## **SCOPE OF WORK**

## **HVAC Replacement**

South Jersey Regional Airport Lumberton, Burlington County, N.J.

## Project No. T0688-00

## **STATE OF NEW JERSEY**

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

## **DEPARTMENT OF THE TREASURY**

Elizabeth Maher Muoio, Treasurer



## **DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION**

Christopher Chianese, Director

Date: February 12, 2024

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### I. OBJECTIVE

The objective of this project is replace two boilers, an air handler and associated controls and ductwork serving the office building at the South Jersey Regional Airport.

## **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):

#### • P003 HVAC Engineering

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

- P037 Asbestos Design
- P038 Asbestos Safety Control Monitoring
- P065 Lead Paint Evaluation

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

## **III. PROJECT BUDGET**

#### A. CONSTRUCTION COST ESTIMATE (CCE)

The initial Construction Cost Estimate (CCE) for this project is \$500,000.

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

#### **B.** CURRENT WORKING ESTIMATE (CWE)

The Current Working Estimate (CWE) for this project is \$718,500.

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

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

#### C. CONSULTANT'S FEES

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

### **IV. PROJECT SCHEDULE**

#### A. SCOPE OF WORK DESIGN & CONSTRUCTION SCHEDULE

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

#### PROJECT PHASE ESTIMATED DURATION (Calendar Days)

1.	Site Access Approvals & Schedule Design Kick-off Meeting	14
2.	Investigation Phase	42
	• Project Team & DPMC Plan/Code Unit Review & Comment	14
3.	Design Development Phase	42
	Project Team & DPMC Plan/Code Unit Review & Comment	14
4.	Final Design Phase	42
	Project Team & DPMC Plan/Code Unit Review & Approval	14
5.	Final Design Re-Submission to Address Comments	7
	Project Team & DPMC Plan/Code Unit Review & Approval	14
6.	DCA Submission Plan Review	30
7.	Permit Application Phase	7
	Issue Plan Release	
8.	Bid Phase	42

9. Award Phase	28
10. Construction Phase	120
11. Project Close Out Phase	30

## B. CONSULTANT'S PROPOSED DESIGN & CONSTRUCTION SCHEDULE

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

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

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

## V. PROJECT SITE LOCATION & TEAM MEMBERS

#### A. PROJECT SITE ADDRESS

The location of the project site is:

South Jersey Regional Airport 68 Stacy Haines Road Lumberton, NJ 08048

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

#### **B. PROJECT TEAM MEMBER DIRECTORY**

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

#### **1. DPMC Representative:**

Name:	Youstina Mansy, Project Manager
Address:	Division of Property Management & Construction
	20 West State Street, 3 <sup>rd</sup> Floor
	Trenton, NJ 08608-1206
Phone No:	(609) 633-2077
E-Mail:	Youstina.Mansy@treas.nj.gov

#### 2. Department of Transportation Representative:

Name:	George Schwarz, Principal Engineer
Address:	Department of Transportation
	1035 Parkway Avenue, 1 <sup>st</sup> Floor E&O
	Ewing, New Jersey 08618
Phone No:	(609) 963-2169
E-Mail:	george.schwarz@dot.nj.gov

## VI. PROJECT DEFINITION

#### A. BACKGROUND

South Jersey Regional Airport is a general aviation public airport. The airport is publicly owned by the New Jersey Department of Transportation (DOT). It covers 642 acres and has one runway. Several buildings onsite are leased to private entities.

#### **B.** FUNCTIONAL DESCRIPTION OF THE BUILDING

The main office building onsite houses various tenants including the "Runway Café". The HVAC system consists of two #2 fuel oil fired boilers and an air handler located above the ceiling in the center of the building. Fixed and flexible ductwork supply conditioned air to the various leased areas and offices of the building. Air handler cooling coils are served by four (4) condensers located outside adjacent to the building. The #2 fuel oil tank that supplies the boilers is located above ground in a partial masonry enclosure adjacent to the building. The system is old and past its useful life.

