

Division I – General Requirements

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SECTION 011100- SUMMARY OF WORK

PART 1 GENERAL

1.1 SECTION INCLUDES:

- A. Work Covered by Contract Documents.
- B. Work by Others.
- C. Contractor Use of Premises.

1.2 WORK COVERED BY CONTRACT DOCUMENTS:

- A. Outline of Work: The work to be performed by Contractor shall conform to the requirements of the Contract Documents, including but not limited to, the General Conditions, specifications, drawings, and other related documents, and include the furnishing of all labor, materials, tools, equipment, plant, and services necessary therefore and incidental thereto to complete the project. **The work shall consist of, but not limited to the Electrical & Mechanical upgrades as defined on plans.**  
Note; **HVAC Units, Air Compressor and Dust Collector are Owner Furnished Contractor Installed (OFCI) as noted on M2.1 and E2.1**
- B. Project Completion Date: All work shall be completed within **90** calendar days after the construction start date specified in the Notice to Proceed.
- C. Work Not Included: Except for such auxiliary work as shown or specified, or is necessary as part of the construction, the following is NOT included in this contract: Any work shown but marked "Not In Contract" (NIC) or otherwise designated to be done under another Contract or by the District.
- D. Location of Site: The site of the work is located at 3835 Freeport Blvd, Sacramento, CA 95822.

1.3 CONTRACT METHOD

- A. Construct the Work under a single Lump Sum Contract.

1.4 CONTRACTOR USE OF PREMISES

- A. Contractor shall have use of the premises as described in the Construction drawings for access to and the execution of the Work. Portion of the site beyond areas in which construction operations are indicated are not to be disturbed.
- B. Coordinate use of the premises with the acceptance of the District's Project Manager.
- C. Assume full responsibility for the protection and safekeeping of products under this Contract, stored on the site.
- D. Schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site.
- E. Move any stored products under Contractor's control which interfere with the operations of the District or a separate contractor.

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- F. Obtain and pay for the use of additional storage or work areas needed for operations.
- G. Contractor shall assume all responsibility for parking his own and his subcontractors' vehicles.

**1.5 SURROUNDING SITE CONDITION SURVEY**

- A. Prior to commencing the work, the Contractor will implement all necessary provisions of the Special Project Procedures, Section 01 35 00. Contractor shall strictly follow these procedures at all times.
- B. Prior to commencing the work, the Contractor, and District's representative shall tour the site together to examine and record damage to existing adjacent improvements. Provide photographs as record. This record shall serve as a basis for determination of subsequent damage due to the Contractor's operations and shall be signed by all parties making tour. Any cracks, sags, or damage to the improvements not noted in the original survey, but subsequently discovered, shall be reported to the District's Representative.

**1.6 DISTRICT-FURNISHED ITEMS**

- A. The District may provide equipment, furniture or casework as indicated in drawings. The Work under this contract includes providing support systems to receive District's equipment, casework, and provide mechanical and electrical connections. Installation is included as part of Work under this Contract.
  - 1. The District will arrange and pay for delivery of District-furnished items and will inspect deliveries for damage.
  - 2. The Contractor is responsible for receiving, unloading and handling District-furnished items at the site.
  - 3. The Contractor is responsible for protecting District-furnished items from damage, including damage from exposure to the elements, and to repair or replace items damaged as a result of his operations.
- B. The Contractor shall inform District in writing of Contractor requested delivery dates of District-furnished items. The Contractor is responsible for designating the delivery dates of District-furnished items in the Contractor's Construction Schedule. These delivery dates are to be based on a mutually agreed-upon schedule between the District and the Contractor.

END OF SECTION

**SECTION 012100 - ALLOWANCES**

**PART 1 – GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

- A. Section includes administrative and procedural requirements governing allowances.
  - 1. Contingency Allowances have been established for the following items:
    - a. Unforeseen work associated with Construction Project Delivery.
  - 2. Contingency Allowances are to be included in the base bid.

**1.3 INFORMATIONAL SUBMITTALS**

- A. Submit time sheets and other documentation to show labor time and cost for allowance items.
- B. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

**1.4 COORDINATION**

- A. Coordinate allowance items with other portions of the Work.

**1.5 CONTINGENCY ALLOWANCES**

- A. Use the contingency allowance only as directed by Owner's Representative for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include insurance, equipment rental, and similar costs.
- C. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

1.6 ADJUSTMENT OF ALLOWANCES

- A. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has changed from what could have been foreseen from information in the Contract Documents.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PREPARATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.2 SCHEDULE OF ALLOWANCES

- A. Contingency Allowance No. 2: Include a contingency allowance of \$20,000 for use according to Owner's written instructions for unforeseen Construction Project Delivery.

END OF SECTION 012100

SECTION 012300 - ALTERNATES

PART 1 GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specifications Sections, apply to this Section.

1.2 SUMMARY:

- A. This Section includes administrative and procedural requirements governing Alternates.

1.3 DEFINITIONS

- A. Definition: An alternate is an amount proposed by bidders and stated on the Bid Form, for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the District decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. The cost for each Alternate is the net change to the Contract Sum to incorporate the Alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent Work as necessary to completely and fully integrate that Work into the Project.
  - 1. Include as part of each Alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.
- B. Notification: Immediately following the award of the Contract, notify each party involved, in writing, of the status of each Alternate. Indicate whether Alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to Alternates.
- C. Execute accepted Alternates under the same conditions as other Work of this Contract.
- D. Schedule: A "Schedule of Alternatives" is included at the end of this Section. Specifications Sections referenced in the Schedule contain requirements for materials necessary to achieve the Work described under each Alternate.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.01 SCHEDULE OF ALTERNATES

A. ALTERNATE NO. 1:XXX.

B. ALTERNATE NO. 2:XXX.

- C. ALTERNATE NO. 3:XXX.
- D.

END OF SECTION

**SECTION 012500 - SUBSTITUTION PROCEDURES**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. This Section specifies administrative and procedural requirements for handling requests for substitutions.
- B. A sample substitution Request Form is included at the end of this Section. This form will also be used for "Or Approved Equal", and "Approved Equal" requests. Similar requirements for approving "Or Approved Equal", and "Approved Equal" are required as indicated in this Section for substitutions.

**1.2 DEFINITIONS**

- A. Definitions used in this Section are not intended to change or modify the meaning of other terms used in the Contract Documents.
- B. Substitutions: Requests for changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by the Contractor after award of the Contract are considered requests for "substitutions." The following are not considered substitutions:
  - 1. Revisions to Contract Documents requested by the District or Architect.
  - 2. Specified options of products and construction methods included in Contract Documents.
  - 3. The Contractor's determination of and compliance with governing regulations and orders issued by governing authorities.
- C. "Or Approved Equal": Whenever, in Contract Documents, any material, process or article is indicated or specified by patent or proprietary name and/or by name of manufacturer, and is followed by the words "or equal" such name shall be deemed to be used for purpose of facilitating description of material and/or process desired, and Contractor may offer any material or process which shall be equal in every respect to that so indicated or specified; provided, however, that if material, process or article offered by Contractor is not, in opinion of Architect, equal in every respect to that specified, then Contractor must furnish material, process or article specified.

**1.3 SUBMITTAL**

- A. Substitution Request Submittal: Requests for substitution will only be considered if received within 30 days after the date of the Contract. Substitutions may be considered after the 30 day period when a product becomes unavailable through no fault of the Contractor.
  - 1. Submit 3 copies of each request for substitution for consideration. Submit requests in the form and in accordance with procedures required for Change Order proposals.
  - 2. Identify the product, or the fabrication or installation method to be replaced in each request. Include related Specification Section and Drawing numbers. Provide complete documentation showing compliance with the requirements for substitutions, and the following information, as appropriate:

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- a. Product Data, including Drawings and descriptions of products, fabrication and installation procedures.
  - b. Samples, where applicable or requested.
  - c. A detailed comparison of significant qualities of the proposed substitution with those of the Work specified. Significant qualities may include elements such as size, weight, durability, performance, warranty and visual effect.
  - d. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by the District and separate Contractors that will become necessary to accommodate the proposed substitution.
  - e. A statement indicating the substitution's effect on the Contractor's Progress Schedule compared to the schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
  - f. Cost information, including a proposal of the net change, if any in the Contract Sum, including detailed cost differences with documentation supporting each item of costs.
  - g. Certification by the Contractor that the substitution proposed is equal-to or better in every significant respect to that required by the Contract Documents, and that it will perform adequately in the application indicated. Include the Contractor's waiver of rights to increases in the Contract Sum or Contract Time, that may subsequently become necessary because of the failure of the substitution to perform adequately, or any additional cost associate to substitution required to conform to design intent.
3. Architect's Action: The Architect will notify the Contractor of acceptance or rejection of the proposed substitution. If a decision on use of a proposed substitute cannot be made or obtained, Contractor shall use the product specified by name. Acceptance will be in the form of a Change Order or "minor change in work".
  4. Only one substitution request per product will be considered. If proposed substitution is not accepted by Architect, Contractor shall submit specified item.

## **PART 2 - PRODUCTS**

### **2.1 SUBSTITUTIONS**

- A. Conditions: The Contractor's substitution request will be received and considered by the Architect when one or more of the following conditions are satisfied, as determined by the Architect; otherwise requests will be returned without action except to record noncompliance with these requirements.
  1. Extensive revisions to Contract Documents are not required.
  2. Proposed changes are in keeping with the general intent of Contract Documents.
  3. The request is timely, fully documented and properly submitted.
  4. The request is directly related to an "or equal" clause or similar language in the Contract Documents.
  5. The specified product or method of construction cannot be provided within the Contract Time due to no act or omission of Contractor or anyone for whom Contractor is legally responsible. The request will not be considered if the product or method cannot be provided as a result of failure to pursue the work promptly or coordinate activities properly.
  6. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
  7. A substantial advantage is offered the District, in terms of cost, time, energy conservation or other considerations of merit, after deducting offsetting

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responsibilities the District may be required to bear. Additional responsibilities for the District may include additional compensation to the Architect for redesign and evaluation services, increased cost of other construction by the District or separate Contractors, and similar considerations.

8. The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the Contractor certifies that the substitution will overcome the incompatibility.
  9. The specified product or method of construction cannot be coordinated with other materials, and where the Contractor certifies that the proposed substitution can be coordinated.
  10. The specified product or method of construction cannot provide a warranty required by the Contract Documents and where the Contractor certifies that the proposed substitution provide the required warranty.
  11. Any product or material submitted for substitution shall be tested as directed by the Architect, and the expense of such testing shall be paid by the manufacturer or vendor requesting substitution. Requests for substitutions must be accompanied with technical data, drawings, samples, literature and other detailed information as will demonstrate to the satisfaction of the Architect that the proposed substitute material, etc. is equal in quality and utility to that originally specified. If the Architect considers tests necessary to determine the quality or utility of any proposed material, etc., such tests shall be made at the expense of the Contractor by an established and unbiased testing laboratory approved by the Architect. The Architect's written approval of such substitutions must be obtained before fabrication or delivery to the site of materials, etc., other than those originally specified.
- B. The Contractor's submittal and Architect's acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the Contract Documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval.
- C. The Contractor is responsible to coordinate with all subcontractors and manufacturers of any related work associated with substitution. Acceptance of a substitution shall not relieve Contractor from responsibility for compliance with all requirements of any portion of Contract Documents, and Contractor shall be responsible, at its own expense, for any changes in other parts of the work which may be caused by substitution.
- The substitution must not invalidate warranties or guaranties related to substitution or any related work associated to substitution.
- D. All substitutions of structural materials require DSA approval.
- E. The review of any proposed substitution shall be within a reasonable time. If Contractor believes that the review of a substitution request needs to be accelerated or completed by a date certain it shall conspicuously identify such a need on the transmittal of the request, and further identify and substantiate the reasons therefore.

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

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### SUBSTITUTION REQUEST

PROJECT: \_\_\_\_\_

SPECIFIED ITEM: \_\_\_\_\_

SPECIFICATION SECTION: \_\_\_\_\_ PARAGRAPH: \_\_\_\_\_ PAGE: \_\_\_\_\_

PROPOSED SUBSTITUTION: \_\_\_\_\_

Manufacturer: \_\_\_\_\_

Product Description (model, pattern, etc.): \_\_\_\_\_

WHY IS SUBSTITUTION BEING SUBMITTED? (Select one of the following)

Pre-Bid Substitution (Prior Approval) Bid Date:

Specified product is not available. Explain.

Cost savings to Owner. Indicate comparative cost analysis.

Other. Explain.

Per Section 012500 Substitution Procedures, attached data includes the following for evaluation of the request:

Product, fabrication, installation description.

Drawings and specifications.

Photographs and/or samples, as applicable or requested.

Performance and Test Data.

Side by side comparison of major components of the specified and proposed product:

○ Weight

○ Warranty

○ Durability

○ Visual effect

○ Performance

○ Other significant qualities. Explain.

Description of changes to the Contract Documents which the proposed substitution will require for proper installation. Explain.

The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:

1. The proposed substitution does not affect dimensions shown on drawings.
2. The undersigned will pay for changes to the building design, including engineering design, detailing and construction cost caused by the requested substitution.
3. The proposed substitution will have no adverse effect on other trades, the construction schedule or specified warranty requirements.
4. Maintenance and service parts will be locally available for the proposed substitution.

The undersigned further states that the function, appearance and quality of the proposed substitution are equivalent or superior to the specified item.

SUBMITTED BY:

Sub-Contractor's Signature: \_\_\_\_\_

Company: \_\_\_\_\_

Contractor's Signature: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Date: \_\_\_\_\_

Attachments: \_\_\_\_\_

For use by the design consultant

\_\_\_\_\_ Accepted

\_\_\_\_\_ Accepted as noted

\_\_\_\_\_ Not Accepted

By: \_\_\_\_\_

Remarks: \_\_\_\_\_

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SECTION 012600-CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. This section specifies administrative and procedural requirements for handling and processing Contract modifications.

1.2 MINOR CHANGES IN THE WORK

- A. Supplemental instructions authorizing minor changes in the work, not involving an adjustment to the Contract Sum or Contract Time, will be issued by the Architect and/or the District's Project Manager through the Architect on AIA form G710, Architect's Supplemental Instructions. All changes must be stamped approved by DSA.

1.3 CHANGE ORDER PROPOSAL REQUESTS

- A. District-Initiated Proposal Requests: Proposed changes in the work that will require adjustment to the Contract Sum or Contract Time will be issued by the Architect, with a detailed description of the proposed change and supplemental or revised Drawings and Specifications, if necessary.
  - 1. Proposal requests issued by the Architect are for information only. Do not consider them as instruction either to stop work in progress, or to execute the proposed change.
  - 2. Unless otherwise indicated in the proposal request, submit to the Architect and the District, a detailed, itemized cost breakdown for the cost necessary to execute the proposed change within 10 days of receipt of the proposal request.
    - a. Include a list of quantities of products to be purchased and unit costs, along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities and documentation to substantiate each item and sub-item of costs.
    - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    - c. Include a statement indicating the effect the proposed change in the work will have on the Contract Time and related cost for time extensions.
- B. Contractor-Initiated Change Order Proposal Requests: When latent or other unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Architect.
  - 1. Include a statement outlining the reasons for the change and the effect of the change on the work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
  - 2. Include a list of quantities of products to be purchased and unit costs along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities and documentation to substantiate each item and sub-item of costs.
  - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
  - 4. Comply with requirements in Section 01 25 00 Substitution Procedures if the proposed change in the work requires the substitution of one product or system for

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- a product or system specified.
- 5. The Architect shall review the Contractor's Change Order proposal request with the District, and submit a written response to the Contractor.

#### 1.4 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: When the District and Contractor are not in total agreement on the terms of a Change Order Proposal Request, the Architect may issue a Construction Change Directive on AIA Form G714, instructing the Contractor to proceed with a change in the work, for subsequent inclusion in a Change Order. All Construction Change Directives must be stamped approved by DSA prior to implementing.
  - 1. The Construction Change Directive will contain a complete description of the change in the work and designate the method to be followed to determine change in the Contract Sum or Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
  - 1. Documentation of Time and Materials work shall be submitted by the Contractor to the Project Inspector on a daily basis and, if approved, shall be signed by the Project Inspector.
    - a. Contractor shall provide 48 hour notice to the Project Inspector prior to starting Time and Materials work.
  - 2. After completion of the change, submit to the Architect an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

#### 1.5 CONTRACT ADJUSTMENTS

- A. Adjustments, if any, in the amount to be paid the Contractor by reason of the modifications of the work as set forth in a Contract Change Order, or Construction Change Directive, shall be determined by one or more of the cost adjustment methods outlined in the Changes Section of the General Conditions.

#### 1.6 CHANGE ORDER PROCEDURES

- A. Upon the District's approval of a Change Order Proposal Request, the Architect will issue a Change Order for signatures of the District and Contractor on AIA Form G701, or similar. All change orders must be stamped approved by DSA prior to proceeding with the work of the change order.
- B. All Change orders will contain the following statement and must be acknowledged by Contractor on each Change Order:

This Change Order is full and complete compensation for Contractor and everyone for whom Contractor is legally responsible, including but not limited to, subcontractors and sub-subcontractors, for all work described, arising from or inferable herein, including but not limited to costs for delays, impact, inefficiency, acceleration, home office overhead (absorbed, unabsorbed and underabsorbed), field office overhead, lost profits, lost opportunity, claim preparation costs, change order preparation costs, direct costs, indirect costs, or any other costs, no matter how characterized. Any attempt by Contractor or anyone for whom it is legally responsible, to limit, alter or modify this Change Order may nullify the Change Order.

**1.7 UNILATERAL CHANGE ORDERS**

It is the intent of the District to have change orders issued bilaterally. However, the District recognizes that there may arise one or more instances where bilateral agreement cannot be reached with the Contractor with regards to a change in contract sum and/or time. If, after the Contractor has submitted its cost and time proposal, and the District and the Contractor fail to successfully negotiate and agree on a time and/or cost for the proposed Change Order, the District may issue a unilateral Change Order to the Contractor in the amount that the District believes is due and the Contractor must proceed with the changed work. If the Contractor disputes any portion of the unilateral Change Order, the Contractor must maintain time and materials records as required by Article 26 of the General Conditions. Failure to create and maintain such records and/or timely submits them, or otherwise to comply with the express provisions of the General Conditions, shall operate as a waiver of the right of Contractor to receive any additional time and/or money for the performance of the unilateral Change Order.

End of Section

**SECTION 01 29 76 - PROGRESS PAYMENT PROCEDURES**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Procedures for preparation and submittal of applications for payment.

