SCOPE OF WORK

Ivy & Ancorage Roof Replacement

Ancora Psychiatric Hospital Ancora, Camden County, N.J.

Project No. M1571-00

STATE OF NEW JERSEY

Honorable Philip D. Murphy, Governor Honorable Sheila Y. Oliver, Lt. Governor

DEPARTMENT OF THE TREASURY

Elizabeth Maher Muoio, Treasurer



DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION

Christopher Chianese, Director

Date: July 29, 2022

PROJECT NO: M1571-00 DATE: July 29, 2022

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I. OBJECTIVE

The objective of this project is to remove and replace approximately 12,800 square feet of a roofing system on Ivy Hall at Ancora Psychiatric Hospital. The Ivy roof consists of two levels. The upper level covers the Gymnasium and is approximately 8600 square feet. The lower level, called the Ancorage, covers the Dining Hall and is approximately 4200 square feet.

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):

• P035 Roofing Consultant

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

- P025 Estimating/ Cost Analysis
- P028 Roofing Inspection
- P037 Asbestos Design
- P038 Asbestos Safety Control Monitoring
- P065 Lead Paint Evaluation

As well as, <u>any and all</u> 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 \$818,983.06

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

B. CURRENT WORKING ESTIMATE (CWE)

The Current Working Estimate (CWE) for this project is \$1,208,000.00

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

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

C. CONSULTANT'S FEES

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

IV. PROJECT SCHEDULE

A. SCOPE OF WORK DESIGN & CONSTRUCTION SCHEDULE

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

PROJECT PHASE **ESTIMATED DURATION (Calendar Days)** 1. Site Access Approvals & Schedule Design Kick-off Meeting 14 2. Design Development Phase **50%** (Minimum) 28 Project Team & DPMC Plan/Code Unit Review & Comment 14 3. Final Design Phase 100% 42 Project Team & DPMC Plan/Code Unit Review & Approval 14 7 4. Final Design Re-Submission to Address Comments 14 Project Team & DPMC Plan/Code Unit Review & Approval 5. DCA Submission Plan Review **30** 7 6. Permit Application Phase Issue Plan Release 7. Bid Phase 42 8. Award Phase 28

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9. Construction Phase

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B. CONSULTANT'S PROPOSED DESIGN & CONSTRUCTION SCHEDULE

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

The Consultant shall estimate the duration of the project Close-Out Phase based on the anticipated time required to complete each deliverable identified in Section XIV of this document entitled "Contract Deliverables - Project Close-Out Phase" and include this information in the bar chart schedule submitted.

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.

C. CONSULTANT DESIGN SCHEDULE

Based on the Notice to Proceed, Consultant shall update their approved schedule and shall distribute it at the design kickoff meeting. Note that this schedule shall be submitted in both paper format and on compact disk in a format compatible with *Microsoft Project*. This schedule will be binding for the Consultant's activities and will include the start and completion dates for each design activity. The Consultant and Project Team members shall use this schedule to ensure that all design milestone dates are being met for the project. The Consultant shall update the schedule to reflect performance periodically (minimally at each design phase) for the Project Team review and approval. Any recommendations for deviations from the approved design schedule must be explained in detail as to the causes for the deviation(s) and impact to the schedule.

D. BID DOCUMENT CONSTRUCTION SCHEDULE

The Consultant shall include a construction schedule in Division 1 of the specification bid document. This schedule shall contain, at minimum, the major activities and their durations for each trade specified for the project. This schedule shall be in "bar chart" format and will be used

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by the Contractors as an aid in determining their bid price. It shall reflect special sequencing or phased construction requirements including, but not limited to: special hours for building access, weather restrictions, imposed constraints caused by Client Agency program schedules, security needs, lead times for materials and equipment, anticipated delivery dates for critical items, utility interruption and shut-down constraints, and concurrent construction activities of other projects at the site and any other item identified by the Consultant during the design phases of the project.

E. CONTRACTOR CONSTRUCTION PROGRESS SCHEDULE

The Contractor shall be responsible for preparing a coordinated combined progress schedule with the Sub-Contractors after the award of the contract. This schedule shall meet all of the requirements identified in the Consultant's construction schedule. The construction schedule shall be completed in accordance with the latest edition of the Instructions to Bidders and General Conditions and Bulletins that may be issued on the project.

The Consultant must review and analyze this progress schedule and recommend approval/disapproval to the Project Team until a satisfactory version is approved by the Project Team. The Project Team must approve the baseline schedule prior to the start of construction and prior to the Contractor submitting invoices for payment.

The Consultant shall note in Division 1 of the specification that the State will not accept the progress schedule until it meets the project contract requirements and any delays to the start of the construction work will be against the Contractor until the date of acceptance by the State.

The construction progress schedule shall be reviewed, approved, and updated by the Contractor, Consultant, and Project Team members at each regularly scheduled construction job meeting and the Consultant shall note the date and trade(s) responsible for project delays (as applicable).

V. PROJECT SITE LOCATION & TEAM MEMBERS

A. PROJECT SITE ADDRESS

The location of the project site is:

Ancora Psychiatric Hospital 301 Spring Garden Road Ancora, NJ 08037-9699

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

B. PROJECT TEAM MEMBER DIRECTORY

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

1. **DPMC Representative:**

Name: <u>Babatunde Ogunnubi, Design Project Manager</u>
Address: <u>Division of Property Management & Construction</u>

20 West State Street, 3rd Floor

Trenton, NJ 08608-1206

Phone No: (609) 633-7061

E-Mail No: babatunde.ogunnubi@treas.nj.gov

2. Client Agency Representative:

Name: <u>Christian Casteel, Director OPMC</u>

Address: Department of Human Services

222 South Warren Street, PO Box 700

Trenton, New Jersey 08625

Phone No: (609) 984-5501

E-Mail No: <u>christian.casteel@dhs.nj.gov</u>

Name: <u>Timothy McCabe, Project Manager</u>

Address: <u>Department of Human Services, OPMC</u>

222 South Warren Street, PO Box 700

Trenton, New Jersey 08625

Phone No: (609) 847-9085

E-Mail No: <u>timothy.mccabe@dhs.nj.gov</u>

VI. PROJECT DEFINITION

A. BACKGROUND

The Ancora Psychiatric Hospital was constructed in the early 1950's and occupies a 640 acres site that includes 65 buildings. The facility provides residential treatment for approximately 300 persons with mental illness and is operated 24 hours a day, 7 days a week. See **Exhibit 'C'** for an aerial view of the facility.

The New Jersey Department of Human Services (NJDHS) commissioned JBCI Engineers to perform an assessment of the existing roof and roof structures at the above referenced locations The final roof assessment report by JBCI, dated March 29, 2021, is included as **Exhibit 'D'**.

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B. FUNCTIONAL DESCRIPTION OF THE BUILDING/ROOF

Ivy Hall is located near the center of the APH campus and houses a large gymnasium and the Ancorage. See **Exhibit 'E'** for an aerial view of the Ivy Hall/Ancorage Roof. The gymnasium is currently being utilized as a COVID-19 testing site, while the Ancorage functions as a morale-boosting commissary space for patients and staff to get lunch on campus. The building was designed in 1955 by Epple & Seaman, Architects & Engineers, Newark, NJ.

Typical roof framing consists of insulating structural roof deck panels that span between small steel "bulb tee" elements. The bulb tees span between the main steel beams and girders. The brand name of this type of roof panel system is "Tectum", and is still manufactured today by Armstrong. The Tectum roof panel system is very common in buildings of this type and construction period.

Both the Gymnasium and Ancorage roofs have exhibited active leaks for several years. The Department of Human Services (DHS) and APH are seeking to remove and replace the existing roofing systems.

VII. CONSULTANT DESIGN RESPONSIBILITIES

A. NEW ROOF DESIGN REQUIREMENTS

The Consultant shall provide the Design, Construction Administration, Permitting and Bid/Award services to replace the existing roof and any of the tectum roof panels as needed at the Ivy Hall, including the upper level roof area over the gymnasium and the lower level roof area covering the Dining Hall (the Ancorage) at Ancora Psychiatric Hospital (APH).

The Client Agency is requesting an SBS cold applied roof system to be installed, with all low-VOC products where applicable. The Consultant shall provide recommendations for roof systems with short off-gassing durations to reduce the impact of odors on clients with respiratory sensitivities.

The Consultant shall coordinate the schedule with the Design Team, the Client Agency and the APH/Ivy Hall Staff. Determine the operational/ non-operational periods of the Ivy Hall and Ancorage areas for the construction phase. The design documents shall identify any special utility coordination and shutdown requirements needed to replace the designated existing roof system and any of the tectum roof panels as needed.

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1. Roof System Removal:

The existing roof system, insulation, flashings, 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, need for chutes and/or cranes for roof material removal, dumpster location, 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., see **Exhibit 'F'** for Contractor's Use of the Premises.

To minimize disruption to unexcavated areas and enhance the protection of fragile underground utilities, ground mats are to be used if heavy equipment (cranes, tractor trailers, dumpsters etc...) are expected to travel over or operate from unpaved areas.

Consultant shall provide detailed plan showing location(s) of staging areas, indicating location(s) of existing fragile underground utilities and indicating where protection plate(s) shall be placed.

2. New Roofing System Criteria:

Provide the design for a new roofing system in accordance with the requirements of the roofing Manufacturer. 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.

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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.

3. 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.

4. Insulation:

The Consultant shall 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 ½" 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).

5. Flashing:

All rooftop HVAC curbing, skylights, parapet walls, pipe supports, pipe vents, roof hatch, 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.

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6. Parapet Walls & Coping:

All of the coping is to be replaced. 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 and to obtain the proper slope to the roof drains.

