

DOCUMENT 01 11 00

SUMMARY OF WORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Access Conditions and Requirements;
- B. Special Conditions.

1.02 SUMMARY OF WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of this Contract may consist of the following:

(Fill in scope)

1.03 CONTRACTS

- A. Perform the Work under a single, fixed-price Contract.

1.04 WORK BY OTHERS

- A. Work on the Project that will be performed and completed prior to the start of the Work of this Contract:
(Modify as needed)

- (1) .
- (2) .

1.05 CODES, REGULATIONS, AND STANDARDS

- A. The codes, regulations, and standards adopted by the state and federal agencies having jurisdiction shall govern minimum requirements for this project. Where codes, regulations, and standards conflict with the Contract Documents, these conflicts shall be brought to the immediate attention of the District and the Architect.
- B. Codes, regulations, and standards shall be as published effective as of date of bid opening, unless otherwise specified or indicated.

1.06 PROJECT RECORD DOCUMENTS:

- A. Contractor shall maintain on Site one set of the following record documents; Contractor shall record actual revisions to the Work:
 - (1) Contract Drawings.
 - (2) Specifications.
 - (3) Addenda.
 - (4) Change Orders and other modifications to the Contract, including abatement activities.

- (5) Reviewed shop drawings, product data, and samples.
 - (6) Field test records.
 - (7) Inspection certificates.
 - (8) Manufacturer's certificates.
- B. Contractor shall store Record Documents separate from documents used for construction. Provide files, racks, and secure storage for Record Documents and samples.
- C. Contractor shall record information concurrent with construction progress.
- D. Specifications: Contractor shall legibly mark and record at each product section of the Specifications the description of the actual product(s) installed, including the following:
 - (1) Manufacturer's name and product model and number.
 - (2) Product substitutions or alternates utilized.
 - (3) Changes made by Addenda and Change Orders and written directives.

1.07 EXAMINATION OF EXISTING CONDITIONS

- A. The Contractor shall be held to have examined the Project Site and acquainted itself with the conditions of the Site or of the streets or roads approaching the Site.
- B. Prior to commencement of Work, Contractor shall survey the Site and existing buildings and improvements to observe existing damage and defects such as cracks, sags, broken, missing or damaged glazing, other building elements and Site improvements, and other damage.
- C. Should Contractor observe cracks, sags, and other damage to and defects of the Site and adjacent buildings, paving, and other items not indicated in the Contract Documents, Contractor shall immediately report same to the District and the Architect.

1.08 CONTRACTOR'S USE OF PREMISES

- A. If unoccupied and only with District's prior written approval, Contractor may use the building(s) at the Project Site without limitation for its operations, storage, and office facilities for the performance of the Work. If the District chooses to beneficially occupy any building(s), Contractor must obtain the District's written approval for Contractor's use of spaces and types of operations to be performed within the building(s) while so occupied. Contractor's access to the building(s) shall be limited to the areas indicated.
- B. If the space at the Project Site is not sufficient for Contractor's operations, storage, office facilities and/or parking, Contractor shall arrange and pay for any additional facilities needed by Contractor.
- C. Contractor shall not interfere with use of or access to occupied portions of the building(s) or adjacent property.
- D. Contractor shall maintain corridors, stairs, halls, and other exit-ways of adjacent buildings clear and free of debris and obstructions at all times.
- E. No one other than those directly involved in the demolition and construction, or specifically designated by the District or the Architect shall be permitted in the areas of work during demolition and construction activities.

1.09 PROTECTION OF EXISTING STRUCTURES AND UTILITIES

- A. The Drawings show above-grade and below-grade structures, utility lines, and other installations that are known or believed to exist in the area of the Work. Contractor shall locate these existing installations with the assistance of a Utility Locator Contractor before proceeding with excavation and other operations that could damage same; maintain them in service, where appropriate; and repair damage to them caused by the performance of the Work. Should damage occur to these existing installations, the costs of repair shall be at the Contractor's expense and made to the District's satisfaction.
- B. Contractor shall be alert to the possibility of the existence of additional structures and utilities. If Contractor encounters additional structures and utilities, Contractor will immediately report to the District for disposition of same as indicated in the General Conditions.

1.10 UTILITY SHUTDOWNS AND INTERRUPTIONS

- A. Contractor shall give the District a minimum of three (3) days written notice in advance of any need to shut off existing utility services or to effect equipment interruptions. The District will set exact time and duration for shutdown, and will assist Contractor with shutdown. Work required to re-establish utility services shall be performed by the Contractor.
- B. Contractor shall obtain District's written approval as indicated in the General Conditions in advance of deliveries of material or equipment or other activities that may conflict with District's use of the building(s) or adjacent facilities.

1.11 STRUCTURAL INTEGRITY

- A. Contractor shall be responsible for and supervise each operation and work that could affect structural integrity of various building elements, both permanent and temporary.
- B. Contractor shall include structural connections and fastenings as indicated or required for complete performance of the Work.

1.12 ADDITIONAL REQUIREMENTS

- A. **KEY PERSONNEL:** Project Manager and Superintendent, once approved, shall remain on site for the duration of the project. Resumes of both individuals shall be submitted at the time of award.
- B. **WAGE RATES:** Within 30 days of award the contractor shall submit to the District all contractor and subcontractor detailed wage rates applicable to the project at the time of award. The wage rate shall be fully burdened; i.e. include union benefits applicable to the particular area/hall, all taxes, fringes, benefits and insurances itemized on a common form issued by the contractor for straight time, over time and double time. Mark-up, small tools and bond shall be separate. Subcontractors and contractor shall update the forms as needed when the conditions change. These rates, after review and approval shall be used for all changes to the Work.
- C. **PAYMENTS:** Supplemental to the requirements in the General Conditions 00 72 13 the Contractor shall obtain from the IOR a signed and dated certificate that the IOR has reviewed and approved of the update performed by the Contractor regarding the Record Documents requirements.

PART 2 – PRODUCTS Not Used

PART 3 – EXECUTION Not Used

END OF DOCUMENT

Date

Summary of Work
Document 01 11 00 -3

DOCUMENT 01 22 00

UNIT PRICES AND ALTERNATES

PART I – ALTERNATES

1.1 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions;
- B. Special Conditions;
- C. Bid Form and Proposal;
- D. Instruction to Bidders.

1.2 DESCRIPTION

- A. The following items of work include proposed modifications to, substitutions for, to and/or deletions from the various parts of the Work specified in other Sections of the Specifications. The acceptance or rejection of any of the alternates is strictly at the option of the District subject to District's acceptance of Contractor's stated prices contained in this Proposal.

1.3 GENERAL

- A. Where an item is omitted, or scope of Work is decreased, all Work pertaining to the item whether specifically stated or not, shall be omitted and where an item is added or modified or where scope of Work is increased, all Work pertaining to that required to render same ready for use on the Project in accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

1.4 BASE BID

The Base Bid includes all work required to construct the Project completely and in accordance with the Contract Documents.

1.5 ALTERNATES

- A. Alternate No. 1:
- B. Alternate No. 2:

The above Alternates descriptions are general in nature and for reference purposes only. The Contract Documents, including, without limitation, the Drawings and Specifications, must be referred to for the complete scope of Work.

PART 2 - UNIT PRICING (Refer to Bid Form – Stipulated Sum, Document 00 41 13)

2.1 GENERAL

Contractor shall completely state all required figures based on Unit Prices listed below. Where scope of Work is decreased, all Work pertaining to the item, whether specifically stated or not, shall be omitted and where scope of Work is increased, all work pertaining to that item required to render same ready for use on the Project in accordance with intention of Drawings and Specifications shall be included in an agreed upon price amount.

Date

Unit Prices and Alternates
Document 01 22 00

2.2 UNIT PRICES

Furnish unit prices for each of the named items on a square foot, lineal foot, or per each basis, as applies. Unit prices shall include all labor, materials, services, profit, overhead, insurance, bonds, taxes, and all other incidental costs of Contractor, subcontractors, and supplier(s).

END OF DOCUMENT

DOCUMENT 01 25 00

SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation

- A. General Conditions, including, without limitation, Substitutions For Specified Items;
- B. Special Conditions: Document 00 70 00

1.02 SUBSTITUTIONS OF MATERIALS AND EQUIPMENT

- A. Catalog numbers and specific brands or trade names followed by the designation "or equal" are used in conjunction with material and equipment required by the Specifications to establish the standards of quality, utility, and appearance required. Substitutions which are equal in quality, utility, and appearance to those specified may be reviewed subject to the provisions of the General Conditions, unless said product is a sole source item as determined by the South San Francisco Unified School District Board of Trustees. If the product is designated as a sole source item by the South San Francisco Unified School District Board of Trustees, no substitutions will be accepted (Per Public Contract Code Section 3400(c)).
- B. Wherever more than one manufacturer's product is specified, the first-named product is the basis for the design used in the work and the use of alternative-named manufacturers' products or substitutes may require modifications in that design. If such alternatives are proposed by Contractor and are approved by the District and/or the Architect, Contractor shall assume all costs required to make necessary revisions and modifications of the design resulting from the substitutions requested by the Contractor.
- C. When materials and equipment are specified by first manufacturer's name and product number, second manufacturer's name and "or approved equal," supporting data for the second product, if proposed by Contractor, shall be submitted in accordance with the requirements for substitutions.
- D. If the District and/or Architect, in reviewing proposed substitute materials and equipment, require revisions or corrections to be made to previously accepted Shop Drawings and supplemental supporting data to be resubmitted, Contractor shall promptly do so. If any proposed substitution is judged by the District and/or Architect to be unacceptable, the specified material or equipment shall be provided.
- E. Samples may be required. Tests required by the District and/or Architect for the determination of quality and utility shall be made at the expense of Contractor, with acceptance of the test procedure first given by the District.
- F. In reviewing the supporting data submitted for substitutions, the District and/or Architect will use for purposes of comparison all the characteristics of the specified material or equipment as they appear in the manufacturer's published data even though all the characteristics may not have been particularly mentioned in the Contract Documents. If more than two (2) submissions of supporting data are required, the cost of reviewing the additional supporting data shall be borne by Contractor, and the District will deduct the costs from the Contract Price.
- G. Substitutions are subject to Division of the State Architect (DSA) approval.

PART 2 – PRODUCTS Not Used

PART 3 – EXECUTION Not Used

END OF DOCUMENT

Date

Substitution Procedures
Document 01 25 00 -1

SECTION 01 31 19

PROJECT MEETINGS

PART I – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions
- B. Special Conditions

1.02 PRE-CONSTRUCTION MEETING

Shortly after the award a Pre-Construction Meeting will be scheduled by the CM. The Contractor and all listed subcontractors shall attend. The following will be discussed without limitation:

- A. The Scope of Work:
 - Drawings and specifications
 - CHPS - Collaborative for High Performance Schools
 - Commissioning
 - Safety and Special Education Requirements
 - Utility Shutdown
- B. Procedures regarding:
 - Submittals
 - RFI
 - Changes and PCO
 - EADOC
 - IOR
 - Testing Engineers
 - Record Documents
- C. Schedule and Reporting Requirements

1.03 WEEKLY PROGRESS MEETINGS

- A. Contractor shall schedule and hold regular weekly progress meetings after a minimum of one week's prior written notice of the meeting date and time to all Invitees as indicated below.
- B. Location: Contractor's field office.
- C. The Contractor shall notify and invite the following entities ("Invitees"):
 - (1) District Representative.
 - (2) Contractor.
 - (3) Contractor's Project Manager.
 - (4) Contractor's Superintendent.
 - (5) Subcontractors, as appropriate to the agenda of the meeting.
 - (6) Suppliers, as appropriate to the agenda of the meeting.
 - (7) Construction Manager, if any.
 - (8) Architect

- (9) Engineer(s), if any and as appropriate to the agenda of the meeting.
- (10) Others, as appropriate to the agenda of the meeting.

- D. The District's, the Architect's, and/or an engineer's Consultants will attend at their discretion, in response to the agenda.
- E. The District representative, the Construction Manager, and/or another District Agent shall take and distribute meeting notes to attendees and other concerned parties. If exceptions are taken to anything in the meeting notes, those exceptions shall be stated in writing to the District within five (5) working days following District's distribution of the meeting notes.

1.04 PRE-INSTALLATION/PERFORMANCE MEETING:

- A. Contractor shall schedule or be invited to attend a meeting prior to the start of each of the following portions of the Work:
 - (1) Cutting and patching of plaster and roofing, and other weather-exposed and moisture-resistant products. Contractor shall invite all Invitees to this meeting, and others whose work may affect or be affected by the quality of the cutting and patching work.
 - (2) Training Scope Meeting: The Architect and Engineer of Record will describe the process and explain the responsibilities of all parties. The contractor and all MEP subcontractor plus additional special subcontractors need to attend.
 - (3) Controls Integration Meeting: The Architect and Engineer of Record will describe the controls coordination process and explain the responsibilities of all parties. The contractor and all MEP subcontractor plus additional special subcontractors need to attend.
- B. Contractor shall review in detail prior to this meeting, the manufacturer's requirements and specifications, applicable portions of the Contract Documents, Shop Drawings, and other submittals, and other related work. At this meeting, invitees shall review and resolve conflicts, incompatibilities, or inadequacies discovered or anticipated.
- C. Contractor shall review in detail Project conditions, schedule, requirements for performance, application, installation, and quality of completed Work, and protection of adjacent Work and property.
- D. Contractor shall review in detail means of protecting the completed Work during the remainder of the construction period.

1.05 SPECIAL MEETINGS

CM or District may at any time request a special meeting to address issues that may impact the Work or District Operations. Attendance, location, subject and date will be by invitation and identified at the time of occurrence, usually several days ahead of the meeting date. All invited contractor personnel and subcontractors shall attend.

1.06 COMMISSIONING

During construction and especially during start-up at the tail end of construction regular Equipment start up and coordination Meetings will be held. They may be stand alone meetings or scheduled at the end of the regular Weekly Progress Meetings depending on need and urgency. All invited contractor personnel and subcontractors shall attend.

