

Bakersfield City School District
1300 Baker Street
Bakersfield, CA 93305

REQUEST FOR PROPOSAL For:
One (1) Permanent Modular TK Classroom Building
@
Dr. Douglas K. Fletcher Elementary School
RFP# 2307

DEADLINE TO SUBMIT BID

Bidding Schedule	Bidding Schedule: Issue date of the solicitation:	11/07/2023
	Deadline for Bid RFI's due:	11/21/2023 @ 2:00pm
	Clarifications Issued by:	11/27/2023
	Proposals Due:	11/30/2023 @ 2:00pm

(RFI) must be submitted by email to:
Manuel Maldonado
jmaldonado@ordizmelby.com

Charlene Perry
cperry@ordizmelby.com

Daniel Wastaferrero
wastaferrero@bcsd.com

Use Bid Package item **19-BID QUESTION FORM** for Questions or RFI's
ANTICIPATED START DATE: 01/01/2024

Submit bids in a Sealed Envelope to:
Bakersfield City School District
District Maintenance, Operations & Transportation Office
1501 Feliz Drive, Bakersfield, California 93307
Attn: Daniel Wastaferrero

Design Narrative

Dr. Douglas K. Flechter Elementary School One (1) Permanent Modular TK Classroom Building

For:

Bakersfield City School District
Bakersfield, CA

Architect of Record
Ordiz-Melby Architects
Bakersfield, CA 93309

Bakersfield City School District hereby requests bids from modular building companies for design, fabrication, and installation of a prefabricated permanent modular building.

DESIGN NARRATIVE

I. Project Description

Project Overview: Bakersfield City School District is in the process of adding roughly 4,314 square feet for three (3) TK Classrooms in one permanent modular building to the existing campus of Dr. Douglas K. Fletcher Elementary School. The building will be constructed using a permanent modular construction system. The modular system shall be of a pit set foundation. The building is identified on the attached drawing sheets Classrooms 101-103 and associated ancillary spaces. These drawings are of a schematic design in nature – it is expected that the selected modular company shall prepare appropriate drawings to complete the plans and submit them to the Division of the State Architect (DSA) for review.

Floor Construction: The modular buildings shall use a concrete slab system based on the fabricators standard structural system.

Foundation System: The modular buildings shall utilize a pit set building foundation design. The design of such system shall be part of this scope of work. The construction of the foundation system shall not be part of this scope of work.

Exterior Walls: The modular buildings shall use a standard “Factory Applied” elastomeric system. The fabricator shall provide a factory applied stucco system that will include a vapor barrier over plywood sheathing over 2x wood studs over ½” water resistant board, with R-19 insulation. Achieve no less than what is required by the current California Energy Code (thermal resistance value is the more stringent value).

Structural System: A moment frame or moment frame shear-wall combination lateral resistive system is acceptable. Module lengths and widths shall be based on the fabricator’s own unique system. If modules change the configuration of the window and door layouts, a substitution request shall be made during the inquiry phase of the bid. If the modules change the overall size of each building and therefore their proximity to each other and existing buildings, a substitution request shall be made immediately during the inquiry phase of the bid. Any deviation from the original design shall be noted and submitted prior to the RFI deadline. All buildings shall be clear span non-posted units. The building unit shall be erected on the assigned portion of the Dr. Douglas K. Fletcher Elementary School campus site.

Procurement Method: The District is currently soliciting proposals from fabricators for work listed in the design narrative and as shown on the attached plans.

Bidding Schedule:	Issue date of the solicitation:	11/07/2023
	Bid Clarifications and RFI's due:	11/21/2023 @2:00pm
	Clarifications Issued:	11/27/2023
	Proposals Due:	11/30/2023 @2:00pm

Bid Clarifications, Bid RFI's, as well as Completed Proposals should be submitted to the following location and contact:

Location: Ordiz-Melby Architects, Inc.
5500 Ming Avenue, Ste 280
Bakersfield, CA 93309

Contact: Manuel Maldonado – Project Architect
jmaldonado@ordizmelby.com

Charlene Perry – Project Administrator
cperry@ordizmelby.com

Daniel Wastafarro – District Representative
wastafarro@bcsd.com

District Representative:

Location: Bakersfield City School District
District Office
1300 Baker Street
Bakersfield, CA 93305

Contact: Daniel Wastafarro – Assistant Director II
(661) 631-5883
wastafarro@bcsd.com

The modular building, procured by the District, shall be turn-key complete and equipped with Electrical, HVAC, Plumbing, and based on the current code adoption. Infrastructure including conduit raceways for fire, signal, Data and A/V systems shall be included in the fabricator's scope of work. The fabricator shall provide Architectural and Engineered DSA plans with all of the site adaptation elements to provide a fully operational building. Plans shall contain all of the disciplines necessary to complete the plans submittal for the fabrication portion of the project, which includes all structural, mechanical, plumbing, and electrical components and includes the design and engineering for the floor and foundation system. Fire sprinklers will be required for the modular building.

The project will consist of two portions described as follows:

Portion 1 (Modular Building)

The development of the modular, single-story, single sloping roof building per the District's standards and requirements. Ordiz-Melby Architects will develop the DSA submittal package based on the Modular Building Manufacturer's Bid and the District's design standards. The district is looking for a building based on the 2022 C.B.C. that closely reflects the modular structures identified in the Design Development drawings. The Fabricator shall be responsible for all the design and engineering of the permanent modular building as listed above.

Portion 2 (Site Adaptation) – not part of this bid

The development of the site adaptation package associated with the coordination and proper placement of the modular buildings at the site. This will include coordinating the dimensioning of all necessary site utilities, fire alarm, fire water and low voltage connections to the existing systems and the Modular Building. Additional coordination of all path-of-travel, rough grading, foundation preparation, finish grading, site hardscape, landscaping and signage shall be considered as part of this portion.

II. Applicable Codes and Standards

The prefabricated permanent modular building shall include the following basic design criteria. Any requests for substitution shall be made during the inquiry period of the bid phase of the project. DSA submittal is likely to take place after June 2024.

The 2022 California Building Standards Code (Title 24, C.C.R.) is applicable as of January 1, 2023.