**1.2 SCHEDULE OF VALUES**

- A. See Section 01 32 16, Construction Progress Schedule

**1.3 APPLICATIONS FOR PAYMENT**

- A. Each Application for Payment shall reflect previous applications and payments.
  - 1. The initial Application for Payment and the final Application for Payment involve additional requirements.
  - 2. All Applications for Payment shall include only materials that have been delivered to the site. Materials that have not been delivered to the site shall not be included in any Application for Payment.
- B. Payment Application Times: The District shall pay monthly to the Contractor, subject to the terms and conditions set forth in these Contract Documents.
  - 1. All materials and work covered by partial payments made shall thereupon become the sole property of the District, but this provision shall not be construed to relieve the Contractor for the sole responsibility for the care and protection of materials and work upon which payments have been made or the restoration for any damaged work, or as a waiver of the right of the District to require the fulfillment of all of the terms of the Contract.
- C. Payment Application Forms: Use AIA Documents G 702 and Schedule of Values as the form for Application for Payment.
  - 1. The following schedules are attached at the end of this section and incorporated herein, and made a part of each Application for Payment.
    - a. EXHIBIT A: List of Subcontractors (provided services during payment period)
    - b. EXHIBIT B: Subcontractor's Unconditional Waiver and Release upon Final Payment (if applicable).
    - c. EXHIBIT C: Contractor's Unconditional Waiver and Release upon Final Payment
- D. Application Preparation: Complete every entry on the form, including notarization and execution by person authorized to sign legal documents on behalf of the Contractor. Incomplete applications will be returned without action.
  - 1. The Contractor shall prepared a tabular report from the current Monthly Schedule Update This report shall include the following information for each activity:
    - a. Activity ID Number
    - b. Activity Description
    - c. Prior Month's Percent Complete
    - d. Current Percent Complete

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- e. Total Budgeted Cost
    - f. Cost Completed To Date
    - g. Other Activity Codes As Directed By The District's Project Manager
    - h. The Report Shall Be Organized By Activity Codes As Directed By The District's Project Manager
  2. Include amounts of Change Orders duly executed by all parties prior to the date of the application.
  3. Provide applicable exhibits.
  4. District's Inspector and/or Project Manager must review and accept the percentages for work completed prior to submission to Architect. The Project Manager's initials must be on each page of the payment application forms.
  5. The amount of each progress payment shall be computed as follows:
    - a. Add that portion of the Contract Sum allocable to the work that is completed to date determined by multiplying the percentage of completion of each portion of the work against the budgeted cost;
    - b. Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for later incorporation into the work (note: only materials and equipment stored at the site are eligible to be billed and paid for);
    - c. Less the total of all payments made previously by the Owner;
    - d. Less the amount, if any, withheld pursuant to Part 1.5 of this Specification Section; and
    - e. Less the amount withheld for retention.
- E. Transmittal: Submit 4 complete, executed copies of each Application for Payment to the Architect.
  1. Transmit each application for payment with a transmittal form listing attachments, and record appropriate information related to the application in a manner acceptable to the Architect.
  2. A District payment schedule may be provided to the Contractor at the preconstruction meeting. Allow a minimum of ten (10) working days for the Architect and the District to process the Application for Payment.
- F. Initial Application for Payment: Administrative actions and submittals (as applicable) that must precede or coincide with submittal of the first Application for Payment include the following:
  1. List of subcontractors.
  2. List of principal suppliers and fabricators.
  5. Schedule of principal products.
  6. Submittal Schedule.
  7. List of Contractor's staff assignments.
  8. List of Contractor's principal consultants.
  9. Copies of permits.
  10. Copies of authorization permits and licenses from governing authorities for performance of the work.
  11. Initial progress report.
  12. Report of pre-construction meeting.
  13. Certificates of insurance and insurance policies.
  14. Performance and payment bonds.
  15. Data needed to acquire District's insurance.
  16. Initial settlement survey and damage report, if required.
- G. Final Payment Application: Administrative actions and submittals (as applicable) which must precede or coincide with submittal of the final payment Application for Payment

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include the following:

1. Permits and approvals.
2. Warranties (guarantees) and maintenance agreements.
3. Test/adjust/balance records.
4. Maintenance instructions.
5. Meter readings.
6. Start-up performance reports.
7. Change-over information related to District's occupancy, use operation and maintenance.
8. Final cleaning.
9. Application for reduction of retainage, and consent of surety.
10. Advice on shifting insurance coverages.
11. Completion of Project close-out requirements.
12. Completion of items specified for completion after Completion.
13. Assurance that unsettled claims will be settled.
14. Assurance that work not complete and accepted will be completed without undue delay.
15. Transmittal of required Project construction records to District.
16. Proof that taxes, fees and similar obligations have been paid.
17. Removal of temporary facilities and services.
18. Removal of surplus materials, rubbish and similar elements.
19. Unconditional Waiver and Release forms Exhibits Band C.

- H. Final Retention Payment: Final retention payment to the Contractor shall become due forty (40) days after recordation of a Notice of Completion by the District Board of Trustees. Notice of Completion will be submitted to the Board of Trustees at their first meeting after all work has been complete, inspected and accepted by the Architect and District, and the Contractor has submitted the following information to the District:

1. Affidavit that all payrolls, bills for materials and equipment and any other indebtedness connected with the work for which the District might in any way be responsible, have been paid or otherwise satisfied.
2. Release of all Stop Notices arising out of the Contract.

- I. Acceptance of Final Payment shall constitute waiver of all claims by the Contractor except those previously made in writing and specifically identified as unresolved in a writing presented with request for final payment.

### 1.4 PAYMENT RETENTION

- A. The District shall retain five percent (5%) of payment as it falls due to ensure performance of all work covered by this agreement.

### 1.5 PAYMENT WITHHELD

- A. District reserves the right to withhold all or any part, of an Application for Payment whether certified or not by the Architect, all or part of a previous Certificate for Payment may be nullified and that amount withheld from a current Application for Payment for reasons as outlined below:

1. Defective work not remedied;
2. Third-party claims against Contractor or District arising from the acts or omissions of Contractor or subcontractors;
3. Stop notices;
4. Failure of Contractor to make timely payments due to subcontractors for material or labor;

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5. A reasonable doubt that the work can be completed for the balance of the Contract Sum then unpaid;
6. Damage to the District or others for which Contractor is responsible;
7. Reasonable evidence that the work cannot be completed within the Contract Time and the unpaid balance of the Contract Sum would not be adequate to cover District's damages for the anticipated delay;
8. Liquidated damages assessed;
9. Any other failure of Contractor to perform its obligations under the Contract Documents.

### 1.6 SECURITY DEPOSIT IN LIEU OF WITHHOLD

- A. Pursuant to the Public Contract Code of the State of California, Section 22300, the Contractor may substitute a deposit of securities in lieu of the District withholding any monies from the total amount of the performance by the Contractor as set forth in the estimate prepared by the Architect under the provisions of Section 13 of said contract code.
1. At the request and expense of the Contractor, securities having a value equivalent to or greater than the amount to be withheld may be deposited with Bank of Sacramento as escrow agent payable either in whole or in part to the District upon demand and certification by the District that the Contractor has defaulted in the performance of his obligation under Contract and setting forth the amount of said security needed to satisfy the completion of the obligation of the Contractor.
  2. Securities eligible for investment under this Section shall include those listed in Section 16430 of the Government Code, and bank or savings & loan certificates of deposit.
  3. The Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive interest thereon.
  4. Any escrow agreement entered into pursuant to this provision shall be essentially on the forms set forth below.
  5. See the following forms attached to the Instructions to Bidders section of these documents:
    - a. Escrow Agreement for Security Deposit in lieu of retention
    - b. EXHIBIT A: Certification of Deposit of Securities (if applicable)
    - c. EXHIBIT B: Authorization to Release Securities Deposited by Contractor (if applicable)
    - d. EXHIBIT C: Notification of Failure of Performance (if applicable)
    - e. EXHIBIT D: Certification of Current Market Value of Securities in Escrow (if applicable)

### PART 2 PRODUCTS

Not Used

### PART 3 EXECUTION

Not Used

END OF SECTION  
SEE FOLLOWING PAGES FOR FORMS

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EXHIBIT B

PROJECT NAME: \_\_\_\_\_  
CONTRACTOR: \_\_\_\_\_  
PROJECT NUMBER: \_\_\_\_\_  
APPLICATION NUMBER: \_\_\_\_\_

SUBCONTRACTOR'S  
UNCONDITIONAL WAIVER AND  
RELEASE UPON FINAL PAYMENT

NOTICE: THIS DOCUMENT WAIVES RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL RELEASE FORM.

The undersigned has been paid in full for all labor, services, equipment, or material furnished to

\_\_\_\_\_ (Name of Contractor or Subcontractor)  
on the subject Project of the Los Rios Community College District located at

\_\_\_\_\_ (Facility and Project Name)  
and does hereby waive and release any claims, liens, and stop notice rights, and any rights against a  
labor and material bond on the subject Project, except for disputed claims for extra work in the amount of

\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

Dated: \_\_\_\_\_  
\_\_\_\_\_ (Company Name)

By: \_\_\_\_\_  
\_\_\_\_\_ (Name)

\_\_\_\_\_  
\_\_\_\_\_ (Title)

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EXHIBIT C

PROJECT NAME \_\_\_\_\_  
CONTRACTOR: \_\_\_\_\_  
PROJECT NUMBER: \_\_\_\_\_  
APPLICATION NUMBER: \_\_\_\_\_

CONTRACTOR'S  
UNCONDITIONAL WAIVER AND  
RELEASE UPON FINAL PAYMENT

NOTICE: THIS DOCUMENT WAIVES RIGHTS UNCONDITIONALLY AND STATES THAT YOU HAVE BEEN PAID FOR GIVING UP THOSE RIGHTS. THIS DOCUMENT IS ENFORCEABLE AGAINST YOU IF YOU SIGN IT, EVEN IF YOU HAVE NOT BEEN PAID. IF YOU HAVE NOT BEEN PAID, USE A CONDITIONAL RELEASE FORM.

The undersigned has been paid in full for all labor, services, equipment, and material furnished on the subject Project of the Los Rios Community College District located at

\_\_\_\_\_ (Facility and Project  
Name) and does hereby waive and release any claims, liens, and stop notice rights, except for disputed  
claims for extra work in the amount of

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

Dated: \_\_\_\_\_  
\_\_\_\_\_ (Company Name)

By: \_\_\_\_\_  
(Name)  
\_\_\_\_\_  
(Title)

END OF SECTION

**SECTION 013113 - PROJECT COORDINATION**

**PART 1 GENERAL**

**1.1 COORDINATION**

- A. Coordinate scheduling, submittals, and work of the various Sections of Specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Coordinate and implement early installation of telephone route, cabling and operation, and electrical transformer and switchboard as annotated on drawings.
- C. Verify that utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs. See paragraph 1.3 below.
- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate space requirements and installation of certain artifacts which are installed by contractor and/or District with District Project Manager well in advance of actual construction activities in area of installation.
- G. Coordinate completion and clean up of work of separate Sections in preparation for completion.
- H. After District occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of District's activities.

**1.2 ELECTRICAL AND MECHANICAL COORDINATION**

- A. Routing and Coordination of HVAC, Mechanical, Fire Sprinkler, Plumbing and Electrical Installations:
  - 1. The Contractor shall schedule and coordinate the work of all subcontractors having installation responsibilities within the work space, of all the new and remodeled space both with respect to the sequence of work and the allocation of space among the trades. The Contractor's construction schedule shall clearly indicate the planned sequence of work in such areas and any proposed departure from it affecting or potentially affecting coordination of the overall installation shall be brought promptly, in writing, to the attention of the District's Representative.
  - 2. The Contractor shall prepare or have prepared detailed shop drawings in plan view, with cross-sections as necessary, indicating his/her proposed installation plan for all HVAC, mechanical, fire sprinkler, plumbing, and electrical installations

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within the area of all the new and remodeled space. These drawings should depict actual elevations and linear dimensions, and all routing changes, transitions, and major offsets deemed necessary to accomplish the installation. Individual shop drawings may be prepared for each trade working within the designated space or area; however, the coordination of the consolidated installation shall remain the responsibility of the Contractor. These shop drawings shall be submitted to the District's Representative for review prior to commencement of installation, and shall be provided to each subcontractor having work in the area.

3. Should unavoidable conflicts be encountered during the preparation or review of the shop drawings, or during construction, they shall be promptly brought to the attention of the District's Representative, in writing, for resolution. Failure of Contractor to properly plan, sequence, coordinate, layout or schedule the work, does not constitute an unavoidable conflict.
4. Where the drawings are diagrammatic, showing only the general arrangement of the systems, the Contractor shall have responsibility for the fitting of materials and equipment to other parts of the equipment and structure, and to make adjustments as necessary or required to resolve space problems, preserve service room, and avoid architectural and structural elements and the work of other trades. The Contractor may be required to identify certain areas to relocate installations within the spaces depicted on the drawings; i.e., ductwork may be shifted within the space shown to accommodate other systems. Such functional relocations shall not be deemed a change to the requirements of the contract. In the event of a major re-routing of a system appears necessary, the Contractor shall prepare and submit for approval, shop drawings of the proposed rearrangement.
5. Because of the diagrammatic nature and small scale of the drawings, all necessary offsets, adjustments, and transitions required for the complete installation are not shown and are the responsibility of Contractor. The Contractor shall carefully investigate the structural and finish conditions affecting all his work and shall arrange such work accordingly, furnishing such fittings, equipment, valves, accessories, etc., as may be required to meet such conditions, at no additional cost.

### 1.3 UTILITIES AND IRRIGATION LINES

- A. Send proper notices, make necessary arrangements, perform other services required in construction, care and maintenance of all utilities and irrigation lines and assume all responsibility concerning same. Provide necessary protection to existing utility services and irrigation lines and repair any work damaged as a result of operations of the contract.

### PART 2 - PRODUCTS (Not Applicable).

### PART 3 - EXECUTION

#### 3.1 GENERAL INSTALLATION PROVISIONS

- A. Inspection of Conditions: Require the installer of each major component to inspect both the substrate and conditions under which work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.
- B. Manufacturer's Instructions: Comply with manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in Contract Documents.

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- C. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.
- D. Provide attachment and connection devices and methods necessary for securing work. Secure work true to line and level. Allow for expansion and building movement.
- E. Visual Effects: Provide uniform joint widths in exposed work. Arrange joints in exposed work to obtain the best visual effect. Refer questionable choices to the Architect for final decision.
- F. Recheck measurements and dimensions, before starting each installation.
- G. Install each component during weather conditions and Project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.
- H. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.
- I. Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application indicated. Refer questionable mounting height decisions to the Architect for final decision.

### 3.2 CLEANING AND PROTECTION

- A. During handling and installation of work at the project the Contractor shall, clean and protect work in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration.
- B. Clean and perform maintenance on installed work as frequently as necessary through the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- C. Preserve and maintain trees and other vegetation on site.
- D. Limiting Exposures: Contractor shall supervise performance of the work in such a manner and by such means which will ensure that none of the work, whether completed or in progress, will be subjected to harmful, dangerous, damaging or otherwise deleterious exposure during the construction period. Such exposure includes, where applicable, but not by way of limitation the following:

- Static or dynamic loading.
- Internal or external pressures.
- High or low temperatures.
- Thermal shock.
- High or low humidity.
- Air contamination or pollution.
- Water or ice.
- Solvents.
- Chemicals.
- Light.
- Radiation.
- Puncture.
- Abrasion.
- Heavy traffic.



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Soiling.  
Bacteria.  
Insect and animal infestation.  
Combustion.  
Electrical current.  
High speed operation, improper lubrication, unusual wear or other misuse.  
Incompatible interface.  
Destructive testing.  
Misalignment.  
Weathering.  
Unprotected storage.  
Improper shipping or handling  
Theft.  
Vandalism.

END OF SECTION

**SECTION 013119 - PROJECT MEETINGS**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. This Section specifies administrative and procedural requirements for project meetings including but not limited to:
  - 1. Pre-Construction Conference.
  - 2. Pre-Installation Conferences.
  - 3. Coordination Meetings.
  - 4. Progress Meetings.
- B. Construction schedules are specified in another Division-1 Section.

**1.2 PRE-CONSTRUCTION CONFERENCE**

- A. The District will schedule a pre-construction conference and organizational meeting at the Project site or other convenient location no later than 15 days after execution of the Contract and prior to commencement of construction activities. Conduct the meeting to review responsibilities and personnel assignments.
- B. Attendees: The District representatives, Architect and their consultants, the Contractor and its superintendent, major subcontractors, manufacturers, suppliers and other concerned parties shall each be represented at the conference by persons familiar with and authorized to conclude matters relating to the work.
- C. Agenda: Discuss items of significance that could affect progress including such topics as:
  - 1. Designation of personnel representing the parties in Contract.
  - 2. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract close-out procedures.
  - 3. Scheduling and Contractor's Progress Schedule.
  - 4. Scheduling activities of geotechnical Engineer, and testing lab services.
  - 5. Use of premises by District and Contractor.
  - 6. District's requirements.
  - 7. Survey and building layout.
  - 8. Security and housekeeping procedures.
  - 9. Procedures for maintaining record documents.
  - 10. Requirements for start-up of equipment.
  - 11. Inspection and acceptance of equipment put into service during construction period.

**1.3 PRE-INSTALLATION CONFERENCES**

- A. Conduct a pre-installation conference at the site before each construction activity that requires coordination with other construction. The Installer and representatives of manufacturers and fabricators involved in or affected by the installation, and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise the Architect and District's project manager and/or inspector of scheduled meeting dates at least 48 hours in advance of the meeting dates.

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1. Review the progress of other construction activities and preparations for the particular activity under consideration at each pre-installation conference, including requirements for:
  - a. Contract Documents.
  - b. Options.
  - c. Related Change Orders.
  - d. Purchases
  - e. Deliveries.
  - f. Shop Drawings, Product Data and quality control Samples.
  - g. Possible conflicts.
  - h. Compatibility problems.
  - i. Time schedules.
  - j. Weather limitations.
  - k. Manufacturer's recommendations.
  - l. Compatibility of materials.
  - m. Acceptability of substrates.
  - n. Temporary facilities.
  - o. Space and access limitations.
  - p. Governing regulations.
  - q. Safety.
  - r. Inspection and testing requirements.
  - s. Required performance results.
  - t. Recording requirements.
  - u. Protection.
2. Record significant discussions and agreements and disagreements of each conference, along with the approved schedule. Distribute the record of the meeting to everyone concerned, promptly, including the District and Architect.
3. Do not proceed if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of work and reconvene the conference at the earliest feasible date.

### 1.4 COORDINATION MEETINGS

- A. Conduct Project coordination meetings. These meetings shall be scheduled weekly convenient for all parties involved. Project coordination meetings maybe held at same time of meetings as regular progress meetings and special pre-installation meetings.
- B. Request representation at each meeting by every party currently involved in coordination or planning for the construction activities involved. District's inspector, project manager, and Architect shall be invited, but not required to attend these meetings.
- C. Record meeting results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

### 1.5 PROGRESS MEETINGS

- A. Conduct progress meetings at the Project site weekly. Notify the District project manager and inspector, and Architect of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request.
- B. Attendees: In addition to representatives of the District and Architect, each subcontractor, supplier or other agency concerned with current progress or involved in planning, coordination or performance of future activities shall be represented at these meetings by

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persons familiar with the Project and authorized to conclude matters relating to progress.