The new HVAC system for the building will be based on fuel oil or propane.

The "Runway Café" has separate HVAC systems that are not part of this scope.

Detailed drawings could not be found for the building. A floor schematic and photos are shown in **Exhibit 'C'** and **'D'**.

### II. CONSULTANT DESIGN RESPONSIBILITIES

#### A. INVESTIGATION

#### 1. General:

The Consultant shall investigate the existing HVAC system and related equipment within the office building at the South Jersey Regional Airport. The Consultant shall provide an analysis of the current needs of each of the building occupants and the job functions being performed within the buildings. The new high efficiency HVAC equipment and HVAC system designed and installed shall address these specific and unique requirements.

#### 2. Existing Conditions:

The Consultant shall perform a thorough evaluation of the indoor thermal environment and indoor air quality of the building, and of the existing systems that help maintain them. The Consultant shall also evaluate the existing electrical power supplied to the aforementioned systems.

The Consultant shall utilize all technical disciplines that are necessary for meeting the aforementioned objectives, taking into account the following considerations as well as any other relevant considerations:

Type of space:

- The types of spaces within the buildings shall be taken into account. For example, occupied spaces such as offices, bathrooms, laboratory rooms, as well as miscellaneous spaces such as electrical rooms, IT rooms...etc.
- Thermal environment / air quality:
  - The existing thermal environment and air quality conditions within the building shall be taken into account. Examples of thermal environment considerations include air temperature, relative humidity, diffuser air speed...etc. Air quality considerations may include ventilation requirements, air change rates, and protection against airborne contaminants...etc.
- Mechanical systems:

- The design, operation, and condition of the existing mechanical systems shall be taken into account. These may include air systems, hydronic systems, DX systems...etc.
- Electrical systems:
  - The design, operation, and condition of the existing electrical power supply and distribution that serve the mechanical systems shall be taken into account.
- Controls systems:
  - The design, operation, and condition of the existing control systems shall be taken into account.
- Building envelope:
  - The design and condition of the existing building envelope shall be taken into account. Example considerations may include wall construction, air infiltration...etc.

#### 3. **Report and Presentation:**

The Consultant shall provide a report and oral presentation to the DPMC Project Team members describing the HVAC system, the inspection findings, and the recommendations for replacement. The Project Team shall review these findings and approve the recommendations based on available project funding and the importance of the recommendation. The Consultant may not proceed with the final design of any report recommendation unless they have written approval from the DPMC Project Team Manager. This report shall be presented with the Investigation Phase presentation and submission.

#### **B. HVAC DESIGN REQUIREMENTS**

#### 1. General:

The Consultant shall provide the design and specifications to replace the HVAC equipment based on approved recommendations made in the investigation phase. The new HVAC equipment is expected to be based on fuel oil or propane. The design documents shall provide details in the drawings and specifications describing the methods and materials required by the contractors to interface the new equipment to the existing interior system components where applicable.

Provide the design for electrical supply, panels, breakers, etc. for new air handler units and ancillary equipment where required.

The specifications shall describe the preferred new air handler systems or equipment and shall list the names of three equal manufacturers for each.

Existing refrigerant shall be properly disposed. The Contractor shall supply the initial charge of new refrigerant.

Provide the design for all associated controls necessary for the proper operation of the new units, their related components, and the room temperature and humidity levels. All system automatic electronic controls shall have a manual override feature. Control items to address shall include, but not be limited to the following items: thermostats, wiring, smoke detectors shutdown and interface with the fire alarm panel.

#### 2. Heating and Cooling Load Calculations:

Provide calculations of the required building air supply and exhaust quantities. Provide a ventilation schedule for all building spaces.

Provide calculations of the cooling and heating load requirements of the interior building spaces to be conditioned. Calculations shall be based on, but not be limited to items such as: conduction and convection heat transmission, air ventilation and infiltration, internal building heat sources, solar heat gain, etc.

