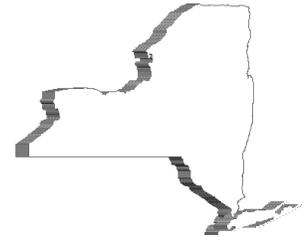




STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242



ADDENDUM NO. 1 TO PROJECT NO. 44898

**ELECTRICAL WORK
UPGRADE STANDBY POWER SYSTEM FOR SERVER ROOM
NATHAN KLINE RESEARCH INSTITUTE - BUILDING 35
140 OD ORANGEBURG ROAD
ORANGEBURG NY**

April 16, 2015

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual.
Acknowledge receipt of this Addendum in the space provided on the Bid Form.

SPECIFICATIONS

1. Section 013113 PROJECT SCHEDULE: Add the attached Section (pages to 013113-1 through 013113-10) to the Project Manual.

END OF ADDENDUM

Margaret F. Larkin
Executive Director
Design and Construction

SECTION 013113

PROJECT SCHEDULE

PART I GENERAL

1.01 RELATED REQUIREMENTS AND INFORMATION SPECIFIED ELSEWHERE

- A. Summary of Work: Section 01 1000.
- B. Administrative Requirements: Section 013000.
- C. Project Meetings: Section 013119.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements to plan, schedule, and document the progress of the Project, and predict and prevent delays to established activities and milestones during performance of the Work.

1.03 SUBMITTALS

- A. Waiver of Submittals: The "Waiver of Certain Submittal Requirements" in Section 013300 does not apply to this Section.
- B. Schedule Submittals:
 - I. Initial Spreadsheet
 - 2. CMU 01 Agreement Form

1.04 DEFINITIONS

- A. Project: Work to be performed as part of one or more Contracts.
- B. Project Team: Persons acting on behalf of the State or Contractors in an effort to successfully plan, schedule, and coordinate the Work of the Project.
- C. Schedule: A comprehensive leveling of necessary procedural tasks, the sequencing of those tasks, and the incorporated resource allocation required to successfully complete the Work by the Project completion date.
- D. Activity: A task or grouping of tasks containing an anticipated start-date and corresponding duration, comprising a generalized portion of the Work, that can be identified and measured for planning, coordinating, monitoring, and controlling the project.
- E. Milestone: A significant start or finish to Work on the Project defined by both the Director's Representative and the Contractors.

- F. Bid Milestones: Milestones or phases identified and included in the Contract Documents to be utilized by the Contractors and Project team in developing the Baseline Project Schedule.
- G. Spreadsheet: The electronic Excel© file provided to the Contractors for establishing activities, anticipated start, duration, predecessors, successors, and budgeted cost for Work of the Project.
- H. Baseline Project Schedule: The Activities and their prescribed durations recognizing the completion of the Work of the Project in accordance with the Contract duration and approved by the Director's Representative and Contractors.
 - 1. Updates to the Baseline Project Schedule, including but not limited to starts, finishes, and activity percent complete, as agreed upon at the Project Schedule meeting by the Contractors and the Director's Representative, shall be defined as the Project Schedule.
 - 2. The Baseline Project Schedule will remain unaltered as a tool to measure progress outlined and anticipated during the initial Project Schedule meeting.
- I. Float: The measure of latitude in starting and/or completing an activity without impeding on the successful realization of Project milestones.
 - 1. Float time is not for the exclusive use or benefit of either the State or the Contractors, but is a jointly owned expiring Project resource: float is available as needed to meet scheduled milestones and Project completion.
 - 2. Recognizing float within an activity, or chain of activities, does not permit the Contractors to disrupt progress or delay completion of an activity.
- J. Resource: Any labor, material, or equipment, shared or exclusive, required for the completion of an Activity or the Work, which recognizes an associated cost.
- K. OGS Scheduling: A member of the OGS Scheduling Department responsible for importing, updating, analyzing, reviewing, and interpreting schedule related information for the Project team to ensure compliance with this or related sections.

1.05 DEVELOPMENT OF THE PROJECT SCHEDULE

- A. An electronic file is available to the Contractors and is to be utilized to assist in completing the Baseline Project Schedule. This file is an Excel© spreadsheet exported from the Scheduling Software and requires the completion of six specified columns including activity name, original duration, anticipated start, predecessor, successor, and budgeted cost.
 - 1. Failure to acquire the file by request upon Project Award will not excuse the required submission times as noted within the section.
 - 2. Contractors may submit initial planning schedule in format compatible with the State's Scheduling Software to be utilized in developing the Baseline Project Schedule in lieu of the Spreadsheet.