PART 2 - PRODUCTS Not Used

PART 3 - EXECUTION Not Used

END OF DOCUMENT

Date

Project Meetings
Document 01 31 19 -2

SECTION 01 32 16

CONTRACT PROGRESS SCHEDULE

PART 1 GENERAL

1.1 DESCRIPTION

- A. This Section is in addition to the Contract General Conditions and Supplementary General Conditions.
- B. Contractor shall develop a network plan and schedule for the project demonstrating complete fulfillment of all contract requirements, shall keep the network plans up to date in accordance with the requirements of this section and shall utilize the Critical Path Method (CPM) in planning, coordinating, performing and reporting the work under this contract, including all activities of Subcontractors, equipment vendors, and suppliers, and in assisting District's Representative and District's Project Manager in monitoring the progress of the Work.
- C. It is the intent of this Section that the CPM schedule shall be prepared using Primavera Project Planner 3.0, Primavera SureTrak 3.0, or newer, or approved equal. Given the widespread use of Primavera Project Planner (P3) in public works construction and the District's familiarity with this scheduling software, this specification uses terminology employed by P3 and addresses features available in and specific to P3, version 3.0, and newer. If the Contractor desires to substitute any other scheduling software the Contractor shall request such substitution in the manner and form required elsewhere in the Contract Documents as relates to Substitutions and Deviations. In such case it shall be incumbent upon the Contractor to demonstrate to the District's satisfaction that the selected software is both capable of meeting every one of the schedule requirements and will result in no additional cost or effort on the part of the District in administering the Contract.
- D. The principles and definition of CPM in terms used herein shall be as follows:
 - 1. A CPM network is a graphic description of the contractor's construction plan, showing the sequential steps needed to reach the completion of the Work within the prescribed contract duration. It shall depict events and tasks as activities, and their interrelationships, and shall recognize the progress that must be made on one activity before subsequent activities can begin. These activities shall be logically represented in a network showing their interrelationships in a chronological fashion. As each activity has a time allocation, the completed network shows the critical path of activities that must be completed on time if the entire project is not to be delayed. It shall also be possible to identify the earliest and latest start and finish times for each activity if the overall project is not to be delayed. Therefore, the CPM network shall be comprehensive and shall include all interdependencies and interactions required to perform the Work of the Project.

1.2 SUBMITTALS - Refer to Section 01 33 00, SUBMITTALS, for procedures.

- A. Contractor shall be prepared to issue a "draft" Initial Contract Schedule that covers at least the first 30 days in the field and submit it to the District no later than 10 days after notice to proceed.
- B. Contractor shall submit Initial Contract Schedule within 30 calendar days after District's issuance of the Notice to Proceed to Contractor.
- C. Contractor shall submit Final As-Built Schedule.
- D. All other required reports referenced herein, typically three (3) each per occurrence.

- E. Submit one (1) reproducible and three (3) color plots on "E" size sheets (approximately 34" x 44") of each required schedule and three (3) copies of all required reports. Contractor shall also submit a copy of the computer data disks used to produce hard copy submittals.
- F. Monthly updated Initial Contract Schedules (hereinafter referred to as the Monthly Baseline Schedules) and reports; three (3) each, referenced herein shall be submitted concurrently in a single package. It is expected that this submittal shall precede by five (5) days the Contractor's pay application. Contractor shall also submit a copy of the computer data disks used to produce hard copy submittals.

1.3 ACCEPTANCE

- A. District's Representative shall have the right to accept or reject the proposed scheduling consultant, or contractor's employee, due to a lack of experience, or a lack of familiarity with the required software. Contractor shall re-propose qualified alternates at no additional cost to the District within three (3) calendar days thereafter and until such time as District's Representative's approval is received. Notice to Proceed will not be issued until the contractor's staff has been approved.
- B. Acceptance of the Contractor's Initial Contract Schedule by the District's Representative will designate the schedule as the Contract Baseline Schedule. An accepted Baseline Schedule shall be a condition precedent to the making of any progress payment for work performed beyond sixty (60) days from receipt of the Notice to Proceed.
- C. Failure of Baseline Schedule to include any element of the Work or any inaccuracy in Baseline Schedule will not relieve Contractor from responsibility for accomplishing the Work in accordance with Contract Documents. District's acceptance of the Baseline Schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests, and shall not, in any manner, impose a duty of care upon the District, or act to relieve Contractor of its responsibility for means and methods of construction
- D. The monthly updating of the Baseline Schedule and reports shall be an integral part and basic element of the estimated percentages upon which progress payments will be made. Submittal, review and approval by District's Representative of these items shall be a condition precedent to the making of progress payments. If, in the judgment of District's Representative, Contractor fails or refuses to provide a complete updated Monthly Baseline Schedule or reports, as specified, the Contractor will be deemed to have not provided the required estimated percentages upon which progress payments may be made, and shall not be entitled to such progress payments unless or until it has furnished the aforesaid reports.
- E. In the event the contractor submits a viable, contractually compliant construction schedule which indicates project completion at a date earlier than the contractually provided contract duration, a schedule activity entitled "project float", of a duration equal to the difference between the proposed construction duration and the contract duration, will be added to the schedule. All project float is a project resource for the contractor and the District, and is not for the exclusive use of either party.

1.4 CONSTRUCTION ANALYSIS

- A. Contractor shall use Primavera Project Planner 3.0, Primavera SureTrak Project Manager 3.0, or approved equal. Contractor shall coordinate with District's Representative to produce the following minimum information within the Initial Contract Schedule:
 - 1. Activity identification;
 - 2. Activity description;
 - 3. The predecessor and successor activities for each individual activity;
 - 4. Status date

5. Original and Remaining Duration;
6. Activity percentage complete;
7. Early start/finish and late start/finish dates;
8. Total float;
9. The capability to compare the current update with the baseline schedule;
10. A critical item list of activities with ten (10) working days or less total float.

1.5 CONTRACT DELIVERABLES

A. Draft Initial Contract Schedule:

1. Contractor shall submit a "draft" Initial Contract Schedule to District's Representative no later than the date of the project pre-construction conference as scheduled by the District's Representative. The draft Initial Contract Schedule will include all activities that are required or anticipated to be complete within the first 60-calendar days of the project and all submittals, submittal reviews, and procurements. The draft Initial schedule shall also contain a summarization of the remaining activities formatting the remaining work areas, project phases, overall contract duration, milestones, etc. for the remainder of the project.
2. Any revisions deemed necessary by District's Representative as a result of its review (5 calendar days) shall be incorporated into the Contractor's draft Initial Contract Schedule and re-submitted to District's Representative for review within three (3) calendar days after Contractor's receipt of the draft Preliminary Initial Contract Schedule from District's Representative
3. Prepare the draft Initial Contract Schedule as a time-scaled CPM network showing continuous flow from left to right. Durations and specific calendar dates shall be clearly and legibly shown for the start and finish of each work activity in sufficient detail to demonstrate preliminary planning for the Work and to represent a practical plan to complete the Work within the Contract Time.
4. The draft Initial Contract Schedule shall include but not be limited to:
 - a. Scheduled work activities that clearly indicate the scope of work to be completed.
 - b. All submittals, submittal reviews, and procurements.
 - c. Major milestones, which are critical to the completion of the work, including but not limited to the following: NTP date; mobilization; coordination review and detailing activities; contractor quality control review activities; substantial completion and contract completion.
 - d. Calendar designations identifying all holidays and non-working days.
 - e. The draft Initial Contract Schedule shall contain an activity code structure sufficient to allow future sorting/grouping by responsibility or subcontractor, area/location, CSI division, SOV identification, Milestones and a code entitled "Update" that will identify the schedule submission when specific activities were added to the network (new activities, Change Orders, FI's, etc.).
 - f. A plot of the draft Initial Contract Schedule with a clearly highlighted critical path.

B. Initial Contract Schedule:

1. Contractor shall submit to District's Representative for review and approval an Initial Contract Schedule no

later than thirty (30) calendar days after Notice to Proceed. The Initial Contract Schedule shall be a computerized, detailed task level CPM diagram in Gantt chart format. A clear delineation of construction sequences shall be shown in the Initial Contract Schedule.

2. The work activities comprising the Initial Contract Schedule shall be of sufficient detail to ensure adequate planning and execution of the Work and such that the schedules provide an appropriate basis for monitoring and evaluating the progress of the Work. A work activity is defined as an activity that requires time and resources (manpower, equipment, and/or material) to complete in a continuous operation (excepting submittal activities, review/approval activities, and fabrication and procurement activities). No activity shall be less than one (1) nor more than ten (10) days in duration for any on-site operation. All holidays and non-working days shall be identified by way of calendar designations.
3. Major work activity categories to be included, but not limited to, in the Initial Contract Schedule
 - a. Submittal Section, containing preparation, submission, review, re-submission (if applicable), procurement and delivery of all project materials. All procurement and or delivery activities will be tied to their applicable work activities downstream in the network.
 - b. Any OFCI/OFOI items (owner furnished, contractor installed/owner furnished, owner installed).
 - c. Substantial Completion.
 - d. Punch list formulation and correction.
 - e. Contractor closeout documentation and training.
 - f. Demobilization and project completion.
4. The schedule shall indicate the sequence and interdependency of all work activities and shall contain no open-ended logic chains.
5. Schedule shall not utilize start-to-start relationships, finish-to-finish relationships, or start-to-finish relationships between activities without prior agreement by the District.
6. Schedule shall not utilize lags without the prior agreement of the District.
7. No more than 20% of the total number of activities shown on the schedule shall be critical or near critical. Near critical is defined as float less than ten (10) days. Critical Work activities are defined as Work activities which, if delayed or extended, will delay the scheduled completion date of the Work. All other Work activities are defined as non-critical Work activities and are considered to contain float.
8. Float is defined as the time that a non-critical Work activity can be delayed or extended without delaying the scheduled completion of project-critical milestones the scheduled completion date of the Work, or both. Float or slack time is not for the exclusive use or benefit of either District or Contractor. Neither Contractor nor District shall have an exclusive right to the use of project float.
9. Delays of any non-critical Work shall not be the basis for an extension of Contract Time until the delays consume the float associated with that non-critical Work activity and cause the Work activity to become critical.
10. No changes shall be made to the Baseline Schedule without the prior approval and consent of the District, excepting only the reporting of Actual Start, Actual Finish and Activity Progress.
11. A combined three (3) week Look-Ahead Schedule with a one (1) week As-Built Schedule for previous week shall be submitted by Contractor to District's Representative for review and approval at each progress meet-

ing.

C. Baseline Schedule Updating and Progress Payments:

1. The Baseline Schedule shall be updated on a monthly basis (or at lesser intervals if deemed necessary by District's Representative without additional cost to the District) for the purpose of recording and monitoring the progress of the work.
2. The Contractor shall first prepare a preliminary monthly update which shall include no logic changes whatsoever except for the inclusion of Actual Start, Actual Finish, and Percentage Completion for activities showing progress.
3. Contractor shall meet with District's Representative and District's Project Manager each month to review actual progress made to date, activities started and completed to date, and the percentage of work completed to date on each activity started but not completed. Contractor may propose changes to schedule logic at this time. Upon completion of the joint review, Contractor shall prepare the updated Baseline Schedule and submit it to District's Representative.
4. The updated Baseline Schedule shall incorporate all changes mutually agreed upon by Contractor and District during preceding periodic reviews and all changes resulting from approved Change Orders and Field Orders. Unauthorized, unilateral contractor changes to logic or activities will not be allowed.
5. Acceptance of the updated Baseline Schedule will be a condition precedent to the making of any progress payments for work performed.

D. Reports:

1. The contractor shall submit, each month for approval, a Gantt chart report of the accepted, updated schedule containing:
 - a. Activity identification;
 - b. Activity description;
 - c. Status date and original & remaining duration;
 - d. Activity percentage complete;
 - e. Early start/finish and late start/finish;
 - f. Total float;
 - g. Activity Bars, clearly delineating the critical path.
2. The contractor shall submit, each month for approval, a written narrative which includes information that occurred during the previous 30 days regarding:
 - a. The status of the project – what got done;
 - b. Any delays to accomplishing the work – what did not get done;
 - c. Description of problem areas.
 - d. Current and anticipated delays:

- 1) Cause of the delay.
 - 2) Corrective action and schedule adjustments to correct the delay.
 - 3) Impact of the delay on other activities, milestones, and completion dates.
 - e. Changes in construction sequences.
 - f. Pending items and status thereof:
 - 1) Change Orders.
 - 2) Time extensions.
 - 3) Non-Compliance Notices.
 - g. Contract completion date(s) status:
 - 1) Ahead of schedule and number of working days.
 - 2) Behind schedule and number of working days.
3. Submittal Schedule:
 - a. Contractor, within twenty-one (21) days after Notice to Proceed, shall prepare and submit to District's Representative for approval a comprehensive Submittal Schedule, which shall be maintained in the Initial Contract Schedule. Contractor shall identify on the Submittal Schedule all of the submittal items required by the Contract Documents governing the Work, listing shop drawings and product data or literature separately. Contractor shall indicate for each submittal item on the Submittal Schedule:
 - 1) The date by which that item will be submitted to District's Representative.
 - 2) Whether the submittal is for review, substitution, or for record only.
 - 3) The date by which response by District's Representative is required.
 - 4) The date by which the material or equipment must be on the Site in order not to delay the progress of the Work.
4. A copy of the monthly schedule update, in compressed form, on a 5" CD, appropriately labeled with the project name, contractor's name, schedule name and data date.

1.6 RESPONSIBILITY FOR COMPLETION

- A. Contractor agrees that at the sole judgment of District's Representative, whenever it becomes apparent from the current monthly updated Contract Baseline Schedule that the contract completion date will not be met, it will take some or all of the following actions, as approved by District's Representative, at no additional cost to District:
 1. Increase construction manpower in such quantities and crafts as will substantially eliminate, in the judgment of District's Representative, the backlog of work.
 2. Increase the number of working hours per shift, shifts per working day, working days per week, or the amount of construction equipment, or any combination of the foregoing, sufficiently to substantially eliminate, in the judgment of District's Representative, the backlog of work. This paragraph shall not be construed to

permit contractor to violate the work hour restrictions specified in the Contract Document.

3. With the concurrence of the District's Representative, reschedule activities to achieve maximum practical concurrence of accomplishment of activities.

1.7 ADJUSTMENT OF TIMES FOR COMPLETION

- A. In addition to provisions of the General Conditions, the time for completion of the work will be adjusted in accordance with these procedures.
- B. Any request for an adjustment of the Contract Time for completion submitted by Contractor for changes or alleged delays shall be accompanied by a complete Time Impact Analysis, (TIA), which shall be submitted for review within ten (10) days after the initial request for time by Contractor. Time extensions will not be granted unless substantiated by the CPM Schedule, and then not until the CPM project float becomes zero. If Contractor fails to submit a TIA within the aforementioned time period, then the Contractor shall be deemed to have agreed that there is no time impact and that Contractor has irrevocably waived its rights to any additional contract time.
- C. Each TIA shall provide information justifying the request and stating the extent of the adjustment requested for each specific change or alleged delay. Each TIA shall be in form and content acceptable to District's Representative, and shall include, but not be limited to, the following:
 1. A fragmentary CPM type network (Fragnet) illustrating how Contractor proposed to incorporate the change or alleged delay into the current updated Baseline Schedule; and
 2. Identification of all activities in the current updated Baseline Schedule whose logic is proposed to be amended due to the change or alleged delay, all activities that are/will be affected by the proposed change or alleged delay, together with engineering estimates and other appropriate data justifying the proposal.
- D. The TIA shall be determined on the basis of the date or dates when the change or changes were issued, or the date or dates when the alleged delay or delays began. The status of the construction project and Time Impact Analysis shall include event time computations for all affected activities including but not limited to work around sequencing, or recovery options to maintain the original Contract completion date.
- E. TIA's provided in order to demonstrate the time impact upon the overall project and the time for completion shall be accomplished at no additional cost to District.
- F. If District's Representative finds, after review of the TIA, that Contractor is entitled to any extension of time for completion, the time for completion will be adjusted accordingly by District's Representative, and Contractor shall then revise the Baseline Schedule accordingly.