7. Removals:

Remove all unused antennas, conduit, piping, structural steel support systems, curbing, etc. as part of this project. Details shall be included on the drawings that indicate the methods to seal all roof penetrations and cap all piping below the new roofline.

8. Walkways:

Provide new walkway pads from access points to and around all roof-mounted equipment requiring periodic servicing and any other trafficking areas. Verify that the pads are compatible with the new roofing system. If their condition is not suitable or if the existing pads are not compatible with the new roofing system, specify new pads, detail their installation, and indicate their location on the plans.

9. Roof Drains:

Roof drains shall be tested by the A/E prior to and after the installation of the new roof by the contractor to determine functionality. The Consultants shall test roof drains using a 3/4" hose flowing for 30 minutes. The contractor shall perform the same test prior to starting roof removal and upon completion. Clogged roof drains shall be cleared. 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/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.

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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.

If hot work is needed, the Contractor is required to obtain and conform to the requirements of two (2) separate hot work permits:

The Contractor must contact the New Jersey Division of Fire Safety (DFS) to obtain a hot work permit for the duration of this Project as required by N.J.A.C. 5:70-2.7. Application must be completed via DCA RIMS website, https://www.nj.gov/dca/divisions/codes/RIMS online.html which requires account set up by the applicant. The Contractor must pay DFS directly for this permit. The estimated cost is approximately one hundred and fifty (\$150.00) dollars for each permit and a separate permit will be required for the work to be performed at each building.

The Contractor shall submit a copy of the DFS Hot Work Permit for each building prior to commencing the hot work. The Contractor will also need to obtain a daily hot work permit from the Facility, as required by the currently adopted version of the International Fire Code, New Jersey Edition, Chapter 29 and by the State's Insurance Carrier. There is no fee for this Permit.

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 the replacement of deteriorated concrete or metal decking, plywood sheathing, wood blocking or curbing, vapor barriers, interior roof drains, etc.

14. Roof Survey:

The Consultant shall provide a survey of the existing roof to confirm if any equipment: exhaust fans, HVAC equipment, vents, exhaust vents, etc. have to be removed or relocated for the new roof installation. Survey for any other unforeseen issues that will have to be addressed during the roof removal and installation construction. The survey shall include survey data, photographs, field observations, tests and meeting minuets. Provide a presentation and a report to the Project Team

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for review and approval. Consultant shall indicate which, if any, existing equipment is not functioning and include in design the replacement of item(s) if applicable.

B. ROOF MONITOR:

The Consultant shall provide a full time roof monitor during the installation of the roof system on the building. Refer to Section **VIII.O**. in this scope of work for 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 XI.B.

Consultant shall confirm the construction time durations of roof removal and replacement with the hours necessary for monitoring and include monitor's hours in proposal.

C. WARRANTY

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

D. CONTRACTOR CERTIFICATION

The Consultant shall state in the design documents that the DPMC Contractor Classification Group must have certification in writing from the roofing system manufacturer that the Roofing Contractor is a licensed or approved installer of the roofing system selected for the project. The certification can be delivered post bid but must be delivered prior to contract award.

E. HAZARDOUS BUILDING MATERIALS

Consultant shall survey the roof and related components and, 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 Sub-code.
- 2. Lead in accordance with N.J.A.C. 5:17, Lead Hazard Evaluation and Abatement Code.

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.

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Consultant shall estimate the cost of hazardous materials sample collection, testing, 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 XI.C.

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, sub-code 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 XI.D.

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 XI.E.

There shall be no "mark-up" of sub-consultant or subcontractor fees if sub-consultants or subcontractors are engaged to perform any of the work defined in paragraph **VII.E** "Hazardous Building Materials". All costs associated with managing, coordinating, observing and administrating sub-consultants 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.

F. SITE REQUIREMENTS

1. Contractor Use of the Premises:

Work with the Project Team to determine any security and policy requirements that must be followed during all work conducted at the facility and include this information in Division 1 of the specification.

Develop procedures for personnel to access the project site and construction areas, and provide the names and phone numbers of approved escorts when needed, see **Exhibit 'F'**, Contractor's Regulations.

2. Dumpster:

The location and security requirements of the dumpster shall be identified 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.

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3. Special Sequencing:

The contract documents must incorporate special sequencing of the work, if necessary, to be coordinated with the Project Team in order to provide for any functional requirement of the facility. Items shall include, but not be limited to: safety/security requirements, pedestrian and vehicle traffic flow, weather and/or seasonal concerns, and shut down of any physical plant functions or services.

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.

G. SPECIAL CONSIDERATIONS

1. Hours of Work:

No work is permitted on weekends or State holidays. The facility allows for work to be performed between 7 AM and 4:00 PM.

Identify the approved construction work hours for this project in Division 1 of the specification. Additional construction hours during the day or weekends will be allowed if the Contractor obtains prior approval from the DPMC Project Manager in Consultation with the Project Team members. If additional hours of work are allowed, it will be at no added cost to the contract. The contractor will be responsible for additional roof monitoring costs. The building will be occupied during construction.

Note that expanded hours of work by the Contractor must be attended by the Roof Monitor and the cost for the Roof Monitor's time must be paid for by the Contractor if he is required to be paid at an overtime rate. The contractor must pay the difference between the regular rate and the overtime rate. If the monitor works at a regular rate, no additional expense shall be charged to the contractor, unless all roof monitor hours included in the project have been expended.

2. Material Staging:

The Project Team shall approve the construction material staging area and the location shall be shown on the project site plan.

3. Material Protection:

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

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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. as part of the product submittal. The MSDS will be distributed by the A/E to the project team and in particular, to the facility's safety officer prior to the start of any work.

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 contractor employees shall be trained in their proper use.

6. Fencing:

All security 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. Fencing must be construction type chain link, minimum of 8' high, on platforms at the joints, joints must be secure and the opening must be padlocked and 6 sets of keys need to be provided to the facility.

7. 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, dishes, etc. and include details indicating the approved methods of reattachment. All removed equipment shall be reinstalled in the same configuration prior to removal.

8. HVAC Unit, Roof Ventilators, Intake Fans:

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

9. Debris Safety:

Measures shall be taken to protect staff and residents from any material or debris that might fall off from the roof onto roadways or sidewalks.

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H. GENERAL DESIGN OVERVIEW

1. Design Detail:

Section VII of this Scope of Work is intended as a guide for the Consultant to understand the overall basic design requirements of the project and is not intended to identify each specific design component related to code and construction items. The Consultant shall provide those details during the design phase of the project ensuring that they are in compliance with all applicable codes, regulating authorities, and the guidelines established in the DPMC Procedures for Architects and Engineers Manual.

The Consultant shall understand that construction documents submitted to DPMC shall go beyond the basic requirements set forth by the current copy of the Uniform Construction Code N.J.A.C. 5:23-2.15(f). Drawings and specifications shall provide detail beyond that required to merely show the nature and character of the work to be performed. The construction documents shall provide sufficient information and detail to illustrate, describe and clearly delineate the design intent of the Consultant and enable all Contractors to uniformly bid the project.

The Consultant shall review and comply with the DPMC "Plan Review Instructions" which can be found on DPMC's web site at:

http://www.state.nj.us/treasury/dpmc/lists_and_publications.shtml

The Consultant shall ensure that all of the design items described in this scope of work are addressed and included in the project drawings and specification sections where appropriate.

It shall be the Consultant's responsibility to provide all of the design elements for this project. Under no circumstance may they delegate the responsibility of the design; or portions thereof, to the Contractor unless specifically allowed in this Scope of Work.

2. Specification Format:

The Consultant shall prepare the construction specifications in the Construction Specifications Institute (CSI) format entitled MasterFormat©, latest edition.

The project construction specifications shall include only those CSI MasterFormat© specification sections and divisions applicable to this specific project.

3. Submittal Schedule:

The Consultant shall include a submittal schedule in Division 1 of the specifications. The schedule (list of required submittals) shall identify the general conditions and/or specification section (number and name) and the type of submittal required (material data, product data, test results, calculations, etc.). The submittal schedule is a compilation of the submittals required on

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the project and is provided as an aid to the contractor. Consultant shall be responsible for updating the submittal log and provide Team with updated submittal log at each construction meeting.

4. Construction Cost Estimates:

The Consultant shall include with each design submittal phase identified in Paragraph IV.A, including the Permit Application Phase and Bid Phase, a detailed construction cost estimate itemized and summarized by the divisions and sections of the Construction Specification Institute (CSI) MasterFormat© latest edition applicable to the project.

The detailed breakdown of each work item shall include labor, equipment, material and total costs.

The construction estimate shall include all alternate bid items and all unit price items itemized and summarized by the divisions and sections of the specifications.

All cost estimates shall be adjusted for regional location, site factors, construction phasing, premium time, building use group, location of work within the building, temporary swing space, security issues, and inflation factors based on the year in which the work is to be performed.

The cost estimate shall include descriptions of all allowances and contingencies noted in the estimate.

All cost estimates must be submitted on a DPMC-38 Project Cost Analysis form at each design phase of the project supported by the detailed construction cost estimate. The Project Manager will provide cost figures for those items which may be in addition to the CCE such as art inclusion, CM services, etc. and must be included as part of the CWE. This cost analysis must be submitted for all projects regardless of the Construction Cost Estimate amount.

I. PROJECT COMMENCEMENT

A pre-design meeting shall be scheduled with the Consultant and the Project Team members at the commencement of the project to obtain and/or coordinate the following information:

1. Project Directory:

Develop a project directory that identifies the name and phone number of key designated representatives who may be contacted during the design and construction phases of this project.

