

DRAFT
BOROUGH OF ROOSEVELT
33 N. Rochdale Ave, Roosevelt Borough, NJ 08555

COUNCIL REGULAR MEETING AGENDA
MAY 19, 2025 @ 7:00 P.M.

TIME IN _____

Adequate notice of this meeting, as required by Chapter 231, P.L. 1975, has been provided by a public notice on January 6, 2025 which was posted on the Bulletin Board Roosevelt Post Office and in the Borough Hall. The notice was transmitted to The Times and Asbury Park Press.

ROLL CALL

Councilmember Louis Esakoff
Councilmember Danelle Feigenbaum
Councilmember Constance Herrstrom
Councilmember Kristine Kaufman-Marut
Councilmember Claudia Luongo
Councilmember Ralph Warnick
Mayor Peggy Malkin

MAYOR'S REPORT:

PUBLIC COMMENT: (Agenda items only)

CORRESPONDENCE:

1. Letter from Roberts Engineering Group, LLC, dated May 15, 2025 regarding an Intensive-level Architectural survey for the Trickling Filter Replacement at the wastewater treatment plan.

MINUTES:

1. Closed Meeting Minutes – January 6, 2025
2. Closed Meeting Minutes – January 21, 2025
3. Closed Meeting Minutes – February 3, 2025
4. Closed Meeting Minutes – March 17, 2025
5. Closed Meeting Minutes – April 7, 2025
6. Regular Council Meeting Minutes – April 7, 2025

RESOLUTION:

Resolution 25-71 Resolution to Submit ETM Associates, LLC's Revised Plans for Improvements to the Franklin Delano Roosevelt Memorial Amphitheater to the State Historic Preservation Office

CONSENT AGENDA RESOLUTIONS:

- Resolution 25-72 Resolution Authorizing Roberts Engineering Group, LLC to Prepare an Application for the New Jersey Department of Transportation (NJDOT) Municipal Aid Grant Fiscal Year 2026
- Resolution 25-73 Resolution Appointing Part-Time Public Works Employee
- Resolution 25-74 Resolution of the Borough Council of the Borough of Roosevelt Waiving March/April Water and Sewer Utility Billings for 5 Cedar Court
- Resolution 25-75 Resolution Authorizing the Award of a Non-Fair and Open Contract for Professional Cemetery Management Services to Sutphen Memorial, Inc., 53 Somerset Street, Hopewell, NJ 08525
- Resolution 25-76 Payment of Bills for May 19, 2025
- Resolution 25-77 Resolution Authorizing Hunter Research to Prepare an Intensive-Level Architectural Survey for the Trickling Filter Replacement

REPORTS OF COMMITTEE CHAIRS:

- Administration Councilmember Esakoff
- Community Dev/Code Councilmember Herrstrom
- Envi, Health & Safety Councilmember Feigenbaum
- Finance Councilmember Kaufman-Marut
- Public Works Councilmember Warnick
- Utilities Councilmember

REPORTS OF BOROUGH OFFICIALS:

UNFINISHED BUSINESS:

NEW BUSINESS:

PUBLIC COMMENT (Any item)

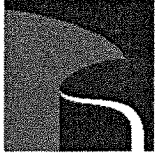
M/Malkin opens the public comment at _____
M/Malkin closes the public comment at _____

CLOSED SESSION:

Resolution 25- Providing for a Private Executive Meeting that Excludes the Public

ADJOURNMENT

TIME OUT: _____



Roberts

ENGINEERING GROUP LLC
Women Business Enterprise Certified

1670 Whitchorse-Hamilton Square Rd.
Hamilton, New Jersey 08690
609-586-1141 fax 609-586-1143
www.RobertsEngineeringGroup.com

May 15, 2025

Mayor and Council
Borough of Roosevelt
P.O. Box 128
33 North Rochdale Avenue
Roosevelt, New Jersey 08555

Re: Wastewater Treatment Plant – Trickling Filter Replacement
Architectural Survey Recommendation
Borough of Roosevelt, Monmouth County, New Jersey
Our File No.: R4671

Dear Mayor and Council:

As you know, Roberts Engineering Group was authorized to design the replacement of the two existing Trickling Filters at the Borough of Roosevelt Wastewater Treatment Plant. On behalf of the Borough, we are also supporting the Borough’s application for funding assistance from the NJ Water Bank, currently in progress.

As part of the application for funding assistance, a review of the cultural and historic resources in the project area is required by NJDEP. The entire Borough of Roosevelt, including the Wastewater Treatment Plant, is listed on the New Jersey and National Register of Historic Places. Due to the historic significance of the property, an Intensive-level Architectural survey is required, as described in a letter dated April 3, 2025, from Elizabeth Davis, NJDEP attached.

Roberts Engineering Group requested proposals from two archaeological consultants to perform the required architectural survey. The table below shows the proposals received for the Intensive-level Architectural Survey with cost estimate for this task:

Consultant Name	Cost Estimate
Hunter Research	\$4,424.00
Richard Grubb & Associates	\$8,308.00

Roberts Engineering Group recommends that the Borough authorize the proposal by **Hunter Research** in the amount of **\$4,424.00** as described in the proposal dated April 22, 2025. See attached proposal letter and cost estimate prepared by Hunter Research.

Should you have any questions or concerns, please do not hesitate to contact this office.

Very truly yours,

Carmela Roberts, PE, CME, CPWM
Borough Engineer

cc: Kathleen Hart, RMC, CMR, Borough Clerk
Ana Debevec, Borough Treasurer
Scott Frueh, Borough CFO
Cameron Corini, PE, CME, CPWM, Roberts Engineering Group, LLC
Justin Streleckis, PE, Roberts Engineering Group, LLC
Thak Bakhru, PE, Roberts Engineering Group, LLC



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WATER QUALITY

Municipal Finance and Construction Element

Bureau of Environmental, Engineering and Permitting

401 East State Street

P.O. Box 420, Mail Code 401-03D

Trenton, New Jersey 08625-0420

Fax:609-633-8165

PHILIP D. MURPHY

Governor

TAHESHA L. WAY

Lt. Governor

SHAWN M. LATOURETTE

Commissioner

April 3, 2025

Scott Frueh
Chief Financial Officer
Roosevelt Borough
33 North Rochdale Avenue
Roosevelt, NJ 08555-0001

Re: WWTP Trickling Filters
Borough of Roosevelt, Monmouth County
Project No. S340761-05
New Jersey Water Bank
Cultural Resources Review of Planning Information

Dear Mr. Frueh,

In accordance with NJAC 7:22-10, the Environmental Review Section (ERS) has reviewed the planning document for the proposed project to determine if it will affect significant cultural resources. The project consists of the in-kind replacement of two trickling filters and their associated appurtenances at the wastewater treatment plant in the borough of Roosevelt located at 85 Pine Drive (Block 2, Lot 8). The removal and replacement of the trickling filters will consist of new structures, media, and distributors. **As detailed below, an Intensive-level Architectural survey consistent with the New Jersey Historic Preservation Office (NJHPO) standards is required for this project. Additionally, the applicant must also contact the NJHPO regarding an Application for Project Authorization (APA).**

The project area is located in Roosevelt Borough, which is listed in its entirety on the New Jersey and National Registers of Historic Places as the Jersey Homesteads Historic District. The district is significant because it is an intact example of a New Deal planned community, with modernist, Bauhaus-influenced architecture, designed by Alfred Kastner and his assistant Louis I. Kahn. The wastewater treatment plant was a part of the original design plans for the community and is designated as a contributing resource to the district. The original 1935 trickling filters at the water treatment plant will be demolished and replaced with new trickling filters, which will be constructed within the same footprint as the originals.


Because this project will take place within a Register-listed Historic District, it falls under the review authority of both the federal Section 106 requirements of the National Historic Preservation Act and the New Jersey Register of Historic Places Act. With respect to the federal Section 106 review, because the trickling filters were originally constructed in 1935, and are a significant feature of the wastewater treatment plant, **an Intensive-level Architectural survey of the wastewater treatment plant is required to provide the information needed for the ERS to evaluate any potential adverse effects. Additionally, the survey must also include recommendations for measures to potentially resolve any adverse effects identified.** As these trickling filters are original to the plant and their removal may also impact other significant contributing resources at the plant, this survey must assess all structures at the treatment plant. The survey must give a detailed evaluation of all structures assessed, which will include all structures existing condition, historic integrity, any alterations made over time, and the extent of previous documentation done on structures within the treatment plant.

The survey should be in line with all aspects of the NJHPO's standards for an Architectural Intensive survey which can be found at <https://dep.nj.gov/hpo/programs/survey/architecture/>. In addition, the survey must be conducted by an Architectural Historian who meets the Secretary of the Interior's Professional Qualifications Standards (36 CFR 61) in Architectural History.

With respect to the New Jersey Register review, **because the trickling filters will be replaced within the boundaries of the New Jersey Register-listed Jersey Homesteads Historic District, the applicant must contact the New Jersey Historic Preservation Office regarding an Application for Project Authorization at <https://dep.nj.gov/hpo/about/contact/review-requests>, who will determine whether the proposed project constitutes an encroachment on the Historic District.** We recommend that the Architectural Survey be completed prior to submitting the APA because the survey will provide information to assist the NJHPO to make its determination. The applicant must submit a copy of the NJHPO's determination to the Cultural Resources Unit, Municipal Finance and Construction Element. Please be aware that submittal of the APA to the NJHPO is required regardless of whether the proposed project receives funding from the New Jersey Water Bank.

Upon completion of the Intensive Architectural survey and APA, additional measures may be required. If the project changes, a revised determination must be obtained from the Section. If you have any questions regarding the cultural resources aspect of this project, please contact Carl Yalden at carl.yalden@dep.nj.gov.

Sincerely,


Elizabeth M. Davis, M.A., RPA
Supervisor, Cultural Resources Unit
Environmental Review Section



HUNTER RESEARCH

Richard W. Hunter
PRESIDENT

Patrick Harshbarger
VICE PRESIDENT

James S. Lee
VICE PRESIDENT

Patricia A. Madrigal
VICE PRESIDENT

April 22, 2025

Mr. Justin Streleckis, PE
Roberts Engineering Group, LLC
1670 Whitehorse-Hamilton Square road
Hamilton, NJ 08690

Via e-mail

Re: Intensive-Level Historic Architectural Survey
Trickling Filter Replacement
85 Pine Drive (Block 2, Lot 8)
Borough of Roosevelt, Monmouth County, New Jersey

Dear Mr. Streleckis:

Please accept this letter and its attached cost estimate as a proposal to provide an Intensive-Level Historic Architectural Survey of the trickling filter replacement project at the wastewater treatment plant located at 85 Pine Street in the Borough of Roosevelt, Monmouth County, New Jersey. The scope of work is in response to a review conducted by the New Jersey Department of Environmental Protection (NJDEP) per letter of April 3, 2025 (Project No. S340761-05, New Jersey Water Bank, Davis to Frueh). NJDEP has identified the project as being subject to Section 106 of the National Historic Preservation Act and the New Jersey Register of Historic Places due to being entirely located within the boundaries of the Jersey Homesteads Historic District, which was listed in the New Jersey and National Registers of Historic Places in 1983.

Specifically, NJDEP requires an Intensive-Level Historic Architectural Survey because the Jersey Homesteads Historic District nomination inventories the Roosevelt wastewater treatment plant as a contributing historic resource. Roosevelt Borough proposes to demolish and replace the original 1935 trickling filters with new trickling filters, which will be constructed on the same footprint as the originals.

Scope of Work – Hunter Research will complete an Intensive-Level Historic Architectural Survey of the Roosevelt wastewater treatment plant to provide NJDEP and the New Jersey Historic Preservation Office (NJHPO) data needed to make assessments of the proposed project impacts. Specific work tasks will include background documentary research to gather historical data on the wastewater treatment plant, field work to assess current conditions from a historical perspective, and completion of NJHPO intensive-level survey forms per the agency's *Guidelines for Architectural Survey*.

Background research will take place primarily at NJDEP, NJHPO and Roosevelt Borough, either in person or on-line, to gather data for an accurate history of the wastewater treatment plant, the history of its buildings/structures and alterations/modifications to them over time, and data needed to place the plant within the broader historic context for the Jersey Homesteads Historic District. Emphasis will be placed on locating photographs, plans and any related maintenance records that have been maintained by the Borough. We request that the client provide original materials such as drawings, photographs and reports related to the property if available. Any information regarding additions, alterations and improvements will be especially helpful.

We anticipate a half-day of field investigation by a qualified architectural historian. We request the client's assistance with access to the project site including building/structure interiors.

Hunter Research will complete intensive-level architectural survey forms that address NJDEP and NJHPO concerns including the existing conditions, historical integrity and alterations made over time, and the extent of previous documentation of the treatment plant.

A cover letter will be provided summarizing the findings and offering data relevant to evaluating any potential adverse effects and measures that could be taken to mitigate them. In order to fulfill this requirement, Hunter Research will need to review project plans and has included time for up to three (3) meetings with the project team, client and/or NJDEP, as needed, to discuss the recommendations.

Deliverable – A draft cover letter and Intensive-Level Historic Architectural Survey will be submitted as digital PDF for review of the client prior to finalizing and submitting to the NJDEP.

Schedule – A draft will be provided within six (6) weeks of notice to proceed. Client comments and questions will be addressed promptly and the survey submitted to the NJDEP.

Qualifications – Hunter Research is a cultural resources management consulting firm based in Trenton, New Jersey with over 35 years of experience conducting historical and archaeological surveys in the State of New Jersey. We are very familiar with the intensive-level architectural forms and guidelines used by the NJDEP and NJHPO. We also have extensive experience evaluating projects funded through the New Jersey Water Bank.

Hunter Research will assign personnel who meet the Secretary of the Interior's Professional Qualifications for Architectural Historians (36 CFR 61) and who are experienced with architectural survey in New Jersey.

Cost Estimate – see attached.

We look forward to the opportunity of providing you with these services. If you have any questions, please feel free to contact either Richard Hunter or me at this office.

Yours sincerely,



Patrick Harshbarger
Vice President/Principal Historian/Architectural Historian

cc: Richard W. Hunter, HRI
enc: cost proposal

Accepted by (signature)

(date)

Title

**INTENSIVE-LEVEL HISTORIC ARCHITECTURAL SURVEY
 TRICKLING FILTER REPLACEMENT
 85 PINE DRIVE (BLOCK 2, LOT 8)
 BOROUGH OF ROOSEVELT, MONMOUTH COUNTY, NEW JERSEY
 TIME AND COST ESTIMATE**

LABOR

	Hours	Hourly Rate	Hourly Cost
Task 1. Background Research			
Architectural Historian	<u>12</u>	\$80.00	<u>\$960.00</u>
Total	12		\$960.00
Task 2. Survey			
Architectural Historian	<u>4</u>	\$80.00	<u>\$320.00</u>
Total	4		\$320.00
Task 3. Analysis, Draft and Final Report, Meetings			
Project Manager/Principal Architectural Historian	8	\$130.00	\$1,040.00
Architectural Historian	20	\$80.00	\$1,600.00
Report Manager	2	\$130.00	\$260.00
Graphics Specialist	<u>2</u>	\$80.00	<u>\$160.00</u>
Total	32		\$3,060.00
TOTAL LABOR	48		\$4,340.00
Expenses			
Travel	120 miles @	\$0.700	per mile
			\$84.00
			\$84.00
			\$4,424.00

RESOLUTION NO. 25-71
MEETING DATE: 05-19-2025

**RESOLUTION TO SUBMIT ETM ASSOCIATES, LLC'S REVISED PLANS FOR
IMPROVEMENTS TO THE FRANKLIN DELANO ROOSEVELT MEMORIAL
AMPHITHEATER TO THE STATE HISTORIC PRESERVATION OFFICE**

C/_____ offered the following resolution and moved its adoption, which was seconded
C/_____.

WHEREAS, the Borough of Roosevelt, County of Monmouth, State of New Jersey (the "Borough") previously submitted an application to the State Historic Preservation Office and the NJDEP Historic Sites Council to improve its historic Franklin Delano Roosevelt Memorial Amphitheater (the "Project"); and

WHEREAS, the Borough has retained ETM Associates, LLC to make appropriate applications and perform certain design work in connection with the Project; and

WHEREAS, the State Historic Preservation Office provided ETM Associates, LLC with certain comments and recommendations regarding its previously submitted design for the Project; and

WHEREAS, ETM Associates, LLC revised the plans for the Project to address the comments and recommendations of the State Historic Preservation Office, and is prepared to submit said revised plans to the State Historic Preservation Office for further review; and

WHEREAS, the revised plans for the Project were publicly presented on May 19, 2025.

NOW THEREFORE, BE IT RESOLVED, that the Governing Body of the Borough of Roosevelt hereby directs ETM Associates, LLC to submit to the State Historic Preservation Office the revised plans addressing the comments and recommendations of the State Historic Preservation Office for improvements to the Franklin Delano Roosevelt Memorial Amphitheater.

ROLL CALL:

AYES:

NAYS:

ABSTAIN:

ABSENT:

CERTIFICATION

I HEREBY CERTIFY the foregoing to be a true copy of a resolution adopted by the Borough Council at a meeting held on May 19, 2025.

Kathleen Hart
Borough Clerk

*BOROUGH OF ROOSEVELT
COUNTY OF MONMOUTH
STATE OF NEW JERSEY*

**RESOLUTION NO. 25-72
MEETING DATE: 05-19-2025**

**RESOLUTION AUTHORIZING ROBERTS ENGINEERING GROUP, LLC TO PREPARE AN
APPLICATION FOR THE NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT)
MUNICIPAL AID GRANT FISCAL YEAR 2026**

C/ _____ offered the following resolution and moved its adoption, which was seconded by
C/ _____.

WHEREAS, the Borough Engineer has recommended an application be prepared to the New Jersey Department of Transportation (“NJDOT”) and be submitted on or before July 1, 2025; and

WHEREAS, the Borough Engineer has made recommendation for Pine Drive from Maple Court and Tamara Drive to the Borough Wastewater Treatment Plant; and

WHEREAS, the Borough Engineer has provided a cost not to exceed \$4,500.00; and

WHEREAS, the Borough’s Chief Financial Officer has certified the availability of funds in the amount not to exceed \$4,500.00; and

WHEREAS, the Borough’s Governing Body supports moving forward with the NJDOT Application for Municipal Aid Grant for fiscal year 2026 for Pine Drive from Maple Court and Tamara Drive to the Borough Wastewater Treatment Plant.

NOW, THEREFORE BE IT RESOLVED, by the Governing Body of the Borough of Roosevelt, County of Monmouth, State of New Jersey that Roberts Engineering Group, LLC is hereby authorized to prepare an application for the NJDOT Application for Municipal Aid Grant for fiscal year 2026.

BE IT FURTHER RESOLVED, that a certified copy of this resolution be sent to the Chief Financial Officer, Purchasing Agent, and Roberts Engineering Group, LLC.

ROLL CALL:

AYES:

NAYS:

ABSTAIN:

ABSENT:

CERTIFICATION

I HEREBY CERTIFY the foregoing to be a true copy of a resolution adopted by the Borough Council at a meeting held on May 19, 2025.

Kathleen Hart
Borough Clerk

BOROUGH OF ROOSEVELT

I, Scott M. Frueh, Chief Financial Officer of the Borough of Roosevelt, do hereby certify that funds are available for the following contract to be awarded:

<u>Vendor</u>	<u>Budget Account</u>	<u>Total Award</u>
Roberts Engineering Group (FY2026 NJDOT-Pine Drive- from Tamara Triangle to WWTP)	Engineering-O/E	\$4,500.00

Only amounts in the temporary budget are certified as available. Amounts past the temporary budget are subject to sufficient funds being available in the adopted budget.

Scott M. Frueh

Scott M. Frueh
Chief Financial Officer

Dated: 5/19/25

**RESOLUTION NO. 25-73
MEETING DATE: 05-19-2025**

RESOLUTION APPOINTING PART-TIME PUBLIC WORKS EMPLOYEE

C/_____ offered the following resolution and moved its adoption, which was second by C/_____.

BE IT RESOLVED, by the Mayor and Council of the Borough of Roosevelt that Earl Groendyke be and is hereby appointed Part-Time Public Works Employee at an hourly rate of \$65.00.

BE IT FURTHER RESOLVED that a copy of this resolution, certified by the Borough Clerk to be a true copy be forwarded to Earl Groendyke, Scott Frueh - Chief Financial Officer and Ana Debevec - Treasurer.

ROLL CALL:

AYES:

NAYS:

ABSTAIN:

ABSENT:

CERTIFICATION

I HEREBY CERTIFY the foregoing to be a true copy of a resolution adopted by the Borough Council at a meeting held on May 19, 2025.

Kathleen Hart
Borough Clerk

**RESOLUTION NO. 25-74
MEETING DATE: 05-19-2025**

**RESOLUTION OF THE BOROUGH COUNCIL OF THE BOROUGH OF ROOSEVELT
WAIVING MARCH/APRIL WATER AND SEWER UTILITY BILLINGS FOR 5 CEDAR
COURT, BLOCK 2, LOT 51**

C/ _____ offered the following resolution and moved its adoption, which was seconded by C/ _____.

WHEREAS, the Borough of Roosevelt, County of Monmouth, State of New Jersey (the “Borough”) operates public water and sewer utilities that provide such services to certain properties within the Borough; and

WHEREAS, the property known as 5 Cedar Court, Block 2, Lot 51 (the “Property”) maintains utility accounts with the Borough; and

WHEREAS, in early March 2023, the structures located upon the Property were severely damaged and destroyed in a casualty loss incident; and

WHEREAS, during the months of March and April 2025, the Borough billed the Property’s utility accounts for structures that were no longer habitable and/or no longer existed upon the Property; and

WHEREAS, the Borough has determined that the amount billed to the Property’s accounts do not accurately reflect the utilities being utilized, and finds that the Property did not utilize any of the municipal services for which it was billed.

NOW, THEREFORE, BE IT RESOLVED, that the Governing Body of the Borough of Roosevelt, County of Monmouth, State of New Jersey does hereby authorize the Borough CFO and Tax Collector to cancel and/or waive the Property’s water/sewer utility bill for March/April 2025 in the amount of \$372.00; and

BE IT FURTHER RESOLVED, that any interest and late fees shall be waived on the Property’s water/sewer utility accounts relating to the above-authorized cancellation; and

BE IT FURTHER RESOLVED, that a certified copy of this resolution be forwarded to the Borough CFO, Tax Collector, and the owner of the Property.

ROLL CALL:

AYES:

NAYS:

ABSTAIN:

ABSENT:

CERTIFICATION

I HEREBY CERTIFY the foregoing to be a true copy of a resolution adopted by the Borough Council at a meeting held on May 19, 2025.

Kathleen Hart
Borough Clerk

RESOLUTION NO. 25-75
MEETING DATE: 05-19-2025

**RESOLUTION AUTHORIZING THE AWARD OF A NON-FAIR AND OPEN
CONTRACT FOR PROFESSIONAL CEMETERY MANAGEMENT SERVICES
TO SUTPHEN MEMORIAL, INC., 53 SOMERSET STREET, HOPEWELL, NJ 08525**

C/ _____ offered the following resolution and moved its adoption, which was seconded by
C/ _____.

WHEREAS, the Borough of Roosevelt, County of Monmouth, State of New Jersey (the “Borough”) has a need to retain the professional services of a cemetery management company as a non-fair and open contract pursuant to the provisions of N.J.S.A. 40A:11-1, *et seq.*; and

WHEREAS, the Borough has determined that the value of the services will not exceed the bid threshold of \$17,500.00; and

WHEREAS, Sutphen Memorial, Inc. has previously provided cemetery management services to the Borough for many years, and for this contractual term, has agreed to renew at the same rate from prior contract for the period July 1, 2025 through June 30, 2028.

NOW THEREFORE, BE IT RESOLVED, that the Governing Body of the Borough of Roosevelt authorizes the Borough to enter into the Cemetery Management Agreement with Sutphen Memorial, Inc. in the form attached hereto as Exhibit A; and

BE IT FURTHER RESOLVED that this Resolution is subject to the availability of funds for the Contract and payment for services described therein and/or any subsequent approvals granted by the Governing Body from time-to-time under the terms of the Contract; and

BE IT FURTHER RESOLVED that a notice in accordance with this resolution and the Local Public Contracts Law shall be published one time in Asbury Park Press; and

BE IT FURTHER RESOLVED that an executed copy of the Contract and a copy of this resolution shall be filed in the office of the Borough Clerk and be available there for public inspection in accordance with the law.

ROLL CALL:

AYES:

NAYS:

ABSTAIN:

ABSENT:

CERTIFICATION

I HEREBY CERTIFY the foregoing to be a true copy of a resolution adopted by the Borough Council at a meeting held on May 19, 2025.

Kathleen Hart
Borough Clerk

BOROUGH OF ROOSEVELT

I, Scott M. Frueh, Chief Financial Officer of the Borough of Roosevelt, do hereby certify that funds are available for the following contract to be awarded:

<u>Vendor</u>	<u>Budget Account</u>	<u>Total Award</u>
Sutphen Memorial, Inc. (7/1/25-12/31/25)	B&G-Cemetery	\$4,650.00

Only amounts in the temporary budget are certified as available. Amounts past the temporary budget are subject to sufficient funds being available in the adopted budget.

Scott M. Frueh

Scott M. Frueh
Chief Financial Officer

Dated: 5/19/25

CEMETERY MANAGEMENT AGREEMENT

THIS AGREEMENT entered into this _____ day of _____, 2025,

BETWEEN: SUTPHEN MEMORIAL, INC., having its principal offices located at 89 E. Broad Street, Hopewell, New Jersey, 08525, hereinafter referred to as the "Contractor";

AND THE BOROUGH OF ROOSEVELT, a Municipal Corporation of the State of New Jersey, located at 33 North Rochdale Avenue, Borough of Roosevelt, County of Monmouth and State of New Jersey, hereinafter referred to as the "Borough";

WITNESSETH

For and in consideration of the mutual covenants and promises contained herein, the parties hereto agree as follows:

1. Services to be Provided. The Contractor shall provide to the Borough the following:

- monthly report on general lot care and upkeep in a form directed by the Governing Body;
- individual lot and cemetery upkeep excluding lawn mowing and snow plowing;
- enforce cemetery rules and regulations;
- lot preparation (marking out) before interment services (no later than 24 hours from time of call for same);
- manage phone calls and family needs/complaints/serving as main contact for families;
- assisting with Ground Penetrating Radar survey;
- maintaining monuments and repairing sinking monuments;

- maintaining cemetery burial records and cemetery map;
- other services incidental, necessary or customary to above services.

2. Term of Agreement. The Agreement shall commence on July 1, 2025 and shall terminate on June 30, 2028 unless terminated sooner pursuant to Section 6. [Note: up to 15-years per N.J.S.A. 40A:11-15 (33).]

3. Payments to Contractor. The Contractor shall be paid annually the sum of \$9,300.00 per year, paid in monthly installments of \$775.00.

4. Insurance Certificate. The Contractor furnishes herewith a Certificate of Insurance evidencing the fact that the Contractor maintains general comprehensive insurance coverage with single limit coverage in the amount of one million (\$1,000,000.00), including both personal injury and property damage, together with statutory workers compensation insurance, property damage and automobile liability insurance pertaining to all vehicles owned or used by the Contractor in the performance of this contract in the minimum amount of \$500,000.00. The Borough of Roosevelt shall be named as an additional insured on such policies of insurance, and the Certificate of Insurance furnished by the Contractor shall so indicate.

5. Indemnification. The Contractor agrees to hold harmless the Borough of Roosevelt from any and all claims for damages arising from all causes in connection with its furnishing of the services specified herein and further agrees that the Contractor will, at its own cost and expense, defend any law suit which may be brought against the

Borough of Roosevelt in connection with or arising out of the services to be furnished under this Agreement.

6. Termination. The Borough of Roosevelt reserves the right to terminate this contract upon the failure of the Contractor to perform in a manner satisfactory to the Borough Council of the Borough of Roosevelt. Without limiting the foregoing, the Contract is renewable each year, and, the Borough may fail to renew for the following year by providing the Contractor with such notice by November 30th of each year.

7. Standards of Service. Contractor shall maintain the Cemetery, including detailed and accurate burial records and the cemetery map, in a first class manner consistent with comparable cemeteries in the area. From the effective date of this Agreement, Contractor will assume care and control of the Cemetery to the extent provided for herein. Any deviation from current Cemetery policies including those regarding burial practices, and monument and grave placement, shall be subject to Borough approval.

8. Books and Records Management. The Contractor shall maintain such books and records of Contractor's operation of the Cemetery that would customarily be expected of a cemetery and as required by law.

9. Relationship of Parties. The relationship of Contractor to the Borough in the performance of the services hereunder is that of an independent contractor and no liabilities or benefits whatsoever that arise from a contract for hire or from any employer/employee relationship shall accrue to either the Contractor or the Borough as

a result of this Agreement. Employees of the Contractor shall not be deemed to be employees of the Borough, nor entitled to receive the benefits of Borough employees.

10. Affirmative Action. The contractor shall execute the Affirmative Action Agreement, Exhibit A attached hereto, which shall be incorporated herein by reference.

11. Severability. The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions hereof, and the Agreement shall be construed in all respects as though such invalid or unenforceable provisions were omitted.

12. Waiver. The failure of either party to insist in any one or more instances upon strict performance of any of the terms or conditions of this Agreement shall not be construed as a waiver or relinquishment of any right granted hereunder or of the future performance of any such term, covenant, or condition.

13. Entire Agreement. This Agreement shall supersede any and all prior, oral and/or written, agreement(s) and constitutes the entire Agreement between the parties and there are no representations, warranties or agreements, whether express or implied, except as set forth herein. This Agreement may not be canceled, changed, modified, or amended orally, and no cancellation, change, modification or amendment hereof shall be effective or binding unless in a written instrument signed by the parties and authorized by the Borough Governing Body. A provision of this Agreement may be waived only by a written instrument signed by the party against whom or which enforcement of such waiver is sought.

14. Assignment. This Agreement shall not be assignable without written consent of the Governing Body of the Borough.

15. Controlling Law. All of the terms, conditions and other provisions of this Agreement shall be interpreted and governed by reference to the substantive laws of the State of New Jersey, without giving effect to principles of conflicts of law.

16. Venue. The parties agree that any suit, action or proceeding based on, arising out of or relating to this Agreement, shall be brought in the Superior Court of New Jersey, Monmouth County, and not in or before any other court, agency or other tribunal. Each party hereby irrevocably consents to the exercise of personal jurisdiction over such party by the respective foregoing forum court, agrees that venue shall be proper in such forum court, and irrevocably waives and releases any and all defenses based on lack of personal jurisdiction, improper venue and/or forum non conveniens.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals the day in here first above written.

ATTESTED BY:

THE BOROUGH OF ROOSEVELT

Kathleen Hart
Borough Clerk

Peggy Malkin, Mayor

Witnessed:

AS TO THE CONTRACTOR:

, Secretary

*BOROUGH OF ROOSEVELT
COUNTY OF MONMOUTH
STATE OF NEW JERSEY*

**RESOLUTION NO. 25-76
MEETING DATE: 05-19-2025**

PAYMENT OF BILLS FOR MAY 19, 2025

C/ _____ offered the following resolution and moved its adoption, which was second by C/ _____.

WHEREAS, the attached list of bills have been submitted to the Council for payment approval; and

WHEREAS, the Chief Financial Officer has certified the availability of funds for the payment of bills.

NOW, THEREFORE, BE IT RESOLVED that the bills on the attached bill list be paid.

ROLL CALL:

AYES:

NAYS:

ABSTAIN:

ABSENT:

CERTIFICATION

I HEREBY CERTIFY the foregoing to be a true copy of a resolution adopted by the Borough Council at a meeting held on May 19, 2025.

