ADDENDUM

Campus HVAC System Upgrade
Mt. Vernon Elementary School
Bakersfield City School District
566-0015

Date: **July 03, 2024**

To: **All Bidders**

Subject: **Addendum #01**

NOTICE TO CONTRACTORS FIGURING THIS WORK

You are hereby notified of the following changes in the Plans and Specifications, which shall take precedence over anything to the contrary therein.

Item # **Description**

1.1 GENERAL INFORMATION:

1.1.1 Add GPR and Utility Line Locator Map, attached herein.

1.2 Changes to the BCSD Project Manual (Division 00):

1.2.1 **REMOVE** Preliminary Bid Schedule and **REPLACE** with Addendum 01 Bid Schedule, attached herein.

1.2.2 To Section 00 21 13.1, Work Scope Summaries by Bid Package:

1.2.2.1 The following statement applies to each Prime Contractor and shall be ADDED to each work scope summary as a new work scope item following in numerical sequence: **Building A shall be completed during summer 2025 as specified in the bid schedule. All prime contractors to furnish required labor and materials to meet the milestones as specified. Performing this work may require 10 hours work per week days and working on Saturdays. Prime contractors to consider this as part of their base bid. No change requests related to this matter will be approved.**

1.2.2.2 **REVISE** Bid Package #MVES-06, Electrical, Low Voltage & Fire Alarm as follows:

1.2.2.2.1 **ADD** the following *new* work scope items 78 through 81:

78. Remove existing IDF cabinets from the site.

79. Install new owner furnished contractor installed IDF cabinets for the entire site. Install new owner furnished contractor installed switches and other components of the IDF cabinets.

80. Terminate low voltage and fiber cables in new IDF cabinets as applicable. Provide, install, and label patch cables as required.

81. Considering the phasing plan, this Prime Contractor is responsible for relocating the fire alarm panel to a temporary location as needed and subsequently moving it to its permanent location as work progresses, while ensuring complete fire alarm system coverage is maintained throughout the project.

1.2.2.2.2 To “Allowances” section, **REVISE** the Allowance amount stipulated in the first sentence from $125,000.00 to **$200,000.00**.

1.2.3 **REMOVE AND REPLACE** Bid Form and Proposal.

1.3 Changes to the AP Architects Project Manual (Division 01-27):

1.3.1 DELETE the Division 00 documents from this Project Manual. BCSD Project Manual (Division 00) was issued with original bid documents and takes precedence.

1.3.2 To the Table of Contents, DELETE Section "DIVISION 00 PROCUREMENT AND CONTRACTING REQUIREMENTS; the Table of Contents for Division 00 is under separate cover.

1.3.3 REMOVE AND REPLACE DIVISION 01 Technical Requirements in its entirety.

1.4 Refer to Architectural Sheet A1.11 Partial Demolition Site Plan:

1.4.1 Replace Architectural Sheet **A1.11** Partial Demolition Site Plan in its entirety with attached.

1.5 Refer to Architectural Sheet A1.21 Partial Site Plan:

1.5.1 Replace Architectural Sheet **A1.21** Partial Site Plan in its entirety with attached.

1.5.2 CONTRACTOR to provide topographic survey of scope of work area for existing grades. CONTRACACTOR to submit to Architect proposed grades for positive drainage. Refer to Specification Section 321313, Item 1.3, C.

1.6 Refer to Architectural Sheet A1.11 Partial Demolition Site Plan, Demo Site Keynotes:

1.6.1 Refer to Keynote 12: Add the following verbiage, "PATCH HOLES- REFER TO DETAIL 42-A8.01".

1.7 Refer to Architectural Sheet A2.00 Schedules:

1.7.1 Refer to Interior Finish Schedule, Building D:

1.7.1.1 Omit room line item "JANITOR"

1.7.1.2 Refer to room STAFF:

1.7.1.2.1 Change all wall finish labeled 1-VTS to read as 2- Gypsum Board Finish. See Interior Elevations for more information.

1.7.1.2.2 Clarification regarding wall finish 3-GWT in this room. Entire room to be newly installed GWT per Detail 13/A8.02. See Interior Elevations for more information.

1.7.1.3 Refer to room WOMEN STAFF:

1.7.1.3.1 Change all wall finish labeled 1-VTS to read as 2- Gypsum Board Finish. Wall finish 3-GWT to remain. See Interior Elevations for more information.

1.7.2 Refer to Interior Finish Schedule Legend, Walls, 3-GWT: Change detail key sheet reference from A8.20 to A8.02.

1.8 Refer to Architectural Sheet A2.10 Demolition Floor Plans:

1.8.1 Refer to Demolition Floor Plan Keynotes- Keynote 07:

1.8.1.1 Add the following verbiage, "AT BUILDINGS B AND C, REMOVE ALL VINYL FLOORING LOCATED BENEATH THE PLYWOOD UNDERLAYMENT FOUND UNDER CURRENT CARPEET FLOORING. SEE THE HAZARDOUS MATERIALS REPORT FOR MORE INFORMATION. PREP FOR NEW FLOORING."

1.9 Refer to Architectural Sheet A2.20 Floor Plans:

1.9.1 Refer to Demolition Floor Plan Keynotes- Keynote 19:

1.9.1.1 Add the following verbiage, “AT BUILDINGS B AND C PROVIDE PLYWOOD UNDERLAYMENT- SEE SPECIFICATIONS FOR MORE INFORMATION.”
1.9.1.2 Add the following verbiage: “PROVDE 6’X6’ HEAVY DUTY WALK-OFF MAT AT EACH ENTRY- SEE SPECIFICATIONS.”

1.10 Refer to Architectural Sheet A3.00 Roof Plan:
1.10.1 Refer to Keynote 02:
1.10.1.1 Add the following verbiage, “VERIFY HAZARDOUS MATERIALS REPORT AND CONFIRM HAZARDOUS MATERIALS HAVE BEEN ABATED/ REMOVED PRIOR TO ROOF SELECTIVE DEMOLITION”.

1.11 Refer to Architectural Sheet A6.00 Interior Elevations:
1.11.1 Add Keynotes 8 and 9 to Typical Classroom- Building D.

1.12 Refer to Architectural Sheet A6.01 Interior Elevations:
1.12.1 Add Keynotes 8 and 9 to Typical Classroom- Building E.

1.13 Refer to Mechanical Sheet M2.20 Mechanical Floor Plan:
1.13.1 See attached drawing **M2.20.1**, Partial Mechanical Plan for changes to Building D to coordinate with Architectural scope of work at this area.

1.14 Refer to Mechanical Sheet M3.10 Mechanical Roof Plan:
1.14.1 See attached drawing **M3.10.1**, Partial Mechanical Plan for changes to Building D to coordinate with Architectural scope of work at this area.

1.15 Refer to Specification Section 102800- Toilet and Bath Accessories:
1.15.1 Remove all references to HAND DRYERS from this section. There are no Hand Dryers on this project.

1.16 Refer to Specification Section 096813 Carpet Tile.:
1.16.1 Replace this entire Specification Section with the attached “SPECIFICATION SECTION 096813 TILE CARPETING.”

1.17 Refer to Specification Section 028333 Renovation with Lead Paint:
1.17.1 Add the attached **Specification Section 028333** REMOVAL OF ASBESTOS CONTAINING ROOFING MATERIAL.

ATTACHMENTS:

A. Utility Locator Map- GPR
B. Bid Schedule
C. Bid Form and Proposal
D. Division 01 Specification Sections 011000 through 018100
E. Specification Section 09 68 13 Tile Carpeting
F. Specification Section 02 83 33 Removal of Asbestos Containing Roof Materials
G. Architectural Drawings- A1.11, A1.21
H. **Mechanical Drawings- M2.20.1, M3.10.1**

End of addendum

POTOMAC AVE

MT VERNON AVE

BLDG B

BLDG H

BLDG A

BLDG C

R30

BLDG G

BLDG D

BLDG R2

BLDG R1

R14

BLDG F

BLDG E

R42

R43

R44

R21-26

BLDG J

R28-29

30' 0' 30'

SCALE: 1" = 30'

LEGEND

C	UNDERGROUND CABLE LINE
G	GAS LINE
E	UNDERGROUND POWER LINE
SS	SEWER LINE
SD	STORM DRAIN LINE
W	WATER LINE
UUL	UNIDENTIFIED LINE

ADDENDUM #01

GPR AND LINE LOCATING
APN 140-270-01 AND 140-230-02 & 03
2161 POTOMAC AVE BAKERSFIELD, CA
MT. VERNON ELEMENTARY

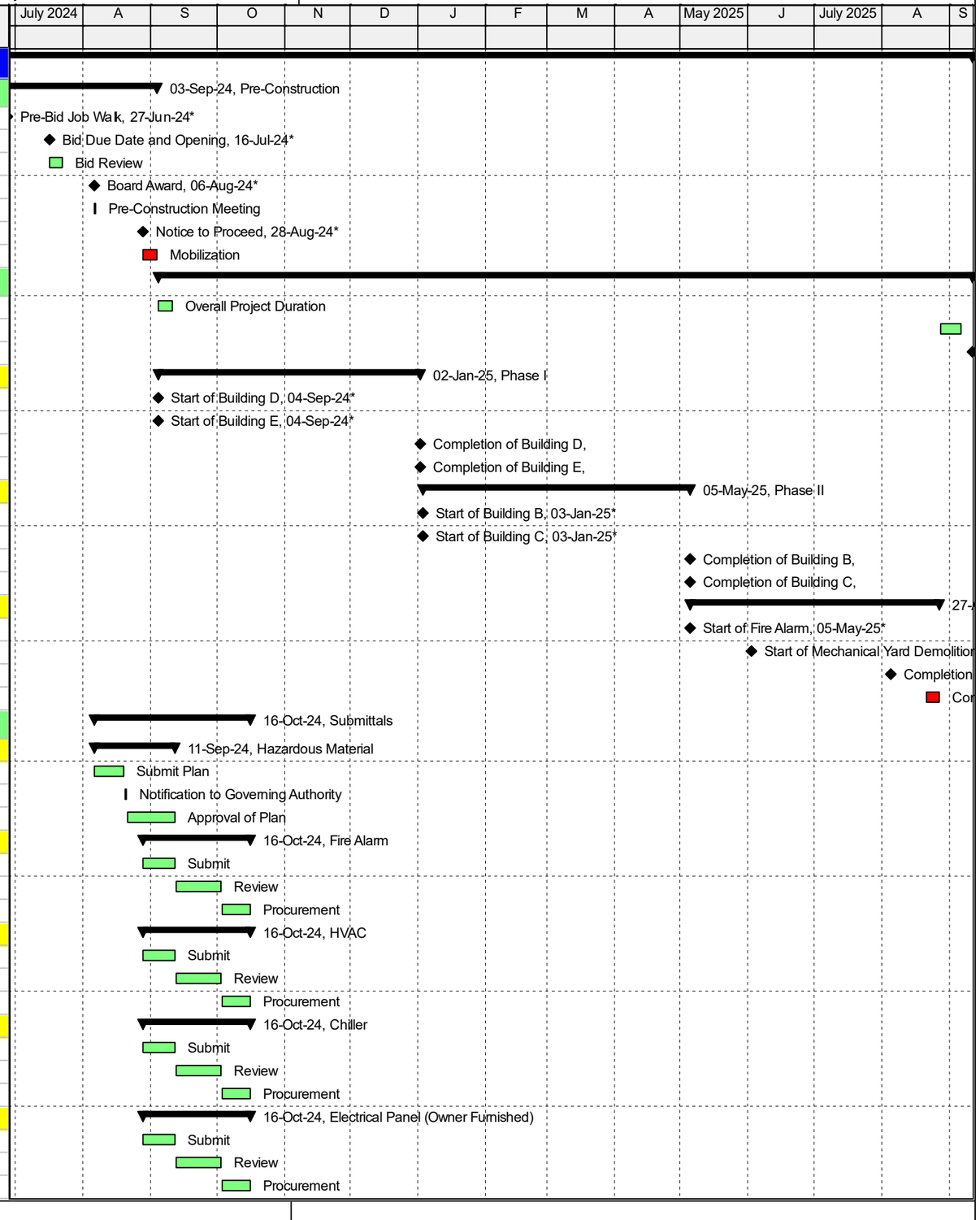
DEWALT Corporation
ENGINEERING PLANNING SURVEYING LAND DEVELOPMENT CONSTRUCTION MANAGEMENT
1930 22nd STREET BAKERSFIELD, CA. 93301
PH. (661) 323-4600 FAX (661) 323-4674

DATE	REVISIONS

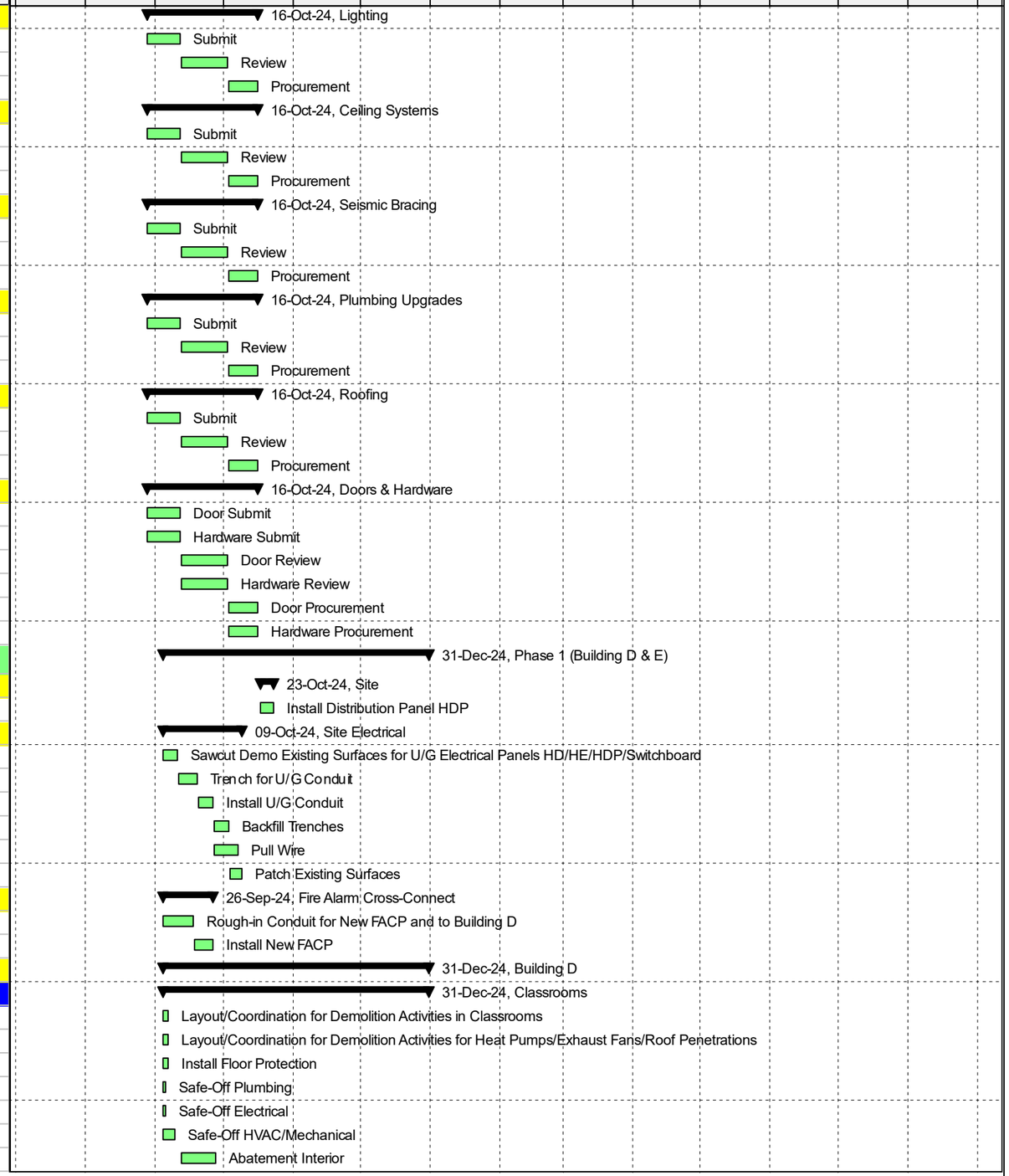
DRAWN BY: C.HAMILTON
CHECKED BY: A.STUBBS
APPROVED BY:
DATE: 06/18/2024
JOB NO: 24-100
ACAD FILE: 24-100 GPR

SHEET 1 OF: 1

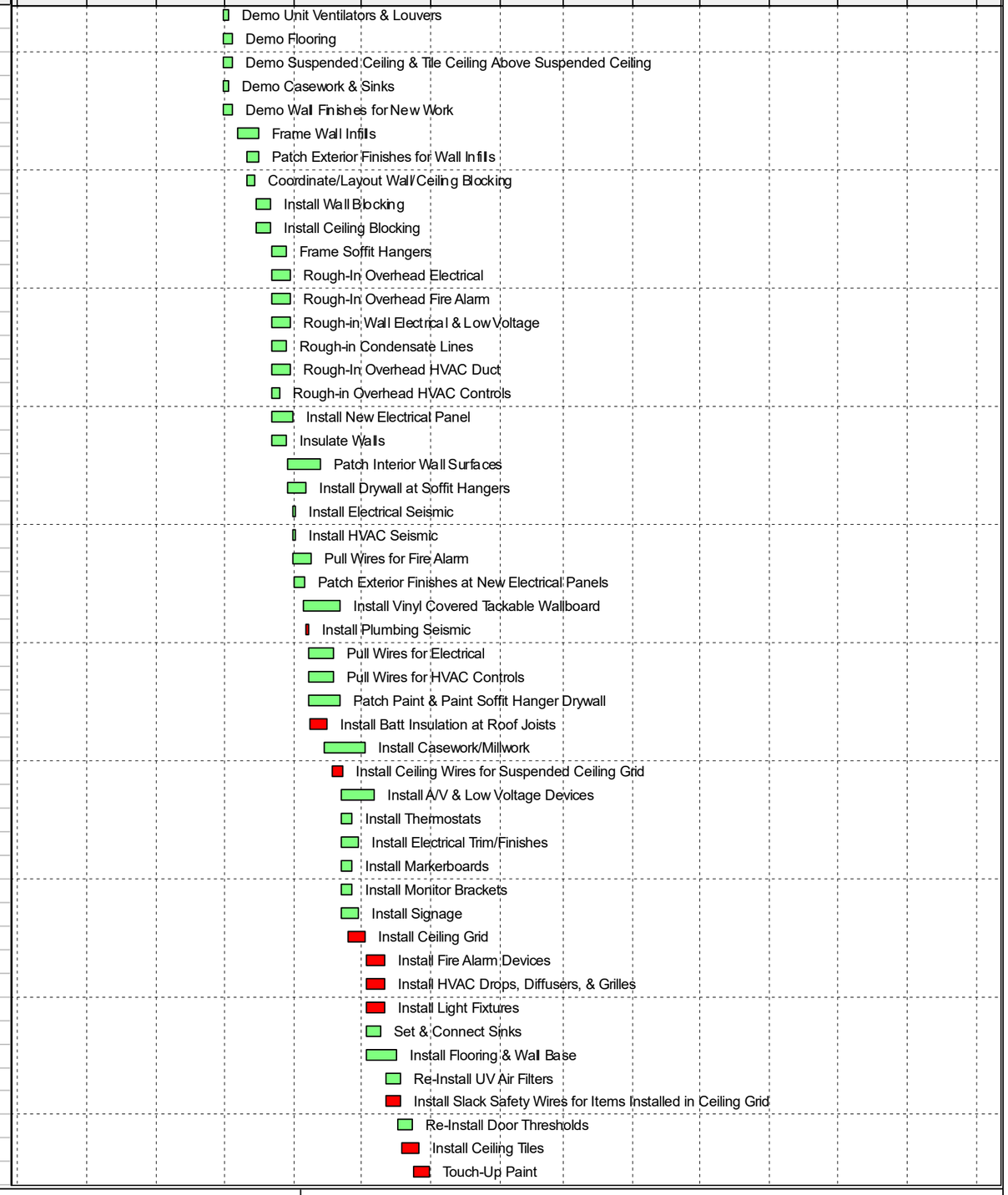
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish
Mt Vernon ES		316	316	27-Jun-24	11-Sep-25
Pre-Construction		47	47	27-Jun-24	03-Sep-24
PC1000	Pre-Bid Job Walk	0	0	27-Jun-24*	
PC1010	Bid Due Date and Opening	0	0	16-Jul-24*	
PC1020	Bid Review	5	5	16-Jul-24	22-Jul-24
PC1030	Board Award	0	0	06-Aug-24*	
PC1050	Pre-Construction Meeting	1	1	06-Aug-24	06-Aug-24
PC1040	Notice to Proceed	0	0	28-Aug-24*	
PC1060	Mobilization	4	4	28-Aug-24	03-Sep-24
Milestones		267	267	04-Sep-24	11-Sep-25
MIL1000	Overall Project Duration	5	5	04-Sep-24	10-Sep-24
MIL1020	Weatherbank	10	10	28-Aug-25	06-Sep-25
MIL1010	Project Completion	0	0		11-Sep-25
Phase I		82	82	04-Sep-24	02-Jan-25
P1MIL1000	Start of Building D	0	0	04-Sep-24*	
P1MIL1020	Start of Building E	0	0	04-Sep-24*	
P1MIL1010	Completion of Building D	0	0		02-Jan-25*
P1MIL1030	Completion of Building E	0	0		02-Jan-25*
Phase II		86	86	03-Jan-25	05-May-25
P2MIL1000	Start of Building B	0	0	03-Jan-25*	
P2MIL1020	Start of Building C	0	0	03-Jan-25*	
P2MIL1010	Completion of Building B	0	0		05-May-25*
P2MIL1030	Completion of Building C	0	0		05-May-25*
Phase III		81	81	05-May-25	27-Aug-25
P3MIL1000	Start of Fire Alarm	0	0	05-May-25*	
P3MIL1020	Start of Mechanical Yard Demolition	0	0	02-Jun-25*	
P3MIL1010	Completion of Fire Alarm	0	0		05-Aug-25*
P3MIL1030	Completion of Mechanical Yard Demolition	5	5	21-Aug-25	27-Aug-25*
Submittals		51	51	06-Aug-24	16-Oct-24
Hazardous Material		26	26	06-Aug-24	11-Sep-24
SHAZ1000	Submit Plan	10	10	06-Aug-24	19-Aug-24
SHAZ1010	Notification to Governing Authority	1	1	20-Aug-24	20-Aug-24
SHAZ1020	Approval of Plan	15	15	21-Aug-24	11-Sep-24
Fire Alarm		35	35	28-Aug-24	16-Oct-24
SFA1000	Submit	10	10	28-Aug-24	11-Sep-24
SFA1010	Review	15	15	12-Sep-24	02-Oct-24
SFA1020	Procurement	10	10	03-Oct-24	16-Oct-24
HVAC		35	35	28-Aug-24	16-Oct-24
SHVAC1000	Submit	10	10	28-Aug-24	11-Sep-24
SHVAC1010	Review	15	15	12-Sep-24	02-Oct-24
SHVAC1020	Procurement	10	10	03-Oct-24	16-Oct-24
Chiller		35	35	28-Aug-24	16-Oct-24
SCHILL1000	Submit	10	10	28-Aug-24	11-Sep-24
SCHILL1010	Review	15	15	12-Sep-24	02-Oct-24
SCHILL1020	Procurement	10	10	03-Oct-24	16-Oct-24
Electrical Panel (Owner Furnished)		35	35	28-Aug-24	16-Oct-24
SELEC1000	Submit	10	10	28-Aug-24	11-Sep-24
SELEC1010	Review	15	15	12-Sep-24	02-Oct-24
SELEC1020	Procurement	10	10	03-Oct-24	16-Oct-24



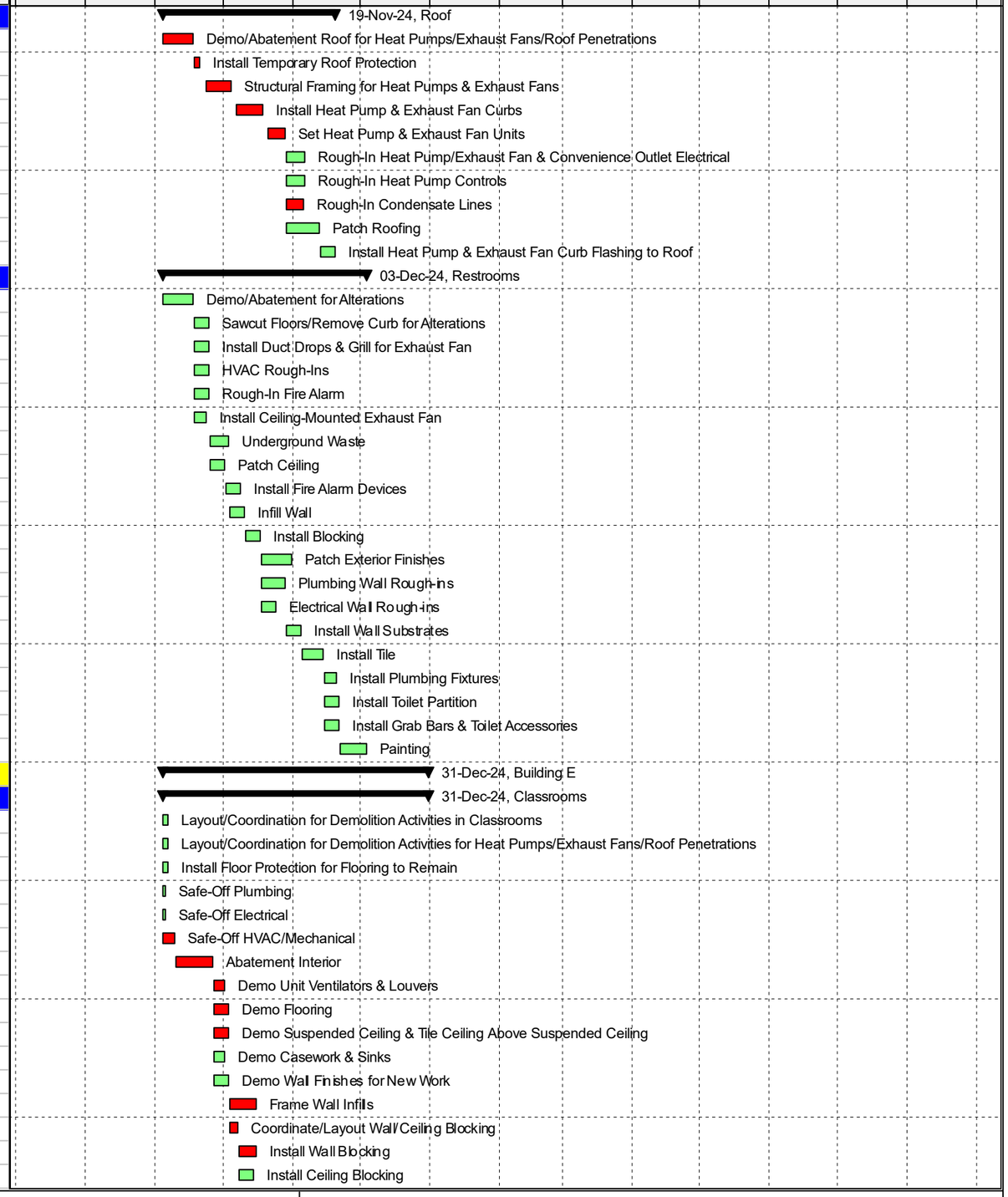
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish
Lighting		35	35	28-Aug-24	16-Oct-24
SLITE1000	Submit	10	10	28-Aug-24	11-Sep-24
SLITE1010	Review	15	15	12-Sep-24	02-Oct-24
SLITE1020	Procurement	10	10	03-Oct-24	16-Oct-24
Ceiling Systems		35	35	28-Aug-24	16-Oct-24
SCEIL1000	Submit	10	10	28-Aug-24	11-Sep-24
SCEIL1010	Review	15	15	12-Sep-24	02-Oct-24
SCEIL1020	Procurement	10	10	03-Oct-24	16-Oct-24
Seismic Bracing		35	35	28-Aug-24	16-Oct-24
SSEIS1000	Submit	10	10	28-Aug-24	11-Sep-24
SSEIS1010	Review	15	15	12-Sep-24	02-Oct-24
SSEIS1020	Procurement	10	10	03-Oct-24	16-Oct-24
Plumbing Upgrades		35	35	28-Aug-24	16-Oct-24
SPLUMB1000	Submit	10	10	28-Aug-24	11-Sep-24
SPLUMB1010	Review	15	15	12-Sep-24	02-Oct-24
SPLUMB1020	Procurement	10	10	03-Oct-24	16-Oct-24
Roofing		35	35	28-Aug-24	16-Oct-24
SROOF1000	Submit	10	10	28-Aug-24	11-Sep-24
SROOF1010	Review	15	15	12-Sep-24	02-Oct-24
SROOF1020	Procurement	10	10	03-Oct-24	16-Oct-24
Doors & Hardware		35	35	28-Aug-24	16-Oct-24
SDRHW1000	Door Submit	10	10	28-Aug-24	11-Sep-24
SDRHW1010	Hardware Submit	10	10	28-Aug-24	11-Sep-24
SDRHW1020	Door Review	15	15	12-Sep-24	02-Oct-24
SDRHW1030	Hardware Review	15	15	12-Sep-24	02-Oct-24
SDRHW1040	Door Procurement	10	10	03-Oct-24	16-Oct-24
SDRHW1050	Hardware Procurement	10	10	03-Oct-24	16-Oct-24
Phase 1 (Building D & E)		82	82	04-Sep-24	31-Dec-24
Site		5	5	17-Oct-24	23-Oct-24
P1SITE1000	Install Distribution Panel HDP	5	5	17-Oct-24	23-Oct-24
Site Electrical		26	26	04-Sep-24	09-Oct-24
P1SE1000	Sawcut Demo Existing Surfaces for U/G Electrical Panels HD/HE/HDP/Sw	5	5	04-Sep-24	10-Sep-24
P1SE1010	Trench for U/G Conduit	7	7	11-Sep-24	19-Sep-24
P1SE1020	Install U/G Conduit	5	5	20-Sep-24	26-Sep-24
P1SE1030	Backfill Trenches	5	5	27-Sep-24	03-Oct-24
P1SE1050	Pull Wire	7	7	27-Sep-24	07-Oct-24
P1SE1040	Patch Existing Surfaces	4	4	04-Oct-24	09-Oct-24
Fire Alarm Cross-Connect		17	17	04-Sep-24	26-Sep-24
P1FACC1000	Rough-in Conduit for New FACP and to Building D	10	10	04-Sep-24	17-Sep-24
P1FACC1010	Install New FACP	7	7	18-Sep-24	26-Sep-24
Building D		82	82	04-Sep-24	31-Dec-24
Classrooms		82	82	04-Sep-24	31-Dec-24
P1DCLASS1000	Layout/Coordination for Demolition Activities in Classrooms	3	3	04-Sep-24	06-Sep-24
P1DCLASS1010	Layout/Coordination for Demolition Activities for Heat Pumps/Exhaust Fan	3	3	04-Sep-24	06-Sep-24
P1DCLASS1020	Install Floor Protection	3	3	04-Sep-24	06-Sep-24
P1DCLASS1030	Safe-Off Plumbing	2	2	04-Sep-24	05-Sep-24
P1DCLASS1040	Safe-Off Electrical	2	2	04-Sep-24	05-Sep-24
P1DCLASS1050	Safe-Off HVAC/Mechanical	4	4	04-Sep-24	09-Sep-24
P1DCLASS1060	Abatement Interior	12	12	12-Sep-24	27-Sep-24



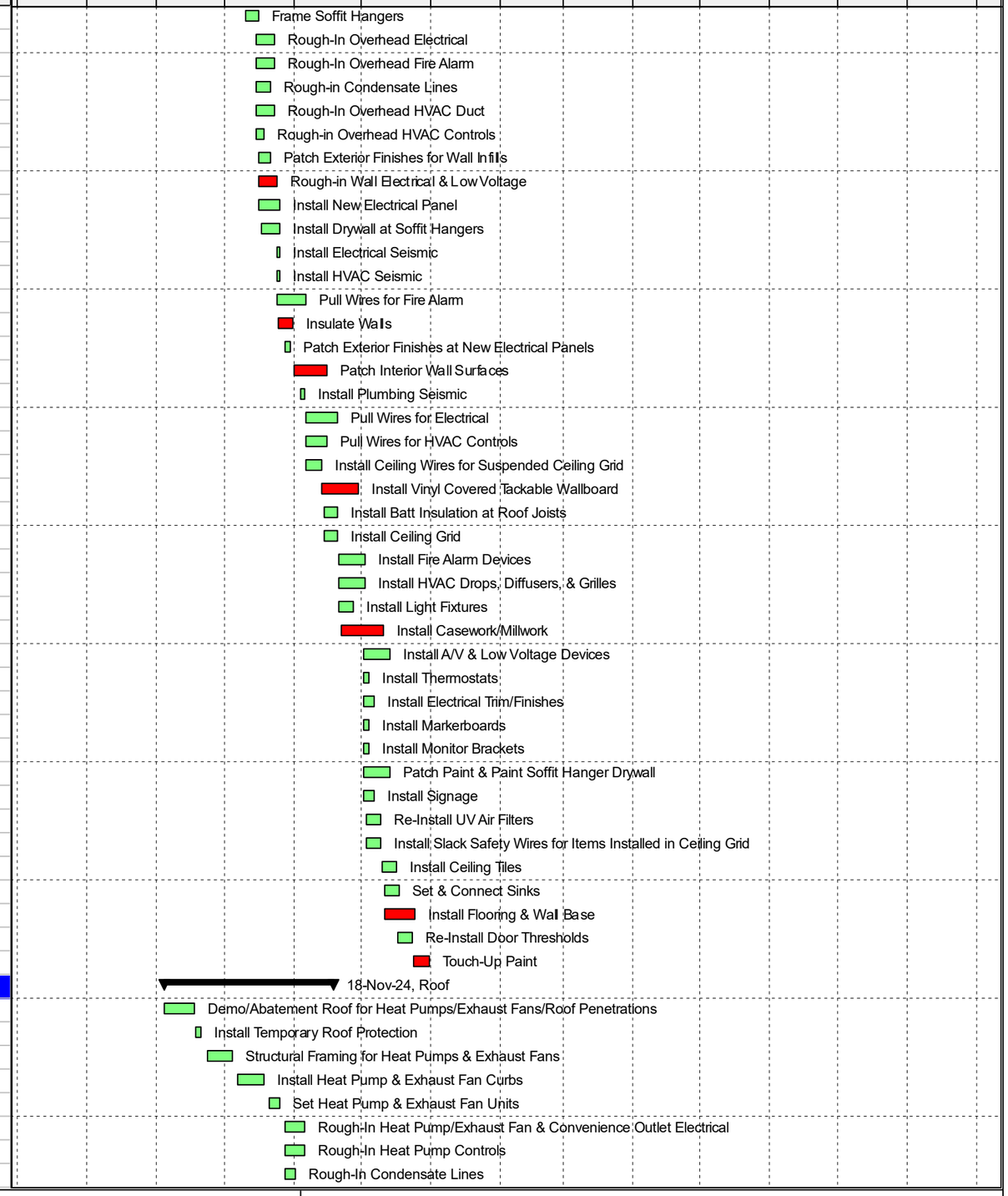
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish
P1DCLASS1070	Demo Unit Ventilators & Louvers	3	3	30-Sep-24	02-Oct-24
P1DCLASS1080	Demo Flooring	5	5	30-Sep-24	04-Oct-24
P1DCLASS1090	Demo Suspended Ceiling & Tile Ceiling Above Suspended Ceiling	5	5	30-Sep-24	04-Oct-24
P1DCLASS1100	Demo Casework & Sinks	3	3	30-Sep-24	02-Oct-24
P1DCLASS1110	Demo Wall Finishes for New Work	5	5	30-Sep-24	04-Oct-24
P1DCLASS1120	Frame Wall Infills	8	8	07-Oct-24	16-Oct-24
P1DCLASS1130	Patch Exterior Finishes for Wall Infills	4	4	11-Oct-24	16-Oct-24
P1DCLASS1150	Coordinate/Layout Wall/Ceiling Blocking	2	2	11-Oct-24	14-Oct-24
P1DCLASS1140	Install Wall Blocking	5	5	15-Oct-24	21-Oct-24
P1DCLASS1160	Install Ceiling Blocking	5	5	15-Oct-24	21-Oct-24
P1DCLASS1170	Frame Soffit Hangers	5	5	22-Oct-24	28-Oct-24
P1DCLASS1180	Rough-In Overhead Electrical	7	7	22-Oct-24	30-Oct-24
P1DCLASS1190	Rough-In Overhead Fire Alarm	7	7	22-Oct-24	30-Oct-24
P1DCLASS1200	Rough-in Wall Electrical & Low Voltage	7	7	22-Oct-24	30-Oct-24
P1DCLASS1210	Rough-in Condensate Lines	5	5	22-Oct-24	28-Oct-24
P1DCLASS1220	Rough-In Overhead HVAC Duct	7	7	22-Oct-24	30-Oct-24
P1DCLASS1230	Rough-in Overhead HVAC Controls	4	4	22-Oct-24	25-Oct-24
P1DCLASS1240	Install New Electrical Panel	8	8	22-Oct-24	31-Oct-24
P1DCLASS1320	Insulate Walls	5	5	22-Oct-24	28-Oct-24
P1DCLASS1330	Patch Interior Wall Surfaces	10	10	29-Oct-24	12-Nov-24
P1DCLASS1370	Install Drywall at Soffit Hangers	7	7	29-Oct-24	06-Nov-24
P1DCLASS1260	Install Electrical Seismic	2	2	31-Oct-24	01-Nov-24
P1DCLASS1270	Install HVAC Seismic	2	2	31-Oct-24	01-Nov-24
P1DCLASS1310	Pull Wires for Fire Alarm	7	7	31-Oct-24	08-Nov-24
P1DCLASS1250	Patch Exterior Finishes at New Electrical Panels	3	3	01-Nov-24	05-Nov-24
P1DCLASS1340	Install Vinyl Covered Tackable Wallboard	12	12	05-Nov-24	21-Nov-24
P1DCLASS1280	Install Plumbing Seismic	2	2	06-Nov-24	07-Nov-24
P1DCLASS1290	Pull Wires for Electrical	7	7	07-Nov-24	18-Nov-24
P1DCLASS1300	Pull Wires for HVAC Controls	7	7	07-Nov-24	18-Nov-24
P1DCLASS1500	Patch Paint & Paint Soffit Hanger Drywall	10	10	07-Nov-24	21-Nov-24
P1DCLASS1360	Install Batt Insulation at Roof Joists	5	5	08-Nov-24	15-Nov-24
P1DCLASS1510	Install Casework/Millwork	12	12	14-Nov-24	02-Dec-24
P1DCLASS1350	Install Ceiling Wires for Suspended Ceiling Grid	5	5	18-Nov-24	22-Nov-24
P1DCLASS1420	Install A/V & Low Voltage Devices	10	10	22-Nov-24	06-Dec-24
P1DCLASS1460	Install Thermostats	3	3	22-Nov-24	26-Nov-24
P1DCLASS1470	Install Electrical Trim/Finishes	5	5	22-Nov-24	29-Nov-24
P1DCLASS1480	Install Markerboards	3	3	22-Nov-24	26-Nov-24
P1DCLASS1490	Install Monitor Brackets	3	3	22-Nov-24	26-Nov-24
P1DCLASS1550	Install Signage	5	5	22-Nov-24	29-Nov-24
P1DCLASS1380	Install Ceiling Grid	5	5	25-Nov-24	02-Dec-24
P1DCLASS1390	Install Fire Alarm Devices	7	7	03-Dec-24	11-Dec-24
P1DCLASS1400	Install HVAC Drops, Diffusers, & Grilles	7	7	03-Dec-24	11-Dec-24
P1DCLASS1410	Install Light Fixtures	7	7	03-Dec-24	11-Dec-24
P1DCLASS1520	Set & Connect Sinks	5	5	03-Dec-24	09-Dec-24
P1DCLASS1530	Install Flooring & Wall Base	10	10	03-Dec-24	16-Dec-24
P1DCLASS1430	Re-Install UV Air Filters	5	5	12-Dec-24	18-Dec-24
P1DCLASS1440	Install Slack Safety Wires for Items Installed in Ceiling Grid	5	5	12-Dec-24	18-Dec-24
P1DCLASS1540	Re-Install Door Thresholds	5	5	17-Dec-24	23-Dec-24
P1DCLASS1450	Install Ceiling Tiles	5	5	19-Dec-24	26-Dec-24
P1DCLASS1560	Touch-Up Paint	5	5	24-Dec-24	31-Dec-24



Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish
Roof		54	54	04-Sep-24	19-Nov-24
P1DROOF1000	Demo/Abatement Roof for Heat Pumps/Exhaust Fans/Roof Penetrations	10	10	04-Sep-24	17-Sep-24
P1DROOF1010	Install Temporary Roof Protection	3	3	18-Sep-24	20-Sep-24
P1DROOF1020	Structural Framing for Heat Pumps & Exhaust Fans	10	10	23-Sep-24	04-Oct-24
P1DROOF1030	Install Heat Pump & Exhaust Fan Curbs	10	10	07-Oct-24	18-Oct-24
P1DROOF1040	Set Heat Pump & Exhaust Fan Units	6	6	21-Oct-24	28-Oct-24
P1DROOF1050	Rough-In Heat Pump/Exhaust Fan & Convenience Outlet Electrical	7	7	29-Oct-24	06-Nov-24
P1DROOF1060	Rough-In Heat Pump Controls	7	7	29-Oct-24	06-Nov-24
P1DROOF1070	Rough-In Condensate Lines	6	6	29-Oct-24	05-Nov-24
P1DROOF1080	Patch Roofing	10	10	29-Oct-24	12-Nov-24
P1DROOF1090	Install Heat Pump & Exhaust Fan Curb Flashing to Roof	5	5	13-Nov-24	19-Nov-24
Restrooms		63	63	04-Sep-24	03-Dec-24
P1DRR1000	Demo/Abatement for Alterations	10	10	04-Sep-24	17-Sep-24
P1DRR1010	Sawcut Floors/Remove Curb for Alterations	5	5	18-Sep-24	24-Sep-24
P1DRR1060	Install Duct Drops & Grill for Exhaust Fan	5	5	18-Sep-24	24-Sep-24
P1DRR1070	HVAC Rough-Ins	5	5	18-Sep-24	24-Sep-24
P1DRR1100	Rough-In Fire Alarm	5	5	18-Sep-24	24-Sep-24
P1DRR1110	Install Ceiling-Mounted Exhaust Fan	4	4	18-Sep-24	23-Sep-24
P1DRR1020	Underground Waste	7	7	25-Sep-24	03-Oct-24
P1DRR1120	Patch Ceiling	5	5	25-Sep-24	01-Oct-24
P1DRR1130	Install Fire Alarm Devices	5	5	02-Oct-24	08-Oct-24
P1DRR1030	Infill Wall	5	5	04-Oct-24	10-Oct-24
P1DRR1050	Install Blocking	5	5	11-Oct-24	17-Oct-24
P1DRR1040	Patch Exterior Finishes	10	10	18-Oct-24	31-Oct-24
P1DRR1080	Plumbing Wall Rough-ins	7	7	18-Oct-24	28-Oct-24
P1DRR1090	Electrical Wall Rough-ins	5	5	18-Oct-24	24-Oct-24
P1DRR1140	Install Wall Substrates	5	5	29-Oct-24	04-Nov-24
P1DRR1150	Install Tile	7	7	05-Nov-24	14-Nov-24
P1DRR1160	Install Plumbing Fixtures	4	4	15-Nov-24	20-Nov-24
P1DRR1170	Install Toilet Partition	5	5	15-Nov-24	21-Nov-24
P1DRR1180	Install Grab Bars & Toilet Accessories	5	5	15-Nov-24	21-Nov-24
P1DRR1190	Painting	7	7	22-Nov-24	03-Dec-24
Building E		82	82	04-Sep-24	31-Dec-24
Classrooms		82	82	04-Sep-24	31-Dec-24
P1ECLASS1000	Layout/Coordination for Demolition Activities in Classrooms	3	3	04-Sep-24	06-Sep-24
P1ECLASS1010	Layout/Coordination for Demolition Activities for Heat Pumps/Exhaust Fan	3	3	04-Sep-24	06-Sep-24
P1ECLASS1020	Install Floor Protection for Flooring to Remain	3	3	04-Sep-24	06-Sep-24
P1ECLASS1030	Safe-Off Plumbing	2	2	04-Sep-24	05-Sep-24
P1ECLASS1040	Safe-Off Electrical	2	2	04-Sep-24	05-Sep-24
P1ECLASS1050	Safe-Off HVAC/Mechanical	4	4	04-Sep-24	09-Sep-24
P1ECLASS1060	Abatement Interior	13	13	10-Sep-24	26-Sep-24
P1ECLASS1070	Demo Unit Ventilators & Louvers	3	3	27-Sep-24	01-Oct-24
P1ECLASS1080	Demo Flooring	5	5	27-Sep-24	03-Oct-24
P1ECLASS1090	Demo Suspended Ceiling & Tile Ceiling Above Suspended Ceiling	5	5	27-Sep-24	03-Oct-24
P1ECLASS1100	Demo Casework & Sinks	3	3	27-Sep-24	01-Oct-24
P1ECLASS1110	Demo Wall Finishes for New Work	5	5	27-Sep-24	03-Oct-24
P1ECLASS1120	Frame Wall Infills	8	8	04-Oct-24	15-Oct-24
P1ECLASS1150	Coordinate/Layout Wall/Ceiling Blocking	2	2	04-Oct-24	07-Oct-24
P1ECLASS1140	Install Wall Blocking	6	6	08-Oct-24	15-Oct-24
P1ECLASS1160	Install Ceiling Blocking	5	5	08-Oct-24	14-Oct-24

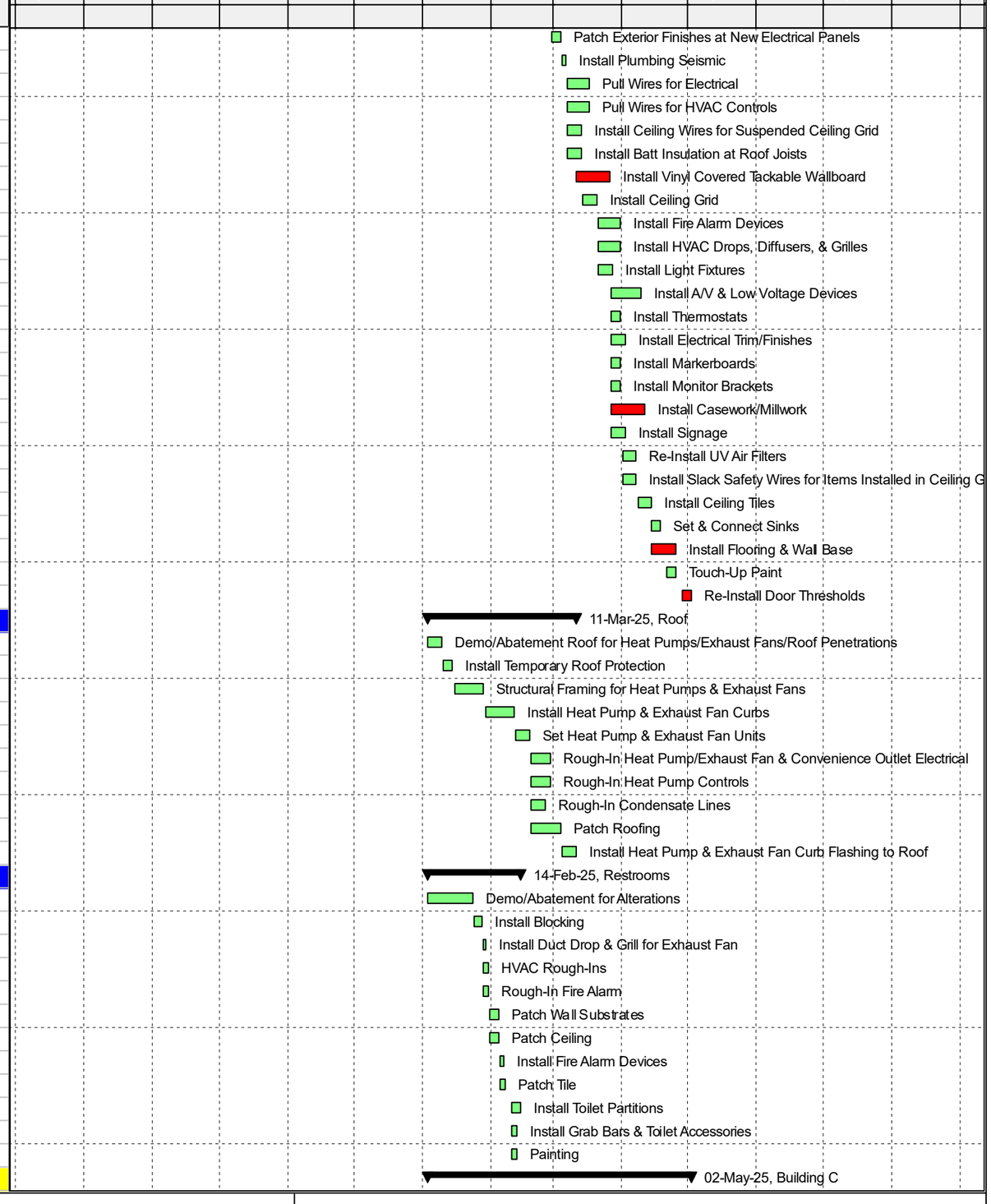


Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish
P1ECLASS1170	Frame Soffit Hangers	5	5	10-Oct-24	16-Oct-24
P1ECLASS1180	Rough-In Overhead Electrical	7	7	15-Oct-24	23-Oct-24
P1ECLASS1190	Rough-In Overhead Fire Alarm	7	7	15-Oct-24	23-Oct-24
P1ECLASS1210	Rough-in Condensate Lines	5	5	15-Oct-24	21-Oct-24
P1ECLASS1220	Rough-In Overhead HVAC Duct	7	7	15-Oct-24	23-Oct-24
P1ECLASS1230	Rough-in Overhead HVAC Controls	4	4	15-Oct-24	18-Oct-24
P1ECLASS1130	Patch Exterior Finishes for Wall Infills	4	4	16-Oct-24	21-Oct-24
P1ECLASS1200	Rough-in Wall Electrical & Low Voltage	7	7	16-Oct-24	24-Oct-24
P1ECLASS1240	Install New Electrical Panel	8	8	16-Oct-24	25-Oct-24
P1ECLASS1370	Install Drywall at Soffit Hangers	7	7	17-Oct-24	25-Oct-24
P1ECLASS1260	Install Electrical Seismic	2	2	24-Oct-24	25-Oct-24
P1ECLASS1270	Install HVAC Seismic	2	2	24-Oct-24	25-Oct-24
P1ECLASS1310	Pull Wires for Fire Alarm	10	10	24-Oct-24	06-Nov-24
P1ECLASS1320	Insulate Walls	5	5	25-Oct-24	31-Oct-24
P1ECLASS1250	Patch Exterior Finishes at New Electrical Panels	3	3	28-Oct-24	30-Oct-24
P1ECLASS1330	Patch Interior Wall Surfaces	10	10	01-Nov-24	15-Nov-24
P1ECLASS1280	Install Plumbing Seismic	2	2	04-Nov-24	05-Nov-24
P1ECLASS1290	Pull Wires for Electrical	10	10	06-Nov-24	20-Nov-24
P1ECLASS1300	Pull Wires for HVAC Controls	7	7	06-Nov-24	15-Nov-24
P1ECLASS1350	Install Ceiling Wires for Suspended Ceiling Grid	5	5	06-Nov-24	13-Nov-24
P1ECLASS1340	Install Vinyl Covered Tackable Wallboard	12	12	13-Nov-24	29-Nov-24
P1ECLASS1360	Install Batt Insulation at Roof Joists	5	5	14-Nov-24	20-Nov-24
P1ECLASS1380	Install Ceiling Grid	5	5	14-Nov-24	20-Nov-24
P1ECLASS1390	Install Fire Alarm Devices	7	7	21-Nov-24	02-Dec-24
P1ECLASS1400	Install HVAC Drops, Diffusers, & Grilles	7	7	21-Nov-24	02-Dec-24
P1ECLASS1410	Install Light Fixtures	5	5	21-Nov-24	27-Nov-24
P1ECLASS1510	Install Casework/Millwork	12	12	22-Nov-24	10-Dec-24
P1ECLASS1420	Install A/V & Low Voltage Devices	10	10	02-Dec-24	13-Dec-24
P1ECLASS1460	Install Thermostats	3	3	02-Dec-24	04-Dec-24
P1ECLASS1470	Install Electrical Trim/Finishes	5	5	02-Dec-24	06-Dec-24
P1ECLASS1480	Install Markerboards	3	3	02-Dec-24	04-Dec-24
P1ECLASS1490	Install Monitor Brackets	3	3	02-Dec-24	04-Dec-24
P1ECLASS1500	Patch Paint & Paint Soffit Hanger Drywall	10	10	02-Dec-24	13-Dec-24
P1ECLASS1550	Install Signage	5	5	02-Dec-24	06-Dec-24
P1ECLASS1430	Re-Install UV Air Filters	5	5	03-Dec-24	09-Dec-24
P1ECLASS1440	Install Slack Safety Wires for Items Installed in Ceiling Grid	5	5	03-Dec-24	09-Dec-24
P1ECLASS1450	Install Ceiling Tiles	5	5	10-Dec-24	16-Dec-24
P1ECLASS1520	Set & Connect Sinks	5	5	11-Dec-24	17-Dec-24
P1ECLASS1530	Install Flooring & Wall Base	10	10	11-Dec-24	24-Dec-24
P1ECLASS1540	Re-Install Door Thresholds	5	5	17-Dec-24	23-Dec-24
P1ECLASS1560	Touch-Up Paint	5	5	24-Dec-24	31-Dec-24
Roof		53	53	04-Sep-24	18-Nov-24
P1EROOF1000	Demo/Abatement Roof for Heat Pumps/Exhaust Fans/Roof Penetrations	10	10	04-Sep-24	17-Sep-24
P1EROOF1010	Install Temporary Roof Protection	3	3	18-Sep-24	20-Sep-24
P1EROOF1020	Structural Framing for Heat Pumps & Exhaust Fans	10	10	23-Sep-24	04-Oct-24
P1EROOF1030	Install Heat Pump & Exhaust Fan Curbs	10	10	07-Oct-24	18-Oct-24
P1EROOF1040	Set Heat Pump & Exhaust Fan Units	5	5	21-Oct-24	25-Oct-24
P1EROOF1050	Rough-In Heat Pump/Exhaust Fan & Convenience Outlet Electrical	7	7	28-Oct-24	05-Nov-24
P1EROOF1060	Rough-In Heat Pump Controls	7	7	28-Oct-24	05-Nov-24
P1EROOF1070	Rough-In Condensate Lines	5	5	28-Oct-24	01-Nov-24

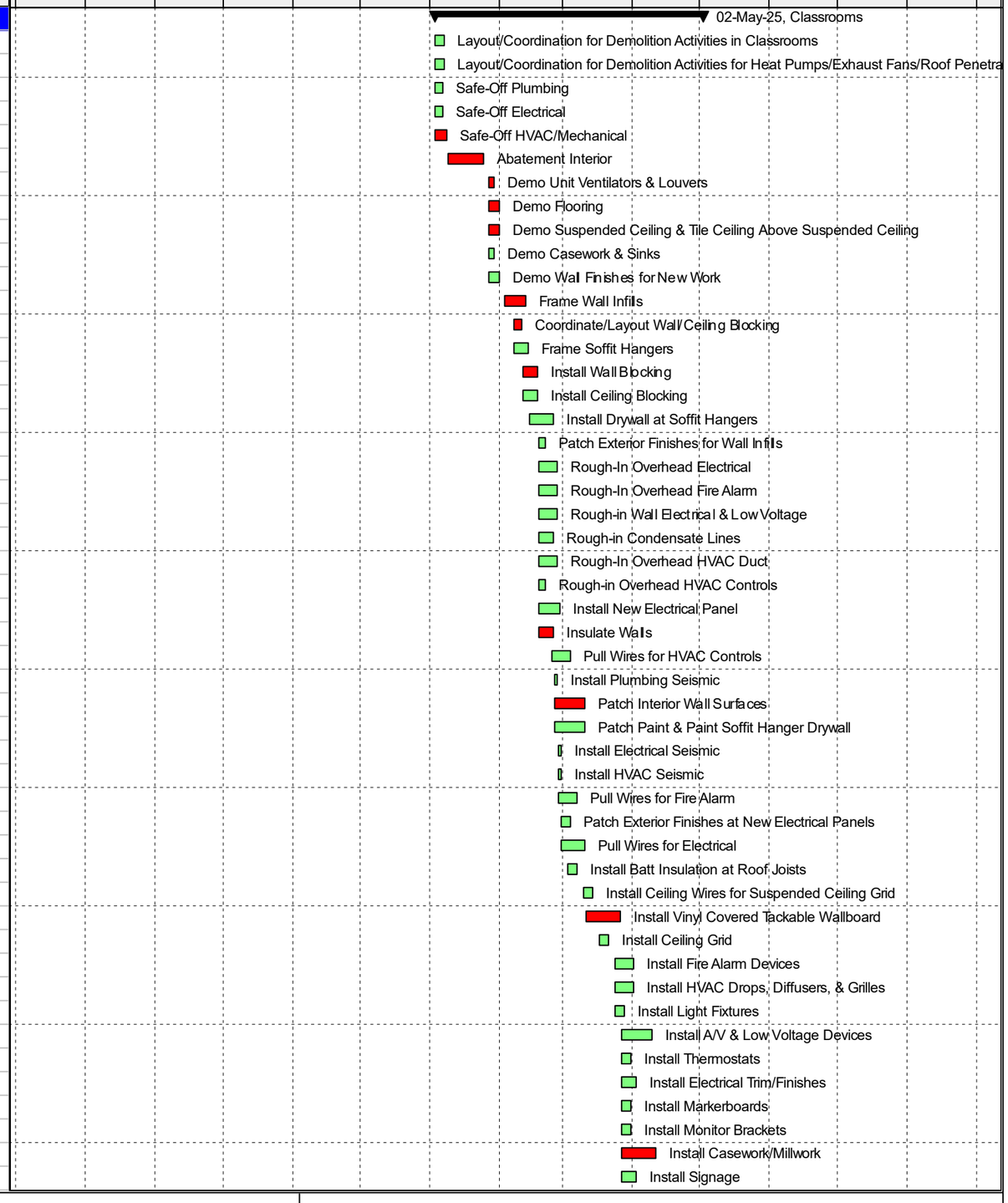


Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish
P1EROOF1080	Patch Roofing	10	10	28-Oct-24	08-Nov-24
P1EROOF1090	Install Heat Pump & Exhaust Fan Curb Flashing to Roof	5	5	12-Nov-24	18-Nov-24
Restrooms		10	10	04-Sep-24	17-Sep-24
P1ERR1000	Install Duct Drops & Grill for Exhaust Fan	5	5	04-Sep-24	10-Sep-24
P1ERR1010	Patch Ceiling	5	5	11-Sep-24	17-Sep-24
Phase 2 (Building B & C)		131	131	03-Jan-25	08-Jul-25
Site Electrical		34	34	03-Jan-25	19-Feb-25
P2SE1000	Sawcut Demo Existing Surfaces for U/G Electrical Panels HB/HC/Pull Box	5	5	03-Jan-25	09-Jan-25
P2SE1010	Trench for U/G Conduit	5	5	10-Jan-25	16-Jan-25
P2SE1020	Install U/G Conduit	7	7	17-Jan-25	27-Jan-25
P2SE1030	Backfill Trenches	5	5	28-Jan-25	03-Feb-25
P2SE1040	Patch Existing Surfaces	5	5	04-Feb-25	10-Feb-25
P2SE1050	Pull Wire	7	7	11-Feb-25	19-Feb-25
Site Fire Alarm		4	4	03-Jan-25	08-Jan-25
P2SFA1000	Install Rooftop Conduit to Building C	4	4	03-Jan-25	08-Jan-25
P2SFA1010	Install Rooftop Conduit to Building B	4	4	03-Jan-25	08-Jan-25
Building B		86	86	03-Jan-25	02-May-25
Classrooms		86	86	03-Jan-25	02-May-25
P2BCLASS1000	Layout/Coordination for Demolition Activities in Classrooms	3	3	03-Jan-25	07-Jan-25
P2BCLASS1010	Layout/Coordination for Demolition Activities for Heat Pumps/Exhaust Fan	3	3	03-Jan-25	07-Jan-25
P2BCLASS1020	Safe-Off Plumbing	2	2	03-Jan-25	06-Jan-25
P2BCLASS1030	Safe-Off Electrical	2	2	03-Jan-25	06-Jan-25
P2BCLASS1040	Safe-Off HVAC/Mechanical	4	4	03-Jan-25	08-Jan-25
P2BCLASS1050	Abatement Interior	12	12	09-Jan-25	24-Jan-25
P2BCLASS1060	Demo Unit Ventilators & Louvers	3	3	27-Jan-25	29-Jan-25
P2BCLASS1070	Demo Flooring	5	5	27-Jan-25	31-Jan-25
P2BCLASS1080	Demo Suspended Ceiling & Tile Ceiling Above Suspended Ceiling	5	5	27-Jan-25	31-Jan-25
P2BCLASS1090	Demo Casework & Sinks	3	3	27-Jan-25	29-Jan-25
P2BCLASS1100	Demo Wall Finishes for New Work	5	5	27-Jan-25	31-Jan-25
P2BCLASS1110	Frame Wall Infills	8	8	03-Feb-25	12-Feb-25
P2BCLASS1140	Coordinate/Layout Wall/Ceiling Blocking	2	2	07-Feb-25	10-Feb-25
P2BCLASS1160	Frame Soffit Hangers	5	5	07-Feb-25	13-Feb-25
P2BCLASS1130	Install Wall Blocking	5	5	11-Feb-25	17-Feb-25
P2BCLASS1150	Install Ceiling Blocking	5	5	11-Feb-25	17-Feb-25
P2BCLASS1360	Install Drywall at Soffit Hangers	7	7	14-Feb-25	24-Feb-25
P2BCLASS1120	Patch Exterior Finishes for Wall Infills	4	4	18-Feb-25	21-Feb-25
P2BCLASS1170	Rough-In Overhead Electrical	7	7	18-Feb-25	26-Feb-25
P2BCLASS1180	Rough-In Overhead Fire Alarm	7	7	18-Feb-25	26-Feb-25
P2BCLASS1190	Rough-in Wall Electrical & Low Voltage	7	7	18-Feb-25	26-Feb-25
P2BCLASS1200	Rough-in Condensate Lines	5	5	18-Feb-25	24-Feb-25
P2BCLASS1210	Rough-In Overhead HVAC Duct	7	7	18-Feb-25	26-Feb-25
P2BCLASS1220	Rough-in Overhead HVAC Controls	4	4	18-Feb-25	21-Feb-25
P2BCLASS1230	Install New Electrical Panel	8	8	18-Feb-25	27-Feb-25
P2BCLASS1310	Insulate Walls	5	5	18-Feb-25	24-Feb-25
P2BCLASS1320	Patch Interior Wall Surfaces	10	10	25-Feb-25	10-Mar-25
P2BCLASS1490	Patch Paint & Paint Soffit Hanger Drywall	10	10	25-Feb-25	10-Mar-25
P2BCLASS1250	Install Electrical Seismic	2	2	27-Feb-25	28-Feb-25
P2BCLASS1260	Install HVAC Seismic	2	2	27-Feb-25	28-Feb-25
P2BCLASS1300	Pull Wires for Fire Alarm	7	7	27-Feb-25	07-Mar-25

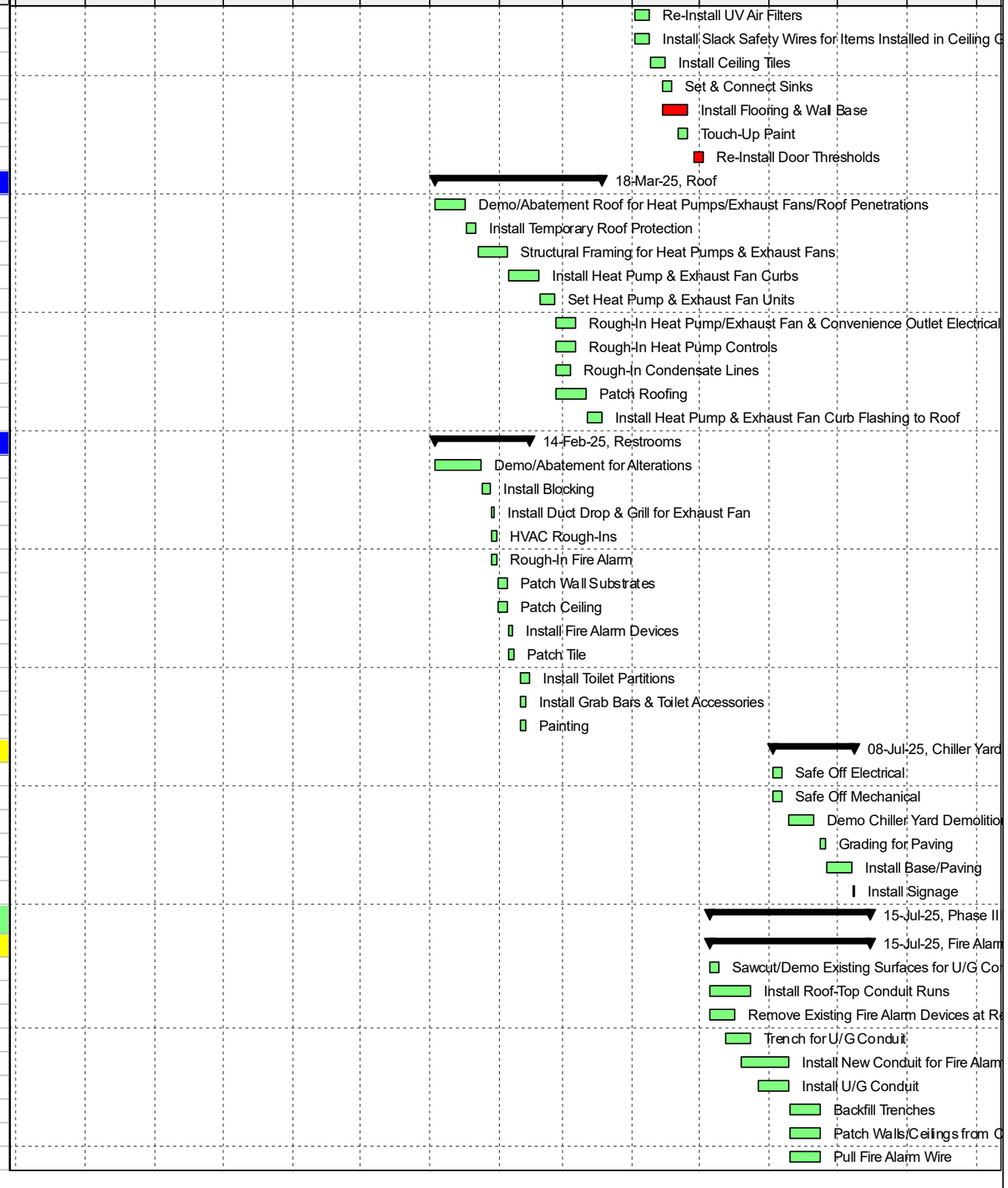
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish
P2BCLASS1240	Patch Exterior Finishes at New Electrical Panels	3	3	28-Feb-25	04-Mar-25
P2BCLASS1270	Install Plumbing Seismic	2	2	05-Mar-25	06-Mar-25
P2BCLASS1280	Pull Wires for Electrical	7	7	07-Mar-25	17-Mar-25
P2BCLASS1290	Pull Wires for HVAC Controls	7	7	07-Mar-25	17-Mar-25
P2BCLASS1340	Install Ceiling Wires for Suspended Ceiling Grid	5	5	07-Mar-25	13-Mar-25
P2BCLASS1350	Install Batt Insulation at Roof Joists	5	5	07-Mar-25	13-Mar-25
P2BCLASS1330	Install Vinyl Covered Tackable Wallboard	12	12	11-Mar-25	26-Mar-25
P2BCLASS1370	Install Ceiling Grid	5	5	14-Mar-25	20-Mar-25
P2BCLASS1380	Install Fire Alarm Devices	7	7	21-Mar-25	31-Mar-25
P2BCLASS1390	Install HVAC Drops, Diffusers, & Grilles	7	7	21-Mar-25	31-Mar-25
P2BCLASS1400	Install Light Fixtures	5	5	21-Mar-25	27-Mar-25
P2BCLASS1410	Install A/V & Low Voltage Devices	10	10	27-Mar-25	09-Apr-25
P2BCLASS1450	Install Thermostats	3	3	27-Mar-25	31-Mar-25
P2BCLASS1460	Install Electrical Trim/Finishes	5	5	27-Mar-25	02-Apr-25
P2BCLASS1470	Install Markerboards	3	3	27-Mar-25	31-Mar-25
P2BCLASS1480	Install Monitor Brackets	3	3	27-Mar-25	31-Mar-25
P2BCLASS1500	Install Casework/Millwork	12	12	27-Mar-25	11-Apr-25
P2BCLASS1540	Install Signage	5	5	27-Mar-25	02-Apr-25
P2BCLASS1420	Re-Install UV Air Filters	5	5	01-Apr-25	07-Apr-25
P2BCLASS1430	Install Slack Safety Wires for Items Installed in Ceiling Grid	5	5	01-Apr-25	07-Apr-25
P2BCLASS1440	Install Ceiling Tiles	5	5	08-Apr-25	14-Apr-25
P2BCLASS1510	Set & Connect Sinks	5	5	14-Apr-25	18-Apr-25
P2BCLASS1520	Install Flooring & Wall Base	10	10	14-Apr-25	25-Apr-25
P2BCLASS1550	Touch-Up Paint	5	5	21-Apr-25	25-Apr-25
P2BCLASS1530	Re-Install Door Thresholds	5	5	28-Apr-25	02-May-25
Roof		48	48	03-Jan-25	11-Mar-25
P2BROOF1000	Demo/Abatement Roof for Heat Pumps/Exhaust Fans/Roof Penetrations	5	5	03-Jan-25	09-Jan-25
P2BROOF1010	Install Temporary Roof Protection	3	3	10-Jan-25	14-Jan-25
P2BROOF1020	Structural Framing for Heat Pumps & Exhaust Fans	10	10	15-Jan-25	28-Jan-25
P2BROOF1030	Install Heat Pump & Exhaust Fan Curbs	10	10	29-Jan-25	11-Feb-25
P2BROOF1040	Set Heat Pump & Exhaust Fan Units	5	5	12-Feb-25	18-Feb-25
P2BROOF1050	Rough-In Heat Pump/Exhaust Fan & Convenience Outlet Electrical	7	7	19-Feb-25	27-Feb-25
P2BROOF1060	Rough-In Heat Pump Controls	7	7	19-Feb-25	27-Feb-25
P2BROOF1070	Rough-In Condensate Lines	5	5	19-Feb-25	25-Feb-25
P2BROOF1080	Patch Roofing	10	10	19-Feb-25	04-Mar-25
P2BROOF1090	Install Heat Pump & Exhaust Fan Curb Flashing to Roof	5	5	05-Mar-25	11-Mar-25
Restrooms		31	31	03-Jan-25	14-Feb-25
P2BRR1000	Demo/Abatement for Alterations	15	15	03-Jan-25	23-Jan-25
P2BRR1010	Install Blocking	2	2	24-Jan-25	27-Jan-25
P2BRR1020	Install Duct Drop & Grill for Exhaust Fan	2	2	28-Jan-25	29-Jan-25
P2BRR1030	HVAC Rough-Ins	3	3	28-Jan-25	30-Jan-25
P2BRR1040	Rough-In Fire Alarm	3	3	28-Jan-25	30-Jan-25
P2BRR1050	Patch Wall Substrates	3	3	31-Jan-25	04-Feb-25
P2BRR1060	Patch Ceiling	3	3	31-Jan-25	04-Feb-25
P2BRR1070	Install Fire Alarm Devices	2	2	05-Feb-25	06-Feb-25
P2BRR1080	Patch Tile	3	3	05-Feb-25	07-Feb-25
P2BRR1090	Install Toilet Partitions	5	5	10-Feb-25	14-Feb-25
P2BRR1100	Install Grab Bars & Toilet Accessories	3	3	10-Feb-25	12-Feb-25
P2BRR1110	Painting	3	3	10-Feb-25	12-Feb-25
Building C		86	86	03-Jan-25	02-May-25



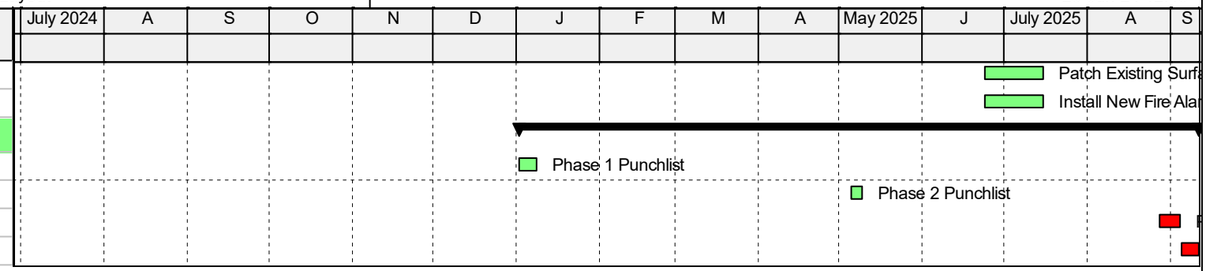
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish
Classrooms		86	86	03-Jan-25	02-May-25
P2CCLASS1000	Layout/Coordination for Demolition Activities in Classrooms	3	3	03-Jan-25	07-Jan-25
P2CCLASS1010	Layout/Coordination for Demolition Activities for Heat Pumps/Exhaust Fan	3	3	03-Jan-25	07-Jan-25
P2CCLASS1020	Safe-Off Plumbing	2	2	03-Jan-25	06-Jan-25
P2CCLASS1030	Safe-Off Electrical	2	2	03-Jan-25	06-Jan-25
P2CCLASS1040	Safe-Off HVAC/Mechanical	4	4	03-Jan-25	08-Jan-25
P2CCLASS1050	Abatement Interior	12	12	09-Jan-25	24-Jan-25
P2CCLASS1060	Demo Unit Ventilators & Louvers	3	3	27-Jan-25	29-Jan-25
P2CCLASS1070	Demo Flooring	5	5	27-Jan-25	31-Jan-25
P2CCLASS1080	Demo Suspended Ceiling & Tile Ceiling Above Suspended Ceiling	5	5	27-Jan-25	31-Jan-25
P2CCLASS1090	Demo Casework & Sinks	3	3	27-Jan-25	29-Jan-25
P2CCLASS1100	Demo Wall Finishes for New Work	5	5	27-Jan-25	31-Jan-25
P2CCLASS1110	Frame Wall Infills	8	8	03-Feb-25	12-Feb-25
P2CCLASS1140	Coordinate/Layout Wall/Ceiling Blocking	2	2	07-Feb-25	10-Feb-25
P2CCLASS1160	Frame Soffit Hangers	5	5	07-Feb-25	13-Feb-25
P2CCLASS1130	Install Wall Blocking	5	5	11-Feb-25	17-Feb-25
P2CCLASS1150	Install Ceiling Blocking	5	5	11-Feb-25	17-Feb-25
P2CCLASS1360	Install Drywall at Soffit Hangers	7	7	14-Feb-25	24-Feb-25
P2CCLASS1120	Patch Exterior Finishes for Wall Infills	4	4	18-Feb-25	21-Feb-25
P2CCLASS1170	Rough-In Overhead Electrical	7	7	18-Feb-25	26-Feb-25
P2CCLASS1180	Rough-In Overhead Fire Alarm	7	7	18-Feb-25	26-Feb-25
P2CCLASS1190	Rough-in Wall Electrical & Low Voltage	7	7	18-Feb-25	26-Feb-25
P2CCLASS1200	Rough-in Condensate Lines	5	5	18-Feb-25	24-Feb-25
P2CCLASS1210	Rough-In Overhead HVAC Duct	7	7	18-Feb-25	26-Feb-25
P2CCLASS1220	Rough-in Overhead HVAC Controls	4	4	18-Feb-25	21-Feb-25
P2CCLASS1230	Install New Electrical Panel	8	8	18-Feb-25	27-Feb-25
P2CCLASS1310	Insulate Walls	5	5	18-Feb-25	24-Feb-25
P2CCLASS1290	Pull Wires for HVAC Controls	7	7	24-Feb-25	04-Mar-25
P2CCLASS1270	Install Plumbing Seismic	2	2	25-Feb-25	26-Feb-25
P2CCLASS1320	Patch Interior Wall Surfaces	10	10	25-Feb-25	10-Mar-25
P2CCLASS1490	Patch Paint & Paint Soffit Hanger Drywall	10	10	25-Feb-25	10-Mar-25
P2CCLASS1250	Install Electrical Seismic	2	2	27-Feb-25	28-Feb-25
P2CCLASS1260	Install HVAC Seismic	2	2	27-Feb-25	28-Feb-25
P2CCLASS1300	Pull Wires for Fire Alarm	7	7	27-Feb-25	07-Mar-25
P2CCLASS1240	Patch Exterior Finishes at New Electrical Panels	3	3	28-Feb-25	04-Mar-25
P2CCLASS1280	Pull Wires for Electrical	7	7	28-Feb-25	10-Mar-25
P2CCLASS1350	Install Batt Insulation at Roof Joists	5	5	03-Mar-25	07-Mar-25
P2CCLASS1340	Install Ceiling Wires for Suspended Ceiling Grid	5	5	10-Mar-25	14-Mar-25
P2CCLASS1330	Install Vinyl Covered Tackable Wallboard	12	12	11-Mar-25	26-Mar-25
P2CCLASS1370	Install Ceiling Grid	5	5	17-Mar-25	21-Mar-25
P2CCLASS1380	Install Fire Alarm Devices	7	7	24-Mar-25	01-Apr-25
P2CCLASS1390	Install HVAC Drops, Diffusers, & Grilles	7	7	24-Mar-25	01-Apr-25
P2CCLASS1400	Install Light Fixtures	5	5	24-Mar-25	28-Mar-25
P2CCLASS1410	Install A/V & Low Voltage Devices	10	10	27-Mar-25	09-Apr-25
P2CCLASS1450	Install Thermostats	3	3	27-Mar-25	31-Mar-25
P2CCLASS1460	Install Electrical Trim/Finishes	5	5	27-Mar-25	02-Apr-25
P2CCLASS1470	Install Markerboards	3	3	27-Mar-25	31-Mar-25
P2CCLASS1480	Install Monitor Brackets	3	3	27-Mar-25	31-Mar-25
P2CCLASS1500	Install Casework/Millwork	12	12	27-Mar-25	11-Apr-25
P2CCLASS1540	Install Signage	5	5	27-Mar-25	02-Apr-25



Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish
P2CCLASS1420	Re-Install UV Air Filters	5	5	02-Apr-25	08-Apr-25
P2CCLASS1430	Install Slack Safety Wires for Items Installed in Ceiling Grid	5	5	02-Apr-25	08-Apr-25
P2CCLASS1440	Install Ceiling Tiles	5	5	09-Apr-25	15-Apr-25
P2CCLASS1510	Set & Connect Sinks	5	5	14-Apr-25	18-Apr-25
P2CCLASS1520	Install Flooring & Wall Base	10	10	14-Apr-25	25-Apr-25
P2CCLASS1550	Touch-Up Paint	5	5	21-Apr-25	25-Apr-25
P2CCLASS1530	Re-Install Door Thresholds	5	5	28-Apr-25	02-May-25
Roof		53	53	03-Jan-25	18-Mar-25
P2CROOF1000	Demo/Abatement Roof for Heat Pumps/Exhaust Fans/Roof Penetrations	10	10	03-Jan-25	16-Jan-25
P2CROOF1010	Install Temporary Roof Protection	3	3	17-Jan-25	21-Jan-25
P2CROOF1020	Structural Framing for Heat Pumps & Exhaust Fans	10	10	22-Jan-25	04-Feb-25
P2CROOF1030	Install Heat Pump & Exhaust Fan Curbs	10	10	05-Feb-25	18-Feb-25
P2CROOF1040	Set Heat Pump & Exhaust Fan Units	5	5	19-Feb-25	25-Feb-25
P2CROOF1050	Rough-In Heat Pump/Exhaust Fan & Convenience Outlet Electrical	7	7	26-Feb-25	06-Mar-25
P2CROOF1060	Rough-In Heat Pump Controls	7	7	26-Feb-25	06-Mar-25
P2CROOF1070	Rough-In Condensate Lines	5	5	26-Feb-25	04-Mar-25
P2CROOF1080	Patch Roofing	10	10	26-Feb-25	11-Mar-25
P2CROOF1090	Install Heat Pump & Exhaust Fan Curb Flashing to Roof	5	5	12-Mar-25	18-Mar-25
Restrooms		31	31	03-Jan-25	14-Feb-25
P2CRR1000	Demo/Abatement for Alterations	15	15	03-Jan-25	23-Jan-25
P2CRR1010	Install Blocking	2	2	24-Jan-25	27-Jan-25
P2CRR1020	Install Duct Drop & Grill for Exhaust Fan	2	2	28-Jan-25	29-Jan-25
P2CRR1030	HVAC Rough-Ins	3	3	28-Jan-25	30-Jan-25
P2CRR1040	Rough-In Fire Alarm	3	3	28-Jan-25	30-Jan-25
P2CRR1050	Patch Wall Substrates	3	3	31-Jan-25	04-Feb-25
P2CRR1060	Patch Ceiling	3	3	31-Jan-25	04-Feb-25
P2CRR1070	Install Fire Alarm Devices	2	2	05-Feb-25	06-Feb-25
P2CRR1080	Patch Tile	3	3	05-Feb-25	07-Feb-25
P2CRR1090	Install Toilet Partitions	5	5	10-Feb-25	14-Feb-25
P2CRR1100	Install Grab Bars & Toilet Accessories	3	3	10-Feb-25	12-Feb-25
P2CRR1110	Painting	3	3	10-Feb-25	12-Feb-25
Chiller Yard		26	26	02-Jun-25	08-Jul-25
P2CY1000	Safe Off Electrical	5	5	02-Jun-25	06-Jun-25
P2CY1010	Safe Off Mechanical	5	5	02-Jun-25	06-Jun-25
P2CY1020	Demo Chiller Yard Demolition	10	10	09-Jun-25	20-Jun-25
P2CY1030	Grading for Paving	3	3	23-Jun-25	25-Jun-25
P2CY1040	Install Base/Paving	7	7	26-Jun-25	07-Jul-25
P2CY1050	Install Signage	1	1	08-Jul-25	08-Jul-25
Phase III (Fire Alarm)		50	50	05-May-25	15-Jul-25
Fire Alarm - Remaining Buildings		50	50	05-May-25	15-Jul-25
P3FA1000	Sawcut/Demo Existing Surfaces for U/G Conduit Runs	5	5	05-May-25	09-May-25
P3FA1050	Install Roof-Top Conduit Runs	15	15	05-May-25	23-May-25
P3FA1060	Remove Existing Fire Alarm Devices at Remaining Buildings	10	10	05-May-25	16-May-25
P3FA1010	Trench for U/G Conduit	10	10	12-May-25	23-May-25
P3FA1070	Install New Conduit for Fire Alarm Devices	15	15	19-May-25	09-Jun-25
P3FA1020	Install U/G Conduit	10	10	27-May-25	09-Jun-25
P3FA1030	Backfill Trenches	10	10	10-Jun-25	23-Jun-25
P3FA1080	Patch Walls/Ceilings from Conduit Penetrations	10	10	10-Jun-25	23-Jun-25
P3FA1090	Pull Fire Alarm Wire	10	10	10-Jun-25	23-Jun-25



Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish
P3FA1040	Patch Existing Surfaces	15	15	24-Jun-25	15-Jul-25
P3FA1100	Install New Fire Alarm Devices	15	15	24-Jun-25	15-Jul-25
Closeout		178	178	02-Jan-25	11-Sep-25
CLOSE1000	Phase 1 Punchlist	5	5	02-Jan-25	08-Jan-25
CLOSE1010	Phase 2 Punchlist	5	5	05-May-25	09-May-25
CLOSE1020	Phase 3 Punchlist	5	5	28-Aug-25	04-Sep-25
CLOSE1030	Project Closeout	5	5	05-Sep-25	11-Sep-25



DOCUMENT 00 41 13

BID FORM AND PROPOSAL

To: Governing Board of the Bakersfield City School District ("District" or "Owner")

From: _____
(Proper Name of Bidder)

The undersigned declares that Bidder has read and understands the Contract Documents, including, without limitation, the Notice to Bidders and the Instructions to Bidders, 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 Drawings and Specifications of **Bid No. 22215.00-34** for the following project known as:

Mt. Vernon Elementary School HVAC System Upgrade & Site Improvements

("Project" or "Contract"), Bid Package **#MVES-**_____ and will accept in full payment for that Work the following total lump sum amount, all taxes included:

_____ dollars $ _____

BASE BID

Bidder acknowledges and agrees that the Base Bid accounts for any and all Allowance(s).