Part 1	2022 California Building Standards Administrative Code
Part 2	2022 California Building Code (CBC)
Part 3	2022 California Electrical Code (CEC)
Part 4	2022 California Mechanical Code (CMC)
Part 5	2022 California Plumbing Code
Part 6	2022 California Energy Code
Part 9	2022 California Fire Code
Part 11	2022 California Green Building Standards Code (CALGreen)
Part 12	2022 California Referenced Standards Code

Partial list of NFPA Standards as referenced at CBC Chapter 35 for California Fire Marshall (SFM) (See CBC Chapter 35 for complete list of referenced NFPA Standards and Amendments):

NFPA 17	Dry Chemical Extinguishing Systems (2012 ED)
NFPA 30	Flammable and Combustible Liquids Code (2021 ED)
NFPA 72	National Fire Alarm and Signaling Code (2022 ED with California Amendments)
NFPA 80	Fire Doors and Other Opening Protectives (2022 ED)
NFPA 101	Life Safety Code (2021 ED)
NFPA 105	Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives (2022 ED)
NFPA 110	Emergency and Standby Power Systems (2022 ED)
NFPA 111	Stored Electrical Energy emergency and Standby Power Systems (2022 ED)
NFPA 170	Standard for Fire Safety and Emergency Symbols (2021 ED)
NFPA 252	Standard Methods of Fire Tests of Door Assemblies (2022 ED)
NFPA 720	Standard for the Installation of Carbon Monoxide Detection and Warning Equipment (2015 ED)

See Chapter 35 for complete list of amendments to ASTM and UL Standards.

Title 19 C.C.R. State Fire Marshal Regulations (Partial List, Title 19):

- UL 464 Audible Signal Appliances (2016 ED)
- UL 521 Heat Detectors for Fire Protective Signaling Systems (1999 ED)
- UL 1971 Signaling Devices for the Hearing Impaired (2002 ED)

Construction Related Accessibility Regulations:

- 2010 ADA Standards for Accessible Design
- 2022 California Building Code, Chapter 11B (ET AL)

Division 1 - General

Bid Scope: Fabricator shall submit any questions on the scope of work and address any deviations in the plans during the inquiry phase of the bid. No exclusions and deviations without permission from the owner are allowed.

Division 3 – Concrete (separate bid package)

Reinforcing Steel

- A. Reinforcing for structural concrete
- B. Steel shall conform to ASTM A-615 grade 60
 - a. #4s and smaller shall be grade 40

Structural Concrete Work

- A. Foundations: $f'c = 3,500\text{psi}$
- B. Slabs: $f'c = 3,500\text{psi}$
 - a. 0.50 maximum water to cement ratio
 - b. Membrane vapor barrier over crushed rock
 - c. Under slab treated for termite control
 - d. Crete seal sealer & curing compound
- C. Portland cement: Conform to ASTM C150, Type V
- D. Aggregate: Conform to ASTM C33

Curing, Sealing and Hardening of Concrete Floors

- A. Single application cure-seal-hardener for new concrete floors.
- B. Single application sealer-hardener for existing concrete floors.
- C. Precautions for avoiding staining concrete before and after application.
- D. Warranty:
 - a. Provide manufacturer's warranty that a structurally sound concrete surface prepared and treated according to the manufacturer's directions will remain permanently dustproof, hardened, and water repellent. If after the specified sealing period the treated surface does

not remain dustproof, hardened, and water repellent, provide, at manufacturer's expense, sufficient material to reseal defective areas.

Division 6 – Wood

Rough Carpentry

- A. Wood stud and shear wall construction (where applicable).
- B. Roof framing, sheathing and crickets.
- C. Installation of framing anchors and hardware.
- D. Lumber shall be:
 - a. Douglas fir-larch per WCLB grading rule no. 17.
 - i. Joists & Planks: No. 1, S-dry.
 - ii. Beams & Stringers: Select Structural (FB: 1600).
 - iii. Posts & Timbers: No. 1.
 - iv. Other lumber: Construction grade, S-dry.
 - v. Plywood Sheathing: Structural I, C-D with exterior glue.

Engineered Wood Product

- A. Laminated Veneer Lumber (LVL).
- B. Wood I-Joist with wood flanges and web.
- C. Materials:
 - a. Subject to compliance with requirements, materials that may be incorporated into the work include, but are not limited to, the following:
 - i. Laminated Veneer Lumber:
 - 1. Headers, beams, and studs: MICRO-LAM LVL by Truss Joist Corporation; ICBO number: ER 4979
 - ii. Wood-I-Joist
 - 1. Georgia Pacific Corp.
 - 2. Louisiana-Pacific Corp.
 - 3. TrusJoist / Weyerhaeuser

Manufactured Wood Chord Joists

- A. Division of the State Architect approved pre-designed wood chord joists (I-joists).
- B. Acceptable manufacturers are as follows:
 - a. Truss-Joist McMillan
 - b. Standard Structures, Inc

Finish Carpentry

- A. Installation of hollow metal frames including reinforcing bar and grouting.
- B. Installation of doors and finish hardware.
- C. Installation of architectural woodwork, millwork, exposed interior plywood, wood stop windows and finish trim.
- D. Installation of signs, fire extinguishers, display cases and other miscellaneous items indicated on the Drawings.
- E. Installation of toilet room accessories and fixtures.

Casework

- A. Maple 3/4" plywood
- B. 3/4" melamine for interiors
- C. Cabinet box construction shall be dado and glued joints
- D. Plywood drawer sides and backs shall be used. 12 ply Baltic Birch.
- E. 3/4" Plywood cabinet bases shall be used
- F. Cabinets shall have a minimum of 1 coat of sealer and 3 coats of water based lacquer
- G. 3/4" banded maple door
- H. 22" full extension drawer guides, locate at bottom areas of drawers
- I. Maple hardwood for face frames
- J. Silver hardware door pulls and hinges (no European hinges)
- K. Corian 12 mm thick counter tops and 4" splash and returns, color to be Fossil

Division 7 – Thermal & Moisture Protection

Thermal insulation will be provided for building roof, walls and doors of type and fire resistance to comply with applicable code requirements. Thermal values of respective assemblies will be determined in accordance with the most current California Energy Code and ASHRAE guidelines. The insulation materials shall not contain asbestos in any form and be formaldehyde free.

General:

Exterior walls are to provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing, a water –resistive barrier behind the exterior veneer, and a means for draining water that enters the assembly to the exterior. Provide a minimum 12" inch metal flashing, 6" above and 6" below finished floor at the exterior walls. Sheet metal shall be installed by the fabricator after the building is set and anchored to the foundation.

Roof assemblies are to provide the building with a weather-resistant barrier. Weather-resistant barrier is to include a roofing system including flashing with manufacturer's warranty, and gutters and down-spouts. Flashing to be provided at all changes of roof slope, roof eave and rake, and at all roof penetrations.

Interior Walls

Demising walls will extend to the underside of the roof structure for acoustical privacy, with acoustical sound batts between studs, full height of the wall – workroom, restrooms, vestibule.

Stud walls: with gypsum wallboard, each side, at non-load-bearing walls – to past ceiling installation.

Toilet rooms and vestibules will be finished with a full height decorative fiber reinforced wall panels, colors and pattern shall be coordinated with the architect.

