SPECIFICATIONS

(PROJECT MANUAL)

MEADOWLANDS ARENA COOLING TOWER MOTOR CONTROL CENTER REPLACEMENT

Project No.CN-254

New Jersey Sports & Exposition Authority Lyndhurst, New Jersey

August 11th, 2022

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SECTION 00010 ADVERTISEMENT FOR BIDS

Notice is hereby given that sealed bids will be received by the New Jersey Sports and Exposition Authority (NJSEA), One DeKorte Park Plaza Lyndhurst, NJ, 07071 for the following:

BID CONTRACT:

Meadowlands Arena Cooling Tower Motor Control Center Replacement

THE WORK to be performed under this Contract will consist of the electrical and structural replacement of the NJSEA Meadowlands Arena Cooling Tower Motor Control Center.

BIDS will be received at the above address until **12:00 PM** prevailing time, on **August 11th**, **2022.** At the termination of the time for receipt of bids, the bids received will be opened. Bids will **not** be accepted after **12:00 PM** on that day. Due to COVID, bids will not be opened in a public forum.

CONTRACT DOCUMENTS (specifications and plans) will be available for review at the NJSEA website beginning on **July 21**st, **2022**, **after 2:00 PM**. Copies of the specifications and the plan set may be downloaded from the NJSEA website at www.NJSEA.com.

A mandatory PRE-BID MEETING will be held on **July 27th**, **2022**, **at 10:00 AM** at the NJSEA Motor Control Center Power Plant Entrance. The pre-bid meeting will consist of a short meeting at the NJSEA offices, followed by a project site visit. All firms who attend the bid walk must submit all questions and concerns by **August 2nd**, **2022 at 3:00 PM**.

THE CONTRACT TIME is 180 consecutive calendar days from the start date given in the Notice-To-Proceed.

A BID DEPOSIT in the amount of five percent of the bid, but not exceeding \$20,000.00, must accompany the Bid. This in the form may be of a bid bond or certified check.

The Contract Documents contain specific requirements for submission of a bid. In conformance with Public Law 1977, Chapter 33, if the bidder is a corporation or partnership, it shall submit with the bid a statement setting forth the names and addresses of all stockholders/partners who have a ten percent or greater interest in the firm.

The attention of all bidders is particularly called to the New Jersey State requirements regarding the conditions of employment to be observed. All bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27, regarding Affirmative Action.

In accordance with Public Law 2001, Chapter 134, the NJSEA may only enter into contracts with Bidders who provide proof of valid business registration with the Division of Revenue, in the Department of Treasury, of the State of New Jersey. The Contractor, and all subcontractors, must

obtain a valid Division of Revenue Business Registration prior to contract award. Registration information can be obtained on the worldwide web at http://www.state.nj.us/treasury/revenue/busregcert.shtml or calling 609-292-9292. Online registration is available, and there is no cost to register.

In accordance with the Public Works Contractor Registration Act, the Contractor, all subcontractors, shall provide proof of registration with NJSA 34:11-56.48 et. seq., with the Bid. The registration form can be located online at:

http://lwd.dol.state.nj.us/labor/forms_pdfs/lsse/lsse-2.pdf or by calling 609-292-9464. No Contractor may bid on the Work of this Contract unless he/she is registered pursuant to this act at the time the bid is made. No Contractor shall list a subcontractor in the Bid for the Work of this Contract unless the subcontractor is registered pursuant to this act at the time the bid is made.

In order to insulate the award of state contracts from risk of improper influence, the NJSEA shall only enter into a Contract with a Bidder who complies with Public Law 2005, C. 51 and Executive Order 117. The required forms and instructions are available at the Purchase Bureau website at http://www.state.nj.us/treasury/purchase/forms.htm and are also included in the appendix.

The successful bidder is also required to complete Division of Purchase and Property Ownership Disclosure Forms including Disclosure of Investigations, Disclosures of Investment Activities in Iran pursuant to Public Law 2012, c. 25, McBride Principles Form, and Certification of Non-Involvement in Prohibited Activities in Russia or Belarus pursuant to Public Law 2022, c.3.

If accommodations are needed under the Americans with Disabilities Act, contact Ms. Rosanne Sireci, NJSEA Human Resources Manager, at 201-460-3725. If there are any questions regarding these Contract Documents, contact Mr. John Duffy at (201) 842-5115.

Date

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

Mr. John Duffy, PE

Senior Vice President of Facilities

SECTION 00100 INSTRUCTIONS TO BIDDERS

1.0 DEFINED TERMS:

1.1 The terms used in these Instructions to Bidders have the meanings assigned to them in the General Conditions. The term "Successful Bidder" means the lowest, qualified, responsible Bidder to whom the New Jersey Sports & Exposition Authority (NJSEA) makes the award, based on the NJSEA's evaluation of all bids received.

2.0 COPIES OF CONTRACT DOCUMENTS:

2.1 Complete sets of the Contract Documents may be obtained as designated in the <u>ADVERTISEMENT FOR BIDS</u>. These Documents shall be used in preparing the bids. The NJSEA assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Contract Documents.

3.0 EXAMINATION OF CONTRACT DOCUMENTS AND WORK SITE:

- 3.1 Before submitting a Bid, each Bidder must: (A) examine the Contract Documents thoroughly; (B) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress, or performance of the work; (C) familiarize himself with Federal, State, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress, or performance of the work; and, (D) study and carefully correlate his own observations with the Contract Documents.
- 3.2 On request, the NJSEA will provide each Bidder access to the site to conduct such investigations and tests, as each Bidder deems necessary for submission of a Bid. At least three days' notice shall be provided. The Bidder may be required to furnish a bond or certified check, payable to the NJSEA, as security to cover possible damages from the above investigations or tests. The Bidder shall fill-in all holes, cleanup, and restore the site to its former state, upon completion of such investigations. The security shall be returned to the Bidder after the site is restored, to the satisfaction of the NJSEA.
- 3.3 The lands upon which the work shall be performed, rights-of-way for access thereto, and other lands designated for use by the Contractor in performing the work, are identified in the Contract Documents.
- 3.4 The submission of a Bid will constitute an incontrovertible representation by the Bidder that it has complied with every requirement of this Article and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.
- 3.5 It is further agreed and understood that the successful Bidder will not use any of the information made available to it, or obtained in any examination made by it, as a basis or ground of a claim or demand of any nature against the NJSEA, arising

from (or by reason of) any variance which may exist between the information offered and the actual materials or structures encountered during the construction work, except as may otherwise be so provided in the Contract Documents.

4.0 INTERPRETATION AND ADDENDA:

- 4.1 Should a Bidder find discrepancies or omissions in any of the Contract Documents, or should it be in doubt as to their meaning, it shall immediately notify the NJSEA in writing, identify the discrepancies or omissions, and request a clarification of the Document's intent. In order to allow the NJSEA sufficient time to address inquiries regarding the Contract Documents, all inquiries must be <u>RECEIVED</u> by the NJSEA no later than seven (7) working days prior to the receipt of bids.
- 4.2 If the question involves equality of use of products or methods it must be accompanied by drawings specifications or other data in sufficient detail to enable the Engineer to determine the equality or suitability of the product or method. In general, the Engineer will neither approve nor disapprove particular products prior to opening of the bids such products will be considered when offered by the Contractor for incorporation into the work.
- 4.3 If the Bidder, prior to submission of its Bid, fails to call to the attention of the Engineer the existence of any such patent ambiguity, inconsistency, error, discrepancy, omission or doubt in the Contract Documents, its Bid will be conclusively presumed to have been based upon an interpretation of such ambiguity or inconsistency or the like, or upon any directions correcting such error, which may have been subsequently given by the Director.
- 4.4 Unless such action shall have been taken by the bidder and approval obtained, he agrees to use the product or method designated or described in the specifications as may be amended by addenda
- 4.5 No interpretation of the Contract Documents will be made orally. All interpretation and supplemental instructions will be in the form of written addenda to the Contract Documents. Addenda will be emailed to those who attend the pre-bid meeting. The NJSEA reserves the sole right to determine whether or not an extension of the bid date is necessary due to the nature of the inquiries.
- 4.6 Receipt of addenda must be acknowledged in the space provided for that purpose on the Bid Forms. Should a Bidder not acknowledge receipt of all addenda, it shall still be required to comply with said addenda.

4.7 All addenda shall become part of the Contract Documents and shall supersede the original Contract Documents. Subsequent addenda shall supersede previously issued addenda.

5.0 BID FORM AND SUBMISSION:

- 5.1 Bids must be submitted on the prescribed form. Telephone or email bids shall not be accepted. An additional unbound copy of the Bid Forms is provided for that purpose with the Contract Documents. Do not use the Bid Forms bound in the Contract Documents.
- 5.2 The Bid Forms must be completed in ink or by computer. The bid price of each item must be stated in words and numerals. All blank spaces must be completed. Ditto marks shall not be used. Discrepancies between words and numerals will be resolved in favor of the words. Discrepancies in extension of unit prices will be resolved in favor of the unit price. Discrepancies between the indicated sum of a column of figures and the correct sum will be resolved in favor of the correct sum.
- 5.3 All unit prices shall be NET and shall include all incidental work normally required in connection with the particular type of work involved, and shall include (but not necessarily be limited to) the following:
 - a. All engineering, including detailing and shop drawings.
 - b. All material costs, including an allowance for waste.
 - c. The provision of all necessary accessories.
 - d. All fabrication and shop costs.
 - e. All shop and field labor, including supervision and engineering layout costs.
 - f. All temporary utilities required, including safety precautions.
 - g. All costs of standby trades during or beyond normal working hours.
 - h. All charges for transportation, freight, insurance, taxes, overhead, profit and any other item, as well as bonding costs, if applicable.
 - i. If unit prices are not deemed fair and reasonable by the NJSEA, Bids may be rejected.
- 5.4 Bids by corporations must be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The name and title of the signator, the corporate address, and the state of incorporation shall be typed below the signature.
- 5.5 Bids by partnerships must be executed in the partnership name by a general partner, whose name, title, and official partnership address must be typed below the signature.

- 5.6 The Bid shall contain an acknowledgment of receipt of all addenda (the numbers of which shall be written on the Bid Forms in the appropriate place).
- 5.7 The address and telephone number, to which communications regarding the Bid will be directed, must also be shown.
- 5.8 Each Bidder who is not chartered under the laws of the State of New Jersey but licensed to do business in the State of New Jersey must submit with its Bid a certificate authorizing it to do business in the State of New Jersey. Also see Article 26 of the INSTRUCTIONS TO BIDDERS.
- 5.9 Each Bidder who is a corporation not organized under the laws of the State of New Jersey or is not authorized to do business in the State of New Jersey must obtain a certificate authorizing it to do business in the State of New Jersey prior to the award of the contract.
- 5.10 Per NJSA 52:25-24.2, if the Bidder is a corporation or partnership, the Bidder shall complete the Section 00424; BIDDERS DISCLOSURE FORM, setting forth the names and addresses of all its owners holding a ten (10) percent or greater interest in the corporation of partnership.
- 5.11 See Article 28 of the <u>INSTRUCTIONS TO BIDDERS</u> for requirements of Executive Order 134.
- 5.12 Any Bid may be withdrawn prior to the time for termination of receipt of bids specified in the <u>ADVERTISEMENT FOR BIDS</u>.
- 5.13 Refer to the <u>SPECIFIC PROJECT REQUIREMENTS</u> for additional information regarding the submission of the Bid.

6.0 RECEIPT AND OPENING OF BIDS:

- 6.1 To be considered valid, Bids must be received prior to the time specified in the <u>ADVERTISEMENT FOR BIDS</u>. All valid Bids will then be opened and read aloud.
- 6.2 All Bidders agree the Bids shall remain open for 90 days after the day of opening, but the NJSEA may at its sole discretion, release any Bid and return the bid security prior to that date.
- 6.3 If, within 24 hours after Bids are opened, any Bidder files a duly signed written notice with NJSEA and promptly thereafter demonstrates to the reasonable satisfaction of NJSEA that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid and the bid security will be returned. Thereafter, that Bidder will be disqualified from further bidding on the Work.

7.0 BID SECURITY:

- 7.1 Each Bid must be accompanied by a bid security (in the form of a bid bond, issued by a surety licensed in the State of New Jersey; or a certified check, issued by a national bank or trust company) and payable to the order of the NJSEA, in the amount of five percent of the Bid, but not exceeding \$20,000.00. The bid bond must be executed by a company authorized to do business in the State of New Jersey.
- 7.2 The bid security shall be enclosed in the sealed envelope containing the Bid. The bid security will be held by the NJSEA as security for fulfillment of the Bidder's promises set forth in its Bid; that it will not withdraw its Bid while it is being considered, and will execute the Contract and furnish the required bonds, insurance certificates, and other documents, if its Bid is accepted.
- 7.3 The successful Bidder, upon its failure or refusal to execute and deliver the contract, insurance, bonds, and other documents required within the time limits specified, shall forfeit the bid security deposited with its Bid. The forfeited bid security shall be credited towards the damages suffered; which shall be defined as the difference between the amount specified in the successful Bid and the amount for which the NJSEA may contract with another party to perform the work covered by said Bid (if the latter amount be in excess of the former) together with any additional expenses incurred by the NJSEA as a result of such Bidder's failure to enter into the contract; including, but not limited to, the expense for readvertisement for bids and the processing of such bids. Any amount in excess of such damages shall be returned to the Bidder.
- 7.4 Except as specified above said bid security shall be returned to the Bidder as hereinafter provided. Bid security will be returned to all except the three lowest Bidders within ten working days after the formal opening of Bids, and to the three lowest Bidders within 5 working days after the successful Bidder and the NJSEA have executed the Contract. In the event that the Contract has not been awarded by the NJSEA within 60 days after the opening of the Bids, bid security will be returned promptly upon the demand of any Bidder whose Bid has not been accepted.

8.0 RIGHT TO REJECT, WAIVE, OR ACCEPT:

8.1 The NJSEA reserves the right to reject any and/or all non-conforming, non-responsive, or conditional bids; to waive any informalities in any Bid; and to accept any Bid deemed to be in the best interest of the NJSEA.

9.0 EVALUATION OF BIDS:

9.1 The NJSEA may make such investigations as it deems necessary to determine the ability of the Bidder to perform the work; and the Bidder shall furnish all such information and data for this purpose as NJSEA may request. The NJSEA reserves

the right to reject any Bid if the evidence submitted by (or the investigation of) such Bidder fails to satisfy it that such Bidder is properly qualified to carry out the obligations of the Contract, and to complete the work contemplated therein.

- 9.2 Bidders shall be experienced in the kind of work to be performed, have the necessary equipment therefore, and possess sufficient capital to properly execute the work within the time allowed. Bids received from Bidders who have previously failed to complete contracts within the time required, or who have previously performed similar work in an unsatisfactory manner, may be rejected. A Bid may be rejected if the Bidder cannot show that it has the necessary ability, plant, and equipment to commence the work at the time prescribed, and thereafter to prosecute and complete the work at the rate or within the time specified. A Bid may also be rejected if the Bidder is already obligated for the performance of other work that would delay the commencement, prosecution, or completion of the Work.
- 9.3 In evaluating the Bids, the NJSEA shall consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and alternates and unit prices if requested in the Bid Forms. The NJSEA reserves the right to choose any of the alternates described in the Bid Forms. Final determination will be at the sole discretion of the NJSEA and will be made after receipt of Bids.
- 9.4 The NJSEA may consider the qualifications and experience of subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for those portions of the work. Operating costs, maintenance considerations, performance data, and guarantees of materials and equipment may also be considered.
- 9.5 The NJSEA reserves the right to reject the Bid of any Bidder who does not pass these investigations to the satisfaction of the NJSEA.
- 9.6 If requested by the NJSEA, the three lowest Bidders shall, within 10 days of such request, submit a financial statement prepared by a Certified Public Accountant.

10.0 AWARD AND SIGNING OF THE CONTRACT:

- 10.1 Award of the Contract, if made, will be to the lowest responsive Bidder whose Bid complies with the requirements stated herein, and whose evaluation indicates to the NISEA that the award will be in the best interests of the NISEA.
- 10.2 The NJSEA will award the Contract (or reject all bids) within 60 days from the bid opening date. If the NJSEA requests and the Bidders agree, the Bids may be held open for consideration for such longer time as may be agreed.

- 10.3 The contract shall be extended at the sole discretion of the NJSEA, as deemed to be in its own best interest.
- 10.4 Upon award of the Contract by the NJSEA, three (3) copies of the Contract will be sent to the Successful Bidder. All three copies shall be signed by the Bidder and returned along with the required bonds, insurance certificate and other documents. After acceptance of these documents, the NJSEA will execute the Contract and deliver two (2) fully signed copies of the Contract to the Contractor.

11.0 ESTIMATES OF QUANTITIES OF WORK:

11.1 The NJSEA reserves the right to increase or decrease the quantities of any item of Work as may be deemed necessary, or to leave out any item or to add new items, if and when the necessity arises.

12.0 TIME FOR COMPLETING THE WORK:

- 12.1 The number of days within the work is to be completed (the contract time) is set forth in the Contract.
- 12.2 The attention of the Bidder is directed to the <u>SPECIFIC PROJECT</u> <u>REQUIREMENTS</u> regarding damages for failure to complete the work within the time specified.

13.0 SUBSTITUTE MATERIALS AND EQUIPMENT:

13.1 The Contract, if awarded, will be on the basis of the materials and equipment described in the Contract Documents without consideration of possible substitute or "or equal" items. The procedure for submittal of any request for such substitution by the Contractor, and consideration by the NJSEA, is set forth in the GENERAL CONDITIONS.

14.0 MATERIALS AND EQUIPMENT:

- 14.1 All materials and equipment for the work shall be furnished by the Contractor unless otherwise specified. They shall conform to the Contract Documents and shall be from an acceptable source.
- 14.2 Where possible, preference shall be given to New Jersey manufacturers and/or suppliers.
- 14.3 All materials and equipment for the work shall be new, except where the use of existing or previously used materials and equipment is specified.

15.0 BONDS AND INSURANCE:

15.1 The attention of the Bidder is directed to the <u>SPECIFIC PROJECT</u> <u>REQUIREMENTS</u> regarding the requirements for bonds and insurance.

16.0 POWER-OF-ATTORNEY:

16.1 Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified copy of their power-of-attorney to sign said bonds.

17.0 ASSIGNMENTS:

17.1 The Contractor shall not assign the whole or any part of this Contract without prior written notice to and the written consent of the NJSEA. Money due or to become due the Contractor hereunder shall not be assigned for any purposes whatsoever.

18.0 APPLICABLE LAWS AND SAFETY REGULATIONS:

- 18.1 The attention of the Bidders is especially directed to the provisions of Federal, State, County, and Municipal laws, statutes, and regulations that may apply to the work; including particularly all safety regulations. Such provisions refer to obstruction of streets, open burning, maintaining of signals, storing and handling of explosives, etc. Particular note shall also be taken of those provisions affecting the Contractor or its employees in the prosecution of the work or its relation to any political subdivision or person. All pertinent laws, statutes, ordinances, and regulations shall be obeyed and complied with by the Contractor, its subcontractors, and all of its representatives.
- 18.2 The Contractor shall comply with all provisions of Federal and New Jersey State Labor Laws.
- 18.3 The Contractor shall comply with all current requirements of the Federal Department of Labor, Safety, and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596); and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54); and the Superfund Amendments and Reauthorization Act of 1986 (PL 99-499).
- 18.4 The Contractor shall also comply with all current requirements for construction promulgated under the New Jersey Department of Labor and Industry's Bureau of Engineering and Safety regulations, Title 12 of the NJAC.
- 18.5 In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions in, on, or near the job site; including safety of all persons and property affected directly or indirectly by its operations during performance of the work. This requirement will apply continuously 24 hours per day until acceptance of the work by the NJSEA. It shall not be limited to normal working hours.
- 18.6 The duty of the NJSEA, or its authorized representative, to conduct construction review of the Contractor's performance does not include review of the adequacy of the Contractor's safety measures, in, on, or near the construction site.

19.0 OFFER OF GRATUITIES:

- 19.1 No vendor shall pay, offer to pay, or agree to pay, either directly or indirectly, any fee, commission, compensation, gift, gratuity, or other item of value of any kind to any State officer or employee or special State officer or employee, as defined by NJSA 52:13D-13b. and e., in the Department of the Treasury or any other agency with which such vend or transacts or offers or proposes to transact business, or to any member of the immediate family, as defined by NJSA 52:13D-13i., of any such officer or employee, or any partnership, firm, or corporation with which they are employed or associated, or in which such officer or employee has an interest within the meaning of NJSA 52:13D-13g.
- 19.2 The solicitation of any fee, commission, compensation, gift, gratuity or other item of value by any State officer or employee or special State officer or employee, from any State vendor shall be reported in writing forthwith by the vendor to the Attorney General and the Executive Commission or Ethical Standards.
- 19.3 No vendor may directly or indirectly, undertake any private business, commercial or entrepreneurial relationship with, whether or not pursuant to employment, contract or other agreement, express or implied, or sell any interest in such vendor to, any State officer or employee, having any duties or responsibilities in connection with the purchase, acquisition or sale of any property or services by or to any State agency or any instrumentality thereof, or with any person, firm or entity with which he is employed or associated or in which he has an interest within the meaning of NJSA 52:13D-13g. Any relationships subject to this provision shall be reported in writing forthwith to the Executive Commission on Ethical Standards, which may grant a waiver of this restriction upon application of the State officer or employee or special State officer or employee upon a finding that the present or proposed relationship does not present the potential, actuality or appearance of a conflict of interest.
- 19.4 No vendor shall influence, attempt to influence, or cause to be influenced, any State officer or employee or special State officer or employee in his official capacity in any manner which might tend to impair the objectivity or independence of judgment of said officer or employee.
- 19.5 No vendor shall cause or influence, or attempt to cause or influence, any State officer or employee, or special State officer or employee, to use, or attempt to use, his official position to secure unwarranted privileges or advantages for the vendor or any other person.
- 19.6 The provisions cited above in paragraph 19.1 through 19.5 shall not be construed to prohibit a State officer or employee, or special State officer or employee, from receiving gifts from or contracting with vendors under the same terms and

conditions as are offered or made available to members of the general public subject to any guidelines the Executive commission on Ethical Standards may promulgate under paragraph 19.3.

20.0 SUBCONTRACTORS:

- 20.1 A list of proposed subcontractors shall be included with the Bid as required by the Bid Forms. The list shall be accompanied by an experience statement for each subcontractor indicating each subcontractor's qualifications. If the NJSEA, after due investigation, has reasonable objection to any proposed subcontractor, the NJSEA may, before giving the notice of award, request the apparent Successful Bidder to submit an acceptable substitute without an increase in bid price. If the apparent Successful Bidder declines to make any such substitution, the Contract shall not be awarded to said Bidder; but its declining to make such a substitution will not constitute grounds for sacrificing its bid security. Any subcontractor, to whom the NJSEA does not make a written objection prior to the giving of the notice of award, shall be deemed acceptable to the NJSEA.
- 20.2 No Contractor shall be required to employ any subcontractor against whom it has objection.

21.0 PRE- START CONFERENCE:

21.1 The Contractor shall be prepared to attend a pre-start up conference after execution of the Contract, and prior to the beginning of work, at which representatives of the NJSEA will be present, to discuss performance of the work under this contract. The Contractor's representative must be authorized to speak for the Contractor and to act as an agent of the Contractor.

22.0 CONTRACT DOCUMENTS:

- 22.1 The information and requirements included as the <u>INSTRUCTIONS TO BIDDERS</u> are neither inclusive nor exclusive, and the Bidder or Contractor shall make no claim for lack of notice because information requirements are stated elsewhere in the Contract Documents, but are not repeated herein.
- 22.2 The Table of Contents, titles, headings, running headlines, and notes contained in the Contract Documents are solely to facilitate reference to various provisions of the Contract Documents; and in no way affect, limit, or cast light on the interpretation of the provisions to which they refer.

23.0 EQUAL EMPLOYMENT OPPORTUNITY AND AFFIRMATIVE ACTION:

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

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to

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

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees places 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 of 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 contractors' 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 the N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time with the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith effort 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 assurance from the construction trade union at least five business days prior to the commencement of the 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 its awaiting available vacancies;
- 3. Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;

- 4. To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
- 5. If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;
- 6. To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor;
- (i) The 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 contractors 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 Division and submitted promptly to the Dept. of LWD, Construction 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 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 ration 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 AA201) electronically provided to the public agency by the Division, through its website, for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a monthly thereafter for the duration to his 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 the on-the-job programs for outreach and training of minorities and women.

(D) The contractor and its subcontractor 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 NJAC 17:27-1.1 et seq.

The Executive Order No. 151 (Corzine, August 28, 2009) and P.L. 2009, Chapter 335 include a provision which require all state agencies, independent authorities and colleges and universities to include additional mandatory equal employment and affirmative action language in its construction contracts. It is important that this language is in addition to and does not replace the mandatory contract language and good faith efforts requirements for construction contracts required by N.J.A.C. 17-27-3.6, 3.7 and 3.8, also known as Exhibit B. The additional mandatory equal employment and affirmative action language is as follows:

It is the policy of the [Reporting Agency] that its contracts should create a workforce that reflects the diversity of the State of New Jersey. Therefore, contractors engaged by the [Reporting Agency] to perform under the construction contract shall put forth a good faith effort to engage in recruitment and employment practices that further the goal of fostering equal opportunities to minorities and women.

The contractor must demonstrate to the [Reporting Agency]'s satisfaction that a good faith effort was made to ensure that minorities and women have been afforded equal opportunity to gain employment under the [Reporting Agency]'s contract with the contractor. Payment may be withheld from a contractor's contract for failure to comply with these provisions.

Evidence of a "good faith effort" includes, but is not limited to:

- 1. The Contractor shall requite prospective employees through the State Job bank website, managed by the Department of Labor and Workforce Development, available online at http://NJ.gov/JobCentralNJ;
- 2. The Contractor shall keep specific records of its efforts, including records of all individuals interviewed and hired, including the specific numbers of minorities and women;
- 3. The Contractor shall actively solicit and shall provide the [Reporting Agency] with proof of solicitations for employment, including but not limited to advertisements in general circulation media, professional service publications and electronic media; and

- 4. The Contractor shall provide evidence of efforts described at 2 above to the [Reporting Agency] no less frequently than once every 12 months.
- 5. The Contractor shall comply with the requirements set forth at N.J.A.C. 17:27.

To ensure successful implementation of Executive Order and Law, state agencies, independent authorities and colleges and universities must forward and Initial Project Workforce Report (AA201) for any projects funded with ARRA money to the Division of Public Contracts EEO Compliance immediately upon notification of award but prior to execution of the contract.

24. NEW JERSEY EQUAL PAY ACT:

Please be advised that in accordance with P.L. 2018, c. 9, also known as the Diane B, Allen Equal Pay Act, which was signed in to law by Governor Phil Murphy on April 24, 2018, a contractor performing "qualifying services" or "public work" to the State or any agency or instrumentality of the State shall provide the Commissioner of Labor and Workforce Development a report regarding the compensation and hours worked by employees categorized by gender, race, ethnicity, and job category. For more information and report templates see https://nj.gov/labor/equalpay/equalpay.html.

3. STATE LAW REQUIRING MANDATORY COMPLIANCE BY CONTRACTORS UNDER CIRCUMSTANCES SET FORTH IN LAW OR BASED ON THE TYPE OF CONTRACT:

3.8 DIANE B. ALLEN EQUAL PAY ACT Pursuant to N.J.S.A. 34:11-56.14, a contractor performing "qualifying services" or "public work" to the State or any agency or instrumentality of the State shall provide the Commissioner of Labor and Workforce Development a report regarding the compensation and hours worked by employees categorized by gender, race, ethnicity, and job category. For more information and report templates see https://nj.gov/labor/equalpay/equalpay/equalpay.html

25.0 BUSINESS REGISTRATION CERTIFICATE:

- 25.1 Any Contractor or subcontractor entering into a contract with a State agency shall provide the following:
- A. A Contractor shall provide proof of valid business registration with the Division of Revenue in the Department of the Treasury to any contracting State agency; no contract shall be entered into by any contracting State agency unless the contractor first provides proof of valid business registration.
- B. A subcontractor under any contract with a contracting State agency shall provide proof of valid business registration with the Division of Revenue to any contractor; verification information shall be forwarded by the contractor to the contracting State agency. No subcontract shall be entered into by any contractor under any contract

- with a contracting State agency unless the subcontractor first provides proof of valid business registration.
- 25.2 The Contractor and any subcontractor providing goods or performing services under this contract, and each of their affiliates, shall, during the term of the contract, 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, P.L. 1966, c.30 (N.J.S.A. 54:32B-1 et seq.) on all their sales of tangible personal property delivered to the State. Any questions can be directed to the Division of Revenue at (609) 292-1730. Form NJ-REG can be filed online at http://www.state,nj.us/treasury/revenue/busregcert.htm
- 25.3 A Contractor's Exemption Purchase Certificate, Form ST-13 of the State of New Jersey, Division of Taxation, Sales Tax Bureau, shall be completed by the Bidder and shall, for Sales and Use Tax exemption purposes under N.J.S.A. 54:32B-8.22, be presented to the sellers of materials, supplies or services purchased by the Bidder for exclusive use in connection with this Project only.

26.0 REGISTRATION WITH THE PUBLIC WORKS CONTRACTOR:

- 26.1 The Contractor and all subcontractors shall provide, <u>with the Bid</u>, proof of registration with the Public Works Contractor Registration Act (NJSA 34:11-56.48 et. seq.). Registration information can be obtained on the worldwide web at http://www.nj.gov/labor/lsse/lspubcon.html or by calling 609-292-9464.
- 26.2 No Contractor shall bid on the Work of this Contract unless the Contractor is registered pursuant to this act <u>at the time the Bid is made.</u>
- 26.3 No Contractor shall list a subcontractor in the Bid for the Work of this Contract unless the subcontractor is registered pursuant to this act <u>at the time the Bid is made.</u>
- 26.4 Should a subcontractor be named after the Bid, that subcontractor must be registered pursuant to this Act prior to engaging in the Work of this Contract.
- **27.0 REQUIREMENTS OF PUBLIC LAW 2005, CHAPTER 51:** (to be submitted by all bidders)
- 27.1 Public Law 2005, c. 51 supersedes Executive Order 134. The Executive Order, and the subsequent legislation, contain additional restrictions and reporting requirements that will necessitate a thorough review of the provisions. Chapter 51 can be found on the Purchase Bureau website at http://www.njleg.state.nj.us/2004/Bills/PL05/51-.PDF
- 27.2 In order to safeguard the integrity of State government procurement by imposing restrictions to insulate the award of State contracts from political contributions

that pose the risk of improper influence, purchase of access, or the appearance thereof, Executive Order 134 was signed on September 22, 2004 ("EO 134"). Pursuant to the requirements of EO 134, the terms and conditions set forth in this section are material terms of any contract resulting from this Bid.

- 27.3 Definitions For the purpose of this section, the following shall be defined as follows:
- A. Contribution means a contribution reportable as a recipient under "The New Jersey Campaign Contributions and Expenditures Reporting Act." P.L. 1973, c. 83 (C.10:44A-1 et seq.), and implementing regulations set forth at N.J.A.C. 19:25-7 and N.J.A.C. 19:25- 10.1 et seq. Currently, contributions in excess of \$300 during a reporting period are deemed "reportable" under these laws.
- B. Business Entity means any natural or legal person, business corporation, professional services corporation, limited liability company, partnership, limited partnership, business trust, association or any other legal commercial entity organized under the laws of New Jersey or any other state or foreign jurisdiction. It also includes (i) all principals who own or control more than 10 percent of the profits or assets of a business entity or 10 percent of the stock in the case of a business entity that is a corporation for profit, as appropriate; (ii) any subsidiaries directly or indirectly controlled by the business entity; (iii) any political organization organized under 26 U.S.C.A. 527 that is directly or indirectly controlled by the business entity, other than a candidate committee, election fund, or political party committee; and (iv) if a business entity is a natural person, that person's spouse or child, residing in the same household.
- Breach of Terms of Executive Order 134 Deemed Breach of Contract It shall be a 27.4 breach of the terms of the contract for the Business Entity to (i) make or solicit a contribution in violation of this Order, (ii) knowingly conceal or misrepresent a contribution given or received; (iii) make or solicit contributions through intermediaries for the purpose of concealing or misrepresenting the source of the contribution; (iv) make or solicit any contribution on the condition or with the agreement that it will be contributed to a campaign committee or any candidate of holder of the public office of Governor, or to any State or county party committee; (v) engage or employ a lobbyist or consultant with the intent or understanding that such lobbyist or consultant would make or solicit any contribution, which if made or solicited by the business entity itself, would subject that entity to the restrictions of EO 134; (vi) fund contributions made by third parties, including consultants, attorneys, family members, and employees; (vii) engage in any exchange of contributions to circumvent the intent of EO 134; or (viii) directly or indirectly through or by any other person or means, do any act which would subject that entity to the restrictions of EO 134.

27.5 Certification and Disclosure Requirements

- A. The State shall not enter into a contract to procure from any Business Entity services or any material, supplies or equipment, or to acquire, sell or lease any land or building, where the value of the transaction exceeds \$17,500, if that Business Entity has solicited or made any contribution of money, or pledge of contribution, including in-kind contributions to a candidate committee and/or election fund of any candidate for or holder of the public office of Governor, or to any State or county political party committee during certain specified time periods.
- В. Prior to awarding any contract or agreement to any Business Entity, the Business Entity proposed as the intended awardee of the contract shall submit the Certification and Disclosure form, certifying that no contributions prohibited by Executive Order 134 have been made by the Business Entity and reporting all contributions the Business Entity made during the preceding four years to any political organization organized under 26 U.S.C.527 of the Internal Revenue Code that also meets the definition of a "continuing political committee" within the mean of N.J.S.A. 19:44A-3(n) and N.J.A.C. 19:25-1.7. The required form and instructions, available for review on the Purchase Bureau website at http://www.state.nj.us/treasury/purchase/forms.shtml shall be provided to the intended awardee for completion and submission to the Purchase Bureau with the Notice of Intent to Award. Upon receipt of a Notice of Intent to Award a Contract, the intended awardee shall submit to the Division, in care of the Purchase Bureau Buyer, the Certification and Disclosure(s) within five (5) business days of the State's request. Failure to submit the required forms will preclude award of a contract under this Bid, as well as future contract opportunities. Instructions and sample copies of the required forms are included in the Appendices at the end of these INSTRUCTIONS TO BIDDERS.
- C. Further, the Contractor is required, on a continuing basis, to report any contributions it makes during the term of the contract, and any extension(s) thereof, at the time any such contribution is made. The required form and instructions, available for review on the Purchase Bureau website at http://www.state.nj.us/treasury/purchase/forms.shtml shall be provided to the intended awardee with the Notice of Intent to Award.
- 27.6 State Treasurer Review The State Treasurer or his designee shall review the Disclosures submitted pursuant to this section, as well as any other pertinent information concerning the contributions or reports thereof by the intended awardee, prior to award, or during the term of the contract, by the contractor. If the State Treasurer determines that any contribution or action by the contractor constitutes a breach of contract that poses a conflict of interest in the awarding of the contract under this solicitation, the State Treasurer shall disqualify the Business Entity from award of such contract.

28.0 EXECUTIVE ORDER 117:

28.1 Executive Order No. 117 builds on the provisions of P.L. 2005, c. 51 ("Chapter 51"), which limits contributions to certain political candidates and committees by for-profit business entities that are, or seek to become, State government vendors.

Executive Order No. 117 extends the provisions of Chapter 51 in two ways:

- A. The definition of "business entity" is revised and expanded so that contributions by the following individuals also are considered contributions attributable to the business entity:
 - 1. Officers of corporations and professional services corporations, with the term "officer" being defined in the same manner as in the regulations of the Election Law Enforcement Commission regarding vendor disclosure requirements (N.J.A.C. 19:25-26.1), with the exception of officers of non-profit entities;
 - 2. Partners of general partnerships, limited partnerships, and limited liability partnerships and members of limited liability companies (LLCs), with the term "partner" being defined in the same manner as in the regulations of the Election Law Enforcement Commission regarding vendor disclosure requirements (N.J.A.C. 19:25-26.1); and
 - 3. Spouses, civil union partners, and resident children of officers, partners, LLC members and persons owning or controlling 10% or more of a corporation's stock are included within the new definition, except for contributions by spouses, civil union partners, or resident children to a candidate for whom the contributor is eligible to vote or to a political party committee within whose jurisdiction the contributor resides.
- B. Reportable contributions (those over \$300.00 in the aggregate) to legislative leadership committees, municipal political party committees, and candidate committees or election funds for Lieutenant Governor are disqualifying contributions in the same manner as reportable contributions to State and county political party committees and candidate committees or election funds for Governor have been disqualifying contributions under Chapter 51.

29.0 NEW JERSEY PREVAILING WAGE ACT:

The New Jersey Prevailing Wage Act, P.L. 1963, Chapter 150, is hereby made a part of every contract entered into by the Authority, except those contracts which are not within the contemplation of the Act. The Proposer's submission of its Proposal is its guarantee that neither it nor any subcontractors might employ to perform the work

covered by this bid are listed or are on record in the Office of the Commissioner of the Department of Labor and Industry as one who has failed to pay prevailing wages in accordance with the provisions of the Act.

Attention is directed to the Prevailing Wage Rate List and to the applicable provisions of "The New Jersey Prevailing Wage Act" Chapter 150 of the Laws of 1963 governing the prevailing rates of wage for workers who are employed in this project. All provisions of said Wage Act and amendments thereto, shall be considered part of the Contract and made part thereof.

The Proposer, by submitting the Proposal, declares to the Authority that it is aware of the provisions of said Wage Act with relation to prevailing rates of wages for workers to be employed on this project.

FORMS AND INSTRUCTIONS ARE INCLUDED IN THE APPENDIX

30.0 NOTICE OF SETOFF FOR STATE TAXES:

- 30.1 Pursuant to N.J.S.A. 54:49-19, if the Contractor is entitled to payment under the Contract at the same time as it is indebted for any State tax (or is otherwise indebted to the State), the NJSEA may set off that payment by the amount owed.
- 30.2 The Bidder shall certify acknowledgement of this by completing the form contained in the <u>BID FORMS</u>.

31.0 NEW JERSEY PROMPT PAYMENT ACT:

31.1 The New Jersey prompt Payment Act (N.J.S.A. 52:32-32 et seq.) requires state agencies to pay for goods and services within sixty (60) days of the agency's receipt of a properly executed State Payment Voucher or within sixty (60) of receipt and acceptance of goods and services, whichever is later. Properly executed performance security, when required, must be received by the state prior to processing any payments for goods and services accepted by state agencies. Interest will be paid on delinquent accounts at a rate established by the State Treasurer. Interest will not be paid until it exceeds \$5.00 per properly executed invoice.

32.0 CORPORATE RESOLUTION FORM

32.1 Bidders to complete a corporate resolution form per **SECTION 00486.**

32.0 OWNER DISCLOSURE FORM and MacBRIDE PRINCIPLES: (to be completed by successful bidder

32.1 The successful bidder is required to complete Division of Purchase and Property Ownership Disclosure Forms (N.J.S.A. 52:25-24.2 et seq.) including Disclosure of Investigations, Disclosures of Investment Activities in Iran pursuant to Public Law 2012, c. 25, McBride Principles Form pursuant to Public Law 1995, c. 134, and Certification of Non-Involvement in Prohibited Activities in Russia or Belarus pursuant to Public Law 2022, c.3.

32.2 Forms and Instructions are included in the Appendix.

33.0 PROOF OF COMPETENCY OF BIDDERS

- 33.1 Any Bidder may be required to furnish evidence satisfactory to the NJSEA that the Bidder and his proposed Subcontractors have sufficient means and experience in the types of work called for to assure completion of the Contract in a satisfactory manner. In particular, the Contractor must have the appropriate licenses to perform the required remediations.
- 33.2 The NJSEA reserves the right to reject any Bid if the evidence submitted fails to satisfy the NJSEA that the Bidder and/or Bidder's proposed Subcontractors are qualified to carry out and complete the Contract.

