

**Invitation to Bid For
General Contractor Construction
Services**

**Fire Life Safety Building
Deficiency Corrections, Floors
1, 2 and 3
Santa Ana, CA
Bldg. ID 30-A1**

Judicial Council of California

**RFP-FS-2021-22-JP
Invitation to Bid**

**Issued: September 27, 2022
Bids Due: November 14, 2022**

No Later Than 10:00 AM Pacific Time
=====

DOCUMENT 00 01 10

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PROCUREMENT AND CONTRACTING REQUIREMENTS

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	00 11 16	Notice to Bidders / Invitation to Bid
	00 21 13	Instructions to Bidders
	00 31 19	Existing Information and Documentation Regarding Project Site (<u>NOT</u> part of the Contract Documents)

<u>DOCUMENTS THAT BIDDER MUST SUBMIT AS PART OF ITS BID</u>		
	00 41 13	Bid Form
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	00 43 36	Designated Subcontractors List
	00 43 37	Disabled Veteran Business Enterprise Certification (Bid Version)
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	00 45 00	RESERVED
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	00 45 10	Construction Agreement (Design-Bid-Build) Coversheet & Construction Agreement (Design-Bid-Build Agreement)

<u>THE FOLLOWING DOCUMENTS ARE ATTACHED AS EXHIBITS TO THE CONSTRUCTION AGREEMENT (DESIGN-BID-BUILD) COVERSHEET & CONSTRUCTION AGREEMENT (DESIGN-BID-BUILD AGREEMENT) (DOCUMENT 00 45 10)</u>		
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Exhibit A	Project Description
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00 71 00	
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Exhibit R	Division 1 Documents
00 91 14	
Exhibit S	Division 2 Through Division 49 Documents
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<i>FOR BIDDING, THESE SPECIFICATIONS WILL BE DISTRIBUTED TO PREQUALIFIED BIDDERS THROUGH AN ELECTRONIC FILE TRANSFER PROCESS. UPON CONTRACT EXECUTION, THEY WILL BE INCLUDED AS EXHIBIT R AND EXHIBIT S.</i>	

SPECIFICATIONS (GENERAL REQUIREMENTS (DIVISION 01) & TECHNICAL SPECIFICATIONS (DIVISION 02 THROUGH DIVISION 49))

DIVISION 01

THE DIVISION 01 SPECIFICATIONS ARE ATTACHED AS EXHIBIT R (DOCUMENT 00 91 14) TO THE CONSTRUCTION AGREEMENT (DESIGN-BID-BUILD) COVERSHEET & CONSTRUCTION AGREEMENT (DESIGN-BID-BUILD AGREEMENT) (DOCUMENT 00 45 10).

Division 01	Section	Title
	01 11 00	SUMMARY OF WORK
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	01 20 00	PRICE AND PAYMENT PROCEDURES
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	01 31 27	ASBESTOS LEAD SURVEY DATA
	01 31 28	APPENDIX A: PRE-RENOVATION SURVEY REPORT, FIRE SPRINKLER STUDY APPENDIX B: CENTRAL JUSTICE CENTER FIRE SPRINKLER STUDY
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	01 42 13	ABBREVIATIONS AND ACRONYMS
	01 42 16	GENERAL DEFINITIONS AND REFERENCES
	01 45 29	TESTING LABORATORY SERVICES
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	01 52 10	SITE STANDARDS
	01 56 39	TEMPORARY TREE AND PLANT PROTECTION (NOT USED)
	01 57 10	STORM WATER POLLUTION PREVENTION PLAN (SWPPP) – CONSTRUCTION (NOT USED)
	01 60 00	MATERIALS AND EQUIPMENT

01 66 10	DELIVERY, STORAGE AND HANDLING
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01 78 23	OPERATION AND MAINTENANCE DATA
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01 78 39	PROJECT RECORD DOCUMENTS
01 91 00	COMMISSIONING

DIVISION 02 THROUGH DIVISION 49

THE DIVISION 02 THROUGH DIVISION 49 SPECIFICATIONS ARE ATTACHED AS EXHIBIT S (DOCUMENT 00 91 15) TO THE CONSTRUCTION AGREEMENT (DESIGN-BID-BUILD) COVERSHEET & CONSTRUCTION AGREEMENT (DESIGN-BID-BUILD AGREEMENT) (DOCUMENT 00 45 10).

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Division 03	03 00 00	CONCRETE (NOT USED)
Division 04	04 00 00	MASONRY (NOT USED)
Division 05	05 00 00	METALS (NOT USED)
Division 06	06 00 00	WOOD, PLASTICS, AND COMPOSITES (NOT USED)
Division 07	07 00 00	THERMAL AND MOISTURE PROTECTION
Division 08	08 00 00	OPENINGS
Division 09	09 00 00	FINISHES
Division 10	10 00 00	SPECIALTIES
Division 11	11 00 00	RESERVED (NOT USED)
Division 12	12 00 00	RESERVED (NOT USED)
Division 13	13 00 00	RESERVED (NOT USED)
Division 14	14 00 00	RESERVED (NOT USED)
Division 15	15 00 00	RESERVED (NOT USED)
Division 16	16 00 00	RESERVED (NOT USED)
Division 17	17 00 00	RESERVED (NOT USED)
Division 18	18 00 00	RESERVED (NOT USED)
Division 19	19 00 00	RESERVED (NOT USED)
Division 20	20 00 00	RESERVED (NOT USED)
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Division 26	26 00 00	ELECTRICAL
Division 27	27 00 00	RESERVED (NOT USED)
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Division 29	29 00 00	RESERVED (NOT USED)
Division 30	30 00 00	RESERVED (NOT USED)
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Division 34	34 00 00	RESERVED (NOT USED)
Division 35	35 00 00	RESERVED (NOT USED)
Division 36	36 00 00	RESERVED (NOT USED)
Division 37	37 00 00	RESERVED (NOT USED)
Division 38	38 00 00	RESERVED (NOT USED)
Division 39	39 00 00	RESERVED (NOT USED)
Division 40	40 00 00	PROCESS INTEGRATION (NOT USED)
Division 41	41 00 00	MATERIAL PROCESSING AND HANDLING EQUIPMENT (NOT USED)
Division 42	42 00 00	PROCESS HEATING, COOLING, AND DRYING EQUIPMENT (NOT USED)

Division 43	43 00 00	PROCESS GAS AND LIQUID HANDLING, PURIFICATION, AND STORAGE EQUIPMENT (NOT USED)
Division 44	44 00 00	POLLUTION CONTROL EQUIPMENT (NOT USED)
Division 45	45 00 00	INDUSTRY-SPECIFIC MANUFACTURING EQUIPMENT (NOT USED)
Division 46	46 00 00	WATER AND WASTEWATER EQUIPMENT (NOT USED)
Division 47	47 00 00	RESERVED (NOT USED)
Division 48	48 00 00	ELECTRICAL POWER GENERATION (NOT USED)
Division 49	49 00 00	RESERVED (NOT USED)

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DOCUMENT 00 01 15

LIST OF DRAWINGS, TABLES, AND SCHEDULES

DRAWINGS

This is a list of the Drawings prepared by Salas O'Brien for the Project dated February 11, 2022, as fully approved by any authority having jurisdiction(s) on or about June 9, 2022, and as may be amended hereafter, which are incorporated herein by reference as through fully set forth herein.

<u>Sheet number</u>	<u>Description</u>
G-0.0	COVER SHEET
G-0.1	PHASING PLAN
G-0.2	FIRST FLOOR AIR ZONING PLAN
AD-1.1A	FIRST FLOOR REFLECTED CEILING PLAN AREA A– DEMO
A-1.1A	FIRST FLOOR REFLECTED CEILING PLAN AREA A – NEW
AD-1.1B	FIRST FLOOR REFLECTED CEILING PLAN AREA B– DEMO
A-1.1B	FIRST FLOOR REFLECTED CEILING PLAN AREA B – NEW
AD-1.1C	FIRST FLOOR REFLECTED CEILING PLAN AREA C– DEMO
A-1.1C	FIRST FLOOR REFLECTED CEILING PLAN AREA C – NEW
AD-1.2A	SECOND FLOOR REFLECTED CEILING PLAN AREA A– DEMO
A-1.2A	SECOND FLOOR REFLECTED CEILING PLAN AREA A – NEW
AD-1.2B	SECOND FLOOR REFLECTED CEILING PLAN AREA B– DEMO
A-1.2B	SECOND FLOOR REFLECTED CEILING PLAN AREA B – NEW
AD-1.2C	SECOND FLOOR REFLECTED CEILING PLAN AREA C– DEMO
A-1.2C	SECOND FLOOR REFLECTED CEILING PLAN AREA C – NEW
AD-1.3A	THIRD FLOOR REFLECTED CEILING PLAN AREA A– DEMO
A-1.3A	THIRD FLOOR REFLECTED CEILING PLAN AREA A – NEW
AD-1.3B	THIRD FLOOR REFLECTED CEILING PLAN AREA B– DEMO
A-1.3B	THIRD FLOOR REFLECTED CEILING PLAN AREA B – NEW
AD-1.3C	THIRD FLOOR REFLECTED CEILING PLAN AREA C– DEMO
A-1.3C	THIRD FLOOR REFLECTED CEILING PLAN AREA C – NEW
A-5.1	ARCHITECTURAL DETAILS
A-5.2	ARCHITECTURAL DETAILS
A-5.3	ARCHITECTURAL DETAILS
MD-1.1A	MECHANICAL FIRST FLOOR PLAN AREA A DEMO
M-1.1A	MECHANICAL FIRST FLOOR PLAN AREA A NEW
MD-1.1B	MECHANICAL FIRST FLOOR PLAN AREA B DEMO
M-1.1B	MECHANICAL FIRST FLOOR PLAN AREA B NEW
MD-1.1C	MECHANICAL FIRST FLOOR PLAN AREA C DEMO
M-1.1C	MECHANICAL FIRST FLOOR PLAN AREA C NEW
MD-1.2A	MECHANICAL SECOND FLOOR PLAN AREA A DEMO
M-1.2A	MECHANICAL SECOND FLOOR PLAN AREA A NEW
MD-1.2B	MECHANICAL SECOND FLOOR PLAN AREA B DEMO
M-1.2B	MECHANICAL SECOND FLOOR PLAN AREA B NEW
MD-1.2C	MECHANICAL SECOND FLOOR PLAN AREA C DEMO
M-1.2C	MECHANICAL SECOND FLOOR PLAN AREA C NEW
MD-1.3A	MECHANICAL THIRD FLOOR PLAN AREA A DEMO
M-1.3A	MECHANICAL THIRD FLOOR PLAN AREA A NEW
MD-1.3B	MECHANICAL THIRD FLOOR PLAN AREA B DEMO
M-1.3B	MECHANICAL THIRD FLOOR PLAN AREA B NEW
MD-1.3C	MECHANICAL THIRD FLOOR PLAN AREA C DEMO
M-1.3C	MECHANICAL THIRD FLOOR PLAN AREA C NEW
M-5.1	MECHANICAL DETAILS
M-6.1	MECHANICAL SCHEDULES

M-7.1
M-7.2

CONTROLS POINTS LIST
CONTROLS SCHEMATICS AND SEQUENCES

FP-0.1	FIRE PROTECTION GENERAL
FPD-1.1A	FIRE PROTECTION FIRST FLOOR PLAN AREA A DEMO
FPD-1.1B	FIRE PROTECTION FIRST FLOOR PLAN AREA B DEMO
FPD-1.1C	FIRE PROTECTION FIRST FLOOR PLAN AREA C DEMO
FPD-1.2A	FIRE PROTECTION SECOND FLOOR PLAN AREA A DEMO
FPD-1.2B	FIRE PROTECTION SECOND FLOOR PLAN AREA B DEMO
FPD-1.2C	FIRE PROTECTION SECOND FLOOR PLAN AREA C DEMO
FPD-1.3A	FIRE PROTECTION THIRD FLOOR PLAN AREA A DEMO
FPD-1.3B	FIRE PROTECTION THIRD FLOOR PLAN AREA B DEMO
FPD-1.3C	FIRE PROTECTION THIRD FLOOR PLAN AREA C DEMO
FP-1.1A	FIRE PROTECTION FIRST FLOOR PLAN AREA A NEW
FP-1.1B	FIRE PROTECTION FIRST FLOOR PLAN AREA B NEW
FP-1.1C	FIRE PROTECTION FIRST FLOOR PLAN AREA C NEW
FP-1.2A	FIRE PROTECTION SECOND FLOOR PLAN AREA A NEW
FP-1.2B	FIRE PROTECTION SECOND FLOOR PLAN AREA B NEW
FP-1.2C	FIRE PROTECTION SECOND FLOOR PLAN AREA C NEW
FP-1.3A	FIRE PROTECTION THIRD FLOOR PLAN AREA A NEW
FP-1.3B	FIRE PROTECTION THIRD FLOOR PLAN AREA B NEW
FP-1.3C	FIRE PROTECTION THIRD FLOOR PLAN AREA C NEW
FP-2.1A	FIRE PROTECTION FIRST FLOOR CEILING PLAN AREA A NEW
FP-2.1B	FIRE PROTECTION FIRST FLOOR CEILING PLAN AREA B NEW
FP-2.1C	FIRE PROTECTION FIRST FLOOR CEILING PLAN AREA C NEW
FP-2.2A	FIRE PROTECTION SECOND FLOOR CEILING PLAN AREA A NEW
FP-2.2B	FIRE PROTECTION SECOND FLOOR CEILING PLAN AREA B NEW
FP-2.2C	FIRE PROTECTION SECOND FLOOR CEILING PLAN AREA C NEW
FP-2.3A	FIRE PROTECTION THIRD FLOOR CEILING PLAN AREA A NEW
FP-2.3B	FIRE PROTECTION THIRD FLOOR CEILING PLAN AREA B NEW
FP-2.3C	FIRE PROTECTION THIRD FLOOR CEILING PLAN AREA C NEW
FP-5.1	FIRE PROTECTION DETAILS
E-0.1	ELECTRICAL GENERAL NOTES, SYMBOLS & ABBREVIATIONS
ELD-1.1A	LIGHTING FIRST FLOOR PLAN AREA A DEMO
EL-1.1A	LIGHTING FIRST FLOOR PLAN AREA A NEW
ELD-1.1B	LIGHTING FIRST FLOOR PLAN AREA B DEMO
EL-1.1B	LIGHTING FIRST FLOOR PLAN AREA B NEW
ELD-1.1C	LIGHTING FIRST FLOOR PLAN AREA C DEMO
EL-1.1C	LIGHTING FIRST FLOOR PLAN AREA C NEW
ELD-1.2A	LIGHTING SECOND FLOOR PLAN AREA A DEMO
EL-1.2A	LIGHTING SECOND FLOOR PLAN AREA A NEW
ELD-1.2B	LIGHTING SECOND FLOOR PLAN AREA B DEMO
EL-1.2B	LIGHTING SECOND FLOOR PLAN AREA B NEW
ELD-1.2C	LIGHTING SECOND FLOOR PLAN AREA C DEMO
EL-1.2C	LIGHTING SECOND FLOOR PLAN AREA C NEW
ELD-1.3A	LIGHTING THIRD FLOOR PLAN AREA A DEMO
EL-1.3A	LIGHTING THIRD FLOOR PLAN AREA A NEW
ELD-1.3B	LIGHTING THIRD FLOOR PLAN AREA B DEMO
EL-1.3B	LIGHTING THIRD FLOOR PLAN AREA B NEW
ELD-1.3C	LIGHTING THIRD FLOOR PLAN AREA C DEMO
EL-1.3C	LIGHTING THIRD FLOOR PLAN AREA C NEW
EL-2.1A	LIGHTING FIRST FLOOR PLAN AREA A CONTROLS
EL-2.1B	LIGHTING FIRST FLOOR PLAN AREA B CONTROLS
EL-2.1C	LIGHTING FIRST FLOOR PLAN AREA C CONTROLS

E-5.1	ELECTRICAL DETAILS
E-6.1	ELECTRICAL SCHEDULES
E-7.1	ELECTRICAL SINGLE LINE DIAGRAM
FA-0.1	FIRE ALARM GENERAL NOTES, SYMBOLS & ABBREVIATIONS
FAD-1.1A	FIRE ALARM FIRST FLOOR PLAN AREA A DEMO
FA-1.1A	FIRE ALARM FIRST FLOOR PLAN AREA A NEW
FAD-1.1B	FIRE ALARM FIRST FLOOR PLAN AREA B DEMO
FA-1.1B	FIRE ALARM FIRST FLOOR PLAN AREA B NEW
FAD-1.1C	FIRE ALARM FIRST FLOOR PLAN AREA C DEMO
FA-1.1C	FIRE ALARM FIRST FLOOR PLAN AREA C NEW
FAD-1.2A	FIRE ALARM SECOND FLOOR PLAN AREA A DEMO
FA-1.2A	FIRE ALARM SECOND FLOOR PLAN AREA A NEW
FAD-1.2B	FIRE ALARM SECOND FLOOR PLAN AREA B DEMO
FA-1.2B	FIRE ALARM SECOND FLOOR PLAN AREA B NEW
FAD-1.2C	FIRE ALARM SECOND FLOOR PLAN AREA C DEMO
FA-1.2C	FIRE ALARM SECOND FLOOR PLAN AREA C NEW
FAD-1.3A	FIRE ALARM THIRD FLOOR PLAN AREA A DEMO
FA-1.3A	FIRE ALARM THIRD FLOOR PLAN AREA A NEW
FAD-1.3B	FIRE ALARM THIRD FLOOR PLAN AREA B DEMO
FA-1.3B	FIRE ALARM THIRD FLOOR PLAN AREA B NEW
FAD-1.3C	FIRE ALARM THIRD FLOOR PLAN AREA C DEMO
FA-1.3C	FIRE ALARM THIRD FLOOR PLAN AREA C NEW
FA-5.1	FIRE ALARM DETAILS

END OF DOCUMENT

DOCUMENT 00 11 16

NOTICE TO BIDDERS / INVITATION TO BID

1. Notice is hereby given that Judicial Council of California (“Judicial Council”) will receive sealed bids (“Bid(s)”) from contractors intending to submit a Bid (“Bidder(s)”) for the award of a contract (“Contract”) to construct the following project (“Project”):

**Central Justice Center
Fire Life Safety Building Deficiency Corrections
Floors 1, 2 and 3
700 West Civic Center Drive, Santa Ana, CA
Bldg. ID 30-A1**

2. Judicial Council prequalified Bidders pursuant to a Request for Qualifications to Prequalify General Contractors as Prospective Bidders for the Project, RFP-FS-2021-22-JP (“RFQ”) and notified contractors responding to the RFQ of their prequalification status by posting a list of prequalified Bidders on Judicial Council’s website (<http://www.courts.ca.gov/rfps.htm>) on **May 25, 2022**. **Only prequalified Bidders may submit a Bid for the Project. Bids submitted for this Project by any contractor other than a prequalified Bidder will be rejected.**
3. Judicial Council will host a **MANDATORY** pre-Bid meeting via video conference on **October 3, 2022**, at **10:00 a.m.** The credentials for the video conference are as follows:

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 264 495 129 773

Passcode: JiYrAZ

[Download Teams](#) | [Join on the web](#)

Join with a video conferencing device

178332609@teams.bjn.vc

Video Conference ID: 119 486 267 1

[Alternate VTC instructions](#)

Or call in (audio only)

+1 415-906-0569,684763648# United States, San Francisco

Phone Conference ID: 684 763 648#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)

4. A **MANDATORY** site visit will be held on **October 12, 2022**, at **10:30 a.m.** (“Site Visit”). The responsible Judicial Council Project Manager will contact Bidders for further information regarding the location and time for the Site Visit. All participants will be required to sign in at the Site Visit. The Site Visit is expected to take approximately **two (2) hours**. **Failure to attend, or tardy attendance at, the Site Visit will result in Bidder’s Bid being determined nonresponsive.**
5. All communications with, or questions to, Judicial Council in any way concerning the Project, Contract Documents, or Bid, must be in writing and submitted via e-mail to Solicitations@jud.ca.gov. Questions must be received **NO LATER THAN October 24, 2022**, at **3:00 p.m.**
6. Judicial Council will reply to questions on or before **October 31, 2022**, at **5:00 p.m.** Judicial Council will post responses to questions on Judicial Council’s website (www.courts.ca.gov). **Bidders are solely responsible for accessing the website and reviewing Judicial Council’s responses.**
7. Bidders must submit Bids on or before **10:00 a.m., November 14, 2022**. Bids must be submitted electronically via email to: RFP-FS-2021-22-JP-Santa-Ana-Submit-Bids@jud.ca.gov (“Online Submittal”). Any Bid that is submitted to the Online Submittal after this time will be determined nonresponsive. Judicial Council will provide

a confirmation of the date and time of the receipt of a Bid by responsive email. Bidders are ultimately responsible for determining whether their Bid was received by Judicial Council. Judicial Council is not responsible for Bidder's failure to properly submit the Bid, or for a Bidder's failure to ascertain if Judicial Council received the Bid if Bidder did not receive an electronic receipt from the Online Submittal.

Judicial Council will open sealed Bids and publicly read them aloud by video conference via Microsoft Teams on **November 14, 2022**, at **2:00 p.m.** The credentials for the video conference via Microsoft Teams are as follows:

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 278 452 650 670

Passcode: x33pY8

[Download Teams](#) | [Join on the web](#)

Join with a video conferencing device

178332609@teams.bjn.vc

Video Conference ID: 113 853 605 1

[Alternate VTC instructions](#)

Or call in (audio only)

+1 415-906-0569,,22435717# United States, San Francisco

Phone Conference ID: 224 357 17#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)

8. Any claim by Bidder that its Bid contains an error, or request for relief from its Bid, made **after** the time for opening of Bids, **MUST** be made in compliance with Public Contract Code section 5100 et seq. Upon written request, Bidder may withdraw its Bid **prior** to the time for opening of Bids without forfeiting its Bid Security. Upon written request, Bidder may withdraw its Bid **prior** to the time for opening of Bids without forfeiting its Bid Security. Any request to withdraw a Bid must be executed by the Bidder or its duly authorized representative. Bidder's withdrawal of its Bid does not prejudice the Bidder's right to submit a new Bid **before** the time of Bid opening.
9. The Project is a fire, life, and safety ("FLS") modernization project of Floors 1 through 3 ("Floors") of the Courthouse. The Project will consist of the abatement of all asbestos containing material ("ACM") on the affected Floors. Additionally, new ceilings and energy efficient LED lighting will be installed on the Floors. The mechanical ductwork and terminal units will be replaced in kind and integrated into a smoke removal system. The mechanical and electrical work will both require the installation of associated new control units. The coverage of the existing fire sprinkler system will be expanded to cover the entire floor area of the Floors, as opposed to just the path of egress. The fire alarm system for the Floors will also be upgraded. Finally, a new building management system will be installed. The Project will require the selected Bidder to perform calculations and submit submittals to the State Fire Marshal after completion of certain scopes of work. For more information regarding the scope of work on the Project please review the Contract Documents, but specifically:
 - Project Description (**Exhibit A** (Document 00 45 30) attached to the Construction Agreement (Design-Bid-Build) Coversheet and Construction Agreement (Design-Bid-Build Agreement) (Document 00 45 10) ("Form of Contract");
 - General Conditions (**Exhibit M** (Document 00 70 00) ("General Conditions") attached to the Form of Contract;
 - List of Drawings, Tables and Schedules (Document 00 01 15);
 - Division 1 Documents attached to the Form of Contract (**Exhibit R** (00 91 14)); and
 - Division 2 through Division 49 Documents attached to the Form of Contract (**Exhibit S** (00 91 15)).
10. All Bids must be submitted on the provided Bid Form (Document 00 41 13) ("Bid Form"). Each Bid must conform and be responsive to all pertinent Contract Documents (as defined in General Conditions), including, but not

limited to, the Instructions to Bidders (Document 00 21 13). **Any Bid not submitted on the Bid Form included in the Contract Documents will be rejected.**

11. To bid on this Project, Bidder must possess one or more of the following State of California Contractor Licenses:

B – General Building Contractor
C16 – Fire Protection Contractor

Bidder's license(s) must be active and in good standing **at the time of submission of the Bid** and, if awarded the Contract, the required licenses must remain active and in good standing throughout the term of the Contract.

12. A person or entity who has been convicted of violating a state or federal law respecting the employment of undocumented workers within the past **FIVE (5) years** will **NOT** be eligible to submit a Bid, or be awarded a Contract, for the Project.

13. No contractor or subcontractor who is ineligible to bid, work on or be awarded a public works project pursuant to sections 1777.1 or 1777.2 of the Labor Code is eligible to bid, be awarded a Contract, or otherwise perform work on the Project.

14. As security for its Bid, Bidder must provide one of the following with its Bid Form (each, "Bid Security"):

- An electronic bid bond issued by a California admitted surety insurer submitted using an electronic registry service approved by Judicial Council;
- A signed bid bond issued by a California admitted surety insurer on the form provided by Judicial Council (Document 00 43 13);
- Cash; or
- A cashier's check or a certified check, drawn to the order of Judicial Council.

Any form of Bid Security must be in the amount of ten percent (10%) of the total Base Bid (as defined in the General Conditions), plus any Alternate Bid Item(s) (if any)). The Bid Security is a guarantee that Bidder will, by the date set forth in the Notice of Award, enter into the Form of Contract with Judicial Council for the performance of the work described in the Contract Documents. The successful Bidder will forfeit its Bid Security if Bidder fails to execute the Contract for the Project by the date set forth in the Notice of Award.

15. The successful Bidder awarded the Contract for the Project will be required to furnish a 100% Performance Bond (in the form attached to the Form of Contract (**Exhibit H** (Document 00 61 14)) and a 100% Payment Bond (Contractor's Labor and Material Bond) (in the form attached to the Form of Contract (**Exhibit I** (Document 00 61 15))).

16. The successful Bidder and all Bidder's Subcontractors must pay all workers on work performed pursuant to a contract for the Project not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California ("DIR"), for the type of work performed and the locality in which the work is to be performed, pursuant to sections 1770 et seq. of the Labor Code. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the DIR, are on file at Judicial Council's principal office. Prevailing wage rates are also available from Judicial Council or on the internet at (<http://www.dir.ca.gov>).

The Project is subject to compliance monitoring and enforcement by the DIR. The successful Bidder must post job site notices, as prescribed by regulation. The successful Bidder must comply with all requirements of Labor Code section 1771.4, except the requirements that are exempted by the Labor Commissioner for the Project.

17. All Bidders must comply with the registration and compliance monitoring provisions of Labor Code section 1771.4, including furnishing its certified payroll records ("CPR(s)") to the Labor Commissioner of California and complying with any applicable enforcement by the DIR. Labor Code section 1771.1, subdivision (a) states the following:

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

18. This Notice to Bidders / Invitation to Bid, as well as Document 00 01 01 through Document 00 45 05, are available on Judicial Council's website at: <http://www.courts.ca.gov/rfps.htm>. Judicial Council will share the Drawings and Specifications (as defined in the General Conditions) directly with Bidders through an **Electronic File Transfer Process**. The Division 1 Documents and Division 2 through Division 49 Documents will be attached as **Exhibit R** (Document 00 91 14) and **Exhibit S** (Document 00 91 15) to the Contract awarded to the successful Bidder.

19. Judicial Council will award the Contract to the lowest responsive and responsible Bidder based on the total of the Base Bid (as defined in the Bid Form), **PLUS** the additive and deductive Alternate Bid Item(s) (as defined in the General Conditions), **AND** Unit Price(s) (as described in the Bid Form), **AND** the Compensable Delay Bid Rate (as defined in the Bid Form) all of which are identified in the Bid Form. If the lowest Bidder's Bid is either nonresponsive, or Bidder refuses or fails to execute the Contract, then Judicial Council, if it determines it is in the best interest of the State of California, may, in its sole and absolute discretion, award the Contract to the second low Bidder. If the second low Bidder's Bid is either nonresponsive, or Bidder refuses or fails to execute the Contract, then Judicial Council may award the Contract to the third low Bidder.

20. To the furthest extent permitted by applicable law, Judicial Council reserves the right to reject any and all Bids and/or waive any irregularity in any Bid received. If Judicial Council awards the Contract, the Bid Security of the unsuccessful Bidder(s) will be returned within **NINETY (90) calendar days** from the time the award is made, unless Judicial Council is permitted to foreclose on the Bid Security. Unless otherwise required by law, no Bidder may withdraw its Bid for **NINETY (90) calendar days** after the date of the Bid opening, and Bids will remain open for that period.

END OF DOCUMENT

DOCUMENT 00 21 13

INSTRUCTIONS TO BIDDERS

Bidders must follow the instructions in this Instruction to Bidders, and submit all documents, forms, and information required for the submission of a Bid.

1. **Contract Documents.** The Notice to Bidders / Invitation to Bid (Document 00 11 16) (“Invitation to Bid”), these Instructions to Bidders, and every document referenced herein and submitted with a Bid, will be read collectively with, and comprise a part of, the “Contract Documents” as defined in the General Conditions (**Exhibit M** (Document 00 70 00) (“General Conditions”) attached to the Construction Agreement (Design-Bid-Build) Coversheet and Construction Agreement (Design-Bid-Build Agreement) (Document 00 45 10) (“Form of Contract”). Any capitalized term not defined herein shall have the same definition given to it in the Contract Documents, including, without limitation, the General Conditions, and interpreted as set forth based on the order of precedence set forth in the Form of Contract.
2. **Basis of Award.** Judicial Council will evaluate Bidder’s Bid and award the Contract to the lowest responsive and responsible Bidder as further set forth in the Invitation to Bid. If the lowest Bidder’s Bid is either nonresponsive, or Bidder refuses or fails to execute the Contract, then Judicial Council, if it determines it is in the best interest of the State of California, may, in its sole and absolute discretion, award the Contract to the second low Bidder. If the second low Bidder’s Bid is either nonresponsive, or Bidder refuses or fails to execute the Contract, then Judicial Council may award the Contract to the third low Bidder. For information related to nonresponsive bids, the rejection of bids, and non-responsibility, refer to the “Rejection of Bids” and “Bidder Responsibility” sections below.
3. **Project.** Bids are invited for the following Project, as further described in the Contract Documents:

**Central Justice Center
Fire Life Safety Building Deficiency Corrections
Floors 1, 2 and 3
700 West Civic Center Drive, Santa Ana, CA Bldg. ID 30-A1**

- a. For more information regarding the scope of Work on the Project review the Contract Documents, including the:
 - i. Project Description (**Exhibit A** (Document 00 45 30) attached to the Form of Contract;
 - ii. General Conditions;
 - iii. List of Drawings, Tables and Schedules (Document 00 01 15);
 - iv. Division 1 Documents attached to the Form of Contract (**Exhibit R** (00 91 14)); and
 - v. Division 2 through Division 49 Documents attached to the Form of Contract (**Exhibit S** (00 91 15)).
4. **Mandatory Prequalification.** Every Bidder is required to have been prequalified with Judicial Council to submit a Bid for this Project during the RFQ process for this Project, as set forth in the Invitation to Bid. **Bids from contractors other than Prequalified Bidders will be rejected and returned.**
5. **Electronic Bids.**
 - a. Judicial Council will receive Bids **electronically** through the Online Submission. Bidders must submit Bids through the Online Submittal on or before **10:00 a.m., November 11, 2022**, via email to: RFP-FS-2021-22-JP-Santa-Ana-Submit-Bids@jud.ca.gov. **Bids received after this time will be determined nonresponsive.**

- b. The Bid must be in .pdf format and:
 - i. Be **ONE (1)** file that includes all documents required by these Instruction to Bidders; and
 - ii. The **file name** must clearly indicate the content of the .pdf file, and must include in the file's title, at a minimum: (i) Bidder's name; (ii) the Project solicitation number RFP-FS-2021-22-JP; and (iii) the date of submission.
 - c. The **subject line** submitted to the Online Submittal must include: (i) the Project solicitation number RFP-FS-2021-22-JP; and (ii) the name of Bidder.
 - d. Electronic submission of the Bid through Online Submission may not be instantaneous, and it may take time for the Bid to be transmitted to Judicial Council. Judicial Council will provide a confirmation of the date and time of the receipt of a Bid by responsive email. Bidders are responsible for ensuring that their Bid is timely transmitted and is successfully received by Judicial Council.
6. **Claims of Mistaken Bids.** Although this Project is not subject to the Public Contract Code, Judicial Council has elected to apply Public Contract Code section 5100 et seq. to any request to withdraw a Bid made **after** the time for opening of Bids. Any claim by Bidder that its Bid contains an error, or request for relief from its Bid, made **after** the time for opening of Bids, must be made in compliance with Public Contract Code section 5100 et seq. Upon written request, Bidder may withdraw its Bid **prior** to the time for opening of Bids without forfeiting its Bid Security. Any request to withdraw a Bid must be executed by the Bidder or its duly authorized representative. Bidder's withdrawal of its Bid does not prejudice the Bidder's right to submit a new Bid **before** the time of Bid opening.
7. **Bid Opening.** Bids will be opened at or after the time indicated in the Invitation for Bids.
8. **Complete Bids.** Bidder must supply all information required by each document identified herein (collectively, "Bid Document(s)"). Bids must be full and complete. Judicial Council reserves the right in its sole discretion to determine any Bid nonresponsive due to any error or omission in the submitted Bid and/or Bid Documents. Bidder must complete and submit all of the following Bid Documents as its Bid:
- a. Bid Form (Document 00 41 13)
 - b. Bid Bond (Document 00 43 13), unless Bidder will use alternative Bid Security
 - c. Designated Subcontractors List (Document 00 43 36)
 - d. Disabled Veteran Business Enterprise Certification (**Bid Version**) (Document 00 43 37)
 - e. Non collusion Declaration (Document 00 43 40)
 - f. Iran Contracting Act Certification (Document 00 43 50)
9. **Use of Required Bid Form and Other Forms.** Bidder must utilize the Bid Form and the above-referenced Judicial Council-provided forms. Bids not submitted on the Bid Form, and any other forms provided by Judicial Council, will be determined nonresponsive. Additional sheets of paper required to fully respond to requested information are permissible. Bidder must **not** modify the Bid Form or otherwise qualify its Bid. Bidder must not submit re-typed, word-process, or otherwise recreated versions of the Bid Form or the above-referenced Judicial Council-provided forms.
10. **Bid Bond or Other Security.** As security for its Bid, Bidder must provide one of the following with its Bid Form (each, "Bid Security"):

- a. An electronic bid bond issued by a California admitted surety insurer submitted using an electronic registry service approved by Judicial Council;
- b. A signed bid bond issued by a California admitted surety insurer on the form provided by Judicial Council (Document 00 43 13);
- c. Cash; or
- d. A cashier's check or a certified check, drawn to the order of Judicial Council.

Any form of Bid Security must be in the amount of ten percent (10%) of the total Base Bid (as defined in the General Conditions), plus any Alternate Bid Item(s)). The Bid Security is a guarantee that Bidder will, by the date set forth in the Notice of Award, enter into the Form of Contract with Judicial Council for the performance of the work described in the Contract Documents. The successful Bidder will forfeit its Bid Security if Bidder fails to execute the Contract for the Project by the date set forth in the Notice of Award. **Bids submitted without the required Bid Security will be determined nonresponsive.**

- 11. **Designated Subcontractors List.** Bidder must submit the Designated Subcontractors List (Document 00 43 36) with its Bid for those subcontractors who will perform any portion of work, including labor, rendering of services, or specially fabricating and installing a portion of the Work according to detailed drawings contained in the Drawings and Specifications, in excess of one half of one percent (0.5%) of the total Bid. Failure to fully complete and submit this list when required by law and herein will result in a Bid being determined nonresponsive.
- 12. **Disabled Veteran Business Enterprise Certification (Bid Version).** Bidder must submit the Disabled Veteran Business Enterprise Certification (**Bid Version**) (Document 00 43 37) with its Bid. A Bid submitted without the Disabled Veteran Business Enterprise Certification (**Bid Version**) will be determined nonresponsive.
- 13. **Non collusion Declaration.** Bidder must submit the Non collusion Declaration (Document 00 43 40) with its Bid. A Bid submitted without the Non collusion Declaration will be determined nonresponsive.
- 14. **Iran Contracting Act Certification.** Bidder must submit the Iran Contracting Act Certification (Document 00 43 50) with its Bid. A Bid submitted without the Iran Contracting Act Certification will be determined nonresponsive.
- 15. **Bidder Requirements.**
 - a. Bidder must be licensed with the license classification(s) identified in the Invitation to Bid at the time Bidder submits its Bid. Judicial Council will verify licensure either by confirming the license status with the Contractors State License Board, or by requiring Bidder to present its pocket license or certificate of licensure and provide a signed statement which swears, under the penalty of perjury, that the pocket license or certificate of licensure presented is current and valid and is in a classification(s) appropriate to perform the Work.
 - b. A person or entity who has been convicted of violating a state or federal law respecting the employment of undocumented workers within the past **FIVE (5) years** will not be eligible to submit a Bid or be awarded a contract, for the Project. No contractor or subcontractor who is ineligible to bid or work on or be awarded a public works project pursuant to sections 1777.1 or 1777.2 of the Labor Code, is eligible to bid, be awarded a Contract, or otherwise perform work on the Project.
- 16. **Erasures.** The Bid must be clearly written without erasure or deletions. Judicial Council reserves the right to reject any Bid containing erasures or deletions.
- 17. **Prevailing Wages.** The successful Bidder and all Bidder's Subcontractors pay all workers on Work performed pursuant to the Contract Documents not less than the general prevailing rate of per diem wages

and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California (“DIR”), for the type of work performed and the locality in which the work is to be performed, pursuant to sections 1770 et seq. of the Labor Code. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the DIR, are on file at Judicial Council’s principal office. Prevailing wage rates are also available from Judicial Council or on the internet at (<http://www.dir.ca.gov>).

The Project is subject to compliance monitoring and enforcement by the DIR. The successful Bidder must post job site notices, as prescribed by regulation. The successful Bidder will comply with all requirements of Labor Code section 1771.4, except the requirements that are exempted by the Labor Commissioner for the Project.

18. **Contractor Registration.** All Bidders must comply with the registration and compliance monitoring provisions of Labor Code section 1771.4, including furnishing its certified payroll records (“CPR(s)”) to the Labor Commissioner of California and complying with any applicable enforcement by the Department of Industrial Relations (“DIR”). Labor Code section 1771.1, subdivision (a) states the following:

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

19. **DVBE.** Section 999.2 of the Military and Veterans Code and, if applicable, section 10115.12 of the Public Contract Code require Judicial Council to have a participation goal for Disabled Veteran Business Enterprises (“DVBE”) of at least three percent (3%) per year of the overall dollar amount expended on construction projects. The successful Bidder must submit certification of compliance with the procedures for implementation of DVBE contracting goals with the signed Contract. The Disabled Veteran Business Certification Participation Form (**Exhibit D** (Document 00 45 55)) must be submitted during the construction of the Project as indicated in the Contract Documents.

20. **Conditions Shown on the Contract Documents.**

- a. Information as to underground conditions, “as-built” conditions, or other conditions or obstructions, indicated in the Contract Documents, including, without limitation, in the Documentation Regarding Project Site (Document 00 31 19), Drawings, or Specifications, has been obtained with reasonable care, and has been recorded in good faith. Judicial Council will not be responsible for accuracy of such information, and only warrants, and Bidder agrees, that Bidder may only rely on the accuracy of limited types of information, as strictly set forth below:
- i. As to above-ground conditions or “as-built” conditions shown or indicated in the Contract Documents, there is no warranty, express or implied, or any representation express or implied, that such information is correctly shown or indicated. This information is verifiable by independent investigation and Bidder is required to make such verification as a condition to submitting its Bid. In submitting its Bid, Bidder will rely on the results of its own independent investigation. In submitting its Bid, Bidder will not rely on Judicial Council-supplied information regarding above-ground conditions or “as-built” conditions.
 - ii. As to any subsurface condition shown or indicated in the Contract Documents, Bidder may rely only upon the general accuracy of actual reported: (i) depths; (ii) character of materials; (iii) soil types; (iv) water conditions; and (v) obstructions shown or indicated. Judicial Council is not responsible for the completeness of such information for bidding or

construction, nor is Judicial Council responsible in any way for subsurface conditions not specifically shown if those subsurface conditions are reasonably determinable by above-ground conditions or “as-built” conditions (e.g., subsurface soil conditions in areas contiguous to areas where an above-ground condition is shown; utility pipes between a manhole and a water source, etc.).

- b. Further, reference is made to the document titled Existing Information and Documentation Regarding Project Site (Document 00 31 19), for identification of:
 - i. Subsurface Conditions. Those reports of explorations and tests of subsurface conditions at or contiguous to the Project Site that have been utilized by Architect in preparing the Contract Documents; and
 - ii. Physical Conditions. Those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Project Site that has been utilized by Architect in preparing the Contract Documents.

These reports and drawings are **not** Contract Documents and, except for any “technical” data regarding subsurface conditions specifically identified in Existing Information and Documentation Regarding Project Site (Document 00 31 19), and underground facilities data, Bidder may not in any manner rely on the information in these reports and drawings. Subject to the foregoing, Bidder must make its own independent investigation of all conditions affecting the Work and must not rely on information provided by Judicial Council.

21. **Bidder Diligence**. Submission of a Bid signifies careful examination of the Contract Documents and a complete understanding of the nature, extent, and location of Work to be performed. Bidder must complete the tasks listed below, and any other examination requirement in the Contract Documents, as a condition of submitting a Bid. Bidder agrees and expressly represents to Judicial Council by submitting its Bid that Bidder has fully completed **all** the following:

- a. Bidder has visited the Premises and Site, if required, and has examined thoroughly and understood the nature and extent of the Contract Documents, Work, Premises, Site, locality, actual conditions, “as-built” conditions, and all local conditions and federal, state and local laws, and regulations that in any manner may affect cost, progress, performance, or furnishing of Work or that relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto.
- b. Bidder obtained, and has understood, all examinations, investigations, explorations, tests, reports, and studies that pertain to the subsurface conditions, “as-built” conditions, underground facilities, and all other physical conditions at or contiguous to the Site or otherwise that may affect the cost, progress, performance, or furnishing of Work, as Bidder considers necessary for the performance or furnishing of Work at the Contract Price, within the Contract Time, and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of the General Conditions. Bidder has notified Judicial Council if it contends that it requires additional examinations, investigations, explorations, tests, reports, studies, or similar information or data prior to that performance of the Work. If no notice is given, no additional examinations, investigations, explorations, tests, reports, studies, or similar information or data are or will be required by Bidder for such purposes.
- c. Bidder acknowledges and agrees that it had the opportunity to examine any available “as-built” and/or drawings of previous work upon giving Judicial Council reasonable advance notice and has reviewed the document entitled Existing Information and Documentation Regarding Project Site (Document 00 31 19) which addresses all supplied “as-built” drawings and/or record drawings.

- d. Bidder has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents.
 - e. Bidder has given Judicial Council prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and the actual conditions, and the written resolution thereof by Judicial Council is acceptable to Bidder.
 - f. Bidder has made a complete disclosure in writing to Judicial Council of all facts bearing upon any possible conflict of interest based on the applicable provisions of the General Conditions.
 - g. Bidder has included in its Bid the entire cost of all work “incidental” to completion of the Work, and reasonably inferable as being required to complete the Work, in compliance with the requirements of the Contract Documents.
22. **Questions.** Questions regarding this Project, the Contract Documents, or a Bid must be submitted on or before the date set forth in the Invitation to Bid for submission of written questions. Questions received after the date specified in the Invitation to Bid will **not** be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
23. **Addenda.** Judicial Council may also issue Addenda to modify parts of the Contract Documents as determined necessary by Judicial Council, in its sole and absolute discretion. Bidder must acknowledge each Addendum in its Bid Form by number, or its Bid will be determined nonresponsive. Each Addendum will become part of the Contract Documents. A complete listing of Addenda may be obtained on Judicial Council’s website at: <http://www.courts.ca.gov/rfps.htm>. **Bidders are solely responsible for reviewing the website for the issuance of Addenda. Judicial Council will not issue Addenda directly to Bidders. Judicial Council is not responsible for a Bidder’s failure to locate Addenda on Judicial Council’s website and acknowledge receipt in the Bid Form.**
24. **Substitution for Specified Items.** For this Project, Judicial Council will **NOT** consider pre-Bid Requests for Substitution. Such requests shall be considered after award of the Contract consistent with the requirements of the Contract Documents.
25. **Notice of Award.** Judicial Council will award a Contract for the Project, if it awards it at all, to the lowest responsive and responsible Bidder consistent with the Invitation to Bid and these Instruction to Bidders. The Bidder awarded the Contract must execute and submit the following documents by **5:00 p.m.** on the **FIFTH (5th) Business Day** following the date of the Notice of Award. Failure to properly and timely submit these documents entitles Judicial Council to, among other remedies, make a claim against Bidder’s Bid Bond or other Bid Security. The proceeds thereof will be retained by Judicial Council.
- a. **Contract.** An executed, electronic copy of the Construction Agreement (Design-Bid-Build) Coversheet and Construction Agreement (Design-Bid-Build Agreement) (Document 00 45 10), or as later directed by Judicial Council after issuance of the Notice of Award based on the terms set forth in the Notice of Award.
 - b. **Certifications.** Certifications to be Completed by Contractor (**Exhibit B** to the Form of Contract (Document 00 45 40)).
 - c. **Escrow of Bid Documentation.** All Escrow of Bid Documentation (**Exhibit E** to the Form of Contract (Document 00 54 50)), including all documentation required therein. For more information, see the instructions in the Escrow of Bid Documentation (**Exhibit E** to the Contract (Document 00 54 50)).
 - d. **Bonds.** Performance Bond in the form included in **Exhibit H** (Document 00 61 14) to the Form of Contract, **and** Payment Bond in the form included in **Exhibit I** (Document 00 61 15) to the Form

of Contract, both fully executed consistent with the requirements of, and in the amounts identified in, the Contract Documents.

e. **Insurance.** Insurance Certificates and Endorsements as required by the Contract Documents.

26. Notice to Proceed. Judicial Council expects to issue a Notice to Proceed within **THREE (3)** months from the date of the Notice of Award. Upon receipt of the Notice to Proceed, Bidder will commence Work as described in the Notice to Proceed. Bidder will complete Work within the Contract Time as indicated in the Contract Documents. Bidder expressly understands that Bidder will not be entitled to any additional compensation or additional time when the Notice to Proceed is issued within the **THREE (3)** month period. **Bidder will be solely responsible for any escalation in costs of labor or materials during the THREE (3) month period.**

a. Judicial Council may postpone issuing the Notice to Proceed beyond the **THREE (3)** month period, upon reasonable notice to Bidder (“Notice of Postponement”).

b. Bidder expressly understands that Bidder will not be entitled to any additional compensation Bidder alleges results from the postponement of the issuance of the Notice to Proceed beyond the **THREE (3)** month period. If Bidder reasonably believes that Judicial Council’s postponement of a Notice to Proceed will cause Bidder undue hardship, Bidder may terminate the Contract. Bidder’s termination due to a postponement beyond the **THREE (3)** month period must be made by written notice to Judicial Council within **SEVEN (7)** Days after receipt by Bidder of Judicial Council’s Notice of Postponement.

c. It is further understood by Bidder that, if Bidder terminates the Contract due to the postponement of the Notice to Proceed, Judicial Council will only be obligated to pay Bidder for the Work that Bidder: (i) has satisfactorily completed when the Notice of Postponement is issued, but **ONLY** if Judicial Council had in writing authorized Bidder to perform that Work prior to issuing a, or in the, Notice to Proceed; and (ii) has complied with the applicable provisions of the Contract Documents regarding Application for Payment(s). Bidder agrees that it is only entitled to bring a Claim for compensation arising from a Notice of Postponement pursuant to the Claims Resolution Process of the General Conditions. Bidder’s failure to comply with the Claims Resolution Process for any such Claim constitutes Bidder’s waiver of any such Claim.

d. If Bidder terminates the Contract due to a Notice of Postponement, Judicial Council may award the Contract to the next lowest responsive and responsible Bidder.

27. Bid Protests.

a. Bidders may only protest a decision of Judicial Council relating to the award of the Project (“Protest”) or a Bid as set forth herein (“Protest Procedures”). Failure of a Bidder to comply with the Protest Procedures, will result in the rejection of a Protest and a waiver of any further claim related thereto. A Bidder’s strict compliance with the Protest Procedures, which includes an appeal of a protest (“Protest Appeal”), shall be construed as an administrative remedy required to be exhausted as a condition precedent to initiating a lawsuit in any way concerning a Bid or the award of the Project.

b. **Submittal and Form of Protest & Response.**

i. **Transmittal of Protest (Manner & Time).**

(1) Any Protest must be in writing and sent by certified, or registered mail, or overnight delivery service (with proof of delivery) or delivered personally to Judicial Council at the following address at: Branch Accounting and Procurement | Administrative Division Judicial Council of California, 455 Golden Gate Avenue, San Francisco, CA 94102-3688.

- (2) If the Protest is hand-delivered, Bidder must obtain a receipt verifying the date and time of delivery. Bidder may also send a courtesy copy of the Protest to Judicial Council by email at solicitations@jud.ca.gov, but the courtesy copy is **not** an alternative to transmitting the Protest as indicated above.
 - (3) Judicial Council must receive a Protest no later than **FIVE (5)** Business Days after the earlier of: (i) Judicial Council notifies a Bidder that its Bid is nonresponsive or that Bidder is disqualified; or (ii) Judicial Council posts a notice of its intent to award the Contract on its website.
- ii. **Content of Protest.** The Protest **MUST** include all of the following:
- (1) The name, address, telephone and facsimile numbers, and email address of Bidder submitting the Protest (“Protesting Bidder”) and its representative authorized to legally bind Bidder;
 - (2) If the Protest challenges another Bidder(s)’ Bid(s), clear identification of the Bidder(s)’ Bid(s) that the Protesting Bidder challenges (“Challenged Bidder(s)), and include a copy(ies) of ANY document(s) in the Challenged Bidder(s)’ Bid(s) that form the basis of the Protest;
 - (3) Title of the Project, solicitation number, and any associated reference number for the Contract or Project for which the Protest is submitted;
 - (4) A detailed description of **ALL** specific legal and factual grounds forming the legal basis of the Protest and any legal authorities and/or supporting documentation and evidence. The description **MUST** include specific references to **ALL** provisions in the Bid Documents and/or Contract Documents, and applicable law, that support the legal basis for the protest, and any attached documents and/or evidence; and
 - (5) The specific ruling, relief, or remedy requested. If a Protest fails to include all required information, the protest will be rejected.
- iii. **Further Responses.** Judicial Council, at its sole discretion, may issue a decision regarding the Protest (“Protest Decision”) without requesting, or receiving, further information or documents from the Protesting Bidder or the Challenged Bidder(s). If a Challenged Bidder(s) desires to submit a response to the Protest (“Protest Response”), it must give Judicial Council notice of its intent to respond within **TWO (2)** Business Days of its receipt of a Protest by sending such notice by email to: solicitations@jud.ca.gov (“Protest Notice”). A Challenged Bidder must submit a Protest Response within **TWO (2)** Business Days of its transmittal of the Protest Notice. A Challenged Bidder’s failure to either timely submit the Protest Notice and/or Protest Response permits the Judicial Council to issue the Protest Decision without considering any further information. A Protesting Bidder is not entitled, nor must Judicial Council consider, any reply to the Protest Response.
- c. **Further Information.** Judicial Council may request additional information and any Bidder that is subject of the Protest shall reasonably cooperate with any such request. Any Bidder’s unreasonable failure to cooperate with Judicial Council and/or failure to provide reasonable information material to the issuance a Protest Decision shall provide grounds for Judicial Council to issue a Protest Decision adverse to the non-cooperative Bidder. If, in response to a request for further information, the Protesting Bidder later raises new grounds or evidence that were not included in the **INITIAL** Protest transmitted to Judicial Council and a Challenged Bidder(s), but which could have reasonably been included in the Protest, Judicial Council will not consider such new grounds or new evidence.

- d. **Protest Decision.** Judicial Council will issue a written Protest Decision after its review and consideration of the Protest, and if applicable, a Protest Response and any other supplemental information requested by Judicial Council.
 - e. **Appeals Process.** The Protest Decision shall be considered the final action by Judicial Council unless the protesting Bidder thereafter timely submits a Protest Appeal compliant with the requirements hereunder.
 - i. **Time to Submit Protest Appeal.** A Protest Appeal must be made in writing and submitted within **FIVE (5)** Business Days of the issuance of the Protest Decision. A Protest Appeal must be submitted to Judicial Council at: Branch Accounting and Procurement | Administrative Division Judicial Council of California 455 Golden Gate Avenue, San Francisco, CA 94102-3688.
 - ii. **Grounds for Protest Appeal.** The grounds for a Protest Appeal are specifically limited to:
 - (1) The discovery of facts and/or information related to the Protest, as originally submitted, that were not known to the Protesting Bidder, or could not have been reasonably discovered by the Protesting Bidder, at the time the Protest was originally submitted;
 - (2) Errors of fact in the Protest Decision, and such errors of fact were significant and material factors in the Protest Decision; and/or
 - (3) The Protest Decision was in error of law or regulation.
 - iii. **Content of Protest Appeal.** A Protest Appeal **MUST** include all the following:
 - (1) The name, address telephone and facsimile numbers, and email address of Bidder and their representative;
 - (2) A copy of Judicial Council’s decision; and
 - (3) The legal and factual basis for the appeal; and the ruling or relief requested.
 - iv. **Appeal Decision.** Upon the timely receipt of a Protest Appeal compliant with all the above requirements, Judicial Council will review the Protest Appeal and issue a final, written decision (“Appeal Decision”). There shall be no opportunity for the Protesting Bidder, or Challenged Bidder, to the extent applicable, to respond to the Appeal Protest. The Appeal Decision shall constitute the final action of Judicial Council with respect to the Protest Appeal.
 - f. **Protest Remedies.** If Judicial Council determines that the Protest or Protest Appeal is meritorious Judicial Council may take any action permitted by the Contract Documents and applicable law, including, without limitation, rejecting a Protest later determined erroneously granted during a Protest Appeal, awarding the Contract to the next lowest responsive and responsible Bidder, or rejecting all Bids.
28. **Rejection of Bids.** To the furthest extent permitted by applicable law, Judicial Council reserves the right to reject all Bids, to re-bid the Project, or to decide not to award the Contract for the Project at this time. Judicial Council also reserves the right to waive deviations determined inconsequential by Judicial Council, consistent with and to the furthest extent permitted by applicable law. Judicial Council reserves the right to reject Bids that are nonconforming, nonresponsive, unbalanced, or conditional Bids, or to reject the Bid of any Bidder if Judicial Council believes that it would not be in the best interest of Judicial Council to make an award to that Bidder, whether because the Bid is not responsive, Bidder is unqualified or of doubtful financial ability, or fails to meet any other standard or criteria established by Judicial Council. For purposes of this paragraph,

an “unbalanced” Bid is a Bid having nominal prices for work item(s) that represent substantive work and/or overly enhanced prices for nominal work item(s).

29. **Bidder Responsibility**. Prior to the award of Contract, Judicial Council reserves the right to consider the responsibility of Bidder. Judicial Council may conduct any investigations, and consider any facts, that Judicial Council deems necessary to assist in the evaluation of any Bid and to establish a Bidder’s responsibility, including, without limitation, qualifications, competence and financial ability of Bidders, the honesty of Bidders, proposed subcontractors, suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Judicial Council’s satisfaction within the prescribed time.

END OF DOCUMENT

DOCUMENT 00 31 19

EXISTING INFORMATION AND DOCUMENTATION REGARDING PROJECT SITE

1. Summary.

This document describes existing conditions at or near the Project, Site, and/or Premises and use of information available regarding such conditions. This document is **NOT** part of the Contract Documents. See the General Conditions for definition(s) of terms used herein.

All documents identified hereunder or included as existing information are being provided by Judicial Council through the Electronic File Transfer Process sent to the Bidders. For any information, document, or report, identified in the not provided in the Electronic File Transfer Process, Bidder/Contractor **MUST** request from Judicial Council a copy of any reports that it believes are necessary to perform the Work in a safe, efficient, and workman-like manner in compliance with the Contract Documents.

2. Reports and Information on Existing Conditions.

- a. Documents providing a general description of the Site, Premises and/or conditions of the Work may have been collected by Judicial Council, its consultants, contractors, and tenants. These documents may include previous contracts, contract specifications, tenant improvement contracts, “as-built” drawings, utility drawings, and information regarding underground facilities.
- b. Any information not provided in Electronic File Transfer Process regarding existing conditions may be inspected at Judicial Council offices or the Construction Manager’s offices, to the extent that Judicial Council possesses that information, and copies may be obtained at cost of reproduction and handling upon Bidder/Contractor’s agreement to pay for such copies. If Judicial Council has electronic copies, it will transmit those documents electronically to Bidder. These reports, documents, and other information are **not** part of the Contract Documents.
- c. Information regarding existing conditions may also be included in the Contract Documents but will **not** be considered part of the Contract Documents.
- d. The reports and other data or information regarding existing conditions and underground facilities at or contiguous to the Project are the following:
 - (1) **Central Justice Center Fire Sprinkler Study prepared by Salas O’Brien, dated April 2021 (Project Number: 2001747)**
 - (2) **Pre-Renovation ASBESTOS SURVEY REPORT CJC Fire Sprinkler Upgrade Project Floors 1-3**

3. Use of Information.

- a. Information regarding existing conditions was obtained only for use of Judicial Council and its consultants, contractors, and tenants for planning and design and is **not** part of the Contract Documents.
- b. Judicial Council does not warrant, and makes no representation regarding, the accuracy or thoroughness of any information regarding existing conditions. Bidder represents and agrees that in submitting a Bid it is not relying on any information regarding existing conditions supplied by Judicial Council.
- c. Consistent with the Bidder Diligence section of the “Instruction to Bidders,” under no circumstances will Judicial Council be determined to warrant or represent existing above-ground conditions, “as-built” conditions, or other actual conditions, verifiable by independent investigation. These conditions are verifiable by Bidder by the performance of its own independent investigation that Bidder must perform as a condition

to submitting a Bid as set forth in the Instruction to Bidders, and Bidder should not, and agrees it will not, rely on this information or any other information supplied by Judicial Council regarding existing conditions.

- d. Any information shown or indicated in the reports and other data supplied herein with respect to existing underground facilities at or contiguous to the Project may be based upon information and data furnished to Judicial Council by Judicial Council's employees and/or consultants or builders of such underground facilities or others. Judicial Council does not assume responsibility for the completeness of this information, and Bidder is solely responsible for any interpretation or conclusion drawn from this information.
- e. Judicial Council will be responsible only for the general accuracy of information regarding underground facilities, and only for those underground facilities that are owned by Judicial Council, and only where Bidder has conducted the independent investigation required of it pursuant to the Instructions to Bidders (Document 00 21 13), and discrepancies are not apparent.

4. Investigations/Site Examinations.

- a. Before submitting a Bid, each Bidder is responsible for conducting or obtaining any additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and underground facilities) at or contiguous to the Site and/or Premises, or that may affect cost, progress, performance, or furnishing of Work or that relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by Bidder, and safety precautions and programs incident thereto, or that Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price, and other terms and conditions of Contract Documents.
- b. Upon request, Judicial Council will provide each Bidder access to the Site and/or Premises to conduct such examinations, investigations, explorations, tests, and studies, as each Bidder deems necessary for submission of a Bid. Bidders must fill all holes and clean up and restore the Site and/or Premises to its former condition upon completion of its explorations, investigations, tests, and studies. Such investigations and Site examinations may be performed during any visit of the Site and/or Premises indicated in the Invitation to Bid, with Judicial Council's prior written approval, and consistent with the Contract Documents, including, but not limited to, the requirement to provide proof of insurance, indemnify Judicial Council against claims arising from such work

END OF DOCUMENT

DOCUMENT 00 41 13

BID FORM

To: **Judicial Council of California** (“Judicial Council”)

From: _____
(Proper Name of Bidder)

Project: **Central Justice Center, Fire Life Safety Building Deficiency Corrections, Floors 1, 2 and 3,
700 West, Civic Center Drive, Santa Ana, CA, Bldg. ID 30-A1**

1. **Defined Terms.** This document is part of the Contract Documents (as defined in the General Conditions) for the Project and any capitalized term herein shall be given the same meaning as in the Contract Documents, unless specifically defined herein.
2. **Calculation of Bidder’s Bid & Award of Project.** Bidder’s Bid price shall be calculated by adding the Base Bid (defined below), with the amounts for Alternate Bid Item(s), Unit Price(s), and the Compensable Delay Bid Rate if any (e.g., Bid = Base Bid + Alternate Bid Item(s) (if any) + Unit Price(s) (if any) + Compensable Delay Bid Rate). The lowest Bid shall be the Bid that presents the lowest total price. Judicial Council will award a Contract, if at all, to the lowest responsible Bidder as further described in the Invitation to Bid.
3. **Bidder’s Bid.** The undersigned declares that it has read the Contract Documents including, without limitation, the Invitation to Bid, the Instructions to Bidders, the Contract and all Exhibits thereto, and all information provided by Judicial Council related to the Project and/or Work, and agrees and proposes to furnish all necessary labor, materials, and equipment to perform and furnish all Work in accordance with the terms and conditions of the Contract Documents, including, without limitation, the General Conditions, Special Conditions, and Drawings and Specifications for the Project, and will accept in full payment for that Work the following total lump sum amount, if any, all taxes included:

a. **Base Bid.**

<hr/>	Dollars (“Fire Life Safety”)	\$ _____
Fire Life Safety Bldg. Deficiency Corrections		
<hr/>	Dollars (“BMS Upgrade”)	\$ _____
Building Management System (BMS) Upgrade		
<hr/>	Dollars (“BASE BID”)	\$ _____
TOTAL BASE BID		

b. **Alternate Bid Items (Additive/Deductive Alternates).** – None.

4. **Unit Price(s).** The Base Bid includes the following Unit Price(s), which the Bidder must provide, and Judicial Council may, at its discretion, utilize in valuing any additive and/or deductive Change Order(s):

Provide unit prices to install Hilti Firestop Systems for a complete and functional fire and electrical system pursuant to the quantity shown on Sheet A5.2 drawing. Adjustment to added quantities will be made by Change Order to the Contract Sum.

<p>Unit Price 1:</p> <p>Unit Price for nominal pipe size <2" (SINGLE) two hundred (200) penetrations as specified in Section 01 22 00 - Unit Prices.</p>	<p>\$ _____ Dollars Per _</p>
<p>Unit Price 2:</p> <p>Unit Price for nominal pipe size <2" (MULTIPLE) fifty (50) penetrations as specified in Section 01 22 00 - Unit Prices.</p>	<p>\$ _____ Dollars Per _</p>
<p>Unit Price 3:</p> <p>Unit Price for nominal pipe size 2" forty (40) penetrations as specified in Section 01 22 00 - Unit Prices.</p>	<p>\$ _____ Dollars Per _</p>
<p>Unit Price 4:</p> <p>Unit Price for nominal pipe size 3" forty (40) penetrations as specified in Section 01 22 00 - Unit Prices.</p>	<p>\$ _____ Dollars Per _</p>
<p>Unit Price 5:</p> <p>Unit Price for nominal pipe size 4" forty (40) penetrations as specified in Section 01 22 00 - Unit Prices.</p>	<p>\$ _____ Dollars Per _</p>
<p>Unit Price 6:</p> <p>Unit Price for nominal pipe size 5" forty (40) penetrations as specified in Section 01 22 00 - Unit Prices.</p>	<p>\$ _____ Dollars Per _</p>
<p>Unit Price 7:</p> <p>Unit Price for nominal pipe size 6" forty (40) penetrations as specified in Section 01 22 00 - Unit Prices.</p>	<p>\$ _____ Dollars Per _</p>
<p>Unit Price 8:</p> <p>Unit Price for nominal pipe size >6" twenty (20) penetrations as specified in Section 01 22 00 - Unit Prices.</p>	<p>\$ _____ Dollars Per _</p>
<p>Unit Price 9:</p> <p>Unit Price for nominal pipe size 8" forty-eight (48) penetrations as specified in Section 01 22 00 - Unit Prices.</p>	<p>\$ _____ Dollars Per _</p>

5. Judicial Council will aggregate the total Unit Price(s) and add the total with the Total Base Bid, Alternate Bid Item(s), and Compensable Delay Bid Rate, if any, to arrive at Bidder's Bid price. **If there is any discrepancy between the Base Bid and the Unit Price(s) for the specific scope of Work to which the Unit Price(s) apply, the Unit Price(s) shall prevail. In such an event, the Base Bid will be adjusted consistent with the Unit Price(s).**

6. **Daily Rate for Compensable Delays.** Bidder shall determine and provide a daily rate in the "Daily Rate" box below for Compensable Delay that will be compensation for each day of Compensable Delay ("Compensable Delay Rate") approved by Judicial Council during the performance of the Work. The Compensable Delay Rate will **NOT** be included in the Contract Price. The Compensable Delay Rate will be utilized by Judicial Council to calculate any adjustment to the Contract Price for approved Compensable Delay during the Project. **The Compensable Delay Rate will apply until the Completion of the Project and shall NOT be adjusted.**

$$\$ \begin{array}{|c|c|} \hline & \\ \hline \end{array} , \begin{array}{|c|c|c|} \hline & & \\ \hline \end{array} \text{ Daily Rate} \cdot \begin{array}{|c|c|} \hline & \\ \hline \end{array} \times \begin{array}{|c|} \hline [72] \\ \hline \end{array} \text{ Multiplier}$$

(Place figures in appropriate boxes)

- a. Bidder shall not include an amount less than zero dollars for the "Daily Rate" above (i.e., the daily rate cannot be a negative number). If Bidder fails to include a dollar figure for the "Daily Rate" above, Judicial Council will interpret the Bid as offering a daily Compensable Delay rate of "Zero Dollars" (\$0.00). **Bidder's inadvertent omission of the above rate for Compensable Delay shall NOT be an arithmetic error sufficient to constitute a mistake and permit Bidder to withdraw its Bid.** Judicial Council will multiply Bidder's proposed "Daily Rate" by the "Multiplier" above to arrive at the "Compensable Delay Bid Rate" (Delay Rate x Multiplier = Compensable Delay Bid Rate). The Compensable Delay Rate will be added to the Total Base Bid, and Unit Price(s) and Alternate Bid item(s), if any, to arrive at Bidder's total Bid for the Project. The number of days of Compensable Delay shown as a "Multiplier" above is not intended as an estimate of the number of days of Compensable Delay anticipated by Judicial Council. The actual number of days of Compensable Delay may be greater or lesser than the "Multiplier" shown above.

- c. By submitting the Bid, Bidder agrees that the Compensable Delay Rate will be the total amount Bidder will be entitled to for each day of Compensable Delay approved by Judicial Council during the performance of the Work and shall constitute payment in full for all delay costs, direct or indirect (including, without limitation, compensation for all extended home office overhead and extended general conditions), of Bidder and all Subcontractors, suppliers, persons, and entities under Bidder on the Project claiming any compensation for Compensable Delay. Judicial Council will only pay Bidder the Compensable Delay Rate for the actual number of days of Compensable Delay substantiated by Bidder and approved by Judicial Council consistent with the requirements of the Contract Documents.

7. **Allowance(s).** The Base Bid will **NOT** include the following potential Allowance(s). Judicial Council will add some or all of the following Allowance(s) amount(s) to the successful Bidder's Contract, at Judicial Council's sole discretion. Bidder will be permitted to invoice for Work under an Allowance(s) in the identical structure as a Change Order consistent with the requirements of the Contract Documents. **For this project, the Judicial Council in not allowing any allowances.**

8. **DVBE Certification.** Bidder must submit with its Bid the Disabled Business Enterprise (“DVBE”) Certification (**Bid Version**) (Document 00 43 37) and include the information required for each DVBE Subcontractor. This is a condition of bidding and is in addition to any other requirement in the Contract Documents with respect to DVBE compliance.

9. **Contract Review.** Bidder has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Bid, understands the construction and project management function(s) described in the Contract Documents, and all applicable contract provisions governing the Project, Premises, Site and the Work, including, without limitations, provisions for changes in the Work and delay, liquidated damages, indemnification and insurance. Bidder has undertaken all Site examination requirements set forth in the Contract Documents and has satisfied itself of all existing Site conditions that Bidder is required to investigate and discover consistent with the Site examination requirements of the Contract Documents. Bidder fully understands and agrees that the Bidder awarded the Contract will be in fact a prime contractor, not a subcontractor, to Judicial Council, and agrees that its Bid, if accepted by Judicial Council, will be the basis for Bidder to enter into a Contract with Judicial Council in accordance with the intent of the Contract Documents.

10. **Requests for Clarification.** The undersigned has notified Judicial Council in writing of any discrepancies or omissions in, or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents and has contacted Judicial Council before Bid opening to verify the issuance of any clarifying Addenda and, if issued, has reviewed and verified any such clarifications.

11. **Contract Time.** The undersigned, agrees to commence Work under a contract on the date established in the Contract Documents and to complete all Work within the time specified in the Contract Documents.

12. **Contractual Provisions.** The undersigned hereby acknowledges all provisions in the Contract Documents, including, without limitation, the General Conditions (Document 00 70 00), and agrees to be bound by all contractual provisions therein, including, without limitation the following provisions:
 - a. Liquidated damages;
 - b. Indemnification;
 - c. Force majeure;
 - d. Infectious Disease;
 - e. Changes in the Work provision(s) that limit the permitted charges and mark-ups on Change Orders and on the amount of home office overhead that Bidder may request from Judicial Council;
 - f. Extensions of Time – Liquidated Damages provision(s) that set forth applicable provisions related to seeking extensions to the Contract Time;
 - g. Insurance and Bonds provision(s) that set forth the applicable policies of insurance and bonds that Bidder will provide to perform the Work; and
 - h. Claims Resolution provision(s) that delineate the required process to submit and resolve disputes and Claims.

13. **Bid Open for 90 Days.** Judicial Council reserves the right to reject this Bid and the Bid shall be open to acceptance and is irrevocable for a period of **NINETY (90) calendar days following the date bids are due.**

14. **Attachments.** The following documents are attached hereto:
 - a. The Bid Bond (Document 00 43 13) or other Bid Security
 - b. The Designated Subcontractors List (Document 00 43 36)
 - c. Disabled Business Enterprise (“DVBE”) Certification (**Bid Version**) (Document 00 43 37)
 - d. The Non collusion Declaration (Document 00 43 40)
 - e. Iran Contracting Act Certification (Document 00 43 50)

15. **Addenda Acknowledgement.** Receipt and acceptance of the following Addendum(a) is hereby acknowledged:

No. _____, Dated _____	No. _____, Dated _____
------------------------	------------------------

No. _____, Dated _____	No. _____, Dated _____
No. _____, Dated _____	No. _____, Dated _____
<input type="checkbox"/> Or check here if no Addenda were issued.	

BIDDER MUST ATTACH ADDITIONAL SHEETS OF PAPER ACKNOWLEDGING ADDITIONAL ADDENDA IF THE ABOVE SPACES ARE INSUFFICIENT.

16. **Bidder's License.** Bidder acknowledges that any license required for performance of the Work is stated in the Invitation to Bid. Bidder certifies that at the time it submits this Bid and the award it has any license required to perform the Work and shall during all Work performed under the Contract, be licensed by the State of California to do the type of Work required under the terms of the Contract Documents. Bidder further certifies that it is regularly engaged in the general class and type of Work called for in the Contract Documents.
17. **Labor Harmony.** The undersigned hereby certifies that Bidder can furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.
18. **DIR Registration.** Bidder will ensure that it and its Subcontractors comply with the registration and compliance monitoring provisions of Labor Code section 1771.4, including furnishing its CPRs to the Labor Commissioner, and are registered pursuant to Labor Code section 1725.5.
19. **Prequalification.** Bidder confirms that it has been prequalified by Judicial Council.
20. **SWPPP QSP.** To the extent applicable, Bidder specifically acknowledges and understands that if awarded a Contract for the Project, it must perform all Work related to being Judicial Council's Qualified SWPPP (Storm Water Pollution Prevention Plan) Practitioner ("QSP") and that Bidder is certified to be Judicial Council's QSP as required by the current California State Water Board's Construction General Permit.
21. **General Acknowledgement.** Bidder represents that it is competent, knowledgeable, and has special skills with respect to the nature, extent, and inherent conditions of the Work to be performed. Bidder further acknowledges that there are certain peculiar and inherent conditions existent in the construction of the Work that may create, during the Work, unusual or peculiar unsafe conditions hazardous to persons and property, which may include, without limitation, Unforeseen Site Conditions. Bidder expressly acknowledges that it is aware of such peculiar risks and that it has the skill and experience to foresee and to adopt protective measures to adequately and safely perform the Work with respect to such hazards.
22. **False Claims Act.** Bidder expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False Claims Act, Cal. Gov. Code, § 12650 et seq.), Judicial Council will be entitled to civil remedies set forth in the California False Claim Act. Such false claims may also be considered fraud and Bidder may be subject to criminal prosecution, and a finding of non-responsibility by Judicial Council and/or debarment proceedings.

The undersigned, is authorized to legally bind Bidder and submit this Bid on behalf of Bidder, hereby certifies to Judicial Council that all representations, certifications, and statements made by Bidder, as set forth in this Bid Form, and any document attached thereto, are true and correct and are made under penalty of perjury.

Dated this _____ day of _____ 20 _____

Signature _____

Signed by (Print Name) _____

Title of Person Signing _____

Name of Bidder _____

Type of Organization _____

Address of Bidder _____

Taxpayer's Identification No. of Bidder _____

Telephone Number _____

Fax Number _____

E-mail _____ Web page _____

Bidder's DIR Registration No.: No.: _____

Contractor's License No(s): No.: _____ Class: _____ Expiration Date: _____

No.: _____ Class: _____ Expiration Date: _____

No.: _____ Class: _____ Expiration Date: _____

If Bidder is a corporation, provide the following:

Name of Corporation: _____

President: _____

Secretary: _____

Treasurer: _____

Manager: _____

DOCUMENT 00 43 13

BID BOND (SECURITY)

**(Note: If Bidder is providing a bid bond as its bid security,
Bidder must use this form, NOT a surety company form.)**

That the undersigned, _____ as Principal (“Principal”),
and _____ as Surety (“Surety”),

a corporation organized and existing under and by virtue of the laws of the State of _____

and authorized to do business as a surety in the State of California, are held and firmly bound unto the

Judicial Council of California (“Judicial Council” or “Obligee”) of the State of California as Obligee, in the sum of

_____ (\$ _____)

lawful money of the United States of America, for the payment of which sum well and truly to be made, we, and each of us, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted a bid to Judicial Council for all work specifically described in the accompanying bid.

NOW, THEREFORE, if the Principal is awarded a contract and, within the time and manner required under the contract documents, after the prescribed forms are presented to Principal for signature, enters into a written contract, in the prescribed form in accordance with the bid, and files two bonds, one guaranteeing faithful performance and the other guaranteeing payment for labor and materials as required by law, and meets all other conditions to the contract between the Principal and the Obligee becoming effective, or if the Principal shall fully reimburse and save harmless the Obligee from any damage sustained by the Obligee through failure of the Principal to enter into the written contract and to file the required performance and labor and material bonds, and to meet all other conditions to the contract between the Principal and the Obligee becoming effective, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect. The full payment of the sum stated above shall be due immediately if Principal fails to execute the Contract within seven (7) calendar days of the date of Judicial Council’s Notice of Award to Principal.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or the Invitation to Bid , or to the work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligation under this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or the call for bids, or to the work, or to the specifications.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorneys’ fee to be fixed by a Court.

If Judicial Council awards the bid, the security of unsuccessful bidder(s) shall be returned within **NINETY (90) calendar days** from the date indicated on the Notice of Award. Unless otherwise required by law, no bidder may withdraw its bid for ninety (90) calendar days after the date of the bid opening.

SIGNATURE ON THE FOLLOWING PAGE

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety above named, on the _____ day of _____, 20__.

Principal

By

Surety

By

Name of California Agent of Surety

Address of California Agent of Surety

Telephone Number of California Agent of Surety

Bidder must attach Power of Attorney and Certificate of Authority for Surety and a Notarial Acknowledgment for all Surety's signatures. The California Department of Insurance must authorize the Surety to be an admitted Surety Insurer.

END OF DOCUMENT

DOCUMENT 00 43 36

DESIGNATED SUBCONTRACTORS LIST

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

Central Justice Center, Fire Life Safety Building Deficiency Corrections, Floors 1, 2 and 3, 700 West Civic Center Drive, Santa Ana, CA, Bldg. ID 30-A1 (“Project” or “Contract”)

This document is part of the Contract Documents (as defined in **Exhibit M** (Document 00 70 00)) for the Project and any capitalized term herein shall be given same meaning as in the Contract Documents, unless specifically defined otherwise.

1. **Identify Subcontractors**. Bidder must list, in the matrixes following these instructions, the name and location of each Subcontractor who will be employed, and the scope of Work that each will perform if a contract for the Project is awarded to Bidder. Bidder acknowledges and agrees that under Public Contract Code section 4100, et seq., it must clearly identify the name and location of each Subcontractor who will perform work or labor for, or render service to, Bidder in or about the construction of the Work in an amount that exceeds one half of one percent (.5%) of Bidder’s total Bid price (Base Bid + Alternate Bid Item(s) (if any), not including Unit Price(s)).
2. **Identify Subcontractors for Alternate Bid Item(s)**. If an Alternate Bid Item(s) is called for and Bidder intends to use Subcontractors different from or in addition to those Subcontractors listed for Work under the base Bid, Bidder must list Subcontractors that will perform Work in an amount that exceeds one half of one percent (.5%) of Bidder’s total Bid price (Base Bid + Alternate Bid Item(s), not including Unit Price(s)).
3. **Same Scope**. In case more than one Subcontractor is named for the same scope of Work, state the portion that each will perform. Bidder may differentiate the scope of Work by reference to specific portions of the Specifications.
4. **No Vendors or Suppliers**. Bidder need not list entities that are only vendors or suppliers of materials.
5. **Not Identified**. As to any Work that Bidder fails to list a Subcontractor whose work exceeds one half of one percent (.5%) of Bidder’s total Bid price (Base Bid + Alternate Bid Item(s) (if any), not including Unit Price(s)), Bidder agrees that it is licensed to, and will, perform that portion itself or be subjected to penalty under applicable law.
6. **DVBEs**. Bidder must indicate which, if any, of the Subcontractors are Disabled Veteran Business Enterprises (“DVBE”) and the estimated percentage of the Work those Subcontractor(s) will perform.
7. **CSLB Number**. Bidder must provide the Contactor State License Board number (“CSLB No.,”) for all listed Subcontractors.
8. **DIR Number**. Bidder must provide the Department of Industrial Relations registration number (“DIR No.,”) for all listed Subcontractors.
9. **ONCE SUBMITTED, BIDDERS MAY ONLY SUBMIT CORRECTIONS RELATED TO A LISTED SUBCONTRACTOR’S CSLB NO. AND/OR DIR REGISTRATION NO. SUCH CORRECTIONS MAY BE SUBMITTED NO LATER THAN TWENTY-FOUR (24) HOURS AFTER BID OPENING.**
10. **Additional Sheets of Paper**. If further space is required for the list of proposed Subcontractors, additional sheets of paper providing the required information, as indicated below, must be attached to this document.

BIDDER MUST EXECUTE THE CERTIFICATION ON THE FOLLOWING PAGE AND SUBMIT IT WITH BIDDER’S BID.

The undersigned certifies that the undersigned is authorized to legally bind Bidder to include the above information in this document and submit the Bid on behalf of Bidder, and hereby certifies and declares under penalty of perjury under the laws of the State of California that all the information listed on the following page(s) is complete, true, and correct.

Date: _____

Proper Name of Bidder: _____

Signature: _____

Print Name: _____

Title: _____

Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:

Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	CSLB No.:
			DIR No.:
			If DVBE, % of Work:

END OF DOCUMENT

DOCUMENT 00 43 37

DISABLED VETERAN BUSINESS ENTERPRISE CERTIFICATION (BID VERSION)

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

This document is part of the Contract Documents (as defined in **Exhibit M** (Document 00 70 00)) for the Project and any capitalized term herein shall be given same meaning as in the Contract Documents, unless specifically defined otherwise.

Military and Veterans Code section 999.2 requires that Judicial Council have a participation goal for Disabled Veteran Business Enterprises (“DVBE(s)”) of at least three percent (3%), per year, of the overall dollar amount expended on construction projects each year by Judicial Council.

Bidder must complete this certification and provide the information related to DVBEs as required in the Designated Subcontractors List with Bidder’s Bid. Bidder must comply with the requirements hereunder and in the Contract Documents with respect to compliance with the DVBE participation goal during performance of the Work on the Project.

1. **Disabled Veteran Business Enterprise.** A DVBE is a business enterprise certified by the California Office of Small Business as a DVBE.
2. **DVBE Participation Policy.** Judicial Council is committed to achieving this DVBE participation goal. Judicial Council encourages Bidder to ensure maximum opportunities for the participation of DVBEs in the Work of the Contract.
3. **DVBE Participation Goal.** The three percent (3%) participation goal is not a quota, set-aside or rigid proportion.
4. **Certification of Participation / Contract Requirements.** At the time Bidder executes the Contract, Bidder will provide a statement to Judicial Council of anticipated participation of DVBEs in the Contract. During performance of the Contract, Bidder will monitor the Work of the Contract, award of subcontracts and contracts for materials, equipment and supplies for the purpose of determining DVBE participation in the Work of the Contract. Review the Form of Contract, including, without limitation, the General Conditions (**Exhibit M** (Document 00 70 00)) for further information regarding DVBE compliance during the performance of Work on the Project.

**DVBE PARTICIPATION CERTIFICATION
(BID VERSION)**

Bidder Name: _____ Date: _____

Project Name: _____ Project Number: RFP-FS-2021-22-JP

Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	DVBE Certification No.:
			Phone Number / Email:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	DVBE Certification No.:
			Phone Number / Email:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	DVBE Certification No.:
			Phone Number / Email:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	DVBE Certification No.:
			Phone Number / Email:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	DVBE Certification No.:
			Phone Number / Email:

PLEASE NOTE THE FOLLOWING WHEN COMPLETING THE ABOVE CHART:

- Use additional sheets of paper as necessary.
- Unless the Project is necessary for the immediate preservation of the public health, welfare, or safety, or protection of Judicial Council property, Bidder shall list only **ONE (1)** Subcontractor for each portion of Work as defined by Bidder in its Bid. Bidder may identify individual scopes of Work by reference to Specifications.

Does the cumulative dollar value of these DVBE contracts meet or exceed the participation goal of three percent (3%) of the total Bid price (Base Bid + Alternate Bid Item(s) (if any)).?

YES _____

NO _____

If Bidder's response is "NO," please attach to this certification / report a detailed description of the reasons Bidder did not achieve the participation goal of three percent (3%) of the total Bid price (Base Bid + Alternate Bid Item(s) (if any), not including Unit Price(s)).

The undersigned certifies that the undersigned is authorized to legally bind Bidder to all items in this certification and hereby certifies and declares under penalty of perjury under the laws of the State of California that all the foregoing information is complete, true, and correct and that all Work performed by each Subcontractor identified in the DVBE Participation Certification (Bid Version) serves a "commercially useful function," as defined in Section 999(b)(5)(B)(i) of the Military Code.

Date: _____

Proper Name of Bidder: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

DOCUMENT 00 43 40

NONCOLLUSION DECLARATION

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

This document is part of the Contract Documents (as defined in the General Conditions) for the Project and any capitalized term herein shall be given same meaning as in the Contract Documents, unless specifically defined herein.

The undersigned declares:

I am the _____ **[PRINT YOUR TITLE]**

of _____ **[PRINT FIRM NAME]**.

the party making the Bid.

The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham Bid. Bidder has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, or to refrain from bidding. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the Bid of Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the Bid, or of that of any other bidder. All statements contained in the Bid are true. Bidder has not, directly or indirectly, submitted its Bid or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that they have full power to execute, and does execute, this declaration on behalf of Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on the following date:

Date: _____

Proper Name of Bidder: _____

City, State: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

DOCUMENT 00 43 50

IRAN CONTRACTING ACT CERTIFICATION

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

This document is part of the Contract Documents (as defined the General Conditions) for the Project and any capitalized term herein shall be given same meaning as in the Contract Documents, unless specifically defined herein.

Central Justice Center, Fire Life Safety Building Deficiency Corrections, Floors 1, 2 and 3, 700 West Civic Center Drive, Santa Ana, CA, Bldg. ID 30-A1 (“Project” or “Contract”)

Bidder must complete **ONLY ONE** of the following three paragraphs.

1. The Base Bid is less than one million dollars (\$1,000,000).

OR

2. The Base Bid is one million dollars (\$1,000,000) or more, but Bidder is **not** on the current list of persons engaged in investment activities in Iran created by the California Department of General Services (“DGS”) pursuant to Public Contract Code section 2203(b), and Bidder is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

OR

3. The Base Bid is one million dollars (\$1,000,000) or more, but Judicial Council has given prior written permission to Bidder to submit a Bid without making the certification set forth in item 2 above. **A copy of the written permission from Judicial Council is included with Bid.**

The undersigned certifies that the undersigned is authorized to legally bind Bidder to all items in this certification and declares under the penalty of perjury under the laws of the State of California, that the contents of this certification are true and correct.

Date: _____

Proper Name of Bidder: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

DOCUMENT 00 43 60

RESERVED

DOCUMENT 00 43 70

RESERVED

DOCUMENT 00 45 00

RESERVED

DOCUMENT 00 45 05

RESERVED

DOCUMENT 00 45 10

**CONSTRUCTION AGREEMENT (DESIGN-BID-BUILD) COVERSHEET & CONSTRUCTION
AGREEMENT (DESIGN-BID-BUILD AGREEMENT)**

[BEGINS FOLLOWING THIS PAGE]

CONSTRUCTION AGREEMENT (DESIGN-BID-BUILD) COVERSHEET

AGREEMENT NUMBER

[Insert]

FEDERAL EMPLOYER ID





[Insert]

1. This Construction Agreement (Design-Bid-Build) (“Agreement”) is between the Judicial Council of California (“Judicial Council”), and [Insert Name of Contractor] (“Contractor”). Judicial Council and Contractor may be referred to herein individually as a “Party” or collectively as the “Parties.” This coversheet is part of the Agreement and Contract Documents. Unless otherwise specifically defined herein, any capitalized term shall be as defined in the General Conditions (**Exhibit M** (Document 00 70 00))
2. The term of this Agreement shall commence on [Insert Start Date, 20] (“Effective Date”) and shall expire on the Completion of the Work, or upon the early termination by Judicial Council, whichever occurs first.
3. The title of this Agreement is: Construction Agreement (Design-Bid-Build). The number of this Agreement is: [Insert Agreement Number]. **The title and number listed is for administrative reference only and does not define, limit, or construe the scope or extent of the Agreement.**
4. The Parties agree to the terms and conditions of this Agreement and acknowledge that this Agreement (including this coversheet, the Exhibits, and all other Contract Documents) contains the Parties’ entire understanding related to the subject matter of this Agreement. The following Exhibits are incorporated into the Agreement:
 - **Exhibit A: Project Description (Document 00 45 30).** A general description of the Work for the Project.
 - **Exhibit B: Certifications to be Completed by Contractor (Document 00 45 40).** The certifications that Contractor must execute and submit with the executed Agreement.
 - **Exhibit C: RESERVED**
 - **Exhibit D: Disabled Veteran Business Enterprise Certification (Document 00 45 55).** The form that Contractor will submit during the Work to certify participation of Disabled Veteran Business Enterprises as required by the Contract Documents.
 - **Exhibit E: Escrow of Bid Documentation (Document 00 54 40).** The instructions for the escrow of Contractor’s Bid documentation.
 - **Exhibit F: RESERVED**
 - **Exhibit G: RESERVED**
 - **Exhibit H: Performance Bond (00 61 14).** The form performance bond that Contractor must submit to Judicial Council consistent with the requirements of the Contract Documents, that will be the Performance Bond for the Project once executed.
 - **Exhibit I: Payment Bond (00 61 15).** The form payment bond that Contractor must submit to Judicial Council consistent with the requirements of the Contract Documents, that will be the Payment Bond for the Project once executed.
 - **Exhibit J: Judicial Council Contract Forms (Document 00 63 00).** Judicial Council required forms that Contractor will utilize during Work on the Project.
 - **Exhibit K: Judicial Council Closeout Forms (Document 00 65 00).** Judicial Council required forms that Contractor will utilize during Closeout of the Project.
 - **Exhibit L: Warrantee and Guarantee Form (Document 00 65 36).** The form setting forth Contractor’s warranty and guarantee obligations and which Contractor will execute as set forth in the Contract Documents.
 - **Exhibit M: General Conditions (Document 00 70 00).** The general construction provisions applicable to all Work performed by Contractor.
 - **Exhibit N: Special Conditions (Document 00 71 00).** The special construction provisions applicable to all Work performed by Contractor .
 - **Exhibit O: RESERVED**
 - **Exhibit P: RESERVED**
 - **Exhibit Q: Addenda (00 91 13).** Addenda issued by Judicial Council prior to the Bid Opening and submission of Contractor’s Bid.
 - **Exhibit R: Division 1 Documents (Document 00 91 14).** The general specifications governing the Work.
 - **Exhibit S: Division 2 through 49 Documents (00 91 15).** The technical specifications governing the Work.

Judicial Council of California

CONSTRUCTION AGREEMENT (DESIGN-BID-BUILD) COVERSHEET AND CONSTRUCTION AGREEMENT (DESIGN-BID-BUILD) DOCUMENT 00 45 10- 0

RFP-FS-2021-22-JP

JUDICIAL COUNCIL'S SIGNATURE	DESIGN BUILD ENTITY'S SIGNATURE
Judicial Council of California	Contractor (state whether a corporation, partnership, joint venture, limited liability company, or sole proprietorship)
BY (Authorized Signature) 	BY (Authorized Signature) 
PRINTED NAME AND TITLE OF PERSON SIGNING	PRINTED NAME AND TITLE OF PERSON SIGNING
DATE EXECUTED	DATE EXECUTED
ADDRESS Branch Accounting and Procurement 455 Golden Gate Avenue, 6 th Floor San Francisco, CA 94102	ADDRESS  License No.: 

DOCUMENT 00 45 10
CONSTRUCTION AGREEMENT

This Construction Agreement (Design-Bid-Build) (“Agreement”) is made and entered into on [REDACTED], 2022 (“Effective Date”), by and between Judicial Council of California (“Judicial Council”) and [REDACTED] (“Contractor”). Judicial Council and Contractor may be referred to individually as a “Party,” or collectively as the “Parties.” Judicial Council and Contractor agree as follows:

1. **Defined Terms.** Unless otherwise specifically defined herein, any capitalized term shall be given the same definition defined in the General Conditions (**Exhibit M** (Document 00 70 00)).
2. **Work.** Contractor agrees to furnish all Work for the following project consistent with all requirements of the Contract Documents:

Central Justice Center, Fire Life Safety Building Deficiency Corrections, Floors 1, 2 and 3, 700 West Civic Center Drive, Santa Ana, CA, Bldg. ID 30-A1 (“Project”)

All Work must be performed and Completed as required in the Contract Documents, under the direction and supervision of, and subject to, the approval of Judicial Council or its authorized representative.

3. **The Contract Documents.**

- a. **General Overview.** The complete Agreement consists of all Contract Documents, which are hereby incorporated by this reference as though fully set forth herein. All obligations of Judicial Council and Contractor are fully set forth and described in the Contract Documents. The Contract Documents are complimentary and intended to be read together as a whole so that Work called for in one and not mentioned in the other, or vice versa, is to be performed the same as if mentioned in all Contract Documents. All Exhibits are hereby incorporated by reference into this Agreement as though fully set forth herein.
- b. **Interpretation of Contract Documents/Order of Precedence.** Questions concerning the intent, precedence, or meaning of the Contract Documents, including the Drawings or Specifications, must be submitted to Judicial Council for interpretation. Judicial Council shall render a decision as to the interpretation in its sole discretion and any such decision will be final. Inconsistencies in the Contract Documents will be resolved by giving precedence to the Contract Documents in the following order:
 - (i) Judicial Council-approved **written** modifications, beginning with the most recent (if any), including, without limitation Change Orders, Field Orders, etc.;
 - (ii) Agreement (Document 00 45 10);
 - (iii) State Contract Act Provisions (if any) (**Exhibit O** (Document 00 75 00));
 - (iv) Special Conditions (if any) (**Exhibit N** (Document 00 71 00));
 - (v) Supplemental Conditions (if any);
 - (vi) General Conditions (**Exhibit M** (Document 00 70 00));
 - (vii) Division 1 Documents (Documents beginning with “01”) (**Exhibit R** (Document 00 91 14));
 - (viii) Division 2 through Division 49 Documents (Technical Specifications) (**Exhibit S** (Document 09 91 15));
 - (ix) Figured dimensions;
 - (x) Large-scale drawings;
 - (xi) Small-scale drawings; and
 - (xii) Remaining Division 0 documents (Documents beginning with “00”), including those in the Exhibits attached to this Agreement.

In case of conflict, the greater quantity and/or higher standard of workmanship will apply unless Judicial Council expressly agrees in a writing signed by the Parties (e.g., via a Change Order) accepts a lesser quantity

or lower quality of workmanship and the Contract Price is adjusted accordingly. Judicial Council shall render a decision as to the applicable quantity or standard of workmanship in its sole discretion and any such decision will be final. Without in any way limiting the foregoing, the Existing Information and Documentation Regarding Project Site (Document 00 31 19) **SHALL NOT** be a Contract Document.

4. **Integration and Modification.** The Contract Documents, and any other documents specifically incorporated by reference into this Agreement, are completely integrated as the complete and exclusive statement of the terms of the Agreement. This Agreement supersedes all previous contracts, agreements, and/or communications, both oral and written, and constitutes the entire understanding of Judicial Council and Contractor. No extrinsic evidence whatsoever will be admissible or used to explain, vary, add to, supplement, or interpret the terms of the Agreement, Contract Documents, or any items incorporated by reference. No changes, amendments or alterations will be effective unless in writing, signed by both Parties, and unless provided otherwise by the Contract Documents.
5. **Time for Completion.** It is hereby understood and agreed that Contractor must complete all Work within One Thousand (1,000) consecutive Days (“Contract Time”) from the date specified in Judicial Council’s Notice to Proceed. Judicial Council will not approve an early completion schedule by Contractor. A schedule showing the Work completed in less than the Contract Time, will be considered to have Float.
6. **Completion-Extension of Time.** If Contractor fails to complete the Work within the Contract Time, with any allowance being made for Excusable Delays, Contractor will become liable to Judicial Council for all losses and damages Judicial Council may suffer on account thereof. Contractor must coordinate its Work with the work of all other contractors. Judicial Council will not be liable for delays resulting from Contractor's failure to coordinate its Work with other contractors in a manner that allows for timely completion of Contractor's Work. Contractor will be liable for delays to other contractors caused by Contractor’s failure to coordinate its Work with the work of other contractors.
7. **Liquidated Damages.** Time is of the essence for all Work to be performed. It is hereby understood and agreed that it is and will be difficult and/or impossible to ascertain and determine the actual damage that Judicial Council will sustain in the event of and by reason of Contractor's delay; therefore, as authorized by law, Contractor will forfeit and pay to Judicial Council the following sum(s) as liquidated damages (“Liquidated Damages”):
 - a. **Submittal of any Item on approved Submittal Schedule: One Thousand Dollars (\$1,000.00)** per-Day as Liquidated Damages for each and every Day’s delay beyond the time herein prescribed for each item on approved Submittal Schedule.
 - b. **Project Completion: Five Thousand, One Hundred and Twenty Five Dollars (\$5,125.00)** per-Day as Liquidated Damages for each and every Day’s delay beyond the Contract Time to complete all the Work.
 - c. Liquidated Damages shall be assessed consistent with the requirements of the Contract Documents, and subject to the following:
 - (i) Each portion of the Liquidated Damages will be calculated cumulatively. For example, if Contractor is late in completing two (2) milestones and the entire Project, Contractor will forfeit and pay three (3) separate Liquidated Damages amounts (Amount for Project + Amount for Milestone 1 + Amount for Milestone 2). It is hereby understood and agreed that neither the total cumulative Liquidated Damages amount nor any portion of the Liquidated Damages are penalties.
 - (ii) Without limiting Judicial Council’s other remedies to recover Liquidated Damages, Judicial Council may deduct Liquidated Damages from money due or that may become due Contractor under this Agreement. Contractor’s forfeiture of Liquidated Damages to Judicial Council, and Judicial Council’s right to retain Liquidated Damages, are as allowable by law and as indicated herein and in the General Conditions. Liquidated Damages are automatically and without notice of any kind forfeited and payable by Contractor upon the accrual of each Day of delay. Neither Judicial Council’s failure or delay in

deducting Liquidated Damages from payments otherwise due Contractor, nor Judicial Council’s failure or delay in notifying Contractor of the forfeiture and payment of Liquidated Damages, will be deemed a waiver of Judicial Council’s right to Liquidated Damages and/or Judicial Council’s right to withhold Liquidated Damages from any amounts that would otherwise be payable to Contractor.

(iii) Contractor and Surety will be liable for and pay to Judicial Council the entire amount of Liquidated Damages, including any portion that exceeds the amount of the Contract Price then held, retained or controlled by Judicial Council.

(iv) Liquidated Damages will be in addition, and not in lieu of, Judicial Council’s rights or remedies in the Contract Documents, including, without limitation, to charge Contractor for Judicial Council’s cost of completing or correcting items of the Work, and any other relief allowed by law.

8. **Contract Price.** In consideration of the foregoing covenants, promises, and agreements, Contractor offers, in the amounts stated below, to perform the Work according to the Contract Documents. Judicial Council covenants, promises, and agrees that it will pay and cause to be paid to Contractor in full consistent with the Contract Documents, the following amount(s) for Contractor’s performance of the Work:

	_____ Dollars (\$ _____)	
	(Base Bid Amount)	
+	_____ Dollars (\$ _____)	
	(Alternate Bid Items) [NOT APPLICABLE]	
+	_____ Dollars (\$ _____)	
	(Unit Prices)	
+	_____ Dollars (\$ _____)	
	(Compensable Delay Bid Rate)	
=	_____ Dollars (\$ _____)	
	(“Contract Price”)	

- a. The above Allowances are within the Contract Price only to the extent all the following conditions have been met:
 - (i) Judicial Council has issued a Change Order for the subject Work;
 - (ii) Contractor has performed work as described in the Allowance description consistent with the Contract Documents;
 - (iii) Contractor has appropriately invoiced Judicial Council for that Work in accordance with the Contract Documents; and
 - (iv) Judicial Council has accepted the Work and approved Contractor’s invoice.

- b. The unused portion of each Allowance will be retained by Judicial Council through the issuance of a deductive Change Order after Completion of the Project. Contractor acknowledges and agrees that Contractor priced the allowance(s) in its Bid, and by doing so the Allowance amount is sufficient compensation in full for the work performed for the Allowance(s). If the Work for the Allowance(s) at any time exceeds the Allowance(s) amount(s) included herein and in its Bid, Contractor shall be solely responsible for such costs, unless those costs are compensable under a separate provision of the Contract Documents.

- c. Judicial Council will pay the Contract Price in lawful money of the United States pursuant to the payment provisions in the General Conditions.

d. Judicial Council may, at its sole discretion, increase or decrease the Contract Price by Unit Price(s) or Alternate Bid Item(s) contained in Contractor's Bid. If the Bid for the Work included compensation for Alternate Bid Item(s), during Contractor's performance of the Work, Judicial Council may elect to add or delete any Alternate Bid Item. If Judicial Council elects to add or delete an Alternate Bid Item(s) pursuant to the foregoing, the cost or credit for that Alternate Bid Item(s) will be in an amount(s) set forth in Contractor's Bid, at Judicial Council's discretion. If any Alternate Bid Item is added or deleted from the Work pursuant to the foregoing, the Contract Time will be adjusted by the number of days allocated for the added or deleted Alternate Bid Item in the Contract Documents; if days are not allocated for any Alternate Bid Item added or deleted pursuant to the foregoing, the Contract Time will be equitably adjusted.

e. The Compensable Delay Rate in the Bid Form will be the only compensation that Contractor is entitled to when seeking an adjustment to the Contract Price for each day of Compensable Delay, as further set forth in the General Conditions.