Kathleen Hart
Borough Clerk

BOROUGH OF ROOSEVELT
Bill List By Vendor Name

05/15/2025

11:34 AM

5-19-25 BILL LIST

Ranges		Item Status	Purchase Types	Misc				
<i>Range: First to Last</i>		<i>Open: N</i>	<i>Bid: Y</i>	<i>P.O. Type: All</i>				
<i>Rcvd Batch Id Range: First to Last</i>		<i>Void: N</i>	<i>State: Y</i>	<i>Format: Condensed</i>				
		<i>Paid: N</i>	<i>Other: Y</i>	<i>Include Non-Budgeted: Y</i>				
		<i>Held: Y</i>	<i>Exempt: Y</i>	<i>Vendors: All</i>				
		<i>Aprv: N</i>						
		<i>Rcvd: Y</i>						
Vendor #	P.O. #	PO Date	Description	Status	Amount	Void Amount	Contract	PO Type
ALPHA005			ALPHADOG SOLUTIONS, INC.					
25-00128	02/21/25		2025 WEBSITE MANAGEMENT	Open	\$720.00	\$0.00		B
BOROU005			BOROUGH OF HIGHTSTOWN					
25-00319	05/12/25		SOLID WASTE CONTRACT:MAY 2025	Open	\$6,274.17	\$0.00		
CANNO010			CANNON & MCGUINN, LLC					
25-00299	05/06/25		LEGAL SERVICES-MAR 2025	Open	\$2,750.00	\$0.00		
25-00303	05/08/25		MAR 2025-NJDEP	Open	\$198.00	\$0.00		
25-00304	05/08/25		MAR 2025-NVR EASEMENTS	Open	\$660.00	\$0.00		
25-00305	05/08/25		MAR 2025-TAX APPEALS	Open	\$676.50	\$0.00		
			Vendor Total:		\$4,284.50			
CINTA005			CINTAS CORPORATION					
25-00327	05/14/25		BORO HALL & WTP 5/13/25	Open	\$93.29	\$0.00		
COMPL005			COMPLETE SECURITY SYSTEMS, INC					
25-00288	04/30/25		SERVICE CALL 4/9/25 AT WWTP	Open	\$411.00	\$0.00		
DONAT005			DONATO, ESQ., MICHELE					
25-00324	05/13/25		PB REVIEW-5 CEDAR COURT	Open	\$834.75	\$0.00		
FRIED005			FRIED BROTHERS, INC.					
25-00301	05/07/25		PADLOCKS (10)	Open	\$103.36	\$0.00		
GANNE005			GANNETT NJ NEWSPAPERS					
25-00326	05/13/25		APR 2025 NOTICES	Open	\$177.74	\$0.00		
HOLDE005			HOLDEN, JOHN B.					
25-00091	02/10/25		2025 WATER PLANT MANAGEMENT	Open	\$5,415.00	\$0.00		B
25-00302	05/08/25		ADDITIONAL SERVICES-APR 2025	Open	\$79.50	\$0.00		
			Vendor Total:		\$5,494.50			
INTER015			INTERSTATE WASTE SERVICES, INC					
25-00015	01/13/25		2025 RECYCLING CONTRACT	Open	\$3,577.00	\$0.00		B
JCPL0005			JCP & L					
25-00312	05/09/25		APR 2025 ELECTRIC SERVICE	Open	\$1,150.45	\$0.00		
25-00313	05/09/25		W/S-APR 2025 ELECTRIC SERVICE	Open	\$4,777.09	\$0.00		
			Vendor Total:		\$5,927.54			
LYONS005			LYONS ENVIRONMENTAL SERV, LLC					
25-00081	02/03/25		2025 SEWER PLANT MANAGEMENT	Open	\$9,750.00	\$0.00		B
25-00310	05/09/25		ADDT'L SERVICES 4/14/25	Open	\$765.00	\$0.00		
25-00311	05/09/25		WATER TEST 4/1/25	Open	\$50.00	\$0.00		
			Vendor Total:		\$10,565.00			

BOROUGH OF ROOSEVELT
Bill List By Vendor Name

05/15/2025

11:34 AM

Vendor # P.O. #	PO Date	Name Description	Status	Amount	Void Amount	Contract	PO Type
MAINP005 25-00045	01/23/25	MAIN POOL & CHEMICAL CO., INC. WATER-2025 SODIUM HYPOCHLORITE	Open	\$860.88	\$0.00		B
MONMO005 25-00306	05/08/25	MONMOUTH COUNTY BOARD OF 2025 RECORDS ACCESS FEE	Open	\$154.63	\$0.00		
MONMO015 25-00241	04/09/25	MONMOUTH COUNTY OFFICE OF 2025 SHARED SERVICE FEE	Open	\$8,234.00	\$0.00		
MONMO020 25-00321	05/12/25	MONMOUTH MUNICIPAL JIF 2025 INSUR-SECOND INSTALLMENT	Open	\$22,311.00	\$0.00		
NJDEP005 25-00328	05/14/25	NJ DEPARTMENT OF HEALTH DOG REPORT:APR 2025	Open	\$7.80	\$0.00		
PARTY010 25-00300	05/06/25	PARTY PERFECT RENTALS, LLC MOVIE NIGHT 3/8/25	Open	\$925.00	\$0.00		
PASSA005 25-00307	05/08/25	PASSAIC VALLEY SEWERAGE SLUDGE DISPOSAL-MAR 2025	Open	\$1,209.60	\$0.00		
PEGER005 25-00228	04/08/25	PEGER, KYLE d/b/a PUBLIC LAND MAINTENANCE:2025	Open	\$1,798.00	\$0.00		B
PETTY005 25-00298	05/01/25	PETTY CASH REIMBURSE PETTY CASH	Open	\$17.05	\$0.00		
25-00308	05/09/25	REIMBURSE PETTY CASH	Open	\$45.77	\$0.00		
25-00309	05/09/25	REIMBURSE PETTY CASH	Open	\$39.42	\$0.00		
		Vendor Total:		\$102.24			
PSEGC005 25-00329	05/14/25	PSE & G CO. APR 2025 GAS SERVICE	Open	\$451.39	\$0.00		
ROBER005 25-00323	05/13/25	ROBERTS ENGINEERING GROUP, LLC PB REVIEW-5 CEDAR COURT	Open	\$1,481.00	\$0.00		
ROOSE025 25-00293	04/30/25	ROOSEVELT ARTS PROJECT CLEAN COMM-LITTER PICKUP	Open	\$100.00	\$0.00		
ROOSE005 25-00322	05/12/25	ROOSEVELT BOARD OF EDUCATION JUN 2025 SCHOOL TAXES	Open	\$159,053.00	\$0.00		
ROOSE020 25-00292	04/30/25	ROOSEVELT PUBLIC SCHOOL CLEAN COMM-LITTER PICKUP	Open	\$200.00	\$0.00		
RUOTO005 25-00297	05/01/25	RUOTOLO-LAHENS, DAN 2025 EC AWARD	Open	\$50.00	\$0.00		
RUSSE005 25-00100	02/11/25	RUSSELL REID, INC. 2025 SLUDGE REMOVAL	Open	\$3,734.64	\$0.00		B

BOROUGH OF ROOSEVELT
Bill List By Vendor Name

05/15/2025

11:34 AM

Vendor # P.O. #	PO Date	Name Description	Status	Amount	Void Amount	Contract	PO Type
STAPL005 25-00251	04/14/25	STAPLES BUSINESS ADVANTAGE OFFICE & JANITORIAL SUPPLIES	Open	\$169.72	\$0.00		
SUTPH005 25-00027	01/14/25	SUTPHEN MEMORIAL, INC. 2025 CEMETERY MANAGEMENT	Open	\$775.00	\$0.00		B
THOMA005 25-00085	02/05/25	THOMAS PLANNING ASSOCIATES,LLC HOUSING PLAN ELEMENT ROUND 4	Open	\$1,860.00	\$0.00		B
TOWNS015 25-00318	05/12/25	TOWNSHIP OF MANALAPAN ANIMAL CONTROL SERV-MAY 2025	Open	\$1,041.66	\$0.00		
TOWNS005 24-00544	09/20/24	TOWNSHIP OF MILLSTONE 2024 RECYCLING COORDINATOR	Open	\$200.00	\$0.00		
TREAS010 25-00330	05/14/25	TREASURER, STATE OF NJ SURFACE WATER DISCHARGE PERMIT	Open	\$4,669.85	\$0.00		
25-00331	05/14/25	STORMWATER DISCHARGE PERMIT	Open	\$600.00	\$0.00		
Vendor Total:				\$5,269.85			
TREEW005 25-00296	05/01/25	TREE WISE MEN, LLC REMOVE LARGE WHITE PINE	Open	\$1,600.00	\$0.00		

Total Purchase Orders: 45 Total P.O. Line Items: 0 Total List Amount: \$250,052.26 Total Void Amount: \$0.00

BOROUGH OF ROOSEVELT
Bill List By Vendor Name

05/15/2025

11:34 AM

Totals by Year-Fund							
Fund Description	Fund	Budget Rcvd	Budget Held	Budget Total	Revenue Total	G/L Total	Total
	5-01	\$210,537.46	\$0.00	\$210,537.46	\$0.00	\$0.00	\$210,537.46
	5-09	\$36,691.25	\$0.00	\$36,691.25	\$0.00	\$0.00	\$36,691.25
	Year Total:	\$247,228.71	\$0.00	\$247,228.71	\$0.00	\$0.00	\$247,228.71
	G-02	\$500.00	\$0.00	\$500.00	\$0.00	\$0.00	\$500.00
	T-12	\$2,315.75	\$0.00	\$2,315.75	\$0.00	\$0.00	\$2,315.75
ANIMAL CONTROL	T-13	\$7.80	\$0.00	\$7.80	\$0.00	\$0.00	\$7.80
	Year Total:	\$2,323.55	\$0.00	\$2,323.55	\$0.00	\$0.00	\$2,323.55
Total Of All Funds:		\$250,052.26	\$0.00	\$250,052.26	\$0.00	\$0.00	\$250,052.26

*BOROUGH OF ROOSEVELT
COUNTY OF MONMOUTH
STATE OF NEW JERSEY*

**RESOLUTION NO. 25-77
MEETING DATE: 05-19-2025**

**RESOLUTION AUTHORIZING HUNTER RESEARCH TO PREPARE AN INTENSIVE-LEVEL
ARCHITECTURAL SURVEY FOR THE TRICKLING FILTER REPLACEMENT**

C/ _____ offered the following resolution and moved its adoption, which was seconded by
C/ _____.

WHEREAS, the Borough Engineer was authorized to design the replacement of the two existing
Trickling Filters at the Wastewater Treatment Plant; and

WHEREAS, as part of the application for funding assistance, a review of the cultural and historic
resources in the project area is required by NJ Department of Environmental Protection; and

WHEREAS, the entire Borough of Roosevelt, including the Wastewater Treatment Plant is listed
on the New Jersey and National Register of Historic Places and due to the historic significance of the
property, an Intensive-level Architectural survey is required; and

WHEREAS, two (2) quotes were received and Hunter Research was the lowest at a cost of
\$4,424.00; and

WHEREAS, the Borough's Chief Financial Officer has certified the availability of funds in the
amount not to exceed \$4,424.00.

NOW, THEREFORE BE IT RESOLVED, by the Mayor and Governing Body of the Borough
of Roosevelt, County of Monmouth, State of New Jersey that Hunter Research is authorized to prepare an
Intensive-level Architectural survey in the amount not to exceed \$4,424.00.

BE IT FURTHER RESOLVED, that a certified copy of this resolution be sent to the Chief
Financial Officer, Purchasing Agent, Roberts Engineering Group, LLC and Hunter Research.

ROLL CALL:

AYES:

NAYS:

ABSTAIN:

ABSENT:

CERTIFICATION

I HEREBY CERTIFY the foregoing to be a true copy of a resolution adopted by the Borough
Council at a meeting held on May 19, 2025.

Kathleen Hart
Borough Clerk

BOROUGH OF ROOSEVELT

I, Scott M. Frueh, Chief Financial Officer of the Borough of Roosevelt, do hereby certify that funds are available for the following contract to be awarded:

<u>Vendor</u>	<u>Budget Account</u>	<u>Total Award</u>
Hunter Research, Inc.	Bond Ord. 20-14	\$4,324.90
(Architectural Survey regarding Trickling Filters)	Sewer O/E	\$ 99.10

Scott M. Frueh

Scott M. Frueh
Chief Financial Officer

Dated: 5/19/25

FDR AMPHITHEATER REHABILITATION

BOROUGH OF ROOSEVELT

ROOSEVELT, NJ 08555 -BLOCK 3 LOT 33

CONSTRUCTION NOTES

1. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS.
2. THE LOCATIONS OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES FOR THEIR EXACT LOCATIONS.
2. TRENCHES OR AREAS EXCAVATED ARE TO BE BACK FILLED WITH SUITABLE MATERIAL AND TOPPED WITH QUARRY PROCESS STONE AT THE END OF EACH WORKING DAY AND PAVED AT THE END OF THE WORK WEEK. NO TRENCHES WILL BE PERMITTED TO BE LEFT OPEN OVERNIGHT.
3. ANY MATERIAL THAT MAY BE DISTURBED DURING THE REMOVAL AND REPLACEMENT TO EXISTING CURBING AND SIDEWALKS, MUST BE RETURNED TO ITS ORIGINAL CONDITION. THE COST FOR THIS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SITE RESTORATION.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAPERING PROPOSED WORK TO MEET EXISTING CONDITIONS IN A UNIFORM MANNER.
5. THE CONTRACTOR SHALL RECEIVE ALL THE NECESSARY APPROVALS FROM ALL LOCAL, COUNTY, AND STATE GOVERNING AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING ANY TRAFFIC DETOURS WITH LOCAL POLICE DEPT. AND TRAFFIC DEPARTMENT. SHOULD ANY TRAFFIC DIRECTORS BE REQUIRED BY THE LOCAL POLICE DEPT., THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING TRAFFIC DIRECTORS WITH THE LOCAL POLICE DEPT.
6. THE CONTRACTOR SHALL MAINTAIN CONTINUOUS SERVICES DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL DIG TEST PITS AT ALL CROSSINGS TO VERIFY EXISTING UTILITY LOCATIONS AND ELEVATION PRIOR TO THE START OF CONSTRUCTION AS DIRECTED BY THE ENGINEER.
8. ALL EXISTING UTILITIES TO BE ABANDONED (IF ANY), SHALL BE PLUGGED AT BOTH ENDS.
9. THE CONTRACTOR WILL NOT BE PERMITTED TO STORE ANY MATERIALS WITHIN THE PUBLIC RIGHT OF WAY OVERNIGHT. AT NO TIME MAY ANY MATERIALS BE STORED OR PLACED BEYOND THE PROPERTY LIMITS. ALL STORAGE SITES SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE END OF THE PROJECT AT NO COST TO THE BOROUGH OF ROOSEVELT.
10. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, NOTES AND CONDITIONS AT THE SITE BEFORE ANY CONSTRUCTION WORK IS STARTED. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR CONFLICTS BETWEEN THESE DRAWINGS AND FIELD CONDITIONS. THE DISCOVERY OF DISCREPANCIES AFTER COMMENCEMENT OF WORK WILL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR TO CORRECT.
11. CONTRACTOR TO PROTECT ALL "EXISTING TO REMAIN". CONTRACTOR SHALL ALSO PROTECT PAVING AND CURBING OUTSIDE THE CONTRACT LIMIT LINES, WHICH MAY BE AFFECTED BY CONSTRUCTION AND CONSTRUCTION TRAFFIC. THESE AREAS SHALL BE PATCHED AND REPAIRED AS REQUIRED TO MAINTAIN THEIR EXISTING CONDITIONS.
12. AT COMPLETION OF THE JOB, CONTRACTOR IS TO REPAIR ALL EXISTING PAVEMENT AND SITE FEATURES DAMAGED BY CONSTRUCTION.



SITE LOCATION PLAN

DRAWING LIST

1.00	TITLE SHEET
2.00	SITE SURVEY
3.00	DEMOLITION AND REMOVALS PLAN
4.00	MATERIALS PLAN
4.10	REPOINTING AND BRICK REPLACEMENT PLAN
5.00	MATERIALS & LAYOUT ENLARGEMENT PLAN
6.00	GRADING PLAN
7.00	PLANTING PLAN AND DETAILS
8.00	SITE CONSTRUCTION DETAILS 1
8.01	SITE CONSTRUCTION DETAILS 2
C-1.00	SEDIMENTATION AND EROSION CONTROL PLAN
C-2.00	SEDIMENTATION AND EROSION CONTROL DETAILS
EP-1.00	ELECTRICAL AND LIGHTING SITE PLAN
E-001	ELECTRICAL GENERAL NOTES AND SYMBOLS
E-101	ELECTRICAL FLOOR PLANS
E-201	ELECTRICAL DETAILS

BOROUGH OF ROOSEVELT

TITLE OF REQUIRED SIGNATORY

TITLE OF REQUIRED SIGNATORY

KNOW WHAT'S BELOW - CALL BEFORE YOU DIG!
Dial 811 or 800-272-1000. It's FREE and it's the LAW



FDR AMPHITHEATER REHABILITATION

BOROUGH OF ROOSEVELT, NJ

NO.	DATE	DESCRIPTION	BY
1	04.25.2025	Review Submission	ETM
2	05.15.2025	Update Submission	ETM

ETM ASSOCIATES L.L.C.
PUBLIC SPACE DESIGN
PUBLIC SPACE MANAGEMENT
PROJECT MANAGEMENT
1202 Raritan Avenue
Highland Park, NJ 08904
t: 732 572 6626
f: 732 572 7161
etmassociatesllc.com



100 Judd Drive | Somerville, NJ 08876 | 908-800-5500 | manterradesign.com
certificate of authorization: 245424022100

Giovanni Manilo, PE
New Jersey Professional Engineer 47552

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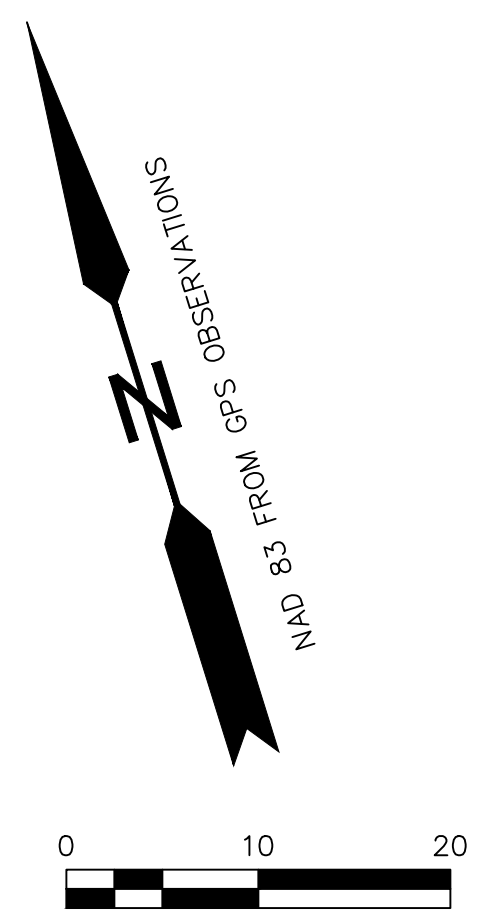
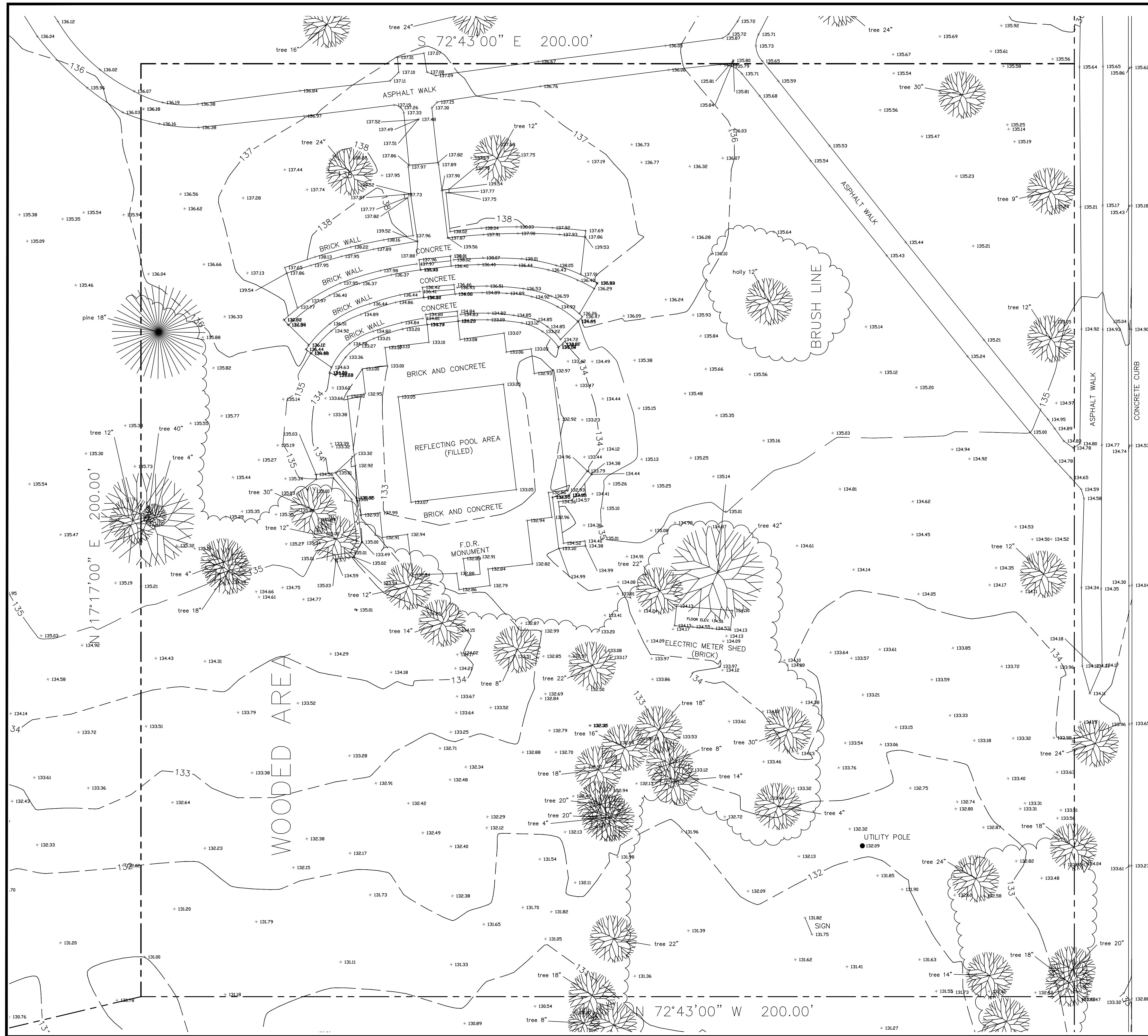
GIOVANNI MANILO
47552

E. TIMOTHY MARSHALL
A500672

ISSUED:
CHECKED:

DRAWING TITLE: TITLE SHEET

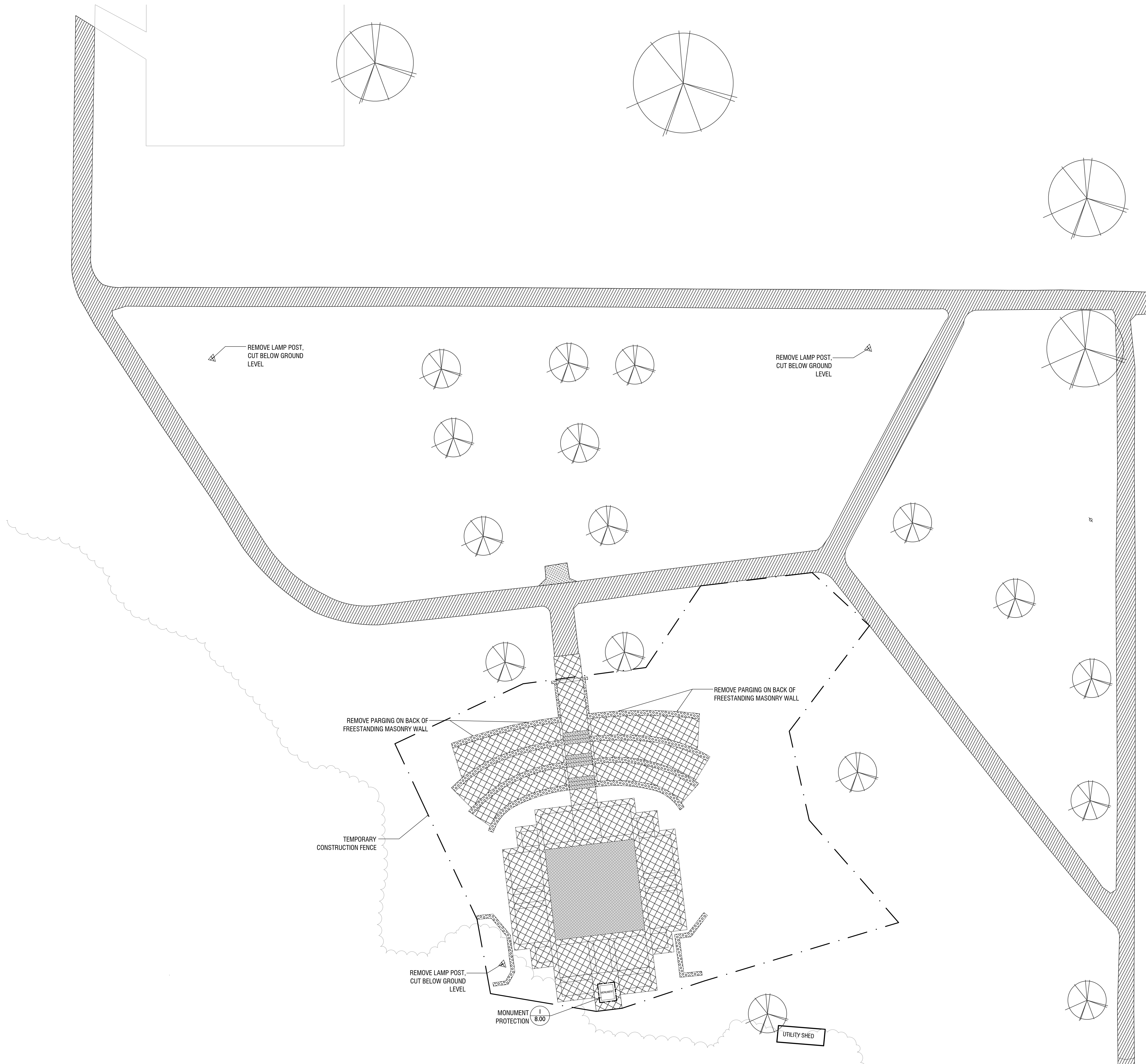
SHEET NO: 1.00



S 17°17'00" W 200.00'
 ROCHDALE AVENUE

Note:
The elevations shown on this plan are
referenced to NAVD 88 from GPS observations

TOPOGRAPHIC SURVEY OF F.D.R. MEMORIAL ROCHDALE AVENUE BOROUGH OF ROOSEVELT MONMOUTH COUNTY, NEW JERSEY		I HEREBY CERTIFY THIS SURVEY TO:
DRAWN BY: SEM DESIGNED BY: CHECKED BY:	JOB NUMBER: DRAWING NO. 230001 SCALE 1"=20'	

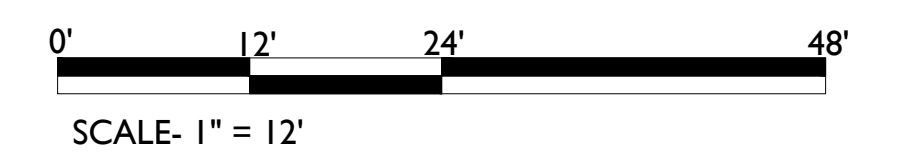


LEGEND / QUANTITY TAKEOFFS			
ITEM	KEY	UNITS	QTY.
REMOVE CONCRETE/BRICK PAVING	[Hatched Pattern]	LS	1
REMOVE BRICK AT STEP LOCATIONS	[Hatched Pattern]	LS	1
REMOVE SOIL FILLED REFLECTING POOL	[Dotted Pattern]	SY	59
SELECTIVE BRICK REMOVAL ON SEAT WALLS	[Hatched Pattern]	EACH	925
REMOVE ASPHALT PATHWAY	[Hatched Pattern]	SY	4
MILL ASPHALT PATHWAY	[Hatched Pattern]	SY	536
REMOVE POLE LIGHT	[Pole Light Symbol]	EA	3
MONUMENT PROTECTION	[Circle with X]	EA	1

DEMOLITION NOTES

1. THE CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
2. ALL DEMOLITION AND REMOVAL WORK SHALL CONFORM WITH ALL LOCAL, STATE, AND FEDERAL STANDARDS.
3. REMOVE ANY AND ALL DEMOLISHED MATERIAL FROM THE SITE AND DISPOSED OF LEGALLY.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO RECLAIM OR PROPERLY DISPOSE OF ALL REMOVED BITUMINOUS MATERIAL.
5. THE CONTRACTOR SHALL REPLACE ANY BROKEN OR DAMAGED EXISTING CURB, THE SIDEWALK OR ROADWAY DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.
6. WHERE NEW CONSTRUCTION ABUTS EXISTING CURBS OR PAVEMENTS THE EXISTING MATERIAL SHALL BE CLEANLY SAW CUT TO PROVIDE A CLEAR MATCH WITH NO TRIP HAZARDS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL TREES TO REMAIN, PROTECTION SHALL BE AS SPECIFIED.
8. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND LOCATION OF ALL UTILITIES PRIOR TO THE START OF WORK, ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND CONSTRUCTION DOCUMENTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT.
9. PRIOR TO THE COMMENCEMENT OF WORK THE CONTRACTOR SHALL SUBMIT FOR APPROVAL THE LOCATION OF STAGING AND STOCKPILE AREAS. THE LANDSCAPE ARCHITECT SHALL APPROVE ALL STOCKPILE LOCATIONS. MATERIALS STOCKPILED ON THE SITE SHALL BE SECURELY FENCED AT THE CONTRACTORS EXPENSE.
10. CONTRACTOR SHALL COMPLY WITH ALL CODES AND REGULATIONS GOVERNING THE WORK.
11. CONTRACTOR TO SALVAGE BRICKS FROM EXISTING PAVING AND WALL CONSTRUCTION. SALVAGE QUANTITIES SHALL BE SUFFICIENT TO COMPLETE ALL REQUIRED BRICK REPAIR WORK TO EXISTING WALLS (SEE ESTIMATED PROJECT QUANTITIES FOR BRICK REPLACEMENT).
12. ALL AMPHITHEATER WALL CONCRETE FOUNDATION AND CORE MATERIAL TO REMAIN. CONTRACTOR TO AVALUATE CONCRETE FOUNDATION CONDITION UPON SELECTIVE BRICK REMOVAL AND NOTIFY PROJECT LANDSCAPE ARCHITECT OF ANY IDENTIFIED STRUCTURAL ISSUES.