34.0 ANTI-KICKBACK ACT

34.1 The Contractor shall comply with the applicable regulations of the Secretary of Labor, United States Department of Labor, promulgated pursuant to the so-called "Anti-Kickback Act" of June 13, 1934 (48 Stat. 863: Title 18 U.S.C., Sec. 874, and Title 40 U.S.C., Sec. 276c), and any amendments or modifications thereof, and shall cause appropriate provisions to be inserted in Subcontracts to insure compliance therewith by all Subcontractors.

35.0 BUY AMERICAN

34.1 Only manufactured and farm products of the United States, wherever available, shall be used under this Contract, pursuant to N.J.S.A. 40A:11-18.

36.0 LAWS, ORDINANCES, CODES AND REGULATIONS

- **36.1** All "work" to be provided for this project shall conform to the following and subsequent revisions thereto:
- A. The State Uniform Construction Code Act (N.J.S.A. 52:27D-119 et seq.); and the Uniform Construction Code and all applicable Subcodes thereof.
- B. All applicable published communications by the Department of Community Affairs (DCA) including but not limited to the following:
 - 1. DCA Interpretations
 - 2. DCA Formal Technical Opinions
 - 3. DCA Bulletins
 - 4. Related Regulations
 - 5. Miscellaneous
- C. The Americans with Disabilities Act of 1990.
- D. NJDOT Standard Specifications and details except as outlined otherwise.

36.2 The Specifications make reference to certain laws, ordinances, codes and regulations, whether they be by Federal, State, County and/or Municipal Governments. This is done to alert those involved with the Project of unique requirements that pertain to building construction work for the NJSEA. This is not intended as a limitation of the Contractor's responsibility to comply with any and all other Federal, State and Local building codes and ordinances that relate to this project.

37.0 STOCKHOLDER DISCLOSURE:

All corporations and partnerships submitting a bid are required to enclose 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 owning a 10% or greater interest therein.

38.0 WITHDRAWAL OF BIDS

38.1 Upon proper request and identification a bidder may withdraw his bid prior to the scheduled time for the opening thereof. However, no bid may be withdrawn after the first bid has been opened and thereafter not for a period of 60 days after the date of the opening thereof.

39.0 LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

39.1 The successful bidder upon his failure or refusal to execute and deliver the Contract and Contract Bond required within 5 days after he has received notice of the acceptance of his bid shall forfeit to the Owner as liquidated damages for such failure or refusal the security deposited with his bid.

40.0 PENALTIES FOR FALSE STATEMENTS

40.1 Any person who makes or causes to be made a false deceptive or fraudulent statement in the statement or answers in response to the questionnaire, or in the course of any hearing hereunder, shall be guilty of a misdemeanor, and upon conviction shall be punishable by a fine of not less than \$ 100.00 no more than \$1,000.00, and shall be permanently disqualified from bidding all public work or contracts of the contracting unit which submitted the questionnaire; or in the case of an individual or an officer or employee charged with the duty of responding to the questionnaire for a person, firm, co partnership, association or corporation, by such fine or by imprisonment, not exceeding-6 months, or both (40A: 11-34).

END OF SECTION 00100

SECTION 00300 STATE OF NEW JERSEY NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

BID SHEET: PROJECT CN-254

TO: The New Jersey Sports and Exposition Authority (NJSEA)

RE: NJSEA MEADOWLANDS ARENA COOLING TOWER MOTOR CONTROL CENTER REPLACEMENT

This bid will not be accepted after 12:00 PM prevailing local time on August 11th, 2022. There will <u>not</u> be a public bid opening due to COVID. The bidder agrees that this bid will not be withdrawn for a period of 60 calendar days after the closing time for receipt of bids.

of blus.			
	(Name of Firm S	Submitting Bid)	
The undersigned he	ereby acknowledges recei	pt of the following addenda:	
	ADDENDUM NO.	<u>DATE</u>	

The following documents are included with this bid:

- 1. Bid Security (including Power of Attorney if bid security is in the form of a bond)
- 2. Consent of Surety
- 3. Bidder's Experience Affidavit
- 4. Bidder's Disclosure Form
- 5. Bidder's Affidavit of Authorization
- 6. Moral Integrity Affidavit
- 7. Non-Collusion Affidavit
- 8. Subcontractor Use Form
- 9. Proof of Registration in accordance with the Public Works Contractor Registration Act (For Contractor and all listed subcontractors)
- 10. Notice to All Bidders of Set-Off for State Tax
- 11. Corporate Resolution Form
- 12. Two-Year Chapter 51/Executive Order 117 Vendor Certification And Disclosure Of Political Contributions
- 13. Iran Certification Form

- 14. Certification Of Non-Debarment For Federal Government Contracts [N.J.S.A. 52:32-44.1 (P.L. 2019, C.406)]
- 15. MacBride Principles Form
- 16. Certification of Non-Involvement in Prohibited Activities in Russia or Belarus

The following Bid is hereby made to the New Jersey Sports and Exposition Authority.

The undersigned hereby proposes and agrees to furnish all the labor, materials, equipment, tools, and services necessary for the work specified for the above referenced Contract.

The undersigned has examined the location of the proposed Work, the Drawings, Specifications and all other Contract Documents, and is familiar with the local conditions at the place where the work is to be performed. The bidder understands that information relative to any existing structures, apparent and latent conditions, and natural phenomena as furnished in the Contract Documents or by the NJSEA, carries no guarantee expressed or implied as to its completeness or accuracy, and has made all due allowances therefore.

The undersigned Bidder declares that this Bid is made without connection to any other person or persons making Bids for the same work and is in all respects fair and without collusion or fraud.

The undersigned Bidder has determined the quantity and quality of equipment and materials required; has investigated the location and determined the sources of supply of the materials required; has investigated labor conditions; and has arranged for the continuous prosecution of the work herein described.

The undersigned Bidder agrees that the price bid shall apply to actual quantities required, approved and used during construction of the work, including Addenda. It further agrees to complete the entire work of the Contract within the time specified, starting on the date specified in the Notice-to-Proceed.

The undersigned Bidder hereby agrees to be bound by the award of the Contract, and if awarded the Contract on this Bid, to execute the Contract, to furnish the required Bonds and Insurance Certificates and Affirmative Action documentation, and to furnish all other information required by the Contract Documents within the time limits specified.

The undersigned understands that the NJSEA reserves the right to reject any or all Bids or to waive any informality or technicality of any Bid in the interest of the NJSEA. The Bidder agrees to perform all the work described in the Contract Documents, provide all plant, labor, equipment, materials, tools, and services necessary for the completion of

the Contract all as specified and shown complete to a fully acceptable condition for the prices shown. The prices shall be printed and written on the following Schedule of Bid

SCHEDULE OF BID PRICES

NJSEA Meadowlands Arena Cooling Tower Motor Control Center Replacement.

I (we) her in propose to furnish and install all work associated with the work described in these Bid Documents for the MEADOWLANDS ARENA COOLING TOWER MOTOR CONTROL CENTER REPLACEMENT

(\$)		
Lump Sum - in words			
(\$ Lump Sum - in figures			
Lump Sum - <i>in figures</i>			
I, or We, hereby commit to complete this Pro	ject within:		
Number of Calendar Days to Complete	Contractor Signature		
If this Bid shall be accepted by the NJSEA, and the undersigned shall fail to contract as aforesaid, the NJSEA shall be entitled to recover from the Bidder those moneys as specified in Article 7.0 of the INSTRUCTIONS TO BIDDERS .			
<u>If a Corp</u>	oration:		
Name of Company			
Business Address			
Business Telephone Number			
Incorporated under the laws of the State of _			

Signature and Title of Bidder	
	(Signature)
	,
	(Typed Name)
	(Typed Title)
Name of President	
Name of Secretary	
Name of Tuescamon	
Name of Treasurer	
Date	
	(Affix Corporate Seal Here)

If a Partnership, Individual, or Non-Incorporated Organization:

Name of Company				
Business Address				
Business Telephone Number				
Signature and Title of Bidder	(Signature)			
(Typed Name)	(Typed Title)			
Dated				
Typed Names and Addresses of Company Members:				

(Use Additional Sheets if Necessary)

END OF SECTION 00300

SECTION 00410 STATE OF NEW JERSEY NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

BID BOND FOR PROJECT CN-254

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned			
as Surety, are hereby held and firmly			
EXPOSITION AUTHORITY (NJSEA) for			
for the payment of which, well and			
ally bind ourselves, our heirs, executors,			
ive on the latest date of signature at the			

The condition of the above obligations is such that whereas the Principal attached hereto and hereby made a part hereof to enter into the above referenced Contract.

NOW THEREFORE:

- If said Bid shall be rejected; or in the alternate,
- If said Bid shall be accepted and the Principal shall execute and deliver a contract on the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for the faithful performance of said Contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by an extension of the time within which the NJSEA may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

PRINCIPAL:		
	(Signature)	(Typed Name)
Date:		
		(Typed Address)
SURETY:		
	(Signature)	(Typed Name)
		(Typed Firm Name/Address)

SEAL

END OF SECTION 00410

SECTION 00411

STATE OF NEW JERSEY NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

CONSENT OF SURETY FOR PROJECT CN-254

KNOW ALL MEN BY THESE PRESE	NTS, that for and in consideration of the sum of
\$1.00, lawful money of the United State	es, the receipt whereof is hereby acknowledged,
paid the undersigned corporation, and	for other valuable consideration,
	(Name of Surety Company), a
corporation organized and existing und	ler the laws of the State of
and licensed to do business in the Stat	e of New Jersey, certifies and agrees, that if this
Contract is awarded to	(Name of Bidder)
the undersigned corporation will execu	te the bond or bonds as required by the Contract
Documents, and will become Surety	in the full amounts set forth in the Contract
Documents, for the faithful performance	e of all obligations of the Contractor.
	(Surety)
(Must be accompanied by the usual p	roof of authority of surety company officers to
execute the same).	

END OF SECTION 00411

SECTION 00420 STATE OF NEW JERSEY NEW JERSEY SPORTS AND EXPOSTION AUTHORITY

BIDDERS EXPERIENCE AFFIDAVIT: PROJECT CN-254

Any businesses incorporated outside the State of New Jersey shall furnish a certificate proving they are authorized by the Secretary of the State of New Jersey to do business in the State of New Jersey prior to contract award.

The **BIDDER** shall document their experience by completing the form below, or on sheets to be attached. The list shall include **AT LEAST THREE PROJECTS COMPLETED WITHIN THE LAST FIVE YEARS**, which are similar in scope and size to that proposed in this Contract.

All listed subcontractors refer to the individual specifications for qualification requirements to be submitted.

Project Name & Address	Name and # of Contact	Completion Date	Description of Work	Contract Amount
1.			-	
2.				
2				
3.				

This information will assist the NJSEA to judge the bidder's experience, skill, and business standing. **Bidders failing to furnish all the required information may be disqualified.**

The undersigned is (an Individual) (a Partnership) (a Co	orporation) under the laws of the		
State of	, having principal offices at _	, having principal offices at		
(Signature)		(Typed Name)		
Date:				
		(Typed Address)		

OWNERSHIP DISCLOSURE FORM



STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND PROPERTY
33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW JERSEY 08625-0230

DOR NAM	ΛE:					
UANT TO I	N.J.S.A. 52:25-	24.2, ALL PARTIES ENTER	RING INTO A CONTRA	CT WITH THE STATE ARE REQ	UIRED TO PROVIDE A STA	TEMENT OF OWNER
					YES	NO
		rofit Entity; and theref				
		roprietor; and therefor				
	•	company with a single	•	usiness by himself or her-sel	т.	
	•	ration, partnership, or		•		
THE VEHU	or is a corpor	ation, partnersing, or	illinited hability com	parry.		
own 10%	or more of it		all individual partr	ing: (a) the names and addr ners in the partnership who ter interest therein.*		
NAME				NAME		
ADDRES	ss			ADDRESS		
ADDRES				ADDRESS		
CITY		STATE	ZIP	CITY	STATE	ZIP
NAME				NAME		
ADDRES	SS			ADDRESS		
ADDRES	ss			ADDRESS		
individua owning a	ls, partners, i 10% or great	members, stockholders er interest of those list	s, corporations, part ed business entities?	npanies identified above, an nerships, or limited liability (a) the names and addresse	companies	NO ne corporation who do
For each individua owning a lf you ans 10% or m in the lim	Is, partners, r 10% or great swered YES to lore of its stoo ited liability co	rations, partnerships, o members, stockholders er interest of those list o Question 4, you must o ck, of any class; (b) all in ompany who own a 10	r limited liability cor s, corporations, part ed business entities? disclose the following dividual partners in t % or greater interes	npanies identified above, an nerships, or limited liability (: (a) the names and address the partnership who own a 10 t therein. The disclosure(s) s	YES re there any r companies es of all stockholders in the 0% or greater interest the hall be continued until th	NO ne corporation who orein; or, (c) all members.
For each individua owning a If you ans 10% or m in the lim of every r	Is, partners, r 10% or great swered YES to lore of its stoo ited liability co	rations, partnerships, o members, stockholders er interest of those list o Question 4, you must o ck, of any class; (b) all in ompany who own a 10	r limited liability cor s, corporations, part ed business entities? disclose the following dividual partners in t % or greater interes	mpanies identified above, and nerships, or limited liability on the names and address of the partnership who own a 10 therein. The disclosure(s) suber a 10% or greater interest	YES re there any r companies es of all stockholders in the 0% or greater interest the hall be continued until th	NO ne corporation who orein; or, (c) all members.
For each individua owning a If you and 10% or m in the lim of every r	ls, partners, r 10% or great swered YES to nore of its stoc ited liability conon-corporate	rations, partnerships, o members, stockholders er interest of those list o Question 4, you must o ck, of any class; (b) all in ompany who own a 10	r limited liability cor s, corporations, part ed business entities? disclose the following dividual partners in t % or greater interes	mpanies identified above, and nerships, or limited liability of the names and address the partnership who own a 10 therein. The disclosure(s) somber a 10% or greater interesting the second of the partnership who own the partnership who own a 10 therein. The disclosure(s) somber a 10% or greater interesting the partnership when the partnership with the partnership	YES re there any r companies es of all stockholders in the 0% or greater interest the hall be continued until th	NO ne corporation who orein; or, (c) all members.
For each individua owning a If you and 10% or m in the lim of every r	Is, partners, in 10% or great swered YES to have of its stockited liability contained in the components.	rations, partnerships, o members, stockholders er interest of those list o Question 4, you must o ck, of any class; (b) all in ompany who own a 10	r limited liability cor s, corporations, part ed business entities? disclose the following dividual partners in t % or greater interes	npanies identified above, an nerships, or limited liability of the names and address the partnership who own a 10 therein. The disclosure(s) so there a 10% or greater interest name. NAME ADDRESS	YES re there any r companies es of all stockholders in the 0% or greater interest the hall be continued until th	NO ne corporation who orein; or, (c) all members.
For each individua owning a lf you and 10% or m in the lim of every r	Is, partners, in 10% or great swered YES to have of its stockited liability contained in the components.	rations, partnerships, o members, stockholders er interest of those list o Question 4, you must o ck, of any class; (b) all in ompany who own a 10 e stockholder, individual	r limited liability cor s, corporations, part ed business entities: disclose the following dividual partners in t % or greater interes partner, and/or mer	npanies identified above, an nerships, or limited liability (a) the names and addresse the partnership who own a 10 therein. The disclosure(s) so there a 10% or greater interesting the second of th	YES re there any r companies es of all stockholders in the 0% or greater interest the hall be continued until th st has been identified.*	NO ne corporation who orein; or, (c) all members and address
For each individua owning a lf you and 10% or m in the lim of every r	Is, partners, in 10% or great swered YES to have of its stockited liability contained in the components.	rations, partnerships, o members, stockholders er interest of those list o Question 4, you must o ck, of any class; (b) all in ompany who own a 10	r limited liability cor s, corporations, part ed business entities? disclose the following dividual partners in t % or greater interes	npanies identified above, an nerships, or limited liability of the names and address the partnership who own a 10 therein. The disclosure(s) so there a 10% or greater interest name. NAME ADDRESS	YES re there any r companies es of all stockholders in the 0% or greater interest the hall be continued until th	NO ne corporation who orein; or, (c) all members.
For each individua owning a lf you and 10% or m in the lim of every r	Is, partners, in 10% or great swered YES to have of its stockited liability contained in the components.	rations, partnerships, o members, stockholders er interest of those list o Question 4, you must o ck, of any class; (b) all in ompany who own a 10 e stockholder, individual	r limited liability cor s, corporations, part ed business entities: disclose the following dividual partners in t % or greater interes partner, and/or mer	npanies identified above, an nerships, or limited liability (a) the names and addresse the partnership who own a 10 therein. The disclosure(s) so there a 10% or greater interesting the second of th	YES re there any r companies es of all stockholders in the 0% or greater interest the hall be continued until th st has been identified.*	NO ne corporation who orein; or, (c) all members and address
For each individua owning a 10% or m in the lim of every r NAME ADDRES ADDRES CITY	Is, partners, r 10% or great swered YES to nore of its stoc ited liability co non-corporate SSS SSS	rations, partnerships, o members, stockholders er interest of those list o Question 4, you must o ck, of any class; (b) all in ompany who own a 10 e stockholder, individual	r limited liability cor s, corporations, part ed business entities: disclose the following dividual partners in t % or greater interes partner, and/or mer	mpanies identified above, an nerships, or limited liability : (a) the names and address the partnership who own a 10 therein. The disclosure(s) somber a 10% or greater interest the state of the state of the state of the partnership who own a 10 th	YES re there any r companies es of all stockholders in the 0% or greater interest the hall be continued until th st has been identified.*	NO ne corporation who orein; or, (c) all members and address
For each individua owning a If you and 10% or m in the lim of every r NAME ADDRES ADDRES CITY	Is, partners, r 10% or great swered YES to nore of its stoc ited liability co non-corporate SS SS SS	rations, partnerships, o members, stockholders er interest of those list o Question 4, you must o ck, of any class; (b) all in ompany who own a 10 e stockholder, individual	r limited liability cor s, corporations, part ed business entities: disclose the following dividual partners in t % or greater interes partner, and/or mer	mpanies identified above, and nerships, or limited liability of the names and address the partnership who own a 10 to therein. The disclosure(s) somber a 10% or greater interest of the name and name an	YES re there any r companies es of all stockholders in the 0% or greater interest the hall be continued until th st has been identified.*	NO ne corporation who orein; or, (c) all members and address
For each individua owning a If you and 10% or m in the lim of every rows NAME ADDRES CITY	Is, partners, r 10% or great swered YES to nore of its stoc ited liability co non-corporate SS SS SS	rations, partnerships, o members, stockholders er interest of those list o Question 4, you must o ck, of any class; (b) all in ompany who own a 10 e stockholder, individual	r limited liability cor s, corporations, part ed business entities: disclose the following dividual partners in t % or greater interes: partner, and/or mer	npanies identified above, an nerships, or limited liability (a) the names and addresse the partnership who own a 10 therein. The disclosure(s) so there a 10% or greater interesting the second of the second of the second of the partnership who own a 10 the partnership who own a 10 therein. The disclosure(s) so the partnership who own a 10 therein. The disclosure(s) so the partnership who own a 10 therein the partne	YES re there any r companies es of all stockholders in the 0% or greater interest the hall be continued until th st has been identified.*	NO ne corporation who rein; or, (c) all mem e names and addre

^{*} Attach additional sheets if necessary

SECTION 00426

STATE OF NEW JERSEY NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

BIDDER'S AFFIDAVIT OF AUTHORIZATION: PROJECT CN-254

State of		
County of	ss: _	
	_ (Name of Bidder), being duly sworn, deposes and says tha	at:
• he/she resides at	;	
• he/she is the	(Title) who signed the Bid Forms for this Contract;	
•	zed to sign, and that the Bid is a true offer of the Bidder, a seal of the Bidder; and,	nc
all the declarations a his/her knowledge an	nd statements contained in the Bid are true to the best d belief.	O
(Signature)	(Typed Name)	
Subscribed and sworn to before me this	day	
of20		
(Notary Public)		
My commission expires	. 20	

<u>SECTION 00427</u> STATE OF NEW JERSEY

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

CORPORATE RESOLUTION FORM FOR PROJECT CN-254

BE IT RESOLVED, By the Board of Director	ors of
that the president () be and hereby is authorized to make
execute and deliver a contract for	
with the New Jersey Sports & Exposition A	Authority; and that the Secretary
() be and here	by is authorized to attest to the execution of
the same and affix the corporate seal there	to.
	BOARD OF DIRECTORS
SECRETARY	(SEAL)
I HEREBY CERTIFY that the foregoing is a of Directors of	an exact copy of a Resolution by the BOARD
() adopted	at a () , meeting held
on	
at which quorum	was present.
IN WITNESS WHEREOF, I have hereunto	set my hand and the seal of
()	
thisday of20	<u>. </u>
	SECRETARY
(SEAL)	

SECTION 00428 STATE OF NEW JERSEY NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

MORAL INTEGRITY AFFIDAVIT: PROJECT CN-254

Sta	ate of	_		
Co	ounty of	SS: -		
I, _		_(Name), the	(Title)	
of	-	(Compan	ny), being first duly sworn, de	pose
an	id say that:			
1.	the above named comp Jersey Sports and Expo	. •	id regarding this Contract to the l	New
2.	_	oany wishes to demonst ts and Exposition Autho	crate moral integrity to the satisfactority;	ction
3.	its owners, officers, of	or directors are involvations concerning crimin	the above named company nor a ved in any Federal, State, or nal or quasi-criminal violations, e	other
4.	committed any violati	on of a Federal or Sta	ers, officers, or directors have ate criminal or quasi-criminal sta	
5.	suspended, disbarred of from bidding or contra	or otherwise declared in	, officers or directors have ever neligible by any agency or govern es, labor, material or supplies exce	ment
6.	involved in any investigation and, for a the action, date of inception investigation and the action investigation and the action investigation and inception investigation and inception investigation and investi	gation, litigation, includ lings, involving any pu ws (if applicable set any litigation, the captic	, officers or directors have ever ling administrative complaints or ablic sector clients during the pas forth the nature and status of on of the action, a brief description d, if applicable, disposition (If nor	other It five If the Ion of
7.	the company is incorpo	oration in the State of:		

- 8. if the answer to the above question is a state other than New Jersey, that the company has received from the Secretary of State of New Jersey a certificate authorizing it to conduct business in New Jersey, and a copy of the certificate is enclosed with the Bid.
- 9. he/she is personally acquainted with the operations of the company, has full knowledge of the factual basis comprising the contents of this Affidavit, and that the contents are true.

the contents of this Amaavit, and that the
ncipals, shareholders, and officers of the ares owned or % of partnership) are as
ports and Exposition Authority to accept knowing that the New Jersey Sports and of the statements contained herein.
ontinuing obligation from the date of this to the answers or information contained
ainal offense to make a false statement in am subject to criminal prosecution under terial breach of my agreement with the ontract(s) resulting from this certification
(Typed Name)
(Notary Public)
, 20

SECTION 00480

STATE OF NEW JERSEY NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

NON-COLLUSION AFFIDAVIT: PROJECT CN-254

State of	<u></u>	
County of	ss:	
I,	(Name), of the municipality of	
in the County of	and the State of	being
first duly sworn, depose	and say that:	
I am the the Bidder making th	(Title) of the firm ne Bid for this Contract.	
I execute the Bid with	n the full authority to do so.	
any collusion, or oth	directly or indirectly entered into any agreen erwise taken any action in restraint of free, c se above named Project.	
made with full know	ined in said Bid and in this affidavit are traveledge that the New Jersey Sport and Exposite statements contained in the Bid and this af	ion Authority relies
solicit or secure such Co	no person or selling agency has been emplo ontract upon an agreement or understanding or contingent fee, except bona fide employee ned by the Bidder.	g for a commission,
Subscribed and sworn to before me this day of 20_	7	
	(Type or print name u	ınder signature)
(Notary Public)		
My commission expires	, 20	

SECTION 00482

STATE OF NEW JERSEY NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

SUBCONTRACTOR USE FORM: PROJECT CN-254

In accordance with the provisions of SECTION 00100, Article 20, of these Contract Documents, furnish below the company name, address, telephone number, and the name of contact person for each subcontractor to be used in the performance of the Work. Experience statements shall be attached hereto for each company.

NOTE: If no work will be subcontracted, indicate NONE.				

SECTION 00483 STATE OF NEW JERSEY NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

PROOF OF VALID BUSINESS REGISTRATION CERTIFICATE FOR STATE AGENCY AND CASINO SERVICE CONTRACTS - DEPARTMENT OF TREASURY DIVISION OF REVENUE: PROJECT CN-254

The Bidder shall provide proof of valid business registration with the Division of Revenue. A copy of the registration for the Bidder and for all listed subcontractors shall be attached to this form.

SECTION 00484 STATE OF NEW JERSEY NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

PROOF OF REGISTRATION WITH THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT - DEPARTMENT OF LABOR - PROJECT CN-254

The Bidder shall provide proof of valid registration with the Public Works Contractor Registration Act. A copy of the registration for the Bidder and for all listed subcontractors shall be attached to this form.

SECTION 00485 STATE OF NEW JERSEY

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

NOTICE TO ALL BIDDERS OF SET-OFF FOR STATE TAX: PROJECT CN-254

Please be advised that, pursuant to <u>L.</u> 1995, <u>c.</u> 159, effective January 1, 1996, and codified at <u>N.J.S.A.</u> 59:49-19 and <u>N.J.S.A.</u> 59:49-20, and notwithstanding any provision of the law to the contrary, whenever any taxpayer, partnership of S corporation under contract to provide goods or services or construction projects to the state of New Jersey or its agencies or instrumentalities, including the legislative and judicial branches of State government, is entitled to payment for those goods and services or construction projects, at the same time a taxpayer, partner or shareholder of that entity is indebted for any State tax, the Director of the Division of Taxation shall seek to set off that taxpayer's, partner's or shareholder's share of the payment of that indebtedness. The amount set off shall not allow for the deduction of any expenses or other deductions which might be attributable to the taxpayer, partner or shareholder subject to set-off.

The Division of Taxation may initiate procedures to set off the tax debt of a specific vendor upon the expiration of ninety (90) days after either the issuance by the Division of a notice and demand for payment of any state tax owed by the taxpayer or the issuance by the Division of a final determination on any protest filed by the taxpayer against an assessment or final audit determination. A set-off reduces the contract payment due to a vendor by the amount of that vendor's state tax indebtedness or, in the case of a vendor-partnership or vendor-S corporation, by the amount of state tax indebtedness of any member-partner or shareholder of the partnership or S-corporation, respectively. N.J.A.C. 18:2-8.3.

The Director of the Division of Taxation shall give notice of the set-off to the taxpayer, partner or shareholder and shall provide an opportunity for a hearing within 30 days of such notice under the procedures for protest established under N.J.S.A. 54:49-18. No requests for conference, protest, or subsequent appeal to the Tax Court from any protest under N.J.S.A. 59:49-19 shall stay the collection of the indebtedness. Interest that may be payable by the State to the taxpayer, pursuant to L. 1987, c. 184 (N.J.S.A. 52:32-35) shall be stayed.

"I HAVE BEEN ADVISED OF THIS NOTICE"

T'A'	ID OF CECTION 0040F
Date:	
Print or Type Title of Signe	r:
Print or Type Name of Sigr	ner:
Signature:	
1 /	
Company:	

SECTION 00486 STATE OF NEW JERSEY

NEW JERSEY SPORTS AND EXPOSITION AUTHORITY

CORPORATE RESOLUTION FORM FOR CONTRACT: PROJECT CN-254

BE IT RESOLVED, By the I	Board of Directors of	
that the president (_) be and hereby is authorized to make,
execute and deliver a contr Authority	ract FOR: with the Ne	w Jersey Sports and Exposition
and that the Secretary ()
be and hereby is authorize seal thereto.	d to attest to the exec	ution of the same and affix the corporate
		BOARD OF DIRECTORS
SECRETARY		(SEAL)
I HEREBY CERTIFY that tl of Directors of	ne foregoing is an exa	act copy of a Resolution by the BOARD
() adopted at a () , meeting held
on at		
IN WITNESS WHEREOF,	I have hereunto set m	y hand and the seal of
()	
thisday of	20	
(CEAL)		SECRETARY
(SEAL)		

INFORMATION AND INSTRUCTIONS

For Completing the "Two-Year Vendor Certification and Disclosure of Political Contributions" Chapter 51 Form

Backo	round Ir	ıformation

On September 22, 2004, then-Governor James E. McGreevey issued E.O. 134, the purpose of which was to insulate the negotiation and award of State contracts from political contributions that posed a risk of improper influence, purchase of access or the appearance thereof. To this end, E.O. 134 prohibited State departments, agencies and authorities from entering into contracts exceeding \$17,500 with individuals or entities that made certain political contributions. E.O. 134 was superseded by Public Law 2005, c. 51, signed into law on March 22, 2005 ("Chapter 51").

On September 24, 2008, Governor Jon S. Corzine issued E.O. 117 which is designed to enhance New Jersey's efforts to protect the integrity of procurement decisions and increase the public's confidence in government. The Executive Order builds upon the provisions of Chapter 51.

Two-Year Certification Process

Upon approval by the State Chapter 51 Review Unit, the Certification and Disclosure of Political Contributions form is valid for a two (2) year period. Thus, if a vendor receives approval on January 1, 2014, the certification expiration date would be December 31, 2015. Any change in the vendor's ownership status and/or political contributions during the two-year period will require the submission of new Chapter 51/Executive Order 117 forms to the State Review Unit. Please note that it is the vendor's responsibility to file new forms with the State should these changes occur.

State Agency Instructions: Prior to the awarding of a contract, the State Agency should first use NJSTART () to check the status of a vendor's Chapter 51 certification before contacting the Review Unit's mailbox at . If the State Agency does not find any Chapter 51 Certification information in NJSTART and/or the vendor is not registered in NJSTART, then the State Agency should send an e-mail to to verify the certification status of the vendor. If the response is that the vendor is NOT within an approved two-year period, then forms must be obtained from the vendor and forwarded for review. If the response is that the vendor is within an approved two-year period, then the response so stating should be placed with the bid/contract documentation for the subject project.

Instructions for Completing the Form

Part 1: BUSINESS ENTITY INFORMATION

Business Name – Enter the full legal name of the vendor, including trade name if applicable.

Address, City, State, Zip and Phone Number -- Enter the vendor's street address, city, state, zip code and telephone number.

Vendor Email – Enter the vendor's primary email address.

Vendor FEIN – Please enter the vendor's Federal Employment Identification Number.

Business Type - Check the appropriate box that represents the vendor's type of business formation.

Listing of officers, shareholders, partners or members - Based on the box checked for the business type, provide the corresponding information. (A complete list must be provided.)

Part 2: DISCLOSURE OF CONTRIBUTIONS

Read the three types of political contributions that require disclosure and, if applicable, provide the recipient's information. The definition of "Business Entity/Vendor" and "Contribution" can be found on pages 3 and 4 of this form.

Name of Recipient - Enter the full legal name of the recipient.

Address of Recipient - Enter the recipient's street address.

Date of Contribution - Indicate the date the contribution was given.

Amount of Contribution - Enter the dollar amount of the contribution.

Type of Contribution - Select the type of contribution from the examples given.

Contributor's Name - Enter the full name of the contributor.

Relationship of the Contributor to the Vendor - Indicate the relationship of the contributor to the vendor. (e.g. officer or shareholder of the company, partner, member, parent company of the vendor, subsidiary of the vendor, etc.)

NOTE: If form is being completed electronically, click "Add a Contribution" to enter additional contributions. Otherwise, please attach additional pages as necessary.

Check the box under the recipient information if no reportable contributions have been solicited or made by the business entity. **This box** must be checked if there are no contributions to report.

Part 3: CERTIFICATION

Check Box A if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity <u>and all</u> individuals and/or entities whose contributions are attributable to the business entity.

(No additional Certification and Disclosure forms are required if BOX A is checked.)

Check Box B if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity <u>and all</u> individuals and/or entities whose contributions are attributable to the business entity <u>with the exception</u> of those individuals and/or entities that submit their own separate form. For example, the representative is not signing on behalf of the vice president of a corporation, but all others. The vice president completes a separate Certification and Disclosure form. (Additional Certification and Disclosure forms are required from those individuals and/or entities that the representative is not signing on behalf of and are included with the business entity's submittal.)

Check Box C if the representative completing the Certification and Disclosure form is doing so on behalf of the business entity only. (Additional Certification and Disclosure forms are required from all individuals and/or entities whose contributions are attributable to the business entity and must be included with the business entity submittal.)

Check Box D when a sole proprietor is completing the Certification and Disclosure form or when an individual or entity whose contributions are attributable to the business entity is completing a separate Certification and Disclosure form.

Read the five statements of certification prior to signing.

The representative authorized to complete the Certification and Disclosure form must sign and print her/his name, title or position and enter the date.

State Agency Procedure for Submitting Form(s)

The State Agency should submit the completed and signed Two-Year Vendor Certification and Disclosure forms either electronically to: cd134@treas.nj.gov or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625-0230. Original forms should remain with the State Agency and copies should be sent to the Chapter 51 Review Unit.

Business Entity Procedure for Submitting Form(s)

The business entity should return this form to the contracting State Agency.

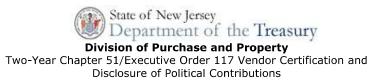
The business entity can submit the Certification and Disclosure form directly to the Chapter 51 Review Unit only when:

- The business entity is approaching its two-year certification expiration date and is seeking certification renewal;
- · The business entity had a change in its ownership structure; OR
- The business entity made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

Questions & Information

Questions regarding Public Law 2005, Chapter 51 (N.J.S.A. 19:44A-20.13) or E.O. 117 (2008) may be submitted electronically through the Division of Purchase and Property website at: .

Reference materials and forms are posted on the Political Contributions Compliance website at: .



	FOR STAT	E USE ONLY	
Solicitation, RFP, or Contract No		Awa	rd Amount
Description of Services			
State Agency Name	Conta	act Person	
Phone Number	Conta	act Email	
Check if the Contract / Agreement is Bei	ng Funded Using I	FHWA Funds	
			Please check if requesting
Part 1: Business Entity Information			recertification \square
Full Legal Business Name			
	Including trade r		
Address			
City	State	Zip	Phone
Vendor Email	Vendor FEIN	(SS# if sole pro	prietor/natural person)
Check off the business type and li		uired informatio PLETED IN FULL	on for the type of business selected.
 Corporation: LIST ALL OFFICERS and an Professional Corporation: LIST ALL OFFI Partnership: LIST ALL PARTNERS with an Limited Liability Company: LIST ALL MEN Sole Proprietor 	CERS <u>and</u> ALL SHA ny equity interest	REHOLDERS "sol	the corporation only has one officer, please write le officer" after the officer's name.)
Note: "Officers" means President, Vice President Officer or Chief Financial Officer of a corpora Also Note: "N/A will not be accepted as a va	tion, or any person	routinely perforn	
All Officers of a Corporation or I	PC	10% and (greater shareholders of a corporation or <u>all</u> shareholders of a PC
All Equity partners of a Partner	rship		All Equity members of a LLC
			nbers, please attach separate page.

Part 2: Disclosure of Contributions by the business entity or any person or entity whose contributions are attributable to the business entity.

1. Report below all contributions solicited or made during the 4 years immediately preceding the commencement of negotiations or submission of a proposal to any:

Political organization organized under Section 527 of the Internal Revenue Code and which also meets the definition of a continuing political committee as defined in N.J.S.A. 19:44A-3(n)

2. Report below all contributions solicited or made during the 5 $\frac{1}{2}$ years immediately preceding the commencement of negotiations or submission of a proposal to any:

Candidate Committee for or Election Fund of any Gubernatorial or Lieutenant Gubernatorial candidate State Political Party Committee County Political Party Committee

3. Report below all contributions solicited or made during the 18 months immediately preceding the commencement of negotiations or submission of a proposal to any:

Municipal Political Party Committee Legislative Leadership Committee

Full	Legal Name of Recipient				
Addr	ess of Recipient				
Date	e of Contribution	Amount of Contribution			
Туре	e of Contribution (i.e. curren	cy, check, loan, in-kind)			
Cont	ributor Name				
Rela I	tionship of Contributor to th If this form is not being com Remove Contribution	e Vendor pleted electronically, please attach additional contributions on separate page. Click the "Add a Contribution" tab to enter additional contributions.			
	Add a Contribution				
or a		political contributions have been solicited or made by the business entity se contributions are attributable to the business entity. e box only)			
` '	, -	alf of the business entity <u>and all</u> individuals and/or entities whose contributions ess entity as listed on Page 1 under Part 1: Vendor Information .			
(B)	are attributable to the busir	alf of the business entity <u>and all</u> individuals and/or entities whose contributions ness entity as listed on Page 1 under <u>Part 1: Vendor Information</u> , except for es who are submitting separate Certification and Disclosure forms which are .			
(C)	(C) I am certifying on behalf of the business entity only; any remaining persons or entities whose contributions are attributable to the business entity (as listed on Page 1) have completed separate Certification and Disclosure forms which are included with this submittal.				
(D)	☐ I am certifying as an in	dividual or entity whose contributions are attributable to the business entity.			
I here	eby certify as follows:				

- 1. I have read the Information and Instructions accompanying this form prior to completing the certification on behalf of the business entity.
- 2. All reportable contributions made by or attributable to the business entity have been listed above.

- 3. The business entity has not knowingly solicited or made any contribution of money, pledge of contribution, including in-kind contributions, that would bar the award of a contract to the business entity unless otherwise disclosed above:
 - a) Within the 18 months immediately preceding the commencement of negotiations or submission of a proposal for the contract or agreement to:
 - (i) A candidate committee or election fund of any candidate for the public office of Governor or Lieutenant Governor or to a campaign committee or election fund of holder of public office of Governor or Lieutenant Governor; OR
 - (ii) Any State, County or Municipal political party committee; OR
 - (iii)Any Legisative Leadership committee.
 - b) During the term of office of the current Governor or Lieutenant Governor to:
 - (i) A candidate committee or election fund of a holder of the public office of Governor or Lieutenant Governor;
 - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.
 - c) Within the 18 months immediately preceding the last day of the sitting Governor or Lieutenant Governor's first term of office to:
 - (i) A candidate committee or election fund of the incumbent Governor or Lieutenant Governor; OR
 - (ii) Any State or County political party committee of the political party that nominated the sitting Governor or Lieutenant Governor in the last gubernatorial election.
- 4. During the term of the contract/agreement the business entity has a continuing responsibility to report, by submitting a new Certification and Disclosure form, any contribution it solicits or makes to:
 - (a) Any candidate committee or election fund of any candidate or holder of the public office of Governor or Lieutenant Governor; OR
 - (b) Any State, County or Municipal political party committee; OR
 - (c) Any Legislative Leadership committee.

The business entity further acknowledges that contributions solicited or made during the term of the contract/agreement may be determined to be a material breach of the contract/agreement.

5. During the two-year certification period the business entity will report any changes in its ownership structure (including the appointment of an officer within a corporation) by submitting a new Certification and Disclosure form indicating the new owner(s) and reporting said owner(s) contributions.

are willfully false, I may be subject to punishment.					
Signed Name	Print Name				
Title/Position	Date				

The stiff that the formation of the statement in Ports 1, 2 and 2 and the statement in the

Procedure for Submitting Form(s)

The contracting State Agency should submit this form to the Chapter 51 Review Unit when it has been required as part of a contracting process. The contracting State Agency should submit a copy of the completed and signed form(s), to the Chapter 51 Unit and retain the original for their records.