2. Site Access:

Develop procedures to access the project site and provide the names and phone numbers of approved escorts when needed. Obtain copies of special security and policy procedures that

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must be followed during all work conducted at the facility and include this information in Division 1 of the specification.

3. Project Coordination:

Review and become familiar with any current and/or future projects at the site that may impact the design, construction, and scheduling requirements of this project. Incorporate all appropriate information and coordination requirements in Division 1 of the specification.

4. Existing Documentation:

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.

5. Scope of Work:

Review the design and construction administration responsibilities and the submission requirements identified in this Scope of Work with the Project Team members. Items such as: contract deliverables, special sequencing or phased construction requirements, special hours for construction based on Client Agency programs or building occupancy, security needs, delivery dates of critical and long lead items, utility interruptions or shut down constraints for tie-ins, weather restrictions, and coordination with other project construction activities at the site shall be addressed.

This information and all general administrative information; including a narrative summary of the work for this project, *shall be included in Division 1* of the specification. The Consultant shall assure that there are no conflicts between the information contained in Division 1 of the specification and the DPMC General Conditions.

6. Project Schedule:

Review and update the project design and construction schedule with the Project Team members.

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J. BUILDING & SITE INFORMATION

The following information shall be included in the project design documents.

1. Building Classification:

Provide the building Use Group Classification and Construction Type on the appropriate design drawing.

2. Building Block & Lot Number:

Provide the site Block and Lot Number on the appropriate design drawing.

3. Building Site Plan:

Only when the project scope involves site work, or when the design triggers code issues that require site information to show code compliance, shall a site plan be provided that is drawn in accordance with an accurate boundary line survey. The site plan shall include, but not be limited to, the following as may be applicable:

- The size and location of new and existing buildings and additions as well as other structures.
- The distance between buildings and structures and to lot lines.
- Established and new site grades and contours as well as building finished floor elevations.
- New and existing site utilities, site vehicular and pedestrian roads, walkways and parking areas.

4. Site Location Map:

Provide a site location map on the drawing cover sheet that identifies the vehicular travel routes from major roadways to the project construction site and the approved access roads to the Contractor's worksite staging area.

K. 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

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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 seven (7) calendar days to all attendees and those persons specified to be on the distribution list by the Project Manager.

2. Design Presentations:

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

Design Development Phase:

Conduct One (1) working meeting halfway through phase at APH.

Conduct One (1) oral presentation at APH at phase completion.

Final Design Phase:

Conduct One (1) working meeting halfway through phase at APH.

Conduct One (1) oral presentation at APH at phase completion.

L. CONSTRUCTION BID DOCUMENT SUBMITTAL

In addition to submitting construction bid documents as defined in Section XIV Contract Deliverables, Consultant shall submit both specifications and drawings on compact disk (CD) in *Adobe Portable Document Format* (.pdf).

VIII. CONSULTANT CONSTRUCTION RESPONSIBILITIES

A. GENERAL CONSTRUCTION ADMINISTRATION OVERVIEW

This section of the Scope of Work is intended as a guide for the Consultant to understand their overall basic construction administration responsibilities for the project and does not attempt to identify each specific activity or deliverable required during this phase. The Consultant shall obtain that information from the current publication of the DPMC Procedures for Architects and

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Engineers Manual and any additional information provided during the Consultant Selection Process.

B. PRE-BID MEETING

The Consultant shall attend, chair, record and distribute minutes of the Contractor pre-bid meetings. When bidders ask questions that may affect the bid price of the project, the Consultant shall develop a Bulletin(s) to clarify the bid documents in the format described in the Procedures for Architects and Engineers Manual, Section 9.2 entitled "Bulletins." These Bulletins must be sent to DPMC at least seven (7) calendar days prior to the bid opening date. DPMC will then distribute the document to all bidders.

C. POST BID REVIEW MEETING, RECOMMENDATION FOR AWARD

The Consultant; in conjunction with the Project Manager, shall review the bid proposals submitted by the various Contractors to determine the low responsible bid for the project. The Consultant; in conjunction with the Project Manager and Project Team members, shall develop a post bid questionnaire based on the requirements below and schedule a post bid review meeting with the Contractor's representative to review the construction costs and schedule, staffing, and other pertinent information to ensure they understand the Scope of the Work and that their bid proposal is complete and inclusive of all requirements necessary to deliver the project in strict accordance with the plans and specifications.

1. Post Bid Review:

Review the project bid proposals including the alternates, unit prices, and allowances within seven (7) calendar days from the bid due date. Provide a bid tabulation matrix comparing all bids submitted and make a statement about the high, low, and average bids received. Include a comparison of the submitted bids to the approved current construction cost estimate. When applicable, provide an analysis with supporting data, detailing why the bids did not meet the construction cost estimate.

2. Review Meeting:

Arrange a meeting with the apparent low bid Contractor to discuss their bid proposal and other issues regarding the award of the contract. Remind the Contractor that this is a Lump Sum bid. Request the Contractor to confirm that their bid proposal does not contain errors. Review and confirm Alternate pricing and Unit pricing and document acceptance or rejection as appropriate.

Comment on all omissions, qualifications and unsolicited statements appearing in the proposals. Review any special circumstances of the project. Ensure the Contractor's signature appears on all post bid review documents.

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3. Substitutions:

Inquire about any potential substitutions being contemplated by the Contractor and advise them of the State's guidelines for the approval of substitutions and the documentation required. Review the deadline and advise the Contractor that partial submissions are not acceptable. Submission after the deadline may be rejected by the State.

Equal substitutions that are proposed by the Contractor that are of lesser value must have a credit change order attached with the submittal (See Article 4.7.5 "Substitutions" of the General Conditions). The State has the right to reject the submission if there is no agreement on the proposed credit. Contractor will be responsible to submit a specified item.

4. Schedule:

Confirm that the Contractor is aware of the number of calendar days listed in the contract documents for the project duration and that the Contractor's bid includes compliance with the schedule duration and completion dates. Particular attention shall be given to special working conditions, long lead items and projected delivery dates, etc. Review project milestones (if applicable). This could give an indication of Contractor performance, but not allow a rejection of the bid.

Review the submittal timeframes per the Contract documents. Ask the Contractor to identify what products will take over twenty-eight (28) calendar days to deliver from the point of submittal approval.

5. Performance:

Investigate the past performance of Contractor by contacting Architects and owners (generally three of each) that were listed in their DPMC pre-qualification package or other references that may have been provided. Inquire how the Contractor performed with workmanship, schedule, project management, change orders, cooperation, paper work, etc.

6. Letter of Recommendation:

The Consultant shall prepare a Letter of Recommendation for contract award to the Contractor submitting the lowest responsible bid within three (3) calendar days from the post bid review meeting. The document shall contain the project title, DPMC project number, bid due date and expiration date of the proposal. It shall include a detailed narrative describing each post bid meeting agenda item identified above and a recommendation to award the contract to the apparent low bid Contractor based on the information obtained during that meeting. Describe any acceptance or rejection of Alternate pricing and Unit pricing.

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Comment on any discussion with the Contractor that provides a sense of their understanding of the project and any special difficulties that they see, and how they might approach those problems.

Attach all minutes of the Post bid meeting and any other relevant correspondence with the Letter of Recommendation and submit them to the Project Manager.

7. Conformed Drawings:

The Consultant shall prepare and distribute two (2) sets of drawings stamped "Conformed Drawings" to the Project Manager that reflect all Bulletins and/or required changes, additions, and deletions to the pertinent drawings within fourteen (14) calendar days of the construction contract award date.

Any changes made in Bulletins, meeting minutes, post bid review requirements shall also be reflected in the specification.

D. DIRECTOR'S HEARING

The Consultant must attend any Director's hearing(s) if a Contractor submits a bid protest. The Consultant shall be present to interpret the intent of the design documents and answer any technical questions that may result from the meeting. In cases where the bid protest is upheld, the Consultant shall submit a new "Letter of Recommendation" for contract award. The hours required to attend the potential hearings and to document the findings shall be estimated by the Consultant and the costs will be included in the base bid of their fee proposal.

E. CONSTRUCTION JOB MEETINGS, SCHEDULES, LOGS

The Consultant shall conduct all of the construction job meetings, to be held bi-weekly for the duration of construction, in accordance with the procedures identified in the A/E manual and those listed below.

1. Meetings:

The Consultant and Sub-Consultant(s) shall attend the pre-construction meeting and all construction job meetings during the construction phase of the project. The Consultant shall chair the meeting, transcribe and distribute the job-meeting minutes for every job meeting to all attendees and to those persons specified to be on the distribution list by the Project Manager. The Agenda for the meeting shall include, but not be limited to the items identified in the Procedures for Architects and Engineers Manual, Section 10.3.1, entitled "Agenda." Also, the Consultant is responsible for the preparation and distribution of minutes within three (3) calendar days of the meeting. The format to be used for the minutes shall comply with those identified in the "Procedures for Architects and Engineers Manual," Section 10.3.4, entitled,

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"Format of Minutes." All meeting minutes are to have an "action" column indicating the party that is responsible for the action indicated and a deadline to accomplish the assigned task. These tasks must be reviewed at each job progress meeting until it is completed and the completion date of each task shall be noted in the minutes of the meeting following the task completion.

2. Schedules:

The Consultant; with the input from the Client Agency Representative and Project Manager, shall review and recommend approval of the project construction schedule prepared by the Contractor. The schedule shall identify all necessary start and completion dates of construction, construction activities, submittal process activities, material deliveries and other milestones required to give a complete review of the project.

The Consultant shall record any schedule delays, the party responsible for the delay, the schedule activity affected, and the original and new date for reference.