ROCHDALE AVENUE



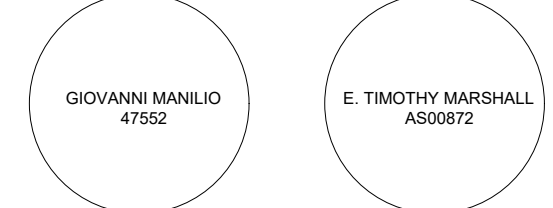
**FDR AMPHITHEATER
REHABILITATION**
BOROUGH OF ROOSEVELT, NJ

ISSUE RECORD:			
NO.	DATE	DESCRIPTION	BY
1	04.25.2025	Review Submission	ETM
2	05.15.2025	Update Submission	ETM

ETM ASSOCIATES L.L.C.
PUBLIC SPACE DESIGN
PUBLIC SPACE MANAGEMENT
PROJECT MANAGEMENT
1202 Raritan Avenue
Highland Park, NJ 08904
t: 732.572.6626
f: 732.572.7161
etmassociatesllc.com



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DRAWN:
CHECKED:

DRAWING TITLE:
**DEMOLITION AND
REMOVALS PLAN**
SHEET NO:
3.00



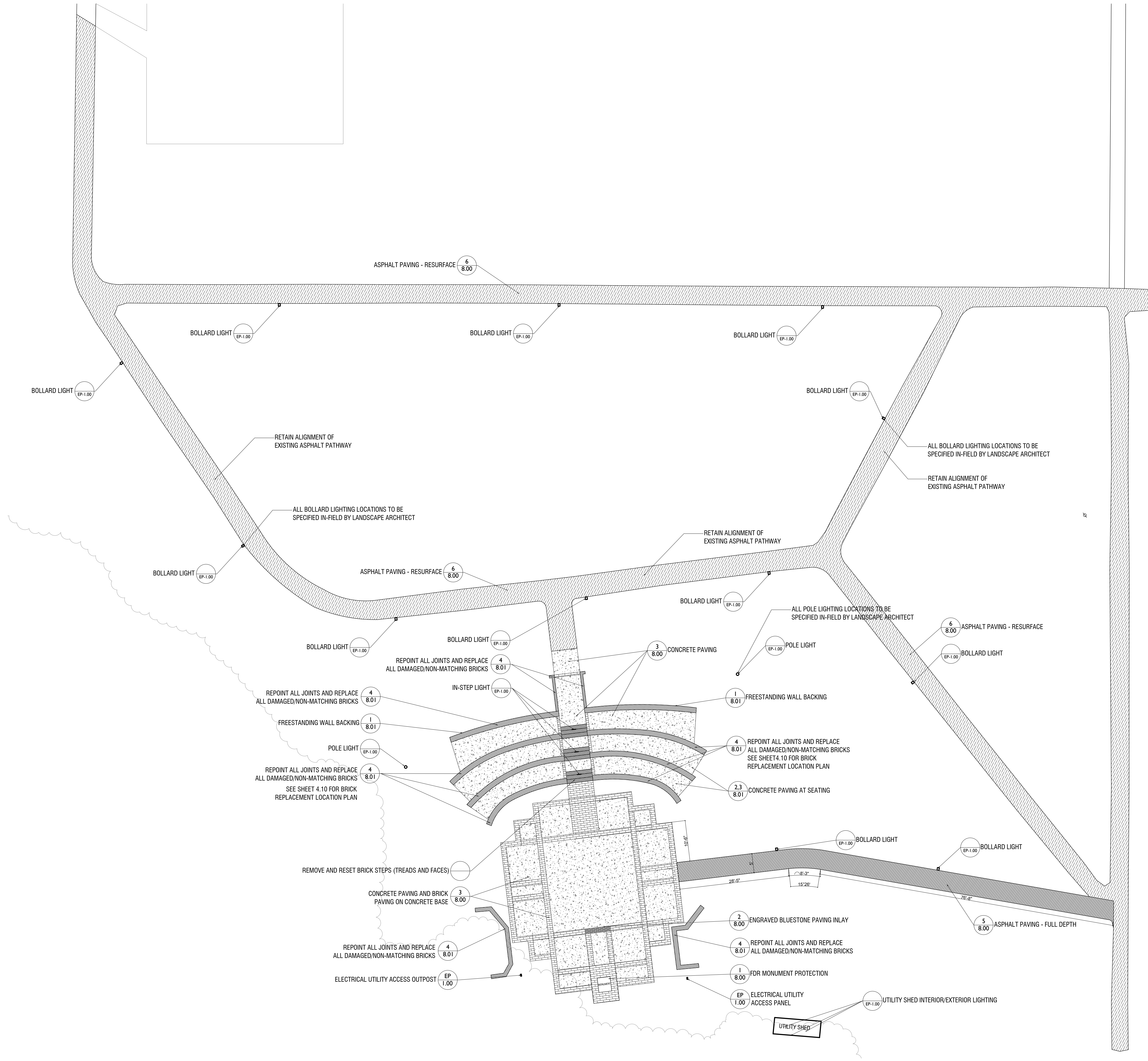
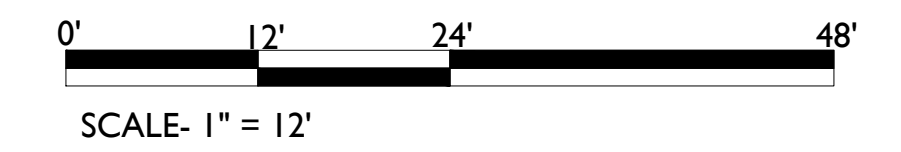
FDR AMPHITHEATER REHABILITATION

BOROUGH OF ROOSEVELT, NJ

LEGEND / QUANTITY TAKEOFFS			
ITEM	KEY	UNITS	QTY.
CONCRETE PAVING	[Pattern]	SY	253
BRICK PAVING ON CONCRETE BASE	[Pattern]	SY	72
BRICK STEP SETS	[Pattern]	EA	3
ENGRAVED BLUESTONE PAVING INLAY	[Pattern]	SF	9
ASPHALT PAVING - RESURFACED	[Pattern]	SY	532
ASPHALT PAVING - FULL DEPTH	[Pattern]	SY	62
BOLLARD LIGHT	[Symbol]	EA	12
IN-STEP LIGHT	[Symbol]	EA	3
POLE LIGHT	[Symbol]	EA	2
ELECTRICAL UTILITY ACCESS	[Symbol]	EA	2

MATERIALS NOTES

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS.
2. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, NOTES AND CONDITIONS AT THE SITE BEFORE ANY CONSTRUCTION WORK IS STARTED. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR CONFLICTS BETWEEN THESE DRAWINGS AND FIELD CONDITIONS. THE DISCOVERY OF DISCREPANCIES AFTER COMMENCEMENT OF WORK WILL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR TO CORRECT.
3. CONTRACTOR SHALL PROTECT ALL "EXISTING TO REMAIN". CONTRACTOR SHALL ALSO PROTECT PAVING AND CURBING OUTSIDE THE CONTRACT LIMIT LINES, WHICH MAY BE AFFECTED BY CONSTRUCTION AND CONSTRUCTION TRAFFIC. THESE AREAS SHALL BE PATCHED AND REPAIRED AS REQUIRED TO MAINTAIN THEIR EXISTING CONDITIONS.
4. AT COMPLETION OF THE JOB, CONTRACTOR IS TO REPAIR ALL EXISTING PAVEMENT AND SITE FEATURES DAMAGED BY CONSTRUCTION.



ROCHDALE AVENUE

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Giovanni Manillo, PE
New Jersey Professional Engineer 47702

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DRAWN:
CHECKED:

DRAWING TITLE: **MATERIALS PLAN**

SHEET NO: **4.00**



TYPICAL CONDITION - LOCATION A: INDIVIDUAL BRICK REPLACEMENTS ASSOCIATED WITH CHIPPED/DAMAGED/MISMATCHED BRICKS AND ELECTRICAL WALL PLATE REMOVAL, ON HORIZONTAL AND VERTICAL FACES.



TYPICAL CONDITION - LOCATION B: INDIVIDUAL BRICK REPLACEMENTS ASSOCIATED WITH CHIPPED/DAMAGED/MISMATCHED BRICKS AND ELECTRICAL WALL PLATE REMOVAL (SHOWN), ON HORIZONTAL AND VERTICAL FACES.



TYPICAL CONDITION - LOCATION C: BRICK REPLACEMENTS ASSOCIATED WITH DAMAGED BRICKS ALONG VERTICAL CRACK.



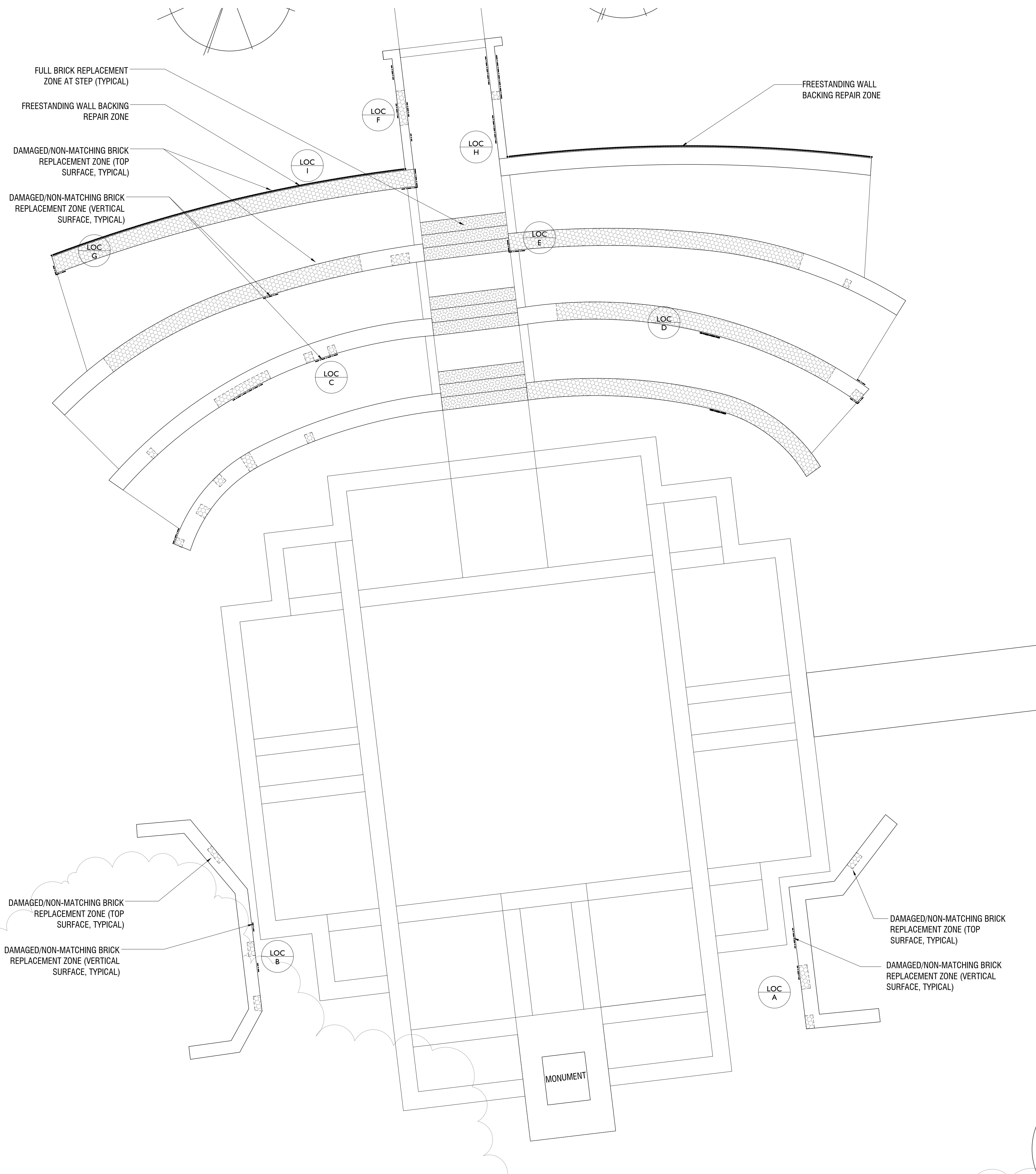
TYPICAL CONDITION - LOCATION D: BRICK REPLACEMENTS ASSOCIATED WITH CHIPPED/DAMAGED/LOOSE BRICKS ON HORIZONTAL FACES.



TYPICAL CONDITION - LOCATION E: BRICK REPLACEMENTS ASSOCIATED WITH PREVIOUS MISMATCHED BRICK REPLACEMENTS ALONG WALL SECTIONS.



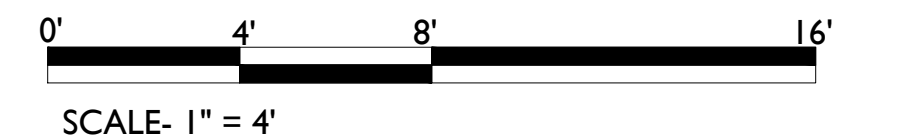
TYPICAL CONDITION - LOCATION F: BRICK REPLACEMENTS ASSOCIATED WITH DEEP MORTAR REPAIR AND REPLACEMENT ALONG FREESTANDING BRICK WALL SECTION.



LEGEND	
ITEM	KEY
BRICK STEP REPLACEMENT (VERT. + TOP SURFACES)	[Hatched pattern]
VERTICAL SURFACE BRICK REPLACEMENT	[Hatched pattern]
TOP SURFACE BRICK REPLACEMENT	[Hatched pattern]
WALL BACKING REPAIR	[Hatched pattern]

BRICK REPOINTING AND REPAIR NOTES

1. BRICK REPAIR ZONES SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY, INDICATING OBVIOUS AREAS IN NEED OF REPLACEMENT. SEE ESTIMATED TOTAL PROJECT BRICK REPLACEMENT QUANTITIES FOR BASE BID BRICK REPLACEMENT SQUARE FOOTAGE. CONTRACTOR TO EVALUATE EXISTING CONDITIONS AND IDENTIFY BRICK REPLACEMENT NEEDS. ANY BRICK REPLACEMENT NEEDS IDENTIFIED BEYOND BASE BID SQUARE FOOTAGE ALLOWANCE MAY BE ADDRESSED USING THE ALLOWANCE LINE ITEM IN THE PROJECT BID.
2. BRICK REPLACEMENT REQUIRED IN AREAS WHERE BRICKS ARE CLEARLY 1) LOOSE, 2) DAMAGED/CHIPPED, 3) NON MATCHING COLOR OR TEXTURE.
3. THE SCOPE OF THIS PROJECT ASSUMES REPOINTING OF ALL EXPOSED MORTAR JOINTS ON EXISTING SEAT WALL SURFACES.
4. ALL EXPOSED BRICK SURFACES ARE TO BE THOROUGHLY CLEANED (USING AN APPROVED METHOD) PRIOR TO REPOINTING AND BRICK REPLACEMENT WORK.
5. SEE PROJECT SPECIFICATIONS FOR REPOINTING AND REPLACEMENT REQUIREMENTS.
6. ALL SALVAGED BRICK FROM PAVING AND WALL REMOVALS TO BE CLEANED, PREPPED, AND REUSED FOR WALL REPAIRS. NEW BRICK TO BE USED ONLY IF NEEDED FOR WALL REPAIRS.
7. IT IS ASSUMED THAT ALL BRICK USED FOR PAVING WILL BE NEW BRICK SELECTED TO MATCH EXISTING WALL AND PAVING BRICK.
8. ANY NEW BRICK TO BE APPROVED BY CLIENT AND LANDSCAPE ARCHITECT THROUGH TYPICAL SUBMITTAL, SAMPLE, MOCKUP PROCESS. CONTRACTOR TO PROVIDE MULTIPLE BRICK SAMPLE OPTIONS FOR REVIEW AND APPROVAL.



LOCATION G - FULL BRICK REPLACEMENT ALONG TOP OF WALL DUE TO MISMATCHED BRICK SIZES AND COLORS.



TYPICAL CONDITION - LOCATION H: MORTAR REPAIR AND SELECTIVE BRICK REPLACEMENTS ASSOCIATED WITH STAGGERED CRACK ALONG FREESTANDING BRICK WALL SECTION.



TYPICAL CONDITION - LOCATION I - FREESTANDING WALL PACKING REPAIR. REPLACE UNEVEN, FAILING PAVING ALONG REAR OF FREESTANDING WALL.



FDR AMPHITHEATER REHABILITATION

BOROUGH OF ROOSEVELT, NJ

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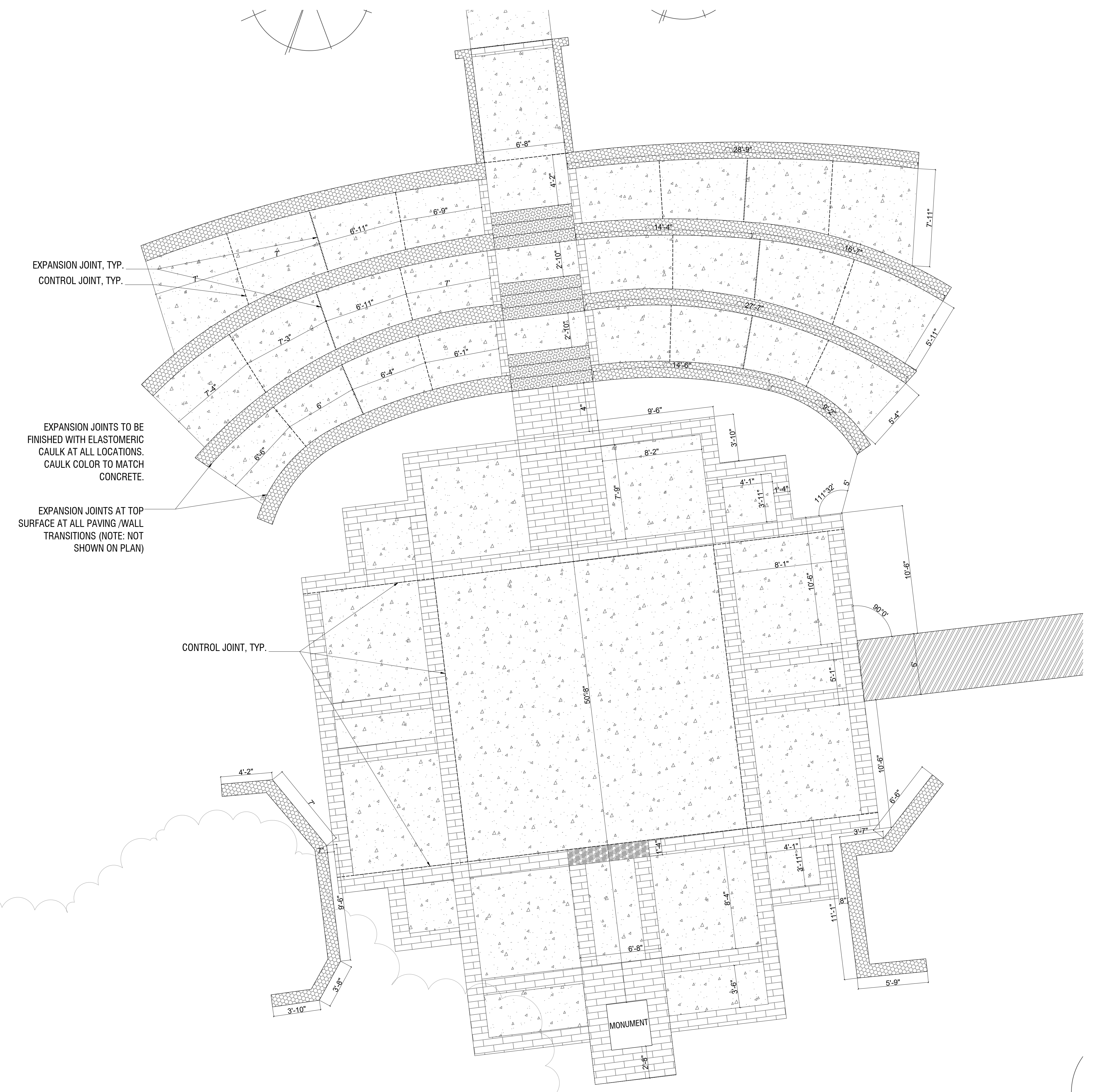
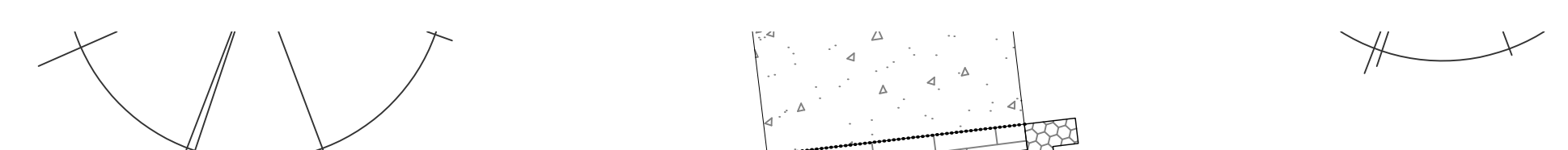
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 New Jersey Professional Engineer 47052

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 GIOVANNI MANILLO 47552	 E. TIMOTHY MARSHALL AS00872
-------------------------------	------------------------------------

DRAWN BY:
 CHECKED BY:

DRAWING TITLE:
WALL REPAIR ENLARGEMENT PLAN
 SHEET NO:
4.10



EXPANSION JOINT, TYP.
CONTROL JOINT, TYP.

EXPANSION JOINTS TO BE FINISHED WITH ELASTOMERIC CAULK AT ALL LOCATIONS. CAULK COLOR TO MATCH CONCRETE.

EXPANSION JOINTS AT TOP SURFACE AT ALL PAVING / WALL TRANSITIONS (NOTE: NOT SHOWN ON PLAN)

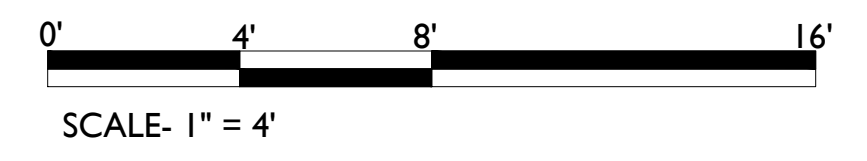
CONTROL JOINT, TYP.

MONUMENT

LEGEND	
ITEM	KEY
EXPANSION JOINT	
CONTROL JOINT (SAW CUT)	

LAYOUT NOTES

1. ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
2. ALL LINE AND GRADE WORK PER DRAWINGS AND SPECIFICATIONS SHALL BE LAID OUT BY A REGISTERED CIVIL ENGINEER OR SURVEYOR ENGAGED BY THE CONTRACTOR.
3. LAYOUT AND LOCATION OF ALL SITE ELEMENTS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO ACTUAL CONSTRUCTION OR INSTALLATION.
4. DIMENSIONS SHOWN SHALL BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT.
5. STAGING AREAS FOR CONTRACTOR'S EQUIPMENT AND MATERIALS SHALL BE ON AND WITHIN LIMITS OF WORK AS SHOWN ON THE PLANS AND AS APPROVED BY THE LANDSCAPE ARCHITECT.
6. AT ALL LOCATIONS WHERE EXISTING CURBING, BITUMINOUS CONCRETE ROADWAY OR CONCRETE SIDEWALK ABUT NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE.
7. WHERE NEW PAVING OR EARTHWORK MEETS EXISTING PAVING OR EARTHWORK THE CONTRACTOR SHALL SMOOTHLY BLEND LINE AND GRADE OF EXISTING WITH NEW.
8. ALL TREE AND SHRUB LOCATIONS AND PERENNIAL PLANTING BED OUTLINES TO BE SPECIFIED IN FIELD BY LANDSCAPE ARCHITECT.
9. EXPANSION JOINTS TO BE INCLUDED AT ALL PAVING/WALL TRANSITIONS AND ALL JOINTS TO BE FINISHED AT TOP SURFACE WITH ELASTOMERIC CAULK (COLOR TO MATCH CONCRETE).



FDR AMPHITHEATER REHABILITATION

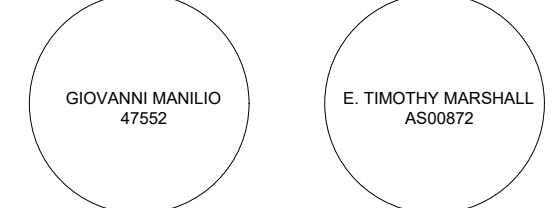
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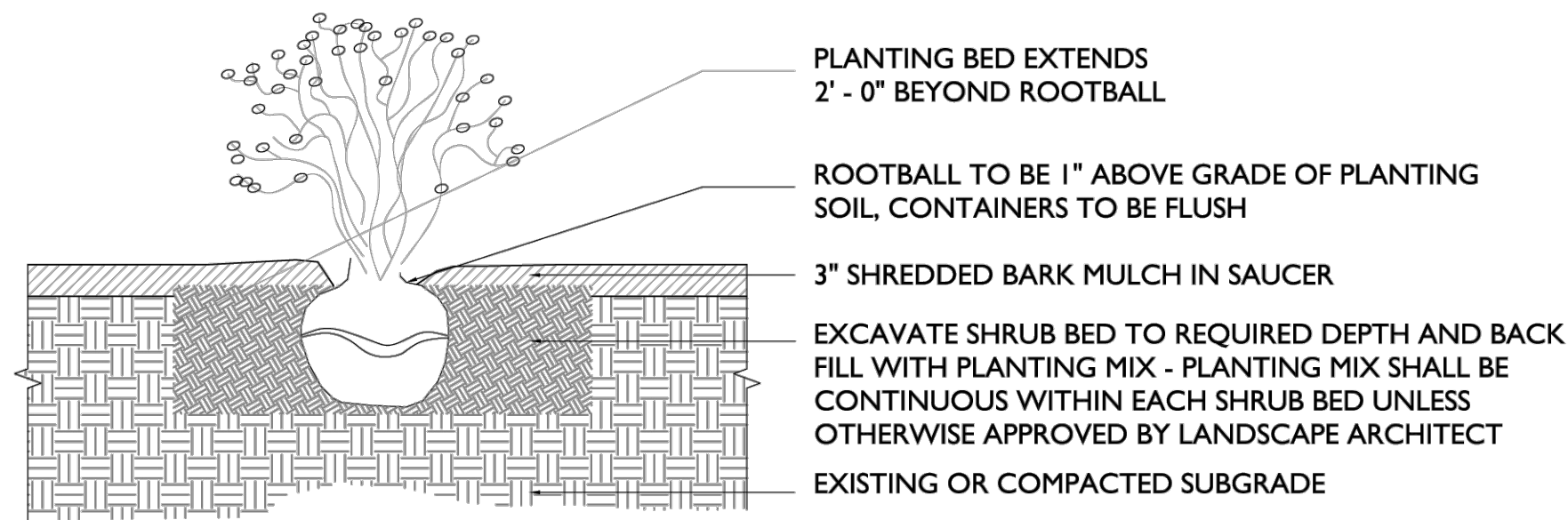
DRAWING TITLE: **MATERIALS & LAYOUT ENLARGEMENT PLAN**
SHEET NO.: **5.00**

PLANTING SCHEDULE

TREES					
KEY	COMMON NAME	SCIENTIFIC NAME	SPACING	SIZE	Qty.
10	American Holly	Ilex opaca	Per Plan	8-10' height	1

SHRUBS					
KEY	COMMON NAME	SCIENTIFIC NAME	SPACING	SIZE	Qty.
PI-S	Schip Laurel	Prunus laurocerasis 'Schipkaensis'	Per Plan	B&B - 48"-60" height	3
PL-OL	Otto Luyken Cherry Laurel	Prunus laurocerasis 'Otto Luyken'	Per Plan	B&B - 30"-40" height	3

TURF AND MULCH AREAS					
KEY	COMMON NAME	SCIENTIFIC NAME	UNIT	Comments	Qty.
	Turfgrass HydroSeed	Fescue/Kentucky Blue Blend	LS	See SESC Disturbance area	1
	Turfgrass Sod	Fescue/Kentucky Blue Blend	SF	See planting plan	215
	Hardwood Mulch	At all tree/shrub planting areas	CY	See planting details	1.5



1
7.00
SHRUB AND SMALL TREE PLANTING DETAIL - 24" - 48' SIZE
3/4" = 1'-0"

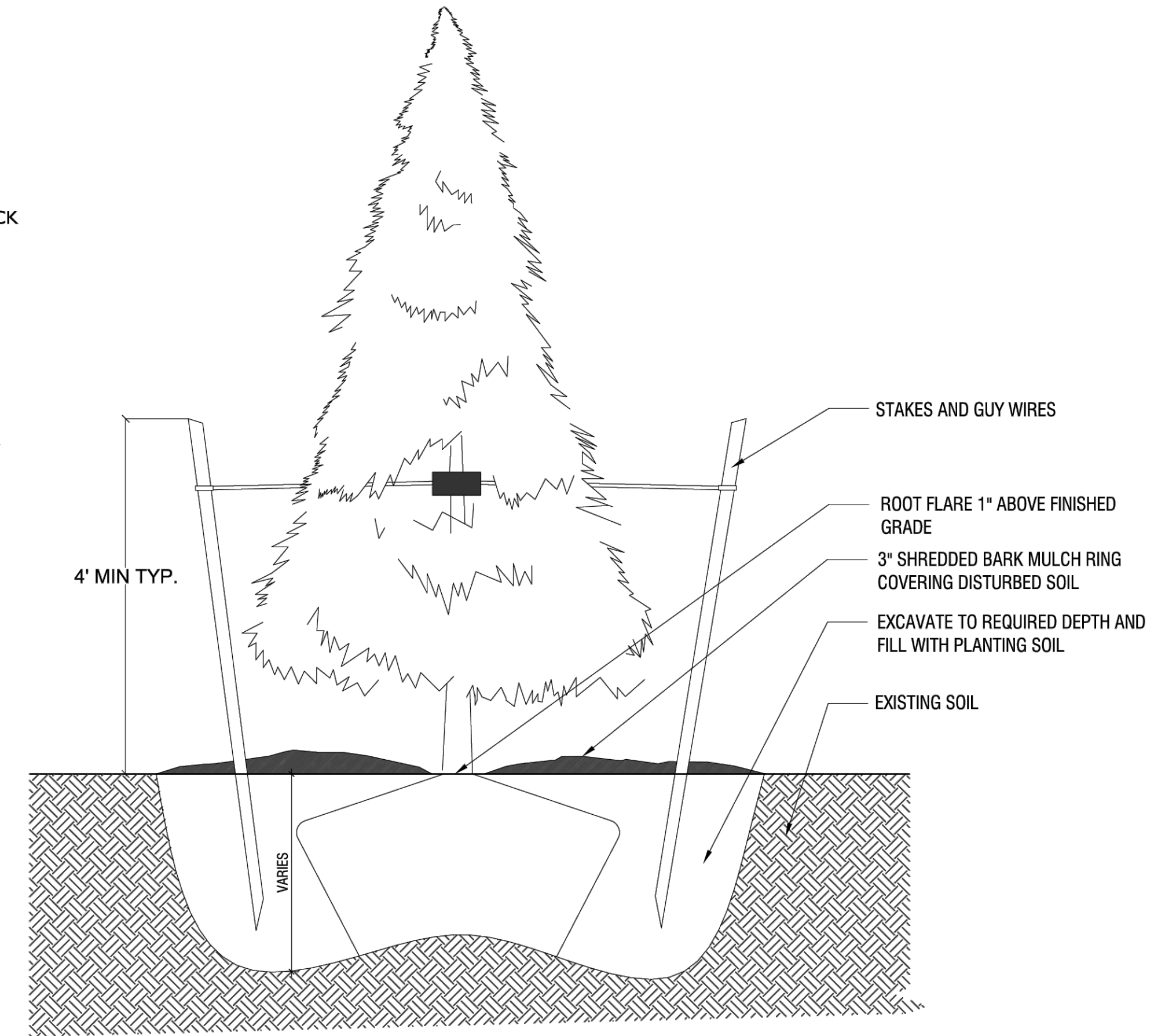
TURF GRASS MIX:

Seed Mix (Ernst Conservation Seeds Inc. or Approved Equal) Seeding Rate 3-5lf/1,000 SF
 45% Tall Fescue, 'Cochise III' (Festuca arundinacea 'Cochise III)
 45% Tall Fescue, 'Cortex II' (Festuca arundinacea 'Baron)
 5% Perennial Ryegrass, 'Amazing GS' (Lolium perenne 'Amazing GS')
 5% Kentucky Bluegrass, 'Baron' (Opa pratensis 'Baron')
 Total: 100%

Note: Recommended seed mixes are subject to change and seed provider should verify seed selection based on availability of existing and new products. While the exact formula may change, the guiding philosophy and function of the mix will not.

TURF LAWN SPECIES MIX

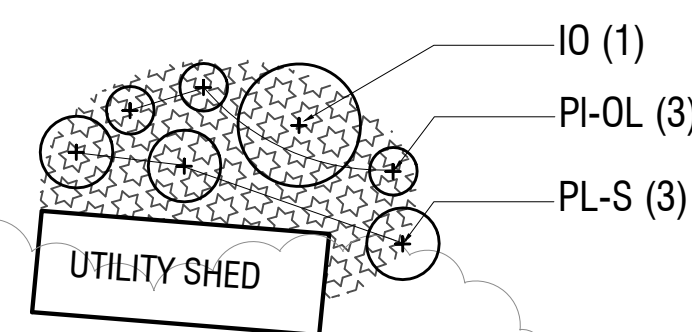
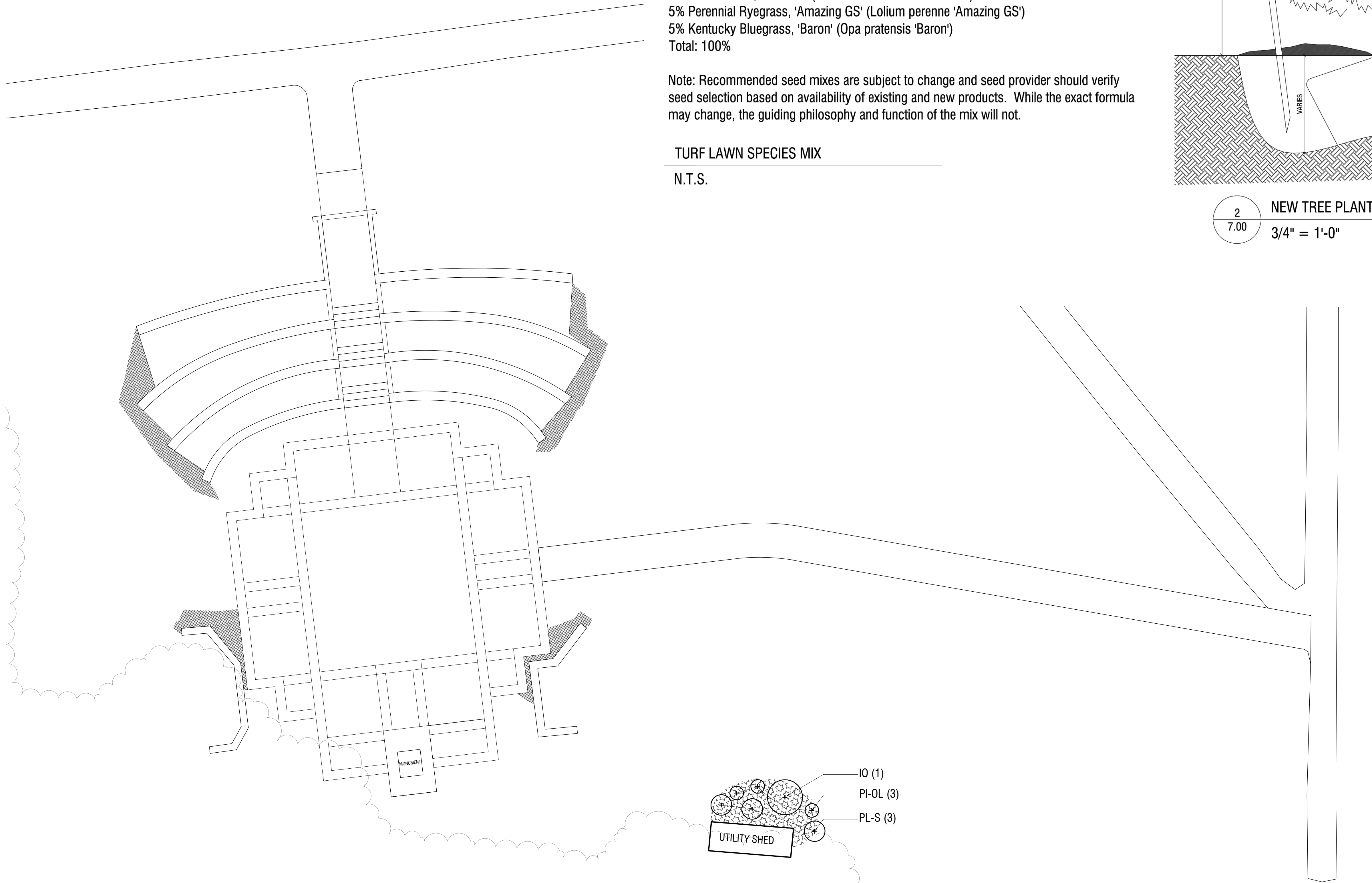
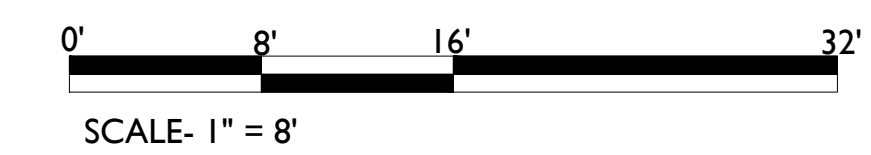
N.T.S.