The business entity should return this form to the contracting State Agency. The business entity can submit this form directly to the Chapter 51 Review Unit only when it -

- Is approaching its two-year certification expiration date and wishes to renew certification;
- · Had a change in its ownership structure; OR
- Made any contributions during the period in which its last two-year certification was in effect, or during the term of a contract with a State Agency.

Forms should be submitted either electronically to:cd134@treas.nj.gov , or regular mail at: Chapter 51 Review Unit, P.O. Box 230, 33 West State Street, Trenton, NJ 08625.



CONTRACT #:

STATE OF NEW JERSEY **DEPARTMENT OF THE TREASURY DIVISION OF PURCHASE AND PROPERTY**

33 WEST STATE STREET, P.O. BOX 0230 TRENTON, NEW JERSEY 08625-0230

VENDOR/BIDDER CERTIFICATION AND POLITICAL CONTRIBUTION DISCLOSURE FORM PUBLIC LAW 2005, CHAPTER 271

At least ten (10) days <u>prior</u> to entering into the above-referenced Contract, the Vendor/Bidder must complete this Certification and

VENDOR/BIDDER:

Attach additional sheets if necessary CERTIFICAT I, the undersigned, certify that I am authorized to execute this certification and any attachments hereto, to the best of my knowledge Jersey is relying on the information contained herein, and that the Vene this certification through the completion of any contract(s) with the information contained herein; that I am aware that it is a criminal officertification. If I do so, I will be subject to criminal prosecution und agreement(s) with the State, permitting the State to declare any contractors. Signature Print Name and Title	ication on behalf of are true and complete dor/Bidder is under a State to notify the S ense to make a false der the law, and it w	the Vendor/Bidd . I acknowledge continuing oblig tate in writing of statement or mis	that the State of New ation from the date of of any changes to the srepresentation in this naterial breach of my
CERTIFICAT I, the undersigned, certify that I am authorized to execute this certification and any attachments hereto, to the best of my knowledge of Jersey is relying on the information contained herein, and that the Venethis certification through the completion of any contract(s) with the information contained herein; that I am aware that it is a criminal officertification. If I do so, I will be subject to criminal prosecution und agreement(s) with the State, permitting the State to declare any contractors.	ication on behalf of are true and complete dor/Bidder is under a State to notify the Sense to make a false der the law, and it w (s) resulting from this	the Vendor/Bidd . I acknowledge continuing oblig tate in writing of statement or mis	that the State of New ation from the date of of any changes to the srepresentation in this naterial breach of my
I, the undersigned, certify that I am authorized to execute this certification and any attachments hereto, to the best of my knowledge. Jersey is relying on the information contained herein, and that the Venethis certification through the completion of any contract(s) with the information contained herein; that I am aware that it is a criminal officertification. If I do so, I will be subject to criminal prosecution understanding the contract of the contract of the certification.	ication on behalf of are true and complete dor/Bidder is under a State to notify the S ense to make a false der the law, and it w	the Vendor/Bidd . I acknowledge continuing oblig tate in writing of statement or mis	that the State of New ation from the date of of any changes to the srepresentation in this naterial breach of my
Attach additional sheets if necessary			
		Ф	
		\$	
		\$	
Indicate "NONE" if no Reportable Contribution was made.		I	
Name and Address of Committee to which a Reportable Contribution was made	Date of Reportable Contribution	Amount of Reportable Contribution	Contributor's Name
"Reportable Contributions" are those contributions that are required to be Contributions and Expenditures Reporting Act," P.L. 1973, c.83 (C.19 N.J.A.C. 19:25-10.1 et seq. As of January 1, 2005, contributions in "reportable."	2:44A-1 et seq.), and n excess of \$300 du	implementing reg ring a reporting	gulations set forth at period are deemed
The Vendor/Bidder is required to disclose Reportable Contributions by: the Vendor/Bidder itself; all persons or other business entities owning or controlling more than 10% of the profits of the Vendor/Bidder or more than 10% of the stock of the Vendor/Bidder, if the Vendor/Bidder is a corporation for profit; a spouse or child living with a natural person that is a Vendor/Bidder; all of the principals, partners, officers or directors of the Vendor/Contractor and all of their spouses; any subsidiaries directly or indirectly controlled by the Vendor/Bidder; and any political organization organized under section 527 of the Internal Revenue Code that is directly or indirectly controlled by the Vendor/Bidder, other than a candidate committee, election fund, or political party committee.			
DISCLOSURE The following is the required Vendor/Bidder Disclosure of all Reportable Contributions made in the twelve (12) months prior to and including the date of signing of this Certification and Disclosure to: (i) any State, county, or municipal committee of a political party, legislative leadership committee, candidate committee of a candidate for, or holder of, a State elective office, or (ii) any entity that is also defined as a "continuing political committee" under N.J.S.A. 19:44A-3(n) and N.J.A.C. 19:25-1.			
NOTE that the disclosure requirements under Public Law 2005, Chapter 271 are separate and different from the disclosure requirements under Public Law 2005, Chapter 51 (formerly Executive Order 134). Although no Vendor/Bidder will be precluded from entering into a contract by any information submitted on this form, a Vendor's/Bidder's failure to fully, accurately and ruthfully complete this form and submit it to the appropriate State agency may result in the imposition of fines by the New Jersey Election Law Enforcement Commission.			

DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM



STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND PROPERTY
33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW JERSEY 08625-0230

BID SOLICITATION # AND TITLE:
VENDOR/BIDDER NAME:
Pursuant to N.J.S.A. 52:32-57, et seq. (P.L. 2012, c.25 and P.L. 2021, c.4) any person or entity that submits a bid or proposator otherwise proposes to enter into or renew a contract must certify that neither the person nor entity, nor any of its parents subsidiaries, or affiliates, is identified on the New Jersey Department of the Treasury's Chapter 25 List as a person or entity engaged in investment activities in Iran. The Chapter 25 list is found on the Division's website a https://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf. Vendors/Bidders must review this list prior to completing the below certification. If the Director of the Division of Purchase and Property finds a person or entity to be in violation of the 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 of suspension of the party.
CHECK THE APPROPRIATE BOX
I certify, pursuant to N.J.S.A. 52:32-57, et seq. (P.L. 2012, c.25 and P.L. 2021, c.4), that neither the Vendor/Bidder listed above nor any of its parents, subsidiaries, or affiliates is listed on the New Jersey Department of the Treasury's Chapter 25 List of entities determined to be engaged in prohibited activities in Iran.
I am unable to certify as above because the Vendor/Bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the New Jersey Department of the Treasury's Chapter 25 List. I will provide a detailed, accurate and precise description of the activities of the Vendor/Bidder, or one of its parents, subsidiaries or affiliates, has engaged in regarding investment activities in Iran by completing the information requested below. Entity Engaged in Investment Activities Relationship to Vendor/ Bidder
Duration of Engagement Anticipated Cessation Date Attach Additional Sheets If Necessary.
<u>CERTIFICATION</u>
I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor/Bidder, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Vendor/Bidder is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State 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 of misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitut a material breach of my agreement(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.
Signature Date
Print Name and Title

FEDERAL NON-DEBARMENT CERTIFICATION

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

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

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

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

<u>CERTIFICATION OF NON-DEBARMENT</u> <u>FOR FEDERAL GOVERNMENT CONTRACTS</u>

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 INFORM	ATION			
	Individual or					
	Organization Name					
	Address of Individu	al				
	or Organization					
	DUNS Code					
	(if applicable)					
	CAGE Code					
	(if applicable)					
	Chec	ek the box that represents the type of b	usiness o	rganization:		
Г	□Cala Dranniatanahin	(alrin Danta III and IV) Non Duafit Com	anation (alsin Douta III and IV		
L		(skip Parts III and IV) □Non-Profit Corp	ì	•		
	□For-Profit Corpo	ration (any type) □Limited Liability Con	mpany (L	LC) □Partnership		
	□Limite	d Partnership	Partnershi	p (LLP)		
	□Other (be spe	ecific):				
	\ 1	, <u> </u>				
	PART II – CE	RTIFICATION OF NON-DEBARMEN	NT: Indiv	vidual or Organization		
		the individual or organization listed a				
	federal government	from contracting with a federal agency	. I furth	er acknowledge: that I am		
		ute this certification on behalf of the				
	Borough of Wood	eliff Lake is relying on the information co	ontained l	nerein and that I am under a		
		on from the date of this certification through				
	municipality to notify the municipality 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 m	naterial breach of my agreement(s) wit	th the m	unicipality, permitting the		
	municipality to dec	lare any contract(s) resulting from this ce	rtification	n void and unenforceable.		
	Full Name		Title:			
	(Print):		11110.			
			+_			
	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)				
	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			
	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 i	f no Business entity is listed in Section A above)			
	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of the voting stock of the organization's parent entity, or of the partner in the partnership who owns more than 50 percent interest in the organization's parent entity, or of the member of the limited liability company owning more than 50 percent interest in organization's parent entity, as the case may be.			
Stockholder/Partner/Member Owning Greater Than 50 Percent of Parent Entity				
Home Address (for Individual) or Business Address				
	OR			
	No one stockholder in the parent entity corporation owns more than 50 percent of its voting stock, no partner in the parent entity partnership owns more than 50 percent interest therein, or no member in the parent entity limited liability company owns more than 50 percent interest therein, as the case may be.			
Section C – Part III Certification				

I hereby certify that no	individual or or	ganizatio	n that i	is deb	arred by	the fec	deral gove	rnment f	rom
contracting with a federa	al agency owns	greater th	an 50 p	ercen	t of the C)rgani	zation lis	ted abov	e in
Part I or, if appl	licable, owns	greater	than	50	percent	of	a parent	entity	of
				I furt	her ackno	wledg	e: that I a	m authori	ized
to execute this certification	ation on behalf	of the	above-1	name	d organiz	ation;	that the	Borough	of
Woodcliff Lake is rely	ring on the info	rmation c	ontaine	ed her	ein and t	hat I a	am under	a continu	iing
obligation from the date	of this certifica	tion throu	ugh the	date	of contrac	et awai	rd the mu	nicipalit	y to
notify the municipality	in writing of a	ıny chang	ges to t	he in	formation	conta	ined here	in; 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 municipality, permitting the municipality to declare any									
contract(s) resulting from this certification void and unenforceable.									
Full Name (Print):					Title:				
					1100.				
Signature:					Date:				

Part IV – CERTIFICATION OF NON-DEBARMENT: Contractor – Controlled Entities					
	S	ection A			
	Below is the name and address of the corporation(s) in which the				
	Organization listed in	n Part I owns more than 50 percent of voting			
	stock, or of the partners	ship(s) in which the Organization listed in Part I			
	owns more than 50 pe	ercent interest therein, or of the limited liability			
	company or companies in which the Organization listed above in Pa				
	owns more than 50 perc	cent interest therein, as the case may be.			
Name of	Business Entity	Business Address			
Add additional sl	neets if necessary				
7 Ida adamonar si	icets if necessary	OR			
	O .	ed above in Part I does not own greater than 50			
	percent of the voting s	tock in any corporation and does not own greater			
	than 50 percent inter	est in any partnership or any limited liability			
company.					

Section E	Section B (skip if no business entities are listed in Section A of Part IV)				
	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 Busines Entity Listed in		Bus	iness Address		
Add additional Sh	neets if necessary				
		OR			
	No entity listed in Part	III A owns	greater t	han 50 percent of the voting	
				an 50 percent interest in any	
	partnership or limited l				
Section C – Part IV Certification					
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					
		_			
		<u> </u>	-	the federal government from	
_	_ ,	_		am authorized to execute this Borough of Woodcliff Lake	
I .		•		a continuing obligation from	
-				by the municipality to notify	
I .					
	the municipality 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 municipality, permitting the municipality to					
I .	et(s) resulting from this ce	_			
Full Name			Title:		
(Print):			TILL.		
			1		
Signature:			Date:		



MACBRIDE PRINCIPLES FORM

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY - DIVISION OF PURCHASE AND PROPERTY
33 WEST STATE STREET, P.O. BOX 230 TRENTON, NEW JERSEY 08625-0230

BID SOLICITATION # AND TITLE:	
VENDOR/BIDDER NAME: VENDOR/BIDDER ADDRESS:	
VENDOR/BIDDER PHONE NUMBER: VENDOR/BIDDER EMAIL:	
the MacBride Principles and Northern Irel the certification below by checking one of that would otherwise be awarded a purcha may determine, in accordance with applica contract or agreement to another Vendor/E percent of the most advantageous bid. If the of this law, he/she shall take such action	onsible Vendor/Bidder is required to provide a certification in compliance with nd Act of 1989. Pursuant to N.J.S.A. 52:34-12, Vendor/Bidder must complete the two options listed below and signing where indicated. If a Vendor/Bidder se, contract or agreement does not complete the certification, then the Director ble law and rules, that it is in the best interest of the State to award the purchase, dder that has completed the certification and has submitted a bid within five (5). Director finds contractors to be in violation of the principles that are the subject s may be appropriate and provided by law, rule or contract, including but not ompliance, recovering damages, declaring the party in default and seeking
I, the undersigned, on behalf the Vendor/B	dder, certify pursuant to N.J.S.A. 52:34-12.2 that:
<u>(</u>	HECK THE APPROPRIATE BOX
The Vendor/Bidder has no busines	s operations in Northern Ireland; or
Ireland in accordance with the Ma of P.L. 1987, c. 177 (N.J.S.A. 52	all steps in good faith to conduct any business operations it has in Northern Bride principles of nondiscrimination in employment as set forth in section 2 (18A-89.5) and in conformance with the United Kingdom's Fair Employment I permit independent monitoring of its compliance with those principles.
information and any attachments hereto, to of New Jersey is relying on the information from the date of this certification through any changes to the information contained misrepresentation in this certification. If I of	ed to execute this certification on behalf of the Vendor/Bidder, that the foregoing the best of my knowledge are true and complete. I acknowledge that the State a contained herein, and that the Vendor/Bidder is under a continuing obligation he completion of any contract(s) with the State to notify the State in writing of the serie; that I am aware that it is a criminal offense to make a false statement or a so, I will be subject to criminal prosecution under the law, and it will constitute in the State, permitting the State to declare any contract(s) resulting from this
Signature	Date
Print Name and Title	

DPP Rev. 12.8.2020 Page 1 of 1



CERTIFICATION OF NON-INVOLVEMENT IN PROHIBITED ACTIVITIES IN RUSSIA OR BELARUS PURSUANT TO P.L.2022, c.3

CONTR	ACT / BID SOLICITATION TITLE		
CONTR	ACT / BID SOLICITATION No.		
	CHECK THE APPROPRIAT	TE BOX	
	I, the undersigned , am authorized by the person or entity se above, to certify that the Vendor/Bidder is not engaged in perm is defined in P.L.2022, c.3,1 section 1.e, except as permanents.	prohibited activities in Russia or Belarus as such	
	I understand that if this statement is willfully false, I may be section 1.d.	e subject to penalty, as set forth in P.L.2022, c.3,	
OR			
	I, the undersigned am unable to certify above because the contract identified above, or one of its parents, subsidiarie activities in Russia or Belarus. A detailed, accurate and pred	es, or affiliates may have engaged in prohibited	
	Failure to provide such description will result in the Quote being rendered as non-responsive, and the Department/Division will not be permitted to contract with such person or entity, and if a Quote is accepted contract is entered into without delivery of the certification, appropriate penalties, fines and/or sanctions will be assessed as provided by law.		
	Description of Prohibited Activity		
	Attach Additional Sheets If Necessary.		
engaging certification it is not en and shall	tify that the bidder is engaged in activities prohibited by P.L. in any prohibited activities and on or before the 90 th day on. If the bidder does not provide the updated certification or a ngaged in prohibited activities, the State shall not award the be required to terminate any contract(s) the business entity he date of P.L. 2022, c. 3.	after this certification, shall provide an updated t that time cannot certify on behalf of the entity that business entity any contracts, renew any contracts,	
Signatur	e of Authorized Representative	Date	
Delmá NI :	mo and Title of Authorized Depresentative		
riiil Na	me and Title of Authorized Representative		
Vendor I	Name		

¹ Engaged in prohibited activities in Russia or Belarus" means (1) companies in which the Government of Russia or Belarus has any direct equity share; (2) having any business operations commencing after the effective date of this act that involve contracts with or the provision of goods or services to the Government of Russia or Belarus; (3) being headquartered in Russia or having its principal place of business in Russia or Belarus, or (4) supporting, assisting or facilitating the Government of Russia or Belarus in their campaigns to invade the sovereign country of Ukraine, either through in-kind support or for profit.

SECTION 00500

STATE OF NEW JERSEY NEW JERSEY SPORTS & EXPOSITION AUTHORITY

CONTRACT for PROJECT CN-254

This Contract, effective on the latest date of signature at the last page, by and between the New Jersey Sports & Exposition Authority, One DeKorte Park Plaza, Lyndhurst, New Jersey, 07071, hereinafter called the NJSEA, the party of the first part, and:

hereinafter called the Contractor, the party of the second part.

WITNESSETH, that whereas the NJSEA intends to execute the Contract for NJSEA Meadowlands Arena Cooling Tower Motor Control Center Replacement hereinafter called the Project or the Work, in accordance with Specifications, and other Contract Documents.

1.0 PARTS OF CONTRACT:

- 1.1 The parties agree that the conditions contained in the following documents which comprise and are hereinafter called the Contract Documents are made part of this Contract and are binding on both parties as if all conditions contained in the Contract Documents were set forth in this Contract:
 - 00010 Advertisement for Bids
 - 00100 Instructions to Bidders
 - 00300 Bid
 - 00400 Bid Forms
 - 00500 Contract
 - 00700 General Conditions
 - 00800 Specific Project Requirements
 - 00900 Environmental Requirements
 - 01000 General Requirements
 - 02000 Technical Specifications
 - Photos and Drawings
 - Addenda
 - Change Orders

2.0 TIME FOR COMPLETION:

2.1 Work under this Contract shall be completed within 180 consecutive calendar days from the date specified from the Notice-To-Proceed

2.2 The Contractor shall pay to the NJSEA for each and every calendar day that they shall be in default in completing the work within the time stipulated, liquidated damages in the sum of five hundred (\$500) per day. Please note that there is no substantial completion for this work. All final submittals (as builts, subcontractor releases) as well as all work must be completed within the 180 days.+

WITNESSETH, that the said CONTRACTOR, for and in consideration of the payments specified hereinafter and agreed to be made by the NJSEA, hereby covenants and agrees to furnish and deliver all the materials and perform all the work required to be furnished in and about the described premises in strict and entire conformance with all of the Contract Documents.

3.0 SUBCONTRACTORS:

3.1 The Contractor agrees to bind every subcontractor by the terms of the Contract Documents. The Contract Documents shall not be construed as creating any contractual relations between any subcontractor and the NJSEA. Relations between the Contractor and subcontractors are further defined in the <u>GENERAL</u> CONDITIONS.

4.0 **WORK**:

4.1 The Contractor agrees to furnish all the necessary labor, materials, equipment, tools, and services necessary to perform and complete all work required for the construction of the Project, in strict compliance with the Contract Documents herein mentioned, which are hereby made a part of the Contract, including the following Addenda:

ADDENDUM No.	DATE

5.0 PRICES FOR WORK:

5.1 The NJSEA shall pay based on the prices in the bid, and the Contractor shall receive the prices stipulated in the bid as full compensation for everything furnished and performed by the Contractor under this Contract, including all work required but not specifically mentioned, and also for all loss or damage 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 the work, and for all risks of every description connected with the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of the work as herein specified, and for well and faithfully completing the work and the whole thereof, as herein provided.

6.0 PAYMENTS:

- 6.1 Payments will be made in accordance with the <u>GENERAL CONDITIONS</u>
- 6.2 In consideration of the covenants contained herein, the NJSEA hereby agrees to pay the CONTRACTOR for said work.

The cost for the Work of this Contract shall not exceed \$	
\$	
(Amount in Words)	

7.0 WAIVERS:

7.1 Neither the inspection by the NJSEA nor any of its agents, nor any orders, measurements of certificate by the Project Representative, nor any order by the NJSEA for the payment of money nor payment for, nor acceptance of, the whole nor any part of the work by the NJSEA nor any extension of time nor any possession taken by the NJSEA or its employees, shall operate as a waiver of any provision of this Contract, or of any power herein reserved to the NJSEA, or any right to damages herein provided, nor shall any waiver of any breach of this Contract be held to be a waiver of any other or subsequent breach. Any remedy provided in this Contract shall be taken and construed as cumulative, that is, in addition to each and every other remedy herein provided, and in addition to all other suits, actions, or legal proceedings, the NJSEA shall also be entitled as of right to writ of injunction against any breach of any of the provisions of this Contract.

8.0 INDEMNIFICATION:

8.1 The Contractor shall assume all risk of, and responsibility for, and agrees to indemnify, defend, and save harmless the NJSEA, the project Representative and their employees from and against any and all claims, demands, suits, actions, recoveries, judgments and costs and expenses in connection therewith on account of the loss of life, property, injury, or damage to the person, body or property of any person or persons whatsoever, which shall arise from or result directly or indirectly from the work and/or materials supplied under this Contract. This indemnification obligation is not limited by, but is in addition to, the insurance obligations contained in this Contract.

9.0 PROJECT REPRESENTATIVE'S STATUS DURING THE PROJECT:

9.1 All work under this Contract shall be done under the observation of the Project Representative. The Project Representative shall decide any and all questions that may arise as to the quality and acceptability of materials furnished, work performed, rate of progress of work, interpretation of Plans and Specifications, and

all questions as to the acceptable fulfillment of the Contract on the part of the Contractor.

- 9.2 The Project Representative shall be an employee or agent of NJSEA. In addition, the Project Representative may designate additional individuals to act on his/her behalf on a temporary basis, depending on the type of work occurring at the Project Site. At all times, these individuals shall have the same responsibilities and authority as the Project Representative. In addition, throughout the Contract Documents, the term "Project Representative" refers to the Project Representative and his/her designates.
- 9.3 The Project Representative shall make visits to the site to observe the progress and quality of the executed Work and to determine if it is proceeding in accordance with the Contract Documents. On the basis of such visits and observations, the Project Representative will keep the NJSEA informed of the quality and progress of the Work.
- 9.4 The Project Representative may authorize minor variations in the Work, which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. If the Contractor believes that a variation issued as minor justifies an increase in the Contract Price and/or an extension of the Contract Time, the Contractor may make a claim therefore.
- 9.5 The Project Representative may reject Work believed to be defective. The Project Representative also has the authority to require special inspection and testing of the Work, whether or not it has been fabricated, installed or completed.
- 9.6 The Project Representative shall not be responsible for the means, methods, techniques, sequences or procedures of the Contractor's performance of the Work, or the safety programs and precautions incident thereto. The Project Representative will not be responsible for the failure of the Contractor to furnish or perform the Work in accordance with the Contract Documents.
- 9.7 The Project Representative will not be responsible for acts of omission by the Contractor or any of his subcontractors or suppliers furnishing or performing any of the Work.

10.0 CONTRACTOR'S BANKRUPTCY:

10.1 In the event of bankruptcy of the Contractor, the NJSEA shall use the Performance and Payment Bond to complete the project. The Performance and Payment Bond shall specifically include coverage and protection against bankruptcy of the Contractor.

11.0 SUCCESSORS AND ASSIGNS:

11.1 This Contract and all of the covenants hereof shall inure to the benefit of and be binding upon the NJSEA and the Contractor respectively and partners, successors, assigns and legal representatives. Neither the NJSEA nor the Contractor shall have the right to assign, transfer or sublet his interests or obligations hereunder without notice to and written consent of the other party.

IN WITNESS THEREOF,	
and the NJSEA have executed adjacent to their respective significant.	d this Contract at the place and on the date immediately natures.
, ,	,
FOR THE CONTRACTOR:	
(Witness)	(Typed Name of Firm)
(Date)	(Signature of Bidder)
	(Typed Name of Bidder)
EOD THE NICE A.	(Typed Title of Bidder)
FOR THE NJSEA:	
(Witness)	Vincent Prieto, President and Chief Executive Officer
(Date)	

SECTION 00700 GENERAL CONDITIONS

1.0 **DEFINITIONS**:

1.1 Whenever used in these Contract Documents, the following terms and abbreviations have the meanings indicated, which are applicable to both the singular and plural thereof:

<u>Addendum(a)</u> - Written instructions issued prior to the opening of Bids which clarify, correct or change the bidding requirements or the Contract Documents.

<u>Bid</u> - The proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

<u>Bidder</u> - Any corporation, partnership, or individual who submits a bid for the Work.

<u>Change Order</u> - A document recommended by the Project Representative, signed by the Contractor and the NJSEA, authorizing an addition, deletion or revision in the Work, an adjustment in the Contract Price, Time, and/or Conditions, and issued on or after the Effective Date of the Contract.

<u>Contract</u> - The written Contract between the NJSEA and the Contractor covering the Work to be performed. Other Contract Documents are attached to it and made a part thereof, as provided in the Contract.

<u>Contractor</u> - The company to whom the Contract has been awarded and who is responsible for performing the Work.

<u>Day</u> - A calendar period of twenty-four (24) hours, beginning with midnight and ending just before the following midnight, shall constitute a day. When unmodified, it shall mean a calendar day, and not a working day.

<u>NJSEA</u> - The New Jersey Sports & Exposition Authority.

NJDEP or DEP - New Jersey Department of Environmental Protection

<u>Project</u> - The total construction or obligation under the Contract, of which the Work to be provided may be the whole or a part, as indicated elsewhere in the Contract Documents.

<u>Project Representative</u> - The person, firm, or corporation named by the NJSEA to be its representative for the Project.

<u>Successful Bidder</u> - The Contractor, the lowest qualified, responsible bidder to whom the NJSEA awarded the Contract.

<u>Work</u> - The entire completed construction, or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor, and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

Working Day - A day on which the NJSEA is open for business.

SCHEDULED HOLIDAYS

Friday, December 31, 2021 (Observed) New Year's Day

Monday, January 17, 2022 Martin Luther King, Jr. Day

Monday, February 21, 2022 President's Day
Friday, April 15, 2022 Good Friday
Monday, May 30, 2022 Memorial Day

Friday, June 17, 2022 (Observed)

Juneteenth

Monday, July 4, 2022 Independence Day

Monday, September 5, 2022

Monday, October 10, 2022

Tuesday, November 8, 2022

Friday, November 11, 2022

Thursday, November 24, 2022

Monday, December 26, 2022 (Observed)

Labor Day

Columbus Day

Election Day

Veteran's Day

Thanksgiving Day

Christmas Day

2.0 PRELIMINARY MATTERS:

- 2.1 The Contractor shall deliver the executed Contracts bonds, insurance certificates, and other documents as the Contractor may be required to furnish at the times required by the Contract Documents.
- 2.2 The NJSEA shall furnish the Contractor a maximum of six copies of the Contract Documents for his use in the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.
- 2.3 The Contract Time will commence to run on the starting date given in the Notice-To-Proceed. A Notice-To-Proceed may be issued any time within thirty (30) days after the Contract is fully executed.
- 2.4 The Contractor shall start to perform the Work on the date when the Contract Time commences to run. No Work shall be performed at the site prior to that date.

- 2.5 Before undertaking each part of the Work, the Contractor shall carefully study and compare the Contract Documents and the field conditions, checking and verifying pertinent figures shown in the Documents with applicable field measurements. The Contractor shall promptly report in writing to the Project Representative any conflict, error, or discrepancy that he may discover; and shall obtain a written interpretation or clarification from the Project Representative before proceeding with any Work affected thereby. However, the Contractor shall not be liable to the NJSEA or the Project Representative for failure to report any conflict, error, or discrepancy in the Contract Documents; unless the Contractor had actual knowledge, or should reasonably have known thereof.
- 2.6 The progress schedule will be accepted by the Project Representative as providing an orderly progression of the Work to completion, and a workable arrangement for reviewing and processing the required submittals. Such acceptance will not impose on the Project Representative any responsibility for the sequencing, scheduling, or progress of the Work; or relieve the Contractor of his full responsibility therefore.
- 2.7 Except where the Contract Documents specifically allow the reuse of existing materials, all materials and equipment provided by the Contractor shall be new and of good quality. They shall be applied, erected, installed, connected, tested, cleaned, and conditioned in accordance with the instructions of the applicable suppliers, unless otherwise specified in the Contract Documents.
- 2.8 Whenever materials or equipment are specified by using the name of a particular manufacturer, supplier, or proprietary item; the naming is intended to establish the type, function, and quality required. Unless the name is followed by words indicating no substitution will be permitted, substitute materials or equipment may be acceptable. If the Contractor wishes to furnish or use substitute materials or equipment, he shall make a written application to the Project Representative for acceptance thereof; certifying that the proposed substitutes will perform their functions adequately and achieve the results desired by the Contract Documents. The application shall also state that the evaluation and acceptance of the proposed substitutes will not prejudice the Contractor's achievement of on-time completion of the Work; regardless of any needed changes to the Contract Documents, or any other problems directly or indirectly associated with acceptance of the substitutes (including payment of any license fee or royalty). All variations from the Contract Documents must be identified in the application, along with the availability of spare parts, maintenance, repair, and replacement services. The application shall also contain an itemized list of all additional direct and indirect costs due to the acceptance of such substitutes. All of the above will be considered by the Project Representative in evaluating each

- application. The Project Representative may require the Contractor to furnish additional data about the proposed substitutes at the Contractor's expense.
- 2.9 Except in connection with safety or protection of the Work, property, or persons at the site or adjacent thereto; all work shall be performed during regular working hours. The Contractor shall not permit overtime work, or the performance of work on Saturdays, Sundays, or any NJSEA holidays without written approval from the NJSEA.
- 2.10 Although it is understood that the Contractor must be permitted to select the equipment that will provide him with the most economical rate of production, and to devise his work methods and schedules to expedite the completion of the Work; it is not intended that the Contractor will be permitted to use equipment or methods which may damage any part of the site or nearby properties, or conflict with any state or local laws.
- 2.11 The duties and obligations imposed by this Section (and the rights and remedies available hereunder to the parties hereto) are in addition to any rights and remedies available to the parties; whether imposed or available by applicable regulations or laws, or by special warranties, guarantees, or other provisions of the Contract Documents. This Section is not to be construed as limiting in any way the other rights and remedies outlined above. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply. All representations, warranties, and guarantees made in the Contract Documents will survive completion, final payment, and termination of the Contract.

3.0 CONTRACT DOCUMENTS: INTENT, AMENDMENT, AND RE-USE:

- 3.1 The Contract Documents comprise the entire Contract between the NJSEA and the Contractor concerning the Work. The Contract Documents are complementary (what is called for by one is as binding as if called for by all). The Contract Documents will be construed in accordance with the law of the place of the Project.
- 3.2 It is the intent of the Contract Documents to describe a functionally complete Project to be performed in accordance with the Contract Documents. Any Work, materials, or equipment that may reasonably be inferred as being necessary to produce the intended result shall be supplied, whether or not specifically mentioned in the Documents. When words or phrases having a well-known technical or trade meaning are used to describe work, materials, or equipment; such words shall be interpreted in accordance with that meaning. Clarifications

and interpretations of the Contract Documents shall be issued by the Project Representative as needed, in accordance with paragraph 8.3.

- 3.3 Reference to standards, specifications, manuals, and/or codes of any technical society, organization, or association, or to the laws or regulations of any governmental authority (whether such reference be specific or implied), shall mean the latest standards, specifications, manuals, codes, laws, or regulations in effect at the time of bid opening, unless specifically stated otherwise in the Contract Documents. If the Contractor finds a conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any of the above references, during the performance of the Work; he shall immediately report it to the Project Representative in writing. Before proceeding with affected work, the Contractor shall obtain a written interpretation or clarification from the Project Representative (except for an emergency authorized in accordance with paragraph 6.16). The Contractor shall not be liable to the NJSEA or the Project Representative for failure to report any such conflict, error, ambiguity, or discrepancy; unless he knew or should reasonably have known thereof.
- 3.4 Except as otherwise specifically stated therein, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
 - A. The provision of any such standard, specification, manual or code.
 - B. The provision of any such laws or regulations applicable to the performance of the Work (unless such an interpretation would result in a violation of such law or regulation).
- 3.5 No provision of any such standard, specification, manual or code shall change the duties and responsibilities of the NJSEA, the Contractor, or the Project Representative, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision shall be effective to assign to the NJSEA, the Project Representative, or any of the Project Representative's consultants, agents, or employees any duty or authority to supervise or direct the furnishing or performance of the Work, or any duty or authority to undertake responsibilities inconsistent with any other provision of the Contract Documents.
- 3.6 Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as approved" or terms of like effect or import, or the adjectives "reasonable," "suitable," "acceptable," "proper," " satisfactory" or adjectives of like effect or import, are used to describe a requirement, direction, review, or judgment of the Project Representative regarding the Work; it is

intended that such requirement, direction, review or judgment will be solely to generally evaluate the completed Work for compliance with the Contract Documents and conformance with the design concept of the completed Project. The use of any such terms or adjectives shall not assign to the Project Representative any duty or authority to supervise or direct the furnishing or performance of the Work; or any duty or authority to undertake responsibilities contrary to any other provision of the Contract Documents.

- 3.7 The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work, or to modify the terms and conditions thereof, by a Change Order.
- 3.8 Neither the Contractor, nor any subcontractor, supplier, organization, or other person performing or furnishing any of the Work, shall have or acquire any title to, or ownership rights in, any of the Contract Documents or copies thereof. They shall not reuse them on extensions of this, or any other project without the written consent of the NJSEA and the Project Representative, and without the specific written verification or adaptation by the Project Representative.

4.0 AVAILABILITY OF LANDS, REFERENCE POINTS, SUBSURFACE AND PHYSICAL CONDITIONS:

- 4.1 The NJSEA shall furnish, as indicated in the Contract Documents, the lands upon which the Work shall be performed, rights-of-way and easements for access thereto, and such other lands designated for the use of the Contractor. Easements for permanent structures or permanent changes to the existing facilities will be obtained and paid for by the NJSEA, unless otherwise noted in the Contract Documents. The Contractor shall provide for all additional lands, and access thereto, that may be required for any temporary construction facilities, or the storage of materials and equipment.
- 4.2 The NJSEA shall furnish, as indicated on the Contract Drawings, reference points so the Contractor can properly proceed with the Work. The Contractor shall be responsible for laying out the Work. The Contractor shall protect and preserve the established reference points and shall not change or relocate the reference points without written approval of the NJSEA. The Contractor shall report to the Project Representative whenever any reference point is lost, damaged or destroyed and shall pay for the reestablishment of all lost, damaged or destroyed reference points. The reference points shall be reestablished by a surveyor licensed in the State of New Jersey.
- 4.3 The information shown and/or described in the Contract Documents with respect to existing underground facilities at or contiguous to the site is based on the best available data. The NJSEA and the Project Representative shall not be responsible for the accuracy or completeness of any such information. The

Contractor shall review and check all such information, and determine the exact location of all underground facilities in the field. The Contractor shall be responsible for the safety and protection of underground facilities during construction, and shall repair any damage thereto resulting from the Work.

- 4.4 If an underground facility, which was not shown in the Contract Documents, is uncovered or revealed at or contiguous to the site; the Contractor shall promptly identify the owner of the facility, and give written notice to the owner of that facility, the NJSEA, and the Project Representative. The Contractor will cease work in the area, except in the case of an emergency. The Project Representative shall promptly review the location of the underground facility in relation to the contractual work in the area, and determine what change, if any, is required to the Contract Documents.
- 4.5 If the Contractor believes that any physical condition uncovered or revealed at the site differs materially from that shown in the Contract Documents; he shall immediately notify the Project Representative in writing. Before proceeding with affected work, the Contractor shall obtain a written interpretation or clarification from the Project Representative.
- 4.6 The Project Representative will review the Contractor's findings, determine the necessity of obtaining any additional explorations or tests with respect thereto; and advise the NJSEA and the Contractor of the Project Representative's conclusions in writing within a reasonable amount of time.
- 4.7 If the Project Representative concludes that there is a material difference between the conditions shown in the Contract Documents and those in the field; a Change Order will be issued to document the increase or decrease in the Contract Price, and/or an extension or reduction of the Contract Time, attributable to the difference in the conditions.

5.0 BONDS AND INSURANCE:

5.1 Refer to the SPECIFIC PROJECT REQUIREMENTS for information regarding bonds and insurance.

6.0 CONTRACTOR'S RESPONSIBILITIES:

- 6.1 The Contractor shall be responsible for obtaining and paying all construction permits and licenses; and shall pay all inspection fees associated with the prosecution of the Work. The Contractor shall also schedule and pay for all utility connections required for the Work.
- 6.2 The Contractor shall perform the Work in accordance with the Contract Documents. The Contractor shall be solely responsible for the means, methods,

techniques, sequences, and procedures of his work. The Contractor shall be responsible for the finished Work complying accurately with the Contract Documents.

- 6.3 The Contractor shall provide someone on staff that is available to the NJSEA to resolve contractual items that the foreman cannot, for example, scheduling of equipment or crew. There is no separate pay for any other personnel.
- 6.4 The Contractor shall be responsible for providing competent, suitably qualified personnel to survey, layout, and perform the Work required by the Contract Documents. The Contractor shall maintain good discipline and order at the site. The Contractor shall be responsible for removing any person from the site who appears to be incompetent, unfaithful, disorderly, or otherwise unsatisfactory. Said person shall not again be employed at the site without the written consent of the NJSEA.
- 6.5 The Contractor shall be responsible for compliance with the provisions of the Contract Work Hours and Safety Standards Act, Public Law 87-581.
- 6.6 The Contractor and his subcontractors shall give preference in the hiring of workers to qualified local residents, with first preference being given to citizens of the United States who have served in the armed forces of the United States, and have been honorably discharged and from active duty.
- 6.7 The Contractor shall be responsible for the proper and timely submittal of the required documents for all equipment and materials so as to not delay the progress of the Work. The Contractor shall determine delivery availability for all items to be furnished and shall order all long-lead items as soon as possible after the award of the contract, to ensure delivery in time to complete the work in the time available.
- 6.8 The Contractor shall be fully responsible to the NJSEA and the Project Representative for all acts and omissions of his subcontractors, suppliers, organizations, and other persons performing or furnishing any of the Work. Nothing in the Contract Documents shall create any contractual relationship between the NJSEA or the Project Representative, and any such subcontractor, supplier, organization, or other person.
- 6.9 The Contractor shall give all notices and comply with all laws and regulations applicable to furnishing and performing the Work. If the Contractor performs any work that is contrary to such laws and/or regulations, he shall be responsible for all costs arising there from. If the Contractor observes that the Contract Documents are at variance with these laws and/or regulations, he shall

- promptly notify the Project Representative, in writing. Any necessary changes to the Work will be authorized by a Change Order.
- 6.10 If the Contractor elects to remove, replace, or relocate any poles, utilities, or structures during the performance of the Work; he shall be responsible for making all the necessary arrangements and obtaining all the necessary permits and approvals without the involvement of the NJSEA or the Project Representative.
- 6.11 The Contractor shall be responsible for all damages resulting from the performance of the Work. Should any claim be made against the NJSEA and/or the Project Representative as a result of the performance of the Work; the Contractor shall attempt to promptly settle with such other party.
- 6.12 The Contractor shall not load any part of the Work in a manner that will endanger the Work. The Contractor shall be responsible for damage caused to the Work and to adjacent property, subject to said dangerous stresses or pressures.
- 6.13 The Contractor shall be responsible for initiating, maintaining, and supervising all safety programs and precautions regarding the Work. The Contractor shall comply with all applicable laws and regulations for the safety and protection of persons and property; and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor shall remedy all damage, injury, or loss to any persons or property caused by the Contractor, or any of his subcontractors, suppliers, organizations, or other persons directly or indirectly employed by any of them. The Contractor's duties and responsibilities for safety and protection shall continue until the Project Representative has issued a notice to the NJSEA and the Contractor that the Work has been completed and is acceptable.
- 6.14 The Contractor shall be responsible for repairing any damage caused by his operations that could affect public health and safety, within four hours; or the NJSEA may have the repairs made by others at the expense of the Contractor. The Contractor shall repair all other damage expeditiously. Until such time as said other damage is repaired by the Contractor and approved by the NJSEA, twice the amount of the Project Representative's cost estimate for the repairs will be withheld from the Contractor's progress payment.
- 6.15 In the event of an emergency affecting the safety or protection of persons, the Work, the site, or adjacent property; the Contractor shall be responsible to act to prevent threatened damage, injury, or loss without special instruction or approval from the Project Representative or the NJSEA.