- B. The Contractors will complete the Spreadsheet with information relating to activity naming, duration, anticipated start date, predecessor, successor, and budgeted cost and submit to the Director's Representative for review prior to the initial Project Schedule meeting.
- C. The Director's Representative will schedule the initial Project Schedule meeting within 15 calendar-days of Project Award. The meeting will include members of the Project team and will be conducted by OGS Scheduling for the purpose of reviewing the Contractors' initial planning schedule, defining the intent of the specification, and realizing a schedule management strategy for all required iterations and reporting. The mutual agreements reached at this and subsequent meetings form the basis for the Baseline Project Schedule, and will be used for coordinating, scheduling, and monitoring the Work of all related contracts.
 - I. OGS Scheduling will work with other members of the Project team to incorporate activities, task summaries, contractual or Project milestones, intermediate and critical milestones, and testing, inspection, or commissioning periods to assist in planning or coordination.
- D. The Contractors will sign the CMU 01 Agreement form (blank included in Document 013113) within five (5) calendar-days of final Baseline Project Schedule review and approval by the Director's Representative. Failure to complete and submit the Spreadsheets, develop the Baseline Project Schedule, and sign the CMU 01 Agreement form will not absolve the Contractors of the scheduling requirements. The Contractors will be required to provide the necessary resources, at no additional charge to the State, to complete the Project in the manner defined by the Director's Representative.
 - 1. The Baseline Project Schedule and CMU 01 agreement are to be completed within 45 days of Project Award. Failure by the Contractors to provide the required or requested information will result in the withholding of progress payments.
- E. A Baseline Project Schedule recognizing early completion will be reviewed by members of the Project team prior to acceptance.
- F. Bid Milestones are to be incorporated into the project schedule.

1.06 UPDATING THE PROJECT SCHEDULE

- A. Monthly Project Schedule meetings will be held to review updates to the actual starts, actual finishes, and the percent complete of in-progress activities, and consider logic changes, sequencing alterations, duration amendments, time impact events, and scope changes, for the purpose of determining the status of construction progress for the updated Project Schedule.
 - 1. During the progress of Work on the Project, the Contractors are required to document actual start, actual finish, and activity percent complete on a daily basis, and provide the information to OGS Scheduling in the manner defined during the Initial Project Schedule meeting.
 - 2. The Contractors and Director's Representative will review the documented progress at the Project Schedule meeting prior to incorporating the information on the Project Schedule.

3. Any Contractor failing to progress their Work as outlined in the updated Project Schedule will be informed of their deficiencies and, if required, be requested to provide a recovery option.
- B. The Contractors will furnish all schedule information requested by the Director's Representative. Any Contractor who fails to furnish accurate information during the Project Schedule meeting will be required to provide all resources necessary to execute the updated Project Schedule based on progress information documented and recorded by the Director's Representative.
 - C. Project Schedule updates recognizing early completion will be reviewed by members of the Project team prior to acceptance of the Project Schedule update.

1.07 MAINTAINING SCHEDULE

- A. Perform the Work in accordance with the Project Schedule and provide resources necessary to maintain the progress of activities as scheduled so that no delays are caused to other Contractors engaged in the Work.
 1. Should any Contractor fail to maintain progress according to the Project Schedule, or cause delay to another Contractor, that Contractor shall provide such additional manpower, equipment, additional shifts, or other measures, at their own cost, to bring their operations back on schedule.
 2. Performing activities as part of the Work out of sequence with the Project Schedule is not permitted unless written approval is obtained from the Director's Representative prior to commencement.

1.08 RECOVERY SCHEDULE

- A. Recovery Schedule: When periodic updates indicate the Work is 15 or more calendar-days behind the approved Baseline Project Schedule's Substantial or Physical Completion dates, the Contractors will present recovery options to the Director's Representative to be incorporated into an updated Project Schedule; these include, but are not limited to, allocating additional resources for activity duration reduction or modifying activity sequencing,
- B. Any Contractor failing to furnish recovery options to the Director's Representative for a Recovery Schedule within 10 calendar-days subsequent to the monthly Project Schedule update will be required to provide all resources necessary to execute an updated Project Schedule defined by the Director's Representative .
- C. Alterations to the Project Schedule by a Recovery Schedule will require the approval of the Contractors and the Director's Representative.
- D. Approved alterations to the Project Schedule by a Recovery Schedule, will constitute the updated Project Schedule.
 1. The updated Project Schedule following the implemented Recovery Schedule will be recognized as the primary baseline schedule for reporting. The Baseline Project Schedule will be retained as a secondary

baseline schedule and will be utilized to measure progress against the alterations.

- E. A Recovery Schedule recognizing early completion will be reviewed by the Director's Representative prior to acceptance of the Project Schedule update.