2
7.00
NEW TREE PLANTING - BALLED & BURLAPPED
3/4" = 1'-0"

PLANTING NOTES

- ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AS ESTABLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION, LATEST EDITION.
- ALL PLANT MATERIAL SHALL BE VIGOROUS AND FREE OF INJURY, INSECTS, OR DEFECTS. PLANT MATERIAL SHALL BE STOCK FROM A RECOGNIZED NURSERY WITHIN THE NORTHEAST REGION.
- CONTRACTOR SHALL VERIFY QUANTITIES AS SHOWN ON THE CONTRACT DRAWINGS. IF A DISCREPANCY EXISTS BETWEEN THE PLANT COUNT AS SHOWN ON THE PLANT LIST AND THE PLANTING PLAN, THE PLANT LIST SHALL TAKE PRECEDENCE.
- THE LANDSCAPE ARCHITECT MAY REJECT ANY MATERIAL WHICH DOES NOT REPRESENT SPECIES AS OUTLINED IN THE PLANT LIST.
- NO SUBSTITUTION WILL BE MADE UNLESS AUTHORIZED BY THE LANDSCAPE ARCHITECT.
- ALL TREES SHALL BE PLANTED SO THAT THE ROOT FLARE IS 1" TO 2" ABOVE FINISHED GRADE. CONTRACTOR SHALL VERIFY ROOT FLARE PRIOR TO PLANTING. REMOVE EXCESS SOIL OVER THE ROOTBALL AS REQUIRED TO EXPOSE THE ROOT FLARE ONLY AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- ALL TREE PITS ARE TO RECEIVE A 3" LAYER OF SHREDDED BARK MULCH. MULCH SHALL NOT COME IN DIRECT CONTACT WITH TREE TRUNKS.
- ALL NEW TREES TO RECEIVE GATOR BAGS; PROVIDED AND MAINTAINED BY THE CONTRACTOR THROUGH SUBSTANTIAL COMPLETION AND APPROVAL. ALL PLANTINGS SHALL BE WATERED BY THE CONTRACTOR AT INSTALLATION. WHEN RAINFALL IS LESS THAN 1" PER WEEK AND DURING PERIODS OF EXCESSIVE HEAT. TREES SHALL RECEIVE 7-10 GALLONS PER CALIPER PER WEEK OR AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- TREES SHALL BE GUYED OR STAKED AS INDICATED ON THE DRAWING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL GUYING/STAKING FOR A PERIOD OF ONE YEAR. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL GUYING/STAKING AFTER THIS PERIOD UPON DIRECTION OF LANDSCAPE ARCHITECT.
- PLAN INDICATES APPROXIMATE LOCATION OF TREES. FINAL LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE LANDSCAPE ARCHITECT.
- ALL BURLAP, METAL CAGES, AND NAILS MUST BE REMOVED PRIOR TO PLANTING. ANY TRUNK PROTECTIVE WRAP, SUPPORTS, ROPE MUST BE REMOVED AFTER PLANTING.
- ALL PLANT SIZES MUST REPRESENT THE AVERAGE OF SIZE INDICATED.
- ALL DISTURBED EXISTING TURF AREAS SHALL BE RESTORED TO ORIGINAL CONDITION UPON COMPLETION OF WORK. TURF RESEEDING SHALL BE HYDROSEED UNLESS NOTED OTHERWISE ON PLANS.
- CONTRACTOR SHALL SUPPLY HIGH QUALITY PLANTING SOIL AS NEEDED FOR NEW PLANTING AREAS AND TURF RESTORATION ZONES.



**FDR AMPHITHEATER
REHABILITATION**
BOROUGH OF ROOSEVELT, NJ

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Signature circles for:
 GIOVANNI MANILLO 47552
 E. TIMOTHY MARSHALL AS0872

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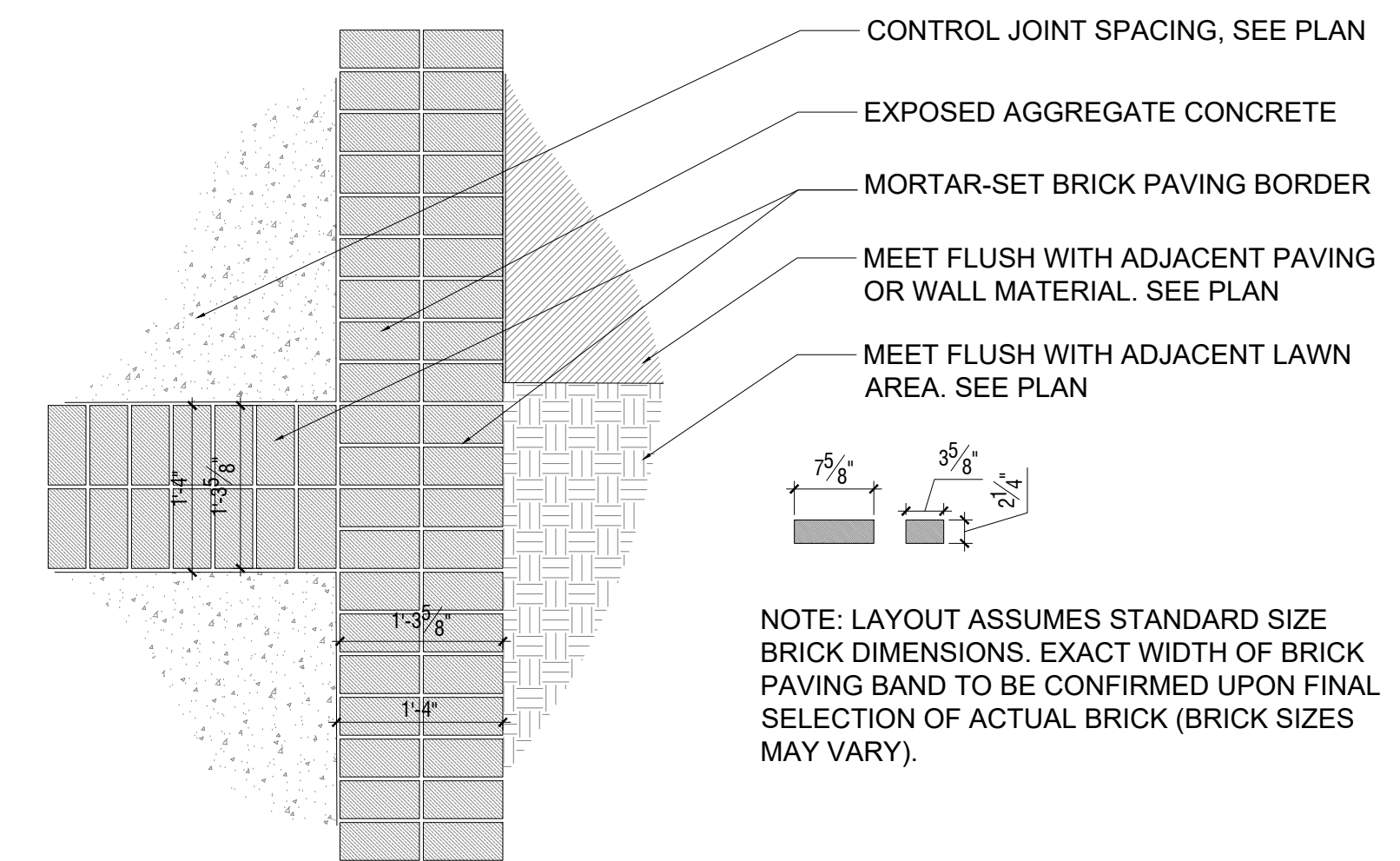
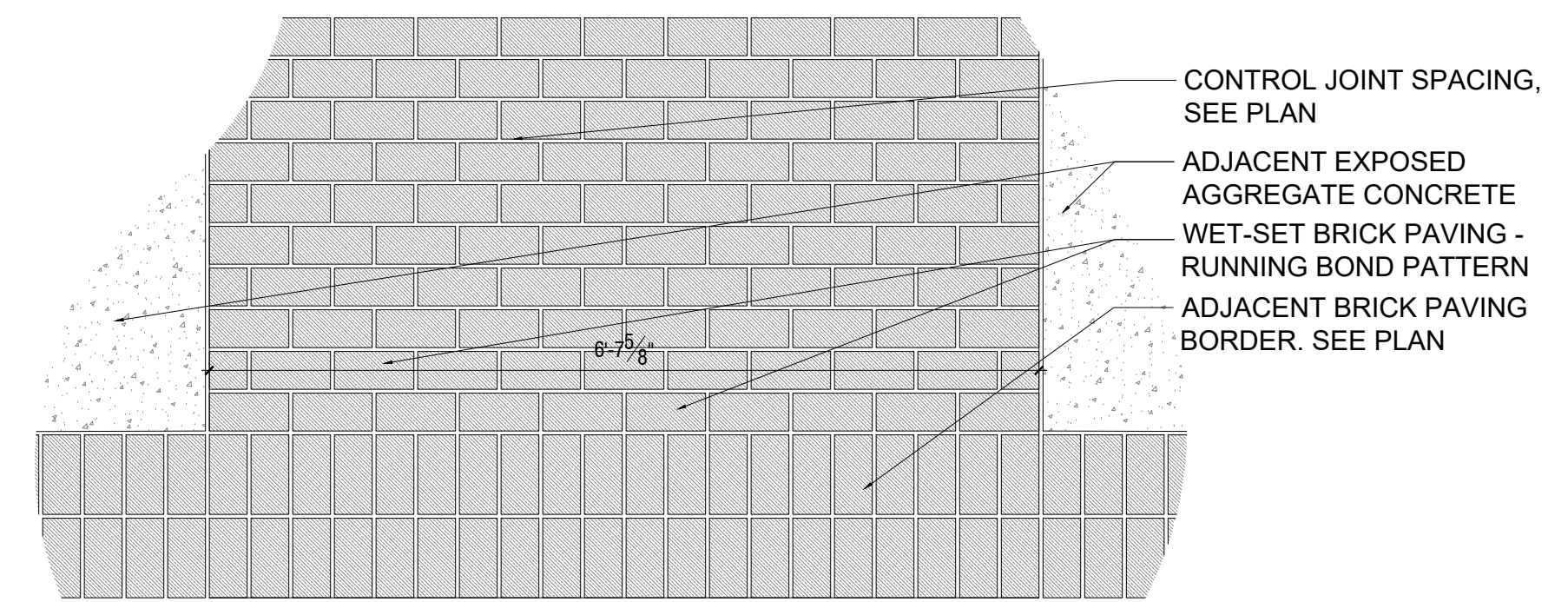


TEMPORARY PROTECTION OF MONUMENT - THE BRONZE BUST OF FRANKLIN DELANO ROOSEVELT AND THE BELOW STONE (SERPENTINE) SUPPORT BASE WILL REMAIN IN THE CURRENT LOCATION DURING THE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT. THE STATUE AND BASE SHALL BE ADEQUATELY PROTECTED DURING THE CONSTRUCTION PROCESS WITH A TEMPORARY WOOD ENCLOSURE CONSTRUCTED OF A DIMENSIONAL LUMBER FRAME (2X6" MATERIAL) AND CLAD WITH A MINIMUM 3/4" PLYWOOD MATERIAL. THE PROTECTION ENCLOSURE MUST COVER THE STATUE AND BASE ON ALL SIDES AND MUST BE FITTED WITH FOAM INSULATION PANELS AS A BUFFER BETWEEN THE STATUE/BASE AND THE WOOD ENCLOSURE (MINIMUM 1" THICKNESS). APPROXIMATE PEDESTAL AND BUST OVERALL DIMENSIONS - 16' HEIGHT X 4' WIDTH/LENGTH

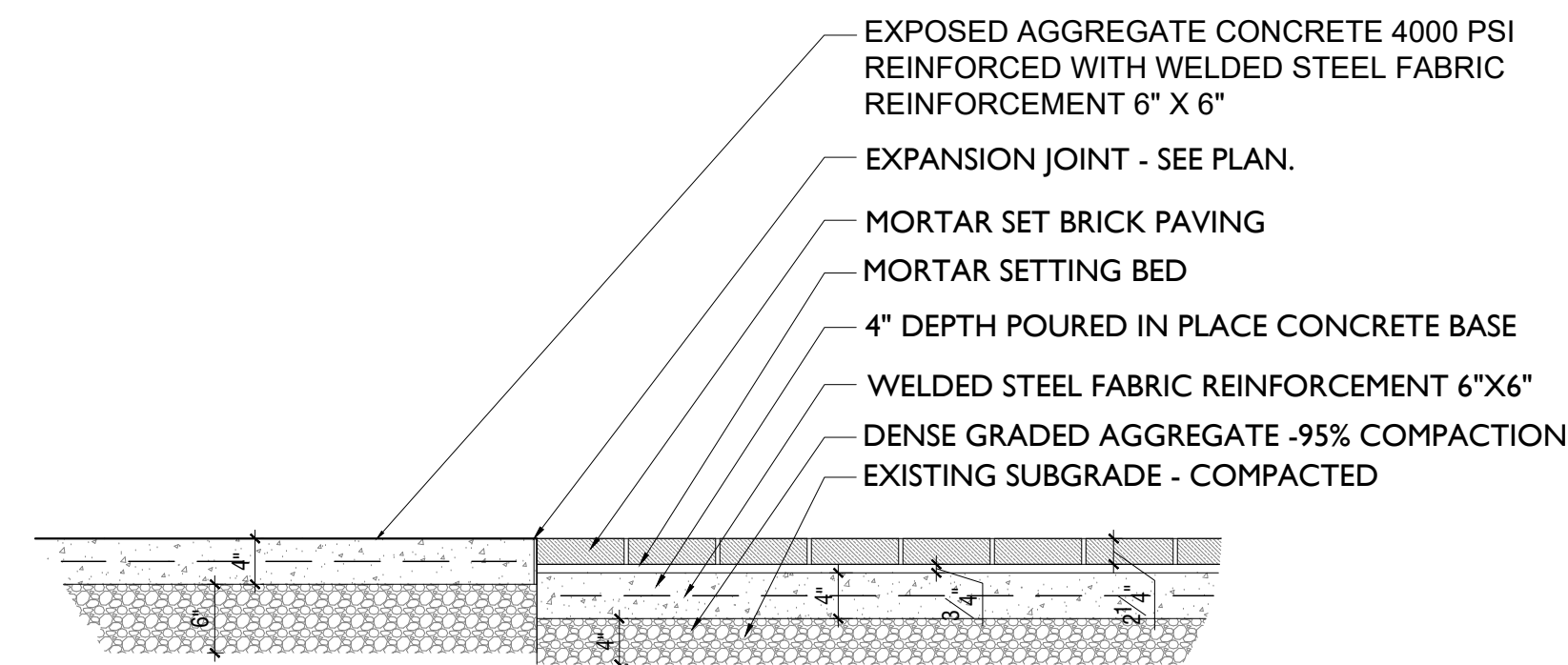
CONTRACTOR TO PROVIDE SHOP DRAWING OF ENCLOSURE FOR REVIEW AND APPROVAL.



EXISTING BRICK PAVING FOR REFERENCE. NOTE DIAGONAL SAWCUTS AT INTERSECTIONS AND STAGGERED BRICK JOINTS IN SELECTIVE AREAS.

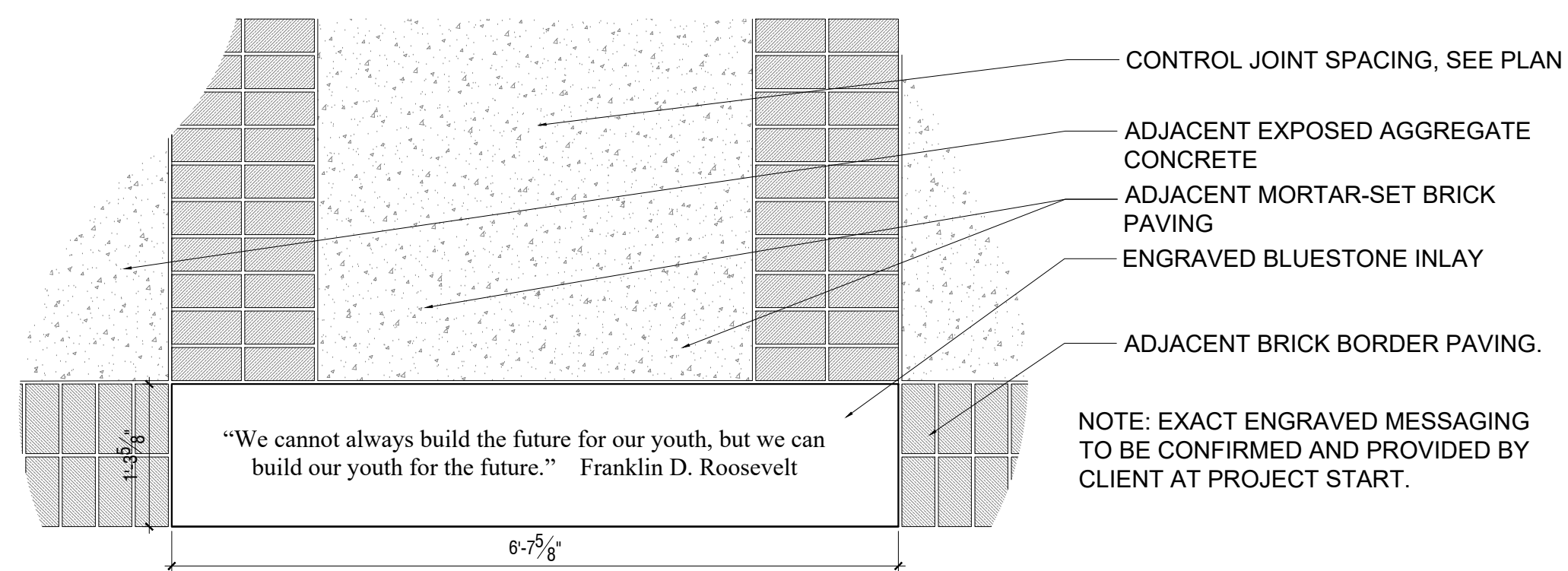


NOTE: LAYOUT ASSUMES STANDARD SIZE BRICK DIMENSIONS. EXACT WIDTH OF BRICK PAVING BAND TO BE CONFIRMED UPON FINAL SELECTION OF ACTUAL BRICK (BRICK SIZES MAY VARY).

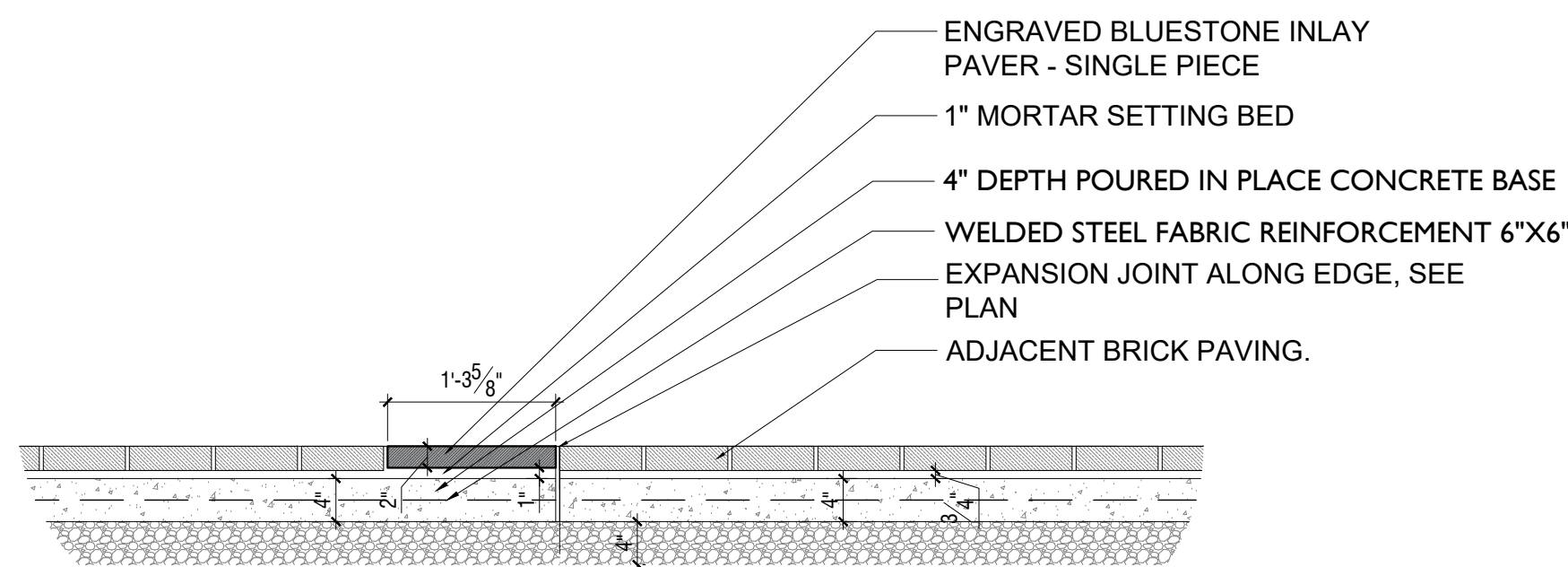


3 CONCRETE PAVING AND BRICK PAVING ON CONCRETE BASE

8.00 3/4" = 1'-0"

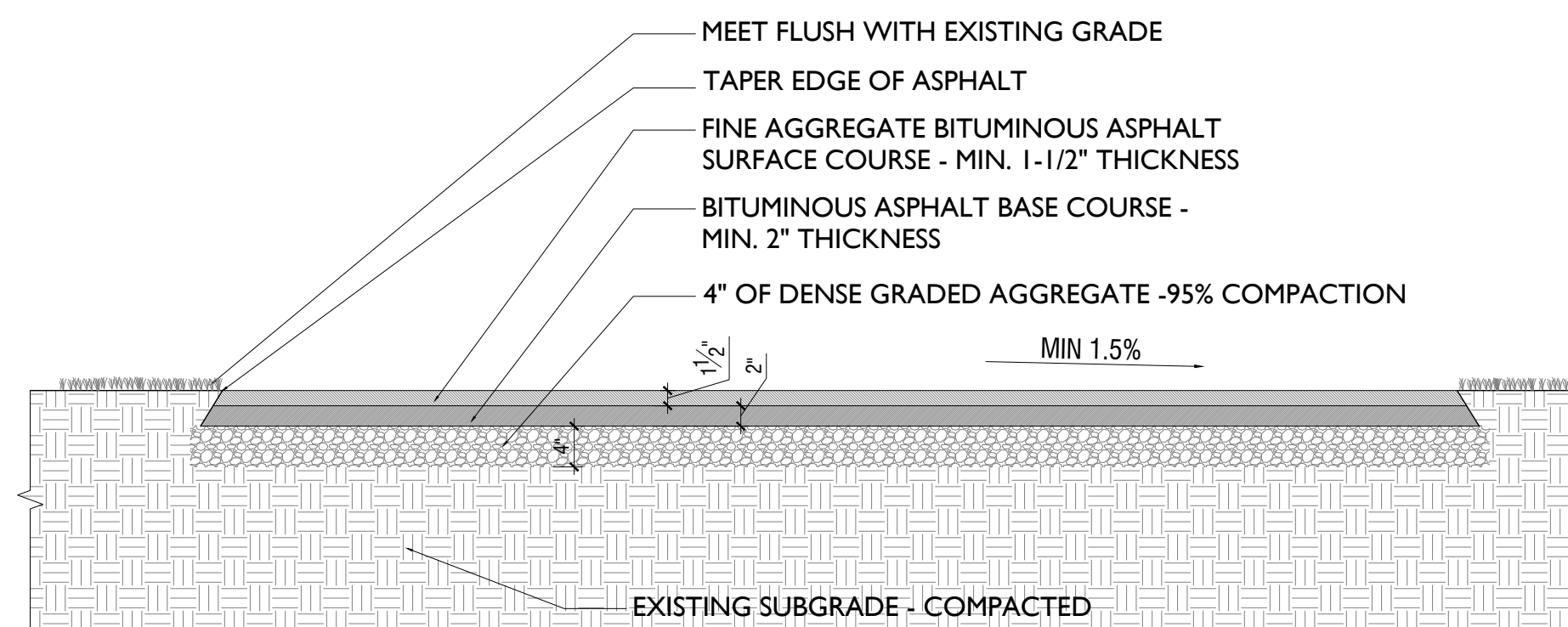


NOTE: EXACT ENGRAVED MESSAGING TO BE CONFIRMED AND PROVIDED BY CLIENT AT PROJECT START.



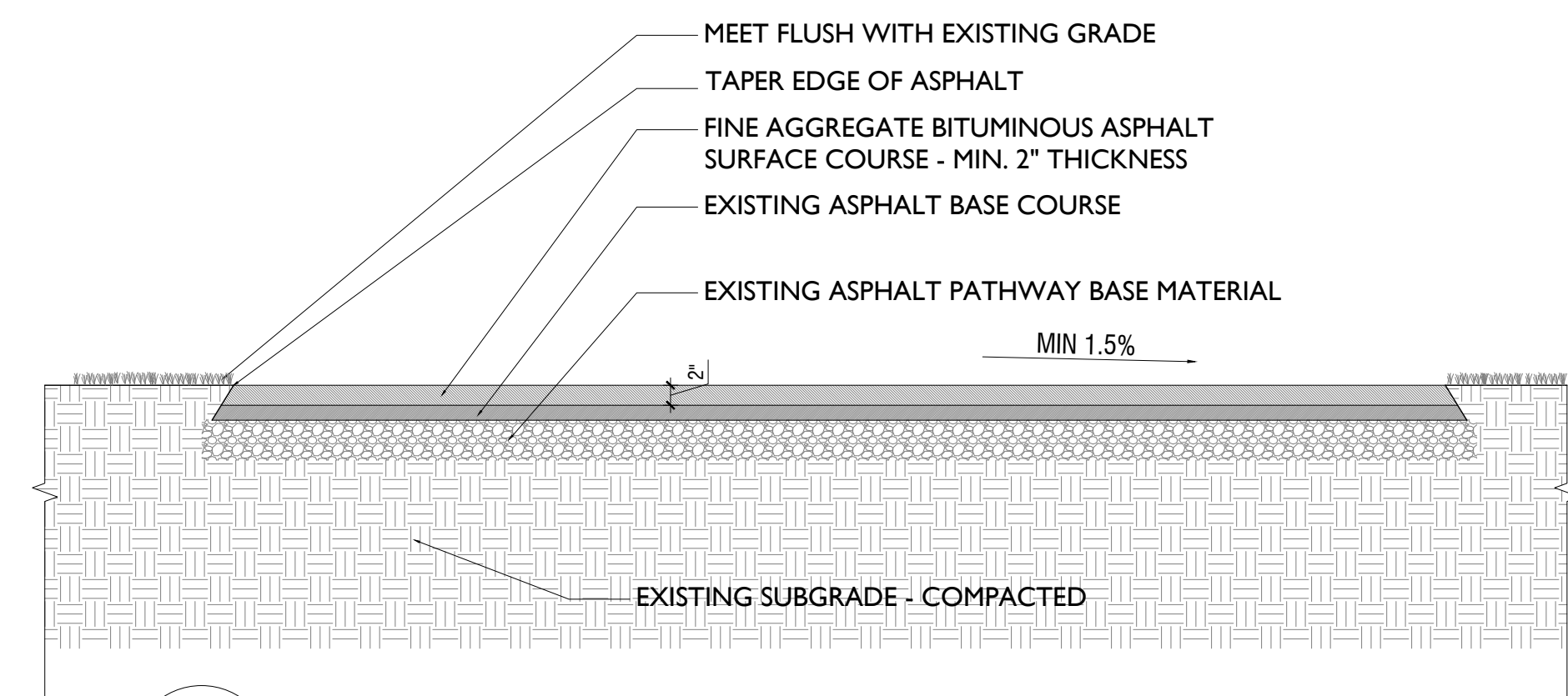
2 ENGRAVED BLUESTONE PAVING INLAY

8.00 3/4" = 1'-0"



5 ASPHALT PAVING - FULL DEPTH

8.00 3/4" = 1'-0"



6 ASPHALT PAVING - RESURFACE

8.00 3/4" = 1'-0"

FDR AMPHITHEATER
REHABILITATION
BOROUGH OF ROOSEVELT, NJ

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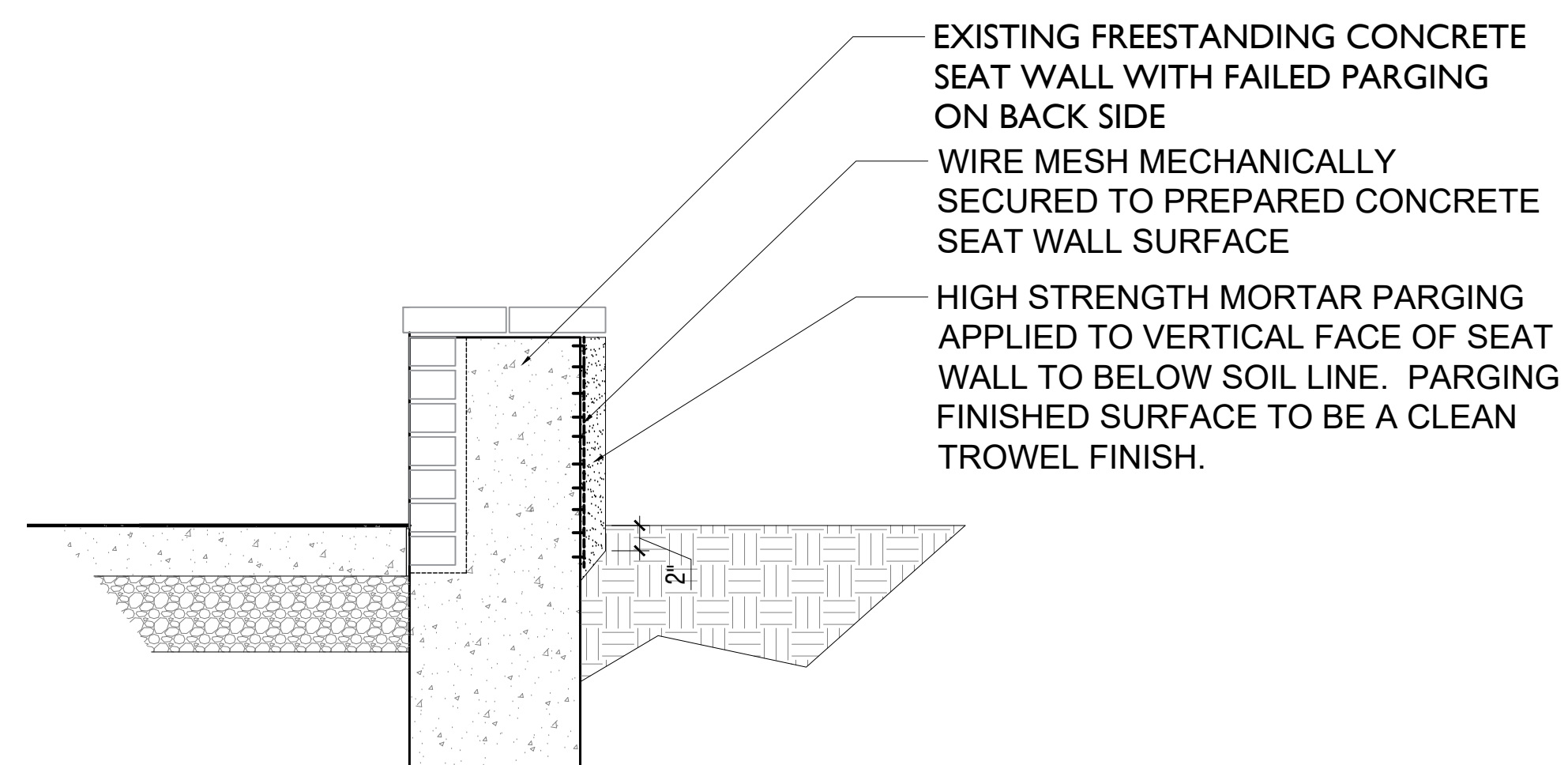
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Giovanni Manillo, PE
New Jersey Professional Engineer 47502

