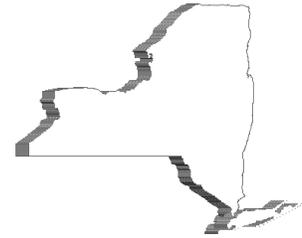




STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242



ADDENDUM NO. 2 TO PROJECT NO. 44846

**ELECTRICAL WORK
PROVIDE VOIP COMMUNICATIONS
SYSTEM AND ELECTRICAL
INFRASTRUCTURE MODIFICATIONS
HIGHLAND RESIDENTIAL CENTER
629 NORTH CHODIKEE LAKE ROAD
HIGHLAND, NY 12528**

June 2, 2014

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.

CHANGES TO ADDENDUM NO. 1

1. Item No. 2. Remove Section 013113 PROJECT SCHEDULE in its entirety from the Project Manual.

SPECIFICATIONS

2. Section 013200 PROJECT SCHEDULE: Add the attached Section (Pages 013200-1 through 013200-10) to the Project Manual.

END OF ADDENDUM

Margaret F. Larkin
Acting Executive Director

SECTION 013200

CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.01 RELATED REQUIREMENTS AND INFORMATION SPECIFIED ELSEWHERE

- A. Summary of Work: Section 011000.
- 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 sequences and milestones during performance of the Work, including the following:
 - 1. Critical Path Method schedule and reports.
 - 2. Material location and delivery reports.
 - 3. Field condition reports.
 - 4. Special reports.
 - 5. Change management.

1.03 DEFINITIONS

- A. Project: Work to be performed as part of one or more Contracts.
- B. 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.
- C. Activity: An intricate part of the Work that can be identified and measured for planning, coordinating, monitoring, and controlling the project.
- D. Milestone: A significant start or finish to Work on the Project defined by both the Director's Representative and the Contractors.
- E. Bid Milestones: Milestones or phases identified and included in the Contract Documents to be utilized by the Contractors in developing the Baseline Project Schedule.
- F. CPM: 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.

- G. **Baseline Project Schedule:** The initial CPM schedule for completion of the Work of the Project in accordance with the Contract duration, approved by the Director's Representative and Contractors, and completed by the Schedule Preparer.
1. Following the initial update to the Baseline Project Schedule, including but not limited to starts, finishes, activity percent complete, logic adjustments, or duration amendments, as agreed upon at the Project Schedule meeting by the Contractors and the Director's Representative, the current updated schedule rendering will 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 Project Schedule Definition meeting.
- H. **PDM:** Precedence Diagram Method utilizes standard CPM calculations creating an interdependent logical relationship between activities and a dependent path from Project Award through Substantial and Physical Completion.
- 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 delay progress or completion of an activity.
- J. **Critical Path:** A progressing sequence of interdependent activities within the schedule network containing zero (0d) total float and establishing the minimum Project Substantial and Physical Completion duration.
- K. **Resource:** Any labor, material, or equipment, shared or exclusive, required for the completion of an Activity or the Work, which recognizes an associated cost.

1.04 SCHEDULE PREPARER

- A. The Electrical Work Contractor shall designate a Schedule Preparer responsible for the preparation of the Preliminary Project Schedule, the Baseline Project Schedule, and all required updates and reporting for the Project Schedule. The Schedule Preparer shall possess a minimum of five (5) years of construction related scheduling experience, shall have developed and maintained at least two (2) schedules for projects of similar size and scope, and shall be competent in the use of the specified Scheduling Software.
1. Submit intended Schedule Preparer's qualifications to the Director's Representative prior to the Project Schedule Definition Meeting including qualifying project names, locations, scope description, project construction value, the type of scheduling software utilized and the submitted representative's direct role on the projects noted.
 2. During the period encompassing Project Award to Physical Completion, any substitution for the Schedule Preparer, needed or requested, will

- require the resubmission of qualifications to the Director's Representative in accordance with this article.
3. Failure to designate a Schedule Preparer or submit qualifications will not absolve the Electrical Work Contractor of the requirements of this article.
 4. If a Schedule Preparer is needed by the Director's Representative to comply with the requirements of this section or related sections, the Electrical Work Contractor will assume all costs associated with the preparation and execution of the Preliminary, Baseline, and updated Project Schedule required by the Director's Representative.