Rated Electrical Rooms wall assemblies will comply with UL rated designs.

Gypsum Wall Board

- A. Interior gypsum board finishes and backing boards.
 - 1. Type "X" in areas requiring fire rated construction.
 - 2. Abuse-resistant gypsum fiber panels where indicated on Drawings.
- B. Manufacturers:
 - 1. US Gypsum Co.
 - 2. Gold Bond
 - 3. Georgia-Pacific
 - 4. Other approved equal.

Roofing System

Metal roof system (Class B Min.). Roofing system over membrane underlayment and roof joists with 1/2 in 12 pitch and achieve no less than a thermal resistance value of R-30 and as required by California Energy Code, (thermal resistance value is the more stringent value), thermal foil-faced (FSK fiberglass insulation. Panels and related flashings to be a minimum 26 gauge. Metal roofing and gutters to receive Kynar 500 manufacturer's standard two-coat finish. 3-inch galvanized downspouts to be painted to match wall color.

Preformed Metal Roofing

- A. 24-gauge preformed metal roofing:
 - 1. Minimum five (5) year weather tightness guarantee is required from the installation contractor.
 - 2. Finish:
 - (a) Oven cured, 1 mil thick, fluoropolymer coating.
 - (1) KYNAR 500 or equal.
 - (2) Custom color as selected by Architect.
 - (3) Minimum twenty (20) year finish guarantee is required from the roofing manufacturer.
- B. Warranty:
 - 1. Manufacturer:
 - (a) Twenty (20) year paint finish guarantee.
 - 2. Installation Contractor:
 - (a) Five (5) year weather tightness guarantee

Division 8 – Doors, Windows, and Openings

Exterior windows will be double-pane, low-e insulated fixed glass in hollow metal frames. Windows will provide thermal insulation by means of the ½-inch air gap between the dual-panes.

Interior and exterior windows will be welded hollow metal frames. Hollow metal frames of smaller window openings are 16 gauge, and frames of larger window-walls are 14 gauge. Windows are to have true, welded hollow metal intermediate mullions, matching the profile of the window frames.

Windows in interior walls, sidelight and transoms at classroom and other interior locations are single pane, clear laminated or tempered safety glass. All exterior pedestrian door frames will be 16 gauge, galvanized, welded hollow metal, reinforced for hardware, and chemically treated for maximum adhesion of field-applied paint. All exterior head of frames to include an integral drip cap.

Hollow Metal Doors & Frames

- A. Doors
 - a. 16-gauge steel extra heavy-duty seamless doors.
 - i. Exterior doors shall be galvanized.
 - ii. Reinforced with internal channels:
 - 1. 12 gauge at top of door for closer.
 - 2. 16 gauge at sides and bottom of door.
 - b. Out-swinging exterior doors shall be provided with top caps for

- protection against weather with flush-steel top
- B. Frames
 - a. 14-gauge steel welded corner frames.
 - i. Exterior frames shall be galvanized.
 - ii. Heavy-duty anchor clips.
 - b. Corners: weld full depth and face, grind smooth, and re-prime
- C. Warranty:
 - a. Steel doors and frames supplied with a one (1) year warranty against defects in materials and workmanship.

Wood Doors

- A. Wood doors will be used on interior openings only.
 - a. Doors shall be premium quality, 1-3/4" thick, flush type, particleboard core.
 - i. Stiles shall be 1-1/2" wide hardwood of fire treated Douglas Fir.
 - ii. Rails shall be 2-1/4" wide
 - 1. 3/4" minimum shall be hardwood
 - iii. Core adhesive shall be type II minimum
 - iv. Face adhesive shall be type I minimum
 - b. Veneer shall be plain sliced AWI grade-1 facing veneer of natural book matched White Birch.
 - i. Provide veneer with minimal color variation throughout.
 - 1. Premium quality, solid core.
 - 2. Stain grade natural birch veneer
 - 3. Face Veneer Match shall be Book Match.
 - 4. Face Veneer Balance shall be Center-Balanced match
 - c. Finish shall be factory applied stain finish. Color selected by Architect.
- B. Warranty:
 - a. Wood Doors:
 - i. Submit written warranty on manufacturer's standard form signed by an official of the door manufacturer agreeing to repair or replace defective doors which have:
 - 1. Delamination in any degree.
 - 2. Warp or twist of 1/4 inch or more in any 3-foot 6 inch by 7-foot plane of door face.

- 3. Telegraphing of stile, rail, or core through face to cause surface variation in excess of 1/100 inch in any 3-inch span.
 - ii. Warranty to be in effect for life of original installation.
 - iii. Warranty to include refinishing and reinstallation that may be required due to repair or replacement of defective doors.
 - iv. Warranty not to be in effect for any field-finished doors not having been sealed properly on all edges and faces.
 - b. Installation
 - i. Contractor shall warranty door installation for a period of two (2) years.
- C. Factory finished steel access doors
 - a. Use master key compatible key lock on all exterior access doors, per District Standards.
 - b. Use cam lock for interior access doors.

Light Openings in doors

- A. Light Openings:
 - a. Openings shall be factory cut.
 - b. Coordinate openings with hardware cutouts.
- B. Factory-supplied, through-bolted metal stop assemblies shall be used.
- C. Glazing stop assemblies shall be 18-gauge steel, complete with factory-applied primer finish.
 - a. Quality Standard:
 - i. Visionlite #VLT by Air Louver Inc.;
 - ii. Or equal.
- D. Exterior door: Exterior Door Glazing.
- E. Interior door: Tempered Polished Plate Glass.

Hardware

Hardware to comply with District Standards. Doors and frames shall have sound seals where required to sound attenuation, and smoke seals where required at fire and smoke rated doors. Kick plates will be provided on doors, where appropriate.

