SCOPE OF WORK

Harding Rest Area SSP Renovations

NJDOT Harding Township Rest Area Building
Harding, Morris County, NJ

Project No. T0695-00

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

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I. OBJECTIVE

The objective of this project is to upgrade the NJDOT Harding Rest Area facility used by the Safety Service Patrol (SSP) in Harding Township. Upgrades include roof system replacement, restroom renovations, HVAC repairs, fire alarm installation and generator replacement.

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):

- **P001 Architecture**

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

- **P002 Electrical Engineering**
- **P003 HVAC Engineering**
- **P004 Plumbing Engineering**
- **P025 Estimating/ Cost Analysis**
- **P028 Roof Inspection**
- **P037 Asbestos Design**
- **P038 Asbestos Safety Control Monitoring**
- **P043 Fire Detection Systems**
- **P065 Lead Paint Evaluation**

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 $ 750,000.

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 $ 1,017,700.

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. Investigation and Schematic Design Phase	**63**
• *Project Team & DPMC Plan/Code Unit Review & Comment*	14
3. Design Development Phase	**42**
• *Project Team & DPMC Plan/Code Unit Review & Comment*	14
4. Final Design Phase	**42**
• *Project Team & DPMC Plan/Code Unit Review & Approval*	14
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• *Project Team & DPMC Plan/Code Unit Review & Approval*	14
6. DCA Submission Plan Review	**30**

7. Permit Application Phase • *Issue Plan Release*	**7**
8. Bid Phase	**42**
9. Award Phase	**28**
10. Construction Phase	**210**
11. Project Close Out Phase	**30**

B. CONSULTANT'S PROPOSED DESIGN & CONSTRUCTION SCHEDULE

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:

NJDOT Harding Township Rest Area
Route 287 Northbound
Harding, Morris County

GPS Coordinates: 40.7611° N, 74.5119° W

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: Nehad Mohamed, Project Manager
Address: Division of Property Management & Construction
20 West State Street, 3rd Floor
Trenton, NJ 08608-1206
Phone No: (609) 292-6558
E-Mail: Nehad.Mohamed@treas.nj.gov

2. Department of Transportation:

Name: Hani Shamroukh, Project Manager
Address: Department of Transportation
1035 Parkway Ave., PO Box 600
Trenton, New Jersey 08625
Phone No: (609) 963-1341
E-Mail: Hani.Shamroukh@dot.nj.gov

VI. PROJECT DEFINITION

A. BACKGROUND

The NJ Department of Transportation (DOT) northern region Safety Service Patrol (SSP) operates from the Harding Rest Area building on Highway I-287 in Harding Township, Morris County. The NJDOT SSP program assists motorists whose vehicles have become disabled on major New Jersey highways.

The Harding rest area closed to the public in 2006. The truck side parking lot will continue to be used by truckers without access to the main service building. The Harding facility will remain as a staging area for the SSP maintenance trucks and employees of the program. The NJDOT staff and SSP require the building to be operable year-round including holidays and accessible to staff throughout all hours of the day and evening. (see **Exhibit 'B'** Site Map)

A rehabilitation study by Rodier Ebersberger Architects for the NJDOT Harding Rest Area was completed in 2021 and includes recommendations to meet current codes for the repairs and/or replacement of the existing restrooms, HVAC, a roofing system, a generator, and a fire alarm system installation. It should be noted that the study was conducted with the idea that the rest

area would be reopened to the public. Since the completion of the study, DOT has decided to keep the rest area for use by the SSP.

B. FUNCTIONAL DESCRIPTION OF THE BUILDING

The Harding Rest Area building was constructed in 1975 and is approximately 3,756 sq. feet. The masonry building was originally designed as a public rest area with a lobby, vestibule, men's and women's restrooms, a mechanical equipment room, and a work area and office space. The men's and women's restrooms are divided into two sections. The facility originally had an on-site septic sewage system and is now connected to the municipal wastewater system. (see **Exhibit 'D'** Schematic Layout).

The men's and women's restrooms are each served by separate narrow pipe chases. The building's original layout has had modifications through the years to make the building more suitable for use by the SSP. The existing HVAC system was installed in 1997 and does not meet current codes. The existing 20-year old 50kW emergency diesel generator is near the end of its useful life and provides back-up to various lighting, heating, receptacles and other equipment. The built-up roof system is at the end of its useful life and will need to be replaced. The DOT would like the new roof to be a EPDM roofing system. The interior renovations will address upgrading restrooms to meet ADA standards, installation of energy efficient plumbing fixtures, and improving the layout to include locker room spaces and shower accommodations. (See **Exhibit 'C'** Photos)

NJDOT SSP North Region operates from this facility and the building will be occupied during construction.

VII. CONSULTANT DESIGN RESPONSIBILITIES

A. INVESTIGATION AND SCHEMATIC DESIGN PHASE

1. General:

The Consultant shall conduct an inspection of the building's roof to identify conditions of the existing roofing system and related roofing components. Listed below are potential roof inspection items; however, the Consultant shall identify the final list based on their experience with roofing projects similar in size and scope to this project and observations made at the pre-bid site visit. All costs for the roof inspection shall be estimated by the Consultant and the amount included in the base bid of their fee proposal.

2. Existing Roofing System:

Perform roof test cuts to confirm the type of roofing system installed, the roofing materials used, the number of plies, the type, thickness, and attachment method of each layer of insulation, type and condition of deck, location and quantity of wet insulation.

Perform a visual survey to determine the existing construction and condition of the walls, counter flashings, reglets, coping stone joints, expansion joints, and all other components that could affect the water tightness of the roof.

3. Hazardous Materials:

Samples of the roofing components must be tested for asbestos and lead by a certified Environmental Testing & Analysis Lab pre-qualified by DPMC. If present, the guidelines described in Sections VII.E & F of this scope of work shall be incorporated in the design documents.

4. Roofing Materials:

Investigate the roof deck material, expansion joints, flashings, copings, boots, nailing strips, gravel stops, parapet walls, masonry caulking and pointing materials, mortar, sealants, water repellants, etc.

5. Fixed Roof Mounted Items:

Investigate the condition of all fixed roof mounted items such as hatches, ladders, exhausts, vents, covers, louvers, light fixtures, lightning rods, guy wires and anchors, piping and supports, and electrical conduit, etc. to determine those that should be repaired and/or replaced. Inspect the attachment methods to ensure the fasteners are installed correctly and waterproofed where appropriate.

6. Roof Drains:

Perform a visual survey of the roof area to determine areas lacking positive drainage. Investigate the condition of all interior/exterior roof drains. Ensure that the drains are located properly and are sufficient in number and size to drain all accumulated water from the surface of the roof in accordance with code. Inspect for broken or separated drain pipe seals and joint connections, broken or stripped bolts, clamping rings, and strainers. Conduct water flow tests for every roof drain prior to roof demolition and upon completion of the new roof installation to ensure they are not blocked and operate properly.

7. Structural Investigation:

Obtain a set of original building as-built drawings; if available, or take field measurements that will verify the existing dimensions of the structural components supporting the new roofing system. Determine the allowable loading on the deck and structure.

8. Construction Canopy:

Investigate the need for a temporary canopy that will prevent roofing materials, construction tools and equipment, dirt and debris, solvents, sealants, bonding adhesives, etc. from injuring personnel using the public access areas of the building during the demolition and construction activities of the project.

9. Mechanical Equipment:

All rooftop HVAC equipment and exhaust fans shall be replaced with new equipment.

10. Rooftop Ductwork & Piping:

Investigate any existing rooftop ductwork, vents, piping, joints, and supports to determine those that shall be replaced as part of this project. Methods of coordination with the HVAC unit shutdown shall be described.

11. Painting:

Investigate the finishes of all the roof mounted mechanical equipment, metal housings, hatches, vents, roof structural frames, column supports, anchor brackets, piping, ladders, and all other metal components to determine those that will require repainting.

12. Guard Rails:

Investigate all equipment that is installed within 10 feet of the roof edge and will require a protection guard rail system as required by the NJ Uniform Construction Code.

13. Metal Wall Panels & Fascias:

Investigate the condition of all metal wall panels, fascias, louvered soffits, skylights, etc. that are located above the roof area to determine potential areas of water infiltration in the building.

14. Other Items:

Investigate any other item not identified above but would be considered part of the roofing system components, etc.

15. Investigation and Schematic Design Phase Presentation:

An oral presentation shall be made to the Project Team members at the end of the Investigation and Schematic Design Phase describing the roof system and related components, the findings, and the recommendations for repair and/or replacement. The Project Team shall review these findings and approve the recommendations based on available project funding and the importance of the recommendation. The Consultant may not proceed with the design of any report recommendation unless they have written approval from the Project Manager.

