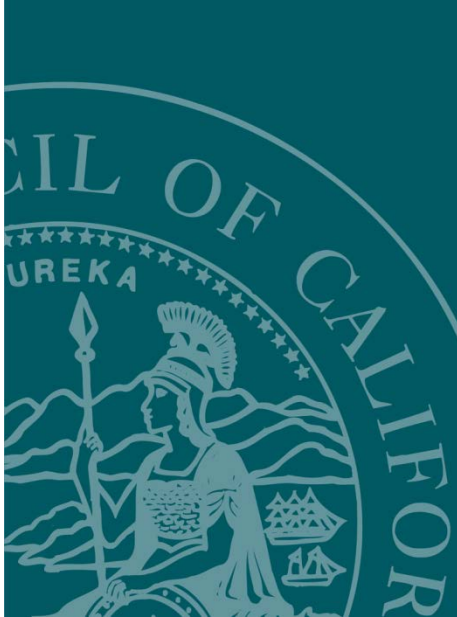


EXHIBIT I TO CMR AGREEMENT



DIVISION 01

New Santa Rosa Courthouse
Superior Court of California

County of Sonoma |



**JUDICIAL COUNCIL
OF CALIFORNIA**

OPERATIONS AND PROGRAMS DIVISION

DIVISION 01

SECTION 01 00 00

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SECTION 01 11 00

SUMMARY OF WORK

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Technical Specifications; and
- 1.1.3. Design Document.

1.2. PROJECT SUMMARY

- 1.2.1. Project Identification: New Santa Rosa Courthouse
- 1.2.2. Project Location: Ventura Avenue and Administration Drive, Santa Rosa, CA
- 1.2.3. Judicial Council of California
- 1.2.4. Judicial Council of California Project Manager: Deepika Padam
- 1.2.5. Architect: Richard Meier and Partners
- 1.2.6. Judicial Council of California Inspector of Record: TBD
- 1.2.7. Judicial Council of California Construction Manager (CM): TBD
- 1.2.8. The Work consists of the following:
 - 1.2.8.1. The new courthouse project is programmed for 15 courtrooms comprised of a total of 169,342 Building Gross Square Feet (BGSF) in the City of Santa Rosa. This new facility will replace the existing space in the Sonoma County Hall of Justice (Hall of Justice), in the attached Old Jail building, and in the attached current jail or Main Adult Detention Facility (MADF) at the county administrative complex, as well as the space in the offsite Family Court Services leased facility. The project will provide space for 15 existing judicial officers and provides a modern, secure courthouse for the residents of Sonoma County, replacing the existing deficient courthouse and creating operational efficiencies and on-going savings through consolidation of current court services with mediation services currently located in leased space. This new courthouse will provide centralized criminal, traffic, and juvenile dependency proceedings for the entire county.
 - 1.2.8.2. The site development includes but is not limited to site preparation, underground utilities, landscape, hardscape, vehicular drives, surface parking, security barriers, fencing, and gates.
 - 1.2.8.3. Project scope includes surface parking for 450 cars plus 20 underground secure parking for judicial officers.

1.2.8.4. The Project will be insured under an owner controlled insurance program (OCIP) provided by the Judicial Council.

1.3. TYPE OF CONTRACT

1.3.1. Project will be constructed under the Judicial Council of California's CM-at-Risk Agreement for Preconstruction and Construction Phase Services.

1.4. USE OF PREMISES

1.4.1. Confine construction operations to within site boundaries.

1.5. WORK RESTRICTIONS

1.5.1. Check requirements of local jurisdiction and coordinate with existing Judicial Council of California facilities on or near the Project Site.

1.5.2. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Judicial Council of California or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

1.5.2.1. Notify Judicial Council of California not less than two (2) days in advance of proposed utility interruptions.

1.5.2.2. Do not proceed with utility interruptions without Judicial Council of California's written permission.

1.6. ENVIRONMENTAL REQUIREMENTS

1.6.1. This Project has been designated to incorporate environmental concepts established as part of the Judicial Council of California's California Trial Court Facilities Standards. To the extent possible, materials and equipment included in these Specifications comply with sustainable design practices.

1.6.2. LEED™ Certification: This Project will submit documentation for LEED™ Certification Program of US Green Building Council (USGBC), 1015 18th Street, NW, Suite 805, Washington, DC 20036; Ph: 202-828-7422; Fax: 202/828-5110; www.usgbc.org. Requirements are described in Document 01 81 13, "Sustainable Design Requirements."

1.6.3. The Project is being designed for sustainability and to the standards of LEED Silver rating including full participation in the formal LEED certification process. CMR shall provide all required documentation to the Project Architect for LEED certification from Working Drawing phase through the Construction Phase.

END OF SECTION 01 11 00

SECTION 01 20 00

PRICE AND PAYMENT PROCEDURES

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS:

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions

1.2. DESCRIPTION:

- 1.2.1. This Document contains procedures to be followed by the CMR to request payment.
- 1.2.2. **IF THERE IS ANY INCONSISTENCY IN THIS DOCUMENT WITH THE PROVISIONS IN THE GENERAL CONDITIONS THAT THE CMR SHALL COMPLY WITH RELATED TO CHANGES AND/OR REQUESTS FOR CHANGES (e.g., "PAYMENTS," "SCHEDULE OF VALUES"), THOSE PROVISIONS IN THE GENERAL CONDITIONS SHALL TAKE PRECEDENCE.**

1.3. SECTION INCLUDES

- 1.3.1. Schedule of Values.
- 1.3.2. Application for Payment.

1.4. SCHEDULE OF VALUES

- 1.4.1. Provide a breakdown of the GMP with enough detail to facilitate continued evaluation of CMR's Invoices and Progress Reports.
- 1.4.2. CMR must update and resubmit the Schedule of Values before the next Invoice or Application for Payment when Change Orders result in a change in the GMP.

1.5. APPLICATIONS FOR PAYMENT

- 1.5.1. Form: CMR shall submit one (1) original and two (2) copies of the Judicial Council of California Request for Payment form.
- 1.5.2. Content and Format: CMR shall use Schedule of Values for listing items in Judicial Council of California Request for Payment Form.

END OF SECTION

SECTION 01 21 00

ALLOWANCES

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISION

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions; and
- 1.1.2. CM-at-Risk Agreement (“Agreement”), including Exhibit “B” (Price and Payment Detail).

1.2. SUMMARY

- 1.2.1. **THE SPECIFIC ALLOWANCES FOR THIS PROJECT ARE AS LISTED IN THE AGREEMENT.**
- 1.2.2. This Document includes administrative and procedural requirements governing Allowances.
- 1.2.3. Certain items are specified in the Contract Documents by Allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.

1.3. SELECTION AND PURCHASE

- 1.3.1. At the earliest practical date after award of the Contract, CMR shall advise Judicial Council of California of the date when final selection and purchase of each product or system described by an Allowance must be completed to avoid delaying the Work.
- 1.3.2. At Judicial Council of California's request, obtain proposals for each Allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- 1.3.3. Purchase products and systems selected by Judicial Council of California from the designated supplier.

1.4. SUBMITTALS

- 1.4.1. Submit proposals for purchase of products or systems included in Allowances, in the form specified for Change Orders.
- 1.4.2. Submit invoices or delivery slips to show actual quantities of materials delivered to the Site for use in fulfillment of each Allowance.
- 1.4.3. Coordinate and process submittals for Allowance items in same manner as for other portions of the Work.

1.5. COORDINATION

Coordinate Allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.6. PAYMENT FOR ALLOWANCES

Allowance shall include cost to CMR of specific products and materials under Allowance and shall include taxes, freight, and delivery to Project site.

1.7. UNUSED MATERIALS

1.7.1. Return unused materials purchased under an Allowance to manufacturer or supplier for credit to Judicial Council of California, after installation has been completed and accepted.

1.7.2. If requested, prepare and deliver unused material for storage by Judicial Council of California when it is not economically practical to return the material for credit. If directed, deliver unused material to Judicial Council of California's storage space. Otherwise, disposal of unused material is CMR's responsibility.

2. EXECUTION

2.1. EXAMINATION

Examine products covered by an Allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

2.2. PREPARATION

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.

END OF SECTION

SECTION 01 26 00

CONTRACT MODIFICATION PROCEDURES

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS:

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Allowances; and.
- 1.1.3. Substitutions

1.2. DESCRIPTION:

- 1.2.1. This Document contains procedures to be followed by the CMR to request changes in the Contract Time or the GMP.
- 1.2.2. IF THERE IS ANY INCONSISTENCY IN THIS DOCUMENT WITH THE PROVISIONS IN THE GENERAL CONDITIONS THAT THE CMR SHALL COMPLY WITH RELATED TO CHANGES AND/OR REQUESTS FOR CHANGES (e.g., "CHANGES IN THE WORK"), THOSE PROVISIONS IN THE GENERAL CONDITIONS SHALL TAKE PRECEDENCE.

1.3. PRICE REQUESTS:

- 1.3.1. Price Requests issued by Judicial Council of California are for information only. CMR shall not consider Price Requests to be instructions either to stop work in progress or to execute the proposed change.
- 1.3.2. Within time specified in Price Request after receipt of Price Request, submit a quotation estimating cost adjustments to the GMP and the Contract Time necessary to execute the change.
 - 1.3.2.1. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 1.3.2.2. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 1.3.2.3. Include costs of labor and supervision directly attributable to the change.
 - 1.3.2.4. Include an updated CMR's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

1.4. PROPOSED CHANGE ORDERS:

**[New Santa Rosa Courthouse]
[Judicial Council of California]**

CMR may propose changes by submitting a request for a change on Judicial Council of California's Proposed Change Order form (PCO) to Judicial Council of California.

- 1.4.1. Include an updated Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- 1.4.2. Comply with Product Requirements if the proposed change requires substitution of one product or system for product or system specified.

END OF SECTION

SECTION 01 26 10

REQUESTS FOR INFORMATION

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Documentation Requirements;
- 1.1.3. Electronic Data Transfer
- 1.1.4. Submittals
- 1.1.5. Contract Closeout and Final Cleaning;
- 1.1.6. Operation and Maintenance Data;
- 1.1.7. Warranties;
- 1.1.8. Record Documents;
- 1.1.9. Demonstration and Training;
- 1.1.10. LEED; and
- 1.1.11. General Commissioning Requirements.

1.2. DESCRIPTION

This Document contains procedures to be followed by the CMR to request Architect provide additional information necessary to clarify or amplify an item in the Contract Documents that CMR thinks is not clearly shown or called for in the Drawings or Specifications or other portions of the Contract Documents, or to address issues that have arisen under field conditions.

1.3. PROCEDURES

- 1.3.1. Notification by CMR:
 - 1.3.1.1. Submit all requirements for clarification or additional information in writing to Judicial Council of California as required by the Contract Documents.
 - 1.3.1.2. Number RFIs sequentially. Follow RFI number with sequential alphabetical suffix as necessary for each resubmission. For example, the first RFI would be "001." The second RFI would be "002."
 - 1.3.1.3. All RFIs shall reference all applicable Contract Document(s), including Specification section(s), detail(s), page number(s), drawing number(s), and sheet number(s), etc. CMR shall make suggestions and interpretations of the issue

raised by each RFI. An RFI cannot modify the GMP, Contract Time, or the Contract Documents.

1.3.1.4. Limit each RFI to one subject.

1.3.1.5. Submit a RFI if one of the following conditions occurs:

1.3.1.5.1. CMR discovers an Unforeseen Site Condition or circumstance that is not described in the Contract Documents.

1.3.1.5.2. CMR discovers an apparent conflict or discrepancy between portions of the Contract Documents that appears to be inconsistent or is not reasonably inferred from the intent of the Contract Documents.

1.3.2. All RFIs shall be submitted as .pdf documents and shall comply with the formatting and numbering requirements of the document “**Documentation Requirements.**”

1.3.3. CMR shall **not**:

1.3.3.1. Submit an RFI as a request for substitution.

1.3.3.2. Submit an RFI as a submittal.

1.3.3.3. Submit an RFI without first having thoroughly reviewed the Contract Documents.

1.3.3.4. Submit an RFI in a manner that suggests that specific portions of the Contract Documents are assumed to be excluded or by taking an isolated portion of the Contract Documents in part rather than whole.

1.3.3.5. Submit an RFI in an untimely manner without proper coordination and scheduling of Work related trades.

1.4. RESPONSE TIME

1.4.1. Architect shall review RFIs and issue a response and instructions to CMR within a reasonable time frame.

1.4.2. Should CMR direct its subcontractors to proceed with the Work affected before receipt of a response from Architect, any portion of the Work which is not done in accordance with the Architect’s ultimate interpretations, clarifications, instructions, or decisions is subject to removal or replacement at CMR’s sole expense and responsibility.

END OF SECTION

SECTION 01 31 00

COORDINATION AND PROJECT MEETINGS

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS:

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions.

1.2. SECTION INCLUDES

- 1.2.1. Coordination Responsibilities of the CMR.
- 1.2.2. Field Engineering Responsibilities of the CMR.
- 1.2.3. Preconstruction Conference.
- 1.2.4. Progress Meetings.
- 1.2.5. Pre-Installation Conferences.
- 1.2.6. Post Construction Dedication.

1.3. COORDINATION RESPONSIBILITIES OF THE CMR

- 1.3.1. Coordinate scheduling, submittals, and Work of the Specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- 1.3.2. Prior to commencement of a particular type or kind of work examine relevant information, contract documents, and subsequent data issued to the Project.
- 1.3.3. 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.
- 1.3.4. Closing up of holes, backfilling, and other covering up operations shall not proceed until all enclosed or covered work and inspections have been completed. Verify before proceeding.
- 1.3.5. 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.
- 1.3.6. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- 1.3.7. In locations where several elements of mechanical and electrical work must be sequenced and positioned with precision in order to fit into available space, prepare coordination

drawings showing the actual conditions required for the installation. Prepare coordination drawings prior to purchasing, fabricating, or installing any of the elements required to be coordinated.

- 1.3.8. Closing up of walls, partitions or furred spaces, backfilling, and other covering up operations shall not proceed until all enclosed or covered work and inspections have been completed. Verify before proceeding.
- 1.3.9. Coordinate completion and clean up of Work of separate sections in preparation for completion and for portions of work designated for Judicial Council of California's occupancy.
- 1.3.10. After Judicial Council of California occupancy of Project, coordinate access to Site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Judicial Council of California's activities.
- 1.3.11. Coordinate all utility company work in accordance with the Contract Documents.

1.4. FIELD ENGINEERING RESPONSIBILITIES OF THE CMR

- 1.4.1. CMR shall employ a Land Surveyor registered in the State of California and acceptable to the Architect.
- 1.4.2. Control datum for survey is that established by Judicial Council of California provided survey. CMR to locate and protect survey control and reference points.
- 1.4.3. Replace dislocated survey control points based on original survey control.
- 1.4.4. Provide field engineering services. Establish elevations, lines, and levels utilizing recognized engineering survey practices.
- 1.4.5. Upon completion of Work, submit certificate signed by the Land Surveyor, that elevations and locations of Work are in conformance with Contract Documents. Record deviations on Record Drawings.

1.5. PRECONSTRUCTION CONFERENCE

- 1.5.1. Construction Manager or Project Engineer will schedule a conference immediately after receipt of fully executed Contract Documents prior to Project mobilization.
- 1.5.2. Mandatory Attendance: Construction Manager, Project Engineer, Inspector of Record, Architect of Record, CMR, CMR's Project Manager, and CMR's Job/Project Superintendent.
- 1.5.3. Optional Attendance: Architect's consultants, and utility company representatives.
- 1.5.4. Judicial Council of California Project Manager shall preside at conference and the Project Architect shall prepare and record minutes and distribute copies.
- 1.5.5. Agenda:
 - 1.5.5.1. Execution of Judicial Council of California-CMR Agreement.
 - 1.5.5.2. Issue Notice to Proceed.

- 1.5.5.3. Submission of executed bonds and insurance certificates.
- 1.5.5.4. Distribution of Contract Documents.
- 1.5.5.5. Submission of list of Subcontractors, list of Products, Schedule of Values, and Progress Schedule.
- 1.5.5.6. Designation of responsible personnel representing the parties.
- 1.5.5.7. Procedures for processing Change Orders.
- 1.5.5.8. Procedures for Request for Information.
- 1.5.5.9. Procedures for testing and inspecting.
- 1.5.5.10. Procedures for processing applications for payment.
- 1.5.5.11. Procedures for Project closeout.
- 1.5.5.12. Use of Premises.
- 1.5.5.13. Work restrictions.
- 1.5.5.14. Judicial Council of California's occupancy requirements or options.
- 1.5.5.15. Responsibility for temporary facilities and controls.
- 1.5.5.16. Construction waste management and recycling.
- 1.5.5.17. Parking availability.
- 1.5.5.18. Office, work and storage areas.
- 1.5.5.19. Equipment deliveries and priority.
- 1.5.5.20. Security.
- 1.5.5.21. Progress cleaning.
- 1.5.5.22. Review required submittals and LEED Certification requirements.

1.6. PROGRESS MEETINGS

- 1.6.1. CMR/ Judicial Council of California Project Manager shall schedule and administer meetings throughout progress of the Work at a minimum of every week.
- 1.6.2. Judicial Council of California Project Manager or Project Engineer will make arrangements for meetings, prepare agenda, and preside at meetings. Project Architect shall record minutes (Field Reports), and distribute copies.
- 1.6.3. Attendance Required: Job Superintendent, CMR, Project Engineer, Project Inspector, Architect of Record, Subcontractors, and suppliers as appropriate to agenda topics for each meeting.
- 1.6.4. Agenda:

- 1.6.4.1. Review minutes of previous meetings. (Field Reports)
 - 1.6.4.2. Review of Work progress.
 - 1.6.4.3. Field observations, problems, and decisions.
 - 1.6.4.4. Identification of problems which impede planned progress.
 - 1.6.4.5. Review of submittals schedule and status of submittals.
 - 1.6.4.6. Review of off-site fabrication and delivery schedules.
 - 1.6.4.7. Maintenance of construction schedule.
 - 1.6.4.8. Corrective measures to regain projected schedules.
 - 1.6.4.9. Planned progress during succeeding work period.
 - 1.6.4.10. Coordination of projected progress.
 - 1.6.4.11. Maintenance of quality and work standards.
 - 1.6.4.12. Effect of proposed changes on progress schedule and coordination.
 - 1.6.4.13. Other business relating to Work.
- 1.6.5. Judicial Council of California has authority to schedule meetings other than those listed, as necessary.

1.7. PRE-INSTALLATION CONFERENCES

- 1.7.1. When required in individual specification section, CMR shall convene a pre-installation conference prior to commencing work of the section. Refer to individual specification section for timing requirements of conference.
- 1.7.2. CMR shall require its Subcontractors and suppliers directly affecting, or affected by, work of the specific section to attend.
- 1.7.3. Notify the Judicial Council of California Project Manager, Project Engineer, Inspector of Record, and Architect of Record four (4) days in advance of meeting date.
- 1.7.4. The pre-installation conference may coincide with a regularly scheduled progress meeting.
- 1.7.5. CMR shall prepare agenda, preside at conference, record minutes, and distribute copies within two (2) days after conference to participants.
- 1.7.6. The purpose of the meeting will be to review Contract Documents, conditions of installation, preparation and installation procedures, and coordination with related work and manufacturer's recommendations.
- 1.7.7. Pre-installation Schedule: As a minimum, Work being installed under the Contract Documents technical sections will require pre-installation conferences. CMR shall review the technical specifications and add all additional requirements for pre-installation meetings

contained in those sections.

1.8. POST CONSTRUCTION DEDICATION

- 1.8.1. Attendance Required: Project Superintendent, CMR, Project Manager, major Subcontractors, Construction Manager, Project Engineer, Project Inspector, and Architect of Record.
- 1.8.2. Preparation prior to Dedication: CMR and appropriate Subcontractors and suppliers shall:
 - 1.8.2.1. Assist Judicial Council of California in operation of mechanical devices and systems.
 - 1.8.2.2. Verify operation and adjust controls for communication systems.
 - 1.8.2.3. Assist Judicial Council of California in operation of lighting systems.

END OF SECTION

SECTION 01 31 20

DOCUMENTATION REQUIREMENTS

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.12. General Conditions;
- 1.1.13. Requests for Information;
- 1.1.14. Electronic Data Transfer;
- 1.1.15. Submittals;
- 1.1.16. Contract Closeout and Final Cleaning;
- 1.1.17. Operation and Maintenance Data;
- 1.1.18. Warranties;
- 1.1.19. Record Documents;
- 1.1.20. Demonstration and Training;
- 1.1.21. LEED; and
- 1.1.22. General Commissioning Requirements.

1.2. RESPONSIBILITIES

The following table describes the responsibilities of the CMR related to the document creation and submittal. The table also summarizes the format that these documents need to be provided in for Judicial Council of California.

Document Type	Format (s)	Embedded Keywords
Shop Drawings	* PDF	* Document Type - "Drawing"
		* TAG # of the Major equipment on that sheet.
Project Record Documents (PRD)	* PDF	* Document Type - "Drawing"
	* DWG (or other CAD). * REVIT or NAVISWORKS.	* TAG # of the Major equipment on that sheet.
O&M	* PDF	* Document Type - "O&M"
		* Equipment TAG #
		* Technical Specifications Div #

Service Manuals	* PDF	* Document Type - "Manuals"
		* Equipment TAG #
		* Technical Specifications Div #
RFIs	* PDF	None
Approved Submittals	* PDF	* Document Type - "Submittals"
		* Equipment TAG #'s for all equipment covered in that document
		* Technical Specifications Div #
Warranty / Licensing Documents	* PDF	* Document Type - "Warranty"
		* Technical Specifications Div #
		* Execution date
Certificates (Fire, Elevator, Generator AQMB, etc.)	* PDF	* Expiration Date MMDDYYYY
		None
		None
Key Schedule	* Excel	None
Record Photographs	* JPG	None

1.3. SUBMITTAL PROCESS

All documents from the construction phase are to be turned over to the Judicial Council of California and CMR shall certify that the documents listed above meet the required standards set forth herein.

1.4. NAMING CONVENTION

1.4.1. The documents shall have a consistent naming convention that includes the following components as applicable to each type of document:

Building ID:	Unique Judicial Council of California Facility ID (e.g., - 01-A1)
Building Name:	This could be changed over the life of the building so do NOT include.
Discipline:	e.g., Electrical, Mechanical, etc.
Drawings Type:	Record Drawings, Warranty, Contract, License
Division #:	Use the specification sections within the Technical Specifications
Sheet #:	e.g., E01.1.1, M3.2.1 etc.
Asset TAG #:	Unique Equipment Tag # (e.g. CHW01, CTW01, etc.) Include full Judicial Council of California ID if finalized prior to Completion
Description:	e.g., First Floor Mechanical Layout, Centrifugal Chiller, etc.