#### 3. Structural Calculations:

As applicable, one (1) set of signed and sealed structural calculations shall be provided to the DPMC Plan and Code Review Unit Manager indicating that the existing roof structural system is designed properly for the weight of the replacement HVAC units, curbing, supports, ductwork, etc.

The design drawings must indicate the size and dimensions of the new HVAC units and their related curbing, support fixtures, and structural components including the approved method of attachment to those components.

#### 4. Demolition:

Special demolition and removal procedures shall be identified in the design documents for the HVAC units that are to be replaced. Special procedures and required hours for electric utility shutdown and/or switchover during the HVAC unit removal and replacement shall be described and included in the design documents.

#### 5. New Equipment:

Delivery dates of the HVAC equipment specified must be obtainable to meet the projected completion date of the project. Documents shall include a requirement for the Contractor to minimize the HVAC system downtime.

The Consultant shall ensure that a factory representative is onsite for the start-up of the new HVAC equipment.

#### 6. Controls:

Provide a design for a digital control system for the proper operation of the HVAC units, their related components, and building temperature levels. Control items to address shall include, but not be limited to the following: thermostats, smoke detectors, HVAC fan motor shutdown, and interface with the existing fire detection system and fire alarm panel.

All system automatic electronic controls shall have a manual override feature.

#### 7. Testing and Balancing:

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

As part of the design documents, the Consultant shall ensure that, following construction, the Contractor is required to hire a qualified HVAC Testing and Balancing firm, and such firm shall perform system tests to ensure that the HV AC system as installed performs as specified and designed. The design documents shall further require that the HV AC System Testing and Balancing firm shall produce a report setting forth its findings, adjustments, recommendations, and further that it shall certify that the HV AC system meets the design intent and will perform as specified and designed and that that all equipment, i.e., fans, controls, dampers, and devices requiring adjustments or regulation are properly installed, thoroughly cleaned, adjusted, or regulated for proper operation and free from objectionable noise and vibration. It is not required that such firm be pre-qualified with DPMC, however a NJ Business Registration Certificate will be required.

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

#### 8. Energy Rebates:

The HVAC units shall be high efficiency units with the Consultant completing application for local energy rebates as described in Section IX in this Scope of Work entitled "Energy Rebate and Incentive Programs".

#### C. HAZARDOUS MATERIALS SURVEY AND REPORT

Consultant shall survey the building 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:

- a. Asbestos in accordance with N.J.A.C. 5:23-8, Asbestos Hazard Abatement Subcode.
- b. Lead in accordance with N.J.A.C. 5:17, Lead Hazard Evaluation and Abatement Code.
- c. PCB's in accordance with 40 CFR 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. Consultant shall engage a firm certified in the testing and analysis of materials containing PCB's.
- d. Other items as necessary.

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

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

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

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

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

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

#### D. DESIGN MEETINGS & PRESENTATIONS

#### 1. Design Meetings:

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

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

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

#### 2. Design Presentations:

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

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

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

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

#### **E. EXISTING DOCUMENTATION**

Review any documents and additional information that may be provided at a later date such as reports, studies, surveys, equipment manuals, as-built drawings, etc. The State does not attest to the accuracy of the information provided and accepts no responsibility for the consequences of errors by the use of any information and material contained in the documentation provided. It shall be the responsibility of the Consultant to verify the contents and assume full responsibility for any determination or conclusion drawn from the material used. If the information provided is insufficient, the Consultant shall take the appropriate actions necessary to obtain the additional information required.

