

March 11, 2022

ADDENDUM NO. 1



RE: Building 2000 Interior Modifications
WV Regional Technology Park
Bridge Valley Community and Technical College
2001 Union Carbide Drive
South Charleston, WV
Architect's Project No. 22008

TO: Prospective Bidders

FROM: ZMM, Inc. Architects and Engineers

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents.

ATTACH THIS ADDENDUM TO THE FRONT COVER OF THE PROJECT MANUAL AND ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED ON THE BID FORM.

PART 1 - INFORMATION FOR BIDDERS

- A. **Bid Date is postponed until 3:00 p.m. Easter Time, Tuesday, March 29, 2022.**
- B. The deadline for Bidders' questions and Substitution Requests Prior to Bid is 5:00 p.m. Friday, March 18, 2022.
- C. Pre-Bid Meeting Minutes and Sign-In Sheets are attached to this Addendum.
- D. Clarification: RFB Number appearing in Section 00300 – Form of Proposal is revised to read 22208.
- E. The work performed under this Contract is federally funded. Pursuant to 2CFR 200.317, Vendors are required to pay applicable Davis-Bacon wage rates.
- F. Instructions To Bidders AIA Document A701 – ADD Paragraph 3.3.5 to read: "Submission shall be made by prime Bidders only; no consideration will be given to items submitted directly by manufacturers, suppliers, distributors or subcontractors.
- G. The following Substitution Request has been approved:
 - 1. Specified Product: HDPE Lockers Section 105113.13; Basis of Design and acceptable products listed.
 - 2. Approved Substitute Product: Scranton 'TuffTec' HDPE Lockers.

Blacksburg
200 Country Club Drive SW
Plaza One, Building E
Blacksburg, Virginia 24060
540•552•2151

Charleston
222 Lee Street West
Charleston, West Virginia 25302
304•342•0159
www.zmm.com

Martinsburg
5550 Winchester Avenue
Berkeley Business Park, Suite 5
Martinsburg, West Virginia 25405
304•342•0159

PART 2 - CHANGES TO SPECIFICATIONS

- A. Section 011000 "Summary" – ADD Line 1.3.A.10 to read: "Contractor shall provide and install headwalls and compressors noted in Detail 3/A411 for each of the 5 SIM rooms".
- B. Section 024119 "Selective Demolition" – Note the following revisions:
1. ADD Paragraph 1.8.D.2 to read: "All areas where work is to be performed have been abated of all hazardous materials. A copy of these reports will be made available to the successful bidder after notification."
 2. ADD Paragraph 3.5.D to read as follows: "The following items are to be salvaged and delivered to Owner's basement storage area in building 2000:
 - a. 6 existing doors and frames, all hardware included.
 - b. All lever sets from the remaining doors
 - c. All of the light fixtures from the corridor
 - d. All full size carpet squares from the corridor- no cut pieces
 - e. All of the full size ceiling tiles that are not stained or have cutouts for devices.
 3. ADD Paragraph 3.7.A.4 to read: "Install trash chute for conveying demolition debris down to the loading dock area on the west side of the building. Contractor shall use WV Regional Tech Parks window installer "Given Glass and Glazing" as a required Subcontractor for removal and reinstallation of the windows used for accessing the trash chute and coordination thereof. Contractor is responsible for coordinating location with the building owner and tenants. All costs and coordination shall be the responsibility of the Contractor."
- C. Section 087100 "Door Hardware" – Note the following revisions:
1. REPLACE Door Hardware Sets on pages 25 – 29 with Hardware sets dated 03/10/22 as attached to this Addendum.
 2. All of the proximity card separate box locations are deleted with the exception of those noted for door 361.
 3. All of the Schlage AD400's lever sets are provided and installed by others, but door preparation is by Contractor.
 4. Add surface closers 4040XP REG OR PA AS REQ to the existing door for Classroom 133 and the existing door for Classroom 134.
 5. Required Subcontractor - All keying and key control system work is to be by the Owner's vendor "Johns Lock and Key Service" with all associated costs for this and related work included in the Contract.
- D. ADD Section 101100 "Visual Display Boards" as attached to this Addendum.

PART 3 - CHANGES TO DRAWINGS

- A. Clarification – Sheet A240 Furniture Plan Furniture Schedule – The following items are to be Owner-Furnished Contractor-Installed (OFCI):
1. Refrigerator.
 2. 65 inch Smart TV.