Additive/Deductive Alternates:

Alternate #1

_____ dollars $ _____

Additive/Deductive

Description: All new casework indicated on the DSA approved drawings with exception to any casework that includes a sink. Refer to typical classroom plans (i.e. A6.00-A6.01; All casework with sink must be included in the base bid)

Descriptions of alternates are primarily scope definitions and do not necessarily detail the full range of materials and processes needed to complete the construction.

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Additional Detail Regarding Calculation of Base Bid

1. **Unit Prices**. The Bidder's Base Bid includes the following unit prices, which the Bidder must provide and the District may, at its discretion, utilize in valuing additive and/or deductive change orders (Unit Prices shall include all labor, materials, services, profit, overhead, insurance, bonds, taxes, and all other incidental costs of Contractor, subcontractors, and suppliers):

   SCHEDULE OF UNIT PRICES

Item No.	Description	Unit of Measure	Estimated Quantity	Unit Price	Total Cost = Unit Price x Estimated Quantity (Included in Base Bid)
01	Provide and Install 1" Conduit	L.F.	01	$ _____	$ _____
02	Provide and Install 1.5" Conduit	L.F.	01	$ _____	$ _____
03	Provide and Install Single Gang Electrical Box	EA.	01	$ _____	$ _____
04	Provide and Install Double Gang Electrical Box	EA.	01	$ _____	$ _____
05	Manpower to pull wire into the conduits	Per Hour	01	$ _____	$ _____

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

2. **Allowance**. The Bidder's Base Bid shall include the following Allowances for the Tasks/Work as noted here:

Task/Work by Bid Package	Total Allowance Value per bid package
#MVES-01, General Construction: Unidentified underground hazardous materials abatement, concrete repair including bushing, grinding, filling and leveling above and beyond the scope listed, repair or replacement of existing valves, landscape boxes/covers, re-routing or relocation of any underground utilities not identified within the contract documents, and/or District requested additional work on a separate mobilization as directed by the CM.	$80,000.00
#MVES-02, Acoustical Ceilings: Labor and/or material required to perform minor repairs to ceiling grids and replace tiles due to unidentified trade damage, or additional work required outside of the scope of the work, as directed by the CM.	$15,000
#MVES-03, Flooring: Additional installation of flooring as directed by the CM.	$30,000
#MVES-04, Plumbing: Re-routing or relocation of any underground utilities not identified within the contract documents, additional shut-off valves as requested by the District and beyond the locations indicated in the plans and/or any other work as directed by the CM.	$40,000
#MVES-05, HVAC: Unidentified HVAC and controls changes and/or District requested additional work as directed by the CM.	$50,000
#MVES-06, Electrical, Low Voltage & Fire Alarm: Unidentified electrical changes including any unidentified pathways required, re-routing or relocation of any underground utilities not identified within the contract documents, and/or District requested additional work.	$200,000

The Allowance Value for an Allowance Item includes the direct cost of labor, materials, equipment, transportation, taxes and insurance associated with the applicable Allowance Item. All other costs, including Contractor's overall project management and general conditions costs, overhead and fee, are deemed to be included in the Base Bid, and are not subject to adjustment regardless of the actual amount of the Allowance Item.

The District shall have sole discretion to authorize all expenditures from the Allowances. The District shall process expenditures from the Allowances in the form of an Allowance Expenditure Directive ("AED"). Any unused Allowance or unused portion thereof shall be deducted from the Contract Price to the benefit of the District.

3. The undersigned has reviewed the Work outlined in the Contract Documents and fully understands the scope of Work required in this Proposal, understands the construction and project management function(s) is described in the Contract Documents, and that each Bidder who is awarded a contract shall be in fact a prime contractor, not a subcontractor, to the District, and agrees that its Proposal, if accepted by the District, will be the basis for the Bidder to enter into a contract with the District in accordance with the intent of the Contract Documents.

4. The undersigned has notified the District in writing of any discrepancies or omissions or of any doubt, questions, or ambiguities about the meaning of any of the Contract Documents, and has contacted the Construction Manager before bid date to verify the issuance of any clarifying Addenda.

5. The undersigned agrees to commence work under this Contract on the date established in the Contract Documents and to complete all work within the time specified in the Contract Documents.

6. The liquidated damages clause of the General Conditions and Agreement is hereby acknowledged.

7. It is understood that the District reserves the right to reject this bid and that the bid shall remain open to acceptance and is irrevocable for a period of ninety (90) days.

8. The following documents are attached hereto:

   - Bid Bond on the District's form or other security
   - Designated Subcontractors List
   - Non-Collusion Declaration
   - Iran Contracting Act Certification, required if contract value is $1,000,000 or more

9. Receipt and acceptance of the following Addenda is hereby acknowledged:

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

10. Bidder acknowledges that the license required for performance of the Work is a _____ _____ license.

#MVES-01,	General Construction (B)	#MVES-04,	Plumbing (C-36)
#MVES-02,	Acoustical Ceilings (C-02)	#MVES-05,	HVAC (C-20)
#MVES-03,	Flooring (C-15)	#MVES-06,	Electrical, Low Voltage & Fire Alarm (C-10)

11. Bidder hereby certifies that Bidder is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the Work.

12. Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while complying with all requirements of the Department of Industrial Relations.

13. Bidder hereby certifies that its bid includes sufficient funds to permit Bidder to comply with all local, state or federal labor laws or regulations during the Project, including payment of prevailing wage, and that Bidder will comply with the provisions of Labor Code section 2810(d) if awarded the Contract

14. Bidder specifically acknowledges and understands that if it is awarded the Contract, that it shall perform the Work of the Project while complying with the Davis Bacon Act, applicable reporting requirements, and any and all other applicable requirements for federal funding. If a conflict exists, the more stringent requirement shall control.

15. 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.

16. 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.

17. Bidder expressly acknowledges that it is familiar with and capable of complying with applicable federal, State, and local requirements relating to COVID-19 or other public health emergency/epidemic/pandemic including, if required, preparing, posting, and implementing a Social Distancing Protocol.

18. 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, Gov. Code, § 12650 et seq.), the District will be entitled to civil remedies set forth in the California False Claim Act. It may also be considered fraud and the Contractor may be subject to criminal prosecution.

19. The undersigned Bidder certifies that it is, at the time of bidding, and shall be throughout the period of the Contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents and registered as a public works contractor with the Department of Industrial Relations. Bidder further certifies that it is regularly engaged in the general class and type of work called for in the Contract Documents.

*****

Furthermore, Bidder hereby certifies to the District that all representations, certifications, and statements made by Bidder, as set forth in this bid form, are true and correct and are made under penalty of perjury.

Dated this _____ day of _____ 20 ____

Name of Bidder: _____

Type of Organization: _____

Signature: _____

Print Name: _____

Title: _____

Address of Bidder: _____

Taxpayer Identification No. of Bidder: _____

Telephone Number: _____

Fax Number: _____

E-mail: _____ Web Page: _____

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

No.: _____ Class:_____ Expiration Date: _____

No.: _____ Class:_____ Expiration Date: _____

Public Works Contractor Registration No.: _____

END OF DOCUMENT

SECTION 011000 - SUMMARY OF WORK

11/01/16

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes, but not limited to the following:

1. Project information.
2. Work covered by Contract Documents.
3. Phased construction.
4. Work by Owner.
5. Work under separate contracts.
6. Future work.
7. Purchase contracts.
8. Owner-furnished products.
9. Contractor-furnished, Owner-installed products.
10. Access to site.
11. Coordination with occupants.
12. Work restrictions.
13. Specification and drawing conventions.
14. Miscellaneous provisions.

B. Related Requirements:

1. Division 1 Section 012100 “Allowances”: for purchase contracts.
2. Division 1 Section 015000 "Temporary Facilities" for limitations and procedures governing temporary use of Owner's facilities.

1.3 PROJECT INFORMATION

A. Project Identification:

Campus HVAC System Upgrade
Mt. Vernon Elementary School
2161 Potomac Ave,
Bakersfield, CA 93307

Bakersfield City School District
Juan Montelongo
1300 Baker St,
Bakersfield, CA 93305

B. Architect:

AP Architects
J. Patrick Fogarty

3434 Truxtun Avenue Suite 240,
Bakersfield CA 93301

C. Architect's Consultants: The Architect has retained the following design professionals who have prepared designated portions of the Contract Documents:

John A Martin & Associates
Shane Fitzgerald
950 South Grand Ave. 4th Floor
Los Angeles, CA 90015

JMPE
John Maloney
627 Olive Street
Santa Barbara, CA 93101

Baskin Mechanical Engineers
Mark Baskin, P.E., LEED AP
175 Fulton Street
Fresno, CA 93721

1.4 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work consists of alterations to existing building, fire alarm system upgrade and site improvements as required. Hazardous material removal required.

B. Type of Contract:

1. Project will be constructed under a multi-prime contract.

1.5 WORK UNDER OTHER CONTRACTS

A. Owner furnished products:

1. Items indicated on documents.

a. HVAC equipment.
b. Electrical equipment.

1.6 WORK SEQUENCE

A. The Work will be conducted in one phase to provide the least possible interference to the activities of the Owner's personnel and to permit an orderly transfer of personnel and equipment to the new facilities. Project completion is scheduled for specific number calendar days, (refer to Bid Proposal). Contractor shall review scope of work, and provide manpower, resources, etc., as required to complete project on or before the date required for project completion. Contractor shall allow in Proposal weekend workers, shifts of workers and additional productivity not limited to workers, materials, temporary facilities and equipment as required to meet project schedule with limited access times as indicated herein.

1.7 CONTRACTOR USE OF PREMISES

A. General: Limit use of the premises to construction activities in areas indicated; allow for Owner occupancy and use by the public.

1. Confine operations to areas within Contract limits indicated. Portions of the site beyond areas in which construction operations are indicated are not to be disturbed.
2. Keep driveways and entrances serving the premises clear and available to the Owner and the Owner's employees at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.
3. When performing new construction on existing sites, become informed and take into specific account the maturity of the students on the site, and perform work which may interfere with educational facility routine before or after facility hours; enclose the work area with a substantial barricade and arrange work to cause a minimum of inconvenience and danger to students and staff in their regular facility activities.

B. Use of the Existing Building: Maintain the existing buildings in a weathertight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.

1.8 OWNER OCCUPANCY

A. Full Owner Occupancy: The Owner will occupy the site and existing building during the entire construction period. Cooperate with the Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with the Owner's operations.

B. Partial Owner Occupancy: The Owner reserves the right to occupy and to place and install equipment in completed areas of the building, prior to Notice of Completion provided that such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.

1. Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy the Owner will provide operation and maintenance of mechanical and electrical systems in occupied portions of the building.

C. All work shall be complete and approved prior to occupancy not limited to the following:

1. No portion of building may be occupied requiring impaired Required Fire Detection System unless system is installed and approved.
2. All completed work shall be in compliance with CBC 901.5 and CFC 901.5.1 related to acceptance tests.

1.9 WORK RESTRICTIONS:

A. Work Restrictions, General: Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets and other requirements of authorities having jurisdiction.
2. Smoking is not permitted within the building or within 25 feet (8 m) of entrances, operable windows, or outdoor air intakes.
3. Use of controlled substances on the Project site is not permitted.

B. On-Site Work Hours: Limit work in the existing building to normal business working hours of **6:00** a.m. to **4:00** p.m., Monday through Friday, except as otherwise indicated.

1. Weekend Hours: **work may occur between the hours of 8:00 a.m. and 9:00 p.m.**
2. Early Morning Hours: **No work may occur before 6:00 a.m. per City noise oridance.**
3. Hours for Utility Shutdowns: Arranged and agreed to advance shutdown with Owner.
4.

C. Construction work that generates noise beyond 90db that will disturb adjacent areas shall be scheduled around class schedule and office hours of occupied rooms within 125 feet of work to be done. This work may have to be done during after hours, evenings and Contractor shall verify class schedules when work will generate noise beyond 90db.

D. Deliver materials to the building area over the route designated by the facility Maintenance and Operations department. Times of deliveries shall coincide not to be done during 5 minutes before class change time between classes and 5 minutes after if said deliveries path is thru any area students will occupy during class change times. If a delivery is overlapping class change times, cease work, provide temporary barricades and resume 5 minutes after classes resume.

PART 2 - PRODUCTS (Not applicable).

PART 3 - EXECUTION (Not applicable).

END OF SECTION 011000

SECTION 012100 - ALLOWANCES 04/16/15

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 &1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements governing handling and processing allowances.

1. Selected materials, services, equipment, related items and in some cases, their installation and related/non-related work are shown and specified in the Contract Documents by allowances herein. Allowances have been established in lieu of additional requirements and to defer selection of actual materials, miscellaneous additional work scope and equipment to a later date when additional information is available for evaluation.
2. Special allowances have been established for unforeseen conditions, latent conditions and related item to be authorized by the Architect for use.

B. Types of allowances required include the following:

1. Lump sum allowances in Base Bid.

C. Related Requirements:

1. Division 1 Section "Modification Procedures" for procedures for submitting and handling Change Orders.
2. Division 1 Section “Summary of Work” for additional requirements on purchase contracts.

1.3 SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

B. Submit invoices or delivery slips to indicate actual quantities of materials delivered to the site for use in fulfillment of each allowance.

1.4 ALLOWANCES

A. Use the allowance only as directed for the Owner's purposes, and only by Supplementary Instructions, which designate amounts to be charged to the allowance.

1. The direct costs for products or equipment ordered by the Owner under the lump sum allowances, including delivery, installation, taxes, and similar costs are part of the allowance. Vendor shall provide insurance as required by the Owner. Contractor shall agree to accept insurance required by Owner for vendor for allowance item. If the contractor requires any special insurance, additional requirements and or bonding of any allowance vendor, contractor shall allow for this cost in his base bid or alternate bid if allowance is tied to an alternate.

a. In the event the work under allowance cannot be completed during the duration of the project as prescribed under “Project Summary”, contractor may elect to request additional extended overhead. Extended overhead will be determined by actual costs incurred by contractor specific to this project and verified by project schedule.

2. Supplementary Instructions (SI) authorizing use of funds from the lump sum allowance will not include the Contractor's related costs and reasonable overhead, supervision, profit margins and other related costs as these costs are already in the contractor’s proposal/bid.
3. If any individual allowance contains surplus funds or contains deficient funds, Architect may transfer funds between allowances as necessary.
4. At Project closeout, credit unused amounts remaining in the allowance to Owner by Negative Change Order amount for unused amounts.
5. The contractor shall include in his base bid all overhead, profit, supervision, bonds, insurance and all other indirect costs for allowance items. None of these items will be added to lump sum and miscellaneous allowance as it is used by the Owner and directed by the architect. In the event the allowance is required in an Alternate, the contractor shall include in his alternate bid all overhead, profit, supervision, bonds, insurance and all other indirect costs for allowance items specific to that alternate.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 INSPECTION

A. Inspect products covered by an allowance promptly upon delivery for damage or defects.

3.2 PREPARATION

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

B. Coordinate scheduling of Owner selected Vendors. Obtain availability schedules from Vendors early in project to coordinate timing of special milestones and products necessary for implementation into overall construction activities.

END OF SECTION 012100

SECTION 012300 - ALTERNATES

03/31/15

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for Alternates.

B. Definition: An Alternate is an amount proposed by Bidders and stated on the Bid Form for certain construction activities defined in the Bidding Requirements that may be added to the Base Bid amount if the Owner decides to accept a corresponding change in either the amount of construction to be completed, or in the products, materials, equipment, systems or installation methods described in Contract Documents. See each alternate in schedule of alternates below for construction duration impacts if any.

1. Where items or portions of items are added or removed to the Base Bid by alternate, it shall be the responsibility of the Contractor to allow for any reduction or additional material or labor which may be required to finish items not so removed, thereby providing a complete and finished condition matching that of similar conditions which are a part of the Contract.

    a. Add: Where alternates are noted as Add, Contractor shall allow for work indicated to be in alternate cost and shall be the amount that Base Bid would be increased.

2. A bidder's un-awarded alternative bids remain open for a period of 180 calendar after award of contract or acceptance of completed project, whichever come first, as irrevocable offers to enter into either change orders or separate contracts for the stated price adjustment.
3. The Construction time allotted for this project shall not be changed by the acceptance of any alternate unless indicated in the Alternate Schedule herein.

C. Coordination: Contractor to coordinate related Work and modify or adjust adjacent Work as necessary to ensure that Work affected by each accepted Alternate is complete and fully integrated into the project.

1. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
2. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
3. Refer to Allowance Section where Alternates are affected by Allowances.

1.3 SCHEDULE OF ALTERNATES:

A. Alternate No. 1 (Add): All new casework indicated on the DSA approved drawings with exception to any casework that includes a sink. Refer to typical classroom plans (i.e. A6.00-A6.01)

1. Base Bid: All casework with sink must be included in the base bid.
2.

1.4 NOTIFICATION:

A. Immediately following the award of the Contract, prepare and distribute to each party involved, notification of the status of each Alternate. Indicate whether Alternates have been accepted, rejected or deferred for consideration at a later date. Include a complete description of negotiated modifications to Alternates.

1. Owner may defer the award of any alternates, refer to supplemental conditions and herein.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION (Not Applicable).

END OF SECTION 012300

SECTION 012600 - MODIFICATION PROCEDURES 11/01/16

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification sections, apply to this section.

1.2 SUMMARY

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

1.3 MINOR CHANGES IN THE WORK and REQUEST FOR INFORMATION (RFI)

A. Supplemental instructions authorizing minor changes in the Work, not involving an adjustment to the Contract Sum or Contract Time, will be issued by the Architect. The Architect may issue written Supplemental Instructions, (SI), which interpret the Contract Documents or which order minor changes in the work without change in Contract sum or Contract time. The Contractor shall carry out such Supplemental Instructions promptly.

1. Unless otherwise noted, SI, (Supplemental Instructions) does not warrant a cost or time impact to the Contract cost or time. If Contractor does not agree, Contractor has 10 calendar days from date of receipt of SI to file a claim for adjustment in writing to the architect.
2. The Architect shall use SI's for written order for usage of allowance funds for project if any allowances are indicated.

B. Contractor shall be able to ask valid questions concerning items required to construct project. This shall be done by the following methods in order as follows: (1) Contractor to review plans and determine if information is prescribed therein; (2) Contractor to review question with Project Inspector and determine if information is indicated, intended and/or prescribed in construction documents; (3) Contractor place an informal inquiry with architect and discuss question: and if no answer is determined then (4) Contractor shall prepare a Request for Information (RFI) and deliver to architect for determination of answer and or direction from architect as prescribed herein.

1. Contractor shall submit Request for Information (RFI) on enclosed form at end of this Section.
2. Contractor shall attach to RFI what they consider to be answer to Request for Information. Failure to provide this information shall be grounds for Architect to Request for Clarification.
3. An RFI is defined as a request for information for information that cannot be found in the construction documents and related submittals. Items not considered RFI's are as follows:

a. A request for a proposed alternative materials, products or colors.
b. Substitutions.
c. Coordination of Contractor changed/initiated field conditions.

1.4 CHANGES IN WORK

A. The Owner, without invalidating the Contract may make changes by altering, adding to, or deducting from the work, the Contract sum and construction duration being adjusted accordingly. All such work shall be executed under the conditions of the original contract. Unless so authorized, the Contractor shall not deviate from nor alter the work as shown on the drawings or specifications. Additional work may be added to project by using project allowances as prescribed herein.

1. In the event additional work is added to the project via allowances the Contractor shall provide an analysis of the schedule impact if any. If additional work is shown to impact the construction schedule the Contractor shall be entitled additional time as agreed to by architect. If additional work is shown by schedule analysis to have no impact, no additional construction duration will added to project.
2. Any changes in construction duration shall be documented by a Change Order to Contract.

B. If Contractor should claim that any instruction, request, drawing, specification, action, condition, omission, default, or other situation constitutes a change, extra work, or otherwise obligates Owner to pay additional compensation to Contractor or to grant an extension of time, or constitutes a waiver of any provision in the Contract Documents, Contractor shall notify Owner in writing of such claim within ten calendar days from the date Contractor has actual or constructive notice of the factual basis supporting the claim. The notice shall state the factual basis for the claim and cite in detail the Contract Documents (including plans and specifications) upon which the claim is based. Contractor's failure to notify Owner and Architect within the ten-day period shall be deemed a waiver and relinquishment of such a claim. If the notice is given within the specified time, the procedure for its consideration shall be as stated in these General Conditions. In the event of failure to agree, the matter shall be treated as a claim following the claims procedures in the Contract Documents.

C. No change shall be made without such authorization, signed by the Owner, and countersigned by the Architect, or signed by the Architect and stating that the Owner has authorized such changes.

1. Refer to Supplementary Conditions for Construction Change Directive (CCD) procedures.
2. Refer to Supplementary Conditions for Supplemental Instructions (SI) procedures.

D. Any changes processed by the Contractor or any work performed not in conformance with these plans and specifications which requires extra drawing, specifications, calculations, inspections and any other work by the Architect and/or Engineers shall be paid for by the Contractor. Payment shall be made to the Architect at current hourly rate on file due and payable upon presentation of invoice.

1.5 CHANGE ORDER PROCESS-(OWNER AND CONTRACTOR INITIATED PROPOSAL REQUEST, AND ALLOWANCES.)

A. Owner-Initiated Proposal Requests: Proposed changes in the Work that will require adjustment to the Contract Sum or Contract Time will be issued by the Architect, with a detailed description of the proposed change and supplemental or revised Drawings and Specifications, if necessary.

1. Request for Proposal requests (RFP),issued by the Architect are for information only. Do not consider them an instruction either to stop work in progress, or to execute the proposed change.
2. Unless otherwise indicated in the proposal request, within 20 calendar days of receipt of the proposal request, submit to the Architect for the Owner's review an estimate of cost necessary to execute the proposed change as well as Construction Duration impact.

a. Include a list of quantities of products to be purchased and unit costs, along with the

total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.

b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.

c. Include a statement indicating the effect the proposed change in the Work will have on the Contract Duration.

d. Before Contractor is authorized to proceed with extra work or changes on the basis set forth above, the Owner and the Contractor shall be in complete agreement on what the term "costs" shall include and the amount of overhead and profit the Contractor is to charge.

e. All unit prices, whether set forth in the Contract or subsequently agreed upon, shall include overhead, profit, supervision, increased premium on all Bonds, increased premium on all insurances and other indirect cost for all tiers of contractors and related material men unless said items are being paid thru an allowance where overhead, profit, supervision, bonds, insurance and related items are included in contractor's base bid.

f. If there has been no response within 20 calendar days to an Architect's Request for Proposal, the Architect may direct the change to be done Time and Material. Under no circumstance may the contractor increase cost or increase schedule time due to Owner not receiving proposal timely.

B. Contractor-Initiated Change Order Proposal Requests: When latent or other unforeseen conditions require modifications to the Contract, the Contractor may propose changes by submitting a request for a change to the Architect.

1. Include a statement outlining the reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and Contract Time.
2. Include a list of quantities of products to be purchased and unit costs along with the total amount of purchases to be made. Where requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Comply with requirements in Special Conditions Section 3. Substitutions for Specified Items if the proposed change in the Work requires the substitution of one product or system for a product or system specified.
5. Claim submitted to the Architect for extensions of time and extra cost shall be made on forms carrying Contractor's letterhead and shall contain a complete breakdown of all costs and extension of Surety Bonds and Insurance impacts.
6. Before Contractor is authorized to proceed with extra work or changes on the basis set forth above, the Owner and the Contractor shall be in complete agreement on what the term "costs" shall include and the amount of overhead and profit the Contractor is to charge as any Contract Duration impacts.

C. All CCDs to be submitted to DSA per IR A-6.

D. For changes that increase or decrease the contract price, or being paid by allowance item, the Contractor shall include the following amounts for overhead and profit:

1. Contractor's overhead and profit on the cost of work performed by contractor without subcontractor shall be a total sum not exceeding fifteen percent (15%) of the cost of labor, materials, rentals, etc. (See below for allowances)
2. Subcontractor's overhead and profit on the cost of work performed by subcontractor shall be a total sum not exceeding ten percent (10%) of the cost of labor, materials, rentals, etc.
3. Contractor's overhead and profit on the cost of work performed by sub-contractors (one lower tier) shall be a total sum not exceeding five percent (5%) of such work.

4. Allowances: The contractor shall include in his base bid all overhead, profit, supervision, bonds, insurance and all other indirect costs for allowance items. None of these items will be added to lump sum and miscellaneous allowance as it is used by the Owner and directed by the Architect. In the event the allowance is required in an Alternate, the Contractor shall include in his alternate bid all overhead, profit, supervision, bonds, insurance and all other indirect costs for allowance items specific to that alternate.

E. Time and Material basis as changes in the work. For changes that increase the contract price and work is authorized based upon the cost of labor, material, equipment and subcontract prices, plus a percentage for overhead and profit the following requirements shall apply. In the event the costs for changes in the work are not agreed to by the Architect and Contractor the work may be authorized to move forward on a time and material basis. If a Time and Material basis is used and scope of work is being paid thru an allowance overhead and profit are to be included in base bid and alternates where occur.

1. Daily reports by Contractor, as follows:

a. General. At the close of each working day, Contractor shall submit a daily report to the Architect and the Project Inspector on forms approved by Owner, together with applicable delivery tickets listing all labor, materials, and equipment involved for that day, and for other services and expenditures, when authorized, concerning extra work items. An attempt shall be made to reconcile the report daily, and it shall be signed by the Architect and Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by subcontractors or others shall be submitted through Contractor.

b. Labor. The report shall show names of workers, classifications, and hours worked and hourly rate. Project supervision expenses, including for foremen and above, are not allowed. (iii) Materials. The report shall describe and list quantities of materials used and unit cost.

c. Equipment. The report shall show the type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable, and hourly/daily costs.

d. Other Services and Expenditures. Other services and expenditures shall be described in such detail as Owner may require.

2. Basis for Establishing Costs

a Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft classification or type of worker at the time the extra work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from federal, state, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. The use of labor classifications which would increase the extra work cost will not be permitted unless Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

b. Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the work site in the quantities involved, plus sales tax, freight, and delivery. Owner reserves the right to approve materials and sources of supply, or to supply materials to Contractor if necessary for the progress of the work. No markup shall be applied to any material provided by the Owner.

c. Tool and Equipment Rental. No payment will be made for the use of tools which have a replacement value of $500 or less or where an invoice is not provided.

Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental sources or distributors at the time the work is performed. The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Necessary loading and transportation costs for equipment used on the extra work shall be included. If equipment is used intermittently, and when not in use could be returned to its rental source at less expense to Owner than holding it at the work site, it shall be returned, unless Contractor elects to keep it at the work site at no expense to Owner. All equipment shall be acceptable to the Architect in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and manufacturer's approved modifications shall be used to classify equipment and it shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

d. Other Items. Owner may authorize other items which may be required on the extra work. These items include labor, services, material, and equipment which are different in their nature from those required by the work and which are of a type not ordinarily available from Contractor any of the Subcontractors. Detailed invoices covering all such items shall be submitted with the request for payment. (v) Invoices. Vendors' invoices for material, equipment rental, and other expenditures shall be submitted with the request for payment. If the request for payment is not substantiated by invoices or other documentation, Owner may establish the cost of the item involved at the lowest price which was current at the time of the report.

3. Daily worker time sheets shall be approved by the Project Inspector as well as copies of all materials invoices delivered to project site for this specific change. Time sheets and copies of all material costs shall be provided with pay request for this specific change with daily approvals by Project Inspector

F.

G. It is expressly understood that the value of such extra work or changes as determined by any of the methods herein expressly includes any and all of the contractors' costs and expense, both direct and indirect, resulting from delays or additional time required on the project, or resulting from accelerated work to avoid delays to the project.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 012600

CONSTRUCTION REQUEST FOR INFORMATION

DATE: _____ RFI # _____

ATTN: _____ PROJECT: _____

3434 Truxtun Avenue Ste 240

Bakersfield CA 93301

PROJECT#: _____

Subject: _____ Section #: _____

Sheet #: _____

Description: _____

☐ Clarification ☐ Unforeseen Condition ☐ Owner Change ☐ Others

Requesting Sponsor: _____ Approved by: _____

Total number of pages: _____ Contractor: _____

☐ RFI has been reviewed with Project Inspector without resolution

The Architect has 15 business days after written request is received to respond to Request for Information. No delay will be recognized on account of failure of Architect to furnish such interpretations within that period. Partial response or request for clarification of Request for Information constitutes response by Architect. Claims for adjustment shall be made within 10 calendar days after occurrence of the event giving rise to such claim in writing. Date received at Architect's office of signed original claim shall constitute date received. Architect shall be reimbursed by Contractor for time at current hourly rates prevailing to respond to Request for Information that are found to be substantially answered in Construction Documents.

ARCHITECT'S RESPONSE: ☐ RFI not valid ☐ RFI valid

Issued RFI Response #: _____

SECTION 013000 - PROJECT COORDINATION

11/01/16

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Divisions 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and supervisory requirements necessary for Project coordination including, but not necessarily limited to:

1. Coordination.
2. Administrative and supervisory personnel.
3. General installation provisions.
4. Cleaning and protection.
5. Coordination of allowance items and impacts with base bid scope of work.
6. Coordination of alternate(s) scope of work and impacts with base bid scope of work.

B. Progress meetings, coordination meetings and pre-installation conferences are included in Section "Project Meetings".

C. Requirements for the Contractor's Construction Schedule are included in Division 1, Section "Submittals" and Division 1 Section "Progress Schedules and Reports".

1.3 COORDINATION

A. Coordination: Coordinate construction activities included under various Sections of these Specifications to assure efficient and orderly installation of each part of the Work. Coordinate construction operations included under different Sections of the Specifications that are dependent upon each other for proper installation, connection, and operation.

1. Where installation of one part of the Work is dependent on installation of other components, either before or after its own installation, schedule construction activities in the sequence required to obtain the best results.
2. Where availability of space is limited, coordinate installation of different components to assure maximum accessibility for required maintenance, service and repair.
3. Make adequate provisions to accommodate items scheduled for later installation.

B. Where necessary, prepare memoranda for distribution to each party involved outlining special procedures required for coordination. Include such items as required notices, reports, and attendance at meetings.

1. Prepare similar memoranda for the Owner and separate Contractors where coordination of their Work is required.

C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities to avoid conflicts and ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Preparation of schedules.
2. Installation and removal of temporary facilities.
3. Delivery and processing of submittals.
4. Progress meetings.
5. Project Close-out activities.

D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials provided by Owner.

1. Salvage materials and equipment involved in performance of, but not actually incorporated in, the Work. Refer to other sections for disposition of salvaged materials that are designated as Owner's property.

1.4 SUBMITTALS

A. Coordination Drawings: Prepare and submit coordination Drawings.

1. Show the interrelationship of components shown on separate Shop Drawings.
2. Indicate required installation sequences.
3. Comply with requirements contained in Section "Submittals."
4. Refer to Division-21 “Fire Suppression”, 22 “Plumbing”, 23 HVAC” and Division 26 "Electrical" for specific coordination Drawing requirements for mechanical and electrical installations.
5. Attic/Ceiling coordination drawings.

    a. Provide attic/ceiling coordination drawings that utilize the available space for efficient installation of the following building components. Coordination meetings shall be held at the project site as the work progresses and adjustments made to coordination drawings with as-built conditions. All Contractors shall coordinate layouts with other disciplines/systems.

        1) Mechanical Systems.
        2) Plumbing Systems.
        3) Electrical Systems.
        4) Ceiling Systems.
        5) Structural Systems.
        6) Fire Sprinkler Systems.
        7) Data Cabling Systems.
        8) Security Systems.
        9) Other Systems.

6. Provide site utility coordination drawings. Refer to project manual Section “Utility Materials” for additional requirements.
7. Roof openings: Provide coordination drawings that verify locations and sizes of roof openings with structural, mechanical, plumbing and electrical drawings as well as actual equipment to be provided.

B. Staff Names: Within 15 days of Notice to Proceed, submit a list of the Contractor's principal staff assignments, including the Superintendent and other personnel in attendance at the site; identify individuals, their duties and responsibilities; list their addresses and telephone numbers.

1. Post copies of the list in the Project meeting room, the temporary field office, and each

temporary telephone.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION

3.1 GENERAL INSTALLATION PROVISIONS

A. Inspection of Conditions: Require the Installer of each major component to inspect both the substrate and conditions under which Work is to be performed. Do not proceed until unsatisfactory conditions have been corrected in an acceptable manner.

B. Manufacturer's Instructions: Comply with manufacturer's installation instructions and recommendations, to the extent that those instructions and recommendations are more explicit or stringent than requirements contained in Contract Documents.

C. Inspect materials or equipment immediately upon delivery and again prior to installation. Reject damaged and defective items.

D. Provide attachment and connection devices and methods necessary for securing Work. Secure Work true to line and level. Allow for expansion and building movement.

E. Visual Effects: Provide uniform joint widths in exposed Work. Arrange joints in exposed Work to obtain the best visual effect. Refer questionable choices to the Architect for final decision.

F. Recheck measurements and dimensions, before starting each installation.

G. Install each component during weather conditions and Project status that will ensure the best possible results. Isolate each part of the completed construction from incompatible material as necessary to prevent deterioration.

H. Coordinate temporary enclosures with required inspections and tests, to minimize the necessity of uncovering completed construction for that purpose.

I. Mounting Heights: Where mounting heights are not indicated, install individual components at standard mounting heights recognized within the industry for the particular application indicated. Refer questionable mounting height decisions to the Architect for final decision. Confirm all handicapped mounting heights are in compliance with Title 24 prior to any rough-in work.

3.1 CLEANING AND PROTECTION

A. During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at final acceptance.

B. Clean and maintain completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

C. Limiting Exposures: Supervise construction activities to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to, the following:

1. Excessive static or dynamic loading.
2. Excessive internal or external pressures.
3. Excessively high or low temperatures.
4. Thermal shock.
5. Excessively high or low humidity.
6. Air contamination or pollution.
7. Water or ice.
8. Solvents.
9. Chemicals.
10. Light.
11. Radiation.
12. Puncture.
13. Abrasion.
14. Heavy traffic.
15. Soiling, staining and corrosion.
16. Bacteria.
17. Rodent and insect infestation.
18. Combustion.
19. Electrical current.
20. High speed operation.
21. Improper lubrication.
22. Unusual wear or other misuse.
23. Contact between incompatible materials.
24. Destructive testing.
25. Misalignment.
26. Excessive weathering.
27. Unprotected storage.
28. Improper shipping or handling.
29. Theft.
30. Vandalism.