The Consultant shall ensure that the Contractor provides a two (2) week "look ahead" construction schedule based upon the current monthly updated schedule as approved at the biweekly job meetings and that identifies the daily planned activities for that period. This Contractor requirement must also be included in Division 1 of the specification for reference.

3. Submittal Log:

Based on the Submittal Schedule in Division 1 of the specifications, the Consultant shall develop and implement a submittal log that includes all of the required project submittals as identified in the general conditions and technical specifications. The submittal log shall be provided to the contractor at the pre-construction meeting. The dates of submission shall be determined and approved by all affected parties during the pre-construction meeting.

Examples of the submissions to be reviewed and approved by the Consultant and Sub-Consultant (if required) include: project schedule, schedule of values, shop drawings, equipment and material catalog cuts, spec sheets, product data sheets, MSDS material safety data sheets, specification procedures, color charts, material samples, mock-ups, etc. The submittal review process must be conducted at each job progress meeting and shall include the Consultant, Sub-Consultant, Contractor, Project Manager, and designated representatives of the Client Agency.

The Consultant shall provide an updated submittal log at each job meeting that highlights the status of all required submissions.

F. CONSTRUCTION SITE ADMINISTRATION SERVICES

The Consultant and Sub-Consultant(s) shall provide construction site administration services during the duration of the project. The Consultant and Sub-Consultant(s) do not necessarily have

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to be on site concurrently if there are no critical activities taking place that require the Sub-Consultant's participation.

The services required shall include, but not be limited to; field observations sufficient to verify the quality and progress of construction work, conformance and compliance with the contract documents, and to attend/chair meetings as may be required by the Project Manager to resolve special issues.

Consultant and Sub-Consultant(s) shall conduct weekly site inspection/field observation visits. Site inspection/field observation visits may be conducted in conjunction with regularly scheduled bi-weekly construction job meetings, depending on the progress of work, for weeks that construction job meetings are scheduled. The Consultant and their Sub-Consultant(s) shall submit a field observation report for each site inspection to the Project Manager within three (3) calendar days of the site visit. Also, they shall conduct inspections during major construction activities including, but not limited to the following examples: concrete pours, steel and truss installations, code inspections, final testing of systems, achievement of each major milestone required on the construction schedule, and requests from the Project Manager. The assignment of a full time on-site Sub-Consultant does not relieve the Consultant of their site visit obligation.

The Consultant shall refer to Section XIV. Contract Deliverables of this Scope of Work subsection entitled "Construction Phase" to determine the extent of services and deliverables required during this phase of the project.

G. SUB-CONSULTANT PARTICIPATION

It is the responsibility of the Consultant to ensure that they have provided adequate hours and/or time allotted in their technical proposal so that their Sub-Consultants may participate in all appropriate phases and activities of this project or whenever requested by the Project Manager. This includes the pre-proposal site visit and the various design meetings and construction job meetings, site visits, and close-out activities described in this Scope of Work. Field observation reports and/or meeting minutes are required to be submitted to the Project Manager within three (3) calendar days of the site visit or meeting. All costs associated with such services shall be included in the base bid of the Consultant's fee proposal.

H. DRAWINGS

1. Shop Drawings:

Each Contractor shall review the specifications and determine the numbers and nature of each shop drawing submittal. Five (5) sets of the documents shall be submitted with reference made to the appropriate section of the specification. The Consultant shall review the Contractor's shop drawing submissions for conformity with the construction documents within seven (7) calendar days of receipt. The Consultant shall return each shop drawing submittal stamped with the

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appropriate action, i.e. "Approved", "Approved as Noted", "Approved as Noted Resubmit for Records", "Rejected", etc.

2. As-Built & Record Set Drawings:

The Contractor(s) shall keep the contract drawings up-to-date at all times during construction and upon completion of the project, submit their AS-BUILT drawings to the Consultant with the Contractor(s) certification as to the accuracy of the information prior to final payment. All AS-BUILT drawings submitted shall be entitled AS-BUILT above the title block and dated.

The Consultant shall review the Contractor(s)' AS-BUILT drawings at each job progress meeting to ensure that they are up-to-date. Any deficiencies shall be noted in the progress meeting minutes.

The Consultant shall acknowledge acceptance of the AS-BUILT drawings by signing a transmittal indicating they have reviewed them and that they reflect the AS-BUILT conditions as they exist.

Upon receipt of the AS-BUILT drawings from the Contractor(s), the Consultant shall obtain the original reproducible drawings from DPMC and transfer the AS-BUILT conditions to the original full sized signed reproducible drawings to reflect RECORD conditions within fourteen (14) calendar days of receipt of the AS-BUILT information.

The Consultant shall note the following statement on the original RECORD-SET drawings. "The AS-BUILT information added to this drawing(s) has been supplied by the Contractor(s). The Architect/Engineer does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the AS-BUILT information to the best of the Architect's/Engineer's knowledge."

Upon completion, The Consultant shall deliver the RECORD-SET original reproducible drawings to DPMC who will acknowledge their receipt in writing. This hard copy set of drawings and two (2) sets of current release AUTO CAD discs shall be submitted to DPMC. The discs shall contain all AS-BUILT drawings in both ".dwg" (native file format for AUTO CAD) and ".pdf" (*Adobe* portable document format) file formats.

I. CONSTRUCTION DEFICIENCY LIST

The Consultant shall prepare, maintain and continuously distribute an on-going deficiency list to the Contractor, Project Manager, and Client Agency Representative during the construction phase of the project. This list shall be separate correspondence from the field observation reports and shall not be considered as a punch list.

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J. INSPECTIONS: SUBSTANTIAL & FINAL COMPLETION

The Consultant and their Sub-Consultant(s) accompanied by the Project Manager, Code Inspection Group, Client Agency Representative and Contractor shall conduct site inspections to determine the dates of substantial and final completion. The Project Manager will issue the only recognized official notice of substantial completion. The Consultant shall prepare and distribute the coordinated punch list, written warranties and other related DPMC forms and documents, supplied by the Contractor, to the Project Manager for review and certification of final contract acceptance.

If applicable, the punch list shall include a list of attic stock and spare parts.

K. CLOSE-OUT DOCUMENTS

The Consultant shall review all project close-out documents as submitted by the Contractors to ensure that they comply with the requirements listed in the "Procedure for Architects and Engineers' Manual." The Consultant shall forward the package to the Project Manager within fourteen (14) calendar days from the date the Certificate of Occupancy/Certificate of Approval is issued. The Consultant shall also submit a letter certifying that the project was completed in accordance with the contract documents, etc.

L. CLOSE-OUT ACTIVITY TIME

The Consultant shall provide all activities and deliverables associated with the "Close-Out Phase" of this project as part of their Lump Sum base bid. The Consultant and/or Sub-Consultant(s) may not use this time for additional job meetings or extended administrative services during the Construction Phase of the project.

M. TESTING, TRAINING, MANUALS AND ATTIC STOCK

The Consultant shall ensure that all equipment testing, training sessions and equipment manuals required for this project comply with the requirements identified below.

1. Testing:

All equipment and product testing conducted during the course of construction is the responsibility of the Contractor. However, the Consultant shall ensure the testing procedures comply with manufacturers recommendations. The Consultant shall review the final test reports and provide a written recommendation of the acceptance/rejection of the material, products or equipment tested within seven (7) calendar days of receipt of the report.

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2. Training:

The Consultant shall include in the specification that the Contractor shall schedule and coordinate all equipment training with the Project Manager and Client Agency representatives. It shall state that the Contractor shall submit the Operation and Maintenance (O&M) manuals, training plan contents, and training durations to the Consultant, Project Manager and Client Agency Representative for review and approval prior to the training session.

The Consultant shall ensure that the training session is video recorded by the Contractor. A copy of the recording shall be transmitted to the Project Manager who will forward the material to the Client Agency for future reference.

All costs associated with the training sessions shall be borne by the Contractor installing the equipment. A signed letter shall be prepared stating when the training was completed and must be accompanied with the training session sign-in sheet as part of the project close-out package.

3. Operation & Maintenance Manuals:

The Consultant shall coordinate and review the preparation and issuance of the equipment manuals provided by the Contractor(s) ensuring that they contain the operating procedures, maintenance procedures and frequency, cut sheets, parts lists, warranties, guarantees, and detailed drawings for all equipment installed at the facility.

A troubleshooting guide shall be included that lists problems that may arise, possible causes with solutions, and criteria for deciding when equipment shall be repaired and when it must be replaced.

Include a list of the manufacturer's recommended spare parts for all equipment being supplied for this project.

A list of names, addresses and telephone numbers of the Contractors involved in the installations and firms capable of performing services for each mechanical item shall be included. The content of the manuals shall be reviewed and approved by the Project Manager and Client Agency Representative.

The Consultant shall include in the specification that the Contractor must provide a minimum of ten (10) "throwaway" copies of the manual for use at the training seminar and seven (7) hardbound copies as part of the project close-out package.

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4. Attic Stock:

The Consultant shall determine and recommend whether "attic stock" should be included for all aspects of the project. If required, the Consultant shall specify attic stock items to be included in the project.

Prior to project close-out, the Consultant must prepare a comprehensive listing of all items for delivery by the Contractor to the Owner and in accordance with the appropriate specification/plan section. Items shall include, but not be limited to: training sessions, O&M manuals, as-built drawings, itemized attic stock requirements, and manufacturer guarantees/warranties.

N. CHANGE ORDERS

The Consultant shall review and process all change orders in accordance with the contract documents and procedures described below.

1. Consultant:

The Consultant shall prepare a detailed request for Change Order including a detailed description of the change(s) along with appropriate drawings, specifications, and related documentation and submit the information to the Contractor for the change order request submission. This will require the use of the current DPMC 9b form.

