SCOPE OF WORK

EV Charging Hub at DOC Central Office

1300 Stuyvesant Avenue
Trenton, Mercer County, NJ

Project No. A1417-00

STATE OF NEW JERSEY

Honorable Philip D. Murphy, Governor
Honorable Tahesha L. Way, Lt. Governor

DEPARTMENT OF THE TREASURY

Elizabeth Maher Muoio, Treasurer

DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION

Christopher Chianese, Director

Date: October 24, 2024

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I. OBJECTIVE

The objective of this project is to install sixteen (16) dual head level 2 charging stations at the DOC Central Office parking lot in Trenton. A feasibility study prepared by Concord Engineering Group, dated May 2024, will be made available to the consultant.
See **Exhibit 'B'** for the project site location map.

II. CONSULTANT QUALIFICATIONS

A. CONSULTANT & SUB-CONSULTANT PRE-QUALIFICATIONS

The Consultant shall be a firm pre-qualified with the Division of Property Management & Construction (DPMC) in the following discipline(s):

- **P002 Electrical Engineering**

The Consultant shall also have in-house capabilities or Sub-Consultants pre-qualified with DPMC in:

- **P003 Civil Engineering**

As well as, **any and all** other Architectural, Engineering and Specialty Disciplines necessary to complete the project as described in this Scope of Work (SOW).

III. PROJECT BUDGET

A. CONSTRUCTION COST ESTIMATE (CCE)

The initial Construction Cost Estimate (CCE) for this project is $455,765.

The Consultant shall review this Scope of Work and provide a narrative evaluation and analysis of the accuracy of the proposed project CCE in its technical proposal based on its professional experience and opinion.

B. CURRENT WORKING ESTIMATE (CWE)

The Current Working Estimate (CWE) for this project is $619,841.

The CWE includes the construction cost estimate and all consulting, permitting and administrative fees.

The CWE is the client agency's financial budget based on this project Scope of Work and shall not be exceeded during the design and construction phases of the project unless DPMC approves the change in Scope of Work through a Contract amendment.

C. CONSULTANT'S FEES

The construction cost estimate for this project ***shall not*** be used as a basis for the Consultant's design and construction administration fees. The Consultant's fees shall be based on the information contained in this Scope of Work document and the observations made and/or the additional information received during the pre-proposal meeting.

IV. PROJECT SCHEDULE

A. SCOPE OF WORK DESIGN & CONSTRUCTION SCHEDULE

The following schedule identifies the estimated design and construction phases for this project and the estimated durations.

PROJECT PHASE	ESTIMATED DURATION (Calendar Days)
1. Site Access Approvals & Schedule Design Kick-off Meeting	**14**
2. Design Development Phase	**42**
• *Project Team & DPMC Plan/Code Unit Review & Comment*	14
3. Final Design Phase	**42**
• *Project Team & DPMC Plan/Code Unit Review & Approval*	14
4. Final Design Re-Submission to Address Comments	**7**
• *Project Team & DPMC Plan/Code Unit Review & Approval*	14
5. DCA Submission Plan Review	**30**
6. Permit Application Phase	**7**
• *Issue Plan Release*	
7. Bid Phase	**42**
8. Award Phase	**28**
9. Construction Phase	**360***

10. Project Close Out Phase **30**

B. CONSULTANT'S PROPOSED DESIGN & CONSTRUCTION SCHEDULE

*Equipment lead times, such as transformers and panel boards, are expected to be 12 to 15 months. Construction phase duration to be adjusted accordingly dependent upon equipment lead times.

The Consultant shall submit a project design and construction schedule with its technical proposal that is similar in format and detail to the schedule depicted in **Exhibit 'A'**. The schedule developed by the Consultant shall reflect its recommended project phases, phase activities, activity durations.

A written narrative shall also be included with the technical proposal explaining the schedule submitted and the reasons why and how it can be completed in the time frame proposed by the Consultant.

This schedule and narrative will be reviewed by the Consultant Selection Committee as part of the evaluation process and will be assigned a score commensurate with clarity and comprehensiveness of the submission.

V. PROJECT SITE LOCATION & TEAM MEMBERS

A. PROJECT SITE ADDRESS

The location of the project site is:

DOC Central Office
1300 Stuyvesant Avenue
Trenton, NJ 08618

See **Exhibit 'B'** for the project site location map.

B. PROJECT TEAM MEMBER DIRECTORY

The following are the names, addresses, and phone numbers of the Project Team members.

1. DPMC Representative:

Name:	William Golubinski, Manager Energy Initiatives Unit
Address:	Division of Property Management & Construction 20 West State Street, 3rd Floor P.O. Box 235 Trenton, NJ 08625
Phone No:	(609) 306-9854
E-Mail:	william.golubinski@treas.nj.gov

2. Department of Treasury Representative:

Name:	Amanda Truppa, Director, Division of Administration Department of Treasury
Address:	Division of Administration P.O. Box 211 Trenton, NJ 08625-0211
Phone No:	(609)633-2826
E-Mail:	Amanda.Truppa@treas.nj.gov

3. Department of Corrections:

Name:	David Wiszniewski, Project Manager Department of Corrections
Address:	Whittlesey Road, PO Box 863 West Trenton, NJ 08625
Phone No:	(609) 292-4036 ext. 5431/ (908) 884-3889
E-Mail:	David.Wiszniewski@doc.nj.gov

VI. PROJECT DEFINITION

A. BACKGROUND

On January 17, 2020, Governor Phil Murphy signed comprehensive legislation (S2252) that establishes goals and incentives for the increased use of plug-in electric vehicles and infrastructure in New Jersey. NJ law will require 25% of state-owned non-emergency light duty vehicles to be plug in electric vehicles by 2025 and for 100% of vehicles to be plug in EV's by 2035. To meet these requirements, the State of New Jersey has initiated several projects to install EV chargers at various locations. One of those locations is at the DOC Central Office at 1300 Stuyvesant Avenue, Trenton, New Jersey.

The NJ Department of Property Management and Construction procured the services of Concord Engineering Group to provide a feasibility study to add EV charging stations to the site. The study is shown in **Exhibit 'C'**.

The Division of Purchase and Property (DPP), under the State of New Jersey Treasury Department, has a working contract for the purchase of equipment with associated service contracts. Term Contract T3138 Electric Vehicle Service Equipment – Statewide is the title of the contract. The service agreement as part of the term contract with DPP enables the sharing of data even if a state vehicle uses a commercial charger (like the ones by eVgo or Chargepoint located throughout the State). Chargers shall be networked. "Dumb" chargers with no network capabilities will not be used. Chargepoint equipment will be the basis of design.

B. FUNCTIONAL DESCRIPTION OF THE SITE

The Department of Corrections Headquarters (DOC) is located at 1300 Stuyvesant Avenue in Trenton New Jersey.

The existing campus primary 4,160-volt service (Meter #9212924D) is derived from an existing PSE&G Pole #63806TN located along Stuyvesant Avenue adjacent to the campus main entrance. The 4,160-volt service is routed underground through utility owned Manholes to a centrally located building on campus and terminates in a 4-compartment paralleling switchgear style arrangement allowing for transfer between normal and emergency source. The campus emergency source is derived from a 240kW Diesel Fired Generator with Day Tank located on exterior of the building.

Location #1, the Parking area adjacent to the Stokes building is approximately 72,00 Square Feet, accommodates ±242 vehicles and is currently utilized for general employee parking.

Location #2, the Parking area adjacent to the Colpitts building is approximately 52,500 Square Feet, accommodates ±130 vehicles and is currently utilized for general employee parking, fleet vehicles, trailers, and oversized trucks.

However, DOC will exclude location #2 due to excessive underground primary service costs.

This project will be eligible for multiple EV incentives under programs by the utility company (PSEG) and NJ DEP.

At least 5% of the charging parking spaces to receive a level 2 charger shall be made accessible for people with disabilities. One of the level 3 charging spots shall be accessible. See the following link for guidelines.

https://dep.nj.gov/wp-content/uploads/drivegreen/ippi/accessibilityguidelines.pdf

VII. CONSULTANT DESIGN RESPONSIBILITIES

A. DESIGN REQUIREMENTS

The Consultant shall review the feasibility study by Concord Engineering Group shown in **Exhibit 'C'** as a guide and provide design, specification, permit, bid/award and construction administration services to install sixteen (16) dual head level 2 charging stations at the DOC Central Office parking lot in Trenton. This is expected to include a new 1,200 Ampere 208/120V, 3 phase, 4 wire service to support proposed installation of (16) Level 2 Dual Chargers on campus. The overall service size requested takes into consideration future additional chargers that may be implemented by the DOC in the same parking area.

The Consultant shall be responsible for the following:

Coordination with utility company for new services as required.
Load calculations for use in designing load center, switchgear, distribution equipment etc.
Pedestal details to support charging stations.
Restriping of parking spaces as necessary.
Appropriate signage indicating EV charging spaces.
Restoration details.
Bollard design for charger protection.
Design of fencing repairs/modifications for isolation of pedestrian walkways and security.

At least five percent (5%) of the parking spaces served by the new EV chargers shall be accessible for people with disabilities.