9. **Insurance and Bonds.** Prior to the commencement of the Work, Contractor must provide all required certificates of insurance, a performance bond (on the form provided in **Exhibit H** (Document 00 61 14)), and payment bond (on the form provided in **Exhibit I** (Document 00 61 15)).

10. **Performance of Work.** If Contractor fails to perform the Work properly or fails to perform consistent with any provisions of the Contract Documents, Judicial Council, may, pursuant to the General Conditions and without prejudice to any other remedy it may have, cure the deficiencies in Contractor's Work and deduct the cost thereof from the payment then or thereafter due Contractor.


11. **Authority of Architect, Project Inspector.** Contractor hereby acknowledges that Architect(s) and Project Inspector(s) (if applicable) have authority to approve and/or stop Work if Contractor's Work does not comply with the requirements of the Contract Documents and all applicable laws. Contractor will be liable for any delay caused by its non-compliant Work, including, without limitation, Nonconforming or Defective Work.

12. **Notice and Service Thereof.**

a. Any notice required by the Contract Documents must be in writing and dated and signed by the Party giving notice, or by a duly authorized representative of that Party. Notice must be served and will be considered effective if given in one of the following manners:

- (i) By personal delivery, considered delivered on the date of delivery.
- (ii) By overnight delivery service, considered delivered one (1) Day after date deposited, as indicated by the delivery service.
- (iii) By depositing same in United States mail, enclosed in a sealed envelope, considered delivered three (3) Days after date deposited, as indicated by the postmarked date.
- (iv) By registered or certified mail with postage prepaid, return receipt requested; considered delivered on the date the notice is signed for.

b. Notice will be provided to the Parties at the following locations:

<p>If to Judicial Council: Judicial Council of California Facilities Services Attn: Kesri Sekhon, Project Manager 455 Golden Gate Avenue, 8th Floor San Francisco, CA 94102</p>	<p>If to Contractor:  _____, _____, CA _____ ATTN: _____</p>
--	---

With a copy to:

Judicial Council of California
Branch Accounting and Procurement
Attn: Manager, Contracts
455 Golden Gate Avenue, 6th Floor
San Francisco, CA 94102-3688

- 13. Assignment of Contract.** Contractor will not assign the Agreement, or any part thereof including, without limitation, any services or money that may become due, without the prior written consent of Judicial Council, nor without the written consent of the Surety on Contractor's Performance Bond, unless the Surety has waived in writing its right to notice of assignment. Assignment without Judicial Council's prior written consent will be null and void. Any assignment of money due or to become due under the Contract Documents will be subject to a prior lien for services rendered or material supplied for Work performed in favor of all persons, firms, or corporations rendering services or supplying material to the extent that claims are filed pursuant to the Civil Code, Code of Civil Procedure, Government Code (if applicable), Labor Code, and/or Public Contract Code (if applicable), and will also be subject to deductions for Liquidated Damages or withholding of payments as determined by Judicial Council in accordance with the Contract Documents. Contractor will not assign or transfer in any manner to a Subcontractor or supplier the right to prosecute or maintain an action against Judicial Council.
- 14. Successors and Assigns.** Contractor binds Contractor, Contractor's partners, successors, permitted assigns and legal representatives to Judicial Council in respect to covenants, agreements and obligations contained in the Contract Documents. Contractor will not voluntarily or involuntarily assign (e.g., assignment by operation of law), encumber, or otherwise transfer or delegate its duty or obligation to perform any Work under the Contract Documents without the prior written consent of Judicial Council. Any voluntary assignment by Contractor or assignment by operation of law (e.g., involuntarily assignment) of any portion of Contractor's duty or obligation to perform any Work under the Contract Documents will be deemed a default allowing Judicial Council to exercise all remedies available to it under applicable law and the Contract Documents. Judicial Council will not consent to an assignment which would relieve Contractor or the Surety of their responsibilities under the Contract Documents. Any assignment in violation hereof is null and void.
- 15. Classification of Contractor's License.** Contractor hereby acknowledges that it currently holds valid Type B, C16, and C22 contractor's license(s) issued by the State of California, Contractor's State Licensing Board, in accordance with division 3, chapter 9, of the Business and Professions Code and in the classification(s) called for in the Contract Documents.
- 16. Payment of Prevailing Wages.** Contractor and all Subcontractors under Contractor must pay all workers on Work performed pursuant to the Contract Documents not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the DIR, for the type of work performed and the locality in which the work is to be performed, pursuant to sections 1770 et seq. of the California Labor Code. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Agreement, as determined by Director of the DIR, are on file at Judicial Council's principal office. Prevailing wage rates are also available on the internet at (<http://www.dir.ca.gov>).
- The Project is subject to compliance monitoring and enforcement by the DIR. Contractor must post job site notices, as prescribed by regulation. Contractor must comply with all requirements of Labor Code section 1771.4, except the requirements that are exempted by the Labor Commissioner for the Project.
- 17. Contractor and Subcontractor Registration.** Contractor must comply with the registration and compliance monitoring provisions of Labor Code section 1771.4, including furnishing its CPRs to the Labor Commissioner of California and complying with any applicable enforcement by the DIR. Labor Code section 1771.1, subdivision (a) states the following:

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

18. **Authority of Contractor's Representative.** Contractor hereby certifies that the person who executes this Agreement has the authority and power to legally bind Contractor. Contractor also certifies that the person(s) it employs on the Project at or above the level of project superintendent, each have the authority to legally bind Contractor.
19. **Governing Law and Venue.** This Agreement will be governed by California law without regard to any conflict of law rules that would direct the application of the laws of any other jurisdiction. Contractor irrevocably consents to personal jurisdiction in California. In the event of any legal action to enforce or interpret this Agreement, the Parties hereby agree that venue of such action shall be in the Superior Court of California in the county in which the Project is being undertaken.
20. **Construction of Contract.** Headings or captions to the provisions of this Agreement and the Contract Documents are solely for the convenience of the Parties, are not part thereof, and will not be used to interpret or determine the validity of this Agreement and/or the Contract Documents. Any ambiguity in the Contract Documents will not be construed against the drafter, but rather the terms and provisions must be given their reasonable interpretation.
21. **Severability.** If any term, covenant, condition, or provision of the Contract Documents is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions in the Contract Documents will remain in full force and effect and will in no way be affected, impaired, or invalidated thereby.

The Parties accept and agree to the terms of this Agreement as of the Effective Date:

Dated: _____, 20____ Dated: _____, 20____

Judicial Council of California

[Name of Contractor]

Signature: _____

Signature: _____

Print Name: _____

Print Name: _____

Print Title: _____

Print Title: _____

NOTE: If Contractor is a corporation, Contractor must attach a certified copy of the corporation's by-laws, or the resolution of the Board of Directors of the corporation, authorizing the above person to execute this Agreement and the bonds required by the Contract Documents.

END OF DOCUMENT

EXHIBIT A
(DOCUMENT 00 45 30)

PROJECT DESCRIPTION

General Overview. The Project consists **generally** of the following scopes of Work. This Exhibit is a reference document **ONLY** and is **NOT** a Contract Document:

Abatement:

- Contractor shall have reviewed the Hazardous Materials report and shall fully abate all Hazardous Materials. Contractor shall submit an abatement plan for approval prior to commencing any demolition.

Architectural:

- Provide new ceilings throughout Floors 1 through 3 of the Premises (“Floors”).
- Provide assessment of penetrations through rated assemblies that are not properly fire-proofed and provide appropriate UL listed fire proofing for each condition.

Mechanical:

- Replace all ductwork above the ceiling back to where the existing ducts penetrate the mechanical rooms.
- Add new fire smoke dampers where ducts penetrate rated assemblies.
- Replace all mixing boxes above the ceiling in kind.
- Replace all supply diffusers and return grilles compatible with the new ceiling grid.
- All hydronic piping shall be protected in place. New reheat coils shall be provided with the new terminal units, where applicable.

Controls:

- Upgrade the existing Building Management System (BMS) for building mechanical controls of the Heating Ventilating and Air Conditioning system and associated mechanical components for a fully functioning BMS system. Install new DDC controls system, meeting Judicial Council standards, consisting of a Tridium Niagara front end.

Electrical & Lighting:

- Install new lighting to meet Title 24 code compliance.
- Install new grounding for the lighting and lighting panels that are worked on for the Project.

Fire Protection:

- Install new fire sprinkler coverage, extending existing coverage to the courtrooms and offices.
- Provide necessary submittals and calculations to submit to State Fire Marshal, upon completion of piping installation.

Fire Alarm:

- Install new fire alarm devices to bring the current Floors 1 through 3 to code requirements.
- Provide necessary submittals and calculations to submit to California Fire Marshal, upon completion of installation.

Smoke Control:

- Install new smoke control system, integrating the air handler units serving Floors into the existing smoke control system.
- Provide necessary submittals and calculations to submit to California Fire Marshal, upon completion of installation.

Drawings and Specifications. In addition to the Contract Documents, the Project shall be constructed consistent with the Drawings and Specifications identified in the List of Drawings, Tables, and Schedules (Document 00 01 10) and pursuant to the Division 1 Documents (**Exhibit R** (Document 00 91 14)) and the Division 2 through 49 Documents (**Exhibit S** (Document 00 91 15)).

END OF DOCUMENT

EXHIBIT B
(DOCUMENT 00 45 40)

CERTIFICATIONS TO BE COMPLETED BY CONTRACTOR

THE UNDERSIGNED MUST CHECK EACH BOX AND EXECUTE THIS FORM AND HEREBY CERTIFIES TO JUDICIAL COUNCIL THAT:

The undersigned is:

- A representative of Contractor;
- Familiar with the facts herein certified and acknowledged; and
- Authorized to bind, and qualified to execute, the Agreement and these certifications on behalf of Contractor and that by executing this Agreement the undersigned is certifying the following items.

Labor Code Sections 1860-1861 (Workers' Compensation). In accordance with Labor Code section 3700, every employer will be required to secure the payment of compensation to its employees. I acknowledge and certify under penalty of perjury that I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the Work.

Government Code Sections 8355-8357 (Drug-Free Workplace). I acknowledge and certify under penalty of perjury that I will provide a drug-free workplace by doing all of the following:

1. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's or organization's workplace and specifying the actions that will be taken against employees for violations of the prohibition.
2. Establishing a drug-free awareness program to inform employees about all of the following:
 - a. The dangers of drug abuse in the workplace.
 - b. The person's or organization's policy of maintaining a drug-free workplace.
 - c. Any available drug counseling, rehabilitation, and employee assistance programs.
 - d. The penalties that may be imposed upon employees for drug abuse violations.
3. Requiring that each employee engaged in the performance of Work on the Project be given a copy of the statement required by subdivision 1 and that, as a condition of employment on the Work, the employee agrees to abide by the terms of the statement.

I also acknowledge that the Agreement may be subject to suspension of payments under the Agreement or termination of the Agreement, or both, and Contractor may be subject to debarment, in accordance with the requirements of the above-referenced statute, if Judicial Council or a granting agency determines that any of the following has occurred:

- a. Contractor or grantee has made a false certification under Section 8355.
- b. Contractor or grantee violates the certification by failing to carry out the requirements of subdivisions (a) to (c), inclusive, of Section 8355.

I also acknowledge that the Department of General Services shall establish and maintain a list of individuals and organizations whose contracts or grants have been canceled due to failure to comply with the above-referenced statute. This list shall be updated monthly and published each month. No state agency shall award a contract or grant to a person or organization on the published list until that person or organization has complied with the above-referenced statute.

No Hazardous Materials. I acknowledge and certify under penalty of perjury that no asbestos, or asbestos-containing materials, polychlorinated biphenyl (PCB), or any material listed by the federal or state Environmental Protection Agency or federal or state health agencies as a hazardous material, or any other material defined as being hazardous under federal or state laws, rules, or regulations (“New Hazardous Material”), shall be furnished, installed, or incorporated in any way into the Project or in any tools, devices, clothing, or equipment used to affect any portion of Contractor’s Work on the Project. I have instructed our employees with respect to the above-mentioned standards, hazards, risks, and liabilities.

1. Asbestos and/or asbestos-containing material shall be defined as all items containing but not limited to chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite. Any or all material containing greater than one-tenth of one percent (.1%) asbestos shall be defined as asbestos-containing material. Any disputes involving the question of whether or not material is New Hazardous Material shall be settled by electron microscopy or other appropriate and recognized testing procedure, at Judicial Council’s determination. The costs of any such tests shall be paid by Contractor if the material is found to be New Hazardous Material.
2. All Work or materials found to be New Hazardous Material or Work or material installed with equipment containing “New Hazardous Material,” will be immediately rejected and this work will be removed at Contractor’s expense at no additional cost to Judicial Council.

Contractor must immediately notify Judicial Council at the time of discovery, if Contractor finds and before it disturbs, any material that Contractor believes may be hazardous waste, as defined in section 25117 of the Health and Safety Code, and requires removal to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

I acknowledge and certify under penalty of perjury that this certification provides notice to Contractor that:

- a. Contractor’s Work may disturb lead-containing building materials.
- b. Contractor must notify Judicial Council if any Work may result in the disturbance of lead-containing building materials.

Lead as a Health Hazard. Lead poisoning is recognized as a serious environmental health hazard. Lead enters the environment as tiny lead particles and lead dust disburse when paint chips, chalks, peels, wears away over time, or is otherwise disturbed. Exposures may result from construction or remodeling activities that disturb lead paint, from ordinary wear and tear of windows and doors, or from friction on other surfaces.

Ordinary construction and renovation or repainting activities carried out without lead-safe work practices can disturb lead-based paint and create significant hazards. Improper removal practices, such as dry scraping, sanding, or water blasting painted surfaces, are likely to generate high volumes of lead dust.

Because Contractor and its employees will be providing services for Judicial Council, and because Contractor’s work may disturb lead-containing and/or lead-based building materials, **Contractor is hereby notified** of the potential presence of lead-containing and lead-based materials located within certain buildings utilized by Judicial Council. It can be assumed that most buildings constructed prior to the 1980s have lead pipes or paint (and buildings constructed later likely have paint containing lead levels that require some type of control).

1. Overview of California Law.

Both the Federal Occupational Safety and Health Administration (“Fed/OSHA”) and the California Division of Occupational Safety and Health (“Cal/OSHA”) have implemented safety orders applicable to all construction work where a contractor’s employee may be occupationally exposed to lead.

The OSHA Regulations apply to all construction work where a contractor's employee may be occupationally exposed to lead. The OSHA Regulations contain specific and detailed requirements imposed on contractors

subject to that regulation. The OSHA Regulations define construction work as work for construction, alteration, and/or repair, including painting and decorating. It includes, but is not limited to, the following:

- a. Demolition or salvage of structures where lead or materials containing lead are present;
- b. Removal or encapsulation of materials containing lead;
- c. New construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead, or materials containing lead;
- d. Installation of products containing lead;
- e. Lead contamination/emergency cleanup;
- f. Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed; and
- g. Maintenance operations associated with the construction activities described in the subsection.

It is imperative that Contractor, its workers and Subcontractors, and Subcontractors' workers, fully and adequately comply with all applicable laws, rules and regulations governing lead-containing and lead-based materials (including title 8, California Code of Regulations, section 1532.1).

Contractor must notify Judicial Council if any Work may result in the disturbance of lead-containing building and lead-based materials. Any and all Work that may result in the disturbance of lead-containing and lead-based building materials must be coordinated through Judicial Council. A signed copy of this Certification must be on file prior to beginning Work on the Project, along with all current insurance certificates.

2. Contractor's Liability.

- a. If Contractor fails to comply with any applicable laws, rules, or regulations, and that failure results in a site or worker contamination, Contractor will be held solely responsible for all costs involved in any required corrective actions, and shall defend, indemnify, and hold harmless Judicial Council, pursuant to the indemnification provisions of the Contract Documents, for all damages and other claims arising therefrom.
- b. If lead disturbance is anticipated in the Work, only persons with appropriate accreditation, registrations, licenses, and training shall conduct this Work.
- c. It shall be the responsibility of Contractor to properly dispose of any and all waste products, including, but not limited to, paint chips, any collected residue, or any other visual material that may occur from the prepping of any painted surface. It will be the responsibility of Contractor to provide the proper disposal of any hazardous waste by a certified hazardous waste hauler. This company shall be registered with the Department of Transportation (DOT) and shall be able to issue a current manifest number upon transporting any hazardous material from any site owned by Judicial Council.
- d. Contractor shall provide Judicial Council with any sample results prior to beginning Work, during the Work, and after the completion of the Work. Judicial Council may request to examine, prior to the commencement of the Work, the lead training records of each employee of Contractor.

I acknowledge and certify under penalty of perjury, that:

1. I have received notification of potential lead-based and lead-containing materials on Judicial Council's property;

2. I am knowledgeable regarding and will comply with all applicable laws, rules, and regulations governing working with, and disposal of, lead.

Imported Materials. All soils, aggregate, or related materials (“Fill”) that Contractor, a Subcontractor, agent or supplier, in any way, provides or delivers and/or supplies to the Project Site shall be free of any and all hazardous material as defined in section 25260 of the Health and Safety Code and shall satisfy the requirements of any environmental review of the Project performed pursuant to the statutes and guidelines of the California Environmental Quality Act, sections 21000 et seq. of the Public Resources Code (“CEQA”). I acknowledge that, to the furthest extent permitted by California law, the indemnification provisions in the Contract Documents apply to, without limitation, any claim(s) connected with providing, delivering, and/or supplying Fill.

I acknowledge and certify under penalty of perjury that I am duly authorized to legally bind Contractor to all provisions and items included in these certifications, that the contents of these certifications are true, and that these certifications are made under the laws of the State of California.

Date: _____

Proper Name of Contractor: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

EXHIBIT C
(DOCUMENT 00 45 50)

RESERVED

EXHIBIT D
(DOCUMENT 00 45 55)

DISABLED VETERAN BUSINESS ENTERPRISE CERTIFICATION

Military and Veterans Code section 999.2 requires that Judicial Council have a participation goal for a DVBE of at least three percent (3%), per year, of the overall dollar amount expended each year by Judicial Council.

Contractor must comply with the requirements hereunder and in the Contract Documents with respect to compliance with the DVBE participation goal during performance of the Work on the Project.

1. **Disabled Veteran Business Enterprise.** A DVBE is a business enterprise certified by the California Office of Small Business as a DVBE.
2. **DVBE Participation Policy.** Judicial Council is committed to achieving this DVBE participation goal. Judicial Council encourages Contractor to ensure maximum opportunities for the participation of DVBEs in the Work of the Project.
3. **DVBE Participation Goal.** The three percent (3%) participation goal is not a quota, set-aside or rigid proportion.
4. **Certification of Participation.** At the time of execution of the Agreement, Contractor will provide a statement to Judicial Council of anticipated participation of DVBEs in the Work during the Project.
5. **Submission of Report.** During performance of the Work, Contractor will monitor the Work of the Project, award of subcontracts and contracts for materials, equipment and supplies for the purpose of determining DVBE participation in the Work .
 - a. Contractor will report monthly all DVBEs utilized in the performance of the Work, the type or classification of the Work performed by each DVBE, and the dollar value of the Work performed by each DVBE.
 - b. Upon Completion of the Work, Contractor must submit a report to Judicial Council in the form attached hereto identifying all DVBEs utilized in the performance of the Work, the type or classification of the Work performed by each DVBE, and the dollar value of the Work performed by each DVBE.
 - i. The submission to Judicial Council of this report is a condition precedent to Judicial Council's obligation to make payment of the final payment under the Contract Documents. The submission of this report will be in addition to, and not in lieu of, any other conditions precedent set forth in the Contract Documents for Judicial Council's obligation to make payment of the final payment.
 - ii. Judicial Council reserves the right to request additional information or documentation from Contractor evidencing efforts to comply with the three percent (3%) DVBE participation goal.

DVBE PARTICIPATION CERTIFICATION / REPORT

Contractor Name: _____ Date: _____

Project Name: _____ Project Number: RFP-FS-2021-22-JP

Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	DVBE Certification No.:
			Phone Number / Email:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	DVBE Certification No.:
			Phone Number / Email:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	DVBE Certification No.:
			Phone Number / Email:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	DVBE Certification No.:
			Phone Number / Email:
Subcontractor Name	Portion of Work (Scope)	Location of Business (Full Address)	DVBE Certification No.:
			Phone Number / Email:

PLEASE NOTE THE FOLLOWING WHEN COMPLETING THE ABOVE CHART:

- Use additional sheets of paper as necessary.
- Unless the Project is necessary for the immediate preservation of the public health, welfare, or safety, or protection of Judicial Council property, Contractor shall list only ONE (1) Subcontractor for each portion of Work as defined by Contractor in its Bid. Contractor may identify individual scopes of Work by reference to the Specifications.

Does the cumulative dollar value of Contractor's DVBE contracts meet or exceed the participation goal of three percent (3%) of the Contract Price, as adjusted by all Change Orders, Unilateral Change Orders, or Field Orders (if applicable)?

YES _____ NO _____

If Contractor's response is "NO," attach to this document a detailed description of the reasons Contractor did not achieve the participation goal of three percent (3%) of the Contract Price.

I certify and declare under penalty of perjury under the laws of the State of California that all the foregoing information is complete, true, and correct and that all Work performed by each Subcontractor identified in the DVBE Participation Certification serves a "commercially useful function," as defined in Section 999, subdivisions (b)(5)(B)(i) of the Military Code.

Date: _____

Proper Name of Contractor: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

EXHIBIT E
(DOCUMENT 00 54 50)

ESCROW OF BID DOCUMENTATION

1. Requirement to Provide Escrow Bid Documentation.

- a. Contractor must submit by the time identified in the Notice of Award, one copy of all documentary information received or generated by Contractor in preparation of its Bid for the Project as set forth herein. This documentary information shall be referred to as “Escrow Bid Documentation.” The Escrow Bid Documentation will be held in escrow by Judicial Council for the duration of the Work.
- b. Contractor agrees, as a condition of award of the Project, that the Escrow Bid Documentation constitutes **ALL** written information used in the preparation of its Bid, and that no other written Bid preparation information will be considered in resolving disputes or Claims. Contractor also agrees that nothing in the Escrow Bid Documentation will change or modify the terms or conditions of the Contract Documents.
- c. The Escrow Bid Documentation will not be opened by Judicial Council except as indicated herein. The Escrow Bid Documentation will be used only to assist in the negotiation of adjustments to the Contract Price consistent with the Contract Documents, or the settlement of disputes or Claims.
- d. Contractor’s submission of the Escrow Bid Documentation, with the bonds and insurance documents required, is considered an essential part of the Project award. Should Contractor fail to make the submission within the time specified in the “Submittal of Escrow Bid Documentation” section below, Judicial Council may deem Contractor to have failed to enter into the Agreement, and Contractor will forfeit the amount of its Bid Security, accompanying Contractor’s Bid, and Judicial Council may award the Project to the next lowest responsive and responsible bidder.
- e. **NO PAYMENTS WILL BE MADE, NOR WILL JUDICIAL COUNCIL ACCEPT PROPOSED CHANGE ORDERS, UNTIL THE ESCROW BID DOCUMENTATION IS SUBMITTED AND RECEIVED.**

2. Ownership of Escrow Bid Documentation.

- a. The Escrow Bid Documentation is, and will always remain, the property of Contractor, subject to review by Judicial Council, as provided herein.
- b. As trade secrets, the Escrow Bid Documentation is proprietary and confidential to the extent allowed by law. Escrow Bid Documentation constitute trade secrets, not known outside Contractor’s business, known only to a limited extent and only by a limited number of employees of Contractor, safeguarded while in Contractor’s possession, extremely valuable to Contractor, and could be extremely valuable to Contractor’s competitors by virtue of it reflecting Contractor’s contemplated techniques of construction. Subject to the provisions herein, Judicial Council agrees to safeguard the Escrow Bid Documentation, and all information contained therein, against disclosure to the fullest extent permitted by law. To the extent permitted by California Rule of Court Rule 10-500, Escrow Bid Documentation is exempt from disclosure.

3. Format and Contents of Escrow Bid Documentation.

- a. Contractor may submit Escrow Bid Documentation in its usual cost-estimating format; a standard format is not required.
- b. Escrow Bid Documentation must clearly itemize the estimated costs of performing the work of each bid item contained in the bid schedule, separating bid items into sub-items as required to present a detailed cost estimate and allows a detailed cost review.

- c. The Escrow Bid Documentation must include all Subcontractor bids or quotes, supplier bids or quotes, quantity takeoffs, crews, equipment, calculations of rates of production and progress, copies of quotes from subcontractors and suppliers, and memoranda, narratives, add/deduct sheets, and all other information used by Contractor to arrive at the prices contained in the Bid.
- d. Estimated costs should be broken down into Contractor's usual estimate categories such as direct labor, repair labor, equipment ownership and operation, expendable materials, permanent materials, and subcontract costs as appropriate. Plant and equipment and indirect costs should be detailed in Contractor's usual format. Contractor's allocation of indirect costs, contingencies, markup, and other items to each bid item must be identified.
- e. For bid items amounting to less than \$10,000, estimated unit costs are acceptable without a detailed cost estimate, provided that labor, equipment, materials, and subcontracts, as applicable, are included and provided that indirect costs, contingencies, and markup, as applicable, are allocated.
- f. Bid documentation provided by Judicial Council should not be included in the Escrow Bid Documentation unless needed to comply with the following requirements.

4. Submittal of Escrow Bid Documentation.

- a. The Escrow Bid Documentation must be submitted by Contractor in a sealed container/envelope within the within the time identified in the Notice of Award. The container/envelope must be clearly marked on the outside with Contractor's name, date of submittal, project name and, if applicable, number, and the words "*Escrow Bid Documentation – To be opened after prior written notice to Contractor.*"
- b. The Escrow Bid Documentation may be submitted in person, by courier, or by overnight parcel service to Judicial Council.
- c. By submitting Escrow Bid Documentation, Contractor represents that the material in the Escrow Bid Documentation constitutes of all the documentary information used in preparation of the Bid and that Contractor has personally examined the contents of the Escrow Bid Documentation container and has found that the documents in the container are complete.
- d. If Contractor's Bid is based upon subcontracting any part of the Work, each Subcontractor whose total subcontract price exceeds five percent (5%) of the total Contract Price in Contractor's Bid, will provide separate escrow documents to be included with those of Contractor. Those documents will be opened and examined in the same manner and at the same time as the examination described above for Contractor. Each Subcontractor's documents can be sealed within Contractor's Escrow Bid Documentation and will only be opened if the Change Order or dispute at issue relates to that Subcontractor(s)' scope of Work.
- e. If Contractor wishes to subcontract any portion of the Work after award of the Project, Judicial Council retains the right to require Contractor to submit escrow documents for the Subcontractor before the subcontract is approved.

5. Storage, Examination and Final Disposition of Escrow Bid Documentation.

- a. The Escrow Bid Documentation will be placed in escrow, for the duration of the Work, at Judicial Council offices.
- b. The Escrow Bid Documentation may be examined by Judicial Council, by Contractor, and/or by both Parties, upon **FIVE (5)** Business Days' written notice from the Party noticing the examination to the other Party.
- c. An examination is permissible at any time that a Party reasonably believes that an examination of the Escrow Bid Documentation is necessary to assist in the negotiation of adjustments to the Contract Price, or the settlement of Disputes or Claims. In the case of legal proceedings, Escrow Bid Documentation may be subject

to the terms of an appropriate protective order, if requested via motion by Contractor and ordered by a court of competent jurisdiction.

- d. If Contractor or Judicial Council fails to designate a representative or fails to appear for the noticed examination, then Contractor or Judicial Council representative may examine the Escrow Bid Documents alone.
- e. If a Subcontractor has submitted sealed information that is included in the Escrow Bid Documentation and that Subcontractor is reasonably involved in the negotiation of adjustments to the Contract Price, or the settlement of disputes or Claims, then the Party requesting examination (Contractor or Judicial Council must also notify that Subcontractor with the same **FIVE (5)** Business Days' written notice that the requesting Party sends to the other Party.
- f. The Escrow Bid Documentation will be returned to Contractor upon Project Completion, if all Contractor's Claims (if any) have been resolved to Judicial Council's and Contractor's satisfaction, and when Contractor certifies that it has no further Claims against Judicial Council.

END OF DOCUMENT

EXHIBIT F
(DOCUMENT 00 54 55)

RESERVED

EXHIBIT G
(DOCUMENT 00 54 70)

RESERVED

END OF DOCUMENT

EXHIBIT H
(DOCUMENT 00 61 14)

PERFORMANCE BOND (100% of Contract Price)
(Note: Contractors must use this form, NOT a surety company form.)

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, Judicial Council of California, (“Judicial Council”) and _____ (“Principal”) have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to perform the following project:

**Central Justice Center, Fire Life Safety Building Deficiency Corrections, Floors 1, 2 and 3
700 West Civic Center Drive, Santa Ana, CA, Bldg. ID 30-A1**

which Contract dated _____, 20___, and all of the Contract Documents attached to or forming a part of the Contract, are hereby referred to and made a part hereof; and

WHEREAS, said Principal is required under the terms of the Contract to furnish a bond for the faithful performance of the Contract.

NOW, THEREFORE, the Principal and _____ (“Surety”) are held and firmly bound unto the Board of Judicial Council in the penal sum of:

_____ DOLLARS

(\$ _____), lawful money of the United States, for the payment of which sum well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents, to:

- Perform all the work required to complete the Project; and
- Pay to Judicial Council all damages Judicial Council incurs as a result of the Principal’s failure to perform all the Work required to complete the Project.

In the event the Principal is declared by Judicial Council to be in breach or default in the performance of the Contract, then, after written notice from Judicial Council to the Surety, as provided for herein, the Surety shall either remedy the default or breach of the Principal or shall take charge of the Work of the Contract and complete the Contract with a Contractor other than the Principal at its own expense; provided, however, that the procedure by which the Surety undertakes to discharge its obligations under this Bond shall be subject to the advance written approval of Judicial Council.

The condition of the obligation is such that, if the above bounden Principal, or Principal’s heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in the Contract and any alteration thereof made as therein provided, on Principal’s or its part to be kept and performed at the time and in the intent and meaning, including all contractual guarantees and warranties of materials and workmanship, and shall indemnify and save harmless Judicial Council, its trustees, officers and agents, as therein stipulated, then this obligation shall become null and void, otherwise it shall be and remain in full force and virtue.

As a condition precedent to the satisfactory completion of the Contract, the above obligation shall hold good for a period equal to the warranty and/or guarantee period of the Contract, during which time Surety’s obligation shall continue if Principal shall fail to make full, complete, and satisfactory repair, replace, and totally protect Judicial Council from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long as any obligation of Principal remains. Nothing herein shall limit Judicial Council’s rights or Principal’s or Surety’s obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or to the Work to be performed thereunder shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the Contract Documents or to the Work.

Any claims under this bond may be addressed to the Surety at the following address. This cannot be Contractor's broker for this bond, but must be an employee of the Surety or the Surety's legal counsel:

Attention: _____

Telephone No.: (_____) _____ - _____

Fax No.: (_____) _____ - _____

E-mail Address: _____

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named, on the _____ day of _____, 20__.

Principal

Surety

(Name of Principal)

(Name of Surety)

(Signature of Person with Authority)

(Signature of Person with Authority)

(Print Name)

(Print Name)

(Name of California Agent of Surety)

(Address of California Agent of Surety)

(Telephone Number of California Agent of Surety)

Contractor must attach a Notarial Acknowledgment for all Surety's signatures and a Power of Attorney and Certificate of Authority for Surety. The California Department of Insurance must authorize the Surety to be an admitted surety insurer.

END OF DOCUMENT

EXHIBIT I
(DOCUMENT 00 61 15)

PAYMENT BOND – Contractor’s Labor & Material Bond (100% of Contract Price)
(Note: Contractor must use this form, NOT a surety company form.)

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, Judicial Council of California, (or “Judicial Council”) and _____, (“Principal”) have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to

Central Justice Center, Fire Life Safety Building Deficiency Corrections, Floors 1, 2 and 3
West 700 Civic Center Drive, Santa Ana, CA, Bldg. ID 30-A1

which Contract dated _____, 20___, and all of the Contract Documents attached to or forming a part of the Contract, are hereby referred to and made a part hereof; and

WHEREAS, pursuant to law and the Contract, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by which the Contract is awarded in an amount equal to 100 percent (100%) of the Contract price, to secure the claims to which reference is made in the Civil Code of California, including section 9100, and the Labor Code of California, including section 1741.

NOW, THEREFORE, the Principal and _____, (“Surety”) are held and firmly bound unto all laborers, material men, and other persons referred to in said statutes in the penal sum of:

_____ DOLLARS

(\$ _____), lawful money of the United States, being a sum not less than the total amount payable by the terms of Contract, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, by these presents.

The condition of this obligation is that if the Principal or any of his or its subcontractors, of the heirs, executors, administrators, successors, or assigns of any, all, or either of them shall fail to pay for any labor, materials, provisions, provender, or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, that the Surety will pay the same in an amount not exceeding the amount herein above set forth, and also in case suit is brought upon this bond, will pay a reasonable attorney’s fee to be awarded and fixed by the Court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under sections 9000 through 9566 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void; otherwise it shall be and remain in full force and affect.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or to the Work to be performed thereunder shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the Contract Documents or to the Work.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named, on the _____ day of _____, 20__.

Principal

Surety

(Name of Principal)

(Name of Surety)

(Signature of Person with Authority)

(Signature of Person with Authority)

(Print Name)

(Print Name)

(Name of California Agent of Surety)

(Address of California Agent of Surety)

(Telephone Number of California Agent of Surety)

Contractor must attach a Notarial Acknowledgment for all Surety's signatures and a Power of Attorney and Certificate of Authority for Surety. The California Department of Insurance must authorize the Surety to be an admitted surety insurer.

END OF DOCUMENT

EXHIBIT J
(DOCUMENT 00 63 00)

JUDICIAL COUNCIL CONTRACT FORMS



JUDICIAL COUNCIL OF CALIFORNIA
ADMINISTRATIVE DIVISION
FACILITIES SERVICES

CONSTRUCTION CHANGE ORDER - LUMP SUM

FROM			
Capital Program:	<input type="text"/>	Change Order Number:	<input type="text"/>
Judicial Council PM:	<input type="text"/>	Contract Number:	<input type="text"/>
Phone Number:	<input type="text"/>	Original Construction Contract Amount:	<input type="text"/>
Email:	<input type="text"/>	Executed CO Amount to Date:	<input type="text"/>
		Current Construction Contract Amount:	<input type="text"/>
TO		CO Amount:	<input type="text"/>
Contractor:	<input type="text"/>	New Construction Contract Amount:	<input type="text"/>
Contractor's Contact:	<input type="text"/>	Project Name:	<input type="text"/>
Address:	<input type="text"/>	Location:	<input type="text"/>
City, State & Zip:	<input type="text"/>	CAFM ID#:	<input type="text"/>
Email:	<input type="text"/>		

*This Change Order is issued pursuant to the provisions of the General Conditions of the Contract for Construction Changes in the work. The Contractor is directed to proceed with construction activities in such manner as to preclude the necessity for later altering the work in order to accomplish this change. This document must be completed in every detail, signed, dated, and returned in **DUPPLICATE** to the Judicial Council no later than **fourteen (14)** calendar days from the date of issue, as provided in the General Conditions of the Contract. **Upon approval by the Judicial Council, a fully executed Change Order will be sent to the Contractor from the Judicial Council as authority for proceeding with the changes (or as confirmation of previously issued instructions).***

For the work included in the referenced project document below for PCO #:

Brief description of change and referenced project documents

The contractor shall receive (or credit) and accept the agreed lump sum price:

Agreed Lump Sum Price

Time Adjustment: This the contract time by reason of this change

The contract completion date upon approval of this change order is:

This agreement constitutes full, final, and complete settlement for all aspects of the work described and referenced herein including all markups. As part of this Agreement, Contractor waives any and all rights to claim for any delay or impact costs associated with the work described herein, including, but not limited to, inefficiency, unabsorbed and extended home office overhead and extended field office overhead.

We, the undersigned Contractor, have given careful consideration to the change proposed and agree to provide equipment, furnish materials, and perform the work specified above, and will accept as full settlement the prices and days shown above.

CONTRACTOR ACCEPTANCE BY		
SIGNATURE	(PRINT NAME AND TITLE)	DATE
SUBMITTED BY JUDICIAL COUNCIL PROJECT MANAGER		
APPROVAL RECOMMENDED BY UNIT MANAGER		
APPROVAL RECOMMENDED BY JUDICIAL BRANCH DIRECTOR FACILITIES SERVICES		
APPROVAL RECOMMENDED BY JUDICIAL BRANCH CHIEF ADMINISTRATIVE OFFICER		



CONSTRUCTION CHANGE ORDER - TIME & MATERIALS

FROM

Capital Program:
 Judicial Council PM:
 Phone Number:
 Email:

TO

Contractor:
 Contractor's Contact:
 Address:
 City, State, Zip:
 Email:

Change Order No.:
 Contract No.:
 Original Construction Contract Amount:
 Executed CO Amount to Date:
 Current Construction Contract Amount:
 CO Amount Not to Exceed:
 New Contract Amount Not to Exceed:
 Project Name:
 Location:
 CAFM ID#:

This Change Order is issued pursuant to the provisions of the General Conditions of the Contract for Construction Changes in the work. The Contractor is directed to proceed with construction activities in such manner as to preclude the necessity for later altering the work in order to accomplish this change. This document must be completed, signed, dated, and returned in DUPLICATE to the Judicial Council no later than fourteen (14) calendar days from the date of issue, as provided in the General Conditions of the Contract. Upon approval by the Judicial Council, a fully executed Change Order will be sent to the Contractor from the Judicial Council as authority for proceeding with the changes (or as confirmation of previously issued instructions).

For the work included in the referenced project document below,

PCO # Brief description of change and referenced project documents
*see attached documentation substantiating all incurred costs and time to provide the work
 (attach labor and materials invoices, including documentation of all overhead costs, and consequential impact costs)*

The contractor shall receive (or credit) and accept the agreed amount:

Agreed Time and Materials Price \$ -

Time Adjustment:

There will be an to the contract time by reason of this change

The method of determining change of contract time:

The contract completion date upon approval of this change order is:

The contractor shall not proceed if the work is expected to exceed the amount or time indicated above without further written authorization.

This agreement constitutes full, final, and complete settlement for all aspects of the work described and referenced herein including all markups. As part of this Agreement, Contractor waives any and all rights to claim for any delay or impact costs associated with the work described herein, including, but not limited to, inefficiency, unabsorbed and extended home office overhead and extended field office overhead.

We, the undersigned Contractor, have given careful consideration to the change proposed and agree to provide equipment, furnish materials, and perform the work specified above, and will accept as full settlement the prices and days shown above.

CONTRACTOR ACCEPTANCE BY		
SIGNATURE	(PRINT NAME AND TITLE)	DATE
<input type="text"/>	<input type="text"/>	<input type="text"/>
SUBMITTED BY JUDICIAL COUNCIL PROJECT MANAGER		
<input type="text"/>	<input type="text"/>	<input type="text"/>
APPROVAL RECOMMENDED BY UNIT MANAGER		
<input type="text"/>	<input type="text"/>	<input type="text"/>
APPROVAL RECOMMENDED BY JUDICIAL BRANCH DIRECTOR FACILITIES SERVICES		
<input type="text"/>	<input type="text"/>	<input type="text"/>
APPROVAL RECOMMENDED BY JUDICIAL BRANCH CHIEF ADMINISTRATIVE OFFICER		
<input type="text"/>	<input type="text"/>	<input type="text"/>

END OF DOCUMENT

EXHIBIT K
(DOCUMENT 00 65 00)

JUDICIAL COUNCIL CLOSEOUT FORMS



PROJECT TURNOVER FORM

DATE:

Court Facility:

<input type="text"/>
<input type="text"/>

FM#:

Equipment:

<input type="text"/>
<input type="text"/>
<input type="text"/>

Brief Scope of Work: Punch List Items:

<input type="text"/>
<input type="text"/>
<input type="text"/>

Plan of Action to Complete the Punch List:

<input type="text"/>
<input type="text"/>
<input type="text"/>

O&M manuals and associated information turn over:

Service Provider Accepted – Company: Date Initials

Contractor – Company: Date Initials



Testing has been satisfactory completed: YES NO

- Any outstanding issues?

Commissioning has been satisfactory completed: YES NO

- Any outstanding issues?

Final System Operating Procedure Complete:

Trainer – Company Date Initials
 Trainer – Company Date Initials

Service Provider Staff – Company Date Initials
 Service Provider Staff – Company Date Initials

Contractor – Company Date Initials
 Contractor – Company Date Initials



Inventory/List of Equipment:

- **Type: Fill in Generator Info - ex**

• Manufacturer: _____
 • Model #: _____
 Serial#: _____

- **Type: Fill in ATS info (Both)- ex**

• Manufacturer: _____
 • Model #: _____
 Serial#: _____

- **Type: Fill in Day Tank Info- ex**

• Manufacturer: _____
 • Model #: _____
 Serial#: _____
 • Location: _____
 • Date of Installation: _____
 • Installation Contractor/Sub Contractor: _____

Spare Parts Recommendation:

Attic Stock? _____

What is the Stock? _____

As built drawings: Date Turned Over _____



Warranty Information:

- Duration
- Start Date:

PROJECT MANAGEMENT and CONTRACTOR

- Project Manager:
 - PHONE NUMBER:
 - EMAIL ADDRESS:
- Contractor:
 - NAME OF CONTRACTOR CONTACT:
 - CONTACT PHONE NUMBER:

Turn Over Date:

Service Provider Signature:

Print Name:

Service Provider Signature:

Print Name:

FMA Signature:

Print Name:

FOS Signature:

Print Name:

Project Manager Signature:

Date:

NOTE: Service Provider to develop maintenance data and complete the Asset updates to the equipment and in CAFM

END OF DOCUMENT

EXHIBIT L
(DOCUMENT 00 65 36)

WARRANTY AND GUARANTEE FORM

1. _____ (“Contractor”) hereby agrees that the Work performed by Contractor for Judicial Council on the Project was performed in accordance with the requirements of the Contract Documents and that the Work as installed fulfills all requirements of the Contract Documents.
2. Contractor agrees to repair or replace all Work that may prove to be defective in workmanship or material and any other adjacent Work that may be displaced in connection with such replacement within a period of **1 YEAR(S)** from the date of Completion as defined in the Contract Documents, ordinary wear and tear and unusual abuse or neglect excepted. The date of Completion is _____, **20**__.
3. If Contractor fails to comply with the above-mentioned conditions within a reasonable period of time, as determined by Judicial Council, but not later than **SEVEN (7)** Days after Judicial Council notifies Contractor in writing, Contractor authorizes Judicial Council to proceed to repair or replace the Defective Work at the expense of Contractor. Contractor will pay the costs and charges therefor upon demand.
4. **Contractor’s representative(s) to be contacted for warranty service subject to this Warranty and Guarantee Form and the terms of Contract Documents shall be as set forth below:**

NAME: _____

ADDRESS: _____

PHONE NO.: _____

EMAIL: _____

Date: _____

Name of Contractor: _____

Signature: _____

Print Name: _____

Title: _____

END OF DOCUMENT

EXHIBIT M
DOCUMENT 00 70 00)

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1. CONTRACT TERMS AND DEFINITIONS

1.1. Definitions.

Wherever the following terms, titles, or phrases are used in the Contract Documents, the intent and meaning thereof will be as defined in this article:

- 1.1.1. Acceptance. The terms “Acceptance of the Work,” “Acceptance,” or “Accept(s/ed)” mean written acceptance of the Work or a completed deliverable, submittal, phase, or other contractual requirement in compliance with the Agreement by Judicial Council staff member with authority to make that decision.
- 1.1.2. Addendum or Addenda. The term “Addendum(a)” means a written document(s) issued by Judicial Council before award of the Project, interpreting the Contract Documents or answering questions of prospective bidders, which modifies, supersedes, or supplements portions of, and are part of, the Contract Documents. All Addenda issued for the Project are included in **Exhibit Q** (Document 00 91 13) attached hereto and incorporated herein by reference.
- 1.1.3. Administrative Director. The terms “Administrative Director” or “Director” means the Administrative Director of Judicial Council.
- 1.1.4. Adverse Weather. The term “Adverse Weather” means weather that satisfies **ALL** the following conditions:
 - 1.1.4.1. Unusually severe precipitation, sleet, snow, hail, heat, or cold, wind or fog, conditions in excess of the norm for the location and time of year it occurred as determined by a source mutually agreed to by Judicial Council and Contractor or, if none can be mutually agreed upon, as indicated by the United States National Center for Environmental Information, National Oceanic and Atmospheric Administration at <https://www.ncdc.noaa.gov>, or if the air quality index for the location of the Project exceeds 300 as indicated by AirNow at <https://www.airnow.gov>; and
 - 1.1.4.2. Unanticipated and beyond the weather days allocated in the Construction Schedule; and
 - 1.1.4.3. Occurring at the Project Site.
- 1.1.5. Agreement. The term “Agreement” means the Construction Agreement (Design-Bid-Build) Coversheet & Construction Agreement (Design-Bid-Build Agreement) (Document 00 45 10), and all associated Exhibits, signed by the Parties for the Project and that is part of the Contract Documents.
- 1.1.6. Allowance(s). The term “Allowance(s)” means amount(s) stated in the Agreement for specific scopes of Work for which Contractor may bill its time and materials upon Judicial Council’s issuance of Change Order.
- 1.1.7. Approve. The terms “Approve,” “Approval,” and “Approved” mean written authorization by Judicial Council or its representative authorized by Judicial Council to give such authorization, unless stated otherwise.
- 1.1.8. Approved Person. The term “Approved Person(s)” means the person Approved by Judicial Council pursuant to the “Background Checks / Access to Restricted Areas” article of these

General Conditions to wear an identification badge bearing that person's name and picture and who may have access to Restricted Areas.

- 1.1.9. Application for Payment. The term "Application for Payment" shall refer to the payment application submitted by Contractor, consistent with the requirements of the Contract Documents, to Judicial Council requesting Judicial Council pay Contractor monthly progress payments for Work satisfactorily performed during the Project.
- 1.1.10. Alternate Bid Item(s). The term "Alternate Bid Item(s)" refers to the alternate item(s) of Work and associated cost(s) identified in the Bid submitted by Contractor. Alternate Bid Item(s) are only part of the Work if identified in the Notice to Proceed, or added by Judicial Council, consistent with the requirements of the Contract Documents.
- 1.1.11. Architect. The term "Architect" means the individual, partnership, corporation, joint venture, or any combination thereof, named as architect of record that has the rights and authority assigned to the Architect in the Contract Documents, or Architect's authorized representative. If no Architect is used on the Project, then all references in the Contract Documents to Architect shall be read to refer to Judicial Council.
- 1.1.12. As-Built Drawings. The terms "As-Built Drawings" or "As-Built" mean reproducible, full-size sets of drawings to be prepared by Contractor as required by the Contract Documents, that reflect the actual construction of the Project, and record all differences between the original design of the Work and the Work as constructed. The As-Built Drawings are different from any "as-builts" provided to Contractor for the purpose of Contractor's site examination obligations pursuant to the Contract Documents.
- 1.1.13. Authorities Having Jurisdiction. The term "Authority(ies) Having Jurisdiction" means any municipal (or local), county, state, regional or federal public authorities responsible for enforcing requirements of applicable laws or codes, performing inspections of the Work, reviewing applications, and/or that may provide approvals relating to the Project and/or the Work. These authorities include, without limitation, Judicial Council, the State Fire Marshal, DSA, Board of State and Community Corrections, and any other agency charged with regulatory compliance in connection with, and/or oversight over, the Project, the Site, the Work or Contractor's performance of the Work.
- 1.1.14. Background Check Policy. The term "Background Check Policy" means the policy governing Judicial Council screening and approving employees of Contractor and Subcontractors that have access to Restricted Areas pursuant to Judicial Council's then-current background check policies and procedures.
- 1.1.15. Bid. The term "Bid" means the bid submitted by Contractor for the Project and formed the basis for Judicial Council's award of the Project to Contractor comprised of the following documents:
 - 1.1.15.1. Bid Form (Document 00 41 13)
 - 1.1.15.2. Bid Bond (Security) (Document 00 43 13) or other Bid Security;
 - 1.1.15.3. Designated Subcontractor List (Document 00 43 36)
 - 1.1.15.4. Disabled Veteran Business Enterprise Certification (**Bid Version**) (Document 00 43 37)
 - 1.1.15.5. Noncollusion Declaration (Document 00 43 40)

1.1.15.6. Iran Contracting Act Certification (Document 00 43 50)

1.1.15.7. Fair Chance Employment Certification (Document 00 43 60), if applicable

1.1.15.8. Darfur Contracting Act Certification (Document 00 43 70), if applicable

all of which are incorporated herein by reference as through fully set forth herein.

- 1.1.16. Bid Security. The term “Bid Security” means the security in the form and amount identified in the Notice to Bidders / Invitation to Bid (Document 00 11 16) and Instructions to Bidders (Document 00 21 13) submitted by Contractor with its Bid, including, if applicable, an executed Bid Bond (Document 00 43 13), to guarantee that Contractor will, by the date set forth in the Notice of Award, execute the Agreement with Judicial Council.
- 1.1.17. Building Information Model. The terms “Building Information Model” or “BIM” mean a parametric computable representation of the design of the Project including architectural, structural, mechanical, electrical, plumbing and information technology details. This also includes the primary design model or models and all linked, related, affiliated, or subsidiary models developed for design, detailing, fabrication, or construction of the Project.
- 1.1.18. CalOSHA. The term “CalOSHA” means the California Division of Occupational Safety and Health.
- 1.1.19. CEQA. The term “CEQA” means the California Environmental Quality Act (Pub. Resources Code, §§ 21000 et. seq.).
- 1.1.20. Certified Payroll Records (CPR). The term “CPR(s)” means the certified payroll records submitted by Contractor and Subcontractors to the DIR for Work performed on the Project as required by the Labor Code.
- 1.1.21. Change Order. The term “Change Order” means a written order to Contractor authorizing an addition to, deletion from, or revision in the Work, and/or authorizing an adjustment in the Contract Price and/or Contract Time. No Change Order is enforceable unless signed by both Parties and Approved by Judicial Council.
- 1.1.22. Claims Resolution Process. The term “Claims Resolution Process” means the process for the resolution of a Claim(s) as set forth in the “Claims Resolution” article of these General Conditions.
- 1.1.23. Claim. The term “Claim” means a written demand by Contractor (or by Contractor on behalf of a Subcontractor) for the following:
- 1.1.23.1. An extension to the Contract Time, including relief from damages or penalties assessed by Judicial Council for delay;
- 1.1.23.2. Payment of money or damages arising from Work done by, or on behalf of, Contractor pursuant to the Contract Documents and payment that is not otherwise expressly provided for in the Contract Documents or to which Contractor is not otherwise entitled; or
- 1.1.23.3. Payment that is disputed by Judicial Council.
- 1.1.24. Compensable Delay Rate. The term “Compensable Delay Rate” means the daily rate included by Contractor in the Bid Form (Document 00 41 13) that Contractor expressly agreed is the sole compensation owed to Contractor for each day of Compensable Delay,

substantiated by Contractor consistent with the requirements of the Contract Documents, and Approved by Judicial Council, during the performance of the Work. Judicial Council will utilize the Compensable Delay Rate to calculate any adjustment to the Contract Price caused by a substantiated and Approved Compensable Delay.

- 1.1.25. Commissioning. The term “Commissioning” means the process for achieving, validating and documenting that the Work, facility, and/or any systems are planned, designed, installed, tested, and capable of being operable and maintained to perform in conformity with the Contract Documents and to meet the sustainability requirements for the Project.
- 1.1.26. Completion. The terms “Completion,” “Complete,” or “Completes(d)” mean Contractor has completed the entire Work in accordance with the Contract Documents, including, without limitation, Completion and Acceptance of all final Punch List items by Judicial Council, and all Work has been Accepted by the Administrative Director or designee consistent with the requirements of the Contract Documents.
- 1.1.27. Concurrent Delay. The term “Concurrent Delay” means a Contractor-caused delay event which covers the same time-period of an Excusable and Compensable Delay or Excusable Delay, each independently affecting the Completion date and extending the Contract Time.
- 1.1.28. Construction Manager. The term “Construction Manager” means the individual, partnership, corporation, joint venture, or any combination thereof, or its authorized representative, named as such by Judicial Council. If no Construction Manager is used on the Project, then all references in the Contract Documents to Construction Manager will be read to refer to Judicial Council.
- 1.1.29. Construction Schedule. The term “Construction Schedule(s)” means Judicial Council-Approved Project schedule that is compliant with the requirements of the Contract Documents, incorporating all activities and Project milestones, and includes durations, logic, resources and status for each activity, to complete the Project within the Contract Time.
- 1.1.30. Contract Documents. The term “Contract Document(s)” means the following documents that comprise the entire agreement between Judicial Council and Contractor for the Completion of the Project, if applicable:
 - 1.1.30.1. List of Drawings, Tables and Schedules (Document 00 01 15).
 - 1.1.30.2. Notice to Bidders / Invitation to Bid (Document 00 11 16).
 - 1.1.30.3. Instructions to Bidders (Document 00 21 13).
 - 1.1.30.4. Bid submitted by Contractor, including:
 - 1.1.30.4.1. Bid Form (Document 00 41 13).
 - 1.1.30.4.2. Bid Bond (Document 00 43 13) or other Bid Security.
 - 1.1.30.4.3. Designated Subcontractors List (Document 00 43 36).
 - 1.1.30.4.4. Disabled Veterans Business Enterprise Certification (**Bid Version**) (Document 00 45 37).
 - 1.1.30.4.5. Noncollusion Declaration (Document 00 43 40).

- 1.1.30.4.6. Iran Contracting Act Certification (Document 00 43 50).
- 1.1.30.4.7. Fair Chance Employment Act Certification (Document 00 43 60) (if applicable).
- 1.1.30.4.8. Darfur Contracting Act Certification (Document 00 43 70) (if applicable).
- 1.1.30.5. Certifications to be Completed by Contractor (**Exhibit B** (Document 00 45 40)).
- 1.1.30.6. Appellate Court Construction Certifications to be Completed by Contractor (**Exhibit C** (Document 00 45 50)) (if applicable).
- 1.1.30.7. Disabled Veterans Business Enterprise Certification (**Exhibit D** (Document 00 45 55)).
- 1.1.30.8. Notice of Award (Document 00 45 00) (if applicable).
- 1.1.30.9. Agreement (Document 00 45 10).
- 1.1.30.10. Escrow of Bid Documentation (if applicable) (**Exhibit E** (Document 00 54 50)).
- 1.1.30.11. Escrow Agreement for Security Deposits in Lieu of Retention (**Exhibit F** (Document 00 54 55)) (if applicable).
- 1.1.30.12. Storm Water Pollution Prevention Plan (**Exhibit G** (Document 00 54 70)) (if applicable).
- 1.1.30.13. Notice to Proceed (Document 00 45 05) (if applicable).
- 1.1.30.14. Performance Bond in the form included **Exhibit H** (Document 00 61 14)
- 1.1.30.15. Payment Bond (Contractor's Labor and Material Bond) in the form included **Exhibit I** (Document 00 61 15).
- 1.1.30.16. Judicial Council Contract Forms (**Exhibit J** (Document 00 63 00)) (if applicable).
- 1.1.30.17. Judicial Council Closeout Forms (**Exhibit K** (Document 00 65 00)) (if applicable).
- 1.1.30.18. Warranty and Guarantee Form (**Exhibit L** (Document 00 65 36)).
- 1.1.30.19. General Conditions (**Exhibit M** (Document 00 70 00)).
- 1.1.30.20. Special Conditions (**Exhibit N** (Document 00 71 00)).
- 1.1.30.21. State Contract Act Provisions (**Exhibit O** (Document 00 75 00)) (if applicable).
- 1.1.30.22. OCIP Project Safety Guidance Manual / Insurance Manual (**Exhibit P** (Document 00 91 12)) (if applicable).

- 1.1.30.23. Addenda (**Exhibit Q** (Document 00 91 13)).
- 1.1.30.24. Project Drawings and Specifications, including, without limitation: (i) Division 1 Documents (**Exhibit R** (Document 00 91 14)); (ii) Division 2 through Division 49 Documents (**Exhibit S** (Document 00 91 15)); and (iii) the Drawings identified in the List of Drawings, Tables, and Schedules (Document 00 01 15).
- 1.1.30.25. Approved submittals;
- 1.1.30.26. Schedule of Value(s), Construction Schedule(s), and Monthly Progress Schedule(s), if Approved by Judicial Council.
- 1.1.30.27. Written modifications to the above documents if Approved by Judicial Council, including Change Orders.

Without in any way limiting the foregoing, Existing Information and Documentation Regarding Project Site (Document 00 31 19) **SHALL NOT** be a Contract Document.

- 1.1.31. Contract Price. The term “Contract Price” means the maximum amount payable to Contractor by Judicial Council for the Work as identified in the Agreement, and that will be payable pursuant to the terms and conditions of the Contract Documents. The Contract Price may only be adjusted as permitted herein.
- 1.1.32. Contract Time. The period of time stated in the Agreement for the Completion of the Work. The Contract Time may only be adjusted as permitted herein.
- 1.1.33. Contractor. The term “Contractor” means the corporation, limited liability company, partnership, joint venture, or other legal entity identified in the Agreement that is appropriately licensed and capable of providing, and has agreed to provide, all Work required to construct the Project consistent with the Contract Documents.
- 1.1.34. Court. The term “Court” means the Court that is the subject of the Project.
- 1.1.35. Daily Job Report(s). The term “Daily Job Report(s)” means the Project reports prepared by Contractor’s employee(s) who are present on Site consistent with the requirements of the Contract Documents.
- 1.1.36. Day(s).
 - 1.1.36.1. Unless otherwise designated, the term “Day(s)” means calendar day(s).
 - 1.1.36.2. “Business Day(s)” means calendar days except Saturday, Sunday, a day that is a federally recognized holiday, or a day that is a California-recognized holiday.
- 1.1.37. Defective Work. The terms “Defective Work” and /or “Nonconforming Work” mean Work that is unsatisfactory, faulty, omitted, incomplete, deficient, or does not conform to, or deviates from, the requirements of the Contract Documents, directives of Judicial Council, Architect, Construction Manager and/or Project Inspector, or the requirements of any inspection, reference standard, test, or approval specified in the Contract Documents.
- 1.1.38. Department of Industrial Relations (DIR). The term “DIR” means the California Department of Industrial Relations.
- 1.1.39. Department of Justice (DOJ). The term “DOJ” means the California Department of Justice.

- 1.1.40. Department of Motor Vehicles (DMV). The term “DMV” means the California Department of Motor Vehicles.
- 1.1.41. Division of the State Architect (DSA). The term “DSA” means the Division of the State Architect, a component of the California Department of General Services.
- 1.1.42. Disabled Veteran Business Enterprise (DVBE). The term “DVBE” means Disabled Veterans Business Enterprise as set forth in Military and Veterans Code section 999, et seq.
- 1.1.43. Drawings. The term “Drawings” means the graphic and pictorial portions of the Contract Documents showing the design, location, scope, and dimensions of the Work, generally including plans, elevations, sections, details, schedules, sequence of operation, and diagrams, including, without limitation, the final construction Drawings, as may be amended, prepared by Architect, and approved by all Authorities Having Jurisdiction as those are identified in the List of Drawings, Tables, and Schedules (Document 00 01 15), which are incorporated herein by reference as though fully set forth herein.
- 1.1.44. Effective Date. The term “Effective Date” shall be given the same meaning as given in the Agreement.
- 1.1.45. Excusable Delay. The term “Excusable Delay” means a delay that entitles Contractor to an adjustment of the Contract Time but **NOT** an adjustment of the Contract Price.
- 1.1.46. Excusable and Compensable Delay. The term “Excusable and Compensable Delay” means a delay that entitles Contractor to an adjustment of the Contract Price and an adjustment to the Contract Time and excuses Contractor from an assessment of Liquidated Damages for the specific delay period Approved by Judicial Council.
- 1.1.47. Exhibit(s). The term “Exhibit(s)” means, collectively or individually, the exhibits attached to the Agreement and incorporated herein by reference as though fully set forth herein.
- 1.1.48. Field Orders. The term “Field Order(s)” means a process that may be used when Judicial Council and Contractor cannot agree on a price for a specific scope of Work or before Contractor prepares a price for the scope of Work and Contractor performs on a time and materials basis.
- 1.1.49. Float or Slack. The terms “Float” or “Slack” mean the amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any of the activities in the Construction Schedule. Float or Slack is not for the exclusive use, or benefit, of either Judicial Council or Contractor, but its use will be determined solely by Judicial Council in its sole and absolute discretion.
- 1.1.50. Force Majeure.
- 1.1.50.1. The terms “Force Majeure” or “Force Majeure Event” mean one (1) or more of the following events that prevents Judicial Council’s or Contractor’s performance and is beyond the reasonable contemplation of the Parties at the time Judicial Council awarded the Contract: fires; floods; lightning; explosion; windstorms; tornadoes; earthquakes; other natural catastrophes which neither Party can prevent; acts of nature or public enemy (including acts of terrorism); war (declared or undeclared); riot or similar civil disturbance; blockade; insurrections; revolution; epidemics; pandemics; viral outbreaks; quarantine restrictions; strikes; lockouts and other labor disputes; fuel shortages; or freight embargoes.

Force Majeure Events may include the actions or omissions of third parties not under control of Contractor or Judicial Council.

1.1.50.2. Notwithstanding the preceding, Force Majeure Events will **NOT** include: (i) strikes or lockouts involving Contractor or Contractor's employees; (ii) strikes or lockouts involving Contractor's Subcontractors or Subcontractors' employees unless Contractor has taken all diligent efforts to avoid or minimize the strikes or lockouts; and/or (iii) poor air quality, regardless of the cause, unless poor air quality is caused by smoke and it constitutes Adverse Weather, in which case the provisions concerning Adverse Weather will apply.

1.1.50.3. If an Infectious Disease impacts the progress of the Work and Contractor demonstrates that the event satisfies the conditions of the Contract Documents for an adjustment to the Contract Time, it will be considered a Force Majeure Event.

- 1.1.51. **General Conditions.** The term "General Conditions" shall refer these general construction provisions in **Exhibit M** (Document 00 70 00).
- 1.1.52. **Hazardous Material.** The term "Hazardous Material(s)" means without limitation: (i) any chemical, compound, or substance that is defined or listed in, or otherwise classified pursuant to, any federal or State law as a "hazardous substance", "hazardous waste", "hazardous material", "radioactive waste", "infectious waste", "biohazardous waste", "toxic substance, pollutant, or contaminant"; (ii) petroleum, natural gas, liquefied natural gas, synthetic gas usable as fuel; (iii) "hazardous substance" as defined in section 25281(h) of the California Health and Safety Code; (iv) "waste" as defined in section 13050(d) of the California Water Code; (v) asbestos containing materials; and (vi) any other material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace of the environment. "Hazardous Materials(s)" do not include the foregoing to the extent that they are (i) contained in products that are commercially available in the United States of America; and (ii) used in quantities or concentrations that do not violate applicable federal or State environmental law.
- 1.1.53. **Indemnitees.** The term "Indemnities" means the State, Judicial Council, the State's trial courts, appellate courts, justices, judges, subordinate judicial officers, court executive officers, court administrators, and all their officers, agents, contractors, representatives, volunteers, and employees.
- 1.1.54. **Infectious Disease.** The term "Infectious Disease(s)" means any infectious and communicable disease in any form, whether bacterial or viral, including, without limitation, MSRA, influenza, COVID-19, and/or any similar virus or derivative strain.
- 1.1.55. **Judicial Council.** The term "Judicial Council" means the State of California acting through Judicial Council of California, who is the owner of the Project.
- 1.1.56. **Judicial Council Project Manager.** The term "Judicial Council Project Manager" means a Judicial Council employee who is authorized to act as Judicial Council's agent to oversee the construction of the Project. Judicial Council Project Manager oversees the work of the third-party Construction Manager who is Judicial Council's on-site construction management agent.
- 1.1.57. **Liquidated Damages.** The term "Liquidated Damages" shall be given the same definition as in the Agreement.

- 1.1.58. Logistics Plan. The term “Logistics Plan” means the plan for Contractor’s staging and coordination of delivery of materials and equipment specifically adapted and prepared by Contractor for the Project which complies with the requirements of the Contract Documents including, without limitation, the “Logistics Plan” article of these General Conditions.
- 1.1.59. Monthly Progress Schedule. The term “Monthly Progress Schedule(s)” means the updated Construction Schedule provided monthly by Contractor to Judicial Council to update the Approved Construction Schedule consistent with the requirements of the Contract Documents.
- 1.1.60. Notice of Award. The term “Notice of Award” means the notice provided by Judicial Council notifying Contractor of Judicial Council’s award of the Project. The Notice of Award may be on the form provided in Document 00 45 00, if applicable.
- 1.1.61. Notice to Proceed. The term “Notice to Proceed” means the notice provided by Judicial Council directing Contractor to commence all, or a portion, of the Work, and which starts the Contract Time for the Project. The Notice to Proceed may be on the form provided in (Document 00 45 05), if applicable.
- 1.1.62. OSHA. The term “OSHA” means the United States Occupational Safety and Health Administration.
- 1.1.63. Owner Controlled Insurance Program (OCIP). The terms “Owner Controlled Insurance Program” or “OCIP” mean a project specific insurance program that will be initiated and administered by Judicial Council to provide many of the insurance requirements set forth herein during the performance of Work that will insure the interests of Contractor, and any Subcontractor, performing Work at or incidental to the Project Site.
- 1.1.63.1. The term “OCIP Insurance” means the insurance provided by the OCIP pursuant to the “OCIP Insurance” article of these General Conditions.
- 1.1.63.2. The term “OCIP Manual” means the OCIP Project Safety Guidance Manual / Insurance Manual attached hereto as **Exhibit P** (Document 00 91 12), which is incorporated herein by reference as though fully set forth herein.
- 1.1.64. Party(ies). The terms “Party” or “Parties” mean Judicial Council and/or Contractor when referred to individually or collectively as set forth in the Agreement.
- 1.1.65. Payment Bond. The term “Payment Bond” means the bond provided by Contractor executed by the Surety as security for payment of persons performing labor and/or furnishing materials in connection with the Work on the Project consistent with the requirements of the Contract Documents and in the form attached hereto as **Exhibit I** (Document 00 61 15).
- 1.1.66. Performance Bond. The term “Performance Bond” means the bond provided by Contractor executed by the Surety securing Contractor’s faithful performance of the Work consistent with the requirements of the Contract Documents and in the form attached hereto as **Exhibit H** (Document 00 61 14).
- 1.1.67. PPE. The term “PPE” means personal protective equipment.
- 1.1.68. Premises. The term “Premises” means the real property owned by Judicial Council on which the Project Site is located.

- 1.1.69. Price Request. The term “Price Request” means a written request prepared by Architect or Judicial Council, requesting that Contractor submit to Judicial Council and Architect an estimate of the effect of a proposed change in the Work on the Contract Price and the Contract Time.
- 1.1.70. Product(s). New material, machinery, components, equipment, fixtures and systems forming the Work, including existing materials or components required and Approved by Judicial Council for reuse.
- 1.1.71. Product Data. The term “Product Data” means illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by Contractor to illustrate a material, product, or system for a scope of the Work.
- 1.1.72. Project. The term “Project” is given the same meaning as in the Agreement, which shall be Completed by Contractor consistent with the requirements of the Contract Documents.
- 1.1.73. Project Inspector. The terms “Project Inspector,” “Inspector of Record,” “IOR,” or “Inspector” mean the person or persons employed or engaged as an independent contractor(s) by Judicial Council to inspect the performance of the Work by Contractor for compliance with the Construction Documents. The authority of Project Inspector to monitor the performance of the Work will be strictly limited to the authority specified in the Contract Documents and in Title 24 of the California Code of Regulations, and no additional authority has been granted or may be inferred. If no Project Inspector is used on the Project, then all references in the Contract Documents to Project Inspector shall be read to refer to Judicial Council.
- 1.1.74. Proposed Change Order. The terms “Proposed Change Order” or “PCO” mean a written request by Contractor that Judicial Council issue a Change Order consistent with the requirements of the Contract Documents.
- 1.1.75. Punch List. The term “Punch List” means the list of minor, non-material corrective items prepared by Architect prior to Contractor’s Completion of the Work.
- 1.1.76. Request for Information. The terms “Request for Information” or “RFI” mean a written request by Contractor that Architect provide additional information necessary to clarify an item in the Contract Documents, or to address issues that have arisen under field conditions.
- 1.1.77. Request for Substitution. The term “Request for Substitution” means a request by Contractor to substitute an equal or superior material, product, thing, or service for a specific material, product, thing, or service that has been designated in the Contract Documents by a specific brand or trade name.
- 1.1.78. Restricted Areas. The term “Restricted Area” means all areas within the Premises and/or Site: (i) that are not generally accessible to the public, including judges’ chambers, all non-public restrooms, elevators, break rooms, and corridors, and other non-public spaces that are dedicated for use only by judges or Court staff and employees; (ii) public areas of a Premises and/or Site during non-business hours that are subject to security screening during normal business hours; and/or (iii) the areas defined as Restricted Areas in the Background Check Policy.
- 1.1.79. Safety Orders. The term “Safety Order(s)” means written and/or verbal orders for construction issued by CalOSHA or by OSHA.
- 1.1.80. Safety Plan. The term “Safety Plan” means the plan for Project safety prepared and specifically adapted by Contractor for the Project which complies with the requirements of

the Contract Documents, including, without limitation, all provisions regarding Project safety in the Contract Documents.

- 1.1.81. Samples. The term “Sample(s)” means the physical examples that illustrate materials, products, equipment, finishes, colors, or workmanship and that, when Approved in accordance with the Contract Documents, establish standards by which portions of the Work will be judged.
- 1.1.82. Shop Drawing(s). The term “Shop Drawing(s)” means all drawings, prints, diagrams, illustrations, brochures, schedules, and other data that are prepared by Contractor, a Subcontractor, manufacturer, supplier, or distributor, that illustrate how specific portions of the Work must be fabricated or installed.
- 1.1.83. Site. The term “Site” means the physical location where the Project is to be constructed, as well as adjacent property or facilities specifically identified for use in connection with the Project.
- 1.1.84. Specifications. The term “Specifications” means that portion of the Contract Documents, Division 1 (**Exhibit R** (Document 00 91 14)) and Division 2 through Division 49 (**Exhibit S** (Document 00 91 15)), and all technical sections, and Addenda or any changes to these documents, if any, consisting of written descriptions and requirements of a technical nature of materials, equipment, construction methods and systems, standards, and workmanship.
- 1.1.85. State Fire Marshal. The terms “State Fire Marshal” or “OSFM” mean the State Fire Marshal that has jurisdiction over Fire, Life, and Safety in the design and construction of the Project. The State Fire Marshal is responsible to aid in the enforcement of all laws and ordinances, any rules and regulations adopted under the provisions of Division 11 (commencing with Section 12000) of, and Part 1 (commencing with Section 13000) and Part 2 (commencing with Section 13100) of Division 12 of, the Health and Safety Code, and building standards adopted by the State Fire Marshal and published in the State Building Standards Code relating to fires or to fire prevention and protection.
- 1.1.86. Stored Materials. The term “Stored Materials” means materials and/or equipment stored by Contractor off-Site with Judicial Council’s consent consistent with the requirements of the Contract Documents.
- 1.1.87. Subcontractor. The term “Subcontractor(s)” means a contractor and/or supplier who is under contract with Contractor or with any other subcontractor, regardless of tier, to perform a portion of the Work.
- 1.1.88. Submittal Schedule. The term “Submittal Schedule” means the schedule of submittals prepared by Contractor consistent with the requirements of the Contract Documents and Approved by Judicial Council.
- 1.1.89. Surety. The term “Surety” means the person, firm, or corporation that executes as surety Contractor’s Performance Bond and Payment Bond and must be a California admitted surety insurer as defined in the Code of Civil Procedure section 995.120.
- 1.1.90. SWPPP. The term “SWPPP” means Judicial Council’s Storm Water Pollution Prevention Plan for the Project, a copy of which is attached hereto as **Exhibit G** (Document 00 54 70) and incorporated herein by reference as though fully set forth herein.
- 1.1.91. Unexcused Delay. The term “Unexcused Delay” means a delay that does not entitle Contractor to an adjustment of the Contract Price and/or to an adjustment of the Contract Time, and for which Judicial Council may assess Liquidated Damages.

- 1.1.92. Unforeseen Site Conditions. The term “Unforeseen Site Condition(s)” means conditions actually encountered on the Site that were reasonably unforeseeable based on all the information available to Contractor prior to Judicial Council’s award of the Project to Contractor, **AND** that are one (1) or more of the following:
- 1.1.92.1. Subsurface or latent physical conditions at the Site differing materially from those indicated;
 - 1.1.92.2. Unknown physical conditions at the Site of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents; or
 - 1.1.92.3. Unknown Hazardous Materials on the Site.
- 1.1.93. Unilateral Change Order. The term “Unilateral Change Order” means a written order prepared and issued by Judicial Council, Construction Manager, and/or Architect and signed by Judicial Council and Architect, directing a change in the Work.
- 1.1.94. Unit Price(s). The term “Unit Price(s)” means the monetary value identified in Contractor’s Bid Form (Document 00 41 13) submitted with Contractor’s Bid, as a price per unit of measure for the materials or services identified in the Bid and Contract Documents. Contractor acknowledges that Unit Price(s) included in the Bid include Contractor’s mark-up, and Contractor acknowledges that Contractor shall not be entitled to any mark-up for Work compensated through Unit Price(s).
- 1.1.95. Work. The term “Work” means all labor, materials, equipment, components, appliances, supervision, coordination, and services required by, or reasonably inferred from, the Contract Documents, that are necessary for the construction and Completion of the Project.

1.2. Terms in the Contract Documents.

The term “provide” means “provide complete in place” or to “furnish and install” such item. Unless otherwise specifically provided in the Contract Documents, the terms “approved;” “directed;” “satisfactory;” “accepted;” “acceptable;” “proper;” “required;” “necessary” and “equal” mean as approved, directed, satisfactory, accepted, acceptable, proper, required, necessary and equal, in the opinion of Judicial Council. The terms “shall”, “will”, or “must” are mandatory, and “may” is permissive.

1.3. Laws Concerning the Contract.

The Contract Documents are subject to all provisions of the Constitution and laws of California and the United States, governing, controlling, or affecting Judicial Council, or the property, funds, operations, or powers of Judicial Council, and such provisions are by this reference made a part hereof. Any provision required by law to be included in the Contract Documents will be deemed to be inserted.

1.4. No Oral Agreements.

No oral agreement or conversation with any officer, agent, or employee of Judicial Council, either before or after of the Effective Date of the Agreement, will affect or modify any of the terms or obligations contained in the Contract Documents.

1.5. Confidentiality.

- 1.5.1. Contractor understands and agrees that, in the performance of the Work under the Contract Documents or in contemplation thereof, Contractor may have access to private or

confidential information which may be owned or controlled by, or otherwise in the possession of, Judicial Council and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to Judicial Council or compromise the safety of the Court. Contractor agrees that all information disclosed by Judicial Council to Contractor will be held in confidence and used only in the performance of the Work under the Contract Documents. Contractor must exercise the same standard of care to protect such information as Contractor uses to protect its own proprietary information and, in any case, no less than a reasonably prudent person or entity would use to protect its own proprietary data.

- 1.5.2. Notwithstanding, it is understood that Contractor may disclose Judicial Council's confidential information to Contractor's employees, Contractor's Subcontractors, and the Subcontractors' employees, if required to perform the Work and as required by law. Contractor will execute written agreements with its Subcontractors that bind each Subcontractor and its employees to these confidentiality provisions.
- 1.5.3. Contractor will acquire no right or title to the confidential information. Contractor agrees not to use the confidential information for any purpose except to provide the Work. Notwithstanding the foregoing, Contractor may disclose the confidential information: (i) to the extent necessary to comply with any law, rule, regulation or ruling applicable to it or as appropriate to respond to any summons or subpoena applicable to it; provided, however, that Contractor first gives reasonable notice of its intention to disclose in order for Judicial Council to seek a protective order; or (ii) to the extent necessary, to enforce its rights under the Contract Documents.
- 1.5.4. Contractor agrees that monetary damages are inadequate to remedy any breach or threatened breach of this section and, accordingly, consents to injunctive relief for any breach or threatened breach hereof without the posting of any bond.

1.6. No Waiver.

The failure of Judicial Council in any one or more instances to insist upon strict performance of any term of the Contract Documents, or to exercise any Judicial Council term, option or right, will not be construed as a waiver or relinquishment of the right to assert or rely upon any such term, option, or right on a future occasion. No action or failure to act by Judicial Council, Architect, or Construction Manager constitutes a waiver of any right or duty afforded Judicial Council under the Contract Documents, nor will any action or failure to act constitute an approval of or acquiescence in any breach hereunder, except as may be specifically agreed in writing.

1.7. Substitutions for Specified Items.

- 1.7.1. Requests for Substitutions prior to award of the Project will be done within the time period indicated in the Instructions to Bidders (Document 00 21 13).
- 1.7.2. Requests for Substitutions after award of the Project must be submitted within **THIRTY-FIVE (35)** Days of the date of the Notice of Award. This time period can be extended by Judicial Council only, in its sole discretion.
- 1.7.3. Whenever in the Specifications any materials, process, or article is indicated or specified by grade, patent, or proprietary name, or by name of manufacturer, that Specification will be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer any material, process, or article that will be substantially equal or better in every respect to that so indicated or specified.
 - 1.7.3.1. If the material, process, or article offered by Contractor is not, in the opinion of Judicial Council, substantially equal or better in every respect to that specified,

then Contractor must furnish the material, process, or article specified in the Specifications without any additional compensation or Change Order.

- 1.7.4. A Request for Substitution shall be in writing and must include:
 - 1.7.4.1. All variations of the proposed substitute from the material specified including, but not limited to, principles of operation, materials, or construction finish, thickness or gauge of materials, dimensions, weight, and tolerances;
 - 1.7.4.2. Available maintenance, repair or replacement services;
 - 1.7.4.3. Increases or decreases in operating, maintenance, repair, replacement, and spare parts costs;
 - 1.7.4.4. Whether or not acceptance of the substitute will require other changes in the Work (or in work performed by Judicial Council or others under contract with Judicial Council); and
 - 1.7.4.5. The time impact on any part of the Work resulting directly or indirectly from acceptance of the proposed substitute.
- 1.7.5. No substitutions will be made until Approved by Judicial Council. Contractor has the burden of proof to demonstrate the equality of any material, process, or article. Contractor warrants that if substitutes are Approved:
 - 1.7.5.1. The proposed substitute is equal or superior in all respects to that specified, and that such proposed substitute is suitable and fit for the intended purpose and will perform adequately the function and achieve the results called for by the general design of the Project and the Contract Documents;
 - 1.7.5.2. Contractor provides the same warranties and guarantees for the substitute that would be provided for any material, process, or article specified;
 - 1.7.5.3. Contractor will be fully responsible for the installation of the substitute and any changes in the Work required, either directly or indirectly, because of the acceptance of such substitute, with no increase in Contract Price and/or Contract Time. Incidental changes or extra component parts required to accommodate the substitute will be made by Contractor without a change in the Contract Price or Contract Time;
 - 1.7.5.4. Contractor will be responsible for any re-design costs occasioned by Judicial Council's Approval of any substitute; and
 - 1.7.5.5. Contractor will, in the event that a substitute costs less than a specified item, credit Judicial Council with one hundred percent (100%) of the net difference between the substitute and the originally specified material. In this event, Contractor agrees to execute a deductive Change Order to reflect that credit.
- 1.7.6. In the event Contractor furnishes a material, process, or article more expensive than that specified, the difference in the cost of that material, process, or article so furnished will be the sole responsibility of the Contractor.
- 1.7.7. In no event will Judicial Council be liable for any increase in Contract Price and/or Contract Time due to any claimed delay in the evaluation of any Request for Substitution or in the acceptance or rejection of any Request for Substitution.

- 1.7.8. If Judicial Council Approves a Request for Substitution after the award of the Project, Judicial Council will memorialize that approval in a Change Order or other applicable process to modify the Contract Documents.

1.8. Materials and Work.

- 1.8.1. Except as otherwise stated in the Contract Documents, Contractor will provide and pay for all materials, labor, tools, equipment, transportation, supervision, temporary constructions of every nature, and all other services, management, and facilities of every nature whatsoever necessary to execute and complete the Project within the Contract Time and at the Contract Price.
- 1.8.2. Unless otherwise specified, all materials must be new and the best of their respective kinds and grades as noted or specified in the Contract Documents, and workmanship must be of good quality.
- 1.8.3. Materials must be furnished in sufficient quantities and at such times as to ensure uninterrupted progress of the Work and must be stored properly and protected.
- 1.8.4. For all materials and equipment specified or indicated in the Drawings and/or Specifications, Contractor must provide all labor, materials, equipment, and services necessary for complete assemblies, and complete working systems, functioning as intended. Incidental items not indicated on Drawings, nor mentioned in the Specifications, that can reasonably be inferred to belong to the Work, or be necessary in good practice to provide a complete assembly or system, will be furnished as though itemized in every detail in the Contract Documents. In all instances, material and equipment will be installed in strict accordance with each manufacturer's most recent published recommendations and specifications.
- 1.8.5. Contractor must, after award of the Project by Judicial Council, and after relevant submittals have been Approved, place orders for materials and/or equipment as specified so that delivery of the same may be made without delays to the Work. Contractor will, upon demand from Judicial Council, present documentary evidence showing that orders have been placed.
- 1.8.6. Judicial Council reserves the right, but has no obligation, for any failure to comply with the above instructions, to place orders for such materials and/or equipment as Judicial Council may deem advisable so the Work may be completed within the Contract Time, and all expenses incidental to the procuring of said materials and/or equipment will be paid for by Contractor or withheld from payment(s) to Contractor.
- 1.8.7. Contractor warrants good title to all material, supplies, and equipment installed or incorporated into the Work. Upon Completion of the Work, Contractor shall deliver the Site to Judicial Council, together with all improvements and appurtenances constructed or placed thereon, free from any claims, liens, or charges. Contractor further agrees that neither it nor any person, firm, or corporation furnishing any materials or labor for any Work will have any right to lien any portion of the Premises or any improvement or appurtenance thereon, except that Contractor may install metering devices or other equipment of utility companies or of a political subdivision(s), title to which is commonly retained by the utility company or political subdivision. In the event of installation of any such metering device or equipment, Contractor will inform Judicial Council as to the legal owner of such device or equipment.
- 1.8.8. Nothing contained in this article, however, will defeat or impair the rights of persons furnishing materials or labor under any bond given by Contractor for their protection or

any rights under law permitting such protection, or any rights under law permitting such persons to look to funds due Contractor in the possession of Judicial Council (e.g., stop payment notices). This article must be inserted in all subcontracts and material contracts and notice of its provisions must be given to all persons furnishing material for Work when no formal contract is entered into for such material.

- 1.8.9. Title to new materials and/or equipment for the Work and attendant liability for its protection and safety will remain with Contractor until incorporated into the Work of the Project and Accepted by Judicial Council. No part of any materials and/or equipment will be removed from its place of storage except for immediate installation in the Work. Contractor will keep an accurate inventory of all materials and/or equipment in a manner satisfactory to Judicial Council or its authorized representative and will, at Judicial Council's request, provide it to Judicial Council.

2. JUDICIAL COUNCIL RIGHTS AND RESPONSIBILITIES

2.1. Judicial Council. Judicial Council may, at any time:

- 2.1.1. Direct Contractor to communicate with or provide notice to Construction Manager and/or Architect on matters for which the Contract Documents indicate Contractor will communicate with, or provide notice, to Judicial Council; and/or
- 2.1.2. Direct Construction Manager or Architect to communicate with or direct Contractor on matters for which the Contract Documents indicate Judicial Council will communicate with or direct Contractor.

2.2. Judicial Council Project Manager.

Judicial Council will designate a Judicial Council Project Manager, who will function as the main point of contact on the Project. Judicial Council may, from time to time, substitute a new Judicial Council Project Manager to act on behalf of Judicial Council in the administration of the Project. Unless otherwise specifically provided by the Contract Documents or delegated by Judicial Council Project Manager in written notice to Contractor, Contractor may rely only upon the written directions and approvals given by Judicial Council Project Manager. Judicial Council Project Manager will facilitate all communication with the Court. Judicial Council may also employ a separate consultant such as Construction Manager to assist Judicial Council Project Manager in administration of the Contract Documents. Judicial Council may also be represented by a Project Inspector, Architect and other representatives as needed.

2.3. Judicial Council's Rights if Contractor Fails to Perform.

If Judicial Council at any time believes that the Work does not conform to the Construction Schedule, or that Contractor is failing to construct the Project pursuant to the Contract Documents, or is otherwise failing to perform the Work consistent with the requirements of the Contract Documents, Judicial Council, after **FORTY-EIGHT (48)** hours written notice to Contractor, may take any action necessary or beneficial to Judicial Council to complete the Project, takeover the Work of the Project, terminate or suspend the Agreement as indicated herein, or any combination or portion of those actions. Contractor and the Surety will be liable to Judicial Council for any cost incurred by Judicial Council in those actions and Judicial Council has the right to deduct the cost thereof from any payment then or thereafter due Contractor or, if there is no payment from which to deduct the cost, to invoice Contractor for the cost.

3. ARCHITECT AUTHORITY AND RESPONSIBILITIES

- 3.1. Architect has the authority to act on behalf of Judicial Council to the extent expressly provided in the Contract Documents and to the extent determined by Judicial Council to, among other things, observe the progress and quality of the Work on behalf of Judicial Council.
- 3.2. Architect has the authority to reject materials, workmanship, and/or the Work whenever, in Architect's reasonable opinion, rejection may be necessary to ensure the proper execution of the Work and/or if Work is Defective Work. Whenever Architect considers it necessary or advisable, for implementation of the intent of the Contract Documents, Architect will have authority to require additional inspections or testing of the Work, whether such Work is fabricated, installed or completed. Neither this authority of Architect nor a decision made in good faith by Architect to exercise or not to exercise that authority will give rise to a duty or responsibility of Architect to Contractor, Subcontractors, material suppliers, their agents or employees, or other persons performing portions of the Work.
- 3.3. Architect will, with Judicial Council and on behalf of Judicial Council, determine the amount, quality, acceptability, and fitness of all parts of the Work, and interpret the Specifications, Drawings, and, with Judicial Council, interpret all other Contract Documents.
- 3.4. Architect has all authority and responsibility established by law, including the scope of authority and responsibilities set forth in Title 24 of the California Code of Regulations.
- 3.5. Contractor will provide Judicial Council and Construction Manager with a copy of all written communication between Contractor and Architect at the same time as that communication is made to Architect, including, without limitation, all RFIs, correspondence, submittals, claims, and PCOs.

4. CONSTRUCTION MANAGER AUTHORITY AND RESPONSIBILITIES

- 4.1. Construction Manager will administer the Project and Contract Documents on Judicial Council's behalf. After execution of the Agreement, and all other documents required by the Contract Documents after the issuance of a Notice of Award, and Judicial Council's issuance of a Notice to Proceed, all correspondence and/or instructions from Contractor and/or Judicial Council will be forwarded through Construction Manager. Construction Manager will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences, or procedures or for safety precautions in connection with the Work, which all remain Contractor's responsibility.
- 4.2. Construction Manager, however, has the authority to reject materials and/or workmanship not conforming to the Contract Documents, as determined by Judicial Council, Architect, and/or Project Inspector. Construction Manager also has the authority to require special inspection or testing of any portion of the Work (to the extent applicable), whether it has been fabricated, installed, or fully completed. Any decision made by Construction Manager, in good faith, will not give rise to any duty or responsibility of Construction Manager to Contractor, any Subcontractor, their agents, employees, or other persons performing any of the Work. Construction Manager will have free access to all parts of Work at any time.
- 4.3. If Judicial Council does not use a Construction Manager on this Project, all references to Construction Manager will be read as referring to Judicial Council.

5. PROJECT INSPECTOR AUTHORITY AND RESPONSIBILITIES & TESTS AND INSPECTIONS

5.1. Project Inspector.

- 5.1.1. One or more Project Inspector(s), including special inspectors, as required, may be assigned to the Work by Judicial Council, in accordance with requirements of Title 24, Part 1, of the California Code of Regulations (to the extent applicable), to enforce the building code and monitor compliance with the Drawings and Specifications for the Project.

- 5.1.2. Project Inspector(s) will have free access to all parts of Work at any time. Contractor will furnish Project Inspector(s) reasonable opportunities for obtaining such information as may be necessary to keep Project Inspector(s) fully informed of the progress and manner of Work and character of materials. Inspection of Work will not relieve Contractor from the obligation to fulfill any requirement of the Contract Documents.
- 5.1.3. If Contractor and/or any Subcontractor requests that Project Inspector(s) perform any inspection off-Site, that inspection will only be performed with Project Inspector(s)' written agreement, and at Contractor's sole expense.
- 5.1.4. Project Inspector does not have authority to interpret the Contract Documents or to modify the Work depicted in the Contract Documents. No Work inconsistent with the Contract Documents will be performed solely on the basis of the direction of Project Inspector, and Contractor will be liable to Judicial Council for the consequences of all such work.

5.2. Tests and Inspections.

- 5.2.1. If the Contract Documents, laws, ordinances or any Authority Having Jurisdiction requires the Work, or any portion thereof, to be specially tested, inspected or approved, Contractor will give Architect, Construction Manager and Project Inspector, written notice of the readiness of such Work for observation, testing or inspection at least **SEVENTY-TWO (72)** hours prior to the time for the conducting of such test, inspection or observation. If inspection, testing or observation is by any entity other than Judicial Council, Contractor will provide notice to Architect, Construction Manager, and Project Inspector not less than **SEVENTY-TWO (72)** hours prior to the date fixed for such inspection, test or observation. Contractor will not cover up any portion of the Work subject to tests, inspections or observations prior to the completion and satisfaction of the requirements of such test, inspection or observation. If any portion of the Work subject to test, inspection or approval will be covered up by Contractor prior to completion and satisfaction of the requirements of such test, inspection or approval, Contractor is responsible for the uncovering of such portion of the Work as is necessary for performing such test, inspection or approval at Contractor's sole cost and expense.
- 5.2.2. Judicial Council will select an independent testing laboratory to conduct any special tests. Selection of the materials required to be tested will be selected by the laboratory or Judicial Council's representative and not by Contractor. Contractor must notify Judicial Council's representative sufficiently in advance of its readiness for required observation or inspection to enable Judicial Council, or any representative, to observe any test.
- 5.2.3. Contractor must notify Judicial Council's representative sufficiently in advance of the manufacture of material supplied to the Project, and which the Contract Documents required be tested, so Judicial Council may arrange for the testing of same at the source of supply. This notice will be, at a minimum, **SEVENTY-TWO (72)** hours prior to the manufacture of the material that must be tested.
- 5.2.4. Any material shipped by Contractor from the source of supply prior to having satisfactorily passed required testing and inspection, or prior to the receipt of notice from the representative that testing and inspection will not be required, will not be incorporated into and/or into the Work.
- 5.2.5. Judicial Council will select and pay testing laboratory costs for all tests and inspections. Costs of tests of any materials found to be not in compliance with the Contract Documents will be paid for by Judicial Council and reimbursed by Contractor or deducted from the Contract Price through the issuance of a deductive Change Order.

5.3. Costs for After Hours and/or Off-Site Inspections.

If Contractor performs Work outside Project Inspector's regular working hours, over a period of more than **EIGHT (8)** hours per day by any single person on weekends/holidays, or requests that Project Inspector perform inspections off-Site, then the costs of any inspections required outside those hours will be borne by Contractor at its sole cost and expense and may be invoiced to Contractor by Judicial Council or Judicial Council may deduct those expenses from the Contract Price and withhold those amounts from payment(s) due to Contractor.

6. CONTRACTOR DUTIES AND RESPONSIBILITIES

Contractor will construct the Work for the Contract Price and within the Contract Time consistent with the standards and requirements set forth in the Contract Documents. Except as otherwise provided, Contractor will provide and pay for all labor, materials, equipment, permits, fees, licenses, facilities, transportation, taxes, and services necessary for the proper performance and Completion of the Work.

6.1. Status of Contractor.

6.1.1. Contractor is and will at all times be deemed to be an independent contractor and is wholly responsible for the manner in which it and its Subcontractors perform any part of the Work required of it by the Contract Documents. Nothing herein contained will be construed as creating the relationship of employer and employee, or principal and agent, between Judicial Council, or any of Judicial Council's employees or agents, and Contractor or any of Contractor's Subcontractors, agents or employees. Contractor assumes exclusively the responsibility for the acts of its employees as they relate to the services to be provided during the course and scope of their employment. Contractor, its Subcontractors, agents, and its employees will not be entitled to any rights or privileges of Judicial Council employees. Judicial Council will be permitted to monitor Contractor's activities to determine compliance with the terms of the Contract Documents.

6.1.2. As required by law, Contractor and all Subcontractors must be properly licensed and regulated by Contractor's State License Board, located at 9821 Business Park Drive, Sacramento, California 95827, with a mailing address of Post Office Box 26000, Sacramento, California, and with a website at <http://www.cslb.ca.gov>.

6.2. Contractor's Supervision.

6.2.1. During progress of the Work, Contractor must keep on the Site, and at all other locations where any Work related to the Project is being performed, a competent project manager and construction superintendent who are employees of Contractor, to whom Judicial Council does not object and at least one (1) of whom is fluent in English (written and verbal). The project manager and construction superintendent must also both speak fluently the predominant language of Contractor's employees.

6.2.2. Before commencing the Work, Contractor will give written notice to Judicial Council of the name of its project manager and construction superintendent. Neither Contractor's project manager nor construction superintendent will be changed except with prior written notice to Judicial Council, unless Contractor's project manager and/or construction superintendent proves to be unsatisfactory to Contractor, Judicial Council, any of Judicial Council's employees, agents, Construction Manager, or Architect, in which case, Contractor will notify Judicial Council in writing after the change has been made. Judicial Council retains the right to reasonably refuse Contractor's replacement personnel. Contractor's project manager and construction superintendent will each represent Contractor, and all directions given to Contractor's project manager and/or construction

superintendent by Judicial Council, Construction Manager, or Architect will be binding as if given to Contractor.

- 6.2.3. Contractor will efficiently supervise the Work, using its best skill and attention. Contractor must carefully study and compare all Contract Documents, Drawings, Specifications, and other instructions and must at once report to Judicial Council, Construction Manager, and Architect any error, inconsistency, or omission that Contractor or its employees and Subcontractors may discover, in writing, with a copy to Project Inspector(s). Contractor has the responsibility for discovery of errors, inconsistencies, or omissions in the Work.
- 6.2.4. Contractor's construction superintendent must be employed full-time for the Project and shall have complete authority to represent and act on behalf on Contractor on all matters pertaining to the Work. The construction superintendent must be competent and have a minimum of five (5) years' experience in construction supervision on projects of similar scale and complexity.
- 6.2.5. Contractor's project manager must devote sufficient time to the Project and be on Site, and in Contractor's home office, to pre-plan all activities for the Work to meet the Construction Schedule and so that Contractor fulfills all obligations in the Contract Documents. This includes, without limitation, making timely submittals, issuing and disseminating necessary RFIs, promptly processing and distributing bulletins, Change Orders and payments, keeping required logs current, etc. If any of these activities fall behind requirements of the Contract Documents or dates necessary to complete the Project within the Contract Time, Contractor must provide a full-time project manager on the Project Site dedicated solely to the Project, until the deficiencies are corrected.
- 6.2.6. Contractor must verify all indicated dimensions before ordering materials or equipment, or before performing Work. Contractor must take field measurements, verify field conditions, and must carefully compare such field measurements and conditions and other information known to Contractor with the Contract Documents before commencing Work. Contractor must immediately report errors, inconsistencies or omissions discovered by Contractor to Judicial Council. Upon commencement of any item of Work, Contractor is responsible for dimensions related to the Work and must make any corrections necessary to make Work properly fit at no additional cost to Judicial Council. This responsibility for verification of dimensions is a non-delegable duty and may not be delegated to Subcontractors or agents.
- 6.2.7. Omissions from the Drawings or Specifications, or any incorrect description of details of Work which are manifestly necessary to carry out the intent of the Drawings and Specifications, or which are customarily performed, do not relieve Contractor from performing such omitted or any incorrectly described Work. Contractor must perform that Work as if fully and correctly set forth and described in the Drawings and Specifications.
- 6.2.8. Contractor is solely responsible for the means, methods, techniques, sequences, and procedures of performing all Work. This includes, without limitation, exercising full control over the direction and compensation of all persons assisting Contractor in the performance of the Work and the coordination and sequencing of the Work amongst the Subcontractors. Contractor is solely responsible for all matters relating to the payment of its employees, including compliance with social security, withholding, all employee benefits, and all regulations governing such matters. Contractor is responsible for ensuring that the finished Work complies accurately with the Contract Documents.

6.3. Duty to Provide Fit Workers.

- 6.3.1. Contractor and Subcontractor(s) must at all times enforce strict discipline and good order among their employees and must not employ or work any unfit person, or anyone not

skilled in the work assigned to that person. Contractor is responsible to ensure compliance with this requirement. Judicial Council may require Contractor to permanently remove unfit persons from Project Site. Contractor must ensure that all its employees and employees of its Subcontractors comply with all applicable construction site safety requirements.

- 6.3.2. Any person employed by, or working as an agent of, Contractor or Subcontractor(s) whom Judicial Council may deem incompetent or unfit will be excluded from working on the Project and will not again be employed or otherwise retained on the Project except with the prior written consent of Judicial Council.
- 6.3.3. Contractor will furnish labor that can work in harmony with all other elements of labor employed or to be employed in the Work.
- 6.3.4. If Contractor intends to make any change in the name or legal nature of Contractor's entity, Contractor must first notify Judicial Council of the exact nature of the proposed change and how the proposed change will not in any way cause Contractor to be out of compliance with any licensing or prevailing wage registration requirements at any time. Judicial Council will determine if Contractor's intended change is permissible while performing the Work during the duration of the Project. If Judicial Council reasonably determines that the intended change will materially prejudice Judicial Council, or is unlawful, then Judicial Council may issue a written objection. Contractor must cure any issue identified by Judicial Council to Judicial Council's reasonable satisfaction. If Contractor fails to do so, then Judicial Council may terminate the Agreement for cause.
- 6.3.5. As required by law, Contractor and all Subcontractors must employ individuals for the Work in conformity with the Immigration Reform and Control Act of 1986, 8 USC §§1101 et seq.

6.4. Personnel.

- 6.4.1. Contractor, Contractor's employees, Subcontractors, Subcontractors' employees, or any person associated with the Work on behalf of Contractor will conduct themselves in a manner that is appropriate and does not interfere with any ongoing Court operations at the Premises. Judicial Council will not permit any: (1) verbal or physical contact with neighbors, Court staff, or members of the public; (2) profanity, or inappropriate attire or behavior; and/or (3) photographing, videoing, or audio recording of any neighbors, the Site, Court staff, or members of the public or any posting of any photographs, videos, or audio recordings of any neighbors, the Site, Court staff, or members of the public on any internet site, social media platform of any kind, regardless of source of any photograph, video, or audio recording, except as expressly authorized in writing by Judicial Council. Judicial Council may require Contractor to permanently remove noncomplying persons from the Site.
- 6.4.2. Contractor will employ a competent estimator and necessary assistants, or shall contract for sufficient services of an estimating consultant to estimate the cost of Work and process PCOs. The estimator must have a minimum of five (5) years' experience in estimating. The estimator must be satisfactory to Judicial Council and, if not satisfactory, will be replaced by Contractor with one reasonably acceptable to Judicial Council.
- 6.4.3. Contractor will employ a competent scheduler and necessary assistants, or contract for sufficient services of a scheduling consultant. The scheduler must have a minimum of five (5) years' experience in construction scheduling. The scheduler must be satisfactory to Judicial Council and, if not satisfactory, will be replaced by Contractor with one that is reasonably acceptable to Judicial Council.