1.4.2. The detailed naming convention for each type of document is provided in the Part 2 of this document.

1.4.3. File Format

All documents shall be submitted in an electronic (digital) format. The acceptable formats include PDF. Additional hard copies of certain documents may be required and shall be in the following format:

1.4.3.1. 3-Ring binders;

1.4.3.2. White;

1.4.3.3. 3 to 5 inches;

1.4.3.4. The spine & front cover identified with:

1.4.3.4.1. Building ID;

1.4.3.4.2. Building name;

1.4.3.4.3. Division Number using the specification sections within the Technical Specifications;

1.4.3.4.4. Brief Title; and

1.4.3.4.5. Volume Number.

1.4.3.5. Each binder must contain a Table of Contents (TOC). Index the TOC using the specification sections within the Technical Specifications.

1.4.4. Embedded Key Words

Electronic documents shall contain keyword(s) for searching.

1.4.5. Media

All documents must be submitted in an electronic format unless specified otherwise.

2. PRODUCTS

All submittals shall be provided for with the following detailed naming convention for each type of document.

2.1. Submittals

2.1.1. **File Name:** <BldgID><FullSubmittal#><SubSections><Description>
Example: "07E3_02-057000-0506-0__DecorativeMetal" Format – ACAD"

2.1.2. Format – PDF

2.1.3. Embedded Keywords

2.1.4. Hard copies Required – Yes

2.2. RFIs

2.2.1. **File Name:** <BldgID><Technical Specifications#><RFI#><Description>
Example: "07E3_232123_RFI067_CWHPSequenceOfOperation"

2.2.2. Format – PDF

2.2.3. Embedded Keywords – None

2.2.4. Hard copies Required – No

2.3. O&M Documents / Service Manuals

2.3.1. **File Name:** <BldgID><Technical Specifications#><EquipmentTag><Description>
Example: "07E3_232123_CHWP1_ChilledWaterPump"

2.3.2. Format – PDF

2.3.3. Embedded Keywords

2.3.4. Hard copies Required – No

2.4. Warranty Licensing Documents

2.4.1. **File Name:** <BldgID><DocType><Technical Specifications#><CMRName><ExpDateMMDDYYYY><Tag#><Description>
Example: "07E3_Warranty033000_Conco10052020_CastInPlaceConcrete"
Example: "07E3_Service0233400_Airco12312012_AHU1B_SupplyFanMotor"

2.4.2. Format – PDF

2.4.3. Embedded Keywords

2.4.4. Hard copies Required – Yes

2.5. Certificates

2.5.1. **File Name:** <BldgID><Technical Specifications#><Description>
Example: "07E3_232123_Elevator_E1"

2.5.2. Format – PDF

2.5.3. Embedded Keywords – None

2.5.4. Hard copies Required – No

END OF SECTION

SECTION 01 32 16

CONSTRUCTION SCHEDULE – NETWORK ANALYSIS

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISION

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Coordination and Meetings; and
- 1.1.3. Submittals.

1.2. PERFORMANCE REQUIREMENTS

- 1.2.1. Ensure adequate scheduling during construction activities so Work may be prosecuted in an orderly and expeditious manner within stipulated Contract Time.
- 1.2.2. Ensure coordination of CMR and Subcontractors at all levels.
- 1.2.3. Ensure coordination of submittals, fabrication, delivery, erection, installation, and testing of Products, materials and equipment.
- 1.2.4. Ensure on-time delivery of Judicial Council of California furnished Products, materials and equipment.
- 1.2.5. Ensure coordination of jurisdictional reviews.
- 1.2.6. Prepare applications for payment.
- 1.2.7. Monitor progress of Work.
- 1.2.8. Prepare proper requests for changes to Contract Time.
- 1.2.9. Prepare proper requests for changes to Construction Schedule.
- 1.2.10. Assist in detection of schedule delays and identification of corrective actions.

1.3. QUALIFICATIONS

1.3.1. Scheduler:

- 1.3.1.1. CMR shall retain a construction scheduler to work in enough capacity to perform all of the CMR's requirements to prepare the Construction Schedule. The Scheduler shall plan, coordinate, execute, and monitor a cost/resource loaded CPM schedule as required for Project.
- 1.3.1.2. Scheduler will cooperate with Judicial Council of California and shall be available on site for monitoring, maintaining and updating schedules in a timely manner.

1.3.1.3. Judicial Council of California has the right to reject the Scheduler based upon a lack of experience as required by this Document or based on lack of performance and timeliness of schedule submittals/fragnets on past projects. CMR shall within seven (7) calendar days of Judicial Council of California's rejection, propose another scheduler who meets the experience requirements stated above.

1.3.2. **Administrative Personnel:** Five (5) years minimum experience in using and monitoring schedules on comparable projects.

1.4. SUBMITTALS

1.4.1. Submit Short Interval Schedule at each Construction Progress Meeting.

1.4.2. Submit Time Adjustment Schedule within five (5) days of commencement of a claimed delay.

1.4.3. Submit Recovery Schedules as required for timely completion of Work or when demanded by the Judicial Council of California.

1.4.4. Submit job cost reports when demanded by the Judicial Council of California.

1.4.5. Submit one (1) reproducible and two (2) copies of each schedule and cost report.

1.5. REVIEW AND EVALUATION

1.5.1. CMR shall participate in joint review of Construction Schedule and Reports with Judicial Council of California and Architect.

1.5.2. Within seven (7) days of receipt of Judicial Council of California and Architect's comments provide satisfactory revision to Construction Schedule or adequate justification for activities in question.

1.5.3. In the event that an activity or element of Work is not detected by Judicial Council of California or Architect review, such omission or error shall be corrected by next scheduled update and shall not affect Contract Time.

1.5.4. Acceptance by Judicial Council of California of corrected Construction Schedule shall be a condition precedent to making any progress payments.

1.5.5. Cost-loaded values of Construction Schedule shall be basis for determining progress payments.

1.5.6. Review and acceptance by Judicial Council of California and Architect of Preliminary Work Schedule or Construction Schedule does not constitute responsibility whatsoever for accuracy or feasibility of schedules nor does such acceptance expressly or impliedly warrant, acknowledge or admit reasonableness of activities, logic, duration, manpower, cost or equipment loading stated or implied on schedules.

1.6. FORMAT

1.6.1. Prepare diagrams and supporting mathematical analyses using Precedence Diagramming Method, under concepts and methods outlined in AGC Construction Planning and Scheduling Manual, or other method pre-approved by Judicial Council of California.

- 1.6.2. **Listings:** Reading from left to right, in ascending order for each activity.
- 1.6.3. **Diagram Size:** 42 inches maximum height x width required.
- 1.6.4. **Scale and Spacing:** To allow for legible notations and revisions.
- 1.6.5. Illustrate order and interdependence of activities and sequence of Work.
- 1.6.6. Illustrate complete sequence of construction by activity.
- 1.6.7. Provide legend of symbols and abbreviations used.

1.7. COST AND SCHEDULE REPORTS

- 1.7.1. **Activity Analysis:** Tabulate each activity of network diagram and identify for each activity:
 - 1.7.1.1. Description.
 - 1.7.1.2. Interface with outside CMRs or agencies.
 - 1.7.1.3. Number.
 - 1.7.1.4. Preceding and following number.
 - 1.7.1.5. Duration.
 - 1.7.1.6. Earliest start date.
 - 1.7.1.7. Earliest finish date.
 - 1.7.1.8. Actual start date.
 - 1.7.1.9. Actual finish date.
 - 1.7.1.10. Latest start date.
 - 1.7.1.11. Latest finish date.
 - 1.7.1.12. Total and free float.
 - 1.7.1.13. Identification of critical path activity.
 - 1.7.1.14. Monetary value keyed to Schedule of Values.
 - 1.7.1.15. Manpower requirements.
 - 1.7.1.16. Responsibility.
 - 1.7.1.17. Percentage complete.
 - 1.7.1.18. Variance positive or negative.
- 1.7.2. **Cost Report:** Tabulate each activity of network diagram and identify for each activity:

- 1.7.2.1. Description.
- 1.7.2.2. Number.
- 1.7.2.3. Total cost.
- 1.7.2.4. Percentage complete.
- 1.7.2.5. Value prior to current period.
- 1.7.2.6. Value this period.
- 1.7.2.7. Value to date.
- 1.7.3. **Required Sorts:** List activities in sorts or groups:
 - 1.7.3.1. By activity number.
 - 1.7.3.2. By amount of float time in order of early start.
 - 1.7.3.3. By responsibility in order of earliest start date.
 - 1.7.3.4. In order of latest start dates.
 - 1.7.3.5. In order of latest finish dates.
 - 1.7.3.6. Application for payment sorted by Schedule of Values.
 - 1.7.3.7. Listing of activities on critical path.
- 1.7.4. Listing of basic input data which generates schedule.

1.8. CONSTRUCTION SCHEDULE

- 1.8.1. CMR shall develop and submit a cost loaded preliminary schedule of construction (or Preliminary Construction Schedule) as required by this Document and the Contract Documents. It shall be submitted in computer generated network format and shall be organized by Activity Codes representing the intended sequencing of the Work, and with time scaled network diagrams of activities. The Preliminary Construction Schedule shall include activities such as mobilization, preparation of submittals, specified review periods, procurement items, fabrication items, milestones, and all detailed construction activities.
- 1.8.2. Upon Judicial Council of California's acceptance of the Preliminary Construction Schedule, CMR shall update the accepted Preliminary Construction Schedule until CMR's Construction Schedule is fully developed and accepted. Since updates to the Construction Schedule are the basis for payment to CMR, submittal and acceptance of the Construction Schedule and updates shall be a condition precedent to making of monthly payments, as indicated in the General Conditions.
- 1.8.3. Failure to submit an adequate or accurate Preliminary Construction Schedule, Construction Schedule, updates thereto or failure to submit on established dates, will be considered a breach of Contract.
- 1.8.4. Failure to include any activity shall not be an excuse for completing all Work by required Completion Date.

- 1.8.5. Activities of long intervals shall be broken into increments no longer than fourteen (14) days or a value over \$20,000.00 unless approved by the Judicial Council of California or it is non-construction activity for procurement and delivery.
- 1.8.6. The Construction Schedule shall comply with the following and include the following:
 - 1.8.6.1. Provide a written narrative describing CMR's approach to mobilization, procurement, and construction during the first thirty (30) calendar days including crew sizes, equipment and material delivery, Site access, submittals, and permits.
 - 1.8.6.2. Shall designate critical path or paths.
 - 1.8.6.3. Procurement activities to include mobilization, shop drawings and sample submittals.
 - 1.8.6.4. Identification of key and long-lead elements and realistic delivery dates.
 - 1.8.6.5. Construction activities in units of whole days limited to fourteen (14) days for each activity except non-construction activities for procurement and delivery.
 - 1.8.6.6. Approximate cost and duration of each activity.
 - 1.8.6.7. Shall contain seasonal weather considerations.
 - 1.8.6.8. Indicate a date for Project Completion that is no later than Completion Date subject to any time extensions processed as part of a Change Order.
 - 1.8.6.9. Conform to mandatory dates specified in the Contract Documents.
 - 1.8.6.10. CMR shall allow for inclement weather in the Proposed Baseline Schedule by incorporating an activity titled "Rain Day Impact Allowance" as the last activity prior to the Completion Milestone. No other activities may be concurrent with it. The duration of the Rain Day Impact Allowance activity will in accordance with the Special Conditions, and will be calculated from the Notice to Proceed until the Completion.
 - 1.8.6.11. Level of detail shall correspond to complexity of work involved.
 - 1.8.6.12. Indicate procurement activities, delivery, and installation of Judicial Council of California furnished material and equipment.
 - 1.8.6.13. Designate critical path or paths.
 - 1.8.6.14. Subcontractors work at all levels shall be included in schedule.
 - 1.8.6.15. As developed shall show sequence and interdependence of activities required for complete performance of Work.
 - 1.8.6.16. Shall be logical and show a coordinated plan of Work.
 - 1.8.6.17. Show order of activities and major points of interface, including specific dates of completion.
 - 1.8.6.18. Duration of activities shall be coordinated with Subcontractors and suppliers and

shall be best estimate of time required.

1.8.6.19. Shall show description, duration and float for each activity.

1.8.7. **Activity.** An activity shall meet the following criteria:

1.8.7.1. Any portion or element of Work, action, or reaction that is precisely described, readily identifiable, and is a function of a logical sequential process.

1.8.7.2. Descriptions shall be clear and concise. Beginning and end shall be readily verifiable. Starts and finishes shall be scheduled by logical restraints.

1.8.7.3. Responsibility shall be identified with a single performing entity.

1.8.7.4. Additional codes shall identify building, floor, bid item and CSI classification.

1.8.7.5. Assigned dollar value (cost-loading) of each activity shall cumulatively equal total contract amount. Mobilization, bond and insurance costs shall be separate. General requirement costs, overhead, profit, shall be prorated throughout all activities. Activity costs shall correlate with Schedule of Values.

1.8.7.6. Each activity shall have manpower-loading assigned.

1.8.7.7. Major construction equipment shall be assigned to each activity.

1.8.7.8. Activities labeled start, continue or completion are not allowed.

1.8.8. **Equipment and Materials.** For major equipment and materials show a sequence of activities including:

1.8.8.1. Preparation of shop drawings and sample submissions.

1.8.8.2. Review of shop drawings and samples.

1.8.8.3. Finish and color selection.

1.8.8.4. Fabrication and delivery.

1.8.8.5. Erection or installation.

1.8.8.6. Testing.

1.8.9. Include a minimum of fifteen (15) days prior to Completion Date for punch lists and clean up. No other activities shall be scheduled during this period.

1.9. SHORT INTERVAL SCHEDULE

1.9.1. The Four-Week Rolling Schedule shall be based on the most recent Judicial Council of California Accepted Construction Schedule or Update. It shall include weekly updates to all construction, submittal, fabrication/procurement, and separate Work Contract activities. CMR shall ensure that it accurately reflects the current progress of the Work.

1.9.2. Shall be fully developed horizontal bar-chart-type schedule directly derived from Construction Schedule.

- 1.9.3. Prepare schedule on sheet of sufficient width to clearly show data.
- 1.9.4. Provide continuous heavy vertical line identifying first day of week.
- 1.9.5. Provide continuous subordinate vertical line identifying each day of week.
- 1.9.6. Identify activities by same activity number and description as Construction Schedule.
- 1.9.7. Show each activity in proper sequence.
- 1.9.8. Indicate graphically sequences necessary for related activities.
- 1.9.9. Indicate activities completed or in progress for previous two (2) week period.
- 1.9.10. Indicate activities scheduled for succeeding two (2) week period.
- 1.9.11. Further detail may be added if necessary to monitor schedule.

1.10. REQUESTED TIME ADJUSTMENT SCHEDULE

- 1.10.1. Updated Construction Schedule shall not show a Completion Date later than the Contract Time, subject to any time extensions processed as part of a Change Order.
- 1.10.2. If an extension of time is requested, a separate schedule entitled "Requested Time Adjustment Schedule" shall be submitted to Judicial Council of California and Architect.
- 1.10.3. Indicate requested adjustments in Contract Time which are due to changes or delays in completion of Work.
- 1.10.4. Extension request shall include forecast of Project Completion date and actual achievement of any dates listed in Contract Documents.
- 1.10.5. To the extent that any requests are pending at time of any Construction Schedule update, Time Adjustment Schedule shall also be updated.
- 1.10.6. Schedule shall be a time-scaled network analysis.
- 1.10.7. Accompany schedule with formal written time extension request and detailed impact analysis justifying extension.
- 1.10.8. Time impact analysis shall demonstrate time impact based upon date of delay, and status of construction at that time and event time computation of all affected activities. Event times shall be those as shown in latest Construction Schedule.
- 1.10.9. Activity delays shall not automatically constitute an extension of Contract Time.
- 1.10.10. Failure of Subcontractors shall not be justification for an extension of time.
- 1.10.11. Float is not for the exclusive use or benefit of any single party. Float time shall be apportioned according to needs of project, as determined by the Judicial Council of California.
- 1.10.12. Float suppression techniques such as preferential sequencing, special lead/lag logic restraints, extended activity durations, or imposed dates shall be apportioned according to benefit of Project.

- 1.10.13. Extensions will be granted only to extent that time adjustments to activities exceed total positive float of the critical path and extends Completion date.
- 1.10.14. Judicial Council of California shall not have an obligation to consider any time extension request unless requirements of Contract Documents, and specifically, but not limited to these requirements are complied with.
- 1.10.15. Judicial Council of California shall not be responsible or liable for any construction acceleration due to failure of Judicial Council of California to grant time extensions under Contract Documents should requested adjustments in Contract Time not substantially comply with submission and justification requirements of Contract for time extension requests.
- 1.10.16. In the event a Requested Time Adjustment Schedule and Time Impact Analysis are not submitted within ten (10) days after commencement of a delay it is mutually agreed that delay does not require a Contract Time extension.

1.11. RECOVERY SCHEDULE

- 1.11.1. When activities are behind Construction Schedule a supplementary Recovery Schedule shall be submitted.
- 1.11.2. CMR shall prepare and submit to the Judicial Council of California a Recovery Schedule at any time requested by the Judicial Council of California, at no cost to the Judicial Council of California.
- 1.11.3. Form and detail shall be sufficient to explain and display how activities will be rescheduled to regain compliance with Construction Schedule and to complete the Work by the Completion Date.
- 1.11.4. Maximum duration shall be one (1) month and shall coincide with payment period.
- 1.11.5. Ten (10) days prior to expiration of Recovery Schedule, CMR shall have to show verification to determine if activities have regained compliance with Construction Schedule. Based upon this verification the following will occur:
 - 1.11.5.1. Supplemental Recovery Schedule will be submitted to address subsequent payment period.
 - 1.11.5.2. Construction Schedule will be resumed.

1.12. UPDATING SCHEDULES

- 1.12.1. Review and update schedule at least ten (10) days prior to submitting an Application for Payment.
- 1.12.2. Maintain schedule to record actual prosecution and progress.
- 1.12.3. Approved Change Orders which affect schedule shall be identified as separate new activities.
- 1.12.4. Change Orders of less than \$5,000.00 value or less than three (3) days duration need not be shown unless critical path is affected.
- 1.12.5. No other revisions shall be made to schedule unless authorized by Judicial Council of

California.

1.12.6. **Written Narrative Report:** CMR shall include a written report to explain the Monthly Schedule Update. The narrative shall, at a minimum include the following headings with appropriate discussions of each topic:

1.12.6.1. Activities or portions of activities completed during previous reporting period.

1.12.6.2. Actual start dates for activities currently in progress.

1.12.6.3. Deviations from critical path in days ahead or behind.

1.12.6.4. List of major construction equipment used during reporting period and any equipment idle.

1.12.6.5. Number of personnel by trade engaged on Work during reporting period.

1.12.6.6. Progress analysis describing problem areas.

1.12.6.7. Current and anticipated delay factors and their impact.

1.12.6.8. Proposed corrective actions and logic revisions for Recovery Schedule.

1.12.6.9. Proposed modifications, additions, deletions and changes in logic of Construction Schedule.

1.12.6.10. In updating the Schedule, CMR shall not modify Activity ID numbers, schedule calculation rules/criteria, or the Activity Coding Structure required.

1.12.7. Schedule update will form basis upon which progress payments will be made.

1.12.8. Judicial Council of California will not be obligated to review or process Application for Payment until schedule and Progress Report have been submitted.

1.13. DISTRIBUTION

1.13.1. Following joint review and acceptance of updated schedules distribute copies to Judicial Council of California, Architect, and all other concerned parties.

1.13.2. Instruct recipients to promptly report in writing any problem anticipated by projections shown in schedule.

2. PRODUCTS

2.1. SCHEDULING SOFTWARE

2.2. CMR shall utilize Primavera P6 Project Management® software (latest version) by Oracle, or Judicial Council of California-approved equivalent scheduling software to employ the Critical Path Method (CPM) in the development and maintenance of the Construction Schedule. The scheduling software shall be capable of being resource loaded with manpower, costs and materials. It shall also be capable of generating time-scaled logic diagrams, resource histograms and profiles, bar charts, layouts and reports with any and/or all activity detail.

2.3. ELECTRONIC DATA

**[New Santa Rosa Courthouse]
[Judicial Council of California]**

Provide compact disk(s) that contain a back-up of the Proposed Baseline Schedule data on it. The electronic P6 files shall be saved in “.XER” type format.

END OF SECTION

SECTION 01 32 80

ELECTRONIC DATA TRANSFER

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Documentation Requirements;
- 1.1.3. Submittals;
- 1.1.4. Contract Closeout and Final Cleaning;
- 1.1.5. Operation and Maintenance Data;
- 1.1.6. Warranties;
- 1.1.7. Record Documents;
- 1.1.8. Demonstration and Training;
- 1.1.9. LEED; and
- 1.1.10. General Commissioning Requirements.

1.2. SUMMARY

- 1.2.1. This Document includes Terms and Conditions for the transfer of the Judicial Council of California's Electronic Data to CMR for use in preparation of Submittals, Record Documents, Coordination Drawings, and related project documents.
- 1.2.2. CMR's acceptance of Electronic Data in any form shall constitute acceptance of the Terms and Conditions of this Document, including payment of indicated fees.
- 1.2.3. **THE ELECTRONIC DATA PROVIDED BY JUDICIAL COUNCIL OF CALIFORNIA ARE THE PROPRIETARY INFORMATION OF JUDICIAL COUNCIL OF CALIFORNIA. ALL ELECTRONIC DATA SHALL BE TREATED AS CONFIDENTIAL AND SHALL NOT BE DISCLOSED TO OR SHARED WITH OTHERS WITHOUT EXPRESS, WRITTEN CONSENT FROM THE JUDICIAL COUNCIL OF CALIFORNIA'S EXPRESS, WRITTEN CONSENT.**

1.3. TERMS AND CONDITIONS

- 1.3.1. In consideration of CMR's request to the Judicial Council of California to deliver certain Electronic Data for use on the Project, CMR agrees to the following:
 - 1.3.1.1. Electronic Data includes but is not limited to, computer-aided design (CAD) files, and files produced by word processing, spread sheet, scheduling, data base

and other software programs. The Electronic Data may be provided in an original format produced by Architect or an alternate, “translated” format as requested.

- 1.3.1.2. The means by which the Electronic Data is transferred may include but are not limited to, electronic mail, File Transfer Protocol (FTP) sites, project websites, and disk copies transmitted between Judicial Council of California and CMR. CMR acknowledges that Electronic Data transferred in any manner or translated from the system and format used by Judicial Council of California’s Consultant to an alternate system or format is subject to errors that may affect the accuracy and reliability of the data and that the data may be altered, whether inadvertently or otherwise. Accordingly, the Judicial Council of California makes no warranty, express or implied, as to the accuracy of the information transferred. The Electronic Data are not the Construction Documents and differences may exist between these electronic files and corresponding hard-copy Construction Documents. Judicial Council of California reserves the right to retain hard copy originals in addition to electronic copies of the Electronic Data transferred, which originals shall be referred to and shall govern.
- 1.3.1.3. The Judicial Council of California shall issue the most current information available, but does not undertake the responsibility for providing updated information as the Project proceeds.