2. Contractor:

The Contractor shall submit a DPMC 9b Change Order Request form to the Project Manager within seven (7) calendar days after receiving the Change Order from the Consultant. The document shall identify the changed work in a manner that will allow a clear understanding of the necessity for the change. Copies of the original design drawings, sketches, etc. and specification pages shall be highlighted to clarify and show entitlement to the Change Order.

Copies shall be provided of job minutes or correspondence with all relative information highlighted to show the origin of the Change Order. Supplementary drawings from the Consultant shall be included if applicable that indicate the manner to be used to complete the changed work. A detailed breakdown of all costs associated with the change, i.e. material, labor, equipment, overhead, Sub-Contractor work, profit and bond, and certification of increased bond shall be provided.

If the Change Order will impact the time of the project, the Contractor shall include a request for an extension of time. This request shall include a copy of the original approved project schedule and a proposed revised schedule that reflects the impact on the project completion date. Documentation to account for the added time requested shall be included to support entitlement

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of the request such as additional work, weather, other Contractors, etc. This documentation shall contain dates, weather data and all other relative information.

3. Recommendation for Approval:

The Consultant shall evaluate the reason for the change in work and provide a detailed written recommendation for approval or disapproval of the Change Order Request including backup documentation of costs in CSI format and all other considerations to substantiate that decision.

4. Code Review:

The Consultant shall determine if the Change Order request will require Code review and shall submit six (6) sets of signed and sealed modified drawings and specifications to the DPMC Plan & Code Review Unit or the Department of Community Affairs (DCA) for approval, if required. The Consultant must also determine and produce a permit amendment request if required.

5. Cost Estimate:

The Consultant shall provide a detailed cost estimate of the proposed Change Order Request, as submitted by the Contractor, in CSI format (latest edition) for all appropriate divisions and subdivisions using a recognized estimating formula. The estimate shall then be compared with that of the Contractor's estimate. If any line item in the Consultant's estimate is lower than the corresponding line item in the Contractor's estimate, the Consultant in conjunction with the Project Manager is to contact the Contractor by telephone and negotiate the cost differences. The Consultant shall document the negotiated agreement on the Change Order Request form. If the Contractor's total dollar value changes based on the negotiations, the Consultant shall identify the changes on the Change Order Request form accordingly.

When recommending approval or disapproval of the change order, the Consultant shall be required to prepare and process a Change Order package that contains at a minimum the following documents:

- DPMC 9b Change Order Request
- DPMC 10 Consultant's Evaluation of Contractor's Change Order Request
- Consultant's Independent Detailed Cost Estimate
- Notes of Negotiations

6. Time Extension:

When a Change Order Request is submitted with both cost and time factors, the Consultant's independent cost estimate is to take into consideration time factors associated with the changed work. The Consultant is to compare their time element with that of the Contractor's time request

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and if there is a significant difference, the Consultant in conjunction with the Project Manager is to contact the Contractor by telephone and negotiate the difference.

When a Change Order Request is submitted for time only, the Consultant is to do an independent evaluation of the time extension request using a recognized scheduling formula.

Requests for extension of contract time must be done in accordance with the General Conditions Article 10.1 "Changes in the Work".

7. Submission:

The Consultant shall complete all of the DPMC Change Order Request forms provided and submit a completed package to the Project Manager with all appropriate backup documentation within seven (7) calendar days from receipt of the Contractor's change order request. The Consultant shall resubmit the package at no cost to the State if the change order package contents are deemed insufficient by the Project Manager.

8. Meetings:

The Consultant shall attend and actively participate at all administrative hearings or settlement conferences as may be called by Project Manager in connection with such Change Orders and provide minutes of those meetings to the Project Manager for distribution.

9. Consultant Fee:

All costs associated with the potential Contractor Change Order Requests shall be anticipated by the Consultant and included in the base bid of their fee proposal.

If the Client Agency Representative requests a scope change; and it is approved by the Project Manager, the Consultant may be entitled to be reimbursed through an amendment and in accordance with the requirements stated in paragraph 10.01 of this Scope of Work.

O. ROOF MONITOR RESPONSIBILITIES

The Consultant shall provide a full time roof monitor during the installation of the roof system on the building. 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

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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, 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.

IX. PERMITS & APPROVALS

A. NJ UNIFORM CONSTRUCTION CODE PERMIT

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

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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 XI.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, Health Care Plan Review Unit to secure a complete plan release.

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

http://www.state.nj.us/dca/divisions/codes/forms/pdf_bcpr/hcpr_procedures.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 XI.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, Health Care Plan Review Unit, 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:

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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 IX.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

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a. Definition:

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

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

b. Responsibilities:

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

B. OTHER REGULATORY AGENCY PERMITS, CERTIFICATES AND APPROVALS

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

The Consultant may refer to the Division of Property Management and Construction "Procedures for Architects and Engineers Manual", Section 6.4.8, 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.

C. STATE INSURANCE APPROVAL

The Consultant's Design shall meet all roof requirements of Insurance carrier FM. Global. If requested by the using agency or DPMC design management, plans and specifications shall be submitted to the State insurance underwriter for review and comment. The plans shall be sent

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directly by the consultant and a copy of the comments, if any, shall be provided to the DPMC Plan & Code Review Unit for its information. The Consultant shall review all the comments and, with agreement of the Project Team, modify the documents while adhering to the project's SOW requirements, State code requirements, schedule, budget, and Consultant fee.

D. PUBLIC EMPLOYEES OCCUPATIONAL SAFETY & HEALTH PROGRAM

A paragraph shall be included in the design documents, if applicable to this project that states: The Contractor shall comply with all the requirements stipulated in the Public Employees Occupational Safety & Health Program (PEOSHA) document, paragraph 12:100-13.5 entitled "Air quality during renovation and remodeling". The Contractor shall submit a plan demonstrating the measures to be utilized to confine the dust, debris, and air contaminants in the renovation or construction area of the project site to the Project Team prior to the start of construction.

The link to the document is: http://www.state.nj.us/health/eoh/peoshweb/iaqstd.pdf

E. PERMIT MEETINGS

The Consultant shall attend and chair all meetings with Permitting Agencies necessary to explain and obtain the required permits.

F. MANDATORY NOTIFICATIONS

The Consultant shall include language in Division 1 of the specification that states the Contractor shall assure compliance with the New Jersey "One Call" Program (1-800-272-1000) if any excavation is to occur at the project site.

The One Call Program is known as the "New Jersey Underground Facility Protection Act", refer to N.J.A.C. 14:2.

G. CONSULTANT FEE

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

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X. GENERAL REQUIREMENTS

A. SCOPE CHANGES

The Consultant must request any changes to this Scope of Work in writing. An approved DPMC 9c Consultant Amendment Request form reflecting authorized scope changes must be received from the Consultant prior to undertaking any additional work. The DPMC 9c form must be approved and signed by the Director of DPMC and written authorization issued from the Project Manager prior to any work being performed by the Consultant. Any work performed without the executed DPMC 9c form is done at the Consultant's own financial risk.

B. ERRORS AND OMISSIONS

The errors and omissions curve and the corresponding sections of the "Procedures for Architects and Engineers Manual" are eliminated. All claims for errors and omissions will be pursued by the State on an individual basis. The State will review each error or omission with the Consultant and determine the actual amount of damages, if any, resulting from each negligent act, error or omission.

C. ENERGY INCENTIVE PROGRAM

The Consultant shall review the programs described on the "New Jersey's Clean Energy Program" website at: http://www.njcleanenergy.com as well as New Jersey electric and gas utility websites to determine if any proposed upgrades to the mechanical and/or electrical equipment and systems for this project qualify for "New Jersey Clean Energy Program" or utility approved rebates and incentives.

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 their fee proposal.

XI. ALLOWANCES

A. PLAN REVIEW AND PERMIT FEE ALLOWANCE

The Consultant shall pay all DCA plan review fees and regulatory permit fees (except the NJ Uniform Construction Code permit) in accordance with the guidelines identified below.

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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 plan reviews, permits, certificates, and approvals (excluding the NJ Uniform Construction Code permit) and include that amount in their fee proposal line item entitled "Plan Review and Permit Fee Allowance", refer to Paragraph IX.A. 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 by the Contractor.

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 their 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. ROOF MONITOR ALLOWANCE

The Consultant shall provide a full time roof monitor pre-qualified with DPMC in the P028 Roofing Inspection Specialty Discipline during the installation of the roof system on the building. See section VIII, paragraph O of this Scope of Work for a description of services to be provided by a roof monitor.

The costs for the services provided by the roof monitor shall be included in the "**Roof Monitor Allowance**" of their fee proposal. A cost breakdown sheet 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 at the end of the project.

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C. 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.E 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
 - o Preparation of a 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.

D. HAZARDOUS MATERIALS ABATEMENT DESIGN ALLOWANCE

Consultant shall estimate the costs to prepare construction documents for hazardous materials abatement noted in paragraph VII.F 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.

E. 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.F 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.

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XII. SUBMITTAL REQUIREMENTS

A. CONTRACT DELIVERABLES

All submissions shall include the Contract Deliverables identified in Section XIV of this Scope of Work and described in the DPMC Procedures for Architects and Engineers Manual.

B. CATALOG CUTS

The Consultant shall provide catalog cuts as required by the DPMC Plan & Code Review Unit during the design document review submissions. Examples of catalog cuts include, but are not limited to: mechanical equipment, hardware devices, plumbing fixtures, fire suppression and alarm components, specialized building materials, electrical devices, etc.