- C. Agenda: Contractor shall develop and distribute an agenda at least 24 hours in advance of meeting. The Agenda should include a review, and approve of minutes of the previous progress meeting. Review other items of significance that could affect progress and topics for discussion as appropriate to the current status of the Project.
  - 1. Contractor's Progress Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Progress Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
  - 2. Review the present and future needs of each entity present, including such items as:
    - a. Interface requirements.
    - b. Time.
    - c. Sequences.
    - d. Deliveries.
    - e. Off-site fabrication problems.
    - f. Access.
    - g. Site utilization.
    - h. Temporary facilities and services.
    - i. Hours of Work.
    - j. Hazards and risks.
    - k. Housekeeping.
    - l. Quality and Work standards.
    - m. Change Orders.
    - n. Documentation of information for payment requests.
- A. Reporting: No later than 3 days after each progress meeting date, distribute copies of minutes of the meeting to each party present and to other parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
  - 1. Schedule Updating: Revise the progress schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION

**SECTION 013123- COMMUNICATION – PROJECT WEBSITE**

**PART 1 - GENERAL**

**1.1 INTRODUCTION**

- A. This Communication Specification is intended to outline the communication for the project. The project team will use Autodesk Constructware® (Constructware®) for communication and collaboration. All usage of Constructware® is to strictly adhere to the procedures defined in this specification.
- B. The following abbreviations are used throughout this document in order to describe the roles and responsibilities of each party:
  - 1. Los Rios – (Los Rios Community College District) Project Owner
  - 2. A/E Firm – (Architect/Engineer) The design team
  - 3. GC Firm – (General Contractor) The general contractor

**1.2 SYSTEM REQUIREMENTS**

- A. Overview - The General Contractor is required to provide computer hardware that meets the requirements of Constructware® project management system, at both field office and home office location(s) from where this project is managed. Constructware® software and licenses to use the project database will be provided by Los Rios for the duration of the project. The hardware and browser software required to access this system via the Internet is to be provided by all parties. Licenses to Los Rios's database will permit access only to the projects the party is working on, in accordance with permission levels configured by Los Rios's Constructware® Administrator.
- B. Equipment
  - 1. Pentium based (or equivalent) workstation or laptop.
  - 2. A 32-bit operating system such as Windows XP, 2000, 98 or Windows NT.
  - 3. Microsoft's Internet Explorer 6.0 or higher browser software that supports HTML 1.1, Tables, Cookies, JavaScript, and Frames. If any of the computers do not have Internet Explorer 6.0 or higher installed, it may be downloaded for free by accessing [www.microsoft.com](http://www.microsoft.com).
  - 4. There is a one-time install of Java Runtime Environment (JRE) software utilized by portions of Constructware®.
  - 5. There is a one-time install of an ActiveX upload component
- C. Connectivity
  - 1. A high-speed Internet connection (Cable, DSL, or comparable substitute) will be required at all locations from which the project will be managed. The GC Firm is responsible for supplying the lines at the project site (for themselves, IOR and CM/PM).
  - 2. The Constructware® site may be accessed through RIM's Blackberry™ technology. A one-time download of the Constructware® Blackberry™ offering is available in the Online Help section of Constructware®.
- D. User Requirements
  - 1. All users shall have a unique and valid e-mail address.

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2. Constructware® licenses to use the database will be provided by Los Rios for all users that require access. Licenses will permit access only to projects that the company is working on in accordance with permission levels set by the Los Rios Constructware® Administrator. Requests for new user licenses shall be submitted to the Los Rios Project Manager.
3. Company and contact information will be managed in the site by the Los Rios Constructware® Administrator. All parties are responsible for ensuring that the information is accurate. Submit all company and contact information and revisions to the Los Rios Project Manager.
  - a. Participating team members shall have a license and access to Constructware assigned to their company. Licenses and passwords shall also be confidential. Additional licenses per Company are at the discretion of the Los Rios Constructware® Administrator.
  - b. All users shall log into Constructware® as needed (unless otherwise dictated by project requirements) while the project is ongoing to check for messages and outstanding items.
  - c. All parties shall notify the Los Rios Constructware® Administrator within forty-eight (48) hours when an employee has been terminated that has access to Constructware®, in order to deactivate their user account.
  - d. All parties are responsible for obtaining training in the use of Constructware®. Los Rios will supply all parties with the Constructware Policies and Procedures Guide, which will demonstrate the proper use of the system. Los Rios will also offer formal Constructware® training classes during the initial implementation phase of the system.

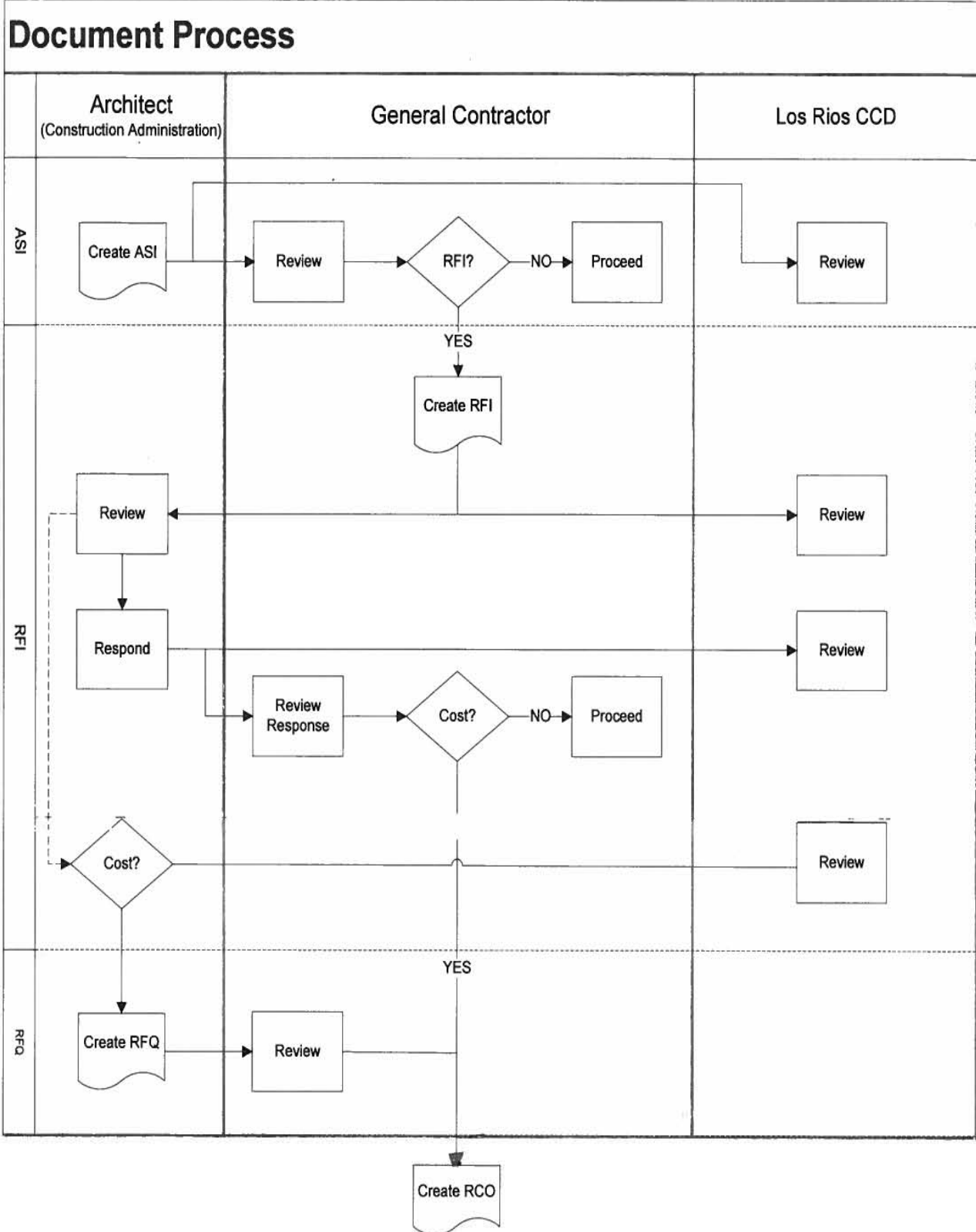
### 1.3 UPDATES

- A. Functionality Updates: Constructware® is continually modified and improved in order to enhance the product and provide additional functionality. Autodesk has many methods of alerting clients to changes, and providing support to the end users. All users are responsible for maintaining the use of the system after these modifications have been made. The following methods should be used in order to maintain this knowledge base:
- B. Constructware® Administrator Notices: Upon rolling out new functionality or changes to existing functionality, Autodesk will send out Administrator Notices informing users of the upcoming changes. These Notices contain information about what will be rolled out, the reasons for the changes or additions, and educational information about how to use the new functionality.
- C. Constructware® Preview Site: Autodesk provides all users with access to a preview site. This site is intended to allow users to practice and experiment with new functionality or changes in functionality before they are rolled out to the clients' sites. The login information for the preview site can be obtained from Los Rios's Constructware® Administrator.
- D. Autodesk Newsletter: The Autodesk Newsletter provides information and updates about Autodesk as a company, and also the product itself as well as other Autodesk products. Much of the information about product functionality that is available in the Newsletter is also available in the Constructware® Notices.
- E. Constructware® Continuing Education Webex™ Seminars: Autodesk hosts a continuing education session that is open to all users. The session reviews topics focusing on different areas of Constructware®. During functionality rollouts, these sessions will focus on the changes or additions to the product. Information about these sessions is provided in the Constructware® Notices. In addition, a calendar of topics is available on Autodesk Constructware®'s website ([www.autodesk.com/constructware](http://www.autodesk.com/constructware)).

- F. Procedural Updates: Los Rios reserves the right to update the Communication Specification based on functionality updates and or procedural changes. Updates to the Communication Specification shall be communicated to all parties.

#### 1.4 DOCUMENT MANAGEMENT

- A. General: The project will utilize Constructware's® Document Management system to generate Architectural Supplemental Instructions (ASIs) and Request for Information (RFIs). RFI's are further defined in the General Conditions, Article 9. Los Rios's Constructware® Administrator will manage the permission levels for each module and a history of activity in Document Management will automatically be generated. Users shall adhere to the following procedures regarding the use of Document Management.
- B. Overview: Los Rios allows the A/E Firm to enter instructions to the GC Firm through the Architectural Supplemental Instructions (ASIs) module. ASIs will be used to promote collaboration between the A/E Firm, GC Firm and Los Rios. In addition to ASIs, RFIs will be used as a result of an ASI between the A/E Firm and the GC Firm. Through this collaboration, potential changes to the project cost may result, which will promote the use of Request for Quote (RFQ) or Request for Change Orders (RCOs). The roles and responsibilities as to who will initiate and respond to RFIs, RFQ's and RCOs are variable, dependent on project needs, and are based on permissions. The workflow is outlined in the Constructware® Policies & Procedures Guide and shown below.





**C. Architectural Supplemental Instructions (ASIs)**

1. Constructware® allows A/E Firms to create Architect Supplemental Instructions (ASIs). ASIs are zero-cost instructions and clarification from the A/E Firm to the project team. Changes that will increase the cost of the project shall be submitted as Request for Quotes (RFQs), and not ASIs. ASIs shall be submitted after the 100% construction documents have been issued.
2. See the **Constructware Policies & Procedures Guide** for information on using the ASIs module in Constructware®.
3. Architectural Supplemental Instructions (ASIs) Roles and Responsibilities:
  - a. A/E Firm:
    - 1) All ASIs shall be created in Constructware® after the 100% construction documents have been issued. The ASI document shall be generated in Constructware®, however backup documentation created outside of Constructware® shall be attached if applicable. ASIs shall be entered in Constructware® immediately (or by the end of the business day) after the issue has occurred. Notifications of the ASI shall be made to the GC Firm and Los Rios shall be carbon copied (CC'd) for each ASI that is created.
  - b. GC Firm:
    - 1) The GC Firm shall review the ASI and will proceed with the instruction if there are no questions. After review of the ASI, if the GC Firm has a question, the GC Firm shall create a RFI in Constructware® and submit to the A/E Firm for response. The GC Firm shall notify the A/E Firm and Los Rios if an ASI will result in a cost change by issuing a Request for Change Order (RCO).
  - c. Los Rios:
    - 1) Los Rios may monitor the ASI log.

**D. Request for Information (RFIs)**

1. Constructware® allows for users from various parties to collaborate on RFIs. The RFI module allows for the GC Firm, A/E Firm, or Los Rios to submit RFIs to the appropriate responder(s), such as Los Rios, Contractor, or the A/E Firm, while copying the other parties. The responders that were selected can then submit a reply to the GC Firm, A/E Firm, or Los Rios.
2. See the Constructware Policies & Procedures Guide for information on using the RFI module in Constructware®.
3. Request for Information (RFIs): Roles and Responsibilities
  - a. A/E Firms:
    - 1) The A/E Firm shall respond to the RFI as outlined by the contract. The A/E Firm shall use the 'Notify' function to inform the RFI initiator (contractor) and Los Rios that a response has been given.

b. GC Firm:

- 1) The GC Firm shall initiate an RFI and fill in all corresponding fields. All electronic drawings and files (such as sketches or photos) shall be linked (if possible) to help explain the nature of the RFI. The State of the document shall be marked 'Active', and the status shall be marked 'Open'. Like all modules in Constructware®, the RFI shall be electronically 'Sent' to all responders through notification messaging in Constructware.
- 2) If upon receiving the formal response to the RFI by the A/E Firm, the GC Firm or Los Rios wishes to re-open the RFI, they shall change the state of the RFI to 'Locked' and create a new version of the document by revising the original RFI.
- 3) The GC Firm shall notify the A/E and Los Rios as described in Division 0 and Division 1 of Specifications if an RFI will result in a cost and/or schedule change by issuing a Request for Change Order (RCO) and notifying the A/E Firm and Los Rios.

c. Los Rios:

- 1) Los Rios may initiate an RFI using Constructware®, if needed, and shall fill in all corresponding fields. All electronic drawings and files (such as sketches or photos) shall be linked (if possible) to help explain the nature of the RFI. The state of the document shall be marked 'Active', and the status shall be marked 'Open'. Like all modules in Constructware®, the RFI shall be electronically 'Sent' to all responders through notification messaging.
- 2) If upon receiving the formal response to the RFI by the Primary Responder, the GC Firm or Los Rios wishes to re-open the RFI, they shall change the state of the RFI to 'Locked' and create a new version of the document.

E. Request for Quote (RFQ)

1. In Constructware®, Requests for Quote is used as a means for the Owner team to request pricing from the Contracting team for a specific scope of work.
2. See the Constructware Policies & Procedures Guide for information on using the Request for Quote module in Constructware®.
3. Request for Quote (RFQ): Roles and Responsibilities

a. A/E Firm:

- 1) A/E Firm shall initiate the Request for Quote (RFQ) in Constructware using the RFQ module found within the Cost Management Folder. The A/E firm shall fill in all corresponding fields and provide, as required, all electronic drawings and files necessary to completely explain the nature of the RFQ. Like all modules in Constructware the RFQ shall be electronically 'Sent' to all responders through notification messaging in Constructware

b. GC Firm:

- 1) GC Firm shall respond to the RFQ with a Request for Change Order (RCO). See Section m iii 2 for additional information

c. Los Rios:

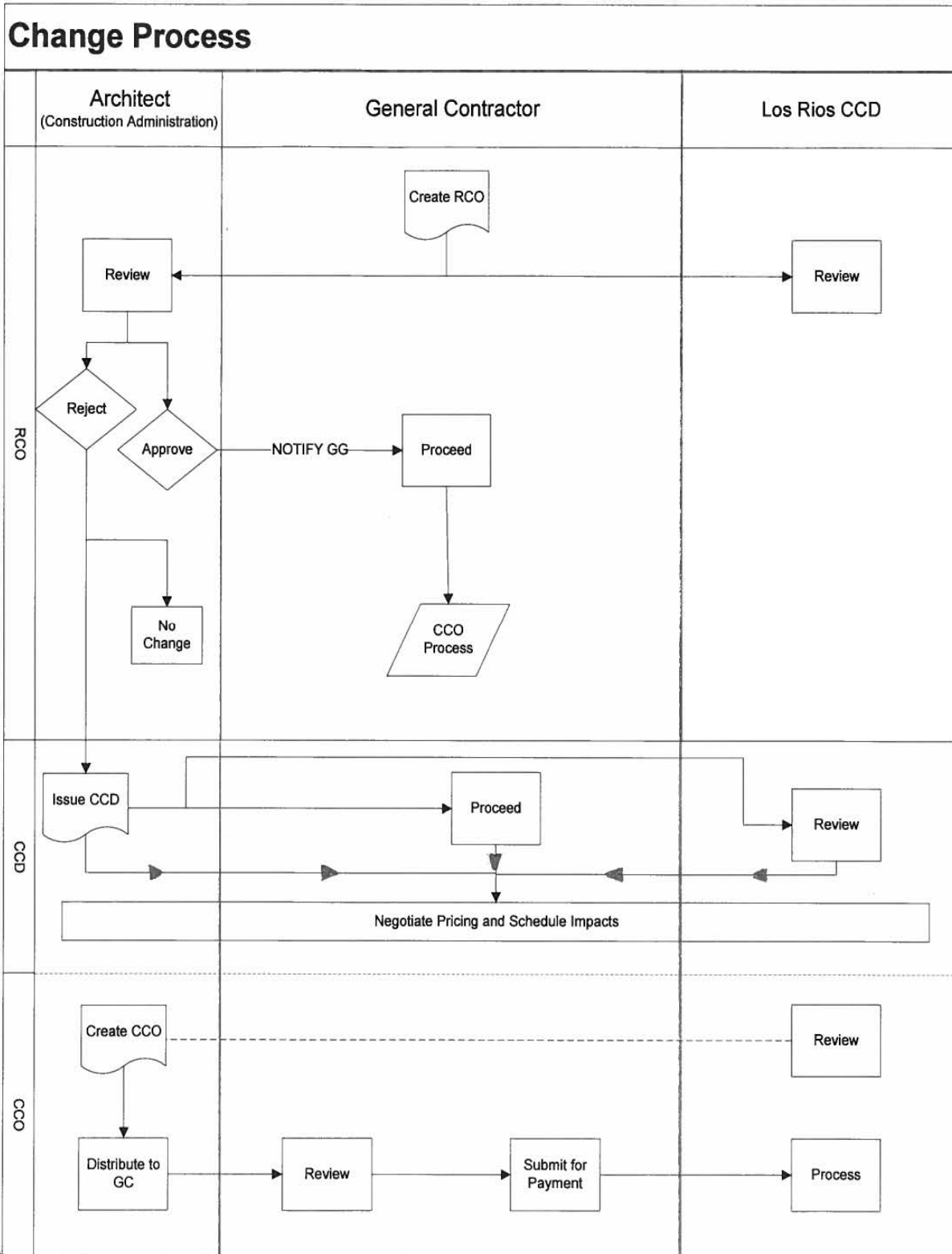
- 1) Los Rios may initiate the RFQ using Constructware, if needed, and shall fill in all corresponding fields. All electronic drawings and files shall be linked, if possible, to help explain the nature of the RFQ. Like all modules in Constructware the RFQ shall be electronically 'Sent' to all responders through notification messaging in Constructware.