B. NEW ROOFING SYSTEM DESIGN REQUIREMENTS

The Consultant shall provide the Design, Construction Administration, Permitting and Bid/ Award services for the removal and replacement of approximate 3,500 sq. ft. built-up roofing system on the service building with an EPDM roofing system design if feasible or a replaced roofing system design in similar kind. Additionally, the Design Consultant shall include the recommendations provided in the Harding Rehabilitation Study which shall be used as a guide. The Consultant shall determine the feasibility of replacing the copper mansard roofing around the perimeter of the existing roofing system. Design documents shall include the appropriate cleaning of all bituminous roofing tar for any mansard copper roofing not replaced.

The Consultant shall include in the design, along with the recommendations provided in the Harding Rehabilitation Study, the removal and replacement of: exhaust fans, HVAC equipment, vents, exhaust vents, etc. for the new roof system installation. Additionally, the Study recommended adding a safety cage and rail extender to the existing roof access ladder or if necessary replacement of the roof access ladder with a safety cage according to code requirements.

1. Roofing System Removal:

The existing built-up roof system, insulation, flashings, guardrail, and related trims shall be completely removed to the original decking, and legally disposed. The removal of the existing roof system shall be coordinated with the installation of the new roof to prevent exposure to weather conditions and potential water infiltration into the building.

Design documents shall identify all requirements for safety devices, dumpster location, chutes or other methods of roofing material removal, protection from exposure to the weather, protection of property and personnel, building access routes and circulation patterns, contractor use of the premises, parking, security procedures, equipment and materials storage, waste disposal, etc.

2. Caulking & Joint Sealants:

All appropriate roof deck joint sealants shall be removed and replaced with high performance sealant as part of the roof system. The consultant shall specify low VOC sealants wherever

possible. The design shall include the cleaning, priming, and installation of new sealants with new backer rods and bond breakers.

Examine and measure all exterior joints and calculate the required joint width(s). Design for widening joints as required.

Observe the installation of the sealant joints, performing pull tests for cohesion and adhesion on a random sampling of each joint type.

Specify that the sealant manufacturer must provide a warranty for a minimum of twenty (20) years for any repairs to maintain joints in a leak free condition and at no cost to the State.

3. Insulation:

Recommend new high-density rigid insulation boards that comply with current energy code requirements. Ensure the roofing system manufacturer approves the method of fastening the insulation board through the medium to the roof deck system.

Flat roofs shall be avoided by using tapered insulation or another method to promote positive drainage to the roof drains. Incorporate a roof design that shall slope a minimum of ¼" per foot (½" per foot preferred).

DPMC does not permit Urethane material insulation due to a history of gas release and bubbling under the roofing ply layer(s).

4. New Roofing System Criteria:

Provide the design and specifications for a new EPDM roofing system and all related components based on the provided study, Consultant's investigation and the Agency Project Team's approval.

Review all roof mounted equipment or features including roof exhausts, flashing, plumbing, vents, antennas, guard rails, satellite dishes, electrical connections or devices and other roof related materials and provide the design for the removal and/or replacement as recommended in the Study or per Agency request for reinstallation of those items in the design documents. The design documents shall specify that the roofing work must be protected, and the building made watertight at the completion of each day's work.

Provide the design for a new roofing system in accordance with the requirements of the roofing manufacturer and those described in the DPMC Procedures for Architects and Engineers Manual.

The manufacturer of the roofing system shall have no less than five (5) years successful experience in producing the materials required for this project. Membrane, flashing, adhesive and all materials shall be the single product of a standard manufacturer. New roofing materials, with less than 5 years of successful application in the field, will not be accepted for this project.

The roofing system shall be in accordance with the latest adopted version ASHRAE energy standards.

The roofing system shall be in compliance with the "Factory Mutual Research Corp" (FMRC) standards and must meet all requirements of Factory Mutual I-90 classification for wind uplift.

The Contractor shall supply only a U.L. Class "A" fire rated roofing system.

If the roofing system and/or related components are not a replacement in kind, then the Consultant shall submit a signed and sealed letter or calculations to the DPMC Design and Code Review Unit Manager verifying that the existing roof structure can support all loads of the new roofing system and components per current code requirements or the consultant may submit calculations of the new load as compared to the existing (old) load in order to prove the structure is sufficient.

The design documents shall address the roof manufacturer's installation criteria, occupancy of the building, access to the building roof and security issues, approved storage methods of the roofing materials, etc.

5. Flashing:

All rooftop HVAC curbing, pipe supports, pipe vents, exhaust fans, and other roof penetrations must have new flashing installed as part of this project.

All pipe flashings are to be pre-molded and provided with stainless steel pipe clamps at each penetration.

6. Parapet Walls & Coping:

Provide a design to replace any damaged coping and parapet walls as part of this project including design details to seal the coping joints.

Address any required increase to the height of the existing parapet walls based on the tapered insulation thickness selected for energy requirements. Avoid the need to extend the height of parapet walls throughout the project design.

7. Building Component Replacements:

Provide a design for the approved building component replacements as determined in the Investigation and Schematic Design Phase. The contract documents shall indicate the scope and methods of the proposed replacements to allow for permitting, bidding and construction purposes. The design documents shall be accurate and include sufficient detail to cover all conditions for fixed price quotations of the work.

8. Walkways:

Provide new walkway protection from access points to/around all roof mounted HVAC units and/or other similar equipment requiring periodic servicing and any other trafficking areas. If existing walk pads are to be reused then verify that they are compatible with the new roofing system.

9. Roof Drains:

All drains shall be removed and reset or repositioned so that the drain is below the roof membrane surface. Provide for the interior cleaning, repair, replacement and additional drains as required and ensure that drainage water will be carried away from the building foundations, footings, lanes, sidewalks and driveways. Investigate the abandonment of leaking interior drain lines and the installation of new interior lines where access is impossible for repairs and/or replacement.

Provide for the interior cleaning, repair, replacement and additional drains as required and ensure that drainage water will be carried away from the building foundations, footings, lanes, sidewalks and driveways. Investigate the abandonment of leaking interior drain lines and/or replace as necessary. Install new interior lines where access is impossible for repairs and/or replacement. New drains can be tied into existing drain piping to avoid disturbing interior finishes.

10. Night Seals:

Specify in the design documents that only as much roofing insulation, membrane, and flashing as can be made weather tight shall be demolished and installed each day. Install temporary water tight night seals around all exposed edges of the roofing assembly at the end of each work day and when work must be postponed due to inclement weather. No application of tarps will be acceptable as a temporary seal of an open roof area day or night.

11. Fire Protection Program:

Address fire protection requirements during the demolition and installation of the roofing system. Language shall be included that states open flames such as propane torches, kettles,

flame cutting, and welding cannot be used on the construction site until a fire watch program has been submitted by the Contractor and approved by the Consultant and Project Team members.

12. Allowable Roof System Installation:

The design documents shall specify the weather and temperature installation restrictions based on the roof system manufacturer's recommendations.

13. Unit Prices:

If the total amount or quantity of repair work cannot be determined for a roof related item by the roof inspection process, then the Consultant shall include a "Unit Price" Section in Division 1 of the specification for that item. Items may include deteriorated concrete or metal decking, plywood sheathing, wood blocking or curbing, vapor barriers, interior roof drains, etc.

14. Warranty:

The roofing manufacturer's warranty shall be for a minimum period of twenty (20) years.

C. ROOF MONITOR RESPONSIBILITIES

The Consultant shall have in-house capabilities or a Sub-Consultant pre-qualified with DPMC in the P028 Roofing Inspection Specialty Discipline. The costs for the services provided by the roof monitor shall be included in their fee proposal line item entitled **"Roof Monitor Allowance"**, refer to paragraph X.E. A cost breakdown sheet shall accompany the fee proposal that identifies all costs associated with the Roof Monitoring services to be provided.

The Consultant shall provide a full time roof monitor during the installation of the roof systems on the buildings. The responsibilities of the roof monitor shall include, but not be limited to the following items:

1. Roof Monitor Inspections:

The Roof Monitor must continuously inspect and monitor the Contractor's work on site and file a daily DPMC 605 Roofing Inspector's Check List Form to ensure compliance with the contract documents. Photographs shall be included for reference. The report shall include weather conditions, number of workers, and the amount of roof removed and installed together with comments on each phase of work. Comments shall provide descriptions and information on project mobilization, material delivery, removal of existing roof system, preparation of the existing deck, installation of the new underlayment and/or insulation, sealant and adhesive applications, flashing, walkways, etc.

2. Inclement Weather:

The Consultant, in conjunction with the Roof Monitor, shall anticipate time losses due to seasonal inclement weather conditions such as rain, wind and low ambient temperatures and include these hours in the base bid of the fee proposal.