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

## VIII. PERMITS & APPROVALS

#### A. NJ UNIFORM CONSTRUCTION CODE PLAN REVIEW AND PERMIT

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

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

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

#### 1. NJ Uniform Construction Code (NJUCC) Plan Review

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

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

As of July 25, 2022, the Department of Community Affairs (DCA) is only accepting digital signatures and seals issued from a third party certificate authority. The DCA ePlans site can be found at:

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

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

#### https://www.state.nj.us/dca/divisions/codes/forms/pdf bcpr/pr app guide.pdf

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

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

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

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

http://www.state.nj.us/dca/divisions/codes/forms/pdf bcpr/pr fees.pdf

#### 2. NJ Uniform Construction Code Permit

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

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

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

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

#### **3.** Prior Approval Certification Letters:

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

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

#### 4. Multi-building or Multi-site Permits:

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

#### 5. Special Inspections:

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

Bulletin 03-5 can be found at:

http://www.state.nj.us/dca/divisions/codes/publications/pdf\_bulletins/b\_03\_5.pdf

#### a. Definition:

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

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

#### b. Responsibilities:

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

# B. OTHER REGULATORY AGENCY PERMITS, CERTIFICATES AND APPROVALS

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

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

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

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

## IX. ENERGY REBATE AND INCENTIVE PROGRAMS

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

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

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

The Consultant shall be responsible to complete the appropriate registration forms and applications, provide any applicable worksheets, manufacturer's specification sheets, calculations, attend meetings, and participate in all activities with designated representatives of the programs and utility companies to obtain the entitled financial incentives and rebates for this project.

All costs associated with this work shall be estimated by the Consultant and the amount included in the base bid of its fee proposal.

### X. ALLOWANCES

#### A. PLAN REVIEW AND PERMIT FEE ALLOWANCE

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

#### 1. Permits:

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

#### 2. Permit Costs:

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

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

#### 3. Applications:

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

#### 4. Consultant Fee:

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

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

#### **B. HAZARDOUS MATERIALS TESTING AND REPORT ALLOWANCE**

Consultant shall estimate the costs to complete the hazardous materials survey, sample collection, testing and analysis and preparation of a "Hazardous Materials Survey Report" noted in paragraph VII.C 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 an Hazardous Materials Survey Report

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

#### C. HAZARDOUS MATERIALS ABATEMENT DESIGN ALLOWANCE

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

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

# D. HAZARDOUS MATERIALS CONSTRUCTION ADMINISTRATION ALLOWANCE

Consultant shall estimate the cost to provide Construction Monitoring and Administration Services for hazardous materials abatement as noted in paragraph VII.C 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.

#### XI. SOW SIGNATURE APPROVAL SHEET

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

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

SOW APPROVED BY: James Wright	2/12/2024
JAMES WRIGHT, MANAGER	DATE
DPMC PROJECT PLANNING & INITIATION	

SOW APPROVED BY: Dennis W. Meszaros

DENNIS MESZAROS, MANAGER DEPARTMENT OF TRANSPORTATION 02/14/2024 DATE

SOW APPROVED BY: Goustina Mansy	2/14/2024
YOUSTINA MANSY, PROJECT MANAGER	DATE
DPMC PROJECT MANAGEMENT GROUP	

**SOW APPROVED BY:** 

2/14/24

CHRISTOPHER GEARY, ASST. DEPUTY DIRECTOR DATE **DIV PROPERTY MGT & CONSTRUCTION** 

## XII. CONTRACT DELIVERABLES

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

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

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

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

#### XIII. EXHIBITS

- A. SAMPLE PROJECT SCHEDULE FORMAT
- B. PROJECT SITE LOCATION MAP
- C. FLOOR SCHEMATIC
- D. PHOTOS

#### END OF SCOPE OF WORK

## Deliverables Checklist Investigation Phase

#### A/E Name: \_\_\_\_\_\_

A/E Manual						-	Enclosed	
Reference	Submission Item	Yes	No	Yes	No	Yes	No	
12.3.1.	A/E Statement of Site Visit							
12.3.2.	Narrative Description of Project							
12.3.3.	Building Code Information Questionnaire							
12.3.4.	Space Analysis							
12.3.5.	Special Features							
12.3.6.	Catalog Cuts							
12.3.7.	Site Evaluation							
12.3.8.	Subsurface Investigation							
12.3.9.	Surveys							
12.3.10.	Fine Arts Inclusion							
12.3.11.	Design Rendering							
12.3.12.	Regulatory Approvals							
12.3.13.	Utility Availability							
12.3.14.	Diagrammatic Sketches/Drawings (6 Sets)							
12.3.15.	Outline Specifications (6 Sets)							
12.3.16.	Current Working Estimate/Cost Analysis							
12.3.17.	Project Schedule							
12.3.18.	Formal Presentation							
12.3.19.	Scope of Work Compliance Statement							
12.3.20.	Investigation Phase Deliverables Checklist							
S.O.W. Reference	S.O.W. Specific Requirements				1			