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GIOVANNI MANILLO 47502
E. TIMOTHY MARSHALL AS00872

**FDR AMPHITHEATER
 REHABILITATION**
 BOROUGH OF ROOSEVELT, NJ



1
8.01
FREESTANDING WALL BACKING (WALL PARGING)
1" = 1'-0"

EXISTING CONDITION AT FREESTANDING WALL

EXISTING CONDITION AT FREESTANDING WALL

ISSUE RECORD:

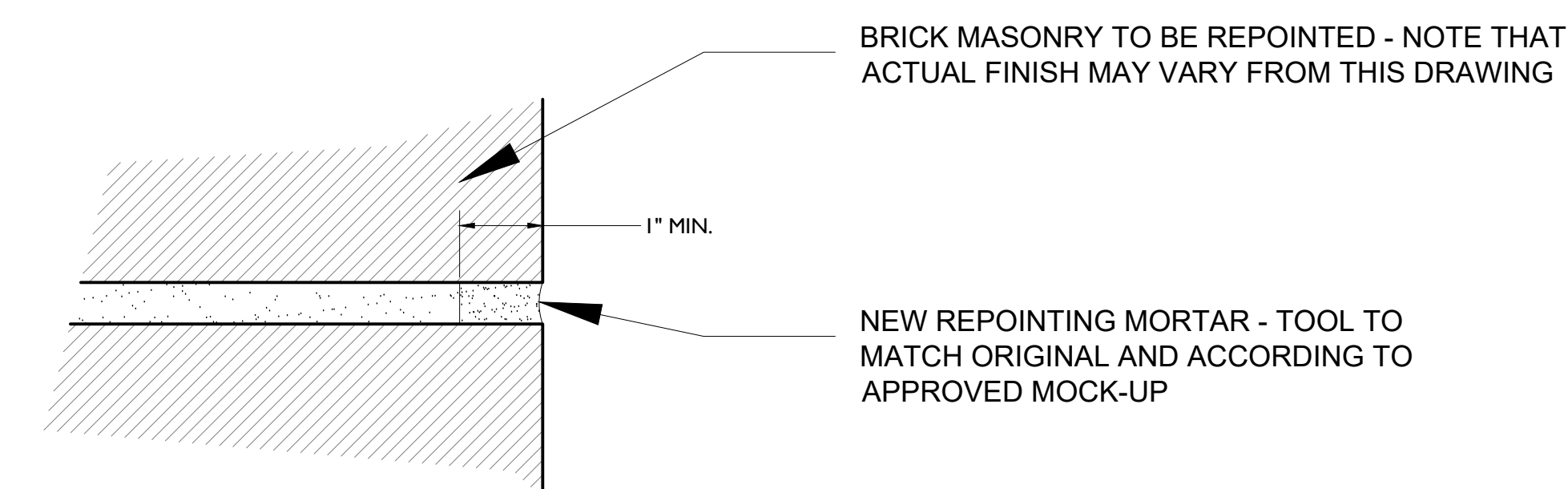
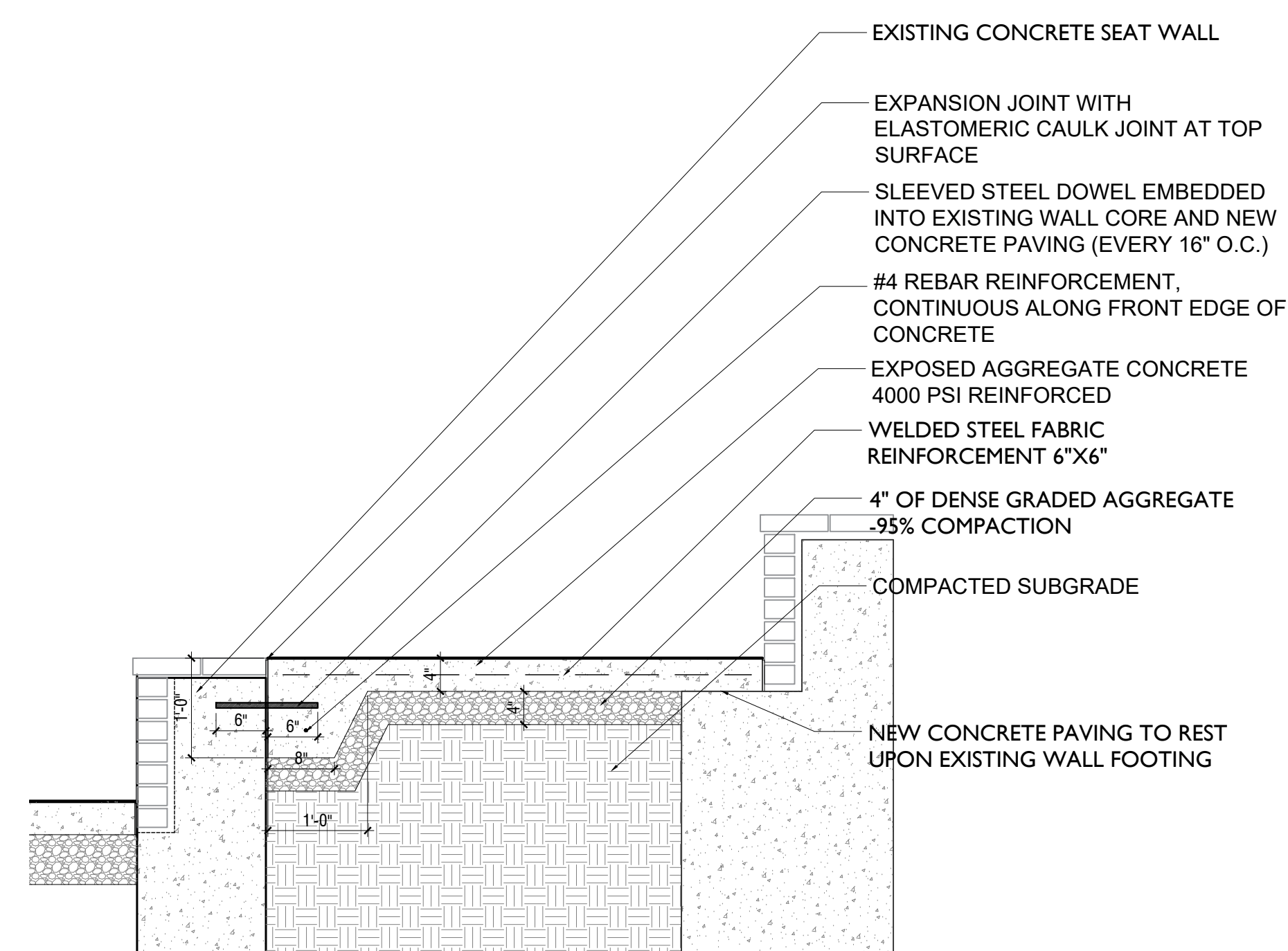
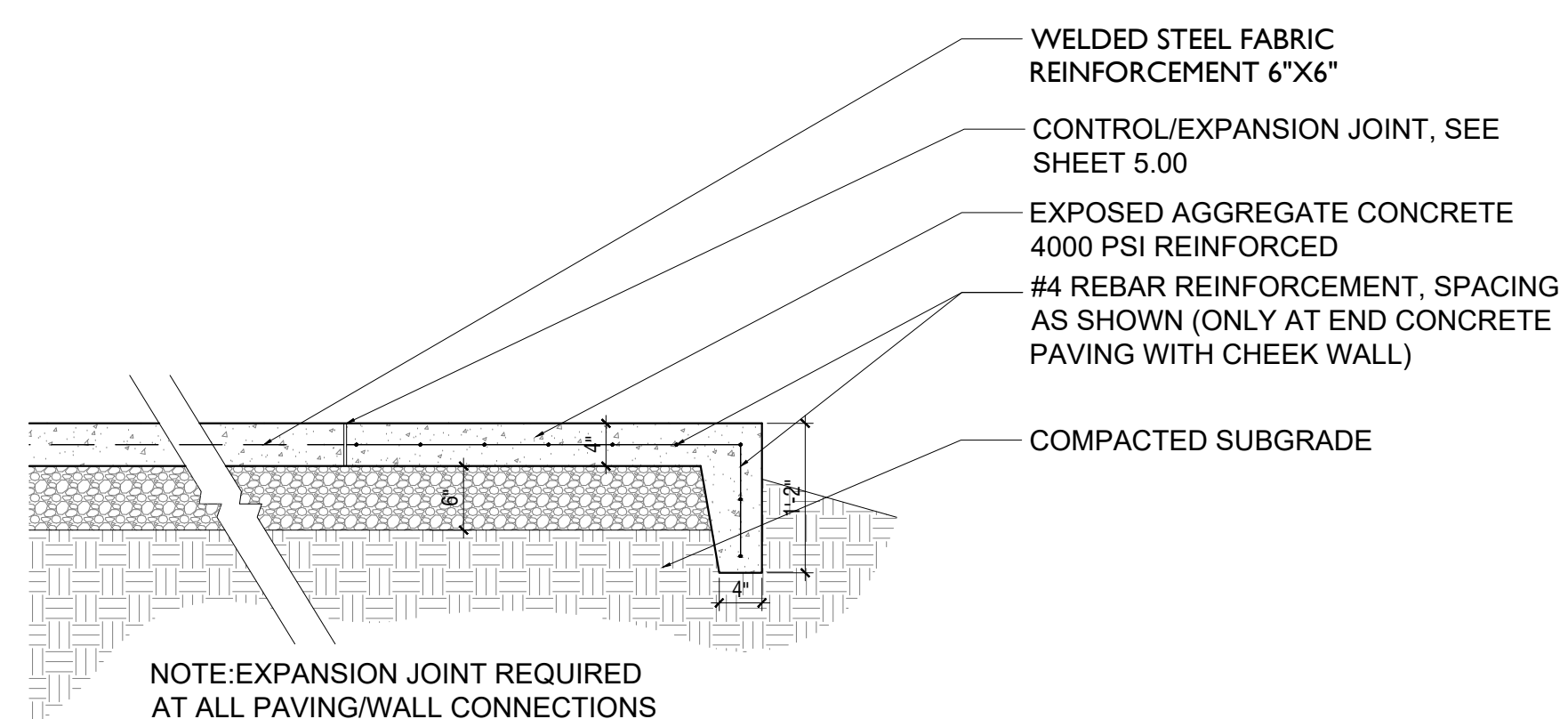
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 certificate of authorization: 24G2837100

Giovanni Manillo, PE
 New Jersey Professional Engineer 47562



NOTE: PROFILES OR CONDITIONS SHOWN MAY NOT REFLECT ACTUAL EXISTING CONDITIONS - NEW POINTING TO MATCH EXISTING TOOLING AT ORIGINAL POINTING

2
8.01
CONCRETE PAVING AT SEATING (END CONDITION AT LAWN EDGE)
3/4" = 1'-0"

3
8.01
CONCRETE PAVING AT SEATING (WALL DOWELING)
3/4" = 1'-0"

4
8.01
REPOINTING BRICK MASONRY
N.T.S.

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47562

E. TIMOTHY MARSHALL
AS00872

DRAWN:

CHECKED:

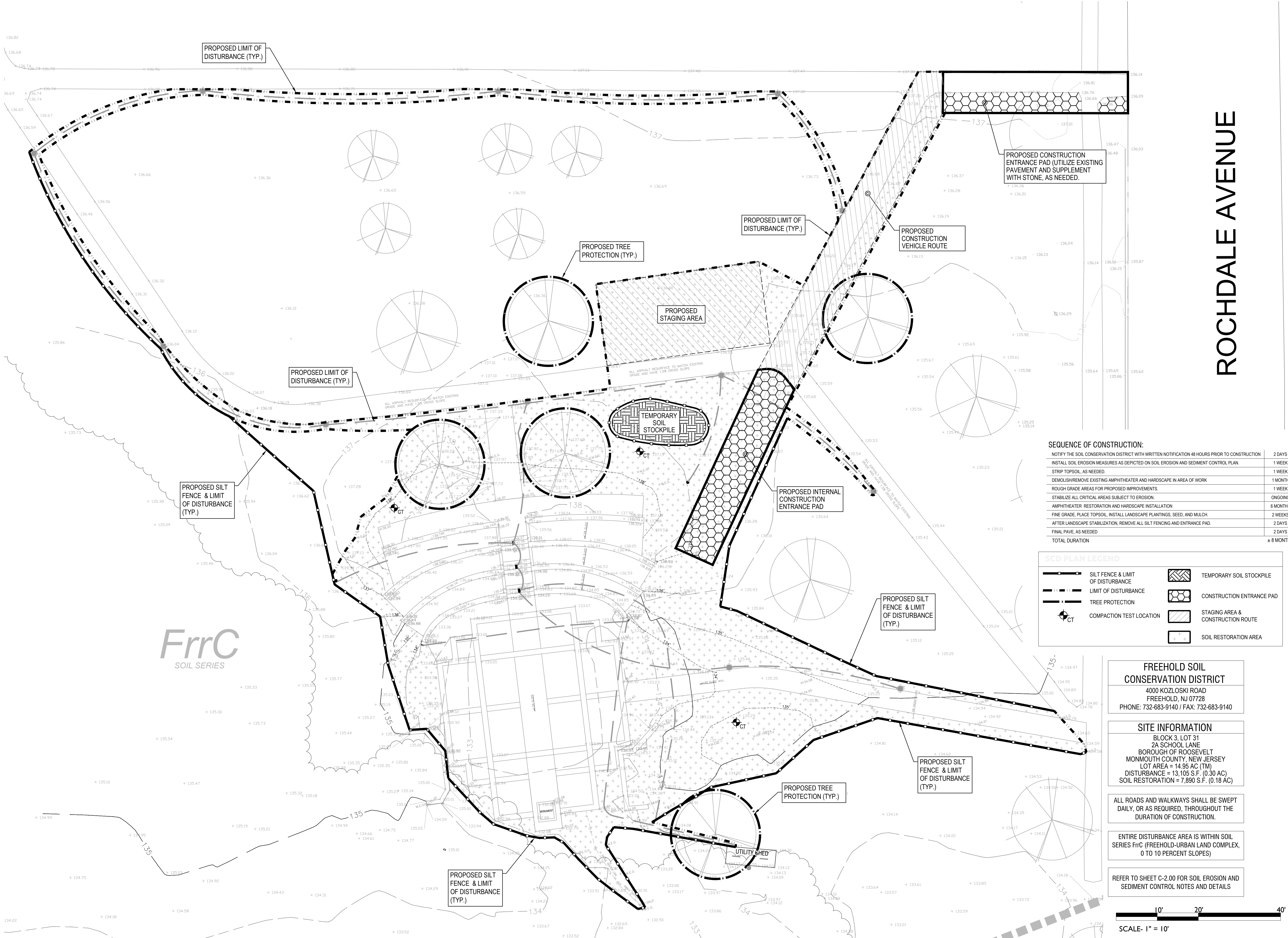
ISSUE TITLE: SITE CONSTRUCTION DETAILS 1

8.01

FDR AMPHITHEATER REHABILITATION

BOROUGH OF ROOSEVELT, NJ

ROCHDALE AVENUE



SEQUENCE OF CONSTRUCTION:

NOTIFY THE SOIL CONSERVATION DISTRICT WITH WRITTEN NOTIFICATION 48 HOURS PRIOR TO CONSTRUCTION	2 DAYS
INSTALL SOIL EROSION MEASURES AS DEPICTED ON SOIL EROSION AND SEDIMENT CONTROL PLAN.	1 WEEK
STRIP TOPSOIL, AS NEEDED.	1 WEEK
DEMOLISH/REMOVE EXISTING AMPHITHEATER AND HARDSCAPE IN AREA OF WORK	1 MONTH
ROUGH GRADE AREAS FOR PROPOSED IMPROVEMENTS.	1 WEEK
STABILIZE ALL CRITICAL AREAS SUBJECT TO EROSION.	ONGOING
AMPHITHEATER RESTORATION AND HARDSCAPE INSTALLATION	6 MONTHS
FINE GRADE, PLACE TOPSOIL, INSTALL LANDSCAPE PLANTINGS, SEED, AND MULCH.	2 WEEKS
AFTER LANDSCAPE STABILIZATION, REMOVE ALL SILT FENCING AND ENTRANCE PAD.	2 DAYS
FINAL PAVE, AS NEEDED	2 DAYS
TOTAL DURATION	± 8 MONTHS

SCD PLAN LEGEND

	SILT FENCE & LIMIT OF DISTURBANCE		TEMPORARY SOIL STOCKPILE
	LIMIT OF DISTURBANCE		CONSTRUCTION ENTRANCE PAD
	TREE PROTECTION		STAGING AREA & CONSTRUCTION ROUTE
	COMPACTION TEST LOCATION		SOIL RESTORATION AREA

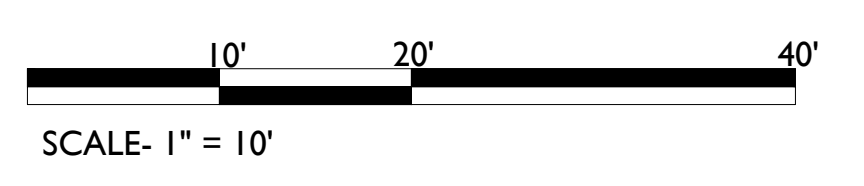
FREEHOLD SOIL CONSERVATION DISTRICT
 4000 KOZLOSKI ROAD
 FREEHOLD, NJ 07728
 PHONE: 732-683-9140 / FAX: 732-683-9140

SITE INFORMATION
 BLOCK 3, LOT 31
 2A SCHOOL LANE
 BOROUGH OF ROOSEVELT
 MONMOUTH COUNTY, NEW JERSEY
 LOT AREA = 14.95 AC (TM)
 DISTURBANCE = 13,105 S.F. (0.30 AC)
 SOIL RESTORATION = 7,890 S.F. (0.18 AC)

ALL ROADS AND WALKWAYS SHALL BE SWEEPED DAILY, OR AS REQUIRED, THROUGHOUT THE DURATION OF CONSTRUCTION.

ENTIRE DISTURBANCE AREA IS WITHIN SOIL SERIES FrrC (FREEHOLD-URBAN LAND COMPLEX, 0 TO 10 PERCENT SLOPES)

REFER TO SHEET C-2.00 FOR SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS



FrrC
 SOIL SERIES

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 certificate of accreditation: 046420027100

Giovanni Manillo, P.E.
 New Jersey Professional Engineer 47562

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 GIOVANNI MANILLO
 47562


 E. TIMOTHY MARSHALL
 AS00872

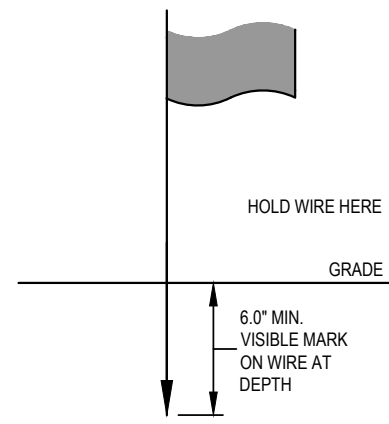
PHASE:
 SHEET:

DRAWING TITLE: **SEDIMENTATION AND EROSION CONTROL PLAN**

SCALE: **C-1.00**

NOTES:

- SOIL SHOULD BE MOST BUT NOT SATURATED. DO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR SUBJECT TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD PRESSURE USED TO ADVANCE THE WIRE.
- WIRE MAY BE RE-INSERTED IF WHEN AN OBSTRUCTION (ROOT, ROOT, DEBRIS) IS ENCOUNTERED.
- WIRE MUST PENETRATE A MINIMUM OF 6" WITHOUT DEFORMATION.

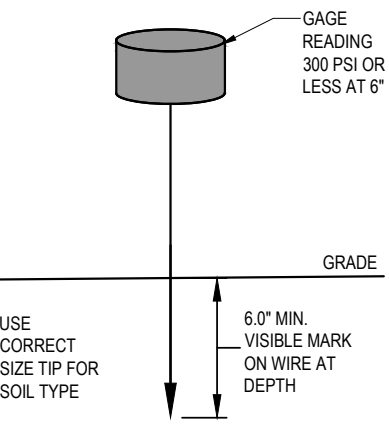


PROBING WIRE TEST, 1.5 GA. STEEL WIRE

SCALE - NTS

NOTES:

- SOIL SHOULD BE MOST BUT NOT SATURATED. DO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR SUBJECT TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD PRESSURE USED TO ADVANCE THE PROBE. PROBE MUST PENETRATE AT LEAST 6" WITH LESS THAN 300 PSI READING ON THE GAUGE.
- PENETROMETER MAY BE RE-INSERTED IF WHEN AN OBSTRUCTION (ROOT, DEBRIS) IS ENCOUNTERED.



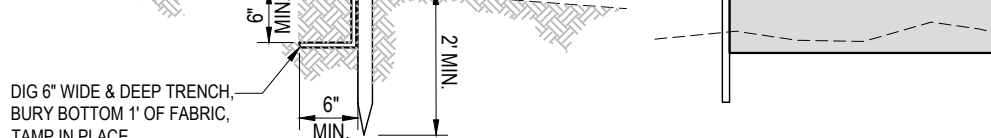
HANDHELD SOIL PENETROMETER TEST

SCALE - NTS

STANDARD FOR TEMPORARY VEGETATIVE COVER

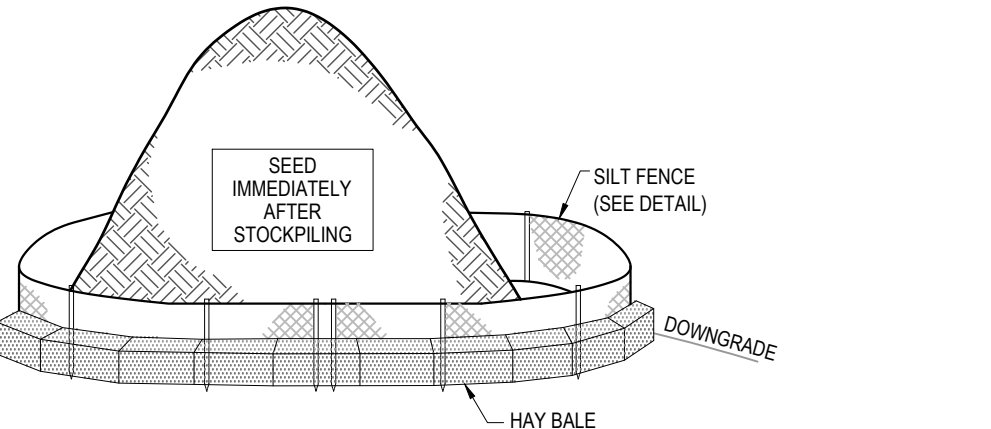
TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

- SITE PREPARATION:**
 - GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PG. 19-1.
 - INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.



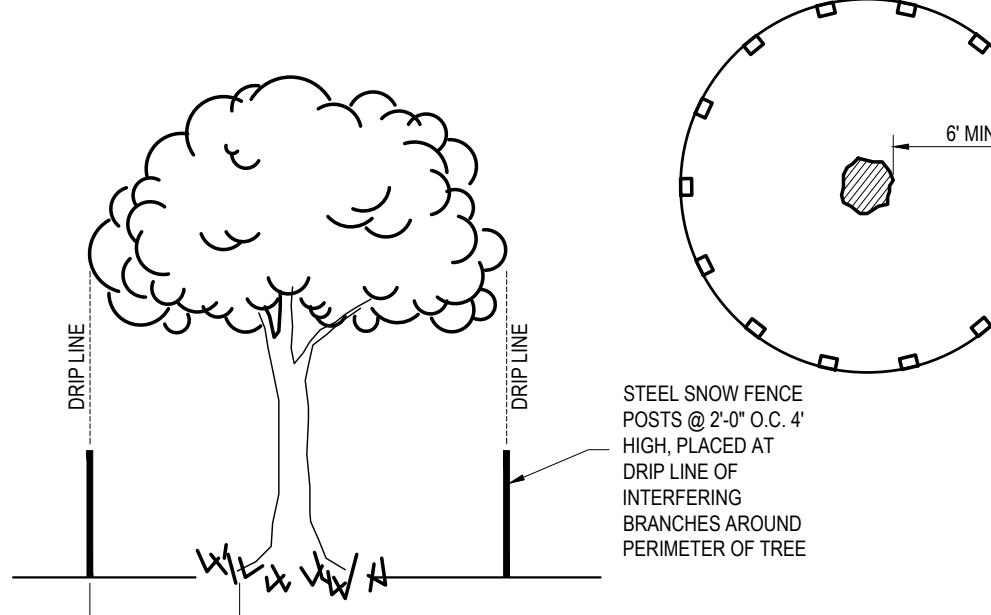
SILT FENCE DETAIL

SCALE - NTS



TEMPORARY STOCKPILE DETAIL

SCALE - NTS



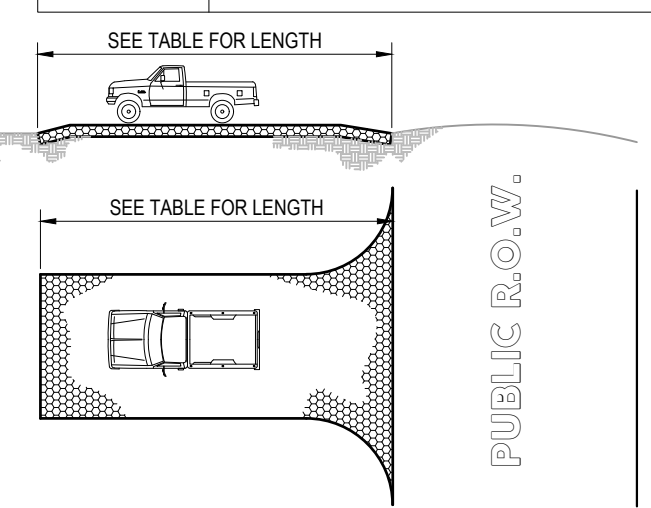
TREE PROTECTION DETAIL

SCALE - NTS

CONSTRUCTION ENTRANCE PAD DETAIL

SCALE - NTS

PERCENT OF ROADWAY SURFACE	LENGTH OF STONE REQUIRED	
	COARSE GRANDED SOLS	FINE GRANDED SOLS
0-75%	50 FT.	100 FT.
75-95%	100 FT.	200 FT.
> 95%	ENTIRE SURFACE STABILIZED WITH FABRIC BASE COURSE	



SOIL DE-COMPACTION AND TESTING REQUIREMENTS

- SOIL COMPACTION TESTING REQUIREMENTS:**
 - SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
 - AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY DENOTED ON THE CERTIFIED SOIL EROSION CONTROL PLAN.
 - COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR PORTION OF THE PLAN SHALL BE USED TO MARK LOCATIONS OF TESTS, AND ATTACHED TO THE COMPACTION REMEDIATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.
 - IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE SIMPLIFIED TESTING METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING SHALL BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL.

COMPACTION TESTING METHODS

- PROBING WIRE TEST (SEE DETAIL)
 - HAND-HELD PENETROMETER TEST (SEE DETAIL)
 - TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)
 - NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)
- NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.

SOIL COMPACTION TESTING IS NOT REQUIRED IF WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE @ 6\"/>

PROCEDURES FOR SOIL COMPACTION MITIGATION

PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.

RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6\"/>

STANDARD FOR TOPSOILING

METHODS AND MATERIALS

- MATERIALS:**
 - TOPSOIL SHOULD BE FRAGILE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMOHS PER CENTIMETER, MORE THAN 0.5 MILLIMOHS MAY DECREASE SEEDINGS AND ADVERSELY IMPACT GROWTH). IMPROVED TOPSOIL SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.5 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDING:
 - TOPSOIL SUBSTITUTE IS A SOIL MATERIAL, WHICH MAY BE MIXED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.
 - STRIPPING AND STOCKPILING
 - FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
 - STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
 - WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY 6.5.
 - A 4-4 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.
 - STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
 - STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH STANDARDS PREVIOUSLY DESCRIBED HEREIN. SEE STANDARDS FOR PERMANENT PLS. 4-108 TEMPORARY (PG 1-1); VEGETATIVE COVER FOR SOIL STABILIZATION. WEEDS SHALL NOT BE ALLOWED TO GROW ON STOCKPILES.

SITE PREPARATION

- GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE. TIME IS OF THE ESSENCE.
- GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. SEE THE STANDARD FOR LAND GRADING, PG. 19-1.
- AS GUIDANCE FOR IDEAL CONDITIONS, SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
- PRIOR TO TOPSOILING, THE SUBSOIL SHALL BE IN COMPLIANCE WITH THE STANDARD FOR LAND GRADING, PG. 19-1. E. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASUREMENTS, BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

APPLYING TOPSOIL

- TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE, I.E. LESS THAN FIELD CAPACITY (SEE GLOSSARY).
- A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5.0 INCHES, MINIMUM OF 4 INCHES, FIRMED IN PLACE IS REQUIRED. ALTERNATIVE DEPTHS MAY BE CONSIDERED WHERE SPECIAL REGULATORY AND/OR INDUSTRY DESIGN STANDARDS ARE APPROPRIATE SUCH AS ON GOLF COURSES, SPORTS FIELDS, LANDFILL CAPPING, ETC. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL, HAVING A PH OF 5.0 OR MORE, IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS (PG. 1-1).
- PURSUANT TO THE REQUIREMENTS IN SECTION 7 OF THE STANDARD FOR PERMANENT VEGETATIVE STABILIZATION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT PERMANENT VEGETATIVE COVER BECOMES ESTABLISHED ON AT LEAST 80% OF THE SOILS TO BE STABILIZED WITH VEGETATION. FAILURE TO ACHIEVE THE MINIMUM COVERAGE MAY REQUIRE ADDITIONAL WORK TO BE PERFORMED BY THE CONTRACTOR TO INCLUDE SOME OR ALL OF THE FOLLOWING: SUPPLEMENTAL SEEDING, REAPPLICATION OF LIME AND FERTILIZERS, AND/OR THE ADDITION OF ORGANIC MATTER (I.E. COMPOST) AS A TOP DRESSING. SUCH ADDITIONAL MEASURES SHALL BE BASED ON SOIL TESTS SUCH AS THOSE OFFERED BY RUTGERS COOPERATIVE EXTENSION SERVICE OR OTHER APPROVED LABORATORY FACILITIES QUALIFIED TO TEST SOIL SAMPLES FOR AGRONOMIC PROPERTIES.

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STANDARD FOR STABILIZATION WITH MULCH ONLY

METHODS AND MATERIALS

- SITE PREPARATIONS:**
 - GRADE, AS NEEDED AND FEASIBLE, TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PAGE 19-1.
 - INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
- PROTECTIVE MATERIALS:**
 - UNROTTED SMALL GRAIN STRAW, OR SALT HAY AT 2.0 TO 2.5 TONS PER ACRE IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIEDOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.
 - WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE (OR ACCORDING TO THE MANUFACTURERS' REQUIREMENTS) MAY BE APPLIED BY A HYDROSEEDER.
 - MULCH NETTING, SUCH AS PAPER, JUTE, EXCELISOR, COTTON, PLASTIC, MAY BE USED.
 - WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.

III. MULCH BINDERS: SHOULD BE APPLIED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES.

- PEG AND TWINE: DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE TWINE AROUND EACH PEG WITH 2 OR MORE ROUND TURNS.
- MULCH NETTINGS: STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
- CRIMPER (MULCH ANCHORING TOOL), A TRACTOR-DRAWN IMPLEMENT, ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE. SAFELY, SOIL PENETRATION SHOULD BE DONE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHOULD BE DONE ON THE CONTOUR.
- LIQUID MULCH BINDERS:
 - APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
 - USE ONE OF THE FOLLOWING:
 - ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
 - SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

STANDARD FOR PERMANENT VEGETATIVE COVER

- SITE PREPARATION:**
 - GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.
 - IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
 - TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.
 - INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
- SEEDBED PREPARATION:**
 - UNFORMALLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL, WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MALERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NAJES.RUTGERS.EDUCATION/). FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

- WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR, CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
- HIGH ACID PRODUCING SOILS, SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL, HAVING A PH OF 5.0 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

SEEDING: PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL.

SITE CONTAINS SOIL F5% FREE-HOLD SANDY LOAM, 2 TO 5 PERCENT SLOPES AND CLASSIFIED AS "WELL DRAINED" AS PER NJ WE SOIL SURVEY USDA

PLANTING MIXTURE TO BE USED: MIX-10 (RESIDENTIAL/COMMERCIAL USE)
 TALL FESCUE (TURF TYPE) @ 20% LB/AC
 PERENNIAL RYEGRASS @ 20 LB/AC
 OR
 WHITE CLOVER @ 5 LB/AC. (WHITE CLOVER CAN BE EXCLUDED ON LAWN SITES)

SITE IS LOCATED WITHIN USDA PLANT HARDINESS ZONE 6B. PLANTING DATES:
 OPTIMAL DATE: 301 TO 430
 ACCEPTABLE DATE: 301 TO 814 (**)
 ACCEPTABLE DATE: 815 TO 1015 (**)

(**) SUMMER SEEDINGS SHOULD ONLY BE CONDUCTED WHEN THE SITE IS IRRIGATED. MIXES INCLUDING WHITE CLOVER REQUIRE THAT AT LEAST SIX WEEKS OF GROWING SEASON REMAIN AFTER SEEDING TO ENSURE ESTABLISHMENT BEFORE FREEZING CONDITIONS.