Acceptable Manufacturers:

ITEM:	MANUFACTURER:	ACCEPTABLE SUB:
Hinges	(HAG) Hager	Ives
Key System	(YAL) Yale	Owner's Standard
Locks	(YAL) Yale	Owner's Standard
Exit Devices	(YAL) Yale	Owner's Standard
Electronic Locks	(SCE) Schlage Electronics	
Closers	(NOR) Norton	Owner's Standard
Silencers	(IVE) Ives	Trimco
Kickplates	(IVE) Ives	Trimco
Stops & Holders	(IVE) Ives	Trimco
Thresholds	(PEM) Pemko	NGP
Seals & Bottoms	(PEM) Pemko	NGP

Exterior Single Doors With Panic Hardware Hw. Set No. 01

3	EA	HINGE	BB1191 4.5 X 4.5 NRP	26D	HAG
1	EA	EXIT DEVICE	5CA-7150 X AU546F	626	YAL
1	EA		IC RIM CYLINDER (W/ TEMP CORE)	626	YAL
1	EA		PERMANENT IC CORE ONLY	626	YAL
1	EA	SURFACE CLOSER	P7500-H	689	NOR
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	SECURITY FLOOR STOP	FS18S	BLK	IVE
2	EA	JAMB SEALS	290AS	AL	PEM
1	EA	HEAD SEAL	2891AS	AL	PEM
1	EA	DOOR SWEEP	315CN	AL	PEM
1	EA	THRESHOLD	272A MS/LA	AL	PEM

INSTALL HEAD SEAL BEFORE CLOSER

Interior Restroom Single Doors Hw. Set No. 02

3	EA	HINGE	BB1279 4.5 X 4.5	26D	HAG
1	EA	PASSAGE LATCH	AU5401LN	626	YAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS401CCV	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

Interior Single Workroom Doors Hw. Set No. 03

3	EA	HINGE	BB1279 4.5 X 4.5	26D	HAG
1	EA	ENTRY LOCK	AU5404LN	626	YAL
1	EA		PERMANENT IC CORE ONLY	626	YAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	DOME STOP	FS438 435 436 437 AS REQU'D	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

Exterior Unisex Restroom Doors Hw. Set No. 04

3	EA	HINGE	BB1279 4.5 X 4.5	26D	HAG
1	EA		PERMANENT IC CORE ONLY	626	YAL
1	EA	ELECTRONIC LOCK	CO-200-CY-40-PRK-RHO-YALE	626	SCE
1	EA	SURFACE CLOSER	7500	689	NOR
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	MOP PLATE	8400 4" X 1" LDW	630	IVE
1	EA	WALL STOP	WS401CCV	626	IVE
1	SET	JAMB SEALS	290AS HEAD AND JAMBS	AL	PEM
1	EA	DOOR SWEEP	315CN	AL	PEM
1	EA	THRESHOLD	272A MS/LA	AL	PEM
25	EA	PROXIMITY KEYFOB	7610		SCE

Exterior Storage Doors Hw. Set No. 05

3	EA	HINGE	BB1279 4.5 X 4.5	26D	HAG
1	EA	STOREROOM LOCK	AU5405LN	626	YAL
1	EA		PERMANENT IC CORE ONLY	626	YAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS401CCV	626	IVE
1	SET	JAMB SEALS	290AS HEAD AND JAMBS	AL	PEM
1	EA	DOOR SWEEP	315CN	AL	PEM
1	EA	THRESHOLD	272A MS/LA	AL	PEM

Tubular Skylights

Complete skylight assembly that is weather-tight and airtight, conforming to the performance requirements below.

Performance Requirements:

1. Water Penetration: No water penetration shall occur when system is tested in accordance with ASTM E331. Water penetration is defined as the appearance of uncontrolled water, other than condensation on the interior surface of any part of the skylight.

2. Air Infiltration: Air infiltration through the skylight assembly, when tested in accordance with ASTM E283, shall not exceed 0.06 cubic feet per minute per square foot of fixed area.
3. Thermal Movement: Skylight assembly shall be so designed and anchored that there will be no objectionable distortion or stresses in fastening and joinery due to expansion and contraction when subjected to temperature variance.
4. Uniform Load Testing: No breakage, permanent damage to fasteners, hardware parts, or damage to make tubular skylight inoperable, or cause permanent deflection of any section in excess of 1% of its span at either a maximum Positive or Negative Load of 100psf (4.7881kPa) for the 10 inch (254 mm) and 14 inch (356 mm) units and 35psf (1.6758) unit. All units shall be tested with a safety factor of (3) for positive pressure and (2) for negative pressure, acting normal to plane of roof in accordance with ASTM E 330.
5. Fire Testing:
 - a. Class 'B' Burning Brand -The burning brand shall self-extinguish without transferring the fire to the dome per UBC Standard 15-2 Class 'B' Burning Brand Test. See ASTM E 108 and UL 790.
 - b. Self-Ignition Temperature - greater than 650 degrees F per UBC Standard 26-6. See ASTM D-1929-68 (1975)
 - c. Smoke Density-Rating no greater than 75 per UBC Standard 26-5. (See ASTM D-2843-70) or greater than 450 per UBC 8-1 (See ASTM Standard E 84-91A) in way intended for use.
 - d. Rate of Burn - Minimum Burning Rate: 2.5 inches/min. (64 mm/min) Classification CC-2: UBC Standard 26-7. See ASTM D-635-74.

Accessories:

- a. Security Bars: Type B Security Bars 0.375 inch (95 mm) stainless steel bar across flashing diameter opening.
- b. Security Kit: Type SK Dome Security Kit, rivets with nylon spacers to replace dome screws.
- c. Daylight Dimmer: Locations shown on the drawings only. Type D electro-mechanically actuated daylight valve; for universal input voltages ranging between 90 and 277V at 50 or 60 Hz; actuator rated at 0.1 amp per unit; controlled by low voltage, series Type T02: circuited, 4 conductor, size 22 cable, and low voltage DC DP/DT switch; providing daylight output between 2 and 100 percent. Provided with dimmer switch and cable.
- 1) Switch: Type SW, low voltage switch (white) required to operate

Daylight Dimmer. Note: only one switch is required per set of synchronously controlled dimmers.

- 2) Cable: Type CA, two conductor low voltage cable (500 ft.).

Division 9 – Finishes

Exterior Lathing and Plastering

Elastomeric Factory Applied Finish Colors to be selected by Architect.

Gypsum Wall Board Walls and Ceilings (where applicable)

Interior gypsum board finished and backing boards.

1. Type "X" in areas requiring fire-rated construction.
2. Abuse-resistant gypsum fiber panels where indicated on Drawings.
3. Painted

Manufacturers

1. US Gypsum Co.
2. Gold Bond
3. Georgia-Pacific
4. Other approved Equal

Acoustic Ceiling (where applicable)

- A. Suspended acoustic ceilings shall be heavy duty T-Bar grid.
 - a. Standard white color.
- B. Acoustic tiles shall be 2'x4' fissured typical.
 - a. 2'x4' acoustic tile layout as indicated on drawings.
- C. Manufacturers
 - a. Suspension System
 - i. Chicago Metallic
 - ii. Donn
 - iii. Armstrong World Industries
 - iv. Substitutions must demonstrate structural equivalency and must be submitted as a no-cost change order and must be approved by the Division of the State Architect, Structural Safety Section, and the Structural Engineer of Record.
 - b. Acoustic Tiles and Panels
 - i. Armstrong
 - ii. USG
 - iii. Or approved equal

Painting

Exterior and interior colors shall be selected by the Architect and approved by the District. All interior gypsum board walls and ceilings, doors, and frames, exposed roof framing and roof deck, exposed metal ductwork and metal trim shall be painted with Semi-Gloss, low VOC coatings that are lead-free and chromatic-free. Dunn Edwards or equal.