1.8 FINAL AS-BUILT SCHEDULE

- A. As a condition precedent to final acceptance of the Project, submit a final As-Built Construction Schedule and all final reports which accurately reflects the manner in which the Project was constructed and includes actual start and completion dates for all work activities on the Baseline Schedule.

PART 2 PRODUCTS: Not Used

PART 3 EXECUTION: Not Used

END OF SECTION

DOCUMENT 01 33 00

SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Contractor's Submittals and Schedules, Drawings and Specifications;
- B. Special Conditions.
- C. Sections 01 and all technical specifications

1.02 SECTION INCLUDES:

- A. Definitions:
 - (1) Shop Drawings and Product Data are as indicated in the General Conditions and include, but are not limited to, fabrication, erection, layout and setting drawings, formwork and falsework drawings, manufacturers' standard drawings, descriptive literature, catalogues, brochures, performance and test data, wiring and control diagrams. In addition, there are other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment or systems and all positions conform to the requirement of the Contract Documents, including, without limitation, the Drawings.
 - (2) "Manufactured" applies to standard units usually mass-produced; "fabricated" means specifically assembled or made out of selected materials to meet design requirements. Shop Drawings shall establish the actual detail of manufactured or fabricated items, indicated proper relation to adjoining work and amplify design details of mechanical and electrical equipment in proper relation to physical spaces in the structure.
 - (3) Manufacturer's Instructions: Where any item of Work is required by the Contract Documents to be furnished, installed, or performed, at a minimum, in accordance with a specified product manufacturer's instructions, the Contractor shall procure and distribute copies of these to the District, the Architect, and all other concerned parties and shall furnish, install, or perform the work, at a minimum, in accordance with those instructions.
- B. Samples, Shop Drawings, Product Data, and other items as specified, in accordance with the following requirements:
 - (1) All submittals shall be submitted and tracked via EADOC (web based project management system) including uploaded electronic copies of entire submittal attached to the EADOC submittal.
 - (2) Contractor shall submit all Shop Drawings, Product Data, and Samples to the District, the Architect, the Project Inspector, and the Construction Manager.
 - (3) Contractor shall comply with all time frames herein and in the General Conditions and, in any case, shall submit required information in sufficient time to permit proper consideration and action before ordering any materials or items represented by such Shop Drawings, Product Data, and/or Samples.

- (4) Contractor shall comply with all time frames herein and in the General Conditions and, in any case, shall allow sufficient time so that no delay occurs due to required lead-time in ordering or delivery of any item to the Site. Contractor shall be responsible for any delay in progress of Work due to its failure to observe these requirements.
- (5) Time for completion of Work shall not be extended on account of Contractor's failure to promptly submit Shop Drawings, Product Data, Samples and/or other required deliverables.
- (6) Reference numbers on Shop Drawings shall have Architectural and/or Engineering Contract Drawings reference numbers for details, sections, and "cuts" shown on Shop Drawings. These reference numbers shall be in addition to any numbering system that Contractor chooses to use or has adopted as standard.
- (7) When the magnitude or complexity of submittal material prevents a complete review within the stated time frame, Contractor shall make this submittal in increments to avoid extended delays.
- (8) Contractor shall certify on submittals for review that submittals conform to Contract requirements. In event of any variance, Contractor shall specifically state in transmittal and on Shop Drawings, portions vary and require approval of a substitute. Also certify that Contractor-furnished equipment can be installed in allocated space.
- (9) Unless specified otherwise, sampling, preparation of samples, and tests shall be in accordance with the latest standard of the American Society for Testing and Materials.
- (10) Upon demand by Architect or District, Contractor shall submit samples of materials and/or articles for tests or examinations and consideration before Contractor incorporates same in Work. Contractor shall be solely responsible for delays due to sample(s) not being submitted in time to allow for tests. Acceptance or rejection will be expressed in writing. Work shall be equal to approved samples in every respect. Samples that are of value after testing will remain the property of Contractor.

C. Submittal Schedule

- (1) Contractor shall prepare its proposed submittal schedule that is coordinated with the proposed construction schedule and submit both to the District within ten (10) days after the date of the Notice to Proceed. Contractor's proposed schedules shall become the Project Construction Schedule and the Project Submittal Schedule after each is approved by the District.
- (2) Contractor shall include all submittals identified in the Contract Documents. Contractor is responsible for all lost time should the initial submittal be rejected, marked "revised and resubmit", etc.
- (3) All Submittals shall be forwarded to the District within 3 months of Notice to Proceed, unless an earlier date is necessary to maintain the Construction Schedule, in which case those Submittals shall be forwarded to the District so as not to delay the Construction Schedule.
- (4) Submittal requirements with specific schedule dates or time lines shall govern over these general requirements.

1.03 SHOP DRAWINGS

- A. Contractor shall submit six (6) complete copies of shop drawings and related documents. The District will review and return two (2) copies to the Contractor.

- B. Before commencing installation of any Work, the Contractor shall submit and receive approval of all drawings, descriptive data, and material list(s) as required to accomplish Work.
- C. Review of Shop Drawings is regarded as a service to assist Contractor and in all cases original Contract Documents shall take precedence as outlined under General Conditions.
- D. No claim for extra time or payment shall be based on work shown on Shop Drawings unless the claim is noted on Contractor's transmittal letter accompanying Shop Drawings and Contractor has complied with all applicable provisions of the General Conditions, including, without limitation, provisions regarding changes and payment requires appropriate written approval is secured.
- E. District shall not review Shop Drawings for quantities of materials or number of items supplied.
- F. District's and/or Architect's review of Shop Drawing will be general. District and/or Architect review does not relieve Contractor of responsibility for accuracy, proper fitting, construction of Work, furnishing of materials, or Work required by Contract Documents and not indicated on Shop Drawings. Shop Drawing reviewed by District and/or Architect is not to be construed as approving departures from Contract Documents.
- G. Review of Shop Drawings and Schedules does not relieve Contractor from responsibility for any aspect of those Drawings or Schedules that is a violation of local, County, State, or Federal laws, rules, ordinances, or rules and regulations of commissions, boards, or other authorities or utilities having jurisdiction.
- H. Before submitting Shop Drawings for review, Contractor shall check Shop Drawings of its subcontractors for accuracy, and confirm that all Work contiguous with and having bearing on other work shown on Shop Drawings is accurately drawn and in conformance with Contract Documents.
- I. Submitted drawings and details must bear stamp of approval of Contractor:
 - (1) Stamp and signature shall clearly certify that Contractor has checked Shop Drawings for compliance with Drawings.
 - (2) If Contractor submits a shop Drawing without an executed stamp of approval, or whenever it is evident (despite stamp) that Drawings have not been checked the District and/or Architect will not consider them and will return them to the Contractor for revision and resubmission. In that event, it will be deemed that Contractor has not complied with this provision and Contractor shall bear risk of all delays to same extent as if it had not submitted any Shop Drawings or details.
- J. Submission of Shop Drawings (in either original submission or when resubmitted with correction) constitutes evidence that Contractor has checked all information thereon and that it accepts and is willing to perform Work as shown.
- K. Contractor shall pay for cost of any changes in construction due to improper checking and coordination. Contractor shall be responsible for all additional costs, including coordination. Contractor shall be responsible for costs incurred by itself, the District, the Architect, the Project Inspector, the Construction Manager, any other Subcontractor or contractor, etc., due to improperly checked and/or coordination of submittals.
- L. Shop Drawings must clearly delineate the following information:
 - (1) Project name and address.
 - (2) Architect's name and project number.
 - (3) Shop Drawing title, number, date, and scale.
 - (4) Names of Contractor, Subcontractor(s) and fabricator.

- (5) Working and erection dimensions.
 - (6) Arrangements and sectional views.
 - (7) Necessary details, including complete information for making connections with other Work.
 - (8) Kinds of materials and finishes.
 - (9) Descriptive names of materials and equipment, classified item numbers, and locations at which materials or equipment are to be installed in the Work. Contractor shall use same reference identification(s) as shown on Contract Drawings.
- M. Contractor shall prepare composite drawings and installation layouts when required to solve tight field conditions.
- (1) Shop Drawings shall consist of dimensioned plans and elevations and must give complete information, particularly as to size and location of sleeves, inserts, attachments, openings, conduits, ducts, boxes, structural interferences, etc.
 - (2) Contractor shall coordinate these composite Shop Drawings and installation layouts in the field between itself and its Subcontractor(s) for proper relationship to the Work, the work of other trades, and the field conditions. The Contractor its submittal(s) shall, check and approve them before submission for final review.

1.04 PRODUCT DATA OR NON-REPRODUCIBLE SUBMITTALS

- A. Contractor shall submit manufacturer's printed literature in original form and electronically via Eadoc. Any fading type of reproduction will not be accepted. Contractor must submit a minimum of six (6) each, to the District. District shall return two (2) to the Contractor, who shall reproduce whatever additional copies it requires for distribution.
- B. Contractor shall submit six (6) copies of a complete list of all major items of mechanical, plumbing, and electrical equipment and materials in accordance with the approved Submittal Schedule, except as required earlier to comply with the approved Construction Schedule. Other items specified are to be submitted prior to commencing Work. Contractor shall submit items of like kind at one time in a neat and orderly manner. Partial lists will not be acceptable.
- C. Submittals shall include manufacturer's specifications, physical dimensions, and ratings of all equipment. Contractor shall furnish performance curves for all pumps and fans. Where printed literature describes items in addition to that item being submitted, submitted item shall be clearly marked on sheet and superfluous information shall be crossed out. If highlighting is used, Contractor shall mark all copies.
- D. Equipment submittals shall be complete and include space requirements, weight, electrical and mechanical requirements, performance data, and supplemental information that may be requested.

1.05 SAMPLES

- A. Contractor shall submit for approval Samples as required and within the time frame in the Contract Documents. Materials such as concrete, mortar, etc., which require on-site testing will be obtained from Project Site.
- B. Contractor shall submit four (4) samples except where greater or lesser number is specifically required by Contract Documents including, without limitation, the Specifications.

- (1) Samples must be of sufficient size and quality to clearly illustrate functional characteristics, with integrally related parts and attachment devices.
 - (2) Samples must show full range of texture, color, and pattern.
- C. Contractor shall make all Submittals, unless it has authorized Subcontractor(s) to submit and Contractor has notified the District in writing to this effect.
- D. Samples to be shipped prepaid or hand-delivered to the District's Construction Manager.
- E. Contractor shall mark samples to show name of Project, name of Contractor submitting, Contract number and segment of Work where representative Sample will be used, all applicable Specifications Sections and documents, Contract Drawing Number and detail, and ASTM or FS reference, if applicable.
- F. Contractor shall not deliver any material to Site prior to receipt of District's and/or Architect's completed written review and approval. Contractor shall furnish materials equal in every respect to approved Samples and execute Work in conformance therewith.
- G. District's and/or Architect's review, acceptance, and/or approval of Sample(s) will not preclude rejections of any material upon discovery of defects in same prior to final acceptance of completed Work.
- H. After a material has been approved, no change in brand or make will be permitted.
- I. Contractor shall prepare its Submittal Schedule and submit Samples of materials requiring laboratory tests to specified laboratory for testing not less than ninety (90) days before such materials are required to be used in Work.
- J. Samples which are rejected must be resubmitted promptly after notification of rejection and be marked "Resubmitted Sample" in addition to other information required.
- K. Field Samples and Mock-Ups are to be removed by Contractor at District's direction:
 - (1) Size: As Specified.
 - (2) Furnish catalog numbers and similar data, as requested.

1.06 OTHER SUBMITTAL DATA

- A. The following required data shall be made a submittal when transmitting the information to the District and/or Architect:
 - (1) Safety Plan
 - (2) MSDS
 - (3) All Schedule related data
 - (4) Wage Rate Information for Changes
 - (5) All Required Surveys
 - (6) Personnel Qualifications/Resumes
 - (7) Record Drawings/Specifications

- (8) Incomplete Items List
- (9) Punchlists
- (10) Additional Commissioning Data and Information

1.07 REVIEW AND RESUBMISSION REQUIREMENTS

- A. The District will arrange for review of Sample(s), Shop Drawing(s), Product Data, and other submittal(s) by appropriate reviewer and return to Contractor as provided below within twenty one (21) days after receipt or within twenty one (21) days after receipt of all related information necessary for such review, whichever is later.
- B. At least one (1) copy of product or materials data will be returned to Contractor with the review status.
- C. Samples to be incorporated into the Work will be returned to Contractor, together with a written notice designating the Sample with the appropriate review status and indicating errors discovered on review, if any. Other Samples will not be returned, but the same notice will be given with respect thereto, and that notice shall be considered a return of the Sample.
- D. Contractor shall revise and resubmit any Sample(s), Shop Drawing(s), Product Data, and other submittal(s) as required by the reviewer. Such re-submittals will be reviewed and returned in the same manner as original Sample(s), Shop Drawing(s), Product Data, and other submittal(s), within fourteen (14) days after receipt thereof or within fourteen (14) days after receipt of all related information necessary for such review.
- E. Contractor may proceed with any of the Work covered by Sample(s), Shop Drawing(s), Product Data, and other submittal(s) upon its return if designated as no exception taken, or revise as noted, provided the Contractor proceeds in accordance with the District and/or the Architect's notes and comments.
- F. Contractor shall not begin any of the work covered by a Sample(s), Shop Drawing(s), Product Data, and other submittal(s), designated as revise and resubmit or rejected, until a revision or correction thereof has been reviewed and returned to Contractor.
- G. Sample(s), Shop Drawing(s), Product Data, and other submittal(s) designated as revise and resubmit or rejected and requiring re-submittal, shall be revised or corrected and resubmitted to the District no later than fourteen (14) days or a shorter period as required to comply with the approved Construction Schedule, after its return to Contractor.
- H. Neither the review nor the lack of review of any Sample(s), Shop Drawing(s), Product Data, and other submittal(s) shall waive any of the requirements of the Contract Documents, or relieve Contractor of any obligation thereunder.
- I. District's and/or Architect's review of Shop Drawings does not relieve the Contractor of responsibility for any errors that may exist. Contractor is responsible for the dimensions and design of adequate connections and details and for satisfactory construction of all the Work.

END OF DOCUMENT

DOCUMENT 01 35 13.13

SPECIAL PROJECT PROCEDURES EDUCATION

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including without limitation, Site Access, Conditions, and Regulations;
- B. Special Conditions;
- C. Drug-Free Workplace Certifications;
- D. Criminal Background Investigation/Fingerprinting Certification
- E. Construction Facilities And Temporary Controls

1.02 REQUIREMENTS OF SOUTH SAN FRANCISCO UNIFIED SCHOOL DISTRICT

A. Drug-Free Schools:

All school sites and other District Facilities have been declared "Drug-Free Zones".

No drugs, alcohol and/or smoking are allowed at any time in any buildings and/or grounds on District property. No students, staff, visitors, or contractors are to use drugs on these sites.