F. Request for Change Order (RCO)

1. In Constructware®, Requests for Change Orders (RCOs) are a means to request a change in the contract between Los Rios and the GC Firm. RCO's are further defined within the General Conditions part 39. Typically, the RCO is created by the GC Firm and sent to the A/E firm and Los Rios for review.
2. See the Constructware Policies & Procedures Guide for information on using the Request for Change Order module in Constructware®.
3. Request for Change Order (RCO): Roles and Responsibilities
  - a. A/E Firm:
    - 1) A/E Firm shall review the RCO submitted by the GC Firm. If accepted, the A/E Firm shall forward the RCO to Los Rios for approval. If not approved, the A/E Firm will reject the RCO and return to the GC Firm.
    - 2) If the RCO is approved by Los Rios, the A/E Firm will create a Cost Item in Constructware and will continue with the change process outlined in Section 4.
    - 3) If the RCO is rejected by Los Rios, the A/E Firm will return the RCO back to the GC Firm for review and resubmission, if necessary.
  - b. GC Firm:
    - 1) The GC Firm shall create RCOs for any requested cost change on the project. The RCO shall include a scope of work, estimated cost, estimate increase in schedule days, and any other relevant supporting documentation. The author of the RCO shall attach documentation to support the cost change in the linked documents field.
    - 2) The GC Firm should direct the RCO to the A/E representative and notify that individual through the Constructware® notification feature.
    - 3) The approval of the RCO does not constitute a Construction Change Directive (CCD).
    - 4) If the GC Firm wishes to resubmit a RCO that has been rejected by Los Rios, that RCO must be created as new.
  - c. Los Rios:
    - 1) Los Rios may review and approve/reject all RCOs. Notification of the RCO status shall be made to the A/E/ Firm.
    - 2) Los Rios may monitor the RCO log.

**1.5 COST MANAGEMENT**

- A. General: The project will utilize Constructware's® Cost Management system to generate Contract Change Orders (CCOs), Requests for Quote (RFQs), Request for Change Order (RCO) and Construction Change Directive CCDs). RFQ's, CCD's and CCO's are further defined within the General Conditions part 41. The GC will input their change order requests in the Request for Change Order (RCOs) module. A/E Firm will respond to the RCO and possibly process the RCO into a CCD and potentially into a CCO. The GC and A/E Firms will have access to see RFQs, RCOs, CCDs or CCOs. Users shall adhere to the following specifications regarding the use of Cost Management.
- B. Change Order Process Overview: Los Rios allows the A/E Firm to enter pending costs into the Cost Item module. Cost Items are issues that may eventually become Change Orders. Cost Items can be rolled into a Request for Change Order (RCO) or CCD document that shall be forwarded to Los Rios for review and approval. The roles and responsibilities as to who will initiate Cost Items and Change Orders are variable and are based on permissions. The workflow is outlined in the Constructware Policies & Procedures Guide and shown below.



**C. Cost Item**

1. In Constructware®, the Cost Item is the detail item on Cost Management documents that relates a Budget Code, a Company, and Units/Dollars. For example, the Items on a RCO are Cost Items. Because the Cost Item is the detail item on all Cost Management documents, the only manner in which a cost can be created against the Budget is with a Cost Item.
2. See the Constructware Policies & Procedures Guide for information on using the Cost Item module in Constructware®.
3. Processed Cost Items shall be routed through Los Rios's cost procedures to create a new construction change directive (CCD) or contract change order (CCO).
4. Cost Item: Roles and Responsibilities
  - a. A/E Firm:
    - 1) The A/E Firm shall review the RCO submitted by the GC Firm. Upon approval, the A/E Firm shall create the Cost Item for any requested cost and/or schedule change on the project. The Cost Item shall include a scope of work, estimated cost, estimate increase in schedule days, and any other relevant supporting documentation. The author of the Cost Item shall attach documentation to support the cost change in the linked documents field.
    - 2) The A/E Firm shall list who the Cost Item is addressed to and notify that individual through the Constructware® notification feature.
    - 3) The approval of a Cost Item does not constitute a Contract Change Order (CCO).
    - 4) If the A/E wishes to resubmit a Cost Item that has been rejected by Los Rios, that Cost Item must be created as new with the original cost item shown as rejected.
  - b. GC Firm:
    - 1) Because the contractor will not be creating Cost Items they will not have access to the cost item log. All change process information specific to the GC Firm can be found in the RCO, RFQ, CCD or CCO logs
  - c. Los Rios:
    - 1) Los Rios may monitor the Cost Item log in Constructware®. Los Rios may respond to each Cost Item with an Approved or Rejected response. If a Cost Item will be considered, the status shall be set to Pending Approval.

**D. Construction Change Directive (CCD)**

1. A Construction Change Directive (CCD) is a directive from the A/E Firm to the GC Firm to proceed with a change to the work, and states a proposed adjustment in cost and time, if appropriate. It is used in the absence of a complete agreement in terms of scope, cost, and time between the contracting parties. The GC Firm must proceed with the change immediately, and inform the other parties as to whether it agrees or disagrees with the proposed terms of change. If the GC Firm disagrees with the proposed change, further negotiation may ensue. In Constructware the CCD may be used to produce CCOs to further the change management and negotiation processes.

2. See the Constructware Policies & Procedures Guide for information on using the Construction Change Directive module in Constructware®.
3. Roles and Responsibilities
  - a. A/E Firm:
    - 1) The A/E Firm shall process the approved Cost Item into a Construction Change Directive (CCD) and submit to Los Rios for review. Upon approval, the A/E Firm shall issue the CCD to the GC Firm for review.
    - 2) If the CCD is approved by the GC Firm, the A/E Firm will process the CCD into a Contract Change Order (CCO).
    - 3) The A/E Firm shall consolidate several CCDs as appropriate into one CCO.
  - b. GC Firm:
    - 1) The GC Firm shall review the cost and time elements and approve the CCD.
    - 2) Upon approval, the GC Firm shall notify the A/E Firm and proceed with the work outlined in the CCD.
  - c. Los Rios:
    - 1) Los Rios may review and approve the CCD.
    - 2) The CCD shall be sent to the A/E Firm once it has been approved. The Cost Item shall be updated based on the status of the CCD.

**E. Contract Change Order (CCO):**

1. Overview: Contract Change Orders (CCOs) are contract amendments from the Los Rios to the GC Firm. Constructware permits A/E Firm to log, track, and print CCOs as well as to generate them automatically by processing them from Construction Change Directives or Cost Items. In Constructware, CCOs contain Cost Items and summary information about the contract amendment. Contract Change Orders can only be generated for contractors with valid contracts entered in Constructware.
2. See the Constructware Policies & Procedures Guide for information on using the Contract Change Order module in Constructware®.
3. Contract Change Order (CCO): Roles and Responsibilities
  - a. A/E Firm:
    - 1) The A/E Firm shall submit the CCO to Los Rios for review.
    - 2) Upon approval, the A/E Firm shall distribute the approved CCO to the GC Firm.
    - 3) As appropriate, the A/E Firm shall combine CCDs into one CCO.

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b. GC Firm:

- 1) The GC Firm shall review the approved CCO and submit for payment or partial payment after the CCO has been approved and work has been completed.

c. Los Rios:

- 1) Los Rios may review and approval all CCOs.
- 2) The CCO shall be sent to the A/E Firm once it has been approved for distribution.

END OF SECTION



**SECTION 013216 - CONTRACT SCHEDULE**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

A. The Contractor shall develop a network plan and schedule for the project demonstrating complete fulfillment of all contract requirements and shall keep the network plan up to date in accordance with the requirements of this section. The Contractor shall employ the Critical Path Method (CPM) in developing the plan and schedule, and in the planning, coordinating, performing and reporting the work under this contract, including all activities of Subcontractors, equipment vendors, suppliers, and any the Owner functions that impact the work. It is explicitly understood that the schedule shall be employed by, and is vital to, the Owner's Representative and the Owner's Project Manager in monitoring the progress of the Work and administering this Contract. The Owner may utilize a scheduling consultant to assist in the review of the Contractor's schedules.

B. The CPM schedule shall be prepared using Primavera Project Planner version 3.1 or Primavera SureTrak version 3.0. Equivalency of a proposed substitute CPM program shall be determined by the Owner's Project Manager at his/her sole discretion upon the application from the Contractor. Regardless of which scheduling software is used it must have the capability of a definitive "Data Date" that will illustrate impacts to individual activities and the overall project where an activity's progress is not proceeding as originally planned or it has not started as planned. If a substitute CPM program is used in the development of the schedule, it is the responsibility of the Contractor to assure that it is readable in Primavera version 3.1.

C. The principles and definition of CPM and the terms used herein shall be as follows:

CPM network is a graphic description of the construction plan, showing the sequential steps needed to reach the completion of the Work. It shall depict events and tasks, and their interrelationships, and shall recognize the progress that must be made in one task before subsequent tasks can begin. The CPM network shall be comprehensive and shall include all interdependencies and interactions required to perform the Work of the Project. The only activity in the schedule that will not have a predecessor is the Project Start or Notice to Proceed Milestone. The only activity in the schedule that will not have a successor is the Project Completion Milestone. All other activities in the schedule shall have predecessor and successor logic ties.

**1.02 SUBMITTALS**

A. Within ten (10) calendar days following receipt of Notice of Award and prior to the full execution of the Agreement, and prior to engaging a scheduling consultant or commencing performance of the work specified in this Section with its own forces, the Contractor shall submit to the Owner's Project Manager:

1. Contractor's scheduler(s) Information;
  - a. If the schedules are to be prepared by any outside consultant, the name and the address of the proposed scheduling consultant;
  - b. Information sufficient to show that the Contractor's own organization or the Contractor's proposed scheduling consultant has scheduling support staff and computer facilities meeting the requirements herein.
  - c. A list of prior projects, with the Owner's telephone contact numbers, where services similar to those required for this Contract were performed.
  - d. The acceptability of the proposed scheduler will be at the sole discretion of the Owner's Project Manager.
  - e. The scheduling software and version to be used.

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- B. The “Preliminary 90-Day Contract Schedule” shall be submitted no later than seven (7) days after the Notice to Proceed.
- C. Submit the “(Proposed) Contract Schedule” within 30 calendar days after the Owner’s issuance of the Notice to Proceed to the Contractor. Upon acceptance, the (Proposed) Contract Schedule shall become the “Baseline Schedule”.
- D. Submit monthly updated Contract Schedules (hereinafter referred to as the Monthly Schedule Updates) along with each monthly pay application in accordance with Specification Section 01 2976 – Progress Payment Procedures.
- E. All other required reports referenced herein, typically three (3) each per occurrence. Submit three (3) color plots on “E” size sheets (approximately 34” x 44”) of each required schedule and three (3) copies of all required reports. The Contractor shall also submit a copy of the computer data disks used to produce hard copy submittals. The computer data disks will contain the schedule computer files in Primavera version 3.1 compatible format. A PDF file format is not acceptable.

### Schedule of Submittal Items Due:

<u>Submittal Item</u>	<u>Due Date No Later Than</u>
Contractor Scheduler Information	10 calendar days from Notice to Award
Preliminary 90-Day Contract Schedule	7 calendar days from Notice of Proceed
(Proposed) Contract Schedule	30 calendar days from Notice to Proceed
Monthly Schedule Updates	5 calendar days before the monthly pay application

### 1.03 APPROVAL

- A. The Owner’s Project Manager shall have the right to accept or reject the Contractor’s proposed scheduler. The Contractor shall re-propose qualified alternates at no additional cost to the Owner within three (3) calendar days thereafter and until the Owner’s Project Manager’s approval is received.
- B. Approval of the Contractor’s Preliminary 90-Day Contract Schedule by the Owner’s Project Manager will be a condition precedent to the making of any progress payment.
- C. The required schedules and reports shall be prepared and submitted for review and approval in accordance with the General Conditions and this Section.
- D. The Monthly Schedule Updates and reports shall be an integral part and basic element of the estimate upon which progress payments will be made. Submittal, review and approval by the Owner’s Project Manager of these items shall be a condition precedent to the making of progress payments. If in the judgment of the Owner’s Project Manager, the Contractor fails or refuses to provide a complete Monthly Schedule Updates or reports, as specified, the Contractor will be deemed to have not provided the required estimate upon which progress payments may be made, and shall not be entitled to such progress payments unless or until it has furnished the aforesaid schedules.
- E. In the event the Contractor submits a workable, contractually compliant (Proposed) Contract Schedule which indicates project completion at a date earlier than the contract completion date, the acceptance of such a schedule will not change the contract time. In such an event, a schedule activity entitled

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“project float”, of a duration equal to the difference between the proposed early completion date and the contract completion date, will be added to the schedule. All project float is a project resource for the Contractor and the Owner, and is not for the exclusive use of either party.

#### **1.04 CONSTRUCTION ANALYSIS**

A. The Contractor shall use Primavera Project Planner version 3.1 or Primavera SureTrak version 3.0. The Contractor shall coordinate with the Owner's Project Manager to produce the following minimum information with the (Proposed) Contract Schedule:

1. Activity identification;
2. Activity description;
3. Status date (data date);
4. Activity percentage complete;
5. Activity original and remaining durations;
6. Early start/finish and late start/finish;
7. Total float;
8. The predecessor and successor activities for each individual activity;
9. Designation of the planned work day/work week for each activity (calendar identification);
10. A near-critical item list of activities with ten (10) working days or less total float;
11. Scheduled and actual progress payment for each activity.

B. Should the Contractor develop the schedule in any version of a Primavera product newer than Primavera Project Planner version 3.1 or SureTrak version 3.0 the schedule will be developed utilizing the “Project Level” coding not the “Enterprise” or “Global” Level. It is the Contractor's sole responsibility to insure that all coding included in its schedules is transferred and readable by the Owner in the electronic format in Primavera Project Planner version 3.1.

#### **1.05 QUALITY ASSURANCE**

A. To assist in the preparation and for the production of the required submittal of the Schedules and Reports outlined in this Section, the Contractor shall engage, at his own expense, a CPM consultant having the following qualifications, except that the Contractor may perform these services with its own organization if the Contractor itself has such qualifications:

1. Have at least one employee regularly engaged and skilled in the application of computerized CPM scheduling methods on similar or larger size construction projects.
2. Possess or have access to computer programs for preparation and production of schedules and reports.
3. Have computer facilities or access on short notice to computer facilities with the capability of delivering a CPM plot and readout within 48-hours, and;
4. Scheduling Software
  - a. The Contractor shall utilize a Windows-based computer-software program compatible with Primavera Project Planner version 3.1 or Primavera SureTrak version 3.0.
  - b. If the Contractor requests and receives authorization from the Owner to utilize scheduling software other than Primavera Project Planner version 3.1 or Primavera SureTrak version 3.0;
    - i. The Contractor will still be obligated to provide schedules, reports and all other data required by this Section to the Owner in Primavera Project Planner version 3.1.
    - ii. Any conversions of schedule files that may be required to accommodate the Primavera Project Planner version 3.1 will be performed by the Contractor at no cost to the Owner.
5. In the event that there is a difference between the schedule as developed in the software

utilized by the Contractor and the schedule as converted to and used by Primavera Project Planner version 3.1, the schedule that is used in Primavera Project Planner version 3.1 shall have primacy.

**1.06 CONTRACT SUBMITTALS AND DETAILS**

**A. Preliminary 90-Day Contract Schedule:**

**1. Submission:**

a. The Contractor shall submit a Preliminary 90-Day Contract Schedule to the Owner's Project Manager as indicated in Paragraph 1.02 Submittals. The Preliminary 90-Day Contract Schedule will include all activities that are required or anticipated to be completed within the first 90-calendar days of the project. The Preliminary 90-Day Contract Schedule shall also contain a summary of the remaining activities formatting the remaining work areas, overall contract duration, milestones, etc. for the remainder of the project.

b. Any revisions deemed necessary by the Owner's Project Manager as a result of its review (allow 14 calendar days for this review) shall be incorporated into the Contractor's Preliminary 90-Day Contract Schedule and re-submitted to the Owner's Project Manager for review within fourteen (14) calendar days after the Contractor's receipt of the Owner's Project Manager Preliminary 90-Day Contract Schedule comments.

**2. Form:**

a. Prepare the Preliminary 90-Day Contract Schedule as a time-scaled CPM bar chart showing continuous flow from left to right. Durations and specific calendar dates shall be clearly shown for the start and finish of each work activity in sufficient detail to represent a practical plan to complete the Work within the Contract Time.

**3. The Preliminary 90-Day Contract Schedule shall include but not be limited to:**

- a. A legend of scheduled activities;
- b. Scheduled work activities that clearly indicate the scope of work to be completed;
- 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; the Contractor quality control review activities; and contract completion. Major work activity categories that are to be included in the (Proposed) Contract Schedule;
- d. Submittals Section, containing activities for submittals, approvals, fabrication and delivery of materials or other components that affect any work activity that has total float of 60 calendar days or less;
- e. OFCI/OFOI items;
- f. Start up, Testing, Inspections and Commissioning;
- g. Punch list formulation;
- h. The Contractor closeout documentation and training;
- i. The Contractor punch list corrective work;
- j. Demobilization and project completion;
- k. A plot of the Preliminary 90-Day Contract Schedule with a clearly highlighted critical path;
- l. Calendar designations identifying all holidays and non-working days;
- m. The Preliminary 90-Day Contract Schedule shall be cost loaded. Once the (Proposed) Contract Schedule is approved and becomes the Baseline Schedule, the costs reflected in the Baseline schedule will be the official Schedule of Values for the project and utilized for each payment application;
- n. The Preliminary 90-Day Contract Schedule shall contain an activity code structure sufficient to allow sorting/grouping by the following categories:

- a. Responsibility or Subcontractor;
- b. Area;
- c. Location,
- d. CSI division;
- e. A code entitled "Update" that will identify the schedule submission when specific activities were added to the network (new activities, Change Orders, RFI's, etc.);

**B. (Proposed) Contract Schedule:**

1. The Contractor shall submit to the Owner's Project Manager a (Proposed) Contract Schedule as indicated in Paragraph 1.02 Submittals, and in sufficient time to allow for review and approval. The (Proposed) Contract Schedule shall be a computerized detailed task level CPM diagram in precedence diagramming method (PDM) format. A clear delineation of construction activities shall be shown on the (Proposed) Contract Schedule. This schedule shall be cost loaded.

a. The Contractor and requested Subcontractors shall participate in a review of the proposed (Proposed) Contract Schedule by the Owner's Project Manager when requested to do so. Any revisions deemed necessary by the Owner's Project Manager as a result of this joint review shall be re-submitted within ten (10) days after said meeting.