On the first day of inclement weather, the Roof Monitor will be entitled to four hours to visit the site and inspect the roofing system for potential roof leaks or damage. Additional time spent on the site during inclement weather will not be reimbursed unless directed by the Project Manager.

3. Unsatisfactory Work:

If the Roof Monitor determines that the roof Contractor is installing the roofing system improperly, he shall notify the Contractor to stop all work until the Consultant is notified and inspects the work for design conformity. If appropriate, provisions shall be made to seal the roof work area until the Consultant arrives and the installation issues are resolved.

If the Consultant determines that the installation does not meet the intentions of the design or indicates poor workmanship, he shall notify the Project Manager that he recommends the questionable roofing installation be removed and replaced properly. The Project Manager shall then notify the Contractor verbally to take the recommended action and shall follow up with a written directive indicating the time and date the Contractor was notified.

4. Meetings:

The Consultant and Roof Monitor shall both attend the pre-construction conference and all periodic job progress meetings during the construction phase of the project.

D. RESTROOM RENOVATIONS

1. General:

The Consultant shall provide the Design, Construction Administration, Permitting and Bid/ Award services to upgrade the building's existing restrooms. The existing Rehabilitation Study completed and updated in 2021 shall be provided to the Design Consultant and used as a guide. The Consultant shall evaluate and provide the design to include male and female locker rooms with shower facilities for staff working after hours and during the winter. The Consultant shall investigate the feasibility and provide an Agency approved design for having contactless/touch-free, motion and/or sensor access, electric flush-meters, faucets and hand dryers. The Consultant shall provide the design for agency approved floor mounted toilets and floor mounted urinals, where necessary, and a minimum of one sink in each restroom.

The survey shall include and identify, but not be limited to: room dimensions, door and window openings, room finishes, all fixtures, waste, drain, vent, water supply piping, sanitary piping, floor drains, heating and/or cooling outlets.

All pipe chase access will need to be verified. Shut-off valves shall be replaced or installed, where necessary. ADA / Barrier free access will be evaluated and brought up to code, where feasible, and as allowed by the NJ Uniform Construction Code, Rehabilitation Subcode, Chapter 6. An agency approved phasing plan shall be included for the restroom upgrades.

2. Demolition & Removal:

The Consultant shall provide the design for the demolition and safe removal of the existing restroom fixtures and equipment. The existing Hazardous Material report completed in 2019 shall be used as a guide to determine the appropriate abatement methods required for the safe removal of any hazardous materials found.

The Design Consultant shall make note of any specialty construction equipment required for the demolition and safe removal of the debris and/or fixtures. If any of the walls are to be demolished, the consultant shall make sure that this does not compromise the structural integrity of the building. If any structural walls are to be demolished, the consultant shall provide a design for supporting the structure. This shall include but not be limited to: installation, maintenance and removal of temporary protection measures, all required pedestrian traffic control measures, limits of removal for existing finishes and fixtures and piping, removal and legal disposal of all demolition items. The Consultant shall evaluate and determine the necessary ceiling design for the project. Any ceiling repair or patch-work shall be included in the design. The Consultant shall also identify any and all items to be removed and replaced or removed and placed to storage.

Any demolition equipment and/or dumpster locations shall be provided at an Agency approved location.

3. Temporary Conditions:

The Consultant shall include in the design a working temporary restroom or port-a-john with a toilet and sink during construction.

4. Carpentry:

The Consultant shall provide all design requirements for any and all carpentry items, whether exposed or concealed, necessary for attachment and or support of other work. The proposed counter tops shall be of a solid surface material and shall be fully anchored and supported. Sink type shall be discussed in the design phase. Doors, frames and hardware shall be barrier free where feasible.

5. Finishes:

All floor and wall surfaces shall be prepared for tile finish. The consultant shall determine and provide the necessary floor and wall prep work as required by the type of tile to be installed. The Agency approved height of the wall tile shall be determined by the Design Consultant. Wall surfaces not receiving a tile finish shall be prepared for a paint finish, with suitable substrate. The paint finish shall extend up to or above the finished ceiling height. All floor tile finishes shall be designed with a slip resistant finish suitable for restrooms. Floors shall have a code compliant, positive drain slope to floor drains, where applicable.

6. Fixtures:

The Consultant shall design all agency approved fixtures including but not limited to: sinks, toilets and shower stalls. Floor mounted toilets and urinals are preferred. Electric flushometers, faucets and hand dryers are also preferred along with a garbage disposal for one sink in each bathroom. All fixtures and their controls shall be suitable for facilities of this type and shall meet all requirements relative to Barrier Free where feasible and as all owed by the NJ Uniform Construction Code, Rehabilitation Subcode, Chapter 6.

The Consultant shall determine if the existing water pressure is sufficient for the proper operation of the new fixtures. If not, provide a system design that will satisfy water pressure demand of the new agency approved fixtures.

7. Accessories:

The Consultant shall provide the design criteria for the accessories for the renovated restrooms. This shall include but not be limited to: grab bars, mirrors, shelves, toilet tissue dispensers, feminine hygiene dispensing and disposal units, paper towel dispensers, robe hooks, soap dispensers and hand dryers. Mounting heights for all accessories shall be code and Barrier Free compliant.

8. Waste, Drain and Vent Piping:

All existing waste, drain and vent piping removal shall be removed and replaced up to the first manhole outside the building.

All new pipe materials, floor drains, hangers, pipe fastening materials and all other components of the new work shall be adequately sized and suitable for facilities of this type. The Consultant shall provide the design criteria for the sanitary waste and vent piping to meet the demands of the new plumbing fixtures. This is to include any new under the floor waste and vent piping to the new fixtures and floor drain locations. All new installations shall comply with all applicable building codes and regulations.

9. Supply Piping:

The Consultant shall include in the design the replacement of all cold and hot water supply piping back to the water meter as per the study report. All supply piping shall meet the demands of the toilets, sinks and showers, where applicable. Supply rooms/ janitor closets shall include the replacement or installation of slop sinks. Verify access for pipe chases. All piping shall clearly show the utility interface demarcation in the chase room. The replacement or installation of shut-off valves shall be provided where necessary. The system design shall also consider but not be limited to: all pipe joint connection methods, installation of appropriate valves, water temperature tempering devices, pipe anchoring and bracing, change in direction fittings, and all other items necessary to provide a complete water supply system. Additionally, the design shall include the installation of a a backflow preventer.

Plumbing shall be of PEX piping where permitted. All supply piping not of PEX piping shall be insulated with an appropriate material sufficient to maintain desired water temperatures and prevent condensation build-up. The insulation design criteria shall consider all components to include but not be limited to: insulation thickness, insulation jacket material, insulating of all fittings and valves, butt-joint fastening, and all other items necessary to provide a completely insulated water supply system. All exposed to view piping within the restrooms shall also be insulated with the appropriate materials.

E. HVAC SYSTEM AND RELATED EQUIPMENT

1. General:

The Consultant may be guided by the recommendations provided in the Harding Rehabilitation Study completed in 2021. However, HVAC equipment shall be replaced and not repaired. The Consultant shall provide design, specifications, bid/award and construction administration services to removal and replace all of the existing HVAC systems and related equipment. The design shall include, but not limited to, replacing the Air Handling Unit (AHU), Rooftop units (RTU), exhaust fans, air distribution grills, registers and diffusers electric unit heaters, window air conditions and electric cabinet heaters and all other heating, cooling and air distribution components.

The Consultant shall include in the design start-up, testing, and balancing for all installed HVAC equipment room to ensure adequate fresh air is supplied per code requirements.

The Consultant shall include in the design new HVAC controls that are direct digital (DDC) controls and shall be BACnet compatible in order to accommodate the installation of a future BMS (Building Management System).

The Consultant shall include in the design all replaced equipment to be equipped with the necessary controls and thermostats to meet all current energy codes and standards.

2. Equipment Removal:

The Consultant shall include in the design the removal and disposal of HVAC equipment including, but not limited to all heating, cooling and air distribution components, air distribution grills, registers and diffusers.

Upon completion of the work any HVAC related equipment not being replaced shall be cleaned and reinstalled and shall function properly after reinstallation. Any and all adjustments to any pipe work, electrical lines, ductwork etc., shall be performed to allow for reinstallation.

3. Temporary Conditions:

The Consultant shall provide temporary heating and/or cooling accommodations as needed to keep the facility operational for Agency staff during construction phases and throughout construction.

4. Load Calculation:

The Consultant shall perform a load calculation to determine that the replacement of the new HVAC equipment and accessories meets the code and building requirement of the required occupancy count.

5. Testing and Balancing:

The Consultant shall, during the survey phase of its work, use its discretion and experience to determine whether HVAC System Testing and Balancing is needed in order to properly assess the function of the existing HVAC System. Such HVAC System Testing and Balancing shall be performed by a qualified firm. It is not required that such firm be pre-qualified with DPMC, however a NJ Business Registration Certificate will be required.