90% or more of the total volumes of such products shall meet the applicable VOC content requirements of the California Air Resources Board (CARB) 2007, Suggested Control Measure (SCM) for Architectural Coatings, or the South Coast Air Quality Management Districts (SCAQMD) Rule 1113, effective June 3, 2011. Aerosol paintings and coatings shall comply with CALGreen section 5.504.1.3.1.

A. Manufacturers

- a. Dunn Edwards
- b. Benjamin Moore
- c. Sherwin Williams
- d. Glidden Professional

B. Metal Trim, Metal Doors, and Frames (Semi-Gloss):

- a. 1st Coat (Shop-Primer):
 - i. Rust-inhibiting primer by Section 08 11 13, "Hollow Metal Doors and Frames".
 1. When "Shop Primed" do not omit field applied primer prior to first coat, Devoe 4020PF or Carboline Galoseal WB.
 2. Onsite solvent cleaning per SSPC-SP 1 requirements.
- b. 1st Coat (Primer):
 - i. Alkyd, Anti-Corrosive Metal Primer.
 1. Benjamin Moore, Corotech Metal Primer V110
 2. Dunn-Edwards, Bloc-Rust Premium BPRPR00 Series or Enduraprime Rust Preventative Primer ENPR00.
 3. Sherwin Williams, Procryl Primer B66W310
- c. 2nd Coat:
 - i. Interior Acrylic Enamel Semi-Gloss.
 1. Benjamin Moore, Scuff-x Semi-Gloss
 2. Dunn-Edwards, Spartawall SWLL50 (Gloss Level 50)
 3. Sherwin Williams, PI WB Alkyd Urethane B53 Series

- d. 3rd Coat:
 - i. Interior Acrylic Enamel Semi-Gloss.
 - 1. Benjamin Moore, Scuff-x Semi-Gloss
 - 2. Dunn-Edwards, Spartawall SWLL50 (Gloss Level 50)
 - 3. Sherwin Williams, PI WB Alkyd Urethane B53 Series
- C. Wall and Ceiling Finishes - General Use Areas:
 - a. Gypsum Wall Board Semi-Gloss Sheen (Ceilings and Walls):
 - i. 1st Coat (Wall Sealer):
 - 1. Interior Latex Wall Sealer
 - a. Benjamin Moore, Ultra Spec Primer N534
 - b. Dunn-Edwards; Vinylastic Plus VNPL0
 - c. Sherwin Williams, ProMar 200 Primer B28W2600
 - ii. 2nd Coat:
 - 1. Interior Acrylic Enamel Semi-Gloss.
 - a. Benjamin Moore, Ultra Spec Interior Semi-Gloss N539
 - b. Dunn-Edwards, Spartawall SWLL50 (Gloss Level 50)
 - c. Sherwin Williams, ProMar 200S/G B31
 - iii. 3rd Coat:
 - 1. Interior Acrylic Enamel Semi-Gloss.
 - a. Benjamin Moore, Ultra Spec Interior Semi-Gloss N539
 - b. Dunn-Edwards, Spartawall SWLL50 (Gloss Level 50)
 - c. Sherwin Williams, ProMar 200S/G B31

Tiling

- 1. Interior Floor and Wall Tile:
 - 1) Unless otherwise noted, standard grade materials complying with ANSI A137.1 shall be used.
 - 2) Manufacturers: Daltile, American Olean, or approved equal
- 2. Floor Tile:
 - 1) Unglazed ceramic mosaic, natural clay, cushion edge.
 - (a) Static coefficient of friction shall be as specified in Part 1.03 A Regulatory Compliance above.
 - 2) Quality Standards:
 - (a) Field Colors:
 - (1) Daltile "Keystones," price range 1 and 2.

- (b) Accent Colors:
 - (1) Daltile "Keystones," price range 2 and 3.
- 3) Base Tile:
 - (a) 4-1/4" x 4-1/4" glazed cove base tile.
 - (b) Quality Standards:
 - (1) Base tile matching wall tile.
- 4) Miscellaneous Shapes:
 - (a) Use coved or bullnose corners on all tile walls and wall / floor corners.

Flooring

Warranty:

1. Warranty Period: 10 years from date of Substantial Completion

Carpet Tile

1. Modular Carpet Tile (Walk-off Mat)
 - a. Basis of design: Interface, Inc. SR799
 - b. Color: Onyx
 - c. Construction: Tufted Textured Loop
 - d. Fiber Content: 100 percent nylon.
 - e. Fiber Type: Aquafil.
 - f. Dye Method: 100 percent solution dyed.
 - g. Pile Characteristic: Tip-sheared.
 - h. Pile Height: .19 inch.
 - i. Stitches: 10 per inch.
 - j. Gage: 1/12 inch.
 - k. Face Yarn Weight: 26 oz per sq yd.
 - l. Density: 6,686 oz per cu yd.
 - m. Primary Backing/Backcoating: Non-woven fiberglass-reinforced PVC.
 - n. Secondary Backing: Fiberglass-reinforced thermoplastic composite; 100 percent recyclable.
 - i. Provide minimum 39 percent recycled content, post-consumer or post-industrial in secondary backing material.
 - o. Size: 19.6 inches square.
 - p. Applied Soil-Resistance Treatment: Manufacturer's standard material; 8.0 on the Red 40 Stain Scale, per AATCC 175.
 - q. 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.

- r. Performance Characteristics: As follows:
 - i. Colorfastness to Crocking: Not less than 4, wet and dry, per AATCC 165.
 - ii. Colorfastness to Light: Not less than 4 after 60 AFU (AATCC fading units) per AATCC 16, Option E.
 - iii. Electrostatic Propensity: Less than 3.0 kV per AATCC 134.
- s. Minimum Recycled Content:
 - i. Preconsumer: 33 percent.
 - ii. Postconsumer: 33 percent.
- t. VOC Emissions:
 - i. Complies with requirements specified in "CALGreen Requirements" Article.
 - ii. Certification: CRI Green Label Plus.