END OF SECTION

SECTION 01 33 00

SUBMITTALS

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISION

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Requests for Information;
- 1.1.3. Documentation Requirements;
- 1.1.4. Electronic Data Transfer;
- 1.1.5. Contract Closeout and Final Cleaning;
- 1.1.6. Operation and Maintenance Data;
- 1.1.7. Warranties;
- 1.1.8. Record Documents;
- 1.1.9. Demonstration and Training;
- 1.1.10. LEED; and
- 1.1.11. General Commissioning Requirements.

1.2. DOCUMENT INCLUDES

- 1.2.1. Submittal procedures;
- 1.2.2. Shop drawings;
- 1.2.3. Electronic Submittal Process;
- 1.2.4. Product data;
- 1.2.5. Samples;

- 1.2.6. Manufacturers' Instructions;
- 1.2.7. Manufacturers' Certificates;
- 1.2.8. Mock-Up; and
- 1.2.9. Deferred approval requirements.

1.3. SUBMITTAL PROCEDURES – USE OF PRE-APPROVED PROGRAM

- 1.3.1. CMR shall utilize for the submittal process a project / document management software program pre-approved by the Judicial Council of California.
- 1.3.2. CMR shall transmit each submittal in conformance with requirements of this Document. For each submittal, CMR shall:
 - 1.3.2.1. Sequentially number the transmittal forms. Resubmitted submittals must have the original number with an alphabetic suffix;
 - 1.3.2.2. Identify Judicial Council of California's project number, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate;
 - 1.3.2.3. Apply CMR's stamp, signed or initialed 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. Submittals without CMR's stamp and signature will be returned without review.
- 1.3.3. Coordinate preparation and processing of submittals with performance of Work. Transmit each submittal sufficiently in advance of performance of Work to avoid delay.
 - 1.3.3.1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 1.3.3.2. Coordinate transmittal of different types of submittals for related parts of Work so processing will not be delayed because of the need to review submittals concurrently for coordination.
 - 1.3.3.3. Judicial Council of California's Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- 1.3.4. Comply with Contract Documents for list of submittals and time requirements for scheduled performance of Work.
- 1.3.5. No extension of Contract Time will be authorized because of failure to transmit submittals to the Judicial Council of California's Architect sufficiently in advance of the Work to permit processing.
- 1.3.6. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.

- 1.3.7. Provide space for CMR and Architect review stamps.
- 1.3.8. Revise and resubmit submittals as required, identify all changes made since previous submittal.
- 1.3.9. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.
- 1.3.10. Submittals not requested will not be recognized or processed. Submittals not requested will be returned without review.

1.4. SHOP DRAWINGS

- 1.4.1. Prepare Project-specific information, drawn accurately to scale. 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 a shop drawing.
- 1.4.2. Do not use or allow others to use Shop Drawings which have been submitted and have been rejected.
- 1.4.3. Preparation: Fully illustrate requirements in Contract Documents. Include the following information, as applicable:
 - 1.4.3.1. Dimensions.
 - 1.4.3.2. Identification of products.
 - 1.4.3.3. Fabrication and installation drawings.
 - 1.4.3.4. Roughing-in and setting diagrams.
 - 1.4.3.5. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - 1.4.3.6. Shopwork manufacturing instructions.
 - 1.4.3.7. Templates and patterns.
 - 1.4.3.8. Schedules.
 - 1.4.3.9. Design calculations.
 - 1.4.3.10. Compliance with specified standards.
 - 1.4.3.11. Notation of coordination requirements.
 - 1.4.3.12. Notation of dimensions established by field measurements.
 - 1.4.3.13. Relationship to adjoining construction clearly indicated.
 - 1.4.3.14. Seal and signature of professional engineer if specified.
 - 1.4.3.15. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.

1.4.3.16. All deviations, from the Contract Documents, clearly indicated.

1.4.3.17. Copy of letter indicating acceptance of deviations indicated on the submittal.

1.4.4. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 30 by 40 inches (750 by 1000 mm).

1.4.5. Do not use Shop Drawings without an appropriate final stamp from the CMR and Judicial Council of California indicating action taken in connection with construction.

1.4.6. Deviations from Contract Documents require specific written acceptance by the Judicial Council of California of the noted deviation and clear indication on the submittal.

1.4.7. All Shop Drawings shall be submitted as .pdf documents and shall comply with the formatting and numbering requirements of the document “**Documentation Requirements.**”

1.5. ELECTRONIC SUBMITTAL PROCESS

1.5.1. Submittal Procedure for Large Format shop drawings.

1.5.1.1. CMR shall provide six (6) paper copies of the large format Shop Drawings directly to the Judicial Council of California and the Construction Manager (CM) and CMR will upload/post an electronic transmittal (with a detailed description of the submittal including the subject, specification number and number of drawings).

1.5.1.2. CMR shall verify that the Schedule of Submittals and all submittal log(s) are accurate and up to date.

1.5.1.3. The Judicial Council of California and Architect will review and markup each Submittal and provide changes to CMR for CMR’s incorporation into the Submittal.

1.5.1.4. This process will continue until the CMR has provided a Submittal that is acceptable to the Judicial Council of California and the Architect.

1.5.1.5. Once a Submittal is accepted, the Judicial Council of California will provide a final accepted Submittal to the CMR and the CMR will closeout that one Submittal.

1.5.1.6. CMR shall send one (1) copy of the completed record submittal of the large format documents to a vendor for scanning and posting.

1.5.2. Product Data, Calculations and Small Format Drawings

1.5.2.1. CMR shall upload/post one (1) electronic copy (from manufacturer’s website or pre-scanned) of the product literature, data, calculations, and/or small format shop drawings with a Transmittal (with a detailed description of the submittal) directly to the CM.

1.5.2.2. The Judicial Council of California and Architect will review and markup each Submittal and provide changes to CMR for CMR’s incorporation into the Sub-

mittal.

1.5.2.3. This process will continue until the CMR has provided a Submittal that is acceptable to the Judicial Council of California and the Architect.

1.5.2.4. Once a Submittal is accepted, the Judicial Council of California will provide a final accepted Submittal to the CMR and the CMR will closeout that one Submittal.

1.5.2.5. CMR shall send one (1) copy of the completed record submittal of the large format documents to a vendor for scanning and posting..

1.5.3. Sample Submittal Procedure – (Product / Assembly Samples)

1.5.3.1. CMR shall provide four (4) physical samples directly to the Judicial Council of California and the CM and CMR will upload/post an electronic transmittal (with a detailed description of the submittal including the subject, specification number and number of drawings).

1.5.3.2. The Judicial Council of California and Architect will review and markup each Submittal and provide changes to CMR for CMR's incorporation into the Submittal.

1.5.3.3. This process will continue until the CMR has provided a Submittal that is acceptable to the Judicial Council of California and the Architect.

1.5.3.4. Once a Submittal is accepted, the Judicial Council of California will provide a final accepted Submittal to the CMR and the CMR will closeout that one Submittal.

1.5.3.5. CMR shall send one (1) copy of the completed record submittal of the large format documents to a vendor for scanning and posting.

1.6. PRODUCT DATA

1.6.1. In addition to the above requirements, mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this Project.

1.6.2. After review, distribute in accordance with the above provisions and provide copies for Record Documents described in the Contract Documents.

1.7. SAMPLES

1.7.1. In addition to the above requirements, submit samples to illustrate functional and aesthetic characteristics of the Product in accordance with this Document, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

1.7.2. Where specific colors or patterns are not indicated, provide materials and products specified in the full range of color, texture and pattern for selection by Judicial Council of California. Range shall include standard stocked color/texture/pattern, standard color/texture/pattern not stocked, but available from manufacturer, and special color/texture/pattern available from manufacturer as advertised in product data and brochures. Unless otherwise indicated in individual specification sections, Judicial Council of Califor-

nia may select from any range at no additional cost to Judicial Council of California.

- 1.7.3. Include identification on each sample, with full Project information.
- 1.7.4. Submit the number of samples that CMR requires, plus one that will be retained by Architect and one by Judicial Council of California.
- 1.7.5. Reviewed samples which may be used in the Work are indicated in individual specification Sections.

1.8. MANUFACTURER'S INSTRUCTION

- 1.8.1. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.
- 1.8.2. Identify conflicts between manufacturers' instructions and Contract Documents.

1.9. MANUFACTURER'S CERTIFICATES

- 1.9.1. When specified in individual specification Sections, submit manufacturers' certificate to Architect for review, in quantities specified for Product Data.
- 1.9.2. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits, and certifications as appropriate.
- 1.9.3. Certificates may be recent or previous test results on material or Product, but must be acceptable to Judicial Council of California.

1.10. MOCK-UP

- 1.10.1. Where indicated, provide mock-ups as required. Mock-ups shall be prepared per the specifications and shall accurately and reasonably represent the quality of construction the CMR will provide. If the mock-up or portions thereof do not adequately represent the quality of the work specified, the CMR shall modify the mock-up as needed.
- 1.10.2. Once completed to the Judicial Council of California's satisfaction, the mock-up shall serve as the standard of quality for the work.
- 1.10.3. All mock-ups, at Judicial Council of California's option, shall remain the property of the Judicial Council of California. If not required by the Judicial Council of California, CMR shall remove and dispose of the mock-up.
- 1.10.4. Where indicated, on-site mock-ups, if accepted, may be integrated into the Work.

1.11. DEFERRED APPROVAL REQUIREMENTS

- 1.11.1. Installation of deferred approval items shall not be started until detailed plans, specifications, and engineering calculations have been accepted and signed by the Architect or Engineer in general responsible charge of design and signed by a California registered Architect or professional engineer who has been delegated responsibility covering the work shown on a particular plan or specification and approved by the agency having authority (e.g., Corrections Standards Authority, State Fire Marshall, Division of the State Architect of the Department of General Services, gas company, electrical utility company,

water district, etc.). Deferred approval items for this Project are as indicated in the Summary of Work.

- 1.11.2. Unless otherwise indicated in the Contract Documents or if Judicial Council of California provides written approval of a longer time period, CMR shall submit all deferred approval items for approval within thirty (30) days of the notice to proceed with the Construction Phase.
- 1.11.3. Deferred approval drawings and specifications become part of the approved documents for the Project when they are submitted to and approved by the agency having authority.
- 1.11.4. Submit material using electronic submittal process as defined above.
- 1.11.5. Identify and specify all supports, fasteners, spacing, penetrations, etc., for each of the deferred approval items, including calculations for each and all fasteners.
- 1.11.6. Submit documents to Architect for review prior to forwarding to the agency having authority.
- 1.11.7. Documents shall bear the stamp and signature of the Structural, Mechanical, or Electrical Engineer licensed in the State of California who is responsible for the work shown on the documents.
- 1.11.8. Architect and its subconsultants will review the documents only for conformance with design concept shown on the documents. The Architect will then forward the Submittal to agency having authority for approval.
- 1.11.9. CMR shall respond to review comments made by agency having authority and revise and resubmit submittal to the Architect for re-submittal to agency having authority for final approval.

END OF SECTION

SECTION 01 40 00
QUALITY REQUIREMENTS

1. PART GENERAL

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.

2. SUMMARY

- a This Section includes administrative and procedural requirements for quality assurance and quality control.
- b Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1 Specific quality-control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2 Specified tests, inspections, and related actions do not limit Contractor's other quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 3 Requirements for Contractor to provide quality-control services required by Judicial Council of California, Judicial Council of California's Consultants, or authorities having jurisdiction are not limited by provisions of this Section.
- c Related Sections include the following:
 - 1 Section 01 21 00, "Allowances" for testing and inspecting allowances.
 - 2 Section 01 32 16, "Construction Schedule-Network Analysis" for developing a schedule of required tests and inspections.
 - 3 Section 01 43 39, "Visual Mock Ups and Benchmarks" for full-size, physical assemblies that are constructed on-site.
 - 4 Section 01 73 10, "Cutting and Patching" for repair and restoration of construction disturbed by testing and inspecting activities.
 - 5 Divisions 02 through 49 Sections for specific test and inspection requirements.
 - 6 Section 01 45 16, "Contractor's Quality Control Program".

3. DEFINITIONS

- a **Quality-Control Services:** Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements. Services do not include contract enforcement activities performed by Judicial Council of California or their Consultants.
- b **Quality-Assurance Services:** Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements.
- c **Mockups:** Full-size, physical assemblies that are constructed on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.
- d **Laboratory Mockups:** Full-size, physical assemblies that are constructed at testing facility to verify performance characteristics.

- e Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- f Product Testing: Tests and inspections that are performed by an NRTL (National Recognized Testing Laboratory), an NVLAP (National Voluntary Laboratory Accreditation Program), or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- g Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- h Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- i Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- j Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1 Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to trades-people of the corresponding generic name.
- k Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

4. CONFLICTING REQUIREMENTS

- a General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Judicial Council of California for a decision before proceeding.
- b Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Judicial Council of California for a decision before proceeding.

5. SUBMITTALS

- a Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- b Schedule of Tests and Inspections: Prepare in tabular form and include the following:
 - 1 Specification Section number and title.
 - 2 Description of test and inspection.
 - 3 Identification of applicable standards, codes or regulations.
 - 4 Identification of test and inspection methods.
 - 5 Number of tests and inspections required.
 - 6 Time schedule or time span for tests and inspections.
 - 7 Entity responsible for performing tests and inspections.
 - 8 Requirements for obtaining samples.

- 9 Unique characteristics of each quality-control service.
 - c Reports: Prepare and submit certified written reports that include the following:
 - 1 Date of issue.
 - 2 Project title and number.
 - 3 Name, address, and telephone number of testing agency.
 - 4 Dates and locations of samples and tests or inspections.
 - 5 Names of individuals making tests and inspections.
 - 6 Description of the Work and test and inspection method.
 - 7 Identification of product and Specification Section.
 - 8 Complete test or inspection data.
 - 9 Test and inspection results and an interpretation of test results.
 - 10 Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 11 Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12 Name and signature of laboratory inspector.
 - 13 Recommendations on retesting and reinspecting.
 - d Test reports shall include a description of deficiencies noted, and corrective action undertaken to resolve such deficiencies.
 - e Deficiencies observed shall immediately be brought to the attention of the Contractor's field superintendent, and trade foreman. In the event deficiencies are not corrected, or if an interpretation of the Contract Documents is required, the Testing Agency shall immediately notify the Judicial Council of California and applicable Consultant, Architect, or Engineer.
 - f The Testing Agency shall maintain a deficiency list of all items not corrected and shall reinspect the area after the deficiency has been corrected. The list shall include a description of the deficiency, the date and time the deficiency was observed, who was notified, the date of reinspection and description of corrective action taken. Distribute the deficiency list at least once per month.
 - g At the end of the project, the Testing Agency shall submit a final signed report stating whether the work tested and inspected conforms to the contract documents.
 - h Permits, Licenses, and Certificates: For Judicial Council of California's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.
6. QUALITY CONTROL
- a General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
 - b Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance. Where required by the individual Specification Sections, Installer employing workers trained and approved by manufacturer, Installer being acceptable to manufacturer, and/or Installer being an authorized representative of manufacturer for both installation and maintenance.
 - c Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
 - d Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Section 01 33 00, "Submittal Procedures."

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- e Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- f Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in the State of California, and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- g Specialists: Certain Sections of the Specifications may require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1 Requirement for specialists shall not supersede building codes and regulations governing the Work.
- h Testing Agency Qualifications: A Division of the State of Architect's Accepted Laboratory or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1 Tests shall be made by an accredited testing agency with a minimum of 5 years experience in the specific type of testing to be performed. Except as otherwise provided, sampling and testing of all materials and the laboratory methods and testing equipment shall be in accordance with the applicable standards and methods of the California Building Standards code.
 - 2 For each type of inspection and testing service to be performed, the Testing Agency shall submit certification, signed and sealed by the Agency's professional engineer, of compliance with all applicable requirements. of the following:
 - a ASTM E329, "Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction."
 - b "Recommended Requirements for Independent Laboratory Qualifications" published by the American Council of Independent Laboratories.
 - 3 Furnish written certification to the Judicial Council of California that all equipment to be used has been calibrated in accordance with applicable ASTM standards within the last year and is in proper working order.
 - 4 Testing Agency Personnel Qualifications: Testing and inspection services shall be performed only by trained and experienced technicians currently qualified for the work they are to perform. Documentation of such training and experience shall be submitted to the Judicial Council of California and their Consultant upon request.
 - 5 Each independent inspection and testing agency engaged on the Project shall be authorized by authorities having jurisdiction to operate in the state where the Project is located.
- i Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- j Preconstruction Testing: Where testing agency is indicated to perform preconstruction testing for compliance with specified requirements for performance and test methods, comply with the following:
 - 1 Contractor responsibilities include the following:
 - a Provide test specimens representative of proposed products and construction.
 - b Submit specimens in a timely manner with sufficient time for testing and analyzing results to prevent delaying the Work.

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- c Provide sizes and configurations of test assemblies, mockups, and laboratory mockups to adequately demonstrate capability of products to comply with performance requirements.
 - d Build site-assembled test assemblies and mockups using installers who will perform same tasks for Project.
 - e Build laboratory mockups at testing facility using personnel, products, and methods of construction indicated for the completed Work.
 - f When testing is complete, remove test specimens, assemblies, mockups, and laboratory mockups; do not reuse products on Project.
 - 2 Testing Agency Responsibilities: Submit a certified written report of each test, inspection, and similar quality-assurance service to Judicial Council of California with copy to Contractor. Interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 - k Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
 - 1 Build mockups in location and of size indicated or, if not indicated, as directed by Judicial Council of California or their Consultant.
 - 2 Notify Judicial Council of California and their Consultants seven (7) days in advance of dates and times when mockups will be constructed.
 - 3 Demonstrate the proposed range of aesthetic effects and workmanship.
 - 4 Obtain Judicial Council of California's and their Consultant's approval of mockups before starting work, fabrication, or construction.
 - a Allow seven (7) days for initial review and each re-review of each mockup.
 - 5 Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 - 6 Demolish and remove mockups when directed, unless otherwise indicated.
 - l Laboratory Mockups: Comply with requirements of preconstruction testing and those specified in individual Sections in Divisions 02 through 49.
 - m Retesting/Reinspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and reinspecting, for construction that replaced Work that failed to comply with the Contract Documents.
7. QUALITY ASSURANCE
- A. Judicial Council of California Responsibilities: Where quality assurance services are indicated as Judicial Council of California's responsibility, Judicial Council of California will engage a qualified testing agency to perform these services.
 - 1 Judicial Council of California will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 - 2 Costs for retesting and reinspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.
 - b Tests and inspections not explicitly assigned to Judicial Council of California are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.

- 1 Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a Contractor shall not employ same entity engaged by Judicial Council of California, unless agreed to in writing by Judicial Council of California.
 - 2 Notify testing agencies at least 48 hours in advance of time when Work that requires testing or inspecting will be performed.
 - 3 Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
 - 4 Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
 - 5 Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- c Testing Agency Responsibilities: Cooperate with Judicial Council of California, Judicial Council of California's Consultants, and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
- 1 Notify Judicial Council of California, their Consultants, and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2 Determine the location from which test samples will be taken and in which in-situ tests are conducted.
 - 3 Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4 Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
 - 5 Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6 Do not perform any duties of Contractor.
- d Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
- 1 Access to the Work.
 - 2 Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3 Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4 Facilities for storage and field curing of test samples.
 - 5 Delivery of samples to testing agencies.
 - 6 Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 7 Security and protection for samples and for testing and inspecting equipment at Project site.
 - 8 Furnish tools, samples of materials, design mixes, equipment and assistance as requested.
 - 9 Provide and maintain, for the sole use of the Testing Agency, adequate facilities for the safe storage and proper curing of concrete test cylinders on the project site for the first 24 hours after casting as required by ASTM C31, Method of Making and Curing Concrete Test Specimens in the Field.
 - 10 Build and store masonry test prisms in a manner acceptable to the Testing Agency. Prisms to be tested shall remain at the job site until moved by Testing Agency personnel.
 - 11 Notify Testing Agency at least 10 working days in advance of any qualification testing for welding required herein.
 - 12 Notify Testing Agency at least 24 hours prior to expected time for operations requiring testing or inspection services.
 - 13 Make arrangements with the Testing Agency and pay for additional samples and tests made for the Contractor's convenience or for retesting of failed samples.
 - 14 For deficiencies requiring corrective action, submit in writing a description of the deficiency and a proposed correction to the Judicial Council of California. After review and approval, the proposed

corrective action shall be implemented and inspected by the Testing Agency. It is the Contractor's responsibility to ascertain that the deficiency is corrected and inspected prior to the work being covered.

15 Retention of an independent Testing Agency by the Judicial Council of California shall in no way relieve the Contractor of responsibility for performing all work in accordance with contract requirements.

e Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1 Schedule times for tests, inspections, obtaining samples, and similar activities.

8. TESTS AND SPECIAL INSPECTIONS

A. Tests and Special Inspections: Judicial Council of California will engage a qualified testing agency to conduct tests and special inspections required by authorities having jurisdiction, including but not limited to, as follows:

1	Compact Fill:	Table 1704.7, item 4 – Filled Material Acceptance Test
2	Compact Fill:	Table 1704.7, item 4 – Compaction Test
3	Concrete:	Section 1704.4.1 – Cement
4	Concrete:	Section 1704.4.1 – Aggregates
5	Concrete:	Section 1704.4.1 – Admixtures
6	Concrete:	Table 1704.4, item 5 – Mix design
7	Concrete:	Table 1704.4, item 6 & 1905.6 – Strength test
8	Concrete:	Table 1704.4, item 6 & 1704.3, item 5B – Metal reinforcement (including welded wire fabric)
9	Concrete:	Section 1916A.3 – Pre-stressing tendons
10	Miscellaneous:	Table 1704.4, item 4 – Expansion and epoxy anchors
11	Concrete:	Table 1704.4, item 7 – Placement of concrete
12	Foundation:	Table 1704.8 – Piles & caissons
13	Concrete:	Table 1704.3, item 5B – Reinforcing steel and prestressing steel
14	Concrete:	Table 1704.3, item 5B – Welding of reinforcing bars
15	Concrete:	Table 1704.4, item 3 – Bolts installed in concrete
16	Steel:	Table 1704.3, item 5A – Structural welding
17	Bolts:	Table 1704.3, item 2 – High strength bolting
18	Structural Masonry:	Table 1704.5.1 - Masonry
19	Reinforced Gyp Concrete:	Section 1914 – Reinforced Gypsum Concrete
20	Wood:	Section 1704.6 – Manufactured trusses
21	Miscellaneous:	Table 1704.4, item 4 – Expansion and Epoxy Anchors (see above)
22	Fire resistive materials:	Section 1704.12 – Spray applied fireproofing

B. Special Tests and Inspections: Conducted by a qualified testing agency as required by authorities having jurisdiction, as indicated in individual Specification Sections, and as follows:

1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
2. Notifying Judicial Council of California, their Consultants, and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
3. Submitting a certified written report of each test, inspection, and similar quality-control service to Judicial Council of California, with copy to Contractor and to authorities having jurisdiction.
4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.