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3. Vertical Monitor for Digital Signage.
 4. Contractor is responsible for all required electrical power, data, rough-ins, and blocking.
- B. Clarification: Sheet A411 Enlarged Plans - Detail 3/A411 – Wall-Mounted Computer Bracket is to be Owner-Furnished Contractor-Installed (OFCI). Contractor is responsible for all required electrical power, data, rough-ins, and blocking.
- C. ELECTRICAL SHEET E111 - ADD GENERAL NOTE: TEMPORARILY SUPPORT ALL EXISTING CEILING MOUNTED FIRE ALARM DEVICES FROM BUILDING STRUCTURE WHERE CEILING IS TO BE DEMOLISHED. COORDINATE WORK WITH CEILING DEMOLITION CONTRACTOR. PROTECT ALL EXISTING SMOKE DETECTORS FROM DUST AND DAMAGE DURING PERIODS OF DEMOLITION AND NEW WORK. SMOKE DETECTORS SHALL BE UNCOVERED OUTSIDE OF CONSTRUCTION WORKING HOURS AND FIRE WATCH REQUIREMENTS SHALL BE COORDINATED WITH AHJ FOR TIMES THAT SMOKE DETECTORS ARE INACTIVE OR BEING PROTECTED.
- D. ELECTRICAL SHEETS E151 AND 161 - ADD GENERAL NOTE: AT LOCATIONS WHERE POWER AND DATA FLOOR BOXES OCCUR. CONDUIT SHALL BE ROUTED BELOW FLOOR AND Laterally TO THE NEXT VERTICAL WALL LOCATION WHERE IT CAN BE RUN UP IN NEW CONDUIT THRU SAID WALL TO CONNECT EITHER TO THE PLENUM SPACE OR NEW POWER FEEDS OF THE NEW THIRD FLOOR. FOR DATA RUNS A PULL CORD SHALL BE INCLUDED IN CONDUIT.
- E. ELECTRICAL SHEET E161 – Note the following:
1. DELETE ALL EXTERNAL CARD READER LOCATIONS INDICATED FOR ALL DOORS EXCEPT DOOR 361 (BVCTC OPEN LOUNGE – 442). IN DELETED LOCATIONS CARD READERS ARE BATTERY OPERATED AND IN THE LEVER SETS PROVIDED AND INSTALLED BY OWNER'S VENDOR.
 2. ADD AN ADDITIONAL DOOR CARD READER TO DOOR 361 (BVCTC OPEN LOUNGE – 442) FOR CORRIDOR ACCESS INTO ROOM. TOTAL OF 2 EXTERNAL CARD READERS THIS LOCATION.
 3. REVISE KEYED NOTE 5: FIRE ALARM SYSTEM INITIATING AND NOTIFICATION DEVICES TO MATCH EXISTING SIMPLEX SYSTEM. TIE INTO EXISTING SYSTEM. COORDINATE WITH OWNER BEFORE TIE-IN.

END OF ADDENDUM

Attachments:	Pre-Bid Meeting Minutes and Sign-In Sheets5 pages
	Section 087100 “Door Hardware” pages 25-29.....5 pages
	Section 101100 “Visual Display Boards”4 pages

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PROJECT NAME: **WV Regional Tech Park/ BridgeValley CTC Nursing Expansion**

OWNER: Project Owner is: **WV Council for Community and Technical College Education**
 Tenant is: **Bridge Valley Community and Technical College**
 Building Owner: **WV Regional Tech Park/ WV Higher Education Policy Commission**

ZMM PROJECT NUMBER: 22008

PREBID DATE: 3/9/2022	WALKTHROUGH SCHEDULED: Yes
LOCATION: Bldg 2000- WV Tech Park	START TIME: 11:00 am END TIME: 11:45 am

