# Section 01 10 00 Summary of Work

01 10 00-1

## PART 1 - GENERAL

# 1.01 SECTION INCLUDES

- A. Contract Description.
- B. Phasing and/or Completion of parts of the Work
- C. Coordination and Cooperation of Other Work
- D. Intent of the Drawings and Specs

#### 1.02 CONTRACT DESCRIPTION

- A. Work of the Project includes: Demolition and Renovation of portions an existing elementary school.
- The Contractor shall provide all equipment, services necessary to perform the construction of the Work.

## 1.03 COORDINATION AND COOPERATION OF OTHER WORK

- A. The General Contractor shall be required to cooperate and coordinate with Owner furnished Contractor(s) who shall be performing work on the project site as required. Refer to the drawings for specific items/trades.
- B. The General Contractor will have limited access to certain areas of the site, as indicated in the Drawings.

# 1.04 STAGING AND PHASING OF WORK

- A. Portions of this site will be occupied by the Owner and will be off-limits to the Contractor for portions of the Contract Duration. Contractor shall coordinate with the Owner to maintain access to and full use of the portions of the site designated in the Construction Documents.
- B. The Contractor shall coordinate staging of work with the Owner.
  - Contractor shall perform work at the following locations: Rm # 103, 104, 106, 107, 108, 109. Work
    at these locations shall be complete prior to the start of the 2015/2016 school year, RE: 2015/2016
    school calendar.
  - All work at Rm # 101, 102, 105 shall begin prior to the completion of work at 103, 104, 106, 107, 108, and 109. RE: Instruction to Bidders, Article 9 for total contract days. Provide complete environmental separation of construction areas from remaining areas of school.
- C. The Contractor shall coordinate with:
  - a. The delivery of the Owner's supplied-equipment.
  - b. The correct specific utility requirements of the Owner-supplied equipment.
- D. The Contractor shall have limited use of the site. Refer to the drawings for limits of construction.

# 1.05 CORRELATION AND INTENT OF CONTRACT DOCUMENTS

A. To further define the intent of Article 3-2 of the General Conditions, in the event of conflicting information within the plans, and within the specifications, the Contractor shall bid the more costly (of monetary value) of the conflicting information; the Contractor shall request verification and/or clarification of the conflicting information prior to commencement of the Work at the Preconstruction Meeting. These requirements set forth herein shall not apply if the items in question have been addressed, clarified, and/or corrected by Addendum.

# Section 01 31 00 Coordination Drawings

Specifications 01 31 00-1

#### **PART 1 - GENERAL**

#### 1.01 SECTION INCLUDES

- A. Coordination Drawings
- B. Coordination with Requirements of related sections of the specifications.

#### 1.02 RELATED SECTIONS

A. Refer to Mechanical and Electrical Sections

#### 1.03 COORDINATION DRAWINGS

- A. The Contractor shall coordinate work of all various sections having interdependent responsibilities for installing, connecting to, and placing such equipment. At the Contractor's expense, all (including, but not limited to, mechanical, plumbing, electrical system) necessary offsets, bends, duct size/configurations, crossings/cross-overs shall be provided and installed as necessary to integrate within the structural system and the architectural features (ceilings and walls, etc.)
- B. Coordination Drawings: The purpose of the coordination drawings is to assure proper forethought and coordination of integrating all systems of the building within the structural framework, architectural ceilings, floors, and walls of the building. The Contractor shall provide coordination drawings prior to the submittal of all system shop drawings. The coordination drawings shall include ductwork and all mechanical HVAC piping and associated items, plumbing verticals and sprinkler piping, chases, electrical conduit, and shall indicate sizes of these items and the structural members.
- C. The Contractor shall submit the Coordination Drawings to the Architect for the Architect's approval no later than one month after the Work has commenced on the project site. The Contractor shall revise and re-submit the Drawings as the Architect may require.
- D. The Coordination Drawings shall include, but is not limited to, the following: 1. Plan drawings for each floor indicating structural member sizes, HVAC components sizes/routes/locations, major electrical conduit grouping/routes, vertical chases/openings, and all other items as necessary to comply with the requirements of 1.03.A and 1.03.B of this Section.
  - 2. Section Drawings through major pathways for systems (such as corridors, if appropriate), and exemplary rooms.
  - 3. Prior to commencement of preparing the Drawings, the Contractor shall confirm the proposed listing of drawings to be submitted.
  - 4. Any and all other drawings, schedules, and information necessary to illustrate the Contractor's understanding of the architectural design intent of the critical ceiling heights, wall locations, and all other design parameters and how they are accommodated upon the Contractor's proposed integration of the Systems noted in the Contract Documents.
- E. During the course of construction, the Contractor shall update the Coordination Drawings in a clean, clear, and legible manner and have the Drawings readily available on-site for the Architect's access. Upon Substantial Completion, the Contractor shall submit the updated Coordination Drawings to the Architect for the Owner's future use and shall be the property of the Owner.