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

Consultant Signature

### Deliverables Checklist Design Development Phase

#### A/E Name: \_\_\_\_\_

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

#### A/E Name: \_\_\_\_\_

A/E Manual		Required by S.O.W.		Previously Submitted		Enclosed	
Reference	Submission Item	Yes	No	Yes	No	Yes	No
15.4.1.	A/E Statement of Site Visit						
15.4.2.	Narrative Description of Project						
15.4.3.	Building Code Information Questionnaire						
15.4.4.	Space Analysis						
15.4.5.	Special Features						
15.4.6.	Catalog Cuts						
15.4.7.	Site Evaluation						
15.4.8.	Subsurface Investigation						
15.4.9.	Surveys						
15.4.10.	Arts Inclusion						
15.4.11.	Design Rendering						
15.4.12.	Regulatory Approvals						
15.4.13.	Utility Availability						
15.4.14.	Drawings (6 Sets)						
15.4.15.	Outline Specifications (6 Sets)						
15.4.16.	Current Working Estimate/Cost Analysis						
15.4.17.	Project Schedule						
15.4.18.	Formal Presentation						
15.4.19.	Plan Review/Scope of Work Compliance Statement						
15.4.20.	Final Design Phase Deliverables Checklist						
S.O.W. Reference	S.O.W. Specific Requirements						
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This checklist shall be completed by the Design Consultant and included as the cover sheet of this submission to document to the DPMC the status of all the deliverables required by the project specific Scope of Work.

Consultant Signature

#### Deliverables Checklist Permit Application Phase

## A/E Name: \_\_\_\_\_

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

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

Consultant Signature

#### Deliverables Checklist Bidding and Contract Award Phase

#### A/E Name: \_\_\_\_\_

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

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

Consultant Signature

## Deliverables Checklist Construction Phase

A/E Manual		S.O	red by .W.		Previously Submitted		Submitted Enclos		osed
Reference	Submission Item	Yes	No	Yes	No	Yes	No		
18.2.	Pre-Construction Meeting								
18.3.	Submittal Log								
18.4.	Construction Schedule								
18.5.	Project Progress Meetings								
18.7.	Contractor's Invoicing and Payment Process								
18.8.	Contractor Submittals								
18.10.	Testing								
18.11.	Shop Drawings (6 Sets)								
18.12.	As-Built & Record Set Drawings (6 Sets)								
18.13.	Change Orders								
18.14.	Construction Photographs								
18.15.	Field Observations								
18.17.	Construction Phase Deliverables Checklist								
S.O.W. Reference	S.O.W. Specific Requirements				·				
					1				

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

Consultant Signature

### Deliverables Checklist Project Close-Out Phase

A/E Manual		Requii S.O	red by .W.		ously nitted	Encle	osed
Reference	Submission Item	Yes	No	Yes	No	Yes	No
19.3.	Development of Punch List and Inspection						
	Reports						
19.5.	Determination of Substantial Completion						
19.6.	Correction/Completion of Punch List						
19.7.	Submission of Close-Out Documentation						
19.7.1.	As-Built and Record Sets of Drawing (6 Sets)						
19.8.	Final Payment						
19.9.1.	Contractors Final Payment						
19.9.2.	A/E's Final Payment						
19.10.	Project Close-Out Phase Deliverables Checklist						
S.O.W. Reference	S.O.W. Specific Requirements						•
						1	
					1	1	