6. Retesting and reinspecting corrected work.

2. PART PRODUCTS

1. GENERAL

- a Do not use any materials or equipment represented by samples until tests, if required, have been made and the materials or equipment found to be acceptable. Any product which becomes unfit for use after acceptance shall not be incorporated into the work.

3. PART EXECUTION

1. TEST AND INSPECTION LOG

- a Prepare a record of tests and inspections. Include the following:
 - 1 Date test or inspection was conducted.
 - 2 Description of the Work tested or inspected.
 - 3 Date test or inspection results were transmitted to Judicial Council of California.
 - 4 Identification of testing agency or special inspector conducting test or inspection.
- b Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Judicial Council of California's reference during normal working hours.

2. ACCESS

- a Contractor to provide and maintain access to areas to be inspected

3. REPAIR AND PROTECTION

- a General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1 Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
 - 2 Comply with the Contract Document requirements for Section 01 73 10, "Cutting and Patching."
- b Protect construction exposed by or for quality-control service activities.
- c Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION

SECTION 01 42 00

GENERAL DEFINITIONS AND REFERENCES

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

2.2.1. General Conditions; and

2.2.2. Summary of Work.

1.2. DEFINITIONS

General: Basic Contract definitions are included in the General Conditions of the Contract for Construction. The following are in addition to those definitions.

1.2.1. “Alternate”: A cost or credit for certain Work that may be added to or deducted from the Project.

1.2.2. “Indicated”: Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including “shown,” “noted,” “scheduled,” and “specified” have the same meaning as “indicated.”

1.2.3. “Regulations”: Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.

1.2.4. “Furnish”: Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

1.2.5. “Install”: Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

1.2.6. “Provide”: Furnish and install, complete and ready for the intended use.

1.3. STANDARDS

1.3.1. Abbreviations and Acronyms for Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations as indicated in Thomson Gale™ (www.gale.com), Gale Research’s “Encyclopedia of Associations” or “Encyclopedia of Associations: National Organizations of the U.S.,” or in Columbia Books’ “National Trade & Professional Associations of the U.S.”

END OF SECTION

SECTION 01 42 13

ABBREVIATIONS AND ACRONYMS

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions

1.2. DOCUMENT INCLUDES

- 1.2.1. Abbreviations and Acronyms for Standards and Regulations used throughout the Contract Documents shall mean the recognized name of the standards and regulations indicated in:

1.2.1.1. Thomson Gale, Gale Research's "Encyclopedia of Associations: National Organizations of the U.S." or

1.2.1.2. Columbia Books' "National Trade & Professional Associations of the U.S."

- 1.2.2. Some of the applicable abbreviations and acronyms have the following meanings, subject to updates or revisions based on the above-referenced publications:

- AA: Aluminum Association
- AAMA: American Architectural Manufacturers Association
- AASHTO: American Association of State Highway and Transportation Officials
- ABPA: Acoustical and Board Products Association
- ACI: American Concrete Institute
- AGA: American Gas Association
- AGC: Associated General Contractors
- AHC: Architectural Hardware Consultant
- AI: Asphalt Institute
- AIA: American Institute of Architects
- AIEE: American Institute of Electrical Engineers
- AISC: American Institute of Steel Construction
- AISI: American Iron and Steel Institute
- AMCA: Air Movement and Control Association International, Inc.
- ANSI: American National Standards Institute
- APA: American Plywood Association
- ARI: Air Conditioning and Refrigeration Institute
- ASHRAE: American Society of Heating, Refrigeration and Air Conditioning Engineers
- ASME: American Society of Mechanical Engineers
- ASSE: American Society of Sanitary Engineering
- ASTM: American Society of Testing and Materials
- AWP: American Wood Protection Association
- AWS: American Welding Society
- AWS: American Welding Society Code
- AWI: Architectural Woodwork Institute

- AWWA: American Water Works Association
- BHMA: Builders Hardware Manufacturers Association
- BIA: Brick Industry Association
- CCR: California Code of Regulations
- CLFMI: Chain Link Fence Manufacturers Institute
- CMG: California Masonry Guild
- CRA: California Redwood Association
- CRSI: Concrete Reinforcing Steel Institute
- CS: Commercial Standards
- CSI: Construction Specifications Institute
- CTI: Cooling Technology Institute
- FIA: Factory Insurance Association
- FM Global: FM Global
- FS: Federal Specification
- FSC: Forest Stewardship Council
- GA: Gypsum Association
- GANA: Glass Association of North America
- ICC: International Code Council
- IEEE: Institute of Electrical and Electronic Engineers
- IES: Illumination Engineering Society
- MIA: Marble Institute of America
- MLMA: Metal Lath Manufacturers Association
- MS: Military Specifications
- NAAMM: National Association of Architectural Metal Manufacturers
- NBFU: National Board of Fire Underwriters
- NBS: National Bureau of Standards
- NCMA: National Concrete Masonry Association
- NEC: National Electrical Code
- NEMA: National Electrical Manufacturers Association
- NFPA: National Fire Protection Association
- NMWIA: National Mineral Wool Insulation Association
- NTMA: National Terrazzo and Mosaic Association
- NWMA: National Woodwork Manufacturer's Association
- ORS: Office of Regulatory Services (California)
- OSHA: Occupational Safety and Health Act
- PCI: Precast Concrete Institute
- PCA: Portland Cement Association
- PDCA: Painting and Decorating Contractors of America
- PDI: Plumbing Drainage Institute
- PEI: Porcelain Enamel Institute
- PG&E: Pacific Gas & Electric Company
- PS: Product Standards
- SDI: Steel Door Institute; Steel Deck Institute
- SJI: Steel Joist Institute
- SSPC: Steel Structures Painting Council
- TCNA: Tile Council of North America
- TPI: Truss Plate Institute
- UBC: Uniform Building Code
- UL: Underwriters Laboratories Code
- UMC: Uniform Mechanical Code
- USDA: United States Department of Agriculture
- VI: Vermiculite Institute

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- WCLA: West Coast Lumberman's Association
- WCLB: West Coast Lumber Bureau
- WEUSER: Western Electric Utilities Service Engineering Requirements
- WIC: Woodwork Institute of California
- WPOA: Western Plumbing Officials Association

END OF SECTION

SECTION 01 43 39

VISUAL MOCK-UPS AND BENCHMARKS

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

1.1.1. General Conditions.

1.2. VISUAL MOCK-UPS

1.2.1. Visual Mock-Ups: Special construction used to illustrate materials and workmanship, which will not be part of the finished construction.

1.2.2. Sitework Mockups:

1.2.2.1. Site Concrete:

1.2.2.1.1. Flatwork: Construct 6'-0" x 6'-0" mock-up for each concrete type and finish.

1.2.2.1.2. Paving Module: Construct a mock-up of one special paving module, including banding, 12'-0" x 12'-0".

1.2.2.2. Unit Pavers:

1.2.2.2.1. Mockups for each form and pattern of unit pavers required to verify selections made under sample submittals and to demonstrate aesthetic effects as well as qualities of materials and execution.

1.2.3. Building Facade: Scope as indicated on Drawings. Provide evaluation mock-up at location as directed by Judicial Council of California to illustrate erection, anchorage of aluminum window wall system, sealants, glass, glazing, and finishes.

1.2.3.1. Design Concept: Mock-up requirements shown on the Drawings are intended to establish general configuration and scope. Design the mock-up as a complete and independent structure, including required structural supports. CMR shall make necessary additions and modifications to the details as may be required to comply with aesthetic requirements while maintaining the design.

1.2.3.2. Evaluation mock-up shall be built of the same materials, components and using the construction procedures and subcontractors proposed for the Work.

1.2.3.3. Modifications to the Work, if needed, to obtain the quality of workmanship and finish required in the finished structure shall be made during construction of the mock-up.

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1.2.4. Courtroom Bench Mockup: After approval of shop drawings for the judge/clerk/witness bench mock-up, CMR shall prepare the visual mock-up prior to and obtain approval prior to proceeding with final shop drawings for the courtroom casework.

1.2.4.1. Build mock-up to comply with the following requirements:

- 1.2.4.1.1. Location: At location designated by Judicial Council of California.
- 1.2.4.1.2. Include Judge; clerk and witness stations, work surfaces, built in casework and rail at spectator seating.
- 1.2.4.1.3. Judicial/Witness Bench shall be fabricated complete and with all finished components proposed for the Project. Install the ballistic protection sheet behind the finished panels.
- 1.2.4.1.4. Construct an elevated floor for support of benches to simulate the actual conditions that will exist in the Courtroom.
- 1.2.4.1.5. Portion of the Judges/Clerk Bench and Witness Stand shall utilize the same materials proposed for the Project; construct mock-up in sections as planned for the final work; employ a method of joining individual front panel and transaction counter sections which will enable disassembly and possible reuse, while demonstrating joint design and tightness. All wood veneers and solid stock shall be finished to match previously approved samples.
- 1.2.4.1.6. Fabricate and erect mock-up utilizing the same craftspeople as that intended to be used for the actual Work. Should field installation be accomplished by a firm other than the fabricator, the firm responsible for the field installation must be present during all phases of shop assembly of the mock-up.
- 1.2.4.1.7. Provide a minimum of twenty (20) days notice to Judicial Council of California of time when mock-up will be available for evaluation.
- 1.2.4.1.8. Mock-up will be examined to ascertain quality of the Work and conformity to AWI (Architectural Woodwork Institute) quality standards and specification requirements. Approved mock-up shall serve as a standard of comparison for all remaining casework with respect to workmanship, design, materials, finish, joining, and tolerances.
- 1.2.4.1.9. Provide additional materials and labor if required to obtain approval of mock-up at no additional cost to Judicial Council of California.
- 1.2.4.1.10. CMR may reuse as much of the approved mockup as is practical, when approved by the Judicial Council of California; the decision as to methods employed in constructing mock-up to maximize its reuse shall rest with the fabricator. Fabricator shall not be entitled to additional compensation if it is

determined upon disassembly that all, or a portion of the approved mock-up is not acceptable for reuse within the building.

1.2.5. Mock-ups listed below are examples only. Modify selection to suit project requirements.

1.2.6. Other Mockups:

1.2.6.1. Cement-Based Underlayment: Architect will select one area or surface to represent surfaces and conditions for application on each substrate required. Mockups shall demonstrate qualities of materials and execution.

1.2.6.2. Unit Masonry Assemblies: Sample panels of Brick, approximately 32 inches (800 mm) wide by 48 inches (1200 mm) high by full thickness. Use materials proposed for the Work, including typical field units and mortar, to verify selections made under sample submittals and to demonstrate aesthetic effects. Approval required prior to work on visual mockup for building façade.

1.2.6.3. Water Repellents:

1.2.6.3.1. Use visual mock-up specified to establish actual application rates necessary to meet Project requirements. At no time shall the rate of coverage be less than that recommended by the manufacturer's printed data sheets.

1.2.6.3.2. Apply water repellent to mockup, for full coverage as directed, before proceeding with installation. Comply with installation requirements of this Section.

1.2.6.4. Audio-Visual Systems: Mock-up demonstration. Before ordering, mock-up equipment to demonstrate a completely operational system to Judicial Council of California.

1.3. BENCHMARKS

1.3.1. Benchmarks: Benchmarks are first construction of assemblies to be repeated throughout. Approved benchmarks are intended to serve as a standard of quality during construction. Protect from damage to ensure they are undisturbed at time of Completion and may become part of the completed Work.

1.3.1.1. Build benchmark mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution and set quality standards for fabrication and installation.

1.3.1.2. Approval of mockups is also for other material and construction qualities specifically approved by Judicial Council of California in writing.

1.3.1.3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless such deviations are specifically approved by Judicial Council of California in writing.

1.3.2. Mock-ups listed below are examples only. Modify selection to suit Project requirements.

1.3.3. Interior Construction / Finishes:

- 1.3.3.1. Steel Stairs, Decorative Metal Railings, and High Performance Epoxy Finish System: One full flight, First Floor to Second Floor, of main stair to include railings and finishes.
- 1.3.3.2. Interior Architectural Woodwork:
 - 1.3.3.2.1. Elevator Lobbies: One complete set of wall panels at Elevator Lobby front.
 - 1.3.3.2.2. First transaction / cashier counter.
 - 1.3.3.2.3. First audience rail.
 - 1.3.3.2.4. First jury box and rail, with fixed seating installed.
- 1.3.3.3. Door Hardware, Hollow Metal (Steel) Doors and Frames, and Flush Wood Doors:
 - 1.3.3.3.1. First 180-degree opening door assembly.
 - 1.3.3.3.2. First set of cross corridor door assembly.
 - 1.3.3.3.3. First pair of 180-degree double-door hold-open assembly at typical staff elevator entrance shall be constructed as "work-in-place" mock-up.
 - 1.3.3.3.3.1. This mock-up shall be completed (including all specified hardware), tested, and accepted by the Judicial Council of California prior to starting work on door installation at other 180-degree installations.
 - 1.3.3.3.3.2. CMR will be responsible for all costs associated with corrective work required because of starting further work prior to acceptance of this mock-up.
 - 1.3.3.3.3.3. Mock-ups shall be complete, serviceable installation of drywall partitions, doors, frames, and hardware. CMR shall coordinate work affecting the assembly and adjust detailed dimensions as necessary for tolerances and correct operation of doors.
 - 1.3.3.3.3.4. The approved mock-up shall remain as part of the Work.
- 1.3.3.4. Ceramic Tile:
 - 1.3.3.4.1. Complete first Toilet Room.
 - 1.3.3.4.2. Acoustical Panel Ceilings:
 - 1.3.3.4.2.1. Two structural bays long by full width complete ceiling including cut outs for fixtures.

- 1.3.3.4.2.2. Toilet Compartments:
- 1.3.3.4.2.3. Typical and disabled access.
- 1.3.3.4.3. Toilet Accessories:
 - 1.3.3.4.3.1. First toilet room, complete with required toilet accessories.
- 1.3.3.4.4. Toilet Room Benchmark: Finish one First Floor core toilet room completely before beginning work on any others. Benchmark shall include all fixtures, lighting and interior finishes and will be evaluated for any required modifications.

1.4. EVALUATION

- 1.4.1. Completed mock-ups and benchmarks as accepted by the Judicial Council of California shall be maintained in good condition during the Work as standards of workmanship and appearance for the completed Project.
- 1.4.2. Mock-ups shall not be disassembled until Judicial Council of California provides notice to CMR that its evaluation and use of the mock-ups is complete.

END OF SECTION

SECTION 01 45 16

CONTRACTOR'S QUALITY CONTROL PROGRAM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section describes the requirements for implementation of a Quality Control Program by the Contractor to assure performance of the Work in conformance with the requirements of the Contract Documents.
- B. Related Work Specified Elsewhere:
 - 1. Testing and Inspection Services of Quality Control are specified in Section 014000, "Quality Requirements."

1.3 QUALITY CONTROL PROGRAM

- A. The Contractor shall prepare and submit within 30 days after the issuance of Notice to Proceed, the Quality Control Program (QCP) they intend to implement for the Work for approval by the Judicial Council of California. This Program shall be tailored to the specific requirements of the Work and shall become an active part of the construction procedures. The Quality Control Program shall include the procedures, instructions, reports and forms to be used throughout the performance of the Work. The Judicial Council of California reserves the right to review and reject all or part of the Quality Control Program as proposed by the Contractor. The Contractor shall revise and resubmit as appropriate until satisfactory to the Judicial Council of California and their Consultants. The basic objectives of the Quality Control Program are as follows:
 - 1. To ensure that all Work adheres strictly to all requirements of the Contract Documents and governing agencies.
 - 2. To produce first class workmanship.
 - 3. To prevent deficiencies through pre-construction quality control coordination.
 - 4. To detect and correct deficiencies in a timely manner.
 - 5. To provide an auditable record of all tests, inspections, procedures, non-compliance and corrections, and any other pertinent data as required by the Judicial Council of California.
- B. The Contractor shall notify the Judicial Council of California in writing of any proposed change to his Quality Control system and changes shall not be permitted if they would, in the opinion of the Judicial Council of California or their Consultants, result in nonconformance with the Contract requirements.
- C. The Contractor may select either an outside "agency" or in-house personnel to administer the program. In either case, the Quality Control staff on-site shall be responsible only for Quality Control and the Quality Control manager shall report directly to the Contractor's highest ranking Corporate Officer involved in the

Work. The management and/or control of the construction process. Quality Control staff members shall interface with the Judicial Council of California, its Inspectors and Consultants, as required and appropriate.

- D. Failure to comply with the Quality Control Program requirements stated herein may result in the withholding of monthly progress payments and/or termination of the Contractor for cause by the Judicial Council of California in accordance with the General Conditions.

1.4 REQUIREMENTS OF THE PROGRAM

- A. The Quality Control Program submittal shall include, as a minimum, the following:
1. The Quality Control organization chart, beginning with the Quality Control Manager, shall include Quality Control personnel as may be necessary to accomplish complete and adequate inspection of the Work.
 2. Names and qualifications of personnel and firms selected to implement the Quality Control Program on-site and off-site.
 3. Authority and responsibility of the Quality Control Staff.
 4. Methods of Quality Control inspection including subcontractor's work and describing name of qualified testing laboratory to be used, if applicable.
 5. Documents to be used to record inspections and tests, including those specified in the Contract.
 6. Formats for documentation and reports.
 7. A letter signed by the Responsible Managing Officer of the Contractor's firm outlining the authority of the Quality Control Manager to include, among other things, the authority as described herein. Clerical personnel sufficient to accomplish timely submittal of Quality Control Reports and other required documentation shall be provided.

1.5 QUALIFICATION OF QUALITY CONTROL MANAGER

- A. The qualifications required of the Quality Control Manager are as follows:
1. Has recent construction experience in projects of similar size and nature.
 2. Has a minimum of 10 years construction-related Quality Control experience.
- B. Responsibilities and Duties of the Quality Control Staff:
1. The Quality Control Manager shall have the authority to stop work, reject work, order work removed, initiate remedial work, propose solutions, and reject material not in compliance with the Contract.
 2. Responsibilities of the Quality Control Manager shall include, but are not limited to the following:
 - a. Present on-site during all working hours and assigned "full time" to this Project. Contractor shall designate alternate individual(s) to assume responsibilities in the temporary absence of the Quality Control Manager or when overtime work is being performed.
 - b. Have complete familiarity with the Contract Drawings and Specifications.
 - c. Establish and implement Quality Control Programs for the Contractor and with the various Sub-contractors and monitor their conformance.

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- d. Present samples, mock-ups and test panels to be used as standards of quality for review by the Judicial Council of California and their Consultants.
- e. Inspect existing conditions prior to the start of new work segments.
- f. Perform in-progress and follow-up inspections on each work segment to ensure compliance with the Contract Documents. Accompany the Judicial Council of California and their Consultants on such inspections.
- g. Coordinate required tests, inspections, and demonstrations with the Judicial Council of California's Testing Agency, County and State inspectors and any other authority having jurisdiction.
- h. Inspect all materials and equipment arriving at the job site to ensure conformance to the requirements of the Contract Documents. Prepare and submit to the Judicial Council of California written reports as required by the Contract Documents.
- i. Identify, report and reject defective Work or Work not in conformance with the Contract Documents. Monitor the repair or reconstruction of rejected Work.
- j. Develop checklists to be used for the inspection of each Division of the Work.
- k. Retain specialists or outside firms for inspection of Work in areas where additional technical knowledge is required (mechanical, electrical, electronics, controls, communications, security, welding, structural, security hardware, etc.). Submit qualifications of firms and specialists to the Judicial Council of California and their Consultants for approval.
- l. Schedule and accompany the Judicial Council of California and their Consultants on any Site visits when requested.
- m. Schedule additional Site visits where appropriate.
- n. Verify and report that all materials and equipment manufactured off-site are in conformance with the Contract Documents.
- o. Prior to the start of each Division, Section and/or major item of Work required by the Contract Documents, conduct a preconstruction Quality Control meeting with responsible field and office representative and the Judicial Council of California and their Consultants. Provide the Judicial Council of California and their Consultants minutes of these meetings within 48 hours.
- p. Work closely with the Judicial Council of California to ensure optimum Quality Control. Attend Project meetings as required by the Judicial Council of California.

1.6 REPORTING PROCEDURES

- A. As a minimum, develop forms, logs and reporting procedures consisting of the following:
 1. A Quality Control meeting held monthly between the Judicial Council of California, Judicial Council of California's Consultants and the Quality Control Manager during which only Quality related topics will be reviewed.
 2. A monthly written report published at month end providing an overview of Quality Control activities, problems found and/or solved status of remedial work, status of mock-ups, anticipated problems and planned activities for the coming month, etc.
 3. Deficiency reports: Plan of action by the Contractor for correcting any known contract deficiencies including delay in scheduled progress.
 4. Weekly reports (including reports from Contractor and Subcontractors) to the Judicial Council of California describing:
 - a. Equipment and material received.
 - b. Tests and inspections performed with submittal information.
 - c. Deficiencies noted and/or corrected.
 - d. Quality Control concerns and problems.
 - e. Record keeping (as required).

1.7 IMPLEMENTATION

- A. The Contractor's Quality Control program shall be adequate to cover all operations, including both on-site and off-site and will be keyed to the proposed sequence of work and shall include as a minimum at least 3 phases of inspection for all definable items or segments of work, as follows:
1. Preparatory Inspection shall be performed prior to beginning any work on any definable segment of the Work and shall include a review of Contract requirements; verification that all materials and/or equipment have been tested, submitted, and accepted; verification that provisions have been made to provide required control testing; examination of the work area to ascertain that all preliminary work has been completed; and a physical examination of materials and equipment to assure that they conform to accepted shop drawings or submittal data and that all material and/or equipment are available. As a part of this preparatory work, Contractor's Quality Control organization will review and verify that all documents, including but not limited to; shop drawings, submittal data, method of Quality Control, product data sheets, test reports, affidavits, Certification and manufacturer's instructions have been submitted and accepted by the Judicial Council of California as required herein. Each submittal to the Judicial Council of California shall bear the date and the signature of the Contractor's Quality Control Manager indicating that he has reviewed the submittal and certified it to be in compliance with Drawings and Specifications or showing the required changes.
 2. Initial Inspection: To be performed as soon as a representative segment of the particular item of work has been accomplished and to include examination of the quality of workmanship and a review of control testing for compliance with Contract requirements, exclusion of defective or damaged materials, omissions, and dimensional requirements.
 3. Follow-up Inspection: To be performed daily or as frequently as necessary to ensure continuing compliance with Contract requirements, including control testing, until completion.
 4. The Contractor shall maintain daily current records with information as described above, in an appropriate format of all inspections and tests that the required inspection or tests have been performed. These records must cover both conforming and defective items and must include a statement that all supplies and materials, incorporated in the Work, are in full compliance with the terms of the Contract. Two legible copies must be furnished to the Judicial Council of California. The report will cover all work performed or completed subsequent to the previous report.