C. PROJECT DOCUMENT BOOKLET

The Consultant shall submit all of the required Contract Deliverables to the Project Manager at the completion of each phase of the project. All reports, meeting minutes, plan review comments, project schedule, cost estimate in CSI format (latest edition), correspondence, calculations, and other appropriate items identified on the Submission Checklist form provided in the A/E Manual shall be presented in an $8\frac{1}{2}$ " x 11" bound "booklet" format.

D. DESIGN DOCUMENT CHANGES

Any corrections, additions, or omissions made to the submitted drawings and specifications at the Permit Phase of the project must be submitted to DPMC Plan & Code Review Unit as a complete document. Corrected pages or drawings may not be submitted separately unless the Consultant inserts the changed page or drawing in the original documents. No Addendums or Bulletins will be accepted as a substitution to the original specification page or drawing.

E. SINGLE-PRIME CONTRACT

All references to "separate contracts" in the Procedures for Architects and Engineers Manual, Chapter 8, shall be deleted since this project will be advertised as a "Single Bid" (Lump Sum All Trades) contract. The single prime Contractor will be responsible for all work identified in the drawings and specifications.

The drawings shall have the required prefix designations and the specification sections shall have the color codes as specified for each trade in the DPMC Procedure for Architects and Engineers Manual.

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The Consultant must still develop the Construction Cost Estimate (CCE) for each trade and the amount shall be included on the DPMC-38 Project Cost Analysis form where indicated. This document shall be submitted at each design phase of the project and updated immediately prior to the advertisement to bid.

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XIII. 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 and verifies that the work will not conflict with the existing or future construction activities of other projects at the site.

SOW PREPARED BY: DOAA ABOUELELA. PROJECT MANAGER DPMC PROJECT PLANNING & INITIATION **SOW APPROVED BY:** JAMES WRIGHT, MANAGER **DPMC PROJECT PLANNING & INITIATION** 7/29/2022 SOW APPROVED BY CHRISTIAN CASTEEL, DIRECTOR **DATE** DEPARTMENT OF HUMAN SERVICES Babatunde Ogunnubi **SOW APPROVED BY:** 07/29/2022 BABATUNDE OGUNNUBI, PROJECT MANAGER DATE DPMC PROJECT MANAGEMENT GROUP

SOW APPROVED BY:

RICHARD FLODMAND DEPLITY DIR

7/29/2022

DATE

RICHARD FLODMAND, DEPUTY DIRECTOR DIV PROPERTY MGT & CONSTRUCTION

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XIV. CONTRACT DELIVERABLES

The following is a listing of 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," Volumes I and II, 2nd Edition, dated January, 1991 to obtain a more detailed description of the deliverables required for each item listed below.

The numbering system used in this "Contract Deliverables" section of the scope of work corresponds to the numbering system used in the "Procedures for Architects and Engineers" manual and some may have been deleted if they do not apply to this project.

DESIGN DEVELOPMENT PHASE: 50% Complete Design Documents (Minimum)

- 7.1 Project Schedule (Update Bar Chart Schedule)
- 7.2 Meetings & Minutes (Minutes within seven (7) calendar days of meeting)
- 7.3 Correspondence
- 7.4 Submission Requirements
 - 7.4.1 A/E Statement of Site Visit, As-Built Drawing Verification (if available)
 - 7.4.2 Space Analysis & Program Requirements
 - 7.4.3 Special Features Description: communications, security, fire protection, special structural features, etc.
 - 7.4.4 Site Evaluation
 - 7.4.7 Design Rendering/Sketches
 - 7.4.8 Regulatory Agency Approvals
 - 7.4.10 Drawings: 6 sets

Cover Sheet (See A/E Manual for format)

Site Plan

Site Utility Plan

Floor Plans

Elevations

Sections/Details

Structural Drawings, Seismic Design Load Criteria

- 7.4.11 Specifications: 6 sets (See A/E Manual for format, include Division 1 and edit to describe the administrative and general requirements of the project)
- 7.4.12 Current Working Estimate in CSI Format & Cost Analysis 38 Form
- 7.4.13 Bar Chart of Design and Construction Schedule
- 7.4.14 Oral Presentation of Submission to Project Team

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- 7.4.15 SOW Compliance Statement
- 7.4.16 This Submission Checklist (See A/E Manual, Figure 6.4.16 for format)
- 7.4.17 Deliverables Submission in Booklet Form: 7 sets

7.5 Approval

7.5.1 Respond to Submission Comments

7.6 Submission Forms

- Figure 7.4.12 Current Working Estimate/Cost Analysis
- Figure 7.4.16 Submission Checklist

FINAL DESIGN PHASE 100% Complete Construction Documents

This Final Design Phase may require more than one submission based on the technical quality and code conformance of the design documents.

- 8.1 Schedule (Update Bar Chart Schedule)
- 8.2 Meeting & Minutes (Minutes within seven (7) calendar days of meeting)
- 8.3 Correspondence

8.4 Submission Requirements

- 8.4.1 A/E Statement of Site Visit
- 8.4.2 Space Analysis
- 8.4.3 Special Features Description, Communication/Security/Fire/Smoke/Exhaust)
- 8.4.4 Site Evaluation
- 8.4.7 Framed Rendering and Photographs
- 8.4.8 Regulatory Agency Approvals (Include itemized list specific to this project)
- 8.4.10 Drawings: 6 sets
- 8.4.11 Specifications: 6 sets
- 8.4.12 Current Working Estimate in CSI Format & Cost Analysis 38 Form
- 8.4.13 Bar Chart of Design and Construction Schedule
- 8.4.14 Oral Presentation of this Submission to Project Team
- 8.4.15 Plan Review/SOW Compliance Statement
- 8.4.16 This Submission Checklist
- 8.4.17 Deliverables Submission in Booklet Form: 6 sets

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8.5 Approvals

8.5.1 Respond to Submission Comments

PERMIT APPLICATION PHASE

This Permit Application Phase should not include any additional design issues. Design documents shall be 100% complete at the Final Design Phase.

8.6 Permit Application Submission Requirements

- 8.6.1 8.6.7: If all of the deliverables of these sections have been previously submitted to DPMC and approved there are no further deliverables due at this time
- 8.6.8 Regulatory Agency Approvals(a) UCC Permit Application & Technical Sub-codes completed by A/E
- 8.6.9 Utility Availability Confirmation
- 8.6.10 Signed and Sealed Drawings: 6 sets
- 8.6.11 Signed and Sealed Specifications: 6 sets
- 8.6.12 Current Working Estimate/Cost Analysis
- 8.6.13 Bar Chart Schedule
- 8.6.14 Project Presentation (N/A this Project)
- 8.6.15 Plan Review/SOW Compliance Statement
- 8/6.16 Submission Checklist

8.7 Approvals

8.8 Submission Forms

Figure 8.4.12	Current Working Estimate/Cost Analysis
Figure 8.4.16	Submission Checklist (Final Review Phase)
Figure 8.6.12-b	Bid Proposal Form (Form DPMC -3)
Figure 8.6.12-c	Notice of Advertising (Form DPMC -31)
Figure 8.6.16	Submission Checklist (Permit Phase)
Figure 8.7	Bid Clearance Form (Form DPMC -601)

BIDDING AND CONTRACT AWARD

9.0 Bidding Phase Requirements

- 9.01 Original Drawings signed & sealed by A/E and drawings on compact disk (CD) in *Adobe Portable Document Format* (.pdf)
- 9.02 One Unbound Specification Color Coded per A/E Manual Section 8.4.11 and specifications on compact disk (CD) in *Adobe Portable Document Format* (.pdf)

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10.8

	9.04	Bid Documents Checklist Bid Proposal Form Notice for Advertising
9.1	Chair	Pre-Bid Conference/Mandatory Site Visit
9.2	Prepar	re Bulletins
9.3 9.4		Bid Opening mendation for Contract Award
	9.4.1	Prepare Letter of Recommendation for Award & Cost Analysis
9.5	Attend	Pre-Construction Meeting
9.6	Submi	ssion Checklist
9.7	Submi	ssion Forms
	Figure Figure	9.4.1 Cost Analysis 9.6 Submission Checklist
CON	STRU	CTION PHASE
10.1	Site Co	onstruction Administration
10.2	Pre-Co	onstruction Meeting
10.3	Constr	ruction Job Meetings
	10.3.1 10.3.2 10.3.3 10.3.4	Agenda: Schedule and Chair Construction Job Meetings Minutes: Prepare and Distribute Minutes within 5 working days of meeting Schedules; Approve Contractors' Schedule & Update Minutes Format: Prepare Job Meeting Minutes in approved format, figure 10.3.4-a
10.4	Corres	spondence
10.5	Prepar	re and Deliver Conformed Drawings
10.7	Appro	ve Contractors Invoicing and Payment Process
10.8	Appro	ve Contractors 12/13 Form for Subs, Samples and Materials

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10.10 Appro	ove Test	Reports
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10.11 Approve Shop Drawings

10.12 Construction Progress Schedule

- 10.12.1 Construction Progress Schedule
- 10.12.2 CPM Consultant

10.13 Review & Recommend or Reject Change Orders

- 10.13.1 Scope Changes
- 10.13.2 Construction Change Orders
- 10.13.3 Field Changes

10.14 Construction Photographs

10.15 Submit Field Observation Reports

10.16 Submission Forms

Figure 10.3.4-b	Field Report
Figure 10.6	DPMC Insurance Form-24
Figure 10.6-a	Unit Schedule Breakdown
Figure 10.6-b	Monthly Estimate for Payment to Contractor DPMC 11-2
Figure 10.6-c	Monthly Estimate for Payment to Contractor DPMC 11-2A
Figure 10.6-d	Invoice DPMC 11
Figure 10.6-e	Prime Contractor Summary of Stored Materials DPMC 11-3
Figure 10.6-f	Agreement & Bill of Sale certificate for Stored Materials DPMC 3A
Figure 10.7-a	Approval Form for Subs, Samples & Materials DPMC 12
Eigung 10.7 h	Degreest for Change Order DDMC Ob