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

Consultant Signature

A/E Name: \_\_\_\_\_

February 7, 1997 **Rev.**: January 29, 2002

#### **Responsible Group Code Table**

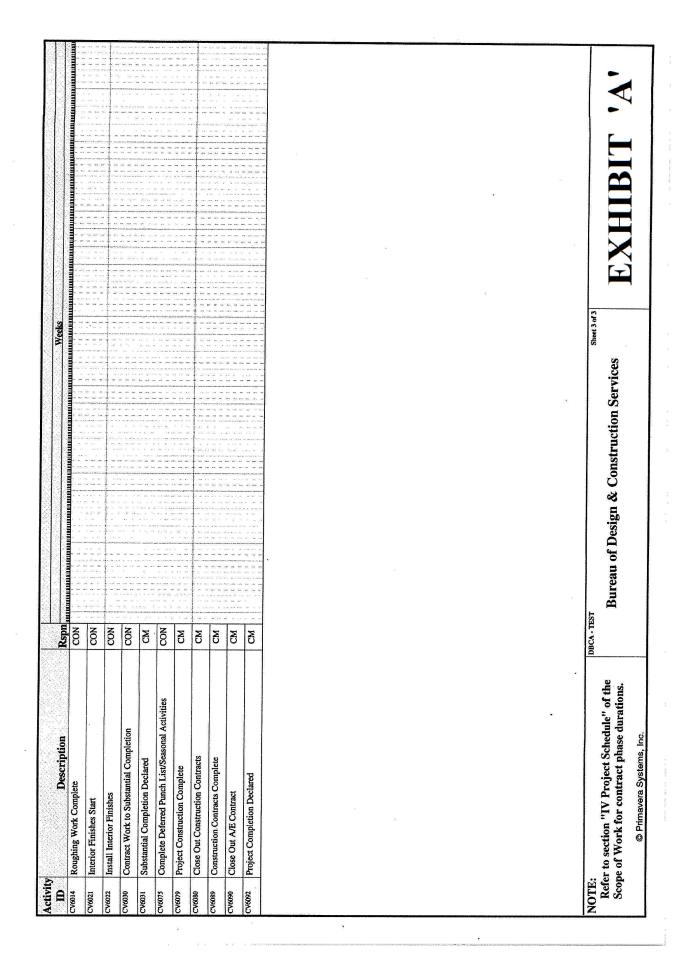
The codes below are used in the schedule field "GRP" that identifies the group responsible for the activity. The table consists of groups in the Division of Property Management & Construction (DPMC), as well as groups outside of the DPMC that have responsibility for specific activities on a project that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