The Contractor may designate a smoking area outside of District property within the public right-of-way, provided that this area remains quiet and unobtrusive to adjacent neighbors. This smoking area is to be kept clean at all times.

The Site shall be posted: "Non-Smoking Area" in a highly visible location.

B. Language:

Unacceptable and/or loud language will not be tolerated, "Cat calls" or other derogatory language toward students or public will not be allowed.

C. Disturbing the Peace (Noise and Lighting):

Contractor shall observe the noise ordinance of the Site at all times including, without limitation, all applicable local, city, and/or state laws, ordinances, and/or regulations regarding noise and allowable noise levels.

The use of radios, etc., is not allowed.

If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.

D. Traffic:

Driving on the Premises shall be limited to periods when students and public are not present. If driving or deliveries must be made during the school hours, two (2) or more ground guides shall lead the vehicle across the area of travel. In no case shall driving take place across playgrounds or other pedestrian paths during

recess, lunch, and/or class period changes. The speed limit on-the Premises shall be five (5) miles per hour (maximum) or less if conditions require.

All paths of travel for deliveries, including without limitation, material, equipment, and supply deliveries, shall be reviewed and approved by District in advance. Any damage will be repaired to the pre-damaged condition by the Contractor.

The District shall designate a construction entry to the Site. If Contractor requests, the District determines it is required, and to the extent possible, the District shall designate a staging area so as not to interfere with the normal functioning of school facilities. Location of gates and fencing shall be approved in advance with the District and at Contractor's expense.

Parking areas shall be reviewed and approved by District in advance. No parking is to occur under the drip line of trees or in areas that could otherwise be damaged.

E. Construction Site

Construction Site shall be thoroughly fenced in with minimum six (6) foot high construction fencing with "Green Screen". Contractor gates shall be closed at all times during the day except when materials and workmen are entering / exiting the construction site. Gates to be "double locked" whenever no construction is taking place. Workmen are to remain in fenced areas during the workday and off School Grounds for lunch. No vehicle parking of any kind is allowed on the campus unless it is within the construction fencing.

F. Conclusion:

All of the above shall be observed and complied with by the Contractor and all workers on the Job Site. Failure to follow these directives could result in individual(s) being suspended or removed from the work force at the discretion of the District.

The same rules and regulations shall apply equally to delivery personnel, inspectors, consultants, and other visitors to the Site.

END OF DOCUMENT

DOCUMENT 01 41 00

REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Obtaining of Permits and Licenses and Contractor's Work To Comply With All Applicable Regulations;
- B. Special Conditions;
- C. Quality Control.

1.02 DESCRIPTION

- A. This section covers the general requirements for regulatory requirements pertaining to the Work and is supplementary to all other regulatory requirements mentioned or referenced elsewhere in the Contract Documents.

1.03 REQUIREMENTS OF REGULATORY AGENCIES

- A. All statutes, ordinances, laws, rules, codes, regulations, standards, and the lawful orders of all public authorities having jurisdiction of the Work, are hereby incorporated into these Contract Documents as if repeated in full herein and are intended to be included in any reference to Code or Building Code, unless otherwise specified, including, without limitation, the references in the list below. Contractor shall make available at the Site copies of all the listed documents applicable to the Work as the District and/or Architect may request, including, without limitation, applicable portions of the California Code of Regulations ("CCR").
- B. This Project shall be governed by applicable regulations, including, without limitation, the State of California's Codes Section Group 1, Chapter 4, Part 1, Title 24, CCR, and the most current version on the date the bids are opened and as it pertains to school construction including, without limitation:
 - (1) Test and testing laboratory per Section 4-335 (District shall pay for the testing laboratory).
 - (2) All special inspections per Section 4-333(c).
 - (3) Contractor shall submit verified reports per Section 4-336 & 4-343(c).
 - (4) Administration
 - (a) Duties of the Architect & Engineers shall be per Section 4-333(a) & 4-341.
 - (b) Duties of the Contractor shall be per Section 4-343.
 - (c) Verified Reports per Section 4-336.
 - (5) Contractor shall keep and make available a copy of Part I and II of the 2007 version of Title 24 at the Site during construction.
 - (6) Contractor shall notify the Division of State Architect ("DSA") upon the start of construction per Section 4-331.

- (7) Addenda and Change Orders per Section 4-338.
 - (8) Supervision by the Division of the State Architect per Section 4-334.
 - (9) Division of the State Architect is not subject to arbitration.
- C. Items of deferred approval shall be clearly marked on the first sheet of the Architect's and/or Engineer's approved Drawings. All items later submitted for approval shall be per Title 24 requirements to the DSA.
- (1) Building Standards Administrative Code, Part 1, Title 24, CCR
 - (2) California Building Code (CBC), Part 2, Title 24, CCR; (Uniform Building code volumes 1-3 and California Amendments).
 - (3) California Electrical Code (CEC), Part 3, Title 24, CCR; (National Electrical Code and California Amendments).
 - (4) California Mechanical Code (CMC), Part 4, Title 24, CCR; (Uniform Mechanical Code and California Amendments).
 - (5) California Plumbing Code (CPC), Part 5, Title 24, CCR; (Uniform Plumbing Code and California Amendments).
 - (6) California Fire Code (CFC), Part 9, Title 24, CCR; (Fire Plumbing Code and California Amendments).
 - (7) California Referenced Standards Code, Part 12, Title 24, CCR
 - (8) Title 19, CCR, Public Safety, State Fire Marshal Regulations.
 - (9) Partial List of Applicable NFPA Standards:
 - (a) NFPA 13 - Automatic Sprinkler System.
 - (b) NFPA 14 - Standpipes Systems.
 - (c) NFPA 17A - Wet Chemical System
 - (d) NFPA 24 - Private Fire Mains.
 - (e) (California Amended) NFPA 72 - National Fire Alarm Codes.
 - (f) NFPA 253 - Critical Radiant Flux of Floor Covering System.
 - (g) FPA 2001 - Clean Agent Fire Extinguishing Systems.
 - (10) California Division of the State Architect Interpretive Regulations.
 - (11) California Elevator Safety Construction Code, Part 7, Title 24 CCR.

PART 2 – PRODUCTS Not Used

PART 3 – EXECUTION Not Used

END OF DOCUMENT

DOCUMENT 01 42 13

ABBREVIATIONS AND ACRONYMS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions including without limitation, Definitions
- B. Special Conditions

1.02 DOCUMENT INCLUDES:

- A. Abbreviations used throughout the Contract Documents.
- B. Reference to a technical society, organization, or body is by abbreviation, as follows:

1.	AA	Aluminum Association
2.	AAMA	Architectural Aluminum Manufacturers Association
3.	AASHTO	American Association of State Highway and Transportation Officials
4.	ABPA	Acoustical and Board Products Association
5.	ACI	American Concrete Institute
6.	AGA	American Gas Association
7.	AGC	Associated General Contractors
8.	AHC	Architectural Hardware Consultant
9.	AI	Asphalt Institute
10.	AIA	American Institute of Architects
11.	AIEE	American Institute of Electrical Engineers
12.	AISC	American Institute of Steel Construction
13.	ISI	American Iron and Steel Institute
14.	AMCA	Air Moving and Conditioning Association
15.	ANSI	American National Standards Institute
16.	APA	American Plywood Association
17.	ARI	Air Conditioning and Refrigeration Institute
18.	ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers
19.	ASME	American Society of Mechanical Engineers
20.	ASSE	American Society of Structural Engineers
21.	ASTM	American Society of Testing and Materials
22.	AWPB	American Wood Preservers Bureau
23.	AWPI	American Wood preservers Institute
24.	AWS	American Welding Society
25.	AWSC	American Welding Society Code
26.	AWI	Architectural Woodwork Institute
27.	AWWA	American Water Works Association
28.	BIA	Brick Institute of America
29.	CCR	California Code of Regulations
30.	CLFMI	Chain Link Fence Manufacturers Institute
31.	CMG	California Masonry Guild
32.	CRA	California Redwood Association
33.	CRSI	Concrete Reinforcing Steel Institute
34.	CS	Commercial Standards

35.	CSI	Construction Specifications Institute
36.	CTI	Cooling Tower Institute
37.	FGMA	Flat Glass Manufacturer's Association
38.	FIA	Factory Insurance Association
39.	FM	Factory Mutual
40.	FS	Federal Specification
41.	FTI	Facing Title Institute
42.	GA	Gypsum Association
43.	ICC	International Code Council
44.	IEEE	Institute of Electrical and Electronic Engineers
45.	IES	Illumination Engineering Society
46.	LIA	Lead Industries Association
47.	MIA	Marble Institute of America
48.	MLMA	Metal Lath Manufacturers Association
49.	MS	Military Specifications
50.	NAAMM	National Association of Architectural Metal Manufacturers
51.	NBHA	National Builders Hardware Association
52.	NBFU	National Board of Fire Underwriters
53.	NBS	National Bureau of Standards
54.	NCMA	National Concrete Masonry Association
55.	NEC	National Electrical Code
56.	NEMA	National Electrical Manufacturers Association
57.	NFPA	National Fire Protection Association/National Forest Products Association
58.	NMWIA	National Mineral Wool Insulation Association
59.	NTMA	National Terrazzo and Mosaic Association
60.	NWMA	National Woodwork Manufacturer's Association
61.	DSA	Division of State Architect
62.	OSHA	Occupational Safety and Health Act
63.	PCI	Precast Concrete Institute
64.	PCA	Portland Cement Association
65.	PDCA	Painting and Decorating Contractors of America
66.	PDI	Plumbing Drainage Institute
67.	PEI	Porcelain Enamel Institute
68.	PG&E	Pacific Gas & Electric Company
69.	PS	Product Standards
70.	SDI	Steel Door Institute; Steel Deck Institute
71.	SJI	Steel Joist Institute
72.	SSPC	Steel Structures Painting Council
73.	TCA	Tile Council of America
74.	TPI	Truss Plate Institute
75.	CBC	California Building Code
76.	UL	Underwriters Laboratories Code
77.	UMC	Uniform Mechanical Code
78.	USDA	United States Department of Agriculture
79.	VI	Vermiculite Institute
80.	WCLA	West Coast Lumberman's Association
81.	WCLB	West Coast Lumber Bureau
82.	WEUSER	Western Electric Utilities Service Engineering Requirements
83.	WI	Woodwork Institute
84.	WPOA	Western Plumbing Officials Association

END OF DOCUMENT

DOCUMENT 01 45 00

QUALITY CONTROL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS:

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Inspector, Inspections and Tests, Uncovering of Work and Non-conforming of Work and Correction of Work;
- B. Special Conditions.

1.01 RELATED CODES:

- A. The Work is governed by requirements of Title 24, California Code of Regulations ("CCR"), and the Contractor shall keep a copy of these available at the job Site for ready reference during construction.
- B. The Division of the State Architect ("DSA") shall be notified at or before the start of construction.

1.02 OBSERVATION AND SUPERVISION:

- A. The District and Architect or their appointed representatives will review the Work and the Contractor shall provide facilities and access to the Work at all times as required to facilitate this review. Administration by the Architect and any consulting Structural Engineer will be in accordance with applicable regulations, including, without limitation, CCR, Part 1, Title 24, Section 4-341.
- B. One or more Project Inspector(s) approved by DSA and employed by or in contract with the District, referred to hereinafter as the "Project Inspector", will observe the work in accordance with CCR, Part 1, Title 24, Sections 4-333(b) and 4-342:
 - (1) The Project Inspector shall have access to the Work wherever it is in preparation or progress for ascertaining that the Work is in accordance with the Contract Documents and all applicable code sections.. The Contractor shall provide facilities and access as required and shall provide assistance for sampling or measuring materials.
 - (2) The Project Inspector will notify the District and Architect and call the attention of the Contractor to any observed failure of Work or material to conform to Contract Documents.
 - (3) The Project Inspector shall observe and monitor all testing and inspection activities required.

The Contractor shall conform with all applicable laws as indicated in the Contract Documents, including, without limitation, to CCR, Part 1, Title 24, Section 4-343. The Contractor shall supervise and direct the Work and maintain a competent superintendent on the job who is authorized to act in all matters pertaining to the Work. The Contractor's superintendent shall also inspect all materials, as they arrive, for compliance with the Contract Documents. Contractor shall reject defective Work or materials immediately upon delivery or failure of the Work or material to comply with the Contract Documents. The Contractor shall submit verified reports as indicated in the Contract Documents, including, without limitation, the Specifications and as required by Part 1, Title 24, Section 4-336.

1.03 TESTING AGENCIES:

Date

QUALITY CONTROL
DOCUMENT 01 45 00 - 1

- A. Testing agencies and tests shall be in conformance with the General Documents and the requirements of Part 1, Title 24, Section 4- 335.
- B. Testing and inspection in connection with earthwork shall be under the direction of the District's consulting soils engineer, if any, referred to hereinafter as the "Soils Engineer."
- C. Testing and inspection of construction materials and workmanship shall be performed by a qualified laboratory, referred to hereinafter as the "Testing Laboratory." The Testing Laboratory shall be under direction of an engineer registered in the State of California, shall conform to requirements of ASTM E329, and shall be employed by or in contract with the District.

1.04 TESTS AND INSPECTIONS:

- A. The Contractor shall be responsible for notifying the District and Project Inspector of all required tests and inspections. Contractor shall notify the District and Project Inspector forty-eight (48) hours in advance of performing any Work requiring testing or inspection.
- B. The Contractor shall provide access to Work to be tested and furnish incidental labor, equipment, and facilities to facilitate all inspections and tests.
- C. The District will pay for first inspections and tests required by the "CCR", and other inspections or tests that the District and/or the Architect may direct to have made, including the following principal items:
 - (1) Tests and observations for earthwork and pavings.
 - (2) Tests for concrete mix designs, including tests of trial batches.
 - (3) Tests and inspections for structural steel work.
 - (4) Field tests for framing lumber moisture content.
 - (5) Additional tests directed by the District that establish that materials and installation comply with the Contract Documents.
 - (6) Test and observation of welding and expansion anchors.
- D. The District may at its discretion, pay and back charge the Contractor for:
 - (1) Retests or re-inspections, if required, and tests or inspections required due to Contractor error or lack of required identifications of material.
 - (2) Uncovering of work in accordance with Contract Documents.
 - (3) Testing done on weekends, holidays, and overtime will be chargeable to the Contractor for the overtime portion.
 - (4) Testing done off Site.
- E. Testing and inspection reports and certifications:
 - (1) If initially received by Contractor, Contractor shall provide to each of the following a copy of the agency or laboratory report of each test or inspection or certification.
 - a. The District;
 - b. The Construction Manager, if any;

- c. The Architect;
- d. The Consulting Engineer, if any;
- e. Other Engineers on the Project, as appropriate;
- f. The Project Inspector; and
- g. The Contractor.

- (2) When the test or inspection is one required by the CCR, a copy of the report shall also be provided to the DSA.