As part of the design documents, the Consultant shall ensure that, following construction, the Contractor is required to hire a qualified HVAC Testing and Balancing firm, and such firm shall perform system tests to ensure that the HVAC system as installed performs as specified and designed. The design documents shall further require that the HVAC System Testing and Balancing firm shall produce a report setting forth its findings, adjustments, recommendations, and further that it shall certify that the HVAC system meets the design intent and will perform as specified and designed and that all equipment, i.e., fans, controls, dampers, and devices requiring adjustments or regulation are properly installed, thoroughly cleaned, adjusted, or regulated for proper operation and free from objectionable noise and vibration.

As part of Consultant's Construction Site Administration services, it will oversee the Contractor's work and their hiring of a HVAC System Testing and Balancing firm. The Consultant shall further ensure that any testing and balancing is performed in accordance with the current Association Air Balancing Council Standards or other State approved associations. Any system tests shall be observed and approved by the DPMC Project Manager and Code Group and a copy of the certified report and certification referred to above is to be provided to the DPMC Project Manager. The system shall be maintained by the maintenance personnel in accordance with the report data and operating manuals provided by the Contractor.

F. ELECTRICAL/ LIGHTING

The Consultant shall include in the design all electrical requirements for the project and the specifications for LED lighting and fixtures and lenses cleaned at a minimum. The Consultant shall provide the design for new emergency lighting units in the vestibules with remote heads for exterior emergency egress.

G. FIRE ALARM SYSTEM

1. Survey Condition Phase/ Needs Assessment:

Conduct a survey of the building to determine the existing conditions of all areas that will be impacted by the installation of the new fire alarm system and the site specific design requirements for this project.

The survey/needs assessment shall include, but not be limited to the following:

a. Identify all existing fire detection system components, both operable and inoperable, that shall be removed and replaced as part of this project.

b. Identify building systems and components that require the fire detection systems monitoring such as: duct work, air handlers, etc. and any other conditions that need to be monitored by the fire detection system.

c. Identify the appropriate locations for the new building remote fire detection annunciator panel. Determine the design requirements for space needs, electrical power, tie-ins to the alarm panel and provisions for a protected environment at the panel site location where required.

d. Identify the location and space requirements for the main fire alarm panel.

e. Identify the design requirements to ensure the fire command station meets the requirements of a non-proprietary supervising alarm system per NFPA 72.

f. Identify the design requirements and exact routing of all new electrical distribution power wiring to the fire detection system and related components and the upgrades required to any existing electrical system component if required. Reuse existing wiring if possible.

g. Identify all obstructions that must be altered, relocated, or removed in order to install the new fire detection system. Items shall include, but not be limited to walls, ceiling systems, light fixtures, ductwork, diffusers, piping, conduit, brackets, hangers, etc.

h. Identify the design requirements for backup power, through batteries and/or UPS, so that a loss of power, for any reason will not limit the operation of the detection and annunciation of the system in each building.

i. Survey the existing suppression system and make design provisions to tie the suppression system into new panels as necessary.

2. New System Design Criteria:

Provide the design and specifications to install all of the existing fire alarm detectors, peripheral devices and panels at the facility with a new non-proprietary system. In addition, address the following as may be applicable:

- Protection of the fire alarm system from electrical surges, spikes, sags, over-voltages, brownouts, and electrical noise.
- Addressability of devices and notifications made to the building fire alarm control panels and the facility main fire alarm remote station panel.
- All programmable devices must be able to have their addresses set without special equipment, tools, or programs. Changing of vandalized heads or devices must be able to be completed by facility maintenance staff without the requirement of special software or tools.
- Software requirements and compatibility with new and existing devices.
- New smoke detectors shall be appropriate for the institution and approved by facility staff. Install heat detectors rather than smoke detectors in high humidity locations.
- Tamper proof security covers that meet Department of Transportation requirements and standards shall be provided on all devices that may be accessible to selective Agency occupants.

The system is to be non-proprietary such that any company shall have the ability to install, service, maintain and monitor it. All software and devices shall be non-proprietary also. The

building fire alarm system shall provide evacuation alarm tone signaling using horns to sound the alarm signals and strobe lights as visual notification appliances. The system circuits shall have intelligent addressable sensors, analog detecting, low voltage and modular, with digital communication techniques, and notifications made to the building fire alarm control panel, and the facility main fire alarm remote station panel.

The fire alarm system shall be provided with a hardwired mini-computer power conditioner to protect the system from electrical surges, spikes, sags, over-voltages, brownouts, and electrical noise. The power conditioner shall be UL listed and shall have a built in overload protection.

System must have software logic to have thirty seconds to screen out false alarms and meet all code requirements.

All programmable devices must be able to have their addresses set without special equipment, tools, or programs. Changing of heads or devices must be completed by facility maintenance staff without the requirement of special software or tools.

The building fire alarm panel, annunciators, and each power supply, addressable circuit, audible circuit, visual circuit, amplifier, etc. shall be designed to have 25% spare capacity. System operating hardware shall be functionally expandable by installing additional solid state plug-in modules. Note that the installation of additional plug-in modules shall not require the replacement of existing equipment, components, or accessories.

Identify the requirements for power to run the system and the availability of output devices to enable local as well as remote monitoring.

3. Detectors:

Smoke detectors shall be of the solid state, photoelectric or ionization type and shall be compatible for use in addressable, zoned, and combination addressable and zoned systems. Install heat detectors rather than smoke detectors in high humidity locations.

Duct detectors need to be installed so they are accessible for repair or replacement.

Ceiling mounted detectors shall either not be installed prior to completion of other construction work in the area, or plastic bags shall cover the detectors until the other construction work is completed to prevent false alarms.

The detectors shall report to the fire alarm panel and the fire alarm panel shall operate a control module to stop the associated HVAC system fan(s). Design documents shall state that duct type detectors shall not be installed in the ducts until after the ducts have been cleaned and the duct filters have been changed.

4. Alarms:

Horns shall be of sufficient number so that an alarm shall be clearly audible to all occupants of the building and/or fire area. Audible alarm signals shall produce an acceptable sound level for the proper duration in the building.

The selection and placement of the alarming devices shall comply with the requirements of the applicable building codes for the individual building and occupancy classifications, NJUCC Barrier Free Code, and the NFPA–72–2002.

5. Strobes:

The design of the strobe devices shall be ADA compliant and comply with the requirements of the UL 1971 and standard NFPA 72. They shall be installed at the proper height and in appropriate building locations ensuring they provide optimum coverage and visibility. Details shall be provided in the design documents that indicate the strobe mounting methods and if required, specify any required adaptors to make use of the existing manufacturer's mounting boxes.

The strobe lights shall be tied into the new fire alarm system and include battery backup power. The battery backup shall be sufficient to meet all demands imposed by an activated light for a time duration specified by the Consultant.

6. Pull Stations:

Manual addressable pull stations shall be provided in all building areas required by code and tied to the new fire detection system. Make recommendations for locked versus non-locked pull stations and their locations on a building by building basis.

Activation of any manual pull station shall automatically operate all audible and visual appliances and produce an alarm signal at the building fire alarm control panel. Replace existing pull stations that are not compatible to the new system or deemed unacceptable due to age or physical condition.

7. Control Panel:

Each building alarm control panel shall be wired to all peripheral alarm and initiating devices and tied into a remote annunciator panel located in a convenient area near the fire department entrance to the building and shall be readily accessible and readily visible to fire fighters. The building alarm control panel and annunciator panel shall be tied into the existing or a new electrical power source at their location in the building. Provide a riser diagram drawing for each building fire/burglar alarm control panel that identifies their connections to the various circuits and peripheral initiating devices.

8. Annunciator Panel:

Each building annunciator panel shall have a graphic display that will enable responding personnel to quickly and accurately identify the location of a fire in the building and indicate the status of emergency equipment or fire safety functions that might affect the safety of occupants in a fire situation. It shall be UL listed and FM approved for Central Monitoring Station tie-in.

9. Wiring:

The new low voltage wiring from the fire alarm panels to the peripheral devices shall be concealed and run in wire mold or conduit, whichever is more appropriate for the building conditions, security requirements, efficiency, and cost effectiveness. Any exposed wiring installed above the ceiling shall be plenum fire rated cable in accordance with NEC Article 760 or must be protected in conduit. Protect exposed fire alarm wiring from potential rodent damage.