B. DESIGN MEETINGS & PRESENTATIONS

1. Design Meetings:

Conduct the appropriate number of review meetings with the Project Team members during each design phase of the project so they may determine if the project meets their requirements, question any aspect of the contract deliverables, and make changes where appropriate. The Consultant shall describe the philosophy and process used in the development of the design criteria and the various alternatives considered to meet the project objectives. Selected studies, sketches, cost estimates, schedules, and other relevant information shall be presented to support the design solutions proposed. Special considerations shall also be addressed such as: Contractor site access limitations, utility shutdowns and switchover coordination, phased construction and schedule requirements, security restrictions, available swing space, material and equipment delivery dates, etc.

It shall also be the responsibility of the Consultant to arrange and require all critical Sub-Consultants to be in attendance at the design review meetings.

Record the minutes of each design meeting and distribute within three (3) calendar days to all attendees and those persons specified to be on the distribution list by the Project Manager.

2. Design Presentations:

The minimum number of design presentations required for each phase of this project is identified below for reference:

Design Development Phase: One (1) oral presentation at phase completion.

Final Design Phase: One (1) oral presentation at phase completion.

C. EXISTING DOCUMENTATION

Copies of the following documents will be provided to each Consulting firm at the pre-proposal meeting to assist in the bidding process.

- **C0084-00 - Transformer Replacements.**
- **C0623-02 - Emergency Generator Replacement.**
- **DOC HQ Power Distribution Site Plan.**
- **DOC HQ one line.**

Review these documents and any additional information that may be provided at a later date such as reports, studies, surveys, equipment manuals, as-built drawings, etc. The State does not attest to the accuracy of the information provided and accepts no responsibility for the consequences of

errors by the use of any information and material contained in the documentation provided. It shall be the responsibility of the Consultant to verify the contents and assume full responsibility for any determination or conclusion drawn from the material used. If the information provided is insufficient, the Consultant shall take the appropriate actions necessary to obtain the additional information required.

All original documentation shall be returned to the provider at the completion of the project.

VIII. PERMITS & APPROVALS

A. NJ UNIFORM CONSTRUCTION CODE PLAN REVIEW AND PERMIT

The project construction documents must comply with the latest adopted edition of the NJ Uniform Construction Code (NJUCC).

The latest NJUCC Adopted Codes and Standards can be found at:

http://www.state.nj.us/dca/divisions/codes/codreg/

1. NJ Uniform Construction Code (NJUCC) Plan Review

Consultant shall estimate the cost of the NJUCC Plan Review by DCA and include that amount in their fee proposal line item entitled **"Plan Review and Permit Fee Allowance"**, refer to paragraph X.A.

Upon approval of the Final Design Phase Submission by DPMC, the Consultant shall submit the construction documents to the Department of Community Affairs (DCA), Bureau of Construction Project Review to secure a complete plan release.

As of July 25, 2022, the Department of Community Affairs (DCA) is only accepting digital signatures and seals issued from a third party certificate authority.

Procedures for submission to the DCA Plan Review Unit can be found at:

https://www.state.nj.us/dca/divisions/codes/forms/pdf_bcpr/pr_app_guide.pdf

Consultant shall complete the "Project Review Application" and include the following on Block 5 as the "Owner's Designated Agent Name":

Trevor M. Dittmar, DPMC
PO Box 235
Trenton, NJ 08625-0235

Trevor.Dittmar@treas.nj.gov 609-984-5529

The Consultant shall complete the NJUCC "Plan Review Fee Schedule", determine the fee due and pay the NJUCC Plan Review fees, refer to Paragraph X.A.

The NJUCC "Plan Review Fee Schedule" can be found at:

http://www.state.nj.us/dca/divisions/codes/forms/pdf_bcpr/pr_fees.pdf

2. NJ Uniform Construction Code Permit

Upon receipt of a complete plan release from the DCA Bureau of Construction Project Review, the Consultant shall complete the NJUCC permit application and all applicable technical sub-code sections. The "Agent Section" of the application and certification section of the building sub-code section shall be signed. These documents, with **six (6) sets of DCA approved, signed and sealed construction documents** shall be forwarded to the DPMC Project Manager.

The Consultant may obtain copies of all NJUCC permit applications at the following website:

https://www.nj.gov/dca/divisions/codes/resources/constructionpermitforms.html

All other required project permits shall be obtained and paid for by the Consultant in accordance with the procedures described in Paragraph VIII.B.

3. Prior Approval Certification Letters:

The issuance of a construction permit for this project may be contingent upon acquiring various "prior approvals" as defined by N.J.A.C. 5:23-1.4. It is the Consultant's responsibility to determine which prior approvals, if any, are required. The Consultant shall submit a general certification letter to the DPMC Plan & Code Review Unit Manager during the Permit Phase of this project that certifies all required prior approvals have been obtained.

In addition to the general certification letter discussed above, the following specific prior approval certification letters, where applicable, shall be submitted by the Consultant to the DPMC Plan & Code Review Unit Manager: Soil Erosion & Sediment Control, Water & Sewer Treatment Works Approval, Coastal Areas Facilities Review, Compliance of Underground Storage Tank Systems with N.J.A.C. 7:14B, Pinelands Commission, Highlands Council, Well Construction and Maintenance; Sealing of Abandoned Wells with N.J.A.C. 7:9D, Certification that all utilities have been disconnected from structures to be demolished, Board of Health Approval for Potable Water Wells, Health Department Approval for Septic Systems. It shall be noted that in accordance with N.J.A.C. 5:23-2.15(a)5, a permit cannot be issued until the letter(s) of certification is received.

4. Multi-building or Multi-site Permits:

A project that involves many buildings and/or sites requires that a separate permit shall be issued for each building or site. The Consultant must determine the construction cost estimate for *each* building and/or site location and submit that amount where indicated on the permit application.

5. Special Inspections:

In accordance with the requirements of the New Jersey Uniform Construction Code N.J.A.C. 5:23-2.20(b), Bulletin 03-5 and Chapter 17 of the International Building Code, the Consultant shall be responsible for the coordination of all special inspections during the construction phase of the project.

Bulletin 03-5 can be found at:

http://www.state.nj.us/dca/divisions/codes/publications/pdf_bulletins/b_03_5.pdf

a. Definition:

Special inspections are defined as an independent verification by a certified special inspector for **Class I buildings and smoke control systems in any class building**. The special inspector is to be independent from the Contractor and responsible to the Consultant so that there is no possible conflict of interest.

Special inspectors shall be certified in accordance with the requirements in the New Jersey Uniform Construction Code.

b. Responsibilities:

The Consultant shall submit with the permit application, a list of special inspections and the agencies or special inspectors that will be responsible to carry out the inspections required for the project. The list shall be a separate document, on letter head, signed and sealed.

B. OTHER REGULATORY AGENCY PERMITS, CERTIFICATES AND APPROVALS

The Consultant shall identify and obtain all other State Regulatory Agency permits, certificates, and approvals that will govern and affect the work described in this Scope of Work. An itemized list of these permits, certificates, and approvals shall be included with the Consultant's Technical Proposal and the total amount of the application fees should be entered in the Fee Proposal line item entitled, **"Plan Review and Permit Fee Allowance."**

The Consultant may refer to the Division of Property Management and Construction "Procedures for Architects and Engineers Manual", Paragraph "**9. REGULATORY AGENCY APPROVALS"** which presents a compendium of State permits, certificates, and approvals that may be required for this project.

The Consultant shall determine the appropriate phase of the project to submit the permit application(s) in order to meet the approved project milestone dates.

Where reference to an established industry standard is made, it shall be understood to mean the most recent edition of the standard unless otherwise noted. If an industry standard is found to be revoked, or should the standard have undergone substantial change or revision from the time that the Scope of Work was developed, the Consultant shall comply with the most recent edition of the standard.

IX. ENERGY REBATE AND INCENTIVE PROGRAMS

The Consultant shall review any and all programs on the State and Federal level to determine if any proposed upgrades to the mechanical and/or electrical equipment and systems for this project qualify for approved rebates and incentives.

The Consultant shall review the programs available on the "New Jersey's Clean Energy Program" website at: http://www.njcleanenergy.com as well as federal websites and New Jersey electric and gas utility websites to determine if and how they can be applied to this project.

The Consultant shall identify all applicable rebates and incentives in their technical proposal and throughout the design phase.

The Consultant shall be responsible to complete the appropriate registration forms and applications, provide any applicable worksheets, manufacturer's specification sheets, calculations, attend meetings, and participate in all activities with designated representatives of the programs and utility companies to obtain the entitled financial incentives and rebates for this project.
All costs associated with this work shall be estimated by the Consultant and the amount included in the base bid of its fee proposal.

X. ALLOWANCES

A. PLAN REVIEW AND PERMIT FEE ALLOWANCE

The Consultant shall obtain and pay for all of the project permits in accordance with the guidelines identified below.

1. Permits:

The Consultant shall determine the various permits, certificates, and approvals required to complete this project.

2. Permit Costs:

The Consultant shall estimate the application fee costs for all of the required project permits, certificates, and approvals (excluding the NJ Uniform Construction Code permit) and include that amount in its fee proposal line item entitled **"Plan Review and Permit Fee Allowance"**. A breakdown of each permit and application fee shall be attached to the fee proposal for reference.

NOTE: The NJ Uniform Construction Code permit is excluded since it will be paid for by the State.

3. Applications:

The Consultant shall complete and submit all permit applications to the appropriate permitting authorities and the costs shall be paid from the Consultant's permit fee allowance. A copy of the application(s) and the original permit(s) obtained by the Consultant shall be given to the DPMC Project Manager for distribution during construction.