- 6.4.4. If Contractor or any Subcontractor on the Site fails to comply with any applicable provision of the “Contractor Duties and Responsibilities” article, Judicial Council may have the offending person(s) immediately removed from the Site, and the person(s) will be replaced within **THREE (3)** Days, at no additional expense to Judicial Council. Contractor, on behalf of it and its Subcontractors, hereby waives any claim that the provisions of this paragraph or the enforcement thereof interferes, or has the potential to interfere, with its right to control the means and methods of its performance and duties under the Contract Documents.
- 6.4.5. Contractor understands that the Project is located on property of the State of California and that the possession and/or consumption of alcohol and/or tobacco products, and the use or possession of weapons, or illegal controlled substances by Contractor, or is Subcontractors, suppliers, and other business invitees, is prohibited.
- 6.4.6. Background Checks / Access to Restricted Areas.
- 6.4.6.1. *Security Protocols and Tool Control Policy.* Contractor is responsible for Contractor’s, Contractor’s employees, Subcontractors’, and Subcontractors’ employees’ knowledge and compliance with all Judicial Council and Court required security protocols in the performance of the Work. Such protocols include, but are not limited to, the then-current Judicial Council Tool Control Policy. Violation of Judicial Council’s security protocols and policies is considered a material breach of the Agreement. The version of Judicial Council Tool Control Policy applicable to the Agreement is provided in the Judicial Council Provided Forms and is hereby incorporated by reference. The Tool Control Policy may be amended or updated during the Contract Time. Contractor shall be responsible for complying with the most current Tool Control Policy. Judicial Council Tool Control Policy is subject to change at Judicial Council’s sole discretion.
- 6.4.6.2. *Background Checks.* If Contractor assigns persons (whether employees, independent contractors, Subcontractors or agents) to perform Work on the Project that requires that those persons have access to the systems (whether on-site or by remote access), any premises of Judicial Council or other judicial branch entity(ies), Judicial Council has the right, but not the obligation, to conduct a background check or to require Contractor to conduct a background check, as permitted by law, on all such persons before Judicial Council will grant access to Judicial Council’s or other judicial branch entities’ premises or systems to such persons. Contractor will cooperate with Judicial Council in performing background check(s) and will promptly notify Judicial Council of any person refusing to undergo a background check and will reassign such person to perform other services. Contractor must obtain all releases, waivers, or permissions required for the release of background check information.
- 6.4.6.3. *Access to Site.* Only Approved Persons may have unescorted access to: (i) the Restricted Areas; and (ii) any area of the Site and/or Premises during non-business hours when there is no security screening available. Contractor and Subcontractor employees who are not Approved Persons may access Restricted Areas only if they are escorted by an Approved Person at all times that they are in the Restricted Areas. Contractor may not rely upon an employee of the Court to escort or monitor these persons. Contractor must take all reasonable steps to ensure that its operations in any Restricted Area are at all times consistent with this section.
- 6.4.6.4. *Notification.* Contractor must notify all Subcontractors that: (i) Judicial Council requires a background check for personnel working in Restricted Areas without

an escort pursuant to this provision; (ii) the Court may have supplemental screening procedures, criteria, and requirements; and (iii) Subcontractor's employees must comply with both Judicial Council's and the Courts' background checks and procedures.

- 6.4.6.5. *Judicial Council Screening and Approval Process.* Judicial Council will conduct the screening and approval of employees of Contractor and Subcontractors pursuant to the Background Check Policy. Contractor agrees to cooperate with Judicial Council with respect to the screening of those employees. The version of Judicial Council Background Check Policy in effect is attached in Judicial Council Provided Forms. Judicial Council may update and/or revise the Background Check Policy at any time, without notice to Contractor. Contractor acknowledges that the definition of Restricted Areas in the Contract Documents is broader and includes more areas than the definition of Restricted Areas in the Background Check Policy and the definition of Restricted Areas shall control as applied to the Premises and/or Site for the purposes of the Project. Contractor must comply with the Background Check Policy.
- 6.4.6.6. *Judicial Council Badges.* Judicial Council will issue an identification badge to each Approved Person. The badge will indicate that the person is permitted to access the Restricted Areas. Judicial Council will either (i) notify Contractor if an employee is approved, whereupon Judicial Council will issue an identification badge for that person, or (ii) provide an identification badge for the person to Contractor, and Contractor will be responsible for issuing the identification badge to that person. All such persons must wear their identification badges in a readily visible manner whenever they are in a Restricted Area of the Premises and/or Site. Contractor will have a procedure in place to ensure that all badges are returned to Judicial Council upon termination of an employee.
- 6.4.6.7. *Court-Required Screening and Background Check Requirements.* Even if a Contractor or Subcontractor employee has a Judicial Council-issued badge, the Court has the ultimate decision as to whether a specific Contractor, Contractor's employee, or Subcontractor or Subcontractor's employee may have unescorted access to any portion of the Premises and/or Site. The Court will have the right at any time to refuse Premises and/or Site access to any Contractor or Subcontractor employee (even if that employee has a Judicial Council-issued badge) if the Court determines, in its sole discretion, that such person poses a risk to the Court or any person, system, or asset associated with the Court. The Court may elect to perform supplemental screening on Contractor or Subcontractor, each of their employees, who perform Work in that Court's Restricted Areas. Contractor agrees to cooperate with the Court with respect to the screening of those employees and will obtain at no additional cost to the Court all related releases, waivers, and permissions the Court requires. The Court may issue its own identification badge.
- 6.4.6.8. *DOJ and DMV Requirements.* Notwithstanding anything in the Contract Documents to the contrary, Contractor must comply with background check and clearance requirements of the DOJ and the DMV relating to any employee of either Contractor or Subcontractor who has physical access to any area which is either connected to, or contains records from the following databases at any Premises: the DOJ criminal computer database, including the California Law Enforcement Telecommunications System (CLETS) and the Criminal Offender Record Information (CORI), and the DMV computer database. If requested by either the Court or Judicial Council, Contractor must provide to either the Court or Judicial Council suitable documentation evidencing Contractor's compliance with the policies, practices, and procedures of the DOJ and the DMV regarding

background check and clearance requirements relating to access to these databases.

6.5. Prohibition of Harassment.

- 6.5.1. In addition to the non-discrimination requirements in these General Conditions, Contractor and all Subcontractors must comply with these provisions prohibiting harassment at the Site. Judicial Council is committed to providing a public environment and workplace free of sexual harassment and harassment based on factors such as race, color religion, national origin, ancestry, age, medical condition, marital status, disability or veteran status. Harassment includes without limitation, verbal, physical, or visual conduct which creates an intimidating, offensive or hostile environment such as racial slurs; ethnic jokes; posting of offensive statements, posters or cartoons or similar conduct. Sexual harassment includes without limitation the solicitation of sexual favors, unwelcome sexual advances, or other verbal, visual or physical conduct of a sexual nature.
- 6.5.2. Contractor must take all reasonable steps to prevent harassment from occurring, including without limitation affirmatively raising the subject of harassment among its employees, expressing strong disapproval of any form of harassment, developing appropriate sanctions, informing employees of their right to raise and how to raise the issue of harassment and informing complainants of the outcome of an investigation into a harassment claim.
- 6.5.3. Contractor cannot not permit any person, whether employed by Contractor, a Subcontractor, or any other person or entity, performing any Work at or about the Site and/or Premises to engage in any prohibited form of harassment. Any person performing or providing Work on or about the Site engaging in a prohibited form of harassment directed to any judge, clerk, or staff of the Court or of Judicial Council, or directed to any other person on or about the Site, will be subject to immediate removal and will be prohibited thereafter from providing or performing any portion of the Work. Upon Judicial Council's receipt of any notice or complaint that any person employed directly or indirectly by Contractor or any Subcontractor to perform or provide the Work has engaged in a prohibited form of harassment, Judicial Council will promptly undertake an investigation of such notice or complaint. If Judicial Council, after such investigation, reasonably determines that a prohibited form of harassment has occurred, Judicial Council will promptly notify Contractor of the same and direct that the person engaging in such conduct be immediately removed from the Site. Unless Judicial Council's determination that a prohibited form of harassment has occurred is grossly negligent or without reasonable cause, Judicial Council has no liability for directing the removal of any person determined to have engaged in a prohibited form of harassment nor will the Contract Price or the Contract Time be adjusted on account thereof. The indemnity provisions of the Contract Documents apply to any assertion by any person dismissed from performing or providing Work at the direction of Judicial Council pursuant to this provision, or the assertion by any person that any person directly or indirectly under the employment or direction of Contractor has engaged in a prohibited form of harassment directed to or affecting such person. The obligations of Contractor and the Surety under the preceding sentence are in addition to, and not in lieu of, any other obligation of defense, indemnity and hold harmless whether arising under the Contract Documents, at law or otherwise. All these obligations survive Completion of the Work or the termination of the Agreement.

6.6. Conferences and Meetings.

- 6.6.1. General Requirement. In addition to the conference and meeting requirements in the Specifications, Contractor's supervisory personnel for the Work and Contractor's management personnel must attend all required meetings as required by the Contract Documents or as requested by Judicial Council. Contractor's personnel participating in

conferences and meetings relating to the Work will be authorized to act on behalf of Contractor and to bind Contractor. Contractor is solely responsible for arranging for the attendance of Subcontractors and material suppliers at meetings and conferences relating to the Work as necessary and appropriate, or as requested by Judicial Council.

- 6.6.2. Preconstruction Conference. Contractor's representatives (and representatives of Subcontractors and/or materials suppliers as requested by Judicial Council) must attend a preconstruction conference at such time and place as designated by Judicial Council. The preconstruction conference will generally address the requirements of the Work and Contract Documents, and to establish construction procedures. Subject matters of the preconstruction conference will include, without limitation and as appropriate: (i) administrative matters, including an overview of the respective responsibilities of Judicial Council, Architect, Construction Manager, Contractor, Subcontractors, Project Inspector, and others performing any part of the Work or services relating to the Work; (ii) submittals; (iii) changes; (iv) employment practices, including CPR preparation and submission and prevailing wage rate responsibilities of Contractor and Subcontractors; (v) Progress Schedule development and maintenance; (vi) development of Schedule of Values and payment procedures; (vii) implementation of BIM, if applicable; (viii) communication procedures, including the handling of RFIs; (ix) emergency and safety procedures; (x) Site visitor policies and security/background check requirements; (xi) conduct of Contractor/Subcontractor personnel at the Site; and (xii) Completion, Punch List and closeout procedures.
- 6.6.3. Progress Meetings. Progress meetings will be conducted on regular intervals (weekly unless otherwise expressly indicated elsewhere in the Contract Documents). Contractor's representatives and representatives of Subcontractors (as requested by Judicial Council) must attend progress meetings. Progress Meetings will be chaired by Judicial Council or Construction Manager and will generally include as agenda items, without limitation: Site safety, field issues, coordination of Work, construction progress and impacts to timely Completion, if any. The purposes of the progress meetings include: (i) a formal and regular forum for discussion of the status and progress of the Work by all Project participants; (ii) a review of progress or resolution of previously raised issues and action items assigned to the Project participants; and (iii) reviews of the Construction Schedule (including any potential impacts to the Contract Time) and submittals.
- 6.6.4. Special Meetings. As deemed necessary or appropriate by Judicial Council, special meetings will be conducted with the participation of Contractor, Subcontractors and other Project participants as requested by Judicial Council.
- 6.6.5. Minutes of Meetings. Following conclusion of the preconstruction conference, progress meetings and special meetings, Architect or Construction Manager will prepare and distribute minutes reflecting the items addressed and actions taken at a meeting or conference. Unless Contractor notifies Architect and Construction Manager in writing of objections or corrections to minutes prepared hereunder within **FIVE (5)** Days of the date of distribution of the minutes, the minutes as distributed will constitute the official record of the meeting or conference. No objections or corrections of any Subcontractor or material supplier must be submitted directly to Architect or Construction Manager; such objections or corrections must be submitted to Architect and Construction Manager through Contractor. If Contractor timely objects, or notes corrections, to the minutes, the resolution of such matters will be addressed at the next scheduled progress meeting.

6.7. Purchase of Materials and Equipment.

- 6.7.1. Ordering Materials. Contractor is required to order and obtain materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from Judicial Council to assure that there will be no delays or disruptions to the progress of the Work

and so that Contractor will achieve Completion within the Contract Time. All materials and equipment shall be stored on-Site and secured by Contractor, unless otherwise provided hereunder.

6.7.2. Off-Site Storage of Materials and Equipment Only Upon Judicial Council's Written Consent. Contractor will not store materials and/or equipment off-Site without first obtaining Judicial Council's express, written consent. If Contractor receives Judicial Council's consent for Stored Materials, Contractor must comply with all the following:

6.7.2.1. *Property of Others Insurance.* If this Project is not enrolled in an OCIP, then Contractor must procure and maintain, during the entire time Stored Materials are in off-Site storage, insurance coverage acceptable to Judicial Council that protects Contractor and Judicial Council from all claims for Stored Materials that are lost, stolen, or damaged. Judicial Council must be named as a loss payee for this insurance coverage. The insurance coverage must include a "loss payable endorsement" stating that, in the event Judicial Council has paid for Stored Materials that are lost, stolen, or damages, all amounts payable will be paid directly to Judicial Council. If approved in advance by Judicial Council, this required insurance may be obtained by an "Employee Theft Protection Insurance Policy" or an "Employee Theft Protection Bond."

6.7.2.2. *Payment for Stored Materials.* Judicial Council will only make payment to Contractor for Stored Materials if agreed upon in advance, in writing, by Judicial Council and only if Contractor submits an itemized list of all Stored Materials with Contractor's Application for Payment. Contractor's itemized list of all Stored Materials must be supported by all the following:

6.7.2.2.1. Itemized breakdown of the Stored Materials for the purpose of requesting partial payment, identifying the serial numbers and exact storage location of each piece of equipment and material.

6.7.2.2.2. Verified invoices for the Stored Materials.

6.7.2.2.3. Original copy of Property of Others Insurance, Employee Theft Protection Insurance Policy, or an Employee Theft Protection Bond based on the type of insurance required by Judicial Council. These documents must include certificates and endorsements stating the coverage and that Judicial Council is a loss payee or obligee, as appropriate.

6.7.2.2.4. An express, signed document from Contractor indicating that Judicial Council may, at any time and at its sole discretion, have unhindered and unqualified access to all Stored Materials and to remove the Stored Materials.

6.8. Documents on Work Site.

Contractor must at all times keep on the Site, or at another location as Judicial Council may authorize in writing, one legible copy of: (i) all Contract Documents, including Addenda (**Exhibit Q** (Document 00 91 13) and Change Orders; (ii) Title 19 and Title 24 of the California Code of Regulations; (iii) the specified edition(s) of the Uniform Building Code (electronic versions are acceptable); (iv) all approved Drawings, Schedules, and Specifications, as amended or revised; and (v) all codes and documents referred to in the Specifications, and made part thereof. These documents will be kept in good order and available to Judicial Council, Construction Manager, Architect, Architect's representatives, Project Inspector(s), and all Authorities Having Jurisdiction over Contractor that must be acquainted with and comply with the provisions of these titles as they

relate to this Project. (See particularly the duties of Contractor, Title 24, Part 1, California Code of Regulations, Section 4-343.) Contractor will coordinate with Architect and Construction Manager and will submit its verified report(s) according to the requirements of Title 24.

6.9. Daily Job Reports.

6.9.1. Contractor must maintain, at a minimum, at least one (1) set of Daily Job Reports on the Site. These must be prepared by Contractor's employee(s) who are present on Site, and must include, at a minimum, the following information:

6.9.1.1. A brief description of all Work performed on that date.

6.9.1.2. A summary of all other pertinent events and/or occurrences on that date.

6.9.1.3. The weather conditions on that date.

6.9.1.4. A list of all Subcontractor(s) working on that date.

6.9.1.5. A list of each Contractor employee working on that date and the total hours worked for each employee.

6.9.1.6. A complete list of all equipment on the Site that date, whether in use or not.

6.9.1.7. A complete list of all materials, supplies, and equipment delivered to the Site on that date.

6.9.1.8. A complete list of all inspections and tests performed on that date.

6.9.2. Each day Contractor must provide a copy of the previous day's Daily Job Report to Judicial Council or Judicial Council's Construction Manager.

6.10. Preservation of Records.

Judicial Council has the right to examine and audit all Daily Job Reports or other Project records of Contractor's project manager(s), superintendent(s), and/or foreperson(s), all CPRs and/or related documents including, without limitation, payroll, payment, timekeeping and tracking documents; all books, estimates, records, contracts, documents, bid documents, Bid cost data, subcontract job cost reports, and other data of Contractor, any Subcontractor, and/or supplier, including computations and projections related to bidding, negotiating, pricing, or performing the Work or modification of the Contract Documents, in order to evaluate the accuracy, completeness, and currency of the cost, manpower, coordination, supervision, or pricing data at no additional cost to Judicial Council. These documents may be duplicative and/or be in addition to any Bid documents held in escrow by Judicial Council. Contractor must make available at its office at all reasonable times the materials described in this paragraph for the examination, audit, or reproduction until **THREE (3)** years after final payment under the Contract Documents. Notwithstanding the provisions above, Contractor must provide any records requested by any governmental agency or Authority Having Jurisdiction, if available, after the time set forth above.

6.11. Obtaining of Permits and Licenses.

Contractor must secure and pay for all permits, licenses, and certificates as indicated in the Special Conditions (**Exhibit N (Document 00 71 00)**). Contractor must review the Special Conditions (**Exhibit N (Document 00 71 00)**) for any changes or exceptions to this provision.

6.12. Work to Comply with Standard of Care.

Contractor, its officers, agents, employees, Subcontractors, consultants and any persons or entities for whom Contractor is responsible, must provide all Work pursuant to and in accordance with the requirements of the Contract Documents and in a manner consistent with the standard of care under California law applicable to those who specialize in providing such services for projects of the type, scope, and complexity of the Project. Judicial Council's Acceptance of any submittals, deliverables, construction Work, or other work product of Contractor will not be construed as assent that Contractor has complied, nor in any way relieve Contractor of, compliance with: (i) the applicable standard of care; (ii) applicable statutes, regulations, rules, guidelines, and requirements; and/or (iii) the Contract Documents.

6.13. Work to Comply with Applicable Laws and Regulations.

6.13.1. General Requirements. Contractor must be acquainted and comply with, and give all notices required by, all applicable laws, ordinances, rules, and regulations relating to the Work, including, but not limited to the specific laws, ordinances, rules, and regulations as indicated and specified in the Contract Documents and identified below, and the appropriate statutes and administrative code sections related thereto or otherwise applicable to the Project. If Contractor observes that Drawings and Specifications are at variance therewith, or should Contractor become aware of the development of conditions not covered by Contract Documents that will result in finished Work being at variance therewith, Contractor will promptly notify Judicial Council in writing and any changes deemed necessary by Judicial Council must be made as provided in Contract Documents for changes in Work.

- 6.13.1.1. Americans with Disabilities Act
- 6.13.1.2. California Art Preservation Act
- 6.13.1.3. California Code of Regulations, including, without limitation Title 8, 17, and Title 24
- 6.13.1.4. Government Code (when applicable to the Project)
- 6.13.1.5. Industrial Accident Commission's Safety Orders, State of California
- 6.13.1.6. Labor Code of the State of California, division 2, part 7, Public Works and Public Agencies
- 6.13.1.7. Manual of Accident Prevention in Construction, latest edition, published by A.G.C. of America
- 6.13.1.8. National Electrical Safety Code, U. S. Department of Commerce
- 6.13.1.9. National Board of Fire Underwriters' Regulations
- 6.13.1.10. Public Contract Code (when applicable to the Project)
- 6.13.1.11. Regulations of the State Fire Marshall (title 19, California Code of Regulations) and Pertinent Local Fire Safety Codes
- 6.13.1.12. Uniform Building Code, latest addition, and the California Code of Regulations, title 24, including amendments
- 6.13.1.13. U. S. Copyright Act

6.13.1.14. U. S. Visual Artists Rights Act

- 6.13.2. CEQA Compliance. Contractor will comply will all applicable mitigation measures, if any, adopted by any public agency with respect to this Project pursuant to CEQA.
- 6.13.3. SWPPP Compliance. Contractor will comply with the SWPPP and, if indicated in the Special Conditions (**Exhibit N** (Document 00 71 00)), will be Judicial Council’s Qualified SWPPP Practitioner, at no additional cost to Judicial Council.
- 6.13.4. Air Pollution Compliance. Contractor and each Subcontractor will comply with all State and/or local air pollution control rules, regulations, ordinances, and statutes that apply to any Work performed under the Contract Documents. If there is a conflict between the State and local air pollution control rules, regulations, ordinances, and statutes, the most stringent will govern.
- 6.13.5. Water Pollution Control. Contractor and each Subcontractor will comply with all State and/or local water pollution control rules, regulations, ordinances, and statutes that apply to any Work performed under the Contract Documents. If there is a conflict between the State and local air pollution control rules, regulations, ordinances, and statutes, the most stringent will govern.
- 6.13.6. OSFM Compliance. Contractor shall interact with the appointed OSFM at regular intervals during construction as required. To the extent applicable, Contractor shall provide any construction details for which Contractor is responsible, which may include Shop Drawings, and/or installation details, using simple, proven and established approaches and Underwriters’ Laboratories (UL) listed assemblies which comply with applicable code requirements of any Authority Having Jurisdiction. Contractor shall avoid complex and unproven approaches to assemblies and fire life systems. Complex and unproven approaches shall be avoided as these approaches can result in increased OSFM review durations, including potential additional time related to resolution of OSFM’s code interpretations. If there is a delay in the OSFM review time or other impacts and Judicial Council determines that Contractor did not follow this requirement, the responsibility for any increased OSFM review durations or any other impact to the Contract Time and cost shall be the sole responsibility of Contractor. Where Specifications or Drawings state that materials, processes, or procedures must be approved by OSFM, or other Authorities Having Jurisdiction, Contractor shall be responsible for satisfying requirements of Authorities Having Jurisdiction.
- 6.13.6.1. *OSFM Code Interpretations*. Contractor is fully responsible to obtain OSFM approval for any documents prepared by Contractor, to the extent applicable, and obtain a Certificate of Occupancy at Completion of the Project. Contractor shall complete construction in accordance with the OSFM’s interpretations of applicable codes, including previously published OSFM interpretations of any code provisions. Such compliance shall also include any requirements of the Contract Documents that are more stringent than the applicable code’s minimum requirements.
- 6.13.6.2. *Changes to Contract Price or Contract Time Resulting from OSFM Interpretations*. With respect to OSFM code interpretations, Contractor is only entitled to a change in the Contract Price and/or Contract Time if Contractor can demonstrate that OSFM’s code interpretations for the Project were more stringent than industry standards. Code interpretations by OSFM during construction inspections are considered more stringent than industry standards, if, by a preponderance of evidence, Contractor demonstrates that the interpretation was

more stringent than those in the following sources, with previous OSFM published interpretations being of primary significance:

- 6.13.6.2.1. OSFM published interpretations, interpretations by qualified third-party reviewers;
- 6.13.6.2.2. ICC code interpretations; reference standards detailed in Chapter 35 of the California Building Code;
- 6.13.6.2.3. California Fire Code Chapter 80 reference standards; California Mechanical Code Chapter 17; and
- 6.13.6.2.4. California Electric Code, Annex A and B; and interpretations from these sources.

If so demonstrated, Contractor may be provided an appropriate adjustment in the Contract Time in accordance with these General Conditions. In all instances where an adjustment in the Contract Price is agreed to, Contractor will be compensated at fifty percent (50%) of the additional cost of the change resulting from the required modifications to comply with the specific OSFM code interpretation under consideration.

6.13.6.3. *OSFM Inspections.* Contractor shall cooperate with the State Fire Marshall during any inspection of the Work. All durations for such inspections by the State Fire Marshall must be included in Construction Schedule. If Contractor fails to timely make Work available to State Fire Marshall for inspection, fails to complete any Work in time for inspection by the State Fire Marshall, or if Contractor otherwise fails to cooperate with the State Fire Marshal during any such inspections, Contractor waives any entitlement to cost or time impacts arising therefrom.

6.13.7. Responsibility of Contractor for Non-Compliance. If Contractor performs any Work that it knew, or through exercise of reasonable care should have known, was contrary to any applicable laws, ordinance, rules, or regulations, Contractor will be solely responsible for all costs arising therefrom, including, without limitation whatsoever, performing any corrective Work at Contractor's sole cost and expense.

6.14. Safety/Protection of Persons and Property.

- 6.14.1. Contractor will be solely and completely responsible for conditions of the Work and the Site, including safety of all persons and property during performance of the Work. This requirement will apply continuously and not be limited to normal working hours.
- 6.14.2. Contractor will be solely responsible for the implementation and maintenance of safety programs as required by the Contract Documents.
- 6.14.3. Contractor will furnish to Judicial Council a copy of Contractor's Safety Plan, specifically adapted for the Project, within the time frame indicated in the Contract Documents.
- 6.14.4. Contractor is responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the performance of the Work, or otherwise arising from the any obligation of the Contract Documents, and will take all necessary measures and be responsible for the proper care and completion and final Acceptance of the Work by Judicial Council.

- 6.14.5. Damage to the Site, Premises, and/or Work of the Project must be promptly removed, repaired, or corrected by Contractor.
- 6.14.6. Contractor must take, and require Subcontractors to take, all necessary precautions for safety of workers on the Site and must comply with all applicable federal, state, local, and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to the Premises. Contractor shall provide a safe and healthy place of employment. Contractor will furnish, erect, and properly maintain, at all times, all necessary safety devices, safeguards, construction canopies, signs, nets, barriers, lights, and watchmen for protection of workers and the public and post danger signs warning against hazards created by such features in the course of the Work.
- 6.14.7. Contractor must store volatile wastes in covered metal containers and remove them from the Site daily. Contractor will prevent accumulation of wastes that create hazardous conditions. Contractor must provide adequate ventilation during use of volatile or noxious substances.
- 6.14.8. Contractor will designate a responsible member of its organization on the Project, whose duty is to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety, and health of workers. Contractor must report the name and position of the person so designated to Judicial Council.
- 6.14.9. Contractor must notify Judicial Council immediately of any violations of safety laws, rules, orders, standards or regulations. Contractor will correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, Contractor will correct any such violations promptly.
- 6.14.10. In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization, will act, at its discretion, to prevent such threatened loss or injury. Any compensation claimed by Contractor on account of emergency work will be determined by mutual agreement of the Parties, and if no agreement can be reached, Judicial Council may issue a Unilateral Change Order in any deemed reasonable by Judicial Council, in its sole discretion.
- 6.14.11. All salvage materials will become the property of Contractor and will be removed from the Site unless otherwise called for in the Contract Documents. Judicial Council reserves the right to designate certain items of value that will be turned over to Judicial Council unless otherwise directed by Judicial Council.
- 6.14.12. All connections to public utilities and/or existing on-site services will be made and maintained in such a manner as to not interfere with the continuing use of same by Judicial Council or Court during the entire progress of the Work.
- 6.14.13. Contractor will provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions, such as extreme heat, cold, rain, snow, winds, flooding, or dampness.
- 6.14.14. Contractor will protect and preserve the Work from all damage or accident, providing temporary roofs, window and door coverings, boxing, or other construction as needed. Contractor is responsible for existing structures, walks, roads, trees, landscaping, materials, equipment, furnishings, and/or improvements in working areas, and shall also provide

adequate protection therefor. If temporary removal of any of the above items is necessary, or damage occurs due to the Work, Contractor will replace the same at its sole expense with the same kind, quality, and size of any Work or damaged item. This includes any adjoining property of Judicial Council and others.

- 6.14.15. Contractor must take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property, and structures (including, without limitation, protection from settlement or loss of lateral support), and to avoid, and repair any, damage thereto caused by any part of the Work.
- 6.14.16. Contractor will confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits, or directions of Judicial Council and/or Architect, and will not interfere with the Work or unreasonably encumber the Site and/or Premises or overload any structure with materials. Contractor will enforce all instructions of Judicial Council and Architect regarding signs, advertising, fires, and smoking, and require that all workers comply with all regulations while on the Premises and/or Site, to the extent applicable.
- 6.14.17. Contractor must take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed, Contractor must have a civil engineer, registered as a professional engineer in California, replace them at no cost to Judicial Council.
- 6.14.18. In the event that Contractor enters into any agreement with owners of any adjacent property to enter upon the adjacent property for the purpose of performing the Work, Contractor shall fully indemnify, defend, and hold harmless each person, entity, firm, or agency that owns or has any interest in adjacent property. The form and content of the agreement of indemnification must be Approved by Judicial Council prior to entering the adjacent property. Contractor shall also indemnify Judicial Council as provided in the indemnification provision herein. These provisions are in addition to any other requirements of the owners of the adjacent property.
- 6.14.19. Contractor must obtain written approval from Judicial Council prior to engaging in any video documentation of the Project Site. Contractor may utilize drones or similar aerial equipment to monitor the progress of the Work and for security purposes, but Contractor must comply with all legal requirements of the Federal government, the State of California, and the County and City in which the Project is located, applicable to the use of drones or similar aerial equipment. In addition, Contractor must ensure that no photographs, videos or digital recordings of any kind are taken of judicial officers, Court staff, or Judicial Council staff. If Contractor utilizes drones or any other unmanned aircraft during construction operations, Contractor must either ensure its insurance coverage includes unmanned aircraft operations or procure and maintain a separate aircraft liability policy to cover unmanned aircraft operations with limits and coverage equal to the General Liability limits identified in the Contract Documents
- 6.14.20. Contractor must maintain emergency first aid treatment for Contractor's workers on the Project which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 et seq.) the California Occupational Safety and Health Act of 1973, and all related regulations, including without limitation section 330 et seq. of Title 8 of the California Code of Regulations.

6.15. Infectious Disease Compliance Provisions.

- 6.15.1. Compliance with Orders. Contractor and its Subcontractors, agents and employees thereof, are responsible for complying with all applicable and existing federal, State, and/or local

statutes, orders, rules, regulations, ordinances, and/or directives in any way relating to construction site safety, the Work, the Project, and Site, in connection with any Infectious Disease. Contractor shall ensure it has supervisory employees onsite that are trained and knowledgeable of all these requirements to ensure full compliance on Site and during the Work. Contractor's obligations hereunder shall include, without limitation providing personal PPE to its employees and to ensure that its Subcontractors provide PPE to its employees to prevent the spread of an Infectious Disease at the Project Site(s).

6.15.2. Infectious Disease and Contract Time. Contractor agrees that the Contract Time is based on Contractor's full compliance with all applicable and existing federal, State, and/or local statutes, orders, rules, regulations, ordinances, and/or directives relating to construction site safety, the Work, the Project, and the Site in connection with an Infectious Disease. Any dispute concerning the Contract Time in connection with any delay associated with an Infectious Disease shall be resolved pursuant to the Claims Resolution Process, to the extent that Contractor establishes that it is entitled to an adjustment of the Contract Time.

6.15.3. Infectious Disease & Extra Work.

6.15.3.1. Contractor agrees that its Bid, the Contract Price and the Contract Time are based on Contractor's full compliance with all applicable federal, state, and/or local statutes, orders, rules, regulations, ordinances, and/or directives relating to construction site safety, the Work, the Project, and the Site in relation with an Infectious Disease at the time the Parties entered into the Agreement. Therefore, any additional costs to Contractor associated with any Infectious Disease, or any federal, state, or local order relating thereto, shall not be considered compensable unless:

6.15.3.1.1. It occurred after the date of the award of the Project to Contractor;

6.15.3.1.2. It materially increases the Contract Price or the Contract Time by imposing different, additional or more stringent requirements; and

6.15.3.1.3. Contractor notifies District within **TEN (10)** Days of the issuance of any new public health order(s), including the anticipated increase to the Contract Price or Contract Time due to the new public health order(s), and Contractor substantiates those costs with detailed supporting documentation as required by the Contract Documents. Including, without limitation, the "Changes in the Work" article herein and the Claims Resolution Process.

6.15.3.2. If, during the Work, the applicable and existing federal, state, and/or local statutes, orders, rules, regulations, ordinances, and/or directives relating to construction site safety, the Work, the Project, and/or the Site in connection with an Infectious Disease, are changed or rescinded (e.g., by the reduction of potential exposure or risk due to vaccinations), the Parties agree to reduce the Contract Price and the Contract Time due to the removal of the required efforts. If the Parties cannot mutually agree on the appropriate reduction, District may issue a Unilateral Change Order for an amount of time and money it determines to be both reasonable and appropriate. Any dispute concerning the application of this procedure shall be resolved pursuant to the Claims Resolution Process.

6.15.3.3. *Infectious Disease Release.* Contractor acknowledges that it is voluntarily and freely entering into the Agreement for this Project and deciding to perform the Work which will require Contractor to enter upon and into the Site and that Contractor use of the Site includes the possible exposure to and illness from an

Infectious Disease. Contractor further acknowledges the dangers involved and with full knowledge of these dangers, voluntarily agrees to assume all risks of bodily injury, death, or property damage, whether those risks are known or unknown. Contractor hereby releases Judicial Council from any and all liabilities, causes of action, lawsuits, claims, demands, or damages of any kind whatsoever that Contractor, its staff, participants, relatives, children, spouse, partner, household members, family members, employees, guests, invitees, volunteers, agents, consultants, Subcontractors, and any other person tracing exposure or illness to Contractor, now have, or may have in the future, for injury, trauma, illness, loss, unwanted contact, harassment, disability, death or property damages related to being exposed to or contracting an Infectious Disease while using the Site for the performance of the Work. Contractor shall include this paragraph in all subcontracts with Subcontractors.

- 6.15.4. Contractor shall ensure it has supervisory employees onsite, including, without limitation, Contractor's project manager and construction superintendent, that are trained and knowledgeable of all of these requirements to ensure full compliance on the Site and during the Work.
- 6.15.5. Any cost or time considerations required to comply with these "Infectious Disease Compliance Provisions" shall be at Contractor's sole expense and expense, but may be included in the Contract Price and Contract Time when Contractor submits its Bid.

6.16. Working Evenings and Weekends.

Contractor may be required to work evenings and/or weekends at no additional cost to Judicial Council. Contractor must provide Judicial Council **SEVENTY-TWO (72)** hours' notice prior to performing any evening and/or weekend work. Contractor must perform all evening and/or weekend work only upon Judicial Council's prior Approval and in compliance with all applicable rules, regulations, laws, and local ordinances including, without limitation, all noise and light limitations. Contractor will reimburse Judicial Council for any Inspector and custodial charges necessitated by Contractor's evening and/or weekend work, or any such charges may be withheld from any sum due to Contractor.

6.17. Demolition.

- 6.17.1. If the Work requires the demolition of existing structures, Contractor must perform all Work reasonably required for removal or demolition, whether or not structures are fully detailed in the Drawings and Specifications.
- 6.17.2. The demolition component of the Work may include the removal of existing materials and components which, depending on the age and design of the structures existing at the Site may contain Hazardous Materials, the full extent of which may not yet be determined. Judicial Council has provided Contractor for its reference Site information. Any additional information on Hazardous Materials, if applicable, may be provided elsewhere in the Contract Documents, including, without limitations in any supplemental or Special Conditions. Contractor shall plan for and execute the demolition, redesign, and reconstruction of the Work taking into account any uncertainty with respect to Hazardous Materials.

6.18. Noise and Dust Control.

- 6.18.1. General Obligations. In addition to the noise control, dust control and related requirements in the Specifications, Contractor will control the noise and dust at the Site as indicated here.

- 6.18.2. Noise Control. Contractor must comply with any city or county rules, regulations, or ordinances governing construction noise that are applicable to the Project. In the absence of any such rules, regulations and ordinances, Contractor must conduct its Work to minimize disruption to others due to sound and noise from any Work and will be responsive to Judicial Council's requests to reduce noise levels. Contractor must install noise reducing devices on construction equipment. Construction equipment noise at the Site will be limited as required by applicable law, rule or regulation. If the Court or any other public operations are ongoing at a Site at any point during the progress of the Work, and if, in Judicial Council's reasonable discretion, the noise from any Work disrupts or disturbs the normal Court operations at the Site, at Judicial Council's request, Contractor will schedule the performance of that Work around normal Court operating hours or make other arrangements so that the Work does not cause disruption or disturbance. In no event will those arrangements result in adjustment of the Contract Price or the Contract Time.
- 6.18.2.1. Contractor will not cause or allow sounds to be produced more than 65 decibels measured at the jobsite between the hours of 7:00 p.m. and 7:00 a.m. or as dictated by local ordinances. Contractor will not cause or allow sounds to be produced more than 85 decibels measured at the jobsite between the hours of 7:00 a.m. and 7:00 p.m. without the consent of the Court and Judicial Council.
- 6.18.2.2. Each internal combustion engine, used for any purpose on the Project or related to the Project, must be equipped with a muffler of a type recommended by the manufacturer and comply with the applicable rules and regulations of the air quality control district in the county in which the Project is located. No internal combustion engine may be operated on the Project without a muffler.
- 6.18.2.3. Loading and unloading of construction materials will be scheduled to minimize disruptions to Court, Court uses and/or Judicial Council activities. Construction activities will be scheduled to minimize disruption to the Court and to Court users
- 6.18.3. Dust Control. Contractor is solely responsible for maintaining and upkeeping all areas of the Site and adjoining areas, outdoors and indoors, free from flying debris, grinding powder, sawdust, dirt and dust, as well as any other product, product waste or work waste, that, by becoming airborne, may cause respiratory inconveniences to persons, particularly to Judicial Council personnel. Dust barriers must be provided to isolate dust and dirt from construction operations. Contractor must take specific care to avoid deposits of airborne dust or airborne elements. The protection devices, systems or methods used by Contractor to control airborne dust must comply with the regulations set forth by the EPA and OSHA, and other applicable law, rule or regulation. Additionally, Contractor must regularly and routinely clean up and remove any and all deposits of dust and other elements. Damage and/or any liability derived from Contractor's failure to comply with these requirements shall be borne solely by Contractor, including, without limitation, any and all penalties that may be incurred for violations of applicable law, rule or regulation, and any amounts expended by Judicial Council to pay such damages will be due and payable to Judicial Council on demand, or may be deducted from any sum due to Contractor, whichever Judicial Council elects in its sole discretion. Contractor will replace any damaged property or part thereof and professionally clean any and all items that become covered or partially covered to any degree by dust or other airborne elements. If Court or any other public operations are ongoing at any point during the progress of Work, and, in Judicial Council's reasonable discretion, flying debris, grinding powder, sawdust, dirt or dust from any Work disrupts or disturbs the judicial officers, Court staff, or Judicial Council staff, or the normal operation of the Court, at Judicial Council's request, Contractor will schedule the performance of all that Work around normal Court hours and make other arrangements so

that the Work does not cause disruption or disturbance. In no event will those arrangements result in adjustment of the Contract Price or the Contract Time.

- 6.18.4. Contractor Failure to Comply. If Contractor fails to comply with the requirements for dust control, noise control, or any other maintenance or clean up requirement of the Contract Documents, Judicial Council, Architect, Project Inspector, or Construction Manager will notify Contractor in writing and Contractor will take immediate action. Should Contractor fail to respond with immediate and responsive action and not later than **TWENTY-FOUR (24)** hours from that notification, Judicial Council will have the absolute right to proceed as it may deem necessary to remedy such matter. Any and all costs incurred by Judicial Council in connection with those actions are the sole responsibility of, and be borne by, Contractor; Judicial Council may deduct those amounts from the Contract Price and withhold those amounts from payment(s) due to Contractor.

6.19. Archaeological Finds / Human Remains.

- 6.19.1. If Contractor discovers any archeological artifacts during excavation and/or construction, Contractor will immediately stop all affected Work and notify Judicial Council. Judicial Council will obtain a qualified archaeologist to assess the discovery and suggest further mitigation, as necessary.
- 6.19.2. If Contractor discovers human remains, Contractor must notify Judicial Council. Judicial Council will contact the county coroner. If the remains are determined to be Native American, Judicial Council will contact the appropriate tribal representative.

6.20. Cleaning Up.

- 6.20.1. Contractor must provide all services, labor, materials, and equipment necessary for protecting the Work, all Court occupants, furnishings, equipment, and building structure from damage until its Completion and final Acceptance of the Work by Judicial Council. Contractor must perform all routine cleaning, operation, and maintenance on completed portions of the Work, including buildings, site utilities and all systems until Completion or unless otherwise directed by Judicial Council. At Completion of the Work and portions thereof, Contractor will clean to the original state any areas beyond the Work area that become dust laden as a result of the Work. Contractor must erect the necessary warning signs and barricades to ensure the safety of all Court occupants. Contractor at all times must maintain good housekeeping practices to reduce the risk of fire damage and must make a fire extinguisher, fire blanket, and/or fire watch, as applicable, available at each location where cutting, braising, soldering, and/or welding is being performed or where there is an increased risk of fire.
- 6.20.2. Contractor at all times will keep the Site free from debris such as waste, rubbish, and excess materials and equipment caused by the Work. Contractor will not leave debris under, in, or about the Site, but promptly remove same from the Site on a daily basis. If Contractor fails to clean up, Judicial Council may do so and the cost thereof will be charged to Contractor, or deducted from any sum due to Contractor, which ever Judicial Council elects at its sole discretion. If the Project is for work on an existing facility, Contractor will also perform specific clean-up on or about the Site upon request by Judicial Council as it deems necessary for the continuing judicial functions. Contractor must comply with all related provisions of the Specifications.
- 6.20.3. If Construction Manager, Architect, or Judicial Council observes the accumulation of trash and debris, Judicial Council will give Contractor a **TWENTY-FOUR (24)** hour written notice to mitigate the condition.

6.20.4. Should Contractor fail to perform the required clean-up, or should the clean-up be deemed unsatisfactory by Judicial Council, Judicial Council will then perform the clean-up. All cost associated with the clean-up work (including all travel, payroll burden, and costs for supervision) will be the sole responsibility of Contractor and may be deducted from the Contract Price and/or Judicial Council may withhold those amounts from payment(s) due to Contractor.

7. SUBCONTRACTORS

- 7.1. Contractor must provide Judicial Council with information for all Subcontractors as required in Contractor's Submittals and Schedules Section.
- 7.2. No contractual relationship exists between Judicial Council and any Subcontractor or supplier by reason of the Agreement or Work.
- 7.3. Contractor agrees to bind every Subcontractor to the terms of the Contract Documents as far as those terms are applicable to Subcontractor's scope of Work. If Contractor subcontracts any part of the Work for the Project, Contractor is fully responsible to Judicial Council for acts and omissions of any Subcontractor and of persons either directly or indirectly employed by any Subcontractor, to the same extent Contractor would be for acts and omissions of persons directly employed by Contractor. The divisions or sections of the Specifications are not intended to control Contractor in dividing the Work among Subcontractors or limit the work performed by any trade.
- 7.4. Judicial Council's consent to, or Approval of, or failure to object to, any Subcontractor does not in any way relieve Contractor of any obligations under the Contract Documents and no such consent is a waiver of any provisions of the Contract Documents.
- 7.5. Contractor will not, without consent of Judicial Council and in full compliance with section 4100, et seq, of the Public Contract Code, including, without limitation, sections 4107, 4107.5, and 4109 of the Public Contract Code:
- 7.5.1. Substitute any person as a Subcontractor in place of the Subcontractor designated in Contractor's Bid;
- 7.5.2. Permit any work of Subcontractor to be assigned or transferred, or allow any portion of the Work to be performed by anyone other than the original Subcontractor listed in the Bid; or
- 7.5.3. Sublet or subcontract any portion of the Work in excess of one-half of one percent (.5%) of Contractor's total Bid as to which the Bid did not designate a Subcontractor.
- 7.6. Contractor is responsible for the coordination of the trades, Subcontractors, and material or equipment suppliers working on the Project.
- 7.7. Contractor is solely responsible for resolving any disputes between Contractor and its Subcontractor(s) or between Subcontractors.
- 7.8. Contractor must include in all subcontracts the assignment provisions as indicated in the Termination section of these General Conditions.
- 7.9. Each Subcontractor can work at the Site if it can demonstrate its compliance with the following requirements and it can provide the following required written documentation:
- 7.9.1. A Subcontractor's average worker's compensation experience modifier rate(s) for the most recent **THREE (3)** year period is 1.00 or less;

- 7.9.1.1. A Subcontractor's average total recordable injury and illness rate(s) for the most recent **THREE (3)** year period must not exceed the applicable statistical standards for its business category;
- 7.9.1.2. Subcontractor's average lost work rate for the most recent **THREE (3)** year period; and
- 7.9.1.3. A Subcontractor's acknowledgements of its compliance with Contractor's Safety Plan.
- 7.9.2. If any Subcontractor's workers compensation experience modifier for the most recent **THREE (3)** year period, or its average total recordable injury and illness rates for the most recent **THREE (3)** year period exceed the above requirements, then the Subcontractor may work at the Site if the Subcontractor is a party to an alternative dispute resolution system as provided for in Labor Code section 3201.5; and demonstrates that its Site safety program is compliant with the provisions of CalOSHA regulations, Contractor's Safety Plan required hereunder, the safety requirements of these General Conditions, and the provisions of Judicial Council's OCIP.
- 7.9.3. Consistent with the OCIP Manual, Subcontractors with a workers compensation experience modifier greater than 1.0 shall submit:
 - 7.9.3.1. A document outlining the reason for the current workers compensation experience modifier;
 - 7.9.3.2. A Site Specific Safety Program (SSSP); and
 - 7.9.3.3. Qualified and competent person appointment letters.
- 7.9.4. If Contractor intends to utilize a Subcontractor(s) with and workers compensation experience modifier greater than 1.0, Contractor shall prepare and provide to Judicial Council a safety action plan for monitoring the Subcontractor(s) consistent with the Requirements of the OCIP Manual.

8. OTHER CONTRACTS/CONTRACTORS

- 8.1.** Judicial Council reserves the right to let other contracts, and/or to perform work with its own forces, in connection with other portions of the Project or other construction or operations at or about the Site. Contractor will afford other contractors reasonable opportunity for introduction and storage of their materials and execution of their work and properly coordinate and connect Contractor's Work with the work of other contractors.
- 8.2.** In addition to Contractor's obligation to protect its own Work, Contractor will protect the work of any other contractor that Contractor encounters while working on the Site.
- 8.3.** If any part of Contractor's Work depends for proper execution or results upon work of Judicial Council or any other contractor, Contractor will inspect and promptly report to Judicial Council in writing before proceeding with its Work any defects in Judicial Council's or any other contractor's work that render Contractor's Work unsuitable for proper execution and results. Contractor will be held responsible for any damages and costs to Judicial Council relating to Judicial Council's or any other contractor's work that Contractor failed to inspect or should have inspected. Contractor's failure to inspect and report will constitute Contractor's acceptance of all Judicial Council's or any other contractor's work as fit and proper for reception of Contractor's Work, except as to defects that may develop in Judicial Council's or any other contractor's work after execution of Contractor's Work.

- 8.4. To ensure proper execution of any subsequent Work, Contractor must measure and inspect Work already in place and will at once report to Judicial Council in writing any discrepancy between that executed Work and the Contract Documents.
- 8.5. Contractor must ascertain to its own satisfaction the scope of the Project and nature of Judicial Council's or any other contracts that have been or may be awarded by Judicial Council in completion of the Project to the end that Contractor may perform the Work in light of the other contracts, if any.
- 8.6. Nothing herein contained will be interpreted as granting to Contractor exclusive occupancy of the Site, the Premises, or of the Project. Judicial Council will have complete access to the Project Site for any reasonable purpose at all times. Contractor will not cause any unnecessary hindrance or delay to the use and/or Court operation(s) of the Premises and/or to Judicial Council or any other contractor working on the Project. If simultaneous execution of any contract or Court operation is likely to cause interference with performance of Contractor's Work, Contractor will coordinate with those contractor(s), person(s), and/or entity(ies) and notify Judicial Council of the resolution.

9. DRAWINGS AND SPECIFICATIONS

- 9.1. A complete list of all Drawings that form a part of the Contract Documents is included as an index on the Drawings themselves, and/or may be provided to Contractor and/or in the List of Drawings, Tables and Schedules (Document 00 01 10).
- 9.2. Materials or Work described in words that so applied have a well-known technical or trade meaning refers to recognized standards, unless noted otherwise.
- 9.3. Judicial Council does not intend for the Contract Documents to go into detailed descriptions of any materials and/or methods commonly known to the trade under "trade name" or "trade term." The mere mention or notation of "trade name" or "trade term" is sufficient notice to Contractor that it will be required to complete the work so named, complete, finished, and operable, with all its appurtenances, according to the best practices of the trade.
- 9.4. The naming of any material and/or equipment means furnishing and installing of same, including all incidental and accessory items thereto and/or labor therefor, pursuant to the best practices of the trade(s) involved, unless specifically noted otherwise.
- 9.5. Contract Documents are complementary, and what is called for by one is binding as if called for by all. Drawings and Specifications are intended to be consistent with each other. However, if Contractor observes that Drawings and Specifications are in conflict, Contractor will promptly notify Judicial Council and Architect in writing, and any necessary changes will be made as provided in the Contract Documents.
- 9.6. In the case of discrepancy or ambiguity in the Contract Documents, the order of precedence in the Agreement will prevail. However, in the case of discrepancy or ambiguity solely between and among the Drawings and Specifications, the discrepancy or ambiguity will be resolved in favor of the interpretation that will provide Judicial Council with the functionally complete and operable Project described in the Drawings and Specifications. In case of ambiguity, conflict, or lack of information, Judicial Council will furnish clarifications with reasonable promptness.
- 9.7. Drawings and Specifications are intended to comply with all laws, ordinances, rules, and regulations of constituted Authorities Having Jurisdiction, and as referred to in the Contract Documents, the laws, ordinances, rules, and regulations are to be considered a part of the Contract Documents within the limits specified. Contractor will be solely responsible for any expense of correcting work done contrary to said laws, ordinances, rules, and regulations.

- 9.8. All copies of the Drawings, Specifications, any other design documents, and copies of other incidental architectural and engineering work, or copies of other Contract Documents furnished by Judicial Council, are the property of Judicial Council. These documents are not to be used by Contractor in other work and, with the exception of signed sets of Contract Documents, are to be returned to Judicial Council on request at Completion of Work or may be used by Judicial Council as it may require without any additional costs to Judicial Council. Neither Contractor nor any Subcontractor, or material or equipment supplier will own or claim a copyright in the Drawings, Specifications, and other documents prepared by Architect. Judicial Council hereby grants Contractor, Subcontractors, and material or equipment suppliers a limited license to use applicable portions of the Drawings prepared for the Project in the execution of their Work under the Contract Documents.

10. CONTRACTOR'S SUBMITTALS AND SCHEDULES

10.1. General Requirements.

- 10.1.1. Contractor's submittals must comply with applicable provisions and requirements of the Specifications. No submittal, unless Approved in writing by Judicial Council is a Contract Document.
- 10.1.2. Contractor must provide all schedules both in hard copy and electronically (e.g., Microsoft Project or Primavera, or substantially similar product), in a format Approved in advance by Judicial Council.
- 10.1.3. Judicial Council will review the schedules submitted and Contractor will make changes and corrections in the schedules as requested by Judicial Council and resubmit the schedules until Approved by Judicial Council.
- 10.1.4. All submittals and schedules must be Approved by Judicial Council before Contractor can rely on them as a basis for payment.

10.2. Schedules, Safety Plan and Complete Subcontractor List.

- 10.2.1. Required Documents. Within **TEN (10)** Days after the date of the Notice to Proceed (unless otherwise specified in the Notice to Proceed or in the Special Conditions (**Exhibit N** (Document 00 71 00)), Contractor must prepare and submit to Judicial Council for review, in a form supported by sufficient data to substantiate its accuracy as Judicial Council may require:

10.2.1.1. *Schedule of Work*. Contractor must provide a preliminary schedule of construction indicating the starting and completion dates of the various stages of the Work, including any information and consistent with the form that may be specified in the Specifications. Once Approved by Judicial Council, this will become the Construction Schedule. The preliminary schedule must include and identify all tasks that are on the Project's critical path with a specific determination of the start and completion of each critical path task, all contract milestones and each milestone's completion date(s) as may be required by Judicial Council, and the date of Project Completion.

- 10.2.1.1.1. Proposed Early Completion or Advanced Schedule. Judicial Council is not required to Accept an early completion or advanced schedule (i.e., one that shows early completion dates for Project Completion or milestones). Contractor will not be entitled to an increase in the Contract Price if Judicial Council allows Contractor to proceed performing the Work on an earlier or advanced schedule

and Contractor completes the Project, for whatever reason, beyond the date shown in that earlier or advanced schedule, but within the Contract Time. A schedule showing the Work completed in less than the Contract Time is considered to have Float.

10.2.1.2. *Schedule of Submittals.* Contractor must provide a preliminary schedule of submittals, including Shop Drawings, Product Data, and Samples submittals. Once Approved by Judicial Council, this will become the Submittal Schedule. All submittals must be forwarded to Judicial Council by the date indicated on the Approved Submittal Schedule, unless an earlier date is necessary to maintain the Construction Schedule, in which case those submittals must be forwarded to Judicial Council so as not to delay the Project.

10.2.1.3. *Schedule of Values.* Contractor must provide a preliminary Schedule of Values for all component parts of the Work for which progress payments may be requested. The Schedule of Values must include quantities and prices of items totaling the Contract Price and must subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. The preliminary Schedule of Values should include, at a minimum, the following information and the following structure below. The Schedule of Values, including the preliminary Schedule of Values any update thereto, is subject to Judicial Council's review and Approval for compliance with the requirements of the Contract Documents.

10.2.1.3.1. Divided into at least the following categories:

- 10.2.1.3.1.1. Overhead and profit;
- 10.2.1.3.1.2. Supervision;
- 10.2.1.3.1.3. General conditions;
- 10.2.1.3.1.4. Layout;
- 10.2.1.3.1.5. Mobilization;
- 10.2.1.3.1.6. Submittals;
- 10.2.1.3.1.7. Bonds and insurance;
- 10.2.1.3.1.8. Closeout documentation;
- 10.2.1.3.1.9. Demolition;
- 10.2.1.3.1.10. Installation;
- 10.2.1.3.1.11. Rough-in;
- 10.2.1.3.1.12. Finishes;
- 10.2.1.3.1.13. Testing;
- 10.2.1.3.1.14. Punch List and acceptance.

10.2.1.3.2. Divided by each of the following areas:

- 10.2.1.3.2.1. Site work;
- 10.2.1.3.2.2. By each building;
- 10.2.1.3.2.3. By each floor.

10.2.1.3.3. The preliminary Schedule of Values will not provide for values any greater than the following percentages of the Contract Price:

- 10.2.1.3.3.1. Mobilization and layout combined to equal not more than one percent (1%);
- 10.2.1.3.3.2. Submittals, samples and Shop Drawings combined to equal not more than three percent (3%),

- 10.2.1.3.3. Bonds and insurance combined to equal not more than two percent (2%).
- 10.2.1.3.4. Closeout Documentation. Closeout Documentation will have a value in the preliminary Schedule of Values of not less than five percent (5%). The value for Closeout Documentation is in addition to and will not be a part of retention.
- 10.2.1.3.5. All items on the Schedule of Values must have a specific completion date on the Construction Schedule, or instead Judicial Council has Approved the Construction Schedule and the Construction Schedule is fully cost-loaded and resource-loaded, unless waived by Judicial Council in writing, and detailed as required by the Contract Documents.
- 10.2.1.3.6. Contractor must certify that the preliminary Schedule of Values as submitted to Judicial Council is accurate and reflects the costs as developed in preparing its Bid. In the event that Judicial Council objects to any portion of the preliminary Schedule of Values, Judicial Council will notify Contractor, in writing, of Judicial Council's objection(s) to the preliminary Schedule of Values. Within **FIVE (5)** Days of the date of Judicial Council's written objection(s), Contractor will submit a revised preliminary Schedule of Values to Judicial Council for review and approval. The foregoing procedure for the preparation, review, and approval of the preliminary Schedule of Values will continue until Judicial Council has Approved the entirety of the preliminary Schedule of Values.
- 10.2.1.3.7. Once the preliminary Schedule of Values is Approved by Judicial Council, it will become the Schedule of Values. The Schedule of Values will not thereafter be modified or amended by Contractor without the prior consent and Approval of Judicial Council, which may be granted or withheld in the sole discretion of Judicial Council.
- 10.2.1.3.8. Notwithstanding any provision of the Contract Documents to the contrary, payment of Contractor's overhead, supervision, general conditions costs, and profit, as reflected in the Schedule of Values, will be paid by Judicial Council in installments, based on the percentage of the Project complete, with the disbursement of progress payments and the final payment.
- 10.2.1.3.9. Contractor will not "front-load" the Schedule of Values with false dollar amounts for activities to be performed in the early stages of the Project. Judicial Council may, in its sole discretion, utilize the costs listed in the Schedule of Values as the true cost of items to be deducted from the Contract Price through credit or deductive Change Orders. The values for each line item will include the amount of overhead and profit applicable to each item of Work and must include, at a minimum, a breakdown between rough and finish Work for the basic trades as well as individual dollar figures for large dollar equipment and materials to be installed or furnished for the Project. No individual line item or scope of Work in the Schedule of Values will exceed \$50,000, except with the express, written consent of Judicial Council. Exceptions will be given by Judicial Council for a single item of equipment for which the true cost exceeds \$50,000. Upon request, Contractor must provide Judicial

Council with data and documentation substantiating the accuracy of the proposed line items. In the event Judicial Council reasonably objects to any portion of the Schedule of Values, within **TEN (10)** Days of Judicial Council's receipt of the Schedule of Values, Judicial Council will notify Contractor in writing of Judicial Council's objection(s) to the Schedule of Values together with any request for substantiating data or documentation. Within **FIVE (5)** Days of the date of Judicial Council's written objection(s) and request for substantiating data and documentation, Contractor must submit a revised Schedule of Values to Judicial Council for review and approval together with the requested data and documentation. The foregoing procedure for the preparation, review and approval of the Schedule of Values will continue until Judicial Council has Approved of the entirety of the Schedule of Values. Once the Schedule of Values is Approved by Judicial Council, the Schedule of Values will not be thereafter modified or amended by Contractor without the prior consent and Approval of Judicial Council, which may be granted or withheld in the sole reasonable discretion of Judicial Council.

10.2.1.3.10. Judicial Council will have the right at any time to revise the Schedule of Values if, in Judicial Council's sole opinion, the Schedule of Values does not accurately reflect the value of the Work performed.

10.2.1.4. *Safety Plan*. Contractor must provide a preliminary Safety Plan specifically adapted for the Project. The Safety Plan must comply with Judicial Council's construction safety manual, if included in the Contract Documents, and the following requirements:

10.2.1.4.1. Compliant with all applicable requirements of CalOSHA and/or of OSHA.

10.2.1.4.2. Compliant with all provisions regarding Project safety, including all applicable provisions in these General Conditions.

10.2.1.4.3. Prepared in both English and in the predominant language(s) of Contractor's and its Subcontractors' employees.

10.2.1.5. *Complete Subcontractor List*. Contractor must provide a preliminary Subcontractor List stating the name, address, telephone number, facsimile number, email address, California State Contractors License number, DIR registration number, classification, and monetary value of all subcontracts for parts, furnishing labor, material, or equipment for the Project.

10.3. Monthly Progress Schedule(s).

10.3.1. Contractor must provide monthly to Judicial Council an updated Monthly Progress Schedule. The first Monthly Progress Schedule shall be based on, and update, the Approved Construction Schedule. Thereafter, the Monthly Progress Schedule shall update the last Monthly Progress Schedule. A Monthly Progress Schedule must show all Work completed and to be completed by Contractor. The Monthly Progress Schedule must be sent to Judicial Council, in a format acceptable to Judicial Council, and contain a written narrative of the progress of Work that month and any changes, delays, or events that may

affect the Work. The process for Judicial Council Approval of the Monthly Progress Schedule is the same as the process for Approval of the Construction Schedule.

- 10.3.2. Contractor must also submit Monthly Progress Schedule(s) with all Applications for Payment.

10.4. Safety Data Sheets (SDS).

Contractor is required to ensure Safety Data Sheets are available in a readily accessible place at the Site for any material requiring a Safety Data Sheet per the Federal “Hazard Communication” standard, or employees right to know law. Contractor is also required to ensure proper labeling on substances brought onto the Site and that any person working with the material or within the general area of the material is informed of the hazards of the substance and follows proper handling and protection procedures. One electronic copy of the Safety Data Sheets must also be submitted directly to Judicial Council.

10.5. Logistic Plan.

Contractor must provide a staging and logistics plan identifying laydown areas, loading and unloading areas, crane locations, fence locations, temporary utility connections, trailer locations, and emergency evacuation meeting area. This plan must be Approved by Judicial Council prior to Contractor mobilizing on the Site.

10.6. Contractor Submittals.

- 10.6.1. Information Included in Submittals. All submittals must be accompanied by a written transmittal and each set of plans must carry a “wet stamp” or other writing by Contractor providing an identification of the portion of the Drawings or the Specifications pertaining to the submittal, with each submittal numbered consecutively for ease of reference along with the following information: (i) date of submission; (ii) Project name; (iii) name of submitting Subcontractor; and (iv) if applicable, the revision number. The foregoing information is in addition to, and not in lieu of, any other information required for Judicial Council’s review, evaluation, and Approval of Contractor’s submittals. Each submittal must be complete with its required number of copies, no piecemeal documentation is allowed. Any submittal not bearing the required wet stamp as stated herein, will be rejected until the appropriate wet stamp information is provided on each submittal.
- 10.6.2. Verification of Submittal Information. By approving and submission of submittals, Contractor represents to Judicial Council and Architect that Contractor has determined and verified materials, field measurements, field construction criteria, catalog numbers and similar data related thereto and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. Each submittal must include the following certification duly executed by Contractor’s superintendent or project manager for the Work: “Contractor has reviewed and approved the field dimensions and construction criteria of the attached submittal. Contractor has verified that the submittal is complete and includes notations of any portion of the Work depicted in the Submittal which is not in strict conformity with the Contract Documents. The information in the attached submittal has been reviewed and coordinated by contractor with information included in other submittals.”
- 10.6.3. Contractor Responsibility for Deviations. Contractor will not be relieved of responsibility for correcting deviations from the requirements of the Contract Documents by Judicial Council’s and Architect’s review of submittals unless Contractor has specifically informed Judicial Council in writing of such deviation at the time of submission of the submittal and Judicial Council has given Approval to the specific deviation. Contractor will not be

relieved of responsibility for errors or omissions in submittals by Judicial Council's and Architect's review or comments thereon.

- 10.6.4. No Performance of Work Without Architect Review. Contractor shall not perform any portion of the Work requiring Judicial Council's and Architect's review of submittals until Judicial Council and Architect have completed their review and returned the submittal to Contractor indicating "No Exception Taken" to that submittal. Contractor will not perform any portion of the Work forming a part of a submittal or which is affected by a related submittal until the entirety of the Submittal or other related submittal has been fully processed. All Work must comply with the final action taken by Judicial Council and Architect review in review of submittals and other applicable portions of the Contract Documents.
- 10.6.5. Judicial Council and Architect Review of Submittals. The purpose of Judicial Council's and Architect's review of submittals and the time for Judicial Council's and Architect's return of submittals to Contractor is as set forth elsewhere in the Contract Documents. If Judicial Council and/or Architect return a submittal as rejected or requiring correction(s) with re-submission, Contractor, so as not to delay the progress of the Work, must promptly thereafter resubmit a submittal conforming to the requirements of the Contract Documents; the resubmitted submittal must indicate the portions thereof modified in accordance with Judicial Council's and Architect's direction. When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, Judicial Council is entitled to rely upon the accuracy and completeness of Contractor's calculations and certifications accompanying submittal. Judicial Council's and Architect's review of the submittals is for the limited purposes described in the Contract Documents. Judicial Council and Architect will review each submittals twice. Should additional submittals be required due to Contractor's failure to address comments, Contractor will pay for Architect's services on a time and material basis for each subsequent review.

11. SITE ACCESS, CONDITIONS AND REQUIREMENTS

11.1. Site Investigation.

Before submitting its Bid for the Work, and in addition to any other requirement of the Contract Documents, including, without limitation, the Instruction to Bidders (Document 00 21 13), Contractor was required to fully investigate the Site to become familiar with all observable conditions, and thoroughly familiarize itself with the requirements of the Contract Documents. By submitting a Bid for the Work, Contractor was deemed to have undertaken all Site examination requirements in the Contract Documents, made a complete study and investigation of the Site, and to be familiar with, satisfied itself of, and accepted the existing conditions of the Site.

11.2. Geotechnical Investigation Report.

- 11.2.1. When a geotechnical report is available, Contractor must review all geotechnical data provided and determine whether additional data or services are necessary to complete the Work. Such services include, without limitation, test borings, test pits, soil bearing values, percolation tests, water pollution and other environmental tests, ground corrosion and resistivity tests, and other necessary operations determining subsoil, air, and water conditions with reports and appropriate professional interpretations and recommendations thereof. Any information obtained from the geotechnical report made available by Judicial Council is approximate only, is not guaranteed, does not form a part of the Contract Documents, and Contractor may not rely thereon.

- 11.2.2. If additional services or investigations are deemed necessary by Contractor, Contractor must submit a request in writing to Judicial Council fully detailing the need for additional services. If Judicial Council Approves of the request, Contractor must coordinate directly with Judicial Council for performance of the requested services.

11.3. Soils Investigation Report.

- 11.3.1. When a soils investigation report obtained from test holes at Site is available, that report will be available to Contractor but will not be a part of the Contract Documents. Any information obtained from that report or any information given on Drawings as to subsurface soil condition or to elevations of existing grades or elevations of underlying rock is approximate only, is not guaranteed, does not form a part of the Contract Documents, and Contractor may not rely thereon. By submitting its Bid, Contractor acknowledges that it made visual examination of Site and made whatever tests Contractor deems appropriate to determine underground condition of soil.
- 11.3.2. If a soils report is identified in the Contract Documents, it is not a Contract Document. Further, no representation is made by Judicial Council that the information provided is adequate for purposes of construction of the Project. Judicial Council disclaims responsibility for any and all interpretations made by Contractor of any soil or subsurface condition for information, such as soil-bearing values, rock profiles, presence and scope of boulders and cobbles, soil stability and the presence or level and extent of underground water.
- 11.3.3. Contractor shall determine the means, methods, techniques, and sequences necessary to achieve required soil contours and characteristics of all completed Work.
- 11.3.4. If, after the Effective Date of the Agreement, Contractor encounters conditions at the Site than are materially different from those customarily encountered at or near the Premises, any request by Contractor for additional funds or additional time, shall be governed by provisions of the Contract Documents for Changes in the Work related to Unforeseen Site Conditions.

11.4. Above Ground Existing Conditions.

Under no circumstances will Judicial Council be deemed to make a warranty or representation of visible existing above-ground conditions, as-built conditions, or other above-ground actual conditions verifiable by Contractor by the performance of its own reasonable independent investigation, which Contractor was required to perform prior to submitting its Bid. Contractor must not rely on the information supplied by Judicial Council regarding existing above-ground conditions.

11.5. Subsurface Investigations.

When Judicial Council has made investigations of subsurface conditions and have made that information available to Contractor, Contractor must verify the location and depth (elevation) of all existing utilities and existing service before performing any excavation Work.

11.6. Failure to Investigate.

Any failure by Contractor and Subcontractors to acquaint themselves with information that is provided, information that could reasonably be obtained, or conditions which could be identified with reasonable investigation, will not relieve Contractor from responsibility to properly estimate the difficulty or cost to perform the Work and any cost arising from such failure shall not entitle

Contractor to an adjustment to the Contract Price and/or Contract Time, unless otherwise provided by the Contract Documents.

11.7. Contract Adjustments.

11.7.1. Contractor agrees that no claim against Judicial Council will be made by Contractor for damages, and hereby waives any rights to damages, if during the progress of Work, Contractor encounters subsurface or latent conditions at the Site materially differing from those shown on Drawings or indicated in Specifications, or for Unforeseen Site Conditions, except as indicated in the provisions of these General Conditions.

11.7.2. As it relates to all other differing Site conditions, Contractor agrees that no claim against Judicial Council will be made by Contractor for damages and hereby waives any right to damages if, during progress of Work, Contractor encounters differing Site Conditions, unless Contractor establishes by satisfactory evidence that the conditions were reasonably unforeseeable based on all the information available to Contractor or that could have been reasonably ascertained by Contractor prior to submitting its Bid for the Project.

11.8. No Warranty.

There is no guarantee or warranty, either expressed or implied that the Site conditions indicated in the information provided by Judicial Council are comprehensively representative of those existing throughout the Site, or that Unforeseen Site Conditions or developments may not occur. Making information related to such conditions available to Contractor will not be construed to be a waiver of this provision.

11.9. Access to Work.

Judicial Council and its representatives will at all times have access to Work wherever it is in preparation or progress, including storage and fabrication. Contractor must provide safe and proper facilities for access so that Judicial Council's representatives may perform their functions.

11.10. Layout and Field Engineering.

11.10.1. All field engineering required for layout of this Work and establishing grades for earthwork operations will be furnished by Contractor at its expense. This Work must be performed by a qualified, California-registered civil engineer Approved by Judicial Council and, if required by Judicial Council, Architect. Any required record and/or As-Built Drawings of Site development must be prepared by the approved civil engineer.

11.10.2. Contractor is responsible for having ascertained pertinent local conditions such as location, accessibility, and general character of the Site and for having satisfied itself as to the conditions under which the Work is to be performed. Judicial Council will not be liable for any Claim for an adjustment to the Contract Price or Contract Time because of Contractor's error or negligence in acquainting itself with the conditions at the Site.

11.10.3. Contractor must protect and preserve established benchmarks and monuments and make no changes in locations without the prior Approval of Judicial Council. Contractor must replace any benchmarks or monuments that are lost or destroyed subsequent to notification of Judicial Council and with Judicial Council's Approval.

11.11. Utilities for Construction.

Utilities necessary to complete the Work and to completely perform Contractors' obligations hereunder will be obtained by Contractor without adjustment of the Contract Price. Contractor must

furnish and install necessary or appropriate temporary distributions of utilities, including utilities furnished by Judicial Council. Any such temporary distributions must be removed by Contractor upon Completion of the Work. The costs of all such utility services, including the installation and removal of temporary distributions thereof, is the responsibility of Contractor and is included in the Contract Price. Also refer to other utility requirements as indicated in the Specifications.

11.12. Sanitary Facilities.

At all times during Work at the Site, Contractor must obtain and maintain temporary sanitary facilities in conformity with applicable law, rule, or regulation. Contractor must maintain temporary sanitary facilities in a neat and clean manner with sufficient toilet room supplies. Personnel engaged in the Work are not permitted to use any existing or constructed toilet facilities at the Site. Also refer to other sanitary facility requirements as indicated in the Specifications.

11.13. Surveys.

Contractor must provide surveys prepared by a California-licensed civil engineer surveyor to determine locations of construction, grading, and site work as required to perform the Work.

11.14. Regional Notification Center.

Except in an emergency situation, Contractor must contact the appropriate regional notification center at least **TWO (2)** Days prior to commencing any excavation if the excavation will be conducted in an area of the Site that is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by Judicial Council, and obtain an inquiry identification number from the notification center. No excavation may be commenced and/or carried out by Contractor unless an inquiry identification number has been assigned to Contractor or any Subcontractor and Contractor has provided the identification number to Judicial Council. Any damage arising from Contractor's failure to comply with these notification requirements will be the sole responsibility of Contractor. Any delay caused by Contractor's failure to comply with these notification requirements will be the sole responsibility of Contractor and will not be an allowable bases for an extension of the Contract Time.

11.15. Existing Utility Lines.

11.15.1. Pursuant to Government Code section 4215, Judicial Council assumes the responsibility for removal, relocation, and protection of main or trunk utility lines and facilities that are not identified in the Drawings and Specifications and which are located on the Site at the time of commencement of the Work. Contractor will not be assessed Liquidated Damages for delay in completion of the Project caused by failure of Judicial Council to provide for removal or relocation of such utility facilities.

11.15.2. Locations of existing utilities provided by Judicial Council will not be considered exact, but approximate, within a reasonable margin and will not relieve Contractor of responsibilities to exercise reasonable care, nor the costs of repair due to Contractor's failure to do so. Judicial Council will compensate Contractor for: (i) the costs of locating and repairing damage not due to the failure of Contractor to exercise reasonable care; (ii) removing or relocating such utility facilities not indicated in the Drawings and Specifications with reasonable accuracy; and (iii) for equipment necessarily idle during such work.

11.15.3. No provision herein will be construed to preclude assessment against Contractor for any other delays in completion of the Work. Nothing in this section requires Judicial Council to indicate the presence of existing service laterals, appurtenances, or other utility lines, within the exception of main or trunk utility lines, whenever the presence of these utilities

on the Site can be inferred from the presence of other visible facilities, such as buildings, meter junction boxes, on or adjacent to the Site.

11.15.4. If Contractor, while performing Work, discovers utility facilities not identified by Judicial Council in the Drawings and Specifications, Contractor must immediately, but in no case longer than **TWO (2)** Business Days, notify Judicial Council and the utility provider in writing. The cost to repair damage to visible utility facilities without prior written notification to Judicial Council will be the sole responsibility of Contractor.

11.16. Utility Interruptions.

11.16.1. Notwithstanding the foregoing, Contractor must provide at least **FOURTEEN (14)** Business Days' written notice to Judicial Council and receive Judicial Council Approval before interrupting any utility service at the Project, and all emergency power, etc., must be in place prior to disruption of service.

11.16.2. Should Contractor disturb, damage, or disconnect any existing utilities or services during construction, Contractor is responsible, at no additional cost or time, to Judicial Council, for all expenses and consequential damages of every type arising from such disturbance or the replacement or repair thereof and must repair such items as required to maintain continuing service, including emergency repairs.

11.17. Notification.

Contractor understands, acknowledges and agrees that the purpose for prompt notification to Judicial Council pursuant to these provisions is to allow Judicial Council to investigate the Site condition(s) so that Judicial Council will have the opportunity to determine how to proceed as a result of the condition(s). Accordingly, failure of Contractor to promptly notify Judicial Council in writing, pursuant to the applicable provisions of these General Conditions, will constitute Contractor's waiver of any claim for damages or delay incurred as a result of the condition(s).

11.18. Hazardous Materials.

11.18.1. Contractor must comply with all provisions and requirements of the Contract Documents related to Hazardous Materials, including, without limitation, those hereunder and the certifications related to Hazardous Materials included in the Certifications to be Completed by Contractor (**Exhibit B** (Document 00 45 40)).

11.18.2. Contractor must comply with Judicial Council's Asbestos Management Plan and Hazardous Materials Management Process, as applicable. Contractor must review all test results prior to performing any Work. Contractor will be responsible for soliciting and contracting with a licensed abatement contractor to perform abatement of hazardous material present in accordance with all regulatory requirements.

11.18.3. Contractor shall not bring on the Site or use in the Work any Hazardous Materials unless Contractor first obtains Judicial Council's prior Approval. Contractor must comply with all Applicable Code Requirements concerning the use, storage, transportation and disposal of any Hazardous Materials on the Project and must obtain all permits and pay all fees and taxes related thereto.

11.18.4. Prior to starting Work on the Project, Contractor must submit to Judicial Council a list of all Hazardous Materials expected to be used on the Project in triplicate. Contractor must keep a copy of this list at the Site. This list must include, without limitation, any cleaner, solvent, paint or explosive charge used in the Work. Contractor must submit one (1) copy of the OSHA Safety Data Sheet for each Hazardous Material listed and must advise every

person at or near the Site of these materials, of proper handling, and of proper action in the event of accidental exposure or emergency.

- 11.18.5. Contractor must safely contain and store all Hazardous Materials, and in the event of a spill or discharge, must immediately notify all required federal, State, county and local agencies including the fire department. Contractor must protect personnel from exposure and provide treatment as necessary.
- 11.18.6. Contractor must immediately advise Judicial Council of any potentially Hazardous Materials encountered at the Site and must take all necessary action to prevent exposure of personnel until the material is identified and proper action can be taken.
- 11.18.7. Contractor must not store or use any Hazardous Materials near air intakes or doors and windows serving persons on or off-Site without proper protection and safeguards to prevent exposure.
- 11.18.8. Contractor must exercise all required precautions and safeguards in the storage, use and disposal of Hazardous Materials. Nothing herein, relieves Contractor of responsibility for compliance with all Applicable Code Requirements, or other provisions of this Agreement, particularly Contractor's responsibility for damage and preservation of life and property.

11.19. No Signs. Neither Contractor, Contractor's employees, consultants, Subcontractors, nor Subcontractors' employees will display any signs not required by law or the Contract Documents at the Site, fences trailers, offices, or elsewhere on the Site without specific prior Approval of Judicial Council.

12. INTEGRATION OF WORK, UNCOVERING WORK, CORRECTION OF WORK AND RIGHT TO TAKEOVER WORK

12.1. Integration of Work.

- 12.1.1. Contractor must perform all cutting, fitting, patching, and preparation of Work as required to make its several parts come together properly, to fit it to receive or be received by work of other contractors, and to coordinate tolerances to various pieces of work, showing upon, or reasonably implied by, the Contract Documents for the completed structure, and conform them as Judicial Council and/or Architect may direct.
- 12.1.2. All costs resulting from Defective Work or ill-timed Work will be borne by Contractor, inclusive of repair Work.
- 12.1.3. Contractor must not endanger any Work performed by it or anyone else by cutting, excavating, or otherwise altering work and must not cut or alter work of any other contractor except with prior written consent of Judicial Council.
- 12.1.4. Prior to any cutting or removing of existing materials, Contractor must ensure that a Hazardous Material survey has been completed on all materials disturbed by cutting or removing activities. By starting cutting or patching operations, Contractor acknowledges completion of Hazardous Material survey results, completion of abatement requirements prior to cutting or removing, acceptance of existing conditions, and the responsibility to restore the cut and patched area to match the original conditions.

12.2. Uncovering of Work.

Without in anyway limiting or affecting any other provision of the Contract Documents, if a portion of the Work is covered without Project Inspector (if applicable) or Architect approval, or not in

compliance with the Contract Documents, Contractor, if required in writing by Judicial Council, Project Inspector (if applicable), or Architect, must uncover the Work for Project Inspector's (if applicable) or Architect's observation and be replaced at Contractor's expense without any adjustment in the Contract Price or Contract Time.

12.3. Rejection of Work.

Prior to Judicial Council's Acceptance of the Work, any Work or materials or equipment forming a part of the Work or incorporated into the Work that is defective or not in conformity with the Contract Documents may be rejected by Judicial Council, Architect or Project Inspector (if applicable) and Contractor must correct all rejected Work without any adjustment to the Contract Price or the Contract Time, even if the Work, materials or equipment have been previously inspected by Architect or Project Inspector (if applicable) or even if they failed to observe the defective or non-conforming Work, materials or equipment.

12.4. Nonconforming Work.

12.4.1. Contractor must promptly remove from Premises all Work identified by Judicial Council as failing to conform to the Contract Documents, including Nonconforming Work, whether incorporated or not. Contractor must promptly replace and re-execute its own Work to comply with the Contract Documents without additional expense to Judicial Council and will bear any expense related to making good all work of other contractors destroyed or damaged by any removal or replacement pursuant hereto and/or any delays to Judicial Council or other Contractors caused thereby.

12.4.2. If Contractor does not remove Work that Judicial Council has identified consistent with the above requirement within a reasonable time, not to exceed **FORTY-EIGHT (48)** hours, Judicial Council may remove it and may store any material at Contractor's expense. If Contractor does not pay expense(s) of that removal within **TEN (10)** Days' time thereafter, Judicial Council may, upon **TEN (10)** Days' written notice, sell any material at auction or at private sale and will apply the proceeds of that sale to any losses sustained by the Judicial Council as a result of Contractor's nonconforming Work, or any other Work covered by the preceding provision. In the event that Judicial Council does not perform a sale, or the proceeds are inadequate to fully compensate Judicial Council for its losses, Judicial Council will deduct the outstanding amount of its losses from the Contract Price and Judicial Council may withhold those amounts from sums due to Contractor.

12.5. Correction of Work.

12.5.1. Pursuant to the notice provisions herein, Contractor must promptly correct Work rejected by Judicial Council, Architect, or Project Inspector as failing to conform to the requirements of the Contract Documents, whether observed before or after Completion and whether or not fabricated, installed, or completed. Contractor bears all costs of correcting the rejected Work, including additional testing, inspections, and compensation for Inspector's or Architect's services and expenses made necessary thereby.

12.5.2. If, within **ONE (1)** year after the date of Completion of the Work or a designated portion thereof, or after the date for commencement of warranties established hereunder, or by the terms of an applicable special warranty required by the Contract Documents, any of the Work is found non-compliant with the requirements of the Contract Documents, Contractor must correct that Work promptly after receipt of written notice from Judicial Council to do so. This **ONE (1)** year period will be extended, with respect to any portion of the Work performed after Completion, by the period of time between Completion and Judicial Council's Acceptance of the post-Completion Work. This obligation hereunder will

survive Acceptance of the Work and termination of the Agreement. Judicial Council will give such notice promptly after discovery of the condition.

12.6. Judicial Council's Right to Takeover Work.

12.6.1. If Contractor should neglect to perform the Work properly or fail to perform any provisions of the Contract Documents, Judicial Council, after **FORTY-EIGHT (48)** hours written notice to Contractor, may, without prejudice to any other remedy it may have, make good such deficiencies and may deduct the cost thereof from the Contract Price and may withhold payment from payment(s) due to Contractor.

12.6.2. If Judicial Council determines at any time, before or after Completion of the Work, that Contractor has varied from the Drawings and/or Specifications, including, but not limited to, variation in material, quality, form, or finish, or in the amount or value of the materials and labor used, Judicial Council may, at its option and its sole discretion:

12.6.2.1. Require that all such Nonconforming Work be removed, remade or replaced, and all work disturbed by these changes be repaired by Contractor at no additional cost to Judicial Council;

12.6.2.2. Deduct from any amount due Contractor the sum of money equivalent to the difference in value between the Nonconforming Work and that required by the Drawings and Specifications; or

12.6.2.3. Exercise any other remedy it may have at law or under the Contract Documents, including but not limited to Judicial Council hiring its own forces or another contractor to replace Contractor's Nonconforming Work, in which case Judicial Council will either issue a deductive Change Order, a Unilateral Change Order, or invoice Contractor for the cost of that Nonconforming Work. Contractor must pay any invoices within **THIRTY (30)** Days of receipt of same or Judicial Council may withhold those amounts from payment(s) to Contractor.

12.7. Judicial Council may, in its sole and exclusive discretion, elect to Accept the Nonconforming Work and reduce the Contract Price as appropriate and equitable.

13. TRENCHES

13.1. Trenches Greater Than Five Feet.

If the Contract Price exceeds \$25,000 and involves the excavation of any trench or trenches five (5) feet or more in depth, Contractor must, in advance of excavation, promptly submit to Judicial Council and/or a registered civil or structural engineer employed by Judicial Council or Architect, a detailed plan showing the design of shoring for protection from the hazard of caving ground during the excavation of such trench or trenches.

13.2. Excavation Safety.

If such plan varies from the shoring system standards established by the construction safety orders, the plan must be prepared by a registered civil or structural engineer, but in no case will such plan be less effective than that required by the construction safety orders. No excavation of such trench or trenches can commence until said plan has been accepted by Judicial Council or by the person to whom authority to accept has been delegated by Judicial Council.

13.3. No Tort Liability of Judicial Council.

Pursuant to Labor Code section 6705, nothing in this section imposes tort liability upon Judicial Council or any of its employees.

13.4. No Excavation without Permits.

Contractor must not commence any excavation Work until it has secured all necessary permits including the required CalOSHA excavation/shoring permit. Any permit must be prominently displayed on the Site prior to the commencement of any excavation.

13.5. Discovery of Hazardous Waste, Unusual Conditions and/or Unforeseen Site Conditions.

13.5.1. If the Work involves digging trenches or other excavations that extend deeper than four (4) feet below the surface, Contractor must immediately, and before the following conditions are disturbed, notify Judicial Council, verbally and in writing, of any:

13.5.1.1. Material that Contractor believes may be material that is hazardous waste, as defined in section 25117 of the Health and Safety Code, and requires removal to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

13.5.1.2. Subsurface or latent physical conditions at the Site differing from those indicated.

13.5.1.3. Unknown physical conditions at the Site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

13.5.2. Judicial Council will promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste (including Hazardous Materials), and cause a decrease or increase in the Contract Time and/or Contract Price for the performance of any part of the Work, will issue a Change Order under the procedures described herein.

13.5.3. In the event that a dispute arises between Judicial Council and Contractor concerning whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contract Time and/or Contract Price for the performance of any part of the Work, Contractor will not be excused from any scheduled Completion date provided for by the then current Construction Schedule, but must proceed with all Work to be performed under the Contract Documents. Contractor will retain any and all rights provided by the Contract Documents or by law that pertain to the resolution of disputes and protests, which include the requirement that Contractor complies with the notice and PCO provisions of the Contract Documents and the Claims Resolution Process. Contractor's failure to submit a PCO pursuant to the terms of the Contract Documents is a waiver of Contractor's right to an adjustment of the Contract Price or Contract Time.

14. INSURANCE AND BONDS

14.1. Contractor's Insurance.

Unless the Special Conditions (**Exhibit N** (Document 00 71 00)) indicate that this Project is covered by a Judicial Council provided OCIP, Contractor shall comply with **ALL** requirements of this "Contractor's Insurance" article. If the Special Conditions (**Exhibit N** (Document 00 71 00)) indicate that this Project is covered by a Judicial Council provided OCIP, all insurance required of Contractor and/or its Subcontractor(s) that is not provided by the OCIP must be in the amounts indicated herein and include the provisions set forth herein.

14.1.1. General Requirements.

- 14.1.1.1. Contractor shall maintain the required insurance for its operations not insured under the OCIP with an insurance company or companies that are rated “A-VII” or higher by A. M. Best’s key rating guide and are authorized to do business in the State of California.
- 14.1.1.2. For all insurance policies required herein, Contractor shall declare any deductible or self-insured retention (SIR). Any deductible or SIR must be clearly stated on the appropriate certificate of insurance.
- 14.1.1.3. If self-insured, Contractor agrees to administer its self-insurance program in a commercially reasonable manner to ensure the availability of funds to cover losses required to be insured against by Contractor under the terms herein.
- 14.1.1.4. Contractor, prior to commencement of the Work, shall provide Judicial Council with certificates of insurance and signed insurance policy endorsements, on forms acceptable to Judicial Council, as evidence that the required insurance is in full force and effect. Where applicable, each certificate of insurance and signed insurance policy endorsement shall specifically provide verification that the State of California, Judicial Council; the Court, and their respective elected and appointed officials, judicial officers, officers, and employees have been added as additional insureds on the insurance policy being referenced.
- 14.1.1.5. The Certificates of Insurance must be addressed as follows:
- Maria Topete, Analyst
RFP-FS-2021-22-JP
Judicial Council of California
455 Golden Gate Avenue
San Francisco, CA 94012
- 14.1.1.6. All insurance policies required herein must remain in force until Completion of the Project and Contractor and Judicial Council have agreed in writing that the Work is covered under Judicial Council’s programs of insurance or self-insurance designed for the purpose of providing coverage for the accepted Work once occupied.
- 14.1.1.7. If the insurance expires prior to the completion of the Project, Contractor shall immediately renew or replace the required insurance and provide a new current certificate of insurance and signed insurance policy endorsements, or it may be declared in breach of the Agreement. Judicial Council reserves the right to withhold all progress and retention payments until the breach is cured to the satisfaction of Judicial Council. Contractor must provide renewal insurance certificates and signed policy endorsements to Judicial Council at least **TEN (10)** Days following the expiration of the previous insurance certificates and signed policy endorsements.
- 14.1.1.8. In the event Contractor fails to keep in effect at all times the specified insurance coverage, Judicial Council may, in addition to any other remedies it may have, terminate the Agreement upon the occurrence of such event, subject to the provisions of the Agreement.

- 14.1.1.9. The insurance required herein below, and any excess liability or umbrella liability insurance that Contractor maintains in compliance with the terms of this “General Requirements” subparagraph (with the exception of Professional Liability Insurance, if required) must be endorsed to include the State of California, Judicial Council; the Court, and their respective elected and appointed officials, judicial officers, officers, and employees as additional insureds, but only with respect to liability assumed by Contractor under the terms of the Contract Documents or liability arising out of the performance of the Services.
- 14.1.1.10. Contractor, and any insurer providing insurance required hereunder shall waive any right of recovery or subrogation it may have against the State of California; Judicial Council; the Court, and their respective elected and appointed officials, judicial officers, officers, and employees for direct physical loss or damage to the Work, or for any liability arising out of the Work performed by Contractor under the Agreement.
- 14.1.1.11. All insurance policies required hereunder shall contain a provision that coverage will not be materially changed or cancelled without **THIRTY (30)** Days prior written notice to Judicial Council.
- 14.1.1.12. Contractor is responsible for and may not recover from the State of California, Judicial Council; or the Court, any deductible or self-insured retention that is connected to the insurance required hereunder.
- 14.1.1.13. The insurance required hereunder must be endorsed to be primary and non-contributing with any insurance or self-insurance maintained by the State of California; Judicial Council; or the Court, with the exception of coverage provided under the OCIP, which must be primary to coverage provided by Contractor where applicable. Contractor’s liabilities under this contract shall not be limited in any manner to the insurance coverage required.
- 14.1.1.14. Judicial Council reserves the right to request certified copies of any of the insurance policies required hereunder, which must be provided by Contractor within **TEN (10)** Business Days following the request by Judicial Council.
- 14.1.1.15. The cost of all insurance required hereunder is the sole cost of Contractor and is a component part of the Contract Price.
- 14.1.1.16. Contractor shall require insurance from Subcontractors defined as “Excluded Parties” herein below with substantially the same terms and conditions as required of Contractor herein below and with limits of liability, which in the opinion of Contractor are sufficient to protect the interests of Contractor, State of California, Judicial Council, and Court. Should Contractor elect to allow Insurance Requirements that are not in accordance with the limits, terms and conditions of the contract, that the acceptance of those lower limits/coverage does not alleviate their responsibility to meet the contractual obligations of this section and they do so at their own risk.
- 14.1.1.17. Contractor shall procure and maintain the following policies of insurance at the limits listed below during the life of the Contract:
- 14.1.1.17.1. Commercial General Liability Insurance (and if required Excess Liability or Umbrella Liability insurance) written on an occurrence form with limits of not less than \$5,000,000 per

occurrence and a \$5,000,000 per location annual aggregate limit of liability. The policy shall include coverage for liabilities arising out of premises, operations, independent contractors, products and completed operations, personal and advertising injury, and liability assumed under an insured contract. This insurance shall apply separately to each insured against whom a claim is made or lawsuit is brought subject to the insurance policy limit of liability.

14.1.1.17.2. Commercial Automobile Liability. Automobile liability insurance with limits of not less than \$2,000,000 per accident. Such insurance shall cover liability arising out of the operation, use, loading or unloading of a motor vehicle, including owned, hired, and non-owned motor vehicles, assigned to or used in connection with the Work.

14.1.1.17.3. Workers' Compensation. Statutory workers' compensation insurance for all of Contractor's employees, who are engaged in the performance of the work including special coverage extensions where applicable and employer's liability insurance with limits not less than \$1,000,000 for each accident, \$1,000,000 as the aggregate disease policy limit, and \$1,000,000 as the disease limit for each employee.

14.1.1.17.4. Contractor's Equipment Insurance. Contractor's equipment insurance covering its business property, equipment and tools used in the performance of the Work at the Project site that are not intended to become a permanent part of the Work.

14.1.1.17.5. Professional Liability Insurance. Covering Contractor's acts, errors or omissions committed or alleged to have been committed which arise out of rendering or failure to render the Work provided under the terms of this Agreement. The policy shall provide limits of not less than \$2,000,000 per claim or per occurrence and \$2,000,000 annual aggregate. If the policy is written on a "claims made" form, Contractor shall continue such coverage, either through policy renewals or the purchase of an extended discovery period, if such extended coverage is available, for not less than three (3) years from the date of completion of the Work which are the subject of this Agreement. The retroactive date or "prior acts inclusion date" of any such "claims made" policy must be no later than the date that Work commences pursuant to the Agreement.

14.1.1.17.6. Unmanned Aircraft Liability Insurance. If Contractor utilizes drones or any other unmanned aircraft during construction operations, existing insurance coverage must include an endorsement for unmanned aircraft operations or maintain a separate aircraft liability policy to cover unmanned aircraft operations with limits and coverage equal to \$1,000,000 per claim or per occurrence and \$2,000,000 annual aggregate.

14.2. Owner Controlled Insurance Program (OCIP).

14.2.1. General Overview. Notwithstanding the insurance requirements stated herein above, if Judicial Council is utilizing an OCIP during the Work on the Project, this "Owner

Controlled Insurance Program” article shall apply. Contractor has confirmed that its General Conditions costs do not include any amounts for insurance coverages that are within the OCIP. Judicial Council has elected to provide the types of insurance indicated herein below insuring Judicial Council, Contractor, Subcontractors, and Sub-subcontractors of every tier (other than Excluded Parties as defined herein), while performing Work at the Project Site until final Completion of the Project.

- 14.2.2. Indemnified Site. The indemnified site is defined in the OCIP as the Site designated in the Contract Documents that has been scheduled with the OCIP insurance companies, including operations necessary or incidental to the Project site that have been specifically added to the OCIP insurance program by specific agreement with the OCIP insurance companies.
- 14.2.3. Ratings. The insurance must be provided through an insurance company or companies that are rated “A-VII” or higher by A. M. Best’s key rating guide.
- 14.2.4. Named Insured. The State of California; Judicial Council; the Court, Contractor, its Subcontractors, and their Sub-subcontractors of each and every tier.
- 14.2.5. Additional Insureds. As required by written contract.
- 14.2.6. Excluded Parties. Contract haulers or truckers (or others only making deliveries or pickups from the Project site), vendors, suppliers (who do not perform or subcontract installation work at the Project site), material dealers, manufacturing representatives, equipment rental companies who perform equipment maintenance (does not apply to equipment companies who provide operators); architects, surveyors, soil testing contractors, and their consultants; asbestos abatement or other hazardous waste removal contractors and their respective subcontractor of any tier (unless specifically enrolled in the OCIP); demolition and blasting contractors and their respective subcontractors of any tier (unless specifically enrolled in the OCIP), and others who do not perform any actual on Project site labor, and any other entity specifically determined by Judicial Council to be excluded, will not be covered by insurance purchased by Judicial Council under the OCIP.
- 14.2.7. Term. Any insurance policies provided within the OCIP must remain in force until the Completion of the Project, whichever comes later.
- 14.2.8. Completed Operations. The completed operations insurance provided under the commercial general liability, excess liability and contractor’s pollution liability insurance provided under the OCIP Insurance shall extend for a period of ten (10) years past the Completion, termination or cancellation of the Project, but the aggregate limit of liability shall not reinstate each annual period following Completion.
- 14.2.9. Waiver of Subrogation. Each OCIP insurer shall waive any right of recovery or subrogation it may have against the Named Insureds and the Additional Insureds for direct physical loss or damage to the Work, or for any liability arising out of the services performed in the completion of the Work.
- 14.2.10. Contractor/Subcontractor Waiver. Contractor shall waive and require its insurers, its Subcontractors and their Sub-subcontractors, and their respective insurers to waive any right of recovery or subrogation each may have against the State of California; Judicial Council; the Court, including their respective elected and appointed officials, judicial officers, officers, employees arising out of the services performed at the Project Site in the completion of the Work of the Project.

- 14.2.11. Cancellation. All required insurance policies required under OCIP Insurance shall contain a provision that coverage will not be materially changed or cancelled without **NINETY (90)** Days prior written notice to the Named Insureds.
- 14.2.12. Primary and Non-Contributory. Any insurance provided under OCIP Insurance must be endorsed to be primary and non-contributing with any insurance or self-insurance maintained by the Named Insureds or the Additional Insureds.
- 14.2.13. Limits Sharing. The limits of liability provided under the commercial general liability insurance apply collectively for all Named Insureds and Additional Insureds.
- 14.2.14. Insurance Credits. Contractor will require that each prospective Subcontractor and each of their Sub-subcontractors prepare their bids and proposals for work on the Project to exclude the cost for any insurance that will be provided under OCIP Insurance. At the time of their bid, each Subcontractor and their Sub-subcontractors are required to complete a warranty statement to certify that as a condition of its contract to perform work at the Project Site, and under penalty of having its contract to perform Work at the Project site terminated that it has removed the cost of any insurance that will be provided under the OCIP from its bid and that there is no duplication in insurance coverage for which reimbursement is being sought. Upon award the warranty statement will become a component part of any contract.
- 14.2.15. Contract Obligations. Any OCIP insurance provided by Judicial Council is not intended to, and shall not qualify, limit or waive any liabilities or obligations of Contractor, its Subcontractors, or their Sub-subcontractors have assumed under the Contract Documents, or the contract between Contractor and Subcontractor, or the Subcontractor and its Sub-subcontractors.
- 14.2.16. Contractor Insurance. Contractor shall continue to be responsible to provide any insurance required as indicated herein above that is not provided by Judicial Council under the OCIP.
- 14.2.17. OCIP Insurance. Prior to the commencement of performance of the Work, Judicial Council shall furnish the OCIP Insurance for all contractors of every tier that are enrolled in the OCIP while performing Work at the Project Site until final Completion of the Project.
- 14.2.17.1. *Commercial General Liability*. Commercial General Liability Insurance written on an occurrence form with separate limits as follows:
- 14.2.17.1.1. \$2,000,000 each occurrence
- 14.2.17.1.2. \$2,000,000 personal and advertising injury
- 14.2.17.1.3. \$4,000,000 general annual aggregate
- 14.2.17.1.4. \$4,000,000 products – completed operations aggregate
- 14.2.17.1.5. \$100,000 damages to premises rented to an insured
- 14.2.17.1.6. \$10,000 medical payments
- 14.2.18. Limits. All limits of liability are applicable solely to the Project. The policy shall include coverage for liabilities arising out of premises, operations, independent contractors, products–completed operations, personal and advertising injury, and liability assumed under an insured contract. The policy shall not include exclusions for property damage resulting from explosion, collapse or underground hazard, or the consequences of inadvertent construction defects.

- 14.2.18.1. *Excess Liability.* Excess Liability Insurance provided on a form following the commercial general liability insurance insuring against bodily injury, bodily injury, property damage, personal and advertising injury liability, products – completed operations, and employer’s liability on an occurrence form with limits as follows:
- 14.2.18.1.1. \$100,000,000 each occurrence
 - 14.2.18.1.2. \$100,000,000 general annual aggregate
 - 14.2.18.1.3. \$100,000,000 products and completed operations aggregate
- 14.2.18.2. *Contractor’s Pollution Liability Insurance.* Contractor’s Pollution liability insurance (and if required Excess Liability insurance) written on an occurrence form with limits of liability of not less than \$25,000,000 per occurrence and \$25,000,000 general aggregate applicable solely to the Project for third-party claims for bodily injury and/or property damage, and for remediation costs stemming from pollution incidents resulting from the contractor’s covered operations resulting from Work at the Project Site.
- 14.2.18.3. *Workers’ Compensation.* Statutory workers’ compensation insurance for all of Contractors, Subcontractors, and Sub-subcontractors’ employees who will be engaged in the performance of the Work at the Project Site including special coverage extensions where applicable and employer’s liability with limits of not less than \$1,000,000 for each accident, \$1,000,000 as the aggregate disease policy limit, and \$1,000,000 as the disease limit for each employee.
- 14.2.18.4. *Builders Risk.* Builder’s Risk Insurance with limits of liability equal to the combined value of the building under course of construction and final completed value of the Work. The insurance shall apply to physical loss or damage to the insured property, including the cost of damage to that portion of the building not under construction. Judicial Council reserves the right to purchase coverage for risks of physical loss and/or damage caused by flood, earthquake, earth movement and shall notify Contractor in the event coverage for flood, earthquake and/or earth movement are purchased. If provided, the coverage for flood, earthquake and earth movement will be provided with sub-limits less than the final completed value of the Work at the sole determination of Judicial Council.
- 14.2.18.4.1. Builder’s Risk Insurance shall cover Work during construction at the Project Site, at any temporary off-Site location, and while in transit. Included within the terms of coverage will be all buildings, materials, supplies scaffolding, false work, and temporary structures located at the Project Site that are to be used in or incidental to the fabrication, erection, testing, or completion of the Project. The Builder’s Risk Insurance shall cover the cost of removing debris, including demolition as may be made necessary by the operations of any law, ordinance, or regulation.
 - 14.2.18.4.2. Builder’s Risk Insurance may exclude loss resulting from, war and related causes, terrorism resulting from nuclear, biological or chemical materials, nuclear perils, dishonest acts of employees, mysterious disappearance, and ordinary wear and tear, and earthquake and earth movement excess of a

primary limit of earthquake and earth movement insurance. The insurance policy may also exclude the cost of making good faulty workmanship or materials but shall specifically cover loss or damage arising because of faulty workmanship or materials.