- 6.16 The Contractor and his subcontractors shall protect the Work against any damage caused by the weather. If the Project Representative determines that any portion of Work has been damaged or injured by a failure on the part of the Contractor or his subcontractors to protect the Work; it shall be repaired, or removed and replaced, at the expense of the Contractor.
- 6.17 The Contractor shall be responsible for proceeding with the Work and adhering to the progress schedule during all disputes or disagreements with the NJSEA. No Work shall be delayed or postponed pending resolution of any disputes or disagreements.
- 6.18 If the Work is defective, or the Contractor fails to supply sufficiently skilled workers, suitable materials or equipment, or fails to furnish or perform the Work in a manner, which will guarantee conformance with the Contract Documents; the NJSEA or the Project Representative may order the Contractor to stop the Work until the cause for such order has been eliminated. However, this right of the NJSEA and the Project Representative to stop the Work shall not give rise to any duty on the part of either to exercise this right for the benefit of the Contractor, or any other party.
- 6.19 The Contractor and his subcontractors shall comply with the New Jersey Prevailing Wage Act and all amendments thereto. This Act is hereby made part of these Contract Documents as if it were included herein, in its entirety.
- 6.20 The Contractor shall maintain books, records, and other documents pertinent to the performance of the Work, in accordance with accepted accounting procedures and practices. The New Jersey Department of Labor, the NJSEA, and/or any of their duly authorized representatives shall have access to such books, records, and other documents for the purpose of inspection, auditing, and copying. The Contractor shall provide proper facilities for such access and inspection, and agrees to the disclosure of all information and reports resulting from access of the above records to any of the above agencies. Records shall be maintained and made available until three years from the date of final payment for the Project. Records which relate to any dispute, appeal, litigation, or settlement of claims arising out of such performance (or costs or items to which an audit exception has been taken); shall be maintained and made available until three years after the date of the resolution of each dispute, appeal, litigation, claim, or exception.
- 6.21 The Contractor shall constantly give his personal attention to the faithful prosecution of the Work; and shall keep the Work under his personal control. The Contractor shall not sublet the Work as a whole or substantial part of the

whole, without the previous written consent of the NJSEA. The Contractor shall not assign any of the Work, or any monies payable under this Contract (or his claim thereto), without the written consent of the NJSEA and the surety on the bond.

- 6.22 The Contractor shall pay to the NJSEA, and the NJSEA shall have the right to deduct the full amount of all expenses, losses, damages and costs from all monies due, or to become due, the Contractor as detailed in the SPECIFIC PROJECT REQUIREMENTS.
- 6.23 The Contractor shall take all necessary precautions to protect and preserve existing utilities, and improvements during all phases of the Work. The Contractor shall be solely responsible for any damage or disturbance of any existing utilities and improvements, and shall restore them to their original condition, at no cost to the NJSEA.
- 6.24 While performing the Work, the Contractor shall not encumber the premises with materials or equipment; and shall keep the premises free from accumulations of waste materials. At the completion of the Work, the Contractor shall remove all waste and surplus materials, tools, equipment, and machinery; and shall restore to original condition all property not designated for alteration by the Contract Documents.
- 6.25 The Contractor warrants and guarantees to the NJSEA and the Project Representative that all Work will be performed in accordance with the Contract Documents; and that the completed Project will not be defectively or improperly installed. The Contractor agrees that all work improperly performed shall be remedied, all defective Work shall be repaired or replaced, and all improperly installed Work shall be reinstalled correctly in accordance with the Contract Documents.

7.0 OTHER WORK:

- 7.1 The NJSEA may perform other work by its own forces, have other work performed by utility owners, or let other direct contracts for other work at the site.
- 7.2 The Contractor shall afford the NJSEA, each utility owner, and other contractors, a reasonable opportunity for the introduction and storage of materials and equipment, and proper and safe access to the site for execution of such work. The Contractor shall properly connect and coordinate the work of others with the Work, as necessary. The Contractor shall not endanger any work of others; and will only alter the work of others with the written consent of the Project Representative and those who performed the work.

8.0 PROJECT REPRESENTATIVE'S STATUS DURING THE PROJECT:

- 8.1 The Project Representative shall be the NJSEA's representative for this Project. The Project Representative shall be the initial interpreter of the Contract Document requirements and judge of the acceptability of the Work thereunder. Any claims, disputes, and/or other matters relating to the above, or to changes in the Contract Price or Time, will initially be referred to the Project Representative, in writing. The Project Representative will render a decision, in writing, within a reasonable period of time.
- 8.2 The Project Representative shall make visits to the site to observe the progress and quality of the executed Work and to determine if it is proceeding in accordance with the Contract Documents. On the basis of such visits and observations, the Project Representative will keep the NJSEA informed of the quality and progress of the Work.
- 8.3 The Project Representative will issue with reasonable promptness such written clarifications or interpretations of the Contract Documents as are determined necessary. If the Contractor believes that a written clarification or interpretation justifies an increase in the Contract Price, and/or an extension of the Contract Time, the Contractor may make a claim therefore.
- 8.4 The Project Representative may authorize minor variations in the Work, which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents. If the Contractor believes that a variation issued as minor justifies an increase in the Contract Price and/or an extension of the Contract Time, the Contractor may make a claim therefore.
- 8.5 The Project Representative may reject Work believed to be defective. The Project Representative also has the authority to require special inspection and testing of the Work, whether or not it has been fabricated, installed, or completed.
- 8.6 The Project Representative shall not be responsible for the means, methods, techniques, sequences, or procedures of the Contractor's performance of the Work, or the safety programs and precautions incident thereto. The Project Representative will not be responsible for the failure of the Contractor to furnish or perform the Work in accordance with the Contract Documents.
- 8.7 The Project Representative will not be responsible for acts of omission by the Contractor, or any of his subcontractors or suppliers furnishing or performing any of the Work.

9.0 CHANGES IN THE WORK:

- 9.1 Without invalidating the Contract, and without notice to any surety, the NJSEA may order revisions in the Work. These revisions shall be authorized by Change Orders. Upon receipt of such a document, the Contractor shall promptly proceed with the work involved, in accordance with the applicable conditions of the Contract Documents.
- 9.2 The Contractor shall not be entitled to an increase in the Contract Price, or an extension of the Contract Time, for any work not required by the Contract Documents and performed without a Change Order, except for an emergency.

10.0 CHANGE OF CONTRACT PRICE:

- 10.1 The Contract Price may only be changed by a Change Order. Any claim for a change in the Contract Price shall be based on written notice delivered by the party making the claim, to the other party and the Project Representative, no later than ten days after the occurrence of the event giving rise to the claim. The amount of the claim, with supporting data, shall be delivered within twenty days of such notice; and shall be accompanied by a written statement that the amount claimed covers all known costs to which the claimant is entitled. The validity of all claims shall be determined by the Project Representative.
- 10.2 Where the Contract Documents provide that all or part of the Work shall be on a unit price basis, the initial Contract Price will be deemed to include an amount equal to the sum of each unit price, multiplied by the estimated quantity of each item, as indicated in the Bid Forms. Each unit price will be deemed to include an amount adequate to cover the Contractor's overhead and profit for each separately identified item. The estimated quantities of unit price items of work are not guaranteed, but are solely for the purposes of bid comparison and determining the initial Contract Price. Classification of the unit price Work, and the actual quantity determinations, shall be made by the Project Representative. Incorporation of the actual classified quantities into the Contract Price, if different than the amount given with the Bid, shall be accomplished by Change Order(s).
- 10.3 The value of a Change Order shall be determined in one of the following ways:
 - A. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of said unit prices to the additional or reduced quantities of the items involved.
 - B. By mutual acceptance of a lump sum.

11.0 CHANGE OF CONTRACT TIME:

- 11.1 The Contract Time may only be changed by a Change Order. Any claim for a change to the Contract Time shall be based on written notice delivered by the party making the claim, to the other party and to the Project Representative no later than ten days after the occurrence of the event giving rise to the claim. The extent of the claim with supporting data shall be delivered within ten days of the notice, and shall be accompanied by a written statement that the time claimed is the total time to which the claimant is entitled. The Project Representative shall determine the validity of all claims for adjustment to the Contract Time.
- 11.2 The Contract Time shall be extended an amount equal to the time lost due to delays beyond the control of the Contractor, if a claim is made therefore. Said delays shall include, but not be limited to; labor disputes, fires, floods, epidemics, abnormal weather conditions, other acts of God, and acts of NJSEA neglect.
- 11.3 All time limits stated in the Contract Documents are of the essence of the Contract. The provisions of this Article shall not exclude the recovery of damages by either party due to delay.

12.0 PAYMENTS TO CONTRACTOR; INSPECTION AND COMPLETION:

- 12.1 Payment Schedule: Please refer to <u>Technical Specifications</u>
- 12.2 It is agreed that this Project is one contract for the whole and complete Work. No partial payments on account by the NJSEA, or its use of parts of the Project; shall constitute the acceptance of any part of the Work before final inspection, acceptance, and final payment.
- 12.3 The Total Contract Amount shall be the total compensation paid to the Contractor for performing the Work. All duties, responsibilities, and obligations assigned to, or undertaken by the Contractor in the performance of the Work, shall be at his own expense, without change to the Total Contract Amount.
- 12.4 The Project Representative may refuse to recommend payment of the whole or any part of any application, if in Project Representative's opinion; it would be incorrect to make such representations to the NJSEA. The Project Representative may also refuse to recommend any such payment (or because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended) to such extent as may be necessary, in the Project Representative's opinion, to protect the NJSEA from loss. Reasons for refusing to recommend payment, or for nullifying payments previously made, include but are not limited to the following:
 - A. Unacceptable Work not remedied.

- B. Failure of the Contractor to make payments properly to subcontractors, manufacturers, or suppliers.
- C. A reasonable doubt that the Contract can be completed for the balance unpaid.
- D. Damage to another contractor.
- E. Failure of the Contractor to keep his work progressing in accordance with his progress schedule.
- F. Failure to submit certified payrolls (including subcontractor's payrolls) corresponding to the time period covered by the payment application.
- G. Failure to satisfactorily prosecute the Work in accordance with the Contract Documents.
- H. Failure to comply with Affirmative Action goals and objectives in accordance with PL1975, c127.
- I. Failure to submit any items required by the Contract Documents in the time frame specified.
- J. Failure to maintain insurance and/or to provide proof of insurance.

13.0 SUSPENSION OF WORK AND TERMINATION:

- 13.1 The NJSEA may, at any time and without cause, suspend the Work, or any portion thereof, for a period of not more than ninety (90) days by notice in writing to the Contractor and the Project Representative. The written notice shall establish the date on which the Work will be resumed. The Contractor shall resume work on the established date. The Contractor shall be allowed an increase in the Contract Price and/or an extension of the Contract Time attributable to the suspension; if the Contractor makes a claim therefore, and it is approved.
- 13.2 The NJSEA may terminate the services of the Contractor after giving him and the surety seven days written notice, upon the occurrence of any one or more of the following events. In such case, the Contractor shall not be entitled to receive any further payment. Where the Contractor's services have been so terminated by the NJSEA, said termination shall not affect any rights or remedies of the NJSEA against the Contractor existing at the time, or which may thereafter accrue.
 - A. If the Contractor commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code) now or hereafter in effect.
 - B. If the Contractor takes any equivalent or similar action by filing a petition or other notice under any other federal or state law in effect at such time relating to bankruptcy or insolvency.
 - C. If a petition is filed against the Contractor under any chapter of the Bankruptcy Code now or hereafter in effect at the time of filing.

- D. If a petition is filed seeking any such equivalent or similar relief against the Contractor under any other federal or state law in effect at the time relating to bankruptcy or insolvency.
- E. If the Contractor makes a general assignment for the benefit of creditors.
- F. If a trustee, receiver, custodian, or agent of the Contractor is appointed under applicable law or contract, whose appointment or authority to take charge of the Contractor's property is for the purpose of enforcing a lien against such property, or for the purpose of general administration of such property for the benefit of the Contractor's creditors.
- G. If the Contractor admits in writing an inability to pay his debts as they become due.
- H. If the Contractor persistently fails to perform the Work in accordance with the Contract Documents: including but not limited to, failure to supply sufficiently skilled workers, suitable materials, or equipment, or the failure to adhere to the progress schedule.
- I. If the Contractor disregards any applicable laws or regulations.
- J. If the Work to be performed under this Contract shall be abandoned by the Contractor. Abandonment shall mean that the Contractor has failed to perform any work on the Contract for a period of thirty consecutive calendar days.
- K. If this Contract or any part thereof shall be assigned, transferred, or sublet without the previous notice to and written consent of the NJSEA.
- L. If the Contract or any claim thereunder shall be assigned by the Contractor other than as herein specified.
- M. If the Contractor fails to maintain insurance during the entire Contract term and until the NJSEA accepts the Contract Work and the Contract is ended or fails to provide the NJSEA with proof of insurance upon request of the NJSEA.
- N. If the Contractor otherwise violates in any substantial way any provisions of the Contract Documents.
- 13.3 Upon seven days written notice to the Contractor, the NJSEA may elect to abandon the Work and terminate the Contract without cause and without prejudice to any other right or remedy. In such case, the Contractor shall be paid for all completed Work, plus reasonable termination expenses.

14.0 MISCELLANEOUS ITEMS:

14.1 The address given on the Bid Form upon which this Contract is founded is hereby designated as the place to which notices, letters, and other communications to the Contractor shall be certified, mailed, or delivered. The delivering to said address or the depositing (in a postpaid wrapper with said address) in any mail box regularly maintained by the United States Postal Service of any notice, letter, or other communication to the Contractor shall be deemed

sufficient service thereof upon the Contractor. The date of said service shall be the date of such delivery or mailing. The above-named address may be changed at any time by a written notice delivered to the NJSEA and the Project Representative. Nothing herein contained shall be deemed to preclude or render inoperative, the service of any notice, letter, or other written communication upon the Contractor personally.

- 14.2 When any period of time is referenced in the Contract Documents by days, it will be computed to exclude the first, and include the last day of said period. If the last day of said period falls on a Saturday, Sunday, or a legal holiday observed by the NJSEA, it shall be omitted from the computation.
- 14.3 Should the NJSEA or the Contractor suffer injury or damage to persons or property, respectively, because of any error, omission, or act of the other party (or others for whose acts the other party is legally liable), a claim shall be made in writing to the other party within a reasonable time of the first observance of said injury or damage.

END OF SECTION 00700

SECTION 00800 SPECIFIC PROJECT REQUIREMENTS

1.0 LOCATION OF THE WORK:

1.1 The Work of this Contract shall be performed at the NJSEA Meadowlands Arena Cooling Tower Motor Control Center.

2.0 SUMMARY OF WORK:

- 2.1 The services described herein shall be provided for New Jersey Sports and Exposition Authority's Facility.
- 2.2 Contractor shall perform all work as outlined in these specifications unless otherwise directed by the Project Representative. NJSEA reserves the right to redirect the efforts of the Contractor in response to current circumstances. All work shall be done under the direction of the Project Representative.

3.0 ADDENDA:

3.1 Only addenda signed by John J. Duffy, P.E., Senior Vice President of Facilities, are valid addenda for this Project.

4.0 PRE-BID MEETING:

4.1 A pre-bid meeting will be held at 10:00 AM on July 27th, 2022. The meeting will be held at the NJSEA Motor Control Center Power Plant Entrance, and will include a tour of the site specified in the Contract Documents.

5.0 BID SUBMISSION:

- 5.1 Each Bid must be submitted with two (2) copies in a sealed envelope with the Bidder's name, address, and telephone number clearly indicated on the outside of the envelope.
- 5.2 The envelope shall also be clearly marked, in large letters, as follows:

BID DOCUMENTS - PROJECT CN-254
MEADOWLANDS ARENA COOLING TOWER
MOTOR CONTROL CENTER REPLACEMENT
For New Jersey Sports and Exposition Authority Facility
DO NOT OPEN
DELIVER TO JOHN J. DUFFY

- 5.3 All the documents listed in the Bid Forms shall be enclosed in the sealed envelope with the Bid.
- 5.4 If a carrier service (such as Federal Express) is used to deliver the Bid; the sealed envelope containing the Bid shall be completed as noted above, and shall be

placed into the carrier's envelope.

6.0 BONDS AND INSURANCE:

- 6.1 BONDS: A performance and payment bond will be required for the faithful performance of the Contract, for payment of all labor and materials, and for the guarantee and maintenance of the Work. The bonds shall be duly executed by the Contractor, as Principal, and by a surety company satisfactory to the NJSEA and licensed to do business under the laws of the State of New Jersey.
- 6.2 All bonds shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as Published in circular 570 (amended) by the Audit Staff, Bureau of Government Financial Operations, United States Treasury Department. All bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.
- 6.3 If the surety on any bond furnished by the Contractor is declared bankrupt, becomes insolvent, its right to do business is terminated, or it ceases to meet the requirements of paragraph 5.1; the Contractor shall substitute another bond and surety acceptable to the NJSEA within ten working days of such declaration of insolvency, termination, or failure to meet the requirements of paragraph 5.1.
- 6.4 The performance and payment bond shall be for the full one year Contract amount. It must be furnished with the executed Contract(s) and shall remain in effect until completion and acceptance of the Project. The bond shall specifically protect the NJSEA should the Contractor go bankrupt or be declared insolvent. Each year the Contractor shall resubmit to NJSEA a new performance bond in the amount of the single year contracted price for the specific year. (See Section 00300)
- 6.5 INSURANCE: The Contractor shall furnish the NJSEA with satisfactory proof that he has obtained the insurance described below from insurance companies or underwriters satisfactory to the NJSEA. The Contractor shall keep such insurance in force until each and every obligation assumed under the Contract shall be fully and satisfactorily performed. The NJSEA and the Project Representative shall be named as additional insured under all the policies, except the Compensation Insurance.
- 6.6 The Contractor shall furnish to the NJSEA certificates for the following types of insurance showing the type, amount, and class of operations insured, and the effective and expiration dates of the policies. The certificates shall be submitted with the executed Contract(s). Work on the Contract will not be permitted to proceed until the certificate has been received and verified. Specific reference to

the Contract shall be made in all policies.

- A. CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE, including Independent Contractor's Completed Operations and Contractual Liability Insurance with combined single limits of not less than one million dollars (\$1,000,000) each occurrence and with an annual aggregate of three million dollars (\$3,000,000) with respect to bodily/personal injury and property damage. Said policies of insurance shall contain a provision or endorsement providing insurance protection against property damage caused by explosion or collapse; and against damage to or interference with other facilities.
- B. CONTRACTOR'S VEHICLE LIABILITY INSURANCE, for "any auto/vehicle" for the duration of the contract for bodily injury/property damage with a combined single limit of one million dollars (\$1,000,000).
- C. EXCESS LIABILITY INSURANCE, in the amount of five million dollars (\$5,000,000) is to be provided in addition to the above requirements.
- D. COMPENSATION INSURANCE, coverage "B", as required by state law for all employees who will be engaged in the work associated with this Contract. The Contractor shall require all subcontractors to provide similar workmen's compensation insurance for all of their employees, unless those employees are covered under the Contractor's insurance. If any employees engaged in hazardous work under this Contract are not protected under the workmen's compensation statute; the Contractor (and any subcontractors) shall also provide adequate employer's liability insurance for the protection of these employees.
- E. ENVIRONMENTAL LIABILITY INSURANCE in the amount of one million dollars (\$1,000,000) for bodily injury/property damage. The policy form must accompany the certificate of insurance and the contract documents.
- 6.7 SUBCONTRACTORS: The Contractor shall not permit any Subcontractor to commence work on his subcontract until all similar insurance (as listed above) required of the subcontractor has been obtained and approved. Copies of all Subcontractors certificates shall be forwarded to the NJSEA.
- 6.8 All insurance certificates shall stipulate that the insurance will not be changed or canceled without giving at least 30 days written notice to the NJSEA and the Project Representative by certified mail.

6.9 The insurance required above shall be written for not less than the limits of liability specified therein. Coverages, whether written or an occurrence or claimsmade basis, shall be maintained without interpretation from date of commencement of the Work until the date of final payment and the termination of any coverage required to be maintained after final payment.

The forms and/or amounts of insurance to be furnished by the Contractor and each of its Subcontractors shall not in any way operate to relieve or limit the liability of the Contractor or any Subcontractor under the Contract or any other of the Contract Documents.

The Contractor shall not commence work under the Contract until all insurance required of the Contractor has been obtained and has been approved by the Owner, nor shall the Contractor allow any Subcontractor to commence work on its subcontract until all similar insurance required of the Subcontractor has been obtained and approved by the Owner. Approval of such insurance by the Owner shall not relieve or decrease the liability of the Contractor under the Contract or the Contract Documents.

The Contractor and each of its Subcontractors shall purchase from and maintain insurance with companies which, as of the time of the Bid (in the case of the Contractor) and as of the time of the purchase (in the case of the Subcontractor), have at the very least an A Minus rating by A.M. Best & Company.

All of the insurance to be provided shall be considered to be primary insurance as respects the Owner, the Engineer and the municipalities in which the on-site Work is to be performed. The Contractor will save harmless, indemnify and defend the Owner, the Engineer and the municipalities in which the on-site Work is to be performed, as well as their respective agents, officers and employees, from any and all claims arising out of the Contractor's performance.

7.0 NJSEA RIGHT TO DEDUCT MONIES:

- 7.1 The Contractor shall pay to the NJSEA, and the NJSEA shall have the right to deduct the full amount of all expenses, losses, damages and costs from all monies due, or to become due, the Contractor under this Contract for any of the following reasons:
 - A. Any defect, omission, or mistake of the Contractor or his employees, and the repairs of same, as determined by the Project Representative.
 - B. All costs incurred by the NJSEA for overtime payments to the Project Representative caused by the Contractor's overtime work (Overtime is considered to be all hours worked in excess of eight hours per day or 40

hours per week, all hours worked on Saturdays and Sundays, and all hours worked on legal holidays observed by the NJSEA). All such inspection costs shall be at a rate of \$100.00 per hour.

8.0 SANITARY FACILITIES:

8.1 The Contractor MUST provide sanitary facilities for their employees

9.0 WATER:

9.1 The Contractor may use potable outdoor drinking fountain. The Contractor may use outdoor spigot for water and washing from the NJSEA facilities.

10.0 ELECTRICAL SERVICE:

10.1 The Contractor may use electrical service from the NJSEA facilities.

11.0 TELEPHONE SERVICE:

11.1 The Contractor is responsible for providing telephone service for use of its personnel working on the Project.

12.0 CONTRACTOR'S STORAGE AREA:

12.1 The contractor may use the area designated to store equipment and material upon the approval of the Project Representative.

13.0 COORDINATION WITH NJSEA OPERATIONS: HOURS OF OPERATION

- 13.1 The NJSEA Facilities will be open for normal business during the course of the Contract. The Contractor shall not interfere with the NJSEA operations in any manner. Should conflicts arise; the NJSEA operations will take precedence over the Contractor's operations.
- 13.2 All work shall be executed Monday-Friday 7:00 AM 4:00 PM. No work shall be performed outside these hours unless prior approval is obtained through the Project Representative. The contractor must report to the Project Representative before starting work, and also at the end of each work day. Work will be done under the term of contract at no additional cost.
- 13.3 The Contractor shall not schedule work on days when the NJSEA is closed without advance approval of the Project Representative.
- 13.4 All work schedules shall be coordinated through the Project Representative in order to minimize interference with normal operations of the NJSEA.
- 13.5 At the end of each day's work, all equipment that the contractor has been servicing must be put back in service in order to maintain operation of NJSEA Facilities.

- 13.6 The NJSEA will be closed the following 13 days: New Year's Day, Martin Luther King Day, Presidents Day, Good Friday, Memorial Day, Juneteenth, Independence Day, Labor Day, Columbus Day, Election Day, Veterans Day, Thanksgiving Day, and Christmas Day.
- 13.7 During the servicing procedure, should contractor discover any code violations or other conditions contrary to reliability or safe operation, a report shall be made at once directly to the Project Representative.
- 13.8 Under no circumstances will equipment be shut down, repairs or adjustments made without first securing the approval of Project Representative.
- 13.9 Any work that disrupts or interferes with the operations of the NJSEA shall be terminated immediately and rescheduled at the direction of the Project Representative.

14.0 MATERIALS:

- 14.1 All materials furnished by the Contractor shall be compatible with those specified herein. Any substitutions shall be subject to the approval of the Project Representative.
- 14.2 Where materials are not specified, Contractor shall submit Manufacturer's Data sheets for all products proposed for use under this contract and shall obtain approval of Project Representative prior to their application.
- 14.3 Contractor shall supply labels of all products proposed for use under this contract to the Project Representative for approval prior to any application of these chemicals.
 - A. In accordance with the New Jersey Right to Know Act, the Contractor shall supply Material Safety Data Sheets (MSDS) for chemical cleaners, solutions, cleaners and chemicals proposed for use under this contract.

15.0 QUALITY ASSURANCE:

- 15.1 One to Three experienced personnel must be designated by the Contractor to oversee this work. They must have knowledge of standard industry practices relating to the scope of work.
- 15.2 Only experienced workmen shall perform the Work. In the acceptance of the Work, no allowance will be made for lack of skill or experience on the part of workmen.

- 15.2 Contractor shall have all equipment available and tools necessary to properly perform all parts of the work described herein.
- 15.3 Contractor shall supply the proper equipment required to each job described herein.
 - A. The NJSEA reserves the right to withhold or reduce payment up to one hundred percent in the event that, the right equipment is not on site, equipment is not working properly, a full day is not completed, or scheduled work has not been completed according to these specifications to the satisfaction of the Project Representative. (Example: Payments may be reduced if contractor doesn't show up for the scheduled day/week are not consistent, and or certain task don't get completed, proper equipment is not on site. Work order reports are not emailed or faxed to the Project Representative). This will be determined by the Project Representative.

16.0 STAFFING

- 16.1 The Project Representative may assign additional tasks to expend any hours remaining after the work of Section 02000, outlined herein, and is completed.
- 16.2 While doing the work specified in Section 02000, the Contractor shall be required to sign in upon arrival at the site and to sign out upon departure.
 - A. The Sign in book is at the NJSEA Administration main front desk. The Contractor shall sign in and out when working at the NJSEA facility. This is not applicable if the Contractor is not entering the facility.
 - B. Contractor shall supply daily Service Reports/ Work order reports on date of work the names of all workers, hours worked; tasks accomplished and any chemical cleaners, solutions, and chemicals used and or major work completed or required. In addition to a written report the reports shall be emailed and or faxed to the Project Representative after the completion of any service.
 - C. The Contractor shall maintain records for services rendered against the contract for a period of three (3) years from the date of final payment. Such records shall be made available to the NJSEA upon request for purposes of conducting an audit, or for ascertaining information regarding dollar volume or number of transactions.
 - D. The Foreman shall be the Contractor's Representative at the site and shall have the authority to act on behalf of the Contractor.

- E. All communications given to the Foreman shall be binding as if given to the Contractor.
- 16.3 The Contractor shall provide consistency in staff so that individuals become familiar with the requirements of the site.

17.0 GUARANTEE

17.1 All Contractors shall guarantee their labor and all materials for a period of two (2) years from date of Substantial Completion, unless otherwise specified in writing and approved by the Owner.

END OF SECTION 00800

SECTION 00900 GENERAL REQUIREMENTS

1.0 ABBREVIATIONS, SYMBOLS, AND STANDARDS:

1.1 The following abbreviations may appear in the Contract Documents:

C. degrees Centigrade cu. ft. cubic foot (feet) cu. in. cubic inch(es) C.Y. cubic yard(s)

USEPA (EPA) United States Environmental Protection Agency

F. degrees Fahrenheit

ft. foot (feet)

gpm gallons per minute

in. inch(es) lb. pound(s)

NJAC New Jersey Administrative Code

NJDEP (DEP) New Jersey Department of Environmental Protection

NJSA New Jersey Statutes Annotated

No. number

OSHA Occupational Safety and Health Administration

psi pounds per square inch psf pounds per square foot rpm revolutions per minute

sq. ft. square foot(feet) sq. in. square inch(es)

2.0 REFERENCE SPECIFICATIONS AND STANDARDS:

The following current standards and publications of the issues currently in effect form a part of this specification to the extent indicated by any reference thereto:

3.0 SUBMITTALS:

- 3.1 Submittals that are required in the performance of work of this Contract are as follows:
 - A. It shall be the Contractor's ultimate responsibility to ensure the health and safety of all his employees and subcontractor personnel. The Contractor shall develop a pollution control system which will be in compliance with all USEPA, NJDEPE, OSHA, USCG, etc. rules, regulations, standards, and guidelines in effect at the time the Work is in progress. All references to workers and employees shall mean the Contractor's employees and subcontractor personnel.

- B. Material Safety Data Sheets (MSDS): Submit MSDS sheets for all chemicals, cleaners, solutions, refrigerants, and oils used on the facility.
- C. Certificates: Submit labels from the manufacturer's or supplier's container certifying that the following products meet the specified requirements: chemicals, cleaners and solutions, used on the facility.

4.0 RESPONSIBILITY FOR PROPERTY DAMAGE:

- 4.1 The Contractor assumes full responsibility for the equipment employed in the execution of the work described herein and agrees to make no claims whatsoever against the NJSEA for any damages to such equipment, or injuries caused by the equipment.
- 4.2 All property of the Contractor, its employees or agents which is brought, kept, used, and or left on NJSEA property shall be at the sole risk of the Contractor who shall be responsible for all loss or damage to such equipment and property.
- 4.3 The Contractor shall be responsible for any damage to NJSEA property in excess (cumulatively) of \$50 caused by its negligence in the performance of work under this Contract.
- 4.4 In the event of damage to NJSEA property in excess (cumulatively) of \$50, NJSEA reserves the right to immediately effect both temporary and permanent repairs at the expense of the Contractor. The Contractor agrees that, in such event, NJSEA may deduct the cost of such repairs and related expenses incurred by the NJSEA from any moneys due to the Contractor under this Contract or to charge the Contractor accordingly. Any repairs made by the Contractor shall be "in kind", i.e. match existing conditions.
- 4.5 The Contractor will work closely with NJSEA personnel to establish all necessary safeguards or safety devices to protect equipment and safety of workmen and other personnel while work is being performed.
- 4.6 Use all means necessary to protect all NJSEA Facilities.

5.0 CLEANUP - SAFETY:

- 5.1 It shall be the responsibility of the Contractor to leave the job sites in a clean and safe condition at the end of each workday.
- 5.2 The Contractor shall properly remove and/or store all tools, equipment and materials and shall clean debris from the job sites at the end of each workday.

- 5.3 The Contractor shall wear proper safety gear while operating machinery or applying chemicals, including but not limited to eye and ear protection.
- 5.4 The Contractor shall promptly notify the Project Representative of any damage resulting from weather, vandalism, etc. observed during the performance the work of this Contract. This will allow for the prompt remediation of potential safety hazards.
- 5.5 All employees of the Contractor shall be trained to properly perform the work assigned to them.

6.0 PROHIBITED ACTIVITIES:

- 6.1 The Contractor shall not use procedures, activities or operations that may adversely impact the natural environment, or the public health and safety of the area. Prohibited activities include, but are not limited to, the following:
 - A. Dumping or disposing of materials into any stream corridors, wetlands, or surface waters or on public or private property not specified for said purpose.
 - B. Indiscriminate, arbitrary, or capricious operation of equipment in any wetlands or surface waters.
 - C. Indiscriminate damaging of vegetation.
 - D. Disposal of trees, brush, and other debris in any wetlands, surface waters, or unspecified locations.
 - E. Discharging injurious silica dust concentrations into the atmosphere closer than 200 feet to areas of human occupation.
 - F. Closing off clear access to the site without the prior the consent of the Project Representative and the NJSEA.
 - G. Operation of equipment outside the boundaries of the working area.

7.0 ACCIDENT REPORTS

7.1 The Contractor shall promptly report, in writing within 24 hours to the Project Representative, all accidents whatsoever arising out of, and in conjunction with the performance of work, whether on or adjacent to the working site, which cause death, personal injury or property damage, giving details and statements of witnesses.

- 7.2 In addition, if death or serious personal injury is caused, the accident shall be reported immediately, by telephone, to the Project Representative.
- 7.3 If any claim is made by a third person against the Contractor on account of any accident, the Contractor shall promptly report the matter in writing, within 24 hours to the Project Representative, giving full details of the claim.

8.0 WASTE DISPOSAL:

8.1 All debris and waste materials shall be removed from the site by vehicles designed for the transport of the various materials being removed.

END SECTION 00900

SECTION 01070 ABBREVIATIONS, SYMBOLS, AND STANDARDS

1.0 ABBREVIATIONS:

1.1 The following abbreviations may appear in the Contract Documents:

AASHTO American Association of State Highway and Transportation Officials

ACI American Concrete Institute

AISC American Institute of Steel Construction

AISI American Iron and Steel Institute
ANSI American National Standards Institute
ASTM American Society of Testing and Materials
AWG American (or Brown and Sharpe) Wire Gauge

AWS American Welding Society

AWWA American Water Works Association

C. degrees Centigrade
cfs cubic feet per second
cu. ft. cubic foot (feet)
cu. in. cubic inch(es)
C.Y. cubic yard(s)

USEPA (EPA) United States Environmental Protection Agency

F. degrees Fahrenheit

ft. foot (feet)

gpm gallons per minute

in. inch(es)

ISO International Organization for Standardization

lb. pound(s)
LF linear foot

MSDS Material Safety Data Sheet

NAVD88 North American Vertical Datum of 1988 NGVD29 National Geodetic Vertical Datum of 1929

NIST National Institute of Standards and Technology

NJAC New Jersey Administrative Code

NJDEP (DEP) New Jersey Department of Environmental Protection

NJDOT New Jersey Department of Transportation NJSEA New Jersey Sports and Exposition Authority

NJSA New Jersey Statutes Annotated NJTA New Jersey Turnpike Authority

No. number

NOAA National Oceanic and Atmospheric Administration
OSHA Occupational Safety and Health Administration

psi pounds per square inch psf pounds per square foot PVC Polyvinyl Chloride

QPL Qualified Product List RCP Reinforced Concrete Pipe

ROW Right-of-Way

rpm revolutions per minute

SESC Soil Erosion and Sediment Control SI International System of Units

sq. ft. square foot(feet) sq. in. square inch(es)

USACE United States Army Corps of Engineers

USEPA (EPA) United States Environmental Protection Agency

USGS United States Geodetic Survey

2.0 REFERENCE SPECIFICATIONS AND STANDARDS:

- 2.1 Standard specifications, such as those published by ASTM, ACI, NEMA, ANSI, and others that are referenced herein shall be the latest revisions thereof and shall include all amendments and revisions that are in effect on the date bids are received unless otherwise specified.
- 2.2 Reference to New Jersey Department of Transportation (NJDOTSS) shall refer to Standard Specifications for Road and Bridge Construction (dated 2007)

END OF SECTION 01070

SECTION 01200 PROJECT MEETINGS AND CORRESPONDENCE

1.0 MEETINGS:

- 1.1 Project meetings shall be where necessary to discuss the progress and prosecution of the Work. The meetings will be held at the time and place designated by the Project Representative. The Project Representative will prepare minutes of these meetings. The Contractor shall be provided a copy of the minutes for his records. Meeting minutes shall be read and accepted, either as read or as amended, at the following meeting.
- 1.2 The Contractor or the NJSEA may request additional meetings when they believe such are necessary. A minimum of forty-eight (48) hours' notice shall be given, though each request will be treated on an individual basis.

2.0 CORRESPONDENCE:

2.1 Any request in writing by the NJSEA to the Contractor must be answered in writing, in sufficient detail and within a reasonable period of time, by the Contractor.

3.0 PAYMENT:

3.1 Payment for the above work shall not be made under any specific item. The Contractor shall include all costs for the above work in the bid prices for the various items scheduled in the Bid Forms.

END OF SECTION 01200

SECTION 01340

SUBMITTALS AND SAMPLES

1.0 GENERAL:

1.1 All equipment and materials to be incorporated in the Work shall be submitted to the Project Representative for review and acceptance. No equipment or materials shall be processed, fabricated, or delivered to the site without the prior review of submittals and/or samples; and acceptance of same by the Project Representative, except at the sole risk of the Contractor. The Contractor shall be responsible for prompt submission of all submittals and samples to insure there will be no delay to the Work. All material must have certifications that they meet the requirements of the Contract Specifications and Drawings.

2.0 SUBMITTALS:

- 2.1 All submittals shall be properly referenced to clearly indicate the Contract number, the particular Specification Section, and the Work location, service, and function of each particular item. Inadequate or improperly identified submittals shall be returned to the Contractor without the Project Representative's review.
- 2.2 Each submittal by the Contractor shall have his signature indicating approval of the information contained therein. By approving and submitting the information to the Project Representative, the Contractor represents that he has determined and verified all field measurements, quantities, dimensions, field construction criteria, materials, catalog numbers, and other related data; and that he has reviewed and coordinated each submittal and submittal item with any related approved submittals and the Contract Documents. Any fabrication, erection, setting of equipment, or other work performed in advance of the receipt by the Contractor of submittal(s) returned by the Project Representative and noted as "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED", shall be entirely at the Contractor's own risk. The Contractor is not required to resubmit submittals returned by the Project Representative noted "MAKE CORRECTIONS NOTED". However, the Contractor shall be responsible for making the noted corrections, unless a resubmittal is made.
- 2.3 The notation "NO EXCEPTIONS TAKEN" of a separate item shall not indicate acceptance of the assembly in which the separate item is included. Where manufacturers' publications (in the form of catalogs, pamphlets, or other data sheets) are submitted in lieu of prepared Shop Drawings; such submittals shall specifically indicate the item for which a review is requested. Identification of items shall be made in ink; and sufficient space on the submittals shall be provided for review stamps and comments.
- 2.4 Submittals, and any resubmittals, shall be designated in the following manner:

- A. Each original submittal shall be identified by the Contract Number, the applicable Specification Section Number, and the applicable Article Number(s).
- B. The first resubmittal shall have the letter "A" added to the above number. All items changed shall be noted in a revision box under "A" and dated, or marked with an "A" at the changed area.
- C. Subsequent resubmittals shall be noted as above with the letters "B", "C", "D", etc., as necessary.
- D. A revision box shall be included on all drawings detailing where the changes have been made. All changes shall be referenced as noted in "B." above.
- 2.5 Sufficient sets of all submittals shall be submitted to the Project Representative by the Contractor. The Project Representative will retain two sets. The other sets will be returned to the Contractor.
- 2.6 All submittals shall be either 8-1/2" by 11", 11" by 17", or 24" by 36", in size.
- 2.7 The Contractor agrees that submittals processed by the Project Representative are not Change Orders; that the purpose of submittals by the Contractor is to demonstrate to the Project Representative that the Contractor understands the design concept. The Contractor demonstrates his understanding by indicating which equipment and material he intends to furnish and install, and by detailing the fabrication and installation methods he intends to use. The Contractor further agrees that if deviations, discrepancies, or conflicts occur between the submittals and the Contract Documents that were not identified in accordance with paragraph 2.7 herein, the Contract Documents shall control and shall be followed at no extra cost.
- 2.8 If the submittals contain any deviations from the Contract Documents, the deviations must be specifically mentioned in the Contractor's submission and letter of transmittal. The Contractor is fully responsible for all required changes to the Work resulting from the deviations. Where such deviations require revisions to layouts or structural changes in the specified Work, the Contractor shall, at his own expense, prepare and submit a revised layout drawing for review. Revision drawings shall include design calculations prepared, signed, and sealed by a licensed New Jersey Professional Engineer/Land Surveyor as needed. Such drawings shall be the same size as the Contract Drawings. The Contractor will not be relieved of his responsibilities for any deviations from the Contract Documents, unless the Project Representative has given written concurrence to the specific deviations. Concurrence by the Project Representative shall not relieve the Contractor from his responsibility for errors and omissions in the submittals.