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions; and
- 1.1.2. Temporary Tree and Plant Protection.

1.2. TEMPORARY UTILITIES

1.2.1. Electric Power and Lighting:

- 1.2.1.1. CMR will furnish and pay for power during the course of the work to the -extent power is not in the building(s) or on the Site. CMR shall be responsible for providing temporary facilities required on the Site to point of intended use.
- 1.2.1.2. CMR shall furnish, wire for, install, and maintain temporary electrical lights wherever it is necessary to provide illumination for the proper performance and/or observation of the Work: a minimum of 20 foot-candles for rough work and 50 foot-candles for finish work.
- 1.2.1.3. CMR shall be responsible for maintaining existing lighting levels in the Project vicinity should temporary outages or service interruptions occur.

1.2.2. Heat and Ventilation:

- 1.2.2.1. CMR shall provide temporary heat to maintain environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation and curing of materials, and to protect materials and finishes from

damage due to improper temperature and humidity conditions. Portable heaters shall be standard units complete with controls.

1.2.2.2. CMR shall provide forced ventilation and dehumidification, as required, of enclosed areas for proper installation and curing of materials, to disperse humidity, and to prevent hazardous accumulations of dust, fumes, vapors, and gases.

1.2.2.3. CMR shall pay the costs of installation, maintenance, operation, and removal of temporary heat and ventilation, including costs for fuel consumed, required for the performance of the Work.

1.2.3. Water:

1.2.3.1. CMR will furnish and pay for water during the course of the work. CMR shall be responsible for providing temporary facilities required.

1.2.3.2. CMR shall make potable water available for human consumption.

1.2.4. Sanitary Facilities:

1.2.4.1. CMR shall provide sanitary temporary facilities in no fewer numbers than required by law and such additional facilities as may be directed by the Inspector for the use of all workers. The facilities shall be maintained in a sanitary condition at all times and shall be left at the Site until removal is directed by the Judicial Council of California or CMR completes all Work.

1.2.5. Telephone Service:

1.2.5.1. CMR shall arrange with local telephone service company for telephone service for the performance of the Work. CMR shall, at a minimum, provide in its field office one line for telephone and one line for fax machine.

1.2.5.2. CMR shall pay the costs for telephone and fax lines installation, maintenance, service, and removal.

1.2.6. Fire Protection:

1.2.6.1. CMR shall provide and maintain fire extinguishers and other equipment for fire protection. Such equipment shall be designated for use for fire protection only and shall comply with all requirements of the California Fire, State Fire

Marshall and/or its designee.

1.2.6.2. Where on-site welding and burning of steel is unavoidable, CMR shall provide protection for adjacent surfaces.

1.2.7. Trash Removal:

1.2.7.1. CMR shall provide trash removal on a timely basis from all Site Offices and throughout the Site.

1.2.8. Temporary Facilities:

1.2.8.1. CMR shall provide sufficient space and facilities for its own force's needs.

1.2.8.2. In addition, unless otherwise indicated in the Contract Documents, CMR shall provide the following facilities, trailers, offices, furniture and services for the Judicial Council of California's use:

1.2.8.2.1. One (1) 12X60 office trailer with two (2) offices for two (2) Judicial Council of California representatives, with bathroom, common space between both offices;

1.2.8.2.2. Basic furniture: chair, desks plan table, conference room table and chairs.

1.2.8.2.3. Basic services: fixed line for phone, fax, and high speed internet service.

1.3. CONSTRUCTION AIDS

1.3.1. Plant and Equipment:

1.3.1.1. CMR shall furnish, operate, and maintain a complete plant for fabricating, handling, conveying, installing, and erecting materials and equipment; and for conveyances for transporting workmen. Include elevators, hoists, debris chutes, and other equipment, tools, and appliances necessary for performance of the Work.

1.3.1.2. CMR shall maintain plant and equipment in safe and efficient operating condition. Damages due to defective plant and equipment, and uses made

thereof, shall be repaired by CMR at no expense to the Judicial Council of California.

- 1.3.2. No Judicial Council of California tools or equipment shall be used by CMR or its subcontractors for the performance of the Work.

1.4. BARRIERS AND ENCLOSURES

- 1.4.1. CMR shall obtain Judicial Council of California's written permission for locations and types of temporary barriers and enclosures, including fire-rated materials proposed for use, prior to their installation.
- 1.4.2. CMR shall provide a six (6) foot high, chain link perimeter fence with post driven into the ground and fabric screen as a temporary barrier around construction area. CMR shall provide and maintain temporary enclosures to prevent public entry and to protect persons using other buildings and portions of the Site and/or Premises. CMR shall remove temporary fence, barriers and enclosure upon Completion of the Work.
- 1.4.3. CMR shall provide site access to existing facilities for persons using other buildings and portions of the Site, the public, and for deliveries and other services and activities.

1.5. SECURITY

CMR shall secure all construction equipment, machinery and vehicles, park and store only within fenced area, and render inoperable during non-work hours. CMR is responsible for insuring that no construction materials, tools, equipment, machinery or vehicles can be used for unauthorized entry or other damage or interference to activities and security of existing facilities adjacent to and in the vicinity of the Project Site.

1.6. TEMPORARY CONTROLS

- 1.6.1. Noise Control:
 - 1.6.1.1. CMR acknowledges that adjacent facilities may remain in operation during all or a portion of the Work, and it shall take all reasonable precautions to minimize noise as required by applicable laws and the Contract Documents.
 - 1.6.1.2. Notice of proposed noisy operations, including without limitation, operation of pneumatic demolition tools, concrete saws, and other equipment, shall be submitted to Judicial Council of California a minimum of forty-eight (48) hours in advance of their performance.

1.6.2. Noise and Vibration:

1.6.2.1. Equipment and impact tools shall have intake and exhaust mufflers.

1.6.2.2. CMR shall cooperate with Judicial Council of California to minimize and/or cease the use of noisy and vibratory equipment if that equipment becomes objectionable by its longevity.

1.6.3. Dust and Dirt:

1.6.3.1. CMR shall conduct demolition and construction operations to minimize the generation of dust and dirt, and prevent dust and dirt from interfering with the progress of the Work and from accumulating in the Work and adjacent areas including, without limitation, occupied facilities.

1.6.3.2. CMR shall periodically water exterior demolition and construction areas to minimize the generation of dust and dirt.

1.6.3.3. CMR shall ensure that all hauling equipment and trucks carrying loads of soil and debris shall have their loads sprayed with water or covered with tarpaulins, and as otherwise required by local and state ordinance.

1.6.3.4. CMR shall prevent dust and dirt from accumulating on walks, roadways, parking areas, and planting, and from washing into sewer and storm drain lines.

1.6.4. Water:

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

1.6.5. Pollution:

1.6.5.1. No burning of refuse, debris, or other materials shall be permitted on or in the vicinity of the Premises.

1.6.5.2. CMR shall comply with applicable regulatory requirements and anti-pollution ordinances during the conduct of the Work including, without limitation, demolition, construction, and disposal operations.

1.6.6. Lighting

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

1.7. JOB SIGN(S)

1.7.1. General:

1.7.1.1. CMR shall provide and maintain and locate a Project identification sign with the design, text, and colors designated by Judicial Council of California and/or the Architect.

1.7.1.2. Signs other than the specified Project sign and or signs required by law, for safety, or for egress, shall not be permitted, unless otherwise approved in advance by the Judicial Council of California.

1.7.2. Materials:

1.7.2.1. Structure and Framing: Structurally sound, new or used wood or metal; wood shall be nominal 3/4-inch exterior grade plywood.

1.7.2.2. Sign Surface: Minimum 3/4-inch exterior grade plywood.

1.7.2.3. Rough Hardware: Galvanized.

1.7.2.4. Paint: Exterior quality, of type and colors selected by the Judicial Council of California and/or the Architect.

1.7.3. Fabrication:

1.7.3.1. CMR shall fabricate to provide smooth, even surface for painting.

1.7.3.2. Size: 4'-0" x 8'-0", unless otherwise indicated.

1.7.3.3. CMR shall paint exposed surfaces of supports, framing, and surface material

with exterior grade paint: one coat of primer and one coat of finish paint.

1.7.3.4. Text and Graphics: As indicated.

1.8. PUBLICITY RELEASES

CMR shall not release any information, story, photograph, plan, or drawing relating information about the Project to anyone, including press and other public communications medium, including, without limitation, on website(s).

END OF SECTION

SECTION 01 56 39

TEMPORARY TREE AND PLANT PROTECTION

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions; and
- 1.1.2. Temporary Facilities and Controls.

1.2. SUMMARY

This Document includes the protection and trimming of existing trees that interfere with, or are affected by, execution of the Work, whether temporary or permanent construction.

1.3. DEFINITIONS

Tree Protection Zone: Area surrounding individual trees or groups of trees to remain during construction, and defined by the drip line of individual trees or the perimeter drip line of groups of trees, unless otherwise indicated.

1.4. SUBMITTALS

- 1.4.1. Product Data: For each type of product indicated.
- 1.4.2. Tree Pruning Schedule: Written schedule from arborist or landscape architect detailing scope and extent of pruning of trees to remain that interfere with or are affected by construction.
- 1.4.3. Certification: From arborist or landscape architect, certifying that trees indicated to remain have been protected during construction according to recognized standards and that trees were promptly and properly treated and repaired when damaged.
- 1.4.4. Maintenance Recommendations: From arborist or landscape architect, for care and protection of trees affected by construction during and after completing the Work.

1.5. QUALITY ASSURANCE

- 1.5.1. Tree Service Firm Qualifications: An experienced tree service firm that has successfully completed tree protection and trimming work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of tree protection and trimming.
- 1.5.2. Arborist Qualifications: An arborist certified by ISA (International Society of Arboriculture) or licensed in the jurisdiction where Project is located.
- 1.5.3. Before tree protection and trimming operations begin, meet with Judicial Council of California to review tree protection and trimming procedures and responsibilities. CMR shall perform tree protection and trimming work in accordance to maintenance recommendations from arborist or landscape architect.

2. PRODUCTS

2.1. MATERIALS

CMR shall select materials as recommended by arborist or landscape architect.

3. EXECUTION

3.1. CMR shall install temporary fencing around tree protection zones to protect remaining trees and vegetation from construction damage as recommended by arborist or landscape architect. CMR shall maintain temporary fence until construction is complete.

3.2. EXCAVATION

Where excavation for new construction is required within tree protection zones, CMR shall perform excavation as recommended by arborist or landscape architect.

3.3. REGRADING

Where new finish grade is required around trees, CMR shall perform grading as recommended by arborist or landscape architect.

3.4. TREE PRUNING

CMR shall prune trees that are affected by temporary and permanent construction as recommended by arborist or landscape architect.

3.5. TREE REPAIR AND REPLACEMENT

CMR shall repair trees damaged by construction operations within twenty-four (24) hours. Treat damaged trunks, limbs, and roots as recommended by arborist or landscape architect.

3.6. DISPOSAL OF WASTE MATERIALS

3.6.1. Burning is not permitted.

3.6.2. Disposal: Remove excess excavated material and displaced trees from Site.

END OF SECTION

SECTION 01 57 10

STORM WATER POLLUTION PREVENTION PLAN – CONSTRUCTION

IN ORDER TO ENROLL IN THE CONSTRUCTION STORM WATER PERMIT AND BEFORE CONSTRUCTION ACTIVITIES BEGIN, THE Judicial Council of California WILL FILE CERTAIN SUBMITTALS REFERRED TO AS PERMIT REGISTRATION DOCUMENTS (PRDS) WITH THE REGIONAL WATER QUALITY CONTROL BOARD.

THE STATUS OF THE Judicial Council of California’S PRDS (THE RISK ASSESSMENT, SITE MAP(S), AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP)) ARE AS FURTHER INDICATED IN THE CONTRACT DOCUMENTS.

IF THE CONTRACT DOCUMENTS INDICATE THAT CMR SHALL BE RESPONSIBLE FOR PREPARING SOME OR ALL OF THE PRDS, CMR SHALL FOLLOW THE REQUIREMENTS HEREIN.

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISION

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions; and
- 1.1.2. Sustainable Design Requirements.

1.2. The Clean Water Act and Porter Cologne Water Quality Act prohibit the discharge of any water containing pollutants from certain construction sites unless a National Pollutant Discharge Elimination System permit is first obtained and followed. The National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction Storm Water Permit) Order No. 2009-0009-DWQ as amended by Order No. 2010-0014-DWQ (NPDES No. CAS000002) issued by the California State Water Resources Control Board (State Water Board) authorizes the discharge of storm water and certain non-storm water from construction sites if certain conditions and measures are taken. The Judicial Council of California has determined that the construction of this Project requires enrollment in the Construction Storm Water Permit.

2. SUBMITTALS

2.1. GENERAL

All submittals shall be made in a form conducive for the Judicial Council of California to electronically upload the approved submittals to the Storm water Multi-Application Reporting and Tracking System (SMARTS).

2.2. RISK ASSESSMENT

- 2.2.1. Concurrent with the Schedule of Submittals as indicated in the General Conditions, CMR shall prepare and submit a proposed “Risk Assessment” as set forth in the Construction Storm Water Permit.
- 2.2.2. The Judicial Council of California’s Qualified SWPPP Developer (“QSD”) will review the CMR’s proposed Risk Assessment for compliance with the Construction Storm Water

Permit. If changes to the proposed Risk Assessment are required to comply with the Construction Storm Water Permit, the Judicial Council of California QSD will identify such changes to the CMR.

- 2.2.3. CMR shall make the changes specified by the Judicial Council of California's QSD and shall submit the revised Risk Assessment to the Judicial Council of California within seven (7) days of receipt of the changes identified by the Judicial Council of California's QSD. If the changes had been acceptably made, the Judicial Council of California's QSD will approve the Risk Assessment and provide the CMR with a copy within seven (7) days of receipt of the revised Risk Assessment.

2.3. SITE MAPS

- 2.3.1. Concurrent with the Schedule of Submittals as indicated in the General Conditions, CMR shall prepare and submit proposed "Site Maps" as described in Attachment B of the Construction Storm Water Permit.
- 2.3.2. The Judicial Council of California's QSD will review the CMR's proposed Site Maps for compliance with the Construction Storm Water Permit. If changes to the proposed Site Maps are required to comply with the Construction Storm Water Permit, the Judicial Council of California QSD will identify such changes to the CMR.
- 2.3.3. CMR shall make the changes specified by the Judicial Council of California's QSD and shall submit the revised Site Maps to the Judicial Council of California within seven (7) days of receipt of the changes identified by the Judicial Council of California's QSD. If the changes had been acceptably made, the Judicial Council of California's QSD will approve the Site Maps and provide the CMR with a copy within seven (7) days of receipt of the revised SWPPP.

2.4. SWPPP

- 2.4.1. Concurrent with the Schedule of Submittals as indicated in the General Conditions, CMR shall prepare and submit to the Judicial Council of California a proposed SWPPP for the Work.
- 2.4.2. The Judicial Council of California's Qualified SWPPP Developer ("QSD") will review the CMR's proposed SWPPP for compliance with the Construction Storm Water Permit. If changes to the proposed SWPPP are required to comply with the Construction Storm Water Permit, the Judicial Council of California QSD will identify such changes to the CMR.
- 2.4.3. CMR shall make the changes specified by the Judicial Council of California's QSD and shall submit the revised SWPPP to the Judicial Council of California within seven (7) days of receipt of the changes identified by the Judicial Council of California's QSD. If the changes had been acceptably made, the Judicial Council of California's QSD will approve the SWPPP and provide the CMR with a copy within seven (7) days of receipt of the revised SWPPP.

2.5. RAIN EVENT ACTION PLAN (REAP) – CMR'S OBLIGATIONS TO PREPARE

- 2.5.1. A Rain Event Action Plan (REAP) is a written document, specific for each rain event. A REAP should be designed that when implemented it protects all exposed portions of the site within 48 hours of any likely rain.
- 2.5.2. The General Permit requires Risk Level 2 and 3 dischargers to develop and implement a

REAP designed to protect all exposed portions of their sites within 48 hours prior to any likely precipitation event. The REAP requirement is designed to ensure that the discharger has adequate materials, staff, and time to implement erosion and sediment control measures that are intended to reduce the amount of sediment and other pollutants generated from the active site. A REAP must be developed when there is likely a forecast of 50% or greater probability of precipitation in the project area. (The National Oceanic and Atmospheric Administration (NOAA) defines a chance of precipitation as a probability of precipitation of 30% to 50% chance of producing precipitation in the project area.¹⁴ NOAA defines the probability of precipitation as the likelihood of occurrence (expressed as a percent) of a measurable amount (0.01 inch or more) of liquid precipitation (or the water equivalent of frozen precipitation) during a specified period of time at any given point in the forecast area.) Forecasts are normally issued for 12- hour time periods.

2.5.3. CMR shall prepare and submit to the Judicial Council of California a proposed REAP for the Work.

2.5.3.1. The Judicial Council of California's QSD will review the CMR's proposed REAP for compliance with the Construction Storm Water Permit. If changes to the proposed REAP are required to comply with the Construction Storm Water Permit, the Judicial Council of California QSD will identify such changes to the CMR.

2.5.4. CMR shall make the changes specified by the Judicial Council of California's QSD and shall submit the revised REAP to the Judicial Council of California within seven (7) days of receipt of the changes identified by the Judicial Council of California's QSD. If the changes had been acceptably made, the Judicial Council of California's QSD will approve the REAP and provide the CMR with a copy within seven (7) days of receipt of the revised REAP.

2.6. ACTIVE TREATMENT SYSTEM (ATS)

2.6.1. If CMR determines that Site requires an ATS under the Construction Storm Water Permit, concurrent with the Schedule of Submittals as indicated in the General Conditions, CMR shall prepare and submit to the Judicial Council of California a proposed ATS for the Work.

2.6.2. The Judicial Council of California's QSD will review the CMR's proposed ATS for compliance with the Construction Storm Water Permit. If changes to the proposed ATS are required to comply with the Construction Storm Water Permit, the Judicial Council of California QSD will identify such changes to the CMR.

2.6.3. CMR shall make the changes specified by the Judicial Council of California's QSD and shall submit the revised ATS to the Judicial Council of California within seven (7) days of receipt of the changes identified by the Judicial Council of California's QSD. If the changes had been acceptably made, the Judicial Council of California's QSD will approve the ATS and provide the CMR with a copy within seven (7) days of receipt of the revised ATS.

2.7. RECORDS

All electronic and hardcopy records required by the Construction Storm Water Permit shall be submitted to the Judicial Council of California within seven (7) days of Completion of the Project.

3. PERMIT REGISTRATION DOCUMENTS

Prior to any activities on Site that disturb the Site's surface, the Permit Registration Documents (PRDs) required by the Construction Storm Water Permit must be filed with the Regional Water Quality Control Board. The Judicial Council of California shall file the PRDs with the Regional Water Quality Control Board to activate coverage under the Construction Storm Water Permit.

4. IMPLEMENTATION REQUIREMENTS

- 4.1.** CMR shall not conduct any activities that may affect the Site's construction runoff water quality until the Judicial Council of California provides CMR with the Waste Discharger Identification Number (WDID) assigned to this Project by the State Water Board.
- 4.2.** CMR shall keep a copy of the approved SWPPP at the job site. The SWPPP shall be made available when requested by a representative of the Regional Water Quality Control Board, State Water Resources Control Board, United States Environmental Protection Agency, or the local storm water management agency. Requests from the public shall be directed to the Judicial Council of California for response.
- 4.3.** CMR shall designate in writing to the Judicial Council of California a Qualified SWPPP Practitioner (QSP) who shall be responsible for implementing the SWPPP, REAP (if applicable), ATS (if applicable), conducting non-storm water and storm water visual observations, and for ensuring that all best management practices (BMPs) required by the SWPPP and General Permit are properly implemented and maintained.
- 4.4.** All measures required by the SWPPP shall be implemented concurrent with the commencement of construction. Pollution practices and devices shall be followed or installed as early in the construction schedule as possible with frequent upgrading of devices as construction progresses.
- 4.5.** CMR shall ensure that all measures are properly maintained and repaired to protect the water quality of discharges.

5. INSPECTION, SAMPLING, ANALYSIS, AND RECORD KEEPING REQUIREMENTS

The CMR's QSP shall conduct all required visual observations, sampling, analysis, reporting, and record keeping required by the SWPPP and the Construction Storm Water Permit.

6. REPORTING REQUIREMENTS

CMR shall prepare and provide all the reports, which include, but are not limited to the Annual Report and any NEL Violation Reports or NAL Exceedance Reports, all of which are required by the SWPPP and the Construction Storm Water Permit.

7. ANNUAL REPORT

By August 1 of each year (defined as July 1 to June 30) that had at least one continuous three (3) month period coverage under the General Permit, CMR shall complete and submit to the Judicial Council of California an Annual Report, as required by the General Permit. If the Project is complete prior to August 1, CMR shall submit the report prior to acceptance of the Project.

8. COMPLETION OF WORK

- 8.1.** Clean-up shall be performed as each portion of the work progresses. All refuse, excess material, and possible pollutants shall be disposed of in a legal manner off-site and all temporary and permanent SWPPP devices shall be in place and maintained in good condition.
- 8.2.** At Completion of Work, CMR shall inspect installed SWPPP devices, and present the currently

implemented SWPPP with all backup records to the Judicial Council of California.

9. NOTICE OF TERMINATION (NOT)

A Notice of Termination (NOT) must be submitted by the CMR to the Judicial Council of California for electronic submittal by the Legally Responsible Person via SMARTS to terminate coverage under the General Permit. The NOT must include a final Site Map and representative photographs of the Project site that demonstrate final stabilization has been achieved. The NOT shall be submitted to the Judicial Council of California on or before the CMR submits its final application for payment. If the Regional Water Board rejects the NOT for any reason, the CMR shall revise the NOT as many times as necessary to get the Regional Water Board's approval. The Regional Water Board will consider a construction site complete when the conditions of the General Permit, Section II.D have been met.

10. QUALITY ASSURANCE

- 10.1. Before performing any of the obligations indicated herein, the CMR's QSP shall meet the training and certification requirements in the Construction Storm Water Permit.
- 10.2. CMR shall perform the Work in strict compliance with the approved SWPPP, REAP, ATS, and the Construction Storm Water Permit.
- 10.3. CMR shall conduct at least a one-hour training session on the requirements of the SWPPP for each employee before an employee conducts any construction on the Site. CMR shall maintain documentation of this employee training at the site for review by the Judicial Council of California or any regulatory agency.