2. Modular Carpet Tile (Field)

- a. Product: Interface, Inc.; Cubic.
- b. Color: T.B.D.
- c. Construction: Tufted.
- d. Fiber Content: 100 percent nylon Type 6, 6.
- e. Fiber Type: Aquafil.
- f. Dye Method: 100 percent solution dyed.
- g. Pile Characteristic: Textured loop.
- h. Pile Height: .145 inch.
- i. Stitches: 8.16 per inch.
- j. Gage: 1/12 inch.
- k. Face Yarn Weight: 18 oz per sq yd.
- l. Density: 6,968 oz per cu yd.
- m. Primary Backing/Backcoating: Non-woven fiberglass-reinforced PVC.
- n. Secondary Backing: Fiberglass-reinforced thermoplastic composite; 100 percent recyclable.
 - i. Provide minimum 39 percent recycled content, post-consumer or post-industrial in secondary backing material.
- o. Size: 50 cm by 50 cm (19.69 inches square).
- p. Applied Soil-Resistance Treatment: Manufacturer's standard material; 8.0 on the Red 40 Stain Scale, per AATCC 175.

- q. 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).
- r. Performance Characteristics: As follows:
 - i. Colorfastness to Crocking: Not less than 4, wet and dry, per AATCC 165.
 - ii. Colorfastness to Light: Not less than 4 after 60 AFU (AATCC fading units) per AATCC 16, Option E.
 - iii. Electrostatic Propensity: Less than 3.0 kV per AATCC 134.
- s. Minimum Recycled Content:
 - i. Preconsumer: 45 percent.
- t. VOC Emissions:
 - i. Complies with requirements specified in "CALGreen Requirements" Article.
 - ii. Certification: CRI Green Label Plus.

Decorative Fiberglass Reinforced Wall Panels

Manufacturers: Marlite, Symmetrix Smart Seam FRP, or approved equal.

- A. Fiberglass reinforced thermosetting polyester resin panel sheets complying with ASTM D 5319.
 - 1. Coating Panel Color: Solid Color Panel from Sherwin Williams color chart – Color selected by Architect
 - 2. Groove Color: white
 - 3. Tile pattern: Square: 4" x 4" tile configuration
 - 4. Fire rating: Class C (III) Fire Rating
 - 5. Dimensions:
 - a) Thickness – 0.090" (2.29mm) nominal
 - b) Width – 4'-0" (1.22m) nominal
 - c) Induro FRP Panels are not available in lengths exceeding 8' (2.4m).
 - d) Length – As indicated on the drawings
 - e) Tolerance:
 - (1) Length and Width: +/-1/8" (3.175mm)
 - (2) Square - Not to exceed 1/8" for 4' (1.2m) panels, 8' (2.4m) panels or 5/32" (3.96mm) for 10' (3.0m) panels
- A. Moldings:
 - 1. Manufacturer's standard moldings as required.

Division 10 – Specialties

Tackboard

Vinyl Covered Tackboard: substrate shall be industrial insulation board 1/2" by full height and shall be manufactured specifically as a substrate for vinyl covered wall panels applied directly to the walls. The board shall be asphalt free, shall have an ironed-on coating, and have a density of 16 pounds per cubic foot. Edges are square without bevel (beveled available on request). The vinyl coatings shall be made of virgin vinyl calendared base color, weighing a minimum of 15 oz. per lineal yard. The coating shall be backed with sheeting of nonwoven fabric. The vinyl wallcovering shall be mechanically laminated, with the long edges wrapped to the back of the tackboard. The panels will be applied over 1/2" Gypsum board or 3/8" plywood sheeting. The vinyl covered tackboard shall be a class II flame spread rating. Architect may select up to three different colors and/or pattern series for the project.

Accessories

A. Adhesives:

1. Manufacturer's recommended adhesive appropriate for substrate.

B. Trim:

1. Plastic 'J' mold trim with color to match vinyl.
 - a. Extruded aluminum channel trim:
 - a. 0.50 inch thick with 5/8" legs.
 - b. Clear anodized.

Basis of design: Chatfield-Clarke Co., Inc. – **Group 2, Type 1** or comparable.

Care shall be taken in mounting the tackboard so that the texture of all panels will have the same orientation and color match.

Toilet Compartments / Toilet Room Accessories

Toilet Accessories items based on the use of products by Bobrick Washroom Equipment, Inc.:

- Paper Towel Dispenser: Model B-262, Classic Series, 22-gauge stainless steel, surface mounted. Staff areas.
- Paper Towel Dispenser: Model B-263, 22-gauge, stainless steel, surface mounted. Student areas.

- Toilet Seat Cover Dispenser: Model B-221, Classic Series, 20-gauge stainless steel, surface mounted.
- Toilet Paper Holder (student areas): Model B-6999, 22-gauge stainless steel, heavy duty spindles, surface mounted.
- Toilet Paper Holder (staff areas): Model B-2888, Classic Series, 22-gauge stainless steel, heavy duty spindles, surface mounted.
- Soap Dispenser: Model B-2111, Classic Series, 22-gauge stainless steel, surface mounted.
- Mirror:
 - Staff areas: Model B-290-18x30, Angle Frame, Tempered Glass, with No. 4 stainless steel finish, snap locking design.
 - Student areas: Model B-1556; Stainless Steel Angle Mirror Frames, Fabricated from 0.0375-inch stainless steel, formed to $\frac{3}{4}$ -by- $\frac{3}{4}$ inch angle with beveled edge; vertical-grain satin finish; concealed mounting brackets with tamper-proof fasteners.
 - Tempered Plane Glass Mirror: $\frac{1}{4}$ inch thick, No. 1 quality, tempered select float glass; silver-coated, hermetically sealed with uniform electrolytically-deposited copper plating.
- Grab Bars: Model B-6806, Fabricated to comply with ASTM F446 and to withstand a 900-pound force. Stainless steel tubing, Type 304, 18-8 alloy, formed 1-1/2-inch radius return to wall at each end; each end heliarch-welded to minimum 11 gage stainless steel circular flange; with concealed mounting flanges.
- Feminine Towel Dispenser: Model B-254, 22 gauge Stainless Steel, Classic Series, surface mounted
- Robe Hook: Model B-212, solid cast aluminum with matte finish. Unit shall be equipped with hard rubber bumper
- Electric hand dryer (student areas), design is based on the use of products manufactured by World Dryer Corporation, Model SLIMdri, 3-15/16-inch projection from wall, die-cast aluminum housing with epoxy paint or chrome plating, single-piece construction, $\frac{1}{4}$ inch thick, with acid –resistant porcelain enamel finish. Hand dryer requires a dedicated circuit.

Signage

Exterior building ADA Access compliance by fabricator. Interior and Exterior room signage will be designed to accommodate the visually impaired. Signage shall conform to California Code of Regulations, Title 24, Part 2, 2022 CBC Section 11B-703. All room doors will have solid photo-etched zinc wall panels with the room name and/or number. Signs shall be 1/4" thick solid acrylic plastic base with 1/8" thick characters chemically welded to base.