14.2.18.4.3. Unless otherwise required by Judicial Council, claims under Builders' Risk insurance provided are subject to a Contractor claims obligation of twenty-five thousand (\$25,000) per occurrence for all risk perils and fifty thousand (\$50,000) per occurrence for water related loss. If a claim results from any construction activity, the responsible Contractor, or Subcontractor shall pay Contractor claims obligation up to \$25,000 for all risk perils and fifty thousand (\$50,000) per occurrence for water related loss. All Builders' Risk losses will be adjusted with and payable to Judicial Council or Designee for the benefit of all parties as their interests may appear.

14.2.18.4.4. Judicial Council shall not be responsible for loss or damage to, or obtaining and/or maintaining in force insurance on temporary structures, construction equipment, tools or personal effects, owned or rented to or in the care, custody and control of a Contractor of any tier.

14.3. Contract Security – Bonds.

14.3.1. Prior to commencing Work pursuant to the Contract Documents, Contractor shall furnish two surety bonds issued by a California admitted surety insurer as follows:

14.3.1.1. *Performance Bond.* A bond in an amount at least equal to one hundred percent (100%) of Contract Price as security for faithful performance of the Work.

14.3.1.2. *Payment Bond.* A bond in an amount at least equal to one hundred percent (100%) of the Contract Price as security for payment of persons performing labor and/or furnishing materials in connection with the Work.

14.3.2. Cost of bonds are included in the Contract Price.

14.3.3. All bonds related to the Project must be in the forms set forth in the Contract Documents and shall comply with all requirements of the Contract Documents.

15. WARRANTY/GUARANTEE/INDEMNITY

15.1. Warranty/Guarantee.

15.1.1. Contractor must obtain and preserve for the benefit of Judicial Council, manufacturer's warranties on materials, fixtures, and equipment incorporated into the Work. Contractor shall ensure that all warranties are maintained for the benefit of Judicial Council, regardless of the who the manufacturer is, who the installing Subcontractor was, if any, etc. While Judicial Council fully expects Contractor to manage all warranty work through all applicable warranty periods, Judicial Council must have that same ability if Contractor fails to perform its warranty obligations as required.

15.1.2. In addition to guarantees required elsewhere, Contractor guarantees and warrants all Work against all defects for a period of **ONE (1)** year after the later of the following dates:

15.1.2.1. Within **SIXTY (60)** Days of Completion of the Project measured by the occurrence of any of the following:

15.1.2.1.1. The occupation, beneficial use, and enjoyment of the Project, excluding any operation only for testing, startup, or commissioning, by Judicial Council or its agent, accompanied by cessation of labor on the Project;

15.1.2.1.2. Acceptance of the Work;

15.1.2.1.3. A cessation of labor on the Project for a continuous period of **ONE HUNDRED (100)** Days or more, due to factors beyond the control of Contractor; provided, however, that a suspension as provided for in the Contract Documents will not constitute a cessation of labor; **or**

15.1.2.1.4. A cessation of labor on the Project for a continuous period of **THIRTY (30)** Days or more, if Judicial Council files for record a notice of cessation or a notice of completion.

15.1.2.2. The commissioning date for the Project, if any.

15.1.3. At Judicial Council's sole option, Contractor must repair or replace any and all of that Work, together with any other Work that may be displaced in so doing, that may prove defective in workmanship and/or materials within a **ONE (1)** year period from date of Completion as defined above without expense whatsoever to Judicial Council. In the event of failure of Contractor and/or Surety to commence and pursue with diligence said replacements or repairs within **TEN (10)** Days after being notified in writing, Contractor and Surety hereby acknowledge and agree that Judicial Council is authorized to proceed to have defects repaired and made good at expense of Contractor and/or Surety who hereby agree to pay costs and charges therefore immediately on demand.

15.1.4. If, in the opinion of Judicial Council, Defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to Judicial Council or to prevent interruption of operations of Judicial Council, Judicial Council will attempt to give the notice required above. If Contractor or Surety cannot be contacted or neither complies with Judicial Council's request for correction within a reasonable time as determined by Judicial Council, Judicial Council may, notwithstanding the above provision, proceed to make all corrections and/or provide attentions Judicial Council believes are necessary. The costs of correction or attention will be charged against Contractor and Surety of the guarantees provided in this article or elsewhere in the Contract Documents.

15.1.5. The above provisions do not in any way limit the guarantees on any items for which a longer guarantee is specified or on any items for which a manufacturer gives a guarantee for a longer period. Contractor must furnish to Judicial Council all appropriate guarantee or warranty certificates as indicated in the Specifications or upon request by Judicial Council.

15.1.6. Upon Completion of the Work, and as a condition of Contractor's receipt of the final progress payment, Contractor shall execute and submit to Judicial Council the Warranty and Guarantee Form (**Exhibit L** (Document 00 65 36)).

15.1.7. Nothing herein limits any other rights or remedies available to Judicial Council.

15.2. Indemnity.

- 15.2.1. To the furthest extent permitted by California law, Contractor shall indemnify, defend with legal counsel reasonably acceptable to Judicial Council, keep and hold harmless the Indemnitees, against all suits, claims, damages, losses, and expenses, including but not limited to attorney's fees, caused by, arising out of, resulting from, or incidental to, the performance of the Work by Contractor, its Subcontractors, vendors, or suppliers, including, without limitation, any such suit, claim, damage, loss, or expense attributable to, without limitation, bodily injury, sickness, disease, death, alleged patent violation or copyright infringement, or to injury to or destruction of tangible property (including damage to the Work itself) including the loss of use resulting therefrom, except to the extent caused by the sole negligence, active negligence, or willful misconduct of the Indemnitees, and/or to any extent that would render these provisions void or unenforceable. This agreement and obligation of Contractor shall not be construed to negate, abridge, or otherwise reduce any right or obligation of indemnity that would otherwise exist as to any party or person described herein. Without in any way limiting the foregoing, this indemnification, defense, and hold harmless obligation includes:
- 15.2.1.1. Any failure or alleged failure by Contractor to comply with any provision of law and/or any failure or alleged failure to timely and properly fulfill all of its obligations under the Contract Documents in strict accordance with their terms, which shall include, without limitation, any stop payment notice actions or liens, including liens by the California Department of Labor Standards Enforcement.
- 15.2.1.2. Any claim arising (including bid protests) from any errors or mistakes in Contractor's bid documents provided to Subcontractors.
- 15.2.2. Contractor shall give prompt notice to Judicial Council in the event of any injury (including death), loss, or damage included herein. Without limitation of the provisions herein, if Contractor's agreement to indemnify, defend, and hold harmless the Indemnitees as provided herein against liability for damage arising out of bodily injury to persons or damage to property caused by or resulting from the negligence of any of the Indemnitees shall to any extent be or be determined to be void or unenforceable, it is the intention of the Parties that these circumstances shall not otherwise affect the validity or enforceability of Contractor's agreement to indemnify, defend, and hold harmless the rest of the Indemnitees, as provided herein, and in the case of any such suits, claims, damages, losses, or expenses caused in part by the default, negligence, or act or omission of Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, and in part by any of the Indemnitees, Contractor is and will remain fully liable on its agreements and obligations herein to the full extent permitted by law.
- 15.2.3. In any and all claims against any of the Indemnitees by any employee of Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, Contractor's indemnification obligation herein shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- 15.2.4. In addition to any remedy authorized by law, moneys due Contractor under the Contract Documents, as considered necessary by the State, may be retained until disposition has been made of any claims, lawsuits, losses, costs, liabilities, and damages; however, this provision shall not be construed as precluding the State from enforcing any right of offset the State may have to any moneys.
- 15.2.5. The defense and indemnification obligations hereunder shall survive the Completion of Work, including the warranty/guarantee period, and/or the termination of the Agreement.

16. TIME

16.1. Notice to Proceed.

Judicial Council may issue a Notice to Proceed as indicated in the Instructions to Bidders (Document 00 21 13) or will otherwise instruct Contractor begin performing the Work of the Project.

16.2. Hours of Work.

Work must be performed during regular working hours as permitted by the appropriate Authority Having Jurisdiction except that in the event of an emergency, or when required to complete the Work in accordance with the Construction Schedule and within the Contract Time, Work may be performed outside of regular working hours with prior written Approval of Judicial Council and approval of any Authority Having Jurisdiction. Contractor and Subcontractors shall continuously furnish sufficient forces to ensure the performance of the Work in accordance with the Construction Schedule. In no event will Judicial Council be responsible for the costs of Work performed outside of regular working hours, including, without limitation, overtime or weekend Work, unless expressly agreed to be Judicial Council in writing and Approved in a Change Order.

16.3. Progress and Completion.

16.3.1. Time of the Essence. Time limits stated in the Contract Documents are of the essence to the Work. Contractor has reviewed the Contract Documents and expressly agrees that the Contract Time is a reasonable period for performing the Work.

16.3.2. No Commencement Without Bonds and Insurance. Contractor must not commence Work on the Project or elsewhere prior to the effective date of insurance and bonds. The effective date of such insurance will neither effect date for the commencement of the Work as indicated in the Notice to Proceed and/or the Contract Time. If Contractor commences Work without insurance and bonds, all Work is performed at Contractor's peril and will not be compensable until and unless Contractor secures bonds and insurance pursuant to the terms of the Contract Documents and subject to any claim by Judicial Council claim for damages if such damages were incurred.

16.4. Schedule.

Before commencing Work, Contractor must provide to Judicial Council, Construction Manager, and Architect a Construction Schedule in conformance with the Contract Documents and as required in the Notice to Proceed and Contractor's Submittals and Schedules section of these General Conditions.

16.5. Expeditious Completion.

Contractor must proceed expeditiously with adequate forces and must achieve Completion within the Contract Time.

17. EXTENSIONS OF TIME – LIQUIDATED DAMAGES

17.1. Contractor's Notice of Delay.

17.1.1. In addition to the requirements indicated in this subsection, Contractor must submit any request for an adjustment of the Contract Price or Contract Time through the Change Order provisions in these General Conditions.

- 17.1.2. Contractor must, within **FIVE (5)** Days of any delay impacting the critical path in completing the Work, or, any delay Contractor reasonably believes will extend the then current Project Completion date set forth in the current and Judicial Council Approved Construction Schedule, notify Judicial Council in writing of the causes of the delay including documentation and facts explaining the delay.
- 17.1.3. Any request by Contractor for an adjustment of the Contract Price and/or the Contract Time for a delay must be submitted in accordance with the provisions in the Contract Documents governing Changes in Work. When requesting time, requests must be submitted with full justification and documentation. Such justification must be based on the official Construction Schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the scope of Work.
- 17.1.4. Any claim for delay must include the following information as support, without limitation:
 - 17.1.4.1. The duration of the activity relating to the changes in the Work and the resources (manpower, equipment, material, etc.) required to perform the activities within the stated duration.
 - 17.1.4.2. Specific logical ties to the Construction Schedule for the proposed changes and/or delay showing the activity(ies) in the Construction Schedule that are affected by the change and/or delay. Include a “fragnet” analysis for the portion of the schedule and the activities Contractor contends are impacted by the delay.
 - 17.1.4.3. A recovery or updated Construction Schedule must be submitted.
- 17.1.5. Judicial Council will review the facts and extent of any noticed delay and may grant Contract Time extension(s) for Completion of the Work when, in Judicial Council’s sole judgment, the findings of fact justify an extension.
- 17.1.6. Contract Time extension(s) may be limited to only those portions of Work affected by delay and may not apply to other portions of Work not so affected, in the sole discretion of Judicial Council.
- 17.1.7. There are three (3) types of delay:
 - 17.1.7.1. Excusable and Compensable Delay;
 - 17.1.7.2. Excusable Delay; and
 - 17.1.7.3. Unexcused Delay.
- 17.1.8. Following submission of a notice of delay, Judicial Council may determine whether Contractor is entitled to an extension of the Contract Time, and, if applicable, an increase in the Contract Price arising from any properly noticed and substantiated delay. In making that determination, Judicial Council will consider the following, based on the evidence submitted by Contractor and any investigations performed by Judicial Council:
 - 17.1.8.1. Whether the delay an Excusable and Compensable Delay, Excusable Delay, or Unexcused Delay;
 - 17.1.8.2. How long the delay continues; and
 - 17.1.8.3. To what extent the prosecution and Completion of the Work might be delayed thereby.

- 17.1.9. Contractor's failure to request adjustment(s) of the Contract Time in strict conformity with applicable provisions of the Contract Documents is a waiver of Contractor's right to assert a claim for a delay.
- 17.1.10. Delays from Force Majeure Events may constitute Excusable Delay, but **NOT** Excusable and Compensable Delay.
- 17.1.11. Any adjustment of the Contract Time on account of an Excusable Delay or an Excusable and Compensable Delay is limited as set forth herein. No adjustment of the Contract Time will be made on account of any Excusable Delays or an Excusable and Compensable Delays unless those delay(s) actually and directly impact Work or Work activities on the critical path of the then current and updated and Approved Construction Schedule as of the date on which a delay first occurs. Judicial Council will not be deemed in breach of, or otherwise in default of any obligation hereunder, if Judicial Council denies a request by Contractor for an adjustment of the Contract Time for any delay that does not actually and directly impact Work on the then current and updated and Approved Construction Schedule. In submitting a request for an adjustment of Contract Time, and as a condition precedent to Judicial Council's review of that request, Contractor must insert into the then current and updated Approved Construction Schedule a "fragnet" analysis representing the event that Contractor claims to result in delay to the critical path as depicted in the updated Approved Construction Schedule. If an Excusable Delay and a Compensable Delay occur concurrently, the maximum extension of the Contract Time is the number of Day from the commencement of the first delay to the cessation of the delay that ends last. If an Unexcused Delay occurs concurrently with either an Excusable Delay or a Compensable Delay, the maximum extension of the Contract Time is the number of Days, if any, which the Excusable Delay or the Compensable Delay exceeds the period of time of the Unexcused Delay.

17.2. Excusable and Compensable Delay(s).

- 17.2.1. A delay is not considered Excusable and Compensable Delay unless **all** the following conditions are met:
- 17.2.1.1. Judicial Council is responsible for the delay;
- 17.2.1.2. The delay is unreasonable under the circumstances involved and impacts the critical path of the Work and extends the most current Project Completion date. A delay impacts the critical path of the Project if it delays a work activity that cannot be delayed without delaying Completion of the Work to a date that is beyond the Contract Time;
- 17.2.1.3. The delay was not within the contemplation of Judicial Council and Contractor;
- 17.2.1.4. Contractor complies with the Change Order procedures, and if necessary, the Claims Resolution Process of the Contract Documents;
- 17.2.1.5. The delay could not have been avoided or mitigated by Contractor's care, prudence, foresight, and diligence;
- 17.2.1.6. The delay extends the most current Project Completion date; and
- 17.2.1.7. The delay is not concurrent with a Concurrent Delay or other Excusable Delay.

17.3. Excusable Delay(s).

- 17.3.1. To constitute Excusable Delay **all** the following conditions must be met:
- 17.3.1.1. The delay could not have been avoided by Contractor exercising care, prudence, foresight, and diligence, including, without limitation, Adverse Weather and/or a Force Majeure Event,
 - 17.3.1.2. The delay is beyond the reasonable control of Contractor; and
 - 17.3.1.3. The delay actually extends the most current Project Completion date.
- 17.3.2. Contractor may be entitled to an extension of the Project Completion date if there is an Excusable Delay, but Contractor will not be entitled to additional compensation for an Excusable Delay.
- 17.3.3. Contractor is aware that governmental agencies and utilities, including, without limitation, the DSA, the State Fire Marshal, the Department of General Services, gas companies, electrical utility companies, water districts, and other agencies may have to approve Contractor-prepared drawings or approve a proposed installation. Contractor must include in its Bid, time for possible review of its drawings and for reasonable delays and damages that may be caused by such agencies. Contractor is not entitled to make a claim for damages or delays or an Excusable Delay arising from the review of Contractor's drawings or other approvals from the DSA, the State Fire Marshal, the Department of General Services, gas companies, electrical utility companies, water districts, and other agencies.
- 17.3.4. If an Infectious Disease impacts the progress of the Work and Contractor demonstrates that the event satisfies the conditions of the Contract Documents for an adjustment to the Contract Time, it will be an Excusable Delay.
- 17.3.5. Neither the financial resources of Contractor or any person or entity directly or indirectly engaged by Contractor in performance of any portion of the Work will be deemed conditions beyond the control of Contractor.
- 17.3.6. Computation of Time / Adverse Weather.
- 17.3.6.1. Contractor will only be allowed a time extension for Adverse Weather conditions if requested by Contractor within **FIVE (5)** Days of the Adverse Weather event, and only if **all** of the following conditions are met – thereby making the resulting delay an Excusable Delay.
 - 17.3.6.1.1. The weather conditions constitute Adverse Weather, as defined herein and further specified in the Special Conditions (**Exhibit N** (Document 00 71 00));
 - 17.3.6.1.2. Contractor can verify that the Adverse Weather caused delays in excess of **FIVE (5)** hours of the indicated labor required to complete the scheduled tasks of Work on the date affected by the Adverse Weather;
 - 17.3.6.1.3. Contractor's crew was dismissed as a result of the Adverse Weather; and
 - 17.3.6.1.4. The number of Days of delay exceed those indicated in the Special Conditions (**Exhibit N** (Document 00 71 00)).

17.3.6.2. A day-for-day extension will only be allowed for those days in excess of those indicated in the Special Conditions (**Exhibit N** (Document 00 71 00)) and only if the tasks of Work on the date affected by the Adverse Weather were tasks required to be performed on that date to maintain the critical path of the Construction Schedule.

17.3.6.3. Contractor will work **SEVEN (7)** Days per week, if necessary, irrespective of inclement weather, to maintain access and the Construction Schedule, and to protect the Work under construction from the effects of Adverse Weather, all at no further cost to Judicial Council.

17.3.6.4. The Contract Time has been determined with consideration given to the average climate weather conditions prevailing in the County in which the Project is located.

17.4. Unexcused Delay(s) – Liquidated Damages.

17.4.1. Any delay that is neither an Excused and Compensable Delay or an Excusable Delay is an Unexcused Delay. Neither the Contract Price nor the Contract Time will be adjusted on account of Unexcused Delay.

17.4.2. Contractor and Judicial Council hereby agree that the exact amount of damages for failure to complete the Work within the time specified is extremely difficult or impossible to determine. If the Work is not completed within the time specified in the Contract Documents, it is understood that Judicial Council will suffer damage. It being impractical and unfeasible to determine the amount of actual damage, it is agreed Contractor will forfeit and pay to Judicial Council as fixed and Liquidated Damages, and not as a penalty, the amount set forth in the Agreement for each Day of delay in Completion. Contractor and its Surety are liable for the amount thereof.

17.4.3. Contractor will not forfeit or pay Liquidated Damages for an Excusable Delay or an Excusable and Compensable Delay.

17.5. Granting Time Extensions.

17.5.1. If and only if a delay meets all conditions above for either Excusable and Compensable Delay or Excusable Delay, will Judicial Council grant a time extension for each established day of delay, subject to the following:

17.5.1.1. When two (2) or more delays (each of which meet all conditions prescribed above) occur concurrently on the same day, and each delay by itself without consideration of the other delays would be critical, then all such delays will be considered critical. In the event that two (2) or more substantiated delays apply concurrently to the same day and extend the Construction Schedule, then that day of delay shall be treated as one (1) day of delay and not multiple days of delay when adjusting the Contract Time.

17.5.1.2. Any Concurrent Delay is considered an Unexcused Delay.

17.5.2. If for any reason one or more of the conditions above for Excusable and Compensable Delay or Excusable Delay is held legally unenforceable, then all remaining conditions must be met as a condition to obtaining an extension of the Contract Time as herein provided.

18. CHANGES IN THE WORK

18.1. No Changes Without Authorization.

- 18.1.1. There will be no change whatsoever in the Drawings, Specifications, or in the Work without an executed Change Order, a written Unilateral Change Order, or a written Field Order Approved by Judicial Council as herein provided. Judicial Council will not be liable for the cost of any extra Work, any changes to the Contract Time, or any substitutions, changes, additions, omissions, or deviations from the Drawings and Specifications unless Judicial Council has authorized the same and the cost thereof has been Approved by an executed Change Order, a written Unilateral Change Order, or a written Field Order.
- 18.1.2. The Surety, in executing and providing the Performance Bond and the Payment Bond, is deemed to have expressly agreed to any change to the Contract Price and to the Contract Time made by reason thereof.
- 18.1.3. No adjust to the Contract Time for performance of the Work will be allowed hereunder unless a request for such an extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the Change Order, Unilateral Change Order, or Field Order. The provisions of the Contract Documents will apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Drawings and Specifications.
- 18.1.4. Contractor must perform immediately all Work that has been authorized by a fully executed Change Order, Unilateral Change Order, or Field Order. Contractor is fully responsible for any and all delays and/or expenses caused by Contractor's failure to expeditiously perform this Work and Contractor's failure or refusal to so proceed with that Work may be deemed to be Contractor's default of a material obligation of Contractor under the Contract Documents.
- 18.1.5. Should any Change Order result in an increase in the Contract Price, the cost of that Change Order must be agreed to, in writing, in advance by Contractor and Judicial Council. In the event that Contractor proceeds with any change in Work without a Change Order executed by Judicial Council, Unilateral Change Order, or Field Order, Contractor waives any claim of additional compensation or time for that additional work.
- 18.1.6. Contractor understands, acknowledges, and agrees that the reason for Judicial Council authorization is so that Judicial Council may have an opportunity to analyze the Work and decide whether Judicial Council will proceed with the Change Order or alter the Project so that a change in Work becomes unnecessary.
- 18.1.7. In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization, must act, at its discretion, to prevent all threatened loss or injury. Any compensation or time claimed by Contractor on account of emergency work will be determined as indicated herein as a PCO.
- 18.1.8. No payments will be made, nor will Judicial Council accept PCOs until Contractor has complied with all the requirements of the Escrow of Bid Documentation (**Exhibit E** (Document 00 54 50)) document (if applicable).

18.2. Architect Authority.

Architect will have authority to order minor changes in the Work not involving any adjustment in the Contract Price, or an extension of the Contract Time, or a change that is inconsistent with the intent of the Contract Documents. These changes will be affected by written Architect's Supplemental Instruction, Change Order, or by Unilateral Change Order.

18.3. Change Orders.

- 18.3.1. A Change Order is a written instrument prepared and issued by Judicial Council and/or Architect and signed by Judicial Council, Contractor, Architect, and approved by Project Inspector (if necessary), stating their agreement regarding all of the following:
- 18.3.1.1.A description of a change in the Work;
 - 18.3.1.2.The amount of the adjustment in the Contract Price, if any; and
 - 18.3.1.3.The extent of the adjustment in the Contract Time, if any.
- 18.3.2. If Judicial Council Approves a change, Judicial Council or Architect will provide a written Change Order to Contractor describing the change and setting forth the adjustment to the Contract Time and the Contract Price, if any, on account of that change. All Change Orders are full payment and final settlement of all rights for direct, indirect and consequential costs, including without limitation, costs of delays or impacts related to, or arising out of, items covered and affected by the Change Order, as well as any adjustments to the Contract Time. Contractor shall waive any demand or request for an adjustment to the Contract Time or the Contract Price relating to any changed Work which was not first presented by Contractor in a PCO for Approval as a Change Order. Contractor must execute the Change Order prepared pursuant to the foregoing. After the Change Order has been prepared and forwarded to Contractor for execution, Contractor will not modify or amend the form or content of such Change Order, or any portion thereof.

18.4. Unilateral Change Orders.

- 18.4.1. A Unilateral Change Order is a written order prepared and issued by Judicial Council, Construction Manager, and/or Architect and signed by Judicial Council, directing a change in the Work. Judicial Council may issue a Unilateral Change Order to order changes in the Work consisting of additions, deletions, or other revisions. Any dispute as to the sum of the Unilateral Change Order or timing of payment will be resolved pursuant to the Payment provisions and the Claims provisions herein.
- 18.4.2. Judicial Council may issue a Unilateral Change Order in the absence of agreement on the terms of a Change Order.

18.5. Field Orders.

- 18.5.1. When Work, for which a definite price has not been agreed upon in advance, is to be paid on a force account basis, all direct costs necessarily incurred and paid by Contractor for labor, material, and equipment used in the performance of that Work, will be subject to the Approval of Judicial Council and compensation will be determined as set forth herein.
- 18.5.2. Judicial Council will issue a Field Order to proceed with the Work on a force account basis, and a not-to-exceed budget will be established by Judicial Council.
- 18.5.3. All requirements regarding direct cost for labor, labor burden, material, equipment, and markups on direct costs for overhead and profit described in this section applies to Field Orders. However, Judicial Council will only pay for actual costs verified in the field by Judicial Council or its authorized representative(s) on a daily basis.
- 18.5.4. Contractor is responsible for all costs related to the administration of Field Orders. The markup for overhead and profit for Contractor modifications are full compensation to Contractor to administer Field Orders.

- 18.5.5. Contractor must notify Judicial Council or its authorized representative(s) at least **TWENTY-FOUR (24)** hours prior to proceeding with any of the force account Work. Furthermore, Contractor must notify Judicial Council when it has consumed eighty percent (80%) of the budget and must not exceed the budget unless specifically authorized in writing by Judicial Council. Contractor will not be compensated for force account Work if Contractor fails to timely notify Judicial Council regarding the commencement of force account work or exceeding the force account budget.
- 18.5.6. Contractor must diligently proceed with the Work, and daily, submit a daily force account report on a form supplied by Judicial Council no later than 5:00 p.m. each day. The report must contain a detailed itemization of the daily labor, material, and equipment used on the force account work only. The names of the individuals performing the force account Work will be included on the daily force account reports. The type and model of equipment must be identified and listed. Judicial Council will review the information contained in the reports and sign the reports no later than the next workday and return a copy of the report to Contractor for its records. Judicial Council will not sign, nor will Contractor receive compensation for work Judicial Council cannot verify. Contractor will provide a weekly force account summary indicating the status of each Field Order in terms of percent complete of the not-to-exceed budget and the estimated percent complete of the Work.
- 18.5.7. In the event Contractor and Judicial Council reach a written agreement on a set cost for the work while the work is proceeding based on a Field Order, Contractor's signed daily force account reports will be discontinued, and all previously signed reports considered invalid.

18.6. Price Request.

- 18.6.1. Scope of Price Request. A Price Request must contain adequate information, including any necessary Drawings and Specifications, to enable Contractor to provide the cost breakdowns required herein. Contractor will not be entitled to any additional compensation for preparing a response to a Price Request, whether ultimately accepted or not.
- 18.6.2. Not Instructions. Contractor will not consider Price Requests to be instructions either to stop work in progress or to execute the proposed change.
- 18.6.3. Submission of Quote. Within the time specified in Price Request after receipt of Price Request, Contractor must submit a quotation estimating cost adjustments to the Contract Price and the Contract Time necessary to execute the change, with the following documentation and information:
- 18.6.3.1. 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.
- 18.6.3.2. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
- 18.6.3.3. Include costs of labor and supervision directly attributable to the change.
- 18.6.3.4. Include a revised Construction Schedule that reflects the change, showing for example, changes in activity duration, start and finish times, and activity relationship. Use available total Float before requesting an extension of the Contract Time.

18.7. Proposed Change Order.

- 18.7.1. Submittal of Proposed Change Orders. Contractor may submit a PCO(s) to Judicial Council and Architect to request that Judicial Council issue a Change Order for a proposed change to the Work.
- 18.7.2. Changes in Contract Price. A PCO must include breakdowns pursuant to the provisions herein to validate any change in Contract Price and include all reasonable documentation as required herein.
- 18.7.3. Changes in Time. A PCO must also include any changes in time required to complete the Project. A PCO must also include a revised Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationships. Contractor must use available total Float before requesting an extension of the Contract Time. Any additional time requested must not be the number of Days to make the proposed change but must be based upon the impact to the Construction Schedule as defined in the Contract Documents. If Contractor fails to request a time extension in a PCO, then Contractor is thereafter precluded from requesting time and/or claiming a delay. If Contractor believes a delay constitutes an Excusable and Compensable Delay, then Contractor must provide detailed documentation that supports its position and that addresses all the components of the “Excusable and Compensable Delay(s)” section above.
- 18.7.4. Unforeseen Site Conditions. If Contractor submits a PCO requesting an increase in Contract Price and/or Contract Time that is based at least partially on Contractor’s assertion that Contractor has encountered Unforeseen Site Condition(s) on the Project, then Contractor must base the PCO on provable information that, beyond a reasonable doubt and to Judicial Council’s satisfaction, demonstrates that the Unforeseen Site Condition(s) were actually unknown and/or unforeseen and that the condition(s) were reasonably unknown and/or unforeseen. If not, Judicial Council will deny the PCO and Contractor must complete the Project without any increase in Contract Price and/or Contract Time based on that PCO.
- 18.7.5. Time to Submit PCO. Contractor must submit PCOs within **FIVE (5)** Days of the date Contractor discovers, or reasonably should discover, the circumstances giving rise to a PCO, unless additional time to submit a PCO is granted in writing by Judicial Council. Time is of the essence in Contractor’s written notice pursuant to the preceding sentence so that Judicial Council can promptly investigate and consider alternative measures to the address the basis for the PCO. Accordingly, Contractor acknowledges that its failure, for any reason, to give written notice within this time frame is a waiver, release, discharge and relinquishment of Contractor’s right to assert or claim any entitlement to an adjustment of the Contract Time or the Contract Price on account of the circumstances giving rise to the PCO.

18.8. Format for Proposed Change Order.

The following “Format For Proposed Change For Subcontractor Performed Work” and “Format For Proposed Change For Contractor Performed Work” will be used as applicable by Judicial Council and Contractor (e.g. Change Orders, PCOs) to communicate proposed additions and deductions to the Contract Price, supported by attached documentation.

FORMAT FOR PROPOSED CHANGE FOR SUBCONTRACTOR PERFORMED WORK

	<u>SUBCONTRACTOR PERFORMED WORK</u>	<u>ADD</u>	<u>DEDUCT</u>
(A)	<u>Labor Charge</u> 1. Hours. Attach total itemized hours, by each Subcontractor at each tier. 2. Rate. This can be no more than the Straight-Time Total Hourly Rate as determined by the DIR for the applicable labor category.		
(B)	<u>Labor Burden & Worker's Compensation Charge</u> 1. This can be no more than twenty percent (20%) of item (A) , the Labor Charge. 2. This will be the total cumulative charge permitted for all Subcontractors or all labor performed by the Subcontractor or Subcontractor's Subcontractor(s) (i.e., all "lower-tier" Subcontractor(s)).		
(C)	<u>Subtotal (A+B)</u>		
(D)	<u>Material Charge</u> Attach itemized quantity and unit cost plus sales tax and invoice(s) from vendor(s).		
(E)	<u>Equipment Charge</u> Attach invoice(s) from supplier(s).		
(F)	<u>Subtotal (C+D+E)</u>		
(G)	<u>Subcontractor's Overhead and Profit Charge</u> Calculated as indicated in the Mark-Up section below.		
(H)	<u>Subtotal (F+G)</u>		
(I)	<u>Contractor's Overhead, Profit, Bond and Insurance</u> 1. This will be no more than six percent (6%) of Item (F) . 2. This will be the total mark-up permitted for Contractor.		
(J)	<u>TOTAL (H+I)</u>		
(K)	<u>Time</u>		Days

FORMAT FOR PROPOSED CHANGE FOR CONTRACTOR PERFORMED WORK

	<u>CONTRACTOR PERFORMED WORK</u>	ADD	DEDUCT
(A)	<p><u>Labor Charge</u></p> <p>1. Hours. Attach total itemized hours.</p> <p>2. Rate. This can be no more than the Straight-Time Total Hourly Rate as determined by the DIR for the applicable labor category.</p>		
(B)	<p><u>Labor Burden & Worker's Compensation Charge</u></p> <p>1. This can be no more than twenty percent (20%) of item (A), the Labor Charge.</p> <p align="center">This will be the total cumulative charge permitted for all labor performed by Contractor.</p>		
(C)	<u>Subtotal (A+B)</u>		
(D)	<p><u>Material Charge</u></p> <p>Attach itemized quantity and unit cost plus sales tax and invoice(s) from vendor(s).</p>		
(E)	<p><u>Equipment Charge</u></p> <p>Attach invoice(s) from supplier(s).</p>		
(F)	<u>Subtotal (C+D+E)</u>		
(G)	<p><u>Contractor's Overhead, Profit, Bond and Insurance</u></p> <p>Calculated as indicated in the Mark-Up section below.</p>		
(H)	<u>TOTAL WORK COSTS (F+G)</u>		
(I)	<u>Time</u>	TOTAL _____ _____ Days of Excusable Delay _____ Days of Compensable Delay	
(J)	<u>Compensable Delay Compensation</u>	\$ _____ <i>(Days of</i> <i>Compensable</i> <i>Delay x</i> <i>Compensable</i> <i>Delay Rate)</i>	
(K)	<u>TOTAL ADJUSTMENT TO CONTRACT PRICE</u>	\$ _____	

18.8.1. Required Information. All PCO requests by Contractor for a change must include a complete itemized breakdown with the following detail:

18.8.1.1. *Labor*. Labor breakdown by trade classification, wage rates, and estimated hours. Labor costs will only include fringe benefits indicated by governing trade organizations. Wages will not exceed current prevailing wages in the locality for performance of the changes.

18.8.1.1.1. Contractor's or Subcontractors' labor burden and Workers' Compensation premium will only be charged as indicated herein. In no event will Contractor include any other charges than as indicated herein without the prior Approval of Judicial Council.

18.8.1.2. *Material*. Material quantities, and types of products, and transportation costs, if applicable.

18.8.1.3. *Equipment*. Equipment breakdown by make, type, size, rental rates (if not owned), equipment hours and transportation costs, if applicable.

18.8.1.3.1. The equipment costs will not exceed one hundred percent (100%) of the Association of Equipment Distributors (AED) rental rates and delay factors or Caltrans rates and delay factors, whichever is less. Hourly, daily, weekly, or monthly rates will be used, whichever is lower. Hourly rates including operator will not be used.

18.8.1.3.2. The time to be paid for equipment will be the actual time that the equipment (i) is in productive operation on the Work or (ii) idled as a result of the event or circumstance giving rise to the PCO.

18.8.1.3.3. To calculate the costs of idle equipment, Contractor must use the applicable idle equipment rate. For example, and clarification purposes only, if the rate for "X" piece of equipment is \$100 and the applicable delay factor is .20 for that piece of equipment, then the hourly rate for idle equipment will be \$20 (\$100 x .20), which will be applied against the number of hours idle. In no event will Contractor charge an amount greater than 50% of the applicable equipment rate for idle equipment.

18.8.1.3.4. In computing the hourly rental of equipment, any time less than **THIRTY (30)** minutes will be considered **ONE-HALF (1/2)** hour. No payment will be made for time while equipment is inoperative due to breakdown, or for non-workdays. In addition, the rental time will not include the time required to move the equipment to and from the Project Site. No mobilization or demobilization will be allowed for equipment already on site. If such equipment is not moved by its own power, then loading and transportation costs will be paid in lieu of rental time thereof. However, neither moving time nor loading and transportation costs will be paid if the equipment is used on the Project Site in any other way than upon the work directly related to the event or circumstance giving rise to the PCO.

18.8.1.3.5. Individual pieces of equipment having a replacement value of one thousand dollars (\$1,000) or less will be considered to be small tools or small equipment, and no payment will be made since the costs of

these tools and equipment is included as part of the markup for overhead and profit defined herein.

18.8.1.3.6. Payment to Contractor for the use of equipment as set forth above will constitute full compensation to Contractor for the cost of fuel, power, oil, lubricants, supplies, small equipment, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, labor (except for equipment operators), and any and all costs to Contractor incidental to the use of the equipment.

18.8.1.3.7. Should Contractor, or any of its owners, officers, directors or agents, hold any ownership interest in any company, organization, association or corporation from whom rental equipment is secured. Contractor must immediately notify Judicial Council of such and the price set for any such rental will be agreed upon in advance by Contractor and Judicial Council.

18.8.1.4. *Overhead, Profit, Bond and Insurance Costs.* Markup for overhead and profit, which will be used to compensate Contractor for all costs for all administration, general conditions, and supervision, including, without limitation:

18.8.1.4.1. All home office overhead, field office overhead, field office personnel including, but not limited to, principals, project managers, superintendents, supervisory foremen, estimators, project engineers, detailers, draftsmen, schedulers, consultants, watchmen, payroll clerks, administrative assistants, labor compliance costs and secretaries.

18.8.1.4.2. All field and field office expenses including, but not limited to, field trailers, parking, storage sheds, office equipment and supplies, telephone service and long distance telephone calls, computers, fax machines, temporary utilities, sanitary facilities and services, janitorial services, small tools and equipment with a cost under \$1000 each, portable scaffolding, blocking, shores, appliances, job vehicles, security and fencing, conformance to regulatory requirements including compliance to safety regulations, safety programs and meetings, cartage, warranties, As-Built Drawings, as well as any related maintenance costs.

18.8.1.4.3. Administrative functions such as, but not limited to, reviewing, coordinating, distributing, processing, posting, recording, estimating, negotiating, expediting, engineering, drawing, detailing, revising Shop Drawings, carting, cleaning, protecting the work, and other incidental Work related to the change.

18.8.1.4.4. All other costs and taxes required to be paid, but not included under direct costs as defined above including, without limitation, payroll taxes, social security, etc.

18.8.1.4.5. All costs for Contractor's bonds and insurance.

18.8.1.4.6. Federal excise tax will not be included. Judicial Council will issue an exemption on request.

18.8.1.5. *Mark-Up*. The following amounts for mark-ups of any added Work will constitute full compensation for all other costs not covered under the above-stated allowable costs and includes compensation for all additional field and home office overhead, profit, insurance, taxes, and bonds. Contractor is not permitted to add costs for additional items that are part of Contractor's general conditions in its performance of the Work, unless Approved in advance by Judicial Council.

18.8.1.5.1. Contractor's Mark-Up for Overhead, Profit, Bonds & Insurance. Contractor's fee for self-performed and/or Subcontractor-performed work will be six percent (6%) of Item (F) (Labor, Materials, and Equipment) in the Format for Proposed Change Order above.

18.8.1.5.2. Subcontractor(s) Mark-Up for Overhead and Profit. The Subcontractor(s) will compute mark-up as follows:

18.8.1.5.2.1. For mark-up for Item (C) (Labor) in the Format for Proposed Change Order above:

18.8.1.5.2.1.1. If performed by a first-tier Subcontractor, seven percent (7%) of Item (C).

18.8.1.5.2.1.2. If performed by a second-tier Subcontractor, aggregate mark-ups for both Subcontractor tiers will not exceed fourteen percent (14%) of Item (C).

18.8.1.5.2.1.3. If performed by a third-tier or lower Subcontractor, aggregate mark-ups for all Subcontractor tiers will not exceed twenty percent (20%) of Item (C).

18.8.1.5.2.2. For mark-up for the aggregate of Items (D) (Material) and (E) (Equipment) in the Format for Proposed Change Order above:

18.8.1.5.2.2.1. If Materials and Equipment are procured by a first-tier Subcontractor, five percent (5%) of the aggregate of Items (D) and (E).

18.8.1.5.2.2.2. If Materials and Equipment are procured by a second-tier Subcontractor, the aggregate markup for both subcontract tiers will not exceed ten percent (10%) of the aggregate of Items (D) and (E).

18.8.1.5.2.2.3. If Materials and Equipment are procured by a third-tier Subcontractor, the aggregate markup for both subcontract tiers will not exceed fifteen percent (15%) of the aggregate of Items (D) and (E).

18.8.1.5.2.3. Contractor's premium charges for Subcontractor bond costs or Contractor-provided subcontractor default insurance protection in lieu of Subcontractor bonds (e.g., Sub Guard), if any.

18.8.1.5.2.4. If additional Work is paid from Allowance(s), no mark-up is permitted.

18.8.1.5.3. *Material Escalation Costs.* Contractor will **NOT** be entitled to an increase in the Contract Price for material escalation costs unless **all** the following conditions are satisfied:

18.8.1.5.3.1. The actual increase in the cost of the materials in question exceeds ten percent (10%) of the **total** material costs on the Project.

18.8.1.5.3.2. The cost escalation is the result of unusual and unforeseeable market conditions not reasonably foreseeable at the time of award of the Project and was not an escalated cost resulting from any action or inaction of Contractor.

18.8.1.5.3.3. Contractor timely ordered and/or purchased the materials at issue, based on (i) Contractor's constructive knowledge of the supply chain for required materials and (ii) Contractor's request to utilize the provisions in the Contract Documents related to Judicial Council's payment for materials and equipment purchased and stored on Site or off-Site.

18.8.1.5.3.4. Contractor's material costs were reasonable at the time of Contractor submitted its Bid for the Project.

18.8.1.5.3.5. Contractor demonstrates an actual increase in the cost of materials in its Contract Price at the time of award of the Project and/or as reflected in Contractor's escrowed bid documents compared to Contractor's actual material payment cost paid either at time of purchase or delivery, whichever is earlier.

18.8.1.5.3.6. An actual year-to-date price increase has occurred and can be substantiated by the E.N.R. 20-City Average Material Cost Index for the material at issue that demonstrates the claim for an increase in price of the material at the time of delivery of the higher priced material to the Project.

18.8.1.6. *Contract Time.*

18.8.1.6.1. Justification for any adjustment in Contract Time must include a schedule analysis identifying critical schedule activities delayed by the request. Contract Time will be extended or reduced by Change Orders, Unilateral Change Orders, or Field Orders for a period of time commensurate with the time reasonably necessary to perform a Change. Changes performed within available Float will not

justify an extension to the Contract Time. Judicial Council will make the final determination of the amount of Contract Time to allocate to any change.

18.8.1.6.2. If Contractor is seeking compensation for Compensable Delay, Contractor must include the requested adjustment to the Contract Price calculated by multiplying the Compensable Delay Rate against the amount of days of alleged, or Judicial Council approved, Compensable Delay, to the extent applicable.

18.8.1.6.3. Under no circumstances will Judicial Council pay Contractor more than the **ACTUAL, DIRECT COSTS** to Contractor for each day of Compensable Delay substantiated by Contractor consistent with the requirements of the Contract Documents.

18.8.1.7. *Supporting Documentation.* Contractor must include with each PCO, along with the itemized breakdown as required herein, documentation substantiating the requested change in the Contract Price and Contract Time. If Judicial Council deems Contractor's supporting documentation incomplete or inadequate to substantiate the requested change to the Contract Price and Contract Time, Judicial Council will request that Contractor supplement the PCO with additional, reasonable supporting documentation. Any PCO that does not include the documentation required by this section will be rejected.

18.9. Change Order Certification.

18.9.1. All Change Orders and PCOs must include the following certification by Contractor. The Parties acknowledged that if a Change Order is Approved and does not include this language, that Change Order will be deemed to include this certification language:

Contractor approves the foregoing changes as stated herein to: (i) the Work, if any; (ii) changes to the Contract Price, if any, as specified for each item; and (iii) the extension of the Contract Time for Completion of the Project. Contractor agrees to furnish all labor, materials, and service, and perform all work necessary to complete all additional work specified for the consideration and time extension stated herein. Submission of sums that have no basis in fact or which Contractor knows are false are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code section 12650 et seq. It is understood that the changes herein to the Contract Price shall only be effective when approved by Judicial Council. It is expressly understood that the value of the extra Work or changes includes all of Contractor's costs, expenses, field overhead, home office overhead, profit, both direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.

18.10. Determination of Change Order Cost.

18.10.1. The amount of the increase or decrease in the Contract Price from a Change Order, if any, will be determined in one or more of the following ways as applicable to a specific situation and at Judicial Council's discretion:

- 18.10.1.1. Judicial Council acceptance of a PCO;
- 18.10.1.2. By agreement between Judicial Council and Contractor;
- 18.10.1.3. By Unit Price(s) or Alternate Bid Item(s) contained in Contractor's original Bid. If the Bid for the Work included proposal(s) for Alternate Bid Item(s), during Contractor's performance of the Work, Judicial Council may elect to add or delete any Alternate Bid Items. If Judicial Council elects to add or delete an Alternate Bid Item(s) pursuant to the foregoing, the cost or credit for that Alternate Bid Item(s) will be as set forth in Contractor's Bid, at Judicial Council's discretion. If any Alternate Bid Item is added or deleted from the Work pursuant to the foregoing, the Contract Time will be adjusted by the number of Days allocated for the added or deleted Alternate Bid Item in the Contract Documents; if Days are not allocated for any Alternate Bid Item added or deleted pursuant to the foregoing, the Contract Time will be equitably adjusted;
- 18.10.1.4. By Judicial Council, based upon actual and necessary costs incurred by Contractor as determined by Judicial Council on the basis of Contractor's records. Promptly upon determining the extent of adjustment to the Contract Price, Judicial Council will notify Contractor in writing of the same; Contractor will be deemed to have accepted Judicial Council's determination of the amount of adjustment to the Contract Price on account of a Change to the Work unless Contractor notifies Judicial Council, in writing, not more than **FIFTEEN (15)** Days from the date of Judicial Council's written notice, of any objection to Judicial Council's determination. Failure of Contractor to timely notify Judicial Council of Contractor's objections to Judicial Council's determination of the extent of adjustment to the Contract Price will be deemed Contractor's acceptance of Judicial Council's determination and a waiver of any right or basis of Contractor to thereafter protest or otherwise object to Judicial Council's determination. Notwithstanding any objection of Contractor to Judicial Council's determination of the extent of any adjustment to the Contract Price pursuant to this provision, Contractor must diligently proceed to perform and complete any such change.

18.11. Deductive Change Orders.

If Contractor offers a proposed amount for a deductive Change Order(s), Contractor will include a minimum of six percent (6%) total overhead and profit to be deducted with the amount of the Work of the Change Order(s). If Subcontractor work is involved, Subcontractors will also include a minimum of six percent (6%) overhead and profit to be deducted with the amount of its deducted work, for a total minimum of twelve percent (12%) total overhead and profit to be deducted. Any deviation from this provision will not be allowed. Any deductive Change Order will include all amounts related to the direct labor, Subcontractor insurance and bond costs or Contractor provided contractor default insurance protection in lieu of Subcontractor bonds, materials, and supervision.

18.12. Discounts, Rebates and Refunds.

For purposes of determining the cost, if any, of any change, addition, or omission to the Work hereunder, all trade discounts, rebates, refunds, and all returns from the sale of surplus materials and equipment will accrue and be credited to Contractor, and Contractor will make provisions so that such discounts, rebates, refunds, and returns may be secured, and the amount thereof will be allowed as a reduction of Contractor's cost in determining the actual cost of construction for purposes of any change, addition, or omission in the Work as provided herein.

18.13. Accounting Records.

With respect to portions of the Work performed by Change Orders, Unilateral Change Orders, or Field Orders, Contractor must keep and maintain cost-accounting records satisfactory to Judicial Council, which will be available to Judicial Council on the same terms as any other books and records Contractor is required to maintain pursuant to the Contract Documents.

18.14. Notice Required.

If Contractor is seeking an adjustment in the Contract Price, or any extension in the Contract Time for Completion, it must notify Judicial Council pursuant to the provisions of the Contract Documents. No adjustment in the Contract Price or Contract Time will be considered unless made in accordance with the Contract Documents. Contractor must proceed to execute the Work even though the adjustment may not have been agreed upon. Any change in the Contract Price or extension of the Contract Time resulting from such contract adjustment will only be authorized by a Change Order.

18.15. Applicability to Subcontractors.

All requirements under this article are equally applicable to Change Orders, Unilateral Change Orders, or Field Orders issued to Subcontractors by Contractor to the extent required by the Contract Documents.

18.16. Alteration to Change Order Language.

Contractor shall not alter Change Orders or reserve time in Change Orders. Contractor shall execute finalized Change Orders and proceed under the provisions herein with proper notice.

18.17. Failure of Contractor to Execute Change Order.

It shall be a breach of the Agreement if Contractor fails to execute a Change Order when Contractor agrees with the addition and/or deletion of the Work in that Change Order.

19. REQUEST FOR INFORMATION

19.1. Any Request for Information must reference all applicable Contract Document(s), including Specification section(s), detail(s), page number(s), drawing number(s), and sheet number(s), etc. Contractor shall make suggestions and interpretations of the issue raised by each RFI. An RFI cannot modify the Contract Price, Contract Time, or the Contract Documents.

19.2. Contractor will be liable for all costs incurred by Judicial Council as a result of processing, reviewing, evaluating and responding to any RFI, including without limitation, fees of Architect and any other design consultant to Architect or Judicial Council, that Judicial Council reasonably determines:

19.2.1. Does not reflect adequate or competent supervision or coordination by Contractor or any Subcontractor;

19.2.2. Does not reflect Contractor's adequate or competent knowledge of the requirements of the Work or the Contract Documents;

19.2.3. Requests an interpretation or decision of a matter where the information sought is equally available to Contractor; and/or

19.2.4. Is not justified for any other reason.

- 19.3. Prior to submitting the RFI, Contractor will diligently review the Contract Documents for information responsive to the RFI, including information incorporated by reference. Contractor should not issue an RFI regarding information contained in or inferable from the Contract Documents, including information incorporated by reference. An RFI is invalid if the RFI response is contained in or inferable from the Contract Documents.
- 19.4. Contractor is responsible for preparing and submitting each RFI so as to not cause delay to the progress of the Work nor to cause any impact to Contractor's labor productivity. An RFI may be considered untimely if not submitted within **FORTY-EIGHT (48)** hours of receipt from a Subcontractor. Untimely submission of any RFI will preclude Contractor from asserting any claims for delay or for labor impact against Judicial Council.
- 19.5. If Contractor fails to timely notify Architect in writing of any conditions encountered on the Site, including Unforeseen Site Conditions, and Contractor proceeds to perform any portion of the Work containing or affected by such conditions, Contractor will bear all costs associated with or required to correct, remove, or otherwise remedy any portion of the Work affected thereby without adjustment of the Contract Time or the Contract Price. In requesting information of Judicial Council to address and resolve any such conditions, Contractor must act with promptness in submitting any written request so as to allow Judicial Council a reasonable period of time to review, evaluate and respond to any request, taking into account the then current status of the progress and Completion of the Work and the actual or potential impact of any conditions upon the Completion of the Work within the Contract Time. The Contract Time will not be subject to adjustment in the event that Contractor fails to timely request information from Judicial Council.

20. **PAYMENTS**

20.1. **Contract Price.**

The Contract Price is stated in the Agreement and, including adjustments authorized by the Contract Documents, is the total amount payable by Judicial Council to Contractor for performance of the Work pursuant to the Contract Documents.

20.2. **Applications for Progress Payments.**

20.2.1. Procedure for Applications for Progress Payments.

20.2.1.1. *Application for Payment.*

20.2.1.1.1. Not before the **FIFTH (5TH)** Day of each calendar month during the progress of the Work, Contractor must submit to Judicial Council and Architect an itemized Application for Payment for Work completed in accordance with the Schedule of Values. The Application for Payment will be notarized, if required, and supported by the following or each portion thereof unless waived by Judicial Council in writing:

20.2.1.1.1.1. The amount paid to the date of the Application for Payment to Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for Contractor's Work on the Project;

20.2.1.1.1.2. The amount being requested by the Application for Payment by Contractor on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing

labor, material, and equipment under the Contract Documents;

20.2.1.1.1.3. The balance that will be due to each of the entities after payment is made;

20.2.1.1.1.4. A certification that the As-Built Drawings and annotated Specifications are current;

20.2.1.1.1.5. An itemized breakdown of Work performed;

20.2.1.1.1.6. An updated and acceptable Construction Schedule in conformance with the provisions herein;

20.2.1.1.1.7. The additions to and subtractions from the Contract Price and Contract Time;

20.2.1.1.1.8. A total of the retention held;

20.2.1.1.1.9. The material invoices, evidence of equipment purchases, rentals, and other support and details of cost as Judicial Council may require from time to time;

20.2.1.1.1.10. The percentage of completion of Contractor's Work by line item;

20.2.1.1.1.11. The Schedule of Values updated from the preceding Application for Payment;

20.2.1.1.1.12. A duly completed and executed conditional waiver and release upon progress payment compliant with Civil Code section 8132 from each Subcontractor and supplier to be paid from the current progress payment;

20.2.1.1.1.13. A duly completed and executed unconditional waiver and release upon progress payment compliant with Civil Code section 8134 from each Subcontractor and supplier that was paid from the previous progress payment; and

20.2.1.1.1.14. A certification by Contractor of the following:

Contractor warrants title to all Work performed as of the date of this payment application. Contractor further warrants that all Work performed as of the date of this payment application is free and clear of liens, claims, security interests, or encumbrances in favor of Contractor, Subcontractors, material and equipment suppliers, workers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work, except those of which Judicial Council has been informed.

- 20.2.1.1.2. If requested by Judicial Council, a third party, or as required by the California Department of Industrial Relations, all requested or required CPRs for each journeyman, apprentice, worker, or other employee employed by Contractor and/or each Subcontractor in connection with the Work for the period of the Application for Payment.
- 20.2.1.1.3. Except as expressly provided for herein, no payments will be made by Judicial Council on account of any item of the Work, including without limitation, materials or equipment that, at the time of Contractor's submittal of an Application for Payment, has/have not been incorporated into and made a part of the Work.
- 20.2.1.1.4. Contractor is subject to the False Claims Act set forth under Government Code section 12650 et seq., for information provided with any Application for Payment.

20.2.2. Prerequisites for Progress Payments.

20.2.2.1. *First Payment Request.* The following items, if applicable, must be completed by Contractor, and/or provided to Judicial Council, before Judicial Council will accept and/or process Contractor's first payment request:

- 20.2.2.1.1. Installation of the Project sign;
- 20.2.2.1.2. Installation of field office;
- 20.2.2.1.3. Installation of temporary facilities and fencing;
- 20.2.2.1.4. Schedule of Values;
- 20.2.2.1.5. Construction Schedule;
- 20.2.2.1.6. Schedule of Unit Price(s), if applicable;
- 20.2.2.1.7. Submittal Schedule;
- 20.2.2.1.8. Receipt by Architect of all submittals due as of the date of the payment application;
- 20.2.2.1.9. Copies of necessary permits;
- 20.2.2.1.10. Copies of authorizations and licenses from governing authorities;
- 20.2.2.1.11. Initial progress report;
- 20.2.2.1.12. Surveyor qualifications;
- 20.2.2.1.13. Written acceptance of Judicial Council's survey of rough grading, if applicable;
- 20.2.2.1.14. List of all Subcontractors, with names, license numbers, telephone numbers, and Scope of Work;
- 20.2.2.1.15. All bonds and insurance endorsements; and

20.2.2.1.16. Resumes of Contractor's project manager, and if applicable, job site secretary, record documents recorder, and construction superintendent.

20.2.2.2. *Second Payment Request.* Judicial Council will not process the second payment request until and unless all submittals and Shop Drawings have been accepted for review by Architect.

20.2.2.3. *No Waiver of Criteria.* Any payment made to Contractor where criteria set forth herein have not been met will not constitute a waiver of said criteria by Judicial Council. The approval of any Application for Payment or the disbursement of any progress payment to Contractor will not be deemed nor constitute Acceptance of defective Work or Work not in conformity with the Contract Documents. Instead, such payment will be construed as a good faith effort by Judicial Council to resolve differences so Contractor may pay its Subcontractors and suppliers. Contractor agrees that failure to submit such items may constitute a material breach of the Agreement by Contractor and may subject Contractor to termination.

20.3. Progress Payments.

20.3.1. Judicial Council's Approval of Application for Payment.

20.3.1.1. Upon receipt of an Application for Payment, Judicial Council will act in accordance with the following:

20.3.1.1.1. Each Application for Payment will be reviewed by Judicial Council as soon as practicable after receipt for the purpose of determining that the Application for Payment is a proper Application for Payment.

20.3.1.1.2. Any Application for Payment determined not to be a proper Application for Payment suitable for payment will be returned to Contractor as soon as practicable, but not later than **SEVEN (7)** Days, after receipt. An Application for Payment returned pursuant to this paragraph will be accompanied by a document setting forth in writing the reasons why the Application for Payment is rejected. The number of Days available to Judicial Council to make a payment without being subject to any applicable statute regarding prompt payment or interest accrual, will be reduced by the number of Days by which Judicial Council exceeds this seven-Day return requirement.

20.3.1.1.3. An approved Application for Payment will be considered payable if funds are available for payment after the deduction of amounts allowed by law and/or pursuant to the section herein entitled "Decisions to Withhold Payment."

20.3.1.2. Judicial Council's review of Contractor's Application for Payment will be based on Judicial Council's and Architect's observations at the Site and the data comprising the Application for Payment demonstrating that the Work has progressed to the point indicated and that, to the best of Judicial Council's and Architect's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to:

20.3.1.2.1. Observation of the Work for general conformance with the Contract Documents;

20.3.1.2.2. Results of subsequent tests and inspections;

20.3.1.2.3. Minor deviations from the Contract Documents correctable prior to Completion, and

20.3.1.2.4. Specific qualifications expressed by Architect.

20.3.1.3. Judicial Council's approval of each Application for Payment will be based on Contractor complying with all requirements for a fully complete and valid Application for Payment.

20.3.2. Payments to Contractor.

20.3.2.1. Within **THIRTY (30)** Days after Judicial Council's receipt of each undisputed and properly submitted Application for Payment, Contractor will be paid a sum equal to ninety-five percent (95%) of the value of the Work performed (as verified by Architect and Inspector and certified by Contractor) up to the last day of the previous month, less the aggregate of previous payments and any amount to be withheld. The value of the Work completed must be Contractor's best estimate. No inaccuracy or error in Contractor's estimate will release Contractor, or any Surety upon any bond, from damages arising from such Work, or from Judicial Council's right to enforce each and every provision of the Contract Documents, and Judicial Council will have the right subsequently to correct any error made in any estimate for payment.

20.3.2.2. Judicial Council will withhold five percent (5%) retention from all progress payments.

20.3.2.3. Judicial Council may withhold an amount in excess of five percent (5%) from all progress payments if the Project is determined to be "substantially complex."

20.3.2.4. Contractor will not be entitled to have any payment requests processed or be entitled to have any payment made for Work performed, so long as any lawful or proper direction given by Judicial Council concerning the Work, or any portion thereof, remains incomplete.

20.3.2.5. Contractor acknowledges the complex payment approval process that Judicial Council must follow and agrees that Judicial Council will pay invoices that are approved, due and payable within **FORTY-FIVE (45)** Days after receipt of a correct, itemized invoice. In no event will Judicial Council be liable for interest or late charges for any late payments.

20.3.2.6. Payment will be made by Judicial Council to Contractor at the address specified on the invoice.

20.3.3. No Waiver. No payment by Judicial Council hereunder will imply that Judicial Council has inspected, approved, or accepted any part of the Work. Notwithstanding any payment, Judicial Council may enforce every provision of the Contract Documents. Judicial Council may correct or require correction of any error subsequent to any payment.

20.3.4. Warranty of Title.

20.3.4.1. If a lien or a claim based on a stop notice or stop payment notice of any nature should at any time be filed against the Work or any Judicial Council property, by any entity that has supplied material or services at the request of Contractor, Contractor and Contractor's Surety will promptly, on demand by Judicial Council and at Contractor's and Surety's own expense, take any and all action necessary to cause any such lien or a claim based on a stop notice or stop payment notice to be released or discharged immediately therefrom.

20.3.4.2. If Contractor fails to furnish to Judicial Council within **TEN (10)** Days after demand by Judicial Council, satisfactory evidence that a lien or a claim based on a stop notice or stop payment notice has been so released, discharged, or secured, Judicial Council may discharge such indebtedness and deduct the amount required therefore, together with any and all losses, costs, damages, and attorney's fees and expense incurred or suffered by Judicial Council from any sum payable to Contractor pursuant to the Contract Documents.

20.4. Decisions to Withhold Payment.

20.4.1. Reasons to Withhold Payment. Judicial Council may withhold payment in whole, or in part, to the extent reasonably necessary to protect Judicial Council from losses caused by Contractor or Subcontractors. Judicial Council may to withhold payment for loss because of, but not limited to:

20.4.1.1. Defective Work not remedied within the time prescribed for cure or remedy as set forth in the Contract Documents written notice to Contractor;

20.4.1.2. Stop notices, stop payment notices or other liens served upon Judicial Council as a result of the Project;

20.4.1.3. Liquidated Damages assessed against Contractor;

20.4.1.4. The cost to complete the Work if there exists reasonable doubt that the Work can be completed for the unpaid balance of the Contract Price or by the Completion Date;

20.4.1.5. Damage to Judicial Council or other contractor(s);

20.4.1.6. Unsatisfactory performance of the Work by Contractor;

20.4.1.7. Failure to store and properly secure materials;

20.4.1.8. Failure of Contractor to submit, on a timely basis, proper, sufficient, and acceptable documentation required by the Contract Documents, including, without limitation, a Construction Schedule, Submittal Schedule, Schedule of Values, Monthly Progress Schedules, Shop Drawings, Product Data and samples, Proposed product lists, executed Change Orders, and/or verified reports;

20.4.1.9. Failure of Contractor to maintain As-Built Drawings;

20.4.1.10. Erroneous estimates by Contractor of the value of the Work performed, or other false statements in an Application for Payment;

20.4.1.11. Unauthorized deviations from the Contract Documents;

- 20.4.1.12. Failure of Contractor to perform the Work in a timely manner in compliance with the Construction Schedule, established progress schedules, and/or completion dates;
- 20.4.1.13. The failure to provide to the DIR, or Judicial Council (if requested by Judicial Council), CPRs acceptable to either Party for each journeyman, apprentice, worker, or other employee employed by Contractor and/or each Subcontractor in connection with the Work for the period of the Application for Payment;
- 20.4.1.14. Failure to properly pay prevailing wages as defined in Labor Code sections 1720 et seq. and/or failure to comply with any other Labor Code requirements;
- 20.4.1.15. Failure to properly maintain or clean up the Site;
- 20.4.1.16. Failure to timely indemnify, defend or hold harmless Judicial Council;
- 20.4.1.17. Any payments due to Judicial Council, including but not limited to payments for failed tests, utilities changes, or permits;
- 20.4.1.18. Failure to pay Subcontractor(s) or supplier(s) as required by law and by the Contract Documents;
- 20.4.1.19. Failure to pay any royalty, license or similar fees;
- 20.4.1.20. Failure of Contractor to submit on a timely basis all Closeout Documentation in a manner and form that is proper, sufficient, and reasonably acceptable to Judicial Council, and to not cause a delay in the Completion or approval of the Project;
- 20.4.1.21. Failure to perform any implementation and/or monitoring required by any SWPPP for the Project and/or the imposition of any penalties or fines imposed therefore against Contractor or Judicial Council;
- 20.4.1.22. Failure to properly implement any CEQA mitigation measures as required by the Contract Documents;
- 20.4.1.23. Payment is delayed due to an audit inquiry by the State or any Authority Having Jurisdiction related to the Project;
- 20.4.1.24. Contractor is otherwise in breach, default or in substantial violation of any provision of the Contract Documents; and
- 20.4.1.25. For any other reason permitted by law or the Contract Documents.

20.4.2. Reallocation of Withheld Amounts.

20.4.2.1. Judicial Council may, in its discretion, apply any withheld amount to pay outstanding claims or obligations. In so doing, Judicial Council will make such payments on behalf of Contractor. If any payment is so made by Judicial Council, then that amount is considered a payment made pursuant to the Contract Documents and Judicial Council will not be liable to Contractor for any payment made in good faith. These payments may be made without prior judicial

determination of claim or obligation. Judicial Council will render Contractor an accounting of funds disbursed on behalf of Contractor.

20.4.2.2. If Contractor defaults or neglects to perform the Work in accordance with the Contract Documents or fails to perform any provision thereof, Judicial Council may, after **FORTY-EIGHT (48)** hours written notice to Contractor and, without prejudice to any other remedy, make good such deficiencies. Judicial Council will reduce the Contract Price by the cost of making good such deficiencies and withhold those costs from any sum owed to Contractor, or invoice Contractor for any such costs if the remaining unpaid Contract Price is not sufficient to cover the cost of correction. If Judicial Council determines that it is inexpedient to correct Work that is damaged, defective, or not done in accordance with provisions of the Contract Documents, an equitable reduction in the Contract Price (of at least one hundred twenty-five percent (125%) of the estimated reasonable value of the Nonconforming Work) will be made therefor.

20.4.3. Payment After Cure. When Contractor cures the grounds for declining approval, payment is made only for amounts so withheld. No interest will be paid on any retention or amounts withheld due to the failure of Contractor to perform in accordance with the terms and conditions of the Contract Documents.

20.5. Subcontractor Payments.

20.5.1. Payments to Subcontractors. No later than **SEVEN (7)** Days after receipt of payment from Judicial Council, or as consistent with any statute applicable to the Work, Contractor must pay to each Subcontractor, out of the amount paid to Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled. Contractor must, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to its Subcontractors in a similar manner.

20.5.2. No Obligation of Judicial Council for Subcontractor Payment. Judicial Council will have no obligation to pay, or to see to the payment of, money to a Subcontractor except as may otherwise be required by law.

20.5.3. Joint Checks. Judicial Council may, in its sole discretion, if necessary for the protection of Judicial Council, issue joint checks made payable to Contractor and Subcontractors and material or equipment suppliers. The joint check payees are responsible for the allocation and disbursement of funds included as part of any such joint payment. In no event will any joint check payment be construed to create any contract between Judicial Council and a Subcontractor of any tier, any obligation from Judicial Council to such Subcontractor, or rights in such Subcontractor against Judicial Council.

21. COMPLETION OF THE WORK

21.1. Completion.

21.1.1. The Project may only be accepted through Judicial Council's Acceptance of the Work.

21.1.2. Judicial Council will provide Acceptance of the Project and may have a Notice of Completion recorded when Project Completion has been achieved in accordance with the Contract Documents and to the satisfaction of Judicial Council. For purposes of the timely filing of Stop Payment Notices, Completion is defined in California Civil Code section 9200, et seq.

- 21.1.3. There is no “substantial completion” for this Project. Notwithstanding, Judicial Council, at its sole option, may Accept the Project and record a Notice of Completion when Project Completion has been completed to the satisfaction of Judicial Council, except for minor corrective items, as distinguished from incomplete items. If Contractor fails to complete all minor corrective items within **THIRTY-FIVE (35)** Days after the date of Judicial Council’s acceptance of the Project, Judicial Council will withhold from the final payment one hundred fifty percent (150%) of an estimate of the amount sufficient to complete the corrective items, as determined by Judicial Council, until the item(s) are completed.
- 21.1.4. At the end of the **THIRTY-FIVE (35)** Day period, if there are any items remaining to be corrected, Judicial Council may elect to proceed as provided herein related to adjustments to Contract Price, and/or Judicial Council’s right to perform the Work of Contractor.

21.2. Closeout Procedures.

21.2.1. Punch List. Contractor will notify Architect when Contractor considers the Work complete. Upon notification, Architect will prepare the Punch List. Contractor and/or its Subcontractors will 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 Contractor to complete all Work in accordance with the Contract Documents.

21.2.2. Closeout Requirements.

21.2.2.1. *Utility Connections*. Buildings must be connected to water, gas, sewer, and electric services, complete and ready for use. Service connections must be made and existing services reconnected.

21.2.2.2. *As-Built Drawings*.

21.2.2.2.1. In addition to its requirement to provide monthly As-Built Drawings to Judicial Council, Contractor must also provide Judicial Council with a final set of As-Built Drawings, sometimes referred to as “Record Drawings,” showing all of the Work as actually constructed upon Completion of the Project as indicated in the Specifications.

21.2.2.2.2. Contractor is liable and responsible for any inaccuracy in the As-Built Drawings, even if an inaccuracy becomes evident after the Project is Complete.

21.2.2.2.3. Upon Completion of the Work and as a condition precedent to approval of final payment, Contractor must obtain Inspector’s approval of the final set of As-Built Drawings.

21.2.2.3. *Operations & Maintenance Manuals*. Contractor must prepare, and deliver to Judicial Council, all operation and maintenance manuals and date as indicated in the Specifications.

21.2.2.4. *Closeout Documentation*. Contractor must provide Judicial Council with all Closeout Documentation. The term “Closeout Documentation” will include the following, without limitation:

21.2.2.4.1. A full set of final As-Built Drawings, as further defined herein, in hard copy and in BIM and AutoCAD files generated from the As-Built Drawings.

- 21.2.2.4.2. All Operations & Maintenance Manuals and information, as further defined herein.
- 21.2.2.4.3. All Warranties, as further defined herein.
- 21.2.2.4.4. All verified report(s) for all scope(s) of Work as require for Completion of the Project.

21.3. Final Inspection.

- 21.3.1. Contractor must comply with Punch List procedures as provided herein and maintain the presence of Contractor's superintendent and Judicial Council Project Manager until the Punch List is complete to ensure proper and timely completion of the Punch List. Under no circumstances will Contractor demobilize its forces prior to completion of the Punch List. Upon receipt of Contractor's written notice that all of the Punch List items have been fully completed and the Work is ready for final inspection and acceptance, Architect and Project Inspector will inspect the Work and will submit to Contractor and Judicial Council 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 will consist of the Punch List items not yet satisfactorily completed.
- 21.3.2. Upon Contractor's completion of all items on the Punch List and any other uncompleted portions of the Work, Contractor must notify Judicial Council, Judicial Council Project Manager, and Architect, who will again inspect such Work. If Architect finds the Work complete and acceptable under the Contract Documents, Architect will notify Contractor, who will then jointly submit to Architect and Judicial Council its final Application for Payment.
- 21.3.3. Final Inspection Requirements.
 - 21.3.3.1. Before calling for final inspection, Contractor must determine that the following have been performed consistent with the Contract Documents:
 - 21.3.3.1.1. The Work has been completed.
 - 21.3.3.1.2. All life safety items are completed and in working order.
 - 21.3.3.1.3. Mechanical and electrical Work are complete and tested, fixtures are in place, connected, and ready for tryout.
 - 21.3.3.1.4. Electrical circuits scheduled in panels and disconnect switches labeled.
 - 21.3.3.1.5. Painting and special finishes complete.
 - 21.3.3.1.6. Doors complete with hardware, cleaned of protective film, relieved of sticking or binding, and in working order.
 - 21.3.3.1.7. Tops and bottoms of doors sealed.
 - 21.3.3.1.8. Floors waxed and polished as specified.
 - 21.3.3.1.9. Broken glass replaced and glass cleaned.

- 21.3.3.1.10. Site cleared of Contractor's equipment, raked clean of debris, and all trash removed.
- 21.3.3.1.11. Work cleaned, free of stains, scratches, and other foreign matter, of damaged and broken material replaced.
- 21.3.3.1.12. Finished and decorative work have marks, dirt, and superfluous labels removed.
- 21.3.3.1.13. Final cleanup.

21.4. Costs of Multiple Inspections / Early Retention Release.

More than two (2) requests of Judicial Council to make a final inspection will be considered an additional service of Judicial Council, Architect, Construction Manager, and/or Project Inspector, and all subsequent costs will be invoiced to Contractor and if funds are available, withheld from remaining payments. Notwithstanding anything herein, and upon the Director's Approval and the Surety's written consent, with respect to specific Punch List items, Judicial Council may, prior to acceptance, direct Contractor to complete remaining Punch List items, pay the retention and withhold one hundred fifty percent (150%) of the value of the incomplete or deficient Punch List items and any statutory requirements for withholding (e.g., outstanding stop payment notices) and release the remainder of the retention upon acceptance.

21.5. Partial Occupancy or Use Prior to Completion.

- 21.5.1. Judicial Council may occupy or use, or allow the Court to do the same, any completed or partially completed portion of the Work at any stage. Neither Judicial Council's final Acceptance of the Work for the Project, the making of final payment, any provision in Contract Documents, nor the use or occupancy of the Work, in whole or in part, by Judicial Council will constitute Acceptance of the Work not in accordance with the Contract Documents nor relieve Contractor or Contractor's Performance Bond Surety from liability with respect to any warranties or responsibility for faulty or defective Work or materials, equipment and workmanship incorporated therein. Judicial Council and Contractor will establish by Change Order, prior to occupancy, the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents. Any dispute as to responsibilities will be resolved pursuant to the Claims provisions herein, with the added provision that during the dispute process, Judicial Council will have the right to occupy or use any portion of the Work that it needs or desires to use.
- 21.5.2. If Judicial Council chooses to take occupancy prior to Completion of the Work, the Guarantee and Warranty period will commence upon the date that Judicial Council occupies the Project **only** for system(s) and item(s) that were completed and fully operational in the portion of the Project occupied, at Judicial Council's reasonable determination and as set forth in writing by the Parties, as of the date of the occupancy. Notwithstanding this early start of the Guarantee and Warranty period for those system(s) and item(s), the commencement of the Guarantee and Warranty period for all other systems or items and the Project will continue to be the date indicated in the guarantee/Warranty section of these General Conditions.
- 21.5.3. The following conditions must be satisfied prior to Judicial Council and/or Court occupying all or any part of the Project prior to Completion of the Work:

- 21.5.3.1. The Project in its entirety or partially, as applicable, is ready for use for the purposes of normal courtroom and Court office operations, except for Punch List items;
 - 21.5.3.2. Contractor has issued a letter of confirmation to Judicial Council indicating that building and systems at the Project are ready for use, except for Punch List items, and to the best of its knowledge have been built in accordance with the Contract Documents;
 - 21.5.3.3. There are no encumbrances registered or recorded on the Site or any part of the Project;
 - 21.5.3.4. Contractor has completed commissioning the Project in accordance with the commissioning plan, and the commissioning tests have been successfully performed and satisfied (subject to such commissioning which is identified in the commissioning plan to be conducted after occupancy);
 - 21.5.3.5. A temporary or final certificate of occupancy has been issued for the Project by the Authorities Having Jurisdiction;
 - 21.5.3.6. Project Inspector has issued their final verified report; and
 - 21.5.3.7. All other Authorities Having Jurisdiction have confirmed (and issued all pertinent governmental approvals or other documents in respect thereof) that the building and structures on the Site are ready for occupancy.
- 21.5.4. For purposes of this section, in determining whether the Project or project equipment is “ready for use,” the following factors will be considered:
- 21.5.4.1. Requirements of the Contract Documents are satisfied;
 - 21.5.4.2. Ability of public to access the Project, and mitigation of the risk of injury to members of the public and all Project users;
 - 21.5.4.3. Security systems set forth in the Contract Documents are operational and commissioned;
 - 21.5.4.4. Any apparent hazard or nuisance is mitigated;
 - 21.5.4.5. The need to conduct Court operations in a reasonably quiet and stable environment free from dust, chemical, smoke, and other health, and safety concerns;
 - 21.5.4.6. Proper installation and functionality of all Project equipment; and
 - 21.5.4.7. Such other functional requirements and considerations as a reasonable person of ordinary prudence would take into account if asked to decide whether the Project is suitable for the commencement of court proceedings, all so that, subject to the Punch List items, the Project in its entirety is ready to use for the purposes of normal courtroom and court office operations.
- 21.5.5. Immediately prior to partial occupancy or use, Judicial Council, Contractor, and Architect will jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

- 21.5.6. Unless otherwise agreed upon, partial or entire occupancy or use of a portion or portions of the Work will not constitute beneficial occupancy or Acceptance of the Work not complying with the requirements of the Contract Documents.

22. FINAL PAYMENT AND RETENTION

22.1. Final Payment.

- 22.1.1. After Acceptance of the Work by Judicial Council, Contractor will submit a final Application for Payment to Judicial Council for any sum due to Contractor including retention. Upon receipt and Approval of a valid and final Application for Payment, Architect will issue a final certificate of payment or similar document indicating Architect's agreement that the Project has reached Completion. Judicial Council will thereupon jointly inspect the Work and either Accept the Work as complete or notify Architect and Contractor in writing of reasons why the Work has not reached Completion to the satisfaction of Judicial Council.
- 22.1.2. Upon Acceptance of the Work by Judicial Council (that, absent unusual circumstances, will occur when the Punch List items have been satisfactorily completed), Judicial Council may record a Notice of Completion with the County Recorder, and Contractor will, upon receipt of final payment from Judicial Council, pay all the amount(s) due to its Subcontractors.
- 22.1.3. If Contractor owes any amount to Judicial Council, the final payment will serve as an invoice to Contractor.
- 22.1.4. If any progress payments were not authorized, Contractor will submit a final Application for Payment, and Judicial Council will pay Contractor, one hundred percent (100%) of the sum owing pursuant to the Contract Documents after Acceptance of the Work any Contractor's compliance with the Prerequisites for final payment herein below.

22.2. Prerequisites for Final Payment.

The following conditions must be fulfilled prior to final payment:

- 22.2.1. A full and final waiver or release of all liens, stop notices and stop payment notices in connection with the Work will be submitted by Contractor, including a release of stop notice or stop payment notice in recordable form, together with (to the extent permitted by law) a copy of the full and final release of all stop notice or stop payment notice rights.
- 22.2.2. A duly completed and executed conditional waiver and release upon final payment compliant with Civil Code section 8136 from each Subcontractor and supplier to be paid from the current progress payment.
- 22.2.3. A duly completed and executed unconditional waiver and release upon final payment compliant with Civil Code section 8138 from each Subcontractor and supplier that was paid from the previous progress payment.
- 22.2.4. Contractor must have made all corrections to the Work that are required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of Judicial Council required under the Contract Documents.
- 22.2.5. Each Subcontractor must have delivered to Contractor all written guarantees, warranties, applications, and bonds required by the Contract Documents for its portion of the Work.

- 22.2.6. Contractor must have completed all requirements set forth under “Closeout Procedures,” including, without limitation, submission of an approved set of complete As-Built Drawings.
- 22.2.7. Architect must have issued its written approval that final payment can be made.
- 22.2.8. Contractor must have delivered to Judicial Council all manuals and materials required by the Contract Documents.
- 22.2.9. Contractor must have completed final clean up.

22.3. Retention.

- 22.3.1. The retention, less any amounts disputed by Judicial Council or that Judicial Council has the right to withhold pursuant to provisions herein, will be paid:
 - 22.3.1.1. After approval of Judicial Council by Architect’s Certificate of Payment;
 - 22.3.1.2. After the satisfaction of the conditions set forth herein;
 - 22.3.1.3. Within **SIXTY (60)** Days after Completion; and
 - 22.3.1.4. No earlier than **THIRTY-FIVE (35)** Days of the recording of the Notice of Completion by Judicial Council, if a Notice of Completion is recorded by Judicial Council.
- 22.3.2. No interest will be paid on any retention, or on any amounts withheld due to a failure of Contractor to perform, in accordance with the terms and conditions of the Contract Documents.

22.4. Claims Asserted After Final Payment.

Any lien, stop payment notice or other claim filed or asserted after Contractor’s acceptance of the final payment by any Subcontractor, of any tier, laborer, material supplier or others in connection with or for Work performed under the Contract Documents is the sole and exclusive responsibility of Contractor pursuant to the indemnification obligations of the Contract Documents. In the event any lien, stop payment notice or other claim of any Subcontractor, laborer, material supplier or others performing Work under the Contract Documents remain unsatisfied after final payment is made, Contractor will refund to Judicial Council all monies that Judicial Council may pay or be compelled to pay in discharging any lien, stop payment notice or other claim, including, without limitation all costs and reasonable attorneys’ fees incurred by Judicial Council in connection therewith.

23. TERMINATION AND SUSPENSION

23.1. Judicial Council’s Right to Terminate for Cause.

- 23.1.1. Grounds for Termination. Judicial Council, in its sole discretion, may terminate the Agreement based upon the following:
 - 23.1.1.1. Contractor refuses or fails to execute the Work or any separable part thereof with sufficient diligence as will ensure its completion within the time specified or any extension thereof;
 - 23.1.1.2. Contractor refuses or fails to submit required Contract Documents;

- 23.1.1.3. Contractor fails to complete said Work within the time specified or any extension thereof;
- 23.1.1.4. Contractor persistently fails or refused to perform Work or provide material of sufficient quality that complies with the Contract Documents;
- 23.1.1.5. Contractor files a petition for relief as a debtor, or a petition is filed against Contractor without its consent, and the petition not dismissed within **SIXTY (60)** Days;
- 23.1.1.6. Contractor makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency;
- 23.1.1.7. Contractor persistently or repeatedly refuses fails, except in cases for which extension of time is provided, to supply enough properly skilled workers or proper materials to complete the Work in the time specified;
- 23.1.1.8. Contractor fails to make prompt payment to Subcontractors, or for material, or for labor;
- 23.1.1.9. Contractor persistently disregards laws, or ordinances, or instructions of Judicial Council;
- 23.1.1.10. Contractor fails to supply labor, including that of Subcontractors, that can work in harmony with all other elements of labor employed or to be employed on the Work; and
- 23.1.1.11. Contractor or its Subcontractor(s) is/are otherwise in breach, default, or in substantial violation of any provision of the Contract Documents.

23.1.2. Notification of Termination.

23.1.2.1. Upon the occurrence, in Judicial Council's sole determination, of any of the above conditions, Judicial Council may, without prejudice to any other right or remedy, serve written notice upon Contractor and its Surety of Judicial Council's termination of the Agreement and/or Contractor's right to perform the Work. This notice will contain the reasons for termination. Unless, within **FIVE (5)** Days after the service of the notice, any and all grounds for termination cease, or arrangement satisfactory to Judicial Council for the correction of the grounds for termination are made, the Agreement and/or Contractor's right to perform the Work will cease and terminate. Upon termination, Contractor will not be entitled to receive any further payment until the entire Work is finished.

23.1.2.2. Upon termination, Judicial Council may immediately serve written notice of tender to Surety whereby Surety will have the right to takeover and perform the Work only if Surety:

23.1.2.2.1. Within **THREE (3)** Days after service upon it of the notice of tender, gives Judicial Council written notice of Surety's intention to takeover and perform the Work.

23.1.2.2.2. Commences performance of the Work within **SEVEN (7)** Days from the date the Surety provides notice to Judicial Council that Surety will takeover and perform the Work.

23.1.2.2.3. If Surety fails to provide notice that it will takeover and perform the Work, or begin performance of the Work as indicated herein, Judicial Council may take over the Work and execute the Work to Completion by any method it may deem advisable at the expense of Contractor and/or its Surety. Contractor and/or its Surety will be liable to Judicial Council for any excess cost or other damages Judicial Council incurs thereby. Time is of the essence in the performance of the Work. If Judicial Council takes over the Work as herein provided, Judicial Council may, without liability for so doing, take possession of and utilize in completing the Work such materials, appliances, plan, and other property belonging to Contractor as may be on the Site, in off-Site bonded storage, or which Judicial Council previously paid for.

23.1.2.2.4. If Surety Completes the Project, the Surety will be subrogated to money due under the Contract Documents and to money which will become due in the Court of completing the Project by the Surety, to the extend provided by law.

23.1.2.3. *Conversion to Termination for Convenience.* In the event the Agreement is terminated under this “Judicial Council’s Right to Terminate Contract for Cause” section and it is finally determined by an arbitrator, court, jury or other tribunal having jurisdiction, for any reason, that Contractor was not in default under the provisions hereof or that Judicial Council’s exercise of its rights under this section was defective, deficient, ineffective, invalid or improper for any reason, the termination will be deemed a termination for convenience of Judicial Council under the “Termination of Contractor for Convenience” section herein and thereupon, the rights and obligations of Judicial Council and Contractor will be determined in accordance with the “Termination of Contractor for Convenience” section herein.

23.1.3. Effect of Termination.

23.1.3.1. *Removal of Materials and Personal Property.* Contractor will, only if ordered to do so by Judicial Council, immediately remove from the Site all or any materials and personal property belonging to Contractor that have not been incorporated in the construction of the Work, or which are not in place in the Work. Judicial Council retains the right, but not the obligation, to keep and use any materials and personal property belonging to Contractor that have not been incorporated in the construction of the Work, or which are not in place in the Work. Contractor and its Surety will be liable upon the performance bond for all damages caused Judicial Council by reason of Contractor’s failure to complete the Work.

23.1.3.2. *No Allowances or Compensation for Loss of Anticipated Profit.* If the Agreement is terminated for any reason, no allowances or compensation will be granted for the loss of any anticipated profit by Contractor or any impact or impairment of Contractor’s bonding capacity.

23.1.3.3. *Assignment and Assumption of Subcontracts.* Judicial Council will have the right (but will have no obligation) to assume and/or assign to a general contractor or construction manager or other third party who is qualified and has sufficient resources to complete the Work, the rights of Contractor under its subcontracts with any or all Subcontractors. In the event of an assumption or assignment by Judicial Council, no Subcontractor will have any claim against Judicial Council or third party for Work performed by Subcontractor or other matters arising prior

to termination of the Agreement. Judicial Council or any third party, as the case may be, will be liable only for obligations to the Subcontractor arising after assumption or assignment. Should Judicial Council so elect, Contractor must execute and deliver all documents and take all steps, including the legal assignment of its contractual rights, as Judicial Council may require, for the purpose of fully vesting in Judicial Council the rights and benefits of it Subcontractor under Subcontracts or other obligations or commitments. All payments due Contractor hereunder are subject to a right of offset by Judicial Council for expenses and damages suffered by Judicial Council as a result of any default, acts, or omissions of Contractor. Contractor must include this assignment provision in all its contracts with its Subcontractors.

23.1.3.4. *Cumulative Remedies.* The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to Judicial Council.

23.2. Emergency Termination of Public Contracts Act of 1949.

23.2.1. The Agreement is subject to termination as provided by Government Code sections 4410 and 4411, being a portion of the Emergency Termination of Public Contracts Act of 1949.

23.2.1.1. Government Code section 4410 states:

In the event a national emergency occurs, and public work, being performed by contract, is stopped, directly or indirectly, because of the freezing or diversion of materials, equipment or labor, as the result of an order or a proclamation of the President of the United States, or of an order of any federal authority, and the circumstances or conditions are such that it is impracticable within a reasonable time to proceed with a substantial portion of the work, then the public agency and the contractor may, by written agreement, terminate said contract.

23.2.1.2. Government Code section 4411 states:

Such an agreement shall include the terms and conditions of the termination of the contract and provision for the payment of compensation or money, if any, which either Party shall pay to the other or any other person, under the facts and circumstances in the case.

23.2.2. Compensation to Contractor will be determined at the sole discretion of Judicial Council on the basis of the reasonable value of the Work done, including preparatory work. As an exception to the foregoing and at Judicial Council's discretion, in the case of any fully completed separate item or portion of the Work for which there is a separate previously submitted Unit Price or item on the accepted Schedule of Values, that price will control. Judicial Council, in its sole discretion, may adopt the Contract Price as the reasonable value of the Work performed or any portion thereof.

23.3. Termination of Contract for Convenience.

23.3.1. Judicial Council in its sole discretion may terminate the Agreement upon **FIVE (5)** Days written notice to Contractor. Under a termination for convenience, Judicial Council retains the right to all the options available to Judicial Council if there is a termination for cause. In case of a termination for convenience, Contractor will have no claims against Judicial Council except:

23.3.1.1. The actual cost for labor, materials, and services performed that is unpaid and can be documented through timesheets, invoices, receipts, or otherwise, and

23.3.1.2. Five percent (5%) of the total cost of work performed as of the date of termination, or five percent (5%) of the value of the Work yet to be performed, whichever is less. This five percent (5%) amount is full compensation for all Contractor's and its Subcontractor(s)' mobilization and/or demobilization costs and any anticipated lost profits resulting from termination of Contractor for convenience.

23.4. Termination for Lack of Funding.

23.4.1. Judicial Council's obligations under the Contract Documents are subject to the availability of authorized funds. Funding beyond the initial appropriation year is conditioned upon appropriation of sufficient funds to support the activities described in the Contract Documents. Immediately upon written notice, Judicial Council may terminate the Agreement in whole or in part, without prejudice to any right or remedy of Judicial Council, if expected or actual funding is withdrawn, reduced, or limited in any way.

23.4.2. Payment will not exceed the amount allowable for appropriation by Legislature. If the Agreement is terminated for non-appropriation:

23.4.2.1. Judicial Council will only be liable for payment in accordance with the terms of the Contract Documents for Work actually performed prior to the effective date of termination; and

23.4.2.2. Contractor is released from any obligation to perform further Work as affected by the termination.

23.4.3. If funding for the Project is beyond the current appropriation year, such funding is conditional upon appropriation by the Legislature of sufficient funds to support the activities described in the Contract Documents. Should such an appropriation not be approved, the Agreement may terminate at the end of the current appropriation year. The appropriation year ends on June 30 of each year.

23.5. Suspension of Work.

23.5.1. Judicial Council may, without cause, order Contractor in writing to suspend, delay or interrupt the Project in whole or in part for such period of time as Judicial Council may determine. When Judicial Council resumes the Project, the Parties will attempt to negotiate an adjustment in the Contract Price for increases or decreases in the cost of performance of the Project caused by suspense, delay or interruption. If the Parties cannot agree on an adjusted Contract Price, Judicial Council may terminate the Agreement as permitted herein.

23.5.2. In the event Judicial Council orders suspension of the Work, an adjustment will be made to the Contract Price for increases in the direct cost of performance of the Work of the Contract Documents, actually caused by suspension, delay or interruption ordered by Judicial Council; provided however that no adjustment of the Contract Price will be made to the extent: (i) that performance is, was or would have been so suspended, delayed or interrupted by another cause for which Contractor is responsible under the Contract Documents; or (ii) that an equitable adjustment is made or denied under another provision of the Contract Documents. The foregoing notwithstanding, any adjustment of the Contract Price will not include any adjustment to increase Contractor's overhead, general administrative costs or profit, all of which will remain as reflected in the Schedule of Values submitted by Contractor pursuant to the Contract Documents. In the event of Judicial Council's suspension of the Work, the Contract Time will be equitably adjusted.

23.6. Scope Reduction.

In cases of suspension, partial or complete termination, or at the discretion of Judicial Council, Judicial Council reserves the right to unilaterally approve a deductive Change Order to reduce scope of Work or perform Work with other forces or its own forces.

24. CLAIMS RESOLUTION

24.1. Exclusive Remedy.

24.1.1. Compliance with the Claims Resolution Process and timelines described in this Claims Resolution Process, as well as the notice provisions of the Contract Documents, are express conditions precedent to Contractor's right to pursue any litigation or otherwise pursue a Claim beyond this Claims Resolution Process.

24.1.2. Contractor acknowledges that its failure, for any reason, to provide written notice and all required supporting documentation to permit Judicial Council's review and evaluation within the time frame required by this Claims Resolution Process, is a waiver, release, discharge and relinquishment of Contractor's right to assert, request, or demand any entitlement to an adjustment of the Contract Time or the Contract Price on account of any instruction, request, drawings, specifications, action, condition, omission, default or other situation.

24.2. Performance During Claim Resolution Process.

Contractor must diligently proceed with Work on the Project at the same time that Claims are addressed under the Claims Resolution Process. It is the intent of Judicial Council to resolve Claims with Contractor as close to the events giving rise to the Claims as possible, and to avoid stale or late Claims and the late documenting of Claims. Contractor's failure to diligently proceed in accordance with Judicial Council's instructions or the terms of the Contract Documents will be considered a material breach of the Agreement and a waiver of Contractor's rights under the Contract Documents.

24.3. Waiver.

If Contractor fails to timely submit any written notices required under the terms of the Contract Documents or in this Claims Resolution section, Contractor waives and releases its rights regarding further review of its Claim, unless Contractor and Judicial Council mutually agree in writing to other time limits.

24.4. Intention.

The Claims Resolution Process required herein is intended to provide a concise mechanism for resolving Claims as they arise during the Project, while requiring accurate documentation related to contested issues as to those Claims that are not contemporaneously resolved.

24.5. Other Provisions.

If portions of the Contract Documents, other than this Claims Resolution Process, establish a specific process regarding a specific subject, then that process will govern and control the resolutions of any disagreements thereunder. Otherwise, the provisions in this Claims Resolution Process will control the resolution of all Claims.

24.6. Claim Presentation.

24.6.1. PCO(s) as a Claim. A PCO may be a Claim **ONLY IF** either of the following conditions are satisfied:

24.6.1.1. Judicial Council states in writing that it disagrees with the terms of a PCO and directs Contractor to utilize the Claim Resolution Process; or

24.6.1.2. Judicial Council rejects in whole or in part a PCO and Contractor states in writing, presented to the Judicial Council within the time required of Contractor to present a Claim based on a rejected PCO, as set forth below, that it is utilizing the Claim Resolution Process for the portion of the PCO that Judicial Council rejected.

24.6.2. Contractor. Contractor must submit a Claim by registered mail or certified mail, return receipt requested consistent, with the requirements hereunder.

24.6.3. Subcontractors.

24.6.3.1. Contractor may present to Judicial Council a Claim on behalf of a Subcontractor or lower tier Subcontractor. A Subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier Subcontractor, that Contractor present a claim for Work which was performed by the Subcontractor or by a lower tier Subcontractor on behalf of the Subcontractor. The Subcontractor requesting that the Claim be presented to Judicial Council must furnish reasonable documentation to support the Claim. Within **FORTY-FIVE (45)** Days of receipt of this written request, Contractor must notify the Subcontractor in writing as to whether Contractor presented the Claim to Judicial Council and, if Contractor did not present the Claim, provide the Subcontractor with a statement of the reasons for not having done so.

24.6.3.2. Contractor is responsible for providing this Claims Resolution Process to its Subcontractors and for ensuring that all Subcontractors or others who may assert Claims by and through Subcontractors and/or Contractor are informed of this Claims Resolution Process. No Claim submitted by any party that fails to follow the provisions of this Claims Resolution Process will be considered. Contractor shall indemnify, keep and hold harmless Judicial Council and its consultants, against all suits, claims, damages, losses, and expenses, including but not limited to attorney's fees, caused by, arising out of, resulting from, or incidental to, the failure to provide this Claims Resolution Process to its Subcontractors or others who may assert Claims by and through Subcontractors and/or Contractor.

24.6.4. Contractor Must Timely Identify, Present and Document Any Claim.

24.6.4.1. Every Claim must be stated with specificity, in writing, and be signed by Contractor under penalty of perjury.

24.6.4.2. Every Claim shall be presented to Judicial Council within **TEN (10)** Days: (i) of Judicial Council's rejection of a PCO; (ii) of Judicial Council's issuance of a Change Order or Unilateral Change Order which Contractor and/or Subcontractor disputes from the date Contractor discovers; or (iii) if neither of the foregoing apply, of when Contractor reasonably should have discovered, that an act, error or omission of Judicial Council, its agents or employees, or action, condition or other situation has occurred that may entitle Contractor to make a Claim. With respect Contractor's discovery of an error or omission, or condition or situation, referred to above, such discovery applies to Contractor's actual or constructive knowledge of any instruction, request, drawings, specifications, action, condition, omission, default or other situation for which Contractor believes there should an adjustment of the Contract Price and/or Contract Time. Contractor will provide the above-referenced in writing even if Contractor has not yet been damaged, delayed, or incurred extra cost when Contractor discovers, or reasonably should

discover, the act, error, omission, action, condition or situation giving rise to the incidents giving rise to the Claim.

24.6.4.3. CONTRACTOR'S FAILURE TO TIMELY GIVE NOTICE TO JUDICIAL COUNCIL OF A CLAIM AS REQUIRED IN THIS SECTION WAIVES CONTRACTOR'S RIGHT TO RECOVER FOR ANY DAMAGES RELATED TO THE CLAIM.

24.6.4.4. The writing described above must comply with all the following:

24.6.4.4.1. Identify all of the issues, events, conditions, circumstances and/or causes giving rise to the Claim.

24.6.4.4.2. Identify all pertinent dates and/or durations and all actual and/or anticipated effects on the Contract Price, milestones and/or Contract Time adjustments.

24.6.4.4.3. Identify in detail line-item costs if the Claim seeks money.

24.6.4.4.4. If the Claim involves extra Work, a detailed cost breakdown of the amounts Contractor is seeking, including actual cost records (including without limitation, payroll records, material and rental invoices and the like) demonstrating that those costs have actually been incurred. To the extent costs have not yet been incurred at the time the Claim is submitted, actual cost records must be submitted on a current basis not less than once a week during any period costs are incurred. A cost record will be considered current if submitted within **SEVEN (7)** Days of the date the cost reflected in the record is incurred. At the request of Judicial Council, extra costs may be subject to further verification procedures (such as having an inspector verify the performance of alleged extra Work on a daily basis).

24.6.4.4.5. If the Claim involves an error or omission in the Contract Documents:

24.6.4.4.5.1. An affirmative representation under penalty of perjury by Contractor and any affected Subcontractors and suppliers that the error or omission was not discovered prior to submitting a proposal for the Work, and

24.6.4.4.5.2. A detailed statement demonstrating that the error or omission reasonably should not have been discovered, by Contractor, its Subcontractors and suppliers, prior to submitting a proposal for the Work.

24.6.4.4.6. If the Claim involves a request for additional compensation for escalation of materials costs, Contractor must submit **ALL** information required in the "Material Escalation Costs" article of these General Conditions with its Claim.

24.6.4.5. If a Claim involves Compensable Delay, the amount Contractor claims it is entitled to calculated as set forth in the "Changes in the Work" article above.

24.6.4.6. The writing must be accompanied by all documents substantiating Contractor's position regarding the Claim.

24.6.4.7. A Claim that asserts an effect on any Construction Schedule milestones and/or Contract Time must include all pertinent scheduling data demonstrating the impact(s) on the critical path(s), milestone(s) and/or Contract Time.

24.6.4.8. Contractor agrees that it will not base its damages, its calculations or its Claim on a "total cost" approach, a "modified total cost" approach or a "jury verdict method" approach, and instead, all such damages will be based on Contractor's actual damages.

24.6.5. Certification. Each copy of the Claim Documentation must be certified by a responsible officer of Contractor in accordance with the requirements of the Contract Documents. This certification must be under penalty of perjury and must include the following language immediately above or before Contractor's signature: "***I declare under penalty of perjury under the laws of the State of California that the information provided and statements made in this Claim are true and correct, substantiated and of merit.***" Contractor acknowledges that this requirement is not a mere formality but is intended to ensure that Contractor only submits Claims that it believes are true and correct, substantiated and have merit. Should Contractor fail to submit the foregoing written statement signed under penalty of perjury, Contractor waives and releases its Claim, including all rights and remedies in connection therewith. This certification must include a certification of any portion of the Claim from Subcontractor(s) or others who are asserting Claims by and through Subcontractors and/or Contractor.

24.6.6. Judicial Council's Written Statement/Decision on Claim. Judicial Council will issue a written statement/decision regarding the Claim to Contractor within **FORTY-FIVE (45)** Days of receipt of the written Claim from Contractor. If Judicial Council fails to timely provide a written statement/decision regarding the Claim, the Claim will be deemed rejected in its entirety.

24.6.7. Contractor Must Demand an Informal Meet and Confer Conference if Contractor Pursues Any Claim.

24.6.7.1. **FAILURE OF A CONTRACTOR TO TIMELY DEMAND A MEET AND CONFER CONFERENCE IS A WAIVER OF ITS RIGHT TO PURSUE ALL OR A PORTION OF ITS CLAIM.**

24.6.7.2. *Where There Is No Agreement*. If there is no agreement between Contractor and Judicial Council on a Claim, then within **TEN (10)** Days of the date of Judicial Council's written statement/decision in response to a Claim or PCO, if Contractor pursues that Claim, then Contractor must demand, by **registered mail or certified mail return receipt requested**, a meet and confer conference with Judicial Council staff. A meet and confer conference with Judicial Council staff is a condition precedent to Contractor seeking any further relief, including a mediation as indicated below.