4. Consultant Fee:

The Consultant shall determine what is required to complete and submit the permit applications, obtain supporting documentation, attend meetings, etc., and include the total cost in the base bid of its fee proposal under the "Permit Phase" column.

Any funds remaining in the permit allowance will be returned to the State at the close of the project.

XI. SOW SIGNATURE APPROVAL SHEET

This Scope of Work shall not be considered a valid document unless all signatures appear in each designated area below.

The client agency approval signature on this page indicates that they have reviewed the design criteria and construction schedule described in this project Scope of Work (including the subsequent contract deliverables and exhibits) and verifies that the work will not conflict with the existing or future construction activities of other projects at the site.

SOW PREPARED BY: Lucy Ibrahim 10/24/2024

LUCY IBRAHIM, PROJECT MANAGER DATE
DPMC PROJECT PLANNING & INITIATION

SOW APPROVED BY: James Wright 10/24/2024

JAMES WRIGHT, MANAGER DATE
DPMC PROJECT PLANNING & INITIATION

SOW APPROVED BY: WillGolli 12/12/2024

WILLIAM GOLUBINSKI, PROJECT MANAGER DATE
DPMC PROJECT MANAGEMENT GROUP

SOW APPROVED BY: Amanda Truppa 1/16/25

AMANDA TRUPPA, DIRECTOR DATE
DEPARTMENT OF TREASURY

SOW APPROVED BY: David Wiszniewski 1/17/25

DAVID WISZNIEWSKI, PROJECT MANAGER DATE
DEPARTMENT OF CORRECTIONS

SOW APPROVED BY: Jeanette M Barnard 3.3.25

JEANETTE M. BARNARD, DEPUTY DIRECTOR DATE
DIV PROPERTY MGT & CONSTRUCTION

XII. CONTRACT DELIVERABLES

The following are checklists listing the Contract Deliverables that are required at the completion of each phase of this project. The Consultant shall refer to the DPMC publication entitled "Procedures for Architects and Engineers," 3.0 Edition, dated September 2022 available at https://www.nj.gov/treasury/dpmc/Assets/Files/ProceduresforArchitectsandEngineers.pdf for a detailed description of the deliverables required for each submission item listed. References to the applicable paragraphs of the "Procedures for Architects and Engineers" are provided.

Note that the Deliverables Checklist may include submission items that are "S.O.W. Specific Requirements". These requirements will be defined in the project specific scope of work and included on the deliverables checklist.

This project includes the following phases with the deliverables noted as "Required by S.O.W" on the Deliverables Checklist:

- **DESIGN DEVELOPMENT PHASE**
- **FINAL DESIGN PHASE**
- **PERMIT APPLICATION PHASE**
- **BIDDING AND CONTRACT AWARD**
- **CONSTRUCTION PHASE**
- **PROJECT CLOSE-OUT PHASE**

XIII. EXHIBITS

A. SAMPLE PROJECT SCHEDULE FORMAT
B. PROJECT SITE LOCATION MAP
C. FEASIBILITY STUDY

END OF SCOPE OF WORK

Deliverables Checklist
Design Development Phase

A/E Name: _____

A/E Manual Reference	Submission Item	Required by S.O.W.		Previously Submitted		Enclosed	
		Yes	No	Yes	No	Yes	No
14.4.1.	A/E Statement of Site Visit						
14.4.2.	Narrative Description of Project						
14.4.3.	Building Code Information Questionnaire						
14.4.4.	Space Analysis						
14.4.5.	Special Features						
14.4.6.	Catalog Cuts						
14.4.7.	Site Evaluation						
14.4.8.	Subsurface Investigation						
14.4.9.	Surveys						
14.4.10.	Arts Inclusion						
14.4.11.	Design Rendering						
14.4.12.	Regulatory Approvals						
14.4.13.	Utility Availability						
14.4.14.	Drawings (6 Sets)						
14.4.15.	Specifications (6 Sets)						
14.4.16.	Current Working Estimate/Cost Analysis						
14.4.17.	Project Schedule						
14.4.18.	Formal Presentation						
14.4.19.	Plan Review/Scope of Work Compliance Statement						
14.4.20.	Design development Phase Deliverables Checklist						
S.O.W. Reference	**S.O.W. Specific Requirements**						

This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC the status of all the deliverables required by the project specific Scope of Work.

_____ _____

Consultant Signature Date

Deliverables Checklist
Final Design Phase

A/E Name: _____

A/E Manual Reference	Submission Item	Required by S.O.W.		Previously Submitted		Enclosed	
		Yes	No	Yes	No	Yes	No
15.4.1.	A/E Statement of Site Visit						
15.4.2.	Narrative Description of Project						
15.4.3.	Building Code Information Questionnaire						
15.4.4.	Space Analysis						
15.4.5.	Special Features						
15.4.6.	Catalog Cuts						
15.4.7.	Site Evaluation						
15.4.8.	Subsurface Investigation						
15.4.9.	Surveys						
15.4.10.	Arts Inclusion						
15.4.11.	Design Rendering						
15.4.12.	Regulatory Approvals						
15.4.13.	Utility Availability						
15.4.14.	Drawings (6 Sets)						
15.4.15.	Specifications (6 Sets)						
15.4.16.	Current Working Estimate/Cost Analysis						
15.4.17.	Project Schedule						
15.4.18.	Formal Presentation						
15.4.19.	Plan Review/Scope of Work Compliance Statement						
15.4.20.	Final Design Phase Deliverables Checklist						
S.O.W. Reference	**S.O.W. Specific Requirements**						

This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC the status of all the deliverables required by the project specific Scope of Work.

_____ _____

Consultant Signature Date

DPMC Project No.: A1417-00

Deliverables Checklist
Permit Application Phase

A/E Name: _____

A/E Manual Reference	Submission Item	Required by S.O.W.		Previously Submitted		Enclosed	
		Yes	No	Yes	No	Yes	No
16.1.	N.J. UCC Permit Application						
16.4.	Drawings, Signed and Sealed (6 Sets)						
16.5.	Specifications, Signed and Sealed (6 Sets)						
16.6.	Current Working Estimate/Cost Analysis						
16.7.	Project Schedule						
16.8.	Plan Review/Scope of Work Compliance Statement						
16.9.	Permit Application Phase Deliverables Checklist						
S.O.W. Reference	**S.O.W. Specific Requirements**						

This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC Project Manager the status of all the deliverables required by the project specific Scope of Work.

_____ _____

Consultant Signature Date

Deliverables Checklist
Bidding and Contract Award Phase

A/E Name: _____

A/E Manual Reference	Submission Item	Required by S.O.W.		Previously Submitted		Enclosed	
		Yes	No	Yes	No	Yes	No
17.1.1.	Notice of Advertising						
17.1.2.	Bid Proposal Form						
17.1.3.	Bid Clearance Form						
17.1.4.	Drawings (6 Sets)						
17.1.5.	Specifications (6 Sets)						
17.1.6.	Construction Schedule						
17.3	Pre-Bid Conference/Mandatory Site Visit						
17.3.1.	Meeting Minutes						
17.4	Bulletins						
17.5	Post Bid Meeting						
17.6.	Contract Award "Letter of Recommendation"						
17.8.	Bid Protests - Hearings						
17.9.	Bidding and Contract Award Phase Deliverables Checklist						
S.O.W. Reference	**S.O.W. Specific Requirements**						

This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC the status of all the deliverables required by the project specific Scope of Work.

_____ _____

Consultant Signature Date

Deliverables Checklist
Construction Phase

A/E Name: _____

A/E Manual Reference	Submission Item	Required by S.O.W.		Previously Submitted		Enclosed	
		Yes	No	Yes	No	Yes	No
18.2.	Pre-Construction Meeting						
18.3.	Submittal Log						
18.4.	Construction Schedule						
18.5.	Project Progress Meetings						
18.7.	Contractor's Invoicing and Payment Process						
18.8.	Contractor Submittals						
18.10.	Testing						
18.11.	Shop Drawings (6 Sets)						
18.12.	As-Built & Record Set Drawings (6 Sets)						
18.13.	Change Orders						
18.14.	Construction Photographs						
18.15.	Field Observations						
18.17.	Construction Phase Deliverables Checklist						
S.O.W. Reference	**S.O.W. Specific Requirements**						

This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC the status of all the deliverables required by the project specific Scope of Work.

_____ _____

Consultant Signature Date

Deliverables Checklist
Project Close-Out Phase

A/E Name: _____

A/E Manual Reference	Submission Item	Required by S.O.W.		Previously Submitted		Enclosed	
		Yes	No	Yes	No	Yes	No
19.3.	Development of Punch List and Inspection Reports						
19.5.	Determination of Substantial Completion						
19.6.	Correction/Completion of Punch List						
19.7.	Submission of Close-Out Documentation						
19.7.1.	As-Built and Record Sets of Drawing (6 Sets)						
19.8.	Final Payment						
19.9.1.	Contractors Final Payment						
19.9.2.	A/E's Final Payment						
19.10.	Project Close-Out Phase Deliverables Checklist						
S.O.W. Reference	**S.O.W. Specific Requirements**						

This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC the status of all the deliverables required by the project specific Scope of Work.