INTRODUCTION

ATTENDEES	
See attached scans of sign-in	

AGENDA

1. Rich Donovan welcomed all attendees and made introductions of the Owners representatives and ZMM. He then proceeded with a detailed description of the Administrative requirements located in the front end of the specifications. Refer to the documents for the specific information.
2. Key points that were emphasized were:
 - a. It was noted that this prebid attendance is mandatory for general contractors. Sign-In Sheets were being distributed and collected (see attached).
 - b. The official project # is RFB 22208 not 6- this will be clarified in Addendum #1.
 - c. The funding requires Davis-Bacon requirements be utilized. It was noted that this language will be added in the first addendum.
 - d. The bid date will be extended. When polled the contractors in attendance requested Tuesday, March 29th. This will be clarified in the first addendum.
 - e. The funding requires substantial completion by August 26, 2022 and final completion 30 days thereafter which is Sunday, September 25, 2022. Please note the liquidated damages outlined in the documents. None of this will be changed if the bid date extends.
 - f. The intent to issue notice to proceed will remain as April 7, 2022.
3. Mike Phillips then gave a brief description of the scope of work with key points that were emphasized below:
 - a. The existing building will be fully occupied during construction. Special attention must be made for work that will need to be performed in the tenant space below on the 2nd floor which is not Bridge Valley – but is a separate technology company.
 - b. He noted to pay specific attention to the “Summary of Work” in the specifications which outlines which work will be performed by the owner or their vendor; especially regarding low voltage devices and installation.
 - c. He reiterated that all inquiries and substitution requests must be made in writing by general contractors and that only the bid documents and any official addenda are valid; refer to the specifications for particulars.

- d. The floor was opened to questions prior to proceeding to touring the work areas. Answers to pertinent questions (that are not already clear in the documents) will be included in the first addendum.
 - i. It was noted that the contact persons to arrange future access to the building are:
 - 1. WV Regional Tech Park : Clark McCoy 304-414-4061
 - 2. Bridge Valley CTC : George Hypes 304-734-6663
- 4. Walking tour: The meeting ended with all parties walking thru: the lobbies and north wing of the 3rd floor; the lobby and lobby extension the north wing of the 2nd floor and looking thru glass of that tenant space; visiting classrooms 133 & 134 and then also the loading dock, where the tour was officially ended.

END OF MINUTES



WV Regional Tech Park/ BridgeValley CTC Nursing Expansion/ WVHEPC/ WVCCTE
MANDATORY PREBID MEETING - SIGN IN SHEET
3/9/2022

NAME	COMPANY/ ORGANIZATION	SIGNATURE	EMAIL
Timothy Hayslett	1 Korin 3-10 inc		tim@1k3-10.com
Justin Dozier	Danhill Construction Co.		justin-dozier@yahoo.com
Geoffrey Heaton	Progressive Electric		dshurrow@we.wired.com
Chris Dozier	CDE, LLC		adozier33@yahoo.com
MIKE PHILLIPS	ZMM		

ZMM # 22008

NAME

COMPANY/ ORGANIZATION

SIGNATURE

EMAIL



WV Regional Tech Park/ BridgeValley CTC Nursing Expansion/ WVHEPC/ WVCCTE
MANDATORY PREBID MEETING - SIGN IN SHEET
3/9/2022

ZMM # 22008

NAME	COMPANY/ ORGANIZATION	SIGNATURE	EMAIL
Donald A. Bates	Neighborsall		estimating@neighborgall.com
Tom Simms	Bob Carver Wolf Creek Contracting		tsimms@bbcarlton.com
Tabitha Zimmer			estimating@wolfcreekcontractors.com
Denver Davis	Astech Corp		Astech 50 R Horton Rd - COA

WV Regional Tech Park/ BridgeValley CTC Nursing Expansion/ WVHEPC/ WVCCTE




MANDATORY PREBID MEETING - SIGN IN SHEET

3/9/2022

ZMM # 22008

NAME	COMPANY/ ORGANIZATION	SIGNATURE	EMAIL
George Hypes	Bridgely CTC		george.hypes@bridgelyvalley.edu
Pete Mardin	Gondae Enterprises		gondae138@gmail.com
Sam Cleavenger	Casto Technical Services		scleavenger@Castotech.com
Rich Donovan	WV Community & Technical College Sys		rich.donovan@wvhepc.com

Legend:












-  Link to catalog cut sheet
-  Electrified Opening

HARDWARE GROUP NO. A

FOR USE ON DOOR #(S):

331 335 341 342 343 344
348

PROVIDE EACH UEP DOOR(S) WITH THE FOLLOWING:









<u>QTY</u>		<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>		<u>FINISH</u>	<u>MFR</u>
6	EA	HINGE	5BB1HW 5 X 5 (NRP AS REQUIRED)		652	IVE
1	EA	CONST LATCHING BOLT	FB51P/FB61P AS REQUIRED		630	IVE
1	EA	DUST PROOF STRIKE	DP2		626	IVE
1	EA	WIRELESS ELECTRONIC LOCK	NDEBBD SPA BATTERY OPERATED - PROVIDED BY OTHERS		 626	SCE
1	EA	SFIC CORE	C607 (KEYED INTO EXISTING SYSTEM)		626	FAL
1	EA	OH STOP	100S		630	GLY
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS		630	IVE
1	EA	WALL STOP	WS401/402CCV		626	IVE
1	EA	MEETING STILE	328AA-S		AA	ZER
1	EA	GASKETING	488SBK PSA		BK	ZER

HARDWARE GROUP NO. B

FOR USE ON DOOR #(S):

333 334 339

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

<u>QTY</u>		<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>		<u>FINISH</u>	<u>MFR</u>
3	EA	HINGE	5BB1HW 4.5 X 4.5 (NRP AS REQUIRED)		652	IVE
1	EA	WIRELESS ELECTRONIC LOCK	NDEBBD SPA BATTERY OPERATED - PROVIDED BY OTHERS		 626	SCE
1	EA	SFIC CORE	C607 (KEYED INTO EXISTING SYSTEM)		626	FAL
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS401/402CCV		626	IVE
1	EA	GASKETING	488SBK PSA		BK	ZER








OPERATION: DOOR CLOSED AND SECURE. VALID CREDENTIAL ALLOWS ENTRY. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. B.1

FOR USE ON DOOR #(S):

338 349

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

<u>QTY</u>		<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>		<u>FINISH</u>	<u>MFR</u>
3	EA	HINGE	5BB1HW 4.5 X 4.5 (NRP AS REQUIRED)		652	IVE
1	EA	WIRELESS ELECTRONIC LOCK	NDEBBD SPA BATTERY OPERATED - PROVIDED BY OTHERS	 ⚡	626	SCE
1	EA	SFIC CORE	C607 (KEYED INTO EXISTING SYSTEM)		626	FAL
1	EA	OH STOP	100S		630	GLY
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488SBK PSA		BK	ZER






OPERATION: DOOR CLOSED AND SECURE. VALID CREDENTIAL ALLOWS ENTRY. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. C

FOR USE ON DOOR #(S):

336 337 345 346

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

<u>QTY</u>		<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>		<u>FINISH</u>	<u>MFR</u>
3	EA	HINGE	5BB1HW 4.5 X 4.5 (NRP AS REQUIRED)		652	IVE
1	EA	WIRELESS ELECTRONIC LOCK	NDEBBD SPA BATTERY OPERATED - PROVIDED BY OTHERS	 ⚡	626	SCE
1	EA	SFIC CORE	C607 (KEYED INTO EXISTING SYSTEM)		626	FAL
1	EA	WALL STOP	WS401/402CCV		626	IVE
1	EA	GASKETING	488SBK PSA		BK	ZER








OPERATION: DOOR CLOSED AND SECURE. VALID CREDENTIAL ALLOWS ENTRY. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. D

FOR USE ON DOOR #(S):

329 330

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

<u>QTY</u>		<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>		<u>FINISH</u>	<u>MFR</u>
3	EA	HINGE	5BB1HW 4.5 X 4.5 (NRP AS REQUIRED)		652	IVE
1	EA	WIRELESS ELECTRONIC LOCK	NDEBBD SPA BATTERY OPERATED - PROVIDED BY OTHERS	 ⚡	626	SCE
1	EA	SFIC CORE	C607 (KEYED INTO EXISTING SYSTEM)		626	FAL
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS401/402CCV		626	IVE
1	EA	GASKETING	488SBK PSA		BK	ZER







OPERATION: DOOR CLOSED AND SECURE. VALID CREDENTIAL ALLOWS ENTRY. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. E

FOR USE ON DOOR #(S):

350 360

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

<u>QTY</u>		<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>		<u>FINISH</u>	<u>MFR</u>
1	EA	MOUNTING PLATES	BRACKETS AS REQUIRED		689	LCN
1	EA	CONT. HINGE	112XY		628	IVE
1	EA	PANIC HARDWARE	LD-99-EO		626	VON
1	EA	ELEC EXIT DEVICE TRIM	AD-400-993R-70-MT-SPA-B 4AA BATTERY	 ⚡	626	SCE
1	EA	SFIC CORE	C607 (KEYED INTO EXISTING SYSTEM)		626	FAL
1	EA	SURFACE CLOSER	4040XP EDA		689	LCN
1	EA	WALL STOP	WS401/402CCV		626	IVE
1	EA	GASKETING	GASKETING PROVIDED BY ALUMINUM FRAME MFR.			B/O