24.6.7.3. *Where There Is Partial Agreement*. If Contractor and Judicial Council partially agree on a Claim but do not reach complete agreement, then the Parties will complete a Change Order, if applicable, for the issues and/or amounts agreed to. For those issues not agreed to, if Contractor pursues those issues from that Claim, then Contractor must demand, by **registered mail or certified mail return receipt requested**, a meet and confer conference with Judicial Council staff regarding those issues. A meet and confer conference with Judicial Council staff

is a condition precedent to Contractor seeking any further relief, including a mediation as indicated below, in connection with Judicial Council's rejection.

24.6.7.4. *Meet and Confer Conference.* Judicial Council and Contractor will schedule the meet and confer conference as soon as reasonably possible after Contractor's written demand for a meet and confer conference, but in no case later than **THIRTY (30)** Days after Contractor's demand.

24.6.7.5. *Judicial Council's Written Decision.* Within **TEN (10)** Business Days of the meet and confer conference, Judicial Council will issue a written decision. If Judicial Council fails to timely provide a written statement/decision after the meet and confer conference, all Claim issues that were part of the meet and confer conference will be deemed rejected in their entirety.

24.6.7.5.1. If Judicial Council's decision completely resolves the Claim, then the Parties will complete a Change Order, if applicable, for the issues and/or amounts agreed to.

24.6.7.5.2. If Judicial Council rejects Contractor's Claim in whole or in part or does not issue a timely written response, then the Parties will mediate the remaining issues of the Claim.

24.6.7.5.3. Contractor's costs incurred in seeking relief for Claims are not recoverable from Judicial Council.

24.6.8. Mediation.

24.6.8.1. At Judicial Council's sole discretion, this mediation may be a multiple-party mediation with Architect, Construction Manager, Inspector, and/or other party deemed necessary by Judicial Council.

24.6.8.2. Judicial Council and Contractor will mutually agree to a mediator within **TEN (10)** Business Days after the disputed portion of the Claim has been identified in writing. If the Parties cannot agree upon a mediator, each Party will select a mediator and those mediators will select a qualified neutral third Party to mediate with regard to the disputed portion of the Claim. Each Party will bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.

24.6.9. Post-Mediation.

24.6.9.1. *Litigation.* If, after a mediation as indicated above, Judicial Council and Contractor have not resolved the Claim, either Party may commence an action in a court of competent jurisdiction to contest that decision within **NINETY (90)** Days following the conclusion of that mediation or **ONE (1)** year following the accrual of the cause of action, whichever is later. By mutual agreement, the Parties can agree to instead resolve the Claim through arbitration.

24.6.9.2. *Government Code Claim Required.* Nothing in the Contract Documents, including this Claims Resolution Process, waives, modifies or tolls Contractor's obligation to present a timely claim under Government Code section 910, et seq. Therefore, in addition to complying with this Claims Resolution Process, Contractor is required to present claims to Judicial Council pursuant to Government Code section 910, et seq. If after the requirements of this Claims Resolution Process are satisfied, and all or a portion of the Claim remains

unresolved, and if the Government Code claim is rejected by Judicial Council, Contractor may proceed under this post-mediation provisions of this Claims Resolution Process.

24.7. Judicial Council Remedies for False Claims.

Judicial Council is entitled to remedy any false claims, as defined in Government Code section 12650 *et seq.*, made to Judicial Council by Contractor or any Subcontractor under the standards set forth in Government Code section 12650 *et seq.* Any Contractor or Subcontractor who submits a false claim will be liable to Judicial Council for three times the amount of damages that Judicial Council sustains because of the false claim. A Contractor or Subcontractor who submits a false claim will also be liable to Judicial Council for (i) the costs, including attorney fees, of a civil action brought to recover any of those penalties or damages, and (ii) a civil penalty of up to \$11,000 for each false claim. In addition, Contractor may be subject to criminal prosecution under California Penal Code section 72 and/or civil liability under False Claims Act. If so, Judicial Council may be entitled to recover its costs incurred to investigate any False Claim, including but not limited to attorneys' fees and expert fees incurred in connection with that investigation.

24.8. Documentation of Resolution.

If a Claim is resolved, Judicial Council will determine if that resolution will be documented in an Agreement and Release of Any and All Claims form or other document, as appropriate.

24.9. Claim Resolution Process – Non-Applicability.

The procedures and provisions in this Claims Resolution section will **not** apply to Judicial Council's determination of what Work is or will be constructed, or whether the Work complies with the Contract Documents for purposes of Judicial Council's Acceptance of the Work.

24.10. Denial of Claim.

Judicial Council's failure to respond to a Claim from Contractor within the time periods described herein or otherwise comply with any provision law applicable to the Project will automatically result in the Claim being deemed rejected in its entirety as of the deadline for Judicial Council to act in response to the Claim, with no admission by Judicial Council as to the merits of the Claim.

24.11. Judicial Council Right to Withhold.

Judicial Council is entitled to withhold up to one hundred fifty percent (150%) of disputed amounts and Judicial Council will not be liable for payment of interest on such disputed amounts pending final adjudication of such disputes.

25. LABOR, WAGE AND HOUR; APPRENTICE AND RELATED PROVISIONS

25.1. Prevailing Wage.

25.1.1. Contractor and all Subcontractors under Contractor shall pay all workers on Work performed pursuant to this Contract Documents not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed, pursuant to sections 1770 *et seq.* of the California Labor Code. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Work, as determined by Director of the State of California Department of

Industrial Relations, are on file at Judicial Council's principal office. Prevailing wage rates are also available from Judicial Council or on the internet at (<http://www.dir.ca.gov>).

- 25.1.2. Contractor shall ensure that Contractor and all Contractor's Subcontractors execute the Prevailing Wage and Related Labor Requirements Certification (Document 00 45 40) included in Certifications to be Completed by Contractor (Document 00 45 40).
- 25.1.3. The Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Contractor shall post job site notices, as prescribed by regulation. Contractor shall comply with all requirements of Labor Code section 1771.4, except the requirements that are exempted by the Labor Commissioner for the Project.

25.2. Registration.

- 25.2.1. Contractor shall comply with the registration and compliance monitoring provisions of Labor Code section 1771.4, including furnishing its CPRs to the Labor Commissioner of California and complying with any applicable enforcement by the Department of DIR. Labor Code section 1771.1, subdivision (a) states the following:

“A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.”

- 25.2.2. Contractor shall ensure that Contractor and all “subcontractors” (as defined by Labor Code section 1722.1), comply with Labor Code section 1725.5, including without limitation the registration requirements with the Department of Industrial Relations that are set forth in Labor Code section 1725.5. Contractor represents to Judicial Council that all “subcontractors” (as defined by Labor Code section 1722.1) are registered pursuant to Labor Code section 1725.5. Contractor shall not permit any Subcontractor to perform Work on the Project, without first verifying the Subcontractor is properly registered with the DIR as required by law, and providing this information in writing to Judicial Council. Contractor acknowledges that, for purposes of Labor Code section 1725.5, this Work is public work to which Labor Code section 1771 applies.

25.3. Hours of Work.

- 25.3.1. Notwithstanding the timing and duration of the Work under the Contract Documents which is subject to court activities and other coordination required for occupied facilities, as provided in article 3 (commencing at section 1810), chapter 1, part 7, division 2, of the Labor Code, eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by Contractor or by any Subcontractor on any subcontract pursuant to the Contract Documents upon the Work or upon any part of the Work contemplated the Contract Documents shall be limited and restricted by Contractor to eight (8) hours per day, and forty (40) hours during any one week, except as hereinafter provided. Notwithstanding the provisions hereinabove set forth, Work performed by employees of Contractor in excess of eight (8) hours per day and forty (40) hours during any one week, shall be permitted upon this public work upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half times the basic rate of pay.

- 25.3.2. Contractor shall keep and shall cause each Subcontractor to keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by Contractor in connection with the Work or any part of the Work contemplated by the Contract Documents. The record shall be kept open at all reasonable hours to the inspection of the Court, Judicial Council, and to the Division of Labor Standards Enforcement of the DIR.
- 25.3.3. Pursuant to Labor Code section 1813, Contractor shall as a penalty to Judicial Council forfeit the statutory amount (believed by Judicial Council to be currently twenty five dollars (\$25)) for each worker employed in the execution of the Work by Contractor or by any Subcontractor for each Day during which such worker is required or permitted to work more than eight (8) hours in any one Day and forty (40) hours in any one calendar week in violation of the provisions of article 3 (commencing at section 1810), chapter 1, part 7, division 2, of the Labor Code.
- 25.3.4. Any Work necessary to be performed after regular working hours, or on Sundays or other holidays shall be performed without additional expense to Judicial Council.
- 25.3.5. Project Work will typically take place in an occupied court facility; therefore, work hours may be restricted depending upon the Project. The individual Service Work Order will include any restrictions on hours of work. If the Service Work Order does not include a restriction on hours of work, then the work must take place during business hours.

25.4. Payroll Records.

- 25.4.1. Contractor and all Subcontractors shall comply with the compliance monitoring provisions of Labor Code section 1771.4, including furnishing its CPRs to the Labor Commissioner of California and complying with any applicable enforcement by DIR. Labor Code section 1771.4 requires Contractor and Subcontractors to provide electronic copies of CPRs to the Labor Commissioner of California at least once every thirty (30) days, and within thirty (30) days of project completion, the failure to timely provide the CPRs could result in penalties of up to \$5,000, or as otherwise determined by Labor Code section 1771.4, applicable laws, and regulations.
- 25.4.2. In addition to submitting CPR(s) to the Labor Commissioner of California pursuant to Labor Code section 1771.4 or any other applicable law, if requested by the Court or Judicial Council, Contractor shall provide, and shall cause each Subcontractor performing any portion of the Work to provide the Court or Judicial Council CPR(s), showing the name, address, social security number, work classification, straight time, and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by Contractor and/or each Subcontractor in connection with the Work.
- 25.4.3. All CPRs shall be available for inspection at all reasonable hours at the principal office of Contractor on the following basis:
 - 25.4.3.1. A certified copy of an employee's CPR shall be made available for inspection or furnished to the employee or his/her authorized representative on request.
 - 25.4.3.2. CPRs shall be made available for inspection or furnished upon request to a representative of the Court, Judicial Council, Division of Labor Standards Enforcement, Division of Apprenticeship Standards, and/or the Department of Industrial Relations.

25.4.3.3. CPRs shall be made available upon request by the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either the Court, Judicial Council, Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested CPRs have not been provided pursuant to the provisions herein, the requesting party shall, prior to being provided the records, reimburse the costs of preparation by Contractor, Subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of Contractor.

25.4.4. The form of certification for the CPRs shall be as follows:

I, _____ (Name-Print), the undersigned, am the _____ (Position in business) with the authority to act for and on behalf of _____ (Name of business and/or Contractor), certify under penalty of perjury that the records or copies thereof submitted and consisting of _____ (Description, number of pages) are the originals or true, full, and correct copies of the originals which depict the payroll record(s) of actual disbursements by way of cash, check, or whatever form to the individual or individual named, and (b) we have complied with the requirements of sections 1771, 1811, and 1815 of the Labor Code for any work performed by our employees on the Project.

Date: _____ Signature: _____

(Section 16401 of Title 8 of the California Code of Regulations)

25.4.5. Each Contractor shall file a certified copy of the CPRs with the entity that requested the records within ten (10) Days after receipt of a written request.

25.4.6. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the Court, Judicial Council, Division of Apprenticeship Standards, or Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of Contractor awarded the Project or performing Work shall not be marked or obliterated.

25.4.7. Contractor shall inform Judicial Council of the location of the records enumerated hereunder, including the street address, city, and county, and shall, within five (5) Business Days, provide a notice of change of location and address.

25.4.8. In the event of noncompliance with the requirements of this section, Contractor shall have ten (10) Days in which to comply subsequent to receipt of written notice specifying in what respects Contractor must comply with this section. Should noncompliance still be evident after the ten (10) Day period, Contractor shall, as a penalty to the Court or Judicial Council forfeit one hundred dollars (\$100) for each Day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of Division of Apprenticeship Standards or Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

25.4.9. It shall be the responsibility of Contractor to ensure compliance with the provisions of Labor Code section 1776.

25.5. Apprentices.

25.5.1. Contractor acknowledges and agrees that, if this Project involves a dollar amount greater than or a number of working days greater than that specified in Labor Code section 1777.5, then this Project is governed by the provisions of Labor Code Section 1777.5. It shall be

the responsibility of Contractor to ensure compliance with this article and with Labor Code section 1777.5 for all apprenticeship occupations.

- 25.5.2. Apprentices of any crafts or trades may be employed and, when required by Labor Code section 1777.5, shall be employed provided they are properly registered in full compliance with the provisions of the Labor Code.
- 25.5.3. Every such apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he/she is employed, and shall be employed only at the work of the craft or trade to which she/he is registered.
- 25.5.4. Only apprentices, as defined in section 3077 of the Labor Code, who are in training under apprenticeship standards and written apprentice agreements under chapter 4 (commencing at section 3070), division 3, of the Labor Code, are eligible to be employed. The employment and training of each apprentice shall be in accordance with the provisions of the apprenticeship standards and apprentice agreements under which he/she is training.
- 25.5.5. Pursuant to Labor Code section 1777.5, if that section applies to this Project as indicated above, Contractor and any Subcontractors employing workers in any apprenticeable craft or trade in performing any Work under this Project shall apply to the applicable joint apprenticeship committee for a certificate approving Contractor or Subcontractor under the applicable apprenticeship standards and fixing the ratio of apprentices to journeymen employed in performing the Work.
- 25.5.6. Pursuant to Labor Code section 1777.5, if that section applies to this Project as indicated above, Contractor and any Subcontractor may be required to make contributions to the apprenticeship program.
- 25.5.7. If Contractor or Subcontractor willfully fails to comply with Labor Code section 1777.5, then, upon a determination of noncompliance by the Administrator of Apprenticeship, it shall:
 - 25.5.7.1. Be denied the right to bid or propose on any subsequent project for one (1) year from the date of such determination; and
 - 25.5.7.2. Forfeit as a penalty to Judicial Council the full amount as stated in Labor Code section 1777.7. Interpretation and enforcement of these provisions shall be in accordance with the rules and procedures of the California Apprenticeship Council and under the authority of the Chief of the Division of Apprenticeship Standards.
- 25.5.8. Contractor and all Subcontractors shall comply with Labor Code section 1777.6, which section forbids certain discriminatory practices in the employment of apprentices.
- 25.5.9. Contractor shall become fully acquainted with the law regarding apprentices prior to commencement of the Work. Special attention is directed to sections 1777.5, 1777.6, and 1777.7 of the Labor Code, and title 8, California Code of Regulations, section 200 et seq. Questions may be directed to the State Division of Apprenticeship Standards, 455 Golden Gate Avenue, San Francisco, California 94102.
- 25.5.10. Contractor shall ensure compliance with all certification requirements for all workers on the Project including, without limitation, the requirements for electrician certification in Labor Code sections 108 et seq.

25.6. Non-Discrimination.

- 25.6.1. Contractor herein agrees not to discriminate in its recruiting, hiring, promotion, demotion, or termination practices on the basis of race, religious creed, national origin, ancestry, sex, age, or physical handicap in the performance of the Work and to comply with the provisions of the California Fair Employment and Housing Act as set forth in part 2.8 of division 3 of the Government Code, commencing at section 12900; the Federal Civil Rights Act of 1964, as set forth in Public Law 88-352, and all amendments thereto; Executive Order 11246, and all administrative rules and regulations found to be applicable to Contractor and Subcontractor.
- 25.6.2. Contractors must include the non-discrimination and compliance provisions of this clause in all subcontracts to perform Work for the Project.
- 25.6.3. To the extent applicable, during the performance of the Work, Contractor agrees to incorporate in all subcontracts the provisions set forth in Chapter 60-1.4(b) of Title 41 published in Volume 33 No. 104 of the Federal Register dated May 28, 1968.

26. MISCELLANEOUS

26.1. DVBE Compliance.

The Project is subject to a DVBE participation goal of at least three percent (3%). Contractor must document its DVBE compliance by completing the certification and report attached hereto as **Exhibit D** (Document 00 45 55).

26.2. Conflict of Interest.

26.2.1. General Requirements. Contractor and employees of Contractor will not participate in proceedings that involve the use of Judicial Council funds or that are sponsored by Judicial Council if the person's partner, family, or organization has a financial interest in the outcome of the proceedings. Contractor and employees of Contractor must also avoid actions resulting in or creating the appearance of:

26.2.1.1. Use of an official position with the government for private gain;

26.2.1.2. Preferential treatment to any person associated with this Project or the Work required herein;

26.2.1.3. Loss of independence or impartiality;

26.2.1.4. A decision made outside official channels; or

26.2.1.5. Adverse effects on the confidence of the public in the integrity of the government or this Agreement.

26.2.2. Prohibited Financial Conflict of Interest. Contractor and its Subcontractors presently have no interest and will not acquire any interest which would present a conflict of interest pursuant to Government Code sections 1090 *et seq.* and 87100 *et seq.*, during the performance of Work pursuant to the Agreement. Contractor further certifies that, to the best of its knowledge after due inquiry, no employees or agents of Judicial Council are now, nor in the future will they be, in any manner interested directly or indirectly in this Agreement, or in any profits expected to arise from this Agreement, as set forth in Government Code sections 1090 *et seq.* and 87100 *et seq.*

26.2.3. Conflict of Interest for Former Judicial Council Employees. Contractor certifies and must require any Subcontractor to certify to the following: Former Judicial Council employees

will not be awarded a contract for TWO (2) years from the date of separation if that employee had any part of the decision making process relevant to the contract, or for ONE (1) year from the date of separation if that employee was in a policy making position in the same general subject area as the proposed contract within the TWELVE (12) month period after his or her employment with Judicial Council.

26.3. Covenant Against Gratuities.

No gratuities, in the form of entertainment, gifts, or otherwise, were offered by Contractor or any agent, director, or representative of Contractor, to any officer, official, agent, or employee of Judicial Council with a view toward securing this Project or securing favorable treatment with respect to any determinations concerning the performance of this Agreement. For breach or violation of this provision, Judicial Council will have the right to terminate this Agreement, either in whole or in part, and any loss or damage sustained by Judicial Council in procuring, on the open market, any items which Contractor agreed to supply, will be borne and paid for by. The rights and remedies of Judicial Council provided in this provision will not be exclusive and are in addition to any other rights and remedies provided by law under the Contract Documents.

26.4. Assignment of Antitrust Actions.

26.4.1. Section 4552 of the Government Code states:

In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

26.4.2. Section 4553 of the Government Code states:

If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

26.4.3. Section 4554 of the Government Code states:

Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under this part if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action.

26.4.4. Under this section, “public purchasing body” is Judicial Council and “bidder” is Contractor.

26.5. Excise Taxes.

If, under Federal Excise Tax Law, any transaction hereunder constitutes a sale on which a Federal Excise Tax is imposed and the sale is exempt from such Federal Excise Tax because it is a sale to a state or local Government for its exclusive use, Judicial Council, upon request, will execute documents necessary to show (i) Judicial Council is an agency of the State of California for the purposes of the exemption, and (ii) the sale is for the exclusive use of Judicial Council. No Federal Excise Tax for the materials will be included in the Contract Price.

26.6. Taxes.

Contract Price is to include any applicable sales taxes or other taxes that may be due in accordance with section 7051 of the Revenue and Taxation Code; Regulation 1521 of the State Board of Equalization or any other tax code that may be applicable.

26.7. Shipments.

All shipments must be F.O.B. destination to Site or sites, as indicated in the Contract Documents. There must be no charge for containers, packing, unpacking, drayage, or insurance. The total Contract Price is all inclusive (including sales tax) and no additional costs of any type will be considered.

26.8. Compliance with Government Reporting Requirements.

If the Project is subject to federal or other governmental reporting requirements because of federal or other governmental financing in whole or in part for the Project which it is part, or for any other reason, Contactor must comply with those reporting requirements at the request of Judicial Council at no additional cost.

26.9. No Personal Liability.

Neither Judicial Council, nor any other officer or employee of Judicial Council will be personally responsible for liabilities arising under the Contract Documents.

END OF DOCUMENT

EXHIBIT N
(DOCUMENT 00 71 00)

SPECIAL CONDITIONS

1. WEATHER DAYS.

Delays due to Adverse Weather conditions will only be permitted in compliance with the provisions in the General Conditions and only if the number of days of Adverse Weather exceeds the following parameters:

January	[11]	July	[0]
February	[10]	August	[0]
March	[10]	September	[1]
April	[6]	October	[4]
May	[3]	November	[7]
June	[1]	December	[10]

2. CONTRACTOR'S OBLIGATION TO MAINTAIN JOB COST REPORTS

2.1. Job Cost Reporting. Contractor and each Subcontractor with a subcontract valued at Three Hundred Thousand Dollars (\$300,000) or greater will maintain a computerized job cost reporting system conforming to the requirements set forth herein. The computer program(s) utilized by Contractor and applicable Subcontractors is subject to the review and Acceptance by Judicial Council. The job cost reporting systems for the Work must be updated in regular intervals of not more than **ONE (1)** calendar month.

2.2. Job Cost Reporting System Requirements. The computerized job cost programs utilized by Contractor and applicable Subcontractors will conform and comply with generally accepted accounting principles applied in a consistent manner and with recognized and generally accepted construction industry accounting standards, guidelines and procedures. The job cost reporting system format and configuration will follow the general format of Judicial Council approved cost breakdown (Schedule of Values) and budgets established for each line item must be traceable to a bid estimate of costs that formed the basis of Contractor's Bid. The job cost reporting systems utilized by Contractor and applicable Subcontractors must be capable of: (i) providing overall cost status on a monthly and cumulative basis; (ii) providing comparative analysis of the original budgeted costs, actual costs, remaining budget, and projected cost of completion; the job cost reporting system must be capable of providing comparative analysis for individual line items and the totality of the Work reflected in the job cost report and; (iii) tracking adjustments to original budget amounts for changes to the Work (including, without limitation, issued, pending and potential Change Orders).

2.3. Job Cost System Information. Upon request of Judicial Council, Contractor and applicable Subcontractors will make available written job cost reports and provide Judicial Council and the Judicial Council Project Manager with the electronic files of the then current or requested job cost report. Contractor's obligations hereunder are material.

3. PERMITS, CERTIFICATES, LICENSES, FEES, APPROVAL

3.1. Approvals, Certificates, Fees, Inspections, Licenses, Permits, Etc.

3.1.1. Permits in Bid Price. Contractor must include in its Bid the cost of any approvals, certificates, fees, inspections, licenses, permits or similar requirements necessary for the performance of the Work ("Permits").

- 3.1.1.1. "Permits" includes, without limitation, any of the following if required: temporary or permanent building, mechanical, electrical or plumbing permits; certificates of occupancy; curb-breaking permits, highway entrance permits; water permits; local inspector fees; etc.
- 3.1.1.2. "Permits" does not include Project Inspector fees (which will be paid by Judicial Council unless otherwise indicated herein), professional licensing, or contractors' licensing.
- 3.1.1.3. Contractor is required to obtain all Permits. Contractor shall ensure sufficient time in its Construction Schedule to secure and obtain all permits and shall not be permitted to claim a delay in the Project due to a delay in obtaining a Permit.

3.2. Certain Fees Not Part of Permits. Notwithstanding the above requirements, Judicial Council will oversee the obtaining and payment of the following permits, fees or charges, but Contractor will assist in those efforts as requested by Judicial Council at no additional cost to Judicial Council:

NOT APPLICABLE

3.3. Storm Water Permits.

- 3.3.1. Contractor will perform the Work of the Project related to being Judicial Council's Qualified SWPPP (Storm Water Pollution Prevention Plan) Practitioner ("QSP").
- 3.3.2. As Judicial Council's QSP, Contractor is responsible for storm water and non-storm water visual observations, sampling, and analysis per Judicial Council's SWPPP.
- 3.3.3. Contractor will strictly follow the requirements to implement all the provisions of the SWPPP including, without limitation, preparation of monitoring and recording reports and providing those to Judicial Council.
- 3.3.4. Contractor's indemnity obligations are applicable to any damages, penalties, fees, charges, or related expenses assessed or charged to Judicial Council by any water boards or agencies with jurisdiction related to compliance with the Storm Water Permits.

END OF DOCUMENT

EXHIBIT O
(DOCUMENT 00 75 00)

RESERVED

EXHIBIT P
(DOCUMENT 00 91 12)

RESERVED

EXHIBIT Q
(DOCUMENT 00 91 13)

ADDENDA

To be determined during the process of Invitation to Bid.

EXHIBIT R
(DOCUMENT 00 91 14)

DIVISION 1 DOCUMENTS

The Division 1 Documents prepared by Architect and applicable to the Project are included in the following pages.

**SECTION 01 11 00
SUMMARY OF WORK**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Project Identification:

Judicial Council of California (JCC)
Central Justice Center
Fire Life Safety Modernization of Floors 1, 2 and 3
700 W Civic Center Drive
Santa Ana, CA 92701
JCC Project FM 0028322 and SWO 1697192

- B. Architect/Engineer: Salas O'Brien, 305 S. 11th St, San Jose, CA 95112

- C. Project Summary: The project includes the various categories of work indicated on the drawings and listed in the Table of Contents bound hereinbefore.

The project scope of work involves modernizing the existing fire life safety (FLS) systems for the Basement, 1st Floor, 2nd Floor, and 3rd Floor in accordance with contract documents. Further scope of work includes the upgrade of the existing deficient Building Management System (BMS) to a fully functional BMS System.

The project scope of work involves, but not limited to the following: Extend the fire sprinkler coverage on Floors 1 through 3 to cover the entire floor area; install new fire sprinkler heads in new areas and replace existing fire sprinkler heads; install new ceilings to accommodate the fire sprinkler work; install new fire alarm devices to meet current code compliance; bring the existing electrical grounding system into code compliance; install conduit, wiring, dimming controls for new lighting fixtures compatible with new ceiling to meet Title 24 requirements; install new smoke control system to integrate the existing air handler units into the existing smoke control system, including replacement of existing fiber board ductwork with new galvanized sheet metal ducting and insulation; perform full abatement of the hazardous materials i.e., abate and replace the entire ceiling as well as abate fireproofing material above the ceiling and below the roof deck to facilitate the fire sprinkler expansion and new ductwork; and upgrade the existing deficient Building Management System (BMS) for building mechanical controls of the Heating Ventilating and Air Conditioning system and associated mechanical components for a fully functional BMS System.

1.03 WORK UNDER SEPARATE CONTRACTS

- A. General: Coordinate and cooperate fully with other contractors on campus and project site so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract or other contracts.

1.04 LAYDOWN/STAGING: CONTRACTOR SHALL PROVIDE MAP OR NARRATIVE FOR THE LAYDOWN/STAGING AREAS.

END OF SECTION

SECTION 01 12 10
CONTRACT FORMS AND SUBMITTALS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. The following, but not limited to, examples of forms and documents listed in this Section are to be utilized and submitted in the administration of the Work. Additional form will be described and promulgated as needed and upon CONTRACTOR request, The Judicial Council may approve the use of alternate forms. Electronic versions of these forms may be available on the Judicial Council website.
- B. From time to time, JUDICIAL COUNCIL may release new revisions and new Project Forms. At any time during the Project, if requested by Architect, CONTRACTOR shall use the newly released Project Forms.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 FORMS

- A. The following examples of forms:
 - 1. Allowance Disbursement Authorization.
 - 2. Application for Payment.
 - 3. Change Order.
 - 4. Construction Directive.
 - 5. List of Subcontractors.
 - 6. Notice of Completion.
- B. Substitution Request: This form is used to submit proposed substitutions of materials or equipment no longer manufactured or which cannot be acquired from existing inventories.
- C. Transmittal: This form is used for transmission of items related to the Contract.

END OF SECTION

**SECTION 01 20 00
PRICE AND PAYMENT PROCEDURES**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 APPLICATIONS AND CERTIFICATES OF PAYMENT

- A. Progress Payment Applications shall be on the form(s) provided by the Judicial Council.

1.03 PROCEDURE TO ESTIMATE PERCENTAGE OF COMPLETION

- A. Each month, five working days prior to the last working day of the month, the Contractor shall submit to the Construction Manager, for review, the Contractor's estimate of the percentage of completion of the Work projected through the end of the month of each activity of the Contract Schedule, marked in pencil to show the percentage of completion anticipated on the last working day of the month by the Contractor for each individual activity.
- B. The Construction Manager will, upon receipt, send a copy of this preliminary request to the Judicial Council Inspector and Architect, and will confer with the Judicial Council Inspector, and the Architect, before the last working day of the month, to verify the percentage complete, through the end of the month, for each activity. The Judicial Council bases progress payment(s) upon the verified percentage completed, all subject to Article 9 of the General Conditions.
- C. If, after review, either the Construction Manager or the Architect do not agree with the percentage requested by the Contractor for any activity, the Contractor will be notified. The Contractor shall have a 48 hour period to provide additional explanation and substantiation of his requested percentages.
- D. If no agreement is reached between the Contractor and the Construction Manager or Architect on final percentage(s) to be paid for that month, the percentage(s) to be paid shall be as determined by the Architect.
- E. The Contractor shall then prepare the application for progress payment with these percentages, as either agreed, or as determined by the Architect, and shall submit this application to the Construction Manager for certification by the Architect, and payment by the Judicial Council.

END OF SECTION

**SECTION 01 22 00
UNIT PRICING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description of Unit Prices.
- B. Specified work.
- C. Unit Prices.
- D. Advanced Coordination.
- E. Costs Included.
- F. Unit Quantities Specified.
- G. Payment.

1.02 DESCRIPTION

- A. Unit Price quotations shall be inserted in the appropriate spaces in the Bid Form for each Unit Price item of Work described herein.
- B. Unit Prices stated in the Agreement shall be used to compute adjustments of the Contract Sum for approved Unit Price items of Work. Such adjustments additive or deductive shall be made by Change Order.
- C. The listed Unit Prices quantities are for demolition or installation of new material not included in the Work, and they shall comply with requirements of the Contract Documents. Contractor shall study all of the drawings and Contract Documents and ensure that the overall scope and Contractor's subsequent bid for each Unit Price quantity are in addition to what is already indicated on the Contract Documents. Quantities of similar materials shown on the drawings and specifications are part of the Lump Sum Base Bid.
- E. Compensation will be paid for those items of Work described in below, Unit Prices.

1.03 SPECIFIED WORK

- A. Applicable Sections of the Specifications describe the materials and methods required under the various Unit Price items of Work.

1.04 UNIT PRICES

- A. List of Unit Price Items and Descriptions: Provide unit prices to install Hilti Firestop Systems for a complete and functional fire and electrical system pursuant to the quantity shown on Sheet A5.2 drawing. Adjustment to added quantities will be made by Change Order to the Contract Sum.

SCENARIO	NOMINAL DIAMETER	WALL/FLOOR CONSTRUCTION	TOTAL PENETRATIONS	DETAIL REFERENCE
#1	<2" (SINGLE)	STUD WALL	200	SHEET A5.2 / W-L-1054
#2	<2" (MULTIPLE)	STUD WALL	50	SHEET A5.2 / W-L-3232
#3	2"	STUD WALL	40	SHEET A5.2 / W-L-1054
#4	3"	STUD WALL	40	SHEET A5.2 / W-L-1054
#5	4"	STUD WALL	40	SHEET A5.2 / W-L-1054
#6	5"	STUD WALL	40	SHEET A5.2 / W-L-1054
#7	6"	STUD WALL	40	SHEET A5.2 / W-L-1054
#8	>6"	STUD WALL	20	SHEET A5.2 / W-L-1054
#9	8"	CONCRETE FLOOR	48	SHEET A5.2 / C-AJ-1276

1.05 ADVANCED COORDINATION

- A. Immediately notify Judicial Council's Representative when conditions require the use of Unit Price items of Work.
- B. The applicability of, measurement methods for, documentation of, and the final adjustment of the Contract Sum for Unit Price items of Work shall be determined by the Judicial Council's Representative.
- C. After performing Unit Price items of Work as directed by Judicial Council 's Representative, Contractor shall take necessary measurements in the presence of Judicial Council's Representative and shall submit calculations of quantities to Judicial Council's Representative for approval. Contractor shall notify Judicial Council's Representative 1 day in advance of taking measurements.
- D. Assist by providing necessary equipment, workers, and survey personnel as required.

1.06 COSTS INCLUDED

- A. Unit Prices included on the Bid Form shall include full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit. Contractor shall accept compensation computed in accordance with the Unit Prices for work installed in place as full compensation for furnishing such Work.

1.07 UNIT QUANTITIES SPECIFIED

- A. Quantities indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements of actual Work will determine the payment amount.

1.08 PAYMENT

- A. Payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities of Work that is incorporated in or made necessary by the Work and accepted by the Engineer, multiplied by the unit price.
- B. If, in the opinion of Engineer, it is not practical to remove and replace the Work, Engineer will direct one of the following remedies:

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 25 10
PRODUCT OPTIONS AND SUBSTITUTIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SECTION INCLUDES

- A. This Section specifies administrative and procedural requirements governing the Contractor's selection of products for use in the Project and requests for substitutions made after award of Contract.

1.03 DEFINITIONS

- A. Substitutions: Requests for changes in products, materials, equipment, and methods of construction required by Contract Documents proposed by the Contractor after award of the Contract are considered requests for "substitutions." The following are not considered substitutions:
 - 1. Substitutions requested during the bidding period, and accepted by written Addendum prior to opening of bids or award of Contract.
 - 2. Revisions to Contract Documents requested by the Judicial Council or Architect.
 - 3. Specified options of products and construction methods included in Contract Documents.
 - 4. Compliance with governing regulations and orders issued by governing authorities.

1.04 SUBMITTALS

- A. Requests for substitution will be considered if received within 35 days after award of Contract.
 - 1. Requests received more than 35 days after award of Contract will be considered only in case of product unavailability or other conditions beyond the control of contractor.
- B. Submit separate request for each substitution. Support each request with:
 - 1. Complete data substantiating compliance of proposed substitution with requirements stated in Contract Documents:
 - a. Product identification, including manufacturer's name and address.
 - b. Manufacturer's literature; identify:
 - 1) Product description.
 - 2) Reference standards.
 - 3) Performance and test data.
 - c. Structural calculations, where applicable or requested, prepared and signed by Engineer licensed in state of California.
 - d. Samples, where applicable or requested.
 - e. Name and address of similar projects on which product has been used, and date of each installation.
 - 2. Itemized comparison of proposed substitution with product specified; list significant variations.
 - 3. List modifications to other parts of Work and to construction performed by District and separate Contractors, necessary to accommodate proposed substitution.
 - 4. Statement indicating substitution's effect on Construction Schedule compared to Schedule without approval of substitution. Indicate effect of proposed substitution on overall Contract Time.
 - 5. Accurate cost data comparing proposed substitution with product specified and amount of any net change to Contract Sum.
 - 6. Certification by Contractor that substitution proposed is equal to or better in every significant respect to that required by the Contract Documents, that it will perform adequately in application indicated, that the same warranties or bonds will be provided for substitution as required for specified work and that Contractor will coordinate installation of

accepted substitution into the Work and will make changes required for work to be complete in all respects.

- C. The Architect will not be responsible for locating or securing information which is not included in the substantiating data.

1.05 QUALITY ASSURANCE

- A. To fullest extent possible, provide products of the same kind, from a single source.

1.06 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle products in accordance with manufacturer's recommendations, to prevent damage, deterioration and loss, including theft.
- B. Deliver products in the manufacturer's original sealed container, complete with labels and instructions for handling, storing, unpacking, protecting and installing.

PART 2 - PRODUCTS

2.01 PRODUCT SELECTION

- A. General: Provide products that comply with the Contract Documents, are undamaged and unused at installation.
- B. Provide products complete with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.
- C. Product Selection Procedures: Product selection is governed by the Contract Documents and governing regulations. Procedures governing product selection include the following:
- D. Compliance with Standards, Codes and Regulations: Where Specifications only require compliance with an imposed code, standard or regulation, select a product that complies with the standards, codes or regulations specified.
- E. Semi-proprietary Specification Requirements: Where two or more products or manufacturers are named, provide one of the products indicated. No substitutions will be permitted.
- F. Where products or manufacturers are specified by name, accompanied by the term "or equal," or "or approved equal" comply with the provisions for "substitutions" to obtain approval for use of an unnamed product.
- G. Visual Matching: Where Specifications require matching existing material or product, the Architect's decision on whether a proposed product matches is final. Where no product matches and complies with other requirements, comply with provisions for "substitutions" for selection of a matching product.

PART 3 EXECUTION

3.01 GENERAL REQUIREMENTS

- A. A Substitution Request for products, assemblies, materials, and equipment constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product, equipment, assembly, or system.
 - 2. Agrees to provide the same warranty for the substitution as for the specified product.
 - 3. Agrees to coordinate installation and make changes to other work that may be required for the work to be complete, with no additional cost to Judicial Council.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents. Burden of proof is on proposer.

- C. Content: Include information necessary for tracking the status of each Substitution Request, and information necessary to provide an actionable response.
1. No specific form is required. Contractor's Substitution Request documentation must include the following:
 - a. Project Information:
 - 1) Official project name and number, and any additional required identifiers established in Contract Documents.
 - b. Substitution Request Information:
 - 1) Discrete and consecutive Substitution Request number, and descriptive subject/title.
 - 2) Indication of whether the substitution is for cause or convenience.
 - 3) Issue date.
 - 4) Reference to particular Contract Document(s) specification section number, title, and article/paragraph(s).
 - 5) Description of Substitution.
 - 6) Reason why the specified item cannot be provided.
 - 7) Differences between proposed substitution and specified item.
 - 8) Description of how proposed substitution affects other parts of work.
 - c. Attached Comparative Data: Provide point-by-point, side-by-side comparison addressing essential attributes specified, as appropriate and relevant for the item:
 - 1) Physical characteristics.
 - 2) In-service performance.
 - 3) Expected durability.
 - 4) Visual effect.
 - 5) Sustainable design features.
 - 6) Warranties.
 - 7) Include, as appropriate or requested, the following types of documentation:
 - (a) Product Data:
 - (b) Certificates, test, reports or similar qualification data.
 - (c) Drawings, when required to show impact on adjacent construction elements.
 - d. Impact of Substitution:
 - 1) Savings to Judicial Council for accepting substitution.
 - 2) Change to Contract Time due to accepting substitution.
- D. Limit each request to a single proposed substitution item.
1. Submit an electronic document, combining the request form with supporting data into single document.

3.02 SUBSTITUTION PROCEDURES DURING PROCUREMENT

- A. Submittal Time Restrictions:
1. Instructions to Bidders specifies time restrictions and the documents required for submitting substitution requests during the bidding period.
 2. Judicial Council will consider requests for substitutions only if submitted at least 10 days prior to the date for receipt of bids.
- B. Submittal Form (before award of contract):

1. Submit substitution requests by completing the form in Section 00 43 25; see this section for additional information and instructions. Use only this form; other forms of submission are unacceptable.
2. Submit substitution requests by completing CSI/CSC Form 1.5C - Substitution Request. See this form for additional information and instructions.

3.03 SUBSTITUTION PROCEDURES DURING CONSTRUCTION

- A. Submittal Form (after award of contract):
- B. Engineer will consider requests for substitutions only within 35 days after date of Agreement.
- C. Submit request for Substitution for Convenience immediately upon discovery of its potential advantage to the project, but not later than 14 days prior to time required for review and approval by Engineer, in order to stay on approved project schedule.
 1. In addition to meeting general documentation requirements, document how the requested substitution benefits the Judicial Council through cost savings, time savings, greater energy conservation, or in other specific ways.
 2. Document means of coordinating of substitution item with other portions of the work, including work by affected subcontractors.
 3. Bear the costs engendered by proposed substitution of:
 - a. Judicial Council's compensation to the Engineer for any required redesign, time spent processing and evaluating the request.
- D. Substitutions will not be considered under one or more of the following circumstances:
 1. When they are indicated or implied on shop drawing or product data submittals, without having received prior approval.
 2. Without a separate written request.

3.04 RESOLUTION

- A. Engineer may request additional information and documentation prior to rendering a decision. Provide this data in an expeditious manner.
- B. Engineer will notify Contractor in writing of decision to accept or reject request.

3.05 ACCEPTANCE

- A. Accepted substitutions change the work of the Project. They will be documented and incorporated into work of the project by Change Order, Construction Change Directive, Architectural Supplementary Instructions, or similar instruments provided for in the Conditions of the Contract.

3.06 CLOSEOUT ACTIVITIES

- A. Include completed Substitution Request Forms as part of the Project record. Include both approved and rejected Requests.

END OF SECTION

SECTION 01 26 00
CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 GENERAL

- A. The Judicial Council or the Contractor may propose changes in the work by submitting a written request through the Construction Manager to the other party.

1.03 PROPOSAL REQUESTS

- A. Proposal requests that require adjustment to the Contract Sum or Time, will be issued by the Architect at the request of the Judicial Council, on the form used by the Judicial Council, with a description of the proposed change(s) and supplemental or revised drawings and specifications.
- B. Proposal Requests shall not be considered by the Contractor as an direction to stop the Work, or to execute the proposed changes(s).
- C. Within ten (10) days of receipt, unless otherwise indicated on the Proposal Request Form, the Contractor shall submit a Change Order Request (COR) for review and consideration by the Judicial Council.

1.04 CHANGE ORDER REQUESTS (COR'S)

- A. Change Order Requests shall describe the adjustment to the Contract Sum and/or Contract Time to perform Changes in the Work, in accordance with the General Conditions, and as follows:
 - 1. Provide a complete and itemized description of the change: Include statements fully explaining the reasons the changes are necessary.
 - 2. Identify and explain effect of the proposed change(s) on the Contract Sum.
 - a. Include a list of quantities of products to be purchased and unit costs, along with amount of purchases to be made. IF requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 3. Identify and explain effect of the proposed change(s) on the Contract Time.
 - a. Include a statement fully explaining the effect the proposed Change(s) in the Work will have on the Contract Time.
 - b. When a Change Order Request may effect the Contract Time, the Contractor shall provide a Network Window as required in Section 013210 Contract Schedule Requirements.
 - 4. Overhead and Profit: Refer to the General Conditions regarding allowable overhead and profit.
- B. Change Order Request Evaluation
 - 1. Change Order Requests shall be initially referred by the Construction Manager to the Architect for review. The Architect will review the Request and take one or more of the following preliminary actions within ten days of receipt:
 - a. Recommend approval of the request by the Judicial Council.
 - b. Recommend approval of the request by the Judicial Council with modifications, stating the modifications proposed.
 - c. Request additional supporting data from the Contractor to substantiate and/or to complete the request.
 - d. Recommend rejection of the request in whole or in part, stating reasons for rejection.

2. If agreement is reached between the Contractor and the Judicial Council, the Judicial Council will include the request in a Change Order, and will, if circumstances warrant, authorize performance of the work by Field Order.
3. If agreement is not reached, the Contractor shall, within then days after receipt of the Architect's preliminary response, take one or more of the following actions:
 - a. Submit additional supporting data requested by the Architect.
 - b. Modify the initial Request.
 - c. Notify the Judicial Council that the initial request stands.
- C. Disputed or Unresolved Change Order Requests: Where the Judicial Council and Contractor are in agreement as to the scope of a Change Order Request, but cannot reach agreement concerning the adjustment of Contract Sum or Contract Time, the Judicial Council may order the Contractor to perform the change work by Field Order.
- D. Disputed Changes/Disputed Work: In the event of any matter in question, dispute or disagreement between the Contractor and the Judicial Council regarding the characterization of any item as a Change to the Work, the Contractor shall promptly proceed with the performance of such item(s) in strict conformance with the General Conditions.

1.05 FIELD ORDERS

- A. Field Orders shall be in accordance with the General Conditions, issued on the form provided by the Judicial Council.

1.06 CHANGE ORDER PROCESSING

- A. Change Orders will be prepared by the Construction Manager.
- B. Order of signature and processing shall be in accordance with the General Conditions.

END OF SECTION

SECTION 01 26 10
REQUESTS FOR INFORMATION

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section describes procedures for requesting information other than that which is shown in the Contract Documents, and discusses conditions under which such requests will be considered.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.
- C. Definitions:
 - 1. Refer to General Conditions for all definitions.

1.02 REQUESTS FOR INFORMATION

- A. Assumption of prior knowledge:
 - 1. The Instructions to Contractors for this Work stipulate that, prior to submitting a bid, contractors become thoroughly familiar with the proposed Contract Documents, and that they request and secure clarification on all matters on which there may be any question as to design intent.
 - 2. Reasons for this stipulation include the Judicial Council's desire:
 - a. That the Contractor have complete and adequate knowledge of the proposed Work in order to propose a fair and proper price;
 - b. To avoid unnecessary expenditure of time and effort providing information during the course of the Work;
 - c. To discourage frivolous requests for information, while encouraging thorough familiarity with the Drawings, Specifications, and other Contract Documents.
- B. Necessity for procedures:
 - 1. Despite the intentions of the above stipulation, it is understood by the Judicial Council and the Architect that inadvertent omissions or conflicts can occur in the Contract Documents, and that further clarifications of data may be required during progress of the Work. Therefore procedures for requesting such information are hereby established.
- C. Procedures:
 - 1. Prior to requesting information, the Contractor shall conduct a thorough search of the Contract Documents in order to clearly establish that the desired information is not included in the Documents.
 - 2. The Contractor shall then fill out a "Request for Information," on a form previously approved by the Architect, and deliver it to the Architect.
 - 3. The Architect will then conduct the necessary research to satisfy the Contractor's request.
 - 4. The Architect will respond to the Contractor's request within a reasonable period of time, a minimum of five working days. Advance notice shall be given to the Architect.
 - a. Should the requested information not have been previously available, it will promptly be supplied to the Contractor.
 - 5. The Contractor shall maintain a RFI Log which indicates the date of the request, the date the response is required, the date the response is received, and the urgency of the request.
- D. RFI Urgency: Indicate the urgency, or necessity of the RFI, or how construction activities depend upon a response or answer. State the urgency in terms of work days, or name the calendar date when an answer must be received by the Contractor in order to avoid the completion or start of a given activity.

END OF SECTION

SECTION 01 31 00
COORDINATION AND PROJECT MEETINGS

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. This section specifies general administrative procedures and performance requirements. Refer to the General Conditions, Division 00 specifications, for additional requirements for project coordination and project meetings, that are not provided under this specification.

1.02 COORDINATION AND MEETINGS

- A. General: Prepare and distribute to each entity performing work at project site, a written memorandum of instructions on required coordination activities, including required notices, reports and attendance at meetings. Prepare similar memorandum for separate contractors where interfacing of work is required.
- B. Coordination of Trades: Coordinate work of different trades so that interference between mechanical, electrical, architectural, and structural work, including existing services, will be avoided and within limits indicated the maximum practical space for operation, repair, removal, and testing of equipment is provided.
- C. Weekly Coordination Meeting: In addition to specific preinstallation meetings and coordination meetings for each major element of work, and regular project meetings for other purposes (as indicated elsewhere in contract documents), hold weekly general project coordination meetings at regularly scheduled times which are convenient for everyone involved.

1.03 ADMINISTRATIVE/SUPERVISORY PERSONNEL

- A. General: In addition to a General Superintendent and other administrative personnel required for performance of the work, provide specific coordinating personnel as specified herein.
- B. Environmental Control Officer: The Contractor shall designate an "Environmental Control Officer" whose duties shall include the responsibility for enforcing the environmental protection provisions of these specifications including safety and health; the requirements of the Occupational Safety and Health Act; and other applicable Federal, state and local standards.
- C. Project Coordinator: Provide a full-time Project Coordinator, who is experienced in administration and supervision of building construction including plumbing, mechanical and electrical work, and who is hereby authorized to act as the general coordinator of interfaces between units of work.

1.04 LIMITATIONS FOR USE OF SITE

- A. General: In addition to site utilization limitations and requirements shown on drawings, and indicated by other contract documents, administer allocation of available space equitably among entities needing access and space, so as to produce best overall efficiency in performance of total work of project.
- B. Partial Occupancy of Premises: The worksite location and its immediate premises will be vacant. However, other parts of the larger building premises will be occupied during the performance of work under the contract. Where the exclusive occupancy of part of the premises is required for the performance of the work, the Government has already vacated the areas involved.
- C. Jobsite Conditions: Loading dock availability (hours) 6 a.m. to 6 p.m. Monday thru Friday, and all day Saturday and Sunday. Twenty-four advance notification is required. For parking, only one hour loading and unloading time is permitted. No all day parking will be allowed. Advance notice of at least 24 hours is required for all activities, and all contract personnel shall conform to the following:
 - 1. Building Normal Working Hours 6:00 a.m. to 6:00 p.m. M-F/Bldg closed Sat-Sun
 - 2. After Working Hours Regulations this is based on a case by case situation and should be handled direct with the JUDICIAL COUNCIL Project Mgr.

3. Staging Area availability within building? Only within the agency space you are working in. No common area is used for this.
 4. Trash removal/dumpster regulations contractors are responsible for handling removal of all trash from the job. The Government owned Building compactor/dumpsters are not to be used. Dumpsters can be brought into the building with prior arrangements with your JUDICIAL COUNCIL. Contact the JUDICIAL COUNCIL Building Manager for directions as to the terms, conditions, and limitations as to the deployment and use of the dumpsters provided by the Contractor.
 5. Requirements for protection for existing finishes (i.e. Masonite on stone floor, etc.) Masonite is required to protect all flooring within common areas, along with cardboard for wall protection.
 6. Special security regulations, if applicable. All contractors and their employees MUST obtain security clearances to work in the building. Special work arrangements may be possible for one day workers (but those arrangements MUST be made IN ADVANCE of workers arrival, a minimum of 72 hours). For uncleared workers, a cleared worker can provide escort but only in certain circumstances. Again, your JUDICIAL COUNCIL Project Manager can provide this specific information and approval.
- D. Storage or Sale of Equipment Prohibited: Storage or sale of excess demolished material on the site is not permitted. Remove demolished materials from site.

1.05 SPECIAL REPORTS

- A. General: Except as otherwise indicated, submit special reports to the Contracting Officer within one day of occurrence requiring special report, with copy to others affected by occurrence.
- B. Reporting Unusual Events: When an event of unusual and significant nature occurs at site (example: visit by news media), prepare and submit a special report listing chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information.
 1. When such events are known or predictable in advance, advise the Contracting Officer in advance at earliest possible date.

1.06 INSPECTIONS, TESTS AND REPORTS

- A. General: Required inspection and testing services are intended to assist in determination of probable compliances of work with requirements, but do not relieve Contractor of responsibility for those compliances, or for general fulfillment of requirements of contract documents.
- B. Qualification of Testing Agencies: Except as otherwise indicated and except where manufacturer's testing facilities are indicated as acceptable, engage independent testing laboratories specializing in required services and acceptable to the Contracting Officer.

1.07 TRADEPERSONS AND WORKMANSHIP STANDARDS

- A. Instigate and maintain procedures to ensure that persons performing work at site are skilled and knowledgeable in methods and craftsmanship needed to produce required quality-levels for workmanship in completed work.
- B. Remove and replace work which does not comply with workmanship standards as specified and as recognized in the construction industry for applications indicated. Remove and replace other work damaged or deteriorated by faulty workmanship or its replacement.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 GENERAL INSTALLATION PROVISIONS

- A. Pre-Installation Conferences: Where pre-installation conferences are specified in technical sections, well in advance of installation meet at project site with installers and representatives of manufacturers and fabricators who are involved in or affected by unit of work, and in its coordination or integration with other work which has preceded or will follow. Advise the Contracting Officer of scheduled meeting dates.

- B. Installer's Inspection of Conditions: Require Installer of each major unit of work to inspect substrate to receive work, and conditions under which work will be performed, and to report (in writing to Contractor) unsatisfactory conditions.
- C. Manufacturer's Instructions: Where installations include manufactured products, comply with manufacturer's applicable instructions and recommendations for installation, to the extent these are more explicit or more stringent than requirements indicated in contract documents.
- D. Coordinate enclosure (closing-in) of work with required inspections and tests, so as to minimize necessity of uncovering work.

3.02 CLEANING AND PROTECTION

- A. General: During handling and installation of work at project site clean and protect work in progress and adjoining work on a basis of perpetual maintenance. Apply suitable protective covering on newly installed work where reasonably required to ensure freedom from damage or deterioration at time of substantial completion; otherwise, clean and perform maintenance on newly installed work as frequently as necessary through remainder of construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

3.03 ENVIRONMENTAL PROTECTION

- A. Solid, Liquid, and Gaseous Contaminants: Contractor shall be responsible for the proper disposal of all solid, liquid, and gaseous contaminants in accordance with all local codes.
- B. Disposal of Refuse: Remove refuse resulting from construction operations from the site.

END OF SECTION

**SECTION 01 31 27
ASBESTOS AND LEAD SURVEY DATA**

PART 1 - GENERAL

1.01 ASBESTOS AND LEAD SURVEY REPORT

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

1.02 STATE'S DISCLAIMER

- A. The following report, prepared by Forensic Analytical Consulting Services, Inc. is attached, Appendix A:

- 1. Title: Pre-Renovation Asbestos Survey Report
- 2. Dated: June 1, 2020
- 3. Author: Forensic Analytical Consulting Services, Inc.
- 4. Availability: Included in contract documents.

- B. The report is a part of the Contract Documents.

1.03 DIFFERING CONDITIONS

- A. The Asbestos and Lead Management Plan and Supplement to Appendix A do not represent total scope of existing asbestos and lead conditions to be removed nor are the results therein to be considered accurate as to locations or materials tested.
- B. See Division 02 for scope of Asbestos Abatement.

END OF SECTION

**SECTION 01 31 28
FIRE SPRINKLER STUDY**

PART 1 - GENERAL

1.01 FIRE SPRINKLER STUDY

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

1.02 STATE'S DISCLAIMER

- A. The following report, prepared by Salas O'Brien is attached, Appendix A:

- 1. Title: Central Justice Center Fire Sprinkler Study
- 2. Dated: April 2021
- 3. Author: Salas O'Brien
- 4. Availability: Included in contract documents.

- B. The report is a part of the Contract Documents.

1.03 DIFFERING CONDITIONS

- A. The Central Justice Center Fire Sprinkler Study to Appendix A does not represent total scope of conditions.
- B. See Division 02 for scope of Fire Sprinkler Study.

END OF SECTION

SECTION 01 32 16
CONSTRUCTION SCHEDULE – NETWORK ANALYSIS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 GENERAL

- A. The Contractor shall furnish Time Scaled, Critical Path Method (CPM) Contract Schedules showing, in detail, how the Contractor plans to execute and coordinate the work.
- B. This Contract Schedules shall be based on and incorporate the contract Milestone and Completion Dates specified in the Contract Documents.
- C. Overall time of completion and time of completion for each milestone shown on the Contract Schedules shall adhere to the times in the Agreement unless an earlier (advanced) time of completion is requested by Contractor and agreed to in writing by the Judicial Council. Any such agreement shall be formalized by a Change Order.
- D. The Contract Schedules shall be the basis for evaluating job progress, payment requests, and time extension requests. The responsibility for developing the Contract Schedule and monitoring actual progress as compared to the schedule rests with the Contractor.
- E. Failure of the Contract Schedule to include any element of the work or any inaccuracy in the Contract Schedules shall not relieve the Contractor from responsibility for accomplishing all the Work in accordance with the Contract Documents.

1.03 INITIAL CONTRACT SCHEDULE

- A. Within seven (7) days after the effective date (the start date) in the Notice to Proceed, the Contractor shall furnish to Judicial Council one (1) reproducible and three (3) prints of an initial Contract Schedule.
- B. The initial Contract Schedule shall indicate the detailed plan for the work to be completed in the first ninety (90) days after the effective date of the Notice to Proceed, details of planned mobilization of plant and equipment; sequence or early operations; and procurement of materials and equipment. Work beyond ninety (90) days shall be shown in summary form.
- C. The initial Contract Schedule shall be a time scaled Critical Path Method (CPM) type schedule.
- D. The accepted initial Contract Schedule will be used as a basis for monthly progress payments until acceptance of the Contract Schedule. Use of the initial Contract Schedule for progress payment shall not exceed 90 days.
- E. The Judicial Council will review the initial Contract Schedule for conformance with the requirements of the Contract Documents. The Judicial Council will return the Initial Contract Schedule with comments within seven (7) days after receiving it from the Contractor.

1.04 FULL DURATION CONTRACT SCHEDULE DEVELOPMENT

- A. Within 28 days after receiving the Notice to Proceed, the Contractor shall submit a detailed full duration Contract Schedule presenting an orderly and realistic plan for completion of the whole work, and in conformance with the requirements of this specification.
 - 1. The Contract Schedule shall be a time-scaled CPM type.
 - 2. No activity on the schedule shall have a duration longer than ten working days, with the exception of fabrication and procurement activities, unless otherwise approved by the Judicial Council, Activity duration shall be the total number of actual days required to perform that activity including consideration of weather impact on completion of that activity.
 - 3. Procurement of major equipment, through receipt and inspection at the job site, identified as a separate activity.
 - 4. Judicial Council furnished materials and equipment if any identified as separate activities.

5. Dependencies (or relationships) between activities processing/approval of submittals and shop drawings for major equipment. Activities that are dependent on submittal acceptance and/or material delivery shall not be scheduled to start earlier than the expected acceptance or delivery date.
6. The total cost of performing each activity. This cost shall be the total of labor, material, equipment, including overhead and profit. The sum of the cost for activities shall equal the total contract value.
7. The resources required (manpower and major equipment) to perform each activity.
8. A responsibility code for each activity corresponding to the subcontractor responsibility for performing the work.
9. Interface with the work of other Contractors (or entities).
10. Ten (10) Days for the inspection and development of punch lists by the Architect. No other activities shall be scheduled during this period.
11. Thirty (30) days for completion of punch list items, and final clean up of the work or any designated portion thereof, and completion of all items precedent to Final Completion.
12. Procurement activities including the following information for each type of material or equipment to be provided.
 - a. Material or equipment description.
 - b. Technical specification reference.
 - c. Duration in days required for preparation and review of submittals.
 - d. Duration in days required for fabrication and delivery.
 - e. Cross-reference to activities, which will be affected by the delivery of the material or equipment item.
 - f. Scheduled delivery dates.
13. Non-Construction Activities:
 - a. "Paperwork" activities, which shall include but not limited to requests for information, proposal requests, change order requests, change orders, construction change directives, stop notices, disputes, or matters in question, or claims, shall be deemed not to be "construction activities" and shall not be any part of the Contract Schedule.

1.05 CONTRACT SCHEDULE REVIEW

- A. The Judicial Council will review the proposed initial Contract and Contract Schedule(s) for conformance with the requirements of the Contract Documents.
- B. Within seven (7) days after receipt, the Judicial Council's Representative will accept the Contract Schedule or will return it with comments.
- C. If the proposed Contract Schedule is not accepted, Contractor shall revise the schedule to incorporate comments and resubmit the schedule for acceptance within seven (7) days after receiving it.
- D. The accepted schedule shall become the Contract Schedule.
- E. Acceptance of the Contract Schedule does not relieve the Contractor of the responsibility for accomplishing all of the Work in accordance with the Contract Documents.

1.06 CONTRACT SCHEDULE UPDATES

- A. Contractor shall submit to Judicial Council each month an up-to-date status report of the work. The status report shall include:
 1. Contractor's estimated percentage complete for each activity not yet complete.
 2. Actual start/finish dates for activities as appropriate.
 3. Identification of processing errors, if any, on the previous update reports.
 4. Revisions, if any, to the assumed activity duration(s) including revisions for weather impact for any activities due to the effect of the previous update on the schedule.
 5. Identification of construction activities which are affected by Change Order Requests issued during the update period.
 6. Resolution of conflict between actual work progress and schedule logic. When out of sequence activities develop in the Contract Schedule because actual construction

progress differs from that planned, the Contractor shall submit revision to schedule logic to conform to current status and direction.

7. Judicial Council will review the updated information and meet with the Contractor each month at the site to determine the status of the work. If agreement is not reached on any issue, then the Judicial Council's determination will be used in the processing of the update by the Contractor.
8. The Contractor will incorporate the Judicial Council Representative's review comments into the Contract Schedule.
9. Progress payments pursuant to the Contract Documents will be based on the update of the Contract Schedule.

1.07 CONTRACT SCHEDULE REVISIONS

- A. If the sequence of construction differs significantly, as determined by Judicial Council, from the Contract Schedule, Contractor shall submit within fifteen (15) days a revised schedule to Judicial Council for acceptance.
- B. When a Change Order Request is issued which has the potential to impact specified completion dates, a Network Window shall be prepared by Contractor to reflect the impact of such changes. After the Network Window has been accepted and the Contractor authorized to proceed with the Change Order Request, it shall be incorporated in to the Contract Schedule. Time extensions will be considered only to the extent there is insufficient remaining float to accommodate these changes, and pursuant to Paragraph 1 .09 of this specification. No additional cost will be allowed for the incorporation of approved Changed Work into the Contract Schedule.
- C. Should the Contractor, after acceptance of the Contract Schedule, intend to change their plan of construction, they shall submit their requested revisions to the Judicial Council, along with a written narrative of the revision(s), including a description of the logic for rescheduling the work, methods of maintaining adherence to intermediate milestones and other specific dates and the reasons the revisions are necessary. If the requested changes are acceptable to the Judicial Council, they will be incorporated into the contract schedule in the next reporting period.
- D. Schedule revisions shall be submitted at least seven (7) days prior to the date of submission of update information. The Judicial Council will have seven (7) days to review the revisions.

1.08 CONTRACT SCHEDULE REPORTS

- A. Contractor shall submit the following reports for the proposed Contract Schedule, Contract Schedule, Contract Schedule updates, Contract Schedule revisions and recovery schedules:
- B. A Schedule Logic Report listing the activities, their early/late and actual start and finish dates, duration, float and the logic relationship of activities sorted by early start.
- C. A Cost Report listing each activity and its associated cost, percentage of work accomplished, earned value to date, previous payments, and amount earned for the update period.
- D. Bar chart showing status of activities.
- E. A narrative report with the updated progress analysis, which shall include a description of problem areas, current and anticipated, delaying factors and their impact, an explanation of corrective action taken and proposed revisions for recovery. Narrative report on proposed contract schedule will outline the Contractor's overall plan, strategy, crew movement and utilization and other considerations in developing the schedule.
- F. Network Plots presenting time scaled network diagram showing activities and their relationships.
- G. Cash Flow report calculated by early start, late start and indicating actual progress.
- H. Manpower histogram, calculated by early start and late start.
- I. In addition to the above reports, Judicial Council may request, from month-to-month, any two of the following reports:
 1. Total float from least to most.

2. Activities by early start.
 3. Activities by late start.
 4. Activities grouped by subcontractors or selected trades.
 5. Activities with scheduled early start dates in a given time frame (i.e. 30 or 60 day outlook).
- J. The Contractor shall provide four (4) copies of all reports and network plots. The reports shall include one (1) reproducible and three (3) copies.
- K. The Contractor shall provide 3 1/2" MS-DOS formatted floppy disks containing all the schedule files.

1.09 TIME EXTENSIONS

- A. The Contractor shall submit a network window for all time extension requests, showing the impact of the delay(s) on the contract schedule.
- B. Float or Slack Time is the amount of time between the earliest start date and the late start date or between the earliest finish date and the latest finish date of activities of the Contract Schedule. No time extensions or delay costs will be allowed for delays caused by the Judicial Council, on paths or activities containing float time, providing such delay does not exceed the total float time, per the latest update of the Contract Schedule.
- C. The Judicial Council shall have no obligation to consider any time extension request unless the requirements of the Contract Documents are complied with; the Judicial Council shall not be responsible or liable to the Contractor for any constructive acceleration due to failure of the to grant time extensions under the Contract Documents, should the Contractor fail to substantially comply with the submission requirements and the justification requirements of the Contract Documents for time extension requests. The Contractor's failure to perform in accordance with the contract schedule shall not be excused because the Contractor has submitted time extension requests, until and unless such requests are approved by the Judicial Council.

1.10 SHORT INTERVAL SCHEDULE

- A. Short Interval Scheduling (515) shall be used throughout the duration of the project, and beginning from the effective date of the Notice to Proceed, and until the final completion of the project.
- B. The interval shall be a three week period¹ which shall include actual work progress during the previous week previous and planned progress for the next two weeks.
- C. It shall contain sufficient detail to evaluate daily milestones and shall identify/tie into the monthly updated Contract Schedule.
- D. Short Interval Schedule shall be subject to the approval of the Judicial Council's Representative.
- E. Eight copies of the Short Interval Schedule shall be submitted to the Judicial Council each week, on the day prior to the regular day of the week for project progress meeting.
- F. Short interval Schedules. Will be distributed reviewed and discussed at the project progress meetings.

1.11 RECOVERY SCHEDULE

- A. If the contract schedule falls 14 days behind schedule on milestone dates or completion dates, the Contractor shall be required to prepare and submit a Recovery Schedule, form and detail appropriate to the need, to explain and display how they intend to reschedule those activities to regain compliance with the contract schedule during the immediate subsequent pay period.
- B. The recovery schedule, upon acceptance by the Judicial Council's Representative, shall be incorporated into the Contract Schedule by the Contractor.

1.12 PAYMENTS WITHHELD

- A. Progress Payments shall be withheld in whole or in part should the Contractor fail to comply with the requirements of this section. Submittal and acceptance of the project schedule in

compliance with all Contract Document requirements shall be a condition precedent to the first progress payment

END OF SECTION

**SECTION 01 33 00
SUBMITTALS**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section specifies the administrative and procedural requirements for submittals and substitution submittals required for the performance of the Contracted Work as specified in the GENERAL CONDITIONS of these Specifications, including:
 - 1. Shop Drawings and Manufacturer's Data.
 - 2. References to Trade Names (as applicable to substitutions).
 - 3. Samples and Mock-ups.

1.03 WORK NOT INCLUDED:

- A. Architect will not review unrelated or irrelevant submittals.
- B. The Contractor may be required to provide supplemental drawings, setting diagrams and similar information necessary for proper coordination of Contracted Work. Such data shall remain between the Contractor and Contractor's Subcontractor and will not be reviewed by the Architect unless specifically called for in the Contract Documents.

1.04 CONTRACTOR'S SUBMITTALS

- A. Submittals required for performance of Contracted Work, include but not limited to the following:
 - 1. Schedule of Values (Cost Breakdown)
 - 2. Construction Schedule
 - 3. Submittal Schedule
 - 4. Daily Construction Reports
 - 5. Shop Drawings and Manufacturer's Data
 - 6. Samples and Mock-ups
 - 7. Certificate of Compliance
 - 8. Substitutions
 - 9. Administrative Submittals:
 - a. Permits
 - b. Application for Payments
 - c. Performance and Payment Bonds
 - d. Insurance Certificates
 - e. Complete List of Subcontractors
 - 10. Quantity of Submittals: The required number of submittals submitted for initial review will be the amount required to provide at least one submittal copy per concerned party. Usually a minimum of 6 copies of the submittal will be required.

1.05 SUBMITTAL PROCEDURES

- A. General: Conform to the provisions related to SHOP DRAWINGS AND MANUFACTURER'S DATA in the GENERAL CONDITIONS of this Project and as may be specifically directed by the Project Engineer.
- B. Preparation and processing of submittals shall be coordinated with Contracted Work operations which includes fabrication, purchasing and delivery of work items so as not to delay Contracted Work operations.
- C. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until such other submittals are received.
- D. Coordination and Submittals:
 - 1. Carefully review and coordinate all aspects of each item being submitted.

2. Verify that all such submittal items conform to the Specification requirements noted in the Technical Specification Sections.
 3. Submittal Identification: Affix to each submittal, the Prime Contractor's signature certifying that required coordination has been performed and include on an attached label for processing and recording action taken, noting the following:
 - a. Name of the Project
 - b. Date of the submittal
 - c. Name and address of Consultant
 - d. Name and address of the Prime Contractor
 - e. Name and address of the Subcontractor(s)
 - f. Name and address of the Supplier
 - g. Name and address of the Manufacturer
 - h. Reference to Specification Section Number and Title
 - i. Reference to Drawing Sheet Number and detail(s)
 - j. Numerically identify each submittal. Each re-submittal of the same item shall be a decimal number of the original, i.e. #11, #11.1, #11.2, etc.
- E. Transmittal of Submittals: Appropriately package and label each submittal for transmittal and handling from Contractor to the Project Manager using a preprinted standard transmittal form verifying that the Contractor has met the following requirements. As approved by Architect and Judicial Council, submittals may be electronic. Contractor shall track status of submittals and report weekly.
- F. Conformance in all respect to the Contract Document requirements.
- G. Has reviewed and coordinated all aspects of each submitted item relative to manufacturer's product data, specifications, etc.
- H. That all deviations and/or questions have been approved and/or answered in writing by the Architect and that the approval of such submittals and/or deviations does not relieve the Contractor of responsibility caused by such deviation(s).
- I. Contractor is not relieved from responsibilities for errors and omissions in the required submittals as revealed resulting from the Construction Project Manager and Architect's review of such submittals.
- J. It is considered reasonable that the Contractor shall make a complete and acceptable submittal to the Architect by the second submission of a submittal item. The Judicial Council reserves the right to withhold moneys due the Contractor to cover additional costs of the Architect's review beyond the second submittal. On the third Contractor's re-submittal, Contractor will be charged \$100 per hour for Architect's review.
- K. Submittal of Contractor's Construction Schedule:
 1. Comply with provisions of "Progress Schedule and Reports" in the GENERAL CONDITIONS.
 2. Coordinate the Contractor's submittal of construction schedule with schedule of values, and lists of subcontracts.

1.06 MISCELLANEOUS SUBMITTALS

- A. List of Subcontractors and Sub-Subcontractors at the site.
- B. Approximate count of personnel at the site.
- C. High and low temperatures, general weather conditions.
- D. Accidents and unusual events.
- E. Meetings and significant decisions.
- F. Stoppages, delays, shortage, losses.
- G. Meter readings and similar recordings.
- H. Emergency procedures.

- I. Orders and requests of governing authorities.
- J. Change Orders received, implemented.
- K. Substantial compilations authorized.
- L. Comply with pertinent provisions of the GENERAL CONDITIONS as applicable to the following:
 - 1. Record Drawings.
 - 2. Manufacturer's Reference Data (operating manuals) etc.
 - 3. Qualification of Contractor.
 - 4. Warranty and Guarantee

END OF SECTION

SECTION 01 40 00
QUALITY REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements for quality control services.
- B. Quality control services include inspections and tests and related actions including reports, performed by independent agencies, governing authorities, and the Contractor. Quality control services do not include Contract enforcement activities performed by the Judicial Council's representative, the Architect, or the Judicial Council's activities as an Authority Having Jurisdiction.
- C. Inspection and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.
- D. Requirements of this Section relate to customized fabrication and installation procedures, not production of standard products.
- E. Specific quality control requirements for individual construction activities are specified in the Sections that specify those activities. Those requirements, including inspections and tests, cover production of standard products as well as customized fabrication and installation procedures.
- F. Inspections, tests and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.

1.03 SELECTION OF TESTING AGENCY

- A. Judicial Council will select and employ an approved testing laboratory or inspection agency to perform specified services.
- B. Employment of Testing Laboratory shall in no way relieve Contractor of his obligation to perform work in accord with Contract.

1.04 PAYMENT

- A. Judicial Council will pay for Quality Control services.

1.05 DEFICIENCIES

- A. Cost of tests or inspections due to the following will be reimbursed to the Judicial Council by deductive change order.
- B. Re-testing because of failure of initial samples.
- C. Additional costs due to overtime work or extra shifts work because of improper scheduling of work or of delivery of materials by Contractor.
- D. Failure to properly notify laboratory.
- E. Changes in sources, lots or suppliers of materials after original tests.
- F. Changes in methods or materials of construction requested by Contractor that required testing, inspection, or other related services in excess of that required by original design.
- G. Overtime or extra shift work requiring overtime work by Judicial Council's Inspector.

1.06 TESTS AND INSPECTIONS

- A. An approved Inspector will be assigned to this project. All testing and inspection will be coordinated through the Inspector as required by CCR Title 24.

- B. Selection of the material required to be tested shall be by the laboratory or the Judicial Councils representative, Inspector and not by the Contractor.
- C. The Contractor shall notify the Inspector a sufficient time in advance of the manufacture of material to be supplied by him under the Contract Documents, which must, by terms of the Contract, be tested in order that the Judicial Council may arrange for the testing of same at the source of supply.
- D. Any material shipped by the Contractor from the source of supply prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said representative that such testing and inspection will not be required shall not be incorporated in the job.

1.07 TESTING AGENCY SERVICES

- A. Cooperate with Architect and Contractor; provide qualified personnel promptly on notice.
- B. Perform specified inspections, sampling and testing of materials and methods of construction.
- C. Comply with specified standards; ASTM, State Fire Marshal, UL or other recognized authorities, and as specified.
- D. Ascertain compliance with requirements of Contract Documents.
- E. Promptly notify Architect and Contractor, of irregularities or deficiencies of work which are observed during performance of services.
- F. Perform additional services as required by the Judicial Council or inspector.
- G. Submittals: Promptly submit copies of reports of inspections and tests, certifications per applicable sections of the specification.
- H. One copy of all test reports shall be forwarded to Judicial Council by the testing agency, as required. Such reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Samples taken but not tested shall also be reported. Records of special sampling operations as required shall also be reported. The reports shall show that the material or materials were sampled and tested with the approved specifications. Test reports shall show the specified design strength. They shall also state definitely whether or not the material or materials tested comply with requirements.
- I. Verification of Test Reports: Each testing agency shall submit to the Judicial Council a verified report in duplicate covering all of the tests are required to be made by that agency during the progress of the project. Such report shall be furnished each time that work on the project is suspended, covering the tests up to that time, and at the completion of the project, covering all tests.
- J. Submit one copy of all test reports to:
 - 1. Judicial Council
 - 2. Architect
 - 3. Structural Engineer
 - 4. Contractor
 - 5. Construction Project Manager
- K. Testing Agency is not authorized to:
 - 1. Release, revoke, alter, or enlarge on, requirements of Contract Documents.
 - 2. Perform any duties of the Contractor.
 - a. All tests and inspection required by Judicial Council shall be conducted in accordance with requirements of the CCR Title 24.
- L. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to:
 - 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 the inspection or tests.

6. Designation of the Work and test method.
7. Identification of product and Specification Section.
8. Complete inspection or test data.
9. Test results and an interpretation of test results.
10. Ambient conditions at the time of sample taking and testing.
11. Comments or professional opinion as to whether inspected or tested Work complies with Contract Document requirements.
12. Name and signature of laboratory inspector.
13. Recommendations on re-testing.
14. List of all parties that were furnished a copy of the report.

1.08 INSPECTION BY THE JUDICIAL COUNCIL

- A. The Judicial Council and his representative shall at all times have access for the purpose of inspection to all parts of the work and to the shops wherein the work is in preparation, and the Contractor shall at all times maintain facilities and provide access for such inspection.
- B. The Judicial Council, Inspector and the Architect shall have the right to reject materials and workmanship which are defective, or to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the premises without charge to the Judicial Council. If the Contractor does not correct such rejected work within a reasonable time, fixed by written notice, the Judicial Council may correct same and charge the expense to the Contractor.
- C. Should it be considered necessary or advisable by the Judicial Council at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out the same, the Contractor shall on request promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any respect due to fault of the Contractor or subcontractor, Contractor shall defray all expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the additional cost of labor and material necessarily involved in the examination and replacement shall be allowed the Contractor.

1.09 CONTRACTORS RESPONSIBILITIES

- A. Cooperate with laboratory personnel, provide access to work, to manufacturer=s operations.
- B. Provide to laboratory, selected preliminary representative samples of materials to be tested, in required quantities.
- C. Furnish casual labor and facilities.
- D. To provide access to work to be tested.
- E. To obtain and handle samples at the site.
- F. To facilitate inspections and tests.
- G. Notify inspector sufficiently in advance of operations to allow for his assignment of personnel and scheduling of tests.

END OF SECTION

SECTION 01 42 16
GENERAL DEFINITIONS AND REFERENCES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings, Specifications and provisions of Construction Contract, including General, Special and Supplementary Conditions and other General Requirements.

1.02 RELATED SECTIONS

- A. Other Division 01 Specification Sections.

1.03 DEFINITIONS

- A. General: Basic contract definitions are included in Conditions of Contract.
 - 1. "Indicated" refers to graphic representations, notes, or schedules on Drawings; or to other paragraphs or schedules in Specifications and similar requirements in Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" have similar meaning, and may be combined with phrases such as "on drawings" to help user locate reference.
 - 2. "Directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed, requested, authorized, selected, approved, required, and permitted by Program Manager, Design Consultant, Judicial Council as the context of Contract Documents indicates.
 - 3. "Furnish" means to supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
 - 4. "Install" describes operations at Project site including unloading, temporary storage, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
 - 5. "Provide" means to furnish and install, complete and ready for intended use.
 - 6. "Installer": Contractor or another entity engaged by Contractor, either as employee or Subcontractor, to perform particular construction activity, including installation, erection, application, or similar operations. Installers are required to be experienced in operations they are engaged to perform.
 - a. "Experienced," when used with term "installer," means having successfully completed minimum of five previous projects similar in size and scope to this Project, except as otherwise indicated; being familiar with requirements indicated; and having complied with requirements of authorities having jurisdiction.
 - b. Trades: Using term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespersons of corresponding generic name.
 - c. Assigning Specialists: Certain Sections of Specifications may require that specific construction activities be performed by specialists who are recognized experts in those operations. Where so required, specialists must be engaged for those activities, and their assignments are requirements over which Contractor has no option. However, ultimate responsibility for fulfilling contract requirements remains with Contractor.
 - 7. "Testing Agencies": Testing agency is independent entity engaged to perform specific inspections or tests, either at Project site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.
 - 8. "Field Engineer": Engineering service provided and paid by contractor for all engineering required to perform the Work, including but not limited to surveying and layout, engineering for temporary support structures, and engineering for temporary utility systems.

1.04 SPECIFICATION FORMAT AND CONTENT EXPLANATION

- A. Specifications are organized into Divisions and Sections based on 16-division format and CSI/CSC's "MasterFormat" numbering system.
- B. Specifications use certain conventions for style of language and intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Abbreviated Language: Language used in Specifications and other Contract Documents is abbreviated. Interpret singular words as plural and plural words as singular where applicable, as context of Contract Documents indicates.
 - a. Words "shall," "shall be," or "shall comply with," depending on context, are implied where colon (:) is used within sentence or phrase.

1.05 INDUSTRY STANDARDS

- A. Applicability of Standards: Except as otherwise required by the Contract Documents, all Work shall be performed in accordance with recognized construction industry standards.
- B. Publication Dates: Wherever the Contract Documents refer to a published standard, it means, unless otherwise specifically stated, the standard as published on the Date for Receipt of Bids.
- C. Where compliance with two (2) or more standards is specified and standards establish different or conflicting requirements for minimum quantities or quality levels, comply with most stringent requirement. In all cases, refer such conflicts and uncertainties to Design Consultant and Judicial Council Project Manager for clarification before proceeding with the Work affected thereby.
 - 1. Quantity or quality level shown or specified represents the minimum standard to be provided or performed. Actual installation may comply exactly with minimum quantity or quality specified, or it may exceed minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for context of requirements. Refer uncertainties to Design Consultant and Judicial Council Project Manager for clarification before proceeding with the Work affected thereby.
- D. Copies of Standards: Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with Contract Documents.
 - 1. Where copies of standards are needed to perform required construction activity, Contractor shall obtain copies directly from publication source and make them available on request.
- E. Abbreviations and Names: Trade association and government agency names and titles of general standards are frequently abbreviated. Where abbreviations and acronyms are used in Specifications or other Contract Documents, they mean recognized name of trade association, standards-generating organization, Governmental Authorities, or other entity applicable to context of text provision. Refer to Gale Research's "Encyclopedia of Associations" or Columbia Books' "National Trade & Professional Associations of the U.S.," which are available in most libraries for abbreviations not defined in Contract Documents.

1.06 SUBMITTALS

- A. Permits, Licenses, and Certificates: For Judicial Council'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 Work

PART 2 - PRODUCTS - (NOT APPLICABLE)

PART 3 - EXECUTION - (NOT APPLICABLE)

END OF SECTION

SECTION 01 45 29
TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.01 DESCRIPTION:

- A. This section specifies materials testing activities and inspection services required during project construction to be provided by a Testing Laboratory retained and paid for by Judicial Council.

1.02 APPLICABLE PUBLICATIONS:

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.
- B. American Association of State Highway and Transportation Officials (AASHTO):
 - 1. T27-06 Sieve Analysis of Fine and Coarse Aggregates
 - 2. T96-02 (R2006) Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
 - 3. T191-02(R2006) Density of Soil In-Place by the Sand-Cone Method
- C. American Concrete Institute (ACI):
 - 1. 506.4R-94 (R2004) Guide for the Evaluation of Shotcrete
- D. American Society for Testing and Materials (ASTM):
 - 1. A325-06 Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength
 - 2. A370-07 Definitions for Mechanical Testing of Steel Products
 - 3. A416/A416M-06 Steel Strand, Uncoated Seven-Wire for Prestressed Concrete
 - 4. A490-06 Heat Treated Steel Structural Bolts, 150 ksi Minimum Tensile Strength
 - 5. C31/C31M-06 Making and Curing Concrete Test Specimens in the Field
 - 6. C33-03 Concrete Aggregates
 - 7. C39/C39M-05 Compressive Strength of Cylindrical Concrete Specimens
 - 8. C109/C109M-05 Compressive Strength of Hydraulic Cement Mortars
 - 9. C138-07 Unit Weight, Yield, and Air Content (Gravimetric) of Concrete
 - 10. C140-07 Sampling and Testing Concrete Masonry Units and Related Units
 - 11. C143/C143M-05 Slump of Hydraulic Cement Concrete
 - 12. C172-07 Sampling Freshly Mixed Concrete
 - 13. C173-07 Air Content of freshly Mixed Concrete by the Volumetric Method
 - 14. C330-05 Lightweight Aggregates for Structural Concrete
 - 15. C567-05 Density Structural Lightweight Concrete
 - 16. C780-07 Pre-construction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry
 - 17. C1019-08 Sampling and Testing Grout
 - 18. C1064/C1064M-05 Freshly Mixed Portland Cement Concrete
 - 19. C1077-06 Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation
 - 20. C1314-07 Compressive Strength of Masonry Prisms
 - 21. D698-07 Laboratory Compaction Characteristics of Soil Using Standard Effort
 - 22. D1143-07 Piles Under Static Axial Compressive Load
 - 23. D1188-07 Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Paraffin-Coated Specimens
 - 24. D1556-07 Density and Unit Weight of Soil in Place by the Sand-Cone Method
 - 25. D1557-07 Laboratory Compaction Characteristics of Soil Using Modified Effort
 - 26. D2166-06 Unconfined Compressive Strength of Cohesive Soil
 - 27. D2167-94(R2001) Density and Unit Weight of Soil in Place by the Rubber Balloon Method
 - 28. D2216-05 Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
 - 29. D2922-05 Density of soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)

30. D2974-07 Moisture, Ash, and Organic Matter of Peat and Other Organic Soils
 31. D3666-(2002) Minimum Requirements for Agencies Testing and Inspection
Bituminous Paving Materials
 32. D3740-07 Minimum Requirements for Agencies Engaged in the Testing and Inspecting
Road and Paving Material
 33. E94-04 Radiographic Testing
 34. E164-03 Ultrasonic Contact Examination of Weldments
 35. E329-07 Agencies Engaged in Construction Inspection and/or Testing
 36. E543-06 Agencies Performing Non-Destructive Testing
 37. E605-93(R2006) Thickness and Density of Sprayed Fire-Resistive Material (SFRM)
Applied to Structural Members
 38. E709-(2001) Guide for Magnetic Particle Examination
 39. E1155-96(R2008) Determining FF Floor Flatness and FL Floor Levelness Numbers
- E. American Welding Society (AWS):
1. D1.1-07 Structural Welding Code-Steel

1.03 REQUIREMENTS:

- A. Accreditation Requirements: Construction materials testing laboratories must be accredited by a laboratory accreditation authority and will be required to submit a copy of the Certificate of Accreditation and Scope of Accreditation. The laboratory's scope of accreditation must include the appropriate ASTM standards (i.e.; E 329, C 1077, D 3666, D3740, A 880, E 543) listed in the technical sections of the specifications. Laboratories engaged in Hazardous Materials Testing shall meet the requirements of OSHA and EPA. The policy applies to the specific laboratory performing the actual testing, not just the "Corporate Office."
- B. Inspection and Testing: Testing laboratory shall inspect materials and workmanship and perform tests described herein and additional tests requested by Resident Engineer. When it appears materials furnished, or work performed by Contractor fail to meet construction contract requirements, Testing Laboratory shall direct attention of Resident Engineer to such failure.
- C. Written Reports: Testing laboratory shall submit test reports to Resident Engineer, Contractor, unless other arrangements are agreed to in writing by the Resident Engineer. Submit reports of tests that fail to meet construction contract requirements on colored paper.
- D. Verbal Reports: Give verbal notification to Resident Engineer immediately of any irregularity.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 SITE WORK CONCRETE:

- A. Test site work concrete including materials for concrete as required in Article CONCRETE of this section

3.02 CONCRETE:

- A. Batch Plant Inspection and Materials Testing:
 1. Perform continuous batch plant inspection until concrete quality is established to satisfaction of Resident Engineer with concurrence of Contracting Officer and perform periodic inspections thereafter as determined by Resident Engineer.
 2. Periodically inspect and test batch proportioning equipment for accuracy and report deficiencies to Resident Engineer.
 3. Sample and test mix ingredients as necessary to insure compliance with specifications.
 4. Sample and test aggregates daily and as necessary for moisture content. Test the dry rodded weight of the coarse aggregate whenever a sieve analysis is made, and when it appears there has been a change in the aggregate.
 5. Certify, in duplicate, ingredients and proportions and amounts of ingredients in concrete conform to approved trial mixes. When concrete is batched or mixed off immediate building site, certify (by signing, initialing or stamping thereon) on delivery slips (duplicate)

that ingredients in truck-load mixes conform to proportions of aggregate weight, cement factor, and water-cement ratio of approved trial mixes.

B. Field Inspection and Materials Testing:

1. Provide a technician at site of placement at all times to perform concrete sampling and testing.
2. Review the delivery tickets of the ready-mix concrete trucks arriving on-site. Notify the Contractor if the concrete cannot be placed within the specified time limits or if the type of concrete delivered is incorrect. Reject any loads that do not comply with the Specification requirements. Rejected loads are to be removed from the site at the Contractor's expense. Any rejected concrete that is placed will be subject to removal.
3. Take concrete samples at point of placement in accordance with ASTM C172. Mold and cure compression test cylinders in accordance with ASTM C31. Make at least three cylinders for each 40 m³ (50 cubic yards) or less of each concrete type, and at least three cylinders for any one day's pour for each concrete type. Label each cylinder with an identification number. Resident Engineer may require additional cylinders to be molded and cured under job conditions.
4. Perform slump tests in accordance with ASTM C143. Test the first truck each day, and every time test cylinders are made. Test pumped concrete at the hopper and at the discharge end of the hose at the beginning of each day's pumping operations to determine change in slump.
5. Determine the air content of concrete per ASTM C173. For concrete required to be air-entrained, test the first truck and every 20 m³ (25 cubic yards) thereafter each day. For concrete not required to be air-entrained, test every 80 m³ (100 cubic yards) at random. For pumped concrete, initially test concrete at both the hopper and the discharge end of the hose to determine change in air content.
6. If slump or air content fall outside specified limits, make another test immediately from another portion of same batch.
7. Perform unit weight tests in compliance with ASTM C138 for normal weight concrete and ASTM C567 for lightweight concrete. Test the first truck and each time cylinders are made.
8. Notify laboratory technician at batch plant of mix irregularities and request materials and proportioning check.
9. Verify that specified mixing has been accomplished.
10. Environmental Conditions: Determine the temperature per ASTM C1064 for each truckload of concrete during hot weather and cold weather concreting operations:
 - a. When ambient air temperature falls below 4.4 degrees C (40 degrees F), record maximum and minimum air temperatures in each 24 hour period; record air temperature inside protective enclosure; record minimum temperature of surface of hardened concrete.
 - b. When ambient air temperature rises above 29.4 degrees C (85 degrees F), record maximum and minimum air temperature in each 24 hour period; record minimum relative humidity; record maximum wind velocity; record maximum temperature of surface of hardened concrete.
11. Inspect the reinforcing steel placement, including bar size, bar spacing, top and bottom concrete cover, proper tie into the chairs, and grade of steel prior to concrete placement. Submit detailed report of observations.
12. Observe conveying, placement, and consolidation of concrete for conformance to specifications.
13. Observe condition of formed surfaces upon removal of formwork prior to repair of surface defects and observe repair of surface defects.
14. Observe curing procedures for conformance with specifications, record dates of concrete placement, start of preliminary curing, start of final curing, end of curing period.
15. Observe preparations for placement of concrete:
 - a. Inspect handling, conveying, and placing equipment, inspect vibrating and compaction equipment.

- b. Inspect preparation of construction, expansion, and isolation joints.
- 16. Observe preparations for protection from hot weather, cold weather, sun, and rain, and preparations for curing.
- 17. Observe concrete mixing:
 - a. Monitor and record amount of water added at project site.
 - b. Observe minimum and maximum mixing times.
- 18. Measure concrete flatwork for levelness and flatness as follows:
 - a. Perform Floor Tolerance Measurements FF and FL in accordance with ASTM E1155. Calculate the actual overall F- numbers using the inferior/superior area method.
 - b. Perform all floor tolerance measurements within 48 hours after slab installation and prior to removal of shoring and formwork.
 - c. Provide the Contractor and the Resident Engineer with the results of all profile tests, including a running tabulation of the overall FF and FL values for all slabs installed to date, within 72 hours after each slab installation.
- 19. Other inspections:
 - a. Grouting under base plates.
 - b. Grouting anchor bolts and reinforcing steel in hardened concrete.
- C. Laboratory Tests of Field Samples:
 - 1. Test compression test cylinders for strength in accordance with ASTM C39. For each test series, test one cylinder at 7 days and one cylinder at 28 days. Use remaining cylinder as a spare tested as directed by Resident Engineer. Compile laboratory test reports as follows: Compressive strength test shall be result of one cylinder, except when one cylinder shows evidence of improper sampling, molding or testing, in which case it shall be discarded and strength of spare cylinder shall be used.
 - 2. Make weight tests of hardened lightweight structural concrete in accordance with ASTM C567.
 - 3. Furnish certified compression test reports (duplicate) to Resident Engineer. In test report, indicate the following information:
 - a. Cylinder identification number and date cast.
 - b. Specific location at which test samples were taken.
 - c. Type of concrete, slump, and percent air.
 - d. Compressive strength of concrete in MPa (psi).
 - e. Weight of lightweight structural concrete in kg/m³ (pounds per cubic feet).
 - f. Weather conditions during placing.
 - g. Temperature of concrete in each test cylinder when test cylinder was molded.
 - h. Maximum and minimum ambient temperature during placing.
 - i. Ambient temperature when concrete sample in test cylinder was taken.
 - j. Date delivered to laboratory and date tested.

3.03 REINFORCEMENT:

- A. Testing lab shall review mill test reports furnished by Contractor.
- B. Make one tensile and one bend test in accordance with ASTM A370 from each pair of samples obtained.
- C. Written report shall include, in addition to test results, heat number, manufacturer, type and grade of steel, and bar size.
- D. Perform tension tests of mechanical and welded splices in accordance with ASTM A370.

3.04 STRUCTURAL STEEL:

- A. General: Provide shop and field inspection and testing services to certify structural steel work is done in accordance with contract documents. Welding shall conform to AWS D1.1 Structural Welding Code.
- B. Prefabrication Inspection:
 - 1. Review design and shop detail drawings for size, length, type and location of all welds to be made.

2. Approve welding procedure qualifications either by pre-qualification or by witnessing qualifications tests.
 3. Approve welder qualifications by certification or retesting.
 4. Approve procedure for control of distortion and shrinkage stresses.
 5. Approve procedures for welding in accordance with applicable sections of AWS D1.1.
- C. Fabrication and Erection:
1. Weld Inspection:
 - a. Inspect welding equipment for capacity, maintenance and working condition.
 - b. Verify specified electrodes and handling and storage of electrodes in accordance with AWS D1.1.
 - c. Inspect preparation and assembly of materials to be welded for conformance with AWS D1.1.
 - d. Inspect preheating and interpass temperatures for conformance with AWS D1.1.
 - e. Measure 25 percent of fillet welds.
 - f. Welding Magnetic Particle Testing: Test in accordance with ASTM E709 for a minimum of:
 - 1) 20 percent of all shear plate fillet welds at random, final pass only.
 - 2) 20 percent of all continuity plate and bracing gusset plate fillet welds, at random, final pass only.
 - 3) 100 percent of tension member fillet welds (i.e., hanger connection plates and other similar connections) for root and final passes.
 - 4) 20 percent of length of built-up column member partial penetration and fillet welds at random for root and final passes.
 - 5) 100 percent of length of built-up girder member partial penetration and fillet welds for root and final passes.
 2. Welding Ultrasonic Testing: Test in accordance with ASTM E164 and AWS D1.1 for 100 percent of all full penetration welds, braced and moment frame column splices, and a minimum of 20 percent of all other partial penetration column splices, at random.
 3. Verify that correction of rejected welds are made in accordance with AWS D1.1.
 4. Testing and inspection do not relieve the Contractor of the responsibility for providing materials and fabrication procedures in compliance with the specified requirements.
- D. Submit inspection reports, record of welders and their certification, and identification, and instances of noncompliance to Resident Engineer.

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 RELATED WORK

- A. Provide temporary construction facilities as indicated within this specification section.

1.02 FIRST AID

- A. The Contractor shall provide and maintain first aid facilities for the use of employees and others engaged in or related to the Work. These shall comply with all applicable laws, ordinances, and regulations.

1.03 SANITARY FACILITIES

- A. The Contractor shall provide and maintain enclosed toilets for the use of employees and others engaged in or related to the Work. These accommodations shall be serviced and maintained in a neat and sanitary condition. They shall also comply with all applicable laws ordinances and regulations pertaining to public health and sanitation. Toilets shall be in a location approved by the Judicial Council and connected to existing sewers when feasible or may be of chemical type. There shall be a minimum of one toilet for each multiple of 20 Contractor's employees (including sub-contractors), or fractional part thereof, working at job site. Provide separate toilets for male and female employees. The Contractor shall not use existing facility toilets. Costs for all sanitary or sanitary-related service(s) shall be paid by the Contractor.
- B. Limited use of Judicial Council's facilities by construction personnel will be permitted under conditions promulgated by the Judicial Council.
- C. The Contractor shall remove all sanitary facilities from the site at the completion of the Work.

1.04 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Except for use of permanent fire protection as soon as available, do not change from use of temporary security and protection facilities to permanent facilities until Substantial Completion.
 - 1. Fire Extinguishers: Provide hand-carried portable UL-rated class "A" fire extinguishers for temporary offices and similar spaces. In other locations provide hand-carried, portable, UL-rated, class "ABC" dry chemical extinguishers. Locate fire extinguishers where effective for the intended purpose, as may be required by the fire martial.
 - a. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities, stairways and other access routes for fighting fires. Prohibit smoking in hazardous fire exposure areas.
 - b. Store combustible materials in containers in fire-safe locations.
 - c. Provide supervision of welding operations, combustion type temporary heating units, and sources of fire ignition.
 - 2. Barricades, Warning Signs and Lights: Comply with standards and code requirements for erection of barricades. Paint appropriate warning signs to inform personnel and the public of the hazard being protected against. Where needed provide lighting, including flashing lights.
 - 3. Enclosure Fence: Prior to commencement of Work, provide an enclosure fence in accordance with the General Conditions, and With lockable entrance gates to the limits of construction as indicated on the drawings, and/or as follows:
 - a. Provide open-mesh, chain-link fencing with posts set in a compacted mixture of gravel and earth.
 - b. Provide (2) pedestrian gates for the convenience of the Judicial Council.
 - c. Provide a minimum of (2) vehicular entrance gates.
 - d. Provide double locks on all gates. Deliver the keys for one lock on each gate to Judicial Council Project Manager for delivery for use by Campus Security Police.
 - 4. Security Enclosure and Lockup: Install temporary enclosure of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism and theft. Where materials and equipment must be stored, provide a secure lockup.

1.05 UTILITIES

- A. Contractor shall arrange for and provide all utility services necessary to Work, including electrical current for power and light, and potable water supplies. Contractor shall provide, maintain and remove upon completion of Work, all temporary connection lines to sources of supplies, and temporary meters and accessories as needed.
- B. Contractor shall bear all expenses involved in providing and connecting all temporary utility services. The Judicial Council will assume payment for utility service charges at the time the various permanent meters are set.

1.06 STORAGE OF MATERIALS

- A. Storage of materials shall be only within areas designated by the Judicial Council.
- B. All items furnished by the Contractor shall be insured by the Contractor.
- C. Contractor shall provide and maintain on the job site, where directed, a watertight storage structures for all materials which might be damaged by weather, including storage facilities for concrete test samples or other material samples required for work.

1.07 PARKING

- A. Contractor may utilize construction site to provide parking subject to the approval of the Project Construction Manager.
 - 1. Water sprinkle unpaved parking areas, access roads, and construction site daily and as often as necessary to control dust.

END OF SECTION

SECTION 01 52 10
SITE STANDARDS

PART 1 GENERAL

1.01 REQUIREMENTS

- A. Performance of the Contract shall be under the governance of the Site Standards. Pursuant to local norms working hours shall be 7:00 AM to 5:00 PM Monday through Friday, unless permitted in writing otherwise. Under special permission, Saturday and Sunday after 8:00AM until 5:00PM [week-end work is by permission only]. Contractors generating any construction noise are restricted to the following days and times:
 - 1. NO construction noise allowed on Sundays
 - 2. Monday through Friday, construction noise is allowed between 7:00 am and 9:00 pm
 - 3. Saturdays and National Holidays, construction noise is allowed between 8:00 am and 6:00.
- B. Smoking is not allowed within any structure, regardless of whether there is a roof incorporated, in the structure. Failure to observe may lead to termination.
- C. Consumption of any alcoholic beverages on the premises is not tolerable. Failure to observe this may lead to termination.
- D. Possession or use of any controlled substance is not allowed within 50 yard of the site. Failure to observe this will lead to termination of the guilty person.
- E. If anyone is deemed to be under the effect of any substance that can be construed, by the Superintendent or Project Manager, as adversely, negatively or unsafely impacting work performance, the person will be barred from the construction site. All personnel on, or involved with the Site or Project MAY be subject to drug urine screening, particularly if the party is involved in an accident or incident. The enforcement of these provisions shall be the responsibility of the Contractor, the Judicial Council their agents.
- F. Catering Truck will be allowed to serve employees near the premises until such time as any debris, waste food, or trash is left present on the site. Thereafter, the catering truck will not be allowed on the premises or inside the fenced areas.
- G. It is the responsibility of every subcontractor to maintain, police, and pickup trash in his operating areas EVERY DAY. Failure to fulfill this will force the Contractor to undertake this and charging of the responsible parties. There will be no forewarning!
- H. All applicable CALOSHA requirements will be fully enforced on this site!
- I. Anyone who elects to urinate or otherwise relieve themselves on the premises not in the appropriate sanitary facility, i.e. restroom, outhouse will be terminated immediately! No one will be allowed the use of the Judicial Council's restrooms
- J. All Subcontractors, vendors, and personnel are subject to security rules, for the site, as dictated by the Judicial Council.
- K. No One NOT certified on equipment, on the premises, will be allowed to operate Said equipment.
- L. Under No circumstances will any firearms or any other offensive weapon as deemed by the Project Manager be allowed on the Site or Premises. Failure to observe this rule will cause termination of the offending person!
- M. All personnel wishing access to the Project shall in advance check in at the Project Site Office.
- N. All personnel working on the Project are required to sign in each day. All subcontractors and vendors shall submit to the Superintendent a daily Personnel Sign-In sheet as well as a daily report.
- O. Site Containers: If the Sub contractor or Vendor requires a container (i.e. for tools, equipment or materials), said Subcontractor or vendor shall provide, in writing, such a request with a graphic presentation of the unit, utility hook-up(if required), schedule of delivery and removal.