11. PERFORMANCE REQUIREMENTS

- 11.1. The Storm Water Pollution Prevention Plan is a minimum requirement. Revisions and modifications to the SWPPP are acceptable only if they maintain levels of protection equal to or greater than originally specified.
- 11.2. Read and be thoroughly familiar with all of the requirements of the SWPPP.
- 11.3. Inspect and monitor all work and storage areas for compliance with the SWPPP prior to any anticipated rain.
- 11.4. Complete any and all corrective measures as may be directed by the regulatory agency.
- 11.5. **Penalties:** CMR shall pay any fees and any penalties that may be imposed by the regulatory agency for non-compliance with SWPPP during the course of Work.
- 11.6. **Costs:** CMR to pay all costs associated with the implementation of the requirements of the SWPPP in order to maintain compliance with the Permit. This includes installation of all House-keeping BMPs, General Site and Material Management BMPs, Inspection requirements, maintenance requirements, and all other requirements specified in the SWPPP.

12. MATERIALS

All temporary and permanent storm water pollution prevention facilities, equipment, and materials as required by or as necessary to comply with the SWPPP as described in the BMP Handbook.

END OF SECTION

SECTION 01 60 00

MATERIALS AND EQUIPMENT

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

1.1.1. General Conditions.

1.2. MATERIAL AND EQUIPMENT

1.2.1. Only items approved by the Judicial Council of California and/or Architect shall be used.

1.2.2. CMR shall submit lists of Products and other Product information in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

1.3. MATERIAL AND EQUIPMENT COLORS

1.3.1. The CMR shall comply with all schedule(s) of colors provided by the Judicial Council of California and/or Architect.

1.3.2. No individual color selections will be made until after approval of all pertinent materials and equipment and after receipt of appropriate samples in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

1.3.3. CMR shall request priority in writing for any item requiring advance ordering to maintain the approved Construction Schedule.

1.4. DELIVERY, STORAGE, AND HANDLING

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[Judicial Council of California]**

- 1.4.1. CMR shall deliver manufactured materials in original packages, containers, or bundles (with seals unbroken), bearing name or identification mark of manufacturer. Judicial Council of California may inspect materials prior to CMR unloading the delivered materials. Judicial Council of California may reject any materials that do not conform to the Contract Documents.
- 1.4.2. CMR shall deliver fabrications in as large assemblies as practicable; where specified as shop-primed or shop-finished, package or crate as required to preserve such priming or finish intact and free from abrasion.
- 1.4.3. CMR shall store materials in such a manner as necessary to properly protect them from damage. Materials or equipment damaged by handling, weather, dirt, or from any other cause will not be accepted.
- 1.4.4. Materials are not be acceptable that have been warehoused for long periods of time, stored or transported in improper environment, improperly packaged, inadequately labeled, poorly protected, excessively shipped, deviated from normal distribution pattern, or reassembled.
- 1.4.5. CMR shall store material so as to cause no obstructions of sidewalks, roadways, and underground services. CMR shall protect material and equipment furnished pursuant to the Contract Documents.
- 1.4.6. CMR may store materials on Site with prior written approval by the Judicial Council of California, all material shall remain under CMR's control and CMR shall remain liable for any damage to the materials. Should the Project Site not have storage area available, the CMR shall provide for off-site storage at no cost to Judicial Council of California.
- 1.4.7. When any room in Project is used as a shop or storeroom, the CMR shall be responsible for any repairs, patching, or cleaning necessary due to that use. Location of storage space shall be subject to prior written approval by Judicial Council of California.

2. PRODUCTS

2.1. MANUFACTURERS

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

2.2. FACILITIES AND EQUIPMENT

CMR shall provide, install, maintain, and operate a complete and adequate facility for handling, the execution, disposal, and distribution of material and equipment as required for proper and timely performance of Work.

2.3. MATERIAL REFERENCE STANDARDS

Where material is specified solely by reference to “standard specifications” or other general reference, and if requested by Judicial Council of California, CMR shall submit for review data on actual material proposed to be incorporated into Work, listing name and address of vendor, manufacturer, or producer, and trade or brand names of those materials, and data substantiating compliance with standard specifications.

3. EXECUTION

3.1. WORKMANSHIP

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

3.2. COORDINATION

- 3.2.1. CMR shall coordinate installation of materials and equipment so as to not interfere with installation of other work. Adjustment or rework because of CMR’s failure to coordinate will be at no additional cost to Judicial Council of California.
- 3.2.2. CMR shall examine in-place materials and equipment for readiness, completeness, fitness to be concealed or to receive Work, and compliance with Contract Documents. Concealing or covering work constitutes acceptance of additional cost which will result should in-place materials and equipment be found unsuitable for receiving other work or otherwise deviating from the requirements of the Contract Documents.

3.3. COMPLETENESS

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

3.4. APPROVED INSTALLER OR APPLICATOR

CMR shall ensure that all installations are only performed by a manufacturer's approved installer or applicator.

3.5. MANUFACTURER'S RECOMMENDATIONS

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

END OF SECTION

SECTION 01 65 00

PRODUCT REQUIREMENTS

1. GENERAL

1.1. RELATED DOCUMENTS

- 1.1.1. 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

- 1.2.1. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.

1.2.1.1. Compatibility of options between products proposed and specified.

1.2.1.2. Reliability of date calculations by Date Sensitive Equipment.

1.2.1.3. Selection of products for use in Project.

1.2.1.4. Product delivery, storage, and handling.

1.2.1.5. Manufacturers' standard warranties on products.

1.2.1.6. Special warranties.

1.2.1.7. Product substitutions.

1.2.1.8. Comparable products.

- 1.2.2. Related Sections include the following:

1.2.2.1. Division 01 Section "Allowances" for products selected under an allowance.

1.2.2.2. Division 01 Section "References" for applicable industry standards for products specified.

1.2.2.3. Division 01 Section "Warranties" for warranties for Contract closeout.

1.2.2.4. Divisions 02 through 49 Sections for specific requirements for warranties on products and installations specified to be warranted.

1.3. DEFINITIONS

- 1.3.1. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

- 1.3.1.1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
- 1.3.1.2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
- 1.3.1.3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- 1.3.2. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.
- 1.3.3. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.4. SUBMITTALS

- 1.4.1. Coordinate durations with General Conditions and CMR Contract.
- 1.4.2. Product List: Submit a list, in tabular form, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
 - 1.4.2.1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
 - 1.4.2.2. Completed List: Within [thirty (30)] days after date of commencement of the Work, submit [three (3)] copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
 - 1.4.2.3. Judicial Council of California's Action: Judicial Council of California will respond in writing to Contractor within [fifteen (15)] days of receipt of completed product list. Judicial Council of California's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Judicial Council of California's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.
- 1.4.3. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1.4.3.1. Form: Use Judicial Council of California's transmittal form at the end of this Section. The MS Word file of this form will be provided to the Contractor for use on each Substitution Request.

- 1.4.3.2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
- 1.4.3.3. Statement indicating why specified material or product cannot be provided.
- 1.4.3.4. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Judicial Council of California and separate contractors, that will be necessary to accommodate proposed substitution.
- 1.4.3.5. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
- 1.4.3.6. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
- 1.4.3.7. Samples, where applicable or requested.
- 1.4.3.8. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
- 1.4.3.9. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
- 1.4.3.10. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
- 1.4.3.11. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
- 1.4.3.12. Cost information, including a proposal of change, if any, in the Contract Sum.
- 1.4.3.13. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
- 1.4.3.14. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- 1.4.3.15. Coordinate durations with General Conditions and CMR Contract.
- 1.4.3.16. Judicial Council of California's Action: If necessary, Judicial Council of California will request additional information or documentation for evaluation within [seven (7)] days of receipt of a request for substitution. Judicial Council of California will notify Contractor of acceptance or rejection of proposed substitution within [fifteen (15)] days of receipt of request, or [seven (7)] days of receipt of additional information or documentation, whichever is later.
- 1.4.3.17. Form of Acceptance: Change Order.

- 1.4.4. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1.4.4.1. Judicial Council of California's Action: If necessary, Judicial Council of California will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Judicial Council of California will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
 - 1.4.4.2. Form of Approval: As specified in Section 01 33 00, "Submittal Procedures."
 - 1.4.4.3. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.5. QUALITY ASSURANCE

- 1.5.1. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.
- 1.5.2. Reliability of Calculations by Date Sensitive Equipment, Systems and Components:
 - 1.5.2.1. Date sensitive equipment, systems and components thereof must individually and in combination properly function and continue to correctly process, sequence and utilize date and time related data for all dates and times, which occur during a reasonable life expectancy for said equipment, systems and components thereof.
 - 1.5.2.2. Correctly process, sequence, and calculate all date and date related data for all dates prior to, through and after January 1, 2000, including leap year calculations.
 - 1.5.2.3. Software products that process date or date related data shall recognize, store and transmit date data in a format which explicitly and unambiguously specifies the correct century.
 - 1.5.2.4. Contractor shall include this requirement in all sub-contracts and equipment orders for this Project.
 - 1.5.2.5. Submittals: Provide certification from suppliers and sub-contractors providing date sensitive equipment, systems, and software that the proposed equipment, components and systems comply with these requirements.

1.6. PRODUCT DELIVERY, STORAGE, AND HANDLING

- 1.6.1. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
- 1.6.2. Delivery and Handling:
 - 1.6.2.1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.

- 1.6.2.2. 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.
- 1.6.2.3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- 1.6.2.4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
- 1.6.3. Storage:
 - 1.6.3.1. Store products to allow for inspection and measurement of quantity or counting of units.
 - 1.6.3.2. Store materials in a manner that will not endanger Project structure.
 - 1.6.3.3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 - 1.6.3.4. Store cementitious products and materials on elevated platforms.
 - 1.6.3.5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 - 1.6.3.6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
 - 1.6.3.7. Protect stored products from damage and liquids from freezing.
- 1.7. PRODUCT WARRANTIES
 - 1.7.1. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1.7.1.1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Judicial Council of California.
 - 1.7.1.2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Judicial Council of California.
 - 1.7.2. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
 - 1.7.2.1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 1.7.2.2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.

1.7.2.3. Refer to Divisions 02 through 49 Sections for specific content requirements and particular requirements for submitting special warranties.

1.7.3. Submittal Time: Comply with requirements in Division 01 Section "Warranties."

2. PRODUCTS

2.1. PRODUCT SELECTION PROCEDURES

2.1.1. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.

2.1.1.1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.

2.1.1.2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.

2.1.1.3. Judicial Council of California reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.

2.1.1.4. Where products are accompanied by the term "as selected," Judicial Council of California will make selection.

2.1.1.5. Where products are accompanied by the term "match sample," sample to be matched is Judicial Council of California's.

2.1.1.6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.

2.1.1.7. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved," comply with provisions in Part 2 "Comparable Products" Article to obtain approval for use of an unnamed product.

2.1.2. Product Selection Procedures:

2.1.2.1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.

2.1.2.2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.

2.1.2.3. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.

2.1.2.4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.

- 2.1.2.5. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
- 2.1.2.6. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
- 2.1.2.7. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
- 2.1.2.8. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
- 2.1.2.9. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches sample. Judicial Council of California's decision will be final on whether a proposed product matches.
- 2.1.2.10. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
- 2.1.2.11. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.
- 2.1.2.12. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Judicial Council of California will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
- 2.1.2.13. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Judicial Council of California will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2. PRODUCT SUBSTITUTIONS

- 2.2.1. Comply with the requirements stated in the General Conditions, Article 3.11.12, "Substitutions and Approved Equals."
- 2.2.2. Conditions: Judicial Council of California will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are

not satisfied, Judicial Council of California will return requests without action, except to record noncompliance with these requirements:

- 2.2.2.1. Requested substitution offers Judicial Council of California a substantial advantage in cost, time, energy conservation, or other considerations, where the best interests of the State so requires.
- 2.2.2.2. Requested substitution does not require extensive revisions to the Contract Documents.
- 2.2.2.3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- 2.2.2.4. Substitution request is fully documented and properly submitted.
- 2.2.2.5. Requested substitution will not adversely affect Contractor's Construction Schedule.
- 2.2.2.6. Requested substitution has received necessary approvals of authorities having jurisdiction.
- 2.2.2.7. Requested substitution is compatible with other portions of the Work.
- 2.2.2.8. Requested substitution has been coordinated with other portions of the Work.
- 2.2.2.9. Requested substitution provides specified warranty.
- 2.2.2.10. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

2.3. COMPARABLE PRODUCTS

- 2.3.1. Conditions: Judicial Council of California will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Judicial Council of California will return requests without action, except to record noncompliance with these requirements:
 - 2.3.1.1. Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
 - 2.3.1.2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
 - 2.3.1.3. Evidence that proposed product provides specified warranty.
 - 2.3.1.4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
 - 2.3.1.5. Samples, if requested.

3. EXECUTION

3.1.

SUBSTITUTION REQUEST FORM

TO: _____ DATE: _____

PROJECT: _____

We hereby submit to your consideration the following product instead of the specified item for the above referenced project:

Proposed Substitution: _____

Section _____ Paragraph _____ Specified Item _____

Attach complete technical data, including laboratory tests, if applicable.

Provide complete information below on changes to Drawings and Specifications which proposed substitution will require for its proper installation.

- A. Does the substitution affect dimensions shown on Drawings? Yes ___ No _____ If yes, clearly indicate changes.

- B. What effect does substitution have on other trades? _____

- C. What effect does substitution have on construction schedule? _____

- D. Cost difference between proposed substitution and specified item? _____
- E. Manufacturer's warranty/guarantees of the proposed and specified items are:
_____ Same _____ Different (explain on attachment)

The undersigned certifies that the function, appearance and quality are equivalent or superior to the specified item. The undersigned also certifies that all costs caused by or resulting from the requested substitution including, but not limited to, additional design work, construction changes and review time will be paid by the firm requesting the substitution.

Submitted by:
Signature: _____

Firm _____

Address _____

Evaluated by:
Accepted _____ Accepted as Noted

Not Accepted _____ Received Too Late

By _____

**[New Santa Rosa Courthouse]
[Judicial Council of California]**

Firm _____

Date _____

Date _____

Telephone _____

Remarks _____

END OF SECTION

SECTION 01 71 10

FIELD ENGINEERING

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions.

1.2. REQUIREMENTS INCLUDED

- 1.2.1. CMR shall provide and pay for field engineering services by a California-registered engineer, required for the Project, including, without limitations:

- 1.2.1.1. Survey work required in execution of the Project.

- 1.2.1.2. Civil or other professional engineering services specified, or required to execute construction methods.

1.3. QUALIFICATIONS OF SURVEYOR OR ENGINEERS

CMR shall only use a qualified licensed engineer or registered land surveyor, to whom Judicial Council of California makes no objection.

1.4. SURVEY REFERENCE POINTS

- 1.4.1. Existing basic horizontal and vertical control points for the Project are those designated on the Drawings.

- 1.4.2. CMR shall locate and protect control points prior to starting Site Work and preserve all permanent reference points during construction. In addition CMR shall:

- 1.4.2.1. Make no changes or relocation without prior written notice to Judicial Council of California and Architect.

- 1.4.2.2. Report to Judicial Council of California and Architect when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.

- 1.4.2.3. Require surveyor to replace Project control points based on original survey control that may be lost or destroyed.

1.5. RECORDS

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

1.6. SUBMITTALS

- 1.6.1. CMR shall submit name and address of Surveyor and Professional Engineer to Judicial Council of California and Architect prior to its/their work on the Project.

**[New Santa Rosa Courthouse]
[Judicial Council of California]**

- 1.6.2. On request of Judicial Council of California and Architect, CMR shall submit documentation to verify accuracy of field engineering work, at no additional cost to the Judicial Council of California.
- 1.6.3. CMR shall submit a certificate signed by registered engineer or surveyor certifying that elevations and locations of improvements are in conformance or nonconformance with Contract Documents.

2. EXECUTION

2.1. COMPLIANCE WITH LAWS

CMR is responsible for meeting all applicable codes, OSHA, safety and shoring requirements.

2.2. NONCONFORMING WORK

CMR is responsible for any re-surveying required by correction of nonconforming work.

END OF SECTION

SECTION 01 73 10

CUTTING AND PATCHING

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

1.1.1. General Conditions.

1.2. CUTTING AND PATCHING

1.2.1. CMR shall be responsible for all cutting, fitting, and patching, including associated excavation and backfill, required to complete the Work or to:

1.2.1.1. Make several parts fit together properly.

1.2.1.2. Uncover portions of Work to provide for installation of ill-timed Work.

1.2.1.3. Remove and replace defective Work.

1.2.1.4. Remove and replace Work not conforming to requirements of Contract Documents.

1.2.1.5. Remove samples of installed Work as specified for testing.

1.2.1.6. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.

1.2.1.7. Attaching new materials to existing remodeling areas – including painting (or other finishes) to match existing conditions.

1.2.2. In addition to Contract requirements, upon written instructions from Judicial Council of California, CMR shall uncover Work to provide for observations of covered Work in accordance with the Contract Documents, remove samples of installed materials for testing as directed by Judicial Council of California, and remove Work to provide for alteration of existing Work.

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

1.2.4. CMR shall not cut and patch operating elements and safety related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operating elements include the following:

1.2.4.1. Primary operational systems and equipment.

1.2.4.2. Air or smoke barriers.

1.2.4.3. Fire-suppression systems.

- 1.2.4.4. Mechanical systems piping and ducts.
- 1.2.4.5. Control systems.
- 1.2.4.6. Communication systems.
- 1.2.4.7. Conveying systems.
- 1.2.4.8. Electrical wiring systems.
- 1.2.5. CMR shall not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing capacity to perform as intended, or that results in increased maintenance or decreased operational life of safety. Miscellaneous elements include the following:
 - 1.2.5.1. Water, moisture or vapor barriers.
 - 1.2.5.2. Membranes and flashings.
 - 1.2.5.3. Exterior curtain-wall construction.
 - 1.2.5.4. Equipment supports.
 - 1.2.5.5. Piping, ductwork, vessels and equipment.
 - 1.2.5.6. Noise and vibration control elements and systems.
 - 1.2.5.7. Shoring, bracing and sheeting.

1.3. REQUEST TO CUT, ALTER, PATCH OR EXCAVATE

- 1.3.1. CMR shall submit written notice to Judicial Council of California pursuant to the applicable notice provisions of the Contract Documents, requesting consent to proceed with the cutting or alteration (“Request”) at least ten (10) days prior to any cutting or alterations that may affect the structural safety of Project, or work of others, including the following:
 - 1.3.1.1. The work of the trades.
 - 1.3.1.2. Structural value or integrity of any element of Project.
 - 1.3.1.3. Integrity or effectiveness of weather-exposed or weather-resistant elements or systems.
 - 1.3.1.4. Efficiency, operational life, maintenance or safety of operational elements.
 - 1.3.1.5. Visual qualities of sight-exposed elements.
- 1.3.2. CMR's Request shall also include:
 - 1.3.2.1. Identification of Project.
 - 1.3.2.2. Description of affected Work.
 - 1.3.2.3. Necessity for cutting, alteration, or excavations.

1.3.2.4. Affects of Work on trades, or structural or weatherproof integrity of Project.

1.3.2.5. Description of proposed Work:

1.3.2.5.1. Scope of cutting, patching, alteration, or excavation.

1.3.2.5.2. Trades that will execute Work.

1.3.2.5.3. Products proposed to be used.

1.3.2.5.4. Extent of refinishing to be done.

1.3.2.6. Alternates to cutting and patching.

1.3.2.7. Cost proposal, when applicable.

1.3.2.8. The scheduled date the Work is to be performed and the duration of time to complete the Work.

1.3.2.9. Written permission of other trades whose Work will be affected.

1.4. QUALITY ASSURANCE

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

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

1.5. PAYMENT FOR COSTS

1.5.1. Cost caused by ill-timed or defective Work or Work not conforming to Contract Documents, including costs for additional services of the Judicial Council of California, its consultants, including but not limited to the Architect, inspector(s), engineers, and agents, will be paid by CMR and/or deducted from the GMP by the Judicial Council of California.

1.5.2. CMR shall provide written cost proposals prior to proceeding with cutting and patching. Judicial Council of California shall only pay for cost of Work if it is part of the GMP or if a change has been made to the Contract in compliance with the provisions of the General Conditions. Cost of Work performed upon instructions from the Judicial Council of California, other than defective or nonconforming Work, will be paid by Judicial Council of California on approval of written Change Order.

2. PRODUCTS

2.1. MATERIALS

2.1.1. CMR shall provide for replacement and restoration of Work removed. CMR shall comply with the Contract Documents and with the Industry Standard(s), for the type of

Work, and the Specification requirements for each specific product involved. If not specified, CMR shall first recommend a product of a manufacturer or appropriate trade association for approval by the Judicial Council of California.

- 2.1.2. Materials to be cut and patched include those damaged by the performance of the Work.

3. EXECUTION

3.1. INSPECTION

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

3.2. PREPARATION

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

3.3. ERECTION, INSTALLATION AND APPLICATION

- 3.3.1. With respect to performance, CMR shall insure its Subcontractors:
- 3.3.1.1. Execute fitting and adjustment of products to provide finished installation to comply with and match specified tolerances and finishes.
- 3.3.1.2. Execute cutting and demolition by methods that will prevent damage to other Work, and provide proper surfaces to receive installation of repairs and new Work.
- 3.3.1.3. Execute cutting, demolition excavating, and backfilling by methods that will prevent damage to other Work and damage from settlement.
- 3.3.1.4. CMR shall use original installer or fabricator to perform cutting and patching for:
- 3.3.1.5. Weather-exposed surfaces and moisture-resistant elements such as roofing, sheet metal, sealants, waterproofing, and other trades.
- 3.3.1.6. Sight-exposed finished surfaces.
- 3.3.2. CMR shall ensure its Subcontractors execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances,

and finishes as shown or specified in the Contract Documents including, without limitation, the Drawings and Specifications.

- 3.3.3. Subcontractors shall fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. CMR shall conform to all Code requirements for penetrations or the Drawings and Specifications, whichever calls for a higher quality or more thorough requirement. CMR shall maintain integrity of both rated and non-rated fire walls, ceilings, floors, etc.
- 3.3.4. CMR's Subcontractors shall restore Work which has been cut or removed and install new products to provide completed Work in accordance with requirements of the Contract Documents and as required to match surrounding areas and surfaces.
- 3.3.5. CMR's Subcontractors shall refinish all continuous surfaces to nearest intersection as necessary to match the existing finish to any new finish.