10. Lighting Protection:

A lightning protection device listed in accordance with UL 497 shall be provided in the alarm power circuit of each building to protect the alarm control panel and associated

11. Emergency Power:

The alarm systems shall have emergency battery backup that is sized in accordance with all applicable codes. The battery supply shall be calculated to operate loads in a supervisory mode for twenty-four (24) hours for central station systems and remote supervisory systems. Batteries shall be sized at 125% of the calculated size to compensate for deterioration and aging during the battery life cycle. Battery calculations shall be submitted to the DPMC Code & Design Review Unit for record.

Provide a battery charging circuit for each standby battery bank in the system. The charger shall be automatic in design, adjusting the charge rate to the condition of the batteries. All system battery charge rates and terminal voltages shall be read using the fire alarm control panel LCD display in the service mode indicating directly in volts and amps.

12. System Tests:

A written “Acceptance Test Procedure” (ATP) for testing the new fire detection system and components, as applicable, shall be prepared by the Consultant in accordance with all applicable codes and standards and included in the specification.

Upon completion of the system installation, the system manufacturer shall be responsible for the performance of the ATP, demonstrating the function of the system and verifying the correct operation of all system components, circuits and programming.

The system test shall be witnessed and approved by the Department of Community Affairs (DCA). The Consultant shall provide ample notification time when arranging the demonstration with DCA, DPMC Project Team members, Client Agency, Contractor, and the equipment manufacturer.

Upon final acceptance of the system, the Contractor shall provide a complete as-built color-coded wiring diagram. The diagram shall include a written statement signed by the Contractor and manufacturer's representative that the diagram has been corrected to include field changes and does represent the system installed.

The fire detection manufacturer shall provide system training to the facility personnel as described in Section VIII, paragraph N of this document.

13. Spare Parts:

A spare parts list shall be prepared and items purchased as part of this project for all critical items necessary for the successful operation of the fire detection system such as detectors, fire alarm fuses, switches, relays, LED lights, etc. Instructions shall be included for the operation and care of the system. Written instructions shall also be included with the final equipment and maintenance brochure.

14. Warranty:

The alarm system shall have a three-year warranty on all parts and a one-year free maintenance contract on all system components. There shall be a three-year maintenance contract after the one-year free maintenance agreement with a guaranteed maintenance cost for the three year period. Maintenance shall include a yearly inspection and operation of the system. Testing of each device shall be as specified in NFPA 72

H. GENERATOR REPLACEMENT

1. General:

Using the Rehabilitation Study for NJDOT Harding Rest Area completed in 2021 as a guide, the Consultant shall provide the Design, Construction, Administration, Permitting and Bid/ Award to remove and replace the existing Kohler 50kW generator located in the exterior rear of the Harding Township Rest Area building along with the necessary related switchgear and equipment at this facility. The new generator shall be sized to power the entire SSP facility.

The design requirements of this project shall include but not be limited to the following items identified below. These items are meant to be used as a design guide; however, it shall be the

responsibility of the Consultant to determine the final design criteria to make a complete working installation based on their experience with projects similar in size and scope to this one, and the equipment manufacturer's requirements.

2. Location:

The Consultant shall survey suggested locations, provide recommendations, and identify requirements, such as structural calculations for new pads as necessary.
The new generator may be located in the same area of the existing generator, space permitting or as necessary. Space created by the removal of the Kohler generator can be considered.

3. Equipment Removal:

The Consultant shall provide a demolition plan specifying the existing equipment to be removed and disposed of by the contractor. Provide a phasing plan for equipment removal and for the installation of the new generator.

4. Temporary Power:

The Consultant shall provide temporary power as needed to keep the site operational during the construction phases, if needed.

5. New Generator:

The Consultant shall determine the new generator classifications, power, capacity and size according to the load requirements in order to back up the entire facility. The Consultant shall in include in the design the fuel type powered by the new generator. The Consultant shall verify there is ample fuel to run the new generator for 72 hours. Determine the need to add a new fuel AST, if necessary. The Consultant shall determine by consulting with the Agency the required load back-up for this facility in case of loss of electricity and power outage.

Survey industry-recognized manufacturers of the replacement components to be specified in the design documents. Items to consider shall include, but not be limited to product reliability and performance, manufacturer's years of service, equipment costs, warranties, guarantees, delivery schedule, compatibility with the existing equipment and related components, physical size, etc. Note that the names of three "equal" manufacturers shall be identified and included in the design documents for reference.

The consultant shall evaluate the generator design criteria based on a thorough evaluation of requirements of NEC Articles 700, 701, and 702.

6. Drawings:

Provide a Single- Line Diagram to show new generator tie-in details that identifies the name, location, and rating of all switchgears, transformers and generator control panel components.

Include all demand factors, switch and panel schedules, wiring identification codes, drawing legends, etc. on the documents.

Provide short circuit study and selective coordination study of over-current protection devices. Provide details on the drawings of any special assembly, electrical tie in requirements, or any other governing or limiting factor of the manufacturer's system component. The drawings shall be prepared with sufficient flexibility to accommodate variations among the equipment manufacturers approved by the Project Team.

Include all demand factors, switch and panel schedules, wiring identification codes, drawing legends, etc. on the documents.

7. Generator Pad:

The Consultant shall assess the existing concrete pad and determine to reuse the existing concrete pad with the new equipment or provide the design and specifications to construct a new concrete pad for the new generator and fuel tank as necessary. Provide signed and sealed structural calculations, verifying that they will support the new equipment.

8. Control Equipment:

Provide the design and specification for a master control system, new breaker switchgear, and all further details regarding the sequence of operations.

9. Generator Annunciator Panel:

The Consultant shall include in their design a local annunciator panel and wireless annunciator panel at approved occupied workstations within the facility.

10. Equipment Installation Schedule:

Develop a proposed sequenced phased construction schedule that identifies how the new generator, components and other related items are to be installed. Minimize the required downtime and switchover periods. Temporary emergency backup power shall be provided if required. The final approved schedule shall be included in Division 1 of the specification for Contractor reference during bidding.

11. Equipment Tests:

The design documents shall include detailed test requirements of the new equipment and systems. The Contractor and a certified testing lab shall perform operational tests of the completed installation to certify their proper operation. All test results shall be bound in a booklet and three (3) copies presented to the Project Manager for record.

12. Spare Parts:

A critical spare parts list shall be prepared for all appropriate items and purchased as part of this project. The Consultant shall include provisions for the manufacture/vendor of the equipment to provide critical spare and maintenance parts as part of this project. All of the critical parts shall be reviewed and approved by the Client Agency.

I. HAZARDOUS BUILDING MATERIALS

The Consultant shall review the Hazardous Materials Testing Report provided USA EMI and conduct additional testing as deemed necessary. If deemed necessary, collect samples of materials that will be impacted by the construction/demolition activities and analyze them for the presence of hazardous materials including:

1. Asbestos in accordance with N.J.A.C. 5:23-8, Asbestos Hazard Abatement Subcode.

2. Lead in accordance with N.J.A.C. 5:17, Lead Hazard Evaluation and Abatement Code.

3. PCB's in accordance with 40 CFR 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. Consultant shall engage a firm certified in the testing and analysis of materials containing PCB's.

Consultant shall document their procedure, process and findings and prepare a "Hazardous Materials Survey Report" identifying building components impacted by construction activities requiring hazardous materials abatement. Consultant shall provide three copies of the "Hazardous Materials Survey Report" to the Project Manager.

Consultant shall estimate the cost of hazardous materials sample collection, destructive testing as necessary, tests and analysis and preparation of the Hazardous Materials Survey Report and include that amount in their fee proposal line item entitled **"Hazardous Materials Testing and Report Allowance"**, refer to paragraph X.B.

Based on the Hazardous Materials Survey Report, Consultant shall provide construction documents for abatement of the hazardous materials impacted by the work in accordance with the applicable code, subcode and Federal regulations.

Consultant shall estimate the cost to prepare construction documents for hazardous materials abatement and include that amount in their fee proposal line item entitled **"Hazardous Materials Abatement Design Allowance"**, refer to paragraph X.C.

Consultant shall estimate the cost to provide "Construction Monitoring and Administration Services" for hazardous materials abatement activities and include that amount in their fee proposal line item entitled **"Hazardous Materials Construction Administration Allowance",** refer to paragraph X.D.

There shall be no "mark-up" of subconsultant or subcontractor fees if subconsultants or subcontractors are engaged to perform any of the work defined in paragraph VII.I "Hazardous Building Materials". All costs associated with managing, coordinating, observing and administrating subconsultants and subcontractors performing hazardous materials sampling, testing, analysis, report preparation, hazardous materials construction administration services shall be included in the consultant's lump sum fee proposal.

J. SITE REQUIREMENTS

The following project site requirements shall be included in the design documents as appropriate:

1. Contractor Use of the Premises:

Determine the coordination, policies, and procedures with the Client Agency and the Contractor with respect to parking, material staging, and storage areas, use of Client Agency utilities, allowable hours of construction, the need and location of portable toilets, the need and location of construction and storage trailers, etc. and include the information in Division 1 of the specification.