# Section 01 32 00 Project Scheduling

Specifications 01 32 00-1

#### **PART 1 - GENERAL**

#### 1.01 SECTION INCLUDES

- A. Construction Schedules
- B. Coordination with Requirements of related sections of the specifications.

#### 1.02 RELATED SECTIONS

A. Refer to Mechanical and Electrical Sections

#### 1.03 COORDINATION

- A. Coordinate scheduling, submittals, and Work of the various sections of the Project Manual to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating Owner's items.
- B. Coordinate work of various sections having interdependent responsibilities for scheduling, installing, connecting to, and placing such equipment.
- C. The Contractor shall coordinate his work in conjunction with that of the Owner's other contractors upon the onset of nearing Substantial Completion.
- D. Key the Submittals Schedule with the Project Construction Schedule such that the Submittals receive approval from the Designer prior to the ordering and subsequent delivery of the materials.
- E. The Contractor shall coordinate completion and clean up of Work of separate sections in preparation for Substantial Completion.
- F. Construction Schedule: The Contractor shall provide the baseline, electronic version (in the original software format) to the Architect for his review and file. The Schedule shall include all start, stop, and completion dates for all building components and systems, as deemed appropriate by the Architect. The Contractor shall submit a schedule with a credentialed scheduling professional's review and approval. The Contractor's Submittal Schedule shall be coordinated with the Construction Schedule.

# 1.04 CPM SCHEDULE PREPARATION

- A. All scheduling requirements listed herein shall be provided in both printed and electronic format. Review and approval of the CPM Schedule(s) by the Design Team does not relinquish the responsibility of the Contractor to complete the project within the Contract Performance Period, as amended in accordance with the Agreement.
- B. Upon execution of the Agreement, the Contractor shall prepare a bar chart schedule which shall depict the general approach to the construction process. This bar chart schedule shall include all major events and key milestones broken out by CSI Divisions. This bar chart schedule shall be distributed for use and discussion at the Pre-Construction Meeting.
- C. Upon execution of the Agreement, the Contractor shall prepare an initial submittal schedule which shall depict all submittals required for the project as indicated in the Project Manual. The submittal schedule shall be prepared in a manner that indicates the submittal review period of 10 days, a 10 day re-review, procurement duration, and delivery. This initial submittal schedule shall be distributed for use and discussion at the Pre-Construction Meeting.
- D. Within 10 days after the Pre-Construction Meeting, the Contractor shall prepare a detailed CPM Schedule, in Bar Chart Format, for the first 120 days of the project for review and approval by the Design Team. Approval of this submittal is a pre-requisite to the first Application for Payment. This 120 day CPM Schedule shall include all administrative and work activities that will occur during this period. Activities shall be clearly identifiable with the required performance of scope. All activities shall have a maximum duration of 15 calendar days. The CPM Schedule shall include the following for each Activity ID, Description, Early Start date, Early Finish date, Duration, Total Float. The CPM Schedule shall incorporate the submittal schedule previously provided, with modifications as necessary to coordinate with the detailed schedule data.
- E. Within 45 days after the Pre-Construction Meeting, the Contractor shall prepare a detailed CPM Schedule, in Bar Chart Format, for the entire Contract Performance Period for review and approval by the Design Team. Approval of this submittal is a pre-requisite to the second Application for Payment, and shall become the Baseline or Target Schedule for the project. The Target schedule performance period shall be representative of that indicated within the Agreement, and shall include all administrative and work activities that will occur during the project. Activities shall be clearly identifiable with the required performance of scope. All