- MULCHING: MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DETERMINED WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY, UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION - SPREAD MULCH UNIFORMY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITH EACH SECTION.

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS:

- PEG AND TWINE: DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
- MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
- CRIMPER (MULCH ANCHORING COLLATER TOOL), A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
- LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR HAY, HAY OR STRAW MULCH.
 - APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
 - USE ONE OF THE FOLLOWING:
 - ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER-BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOXIC EFFECT OR IMPEDE GROWTH OF TURF GRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
 - SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING, SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. BINDER SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

SOIL EROSION AND SEDIMENT CONTROL NOTES

(REFER TO CONSERVATION DISTRICT NOTES 03/20/14)

- THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
- N.J.S.A. 17:27-39 ET. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT CONSTRUCTION COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL, HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
- ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 1/2 TONS PER ACRE, ACCORDING TO THE STANDARD FOR STABILIZATION WITH MULCH ONLY.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIPMENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
- A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE PRELIMINARY GRADING.
- THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRING A STABILIZED CONSTRUCTION ACCESS CONSISTING OF ONE INCH TO TWO INCH (1" - 2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
- ALL SOIL WASHED, DROPPED, SPOILED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
- PERMANENT VEGETATION IS TO BE SEEDDED OR SOODED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
- AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
- IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE, (OR 450 LBS/1,000 SQ FT OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5.0 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
- CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- UNFILTERED DRAINWATER IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DRAINWATER OPERATIONS TO MINIMIZE SEDIMENT TRANSPORT. ANY DRAINWATER METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DRAINWATER.
- SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
- STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE SHALL BE MAINTAINED WITHIN THE LIMIT OF DISTURBANCE. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
- ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6.
- THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

STANDARDS FOR MAINTAINING VEGETATION

A. PREVENTIVE MAINTENANCE PROGRAM ANTICIPATES REQUIREMENTS AND ACCOMPLISHES WORK WHEN IT CAN BE DONE WITH LEAST EFFORT AND EXPENSE TO INSURE ADEQUATE VEGETATIVE COVER. MAINTENANCE SHOULD OCCUR ON A REGULAR BASIS, CONSISTENT WITH FAVORABLE PLANT GROWTH, SOIL, AND CLIMATIC CONDITIONS. THIS INCLUDES REGULAR SEASONAL WORK FOR MOWING, FERTILIZING, LIMING, WATERING, PRUNING, FIRE CONTROL, WEED AND PEST CONTROL, RESEEDING, AND REPAIRS.

- MOVING IS A RECURRING PRACTICE AND ITS INTENSITY DEPENDS UPON THE FUNCTION OF THE GROUND COVER, ON HIGH TO MODERATE A TO B MAINTENANCE AREAS, SUCH AS LAWNS, CERTAIN RECREATION FIELDS, AND PIONEER GRASSES. MOWING WILL BE FREQUENT (2 TO 4 DAY INTERVALS) UNTIL A PERMANENT TURF IS ESTABLISHED. RETURN TO PERSISTENT MOWING (MOWER) TO THE TURF TO REDUCE THE AMOUNT OF FERTILIZER NEEDED TO MAINTAIN THE TURF BY AS MUCH AS 50%. SOME TURF PRODUCTS CAN BE MANAGED AS NATURALIZED AREAS REQUIRING ONLY ONE (ONE) SEASON MIXTURES OR TWO (TWO) SEASON MIXTURES MONTHS PER YEAR. MOWING OF NATURALIZED AREAS IS TYPICALLY DONE AT HEIGHTS NO LESS THAN 4 INCHES AND SHOULD NOT BE DONE BETWEEN APRIL 1ST AND JULY 1ST TO AVOID DISTURBING GROUND NESTING BIRDS. THE LARGE AMOUNT OF CLIPPING DEBRIS GENERATED BY MOWING NATURALIZED AREAS WILL NEED TO BE REMOVED AND/OR DISPERSED SO THE VEGETATION IS NOT SMOTHERED. BURNING OF NATURALIZED AREAS IS ANOTHER PROCEDURE USED TO MAINTAIN NATURALIZED TURFGRASS. LOW BURNING AREAS MAY BE DRIVING TO PROMOTE NATURAL SUCCESSION. SEE PG. 4-13 FOOTNOTE #4. MAINTENANCE LEVELS A, B, C AND D IN THE STANDARD FOR PERMANENT VEGETATIVE COVER, TABLE 4.3.
- INCORPORATION OF ORGANIC MATTER (FOR EXAMPLE, MATURE COMPOST) INTO THE SOIL WILL SUBSTANTIALLY REDUCE THE NEED FOR FERTILIZER AND IRRIGATION INPUTS.
- FERTILIZER AND LIME SHOULD BE APPLIED AS NEEDED TO MAINTAIN A DENSE STAND OF DESIRABLE SPECIES. FREQUENTLY MOWED AREAS AND THOSE OF OR SANDY SOILS WILL REQUIRE MORE FREQUENT FERTILIZATION, BUT AT LOWER NITRATES PER ACRE APPLICATION.
- LIME REQUIREMENT SHOULD BE DETERMINED BY SOIL TESTING EVERY 2 OR 3 YEARS. FERTILIZATION MAY INCREASE THE NEED FOR LIME. CONTACT THE LOCAL COUNTY EXTENSION OFFICE FOR DETAILS ON SOIL TESTING AND FERTILIZATION AND PEST CONTROL RECOMMENDATIONS ON ALL SITE PLANS AND SUBSEQUENT EROSION CONTROL.
- FERTILIZATION AND ADDITIONS OF OTHER SOIL AMENDMENTS ARE NOT RECOMMENDED FOR MANAGING NATIVE VEGETATION SUCH AS IN THE PHOENIX NATIONAL RESERVE. SEE THE STANDARD FOR PERMANENT VEGETATIVE STABILIZATION FOR SPECIFIC REQUIREMENTS IN THIS STATE.
- WEED INVASION MAY RESULT FROM ABUSIVE MOWING AND FROM INADEQUATE FERTILIZING AND LIMING. MANY NEWLY ESTABLISHED GRASSES WILL NOT SURVIVE IF MOWED AT HEIGHTS BELOW 2.5 INCHES AND AT INTERVALS GREATER THAN 7 DAYS. BRUSH INVASION IS A COMMON CONSEQUENCE OF LACK OF MOWING. THE AMOUNT OF WEEDS OR BRUSH THAT CAN BE TOLERATED IN ANY VEGETATIVE AREA DEPENDS UPON THE INTENDED USE OF THE LAND. DRAINAGE OF WATER FROM PESTERATION BY WEED AND WOODY PLANTS, THESE SHOULD BE CONTROLLED, SINCE THEY OFTEN REDUCE DRAINAGE WATER EFFICIENCY. CONTROL OF WEEDS OR BRUSHES IS ACCORDING TO THE STANDARDS FOR PERMANENT VEGETATIVE COVER.
- FIRE HAZARDS IS GREATER WHERE DRY VEGETATION HAS ACCUMULATED. THE TALLER THE VEGETATION, THE GREATER THE HAZARD.
- PRUNE TREES AND SHRUBS TO REMOVE DEAD OR DAMAGED BRANCHES. REMOVE UNSUITABLE OR INVASIVE PLANTS TO MAINTAIN INTEGRITY OF THE LANDSCAPE AND ENHANCE QUALITY OF PERMANENT VEGETATIVE COVER.

DUST CONTROL NOTES

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

- MULCHES - SEE STANDARD FOR STABILIZATION WITH MULCHES ONLY (PG. 5-1)
- VEGETATIVE COVER - SEE STANDARD FOR TEMPORARY VEGETATIVE COVER (PG. 7-1); PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION (PG. 4-1); AND PERMANENT STABILIZATION WITH MULCH ONLY (PG. 5-1)

SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MIXED SOILS), KEEP TRAFFIC OFF THESE AREAS.

TABLE 16-1 DUST CONTROL MATERIALS

MATERIAL	WATER DILUTION	TYPE OF
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FDR AMPHITHEATER REHABILITATION

BOROUGH OF ROOSEVELT, NJ

ISSUE RECORD:

NO.	DATE	DESCRIPTION	BY
1	03.22.2024	Review Submission	ETM

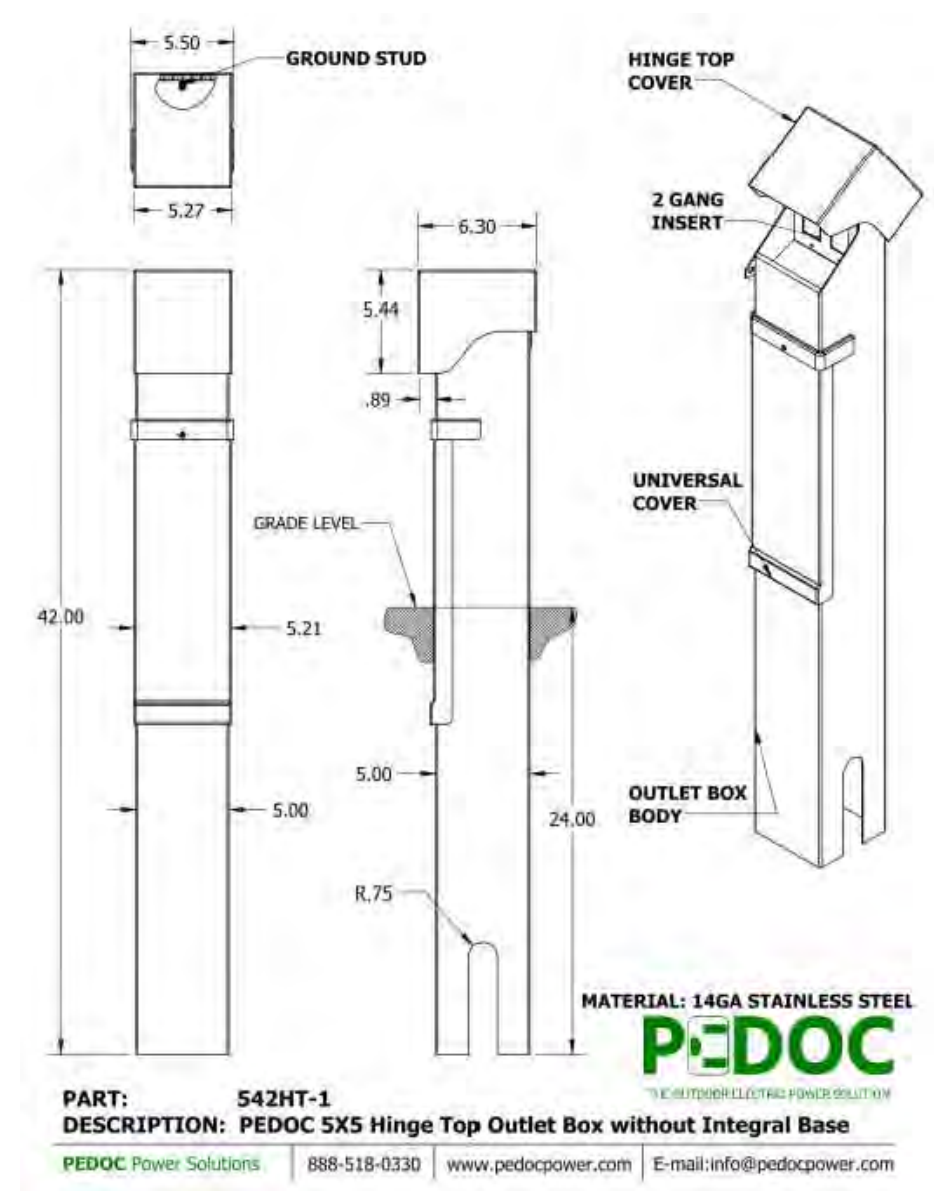
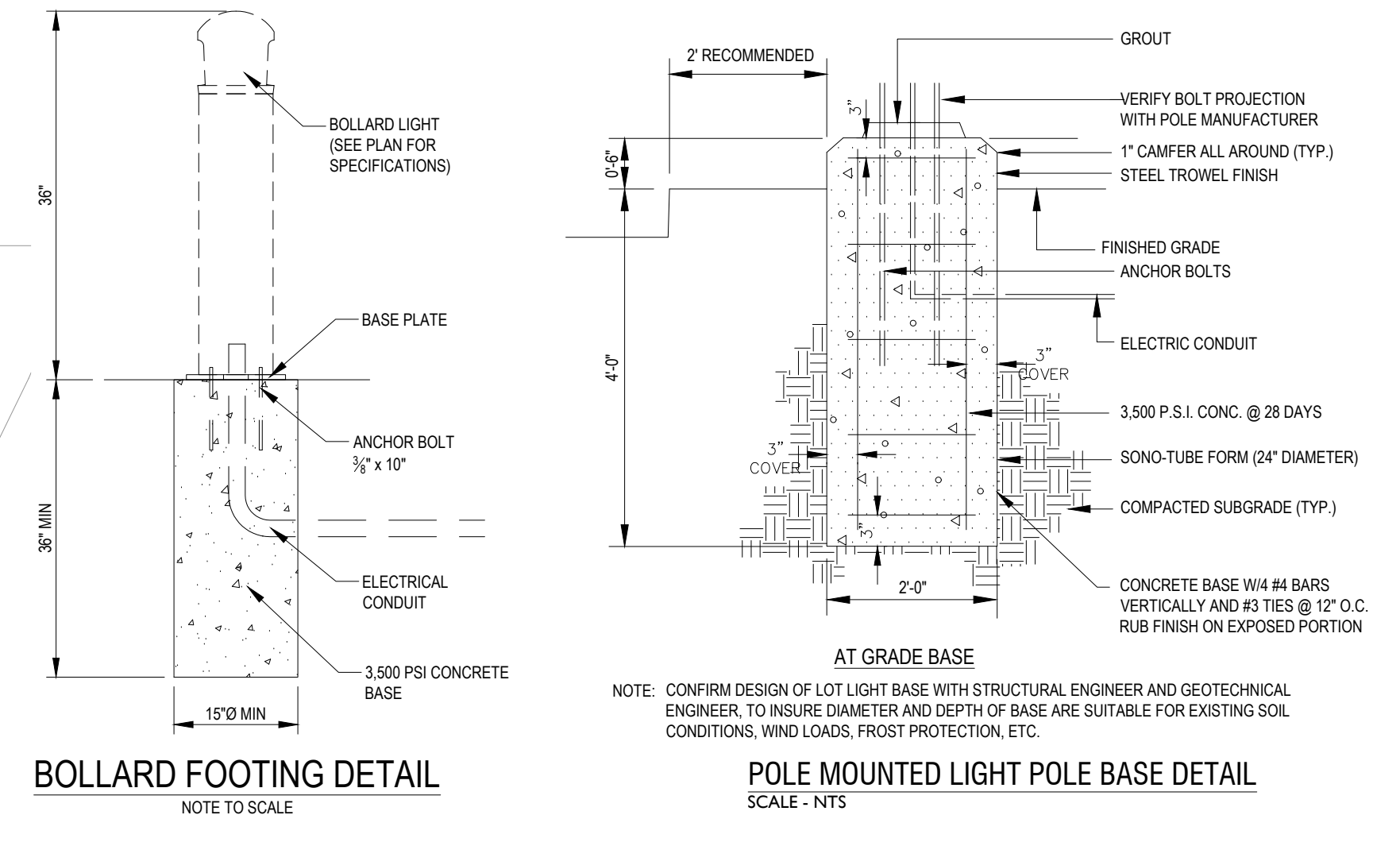
ETM ASSOCIATES L.L.C.
 PUBLIC SPACE DESIGN
 PUBLIC SPACE MANAGEMENT
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 CERTIFICATE OF PROFESSIONAL DESIGNATION: 346240307100
 Giovanni Manillo, P.E.
 New Jersey Professional Engineer #7552

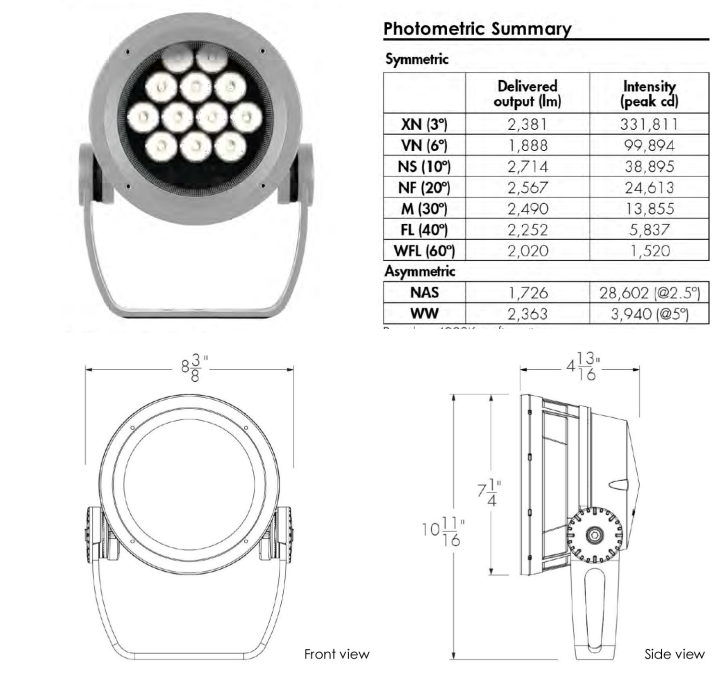
Quantity	SPC	Description	Length	Spans	Light	Light
1	HEX0817T5	Recessed	42"	0"	0"	1"

DESIGNED BY: GIOVANNI MANILLO 47552
 E. TIMOTHY MARSHALL AS00872

PROJECT TITLE: ELECTRICAL AND LIGHTING SITE PLAN
 EP-1.00



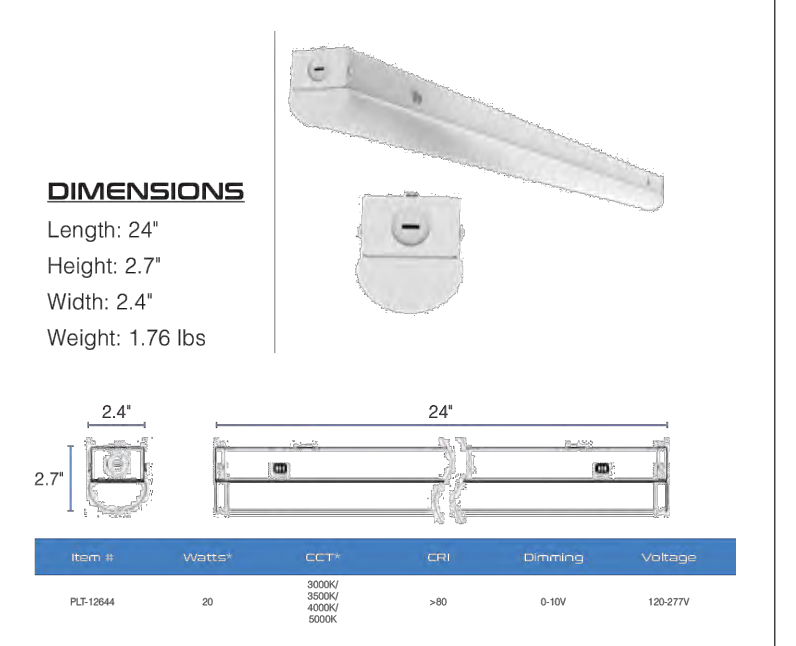
FIXTURE B DETAIL
 SCALE - NTS



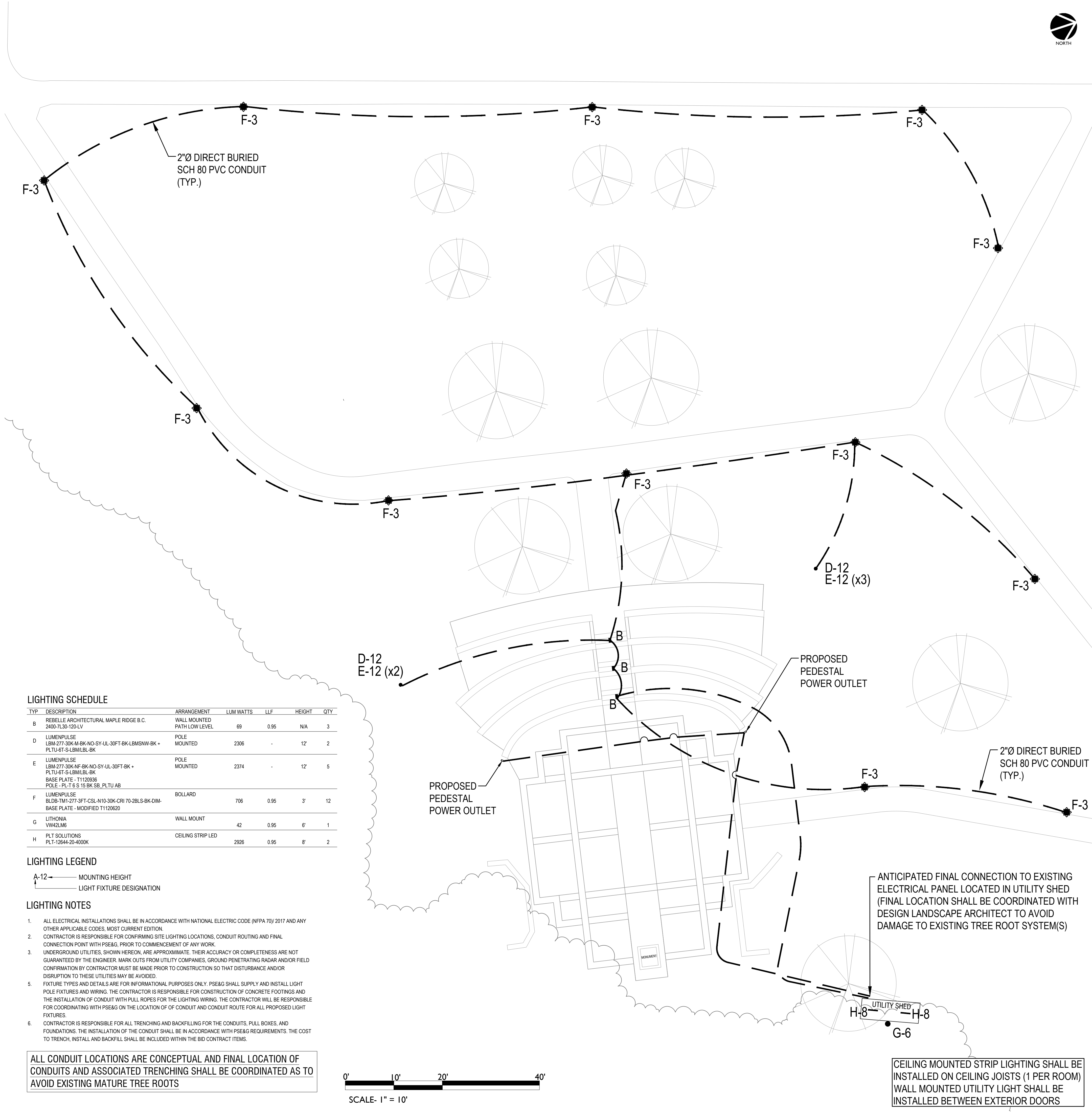
FIXTURE D & E DETAIL
 SCALE - NTS



FIXTURE G DETAIL
 SCALE - NTS



FIXTURE H DETAIL
 SCALE - NTS



LIGHTING SCHEDULE

TYP.	DESCRIPTION	ARRANGEMENT	LUM. WATTS	LLF	HEIGHT	QTY.
B	REBELLE ARCHITECTURAL MAPLE RIDGE B.C. 2400-7L30-120-LV	WALL MOUNTED PATH LOW LEVEL	69	0.95	N/A	3
D	LUMENPULSE LBM-277-30K-M-BK-NO-SY-UL-30FT-BK-LBMSNW-BK + PLTU-6T-S-LBMLBL-BK	POLE MOUNTED	2306	-	12'	2
E	LUMENPULSE LBM-277-30K-M-BK-NO-SY-UL-30FT-BK + PLTU-6T-S-LBMLBL-BK BASE PLATE - T1120936 POLE - PL-T 6 S 15 BK SB - PLTU AB	POLE MOUNTED	2374	-	12'	5
F	LUMENPULSE BLD8-TM1-277-3FT-CSL-N10-30K-CRI 70-2BL5-BK-DIM-BASE PLATE - MODIFIED T1120620	BOLLARD	706	0.95	3'	12
G	LITHONIA VW42LM	WALL MOUNT	42	0.95	6'	1
H	PLT SOLUTIONS PLT-12644-20-4000K	CEILING STRIP LED	2926	0.95	8'	2

LIGHTING LEGEND

▲ MOUNTING HEIGHT
 ○ LIGHT FIXTURE DESIGNATION

- LIGHTING NOTES**
- ALL ELECTRICAL INSTALLATIONS SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NFPA 70) 2017 AND ANY OTHER APPLICABLE CODES, MOST CURRENT EDITION.
 - CONTRACTOR IS RESPONSIBLE FOR CONFIRMING SITE LIGHTING LOCATIONS, CONDUIT ROUTING AND FINAL CONNECTION POINT WITH PSE&G, PRIOR TO COMMENCEMENT OF ANY WORK.
 - UNDERGROUND UTILITIES, SHOWN HEREON, ARE APPROXIMATE. THEIR ACCURACY OR COMPLETENESS ARE NOT GUARANTEED BY THE ENGINEER. MARK OUTS FROM UTILITY COMPANIES, GROUND PENETRATING RADAR AND/OR FIELD CONFIRMATION BY CONTRACTOR MUST BE MADE PRIOR TO CONSTRUCTION SO THAT DISTURBANCE AND/OR DISRUPTION TO THESE UTILITIES MAY BE AVOIDED.
 - FIXTURE TYPES AND DETAILS ARE FOR INFORMATIONAL PURPOSES ONLY. PSE&G SHALL SUPPLY AND INSTALL LIGHT POLE FIXTURES AND WIRING. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF CONCRETE FOOTINGS AND THE INSTALLATION OF CONDUIT WITH PULL ROPES FOR THE LIGHTING WIRING. THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING WITH PSE&G ON THE LOCATION OF CONDUIT AND CONDUIT ROUTE FOR ALL PROPOSED LIGHT FIXTURES.
 - CONTRACTOR IS RESPONSIBLE FOR ALL TRENCHING AND BACKFILLING FOR THE CONDUITS, PULL BOXES, AND FOUNDATIONS. THE INSTALLATION OF THE CONDUIT SHALL BE IN ACCORDANCE WITH PSE&G REQUIREMENTS. THE COST TO TRENCH, INSTALL AND BACKFILL SHALL BE INCLUDED WITHIN THE BID CONTRACT ITEMS.

ALL CONDUIT LOCATIONS ARE CONCEPTUAL AND FINAL LOCATION OF CONDUITS AND ASSOCIATED TRENCHING SHALL BE COORDINATED AS TO AVOID EXISTING MATURE TREE ROOTS

ELECTRICAL SYMBOL LIST:

	DUPLEX RECEPTACLE		ROOF TOP UNIT CIRCUIT BREAKER
	QUAD RECEPTACLE		DISCONNECT SWITCH
	GROUND FAULT INTERRUPT RECEPTACLE		FUSED DISCONNECT SWITCH
	WEATHER RESISTANT GROUND FAULT INTERRUPT RECEPTACLE WITH WEATHER-PROOF COVER. MUST BE W/P WITH CORDS CONNECTED.		NEMA 3R FUSED DISCONNECT SWITCH WITH GFI RECEPTACLE COMBO
	COMBINATION FLOOR QUAD RECEPTACLE WITH TELE/DATA OUTLET FOR THE DATA OUTLET RUN 1" UNDERSLAB CONDUIT WITH CAT6A WIRE TO THE NEAREST WALL AND CONDUIT RISE UP TO ABOVE CEILING. FOR THE POWER RUN 1" UNDERSLAB CONDUIT AS INDICATED ON PLANS.		CCTV CAMERA RUN PLENUM RATED CAT-6A TO IT/IDF/ MDF ROOM
	CEILING MOUNTED POWER AND DATA OUTLET		BUILDING DATA/PHONE OUTLET RUN PLENUM RATED CAT-6A TO IT/IDF/ MDF ROOM
	208/240 OUTLET RATING PER CIRCUIT BREAKER		ABOVE CEILING WIFI CONNECTION RUN PLENUM RATED (2) CAT-6A TO IT/IDF/ MDF
	POWER/LIGHTING PANEL (208/120V) OR 480/277		WALL MOUNTED SPEAKER
	JUNCTION BOX		2x2 CEILING MOUNTED SPEAKER
	LIGHT SWITCH		CEILING MOUNTED SPEAKER
	3-WAY SWITCH "X"=SWITCH LETTER*		WALL MOUNTED SPEAKER CLOCK COMBO
	4-WAY SWITCH "X"=SWITCH LETTER*		WALL MOUNTED CLOCK
	2 OR MORE- SWITCHES IN MULTI-GANG BOX "X"=SWITCH LETTER*		CEILING MOUNTED LOW TEMP OCCUPANCY SENSOR
	KEY OPERATED SWITCH		FIRE ALARM PULL STATION
	COMBO VACANCY SENSOR WITH SWITCH COPPER GREENGATE MODEL OSW-D-1001 OR APPROVED EQUAL DUAL TECHNOLOGY COMBO VACANCY SENSOR WITH DIMMER SWITCH WAITSTOPPER DW-111		HORNSTROBE OR SPEAKER STROBE 110 CANDELA
	MANUAL MOTOR SWITCH PROVIDED BY EQUIPMENT MANUFACTURE		CEILING MOUNTED HORNSTROBE OR SPEAKER STROBE 110 CANDELA
	EQUIPMENT CIRCUIT BREAKER PROVIDED BY EQUIPMENT MANUFACTURE		STROBE LIGHT 15 CANDELA
	EXIT LIGHT		CEILING MOUNTED STROBE LIGHT 15 CANDELA
	LINE VOLTAGE DUAL TECHNOLOGY OCCUPANCY SENSOR COOPER MODEL OAC-DT-2000 MV OR APPROVED EQUAL.		CEILING MOUNTED HEAT DETECTOR
	LOW VOLTAGE DUAL TECHNOLOGY OCCUPANCY SENSOR COOPER MODEL OAC-DT-2000 OR APPROVED EQUAL.		ABOVE CEILING HEAT DETECTOR
	120/277 SWITCHPACK COOPER MODEL SP20-RD4 OR APPROVED EQUAL.		DUCT DETECTOR
			CEILING MOUNTED SMOKE DETECTOR
			CEILING MOUNTED CARBON MONOXIDE DETECTOR
			TAMPER SWITCH
			FLOW SWITCH

* SWITCHES AND LUMINAIRES MAY BE LABELED WITH A LOWERCASE LETTER THAT IDENTIFIES THE SWITCHING CIRCUIT. MULTIPLE LETTERS INDICATE MULTIPLE SWITCHES MOUNTED IN A MULTI-GANG BOX. IF THERE ARE NO LETTERS, ALL LUMINAIRES IN THAT AREA OR ROOM ARE CONTROLLED BY A SINGLE SWITCH.