PART 2 - PRODUCTS

2.01 TYPE OF TEST AND INSPECTIONS (As Applies to the Project):

[THE FOLLOWING ARE EXAMPLES ONLY AND SHOULD BE REVISED WITH CONSULTATIONS WITH ARCHITECT.]

- A. Slump Test
ASTM C 143

- B. Concrete Tests
Testing agency shall test concrete used in the work per the following paragraphs:

- (1) Compressive Strength:

- a. Minimum number of tests required: One (1) set of three (3) cylinders for each 100 cubic yards (Sec. 2604 (h) 01) of concrete or major fraction thereof, placed in one (1) day. See Title 24, Section 2605(g).
- b. Two cylinders of each set shall be tested at twenty-eight (28) days. One (1) cylinder shall be held in reserve and tested only when directed by the Architect or District.
- c. Concrete shall test the minimum ultimate compressive strength in 28 days, as specified on the structural drawings.
- d. In the event that the twenty-eight (28) day test falls below the minimum specified strength, the effective concrete in place shall be tested by taking cores in accordance with UBC Standard No. 26-13 and tested as required for cylinders.
- e. In the event that the test on core specimens falls below the minimum specified strength, the concrete will be deemed defective and shall be removed and replaced upon such direction of the Architect, and in a manner acceptable to the Division of the State Architect.

- C. Reinforcing, Steel

- D. Structural Steel Per Title 24 and as noted:

- (1) Material: Steel per Table in Title 24, Section 2712.
- (2) Qualification of Welders (UBC Std. 27-6).
- (3) Shop fabrication (Section 2712(d). Structural steel only).
- (4) Shop and field welding (Section 2712(e)).

END OF DOCUMENT

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS, PROVISIONS AND REFERENCES

- A. General Conditions
- B. Special Conditions
- C. Site Standards
- D. State of California, Department of Transportation (Caltrans), Traffic Manual: Chapter 5, Manual of Traffic Controls for Construction and Maintenance Work
- E. State of California (Caltrans), Standard Plans

1.2 TEMPORARY FACILITIES AND UTILITIES

- A. Contractor' and IOR Offices
 - 1. Contractor shall furnish and maintain on site a suitable office completely furnished to house the administrative staff of the contractor to the satisfaction of the PM/CM. Size, type, location subject to District approval (Refer site logistics plan). Offices shall include a conference room large enough to seat 12 people for meetings.
 - 2. Contractor shall furnish and maintain on site a (10' x 30') office trailer suitable (secure, HVAC, no restroom) to house the IOR to the satisfaction of the PM/CM. Size, type, location subject to District approval (Refer site logistics plan). This trailer is solely for the use of the IOR and designated District representatives. Contractor shall furnish (3) desks with chairs, (3) phones/3 separate lines, (1) whiteboard (approx. 3' x 6'), and (1) plan table, fax machine, copier, printer, and digital camera as approved by the CM.
 - 3. The office facilities (Contractor) shall have sufficient telephone and data cabling to maintain telephone service, fax service and computer connections to run all software and operations required to satisfactorily communicate with the project team.
 - 4. Contractor office and equipment configuration subject to District approval prior to placement and installation.
- B. Electric Power and Lighting
 - 1. RENOVATION OF EXISTING BUILDINGS: The District will furnish and pay for power during the course of the work to the extent power is available in the building(s) or on the Site. The Contractor shall be responsible for providing and maintaining temporary facilities required to deliver that power service from its existing location in the building(s) or on the Site to points of use. Contractor shall furnish and pay for temporary power for welding and large equipment (cranes, man-hoist, etc.).

2. NEW CONSTRUCTION: The Contractor will furnish and pay for power required for the project during the course of the work. The Contractor shall be responsible for providing and maintaining temporary facilities required to deliver that power service.
3. Contractor shall verify characteristics of power available in building(s) or on the Site. Contractor shall take all actions required to make modifications where power of higher voltage or different phases of current are required. Contractor shall be fully responsible for providing that service and shall pay all costs required therefore.
4. The Contractor shall furnish, wire, install, and maintain temporary electrical lights wherever it is necessary to provide illumination for the proper performance and/or observation of the Work: a minimum of 20 foot-candles for rough work and 50 foot-candles for finish work.

C. Heat and Ventilation

1. Contractor shall provide temporary heat to maintain environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation and curing of materials, and to protect materials and finishes from damage due to improper temperature and humidity conditions. Portable heaters shall be standard units complete with controls.
2. Contractor shall provide temporary forced ventilation and dehumidification, as required to meet the project schedule, of enclosed areas for proper installation and curing of materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, and gases.
3. Contractor shall pay the costs of installation, maintenance, operation, and removal of temporary heat and ventilation, including costs for fuel consumed, required for the performance of the Work.
4. Contractor shall pay the costs of installation, maintenance, operation, and removal of temporary power, heat and ventilation, including costs for fuel consumed, required for the operation of District facilities which contractor caused to be shut down.

D. Water

1. The District will furnish and pay for water during the course of the work to the extent water is then available in the building(s) or on the Site. The Contractor shall be responsible for providing and maintaining temporary facilities required to deliver such utility services from its existing location in the building(s) or on the Site to points of use.
2. Contractor shall use backflow preventers on water lines at point of connection to District's water supply. Backflow preventers shall comply with requirements of Uniform Plumbing Code and the local water agency.
3. Contractor shall make potable water available for human consumption.
4. Potable water shall be provided for the IOR. District trailer.

E. Sanitary Facilities

1. Provide adequate temporary toilets, toilet conveniences, washing facilities, and drinking water for use of all employees and persons engaged on or about the Work, including subcontractors and their employees. Drinking water shall be potable, and drinking water facilities shall be clean and sanitary.

2. Locate sanitary facilities where approved by District, Inspector and/or authorities having jurisdiction and maintain in a clean and sanitary condition during the course of the Work. Keep such facilities adequately supplied with toilet paper, paper toweling, paper cups, and related supplies as required.
3. Use of toilet facilities in the Work under construction shall not be permitted except by consent of the Inspector and the District.
4. At completion of the Work, sanitary facilities shall be properly disinfected and all evidence of same removed from the site.

F. Telephone & Internet Service

1. Contractor shall arrange with local telephone service company for telephone service for the performance of the Work. Contractor shall, at a minimum, provide in its field office three (4) lines for telephone and one (1) line for fax machine.
2. Contractor shall pay the costs for telephone and fax lines installation, usage, maintenance, service, and removal.
3. Contractor shall furnish and install internet access at the construction site office/trailer as required to access Eadoc.

G. Fire Protection

1. Contractor shall provide and maintain fire extinguishers and other equipment for fire protection. Such equipment shall be designated for use for fire protection only and shall comply with all requirements of the California Fire, State Fire Marshall and/or its designee, and the City of South San Francisco Fire Dept.
2. Where on-site welding and burning of steel is unavoidable, Contractor shall provide protection for adjacent surfaces and fire watches until 30 minutes past the conclusion of the event.

H. Trash Removal

1. Contractor shall provide and maintain sufficient debris boxes and shall segregate the debris as required elsewhere in this document for recycling as not to become a public nuisance. Capacity of boxes and bins shall be sufficient as to accept all trash created until removed from site. Type, size and location subject to District approval.
2. Office trailer for I.O.R., District shall be kept in a neat and clean manner at all times.

I. Digital Camera

1. Contractor shall provide a digital camera for the Program/Construction Managers. The Camera shall, at a minimum, 10X Optical Zoom and 10 mega pixels with a 10GB data card. Camera shall be approved by the Program / Construction Managers.

1.3 TRAFFIC PLAN AND CONTROLS

A. Traffic Control Plan:

1. Prepare and submit for approval a traffic control plan to illustrate extent of the Contractor's involvement in the traffic scene of District property, adjacent neighborhood and community. The traffic control plan shall include drawings showing routes, detours, lane closures, traffic decking, signage, striping, barriers, warning signals and lights, and other traffic control devices and facilities as may be required to perform the Work. The Traffic Control Plan shall include explanatory narrative as required to complete the plan.

B. Permits:

1. Apply for and obtain all permits from jurisdictional authorities as required to perform any work in the public right-of-way, including encroachment permits and hauling permits. Two copies of issued permits shall be furnished to the District for record purposes.

C. Pavement Marking:

1. Install necessary temporary and permanent pavement marking as required in connection with the temporary work, and remove or obliterate existing or temporary pavement markings whenever traffic is moved to a newly available area or to different traffic patterns.

D. Temporary Closing to Traffic:

1. Prior to temporary closing to traffic part of any street, sidewalk, or other access, or to changing traffic patterns from those indicated on the Contract Drawings, obtain approval from District, Inspector and/or appropriate jurisdictional authority, and comply with imposed conditions, at least two weeks before such closures or changes are made. Deviations will be for an emergency condition affecting life and property only, and the Contractor shall immediately notify the District, Inspector and the appropriate jurisdictional authority of any such emergency changes. Copies of all approvals shall be furnished to the District.

E. Flaggers:

1. When flagging is required, provide qualified flaggers and flagging in accordance with the requirements of the Caltrans Traffic Manual, Chapter 5, Manual of Traffic Controls, Section 5.07.

F. Temporary Walkways:

1. In areas where removal of existing sidewalks is necessary, access to adjacent buildings, entrances, and facilities shall be maintained by temporary walkways having a width of not less than 4 feet and meeting ADA requirements.

G. Temporary Paving and Patching:

1. Construct, maintain, and remove temporary pavement and patching required to safely and expeditiously handle vehicle and pedestrian traffic, within or adjacent to the jobsite.

1.4 HAUL ROUTES

- A. Make arrangements with the various jurisdictional authorities for access to streets and roads for transporting materials, equipment, excess earth and soil materials, and debris to and from the site of the Work.

- B. All such access or haul routes shall be indicated on the Traffic Control Plan.
- C. These haul routes shall be maintained and cleaned of all dirt and debris resulting from the Contractor's use of these streets and roads. Any damage to streets and roads resulting from the Contractor's use shall be properly repaired and, at completion of this Contract, restored to their original condition or better.

1.5 STORM WATER POLLUTION PREVENTION PLAN

- A. All Construction or demolition activity, including but not limited to, clearing, grubbing, grading, excavation or other activity that results in a land disturbance shall be subject to the State Water Resources Control Board Construction General Permit Order 2010-0014-DWQ.
- B. In compliance with the State and Federal regulations on storm water management and urban runoff pollution control, no pollutants will be allowed to enter the storm drainage system.
- C. The Contractor shall provide all engineering, material, labor and equipment for planning, documenting, submitting, monitoring, testing installing, implementation and maintenance of all surface-water pollution prevention and erosion control measures. This work includes but is not necessarily limited to:
 - 1. Provide a Qualified SWWPPP Developer (QSD) for documenting and planning.
 - 2. Provide a Qualified SWWPPP Practitioner (QSP) for monitoring and implementation.
 - 3. Preparing and implementing a Site specific Storm Water Pollution Prevention Plan (SWPPP)
 - 4. Submitting to and pay fees to the State Water Control Board on behalf of the District.
 - 5. Furnishing, placing and installing effective measures for preventing runoff of soil, silts, gravel, hazardous chemicals or other materials prohibited by the San Francisco Bay RWQCB from entering the storm water drainage system.
 - 6. Management of on-site construction materials in such a manner as to prevent said materials from contacting storm water or wash water and running off into the storm drain system.
 - 7. Complying with applicable standards and regulations specified herein.
 - 8. Maintaining the most current revised SWPPP plan at the Contractor's work site.
 - 9. Reviewing any changes in the SWPPP at the weekly progress meetings. The contractor shall submit a numbered checklist of the current status of each prevention measure on the job site.
- D. In this section, the term "storm drain system" shall include: storm water conduits, storm drain inlets, and other storm drain structures, street gutters, channels and ditches.
- E. Contractor shall have storm water pollution prevention measures in place and conduct inspections daily or as required by RWQCB requirements. Contractor's QSP shall develop a Rain Event Action Plan as required by the requirements, and Contractor shall bear the costs of all Likely Precipitation Events, and all Qualifying Rain Events. It is the responsibility of the contractor to be prepared for a rain event in the non-rainy and rainy season, and to be aware of weather predictions. The district is not responsible for informing the Contractor of rain predictions.
- F. Work specified in Related Sections:
 - 1. Section 00 01 00 Summary of Work
 - 2. Section 01 35 13 Special Procedures
 - 3. Section 01 50 00 Temporary Facilities and Controls.

1.6 DEFINITIONS

- A. LRP: Legally Responsible Party, the owner of the property, the District. As the LRP, it is the intention of the District to ensure through this Contract that the Contractor shall properly follow, implement, and execute all provisions of the State Water Resources Control Board Construction General Permit for storm water Discharges on the behalf of the District, and that the Contractor shall include all such costs within their bid. The District will review and approve documents as submitted by the Contractor in the SMARTS system, for review by the SWRCB.
- B. **Data Submitter.** Data Submitter is any individual authorized by the LRP or an Approved Signatory to enter data on behalf of the LRP. The District will authorize and link the Contractor as Data Submitter to allow Contractor to upload and submit the required documents to the SMARTS System.
- C. PRD Permit Registration Documents which consist of the Notice of Intent, Risk Assessment, Post-Construction Calculations, a Site Map, the SWPPP, a signed certification statement by the LRP, and the annual fee.
- D. QSD: Qualified SWPPP Developer, a certified person responsible for preparing, amending and certifying the project SWPPP.
- E. QSP: Qualified SWPPP Practitioner, a certified person responsible for non-storm water and storm water visual observations, sampling and analysis, and for ensuring full compliance with the general Permit and implementation of all elements of the SWPPP.
- F. SMARTS: Storm Water Multiple Application and Report Tracking System.
<https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp>
- G. SWPPP: Storm Water Pollution Prevention Plan, to be developed and certified by a QSD and to be implemented by a QSP. QSP shall direct Contractor on all aspects of the SWPPP.

1.7 SUBMITTALS AND RESPONSIBILITIES

- A. The Contractor shall develop and submit a site specific State of California Storm Water Prevention Plan (SWPPP) in PDF format which shall be uploaded by the Contractor (as Data Submitter) to the State Water Resources Control Board. The District will review the submittal and approve it in the SMARTS system for review by the SWRCB
- B. The Preparation of the SWPPP shall be in accordance with the State Regional Water Control Board Order No. 2010-0014-DWQ, NPDES CAS000002.
- C. Permit Registration Documents (PRDs) as defined in Attachment B of the Construction General Permit include the Notice of Intent, risk assessment, Post Construction Calculations a Site Map, the SWPPP, a signed certification statement by the LRP, and the first annual fee. The PRDs are to be provided by and electronically filed to the State SMARTS system by the contractor on behalf of the District. The Contractor shall pay the SWRCB the first annual fee and any required renewal fees. The District shall supply the signed certification statement. The District will electronically review and approve the PRDs to the State Water Resources Control Board via the SMARTS system, after uploaded to the SMARTS by the Contractor.
- D. The Contractor shall submit electronic PDF files of the project PRDs to the SMARTS system on behalf of the District within fifteen (15) calendar days after Notice of Award. No Construction work shall begin until the Contractor receives written notification from the District that the Permit Registration Documents components

have been deemed complete by the SMARTS system and a WDID number has been emailed to the District by the system.