2. All activities in the Initial Contract Schedule shall have sufficient code structure to enable a sort by activity code, or "rollup" of the activities in the form of a Summary Schedule. The code structure will allow sufficient sorting capabilities to group by responsibility (by Subcontractor), location (building, floor, etc.), area, type (submittal, approval, change, update, etc), milestones and CSI division at a minimum.

3. The work activities comprising the (Proposed) 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 a singular task that requires time and resources (manpower, equipment, and/or material) to complete in a continuous operation (excepting submittal activities including review and approval activities; and material fabrication and procurement activities). No activity shall be less than one (1) or more than twenty (20) working days in duration for any on-site operation. All holidays and non-working days shall be identified by way of calendar designations.

4. The (Proposed) Contract Schedule shall contain activities for submittals, approvals, fabrication and delivery of materials or other components that affect any work activity that has total float of 60 calendar days or less.

5. The (Proposed) Contract Schedule shall be a cost-loaded CPM schedule. Mobilization, bond and insurance costs may be shown separately. Other general condition costs, overhead, profit, etc., shall be prorated throughout all the activities. The cost-loaded activities of the (Proposed) Contract Schedule shall be basis for establishing the distribution of costs. Costs relating to each activity shall be distributed evenly over the duration of the activity. Contractor agrees that the cost given by Contractor to each activity is the reasonable value thereof and may be used by the District as the basis to adjust the contract sum on account of additional work or work deleted from the contract.

6. Failure by the Contractor to include any element of the work required for the performance of this Contract and completion of the Project, including all submittals, shall not excuse The Contractor from completing all work required within the time for completion, notwithstanding the Owner's Project Manager's approval of the (Proposed) Contract Schedule.

7. No more than 25% of the total number of activities shown on the schedule shall be critical or near critical. Near critical is defined as float equal to or less than ten (10) working days.

8. The schedule shall indicate the sequence and interdependency of all work activities. All activities should be linked by finish-to-start (FS) relationships. Other types of relationships shall be prohibited (including, but not limited to start-to-start, finish-to-finish, and start-to-finish relationships and relationship lags) unless specific permission is granted by the Owner's Project Manager. Any logic usage other than finish to start must be identified in a separate report to be submitted with the (Proposed) Contract Schedule to the Owner's Project Manager for approval. Constraints in the schedule shall be limited to those called for in the contract. Any additional constraints on activities shall be kept to a minimum and must be identified in a separate report to be submitted with the (Proposed) Contract Schedule to the Owner's Project Manager for approval. Finish-to-start relationships are permitted to have negative lags, but in no case will positive lags be permitted. Milestones shall also be limited to those specifically called for in the contract. Unless otherwise called for in the contract, there shall be only two milestones, one for the Notice to Proceed and one for Project Completion.

9. 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 have float.

10. Float is defined as the time that a non-critical Work activity can be delayed or extended without delaying the scheduled completion of milestones specified in this Section or the scheduled completion date of the Work, or both. Float time is not for the exclusive use or benefit of either the Owner or the Contractor. Neither the Contractor nor the Owner shall have an exclusive right to the use of float.

11. 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.

12. The Contractor shall not sequester float through strategies including extending activity durations to consume available float, use of preferential logic; use float suppression techniques like Zero Total Float constraints; use of special lead/lag logic restraints or imposed dates. Use of float time disclosed or implied by the use of alternate float suppression techniques shall be shared to the benefit of both the Owner and the Contractor.

13. Include a critical path activity titled "Inclement Weather Days" on the (Proposed) Contract Schedule. This activity shall have an initial duration of one and one-half (1.5) working days for each month of contract time. Inclement Weather Days shall be the last activity in the schedule prior to the milestone activity entitled "Contract Completion". All predecessor activities must pass through the Inclement Weather Days activity. The Contractor shall apply to the Owner's Project Manager to use an Inclement Weather Day when a critical path activity has been delayed because of inclement weather. An Inclement Weather Delay day is defined as when the weather or effect thereof prevents the Contractor from working on the current critical path with at least 75% of its normal work force for more than 50% of the normal workday. The Contractor must apply for use of Inclement Weather Days in the same month as the inclement weather delay. The Owner's Project Manager shall determine if the Contractor's request for use of Inclement Weather Days is approved or denied. The Inclement Weather Days activity shall not be statused with an actual start or finish date, or percentage of completion. Rather, it is a graphical accounting tool where the original duration shall be reduced by the agreed to weather impact. Inclement Weather Delays to non-critical activities will not be the basis for adjustment under this Paragraph. If, at Completion, there are inclement weather days remaining, the Completion date shall not be adjusted. If, at completion, additional inclement weather days are required, the Owner shall adjust the Completion date accordingly. Any time extension granted the Contractor due to inclement weather delays shall be in the form of excusable non-compensable days

14. Once approved by the Owner's Project Manager, the Contractor's (Proposed) Contract Schedule shall be known as the Baseline Schedule and shall be used by the Contractor for executing the Work of the Contract, including planning, organizing and directing the Work, and reporting its progress until further revised. No unilateral changes shall be made to the Baseline Schedule without the prior approval and consent of the Owner, excepting only the reporting of Actual Start, Actual Finish, and Activity Progress.



15. The Contractor shall provide a contract compliant schedule suitable for approval as the Baseline Schedule as indicated in Paragraph 1.02 Submittals.

16. A combined three (3) week Look-Ahead Schedule with a one (1) week As-Built Schedule for the previous week (a total of four (4) weeks depicted) shall be submitted by the Contractor to the Owner's Project Manager for review and approval at each progress meeting. The Contractor shall status the schedule on a weekly basis, by using data that is actual and current as of the "status" date. This Look-Ahead Schedule shall be derived from this weekly statusing. The cumulative status of the Look-Ahead schedules shall be the basis for the Monthly Schedule Updates. In no event shall the Contractor utilize a separate schedule for generation and maintenance of the Look-Ahead schedules. Depending on the stage of the Project, the Look-Ahead Schedule will be based upon the Preliminary 90-Day Contract Schedule, (Proposed) Contract Schedule, Baseline Schedule or Monthly Schedule Update.

**C. Baseline Schedule Updating and Progress Payments:**

1. The Baseline Schedule shall be updated on a monthly basis for the purpose of recording and monitoring the progress of the work ("Monthly Schedule Updates"), or at lesser intervals if deemed necessary by the Owner's Project Manager without additional cost to the Owner for reasons such as work activities being thirty (30) calendar days or more behind schedule. The Contractor shall meet with the Owner'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. Upon completion of the joint review, the Contractor shall prepare the Monthly Schedule Update and submit it to the Owner's Project Manager. Each Monthly Schedule Update shall be saved with an individual file name that separately preserves the data for each Monthly Schedule Update.

2. The Monthly Schedule Updates shall incorporate all changes mutually agreed upon by the Contractor and the Owner during the preceding periodic reviews and all changes resulting from approved Change Orders and Field Orders. Activities for approved change orders shall be cost loaded. The Contractor shall not make unauthorized or unilateral changes to the activities or logic.

3. Prior to submission of the monthly payment application, the Contractor shall submit to the Owner's Project Manager a report generated from the previously approved Monthly Schedule Update that reflects the percent of completion by activity. The Contractor and the Owner's Project Manager shall jointly walk the project to verify the percentage of completion of each activity. Once the percent of completion of each activity is agreed upon, the Contractor shall incorporate this data into the schedule update and these percentages shall be the basis for development of that month's payment application. The Contractor shall not separate the percentage of completion from the remaining durations in the calculation of the schedule.

4. The schedule calculation setting for the monthly updates shall be "Retained Logic". The "Progress Override" setting may only be utilized to identify the differential in the calculated finish date due to "Out of Sequence Progress". Should the differential in the project completion exceed 10 days utilizing the Retained Logic setting versus the Progress Override setting, the successor logic of the Out of Sequence activities shall be revised to eliminate the differential. The Retained Logic setting is the setting that will be used for the analysis of any time extension requests or delay claims

5. Approval of the Monthly Schedule Update will be a condition precedent to the making of any progress payments for work performed.

6. It is explicitly understood that the Monthly Schedule Update are vital to the Owner in managing, monitoring, and administering the Project. Delays in submitting the schedule updates will have a detrimental effect on the Owner's ability to perform its responsibilities under the contract.

**D. Reports:**

1. The (Proposed) Contract Schedule submittal shall include the following:
  - A. Detailed Bar Chart (“E” size plot);
  - B. Project calendar indicating all non-working periods
  - C. Activity codes dictionary which shall identify all code values and code titles used.
  - D. Primavera version 3.1 schedule data for the (Proposed) Contract Schedule on CD or e-mailed in compressed format to the Owner’s Project Manager.
  - E. After approval of the (Proposed) Contract Schedule as the Baseline Schedule, Primavera version 3.1 schedule data for the Baseline Schedule shall be submitted on CD or e-mailed in compressed format to the Owner’s Project Manager.
2. Monthly Schedule Updates shall include the following
  - A. Detailed Bar Chart (“E” size plot);
  - B. Proposed Revisions Report
  - C. Primavera version 3.1 schedule data for the Monthly Schedule Update on CD or e-mailed in compressed format to the Owner’s Project Manager.
  - D. Narrative Report
    1. The Monthly Narrative Report shall contain the following information for each Monthly Schedule Update:
      - a. Description of overall project status
      - b. Description of problem areas (referenced to pending change orders as appropriate)
      - c. Current and anticipated delays not resolved by approved change order, including:
        1. Cause of the delay
        2. Corrective action and schedule adjustments to correct the delay
        3. Known or potential impact of the delay on other activities and milestones
      - d. Changes in the construction sequence
      - e. Pending items and status thereof, including but not limited to:
        1. Pending Change Orders
        2. Time Extension Requests
        3. Other Issues relating to Contract Time
      - f. Contract Completion Date status:
        1. If ahead of schedule, the number of calendar days ahead
        2. If behind schedule, the number of calendar days behind
      - g. Other project or scheduling concerns
3. Submittal of the monthly reports and schedule updates by the Contractor are required regardless of the approval status of the Baseline Schedule or any Monthly Schedule Update.
4. The Contractor shall not make unilateral revisions to the Monthly Schedule Updates. Should the Contractor desire to revise the schedule logic or durations, the Contractor shall first submit the Monthly Update based upon the previous Monthly Schedule Update with just actual start dates, actual finish dates, and/or percentages of completion. Any additional changes other than actual status data will not be allowed. Following this updating and submittal task the Contractor can then submit a copy of this update with its proposed changes. This proposed revised update will clearly be identified as a proposed revision in the Title,



Number/Version and File Name. This proposed revision schedule shall be accompanied by a narrative fully explaining the need for each revision.

#### **1.07 RESPONSIBILITY FOR COMPLETION**

A. The Contractor agrees that at the sole judgment of the Owner's Project Manager, whenever it becomes apparent from the current Monthly Schedule Update that the currently adjusted contract completion date will not be met, it will take some or all of the following actions, as approved by the Owner's Project Manager, at no additional cost to the Owner:

1. Increase construction manpower in such quantities and crafts as will substantially eliminate, in the judgment of the Owner's Project Manager, 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 the Owner's Project Manager, the backlog of work. This paragraph shall not be construed to permit the Contractor to violate the work hour restrictions specified in the Contract Document.
3. Reschedule activities to achieve maximum practical concurrence of accomplishment of activities.
4. The Owner's Project Manager may require the Contractor to prepare a Recovery Schedule that depicts how the above items 1 – 3 will cause the construction to be completed by the currently adjusted contract completion date. The Owner's Representative may require this Recovery schedule to be:
  - a. Based upon the currently approved Monthly Schedule Update
  - b. Man loaded;
  - c. Resource loaded;
  - d. That reports and schedule data be submitted as required for Monthly Schedule Updates

#### **1.08 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 the Contractor for changes or alleged delays shall be accompanied by a complete Time Impact Analysis, (TIA), which shall be submitted for review within fifteen (15) days after the initial request for time by the Contractor. Time extensions will not be granted unless substantiated by analysis of the approved Monthly Schedule Update that preceded the alleged delay and then not until the project float becomes zero. If the 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 the Contractor has irrevocably waived its rights to any additional contract time.

C. Each Time Impact Analysis shall provide information justifying the request and stating the extent of the adjustment requested for each specific change or alleged delay. Each Time Impact Analysis shall be in form and content acceptable to the Owner's Project Manager, and shall include, but not be limited to, the following:

1. A fragmentary CPM type network (Fragnet) illustrating how the Contractor proposed to incorporate the change or alleged delay into the current Monthly Schedule Update; and
2. Identify the activities and logic in the current Monthly Schedule Update that 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 Time Impact Analysis 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 Current Contract Completion Date.

E. Time Impact Analyses 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 the Owner.

F. If the Owner's Project Manager finds, after review of the Time Impact Analysis, that the Contractor is entitled to any extension of time for completion, the time for completion will be adjusted by Change Order issued by the Owner's Project Representative, and the Contractor shall then revise the current Monthly Schedule Update accordingly.

#### **1.09 FINAL AS-BUILT SCHEDULE**

A. As a condition precedent to final approval of the Project, submit a final As-Built Construction Schedule and all final reports (those reports and plots required by paragraph 1.06 D above), including Primavera version 3.1 schedule data for the As-Built Construction Schedule on CD, which accurately reflect 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

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements for submittals required for performance of the work, including;
  - 1. Shop Drawings.
  - 2. Product Data.
  - 3. Samples.
- B. Administrative Submittals: Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals.
  - 1. Contractor's progress schedule
  - 2. Submittal schedule

1.2 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal no less than forty-five (45) days in advance of performance of related construction activities and in all cases, sufficiently in advance to avoid delay.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
  - 2. Coordinate transmittal of different types of submittals for related elements of the work so processing will not be delayed by the need to review submittals concurrently for coordination.
    - a. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
  - 3. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for resubmittals.
    - a. Allow a minimum of thirty (30) days for initial review. Allow additional time if processing may be delayed to permit coordination with subsequent submittals. The Architect may advise the Contractor when a submittal being processed must be delayed for coordination.
    - b. If an intermediate submittal is necessary, process the same as the initial submittal.
    - c. Allow a minimum of thirty (30) days for reprocessing each submittal.
    - d. No extension of Contract Time will be authorized because of failure to transmit submittals to the Architect sufficiently in advance of the work to permit processing, or submittals not prepared properly.
    - e. Work performed by the Contractor without the approval of a submittal is done at the Contractors risk.
- B. Submittal Preparation: Prepare each submittal with the following information:
  - 1. Submittal Cover Sheet: Place a Submittal Cover Sheet on each submittal for identification and transmittal purposes. The cover sheet will include the following information:
    - a. Project Title.
    - b. Submittal number: Sequentially number the submittals. Resubmittals will have the same original number with an alphabetic suffix.
    - c. Contractor: Provide company name, mailing address, telephone number and name of the contact person responsible for work on this project.
    - d. Sub-contractor/Supplier: Provide company name, mailing address, telephone

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- number and name of the contact person responsible for work on this project.
    - e. Submittal Description:
      - 1. General: Describe contents of submittal completely; identify material or product name, or model number, and name of manufacturer. State any deviations from Contract Document requirements including minor variations and limitations.
      - 2. Submittal Index: Provide index of all items included in submittal; properly identify with drawing numbers, etc.
    - f. Specification Section Number: Identify submitted work with Section number and name shown in the Contract Documents. Provide separate submittals for each specification Section, as required.
    - g. Date: Submission date and revision dates.
    - h. Contractor's stamp: Apply Contractor's stamp, signed certifying that review, verification of products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the work and Contract Documents.
    - i. Provide space for the Architect's review stamp.
  - 2. Shop Drawings: In addition to the Submittal Cover Sheet, provide a space approximately 4" x 5" on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.
- C. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to the Architect's business address using the Submittal Cover Sheet as a transmittal form. Submittals received from sources other than the Contractor will be returned without action, with no extensions of Contract Time. Submittals received without the Contractor's stamp completed will be returned without action with not extensions of contract time.
- D. Number of Copies Required:
- 1. Progress Schedule: See Section 01 32 16 Construction Progress Schedule.
  - 2. Schedule of Values: See Section 01 32 16, Construction Progress Schedule.
  - 3. Certifications: One (1) copy.
  - 4. Shop Drawings: One (1) reproducible electronic copy and two (2) prints of each original drawing.
  - 5. Product Data/Material Lists: One (1) reproducible electronic copy and two (2) prints of each original drawing.
  - 6. Samples:
    - a. General: As identified in individual specification Section.
    - b. Color/Pattern Selection: One set of manufacturer's complete range for initial selection; additional samples as requested of selected color/pattern for final color schedule.
  - 7. Substitutions: One (1) reproducible electronic copy and three (3) prints of each original drawing.
  - 8. Maintenance/Operating Manuals: One (1) reproducible electronic copy and two (2) manuals.
  - 9. Record Drawings: One (1) reproducible electronic copy and one (1) print of each original drawing.
  - 10. Record Survey: One (1) reproducible electronic copy and one (1) print of each original drawing.
  - 11. Guarantees: Two (2) copies.
- E. Submittal Review:
- 1. Review: Review of submittals will be for general conformance with the Contract Documents. Review does not relieve Contractor from responsibility for coordinating work with other trades and compliance with requirements of Contract Documents for lengths, fit and other details, or from furnishing materials and work required by contract which may

not be indicated on submittals when reviewed. Review does not authorize changes from Contract requirements. General Contractor is responsible for the accuracy and correctness of all submittals.

2. Color Selections: Architect will make no selections until all submittals related to color have been received and materials reviewed.

1.3 CONTRACTOR'S PROGRESS SCHEDULE: See Section 01 32 16, Construction Progress Schedule.

1.5 SCHEDULE OF VALUES: See Section 01 32 16, Construction Progress Schedule.

1.6 SUBMITTAL SCHEDULE

- A. In conjunction with development of the Contractor's progress schedule, prepare a complete schedule of submittals. Submit the schedule within 15 days of the date of the Contract.
  1. Coordinate submittal schedule with the list of subcontracts, schedule of values and the list of products as well as the Contractor's progress schedule.
  2. Prepare the schedule in chronological order; include submittals required during the first 90 days of construction. Provide the following information:
    - a. Scheduled date for the first submittal.
    - b. Related Section number.
    - c. Submittal category.
    - d. Name of subcontractor.
    - e. Description of the part of the Work covered.
    - f. Scheduled date for resubmittal
    - g. Scheduled date the Architect's final release or approval.
- B. Distribution: Following response by Architect to initial submittal, print and distribute copies to the Architect, District, subcontractors, and other parties required to comply with submittal dates indicated. Post copies in the project meeting room and field office.
  1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the work and are no longer involved in construction activities.
- C. Revisions: Revise the schedule as necessary and in conjunction with revisions to the construction schedule, update schedule concurrently with progress schedule.