ELECTRICAL ABBREVIATIONS:

AF	AMP FRAME
ER	EXISTING RELOCATED
E	EXISTING
DWG	DRAWING OR DRAWINGS
FACP	FIRE ALARM CONTROL PANEL
GFI	GROUND FAULT INTERRUPT
HVAC	HEATING VENTILATION AND AIR CONDITIONING
IG	ISOLATED GROUND
MDP	MAIN DISTRIBUTION PANEL
SW	SWITCH
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
UON	UNLESS OTHERWISE NOTED
XFR	TRANSFORMER
NL	NIGHT LIGHT

GENERAL ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH NFPA ARTICLE 70, NATIONAL ELECTRICAL CODE (NEC), LATEST EDITION, AND ALL OTHER APPLICABLE CODES.
- MANUFACTURER'S DIRECTION SHALL BE FOLLOWED IN INSTALLING, TESTING AND PLACING INTO OPERATION ALL EQUIPMENT AND SYSTEMS.
- ALL RACEWAYS ENTERING OR LEAVING THE BUILDING SHALL BE SEALED TO PREVENT WATER INTRUSION.
- ALL RACEWAY AND WIRING SHALL BE CONCEALED IN FINISHED AREAS AS DETERMINED BY THE ARCHITECT.
- ALL WIRE SPLICES SHALL BE MADE WITH PRESSURE TYPE CONNECTORS. SPLICES IN DAMP OR WET LOCATIONS SHALL BE MADE WATERTIGHT AND WATERPROOF.
- PROVIDE OUTLET BOXES AT ALL FIXTURES, JUNCTION BOXES AND WIRING DEVICES. BOXES SHALL BE PROPERLY SUPPORTED AND SIZED FOR THE NUMBER OF CONDUCTORS IN ACCORDANCE WITH NEC. INTERIOR BOXES SHALL BE GALVANIZED STEEL. EXTERIOR BOXES AND FITTINGS SHALL BE CAST ALUMINUM.
- PROVIDE JUNCTION BOXES AND WIRING TROUGHS, SIZED AS PER NEC, WHERE SHOWN OR WHERE NECESSARY TO FACILITATE PULLING OF CONDUCTORS. BOXES AND TROUGH SHALL BE SHEET STEEL, EITHER GALVANIZED OR PAINTED FINISH. COVERS SHALL BE SCREW TYPE OR COMBINATION HINGED AND SCREWED.
- PROVIDE EXPANSION FITTINGS AT BUILDING EXPANSION JOINTS. EXPANSION FITTINGS SHALL BE OZ-GEDNEY TYPE AX OR EQUAL WITH APPROPRIATE BONDING JUMPER.
- PROVIDE ALL SAFETY SWITCHES AS SHOWN ON THE DRAWINGS AND/OR REQUIRED BY NEC FOR MOTOR, APPLIANCE AND ELECTRIC HEAT EQUIPMENT DISCONNECTION. ALL DISCONNECT SWITCHES SHALL BE LOCKABLE IN THE "ON" OR "OFF" POSITION.
- ALL ELECTRICAL PANELS AND DISCONNECT SWITCHES, INCLUDING EXISTING EQUIPMENT, SHALL BE PROPERLY IDENTIFIED WITH PHENOLIC NAMEPLATES. PANELS SHALL HAVE TYPEWRITTEN SCHEDULES FOR ACTIVE AND SPARE CIRCUITS.
- GROUNDING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- NEW PANELS SHALL BE AS SCHEDULED ON THE DRAWINGS. CIRCUIT BREAKERS SHALL BE BOLT-IN TYPE OF THE FRAME, TRIP AND INTERRUPTING CAPACITY SHOWN. ALL BUS SHALL BE COPPER. ALL PANELS SHALL HAVE A GROUND BUS.
- PROVIDE ALL FINAL TESTS TO ASSURE A GROUNDING SYSTEM FREE FROM SHORT CIRCUITS OR UNINTENTIONAL GROUNDS.
- THE SINGLE LINE DIAGRAM REPRESENTS THE ELECTRICAL CONNECTIONS BETWEEN VARIOUS EQUIPMENT AND PANELS SHOWN. THE SCOPE OF THE ELECTRICAL WORK SHALL INCLUDE THE PROVISION OF ALL DISTRIBUTION EQUIPMENT AND THE FEEDER CONNECTIONS SHOWN. EQUIPMENT SHALL BE LOCATED AND FEEDERS SHALL BE ROUTED AS SHOWN ON PLANS AND DETAILS AND AS REQUIRED FOR THE ELECTRICAL DISTRIBUTION INTENDED. EXCEPTIONS FROM THE SCOPE OF THE WORK: EQUIPMENT AND WIRING PROVIDED BY THE ELECTRICAL UTILITY.
- PULL BOXES SHALL BE INSTALLED AS REQUIRED TO KEEP PULLING TENSIONS AND SIDEWALL PRESSURES BELOW CABLE VENDOR'S RECOMMENDATION.
- ALL WIRING SHALL BE PROVIDED BASED ON CIRCUIT BREAKER TRIP RATING, PER NEC. EACH CONDUIT TO INCLUDE GROUNDING CABLE.
- ALL LOW VOLTAGE SYSTEM WIRING INCLUDING BUT NOT LIMITED TO IT, PHONE, DATA, PA, CLOCK SHALL BE PLENUM RATED CABLE.

GENERAL FIRE ALARM NOTES

- ALL NEW DEVICES SHALL BE COMPATIBLE WITH EXISTING SYSTEM.
- CONNECT ALL DEVICES TO THE COMMUNICATIONS AND CONTROL LOOPS TO THE FIRE ALARM CONTROL PANEL.
- SPACING CRITERIA FOR ALL ALARMS, SENSORS AND DEVICES, MUST BE IN COMPLIANCE W/ NFPA-72.
- ALL CEILING MOUNTED FIRE ALARM DEVICES AND SENSORS MUST BE COORDINATED W/ EXISTING LIGHTING AND ALL HVAC DUCT, DIFFUSERS, AND SUPPLY/RETURN GRILLS.
- COORDINATE WITH MANUFACTURER ALL WIRING AND INSTALLATION METHODS PRIOR TO ANY WORK.
- FIRE ALARM DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE, NATIONAL ELECTRICAL CODE AND MEET ALL LOCALLY ENFORCED CODE AND ICC/ANSI-A117.1 REQUIREMENTS.
- FIRE ALARM SYSTEM SHALL BE SUBMITTED TO LOCAL FIRE MARSHAL FOR APPROVAL PRIOR TO INSTALLATION.
- ALL CABLES SHALL BE UL LISTED PLENUM RATED FIRE ALARM CABLE, POWER LIMITED, WITH RED JACKET, NEATLY CONCEALED EXPOSED IN CEILING JOIST SPACE BETWEEN THE TOP CORD AND THE BOTTOM CORD OF THE STEEL (I.E. FOLLOW STEEL FRAMING) OR FISHED IN CONCEALED SPACES WITH SUPPORTS & INSTALLATION PER CODE.
- ALL JUNCTION BOXES ASSOCIATED WITH THE FIRE ALARM SYSTEM SHALL BE PAINTED RED.
- DEVICE MOUNTING HEIGHT TO BE COORDINATED WITH & APPROVED BY AUTHORITIES HAVING JURISDICTION.
- DRAWING IS DIAGRAMMATIC. COORDINATE EXACT ROUTING AND INSTALLATION METHODS IN FIELD.
- NEW NOTIFICATION FIRE ALARM DEVICES SHALL BE INSTALLED ON A NEW OR EXISTING FIRE ALARM NOTIFICATION CIRCUIT. WHEN USING AN EXISTING NOTIFICATION CIRCUIT, E.C. SHALL CONFIRM THAT THE ADDITION OF THE NEW DEVICES SHALL NOT CAUSE THE CIRCUIT TO EXCEED THE MAXIMUM ALLOWABLE VOLTAGE DROP. INSTALLED NEW NOTIFICATION CIRCUIT IF REQUIRED.
- E.C. SHALL CONFIRM THAT EXISTING FIRE ALARM SYSTEM BATTERY CAPACITY IS SUFFICIENT TO ACCOMMODATE THE NEW AND INSTALLED FIRE ALARM DEVICES. FURNISHED AND INSTALLED ADDITIONAL BATTERY IF REQUIRED.
- APPROVED SHOP DRAWINGS SHALL INCLUDE BATTERY SIZE CALCULATION, VOLTAGE DROP AND CALCULATION AND SIGN AND SEAL BY A LICENSE NEW JERSEY ENGINEER.
- EXISTING FIRE ALARM SYSTEM SHALL REMAIN FULLY OPERATIONAL DURING CONSTRUCTION, WHERE A SYSTEM SHUT DOWN IS NEEDED E.C. SHALL COMPLY WITH ALL THE REQUIREMENTS OF THE LOCAL FIRE OFFICIAL.
- DUCT DETECTORS SHALL BE FURNISHED BY THE E.C AND INSTALLED BY THE M.C

CKT. SIZE	MAX. CKT. AMPS	VOLTS	PHASE	WIRE SIZE	MAX DISTANCE (FEET)	WIRE SIZE	MAX DISTANCE (FEET)	WIRE SIZE	MAX DISTANCE (FEET)	WIRE SIZE	MAX DISTANCE (FEET)	WIRE SIZE	MAX DISTANCE (FEET)
15	5	120	1	#12	350	#10	600						
15	12	120	1	#12	150	#10	250	#8	375	#6	575		
20	5	120	1	#12	350	#10	600						
20	10	120	1	#12	175	#10	300	#8	450	#6	700		
20	16	120	1	#12	100	#10	175	#8	275	#6	425	#4	525
30	24	120	1	#10	125	#8	175	#6	275	#4	450	#3	650
15	12	208	1	#12	250	#10	425	#8	650				
20	5	208	1	#12	625	#10	1025	#8					
20	10	208	1	#12	300	#10	525	#8					
20	16	208	1	#12	200	#10	325	#8	500				
30	20	208	1	#10	250	#8	400	#6	600				
30	24	208	1	#10	200	#8	325	#6	500				
40	32	208	1	#8	250	#6	375	#4	575				
50	40	208	1	#6	300	#4	450	#3					
60	48	208	1	#4	375	#3	450	#2					
20	5	208	3	#12	725	#10	1200	#8					
20	10	208	3	#12	350	#10	600	#8					
20	16	208	3	#12	225	#10	375	#8	500				
30	20	208	3	#10	300	#3	450	#6					
30	24	208	3	#10	250	#8	375	#6	575				
40	32	208	3	#8	275	#6	425	#4	650				
50	40	208	3	#6	350	#4	525	#3					
60	48	208	3	#4	425	#3	525	#2					
80	64	208	3	#3	400	#2	475	#1	575				
100	80	208	3	#1	450	#1/0	575	#2/0					
20	5	277	1	#12	825	#10		#8					
20	10	277	1	#12	425	#10	700	#8					
20	16	277	1	#12	250	#10	425	#8					
25	20	277	1	#12	200	#10	350	#8	500				
50	40	480	3	#6	500	#4		#3					

GENERAL NOTE:

- MINIMUM WIRE SIZE SHALL BE #12.
- WIRE SIZE SHALL BE AS PER CIRCUIT BREAKER SIZE.
- ALL BRANCH CIRCUIT HOMERUNS 0 THRU 100 AMPS FROM EQUIPMENT AND DEVICES TO PANELBOARDS SHALL BE UP-SIZED TO ACCOUNT FOR VOLTAGE DROP AS TABULATED ABOVE. MAXIMUM VOLTAGE DROP TO BE 5% (2% ON FEEDERS, 3% ON BRANCH CIRCUITS).

VOLTAGE DROP SCHEDULE

GENERAL REQUIREMENTS

- THE WORK TO BE DONE UNDER THIS PROJECT SHALL INCLUDE PROVIDING ALL EQUIPMENT, MATERIALS, LABOR AND SERVICES, AND PERFORMING ALL OPERATIONS FOR COMPLETE AND OPERATING SYSTEMS. ANY WORK NOT SPECIFICALLY COVERED BUT NECESSARY TO COMPLETE THIS INSTALLATION, SHALL BE PROVIDED. ALL EQUIPMENT AND WIRING TO BE NEW AND PROVIDED UNDER THIS CONTRACT UNLESS OTHERWISE NOTED.
 - ENTIRE INSTALLATION, INCLUDING MATERIALS, EQUIPMENT AND WORKMANSHIP, SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE (NEC) AS WELL AS ALL APPLICABLE LAWS AND REGULATIONS AND REGULATORY BODIES HAVING JURISDICTION OVER THIS WORK.
 - THE TERM "FURNISH" SHALL MEAN TO OBTAIN AND SUPPLY TO THE JOB SITE THE TERM "INSTALL" SHALL MEAN TO FIX IN POSITION AND CONNECT FOR USE. THE TERM "PROVIDE" SHALL MEAN TO FURNISH AND INSTALL. THE TERM "CONTRACTOR" SHALL MEAN ELECTRICAL CONTRACTOR.
 - ONLY WRITTEN CHANGES AND/OR MODIFICATIONS APPROVED BY THE ARCHITECT, CONSULTING ENGINEER OR OWNER'S REPRESENTATIVE SHALL BE RECOGNIZED.
 - THE ELECTRICAL CONTRACTOR SHALL SUBMIT, FOR THE ENGINEER'S APPROVAL, DETAILED SHOP DRAWINGS OF ALL EQUIPMENT SPECIFIED.
 - THE CONTRACTOR SHALL COORDINATE WITH SPECIFICATIONS AND DRAWINGS PROVIDED BY OTHER TRADES.
 - EXACT ROUTING OF RACEWAY SHALL BE DETERMINED IN THE FIELD.
 - KEEP PREMISES FREE FROM RUBBISH. REMOVE ALL ELECTRICAL RUBBISH FROM SITE.
 - THE DRAWINGS ARE DIAGRAMMATIC AND ALL SPECIALTIES AND APPURTENANCES ARE NOT SHOWN, BUT SHALL BE PROVIDED AS REQUIRED.
 - THE WORK SHALL INCLUDE ALL PANELS, DEVICES, FEEDERS AND BRANCH CIRCUIT WIRING AS REQUIRED FOR THE DISTRIBUTION SYSTEM INDICATED AND CALLED FOR ON THE DRAWINGS, REQUIRED BY SPECIFICATIONS AND AS NECESSARY FOR COMPLETE FUNCTIONAL SYSTEMS PRESENTED AND INTENDED. THIS INCLUDES SCAFFOLDING, LADDERS, RIGGING, HOISTING, ETC.
 - THE CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, TOOLS, EQUIPMENT, CONSUMABLES AND SERVICES REQUIRED FOR OBTAINING, DELIVERY, INSTALLATION, CONNECTION, DISCONNECTION, REMOVAL, RELOCATION, REPAIR, REPLACEMENT, TESTING AND COMMISSIONING OF ALL EQUIPMENT AND DEVICES INCLUDED IN OR NECESSARY FOR THE WORK, AS APPLICABLE.
 - ELECTRICAL WORK SHALL INCLUDE ALL REQUIRED CUTTING, PATCHING AND THE FULL RESTORATION OF WALL AND FLOOR STRUCTURE AND SURFACES. ALL EQUIPMENT, WALLS, FLOORS, ETC., DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER, AT THE CONTRACTORS EXPENSE.
 - BEFORE SUBMITTING HIS BID, THE CONTRACTOR SHALL VISIT THE JOB SITE AND FULLY ACQUANT HIMSELF/HERSELF WITH THE EXISTING JOB CONDITIONS AND DIFFICULTIES THAT WILL PERTAIN TO THE EXECUTION OF THIS WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS SHALL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED, WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE.
 - THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING UTILITIES.
 - UPON COMPLETION OF THE ELECTRICAL WORK, THE CONTRACTOR SHALL TEST THE COMPLETE ELECTRICAL SYSTEM FOR SHORTS, GROUNDS, AND PROPER OPERATION, IN THE PRESENCE OF THE ENGINEER.
 - UPON COMPLETION OF WORK, THE CONTRACTOR SHALL CLEAN AND ADJUST ALL EQUIPMENT AND LIGHTING AND TEST SYSTEMS TO THE SATISFACTION OF OWNER AND ENGINEER. RESULTS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
 - THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS OF FINISHED CONSTRUCTION PRIOR TO FABRICATION AND INSTALLATION OF FIXTURES AND EQUIPMENT.
 - ALL WORK SHALL BE PERFORMED BY THOSE SKILLED IN THEIR PARTICULAR TRADE IN A NEAT AND WORKMANLIKE MANNER.
 - ALL NEW ELECTRICAL MATERIAL AND EQUIPMENT SHALL BE LISTED BY UNDERWRITERS' LABORATORIES, INC. (UL) AND BEAR THE UL LABEL.
- PROJECT COORDINATION:**
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY FIELD CONDITIONS AT THE SITE AND NOTIFY THE OWNER OF ANY DISCREPANCIES, PRIOR TO COMMENCING WITH THE WORK.
 - THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND COORDINATING WITH THE DOCUMENTS OF ALL TRADES.
 - THE CONTRACTOR SHALL FURNISH A SCHEDULE INDICATING HIS PORTION OF TIME, WITHIN THE OVERALL SCHEDULE, REQUIRED TO COMPLETE THE WORK, IN CONJUNCTION WITH ALL TRADES.
 - ALL CONDUITS AND DEVICE BOXES SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
 - SHUT DOWN OF POWER SHALL BE COORDINATED WITH OWNER, AND ENGINEER AT LEAST 12 WORKING DAYS PRIOR TO SHUT DOWN. ANY SHUT DOWN SHALL BE DONE DURING NIGHT HOURS.
 - REFER TO THE HVAC DRAWINGS FOR THE LOCATIONS OF THE FOLLOWING:
 - MECHANICAL EQUIPMENT, CONTROL PANELS AND MOTORS
 - AUTOMATIC TEMPERATURE CONTROL SYSTEM PANELS AND DEVICES
 - MOTORIZED DAMPERS AND CONTROL VALVES
 - DUCT MOUNTED SMOKE DETECTORS
- PROTECTION OF WORK:**
- EFFECTIVELY PROTECT ALL MATERIALS AND EQUIPMENT FROM ENVIRONMENTAL AND PHYSICAL DAMAGE UNTIL FINAL ACCEPTANCE. CLOSE AND PROTECT ALL OPENINGS DURING CONSTRUCTION.
 - PROVIDE NEW MATERIALS AND EQUIPMENT TO REPLACE ITEMS DAMAGED.
- WARRANTIES AND BONDS:**
- ALL MATERIALS, EQUIPMENT AND WORKMANSHIP SHALL BE GUARANTEED IN WRITING FOR A MINIMUM OF TWO YEARS AFTER FINAL ACCEPTANCE BY OWNER.
 - OBTAIN AND DELIVER TO THE ARCHITECT TWO (2) COPIES OF ALL GUARANTEES AND CERTIFICATES OF COMPLIANCE.

THE CONTRACTOR MUST OBTAIN THE MECHANICAL DRAWINGS FOR LOCATION OF EQUIPMENT AND CONTROL WIRING REQUIREMENTS. ONLY POWER FEEDERS WIRING TO EQUIPMENT ARE SCHEDULED ON THE ELECTRICAL DRAWINGS. FURNISH AND INSTALL ALL CODE REQUIRED DISCONNECT SWITCHES FOR MECHANICAL EQUIPMENT UNLESS SPECIFIED ON THE MECHANICAL DRAWINGS TO BE SUPPLIED BY THE MANUFACTURER. PROVIDE FUSED DISCONNECT SWITCH IF REQUIRED BY THE MANUFACTURER.

ELECTRICAL REQUIREMENTS

PERMITS:

- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND INSPECTION FOR ELECTRICAL WORK.

RACEWAYS:

- ALL CONDUIT SHALL BE MINIMUM SIZE OF 3/4" FOR POWER CIRCUITS AND CONTROL CIRCUITS EXCEPT WHERE FLEXIBLE CONDUIT IS CALLED FOR ON PROJECT DOCUMENTS. ALL EXTERIOR EXPOSED CONDUIT SHALL BE GRC (GALVANIZED RIGID METAL CONDUIT).
- ALL FLEXIBLE CONDUIT IN WET OR DRY AREAS SHALL BE LIQUID TIGHT CONDUIT. NMC, WHERE CALLED FOR ON PROJECT DOCUMENTS, SHALL BE INSTALLED TO CONFORM TO THE NEC.
- ELECTRICAL RACEWAY CONNECTIONS TO VIBRATING EQUIPMENT AND MACHINERY SUCH AS MOTORS, TRANSFORMERS, ETC., SHALL BE MADE WITH FLEXIBLE LIQUID TIGHT CONDUIT.
- THE CONTRACTOR SHALL SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS AND FLOORS WITH APPROVED FIRE RATED SEALANT. ALL PENETRATIONS THROUGH ALL WALLS AND FLOORS SHALL BE SEALED.
- CONDUIT SHALL BE RUN AT RIGHT ANGLES AND PARALLEL TO BUILDING LINES, SHALL BE NEATLY RACKED, AND SECURELY FASTENED. JUNCTION BOXES SHALL BE PROVIDED WHERE REQUIRED TO FACILITATE INSTALLATION OF WIRES.
- ALL CONDUIT AND ELECTRICAL EQUIPMENT SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN AN APPROVED MANNER.
- ALL EMPTY RACEWAYS SHALL BE FURNISHED WITH A 200 LB. TEST NYLON DRAG LINE.
- ARRANGEMENT OF CONDUIT AND EQUIPMENT SHALL BE AS INDICATED UNLESS MODIFICATION IS REQUIRED TO AVOID INTERFERENCES.
- INDOOR CONDUIT SHALL BE CONCEALED TO THE MAXIMUM POSSIBLE EXTENT.
- FOR CONDUITS CROSSING EXPANSION JOINTS, PROVIDE EXPANSION FITTINGS FOR SIZE 1-1/4", AND LARGER. PROVIDE SECTIONS OF FLEXIBLE CONDUIT WITH GROUNDING JUMPERS FOR SIZES 1" AND SMALLER.

BOXES:

- INTERIOR OUTLET BOXES SHALL BE METALLIC.
- JUNCTION BOXES SHALL BE METALLIC, WITH SCREW COVERS. BOXES SHALL BE SUPPORTED INDEPENDENTLY OF CONDUITS. MOUNTING HEIGHTS OF EQUIPMENT AND DEVICES SHALL BE AS INDICATED ON THE DRAWINGS. WHERE MOUNTING HEIGHTS ARE NOT GIVEN ON THE DRAWINGS,
- UTILIZE THE FOLLOWING MOUNTING HEIGHTS UNLESS OTHERWISE NOTED: LIGHTING SWITCHES AND CONTROLS - 46" A.F.F TO CENTER OF THE BOX. PANELBOARDS AND CABINETS - 78" TO TOP OF ENCLOSURE RECEPTACLES - 16" TO BOTTOM OF BOX

WIRING:

- ALL WIRE SHALL BE COPPER WITH 600 VOLT INSULATION, MINIMUM #12 AWG FOR POWER AND LIGHTING AND #16 AWG FOR CONTROL CIRCUITS.
- THE USE OF MC CABLE IN CONCEAL SPACE IS PERMITTED.
- PROVIDE A SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT, NEUTRALS SHALL NOT BE SHARED.
- UNDER NO CIRCUMSTANCES SHALL FEEDERS BE SPLICED.
- ALL LOW VOLTAGE WIRING SHALL BE PLENUM RATED.

MECHANICAL SYSTEMS POWER:

- EXCEPT AS OTHERWISE NOTED, EQUIPMENT FURNISHED UNDER THE MECHANICAL TRADE WILL INCLUDE MOTORS, STARTERS, CONTROL EQUIPMENT, INTERLOCK AND CONTROL WIRING. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL POWER WIRING FROM SOURCE THROUGH INTERVENING EQUIPMENT TO MOTOR TERMINALS. STARTERS SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR.
- DISCONNECT SWITCHES SHALL BE HEAVY DUTY, HORSEPOWER RATED, QUICK MAKE, QUICK BREAK TYPE, ENCLOSED IN A HEAVY SHEET METAL ENCLOSURE WITH HINGED INTERLOCKING COVER, IN PROPER NEMA RATED ENCLOSURES. FUSED OR NON-FUSED AS REQUIRED. DISCONNECT SWITCHES SHALL BE PROVIDED BY CONTRACTOR, EXCEPT AS NOTED ON DRAWINGS.
- THE RATING FOR DISCONNECT SWITCHES SHALL BE THE SAME AS, OR GREATER THAN, THE PROTECTIVE DEVICE SERVING THE EQUIPMENT.
- A STRUT FRAME SHALL BE PROVIDED AT ALL LOCATIONS WHERE STRUCTURE WILL NOT ADEQUATELY SUPPORT EQUIPMENT, OR FOR FREESTANDING EQUIPMENT.
- THE CONTRACTOR SHALL WIRE ALL MECHANICAL AND FIRE ALARM EQUIPMENT SHOWN ON THE DRAWINGS. COORDINATE WITH MECHANICAL DRAWINGS.

PANELBOARDS:

- PROVIDE A NEW TYPEWRITTEN CIRCUIT DIRECTORY FOR EACH NEW PANEL AND REVISED FOR EXISTING PANELS.
- CIRCUIT NUMBERS SHOWN SHALL BE FOLLOWED. HOWEVER, CONTRACTOR IS RESPONSIBLE FOR BALANCING LOADS ON ALL PHASES AND MAY ALTER ASSIGNMENT OF CIRCUITS FOR BALANCING PHASES.

IDENTIFICATION:

- PROVIDE BLACK PHENOLIC IDENTIFICATION PLATES, WITH WHITE LETTERS ON ALL NEW AND EXISTING ELECTRICAL EQUIPMENT ATTACH WITH SUITABLE ADHESIVE.
- INSTALL NAMEPLATES ON ALL MAJOR EQUIPMENT, INCLUDING STARTERS, TRANSFORMERS, PANELBOARDS, DISCONNECT SWITCHES AND OTHER ELECTRICAL BOXES AND CABINETS INSTALLED UNDER THIS CONTRACT.
- APPLY CABLE/CONDUIT IDENTIFICATION MARKERS ON EACH CABLE AND CONDUCTOR IN EACH BOX, ENCLOSURE OR CABINET.

RECORD DRAWINGS:

- DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN A RECORD SET OF INSTALLATION PRINTS. HE SHALL NEATLY AND CLEARLY RECORD ON THESE PRINTS ALL DEVIATIONS FROM THE CONTRACT DRAWINGS IN SIZES, LOCATIONS AND DETAILS.
- UPON PROJECT COMPLETION, CONTRACTOR SHALL COMPLETE THE MARK UP OF ALL PROJECT DRAWINGS TO RECORD INSTALLED CONDITIONS AND SUBMIT TO ARCHITECT.

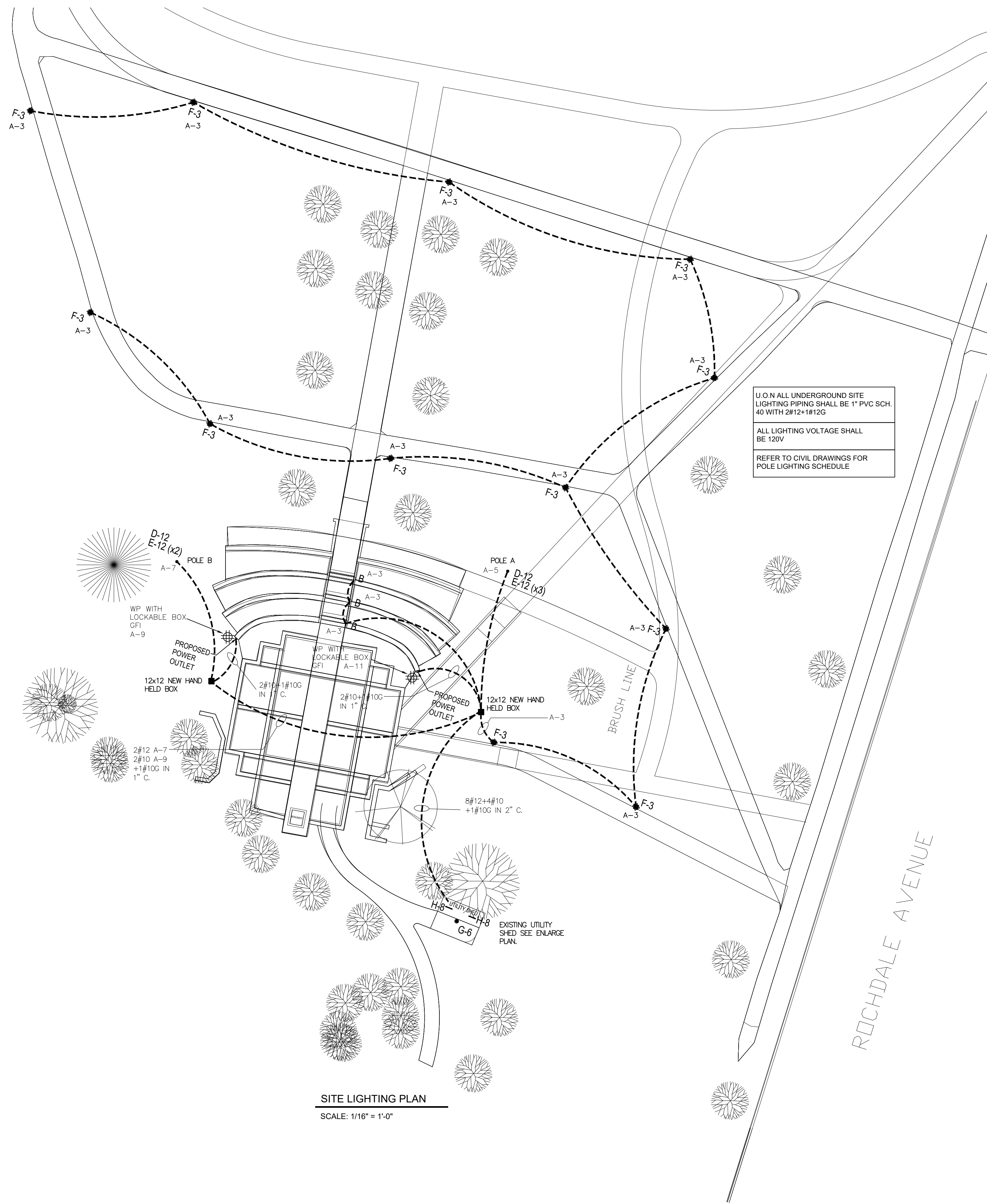
FDR AMPHITHEATER REHABILITATION
BOROUGH OF ROOSEVELT, NJ

ISSUE RECORD:

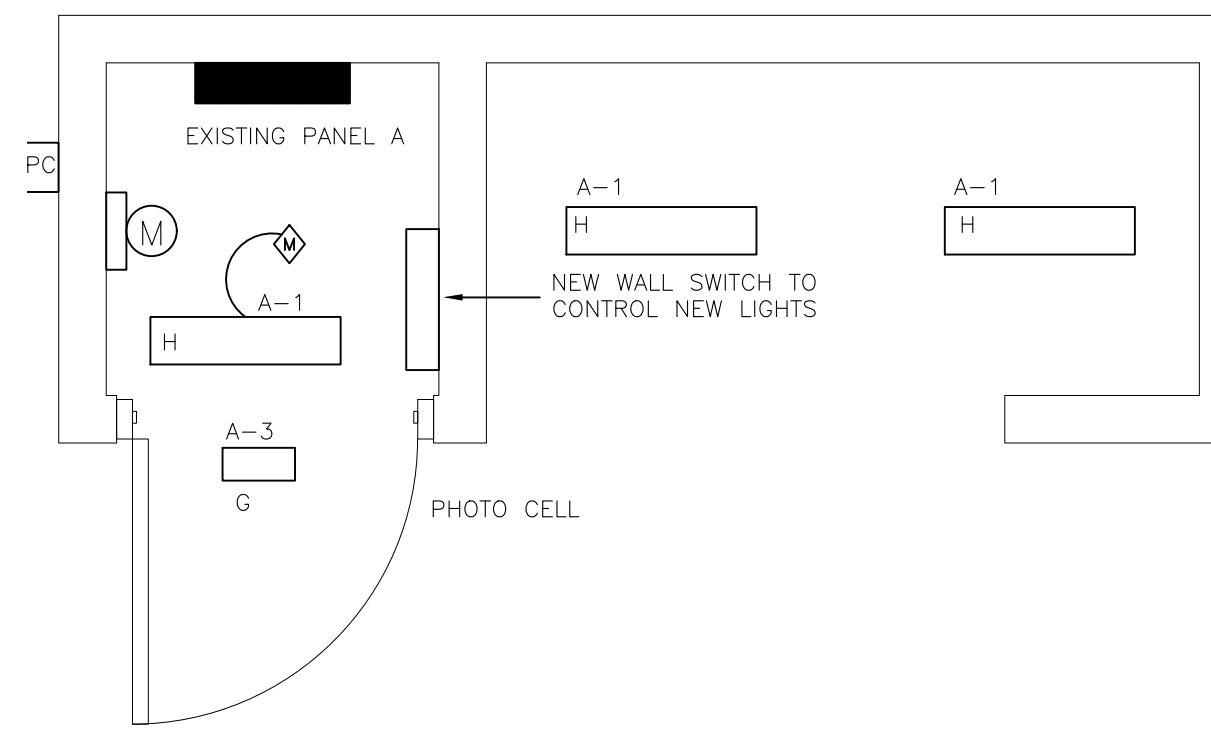
NO.	DATE	DESCRIPTION	BY
1	07-14-2024	REVIEW Submission	ETM