_____ _____

Consultant Signature Date

February 7, 1997
Rev.: January 29, 2002

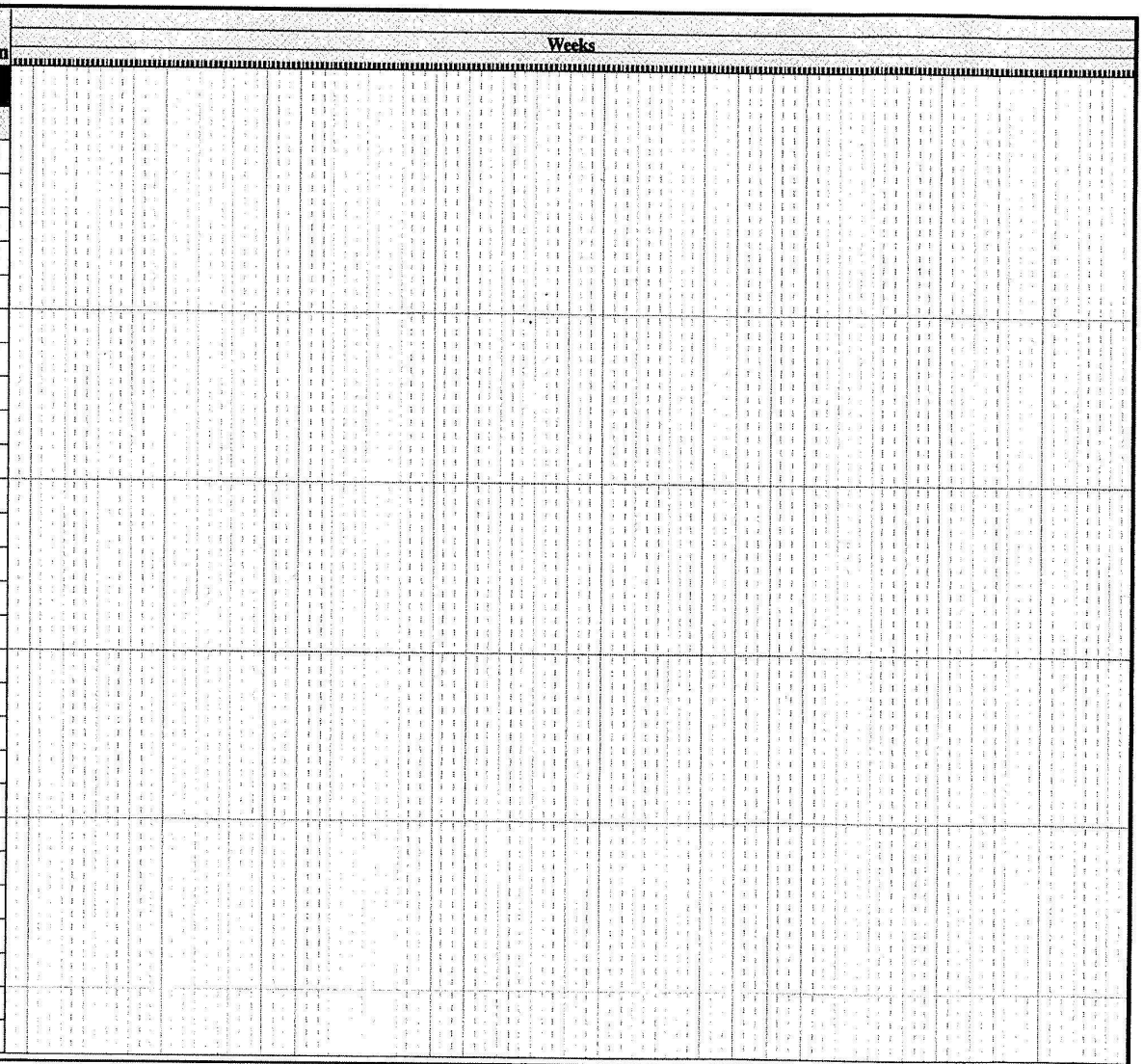
Responsible Group Code Table

The codes below are used in the schedule field "GRP" that identifies the group responsible for the activity. The table consists of groups in the Division of Property Management & Construction (DPMC), as well as groups outside of the DPMC that have responsibility for specific activities on a project that could delay the project if not completed in the time specified. For reporting purposes, the groups within the DPMC have been defined to the supervisory level of management (i.e., third level of management, the level below the Associate Director) to identify the "functional group" responsible for the activity.

CODE	DESCRIPTION	REPORTS TO ASSOCIATE DIRECTOR OF:
CM	Contract Management Group	Contract Management
CA	Client Agency	N/A
CSP	Consultant Selection and Prequalification Group	Technical Services
A/E	Architect/Engineer	N/A
PR	Plan Review Group	Technical Services
CP	Construction Procurement	Planning & Administration
CON	Construction Contractor	N/A
FM	Financial Management Group	Planning & Administration
OEU	Office of Energy and Utility Management	N/A
PD	Project Development Group	Planning & Administration

EXHIBIT 'A'

Activity ID	Description	Rspn
<PROJ>		
Design		
CV3001	Schedule/Conduct Predesign/Project Kick-Off Mtg.	CM
CV3020	Prepare Program Phase Submittal	AE
CV3021	Distribute Program Submittal for Review	CM
CV3027	Prepare & Submit Project Cost Analysis (DPMC-38)	CM
CV3022	Review & Approve Program Submittal	CA
CV3023	Review & Approve Program Submittal	PR
CV3024	Review & Approve Program Submittal	CM
CV3025	Consolidate & Return Program Submittal Comments	CM
CV3030	Prepare Schematic Phase Submittal	AE
CV3031	Distribute Schematic Submittal for Review	CM
CV3037	Prepare & Submit Project Cost Analysis (DPMC-38)	CM
CV3032	Review & Approve Schematic Submittal	CA
CV3033	Review & Approve Schematic Submittal	PR
CV3034	Review & Approve Schematic Submittal	CM
CV3035	Consolidate & Return Schematic Submittal Comment	CM
CV3040	Prepare Design Development Phase Submittal	AE
CV3041	Distribute D. D. Submittal for Review	CM
CV3047	Prepare & Submit Project Cost Analysis (DPMC-38)	CM
CV3042	Review & Approve Design Development Submittal	CA
CV3043	Review & Approve Design Development Submittal	PR
CV3044	Review & Approve Design Development Submittal	CM
CV3045	Consolidate & Return D.D. Submittal Comments	CM
CV3050	Prepare Final Design Phase Submittal	AE
CV3051	Distribute Final Design Submittal for Review	CM
CV3052	Review & Approve Final Design Submittal	CA
CV3053	Review & Approve Final Design Submittal	PR
CV3054	Review Final Design Submitl for Constructability	OCS



NOTE:
Refer to section "IV Project Schedule" of the Scope of Work for contract phase durations.

DBCA - TEST

Sheet 1 of 3

Bureau of Design & Construction Services

EXHIBIT 'A'

Activity ID	Description	Rspn	Weeks
CV3055	Review & Approve Final Design Submittal	CM	
CV3056	Consolidate & Return Final Design Comments	CM	
CV3060	Prepare & Submit Permit Application Documents	AE	
CV3068	Prepare & Submit Bidding Cost Analysis (DPMC-38)	CM	
Plan Review-Permit Acquisition			
CV4001	Review Constr. Documents & Secure UCC Permit	PR	
CV4010	Provide Funding for Construction Contracts	CA	
CV4020	Secure Bid Clearance	CM	
Advertise-Bid-Award			
CV5001	Advertise Project & Bid Construction Contracts	CP	
CV5010	Open Construction Bids	CP	
CV5011	Evaluate Bids & Prep. Recommendation for Award	CM	
CV5012	Evaluate Bids & Prep. Recommendation for Award	AE	
CV5014	Complete Recommendation for Award	CP	
CV5020	Award Construction Contracts/Issue NTP	CP	
Construction			
CV6000	Project Construction Start/Issue NTP	CM	
CV6001	Contract Start/Contract Work (25%) Complete	CON	
CV6002	Preconstruction Meeting	CM	
CV6003	Begin Preconstruction Submittals	CON	
CV6004	Longest Lead Procurement Item Ordered	CON	
CV6005	Lead Time for Longest Lead Procurement Item	CON	
CV6006	Prepare & Submit Shop Drawings	CON	
CV6007	Complete Construction Submittals	CON	
CV6011	Roughing Work Start	CON	
CV6012	Perform Roughing Work	CON	
CV6010	Contract Work (50%+) Complete	CON	
CV6013	Longest Lead Procurement Item Delivered	CON	
CV6020	Contract Work (75%) Complete	CON	

NOTE:
Refer to section "IV Project Schedule" of the Scope of Work for contract phase durations.

Bureau of Design & Construction Services

EXHIBIT 'A'

Activity ID	Description	Rspn	Weeks
CV6014	Roughing Work Complete	CON	
CV6021	Interior Finishes Start	CON	
CV6022	Install Interior Finishes	CON	
CV6030	Contract Work to Substantial Completion	CON	
CV6031	Substantial Completion Declared	CM	
CV6075	Complete Deferred Punch List/Seasonal Activities	CON	
CV6079	Project Construction Complete	CM	
CV6080	Close Out Construction Contracts	CM	
CV6089	Construction Contracts Complete	CM	
CV6090	Close Out A/E Contract	CM	
CV6092	Project Completion Declared	CM	

NOTE:
Refer to section "IV Project Schedule" of the Scope of Work for contract phase durations.