1.7 SHOP DRAWINGS

- A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise clearly and unambiguously indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.
- B. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:
  1. Dimensions.
  2. Identification of products and materials included.
  3. Compliance with specified standards.
  4. Notation of coordination requirements.
  5. Notation of dimensions established by field measurement.
  6. Sheet Size: Except for templates, patterns and similar full- size Drawings, submit Shop Drawings on sheets at least 8-1/2" x 11" but no larger than 36" x 48".
  7. Submittal:

- a. Submit one correctable translucent reproducible print and two blue or blackline print for the Architect's and/or consultants review.
    - b. The Architect will return the reproducible print with appropriate annotations to the Contractor. The Architect will send a properly annotated blue or blackline prints to the District, and the District's inspector.
    - c. The Contractor will reproduce one copy of the approved Shop Drawing, to be marked up and maintained as a "Record Document".
  8. Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction. Do not proceed with installation until an applicable copy of shop drawings are in the installer's possession. Do not permit use of unmarked copies of shop drawings in connection with construction.
  9. Distribution: Furnish copies of submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
  10. Changes shown on shop drawings do not represent changes in Contract Documents. If Contractor believes submittal review has created a change to contract, then the Contractor must notify District and Architect in writing prior to performing work or purchase of materials, or equipment.
- C. Coordination drawings are a special type of Shop Drawing that show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or function as intended.
1. Preparation of coordination Drawings is specified in Section 01 31 13 - Project Coordination and may include components previously shown in detail on Shop Drawings or Product Data.
  2. Submit coordination Drawings for integration of different construction elements. Show sequences and relationships of separate components to avoid conflicts in use of space.
    - a. Architect: Same requirement as shop drawing submittal.
  3. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
    - a. Do not proceed with installation until an applicable copy of Product Data applicable is in the installer's possession.
    - b. Do not permit use of unmarked copies of Product Data in connection with construction.

## 1.8 PRODUCT DATA

- A. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."
1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:
    - a. Manufacturer's printed recommendations and instructions.
    - b. Compliance with recognized trade association standards.
    - c. Compliance with recognized testing agency standards.
    - d. Application of testing agency labels and seals.
    - e. Notation of dimensions verified by field measurement.
    - f. Notation of coordination requirements.
  2. Do not submit Product Data until compliance with requirements of the Contract Documents

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has been confirmed.

3. Submittals:
  - a. Submit 7 copies of each required submittal. The Architect and District will retain three and will return the others marked with action taken.
4. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.
  - a. Do not proceed with installation until an applicable copy of Product Data applicable is in the installer's possession.
  - b. Do not permit use of unmarked copies of Product Data in connection with construction.

#### 1.9 SAMPLES

- A. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, cuts or containers of materials, color range sets, and swatches showing color, texture and pattern.
  1. Mount, display, or package Samples in the manner specified to facilitate review of qualities indicated. Prepare Samples to match the Architect's Sample. Include the following:
    - a. Generic description of the Sample.
    - b. Sample source.
    - c. Product name or name of manufacturer.
    - d. Compliance with recognized standards.
    - e. Availability and delivery time.
  2. Submit Samples for review of kind, color, pattern, and texture, for a final check of these characteristics with other elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.
    - a. Where variation in color, pattern, texture or other characteristics are inherent in the material or product represented, submit multiple units (not less than 3), that show actual limits of the variations.
    - b. Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation and similar construction characteristics.
    - c. Refer to other Sections for Samples to be returned to the Contractor for incorporation in the work. Such Samples must be undamaged at time of use. On the transmittal, indicate special requests regarding disposition of Sample submittals.
  3. Preliminary submittals: Where Samples are for selection of color, pattern, texture or similar characteristics from a range of standard choices, submit a full set of choices for the material or product.
    - a. Preliminary submittals will be reviewed and returned with the Architect's mark indicating selection and other action.
  4. Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation and similar characteristics, submit 3 sets; one will be returned marked with the action taken.
  5. Maintain sets of Samples, as returned, at the Project site, for quality comparisons throughout the course of construction.
    - a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
    - b. Sample sets may be used to obtain final acceptance of the construction associated with each set.

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- B. Distribution of Samples: Prepare and distribute additional sets to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the Work. Show distribution on transmittal forms.
  - 1. Field Samples specified in individual Sections are special types of Samples. Field Samples are full-size examples erected on site to illustrate finishes, coatings, or finish materials and to establish the standard by which the work will be judged.
    - a. Comply with submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

1.10 CERTIFICATIONS

- A. General: Where specifically indicated by individual Sections, submit certification of recognized producer or association.
- B. Asbestos: Provide written certification that no asbestos or asbestos containing materials have been included in the work, and that no tools, devices, clothing or equipment containing asbestos have been used to construct the work.
- C. V.O.C. Compliance: Provide written certification that materials furnished and installed in the work comply with Rules on Architectural Coatings applicable in the area of the work as enforced by the local agency having jurisdiction in that area.
- D. Qualifications: Under various Sections of these specifications, certain experience requirements and other qualifications may be required. When such requirements are specified, written certification of all such requirements shall be submitted to the Architect within fifteen (15) days of date of Notice to Proceed.

1.11 DEFERRED APPROVALS

- A. General: Submit to Architect all documents required for deferred approval that are identified on the cover sheet of the Drawings. The full range of submittals may be required by DSA, including structural calculations and fire testing data. Approval by the Architect is contingent upon approval of all submittals required by DSA. Deferred approval items shall not be incorporated into the work without the approval of the Architect and DSA.
- B. Submit items identified for deferred approval by DSA within 45 days of Notice to Proceed. Contractor should schedule a minimum of 55 calendar days for DSA approvals.

1.12 MAINTENANCE/OPERATING MANUALS

- A. General: Incorporate in Maintenance/Operating Manual(s) brochures, manufacturer's catalogs and written instructions for equipment and materials needing regular care or maintenance; i.e., carpets, resilient flooring, architectural finishes, mechanical and electrical equipment, etc.
- B. Manual:
  - 1. General: Prepare all manuals using durable plastic loose leaf binders approximately 8-1/2 x 11 inches in size with the following minimum data:
  - 2. Identification: On, or readable through, a front cover stating general nature of manual.
  - 3. Index: Neatly typewritten at front of manual; clearly identify location of all emergency data.
  - 4. Operation and Maintenance Data: Complete instructions for all products and equipment required.



5. Repair/Replacement Parts: Complete nomenclature of all replaceable parts, their part numbers, current cost and name and address of nearest vendor of parts.
- C. Additional Data: Where contents of manuals include manufacturer's catalog pages, clearly indicate precise items included in this project and delete, or otherwise clearly indicate, all manufacturer's data which is not in this project.

#### 1.13 RECORD DRAWINGS

- A. General: Record drawings shall be kept up-to-date at all times and shall be available for review by District's Project Inspector at any time. Inspector may not authorize Contractor's pay request if record drawings are not up-to-date.
- B. Drawings:
  1. General: Architect will furnish reproducible transparencies to the Contractor when underground work has been completed.
  2. Locations: At time of installation, installed locations of all underground, drainage, plumbing and electrical work, including storm drain grate and invert elevations, shall be recorded on prints by Contractor, and reviewed with Inspector.
  3. Documentation:
    - a. General: Transfer installed locations to reproducible transparencies and submit inspector approved drawings to Architect.
    - b. Identification of Changes: All information entered on reproducible prints shall be neat, legible and emphasized by drawing "clouds" around changed items.
    - c. Dimensions: Locate all work, including stubs for future connections, with reference to permanent landmarks or buildings and indicate depth below finish grade.
    - d. Symbols and Designations: Use same as shown on Contract Drawings.

#### 1.14 RECORD SURVEY

- A. General: Provide reproducible transparency as required by Section 01 71 23 - Field Engineering.

#### 1.15 WARRANTIES

- A. Submittal: Warranties as required under individual Sections of these specifications shall be submitted in a complete package to the Architect as specified under Section 01 78 00 – Closeout Submittals, prior to completion of the work.

#### 1.16 ARCHITECT'S ACTION

- A. Submittals for record purposes, where action and return is required or requested, the Architect will review each submittal, mark to indicate action taken, and return.
  1. Compliance with specified characteristics is the Contractor's responsibility.
- B. Action Stamp: The Architect may stamp each submittal with a uniform, self-explanatory action stamp. The stamp will be appropriately marked, as follows, to indicate the action taken:
  1. Final Unrestricted Release: where submittals are marked "Reviewed No Exceptions Taken" that part of the work covered by the submittal may proceed provided it complies with requirements of the Contract Documents; final acceptance will depend upon that compliance.
  2. Final-But-Restricted Release: When submittals are marked "Make Corrections as Noted,"

that part of the work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents; final acceptance will depend on that compliance.

3. Returned for Resubmittal: When submittal is marked "Rejected" or "Revise and Resubmit," do not proceed with that part of the work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat if necessary to obtain a different action mark.
  - a. Do not permit submittals marked "Rejected" or "Revise and Resubmit" to be used at the Project site, or elsewhere where work is in progress.
4. Resubmittals: Resubmittals must correct previous exceptions taken. If previous exceptions are not corrected and additional resubmittals are required, the Contractor will be backcharged for Architect, consultants, and District personnel and agents time for processing erroneous resubmittals.
5. Other Action: Where a submittal is primarily for information purposes, special processing or other activity, the submittal will not be returned but may be responded to as acceptance in meeting all elements of the Contract Documents.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION (Not Applicable).

END OF SECTION

**SECTION 013500 - SPECIAL PROJECT PROCEDURES**

**PART 1 - GENERAL**

**1.1 Section Includes**

- A. The section specifies the administrative and procedural requirements for special environmental issues.

**1.2 Historical Archaeological Remains**

- A. During demolition, excavation, or other subsurface construction on the site, the Contractor shall exercise due caution to be on the lookout for any signs of archaeological remains, that is, unusual amounts of prehistoric bones, stones or shells, unusual amounts of historical era, debris, bricks, boards or nails, and/or human remains.
- B. In the event any of the items noted in A above, or similar archaeological items, are discovered, the contractor will immediately stop work in the affected area and immediately notify the District Project Manager. Work will not resume in the affected area until authorized in writing by the District Project Manager.

**1.3 Noise Control**

- A. The Contractor shall comply with all sound control and noise level rules, regulations, and ordinances which apply to any work performed pursuant to this Contract.
- B. All engine driven equipment used for any purpose on the project or related to the project shall be equipped with muffler of a type recommended by the manufacturer.
- C. During the construction period, college activities may be particularly sound sensitive. The District Project Manager will coordinate such time schedules with the Contractor to modify the work schedule to minimize the sound impact.
- D. During major ground level demolition and construction activities, the contractor may be required to provide a sound barrier of plywood or tarps along certain portions of the construction site to reduce the magnitude of the sound impact on college activities.

**1.4 Air Pollution**

- A. The Contractor shall comply with all air pollution control rules, regulations, ordinances, and statutes which apply to any work performed pursuant to this Contract, including any air pollution control rules, regulations, ordinances, and statutes specified in Section 11017 of the Government Code.
- B. The Contractor shall in addition to the air pollution control rules, regulations, ordinances and statutes specified in 1.4A above, comply with the following measures to reduce construction dust and emissions:
  - 1. Apply non-toxic soil stabilizers to all exposed construction areas which have been graded and are to be inactive for 10 days or more.
  - 2. Enclose, cover or water twice daily any exposed piles of dirt, sand, gravel, or other construction debris.
  - 3. Water active areas of construction at least twice daily to control wind borne dust.

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4. Cover all truck beds hauling dirt, sand, soil, or other loose material to and from the construction site.

1.5 Water Pollution Controls

- A. The Contractor shall comply with all rules, regulations, ordinances, and statutes which apply to water pollution, including Section 7-1.01G of the CalTrans Standard Specifications.
- B. The Contractor shall, in addition to the water pollution control rules, regulations, ordinances and statutes specified in 1.5A above, comply with the following measures to reduce water pollution at the construction site:
  1. Implement the Los Rios Districts Storm Water Pollution Prevention Plan if applicable to the project.
  2. Develop a Best Management Plan to prevent and/or mitigate pollution of storm water runoff at and immediately around the construction site.

END OF SECTION

**SECTION 014500- QUALITY CONTROL**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. This Section specifies administrative and procedural requirements for quality control services.
- B. Quality control services include inspections and tests and related actions including reports, performed by independent agencies, governing authorities, and the Contractor. They do not include Contract enforcement activities performed by the Architect, or the District's Project Manager and/or Inspector.
- C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.
- D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.
  - 1. Specific quality control requirements for individual construction activities are specified in the Sections that specify those activities. Those requirements, including inspections and tests, cover production of standard products as well as customized fabrication and installation procedures.
  - 2. Inspections, test and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.
  - 3. Requirements for the Contractor to provide quality control services required by the Architect, District, or authorities having jurisdiction are not limited by provisions of this Section.
- E. Inspection of the Work: All work requires inspection by a Division of State Architect certified District Inspector. No work shall be done without required inspections. Any work covered up without inspection must, if required by the Architect or District's Project Manager or Inspector, be uncovered and replaced at the Contractor's expense, including the expense of testing, if required.

**1.2 RESPONSIBILITIES**

- A. District Responsibilities: The District will pay the costs of inspections, tests and similar quality/assurance control services specified to be performed by independent agencies and not by the Contractor, except where they are specifically indicated as the Contractor's responsibility or are provided by another identified entity. Costs for services other than Contractor required are not included in the Contract Sum.
  - 1. The District will pay for the services of an independent agency, testing laboratory or other qualified firm to perform services which are the District's responsibility.
- B. Duties of the Testing Agency: The independent testing agency engaged to perform inspections, sampling and testing of materials and construction specified in individual Specification Sections shall cooperate with the Architect and Contractor in performance of its duties, and shall provide qualified personnel to perform required inspections and tests.
  - 1. The agency may notify the District of irregularities or deficiencies observed in the

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- Work during performance of its services.
2. The agency is not authorized to release, revoke, alter or enlarge requirements of the Contract Documents, or approve or accept any portion of the Work.
  3. The agency shall not perform any duties of the Contractor, and shall not direct the Contractor to perform any work.
- C. Coordination: The Contractor and each agency engaged to perform inspections, tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition the Contractor and each agency shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.
1. The Contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities.
  2. Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests and similar services and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations (48 hour minimum) to permit assignment of personnel. Auxiliary services required include but are not limited to:
    - a. Providing access to the Work and furnishing incidental labor and facilities necessary to facilitate inspections and tests.
    - b. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
    - c. Providing facilities for storage and curing of test samples, and delivery of samples to testing laboratories.
    - d. Providing the agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.
    - e. Security and protection of samples and test equipment at the Project site.
- D. Contractor Responsibilities: The contractor, all subcontractors, and suppliers, engaged by the Contractor on the Project shall:
1. Monitor quality control over suppliers, manufacturers, products, services, site conditions and workmanship to produce work of the highest quality. Work shall be performed by persons qualified to produce workmanship of the highest quality.
  2. Comply with specified standards to achieve the highest quality for the work. Should specified reference standards conflict with Contract Documents, request in writing clarification from Architect before proceeding. Reference standard is standard current as of the date of Contract Documents.
  3. Strictly comply with all manufacturers' instructions, including each step in sequence. Should manufacturers' instructions conflict with Contract Documents, request in writing clarification from Architect before proceeding.
  4. Secure all products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.
  5. Install field samples and mockups at the site as required by individual specification Sections for review and acceptance. Where field samples and mockups are specified to be removed, clear area of sample/mockup and restore area to acceptable level as directed by District's Project Manager or Inspector.

1.3 SUBMITTALS

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- A. The independent testing agency shall submit a certified written report of each inspection, test, observation, or similar service, to the Architect, District's Project Manager, Inspector and DSA, unless the Contractor is responsible for the service. If the Contractor is responsible for the service, to include manufacturers' field services, submit a certified written report of each inspection, test, observation, or similar service through the Contractor, to the Architect, District's Project Manager, Inspector and DSA.
1. Submit additional copies of each written report directly to the governing authority, when the authority so directs.
  2. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to:
    - a. Date of issue.
    - b. Project title and number.
    - c. Name, address and telephone number of testing agency.
    - d. Dates and locations of samples and tests or inspections.
    - e. Names of individuals making the inspection or test.
    - f. Designation of the Work and test method.
    - g. Identification of product and Specification Section.
    - h. Complete inspection or test data.
    - i. Test results and interpretations of test results.
    - j. Ambient conditions at the time of sample-taking and testing.
    - k. Comments or professional opinion as to whether inspected or tested Work complies with Contract Document requirements.
    - l. Name and signature of laboratory inspector.
    - m. Recommendations on retesting.

### 1.4 QUALITY ASSURANCE

- A. Qualification for Service Agencies: Engage inspection and testing service agencies, including independent testing laboratories, which are prequalified as complying with "Recommended Requirements for Independent Laboratory Qualification" by the American Council of Independent Laboratories, and which specialize in the types of inspections and tests to be performed.
1. Each independent inspection and testing agency engaged on the project shall be authorized by authorities having jurisdiction to operate in the State in which the project is located.

### 1.5 TESTS

- A. Tests of materials and/or special inspection will be made, when required by these Specifications or by applicable laws, rules and regulations by a Testing Laboratory selected by the District. The cost of the tests shall be paid by the District. Tests shall comply with Title 24.
- B. When, in the opinion of the Architect or the District's Inspector/Project Manager, additional tests or inspection are required because of the manner in which the Contractor executes his work, such tests and inspections shall be paid for by the District, but all costs may be deducted from the Contract Price. Examples of such tests and inspections are: Tests of materials, retests made necessary by failure of material to comply with requirements of the Specifications or plan requirements, etc. readiness for such inspections. Any such work covered up without approval must, if required by the Architect or the District's Inspector/Project Manager, be uncovered and replaced at the Contractor's expense, including the expense of testing, if required.

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- C. Retesting: The Contractor is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract Document requirements, regardless of whether the original test was the Contractor's responsibility.
  - 1. Cost of retesting construction revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original construction. The District will pay for retesting and back charge the contractor for these charges.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION

### 3.1 REPAIR AND PROTECTION

- A. General: Upon completion of inspection, testing, sample-taking and similar services, repair damaged construction and restore substrates and finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes. Comply with Contract Document requirements for "Cutting and Patching."
- B. Protect construction exposed by or for quality control service activities, and protect repaired construction.
- C. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.
- D. Testing required by the Division of the State Architect is attached at the end of this section (Attachment A).