END OF SECTION 013000

SECTION 013100 - PROJECT MEETINGS

03/24/16

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for project meetings including but not limited to:

1. Pre-Construction Conference.
2. Pre-Installation Conferences.
3. Progress Meetings.
4. Project Coordination Meetings.

B. Related sections include the following construction schedules are specified in another Division-1 Section.

1. Division 1 Section “Submittals” for construction schedules and related items.
2. Division 1 Section “Progress Schedule and Reports” for construction schedules.

1.3 PRE-CONSTRUCTION CONFERENCE

A. Construction Manager will schedule and conduct a pre-construction conference and organizational meeting at the Project site or other convenient location no later than 15 days after Notice to Proceed and prior to commencement of construction activities. Conduct the meeting to review responsibilities and personnel assignments.

B. Attendees: The Owner, Architect, Construction Manager, the Contractor and its superintendent, major subcontractors, manufacturers, suppliers and other concerned parties shall each be represented at the conference by persons familiar with and authorized to conclude matters relating to the Work.

C. Agenda: Discuss items of significance that could affect progress including such topics as:

1. Tentative construction schedule.
2. Critical Work sequencing.
3. Designation of responsible personnel.
4. Use of Procore online document control software
5. Procedures for processing field decisions and Change Orders.
6. Procedures for processing Applications for Payment.
7. Distribution of Contract Documents.
8. Submittal of Shop Drawings, Product Data and Samples.
9. Preparation of record documents.
10. Use of the premises.
11. Office, Work and storage areas.
12. Equipment deliveries and priorities.

13. Safety procedures.
14. First aid.
15. Security.
16. Housekeeping.
17. Working hours.
18. TRPA compliance.

1.4 PRE-INSTALLATION CONFERENCES

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

1. Review the progress of other construction activities and preparations for the particular activity under consideration at each pre-installation conference, including requirements for:

a. Contract Documents.
b. Deliveries.
c. Shop Drawings, Product Data and quality control Samples.
d. Possible conflicts.
e. Compatibility problems.
f. Time schedules.
g. Weather limitations.
h. Manufacturer's recommendations.
i. Compatibility of materials.
j. Acceptability of substrates.
k. Temporary facilities.
l. Space and access limitations.
m. Governing regulations.
n. Safety.
o. Inspection and testing requirements.
p. Required performance results.
q. Protection.

2. Record significant discussions and agreements and disagreements of each conference, along with the approved schedule. Distribute the record of the meeting to everyone concerned, promptly, including the Owner and Architect.
3. Do not proceed if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of Work and reconvene the conference at the earliest feasible date.

1.5 PROGRESS MEETINGS

A. Construction Manager wills schedule and conduct progress meetings at the Project site at periodic scheduled intervals (weekly). Construction Manager will coordinate schedules with all Prime Contractors, Owner and Architect of proposed meeting dates in advance of meetings. Discuss at Pre-construction meeting. Coordinate dates of meetings with preparation of the payment request such Architect and Project Inspector can discuss any issue with any Prime Contractors on project site.

B. Attendees: In addition to representatives of the Owner and Architect, each subcontractor,

supplier or other entity concerned with current progress or involved in planning, coordination or performance of future activities shall be represented at these meetings by persons familiar with the Project and authorized to conclude matters relating to progress.

C. Agenda: Review and correct or approve minutes of the previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the current status of the Project.

1. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

2. Review the present and future needs of each entity present, including such items as:

a. Interface requirements.
b. Time.
c. Sequences.
d. Deliveries.
e. Off-site fabrication problems.
f. Access.
g. Site utilization.
h. Temporary facilities and services.
i. Hours of Work.
j. Hazards and risks.
k. Housekeeping.
l. Quality and Work standards.
m. Safety of Students and Staff.
n. Documentation of information for payment requests.
o. HCP Impacts on project and work schedules.

D. Reporting: No later than 3 business days after each progress meeting date, Construction Manager will distribute copies of minutes of the meeting to each party present and to other parties who should have been present. Including a brief summary, in narrative form, of progress since the previous meeting and report.

1. Schedule Updating: Revise the construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting.
2. Send Architect, Construction Manager, Project Inspector, and Owner digital files of meeting report and revised schedules.
3. Architect shall provide a copy of field report made during visit to Contractor within 10 days of site visit.

1.6 PROJECT COORDINATION MEETINGS

A. Conduct coordination meetings at the site before each construction activity that requires coordination with other construction. The various Contractors involved in or affected by the installation, and its coordination or integration with other materials and installations shall attend the meeting. Advise the Architect and Construction Manager of scheduled meeting dates.

1. Coordination Meetings Schedule (Minimum):

a. Ceiling/Attic Contractors: The following Contractors shall attend and coordinate construction activities and space requirements:

1) Mechanical Systems.
2) Plumbing Systems.
3) Electrical Systems.
4) Ceiling Systems.
5) Structural Systems.
6) Fire Sprinkler Systems.
7) Data Cabling Systems.
8) Other Systems.

b. Site/Building Utilities Contractors: The following Contractors shall attend the coordination construction activities and space requirements:

1) All Site/Building Utilities Systems.
2) All Site/Building Electrical Systems.
3) All Site/Building Mechanical Systems.
4) All Site/Building Fire Protection Systems.
5) All Site/Building Data Cabling Systems.
6) Other Site/Building Systems.
7) Landscape/Irrigation Site Systems and Requirements Leaching.

2. Record significant discussions and agreements and disagreements of each meeting, along with the approved coordination drawings. Distribute the record of the meeting to everyone concerned, promptly, including the Owner, Construction Manager and Architect.
3. Do not proceed if the coordination meeting cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of Work and reconvene the coordination meeting at the earliest feasible date.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 013100

SECTION 013200 - PROGRESS SCHEDULES AND REPORTS 11/01/16

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. General: This Section specifies administrative and procedural requirements for the critical path method (CPM) of scheduling and reporting progress of the Work.

1. Refer to General Conditions, Supplementary Conditions and the Agreement, for definitions and specific dates of Contract Time.
2. A Contract Schedule using CPM, with all the elements specified in enitre contract documents, is a fundamental and basic requirement for the review and monitoring of the prime Contractors successful and timely progress on the Project. The Contract Schedule specified will be provided and maintained by the Construction Manager . The Prime Contractors shall comply with the with the schedule and provide all necessary information for updating the schedule as directed by the construction manager.

B. Prime Contractors superintendent or foreman’s daily logs, submit weekly as scanned documents.

C. Related Sections:

1. Division 1 Section "Submittals" for submitting schedules and reports.
2. Division 1 Section "Quality Control Services" for submitting a schedule of tests and inspections.

1.3 DEFINITIONS

A. Critical path method (CPM) is a construction scheduling technique using Precedence Diagram Method (PDM) to plan and organize construction activities in an orderly manner and to establish the critical path of Work for the timely completion of the Project.

B. Network: A precedence diagram is a graphic representation showing the relationship of activities and events in the correct sequences required to complete the Work within the Contract Time.

C. Activity: An activity is any single identifiable step in the performance of the Work. It is dependent on other activities, and the interrelationship between all activities is the basis of the network analysis and calculation of the critical path.

1. Critical activities are activities with no (zero or negative) total float time and are, therefore, operations that determine the critical path and control completion of the Work.

D. Event: An event is the starting or ending point of an activity and occurs only when all preceding activities have been completed.

E. Float time is the amount of time available for a given activity in excess of its estimated duration. It represents the amount of leeway available in scheduling an activity. Neither Contractor nor

Owner shall have an exclusive right to the use of float. The effects of used float shall be documented by the Contractor on the updated Contract Schedule. Since float time is not for the exclusive use of either party, but is jointly owned, it is a resource available to and shared by both parties as needed to meet the Contract completion date.

1. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the following activity.
2. Total float is the amount of time an activity can be delayed without adversely affecting overall time for completion of the Work.
3. The earlier time difference from the date of completion of the project as established by the Contractors Schedule and the later time indicated in the Contract Documents shall be considered float time that can be used by either or both Owner and Contractor. While the Contractor may schedule completion of the Project earlier than the date established by the Contract Documents, no additional compensation shall become due the Contractor for the use of float time between the Contractor's projected early completion date and the completion date established by the Contract Documents. The Owner may use this float time for additional work due to Change Orders, use of Allowance funds and Contractors Change Orders that impact the project schedule.

1.4 COMPLIANCE WITH SCHEDULE

A. The Prime Contractors and all entities or firms employed by or under the control of the Prime Contractors shall meet the Contract Schedule. The Construction Manager will review the progress of the Work at least once a month. If any Work falls behind the schedule more than ten (10) days for any stage of the Work, the Prime Contractor shall regain the scheduled position within thirty (30) days.

4. The Prime Contractor shall supply more workers and equipment when necessary to meet the Schedule. Include overtime, weekend, and extra shifts as necessary, without extra cost to the Owner.
5. The Prime Contractor has the responsibility to conduct the Work in accordance with the Contract Schedule and to maintain the accuracy, updating, enforcement and distribution of the Contract Schedule.
6. If the Contractor does not regain the schedule position within the thirty (30) days, the Owner and Construction manager may assess interim liquidated damages.

B. If Prime Contractor is behind schedule by more than ten (10) days for any stage of the Work, based on the updated Contract Schedule after incorporating all approved time extensions if any, Contractor shall submit to construction manager within five (5) days of notification of such delay, a "recovery plan". The recovery plan shall be based on proposed revisions to Contract Schedule for the next sixty (60) day period and shall show how the Contractor intends to bring the Work back on schedule. Recovery plan shall also include a written description of how the measures that the Contractor intends to take without additional cost to Owner shall regain Schedule compliance. The recovery plan activities shall be identified according to their relationship to activities on the accepted Contract Schedule.

1. Should Prime Contractor fail to submit and execute such recovery plan, the Owner and construction manager shall have the option to direct Prime Contractor to employ any or all measures that the Owner may deem fit to regain schedule compliance without additional cost to the Owner.
2. Recovery plan submitted by prime Contractor, upon acceptance by the construction

manager, shall be incorporated into the Contract Schedule during the next update by construction manager

3. Prime Contractor will be required to submit a recovery plan for each update that indicated that the Work progress is more than ten (10) days behind schedule.
4. Should Contractor dispute the determination of the construction manager regarding the status on Contract delay, such dispute shall not relieve him/her of the responsibility to comply with the requirements of this Section and other related sections until the dispute is resolved in accordance with the Contract Documents.

1.5 THE OWNER'S DISCLAIMER OF SCHEDULE

A. Acceptance of the Contract Schedule by Construction manager, Architect or the Owner is for general conformity with the requirements of the Contract Documents. Acceptance of the Schedule does not relieve any one of the prime Contractors of responsibility for including all elements of the Work, for the reasonableness of the Schedule, or for the accuracy or suitability of the Schedule to meet the agreed completion or milestone dates.

1.6 THREE WEEK LOOK-AHEAD SCHEDULE

A. Prepare weekly, for the weekly Project Meeting, a computer-generated Three (3) Week Look-Ahead Schedule (barchart) which is consistent with the CPM schedule and depicts daily labor activities. The Three-Week Schedule will consist of the prior week, current week and the following week. Three week look-ahead schedule to be submitted by each prime contractor to the construction manager no later than 24 hours prior to each one of the weekly project meetings

1.7 DAILY CONSTRUCTION REPORTS

A. Prepare a Daily Construction Report in a form acceptable to the construction manager.

1. Provide the information requested.
2. S

B. Contractor's daily diary.

1. Provide copy of any Daily Diaries related to this project by Contractor. Submit at weekly intervals, on digital media to the Construction Manager.

PART 2 - PRODUCTS (Not Applicable).

PART 3 - EXECUTION (Not Applicable).

END OF SECTION 013200

SECTION 013300 - SUBMITTALS 11/01/16

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including, but not limited to,;

1. Contractor's construction project schedule.
2. Submittal schedule.
3. List of products/manufacturers.
4. Shop Drawings.
5. Product Data.
6. Samples.
7. Miscellaneous Submittals.
8. Construction Schedule and updates required for each payment request.
9. Coordination Drawings, specified in Division 1 Section “Project Coordination”.
10. Test reports.

B. Administrative Submittals: Refer to other Division-1 Sections and other Contract Documents for requirements for administrative submittals. Such submittals include, but are not limited to:

1. Permits/Public Works.
2. Applications for payment.
3. Performance and payment bonds.
4. Insurance certificates.
5. List of Subcontractors.
6. Schedule of Values.
7. DSA Verified Reports.
8. Electronic certified payroll records directly to the Labor Commissioner.
9. Preliminary notices (20-day notice).
10. Procedures for substitutions.
11. TRPA documents

C. Inspection and test reports are included in Section "Quality Control Services."

D. Other submittals:

1. See Division 1 Section "Governing Agency" for DSA Verified Reports to be filed.
2. See Division 1 Section "Project Schedule and Reports," for additional schedule and report requirements

1.3 SUBMITTAL PROCEDURES

A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and

related activities that require sequential activity.

2. Coordinate transmittal of different types of submittals for related elements of the Work so processing will not be delayed by the need to review submittals concurrently for coordination.

    a. The Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
    b. No color selections will be made until all color samples for entire project have been received by the Architect and determined to be acceptable.

3. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for re-submittals.

    a. Allow two weeks for initial review (14 calendar days). Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Architect will promptly advise the Contractor when a submittal being processed must be delayed for coordination.
    b. If an intermediate submittal is necessary, process the same as the initial submittal.
    c. Allow one week (7 calendar days) for reprocessing each submittal.
    d. No extension of Contract Time or claims for additional costs will be approved or authorized because of failure to transmit submittals to the Architect sufficiently in advance of the Work and Critical Path Schedule to permit processing requirements indicated herein. Submittals covering component items and forming an interrelated system of items must be coordinated and submitted concurrently rather than individual submittals for review.
    e. Time is defined as calendar days, starting from date item is received in architect's office and end with date of transmittal to General Contractor as last day of review.

        1) Where Submittal is required to be reviewed by consulting Engineer, time to review will be increased by seven (7) calendar days for review.
        2) Where Submittal is required to be reviewed by two parties--i.e., Architect-Engineer, Engineer-Engineer--add fourteen (14) calendar days for review.
        3) The Architects' office is closed from December 16 through January 2 of each calendar year. Submittals received less than 21 calendar days before office closing may not be processed before office closed dates noted herein. The balance of the 21 calendar days will resume after January 2 of each closing for submittals and related items. It is the contractor's responsibility to have critical submittals received by the architect 21 calendar days prior to above closing for timely processing.

            a). Consulting engineering related submittals and re-review items will add time as indicated herein above to the amount of time indicated due to office closing.

    f. Shop drawings, submittals and related items shall be submitted at a time sufficiently early to allow review by the Architect and the Division of State Architect (DSA) if required, and to accommodate the rate of construction progress required under the Contract Documents. Contractor will be required to pay the Architect's reasonable and customary fees to expedite review of shop drawings which are not submitted in timely fashion.
    g. Contractor shall have no claim for damages or extension of time due to any delay resulting from contractor having to make required revisions to shop drawings unless the Architect's review of the drawings is delayed beyond the time provided in the contract documents and contractor can establish that the Architect's delay is review actually resulted in a delay in Contractor's construction schedule. Contractor shall provide a record as built schedule as proof of delays within 10 days of the event that gives rise to a delay claim. Contractor shall not be entailed to any claim for damages resulting from DSA review beyond days allowed herein documents after submittal. However, owner may consider an extension of time due to any delay caused by DSA review.

4. All submittals shall be cross-referenced to contract documents to expedite checking. Use Project Manual's section designation and Working Drawing's sheet number(s).

B. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.

1. Provide a space approximately 4" x 4" on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken. Provide on the label or beside the title block on Shop Drawings to record the Architect's review and approval markings and the action taken.
2. Include the following information on the label for processing and recording action taken.

a. Project name.
b. Date.
c. Name and address of Architect.
d. Name and address of Contractor.
e. Name and address of subcontractor.
f. Name and address of supplier.
g. Name of manufacturer.
h. Number and title of appropriate Specification Section.
i. Drawing number and detail references, as appropriate.

3. Submittals shall be stamped and signed by the Prime Contractor to the effect that the contents have been reviewed and approved by him and meet the requirements for this project. Submittals will not be reviewed without this approval by Prime Contractor. Contractor’s review and approval of shop drawings shall include the following stamp:

a. "Contractor has reviewed and approved not only the field dimensions but the construction criteria and has also made written notation regarding any information in the shop drawings that does not conform to the Contract Documents. This shop drawing has been coordinated with all other shop drawings received to date by Contractor and this duty of coordination has not been delegated to subcontractors, material suppliers, the Architect, or the engineers on this Project.

_____
Signature of Contractor"

C. Submittal Transmittal: Each submittal package shall be uploaded to Procore in PDF format under approved Submittal Transmittal format. Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Architect, through the Construction Manager, using a transmittal form. Submittals received from sources other than the Contractor will be returned without action.

1. On the transmittal record relevant information and requests for data. On the form, or separate sheet, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

D. Failure to provide adequate and correct submittals: Contractor shall make a complete and acceptable submittal to the Architect by the second submission of submittals. Owner shall withhold funds due to Contractor to cover additional costs of the Architect’s review beyond the second submission and any other costs incurred by Owner.

1. Architect shall be reimbursed for all time spent in reviewing and processing of re-submittals of any submittals after the second submission where items have not been addressed, corrected and/or providing a complete submittal as requested by architect in previous submissions of a submittal.

E. Submittal quantities:

1. Provide one (1) electronic PDF of all submittals, uploaded through Procore, except as follows:

    a. Shop Drawings: Provide 4 copies of shop drawings. Architect and Engineer will red line any corrections and retain 4 copies. Contractor will be sent a PDF file of black and white scanned shop drawing for distribution and printing by Contractor. In the event of corrections and resubmittal contractor shall send 4 corrected copies of Shop Drawings at each resubmittal.

1.4

1.5 SUBMITTAL SCHEDULE

A. Prepare a complete schedule of submittals. Submit the schedule within 15 days of Notice to Proceed.

1. Coordinate submittal schedule with the list of subcontracts, schedule of values and the list of products as well as the Contractor's construction schedule.
2. Prepare the schedule in chronological order. Provide the following information:

    a. Scheduled date for each first submittal.
    b. Related Section number.
    c. Submittal category.
    d. Name of subcontractor.
    e. Description of the part of the Work covered.
    f. Scheduled date for resubmittal.
    g. Scheduled date the Architect's final release or approval.

B. Distribution: Following response to initial submittal, print and distribute copies to the Architect, Owner, subcontractors, and other parties required to comply with submittal dates indicated. Post copies in the Project meeting room and field office.

1. When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.

C. Schedule Updating: Revise the schedule after each meeting or activity, where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting.

1.6 LIST OF PRODUCTS/MANUFACTURES

A. Not later than 35 days from the date of the notice to proceed and prior to installation of items, whichever is less, the Contractor shall provide a list showing the name of the manufacturer proposed to be used for each of the products, proposed for installation, and not specified or named in the contract documents including the name of manufacturer of each, for review by the Owner and Architect. The list shall be tabulated by, and be complete for each specification section. Where applicable, subcontractor's names shall be included in such list.

1.7 SHOP DRAWINGS

A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.

B. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates, shop work manufacturing instructions, coordination drawings (for on-site use), design mix information, contractor's engineer calculations, and similar drawings. Include the following information:

1. Dimensions.
2. Identification of products and materials included.
3. Compliance with specified standards.
4. Notation of coordination requirements.
5. Notation of dimensions established by field measurement.
6. Sheet Size: Except for templates, patterns and similar full- size Drawings, submit Shop Drawings on sheets at least 8-1/2" x 11" but no larger than 36" x 48 (See herein for electronic submittals)".
7. Initial Submittal: Submit one black-line print for the Architect's review; the reproducible print will be returned, (see herein for electronic submittals).

    a. Structural steel, metal deck and miscellaneous steel. Submit black line print and 3 copies for initial submittal.

8. Final Submittal: Submit copies per enclosed requirements.
9. Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction.

C. Coordination drawings are a special type of Shop Drawing that show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or function as intended.

1. Preparation of coordination Drawings include components previously shown in detail on Shop Drawings or Product Data.
2. Submit coordination Drawings for integration of different construction elements. Show sequences and relationships of separate components to avoid conflicts in use of space.

1.8 PRODUCT DATA

A. Collect Product Data into a single submittal for each element of construction or system. Product Data includes printed information such as manufacturer's installation instructions, catalog cuts, standard color charts, roughing-in diagrams and templates, standard wiring diagrams and performance curves. Where Product Data must be specially prepared because standard printed data is not suitable for use, submit as "Shop Drawings."

1. Mark each copy to show applicable choices and options. Where printed Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:

    a. Manufacturer's printed recommendations.
    b. Compliance with recognized trade association standards.
    c. Compliance with recognized testing agency standards.
    d. Application of testing agency labels and seals.
    e. Notation of dimensions verified by field measurement.
    f. Notation of coordination requirements.

2. Do not submit Product Data until compliance with requirements of the Contract Documents has been confirmed.
3. Preliminary Submittal: Submit a preliminary single-copy of Product Data where selection of options is required.
4. Submittals: Submit copies of each required submittal; submit hardcopies where required for maintenance manuals. The Architect will retain one, and will return the other marked with action taken and corrections or modifications required.

a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.

5. Distribution: Furnish copies of final submittal to installers, subcontractors, suppliers, manufacturers, fabricators, and others required for performance of construction activities. Show distribution on transmittal forms.

a. Do not proceed with installation until an applicable copy of Product Data applicable is in the installer's possession.
b. Do not permit use of unmarked copies of Product Data in connection with construction.

1.9 MATERIALS SPECIFIED

A. The Contract is based on standards of quality established in the Contract Documents.

1. In agreeing to the terms and conditions for the Contract, the Contractor has accepted the responsibility to verify that the specified products will be available and to place orders for all required materials in such a timely manner as needed to meet his agreed construction schedule.
2. Neither the Owner nor the Architect has agreed to the substitution of materials or methods called for in the Contract Documents, except as they may specifically otherwise state in writing and when approved in advance of purchase and installation per requirements herein.

B. Colors: Provide finish selections indicated in the Project Manual and Plans.

1. Acceptable Manufacturers: The products and manufacturer’s specified in the Project Manual and Plans are for purposes of establishing color selection options and quality.
2. Manufacturer’s Standard colors and Finishes: Where the Project Manual or Plans specifies a manufacturer’s standard color or finish, the Architect makes no guarantee that matching colors or finishes are available as other non-listed manufacturer’s “standard colors” from the listing of acceptable manufacturers. The Contractor shall be responsible for providing colors matching those indicated in the Project Manual of listed acceptable manufacturer in the Project Manual at no additional cost.
3. Custom Colors: Where the Finish Schedule Project Manual and or Plan indicates a specific manufacturer’s colors, other acceptable manufacturer shall provide matching custom colors where a standard color in not acceptable at no additional cost.

1.10 SAMPLES

A. Submit full-size, fully fabricated Samples cured and finished as specified and physically identical with the material or product proposed. Samples include partial sections of manufactured or fabricated components, small cuts or containers of materials, color range sets, complete units of repetitively used materials, units of work to be used for independent inspection and testing, and swatches showing color, texture and pattern.

1. Mount, display, or package Samples in the manner specified to facilitate review of qualities indicated. Prepare Samples to match the Architect's Sample. Include the following:

a. Generic description of the Sample.
b. Sample source.
c. Product name or name of manufacturer.
d. Compliance with recognized standards.
e. Availability and delivery time.

2. Submit Samples for review of kind, color, pattern, and texture, for a final check of these characteristics with other elements, and for a comparison of these characteristics between the final submittal and the actual component as delivered and installed.

    a. Where variation in color, pattern, texture or other characteristics are inherent in the material or product represented, submit multiple units (not less than 6), that show approximate limits of the variations.
    b. Refer to other Specification Sections for requirements for Samples that illustrate workmanship, fabrication techniques, details of assembly, connections, operation and similar construction characteristics.

3. Preliminary submittals: Where Samples are for selection of color, pattern, texture or similar characteristics from a range of full selection, submit four (4) full sets of choices for the material or product.

    a. Color selection shall be done upon complete submittal of materials and/or products needing color selection. It is the responsibility of the general contractor to see to it that required submittals for color selection shall be submitted to the Architect prior to time for implementation to not affect project schedule.
    b. Provide ninety (90) days time allowance for the Architect to work out preliminary schemes for Owner approval from receipt of complete color submittal of all items for this project.

4. Submittals: Except for Samples illustrating assembly details, workmanship, fabrication techniques, connections, operation and similar characteristics, submit 4 sets; one will be returned marked with the action taken.

5. Maintain sets of Samples, as returned, at the Project site, for quality comparisons throughout the course of construction.

    a. Unless noncompliance with Contract Document provisions is observed, the submittal may serve as the final submittal.
    b. Sample sets may be used to obtain final acceptance of the construction associated with each set.

B. Distribution of Samples: Prepare and distribute additional sets to subcontractors, manufacturers, fabricators, suppliers, installers, and others as required for performance of the Work. Show distribution on transmittal forms.

1. Field Samples specified in individual Sections are special types of Samples. Field Samples are full-size examples erected on site to illustrate finishes, coatings, or finish materials and to establish the standard by which the Work will be judged.

    a. Comply with submittal requirements to the fullest extent possible. Process transmittal forms to provide a record of activity.

1.10 MISCELLANEOUS SUBMITTALS

A. Miscellaneous submittals are work related submittals (non-administrative) including warranties, maintenance agreements, workmanship bonds, survey data and reports, quality testing and certifying reports, copies of industry standards, record drawings, field measurement data, operating and maintenance materials, overrun stock, and similar work related information and materials not process as shop drawings, product data or samples.

B. Inspection and Test Reports: Classify and process each as either "shop drawing" or "product data", depending upon whether report is uniquely prepared for project or a standard publication.

C. Warranties: Refer to "Products" section for specific general requirements on warranties,

product/workmanship bonds, and maintenance agreements. In addition to copies desired for Contractor's use, furnish 2 executed copies, plus additional copies where required for maintenance manuals.

D. Standards: Where submittal of a copy of standards is indicated, submit a single copy for Architect's/Engineer's use. Where workmanship at project site and elsewhere is governed by standard, furnish additional copies to fabricators, installers and others involved in performance of the work.

E. Closeout Submittals: Refer to "Project Closeout" section for specific general requirements on submittal of closeout information, materials, tools, and similar items.

F. Schedule of Values: Contractor shall submit Schedule of Values per Instructions to Bidders,. Refer to General Conditions for minimum list of items to be included in Schedule of Values. Changes in Schedule of Values will not be allowed after Notice to Proceed is issued, unless directed by Architect and/or Change Order items which shall carry their own value as a line item on Schedule of Values.

G. Certified Payroll Records: Refer to “Prevailing wage rates and Apprenticeship Requirements” section for specific general requirements.

1. All contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement).
2. General Contractor shall provide certification that all requirements for prevailing wage have been made with each application for payment, not limited to paying prevailing wage, documentation of prevailing wage and furnishing electronically to Labor Commissioner.

1.12 ARCHITECT'S ACTION

A. Except for submittals for record, information or similar purposes, where action and return is required or requested, the Architect will review each submittal, mark to indicate action taken, and return.

1. Compliance with specified characteristics is the Contractor's responsibility.
2. Numerous serious corrections, or incomplete submittals, will necessitate resubmittal, in which case, only one copy will be returned with notations. Contractor shall resubmit required number of sets with corrections made with original mark-up submittal for review.

B. Conditions of Review: Architect's review is for general conformance with the design concept and contract documents. Review action on a submittal by the Architect does not in any way constitute a change order. Markings or comment shall not be construed as relieving the Contractor from compliance with the project plans and specifications, nor departures therefrom. The Contractor remains responsible for details and accuracy, for conforming an correlating all quantities and dimensions, for selecting fabrication processes for techniques of assembly, and for performing his work in a safe manner.

1. The Contractor is responsible for coordination of his work with and between that of all subcontractors and trades.
2. Absolutely no deviation from the Contract Documents will be permitted without written acknowledgement from Architect of receipt and Review of Written Notification from the Contractor to the Architect accompanying this submittal of all deviations contained in this submittal.
3. The Architect's review is not the final stage of acceptance for any part of the project, nor does it relieve the Contract responsibilities.
4. Contractor shall submit an itemized list of changes of items different than specified/indicated herein and on construction documents. List shall include items that are different and omitted. In the event items are not included on list, omitted from submittal and/or different than specified; Contractor shall be responsible for providing specified item(s). Liabilities

subsequent to items omitted/or different shall be the responsibility of Contractor and shall be warranted a minimum of five (5) years or greater as prescribed by law. If no list is included with Shop Drawings, Architect assumes all items are as specified. Items discovered within five (5) years of Notice of Completion shall be corrected and provided by Contractor and Subcontractor at no cost to Owner.

C. Action: The Architect will identify each submittal with a uniform, self-explanatory action sheet. The sheet will be appropriately marked, as follows, to indicate the action taken:

1. No Exceptions Taken: If this box is marked, the work covered by the submittal may proceed provided it complies with the requirements of the contract documents; acceptance of the work will depend upon that compliance.
2. Make Corrections Noted: If box is marked, the work covered by the submittal may proceed provided it complies with both the Architect's/Engineer's notations or corrections to the submittal and with the requirements of the contract documents; acceptance of the work will depend on that compliance. Submit corrected copy for record if requested by the Architect.
3. Revise and Resubmit: If this box is marked, do not proceed with the work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise the submittal in accordance with the Architect's/Engineer's notations and resubmit without delay. Repeat if necessary.
4. Rejected: If this box is marked, do not proceed with the work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise the submittal or prepare a new submittal in accordance with the Architect's/Engineer's notations and resubmit to Architect.

    a. Do not permit submittals marked "Rejected” or, “Revise and Resubmit" to be used at the Project site, or elsewhere where Work is in progress.

5. Action Not Required: Where a submittal is primarily for information or record purposes, special processing or other activity, the submittal will be returned, marked "Action Not Required".
6. Remarks: The review has occasioned comments that have been attached to the submittal. Process these comments as if they had been written on the submittal itself.
7. Requires Intermediate Submittal: Submittal does not meet all requirements for a complete approval. Submittal requires additional information for processing.

1.13 SUBSTITUTIONS

A. Substitution Request:

1. Cost to Contractor or Bidder for review of Substitution Request.

    a. Each review of a Substitution Request by the Architect may be billed to the submitter (Contractor or Bidder) at the current hourly rate on file at Architect’s office, two hour minimum for each review, whether approved or rejected.
    b. District must receive any notice of request for substitution of a specified item a minimum of TEN (10) calendar days prior to bid opening. The successful bidder will not be allowed to substitute specified items unless properly noticed.
    c. The Contractor will have a thirty-five (35) day period from the contract award date, in which to review the total contract documentation and issue any substitution or clarification requests to the Architect free of any financial charge.
    d. The Contractor will be expected to identify any omissions, anomalies, divergence or discrepancies in the Contract Documents within this time period and so inform the Architect, in writing.
    e. Any such omissions, anomalies, divergence or discrepancies not identified to the Architect within this period shall be deemed to be included within the bid sum and not subject to a Change Order by the Architect.

1) The Architect may waive the review cost if, in his sole opinion, the submittal was complete and the time involved in the review was not substantial, and it was in the best interest of the Owner.

2. Content of Request:

a. Complete the attached Substitution Request Form (at the end of this Section), substantiating compliance of proposed substitution with Contract Documents.
b. For products, attach to the Substitution Request Form:

1) Product identification, including manufacturer's name and address.
2) Manufacturer's literature including product description, performance and complete test data and reference standards.
3) Samples.

c. For construction methods, attach to the Substitution Request Form:

1) Detailed description of proposed methods.
2) Drawings illustrating methods.

d. Attach to the Substitution Request Form an itemized comparison of proposed substitution with product or method specified.
e. Provide long-term serviceability data comparing side by side analysis with specified materials.
f. Provide manufacturer's experience in years with product with specific product formulation that is to be substituted.
g. Provide certified warranty issued for this specific project including application--precisely.
h. Provide system component analysis and statement the product is certified by Contractor to be compatible with all other items of assemblies where product/material/method is specified.

3. In making request for substitution, Contractor attests that:

a. Contractor has personally investigated proposed product or method, and determined that it is equal or superior in all respects to that specified.
b. Contractor will provide the same guarantee or warranty for substitution as for product or method specified.
c. Contractor will coordinate installation of accepted substitution into Work, making such changes as may be required for Work to be complete in all respects.
d. Contractor waives all claims for additional costs related to substitution which subsequently become apparent.
e. Contractor will pay all cost of Consultant to interpret physical properties to compare substitution with specified product, if requested by Architect.
f. Colors: The Contractor will match the color and/or finish available for the acceptable manufacturers listed in the Project Manual and/or Plans as a custom color and at no additional cost to the Owner.

4. Submit one (1) copy of Substitution Request, electronically via PDF, prior to submittals required.

B. Acceptance of Substitutions

1. Procedures:

a. The Contract is based on materials, equipment and methods described in the Contract Documents.
b. Architect will consider proposals submitted in accordance with the Substitution Request.

c. Substitutions will be considered when submitted a minimum of ten (10) days prior to bid opening or within 35 days after date of Contract.
d. Architect is solely responsible for judging the acceptance of substitutions.
e. Substitute materials, equipment or methods shall not be used unless such substitution has been specifically approved for this Work by the Architect and DSA.
f. Substitutions will not be considered if:

1) They are indicated or implied on product submittals without formal request submitted in accordance with Substitution Request.
2) Acceptance will require substantial revision of Contract Documents.
3) They are submitted more than 35 days after date of Contract, unless the specified or drawing item has been verified to be discontinued or is otherwise unavailable, or the Owner desires a cost savings for the product or system.

g. Substitutions may be subject to DSA approval if Structural Safety, Fire/Life Safety or Accessibility is impacted.

2. Time to review: Architect shall be allowed twenty-eight (28) calendar days to review each substitution submittal. In the event review cannot be completed and more information is requested by the Architect to complete this review, upon receipt of requested information, twenty-eight (28) calendar days will be allowed for additional review after receipt of requested and complete information.

PART 2 - PRODUCTS

2.1 SUBSTITUTION REQUEST FORM

See the form attached to the end of this Section.

PART 3 - EXECUTION

3.1 GENERAL

The attached form will be reproduced by the Contractor or any of his Subcontractors for any and all proposed substitutions. No other forms will be accepted.

SUBSTITUTION REQUEST

DATE: _____ Substitution Request # _____

ATTN: _____ PROJECT: _____

_____ _____

_____ _____

PROJECT#: _____ NOA DATE: _____

We hereby submit for your consideration the following product/ manufacturer instead of the one(s) specified in the Project Manual/ Plans:

Item: _____ Section #: _____

Manufacturer: _____ Sheet #: _____

A. Reason for not providing specified product: _____

B. Proposed Substitution: _____

C. Cost shall be shouldered by the undersigned for changes to the building design, including engineering and detailing costs caused by the requested substitution. (Negative response maybe cause for rejection.)

☐ Yes ☐ No Explain: _____

D. Provide the following with Substitution Request Package:

*NI –Not Indicated; N/A – Not Applicable

		Checklist for Architect			
		Yes	No	N/A	NI
1	Attached data includes product data, specifications, photographs, samples, code approvals and laboratory test data adequate for evaluation of request. All test data shall be complete with relevant test(s).	☐	☐	☐	☐
2	Attach data includes description of change to contract documents that proposed substitution will have. Include complete information on changes to drawing and/ or project manual which proposed substitution will require for proper installation.	☐	☐	☐	☐
3	Does proposed substitution affect dimensions shown on contract documents?	☐	☐	☐	☐
4	Does proposed substitution affect other trades and is it clear on the request form? Provide system component compatibilities.	☐	☐	☐	☐
5	Does proposed substitution affect local availability of service and maintenance including where nearest service representative is located and travel time to project site?	☐	☐	☐	☐
6	Attached cost data with detail breakdown of differential, either plus or minus.	☐	☐	☐	☐
7	If substitution is of higher quality, will this impact future replacement cost?	☐	☐	☐	☐
8	What is the impact of substitution on construction schedule?	☐	☐	☐	☐
9	Provide long term serviceability data compared with specified material.	☐	☐	☐	☐
10	Provide manufacturing experience in years with product with specified material product formation substituted.	☐	☐	☐	☐
11	Provide certified product warranty equal or greater to what is required for this project.	☐	☐	☐	☐
12	Is a consultant required to integrate physical properties to compare material/product?	☐	☐	☐	☐
13	Will the Substitute Manufacturer provide colors matching color selection of listed manufacturers in Project Manual?	☐	☐	☐	☐

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

1. The undersigned will compensate the Architect, Architect's staff, and consulting engineers at Architect's rate per hour for changes required to the building design, including engineering design, detailing, and construction costs caused by the requested substitution. The Architect is herein defined as any of those firms or individuals listed by reference on the Directory, including all Consultants identified herein.
2. Attach all cost data with explanations if different from Specified or Drawing item. Include in that explanation a discussion on quality or proposed substitution and cost differential.
3. Attach all cost data with explanations if different from Specified or Drawing item. Include in that explanation a discussion on quality or proposed substitution and cost differential.
4. The undersigned will pay for any subsequent changes in incorporating the proposed substitution that were not apparent at the time of approval into the Work, including compensation to the Architect and consulting agent(s) as described in item 2 above.
5. The undersigned certifies that the substituted material/product/method is compatible with all the items in the system application's specified use in this project.
6. Failure to provide complete substitution package per above requirements are ground for rejection.

The undersigned states that the function, appearance and quality are equivalent or superior to the construction document item. The undersigned agrees to waive all claims for additional costs related to accepted substitution, including cost associated with changes to building design, engineering, or details, which may subsequently become apparent. (Negative response maybe cause for rejection.)

Submitted by: _____ Approved by General Contractor: _____
Signature

Signature: _____ Signed by: _____ Date: _____
Address: _____ Address: _____

Phone: _____ Fax: _____ Phone: _____ Fax: _____

ARCHITECT'S RESPONSE:

Substitution Request #: _____

Date: _____

Reviewed by: _____

☐ Accepted – Submit as construction submittal
☐ Accepted as noted – Submit as construction submittal
☐ Rejected – Use specified material
☐ Received too late – Use specified material

Remarks:

END OF SECTION 013300

SECTION 014000 - QUALITY CONTROL SERVICES

11/01/16

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 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. They do not include periodic surveillance activities performed by the Architect.

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.
   1. Inspections, test and related actions specified are not intended to limit the Contractor's quality control procedures that facilitate compliance with Contract Document requirements.
   2. Requirements for the Contractor to provide quality control services required by the Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
   3. Refer to Structural Test and Inspection requirements.
      a. Requirements at end of this Section for specific test required for this project.

D. Soil Testing: Inspection of subgrade improvement operations, compacted fill and field density.

E. Concrete Work: Testing and certification of concrete ingredients, compression cylinders, reinforcing steel and placement inspections.

F. Structural Steel: Sampling and testing of all unidentified steel members, inspection of structural fabrication, shop welding and field welding as required, testing and inspection of high strength bolts.

G. Related work specified elsewhere:
   1. Division 31 Section "Earthwork" for requirements and related earthwork testing.
   2. Division 3 Section "Cast-in-Place Concrete" for requirements and related concrete testing & inspection.
   3. Division 5 Section " Structural Steel" for requirements and related steel testing.
   4. Division 5 Section "Cold-Form Metal Framing" for requirements and related steel testing.

H. Drill-in (expansion and chemical adhesive) Anchors: Inspection of installation and tension testing.

1.3 COOPERATION

A. Laboratory shall cooperate with all trades whose work affects or is affected by the tests and inspections.

B. Cooperation: Contractor to cooperate with and provide testing laboratory opportunity and assistance in taking samples, making field tests and making inspections.