ETM ASSOCIATES L.L.C.
PUBLIC SPACE DESIGN
PUBLIC SPACE MANAGEMENT
PROJECT MANAGEMENT

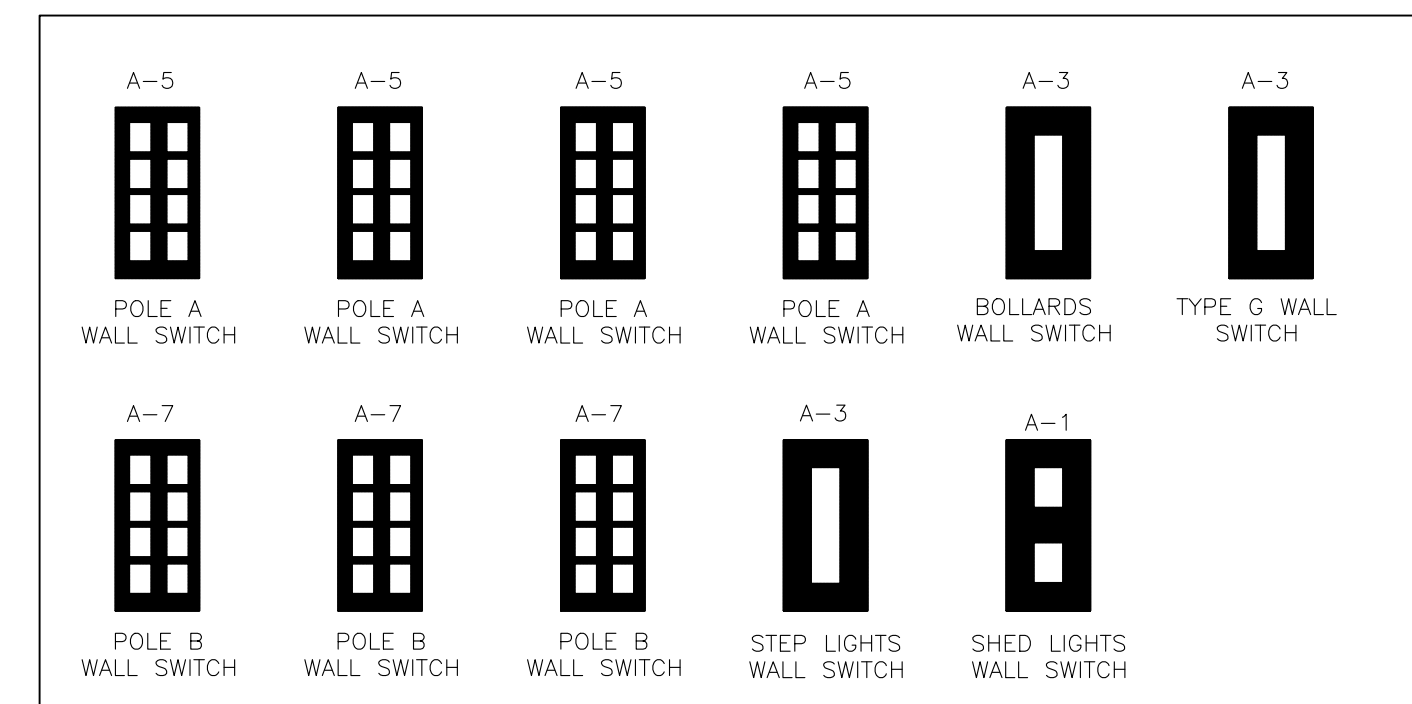
1202 Raritan Avenue
Highland Park, NJ 08904
t: 732 572 6606
f: 73



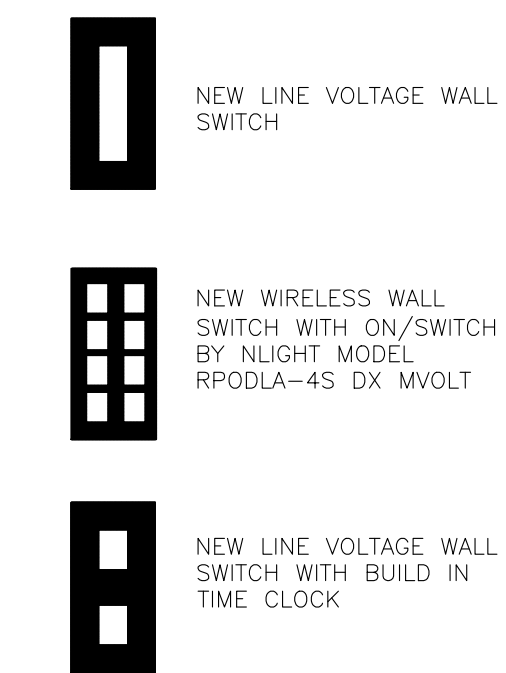
SITE LIGHTING PLAN
SCALE: 1/16" = 1'-0"



UTILITY SHED ENLARGE PLAN
SCALE: 1/2" = 1'-0"



WALL SWITCH BANK DETAIL



CIR. #	DESCRIPTION	EXISTING PANEL A 120/208 1Ø, 3W, 125A						(100A) MAIN CIRCUIT BREAKER		
		# OF POLES	C.B.	LOAD	AØ	BØ	LOAD	C.B.	# OF POLES	DESCRIPTION
1	LIGHTS	1	20	0	-	-	20	1	EXISTING	2
3	BOLLARDS AND STEP LIGHTS	*1	20	250	-	250	20	1	OUTLET SHED	4
5	POLE A LIGHTS	*1	20	112	-	-	-	-	-	6
7	POLE B LIGHTS	*1	20	84	84	-	-	-	-	8
9	POWER OUTLET	*1	20	180	-	180	60	2	SIREN	10
11	POWER OUTLET	*1	20	180	-	-	-	-	-	12
TOTAL LOAD PER PHASE				84	430					

* NEW CIRCUIT BREAKER IN EXISTING SPACE

FDR AMPHITHEATER REHABILITATION

BOROUGH OF ROOSEVELT, NJ

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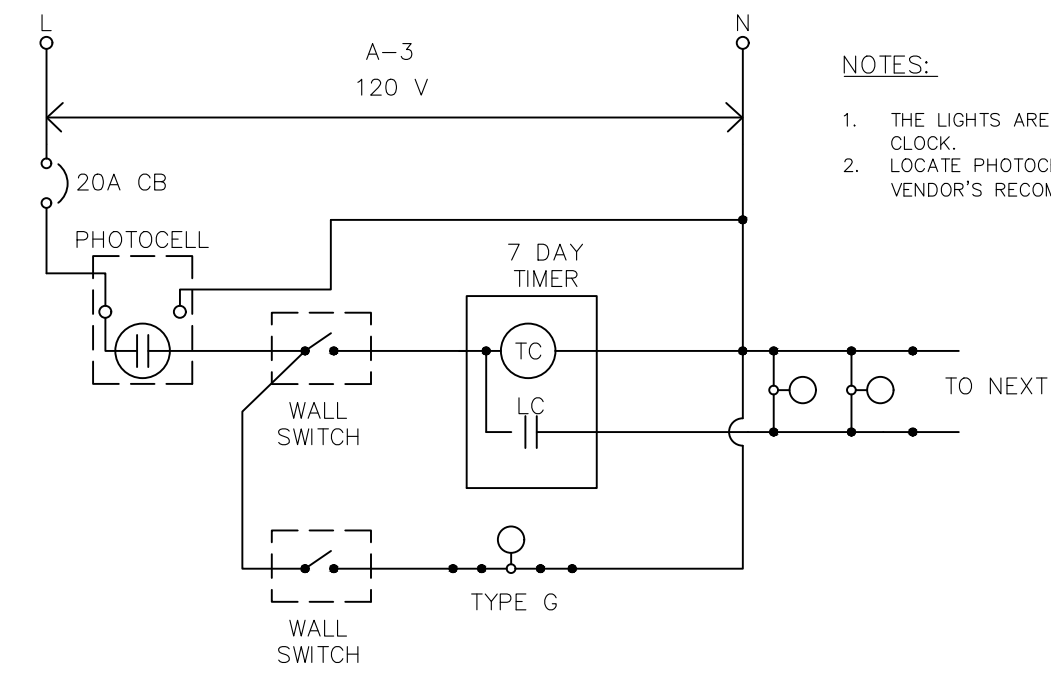
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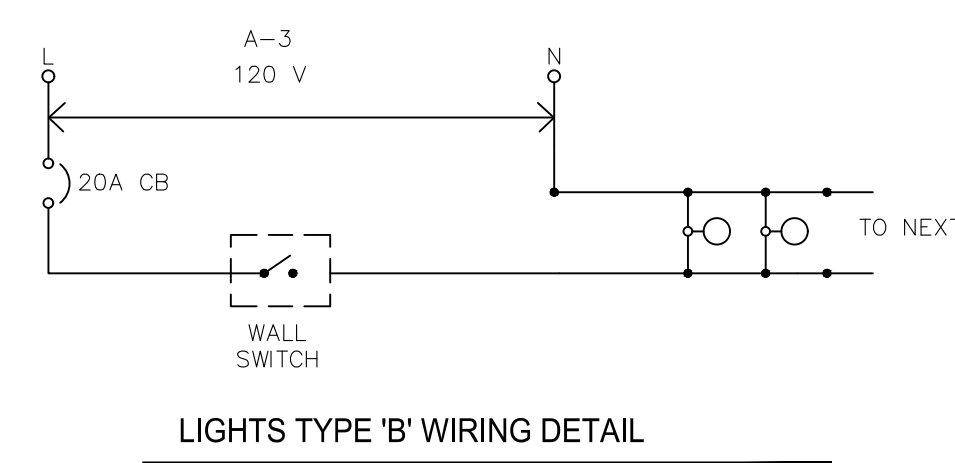
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E. TIMOTHY MARSHALL
AS00072

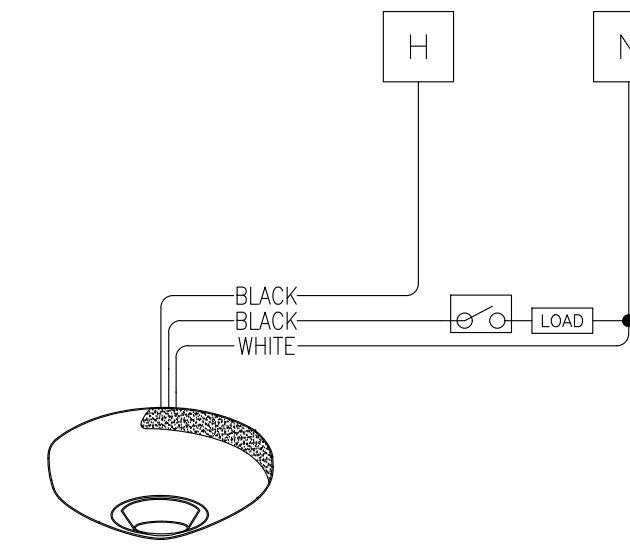


BOLLARDS LIGHTS TYPE 'F' TIME CLOCK DETAIL

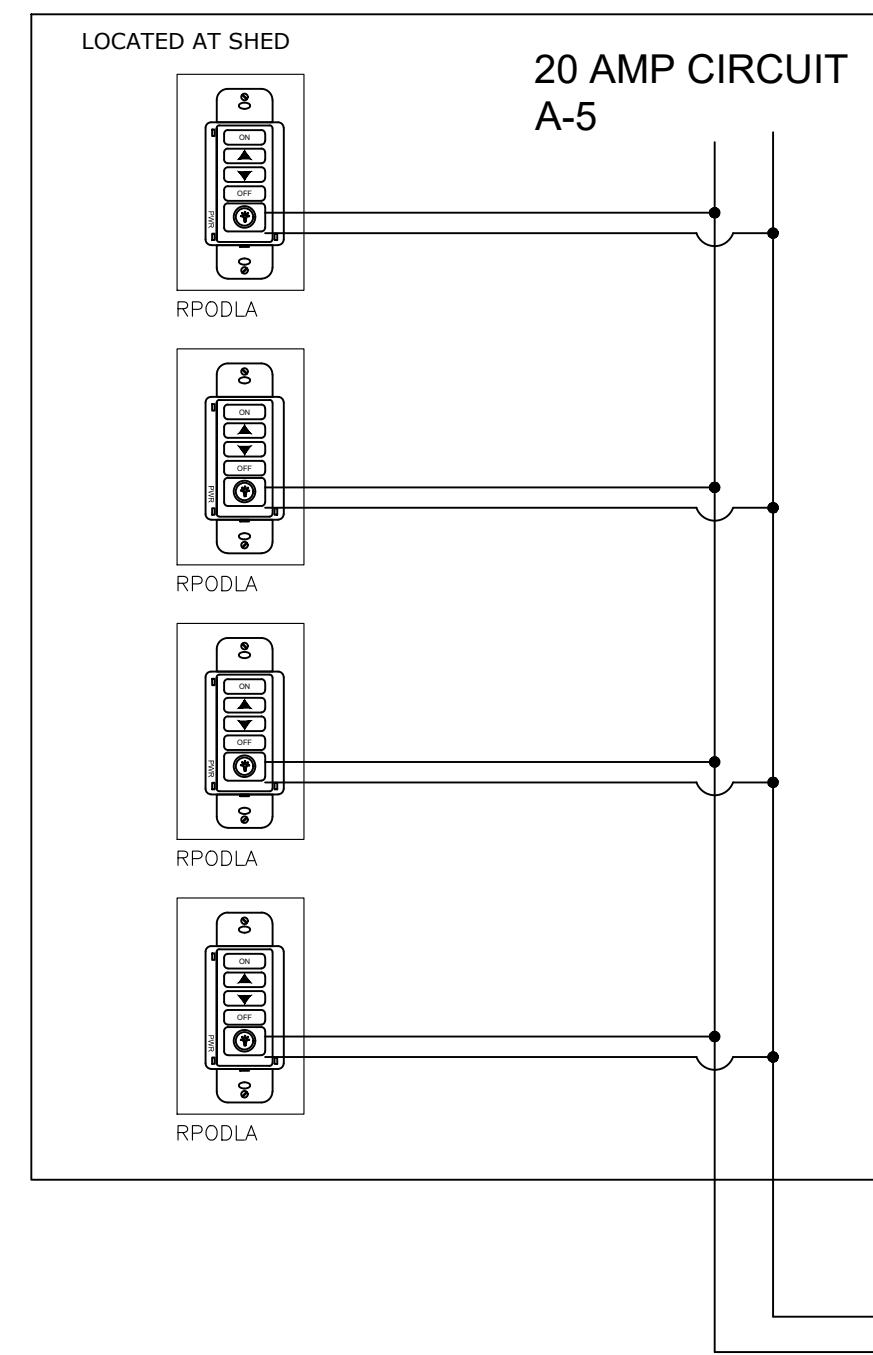
- NOTES:
1. THE LIGHTS ARE TURNED "ON" BY THE PHOTOCELL AND "OFF" BY TIME CLOCK.
 2. LOCATE PHOTOCELL OUTDOORS AT A LOCATION SUITABLE FOR VENDOR'S RECOMMENDED FUNCTION.



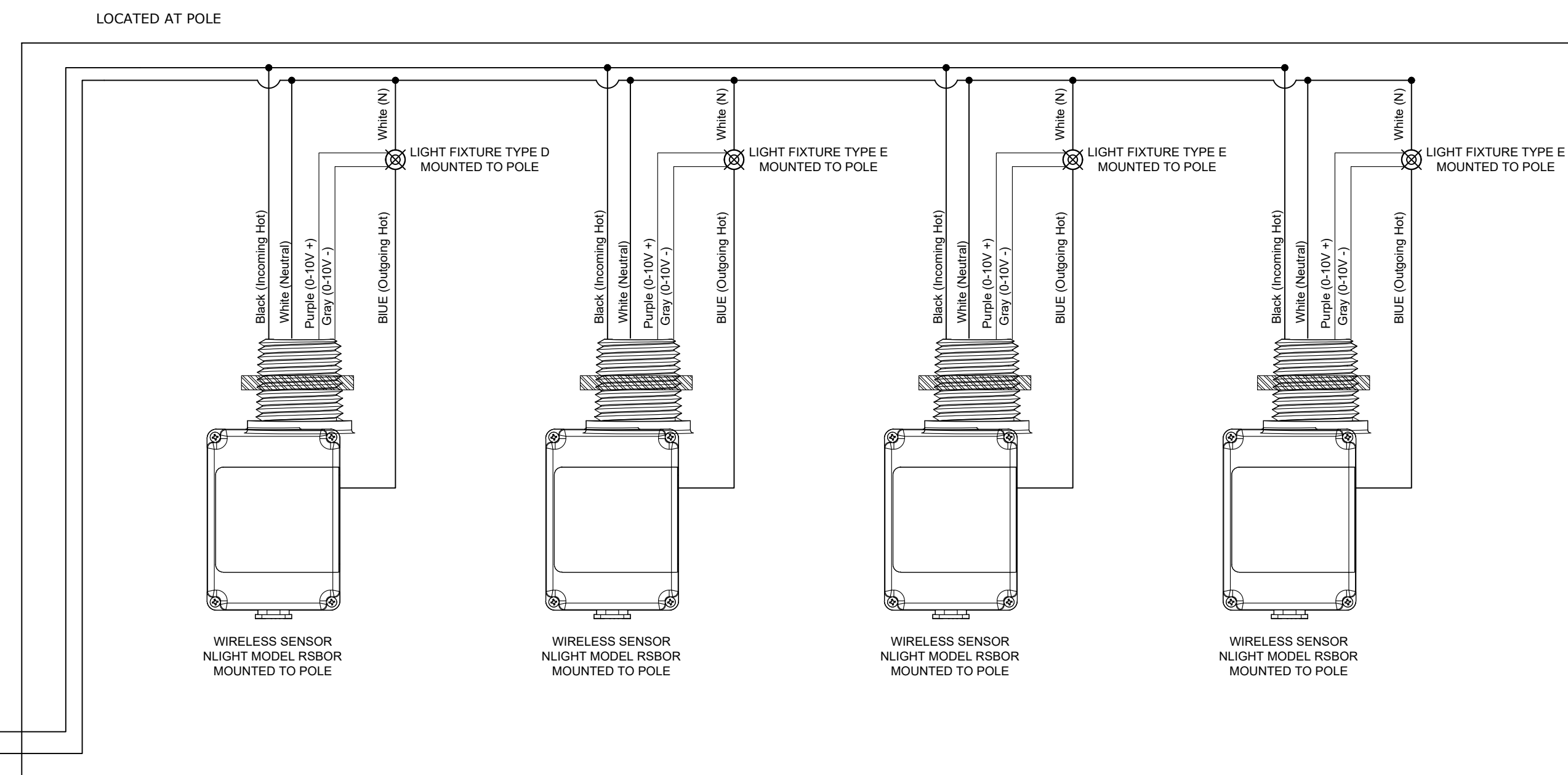
LIGHTS TYPE 'B' WIRING DETAIL



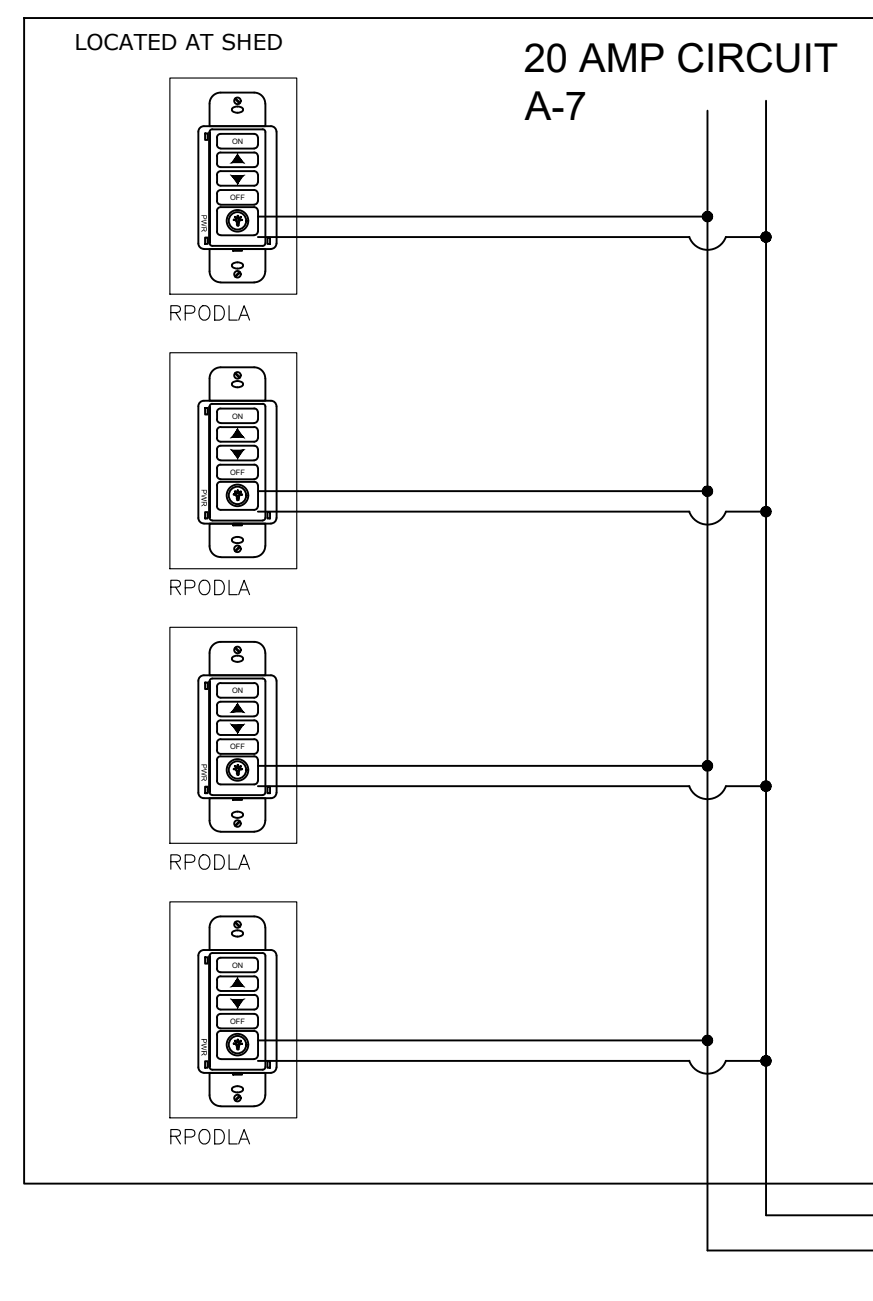
LINE VOLTAGE OCC SENSOR WIRING DIAGRAM



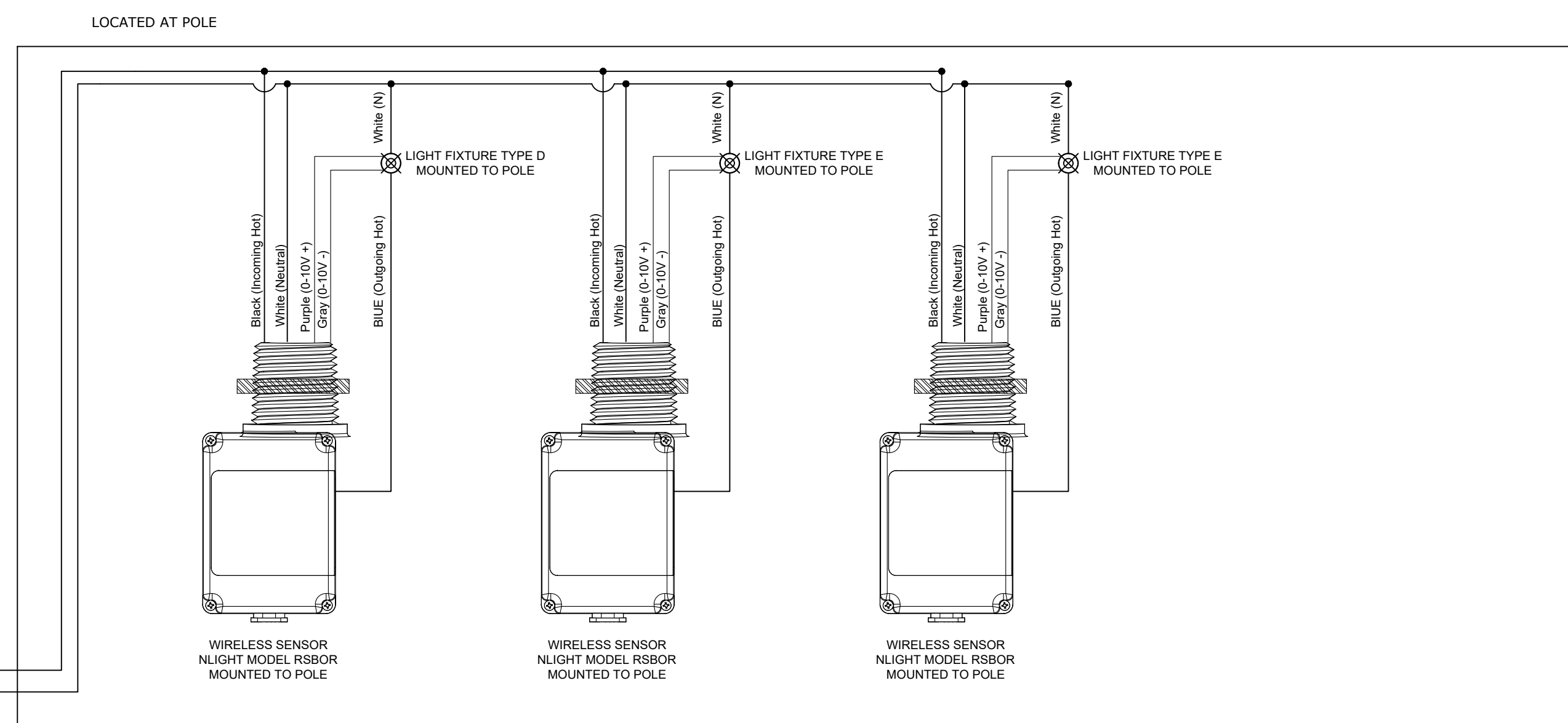
20 AMP CIRCUIT A-5



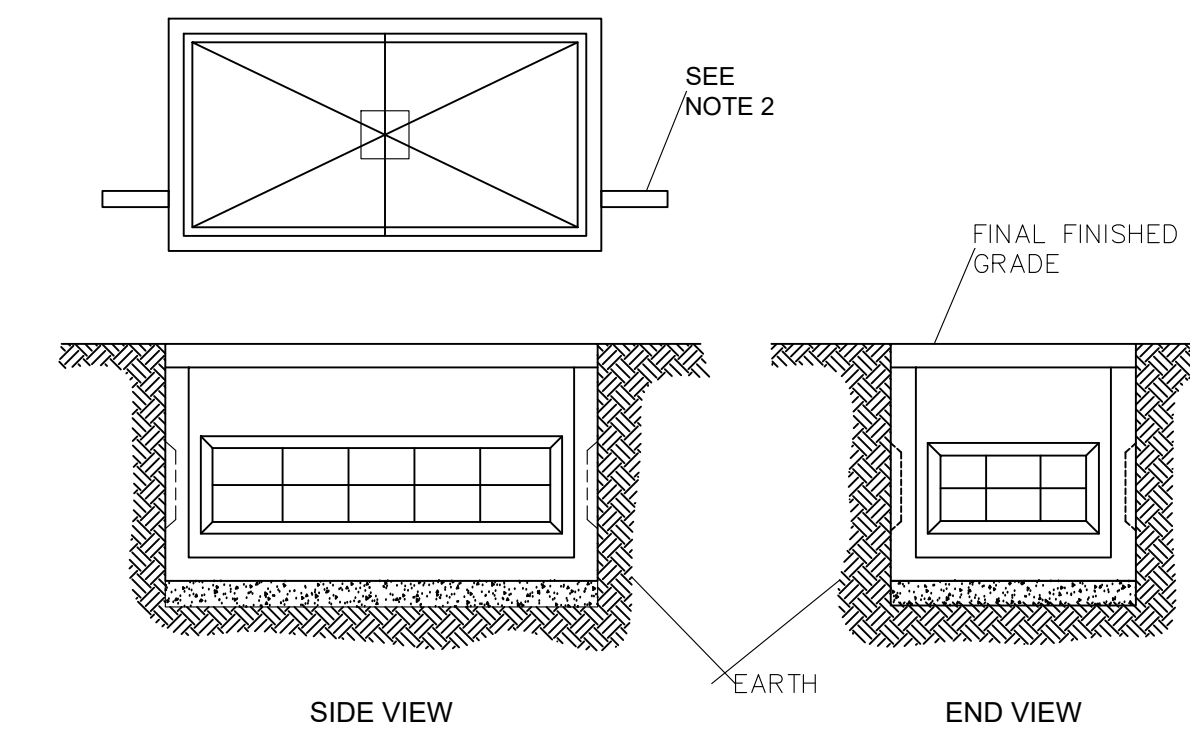
POLE 'A' LIGHTS WIRING DETAIL



20 AMP CIRCUIT A-7



POLE 'B' LIGHTS WIRING DETAIL



NOTES FOR HAND HOLD

1. UNITS SHALL HAVE CONDUIT KNOCKOUT PANELS ON EACH OF THE FOUR SIDES.
2. CONDUITS SHALL ENTER BOX IN CORNER IN ORDER TO ALLOW FOR CABLE LOOP.
3. UNIT SHALL BE SET FLUSH WITH FINISHED GRADE.
4. UNIT SHALL BE INSTALLED ON A 4" MIN. BED OF CRUSHED STONE.
5. CONDUITS REQUIRE BELL ENDS AND SHALL BE TERMINATED FLUSH WITH THE INSIDE SURFACE OF THE PRECAST PULLBOX.
6. CONDUIT AND HAND HOLD SHALL BE PROVIDED BY CONTRACTOR.
7. ALL OPENINGS SHALL BE SEALED WITH MORTAR.
8. HAND HOLD SHALL BE LISTED AND LABELED AS PER NEC.

HAND HOLD DETAIL

FDR AMPHITHEATER REHABILITATION

BOROUGH OF ROOSEVELT, NJ

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E. TIMOTHY MARSHALL
AS00072

DRAWING TITLE
ELECTRICAL DETAILS

SHEET NO.
E-201

ITEM NO.	PROJECT BID ESTIMATE ITEM DESCRIPTION	UNIT	UNIT PRICE	QTY	AMOUNT	COMMENTS
General Requirements						
1	Mobilization (Assume 6% of Base Bid Items)	LS	\$ 27,072.54		\$ 27,072.54	
2	Permit Fees	LS	\$ 5,000.00	1	\$5,000.00	SESC, Building/Electrical
3	SESC Permit Fees	LS	\$ 1,770.00	1	\$1,770.00	Manterra to confirm
4	Building Permit Fees (Electrical)	LS	\$ 2,500.00	1	\$2,500.00	Manterra to confirm
Demolition/Removals and Earthwork						
5	Soil erosion and sediment control	LS	\$ 10,000.00	1	\$10,000.00	Perimeter and inlet protection
6	Tree protection fencing	LF	\$ 4.50	350	\$1,575.00	
7	Temporary construction fencing	LF	\$ 9.00	400	\$3,600.00	
8	Demolition and removals	LS	\$ 24,000.00	1	\$24,000.00	Concrete paving and lighting elements
9	Salvage and clean brick from paving/walls for reuse on wall repairs	EA	\$ 7.00	925	\$6,475.00	Estimated Qty (use new if needed)
10	Unclassified excavation	LS	\$ 1.00	1	\$12,000.00	Includes carting
11	Grading	LS	\$ 10,000.00	1	\$10,000.00	Rough and final grading
Hardscapes and Site Features						
12	Asphalt paving with base (full depth)	SY	\$ 71.00	64	\$4,544.00	All other areas
13	Mill and resurface asphalt pathways	SY	\$ 70.00	532	\$37,240.00	All other areas
14	Wet-set brick paving (includes all base construction)	SY	\$ 450.00	72	\$32,400.00	
15	Engraved bluestone paving inlay (engrave + install (includes base))	LS	\$ 6,800.00	1	\$6,800.00	6'-8"x1'-4" Stone Paver inlay
16	Concrete pavement (exposed aggregate)	SY	\$ 230.00	253	\$58,190.00	Exposed Aggregate
17	Repoint existing brick wall	SF	\$ 35.00	1050	\$36,750.00	
18	Repair existing brick wall (INDIVIDUAL/SMALL SCALE)	BRICK	\$ 65.00	925	\$60,125.00	INCLUDES RMVL + BRICK PREP/REPOINTING
19	REBRICK EXISTING STEPS (Includes removal + salvage)	SF	\$ 45.00	90	\$4,050.00	
20	Resurface concrete on freestanding wall backing (approx 3-4")	SF	\$ 50.00	120	\$6,000.00	
21	Monument protection (plywood enclosure)	LS	\$ 4,500.00	1	\$4,500.00	
Planting						
22	Evergreen trees (Balled and Burlapped, 8-10' tall)	EA	\$ 2,100.00	1	\$2,100.00	
23	Topsoil for planting and turf restoration areas	CY	\$ 65.00	12	\$780.00	
24	Shrubs - Medium (#9 container or Balled and burlapped)	EA	\$ 230.00	3	\$690.00	
25	Shrubs - Large (large container or Balled and burlapped)	EA	\$ 360.00	3	\$1,080.00	
26	Mulch	CY	\$ 180.00	1.5	\$270.00	3" layer
27	Turfgrass (sod)	SF	\$ 4.00	230	\$920.00	
28	Turfgrass (hydroseed)	SY	\$ 15.00	570	\$8,550.00	
Electrical Utilities and Lighting						
29	Connect to existing supply + controls	LS	\$ 12,000.00	1	\$12,000.00	Complete installation and setup
30	Utility Power Pedestals	EA	\$ 1,300.00	2	\$2,600.00	Includes all wiring/trenching/footings
31	Bollard lighting	EA	\$ 4,300.00	12	\$51,600.00	Includes all wiring/trenching/footings
32	Pole lighting (2 poles with multiple fixtures)	LS	\$ 38,000.00	1	\$38,000.00	Includes all wiring/trenching/footings
33	In-step lighting	EA	\$ 1,300.00	3	\$3,900.00	Includes all wiring and trenching
34	Utility shed lighting	LS	\$ 1,200.00	1	\$1,200.00	See Lighting/Electical Plan
Allowances						
35	Brick Repair Allowance	LS	\$ 15,000.00	1	\$15,000.00	Assumes 25% of base bid
36	Wall Structural Allowance	LS	\$ 25,000.00	1	\$25,000.00	Unforeseen structural repair allowance
Subtotal.....					\$ 518,281.54	
10% Construction Contingency					\$51,828.15	
Total.....					\$570,109.69	