The Judicial Councils Representative may authorize, in writing, terms of the placement and duration on site. The Judicial Council will not be in any way liable for theft, vandalism or damage to any property on the site.

- P. Site Offices and Site Office utilities: Placement of a Subcontractor/Vendor Site trailer require a written request, with graphic representation, layout, and schedule for placement and removal. The authorization will be generated in written format from the Contractor. The General Contractor will not be responsible for any utility connections, or maintenance if the placement of the trailer or ensuing utilities, in any way conflict with the construction schedule, the purveyor will be responsible for relocation, or removal, whichever is most appropriate. The cost of relocation or re-placement will be borne by the appropriate Subcontractor or Vendor, or charged to appropriate Subcontractor or Vendor. In the same vein, if there is deemed that any utility service to a site trailer is in conflict with site conditions, the removal and or relocation will be borne buy the party that placed the unit, or charged to appropriate Subcontractor or Vendor. The General Contractor will not provide job site Offices or trailers or utilities for occupancy by vendors or subcontractors.
- Q. Parking: All personnel wishing to park on site will only park in designated areas. If Subcontractor or Vendor or other personnel park on paved surfaces, they shall place a "diaper" beneath the vehicle (e.g. carpet, plywood, visqueen, etc.). The vehicle and "diaper" shall be removed to a satisfactory location at the end of the day and disposed of when no longer needed.
- R. All subcontractors and vendors are to recognize and accept that the Contractor may segregate the Project site into sectors as to rework for punch list activities. All Subcontractors or Vendors will be expected to proceed with resolution of the punch list items within 24 hours. of the first punch list presentation. Failure of a subcontractor or vendor to act diligently on their respective punch list in an acceptable time frame, may lead to the Contractor performing the rework at his own expense, resulting in charging whomever is deemed responsible for failure to perform. It will remain the responsibility of the subcontractors or Vendors to protect the work in place until the Judicial Council signs off Acceptance of the entire Project.

END OF SECTION

SECTION 01 60 00
MATERIALS AND EQUIPMENT

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

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

1.03 DEFINITIONS

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

1.04 SUBMITTALS

- A. Product List Schedule: Prepare a schedule showing products specified in a tabular form acceptable to the Architect. Include generic names of products required. Include the manufacturer's name and proprietary product names for each item listed.
 - 1. Coordinate the product list schedule with the Contractor's Construction Schedule and the Schedule of Submittals.
 - 2. Form: Prepare the product listing schedule with information on each item tabulated under the following column headings:
 - a. Related Specification Section number.
 - b. Generic name used in Contract Documents.
 - c. Manufacturer's name and address.
 - d. Supplier's name and address.
 - e. Installer's name and address.
 - f. Projected delivery date, or time span of delivery period.
 - 3. Initial Submittal: Within 30 days after date of commencement of the Work, submit 3 copies of an initial product list schedule. Provide a written explanation for omissions of data, and for known variations from Contract requirements.
 - a. At the Contractor's option, the initial submittal may be limited to product selections and designations that must be established early in the Contract period.
 - 4. Completed Schedule: Within 60 days after date of commencement of the Work, submit 3 copies of the completed product list schedule. Provide a written explanation for omissions of data, and for known variations from Contract requirements.
 - 5. Architect's Action: The Architect will respond in writing to the Contractor within 2 weeks of receipt of the completed product list schedule. No response within this time period constitutes no objection to listed manufacturers or products, but does not constitute a waiver of the requirement that products comply with Contract Documents. The Architect's response will include the following:

- a. A list of unacceptable product selections, containing a brief explanation of reasons for this action.

1.05 QUALITY ASSURANCE

- A. Source Limitations: To the fullest extent possible, provide products of the same kind, from a single source.
- B. Compatibility of Options: When the Contractor is given the option of selecting between two or more products for use on the Project, the product selected shall be compatible with products previously selected, even if previously selected products were also options.
- C. Nameplates: Except for required labels and operating data, do not attach or imprint manufacturer's or producer's nameplates or trademarks on exposed surfaces of products which will be exposed to view in occupied spaces or on the exterior.
 1. Labels: Locate required product labels and stamps on a concealed surface or, where required for observation after installation, on an accessible surface that is not conspicuous.
 2. Equipment Nameplates: Provide a permanent nameplate on each item of service-connected or power-operated equipment. Locate on an easily accessible surface which is inconspicuous in occupied spaces. The nameplate shall contain the following information and other essential operating data:
 - a. Name of product and manufacturer.
 - b. Model and serial number.
 - c. Capacity.
 - d. Speed.
 - e. Ratings.

1.06 PRODUCT DELIVERY, STORAGE, AND HANDLING

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

PART 2 - PRODUCTS

2.01 PRODUCT SELECTION

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, unused at the time of installation.
 1. Provide products complete with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.
 2. Standard Products: Where available, provide standard products of types that have been produced and used successfully in similar situations on other projects.

- B. Product Selection Procedures: Product selection is governed by the Contract Documents and governing regulations, not by previous Project experience. Procedures governing product selection include the following:
1. Proprietary Specification Requirements: Where only a single product or manufacturer is named, provide the product indicated. No substitutions will be permitted.
 2. Semi-proprietary Specification Requirements: Where two or more products or manufacturers are named, provide one of the products indicated. No substitutions will be permitted.
 - a. Where products or manufacturers are specified by name, accompanied by the term "or equal," or "or approved equal" comply with the Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
 3. Non-Proprietary Specifications: When the Specifications list products or manufacturers that are available and may be incorporated in the Work, but do not restrict the Contractor to use of these products only, the Contractor may propose any available product that complies with Contract requirements. Comply with Contract Document provisions concerning "substitutions" to obtain approval for use of an unnamed product.
 4. Performance Specification Requirements: Where Specifications require compliance with performance requirements, provide products that comply with these requirements, and are recommended by the manufacturer for the application indicated. General overall performance of a product is implied where the product is specified for a specific application.
 - a. Manufacturer's recommendations may be contained in published product literature, or by the manufacturer's certification of performance.
 5. Compliance with Standards, Codes and Regulations: Where the Specifications only require compliance with an imposed code, standard or regulation, select a product that complies with the standards, codes or regulations specified.
 6. Visual Matching: Where Specifications require matching an established Sample, the Architect's decision will be final on whether a proposed product matches satisfactorily. Where no product available within the specified category matches satisfactorily and also complies with other specified requirements, comply with provisions of the Contract Documents concerning "substitutions" for selection of a matching product in another product category, or for noncompliance with specified requirements.
 7. Visual Selection: Where specified product requirements include the phrase "...as selected from manufacturer's standard colors, patterns, textures..." or a similar phrase, select a product and manufacturer that complies with other specified requirements. The Architect will select the color, pattern and texture from the product line selected.

PART 3 - EXECUTION

3.01 INSTALLATION OF PRODUCTS

- A. Comply with manufacturer's instructions and recommendations for installation of products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other Work. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

END OF SECTION

SECTION 01 66 10
DELIVERY, STORAGE, AND HANDLING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 DELIVERY

- A. Deliver and handle goods according to manufacturer's recommendations, using means and methods that will prevent damage, deterioration, and loss.
- B. Schedule delivery to minimize long-term storage at site and to prevent overcrowding construction spaces.
- C. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration or theft.
- D. Delivery shall not be made until products and materials are required for installation, unless specified otherwise.
- E. Deliver goods to site in manufacturer's original sealed container, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- F. Inspect goods upon delivery to ensure compliance with Contract Documents and to ensure that goods are undamaged and properly protected.

3.02 STORAGE

- A. Store goods at site according to manufacturer's recommendations, and in a manner that will facilitate inspection and measurement of quantity or counting of units. Store goods using means and methods that will prevent damage, deterioration, and theft or other loss.
- B. Store heavy goods in a manner that will not endanger building structure.
- C. Store in temperature and humidity within range required by manufacturer's instructions.

3.03 HANDLING

- A. Handle goods as recommended by its manufacturer. The Contractor shall supply appropriate equipment and personnel to handle materials, articles, and equipment in a safe manner and in a manner that will not cause damage to the product, to the environment, to work in progress, or to work in place.

END OF SECTION

SECTION 01 73 00
EXECUTION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section. Reference definitions provided in Section 01 42 16.

1.02 EXAMINATION

- A. Acceptance of Conditions:
 - 1. The Installer of each component shall inspect the substrate and conditions under which Work is performed. Do not proceed until unsatisfactory conditions have been corrected.
- B. Existing Conditions:
 - 1. Where dimensions of existing facilities affect new work, the Contractor shall verify dimensions and conditions necessary for the Work to properly tie-in to existing structures, utilities, pavements, etc., this prior to any fabrication or installation of new work. Any discrepancies in dimensions or variations in conditions shall be immediately reported to the Project Construction Manager.

1.03 PREPARATION

- A. Construction Layout and Markings:
 - 1. The Contractor shall layout the work, establish grades and elevations, and be responsible for the correctness of dimension and elevation.
 - 2. The Contractor shall maintain and preserve stakes and other marks until they are no longer needed. If such marks are destroyed by the Contractor or removed when still necessary, they shall be replaced by the Contractor.
 - 3. The Contractor shall not remove or damage any existing benchmarks and/or monuments on or around the Site, without prior approval in writing, and shall take such care as necessary to see that such topographical markings are unchanged.
- B. Field Engineering:
 - 1. The Contractor shall provide at this own expense, all Field Engineering required or necessary to perform the Work, including but not limited to surveying and layout, engineering for temporary support structures, and engineering for temporary utility systems.
- C. Protection of Adjacent Construction:
 - 1. Protection of Existing Improvements:
 - a. The Contractor shall protect from damage all existing improvements at or near the site of the work, the location of which is shown in the Contract Documents or otherwise made known to him, and shall repair or restore any damage to such facilities resulting from failure to comply with the requirements of the Contract Documents or the failure to exercise reasonable care in the performance of the work.
 - b. Should the operations of the Contractor result in deposition of dirt or other debris on paved areas, Contractor shall clean such facilities at such intervals and in such manner as will prevent the formation of undesirable quantities of mud or dust and avoid making any other nuisance.
 - 2. Protection of Irrigation Systems:
 - a. Landscape irrigation systems within the project site boundaries and outside limits of the work as may be affected by the work of this Contract shall be preserved in their present condition. Systems damaged or removed shall be restored or replaced to proper operating conditions prior to completion of construction.
 - 3. Protection of Trees and Vegetation:
 - a. The Contractor shall preserve and protect existing vegetation such as trees, shrubs, and grass on or adjacent to the site of work which are not to be removed.

- b. The Contractor shall not deface, injure or destroy trees or shrubs, nor remove or cut them without permission of the Judicial Council.
 - c. Care shall be taken in removing trees authorized for removal to avoid damage to vegetation to remain in place. Any limbs or branches of trees broken during such operations or by the careless operation of equipment, or by workmen, shall be trimmed and painted with the approved tree pruning compound as directed.
 - d. Where trees may possibly be defaced, bruised, injured, or damaged by equipment, dumping or other operations, protect such trees by placing boards, planks, or poles around them. Protection shall be maintained at all times.
 - e. Trees or landscape features scarred or damaged or removed due to the Contractor's operations shall be restored as nearly as possible to original condition.
4. Protection of Existing Utilities:
- a. When existing utility lines or structures are indicated, and when existing utility lines that are to be removed occur within the area of operations, the Contractor shall notify the Judicial Council in ample time for taking measures for the prevention of interruption of any required service, prior to beginning of operations.
 - b. Existing utilities that are indicated, or the location of which is made known to the Contractor prior beginning of operations, and utility lines constructed during the Contractor's operation, shall be protected from damage, and, if damaged thereby, shall be repaired by the Contractor at no additional cost to the Judicial Council.
 - c. In the event that the Contractor damages any existing utility lines that are not indicated or the locations of which are not known to the Contractor, report thereof shall be made immediately to the Judicial Council, through the Project Construction Manager, and repair or relocation, if necessary, will be made in accordance with the General Conditions.
- D. Surveying:
- 1. The Contractor shall prepare or cause to be prepared all detailed surveys necessary for performance of the Work, including without limitation, slope stakes, points, lines and elevations.
 - 2. The Contractor shall be responsible for the establishment, location, maintenance and presentation of all temporary or permanent benchmarks, reference points, and stakes for the Work.
 - 3. The cost of any surveys and the establishment, location maintenance and preservation of all benchmarks, reference points and stakes shall be included with in the Contract Price. The Contractor shall be solely responsible for all loss or costs resulting from the loss, destruction, disturbance or damage of benchmarks, reference points or stakes.

1.04 CUTTING AND PATCHING

- A. The Contractor shall perform all cutting, patching, and finishing operations occasioned by the work under the contract, whether or not such operations are indicated on the drawings or specifically mentioned in the various sections of the specification. All such operations shall be performed in the best practices of the various trades involved and to the satisfaction of the Judicial Council. All patching and finishing materials shall match existing adjacent surfaces in every respect, including design, type and quality of materials, finish and color. Cutting, patching and finishing shall include all such operations in existing areas required by the work under the Contract Documents.

1.05 CLEANING:

- A. Progress Cleaning:
 - 1. During progress of work and upon completion of each part of the work as defined by the sections into which these specifications are divided or as separated by the various trades involved in the work, each area shall be cleaned of debris emanating from the work.
 - 2. The Contractor shall remove excess materials, waste, rubbish and debris, and his construction and installation equipment from the premises. Any dirt and stains caused by the work under the contract shall be removed from the surfaces of the structures and from

equipment and fixtures. Final acceptance of the work done under these specifications will not be given until the cleaning has been inspected and approved by the Judicial Council.

- B. Cleaning Prior to Substantial Completion: The Contractor shall complete the following before requesting inspection for Certification of Substantial Completion:
 - 1. Site Cleaning:
 - a. Clean and remove all construction waste, unused materials, loose rock and stones, excess earth, roots, weeds, and all debris and other foreign substances.
 - b. Clean and remove mortar droppings from walks and other paved areas, remove stains, spills and other foreign deposits. Sweep paved areas.
 - c. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.
 - 2. Building Cleaning:
 - a. Remove labels that are not permanent labels.
 - b. Clean transparent materials. Remove glazing compound. Replace chipped or broken glass.
 - c. Clean exposed hard-surfaced finished to a dust-free condition, free of stains, films and similar foreign substances. Restore reflective surfaces to their original reflective condition. Leave concrete floors broom clean. Vacuum carpeted surfaces.
 - d. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.

1.06 SITE MAINTENANCE

- A. Dust Control: The Contractor shall maintain excavations, embankments, stockpiles, temporary roads, plant sites, waste areas, borrow areas, and other work areas within or beyond the project site boundaries free from dust which would cause a hazard or nuisance to others. Approved methods of stabilization consisting of sprinkling, chemical treatment, light bituminous treatment or similar methods will be permitted to control dust. Sprinkling shall be repeated at such intervals as to keep the disturbed area damp at all times. Dust control shall be performed as the work proceeds whenever necessary.
- B. Collection and Disposal of waste: Collect waste daily. Comply with NFPA 241 for removal of combustible waste. Enforce requirements strictly. Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose in a lawful manner.
- C. Rodent and Pest Control: Retain an exterminator or pest control company to perform extermination and control procedures so the project will be free of pests at Substantial Completion. Perform operations in a lawful manner using environmentally safe materials.
- D. Weed Control: Periodically, as required, but no less than once a month, provide weed control by either spraying or cutting or both.

END OF SECTION

**SECTION 01 73 10
CUTTING AND PATCHING**

PART 1 GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.

1.03 DEFINITIONS

- A. Cutting: Removal of existing construction necessary to permit installation or performance of other Work.
- B. Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other Work.

1.04 ACTION SUBMITTALS

- A. Cutting and Patching Proposal: Submit a proposal describing procedures at least 10 days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:
 - 1. Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
 - 2. Changes to Existing Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
 - 3. Products: List products to be used and firms or entities that will perform the Work.
 - 4. Dates: Indicate when cutting and patching will be performed.
 - 5. Utilities: List utilities that cutting and patching procedures will disturb or affect. List utilities that will be relocated and those that will be temporarily out of service. Indicate how long service will be disrupted.
 - 6. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
 - 7. Architect's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

1.05 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. Operational Elements: Do not cut and patch operating elements and 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.
 - 1. Primary operational systems and equipment.
 - 2. Air or smoke barriers.
 - 3. Fire-protection systems.
 - 4. Control systems.
 - 5. Communication systems.
 - 6. Conveying systems.
 - 7. Electrical wiring systems.
 - 8. Operating systems of special construction.
- C. Miscellaneous Elements: Do not cut and patch the following elements or related components in a manner that could change their load-carrying capacity, that results in reducing their

capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.

1. Water, moisture, or vapor barriers.
 2. Membranes and flashings.
 3. Exterior curtain-wall construction.
 4. Equipment supports.
 5. Piping, ductwork, vessels, and equipment.
 6. Noise- and vibration-control elements and systems.
- D. Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- E. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades.
1. Review areas of potential interference and conflict.
 2. Coordinate procedures and resolve potential conflicts before proceeding.

1.06 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 PRODUCTS

2.01 MATERIALS

- A. General: Comply with requirements specified in other Sections of these Specifications.
- B. Existing Materials: Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of existing materials.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Existing Services: Where existing services are required to be removed, relocated, or abandoned, bypass such services before cutting to minimize interruption of services to occupied areas.

3.03 PERFORMANCE

- A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.

1. Cut existing construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Cutting: Cut existing construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 2. Existing Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 3. Concrete or Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 4. Excavating and Backfilling: Comply with requirements in applicable Division 2 Sections where required by cutting and patching operations.
 5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
 6. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections of these Specifications.
 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove existing floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - a. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
 4. Ceilings: Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.
 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.
- D. Detailed requirements shall be as indicated on the drawings and as follows:
 1. Woodwork: Cut and or remove to a panel or joint line.
 2. Sheet Metal: Remove back to joint, lap, or connection. Secure loose or unfastened ends or edges and seal watertight.
 3. Glass: Remove cracked, broken, or damaged glass and clean rebates and stops of setting materials.
 4. Plaster: Cut back to sound plaster on straight lines, and back bevel edges of remaining plaster. Trim existing lath and prepare for new lath.
 5. Gypsum Wallboard: Cut back on straight lines to undamaged surfaces with at least two opposite cut edges centered on supports.

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6. Acoustical ceilings: Remove hanger wires and related appurtenances where ceilings are not scheduled to be installed.
7. Tile: Cut back to sound tile and backing on joint lines.
8. Flooring: Completely remove flooring and clean backing of prior adhesive. Carefully remove wood flooring for patching and repairing of existing wood flooring scheduled to remain.

END OF SECTION

SECTION 01 77 00
CONTRACT CLOSEOUT AND FINAL CLEANING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements for project close-out, including but not limited to:
 - 1. Inspection procedures.
 - 2. Project record document submittals.
 - 3. Operating and Maintenance Manual submittal.
 - 4. Submittal of warranties.
 - 5. Final Adjustment of Accounts.
 - 6. Final cleaning.
- B. Close-out requirements for specific construction activities are included in their appropriate Technical Sections.
- C. Comply with requirements stated in Conditions of the Contract and in Specifications for administrative procedures in closing out the Work.
- D. Related Requirements in Other Parts of the Project Manual:
 - 1. Fiscal provisions, legal submittals and additional administrative requirements: Conditions of the Contract.
- E. Related Requirements Specified in Other Sections:
 - 1. Warranties and Bonds: Section 01 34 00.
 - 2. Close-out Submittals Required of Trades: The respective sections of Specifications.

1.03 SUBSTANTIAL COMPLETION

- A. Substantial Completion is defined in the General Conditions.
- B. When Contractor considers the Work is substantially complete, Contractor shall submit to Construction Manager:
 - 1. A written notice that the Work, or designated portion thereof, is substantially complete.
 - 2. A list of items to be completed or corrected.
- C. Within a reasonable time after receipt of such notice, Construction Manager will make an inspection to determine the status of completion.
- D. Should Construction Manager determine that the Work is not substantially complete:
 - 1. Architect will promptly notify the Contractor in writing, giving the reasons therefore.
 - 2. Contractor shall remedy the deficiencies in the Work, and send a second written notice of substantial completion to the Construction Manager:
 - 3. Architect will re-inspect the Work.
- E. When Architect concurs that the work is substantially complete, Architect will:
 - 1. Prepare a Certificate of Substantial Completion, accompanied by Contractor's list of items to be completed or corrected as verified and amended by the Architect.
 - 2. Submit the Certificate to Judicial Council and Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.

1.04 FINAL INSPECTION

- A. When Contractor considers the Work is complete, Contractor shall submit written certification that:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been inspected for compliance with Contract Documents.

3. Work has been completed in accordance with Contract Documents and is ready for final inspection and is ready for final inspection.
- B. Architect will make an inspection to verify the status of completion with reasonable promptness after receipt of such certification.
- C. Should Architect consider that the Work is incomplete or defective:
 1. Architect will promptly notify the Contractor in writing, listing the incomplete or defective Work.
 2. Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to Architect that the work is complete.
 3. Architect will re-inspect the Work.
- D. When the Architect finds that the Work is acceptable under the Contract Documents, Architect shall request the Contractor to make close-out submittals.

1.05 RE-INSPECTION FEES

- A. Should Architect perform re-inspections due to failure of the Work to comply with the claims of status of completion made by the Contractor.
 1. The Judicial Council will compensate Architect for such additional services.
 2. The Judicial Council will deduct the amount of such compensation from the final payment to the Contractor.

1.06 CONTRACTOR'S CLOSE-OUT SUBMITTALS TO ARCHITECT

- A. All Operating and Maintenance Manuals (3 sets) shall be submitted in hard cover, three ring binders with clear plastic jacket, for clear identified on front and side.
 1. Each manual shall have a cover page with name and address of the project, name of the contractor and the major suppliers with telephone numbers.
 2. A table of contents / index.
 3. Tabs with fly sheets for each section, item or equipment. All equipment supplied for this project shall be clearly identified.
 4. Complete instructions on Operating & Maintenance of all equipment.
 5. Complete nomenclature of all parts of all equipment along with the name address and the telephone number of the nearest vendor.
 6. Warranties and Bonds: Conditions of the Contract and respective sections of Specifications.
- B. Project Record Documents - submit red-marked drawings.
- C. Evidence of Payment and Release of Liens: To requirements of General Conditions.
- D. Certificate of Insurance for Products and Completed Operations.

1.07 FINAL ADJUSTMENT OF ACCOUNTS

- A. Submit a final statement of accounting to Construction Manager:
- B. Statement shall reflect all adjustments to the Contract Sum:
 1. The original Contract Sum.
 2. Additions and deductions resulting from:
 - a. Previous Change Orders.
 - b. Allowances.
 - c. Deductions for uncorrected work.
 - d. Deductions for liquidated damages (when applicable).
 - e. Deductions for re-inspection payments.
 - f. Other adjustments.
 3. Total Contract Sum, as adjusted.
 4. Previous payments.
 - a. Sum remaining due.
- C. Architect will prepare a final Change Order, reflecting approved adjustments to the Contract Sum which were not previously made by Change Orders.

1.08 FINAL APPLICATION FOR PAYMENT

- A. Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

1.09 FINAL CLEANING

- A. Required: Upon the completion of the Contracted Work, the Contractor shall remove all of Contractor's plant, tools, materials and other articles from the property of the Judicial Council. Should the Contractor fail to take prompt action to this end, the Judicial Council at its option and without waiver of such other rights as it may have, on 30 days' notice, treat them as abandoned property. The Judicial Council may remove such items at the Contractor's cost.
- B. The term "Clean" shall be interpreted as meaning the level of cleanliness generally provided by skilled cleaners using commercial quality building maintenance equipment and materials.
- C. Prior to completion of the Contracted Work, remove from the job-site all tools, surplus materials, equipment, scrap, debris and waste. Conduct final progress cleaning as described above.
- D. Structures.
 - 1. Interior:
- E. Visually inspect interior surfaces and remove all traces of soil, waste materials, smudges, and other foreign matter.
 - 1. Remove all traces of splashed materials from adjacent surfaces.
 - 2. Remove paint droppings, spots, stains, and dirt from finished surfaces.
- F. Glass: Clean inside and outside.

END OF SECTION

SECTION 01 78 23
OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation and maintenance documentation directory.
 - 2. Emergency manuals.
 - 3. Operation manuals for systems, subsystems, and equipment.
 - 4. Product maintenance manuals.
 - 5. Systems and equipment maintenance manuals.

1.03 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.
- C. Commissioning Authority: Refer to definition listed in Section 01 91 00.

1.04 CLOSEOUT SUBMITTALS

- A. Manual Content: Operations and maintenance manual content is specified in individual Specification Sections to be reviewed at the time of Section submittals. Submit reviewed manual content formatted and organized as required by this Section.
 - 1. Architect and Commissioning Authority will comment on whether content of operations and maintenance submittals are acceptable.
 - 2. Where applicable, clarify and update reviewed manual content to correspond to revisions and field conditions.
- B. Format: Submit operations and maintenance manuals in the following format:
 - 1. PDF electronic file. Assemble each manual into a composite electronically indexed file. Submit on digital media acceptable to Architect.
 - a. Name each indexed document file in composite electronic index with applicable item name. Include a complete electronically linked operation and maintenance directory.
 - b. Enable inserted reviewer comments on draft submittals.
 - 2. Three paper copies. Include a complete operation and maintenance directory. Enclose title pages and directories in clear plastic sleeves. Architect will return two copies.
- C. Initial Manual Submittal: Submit draft copy of each manual at least 30 days before commencing demonstration and training. Architect and Commissioning Authority will comment on whether general scope and content of manual are acceptable.
- D. Final Manual Submittal: Submit each manual in final form prior to requesting inspection for Substantial Completion and at least 15 days before commencing demonstration and training. Architect and Commissioning Authority will return copy with comments.
 - 1. Correct or revise each manual to comply with Architect's and Commissioning Authority's comments. Submit copies of each corrected manual within 15 days of receipt of Architect's and Commissioning Authority's comments and prior to commencing demonstration and training.

PART 2 - PRODUCTS

2.01 OPERATION AND MAINTENANCE DOCUMENTATION DIRECTORY

- A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information. Include a section in the directory for each of the following:
 - 1. List of documents.
 - 2. List of systems.
 - 3. List of equipment.
 - 4. Table of contents.
- B. List of Systems and Subsystems: List systems alphabetically. Include references to operation and maintenance manuals that contain information about each system.
- C. List of Equipment: List equipment for each system, organized alphabetically by system. For pieces of equipment not part of system, list alphabetically in separate list.
- D. Tables of Contents: Include a table of contents for each emergency, operation, and maintenance manual.
- E. Identification: In the documentation directory and in each operation and maintenance manual, identify each system, subsystem, and piece of equipment with same designation used in the Contract Documents. If no designation exists, assign a designation according to ASHRAE Guideline 4, "Preparation of Operating and Maintenance Documentation for Building Systems."

2.02 REQUIREMENTS FOR EMERGENCY, OPERATION, AND MAINTENANCE MANUALS

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 - 1. Title page.
 - 2. Table of contents.
 - 3. Manual contents.
- B. Title Page: Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Judicial Council.
 - 4. Date of submittal.
 - 5. Name and contact information for Contractor.
 - 6. Name and contact information for Construction Manager.
 - 7. Name and contact information for Architect.
 - 8. Name and contact information for Commissioning Authority.
 - 9. Names and contact information for major consultants to the Architect that designed the systems contained in the manuals.
 - 10. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
 - 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
- E. Manuals, Electronic Files: Submit manuals in the form of a multiple file composite electronic PDF file for each manual type required.

1. Electronic Files: Use electronic files prepared by manufacturer where available. Where scanning of paper documents is required, configure scanned file for minimum readable file size.
 2. File Names and Bookmarks: Enable bookmarking of individual documents based on file names. Name document files to correspond to system, subsystem, and equipment names used in manual directory and table of contents. Group documents for each system and subsystem into individual composite bookmarked files, then create composite manual, so that resulting bookmarks reflect the system, subsystem, and equipment names in a readily navigated file tree. Configure electronic manual to display bookmark panel on opening file.
- F. Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.
1. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf or post-type binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (215-by-280-mm) paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.
 - b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment.
 4. Supplementary Text: Prepared on 8-1/2-by-11-inch (215-by-280-mm) white bond paper.
 5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.03 EMERGENCY MANUALS

- A. Content: Organize manual into a separate section for each of the following:
1. Type of emergency.
 2. Emergency instructions.
 3. Emergency procedures.
- B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component:
1. Fire.
 2. Flood.
 3. Gas leak.
 4. Water leak.
 5. Power failure.
 6. Water outage.
 7. System, subsystem, or equipment failure.
 8. Chemical release or spill.

- C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Judicial Council's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.
- D. Emergency Procedures: Include the following, as applicable:
 - 1. Instructions on stopping.
 - 2. Shutdown instructions for each type of emergency.
 - 3. Operating instructions for conditions outside normal operating limits.
 - 4. Required sequences for electric or electronic systems.
 - 5. Special operating instructions and procedures.

2.04 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and the following information:
 - 1. System, subsystem, and equipment descriptions. Use designations for systems and equipment indicated on Contract Documents.
 - 2. Performance and design criteria if Contractor has delegated design responsibility.
 - 3. Operating standards.
 - 4. Operating procedures.
 - 5. Operating logs.
 - 6. Wiring diagrams.
 - 7. Control diagrams.
 - 8. Piped system diagrams.
 - 9. Precautions against improper use.
 - 10. License requirements including inspection and renewal dates.
- B. Descriptions: Include the following:
 - 1. Product name and model number. Use designations for products indicated on Contract Documents.
 - 2. Manufacturer's name.
 - 3. Equipment identification with serial number of each component.
 - 4. Equipment function.
 - 5. Operating characteristics.
 - 6. Limiting conditions.
 - 7. Performance curves.
 - 8. Engineering data and tests.
 - 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include the following, as applicable:
 - 1. Startup procedures.
 - 2. Equipment or system break-in procedures.
 - 3. Routine and normal operating instructions.
 - 4. Regulation and control procedures.
 - 5. Instructions on stopping.
 - 6. Normal shutdown instructions.
 - 7. Seasonal and weekend operating instructions.
 - 8. Required sequences for electric or electronic systems.
 - 9. Special operating instructions and procedures.
- D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

2.05 PRODUCT MAINTENANCE MANUALS

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

2.06 SYSTEMS AND EQUIPMENT MAINTENANCE MANUALS

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual and drawing or schedule designation or identifier where applicable.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 1. Standard maintenance instructions and bulletins.
 - 2. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
 - 3. Identification and nomenclature of parts and components.
 - 4. List of items recommended to be stocked as spare parts.
- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - 5. Aligning, adjusting, and checking instructions.
 - 6. Demonstration and training video recording, if available.

- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
 - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.01 MANUAL PREPARATION

- A. Operation and Maintenance Documentation Directory: Prepare a separate manual that provides an organized reference to emergency, operation, and maintenance manuals.
- B. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Judicial Council's operating personnel for types of emergencies indicated.
- C. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- D. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Judicial Council's operating personnel.
- E. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- F. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original project record documents as part of operation and maintenance manuals.
 - 2. Comply with requirements of newly prepared record Drawings.
- G. Comply with the schedule for submitting operation and maintenance documentation.

END OF SECTION

SECTION 01 78 36
WARRANTIES

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Warranties.

1.02 PREREQUISITES FOR FINAL COMPLETION

- A. Complete items in following paragraphs before requesting final acceptance and final payment. List known exceptions, if any, in request.
- B. Submit specified warranties, workmanship/maintenance bonds, maintenance agreements, and other similar documents.
- C. Architects Scope of Work: The Architect has a limited scope of work for services with the Judicial Council. Some of the items in the specification are outside their scope of work. Verify the scope of work with the Judicial Council. And, those items outside the Architects scope of work will be provided by the Judicial Council or the Judicial Council's Representative.

1.03 PRODUCT WARRANTIES

- A. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of warranty on Work that incorporates products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with Contractor.
- B. Judicial Council's Recourse:
 - 1. Written warranties made to Judicial Council are in addition to implied warranties, and shall not limit duties, obligations, rights and remedies otherwise available under law.
 - 2. Warranty periods shall not be interpreted as limitations on time in which Judicial Council can enforce such other duties, obligations, rights, or remedies.
 - 3. Rejection of warranties: Judicial Council reserves right to reject warranties and to limit selections to products with warranties not in conflict with requirements of Contract Documents.
- C. 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. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Judicial Council.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Judicial Council.
- D. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
 - 3. See other Sections for specific content requirements and particular requirements for submitting special warranties.
- E. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures."

1.04 SUBMITTAL OF PROJECT WARRANTIES

- A. Time of Submittal: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is

indicated, or when delay in submittal of warranties might limit Judicial Council's rights under warranty.

- B. Submit 3 copies of warranties as specified in various Specification sections. Include one copy of each warranty in Operations and Maintenance Manual, or in Material and Finishes Maintenance Manual
- C. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Judicial Council during construction period by separate agreement with Contractor.
- D. Organize warranty documents into an orderly sequence based on the table of contents of Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, three-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 2. Prepare table of contents in sequence of table of contents of Project Manual, with each item identified with number and title of Specification section in which specified, and name of product or work item.
 - 3. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 4. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
 - 5. Warranty Electronic File: Scan warranties and bonds and assemble complete warranty and bond submittal package into a single indexed electronic PDF file with links enabling navigation to each item. Provide bookmarked table of contents at beginning of document.
- E. Provide additional copies of each warranty to include in operation and maintenance manuals.

END OF SECTION

SECTION 01 78 39
PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for project record documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
 - 4. Miscellaneous record submittals.

1.03 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one set(s) of marked-up record prints.
 - 2. Number of Copies: Submit copies of record Drawings as follows:
 - a. Initial Submittal:
 - 1) Submit one paper-copy set(s) of marked-up record prints.
 - 2) Submit PDF electronic files of scanned record prints and one of file prints.
 - 3) Submit record digital data files and one set(s) of plots.
 - 4) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
 - b. Final Submittal:
 - 1) Submit three paper-copy set(s) of marked-up record prints.
 - 2) Submit PDF electronic files of scanned record prints and three set(s) of prints.
 - 3) Print each drawing, whether or not changes and additional information were recorded.
 - c. Final Submittal:
 - 1) Submit one paper-copy set(s) of marked-up record prints.
 - 2) Submit record digital data files and three set(s) of record digital data file plots.
 - 3) Plot each drawing file, whether or not changes and additional information were recorded.
- B. Record Specifications: Submit one paper copy of Project's Specifications, including addenda and contract modifications.
- C. Record Product Data: Submit one paper copy of each submittal.
 - 1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.
- D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous record-keeping requirements and submittals in connection with various construction activities. Submit one paper copy of each submittal.
- E. Reports: Submit written report weekly indicating items incorporated into project record documents concurrent with progress of the Work, including revisions, concealed conditions, field changes, product selections, and other notations incorporated.

PART 2 - PRODUCTS

2.01 RECORD DRAWINGS

- A. Record Prints: Maintain one set of marked-up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.

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1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an acceptable drawing technique.
 - c. Record data as soon as possible after obtaining it.
 - d. Record and check the markup before enclosing concealed installations.
 - e. Cross-reference record prints to corresponding archive photographic documentation.
 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Depths of foundations below first floor.
 - d. Locations and depths of underground utilities.
 - e. Revisions to routing of piping and conduits.
 - f. Revisions to electrical circuitry.
 - g. Actual equipment locations.
 - h. Duct size and routing.
 - i. Locations of concealed internal utilities.
 - j. Changes made by Change Order or Construction Change Directive.
 - k. Changes made following Architect's written orders.
 - l. Details not on the original Contract Drawings.
 - m. Field records for variable and concealed conditions.
 - n. Record information on the Work that is shown only schematically.
 3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing record Drawings where Architect determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.
1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.
 2. Consult Architect for proper scale and scope of detailing and notations required to record the actual physical installation and its relation to other construction. Integrate newly prepared record Drawings into record Drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.
- C. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
1. Record Prints: Organize record prints and newly prepared record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 2. Format: Annotated PDF electronic file.
 3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each digital data file.
 4. Identification: As follows:
 - a. Project name.

- b. Date.
- c. Designation "PROJECT RECORD DRAWINGS."
- d. Name of Architect.
- e. Name of Contractor.

2.02 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 - 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
 - 4. For each principal product, indicate whether record Product Data has been submitted in operation and maintenance manuals instead of submitted as record Product Data.
 - 5. Note related Change Orders, record Product Data, and record Drawings where applicable.
- B. Format: Submit record Specifications as paper copy.

2.03 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 - 3. Note related Change Orders, record Specifications, and record Drawings where applicable.
- B. Format: Submit record Product Data as paper copy.
 - 1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

2.04 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- B. Format: Submit miscellaneous record submittals as paper copy.
 - 1. Include miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.

PART 3 - EXECUTION

3.01 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Maintenance of Record Documents and Samples: Store record documents and Samples in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal working hours.

END OF SECTION

**SECTION 01 91 00
COMMISSIONING**

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. This section includes:
 - 1. Commissioning: Commissioning is a systematic process of ensuring that all building systems perform interactively according to the design intent and the Judicial Council's operational needs. This is achieved by beginning in the design phase and documenting design intent and continuing through construction, acceptance, and the warranty period with actual verification of performance. The commissioning process shall encompass and coordinate the traditionally separate functions of system documentation, equipment startup, control system calibration, testing and balancing, performance testing and training.
 - 2. Commissioning during the construction phase is intended to achieve the following specific objectives according to the Contract Documents:
 - a. Verify that applicable equipment and systems are installed according to the manufacturer's recommendations and to industry accepted minimum standards and that they receive adequate operational checkout by installing Subcontractors.
 - b. Verify and document proper performance of equipment and systems.
 - c. Verify that O&M documentation left on site is complete.
 - d. Verify that the Judicial Council's operating personnel are adequately trained.
 - 3. The commissioning process does not take away from or reduce the responsibility of the Contractor to meet the Contract Documents.
- B. Related Sections include the following:
 - 1. Contract drawings and specifications, general provisions of the contract, including general and supplementary conditions, architectural, electrical, and mechanical provisions, and Division 1 Specification Sections apply to work of this Section.

1.03 ABBREVIATIONS

- A. Abbreviations: The following are common abbreviations used in this Specification and in the Commissioning Plan.

A/E	Architect and design engineers	GC	General Contractor
CA	Commissioning authority	IC	Installing Contractor
CC	Construction checklist	MC	Mechanical Contractor
CT	Commissioning Team	RTF	Resolution Tracking Form
Cx	Commissioning	Subs	Subs to Contractors
Cx	Commissioning Plan document Plan	TAB	Test and balance Contractor (If independent)
EC	Electrical Contractor	TCC	Temperature Controls Contractor
FT	Functional performance test		

1.04 COORDINATION

- A. Commissioning Team The members of the commissioning team consist of the CA, the GC, the Architect and Design Engineers (particularly the Mechanical Engineer), the MC, the EC, the TAB representative, the TCC, and any other installing subs or suppliers of equipment. If known,

the Judicial Council's building or plant operator/engineer is also a member of the commissioning team.

- B. Management: The CA directs and coordinates the commissioning activities and reports to the Judicial Council. All members work together to fulfill their contracted responsibilities and meet the objectives of the Contract Documents. The CA's responsibilities are the same regardless of who hired the CA.
- C. Scheduling: The CA will work with the GC according to established protocols to schedule the commissioning activities. The CA will provide sufficient notice (generally two weeks' notice) to the GC for scheduling commissioning activities. The GC will integrate all commissioning activities into the master schedule. All parties will address scheduling problems and make necessary notifications in a timely manner in order to expedite the commissioning process.
- D. The CA will provide the initial schedule of primary commissioning events, or commissioning milestones, at the initial commissioning meeting. The Commissioning Plan provides a format for this schedule. As construction progresses and more detailed schedules are available from the GC, the CA will adjust the commissioning schedule accordingly.

1.05 COMMISSIONING PROCESS

- A. Commissioning Plan: The Commissioning Plan, provided as part of the bid documents, is binding on the Contractor. The commissioning plan provides guidance in the execution of the commissioning process. The Specifications will take precedence over the Commissioning Plan.
- B. Commissioning Process: The following narrative provides a brief overview of the typical commissioning tasks during construction and the general order in which they occur.
 1. Commissioning during construction begins with an initial Commissioning meeting conducted by the CA where the commissioning process is reviewed with the commissioning team members.
 2. Additional meetings will be required throughout construction, scheduled by the CA with necessary parties attending, to plan, coordinate, schedule future activities and resolve problems.
 3. Equipment documentation is distributed by the A/E to the CA during the normal submittal process, including detailed start-up procedures.
 4. The CA works with the Contractor in each discipline in developing startup plans and startup documentation formats, including providing the Contractor with construction checklists to be completed during the installation and startup process.
 5. In general, the checkout and performance verification proceeds from simple to complex; from component level to equipment to systems and intersystem levels with construction checklists being completed before functional testing occurs.
 6. The Contractors, under their own direction, will execute and document the completion of construction checklists and perform startup and initial checkout. The CA documents that the checklists and startup were completed according to the approved plans. This may include the CA witnessing start-up of selected equipment.
 7. The CA develops specific equipment and system functional performance test procedures.
 8. The functional test procedures are reviewed with the A/E, CA, and Contractors.
 9. The functional testing and procedures are executed by the Contractors under the direction of, and documented by, the CA.
 10. During initial functional tests and for critical equipment, the Engineer will witness the testing.
 11. Items of non-compliance in material, installation, or setup are corrected at the Contractor's expense, and the system is retested.
 12. The CA reviews the O&M documentation for completeness.
 13. The project will not be considered substantially complete until the conclusion of Commissioning functional testing procedures as defined in the Commissioning Plan.
 14. The CA reviews and coordinates the training provided by the Contractors and verifies that it was completed.
 15. Deferred testing is conducted as specified or required.

1.06 RESPONSIBILITIES

- A. The responsibilities of various parties in the commissioning process are provided in this section. The responsibilities of the MC, TAB and TCC are in Divisions 22 and 23, those of the EC in Division 26, and those of the GC related to the building envelope and LEED- related credits and prerequisites in Division 1. It is noted that the services for the A/E and CA are not provided for in this Contract. That is, the Contractor is not responsible for providing A/E and CA services. Responsibilities are listed in the Commissioning Plan.
- B. All Parties:
 - 1. Follow the Commissioning Plan.
 - 2. Attend an initial commissioning meeting and additional meetings, as necessary.
- C. General Contractor (GC)
 - 1. Construction and Acceptance Phase:
 - a. Facilitate the coordination of the commissioning work by the CA, and with the GC and CA, ensure that commissioning activities are being scheduled into the master schedule.
 - b. Include the cost of commissioning in the total contract price.
 - c. Furnish a copy of all construction documents, addenda, change orders, and approved submittals and shop drawings related to commissioned equipment to the CA.
 - d. In each purchase order or subcontract written, include requirements for submittal data, O&M data, commissioning tasks, and training.
 - e. Ensure that all Contractors execute their commissioning responsibilities according to the Contract Documents and schedule.
 - f. A representative shall attend the initial commissioning meeting and other necessary meetings scheduled by the CA to facilitate the Cx process.
 - g. Coordinate and schedule the training of Judicial Council personnel.
 - 1) Prepare O&M manuals, according to the Contract Documents, including clarifying and updating the original sequences of operation to as-built conditions.
 - h. Provide all requested submittal data, including detailed start-up procedures and specific responsibilities of the Judicial Council to keep warranties in force.
 - i. Assist in equipment testing per agreements with sub- contractors.
 - j. Include all special tools and instruments (only available from vendor, specific to a piece of equipment) required for testing equipment according to these Contract Documents in the base bid price to the Contractor, except for stand-alone data logging equipment that may be used by the CA.
 - k. Through the Contractors they supply products to, analyze specified products and verify that the Designer has specified the newest most updated equipment reasonable for this project's scope and budget.
 - l. Provide information requested by CA regarding equipment sequence of operation and testing procedures.
 - 1) Review test procedures for equipment installed by factory representatives.
 - 2. Warranty Period:
 - a. Ensure that Subcontractors execute seasonal or deferred functional performance testing, witnessed by the CA, according to the specifications.
- D. Ensure that Subcontractors correct deficiencies and make necessary adjustments to O&M manuals and as-built drawings for applicable issues identified in any seasonal testing.

1.07 DEFINITIONS

- A. Acceptance Phase: Phase of construction after startup and initial checkout when functional performance tests, O&M documentation review, and training occur
- B. Approval: Acceptance that a piece of equipment or system has been properly installed and is functioning in the tested modes according to the Contract Documents
- C. Architect / Engineer (A/E): The prime consultants who comprise the design team, generally the HVAC mechanical designer/engineer and the electrical designer/engineer

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- D. Judicial Council's Project Requirements: The Judicial Council's Project Requirements is the documentation of the primary thought processes and assumptions behind design decisions that were made to meet the design intent. The Judicial Council's Project Requirements describes the systems, components, conditions, and methods chosen to meet the intent. Some reiterating of the design intent may be included.
- E. Commissioning Authority (CA): An independent authority, not otherwise associated with the A/E team members or the Contractor, though he/she may be hired as a subcontractor to them. The CA directs and coordinates the day-to-day commissioning activities. The CA does not take an oversight role.
- F. Commissioning Plan: An overall plan, developed before or after bidding that provides the structure, schedule, and coordination planning for the commissioning process
- G. Construction Checklist (CC): A list of items to inspect and elementary component tests to conduct to verify proper installation of equipment, provided by the CA to the Sub. Construction checklists are primarily static inspections and procedures to prepare the equipment or system for initial operation (e.g., belt tension correct, oil levels OK, labels affixed, gages in place, sensors calibrated, etc.). However, some construction checklist items entail simple testing of the function of a component, a piece of equipment, or system (such as measuring the voltage imbalance on a three phase pump motor of a chiller system). The word construction refers to before functional testing. Construction checklists augment and are combined with the manufacturer's start-up checklist. Even without a commissioning process, Contractors typically perform some, if not many, of the construction checklist items a commissioning authority will recommend. However, few Contractors document in writing the execution of these checklist items. Therefore, for most equipment, the Contractors execute the checklists on their own. The Commissioning Authority only requires that the procedures be documented in writing and does not witness much of the completion of construction checklists, except for larger or more critical pieces of equipment.
- H. Contract Documents: The documents binding on parties involved in the construction of this Project (drawings, specifications, change orders, amendments, contracts, Cx Plan, etc.)
- I. Contractor: The general contractor or authorized representative
 - 1. Control system: The central building energy management control system
- J. Data Logging: Monitoring flows, currents, status, pressures, etc. of equipment using stand-alone data loggers separate from the control system
- K. Deferred Functional Tests: FTs that are performed later, after substantial completion, due to partial occupancy, equipment, seasonal requirements, design, or other site conditions that prevent the test from being performed
- L. Deficiency: A condition in the installation or function of a component, piece of equipment or system that is not in compliance with the Contract Documents
- M. Design Intent: A dynamic document that provides the explanation of the ideas, concepts, and criteria that are considered to be very important to the Judicial Council. It is initially the outcome of the programming and conceptual design phases.
- N. Factory Testing: Testing of equipment on-site or at the factory by factory personnel with a Project Manager present
- O. Functional Performance Test (FT): Test of the dynamic function and operation of equipment and systems using manual (direct observation) or monitoring methods. Functional testing is the dynamic testing of systems (rather than just components) under full operation (e.g., the chiller pump is tested interactively with the chiller functions to see if the pump ramps up and down to maintain the differential pressure setpoint). Systems are tested under various modes, such as during low cooling or heating loads, high loads, component failures, unoccupied, varying outside air temperatures, fire alarm, power failure, etc. The systems are run through all the control system's sequences of operation, and components are verified to be responding as the sequences state. Traditional air or water test and balancing (TAB) is not functional testing, in the commissioning sense of the word. TAB's primary work is setting up the system flows and

pressures as specified, while functional testing is verifying that which has already been set up. The Commissioning Authority develops the functional test procedures in a sequential written form, coordinates, oversees, and documents the actual testing, which is usually performed by the installing Contractor or vendor. FTs are performed after construction checklists and startup are complete.

- P. General Contractor (GC): The Contractor for this project. Generally refers to all the GC's subs as well. Also referred to as the Contractor, in some contexts.
- Q. Indirect Indicators: Indicators of a response or condition, such as a reading from a control system screen reporting a damper to be 100% closed
- R. Installing Contractor: Contractor who installs specific equipment and/or systems
- S. Manual Test: Using hand-held instruments, immediate control system readouts, or direct observation to verify performance (contrasted to analyzing monitored data taken over time to make the "observation")
- T. Monitoring: The recording of parameters (flow, current, status, pressure, etc.) of equipment operation using data loggers or the trending capabilities of control systems
- U. Non-Compliance: See Deficiency
- V. Non-Conformance: See Deficiency
- W. Over-written Value: Writing over a sensor value in the control system to see the response of a system (e.g., changing the outside air temperature value from 50°F to 75°F to verify economizer operation). See also "Simulated Signal."
- X. Judicial Council-Contracted Tests: Tests paid for by the Judicial Council outside the GC's contract and for which the CA does not oversee. These tests will not be repeated during functional tests if properly documented.
- Y. Phased Commissioning: Commissioning that is completed in phases (by floors, for example) due to the size of the structure or other scheduling issues, in order minimize the total construction time
- Z. Sampling: Functionally testing only a fraction of the total number of identical or near-identical pieces of equipment. Refer to Part 3.4 F for details.
- AA. Seasonal Performance Tests: FTs that are deferred until the system(s) will experience conditions closer to their design conditions
- AB. Simulated Condition: Condition that is created for the purpose of testing the response of a system (e.g., applying a hair blower to a space sensor to see the response in a VAV box)
- AC. Simulated Signal: Disconnecting a sensor and using a signal generator to send an amperage, resistance, or pressure to the transducer and DDC system to simulate a sensor value
- AD. Specifications: The construction specifications of the Contract Documents
- AE. Startup: The initial starting or activating of dynamic equipment, including executing construction checklists
- AF. Subs: The subcontractors to the Contractor who provide and install building components and systems
- AG. Test Procedures: The step-by-step process that must be executed to fulfill the test requirements. The CA develops the test procedures.
- AH. Test Requirements: Requirements specifying what modes and functions, etc. shall be tested. The test requirements are not the detailed test procedures. The test requirements for each system are specified in the respective section of the Contract Documents.
- AI. Trending: Monitoring using the building control system
- AJ. Vendor: Supplier of equipment

AK. Warranty Period: Warranty period for entire project, including equipment components. Warranty begins at Substantial Completion and extends for at least one year, unless specifically noted otherwise in the Contract Documents and accepted submittals.

1.08 SYSTEMS TO BE COMMISSIONED

A. The following checked systems are to be commissioned.

<u>HVAC Equipment and System</u>	<u>Electrical Equipment and System</u>
<input type="checkbox"/> Variable Speed Drives	<input type="checkbox"/> Power Distribution System
<input type="checkbox"/> Hydronic Piping systems	<input checked="" type="checkbox"/> Lighting Control Systems
<input type="checkbox"/> HVAC Pumps	<input checked="" type="checkbox"/> Lighting Control Programs
<input type="checkbox"/> Boilers	<input checked="" type="checkbox"/> Engine Generators (if applicable)
<input type="checkbox"/> Chemical Treatment System	<input type="checkbox"/> Transfer Switches
<input type="checkbox"/> Air Cooled Condensing Units	<input type="checkbox"/> Switchboard
<input type="checkbox"/> Makeup Air Systems	<input type="checkbox"/> Panelboards
<input checked="" type="checkbox"/> Air Handling Units	<input type="checkbox"/> Grounding
<input type="checkbox"/> Underfloor Air Distribution	<input type="checkbox"/> Fire Alarm and Interface Items with HVAC
<input checked="" type="checkbox"/> Centrifugal Fans	<input type="checkbox"/> Security System
<input checked="" type="checkbox"/> Ductwork	
<input type="checkbox"/> Fire/Smoke Dampers	
<input checked="" type="checkbox"/> Automatic Temperature Controls – Including an intentional sequence of operation	<u>Plumbing System</u>
<input type="checkbox"/> Laboratory Fume Hoods	<input checked="" type="checkbox"/> Domestic Water Heater
<input checked="" type="checkbox"/> Testing, Adjusting, and Balancing	<input type="checkbox"/> Air Compressor & Dryer
<input type="checkbox"/> Building / Space Pressurization	<input type="checkbox"/> Storm Water Oil / Grit Separators
<input type="checkbox"/> Ceiling Radiant Heating	
<input type="checkbox"/> Underfloor Radiant Heating	
	<u>Building Envelope</u>
	<input checked="" type="checkbox"/> Building Insulation Installation
	<input type="checkbox"/> Building Roof Installation Methods
	<input type="checkbox"/> Doors & Windows Installation Methods
	<input type="checkbox"/> Water Infiltration / Shell Drainage Plain

PART 2 - PRODUCTS

2.01 TEST EQUIPMENT

- A. All standard testing equipment required to perform startup and initial checkout and required functional performance testing shall be provided by the ICI for the equipment being tested. For example, the MC of Division 23 shall ultimately be responsible for all standard testing equipment for the HVAC system and controls system in Division 23, except for equipment specific to and used by TAB in their commissioning responsibilities. The Installing Contractor shall provide two-way radios.
- B. Special equipment, tools and instruments (only available from vendor, specific to a piece of equipment) required for testing equipment, according to these Contract Documents, shall be included in the base bid price to the Contractor and left on site, except for stand-alone data logging equipment that may be used by the CA.
- C. Temporary Data logging equipment and software required to test equipment will be provided by the CA but shall not become the property of the Judicial Council.
- D. All testing equipment shall be of sufficient quality and accuracy to test and/or measure system performance with the tolerances specified in the Specifications. If not otherwise noted, the following minimum requirements apply: Temperature sensors and digital thermometers shall have a certified calibration within the past year to an accuracy of 0.5°F and a resolution of + or - 0.1°F. Pressure sensors shall have an accuracy of + or - 2.0% of the value range being measured (not full range of meter) and have been calibrated within the last year. All equipment shall be calibrated according to the manufacturer's recommended intervals and when dropped or damaged. Calibration tags shall be affixed or certificates readily available.
- E. Refer to Part 3 for details regarding equipment that may be required to simulate required test conditions.

PART 3 - EXECUTION

3.01 MEETINGS

- A. Commissioning Meeting: Within 60 days of commencement of construction, the CA will schedule, plan and conduct a commissioning meeting with the entire commissioning team in attendance. Meeting minutes will be distributed to all parties by the CA. Information gathered from this meeting will allow the CA to revise the Commissioning Plan, which will be distributed to all parties.
- B. Miscellaneous Meetings: Other meetings will be planned and conducted by the CA as construction progresses. These meetings will cover coordination, deficiency resolution and planning issues with particular contractors. The CA will plan these meetings and will minimize unnecessary time being spent by contractors. For large projects, these meetings may be held monthly, until the final 3 months of construction when they may be held as frequently as one per week.

3.02 STARTUP, CONSTRUCTION CHECKLISTS, AND INITIAL CHECKOUT

- A. The following procedures apply to all equipment to be commissioned. Some systems that are not comprised so much of actual dynamic machinery, e.g., electrical system power quality, may have very simplified CCs and startup.
- B. General: Construction checklists are important to ensure that the equipment and systems are hooked up correctly and operational. Checklists also ensure that functional performance testing (in-depth system checkout) may proceed without unnecessary delays. Each piece of equipment receives full construction checkout. No sampling strategies are used. The construction testing for a given system must be successfully completed prior to formal functional performance testing of equipment or subsystems of the given system.
- C. Startup and Initial Checkout Plan: The CA will assist the commissioning team members responsible for startup of any equipment in developing detailed startup plans for all equipment. The primary role of the CA in this process is to ensure that there is written documentation that each of the manufacturer-recommended procedures has been completed. Parties responsible

for construction checklists and startup are identified in the initial commissioning meeting and in the checklist forms.

1. The CA adapts, if necessary, the representative construction checklists and procedures from the related sections. These checklists indicate required procedures to be executed as part of startup and initial checkout of the systems and the party responsible for their execution.
2. The CA provides these checklists and tests to the Contractor. The Contractor determines which trade is responsible for executing and documenting each of the line item tasks and notes that trade on the form. Each form will have more than one trade responsible for its execution.
3. The Contractor responsible for the purchase of the equipment develops the full startup plan by combining (or adding to) the CA's checklists with the manufacturer's detailed startup and checkout procedures from the O&M manual and the normally used field checkout sheets. The plan will include checklists and procedures with specific boxes or lines for recording and documenting the checking and inspections of each procedure and a summary statement with a signature block at the end of the plan.
 - a. The full startup plan could consist of something as simple as:
 - 1) The CA's construction checklists
 - 2) The manufacturer's standard written startup procedures copied from the installation manuals with check boxes by each procedure and a signature block added by hand at the end
 - 3) The manufacturer's normally used field checkout sheets
4. The contractor submits the full startup plan to the CA for review and approval.
5. The CA reviews and approves the procedures and the format for documenting them, noting any procedures that need to be added.

D. Sensor and Actuator Calibration

1. All field-installed temperature, relative humidity, CO, CO2 and pressure sensors and gages, and all actuators (dampers and valves) on all equipment shall be calibrated using the methods described below. Alternate methods may be used if approved by the CA beforehand. All test instruments shall have had a certified calibration within the last 12 months. Sensors installed in the unit at the factory with calibration certification provided need not be field-calibrated.
2. All procedures used shall be fully documented on the construction checklists or other approved forms, clearly referencing the procedures followed and written documentation of initial, intermediate, and final results.
3. Sensor Calibration Methods
 - a. All Sensors: Verify that all sensor locations are appropriate and away from causes of erratic operation. Verify that sensors with shielded cable are grounded only at one end. For sensor pairs that are used to determine a temperature or pressure difference, make sure they are reading within 0.2°F of each other for temperature and within a tolerance equal to 2% of the reading of each other for pressure. Tolerances for critical applications may be tighter.
 - b. Sensors Without Transmitters--Standard Application: Make a reading with a calibrated test instrument within 6 inches of the site sensor. Verify that the sensor reading (via the permanent thermostat, gage, or building automation system (BAS)) is within the tolerances in the table below of the instrument-measured value. If not, install offset in BAS, calibrate or replace sensor.
 - c. Sensors With Transmitters--Standard Application: Disconnect sensor. Connect a signal generator in place of sensor. Connect ammeter in series between transmitter and BAS control panel. Using manufacturer's resistance-temperature data, simulate minimum desired temperature. Adjust transmitter potentiometer zero until the ammeter reads 4 mA. Repeat for the maximum temperature matching 20 mA to the potentiometer span or maximum and verify at the BAS. Record all values and recalibrate controller as necessary to conform to specified control ramps, reset schedules, proportional relationship, reset relationship, and P/I reaction. Reconnect

sensor. Make a reading with a calibrated test instrument within 6 inches of the site sensor. Verify that the sensor reading (via the permanent thermostat, gage, or building automation system [BAS]) is within the tolerances in the table below of the instrument-measured value. If not, replace sensor and repeat. For pressure sensors, perform a similar process with a suitable signal generator.

- d. Critical Applications: For critical applications (process, manufacturing, etc.) more rigorous calibration techniques may be required for selected sensors. Describe any such methods used on an attached sheet.
- 4. Tolerances, Standard Applications
- 5. Required Tolerances table

Sensor	Required Tolerance (+/-)	Sensor	Required Tolerance (+/-)
Cooling coil, chilled and condenser water temps	0.4F	Flow rates, water Relative humidity	4% of design 4% of design
AHU wet bulb or dew point	2.0F	Combustion flue temps	5.0F
Hot water coil and boiler water temp	1.5F	Oxygen or CO2 monitor	0.1 % pts
Outside air, space air, duct air temps	0.4F	CO monitor	0.01 % pts
Wattour, voltage and amperage	1% of design	Natural gas and oil flow rate	1% of design
Pressures, air, water and gas	3% of design	Steam flow rate	3% of design
Flow rates, air	10% of design	Barometric pres- sure	0.1 in. of Hg

- 6. Valve and Damper Stroke Setup and Check
 - a. EMS Readout: For all valve and damper actuator positions checked, verify the actual position against the BAS readout.
 - b. Set pumps or fans to normal operating mode. Command valve or damper closed, visually verify that valve or damper is closed and adjust output zero signal as required. Command valve or damper open, verify position is full open and adjust output signal as required. Command valve or damper to a few intermediate positions. If actual valve or damper position doesn't reasonably correspond, replace actuator or add pilot position indicator (for pneumatics).
 - c. Closure for heating coil valves (NO): Set heating setpoint 20°F above room temperature. Observe valve open. Remove control air or power from the valve and verify that the valve stem and actuator position do not change. Restore to normal. Set heating setpoint to 20°F below room temperature. Observe the valve close. For pneumatics, by override in the EMS, increase pressure to valve by 3 psi (do not exceed actuator pressure rating) and verify valve stem and actuator position does not change. Restore to normal.
 - d. Closure for cooling coil valves (NC): Set cooling setpoint 20°F above room temperature. Observe the valve close. Remove control air or power from the valve and verify that the valve stem and actuator position do not change. Restore to normal. Set cooling setpoint to 20°F below room temperature. Observe valve open. For pneumatics, by override in the EMS, increase pressure to valve by 3 psi (do not exceed actuator pressure rating) and verify valve stem and actuator position does not change. Restore to normal.

- E. Execution of Construction Checklists and Startup
 1. Four weeks prior to startup, the contractors and vendors schedule startup and checkout with the GC and CA. The performance of the construction checklists, startup and checkout are directed and executed by the contractor or vendor. When checking off construction checklists, signatures may be required of other contractors for verification of completion of their work.
 2. The CA will, at their own discretion, observe, at minimum, the procedures for each piece of primary equipment unless there are multiple units. In no case will the number of units witnessed be less than four on any one building, nor less than 20% of the total number of identical or very similar units.
 3. For lower-level components of equipment, (e.g., VAV boxes, sensors, controllers), the CA shall observe a sampling of the construction and startup procedures. The sampling procedures are identified in the Commissioning Plan.
 4. The contractors shall execute startup and provide the CA with a signed and dated copy of the completed startup and construction tests and checklists.
 5. Only installing individuals who have direct knowledge that a line item task on the construction checklist was actually performed shall initial or check off that item.
- F. Deficiencies, Non-Conformance and Approval in Checklists and Startup
 1. The contractors shall clearly list any outstanding items of the initial startup and construction procedures that were not completed successfully, at the bottom of the procedures form or on an attached sheet. The procedures form and any outstanding deficiencies are provided to the CA within two days of test completion.
 2. The CA reviews the report and submits either a non-compliance report or an approval form to the contractors. The CA shall work with the Contractors to correct and retest deficiencies or uncompleted items. The CA will involve the contractors and others as necessary. The installing contractors shall correct all areas that are deficient or incomplete in the checklists and tests in a timely manner, and shall notify the CA as soon as outstanding items have been corrected and resubmit an updated startup report and a Statement of Correction on the original non-compliance report. When satisfactorily completed, the CA recommends approval of the execution of the checklists and startup of each system to the A/E using a standard form.
 3. Items left incomplete, which later cause deficiencies or delays during functional testing, may result in back charges to the responsible party.

3.03 PHASED COMMISSIONING

- A. The project will require startup and initial checkout to be executed in phases. This phasing will be planned and scheduled in a coordination meeting of the CA, MC, TAB, TCC and the GC. Results will be added to the master and commissioning schedule.

3.04 FUNCTIONAL PERFORMANCE TESTING

- A. This subsection applies to all commissioning functional testing for all divisions.
- B. The general list of equipment to be commissioned is found in this Section. The specific equipment and modes to be tested for each system are found in the respective sections.
- C. The parties responsible to execute each test are listed with each test in the respective sections.
- D. Objectives and Scope: The objective of functional performance testing is to demonstrate that each system is operating according to the Contract Documents. Functional testing facilitates bringing the systems from a state of substantial completion to full dynamic operation. Additionally, during the testing process, areas of deficient performance are identified and corrected, improving the operation and functioning of the systems.
 1. In general, each system should be operated through all modes of operation (seasonal, occupied, unoccupied, warm-up, cool-down, part- and full-load) where there is a specified system response. Verifying each sequence in the sequences of operation is required. Proper responses to such modes and conditions as power failure, freeze condition, low oil pressure, no flow, equipment failure, etc. shall also be tested. Specific modes required in this project are given in Divisions 22, 23, and 26, and other parts of the specification.

- E. Development of Test Procedures: Before test procedures are written, the CA shall obtain all requested documentation and a current list of change orders affecting equipment or systems, including an updated points list, program code, control sequences and parameters. Using the testing parameters and requirements in Divisions 22, 23, 26, and elsewhere, the CA shall develop specific test procedures and forms to verify and document proper operation of each piece of equipment and system. Each contractor or vendor responsible to execute a test shall provide limited assistance to the CA in developing the procedures review (answering questions about equipment, operation, sequences, etc.). Prior to execution, the CA shall provide a copy of the test procedures to the contractors, who shall review the tests for feasibility, safety, equipment, and warranty protection.
1. The CA shall review Judicial Council-contracted factory testing or required Judicial Council acceptance tests which the CA is not responsible to oversee, including documentation format, and shall determine what further testing or format changes may be required to comply with the Specifications. Redundancy of testing shall be minimized.
 2. The purpose of any given specific test is to verify and document compliance with the stated criteria of acceptance given on the test form.
 3. Representative test formats and examples (not designed for this facility) are found in the appendices to Divisions 22, 23, and 26. The test procedure forms developed by the CA shall include (but not be limited to) the following information:
 - a. System and equipment or component name(s)
 - b. Equipment location and ID number
 - c. Unique test ID number, and reference to unique construction checklist and start-up documentation ID numbers for the piece of equipment
 - d. Date
 - e. Project name
 - f. Participating parties
 - g. A copy of the specification section describing the test requirements
 - h. A copy of the specific sequence of operations or other specified parameters being verified
 - i. Formulas used in any calculations
 - j. Required pre-test field measurements
 - k. Instructions for setting up the test
 - l. Special cautions, alarm limits, etc.
 - m. Specific step-by-step procedures to execute the test, in a clear, sequential, and repeatable format
 - n. Acceptance criteria of proper performance with a Yes / No checkbox to allow for clearly marking whether or not proper performance of each part of the test was achieved
 - o. A section for comments
 - p. Signatures and date block for the CA
- F. Test Methods
1. Functional performance testing and verification may be achieved by manual testing (persons manipulate the equipment and observe performance) or by monitoring the performance and analyzing the results using the control system's trend log capabilities or by stand-alone data loggers. Division 23 Sections and other Sections specify which methods shall be used for each test. The CA may substitute specified methods or require an additional method to be executed other than what was specified. The CA will determine which method is most appropriate for tests that do not have a method specified.
 2. Simulated Conditions: Simulating conditions (not by an overwritten value) shall be allowed, though timing the testing to experience actual conditions is encouraged wherever practical.
 3. Overwritten Values: Overwriting sensor values to simulate a condition, such as overwriting the outside air temperature reading in a control system to be something other than it really is, shall be allowed, but shall be used with caution and avoided when possible. Such testing methods often can only test a part of a system, as the interactions and responses

of other systems will be erroneous or not applicable. Simulating a condition is preferable, e.g., for the above case, by heating the outside air sensor with a hair dryer rather than overwriting the value or by altering the appropriate setpoint to see the desired response. Before simulating conditions or overwriting values, sensors, transducers, and devices shall have been calibrated.

4. Simulated Signals: Using a signal generator which creates a simulated signal to test and calibrate transducers and DDC constants is generally recommended over using the sensor to act as the signal generator via simulated conditions or overwritten values.
 5. Altering Setpoints: Rather than overwriting sensor values, and when simulating conditions is difficult, altering setpoints to test a sequence is acceptable. For example, to see the AC compressor lockout work at an outside air temperature below 55°F, when the outside air temperature is above 55°F, temporarily change the lockout setpoint to be 2°F above the current outside air temperature.
 6. Indirect Indicators: Relying on indirect indicators for responses or performance shall be allowed only after visually and directly verifying and documenting, over the range of the tested parameters, that the indirect readings through the control system represent actual conditions and responses. Much of this verification is completed during construction testing.
 7. Setup: Each function and test shall be performed under conditions that simulate actual conditions as close as is practically possible. The contractor executing the test shall provide all necessary materials, system modifications, etc. to produce the necessary flows, pressures, temperatures, etc. necessary to execute the test according to the specified conditions. At completion of the test, the contractor shall return all affected building equipment and systems, due to these temporary modifications, to their pre-test condition.
 8. Sampling: Multiple identical pieces of non-life-safety or otherwise non-critical equipment may be functionally tested using a sampling strategy. Significant application differences and significant sequence of operation differences in otherwise identical equipment invalidates their common identity. A small size or capacity difference, alone, does not constitute a difference. The specific recommended sampling rates are specified with each type of equipment in Divisions 22, 23, and 26. It is noted that no sampling by contractors is allowed in construction checklist execution.
 - a. A common sampling strategy referenced in the Specifications as the “xx% Sampling—yy% Failure Rule” is defined by the following example.
 - 1) xx = the percent of the group of identical equipment to be included in each sample
 - 2) yy = the percent of the sample that if failing, will require another sample to be tested
 - b. The example below describes a 20% Sampling—10% Failure Rule.
 - 1) Randomly test at least 20% (xx) of each group of identical equipment. In no case test less than three units in each group. This 20%, or three, constitute the “first sample.”
 - 2) If 10% (yy) of the units in the first sample fail the functional performance tests, test another 20% of the group (the second sample).
 - 3) If 10% of the units in the second sample fail, test all remaining units in the whole group.
 - 4) If at any point, frequent failures are occurring and testing is becoming more troubleshooting than verification, the CA may stop the testing and require the contractor to perform and document a checkout of the remaining units, prior to continuing with functionally testing the remaining units.
- G. Coordination and Scheduling: The contractors shall provide sufficient notice to the CA regarding their completion schedule for the construction checklists and startup of all equipment and systems. The CA will schedule functional tests through the A/E, GC and other contractors. The CA shall direct, witness and document the functional testing of all equipment and systems. The contractors shall execute the tests.

1. In general, functional testing is conducted after construction testing and startup has been satisfactorily completed. The control system is sufficiently tested and approved by the CA before it is used for TAB or to verify performance of other components or systems. The air balancing and water balancing is completed and debugged before functional testing of air-related or water-related equipment or systems. Testing proceeds from components to subsystems to systems. When the proper performance of all interacting individual systems has been achieved, the interface or coordinated responses between systems is checked.
- H. Problem Solving: The CA will recommend solutions to problems found; however, the burden of responsibility to solve, correct, and retest problems is with the GC, contractors, and A/E.

3.05 DOCUMENTATION, NON-CONFORMANCE AND APPROVAL OF TESTS

- A. Documentation: The CA shall witness and document the results of all functional performance tests using the specific procedural forms developed for that purpose. Prior to testing, these forms are provided to the contractors for review. The CA will include the filled- out forms in the O&M manuals.
- B. Non-Conformance
 1. The CA will record the results of the functional test on the procedure or test form. All deficiencies or non-conformance issues shall be noted and reported to the A/E on a standard non-compliance form.
 2. Corrections of minor deficiencies identified may be made during the tests at the discretion of the CA. In such cases the deficiency and resolution will be documented on the procedure form.
 3. Every effort will be made to expedite the testing process and minimize unnecessary delays, while not compromising the integrity of the procedures. However, the CA will not be pressured into overlooking deficient work or loosening acceptance criteria to satisfy scheduling or cost issues, unless there is an overriding reason to do so at the request of the Judicial Council.
 4. As tests progress and a deficiency is identified, the CA discusses the issue with the executing contractor.
 - a. When there is no dispute on the deficiency and the contractor accepts responsibility to correct it:
 - 1) The CA documents the deficiency and the Contractor's response and intentions, and they go on to another test or sequence. After the day's work, the CA submits the non-compliance reports to the A/E for signature, if required. A copy is provided to the contractor and CA. The contractor corrects the deficiency, signs the statement of correction at the bottom of the non- compliance form certifying that the equipment is ready to be retested, and sends it back to the CA.
 - 2) The contractor reschedules the test and coordinates with CA to establish a time and date that the test is to be repeated.
 - b. If there is a dispute about a deficiency, regarding whether it is a deficiency or who is responsible:
 - 1) The deficiency shall be documented on the non- compliance form with the contractor's response and a copy given to the A/E and to the contractor representative assumed to be responsible.
 - 2) Resolutions are made at the lowest management level possible. Other parties are brought into the discussions as needed. Final interpretive authority is with the A/E. Final acceptance authority is with the A/E.
 - 3) The CA documents the resolution process.
 - 4) Once the interpretation and resolution have been decided, the appropriate party corrects the deficiency, signs the statement of correction on the non-compliance form and provides it to the CA. The contractor reschedules the test and notifies the CA of the date and time the test is to be repeated. This will occur until satisfactory performance is achieved.
 5. Cost of Retesting

- a. The cost for the contractor to retest a construction or functional test, if they are responsible for the deficiency, shall be theirs. If they are not responsible, any cost recovery for retesting costs shall be negotiated with the responsible parties.
 - b. For a deficiency identified, not related to any construction checklist or startup fault, the following shall apply: The CA will direct the retesting of the equipment once at no "charge" to the contractor for their time. However, the CA's time for a second retest will be charged to the contractor, who may choose to recover costs from the responsible Sub.
 - c. The time for the CA to direct any retesting required because a specific construction checklist or start-up test item, reported to have been successfully completed, but determined during functional testing to be faulty, will be back charged to the contractor, who may choose to recover costs from the party responsible for executing the faulty construction test.
 - d. Refer to the sampling section of Section 01810, for requirements for testing and retesting identical equipment.
6. The contractor shall respond in writing to the CA at least as often as commissioning meetings are being scheduled concerning the status of each apparent outstanding discrepancy identified during commissioning. Discussion shall cover explanations of any disagreements and proposals for their resolution.
7. The CA retains the original non-conformance forms until the end of the project.
8. Any required retesting by any contractor shall not be considered a justified reason for a claim of delay or for a time extension by the contractor.
- C. Failure Due to Manufacturer Defect: If 10%, or three, whichever is greater, of identical pieces (size alone does not constitute a difference) of equipment fail to perform to the Contract Documents (mechanically or substantively) due to manufacturing defect, not allowing it to meet its submitted performance spec, all identical units may be considered unacceptable by the Judicial Council. In such case, the contractor shall provide the Judicial Council with the following:
1. Within one week of notification from the A/E, the contractor shall examine all other identical units making a record of the findings. The findings shall be provided to the A/E within two weeks of the original notice.
 2. Within two weeks of the original notification, the contractor shall provide a signed and dated, written explanation of the problem, cause of failures, etc. and all proposed solutions, which shall include full equipment submittals. The proposed solutions shall not significantly exceed the specification requirements of the original installation.
 3. The A/E will determine whether a replacement of all identical units or a repair is acceptable.
 4. Two examples of the proposed solution will be installed by the contractor and the CA will be allowed to test the installations for up to one week, upon which the CA will decide whether to accept the solution.
 5. Upon acceptance, the contractor and/or manufacturer shall replace or repair all identical items, at their expense and extend the warranty accordingly, if the original equipment warranty had begun. The replacement/repair work shall proceed with reasonable speed beginning within one week from when parts can be obtained.
- D. Approval: The CA notes each satisfactorily demonstrated function on the test form. Formal approval of the functional test is made later after review by the CA. The CA recommends acceptance of each test to the Judicial Council and A/E using a standard form. The A/E gives final approval on each test using the same form, providing a signed copy to the CA and the contractor.

3.06 OPERATION AND MAINTENANCE MANUALS

- A. Standard O&M Manuals.
 1. Special requirements for the TCC and TAB contractor are found in Sections 22 08 00 and 23 08 00.

3.07 TRAINING OF JUDICIAL COUNCIL PERSONNEL

- A. The GC shall be responsible for training coordination and scheduling and ultimately for ensuring that training is completed.
- B. The CA shall be responsible for overseeing and approving the content and adequacy of the training of Judicial Council personnel for commissioned equipment.
 - 1. The CA shall interview the facility manager and lead engineer to determine the special needs and areas where training will be most valuable. The Judicial Council and CA shall decide how rigorous the training should be for each piece of commissioned equipment. The CA shall communicate the results to the contractor and vendors who have training responsibilities.
 - 2. In addition to these general requirements, the specific training requirements of Judicial Council personnel by contractor and vendors is specified in Divisions 22, 23, and 26.
 - 3. Each contractor and vendor responsible for training will submit a written training plan to the CA for review and approval prior to training. The plan will cover the following elements:
 - a. Equipment (included in training)
 - b. Intended audience
 - c. Location of training
 - d. Objectives
 - e. Subjects covered (description, duration of discussion, special methods, etc.)
 - f. Duration of training on each subject
 - g. Instructor for each subject
 - h. Methods (classroom lecture, video, site walk-through, actual operational demonstrations, written handouts, etc.)
 - i. Instructor and qualifications
 - 4. For the primary HVAC equipment, the TCC shall provide a short discussion of the control of the equipment during the mechanical or electrical training conducted by others.
 - 5. The CA develops an overall training plan and coordinates and schedules, with the Judicial Council and contractor, the overall training for the commissioned systems. The CA develops criteria for determining that the training was satisfactorily completed, including attending some of the training, etc. The CA recommends approval of the training to the A/E using a standard form. The A/E also signs the approval form.
 - 6. At one of the training sessions, the CA presents a presentation discussing the use of the blank functional test forms for re-commissioning equipment.
 - 7. The GC will provide videotaping of the training sessions, with tapes cataloged by the GC, and added to the O&M manuals.
 - 8. The mechanical design engineer shall at the first training session present the overall system design concept and the design concept of each equipment section. This presentation shall include a review of all systems using the simplified system schematics (one-line drawings) including chilled water systems, heat rejection systems, heating systems, fuel oil and gas supply systems, supply air systems, exhaust system, and outside air strategies.

3.08 DEFERRED TESTING

- A. Unforeseen Deferred Tests: If any check or test cannot be completed due to the building structure, required occupancy condition, or other deficiency, execution of checklists and functional testing may be delayed upon approval of the A/E.
- B. Architect: These tests will be conducted in the same manner as the seasonal tests as soon as possible. Services of necessary parties will be negotiated.
- C. Seasonal Testing: During the warranty period, seasonal testing (tests delayed until weather conditions are closer to the system's design) specified in Division 23 shall be completed as part of this contract. The CA shall coordinate this activity. Tests will be executed and documented, and any deficiencies corrected by the appropriate contractor, with facilities staff and the CA witnessing. Any final adjustments to the O&M manuals and as-builds due to the testing will be made.

3.09 WRITTEN WORK PRODUCTS

- A. The commissioning process generates a number of written work products described in various parts of the Specifications. The Commissioning Plan lists all the formal written work products, describes briefly their contents, who is responsible to create them, their due dates, who receives and approves them, and the location of the specification to create them. In summary, the written products are:

Product	Developed By
Commissioning plan	CA
Commissioning meeting minutes	CA
Commissioning schedules	GC and CA with other contractors
Equipment documentation submittals	Contractors
Sequence clarifications	Contractors and A/E as needed
Construction checklists	CA (Preliminary in Spec. Revised based on Approved Submittals)
Startup and initial checkout plan	Contractors and CA (Compilation of existing documents)
Startup and initial checkout forms filled out	Contractors
Final TAB report	TAB
Issues log (deficiencies)	CA with responses provided by contractors
Commissioning Progress Record	CA
Deficiency reports	CA
Functional test forms	CA
Filled-out functional tests	CA
O&M manuals	Contractors with review by CA
Commissioning record books and CD's	CA
Overall training plan	CA, GC, and Contractors
Specific training agendas	Contractors
Final commissioning report	CA
Miscellaneous approvals	CA

END OF SECTION

EXHIBIT S
(DOCUMENT 91 15)

DIVISION 2 THROUGH DIVISION 49 DOCUMENTS

The Division 2 through Division 49 Documents prepared by Architect and applicable to the Project are included in the following pages.

SECTION 02 41 13
SELECTIVE DEMOLITION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. SUMMARY
 - 1. This Section requires the selective removal and subsequent offsite disposal of the following:
 - a. Portions of existing building indicated on drawings and as required to accommodate new construction.
 - b. Extent of building demolition work is shown on drawings.

1.02 SUBMITTALS

- A. Schedule indicating proposed sequence of operations for selective demolition work to Owner's Representative for review prior to start of work. Include coordination for shutoff, capping, and continuation of utility services as required, together with details for dust and noise control protection.
- B. Provide a detailed sequence of demolition and removal work to ensure uninterrupted progress of Owner's on-site operations.
- C. Schedule per Section 01325. Include coordination for shutoff, and continuation of utility services as required, together with details for dust and noise control protection
- D. Coordinate with Owner's continuing occupation of portions of existing building.
- E. Photographs of existing conditions of structure surfaces, equipment, and adjacent improvements that might be misconstrued as damage related to removal operations. File with Owner's Representative prior to start of work.

1.03 EXISTING CONDITIONS

- A. Site Surveys:
 - 1. Prior to start of demolition operations, conduct survey of existing conditions. On such survey, list items specified and indicated to be salvaged.
 - 2. Survey with Engineer for accurate count and location of signs to be saved and re-installed after painting.
 - 3. Following performance of demolition, inspect and report defects and structural weaknesses of construction and improvements partially demolished, cut, and removed; of construction and improvements remaining; and of adjacent construction and improvements.

1.04 JOB CONDITIONS

- A. Occupancy: Owner will occupy portions of the existing building immediately adjacent to areas of selective demolition. Conduct selective demolition work in manner that will minimize need for disruption of Owner's normal operations. Provide minimum of 72 hours advance notice to Owner of demolition activities that will affect Owner's normal operation, including dust, noise and vibration.
- B. Condition of Structures: Owner assumes no responsibility for actual condition of items to be demolished.
- C. Conditions existing at time of inspection for bidding purposes will be maintained by Owner insofar as practicable. However, minor variations within structure may occur by Owner's removal and salvage operations prior to start of selective demolition work.
- D. Partial Demolition and Removal: Items indicated to be removed but of salvageable value to Contractor may be removed from structure as work progresses. Transport salvaged items from site as they are removed.

1. Storage or sale of removed items on site will not be permitted.
- E. Protections: Provide temporary barricades and other forms of protection to protect Owner's personnel and general public from injury due to selective demolition work.
 1. Provide protective measures as required to provide free and safe passage of Owner's personnel and general public to and from occupied portions of building.
 2. Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.
 3. Protect floors with suitable coverings when necessary.
 4. Construct temporary dustproof partitions where required to separate areas where dirt or dust operations are performed. Equip partitions with dustproof doors.
 5. Provide temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces and installation of new construction to ensure that no water leakage or damage occurs to structure or interior areas of existing building.
 6. Remove protections at completion of work.
 7. Cover and protect furniture, equipment, and fixtures from soilage or damage when demolition work is performed in areas where such items have not been removed.
- F. Damages: Promptly repair damages caused to adjacent facilities by demolition work.
- G. Traffic: Conduct selective demolition operations and debris removal to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities.
 1. Do not close, block, or otherwise obstruct streets, walks, or other occupied or used facilities without written permission from the authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- H. Flame Cutting: Do not use cutting torches for removal until work area is cleared of flammable materials. At concealed spaces, such as interior of ducts and pipe spaces, verify condition of hidden space before starting flame-cutting operations. Maintain portable fire suppression devices during flame-cutting operations. Owner's representative must be present during flame cutting operations.
- I. Utility Services: Maintain existing utilities indicated to remain in service and protect them against damage during demolition operations.
 1. Do not interrupt utilities serving occupied or used facilities, except when authorized in writing by the authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to the governing authorities.
 2. Maintain fire protection services during selective demolition operations.
- J. Environmental Controls: Use temporary enclosures and other methods to limit dust and dirt migration. Comply with governing regulations pertaining to environmental protection.

PART 2 PRODUCTS

2.01 MATERIALS

- A. General
 1. Remove and dispose of items and materials not designated to be salvaged. Disposal of all paper products, metals, glass, carpet, concrete, plaster, and plastic shall be at recycle facilities. All other materials shall be disposed of at legal dump sites.
 2. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution.
 3. If, in the course of removing designated items and materials, the condition of other materials or the structure so exposed appears to be damaged or of otherwise questionable condition, immediately notify the Architect/Engineer who will determine if the other materials or structure shall be removed, and if so to what extent.
 4. Dispose of removed items and materials not indicated or designated for salvage.
 5. Nothing to be removed from the site shall be stored, sold, or burned on the site without the District's prior written consent.

6. Burning of removed materials is not permitted on Project Site.
7. Remove and dispose of debris found in work areas at start of work.

PART 3 EXECUTION

3.01 PREPARATION

- A. Do not proceed with any demolition work until full protection is provided to prevent the entrance of weather, dust, debris, into occupied areas and rooms. Inspect all dustproof partitions before proceeding with work.
- B. Cover and protect furniture, equipment, and fixtures from soilage or damage when demolition work is performed in areas where such items have not been removed.
- C. Erect and maintain dust-proof partitions and closures as required to prevent spread of dust or fumes to other portions of the building.
- D. Provide weatherproof closures for exterior openings resulting from demolition work.
- E. Locate, identify, stub off, and disconnect utility services that are not indicated to remain.
- F. Provide bypass connections as necessary to maintain continuity of service to occupied areas of building. Submit Access Request to Owner if shutdown of service is necessary during changeover.
- G. Designate a specific area on the construction site for recycling and track recycling efforts throughout the construction process. Identify construction haulers and recyclers to handle the designated materials

3.02 DEMOLITION

- A. General: Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.
 1. Demolish concrete in small sections. Cut concrete at junctures with construction to remain using power-driven masonry saw or hand tools; do not use power-driven impact tools.
 2. Locate demolition equipment to promptly remove debris to avoid imposing excessive loads on floors or framing.
 3. Provide services for effective air and water pollution controls as required by the Owner and local authorities having jurisdiction.
- B. Building Demolition: Demolish buildings completely and remove from site. Use such methods as required to complete work within limitations of governing regulations.
 1. Small structures may be removed intact when acceptable to Architect and approved by authorities having jurisdiction.
 2. Proceed with demolition in a systematic manner, from top of structure to ground. Complete demolition work above each floor or tier before disturbing supporting members on lower levels.
 3. Demolish concrete and masonry in small sections.
 4. Remove structural framing members and lower to ground by hoists, derricks, or other suitable methods.
 5. Break up and remove concrete slabs-on-grade, unless otherwise shown to remain.
 6. Locate demolition equipment throughout structure and remove materials so as to not impose excessive loads to supporting walls, floor or framing.
- C. Below-Grade Construction:
 1. Demolish foundation walls to a depth of not less than 5' below existing ground surface. Demolish and remove below-grade wood, metal construction, and floor construction except concrete slabs on grade.
 2. Demolish and remove below-slab construction and concrete slabs on grade.
- D. Filling Basements and Voids: Completely fill below-grade areas and voids resulting from demolition of structures.

1. Use satisfactory soil materials consisting of stone, gravel, and sand, free from debris, trash, frozen materials, roots and other organic matter.
 2. Prior to placement of fill materials, ensure that areas to be filled are free of standing water, frost, frozen materials, trash and debris.
 3. Place fill materials in horizontal layers not exceeding 6" in loose depth. Compact each layer at optimum moisture content of fill material to a density equal to original adjacent ground, unless subsequent excavation for new work is required.
 4. After fill placement and compaction, grade surface to meet adjacent contours and to provide flow to surface drainage structures.
- E. If unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Owner's Representative in written, accurate detail. Pending receipt of directive from Owner's Representative, rearrange selective demolition schedule as necessary to continue overall job progress without undue delay.
- F. Roads, walks, adjoining areas, shall be kept reasonably clean.
- G. Carefully remove carpet. Do not pull up old floor tile.
- H. Remove screws and anchors when removing signs and equipment.
- I. Perform all selective demolition work necessary for installation of new work, including but not limited to, removal of concrete, asphalt, aggregate, topsoil, planting, subgrade, finishes, etc.

3.03 SALVAGED MATERIALS

- A. Salvaged Items: Where indicated on Drawings or as directed by the Owner, carefully remove indicated items, clean, store, and reuse or turn over to Owner and obtain receipt.

3.04 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove from building site debris, rubbish, and other materials resulting from demolition operations that are not recyclable. Transport and legally dispose of off site.
1. If hazardous materials are encountered during demolition operations, comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure or environmental pollution.
 2. Burning of removed materials is not permitted on Project Site.
 3. All concrete and carpet shall be sent to a recycling facility. As proof, Contractor shall submit a receipt from the facility to the Owner.
 4. All removed material shall be sent to a recycling facility. As proof, Contractor shall submit a receipt from the facility to the Owner.

3.05 CLEANUP AND REPAIR

- A. General: Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Remove protections and leave interior areas broom clean.
1. Repair demolition performed in excess of that required. Return elements of construction and surfaces to remain to condition existing prior to start operations. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.

END OF SECTION

SECTION 02 82 13

ASBESTOS ABATEMENT

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Specification for the abatement of identified asbestos-containing materials (ACMs) and asbestos-containing construction materials (ACCMs) within Floors 1 thru 3 of the Central Justice Center in Santa Ana, CA.

Note: This specification is based upon the *Appendix A Pre-Renovation Asbestos Survey Report, Fire Sprinkler Upgrade Project, Floors 1-3 (June 1, 2020) documents* and associated sample location maps. There is the likelihood that other suspect ACMs and/or ACCMs may be encountered during the planned demolition/renovation activities. ACCMs are included in these specifications under the assumption that they will be removed by the abatement contractor at the same time the ACMs are abated.

1.02 REFERENCES

- A. United States Environmental Protection Agency (USEPA) regulations.
- B. General Industry Safety and Health Standards, 29 CFR Part 1910.
- C. Safety and Health Standards for the Construction Industry, 29 CFR Part 1926.
- D. The USEPA National Emission Standard for Hazardous Air Pollutants (NESHAP), National Emission Standard for Asbestos, Title 40 CFR Part 6,1 (a) and (m).
- E. Bay Area Air Quality Management District (BAAQMD) regulations.
- F. The Occupational Safety and Health Standards for Asbestos, 29 CFR 1910.1001 and 1926.1101.
- G. The Occupational Safety and Health Standards, for Respiratory Protection (OSHA), 29 CFR 1910.134.
- H. California Code of Regulations, Title 8, Section 1529, Asbestos in Construction.
- I. The Transportation Safety Act, Hazardous Material Transportation Act, Title 49 CFR Parts 106, 107, 171-179.

Whenever there is a conflict or overlap of the above references, the most stringent provision is applicable.

1.03 PERMITS

- A. Obtain all special permits and licenses and make all required notifications to the appropriate government regulatory agencies (California Air Resources Board, etc.) required for performance and completion of the abatement work.

1.04 SUBMITTALS

- A. Prior to the start of abatement activities, the contractor shall submit three (3) copies of the training, medical, and respiratory fit-testing documentation, described below, for each supervisor/worker who will be on-site for this project. Contractor shall use only workers medically qualified and trained for asbestos work and respirator usage.
- B. Contractor shall submit statements from the examining physician that each abatement supervisor/worker is fit to wear a respirator in accordance with 8 OCR 5144 from within the last six months.
- C. Prior to the start of abatement activities, the contractor shall submit three (3) copies of the Manufacturer's Product Data for:
 - 1) Local exhaust equipment
 - 2) Vacuum equipment
 - 3) Respirators
 - 4) Pressure differential monitor(s)
- D. Prior to the start of abatement activities, the contractor shall submit three (3) copies of the work plan for removal of the identified ACMs, including a detailed plan of work procedures, work areas and proposed timelines for removal activities.
- E. Prior to the start of abatement activities, the contractor shall submit names and qualifications of each party responsible for transporting, storing, treating, and/or disposing of the resultant asbestos waste. Include the facility location and a 24-hour point of contact. Furnish two (2) copies of federal, state, and local permit applications, permits, and corresponding identification numbers.
- F. The following field test reports shall be submitted during the course of the work:
 - 1) Air Sampling Results: Fiber counting shall be completed via Phase Contrast Microscopy (PCM) in general accordance with NIOSH Method 7400 (analysis of airborne fibers) by an analytical laboratory accredited through the National Voluntary Laboratory Accreditation Program (NVLAP) for the analysis of air samples. The results shall be reviewed by the Client and/or the Client's representative **within 24 hours**. The Client's representative shall notify the contractor immediately of exposure to fibers in excess of 0.01 fibers per cubic centimeter (0.01 f/cc).
 - 2) Pressure Differential Recordings for Local Exhaust Systems: The contractor shall review and report the pressure differential recordings within 24 hours from the end of each day. Negative pressure within the abatement work areas shall be maintained at - 0.02" of water at all times. All exceedances of -0.02" of water shall be reported to/reviewed by the Client's representative.

- 3) Asbestos Disposal Quantity Report: The contractor shall review and report to the Client within 24 hours from the end of each day, the amount of ACMs and/or ACCMs removed during the previous day.
- 4) Sign-In/Sign-Out Log: The contractor shall maintain a sign-in/sign-out log in the immediate vicinity of the change room or any decontamination area or other isolated and restricted work area. This log shall be maintained from the time the first activity is performed involving the disturbance of ACMs and/or ACCMs until acceptance of the final air test results. All persons entering the work area, including the contractor's workers, Client, and Client's representatives or authorities having jurisdiction, shall be required to sign in and out each time upon entering and leaving the Work area. All persons shall indicate name, time, company or agency represented, and reason for entering the work area.
- 5) Daily Activity Report: The contractor shall maintain a daily activity report describing work performed, materials and methods used, inspections made, test taken, and any unusual conditions or problems.

1.05

SITE CONDITIONS

- A. Furnish all labor, materials, facilities, equipment, services, employee training and testing, permits and agreements necessary to perform the removal and disposal of identified ACMs (and ACCMs as needed) in accordance with the latest applicable federal, state, and local government regulations and this specification and as detailed in the sampling survey provided in **Appendix A Pre-Renovation Asbestos Survey Report, Fire Sprinkler Upgrade Project, Floors 1-3 (June 1, 2020)**. The contractor shall also be responsible for all quantity take-offs to determine actual quantities.
- B. The contractor warrants that he/she is familiar with the codes and requirements applicable to asbestos abatement work and shall give all notices and comply with all laws, ordinances, rules, and regulations applicable to the work. If the contractor observes that the specifications or plans are at variance therewith, he/she shall give written notice to the Client's representative describing such variance. If the contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without written notice to the Client's representative, he/she shall bear all costs arising therefrom. The contractor's particular attention is directed to the applicable Cal-OSHA regulations found in 8 CCR 1529 and the necessity of complying with the regulations in the progress of his/her work. Failure or omission on the part of the contractor, or any of their representatives, either to discover or to bring to the attention of the Client any deviation from, omission from, or noncompliance with the requirements for asbestos abatement shall not be used by the contractor as defense for failure on his part to fulfill such requirements.
- C. The contractor shall assume full responsibility and liability for the compliance with all applicable Federal, State, and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.
- D. Work shall be performed to comply with the most stringent provision of the regulations herein specified under Section 1.02, References.
- E. The work specified herein shall be performed by persons trained, knowledgeable, and qualified in state-of-the-art asbestos abatement techniques

PART 2 - PRODUCTS

2.01 MATERIALS, EQUIPMENT, AND FACILITIES

- A. Polyethylene sheeting in sizes so as to minimize the frequency of joints.
- B. Tape: Glass fiber or other tape capable of sealing joints of adjacent plastic sheets and for attachment of plastic sheeting to finished or unfinished surfaces of dissimilar materials under both dry and wet conditions.
- C. Surfactant (Wetting Agent): Shall consist of materials that are non-toxic and non-irritating to skin and eye, and non-carcinogenic. The wetting agent shall consist of 50% polyoxyethylene or polyglycol ester and 50% polyoxyethylene ether, or the equivalent. Wetting agents shall be applied by means of an airless sprayer or the equivalent.
- D. Encapsulant: Shall conform to USEPA requirements, shall contain no toxic or hazardous substances and no solvents.
- E. Impermeable Containers: Air and water-tight, suitable to receive and retain any asbestos-containing or contaminated materials until disposal at an approved site and labeled in accordance with applicable Cal-OSHA regulations (CCR Title 8, § 1529). Two types of impermeable containers shall be used:
 - Six (6) mil plastic bags
 - Metal or fiber drums with tightly fitting lids.
- F. Warning Labels and Signs: In conformance with applicable Cal-OSHA regulations (CCR Title 8, § 1529).
- G. Other Materials: Provide all other materials, such as lumber, nails, and hardware that may be required to construct and dismantle the decontamination area and the barriers that isolate the Work area.

2.02 SUBSTITUTION OF MATERIALS AND/OR METHODS

- A. Any substitution in materials and methods to those specified shall be approved by the Client prior to use. Requests for substitution shall be provided in writing to the Client.
- B. Procedures described and implied in this specification are to be utilized at all times. If specified procedures cannot be utilized, a request must be made in writing to the Client's representative providing details of the problem encountered and recommended alternatives. Alternative procedures shall provide equivalent or greater protection than procedures that are replaced. Any alternative procedure must be approved in writing by the Client's representative prior to the implementation of the procedure.

PART 3 - EXECUTION

3.01 GENERAL

In a work area, the contractor shall:

- A. Remove and dispose of all ACMs (and ACCMs as needed) in accordance with the methods and procedures outlined in CCR Title 8, § 1529.

- B. At all times keep the premises free from accumulation of waste materials or rubbish caused by their employees. Bags of asbestos waste and/or other waste material shall be removed immediately at the daily completion of work. Maintain surfaces of the work area free of debris and keep waste from being distributed outside of the immediate work area.
- C. Where appropriate, place airtight, enclosed work areas under differential air pressure for the duration of the asbestos removal and subsequent cleaning phases and until all removal areas have been air-tested and found to be in compliance with the specified final air quality clearance level as determined by the Client.
- D. Perform appropriate cleaning using HEPA vacuum and/or wet cleaning methods of all areas physically connected to areas receiving asbestos removal.
- E. Dispose of all contaminated or otherwise removed materials and wastes in sealed and labeled containers in an approved sanitary landfill.
- F. Never use high pressure water streams to remove any type of ACM (>1% asbestos) or ACCM (>0.1% asbestos but <1.0 % asbestos).
- G. After removal, all surfaces shall be cleaned using wet methods and HEPA vacuumed to remove residual accumulated material. After cleaning, surfaces shall appear free of visible material.
- H. Prior to the removal of the plastic sheeting from the wall and floor surfaces, apply approved sealant/encapsulant on all concrete substrates, structural steel, and piping surfaces from which the material was removed and to plastic sheeting prior to its removal.
- I. Eating, smoking or applying cosmetics shall not be permitted in the work areas.
- J. Where applicable, during removal and cleanup activities, air samples will be collected inside the work area, in the clean room, at the pressure differential exhaust, and outside the work area adjacent to critical barriers. Samples should be collected in these locations on a daily basis, whenever abatement activities are undertaken. These samples will be analyzed utilizing PCM.
- K. If, in the course of removing ACM and ACCM from the site, the contractor discovers any other ACM or ACCM, other than those described in plans, reports, or specifications, the contractor shall notify the Client's representative in writing and, after receiving Client's approval, the contractor will remove and dispose of such item(s) at the contract unit price identified by the contractor in his bid.

3.02 WORKER PROTECTION AND DECONTAMINATION

- A. The work detailed in this specification section is designated as Class II (removal of texture/joint compound on wallboard assemblies, vinyl floor tiles (VFT)/mastic, black felt paper/vapor barrier, roof fields and penetration mastic, fire doors, HVAC duct seam tape and window/door sealant). As a result, all worker protection and decontamination shall be performed in accordance with 8 CCR Section 1529.