1.05 DEVELOPMENT OF THE PROJECT SCHEDULE

- A. The Director's Representative will schedule the Project Schedule Definition Meeting as outlined in Section 013119. The meeting will include a review of the Schedule Preparer's initial project schedule. The discussions and mutual agreements reached at this and subsequent meetings form the basis for the CPM Preliminary Project Schedule and the development of the CPM Project Schedule, defined as the Baseline Project Schedule, and will be used for coordinating, scheduling, and monitoring the Work of all related contracts.
 1. An electronic file will provided at project award to the Schedule Preparer and is to be utilized to complete the Baseline Project Schedule.
- B. The Schedule Preparer is to complete the Baseline Project Schedule with information provided by the Contractors and Director's Representative and submit to the Contractors and Director's Representative for review and approval.
- C. The Contractors will sign the CMU 01 Agreement form (blank included at end of this Section) within five (5) calendar-days of final Baseline Project Schedule review and approval by the Director's Representative. Failure to develop and submit 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 a Schedule Preparer acting as the Director's Representative.
- D. Preliminary or Baseline Project Schedules recognizing early completion will be reviewed by the Director's Representative prior to acceptance of the Preliminary or Baseline Project Schedule.
- E. Bid Milestones included in the Contract Documents are to be incorporated into the project schedule.
- F. During the period between Project Award and the execution of the CMU-01 Agreement by the Contractors and the Director's Representative, the Contractors will comply with the Preliminary Project Schedule and will be responsible for providing the necessary resources to complete the Work as defined by the Director's Representative and Schedule Preparer.

1.06 UPDATING THE PROJECT SCHEDULE

- A. Monthly Project Schedule meetings will be held to update the actual start, actual finish, and the percent complete of activities being performed for the purpose of determining the status of construction progress on 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.
 - 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 the Director's Representative 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. CPM 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 by the Schedule Preparer; these include, but are not limited to, allocating additional resources for activity duration reduction, modifying network logic, or revising activity sequences.
- B. Any Contractor failing to furnish recovery options to the Director's Representative for a CPM 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 a the Director's Representative and updated by the Schedule Preparer.

- C. Alterations to the Project Schedule by a CPM Recovery Schedule will require the approval of the Contractors and the Director's Representative.
- D. Approved alterations to the Project Schedule by a CPM Recovery Schedule, will constitute the updated Project Schedule.
 - 1. The updated Project Schedule following the implemented CPM 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 CPM Recovery Schedule recognizing early completion will be reviewed by the Director's Representative prior to acceptance of the Project Schedule update.

PART 2 PRODUCTS

2.01 SCHEDULING SOFTWARE

- A. Scheduling Software: Schedule is to be prepared utilizing the electronic file provided by the Director's Representative and developed specifically to interface with the State's schedule program portfolio.
 - 1. Utilize Oracle Primavera P6® PPM or EPPM operating system.

2.02 SCHEDULE UPDATE REPORTS

- A. The Schedule Preparer is to submit update reports in the format required by the Director's Representative, defined during the Project Schedule Meeting. These reports include but are not limited to, the updated P6® file, Gantt charts, logic reports, look-aheads, change management reports, and a Narrative Statement.
- B. Reports are to be provided within five (5) calendar-days of the Project Schedule meeting to allow the Director's Representative and the Contractors time for review of the information for accuracy and prior to approval of progress payments.

2.03 NARRATIVE STATEMENT

- A. The Schedule Preparer is to submit the Narrative Statement with the specified Schedule Update Reports and within five (5) calendar-days of each Project Schedule meeting.
- B. The Narrative Statement shall include the following:
 - 1. An Introduction including the State's Project ID#, Project location, the Contractors names, name of the Schedule Preparer, and a brief overview of the Work of the Project.
 - 2. An Executive Summary highlighting progress or significant changes.

3. A Milestone Chart and Analysis recognizing any change in the Project, Intermediate, or Bid Milestones as defined by the Director's Representative and the Contractors in the Baseline or updated Project Schedule.
4. An Analysis of Critical Path activities.
5. An Analysis of Time Lost or Gained on the schedule regarding Project or Intermediate Milestones.
6. A Material Delivery summary identifying the onsite storage locations of material delivered for Work being performed or Work on the critical path, and the anticipated arrival dates of material required for future critical path Work.
7. A Field Condition and Program Change summary noting any discoveries or contract alterations resulting in approved Field Orders or Change Orders.
8. A Special Condition summary noting any events beyond the control of the Contractors requiring Field Orders or Change Orders.
9. Any necessary Recovery Options.

PART 3 EXECUTION

3.01 CPM SCHEDULE

- A. The Director's Representative has defined a template for the Project through WBS Level 3. The Schedule Preparer and Contractors are to determine further breakdown of WBS Levels within the Project which adequately and appropriately organizes and represents the Work and the intended structure of construction progress. The Schedule Preparer is not to alter the first three WBS Levels within the structure without written approval from the Director's Representative.
- B. The Contractors will determine and define activities applicable to the Work of each Contract and the scope of the Project. Activities are to be appropriately placed within WBS Levels and are to identify specific aspects of the Work according to Project and contract requirements.
- C. Within 15 calendar-days of Project Award, the Schedule Preparer is to submit an initial project schedule encompassing the Work within the first 90 calendar-days of the Project, from Project Award, for the Contractors. The Contractors and Director's Representative will review the initial project schedule at the Project Schedule Definition Meeting and provide comments for the development of the Preliminary Project Schedule. The Preliminary Project Schedule will be used for verifying percentages complete for the Work and progress payments for the first 90 calendar-days.
 1. The Schedule Preparer is to complete the Preliminary Project Schedule based on comments provided by the Contractors and Director's Representative within five (5) calendar-days of the Project Schedule Definition Meeting for review and approval.
 2. If any Contractor fails or refuses to provide information for developing the Preliminary Project Schedule, or if in the judgment of the Director's