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

## EXHIBIT 'A'

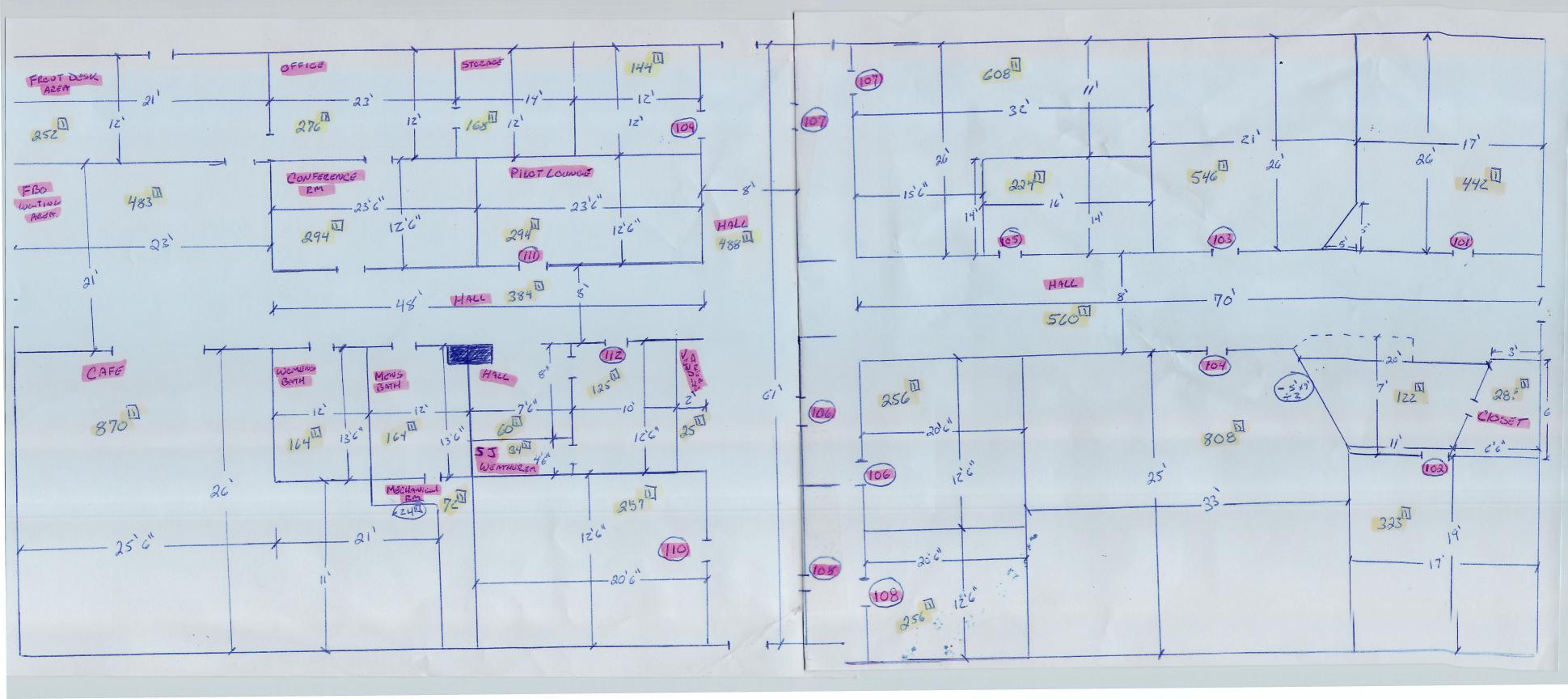
APROJ>         Design         Design         Cv3001       Schedule/Conduct Predesign/Project Kick-Off Mig.         Cv3002       Prepare Program Phase Submittal         Cv3002       Prepare Program Submittal for Review         Cv3021       Distribute Program Submittal for Review         Cv3022       Review & Approve Program Submittal         Cv3023       Review & Approve Program Submittal         Cv3024       Review & Approve Program Submittal		
Schedule/Conduct Predesign/Project Kick-Off Mtg. Prepare Program Phase Submittal Distribute Program Submittal for Review Prepare & Submit Project Cost Analysis (DPMC-38) Review & Approve Program Submittal Review & Approve Program Submittal Review & Approve Program Submittal		
Schedule/Conduct Predesign/Project Kick-Off Mtg. Prepare Program Phase Submittal Distribute Program Submittal for Review Prepare & Submit Pròject Cost Analysis (DPMC-38) Review & Approve Program Submittal Review & Approve Program Submittal Review & Approve Program Submittal		
Prepare Program Phase Submittal Distribute Program Submittal for Review Prepare & Submit Project Cost Analysis (DPMC-38) Review & Approve Program Submittal Review & Approve Program Submittal Review & Approve Program Submittal		
Distribute Program Submittal for Review Prepare & Submit Project Cost Analysis (DPMC-38) Review & Approve Program Submittal Review & Approve Program Submittal Review & Approve Program Submittal		
Prepare & Submit Project Cost Analysis (DPMC-38) Review & Approve Program Submittal Review & Approve Program Submittal Review & Approve Program Submittal		
Review & Approve Program Submittal Review & Approve Program Submittal Review & Approve Program Submittal		
Review & Approve Program Submittal Review & Approve Program Submittal		
Review & Approve Program Submittal		
CV3025 Consolidate & Return Program Submittal Comments CM		
CV3030 Prepare Schematic Phase Submittal AE		
CV3031 Distribute Schematic Submittal for Review CM		
CV3037 Prepare & Submit Project Cost Analysis (DPMC-38) CM		
CV3032 Review & Approve Schematic Submittal CA		
CV3033 Review & Approve Schematic Submittal PR		
CV3034 Review & Approve Schematic Submittal CM		
CV3035 Consolidate & Return Schematic Submittal Comment CM		
CV3040 Prepare Design Development Phase Submittal AE		
CV3041 Distribute D. D. Submittal for Review CM		
CV3047 Prepare & Submit Project Cost Analysis (DPMC-38) CM		
CV3042 Review & Approve Design Development Submittal CA		
CV3043 Review & Approve Design Development Submittal PR		
CV3044 Review & Approve Design Development Submittal CM		
CV3045 Consolidate & Return D.D. Submittal Comments CM		
CV3050 Prepare Final Design Phase Submittal AE		
CV3051 Distribute Final Design Submittal for Review CM		
CV3052 Review & Approve Final Design Submittal CA		
CV3053 Review & Approve Final Design Submittal PR		
CV3054 Review Final Design Submitt for Constructability OCS		
NOTE: DBCA. TEST Refer to section "IV Project Schedule" of the	Bareau of Design & Construction Services	
Stope of Mork for contract phase durations.	EA	HIBII A