OPERATION: DOOR CLOSED AND SECURE. VALID CREDENTIAL ALLOWS ENTRY. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. E.1

FOR USE ON DOOR #(S):

361

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

<u>QTY</u>		<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>		<u>FINISH</u>	<u>MFR</u>
3	EA	HINGE	5BB1HW 5 X 4.5 NRP		652	IVE
1	EA	POWER TRANSFER	EPT10		689	VON
1	EA	EL MORTISE LOCK	L9095BDCEL 17A RX CON 12/24 VDC		626	SCH
2	EA	SFIC CORE	C607 (KEYED INTO EXISTING SYSTEM)		626	FAL
1	EA	OH STOP	100S		630	GLY
1	EA	SURFACE CLOSER	4040XP EDA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	FIRE/LIFE WALL MAG	SEM7800 SERIES		689	LCN
1	EA	GASKETING	488SBK PSA		BK	ZER
1	EA	POWER SUPPLY	PS902 900-FA 900-2RS 120/240 VAC			VON
1	EA	DIAGRAM NOTE	POINT TO POINT CARD READER PROVIDED BY OTHERS			DLR

OPERATION: DOOR CLOSED AND SECURE. VALID CREDENTIAL ALLOWS ENTRY. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. F

FOR USE ON DOOR #(S):

347

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

<u>QTY</u>		<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>		<u>FINISH</u>	<u>MFR</u>
6	EA	HINGE	5BB1HW 4.5 X 4.5 (NRP AS REQUIRED)		652	IVE
1	EA	AUTO FLUSH BOLT	F31P/FB41P AS REQ'D		630	IVE
1	EA	DUST PROOF STRIKE	DP2		626	IVE
1	EA	WIRELESS ELECTRONIC LOCK	NDEBBD SPA BATTERY OPERATED - PROVIDED BY OTHERS		626	SCE
1	EA	SFIC CORE	C607 (KEYED INTO EXISTING SYSTEM)		626	FAL
1	EA	COORDINATOR	COR X FL (MB AS REQ'D)		628	IVE
2	EA	OH STOP	100S		630	GLY
2	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ		689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS		630	IVE
1	EA	MEETING STILE	328AA-S		AA	ZER
1	EA	GASKETING	488SBK PSA		BK	ZER

OPERATION: DOOR CLOSED AND SECURE. VALID CREDENTIAL ALLOWS ENTRY. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. H

FOR USE ON DOOR #(S):

362

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

<u>QTY</u>	<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>	<u>FINISH</u>	<u>MFR</u>
1		EXISTING DOOR, FRAME AND HARDWARE		

HARDWARE GROUP NO. MISC

FOR USE ON DOOR #(S):

MISC

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

<u>QTY</u>	<u>DESCRIPTION</u>	<u>CATALOG NUMBER</u>	<u>FINISH</u>	<u>MFR</u>
5	ELECTRONIC LOCK	GWE - ACCESS CONTROL GATEWAY (QTY AS REQ) - PROVIDED BY OTHERS	↗	SCE

END OF SECTION

SECTION 101100 - VISUAL DISPLAY BOARDS

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 porcelain enamel markerboards.

1.3 SUBMITTALS

- A. Product Data: For each type of visual display board indicated.
- B. Shop Drawings: For each type of visual display board required.
 - 1. Include dimensioned elevations.
 - 2. Include sections of typical trim members.
 - 3. Show anchors, grounds, reinforcement, accessories, layout, and installation details.
- C. Samples for Verification: Of the following products, showing color and texture or finish selected. Where finishes involve normal color and texture variations, include Sample sets showing the full range of variations expected. Prepare Samples from the same material to be used for the Work.
 - 1. Visual Display Boards: Sample panels not less than 8-1/2 by 11 inches, mounted on the substrate indicated for the final Work. Include a panel for each type, color, and texture required.
 - 2. Aluminum Trim and Accessories: Samples of specified finish, on 6-inch long sections.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain visual display boards through one source from a single manufacturer.
- B. Fire-Test-Response Characteristics: Provide vinyl-fabric-faced tackboards with the following surface-burning characteristics as determined by testing assembled materials composed of facings and backings identical to those required in this Section per ASTM E 84 by a testing and inspecting agency acceptable to authorities having jurisdiction. Identify vinyl-fabric-faced tackboards with appropriate markings of applicable testing and inspecting agency.
 - 1. Flame Spread: 25 or less.
 - 2. Smoke Developed: 10 or less.