Floor and furniture protection must be specified in all interior areas of the building when used by the Contractors to access the roof areas.

2. Dumpster:

If a dumpster is required, the location shall be shown on the site plan in an area approved by the Client Agency, and the frequency of debris removal shall be identified in the design specification.

3. Special Sequencing:

The contract documents must incorporate special sequencing of the work, if necessary, to be coordinated with the Client Agency in order to prevent disruption of the facility operation. Items shall include, but not be limited to: noise restrictions, prevention of fumes inside the building from adhesives or asphalt, weather and/or seasonal concerns, and shut down of any physical plant functions, services, and/or utilities.

4. Site Restoration:

Include in the contract documents that the site must be restored to pre-construction conditions after construction has been completed and approved.

K. SPECIAL CONSIDERATIONS

1. Hours of Work:

Identify the approved construction work hours for this project in Division 1 of the specification. Special hours required to install the internal roof drains in the building shall be identified if required. Additional construction hours during the day or weekends will be allowed if the Contractor obtains prior approval from the Project Team members.

2. Trailers:

Provide a storage trailer and meeting room at the construction site if required for the project and in an area approved by the Client Agency.

3. Material Staging:

All stored roofing felts, insulation boards, and/or other roofing components shall be protected from the elements and moisture with plastic sheet covers or other approved materials.

4. Material Safety Data Sheets (MSDS):

Specify in the contract documents that the Contractor shall provide material safety data sheets on site for all roofing materials used such as: sealants, bonding adhesives, solvents, bitumen, etc.

5. Fire Extinguishers:

Design documents shall require the Contractor to make provisions for stand-by portable fire extinguishers of proper size and type. They shall be located on the roof and/or near any source of open flame or spark and all employees shall be trained in their proper use.

6. Fencing:

All fencing that is required around the construction site or elements of the site such as storage trailers, construction materials, buildings, equipment, etc. shall be identified on the design drawings where appropriate.

7. HVAC Unit, Roof Ventilators, Intake Fans:

Requirements to shutdown all rooftop equipment and allowable hours of adhesive application shall be identified in the contract documents to prevent fumes from entering the building.

8. Lightning Protection:

Address the temporary removal and replacement of the lightning protection system if applicable.

9. Roof Antenna:

Indicate if the Contractor or Client Agency will remove and replace any existing roof antennas and mounting fixtures in the contract documents.

10. Vapor Recovery Equipment:

Vapor recovery systems shall be used in conjunction with the asphalt adhesive application. The kettle shall be located considering wind direction, open windows, HVAC air intake louver locations, adjacent buildings, etc. The allowable hours of adhesive application shall be identified in the contract documents and if the building may be occupied during the application.

11. Existing Equipment Removal & Replacement:

Identify on the design drawings any existing equipment and materials that must be removed in order to install any component of the new roofing system such as: lights, security cameras, lightning protection systems, antennas, piping, conduit, etc. and include details indicating the approved methods of reattachment.

L. 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:

Investigation and Schematic Design Phase: One (1) oral presentation at phase completion.

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

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

M. 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.

- DPMC Project No. T0618-00: Rehabilitation Study for NJDOT Harding Rest Area, Rodier Ebersberger Architects LLC, June 1, 2021
- DPMC Project No. T0359-00: Rest Area Modernization Harding Township, New Jersey, 10/7/1997, Degrace Architects Engineers Surveyors
- Hazardous Materials Report for Harding Rest Area, USA Environmental Management, Inc., May 8, 2019
- State of New Jersey Department of Transportation Plans of Route 287 Sections 8B, 9C, 10F & 11D, January 1974

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. The DCA ePlans site can be found at:

https://www.nj.gov/dca/divisions/codes/offices/ePlans.html

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":

Joyce Spitale, DPMC
PO Box 235
Trenton, NJ 08625-0235
Joyce.Spitale@treas.nj.gov 609-943-5193

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:

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

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, **"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.

B. HAZARDOUS MATERIALS TESTING AND REPORT ALLOWANCE

Consultant shall estimate the costs to complete the hazardous materials survey, sample collection, testing and analysis and preparation of a "Hazardous Materials Survey Report" noted in paragraph VII.I.1 and enter that amount on their fee proposal line item entitled **"Hazardous Materials Testing and Report Allowance"**. Consultant shall attach a detailed cost breakdown sheet for use by DPMC during the proposal review and potential fee negotiations. The cost breakdown sheet shall include, but not be limited to, the following information:

- Description of tasks and estimated cost for the following:
  - Sample collection
  - Sample testing
  - Preparation of an Hazardous Materials Survey Report

Any funds remaining in the Hazardous Materials Testing and Report Allowance will be returned to the State at the close of the project.

C. HAZARDOUS MATERIALS ABATEMENT DESIGN ALLOWANCE

Consultant shall estimate the costs to prepare construction documents for hazardous materials abatement noted in paragraph VII.I and enter that amount on their fee proposal line item entitled **"Hazardous Materials Abatement Design Allowance"**. Consultant shall attach a detailed cost breakdown sheet for use by DPMC during the proposal review and potential fee negotiations. The cost breakdown sheet shall include a description of the tasks to be performed and the estimated cost of each task.

Any funds remaining in the Hazardous Materials Abatement Design Allowance will be returned to the State at the close of the project.

D. HAZARDOUS MATERIALS CONSTRUCTION ADMINISTRATION ALLOWANCE

Consultant shall estimate the cost to provide Construction Monitoring and Administration Services for hazardous materials abatement as noted in paragraph VII.I and enter that amount on their fee proposal line item entitled **"Hazardous Materials Construction Administration Allowance"**. Consultant shall attach a detailed cost breakdown sheet for use by DPMC during the proposal review and potential fee negotiations. The cost breakdown sheet shall include a description of the tasks to be performed and the estimated cost of each task.

Any funds remaining in the Hazardous Materials Construction Administration Allowance will be returned to the State at the close of the project.

E. ROOF MONITOR ALLOWANCE

The Consultant shall provide a full time roof monitor during the installation of the roof system on the buildings. Refer to Paragraph VII.C "Roof Monitor Responsibilities" for a description of services to be provided by the roof monitor.

The costs for the services provided by the roof monitor shall be included in the "**Roof Monitor Allowance"** of the Consultants fee proposal. The cost for the roof monitor shall be for onsite services only, administrative and off site services shall be included in the Consultants Construction Administration fee. A cost breakdown shall accompany the fee proposal that identifies all costs associated with the Roof Monitoring services to be provided.

Any funds remaining in the Allowance shall be returned to the State upon completion 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: Alison F. Gottlieb 3/12/2024

ALISON F. GOTTLIEB, PROJECT MANAGER DATE
DPMC PROJECT PLANNING & INITIATION

SOW APPROVED BY: James Wright 3/12/2024

JAMES WRIGHT, MANAGER DATE
DPMC PROJECT PLANNING & INITIATION

SOW APPROVED BY: Dennis W. Meszaros 03/12/2024

DENNIS W. MESZAROS, PROJECT MANAGER DATE
NEW JERSEY DEPARTMENT OF TRANSPORTATION

SOW APPROVED BY: Nehad Mohamed 03/12/2024

NEHAD MOHAMED, PROJECT MANAGER DATE
DPMC PROJECT MANAGEMENT GROUP

SOW APPROVED BY: 3/14/24

CHRISTOPHER GEARY, ASST. 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:

- **INVESTIGATION AND SCHEMATIC DESIGN PHASE**
- **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 PHOTOS
D SCHEMATIC LAYOUT

END OF SCOPE OF WORK

DPMC Project No.: T0695-00

Deliverables Checklist
Investigation and Schematic 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
13.4.1.	A/E Statement of Site Visit						
13.4.2.	Narrative Description of Project						
13.4.3.	Building Code Information Questionnaire						
13.4.4.	Space Analysis						
13.4.5.	Special Features						
13.4.6.	Catalog Cuts						
13.4.7.	Site Evaluation						
13.4.8.	Subsurface Investigation						
13.4.9.	Surveys						
13.4.10.	Arts Inclusion						
13.4.11.	Design Rendering						
13.4.12.	Regulatory Approvals						
13.4.13.	Utility Availability						
13.4.14.	Drawings (6 Sets)						
13.4.15.	Outline Specifications (6 Sets)						
13.4.16.	Current Working Estimate/Cost Analysis						
13.4.17.	Project Schedule						
13.4.18.	Formal Presentation						
13.4.19.	Scope of Work Compliance Statement						
13.4.20.	Investigation & Schematic 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.: T0695-00

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.	Outline 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

DPMC Project No.: T0695-00

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.	Outline 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.: T0695-00