Note: This specification is based upon the *Appendix A Pre-Renovation Asbestos Survey Report, Fire Sprinkler Upgrade Project, Floors 1-3 (June 1, 2020) documents* and associated sample location maps. There is the likelihood that other suspect ACMs and/or ACCMs may be encountered during the planned demolition/renovation activities. ACCMs are included in these specifications under the assumption that they will be removed by the abatement contractor at the same time the ACMs are abated.

- B. The contractor will perform an exposure assessment in accordance with 8 CCR 1529. This includes, but is not limited to, collecting personal air samples to determine the employees' actual exposure to asbestos during renovation/demolition activities which will generate asbestos dust/fibers.
- C. Personal air samples will be collected by the contractor pursuant to OSHA regulations, and results made available to the Client's representative within three days of receipt from the laboratory.
- D. The contractor is responsible for decontamination of fixtures and equipment remaining in the work area.
- E. The contractor shall cooperate fully with Client representatives while conducting air monitoring and observation of procedures and abatement activities.
- F. The contractor shall provide a temporary change room unit with a separate equipment room, decontamination locker room (with shower), and a change room for personnel required to wear personal protective equipment (PPE) (Tyvek suits, etc.). This 3-stage decontamination unit will be observed/reviewed by the Client's representative prior to the start of abatement activities.

3.03 REMOVAL OF WALLBOARD/JOINT COMPOUND ASSEMBLIES THROUGHOUT BUILDING

The removal of wallboard/joint compound assemblies throughout the building shall be performed in accordance with all regulations and guidelines governing asbestos abatement and disposal, as well as other applicable federal, state, and local government regulations. The texture/joint compound material on wallboard shall be removed as a Class II material, as defined by 8 CCR 1529 and disposed of as ACCM. This includes, but is not limited to, the following:

- A. Post warning signs per 8 CCR 1532.1.
- B. Install critical barriers at openings inside the containments/work areas (as appropriate).
- C. Install a negative pressure enclosure in work area per 8 CCR 1529.
- D. Don appropriate PPE in accordance with 8 CCR 1529.
- E. Carefully mist area while removing the texture/joint compound/wallboard assemblies so as to minimize dust or fiber release.
- F. Clean the area using a HEPA vacuum and wet wiping.
- G. Dispose of plastic sheeting (critical barriers, etc.) as non-friable, non-hazardous waste following wet wiping and HEPA vacuuming of these materials.

3.04 REMOVAL OF IDENTIFIED VINYL FLOOR TILE AND ASSOCIATED MASTICS FROM BUILDING

The removal of identified VFT and associated mastics located in the building shall be performed in accordance with all regulations and guidelines governing asbestos abatement and disposal, as well as other applicable federal, state, and local government regulations. The VFT/mastic materials shall be removed as a Class II material, as defined by 8 CCR 1529 and disposed of as ACM. This includes, but is not limited to, the following:

- A. Post warning signs per 8 CCR 1532.1.
- B. Install critical barriers at openings inside the containments/work areas (as appropriate).
- C. Install a negative pressure enclosure in work area per 8 CCR 1529.
- D. Don appropriate PPE in accordance with 8 CCR 1529.
- E. Carefully mist area while removing the VFT/mastic materials so as to minimize dust or fiber release.
- F. Clean the area using a HEPA vacuum and wet wiping.
- G. Dispose of plastic sheeting (critical barriers, etc.) as non-friable, non-hazardous waste following wet wiping and HEPA vacuuming of these materials.

3.05 REMOVAL OF WINDOW FRAME SEALANTS FROM BUILDING

The removal of window sealants on window frame surfaces shall be performed in accordance with all regulations and guidelines governing asbestos abatement and disposal as well as other applicable federal, state, and local government regulations. These materials shall be removed as a Class II material, as defined by 8 CCR 1529 and disposed of as ACM. This includes, but is not limited to, the following:

- A. Post warning signs per 8 CCR 1532.1.
- B. Install critical barriers at openings inside the containments/work areas (as appropriate).
- C. Install a negative pressure enclosure in work area per 8 CCR 1529.
- D. Don appropriate PPE in accordance with 8 CCR 1529.
- E. Carefully mist area while removing the window frame sealant and wall mastic materials so as to minimize dust or fiber release.
- F. Clean the area using a HEPA vacuum and wet wiping.
- G. Dispose of plastic sheeting (critical barriers, etc.) as non-friable, non-hazardous waste following wet wiping and HEPA vacuuming of these materials.

3.06 REMOVAL OF WHITE HVAC DUCT SEAM TAPE

The removal of white HVAC duct seam tape on ductwork or any hydronic piping shall be performed in accordance with all regulations and guidelines governing asbestos abatement and disposal, as well as other applicable federal, state, and local government regulations. The duct seam tape shall be removed as a Class II, as defined by 8 CCR 1529 and disposed of as ACM. This includes, but is not limited to, the following:

- A. Post warning signs per 8 CCR 1532.1.
- B. Install critical barriers at openings inside the containments/work areas (as appropriate).
- C. Install a negative pressure enclosure (as needed) in work area per 8 CCR 1529.
- D. Don appropriate PPE in accordance with 8 CCR 1529.
- E. Carefully mist area while removing the duct seam tape so as to minimize dust or fiber release.
- F. Clean the area using a HEPA vacuum and wet wiping.
- G. Dispose of plastic sheeting (critical barriers, etc.) as non-friable, non-hazardous waste following wet wiping and HEPA vacuuming of these materials.

3.07 CLEARANCE

- A. A visual inspection may be performed by the Client's representative following ACM and ACCM removal in order to determine that the work area has been cleaned of all identified ACM, ACCM, and debris. If the work area is not visibly clean, the contractor will re-clean using HEPA vacuums and wet wiping at no additional cost to the Client.
- B. Clearance air samples may be collected by the Client's representative. Clearance air samples shall only be collected upon satisfactory visual inspection.
- C. All clearance air samples will be analyzed by PCM in accordance with the NIOSH 7400 Method. The contractor will not be released from the work area until all samples collected are determined to have fiber concentrations less than 0.01 f/cc. Should air sample results indicate fiber concentrations greater than 0.01 f/cc, the contractor will be required to re-clean the work area at no additional cost to the Client. This process shall continue until clearance air samples indicate fiber concentration levels less than 0.01 f/cc.
- D. When clearance is achieved, any decontamination enclosure systems shall be removed, the area thoroughly cleaned using wet methods, and materials from any temporary equipment rooms and/or showers disposed of as hazardous waste. Any remaining barriers between contaminated and clean areas and all seals on openings into the work area and fixtures shall be removed and disposed of as hazardous waste.

END OF SECTION

SECTION 02 90 00

LEAD-BASED/LEAD-CONTAINING PAINT ABATEMENT

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. The scope of work under this section consists of furnishing all labor, materials, facilities, equipment, services, employee training and testing, permits and agreements necessary to perform the abatement/stabilization and legal disposal of damaged lead-based paint (LBP) and/or lead-containing paint (LCP) identified in the **Appendix A Pre-Renovation Asbestos Survey Report, Fire Sprinkler Upgrade Project, Floors 1-3 (June 1, 2020)** documents and associated sample location maps/plans in accordance with the latest applicable federal, state, and local government regulations and these specifications.
- B. Abatement/stabilization of all damaged LBP and/or LCP shall include the removal and disposal of loose, flaky, chipping and peeling LBP/LCP, including paint chips, debris, dust and scrapings. LBP/LCP that is securely adhered to the underlying substrate (i.e., non-flaking or non-peeling) shall be disposed of as part of renovation debris as non-hazardous waste with intact paint.
- C. Cleaning with HEPA-filtered vacuums and damp wiping or mopping is required. If vacuuming is not effective, material may be removed by hand and plastic dust pans, then by wiping with damp cloths. Waste material shall be contained, transported, and disposed of in accordance with federal and state regulations.
- D. Refer to the sample location maps associated with the **Appendix A Pre-Renovation Asbestos Survey Report, Fire Sprinkler Upgrade Project, Floors 1-3 (June 1, 2020)** and these specifications indicating the presence and the general locations of LBP/LCP within the site buildings that will undergo required abatement/stabilization.

1.02 REFERENCES

- A. U.S. and State of California Environmental Protection Agency (EPA and Cal/EPA) regulations.
- B. Bay Area Air Quality Management District (BAAQMD) regulations.
- C. California Department of Public Health - Division of Occupational Safety and Health Administration (Cal-OSHA).
- D. Federal Government standards of Occupational Safety and Health Administration (OSHA).
- E. State of California Department of Health Services (DOHS) regulations.
- F. U.S. Department of Transportation 49 CFR, parts 173, 178, and 179.
- G. National Institute for Occupational Safety and Health (NIOSH) standards.
- H. Applicable federal, state, and local government regulations.

Whenever there is a conflict or overlap of the above references, the most stringent provision is applicable.

1.03 SUBMITTALS AND NOTICES

- A. Training: Submit within three (3) days of start date of contract, three (3) copies of the training documentation for each supervisor and worker who will be on-site for this project. This training shall be in accordance with 8 CCR 1532.1 (CAL/OSHA Lead in Construction Standard).
- B. Medical Monitoring: Submit within three (3) days of start date of contract, three (3) copies of the medical documentation for each supervisor and worker who will be on-site for this project. Contractor shall submit documentation that all employees engaged in removal activities have had the appropriate medical examinations within the prescribed time periods immediately preceding project start-up. Documentation shall include, but is not limited to, baseline blood lead levels performed in accordance with 8 CCR 1532.1 (CAL/OSHA Lead in Construction Standard).
- C. Respiratory Protection: Submit within three (3) days of start date of contract, three (3) copies of Respiratory Protection Program which is in compliance with ANSI Z88.2-1980, OSHA 29 CFR 1910 and 1926, Cal-OSHA Title 8 Section 1532.1. Contractor shall submit statement from examining physician that each employee is fit to wear a respirator in accordance with 8 CCR 5144 within the last twelve months. Contractor shall also provide documentation showing that all employees have passed respiratory fit tests within the past six months. Contractor shall use only workers medically qualified, trained CA-DHS, and CA-OSHA certified for lead work and respirator usage.
- D. OSHA Lead Compliance Plan: Submit within three (3) days of start date of contract, three (3) copies of detailed plans of the procedures proposed in order to comply with the requirements of 29 CFR 1926.62 and Cal-OSHA Title 8 Section 1532.1. Include in the plan all components required under the standard.
- E. Hazardous Waste Management Plan: Submit within three (3) days of start date of contract, three (3) copies of Hazardous Waste Management Plan which is in compliance with federal, state, and local hazardous waste regulations and addresses:
 - 1. Identification of hazardous wastes associated with the work.
 - 2. Estimated quantities of wastes to be generated and disposed of.
 - 3. Names and qualifications of each contractor that will be transporting, storing, treating, and/or disposing of the lead wastes. Include the facility location and a 24-hour point of contact. Furnish copies of EPA, state, and local permit applications, permits, and EPA Identification numbers.
 - 4. Names and qualifications (experience and training) of personnel who will be abating on-site hazardous wastes.
 - 5. List of waste handling equipment to be used in performing the work, to include cleaning, volume reduction, and transport equipment.
 - 6. Spill prevention, containment, and cleanup contingency measures to be implemented.
 - 7. The contractor shall submit name, address, and telephone number of landfill or landfills and transporter to Client's representative for approval, prior to disposal. This includes those landfills used for waste categories determined to be non-hazardous.
- F. Waste Disposal Records:

1. A written record of receipts with certified weight for disposal of materials containing lead and LBP/LCP contaminated items shall be furnished to the Client's representative within forty-eight (48) hours after disposal has taken place.
2. Provide a schedule showing date, amount, type of material, and location disposed of within five (5) working days of disposal.

PART 2 – PRODUCTS

2.01 TOOLS AND EQUIPMENT

- A. Provide all necessary tools and materials for removal of lead contamination, including but not limited to required ladders, scaffolding, HEPA vacuums, GFI protected extension cords, hand tools, personal protection equipment (PPE) etc.
- B. Provide HEPA-filtered vacuum cleaners to pickup loose dust and debris.
- C. Transportation Equipment: Transportation equipment, as required, shall be suitable for loading, temporary storage, and unloading of contaminated waste without exposure to persons or property, and shall be in compliance with federal and state regulations.
- D. Provide portable shower unit, hot water heater, water filtration system, and appropriate materials for a temporary shower (if required).

PART 3 – EXECUTION

3.01 BUILDING ISOLATION AND SIGNAGE

- A. Furnish, install, and maintain temporary barricade with continuous lead caution tape demarcating a lead abatement regulated area around the work area during periods of LBP/LCP abatement/stabilization. Only the contractor and the consultant shall be allowed in the area. Anyone entering the work area shall wear appropriate respiratory protection, disposable coveralls and other necessary PPE.

3.02 DECONTAMINATION FACILITIES

- A. The contractor shall construct a personnel and equipment decontamination facility as required under Cal-OSHA regulations.
- B. Waste water shall be filtered through a 3.0-micron pore size filter prior to disposal into the sanitary sewer.

3.03 REMOVAL OF LOOSE AND PEELING LEAD-BASED PAINT AND LEAD-CONTAINING PAINT

- A. The contractor will be required to remove all damaged, loose, flaking, chipping, debris, dust and peeling LBP/LCP from interior and exterior surfaces of the work areas within the site facilities (as needed).
- B. The contractor shall request an inspection from the Client's representative following the completion of the work described in Item A above. The Client's representative will inspect the surfaces for any signs of loose, blistered, peeling paint, dust and/or debris and if found, the contractor shall perform additional work to the satisfaction of the Client's representative. The

Client's representative will accomplish 1 sq. ft. final dust wipe inspections of each particular area, and they must pass at least the Client's minimum clearance level per area tested (<40 µg/ft²) (as needed).

- C. All perimeter exterior work areas where abatement will occur shall be lined with two layers of polyethylene in order to collect all falling LBP/LCP debris. Clear and grade work area as required. HEPA vacuum all LBP/LCP debris from polyethylene surface.

3.04 HANDLING AND DISPOSAL OF LEAD-CONTAMINATED WASTE

- A. Collect and dispose of all loose LBP/LCP as hazardous waste. Miscellaneous debris resulting from the abatement may, at the contractor's option, be disposed of as hazardous waste or undergo testing to determine if the material is hazardous waste. Should the Contractor elect for testing, the testing shall be in accordance with California Code of Regulations, Title 22, Section 6669. The testing procedures shall be subject to the Engineer's approval. The costs of all such testing shall be at the Contractor's expense.
- B. The contractor shall follow all federal and state regulations for waste handling, containerizing, transporting, and disposing of hazardous waste.
- C. The contractor shall remove waste from the structures following specification requirements. Waste shall be deposited directly into double polyethylene waste bags, goose necked, then deposited in to fiber or metal drums or other approved waste receptacles that will be used to transport the waste.
- D. The contractor is responsible for providing all waste receptacles required for disposal. All waste temporarily stored on site shall be secured to prevent against vandalism.
- E. The contractor shall establish a manifest system that meets federal and state regulations and accounts for all hazardous waste.
- F. The transporter must possess an approved EPA identification number for the site. The appropriate hazardous waste manifest must be completed by the contractor, and signed by a representative of the client, other than a Ninyo & Moore employee.

3.05 PROJECT CLOSEOUT

- A. Prior to final payment, the contractor shall comply with the following:
 - 1. Finalize disposal receipts for all waste.
 - 2. At the completion of lead abatement, all waste and storage dumpsters shall be removed from the site.

3.06 SUBSTITUTION OF MATERIALS AND/OR METHODS

- A. Any substitution in materials or methods to those specified shall be approved by the Client prior to use. Requests for substitution shall be provided in writing to the Client's representative.

END OF SECTION

SECTION 07 81 00
APPLIED FIRE PROTECTION

RELATED DOCUMENTS

1.01 DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 01 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.02 SUMMARY

- A. Section includes Sprayed-Applied Fire-Resistive Materials (SFRMs).
- B. Related Requirements:
 - 1. Division 07 Section "Intumescent Mastic Fireproofing" for mastic and intumescent fire-resistive coatings.
 - 2. Division 09 Section "Intumescent Painting" for intumescent paints that are fire retarding but not fire resistive.

1.03 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review products, design ratings, restrained and unrestrained conditions, densities, thicknesses, bond strengths, and other performance requirements.

1.04 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. LEED Submittals:
 - 1. Product Data for Credit EQ 4.2: For paints and coatings, documentation including printed statement of VOC content.
 - 2. Laboratory Test Reports for Credit EQ 4: For paints and coatings used inside the weatherproofing system, documentation indicating that products comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- C. Shop Drawings: Framing plans, schedules, or both, indicating the following:
 - 1. Extent of fireproofing for each construction and fire-resistance rating.
 - 2. Applicable fire-resistance design designations of a qualified testing and inspecting agency acceptable to authorities having jurisdiction.
 - 3. Minimum fireproofing thicknesses needed to achieve required fire-resistance rating of each structural component and assembly.
 - 4. Treatment of fireproofing after application.

1.05 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and testing agency.
- B. Product Certificates: For each type of fireproofing.
- C. Evaluation Reports: For fireproofing, from third party.
- D. Preconstruction Test Reports: For fireproofing.
- E. Field quality-control reports.

1.06 QUALITY ASSURANCE

- A. Installer Qualifications: A firm or individual certified, licensed, or otherwise qualified by fireproofing manufacturer as experienced and with sufficient trained staff to install manufacturer's products according to specified requirements.
- B. Mockups: Build mockups Indicate portion of Work represented by mockup on Drawings or draw mockup as separate element.
 - 1. Build mockup of as shown on Drawings.

2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
4. It is recommended that industry guidelines as noted in National Fireproofing Contractors Association (NFCA) 100 – Standard Practice for the Application of Spray-Applied Fire Resistive Materials (SFRMs) be maintained on the project site.

1.07 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Owner will engage a qualified testing agency to perform preconstruction testing on fireproofing.
 1. Provide test specimens and assemblies representative of proposed materials and construction.
- B. Preconstruction Adhesion and Compatibility Testing: Test for compliance with requirements for specified performance and test methods.
 1. Bond Strength: Test for cohesive and adhesive strength according to ASTM E 736. Provide bond strength indicated in referenced fire-resistance design, but not less than minimum specified in Part 2.
 2. Density: Test for density according to ASTM E 605. Provide density indicated in referenced fire-resistance design, but not less than minimum specified in Part 2.
 3. Verify that manufacturer, through its own laboratory testing or field experience, attests that primers or coatings are compatible with fireproofing.
 4. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
 5. For materials failing tests, obtain applied-fireproofing manufacturer's written instructions for corrective measures including the use of specially formulated bonding agents or primers.

1.08 FIELD CONDITIONS

- A. Environmental Limitations: Do not apply fireproofing when ambient or substrate temperature is 40 deg F 4.4 deg C or lower unless temporary protection and heat are provided to maintain temperature at or above this level for 24 hours prior to, during, and for 24 hours after product application.
- B. Ventilation: Ventilate building spaces during and after application of fireproofing, providing a minimum 4 complete air exchanges per hour and according to manufacturer's written instructions until Spray-Applied Fire Resistive Materials are dried and cured. Use natural means or, if they are inadequate, forced-air circulation until fireproofing dries thoroughly.

PART 2 PRODUCTS

2.01 MATERIALS, GENERAL

- A. Assemblies: Provide fireproofing, including auxiliary materials, according to requirements of each fire-resistance design and manufacturer's written instructions.
- B. Source Limitations: Obtain fireproofing from single source.
- C. Fire-Resistance Design: Indicated on Drawings, tested according to ASTM E 119/UL 263 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 1. Steel members are to be considered unrestrained unless specifically noted otherwise.
- D. VOC Content: Products shall comply with VOC content limits of authorities having jurisdiction.
- E. Low-Emitting Materials: Fireproofing used within the weatherproofing system shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- F. Asbestos: Provide products containing no detectable asbestos.
- G. Products shall possess DECLARE Label

1. Declaration Status "LBC Red List Free"

2.02 SPRAY-APPLIED FIRE RESISTIVE MATERIALS

- A. SFRM: Manufacturer's standard, factory-mixed, lightweight, dry formulation, complying with indicated fire-resistance design and mixed with water at Project site to form a slurry or mortar before conveyance and application.
- B. Products: Subject to compliance with requirements, provide one of the following:
 1. High Density Exposed SFRMs:
 - a. ISOLATEK International: CAFCO® FENDOLITE® M-II (ISOLATEK® Type M-II), CAFCO® FENDOLITE® TG (ISOLATEK® Type TG)
 - b. Physical Properties:
 - 1) Application: Designated for exterior use by a qualified testing agency acceptable to authorities having jurisdiction.
 - 2) Bond Strength: Minimum 1000-lbf/sq. ft. (47.88-kPa) cohesive and adhesive strength based on field testing according to ASTM E 736.
 - 3) Density: Not less than 40 lb/cu. ft. (640 kg/cu. m) as specified in the approved fire-resistance design, according to ASTM E 605.
 - 4) Thickness: As required for fire-resistance design indicated, measured according to requirements of fire-resistance design
 - 5) Combustion Characteristics: When tested in accordance with ASTM E 136 shall be noncombustible
 - 6) Surface-Burning Characteristics: When tested in accordance with ASTM E84 or CAN4-S102, the material shall exhibit the following surface burning characteristics:

2.03 A) FLAME SPREAD INDEX [10] OR LESS

2.04 B) SMOKE DEVELOPED [10] OR LESS

- A. Compressive Strength: When tested in accordance with ASTM E761, the material shall not deform more than 10 percent when subjected to a crushing force of 43,200 psf (2068 kPa).
- B. Corrosion Resistance: No evidence of corrosion according to ASTM E 937.
- C. Deflection: No cracking, spalling, or delamination according to ASTM E 759.
- D. Effect of Impact on Bonding: No cracking, spalling, or delamination according to ASTM E 760.
- E. Air Erosion: Maximum weight loss of 0.025 g/sq. ft. (0.270 g/sq. m) in 24 hours according to ASTM E 859.
- F. Fungal Resistance: When tested in accordance with ASTM G21, the material shall show resistance to mold growth for a minimum period of 28 days with or without the use of a mold inhibitor.

2.05 AUXILIARY MATERIALS

- A. General: Provide auxiliary materials that are compatible with fireproofing and substrates and are approved by UL or another testing and inspecting agency acceptable to authorities having jurisdiction for use in fire-resistance designs indicated.
- B. Substrate Primers: Primers approved by fireproofing manufacturer and complying with one or both of the following requirements:
 1. Fireproofing manufacturer shall be contacted for procedures on handling primed/painted steel.
 2. Primer's bond strength in required fire-resistance design complies with specified bond strength for fireproofing and with requirements in UL's "Fire Resistance Directory" or in the listings of another qualified testing agency acceptable to authorities having jurisdiction, based on a series of bond tests according to ASTM E 736.
- C. Bonding Agent: Product approved by fireproofing manufacturer and complying with requirements in UL's "Fire Resistance Directory" or in the listings of another qualified testing agency acceptable to authorities having jurisdiction.

- D. Metal Lath: Expanded metal lath fabricated from material of weight, configuration, and finish required, according to fire-resistance designs indicated and fireproofing manufacturer's written recommendations. Include clips, lathing accessories, corner beads, and other anchorage devices required to attach lath to substrates and to receive fireproofing.
- E. Reinforcing Fabric: Glass or carbon fiber fabric of type, weight, and form required to comply with fire-resistance designs indicated; approved and provided by fireproofing manufacturer.
- F. Reinforcing Mesh: Metallic mesh reinforcement of type, weight, and form required to comply with fire-resistance design indicated; approved and provided by fireproofing manufacturer. Include pins and attachment.
- G. Sealer: If required, a transparent-drying, water-dispersible, tinted protective coating as recommended by fireproofing manufacturer.
 - 1. Product: Subject to compliance with requirements, provide CAFCO® BOND-SEAL (ISOLATEK® Type EBS) or CAFCO® BOND-SEAL Type X (ISOLATEK® Type X) by ISOLATEK International.
- H. Topcoat: If required, a topcoat suitable for application over applied fireproofing; of type recommended by fireproofing manufacturer.
 - 1. Water-Based Permeable Topcoat: Factory-mixed formulation for brush, roller, or spray application over applied SFRM. Provide application at a rate of [30 sq. ft./gal. (0.75 sq. m/L)] [60 sq. ft./gal. (1.5 sq. m/L)] [120 sq. ft./gal. (3 sq. m/L)].
 - a. Product: Subject to compliance with requirements, provide CAFCO® TOP-COTE (ISOLATEK® TOP-COTE) by ISOLATEK International.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for substrates and other conditions affecting performance of the Work and according to each fire-resistance design. Verify compliance with the following:
 - 1. Substrates are free of dirt, oil, grease, release agents, rolling compounds, mill scale, loose scale, incompatible primers, paints, and encapsulants, or other foreign substances capable of impairing bond of fireproofing with substrates under conditions of normal use or fire exposure.
 - 2. Clips, hangers, supports, sleeves and other attachments to the substrate are to be placed by others prior to the application of the fireproofing materials.
 - 3. The installation of ducts, piping, conduit or other suspended equipment shall not take place until the application of the fireproofing is complete in an area.
- B. Fire protection shall not be applied to steel floor decks prior to the completion of concrete work on that deck.
- C. The application of fireproofing to the underside of roof deck shall not commence until the roof is completely installed and tight, all penthouses are complete, all mechanical units have been placed, and construction roof traffic has ceased. When roof traffic is anticipated, as in the case of periodic maintenance, roofing pavers shall be installed as a walkway to distribute loads.
- D. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Cover other work subject to damage from fallout or overspray of fireproofing materials during application.
- B. Clean substrates of substances that could impair bond of fireproofing.
- C. For applications visible on completion of Project, repair substrates to remove surface imperfections that could affect uniformity of texture and thickness in finished surface of

fireproofing. Remove minor projections and fill voids that would telegraph through fire-resistive products after application.

3.03 APPLICATION

- A. Construct fireproofing assemblies that are identical to fire-resistance design indicated and products as specified, tested, and substantiated by test reports for thickness, primers, sealers, topcoats, finishing, and other materials and procedures affecting fireproofing work.
- B. Comply with fireproofing manufacturer's written instructions for mixing materials, application procedures, and types of equipment used to mix, convey, and apply fireproofing as applicable to particular conditions of installation and as required to achieve fire-resistance ratings indicated.
- C. Coordinate application of fireproofing with other construction to minimize need to cut or remove fireproofing.
 - 1. Do not begin applying fireproofing until clips, hangers, supports, sleeves, and other items penetrating fireproofing are in place.
 - 2. Defer installing ducts, piping, and other items that would interfere with applying fireproofing until application of fireproofing is completed.
- D. Metal Decks:
 - 1. Do not apply fireproofing to underside of metal deck substrates until concrete topping, if any, has been completed.
 - 2. Do not apply fireproofing to underside of metal roof deck until roofing has been completed; prohibit roof traffic during application and drying of fireproofing.
 - 3. When roof traffic is anticipated, as in the case of periodic maintenance, roofing pavers shall be installed as a walkway to distribute loads.
- E. Install auxiliary materials as required, as detailed, and according to fire-resistance design and fireproofing manufacturer's written recommendations for conditions of exposure and intended use. For auxiliary materials, use attachment and anchorage devices of type recommended in writing by fireproofing manufacturer.
- F. Spray apply fireproofing to maximum extent possible. Following the spraying operation in each area, complete the coverage by trowel application or other placement method recommended in writing by fireproofing manufacturer.
- G. Extend fireproofing in full thickness over entire area of each substrate to be protected.
- H. Install body of fireproofing in a single course unless otherwise recommended in writing by fireproofing manufacturer.
- I. For applications over encapsulant materials, including lockdown (post-removal) encapsulants, apply fireproofing that differs in color from that of encapsulant over which it is applied.
- J. Where sealers are used, apply products that are tinted to differentiate them from fireproofing over which they are applied.
- K. Provide a uniform finish complying with description indicated for each type of fireproofing material and matching finish approved for required mockups.
- L. Cure fireproofing according to fireproofing manufacturer's written recommendations.
- M. Do not install enclosing or concealing construction until after fireproofing has been applied, inspected, and tested and corrections have been made to deficient applications.
- N. Finishes: Where indicated, apply fireproofing to produce the following finishes:
 - 1. Manufacturer's Standard Finishes: Finish according to manufacturer's written instructions for each finish selected.
 - 2. Spray-Textured Finish: Finish left as spray-applied with no further treatment.
 - 3. Rolled, Spray-Textured Finish: Even finish produced by rolling spray-applied finish with a damp paint roller to remove drippings and excessive roughness.
 - 4. Skip-Troweled Finish: Even leveled surface produced by troweling spray-applied finish to smooth out the texture and neaten edges.

5. Skip-Troweled Finish with Corner Beads: Even, leveled surface produced by troweling spray-applied finish to smooth out the texture, eliminate surface markings, and square off edges.

3.04 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
 1. Test and inspect as required by Chapter 17 of the IBC.
 2. For reference, utilize AWCI - Inspection Procedure for Field-Applied Sprayed Fire-Resistive Materials, Technical Manual 12-A; an annotated guide.
- B. Test and inspect completed work in successive stages. Do not proceed with application of fireproofing for the next area until test results for previously completed applications of fireproofing show compliance with requirements. Tested values must equal or exceed values as specified and as indicated and required for approved fire-resistance design.
- C. Application will be considered defective if it does not pass tests and inspections.
 1. Remove and replace fireproofing that does not pass tests and inspections, and retest.
 2. Apply additional fireproofing, per manufacturer's written instructions, where test results indicate insufficient thickness, and retest.
- D. Prepare test and inspection reports.

3.05 CLEANING, PROTECTING, AND REPAIRING

- A. Cleaning: Immediately after completing spraying operations in each containable area of project, remove material overspray and fallout from surfaces of other construction and clean exposed surfaces to remove evidence of soiling.
- B. Protect fireproofing, according to advice of manufacturer and installer, from damage resulting from construction operations or other causes, so fireproofing will be without damage or deterioration at time of Substantial Completion.
- C. As installation of other construction proceeds, inspect fireproofing and repair damaged areas and fireproofing removed due to work of other trades.
- D. Repair fireproofing damaged by other work before concealing it with other construction.
- E. Repair fireproofing by reapplying it using same method as original installation or using manufacturer's recommended trowel-applied product.

END OF SECTION

SECTION 07 84 13
PENETRATION FIRESTOPPING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The work covered by this section of the Specifications includes all labor necessary to perform and complete such construction, all materials and equipment incorporated or to be incorporated in such construction and all services, facilities, tools and equipment necessary or used to perform and complete such construction. The work of this section shall include, but is not limited to, the following:
 - 1. Fire stopping all existing and/or new sleeves that are placed in Fire Rated GWB or concrete walls or floors through which telecommunications cables, steel pipe, or conduit are run.

1.02 REFERENCE STANDARD

- A. ASTM E814 - Standard Test Method for Fire Tests of Through-Penetration Fire Stops; 2013a
- B. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials; 2015.
- C. ASTM E2174 - Standard Practice for On-Site Inspection of Installed Firestop Systems 2020a
- D. ASTM E2393 - Standard Practice for On-Site Inspection of Installed Fire Resistive Joint Systems and Perimeter Fire Barriers 2020a.
- E. UL 1479 - Standard for Fire Tests of Penetration Firestops Current Edition, Including All Revisions.

1.03 SUBMITTALS

- A. Schedule of Firestopping: List each type of penetration, fire rating of the penetrated assembly, and firestopping test or design number.
- B. Product Data: Provide data on product characteristics, performance ratings, and limitations.
- C. Manufacturer's Installation Instructions: Indicate preparation and installation instructions.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Certificate from authority having jurisdiction indicating approval of materials used.
- F. Manufacturer's qualification statement.
- G. Installer's qualification statement.
- H. LEED Submittals:
 - 1. Product Data for Credit EQ 4.1: Low-Emitting Materials, Adhesives & Sealants.

1.04 1.05 QUALITY ASSURANCE

- A. Fire Testing: Provide firestopping assemblies of designs that provide the scheduled fire ratings when tested in accordance with methods indicated.
 - 1. Listing in UL (FRD), FM (AG), or ITS (DIR) will be considered as constituting an acceptable test report.
 - 2. Valid evaluation report published by ICC Evaluation Service, Inc. (ICC-ES) at www.icc-es.org will be considered as constituting an acceptable test report
 - 3. Submission of actual test reports is required for assemblies for which none of the above substantiation exists.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- C. Installer Qualifications: Company specializing in performing the work of this section and:
 - 1. Trained by manufacturer.
 - 2. Approved by Factory Mutual Research Corporation under FM 4991, or meeting any two of the following requirements:
 - 3. Verification of minimum 5 years documented experience installing work of this type.
 - 4. Verification of at least five satisfactorily completed projects of comparable size and type.

5. Licensed by local authorities having jurisdiction (AHJ).
- D. Source Limitations: For entire project, obtain firestop systems through one source from a single manufacturer.

PART 2 - PRODUCTS

2.01 BASE BID MANUFACTURERS

- A. Subject to compliance with the requirements of these specifications, manufacturers of telecommunications cabling and equipment that may be incorporated into the work specified herein are as follows:
 1. Firestop Device: Threaded Steel Sleeve
 - a. Unique Fire Stop Products, Inc.
 2. Fire Stop: Caulks, Putty, Composite sheets. (Fill void or cavity materials):
 - a. Hilti Construction Chemicals, inc.
 - b. Rectorseal - Metacaulk Fire Rated Putty
 - c. Specified Technologies, Inc. - SpecSeal Putty
 - d. Rockwool - Mineral Wool
 - e. Or Approved Equal
 - 3.

2.02 FIRE STOP MATERIALS (FILL VOID OR CAVITY)

- A. Used to seal penetrations of copper cables, conduits, steel pipes, and sleeves through fire-rated floors, walls and partitions.
 1. Minimum performance requirements: Must meet testing requirements of ASTM E-814 and UL 1479; must be installed in accordance with UL fire stop system appropriate for the application and in accordance with manufacturer's instructions.

2.03 FIRE STOP SYSTEMS

- A. Used to seal penetrations of either steel pipes or conduits through 1- and 2-hour rated concrete floor or wall assemblies.
 1. UL System Number C-AJ-1276
- B. Used to seal penetrations of either steel pipes or conduits through 1- and 2-hour rated gypsum wall assemblies.
 1. UL System Number W-L-1410
- C. Used to seal penetrations of cables through 1- and 2-hour rated concrete floor or wall assemblies.
 1. UL System Number W-J-3110
- D. Used to seal penetrations of cables through 1- and 2-hour rated gypsum wall assemblies.
 1. UL System Number W-J-3232

PART 3 - EXECUTION

3.01 FIRE STOP INSTALLATION - GENERAL

- A. Provide fire-resistant materials of a type and composition necessary to restore fire ratings to all wall, floor or ceiling penetrations penetrated by conduits, cable trays and/or telecommunications cables. All materials shall be components of an Underwriter Laboratories system number and diagram found in the UL FIRE RESISTANCE DIRECTORY 2003, Vol. 2B, or newer.
- B. Provide and install fire stopping materials, fasteners and material to hold or brace the fire stopping material in place as required by the UL Fire Stopping Systems specified in Part II of this specification section.
- C. All Conduit penetrations through fire rated floors and walls shall be sealed to prevent the passage of smoke and fire through the penetration. The UL fire stopping systems applied at any location in the building shall provide a minimum of a 1 Hour fire rating. The original fire rating of the floor or wall is maintained as required by Article 300-21 of the National Electric Code. Also install fire stops at any other locations indicated in the Specifications or Drawings.

- D. The sealant shall be applied to the opening as per the UL System definition and per manufacturer's printed instructions. No cables may be left touching each other, thereby allowing voids to form in the fire stop, unless explicitly allowed by the fire stop material manufacturer.
- E. No damming materials are to be left in place after the seal is complete unless the material is a component of the UL Fire Stopping System being installed.

3.02 FIRE STOP – SLEEVES THROUGH GYPSUM WALLBOARD/ STUD WALL ASSEMBLIES

- A. Fire stop sleeves through gypsum wallboard/stud wall assemblies with:
 - 1. UL System Number W-L-1410,
 - 2. UL System Number W-J-3232

3.03 FIRE STOP - SLEEVES THROUGH CONCRETE WALL ASSEMBLIES

- A. Fire Stop sleeves through concrete walls and floors with:
 - 1. UL System Number C-AJ-1276
 - 2. UL System Number W-J-3110,

3.04 ACCEPTANCE

- A. Upon receipt of the Contractor's documentation of fire stop installation, the Owner's Representative will review/observe the installation. Once the Local Fire Inspection Authority is satisfied that all work is in accordance with the Contract Documents, the Owner will notify the Contractor in writing.
- B. Prior to installation of the fire stopping system the Local Fire Inspection Authority will review the contractor's placement of cable at wall slots and floor penetrations.
- C. Following installation of the fire stopping system the Local Fire Inspection Authority may review the contractor's installation. Once the Local Fire Inspection Authority is satisfied that all work is in accordance with UL System Number, the Owner's Representative will notify the Contractor in writing.

3.05 CLEANING

- A. Clean adjacent surfaces of firestopping materials.

3.06 PROTECTION

- A. Protect adjacent surfaces from damage by material installation.

END OF SECTION

**SECTION 09 26 00
GYPSUM BOARD ASSEMBLIES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Gypsum wallboard.
- B. Joint treatment and accessories.
- C. Textured finish system.

1.02 REFERENCES

- A. ASTM C 475/C 475M - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.
- B. ASTM C 754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- C. ASTM C 840 - Standard Specification for Application and Finishing of Gypsum Board.
- D. ASTM C 1002 - Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs; 2004.
- E. ASTM C 1396/C 1396M - Standard Specification for Gypsum Board.
- F. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2005.
- G. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
- H. GA-214 - Recommended Levels of Gypsum Board Finish; Gypsum Association.
- I. GA 505 - Gypsum Board Terminology Standard; Gypsum Association; current edition.
- J. GA-600 - Fire Resistance Design Manual; Gypsum Association.

1.03 SUBMITTALS

- A. Product Data: Submit manufacturer's product specifications and installation instructions for each gypsum drywall component, including other data as may be required to show compliance with these specifications.

1.04 QUALITY ASSURANCE

- A. Perform in accordance with ASTM C 840. Comply with requirements of GA-600 for fire-rated assemblies.
- B. Applicator Qualifications: Company specializing in performing gypsum board application and finishing, with minimum 5 years of documented experience.
- C. Single-Source Responsibility: Obtain gypsum board products from a single manufacturer, or from manufacturer recommended by the prime manufacturer of gypsum boards.

1.05 DELIVERY STORAGE AND HANDLING

- A. Deliver Materials in original packages, containers or bundles bearing brand name and identification of manufacturer or supplier.
- B. Store materials inside under cover and in manner to keep them dry, protected from weather, direct sunlight, surface contamination, corrosion and damage from construction traffic and other causes. Neatly stack gypsum boards flat to prevent sagging.
- C. Handle gypsum boards to prevent damage to edges, ends or surfaces. Protect material corner beads from being bent or damaged.

PART 2 PRODUCTS

2.01 GYPSUM BOARD MATERIALS

- A. Manufacturers:
 - 1. G-P Gypsum Corporation: www.gp.com/gypsum.
 - 2. National Gypsum Company: www.nationalgypsum.com.
 - 3. USG: www.usg.com.
- B. Gypsum Wallboard: ASTM C 1396/C 1396M. Sizes to minimize joints in place; ends square cut.
- C. Abuse-Resistant Type: National Gypsum Hi-Impact XP wallboard especially formulated for increased mold, moisture, abuse and impact resistance, with enhanced gypsum core and purple color heavy duty face and back paper.
 - 1. Application: Typical unless noted otherwise.
 - 2. Core Type: Type X.
 - 3. Thickness: 5/8 inch.
 - 4. Edges: Tapered.
- D. Water-Resistant Gypsum Backing Board: ASTM C 630/C 630M: Ends square cut.
 - 1. Core Type: Type X, as indicated.
 - 2. Thickness: 5/8 inch.
 - 3. Edges: Tapered.

2.02 ACCESSORIES

- A. General: Provide manufacturer's standard trim accessories of types indicated for drywall work, formed of galvanized steel unless otherwise indicated, with knurled and perforated for nailing or stapling, and beaded for concealment of flanges in joint compound. Provide corner beads, L-type edge trim beads, U-type edge trim-beads, special L-kerf-type edge trim-beads, and one-piece control joint beads.
 - 1. Semi-Finishing Type: Manufacturer's standard trim units which are not to be finished with joint compound (nonbeaded).
- B. Plastic Edge Trim: Manufacturer's standard rigid or semi-rigid PVC moldings of the semi-finished type, shaped to provide resilient contact of gypsum board edges with other work; friction-fit or pressure-sensitive adhesive mounting.
 - 1. Exterior Trim: Provide zinc-alloy units, except as otherwise indicated.
- C. Joint Treatment Materials
 - 1. General: ASTM C 475; type recommended by the manufacturer for the application indicated, except as otherwise indicated.
 - 2. Joint Tape: Paper reinforcing tape.
 - 3. Joint Compound: Ready-mixed vinyl-type for interior use.
 - a. Grade: A single multi-purpose grade, for entire application.
- D. Textured Finish Materials: Latex-based compound; plain.
- E. Screws: ASTM C 1002; self-piercing tapping type.

2.03 MISCELLANEOUS MATERIALS

- A. General: Provide auxiliary materials for gypsum drywall work of the type and grade recommended by the manufacturer of the gypsum board.
- B. Board Screws: Comply with ASTM C 646.
- C. Exposed Acoustical Sealant: Nonoxidizing, skinnable, paintable, gunnable sealant for exposed applications per ASTM C 919.
- D. Polyethylene Vapor Retarder: A single polyethylene film, 4.0 mils thick, with a vapor rating of 0.20 perms per ASTM E 96.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that project conditions are appropriate for work of this section to commence.
 - 1. Coordinate installation with work of other trades whose work connects with or is affected or concealed by gypsum wallboard. Do all the butting, and patching or work as may be required to accommodate other trades.
 - 2. Before applying gypsum wallboard, see that corners and framing are plumb, true, and solid. Do not apply wallboard until conduits, pipes, ducts, vents, supports, fixture frames, etc., are in place and tested as required. Solid bearing required at all edges and ends of wallboard.
 - 3. Environmental Requirements, General: Comply with requirements of referenced gypsum board application standards and recommendations of gypsum board manufacturer, for environmental conditions before, during and after application of gypsum board.
 - 4. Cold Weather Protection: When ambient outdoor temperatures are below 55 degrees F (13 degrees C) maintain continuous, uniform, comfortable building working temperatures of not less than 55 degrees F (13 degrees C) for a minimum period of 48 hours prior to, during and following application of gypsum board and joint treatment materials or bonding of adhesives.
 - 5. Ventilation: Ventilate building spaces as required to remove water in excess of that required for drying of joint treatment material immediately after its application. Avoid drafts during dry, hot weather to prevent too rapid drying.

3.02 FRAMING INSTALLATION

- A. Studs: Space studs as indicated.
 - 1. Extend partition framing to structure where indicated and to ceiling in other locations.
 - 2. Install supplementary framing, blocking and bracing at terminations in the work and for support of fixtures, equipment, services, heavy trim, grab bars, toilet accessories, furnishings, and similar work to comply with applicable published recommendations of gypsum board manufacturer, or if not available, of "Gypsum Construction Handbook" published by United States Gypsum Co.
 - 3. Isolate stud system from transfer of structural loading to system, both horizontally and vertically. Provide slip or cushioned type joints to attain lateral support and avoid axial loading.
 - 4. Install runner tracks at floors, ceiling and structural walls and columns where gypsum drywall stud system abuts other work, except as otherwise indicated.
 - 5. Extend partition stud system through acoustical ceilings and elsewhere as indicated to the structural support or substrate above the ceiling.
 - 6. Terminate partition stud system at ceilings, except where indicated to be extended to structural support or substrate above.
- B. Expansion Joints:
 - 1. Do not bridge building expansion joints with support system, frame both sides of joints with furring and other support as indicated.

3.03 GYPSUM BOARD INSTALLATION

- A. Comply with ASTM C 840 and manufacturer's instructions. Install to minimize butt end joints, especially in highly visible locations.
 - 1. Locate exposed end-butt joints as far from center of walls and ceilings as possible, and stagger not less than 1'-0" in alternate courses of board.
 - 2. Install wall/partition boards vertically to avoid end-butt joints wherever possible. At stairwells and similar high walls, install boards horizontally with end joints staggered over studs.
 - 3. Install exposed gypsum board with face side out. Do not install imperfect, damaged or damp boards. Butt boards together for a light contact at edges and ends with not more than 1/16" open space between boards. Do not force into place.

4. Located either edge or end joints over supports, except in horizontal applications or where intermediate supports, or gypsum board back-blocking is provided behind end joints. Position boards so that like edges abut, tapered edges against tapered edges and mill-cut or field-cut ends against mill-cut or field-cut ends. Do not place tapered edges against cut edges or ends. Stagger vertical joints over different studs at opposite sides of partitions.
 5. Attach gypsum board to supplementary framing and blocking provide for additional support at openings and cutouts.
 6. Install ceiling boards in the direction and manner which will minimize the number of end-butt joints, and which will avoid end joints in the central area of each ceiling. Stagger end joints at least 1'-0".
 7. Cover both faces of steel studs partition framing with gypsum board in concealed spaces (above ceilings, etc.), except in chase walls which are braced internally.
 - a. Except where concealed application is required for sound, fire, air or smoke ratings, coverage may be accomplished with scraps of not less than 8 sq. ft. area, and may be limited to not less than 75% of full coverage.
 8. Isolate perimeter of non-load-bearing drywall partitions at structural abutments. Provide 1/4" to 1/2" space and trim edge with J-type semi-finishing edge trim. Seal joints with acoustical sealant.
 9. Floating Construction: Where feasible, including where recommended by manufacturer, install gypsum board over wood framing, with "floating" internal corner construction.
 10. Space fasteners in gypsum boards in accordance with referenced standards and manufacturer's recommendations, except as otherwise indicated.
- B. Moisture Protection: Treat cut edges and holes in moisture resistant gypsum board with sealant or with W/R compound.
- C. Apply wallboard first to ceilings then to walls using maximum lengths to minimize end joints. Apply gypsum wallboard to framing members in horizontal application (long edges of board at right angles to framing), with all abutting ends and edges over supports. Install all panels plumb, level, and with all joints on bearing. Smooth all cut ends and edges of panels where necessary to obtain a smooth joint. Neatly fit and stagger all end joints. Boards brought into moderate contact, but not forced into place. Maximum width joint shall be 1/8". Cut and fit neatly around all devices in surface. For cut-outs in panels for pipes, fixtures, or other small openings, make holes and cut-outs by sawing or by such other method that will not fracture the core or tear the covering, and with such accuracy that plates, escutcheons, trim, etc., will cover all edges. "Score-and-knockout" methods will not be permitted.

3.04 METHODS OF GYPSUM DRYWALL APPLICATION

- A. Single-Layer Application: Install gypsum wallboard.
1. On ceilings apply gypsum board prior to wall/partition board application to the greatest extent possible.
 2. On partitions/walls apply gypsum board vertically (parallel), unless otherwise indicated, and provide sheet lengths which will minimize end joints.
 3. On partitions/walls 8"-1" or less in height apply gypsum board horizontally (perpendicular); use maximum length sheets possible to minimize end joints.
 4. On z-furring members apply gypsum board vertically (parallel) with no end joints. Locate edge joints over furring members.
- B. Single-Layer Fastening Methods: Apply gypsum boards to supports as follows:
1. Fasten with screws.

3.05 INSTALLATION OF TRIM AND ACCESSORIES

- A. General: Where feasible, use the same fasteners to anchor trim accessory flanges as required to fasten gypsum board to the supports. Otherwise, fasten flanges by nailing or stapling in accordance with manufacturer's instructions and recommendations.
- B. Corner Beads: Install at external corners, using longest practical lengths.
- C. Edge Trim: Install at locations where gypsum board abuts dissimilar materials and as indicated.

- D. Install metal edge trim whenever edge of gypsum board would otherwise be exposed or semi-exposed, and except where plastic trim is indicated. Provide type with face flange to receive joint compound except where semi-finishing type is indicated. Install L-type trim where work is tightly abutted to other work, and install special kerf-type where other work is kerfed to receive long leg of L-type trim. Install U-type trim where edge is exposed, revealed, gasketed, or sealant-filled (including expansion joints).
- E. Install semi-finishing trim where indicated, and where exterior gypsum board edges are not covered by applied moldings or indicated to receive trim with face flanges covered with joint compound.
- F. Install plastic edge trim where indicated on wall panels at juncture with ceilings.

3.06 JOINT TREATMENT

- A. General: Apply treatment at gypsum board joints (both directions), flanges of trim accessories, penetrations, fastener heads, surface defects and elsewhere as required to prepare work for decoration. Prefill open joints and rounded or beveled edges, if any, using type of compound recommended by manufacturer.
 - 1. Apply joint tape at joints between gypsum boards, except where trim accessories are indicated.
 - 2. Apply joint compound in 3 coats (not including prefill of openings in base), and sand between last 2 coats and after last coat.
- B. Finish all gypsum board in accordance with ASTM C 840 Level 4.
- C. Tape and finish all joints, corners, nail heads, imperfections, etc., with the gypsum wallboard manufacturer's standard Joint Tape, Joint or Embedding Compound, and Topping or Finishing compound in accordance with the manufacturer's specifications and recommendations and as herein specified.
- D. Reinforce all joints, wall and ceiling angles, and inside vertical corners with tape embedded in joint compound and finish with not less than two (2) applications of topping or finishing compound, allow each application to dry thoroughly and sand between coats as required. Dimples at nail heads and all other imperfections similarly treated.
- E. Flanges of external corners, edges, and ends with metal beads and edge trim completely spackled and feathered off smooth.
- F. All gypsum wallboard surfaces uniformly smooth and in condition to receive a painted finish after final application of compound and sanding.
- G. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes.
 - 1. Feather coats of joint compound so that camber is maximum 1/32 inch.
- H. Water-Resistant Gypsum Backing Board Base for Ceramic Tile: Comply with recommendations of gypsum backing board manufacturer for treatment of joints behind ceramic tile.
- I. Partial Finishing: Omit third coat (if specified) and sanding on concealed drywall work which is indicated for drywall finishing or which requires finishing to achieve fire resistance rating, sound rating or to act as air or smoke barrier.

3.07 TEXTURE FINISH

- A. Apply finish texture coating by means of trowel in accordance with manufacturer's instructions and to match approved sample.
- B. Surface Preparation and Primer: Prepare and prime drywall and other surfaces in strict accordance with texture finish manufacturer's instructions. Apply primer to all surfaces to achieve texture finish.
- C. Finish Application: Mix and apply finish to drywall and other surfaces indicated to receive finish in strict accordance with manufacturer's instructions to produce a uniform texture without starved spots or other evidence of thin application, and free of application patterns.

- D. Remove any texture droppings or overspray from door frames, windows and other adjoining work.

3.08 TOLERANCES

- A. Maximum Variation of Finished Gypsum Board Surface from True Flatness: 1/8 inch in 10 feet in any direction.

3.09 FINISH LEVEL SCHEDULE

- A. Level 1: Above finished ceilings concealed from view.
- B. Level 2: Utility areas and areas behind cabinetry.
- C. Level 3: Walls scheduled to receive textured wall finish.
- D. Level 4: Walls and ceilings scheduled to receive flat, eggshell, semi-gloss and gloss paint finish.

3.10 CLEAN-UP

- A. During the progress of this portion of the Work, do not allow the accumulation of scrap and debris resulting from the gypsum drywall installation and finishing. Take all means necessary to prevent spilling and splashing compound. In the event of spilling or splashing of compound on other surfaces, immediately remove the spilled or splashed material and all traces of residue.
- B. Provide final protection and maintain conditions, in a manner suitable to Installer, which ensures gypsum drywall work being without damage or deterioration at time of substantial completion.

END OF SECTION

SECTION 09 51 00
ACOUSTICAL CEILINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Suspended metal grid ceiling system.
- B. Acoustical units.
- C. Supplementary acoustical insulation above ceiling.

1.02 REFERENCE STANDARDS

- A. ASTM C636/C636M - Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels; 2013.
- B. ASTM E1264 - Standard Classification for Acoustical Ceiling Products; 2014.

1.03 SUBMITTALS

- A. Product Data: Submit manufacturer's product specifications and installation instructions for each acoustical ceiling material required, and for each suspension system, including certified laboratory test reports and other data as required to show compliance with these Specifications.
- B. Include manufacturer's recommendations for cleaning and refinishing acoustical units, including precautions against materials and methods which may be detrimental to finishes and acoustical performances.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acoustic Tiles/Panels:
 - 1. Armstrong World Industries, Inc. or approved equal: www.armstrong.com.

2.02 ACOUSTICAL UNITS

- A. General: Provide manufacturer's standard lay-in panel units prepared for mounting system indicated, and of type recommended by manufacturer for required application. Provide with manufacturer's white washable finish unless otherwise indicated.
- B. Acoustical Tile at Open Office & Lobbies:
 - 1. Optima 3252:
 - a. Size: 24"x48"x1"
 - b. Surface Finish: White - DuraBrite Scrim with factory-applied latex paint
 - c. Edge Profile: 15/16" Square Tegular
 - d. NRC: 0.95
 - e. Fire Rating: Class A Fire Guard
- C. Acoustical Tile at Conference Rooms, Training Rooms, Enclosed Offices, Judicial Chambers, Jury Deliberation Rooms, Clerks Offices, and Interview Rooms:
 - 1. Ultima High NRC1944
 - a. Size: 24"x48"x7/8"
 - b. Surface Finish: White - DuraBrite Scrim with factory-applied latex paint
 - c. Edge Profile: 15/16" Beveled Tegular
 - d. NRC: .80
 - e. CAC: .35
 - f. Fire Rating: Class A
- D. Acoustical Tile at Upgraded Areas (to include Courtrooms)
 - 1. Calla 2824 - White
 - a. Size 24"x24"x1"
 - b. Surface Finish: White - Acoustically transparent membrane with factory-applied latex paint.
 - c. Edge Profile: 9/16" Square Tegular

- d. NRC: 0.85
- e. CAC: 35
- f. Fire Rating: Class A

2.03 SUSPENSION SYSTEM(S)

- A. General: Comply with ASTM C 635, as applicable to type of suspension system required for type of ceiling units indicated. Coordinate with other work supported by or penetrating through ceilings, including light fixtures, HVAC equipment, and partition system.
- B. Ceiling System to comply with DSA IR 25-2.13
- C. Structural Class: ASTM C635 Heavy-duty system.
- D. Suspension Systems - General: 15/16" Prelude XL Exposed Tee System Extruded Aluminum with Aluminum-capped face -Gasketed ICC-ESR-1308, Baked polyester White, with stabilizer bars, clips, splices, perimeter moldings, and hold down clips as required.
 - 1. Upgraded System (to include Courtrooms) - Use 9/16" Suprafine

2.04 ACCESSORIES

- A. Support Channels and Hangers: Galvanized steel; size and type to suit application, seismic requirements, and ceiling system flatness requirement specified.
- B. Attachment Devices: Size for 5 times design load indicated in ASTM C 635, Table 1, Direct Hung. Provide for seismic restraints required by local building department.
- C. Hanger Wires: Galvanized carbon steel, ASTM A 641, soft temper, pre-stretched, yield-stress load of at least 3 times design load, but not less than 12 gage (0.106").
- D. Acoustical Sealant For Perimeter Moldings: Non-hardening, non-skinning, for use in conjunction with suspended ceiling system.
- E. Acoustical Sealant: Heavy-bodied, non-shrinking, non-drying, non-sag mastic compound intended for interior sealing of concealed construction joints. Provide at all edge moldings.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Installer must examine conditions under which acoustical ceiling work is to be performed and must notify Contractor in writing of unsatisfactory conditions. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to Installer.
- B. Verify existing conditions before starting work.
- C. Verify that layout of hangers will not interfere with other work.

3.02 PREPARATION

- A. Coordination: Furnish layouts for inserts, clips, or other supports required to be installed by other trades for support of acoustical ceilings.
- B. Measure each ceiling area and establish layout of acoustical units to balance border widths at opposite edges of each ceiling. Avoid use of less-than-half width units at borders, and comply with reflected ceiling plans wherever possible.

3.03 INSTALLATION - SUSPENSION SYSTEM

- A. Install suspension system in accordance with ASTM C 636/C 636M and manufacturer's instructions and as supplemented in this section.
- B. General: Install materials in accordance with manufacturer's printed instructions, and to comply with governing regulations, fire resistance rating requirements as indicated, and industry standards applicable to work.
- C. Install suspension systems to comply with DSA IR 25-2.13, ASTM C635, C636 and E580, Section 5 with modifications per DSA. Hangers supported only from building structural members. Locate hangers within 8" of each end and spaced 4'-0" along each carrying channel or direct-hung runner, leveling to tolerance of 1/8" in 12'-0".

- D. Rigidly secure system, including integral mechanical and electrical components, for maximum deflection of 1:360.
- E. Install after major above-ceiling work is complete. Coordinate the location of hangers with other work.
- F. Secure wire hangers by looping and wire-tying, either directly to structures or to inserts, eye-screws, or other devices which are secure and appropriate for substrate, and which will not deteriorate or fail with age or elevated temperatures. Suspension hangers shall not hang more than 1 in 6 out of plumb unless counterslopping wires are provided. Wires shall not attach to or bend around interfering material or equipment. A trapeze or equivalent device shall be used where obstructions preclude direct suspension.
- G. Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- H. Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- I. Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability.
- J. Support fixture loads using supplementary hangers located within 6 inches of each corner, or support components independently.
- K. Do not eccentrically load system or induce rotation of runners.
- L. Install edge moldings of type indicated at perimeter of acoustical ceiling area and at locations where necessary to conceal edges of acoustical units.
- M. Screw-attach moldings to substrate at intervals not over 16" o.c. and not more than 3" from ends, leveling with ceiling suspension system to tolerance of 1/8" in 12'-0". Miter corners accurately and connect securely

3.04 INSTALLATION - ACOUSTICAL UNITS

- A. Install acoustical units in accordance with manufacturer's instructions.
- B. Fit acoustical units in place, free from damaged edges or other defects detrimental to appearance and function.
- C. Fit border trim neatly against abutting surfaces.
- D. Install units after above-ceiling work is complete.
- E. Install acoustical units level, in uniform plane, and free from twist, warp, and dents.
- F. Cutting Acoustical Units:
 - 1. Make field cut edges of same profile as factory edges.

3.05 CLEANING

- A. Clean exposed surfaces of acoustical ceilings, including trim, edge moldings, and suspension members; comply with manufacturer's instructions for cleaning and touch-up of minor finish damage. Remove and replace work which cannot be successfully cleaned and repaired to permanently e

END OF SECTION

**SECTION 09 91 10
PAINTS AND COATINGS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation.
- B. Field application of paints.

1.02 WORK INCLUDED

- A. Extent of painting work is indicated on drawings and schedules, and as herein specified.
- B. Provide painting of all interior and exterior items affected by the project including all: piping and all unfinished support systems.
- C. The Contractor shall examine the specifications for the various other trades and shall thoroughly familiarize himself with all their provisions regarding their painting. He shall understand that all surfaces that are left unfinished by the requirements of other specifications shall be painted or finished as part of this project unless specifically excluded in these specifications.
- D. Where items or surfaces in the designated areas to be painted are not specifically designated in the "Paint Finish Schedule," paint with the same paint system as adjacent similar work.
- E. Painting and finishing of interior and exterior exposed items and surfaces throughout project, except as otherwise indicated.
- F. Surface preparation, priming and coats of paint specified are in addition to shop-priming and surface treatment specified under other sections of work.
- G. Field painting of exposed bare and covered pipes and ducts (including color coding), and of hangers, steel and iron work, and primed metal surfaces of equipment installed under mechanical and electrical work, except as otherwise indicated.
- H. "Paint" as used herein means all coating systems materials, including primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate, or finish coats.
- I. Surfaces to be Painted: Except where natural finish of material is specifically noted as a surface not to be painted, paint exposed surfaces whether or not colors are designated in "schedules". Where items or surfaces are not specifically mentioned, paint the same as similar adjacent materials or areas. If color or finish is not designated, Architect will select these from standard colors or finishes available.

1.03 WORK NOT INCLUDED

- A. The following categories of work are not included as part of the painted finish work:
 - 1. Concealed Surfaces. Unless otherwise indicated, painting is not required on surfaces in concealed and inaccessible areas, including counter-flashings at built-up roof areas.
 - 2. Operating Parts and Labels. Do not paint any moving parts of operating units, code-required labels and equipment identification.
 - 3. Pre-Finished Material and Equipment. Unless otherwise indicated, do not include painting for manufacturer or installed finished items which are specified in the various sections of the specifications. The extent of pre-finishing by manufacturer or installer generally only includes major components. Minor accessories which are not finished by manufacturer or installer shall be considered as work specified in this section.
 - 4. Pre-Primed Materials. Do not include in this Section prime coating for items which are shop prime coated by manufacturer or fabricator.
 - 5. Finished Metal Surfaces: Unless otherwise indicated, metal surfaces of anodized aluminum, stainless steel, chromium plate, copper, bronze and similar finished materials will not require finish painting.

1.04 SUBMITTALS

- A. Product Data: Provide data on all finishing products and special coatings.

- B. Manufacturer's Instructions: Indicate special surface preparation procedures.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.
- B. Applicator Qualifications: Company specializing in performing the work of this section with minimum three years experience.
- C. Single Source Responsibility: Provide primers and other undercoat paint produced by same manufacturer as finish coats. Use only thinners approved by paint manufacturer, and use only within recommended limits.
- D. Coordination of Work: Review other section of these specifications in which prime paints are to be provided to ensure compatibility of total coatings systems for various substrates. Upon request from other trades, furnish information or characteristics of finish materials provided for use, to ensure compatible prime coats are used.

1.06 REGULATORY REQUIREMENTS

- A. Comply with state and local regulations governing the use of paint materials.

1.07 DELIVERY, STORAGE, AND PROTECTION

- A. Deliver products to site in sealed and labeled containers; inspect to verify acceptability.
- B. Container Label: Include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.
- C. Paint Materials: Store at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in ventilated area, and as required by manufacturer's instructions.

1.08 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- B. Apply solvent-thinned paints only when temperature of surfaces to be painted and surrounding air temperatures are between 45 degrees F and 95 degrees F, unless otherwise permitted by paint manufacturer's printed instructions.
- C. Do not apply paint in snow, rain, fog or mist, or when relative humidity exceeds 85%, or to damp or wet surfaces, unless otherwise permitted by paint manufacturer's printed instructions.
 - 1. Painting may be continued during inclement weather if areas and surfaces to be painted are enclosed and heated within temperature limits specified by paint manufacturer during application and drying periods.
- D. Provide lighting level of 80 ft candles measured mid-height at substrate surface.
- E. Minimum application temperature for latex paints: 45 F for interiors; 50 F for exterior; unless otherwise required by manufacturers instructions.
- F. Project Conditions
 - 1. Provide drop cloths, barricades, and other protection necessary to safeguard other portions of the work. Post signs immediately after paint application.
 - 2. Provide and maintain protection as required to protect painted surfaces from damage until their acceptance.
 - 3. Take all necessary precautions to prevent fire. Remove soiled rags and other waste items from premises at end of each day's work, or store in metal containers with tightly fitting metal covers.
 - 4. Hardware: Ensure that hardware is removed before painting is started and replaced only when paint finishes are thoroughly dry.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Paint shall be best quality products of Dunn-Edwards company, or approved equal.
 - 1. Corribar - Metal Primer (43-5)
 - 2. Vynlastic--Primer; sealer (W-101)
 - 3. Multi Prime (W713.1)
 - 4. Decrovel--Interior flat latex (W-401-1)
 - 5. Uni-Kote--Latex enamel undercoat (W-707)
 - 6. Decaglo--Semi-gloss latex enamel (W-450-1)
 - 7. Decolac--Lacquer sanding sealer (A-LQ 101)
 - 8. Decolac--Semi Gloss lacquer (LQ 104)
 - 9. Syn-Lustro--Semi Gloss Alkyd name (9-1)
 - 10. Syn-Satin--Interior semi Gloss Varnish (V-199)
 - 11. EFF Stop - Acrylic concrete sealer (W-709-1).

2.02 PAINTS AND COATINGS - GENERAL

- A. Material Quality: Provide best quality grade of various types of coatings as regularly manufactured by acceptable paint materials manufacturers. Materials not displaying manufacturer's identification as a standard, best-grade product will not be acceptable.
 - 1. Proprietary names used to designate colors or materials are not intended to imply that products of named manufacturers are required to exclusion of equivalent products of other manufacturers.
 - 2. Federal Specifications establish minimum acceptable quality for paint materials. Provide written certification from paint manufacturer that materials provided meet or exceed these minimums.
 - 3. Manufacturer's products which comply with coating qualitative requirements of applicable Federal Specifications, yet differ in quantitative requirements, may be considered for use when acceptable to Architect. Furnish material data and manufacturer's certificate of performance to Architect for any proposed substitutions.
- B. Color Pigments: Pure, non-fading, applicable types to suit substrates and service indicated.
 - 1. Lead content in pigment, if any, is limited to contain not more than 0.06% lead, as lead metal based on the total non-volatile (dry-film) of paint by weight.
- C. Materials for undercoats and finish coats of paint shall be ready mixed and shall not be changed, except thinning of undercoats (when required), reinforcing, or coloring, any of which shall be in strict accordance with the recommendations of the manufacturer.
- D. The number of coats specified is the minimum number acceptable. If full coverage is not obtained with the specified number of coats, apply such additional coats as are necessary to produce the required finish.
- E. Paint uniformity and compatibility:
 - 1. Paint shall be boxed at the job site or factory-batched to ensure color uniformity and consistency. This includes the required maintenance materials.
 - 2. Provide finish coats compatible with the prime coats used.
 - a. Review other Sections of these Specifications, in which prime coats are specified, and manufacturer's data for shop-primed surfaces to be painted.
 - b. Be responsible for the compatibility of the total coating system.
 - 3. Provide barrier coats over the incompatible primer or remove and reprime.
 - 4. Products of more than one approved manufacturer may be used, except that all products applied on a surface shall be by the same manufacturer.
- F. All paint shall be low or no VOC Products and comply with California Green Code.
- G. All paint coatings shall contain appropriate proportion, as recommended by the manufacturer, of fungicide additives to prevent premature fungal regrowth on/in paint surfaces.

2.03 PAINT PREPARATION

- A. Open paint containers only as required for use and mix paint in designated areas.
- B. Thoroughly stir and agitate paint to uniformly smooth consistency suitable for proper application.
- C. All colors must be custom mixed using campus formulas on file in paint shop.

2.04 PAINT SYSTEMS - INTERIOR

- A. New Paint Schedule
 - 1. New Gypsum Board Walls:
 - a. First Coat: Dunn Edwards/Vinylastic/Primer Sealer (W-101)
 - b. Second Coat: Dunn Edwards/Latex Undercoat (W707) or two coats each of Semi Gloss Latex Enamel (W450-1).
 - c. Third Coat: Dunn Edwards /Semi Gloss Latex Enamel (W450-1).
 - 2. Metal Surfaces/Piping:
 - a. First Coat: Dunn Edwards Corrobar (43-5) or Multi Prime (W-713-1).
 - b. Second Coat: Dunn Edwards Syn Lustro Industrial Enamel Semi Gloss (9-1) or Dunn Edwards/Syn Lustro Industrial Gloss Enamel for exterior (10-1).
 - c. Third Coat: Same as above if required.
 - 3. Finished Wood:
 - a. First Coat: Dunn Edwards/Latex Undercoat (W707).
 - b. Second Coat: Dunn Edwards/Semi Gloss Latex Enamel (W450-1) or Dunn Edwards/Syn Lustro Industrial Enamel Semi Gloss (9-1).
 - c. Third Coat: Same as above.
- B. Repaint Schedule
 - 1. Walls:
 - a. First Coat: Dunn Edwards/Latex Undercoat (W707)
 - b. Second Coat: Dunn Edwards/Semi Gloss Latex Enamel (W450-1)
 - c. NOTE: This may include hard wrap ceilings.
 - 2. Metal Surfaces:
 - a. First Coat: Dunn Edwards/Latex Undercoat (W-707)
 - b. Second Coat: Dunn Edwards/Syn Lustro Industrial Semi Gloss Enamel (9-1).
 - 3. Painted Wood:
 - a. First Coat: Dunn Edwards/Latex Undercoat (W707)
 - b. Second Coat: Dunn Edwards/Semi Gloss Latex Enamel (W-450-1) or Dunn Edwards/Syn Lustro Industrial Semi Gloss Enamel (9-1).

2.05 ACCESSORY MATERIALS

- A. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified; commercial quality.
- B. Patching Material: Latex filler.
- C. Fastener Head Cover Material: Latex filler.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces are ready to receive Work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- C. Test shop-applied primer for compatibility with subsequent cover materials.
- D. Measure moisture content of surfaces using an electronic moisture meter. Do not apply finishes unless moisture content of surfaces are below the following maximums:
 - 1. Plaster and Gypsum Wallboard: 12 percent.
 - 2. Masonry, Concrete, and Concrete Unit Masonry: 12 percent.

3. Interior Wood: 15 percent, measured in accordance with ASTM D 4442.

3.02 PREPARATION

- A. Surface Appurtenances: Remove or mask electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.
- B. Surfaces: Correct defects and clean surfaces which affect work of this section. Remove or repair existing coatings that exhibit surface defects.
- C. Marks: Seal with shellac those which may bleed through surface finishes.
- D. Impervious Surfaces: Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- E. Concrete and Unit Masonry Surfaces to be Painted: Remove dirt, loose mortar, scale, salt or alkali powder, and other foreign matter. Remove oil and grease with a solution of tri-sodium phosphate; rinse well and allow to dry. Remove stains caused by weathering of corroding metals with a solution of sodium metasilicate after thoroughly wetting with water. Allow to dry.
- F. Gypsum Board Surfaces to be Painted: Fill minor defects with filler compound. Spot prime defects after repair.
- G. Plaster Surfaces to be Painted: Fill hairline cracks, small holes, and imperfections with latex patching plaster. Make smooth and flush with adjacent surfaces. Wash and neutralize high alkali surfaces.
- H. Aluminum Surfaces to be Painted: Remove surface contamination by steam or high pressure water. Remove oxidation with acid etch and solvent washing. Apply etching primer immediately following cleaning.
- I. Uncoated Steel and Iron Surfaces to be Painted: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by hand wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Prime paint entire surface; spot prime after repairs.
- J. Shop-Primed Steel Surfaces to be Finish Painted: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
- K. Exterior Wood to Receive Opaque Finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior calking compound after prime coat has been applied. Back prime concealed surfaces before installation.
- L. Metal Doors and Gates to be Painted: Prime metal door top and bottom edge surfaces.

3.03 APPLICATION

- A. Apply products in accordance with manufacturer's instructions.
- B. Do not apply finishes to surfaces that are not dry. Allow applied coats to dry before next coat is applied.
- C. Apply each coat to uniform appearance. Apply each coat of paint slightly darker than preceding coat unless otherwise approved.
- D. Vacuum clean surfaces of loose particles. Use tack cloth to remove dust and particles just prior to applying next coat.
- E. Allow each coat to thoroughly dry before succeeding coat application.
- F. Do not paint factory finished items unless specifically directed.
- G. Finish mill or shop primed items with materials compatible with prime coat.

3.04 CLEAN-UP, PROTECTION AND REPAIR

- A. Clean-up: During progress of work, remove discarded paint materials, rubbish, cans and rags from site at end of each work day.

1. Clean glass and paint-spattered surfaces immediately by proper methods, using care not to scratch or damage finished surfaces.
 2. Contain all paint wash water and haul off site.
- B. Protection: Protect work of other trades, whether to be painted or not. Correct damage by cleaning, repairing, or replacing, and repainting as acceptable to University.
1. Provide "Wet Paint" signs to protect newly-painted finishes.
 2. Remove temporary protective wrappings for protection work after completion of painting operations.
- C. Repair: At completion of work of other trades, touch-up and restore damaged surfaces or defaced painted surfaces.

3.05 CLEANING

- A. Collect waste material which may constitute a fire hazard, place in closed metal containers, and remove daily from site.

3.06 SCHEDULE - SURFACES TO BE FINISHED

- A. Do Not Paint or Finish the Following Items:
1. Items fully factory-finished unless specifically noted.
 2. Fire rating labels, equipment serial number and capacity labels.
 3. Stainless steel items.
- B. Paint the surfaces described below under Schedule - Paint Systems.

3.07 SCHEDULE - PAINT SYSTEMS

- A. Mechanical and Electrical: Use paint systems defined for the substrates to be finished.
1. Paint all ferrous equipment without weather and rust resistant paint, pipes and pipe support exposed to weather.
 2. Touch-up all cut or nicked galvanized metal with zinc enriched paint matching existing.
 3. Paint both sides and edges of plywood backboards for electrical and telephone equipment before installing equipment.
- B. Concrete, Concrete Block, Brick Masonry: Finish all surfaces exposed to view.
- C. Gypsum Board: Finish all surfaces exposed to view.
- D. Plaster: Finish all surfaces exposed to view.
- E. Wood: Finish all surfaces exposed to view.
- F. Steel Doors and Frames: Finish all surfaces exposed to view.
- G. Steel Fabrications: Finish all surfaces exposed to view, except pre-finished factory items.
- H. Aluminum: Finish all surfaces exposed to view.
- I. Shop-Primed Metal Items: Finish all surfaces exposed to view.
- J. Pipe Insulation Jackets: Stencil painting shall be with flat black paint.

END OF SECTION

SECTION 10 44 50
SIGNS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Door Signs.
- B. Room Signs.

1.02 REFERENCES

- A. T-24 CBC Section 11B.
- B. ATBCB ADAAG - Americans with Disabilities Act Accessibility Guidelines; US Architectural and Transportation Barriers Compliance Board.

1.03 SUBMITTALS

- A. Product Data: Manufacturer's descriptive literature for sign types specified, including components and accessories.
- B. Samples of each sign form and material showing finishes, colors and surface texture.
 - 1. Submit full-size sample units. Acceptable units may be installed as part of the work.
 - 2. Samples of exposed metal with respective finish.
 - 3. Signage colors will be selected by the Architect from color samples submitted.
- C. Large scale, dimensioned shop drawings of all signs. Include elevations, sections, and large scale details of copy and lettering layout. Show anchorages and accessory items. Furnish location template drawings for signs supported or anchored to other construction.
 - 1. Indicate sign styles, lettering font, foreground and background colors, locations, overall dimensions of each sign.
- D. Selection Samples: Two sets of color chips representing manufacturer's full range of available colors.
- E. Manufacturer's instructions: Printed installation instructions for each product.
- F. Manufacturer's Warranty: Submit at closeout.

1.04 QUALITY ASSURANCE

- A. Regulatory Requirements: Sign types to comply with ADAAG requirements.
- B. Work of this Section shall be a complete system, products of one manufacturer as well as custom items from local distributors.
- C. T-24 CBC Section 11B.
- D. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum 3 years of documented experience.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Pack, wrap, crate, bundle, box, bag, or otherwise package, handle, transport, and store fabricated work as necessary to provide protection from damage.
- B. Package signs, labeled in name groups.
- C. Protect surfaces and edges of door and wall plaques from damage.
 - 1. Package each plaque individually and in similar groups and identify each package.
- D. Store products of this section in manufacturer's unopened packaging until installation.
- E. Store adhesive attachment tape at ambient room temperatures.
- F. Maintain dry, heated storage area for products of this section until installation of products.

1.06 WARRANTY

- A. Warrant this work against defective materials, workmanship, and design for 5 years from Substantial Completion.

- B. Fading, cracking, warping, peeling, delaminating, rusting, corroding, and structural failure, including distortion by whatever cause, shall be construed to mean failure because of faulty materials and workmanship.
- C. Failures during the warranty period shall be repaired or replaced at no cost to the District.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturer's:
 - 1. ASI
 - 2. ReadyMade
 - 3. EMED Co., Inc.
 - 4. Seton Name Plate Co.
 - 5. Flinn Scientific Inc.
- B. Unless otherwise specified for an individual product or material, supply all products specified in this section from the same manufacturer.

2.02 SIGNS

- A. Cast Acrylic Sheet: Cast (not extruded or continuous cast) methacrylate plastic sheet with a minimum flexural strength of 16,000 psi, ASTM D790, as follows.
 - 1. Transparent sheet: Colorless sheet with light transmittance of 92%, ASTM D 1003, in matte finish, unless otherwise indicated.
 - 2. White translucent sheet: White translucent sheet of density required to produce uniform brightness and minimum halation effects.
 - 3. Opaque sheet: Colored opaque acrylic sheet in colors and finishes indicated.
- B. Fasteners: Use concealed fasteners unless otherwise indicated. Fabricate from metals which are non-corrosive to sign materials and mounting surface.
- C. Anchors and inserts:
 - 1. Non-ferrous metal or hot-dipped galvanized steel anchors and inserts for exterior installations.
 - 2. Toothed steel or lead expansion bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.
- D. Engraved Signs:
 - 1. Sign Types: As indicated.
 - 2. Colors: Selected by Architect from manufacturer's full range of available colors.
 - 3. Graphics/Lettering: As indicated.
- E. Accessories: Installation accessories specified in manufacturer's instructions.

2.03 ROOM I.D. WALL SIGN

- A. Acrylic, 2 color signs shall be 6x 6 x 1.4 in.
- B. Border and lettering shall be raised 1/32 in. above background.
- C. Type face shall be modified "Helvetica", upper case, 2 in. tall.
- D. Corresponding Grade 2 Braille symbol shall be with dots at 1/10 in. o.c. in each cell with 1/5 in. space between cells. Dots shall 1/40 in. above background.
- E. Sign shall be mounted on wall, 60" to center line, 4" from jamb. Colors to be selected.
- F. Attach sign with silicone adhesive and tamper proof screws. Paint screws to match.

2.04 ACCESSORIES

- A. Mounting Hardware: Stainless Steel screws.
- B. Tape Adhesive: Double sided tape, permanent adhesive.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that surfaces to receive signs have been finished, and that finishes are dry and correctly cured.
- B. Environmental Requirements:
 - 1. Do not install signs when ambient temperature is lower than recommended by manufacturer.
 - 2. Maintain this minimum temperature during and after installation of signs.
- C. Permanent Text:
 - 1. Permanent text not indicated in the Drawings will be furnished at the time that submittals are returned.

3.02 INSTALLATION

- A. Install wall and door signs where shown and in accordance with manufacturer's printed installation instructions.
- B. Position signs as indicated.
- C. Locate signs in accordance with approved shop drawings and ADAAG requirements.
- D. Sign shall be a complete vandal resistant installation. Fasteners shall be concealed, in drilled holes, counter sunk. Secure interior signs to solid backing with 4 No. 12 screws. Sign shall align with adjacent lines and edges, be level, flat on the mounting surface.
- E. Graphics shall be free from defects impairing strength and durability. Individual surface mounted signs letters are to be set as shown on the Drawings.
- F. Finishes shall be complete and unblemished.
- G. Accessories shall be provided in organized set and in containers which will protect the finishes.

3.03 CLEANING AND PROTECTION

- A. At completion of installation, clean all surfaces in accordance with manufacturer's instructions. Protect units from damage until acceptance. Repair or replace damaged an unsatisfactory units.

END OF SECTION

SECTION 23 05 93
TESTING, ADJUSTING, AND BALANCING FOR HVAC

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Testing, adjustment, and balancing of air systems.
- B. Testing, adjustment, and balancing of hydronic systems.

1.02 REFERENCE STANDARDS

- A. AABC (NSTSB) - AABC National Standards for Total System Balance, 7th Edition; 2016.
- B. ASHRAE Std 110 - Methods of Testing Performance of Laboratory Fume Hoods; 2016.
- C. AABC MN-1 - AABC National Standards for Total System Balance; 2002.
- D. ASHRAE Std 111 - Measurement, Testing, Adjusting, and Balancing of Building HVAC Systems; 2008.

1.03 SUBMITTALS

- A. See Division 1 for submittal procedures.
- B. TAB Plan: Submit a written plan indicating the testing, adjusting, and balancing standard to be followed and the specific approach for each system and component.
 - 1. Submit to Engineer.
 - 2. Submit six weeks prior to starting the testing, adjusting, and balancing work.
 - 3. Include at least the following in the plan:
 - a. List of all air flow, water flow, sound level, system capacity and efficiency measurements to be performed and a description of specific test procedures, parameters, formulas to be used.
 - b. Copy of field checkout sheets and logs to be used, listing each piece of equipment to be tested, adjusted and balanced with the data cells to be gathered for each.
 - c. Discussion of what notations and markings will be made on the duct and piping drawings during the process.
 - d. Final test report forms to be used.
 - e. Procedures for formal deficiency reports, including scope, frequency and distribution.
- C. Final Report: Indicate deficiencies in systems that would prevent proper testing, adjusting, and balancing of systems and equipment to achieve specified performance.
 - 1. Revise TAB plan to reflect actual procedures and submit as part of final report.
 - 2. Submit draft copies of report for review prior to final acceptance of Project. Provide final copies for Engineer and for inclusion in operating and maintenance manuals.
 - 3. Include actual instrument list, with manufacturer name, serial number, and date of calibration.
 - 4. Form of Test Reports: Where the TAB standard being followed recommends a report format use that; otherwise, follow ASHRAE Std 111.
 - 5. Units of Measure: Report data in I-P (inch-pound) units only.
 - 6. Include the following on the title page of each report:
 - a. Name of Testing, Adjusting, and Balancing Agency.
 - b. Address of Testing, Adjusting, and Balancing Agency.
 - c. Telephone number of Testing, Adjusting, and Balancing Agency.
 - d. Project name.
 - e. Project location.
 - f. Project Engineer.
 - g. Project Contractor.
 - h. Project altitude.
 - i. Report date.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

- A. Test Instruments:
 - 1. Balancing Contractor shall provide all necessary test instruments required to take readings including, but not limited to: Pressure gauges, thermometers, humidity instruments, sling psychrometers, flow meter read out instruments (differential pressure gauges, etc.), air flow hoods, pitot tubes, anemometers, ammeters, voltmeters, tachometers, sound level meters, vibration analyzers, etc., as required to perform measurements required to perform the work of this section and applicable Commissioning specifications. These instruments are considered to be the property of the balancing contractor and required for usual performance of testing and balancing work. No allowance will be made for contractor's failure to provide adequate test instruments.
- B. Incidental Equipment and Materials:
 - 1. Balancing Contractor shall provide at his own expense incidental and/or temporary equipment required to make such readings as required for the performance of this work. Such incidentals include but are not limited to: pipe nipples, couplings, tees, elbows, plugs and caps, gauge valves, teflon tape, and other miscellaneous fittings required to make readings required for balancing work. Incidental materials and fittings shall be removed and the facility restored to 'as found' condition after completion of readings and balancing activities.
- C. Tools and Labor:
 - 1. Balancing Contractor shall provide all tools and labor required to effect necessary readings for balancing work, including but not limited to electric drill and bits, wrenches, pliers, screwdrivers, teflon tape, flashlights, rags, pocket knife or leatherman, pencils, pens, test forms, paper, and other minor tools required for work of this section.
 - 2. Provide labor to alter minor piping and other systems to allow temporary installation of test gages and thermometers, etc., required to make necessary readings. This includes removal of plugs on pump castings and temporary installation of piping, valves, gauges and nipples required to attach pressure gauges for readings, drilling required holes in ductwork and subsequent installation of plugs to allow ductwork pitot tube traverses, connections to flow elements, including a reasonable effort to clear obstructions from test ports, etc. Remove temporary fittings, valves and gauges at completion of readings and restore equipment to 'as found' condition.

PART 3 EXECUTION

3.01 GENERAL REQUIREMENTS

- A. Perform total system balance in accordance with one of the following:
 - 1. AABC (NSTSB), AABC National Standards for Total System Balance.
- B. Begin work after completion of systems to be tested, adjusted, or balanced and complete work prior to Substantial Completion of the project.
- C. TAB Agency Qualifications:
 - 1. Company specializing in the testing, adjusting, and balancing of systems specified in this section.
 - 2. Having minimum of three years documented experience.
 - 3. Certified by one of the following:
 - a. AABC, Associated Air Balance Council: www.aabc.com/#sle; upon completion submit AABC National Performance Guaranty.

3.02 EXAMINATION

- A. Verify that systems are complete and operable before commencing work. Ensure the following conditions:
 - 1. Systems are started and operating in a safe and normal condition.
 - 2. Temperature control systems are installed complete and operable.

3. Proper thermal overload protection is in place for electrical equipment.
 4. Final filters are clean and in place. If required, install temporary media in addition to final filters.
 5. Duct systems are clean of debris.
 6. Fans are rotating correctly.
 7. Fire and volume dampers are in place and open.
 8. Air coil fins are cleaned and combed.
 9. Access doors are closed and duct end caps are in place.
 10. Air outlets are installed and connected.
 11. Duct system leakage is minimized.
 12. Hydronic systems are flushed, filled, and vented.
 13. Pumps are rotating correctly.
 14. Proper strainer baskets are clean and in place.
 15. Service and balance valves are open.
- B. Submit field reports. Report defects and deficiencies that will or could prevent proper system balance.
- C. Beginning of work means acceptance of existing conditions.

3.03 PREPARATION

- A. Provide instruments required for testing, adjusting, and balancing operations. Make instruments available to Engineer to facilitate spot checks during testing.
- B. Provide additional balancing devices as required.

3.04 ADJUSTMENT TOLERANCES

- A. Air Handling Systems: Adjust to within plus or minus 5 percent of design for supply systems and plus or minus 10 percent of design for return and exhaust systems.
- B. Air Outlets and Inlets: Adjust total to within plus 10 percent and minus 5 percent of design to space. Adjust outlets and inlets in space to within plus or minus 10 percent of design.
- C. Hydronic Systems: Adjust to within plus or minus 10 percent of design.

3.05 RECORDING AND ADJUSTING

- A. Ensure recorded data represents actual measured or observed conditions.
- B. Permanently mark settings of valves, dampers, and other adjustment devices allowing settings to be restored. Set and lock memory stops.
- C. After adjustment, take measurements to verify balance has not been disrupted or that such disruption has been rectified.
- D. Leave systems in proper working order, replacing belt guards, closing access doors, closing doors to electrical switch boxes, and restoring thermostats to specified settings.

3.06 AIR SYSTEM PROCEDURE

- A. After systems are balanced, work with the controls contractor to determine optimal final setpoint of fan system static pressure controls. Final setpoint shall be determined by supplying design airflow to all zones with no boxes throttling.
- B. Adjust air handling and distribution systems to provide required or design supply, return, and exhaust air quantities at site altitude.
- C. Measure air quantities at air inlets and outlets.

3.07 WATER SYSTEM PROCEDURE

- A. After systems are balanced, work with the controls contractor to determine optimal final setpoint of pump system static pressure controls. Final setpoint shall be determined by supplying design water flow to all zones with no valves throttling.
- B. Adjust water systems to provide required or design quantities.

- C. Use calibrated Venturi tubes, orifices, or other metered fittings and pressure gauges to determine flow rates for system balance. Where flow metering devices are not installed, base flow balance on temperature difference across various heat transfer elements in the system.
- D. Adjust systems to provide specified pressure drops and flows through heat transfer elements prior to thermal testing. Perform balancing by measurement of temperature differential in conjunction with air balancing.

3.08 SCOPE

- A. Test, adjust, and balance the following:
 - 1. Fire Pumps.
 - 2. Air Handling Units.
 - 3. Air Terminal Units.
 - 4. Air Inlets and Outlets.

3.09 MINIMUM DATA TO BE REPORTED

- A. Electric Motors:
 - 1. Manufacturer.
 - 2. Model/Frame.
 - 3. HP/BHP.
 - 4. Phase, voltage, amperage; nameplate, actual, no load.
 - 5. RPM.
- B. Pumps:
 - 1. Identification/number.
 - 2. Manufacturer.
 - 3. Size/model.
 - 4. Impeller.
 - 5. Service.
 - 6. Design flow rate, pressure drop, BHP.
 - 7. Actual flow rate, pressure drop, BHP.
 - 8. Discharge pressure.
 - 9. Suction pressure.
 - 10. Total operating head pressure.
- C. Air Moving Equipment:
 - 1. Location.
 - 2. Manufacturer.
 - 3. Model number.
 - 4. Serial number.
 - 5. Air flow, specified and actual.
 - 6. Return air flow, specified and actual.
 - 7. Outside air flow, specified and actual.
 - 8. Total static pressure (total external), specified and actual.
- D. Return Air/Outside Air:
 - 1. Identification/location.
 - 2. Design air flow.
 - 3. Actual air flow.
 - 4. Design return air flow.
 - 5. Actual return air flow.
 - 6. Design outside air flow.
 - 7. Actual outside air flow.
- E. Terminal Unit Data:
 - 1. Manufacturer.
 - 2. Type, constant, variable, single, dual duct.
 - 3. Identification/number.

4. Location.
 5. Model number.
 6. Size.
 7. Minimum static pressure.
 8. Minimum design air flow.
 9. Maximum design air flow.
 10. Maximum actual air flow.
 11. Inlet static pressure.
- F. Air Distribution Tests:
1. Air terminal number.
 2. Room number/location.
 3. Terminal type.
 4. Terminal size.
 5. Percent of design air flow.

END OF SECTION

SECTION 23 07 13
DUCT INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Duct insulation.
- B. Duct liner.

1.02 REFERENCE STANDARDS

- A. ASTM C518 - Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus; 2010.
- B. ASTM C553 - Standard Specification for Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications; 2013.
- C. ASTM C612 - Standard Specification for Mineral Fiber Block and Board Thermal Insulation; 2014.
- D. ASTM C916 - Standard Specification for Adhesives for Duct Thermal Insulation; 2014.
- E. ASTM C1071 - Standard Specification for Fibrous Glass Duct Lining Insulation (Thermal and Sound Absorbing Material); 2012.
- F. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.
- G. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials; 2014.
- H. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi; 2015.
- I. SMACNA (DCS) - HVAC Duct Construction Standards Metal and Flexible; 2005.
- J. UL 723 - Standard for Test for Surface Burning Characteristics of Building Materials; Current Edition, Including All Revisions.

1.03 SUBMITTALS

- A. See Division 1 for submittal requirements.
- B. Product Data: Provide product description, thermal characteristics, list of materials and thickness for each service, and locations.
- C. Manufacturer's Instructions: Indicate installation procedures necessary to ensure acceptable workmanship and that installation standards will be achieved.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Accept materials on site in original factory packaging, labelled with manufacturer's identification, including product density and thickness.
- B. Protect insulation from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original wrapping.

PART 2 PRODUCTS

2.01 REGULATORY REQUIREMENTS

- A. Surface Burning Characteristics: Flame spread index/Smoke developed index of 25/50, maximum, when tested in accordance with ASTM E84 or UL 723.

2.02 GLASS FIBER, FLEXIBLE

- A. Manufacturer:
 - 1. Johns Manville: www.jm.com/#sle.
 - 2. Owens Corning Corporation: www.ocbuildingspec.com/#sle.
- B. Insulation: ASTM C553; flexible, noncombustible blanket.
 - 1. K value: 0.36 at 75 degrees F, when tested in accordance with ASTM C518.
 - 2. Maximum Water Vapor Absorption: 5.0 percent by weight.

- C. Vapor Barrier Jacket:
 - 1. Kraft paper with glass fiber yarn and bonded to aluminized film.
 - 2. Secure with pressure sensitive tape.
- D. Vapor Barrier Tape:
 - 1. Kraft paper reinforced with glass fiber yarn and bonded to aluminized film, with pressure sensitive rubber based adhesive.

2.03 DUCT LINER

- A. Manufacturers:
 - 1. Armacell LLC; AP Coilflex: www.armacell.us/#sle.
 - 2. CertainTeed Corporation: www.certainteed.com/#sle.
 - 3. Johns Manville: www.jm.com/#sle.
- B. Insulation: Incombustible glass fiber complying with ASTM C 1071; flexible blanket, rigid board, and preformed round liner board; with acrylic polymer shown to be fungus and bacteria resistant by testing to ASTM G 21 impregnated surface and edge coat.
 - 1. Apparent Thermal Conductivity: Maximum of 0.25 at 75 degrees F.
 - 2. Service Temperature: Up to 250 degrees F.
 - 3. Minimum Noise Reduction Coefficients:
 - 4. 1/2 inch Thickness: 0.30.
 - 5. 1 inch Thickness: 0.45.
- C. Fungus Resistance of Surface and Edge Coating: No visible growth, measured in accordance with ASTM G 21.
- D. Adhesive: Waterproof, fire-retardant type, ASTM C916.
 - 1. Manufacturers:
 - a. Design Polymerics; DP 2502 Water Based, Low VOC, Duct Liner Adhesive: www.designpoly.com/#sle.
- E. Liner Fasteners: Galvanized steel, welded with integral or press-on head.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Test ductwork for design pressure prior to applying insulation materials.
- B. Verify that surfaces are clean, foreign material removed, and dry.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install in accordance with NAIMA National Insulation Standards.
- C. Insulated Ducts Conveying Air Below Ambient Temperature:
 - 1. Provide insulation with vapor barrier jackets.
 - 2. Finish with tape and vapor barrier jacket.
 - 3. Continue insulation through walls, sleeves, hangers, and other duct penetrations.
 - 4. Insulate entire system, including fittings, joints, flanges, fire dampers, flexible connections, and expansion joints.
- D. Insulated Ducts Conveying Air Above Ambient Temperature:
 - 1. Provide with or without standard vapor barrier jacket.
 - 2. Insulate fittings and joints. Where service access is required, bevel and seal ends of insulation.
- E. Ducts Exposed in Mechanical Equipment Rooms or Finished Spaces (below 10 feet above finished floor): Finish with canvas jacket sized for finish painting.
- F. External Duct Insulation Application:
 - 1. Secure insulation with vapor barrier with wires and seal jacket joints with vapor barrier adhesive or tape to match jacket.
 - 2. Secure insulation without vapor barrier with staples, tape, or wires.

3. Install without sag on underside of duct. Use adhesive or mechanical fasteners where necessary to prevent sagging. Lift duct off trapeze hangers and insert spacers.
 4. Seal vapor barrier penetrations by mechanical fasteners with vapor barrier adhesive.
 5. Stop and point insulation around access doors and damper operators to allow operation without disturbing wrapping.
- G. Duct and Plenum Liner Application:
1. Adhere insulation with adhesive for 90 percent coverage.
 2. Secure insulation with mechanical liner fasteners. Refer to SMACNA (DCS) for spacing.
 3. Seal and smooth joints. Seal and coat transverse joints.
 4. Seal liner surface penetrations with adhesive.
 5. Duct dimensions indicated are net inside dimensions required for air-flow. Increase duct size to allow for insulation thickness.

3.03 SCHEDULES

- A. Required Thickness: Insulation thickness shall be selected to provide the following R-values:
1. Ducts on exterior of building or other unconditioned spaces: R-8
 - a. For maximum K-values as specified herein:
 - 1) Glass Fiber, Flexible: K = 0.31; Minimum thickness = 3"
 - 2) Glass Fiber, Rigid: K = 0.25; Minimum thickness = 2"
 - 3) Glass Fiber Duct Liner, Flexible: K = 0.27; Minimum thickness = 1"
 - 4) Glass Fiber Duct Liner, Rigid: K = 0.23; Minimum thickness = 1-1/2"
 - 5) Glass Fiber Round Duct Liner: K = 0.23; Minimum thickness = 1-1/2"
 - 6) Cellular Foam Duct Liner, Flexible: K = 0.27; Minimum thickness = 1"
 2. Ducts interior to building, not in a directly conditioned space: R-4.2
 - a. For maximum K-values as specified herein:
 - 1) Glass Fiber, Flexible: K = 0.29; Minimum thickness = 1-1/2"
 - 2) Glass Fiber, Rigid: K = 0.24; Minimum thickness = 1"
 - 3) Glass Fiber Duct Liner, Flexible: K = 0.27; Minimum thickness = 1"
 - 4) Glass Fiber Duct Liner, Rigid: K = 0.23; Minimum thickness = 1"
 - 5) Glass Fiber Round Duct Liner: K = 0.23; Minimum thickness = 1"
 - 6) Cellular Foam Duct Liner, Flexible: K = 0.27; Minimum thickness = 1"
 3. Ducts in directly conditioned space: None required.
- B. Insulation Types by Location:
1. Exterior Ducts: Provide Glass Fiber, Rigid insulation on exterior of ductwork with galvanized sheet metal duct shield.
 2. Exterior Ducts: Provide Glass Fiber, Rigid insulation between the walls of double wall duct.
 3. Exterior Ducts: Provide Glass Fiber Duct Liner, Flexible on all exterior duct.
 4. Exterior Ducts: Provide Glass Fiber Duct Liner, Rigid on all exterior duct.
 5. Interior Ducts - not in conditioned space: Provide Glass Fiber Flexible wrap on exterior of ductwork .
 6. Interior Ducts - not in conditioned space: Provide Glass Fiber Rigid board on exterior of ductwork .
 7. Interior Ducts - not in conditioned space: Provide Glass Fiber Duct Liner, Flexible on interior of ductwork .
 8. Interior Ducts - not in conditioned space: Provide Glass Fiber Duct Liner, Rigid on interior of ductwork .
 9. Round Ducts - exterior location: Provide Glass Fiber Round Duct Liner on the interior of ductwork .
 10. HVAC Unit Discharge Ducts: Provide Glass Fiber Duct Liner on interior of ductwork for a minimum of the first 10 ft and additional as indicated on the drawing or specification.

END OF SECTION

SECTION 23 07 19
HVAC PIPING INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Piping insulation.
- B. Jackets and accessories.

1.02 REFERENCE STANDARDS

- A. ASTM C177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus; 2013.
- B. ASTM C547 - Standard Specification for Mineral Fiber Pipe Insulation; 2015.
- C. ASTM C552 - Standard Specification for Cellular Glass Thermal Insulation; 2015.
- D. ASTM C795 - Standard Specification for Thermal Insulation for Use in Contact with Austenitic Stainless Steel; 2008 (Reapproved 2013).
- E. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.
- F. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials; 2014.
- G. NFPA 255 - Standard Method of Test of Surface Burning Characteristics of Building Materials; National Fire Protection Association; 2006.
- H. UL 723 - Standard for Test for Surface Burning Characteristics of Building Materials; Current Edition, Including All Revisions.

1.03 SUBMITTALS

- A. See Division 1 for submittal procedures.
- B. Product Data: Provide product description, thermal characteristics, list of materials and thickness for each service, and locations.
- C. Manufacturer's Instructions: Indicate installation procedures that ensure acceptable workmanship and installation standards will be achieved.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with not less than three years of documented experience.
- B. Applicator Qualifications: Company specializing in performing the type of work specified in this section with minimum 5 Years years of experience.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Accept materials on site, labeled with manufacturer's identification, product density, and thickness.

1.06 FIELD CONDITIONS

- A. Maintain ambient conditions required by manufacturers of each product.
- B. Maintain temperature before, during, and after installation for minimum of 24 hours.

PART 2 PRODUCTS

2.01 REGULATORY REQUIREMENTS

- A. Surface Burning Characteristics: Flame spread index/Smoke developed index of 25/50, maximum, when tested in accordance with ASTM E84 or UL 723.

2.02 GLASS FIBER, RIGID

- A. Manufacturers:
 - 1. Knauf Insulation; Earthwool 1000 Degree Pipe Insulation: www.knaufinsulation.com/#sle.
 - 2. Johns Manville: www.jm.com.

3. Owens Corning Corp: www.owenscorning.com.
 4. Substitutions: See Section 01 60 00 - Product Requirements.
- B. Insulation: ASTM C547 and ASTM C795; rigid molded, noncombustible.
1. K Value: ASTM C177, 0.24 at 75 degrees F.
 2. Maximum Service Temperature: 850 degrees F.
 3. Maximum Moisture Absorption: 0.2 percent by volume.
- C. Vapor Barrier Jacket: White kraft paper with glass fiber yarn, bonded to aluminized film; moisture vapor transmission when tested in accordance with ASTM E96/E96M of 0.02 perm-inches.
- D. Tie Wire: 0.048 inch stainless steel with twisted ends on maximum 12 inch centers.