END OF SECTION

SECTION 01 73 20

INDOOR AIR QUALITY PROCEDURES

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Temporary Facilities and Controls;
- 1.1.3. LEED; |
- 1.1.4. General Commissioning Requirements;
- 1.1.5. Contract Closeout and Final Cleaning;
- 1.1.6. Record Documents..

1.2. SUBMITTALS

- 1.2.1. Indoor Air Quality (IAQ) Construction Management Plan. Submit five (5) copies of plan within thirty (30) days of Notice to Proceed.
 - 1.2.1.1. Include a schedule of all IAQ-related construction activities in the IAQ Construction Management Plan submittal.
 - 1.2.1.2. Update plan as required during the construction process to reflect Project conditions.
- 1.2.2. CMR's LEED Quality Control Manager shall sign all submittals.
- 1.2.3. Meeting Minutes: Submit minutes from CMR meetings related to the execution and verification of the IAQ Construction Management Plan.
- 1.2.4. Project Photographs: Submit to document IAQ measures implemented.
- 1.2.5. Product Data: Submit cut sheets of filtration media proposed for use.
- 1.2.6. LEED Submittal: LEED letter template , signed by CMR, with copy of plan and a statement that requirements for the LEED credit have been satisfied.

1.3. QUALITY ASSURANCE

- 1.3.1. Comply with the requirements of LEED as provided by Architect.
- 1.3.2. IAQ Management Conference: Conduct conference at Project site to comply with requirements in Division 01 Document "Project Management and Coordination."
 - 1.3.2.1. Review methods and procedures related to IAQ management during construction.

1.3.2.2. Review IAQ management requirements for each trade.

2. EXECUTION

2.1. IAQ MANAGEMENT DURING CONSTRUCTION

2.1.1. General: CMR's IAQ Construction Management Plan shall include procedures to prevent indoor air quality problems resulting from the construction/renovation process in order to help sustain the comfort and well-being of construction workers and building occupants.

2.1.1.1. CMR's detailed plan shall be based on the particular characteristics of the Project and as required by Project LEED requirements.

2.1.1.2. CMR's Subcontractors and their employees shall be provided instruction and training in the IAQ Management Plan.

2.1.2. Plan Implementation:

2.1.2.1. Implement waste management plan as approved by Judicial Council of California. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.

2.1.3. Monitoring of IAQ Plan:

2.1.3.1. Hold weekly Site Coordination Meetings with the superintendents of all trade subcontractors. Review the appropriate components of the IAQ Construction Management Plan as a regular action topic at these meetings, and update the Plan as required. Document the implementation of the Plan in the meeting minutes.

2.1.3.2. Take a specific series of record photographs at the appropriate stages to document consistent adherence with the IAQ requirements for LEED Credit.

END OF SECTION

SECTION 01 74 19

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Temporary Facilities and Controls;
- 1.1.3. LEED;
- 1.1.4. Contract Closeout and Final Cleaning; and
- 1.1.5. Drawings.

1.2. DEFINITIONS

- 1.2.1. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- 1.2.2. Demolition Waste: Building and site improvement materials resulting from demolition or selective demolition operations.
- 1.2.3. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- 1.2.4. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- 1.2.5. Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in another facility.
- 1.2.6. Salvage and Reuse: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.3. PERFORMANCE REQUIREMENTS

- 1.3.1. General: Develop waste management plan that results in end-of-Project rates for salvage/recycling of fifty percent (50%) by weight of total waste generated by the Work.
- 1.3.2. Salvage/Recycle Requirements: Judicial Council of California's goal is to salvage and recycle as much nonhazardous demolition and construction waste as possible including the following materials:
 - 1.3.2.1. Demolition Waste; and
 - 1.3.2.2. Construction Waste.

1.3.3. Packaging: Regardless of salvage/recycle goal indicated above, salvage or recycle one hundred percent (100%) of the following uncontaminated packaging materials:

1.3.3.1. Paper

1.3.3.2. Cardboard

1.3.3.3. Boxes

1.3.3.4. Plastic sheet and film

1.3.3.5. Polystyrene packaging

1.3.3.6. Wood crates

1.3.3.7. Plastic pails

1.4. SUBMITTALS

1.4.1. Waste Management Plan: Submit three (3) copies of plan within thirty (30) calendar days after the starting date on the Notice to Proceed.

1.4.2. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit three (3) copies of report. Include separate reports for Demolition and Construction Waste. Include the following information:

1.4.2.1. Material category

1.4.2.2. Generation point of waste

1.4.2.3. Total quantity of waste in tons

1.4.2.4. Quantity of waste salvaged, both estimated and actual in tons

1.4.2.5. Quantity of waste recycled, both estimated and actual in tons

1.4.2.6. Total quantity of waste recovered (salvaged plus recycled) in tons

1.4.2.7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste

1.4.3. Waste Reduction Calculations: Before request for final inspection, submit three (3) copies of calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.

1.4.4. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.

1.4.5. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.

1.4.6. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

- 1.4.7. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- 1.4.8. LEED Submittal: Submit LEED letter template for Credit MR 2.1 and/or 2.2 (as applicable), signed by CMR, tabulating total waste material, quantities diverted and means by which it is diverted, and statement that requirements for the credit have been met. Use Judicial Council of California approved format for documentation.

1.5. QUALITY ASSURANCE

- 1.5.1. Waste Management Coordinator Qualifications: LEED Accredited Professional by U.S. Green Building Council.
- 1.5.2. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.
- 1.5.3. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.
- 1.5.4. Waste Management Conference: Conduct conference at Project Site to comply with requirements in Document "Coordination and Project Meetings." Review methods and procedures related to waste management including, but not limited to, the following:
 - 1.5.4.1. Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
 - 1.5.4.2. Review requirements for documenting quantities of each type of waste and its disposition.
 - 1.5.4.3. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
 - 1.5.4.4. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
 - 1.5.4.5. Review waste management requirements for each trade.

1.6. WASTE MANAGEMENT PLAN

- 1.6.1. General: Develop plan consisting of waste identification, waste reduction work plan, and cost/revenue analysis. Include separate sections in plan for demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- 1.6.2. Waste Identification: Indicate anticipated types and quantities of demolition, site-clearing, and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- 1.6.3. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.

- 1.6.3.1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
- 1.6.3.2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.
- 1.6.3.3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.
- 1.6.3.4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
- 1.6.3.5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
- 1.6.3.6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on Project Site where materials separation will be located.
- 1.6.4. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Include the following:
 - 1.6.4.1. Total quantity of waste
 - 1.6.4.2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste
 - 1.6.4.3. Total cost of disposal (with no waste management)
 - 1.6.4.4. Revenue from salvaged materials
 - 1.6.4.5. Revenue from recycled materials
 - 1.6.4.6. Savings in hauling and tipping fees by donating materials
 - 1.6.4.7. Savings in hauling and tipping fees that are avoided
 - 1.6.4.8. Handling and transportation costs. Include cost of collection containers for each type of waste
 - 1.6.4.9. Net additional cost or net savings from waste management plan

2. EXECUTION

2.1. PLAN IMPLEMENTATION

- 2.1.1. General: Implement waste management plan as approved by Judicial Council of California. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.

- 2.1.1.1. Comply with Document "Temporary Facilities and Controls" for operation, termination, and removal requirements.
- 2.1.2. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan. Coordinator shall be present at Project site full time for duration of Project.
- 2.1.3. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
 - 2.1.3.1. Distribute waste management plan to everyone concerned within three (3) days of submittal return.
 - 2.1.3.2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- 2.1.4. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 2.1.4.1. Designate and label specific areas on Project Site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.

2.2. SALVAGING DEMOLITION WASTE

- 2.2.1. Salvaged Items for Reuse in the Work:
 - 2.2.1.1. Clean salvaged items.
 - 2.2.1.2. Pack or crate items after cleaning. Identify contents of containers.
 - 2.2.1.3. Store items in a secure area until installation.
 - 2.2.1.4. Protect items from damage during transport and storage.
 - 2.2.1.5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make items functional for use indicated.
- 2.2.2. Remove salvaged items that are to be sold or donated. Do not store on the Project Site.
- 2.2.3. Salvaged Items for Judicial Council of California's Use:
 - 2.2.3.1. Clean salvaged items.
 - 2.2.3.2. Pack or crate items after cleaning. Identify contents of containers.
 - 2.2.3.3. Store items in a secure area until delivery to Judicial Council of California.
 - 2.2.3.4. Transport items to Judicial Council of California's storage area designated by Judicial Council of California.
 - 2.2.3.5. Protect items from damage during transport and storage.

2.3. RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- 2.3.1. General: Recycle paper and beverage containers used by on-site workers.
- 2.3.2. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project Site to the maximum extent practical.
 - 2.3.2.1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project Site. Include list of acceptable and unacceptable materials at each container and bin.
 - 2.3.2.2. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2.3.2.3. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 2.3.2.4. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 2.3.2.5. Store components off the ground and protect from the weather.
 - 2.3.2.6. Remove recyclable waste off Judicial Council of California's property and transport to recycling receiver or processor.

2.4. RECYCLING DEMOLITION WASTE

- 2.4.1. Asphaltic Concrete Paving: Grind asphalt to maximum of 1-1/2-inch (38-mm) or 4-inch (100-mm) size, as required by the Technical Specifications including, without limitation, "Earthwork" or "Earth Moving."
 - 2.4.1.1. Crush asphaltic concrete paving and screen to comply with the requirements of the Technical Specifications including, without limitation, "Earthwork" or "Earth Moving," for use as general fill.
- 2.4.2. Asphaltic Concrete Paving: Break up and transport paving to asphalt-recycling facility.
- 2.4.3. Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
 - 2.4.3.1. Pulverize concrete to maximum 1-1/2-inch (38-mm) or 4-inch (100-mm) size, as required by the Technical Specifications including, without limitation, "Earthwork" or "Earth Moving."
 - 2.4.3.2. Crush concrete and screen to comply with the requirements of the Technical Specifications including, without limitation, "Earthwork" or "Earth Moving."
- 2.4.4. Masonry: Remove metal reinforcement, anchors, and ties from masonry and sort with other metals.
 - 2.4.4.1. Pulverize masonry to maximum 3/4-inch (19-mm) or 1-inch (25-mm) or 1-1/2-inch (38-mm) or 4-inch (100-mm) size, as required by the Technical Specifications including, without limitation, "Earthwork" or "Earth Moving."

- 2.4.4.1.1. Crush masonry and screen to comply with the requirements of the Technical Specifications including, without limitation, “Earthwork” or “Earth Moving.”
- 2.4.4.1.2. Crush masonry and screen to comply with the requirements of the Technical Specifications including, without limitation, “Plants” or “Exterior Improvements.”
- 2.4.4.2. Clean and stack undamaged, whole masonry units on wood pallets.
- 2.4.5. Wood Materials: Sort and stack members according to size, type, and length. Separate lumber, engineered wood products, panel products, and treated wood materials.
- 2.4.6. Metals: Separate metals by type.
 - 2.4.6.1. Structural Steel: Stack members according to size, type of member, and length.
 - 2.4.6.2. Remove and dispose of bolts, nuts, washers, and other rough hardware.
- 2.4.7. Asphalt Shingle Roofing: Separate organic and glass-fiber asphalt shingles and felts. Remove and dispose of nails, staples, and accessories.
- 2.4.8. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.
- 2.4.9. Acoustical Ceiling Panels and Tile: Stack large clean pieces on wood pallets and store in a dry location.
 - 2.4.9.1. Separate suspension system, trim, and other metals from panels and tile and sort with other metals.
- 2.4.10. Carpet and Pad: Roll large pieces tightly after removing debris, trash, adhesive, and tack strips.
 - 2.4.10.1. Store clean, dry carpet and pad in a closed container or trailer provided by Carpet Reclamation Agency or carpet recycler.
- 2.4.11. Equipment: Drain tanks, piping, and fixtures. Seal openings with caps or plugs. Protect equipment from exposure to weather.
- 2.4.12. Plumbing Fixtures: Separate by type and size.
- 2.4.13. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.
- 2.4.14. Lighting Fixtures: Separate lamps by type and protect from breakage.
- 2.4.15. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers, and other devices by type.
- 2.4.16. Conduit: Reduce conduit to straight lengths and store by type and size.

2.5. RECYCLING CONSTRUCTION WASTE

- 2.5.1. Packaging:

- 2.5.1.1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
- 2.5.1.2. Polystyrene Packaging: Separate and bag materials.
- 2.5.1.3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project Site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
- 2.5.1.4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- 2.5.2. Site-Clearing Wastes: Chip brush, branches, and trees off site or on-site location designated by Judicial Council of California.
 - 2.5.2.1. Comply with the requirements of the Technical Specifications including, without limitation, “Plants” or “Exterior Improvements,” for use of chipped organic waste as organic mulch.
- 2.5.3. Wood Materials:
 - 2.5.3.1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
- 2.5.4. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
 - 2.5.4.1. Comply with the requirements of the Technical Specifications including, without limitation, “Plants” or “Exterior Improvements,” for use of clean sawdust as organic mulch.
- 2.5.5. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location.
 - 2.5.5.1. Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.
 - 2.5.5.1.1. Comply with the requirements of the Technical Specifications including, without limitation, “Plants” or “Exterior Improvements,” for use of clean ground gypsum board as inorganic soil amendment.

2.6. DISPOSAL OF WASTE

- 2.6.1. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project Site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 2.6.1.1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on the Project Site.
 - 2.6.1.2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- 2.6.2. Burning: Do not burn waste materials.
- 2.6.3. Disposal: Transport waste materials off the Project Site and legally dispose of them.

END OF SECTION

SECTION 01 77 00

CONTRACT CLOSEOUT AND FINAL CLEANING

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.12. General Conditions;
- 1.1.13. Requests for Information;
- 1.1.14. Electronic Data Transfer;
- 1.1.15. Submittals;
- 1.1.16. Operation and Maintenance Data;
- 1.1.17. Warranties;
- 1.1.18. Record Documents;
- 1.1.19. Demonstration and Training;
- 1.1.20. LEED;
- 1.1.21. General Commissioning Requirements; and
- 1.1.22. Site Safety Management Plan / OCIP Manual

1.2. PRELIMINARY PROCEDURES

- 1.2.1. Before requesting inspection for determining date of Completion, complete the following. List items below that are incomplete in request.
 - 1.2.1.1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 1.2.1.2. Advise Judicial Council of California of pending insurance changeover requirements.
 - 1.2.1.3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 1.2.1.4. Submit completed LEED Action Plan Materials Log.
 - 1.2.1.4.1 Maintain a notebook with sectional dividers for each product and material contributing to the LEED Action Plan specified above and in other Project Manual Sections. Each divider shall be labeled with the LEED Prerequisite or Credit number. Insert product and material data that is

specified in each section behind its section divider recording the following environmental data, physical properties, and other information required by the specifications to support the use of the material or product in the LEED Action Plan.

- a. VOC
 - b. Recycled content
 - c. FSC certification number (wood products only)
 - d. Material Safety Data Sheet (MSDS)
 - e. Product label and/or manufacturer's data verifying conformance with environmental specifications
 - f. Product cost
 - g. Product point of purchase
- 1.2.1.4.2 Materials Log shall also identify in general terms where the product is to be used in the building.
- 1.2.1.4.3 A working copy of the Materials Log shall be maintained weekly as materials are ordered, shall be accessible at site to the Judicial Council, Architect, and all trades involved in Project.
- 1.2.1.4.4 Mark the Materials Log to indicate the actual product installed and record changes where installation varies from that indicated in the original Materials Log material entry.
- a. Give particular attention to information on concealed materials and installations that cannot be readily identified and recorded later.
 - b. Mark copy with proprietary name and characteristics of products, materials, and equipment furnished, including substitutions and product options selected.
 - c. Record the name of the manufacturer, supplier, installer, and other information necessary to provide a record of selections made.
- 1.2.1.4.5 Arrange for the working copy of Materials Log to be accessible at the Project Site, maintained and updated monthly for the duration of construction.
- 1.2.1.5. Obtain and submit releases permitting Judicial Council of California unrestricted use of the Work and access to services and utilities. Include certificate of occupancy, operating certificates, and similar releases, if required.
- 1.2.1.6. Prepare and submit Project Record Documents, operation and maintenance manuals, Completion construction photograph prints and electronic files, damage or settlement surveys, property surveys, and similar final record information.
- 1.2.1.7. Deliver tools, spare parts, extra materials, and similar items to location designated by Judicial Council of California. Label with manufacturer's name and model number where applicable.
- 1.2.1.8. Make final changeover of permanent locks and deliver keys to Judicial Council of California. Advise Judicial Council of California's personnel of changeover in security provisions.
- 1.2.1.9. Complete startup testing of systems.
- 1.2.1.10. Submit test/adjust/balance records.
- 1.2.1.11. Terminate and remove temporary facilities from Project Site, along with mockups, construction tools, and similar elements.

- 1.2.1.12. Advise Judicial Council of California of changeover in heat and other utilities.
- 1.2.1.13. Submit changeover information related to Judicial Council of California's occupancy, use, operation, and maintenance.
- 1.2.1.14. Complete final cleaning requirements, including touchup painting.
- 1.2.1.15. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

1.3. COMPLETION

- 1.3.1. Preliminary Procedures: Before requesting inspection for determining date of Completion, complete the following:
 - 1.3.1.1. Submit a final Application for Payment according to the Contract Documents.
 - 1.3.1.2. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 1.3.1.3. Submit pest-control final inspection report and warranty.
 - 1.3.1.4. Instruct Judicial Council of California's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training videos where required.
- 1.3.2. Inspection: Submit a written request for inspection.

1.4. LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- 1.4.1. CMR shall notify Judicial Council of California when CMR considers the Work complete. Upon notification, Judicial Council of California and Architect will prepare a list of minor items to be completed or corrected ("Punch List"). CMR and/or its Subcontractors shall proceed promptly to complete and correct items on the Punch List. Failure to include an item on Punch List does not alter the responsibility of the CMR to complete all Work in accordance with the Contract Documents.
- 1.4.2. CMR and/or its Subcontractors shall proceed promptly to complete and correct items on the Punch List. Failure to include an item on Punch List does not alter the responsibility of the CMR to complete all Work in accordance with the Contract Documents.
- 1.4.3. CMR shall comply with Punch List procedures as provided herein, and maintain the presence of a Project Superintendent and Project Manager until the Punch List is complete to ensure proper and timely completion of the Punch List. Under no circumstances shall CMR demobilize its forces prior to completion of the Punch List. Upon receipt of CMR's written notice that all of the Punch List items have been fully completed and the Work is ready for final inspection and acceptance, Judicial Council of California and Architect will inspect the Work and shall submit to CMR a final inspection report noting the Work, if any, required in order to complete in accordance with the Contract Documents. Absent unusual circumstances, this report shall consist of the Punch List items not yet satisfactorily completed.
- 1.4.4. Upon CMR's completion of all items on the Punch List and any other uncompleted portions of the Work, the CMR shall notify the Judicial Council of California and Architect, who shall again inspect such Work. If the Judicial Council of California and Architect

find the Work complete and acceptable under the Contract Documents, the Judicial Council of California will notify CMR, who shall then jointly submit to the Architect and Judicial Council of California its final Application for Payment.

- 1.4.5. **Costs of Multiple Inspections.** More than two (2) requests of Judicial Council of California to make a final inspection shall be considered an additional service of Judicial Council of California, the Architect and/or the Inspector, and all subsequent costs will be invoiced to CMR and if funds are available, withheld from remaining payments.
- 1.4.6. Punch List shall be complete only upon the Judicial Council of California's determination that all items on the Punch List, and all updates to the Punch List, are complete.

1.5. WARRANTIES

- 1.5.1. Submittal Time: Submit written warranties on request of Judicial Council of California for designated portions of the Work where commencement of warranties other than date of Completion is indicated.
- 1.5.2. Organize warranty documents into an orderly sequence as required by the "Warranties" document.

2. PRODUCTS

2.1. MATERIALS

- 2.1.1. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

3. EXECUTION

3.1. FINAL CLEANING

- 3.1.1. Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations. CMR shall use cleaning methods and procedures that reduce the overall impact on human health and the natural environment by reducing the amount of disposed waste, pollution and environmental degradation. If Project is subject to LEED certification, CMR shall ensure compliance with the applicable LEED requirements for final cleaning of the Site.
- 3.1.2. CMR shall employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program.

3.1.2.1. Complete the following cleaning operations before requesting final inspection:

- 3.1.2.1.1. Clean Project Site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
- 3.1.2.1.2. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
- 3.1.2.1.3. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.

- 3.1.2.1.4. Remove tools, construction equipment, machinery, and surplus material from Project Site.
- 3.1.2.1.5. Remove snow and ice to provide safe access to building.
- 3.1.2.1.6. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
- 3.1.2.1.7. Clean all surfaces and other work in accordance with recommendations of the manufacturer.
- 3.1.2.1.8. Remove spots, mortar, plaster, soil, and paint from ceramic tile, stone, and other finish materials.
- 3.1.2.1.9. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
- 3.1.2.1.10. Sweep concrete floors broom clean in unoccupied spaces.
- 3.1.2.1.11. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
- 3.1.2.1.12. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
- 3.1.2.1.13. Remove labels that are not permanent.
- 3.1.2.1.14. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 3.1.2.1.14.1. Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
- 3.1.2.1.15. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
- 3.1.2.1.16. Replace parts subject to unusual operating conditions.
- 3.1.2.1.17. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
- 3.1.2.1.18. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
- 3.1.2.1.19. Clean ducts, blowers, and coils if units were operated without filters during construction.

- 3.1.2.1.20. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
- 3.1.2.1.21. Leave Project Site clean and ready for occupancy.
- 3.1.3. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests.
- 3.1.4. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Judicial Council of California's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project Site and dispose of lawfully.

END OF SECTION

SECTION 01 78 23

OPERATION AND MAINTENANCE DATA

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.23. General Conditions;
- 1.1.24. Electronic Data Transfer;
- 1.1.25. Submittals;
- 1.1.26. Contract Closeout and Final Cleaning;
- 1.1.27. Warranties;
- 1.1.28. Record Documents;
- 1.1.29. Demonstration and Training;
- 1.1.30. LEED; and
- 1.1.31. General Commissioning Requirements.

1.2. QUALITY ASSURANCE

CMR shall prepare instructions and data by personnel experienced in maintenance and operation of described products.

1.3. FORMAT

- 1.3.1. All documents required herein shall be submitted in compliance with the formatting and numbering requirements of the document "**Documentation Requirements.**"
- 1.3.2. CMR shall prepare data in the form of an instructional manual entitled "OPERATIONS AND MAINTENANCE MANUAL & INSTRUCTIONS" ("Manual").
- 1.3.3. Binders: CMR shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size. When multiple binders are used, CMR shall correlate data into related consistent groupings.
- 1.3.4. Cover: CMR shall identify each binder with typed or printed title "OPERATION AND MAINTENANCE MANUAL & INSTRUCTIONS"; and shall list title of Project and identify subject matter of contents.
- 1.3.5. CMR shall arrange content by systems process flow under section numbers and sequence of Table of Contents of the Contract Documents.
- 1.3.6. CMR shall provide tabbed fly leaf for each separate Product and system, with typed description of Product and major component parts of equipment.