1.4 SPECIAL PROVISIONS

A. Governing Agency: Shall be as specified in Section 014300.

B. Laboratory: To be approved by Owner, Architect, Structural Engineer and DSA. Laboratory shall be in the employ of the Owner.

C. Duties of Testing Laboratory: Inspect stock, mark identified stock, select and mark test specimens, perform required tests, inspections as specified, furnish required reports and certificates.

D. Reports: To be executed immediately upon conclusion of each procedure and forwarded to:
Architect - Structural Engineer - Contractor - Owner - Subcontractor - Job Inspector - Governing Agency
1. The Division of the State Architect is the Governing Agency for this project, one copy of all test reports shall be forwarded to that Office by the testing agency. 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. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of Title 24 and 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.
2. Verification of Test Reports: Each testing agency shall submit to the Division of the State Architect a verified report in duplicate covering all of the tests which 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.

E. Payment: The Owner shall pay for all tests, except costs of concrete mix design. When, in the opinion of the Architect or the Division of the State Architect, additional tests are required, then such tests and inspection shall be paid for by the Owner but the amount paid shall be deducted from the Contract Price. Examples of such additional tests are: Tests of material substituted for previously accepted materials, unidentified materials, retests made necessary by the failure of materials to comply with the requirements of the specifications and load tests necessary because certain portions of the structure have not fully met specification or plan requirements.
1. Travel to Shop Fabrication Facility: Where fabrication facility is more than 200 driving miles one way, using AAA maps, from project site, Contractor shall pay for all excess mileage charges over 200 miles one way, subsistence, lodging and drive time of Owner's inspection and testing team to do testing and inspection at fabrication facility.
2. All testing and inspection work provided by Laboratory shall be done during normal working hours, (none premium). In the event over time and or premium time is required by the Laboratory, field and or laboratory time, due to contractor request and or contractor scheduling, all costs over normal time shall be paid by contractor. Laboratory shall identify costs as a separate invoice and all costs tracked for reimbursement to Owner by Contractor. Laboratory shall identify who approved premium costs and reason for each line item on invoice.

F. Selection of Samples: All samples and specimens for testing shall be selected by the inspector or by the testing laboratory, but not by the Contractor. The Contractor shall, at his own expense, furnish, package, mark and deliver all samples to be tested, when so directed by the inspector, testing laboratory, or as required by the Specifications. Delivery of samples to the testing laboratory shall be made in ample time to allow tests to be made without delaying construction. No extra time will be allowed for the completion of the work by reason of delay in testing samples. The Contractor shall allow free access at all times to the representatives of the testing laboratory to the sources from which samples are taken.

G. Preparation of Specimens: Taken by and at expense of fabricator under direction of testing laboratory and machined or prepared to conform to appropriate ASTM specification. Cost of machining specimens is considered part of the testing.

H. Architect and Structural Engineer reserve(s) the right to demand for test and special examination any

materials or part thereof to insure compliance with Specifications, and may reject for satisfactory replacement, any material or part judged defective as a result thereof. Applies also to materials or sources of the same substituted for those previously approved. Such tests or examinations, even though not specified, shall be performed as and when required. Costs paid for by Owner, but the amount paid shall be deducted from the Contract.

I. Owner's Right to Waive Tests and Inspections: The Owner reserves the right to waive any part or all of the tests and inspections, subject to the approval of the Architect, Structural Engineer and DSA in writing.

1.5 OWNER'S INSPECTOR OF RECORD (PROJECT INSPECTOR)

A. An inspector employed by the Owner and approved by DSA in accordance with the requirements of the State of California Code of Regulation, Title 24, Part 1, Administrative Code, will be assigned to the work. His duties are specifically defined in Sec 4-342.

B. The work of construction in all stages of progress shall be subject to the personal continuous observation of the inspector. He shall have free access to any or all parts of the work at any time. The Contractor shall furnish the inspector reasonable facilities for obtaining such information as may be necessary to keep him fully informed respecting the progress and manner of the work and the character of the materials. Inspection of the work shall not relieve the Contractor from any obligation to fulfill this Contract.

1. Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests and similar services and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required include but are not limited to:

a. Providing access to the Work and furnishing incidental labor and facilities necessary to facilitate inspections and tests.
b. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
c. Providing facilities for storage and curing of test samples.
d. Providing the agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.
e. Security and protection of samples and test equipment at the Project site.

2. One or more Inspectors, including specialty Inspectors as required, employed by Owner in accordance with the requirements of the California Code of Regulations will be assigned to the work. All work shall be performed under the observation of or with the knowledge of the Project Inspector. The Project Inspector shall have free access to all parts of the Work at any time. Contractor shall furnish the Project Inspector with such information as may be necessary to keep the Project Inspector fully informed regarding the progress and manner of work and the character of materials.
3. Observations by the Project Inspector shall not in any way relieve Contractor from responsibility for full compliance with all terms and conditions of the Contract Documents, or be construed to lessen to any degree Contractor’s responsibility for providing efficient and capable superintendence.

1.6 DUTIES OF THE TESTING AGENCY

A. The independent testing agency approved by DSA engaged to perform inspections, sampling and testing of materials and construction specified in individual Specification Sections shall cooperate with the Architect and Contractor in performance of its duties, and shall provide qualified personnel to perform required inspections and tests.

1. The agency shall notify the Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.

2. The agency is not authorized to release, revoke, alter or enlarge requirements of the Contract Documents, or approve or accept any portion of the Work.
3. The agency shall not perform any duties of the Contractor.

B. Coordination: The Contractor and each agency engaged to perform inspections; tests and similar services shall coordinate the sequence of activities to accommodate required services with a minimum of delay. In addition the Contractor and each agency shall coordinate activities to avoid the necessity of removing and replacing construction to accommodate inspections and tests.

1. The Contractor is responsible for scheduling times for inspections, tests, taking samples and similar activities during normal working hours, none premium time for Laboratory of Record including field, office and off site laboratory time.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

A. General: Upon completion of inspection, testing, sample-taking and similar services, repair damaged construction and restore substrates and finishes to eliminate deficiencies, including deficiencies in visual qualities of exposed finishes. Comply with Contract Document requirements for "Cutting and Patching."

B. Protect construction exposed by or for quality control service activities, and protect repaired construction.

C. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

3.2 CONCRETE WORK (REFER TO SECTION 033000)

A. Inspections:

1. Notification: The Contractor shall notify the following people, giving advance notice prior to commencing the designated work:

Person Notified	Advance Notice	Prior to Commencing	For Inspection
Architect/Project Inspector	24 hours	Form Work	Excavation
Architect/Project Inspector	48 hours	Pouring Conc.	Forms & Steel
Structural Engineer	7 days	Casting Concrete	Forms & Steel

2. No concrete shall be poured except in the presence of the Owner's Inspector and only after the forms and reinforcing steel have been approved by the Project Inspector. A record shall be kept on the site of the time and date of placing the concrete in each portion of the structure. Such record shall be kept until the completion of the structure and shall be open to the inspection of the enforcement agency.
3. Batch Plant Inspections: Batch plant inspections shall be per CBC Sec. 1704A.4.2 & 1704A.4.3. When transit mixed concrete is used, continuous inspection shall be maintained at the plant by a qualified concrete technician who shall issue tickets certifying that quantities and quality of all materials used in the concrete are in accordance with these specifications and the approved

design mix. The Owner will pay the costs of this inspection. This inspection will not be required for non-structural concrete (as defined in Paragraph (4) following).

4. Bonded Weighmaster Certificates: Non-structural concrete such as walks, curb and gutter, etc., shall not require continuous batch plant inspection, but instead, a bonded weighmaster shall furnish notarized affidavits certifying that quantities and quality of all materials used in the concrete are in accordance with these Specifications and the approved mix design. Comply with CBC 1916A and 1704A.4.3.

   a. Copies of Bonded Weighmaster Certificates shall be submitted to the Architect along with pay requests for work done. Payment will not be made on non-structural concrete items poured requiring Bonded Weighmaster Certificates without receipt of Certificates of items poured requesting payment.

B. Tests: All concrete materials to be tested and reported prior to any use of same.

1. Portland cement shall be tested in accordance with CBC, 1916A.1, 1704A.4.1 and ASTM C-150. The concrete supplier shall submit to the Architect, Structural Engineer, Project Inspector, Project Testing Laboratory and Division of State Architect certification of compliance based on required testing.
2. Aggregate: Shall be in conformance with CBC Sec. 1704A.4.1, 1903A.5, ACI 318, Section 3.3.2 and, where the source is determined to be questionable by the Structural Engineer or by DSA, shall be tested in accordance with ASTM C289. Test samples shall be obtained from the source for both coarse and fine aggregate; a minimum of one sample shall be retrieved and tested for each 200 Tons of aggregate to be used in the project concrete. A qualified Laboratory that is certified by the Cement and Concrete Reference Laboratory shall perform the testing.
3. Reinforcing Steel: To be tested prior to use for compliance with CBC Sections 1916A.2, 1704A.4.1 and ASTM A-615/706 requirements.

   a. Samples: To be selected by representative of testing laboratory from material at the building site or place of distribution, to consist of two (2) pieces, each eighteen inches (18") long of each size, furnished, cut and prepared for testing by Contractor, marked and delivered by representative of testing laboratory.
   b. Tests: One (1) tension and one (1) bend test shall be made of each size of reinforcing steel including wire fabric. One (1) series of tests shall be made for each ten (10) tons or fraction thereof of each size of reinforcing steel if the bundles, as delivered, can be identified as to heat number and the mill analysis, accompany the report. If they cannot be identified as to heat number, then one (1) series of tests shall be made from each two and one-half (2½) tons or fraction thereof.

4. Cylinder Tests shall comply with CBC Sec. 1905A.1 and 1905A.6.

   a. Four (4) cylinders of concrete shall be made for each fifty (50) cubic yards of each grade concrete, or not less than once for each 2000 sq.ft. of slab or fraction thereof, being placed each day. Each cylinder shall be dated, given a number, the point in the structure from which the sample was taken noted thereon, and the slump noted thereon. Comply with CBC 1905A.
   b. Test cylinders shall be made at the job and stored in the testing laboratory in accordance with ASTM C-31. At the end of twenty-four (24) hours after making, the cylinders shall be stored under moist curing conditions at approximately 70 degrees F. and maintained therein until tested. The cylinders shall be tested in accordance with CBC 1905A.6 and ASTM C-39. The cylinders shall develop the following minimum ultimate compressive strengths:

Design Strength	7-Day Test	28-Day Test

4000 p.s.i. 2400 p.s.i. 4000 p.s.i.

c. If the strengths of the first two cylinder tests are satisfactory, the third cylinder shall not be tested, but destroyed. The third cylinder shall be tested if the strengths of the first two cylinders are not satisfactory.
d. If the strength of the cylinders does not meet the minimum as mentioned above, core tests of the hardened concrete shall be made in accordance with CBC 1905A.6 and ASTM C-42. If the core tests show the concrete strength to be deficient, the concrete shall be deemed defective and removed. The Contractor shall reimburse all costs of these core tests with a negative Change Order.

C. Laboratory-Designed Mixes: See Paragraph 2.5, Proportioning and Design of Mixes, Section 033000 and CBC 1905A.2, 1905A.3 and 1905A.4.

3.3 FASTENERS (REFER TO SECTION 061000)

A. Expansion Anchors: (Refer to Section 061000)

Expansion Anchors: Expansion anchors shall only be used for equipment anchorage, sill trackbolting and non-structural applications. Expansion anchors shall be installed in accordance with the ICC ES Report for the specific product and T.24 Sec 1916A.8. Expansion anchors used for sill tracks and for non-structural applications shall have 50% of the bolts (alternate bolts in any group arrangement) proof tested in tension to twice the allowable tension load. If any failures occur, all anchors not previously tested shall be tested until 20 consecutive anchors pass the test requirements. For all other structural applications, test 100% of anchors.

1. All expansion anchors shall be proof tested in tension to the values on the construction documents.
2. Anchor diameter refers to the thread size for the WEDGE & SHELL categories and to the anchor outside diameter for the SLEEVE category.
3. Apply proof test loads to WEDGE & SLEEVE anchors without removing the nut if possible. If not, remove nut & install a threaded coupler to the same tightness of the original nut using a torque wrench apply load.
4. For SLEEVE/SHELL internally threaded categories, verify that the anchor is not prevented from withdrawing by a baseplate of other fixtures. If restraint is found, loosen and shim or remove fixture(s) prior to testing.
5. Reaction loads from test fixtures may be applied close to the anchor being tested, provided the anchor is not restrained from withdrawing by the fixture(s).
6. SHELL type anchors should be tested as follows:
   Visually inspect 25% for full expansion as evidenced by the location of the expansion plug in the anchor body. Plug location of a fully expanded anchor should be as recommended by the manufacturer, or, in the absence of such recommendation, as determined on the job site following the manufacturer's installation instructions, and; proof load 5% as indicated in the table above, but not less than three anchors per day for each different person or crew installing anchors, or; test 50% of the installed anchors per CBC Sec. 1916A.8.
7. Test equipment is to be calibrated by an approved testing laboratory in accordance with standard recognized procedures.
8. Torque test values for SHELL type anchors are omitted due to lack of data. Torque testing can occur on an individual basis when test procedures are submitted and approved by the enforcement agency. Tabulated values may be forthcoming once the enforcement agency has more data to evaluate the feasibility of standard torque values.
9. The following criteria apply for the acceptance of installed anchors:
   HYDRAULIC RAM METHOD: The anchor should have no observable movement at the applicable test load. For wedge and sleeve type anchors, a practical way to determine observable movement is that the washer under the nut becomes loose.

TORQUE WRENCH METHOD: The applicable test torque must be reached within the following limits;
Wedge or Sleeve type: One-half (1/2) turn of the nut.
One-quarter (1/4) turn of the nut for the 3/8 in. sleeve anchor only. If the anchor fails testing, test all anchors of the same category not previously tested until twenty (20) consecutive pass, then resume the initial testing frequency.

10. Testing should occur 24 hours minimum after installation of the subject anchors.

B. Adhesive Anchors (Refer to Section 061000)

1. Inspection: Special inspection, in accordance with the product's specific ICC –ES Report, is required for all adhesive anchors. Such inspection shall include but not be limited to verification of the following:

   a. Drill-bit compliance.
   b. Hole depth and cleanliness.
   c. Product description, including name.
   d. Rod diameter, length, embedment, material and condition.
   e. Adhesive shelf life not expired and packaging in good condition.
   f. Anchor installation in accordance with the manufacturer's published instructions, the ICC report, and the project drawings and specifications.
   g. Ambient temperature restrictions not exceeded.

2. Testing: All adhesive anchors, unless otherwise noted, shall be direct-tension tested to 200% of their allowable loads.

CONCRETE
CHAPTER 17A & 18A

MATERIALS:

1. PORTLAND CEMENT	1704A.4.1, 1916A.1
2. CONCRETE AGGREGATES	1704A.4.1, 1903A.1
3. REINFORCING BARS	1704A4.1, 1916A.2

QUALITY:

1. PROPORTIONS OF CONCRETE	1905A.2, 1905A.3, 1905A.4
2. STRENGTH TESTS OF CONCRETE	1905A.6,1905A.1.1
3. SPLITTING TENSILE TESTS	1905A

INSPECTION:

1. JOB SITE	1905A.7
2. BATCH PLANT	1704A.4.2
3. WAIVER OF BATCH PLANT INSPECTION	1704A.4.3
4. REINFORCING BAR WELDING	1903A.7, 1704A.3.1.3 & 1704A.3.1.4

END OF SECTION 014000

SECTION 014200 - REFERENCE STANDARDS AND DEFINITIONS 10/30/13

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 DEFINITIONS

A. General: Basic contract definitions are included in the Conditions of the Contract.

B. "Indicated": The term "indicated" refers to graphic representations, notes, or schedules on the Drawings; or to other paragraphs or schedules in the Specifications and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the user locate the reference. Location is not limited.

C. "Directed": Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed by the Architect, requested by the Architect, and similar phrases.

D. "Approved": The term "approved," when used in conjunction with the Architect's action on the Contractor's submittals, applications, and requests, is limited to the Architect's duties and responsibilities as stated in the Conditions of the Contract.

E. "Regulations": The term "regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.

F. "Furnish": The term "furnish" means to supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations. New items unless noted otherwise in technical section.

G. "Install": The term "install" describes operations at the Project site including the actual unloading, temporary storage at project site until required, unpacking, assembling, erecting, place secure and connect, anchoring, applying, working to dimension, furnish required appurtenances to complete installation, finishing, curing, protecting, cleaning, and similar operations.

H. "Provide": The term "provide" means to furnish and install, complete and ready for the intended use, including required appurtenances to make a complete operating system/installation.

I. "Installer": An installer is the Contractor or another entity engaged by the Contractor, either as an employee, subcontractor, or contractor of lower tier, to perform a particular construction activity, including installation, erection, application, or similar operations. Installers are required to be experienced in the operations they are engaged to perform.

1. The term "experienced," when used with the term "installer," means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with the special requirements indicated; and having complied with requirements of authorities having jurisdiction.
2. Trades: Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to

tradespersons of the corresponding generic name.

3. Assigning Specialists: Certain Sections of the Specifications require that specific construction activities shall be performed by specialists who are recognized experts in those operations. The specialists must be engaged for those activities, and their assignments are requirements over which the Contractor has no option. However, the ultimate responsibility for fulfilling contract requirements remains with the Contractor.

    a. This requirement shall not be interpreted to conflict with enforcing building codes and similar regulations governing the Work. It is also not intended to interfere with local trade-union jurisdictional settlements and similar conventions.

J. "Project site" is the space available to the Contractor for performing construction activities, either exclusively or in conjunction with others performing other work as part of the Project. The extent of the Project site is shown on the Drawings and may or may not be identical with the description of the land on which the Project is to be built.

K. "Testing Agencies": A testing agency is an independent entity engaged to perform specific inspections or tests, either at the Project site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

L. Nominal/Net: Nominal dimensions shall be industry standard dimensions--i.e., 2x4 shall be 1-1/2" x 3-1/2" actual dimensions. Plans will not indicate (") marks for nominal dimensions--i.e., 3"x6" and plans will indicate (") after each number which means actual net dimension required for member(s) indicated.

M. Section: Refers to a section of this project manual.

N. Standards: The issue in effect as of the date of the project manual and construction documents. In the event of a conflict between either, the more restrictive date will prevail.

1.3 SPECIFICATION FORMAT AND CONTENT EXPLANATION

A. Specification Format: These Specifications are organized into Divisions and Sections based on the 33-division format and CSI/CSC's "MasterFormat" numbering system.

B. Specification Content: These Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:

1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be interpolated as the sense requires. Singular words shall be interpreted as plural and plural words interpreted as singular where applicable as the context of the Contract Documents indicates.
2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by the Contractor. At certain locations in the Text, subjective language is used for clarity to describe responsibilities that must be fulfilled indirectly by the Contractor or by others when so noted.

    a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

1.4 INDUSTRY STANDARDS

A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

B. Publication Dates: Comply with the standards in effect as of the date of the Contract Documents.

C. Conflicting Requirements: Where compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different but apparently equal to the Architect for a decision before proceeding.

1. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of the requirements. Refer uncertainties to the Architect for a decision before proceeding.

D. Copies of Standards: Each entity engaged in construction on the Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

1. Where copies of standards are needed to perform a required construction activity, the Contractor shall obtain copies directly from the publication source and make them available on request.
2. Current standards shall be standard in effect as of date of project manual.

E. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where abbreviations and acronyms are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards-generating organization, authorities having jurisdiction, or other entity applicable to the context of the 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.

F. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. The following abbreviations and acronyms, as referenced in the Contract Documents, mean the associated names. Names and addresses are subject to change and are believed, but are not assured, to be accurate and up-to-date as of the date of the Contract Documents.

AA	Aluminum Association 900 19th St., NW, Suite 300 Washington, DC 20006	(202) 862-5100
AABC	Associated Air Balance Council 1518 K St., NW, Suite 503 Washington, DC 20005	(202) 737-0202
ACI	American Concrete Institute P.O. Box 9094 Farmington Hills, MI 48333	(810) 848-3700
ACPA	American Concrete Pipe Association 222 West Las Colinas Blvd., Suite 641 Irving, TX 75039-5423	(214) 506-7216

ADC	Air Diffusion Council 11 South LaSalle St., Suite 1400 Chicago, IL 60603	(312) 201-0101
AGA	American Gas Association 1515 Wilson Blvd. Arlington, VA 22209	(703) 841-8400
AI	Asphalt Institute Research Park Dr. P.O. Box 14052 Lexington, KY 40512-4052	(606) 288-4960
AIA	The American Institute of Architects 1735 New York Ave., NW Washington, DC 20006-5292	(202) 626-7300
AISC	American Institute of Steel Construction One East Wacker Dr., Suite 3100 Chicago, IL 60601-2001	(312) 670-2400
AITC	American Institute of Timber Construction 7012 S. Revere Pkwy, Suite 140 Englewood, CO 80112	(303) 792-9559
ANSI	American National Standards Institute 11 West 42nd St., 13th Floor New York, NY 10036-8002	(212) 642-4900
APA	APA-The Engineered Wood Association (Formerly American Plywood Association) P.O. Box 11700 Tacoma, WA 98411-0700	(206) 565-6600
ARA	American Registered Architects 305 E. 46th Street New York, NY 10017	(818) 995-6177
ARI	Air-Conditioning and Refrigeration Institute 4301 Fairfax Dr., Suite 425 Arlington, VA 22203	(703) 524-8800
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers 1791 Tullie Circle, NE Atlanta, GA 30329-2305	(800) 527-4723 (404) 636-8400
ASTM	American Society for Testing and Materials 100 Barr Harbor Dr. West Conshohocken, PA 19428-2959	(610) 832-9500
AWS	American Welding Society 550 LeJeune Rd., NW Miami, FL 33126	(305) 443-9353

BHMA	Builders Hardware Manufacturers Association 355 Lexington Ave., 17th Floor New York, NY 10017-6603	(212) 661-4261
CEC	California Electrical Code (Available from NFPA)	
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Rd. Schaumburg, IL 60195	(800) 465-2774
CTI	Ceramic Tile Institute of America 12061 West Jefferson Blvd. Culver City, CA 90230-6219	(310) 574-7800
DHI	Door and Hardware Institute 14170 Newbrook Dr. Chantilly, VA 22021-2223	(703) 222-2010
DSA	Division of the State Architect 1102 Q Street Suite 500 Sacramento, CA 95811	(916) 445-8100
DSA	Division of the State Architect 700 N. Alameda St. Suite 5-500 Los Angeles, CA 90012	(213) 897-0950 (SE) (213) 897-0744(AC) (213) 897-2891 (FLS)
DSA	Division of the State Architect 10920 Via Frontera Suite 300 San Diego, CA 92127	(858) 674-5435 (SE) (858) 674-5415 (AC) (858) 674-5439 (FLS)
EIMA	EIFS Industry Members Association 402 N. Fourth St., Suite 102 Yakima, WA 98901-2470	(509) 457-3500
FM	Factory Mutual 1151 Boston-Providence Tnpk. P.O. Box 9102 Norwood, MA 02062	(617) 762-4300
FS	Federal Specification Unit (Available from GSA) 470 East L'Enfant Plaza, SW, Suite 8100 Washington, DC 20407	(202) 755-0325
GA	Gypsum Association 810 First St., NE, Suite 510 Washington, DC 20002	(202) 289-5440
MFMA	Maple Flooring Manufacturers Association 60 Revere Drive Suite 500 Northbrook, IL 60062	(847) 480-9138
NECA	National Electrical Contractors Association 3 Bethesda Metro Center, Suite 1100	

	Bethesda, MD 20814-5372	(301) 657-3110
NFPA	National Fire Protection Association One Batterymarch Park P.O. Box 9101 Quincy, MA 02269-9101	 (617) 770-3000 (800) 344-3555
NRCA	National Roofing Contractors Association O'Hare International Center 10255 W. Higgins Rd., Suite 600 Rosemont, IL 60018-5607	 (847) 299-9070
OSHA	Occupational Safety and Health Administration (U.S. Department of Labor) 200 Constitution Ave., NW Washington, DC 20210	 (202) 219-8148
PCA	Portland Cement Association 5420 Old Orchard Rd. Skokie, IL 60077-1083	 (847) 966-6200
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association, Inc. 4201 Lafayette Center Dr. P.O. Box 221230 Chantilly, VA 22022-1209	 (703) 803-2980
SSPC	Steel Structures Painting Council 4400 Fifth Ave. Pittsburgh, PA 15213	 (412) 281-2331
TCNA	Tile Council of North America, Inc. 100 Clemson Research Blvd. Anderson, SC 29625	 (864) 646-8453
UL	Underwriters Laboratories Inc. 333 Pfingsten Rd. Northbrook, IL 60062	 (847) 272-8800
WCLIB	West Coast Lumber Inspection Bureau P.O. Box 23145 Portland, OR 97281-3145	 (503) 639-0651
WI	Woodwork Institute 3188 Industrial Blvd. West Sacramento, CA 95691	 (916) 372-9943

1.5 SUBMITTALS

A. Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 014200

SECTION 014300 - GOVERNING (REVIEWING AND APPROVING) AGENCY 11/01/16

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes, but is not limited to, the following:

1. DSA Reports.

1.3 GOVERNING (REVIEWING AND APPROVING) AGENCY

A. The Governing (Reviewing and Approving) Agency for this project shall be:

BAKERSFIELD CITY SCHOOL DISTRICT
AND DIVISION OF THE STATE ARCHITECT
STRUCTURAL SAFETY SECTION (DSA/SSS)
ACCESS COMPLIANCE (DSA/ACS)
FIRE LIFE SAFETY (DSA/FLS)

B. The Governing (Reviewing and Approving) Agency for offsite improvements:

CITY OF _BAKERSFIELD___

1.4 STATE LAWS AND REGULATIONS

A. The project shall be constructed under the complete jurisdiction of all laws of the State of California governing the construction of public buildings, to wit:

1. 2019 Title 24, Parts 1, 2, 3, 4, 5 & 9 of the California Code of Regulations.
2. All laws governing the employment of labor, qualifications for employment, posting of minimum wage rates, hours of work, employment of aliens, payment for employees, convict-made materials, domestic and foreign materials and accident prevention.
2. Public Health Code of California State Department, of Public Health.
3. Title 19 of the California Code of Regulations entitled “Public Safety”, Chapter 1, State Fire Marshal, Subchapter 1, “General Fire and Panic Safety”.
5. General Industrial Safety Orders: Each and every Contractor shall observe and conform to the provisions of Title 8, California Administrative Code bearing upon safe and proper use, construction, disposal, etc., of materials, machinery and building appurtenances as therein set forth.
6. Code Rules and Safety Orders: All work and materials shall be in full accordance with the latest rules and regulations of the State Fire Marshal; the safety orders of the Division of Industrial Safety, Department of Industrial Relations, and any State

Laws or Ordinances. Nothing in these plans and specifications is to be construed to permit work not conforming to these codes.

7. National Board of Fire Underwriters.
8. Occupational Health and Safety Act. (OSHA)

All of the above laws and regulations, through referral herein, are as much a part of the Contract as if they were incorporated in their entirety in this Section.

1.5 LAWS TO BE OBSERVED

A. The Contractor shall keep himself fully informed of all existing and future State and Federal laws and county and municipal ordinances and regulations which in any manner affect those engaged or employed in the Work, or the materials used in the Work, and of all such ordered and decrees of bodies or tribunals having any jurisdiction or authority over the Work. He shall at all times observe and comply with, and shall cause all his agents and employees to observe and comply with all existing and future laws, ordinances, regulations, orders and decrees of bodies or tribunals having any jurisdiction or authority over the Work.

Should the Contractor claim that additional cost is involved because of any change in the law, regulation, code or ordinance, he shall make a claim as provided herein.

1. Contractor shall be licensed and regulated by the Contractors' State License Board pursuant to Business and Professions Code S7000 et seq.
2. Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the Contract shall forthwith be physically amended to make such insertion or correction.
3. Contractor shall not be compensated for additional costs incurred due to changes in laws, regulation, code or ordinances made before date of project bid date, only those after bid date and approved by the Architect.

1.6 TESTS AND INSPECTIONS

A. Tests and Inspections shall be in accordance with Title 24 Part 1 & 2 and as specified herein.

B. The Architect or Structural Engineer in general responsible charge shall designate the testing of materials consistent with the needs of the project and shall issue specific instructions to the testing agency.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION 014300

SECTION 015000 - TEMPORARY FACILITIES

02/02/16

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

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

B. Temporary utilities required include but are not limited to:

1. Water service and distribution
2. Temporary electric power and light
3. Telephone service
4. Storm and sanitary sewer
5. Temporary fire alarm
6. Temporary security alarm

C. Temporary construction and support facilities required include but are not limited to:

1. Temporary heat
2. Field offices and storage sheds
3. Sanitary facilities, including drinking water
4. Dewatering facilities and drains
5. Temporary enclosures
6. Temporary HVAC - fresh air
7. Temporary Project identification signs and bulletin boards
8. Waste disposal services
9. Construction aids and miscellaneous services and facilities
10. Temporary access to occupied buildings
11. Temporary signs indicating building access during construction
12. Temporary roof and envelope of building
13. Temporary storage containers for Owner's use during construction
14. Storm water prevention measures
15. Temporary construction fence around buildings as required to secure and buildings and related work.
16. Temporary access ramps to building
17. Temporary access to buildings
18. Dust control measures

D. Security, protection and miscellaneous facilities required include but are not limited to:

1. Temporary fire protection
2. Barricades, warning signs, lights

3. Enclosure fence at buildings

4. Environmental protection
5. Enclosure fence at site work around each portion of site work
6. Temporary walls around rooms with Owner access during construction to keep Staff and students from entering construction area

E. Special Requirements:

1. Refer to section 011000 for HCP requirements and impacts on temporary measures and additional requirements.
2. Refer to Section 011000 for the following items that relate to the project:

a. Construction Activity Management Plans (SJVAPCD)
b. Dust Control Plan (SJVAPCD)
c. Storm Water Management Plan (State Water Resource Board)
d. Indirect Source Review Plan (SJVAPCD)

1.3 SUBMITTALS

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

1.4 QUALITY ASSURANCE

A. Regulations: Comply with industry standards and applicable laws and regulations if authorities having jurisdiction, including but not limited to:

1. California Building Code requirements – Chapter 33.
2. Health and safety regulations.
3. Utility company regulations.
4. Police, Fire Department and Rescue Squad rules.
5. Environmental protection regulations.
6. California State Accessibility standards, Title 24.
7. California Fire Code Chapters 5 & 14.

B. Standards: Comply with NFPA Code 241, "Building Construction and Demolition Operations", ANSI-A10 Series standards for "Safety Requirements for Construction and Demolition", and NECA Electrical Design Library "Temporary Electrical Facilities."

1. Refer to "Guidelines for Bid Conditions for Temporary Job Utilities and Services", prepared jointly by AGC and ASC, for industry recommendations.
2. Electrical Service: Comply with NEMA, NECA and UL standards and regulations for temporary electric service. Install service in compliance with California Electric Code

(CEC).

C. The Contractor shall maintain, at the site, one (1) copy of the California Building Code, Title 19 and Title 24 (parts 1-5 & 9) of the California Code of Regulations.

1.5 PROJECT CONDITIONS

A. Temporary Utilities: Prepare a schedule indicating dates for implementation and termination of each temporary utility. At the earliest feasible time, when acceptable to the Owner, change over from use of temporary service to use of the permanent service.

B. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to interfere with progress. Do not allow hazardous dangerous or unsanitary conditions, or public nuisances to develop or persist on the site.

C. Site Access: Shall be coordinated with the Director of Maintenance and Operations. All areas damaged by construction work shall be remedied to his satisfaction. Access by persons with disabilities shall be maintained during construction. Architect shall approve all temporary persons with disabilities access to project area prior to implementing any work.

D. Advertising Matter: No advertising matter of any kind will be allowed on any part of the work in the field unless approved by the Architect and the Owner. Contractor shall provide 36" x 48" bulletin board for required posted materials viewable by all workers.

E. Drawings and Specifications at the Site: The Contractor shall maintain at the site for the Owner one copy of all Drawings, Specifications, Addenda, Approved Shop Drawings, Change Orders and other modifications, in good order and marked to record all changes made during construction. These shall be available to the Architect. The Drawings, corrected to record all changes during construction, shall be delivered to him for the Owner upon completion of the Work. See also Project Closeout, Section.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General: Provide new materials; if acceptable to the Architect, undamaged previously used materials in serviceable condition may be used. Provide materials suitable for the use intended.

B. Lumber and Plywood: Comply with requirements in Division-6 Section "Rough Carpentry."

1. For signs and directory boards, provide exterior type, Grade B-B High Density Concrete Form Overlay Plywood conforming to PS-1, of sizes and thickness indicated.
2. For fences and vision barriers, provide exterior type, minimum 3/8" thick plywood.
3. For safety barriers, sidewalk bridges and similar uses, provide minimum 5/8" thick exterior plywood.

C. Paint: Comply with requirements of Division-9 Section "Painting."

1. For sign panels and applying graphics, provide exterior grade alkyd gloss enamel over exterior primer.

D. Tarpaulins: Provide waterproof, fire-resistant, UL labeled tarpaulins with flame-spread rating of 15 or less. For temporary enclosures provide translucent nylon reinforced laminated polyethylene or polyvinyl chloride fire retardant tarpaulins.

E. Water: Provide potable water approved by local health authorities.

F. Open-Mesh Metal Fencing: Provide 11-gage, galvanized 2-inch, chain link fabric fencing 6-feet high with galvanized wire top strand and galvanized steel pipe posts, 1-1/2" I.D. for line posts and 2-1/2" I.D. for corner posts.

G. Open-Mesh Plastic Fencing: Plastic 2-inch fabric fencing, 6 feet high with galvanized steel pipe post, 1-1/2" O.D. for line and corner post.

2.2 EQUIPMENT

A. General: Provide new equipment; if acceptable to the Architect, undamaged, previously used equipment in serviceable condition may be used. Provide equipment suitable for use intended.

B. Water Hoses: Provide 3/4" heavy-duty, abrasion-resistant, flexible rubber hoses 100 ft. long, with pressure rating greater than the maximum pressure of the water distribution system; provide adjustable shut-off nozzles at hose discharge.

C. Electrical Outlets: Provide properly configured NEMA polarized outlets to prevent insertion of 110-120 volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button and pilot light, for connection of power tools and equipment.

D. Electrical Power Cords: Provide grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords, if single lengths will not reach areas where construction activities are in progress.

E. Lamps and Light Fixtures: Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered glass enclosures, where exposed to breakage. Provide exterior fixtures where exposed to moisture.

F. Heating Units: Provide temporary heating units that have been tested and labeled by UL, FM or another recognized trade association related to the type of fuel being consumed.

G. Temporary Offices: The General Contractor shall provide and maintain during progress of the work a field office building for the Inspector. Each office shall be equipped with one window and one door. The Inspector’s office shall have a separate entrance to exterior. Inspector’s office shall be separated from Contractor’s office by full-height partition wall – STC 45.

1. Each office shall be provided with six (6) electric outlets, data outlets, complete with wiring, fluorescent lights 3 watts/sf, and HVAC all of which shall be connected to service. Project Inspector and Architect shall have use of water, computer/internet, telephone, copier, and fax at no charge for items related to this project. Contractor shall provide a minimum

10'x10' field office for this project for inspector and 10' x 20' minimum field office for Contractor staff and project meetings.

2. Furnish and equip offices as follows:

	General Contractor	Inspector
Telephone	2 (1 w/hands-free function)	1
Plan Table 96 x 36	2	1
4 Drawer Files	1	1
6 Shelf Bookcase	1	1
Desk	2	1
Meeting Table 96 x 36	1	
Chairs	8	3
Bottle Water/Cooler	1	
Copier – Plain Paper	1	
Fax Machine	1	
Telephone Answering Machine	1	1
Computer with internet access	1	
Printer	1	
Telephone lines	2	2

H. Temporary Toilet Units: Owner will provide self-contained single-occupant toilet units of the chemical, aerated recirculation, or combustion type, properly vented and fully enclosed with a glass fiber reinforced polyester shell or similar nonabsorbent material. Provide a ratio of one (1) toilet per ten (10) workers on job site, but not less than two (2) toilets.

I. First Aid Supplies: Comply with governing regulations.

J. 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, or a combination of extinguishers of CCR recommended classes for the exposures.

1. Comply with Title 19 CCR Division 1, Chapter 3 for classification, extinguishing agent and size required by location and class of fire exposure.

K. Temporary Storage Units: If applicable, Prime Contractor shall provide their own storage units, weathertight with locking doors, as coordinated with the Construction Manager.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Use qualified personnel for installation of temporary facilities. Locate facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.

B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required.

Do not remove until facilities are no longer needed, or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

A. General: Engage the appropriate local utility company to install temporary service or connect to existing service. Where the company provides only part of the service, provide the remainder with matching, compatible materials and equipment; comply with the company's recommendations.

1. Arrange with the company and existing users for a time when service can be interrupted, where necessary, to make connections for temporary services.
2. Provide adequate capacity at each stage of construction. Prior to temporary utility availability, provide trucked-in services.
3. Use Charges: Cost or use charges for temporary facilities are not chargeable to the Owner or Architect, and will not be accepted as a basis of claims for a Change Order.
4. The Contractor shall provide and pay for telephone services in the offices. The Architect, or his representative and inspector shall have unrestricted use of the phone for business purposes connected with this project.

B. Water Service: Owner will provide point of connection to existing water source for construction operations. Exercise measures to conserve water.

1. Fire access per CFC 1410.1.
2. Fire water service to be active prior to arrival of combustible materials on site per CFC Sections 501.4 and 1412.1.

C. Temporary Electric Power Service: Owner will provide point of connection to existing power source for construction operations. When defined in the Prime Contractor’s Work Scope Summary, Prime Contractor to provide weatherproof, grounded electric power service and distribution system of sufficient size, capacity, and power characteristics during construction period. Include transformers, overload protected disconnects, automatic ground-fault interrupters and main distribution switch gear.

1. Except where overhead service must be used, install electric power service underground.
2. Where existing electrical power is available, owner will pay for usage of electrical power on site for contractor’s use during period of construction. Contractor is responsible for all connection/disconnections and returning all items to original conditions.

D. Temporary Lighting: Whenever overhead floor or roof deck has been installed, provide temporary lighting with local switching and in accordance with the Prime Contractor Work Scope Summary.

1. Install and operate temporary lighting that will fulfill security and protection requirements, without operating the entire system, and will provide adequate illumination for construction operations and traffic conditions.

E. Computer Access: Provide computer with internet access and job site email account. Provide computer and printer.

3.3 TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES INSTALLATION

A. Locate field offices, storage sheds, sanitary facilities and other temporary construction and support facilities as directed by Architect.

1. Maintain temporary construction and support facilities until completion.

B. Temporary Heat: Provide temporary heat required by construction activities, for curing or drying of completed installations or protection of installed construction from adverse effects of low temperatures or high humidity. Select safe equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce the ambient condition required and minimize consumption of energy.

C. Heating Facilities: Except where use of the permanent system is authorized, provide vented self-contained LP gas heaters with individual space thermostatic control.

1. Use of gasoline-burning space heaters, open flame, or salamander type heating units is prohibited.

D. Field Offices for Prime Contractor: Submit requests for field office trailers to Construction Manager. If request is approved, provided field office with the following minimum requirements. 1) Keep the office clean and orderly; 2) Cost of use permits, occupancy permits and related fees, if any required by Governinig Authorities for temporary construction facilities, shall be paid by Prime Contractor; 3) Install no closer than 45 feet from project buildings in accordance with NFPA 241 4) Maintain facility until Project Completion and remove within one week of completion; 5) Provide property insurance and protection. .