Miscellaneous signage to include but is not limited to: Code Required Maximum Occupancy signage, IT Room, Storage, and Electrical Room signage.

Fire Protection Specialties

Fire extinguishers: As required by code, provide 5 lb. with steel cylinder, for Class A, B, C. Provide semi-recessed stainless steel fire extinguisher cabinet, continuously hinged full glass doors with Saf-T-Lok glass and cylinder locks, flexible cams, and FX tub at locations throughout facility.

District Provided Equipment

The following will be provided separately by the School District as part of their FF&E and budget:

1. Loose furniture for the classrooms
2. IP Based Communication and Audio-Visual equipment. Refer to Signaling System section below for additional information.
3. Smart Boards – Fabricator to coordinate raceways and backing necessary.

Division 23 – Mechanical Systems

General Mechanical Requirements

HVAC heating and cooling load calculation for system and equipment sizing are to be performed in accordance with 2022 California Energy Code.

Electrical and IDF rooms are to be conditioned to maintain space temperature below 80-degree F to ensure the proper safety and function of the electronic equipment. The cooling only AC unit capacities are sized based on the heat dissipation of the electrical equipment that is given by the electrical engineer/IT consultant.

The design building envelope for new buildings shall comply with Chapter 5, 2022 Title 24, Part 6, California Energy Code for minimum wall, roof insulation and low E fenestration using performance approach.

For general occupied spaces such as classrooms, the minimum ventilation requirements shall comply with 2022 California Mechanical Code, Table 402.1. Areas such as storages, custodian closets and restrooms shall comply with Table 403.7, minimum exhaust rates. The exhaust fans on roof shall be down shot type and comply with CMC section 506.9 exhaust outlets.

Plumbing Systems

Plumbing Fixtures:

1. Toilet Fixtures: Low water consuming water closets of 1.28 gallon per flush and urinals of 1/8 gallon per flush will be provided. Sensor operated flush valves will be provided for staff water closets.
2. Faucets (staff):
 - a. Manufacturer: Chicago Faucets
 - b. Model: 3600-E2805AB
 - c. Push button, ACC, timed self-closing metering faucets
 - d. Provide both hot and cold water
3. Faucets (student):
 - a. Manufacturer: Chicago Faucets
 - b. Model: 3400-ABCP
 - c. Provide only cold water
4. Classroom sinks:
 - a. Elkay PSDKADQ2517C without bubbler and faucet, (2) hole. Faucet hole in center.
 - b. Haws 5054LF drinking fountain bubbler.
 - c. Haws 5510LF faucet.
 - d. Brasscraft angle stops.

- e. Brasscraft copper faucet riser, one piece with insert.
 - f. Brasscraft Speedi-Plumb plus braided connector.
 - g. Aqua Pure water filter AP717.
5. Lavatories:
 - a. Manufacturer: Kohler
 - b. Model: Hudson K-2867
 - c. Installation: Wall mount
 - d. ADA compliant
 6. Hose bibs will be along the perimeter at maximum 75 feet intervals. Plumbing fixtures to comply with CALGreen fixture flow rates.
 7. Drinking Fountains
 - a. Manufacturer: Haws
 - b. Model: 1501-1920W
 - c. Construction: heavy duty cast iron
 - d. Bottle filler: vandal resistant, powder coated
 - e. Wall mounted

Manufacturer:

Water Closet:	American Standard, Kohler, Zurn
Lavatory:	American Standard, Kohler, Zurn
Faucet:	American Standard, Kohler, Zurn, Chicago
Sink:	American Standard, Kohler, Zurn, Elkay
Drinking Fountain (optional bottle filler):	Haws, Acorn
Service Sink:	American Standard, Kohler, Zurn
Hose Bibb:	Acorn, Zurn

Groups of fixtures shall be provided with isolation valves and heavy-duty angle stops for ease of maintenance. Each plumbing fixture shall also be provided with isolation valves. Each set of restrooms is provided with wall mounted shut-off valves behind a single access panel on the wall of the same toilet room. Service shut-off valves are provided for all fixtures and hose bibs

Sanitary Waste and Vent System

Sanitary waste and vent system shall be provided for each plumbing fixture. All sanitary waste lines and vent piping below grade shall be No-

hub cast iron with elastomeric coupling secured with stainless steel bands. All Sanitary waste and vent lines above ground shall be schedule 40 PVC.

Roof and Storm Drainage System

The roof drainage system will be designed with connections to the on-site storm drainage system. Sizing will be based on a rainfall rate of 2 inches per hours as required by California Plumbing Code.

Site Utility Points of Connection

Locations of Points Of Connection (POC); the existing campus utilities will be extended to locations required by the new building design by others under separate contract. Utility points of connection will be 5' from the footprint of the new classroom building. Locations of the utilities within the building and the POCs shall be coordinated with the project civil engineer and architect.

Division 26 – Electrical Systems

Plan Coordination:

Fabricator shall be responsible for coordinating the entry of raceways into the building, in particular coordination of plumbing and electrical conduits.

Receptacles Placement:

Outlets are to be placed per plans and per code.

Lighting System:

General: Lighting system shall consist of new lighting fixtures, fed from 120/208 volts, 3 phase, 4 wire (or 120/240V, 1 phase) panel boards in electrical rooms.

Lighting Controls: Occupancy sensors will be used to control the lighting system in classrooms and support area. Daylight saving controls will be utilized to dim lights when there is sufficient daylight. The automatic dimming controls will be interconnected digitally with light sensors in daylight zone area. Outdoor and site lights will be controlled by digital timers, photocell controls, motion sensors and dimming controls.

Classrooms: The lighting system shall include multiple rows of recessed LED fixtures (with 0-10V dimming driver). In compliance with California Energy Code requirements, lighting system will operate in three modes, general illumination, quiet mode, and A/V mode. The lighting system will provide an average of 35–50-foot candles at task level, minimum 25-foot candles at the student's desks (worst case 3 feet from walls) and adequate levels at ceiling and vertical surfaces.

Digital dimming switches will be provided at teacher desk and at the door. On/off switches will be provided at door. Digital Switches for whiteboard fixtures, A/V mode, diming up/down and Quite Time shall be provided at teacher desk. Dimming switches for solatubes shall be provided at teacher desk.

Restrooms: Surface / Recessed mounted vandal-proof LED lighting fixtures will be designed for restrooms to provide 10-foot candles of lighting.

Exterior Lighting: LED fixtures light fixtures wall mounted on building exterior will be designed to provide 2-foot candles of lighting at the exterior walkways. Exterior lighting system with dimming will comply with new Title 24 requirements. The exterior lighting fixtures close to property lines will include shields to avoid light spillage beyond the property lines. The built-in motion sensors at exterior lighting fixtures shall automatically dim down lights to minimum security levels.