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activities shall have a maximum duration of 15 calendar days. The CPM Schedule shall include the following for each Activity – ID, Description, Early Start date, Early Finish date, Duration, Total Float. The CPM Schedule shall incorporate the submittal schedule previously provided, with modifications as necessary to coordinate with the detailed schedule data.

F. Included in Schedule shall be milestones for all utility tie-in verification (both site and existing building as applicable), and coordination drawings submittals – including all critical verification included in the coordination drawing submittal.

#### 1.05 CPM SCHEDULE UPDATES

A. Project Schedule updates shall be prepared for distribution, review and approval and at a frequency as required by the Design Team. A Project Schedule update shall be prepared to accurately reflect the progress of work and shall be submitted with the Application for Payment, at a minimum. Failure to provide an accurate CPM update may delay the processing of payment. Updated Project Schedules shall represent the performance period stipulated or as modified in accordance with the Agreement. In the event that extended performance periods are evident in the Project Schedule update(s), the Contractor shall prepare a recovery schedule within 7 days and submit to the Design Team for review and approval. Failure to provide an accurate CPM recovery schedule may delay the processing of payment.

#### 1.06 CPM SCHEDULE AND REQUESTS FOR CHANGE by the Contractor

A. For any Request for Change (RFC) or Change Order Request (COR) where an adjustment to the Contract Performance Period is included, the Contractor shall include an adjusted CPM schedule substantiating the request for the time extension. An extension to the Contract Performance Period shall be considered only when the project schedules critical path is impacted, as validated by the Design Team.

# 1.07 CPM SCHEDULE AND REQUESTS FOR CHANGE by the Design Team

A. In the event that the Design Team initiates a proposed change in scope (PCS) that may impact the project, the Contractor shall prepare an adjusted CPM schedule to substantiate the impact, and submit same to the Design Team within 7 days of the receipt of the PCS. Contingent upon the impact, the PCO may be withdrawn.

# Section 01 33 00 Submittal Procedures

Specifications 01 33 00-1

#### **SUBMITTALS**

#### **PART ONE - GENERAL**

#### 1.01 DESCRIPTION:

- A. Submittals: General term including samples, shop drawings and product data, as applicable and as defined by the General Conditions.
- B. General Provisions:
  - Provisions in this section are mandatory procedures for review, approval and submitting samples, shop drawings and product data in accordance with the General Conditions.
  - Submittals which are received directly from sources other than through the General Contractor's office will be returned to the General Contractor "without action".
  - Job delays occasioned by requirement of re-submission of samples, shop drawings and product data not in accord with Contract Documents and/or submittals sequenced contrary to the agreed schedule are Contractor's responsibility, and will not be considered valid justification for extension of contract time or increase in the contract sum.

#### 1.02 SAMPLE PREPARATION:

- Prepare samples in sizes, shape and finish in accord with provisions of individual specification sections.
- B. Samples are not to be confused with full size, on-the-site "Mock-Ups" called for in some specification sections.
- C. Samples shall be submitted for Architect's selection and approval in accordance with Contractor's submittal schedule or sooner as needed to maintain construction progress. Approvals and color selections will not be made unilaterally where samples or selections of adjacent materials must be made for the purpose of aesthetics. Submit samples for adjacent and interrelated materials concurrently. The Owner will approve all colors before the Architect can take action.
- D. The number of samples submitted shall be the number required by the Contractor, plus two (2) which will be retained by the Architect and the Owner, unless otherwise indicated.