1.09 RESOURCE ASSIGNMENTS

- A. Resources recognizing the budgeted cost associated with all efforts necessary for the completion of a unique activity within the schedule, and the total cumulative cost of the Work of the Project, are to be assigned by the Contractors. All Contractors are responsible for providing the information necessary for assigning resources for the Baseline Project Schedule; all Contractors are responsible for reviewing the information.
- B. Resources recognizing the total Labor/Manpower and specialized equipment associated with all efforts necessary for the completion of a unique activity within the schedule network, and the cumulative curve associated with the Work of the Project, are to be assigned concordant with the intended means and methods proposed by the Contractors. All Contractors are responsible for providing the information necessary for assigning resources for the Baseline Project Schedule; all Contractors are responsible for reviewing the information prior to approval.

PART2 PRODUCTS

2.01 SCHEDULING SOFTWARE

- A. Scheduling Software: Schedule is to be prepared utilizing the Spreadsheet, developed specifically to interface with the State's schedule program portfolio.
 - I. The State's program portfolio utilizes Oracle's Primavera P6©.

2.02 SCHEDULE UPDATE REPORTS

- A. OGS Scheduling will submit the updated Project Schedule within five (5) calendar-days of the Project Schedule meeting utilizing the Scheduling Software.

PART3 EXECUTION

3.01 PROJECT SCHEDULE

- A. The Contractors' will complete the Spreadsheet including all columns and rows within the form and submit to either the web collaborative site or Director's Representative, two (2) days prior to the initial meeting, in a manner appropriate to the development of the Baseline Project Schedule.
 - I. If compatible software is utilized, the Contractors will be required to provide all information applicable to the Spreadsheet, and in accordance

with all submission requirements noted in this section or related sections.

- B. The Contractors will determine and define activities applicable to the Work of their Contract and the scope of the Project. Activities are to be appropriately placed within the Spreadsheet.
- C. Within 15 calendar-days of Project Award, the Contractor's will submit the completed Spreadsheet to be incorporated for the Baseline Project Schedule, encompassing the Work of the Project from Project Award through Physical Completion. The Project team will review the initial project schedule submissions at the Initial Project Schedule meeting and complete the Baseline Project Schedule.
 - 1. The Project team will recommend tasks or summaries appropriate to planning, scheduling and coordinating, including but not limited to: establishing a focused work breakdown structure (WBS), phasing requirements, identifying logical connections critical to Substantial and Physical completion, accounting for critical submittals or submission, fabrication, and delivery of long-lead materials, products, specialized equipment, or services, and recognizing critical testing, inspection, or commissioning durations for coordination and tracking.
- D. The Baseline Project Schedule is to be approved and the CMU 01 Agreement Form signed within 30 calendar-days of Project Award. Failure to complete the Spreadsheet, review the incorporated Spreadsheets and Baseline Project Schedule, and sign the CMU 01 Agreement Form will result in non-payment for Work progressing beyond 30 calendar-days subsequent to Project Award.
- E. Updates to the Project Schedule will be performed concurrent with Project Schedule meetings.

3.02 ACTIVITIES

- A. The Contractors are to provide activities which adequately represent the coordinating needs of the Project and scope of the Work.
 - 1. Each activity will identify the Contractors' anticipated start-date of the task or grouping of tasks, anticipated duration for the activity defined in work-days, and the budgeted cost of the activity.
 - 2. Activities are not required to realize an interlocking and dependent progression of the Work.
- B. The Contractors will identify each activity with a unique Activity Name. No Activity Name will be altered after the Baseline Project Schedule has been approved without written approval by the Director's Representative.
- C. The Project team will identify milestones, activities, or summary activities for incorporation into the Baseline or Project Schedule to assist in planning, scheduling, and coordinating the Project.

- D. The calendar utilized by the Baseline and Project Schedule for each activity will accurately reflect anticipated state and federal holidays as well as work being performed off-hours as defined in the Contract Documents and by the Director's Representative.

3.03 BASELINES

- A. OGS Scheduling will maintain a copy of the Baseline Project Schedule as the assigned project baseline schedule.