Representative the information provided does not accurately reflect the initial 90 calendar-days of Work of the Project, the Contractor will be deemed not to have provided the information necessary for progress payments and payments may be withheld.

- D. Within 45 calendar-days of Project Award, the Schedule Preparer is to prepare and submit the Baseline Project Schedule in compliance with this section to the Director's Representative and the Contractors for review and comment. The Director's Representative and the Contractors will return comments within five (5) calendar-days. The Schedule Preparer is to revise according to the comments.
- E. The Baseline Project Schedule is to be approved and the CMU 01 Agreement Form signed within 60 calendar-days of Project Award. Failure to provide the Baseline Project Schedule and sign the CMU 01 Agreement Form will result in non-payment for Work progressing beyond the 90-day approved Preliminary Project Schedule.

3.02 ACTIVITIES

- A. The Contractors are to provide activities to the Schedule Preparer which accurately reflect the Work of the Project and which can be utilized for monitoring and anticipating progress. In establishing activities for the Work and their durations, the Contractors are to include, as a minimum, the following:
 - 1. Mobilization.
 - 2. Fabrication.
 - 3. Material Delivery.
 - 4. Utility Interruptions.
 - 5. Coordination.
 - 6. Installation.
 - 7. Inspection.
 - 8. Testing and Commissioning.
 - 9. Punchlist.
- B. Long-lead and critical submittals and contract procurement items are to be identified and defined by the Contractors and the Director's Representative, and will be established in the appropriate WBS Level for monitoring and sequencing by the Schedule Preparer.
- C. Activity durations are not to exceed 15d without written approval by the Director's Representative.
 - 1. Subcontract procurement, long-lead material deliveries, and required submittals including preparation and submission, review and approval, and fabrication and delivery may exceed the above-mentioned restrictions and are to be reviewed and approved by the Director's Representative prior to acceptance.
- D. The Schedule Preparer will identify each activity with a unique activity identification number. The Prefix for activity identification is to be approved by the Director's Representative and utilized by the Schedule Preparer for the

duration of the Project. No activity's identification number is to be altered after the Baseline Project Schedule has been approved.

- E. The Schedule Preparer will not utilize any constraining techniques for activities without written approval by the Director's Representative.
- F. The Schedule Preparer will not allow activities to be open-ended having either no predecessor or successor, with the exception of the first and last activity in the Project Schedule network.
- G. Activities will be linked sequentially by the Schedule Preparer with information provided by the Contractors and the Director's Representative according to the anticipated flow and progress of the Work on the Project and the Work of concurrent projects.
 - 1. Activities, and the sequencing of activities, which do not accurately reflect the Work of the Project will not be accepted by the Director's Representative.
- H. The calendar utilized by the Schedule Preparer for each activity is to 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 ACTIVITY CODES

- A. The Schedule Preparer is to provide activity codes for each activity added to the schedule template. The activity codes will include but are not limited to responsibility, WBS Level 2, WBS Level 3, and phase.
- B. The Director's Representative will provide activity code naming information for use by the Schedule Preparer in developing the Baseline Project Schedule. The Schedule Preparer is not restricted from utilizing as many codes as necessary or possible to assist in the management of the Project via the Project Schedule. Any additional activity codes must remain within the scope of this section or related sections.
- C. The Schedule Preparer is to develop activity codes as Project level codes only. Development of Activity Codes as either Global or EPS will result in the rejection of the Baseline Project Schedule or Project Schedule update by the Director's Representative.
- D. No Activity Code is to be altered by the Schedule Preparer after the Baseline Project Schedule has been approved.

3.04 PROJECT CODES

- A. Project Codes are not to be added to the schedule template or the Preliminary, Baseline, or Updated Project Schedule by the Schedule Preparer without prior written approval from the Director's Representative; assigning Project Codes

without written approval will result in rejection of the Baseline Project Schedule or Project Schedule update by the Director's Representative.

3.05 BASELINES

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

END OF SECTION

PROJECT NO. _____

PROJECT NAME: _____

REPORT DATE: _____

REPORT NAME(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 THE ELECTRICAL WORK CONTRACTOR: _____ DATE: _____

THE DIRECTOR'S REPRESENTATIVE: _____ DATE: _____