E. Storage Sheds: Installation of storage sheds must be coordinated with Construction Manager, and sized, furnished and equipped to accommodate materials and equipment involved, including temporary utility service.

F. Toilets: Use of the Owner's existing toilet facilities will not be permitted.

G. De-watering Facilities and Drains: Maintain the site, excavations and construction free of water.

H. Temporary Enclosures: Provide temporary enclosure for protection of construction in progress and completed, from exposure, foul weather, other construction operations and similar activities.

1. Where heat is needed and the permanent building enclosure is not complete, provide temporary enclosures where there is no other provision for containment of heat. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.
2. Install tarpaulins securely, with incombustible wood framing and other materials. Close openings of 25 square feet or less with plywood or similar materials.
3. Close openings through floor or roof decks and horizontal surfaces with load-bearing wood-framed construction.
4. Where temporary wood or plywood enclosure exceeds 100 square feet in area, use UL-labeled fire-retardant treated material for framing and main sheathing.

5. Temporary enclosure where existing doors, glazing and frames are removed. Provide for Owner occupancy of these spaces where this work occurs.
6. Temporary roofing as required to preserve and protect work done and allow work to proceed without project being delayed.

I. Project Identification and Temporary Signs: Prepare project identification and other signs of the size indicated; install signs where indicated to inform the public and persons seeking entrance to the Project. Support on posts or framing of preservative treated wood or steel. Do not permit installation of unauthorized signs.

1. Project Identification Signs: By Owner
2. Temporary Signs: Prepare signs to provide directional information to construction personnel and visitors.

J. Collection and Disposal of Waste: Collect waste from construction areas and elsewhere daily. Comply with requirements of NFPA 241 for removal of combustible waste material and debris. Enforce requirements strictly. Do not hold materials more than 7 days during normal weather or 3 days when the temperature is expected to rise above 80 deg F (27 deg C). Handle hazardous, dangerous, or unsanitary waste materials separately from other waste by containerizing properly. Dispose of material in a lawful manner.

K. Refuse: Refuse barrels shall be provided for workmen's lunch boxes, papers and debris. All rubbish shall be removed from the premises.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Temporary Fire Protection: Until fire protection needs are supplied by permanent facilities, install and maintain temporary fire protection facilities of the types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 10 "Standard for Portable Fire Extinguishers," and NFPA 241 "Standard for Safeguarding Construction, Alterations and Demolition Operations." Comply with CFC Chapter 14 – Fire Safety during all phases of construction and demolition.

1. Locate fire extinguishers where convenient and effective for their intended purpose, but not less than one extinguisher per each 1000 square feet.
2. Store combustible materials in containers in fire-safe locations.
3. 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.
4. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of fire ignition.

B. Barricades, Warning Signs and Lights: Comply with standards and code requirements for erection of structurally adequate barricades. Paint with appropriate colors, graphics and warning signs to inform personnel and the public of the hazard being protected against. Where appropriate and needed provide lighting, including flashing red or amber lights. The Contractor shall provide, install and maintain for the duration of the work, as required, all lawful or necessary barricades and railings, lights, warning signs and signals, and shall take all other precautions as may be required to safeguard persons, the site and adjoining property, including improvements thereon, against injuries and damages of every nature whatsoever. The Contractor shall not obstruct required exitways of adjacent structures.

C. Enclosure Fence: When excavation begins, install an enclosure fence with lockable entrance gates. Locate where indicated, or enclose the entire site or the portion determined sufficient to accommodate construction operations. Install in a manner that will prevent people, dogs and other animals from easily entering the site, except by the entrance gates.

1. Provide open-mesh, chain-link fencing with posts set in a compacted mixture of gravel and earth.

D. Security Enclosure and Lockup: Install substantial temporary enclosure of partially completed areas of construction. Provide locking entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.

1. Storage: Where materials and equipment must be stored, and are of value or attractive for theft, provide a secure lockup. Enforce discipline in connection with the installation and release of material to minimize the opportunity for theft and vandalism.

E. Environmental Protection: Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations, and minimize the possibility that air, waterways and subsoil might be contaminated or polluted, or that other undesirable effects might result. Avoid use of tools and equipment, which produce harmful noise. Restrict use of noise making tools and equipment to hours that will minimize complaints from persons or firms near the site.

1. Dust Control: The Contractor shall exercise precautionary measures to minimize dust emissions which will include, but shall not be limited to, periodic sprinkling or wetting of the site, minimum of every day except as allowed by Architect. The Contractor has the option if using a dust palliative as specified in Caltrans 1981 Edition, Section 18.

    a. Fugitive dust shall be contained during earthwork activities by continuous sprinkling or wetting, as required, to bind soil to prevent fugitive dust. Roadways, walkways, construction areas and similar areas impacted by this project shall be maintained to prevent fugitive dust throughout the duration of project.
    b. All unpaved haul roads shall be watered a minimum of twice per day, not limited to project site.

2. Speed limit of vehicles on site shall not exceed 15 miles per hour and shall be under supervision of Contractor's Safety Representative, who shall evaluate field conditions and establish less speed as conditions change.
3. Storm Water Prevention: Provide a Storm Water Prevention Plan as required by the required governing agency. When applicable, provide a Storm Water Prevention Plan for all construction activities of this project. Submit to governing agency and comply with all agency requirements. Comply and provide all mitigation measures in the governing agency approved Storm Water Prevention Plan. Coordinate plan with required HCP measures.

F. Enclosure fence of construction areas outside Contractor's staging area/main working compound, where construction activity is beyond enclosure of construction area and duration of work in that area is 30 days or less, provide open-mesh plastic fencing with post and barricades. Fencing shall be maintained equal to enclosure fence above with gated access.

3.5 OPERATION, TERMINATION AND REMOVAL

A. Supervision: Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended uses to minimize waste and abuse.

B. Maintenance: Maintain facilities in good operating condition until removal. Protect from damage by freezing temperatures and similar elements.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour day basis where required to achieve indicated results and to avoid possibility of damage.
2. Protection: Prevent water filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

C. Environmental Condition: This project will be occupied during construction. The Contractor shall provide fresh air to construction space total 1500 cfm for work space. Temporary duct modifications shall be made to prevent discharge of construction air into occupied spaces and maintain HVAC to occupied spaces. HVAC at construction area shall have a negative balance to prevent infiltration of construction air into any occupied areas. Construction area shall be aired out for 96 hours continually after all construction is complete and no material will be added that will cause vapors. After being aired out Contractor shall refit changes made to occupied spaces during construction and re-balance system to engineer's requirements.

D. Termination and Removal: Unless the Architect requests that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities are property of the Contractor. The Owner reserves the right to take possession of Project identification signs.
2. At Substantial Completion, clean and renovate permanent facilities that have been used during the construction period, including but not limited to:

a. Replace air filters.
b. Replace significantly worn parts and parts that have been subject to unusual operating conditions. (Unusual conditions shall be defined as 10% of equipment life.)
c. Replace lamps that are burned out or noticeably dimmed by substantial hours of use (substantial shall be defined as 10% of bulb life of accepted industry average hours).

END OF SECTION 015000

SECTION 016000 - MATERIALS AND EQUIPMENT

11/01/16

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

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

B. The Contractor's Schedule of Submittals is included under Section "Submittals."

C. Standards: Refer to Section "Reference Standards and Definitions" for applicability of industry standards to products specified.

D. Related Sections:

1. Division 1 Section “Allowances” for products selected under an allowance.
2. Division 1 Section “Alternates” for products selected under an alternate.

1.3 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.

1.4 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. Initial Submittal: Within 14 days after date of Notice of Contract Award, submit 3 copies of an initial product list schedule. Provide a written explanation for omissions of data, and for variations from Contract requirements.

B. Architect's Action: The Architect will respond in writing to the Contractor within 21 days 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:

1. A list of unacceptable product selections, containing a brief explanation of reasons for this action.

C. Colors: Provide finish selections indicated in the Project Manual and Plans.

1. Acceptable Manufacturers: The products and manufacturer’s specified in the Project Manual and Plans are for purposes of establishing color and quality. Refer to each Specification Section for additional manufacturers and Project Manual Section “Submittals”.
2. Manufacturer’s Standard colors and Finishes: Where the Project Manual or Plans specifies a manufacturer’s standard color or finish, the Architect makes no guarantee that matching colors or finishes are available as other non-listed manufacturer’s “standard colors” from the listing of acceptable manufacturers. The Contractor shall be responsible for providing colors matching those indicated in the Project Manual of listed acceptable manufacturer in the Project Manual at no additional cost.
3. Custom Colors: Where the Finish Schedule Project Manual and or Plan indicates a specific manufacturer’s colors, other acceptable manufacturer shall provide matching custom colors where a standard color in not acceptable at no additional cost.
4. Substitutions: The Contractor will match the color and or finish available for the acceptable manufacturers listed in the Project Manual and/or Plans as a custom color and at no additional cost to the Owner.

1.5 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.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

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

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

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION

A. General Product Requirements: Provide products that 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.

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. Descriptive Specification Requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of a brand or trade name, provide a product or assembly that provides the characteristics and otherwise complies with Contract requirements.
2. 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.

3. Visual Matching: Where Specifications require matching an established Sample, the Architect's decision will be final on whether a proposed product matches satisfactorily.
4. 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.
5. Basis-of- Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturer(s), provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions and other characteristics that are based on the product named.
6. Products/Manufacturers:

a. Restricted list: Where specifications include a list of names of both/either manufacturers and products, provide one of the products listed that comply with requirements. Comparable products or substitutions for Contractor’s convenience will not be considered, unless otherwise indicated.

7. Sole Sourcing: The Owner has made a finding that in order to meet the project requirements and properly match a particular existing installation, installation in the course of completion and/or of an item of intellectual nature on campus that a sole source specification will be required for those specific item(s). The Owner has on file a list of proprietary products, vendors, campus standards and services to be contracted as sole source items as prescribed in Public Contract Code sections. The Owner reserves the right to sole source these items as prescribed herein.

PART 3 - EXECUTION

3.1 INSTALLATION OF PRODUCTS:

A. Comply with manufacturer's instructions and recommendations for installation of products in the applications indicated. Anchor each product securely in place, accurately located and aligned with other Work.

1. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of final acceptance.

END OF SECTION 016000

SECTION 017300 - CUTTING AND PATCHING

07/01/15

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for cutting and patching.

B. Refer to other Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.

1. Requirements of this Section apply to mechanical and electrical installations. Refer to Division-22, 23 and 26 Sections for other requirements and limitations applicable to cutting and patching mechanical and electrical installations.

C. Demolition of selected portions of the building for alterations is included in Division 2:
1. Division 2 Section "Selective Demolition" for building demolition and related work.

1.3 SUBMITTALS

A. Cutting and Patching: Submit a plan describing procedures well in advance of the time cutting and patching will be performed and request approval to proceed. Include the following information, as applicable, in the proposal:

1. Describe the extent of cutting and patching required and how it is to be performed; indicate why it cannot be avoided.
2. Describe anticipated results in terms of changes to existing construction; include changes to structural elements and operating components as well as changes in the building's appearance and other significant visual elements.
3. List products to be used and firms or entities that will perform Work.
4. Indicate dates when cutting and patching is to be performed.
5. List utilities that will be disturbed or affected, including those that will be relocated and those that will be temporarily out-of-service. Indicate how long service will be disrupted.

1.4 QUALITY ASSURANCE

A. Requirements for Structural Work: Do not cut and patch structural elements in a manner that would reduce their load-carrying capacity or load-deflection ratio.

1. Obtain approval of the cutting and patching proposal before cutting and patching the following structural elements. Any changes from Contract Documents of cutting and patching shall be approved by DSA.

a. Foundation construction.
b. Bearing and retaining walls.
c. Structural steel.

d. Timber and primary wood framing.
e. Structural decking.
f. Miscellaneous structural metals.
g. Exterior curtain wall construction.
h. Equipment supports.
i. Piping, ductwork, vessels and equipment.

B. Operational and Safety Limitations: Do not cut and patch operating elements or safety related components in a manner that would result in reducing their capacity to perform as intended, or result in increased maintenance, or decreased operational life or safety.

1. Obtain approval of cutting and patching before cutting and patching the following operating elements or safety related systems:

a. Shoring, bracing, and sheeting.
b. Primary operational systems and equipment.
c. Water, moisture, or vapor barriers.
d. Membranes and flashings.
e. Fire protection systems.
f. Control systems.
g. Communication systems.
h. Electrical wiring systems.
i. Security systems.

C. Visual Requirements: Do not cut and patch construction exposed on the exterior or in occupied spaces, in a manner that would, in the Architect's opinion, reduce the building's aesthetic qualities, or result in visual evidence of cutting and patching. Remove and replace Work cut and patched in a visually unsatisfactory manner.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 INSPECTION

A. Before cutting existing surfaces, examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed. Take corrective action before proceeding, if unsafe or unsatisfactory conditions are encountered.

1. Before proceeding, meet at the site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

3.2 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 the Project that might be exposed during cutting and patching operations.

C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

D. Take all precautions necessary to avoid cutting existing pipe, conduit or ductwork serving the building, but scheduled to be removed or relocated until provisions have been made to bypass them.

3.3 PERFORMANCE

A. General: Employ skilled workmen 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 activities and the subsequent fitting and patching required to restore surfaces to their original condition.

B. Cutting: Cut existing construction using methods least likely to damage elements to be retained or adjoining construction.

1. In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut holes and slots neatly to size required with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
2. To avoid marring existing finished surfaces, cut or drill from the exposed or finished side into concealed surfaces.
3. Cut through concrete and masonry using a cutting machine such as a carborundum saw or diamond core drill.
4. Comply with requirements of applicable Sections of Division-2 where cutting and patching requires excavating and backfilling.
5. By-pass utility services such as pipe or conduit, before cutting, where services are shown or required to be removed, relocated or abandoned. Cut-off pipe or conduit in walls or partitions to be removed. Cap, valve or plug and seal the remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after by-passing and cutting.
6. Cut limit to be determined by access requirements, backing location, support spacing and standard modules of finish material. Intent is to restore finish to unbroken appearance.
7. Bolts shall be cut to within 3/4" of nuts maximum at all threaded rods, hangers and similar applications. Architect shall confirm any exceptions to this requirement. Dress end of cut threads for removal/reinstallation. If bolts are galvanized, spray raw metal with galvalume touch up paint.

C. Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances, if none noted per standard of care of the industry.

1. Where feasible, inspect and test patched areas to demonstrate integrity of the installation.
2. 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. Where removal of walls or partitions extends one finished area into another, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color 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 smooth painted surface, extend final paint coat over entire unbroken item containing the patch, after the patched area has received primer and second coat.

3.4 CLEANING

A. Thoroughly clean areas and spaces where cutting and patching is performed or used as access. Remove completely paint, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied. Restore damaged pipe covering and other items to its original condition.

END OF SECTION 017300

SECTION 017700 - PROJECT CLOSEOUT

10/26/15

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 &1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements for project closeout, including but not limited to:

1. Project Completion and Acceptance
2. Inspection procedures.
3. Project record document submittal(s).
4. Operating and maintenance manual submittal(s).
5. Submittal of warranties.
6. Statement of extra materials delivered to Owner, accepted and signed by Owner
7. Training attendees form
8. Final cleaning.

B. Closeout requirements for specific construction activities are included in the appropriate Sections in Divisions 0 through 33.

C. See Division 1 Section "Governing Agency" for DSA Final Verified Reports to be filed.

1.3 PROJECT COMPLETION

A. Contractor shall notify the Construction Manager and Architect in writing when the project is acceptably completed; all work scope is done and ready for Project Inspector and Contractor to make a list of items to be corrected.

B. The Project Inspector and Contractor shall make a list of items to be corrected and finish any items discovered incomplete. These items shall be completed and corrected prior to Architect and Consultants preparing a Final Inspection and Punch List Preparation. Contractor shall notify Architect in writing when all items are completed and corrected as well as items completed and corrected from Project Inspector and Contractor list of items previously prepared.

C. Architect's field representatives (Architectural, Mechanical, Electrical, and other consultants) will make a field survey of the project to confirm that it has reached a state of completion, and items for "B" above have been done, in order to eliminate an unreasonably long Punch List on final inspection.

1. All items in scope of work have been completed and accepted by Contractor and Project Inspector.
2. All building systems are operational, tested and commissioned.
3. Cleaning of building, grounds and related items completed except when approved by architect in writing in advance of field survey. Contractor’s temporary measures

may be left in place until final demobilization but a condition on removal for final payment processing.

4. Contractor to provide a written status update of project closeout check list.

D. If not ready, the Architect will give the Contractor a written brief summary of what must be done for the project to be considered complete, enough for the Punch List preparation.

E. When, in the opinion of the Architect, the job is ready for the Punch List preparation, a Punch List of items requiring completion and/or correction will be prepared. (This Punch List will be made as specific and complete as possible, and will include the listing of all specified closing items required of the Contractor, such as Record Drawings, maintenance manuals, written guarantees, etc.) Any items observed or noted subsequent to Punch List preparation, shall also be corrected prior to re-inspection, unless the Architect determined, in writing, that any such items properly fall into the category of work to be corrected during the warranty/guarantee period.

1. Architect's Punch List preparation will be scheduled and respective contractors, sub-contractors and vendors shall be present during the Punch List inspection. Sub-Contractors, contractors and vendors will be required to show operational status of items in project scope of each respective discipline.
2. Mechanical, Electrical, and other consultants Punch List preparation will be scheduled and respective sub-contractor, contractors and vendors shall be present during the Punch List inspection. Sub-Contractors, contractors and vendors will be required to show operational status of items in project scope of each respective discipline.
3. All Punch List items shall be completed and/or corrected before Contractor calls for Punch List re-inspection.

    a. Architect shall be notified in writing by Contractor when all Punch List items are complete and project is ready for punch list back check by architect and consultants. Architect shall schedule punch list back check with contractor within 10 calendar days from receipt of written notice from Contractor.
    b. Architect will allow contractor two, (2), punch list back check visits of all items. Any additional site visits for items not completed and acceptable to Architect after second site visit will charged to the contractor as a negative change order for time spent by Architect to do re-inspections and office related work including reimbursable expenses incurred due to additional site visits.

1.4 PROJECT ACCEPTANCE AND NOTICE OF COMPLETION

A Notice of Completion will not be prepared nor moved forward for Owner approval until all of the following are complete:

1. Project Closeout 100% complete.
2. Punch list items 100% complete.
3. Record documents approved and delivered.
4. All warranties and guarantees have been delivered and accepted by Owner and Architect.
5. Training complete.
6. The contractor(s) final verified report is filed with the Division of State Architect of the Department of General Services.
7. OWNER is able to occupy all portions of the project as intended on Construction Documents.
8. Contractor in direct contract with the owner upon completion of work shall execute

certifications as follows:

a. Asbestos Certification shall be used for documentation of non-asbestos materials used in project.
b. PCB Certification shall be used for documentation of non-PCB materials used in project.
c. Lead Certification shall be used for documentation of non-lead materials used in project.
d. In-Service Certification Forms shall be used for all documentation of in-service activities. Copies of forms shall be included in maintenance and operation manuals.
e. Prevailing Wage Certification shall be used for conformation/certification that prevailing wage were paid for this project.
f. Affidavit of Payment of Debts and Claims and Release of Stop Notices shall be notarized and submitted as part of the project closeout requirement.
g. Extra Materials Receipt shall be signed by Owner.
h. Training Attendees Form shall be completed by Owner staff attendees and acknowledged by the Project Inspector.

B. Notice of Completion shall be prepared and approved by Owner prior to recording. The official project acceptance date shall be the date of Owner acceptance of the project and authorization to filing of the Notice of Completion. Owner shall record Notice of Completion within 10 days of acceptance of project as being complete. All warranties start dates will be Date of recordation of Notice of Completion.

C. The project shall be accepted by the Owner who shall authorize after acceptance of the project the subsequent filing of the Notice of Completion. The final payment shall be made forty-five (45) days from the date of recordation of the Notice of Completion, provided that: The Contractor shall furnish satisfactory evidence that all claims for labor and materials have been paid and that no claims shall have been presented to the Owner by any person or persons based upon any act or omission of the Contractor, and no Stop Notices or claims shall have been filed against said work or the property whereon it was done.

1. The Contractor in direct contract with the Owner must record and file with the Owner an Affidavit of Payment of Debts and Claims and Release of Stop Notices prior to request for project acceptance is considered by the Board of Trustees. By this document, the contractor hereby certifies that on date of document recordation, he/she has been paid in full less retainage for all materials and equipment furnished, for all labor and services performed, and for all known indebtedness and claims against the undersigned for damages arising in any manner on or against the Project, its land, improvements, and equipment of any kind.
2. All others not limited to sub-contractors, lower tier contractors, suppliers, vendors and others providing services, materials, equipment and related items must record their liens and serve owner stop notice within thirty (30) days of the date the Notice of Completion is recorded to place and person indicated in project manual herein. (Civil Code §3116).

1.5 RECORD DOCUMENT SUBMITTALS

A. General: Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Architect's reference during normal working hours.

B. Record Drawings: Maintain a clean, undamaged set of black line white-prints of Contract

Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.

1. Mark record sets utilizing Bluebeam Revu. As indicated in the Contract Documents, the Construction Manager will create a Bluebeam Revu session and invite each Prime Contractor for the purposes of updated record drawings.
2. Mark new information that is important to the Owner, but was not shown on Contract Drawings or Shop Drawings.
3. Note related Change Order numbers where applicable.
4. Submit one copy of record drawing for Architect's review.

    a. Show all underground utility locations and routings by horizontal and vertical dimensions.
    b. Show all overhead utility locations and routings by horizontal and vertical dimensions.
    c. Clearly indicate at each affected detail and other Drawings a full description of changes made during construction. Call attention to each entry by drawing a "cloud" around the area(s) affected.

5. Once reviewed and approved by the Architect, organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set. Provide Owner with one (1) full size, full color hard copy print set and one (1) complete full size, full color PDF via Bluebeam on a USB flash drive.

C. Record Product Data: Maintain one copy of each Product Data submittal. Mark these documents to show significant variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site, and from the manufacturer's installation instructions and recommendations. Give particular attention to concealed products and portions of the Work which cannot otherwise be readily discerned later by direct observation. Note related Change Orders and mark-up of record drawings and Specifications.

1. Upon completion of mark-up, submit one complete set of record Product Data to the Architect for the Owner's records.

D. Record Sample Submitted: Immediately prior to the date or dates of Substantial Completion, the Contractor will meet at the site with the Architect and the Owner's personnel to determine which of the submitted Samples that have been maintained during progress of the Work are to be transmitted to the Owner for record purposes. Comply with delivery to the Owner's Sample storage area.

E. Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record-keeping and submittals in connection with actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Architect for the Owner's records.

1.6 PROJECT CLOSEOUT BINDER(S) SUBMITTAL

A. Submit requirements per project manual section(s) one copy original wet signature documents in a binder(s) and one (1) copy of complete closeout document data on flash drives. See Project Closeout form at the end of this section for additional requirements. Note that this form shall be updated with additional materials and sections once Contractor starts submitting closeout documents to include issued addenda, RFPs, FCDs and other items added in the bid document during construction. All required number of years for warranty shall be provided by the Contractor. In the event this conflicts with manufacturer's warrant, more restrictive will prevail. If manufacturer will not meet requirements, Contractor shall take full responsibility for additional warranty requirement above what manufacturer will provide.

1. Binder(s)

   a. Part 1 - Technical Sections

      1) Organize sections items per CSI Format descending order.

   b. Part 2 - General Requirement items

      1) Tab in order per project list herein at end of this section.

2. Binder(s) shall have cover sheet inserted in front face and side label. Cover sheet shall have the following information:

   a. Project name
   b. College name
   c. Date of Notice of Completion
   d. Labeled "Part 1", in the event of multiple binders for a Part, add volume number and list sub-binders on title sheet with name of each specific binder.
   e. General Contractor's name.
   f. Index of items in binder.

3. Labeled divider tabs shall be provided for each section as listed on index on cover.
4. Each applicable section will have the following documents in order:

   a. Subcontractor's Warranty
   b. Product data
   c. Manufacturer's warranty

      1) Each installed equipment, especially for Divisions 21, 22, 23 and 26, shall have warranties from manufacturers with project name stated in the certificate. All forms submitted to the manufacturers to secure warranty shall be enclosed as part of project closeout.

   d. Proposal for continuing services and/or post construction inspection dates – if applicable
   e. Tests/ reports/ certifications/ agreement between Contractor/ Manufacturer/ Subcontractor to repair and replace
   f. Shop drawings
   g. Cleaning data
   h. Receipt of extra material acceptance by the M & O director – see form at the end of section

i. Training attendees' form – see form at the end of section
j. Other document required:

1) Maintenance data
2) Emergency Instructions
3) Spare parts lists
4) Wiring diagram
5) Inspection procedure
6) Recommended "turn around cycles"
7) Lubricants, special tools
8) Control sequences
9) Hazards
10) Fixture lamping schedule
11) Proof of training for equipment operation with list of attendees from College staff

C. Submit general requirements in another binder.

1. Binder shall have a cover sheet and side label. Cover shall have the following information:

a. Project name
b. College name
c. Date of Notice of Completion
d. Labeled "Part 2"
e. General Contractor's name

2. Binder shall have table of contents. This binder will contain the following:

a. Demobilization information with General Contractor's Letterhead and signed by Project Manager.

1) Indicate dated for the following information:

a) Removal of temporary office
b) Removal of temporary fence barricades
c) Disconnect/safing temporary utilities
d) Repair temporary staging to pre-construction or specified condition
e) Removal of temporary toilets
f) Removal of miscellaneous construction debris/ excess materials
g) Removal of project sign, deliver to Owner if requested
h) Removal of miscellaneous project signs
i) Removal of trash dumpster

b. Instructions for Operating equipment signed off by College Staff (see Project Closeout form) with General Contractor's Letterhead and signed by Project Manager.
c. Certification of no asbestos used or substituted
d. Certification of no lead containing products used or substituted
e. Certification of no PCB containing products used or substituted
f. Certification of substitutions made on project, if none state so

g. All substitution products shall be listed and shall indicate substitution number and date approved by the Architect.
h. Notarized affidavit of payment of debts and claims and release of stop notices
i. Prevailing wage reports/ documents
j. Verified DSA report
k. Consent of surety to final payment
l. Statement of final liquidated damages settlement
m. Final utility meter readings signed by Project Inspector

1.7 PROJECT CLOSEOUT NOTIFICATION, SURETY NOTIFICATION

A. If requested in writing, the contractor will be given a project Close-out check list of items to be completed prior to project being accepted as complete. Contractor shall start project closeout no later than 90% completion of project and be complete prior to project punch list preparation/walk. This is contractor's first notice. Notice of Completion will not be filled until project closeout is complete.

B. The contractor will be given a 20 calendar day notification that the project closeout is incomplete and notification that owner will complete project closeout work incomplete and assess contractor additional architectural and engineering fees incurred completing work not complete and per construction documents. Copy will be sent to surety.

C. The contractor will be given a final 10-day notice to complete all project closeout items. The estimated amount of costs will be indicated therein that the owner will be spending for completing the project closeout. Items done by the owner and additional architect's fees will be deducted from funds due contractor. Copy will be sent to surety.

D. If project closeout is not complete after deadline in Item "C" above, the notice of completion will be filed listing incomplete items. Owner will complete project closeout and deduct cost incurred from funds held. Balance of funds will be distributed per Contract Documents. Surety will be notified of actions taken.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 CLOSEOUT PROCEDURES

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

1. Maintenance manuals.
2. Record documents.
3. Spare parts and materials.
4. Tools.
5. Lubricants.
6. Fuels.
7. Identification systems.

8. Control sequences.
9. Hazards.
10. Cleaning.
11. Warranties and bonds.
12. Maintenance agreements and similar continuing commitments.

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

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

3.2 FINAL CLEANING

A. General: General cleaning during construction is required by the General Conditions and included in Section "Temporary Facilities".

B. Cleaning: As defined in the Prime Contractor's Work Scope Summary, Prime Contractor shall employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, commercial building cleaning and maintenance program. Comply with manufacturer's instructions.

1. Complete the following cleaning operations before requesting inspection for Certification of Notice of Completion.

a. Remove labels that are not permanent labels.
b. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compound and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
c. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films and similar foreign substances. Restore reflective surfaces to their original reflective condition. Leave concrete floors broom clean. Vacuum carpeted surfaces.
d. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.
e. Clean the site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.

C. Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction.

D. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner.

3.3 FORMS

A. In-Service Certification Forms shall be used for all documentation of in-service activities. Copies of forms shall be included in maintenance and operation manuals.

B. Asbestos Certification shall be used for documentation of non-asbestos materials used in project.

C. PCB Certification shall be used for documentation of non-PCB materials used in project.

D. Lead Certification shall be used for documentation of non-lead materials used in project.

E. Prevailing Wage Certification shall be used for conformation/certification that prevailing wage were paid for this project.

F. Affidavit of Payment of Debts and Claims and Release of Stop Notices shall be notarized and submitted as part of the project closeout requirement.

G. Project Closeout Liquidated Damages Contract Sum-Days Calculation shall be used for liquidated damages computation.

H. Extra Materials Receipt shall be used for documentation of extra materials required by construction document; to be submitted to College M&O Director.

I. Training Attendees Form shall be used for documentation of College staff that participated in the training scheduled and coordinated by the Contractor.

END OF SECTION 017700

SECTION 017800 - WARRANTIES AND BONDS 10/26/15

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division 0 & 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.

1. Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials.
2. General closeout requirements are included in Section "Project Closeout."
3. Specific requirements for warranties for the Work and products and installations that are specified to be warranted, are included in the individual Sections of Divisions 2 through 33.
4. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
5. Items that are omitted and/or different than specified/indicated herein and on Construction Documents and items not indicated as a change on Submittals, shall be warrantied as required in Sections 006002 and 013300.

B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

C. Notwithstanding any tests, approvals, certificates, commissioning, inspection or otherwise by the Owner, Architect or any other consultant employed by or on behalf of the employer, the Contractor shall be and remain fully and exclusively responsible and liable for ensuring that his works, and all goods and materials therein are in every respect and detail in accordance with the Contract Documents, and no such tests, approval certificates, commissioning, inspection or otherwise shall in any way diminish or negate the Contractor's responsibility or liability as foresaid.

1.3 WARRANTY REQUIREMENTS

A. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.

B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.

D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall

not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.

1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.

E. The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

1.4 SUBMITTALS

A. Submit written warranties to the Architect prior to the date certified for Notice of Completion. If the Architect's Certificate of Notice of Completion designates a commencement date for warranties other than the date of Notice of Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Architect.

1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Architect within fifteen days of completion of that designated portion of the Work.

B. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner through the Architect for approval prior to final execution.

1. Refer to individual Sections of Divisions 2 through 33 for specific content requirements, and particular requirements for submittal of special warranties.

C. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2" by 11" paper.

1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.
2. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS, the Project title or name, and the name of the Contractor.
3. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

PART 2 - PRODUCTS (Not Applicable).

PART 3 – EXECUTION

3.1 FORMS

A. Project Warranty Form, see attached.

B. Subcontractor Warranty Form, see attached.

END OF SECTION 017800

PROJECT WARRANTY

Project: XX
XX College
Owner: XX Community College District
Architect: AP Architects
Contractor:
Inspector:

Date:
File No:
Project No:
DSA Appl No:

_____(Contractor) hereby warrants to the Owner that materials and equipment furnished under the Contract in the _____ (Name of Project) are of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work is free from defects not inherent in the quality required or permitted, and that the Work conforms with the requirements of the Contract Documents. Work not conforming to these requirements, including substitution not properly approved and authorized, may be considered defective. This warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage.

If, within ___ year(s) after the date of Notice of Completion of the Work or designated portion thereof, or by terms of an applicable special warranty required by the Contract Documents extending this time period, and of the Work is found to be not in accordance with the requirements of the Contract Documents or proves to be defective in materials or workmanship, the Contractor expressly agrees to correct it, without expense to the Owner, promptly after receipt of written notice from the Owner or his agent to do so unless the Owner has previously given the Contractor written acceptance of the condition. This period of ____ year(s) shall be extended with respect to portions of the Work first performed after Notice of Completion by the period of time between Notice of Completion and the actual performance of Work. This obligation of the Contractor to correct the Work shall survive acceptance of the Work under the Contract and termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.

Nothing contained in this warranty shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the time period of ___ year(s), or special extended time periods required by the Contract Documents, for correction of the Work as described above relates only to the specific obligation of the Contractor to correct the work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

In the event of the Contractor's failure to comply with the conditions of this warranty within 5 days after being notified in writing by the Owner or his agent, the Contractor hereby authorizes the Owner to proceed to have said defects repaired and made good at the Contractor's expense and the Contractor will honor and pay the costs and charges therefore upon demand.

The term "Work" means the construction and services required by the Contract Documents and includes all other labor, materials, equipment and services provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or part of the total construction performed under the Contract Documents.

Date _____

_____
Contractor

_____
Address

_____

_____
Telephone

_____
Signature of Contractor

_____
Title

SUBCONTRACTOR WARRANTY

Project: XX
XX College
Owner: XX Community College District
Architect: AP Architects
Contractor:
Inspector:

Date:
File No:
Project No:
DSA Appl No:

_____ (Subcontractor) hereby warrants to _____ (General Contractor) that materials and equipment furnished under the Contract, pursuant to Specifications Section(s) _____ in the _____ (Name of Project) are of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work is free from defects not inherent in the quality required or permitted, and that the Work conforms with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. This warranty excludes remedy or damage or defect caused by abuse, modifications not executed by the Subcontractor, improper or insufficient maintenance, improper operation, or normal wear and tear under normal usage.

If, within __ year(s) after the date of Notice of Completion of the Work or designated portion thereof, or by terms of an applicable special warranty required by the Contract Documents extending this time period, and of the Work is found to be not in accordance with the requirements of the Contract Documents or proves to be defective in materials or workmanship, the Subcontractor expressly agrees to correct it, without expense to the Owner, promptly after receipt of written notice from the Contractor to do so unless the Owner has previously given the Contractor written acceptance of the condition. This period of __ year (s) shall be extended with respect to portions of the Work first performed after Notice of Completion by the period of time between Notice of Completion and the actual performance of Work. This obligation of the Subcontractor to correct the Work shall survive acceptance of the Work under the Contract and termination of the Contract. The Contractor shall give such notice promptly after discovery of the condition.

Nothing contained in this warranty shall be construed to establish a period of limitation with respect to other obligations which the Subcontractor might have under the Contract Documents. Establishment of the time period of __ year(s), or special extended time periods required by the Contract Documents, for correction of the Work as described above relates only to the specific obligation of the Subcontractor to correct the work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Subcontractor's liability with respect to the Subcontractor's obligations other than specifically to correct the Work.

In the event of the Subcontractor's failure to comply with the conditions of this warranty within 5 days after being notified in writing by the Contractor, the Subcontractor, hereby authorizes the Contractor to proceed to have said defects repaired and made good at the Subcontractor's expense and the Subcontractor will honor and pay the costs and charges therefore upon demand.

The term "Work" means the construction and services required by the Contract Documents and includes all other labor, materials, equipment and services provided by the Subcontractor to fulfill the Subcontractor's obligations. The Work may constitute the whole or part of the total construction performed under the Contract Documents.

Date _____

_____
Contractor

_____
Address
_____

_____
Telephone

_____
Signature of Contractor

_____
Title

SECTION 018000 – CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING 04/11/16

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 0 &1 Specification Sections, apply to this Section.

1. Standard details and requirements per jurisdiction requirements, not limited to herein.

1.2 SUMMARY

A. This Section includes, but not limited to, construction waste diversion and related items.

1. Establish a Construction Waste Management (CWM) plan for the diverted materials, or meet local construction and demolition waste management ordinance, whichever is more stringent.
2. Construction Waste Management (CWM) worksheet(s).
3. Construction Waste Management (CWM) acknowledgement.
4. Miscellaneous and related forms as required by local jurisdiction and Owner.

B. Related Sections: The following Sections contain requirements that relate to this Section:

1. Division 1 Section “Project Closeout” for required closeout documents.
2. Division 2 Section “Selective Demolition” for related items.

1.3 SUBMITTAL

A. General: Submit for approval prior to initial pay application submission the following in accordance with Conditions of Contract and Division 1 Specification Sections.

1. Construction Waste Management Plan.
2. Construction Waste Management Worksheet(s).
3. Construction Waste Management Acknowledgement.
4. Copies of all applications, permits and related requirements, not limited to, herein and local jurisdiction requirements.
5. Project Closeout Requirements:

a. Copies of all completed forms required herein
b. Compilation of Construction Waste Management (CWM) worksheet(s).
c. Receipts to document diversion.

1.4 QUALITY ASSURANCE

A. Codes and Standards: Comply with provisions of following codes, specifications, and standards, except where more stringent requirements are shown or specified:

1. Title 24, Part 1 CCR 2013, Chapter 5 (California Green Building Standard Code)

B. Refer to Division 2 Section "Selective Demolition", for additional requirements.

B. Refer to Division 2 Section “Building Demolition” for additional requirements.

PART 2 – PRODUCTS (NOT APPLICABLE)

PART 3 – EXECUTION

3.1 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

A. Construction waste diversion. Establish a construction waste management plan for the diverted materials, or meet local construction and demolition waste management ordinance, whichever is more stringent.

B. Construction waste management plan (CWMP). Where a local jurisdiction does not have a construction and demolition waste management ordinance, submit a construction waste management plan for approval by the District that:

1. Identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project or salvage for future use or sale.
2. Determine if materials will be sorted on-site or mixed.
3. Identifies diversion facilities where materials collected will be taken.
4. Specifies that the amount of materials diverted shall be calculated by weight or by volume, but not both.
5. See sample forms at end of section.

C. Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with herein. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the District and Architect.

D. Construction waste reduction of at least 65 percent. Recycle and/ or salvage for reuse a minimum of 65 percent of the non- hazardous construction and demolition debris, or meet a local construction and demolition waste management ordinance, whichever is more stringent. Calculate the amount of materials diverted by weight or volume, but not both.

Exceptions:

1. Excavated soil and land-clearing debris.

E. Excavated soil and land clearing debris. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed, if approved by the District and Architect within 30 days of Notice to Proceed.

3.2 DISPOSAL OF WASTE/ DEMOLISHED MATERIALS

A. Remove from building site debris, rubbish, and other materials resulting from demolition operations. Transport and legally disposed off site per Construction Waste Management Plan.

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.

B. Demolition Permits and Disposal Requirements (Sample forms at end section):

1. The District requires diversion of 65% of discarded materials from landfills, reusing for compliance with AB 939 goals. Contractor shall secure a demolition permit with local jurisdiction as prescribed in Section 002113 “Instructions to Bidders”. The following

requirements are:

a. Prepare Construction Waste Management Plan.
b. Provide for all Contractor, subcontractor, vendor, workers a Construction Waste Management Acknowledgement. Keep files at project site. Provide copies for Project Closeout.
c. Complete Construction and Demolition Recycling Program Application as required by local jurisdiction. Verify requirements prior to bidding.
d. Inform all sub-contractors, vendors and employees about the recycling requirements, as Contractor will be held responsible for any materials they take away from the job site. Document acknowledgement with Construction Waste Management Acknowledgement Report. In order for Contractor to comply with recycling requirements, vendors, employees and subcontractors must take materials to an approved disposal/ recycling site and keep copies of disposal tickets for diversion rate.

    1. Track waste by weight or volume, but not both.

e. Compliance: District will not accept project until it is determined that the Construction and Demolition waste/disposal has fully complied with the diversion requirements and recycling guidelines.
f. Non-Compliance: If the Contractor fails to adhere to the Construction and Demolition Recycling Plan, the applicant will not receive project acceptance.
g. Contractor shall complete a Construction Waste Management Worksheet for documenting compliance with the Waste Management Plan after completion of project, as a precedent to project acceptance.