- E. The Contractor shall ensure that the project SWPPP is prepared and certified by a Qualified SWPPP Developer (QSD). The Contractor shall ensure that all elements of the project SWPPP will be implemented by a Qualified SWPPP Practitioner (QSP). Both the QSD and the QSP must meet the Construction General Permit certification requirements.
- F. The Contractor shall implement, maintain and be responsible for collection and input of data and for the effectiveness of the SWPPP measures in accordance with the Risk Level as determined by the Risk Assessment procedure as described in the General Permit Appendix 1. It is the responsibility of the Contractor's QSD to determine the Risk Level per the general Requirements.
- G. The Contractor shall maintain a rain gauge at the site and record daily (Monday through Friday) rainfall amounts until the project is complete.
- H. The project SWPPP shall be prepared to address the following.
 - 1. All known pollutants and their sources associated with construction activities.
 - 2. All non-storm water discharges are identified and either eliminated, controlled, or treated.
 - 3. BMP's are effective and result in the reduction or elimination pollutants in storm water discharges and authorized non-storm water discharges during construction.
 - 4. Stabilization BMP's installed to reduce or eliminate pollutants after construction are completed, effected and maintained.
- I. The project SWPPP shall be made available at the construction job site during work hours while the construction is occurring and shall be made available upon request by the District or State Inspector.
- J. The Contractor shall notify the District if either the QSD or QSP is no longer associated with the work. The District shall be notified within 24 hours and a qualified replacement shall be named within twenty-four (24) hours.
- K. The Contractor shall provide SWPPP Amendment documents on a regular basis to the district in digital PDF format and shall submit those files as required to the State SMARTS system on behalf of the District. The Contractor shall also inform the District after documents are uploaded to the system so the District may process them in the system as required. SWPPP Amendments shall be provided at a minimum of once every three (3) months. If a SWPPP Amendment is not needed, the QSD and QSP shall send notification to the District stating that an "Amendment is not necessary" for the period of construction.
- L. The Contractor shall provide all documentation required for Annual Reporting and the Notice of Termination to the SMARTS system in PDF format in a timely manner as required by the SWRCB. Inform the district when documents are ready for District certification in the SMARTS system.

1.8 PERMIT VIOLATIONS

- A. If there is a Permit violation, the contractor shall notify the District immediately and corrections shall be made as necessary to comply with the General Permit.
- B. The Contractor is responsible for any fines, and additional sampling, testing and monitoring that result from their negligence to comply with the General Permit Requirements without any compensation from the District. If the District is forced to pay any fines or fees to the SWRCB due to the negligence of the Contractor to

comply with the General Permit Requirements, the costs shall be deducted from the Contractor's contract value.

- C. If the Regional Water Quality Board or City inspector is at the site, the Contractor shall notify the District within twenty-four (24) hours and provide a written notice of any deficiencies noted and/or changes requested by the inspector.
- D. Violation of the General Permit may cause the District to issue a stop-work notice and take necessary actions to require the Contractor to correct and comply with the Permit requirements and regulations. All costs related to the stop-work action and corrective work to come into compliance with the General Permit shall be at the sole expense of the Contractor.

1.9 DUST CONTROL

- A. Provide dust control at all times, including holidays and weekends, as required to abate dust nuisance on and about the site which is a result of construction activities. Dust control shall be by means of sprinklered water or by other approved methods, except that chemicals, oil, or similar palliative shall not be used.
- B. Quantities and equipment for dust control shall be sufficient to effectively prevent dust nuisance on and about the site; water truck and/or sprinklering equipment shall be on hand at all times for immediate availability.
- C. The Inspector shall have authority to order dust control work whenever conditions warrant, and there shall be no additional cost to the District. Dust control shall be effectively maintained whether or not the Inspector orders such work.
- D. The contractor shall report any complaints received directly from the public to the District and shall be acted on immediately.
- E. Where earthwork operations are in progress, keep exposed earth surfaces dampened continuously. Also, keep dirt access ways and roads dampened continuously.
- F. Contractor shall ensure that all hauling equipment and trucks carrying loads of soil and debris shall have their loads sprayed with water or adequately covered, and as otherwise required by local and state ordinance.
- G. If portions of the site are temporarily inactive or abandoned for whatever reason, provide dust control and abatement continuously during such periods of inactivity.
- H. Where dust resulting from construction activities has collected on public or private property, including but not limited to sidewalks, streets and homes shall clean all such areas from accumulated dirt and dust. Contractor shall prevent dust and dirt from washing into sewer and storm drain lines.

1.10 MUD CONTROL

- A. Take proper measures to prevent tracking of mud onto public streets, drives, and sidewalks. Such measures shall include, but are not limited to, covering muddy areas on the site with clean, dry sand or aggregate.
- B. All egress from the site shall be maintained in a dry condition, and any mud tracked onto streets, sidewalks, or drives shall be immediately removed, and the affected area shall be cleaned. The Inspector may order such work at any time the conditions warrant.

- C. Where trucks will leave a muddy site and enter paved public streets, the Contractor shall maintain a suitable truck wheel-washing facility and crew. All trucks, or other vehicles leaving the site, shall be cleaned of mud and dirt, including mud and dirt clinging to exterior body surfaces of vehicles.
- D. All trucks coming to the site or leaving the site with materials or loose debris shall be loaded in a manner which will prevent dropping of materials or debris on streets. Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately.

1.11 NOISE CONTROL

A. Requirements:

Minimize noise caused by construction operations, and provide working machinery and equipment fitted with efficient noise suppression devices. Employ other noise abatement measures as necessary for protection of employees and the public. In addition, restrict working hours and schedule operations in a manner which will minimize, to the greatest extent feasible, disturbance to residents and/or students in the vicinity of the Work.

B. Definitions:

1. Daytime refers to the period from 7:00 a.m. to 7:00 p.m. local time daily except Sundays and legal holidays.
2. Nighttime refers to all other times including all day Sunday and legal holidays.
3. Construction Limits are defined for the purpose of these noise control requirements as the District right-of-way lines, construction easement boundaries, or property lines as indicated on the Contract Drawings.
4. Zones, Special Zones, and Special Construction Sites outside of the Construction Limits shall be as designated by the local authority having jurisdiction. Such specially designated zones shall be treated by the Contractor as if they were within the Construction Limits.

C. Monitoring:

1. Promptly inform the District of any complaints received from the public regarding noise. Describe the action proposed and the schedule for implementation, and subsequently inform the District of the results of the action.

1.12 CONSTRUCTION AIDS

A. Plant and Equipment

1. Contractor shall furnish, operate, and maintain a complete plant for fabricating, handling, conveying, installing, and erecting materials and equipment; and for conveyances for transporting workmen. Include elevators, hoists, debris chutes, and other equipment, tools, and appliances necessary for performance of the Work.
2. Contractor shall maintain plant and equipment in safe and efficient operating condition. Damages due to defective plant and equipment, and uses made thereof, shall be repaired by Contractor at no expense to the District.
3. None of the District's tools and equipment shall be used by Contractor for the performance of the Work

1.10 BARRIERS AND ENCLOSURES

- A. Contractor shall obtain the District's written permission for locations and types of temporary barriers and enclosures, including fire-rated materials proposed for use, prior to their installation.
- B. Contractor shall provide and maintain temporary enclosures to prevent public entry and to protect persons using other buildings and portions of the Site and/or Premises, the public, and workers. Contractor shall also protect the Work and existing facilities from the elements, and adjacent construction and improvements, persons, and trees and plants from damage and injury from demolition and construction operations. Holes and other damages caused by the installation and/or removal of temporary fences shall be properly filled or repaired to match adjacent surfaces.
- C. Temporary chain link fencing shall have green privacy screening. Barricade caution tape will not be allowed as a barrier even for very short term use, vinyl / plastic mesh construction barrier fencing may be use as a temporary short term access control.
- D. Contractor shall not prevent site access to existing facilities for persons using other buildings and portions of the Site, and for deliveries and other services and activities at all times. If access is temporarily impaired Contractor shall prepare and install adequate detour signage and alert the District 48 hours in advance.
- E. Tree and Plant Protection:
 - 1. Contractor shall preserve and protect existing trees and plants on the Premises that are not designated or required to be removed, and those adjacent to the Premises.
 - 2. Contractor shall provide barriers to a minimum height of 4'-0" around each tree and plant, around each group of trees and plants, as applicable, in the proximity of demolition and construction operations.
 - 3. Contractor shall not park trucks, store materials, perform Work or cross over landscaped areas. Contractor shall not dispose of paint thinners, water from cleaning, plastering or concrete operations, or other deleterious materials in landscaped areas, storm drain systems, or sewers. Plant materials damaged as a result of the performance of the Work shall, at the option of the District and at Contractor's expense, either be replaced with new plant materials equal in size and kind to those damaged or by payment of an amount representing the value of the damaged materials as determined by the District.
 - 4. Contractor shall remove soil that has been contaminated during the performance of the Work by oil, solvents, and other materials which could be harmful to trees and plants, and replace with good soil, at Contractor's expense.

1.11 SECURITY

- A. Provide for security of the Work and the site until final inspection and acceptance of the Work. Storage areas shall be suitably fenced and lighted and routinely patrolled by security guards. Refer Site Logistics Plan for security lighting.
- B. The District assumes no responsibility for protection of structures and finished work or for loss of materials and equipment from the time that Contract operations have commenced until final acceptance of the Work.
- C. If watchman service is deemed necessary by the Contractor, such protection shall be provided by the Contractor, and all costs therefore shall be paid for by the Contractor.

- D. Damaged, lost, or stolen materials and equipment, whether or not stored or already installed, shall be replaced by the Contractor with new specified materials and equipment, including reinstallation expenses where applicable, at no additional cost to the District.

1.12 TEMPORARY FACILITIES AND CONTROLS

A. Water:

Contractor shall not permit surface and subsurface water, and other liquids, to accumulate in or about the vicinity of the Premises. Should accumulation develop, Contractor shall control the water or other liquid, and suitably and properly dispose of it by means of temporary pumps, piping, drainage lines, troughs, ditches, dams, or other methods.

B. Pollution:

1. No burning of refuse, debris, or other materials shall be permitted on or in the vicinity of the Premises.
2. Contractor shall comply with applicable regulatory requirements and anti-pollution ordinances during the conduct of the Work including, without limitation, demolition, construction, and disposal operations.

C. Lighting: If portable or temporary lights are used after dark, all light must be located so as not to direct light into neighboring properties.

D. Remove temporary utilities, equipment, facilities, and materials prior to final inspection.

1.13 JOB SIGNS

A. General:

1. Contractor shall provide and maintain temporary Project signage as detailed below with the design, text, and colors designated by the District and/or the Architect. Sign may be up to 4' X 8'. Locate sign as approved by the District. Contractor shall submit shop drawings for District approval prior to proceeding.
2. Signs other than the specified Project sign and or signs required by law, for safety, or for egress, shall not be permitted, unless otherwise approved in advance by the District.

B. Materials & Fabrication

1. Structure and Framing: Structurally sound, new or used wood or metal.
2. Sign Surface: Minimum 3/4-inch exterior grade plywood, MDF or other composite material approved by the District and/or the Architect.
3. Rough Hardware: Galvanized.
4. Paint: Exterior quality, of type and colors selected by the District and/or the Architect.
5. Contractor shall paint exposed surfaces of supports, framing, and surface material with exterior grade paint: one coat of primer and one coat of finish paint.

1.14 PUBLICITY RELEASES

Contractor shall not release any information, story, photographs, plans, or drawings relating information about the Project to anyone, including press and other public communications medium, including, without limitation, on website(s) unless approved in writing by the South San Francisco Unified School District.

1.15 FIRE DEPARTMENT ACCESS

Contractor shall maintain site at all times to allow Fire Truck Access to the school site. Any over excavation, base rock, soil treatment required to achieve access shall be provided by the Contractor, and approved by the Geotechnical Engineer, at no cost to the District.

PART 2 - PRODUCTS Not Used

PART 3 - EXECUTION Not Used

END OF SECTION

SECTION 01 65 00

DELIVERY, STORAGE AND HANDLING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Access, Conditions and Requirements;
- B. Special Conditions.

1.02 PRODUCTS

- A. Products are as defined in the General Conditions.
- B. Contractor shall not use and/or reuse materials and/or equipment removed from existing Premises, except as specifically permitted by the Contract Documents.
- C. Contractor shall provide interchangeable components of the same manufacturer, for similar components.

1.03 TRANSPORTATION AND HANDLING

- A. Contractor shall transport and handle Products in accordance with manufacturer's instructions.
- B. Contractor shall promptly inspect shipments to confirm that Products comply with requirements, quantities are correct, and products are undamaged.
- C. Contractor shall provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement, or damage.

1.04 STORAGE AND PROTECTION

- A. Contractor shall store and protect Products in accordance with manufacturer's instructions, with seals and labels intact and legible. Contractor shall store sensitive products in weather-tight, climate controlled enclosures.
- B. For exterior storage of fabricated Products, Contractor shall place on sloped supports, above ground.
- C. Contractor shall provide off-site storage and protection when Site does not permit on-site storage or protection.
- D. Contractor shall cover products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.
- E. Contractor shall store loose granular materials on solid flat surfaces in a well-drained area and prevent mixing with foreign matter.
- F. Contractor shall provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.

Date

Delivery, Storage and Handling
Document 01 65 00 -1

- G. Contractor shall arrange storage of Products to permit access for inspection and periodically inspect to assure Products are undamaged and are maintained under specified conditions.

PART 2 – PRODUCTS Not Used

PART 3 - EXECUTION Not Used

END OF DOCUMENT

DOCUMENT 01 71 23

FIELD ENGINEERING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Site Investigation, and Soils Investigation Report;
- B. Special Conditions;
- C. Site-Visit Certification.

1.02 REQUIREMENTS INCLUDED

- A. Contractor shall provide and pay for field engineering services required for the project, including, without limitations:
 - (1) Survey work required in execution of the Project.
 - (2) Civil or other professional engineering services specified, or required to execute Contractor's construction methods.
 - (3) Underground utilities locators as required for project.

1.03 QUALIFICATIONS OF SURVEYOR OR ENGINEERS

- A. Contractor shall only use a qualified licensed engineer or registered land surveyor, to whom District makes no objection.

1.04 SURVEY REFERENCE POINTS

- A. Existing basic horizontal and vertical control points for the Project are those designated on the Drawings.
- B. Contractor shall locate and protect control points prior to starting Site Work and preserve all permanent reference points during construction. In addition Contractor shall:
 - (1) Make no changes or relocation without prior written notice to District and Architect.
 - (2) Report to District and Architect when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
 - (3) Require surveyor to replace Project control points based on original survey control that may be lost or destroyed.

1.05 RECORDS

- A. Contractor shall maintain a complete, accurate log of all control and survey work as it progresses.