# 1.03 SHOP DRAWING PREPARATION:

- A. Drawing shall conform to the following requirements:
  - 1. Number sheets consecutively.
  - 2. Indicate working and erection dimensions/relationships to adjacent work.
  - 3. Show arrangements and sectional views, where applicable.
  - 4. Indicate material, gauges, thicknesses, finishes and characteristics.
  - 5. Indicate anchoring and fastening details, including information for making connections to adjacent work.
  - 6. Provide drawings reproducible by normal means; original, prints legible
  - 7. Indicate working and erection dimensions and relationships to adjacent work. Concurrent submittals of different aspects of work may be required by the Architect as deemed necessary to demonstrate Contractor's ability to understand these relationships and coordinate the Work.
  - 8. Provide 6" x 6" clean space in the lower right hand area for entry of approval stamps.
  - Cross-reference drawing details and specification paragraphs applicable to the submittal data.
  - Do not use blue-colored stamps, ink or pencil on transparencies; "Blue" is not reproducible in blueprinting.
- B. Form: Submit one (1) legible sepia transparency and three (3) legible blue line prints of shop drawings.

## 1.04 PRODUCT DATA PREPARATION:

- A. Include product manufacturer's standard printed material, dated, with product description and installation instructions indicated. Data not related to this project shall be deleted or marked "VOID" as applicable.
- B. Form: Number of copies submitted shall be the number required by Contractor plus two

# Section 01 33 00

# **Submittal Procedures**

Specifications 01 33 00-2

(2) which will be retained by Architect and Owner.

- C. Printed material shall be:
  - 1. Legible.
  - 2. Sized no larger than 8-1/2" x 11", suitable for opaque reproduction.
  - 3. Stamped (either on a clean-area space or the reverse side) with the Contractor's approval action.
- D. All submitted data shall bear the Contractor's <u>approval</u> action stamp plus his review notes, comments, and corrections as required.

#### 1.05 CONTRACTOR'S REVIEW:

- A. Review submittals and stamp with approval prior to submission to the Architect; Contractor's stamp shall bear the Contractor's name, the word "Approved", the signed initials of the approving agent, and the date of his approval action. By so noting, the Contractor indicates that he has reviewed and approves the materials, equipment, quantities and dimensions represented by the particular submittal.
- B. Where work is indicated "By others", Contractor shall indicate responsibility for providing and coordinating such work.
- C. Submissions made without Contractor's approval (or when it is apparent that the Contractor has not reviewed the submittal with the intent to coordinate or verify compliance with the Contract Documents) indicated thereon will be returned without being reviewed for compliance with this requirement.
- D. Date each submittal and indicate name of Project, Architect, Contractor, Sub-Contractor, as applicable, description or name of equipment, material or product and identify location at which it is to be used in the Work. Provide cross-reference to specific drawing and specification references.
- E. Accompany submittal with transmittal letter containing project name, Contractor's name, number of samples or drawings, titles, specification section number for the item, and other pertinent data. Transmittal shall outline and obviate deviations, if any, in submittals from requirements of Contract Documents by "clouding" the deviations in a obvious red color; deviations not specifically approved by the Architect shall be the risk of the Contractor.

# 1.06 ARCHITECT'S REVIEW:

- A. Architect's Review will be in accordance with the General Conditions.
- B. Architect will return only the following submittal data to the Contractor for his further reproduction and distribution: The total number of copies (minus two retained) of shop drawings and product data.
- C. Where samples and/or selection chips, etc are required or submitted for review and selection, the Architect shall retain two copies of that selected for his records.

# 1.07 RESUBMISSION:

- A. Make corrections and changes indicated for unapproved submissions and resubmit in same manner as specified above, until Architect's approval is obtained.
- B. In resubmission transmittal direct specific attention to revisions other than corrections requested by Architect on previous submissions, if any.
- C. Contractor shall be responsible for bearing all costs associated with the review and approval process of resubmitted (and/or substituted) submittal data.

# 1.08 DISTRIBUTION:

- A. Contractor is responsible for obtaining and distributing copies of submittals to his subcontractors and material suppliers after, as well as before, final approval. Prints of reviewed shop drawings shall be made from originals which carry the Architect's appropriate stamp.
- B. Contractor shall maintain a file of approved submittals for duration of project, which shall be delivered to Owner as a part of project close-out documents.