B. Demolition Permits and Disposal Requirements:

1. The local jurisdiction requires diversion of 65% of discarded materials from landfills, reusing for compliance with AB 939 goals. Contractor shall secure a demolition permit as prescribed in Section 002113 “Instructions to Bidders”. The following requirements are:

    a. Complete Construction and Demolition Recycling Program Application.
    b. The franchise hauler Mid Valley Disposal shall be the exclusive service provider for roll-off service and shall transport the Construction and Demolition material to their transfer station located at 15300W. Jensen Avenue, Kerman, California, for all projects that require a permit to build or deconstruct to spate material and divert a minimum of sixty-five percent (65%) of Construction and Demolition material form projects. Inform all sub-contractors, vendors and employees about the recycling requirements, as Contractor will be held responsible for any materials they take away from the job site. In order for Contractor to comply with recycling requirements, vendors, employees and subcontractors must take materials to Mid Valley Disposal and keep copies of weight tickets for diversion rate.
    c. Compliance: If the local entity determines that the Construction and Demolition has fully complied with the diversion requirements and recycling guidelines, the local entity will provide final inspection and/or certificate of occupancy.
    d. Non-Compliance: If the Contractor fails to adhere to the Construction and Demolition Recycling Plan, the applicant will not receive final inspection and/or certificate of occupancy.
    e. Contractor shall complete a Waste Reduction and Recycling Report (WRRR) after completion of project, as a precedent to final inspection and/or issuance of any certificate of occupancy is approved by local entity.

END OF SECTION 018000

CONSTRUCTION WASTE MANAGEMENT (CWM) PLAN

Note: This sample form may be used to assist in documenting compliance with the waste management plan.

Project Name: _____
Job #: _____
Project Manager: _____
Waste Hauling Company: _____
Contact Name: _____

All Subcontractors shall comply with the project's Construction Waste Management Plan.
All Subcontractor foremen shall sign the CWM Plan Acknowledgement Sheet.

Subcontractors who fail to comply with the Waste Management Plan will be subject to backcharges or withholding of payment, as deemed appropriate. For instance, Subcontractors who contaminate debris boxes that have been designed for a single material type will be subject to backcharge or withheld payment, as deemed appropriate.

1. The project's overall rate of waste diversion will be _____ %.
2. This project shall generate the least amount of waste possible by planning and ordering carefully, following all proper storage and handling procedure to reduce broken and damaged material and reusing materials whenever possible. The majority of the waste that is generated on this jobsite will be diverted from the landfill and recycled for other use.
3. Spreadsheet 1, enclosed, identifies the waste materials that will be generated on this project, the diversion strategy for each waste type and the anticipated diversion rate.
4. Waste prevention and recycling activities will be discussed at the beginning of weekly subcontractor meetings. As each new subcontractor comes on-site, the WMP Coordinator will present him/her with a copy of the CWM Plan and provide a tour of the jobsite to identify materials to be salvaged and the procedure for handling jobsite debris. All Subcontractor foremen will acknowledge in writing that they have read and will abide by the CWM Plan. Subcontractor Acknowledgement Sheet enclosed. The CWM Plan will be posted at the jobsite trailer.
5. Salvage: Excess materials that cannot be used in the project, nor returned to the vendor, will be offered to site workers, the owner, or donated to charity if feasible.
6. _____ [HAULING COMPANY] will provide a commingled drop box at the jobsite for most of the construction waste. These commingled drop boxes will be taken to [Sorting Facility Name and Location]. The average diversion for commingled waste will be _____%. As site conditions permit, additional drop boxes will be used for particular phases of construction (e.g. concrete and wood waste) tp ensure the highest waste diversion rate possible.
7. In the event that the waste diversion rate achievable via the strategy described in (6) above, is projected to be lower than what is required, then a strategy of source-separated waste diversion and/or waste stream reduction will be implemented. Source separated waste refers to jobsite waste that is not commingled but is instead allocated to a debris box designated for a single material type, such as clean wood or metal.
   Notes:
   a. Waste stream reduction refers to efforts taken by the builder to reduce the amount of waste generated by the project to below four (4) pounds per square foot of building area.
   b. When using waste stream reduction measures, the gross weight of the product is subtracted from the base weight of four (4) pounds per square foot of building area. This reduction is considered additional diversion and can be used in the waste reduction percentage calculations.
8. _____[HAULING COMPANY] will track and calculate the quantity (in tons) of all waste leaving the project and calculate the waste diversion rate for the project. [HAULING COMPANY] will provide Project Manager with an updated monthly report on gross weight hauled and the waste diversion rate being achieved on the project. [HAULING COMPANY's] monthly report will track separately the gross weights and diversion rates for commingled debris and for each source –separated waste stream leaving the project. In the event the [HAULING COMPANY] does not service any or all of the debris boxes on the project, the [HAULING COMPANY] will work with the responsible parties to track the material type and weight (in tons) in such debris boxes in order to determine waste diversion rates for these materials.
9. In the event that the Subcontractors furnish their own debris boxes as part of their scope of work, such Subcontractors shall not be excluded from complying with the CWM Plan and will provide [HAULING COMPANY] weight and waste diversion data for their debris boxes.
10. In the event that site use constraints (such as limited space) restrict the number of debris boxes that can be used for collection of designed waste the project Superintendent will, as deemed appropriate, allocate specific areas onsite where individual material types are to be consolidated. These collection points are not to be contaminated with non-designated waste types.
11. Debris from jobsite office and meeting rooms will be collected by [DISPOSAL SERVICE COMPANY]. [DISPOSAL SERVICE COMPANY] will, at a minimum recycle office paper, plastic, metal and cardboard.

CONSTRUCTION WASTE MANAGEMENT (CWM) WORKSHEET

Note: This sample form may be used to assist in documenting compliance with the waste management plan.

Project Name: _____

Job Name: _____

Project Manager: _____

Waste Hauling Company: _____

Construction Waste Management (CWM) Plan

WASTE MATERIAL TYPE	DIVERSION METHOD		PROJECTED DIVERSION RATE
	COMMINGLED AND SORTED OFF SITE	SOURCE SEPARATED ON SITE	
Asphalt			
Concrete			
Shotcrete			
Metals			
Wood			
Rigid Insulation			
Fiberglass Insulation			
Acoustic ceiling tile			
Gypsum drywall			
Carpet/ carpet pad			
Plastic pipe			
Plastic buckets			
Plastic			
Hardiplank siding and boards			
Glass			
Cardboard			
Pallets			
Job office trash, paper, glass & plastic bottles, cans, plastic			
Alkaline and rechargeable batteries, toner cartridges and electronic devices			
Others:			
Others:			
Others:			
Others:			
Others:			

CONSTRUCTION WASTE MANAGEMENT (CWM) ACKNOWLEDGE

Note: This sample form may be used to assist in documenting compliance with the waste management plan.

Project Name: _____

Job Name: _____

Project Manager: _____

Waste Hauling Company: _____

CWM Plan Acknowledgement

The Foreman for each new Subcontractor that comes on site is to receive a copy of the Construction Waste Management Plan and complete this Acknowledgement Form.

I have read the Waste Management Plan for the project; I understand the goals of this plan and agree to the follow the procedures described in this plan.

DATE	SUBCONTRACTOR COMPANY NAME	FOREMAN NAME	SIGNATURE

SECTION 018100- STORM WATER POLLUTION PREVENTION PLAN 11/07/16

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 0 &1 Specification Sections, apply to this Section.

1. Standard details and requirements per jurisdiction requirements, not limited to herein.

1.2 SUMMARY

A. This Section includes, but not limited to, erosion and sedimentation controls and related items.

1. Provide “Data Submitter” information to Legal Responsible Person (LRP)-(District).
2. LRP creates project with “SMARTS” account. LRP will add “Data Submitter” to project.
3. Data Submitter to input / upload information for Permit Registration Documents (PRD’s).
4. LRP to submit PRD’s (SMARTS Protocol).
5. State of Water Resources Control Board (SWRCB) will send notification of fees for permit, issues with PRD’s and/ or Notice of Intent (NOI).
6. SWRCB will evaluate fees for permit. Permit for Waste Discharge/ Identification (WDID) number will be issued by SWRCB once fees are paid. LRP to pay fees for permit to SWRCB.
7. SWRCB notifies LRP of approval of Notice of Intent (NOI) (NOI can be viewed at SMARTS website).
8. Installation of temporary erosion control systems per PRD’s.
9. Installation of temporary slope protection systems per PRD’s.
10. Removal of temporary measures where required by SWPPP per PRD’s.
11. Signage and posting per requirements per PRD’s.
12. Annual report(s), file with SMARTS by Data Submitter.
13. Post-Construction water balance calculation by Data Submitter.
14. File Notice of Termination (NOT) upon completion of project with SMARTS by Data Submitter.
15. Data Submitter to notify LRP of NOT filing. LRP to submit NOT (SMARTS Protocol).
16. SWRCB to notify LRP NOI submitted.
17. Miscellaneous requirements per local jurisdiction.
18. TRPA BMP and coordination.

B. Related Sections: The following Sections contain requirements that relate to this Section:

1. Division 1 Section “Summary of Work” for HCP requirements and related work.
2. Division 1 Section “Temporary Facilities” for additional PRD’s requirements.
3. Division 1 Section “ Project Closeout” for additional PRD’s requirements.
4. Division 31 Section “Earthwork” for related items.
5. Division 31 Section “Site Clearing” for related items.
6. Division 33 Section “Utility Materials” for related items.

1.3 REQUIREMENTS

A. The NOI and related fee shall be submitted electronically on the State Water Boards Stormwater Multi-Application and Report Tracking system (SMARTS) website, http://smarts.waterboards.ca.gov prior to the start of construction.

1. The Owner will pay the filing fee, when prompted by SMARTS and notification of Data Submitter fees are ready to be paid.

B. Definitions:

1. Data Submitter – prepares and inputs data for Contractor into SMARTS (paid by Contractor)
2. LRP: Legal Responsible Person (District)
3. PRD's: Permit Registration Document(s)
4. SMARTS: Stormwater Multi Application and Report Tracking System
5. NOI: Notice of Intent
6. NOT: Notice of Termination
7. SWRCB: State Water Resources Control Board
8. RWQCB: Regional Water Quality Control Board
9. WDID: Waste Discharge Identification
10. ATS: Active Treatment System

C. Standard PRD Requirements (All Dischargers) per SWRCB Requirements not limited to the following:

1. Notice of Intent
2. Risk Assessment (Standard or Site-Specific)
3. Site Map
4. SWPPP
5. Annual Fee (paid by LRP)
6. Certification

D. Additional PRD Requirements Related to Construction Type per SWRCB Requirements not limited to the following:

1. Discharger in unincorporated areas of the State (not covered under an adopted Phase I or II SUSMP requirements) and that are not a linear project shall also submit a completed:

a. Post-Construction Water Balance Calculator (Appendix 2, available online at SWRCB website).

2. Dischargers who are proposing to implement ATS shall submit:

a. Complete ATS Plan in accordance with Attachment F at least 14 days prior to the planned operation of the ATS and a paper copy shall be available onsite during ATS operation.
b. Certification proof that design done by a professional in accordance with Attachment F (available online at SWRCB website).

3. Dischargers who are proposing an alternate Risk Justification:

a. Particle Size Analysis.

E. Description of PRDs per SWRCB Requirements not limited to the following:

1. Notice of Intent (NOI)
2. Site Map(s) Includes:

a. The project's surrounding area (vicinity)
b. Site layout
c. Construction site boundaries
d. Drainage areas

e. Discharge locations
f. Sampling locations
g. Areas of soil disturbance (temporary or permanent)
h. Active areas of soil disturbance (cut or fill)
i. Locations of all runoff BMPs
j. Locations of all erosion control BMPs
k. Locations of all sediment control BMPs
l. ATS location (if applicable)
m. Locations of sensitive habitats, watercourses, or other features which are not to be disturbed
n. Locations of all post-construction BMPs
o. Locations of storage areas for waste, vehicles, service, loading/unloading of materials, access (entrance/exits) points to construction site, fueling, and water storage, water transfer for dust control and compaction practices.

3. SWPPPs

a. A site-specific SWPPP shall be developed by each discharger and shall be submitted with the PRDs.

4. Risk Assessment - All dischargers shall use the Risk Assessment procedure as describe in the General Permit Appendix 1 (available online at SWRCB website).

a. The Standard Risk Assessment includes utilization of the following:

1) Receiving water Risk Assessment interactive map
2) EPA Rainfall Erosivity Factor Calculator Website
3) Sediment Risk interactive map
4) Sediment sensitive water bodies list

b. The Site-Specific Risk Assessment includes the completion of the hand calculated R value Risk Calculator

5. Post-Construction Water Balance Calculator - All dischargers subject to this requirement shall complete the Water Balance Calculator (in Appendix 2) in accordance with the instructions.
6. ATS Design Document and Certification - All dischargers using ATS must submit electronically their system design (as well as any supporting documentation) and proof that the system was designed by a qualified ATS design professional (see Attachment F – available online at SWRCB website).

F. Information For additional information contact:

Regional Water Quality Control Board
Fresno Branch Office
1685 East Street
Fresno, CA 93706
(559) 445-5116

1. If this project transverses more than one Regional Water Quality Control Board (RWQCB) jurisdiction, a complete Notice of Intent package (Notice of Intent, site map, and fee) and Notice of Termination (upon completion of each section), must be filed for each RWQCB.

G. Annual report required for projects under construction for more than one continuous 3 month period, no later than September 1, of each year. This shall be done on line via the SMARTS web site, see above, for the period July 1, to June 30. Provide information needed for overall program evaluation and public information.

1. Summary and evaluation of all sampling and analysis results
2. Laboratory reports referenced specifically to SWPPP
3. Summary of all corrective actions taken during the compliance year and identification of any compliance activities.

1.4 EROSION CONTROL AND SLOPE PROTECTION IMPLEMENTATION

A. Prevention Plan to be dictated by site conditions in order to maintain the intent of the specifications and permits at no additional cost to Owner.

B. Owner has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations and to direct Contractor to provide immediate permanent or temporary pollution control measures.

C. Maintain temporary erosion control systems as directed by Owner or governing authorities to control siltation during life of contract. Contractor shall respond to maintenance or additional work ordered by Owner or governing authorities within 48 hours or sooner if required at no additional cost to the Owner.

D. Slopes that erode easily or that will not be graded for a period of 14 days or more shall be temporarily seeded as work progresses with wheat, rye or oats application in accordance with City Standards unless otherwise specified on the Construction Drawings.

1.5 POSTING ON SITE

A. Post and maintain all notices per SWPPP requirements and requirements herein not limited to the following:

1. Construction trailer, post the following on a specific allocated board viewable by all parties to this project:

   a. NOI
   b. Permit
   c. Inspection report clipboard
   d. Site stabilization and Construction activity Dates log
   e. Rainfall log

2. Site

   a. Notice of permit and application
   b. Site map
   c. Contractor contact information.
   d. Sign that indicates the following, size 48” x 48”:

SWPPP
Strictly Enforced
You Must

- Comply with all Government Agency Requirements
- Use provided washout areas
- Keep mud off streets

Failure to comply will result in a minimum $1000 Fine.

END OF SECTION 018100

SECTION 09 68 13

TILE CARPETING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes modular carpet tile.

B. Related Sections include:

1. Section 01 74 19 ”Construction Waste Management and Disposal” for recycling of existing carpet materials to be removed.
2. Section 02 41 19 ”Selective Demolition” for removal of existing floor coverings.
3. Section 09 05 65 “Concrete Moisture-Control System” for moisture-vapor-emission control system applied to concrete slab substrates prior to installation of finish flooring.
4. Section 09 65 13 "Resilient Base and Accessories” for the following resilient products used with carpet tile:
    a. Resilient base.
    b. Resilient transition moldings between carpet tile and adjacent finish flooring materials.

1.3 REFERENCES

A. American Association of Textile Chemists and Colorists (AATCC):

1. AATCC 16-E: Test Method for Colorfastness to Light.
2. AATCC 134: Test Method for Electrostatic Propensity of Carpets.
3. AATCC 165: Test Method for Colorfastness to Crocking, Textile Floor Coverings.
4. AATCC 174: Test Method for Antimicrobrial Activity Assessment of Carpets.
5. AATCC 175: Test Method for Stain Resistance for Pile Floor Coverings.

B. ASTM International:
   1. ASTM E 648: Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source.
   2. ASTM E 662: Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
   3. ASTM E 2471: Standard Test Method for Using Seeded-Agar for the Screening Assessment of Antimicrobrial Activity in Carpets.
   4. ASTM F 710: Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.
   5. ASTM F 2170: Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.

C. California Department of Public Health (CDPH):
   1. Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers – Version 1.1, February 2010.

D. CALGreen: California Green Building Standards Code - California Code of Regulations, Title 24, Part 11.

E. Carpet and Rug Institute (CRI):
   1. CRI Carpet Installation Standard.
   2. CRI Green Label Plus testing program.

F. Chemical Abstract Service (CAS):
   1. Chemical Abstract Registration Number (CASRN).

G. Collaborative for High Performance Schools (CHPS).
   1. Criteria Interpretation Library.
      a. EQ 7.0 – Low Emitting Materials.
      b. EQ 7.1 – Additional Low Emitting Materials.

H. Cradle to Cradle Products Innovation Institute:
   1. Cradle to Cradle Certified Product Standard.

I. European Standards (EN):
   1. EN 15804: Sustainability of Construction Works – Environmental Product Declarations – Core Rules for the Product Category of Construction Products.

J. GreenScreen for Safer Chemicals:
   1. GreenScreen Chemical Hazard Assessment Procedure V1.2.

K. Health Product Declaration Collaborative:
   1. Health Product Declaration Open Standard.

L. International Certified Floorcovering Installers Association.
   1. Commercial II certification level.

M. International Organization for Standardization (ISO):
   1. ISO 14021: Environmental Labels and Declarations – Self-Declared Environmental Claims (Type II Environmental Labeling).
   2. ISO 14025: Environmental Labels and Declarations – Type III Environmental Declarations – Principals and Procedures.
   3. ISO 14040: Environmental Management – Life Cycle Assessment – Principals and Framework.
   4. ISO 14044: Environmental Management – Life Cycle Assessment – Requirements and Guidelines.
   5. ISO 21930: Sustainability in Building Construction – Environmental Declaration of Building Products.

N. NSF International/American National Standards Institute (ANSI):
   1. NSF/ANSI 140: Sustainability Assessment for Carpet.

O. Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

P. SCS Global Services:
   1. Sustainable Carpet Certification.

Q. South Coast Air Quality Management District (SCAQMD):
   1. Rule 1168 – Adhesive and Sealant Applications.

1.4 DEFINITIONS

A. VOC: Volatile Organic Compounds.

1.5 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.
   1. Review methods and procedures related to carpet tile installation including, but not limited to, the following:
      a. Delivery, storage, and handling procedures.
      b. Ambient conditions and ventilation procedures.
      c. Subfloor preparation procedures.

1.6 ACTION SUBMITTALS

A. Product Data: For each type of product.
   1. Include manufacturer’s written data on physical characteristics, durability, and fade resistance.
   2. Include manufacturer’s written installation recommendations for each type of substrate.

B. Shop Drawings: For carpet tile installation, plans showing the following:
   1. Columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required in carpet tiles.
   2. Existing flooring materials to be removed.
   3. Existing flooring materials to remain.
   4. Carpet tile type, color, and dye lot.
   5. Type of subfloor.
   6. Type of installation.
   7. Pattern of installation.
   8. Pattern type, location, and direction.
   9. Pile direction patterns.
   10. Types, color, and locations of insets and borders.
   11. Type, color, and location of edge, transition, and other accessory strips.
   12. Transition details to other flooring materials.

C. Samples for Initial Selection: Submit manufacturer's full range of colors/patterns for the following items for selection by Architect.
   1. Carpet Tile.
      a. Minimum Number of Color/Patterns for Selection:
         i) Carpet Tile 1 – "**C-1**"; Walk-Off Mat:.
         ii) Carpet Tile – "**C-2**"; Field: .

D. Samples for Verification: For each of the following products and for each color and texture required. Label each Sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings and in schedules.
   1. Carpet Tile: Full-size Sample.
   2. Exposed Edge, Transition, and other Accessory Stripping: 12-inch long Samples.

E. Product Schedule: For carpet tile. Use same designations indicated on Drawings.

F. CALGreen Submittals:
   1. Manufacturer's product data for adhesives and adhesive primers indicating compliance with product requirements specified in "CALGreen Requirements" Article.
   2. Manufacturer's product data for carpet tile indicating compliance with product requirements specified in "CALGreen Requirements" Article.

1.7 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Product Test Reports: For carpet tile, for tests performed by a qualified testing agency.

C. Sample Warranties: For special warranties.

1.8 CLOSEOUT SUBMITTALS

A. Maintenance Data: For carpet tiles to include in maintenance manuals. Include the following:

1. Methods for maintaining carpet tile, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
2. Precautions for cleaning materials and methods that could be detrimental to carpet tile.

1.9 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Carpet Tile: Full-size units equal to 5 percent of amount installed for each type indicated, but not less than 10 sq yds.

1.10 QUALITY ASSURANCE

A. Installer Qualifications: An experienced Installer who is certified by the International Certified Floorcovering Installers Association at the Commercial II certification level.

B. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for fabrication and installation.

1. Build mockups at locations and in sizes as shown on Drawings or if not shown, as directed by Architect.
2. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.11 DELIVERY, STORAGE, AND HANDLING

A. Comply with CRI's "CRI Carpet Installation Standard."

1.12 FIELD CONDITIONS

A. Comply with CRI's "CRI Carpet Installation Standard" for temperature, humidity, and ventilation limitations.

B. Environmental Limitations: Do not deliver or install carpet tiles until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at occupancy levels planned for building occupants during the remainder of the construction period.

C. Do not install carpet tiles over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by carpet tile manufacturer.

D. Where demountable partitions or other items are indicated for installation on top of carpet tiles, install carpet tiles before installing these items.

1.13 WARRANTY

A. Special Warranty for Carpet Tiles: Manufacturer agrees to repair or replace components of carpet tile installation that fail in materials or workmanship within specified warranty period.
   1. Warranty does not include deterioration or failure of carpet tile due to unusual traffic, failure of substrate, vandalism, or abuse.
   2. Failures include, but are not limited to, the following:
      a. More than 10 percent loss of face fiber, edge raveling, snags, and runs.
      b. Dimensional instability.
      c. Loss of tuft-bind strength.
      d. Excess static discharge.
      e. Loss of face fiber.
      f. Delamination
   3. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 CALGREEN REQUIREMENTS

A. General: Conform with all applicable requirements of the California Green Building Standards Code (CALGreen).

B. Provide adhesives and adhesive primers which comply with current VOC content limits of the South Coast Air Quality Management District (SCAQMD) Rule 1168, except as noted otherwise below. Such products shall also comply with Rule 1168 prohibition of the use of certain toxic compounds (chloroform, ethylene, dichloride, methylene chloride, perchloroethylene, and trichloroethyelen).

1. Aerosol adhesives and similar unit sizes of adhesives, and sealants (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions of use of certain toxic compounds, of the California Code of Regulations, Title 17, commencing with Section 94507.

C. Carpet Tile: Provide carpet tile products which meet at least one of the following:

1. Certified as complying with the testing and product requirements of the Carpet and Rug Institute's Green Label Plus program.
2. Compliant with the VOC-emission limits specified in the California Department of Public Health Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.1, February 2010.
3. Meets requirements of NSF/ANSI 140 for certification at the Gold level or higher.
4. Meets requirements of SCS Global Services Sustainable Carpet Certification program at the Gold level or higher.
5. Compliant with 2014 California Collaborative for High Performance Schools California (CA-CHPS) Criteria Interpretation for EQ 7.0 and EQ 7.1 (formerly EQ 2.2) and listed in the CHPS High Performance Database.

2.2 PERFORMANCE REQUIREMENTS

A. Fire-Test-Response Characteristics for Tile Carpeting:

1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq cm, as determined by testing identical products according to ASTM E 648.
2. Smoke Density: 450 or less, determined by testing identical products according to ASTM E 662.

2.3 CARPET TILE

A. Modular Carpet Tile ***C-1***; **Walk-Off Mat:** Modular carpet tile system designed for specific installation per manufacturer's recommendations. Maintain a visually continuous and finished overall appearance without any tile appearing improperly positioned.

1. Product: ***Interface, Inc.; SR799***.
    a. Color: Onyx
2. Construction: Tufted Textured Loop
3. Fiber Content: 100 percent nylon.
4. Fiber Type: Aquafil.
5. Dye Method: 100 percent solution dyed.
6. Pile Characteristic: Tip-sheared.
7. Pile Height: .19 inch.
8. Stitches: 10 per inch.
9. Gage: 1/12 inch.
10. Face Yarn Weight: 26 oz per sq yd.
11. Density: 6,686 oz per cu yd.
12. Primary Backing/Backcoating: Non-woven fiberglass-reinforced PVC.
13. Secondary Backing: Fiberglass-reinforced thermoplastic composite; 100 percent recyclable.
    a. Provide minimum 39 percent recycled content, post-consumer or post-industrial in secondary backing material.
14. Size: 19.6 inches square.
15. Applied Soil-Resistance Treatment: Manufacturer's standard material; 8.0 on the Red 40 Stain Scale, per AATCC 175.
16. Antimicrobial Treatment: Manufacturer's standard material; passes AATCC 174 (minimum 90 percent reduction of microorganisms according to Part 2; no macroscopic growth according to Part 3); passes ASTM E 2471.
17. Performance Characteristics: As follows:
    a. Colorfastness to Crocking: Not less than 4, wet and dry, per AATCC 165.
    b. Colorfastness to Light: Not less than 4 after 60 AFU (AATCC fading units) per AATCC 16, Option E.
    c. Electrostatic Propensity: Less than 3.0 kV per AATCC 134.
18. Minimum Recycled Content:
    a. Preconsumer: 33 percent.
    b. Postconsumer: 33 percent.
19. VOC Emissions:
    a. Complies with requirements specified in "CALGreen Requirements" Article.
    b. Certification: CRI Green Label Plus.

B. Modular Carpet Tile ***C-2; Field***: Modular carpet tile system designed for specific installation per manufacturer's recommendations. Maintain a visually continuous and finished overall appearance without any tile appearing improperly positioned.

1. Product: ***Interface, Inc.; Cubic***.
    a. Color: T.B.D.
2. Construction: Tufted.
3. Fiber Content: 100 percent nylon Type 6, 6.
4. Fiber Type: Aquafil.
5. Dye Method: 100 percent solution dyed.
6. Pile Characteristic: Textured loop.
7. Pile Height: .145 inch.
8. Stitches: 8.16 per inch.
9. Gage: 1/12 inch.
10. Face Yarn Weight: 18 oz per sq yd.
11. Density: 6,968 oz per cu yd.
12. Primary Backing/Backcoating: Non-woven fiberglass-reinforced PVC.
13. Secondary Backing: Fiberglass-reinforced thermoplastic composite; 100 percent recyclable.
    a. Provide minimum 39 percent recycled content, post-consumer or post-industrial in secondary backing material.
14. Size: 50 cm by 50 cm (19.69 inches square).
15. Applied Soil-Resistance Treatment: Manufacturer's standard material; 8.0 on the Red 40 Stain Scale, per AATCC 175.
16. Antimicrobial Treatment: Manufacturer's standard material; passes AATCC 174 (minimum 90 percent reduction of microorganisms according to Part 2; no macroscopic growth according to Part 3).
17. Performance Characteristics: As follows:
    a. Colorfastness to Crocking: Not less than 4, wet and dry, per AATCC 165.
    b. Colorfastness to Light: Not less than 4 after 60 AFU (AATCC fading units) per AATCC 16, Option E.
    c. Electrostatic Propensity: Less than 3.0 kV per AATCC 134.
18. Minimum Recycled Content:
    a. Preconsumer: 45 percent.
19. VOC Emissions:
    a. Complies with requirements specified in "CALGreen Requirements" Article.
    b. Certification: CRI Green Label Plus.

2.4 INSTALLATION ACCESSORIES

A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided or recommended by carpet tile manufacturer.

B. Primer/Sealer: Carpet manufacturer's standard sealer material designed to seal gypsum-based underlayment surfaces.

C. Corner Connectors: Manufacturer's standard adhesively-surfaced 3-inch by 3-inch square tabs for connecting underside of corners of four adjacent carpet tile units to maintain a tight joint on all sides of tile, thereby maintaining an overall stable surface. Tabs are surfaced with pressure-sensitive acrylic adhesive on one side, only, of polyester backing, so as not to adhere tiles to substrate.

1. Product: Interface, Inc.; TacTiles.

D. Adhesives: Water-resistant, mildew-resistant, nonstaining, pressure-sensitive type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet tile and is recommended by carpet tile manufacturer for releasable installation.

1. VOC Content: Complies with requirements specified in "CALGreen Requirements" Article.

E. Resilient Transition Moldings: As specified in Section 09 65 13 "Resilient Base and Accessories."

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet tile performance.

B. Examine carpet tile for type, color, pattern, and potential defects.

C. Verify that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might show through surface or interfere with adhesion of carpet tile and accessories

D. For painted subfloors, perform bond test recommended in writing by adhesive manufacturer.

E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. General: Comply with CRI's "CRI Carpet Installation Standard," and with carpet tile manufacturer's written installation instructions for preparing substrates indicated to receive carpet tile.

B. Concrete substrates: Prepare according to ASTM F 710.

1. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by adhesive and carpet tile manufacturer.
2. Refer to Section 09 05 65 "Concrete Moisture-Control System" for moisture and alkalinity testing and treatment. Proceed with installation only after substrates pass testing.
3. Adhesion Testing: Perform tests recommended by carpet tile manufacturer. Proceed with installation only after substrates pass testing.

C. Metal Substrates: Clean grease, oil, soil, and rust, and prime if recommended in writing by adhesive manufacturer. Rough sand painted metal surfaces and remove loose paint. Sand aluminum surfaces, to remove metal oxides, immediately before applying adhesive.

D. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes, and depressions 1/8 inch wide or wider, and protrusions more than 1/32 inch, unless more stringent requirements are required by manufacturer's written instructions.

E. Apply primer/sealer over gypsum-based cementitious underlayment in accordance with carpet manufacturer's written instructions and as required to ensure proper adhesion of carpet to underlayment surface.

F. Broom and vacuum clean substrates to be covered immediately before installing carpet tile.

3.3 CARPET TILE INSTALLATION

A. General: Comply with with CRI's "Carpet Installation Standard," Section 18, "Modular Carpet," and with carpet tile manufacturer's written installation instructions.

B. Installation Method: As recommended in writing by carpet tile manufacturer, and as follows:

1. TacTiles

C. Maintain dye lot integrity. Do not mix dye lots in same area.

D. Maintain carpet tile patterns indicated on Drawings.

E. Cut and fit carpet tile to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet tile manufacturer.

F. Extend carpet tile into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

G. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use nonpermanent, nonstaining marking device.

H. Install pattern parallel to walls and borders.

I. Do not bridge building expansion joints with carpet tiles.

J. At access flooring, stagger joints of carpet tiles so carpet tile grid is offset from access flooring panel grid. Do not fill seams of access flooring panels with carpet adhesive; keep seams free of adhesive.

K. Resilient Molding Accessories: Butt to adjacent materials and tightly adhere to substrates throughout length of each piece. Install reducer strips at edges of carpet tiles that would otherwise be exposed.

3.4 CLEANING AND PROTECTION

A. Perform the following operations immediately after installing carpet tile.

1. Remove excess adhesive and other surface blemishes using cleaner recommended by carpet tile manufacturer.
2. Remove yarns that protrude from carpet tile surface.
3. Vacuum carpet tile using commercial machine with face-beater element.

B. Protect installed carpet tile to comply with CRI's "CRI Carpet Installation Standard," Section 20, "Protecting Indoor Installations."

C. Protect carpet tile against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet tile manufacturer.

END OF SECTION 09 68 13

REMOVAL OF ASBESTOS-CONTAINING ROOFING MATERIALS

Divisions 00 & 01 ARE PART OF THIS SECTION

GENERAL

1.01 SCOPE:

The work required under this section consists of all asbestos abatement related items necessary and required to complete the work as indicated in the Contract Documents. Refer to project drawings and previous asbestos survey report prepared by T. Brooks & Associates, a division of Provost & Pritchard Consulting Group (TBA/P&P) for information concerning locations of identified asbestos-containing roofing materials to be impacted as part of the proposed project.

Based on representative bulk sampling of low-slope and steep-slope asphaltic roofing systems on representative structures at the subject school site considered as part of our investigation, asphaltic built-up roofing with silver roof coating, and built-up roofing tested positive for asbestos at various roof locations. All roofs which were identified as containing asbestos are to be treated as asbestos-containing for the purposes of the project. All work which disturbs ACRM shall be conducted in accordance with these specifications and all applicable local, state and federal regulations having jurisdiction over the work.

The Contractor shall comply with the requirements of OSHA's Hazard Communications Standard for but not limited to hazardous materials, fall protection, and shall provide employee training as required under OSHA regulations.

The Contractor shall provide all items, articles, materials, operations, or methods listed, mentioned or scheduled on the drawings and/or specified herein, including all labor, materials, equipment, and incidentals necessary and required for their completion.

Contractor shall utilize fall protection measures in accordance with Cal/OSHA requirements to protect the health and safety of employees engaged in work as part of the project.

1.02 WORK INCLUDED:

All non-asbestos containing roofing materials and related items, which are not contaminated with ACRM elements or debris may be treated as non-asbestos-containing for the purposes of the project, as long as the waste is segregated.

Contractor shall abate all identified asbestos-containing roofing building materials (ACRM's) at specified roof locations at the subject site as indicated in the project design documents so as to allow for renovation operations involving those structures as defined in project documents. Contractor shall review previous Asbestos Survey Report prepared by T.

Brooks & Associates, a division of Provost & Pritchard Consulting Group dated February 16, 2023 to determine locations of identified asbestos-containing roofing materials (ACRM's) at

the subject site which will be impacted by the proposed renovation operations based on review of asbestos survey and all project design documents.

All work involving disturbance of roofing materials designated as asbestos-containing materials shall be completed by a contractor currently registered and licensed by the State of California for asbestos related work. Work shall not commence until approval of all asbestos related submittals from Contractor or qualified abatement sub-contractor.

The Contractor shall make provision for site security and operational procedures such that Building employees, tenants, other trades, and the general public shall not be exposed to airborne asbestos above regulatory levels as a result of activities performed under the Contract. Non abatement employees or personnel, or non-abatement work shall not be permitted within any posted "regulated area" during the course of work involving disturbance of asbestos-containing roofing materials.

All work involving disturbance of asbestos-containing roofing materials shall be as determined by the project design documents. Contractor shall provide necessary lighting, fall protection, and safety equipment as required or regulated to complete the specified work if conducted at night. Night work requires permission of the Building Owner.

Off-loading of ACRM shall be in compliance with OSHA requirements and these specifications.

Contractor may only off-load roofing materials, including asbestos-containing roofing materials from the roof during limited hours as designated by the Owner and its Asbestos Consultant Representative. Any asbestos-containing roofing materials which have been disturbed, and which remain on the roof overnight shall be placed in sealed waste bags, or covered with 6-mil polyethylene film prior to the end of the shift during which they are disturbed and shall be placed within a "regulated area" on the roof with proper labeling per OSHA regulations.

Off-loading of roofing materials by forklift or other mechanical means shall be performed by Contractor's employees and shall be performed only during hours designated by the Building Owner or its Representative. Any off-loading by non-mechanical means, such as use of a waste chute shall be approved by the Building Owner and it's Asbestos Consultant Representative.

1.03 DEFINITIONS:

Abatement: Procedures to control fiber release from asbestos containing building materials. Includes removal, enclosure and encapsulation.

Air Monitoring: The process of measuring the asbestos fiber content of a specific volume of air in a stated period of time using methods approved or recommended by OSHA, EPA, or NIOSH.

Amended Water: Water to which a surfactant has been added to reduce airborne asbestos emissions.

Asbestos: The asbestiform varieties of serpentine (chrysotile), riebickite (crocidolite), cummingtonite, grunerite (amosite), anthophyllite, actinolite, and tremolite.

Asbestos-Containing Roofing Materials (ACRM): Roofing materials either containing more than 0.1% by weight of asbestos or contaminated with friable asbestos to a degree that handling the materials may reasonably be expected to give rise to exposure to airborne asbestos fibers above regulated levels.

Authorized Visitor: Authorized representatives of the Building Owner, it's representative, or a representative of any regulatory or other agency having jurisdiction over the project.

Building Owner's Asbestos Consultant: T. Brooks & Associates, a division of Provost & Pritchard Consulting Group.

Building Owner's Representative: Designated employee of Building Owner.

Competent Person: A person who has successfully completed an EPA -abatement supervisor training program and whose accreditation with state and federal regulatory agencies is current.

Disposal: All procedures necessary to transport and deposit the asbestos-contaminated material stripped and removed from the building to a waste disposal site in compliance with applicable Federal, State, and Local regulations.

Disposal Site: A site approved by the California Department of Public Health (CDPH) and the US Environmental Protection Agency (EPA) for the disposal of asbestos containing waste (Class I or II).

Encapsulation: All procedures necessary to coat all asbestos-containing materials with an encapsulant to prevent the dispersal of asbestos fibers into the air.

Encapsulant: A liquid which can be applied to asbestos-containing material and which reduces likelihood of possible release of fibers from the material by penetrating into the material and binding its components together, or which provides an impervious polymeric coating firmly bound to the ACM.

HEPA Filter: High Efficiency Particulate Air (absolute) filter capable of trapping and retaining 99.97% of particles with diameters than or equal to 0.3 micrometers. In no case shall the HEPA filter permit the discharge of air containing more than 0.01 asbestos structures/cc.

HEPA Vacuum Equipment: Vacuum equipped with a HEPA filter in the exhaust outlet, and so designed and maintained that 99.91% of all asbestos fibers (greater than or equal to 0.3 micrometers diameter) in the inlet air are collected and retained. In no case shall the HEPA vacuum equipment permit the discharge of air containing more than 0.01 asbestos structures/cc.

HVAC: Heating, ventilation and air conditioning system.

Industrial Hygienist: A person qualified by training and/or expertise to specify measures for the recognition, evaluation, and control of occupational health hazards. In this project, an acceptable industrial hygienist must have substantial experience in the management of asbestos exposure.

PCM: Phase Contrast Microscopy according to NIOSH Method 7400.

Permissible Exposure Limit (PEL): Airborne concentration of asbestos in excess of 0.1 fibers per cubic centimeter (f/cc) of air as an eight hour time-weighted average (TWA) as determined by the method prescribed in the current California Occupational Safety and Health Standards.

Regulated Area: An area established by the employer to demarcate areas where Class I, II and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos, exceed or there is a reasonable possibility they may exceed the permissible exposure limit.

Removal: All procedures herein specified, as regulated by local, state, or federal agencies, or necessary to strip asbestos-containing material from designated areas in a safe manner and dispose of these materials at an acceptable disposal site.

Surfactant: A chemical wetting agent added to water to improve penetration, thus reducing the amount of water required for a given operation or area and enhancing the effect of the water in reducing fiber release.

TEM: Transmission Electron Microscopy according to AHERA specifications for Level II analysis.

Transport: Hauling of asbestos-containing wastes from the building to the disposal site and deposit of the wastes therein, in accordance with all Cal/EPA, CHP, Cal/OSHA or other applicable regulations.

Work Area: An isolated area of the building where abatement activities are performed.

Worker: Contractor employee who has completed course work and passed the exam for an EPA accredited AHERA asbestos abatement worker.

1.04 SUBMITTALS:

Approval by the Building Owner and/or it's designated representative is required of the following submittals, which shall be provided following award in compliance with the Project Requirements. Submittals shall include all elements required by Building Owner the Project Design Professionals, as well as those herein stipulated, or as required by applicable regulations.

The successful contractor shall provide a submittal to the Building Owner and/or its Designated Representative before commencement of any project work, and before the project pre-roof construction conference that includes the following information:

1. Pre-Abatement Plan: Submit to the Building Owner and/or its Designated Representative a written work plan describing:
   a. Methods of performing the removal work.
   b. Schedule for asbestos related abatement work.
   c. Plans for construction of isolation barriers and HVAC shut down.
   d. Schedule of removal of debris.
   e. Qualifications of firm to conduct Air Sampling Operations.
   f. Locations of dumpster(s) or temporary storage of ACRM at site.