Figure 10.7-b Request for Change Order DPMC 9b

Figure 10.9 Transmittal Form DPMC 13

Figure 10.3.4-a Job Meeting Format of Minutes

Figure 10.10 Submission Checklist

PROJECT CLOSE-OUT PHASE

- 11.1 Responsibilities: Plan, Schedule and Execute Close-Out Activities
- 11.2 Commencement: Initiate Close-Out w/DPMC 20A Project Close-Out Form
- 11.3 Develop Punch List & Inspection Reports
- 11.4 Verify Correction of Punch List Items

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11.5 Determination of Substantial Completion

- 11.6 Ensure Issuance of "Temporary Certificate of Occupancy or Approval"
- 11.7 Initiation of Final Contract Acceptance Process
- 11.8 Submission of Close-Out Documentation
 - 11.8.1 As-Built & Record Set Drawings, 3 sets AUTOCAD Discs Delivered to DPMC
 - 11.8.2 (a) Maintenance and Operating manuals, Warranties, etc.: 7 sets each
 - (b) Guarantees
 - (c) Shop Drawings
 - (d) Letter of Contract Performance
 - 11.8.3 Final Cost Analysis-Insurance Transfer DPMC 25
 - 11.8.4 This Submission Checklist

11.9 Final Payment

- 11.9.1 Contractors Final Payment
- 11.9.2 A/E Invoice and Close-Out Forms for Final Payment
- 11.10 Final Performance Evaluation of the A/E and the Contractors
- 11.11 Ensure Issuance of a "Certificate of Occupancy or Approval"
- 11.12 Submission Forms

Figure 11.2	Project Close-Out Documentation List DPMC 20A
Figure 11.3-a	Certificate of Substantial Completion DPMC 20D
Figure 11.3-b	Final Acceptance of Consultant Contract DPMC 20C
Figure 11.5	Request for Contract Transition Close-Out DPMC 20X
Figure 11.7	Final Contract Acceptance Form DPMC 20
Figure 11.8.3-a	Final Cost Analysis
Figure 11.8.3-b	Insurance Transfer Form DPMC 25
Figure 11 8 4	Submission Checklist

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XV. EXHIBITS

The attached exhibits in this section will include a sample project schedule, and any supporting documentation to assist the Consultant in the design of the project such as maps, drawings, photographs, floor plans, studies, reports, etc.

END OF SCOPE OF WORK

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.

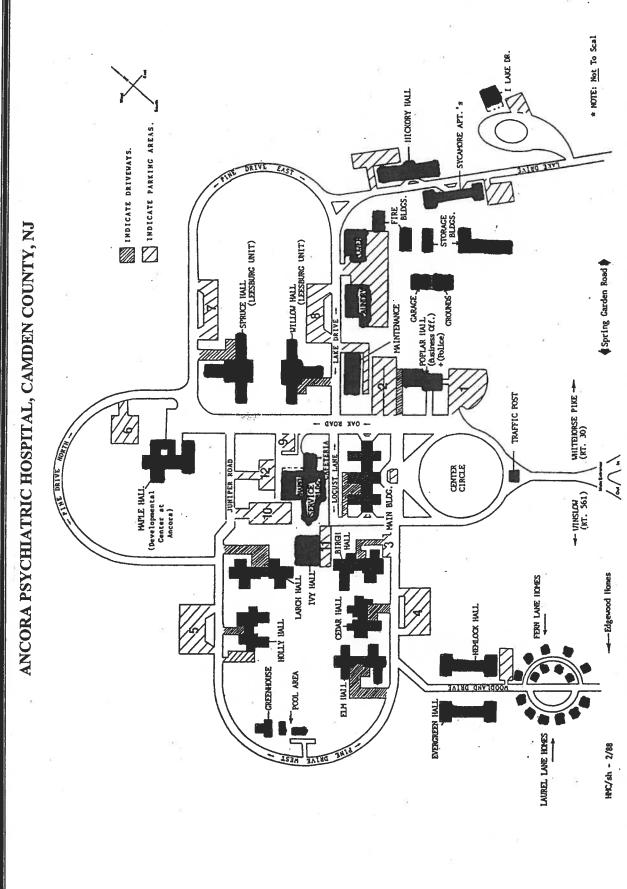
CODE	DESCRIPTION	REPORTS TO ASSOCIATE DIRECTOR OF:
СМ	Contract Management Group	Contract Management
CA	Client Agency	N/A
CSP	Consultant Selection and Prequalification Group	Technical Services
A/E	Architect/Engineer	N/A
PR	Plan Review Group	Technical Services
CP	Construction Procurement	Planning & Administration
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'

а	Description	Rspn	Weeks				
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CV3001	Schedule/Conduct Predesign/Project Kick-Off Mtg.	W O					
CV3020	Prepare Program Phase Submittal	V. V			The plant of the p		
CV3021	Distribute Program Submittal for Review	8				The same of the sa	
CV3027	Prepare & Submit Pròject Cost Analysis (DPMC-38)	8		The second secon	of the control of the		
CV3022	Review & Approve Program Submittal	8			The June 1975 1		
CV3023	Review & Approve Program Submittal	PR				- 20 10 10 10 10 10 10 10	
CV3024	Review & Approve Program Submittal	8					
CV3025	Consolidate & Return Program Submittal Comments	8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9					
CV3030	Prepare Schematic Phase Submittal	AB		A STATE OF THE STA		The same and the s	
CV3031	Distribute Schematic Submittal for Review	8					
CV3037	Prepare & Submit Project Cost Analysis (DPMC-38)	W ₀					
CV3032	Review & Approve Schematic Submittal	X					
CV3033	Review & Approve Schematic Submittal	8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4				The same of the sa	
CV3034	Review & Approve Schematic Submittal	8				The state of the s	
CV3035	Consolidate & Return Schematic Submittal Comment	85					
CV3040	Prepare Design Development Phase Submittal	AE					
CV3041	Distribute D. D. Submittal for Review	**************************************					
CV3047	Prepare & Submit Project Cost Analysis (DPMC-38)	8					
CV3042	Review & Approve Design Development Submittal	8					
CV3043	Review & Approve Design Development Submittal	PR		P P A APP			
CV3044	Review & Approve Design Development Submittal	Ğ					The state of the s
CV3045	Consolidate & Return D.D. Submittal Comments	8					
CV3050	Prepare Final Design Phase Submittal	AE					and one of
CV3051	Distribute Final Design Submittal for Review	8			The state of the s		
CV3052	Review & Approve Final Design Submittal	5					
CV3053	Review & Approve Final Design Submittal	æ					
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CV5012 Evaluate B	Evaluate Bids & Prep. Recommendation for Award	AE												
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CV5020 Award Cor	Award Construction Contracts/Issue NTP	චි												
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CV6004 Longest Le	Longest Lead Procurement Item Ordered	CON		* 100 mm			**************************************					THE SECOND		
CV6005 Lead Time	Lead Time for Longest Lead Procurement Item	CON												
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(towards Philadelphia). Look for signs for Ancora Psychiatric Hospital. Take jug-handle and cross over Route 30 onto Spring Garden Road DIRECTIONS: Proceed to Route 206 South. Follow Route 206 South to Rt. 30. Follow Route 30 West for approximately 5 miles Hospital is located one mile down this road.



Ancora Psychiatric Hospital

EXHIBIT 'C'



March 29, 2021

Mr. Tim McCabe

NJ Department of Human Services

Office of Property Management & Construction
222 South Warren St.

Trenton, NJ 08625

re: Roof Assessment

Ivy Hall and Ancorage

Ancora Psychiatric Hospital

Ancora, New Jersey

Dear Tim:

As requested, we have performed an assessment of the existing roof and roof structures at the above referenced locations. We understand a staff member from Ancora Psychiatric Hospital (APH) commented that portions of the roof were in very poor condition, exhibited "spongey" conditions, and was concerned the roof may be structurally unsound. Following this conversation, APH closed a portion of the building until an engineering assessment of the roof's structural integrity was completed.

Our firm made site visits on March 22nd and 25th to observe the conditions. Following our first visit, we requested additional ceiling tile removal and scissor lift access to the high roof areas. We also requested an exploratory probe be cut in the roof membrane.

We were assisted by APH Maintenance staff and NJDHS during both visits. APH maintenance provided a scissor lift and ladder to facilitate hands-on observations.

We are submitting a report of our findings.

DESCRIPTION

Ivy Hall is located near the center of the APH campus and houses a large gymnasium and the Ancorage. The gymnasium is currently being utilized as a COVID-19 testing site, while the Ancorage functions as a morale-boosting commissary space for patients and staff to get lunch on campus. The building was designed in 1955 by Epple & Seaman, Architects & Engineers, Newark, NJ. NJDHS provided us with select original Architectural and Structural drawings for use in our assessment.

Typical roof framing consists of insulating structural roof deck panels that span between small steel "bulb tee" elements. The bulb tees span between the main steel beams and girders. The brand name of

this type of roof panel system is "Tectum", and is still manufactured today by Armstrong. The Tectum roof panel system is very common in buildings of this type and construction period.

We understand both the gymnasium and Ancorage roofs have exhibited active leaks for several years and that APH intends to initiate a roof replacement project in the near future. Figure 1, below, illustrates the location of Ivy Hall on the APH campus.