- 1.3.7. Text: The content shall include Manufacturer's printed data, or typewritten data on 24 pound paper.
- 1.3.8. Drawings: CMR shall provide with reinforced punched binder tab and shall bind in with text; folding larger drawings to size of text pages.

1.4. CONTENTS, EACH VOLUME

- 1.4.1. Table of Contents: CMR shall provide title of Project; names, addresses, and telephone numbers of the Architect, any engineers, subconsultants, Subcontractor(s), and CMR with name of responsible parties; and schedule of Products and systems, indexed to content of the volume.
- 1.4.2. For Each Product or System: CMR shall list names, addresses, and telephone numbers of Subcontractor(s) and suppliers, including local source of supplies and replacement parts.
- 1.4.3. Product Data: CMR shall mark each sheet to clearly identify specific Products and component parts, and data applicable to installation. Delete inapplicable information.
- 1.4.4. Drawings: CMR shall supplement Product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. CMR shall not use Project Record Documents as maintenance drawings.
- 1.4.5. Text: The CMR shall include any and all information as required to supplement Product data. CMR shall provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

1.5. MANUAL FOR MATERIALS AND FINISHES

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

1.6. MANUAL FOR EQUIPMENT AND SYSTEMS

- 1.6.1. Each Item of Equipment and Each System: CMR shall include description of unit or system, and component parts and identify function, normal operating characteristics, and limiting conditions. CMR shall include performance curves, with engineering data and tests, and complete nomenclature, and commercial number of replaceable parts.

- 1.6.2. Panelboard Circuit Directories: CMR shall provide electrical service characteristics, controls, and communications.
- 1.6.3. CMR shall include color coded wiring diagrams as installed.
- 1.6.4. Operating Procedures: CMR shall include start-up, break-in, and routine normal operating instructions and sequences. CMR shall include regulation, control, stopping, shut-down, and emergency instructions. CMR shall include summer, winter, and any special operating instructions.
- 1.6.5. Maintenance Requirements: CMR shall include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- 1.6.6. CMR shall provide servicing and lubrication schedule, and list of lubricants required.
- 1.6.7. CMR shall include manufacturer's printed operation and maintenance instructions.
- 1.6.8. CMR shall include sequence of operation by controls manufacturer.
- 1.6.9. CMR shall provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- 1.6.10. CMR shall provide control diagrams by controls manufacturer as installed.
- 1.6.11. CMR shall provide CMR's coordination drawings, with color coded piping diagrams as installed.
- 1.6.12. CMR shall provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- 1.6.13. CMR shall provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- 1.6.14. Additional Requirements: CMR shall include all additional requirements as specified in Specification(s).
- 1.6.15. CMR shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.7. SUBMITTAL

- 1.7.1. Concurrent with the Schedule of Submittals as indicated in the General Conditions, CMR shall submit to the Judicial Council of California for review two (2) copies of a preliminary draft of proposed formats and outlines of the contents of the Manual.
- 1.7.2. For equipment, or component parts of equipment put into service during construction and to be operated by Judicial Council of California, CMR shall submit draft content for that portion of the Manual within ten (10) days after acceptance of that equipment or component.
- 1.7.3. On or before the CMR submits its final application for payment, CMR shall submit two (2) copies of a complete Manual in final form. The Judicial Council of California will provide comments to CMR and CMR must revise the content of the Manual as required

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by Judicial Council of California prior to Judicial Council of California's approval of CMR's final Application for Payment.

- 1.7.4. CMR must submit two (2) copies of revised Manual in final form within ten (10) days after receiving Judicial Council of California's comments. Failure to do so will be a basis for the Judicial Council of California withholding funds sufficient to protect itself for CMR's failure to provide a final Manual to the Judicial Council of California.

END OF SECTION

SECTION 01 78 36

WARRANTIES

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.32. General Conditions;
- 1.1.33. Electronic Data Transfer;
- 1.1.34. Submittals;
- 1.1.35. Contract Closeout and Final Cleaning;
- 1.1.36. Operation and Maintenance Data;
- 1.1.37. Record Documents;
- 1.1.38. Demonstration and Training;
- 1.1.39. LEED; and
- 1.1.40. General Commissioning Requirements.

1.2. FORMAT

- 1.2.1. All documents required herein shall be submitted in compliance with the formatting and numbering requirements of the document “**Documentation Requirements.**”
- 1.2.2. Binders: CMR shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size.
- 1.2.3. Cover: CMR shall identify each binder with typed or printed title "WARRANTIES" and shall list title of Project.
- 1.2.4. Table of Contents: CMR shall provide title of Project; name, address, and telephone number of CMR and equipment supplier, and name of responsible principal. CMR shall identify each item with the number and title of the specific Specification, document, provision, or section in which the name of the Product or work item is specified.
- 1.2.5. CMR shall separate each warranty with index tab sheets keyed to the Table of Contents listing, providing full information and using separate typed sheets as necessary. CMR shall list each applicable and/or responsible Subcontractor(s), supplier(s), and/or manufacturer(s), with name, address, and telephone number of each responsible principal(s).
- 1.2.6. In addition to all warranty documentation and information required herein, CMR shall provide its Guarantee as required by the Contract Documents.

1.3. PREPARATION

- 1.3.1. CMR shall obtain warranties, executed in duplicate by each applicable and/or responsible Subcontractor(s), supplier(s), and manufacturer(s), within ten (10) days after completion of the applicable item or work. Except for items put into use with Judicial Council of California's permission, CMR shall leave date of beginning of time of warranty until the date of completion is determined.
- 1.3.2. CMR shall verify that warranties are in proper form, contain full information, and are notarized, when required.
- 1.3.3. CMR shall co-execute submittals when required.
- 1.3.4. CMR shall retain warranties until time specified for submittal.

1.4. TIME OF SUBMITTALS

- 1.4.1. Schedule of Warranties. CMR shall provide Judicial Council of California with a schedule of warranties at least fourteen (14) days prior to submitting its other required submittals indicated herein. This will provide Judicial Council of California the opportunity to review the anticipated warranties and make any comments, suggestions or revisions Judicial Council of California may require.
- 1.4.2. For equipment or component parts of equipment put into service during construction with Judicial Council of California's permission, CMR shall submit a draft warranty for that equipment or component within ten (10) days after acceptance of that equipment or component.
- 1.4.3. On or before the CMR submits its final application for payment, CMR shall submit all warranties and related documents in final form. CMR shall indicate any warranty related work that is being performed and incomplete at the time it submits its final application for payment. The Judicial Council of California will provide comments to CMR and CMR must revise the content of the warranties as required by Judicial Council of California prior to Judicial Council of California's approval of CMR's final Application for Payment.
- 1.4.4. For items of Work that are not completed until after the date of Completion, CMR shall provide an updated warranty for those item(s) of Work within ten (10) days after acceptance, listing the date of acceptance as start of warranty period.

END OF SECTION

SECTION 01 78 39

RECORD DOCUMENTS

1. GENERAL

1.1. RELATED DOCUMENTS AND PROVISIONS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.41. General Conditions;
- 1.1.42. Electronic Data Transfer;
- 1.1.43. Submittals;
- 1.1.44. Contract Closeout and Final Cleaning;
- 1.1.45. Operation and Maintenance Data;
- 1.1.46. Warranties;
- 1.1.47. Demonstration and Training;
- 1.1.48. LEED; and
- 1.1.49. General Commissioning Requirements.

2. RECORD DOCUMENTS

2.1. GENERAL

- 2.1.1. All documents required herein shall be submitted in compliance with the formatting and numbering requirements of the document “**Documentation Requirements.**”
- 2.1.2. “Record Documents” may also be referred to in the Contract Documents as “As-Built Drawings.”
- 2.1.3. As indicated in the Contract Documents, Judicial Council of California will provide CMR with one set of reproducible plans of the original Drawings.
- 2.1.4. CMR shall maintain at each Project Site one (1) set of marked-up Drawings and shall transfer all changes and information to those marked-up Drawings, as often as required in the Contract Documents, but in no case less than once each month. CMR shall submit to the Project Inspector one set of reproducible vellums of the Project Record Documents (“As-BUILTS”) showing all changes incorporated into the Work since the preceding monthly submittal. The As-BUILTS shall be available at the Project Site. The CMR shall submit reproducible vellums at the conclusion of the Project following review of the blue-line prints.
- 2.1.5. Label and date each Record Document "RECORD DOCUMENT" in legibly printed letters.

- 2.1.6. All deviations in construction, including but not limited to pipe and conduit locations and deviations caused by without limitation Change Orders, RFI's, and Addenda, shall be accurately and legibly recorded by CMR.
- 2.1.7. Locations and changes shall be done by CMR in a neat and legible manner and, where applicable, indicated by drawing a "cloud" around the changed or additional information.

2.2. RECORD DOCUMENT INFORMATION

- 2.2.1. CMR shall record the following information:
 - 2.2.1.1. Locations of Work buried under or outside each building, including, without limitation, all utilities, plumbing and electrical lines, and conduits.
 - 2.2.1.2. Actual numbering of each electrical circuit.
 - 2.2.1.3. Locations of significant Work concealed inside each building whose general locations are changed from those shown on the Drawings.
 - 2.2.1.4. Locations of all items, not necessarily concealed, which vary from the Contract Documents.
 - 2.2.1.5. Installed location of all cathodic protection anodes.
 - 2.2.1.6. Deviations from the sizes, locations, and other features of installations shown in the Contract Documents.
 - 2.2.1.7. Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stubouts, invert elevations, etc.
 - 2.2.1.8. Sufficient information to locate Work concealed in each building with reasonable ease and accuracy.
- 2.2.2. In some instances, this information may be recorded by dimension. In other instances, it may be recorded in relation to the spaces in the building near which it was installed.
- 2.2.3. CMR shall provide additional drawings as necessary for clarification.
- 2.2.4. CMR shall provide in an electronic format as indicated in the Contract Documents, a copy of the Drawings, made from final Shop Drawings marked "No Exceptions Taken" or "Approved as Noted."
 - 2.2.4.1. With the Judicial Council of California's prior approval, the CMR may provide these reproducible Drawings, in hard copy.

2.3. RECORD MATERIALS LOG

- 2.3.1. Materials Log shall be submitted prior to Completion.
- 2.3.2. Preparation: Mark Material Log to indicate the actual product installation where installation varies from that indicated in original Material Log.
- 2.3.3. Give particular attention to information on concealed materials and installations that cannot be readily identified and recorded later.

- 2.3.4. Mark copy with the proprietary name and characteristics of products, materials, and equipment furnished, including substitutions and product options selected.
- 2.3.5. Record the name of the manufacturer, supplier, installer, and other information necessary to provide a record of selections made.
- 2.3.6. The working copy of Materials Log shall be consistently maintained throughout construction, and shall be accessible at Project Site.

3. MAINTENANCE OF RECORD DOCUMENTS

- 3.1.** CMR shall store Record Documents apart from documents used for construction as follows:
 - 3.1.1. Provide files and racks for storage of Record Documents.
 - 3.1.2. Maintain Record Documents in a clean, dry, legible condition and in good order.
- 3.2.** CMR shall not use Record Documents for construction purposes.

END OF SECTION

SECTION 01 79 00

DEMONSTRATION AND TRAINING

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.50. General Conditions;
- 1.1.51. Electronic Data Transfer;
- 1.1.52. Submittals;
- 1.1.53. Contract Closeout and Final Cleaning;
- 1.1.54. Operation and Maintenance Data;
- 1.1.55. Warranties;
- 1.1.56. Record Documents;
- 1.1.57. LEED; and
- 1.1.58. General Commissioning Requirements.

1.2. SUMMARY

- 1.2.1. This Document includes administrative and procedural requirements for on-site instruction of Judicial Council of California's personnel, including the following:
 - 1.2.1.1. Demonstration of operation of systems, subsystems, and equipment.
 - 1.2.1.2. Training in operation and maintenance of systems, subsystems, and equipment.
 - 1.2.1.3. Demonstration and training videotapes.

1.3. SUBMITTALS

- 1.3.1. Instruction Program: Submit three (3) copies of outline of instructional program for demonstration and training, including a schedule of proposed dates, times, length of instruction time, and instructors' names for each training module. Include learning objective and outline for each training module.
 - 1.3.1.1. At completion of training, submit two (2) complete set of training manual(s) for Judicial Council of California's use (hard copy and electronic files).
- 1.3.2. Attendance Record: For each training module, submit list of participants and length of instruction time.
- 1.3.3. Evaluations: For each participant and for each training module, submit results and documentation of performance-based test.

1.3.4. Demonstration and Training Videos: Submit two (2) copies to Judicial Council of California within seven (7) days of end of each training module.

1.3.4.1. Identification: On each copy, provide an applied label with the following information:

1.3.4.1.1. Name of Project and Judicial Council of California Project Number.

1.3.4.1.2. Name and address of photographer.

1.3.4.1.3. Name of Judicial Council of California's Representative.

1.3.4.1.4. Name of CMR.

1.3.4.1.5. Date videotape was recorded.

1.3.4.2. Transcript: Prepared on 8-1/2-by-11-inch (215-by-280-mm) paper, punched and bound in heavy-duty, 3-ring, vinyl-covered binders. Mark appropriate identification on front and spine of each binder. Include a cover sheet with same label information as the corresponding videotape. Include name of Project and date of video on each page.

1.4. COORDINATION

1.4.1. Coordinate instruction schedule with Judicial Council of California's Facilities Management Unit. Adjust schedule as required to minimize disrupting Judicial Council of California's operations. Notify at least fourteen (14) days in advance.

1.4.2. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.

1.4.3. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Judicial Council of California.

1.5. INSTRUCTION PROGRAM

1.5.1. Program Structure: Develop an instruction program that includes individual training modules for each system and equipment not part of a system, as required by individual Specification Sections.

1.5.2. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master.

1.6. PREPARATION

1.6.1. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a combined training manual.

1.6.2. Set up instructional equipment at instruction location.

1.7. INSTRUCTION

- 1.7.1. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between CMR and Judicial Council of California for number of participants, instruction times, and location.
- 1.7.2. Engage qualified instructors to instruct Judicial Council of California's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 - 1.7.2.1. Judicial Council of California will furnish CMR with names and positions of participants.
- 1.7.3. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 - 1.7.3.1. Schedule training with Judicial Council of California, with at least fourteen (14) days' advance notice.
- 1.7.4. Evaluation: At conclusion of each training module, assess and document each participant's mastery of module by use of a performance-based test.
- 1.7.5. Cleanup: Collect used and leftover educational materials and remove from Project site. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

END OF SECTION

SECTION 01 81 13

LEED CERTIFICATION
SUSTAINABLE DESIGN REQUIREMENTS

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.59. General Conditions;
- 1.1.60. Temporary Facilities and Controls;
- 1.1.61. Temporary Tree and Plant Protection;
- 1.1.62. SWPPP;
- 1.1.63. Indoor Air Quality Protection;
- 1.1.64. Contract Closeout and Final Cleaning;
- 1.1.65. Operation and Maintenance Data;
- 1.1.66. Warranties;
- 1.1.67. Record Documents;
- 1.1.68. Demonstration and Training;
- 1.1.69. General Commissioning Requirements; and
- 1.1.70. Technical Specifications.

1.2. SUMMARY

- 1.2.1. This Section includes general requirements and procedures for compliance with certain U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) prerequisites and credits needed for the Project to obtain LEED Silver certification.

1.3. SUBMITTALS

- 1.3.1. CMR shall submit all LEED submittal requirements as indicated by the Architect. LEED submittals are in addition to other submittals. If submitted item is identical to that submitted to comply with other requirements, submit duplicate copies as a separate submittal to verify compliance with indicated LEED requirements.
- 1.3.2. LEED Action Plans: CMR shall submit preliminary submittals within thirty (30) calendar days of date established for the Notice to Proceed indicating how the LEED requirements will be met.

- 1.3.3. LEED Progress Reports: CMR shall submit reports comparing actual construction and purchasing activities with LEED action plans with each Application for Payment.

1.4. MATERIALS LOG

- 1.4.1. CMR shall maintain a notebook with sectional dividers for each product and material contributing to the LEED Action Plan specified by Architect and in other Project Manual Sections. Each divider shall be labeled with the LEED Prerequisite or Credit number. Insert product and material data that is specified in each section behind its section divider recording the following environmental data, physical properties, and other information required by the specifications to support the use of the material or product in the LEED Action Plan.
- 1.4.2. CMR shall mark the Materials Log to indicate the actual product installed and record changes where installation varies from that indicated in the original Material Log material entry.
 - 1.4.2.1. Give particular attention to information on concealed materials and installations that cannot be readily identified and recorded later.
 - 1.4.2.2. Mark copy with the proprietary name and characteristics of products, materials, and equipment furnished, including substitutions and product options selected.
 - 1.4.2.3. Record the name of the manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
- 1.4.3. A working copy of the Materials Log shall be maintained weekly as materials are ordered, shall be accessible at site to the Judicial Council of California, Architect, and all trades involved in Project.
- 1.4.4. CMR shall submit completed Materials Log as specified in Document “Contract Closeout and Final Cleaning.”
- 1.4.5. Arrange for the working copy of Materials Log to be accessible at the Project Site, maintained and updated monthly for the duration of construction.

END OF SECTION

SECTION 01 91 13

GENERAL COMMISSIONING REQUIREMENTS

1. GENERAL

1.1. RELATED DOCUMENTS

CMR shall review all Contract Documents for applicable provisions related to the provisions in this document, including without limitation:

- 1.1.1. General Conditions;
- 1.1.2. Electronic Data Transfer;
- 1.1.3. Submittals;
- 1.1.4. Contract Closeout and Final Cleaning;
- 1.1.5. Operation and Maintenance Data;
- 1.1.6. Warranties;
- 1.1.7. Record Documents;
- 1.1.8. Demonstration and Training; and
- 1.1.9. [LEED.]

1.2. DEFINITIONS

- 1.2.1. Commissioning Process: The basic purpose of building commissioning is to provide documented confirmation that building systems function in compliance with criteria set forth in the Contract Documents to satisfy the Judicial Council of California's operational needs.

1.3. CMR'S RESPONSIBILITIES

- 1.3.1. Provide utility services required for the commissioning process.
- 1.3.2. CMR is responsible for construction means, methods, job safety, and/or management function related to commissioning on the Project Site.
- 1.3.3. CMR shall assign representatives with expertise and authority to act on behalf of the CMR and schedule them to participate in and perform commissioning team activities including, but not limited to, the following:
 - 1.3.3.1. Participate in design and construction-phase coordination meetings.
 - 1.3.3.2. Participate in maintenance orientation and inspection.

- 1.3.3.3. Participate in operation and maintenance training sessions.
- 1.3.3.4. Participate in final review.
- 1.3.3.5. Certify that Work is complete and systems are operational according to the Contract Documents, including calibration of instrumentation and controls.
- 1.3.3.6. Evaluate performance deficiencies identified in test reports and, in collaboration with entity responsible for system and equipment installation, recommend corrective action.
- 1.3.3.7. Review and comment on final commissioning documentation.
- 1.3.4. CMR shall integrate all commissioning activities into CMR's Project Schedule.
- 1.3.5. CMR's Subcontractors shall assign representatives with expertise and authority to act on behalf of subcontractors and schedule them to participate in and perform commissioning team activities including, but not limited to, the following:
 - 1.3.5.1. Participate in design and construction-phase coordination meetings.
 - 1.3.5.2. Participate in maintenance orientation and inspection.
 - 1.3.5.3. Participate in procedures meeting for testing.
 - 1.3.5.4. Participate in final review.
 - 1.3.5.5. Provide schedule for operation and maintenance data submittals, equipment startup, and testing to Commissioning Authority for incorporation into the commissioning plan. Update schedule on a weekly basis throughout the construction period.
 - 1.3.5.6. Provide information to the Commissioning Authority for developing construction phase commissioning plan.
 - 1.3.5.7. Participate in training sessions for Judicial Council of California's operation and maintenance personnel.
 - 1.3.5.8. Provide updated Project Record Documents to Commissioning Authority on a daily basis.
 - 1.3.5.9. Gather and submit operation and maintenance data for systems, subsystems, and equipment to the Commissioning Authority, as specified in Document "Operation and Maintenance Data."
 - 1.3.5.10. Provide technicians who are familiar with the construction and operation of installed systems, who shall execute the test procedures developed by the Commissioning Authority, and who shall participate in testing of installed systems, subsystems, and equipment.

1.4. QUALITY ASSURANCE

- 1.4.1. Training Instructor Qualifications: CMR shall provide factory-authorized service representatives, experienced in training, operation, and maintenance procedures for installed systems, subsystems, and equipment.

- 1.4.2. Test Equipment Calibration: Comply with test equipment manufacturer's calibration procedures and intervals. Recalibrate test instruments (per NIST requirements if applicable) immediately whenever instruments have been repaired following damage or dropping. Affix calibration tags to test instruments. Instruments shall have been calibrated within six months prior to use.

1.5. EQUIPMENT & SYSTEM SCHEDULE

- 1.5.1. The following equipment shall be commissioned in this Project.

System	Equipment	Note	Req'd by LEED
HVAC System	Chillers		X
	Boilers		X
	Pumps		X
	Cooling towers		X
	Variable frequency drives		X
	Air handlers		X
	Packaged AC units		X
	Terminal units for Court Rooms and other high occupancy rooms		X
	Terminal units for Office areas	2	X
	Unit heaters		X
	Heat exchangers		X
	Exhaust fans		X
	Supply fans		X
	Return fans		X
Building Management System	Sequences of Operation, Monitored Points, and Alarms		X
	Metering/Monitoring Devices and Equipment		X
	Software Commissioning, GUI presentation commissioning, system access performance criteria, software tools/source code commissioning, instrument data sheets, middleware commissioning, Internet Protocol commissioning		
Electrical System	Sweep or scheduled lighting controls	2	X
	Daylight dimming controls		X
	Lighting occupancy sensors		X
	Electrical grounding		
Plumbing System	Domestic water heaters		X
Security Alarm Systems	Security cameras and monitoring system personal duress alarm system; Intercom system; Paging System.		
System	Equipment	Note	Req'd by LEED
Security Electronics	Security plumbing fixture water management system.		
	Door Controls.		
	Fire alarm system.		
	Distributed radio antenna system.		
	Access control system.		

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Courtroom Systems	Room acoustics.		
	Sound masking system.		
	Assisted listening.		
	Video projection.		
	Audio system.		
	Lighting and lighting controls.		X
Fire/Life Safety Systems	All devices		
	Alarm drivers		
	HVAC/Fire System Integration		
	Event Notifying and Reporting Systems		
Communication System			

END OF SECTION |