DBCA - TEST

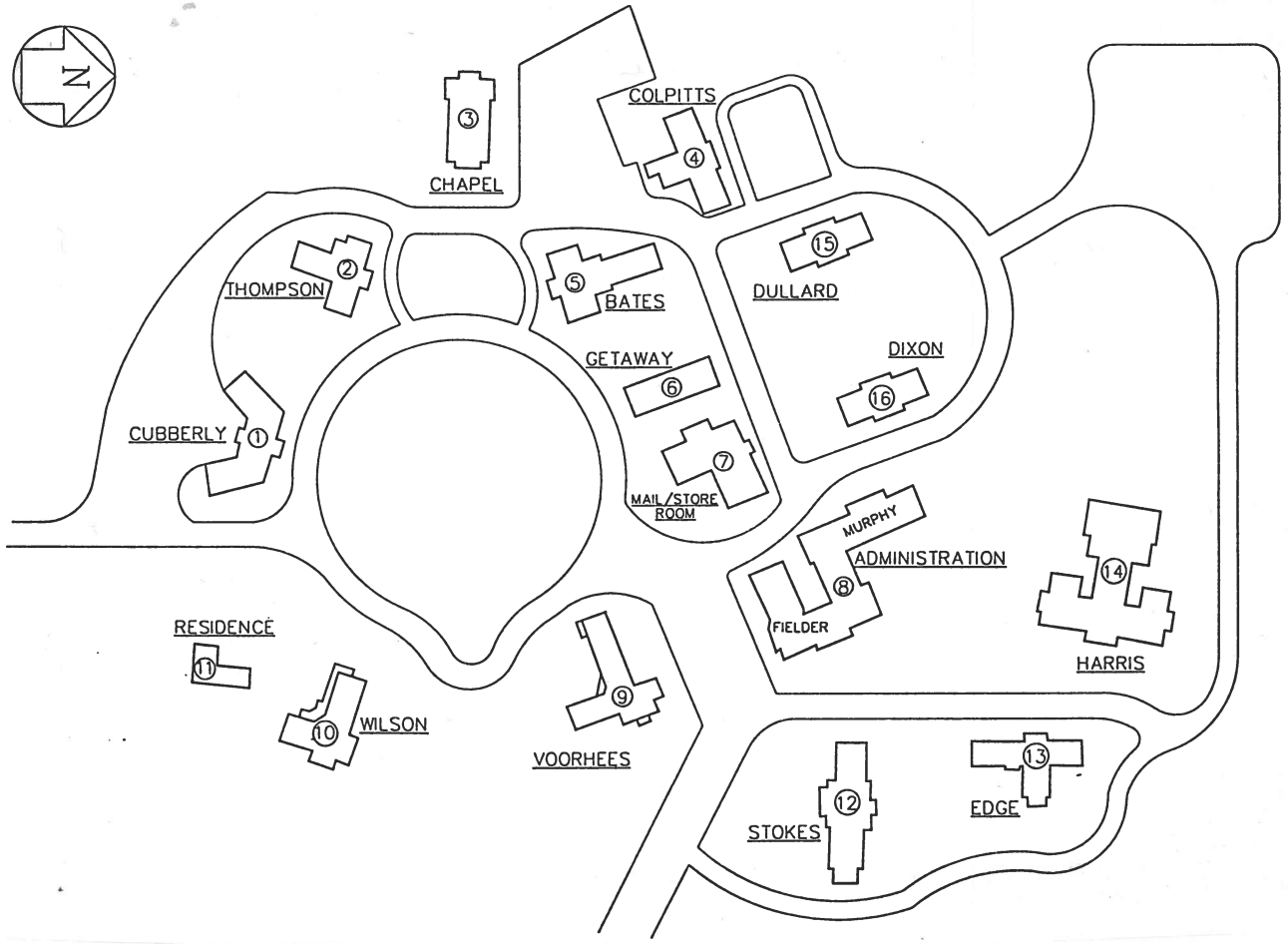
Sheet 3 of 3

Bureau of Design & Construction Services

EXHIBIT 'A'

EXHIBIT 'B'

DEPARTMENT OF CORRECTIONS ADMINISTRATION COMPLEX, TRENTON, MERCER COUNTY, NEW JERSEY



DIRECTIONS: From Route 1 South to Interstate 95 South. Exit right, also sign for Pennsylvania (approximately 4 miles South of Princeton Route 1). Go 8 miles on I-95 to exit for Harbourton-West Trenton. Go right off exit, following sign for West Trenton. Proceed to second light (Katzenbach School for Deaf on left) turn left onto Lower Ferry Road. Go approximately ½ mile, looking for Stuyvesant Avenue on right (opposite entrance to School for Deaf). Turn right onto Stuyvesant Avenue and go 1 mile to Whittlesey Road. Turn left onto Whittlesey Road (Joyce Kilmer Elementary School on left-hand corner) entrance to Department of Corrections Central Office is on your left.

DEPARTMENT OF CORRECTIONS HEADQUARTERS EV CHARGING FEASIBILITY STUDY

PREPARED FOR: Department of Corrections
Trenton, New Jersey

ATTN: Mr. William Golubinski, AIA, CEA
Manager of Energy Initiatives Unit
Division of Property Management and Construction

PREPARED BY:

CONCORD ENGINEERING GROUP
520 S. BURNT MILL ROAD
VOORHEES, NJ 08043
TELEPHONE: (856) 427-0200
FACSIMILE: (856) 427-6529
WWW.CONCORD-ENGINEERING.COM

REPORT ISSUANCE: **Draft – May 15, 2024**

PROJECT NO: **8C23642.00**

EXHIBIT 'C'

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EXHIBIT 'C'

REPORT DISCLAIMER

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This report may contain proprietary, confidential, or privileged information. If you have received this report in error, please notify the sender immediately. Thank you for your anticipated cooperation.

EXHIBIT 'C'

I. EXECUTIVE SUMMARY

Concord Engineering (CE) has been retained by The Division of Property Management & Construction via Work Order #2, Contract #J0392-00 to provide a feasibility study to evaluate the design and construction requirements and associated costs of electric vehicle (EV) charging stations in compliance with governing codes and regulations at the Department of Corrections Headquarters located in Trenton New Jersey.

Installation of new Charging equipment shall be in accordance with the NJDEP best Practices and Compliance Standard.

CE performed an initial site visit on January 31, 2024 and met with Mr. Michael Pepenella to review existing campus conditions and familiarize ourselves with the current Site Electrical Infrastructure. CE Performed a follow up site visit with the PSE&G Engineering Team, Mr. Pepenella (DOC) and Mr. Golubinski (DPMC) on March 13, 2024 to determine least disruptive and cost-conscious installation approach for the proposed new electrical service entrance to be provided by the Utility to support currently planned Electric Vehicle Supply Equipment (EVSE) and future considerations.

EXHIBIT 'C'

II. EXISTING CONDITIONS

The Department of Corrections Headquarters (DOC) is located at 1300 Stuyvesant Avenue in Trenton New Jersey.

The existing campus primary 4,160-volt service (Meter #9212924D) is derived from an existing PSE&G Pole #63806TN located along Stuyvesant Avenue adjacent to the campus main entrance. The 4,160-volt service is routed underground through utility owned Manholes to a centrally located building on campus and terminates in a 4-compartment paralleling switchgear style arrangement allowing for transfer between normal and emergency source. The campus emergency source is derived from a 240kW Diesel Fired Generator with Day Tank located on exterior of the building.

Campus electrical delivery is accomplished by distributing 4,160v through a series of DOC owned and maintained manholes to 4,160-208/120v 3 Phase, 4 Wire pad mounted transformers located around the campus to serve various buildings. All pad mounted equipment and infrastructure is owned and maintained by the DOC.

The Parking area adjacent to the Colpitts building is approximately 52,500 Square Feet, accommodates ±130 vehicles and is currently utilized for general employee parking, fleet vehicles, trailers, and oversized trucks.

The Parking area adjacent to the Stokes building is approximately 72,00 Square Feet, accommodates ±242 vehicles and is currently utilized for general employee parking.

EXHIBIT 'C'

III. FINDINGS / RECOMMENDATIONS

CE offers the following information as it relates to the cost and feasibility of installing the EV charging equipment at two locations on site based on conversations with the Department of Corrections and Public Service Electric and Gas (PSE&G).

CE has populated and submitted a service request application to PSE&G requesting a new 1,200 Ampere 208/120V, 3 phase, 4 wire service to support proposed installation of (16) Level 2 Dual Chargers on campus. The overall service size requested takes into consideration future additional chargers that may be implemented by the DOC in the same parking area. (Refer to attached Service Request)

Location #1- Stokes Building Parking Lot

Location #1 Parking area being considered for EV Charging equipment is currently accessible by the main entrance along Stuyvesant Avenue and is physically located adjacent to Whittseley Road at the intersection of Stacey Avenue. (Refer to Proposed EV Charging Locations Document prepared by Taylor Wiseman Taylor)

Current aerial electrical distribution owned and maintained by PSE&G includes a three-phase overhead service routed on the west side of Whittseley Road which extends just beyond the existing Jefferson Elementary school at which time only two-phases continue down Whittseley Road to provide service for residential customers. Based on initial discussions with the Utility while on site CE was advised that extension of the 3-phase overhead service to a proposed Utility Pad mounted Transformer could be easily accomplished and that the fees associated with the primary service upgrades would be shared via email by Mr. Dellis Pearce.

Mr. Pearce has provided a rough gross estimate for the pole line extension and pad mount transformer installation near the entrance gate on Whittseley Road. The current anticipated cost has been identified as $58,617.00 with lead time on the pad mounted Transformer being six to nine months from date of NTP.