Figure 1. Aerial Photo of the APH Campus



SUMMARY OF FINDINGS

Our second visit followed a recent rain event. We were able to access the topside of the roof of the Ancorage and the underside of the roof in both the Ancorage and gymnasium. We observed the following:

Exterior

- The Ancorage roof exhibits delaminated areas throughout.
 - We observed bubbling and isolated soft areas
- Portion of low roof over Ancorage has been coated with an aluminum material
- Standing water was observed in many locations.
- Exploratory roof cut revealed saturated fiberboard-type insulation at a soft spot.
 - o 3 roof systems were observed
 - Water was found below each roof
 - o Top of Tectum roof deck was exposed and did not exhibit excessive deterioration.

Interior

- No evidence of cracking, dropping, or displacement of the Tectum panel system or roof framing.
- The underside of the roof deck exhibits water staining throughout.
- Active leaking in multiple locations in both the gymnasium and the Ancorage.
- Active leak directly below our exploratory roof cut
 - Water began flowing through the Tectum in this area immediately following the cut.
- The existing roof framing and bulb tees exhibit light to moderate surface corrosion
- The tectum deck exhibits light to heavy discoloration, typically concentrated at the bulb tees and main steel framing elements.
- Some softening of the Tectum fibers was noted at hands-on observation locations.
 - Fibers still generally encased by cementitious material and are hard to the touch, but can be partial penetrated with a flat head screwdriver with moderate force.



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Mr. Tim McCabe March 29, 2021 Page 4

CONCLUSIONS AND RECOMMENDATIONS

Based on our observations, we do not believe the overall structural integrity of the roof structures at Ivy Hall has been compromised. Isolated soft spots due to water saturation are not desirable but have not compromised the roof as a whole.

There is currently no evidence of displacement or "dropping" of the roof panels. We believe the "soft" feeling when walking on the roof above can be attributed to delaminated roof membrane with water and saturated insulation below. Based on our engineering experience, we believe the Ancorage can be safely reopened for normal use and the gymnasium can continue to be used as a testing location.

However, due to the ongoing water infiltration, the conditions should be periodically monitored until the upcoming roof replacement project begins. If APH observes any displacement, cracking, fiber disintegration, or "blackening" of the Tectum panels, the building areas below should be closed immediately. In addition, we recommend the interior areas be closed or "cordoned off" when any staff or workers are on the roof (i.e. when performing mechanical or drain maintenance). This is a typical precaution many facilities take whenever rooftop work is in progress.

It is important to note that the ongoing water infiltration is a concern that must be addressed as soon as possible. We strongly recommend APH work to temporarily repair all current and future roof leak locations to prevent further deterioration until the full roof replacement project is underway. This is extremely important in extending the life of the roof structure and reducing the amount of decking that will require replacement in the future. Water intrusion can erode the cementitious binder holding the Tectum fibers together, resulting in structural deterioration.

We recommend the roof replacement project begin as soon as possible, before the winter and associated snow loading, to ensure the structural integrity is not further affected. We anticipate select Tectum panels may require replacement during the roof replacement work once the topside conditions are exposed. Based on our experience, isolated panel replacement common need when replacing roofs over Tectum roof decks.



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Please contact our office if we can be of further assistance.

Sincerely,

JOSEPH B. CALLAGHAN, INC.

Erik S. Villari, PE

Principal

Michael Salera, PE

Sr. Project Manager





Photo No 1. Top of Ancorage Roof



Photo No 2. Ancorage Roof Probe – Water under all 3 roof membranes



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Photo No 3. Ancorage Roof Underside



Photo No 4. Ancorage Roof Underside – Tectum deck soft spot



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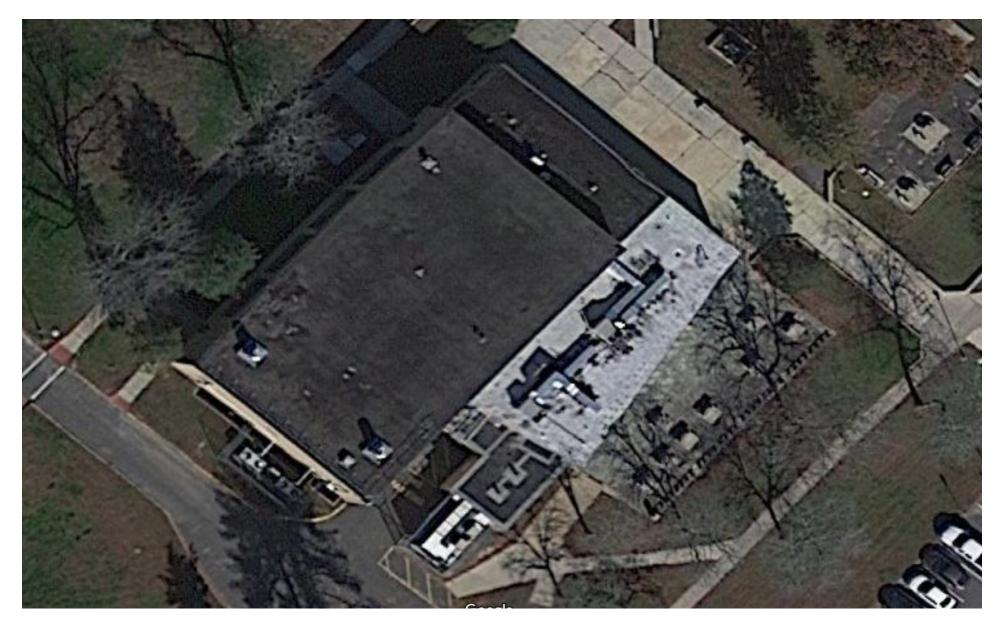


Photo No 5. Ivy Roof Underside



Photo No 6. Ivy Roof Underside – Typical staining





Ivy/Ancorage Roof Aerial view

EXHIBIT 'E'

ANCORA PSYCHIATRIC HOSPITAL REGULATIONS GOVERNING CONTRACTORS EMPLOYEE

All workmen employed by contractors to work within the confines of institutional property must conform to regulations governing the functioning of the Institution and the safety and welfare of patients. Any questions concerning these regulations should be brought to the Business Manager or the Engineer-in-Charge of Maintenance. Particular attention is directed to the following:

- 1. <u>Parking</u>: Areas are subject to varying time limits for parking. Workmen should contact the Chief Security Officer for assignment to a parking place.
- 2. Lock Cars: This is important not only for the protection of your own car, but as a safety measure for patients. Keys left in cars will be removed by patrolmen and permission for reentry to institutional grounds will be a matter of discretion on part of institutional authorities.
- 3. <u>Fire Regulations</u>: The Fire Chief will provide instructions to each workmen on the conduct of work governed by these regulations. At no time is welding or other work involving open flame to be undertaken without permission of the Fire Chief who will direct required precautions.
- 4. <u>Keys</u>: Issuance of keys to contractor's employees carries with it responsibility for exercising the utmost care in preventing elopement of patients. Contractors superintendent or employee in charge will be responsible for keys, which must be returned to institution authorities upon completion of contract.
- 5. <u>Doors</u>: All locked doors, which are opened to permit passage, must be locked again immediately. Particular attention will be given to the stairway and exits to the roof.
- 6. <u>Ladders and Scaffolding</u>: Must be properly attended while work is in progress. Never leave a ladder in position without someone in attendance, and consult the Engineer-in-Charge of Maintenance concerning safeguards for scaffolding that cannot be removed at the end of a work day.
- 7. <u>Materials</u>: Keep all materials stored in places protected from access by patients. Chemicals that are poisonous and may be eaten or drunk must be securely protected from patient access.
- 8. Pictures: No photos are to be taken without permission of the Chief Security Officer.
- 9. <u>Mail</u>: Never mail a letter or communication of any kind for a patient. Such communications are subject to procedures set up by the institution.
- 10. <u>Regulations</u>: Contractor's employees are subject to the same regulations as those governing regular institutional personnel, which prohibit their bringing on the grounds any alcoholic beverages, firearms, ammunition, hunting knives or other articles having the nature of a weapon. When necessary to utilize tools which can conceivably come within this category, it is incumbent upon the users to keep them out of patients' reach. Before doing any work in a patient area, the person in charge of the particular ward must be advised where the men will be working that day.

EXHIBIT 'F'

- 11. Personal Conduct: No workman is to fraternize with patients at any time. For your own protection never permit yourself to be alone with a woman patient. Discretion should be exercised in relationships with employees. While common courtesy and cooperation are expected of our employees at all times, no employee except the Engineer-In-Charge of Maintenance and Business Manager, or their appointed delegates, are authorized to permit entry into locked areas, or provide materials or services of any kind. Never give patients medicines, drugs, alcoholic beverages, cutting instruments, matches or anything with which they can hurt themselves or others. Report any troublesome action or behavior of a patient to the person in charge.
- 12. <u>Prison Details</u>: This institution utilizes prisoner details, and contractors are reminded that anyone violation Statutes 2A-:104-11 "Communication with Prisoners Prohibited" of 2A:104-12 "Taking Prohibited Articles to or from Prisoners or Inmates", is guilty of a misdemeanor.

Contractors will be requested to remove workmen who do not conform to these regulations.

I certify that I have read the above regulations and agree to abide with everything contained therein.

M1571-00 Photographs of Existing Conditions





Existing Roof Conditions of The Ivy Hall and Ancorage .

M1571-00 Photographs of Existing Conditions



Existing Ivy Hall Roof - Existing Upper Flat Roof over the existing gymnasium.



Existing Conditions of the Lower Level Flat Roof, Ducts and RTUs.

M1571-00 Photographs of Existing Conditions





Existing partial lower level – Ancorage Roof.