2.9 The Project Representative will review and comment on submittals with reasonable promptness provided the submissions are complete. The Project Representative's review shall only be for conformance with design concepts of the Project and for compliance with the information given in the Contract Documents. It shall not extend to means, methods, sequences, techniques, and procedures of construction, or to safety precautions or programs incident thereto. The Project Representative's review shall be confined to general arrangements in compliance with the Contract Documents, and will not be for the purpose of checking dimensions, weights, interferences, clearances, tolerances, or fittings; or coordination of trades.

3.0 SAMPLES:

- 3.1 Where required by the Contract Documents, the Contractor shall submit samples of materials to demonstrate that the materials conform to the Contract Documents. Such samples shall be furnished, taken, stored, packed, and shipped as directed, at the expense of the Contractor. Samples shall be packed to reach their destination in good condition.
- 3.2 Each sample shall be identified by the Contract Number, the applicable Specification Section Number, and the applicable Article Number(s).
- 3.3 To ensure consideration of the samples, the Contractor shall give the Project Representative prior notice by letter that the samples have been shipped, and shall describe the samples in the letter. In no case shall the notification letter be enclosed with the sample.

4.0 PAYMENT:

4.1 Payment for the above work shall not be made under any specific item. The Contractor shall include all costs for the above work in the bid prices for the various items scheduled in the Bid Forms.

END OF SECTION 01340

SECTION 01410

FIELD AND LABORATORY TESTING SERVICES

1.0 REQUIREMENTS:

1.1 The Contractor shall submit samples of all materials and products, as required. Certified reports of results of tests and analyses shall be furnished, either prior to beginning or during the progress of the work, as may be necessary to demonstrate that they conform to the Specifications. The Contractor shall engage the services of independent, qualified testing agencies to perform all laboratory and field tests and analyses on all materials and products used during construction, as specified in the relevant sections of these specifications. Results of all tests shall be submitted to the Project Representative for review in a timely manner. Samples shall be furnished, taken, stored, packed, shipped and tested, at the expense of the Contractor.

The Contractor shall submit data and samples, or place his orders, sufficiently early to permit consideration, inspection, testing and approval before the materials are necessary for incorporation in the work. Any delays resulting from his failure to do so shall not be used as a basis of a claim against NJSEA or the Project Representative

The NJSEA and the Project Representative reserve the right to perform tests on any materials or products, in addition to those performed by the Contractor. If the Project Representative orders additional sampling and analyses or test of materials which are usually accepted on certification of the manufacturer or which appear defective or not conforming to the requirements of the Specifications, such sampling and analyses or tests will be performed by a laboratory selected by NJSEA. The NJSEA will bear the costs of tests and analyses, if the materials are found to be sound and conforming to the Specifications; if the materials are found defective or not conforming to the Specifications, the Contractor shall bear all of the costs.

1.2 Tests required by NJSEA shall not relieve the Contractor from the responsibility of supplying certificates from manufacturers or suppliers to demonstrate conformance with the Specifications.

END OF SECTION 01410

SECTION 01500

TEMPORARY CONTROLS

1.0 PERMITS AND LIABILITY

- 1.1 The Contractor is responsible for obtaining all permits, if required, from appropriate utilities prior to commencement of work. The Contractor shall coordinate work per the town requirements and shall prepare a maintenance and protection of traffic plan if so required by same. Review Specific Project Requirements for additional permit information.
- 1.2 The Contractor shall comply with all laws or ordinances applicable to the work under this Contract. The Contractor shall coordinate with the town Police Department prior to initiating haul routes. All service charges and permits shall be obtained at the Contractor's own expense.
- 1.3 The Contractor shall cooperate in every respect with other agencies of the state, town, and private agencies engaged in construction work in the vicinity. Lighting and other methods of protection shall be changed from time to time as conditions change and as ordered by the Project Representative.
- 1.4 Any method or clause under this section is intended to be the minimum requirement. The Contractor shall provide any other facilities that may be required.
- 1.5 The Contractor agrees to assume all responsibility for damage to persons or property that may accrue during the prosecution of the work, due to negligence of the Contractor, the Contractor's agents or employees, in failing to comply with the requirements of the specifications or other necessary precautions for the protection and safety of traffic.
- 1.6 The Contractor shall have no claim against the town, county, state or NJSEA for the extension of the time of completion of this contract nor for damages due to delay, inconvenience or expense caused by the provisions of this section.

2.0 RESTORATION AND CLEAN-UP

2.1 Upon completion of the Contract, all signs, barricades, and temporary controls shall be removed from the Project Site and shall become the property of the Contractor. The Contractor shall remove damaged, excess, and waste materials from the Project Site and dispose of the materials properly.

3.0 SITE SECURITY

3.1 The Contractor shall provide adequate security at the site, to protect work and materials, and to prevent un-authorized personnel from entering the site throughout the duration of the Project. This may include nighttime and weekend watchmen if necessary, temporary site lighting, and installing perimeter fencing and gates. All costs in connection with the providing of the site security shall be borne by the contractor.

4.0 PAYMENT:

4.1 Separate payment will not be made for the work of this Section. The cost shall be included in the prices bid for the various items of work scheduled in the Bid.

END OF SECTION 01500

SECTION 01550

HEALTH AND SAFETY PROVISIONS

1.0 GENERAL REQUIREMENTS:

- 1.1 The following personal protective equipment (PPE) will be required for the work to be performed within a specific area:
 - A. Hard hat, safety glasses, steel toe/shank work boots, traffic safety vest.
- 1.2 The Contractor is responsible to monitor working conditions at all times during construction and, if it is found to be necessary, to provide appropriate protective clothing, equipment and facilities for its personnel, and/or to establish workplace procedures to ensure their safety, and to enforce the use of these procedures, equipment and/or facilities.
- 1.3 The Contractor shall prepare and implement a Health and Safety protection program which shall be described in detail in a site-specific health and safety plan (HASP). The HASP shall require the Contractor to have a Site Health and Safety Coordinator (SHSC).
- 1.4 The Contractor shall engage an independent, qualified health and safety expert to monitor Site conditions during construction activities and recommend all necessary health and safety protection. The Contractor shall follow such recommendations and shall provide such protection to his personnel and personnel of the Owner and Project Representative, as may be affected.
- 1.5 The Contractor shall comply with all Federal, State, and local safety and health requirements related to the presence of combustible gases, nausea-inducing gases, hazardous substances, and physical hazards, as well as the specific requirements stated in this Section and else in the Specifications.
- 1.6 In addition to the above requirements, the Contractor shall comply with the following requirements:
 - A. All construction equipment on the Site shall be equipped with vertical exhaust pipes or spark-proof exhausts.
 - B. Smoking shall not be permitted in any area where gases can accumulate, or in the vicinity of any combustible material, such as a wood, paper, brush, etc.

2.0 APPLICABLE REGULATIONS

2.1 The Contractor and his subcontractors shall comply with all applicable Federal, State, and local laws and regulations concerning worker health and safety. All work shall be in accordance with safety and health regulations promulgated by the U.S. Department of Labor OSHA at 29 CFR 1910: Occupational Safety and Health Standards and at 29 CFR 1926: Safety and Health Regulations for Construction.

3.0 SUBMITTALS

- 3.1 Site-Specific Health and Safety Plan Prior to commencement of the work, the Contractor shall:
 - A. Submit in writing a site-specific health and safety plan (HASP); and
 - B. Meet with the Project Representative to develop mutual understandings relative to the compliance with the provisions of this Section and implementation of the HASP.

4.0 EXECUTION

4.1 The Contractor shall implement the Health and Safety protection program, as prepared by his independent, qualified health and safety expert. The HASP shall require the Contractor to have a Site Health and Safety Coordinator (SHSC) present at all times during construction activities.

END OF SECTION 01550

SECTION 01600

EQUIPMENT AND MATERIALS

1.0 TRANSPORTATION AND HANDLING:

- 1.1 The Contractor shall be responsible to insure that all equipment and materials are delivered to the project site in good condition. The Contractor shall coordinate with his suppliers to insure that deliveries are made in a timely manner and do not delay the Work.
- 1.2 The Contractor shall take whatever measures are necessary to provide for the proper handling of all equipment and materials.

2.0 STORAGE AND PROTECTION:

- 2.1 The Contractor expressly agrees that he is responsible for the following as part of the Work:
 - A. Taking every precaution against injuries to persons or damage to property.
 - B. Storing his equipment, materials, and supplies in an orderly fashion at the site, so as not to interfere with the progress of the Work, or the work of others.
 - C. Maintaining the site in a neat, orderly, and workmanlike manner at all times.
 - D. Removing all surplus materials, temporary structures, and debris of any nature resulting from his operations before final payment.
 - E. Placing upon the site, or any part thereof, only such loads as are consistent with the safety of that portion of the site.
- 2.2 The Contractor shall insure that all materials shall be stored to cause the least inconvenience to the NJSEA and the public. All fire hydrants shall be kept free and unobstructed at all times. Water and gas shutoff boxes, and underground power and telephone manholes shall not be covered or otherwise obstructed.
- 2.3 It shall be understood that the responsibility for the protection and safekeeping of all equipment and materials on or near the site shall be entirely that of the Contractor, and no claim shall be made against the NJSEA or Project Representative because of an act by an employee or a trespasser.
- 2.4 During adverse weather, the Contractor shall take all necessary precautions to properly prosecute the Work. When necessary, protection shall be provided by use of tarpaulins, temporary structures, and/or other approved means.

2.5 The performance of the Work may be suspended at any time when, in the judgment of the Project Representative, the conditions are unsuitable, or the necessary precautions are not being taken.

3.0 CLEANING:

3.1 Before final acceptance by the NJSEA, the Contractor shall remove from the site all equipment, temporary work, unused and useless materials and rubbish. The Contractor shall repair or replace in an acceptable manner all private and/or public property which may have been damaged or destroyed because of the prosecution of the Work, and shall fill all depressions and water pockets on the property caused by his operations. The Contractor shall clean all drains and ditches within and adjacent to the site, which have been obstructed by his operations, and shall leave the site and adjacent properties in a neat and presentable condition.

4.0 PAYMENT:

4.1 Separate payment will not be made for the work of this Section. The cost shall be included in the prices bid for the various items of work scheduled in the Bid.

END OF SECTION 01600

SECTION 01720

PROJECT RECORD DOCUMENTS

1.0 PROJECT RECORD DOCUMENTS:

- 1.1 The purpose of the Project Record Documents is to record the actual location of the Work in place and to record changes in the Work.
- 1.2 In addition to the sets of Contract Documents that are required by the Contractor to perform the Work, Contractor shall maintain, at the Site, 1 copy of all Drawings, Specifications, and Addenda, that are part of the Contract as awarded, and also Change Orders, Modifications, approved Shop Drawings, and other approved changes. Each of these documents shall be clearly marked "Project Record Copy" as indicated below, maintained in a clean and neat condition available at all times for inspection by the Project Representative and shall not be used for any other purpose during the progress of the Work.
 - A. Each record copy shall bear the legend "PROJECT RECORD COPY" in heavy block lettering, 1/4" high and contain the following data:

PROJECT RECORD COPY

Contractor's Name	
Contractor's Address	
Made by	Date
Checked by	Date

- B. Where possible, changes from the Contract as awarded Documents shall be conspicuously encircled.
- 1.3 Project Record Requirements
 - A. The Contractor shall mark-up the "Project Record Documents" to show:
 - a. Approved changes in the Work.
 - b. Details not shown in the original Contract Documents.
 - c. All relocations of Work.
 - e. All changes in dimensions.
 - B. As applicable for the project, such information shall include, but shall not be limited to:
 - a. All approved structural changes.
 - b. All approved substitutions.

- c. Elevations and locations of all features referenced to permanent aboveground structures or monuments.
- d. All approved Change Orders.
- 1.4 Contractor shall keep the Project Record Documents up-to-date from day to day as the Work progresses. Appropriate documents shall be updated promptly and accurately; no Work shall be permanently concealed until all required information has been recorded.
- 1.5 Each month these record drawings will be examined by the Project Representative prior to recommending the approval of the partial payment request to ascertain that the record prints reflect the changes to date.
- 1.6 <u>Record Shop Drawings</u>: If installed equipment is at variance with the respective approved Shop Drawings, Contractor shall furnish to the Project Representative revised Shop Drawings indicating the actual completed installation.
- 1.7 <u>As-Built Drawings</u>: At the conclusion of the job, the Contractor shall transfer all the changes appearing on the Record Document Prints to the as-built drawings. The as-built drawings shall be completed in accordance with SURVEYING SECTION. The title block for the as-built drawings shall include the name of Contractor.
- 1.8 Shop Drawings for Permanent Records In addition to the drawings required as above mentioned, Contractor shall submit a list of all approved Shop Drawings of the Work as installed. From this list the Project Representative will select the drawings desired for permanent records. Contractor shall furnish these in a bound set to the Project Representative.
- 1.9 The Project Record Documents shall be submitted by Contractor to the Project Representative when all the Work is completed and shall be approved by the Project Representative before Contractor may request final payment.
- 1.10 Final payment shall be contingent on completion of the above listed requirements in this Section.

2.0 PAYMENT:

2.1 Separate payment will not be made for the work of this Section. The cost shall be included in the prices bid for the various items of work scheduled in the Bid.

END OF SECTION 01720

SECTION 01740

GUARANTEES, WARRANTIES & BONDS

1.0 CONTRACTOR'S GUARANTEE:

1.1 The Contractor shall furnish a written guarantee in the following form:

	"GUARAN	JTEE"
PROJECT		
CONTRACT NO		
	naterial and wo	Vork specified for the aforesaid Contract orkmanship for a period as specified in MENTS.
necessary by the Project Repre	sentative, all de the guarantee	air or replace, whichever may be deemed efective material or workmanship of the period, to the satisfaction of the Project se to the Project Representative.
		Contractor
	Ву	
	Date_	
Sworn to me before this		
	day of	
		Notary Public
<u>o</u>	defective materi	etermined by the Project Representative. ial or workmanship during the guarantee vithout cost to the NJSEA.

1.3 Should the Contractor fail to remedy defects immediately, the Project Representative may furnish such materials and labor as are necessary to bring the

Work to the standard called for and the Contractor shall reimburse the Project Representative in full immediately.

2.0 WARRANTIES AND GUARANTEES (OTHER THAN CONTRACTOR'S):

2.1 Warranties and guarantees as specified in the respective Sections for products and systems shall be in addition to the Contractor's guarantee, and shall be for such periods and with such conditions as stipulated.

3.0 BONDS:

3.1 The Contractor shall provide bonds as stipulated in SPECIFIC PROJECT REQUIREMENTS.

4.0 PAYMENT:

4.1 Separate payment will not be made for the work of this Section. The cost shall be included in the prices bid for the various items of work scheduled in the Bid.

END OF SECTION 01740

SECTION 02000 TECHNICAL SPECIFICATIONS - STRUCTURAL

1.0 GENERAL INSTRUCTIONS

2.0 GENERAL NOTES - STRUCTURAL

- 2.1 All demolition operations, repair operations, and alteration operations shall be done in accordance with IBC 2018, NJ Edition.
- 2.2 All work shall be in conformance with structural drawings, specifications, and requirements of the IBC 2018, NJ Edition plus updates ("the Building Code" referenced in the following notes):
 - A. The structural drawings and specifications comply with the applicable requirements of the governing building code.
 - B. Construction is to comply with the requirements of the governing building code noted above and all other applicable Federal, State, and Local codes, standards, regulations, and laws.
 - C. The Contractor shall compare structural drawings with the architectural drawings before commencing with the Work and shall notify the architect and engineer of any discrepancies requiring clarification or revisions. Do not scale structural drawings, refer to architectural drawings for all dimensions not shown. See "Dimension" section of general notes for additional notes.
 - D. The Contractor shall use structural drawings in conjunction with architectural, mechanical, plumbing, and electrical drawings to coordinate location of depressed slabs, slopes, drains, outlets, recesses, openings, reglets, bolt settings, sleeves, dimensions, etc.
 - E. Discrepancies between information presented within project specifications and within structural notes on plans shall be brought to the attention of the Engineer by the Contractor prior to presenting his or her bid. If such a discrepancy is discovered subsequent to bidding, the Contractor shall be responsible for implementing the option subsequently selected by the Engineer at no additional cost.
 - F. Contractor shall be responsible for final verification of all dimensions, elevations, clearances, etc. of the framing shown on the structural drawings against information provided by manufacturer of selected mechanical equipment prior to proceeding with any related portion of

work. Contractor shall be solely responsible for any remedial work and for its impact on the work schedule resulting from failure to provide early notification of such conflicts to the design team.

- G. Potential conflicts, errors, or omissions present within the drawings (whether within structural drawings or between structural, architectural, and M.E.P drawings) shall be identified by the Contractor during his/her early review of the project documents. Such conflicts, errors, or omissions shall be communicated to the architect in writing prior to commencement of work. In the event of a failure to provide such a notice and sufficient time for a response, the Contractor shall become responsible for cost of all work or remedial work resulting from such conflicts, errors, or omissions, as well as for its impact on the project schedule.
- H. All costs of investigation and/or redesign, due to Contractor mislocation of structural elements or other lack of conformance with the project documents, shall be at the Contractor's expense.
- In the event that certain details of the construction are not fully shown or noted on the drawings, their construction shall be of the same type as for similar conditions which are shown and noted, subject to the structural engineer's approval. Details labeled "typical" apply to all situations that are the same or similar to those specifically referenced, whether or not they are keyed in at each location. Questions regarding the applicability of typical details shall be resolved by the project architect.
- J. OECIS shall neither have control over or charge of, nor be responsible for, the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work, since these are solely the Contractor's rights and responsibilities under the Contract Documents. OECIS shall not be responsible for the Contractor's or any subcontractor's failure to perform the work in accordance with the Contract Documents. The Contractor shall protect adjacent property, his own work, and the public from harm. The Contractor is solely responsible for jobsite safety including all OSHA requirements.

3.0 SHOP DRAWINGS AND SUBMITTALS - STRUCTURAL

3.1 The Contractor shall submit shop drawings for the architect's approval prior to commencement of work. Such drawings shall include erection plans, work procedure, sequence, and details into which all field conditions have been incorporated.

- 3.2 Shop drawings will be reviewed for compliance with Contract Documents, construction methods, dimensioning, and other trade requirements by the Contractor prior to submittal to the Project Engineer. Drawings without Contractor's approval stamp shall be returned without Engineer's review.
- 3.3 In case of a conflict, information presented on structural drawings shall take precedence over that within shop drawings, unless specifically addressed by the Engineer in writing.
- 3.4 Through the process of a cursory review, Engineer assumes no responsibility for dimensions, quantities, errors, or omissions. Any errors or omissions irrespective of Engineer's comments or duration of the review shall be the responsibility of and must be corrected by the Contractor at no additional service charge even if such work was done in accordance with the shop drawings.
- 3.5 The Engineer reserves ten working days for shop drawing review time (from the date of receipt). In cases where the volume of submitted shop drawings is viewed as excessive, the Engineer reserves the right to notify the Authority, architect, and the Contractor of the additional time required to perform a quality review, number of sets within each individual shop drawing submittal shall be limited to two for structural review.
- 3.6 Reproduction of any portion of the structural contract drawings for resubmittal as shop drawings is prohibited. Shop drawings produced in such a manner will be rejected and returned.
- 3.7 On first submittal, clearly flag and cloud all differences from the Contract Documents. On resubmittals, flag and cloud all changes and additions to previous submittal; only clouded items will be reviewed for resubmitted shop drawings.
- 3.8 In addition to the above, the Structural Engineer's review of delegated/specialty engineer submittal is limited to verifying that the specified structural submittal has been furnished, signed, and sealed by the delegated/specialty engineer and that the delegated/specialty engineer has understood the design intent and used the specified structural criteria. No detailed check of calculations will be made. The delegated/specialty engineer is solely responsible for his/her design, including but not limited to the accuracy of his/her calculations and compliance with the applicable codes and standards.

4.0 CONCRETE AND STEEL REINFORCEMENT NOTES

- 4.1 All concrete work shall be in conformance with American Concrete Institute "Building Code Requirements for Structural Concrete" ACI 318 14 ("ACI").
 - A. "ACI Manual of Concrete Practice" Part 1 to 6, by American Concrete Institute.
 - B. "Manual of Standard Practice" by CRSI.
 - C. "ACI Detailing Manual" by ACI.
- 4.2 All concrete shall be controlled concrete (U.O.N) and comply with the building code, project specifications, ACI 301, and ACI 318. Application for controlled concrete with concrete design mix prepared by an approved laboratory must be submitted to the Engineer for filing with the building department. No concrete shall be placed without the design mix being approved by the building department.
- 4.3 Concrete strength shall be as follows, unless otherwise noted:
 - A. Exterior normal weight concrete (exposed to weather): 5000 psi at 28 days, air-entrained with maximum water cement ratio (WC) of 0.40.
- 4.4 All steel reinforcement shall have an ultimate tensile strength of 90,000 psi as per ASTM A615, Grade 60. The Contractor shall furnish and install all the necessary chairs, rebar, ties, spacers, etc., to secure and support the reinforcement while placing the concrete.
- 4.5 Do not increase quantity of water in excess of that established by design mix. If loss of slump occurs because of the use of fibermesh; add superplasticizer in accordance with testing laboratory's instructions.
- 4.6 Where no reinforcement is specified on drawings, provide minimum temperature reinforcement in accordance with ACI-318; but not less than #4 rebar at 18" on center.
- 4.7 When installing expansion bolts or adhesive anchors, the Contractor shall take measures to avoid drilling or cutting of any existing reinforcing and destruction of the concrete. Holes shall be blown clean prior to placing bolts or adhesive anchors.
- 4.8 Reinforcement shall be epoxy coated.

END OF SECTION 2000

SECTION 2100 TECHNICAL SPECIFICATIONS - ELECTRICAL

1.0 GENERAL NOTES - ELECTRICAL

- 1.1 <u>Codes and Standards</u>: All work shall be systematically, carefully, and neatly performed and shall conform to the following standards:
 - A. IBC 2018, New Jersey Edition
 - B. National Electric Code (NFPA 70) 2017 Edition
 - C. Underwriters Laboratories, Inc.
 - D. OSHA, and all agencies having jurisdiction.

2.0 SCOPE OF WORK - ELECTRICAL

- 2.1 The scope of work shall consist of the following:
 - A. Furnishing, installing, and connecting all panelboards, feeders, power outlets, controls, conduits, and wiring.
 - B. Furnishing and installing new motor control center.
 - C. Furnishing, installing, then removing temporary connections to equipment as shown on drawing and indicated in specifications.
 - D. Insulations resistance testing of existing wiring as noted on drawing and indicated in specifications.
 - E. Other work shown on drawing and indicated in specifications.
- 2.2 The contractor shall be responsible for obtaining all permits and approvals and shall pay all associated costs and fees.
- 2.3 Verify all existing conditions in the field and include in the bid price all work required to accommodate the existing installation.

3.0 SUBMITTALS - ELECTRICAL

- 3.1 Submit the following information as applicable and as required for all work specified under this division:
 - A. Manufacturer's product data sheets and samples where required.
 - B. Shop drawings including dimensioned equipment layouts, point-to-point wiring diagrams, and sequences of operation.

- C. Reproducible drawings, PDF, or AutoCAD files.
- D. Operation and maintenance manuals.
- E. Certified factory and field test reports.
- F. Manufacturer's certifications, warranties, and spare parts.
- 3.2 Substitutions to specified items must comply with all specification requirements and will only be permitted where submitted and approved in writing.

4.0 AS-BUILT DRAWINGS AND MAINTENANCE MANUALS

- 4.1 Contractor shall provide as-built drawings indicating any deviation from the original electrical design. The revised drawing shall be stamped "As-Built" with the date and Contractor's signature. One (1) set of prints and a compact disk containing AutoCAD files shall be delivered to the Engineer before final payment is made. After review and acceptance of as-built Contractor shall deliver compact disk to the Owner. Contractor shall provide three (3) prints and a compact disk of as-built drawings to the building manager upon completion of work.
- 4.2 Furnish to the Owner three (3) bound and indexed copies of operations and maintenance data manuals for the installation. The manual shall provide comprehensive detailed information on the approved installation, operation and use, maintenance, and parts list.

5.0 QUALITY ASSURANCE

- 5.1 Materials, equipment, and installation shall conform to the latest edition of all applicable codes and the requirements of all authorities having jurisdiction, including the electrical code, OSHA, and NJSEA.
- 5.2 Materials, equipment, and installation shall conform to the latest edition of the applicable reference standards published by the NFPA, UL, ANSI, IEEE, and NEMA.
- 5.3 The Contractor shall have completed at least two projects of size and complexity similar to those required under this Contract. All workmen shall be skilled in their respective trade.
- 5.4 All work shall be warranted in writing to be free from defects in materials and/or workmanship for a period of one year from the date of final acceptance by the Owner. Warranty shall include all costs of parts, labor, travel, and living expenses required to repair or replace defective items.

6.0 FIELD REVIEW

- 6.1 All stages of the installation will be reviewed by the Owner and/or Owner's Representative for compliance with the requirements of the contract drawings and specifications. Any portion of the construction not meeting those requirements to the satisfaction of the Engineer shall be replaced at no additional cost to the Owner.
- 6.2 Provide proper equipment and reasonable assistance as the Owner and/or Owner's Representative may require to facilitate access and review at the construction site.

7.0 INSULATION RESISTANCE TESTING

- 7.1 Where called for, Contractor shall provide electronic insulation resistance testing utilizing calibrated testing equipment.
- 7.2 Contractor to coordinate scheduling of testing with equipment and facility shutdown periods and NJSEA.
- 7.3 Conductors to be tested shall be de-energized, discharged, and disconnected from source and load(s) prior to testing.
- 7.4 Submit testing equipment calibrating information, testing procedure, and test results to NJSEA and Engineer for review.
- 7.5 Testing agency shall be High Energy, Jim Ratchin, phone number (732) 938-2275.

8.0 BASIC MATERIAL AND METHODS

- 8.1 Coordinate all work with the work of other trades prior to installation.
- 8.2 All shutdown of building and site power, fire alarm, and control systems shall be coordinated with building operating personnel. Off-hour shutdowns shall be performed at no additional cost to the Owner.
- 8.3 Cut and patch non-structural surfaces as required. Repairs shall match original finish, penetrations of fire rated partitions shall be sealed with approved material to provide the same rating as the partition.
- 8.4 Provide expansion fittings where raceways cross building expansion joints.
- 8.5 Unless otherwise noted, equipment, devices, and enclosures shall be rated NEMA 1 for interior locations, NEMA 3R for damp locations, and NEMA 4 for wet locations.

8.6 Provide 4" high sealed concrete housekeeping pads around all conduits penetrating floors of the Meadowlands Arena Annex.

9.0 DELIVERY, STORAGE, AND HANDLING

9.1 All equipment shall be delivered in manufacturer's original protective packaging and stored in a clean, dry place protected from weather, fumes, water, dust, and physical damage. Touch up damaged finished to match the original finish.

10.0 SUMMARY

- 10.1 Provide all labor, materials, equipment, and services required for complete installation of all work indicated on the drawings or specified herein.
- 10.2 Obtain all permits and approvals required by authorities having jurisdiction and pay the associated printing and filing costs.
- 10.3 Verify existing conditions in field and include in the bid price all work required to accommodate the existing installation.
- 10.4 Provide temporary light and power system (as part of the Contract) adequate for the requirements of all trades during construction. Temporary system shall be disconnected and removed when permanent service is in operation.

11.0 RACEWAYS

- 11.1 Rigged galvanized steel (RGS) conduit shall conform to UL 6. Fittings shall be threaded.
- 11.2 Electrical metallic tubing (EMT) shall conform to UL 797. Fittings shall be gland and ring compression type.
- 11.3 All conduit fittings and connectors shall be steel with insulated throats. Dieformed zinc or malleable iron fittings are not acceptable. Bushings shall be provided at all conduit terminations. Bushings larger than 1" shall be grounding type. PVS bushings may be utilized only for 3/4" branch circuit conduits terminating at panelboards.
- 11.4 Minimum raceway size shall be 3/4". Raceways shall be run parallel to building structural lines. Raceways shall not be run horizontally below 8'-0" AFF in partitions. All empty raceways shall be furnished with a 200lb test nylon drag line.
- 11.5 All wiring between junction boxes and for circuit homeruns between first outlet served by the branch circuit and the panelboard shall be run in EMT or RGS as required.

- 11.6 Raceway utilization shall be as follows:
 - A. Rigged galvanized steel (RGS) In concrete slabs; exposed in all mechanical equipment rooms; underground.
 - B. Electrical metallic tubing (EMT) Interior concealed and exposed locations; exposed in mechanical rooms above 8′-0″ AFF; interior communications wiring.
 - C. Flexible metallic conduit Final connections to transformers (maximum length 3'-0") and lighting fixtures in interior locations (min length 18", maximum length 6'-0"); where approved by the Engineer.
 - D. Liquid tight flexible conduit Final connections to motors and mechanical equipment.
- 11.7 All conduit and tubing shall be cut square and reamed at the ends.
- 11.8 Conduit and tubing runs shall be mechanically and electrically continuous from service starting to all outlets and equipment. Conduit shall enter and be securely connected to a cabinet, junction box, pullbox, or outlet box by means of locknuts on the outside and inside and an insulated bushing in the inside. In tubing or flexible metal conduit the one compression locknut shall be made wrench-tight. All locknuts shall be the bonding type with sharp edges for digging into the metal wall of an enclosure and shall be installed in a manner that will assure a locking and electrically continuous installation. Locknuts and bushings are not required where conduits are screwed into tapped connections.
- 11.9 All vertical runs of conduit or tubing terminating in the bottoms of wall boxes or cabinets, or similar locations, shall be protected from the entrance of foreign material prior to the installation of conductors.
- 11.10 Unless otherwise specified, all conduit and tubing shall be installed concealed. In general, all conduit and tubing shall be run in hung ceilings and furred spaces where they exist. Where conduit is run exposed it shall be securely supported with zinc coated malleable iron pipe straps or other approved means. All conduits shall be supported from structural members.
- 11.11 Every conduit system shall be installed complete before any conductors are drawn in. Wire pulling lubricants, when utilized, shall be in accordance with the requirements of Underwriters Laboratories, Inc., applicable to the specific conductor or cable insulation and raceway material.

- 11.12 Where required by the Engineer, extra deep or extra shallow outlet boxes shall be used to facilitate the installation of the conduit system.
- 11.13 All control wiring for MEP trades shall be run in conduit where required. Conduits shall be prepared for painted finish.

12.0 BOXES

- 12.1 Outlet, pull, and junction boxes shall be fabricated from steel and conform to UL 50, UL 514, and NEMA OS1. Boxes for interior locations shall be code gauge, galvanized sheet steel. Boxes for mechanical rooms shall be cast steel with gasketed covers.
- 12.2 Boxes shall contain suitable knockouts. Barriers shall be furnished as required by code.
- 12.3 Boxes shall be sized as required by code for number and gauge of conductors therein, except where noted to be larger, the minimum box shall be 4" square by 1-1/2" deep. Covers greater than 50lb shall be divided into multiple sections.
- 12.4 Wireways and auxiliary gutters shall be two-piece steel construction with ANSI 61 gray enamel finish. Covers shall be combination hinged and screw-on type. Housings shall have regularly spaced knockouts for conduit entry. Wireways shall be manufactured by Square D or approved equal. Provide all end pieces, connectors, and required accessories.
- 12.5 Boxes with dimensions larger than 6' shall have racking or approved supports for conductors within.

13.0 FASTENERS

13.1 Provide inserts, expansion shield lugs, anchors, bolts with nuts and washers, shims, or any other type of fastening devices required to fasten panels or other equipment to floors, walls, or ceilings. Unless otherwise specified herein or shown on the contract drawings, all fasteners shall be hot-dipped galvanized, of sizes and types recommended by the equipment manufacturer and as approved by the Engineer.

14.0 WIRES, CABLES, SPLICES, AND TERMINATIONS

- 14.1 Power and control wiring shall be copper, minimum 98% conductivity, with type THHN/THWN insulation rated 600 volts. Minimum wire size shall be #12 AWG. Conductors shall be solid for wire sized #10 AWG and smaller and stranded for wire sizes #8 AWG and larger.
- 14.2 Conductors shall be color coded as follows:

<u>208/120V</u>	<u>Phase</u>	<u>480/277V</u>
Black	A	Brown
Red	В	Orange
Blue	С	Yellow
White	Neutral	Gray or White w/ tracer
Green	Ground	Green
White with tracer	Neutral for GFI circuit	

- 14.3 Conductor sizes shall be increased where required by code and/or the engineer to compensate for voltage drop and high ambient temperature.
- 14.4 Splices for wire sizes #10 AWG and smaller shall be made with spring connectors and tape. Splices for wire sizes #8 AWG and larger shall be hydraulic compression type with pre-molded cover and tape.
- 14.5 Terminations of power and control wiring shall be compression type, with two-hole lugs for wire sizes #8 AWG and larger. Mechanical lugs may only be utilized for terminations at branch circuit panelboards.

15.0 WIRING DEVICES

- 15.1 Wiring devices shall be Decora style with NEMA configurations as indicated on the drawings. Color of devices shall be as selected by the architect. Wiring devices shall be manufactured by Arrow-Hart, Hubbell, Leviton, Pass & Seymour, or approved equal.
- 15.2 Pilot light switches shall be furnished with lighted handle or separate glass jewel indicating light wired to be illuminated when the switch is on.
- 15.3 Faceplates shall be non-magnetic stainless steel in all spaces with brushed finish unless specified by the architect. Faceplates shall be furnished for all communications outlets and shall be configured to suit the system suppliers' requirements.
- 15.4 Devices mounted adjacent to each other shall be furnished with a common faceplate and be ganged in one box.

16.0 MOTOR CONTROL CENTERS

- 16.1 Motor control centers shall be NEMA type 3R as made by Schneider/Square D.
- 16.2 Factory-wired network communications compatible with existing Honeywell communications system, managed network switch, solid state communicating relays.

- 16.3 Compartments shall be comprised of modular, individual doors with concealed hinges and quick-captive screw fasteners. Doors to have safety interlocks.
- 16.4 All buses to be plated copper, with ampacity ratings as shown on drawings. Neutral buses to be fully-rated. Equipment ground bus to be noninsulated, 2"x1/4" minimum.
- 16.5 All safety disconnects shall be lockable in the open position.
- 16.6 Center to be comprised of a modular arrangement of starters, control devices, overcurrent protective devices, transformers, panelboards, instruments, indicating instruments, blank panels, and other components mounted in compartments of motor control center.
- 16.7 Motor starters shall be full voltage, non-reversing unless otherwise noted, 3-pole combination type with fused disconnect switch meeting the requirements specified for safety switches. Starters shall be NEMA rated as indicated on the drawings with three separate overload elements adjusted to the motor manufacturer's recommendations. Minimum starter size shall be NEMA 1. Starters shall be manufactured by General Electric, Siemens, Square D, or approved equal.
- 16.8 Starters shall incorporate a 150VA minimum control power transformer with fused primary and fused, grounded 120V secondary. Control circuit shall incorporate a hand-off-automatic selector switch, a manual reset, and push-to-test type pilot light wired in parallel with the coil. All devices shall be oil-tight construction mounted on the front cover. Refer to motor control center schedule for additional requirements.
- 16.9 Relay coils shall be electrically held with renewable silver to silver contacts. Starters shall be furnished with a minimum of two sets of isolated auxiliary form "C" contacts.
- 16.10 Spaces and blank units shall include compartments that are fully bused and equipped.
- 16.11 Spare units shall have types, sizes, and ratings indicated installed in compartments indicated "spare".

17.0 BUILDING MANAGEMENT SYSTEM (BMS)

17.1 Building management system components shall be compatible with the existing Honeywell BMS system.

- 17.2 Existing BMS vendor is Honeywell, Charlie Zielkowki, phone (908) 721-1128.
- 17.3 Contractor to coordinate with BMS vendor to provide all required wiring and programming required for complete functionality of equipment identified within drawing and specifications including monitoring and controls.
- 17.4 BMS programming shall be scheduled in coordination with existing BMS vendor (Honeywell) and NJSEA.

18.0 PANELBOARDS (CIRCUIT BREAKER)

- 18.1 Branch circuit panelboards shall be 208/120V, 3Ø, 4-wire configuration with copper bus bars, neutral bus and separate ground bus bonded to panel enclosure. Cable lugs shall be mechanical type. Panelboards shall be manufactured by Schneider Electric/Square D, General Electric, Siemens, or Cutler-Hammer.
- 18.2 Circuit breakers shall be molded case, bolt-in-place with thermal-magnetic trip element. Minimum interrupting ratings shall be 22,000 AIC for 208/120V.
- 18.3 Panelboard enclosures shall be galvanized code gauge steel. Trims shall be surface type in unfinished spaces and flush type in finished spaces, with ANSI 61 gray enamel finish. Doors shall be door in door type construction and shall be lockable and all locks shall be keyed alike. Furnish one key for each panel.
- 18.4 Panels shall have a minimum of 4" gutter space on both sides.
- 18.5 Furnish and install typewritten directories for each panelboard, new and existing, indicating devices served.

19.0 SAFETY SWITCHES

- 19.1 Safety disconnect switches shall be 250V or 600V as required, heavy duty, horsepower rated, quick-make, quick-break design in NEMA 1 enclosure. Enclosures exposed to wet or rain conditions shall be in NEMA 3R enclosure.
- 19.2 Provide interlocks to prevent opening the cover with the switch in the "on" position or closing of the switch with the door open, except that the interlock shall be tool releasable by a qualified person for inspection of the contacts of mechanism.
- 19.3 Provide for padlocking handle in the off position.
- 19.4 Provide neutral assembly where scheduled.

- 19.5 Switches shall be capable of withstanding the available fault or let through current before the fuse operates without damage or change in rating. The short circuit interrupting rating of the fuse switch combination shall be 100,000 RMS symmetrical amperes and 12 times the continuous current rating when unfused at rated voltage.
- 19.6 Fuse clips shall be of the rejection type, shall accommodate dual element, current limiting fuses only and shall be sized to accept fuses of the proper ampere rating.
- 19.7 Provide ground lug in each switch.

20.0 FUSES

- 20.1 Fuses shall be UL listed, time delay, current limiting and have an interrupting capacity of at least 200,000 amperes RMS symmetrical.
- 20.2 The time-current characteristics and ratings shall be such that positive selective coordination is assured.
- 20.3 Fuse voltage ratings shall be 600V or 250V as required.
- 20.4 Class RK1 (time delay) fuses, rejection type:
 - A. Bussmann type LPN-RK (250V) or type LPS-RK (600V)
 - B. Ferraz-Shawmut A2D (250V) or A6D (600V)
 - C. Littelfuse type LLN-RK (250V) or LLS-RK (600V)
- 20.5 Class L (time delay):
 - A. Bussmann type KRP-C
 - B. Littlefuse type KLP-C
 - C. Mersen A4BQ
- 20.6 Class CC (time delay) fuses, rejection type:
 - A. Bussmann type LP-CC
 - B. Mersen ATDR
 - C. Littlefuse type KLDR

21.0 RELAYS, CONTACTORS, AND CONTROLS

21.1 Control relays shall be furnished in suitable NEMA rated enclosures with locked cover containing any pushbuttons and indicating lights. Panel shall include power supply with grounded secondary, mounting blocks, and relays.