Location #2- Colpitts Building Parking Lot

Location #2 Parking area being considered for EV Charging equipment is currently accessible by the main entrance along Stuyvesant Avenue and is physically located adjacent to Colpitts Building. (Refer to Proposed EV Charging Locations Document)

CE reviewed existing campus manhole primary distribution documentation shared during the development of the study and determined it would be cost prohibitive and pose constructability concerns to derive power for location #2 from the existing primary distribution system. This approach would require installation of a New Liquid Filled Transformer, Service Pad, Medium voltage Cabling, Dead break splices in an existing manhole and extended outage duration at several buildings to accommodate the primary cable splice.

EXHIBIT 'C'

CE also reviewed deriving power directly from the aerial electrical distribution owned and maintained by PSE&G along Stuyvesant Avenue. To accomplish this approach a new Riser would need to be set by PSE&G on the property before transitioning to an underground conduit/manhole system to deliver primary service to the proposed Equipment pad location. The area in which the new underground would need to be installed would impact other existing services and substantial vegetation/tree root systems behind the Thomson Building and Chapel.

Based on initial discussions with the Utility while on site CE was advised that the underground associated with this installation approach would need to be completed by the contractor and not by PSE&G. Mr. Pearce was reluctant to provide a cost estimate for this work knowing that it would be substantially more than Location #1 based on the underground infrastructure.

Based on our review and findings CE would recommend moving forward with Location #1 due to excessive underground primary service costs and impact to daily operations during construction on the headquarters property. (Refer to proposed equipment layouts, Preliminary Single line Diagram and Probable Construction Cost Estimate)

EXHIBIT 'C'

IV. PROPOSED EQUIPMENT LAYOUTS

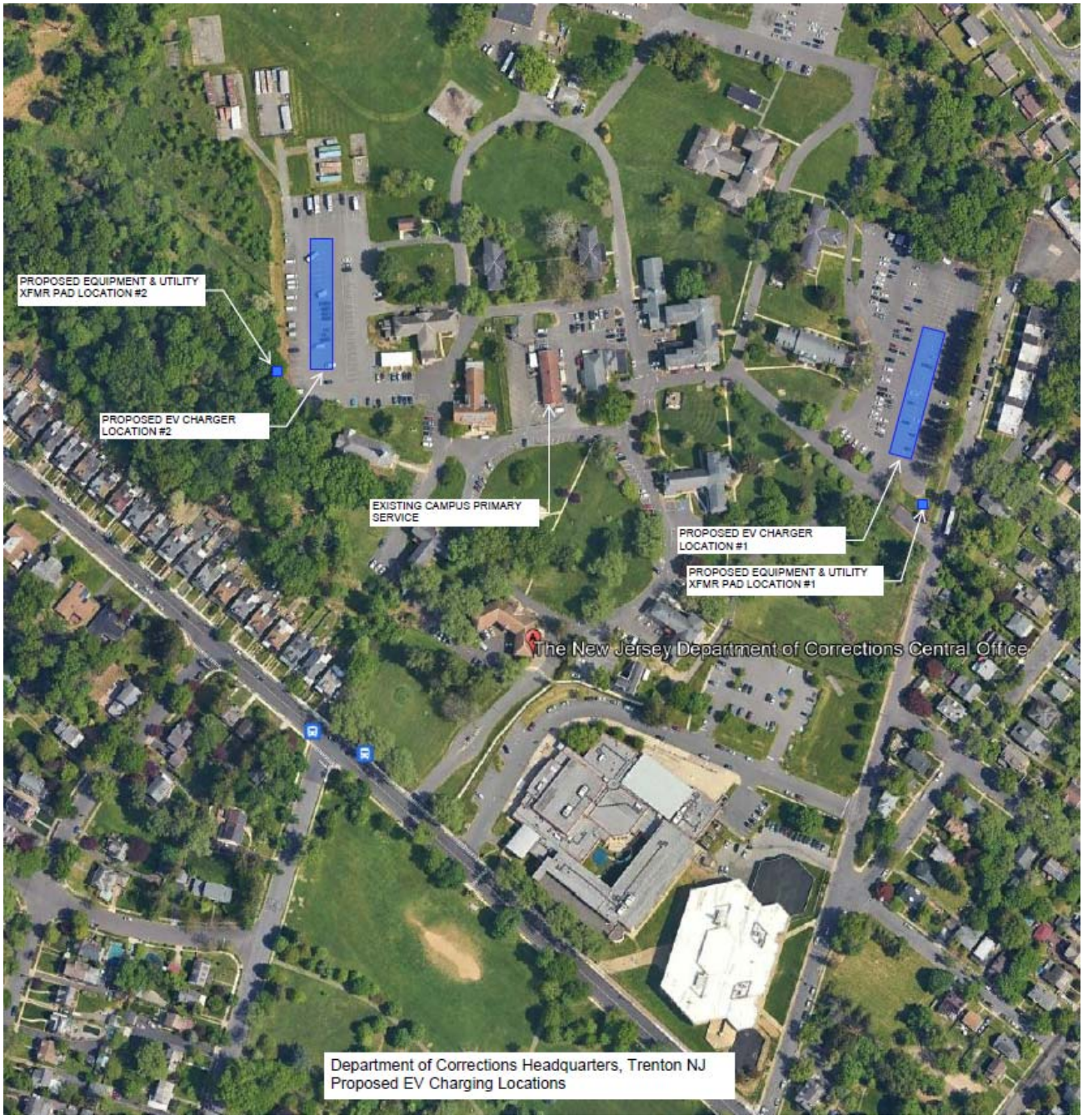


EXHIBIT 'C'

V. REFERENCE PHOTOS

Location #1- Stokes Building Parking Lot

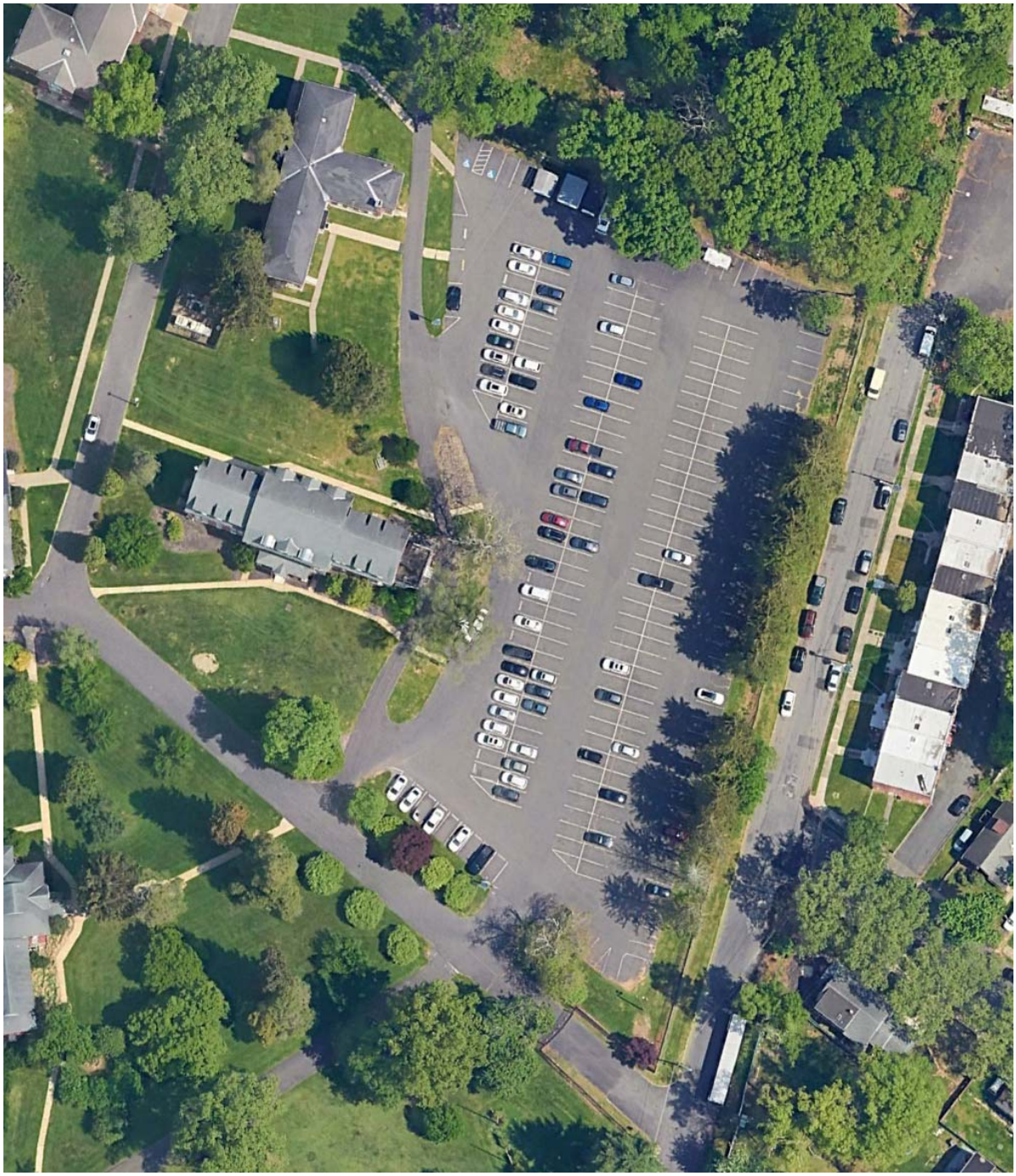


EXHIBIT 'C'