Fire Alarm System:

The Conduits, pathways and race-ways shall be provided under scope of this project to support an addressable fire alarm system. Wiring and Devices by others.

Division 27 – Communications Systems

Signaling System:

The conduits, pathways and race-ways shall be provided under scope of this project to support an Integrated IP Based Communication and AV system to include the following components:

- Data Room
- Fiber run from existing IDF room to the New Classroom Building. (Site Contractor)
- WLAN Wireless cabling and Infrastructure. Two wireless access points at classrooms, lab, and in the pull-out spaces. Four wireless access points at computer lab.
- Data outlets per plan with CAT 6 cabling adjacent to duplex power outlets as shown
- VOIP Telephone System
- Paging, Bells, Intercom, VOIP, and Emergency Notification to be provided in the new building and tied into the existing campus systems.
- Classroom Audio visual system
- Classroom Assistive listening system

Security:

The conduits, pathways and race-ways shall be provided under scope of this project to support surveillance camera system and door security contacts. Coordinate with the district for locations and requirements.

XX. Modular Scope of Work

The following Modular Scope of Work Matrix is not meant to be an exhaustive list and nor shall it be used as one. This Matrix is intended to aide and assist all parties in defining and better understanding each other's responsibilities.

Task	Responsible Party				Notes
	Separate Contract	OMA	Owner	Modular	
General Conditions					
DSA Approvals		X		X	
DSA Back Check (Attend)		X		X	Modular Company to attend DSA Back Check
Final DSA Approval		X		X	
Certificate of Occupancy		X		X	
Temporary Security Fence	X		X		
Temporary Heat				X	As needed for installation
Temporary Lighting				X	As needed for installation
Dumpsters				X	Modular: self-generated debris only
Building Title 24 Signage				X	
Exterior Building Signage	X		X		
Site Cleanup				X	Modular: self-generated debris only
Payment and Performance Bond				X	
Site Security	X		X		
Portable Restrooms During Construction	X		X		
Phone and Data Service for Construction					N/A
Construction Office	X				N/A

Task	Responsible Party				Notes
	Separate Contract	OMA	Owner	Modular	
Project Management	X			X	Include for modular buildings on site and in factory
Prevailing Wages	X			X	On site only
Builder's Risk	X			X	As required
Architecture and Engineering					
Modular Building Engineering	X			X	
Architectural Design		X		X	Modular Building Architectural
MEP Engineering				X	For Modular Building
Fire Alarm/Low Voltage Design	X	X			
Foundation Engineering				X	
Civil Engineering		X			
Site Utility Verification / Engineering	X	X	X		
Storm Water and Erosion Control Plan	X		X		
Surveying	X				
Locate Building Benchmark	X				Will need building corner point
Soils Testing			X		For Geotech report
Slab Utility and Embed Plan					
Regularly Scheduled Meetings	X	X	X	X	
Fire Sprinklers				X	

Task	Responsible Party				Notes
	Separate Contract	OMA	Owner	Modular	
Factory Scope					
Building Manufacturing				X	
Concrete Floor System				X	Modular to provide concrete embeds
Floor Finishes	X		X	X	
Interior Wall Finishes				X	Per plans and specs
Roofing				X	Per plans and specs
Ceiling Finish				X	Per plans and specs
Electrical Wiring				X	Wiring, raceways, and finish devices
Electrical Fixtures				X	
Electrical Panels				X	For Modulars only
Plumbing Fixtures				X	All rough and finishes, ADA compliant hardware
Casework	X		X	X	Per plans and specs
Windows, Doors, and Hardware				X	
Fire Extinguishers				X	For modular only
Building Signage				X	All Title 24 Signage
Smart Boards	X		X	X	
Magnetic Marker Boards	X		X	X	
Third Party DSA Inspections (In-Plant)			X		Owner will contract
Testing and Inspections			X		Owner will contract
Load Side Connections to Panels				X	
Fire Sprinklers				X	

Task	Responsible Party				Notes
	Separate Contract	OMA	Owner	Modular	
Line Side Connections to Panels	X				
Transformers	X				Site Work
Modular Building Installation					
Building Installation per Scope of Work				X	
Interior Finish and Close-Up				X	Smooth finishes, no battens
Level Modular Units				X	
Weld Modular Units to Foundation				X	
Crane Service				X	
Building Transportation to Site				X	
Clear Access to Site	X		X		
MEP in Modular Building				X	Stubbed out to 5' of modular building
Building Safety – Staging and Craning				X	
Site Work					
Site – Cleaning & Demo	X		X		Sub-contractors to collect all generated debris and haul off
Site – Grading	X		X		
Site – Fill & Compact	X		X		
Site – Pave, Curb, Stripe	X		X		
Site – Storm Water Mgmt.	X		X		
Site – Landscaping	X		X		
Site – Light Poles, etc.	X		X		

Task	Responsible Party				Notes
	Separate Contract	OMA	Owner	Modular	
Site – Natural Gas	X		X		
Utility Metering	X		X		
Grounding and Bonding				X	Modular Frames and Electrical Panels
Ground Rod and Testing			X		Owner to Cover Testing
Concrete Foundation Backfill	X				
Any Work NOT Within Building Envelope	X		X		
Site Security	X		X		
Site Utilities	X				
Final Connections to all utilities	X		X		
Concrete Structural Slab	X				Design by Modular
Exterior Finishes				X	Modular buildings to be prefinished
Electric and Low Voltage					
Electrical Service	X				
Electric – Service Connections	X				Coordinate with Modular
Electric – Interior Connections				X	Cross Connects
Provide Power to Interior Islands				X	Per Plans
Fire Alarms and/or Detection Systems				X	Conduits Back Boxes only
Voice/Data Systems				X	Conduits Back Boxes only
Public Address System				X	Conduits Back Boxes only
Commissioning	X		X		

Task	Responsible Party				Notes
	Separate Contract	OMA	Owner	Modular	
Plumbing					
Plumbing – Rough Plumbing	X				
Plumbing Service	X				
Plumbing – Service Connections	X				
Plumbing – Interconnections	X			X	
Fire Sprinklers				X	
Fire Riser				X	Per Plan
Site Test and Sterilize	X			X	Coordinate to 6" above grade at POC
Final Connections	X				
Mechanical					
HVAC System				X	
HVAC Balancing				X	
HVAC Testing				X	
Commissioning				X	
Power Exhaust				X	
EMS	X		X		

XXI. Modular Building Plans and Specifications Enclosed

- A. One (1) Permanent Modular TK Classroom Building with three (3) Classrooms within.

XXII. Modular Project Schedule

Anticipated Modular Contract Award – **December, 2023** – upon Board approval.