1.06 SUBMITTALS

- A. Contractor shall submit name and address of Surveyor and Professional Engineer to District and Architect prior to its/their work on the Project.
- B. On request of District and Architect, Contractor shall submit documentation to verify accuracy of field engineering work, at no additional cost to the District.
- C. Contractor shall submit a certificate signed by registered engineer or surveyor certifying that elevations and locations of improvements are in conformance or nonconformance with Contract Documents.

PART 2 – PRODUCTS Not Used

PART 3 - EXECUTION

- 3.01 Contractor is responsible for meeting all applicable codes, OSHA, safety and shoring requirements.
- 3.02 Contractor is responsible for any re-surveying required by correction of nonconforming work.

END OF DOCUMENT

DOCUMENT 01 73 29

CUTTING AND PATCHING

1. PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Inspector, Inspections, and Tests, Integration of Work, Nonconforming Work, and Correction of Work, and Uncovering Work;
- B. Special Conditions;
- C. Hazardous Materials Procedures and Requirements;
- D. Hazardous Materials Certification;
- E. Lead-Based Paint Certification;
- F. Imported Materials Certification.

1.02 CUTTING AND PATCHING

- A. Contractor shall be responsible for all cutting, fitting, and patching, including associated excavation and backfill, required to complete the Work or to:
 - (1) Make several parts fit together properly.
 - (2) Uncover portions of Work to provide for installation of ill-timed Work.
 - (3) Remove and replace defective Work.
 - (4) Remove and replace Work not conforming to requirements of Contract Documents.
 - (5) Remove Samples of installed Work as specified for testing.
 - (6) Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.
 - (7) Provide penetrations through hazardous materials containing non-structural surfaces or required disturbance of hazardous materials provided the hazardous material is identified in the contract documents.
 - (8) Attaching new materials to existing remodeling areas - - including painting (or other finishes) to match existing conditions.
- B. In addition to Contract requirements, upon written instructions from the District, Contractor shall uncover Work to provide for observations of covered Work in accordance with the Contract Documents; remove samples of installed materials for testing as directed by District; and remove Work to provide for alteration of existing Work.

- C. Contractor shall not cut or alter Work, or any part of it, in such a way that endangers or compromises the integrity of the Work, the Project, or work of others.

1.03 SUBMITTALS

- A. Prior to any cutting or alterations that may affect the structural safety of Project, or work of others, and well in advance of executing such cutting or alterations, Contractor shall submit written notice to District pursuant to the applicable notice provisions of the Contract Documents, requesting consent to proceed with the cutting or alteration, including the following:
 - (1) The Work of the District or other trades.
 - (2) Structural value or integrity of any element of Project.
 - (3) Integrity or effectiveness of weather-exposed or weather-resistant elements or systems.
 - (4) Efficiency, operational life, maintenance or safety of operational elements.
 - (5) Visual qualities of sight-exposed elements.
- B. Contractor's Request shall also include:
 - (1) Identification of Project.
 - (2) Description of affected Work.
 - (3) Necessity for cutting, alteration, or excavations.
 - (4) Affects of Work on District, other trades, or structural or weatherproof integrity of Project.
 - (5) Description of proposed Work:
 - (a) Scope of cutting, patching, alteration, or excavation.
 - (b) Trades that will execute Work.
 - (c) Products proposed to be used.
 - (d) Extent of refinishing to be done.
 - (6) Alternates to cutting and patching.
 - (7) Cost proposal, when applicable.
 - (8) The scheduled date the Contractor intends to perform the Work and the duration of time to complete the Work.
 - (9) Written permission of other trades whose Work will be affected.

1.04 QUALITY ASSURANCE

- A. Contractor shall ensure that cutting, fitting, and patching shall achieve security, strength, weather protection, appearance for aesthetic match, efficiency, operational life, maintenance, safety of operational elements, and the continuity of existing fire ratings.

- B. Contractor shall ensure that cutting, fitting, and patching shall successfully duplicate undisturbed adjacent profiles, materials, textures, finishes, colors, and that materials shall match existing construction. Where there is dispute as to whether duplication is successful or has been achieved to a reasonable degree, the District's decision shall be final.

1.05 PAYMENT FOR COSTS

- A. Cost caused by ill-timed or defective Work or Work not conforming to Contract Documents, including costs for additional services of the District, its consultants, including but not limited to the Construction Manager, the Architect, the Project Inspector(s), Engineers, and Agents, will be paid by Contractor and/or deducted from the Contract by the District.
- B. District shall only pay for cost of Work if it is part of the original Contract Price or if a change has been made to the contract in compliance with the provisions of the General Conditions. Cost of Work performed upon instructions from the District, other than defective or nonconforming Work, will be paid by District on approval of written Change Order. Contractor shall provide written cost proposals prior to proceeding with cutting and patching.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Contractor shall provide for replacement and restoration of Work removed. Contractor shall comply with the Contract Documents and with the Industry Standard(s), for the type of Work, and the Specification requirements for each specific product involved. If not specified, Contractor shall first recommend a product of a manufacturer or appropriate trade association for approval by the District.
- B. Materials to be cut and patched include those damaged by the performance of the Work.

PART 3 – EXECUTION

3.01 INSPECTION

- A. Contractor shall inspect existing conditions of the Site and the Work, including elements subject to movement or damage during cutting and patching, excavating and backfilling. After uncovering Work, Contractor shall inspect conditions affecting installation of new products.
- B. Contractor shall report unsatisfactory or questionable conditions in writing to District as indicated in the General Conditions and shall proceed with Work as indicated in the General Conditions by District.

3.02 PREPARATION

- A. Contractor shall provide shoring, bracing and supports as required to maintain structural integrity for all portions of the Project, including all requirements of the Project.
- B. Contractor shall provide devices and methods to protect other portions of Project from damage.
- C. Contractor shall, provide all necessary protection from weather and extremes of temperature and humidity for the Project, including without limitation, any work that may be exposed by cutting and patching Work. Contractor shall keep excavations free from water.

3.03 ERECTION, INSTALLATION AND APPLICATION

- A. With respect to performance, Contractor shall:

- (1) Execute fitting and adjustment of products to provide finished installation to comply with and match specified tolerances and finishes.
 - (2) Execute cutting and demolition by methods that will prevent damage to other Work, and provide proper surfaces to receive installation of repairs and new Work.
 - (3) Execute cutting, demolition excavating, and backfilling by methods that will prevent damage to other Work and damage to settlement.
- B. Contractor shall employ original installer or fabricator to perform cutting and patching for:
- (1) Weather-exposed surfaces and moisture-resistant elements such as roofing, sheet metal, sealants, waterproofing, and other trades.
 - (2) Sight-exposed finished surfaces.
- C. Contractor shall execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes as shown or specified in the Contract Documents including, without limitation, the Drawings and Specifications.
- D. Contractor shall fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Contractor shall conform to all Code requirements for penetrations or the Drawings and Specifications, whichever calls for a higher quality or more thorough requirement. Contractor shall maintain integrity of both rated and non-rated fire walls, ceilings, floors, etc.
- E. Contractor shall restore Work which has been cut or removed. Contractor shall install new products to provide completed Work in accordance with requirements of the Contract Documents and as required to match surrounding areas and surfaces.
- F. Contractor shall refinish all continuous surfaces to nearest intersection as necessary to match the existing finish to any new finish.

END OF DOCUMENT

SECTION 01 73 19

INSTALLATION - MATERIALS AND EQUIPMENT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Purchase of Materials and Equipment;
- B. Special Conditions;
- C. Imported Materials Certification.

1.02 MATERIAL AND EQUIPMENT

- A. Only items approved by the District and/or Architect shall be used.
- B. Contractor shall submit lists of products and other product information in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

1.03 MATERIAL AND EQUIPMENT COLORS

- A. The District and/or Architect will provide a schedule of colors.
- B. No individual color selections will be made until after approval of all pertinent materials and equipment and after receipt of appropriate samples in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.
- C. Contractor shall request priority in writing for any item requiring advance ordering to maintain the approved Construction Schedule.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Contractor shall deliver manufactured materials in original packages, containers, or bundles (with seals unbroken), bearing name or identification mark of manufacturer.
- B. Contractor shall deliver fabrications in as large assemblies as practicable; where specified as shop-primed or shop-finished, package or crate as required to preserve such priming or finish intact and free from abrasion.
- C. Contractor shall store materials in such a manner as necessary to properly protect them from damage. Materials or equipment damaged by handling, weather, dirt, or from any other cause will not be accepted.
- D. Materials are not be acceptable that have been warehoused for long periods of time, stored or transported in improper environment, improperly packaged, inadequately labeled, poorly protected, excessively shipped, deviated from normal distribution pattern, or reassembled.
- E. Contractor shall store material so as to cause no obstructions of sidewalks, roadways, and underground services. Contractor shall protect material and equipment furnished under Contract.
- F. Contractor may store materials on Site with prior written approval by the District, all material shall remain under Contractor's control and Contractor shall remain liable for any damage to the materials. Should the

Date

Project Site not have storage area available, the Contractor shall provide for off-site storage at no cost to District.

- G. When any room in Project is used as a shop or storeroom, the Contractor shall be responsible for any repairs, patching, or cleaning necessary due to that use. Location of storage space shall be subject to prior written approval by District.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Manufacturers listed in various sections of Contract Documents are names of those manufacturers that are believed to be capable of supplying one or more of items specified therein.
- B. The listing of a manufacturer does not imply that every product of that manufacturer is acceptable as meeting the requirements of the Contract Documents.

2.02 FACILITIES AND EQUIPMENT

- A. Contractor shall provide, install, maintain, and operate a complete and adequate facility for handling, the execution, disposal, and distribution of material and equipment as required for proper and timely performance of Work connected with Contract.

2.03 MATERIAL REFERENCE STANDARDS

- A. Where material is specified solely by reference to "standard specifications" and if requested by District, Contractor shall submit for review data on actual material proposed to be incorporated into Work of Contract listing name and address of vendor, manufacturer, or producer, and trade or brand names of those materials, and data substantiating compliance with standard specifications.

PART 3 - EXECUTION

3.01 WORKMANSHIP

- A. Where not more specifically described in any other Contract Documents, workmanship shall conform to methods and operations of best standards and accepted practices of trade or trades involved and shall include items of fabrication, construction, or installation regularly furnished or required for completion (including finish and for successful operation, as intended).
- B. Work shall be executed by tradespersons skilled in their respective lines of Work. When completed, parts shall have been durably and substantially built and present a neat appearance.

3.02 COORDINATION

- A. Contractor shall coordinate installation of Work so as to not interfere with installation of others. Adjustment or rework because of Contractor's failure to coordinate will be at no additional cost to District.
- B. Contractor shall examine in-place work for readiness, completeness, fitness to be concealed or to receive other work, and in compliance with Contract Documents. Concealing or covering Work constitutes acceptance of additional cost which will result should in-place Work be found unsuitable for receiving other Work or otherwise deviating from the requirements of the Contract Documents.

3.03 COMPLETENESS

- A. Contractor shall provide all portions of the Work, unless clearly stated otherwise, installed complete and operational with all elements, accessories, anchorages, utility connections, etc., in manner to assure well-balanced performance, in accordance with manufacturer's recommendations and by Contract Documents. For example, electric water coolers require water, electricity, and drain services; roof drains require drain system; sinks fit within countertop, etc. Terms such as "installed complete," "operable condition," "for use intended," "connected to all utilities," "terminate with proper cap," "adequately anchored," "patch and refinish," "to match similar," should be assumed to apply in all cases, except where completeness of functional or operable condition is specifically stated as not required.

3.04 APPROVED INSTALLER OR APPLICATOR

- A. Installation by a manufacturer's approved installer or applicator is an understood part of Specifications and only approved installer or applicator is to provide on-site Work where specified manufacturer has on-going program of approving (i.e. certifying, bonding, re-warranting) installers or applicators. Newly established relationships between a manufacturer and an installer or applicator who does not have other approved applicator work in progress or completed is not approved for this Project.

3.05 MANUFACTURER'S RECOMMENDATIONS

- A. All installations shall be in accordance with manufacturer's published recommendations and specific written directions of manufacturer's representative. Should Contract Documents differ from recommendations of manufacturer or directions of his representative, Contractor shall analyze differences, make recommendations to the District and the Architect in writing, and shall not proceed until interpretation or clarification has been issued by the District and/or the Architect.

END OF DOCUMENT

DOCUMENT 01 76 00

PROTECTING INSTALLED CONSTRUCTION

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Integration of Work, Purchase of Materials and Equipment, Uncovering of Work and Non-conforming Work and Correction of Work and Trenches
- B. Special Conditions.
- C. LEED requirements

PART 2 - PRODUCTS

2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK

- A. New Materials: As specified in the Contract Documents including, without limitation, in the Specifications, Contractor shall match existing products, conditions, and work for patching and extending work.
- B. Type and Quality of Existing Products: Contractor shall determine by inspection, by testing products where necessary, by referring to existing conditions and to the Work as a standard.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Contractor shall videotape all restoration areas, including the site in general, the landscaping in particular, curbs, AC paving, concrete structures and flatwork, exterior surfaces and all interior walls, doors, floors, ceilings that will not be part of the renovation.
- B. Contractor shall verify that demolition is complete and that areas are ready for installation of new Work.
- C. By beginning restoration Work, Contractor acknowledges and accepts the existing conditions.

3.02 PREPARATION

- A. Contractor shall cut, move, or remove items as necessary for access to alterations and renovation Work. Contractor shall replace and restore these at completion.
- B. Contractor shall remove unsuitable material not as salvage unless otherwise indicated in the Contract Documents. Unsuitable material may include, without limitation, rotted wood, corroded metals, and deteriorated masonry and concrete. Contractor shall replace materials as specified for finished Work.
- C. Contractor shall remove debris and abandoned items from all areas of the Site and from concealed spaces.
- D. Contractor shall prepare surface and remove surface finishes to provide for proper installation of new Work and finishes.

date

- E. Contractor shall close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity. Contractor shall insulate ductwork and piping to prevent condensation in exposed areas. Contractor shall insulate building cavities for thermal and/or acoustical protection, as detailed.

3.03 INSTALLATION

- A. Contractor shall coordinate Work of all alternations and renovations to expedite completion and to accommodate District occupancy.
- B. Designated Areas and Finishes: Contractor shall complete all installations in all respects, including operational, mechanical work and electrical work.
- C. Contractor shall remove, cut, and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to original or specified condition.
- D. Contractor shall refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes.
- E. Contractor shall install products as specified in the Contract Documents, including without limitation, the Specifications.

3.04 TRANSITIONS

- A. Where new Work abuts or aligns with existing, Contractor shall perform a smooth and even transition. Patched Work must match existing adjacent work in texture and appearance.
- B. When finished surfaces are cut so that a smooth transition with new Work is not possible, Contractor shall terminate existing surface along a straight line at a natural line of division and make a recommendation for resolution to the District and the Architect for review and approval.