1.5 WARRANTY

- A. Special Warranty for Porcelain-Enamel Face Sheets: Manufacturer agrees to repair or replace porcelain-enamel face sheets that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Surfaces lose original writing and erasing qualities.
 - b. Surfaces exhibit crazing, cracking, or flaking.
 - 2. Warranty Period: No less than 50 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 50 or less.

2.2 MANUFACTURERS

- A. Subject to compliance with requirements, provide products by one of the following manufacturers:
 - 1. Marsh Industries.
 - 2. Claridge Products and Equipment, Inc.
 - 3. Platinum Visual Systems.
 - 4. Wenger Corporation.

2.3 MATERIALS

- A. Porcelain Enamel Markerboards: Balanced, high-pressure-laminated, porcelain enamel chalkboards of 3-ply construction consisting of face sheet, core, and backing.
 - 1. Face Sheet: 0.024-inch enameling grade steel especially processed for temperatures used in coating porcelain on steel. Coat exposed face and edges with a 3-coat process consisting of primer, ground coat, and color cover coat. Coat concealed face with a 2-coat process consisting of primer and ground coat. Fuse cover and ground coats to steel at manufacturer's standard firing temperatures, but not less than 1200 deg F.
 - a. Cover Coat: Provide manufacturer's standard, light-colored, special writing surface with gloss finish intended for use with erasable dry markers and magnets.

2.4 ACCESSORIES

- A. Metal Trim and Accessories: Fabricate frames and trim of not less than 0.062-inch-thick, extruded-aluminum alloy, size and shape as indicated, to suit type of installation. Provide straight, single-length units. Keep joints to a minimum. Miter corners to a neat, hairline closure.
 - 1. Where size of visual display boards or other conditions require support in addition to normal trim, provide structural supports or modify trim as selected by Architect from manufacturer's standard structural support accessories to suit conditions.
 - 2. Class II, Clear Anodic Finish: AA-M12C22A31 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class II, clear coating 0.010 mm or thicker) complying with AAMA 607.1.
- B. Map Rail (for every marker board): Furnish map rail at top of each unit, complete with the following accessories:
 - 1. Display Rail: Provide continuous cork display rail 2 inches wide, as indicated, integral with map rail.
 - 2. End Stops: Provide one end stop at each end of map rail.
- C. Chalk trough - Standard continuous, hollow aluminum tray with injection molded end closures at bottom of each markerboard or chalkboard.

2.5 FABRICATION

- A. Assembly: Provide factory-assembled markerboards and tackboard units, with no joints unless field-assembled units are required.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine wall surfaces, with Installer present, for compliance with requirements and other conditions affecting installation of visual display boards.
 - 1. Surfaces to receive chalkboards or markerboards shall be free of dirt, scaling paint, and projections or depressions that would affect smooth, finished surfaces of chalkboards or markerboards.
 - 2. Surfaces to receive tackboards shall be dry and free of substances that would impair the bond between tackboards and substrate.
 - 3. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Deliver factory-built visual display boards completely assembled in one piece without joints, where possible. If dimensions exceed panel size, provide 2 or more pieces of equal length as acceptable to Architect.

1. When overall dimensions require delivery in separate units, prefit components at the factory, disassemble for delivery, and make final joints at the site. Use splines at joints to maintain surface alignment.
 - B. Provide wood blocking as required for support and as specified in section 061053 “Miscellaneous Rough Carpentry”.
 - C. Install units according to manufacturer's written instructions. Keep perimeter lines straight, plumb, and level. Provide grounds, clips, backing materials, adhesives, brackets, anchors, trim, and accessories necessary for complete installation.
- 3.3 ADJUSTING AND CLEANING
- A. Verify that accessories required for each unit have been properly installed and that operating units function properly.
 - B. Clean units according to manufacturer's written instructions.

END OF SECTION