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

DPMC Project No.: T0695-00

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

DPMC Project No.: T0695-00

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

DPMC Project No.: T0695-00

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

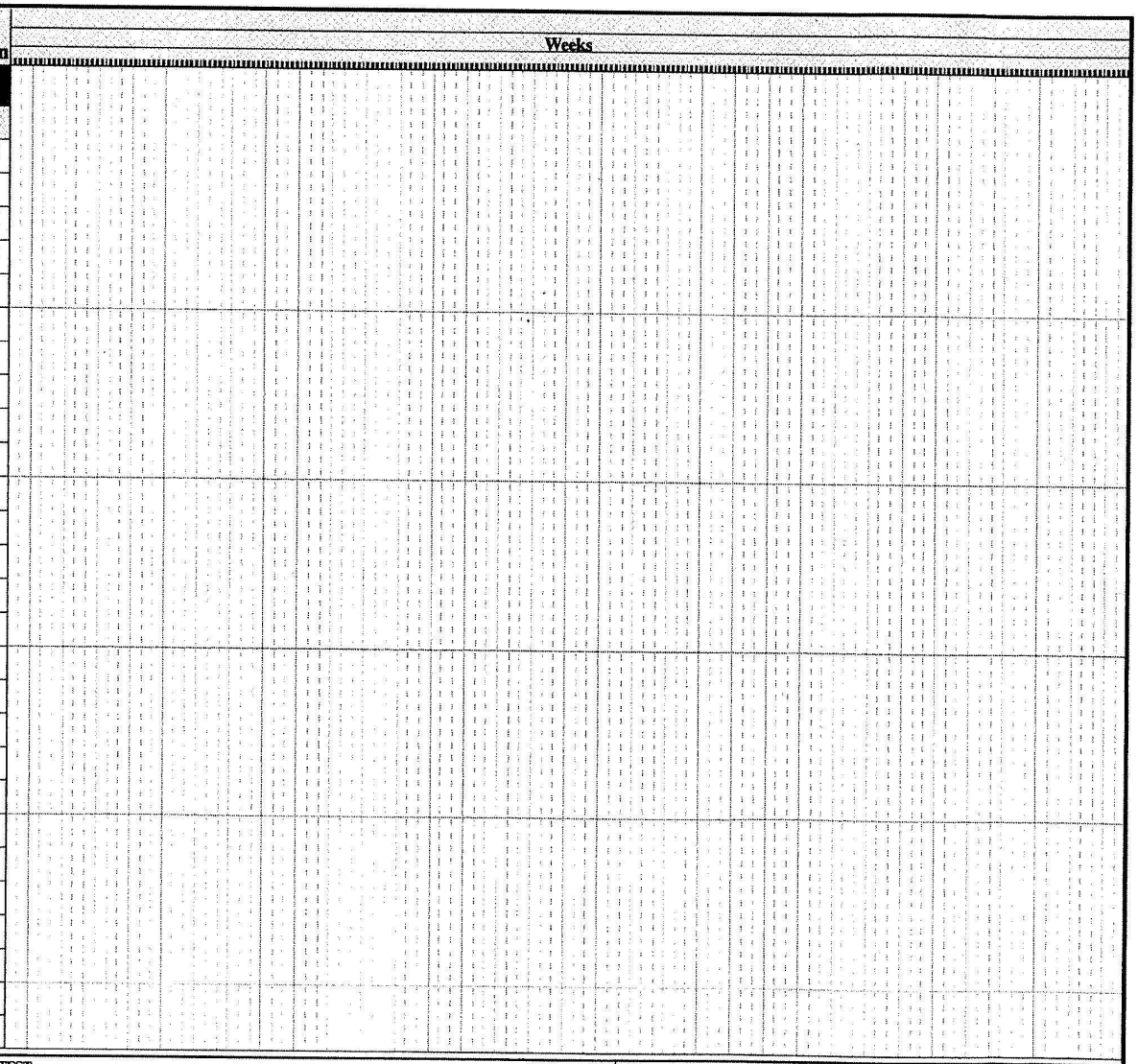
Responsible Group Code Table

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.

DBCA - TEST

Sheet 2 of 3

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	

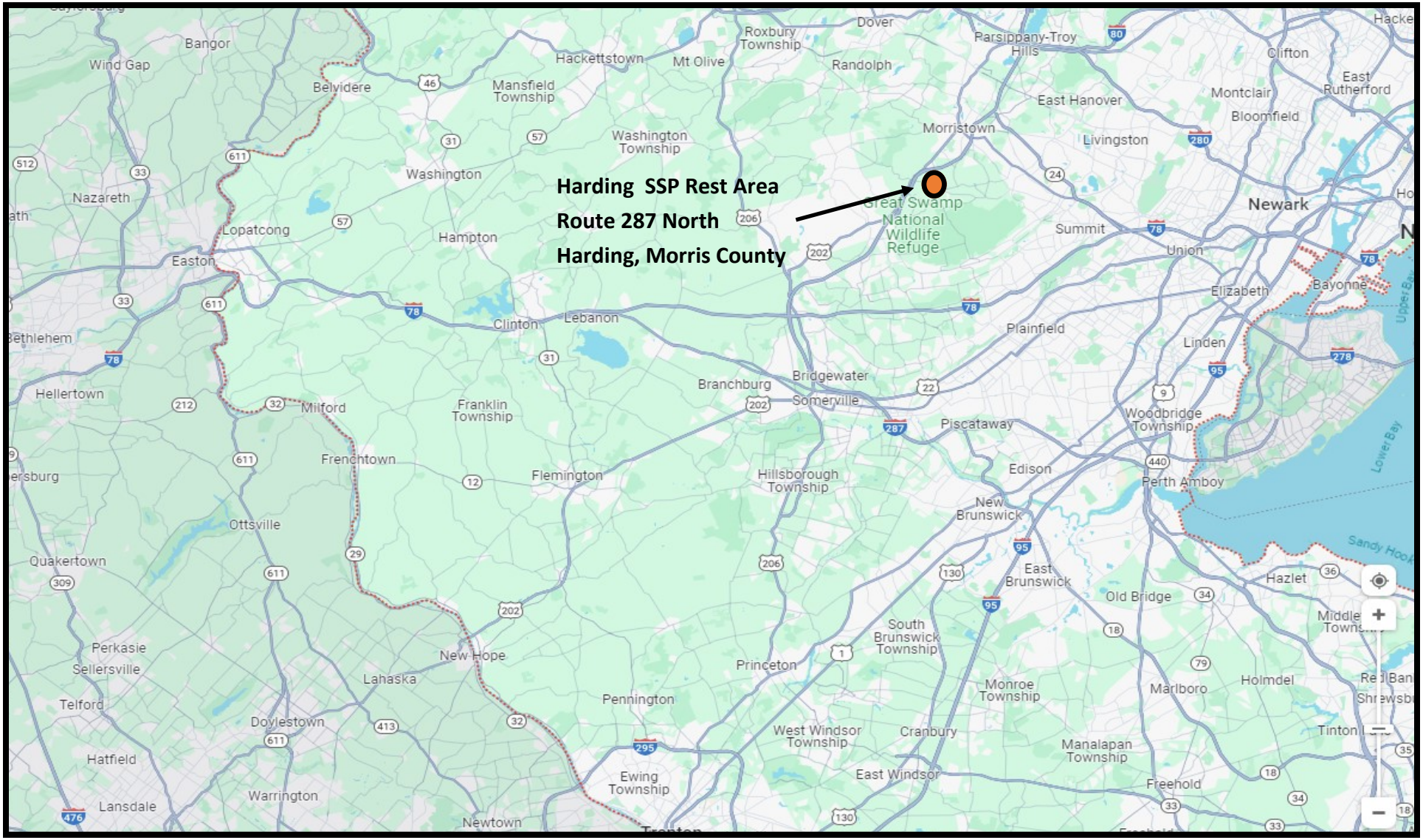
NOTE:
Refer to section "IV Project Schedule" of the Scope of Work for contract phase durations.