2.03 JACKETS

- A. PVC Plastic.
1. Manufacturers:
 - a. Johns Manville Corporation: www.jm.com/#sle.
 2. Jacket: One piece molded type fitting covers and sheet material, off-white color.
 - a. Minimum Service Temperature: 0 degrees F.
 - b. Maximum Service Temperature: 150 degrees F.
 - c. Moisture Vapor Permeability: 0.002 perm inch, maximum, when tested in accordance with ASTM E96/E96M.
 - d. Thickness: 10 mil.
 - e. Connections: Brush on welding adhesive.
 3. Covering Adhesive Mastic: Compatible with insulation.
 - a. Compatible with insulation.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Test piping for design pressure, liquid tightness, and continuity prior to applying insulation materials.
- B. Verify that surfaces are clean and dry, with foreign material removed.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install in accordance with NAIMA National Insulation Standards.
- C. Exposed Piping: Locate insulation and cover seams in least visible locations.
- D. For hot piping conveying fluids 140 degrees F or less, do not insulate flanges and unions at equipment, but bevel and seal ends of insulation.
- E. For hot piping conveying fluids over 140 degrees F, insulate flanges and unions at equipment.
- F. Continue insulation through walls, sleeves, pipe hangers, and other pipe penetrations. Finish at supports, protrusions, and interruptions. At fire separations, refer to Division 7.

END OF SECTION

SECTION 23 09 23
BUILDING AUTOMATION SYSTEM (BAS)

GENERAL

1.01 DESCRIPTION

- A. The intent of this document is to describe a system that is complete in every respect without further cost to the Owner. Anything not shown on the drawings or indicated in the specifications, and required for complete operating systems, shall be included as part of this Work. This will also include all connections to new services.
1. All parts of the plans and specifications fully apply when applicable to work of this Division. No attempt has been made to divide the work between the various trades or subcontractors.
 2. OPERATION: The entire Building Automation System (BAS) shall be comprised of a network of interoperable, stand-alone digital controls communicating on the Niagara N4 open protocol communication network to a host computer communicating via the internet to the new server. The BAS shall communicate to third party systems such as chillers, boilers, air handling systems, energy metering systems, existing energy management systems, access control systems, and other building management related devices with open, interoperable communication capabilities.
 3. Work specified by others:
 - a. HVAC Subcontractor:
 - 1) Installation of automatic control dampers, smoke control dampers, and necessary blank off plates.
 - (a) Access doors where required.
 - (1) Installation of impression wells and pressure taps.
 - (2) Installation of flow switches.
 - (3) Installation of automatic control valves.
 - (4) Installation of pressure taps and associated shut-off cocks. Pete's plugs shall be installed next to each temperature and pressure sensor.
 - (5) Electrical Subcontractor:
 - (6) Electrical work shall, in general, comply with the following:
 - (7) Electrical work may include both line-voltage and low-voltage wiring, as required.
 - (8) All electrical work shall comply with the latest California Electrical Code and local electrical codes.
 - (9) All safety devices shall be wired through both hand and auto positions of motor starting device to insure 100% safety shut-off.
 - (10) All magnetic starters for mechanical equipment shall be furnished with integral 120V control transformers, sized to handle the additional VA needed for the controls - pilots, EP valves, etc. All motor starters to be NEMA rated; no IEC rated starters.
 - (11) The motor starter supplier shall provide auxiliary contacts as required for interlock by BAS Contractor; the supplier shall estimate an allowance of at least one auxiliary contact per starter. All interlock and control wiring shown on the electrical prints is by the electrical subcontractor.
 4. QUALITY ASSURANCE
 - a. Minimum Contractor Qualifications:
 - 1) BAS Contractor; programs software and ensures network compatibility with all hardware as specified within, and the following requirements:
 - (a) Hold a Niagara N4 Framework Certification for at least two years, obtained from a Tridium certified training facility, no exceptions.
 - (b) Shall meet the following criteria:
 - (1) Controls Contractor: Installs all hardware controls as specified within, and the following requirements:

- (2) A minimum of three installed and operational Building Automation Systems (BAS) with the Niagara N4 Framework within the last five years.
 - (3) A minimum of five years' experience in servicing a networked BAS
 - (4) Must provide a list of at least three projects of similar scope and cost, list to include:
 - (5) Project name / Size of project
 - (6) Contact name and phone number.
5. **CODES, STANDARDS, ORDINANCES AND REGULATIONS**
 - a. All work and materials shall be in full accordance with the latest rules and regulations of applicable codes as amended and adopted by any governmental agency which has jurisdiction over this work. Nothing in these Plans or Specifications is to be construed to permit work not conforming to these codes. Should the Plans or Specifications call for material, methods, or construction of a higher quality or standard than required by the above rules, the higher quality shall govern.
 - b. When not contradicting the above, the manufacturers' recommendations along with applicable parts of the following documents shall be the basis for quality and technique of installation.
 - 1) Title 24, California Administrative Code, all parts.
 - 2) Applicable publications of the National Fire Protection Association (NFPA), and the National Electrical Code (NEC).
 - 3) Applicable publications of the American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc. (ASHRAE).
6. **SITE CONDITIONS AND LOCATIONS**
 - a. The general location and arrangement of system hardware is shown on the drawings. Information on the drawings relative to existing services is approximate only. Minor adjustments required to conform to actual locations shall be made without additional cost to Owner. The Controls Contractor shall, as work progresses, verify the dimensions of the spaces available for the installation of the work and he shall assume full responsibility for the proper locations of each portion thereof.
 - b. The construction documents are generally diagrammatic and the locations indicated may be approximate only. They do not show every offset, bend, or elbow required for installation in the space provided. The Controls Contractor, therefore, shall install all equipment, conduit runs and the like as follows:
 - 1) Adhere to the location indicated as near as possible.
 - 2) Maintain ample head room and access in all passageways, clearance around all equipment and under conduit runs for unrestricted passage and for easy servicing of all apparatus, equipment, devices and the like.
 - 3) Provide access for maintenance of all equipment.
7. **SUBMITTALS**
 - a. Control Submittal: Within 30 calendar days after award of the contract, and before any materials of this Section are delivered to the job site, submit:
 - 1) The BAS Contractor shall submit description of operation and schematic drawings of the System to the Architect/Engineer for approval before starting work on-site. At least eight sets of submittals shall be sent through channels.
 - 2) Product data submittals must be complete and in a single bound document for all items supplied in this Division. Each document shall be bound with an index and marked with the equipment identification as specified in the Plans and Specifications.
 - 3) Provide complete control shop drawing including equipment, control devices, point to point connections with terminal numbers, and any details necessary for a complete control drawing.
 - 4) List of name plates to be engraved, showing each name plate wording and location.
8. **REMOVAL AND SALVAGE**

- a. Pre-Demolition conference: Contractor shall schedule a walk-through meeting with Energy Management Department to conduct an inventory on items to be removed and salvaged from the existing building under construction.
 - b. Inventory List: The Contractor shall complete and submit an inventory list of items that have been removed and salvaged to the Facilities Director and store items in a cool dry and protected area.
 - c. Delivery: Delivery of the salvaged items shall be determined by the Facilities Director and the Contractor.
 - d. Remove and Reinstall: Detach items from existing location and store them for reinstallation in a strategic area of operation to be determined.
 - 1) Identify areas of occupancy to remain in-use and functional.
 - 2) If existing BAS is required to be removed, relocated, or abandoned, before proceeding with the demolition provide temporary power and communication that bypasses the area of demolition and that maintains the continuity of the BAS to other occupied parts of the site or building construction.
 - 3) Remove all abandoned pneumatic control tubing and fittings
 - 4) Schedule of Demolition Activities: Indicate the following:
 - (a) Detailed sequence of demolition and removal work, with starting and ending dates for each activity. Ensure on-site operations of the occupied areas of the BAS are not interrupted.
 - (b) If there is to be an interruption in the operation of the existing BAS, Contractor shall notify Architect & District Project Manager and indicate how long the services will be interrupted in writing.
9. CLOSE-OUT DOCUMENTS
- a. Record Documents:
 - 1) At completion of project, BAS Contractor shall provide to the Architect/Engineer all As-Built drawings, communications and controller map, wiring diagrams, equipment specifications, Operations and Maintenance Manuals and other documentation as required to describe the system. At least four sets of operations and maintenance manuals with "as-built" drawings, parts lists, etc. shall be provided at job completion.
 - (a) Hard copies shall be stamped with "Record Drawings".
 - (b) Provide all Record Documents on a CD; including pdf files and CAD files using AutoCAD 2020 or latest version.
 - (1) During progress of the work, maintain an accurate record of all changes made in the systems from those shown on the drawings, specifications and submittals.
 - (2) Revise Shop Drawings and provide on reproducible media and in DWG format compatible Windows operating systems and Autocad 2020 or latest version.
 - 2) Communications and Controller Map: To include the following;
 - (a) A detailed communication routing map showing entering and exiting locations
 - (b) A detailed list of controller locations by room number and location.
 - (c) Permanently attach the communication routing map and controller locations inside the NAC control panel.
 - 3) Operations and Maintenance Manuals: Upon completion of the work, a complete bound book containing the following information shall be submitted to the Architect/ Engineer:
 - (a) Complete catalog and performance data on all control devices, including all documents included in submittals.
 - (b) Complete manufacturers' operating and maintenance instructions on all control devices.

- (c) Complete wiring and control diagrams for all equipment and systems, including list of materials, description of operation and system flow diagrams.
 - (d) Manufacturers' warranty certificates on all equipment.
 - (e) Contractor's warrantee letter.
10. GUARANTEE
- a. The Contractor shall warrantee in writing all work performed under this contract for a period of 2 years from the date of notice of completion.
 - b. When notified of a system failure relating to the work performed under this contract, the Contractor will be responsible for all investigation, diagnoses, repair, revision or replacement necessary to correct the condition.
 - c. Field Controllers must come with a 3 year Warranty
 - d. Monthly Service
 - 1) 1. Contractor must include 12 month Service contract for 1-8 Hour Day per month

PART 2 - PRODUCTS

2.01 GENERAL PRODUCT DESCRIPTION

- A. The Building Automation System (BAS) shall be capable of integrating multiple building functions, including equipment supervision and control, alarm management, energy management, and trend data collection. System shall be Tridium Niagara. BACnet and N2 must reside in controller and Open licensing shall be included in each device. Programming of the controller and creating all required dynamic graphics shall be included in this section.
- B. The BAS shall consist of the following:
 - 1. New server
 - 2. Portable Operator Terminals – Microsoft Surface Pro 6 with licensed FX Workbench software installed.
 - 3. Distributed User Interfaces.
 - 4. Network processing, data storage and communications equipment.
 - 5. Integration to existing devices
 - 6. Other components required for a complete and working BAS.
 - a. The system shall be modular in nature, and shall permit expansion of both capacity and functionality through the addition of sensors, actuators, ASCs, and operator devices. Controllers shall be provided a 10% spare point capacity for all necessary applications.
 - 1) System architectural design shall eliminate dependence upon any single device for alarm generation and control execution. The failure of any single component or network connection shall not interrupt the execution of control strategies at other operational devices.

2.02 CONDUIT AND WIRING

- A. Control Contractor shall provide and install all low voltage conduit and wiring for DDC system as required for a complete and operating system. Conduit and wiring shall conform to Division 16 requirements.
- B. Wiring:
 - 1. BACnet communications cable shall be Connect Air: W223C-2144FCBJC 22-3C (Blue Jacketed). Install per manufacturer's recommendations. No splices, Tee's, or cuts of any kind will be allowed. Identify both ends at terminal blocks, field devices, and sensors. All wiring that is routed below grade shall be W221P-1003PE (Outdoor Polyethylene BACnet-Black).
 - a. Communication Loop and sensors must be run in separate conduits and junction boxes.
 - 1) Sensor wire shall be: Connectair Part # W181P-2040PRB 18-2 (Purple).
 - (a) Analog Output shall be: W184C2059PINK 18-4 (Pink).

- (1) Thermostat wire shall be Connect Air: W224C-2020WHT 22-4C (White Jacketed).
 - (2) Cable routed in accessible ceiling spaces shall comply with EIA/TIA standards for communications cabling. Communication bus wire shall be W223C-2144FCBJC 22 3C (Blue Jacketed) Connect Air, blue jacketed shielded cable.
- 2) Conduit: Conduit shall be minimum 1 inch diameter except that minimum conduit size for 120 volt power shall be 3/4-inch. For underground conduit, provide 100% spare capacity by installing a second conduit (empty) along all conduit routes. All conduits shall be sized as follows: Size per the CEC (NEC with California Amendments) and then oversize by one size. All conduits shall be RGSC (Rigid galvanized steel conduit) only. All fittings shall be steel/not malleable or aluminum.

2.03 BAS ARCHITECTURE

A. Automation Network

1. The automation network shall be configured as a Client/Server network with a web server operating on the Clients LAN/WAN. The web browser interface is extended over the LAN/WAN. Monitoring and control of the BAS is available using the web browser interface.
2. The automation network shall include the option of a PC industry standard of Ethernet TCP/IP. Where used, LAN controller cards shall be standard "off the shelf" products available through normal PC vendor channels.
3. The BAS shall network multiple user interface clients, system controllers and systems supervisors(s) as required for systems operation.
4. The automation network option shall be capable of operating at a communication speed of at least 100 Mbps or more.
5. The automation network option will be compatible with other enterprise-wide networks. Where indicated, the automation network shall be connected to the enterprise network and share resources with it by way of standard networking devices and practices.
 - a. Control Network:
 - 1) Control networks shall provide either "Peer-to-Peer," Master-Slave, or Supervised Token Passing communications, and shall operate at a minimum communication speed of 9600 to 76,800baud.
 - (a) Digital Controllers shall reside on the control network via either BACnet MSTP, N2, BACnet IP or Zigbee wireless Smart Mesh.
 - 2) Integration:
 - (a) Hardwired
 - (1) Analog and digital signal values shall be passed from one system to another via hardwired connections.
 - (2) There will be one separate physical point on each system for each point to be integrated between the systems.
 - (3) Direct Protocol (Integrator Panel)
 - (4) The BAS system shall include appropriate hardware equipment and software to allow bi-directional data communications between the BAS system and 3rd party manufacturers' control panels. The BAS shall receive, react to, and return information from multiple building systems, including but not limited to the chillers, boilers, variable frequency drives, and power monitoring system.
 - (5) All data required by the application shall be mapped into the BAS system, and shall be transparent to the operator.
 - (6) Point inputs and outputs from the controllers shall have real-time interoperability with BAS software features such as: Control Software, Energy Management, Custom Process Programming, Alarm Management, Historical Data and Trend Analysis, Totalization, and Local Area Network Communications.

2.04 USER INTERFACE

A. Browser Based Interface

1. The system shall be capable of supporting an unlimited number of clients using standard Web browser such as Internet Explorer™, Google Chrome and Mozilla Firefox. Systems requiring additional software (to enable a standard Web browser) to be resident on the client machine, or manufacture-specific browsers shall not be acceptable.
2. The Web browser software shall run on any operating system and system configuration that is supported by the Web browser. Systems that require specific machine requirements in terms of processor speed, memory, etc., in order to allow the Web browser to function with the Building Automation System (BAS), shall not be acceptable.
3. The Web browser client shall support at a minimum, the following functions:
 - a. User log-on identification and password shall be required. If an unauthorized user attempts access, notice of access failure shall be displayed. Security using authentication and encryption techniques to prevent unauthorized access shall be implemented.
 - b. HTML programming shall not be required to display system graphics or data on a Web page. HTML editing of the Web page shall be allowed if the user desires a specific look or format.
 - c. Storage of the graphical screens shall be in the Network Area Controller (NAC), without requiring any graphics to be stored on the client machine. Systems that require graphics storage on each client are not acceptable.
 - d. Real-time values displayed on a Web page shall update automatically without requiring a manual “refresh” of the Web page.
 - e. Users shall have administrator-defined access privileges. Depending on the access privileges assigned, the user shall be able to perform the following:
 - 1) Modify common application objects, such as schedules and setpoints in a graphical manner.
 - 2) Commands binary objects to start and stop.
 - 3) View logs and charts.
 - 4) View alarms.
 - (a) Graphic screens on the Web Browser client shall support hypertext links to other locations on the Internet or on Intranet sites, by specifying the Uniform Resource Locator (URL) for the desired link.
 - (1) Graphical interface shall be both PC and mobile compatible.
 - (2) Graphical interface shall be Niagara HTML5. No exceptions.
 - (3) Alarms
 - (4) Alarm feature shall allow user configuration of criteria to create, route, and manage alarms and events. It shall be possible for specific alarms from specific points to be routed to specific alarm recipients. The alarm management portion of the user interface shall, at the minimum, provide the following functions:
 - (5) Allow configuration to generate alarms on any numeric, binary, or data point in the system.
 - (6) Generate alarm records that contain a minimum of a timestamp, original state, acknowledged state, alarm class and priority.
 - (7) Allow the establishment of alarm classes that provide the routing of alarms with similar characteristics to common recipients.
 - (8) Allow a user, with the appropriate security level, to manage alarms - including sorting, acknowledging, and tagging alarms.
 - (9) Reports and Summaries
 - (10) Reports and Summaries shall be generated and directed to the user interface displays, with subsequent assignment to printers, or disk. As a minimum, the system shall provide the following reports:
 - (11) All points in the BAS
 - (12) All points in each BAS application

- (13) All points in a specific controller
- (14) All points in a user-defined group of points
- (15) All points currently in alarm
- (16) All BAS schedules
- (17) All user defined and adjustable variables, schedules, interlocks and the like.
- (18) Reports shall be exportable to .pdf, .txt, or .csv formats.
- (19) The system shall allow for the creation of custom reports and queries.
- (20) Schedules
- (21) A graphical display for time-of-day scheduling and override scheduling of building operations shall be provided. At a minimum, the following functions shall be provided:
 - (22) Regular schedules
 - (23) Repeating schedules
 - (24) Exception schedules
 - (25) Weekly schedules shall be provided for each group of equipment with a specific time use schedule.
 - (26) It shall be possible to define one or more exception schedules for each schedule including references to calendars.
 - (27) Monthly calendars shall be provided that allow for simplified scheduling of holidays and special days. Holidays and special days shall be user-selected with the pointing device or keyboard.
- (28) Password
- (29) Multiple-level password access protection shall be provided to allow the user/manager to user interface control, display, and database manipulation capabilities deemed appropriate for each user, Based on an assigned password.
- (30) Each user shall have the following: a user name, a password, and access levels.
- (31) The system shall provide the capability to require a password of minimum length and require a combination of characters and numerical or special characters.
- (32) When entering or editing passwords, the system shall not echo the actual characters for display on the monitor.
- (33) The system shall provide unlimited flexibility with access rights. A minimum of four levels of access shall be provided along with the ability to customize the system to provide additional levels.
- (34) A minimum of 100 unique passwords shall be supported.
- (35) Operators shall be able to perform only those commands available for their respective passwords. Display of menu selections shall be limited to only those items defined for the access level of the password used to log-on.
- (36) The system shall automatically generate a report of log-on/log-off and system activity for each user.
- (37) All log data shall be available in .pdf, .txt, and .csv formats.
- (38) Historical Data Collection
- (39) All numeric, binary or data points in the system database shall allow their values to be logged over time (trend log). Each historical record shall include the point's name, a time stamp including time zone, and the point's value.
- (40) The Network Area Controller (NAC) shall have the ability to store its historical data records locally and periodically to a remote server on the network (archiving).

- (41) The configuration of the historical data collection shall allow for recording data based on change of value or on a user-defined time interval.
- (42) The configuration of the historical data collection shall allow for the collection process to stop or rollover when capacity has been reached.
- (43) A historical data viewing utility shall be provided with access to all history records. This utility shall allow historical data to be viewed in a table or chart format.
- (44) The history data table view shall allow the user to hide/show columns and to filter data based on time and date. The history data table shall allow exporting to .txt, .csv, or .pdf file formats.
- (45) The historical data chart view shall allow different point histories to be displayed simultaneously, and also provide panning and zooming capabilities.
- (46) Audit Log
- (47) For each log entry, provide the following data:
- (48) Time and date.
- (49) User ID
- (50) Change or activity: i.e., Change set-point, add or delete objects, commands, etc.
- (51) Database Backup and Storage
- (52) The user shall have the ability to back-up the System Controller databases.

2.05 AUTOMATION NETWORK

A. Network Server

- 1. New N4 server shall be licensed for 100 Niagara Networked Connections and 5 Year SMA (Software Maintenance Agreement. BAS Contractor shall have the responsibility of bringing the firmware to current revisions.
- 2. It shall be possible to provide access to all Network Area Controllers via a single connection to the server. In this configuration, each Network Area Controller can be accessed from the Graphical User Interface (GUI) or from a standard Web browser (WBI) by connecting to the server.
 - a. Distributed Control: The server shall provide the ability to execute global control strategies based on control and data objects in any NAC in the network, local or remote.
 - b. The server shall provide scheduling for all Network Area Controllers and their underlying field control devices.
 - c. The server shall implement the BACnet Command Prioritization scheme (16 levels) for safe and effective contention resolution of all commands issued to Network Area Controllers. Systems not employing this prioritization shall not be accepted.
 - d. Each Network Area Controller supported by the server shall have the ability to archive its log data, alarm data and database to the server, automatically. Archiving options shall be user-defined including archive time and archive frequency.
 - e. The server provides central alarm management for all Network Area Controllers supported by the server. Alarm management shall include:
 - 1) Routing of alarms to display, printer, email and email compatible pagers
 - 2) View and acknowledge of alarms
 - 3) Query alarm logs based on user-defined parameters
 - (a) The server shall provide central management of log data for all Network Area Controllers supported by the server. Log data shall include process logs, runtime and event counter logs, audit logs and error logs.
 - 4) Network Area Controller (NAC) or JACE
 - (a) The NAC must provide the following hardware features as a minimum:
 - (1) Communications

- (2) One 10/100 Mb Ethernet Port – RJ-45 connection
 - (3) Digital controllers that are hardwired shall reside on the BACnet MSTP control network.
 - (4) Wireless Digital Controllers shall also reside on the control network via Zigbee Pro wireless Smart Mesh.
 - (5) Two RS-485 ports (up to 76,800 baud) shall be standard. Gateways or non-Johnson drivers not allowed.
 - (6) All required protocol drivers are included. BACnet, Lonworks, SNMP, Modbus and N2 shall be resident as standard without additional costs, additional hardware External gateways shall not be acceptable.
 - (7) System shall also be capable of a Zigbee Pro self-healing wireless mesh network. Standard Johnson Zigbee Pro to BACnet IP gateway shall apply.
 - (8) Inputs/Outputs
 - (9) IO-16/34-REM-H Input/Output Modules shall be utilized for additional control devices.
 - (10) Electronic Backup
 - (11) Micro-SD card with 4GB flash total storage/2GB user storage backup provided for all on board functions including I/O
 - (12) Environment
 - (13) Must be capable of operation over a temperature range of 0°F to 122°F.
 - (14) Must be capable of withstanding storage temperatures of between 0°F and 150°F.
 - (15) Must be capable of operation over a humidity range of 5% to 95% RH, non-condensing.
 - (16) Performance
 - (17) FX80 shall be licensed for enough devices for this project, existing devices and add additional 15% for future devices.
 - (18) FX80 shall be licensed with a 5 Year SMA (Software Maintenance Agreement)
 - (19) The Network Area Controller (NAC) shall be a fully user-programmable device capable of providing all of the capability described in Section 2.3 Part A.
 - (20) Automation network – The Network Area Controller (NAC) shall reside on the automation network. Each NAC shall support one or more sub-networks of controllers.
 - (21) User Interface – Each Network Area Controller (NAC) shall have the ability to deliver a web based user interface as previously described. All computers connected physically or virtually to the automation network shall have access to the web based UI.
 - (22) Power Failure – In the event of the loss of normal power, The Network Area Controller (NAC) shall continue to operate for a defined period after which there shall be an orderly shutdown of all programs to prevent the loss of database or operating system software. Flash memory shall be incorporated for all critical controller configuration data.
 - (23) Upon restoration of normal power and after a minimum off-time delay, the controller shall automatically resume full operation without manual intervention through a normal soft-start sequence.
 - (24) Certification – All controllers shall be listed by Underwriters Laboratories (UL).
- 5) Application Specific Controllers (ACS's)
- (a) The ASC devices must provide the following hardware features as a minimum:
 - (1) Communications:

- (2) All controllers shall be BACnet communicating devices.
- (3) Environment:
- (4) Must be capable of operation over a temperature range of
- (5) 0°F to 122°F.
- (6) Must be capable of withstanding storage temperatures of between
- (7) 0°F and 158°F.
- (8) Must be capable of operation over a humidity range of 5% to 95% RH, non-condensing.
- (9) Please supply Belimo push-pull style Damper Actuators for all VAV Boxes. These will need to be 0-10VDC and controlled from new PCV1630 Controller. This will allow these controllers to be reused if the existing VAV is retrofitted to a standard VAV box

2.06 SOFTWARE PROGRAMMING/TOOLS

A. Network Area Controller Toolset

1. Device embedded toolset shall provide the following capabilities in a graphical environment using a standard Web browser:
 - a. Device and point management
 - b. Scheduling, alarming and trending setup
 - c. Creation and binding of graphics
 - d. Time management
 - e. User management
 - 1) Toolset provides additional engineering capabilities including:
 - (a) Editable table based point listings.
 - (1) Automatically generated graphics for standard applications.
 - 2) Device Program Editor
 - (a) Definition of application and logic and display operation shall be available in a completely graphic environment.
 - (b) Definition of operator device characteristics, Digital Controllers (DC) panels, individual points, applications, and control sequences shall be performed in a drag and drop programming environment.
 - (c) All temperature and equipment control strategies, energy management routines, scheduled operations and local device status indicators shall be definable by the operator. User password access and language options shall be definable by the operator.
 - (d) Event definition, prioritization, logging and reporting options are definable by the operator.
 - (e) Application logic shall provide for stand-alone applications as well as distributed applications that are automatically downloaded from master controllers to a network of controllers.
 - (f) The programming environment shall provide help menus and instructions for each operation and/or application performed, for all programming library functions, and for the programming language itself.
 - (g) Libraries of standard application modules shall be provided, such as temperature, humidity, and flow control. These modules may be used as “building blocks” in defining or creating new control sequences. In addition, the user shall have the capability to easily create and archive new modules and control sequences.

2.07 LOCAL CONTROL PANELS

- A. All control panels shall be factory constructed, incorporating the BAS manufacturer’s standard designs and layouts. All control components shall be UL inspected and listed – No exceptions. Control panels shall be fully enclosed, with sub-panel, hinged door, and slotted flush latch. Control panels shall exist on all equipment specified and shall be UL listed as a complete fabricated system. UL listings shall be shown on final drawings.

- B. Panels for Supervisory (SCP) shall be NEMA 4,12. Panels mounted indoors for equipment such as Unit Ventilators or Fan Coils shall be NEMA 1. Panels mounted outdoors for equipment such as Rooftop units shall be NEMA 4,12 or 3R
- C. In general, the control panels shall consist of the DDC controller(s), display module as specified and indicated on the plans, and I/O devices—such as relays, transducers, and so forth—that are not required to be located external to the control panel due to function. Where specified the display module shall be flush mounted in the panel face unless otherwise noted.
- D. All I/O connections on the DDC controller shall be provide via removable or fixed screw terminals.
- E. Low and line voltage wiring shall be segregated. All provided terminal strips and wiring shall be UL listed, 300-volt service and provide adequate clearance for field wiring.
- F. All wiring shall be neatly installed in plastic trays or tie-wrapped.
- G. A convenience 120 VAC duplex receptacle shall be provided inside SCP, Air Handler, Central Plant enclosures, fused on/off power switch, and required transformers.

PART 3 – EXECUTION

3.01 PREPARATIONS

- A. Prior to Installation: Inspect the installed work executed under other Sections which affect the installation of the controls. Report unacceptable conditions to the Engineer. Do not begin work until unacceptable conditions have been corrected. Installation of the controls shall constitute acceptance of existing conditions.
- B. Coordination: Coordinate work with work specified under other Sections to ensure proper and adequate interface of work. Equipment and systems drawings are generally diagrammatic unless dimensions are indicated. Drawings and details shall be checked for interference's with structural and other conditions prior to performing work.
- C. The Contractor shall be responsible for safety and good condition of his materials and equipment until final acceptance by the Owner. Contractor shall erect and maintain suitable barriers, protective devices, lights and warning signs where required.
- D. The Contractor shall report and price any deficiencies found with the existing control system in writing within 2 business days of finding the issue. This would be any item that would not allow proper installation or control of this system.
- E. INSTALLATION
 - 1. General:
 - a. Please include 20% Shift work for areas not accessible during working hours
 - b. When applicable installation procedures are shown or specified in other sections, those procedures shall be followed.
 - c. Provide all supports and hangers, etc., as required to install the equipment as specified or shown on the drawings. All equipment shall be supported, braced and cross-braced to comply with current CBC and CMC.
 - d. Sealing: Wherever any part of the control system has to pierce the roofing, openings through the roof shall be flashed absolutely watertight.
 - e. Arrange and support piping and equipment so that vibration is at a minimum and is not transmitted to or through building structure.
 - f. During Installation please notify Chief Engineer
- F. CONDUIT AND WIRING
 - 1. Control wiring and conduit shall be the responsibility of this section and be installed as follows:
 - a. In equipment rooms/attics – Conductors shall be run in conduit. Final connection to equipment shall be flexible conduit.
 - b. Concealed in new building construction (wall/inaccessible ceilings) - Conductors shall be run in conduit.

- c. Roof mounted/exterior equipment yards - Conductors shall be in conduit. All flexible conduit shall be seal-tite with weatherproof connections. Equipment on grade and detached from the building a distance greater than 36" shall have underground control conduit routed to equipment.
- d. Above accessible ceiling spaces - Control cable will be allowed to be installed without conduit in accessible areas above ceilings as follows:
 - 1) Plenum rated cable is an approved type for the application.
 - 2) Cable is bundled/organized in management devices routed square with building lines (no diagonals) and kept clear of electrical devices (i.e., ballasts, transformers, etc.) that could cause interference.
 - 3) Conduit sleeves are provided between accessible ceiling spaces (i.e., across soffits, gypsum board ceilings, etc.) as required to maintain future access to cable.

G. CONTROL PANELS AND DEVICE LOCATIONS

- 1. All controllers, relays, switches, etc., for equipment located within equipment rooms shall be mounted in enclosed UL listed control panels with hinged locking doors. All control devices equipment located in exposed areas subject to outside weather conditions shall be mounted inside weatherproof enclosures.
- 2. Location of each panel is to be convenient for adjustment and service. Submit locations of all panels to the engineer with shop drawings.

H. IDENTIFICATION

- 1. The label wording shall match that used on the drawings and provide clearly readable printed labels for each control component inside a panel. When applicable, additional identification needed shall be documented on the Shop Drawings.
- 2. All electrical devices within the panel shall be wired to a terminal strip within the panel. An "electric terminal" numbering system shall be applied to all terminals with aforementioned numbers matching terminals shown on Shop Drawings.

I. CLOSING-IN OF UNINSPECTED WORK

- 1. General: Do not allow or cause any of the Work of this Section to be covered up or enclosed until it has been inspected, tested, and approved by the Mechanical Engineer and by all other authorities having jurisdiction.
- 2. Uncovering: Should any of the Work of this Section be covered up or enclosed before it has been completely inspected, tested, or approved, do all things necessary to uncover all such work. After the Work has been completely inspected, tested, and approved, provide all materials and labor necessary and make all repairs necessary to restore the Work to its original and proper condition at no additional cost to the Owner.

J. PROGRAMMING

- 1. The Direct Digital Control (DDC) operational program will be provided by the BAS Contractor. The Contractor shall provide any testing program he feels necessary to fully test the operation of the various components.

K. SYSTEM INSTRUCTION AND RECORD DRAWINGS

- 1. The BAS Contractor shall schedule a minimum of 40 hours of training to train the Facilities Department in the use and care of the system. This training shall occur after all commissioning of the control system is completed.
- 2. Instruction period shall be started after instruction books, service manuals and record drawings have been submitted to and approved by the Architect/Engineer and shall be at hours (regular and non-regular) arranged by the Architect/Engineer.
- 3. Service manuals shall include oiling, cleaning and servicing data, compiled in clearly and easily understood form and in a burable binder. Data shall show all serial numbers of every piece of equipment and complete list of replacement parts.

L. TESTING AND ACCEPTANCE

- 1. The commissioning period starts when the following conditions are met:

- a. The BAS system and all involved HVAC equipment have been installed, connected to the EMS system and ready to operate.
- b. A commissioning meeting has been conducted with representatives of contractors involved, HVAC Supervisor/Mechanic, General Contractor, Mechanical Contractor, Local ABCS Distributor and the Control System Contractor.
- c. Consensus is reached, by the representatives at the above referenced meeting that it is appropriate for the commissioning process to start. The operational program shall be loaded into the DDC system by the Control Systems Contractor.
 - 1) During the commissioning period, the Control System Contractor will maintain a commissioning file of the printed reports from the building. The District shall verify all commissioning tests.
 - 2) During the commissioning period all mechanical equipment with filters shall have new filters installed. The static pressure across the fan shall be accurately measured and documented if installed. System balance, if required, shall have been completed.
 - 3) The Contractor shall furnish a complete and operating system. The Contractor shall also verify, in the presence of the District, the system accuracy and proper function of each controlled device and sensor. The following items shall be successfully demonstrated prior to acceptance by the District:
 - (a) All system outputs, including controllers, relays and other control devices, shall be addressed and start/stop functions demonstrated.
 - (b) All inputs shall be displayed and all event-initiated functions shall be demonstrated.
 - (c) Demonstrate program integrity and power restore sequence during and after a power failure and restoration.
 - (d) Deliver all As-Built drawings, wiring diagrams, equipment specifications, As-Built communications routing map, Operation and Maintenance Manuals and other documentation as required to describe the system.
 - (e) A laminated wiring schematic shall be permanently attached to the inside door panel of each control device.
 - (f) A detailed As-Built communications wiring loop routing map shall be permanently attached to the front end door panel and a copy shall be provided to the Maintenance Department.
 - (g) Complete operator training in the use, programming and operation of the system.
 - (h) The system will not be considered complete until all system graphics are operational and accurate.

M. COMMISSIONING THE SYSTEM

1. The owner reserves the right to employ a third party commissioner at the owners expense.
2. During the commissioning period all mechanical equipment with filters shall have new filters installed. The static pressure across the fan shall be accurately measured and documented if installed.
3. The commissioning process will be completed and the training process shall start when the following conditions are met:
 - a. No "alarm" or "condition reports" are being generated by the DDC system for seven (7) calendar days (168 hours) due to incomplete or inaccurate installation, program, or programming.
 - b. All adjustments and "fine tuning" of the system shall also be included in the training process.
 - c. The system has been approved by the General Contractor, and accepted by the Mechanical Engineer and owner.
 - 1) The Training Process: Shall consist of the following:
 - (a) System use, operation and field trouble shooting to be provided to the owners Facilities Department's personnel. Training must be a total of 40 hours of hands on, as well as phone support when needed. The 40 hour

training can be used in any time allotment agreed upon by the Controls Contractor and the owners EMS Control Center until hours are depleted.

- (b) The owner reserves the right to stop the clock at any time during the training process if there has been a discovery that impedes the complete full and accurate operation of the BAS installed. This includes the software programming, hardware components, sensors, or mechanical equipment and issues therein until they have been resolved.

END OF SECTION

**SECTION 23 31 00
HVAC DUCTS AND CASINGS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Metal ductwork.

1.02 SUBMITTALS

- A. See Division 1 for submittal procedures.
- B. Product Data: Provide data for duct materials.

1.03 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section, with minimum three years of documented experience, and approved by manufacturer.

PART 2 PRODUCTS

2.01 DUCT ASSEMBLIES

- A. Regulatory Requirements: Construct ductwork to comply with NFPA 90A standards.

2.02 MATERIALS

- A. Galvanized Steel for Ducts: Hot-dipped galvanized steel sheet, ASTM A653/A653M FS Type B, with G60/Z180 coating.
- B. Joint Sealers and Sealants: Non-hardening, water resistant, mildew and mold resistant.
 - 1. Type: Heavy mastic or liquid used alone or with tape, suitable for joint configuration and compatible with substrates, and recommended by manufacturer for pressure class of ducts.
 - 2. Surface Burning Characteristics: Flame spread index of zero and smoke developed index of zero, when tested in accordance with ASTM E84.

2.03 DUCTWORK FABRICATION

- A. Fabricate and support in accordance with SMACNA (DCS) and as indicated.
- B. Provide duct material, gages, reinforcing, and sealing for operating pressures indicated.
- C. Increase duct sizes gradually, not exceeding 15 degrees divergence wherever possible; maximum 30 degrees divergence upstream of equipment and 45 degrees convergence downstream.
- D. Fabricate continuously welded round and oval duct fittings in accordance with SMACNA (DCS).

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install, support, and seal ducts in accordance with SMACNA (DCS).
- B. Install in accordance with manufacturer's instructions.
- C. During construction provide temporary closures of metal or taped polyethylene on open ductwork to prevent construction dust from entering ductwork system.
- D. Duct sizes indicated are inside clear dimensions. For lined ducts, maintain sizes inside lining.
- E. Locate ducts with sufficient space around equipment to allow normal operating and maintenance activities.
- F. Install ductwork in accordance with SMACNA Guidelines for Seismic Restraints of Mechanical Systems.

END OF SECTION

SECTION 23 36 00
AIR TERMINAL UNITS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Single-duct terminal units.
- B. Dual-duct units.

1.02 REFERENCE STANDARDS

- A. AHRI 410 - Standard for Forced-Circulation Air-Cooling and Air-Heating Coils; 2001 (R2011).
- B. AHRI 880 (I-P) - Performance Rating of Air Terminals; 2011 with Addendum 1.
- C. ASHRAE Std 130 - Methods of Testing Air Terminal Units; 2008 (R2014).

1.03 SUBMITTALS

- A. See Division 1 for submittal procedures.
- B. Product Data: Provide data indicating configuration, general assembly, and materials used in fabrication. Include catalog performance ratings that indicate air flow, static pressure, and NC designation. Include electrical characteristics and connection requirements.
- C. Operation and Maintenance Data: Include manufacturer's descriptive literature, operating instructions, maintenance and repair data, and parts lists. Include directions for resetting constant-volume regulators.
- D. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

1.04 WARRANTY

- A. Provide five year manufacturer warranty for air terminal units.

PART 2 PRODUCTS

2.01 SINGLE-DUCT, VARIABLE-VOLUME UNITS

- A. Manufacturers:
 - 1. Basis of Design: Titus, DESV.
 - 2. Price Industries, Inc: www.priceindustries.com/#sle.
- B. General:
 - 1. Factory-assembled, AHRI 880 (I-P) rated and bearing the AHRI seal, air volume control terminal with damper assembly, flow sensor, externally mounted volume controller, duct collars, and all required features.
 - 2. Control box bearing identification, including but not necessarily limited to nominal cfm, maximum and minimum factory-set airflow limits, coil type and coil (right or left hand) connection, where applicable.
- C. Unit Casing:
 - 1. Minimum 22 gauge, 0.0299 inch galvanized steel.
 - 2. Air Inlet Collar: Provide round, suitable for standard flexible duct sizes.
 - 3. Unit Discharge: Rectangular, with slip-and-drive connections.
 - 4. Acceptable Liners:
 - a. Liner not to contain pentabrominated diphenyl ether (CAS #32534-81-9) or octabrominated diphenyl ether.
- D. Damper Assembly:
 - 1. Heavy-gauge, galvanized steel or extruded aluminum construction with solid steel, nickel-plated shaft pivoting on HDPE, self-lubricating bearings.
 - 2. Provide integral position indicator or alternative method for indicating damper position over full range of 90 degrees.
 - 3. Incorporate low leak damper blades for tight airflow shutoff.

- E. Hot Water Heating Coil:
 - 1. Coil Casing: Minimum 22 gauge, 0.0299 inch galvanized steel, factory-installed on terminal discharge with rectangular outlet, duct connection type.
 - 2. Coil Fins: Aluminum or aluminum plated fins, mechanically-bonded to seamless copper tubes.
 - 3. Coil leak tested to minimum 350 psig.
 - 4. Base performance data on tests run in accordance with AHRI 410 and units to bear AHRI 410 label.
- F. Controls:
 - 1. DDC (Direct-Digital Controls):
 - a. The unit level controller to include the following:
 - 1) 24 VAC power terminal or RJ-12 Power connection.
 - 2) T-Stat Port for thermostat connection.
 - 3) Service Port for Price Linker diagnostic equipment.
 - 4) Damper actuator.
 - 5) Fan output connection.
 - 6) LED indication for troubleshooting.
 - 7) Three binary staged heating outputs.
 - 8) Binary cooling output.
 - 9) S.A.T. sensor input.
 - 10) Contact closure input.
 - 11) Four analog outputs.
 - b. Bi-directional Damper Actuator: 24 volt, powered closed, spring return open.
 - c. Microprocessor-Based Controller: Air volume controller, pressure-independent with electronic airflow transducers, factory-calibrated maximum and minimum CFM's.
 - 1) Occupied and unoccupied operating mode.
 - 2) Remote reset of temperature or CFM set points.
 - 3) Proportional, plus integral control of room temperature.
 - 4) Monitoring and adjusting with portable terminal.
 - d. Room Sensor:
 - 1) Compatible with temperature controls specified.
 - 2) Wall-mounted, system powered, with temperature set-point adjustment including connection access for portable operator terminal.
 - 2. Airflow Sensor: Differential pressure airflow device measuring total, static, and wake pressures.
 - a. Signal accuracy: Plus/minus five percent throughout terminal operating range.

2.02 DUAL-DUCT UNITS

- A. Manufacturers:
 - 1. Basis of Design: Titus, DEDV.
 - 2. Price Industries, Inc: www.priceindustries.com/#sle.
- B. General:
 - 1. Factory-assembled, AHRI 880 (I-P) rated, variable air volume control terminal with damper assembly, flow sensor, externally mounted volume controller, duct collars, and all required features.
 - 2. Control box bearing identification, including but not necessarily limited to nominal cfm, maximum and minimum factory-set airflow limits.
- C. Unit Casing:
 - 1. Minimum 22 gauge, 0.0299 inch galvanized steel.
 - 2. Air Inlet Collars: Provide round, suitable for standard flexible duct sizes.
 - 3. Unit Discharge: Rectangular, with slip-and-drive connections.
- D. Damper Assembly:

1. Heavy-gauge, galvanized steel or extruded aluminum construction with solid shaft rotating in bearings.
 2. Provide indicator on damper shaft or alternative method for indicating damper position over full range of 90 degrees.
 3. Incorporate low leak damper blades for tight airflow shutoff.
- E. Controls:
1. DDC (Direct-Digital Controls):
 - a. The unit level controller to include the following:
 - 1) 24 VAC power terminal or RJ-12 Power connection.
 - 2) T-Stat Port for thermostat connection.
 - 3) Service Port for Price Linker diagnostic equipment.
 - 4) Damper actuator.
 - 5) Fan output connection.
 - 6) LED indication for troubleshooting.
 - 7) Three binary staged heating outputs.
 - 8) Binary cooling output.
 - 9) S.A.T. sensor input.
 - 10) Contact closure input.
 - 11) Four analog outputs.
 - b. Damper Actuator: 24 volt, powered open and closed.
 - c. Provide multi-point array with velocity sensors in hot-deck and cold-deck air inlet and outlet.
 - d. Terminal Unit Controller: Pressure-independent, variable air volume controller with electronic airflow transducers, factory-calibrated to minimum and maximum air volumes.
 - 1) Operating Modes: Occupied and unoccupied.
 - 2) Proportional and integral control of room temperature.
 - 3) Remote temperature or airflow set-point reset.
 - 4) Monitoring and adjusting capability with portable terminal.
 - e. Room Sensor:
 - 1) Wall-mounted, compatible with temperature controls specified.
 - 2) Provide with temperature set-point adjustment and access connection for portable operator terminal.
 2. Airflow Sensor: Differential pressure airflow device measuring total, static, and wake pressures.
 3. Control Sequence:
 - a. Cold air damper modulates to maintain space temperature.
 - b. Hot air damper modulates to maintain constant CFM.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install the inlets of air terminal units and air flow sensors a minimum of four duct diameters from elbows, transitions, and duct takeoffs.
- C. Provide ceiling access doors or locate units above easily removable ceiling components.
- D. Do not support from ductwork.

END OF SECTION

SECTION 26 05 05
SELECTIVE DEMOLITION FOR ELECTRICAL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Electrical demolition.

1.02 SUBMITTALS

- A. See Division 1 for submittal procedures.

PART 2 PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. Materials and equipment for patching and extending work: As specified in individual sections.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify field measurements and circuiting arrangements are as indicated.
- B. Verify that abandoned wiring and equipment serve only abandoned facilities.
- C. Demolition drawings are based on casual field observation and existing record documents.
- D. Report discrepancies to Owner before disturbing existing installation.
- E. Beginning of demolition means installer accepts existing conditions.

3.02 PREPARATION

- A. Disconnect electrical systems in walls, floors, and ceilings to be removed.
- B. Coordinate utility service outages with utility company.
- C. Provide temporary wiring and connections to maintain existing systems in service during construction. When work must be performed on energized equipment or circuits, use personnel experienced in such operations.
- D. Existing Electrical Service: Maintain existing system in service until new system is complete and ready for service. Disable system only to make switchovers and connections. Minimize outage duration.
 - 1. Obtain permission from Owner at least 24 hours before partially or completely disabling system.
 - 2. Make temporary connections to maintain service in areas adjacent to work area.
- E. Existing Fire Alarm System: Maintain existing system in service until new system is accepted. Disable system only to make switchovers and connections. Minimize outage duration.

3.03 DEMOLITION AND EXTENSION OF EXISTING ELECTRICAL WORK

- A. Remove, relocate, and extend existing installations to accommodate new construction.
- B. Remove abandoned wiring to source of supply.
- C. Remove exposed abandoned conduit, including abandoned conduit above accessible ceiling finishes. Cut conduit flush with walls and floors, and patch surfaces.
- D. Disconnect abandoned outlets and remove devices. Remove abandoned outlets if conduit servicing them is abandoned and removed. Provide blank cover for abandoned outlets that are not removed.
- E. Disconnect and remove electrical devices and equipment serving utilization equipment that has been removed.
- F. Repair adjacent construction and finishes damaged during demolition and extension work.
- G. Maintain access to existing electrical installations that remain active. Modify installation or provide access panel as appropriate.

- H. Extend existing installations using materials and methods compatible with existing electrical installations, or as specified.

3.04 CLEANING AND REPAIR

- A. See Section 01 74 19 - Construction Waste Management and Disposal for additional requirements.
- B. Clean and repair existing materials and equipment that remain or that are to be reused.
- C. Panelboards: Clean exposed surfaces and check tightness of electrical connections. Replace damaged circuit breakers and provide closure plates for vacant positions. Provide typed circuit directory showing revised circuiting arrangement.
- D. Luminaires: Remove existing luminaires for cleaning. Use mild detergent to clean all exterior and interior surfaces; rinse with clean water and wipe dry. Replace lamps, ballasts and broken electrical parts.

END OF SECTION

SECTION 26 05 10
ELECTRICAL GENERAL PROVISIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Furnish all labor, materials, apparatus, tools, equipment, transportation, temporary construction and special or occasional services as required to make a complete working electrical installation, as shown on the drawings or described in these specifications.

1.02 REFERENCES

- A. Reference to codes, standards, specifications and recommendations of technical societies, trade organizations and governmental agencies shall mean the latest edition of such publications adopted and published prior to submittal of the bid proposed. Such codes or standards shall be considered a part of this specification as though fully repeated herein.
- B. When codes, standards, regulations, etc., allow work of lesser quality or extent than is specified under this Division, nothing in said codes shall be construed or inferred as reducing the quality, requirements or extent of the drawings and specifications.
- C. California Code of Regulations (CCR) Title 24, Part 3, Basic Electrical Requirements, State Building Standards Electrical Code
- D. National Fire Protection Association (NFPA).
- E. Equipment and materials specified under this Division shall conform to the following standards where applicable:
 - 1. UL Underwriters' Laboratories
 - 2. ASTM American Society for Testing Materials
 - 3. CMB Certified Ballast Manufacturers
 - 4. IPCEA Insulated Power Cable Engineer Assoc.
 - 5. NEMA National Electrical Manufacturer's Assn.
 - 6. ANSI American National Standards Institute
 - 7. ETL Electrical Testing Laboratories
- F. All base material shall be ASTM and/or ANSI standards.
- G. All electrical apparatus furnished under this Section shall conform to National Electrical Manufacturers Association (NEMA) standards and the NEC and bear the Underwriters' Laboratories (UL) label where such label is applicable.

1.03 SUBMITTALS

- A. See Division 1 for submittal procedures.
- B. Where items are noted as "or equal" a product of equal design, construction and performance will be considered. Contractor must submit all pertinent test data, catalog cuts and product information required to substantiate that the product is in fact equal. Refer to Division 1, General Requirement for additional requirements. Only one substitution will be considered for each product specified.
- C. Submittals shall consist of detailed shop drawings, specifications, "catalog cuts" and data sheets containing physical and dimensioned information, performance data, electrical characteristics, material used in fabrication, material finish and shall clearly indicate those optional accessories which are included and those which are excluded. Furnish one reproducible and 4 prints of each shop drawing.

1.04 CUTTING, PAINTING AND PATCHING

- A. Structural members shall in no case be drilled, bored or notched in such a manner that will impair their structural value. Cutting of holes, if required, shall be done with core drill and only with the approval of the Engineer.
- B. Cutting and digging shall be under the direct supervision of the General Contractor. Include as necessary for the work in this section.

- C. The contractor shall be responsible for returning any surface from which he has removed equipment or devices to the condition and finish of the adjacent surfaces.

1.05 SUPERVISION

- A. Contractor shall personally or through an authorized and competent representative constantly supervise the work from beginning to completion and, within reason, keep the same workmen and foreman on the project throughout the project duration.

1.06 PROTECTION

- A. Keep conduits, junction boxes, and outlet boxes, and other openings closed to prevent entry of foreign matter: cover fixtures, equipment, and apparatus and protect against dirt, paint, water, chemical, or mechanical damage, before and during construction period. Restore to original condition any fixture, apparatus, or equipment damaged prior to final acceptance, including restoration of damaged shop coats of paint, before final acceptance. Protect bright finished surfaces and similar items until in service. No rust or damage will be permitted.

1.07 EXAMINATION OF SITE

- A. The Contractor shall visit the site and determine the locale, working conditions, conflicting utilities, and the conditions in which the electrical work will take place. No allowances will be made subsequently for any costs which may be incurred because of any error or omission due to failure to examine the site and to notify the Engineer of any discrepancies between drawings and specifications and actual site conditions. Schedule visits at least 1 week in advance with Owner's Maintenance staff.

1.08 ENVIRONMENTAL REQUIREMENTS

- A. After other work such as sanding, painting etc. has been completed, clean lighting fixtures, panelboards, switchboards, and other electrical equipment to remove dust, dirt, and grease, or other marks, and leave work in clean condition.

1.09 VOLTAGE CHECK

- A. At completion of job, check voltage at several points of utilization on the system which has been installed under this contract. During test, energize all loads installed. Measure 3-Phase voltages and note percentage differences. Submit report to Engineer. Include copy in O&M Manual.

1.10 TESTS

- A. Perform tests as specified to prove installation is in accordance with contract requirements. Perform tests in the presence of the Engineer and furnish test equipment, facilities, and technical personnel required to perform tests. Tests shall be conducted during the construction period and at completion to determine conformity with applicable codes and with these Specifications. Tests, in addition to specific system test described elsewhere, shall include:
 1. Insulation Resistance: All 600 volt insulation shall be tested at 1,000 volts D.C for one minute on all feeder and branch circuit conductors including the neutral, and make a typed record of all readings to be included in the maintenance instructions. The direct current amperes shall be recorded at start and at one minute. The value shall be declining and not more than one microampere.
 2. Circuit Continuity: Test all feeder and branch circuits for continuity. Test all neutrals for improper ground.
- B. Equipment Operations: Test motors for correct operation and rotation.
- C. Product Failure: Any products which fail during the tests or are ruled unsatisfactory by the Engineer shall be replaced, repaired, or corrected as prescribed by the Engineer at the expense of the Contractor. Tests shall be performed after repairs, replacements, or corrections until satisfactory performance is demonstrated.
- D. Miscellaneous: Include all test results in the maintenance manual. Cost, if any, for all tests shall be paid by the Contractor.

1.11 DRAWINGS

- A. Layout: General layout shown on the drawing shall be followed except where other work may conflict with the drawings.
- B. Accuracy:
 - 1. Drawings for the work under this section are diagrammatic.
 - 2. Contractor shall verify lines, levels, and dimensions shown on the drawings and shall be responsible for the accuracy of the setting out of work and for its strict conformance with existing conditions at the site.
 - 3. Contractor shall insure reconnection of existing equipment and circuits affected by contract demolition whether or not reconnection is specifically shown on the contract documents.

1.12 PROJECT RECORD DRAWINGS

- A. Refer to General Conditions for contractual requirements. Provide project record drawings as required by the General Provisions of the specifications and as required herein. Such drawings shall fully represent installed conditions including actual locations of outlets, true panelboard connections following phase balancing routines, correct conduit and wire sizing as well as routing, revised fixture schedule listing the manufacturer and products actually installed and revised panel schedule. All changes to drawings shall be made by qualified draftspersons to match existing linework and lettering as close as possible. When all the changes have been made to the trade drawings, contractor shall produce one (1) full size (E-Size) updated set of trade drawing(s) utilizing AutoCad 2008 or newer and supply one (1) set of Compact Discs (CD's) reflecting same.

1.13 MAINTENANCE AND OPERATING INSTRUCTIONS

- A. Furnish to the Engineer four (4) hard back 3-ring binders containing all bulletins, operating and maintenance instructions and part lists and other pertinent information for each and every piece of equipment furnished under this specification. Include service telephone numbers. Each binder shall be indexed into sections and labeled for easy reference. Bulletins containing more information than the equipment concerned shall be properly stripped and assembled.
- B. At the time of completion, a period of not less than eight hours shall be allotted by the Contractor for instruction of building operating and maintenance personnel in the use of all systems. All personnel shall be instructed at one time, the Contractor making all necessary arrangements with manufacturer's representative. The equipment manufacturer shall be requested to provide product literature and application guides for the user's reference. Costs, if any for the above services shall be paid by the Contractor.

1.14 WARRANTIES

- A. Furnish to the Engineer four (4) hard back 3-ring binders containing all warranties of every piece of equipment furnished under this specification. Include terms and limitations of warranties, contact names, addresses, and telephone numbers of manufacturer. Each binder shall be indexed into sections and labeled for easy reference for each equipment warranty.

1.15 EXTRA MATERIALS

- A. See Division 1 - Product Requirements, for additional provisions.
- B. All special tools for proper operation and maintenance of the equipment provided under this Section shall be delivered to the District's representative

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 WORKMANSHIP

- A. Preparation, handling, and installation shall be in accordance with manufacturer's written instructions and technical data particular to the product specified and/or accepted equal except as otherwise specified. Coordinate work and cooperate with others in furnishing and placing this work. Work to reviewed shop drawings for work done by others and to field measurements as necessary to properly fit the work.

- B. Conform to the National Electrical Contractor's Association "Standard of Installation" for general installation practice.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

END OF SECTION

SECTION 26 05 12
BASIC MATERIAL AND METHODS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Conduit, raceways and fittings.
- B. Wires and Cables for 600 Volts and less.
- C. Wire connections.
- D. Wire devices.
- E. Outlet boxes.
- F. Pull and junction boxes.
- G. Disconnect Switches.
- H. Fuses.
- I. Supporting Devices.
- J. Identifying Devices.
- K. Grounding and Bonding

1.02 SUBMITTALS

- A. Submit in accordance with the requirements of Division 1 the following items:
 - 1. A list of conduit types indicating where each type of conduit will be used. Indicate conduit manufacturers and fittings to be used.
 - 2. Wires and Cables.
 - 3. Wiring Devices and Plates
 - 4. Nameplates, including engraving schedules where engraved plates are specified.
 - 5. Fused disconnect switches.

1.03 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Products: Listed and classified by Underwriters Laboratories, Inc. as suitable for the purpose specified and indicated.

1.04 REFERENCES

- A. NFPA 70-2017 - National Electrical Code; 2017.
- B. ANSI C80.1 - Rigid Steel Conduit, Zinc Coated - latest edition.
- C. ANSI C80.3 - Electrical Metallic Tubing, Zinc Coated - latest edition.
- D. NECA (INST) - Standard of Installation; National Electrical Contractors Association - latest edition.
- E. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies; latest edition.
- F. NEMA RN 1 - Polyvinyl Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit - latest edition.
- G. NEMA TC 2 - Electrical Plastic Tubing (EPT) and Conduit (EPC-40 and EPC-80) - latest edition.
- H. NEMA TC 3 - PVC Fittings for Use with Rigid PVC Conduit and Tubing - latest edition.
- I. NFPA 70 - National Electrical Code - latest edition.

PART 2 PRODUCTS

2.01 CONDUIT, RACEWAYS AND FITTINGS

- A. Rigid Steel Conduit

1. Rigid steel conduit shall be full weight, pipe size, finished inside and out by hot-dip galvanizing after fabrication, and shall conform with ANSI C80.1 and UL.
 2. Couplings shall be electroplated steel.
 3. Insulating Bushings: Threaded polypropylene or thermo-setting phenolic rated 150°C minimum.
 4. Insulated grounding Bushings: Threaded cast malleable iron body with insulated throat and steel "lay-in" ground lug with compression screw.
 5. Insulated Metallic Bushings: Threaded cast malleable iron body with plastic insulated throat rated 150°C.
 6. Running threads are not acceptable.
- B. Electrical Metallic Tubing (EMT):
1. Conduit: Conduit shall be formed of cold rolled strip steel, and shall comply with ANSI C80.3 and UL requirements.
 2. Couplings: Electroplated steel, UL listed rain and concrete tight through 1-1/4" trade size. All EMT fittings shall be compression type.
 3. Connectors: Steel, gland compression type with insulated plastic throat, 150°C temperature rated. All EMT fittings shall be compression type.
- C. Liquid Tight Flexible Metal Conduit:
1. Conduit: Conduit shall be fabricated in continuous lengths from galvanized steel strip, spirally wound. Flexible conduit, except where installed in concealed dry locations, shall be liquid tight with plastic jacket extruded over the outer zinc coating. No aluminum substitute will be accepted.
 2. Fittings: Connectors shall be the screw clamp on screw-in (Jake) variety with cast malleable iron bodies and threaded male hubs with insulated throat or insulated bushings. Set screw type connectors are not acceptable. Liquid tight fittings shall be of cadmium plated cast malleable iron, with insulated throat.
- D. Rigid Non-Metallic Conduit:
1. Conduit and fittings shall be homogeneous plastic material free from visible cracks, holes or foreign inclusions. The conduit bore shall be smooth and free of blisters, nicks or other imperfections which could damage conductors or cables.
 2. Materials: Polyvinyl Chloride (PVC) schedule 40. Material shall comply with NEMA TC-2 for conduit and NEMA TC-3 for fittings.

2.02 WIRING AND CABLES

- A. Acceptable manufacturers: Southwire, or approved equal.
- B. Conductor material: All wire and cable shall be insulated, stranded copper conductors. Soft drawn annealed copper wire 98% conductivity, bearing the UL label.
- C. Minimum conductor size: AWG No. 12 for all power and lighting branch circuits. AWG No. 14 for all signal and control circuits.
- D. Color Coding: System conductors shall be identified as to voltage and phase connections by means of color impregnated insulation or approved colored marking tape as follows:
- E. For 120/240 volt, single phase, 3 wire system.
1. Phase A - Black
 2. Phase B - Red
 3. Phase C - Orange for High Leg (208v to neutral)
 4. Neutral - White
 5. Ground - Green
- F. For 120/208 volt, 3 phase, 4 wire systems.
1. Phase A - Black
 2. Phase B - Red
 3. Phase C - Blue
 4. Neutral - White
 5. Ground - Green

- G. for 277/480 Volt, 3 phase, 4 wire system
 - 1. Phase A - Brown
 - 2. Phase B - Orange
 - 3. Phase C - Yellow
 - 4. Neutral - Grey
 - 5. Ground - Green
- H. Secondary Wire and Cable, 0 to 600 Volts;
 - 1. NEC Type THWN, or Type XHHW for feeders and branch circuits in wet or dry locations.
NEC type THHN for branch circuits in dry locations.

2.03 WIRE CONNECTION

- A. Wire Joints: Wires in sizes from #18 to #8 AWG, stranded conductor, with insulation rated 105 degrees C. or less shall be joined with electrical spring connectors of three part construction incorporating a non-restricted, zinc coated steel spring enclosed in a steel shell with an outer jacket of vinyl plastic with a flexible insulating skirt.
- B. Mechanical Compression Connectors and Taps: Stranded conductors from #6 AWG to 750 Kcmil shall be joined or tapped using bolted pressure connectors having cast bronze compression bolts. Fittings shall be wide range-taking and designed to facilitate the making of parallel taps, tees, crosses or end-to-end connections. Split-bolt connectors will not be acceptable.
- C. Fixture Connections: Splice fixture wire to circuit wiring with solderless connectors as specified above in paragraph A.
- D. Terminating Lugs: Conductors from size No. 6 AWG to 750 Kcmil, copper, shall be terminated using tin plated hydraulically operated crimping tools and dies as stipulated by the lug manufacturer. Lugs shall be 3M "Scotchlok" series 30000, Burndy Type Ya-L series, or equal.
- E. Splicing and Insulating Tape (600 volts and below): General purpose electrical tape shall be suitable for temperatures from minus 18 degrees C to 105 degrees C, shall be black, ultraviolet proof, self-extinguishing, 7 mil thick vinyl with a dielectric strength of 10,000 volts. Apply 4 layers half-lap with 2" over-lay on each conductor.
- F. Insulating Putty (600 volts and below): Pads or rolls of non-corrosive, self-fusing, one eight inch thick rubber putty with PVC backing sheet. Putty shall be suitable for temperatures from minus 17.8 degrees C to 37.8 degrees C and shall have a dielectric strength of 570 volts/mil minimum.
- G. Insulating Resin: Two Part liquid epoxy resin with resin and catalyst in pre measured, sealed mixing pouch. Resin shall have a set up time of approximately 30 minutes at 21.1 degrees C, and shall have thermal and dielectric properties equal to the insulation properties of the cables immersed in the resin.
- H. Terminal Strip Connectors: Terminate wire in locking tongue style, pressure type, solderless lug where applicable.

2.04 WIRING DEVICES

- A. Switches: Specification grade, flush mounting, quiet operating AC type, with toggle operator, heat resistant plastic housing and self grounding metal strap. Silver or silver alloy contact. Rated 20A at 120-277V and capable of full capacity on tungsten or fluorescent lamp load. Design for up to #10 wire. Use single pole, double pole, three-way, four-way, lighted, pilot, or keyed type, as indicated on drawings or required. Provide white color unless otherwise noted.
Manufacturer: Leviton, Arrow Hart, or Hubbell.
- B. Receptacles: Specification grade, flush mounting receptacles with nylon face. High grade brass allow triple wipe contacts. Provide 2 pole, 3 wire grounding type with a green colored brass hexagonal equipment grounding screw. Grounding shall be rivetless, single piece brass with no mechanical connections in the primary path between point of ground wire termination and ground blades. Use 20A rated receptacles, white in color, unless otherwise noted.
Manufacturer: Leviton, Arrow Hart, or Hubbell.

1. Isolated Ground - Provide separate path to ground, with orange faceplate or triangle to indicated isolated ground
 2. GFCI - Equipped with diagnostic indicator for miswiring.
 3. Weatherproof - GFCI type, outdoor rated, with metal lockable while in use cover
- C. Faceplates: Provide nylon cover faceplates for wall receptacles, outlets, and switches. Include thermal mounting screws that match plate and device color. Manufacturer: Leviton, Arrow Hart, or Hubbell.

2.05 OUTLET BOXES

- A. Standard outlet boxes: Galvanized, die formed or drawn steel, knock-out type of size and configuration best suited to the application indicated on the plans. Minimum box size, 4 inch square by 1-1/2 inch deep, indoor use. FS cast boxes are required for outdoor use.
- B. Cast Metal Outlet Boxes: FS/FD cast boxes are required for outdoor use. Malleable iron alloy with threaded hubs and mounting lugs as required. Boxes shall be furnished with cast cover plates of the same material as the box and neoprene cover gaskets. Thomas and Betts, Crouse-Hinds, Appleton or equal.
- C. Conduit Outlet Bodies: Cadmium plated, cast iron alloy. Obround conduit outlet bodies with threaded conduit hubs and neoprene gasketed, cast iron covers. Outlet bodies shall be used to facilitate pulling of conductors or to make changes in conduit direction only. Splices are not permitted in conduit outlet bodies. Thomas and Betts, Crouse Hinds Form 8 Condulets, Appleton form 35 Unilets, or equal.

2.06 PULL AND JUNCTION

- A. Sheet Metal Boxes: Use standard outlet or concrete ring boxes wherever possible; otherwise use minimum 15 gauge galvanized metal, NEMA 1 boxes, sized to code requirements with covers secured by cadmium plated machine screws located 6 inches on centers. Circle AW Products, Hoffman Engineering Co., or equal.
- B. Cast Metal Boxes: Use standard cast malleable iron outlet or device boxes wherever possible; otherwise use cadmium plated, cast malleable iron junction boxes with bolt-on, interchangeable conduit hub plates with neoprene gaskets. Appleton FS/FD series; Crouse Hinds FS/FD series, or equal.

2.07 DISCONNECT SWITCHES

- A. All disconnect switches shall be heavy-duty type and have the number of poles, voltage rating, and horsepower rating as required by the motor or equipment. Disconnect switches shall be in enclosures to suit conditions, NEMA 3R for outdoor and NEMA 1 for indoor. Disconnect switches shall be fused unless otherwise noted on the drawings. As manufactured by: Square D - Class 3110, ITE Siemens, or equal.

2.08 FUSES

- A. Dual Element, Time Delay, UL Class RK5. Rejection type. Size and Voltage as indicated on equipment. Bussman, Little Fuse, or approved equal.

2.09 ELECTRICAL SUPPORTING DEVICES

- A. Concrete Fasteners: Hilti Kwik Bolt TZ or equal, self drilling expansion type concrete anchor.
- B. Conduit Straps: Hot-dip galvanized, cast malleable iron, two hole type strap with cast clamp-backs and spacers as required. OZ/Gedney, Thomas & Betts, or equal.
- C. Construction Channel: 1-1/2 inch by 1-1/2 inch 12 gauge galvanized steel channel with 17/32 inch diameter bolt holes, 1-1/2 inch on center, in the base of the channel. Kindorf 905 series, Unistrut P-1000-HS or equal.
- D. Cable Ties and Clamps: Thomas and Betts Co. "Ty-Raps" Panduit "Pan-Ty" or equal one piece, nylon, reusable type lashing ties.
- E. Fasteners (General) : Wood screws for fastening to wood. Machine screws for fastening to steel. Toggle bolts for fastening to hollow concrete block, gypsum board, or plaster walls. Expansion anchors for attachments to pre-poured concrete.

2.10 IDENTIFYING DEVICES

- A. Nameplates: Type NP: Engraved black bakelite, 1 inch by 3-1/2 inch, 1/8 inch high white letters, machine screw retained. For permanent identification of all switchboards, panelboards, circuit breakers in separate enclosures, motor starters, relays, time switches, disconnect switches and other cabinet-enclosed apparatus including terminal cabinets or match existing as closely as possible.
- B. Legend Plates: Type LP: Die-stamped metal legend plate with mounting hole and positioning key for attachment to panel mounted operators' devices. Engraved paint-filled characters as specified.
- C. Wire & Terminal Markers: Self-adhering, pre-printed vinyl with self-laminating wrap around strip. Markers shall be legible after termination. Brady B191 series, Thomas & Betts WSL series or equal.
- D. Conductor Phase Markers: Thomas & Betts WCPHAS series or similar in addition to colored marking as specified under this section of the specifications.

2.11 GROUNDING AND BONDING

- A. Ground Rods
 - 1. Manufacturer: Blackburn, Erico, or approved Equal
 - 2. Size: 3/4" x 10' Ground Rods
- B. Grounding Electrode Conductor, 2/0 for foundation foets, and per NEC.
- C. Grounding Well - Christy Box, G5 Traffic Valve Box.

PART 3 EXECUTION

3.01 CONDUIT AND RACEWAY APPLICATIONS

- A. Rigid Steel Conduit: Use rigid steel conduit for the following locations or conditions:
 - 1. All exterior applications
 - 2. All conduits larger than 2" trade diameter.
 - 3. All conduits indoor below eight (8) feet above finished floor.
- B. Electrical Metallic Tubing (EMT): EMT is allowed for the following conditions:
 - 1. Interior only and above eight (8) feet from finished floor.
 - 2. Interior only and when entering a panel from above.
- C. Liquidtight Flexible Metallic Conduit: Use Liquidtight for the following conditions:
 - 1. In damp and wet locations for connections to motors, transformers, vibrating equipment and machinery.
 - 2. Connections to all pump motors, flow switches, and similar devices.
- D. Rigid Non-Metallic Conduit, Polyvinyl Chloride (PVC) Schedule 40:
 - 1. Underground installation.

3.02 CONDUIT INSTALLATION

- A. General
 - 1. All conduit runs shown on the plans are sized based on the use of rigid steel conduit and THWN copper conductors. If conductor type is changed the contractor shall be responsible for resizing conduits to meet code. In no case is conduit to be sized smaller than 3/4" trade diameter.
 - 2. Low voltage wiring shall be installed in conduit, minimum 3/4" trade diameter.
 - 3. Conduits shall be tightly covered and well protected during construction using metallic bushings and bushing "pennies" to seal open ends.
 - 4. In making joints in rigid steel conduit, ream conduit smooth after cutting and threading.
 - 5. Clean any conduit in which moisture or any foreign matter has collected before pulling in conductors. Paint all field threaded joints to prevent corrosion.
 - 6. In all empty conduits or ducts, install an 1100 pound tensile strength polyethylene pulling rope.

7. Conduit systems shall be electrically continuous throughout. Install code size, uninsulated, copper grounding conductors in all conduit runs, grounding conductor shall be bonded to conduit, equipment frames and properly grounded.
- B. Layout:
1. All new conduits shall be concealed. Any field conditions that does not allow concealment of conduits shall be reviewed with the Engineer prior to rough-in.
 2. Locations of conduit runs shall be planned in advance of the installation and coordinated with concrete work, plumbing and framing.
 3. Where practical install conduits in groups in parallel vertical or horizontal runs and at elevations that avoid unnecessary off-sets.
 4. Low voltage conduit shall be grouped separately and labelled every 10 ft interval as to system (i.e. fire, control, etc)
 5. Exposed conduit shall be run parallel or at right angles to the centerlines of the columns and beams.
 6. Conduits shall not be placed closer than 12 inches from a parallel hot water or steam line or three inches from such lines crossing perpendicular to the runs.
 7. In long runs of conduit, provide sufficient pull boxes per NEC inside buildings to facilitate pulling wires and cables. Support pull boxes from structure independent of conduit supports. These pull boxes are not shown on the plans.
- C. Supports:
1. All raceway systems shall be secured to building structures using specified fasteners, clamps and hangers spaced according to Code.
 2. Support single runs of conduit using two hole pipe straps. Where run horizontally on walls in damp or wet locations, install "clamp blocks" to space conduit off the surface.
 3. Multiple conduit runs shall be supported using "trapeze" hangers fabricated from 3/8 inch diameter, threaded steel rods secured to building structures. Fasten conduit to construction channel with standard two hole pipe clamps. Provide lateral seismic bracing for hangers.
 4. Installation
 - a. Locate and install anchors, fasteners, and supports in accordance with NECA "Standard of Installation".
 - 1) Do not fasten supports to pipes, ducts, mechanical equipment, or conduit.
 - 2) Do not drill or cut structural members.
 - b. Rigidly weld support members or use hexagon-head bolts to present neat appearance with adequate strength and rigidity. Use spring lock washers under all nuts.
 - c. Install surface-mounted cabinets and panelboards with minimum of four anchors.
 - d. In wet and damp locations use steel channel supports to stand cabinets and panelboards 1 inch off wall.
 - e. Use sheet metal channel to bridge studs above and below cabinets and panelboards recessed in hollow partitions.
- D. Terminations and Joints:
1. Raceways shall be joined using specified couplings or transition couplings where dissimilar raceway systems are joined.
 2. Rigid conduit connection to enclosures shall be made by Myers type grounding hubs only. EMT connections to enclosures shall be made with compression connector with grounding lock-nuts or bushings.
 3. Conduit terminations exposed at weatherproof enclosures and cast outlet boxes shall be made watertight using appropriate connectors and hubs.
 4. Install expansion couplings where any conduit crosses a building separation or expansion joint.
 5. Install cable sealing bushings on all conduits originating outside the building walls and terminating in switchgear, cabinets or gutters inside the building. Install cable sealing bushings or caulk conduit terminations in all grade level or below grade exterior pull, junction or outlet boxes.

- E. Penetrations:
 - 1. Furnish and install metal sleeves for all exposed interior conduit runs passing through concrete floors or walls. Following conduit installation, seal all penetrations using non-iron bearing, chloride free, non-shrinking, dry-pack, grouting compound.
 - 2. Install specified watertight conduit entrance seals and membrane clamps at all below grade wall and floor penetrations. Conduits penetrating exterior building walls and building floor slab shall be insulated rigid steel.
 - 3. Conduits penetrating rated walls, floors, etc. shall be fireproofed.

3.03 CABLE AND WIRE INSTALLATION

- A. Examination
 - 1. Verify that interior of building has been protected from weather.
 - 2. Verify that mechanical work likely to damage wire and cable has been completed.
 - 3. Verify that raceway installation is complete and supported.
 - 4. Verify that field measurements are as indicated.
- B. Preparation
 - 1. In existing conduits that will be reused, pull out existing conductors.
 - 2. Completely and thoroughly swab raceway before installing wire.
 - 3. Use 50/50 solution of Simple Green. Use CO2 to blow water and soap into conduit - let soak to break up dried out pulling compounds, then pull conductors. Pull one conductor at a time if will not pull all out together.
- C. General:
 - 1. Conductors shall not be in conduit until all work of any nature that may cause injury is completed. Care should be taken in pulling conductors that insulation is not damaged. U.L. approved non-petroleum base and insulating type pulling compound shall be used as needed.
 - 2. All cables shall be installed and tested in accordance with manufacturer's requirements and warranty.
 - 3. Block and tackle, power driven winch or other mechanical means shall not be used in pulling conductors of size smaller than AWG # 1.
- D. Splicing and Terminating:
 - 1. All aspects of splicing and terminating shall be in accordance with cable manufacturer's published procedures.
 - 2. Make up all splices in outlet boxes with connectors as specified herein with separate tails of correct color to be made up to splice. Provide at least six (6) inches of tails packed in box after splice is made up.
 - 3. All wire and cable in panels, control centers and equipment enclosures shall be bundled and clamped.
 - 4. Encapsulate splices in exterior outlet, junction and pull boxes using insulating resin kits. All splices for exterior equipment in pump rooms shall be made up watertight.
 - 5. Insulate mechanical compression taps AWG #1/0 and larger using pre-molded heat shrink tubing ITCSN Heaving Wall rated to 600V. Heating process should start from the middle of the heat shrink tubing and move to its ends.
- E. Identification:
 - 1. Securely tag all branch circuits, noting the purpose of each. Mark conductors with vinyl wrap-around markers. Where more than two conductors run through a single outlet, mark each circuit with the corresponding circuit number at the panelboard.
 - 2. Color code conductors size #6 and larger using specified phase color markers and identification tags.
 - 3. All terminal strips are to have each individual terminal identified with specified vinyl markers.
 - 4. All identification shall be legible and readable after completion of installation.
 - 5. Provide labeling for all switches and receptacle outlets. Self-adhering machine clear tape with black letters.

3.04 INSTALLATION:

- A. Route wire and cable as required to meet project conditions.
 - 1. Wire and cable routing indicated is approximate unless dimensioned.
 - 2. Where wire and cable destination is indicated and routing is not shown, determine exact routing and lengths required.
 - 3. Include wire and cable of lengths required to install connected devices within 10 ft of location shown.
- B. Install wire and cable in accordance with the NECA "Standard of Installation."
- C. Use wiring methods indicated.
- D. Pull all conductors into raceway at same time.
- E. Use suitable wire pulling lubricant for building wire 4 AWG and larger.
- F. Protect exposed cable from damage.
- G. Support cables above accessible ceiling, using spring metal clips or metal cable ties to support cables from structure or ceiling suspension system. Do not rest cable on ceiling panels.
- H. Use suitable cable fittings and connectors.
- I. Neatly train and lace wiring inside boxes, equipment, and panelboards.
- J. Clean conductor surfaces before installing lugs and connectors.
- K. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise.
- L. Use split bolt connectors for copper conductor splices and taps, 6 AWG and larger. Tape uninsulated conductors and connector with electrical tape to 150 percent of insulation rating of conductor.
- M. Use solderless pressure connectors with insulating covers for copper conductor splices and taps, 8 AWG and smaller.
- N. Use insulated spring wire connectors with plastic caps for copper conductor splices and taps, 10 AWG and smaller.
- O. Trench and backfill for direct burial cable installation as specified in Underground Structure Section. Install warning tape along entire length of direct burial cable.
- P. Identify and color code wire and cable. Identify each conductor with its circuit number or other designation indicated.

3.05 ELECTRICAL CONNECTIONS

- A. Make electrical connections in accordance with equipment manufacturer's instructions.
- B. Make conduit connections to equipment using flexible conduit. Use liquidtight flexible conduit with watertight connectors in damp or wet locations.
- C. Connect heat producing equipment using wire and cable with insulation suitable for temperatures encountered.
- D. Provide receptacle outlet to accommodate connection with attachment plug.
- E. Provide cord and cap where field-supplied attachment plug is required.
- F. Install suitable strain-relief clamps and fittings for cord connections at outlet boxes and equipment connection boxes.
- G. Install disconnect switches, controllers, control stations, and control devices to complete equipment wiring requirements.
- H. Install terminal block jumpers to complete equipment wiring requirements.
- I. Install interconnecting conduit and wiring between devices and equipment to complete equipment wiring requirements.

3.06 INSTALLATION OF BOXES

- A. General:
 - 1. Leave no un-used openings in any box. Install close-up plugs as required to seal openings.
 - 2. Exposed outlet boxes and boxes in damp or wet locations shall be cast metal with gasketed cast metal cover plates.
- B. Box Layout:
 - 1. Outlet boxes shall be installed at the locations and elevations shown on the drawings or specified herein. Make adjustments to locations as required by structural conditions and to suit coordination requirements of other trades.
 - 2. Install junction or pullboxes where required to limit bends in conduit runs to not more than 360 degrees or where pulling tension achieved would exceed the maximum allowable for the cable to be installed. Consult wire and cable manufacturer.

3.07 INSTALLATION OF WIRING DEVICES

- A. General
 - 1. Install all devices flushmounted unless otherwise noted on the drawings. Comply with layout drawings for general locations. Consult Engineer or Owner's Representative for locations that have conflict with other devices or manner not suitable for installation. Avoid placing devices behind open doors.
 - 2. Align devices horizontally and vertically. Device plates shall be aligned vertically with tolerance of 1/16". All four edges of device plates shall be in contact with the wall surface.
 - 3. Mounting height as indicated on the drawings and according to ADA requirements.
 - 4. Install device plates on all outlet boxes. Provide blank plates for all empty, spare, and boxes for future use.
 - 5. Securely fasten devices into boxes and attach appropriate cover plates.
 - 6. Caulk around edges or outdoor device plates and boxes when rough wall surfaces prevent raintight seal. Use caulking materials approved by Engineer. Fireproof around opening of devices located or penetrating fire-rated construction assemblies.
 - 7. Fireproof around opening of devices located or penetrating fire-rated construction assemblies.
- B. Switches
 - 1. Where switches are indicated to be installed near doors, corner walls, etc. mount not less than 2 inches and not more than 18" from trim. Verify exact location with Architect or Engineer prior to rough-in.
 - 2. Coordinate the location of switches to insure locations at the strike side of doors.
 - 3. Furnish and install engraved legend of each switch that controls exhaust fans, motors, equipment systems, etc. not located within sight of the controlling switch.
 - 4. Ganging of Switches - provide barriers for switches of difference phases and voltages. Otherwise switches shall be gauged in one faceplate.
- C. Receptacles
 - 1. Mount receptacles vertically with U-shaped ground position on bottom.
 - 2. Do not combine GFCI protected circuits with other circuits in the same raceway. Limit number of GFI protect circuits in any one raceway to a maximum of one (1) circuit.
- D. Identification
 - 1. Label all outlets and switches. Mark each wiring device where circuits and panel supply is derived from.
 - 2. All identification shall be legible and readable after completion of installation

3.08 INSTALLATION OF FUSES AND DISCONNECT SWITCHES

- A. Fuses shall be installed where noted on plans. Sizes are based on design data provided by equipment mfg. Listed or labeled equipment must be in accordance with instructions included in the listing or labeling. Be sure to observe maximum branch circuit fuse size labels.

- B. Disconnect switches shall be mounted on the equipment, where possible. Coordinate with mechanical contractor to ensure switches are not mounted on a removable access panel.
- C. Label each disconnect fuse with equipment tag as indicated in the single line diagram, or as directed.

3.09 ELECTRICAL EQUIPMENT GROUNDING

- A. Ground non-current carrying metal parts of electrical equipment enclosures, frames, conductor raceways or cable trays to provide a low impedance path for line-to-ground fault current and to bond all non-current carrying metal parts together. Install a ground conductor in each raceway system in addition to conductors shown. Equipment ground conductor shall be electrically and mechanically continuous from the electrical circuit source to the equipment to be grounded. Size ground conductors per NEC 250 unless larger conductors are shown on the drawings.
- B. Grounding conductors shall be identified with green insulation, except where a bare ground conductor is specified. Where green insulation is not available, on larger sizes, black insulation shall be used and suitably identified with green tape at each junction box or device enclosure.
- C. Install metal raceway couplings, fittings and terminations secure and tight to insure good ground continuity. Provide insulated grounding bushing and bonding jumper where metal raceway is not directly attached to equipment metal enclosure and at concentric knock-outs.
- D. Motors shall be connected to equipment ground conductors with a conduit grounding bushing and with a bolted solderless lug connection on the metal frame.
- E. Conduit terminating in concentric knockouts at panelboards, cabinets and gutters shall have insulated grounding bushings and bonding jumpers installed interconnecting all such conduits and the panelboard cabinet, gutter, etc.
- F. Performance:
 - 1. Measure the resistance to ground of each ground rod before connection to the other ground rods. The resistance shall not exceed 25 ohms.
 - a. A single electrode which does not have a resistance to ground of 25 ohms or less shall be augmented by additional electrode(s).
 - 2. Measure the resistance to ground of the total ground system with all connections completed. The resistance shall not exceed 2 ohms for primary services or 5 ohms for secondary services.
 - 3. Tests of the resistance to ground shall be made using either the three point method or the fall-of-potential method.
 - 4. Perform a continuity check from equipment ground bus bars and ground lugs to the ground system.

3.10 BONDING

- A. Bonding shall be provided to assure electrical continuity and the capacity to conduct safely any fault current likely to be imposed.
- B. Bonding shall be in accordance with NEC Article 250, Part V.

3.11 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

END OF SECTION

SECTION 26 08 02
ELECTRICAL ACCEPTANCE TESTING

PART 1 - GENERAL

1.01 OVERVIEW

- A. The purpose of these specifications is to assure that all tested electrical equipment and systems are operational and within applicable standards and manufacturer's tolerances and that the equipment and systems are installed in accordance with design specifications.
- B. The work specified in these specifications may involve hazardous voltages, materials, operations, and equipment. These specifications do not purport to address all of the safety problems associated with their use. It is the responsibility of the independent testing agency to review all applicable regulatory limitations prior to the use of these specifications.
- C. Perform the visual inspections, manual operations and tests on systems and equipment as described in Part 3, "Execution".
- D. Tests shall be performed and documented by an independent testing agency.
- E. Perform these tests in addition to other electrical tests delineated in other Sections.

1.02 REFERENCES

- A. All inspections and field tests shall be in accordance with the latest edition of the following codes, standards, and specifications except as provided otherwise herein.
 - 1. American National Standards Institute - ANSI
 - 2. American Society for Testing and Materials - ASTM
 - 3. Institute of Electrical and Electronic Engineers - IEEE
 - 4. Insulated Cable Engineers Association - ICEA
 - 5. InterNational Electrical Testing Association - NETA
 - 6. National Electrical Manufacturer's Association - NEMA
 - 7. National Fire Protection Association - NFPA
 - 8. Occupational Safety and Health Administration - OSHA
 - 9. State and local codes and ordinances
 - 10. Underwriters Laboratories, Inc. - UL

1.03 SUBMITTAL

- A. The testing organization shall submit appropriate documentation to demonstrate that it satisfactorily complies with the following. An organization having a "Full Membership" classification issued by the InterNational Electrical Testing Association meets this criteria.
 - 1. The testing organization shall be an independent, third party, testing organization which can function as an unbiased testing authority, professionally independent of the manufacturers, suppliers, and installers of equipment or systems evaluated by the testing organization.
 - 2. The testing organization shall be regularly engaged in the testing of electrical equipment devices, installations, and systems.
- B. The testing organization shall utilize technicians who are regularly employed for testing services.
- C. Each on-site crew leader shall hold a current registered certification in electrical testing applicable to each type of apparatus to be inspected or tested. The certification in electrical testing shall be issued by an independent, nationally-recognized, technician certification agency. The following entities shall qualify as independent, nationally-recognized, technician certification agencies:
 - 1. InterNational Electrical Testing Association (NETA)
 - 2. Accepted certifications:
 - 3. Certified Technician/Level III
 - 4. Certified Senior Technician/Level IV

1.04 TEST REPORTS

- A. Provide written test reports, signed and dated, for all tests prior to acceptance of the tested equipment by the Owner. Test reports on megger, dielectric absorption and high potential tests shall include the ambient temperature and relative humidity existing at the time of the tests.

PART 2 - PART 2 -PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.01 VISUAL INSPECTIONS

- A. Prior to any testing, perform visual inspections to verify the following:
 1. The equipment is completely and properly installed
 2. The equipment is free from damage and defects
 3. Shipping blocks and restraints have been removed
 4. Electrical terminations have been properly tightened
 5. The equipment has been properly aligned
 6. The equipment has been properly lubricated
 7. The ventilation louvers are open and unobstructed
 8. The equipment is ready to be tested

3.02 MANUAL OPERATION

- A. Prior to any testing, mechanical devices shall be exercised or rotated manually to verify that they operate properly and freely.

3.03 PRIMARY CABLE TESTS

- A. Perform a continuity test, 2,500-volt DC megger test, AC high potential test, and a second 2,500-volt DC megger test on primary cables. The high potential test shall be performed at 45kV for new cable installations, and at 30kV when new cable has been spliced to existing cable.

3.04 POWER CABLE TESTS

- A. Perform a continuity check and a 1,000 volt DC megger test on 600 volt power cables No. 4 AWG and larger.
 1. The megger test shall be performed between each pair of conductors and from each conductor to ground.
 2. The megger test shall be performed for 15 seconds or until the insulation resistance value stabilizes.
 3. The insulation resistance between conductors and from each conductor to ground shall be 100 megohms minimum in one minute or less. In addition, the lowest insulation resistance value shall not differ from the highest value by more than 20 percent.

3.05 CONTROL CABLE TESTS

- A. Perform a continuity check on control and instrumentation wiring.

3.06 SECONDARY SWITCHGEAR AND SWITCHBOARD TESTS

- A. Perform a continuity check and 1,000 volt DC megger test on buses, and on main and feeder breakers.
- B. Perform a primary current injection test and a 'Ducter' (contact resistance) test on main breakers.
- C. Perform a 1,000-volt DC megger test and a turns-ratio test on CT's and PT's.
- D. Calibrate the metering.

3.07 SERVICE, DISTRIBUTION AND MOTOR CONTROL EQUIPMENT TESTS

- A. Perform a 1,000-volt megger test on buses, motor starters and disconnect switches. This test may be combined with the feeder cable megger test by testing the devices and terminated cables together.
- B. Perform a continuity check on motor control circuits and control panel internal wiring.

- C. Perform an operational test on the controls.
- D. Perform a continuity check and a 1,000-volt DC megger test on 3 phase distribution and isolation transformers.

3.08 MOTOR TESTS

- A. Perform a 1,000-volt megger test on 460 volt, 3 phase motors, and a 500 volt megger test on 200 volt, 3 phase motors.
- B. "Bump" motors to verify proper direction of rotation.
- C. Run motors and check for vibration.

3.09 GROUNDING TESTS

- A. Measure the resistance to ground of each ground rod before connection to the other ground rods. The resistance shall not exceed 25 ohms.
 - 1. A single electrode which does not have a resistance to ground of 25 ohms or less shall be augmented by additional electrode(s).
- B. Measure the resistance to ground of the total ground system with all connections completed. The resistance shall not exceed 2 ohms for primary services or 5 ohms for secondary services.
- C. Tests of the resistance to ground shall be made using either the three point method or the fall-of-potential method.
- D. Perform a continuity check from equipment ground bus bars and ground lugs to the ground system.

END OF SECTION

SECTION 26 09 23
LIGHTING CONTROL DEVICES

PART 2 PRODUCTS

1.01 LIGHTING CONTROL DEVICES - GENERAL REQUIREMENTS

- A. Provide products listed, classified, and labeled as suitable for the purpose intended.
- B. Unless specifically indicated to be excluded, provide all required conduit, wiring, connectors, hardware, components, accessories, etc. as required for a complete operating system.

END OF SECTION

SECTION 28 31 00
FIRE ALARM AND VOICE EVACUATION SYSTEM

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Manual fire alarm stations.
- B. Automatic smoke, heat, duct detectors.
- C. Fire alarm signaling appliances.
- D. Auxiliary fire alarm equipment.

1.02 REFERENCES

- A. NFPA 70 - National Electrical Code; National Fire Protection Association: 2019
- B. NFPA 72 - National Fire Alarm Code; National Fire Protection Association:2019
- C. NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures; National Fire Protection Association: 2019

1.03 SYSTEM DESCRIPTION

- A. Existing Fire Alarm and Voice Evacuation System is automatic, addressable, Class B, Style B system.

1.04 SUBMITTALS

- A. Contractor shall within two weeks of Notice to Proceed submit the following for Electrical Engineer's Review and Approval.
 - 1. Fire Alarm Installer NICET Level II Certification
- B. Submittal shall be pre-reviewed by approved certified installer. Any deviations or conflict in design and construction condition shall be reported, otherwise, installer assumes responsibility.
- C. Contractor shall within two weeks of Notice to Proceed submit the following for the Electrical Engineer's Review and Approval. Submittal shall be pre-reviewed by approved certified installer.
 - 1. Product Data: Provide data cut sheets showing electrical characteristics and connection requirements of fire alarm devices
 - 2. Provide California Fire Marshall Listing of fire alarm devices.
 - 3. Fire Alarm Wiring and Raceways
 - 4. Shop Drawings showing the following:
 - a. Fire Alarm Riser Diagram showing devices, wiring, addresses, and equipment nomenclature
 - b. Floor plans that show routing of conduits and wires from fire alarm equipment to the devices.
 - c. Calculations reflecting distances, voltage drops, and battery current draws.
 - 5. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation and starting of products.
- D. Contractor shall submit progress inspection reports signed by a Certified Installer. Inspection report shall indicate satisfactory installation of raceways, wiring, fire alarm devices, and equipment per Simplex installation standards. Inspection shall be submitted on a bi-weekly basis, or as requested by IOR, the District, or the Electrical Engineer. Contractor shall within 3 working days correct deficiencies noted on the inspection report. No additional contract time will be allotted for correction of deficiencies.
- E. Contractor shall within two weeks of testing submit the following for the Electrical Engineer's Review and Approval.
 - 1. Test Reports: Indicate satisfactory completion of required tests and inspections.
- F. Within two weeks of final acceptance of fire alarm system, Contractor shall submit the following documents to the District.
 - 1. Operation Data: Operating instructions.

2. Maintenance Data: Maintenance and repair procedures.
3. As-built drawings: Drawings shall reflect actual addresses, locations of fire alarm devices, equipment, wire gauge, conduit, and routing. Voltages at EOL resistor shall also be reflected.

G. See Special Materials for additional submittals.

1.05 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 72, NFPA 70 and NFPA 101.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience with service facilities within 100 miles of Project.
- C. Installer Qualifications: Company specializing in installing the products specified in this section.
 1. NICET Certification: The installing contractor shall employ at least one individual at the jobsite supporting this project that has attained NICET Level II Certification in Fire Alarm Systems. All submittals and drawings shall be approved, initialed and show the NICET Certification Number of the individual maintaining the certification and taking responsibility for the installation.
 2. With minimum three years documented experience.
 3. Certified in the state of California as fire alarm installer.
- D. Products: Furnish products listed and classified by Underwriters Laboratories Inc. as suitable for purpose specified and indicated.

1.06 MAINTENANCE SERVICE

- A. Furnish service and maintenance of fire alarm system for one year from Date of Substantial Completion.

1.07 SPECIAL TRAINING AND MATERIALS

- A. Contractor shall arrange a special training (minimum of 8 hours) conducted to familiarize school maintenance personnel with the new fire alarm system. Training shall at a minimum cover the following
 1. Familiarization with the new fire alarm system, devices, identifying zones, coverage, and routing.
 2. Provide general guidelines on the proper maintenance and operation of the fire alarm system (ie. battery, voltage check, alarm, and trouble mode, etc.)
 3. Provide instructions on how to operate fire alarm for fire drill purposes.
- B. Fire Alarm Installer shall provide Owner with 8.5" x 11" sheets of floor plans showing all the fire alarm equipment and devices. Device addresses shall be reflected in these floor plans. Device addresses shall correspond with preprogrammed addresses in the fire alarm control panel.
- C. Fire Alarm Installer shall provide and install a permanently engrave 8.5" x 11" metal plate showing fire alarm site plan. Install in front of the fire alarm panel. Submit fire alarm site plan to engineer for approval.

1.08 EXTRA MATERIALS

- A. Provide six keys of each type.
- B. Provide five of each type of automatic detectors with base.
- C. Provide three of each type of relay.

PART 2 PRODUCTS

2.01 MANUFACTURERS:

2.02 INITIATING DEVICES

- A. Manual Station: Semi-Flush mounted, coded type, double action manual station with break-glass rod. Provide manufacturer's standard backbox.

- B. Spot Heat Detector: Fixed temperature, rated 135 degrees F and temperature rate of rise of 15 degrees F.
- C. Ceiling Mounted Smoke Detector: NFPA 72, ionization type with adjustable sensitivity and visual indication of detector actuation, suitable for mounting on 4 inch outlet box. Provide two-wire detector with common with separate power supply and signal circuits.
- D. Duct Mounted Smoke Detector: NFPA 72, ionization type with auxiliary SPDT relay contact key-operated NORMAL-RESET-TEST switch, duct sampling tubes extending width of duct, and visual indication of detector actuation, in duct-mounted housing. Provide two-wire detector with common with separate power supply and signal circuits.

2.03 SIGNALING APPLIANCES

- A. Alarm Lights: NFPA 72, strobe lamp and flasher with red lettered "FIRE" on white lens. Strobe rating as indicated in the drawings.
- B. Alarm Speaker
- C. Remote Annunciator: Provide supervised remote annunciator including audible and visual indication of fire alarm by zone, and audible and visual indication of system trouble. Install in flush wall-mounted enclosure.

2.04 AUXILIARY DEVICES

- A. Door Holder/Releases: Magnetic door holder with integral diodes to reduce buzzing; coil voltage: 24 VDC, 120 VAC.
- B. Door Holder/Releases: Magnetic door closer/holder as specified.
- C. Auxiliary Relays for Fan Shutdown, Fire Smoke Damp Actuation as specified.

2.05 FIRE ALARM WIRE, CABLE, AND RACEWAYS

- A. Fire Alarm Power Branch Circuits: Building wire as specified in Division 16000.
- B. Initiating Device Appliance Circuits: Belden Fire Alarm Cable, Twisted Pair #14, minimum. Refer to Manufacturer for additional requirements.
- C. Signaling Device Appliance Circuits: Belden Fire Alarm Cable, THWN #12 AWG minimum. Refer to Manufacturer for additional requirements.
- D. Color code and Identification
 - 1. Provide fire alarm circuit conductors with insulation color coded as follows, or using colored tape at each conductor termination and in each junction box.
 - a. Power Branch Circuit Conductors: Black, red, white.
 - b. Initiating Device Circuit: Black, red,
 - c. Detector Power Supply: Violet, brown.
 - d. Signal Device Circuit: Blue (positive), white (negative).
 - e. Door Holder/Release: Gray, gray.
 - 2. Provide tie-on terminal markers or insert markers. Seton identification products, 3M, or wire marker plus.
- E. Vandalproof and Weatherproofing
 - 1. Provide protective covering approved and listed for the device.
 - 2. Provide vandalproof covers as recommended by STI products.
- F. Raceways - Fire Alarm Wiring shall be protected in raceways.

PART 3 EXECUTION

3.01 PREPARATION

- A. Coordinate location of fire alarm devices with Architect prior to rough-in. Device locations in floor plans has been designed to meet strobe and sound coverage. Deviations from locations in floor plans must be approved prior to installation. Contractor shall be responsible for providing additional devices if strobe and sound coverage requirements are not met due to changes in device locations.

- B. All fire alarm conduits shall be concealed. If site conditions do not allow for concealment of conduits, installer shall coordinate routing of exposed conduits with Architect prior to rough in.
- C. Contractor shall megger all fire alarm wiring prior to termination. Test reports shall be submitted to the Engineer for approval. Contractor shall not terminate wires unless Engineer's approves insulation test reports.
- D. Coordination location of fire smoke dampers, HVAC, sprinklers, tamper switch, flow switch, fire curtains, fire separation devices, diffusers, etc with other contractors as it relate to the fire alarm system. Contractor shall provide necessary adjustments to power connection to the fire alarm system.

3.02 INSTALLATION

- A. Install products in accordance with NEC, NFPA 72, CBC, and manufacturer's instructions.
- B. Provide separate conduit for initiation and signaling devices.
- C. Installation detectors 3 feet away from supply diffusers and registers.
- D. Install manual stations with 48 inches to centerline of device above finished floor.
- E. Install audible devices 90 inches to top of device above finished floor, not less than 6 inches from ceiling
- F. Install visual or audible/visual devices 80 inches to bottom of device, not greater than 96 inches above finished floor but not less than 6 inches from ceiling.
 - 1. Synchronize visual or audible/visual devices in the same field of view.
- G. Install fire alarm wiring in 3/4 inch minimum conduit.
- H. Mount outlet box for electric door holder/release to withstand 80 pounds pulling force.
- I. Identify all fire alarm cabling, equipment, and raceways. Observe and indicate all polarity.
- J. Provide identification on the outside of each devices. Indicate circuit number and devices number.

3.03 FIELD QUALITY CONTROL

- A. Perform field inspection and testing in as specified in the contract specifications and drawings.
- B. Testing shall include the testing of the following:
 - 1. Complete Fire Alarm and Voice Evacuation System.
 - 2. Sound Levels
 - 3. Strobe Flash Rate for Multiple Strobes in Single Location
 - 4. Proper operation of Fire Alarm System with respect to other systems (ie. fire smoke dampers, fire doors, HVAC, smoke guards, etc)
 - 5. Testing of connection and communication with remote unit, and central station.
- C. Test in accordance with NFPA 72, Chapter 7.
- D. Conduct tests in the presence of the owner's representative, the local fire authority, and the DSA Inspector of Record.
- E. Provide a signed and completed certificate of completion to DSA upon completion of project in accordance with NFPA 72, Chapter 4. This form shall be signed by DSA IOR.

3.04 MANUFACTURER'S FIELD SERVICES

- A. Include services of certified technician to supervise installation, adjustments, final connections, and system testing.

3.05 DEMONSTRATION

- A. Demonstrate normal and abnormal modes of operation, and required responses to each.

END OF SECTION