3.05 ADJUSTMENTS

- A. Where removal of partitions or walls results in adjacent spaces becoming one, Contractor shall rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
- B. Where a change of plane of 1/4 inch or more occurs, Contractor shall submit a recommendation for providing a smooth transition to the District and the Architect for review and approval.
- C. Contractor shall trim existing doors as necessary to clear new floor finish and refinish trim as required.
- D. Contractor shall fit Work at penetrations of surfaces.

3.06 REPAIR OF DAMAGED SURFACES

- A. Contractor shall patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- B. Contractor shall repair substrate prior to patching finish.

3.07 CULTIVATED AREAS AND OTHER SURFACE IMPROVEMENTS

- A. Cultivated or planted areas and other surface improvements which are damaged by actions of the Contractor shall be restored by Contractor to their original condition or better, where indicated.

date

Protecting Installed Construction
Document 01 76 00 -2

- B. Contractor shall protect and replace, if damaged, all existing guard posts, barricades, and fences.
- C. Contractor shall give special attention to avoid damaging or killing trees, bushes and/or shrubs on the Premises and/or identified the Contract Documents, including without limitation, the Drawings.

3.08 FINISHES

- A. Contractor shall finish surfaces as specified in the Contract Documents, including without limitations, the provisions of all Divisions of the Specifications.
- B. Contractor shall finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, Contractor shall refinish entire surface to nearest intersections.

3.09 CLEANING

- A. Contractor shall continually clean the Site and the Premises as indicated in the Contract Documents, including without limitation, the provisions in the General Conditions and the Specifications regarding cleaning.

END OF DOCUMENT

DOCUMENT 01 77 00

CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Completion of Work;
- B. Special Conditions;
- C. Construction Facilities and Temporary Controls.
- D. Commissioning

1.02 CLOSEOUT PROCEDURES

- A. Contractor shall comply with all closeout provisions as indicated in the General Conditions.
- B. Contractor shall comply with all Commissioning requirements identified elsewhere.

1.03 FINAL CLEANING

- A. Contractor shall execute final cleaning prior to final inspection.
- B. Contractor shall clean interior and exterior glass and surfaces exposed to view; remove temporary labels, tape, stains, and foreign substances, polish transparent and glossy surfaces, wax and polish new vinyl floor surfaces, vacuum carpeted and soft surfaces.
- C. Contractor shall clean equipment and fixtures to a sanitary condition.
- D. Contractor shall replace filters of operating equipment.
- E. Contractor shall clean debris from roofs, gutters, down spouts, and drainage systems.
- F. Contractor shall clean Site, sweep paved areas, and rake clean landscaped surfaces.
- G. Contractor shall remove waste and surplus materials, rubbish, and construction facilities from the Site.

1.04 ADJUSTING

- A. Contractor shall adjust operating products and equipment to ensure smooth and unhindered operation.
- B. Record Documents and Shop Drawings: Contractor shall legibly mark each item to record actual construction, including:
 - (1) Measured depths of foundations in relation to finish floor datum.
 - (2) Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.

- (3) Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - (4) Field changes of dimension and detail.
 - (5) Details not on original Contract Drawings.
 - (6) Changes made by modification(s).
 - (7) References to related Shop Drawings and modifications.
- C. District will provide one set of reproducible drawings to Contractor.
- D. Contractor shall submit all required documents to District and/or Architect prior to or with its final Application for Payment.

1.05 INSTRUCTION OF DISTRICT PERSONNEL

- A. Before final inspection, at agreed upon times, Contractor shall instruct District's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. For equipment requiring seasonal operation, Contractor shall perform instructions for other seasons within six months.
- C. Contractor shall use operation and maintenance manuals as basis for instruction. Contractor shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- D. Contractor shall prepare and insert additional data in Operation and Maintenance Manual when need for such data becomes apparent during instruction.

1.06 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Contractor shall provide products, spare parts, maintenance, and extra materials in quantities specified in the Specifications and in Manufacturer's recommendations.
- B. Contractor shall provide District all required Operation and Maintenance Data.

1.07 PUNCHLIST

- A. Prior to informing the District that the work is substantially complete the Contractor shall obtain from the IOR the written acknowledgment that all the IOR concerns have been addressed and prepare a list of incomplete items with indication when each item will be completed.
- B. Contractor shall submit to the District the list of incomplete items with the request for substantial completion inspection by the District and Architect.
- C. Upon receipt of the Architect's Punchlist the contractor shall diligently pursue completion of each item. Disputed items shall be identified and handled separately in special meetings with the proper representation. The District has the right to identify overlooked items at any time, but will relinquish the right for 'finishes' upon occupancy of facilities by District personnel, if the item was not on the Punchlist.
- D. Periodically the Project Team shall meet and review the progress until all issues and items identified have been corrected.

END OF DOCUMENT

DOCUMENT 01 78 23

OPERATION AND MAINTENANCE INSTRUCTIONS

PART 1 – GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Completion of the Work;
- B. Special Conditions;
- C. Commissioning

1.02 QUALITY ASSURANCE

- A. Contractor shall prepare instructions and data by personnel experienced in maintenance and operation of described products.

1.03 FORMAT

- A. Contractor shall prepare data in the form of an instructional manual entitled "OPERATIONS AND MAINTENANCE MANUAL & INSTRUCTIONS" ("Manual").
- B. Binders: Contractor shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size. When multiple binders are used, Contractor shall correlate data into related consistent groupings.
- C. Cover: Contractor shall identify each binder with typed or printed title "OPERATION AND MAINTENANCE MANUAL & INSTRUCTIONS"; and shall list title of Project and identify subject matter of contents.
- D. Contractor shall arrange content by systems process flow under section numbers and sequence of Table of Contents of the Contract Documents.
- E. Contractor shall provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
- F. Text: The content shall include Manufacturer's printed data, or typewritten data on 24 pound paper.
- G. Drawings: Contractor shall provide with reinforced punched binder tab and shall bind in with text; folding larger drawings to size of text pages.

1.04 CONTENTS, EACH VOLUME

- A. Table of Contents: Contractor shall provide title of Project; names, addresses, and telephone numbers of the Architect, any engineers, subconsultants, Subcontractor(s), and Contractor with name of responsible parties; and schedule of products and systems, indexed to content of the volume.
- B. For Each Product or System: Contractor shall list names, addresses, and telephone numbers of Subcontractor(s) and suppliers, including local source of supplies and replacement parts.

- C. Product Data: Contractor shall mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- D. Drawings: Contractor shall supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Contractor shall not use Project Record Documents as maintenance drawings.
- E. Text: The Contractor shall include any and all information as required to supplement product data. Contractor shall provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.
- F. Warranties and Bonds: Contractor shall bind in one copy of each.

1.05 MANUAL FOR MATERIALS AND FINISHES

- A. Building Products, Applied Materials, and Finishes: Contractor shall include product data, with catalog number, size, composition, and color and texture designations. Contractor shall provide information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Contractor shall include Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture Protection and Weather Exposed Products: Contractor shall include product data listing applicable reference standards, chemical composition, and details of installation. Contractor shall provide recommendations for inspections, maintenance, and repair.
- D. Additional Requirements: Contractor shall include all additional requirements as specified in the Specifications.
- E. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.06 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Each Item of Equipment and Each System: Contractor shall include description of unit or system, and component parts and identify function, normal operating characteristics, and limiting conditions. Contractor shall include performance curves, with engineering data and tests, and complete nomenclature, and commercial number of replaceable parts.
- B. Panelboard Circuit Directories: Contractor shall provide electrical service characteristics, controls, and communications.
- C. Contractor shall include color coded wiring diagrams as installed.
- D. Operating Procedures: Contractor shall include start-up, break-in, and routine normal operating instructions and sequences. Contractor shall include regulation, control, stopping, shut-down, and emergency instructions. Contractor shall include summer, winter, and any special operating instructions.
- E. Maintenance Requirements: Contractor shall include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- F. Contractor shall provide servicing and lubrication schedule, and list of lubricants required.

- G. Contractor shall include manufacturer's printed operation and maintenance instructions.
- H. Contractor shall include sequence of operation by controls manufacturer.
- I. Contractor shall provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- J. Contractor shall provide control diagrams by controls manufacturer as installed.
- K. Contractor shall provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- L. Contractor shall provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- M. Contractor shall provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- N. Additional Requirements: Contractor shall include all additional requirements as specified in Specification(s).
- O. Contractor shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.07 INSTRUCTION OF DISTRICT PERSONNEL
(See section 01 77 00 Close-Out Procedures)

1.08 SUBMITTAL

- A. Contractor shall submit to the District for review two (2) copies of preliminary draft or proposed formats and outlines of the contents of the Manual within thirty (30) days of Contractor's start of Work.
- B. For equipment, or component parts of equipment put into service during construction and to be operated by District, Contractor shall submit draft content for that portion of the Manual within ten (10) days after acceptance of that equipment or component.
- C. Contractor shall use the draft manual as basis for Instruction of District Personnel as outlined in Section 01 77 00. Sufficient copies shall be made available during the training periods to have a copy for each participant. Revise manuals according to issues raised during training sessions before assembling and submitting final copies for review to Architect/Engineer.
- D. Contractor shall submit two (2) copies of a complete Manual and two (2) electronic copies on CD in final form several weeks before the final payment request. Copy will be returned with Architect/Engineer comments. Contractor must revise the content of the Manual as required by District prior to District's approval of Contractor's final Application for Payment.
- E. Contractor must submit two (2) copies of revised Manual and two (2) electronic copies on CD in final form within ten (10) days after final inspection.

PART 2 – PRODUCTS Not Used

PART 3 – EXECUTION Not Used

END OF DOCUMENT

Date

Operation and Maintenance Instructions
Document 01 78 23 -3

DOCUMENT 01 78 36

WARRANTIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Warranty/Guarantee Information;
- B. Warranty Form
- C. Special Conditions.

1.02 FORMAT

- A. Binders: Contractor shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size.
- B. Cover: Contractor shall identify each binder with typed or printed title "WARRANTIES" and shall list title of Project.
- C. Table of Contents: Contractor shall provide title of Project; name, address, and telephone number of Contractor and equipment supplier, and name of responsible principal. Contractor shall identify each item with the number and title of the specific Specification, document, provision, or section in which the name of the product or work item is specified.
- D. Contractor shall separate each warranty with index tab sheets keyed to the Table of Contents listing, providing full information and using separate typed sheets as necessary. Contractor shall list each applicable and/or responsible subcontractor(s), supplier(s), and/or manufacturer(s), with name, address, and telephone number of each responsible principal(s).

1.03 PREPARATION

- A. All warranties shall use the Form in Section 00 65 36 as a minimum. The standard factory forms may be used as an attachment.
- B. Contractor shall obtain warranties, executed in duplicate by each applicable and/or responsible subcontractor(s), supplier(s), and manufacturer(s), within ten (10) days after completion of the applicable item or work. Except for items put into use with District's permission, Contractor shall leave date of beginning of time of warranty until the date of completion is determined.
- C. Contractor shall verify that documents are in proper form, contain full information, and are notarized, when required.
- D. Contractor shall co-execute submittals when required.
- E. Contractor shall retain warranties until time specified for submittal.

1.04 TIME OF SUBMITTALS

- A. Contractor shall submit a sample warranty binder together with the M&O manual requirements identified in 01 78 23 Operation and Maintenance Instructions.
- B. For equipment or component parts of equipment put into service during construction with District's permission, Contractor shall submit the warranty for that equipment or component within ten (10) days after acceptance of that equipment or component.
- C. Contractor shall submit for District approval all warranties and related documents within ten (10) days after date of completion. Contractor must revise the warranties as required by the District prior to District's approval of Contractor's final Application for Payment.
- D. For items of work delayed beyond date of completion, provide updated submittal within ten days after acceptance, listing the date of acceptance as start of warranty period.

PART 2 - PRODUCTS Not Used

PART 3 – EXECUTION Not Used

END OF DOCUMENT

DOCUMENT 01 78 39

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS AND PROVISIONS

All Contract Documents should be reviewed for applicable provisions related to the provisions in this document, including without limitation:

- A. General Conditions, including, without limitation, Documents on Work;
- B. Special Conditions.
- C. Summary of Work

PART 2 - RECORD DRAWINGS

2.01 GENERAL

- A. As indicated in the Contract Documents, the District will provide Contractor with one set of plans of the original Contract Drawings.
- B. Contractor shall maintain at each Project Site one set of marked-up blueline prints and each month, or as otherwise agreed, shall transfer all changes and information to those marked-up blueline prints. The Record Drawings shall be available at the Project Site. The Contractor shall submit one copy at the conclusion of the Project following review and acceptance by the Architect of the blueline prints.
- C. Label and date each Record Drawing "RECORD DOCUMENT" in legibly printed letters.
- D. All deviations in construction, including but not limited to pipe and conduit locations and deviations caused by without limitation Change Orders, Construction Claim Directives, RFI's, and Addenda, shall be accurately and legibly recorded by Contractor.
- E. Locations and changes shall be done by Contractor in a neat and legible manner and, where applicable, indicated by drawing a "cloud" around the changed or additional information.
- F. Contractor shall obtain from the Project Inspector written certification that the Project Record Drawings ("As-Built") showing all changes incorporated into the Work since the preceding monthly submittal having been performed as required. The signed document shall be part of the monthly progress payment request.

2.02 RECORD DRAWING INFORMATION

- A. Contractor shall record the following information:
 - (1) Locations of Work buried under or outside each building, including, without limitation, all utilities, plumbing and electrical lines, and conduits.
 - (2) Actual numbering of each electrical circuit.
 - (3) Locations of significant Work concealed inside each building whose general locations are changed from those shown on the Contract Drawings.
 - (4) Locations of all items, not necessarily concealed, which vary from the Contract Documents.

- (5) Installed location of all cathodic protection anodes.
 - (6) Deviations from the sizes, locations, and other features of installations shown in the Contract Documents.
 - (7) Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stub-outs, invert elevations, etc.
 - (8) Sufficient information to locate Work concealed in each building with reasonable ease and accuracy. In some instances, this may be by dimension, in others, it may be in relation to the spaces in the building near which it was installed.
- B. Contractor shall provide additional drawings as necessary for clarification.
- C. Contractor shall provide reproducible record drawings, made from final Shop Drawings marked "No Exceptions Taken" or "Approved as Noted."

PART 3 - RECORD SPECIFICATIONS

3.01 GENERAL

- A. Specifications: Contractor shall legibly mark and record at each product section of the Specifications the description of the actual product(s) installed, including the following:
- (1) Manufacturer's name and product model and number.
 - (2) Product substitutions or alternates utilized.
 - (3) Changes made by Addenda and Change Orders and written directives.

PART 4 - MAINTENANCE OF RECORD DOCUMENTS

4.01 GENERAL

- A. Contractor shall store Record Documents apart from documents used for construction:
- (1) Provide files and racks for storage of Record Documents.
 - (2) Maintain Record Documents in a clean, dry, legible condition and in good order.
- B. Do not use Record Documents for construction purposes.

PART 5 – PRODUCTS Not Used

END OF DOCUMENT