2. Notifications: Notify in writing the following agencies listed below:
   a. Cal/OSHA District Office
   b. San Joaquin Valley Air Pollution Control District (if required)

3. Supervisor Training: Submit written proof that all supervisors proposed for the project meet the criteria for a "competent person as defined under 8 CCR 1529 and have successfully completed an EPA - approved supervisor's training course in asbestos abatement, including the source of the training. Supervisor shall be EPA certified as a Contractor/Supervisor for asbestos and the State of California Certified under the Department of Industrial Relations.

4. Worker Training: Submit written proof that all employees have successfully completed an EPA - approved course in asbestos abatement and have had instruction on the hazards of asbestos exposure, on use and fitting of respirators, on protective dress, and on all aspects of work procedures and protective procedures including all topics listed in 8 CCR 1529 (0)(1)(a-c).

5. Written proof satisfactory that all employees have been examined by a licensed physician within the last year and have found to be physically suited to perform asbestos related work, including wearing a respirator and other PPE while performing vigorous labor.

6. Injury & Illness Prevention Program: Submit a written Injury and Illness Prevention Program in compliance with SB 198.

7. Air Monitoring Program: Submit a written description of the proposed air monitoring program for this project, including the names of the industrial hygienist, certified

asbestos consultant, and/or air monitoring technicians, types of equipment, sampling procedures, calibration, record keeping, and analytical laboratory proposed.

Contractor Submittals During Construction Phase:

1. Daily Air Monitoring Results: Copies of all daily personal air monitoring results shall be submitted within 48 hours of completion of shift during which they are collected.

2. Copies of all applicable transport manifests and disposal receipts for all asbestos waste material.

3. Work shall not commence until required submittals have been approved.

1.05 PERSONNEL PROTECTION:

Training: Prior to commencement of work, all employees of the Contractor to be assigned to this project (including supervisors) shall be instructed, and shall be knowledgeable, in areas described in and those described in 8 CCR 1529. That training shall be equivalent to "AHERA Contractor/Supervisor and Abatement Worker" training.

Respiratory protection equipment, at a minimum, shall consist of a personally issued, individually identified NIOSH/MSHA approved half-face respirator equipped with HEPA filter cartridges. Additional respiratory protection shall be as required by CCR Title 8, Section 1529 and CFR 1926.

The Contractor shall have in place a respiratory protection program in accordance with the requirements of the California Occupational Safety and Health Standards. At a minimum, all workers shall be qualitatively fit-tested at time of respirator selection according to current regulations and shall have been fit-tested for each proposed respirator type during the proceeding eleven (12) month period.

The Contractor shall ensure that there is always a sufficient supply of replacement filters, of the type described above, and that filters are changed in accordance with regulatory requirements, or as required based on actual job conditions.

Outer work clothes shall consist of disposable full body coveralls.

The Contractor shall ensure that all employees that will wear a respirator during any part of the work are instructed on its proper use, including proper fitting, and changing of filters. Eating, drinking, and smoking while in any “regulated area” will not be permitted.

Except to the extent that more stringent requirements are written directly into the Contract Documents, or where required by Building Owner requirements, the following regulations and standards have the same force and effect (and are made part of the Contract Documents by reference) as if copied directly into the Contract Documents, or as if published copies were bound herewith. Where there is a conflict in requirements set forth in these regulations and standards, meet the more stringent requirement.

1. OSHA - U.S. Department of Labor Occupational Safety and Health Administration, Safety and Health Standards 29 CFR 1910, Section 1001 and Section 1910.134.29 CFR 1926.

2. Cal/OSHA - 8 CCR 1529.

3. NIOSH - National Institute for Occupational Safety and health under the provisions of 30 CFR Part ll.

4. All other applicable local, state and federal regulations have jurisdiction over the work.

5. In addition to these requirements for the prevention of exposure to and dissemination of asbestos fibers, all applicable safety requirements, including electrical safety and fall protection shall be complied with by the Contractor and any subcontractors acting under its' direction. Contractor shall provide regulatory oversight over all subcontractors as stipulated under Cal/OSHA requirements.

Worker Changing Area: The room shall be located at ground level and shall have a curtained doorway to the outside. The Contractor shall be constructed to provide privacy from surrounding areas.

Shower waste-water shall be filtered prior to discharge to the sanitary sewer, with filtration acceptable to the Building Owner and the local water quality district. At minimum, all waste or shower water shall be run through a five micron (5µm) final filter. All requirements governing discharge of asbestos fibers to the sewer system shall be followed.

Worksite Entry: All contractor personnel and authorized visitors prior to entering the work area shall sign the entry log and put on protective clothing and a HEPA-equipped respirator for which they have received training and been approved by a licensed physician.

Worksite Exit: Each worker shall remove gross contamination from disposable or protective clothing before leaving the work area by HEPA vacuum. Remove all disposable or protective clothing (shorts may be worn under disposable or other protective clothing) and dispose of appropriately in labeled containers for disposal. Remove and dispose of respirator filter cartridges in labeled containers for disposal. The respirator shall be washed and rinsed.

Workers shall not eat, drink, smoke or chew gum or tobacco at the worksite except in areas designated by the Building Owner.

Decontamination, respiratory protection, and work procedures are to be followed by all Contractor employees and Authorized Visitors.

1.06 AIR MONITORING: INITIAL AND DAILY

Personal and perimeter air monitoring shall be conducted by the contractor on each day that work is conducted which involves the disturbance of asbestos-containing roofing

materials. Personal monitoring may be conducted by abatement contractor if overseen by a qualified competent person familiar with air sampling operations. Perimeter monitoring may be conducted by independent, third-party Certified Asbestos Consultant (CAC), or Certified Site Surveillance Technician (SST) (acting under the direction of a CAC). Monitoring, shall be conducted for entire shift or as required under Cal/OSHA regulations. Perimeter monitoring may be performed by its Asbestos Consultant at the discretion of the Building Owner shall be conducted at ground level. Personal monitoring shall include both Excursion (30 minute) and Full Shift monitoring per OSHA requirements.

If it is found that airborne fiber levels of personal air samples have exceeded the Permissible Exposure Limits of 1.0 f/cc (30 minute excursion monitoring) or 0.1 fibers per cubic centimeter (f/cc) over an eight (8) hour time weighted average, the Contractor shall be required to take additional measures as required by the Building Owner or it's Representative as required to reduce airborne levels below the PEL's. All air samples found to exceed any PEL shall be re-analyzed by TEM method. TEM analysis shall be conducted at laboratory selected by the Building Owner. Such additional testing shall be performed for each occurrence by an approved and accredited laboratory using Transmission Electron Microscopy (TEM), to determine the actual asbestos content. This additional analysis shall be completed at no cost to the Building Owner. Contractor shall pay Asbestos Consultant directly for all costs related to re-analysis by TEM method, including lab fees, consultant services, etc.

Personal air monitoring shall be conducted specifically on those individuals working at the point where the asbestos-containing materials are being removed.

Air monitoring shall be performed by individuals and firms qualified and knowledgeable in air sampling operations, and knowledgeable in asbestos abatement operations. The firm and/or individual providing air monitoring on the project shall be acceptable to the Building Owner, and Asbestos Consultant Representative. Contractor shall provide qualifications of air monitoring firm and specific individual performing the monitoring as requested by the Building Owner prior to the start of asbestos related work.

The Contractor shall insure that all samples shall be taken under standard industry protocol and tested at a laboratory which is accredited by the American Industrial Hygiene Association and participating in the Proficiency in Analytical Testing (PAT) Program of the National Institute for Occupational Safety and Health.

A copy of the results of all air monitoring performed by the Contractor shall be submitted to the Building Owner within forty-eight (48) hours of end of shift during which they were collected.

PART 2 – PRODUCTS

2.01 GENERAL MATERIALS:

Plastic Sheeting: Shall be min 6-mils thick and fire-resistant polyethylene sized in lengths and widths to minimize the frequency of joints.

Tape: Shall be capable of sealing joints of adjacent sheets of plastic and of attachment of plastic sheets to finished or unfinished surfaces of dissimilar materials and shall be capable of adhering under dry and wet conditions, including use of amended water.

Disposal Containers: Shall be suitable to receive and retain any asbestos-containing materials until disposed of at an approved site. All dumpsters or temporary storage containers for storing ACRM contaminated materials shall be lined with one layer of 10 mil polyethylene and sealed before transport in accordance with local, state and federal requirements, and the requirements of the designated landfill.

Wetting Agent: Shall consist of 50% polyoxyethylene and 50% polyethylene ester, or equivalent, and shall be mixed with water at concentration of one ounce wetting agent to 5 gallons of water (or as recommended by the manufacturer) to produce amended water.

Warning Labels & Signs: Shall be as required by EPA, OSHA, and Health and Welfare Agency (Prop 65) regulations.

HEPA Vacuum: A high efficiency particulate air (HEPA) filtered vacuum capable of trapping and retaining 99.97% of all particles larger than 0.3 microns.

Other Materials: The Contractor shall furnish all materials required to complete the abatement related work. Costs for such materials and equipment shall be reflected in Contractor's bid.

PART 3 EXECUTION

3.01 JOB SITE POSTING:

Job Site Documents: The Contractor shall provide and post the following documents at the project site:

1. All project plans and specifications including addenda and change orders.
2. Copies of Material Safety Data sheets for all materials used on the project.
3. List of all AHERA competent supervisors and workers.
4. Written Injury and Illness Prevention program.
5. Written respiratory protection program.
6. Sign-in sheet for all persons entering a "Regulated Area".

7. All documents required by Cal/OSHA or any other regulatory agency having jurisdiction over the work.

3.02 WORK AREA ISOLATION:

Work areas of the will be isolated off from rest of structure.

Contractor shall post danger signs meeting the requirements of Cal/OSHA regulations (8 CCR 1529), and California Health & Safety Code Section 25916 et seq. at any location and all approaches to the location where airborne concentrations of asbestos may exceed ambient background levels. Signs shall be posted at a distance sufficiently far enough away from the work area to permit an employee or visitor to read the sign and take necessary protective measures to avoid exposure or as required by Cal/OSHA.

Seal off all drains and other building openings between the work area and the interior of the building with 6 mil polyethylene and duct tape in accordance with Cal/OSHA requirements. The Contractor shall inspect all building openings at the beginning of each day and periodically during the work period.

The Contractor shall limit access to the work area to his personnel, emergency services personnel and Authorized Visitors. A log book of all visitors who enter the work area must be kept recording the name, affiliation, time in and time out for each visitor.

Adequate portable fire extinguisher equipment shall be maintained within the work area as defined by OSHA and/or local fire department officials. Fire extinguishers shall be fully charged and currently certified as required by law. Fire extinguishers shall be spaced throughout the roof to be readily accessible in the event of a fire.

3.03 REMOVAL:

When cleaning roof surface, do not use tools or devices which would cause debris to become airborne i.e., brooms, blowers, high pressure rinse, etc. Asbestos-containing dust and debris shall be maintained in wetted condition while being disturbed. No dry sweeping of ACRM contaminated will be allowed.

Adequately wet ACRM with amended water prior to the initiation of the removal process. Amended water shall be applied periodically during the work period to suppress dust in keeping with Cal/OSHA requirements.

The wetting solution shall be applied with low-pressure equipment or a water hose with a shut-off nozzle to avoid displacement and dispersal of asbestos fibers.

The Contractor shall protect roof mounted equipment and cables within raceways.

All asbestos-containing roofing materials will be carried to the edge of the roof where off loading and transport will take place by means of a hoist, ramp, crane, or forklift. No dropping of ACRM from the roof will be permitted.

Carefully lower properly wetted asbestos-containing material that has been removed in units or sections to the ground without dropping or throwing into the designated receptacle.

A waste chute shall not be used for off-loading of ACM roofing.

While still wet, roofing debris must be placed into plastic lined and properly labeled disposal containers.

At the end of each work shift, no loose ACRM debris shall remain on the roof.

3.04 DISPOSAL:

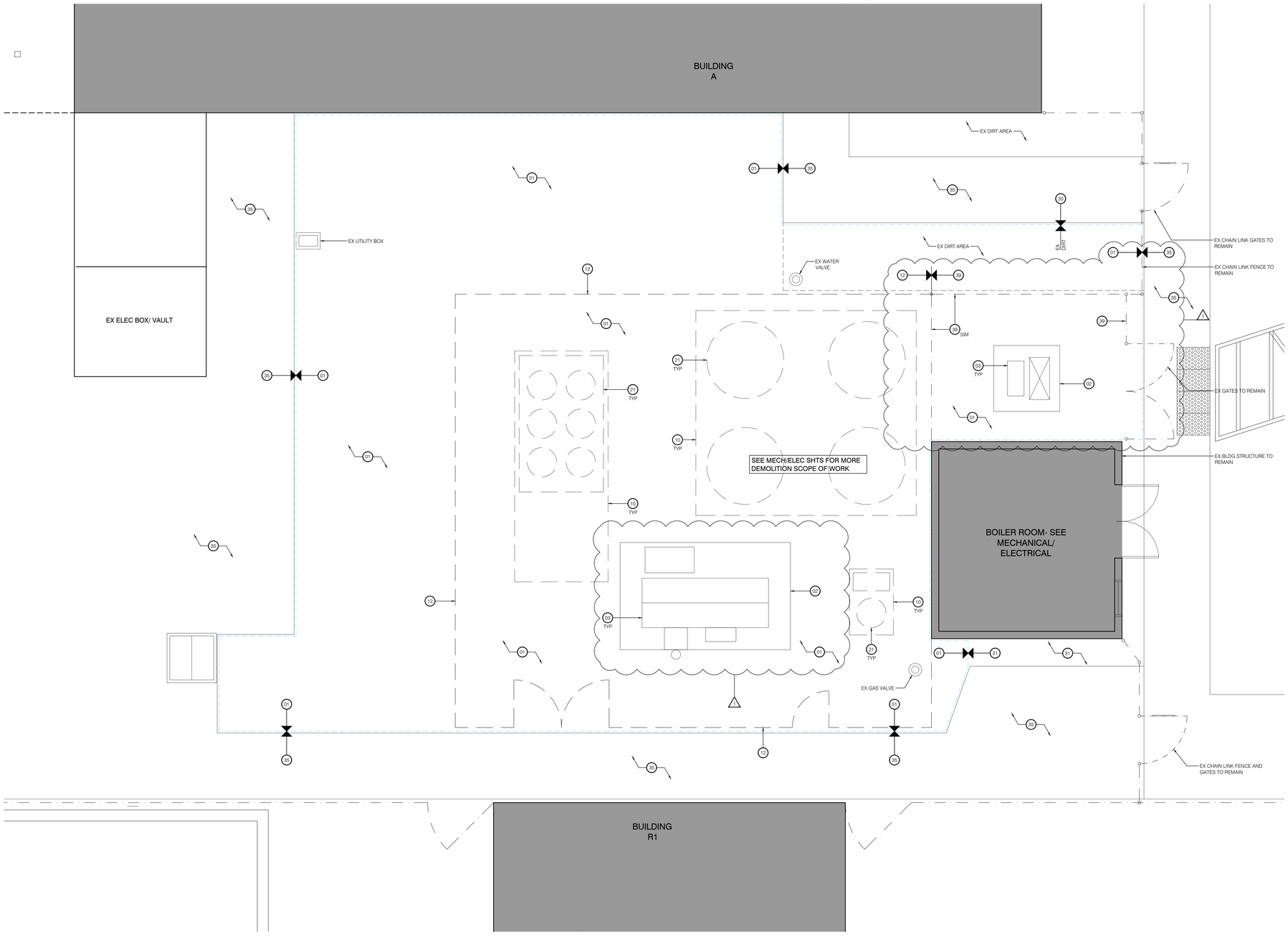
THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE ULTIMATE DISPOSAL OF ASBESTOS WASTES AT AN APPROVED DISPOSAL SITE ACCORDING TO APPLICABLE REGULATIONS. This will include preparation and distribution of Non-Hazardous Waste Manifests with the signature approval of the Building Owner.

Copies of all waste manifests and disposal receipts shall be submitted to the Building Owner as a close-out submittal.

3.05 CLEANUP:

Remove all visible accumulations of asbestos material and debris. Wet clean and HEPA vacuum all substrates within the work area. Clean all dust from roof elements upon completion of work.

END OF SECTION



A. Mechanical Yard Demolition Plan

Scale: 1/4" = 1'-0"

NORTH

GENERAL DEMO SITE PLAN NOTES

1. ALL EXISTING ITEMS, LOCATIONS AND SIZES ARE INDICATED AS ADVISORY. CONTRACTOR TO FIELD VERIFY ACTUAL DIMENSIONS, LOCATIONS AND CONDITIONS AS REQUIRED FOR INTENDED WORK AND MAKE ADJUSTMENTS ACCORDINGLY.
2. CONTRACTOR TO VERIFY ALL EXISTING UNDERGROUND UTILITIES WITH APPROPRIATE UTILITY COMPANIES AND FIELD VERIFY ACUTAL LOCATIONS, DIMENSIONS AND CONDITIONS AS REQUIRED FOR INTENDED WORK.
3. FIELD VERIFY EX UTILITY BOXES/COVERS TO REMAIN AT WORK AREA AND ADJUST TOP TO MATCH NEW FINISH GRADE WHERE OCCURS.
4. FIELD VERIFY, LOCATE AND TAKE NECESSARY CARE TO PROTECT EX UNDERGROUND UTILITIES DURING CONSTRUCTION.
5. SEE CIVIL, ELECTRICAL, MECHANICAL AND PLUMBING SHEETS FOR ADDITIONAL WORK SCOPE AND COORDINATE.
6. PROVIDE TEMPORARY FENCES, DUST BARRIERS, SIGNAGE AND OTHER SAFETY MEASURES AS REQUIRED FOR WORK AND PUBLIC.
7. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
8. SEE MECHANICAL, PLUMBING AND ELECTRICAL FOR ADDITIONAL UTILITIES. ADJUST UTILITY/TRENCH DEPTH AS REQUIRED AT INTERSECTIONS.
9. OWNER HAS FIRST RIGHT OF REFUSAL OF ALL ITEMS REMOVED AND NOT TO BE SALVAGED.
10. CONTRACTOR TO COMPLY W/ SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT REQUIREMENTS FOR RULE 9510 INDIRECT SOURCE REVIEW (ISR).
11. PRIOR TO ANY UNDERGROUND SITE WORK, VERIFY LOCATION OF ALL EX UTILITIES W/ UNDERGROUND SERVICE ALERT (U.S.A.).

DEMO SITE PLAN KEYNOTES

NOTE: NOT ALL KEYNOTES ARE USED ON SHEETS A1.10 AND A1.11

01 REMOVE EX ASPHALT CONC PAVING AND BASE MATERIAL
02 EXISTING CONCRETE HOUSEKEEPING PAD TO REMAIN
03 EXISTING TRANSFORMER/ SWITCHBOARD TO REMAIN- SEE ELECTRICAL SHEETS
04 NOT USED
05 NOT USED
06 NOT USED
07 NOT USED
08 NOT USED
09 NOT USED
10 REMOVE EX CONC PAD AND BASE MATERIAL
11 NOT USED
12 REMOVE EX CHAINLINK FENCE / GATES/ FOOTINGS AND ASSOCIATED HARDWARE - FILL HOLES
13 NOT USED
14 NOT USED
15 NOT USED
16 NOT USED
17 NOT USED
18 NOT USED
19 NOT USED
20 NOT USED
21 REMOVE EXISTING MECHANICAL/ ELECTRICAL EQUIPMENT AND ALL ASSOCIATED PIPING/ ANCHORAGE/ ETC. REMOVE CONCRETE FOUNDATION AT EQUIPMENT REMOVED- SEE MECHANICAL/ ELECTRICAL
22 NOT USED
23 NOT USED
24 NOT USED
25 EXISTING CONCRETE PAD TO REMAIN WITH UTILITY TRENCH BELOW- SEE MECH DRAWINGS FOR ADDITIONAL INFORMATION - PATCH AREA TO MATCH ADJACENT
26 NOT USED
27 NOT USED
28 NOT USED
29 NOT USED
30 NOT USED
31 EXISTING AC PAVING TO REMAIN
32 NOT USED
33 NOT USED
34 NOT USED
35 EXISTING CONCRETE PAVING TO REMAIN
36 NOT USED
37 NOT USED
38 NOT USED
39 EXISTING CHAINLINK FENCE AND GATE(S) TO REMAIN - NO SLATS, SIGNS (UNO) OR OTHER COVERINGS SHALL BE ADDED TO FENCING
40 NOT USED
41 NOT USED
42 NOT USED
43 EXISTING CONCRETE STAIR, LANDING AND RAILING TO REMAIN
44 NOT USED
45 NOT USED
46 EXISTING LANDSCAPE AND IRRIGATION TO REMAIN
47 EXISTING ACCESSIBLE CONCRETE RAMP, LANDING AND RAILING TO REMAIN - VERIFIED TO MEET 2019 CBC 11B - SEE SITE PLANS FOR ADDITIONAL INFORMATION

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CAMPUS HVAC SYSTEM UPGRADE & SITE IMPROVEMENTS

Mt Vernon Elementary School

2161 Potomac Ave. Bakersfield. CA. 93307
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0015
Date	10.12.23
DSA File No	15-6
DSA No	03-122659

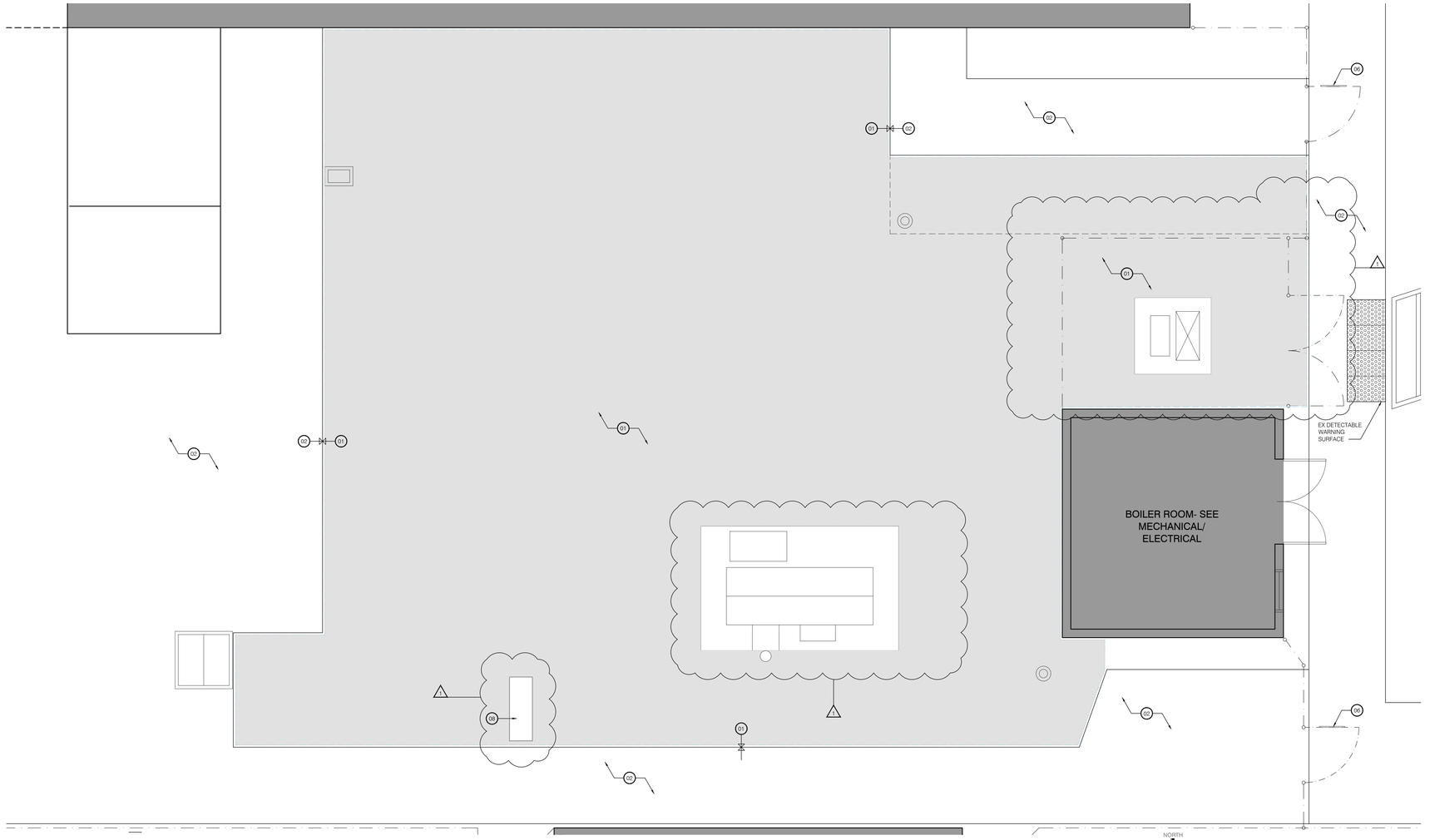
REVISIONS

No	Date	Item
1	06-28-2024	ADDENDUM 01

07.02.24 12:07

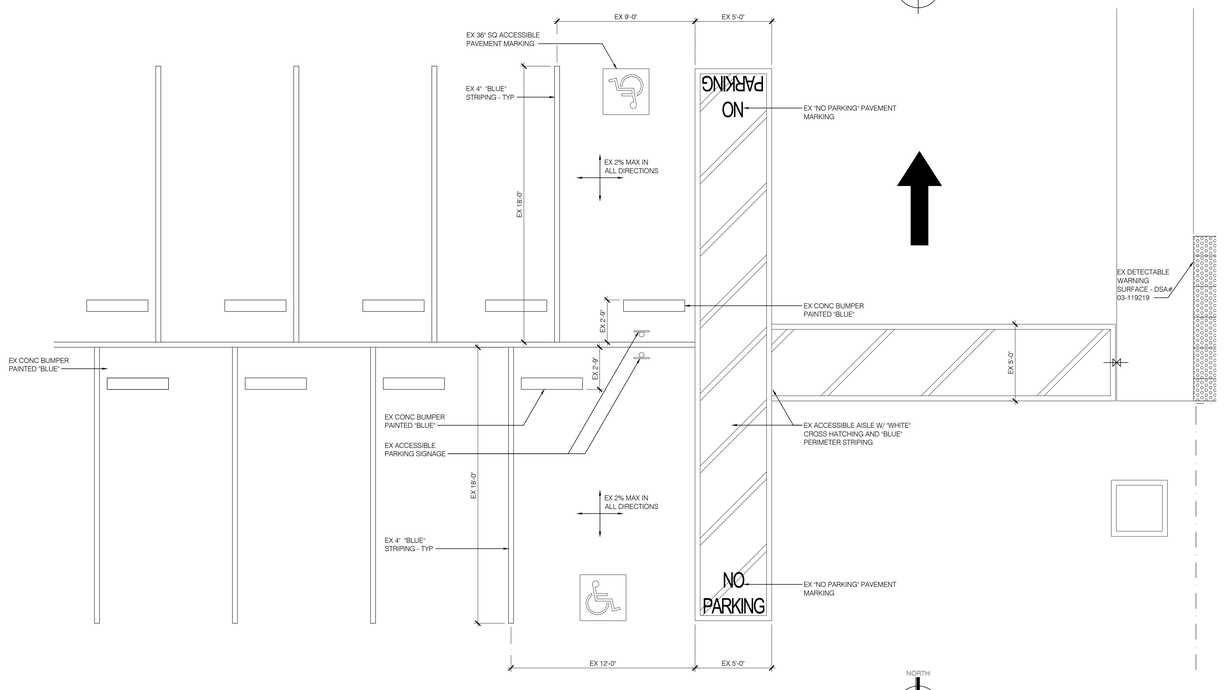
PARTIAL DEMOLITION SITE PLAN

A1.11



A. Mechanical Yard Plan

Scale: 1/4" = 1'-0"



B. Accessible Parking

Scale: 1/4" = 1'-0"

EX ACCESSIBLE PARKING : A#03-119219

GENERAL SITE PLAN NOTES

1. REFER TO CIVIL, PLUMBING AND ELECTRICAL DRAWINGS FOR UNDERGROUND UTILITIES.
2. PRIOR TO ANY UNDERGROUND SITE WORK, VERIFY LOCATION OF ALL EX UTILITIES W/ UNDERGROUND SERVICE ALERT (U.S.A.).
3. CONC SHALL BE REMOVED TO THE NEAREST EX. JOINT UNO. VER EXTENT OF CONC DEMO PRIOR TO START OF WORK.
4. REFER TO FLOOR AND ROOF DEMO PLANS FOR ADDITIONAL INFORMATION NOT SHOWN HERE.
5. ALL EXISTING ITEMS NOTED FOR REMOVAL TO BE PROTECTED IN PLACE.
6. CONTRACTOR TO COMPLY W/ SAN JOAQUIN VALLY AIR POLUTION CONTROL DISTRICT REQUIREMENTS FOR RULE 9510 INDIRECT SOURCE REVIEW (ISR).
7. SEE DTL 41/A8.01 FOR UNDERGROUND UTILITIES.

SITE PLAN KEYNOTES

NOTE: NOT ALL KEYNOTES ARE USED ON SHEETS A1.20 AND A1.21

01 2 1/2" TH AC PAVING OVER 11" CLASS II AGGREGATE BASE — 42/A8.01

02 EXISTING PAVING TO REMAIN

03 EXISTING ACCESSIBLE CONCRETE RAMP, LANDING AND RAILING TO REMAIN - VERIFIED TO MEET 2019 CBC 11B

04 EXISTING MECH CONC PEDESTALS TO REMAIN - PATCH CONC FLUSH

05 EXISTING RAMP AND HANDRAILS - A# NOTED AT EACH LOCATION

06 EXISTING GATE WITH PANIC HARDWARE AND KICKPLATE VERIFIED TO MEET 2019 CBC - 11B REQUIREMENTS

07 EXISTING GATE WITH NEW SIGN CONTROLLED ENTRY SIGN — 43/A8.01

08 NEW DISTRIBUTION PANEL- SEE ELECTRICAL SHEET FOR MORE INFORMATION

17-04-01

ACCESSIBLE PATH OF TRAVEL (P.O.T.)

– – – – "ACCESSIBLE PATH OF TRAVEL" (P.O.T.) AS INDICATED ON PLAN IS A BARRIER FREE ACCESS WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL. POT IS A MINIMUM OF 48" WIDE SLIP RESISTANT SURFACE WITH 5% MAX SLOPE AND 2% MAX CROSS SLOPE, TYP. THERE IS NO DROP-OFF OVER 4" AT THE EDGE OF WALK OR LANDING.

SEE ENLARGED PLANS FOR MORE INFORMATION.

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NON COMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT

17-04-03

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CONSULTANT

PROJECT INFO

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Date	10.12.23
DSA File No	15-6
DSA No	03-122659

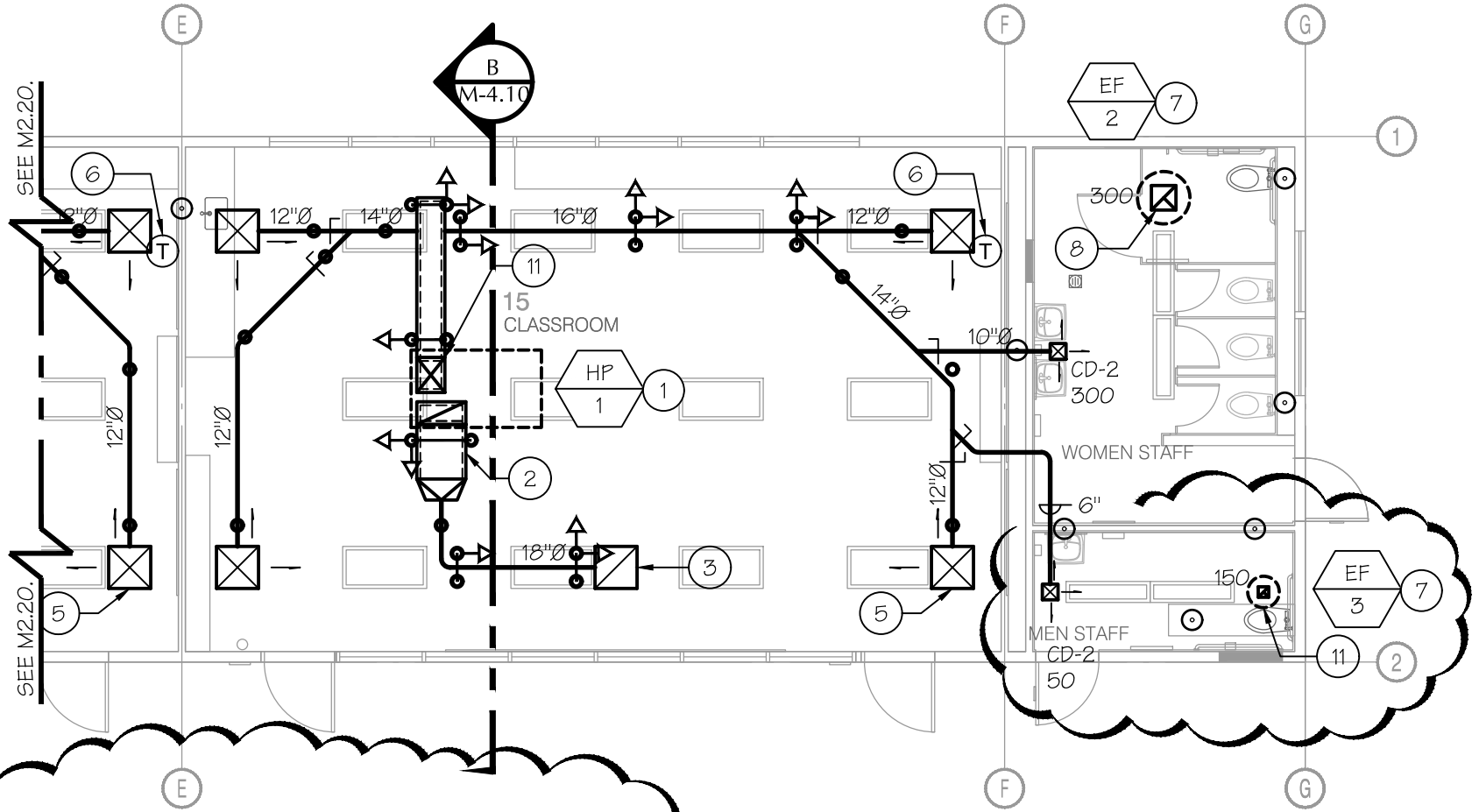
REVISIONS

No	Date	Item
1	06-28-2024	ADDENDUM 01

07.02.24 12:08

PARTIAL SITE PLAN

A1.21



MECHANICAL FLOOR PLAN KEY NOTES:

9. ~~CEILING EXHAUST FAN. SEE DETAIL I/M4.11.~~
10. ~~6" ROUND EXHAUST DUCT ROUTED THRU ROOF TO ROOF CAP.~~
11. 12" X 12" EXHAUST DUCT DROP WITH CE-1, 12" X 12" EXHAUST GRILLE.
12. BRANCH DUCT VOLUME DAMPER, TYPICAL. SEE DETAIL B/M4.11.
13. LOCATE PELICAN WIRELESS GATEWAY MODULE IN IT ROOM IN ADMINISTRATION BUILDING. CONNECT TO LOCAL ROUTER AND 115 WALL OUTLET. REFER TO DETAIL E/M4.11
14. LOCATE WIRELESS RELAY MODULE AT EACH EXHAUST FAN. REFER TO DETAIL F/M4.11.

PARTIAL MECHANICAL PLAN

BUILDING 'D'

SCALE: 1/8"=1'-0"

NOTE:
DELETE EF-4 FROM PROJECT.

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22012
Plt: 7/1/24

REGISTERED PROFESSIONAL ENGINEER
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Campus HVAC System Upgrade & Site Improvements

Mt Vernon Elementary School
2161 Potomac Avenue,Bakersfield,CA.93307
Bakersfield City School District

07.01.24 13:09

PROJECT INFO	
Project No	566-0015
Drawn By	M_BASKIN
Checked By	M_BASKIN
Date	07-01-24

NOTES

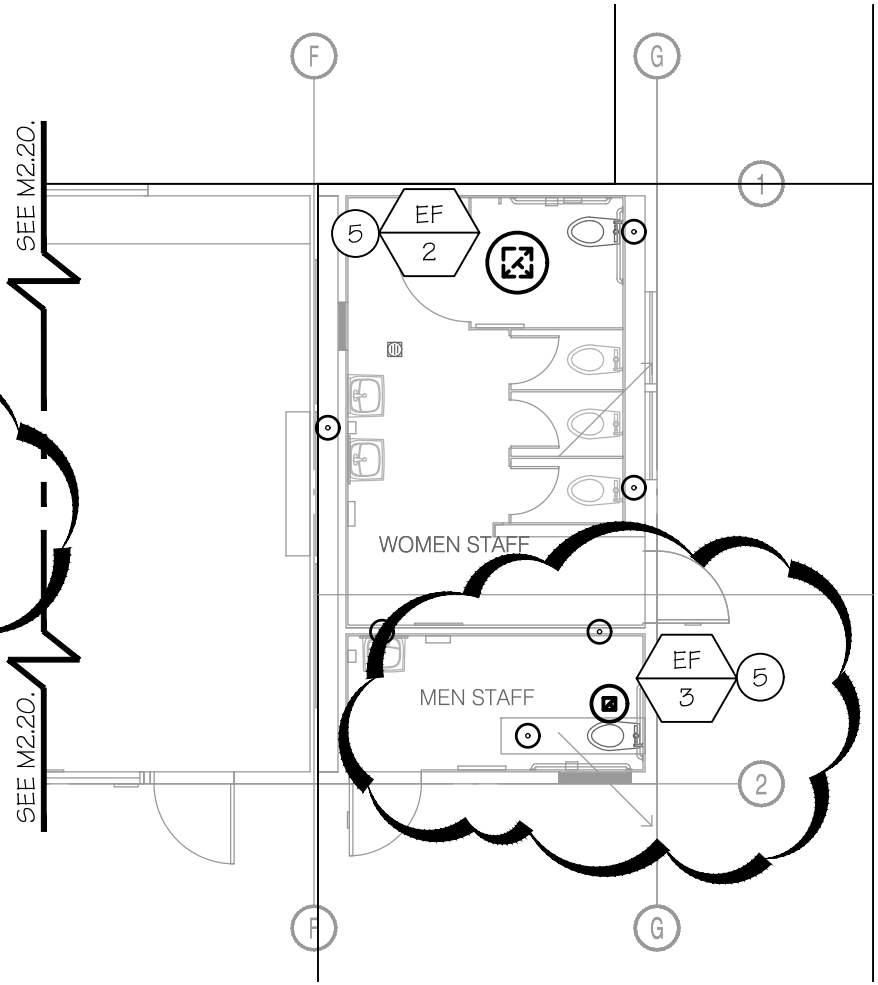
No	Date	Item
Revision	Date	Reference/Sheet

PARTIAL_MECH._PLAN

M2.20.1

MECHANICAL ROOF PLAN KEYNOTES:

7. ~~NEW ROOF CAP FOR CEILING EXHAUST FAN.~~



PARTIAL MECHANICAL PLAN

BUILDING 'D'

SCALE: 1/8"=1'-0"

BASKIN MECHANICAL ENGINEERS

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Job: 22012
Plt: 7/1/24

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Campus HVAC System Upgrade & Site Improvements

Mt Vernon Elementary School
2161 Potomac Avenue,Bakersfield,CA.93307
Bakersfield City School District

07.01.24 13:42

PROJECT INFO	
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Checked By	M_BASKIN
Date	07-01-24

NOTES

No	Date	Item
Revision	Date	Reference/Sheet

PARTIAL_MECH._PLAN

M3.10.1