- 21.2 Relays shall be electrically held with Form C contacts rated to control the voltages and currents required (10 amps minimum). Relays shall be manufactured by Potter-Brumfield, Square D, or approved equal.
- 21.3 Contractors shall be mechanically held with contacts electrically driven to the open and closed positions. Contacts shall be rated 20 amps minimum at rated voltage and shall be field reversible. Provide all accessories required for proper operation. Contactors shall be manufactured by ASCO, Square D, or approved equal.
- 21.4 Wiring diagrams on the drawings are schematic. Provide all materials required for complete control systems. Coordinate the normal position of contacts (open or closed) with the requirements of all equipment furnished.

22.0 GROUNDING

- 22.1 The distribution system shall be completely and properly grounded using approved fittings. Separate insulated ground conductors shall be run with all feeders where indicated, receptacle branch circuits, and flexible connections to lighting fixtures and equipment.
- 22.2 Metal raceways, metal enclosures of electrical devices, and other equipment shall be completely grounded in an approved manner. Proper hardware required for a complete grounding system shall be installed by the Contractor.

23.0 SPLICES AND TERMINATIONS

- 23.1 No splices or joints will be permitted in either feeder or branches except at outlets or accessible terminal, splice, or junction boxes.
- 23.2 All materials required for making splices and/or terminations shall be supplied in complete kits not older than 6 months. The Contractor shall also be responsible for ensuring that all materials furnished will not adversely affect the physical or electrical properties or other materials furnished or of the wire or cable itself.
- 23.3 Where the Contractor makes connections to existing wires, he shall open and disconnect the existing splices from such wires and install new splices to include the existing wires as required.
- 23.4 All splices for wire sizes #10 AWG and smaller shall be made with insulated spring connector applied to twisted conductors. Two half lapped layers of vinyl tape extending a distance of not less than one inch from the connector shall be applied. Splices other than the aforementioned will be permitted at the discretion of the Engineer.

23.5 All splices for wire size #8 AWG and larger shall be made with hydraulic compression splices. Splices shall be insulated with heavy-wall heat shrink tubing that shall overlap the conductor insulation by a minimum of 2 inches.

24.0 REMOVALS

- 24.1 Notes and graphic representations on the drawings shall not limit the extent of removals required. The Contractor shall visit the site and carefully examine existing conditions and shall perform all work required to achieve the final design intent as required by the Contract Documents. The extent of all removal work shall be coordinated with the architect.
- 24.2 All work required to remain in service but interfering with the alteration shall be relocated and reconnected using materials and standards of this contract.
- 24.3 The removal of all BMS devices and associated cable shall be coordinated with the appropriate building operating personnel.

25.0 IDENTIFICATION OF WORK

- 25.1 All panelboards, equipment, and cabinets specified herein shall be clearly identified with the equipment designation, voltage and ampere rating, fuse rating, equipment served and origin of the incoming feed. Identification shall be plastic nameplate with 1/2" minimum lettering attached by screws. White lettering and building standard background color.
- 25.2 Faceplates of switches for equipment such as remote fans and motorized screens shall be identified with the name of the device controlled. Identification shall be by indelible marker in concealed locations and adhesive labels in exposed locations. Emergency devices shall be identified in red.
- 25.3 Empty conduits shall be identified with tags at both ends indicating the location of termination at the opposite end.
- 25.4 All wires shall be identified by panel and circuit number at all termination and splice points by the use of Brady B-500 vinyl cloth tape or equivalent method.
- 25.5 All junction boxes shall be identified with panel and circuit numbers of all circuits or name of communications system cabling contained within. Junction boxes in exposed locations shall be clearly marked with identifying labels. Junction boxes in concealed locations shall be marked with a bold, indelible marking pen. Lettering shall be neatly and legibly printed, junction boxes on emergency service shall be painted red and labeled as emergency.

- 25.6 Conduit runs for branch circuiting and/or communications cabling shall be identified at every 50 feet of length, and at each outlet and pull box with circuit number or system name.
- 25.7 Identification for outdoor equipment shall not compromise the equipment enclosure ratings of equipment, shall have UV-resistant colors, and stainless steel or equal rust-resistant securing means.

26.0 CUTTING AND PATCHING

- 26.1 All cutting and patching required for equipment included in these specifications shall be done by this Contractor.
- 26.2 This Contractor shall not do any cutting that may impair the strength of building construction. No holes are to be drilled into any structural members. Clamps or other approved holding devices are to be used.
- 26.3 All cutting of existing floors, ceilings, and walls shall be performed in a manner so as to minimize damage to adjacent materials. Patching of all surfaces shall be performed in a manner approved by the architect to insure complete matching with adjacent finishes after final treatment of surfaces.

27.0 CORE DRILLING

- 27.1 Cored holes shall be reviewed by a structural engineer prior to starting.
- 27.2 Core drilling is permitted during overtime hours only. Coordinate all drilling with building management prior to beginning and drilling.
- 27.3 For removed or abandoned outlets, the existing cored hole in the concrete slab shall be filled with non-shrink grout. The filled hole shall be adjusted to grade level.
- 27.4 Contractor shall use a bar locator to determine if rebars interfere with proposed hole. If there is interference, the core hole shall be shifted to a new location acceptable to the tenant, structural engineer and architect.
- 27.5 When an existing hole is to be reactivated, inspect to see if rebars have been cut. If rebars have been cut, inform the general contractor to proceed to repair rebars. Proceed with a new core hole as described above.

28.0 SEALING OF PENETRATIONS

28.1 All penetrations of walls, floors, or ceilings must be sealed in an approved manner using an outer circumferential sleeve filled inside and out.

28.2 All penetrations of fire rated walls, floors, or ceilings shall be sealed with approved material to provide same rating as floor, wall or ceiling assembly. Refer to architectural drawings for locations of fire rated partitions.

29.0 HANGERS AND SUPPORTS

- 29.1 Threaded rods shall be fully galvanized, minimum 3/8" diameter. Modular channel supports shall be galvanized steel. Support clips and fasteners shall be listed and approved for the application. Straps and clamps shall be malleable iron.
- 29.2 Supports shall be sized to accommodate the load required. All work shall be supported independently of the work of other trades, including ceiling system supports.
- 29.3 Panels and equipment located on other than masonry walls shall be mounted with modular channel supports secured to the building structure.
- 29.4 Approved seismic restraints rated to resist 1/2g of force shall be furnished for all electrical work where required by local building codes and the authorities having jurisdiction.

30.0 POWER INTERRUPTION NOTE

- 30.1 Electrical power must be shut off prior to the contractor performing any work in raceways with live electrical circuits or any other live electrical circuits or equipment. Any power interruption shall be coordinated with the owner and building operating personnel, providing a minimum of seven (7) days advance notice.
- 30.2 Taps into live risers are not permitted.

31.0 FINAL CLEANUP AND FIELD TESTS

- 31.1 After completion of the entire electrical installation:
 - A. The Contractor, prior to final acceptance, shall clean all panels, switches, cabinets, devices plates, fixtures and other items furnished under this contract and shall ensure that all panelboard directories are in place and completed or revised as required by the work, and that all identification and marking of equipment, cables, all junction boxes and other items is completed.
 - B. The Contractor shall repair or replace, as directed by the Engineer, any item damaged due to installation or relocation of equipment or devices at no additional cost to the Owner.

- 31.2 In addition to other tests which may be required by other divisions, perform field tests in the presence of the NJSEA, to demonstrate the proper functioning of the electrical installation. The NJSEA shall be given a minimum of 48 hours' advance notice of all tests. Required field tests shall include, but not be limited to the following:
 - A. Operation of all electrical equipment for a period for a period of 24 hours without interruption.
 - B. 1,000-volt insulation resistance test for all wires and cables furnished. Contractor shall furnish a test report to the engineer indicating test method used and results.
- 31.3 All defective fixtures, cables, or other equipment encountered during the course of testing shall be promptly reported to the Engineer so replacement of affected items may be evaluated.

32.0 UNIT PRICE NOTES

- 32.1 Contractor is to submit unit prices for the following listed items:
 - A. All conduits required for the job
 - B. All receptacles, wall, and workstation mounted
 - C. All light fixtures
 - D. All switches
 - E. Telephone outlets

33.0 PROJECT CLOSEOUT

- 33.1 After completion of project and prior to requesting final payment, the Contractor shall give written notice that the following items have been completed:
 - A. Required agency approvals
 - B. Final cleaning and adjustment of lighting fixtures and equipment
 - C. Resolution of outstanding submittals and punch list items
 - D. As-built drawings
 - E. Turnover of spare lamps, keys, and any required spare parts or tools
 - F. System startup, testing, and adjustment
 - G. Manufacturer's certifications, warranties, and O&M manuals.
 - H. Demonstrations and Owner instruction.

END OF SECTION 02000

APPENDIX #1

IZOD CENTER COOLING TOWER PLANT

50 STATE ROAD 120, EAST RUTHERFORD, N.J., 07073

MOTOR CONTROL CENTER REPLACEMENT

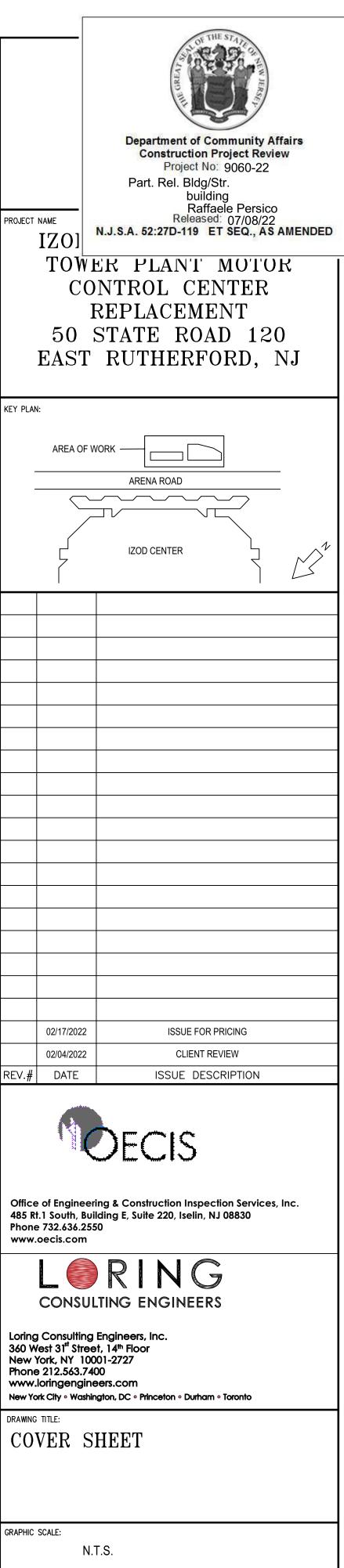
LORING NO. 12606.000



NEW JERSEY SPORTS & EXPOSITION AUTHORITY

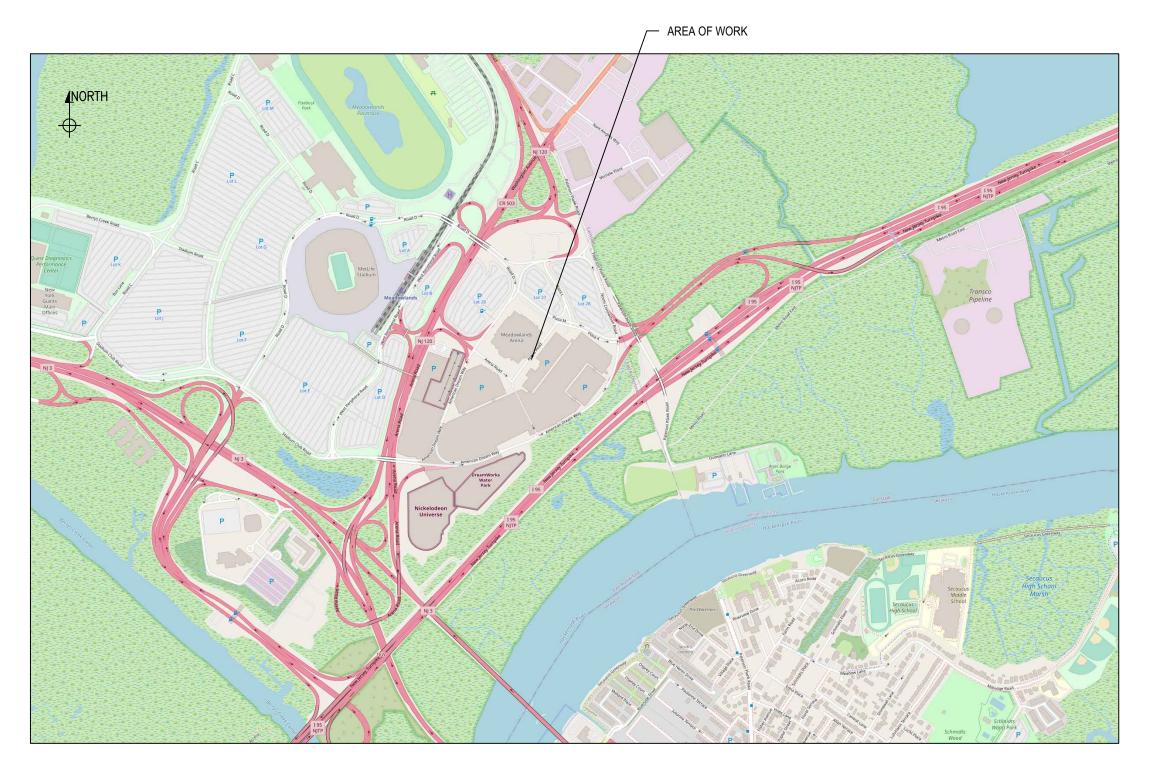
1 DE KORTE PARK PLAZA, LYNDHURST, NEW JERSEY 07071

VINCENT PRIETO, PRESIDENT STEVEN CATTUNA, CHIEF OF STAFF



KEY PLAN:

02/17/2022 Γ001



1 LOCATION PLAN 1 - OVERALL VIEW NOT TO SCALE

INORTH	IZOD CENTER	
		PARKING GARAGE AREA OF WORK
ARENA ROAD		
ROAD.		

2 LOCATION PLAN 2 - ENLARGED NOT TO SCALE

SHEET LIST							
SHEET	SHEET TITLE	CONTRACT	DOB SET				
#		SET	SHEET				
		SHEET NO	NO				
T001.00	COVER SHEET	1	1				
T002.00	SHEET LIST AND LOCATION PLAN	2	2				
S001.00	GENERAL NOTES	3	3				
S100.00	EXISTING PLAN, DETAILS	4	4				
E001.00	ELECTRICAL SYMBOL LIST, NOTES, AND SPECIFICATIONS	5	5				
E101.00	ELECTRICAL REMOVALS AND NEW WORK PLAN	6	6				
E201.00	ELECTRICAL RISER DIAGRAMS	7	7				
E301.00	ELECTRICAL SCHEDULES	8	8				

APPLICABLE CODES:

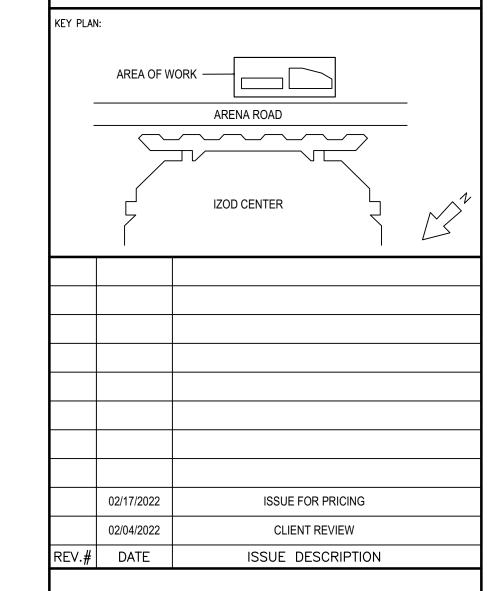
BUILDING SUBCODE, NJAC 5:23-3.14 2018 INTERNATIONAL BUILDING CODE, NEW JERSEY EDITION ELECTRICAL SUBCODE, NJAC 5:23-3.16 2017 NATIONAL ELECTRICAL CODE (NFPA 70)



VINCENT PRIETO, PRESIDENT STEVEN CATTUNA, CHIEF OF STAFF

RESERVED FOR DCA

IZOD CENTER COOLING TOWER PLANT MOTOR CONTROL CENTER REPLACEMENT 50 STATE ROAD 120 EAST RUTHERFORD, NJ





Office of Engineering & Construction Inspection Services, Inc. 485 Rt.1 South, Building E, Suite 220, Iselin, NJ 08830 Phone 732.636.2550 www.oecis.com

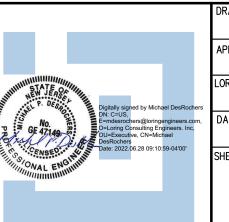


Loring Consulting Engineers, Inc. 360 West 31st Street, 14th Floor New York, NY 10001-2727 Phone 212.563.7400

www.loringengineers.com New York City • Washington, DC • Princeton • Durham • Toronto

DRAWING TITLE: SHEET LIST,, AND LOCATION PLAN

GRAPHIC SCALE: N.T.S.



G.M.A. K.M.P APPROVED: K.M.P 12606.000 02/17/2022 **T002**

STRUCTURAL:

1. ALL DEMOLITION OPERATIONS, REPAIR OPERATIONS AND ALTERATION OPERATIONS SHALL BE DONE IN ACCORDANCE WITH IBC 2018, NJ EDITION.

GENERAL NOTES:

ALL WORK SHALL BE IN CONFORMANCE WITH STRUCTURAL DRAWINGS. SPECIFICATIONS AND THE REQUIREMENTS OF THE IBC 2018. NJ EDITION PLUS UPDATES ("THE BUILDING CODE" REFERENCED IN THE FOLLOWING NOTES).

- 1. TO THE BEST OF OUR KNOWLEDGE, THE STRUCTURAL DRAWINGS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE GOVERNING BUILDING CODE.
- CONSTRUCTION IS TO COMPLY WITH THE REQUIREMENTS OF THE GOVERNING BUILDING CODE NOTED ABOVE AND ALL OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES, STANDARDS, REGULATIONS, AND
- THE CONTRACTOR SHALL COMPARE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL DRAWINGS BEFORE COMMENCING WITH THE WORK AND SHALL NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES REQUIRING CLARIFICATION OR REVISIONS. DO NOT SCALE STRUCTURAL DRAWINGS, REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN. SEE "DIMENSION" SECTION OF GENERAL NOTES FOR ADDITIONAL NOTES.
- 4. THE CONTRACTOR SHALL USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS TO COORDINATE LOCATION OF DEPRESSED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, REGLETS, BOLT SETTINGS, SLEEVES, DIMENSIONS, ETC.
- DISCREPANCIES BETWEEN INFORMATION PRESENTED WITHIN PROJECT SPECIFICATIONS AND WITHIN STRUCTURAL NOTES ON PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE CONTRACTOR PRIOR TO PRESENTING HIS OR HER BID. IF SUCH A DISCREPANCY IS DISCOVERED SUBSEQUENT TO BIDDING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE OPTION SUBSEQUENTLY SELECTED BY THE ENGINEER AT NO ADDITIONAL COST
- CONTACTORS SHALL BE RESPONSIBLE FOR FINAL VERIFICATION OF ALL DIMENSIONS, ELEVATIONS, CLEARANCES, ETC. OF THE FRAMING SHOWN ON THE STRUCTURAL DRAWINGS AGAINST INFORMATION PROVIDED BY MANUFACTURER OF SELECTED MECHANICAL EQUIPMENT PRIOR TO PROCEEDING WITH ANY RELATED PORTION OF WORK. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY REMEDIAL WORK AND FOR ITS IMPACT ON THE WORK SCHEDULE RESULTING FROM FAILURE TO PROVIDE EARLY NOTIFICATION OF SUCH CONFLICTS TO THE DESIGN TEAM.
- POTENTIAL CONFLICTS, ERRORS OR OMISSIONS PRESENT WITHIN THE DRAWINGS (WHETHER WITHIN STRUCTURAL DRAWINGS OR BETWEEN STRUCTURAL, ARCHITECTURAL, AND M.E.P DRAWINGS) SHALL BE IDENTIFIED BY THE CONTRACTOR DURING HIS/HER EARLY REVIEW OF THE PROJECT DOCUMENTS. SUCH CONFLICTS, ERRORS OR OMISSIONS SHALL BE COMMUNICATED TO THE ARCHITECT IN WRITING PRIOR TO COMMENCEMENT OF WORK. IN THE EVENT OF FAILURE TO PROVIDE SUCH A NOTICE AND SUFFICIENT TIME FOR A RESPONSE, THE CONTRACTOR SHALL BECOME RESPONSIBLE FOR COST OF ALL WORK OR REMEDIAL WORK RESULTING FROM SUCH CONFLICTS, ERRORS OR OMISSION, AS WELL AS FOR ITS IMPACT ON THE PROJECT SCHEDULE.
- ALL COSTS OF INVESTIGATION AND/OR REDESIGN, DUE TO CONTRACTOR MISLOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE PROJECT DOCUMENTS, SHALL BE AT THE CONTRACTOR'S EXPENSE.
- 9. IN THE EVENT THAT CERTAIN DETAILS OF THE CONSTRUCTION ARE NOT FULLY SHOWN OR NOTED ON THE DRAWINGS, THEIR CONSTRUCTION SHALL BE OF THE SAME TYPE AS FOR SIMILAR CONDITIONS WHICH ARE SHOWN AND NOTED, SUBJECT TO THE STRUCTURAL ENGINEER'S APPROVAL. DETAILS LABELED "TYPICAL" APPLY TO ALL SITUATIONS THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED, WHETHER OR NOT THEY ARE KEYED IN AT EACH LOCATION. QUESTIONS REGARDING THE APPLICABILITY OF TYPICAL DETAILS SHALL BE RESOLVED BY THE PROJECT ARCHITECT.
- 10. OECIS SHALL NEITHER HAVE CONTROL OVER OR CHARGE OF, NOR BE RESPONSIBLE FOR, THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, SINCE THESE ARE SOLELY THE CONTRACTOR'S RIGHTS AND RESPONSIBILITIES UNDER THE CONTRACT DOCUMENTS. OECIS SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S OR ANY SUBCONTRACTOR'S FAILURE TO PERFORM THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL PROTECT ADJACENT PROPERTY, HIS OWN WORK, AND THE PUBLIC FROM HARM. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOBSITE SAFETY INCLUDING ALL OSHA REQUIREMENTS.

SHOP DRAWINGS AND SUBMITTALS

- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE ARCHITECT'S APPROVAL PRIOR TO COMMENCEMENT OF WORK. SUCH DRAWINGS SHALL INCLUDE ERECTION PLANS, WORK PROCEDURE, SEQUENCE, AND DETAILS INTO WHICH ALL FIELD CONDITIONS HAVE BEEN INCORPORATED.
- SHOP DRAWINGS WILL BE REVIEWED FOR COMPLIANCE WITH CONTRACT DOCUMENTS, CONSTRUCTION METHODS, DIMENSIONING AND OTHER TRADE REQUIREMENTS BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE PROJECT ENGINEER. DRAWINGS WITHOUT CONTRACTOR'S APPROVAL STAMP SHALL BE RETURNED WITHOUT ENGINEER'S REVIEW.
- 3. IN CASE OF A CONFLICT, INFORMATION PRESENTED ON STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THAT WITHIN SHOP DRAWINGS, UNLESS SPECIFICALLY ADDRESSED BY THE ENGINEER IN WRITING.
- THROUGH THE PROCESS OF A CURSORY REVIEW, ENGINEER ASSUMES NO RESPONSIBILITY FOR DIMENSIONS. QUANTITIES, ERRORS OR OMISSIONS. ANY ERRORS OR OMISSIONS IRRESPECTIVE OF ENGINEER'S COMMENTS OR DURATION OF THE REVIEW SHALL BE THE RESPONSIBILITY OF AND MUST BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL SERVICE CHARGE EVEN IF SUCH WORK WAS DONE IN ACCORDANCE WITH THE SHOP DRAWINGS.
- THE ENGINEER RESERVES TEN WORKING DAYS FOR SHOP DRAWING REVIEW TIME (FROM THE DATE OF RECEIPT). IN CASES WHERE THE VOLUME OF SUBMITTED SHOP DRAWINGS IS VIEWED AS EXCESSIVE, THE ENGINEER RESERVES THE RIGHT TO NOTIFY THE AUTHORITY, ARCHITECT, AND THE CONTRACTOR OF THE ADDITIONAL TIME REQUIRED TO PERFORM A QUALITY REVIEW, NUMBER OF SETS WITHIN EACH INDIVIDUAL SHOP DRAWING SUBMITTAL SHALL BE LIMITED TO TWO FOR STRUCTURAL REVIEW.
- REPRODUCTION OF ANY PORTION OF THE STRUCTURAL CONTRACT DRAWINGS FOR RESUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.
- 7. ON FIRST SUBMITTAL, CLEARLY FLAG AND CLOUD ALL DIFFERENCES FROM THE CONTRACT DOCUMENTS. ON RESUBMITTALS, FLAG AND CLOUD ALL CHANGES AND ADDITIONS TO PREVIOUS SUBMITTAL; ONLY CLOUDED ITEMS WILL BE REVIEWED FOR RESUBMITTED SHOP DRAWINGS.
- 8. IN ADDITION TO THE ABOVE, THE STRUCTURAL ENGINEER'S REVIEW OF DELEGATED/ SPECIALTY ENGINEER SUBMITTAL IS LIMITED TO VERIFYING THAT THE SPECIFIED STRUCTURAL SUBMITTAL HAS BEEN FURNISHED, SIGNED AND SEALED BY THE DELEGATED/SPECIALTY ENGINEER AND THAT THE DELEGATED/SPECIALTY ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND USED THE SPECIFIED STRUCTURAL CRITERIA. NO DETAILED CHECK OF CALCULATIONS WILL BE MADE. THE DELEGATED/SPECIALTY ENGINEER IS SOLELY RESPONSIBLE FOR HIS/HER DESIGN, INCLUDING BUT NOT LIMITED TO THE ACCURACY OF HIS/HER CALCULATIONS AND COMPLAINCE WITH THE APPLICABLE CODES AND STANDARDS.

CONCRETE AND STEEL REINFORCEMENT NOTES

- 1. ALL CONCRETE WORK SHALL BE IN CONFORMANCE WITH AMERICAN CONCRETE INSTITUTE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" ACI 318 - 14 ("ACI").
 - 1.1. "ACI MANUAL OF CONCRETE PRACTICE" PART 1 TO 6, BY AMERICAN CONCRETE INSTITUTE.
 - 1.2. "MANUAL OF STANDARD PRACTICE" BY CRSI.
- 1.3. "ACI DETAILING MANUAL" BY ACI.
- ALL CONCRETE SHALL BE CONTROLLED CONCRETE (U.O.N) AND COMPLY WITH THE BUILDING CODE, PROJECT SPECIFICATIONS, ACI 301, AND ACI 318, APPLICATION FOR CONTROLLED CONCRETE WITH CONCRETE DESIGN MIX PREPARED BY AN APPROVED LABORATORY MUST BE SUBMITTED TO THE ENGINEER FOR FILING WITH THE BUILDING DEPARTMENT, NO CONCRETE SHALL BE PLACED WITHOUT THE DESIGN MIX BEING APPROVED BY THE BUILDING DEPARTMENT.
- 3. CONCRETE STRENGTH SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
- 3.1. EXTERIOR NORMAL WEIGHT CONCRETE (EXPOSED TO WEATHER): 5000 PSI AT 28 DAYS, AIR-ENTRAINED WITH MAXIMUM WATER CEMENT RATIO (WC) OF 0.40.
- 4. ALL STEEL REINFORCEMENT SHALL HAVE AN ULTIMATE TENSILE STRENGTH OF 90,000 PSI AS PER ASTM A615, GRADE 60. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL THE NECESSARY CHAIRS, REBARS, TIES, SPACERS, ETC., TO SECURE AND SUPPORT THE REINF. WHILE PLACING THE CONCRETE.
- DO NOT INCREASE QUANTITY OF WATER IN EXCESS OF THAT ESTABLISHED BY DESIGN MIX. IF LOSS OF SLUMP OCCURS BECAUSE OF THE USE OF FIBERMESH; ADD SUPERPLASTICIZER IN ACCORDANCE WITH TESTING LABORATORIES INSTRUCTIONS.
- 6. WHERE NO REINFORCEMENT IS SPECIFIED ON DRAWINGS, PROVIDE MINIMUM TEMPERATURE REINFORCEMENT IN ACCORDANCE WITH ACI-318; BUT, NOT LESS THAN #4 REBARS AT 18" ON CENTER.
- WHEN INSTALLING EXPANSION BOLTS OR ADHESIVE ANCHORS, THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING OF ANY EXISTING REINFORCING AND DESTRUCTION OF THE CONCRETE.
- HOLES SHALL BE BLOWN CLEAN PRIOR TO PLACING BOLTS OR ADHESIVE ANCHORS. 8. REINFORCEMENT SHALL BE EPOXY COATED.

ABBREVIATION LIST ACI AMERICAN CONCRETE INSTITUTE ADD'L ADDITIONAL ADJ ADJACENT **AESS** ARCHITECTURALLY EXPOSED STRUCTURAL STEEL AMERICAN INSTITUTE OF STEEL CONSTRUCTION ARCH ARCHITECTURAL ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS AMERICAN WELDING SOCIETY BLDG BUILDING BRG BEARING **BOTH SIDES** CANTILEVER CENTERLINE COL COLUMN CM CONSTRUCTION MANAGER CONC CONCRETE CONT CONTINUOUS CY CUBIC YARDS DEMO DEMOLITION DTL DETAIL DIA DIAMETER DIM DIMENSION DL DEAD LOAD DO DITTO DWG DRAWING EACH EACH FACE ELEVATION EOS EDGE OF SLAB EQ EQUAL (SPACING) ES EACH SIDE **EACH WAY** EW EXIST EXISTING FEET FINISH FLOOR FINISHED FLG FLANGE GAGE OR GAUGE GALV GALVANIZED H, HORIZ HORIZONTAL KIP = 1000 LBS KSF KIPS PER SQUARE FOOT KSI KIPS PER SQUARE INCH LIVE LOAD LLH LONG LEG HORIZONTAL LLV LONG LEG VERTICAL LONG WAY OR LIGHT WEIGHT CONCRETE MAXIMUM MECH **MECHANICAL** MIN MINIMUM MISC MISCELLANEOUS NOT IN CONTRACT NTS NOT TO SCALE ON CENTER OD OUTSIDE DIAMETER OPNG OPENING OP.WT OPERATING WEIGHT PCF POUNDS PER CUBIC FOOT PSF POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH REINF REINFORCED

REQ'D

REV

SIM

SQ.FT

SQ.IN

SS

STD

STIFF

SW

TBD

THK

TOC

TOS

T/S

TYP

UNO

V, VERT

NOTED

W/O

WP

WWF

SYM

INTENT IS THE SAME

REQUIRED

REVISION

SPECIFICATION

SQUARE FOOT

SQUARE INCH

STANDARD

STIFFENER

THICK

TYPICAL

WITH

WITHOUT

WORKING POINT WELDED WIRE FABRIC

SHORT WAY

SYMMETRICAL

TO BE DETERMINED

TOP OF CONCRETE

UNLESS NOTED OTHERWISE

VERIFY IN FIELD SOLID AT SPACING

WELDED WIRE REINFORCEMENT

TOP OF SLAB

TOP OF STEEL

STAINLESS STEEL

SQUARE FEET OR STEPPED FOOTING

SAW CUT CONTROL JOINT

SIMILAR TO.NOT EXACTLY THE SAME; BUT

Construction Project Review Project No: 9060-22 Part. Rel Bldg./Str. Raffaele Persico Released: 07/08/22 N.J.S.A. 52:27D-119 ET SEQ., AS AMENDED

Department of Community Affairs

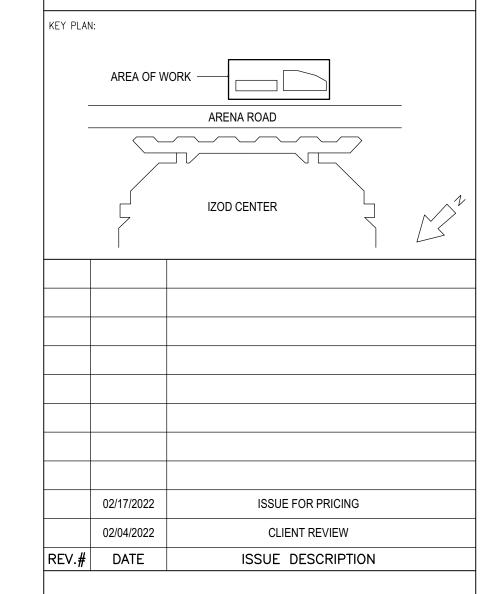
RESERVED FOR DCA



VINCENT PRIETO, PRESIDENT STEVEN CATTUNA, CHIEF OF STAFF

PROJECT NAME

IZOD CENTER COOLING TOWER PLANT MOTOR CONTROL CENTER REPLACEMENT 50 STATE ROAD 120 EAST RUTHERFORD, NJ





Office of Engineering & Construction Inspection Services, Inc. 485 Rt.1 South, Building E, Suite 220, Iselin, NJ 08830 Phone 732.636.2550 www.oecis.com



Loring Consulting Engineers, Inc. 360 West 31st Street, 14th Floor New York, NY 10001-2727 Phone 212.563.7400 www.loringengineers.com New York City • Washington, DC • Princeton • Durham • Toronto

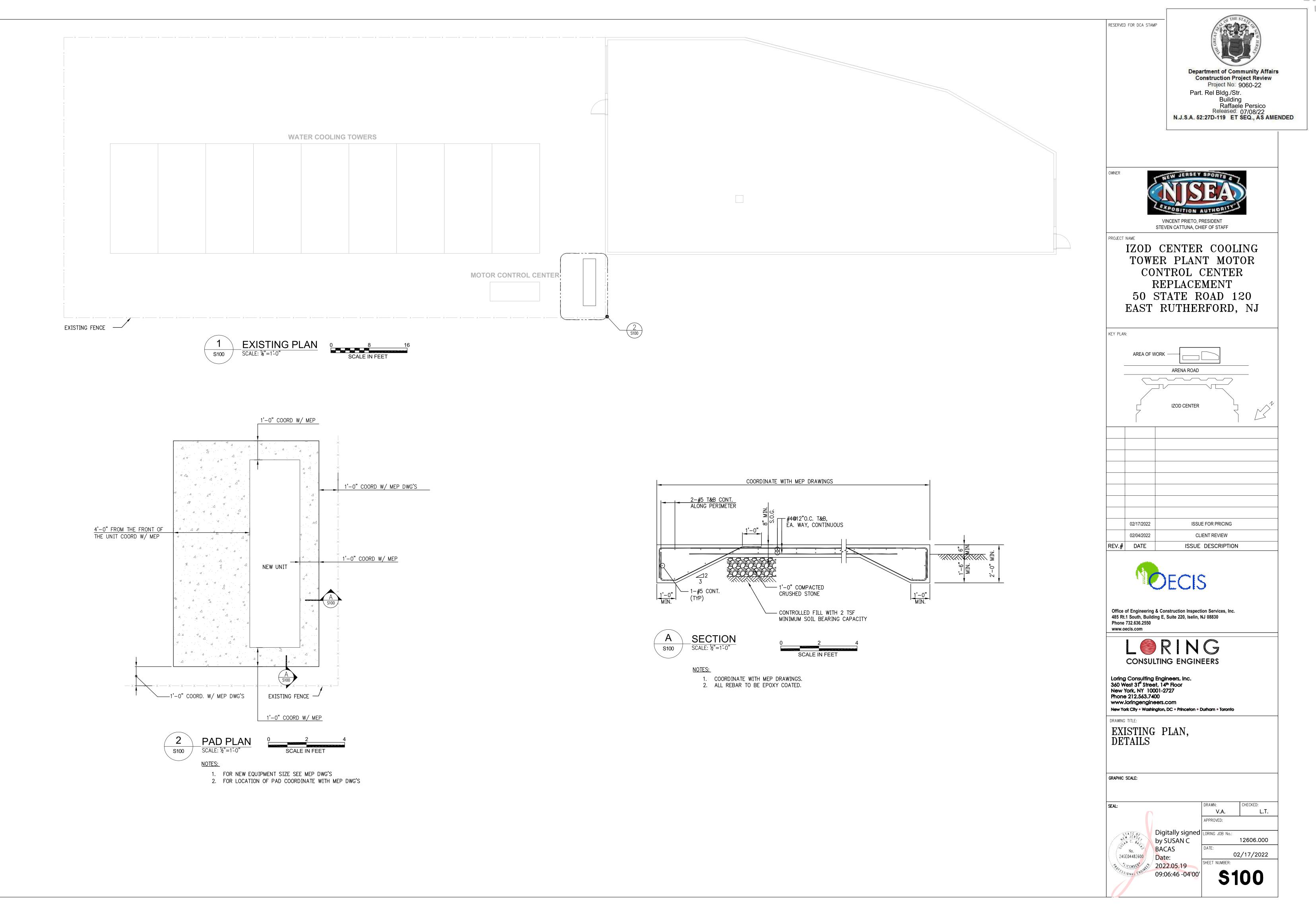
GENERAL NOTES

GRAPHIC SCALE:

Digitally signed by **SUSAN C** BACAS 24GE04482600 Date: 2022.05.19 09:07:55 -04'00'

V.A. APPROVED: LORING JOB No.: 12606.000 02/17/2022 SHEET NUMBER:

L.T.



- A. ALL WORK SHALL BE SYSTEMATICALLY, CAREFULLY AND NEATLY PERFORMED AND SHALL CONFORM TO THE FOLLOWING STANDARDS:
- IBC 2018, NEW JERSEY EDITION
- NATIONAL ELECTRICAL CODE (NFPA 70) 2017 EDITION
- UNDERWRITERS' LABORATORIES, INC. 4. OSHA, AND ALL AGENCIES HAVING JURISDICTION

2. WORK SCOPE

A. THE SCOPE OF WORK SHALL CONSIST OF THE FOLLOWING:

- FURNISHING, INSTALLING AND CONNECTING ALL PANELBOARDS, FEEDERS, POWER
- OUTLETS, CONTROLS, CONDUITS, AND WIRING.
- FURNISHING AND INSTALLING NEW MOTOR CONTROL CENTER. 3. FURNISHING, INSTALLING, THEN REMOVING TEMPORARY CONNECTIONS TO EQUIPMENT
- AS SHOWN ON DRAWING AND INDICATED IN SPECIFICATIONS.
- INDICATED IN SPECIFICATIONS.
- OTHER WORK SHOWN ON DRAWING AND INDICATED IN SPECIFICATIONS.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND APPROVALS AND SHALL PAY ALL ASSOCIATED COSTS AND FEES. VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND INCLUDE IN THE BID PRICE ALL WORK

REQUIRED TO ACCOMMODATE THE EXISTING INSTALLATION.

3. SUBMITTALS

- A. SUBMIT THE FOLLOWING INFORMATION AS APPLICABLE AND AS REQUIRED FOR ALL WORK SPECIFIED UNDER THIS DIVISION:
- MANUFACTURERS' PRODUCT DATA SHEETS AND SAMPLES WHERE REQUIRED.
- SHOP DRAWINGS INCLUDING DIMENSIONED EQUIPMENT LAYOUTS POINT-TO-POINT WIRING DIAGRAMS AND SEQUENCES OF OPERATION.
- REPRODUCIBLE DRAWINGS, PDF, OR AUTOCAD FILES. OPERATION AND MAINTENANCE MANUALS.
- CERTIFIED FACTORY AND FIELD TEST REPORTS.
- MANUFACTURERS' CERTIFICATIONS, WARRANTIES AND SPARE PARTS
- SUBSTITUTIONS TO SPECIFIED ITEMS MUST COMPLY WITH ALL SPECIFICATION REQUIREMENTS AND WILL ONLY BE PERMITTED WHERE SUBMITTED AND APPROVED IN WRITING.