# Section 01 33 00 Submittal Procedures

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C. The Contractor shall maintain a file of all approved submittals, bearing the Stamp of the Architect, at the project site. In the event the Architect or Owner should question the installation of any aspect of the work requiring approved submittal data, the inability of the Superintendent to produce the required approved submittal data upon demand shall constitute cause for a "stop work" order to be issued on that particular questioned aspect of the work and all relevant appurtenant work. The cause shall be equal to the Contractor's not having received required approval of the submittal data. If so issued, such "stop orders" shall not be considered valid justification for extensions of contract time and/or claims for additional monetary compensation.

#### 1.09 SCHEDULE OF SUBMITTALS:

- A. The Contractor shall, within fourteen (14) calendar days following award of the Contract, submit his proposed schedule of submittals to the Architect for review.
- B. The purpose of the schedule is to:
  - Demonstrate that all submittals, shop drawings, data, samples and mock-ups required for the Work are addressed by the Contractor.
  - 2. Demonstrate consistency with the Contractor's proposed Construction Schedule.
  - 3. Assist the Architect in scheduling timely review/approval action of submittals.
- C. The schedule shall contain the description of the submitted item, the proposed date of submittal and the proposed date of requested return by the Architect.
- D. After the Architect's receipt of the Contractor's submittal schedule, the Architect and the Contractor shall jointly review the schedule and mutually agree to acceptability or necessary modifications.
- E. Contractor shall submit his final accepted schedule within five (5) calendar days after the date of the joint review.

# Section 01 73 29 Cutting and Patching

Specifications 01 73 29-1

#### **PART 1 - GENERAL**

#### 1.01 DESCRIPTION OF WORK

- A. This Section Includes the following
  - 1. Summary: Definitions
  - Submittals
  - 3. Safety and Quality Requirements
  - 4. Materials
  - 5. Inspection
  - 6. Preparation and Performance
- B. Refer to other Sections of these Specifications, including Divisions 14, 15 and 16, for specific requirements and limitations applicable to cutting and patching individual parts of the Work.
- C. Coordinate cutting and patching with demolition requirements. Demolition of selected portions of the building for alterations is included in Section 02 41 00.
- D. Definition: "Cutting and Patching" includes cutting into existing construction to provide for the installation or performance of other work and subsequent fitting and patching required to restore surfaces to their original condition.
- E. All cutting and patching shall be the responsibility of the Mechanical, Electrical or other contractor requiring this work. All costs shall be paid by the Contractor needing this work.
- F. All patching shall be done by the General Contractor, who shall be reimbursed by the Contractor doing or requiring the cutting work.

# 1.02 SUBMITTALS

- A. Cutting and Patching Plan: Submit a proposal describing procedures ten days prior to the time cutting and patching will be performed. Include the following information, as applicable:
  - 1. Describe the extent of cutting and patching required and how it is to be performed.
  - 2. Describe anticipated results; include changes to structural elements and operating components and changes in the building's appearance.
  - 3. List products to be used and entities that will be perform Work.
  - 4. Indicate dates when cutting and patching is to be performed.
  - 5. List utilities that will be disturbed and duration.
  - 6. Approval to proceed does not waive the Owner's right to later require complete removal and replacement of Work found to be unsatisfactory.
  - 7. When cutting and patching of structural work involves the addition of reinforcement, submit details and engineering calculations to show how that reinforcement is integrated with original structure to satisfy requirements.
- B. Samples of Cutting and Patching Materials as required by the Architect.

# 1.03 SAFETY AND QUALITY REQUIREMENTS

- A. Requirements for Structural Work: Do not cut and patch structural elements in a manner that would reduce the load-carrying capacity or load deflection ratio. Obtain approval from the Architect of the Cutting and Patching Plan before cutting and patching structural elements.
- B. Visual Requirements: Do not cut and patch work exposed on the building's exterior or in its occupied spaces, in a manner that would, in the Architect's opinion, result in lessening the building's aesthetic qualities or would result in substantial visual evidence of cut-and-patch work.