	D Description	Rspn		Wee	ks				
	Review & Approve Final Design Submittal	Ŋ							<b>munu</b>
	Consolidate & Return Final Design Comments	8							,, . ,,, ,,, ,,,
	Prepare & Submit Permit Application Documents	AB							
CV3068	Prepare & Submit Bidding Cost Analysis (DPMC-38)	CM							
Plan Re	Plan Review-Permit Acquisition								
CV4001	Review Constr. Documents & Secure UCC Permit	- BR							
CV4010	Provide Funding for Construction Contracts	C							- 10 - 10 - 10 - 10
CV4020	Secure Bid Clearance	ß							
Adverti	Advertise-Bid-Award								
CV5001	Advertise Project & Bid Construction Contracts	B							
CV5010	Open Construction Bids	Ð							a ana a an ana a an an a
CV5011	Evaluate Bids & Prep. Recommendation for Award	ß							
1	Evaluate Bids & Prep. Recommendation for Award	YE							
CV5014	Complete Recommendation for Award	ð							
CV5020	Award Construction Contracts/Issue NTP	ð							
Construction	tetion								
CV6000	Project Construction StarVIssue NTP								
CV6001	Contract Start/Contract Work (25%) Complete	CON							
	Preconstruction Meeting	CM			5			3	
CV6003	Begin Preconstruction Submittals	con							
	Longest Lead Procurement Item Ordered	CON							
	Lead Time for Longest Lead Procurement Item	CON							
CV6006	Prepare & Submit Shop Drawings	CON							er is ore 175 6.7 Million (196
CV6007	Complete Construction Submittals	CON							
CV6011	Roughing Work Start	CON							
CV6012	Perform Roughing Work	CON						2 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 1	
CV6010	Contract Work (50%+) Complete	CON							
CV6013	Longest Lead Procurement Item Delivered	CON							
CV6020	Contract Work (75%) Complete	CON						12 5 1000000 100000 100000 100000 100000	
NOTE		DBCA - TEST		Share	Share 7 of 2				
Refe	Refer to section "IV Project Schedule" of the Scope of Work for contract phase durations.	Bureau of Desig	Bureau of Design & Construction Services		Γ <u>-</u>	НХ	RIT	<b>V</b>	~
	C Primavera Systems Inc								





## Project Site Location Map South Jersey Regional Airport **EXHIBIT 'B'**





Office Building at South Jersey Regional Airport.



Two boilers side by side in central attic.





Air handler in central attic.



Fixed and flexible ductwork in central attic.

## EXHIBIT 'D'

Condensers near Runway Café.



#2 Fuel Oil Tank.

## EXHIBIT 'D'