4. AS-BUILT DRAWINGS AND MAINTENANCE MANUALS

- A. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS INDICATING ANY DEVIATION FROM THE ORIGINAL ELECTRICAL DESIGN. THE REVISED DRAWING SHALL BE STAMPED "AS-BUILT" WITH 12. BOXES THE DATE AND CONTRACTOR'S SIGNATURE. ONE (1) SET OF PRINTS AND A COMPACT DISK CONTAINING AUTOCAD FILES SHALL BE DELIVERED TO THE ENGINEER BEFORE FINAL PAYMENT IS MADE. AFTER REVIEW AND ACCEPTANCE OF AS-BUILT CONTRACTOR SHALL DELIVER COMPACT DISK TO THE OWNER. CONTRACTOR SHALL PROVIDE THREE (3) PRINTS AND A COMPACT DISK OF AS-BUILT DRAWINGS TO THE BUILDING MANAGER UPON COMPLETION OF WORK
- FURNISH TO THE OWNER THREE (3) BOUND AND INDEXED COPIES OF OPERATIONS AND MAINTENANCE DATA MANUALS FOR THE INSTALLATION. THE MANUAL SHALL PROVIDE COMPREHENSIVE DETAILED INFORMATION ON THE APPROVED INSTALLATION, OPERATION AND USE, MAINTENANCE AND PARTS LIST.

QUALITY ASSURANCE

- MATERIALS, EQUIPMENT AND INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF ALL APPLICABLE CODES AND THE REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION, INCLUDING THE ELECTRICAL CODE, OSHA AND NJSEA.
- MATERIALS, EQUIPMENT AND INSTALLATION SHALL CONFORM TO THE LATEST EDITION OF THE APPLICABLE REFERENCE STANDARDS PUBLISHED BY THE NFPA. UL. ANSI. IEEE AND NEMA. THE CONTRACTOR SHALL HAVE COMPLETED AT LEAST TWO PROJECTS OF SIZE AND COMPLEXITY SIMILAR TO THOSE REQUIRED UNDER THIS CONTRACT. ALL WORKMEN SHALL BE
- ALL WORK SHALL BE WARRANTED IN WRITING TO BE FREE FROM DEFECTS IN MATERIALS AND/OR WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. WARRANTY SHALL INCLUDE ALL COSTS OF PARTS, LABOR, TRAVEL AND LIVING EXPENSES REQUIRED TO REPAIR OR REPLACE DEFECTIVE ITEMS.

FIELD REVIEW

- A. ALL STAGES OF THE INSTALLATION WILL BE REVIEWED BY THE OWNER AND/OR OWNERS AND SPECIFICATIONS. ANY PORTION OF THE CONSTRUCTION NOT MEETING THOSE REQUIREMENTS TO THE SATISFACTION OF THE ENGINEER SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE PROPER EQUIPMENT AND REASONABLE ASSISTANCE AS THE OWNER AND/OR OWNERS REPRESENTATIVE MAY REQUIRE TO FACILITATE ACCESS AND REVIEW AT THE CONSTRUCTION SITE.

7. INSULATION RESISTANCE TESTING

SKILLED IN THEIR RESPECTIVE TRADE

- A. WHERE CALLED FOR, CONTRACTOR SHALL PROVIDE ELECTRONIC INSULATION RESISTANCE
- TESTING UTILIZING CALIBRATED TESTING EQUIPMENT. CONTRACTOR TO COORDINATE SCHEDULING OF TESTING WITH EQUIPMENT AND FACILITY SHUTDOWN PERIODS AND NJSEA.
- CONDUCTORS TO BE TESTED SHALL BE DE-ENERGIZED, DISCHARGED, AND DISCONNECTED FROM SOURCE AND LOAD(S) PRIOR TO TESTING.
- D. SUBMIT TESTING EQUIPMENT CALIBRATING INFORMATION, TESTING PROCEDURE, AND TEST
- RESULTS TO NJSEA AND ENGINEER FOR REVIEW. E. TESTING AGENCY SHALL BE HIGH ENERGY, JIM RATCHIN, PHONE NUMBER (732) 938-2275.

8. BASIC MATERIAL AND METHODS

- A. COORDINATE ALL WORK WITH THE WORK OF OTHER TRADES PRIOR TO INSTALLATION. B. ALL SHUTDOWN OF BUILDING AND SITE POWER, FIRE ALARM, AND CONTROL SYSTEMS SHALL 15. WIRING DEVICES BE COORDINATED WITH BUILDING OPERATING PERSONNEL. WORK TO ACCOMMODATE
- OFF-HOUR SHUTDOWNS SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER. C. CUT AND PATCH NON STRUCTURAL SURFACES AS REQUIRED. REPAIRS SHALL MATCH ORIGINAL FINISH, PENETRATIONS OF FIRE RATED PARTITIONS SHALL BE SEALED WITH
- APPROVED MATERIAL TO PROVIDE THE SAME RATING AS THE PARTITION. PROVIDE EXPANSION FITTINGS WHERE RACEWAYS CROSS BUILDING EXPANSION JOINTS. UNLESS OTHERWISE NOTED, EQUIPMENT, DEVICES AND ENCLOSURES SHALL BE RATED NEMA

1 FOR INTERIOR LOCATIONS, NEMA 3R FOR DAMP LOCATIONS AND NEMA 4 FOR WET

- LOCATIONS. PROVIDE 4" HIGH SEALED CONCRETE HOUSEKEEPING PADS AROUND ALL CONDUITS
- PENETRATING FLOORS OF THE IZOD ANNEX.

9. DELIVERY, STORAGE AND HANDLING

A. ALL EQUIPMENT SHALL BE DELIVERED IN MANUFACTURER'S ORIGINAL PROTECTIVE PACKAGING AND STORED IN A CLEAN, DRY PLACE PROTECTED FROM WEATHER, FUMES, WATER, DUST AND PHYSICAL DAMAGE. TOUCH UP DAMAGED FINISHES TO MATCH THE ORIGINAL FINISH

10. SUMMARY

- A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED FOR COMPLETE INSTALLATION OF ALL WORK INDICATED ON THE DRAWINGS OR SPECIFIED HEREIN.
- OBTAIN ALL PERMITS AND APPROVALS REQUIRED BY AUTHORITIES HAVING JURISDICTION AND PAY THE ASSOCIATED PRINTING AND FILING COSTS.
- C. VERIFY EXISTING CONDITIONS IN FIELD AND INCLUDE IN THE BID PRICE ALL WORK REQUIRED E
- TO ACCOMMODATE THE EXISTING INSTALLATION. PROVIDE TEMPORARY LIGHT AND POWER SYSTEM (AS PART OF THE CONTRACT) ADEQUATE FOR THE REQUIREMENTS OF ALL TRADES DURING CONSTRUCTION. TEMPORARY SYSTEM

SHALL BE DISCONNECTED AND REMOVED WHEN PERMANENT SERVICE IS IN OPERATION. 11. RACEWAYS

- A. RIGID GALVANIZED STEEL (RGS) CONDUIT SHALL CONFORM TO UL 6. FITTINGS SHALL BE
- B. ELECTRICAL METALLIC TUBING (EMT) SHALL CONFORM TO UL 797. FITTINGS SHALL BE GLAND
- AND RING COMPRESSION TYPE. ALL CONDUIT FITTINGS AND CONNECTORS SHALL BE STEEL WITH INSULATED THROATS. DIE-FORMED ZINC OR MALLEABLE IRON FITTINGS ARE NOT ACCEPTABLE. BUSHINGS SHALL BE PROVIDED AT ALL CONDUIT TERMINATIONS. BUSHINGS LARGER THAN 1" SHALL BE GROUNDING TYPE. PVC BUSHINGS MAY BE UTILIZED ONLY FOR 3/4" BRANCH CIRCUIT CONDUITS
- TERMINATING AT PANELBOARDS. MINIMUM RACEWAY SIZE SHALL BE 3/4". RACEWAYS SHALL BE RUN PARALLEL TO BUILDING

- STRUCTURAL LINES. RACEWAYS SHALL NOT BE RUN HORIZONTALLY BELOW 8'-0" AFF IN I. PARTITIONS. ALL EMPTY RACEWAYS SHALL BE FURNISHED WITH A 200LB TEST NYLON DRAG
- E. ALL WIRING BETWEEN JUNCTION BOXES AND FOR CIRCUIT HOMERUNS BETWEEN FIRST OUTLET SERVED BY THE BRANCH CIRCUIT AND THE PANELBOARD SHALL BE RUN IN EMT OR
- RGS AS REQUIRED.
- F. RACEWAY UTILIZATION SHALL BE AS FOLLOWS:
- RIGID GALVANIZED STEEL (RGS) IN CONCRETE SLABS; EXPOSED IN ALL MECHANICAL
- EQUIPMENT ROOMS; UNDERGROUND. ELECTRICAL METALLIC TUBING (EMT) - INTERIOR CONCEALED AND
- EXPOSED LOCATIONS; EXPOSED IN MECHANICAL ROOMS ABOVE 8'-0" AFF INTERIOR COMMUNICATIONS WIRING. 3. FLEXIBLE METALLIC CONDUIT - FINAL CONNECTIONS TO TRANSFORMERS (MAXIMUM LENGTH 3'-0") AND LIGHTING FIXTURES IN INTERIOR LOCATIONS (MIN. LENGTH 18",
- MAXIMUM LENGTH 6'-0"); WHERE APPROVED BY THE ENGINEER. 4. LIQUID TIGHT FLEXIBLE CONDUIT - FINAL CONNECTIONS TO MOTORS AND MECHANICAL EQUIPMENT.
- INSULATION RESISTANCE TESTING OF EXISTING WIRING AS NOTED ON DRAWING AND G. ALL CONDUIT AND TUBING SHALL BE CUT SQUARE AND REAMED AT THE ENDS. H. CONDUIT AND TUBING RUNS SHALL BE MECHANICALLY AND ELECTRICALLY CONTINUOUS FROM SERVICE STARTING TO ALL OUTLETS AND EQUIPMENT. CONDUIT SHALL ENTER AND BE SECURELY CONNECTED TO A CABINET, JUNCTION BOX, PULLBOX OR OUTLET BOX BY MEANS OF LOCKNUTS ON THE OUTSIDE AND INSIDE AND AN INSULATED BUSHING ON THE INSIDE. IN TUBING OR FLEXIBLE METAL CONDUIT THE ONE COMPRESSION LOCKNUT SHALL BE MADE WRENCH-TIGHT. ALL LOCKNUTS SHALL BE THE BONDING TYPE WITH SHARP EDGES FOR DIGGING INTO THE METAL WALL OF AN ENCLOSURE AND SHALL BE INSTALLED IN A MANNER THAT WILL ASSURE A LOCKING AND ELECTRICALLY CONTINUOUS INSTALLATION. LOCKNUTS AND BUSHINGS ARE NOT REQUIRED WHERE CONDUITS ARE SCREWED INTO TAPPED
 - ALL VERTICAL RUNS OF CONDUIT OR TUBING TERMINATING IN THE BOTTOMS OF WALL BOXES OR CABINETS, OR SIMILAR LOCATIONS, SHALL BE PROTECTED FROM THE ENTRANCE OF FOREIGN MATERIAL PRIOR TO THE INSTALLATION OF CONDUCTORS
 - J. UNLESS OTHERWISE SPECIFIED, ALL CONDUIT AND TUBING SHALL BE INSTALLED CONCEALED. IN GENERAL, ALL CONDUIT AND TUBING SHALL BE RUN IN HUNG CEILINGS AND FURRED SPACES WHERE THEY EXIST. WHERE CONDUIT IS RUN EXPOSED IT SHALL BE SECURELY SUPPORTED WITH ZINC COATED MALLEABLE IRON PIPE STRAPS OR OTHER APPROVED MEANS.
 - ALL CONDUITS SHALL BE SUPPORTED FROM STRUCTURAL MEMBERS. K. EVERY CONDUIT SYSTEM SHALL BE INSTALLED COMPLETE BEFORE ANY CONDUCTORS ARE DRAWN IN. WIRE PULLING LUBRICANTS, WHEN UTILIZED, SHALL BE IN ACCORDANCE WITH THE
 - REQUIREMENTS OF UNDERWRITERS' LABORATORIES, INC., APPLICABLE TO THE SPECIFIC CONDUCTOR OR CABLE INSULATION AND RACEWAY MATERIAL WHERE REQUIRED BY THE ENGINEER, EXTRA DEEP OR EXTRA SHALLOW OUTLET BOXES
 - SHALL BE USED TO FACILITATE THE INSTALLATION OF THE CONDUIT SYSTEM. M. ALL CONTROL WIRING FOR MEP TRADES SHALL BE RUN IN CONDUIT WHERE REQUIRED.

CONDUITS SHALL BE PREPARED FOR PAINTED FINISH.

- A. OUTLET, PULL AND JUNCTION BOXES SHALL BE FABRICATED FROM STEEL AND CONFORM TO UL 50, UL 514 AND NEMA OS1. BOXES FOR INTERIOR LOCATIONS SHALL BE CODE GAUGE, GALVANIZED SHEET STEEL. BOXES FOR MECHANICAL ROOMS SHALL BE CAST STEEL WITH GASKETED COVERS.
- B. BOXES SHALL CONTAIN SUITABLE KNOCKOUTS. BARRIERS SHALL BE FURNISHED AS REQUIRED BY CODE.
- C. BOXES SHALL BE SIZED AS REQUIRED BY CODE FOR NUMBER AND GAUGE OF CONDUCTORS A. TRANSFORMER TO BE INTEGRAL TO THE MOTOR CONTROL CENTER. THEREIN, EXCEPT WHERE NOTED TO BE LARGER, THE MINIMUM BOX SHALL BE 4" SQUARE BY B. TRANSFORMER TO BE ENERGY-EFFICIENT DELTA-WYE CONNECTED WITH 480 VOLT PRIMARY B. CORE DRILLING IS PERMITTED DURING OVERTIME HOURS ONLY. COORDINATE ALL DRILLING 1-1/2" DEEP. COVERS GREATER THAN 50LB SHALL BE DIVIDED INTO MULTIPLE SECTIONS.
- D. WIREWAYS AND AUXILIARY GUTTERS SHALL BE TWO-PIECE STEEL CONSTRUCTION WITH ANSI 61 GRAY ENAMEL FINISH. COVERS SHALL BE COMBINATION HINGED AND SCREW-ON TYPE. HOUSINGS SHALL HAVE REGULARLY SPACED KNOCKOUTS FOR CONDUIT ENTRY. WIREWAYS SHALL BE MANUFACTURED BY SQUARE D OR APPROVED EQUAL. PROVIDE ALL END PIECES, CONNECTORS AND REQUIRED ACCESSORIES.
- BOXES WITH DIMENSIONS LARGER THAN 6' SHALL HAVE RACKING OR APPROVED SUPPORTS FOR CONDUCTORS WITHIN.

PROVIDE INSERTS, EXPANSION SHIELD LUGS, ANCHORS, BOLTS WITH NUTS AND WASHERS, SHIMS OR ANY OTHER TYPE OF FASTENING DEVICES REQUIRED TO FASTEN PANELS OR OTHER EQUIPMENT TO FLOORS, WALLS, OR CEILINGS. UNLESS OTHERWISE SPECIFIED HEREIN OR SHOWN ON THE CONTRACT DRAWINGS, ALL FASTENERS SHALL BE HOT-DIPPED GALVANIZED, OF SIZES AND TYPES RECOMMENDED BY THE EQUIPMENT MANUFACTURER AND AS APPROVED BY THE ENGINEER.

14. WIRES, CABLES, SPLICES AND TERMINATION

- REPRESENTATIVE FOR COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DRAWINGS A. POWER AND CONTROL WIRING SHALL BE COPPER, MINIMUM 98% CONDUCTIVITY, WITH TYPE THHN/THWN INSULATION RATED 600 VOLTS. MINIMUM WIRE SIZE SHALL BE #12 AWG. CONDUCTORS SHALL BE SOLID FOR WIRE SIZED #10 AWG AND SMALLER AND STRANDED FOR
 - WIRE SIZES #8 AWG AND LARGER. B. CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:

208/120V	PHASE	480/277V
BLACK	A	BROWN
RED	В	ORANGE
BLUE	С	YELLOW
WHITE	NEUTRAL	GRAY OR WHITE W/ TRACER
GREEN	GROUND	GREEN
WHITE WITH TRACER	NEUTRAL FOR GFI CIRCUIT	

- CONDUCTOR SIZES SHALL BE INCREASED WHERE REQUIRED BY CODE AND/OR THE ENGINEER TO COMPENSATE FOR VOLTAGE DROP AND HIGH AMBIENT TEMPERATURE.
- SPLICES FOR WIRE SIZES #10 AWG AND SMALLER SHALL BE MADE WITH SPRING CONNECTORS AND TAPE. SPLICES FOR WIRE SIZES #8 AWG AND LARGER SHALL BE HYDRAULIC COMPRESSION TYPE WITH PRE-MOLDED COVER AND TAPE E. TERMINATIONS OF POWER AND CONTROL WIRING SHALL BE COMPRESSION TYPE, WITH

UTILIZED FOR TERMINATIONS AT BRANCH CIRCUIT PANELBOARDS.

TWO-HOLE LUGS FOR WIRE SIZES #8 AWG AND LARGER. MECHANICAL LUGS MAY ONLY BE

OR APPROVED EQUAL

- WIRING DEVICES SHALL BE DECORA STYLE WITH NEMA CONFIGURATIONS AS INDICATED ON THE DRAWINGS. COLOR OF DEVICES SHALL BE AS SELECTED BY THE ARCHITECT. WIRING DEVICES SHALL BE MANUFACTURED BY ARROW-HART, HUBBELL, LEVITON, PASS & SEYMOUR,
- B. PILOT LIGHT SWITCHES SHALL BE FURNISHED WITH LIGHTED HANDLE OR SEPARATE GLASS JEWEL INDICATING LIGHT WIRED TO BE ILLUMINATED WHEN THE SWITCH IS ON.
- C. FACEPLATES SHALL BE NON-MAGNETIC STAINLESS STEEL IN ALL SPACES WITH BRUSHED FINISH UNLESS SPECIFIED BY THE ARCHITECT. FACEPLATES SHALL BE FURNISHED FOR ALL COMMUNICATIONS OUTLETS AND SHALL BE CONFIGURED TO SUIT THE SYSTEM SUPPLIERS' REQUIREMENTS.
- D. DEVICES MOUNTED ADJACENT TO EACH OTHER SHALL BE FURNISHED WITH A COMMON FACEPLATE AND BE GANGED IN ONE BOX.

16. MOTOR CONTROL CENTERS

- A. MOTOR CONTROL CENTERS SHALL BE NEMA TYPE 3R AS MADE BY SCHNEIDER/SQUARE D. B. FACTORY-WIRED NETWORK COMMUNICATIONS COMPATIBLE WITH EXISTING HONEYWELL COMMUNICATIONS SYSTEM, MANAGED NETWORK SWITCH, SOLID STATE COMMUNICATING
- C. COMPARTMENTS SHALL BE COMPRISED OF MODULAR, INDIVIDUAL DOORS WITH CONCEALED HINGES AND QUICK-CAPTIVE SCREW FASTENERS. DOORS TO HAVE SAFETY INTERLOCKS. D. ALL BUSES TO BE PLATED COPPER, WITH AMPACITY RATINGS AS SHOWN ON DRAWINGS. NEUTRAL BUSES TO BE FULLY-RATED. EQUIPMENT GROUND BUS TO BE NONINSULATED,
- 2"X1/4" MINIMUM. ALL SAFETY DISCONNECTS SHALL BE LOCKABLE IN THE OPEN POSITION. CENTER TO BE COMPRISED OF A MODULAR ARRANGEMENT OF STARTERS, CONTROL DEVICES,
- OVERCURRENT PROTECTIVE DEVICES, TRANSFORMERS, PANELBOARDS, INSTRUMENTS, INDICATING INSTRUMENTS, BLANK PANELS, AND OTHER COMPONENTS MOUNTED IN COMPARTMENTS OF MOTOR CONTROL CENTER. G. MOTOR STARTERS SHALL BE FULL VOLTAGE, NON-REVERSING UNLESS OTHERWISE NOTED, 3-POLE COMBINATION TYPE WITH FUSED DISCONNECT SWITCH MEETING THE REQUIREMENTS SPECIFIED FOR SAFETY SWITCHES. STARTERS SHALL BE NEMA RATED AS INDICATED ON THE C.

DRAWINGS WITH THREE SEPARATE OVERLOAD ELEMENTS ADJUSTED TO THE MOTOR

SHALL BE MANUFACTURED BY GENERAL ELECTRIC, SIEMENS, SQUARE D, OR APPROVED H. STARTERS SHALL INCORPORATE A 150VA MINIMUM CONTROL POWER TRANSFORMER WITH FUSED PRIMARY AND FUSED, GROUNDED 120V SECONDARY. CONTROL CIRCUIT SHALL INCORPORATE A HAND-OFF-AUTOMATIC SELECTOR SWITCH, A MANUAL RESET AND PUSH-TO-TEST TYPE PILOT LIGHT WIRED IN PARALLEL WITH THE COIL ALL DEVICES SHALL BE E. OIL-TIGHT CONSTRUCTION MOUNTED ON THE FRONT COVER. REFER TO MOTOR CONTROL

CENTER SCHEDULE FOR ADDITIONAL REQUIREMENTS.

MANUFACTURER'S RECOMMENDATIONS. MINIMUM STARTER SIZE SHALL BE NEMA 1. STARTERS

RELAY COILS SHALL BE ELECTRICALLY HELD WITH RENEWABLE SILVER TO SILVER CONTACTS. STARTERS SHALL BE FURNISHED WITH A MINIMUM OF TWO SETS OF ISOLATED AUXILIARY

- FORM "C" CONTACTS SPACES AND BLANK UNITS SHALL INCLUDE COMPARTMENTS THAT ARE FULLY BUSED AND
- EQUIPPED. COMPARTMENTS INDICATED "SPARE".

K. SPARE UNITS SHALL HAVE TYPES, SIZES, AND RATINGS INDICATED INSTALLED IN

17. BUILDING MANAGEMENT SYSTEM (BMS)

- A. BUILDING MANAGEMENT SYSTEM COMPONENTS SHALL BE COMPATIBLE WITH THE EXISTING
- HONEYWELL BMS SYSTEM. B. EXISTING BMS VENDOR IS HONEYWELL, CHARLIE ZIELKOWSKI, PHONE (908) 721-1128 C. CONTRACTOR TO COORDINATE WITH BMS VENDOR TO PROVIDE ALL REQUIRED WIRING AND 26. <u>IDENTIFICATION OF WORK</u> PROGRAMMING REQUIRED FOR COMPLETE FUNCTIONALITY OF EQUIPMENT IDENTIFIED WITHIN
- DRAWING AND SPECIFICATIONS INCLUDING MONITORING AND CONTROLS. D. BMS PROGRAMMING SHALL BE SCHEDULED IN COORDINATION WITH EXISTING BMS VENDOR (HONEYWELL) AND NJSEA.

18. PANELBOARDS (CIRCUIT BREAKER)

- A. BRANCH CIRCUIT PANELBOARDS SHALL BE 208/120V, 3Ø, 4-WIRE CONFIGURATION WITH COPPER BUS BARS, NEUTRAL BUS, AND SEPARATE GROUND BUS BONDED TO PANEL
- ENCLOSURE. CABLE LUGS SHALL BE MECHANICAL TYPE. PANELBOARDS TO BE INTEGRAL TO MOTOR CONTROL CENTER AND MANUFACTURER OF PANELBOARD SHALL BE THE SAME AS THE MOTOR CONTROL CENTER. CIRCUIT BREAKERS SHALL BE MOLDED CASE, BOLT-IN-PLACE WITH THERMAL-MAGNETIC TRIP
- ELEMENT. MINIMUM INTERRUPTING RATINGS SHALL BE 22,000 AIC FOR 208/120V. D. PANELS SHALL HAVE A MINIMUM OF 4" GUTTER SPACE ON BOTH SIDES. E. FURNISH AND INSTALL TYPEWRITTEN DIRECTORIES FOR EACH PANELBOARD, NEW AND EXISTING, INDICATING DEVICES SERVED.

- SAFETY DISCONNECT SWITCHES SHALL BE 250V OR 600V AS REQUIRED, HEAVY DUTY. HORSEPOWER RATED, QUICK-MAKE, QUICK-BREAK DESIGN IN NEMA 1 ENCLOSURE. ENCLOSURES EXPOSED TO WET OR RAIN CONDITIONS SHALL BE IN NEMA 3R ENCLOSURE. B. PROVIDE INTERLOCKS TO PREVENT OPENING THE COVER WITH THE SWITCH IN THE "ON" POSITION OR CLOSING OF THE SWITCH WITH THE DOOR OPEN, EXCEPT THAT THE INTERLOCK SHALL BE TOOL RELEASABLE BY A QUALIFIED PERSON FOR INSPECTION OF THE CONTACTS
- OF MECHANISM. PROVIDE FOR PADLOCKING HANDLE IN THE OFF POSITION PROVIDE NEUTRAL ASSEMBLY WHERE SCHEDULED.
- SWITCHES SHALL BE CAPABLE OF WITHSTANDING THE AVAILABLE FAULT OR LET THROUGH CURRENT BEFORE THE FUSE OPERATES WITHOUT DAMAGE OR CHANGE IN RATING. THE SHORT CIRCUIT INTERRUPTING RATING OF THE FUSE SWITCH COMBINATION SHALL BE 100,000 B. RMS SYMMETRICAL AMPERES AND 12 TIMES THE CONTINUOUS CURRENT RATING WHEN UNFUSED AT RATED VOLTAGE F. FUSE CLIPS SHALL BE OF THE REJECTION TYPE, SHALL ACCOMMODATE DUAL ELEMENT,
- CURRENT LIMITING FUSES ONLY AND SHALL BE SIZED TO ACCEPT FUSES OF THE PROPER AMPERE RATING. G. PROVIDE GROUND LUG IN EACH SWITCH.

- AND 208/120V GROUNDED SECONDARY UNLESS OTHERWISE NOTED. ENCLOSURE SHALL BE
- NATURALLY VENTILATED WINDINGS SHALL BE COPPER, RATED FOR A MAXIMUM OF 115°C TEMPERATURE RISE OVER A 40°C AMBIENT, INSULATION CLASS SHALL BE 220°C. VOLTAGE TAPS SHALL BE PROVIDED AS FOLLOWS: (2) 21/2" TAPS ABOVE AND (4) 21/2" TAPS BELOW RATED VOLTAGE. MAXIMUM
- TRANSFORMER SOUND LEVEL SHALL BE 50DB. TRANSFORMER SHALL MEET THE EFFICIENCY LEVELS SPECIFIED IN THE 2016 DEPARTMENT OF ENERGY (DOE) EFFICIENCY STANDARDS. TRANSFORMERS SHALL BE MANUFACTURED BY THE SAME AS THE MOTOR CONTROL CENTER,
- OR GENERAL ELECTRIC, ACME TRANSFORMER, INTERNATIONAL TRANSFORMER CORP. (ITC). SQUARE D, OR APPROVED EQUAL COMPATIBLE WITH THE MOTOR CONTROL CENTER. PRIMARY AND SECONDARY PROTECTION FOR THE TRANSFORMER TO BE PROVIDED BY MOTOR 29. SEALING OF PENETRATIONS CONTROL CENTER DEVICES SHOWN ON DESIGN.

- A. FUSES SHALL BE UL LISTED, TIME DELAY, CURRENT LIMITING AND HAVE AN INTERRUPTING CAPACITY OF AT LEAST 200,000 AMPERES RMS SYMMETRICAL THE TIME-CURRENT CHARACTERISTICS AND RATINGS SHALL BE SUCH THAT POSITIVE
- SELECTIVE COORDINATION IS ASSURED. C. FUSE VOLTAGE RATINGS SHALL BE 600V OR 250V AS REQUIRED.
- 9. BUSSMANN TYPE LPN-RK (250V) OR TYPE LPS-RK (600V)
- 10. FERRAZ-SHAWMUT A2D (250V) OR A6D (600V) 11. LITTELFUSE TYPE LLN-RK (250V) OR LLS-RK (600V)

D. CLASS RK1 (TIME DELAY) FUSES, REJECTION TYPE.

- E. CLASS L (TIME DELAY)
- BUSSMANN TYPE KRP-C 2. LITTELFUSE TYPE KLP-C

. MERSEN A4BQ

F. CLASS CC (TIME DELAY) FUSES, REJECTION TYPE

BUSSMANN TYPE LP-CC MERSEN ATDR

- 3. LITTELFUSE TYPE KLDR 22. RELAYS, CONTACTORS AND CONTROLS
- CONTROL RELAYS SHALL BE FURNISHED IN SUITABLE NEMA RATED ENCLOSURES WITH LOCKED COVER CONTAINING ANY PUSHBUTTONS AND INDICATING LIGHTS. PANEL SHALL INCLUDE POWER SUPPLY WITH GROUNDED SECONDARY, MOUNTING BLOCKS AND RELAYS. B. RELAYS SHALL ELECTRICALLY HELD WITH FORM C CONTACTS RATED TO CONTROL THE VOLTAGES AND CURRENTS REQUIRED (10 AMPS MINIMUM). RELAYS SHALL BE MANUFACTURED
- BY POTTER-BRUMFIELD, SQUARE D OR APPROVED EQUAL CONTACTORS SHALL BE MECHANICALLY HELD WITH CONTACTS ELECTRICALLY DRIVEN TO THE OPEN AND CLOSED POSITIONS. CONTACTS SHALL BE RATED 20 AMPS MINIMUM AT RATED VOLTAGE AND SHALL BE FIELD REVERSIBLE. PROVIDE ALL ACCESSORIES REQUIRED FOR PROPER OPERATION. CONTACTORS SHALL BE MANUFACTURED BY ASCO, SQUARE D OR
- D. WIRING DIAGRAMS ON THE DRAWINGS ARE SCHEMATIC. PROVIDE ALL MATERIALS REQUIRED FOR COMPLETE CONTROL SYSTEMS. COORDINATE THE NORMAL POSITION OF CONTACTS (OPEN OR CLOSED) WITH THE REQUIREMENTS OF ALL EQUIPMENT FURNISHED.

23. GROUNDING

APPROVED EQUAL

- A. THE DISTRIBUTION SYSTEM SHALL BE COMPLETELY AND PROPERLY GROUNDED USING APPROVED FITTINGS. SEPARATE INSULATED GROUND CONDUCTORS SHALL BE RUN WITH ALL FEEDERS WHERE INDICATED, RECEPTACLE BRANCH CIRCUITS, AND FLEXIBLE CONNECTIONS TO LIGHTING FIXTURES AND EQUIPMENT.
- METAL RACEWAYS, METAL ENCLOSURES OF ELECTRICAL DEVICES AND OTHER EQUIPMENT SHALL BE COMPLETELY GROUNDED IN AN APPROVED MANNER. PROPER HARDWARE REQUIRED FOR A COMPLETE GROUNDING SYSTEM SHALL BE INSTALLED BY THE CONTRACTOR.

24. SPLICES AND TERMINATIONS

INCLUDE THE EXISTING WIRES AS REQUIRED.

- A. NO SPLICES OR JOINTS WILL BE PERMITTED IN EITHER FEEDER OR BRANCHES EXCEPT AT OUTLETS OR ACCESSIBLE TERMINAL, SPLICE OR JUNCTION BOXES. B. ALL MATERIALS REQUIRED FOR MAKING SPLICES AND/OR TERMINATIONS SHALL BE SUPPLIED
- IN COMPLETE KITS NOT OLDER THAN 6 MONTHS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ENSURING THAT ALL MATERIALS FURNISHED WILL NOT ADVERSELY AFFECT THE PHYSICAL OR ELECTRICAL PROPERTIES OF OTHER MATERIALS FURNISHED OR OF A. THE WIRE OR CABLE ITSELF. WHERE THE CONTRACTOR MAKES CONNECTIONS TO EXISTING WIRES, HE SHALL OPEN AND DISCONNECT THE EXISTING SPLICES FROM SUCH WIRES AND INSTALL NEW SPLICES TO
- D. ALL SPLICES FOR WIRE SIZES #10 AWG AND SMALLER SHALL BE MADE WITH INSULATED SPRING CONNECTOR APPLIED TO TWISTED CONDUCTORS. TWO HALF LAPPED LAYERS OF VINYL TAPE EXTENDING A DISTANCE OF NOT LESS THAN ONE INCH FROM THE CONNECTOR SHALL BE APPLIED. SPLICES OTHER THAN THE AFOREMENTIONED WILL BE PERMITTED AT THE DISCRETION OF THE ENGINEER.

COMPRESSION SPLICES. SPLICES SHALL BE INSULATED WITH HEAVY-WALL HEAT SHRINK

TUBING. THAT SHALL OVERLAP THE CONDUCTOR INSULATION BY A MINIMUM OF 2-INCHES.

ALL SPLICES FOR WIRE SIZE #8 AWG AND LARGER SHALL BE MADE WITH HYDRAULIC

- ALL WIRES SHALL BE IDENTIFIED BY PANEL AND CIRCUIT NUMBER AT ALL TERMINATION AND SPLICE POINTS BY THE USE OF BRADY B-500 VINYL CLOTH TAPE OR EQUIVALENT METHOD. E. ALL JUNCTION BOXES SHALL BE IDENTIFIED WITH PANEL AND CIRCUIT NUMBERS OF ALL CIRCUITS OR NAME OF COMMUNICATIONS SYSTEM CABLING CONTAINED WITHIN. JUNCTION BOXES IN EXPOSED LOCATIONS SHALL BE CLEARLY MARKED WITH IDENTIFYING LABELS. JUNCTION BOXES IN CONCEALED LOCATIONS SHALL BE MARKED WITH A BOLD, INDELIBLE
- NUMBER OR SYSTEM NAME. G. IDENTIFICATION FOR OUTDOOR EQUIPMENT SHALL NOT COMPROMISE THE EQUIPMENT ENCLOSURE RATINGS OF EQUIPMENT, SHALL HAVE UV-RESISTANT COLORS, AND STAINLESS

EMERGENCY SERVICE SHALL BE PAINTED RED AND LABELED AS EMERGENCY.

STEEL OR EQUAL RUST-RESISTANT SECURING MEANS.

27. CUTTING AND PATCHING

- ALL CUTTING AND PATCHING REQUIRED FOR EQUIPMENT INCLUDED IN THESE SPECIFICATIONS
- CLAMPS OR OTHER APPROVED HOLDING DEVICES ARE TO BE USED. C. ALL CUTTING OF EXISTING FLOORS, CEILINGS AND WALLS SHALL BE PERFORMED IN A MANNER SO AS TO MINIMIZE DAMAGE TO ADJACENT MATERIALS. PATCHING OF ALL SURFACES SHALL BE PERFORMED IN A MANNER APPROVED BY THE ARCHITECT TO INSURE COMPLETE

MATCHING WITH ADJACENT FINISHES AFTER FINAL TREATMENT OF SURFACES.

REBARS. PROCEED WITH A NEW CORE HOLE AS DESCRIBED ABOVE.

BUILDING CONSTRUCTION. NO HOLES ARE TO BE DRILLED INTO ANY STRUCTURAL MEMBERS.

- A. CORED HOLES SHALL BE REVIEWED BY A STRUCTURAL ENGINEER PRIOR TO STARTING.
- WITH BUILDING MANAGEMENT PRIOR TO BEGINNING AND DRILLING. C. FOR REMOVED OR ABANDONED OUTLETS, THE EXISTING CORED HOLE IN THE CONCRETE SLAB SHALL BE FILLED WITH NON-SHRINK GROUT. THE FILLED HOLE SHALL BE ADJUSTED TO GRADE

MANNER USING AN OUTER CIRCUMFERENTIAL SLEEVE FILLED INSIDE AND OUT B. ALL PENETRATIONS OF FIRE RATED WALLS, FLOORS, OR CEILINGS SHALL BE SEALED WITH APPROVED MATERIAL TO PROVIDE SAME RATING AS FLOOR, WALL OR CEILING ASSEMBLY.

A. ALL PENETRATIONS OF WALLS, FLOORS, OR CEILINGS MUST BE SEALED IN AN APPROVED

- A. THREADED RODS SHALL BE FULLY GALVANIZED, MINIMUM 3/8" DIAMETER. MODULAR CHANNEL SUPPORTS SHALL BE GALVANIZED STEEL. SUPPORT CLIPS AND FASTENERS SHALL BE LISTED
- AND APPROVED FOR THE APPLICATION. STRAPS AND CLAMPS SHALL BE MALLEABLE IRON. B. SUPPORTS SHALL BE SIZED TO ACCOMMODATE THE LOAD REQUIRED. ALL WORK SHALL BE SUPPORTED INDEPENDENTLY OF THE WORK OF OTHER TRADES, INCLUDING CEILING SYSTEM
- C. PANELS AND EQUIPMENT LOCATED ON OTHER THAN MASONRY WALLS SHALL BE MOUNTED WITH MODULAR CHANNEL SUPPORTS SECURED TO THE BUILDING STRUCTURE. D. APPROVED SEISMIC RESTRAINTS RATED TO RESIST ½G OF FORCE SHALL BE FURNISHED FOR

- A. ELECTRICAL POWER MUST BE SHUT OFF PRIOR TO THE CONTRACTOR PERFORMING ANY WORK IN RACEWAYS WITH LIVE ELECTRICAL CIRCUITS OR ANY OTHER LIVE ELECTRICAL CIRCUITS OR EQUIPMENT. ANY POWER INTERRUPTION SHALL BE COORDINATED WITH THE
- ADVANCE NOTICE.

- THE CONTRACTOR, PRIOR TO FINAL ACCEPTANCE, SHALL CLEAN ALL PANELS, SWITCHES, CABINETS, DEVICES PLATES, FIXTURES AND OTHER ITEMS FURNISHED UNDER THIS CONTRACT AND SHALL ENSURE THAT ALL PANELBOARD DIRECTORIES ARE IN PLACE AND COMPLETED OR REVISED AS REQUIRED BY THE WORK, AND THAT ALL IDENTIFICATION AND MARKING OF EQUIPMENT, CABLES, ALL JUNCTION BOXES AND OTHER ITEMS IS
- THE CONTRACTOR SHALL REPAIR OR REPLACE, AS DIRECTED BY THE ENGINEER, ANY
- B. IN ADDITION TO OTHER TESTS WHICH MAY BE REQUIRED BY OTHER DIVISIONS, PERFORM FIELD TESTS IN THE PRESENCE OF THE NJSEA, TO DEMONSTRATE THE PROPER FUNCTIONING OF THE ELECTRICAL INSTALLATION. THE NJSEA SHALL BE GIVEN A MINIMUM OF 48 HOURS ADVANCE NOTICE OF ALL TESTS. REQUIRED FIELD TESTS SHALL INCLUDE, BUT NOT BE
- OPERATION OF ALL ELECTRICAL EQUIPMENT FOR A PERIOD FOR A PERIOD OF 24 HOURS WITHOUT INTERRUPTION.

CONTRACTOR SHALL FURNISH A TEST REPORT TO THE ENGINEER INDICATING TEST

2. 1,000 VOLT INSULATION RESISTANCE TEST FOR ALL WIRES AND CABLES FURNISHED.

C. ALL DEFECTIVE FIXTURES, CABLES, OR OTHER EQUIPMENT ENCOUNTERED DURING THE COURSE OF TESTING SHALL BE PROMPTLY REPORTED TO THE ENGINEER SO REPLACEMENT OF AFFECTED ITEMS MAY BE EVALUATED.

33. PROJECT CLOSEOUT

- AFTER COMPLETION OF PROJECT AND PRIOR TO REQUESTING FINAL PAYMENT, THE CONTRACTOR SHALL GIVEN WRITTEN NOTICE THAT THE FOLLOWING ITEMS HAVE BEEN COMPLETED:
 - REQUIRED AGENCY APPROVALS.

METHOD USED AND RESULTS.