# **PART 2 PRODUCTS**

# 2.01 MATERIALS

- A. General: Except as otherwise indicated, use materials for cutting and patching that are identical or as close-there-to as existing materials with regard to visual effect. Use material for cutting and patching that will result in equal-or-better performance characteristics.
- B. Where and when directed by Architect, the Contractor shall attempt to remove <u>and retain</u> material noted to be (removed by demolition); this material, if in acceptable condition to the Architect, may be used in areas requiring patching.

# Section 01 73 29 Cutting and Patching

Specifications 01 73 29-2

## **PART 3 EXECUTION**

#### 3.01 INSPECTION

A. Before the start of cutting work, meet at the work site with all parties involved in cutting and patching, including structural, mechanical and electrical trades. Coordinate trades, resolve areas of potential interference and conflict between the various trades.

## 3.02 PREPARATION AND PERFORMANCE

- A. General:
  - 1. Temporary Support: To prevent failure, provide temporary support of work to be cut.
    - a. Where cutting and patching of structural work involves the addition of reinforcement, submit details and engineering calculations to show how that reinforcement is integrated with original structure to satisfy requirements.
  - 2. Protect other work during cutting and patching to prevent damage.
  - Take precaution not to cut existing operating (i.e. utilities) and safety elements of the building.
  - 4. Cut the work using methods that are least likely to damage work to be retained or adjoining work.
  - Cut holes and slots neatly to size required with minimum disturbance of adjacent work. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
  - 6. Patching: Patch with seams, which are durable and as invisible as possible. Comply with specified tolerances for the work.
  - 7. Where removal of walls or partitions extends from one finished area into another finished area, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance.
  - 8. Where patch occurs in a smooth-painted-surface, extend final paint coat over entire unbroken surface containing patch, after patched area has received prime and base coats.
  - 9. Patch, repair or re-hang existing ceilings as necessary to provide an even plane surface of uniform appearance.

# Section 02 41 00 Demolition

Specifications 02 41 00-1

#### **QUALITY CONTROL**

## **PART 1 – GENERAL**

#### 1.01 WORK INCLUDED:

A. Removal and disposal of designated foundations, walls, concrete, utilities, mechanical, lighting and other structures.

# 1.02 RELATED WORK

A. Section 01 73 29: Cutting and Patching

# 1.03 QUALITY ASSURANCE:

- Contractor Qualifications: Minimum of 5 years experience in demolition of comparable structures.
- B. Requirements of Regulatory Agencies:
  - 1. Comply with requirements of codes.
  - 2. Comply with requirements of local Public Health Authority.
  - 3. Comply with local utility companies and/or utility districts.

#### 1.04 SUBMITTALS:

- A. Certificates of severance of utility services.
- B. Permit for transport and disposal of debris.
- C. Demolition procedures and operational sequence for review by Owner's Representative

# 1.05 JOB CONDITIONS:

- A. Protection:
  - 1. Erect barriers, fences, guard rails, enclosures, chutes, and shoring to protect structures, and utilities remaining intact.
  - 2. Protect designated trees and plants from damage.
- B. Maintaining Traffic:
  - Ensure minimum interference with roads, street, driveways, sidewalks, and adjacent facilities.
  - 2. Do not close or obstruct streets, sidewalks, alleys or passageways without permission from authorities having jurisdiction.
  - 3. If required by governing authorities, provide alternate routes around closed or obstructed traffic ways.

# **PART 2 - PRODUCTS**

(Not Applicable)

#### **PART 3 - EXECUTION**

# 3.01 PREPARATION:

- A. Prepare adjacent areas to prevent injury, movement or settlement of structures which are to remain.
- B. Arrange for, and verify termination of utility services to include removing meters and capping lines.
- C. Examine the areas and conditions under which the work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
- D. Remove items scheduled to be salvaged for Owner, and place in designated storage area.