Location #1- Stokes Building Parking Lot Equipment Location

EXHIBIT 'C'

Location #2- Colpitts Building Parking Lot

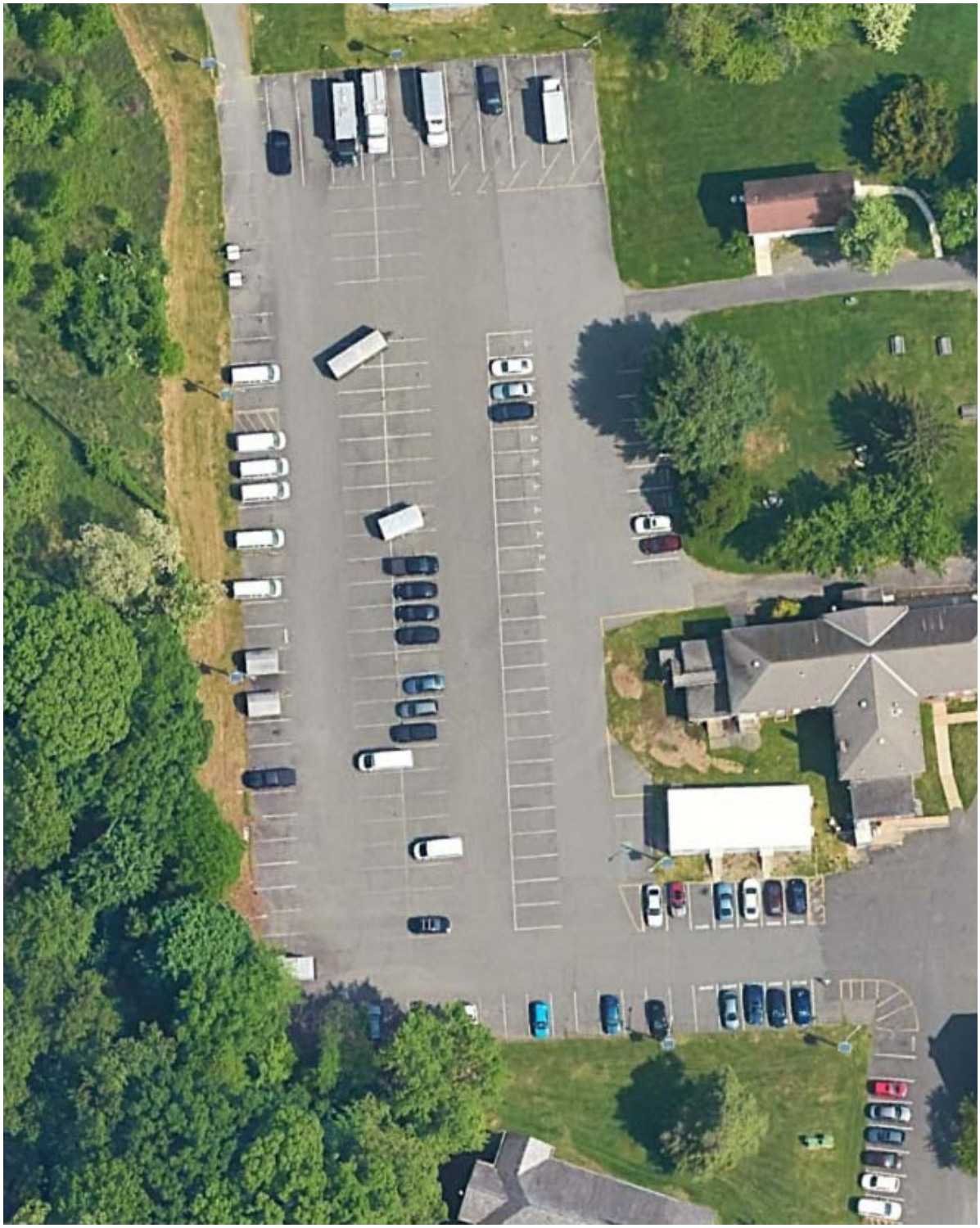


EXHIBIT 'C'

Location #2- Colpitts Building Parking Lot Equipment Location

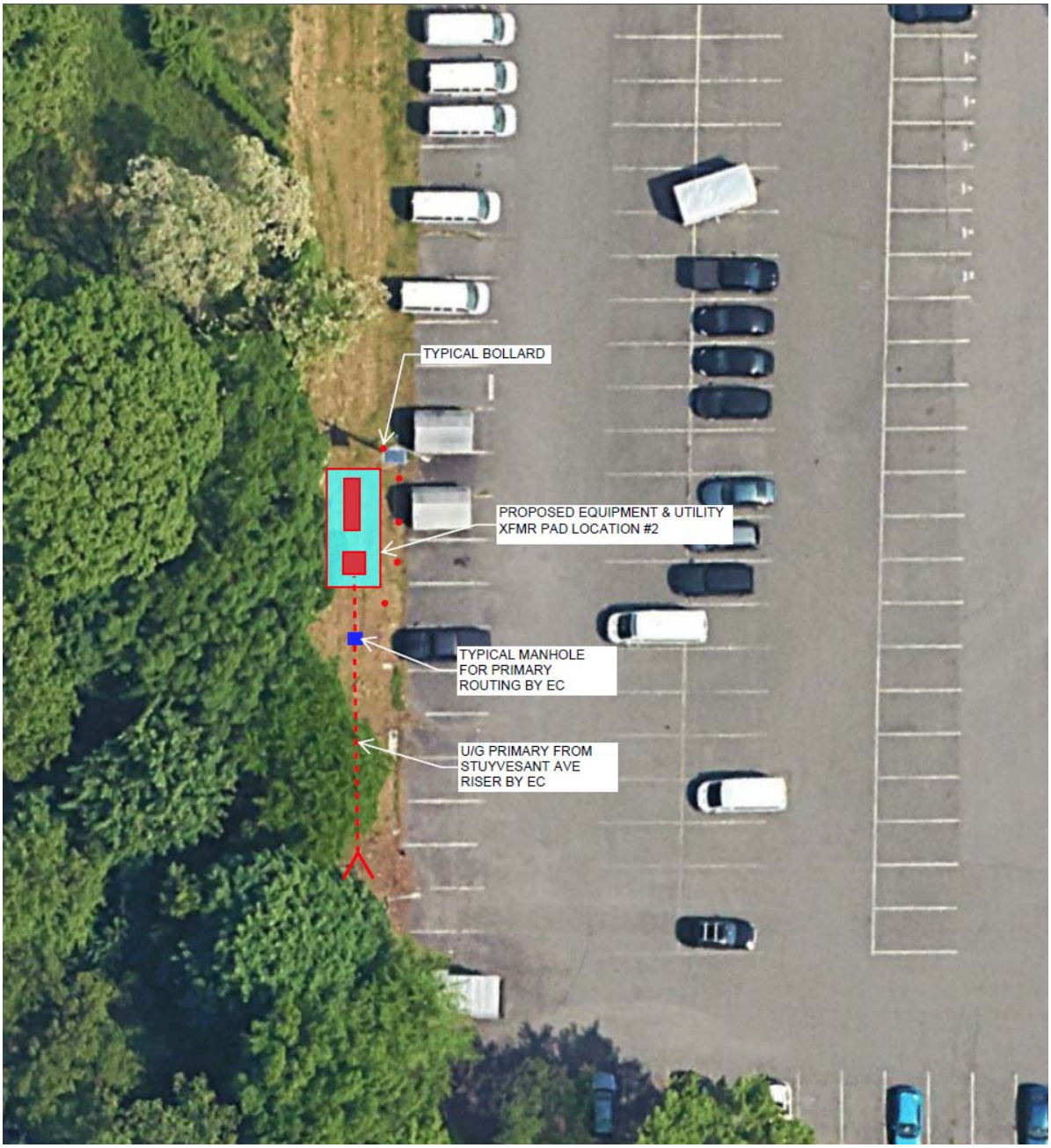


EXHIBIT 'C'

VI. SERVICE REQUEST APPLICATION (Submitted to PSE&G March 2024)

Proposed Start Date: TBD **Proposed Service Date:** TBD

Property Owner Name	State of New Jersey
Owner Phone Number	(609)306-9854 [Bill Golubinski cell]
Service Address	1400 Stuyvesant Ave
City & Zip Code	Trenton NJ, 08619
Is the foundation up?	☐ Yes ☑ No
Is the structure framed?	☐ Yes ☑ No
If there is no foundation at this site, you must submit utility site plans. See cover sheet for details.	
PSE&G Account Billing Name	DOC-HQ EV charging HUB
Phone Number	(609)306-9854 [Bill Golubinski cell]
Email Address	WILLIAM.GOLUBINSKI@TREAS.NJ.GOV
Billing / Mailing Address	20 West State Street, PO Box 235, Trenton, NJ 08625
Primary Contact Name / Title	Lawrence Hart - Senior Project Engineer - Concord Engineering
Contact Phone Numbers	856-427-0200, Ext 122
Contact Email Address	Lhart@Concord-engineering.com
Contact Fax Number	856-427-6508
Electrician's Name	TBD
Electrician's Phone Number	TBD
Electrician's Email Address	TBD
Project Information - Required	
Square Footage of Bldg.	N/A (Exterior EV Charging)
Nearest Cross Street	Whittlesey Rd.
Type of business	Department of Corrections Headquarters
Pole #	
Type of Service	☐ Overhead ☑ Overhead to Underground ☐ NEVI ☐ Underground/Manhole Area ☐ Padmount Transformer
# of Electric Meters To Be Installed & designations (Apt 3, Unit 1, Store D, Office , etc.)	1

Will the Customer be installing parallel generation (co-generation, solar, fuel cell, battery storage)? Yes ☐ No ☑
If yes, approximate capacity in kW.