- FINAL CLEANING AND ADJUSTMENT OF LIGHTING FIXTURES AND EQUIPMENT. RESOLUTION OF OUTSTANDING SUBMITTALS AND PUNCH LIST ITEMS. AS-BUILT DRAWINGS.
- 8. DEMONSTRATIONS AND OWNER INSTRUCTION.

- NOTES AND GRAPHIC REPRESENTATIONS ON THE DRAWINGS SHALL NOT LIMIT THE EXTENT OF REMOVALS REQUIRED. THE CONTRACTOR SHALL VISIT THE SITE AND CAREFULLY EXAMINE EXISTING CONDITIONS AND SHALL PERFORM ALL WORK REQUIRED TO ACHIEVE THE FINAL DESIGN INTENT AS REQUIRED BY THE CONTRACT DOCUMENTS. THE EXTENT OF ALL REMOVAL WORK SHALL BE COORDINATED WITH THE ARCHITECT
- B. ALL WORK REQUIRED TO REMAIN IN SERVICE BUT INTERFERING WITH THE ALTERATION SHALL BE RELOCATED AND RECONNECTED USING MATERIALS AND STANDARDS OF THIS CONTRACT. THE REMOVAL OF ALL BMS DEVICES AND ASSOCIATED CABLE SHALL BE COORDINATED WITH THE APPROPRIATE BUILDING OPERATING PERSONNEL

- ALL PANELBOARDS, EQUIPMENT, AND CABINETS SPECIFIED HEREIN SHALL BE CLEARLY IDENTIFIED WITH THE EQUIPMENT DESIGNATION, VOLTAGE AND AMPERE RATING, FUSE RATING, EQUIPMENT SERVED AND ORIGIN OF THE INCOMING FEED. IDENTIFICATION SHALL BE PLASTIC NAMEPLATE WITH 1/2" MINIMUM LETTERING ATTACHED BY SCREWS. WHITE LETTERING AND BUILDING STANDARD BACKGROUND COLOR.
- B. FACEPLATES OF SWITCHES FOR EQUIPMENT SUCH AS REMOTE FANS AND MOTORIZED SCREENS SHALL BE IDENTIFIED WITH THE NAME OF THE DEVICE CONTROLLED. IDENTIFICATION SHALL BE BY INDELIBLE MARKER IN CONCEALED LOCATIONS AND ADHESIVE LABELS IN EXPOSED LOCATIONS. EMERGENCY DEVICES SHALL BE IDENTIFIED IN RED. EMPTY CONDUITS SHALL BE IDENTIFIED WITH TAGS AT BOTH ENDS INDICATING THE LOCATION
- OF TERMINATION AT THE OPPOSITE END.
- CONDUIT RUNS FOR BRANCH CIRCUITING AND/OR COMMUNICATIONS CABLING SHALL BE IDENTIFIED AT EVERY 50 FEET OF LENGTH, AND AT EACH OUTLET AND PULL BOX WITH CIRCUIT

MARKING PEN. LETTERING SHALL BE NEATLY AND LEGIBLY PRINTED, JUNCTION BOXES ON

- SHALL BE DONE BY THIS CONTRACTOR. THIS CONTRACTOR SHALL NOT DO ANY CUTTING THAT MAY IMPAIR THE STRENGTH OF

- 28. CORE DRILLING
- CONTRACTOR SHALL USE A BAR LOCATOR TO DETERMINE IF REBARS INTERFERE WITH PROPOSED HOLE. IF THERE IS INTERFERENCE, THE CORE HOLE SHALL BE SHIFTED TO A NEW LOCATION ACCEPTABLE TO THE TENANT, STRUCTURAL ENGINEER AND ARCHITECT WHEN AN EXISTING HOLE IS TO BE REACTIVATED, INSPECT TO SEE IF REBARS HAVE BEEN CUT IF REBARS HAVE BEEN CUT, INFORM THE GENERAL CONTRACTOR TO PROCEED TO REPAIR

- REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED PARTITIONS.
- 30. HANGERS AND SUPPORTS

ALL ELECTRICAL WORK WHERE REQUIRED BY LOCAL BUILDING CODES AND THE AUTHORITIES HAVING JURISDICTION.

- 31. POWER INTERRUPTION NOTE
- OWNER AND BUILDING OPERATING PERSONNEL. PROVIDING A MINIMUM OF SEVEN (7) DAYS

B. TAPS INTO LIVE RISERS ARE NOT PERMITTED.

- 32. FINAL CLEANUP AND FIELD TESTS A. AFTER COMPLETION OF THE ENTIRE ELECTRICAL INSTALLATION:
- ITEM DAMAGED DUE TO INSTALLATION OR RELOCATION OF EQUIPMENT OR DEVICES AT NOT ADDITIONAL COST TO THE OWNER.
- LIMITED TO THE FOLLOWING:

- TURNOVER OF SPARE LAMPS, KEYS, AND ANY REQUIRED SPARE PARTS OR TOOLS. SYSTEM STARTUP, TESTING AND ADJUSTMENT. MANUFACTURER'S CERTIFICATIONS, WARRANTIES AND O&M MANUALS.

Department of Community Affairs Construction Project Review Project No: 9060-22 Partial Release

PROJECT NAME

POWER

CONDUIT AND WIRE HOMERUN, MINIMUM 2#12 & 1#12 GND THWN IN 3/4" CONDUIT

ELECTRICAL EQUIPMENT (SWITCHBOARD, MOTOR CONTROL CENTER)

CIRCUIT PROTECTION DEVICE, UON. MINIMUM NEMA 1 STARTER.

RISER CONDUIT UP, WITH WIRING

INDICATES CIRCUIT NUMBER.

HORSEPOWER LESS THAN 1/2HP.

FUSED SWITCH, RATING AND FUSING INDICATED

CURRENT TRANSFORMER AND METER

TRANSIENT VOLTAGE SURGE SUPPRESSOR

GROUNDING BUSBAR

CIRCUIT BREAKER

UNFUSED SWITCH

CONTACTOR

CONNECT TO GROUND

RISER CONDUIT DOWN, WITH WIRING

WIRE TROUGH/SPLICE BOX. SIZE AS REQUIRED

DESCRIPTION

CEILING-MOUNTED JUNCTION/SPLICE BOX WITH EQUIPMENT CONNECTION, SIZE AS REQUIRED

FLOOR-MOUNTED JUNCTION/SPLICE BOX WITH EQUIPMENT CONNECTION, SIZE AS REQUIRED

WALL-MOUNTED JUNCTION/SPLICE BOX WITH EQUIPMENT CONNECTION, SIZE AS REQUIRED

COMBINATION UNFUSED DISCONNECT SWITCH AND MOTOR STARTER WITH EQUIPMENT

INDICATES WEATHERPROOF ENCLOSURE, OTHERWISE ENCLOSURE IS NEMA-1.

INDICATES WEATHERPROOF ENCLOSURE, OTHERWISE ENCLOSURE IS NEMA-1.

REMOTE CONTROL SWITCH/RELAY RATING AS REQUIRED OR INDICATED

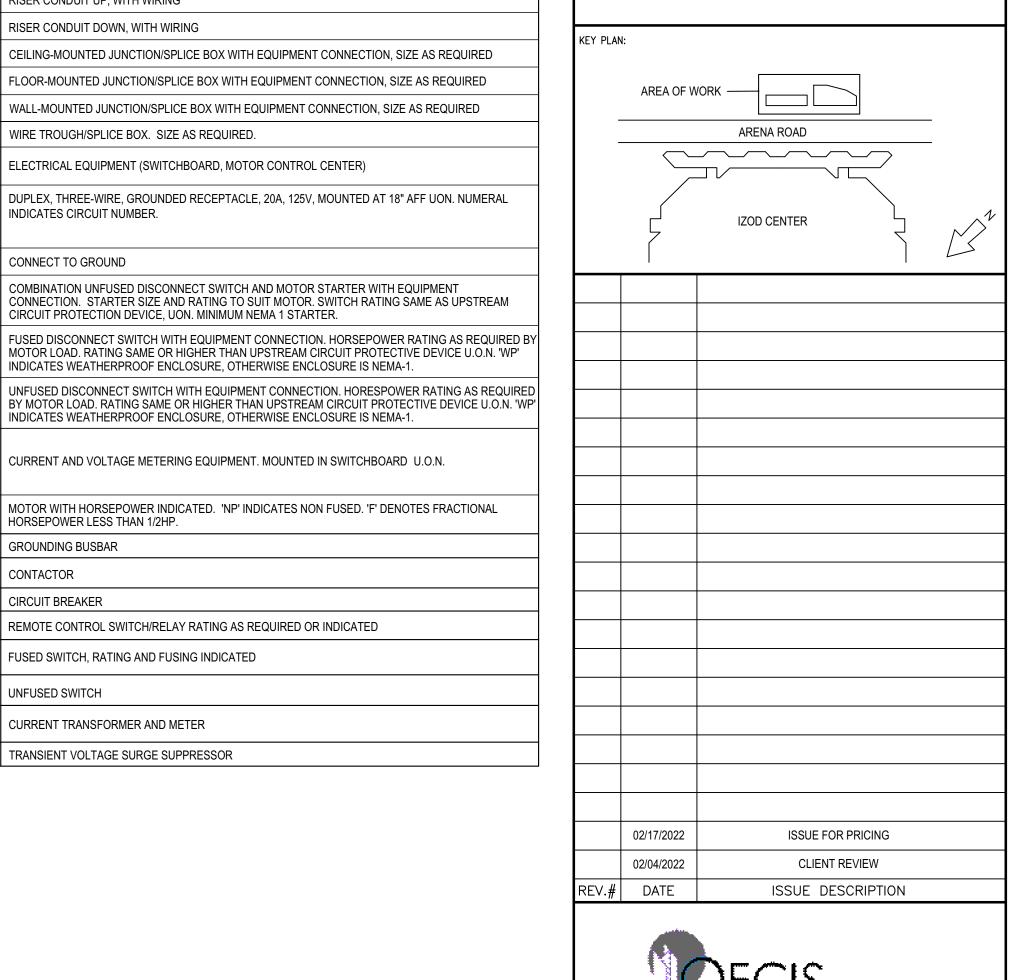
CURRENT AND VOLTAGE METERING EQUIPMENT. MOUNTED IN SWITCHBOARD U.O.N.

SYMBOL

v)—<u>vs</u>—

Electrical David Godbolt Released: 06/08/22 N.J.S.A. 52:27D-119 ET SEQ., AS AMENDED

TOWER PLANT MOTOR CONTROL CENTER REPLACEMENT 50 STATE ROAD 120 EAST RUTHERFORD, N.





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ELECTRICAL SYMBOL LIST,

NOTES, AND SPECIFICATIONS

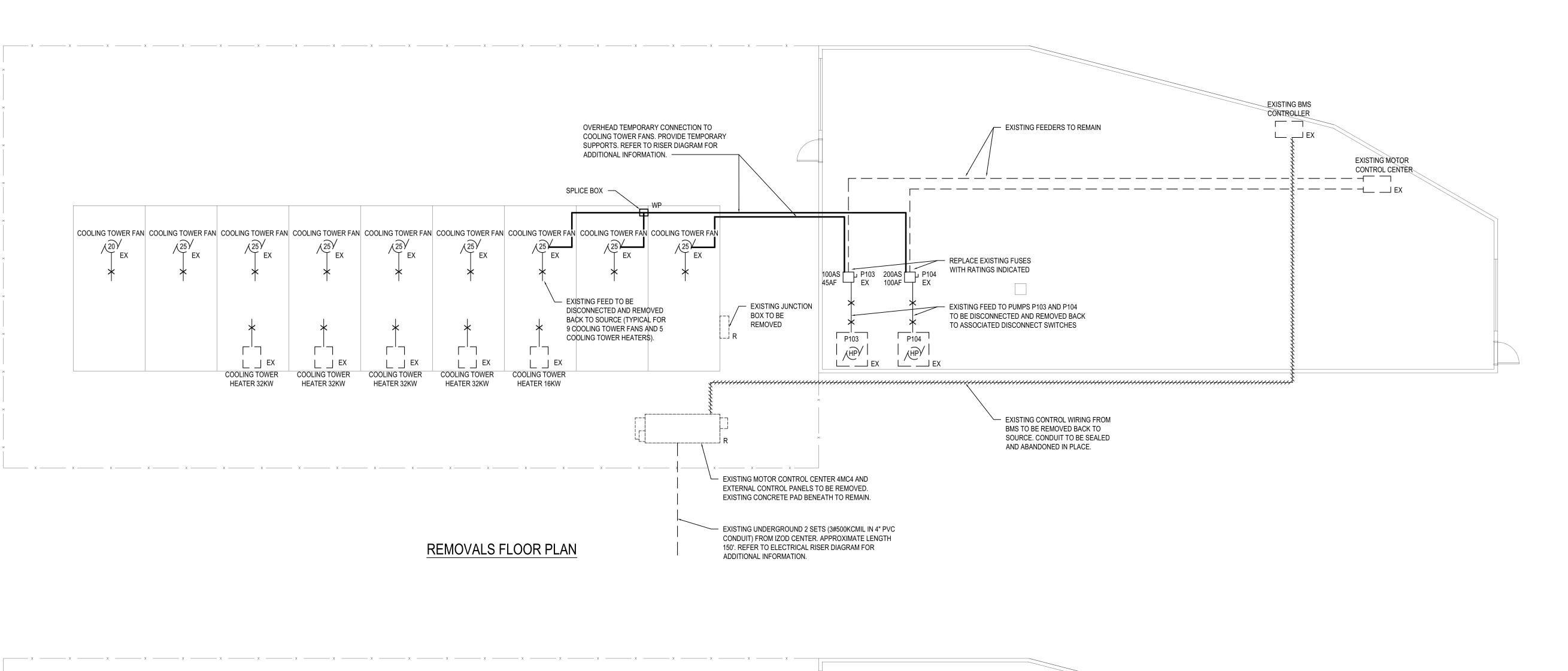
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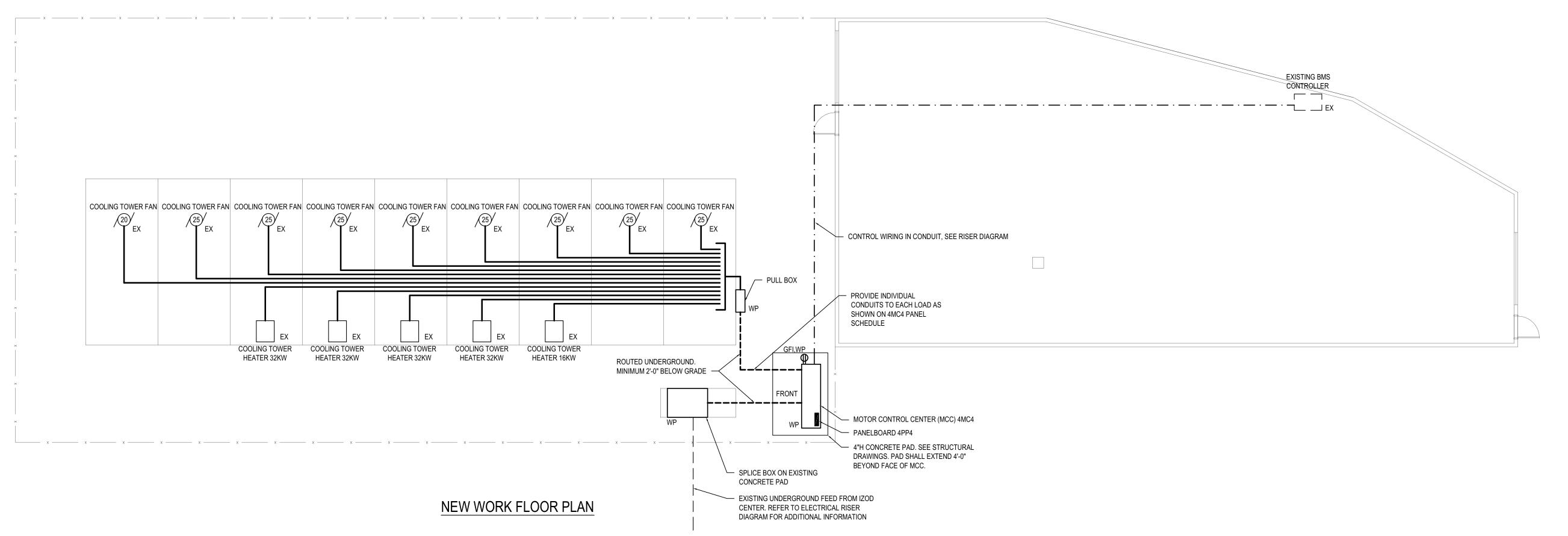
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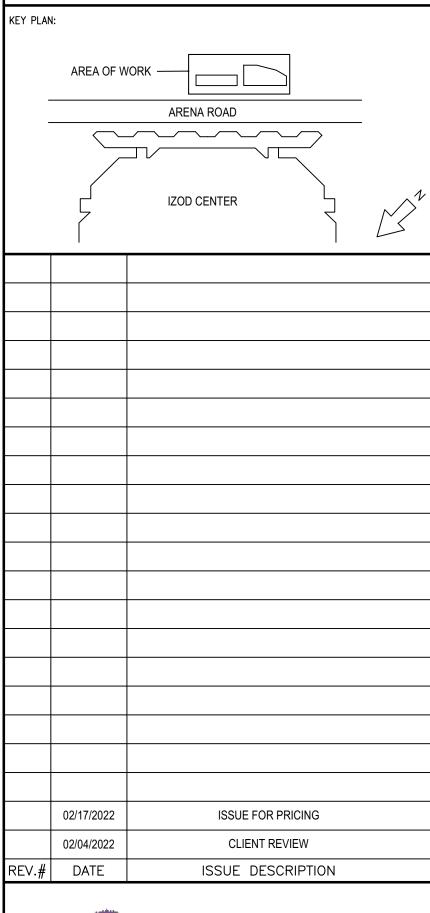




Project No: 9060-22
Partial Release
Electrical
David Godbolt
Released: 06/08/22
N.J.S.A. 52:27D-119 ET SEQ., AS AMENDED

IZOI

TOWER PLANT MOTOR
CONTROL CENTER
REPLACEMENT
50 STATE ROAD 120
EAST RUTHERFORD, NJ





Office of Engineering & Construction Inspection Services, Inc. 485 Rt.1 South, Building E, Suite 220, Iselin, NJ 08830 Phone 732.636.2550 www.oecis.com



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DRAWING TITLE:

ELECTRICAL REMOVALS
AND NEW WORK PLAN

GRAPHIC SCALE: 0 4 8 16 FEE 1/8" = 1'-0"



DRAWN:
G.M.A.

APPROVED:

K.M.P

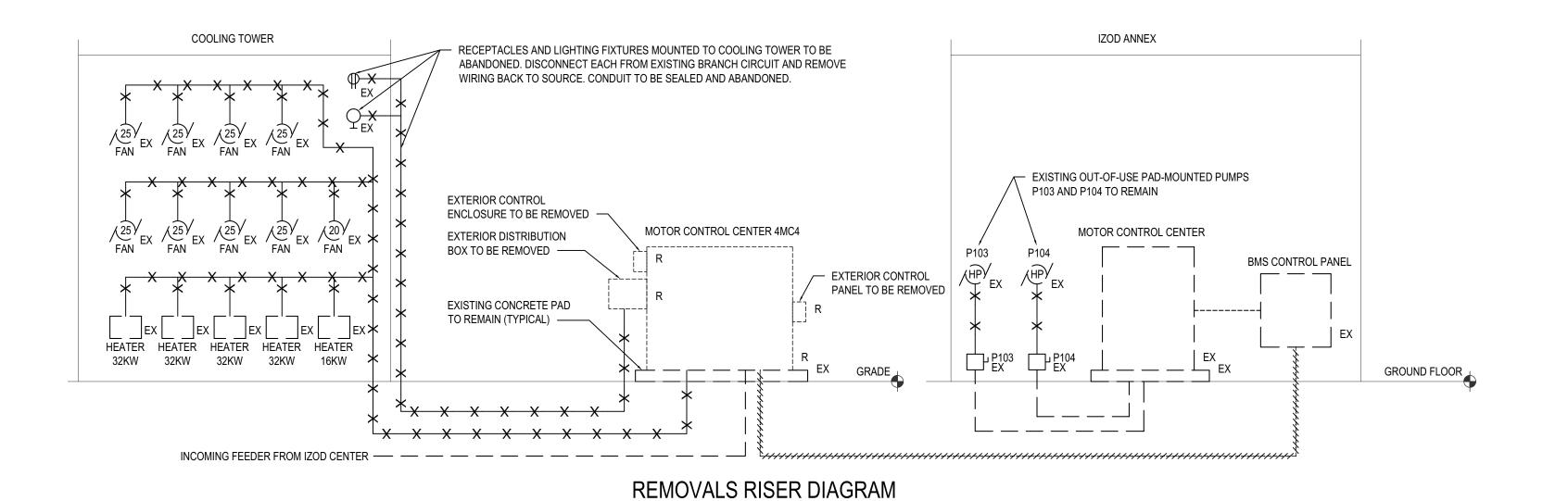
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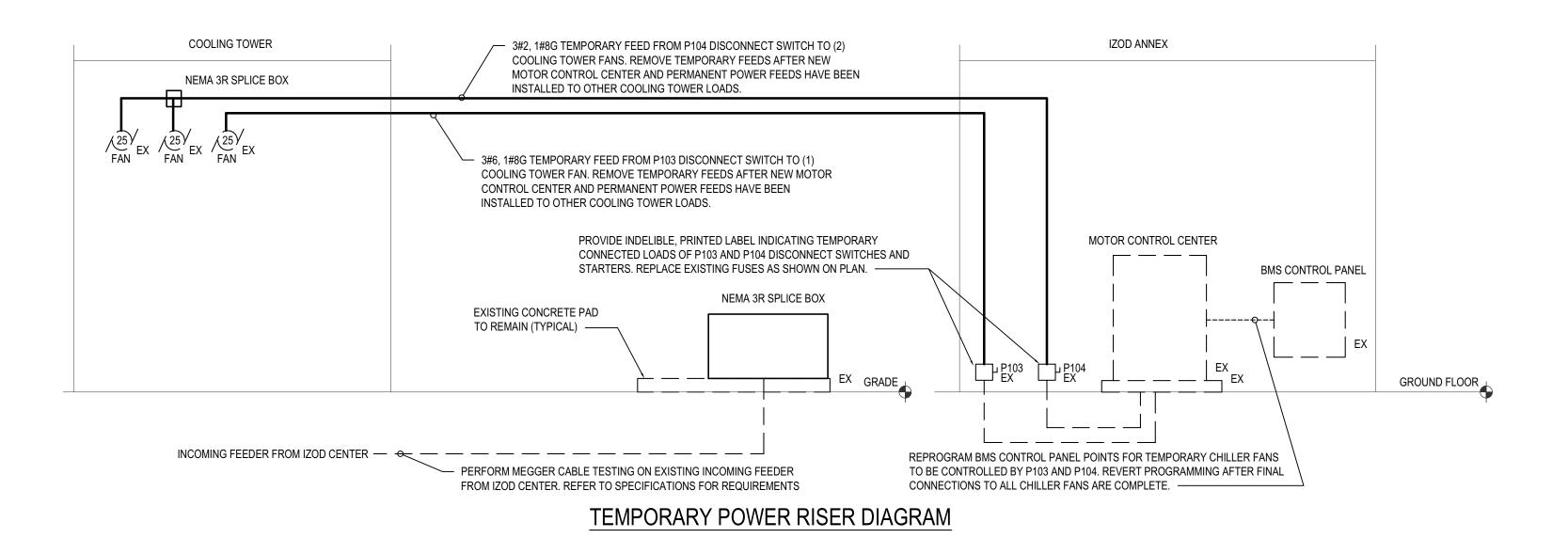
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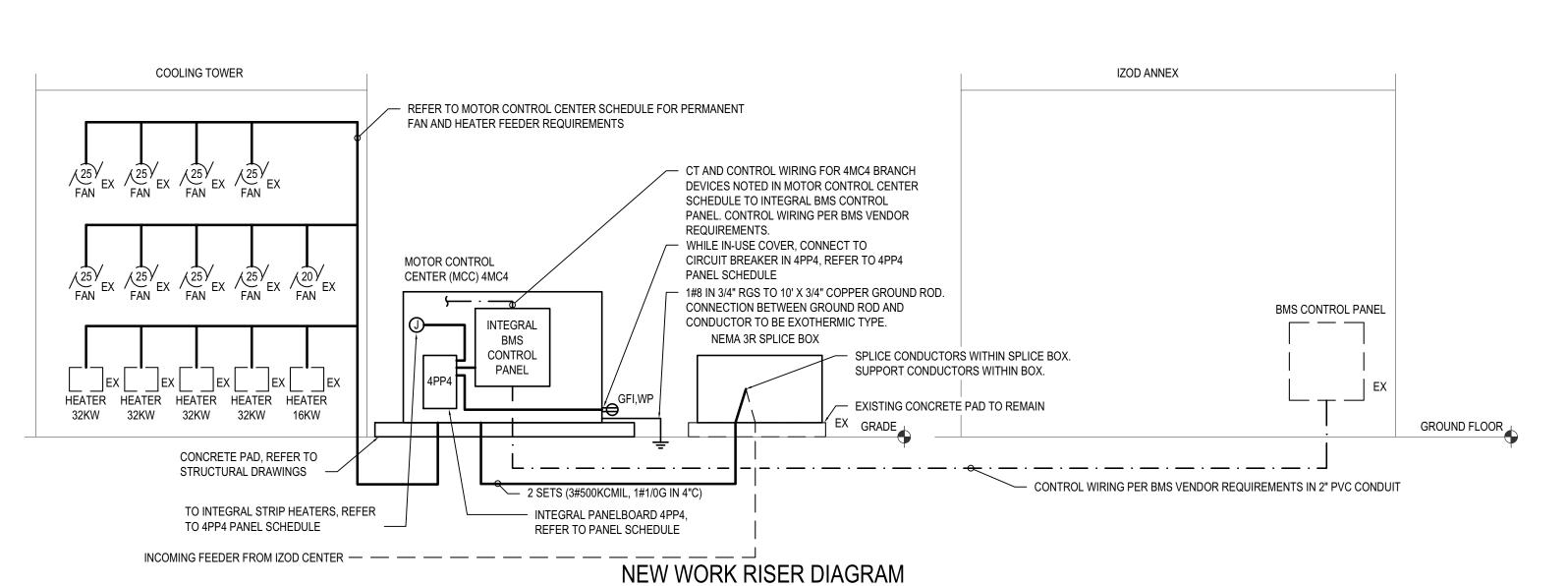
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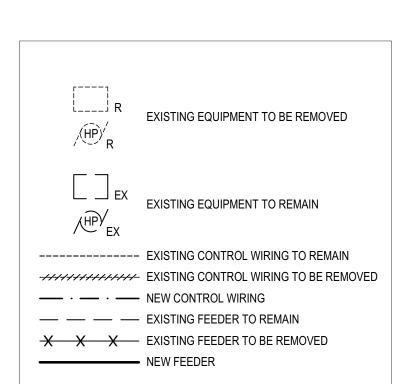






GENERAL NOTES:

1. ALL LOADS SHALL BE FED THROUGH INDIVIDUAL CONDUITS 2. EACH LOAD SHALL BE LABELED TO CORRESPOND TO THE LABEL AT THE MOTOR CONTROL CENTER.



RISER DIAGRAMS LEGEND



Partial Release David Godbolt
Released: 06/08/22
N.J.S.A. 52:27D-119 ET SEQ., AS AMENDED

TOWER PLANT MOTOR

KEY PLAN:

CONTROL CENTER REPLACEMENT 50 STATE ROAD 120 EAST RUTHERFORD, NJ

-	AREA OF W	ARENA ROAD IZOD CENTER	- -
	ı	1	
	02/17/2022	ISSUE FOR PRICING	
	02/04/2022	CLIENT REVIEW	
REV.#	DATE	ISSUE DESCRIPTION	



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G.M.A.

K.M.P

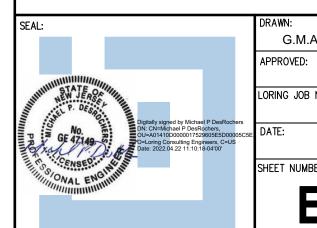
12606.000

02/17/2022

DRAWING TITLE: ELECTRICAL RISER DIAGRAMS

GRAPHIC SCALE:

N.T.S.



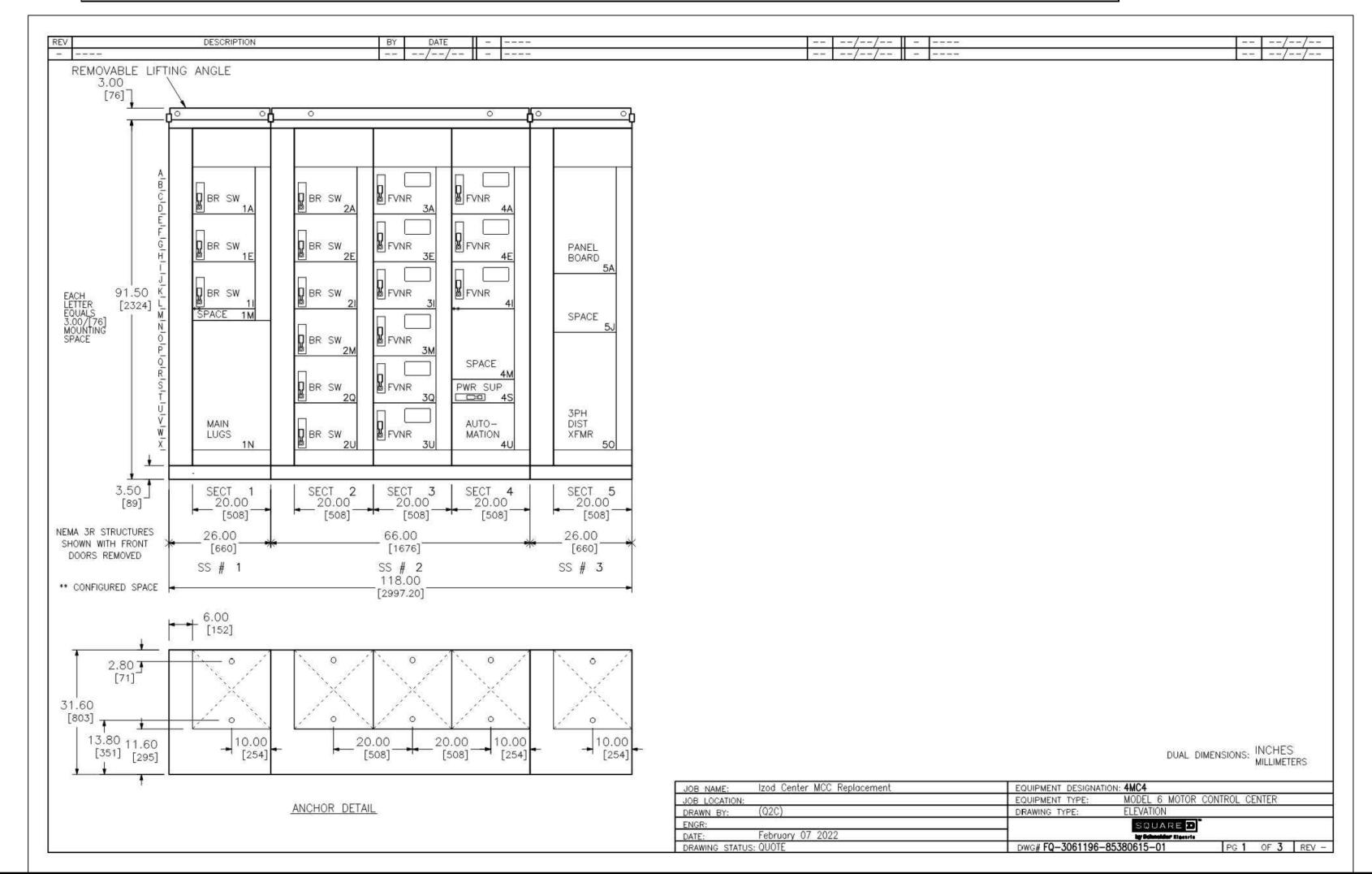
MOTOR CONTROL CENTER 4MC4

480V - 3Φ - 3W - 60 Hz - 800 AMP - MAIN LUG ONLY - NEMA 3R - 65 KAIC - GROUND BUS - INTELLIGENT MOTOR CONTROL CENTER - FUSE/SWITCH

LOCATION: IZOD CENTER ANNEX OUTDOOR COOLING TOWER

			AMPERE	RATING	STARI	STARTER CONTROLS				
UNIT	DESCRIPTION	FEEDER	SWITCH	FUSE (KVA) UNIT TYPE	TYPE	но і	ON IGHT	OFF LIGHT	SWITCH/ PUSHBUTTON	REMARKS
1A	SPARE	-	100	100 0.00 BRANCH SWITCH	-	0	-	-	-	
1E	SPARE	-	60	- 0.00 BRANCH SWITCH	-	0	-	-	-	
11	SPARE	-	60	- 0.00 BRANCH SWITCH	-	0	-	-	-	
1M	SPACE	-	-		-	-	-	-	-	
1N	MAIN LUGS	-	-		-	-	-	-	-	
2A	COOLING TOWER HEATER	3#6, 1#10G IN 1"C	60	50 32.00 BRANCH SWITCH	-	0	-	-	-	PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
2E	COOLING TOWER HEATER	3#6, 1#10G IN 1"C	60	50 32.00 BRANCH SWITCH	-	0	-	-	-	PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
21	COOLING TOWER HEATER	3#6, 1#10G IN 1"C	60	50 32.00 BRANCH SWITCH	-	0	-	-	-	PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
2M	COOLING TOWER HEATER	3#6, 1#10G IN 1"C	60	50 32.00 BRANCH SWITCH	-	0	-	-	-	PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
2Q	COOLING TOWER HEATER	3#10, 1#10G IN 3/4"C	30	25 16.00 BRANCH SWITCH	-	0	-	-	-	PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
2U	SPARE	-	-		-	-	-	-	-	
3A	COOLING TOWER FAN	3#6, 1#10G IN 1"C	60	60 25.00 FULL VOLTAGE, NON REVERSING	NEMA 2	25 G	REEN	-	HOA SELECTOR	CONTROL TRANSFORMER, PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
3E	COOLING TOWER FAN	3#6, 1#10G IN 1"C	60	60 25.00 FULL VOLTAGE, NON REVERSING	NEMA 2	25 G	REEN	-	HOA SELECTOR	CONTROL TRANSFORMER, PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
31	COOLING TOWER FAN	3#6, 1#10G IN 1"C	60	60 25.00 FULL VOLTAGE, NON REVERSING	NEMA 2	25 G	REEN	-	HOA SELECTOR	CONTROL TRANSFORMER, PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
3M	COOLING TOWER FAN	3#6, 1#10G IN 1"C	60	60 25.00 FULL VOLTAGE, NON REVERSING	NEMA 2	25 G	REEN	-	HOA SELECTOR	CONTROL TRANSFORMER, PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
3Q	COOLING TOWER FAN	3#6, 1#10G IN 1"C	60	60 25.00 FULL VOLTAGE, NON REVERSING	NEMA 2	25 G	REEN	-	HOA SELECTOR	CONTROL TRANSFORMER, PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
3U	COOLING TOWER FAN	3#6, 1#10G IN 1"C	60	60 25.00 FULL VOLTAGE, NON REVERSING	NEMA 2	25 G	REEN	-	HOA SELECTOR	CONTROL TRANSFORMER, PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
4A	COOLING TOWER FAN	3#6, 1#10G IN 1"C	60	60 25.00 FULL VOLTAGE, NON REVERSING	NEMA 2	25 G	REEN	-	HOA SELECTOR	CONTROL TRANSFORMER, PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
4E	COOLING TOWER FAN	3#6, 1#10G IN 1"C	60	60 25.00 FULL VOLTAGE, NON REVERSING	NEMA 2	25 G	REEN	-	HOA SELECTOR	CONTROL TRANSFORMER, PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
41	COOLING TOWER FAN	3#6, 1#10G IN 1"C	60	40 20.00 FULL VOLTAGE, NON REVERSING	NEMA 2	20 G	REEN	-	HOA SELECTOR	CONTROL TRANSFORMER, PROVIDE CURRENT TRANSFORMER WITH INTERFACE TO BMS
4M	SPACE		-		-	-	-	-	-	
4 S	24VDC POWER SUPPLY	FACTORY INSTALLED	-		-	-	-	-	-	
4U	AUTOMATION - ETHERNET SWITCH	FACTORY INSTALLED	-		-	-	-	-	-	
5A	PANELBOARD 4PP4	FACTORY INSTALLED	-		-	-	-	-	-	FED FROM UNIT 50 TRANSFORMER
5J	SPACE	-	-	<u> </u>	-	-	-	-	-	
50	DISTRIBUTION TRANSFORMER	FACTORY INSTALLED	30	30 9.00 3PH, 9KVA DISTRIBUTION TRANSFORMER	-	-	-	-	-	CONNECT TO UNIT 5A PANELBOARD

INTERF	CIRCUIT BREAKER: 35A RUPTING RATING 42 KAIC					4	IPF	P 4					MOUNTED WITHIN 4MC4 M CONTROL CENTER	
CKT. NO.	G: 208/120V, 3PH, 4W, 100A CIRCUIT DESCRIPTION	BKR.	POLE	LOAD KVA	REMARKS	A	В	С	REMARKS	LOAD KVA	POLE	BKR.	CIRCUIT DESCRIPTION	CK ⁻
1 3	BMS CONTROL PANEL	20	1	0.2 1.0		1.2	2.0			1.0	2	20	STRIP HEATER	2
5	STRIP HEATER RECEPTACLE	20	2	1.0		1.2	2.0	2.0		1.0	- 2	20	STRIP HEATER	6
9	SPARE	20	1	0.2		1.2	0.0			0.0	1	20	SPARE	10
11	SPARE	20	1	0.0				0.0		0.0	1	20	SPARE	12
13	SPARE	20	1	0.0		0.0				0.0	1	20	SPARE	14
15	SPARE	20	1	0.0			0.0			0.0	1	20	SPARE	16
17	SPARE	20	1	0.0	TOTAL (DUA 05	·	0.0	0.0		0.0	1	20	SPARE	18
					TOTAL (PHASE	:): 2.4	2.0	2.0	SPARE CAPACIT	Y 25	%			
					TOTAL CON		6.4	KVA						
						DEMAND:	6.4	KVA						
				L	TOT. DEMAND -			KVA						
					TOT. DEMAND -	SPARE:	22.1	AMPS						





Department of Community Affairs Construction Project Review Project No: 9060-22

Electrical
David Godbolt
Released: 06/08/22
N.J.S.A. 52:27D-119 ET SEQ., AS AMENDED

TOWER PLANT MOTOR
CONTROL CENTER
REPLACEMENT
50 STATE ROAD 120

EAST RUTHERFORD, NJ

Partial Release

	AREA OF W	YORK —	
-		ARENA ROAD	
-			
	7	IZOD CENTER	Ľ
		<u> </u>	
	02/17/2022	ISSUE FOR PRICING	
	02/04/2022	CLIENT REVIEW	
REV.#	DATE	ISSUE DESCRIPTION	



Office of Engineering & Construction Inspection Services, Inc. 485 Rt.1 South, Building E, Suite 220, Iselin, NJ 08830 Phone 732.636.2550 www.oecis.com



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DRAWING TITLE:
ELECTRICAL SCHEDULES

GRAPHIC SCALE:

N.T.S.



	DRAWN:	CHECKED:
	G.M.A.	K.M.P
	APPROVED:	K.M.P
	LORING JOB No.:	
el P DesRochers		12606.000
Rochers, 29605E5D00005C5E, sineers, C=US	DATE:	
56-04'00'	02	2/17/2022
	SHEET NUMBER:	
	E3	01

EXISTING BUILDING MANAGEMENT CONTROL SYSTEM DRAWINGS