DBCA - TEST

Sheet 3 of 3

Bureau of Design & Construction Services

EXHIBIT 'A'



Project Site Location Map - NJDOT North

Harding Township Rest Area Building

EXHIBIT 'B'

Project Site - NJDOT North

Harding Township Rest Area Building

EXHIBIT 'B'

Project Site - NJDOT North

Harding Township Rest Area Building

EXHIBIT ‘B’

Entrance

Lobby

Photos

NJDOT North - Harding Township Rest Area Building

EXHIBIT ‘C’

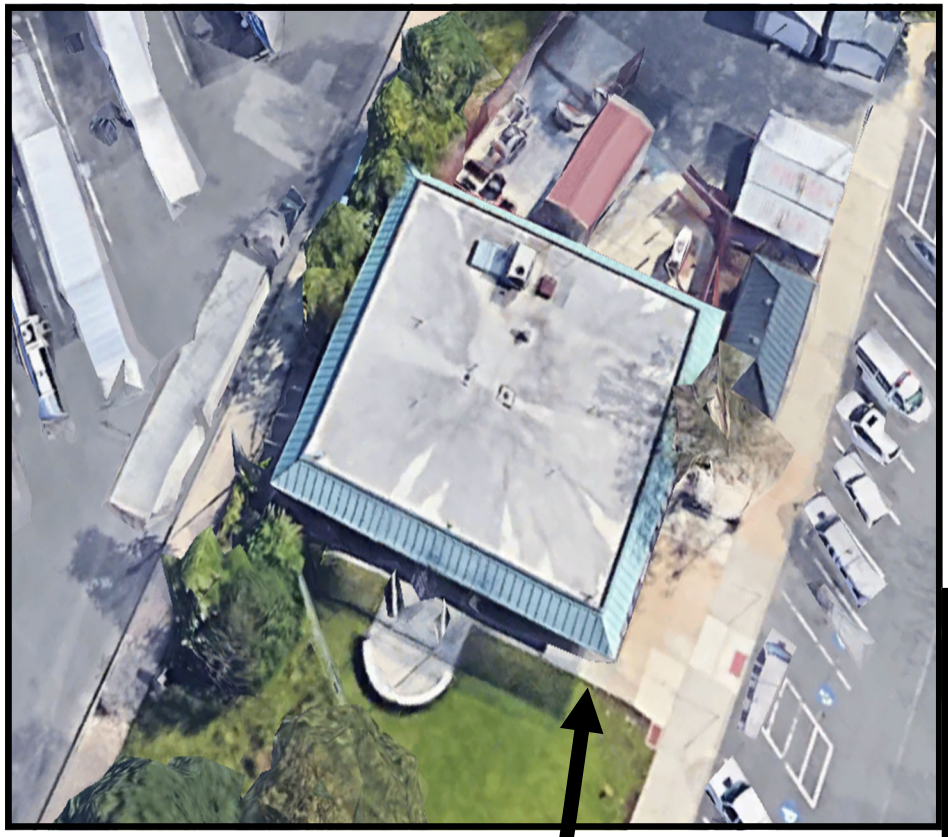
Restrooms,

Locker Room, Shower

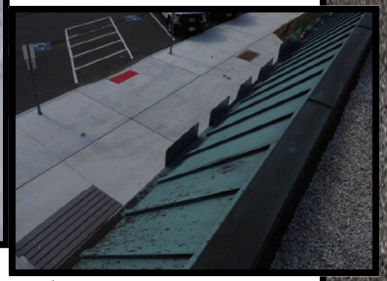
Photos

NJDOT North - Harding Township Rest Area Building

EXHIBIT ‘C’



Flashing



Copper Mansard Roof

Built-up

Roofing System

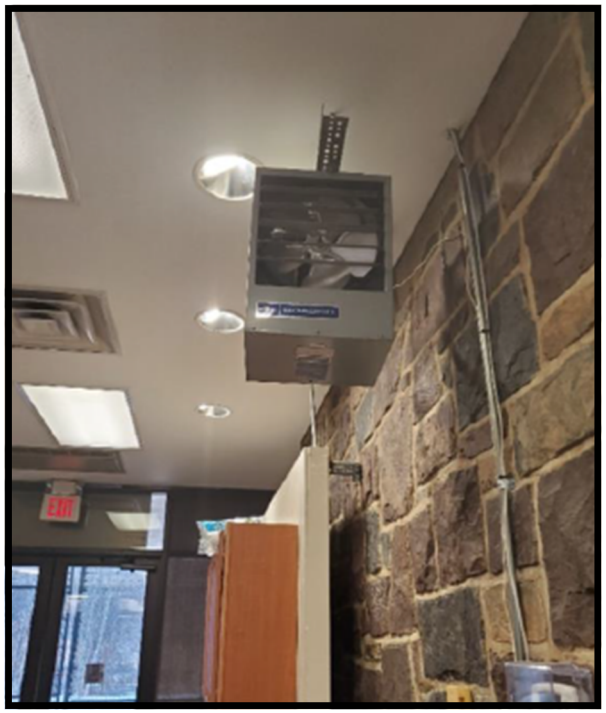
Photos

Harding Township Rest Area Building

EXHIBIT ‘C’

Rooftop Air Handling Unit (AHU)

Cabinet Heater



Electric Heater

Exhaust Fan
&
Register

HVAC Equipment

Photos

NJDOT North - Harding Township Rest Area Building

EXHIBIT 'C'

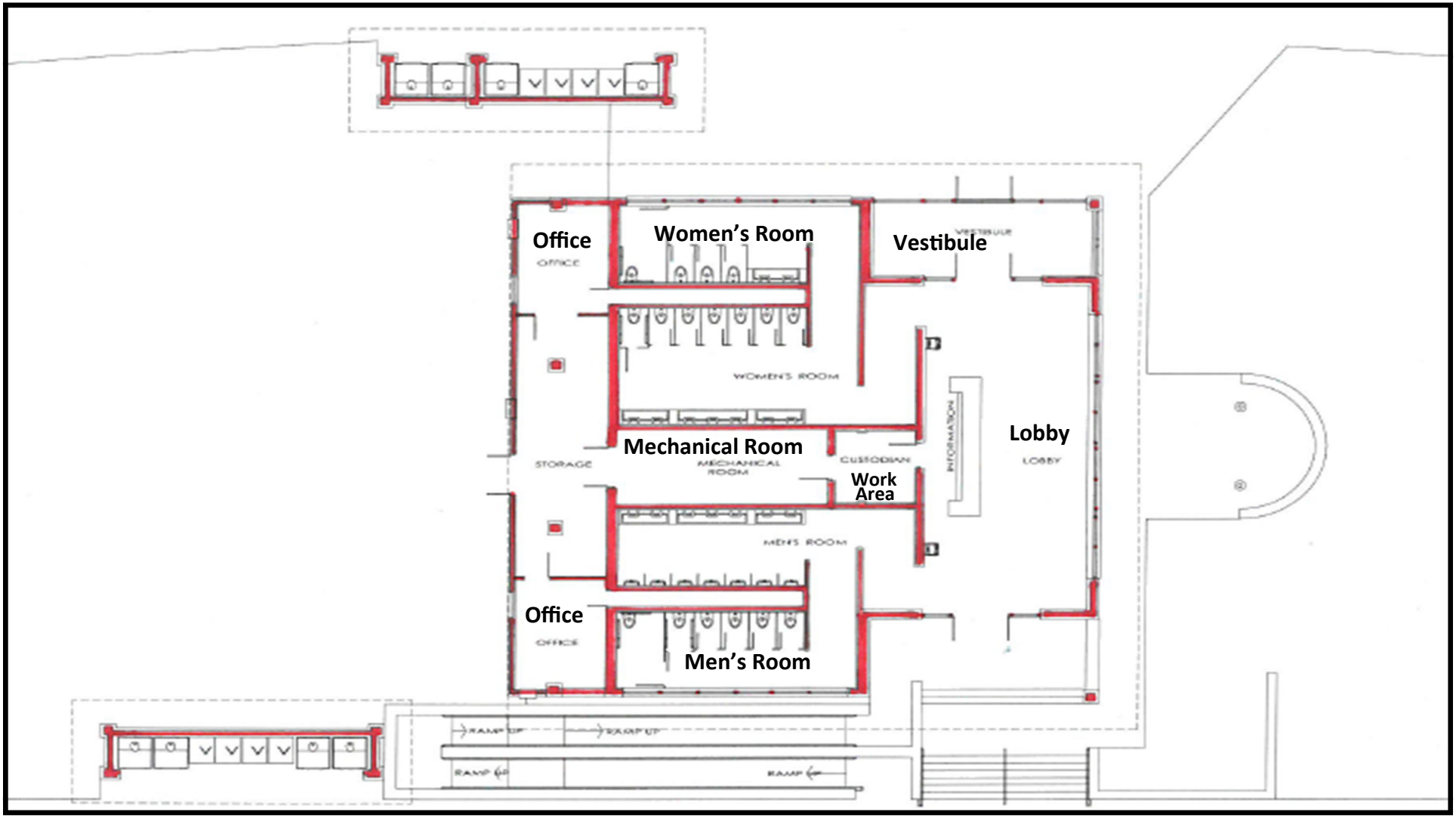
Generator

Transfer Switch & Electrical Panels

Photos

NJDOT North - Harding Township Rest Area Building

EXHIBIT ‘C’



Project Site

Harding Township Rest Area Building - Schematic Layout

EXHIBIT 'D'