END OF SECTION



**SECTION 015000- TEMPORARY FACILITIES AND CONTROLS**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. This Section specifies requirements for temporary services and facilities, including utilities, construction and support facilities, security and protection, provided by Contractor.

**1.2 SUBMITTALS**

- A. Temporary Utilities: Submit reports of tests, inspections and similar procedures performed on temporary utilities.

**1.3 QUALITY ASSURANCE**

- A. Regulations: Comply with industry standards and applicable laws and regulations of authorities having jurisdiction, including but not limited to:
  - 1. Health and safety regulations.
  - 2. Utility company regulations.
  - 3. Police, Fire Department and Rescue Squad rules.
  - 4. Environmental protection regulations.
  - 5. Local County Department of Transportation regulations.
- B. Standards: Comply with NFPA Code 241, "Building Construction and Demolition Operations", ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and NECA Electrical Design Library "Temporary Electrical Facilities."
  - 1. Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services", prepared jointly by AGC and ASC, for industry recommendations.
  - 2. Electrical Service: Comply with NEMA, NECA and UL standards and regulations for temporary electric service. Install service in compliance with the California Electric Code (CEC).
- C. Inspections: Arrange for authorities having jurisdiction to inspect and test each temporary utility before use. Obtain required certifications and permits.
- D. Water Quality: Comply with requirements for water quality contained in Section 01 35 00 Special Project Procedures.

**1.4 PROJECT CONDITIONS**

- A. Temporary Utilities: Prepare a schedule indicating dates for implementation and termination of each temporary utility. If temporary utilities are provided through the local utilities, and only a single service is allowed to the project, the temporary utilities must be shared with all contractors and subcontractors.
- B. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to interfere with progress. Do not allow hazardous dangerous or unsanitary conditions, or public nuisances to develop or persist on the site.

**1.5 PUBLICITY**

- A. The Contractor will not release or allow to be released any information, story, photograph,

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plan or drawing related to the Project to anyone, including press or other public communications medium, except as submitted and authorized in writing for release by appropriate public relations authority of the District.

### 1.6 JOB SITE SECURITY

- A. Security of the job area shall be strictly maintained by Contractor. Contractor shall be responsible for keeping all persons not directly associated with the construction operations from entering the job area without advance approval of the District's Project Manager and the Contractor. The Contractor shall be responsible for keeping areas involved in this work locked at all times when work is not in progress.

### 1.7 SITE CONTROLS AND PARKING

- A. Entrance To Work Site: Contractor and his employees shall use certain access roads and entrances as indicated. Maintain these roads in satisfactory condition during the contract time, and repair damages attributable to work of this project at intervals as needed. At completion of Contract, roads and entrances shall be left in condition at least equal to that existing at start of Contract, except as may be otherwise required by Contract Documents.
- B. Site Coverage and Work Areas (Corporation Yard): District will allocate available on-site storage and work areas to Contractor, subject to change as may be necessary by job progress, such as site development or other intervening work. **At conclusion of project, Corporation Yard will be returned to original condition. If in grassed area Contractor will resod as necessary.**
- C. Parking: Parking will be available at the job site for company vehicles within the fenced site area only. Parking of personal vehicles belonging to Contractor's employees will be permitted on campus at a site designated by the college at the Pre-Construction Conference.
- D. Regulations: Observe and comply with rules and regulations in effect at campuses or other facilities, including, but not restricted to, parking and traffic regulations, security restrictions, hours of access, and the like.

### 1.8 USE OF SIDEWALKS AND STREETS

- A. Make arrangements with local authorities for temporary use of streets and sidewalks for any purpose. Contractors will abide by all rules, regulations, and ordinances, obtain any permits and pay all fees required.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General: Provide new materials. Provide materials suitable for the use intended.

### 2.2 EQUIPMENT

- A. General: Provide new equipment. Provide equipment suitable for use intended.
- B. Temporary Offices: Provide prefabricated or mobile units with lockable entrances, operable windows and serviceable finishes. Provide heated and air- conditioned units on foundations adequate for normal loading.
  - 1. Provide separate office or a separate mobile unit for District representatives of equal quality as the Contractor's field office.

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2. Provide meeting room independent of offices for site meetings.
3. Furnish offices with a desk, chairs, bookcase, plan table and plan rack, and water cooler.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the project adequately and result in minimum interference with performance of the work. Relocate and modify facilities as required. Coordinate with District's Inspector and/or Project Manager.
- B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

#### 3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Engage the appropriate local utility company to install temporary service. Where the company provides only part of the service, provide the remainder with matching, compatible materials and equipment; comply with the company's recommendations.
  1. Arrange with the company and existing users for a time when service can be interrupted, where necessary, to make connections for temporary services.
  2. Provide adequate capacity at each stage of construction. Prior to temporary utility availability, provide trucked-in services.
  3. Use Charges: Cost or use charges for temporary facilities are not chargeable to the District or Architect, and will not be accepted as a basis of claims for a Change Order.
- B. Temporary Water Service: Install temporary water service and distribution piping of sizes and pressures adequate for construction.
  1. Water Source: Use water from Owner's existing water system. Contractor is to furnish and install temporary water meter(s) for connection to Owner's existing hydrant(s). This water is not considered potable and should not be used for human consumption. Contractor is to meter and pay all water service use charges for all water used by all entities engaged in construction activities at Project site including but not limited to water use associated with flushing of existing and new hydronic lines as required by Division 15 specifications.
  2. Sterilization: Sterilize all water piping prior to use.
- C. Temporary Electric Power Service: Provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include meters, transformers, overload protected disconnects, automatic ground-fault interrupters and main distribution switch gear when required. Provide generators for power as required when electrical service is not available.
  1. Electrical Source: Contractor may utilize generators for temporary power or, at his own expense, propose and provide sub-meters and connections to the Campus existing main power for temporary power. All temporary connection costs are the responsibility of the Contractor.
  2. Power Distribution System: Install wiring overhead, and rise vertically where least exposed to damage. Where permitted, wiring circuits not exceeding 125 Volts, AC 20 ampere rating, and lighting circuits may be nonmetallic sheathed cable where

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overhead and exposed for surveillance.

- D. Temporary Telephone and Internet services: Provide temporary telephone and internet services for all personnel engaged in construction activities, throughout the construction period, including the District Project Inspector(s) and Project Manager(s). Contractor shall make all arrangements and pay all charges for telephone and internet services.
  - 1. Provide one (1) telephone line for District Project Inspector and Project Manager.
  - 2. Post a list of important telephone numbers at each telephone.
- E. Sewers and Drainage: If sewers are available, provide temporary connections to remove effluent that can be discharged lawfully. If sewers are not available or cannot be used, provide drainage ditches, dry wells, stabilization ponds and similar facilities. If neither sewers nor drainage facilities can be lawfully used for discharge of effluent, provide containers to remove and dispose of effluent off the site in a lawful manner.
  - 1. Filter out excessive amounts of soil, construction debris, chemicals, oils and similar contaminants that might clog sewers or pollute waterways before discharge. Meet all local and State Agency requirements to prevent discharge outside of property.
  - 2. Connect temporary sewers to the municipal system as directed by the sewer department officials.
  - 3. Maintain temporary sewers and drainage facilities in a clean, sanitary condition. Following heavy use, restore normal conditions promptly.
- F. Storm Drainage: As required by the California State Water Resources Control Board, only rainwater is permitted in storm drain system. Wash down from equipment, vehicles, and other construction activities shall not be discharged directly into storm drain system. Contractor shall provide temporary containment, sediment traps, and/or gravel filters to prevent discharge of non-storm water into storm drain system.
- G. Provide earthen embankments and similar barriers in and around excavations and subgrade construction, sufficient to prevent flooding by runoff of storm water from heavy rains.

### 3.3 TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES INSTALLATION

- A. Locate field offices, storage sheds, sanitary facilities and other temporary construction and support facilities for easy access.
- B. Temporary Signs: Provide signs to provide directional information (that is traffic control, hard hat area, etc.) to construction personnel, supplier, and visitors. Coordinate the location of signs with District Project Manager so as to inform the public and persons seeking entrance to the construction site.
- C. Temporary Paving: Construct and maintain temporary paving to adequately support the indicated loading and to withstand exposure to traffic during the construction period. Locate temporary paving storage areas and parking where the same permanent facilities will be located. Review proposed modifications to permanent paving with the Architect.
  - 1. Maintain temporary paving to existing subgrade, compaction, installation and stabilization of subbase.
- D. Sanitary facilities include temporary toilets, wash facilities and drinking water fixtures. Comply with regulations and health codes for the type, number, location, operation and maintenance of fixtures and facilities. Install where facilities will best serve the project's needs.

1. Toilets: Install self-contained toilet units. Shield toilets to ensure privacy. Use of pit-type privies will not be permitted.
  2. Wash Facilities: Install wash facilities supplied with potable water at convenient locations for personnel involved in handling materials that require wash-up for a healthy and sanitary condition. Dispose of drainage properly. Supply cleaning compounds appropriate for each condition.
  3. Provide safety showers, eye-wash fountains and similar facilities for convenience, safety and sanitation of personnel when required.
  4. Drinking Water Facilities: Provide containerized tap-dispenser bottled-water type drinking water units, including paper supply. Where power is accessible, provide electric water coolers to maintain dispensed water temperature at 45 to 55 deg F (7 to 13 deg C).
  5. Provide toilet tissue, paper towels, paper cups and similar disposable materials for each facility. Provide covered waste containers for used material.
- E. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg F (27 deg C). Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Contractor to pay for and insure disposal of material in a lawful manner.

#### 3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Temporary Fire Protection: Until fire protection needs are supplied by permanent facilities, install and maintain temporary fire protection facilities of the types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 10 "Standard for Portable Fire Extinguishers," and NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations."
1. Locate fire extinguishers where convenient and effective for their intended purpose.
  2. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities and other access routes for fighting fires. Prohibit smoking in hazardous fire exposure areas.
  3. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of fire ignition.
- B. Permanent Fire Protection: At the earliest feasible date in each area of the Project, complete installation of the permanent fire protection facility, including connected services, and place into operation and use. Instruct key personnel on use of facilities.
- C. Barricades, Warning Signs and Lights: Comply with standards and code requirements for erection of structurally adequate barricades. Paint with appropriate colors, graphics and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed provide lighting, including flashing red or amber lights.
- D. Enclosure Fencing: Fencing shall be provided by the Contractor around the total construction site to include the Contractor's Corporation Yard as shown on the Construction Drawings. Access gates must be locked during non construction periods. Contractor will coordinate access control with District's Project Manager.
- E. Security Enclosure and Lockup: Install substantial temporary enclosure(s) of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.

1. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.
- F. Environmental Protection: Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result. Avoid use of tools and equipment which produce harmful noise. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or firms near the site. Comply with environmental requirements outlined in Section 01 35 00 - Special Project Procedures.

### 3.5 OPERATION, TERMINATION AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.
- B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.
  1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour day basis where required to achieve indicated results and to avoid possibility of damage.
  2. Protection: Prevent water filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.
- C. Termination and Removal: Unless the District Project Manager requests that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.
  1. Materials and facilities that constitute temporary facilities are property of the Contractor.
  2. Remove temporary paving that is not intended for or acceptable for integration into permanent paving. Where the area is intended for landscape development, remove soil and aggregate fill that does not comply with requirements for fill or subsoil in the area. Remove materials contaminated with road oil, asphalt and other petrochemical compounds, and other substances which might impair growth of plant materials or lawns. Repair or replace street paving, curbs and sidewalks at the temporary entrances, as required by the governing authority.
  3. Immediately prior to completion, clean and renovate permanent facilities that have been used during the construction period. Replace significantly worn parts and parts that have been subject to unusual operating conditions.

END OF SECTION

**SECTION 01 5713–TEMPORARY EROSION AND SEDIMENT CONTROL**

**PART 1 - GENERAL**

**1.1 SCOPE OF WORK**

- A. Provide all materials, equipment and labor necessary to furnish and install straw wattles at locations shown on the Drawings and on Contractors Storm Water Pollution Prevention Plan.
- B. PERMIT: NOTICE OF INTENT (NOI) Obtain and pay for permit in Owner's name from State Water Resources Control Board
- C. STORM WATER POLLUTION PREVENTION PLAN: Prepare a Storm Water Pollution Prevention Plan (SWPPP tailored to the Contractor's operations, methods and equipment and the requirements of Los Rios Community College District. Comply with State Water Resources Control Board requirements.
  - 1. The SWPPP shall be provided by the Contractor prior to the start of work. The SWPPP shall be tailored to the contractor's approach to the work in this contract. The Contractor shall as a minimum address:
    - a. Cut and fill operations
    - b. Temporary stockpiles
    - c. Vehicle and equipment storage, maintenance and fueling operations
    - d. Concrete, plaster, mortar and paint disposal
    - e. Dust control
    - f. Tracking of dirt, mud on off-site streets
    - g. Pipe flushing

**1.2 SUBMITTALS**

- A. STORM WATER POLLUTION PREVENTION PLAN: The Contractor shall submit and obtain the Storm Water Pollution Prevention Plan prior to beginning work on site.
- B. Notice of Intent (NOI): The Contractor shall submit a NOI to the State Water Resources Control Board prior to beginning work on site.

**1.3 QUALITY ASSURANCE**

- A. Comply with governing codes and regulations.

**PART 2 - PRODUCTS**

**2.1 MATERIALS**

- A. STRAW WATTLES: Shall be new manufactured straw roles in compliance with state requirements for sediment control.

**PART 3 – EXECUTION**

**3.1 INSTALLATION**

- A. STRAW WATTLES: Shall be installed per the drawings and/or as required by the SWPPP.

**3.2 MAINTENANCE AND REMOVAL**

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- A. Maintain and repair existing and new erosion control facilities throughout the construction period. Remove silt build-up at straw wattles as needed. Repair damage to earth slopes and banks. Erosion control measures shall be left in place until final paving and landscaping are complete.
- B. Provide monitoring of erosion control measures before and after storm events. Provide a daily log of construction activities and impact on erosion control measures. Update SWPPP continuously throughout construction period.
- C. Keep area clean of debris.
- D. Remove erosion control measures prior to placing finish landscaping.

### 3.3 CLOSEOUT

- A. File Notice of Termination with the State Water Resources Control Board.

END OF SECTION



SECTION 016000-PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements governing the Contractor's selection of products for use in the project.

1.2 DEFINITIONS

- A. Definitions used in this Article are not intended to change the meaning of other terms used in the Contract Documents, such as "specialties," "systems," "structure," "finishes," "accessories," and similar terms. Such terms are self-explanatory and have well recognized meanings in the construction industry.
  - 1. "Products" are items purchased for incorporation in the work, whether purchased for the project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
    - a. "Named Products" are items identified by manufacturer's product name, including make or model designation, indicated in the manufacturer's published product literature that is current as of the date of the Contract Documents.
  - 2. "Materials" are products that are substantially shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed, or installed to form a part of the work.
  - 3. "Equipment" is a product with operational parts, whether motorized or manually operated, that requires service connections such as wiring or piping.

1.3 SUBMITTALS

- A. Product List Schedule: Prepare a schedule showing products specified in a tabular form acceptable to the Architect. Include generic names of products required. Include the manufacturer's name and proprietary product names for each item listed.
  - 1. Coordinate the product list schedule with the Contractor's Progress Schedule and the Schedule of Submittals.
  - 2. Form: Prepare the product listing schedule with information on each item tabulated under the following column headings:
    - a. Related Specification Section number.
    - b. Generic name used in Contract Documents.
    - c. Proprietary name, model number and similar designations.
    - d. Manufacturer's name and address.
    - e. Supplier's name and address.
    - f. Installer's name and address.
    - g. Projected delivery date, or time span of delivery period.
  - 3. Initial Submittal: Within 15 days after date of Contract, submit 3 copies of an initial product list schedule. Provide a written explanation for omissions of data, and for known variations from Contract requirements.

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- a. At the Contractor's option, the initial submittal may be limited to product selections and designations that must be established early in the Contract period.
- 4. Completed Schedule: Within 30 days after date of Contract, submit 3 copies of the completed product list schedule. Provide a written explanation for omissions of data, and for known variations from Contract requirements.
- 5. Architect's Action: The Architect will respond in writing to the Contractor after receipt of the completed product list schedule. The Architect's response will include the following:
  - a. A list of unacceptable product selections, containing a brief explanation of reasons for this action.

#### 1.4 QUALITY ASSURANCE

- A. Source Limitations: To the fullest extent possible, provide products of the same kind, from a single source.
  - 1. When specified products are available only from sources that do not or cannot produce a quantity adequate to complete project requirements in a timely manner, consult with the Architect for a determination of the most important product qualities before proceeding. Qualities may include attributes relating to visual appearance, strength, durability, or compatibility. When a determination has been made, select products from sources that produce products that possess these qualities, to the fullest extent possible.
- B. Compatibility of Options ("or equal"): When the Contractor is given the option of selecting between two or more products for use on the project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.
- C. Nameplates: Except for required labels and operating data, do not attach or imprint manufacturer's or producer's nameplates or trademarks on exposed surfaces of products which will be exposed to view in occupied spaces or on the exterior.
  - 1. Labels: Locate required product labels and stamps on a concealed surface or, where required for observation after installation, on an accessible surface that is not conspicuous.
  - 2. Equipment Nameplates: Provide a permanent nameplate on each item of service-connected or power-operated equipment. Locate on an easily accessible surface which is inconspicuous in occupied spaces. The nameplate shall contain the following information and other essential operating data:
    - a. Name of product and manufacturer.
    - b. Model and serial number.
    - c. Capacity.
    - d. Speed.
    - e. Ratings.

#### 1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle products in accordance with the manufacturer's recommendations, using means and methods that will prevent damage, deterioration and

loss, including theft.

1. Schedule delivery to minimize long-term storage at the site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other losses.
3. Deliver products to the site in the manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.
4. Inspect products upon delivery to ensure compliance with the Contract Documents, and to ensure that products are undamaged and properly protected.
5. Store products at the site in a manner that will facilitate inspection and measurement of quantity or counting of units.
6. Store heavy materials away from the project structure in a manner that will not endanger the supporting construction.
7. Store products subject to damage by the elements above ground, under cover in a weathertight enclosure, with ventilation adequate to prevent condensation. Maintain temperature and humidity within range required by manufacturer's instructions.