2

EXHIBIT 'C'

Service Characteristics	☐ 120/240V 1PH 3W ☑ 120/208V 3PH 4W ☐ 120/208V 1PH 3W- LIMITED ☐ 277/480V 3PH 4 W ☐ 240V 3 PH 3W-NO GROUND ☐ 120/240 3PH 4W
Amperage	☐ 60 ☐ 100 ☐ 200 ☐ 400 ☐ 600 ☐ 800 ☑ Other - 1200

Load Data

	Quantity	1 Phase KW	3 Phase KW	Total KW
Exterior Lighting (KW)				
Interior Lighting (KW)				
Air Conditioning (Tons/KW)				
Water Heater (KW)				
Electric Vehicle (KW)				
Comfort Heating (KW)				
Receptacles (KW)				
Other (KW) *Explain in summary		214		
Motor (KW) *Explain in summary				

Customer or authorized representative's signature	Lawrence Hart - Concord Engineering
Date of signature	03-13-2024

Note: this may be signed electronically by typing in authorized name. Please note that this will be considered an official signature and approval to move forward and process the application.

Brief Summary of Request & Additional Notes

* Proposed installation of (16) Level 2 Dual EV Chargers on the DOC Campus for fleet vehicles.

- Maximum Connected load will be 1,024 amperes (214kW) utilizing standard option provided by EV charger.

3

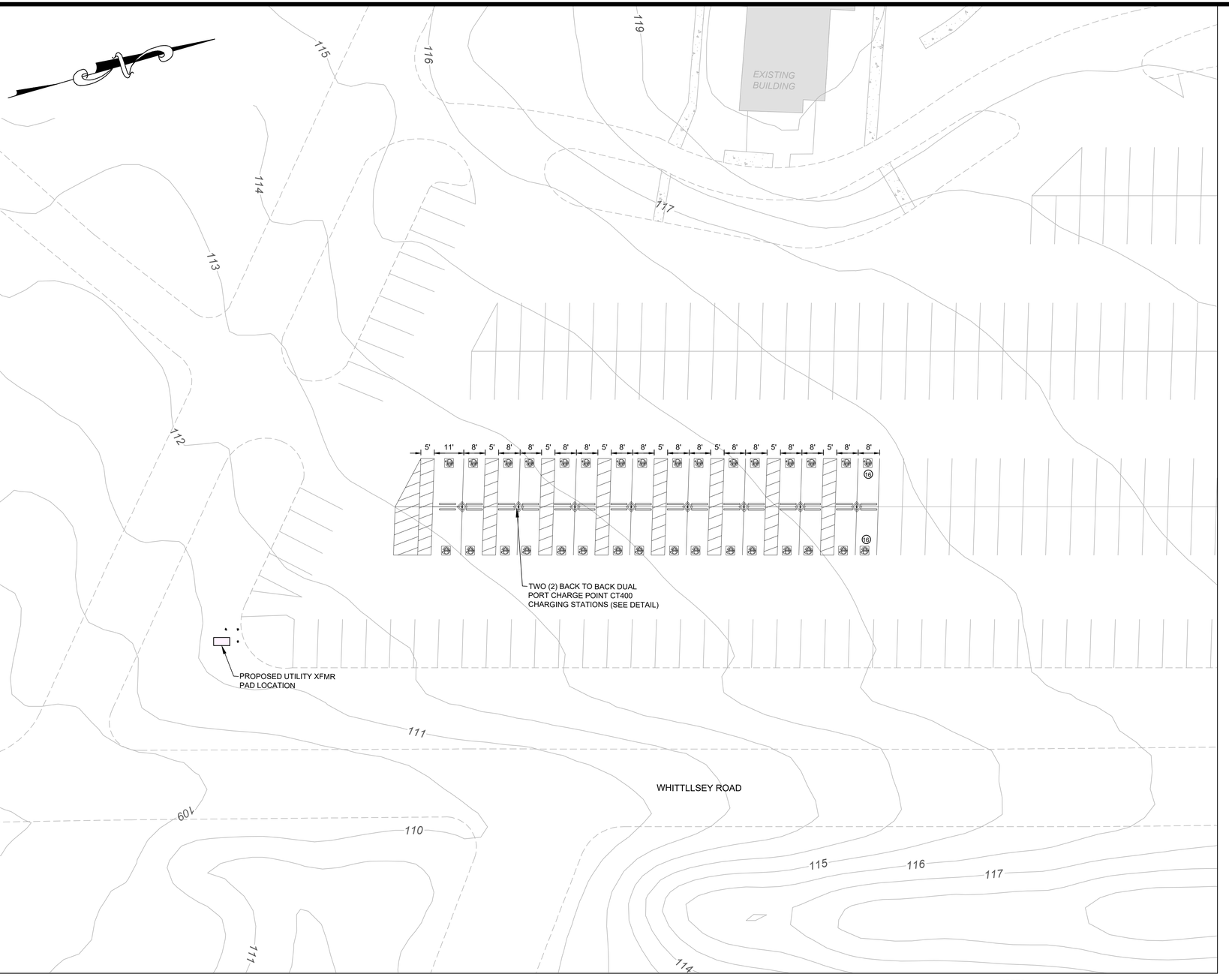
EXHIBIT 'C'

VII. PROBABLE CONSTRUCTION COST ESTIMATE

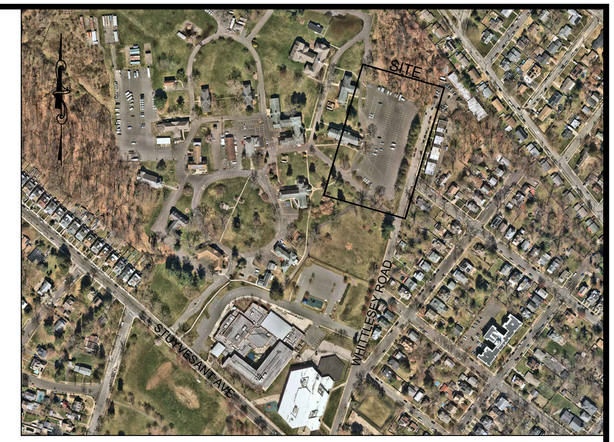
EXHIBIT 'C'

VIII. PROPOSED EQUIPMENT LAYOUT

EXHIBIT 'C'

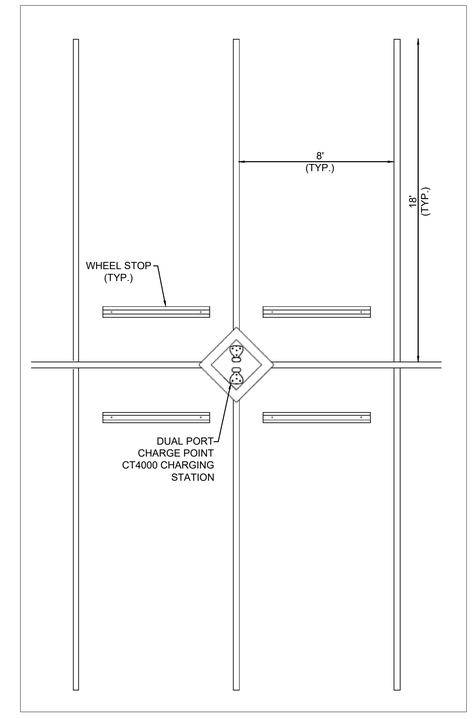


NOTES:
1. EXISTING CONDITIONS TAKEN FROM NEARMAP AERIAL DATED FEBRUARY 24, 2024.
2. TOPOGRAPHY TAKEN FROM GEOSPATIAL DVRPC 2015 LIDAR DATASET USING NOAA OFFICE FOR COASTAL MANAGEMENT DATA ACCESS VIEWER.



LOCATION MAP

SOURCE: NEARMAP



BACK TO BACK EV CHARGING STATION DETAIL

TOTAL NUMBER OF DUAL PORT EV CHARGERS = 16
TOTAL NUMBER OF EV PARKING SPACES = 32

Taylor Wiseman & Taylor
ENGINEERS / SURVEYORS / SCIENTISTS
SUBSURFACE UTILITY ENGINEERING
804 EAST GATE DRIVE, SUITE 100, MOUNT LAUREL, N.J. 08054
TELEPHONE: (856) 235-7200 FAX: (856) 722-9250
www.taylorwiseman.com
NJ CERTIFICATE OF AUTHORIZATION NO. 24GA28032900

EV CHARGING PARKING LOT CONCEPT
THE NEW JERSEY DEPARTMENT OF CORRECTIONS
CENTRAL OFFICE
1300 STUYVESANT AVENUE
BLOCK 35401, LOT 7
TRENTON, NJ 08618

PROJECT NO. 07458
5/8/24

20 10 0 20 40 60 80
GRAPHIC SCALE: 1"=20'

Date: May 08, 2024, 11:51am

User ID: McCloskey File: Q:\CAD\07458_DOC HQ Feasibility Study\Engineering\CONCEPT\001CONCEPT.dwg LAYOUT

EXHIBIT 'C'