3.04 TIME IMPACT AND TIME IMPACT ANALYSIS

- A. OGS Scheduling will represent Time Impact to the Project Schedule milestones utilizing, at a minimum, a milestone event, an activity for resolution, and related work associated with the impact to the as-updated Work of the Project.
 - I. OGS Scheduling and the Project team will use the most current Project Schedule update to prepare the Time Impact representation.
 - 2. If Project Schedules have not been updated in accordance with this specification, an update must be generated which includes an accurate realization of the Work performed and progressed up to the Time Impact event. Failure to maintain Project Schedule updates in accordance with this or related specifications will not absolve the Schedule Preparer or Contractors of the responsibility to identify Time Impact as defined at a minimum by this article.
 - 3. A Request for Time Extension will require Time Impact recognition within the CPM schedule.
 - 4. Time Impact events will be reviewed for accuracy and are to be updated in accordance with relevant new information regarding time for resolution and impact to remaining work on the Project

3.05 REQUESTS FOR TIME EXTENSIONS

- A. The Contractors are to submit in writing to the Director's Representative a Request for Time Extension within ten (10) days of recognizing the need to amend the contractual Substantial or Physical Completion date.
 - I. OGS Scheduling will provide Project Schedule reports, generated from the current Project Schedule update, recognizing the inability to complete the contractual, Project, or Bid Milestones by the established completion dates and a copy of the P6 file used to generate the reports.
 - 2. Submitting a Request for Time Extension does not permit the Contractors to delay Work on the current Project Schedule update.
- B. The Project team is to develop and submit CPM schedule options, in accordance with applicable requirements of this section, showing a milestone event, the time for resolution, the related work associated with the resolution or alternate options, and the newly projected Project and Bid Milestone dates.
- C. Requests for Time Extensions will be responded to within 15 calendar-days of receipt and the Contractors will be notified in writing of the refusal or acceptance of the request.

- D. Reasons for which extensions will be rejected upon receipt include, but are not limited to, the Contractors' failure to provide appropriate resources to complete the Work, misinterpretations of contract requirements, improper planning, failure to coordinate with other Contractors or the Director's Representative, misappropriated distribution of approved costs, payments, or budget for Project Work, failure to comprehend project schedule requirements, failure to provide Project Schedule updates consistent with the requirements of this or related sections, material procurement or delivery delays not associated with Special Events (*force majeure*), or subcontractor and worker related issues such as contractual disputes or work-stoppage strikes.
- E. Approved Request for Time Extensions will require the creation of a revised Project Schedule prepared by OGS Scheduling which will serve as the primary baseline

3.06 CONTRACTORS' OPTION

- A. The Contractors may elect, in writing, to utilize computerized software compatible with the Scheduling Software in place of the Spreadsheet and the OGS Scheduling provided service. Compatible software options include but are not limited to Microsoft Project Professional©, Asta PowerProject©, or Primavera©. If the Contractors resolve to utilize compatible software, one file is to be submitted encompassing the Work of all Contracts, and the selected compatible software file is to be submitted in the proper format for interfacing with the Scheduling Software. The Contractors will notify the Director's Representative, in writing, prior to proceeding with the Contractors' Option.
 1. The State will not be responsible for the Contractors' failure to properly review the compatibility properties or the requirements of this and related sections, and will not accommodate files submitted in an improper format.
 2. The Contractors will be responsible for complying with all requirements of this and related sections when coordinating the development or update of a Baseline or Project Schedule utilizing compatible software under the Contractors' Option.
 3. If the Contractors' elect to utilize compatible software, the Contractors will be responsible for all updating of the Project Schedule, obtaining approval of the updated activities actual start, actual finish, and activity percent complete by the Director's Representative, and submitting the properly formatted file for each update through Physical Completion; under this option, failure to create the Baseline Project Schedule, update the Project Schedule, obtain approval, or failure to submit the properly formatted file may result in withholding payments.
 4. The State will not compensate any Contractor for the selection of this optional article during the compliance of this or related sections.
 5. Proceeding with this option will require the Contractors to assume at the role of OGS Scheduling as defined within this section.

- B. If all Contractors elect to utilize compatible software, the Baseline Project Schedule is to be submitted within the parameters of this section and is to encompass the Work of all Contracts.
 - 1. If any Contractor fails or refuses to provide information for developing the Baseline Project Schedule, or if in the judgment of the Director's Representative the information provided does not adequately reflect the Work of the Project, all Contractors will be deemed not to have provided the information necessary for development of the Baseline Project Schedule and payments may be withheld.

- C. The Contractors are not prohibited from developing a complete Project Schedule encompassing all Contracts utilizing the Critical Path Method.
 - 1. The Critical Path Method is a scheduling process used to plan and coordinate the Project, arranging activities based on logical relationships in order to create a network diagram of interconnected procedures.

END OF SECTION

PROJECTNO. -----

PROJECTNAME: -----

REPORTDATE: -----

REPORTNAME(S): -----

It is agreed that the Baseline Project Schedule defined by the above listed computer reports has been reviewed and is accepted for use in coordinating, scheduling, and monitoring the work of all related contracts.

FOR ELECTRICAL WORK CONTRACTOR: ----- DATE: _____

FOR DIRECTOR'S REPRESENTATIVE: ----- DATE: _____