## **PART 2 - PRODUCTS**

### **2.1 PRODUCT SELECTION**

- A. General Product Requirements: Provide products that are new and undamaged, that comply with the Contract Documents, and, unless otherwise indicated, unused at the time of installation.
  1. Provide products complete whether completely specified or not with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.
  2. Standard Products: Where available, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- B. Product Selection Procedures: Product selection is governed by the Contract Documents and governing regulations, not by previous Project experience. Procedures governing product selection include the following:
  1. Proprietary Specification Requirements: Where only a single product or manufacturer is named, provide the product indicated. No substitutions will be permitted.
  2. Semi-proprietary Specification Requirements: Where two or more products or manufacturers are named, provide one of the products indicated. No substitutions will be permitted.
    - a. Where products or manufacturers are specified by name, accompanied by the term "or equal," or "or approved equal" comply with the Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
  3. Descriptive Specification Requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of a brand or trade name, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.

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4. Performance Specification Requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements, and are recommended by the manufacturer for the application indicated. General overall performance of a product is implied where the product is specified for a specific application.
  - a. Manufacturer's recommendations may be contained in published product literature, or by the manufacturer's certification of performance.
5. Compliance with Standards, Codes and Regulations: Where the Specifications only requires compliance with an imposed code, standard or regulation, select a product that complies with the standards, codes or regulations specified. Certificate covering compliance shall be furnished to Architect.
  - a. When Division of State Architect or California State Fire Marshall has approved a product or material it is the Contractor's responsibility to obtain approval for any products submitted as "substitution". Architects submittal stamp showing review does not deviate the Contractor's responsibility for obtaining approval. Any time spent by Architect to help obtain approval with Contractor will be billed to Contractor by the District, or held from payment due to Contractor.
6. Visual Matching: Where Specifications require matching an established Sample, the Architect's decision will be final on whether a proposed product matches satisfactorily.
  - a. Where no product available within the specified category matches satisfactorily and also complies with other specified requirements, comply with provisions of the Contract Documents concerning "substitutions" for selection of a matching product in another product category, or for noncompliance with specified requirements.
7. Visual Selection: Where specified product requirements include the phrase "as selected from manufacturer's standard colors, patterns, textures..." or a similar phrase, select a product and manufacturer that complies with other specified requirements. The Architect will select the color, pattern and texture from the product line selected.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION OF PRODUCTS:

- A. Comply with manufacturer's instructions and recommendations for installation of products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other Work. Install all accessories, trim finish, safety guards, and other devices and details needed for a complete and finished installation.
  1. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Completion.

END OF SECTION

**SECTION 01 71 23 - FIELD ENGINEERING**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. General: This Section specifies administrative and procedural requirements for field engineering services, including, but not necessarily limited to, the following:
  - 1. Land survey Work.

**1.2 SUBMITTALS**

- A. Certificates: Submit a certificate signed by the Land Surveyor or Professional Engineer certifying that the location and elevation of improvements comply with the Contract Documents.
- B. Project Record Documents: Submit a record of work performed and record survey data as required under provisions of Section 01 77 00 - Closeout Procedures.

**1.3 QUALITY ASSURANCE**

- A. Surveyor: The Contractor will engage a Registered Land Surveyor registered in the State of California, to perform land surveying services as required.

**PART 2 - PRODUCTS (Not Applicable)**

**PART 3 - EXECUTION**

**3.1 EXAMINATION**

- A. The Contractor will locate and identify existing control points and property line corner stakes.
- B. Verify layout information shown on the Drawings, in relation to the property survey and existing benchmarks before proceeding to layout the work. Locate and protect existing benchmarks and control points. Preserve permanent reference points during construction.
  - 1. Do not change or relocate benchmarks or control points without prior written approval by District. Promptly report lost or destroyed reference points, or requirements to relocate reference points because of necessary changes in grades or locations.
  - 2. Promptly replace lost or destroyed project control points. Base replacements on the original survey control points. Work to be performed by a registered surveyor.
- C. Establish and maintain a minimum of two permanent benchmarks on the site, referenced to data established by survey control points.
  - 1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
- D. Existing utilities: It is recognized by the Contractor that the location of existing utility facilities as shown on Contract drawings and specifications are approximate; their exact location is unknown.
  - 1. Recognition is given to the fact that there may be additional utilities existing on the

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property unknown to either party to the Contract. Location of utilities as shown on drawings and specifications represent the best information obtainable from utility maps and other information furnished by the various agencies involved. The District warrants neither the accuracy nor the extent of actual installations as shown on the drawings and specifications.

2. Because of this uncertainty, it may become necessary for the Architect to make adjustments in the line or grade of sewers or storm drains. Installation of such adjusted lines shall be made at the regular unit price bid for the work, and no additional compensation will be paid therefor, unless the scope and character of the work has been changed.
3. The Contractor agrees and is required to coordinate and fully cooperate with the District and utility owners for the location, relocation, and protection of utilities. The Contractor's attention is directed to the existence of utilities, underground and overhead, necessary for normal commercial service for all buildings along the line of work. The Contractor shall make arrangements with utility owners for the location of commercial services lines in advance of the actual construction and for the relocation of such facilities, if necessary, by the utility owner or the Contractor.
4. In accordance with Section 4215 of the Government Code of the State of California, the District shall make provisions to compensate the Contractor for the costs of locating, repairing damage not due to the failure of the Contractor to exercise reasonable care, and removing or relocating such main and trunk line utility facilities not indicated in the plans and specifications with reasonable accuracy, and for equipment on the project necessarily idled during such work. Compensation will be in accordance with Paragraph 39, Changes, and subject to all of the requirements of Paragraph 37, Claims, of the General Conditions. In the event the Contractor discovers utilities not identified in the Contract Documents, the Contractor shall immediately notify the Architect and the utility owner by the most expeditious means available and later confirm in writing.
5. It is understood and agreed that the failure of the Contractor or his/her subcontractor to comply fully with these provisions constitutes failure of the Contractor to exercise reasonable care and precludes Contractor's recovery from District for any related costs or damages.

### 3.2 PERFORMANCE

- A. Working from lines and levels established by the property survey, establish benchmarks and markers to set lines and levels at each story of construction and elsewhere as needed to properly locate each element of the Project. Do not scale Drawings to determine dimensions.
  1. Advise everyone engaged in construction activities, of marked lines and levels provided for their use.
  2. As construction proceeds, check every element for line, level and plumb.
- B. Surveyor's Log: Maintain a surveyor's log of control and other survey work. Make this log available for reference, and submit with as-built drawings.
  1. Record deviations from required lines and levels, and immediately advise the Architect in writing when deviations that exceed indicated or recognized tolerances are detected. On Project Record Drawings, record deviations that are accepted in writing by the District and not corrected.

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- C. Existing Utilities: Furnish information necessary to adjust, move or relocate existing structures, utility poles, lines, services or other appurtenances located in, or affected by construction. Coordinate with local authorities having jurisdiction.

### 3.3 PROJECT SURVEY REQUIREMENTS

- A. Establish lines and levels and layout:
  - 1. Site improvements (pad work)
    - a. Stakes for grading and fill placement.
    - b. Utility slopes and invert elevations.
  - 2. Batter boards for structures
  - 3. Building foundations, column locations, and floor levels
  - 4. Controlling lines and levels required for mechanical and electrical work.
  - 5. Building roof deck slope verification and as built survey.
- B. Verify layouts as work proceeds to assure compliance with required lines, levels, and tolerances.

END OF SECTION

**SECTION 017700-CLOSEOUT PROCEDURES**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. This Section specifies administrative and procedural requirements for project close-out, including but not limited to:
  - 1. Inspection procedures.
  - 2. Project record document submittal.
  - 3. Operating and maintenance manual submittal.
  - 4. Submittal of warranties.
  - 5. Final cleaning.
- B. Close-out requirements for specific construction activities are included in the appropriate Sections in Divisions-2 through -16.
- C. Actual completion is required for all work to be completed under each phase.

**1.2 COMPLETION**

- A. Preliminary Procedures: Before requesting inspection for certification of Completion, complete the following. List exceptions in the request.
  - 1. Deliver tools, spare parts, extra stock, and similar items.
  - 2. Make final change-over of permanent locks and transmit keys to the District. Advise the District's personnel of change-over in security provisions.
  - 3. Complete start-up testing of systems, and instruction of the District's operating and maintenance personnel. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
  - 4. Complete final clean up requirements, including touch-up painting. Touch-up and otherwise repair and restore marred exposed finishes.
- B. Completion: When Contractor determines that all work included under this Contract is completed and with the concurrence of the District Project Manager, he shall submit written notice of such finding to the Architect and indicate the time and date for a "punch list" inspection at least five (5) days following the date of the notice.
  - 1. The Architect will then notify the appropriate consultants to make their inspections and prepare "punch lists".
  - 2. The Architect and consultants shall prepare a "punch list" in the presence of the Contractor as a convenience to the Contractor for items not completed and work unacceptable to the requirements of the Contract Documents.
  - 3. The "punch list" is not to be construed as a requirement to assist in completion of the project, and the Contractor shall make a diligent effort to complete all of the work in conformance with the requirements of the Contract Documents before requesting a "punch list". Corrections of items noted on the "punch list" does not relieve the Contractor from conforming to all requirements of the Contract Documents.



**1.3 FINAL ACCEPTANCE**

- A. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
1. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
  2. Submit an updated final statement, accounting for final additional changes to the Contract Sum.
  3. Submit a certified copy of the Architect's final inspection list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance. The copy is to be signed by Contractor and dated.
  4. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Actual completion, or when the District took possession of and responsibility for corresponding elements of the work.
  5. Submit consent of surety to final payment.
  6. Submit a final liquidated damages settlement statement if applicable.
  7. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- B. Reinspection Procedure: The Architect will reinspect the work upon receipt of notice that the work, including inspection list items from earlier inspections, has been completed, except items whose completion has been delayed because of circumstances acceptable to the Architect.
1. Upon completion of reinspection, the Architect will prepare a letter of final acceptance by the Architect, or advise the Contractor of work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
  2. The Architect, consultants and District Inspector and/or Project Manager will make only one reinspection at no cost to the Contractor.

**1.4 RECORD DOCUMENT SUBMITTALS**

- A. General: Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Architect's reference during normal working hours.
- B. Record Drawings: Maintain current on a daily basis, a clean, undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies in any respect from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
1. Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the work.
  2. Mark new information that is important to the District, but was not shown on Contract Drawings or Shop Drawings.
  3. Note related Change Order numbers where applicable.
  4. Upon completion of the work, obtain one set of reproducible transparencies from the original documents available from the Architect and transfer all comments from the field set of prints to the transparencies. Transfer work shall be of professional quality as performed by a professional draftsman.
  5. Upon completion of the work, submit record drawing transparencies to the District

- for the District's records.
6. Upon completion of the work, submit record survey drawing transparencies to the District for the District's records.
- C. Record Specifications: Maintain one complete copy of the Contract Documents, including addenda, and one copy of other written construction documents such as Change Orders and modifications issued in printed form during construction. Mark these documents to show variations in actual work performed in comparison with the text of the Specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data.
1. Upon completion of the work, submit record Specifications to the District for the District's records.
- D. Record Product Data: Maintain one copy of each Product Data submittal. Mark these documents to show variations in actual work performed in comparison with information submitted. Include variations in products delivered to the site, and from the manufacturer's installation instructions and recommendations. Give particular attention to concealed products and portions of the work which cannot otherwise be readily discerned later by direct observation. Note related Change Orders and mark-up of record drawings and specifications.
1. Upon completion of mark-up, submit complete set of record Product Data to the District for the District's records.
- E. Record Sample Submitted: Immediately prior to the date or dates of Actual completion, the Contractor will meet at the site with the Architect and the District's personnel to determine which of the submitted Samples that have been maintained during progress of the Work are to be transmitted to the District for record purposes. Comply with delivery to the District's Sample storage area.
- F. Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record-keeping and submittals in connection with actual performance of the work. Immediately prior to the date or dates of Actual completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the District for the District's records.
- G. Maintenance Manuals:
1. General: Incorporate brochures, manufacturer's catalogs and written instructions for equipment and materials needing regular care or maintenance; i.e., carpets, resilient flooring, architectural finishes, mechanical and electrical equipment, etc.
2. Provide heavy duty, 3-ring vinyl covered binders with clear plastic covers and pocket folders for folded sheet information. Mark appropriate identification on front and spine of each binder. [Organize manuals into three (3) suitable sets of manageable size.] Deliver three (3) sets of manuals to District's project manager. Provide the following minimum information:
- a. Typewritten index at front of manual.
- b. Emergency instructions.
- c. Copies of warranties.
- d. Operation and maintenance instructions.
- e. Wiring diagrams.
- f. Recommended "turn around" cycles.

- g. Inspection procedures.
- h. Shop drawings and product data.
- i. Repair/Replacement parts; complete nomenclature of all replaceable parts, their part numbers, (current cots), and name and address of nearest vendor.
- j. Fixture lamping schedule.
- k. Material Safety Data Sheets for all materials used.

- 3. Additional Data: Where contents of manuals include manufacturer's catalog pages, clearly indicate precise items included in this project and delete or otherwise clearly indicate manufacturer's data which is not in this project.

## PART 2 - PRODUCTS (Not Applicable)

## PART 3 - EXECUTION

### 3.1 CLOSEOUT PROCEDURES

- A. Operating and Maintenance Instructions: Arrange for each installer of equipment that requires regular maintenance to meet with the District's personnel to provide instruction in proper operation and maintenance. If installers are not experienced in procedures, provide instruction by manufacturer's representatives. Include a detailed review of the following items:

- 1. Maintenance manuals.
- 2. Record documents.
- 3. Spare parts and materials.
- 4. Tools.
- 5. Lubricants.
- 6. Fuels.
- 7. Identification systems.
- 8. Control sequences.
- 9. Hazards.
- 10. Cleaning.
- 11. Warranties and bonds.
- 12. Maintenance agreements and similar continuing commitments.

- B. As part of instruction for operating equipment, demonstrate the following procedures:

- 1. Start-up.
- 2. Shutdown.
- 3. Emergency operations.
- 4. Noise and vibration adjustments.
- 5. Safety procedures.
- 6. Economy and efficiency adjustments.
- 7. Effective energy utilization.

### 3.2 FINAL CLEANING

- A. General: General cleaning during construction is required by the General Conditions.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.
  - 1. Complete the following cleaning operations before requesting inspection for completion.

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- a. Remove labels that are not permanent labels.
  - b. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films and similar foreign substances. Restore reflective surfaces to their original reflective condition.
  - c. Wipe surfaces of electrical equipment. Remove excess lubrication and other substances.
  - d. Clean the site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.
- C. Removal of Protection: Remove temporary protection and facilities installed for protection of the work during construction.
- D. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the District's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.
  - 1. Where extra materials of value remaining after completion of associated work have become the District's property, arrange for disposition of these materials as directed.
- F. If Contractor fails or refuses to fulfill these obligations to the District's satisfaction, District may, at its option, undertake these obligations, and withhold the cost of performing these obligations, plus an additional fee of twenty-five percent (25%) for administrative costs, from payments to Contractor.

END OF SECTION

**SECTION 017800 - CLOSEOUT SUBMITTALS**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturers standard warranties on products and special warranties.
  - 1. Specific requirements for warranties for the work and products and installations that are specified to be warranted, are included in the individual Sections of Divisions-2 through -16.
  - 2. Certifications and other commitments and agreements for continuing services to District are specified elsewhere in the Contract Documents.
- B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- C. Except as otherwise specified all work shall be guaranteed by the Contractor against defects in materials, equipment, or workmanship for one (1) year from date of Notice of Completion.
- D. In case of work performed by subcontractors and where guarantees are required under the various technical Divisions of the Specifications, warranties addressed to and in favor of the District shall be secured from said subcontractors and delivered to the District upon completion of the work. The delivery of said guarantees shall not relieve the Contractor from any obligation assumed under any other provision of the Contract.
- E. After Final Payment: Neither the final certificate for payment nor any provisions in the Contract Documents shall relieve the Contractor of responsibility for defective materials or workmanship, and unless otherwise specified, Contractor shall remedy any defects due thereto and pay for any damage to other work resulting therefrom which shall appear within a period of one (1) year from date of Notice of Completion.

**1.2 DEFINITIONS**

- A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the District.
- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the District.

**1.3 WARRANTY REQUIREMENTS**

- A. Related Damages and Losses: When correcting work that has failed, remove and replace other work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted work.
- B. Reinstatement of Warranty: When work has failed and been corrected by replacement or

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rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

- C. Replacement Cost: Upon determination that work covered by a warranty has failed, replace or rebuild the work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective work regardless of whether the District has benefitted from use of the work through a portion of its anticipated useful service life, regardless of the cost to replace or rebuild the defective work, and the doctrines of diminution of value and economic waste shall not apply.
- D. District's Recourse: Written warranties made to the District are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the District can enforce such other duties, obligations, rights, or remedies.
  - 1. Rejection of Warranties: The District reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- E. The District reserves the right to refuse to accept work for the Project where a special warranty, certification, or similar commitment is required on such work or part of the work, until evidence is presented that entities required to countersign such commitments are willing to do so.
- F. In case the Contractor fails to do the work so ordered the District may have the work done and charge the cost thereof against monies due or to become due the Contractor. If no such monies are available the Contractor and his/her sureties shall pay the District the cost of such work.
- G. If within a guarantee and warranty period defects develop due to defects in materials or workmanship the Contractor shall, within 48 hours after notification to the Contractor by the District and without additional expense to the District:
  - 1. Replace in satisfactory condition in every particular all of such guaranteed work, correct all defects therein and;
  - 2. Make good all damage to the building or site, or equipment or contents thereof which, in the opinion of the Architect and the District, is the result of the use of materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the Contract and;
  - 3. Make good any work or material, or the equipment and contents of said building or site disturbed, in fulfilling any such guarantee.

#### 1.4 SUBMITTALS

- A. Form of Submittal: At Final Completion compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Contract Documents.
- B. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2" by 11" paper.
  - 1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed

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- description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.
2. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS, the Project title or name, and the name of the Contractor.
  3. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

PART 2 - PRODUCTS (not applicable)

PART 3 – EXECUTION (not applicable)

END OF SECTION

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### GUARANTY-WARRANTY FOR

(trade section or item of equipment)

We hereby warrant and the General Contractor guarantees that the (trade section or item of equipment) which we have installed in the (project name) has been done in accordance with the Drawings and Specifications and that the work as installed will fulfill requirements of the Guaranty-warranty included in the Specifications. We agree to repair any or all of our work together with any other adjacent work which may be displaced or damaged by so doing, that may prove to be defective in its workmanship or materials within a period of (number) year(s) from date of acceptance of above named buildings, without any expense to the Los Rios Community College District, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of our failure to comply with above-mentioned conditions within 48 hours after being notified by the Los Rios Community College District we, collectively or separately, do hereby authorize the Los Rios Community College District to proceed to have said defects repaired and made good at our expense and we will honor and pay the costs and charges therefore upon demand.

SIGNED

COUNTERSIGNED

DATE OF ACCEPTANCE:

(month, day, year) TO (month, day, year)