

### LIBERTY HIGH SCHOOL NEW CLASSROOMS

#### **Bid Clarification 03**

8/22/2022

DSA File Number: 07-H4

DSA Application Number: 01-119994

PTN: 61721-83

#### Owner:

Liberty Union High School District 20 Oak Street Brentwood, CA 94513

#### Architect:

Quattrocchi Kwok Architects 636 Fifth Street Santa Rosa, California 95404 P:707.576.0829

#### To: Prospective Bidders

The following changes, modifications and additions to Project Manual and Drawings described below are made a part thereof and are subject to all of the requirements thereof as if originally specified.

The Bidder must acknowledge receipt of the Bid Clarification in the space provided on the Bid Form; failure to do so may subject the Bidder to disqualification. Note that there are no revisions to the scope of work and this is not considered a substantive change.

#### Table of Contents - Bid Clarification 03

This Bid Clarification consists of 4 pages and the attachments as listed below dated August 22, 2022.

Deleted Text is shown in strikeout type.

Added Text is shown in *bold italicized type*.

#### **ATTACHMENTS:**

#### **Project Manual**

Bid Form

#### Drawings: (30X42)

BC 03 C-2.0 - HORIZONTAL CONTROL PLAN

BC 03 C-4.0 - GRADING PLAN

BC 03 A-1.1 - SITE PLAN

BC 03 A-A5.1 - BLDG-A EXTERIOR ELEVATIONS

BC 03 A-B2.1 - BLDG-B FLOOR PLAN

BC 03 A-B7.1 - INTERIOR ELEVATIONS

BC 03 A-B7.2 - INTERIOR ELEVATIONS

BC 03 A-8.1 - DOOR SCHEDULE AND SIGNAGE

BC 03 A-9.5 - ROOF DETAILS

BC 03 A-9.6 - ROOF DETAILS

BC 03 A-10.1 - CEILING DETAILS WD

BC 03 A-10.2 - CEILING DETAILS CONC AND METAL

BC 03 A-10.3 - INTERIOR DETAILS

 ${\rm BC}$ 03 AG-A2.2 - BLDG-A SECOND FLOOR SIGNAGE PLAN

BC 03 FP-6.1 - DETAILS FIRE PROTECTION

BC 03 S-0.1 - GENERAL NOTES

BC S-A4.1 - FOUNDATION DETAILS

BC S-A5.1 - STEEL FRAMING DETAILS

#### BC Drawings (8.5 inch by 11 inch & 11 inch by 17 inch):

None.

#### **Project Record**

None.

#### **End of Table of Contents**

Project No.: 1925.00

**Bid Clarification 03** 

#### A. CHANGES TO PREVIOUS BID CLARIFICATIONS

Items No 2.06

A Questions will be allowed until  $\frac{8}{19}/\frac{2022}{2022}$  8/30/2022 at 5:00. All other questions will be returned noted to bid the documents as is.

#### B. CHANGES TO THE BIDDING AND CONTRACT REQUIREMENTS

Item No. 3. 01

NOTICE INVITING BIDS

Revise NOTICE INVITING BIDS as follows:

NOTICE IS HEREBY GIVEN that the Liberty Union High School District, acting by and through its Governing Board, hereinafter referred to as "District", will receive prior to 2:00 PM on the 25th of August, 7<sup>th</sup> of September 2022 sealed bids for the award of a Contract for the following:

#### Item No. 3. 02

Revise and replace Bid Form denoted Bid Clarification 03

#### C. CHANGES/ ADDITIONS TO THE SPECIFICATIONS

None.

#### D. CHANGES/ ADDITIONS TO THE DRAWINGS

#### Item No. 3. 03

The following drawings dated August 18, 2022 denoted **Bid Clarification 03** supersede and replace previous drawings with the same titles:

BC 03 C-2.0 - HORIZONTAL CONTROL PLAN

BC 03 C-4.0 - GRADING PLAN

BC 03 A-1.1 - SITE PLAN

BC 03 A-A5.1 - BLDG-A EXTERIOR ELEVATIONS

BC 03 A-B2.1 - BLDG-B FLOOR PLAN

BC 03 A-B7.1 - INTERIOR ELEVATIONS

BC 03 A-B7.2 - INTERIOR ELEVATIONS

BC 03 A-8.1 - DOOR SCHEDULE AND SIGNAGE

BC 03 A-9.5 - ROOF DETAILS

BC 03 A-9.6 - ROOF DETAILS

BC 03 A-10.1 - CEILING DETAILS WD

BC 03 A-10.2 - CEILING DETAILS CONC AND METAL

BC 03 A-10.3 - INTERIOR DETAILS

BC 03 AG-A2.2 - BLDG-A SECOND FLOOR SIGNAGE PLAN

BC 03 FP-6.1 - DETAILS FIRE PROTECTION

BC 03 S-0.1 - GENERAL NOTES

BC S-A4.1 - FOUNDATION DETAILS

BC S-A5.1 - STEEL FRAMING DETAILS

Project No.: 1925.00

**Bid Clarification 03** 

#### E. BIDDERS QUESTIONS

#### Item No. 3. 04

- Q: Bid Clarification 02 has pages 4 through 8 labeled as Bid Clarification 01 on the bottom right side. IS this a typo that the bidders should ignore?
- A Yes this is a typo. Those pages belong to bid clarification 02.

#### Item No. 3. 05

- Q: Do bidders need to acknowledge that they've received/read 'Bid Clarifications'? If so, how should bidders differentiate their acknowledgement between the Bid Clarification versus Addenda on the bid form
- A See changes to Contract requirements

#### Item No. 3. 06

- Q: Per Bid Clarification #1, Item No. 1.15, wood laboratory cabinets should be used in the science classrooms. Does this include Prep Room B102?
- A Yes wood laboratory cabinets should be used included in the Prep Room B102

#### Item No. 3. 07

- Q: Where can we find a copy of the project soils report.
- A The following Project Geotechnical Reports are available to the bidders thru the Construction Manager's Procore site. (Contact Maria Galligan at 707-746-8000 or by email at <a href="Maria.Galligan@lathropconstruction.com">Maria.Galligan@lathropconstruction.com</a> to receive a Procore Invite.

BSK Associates Supplemental Geotechnical Recommendations Report dated September 17, 2021 BSK Associates Update Geologic and Seismic Hazards Assessment dated September 17, 2021 BSK Associates Geotechnical Investigation Report and Geological Seismic Hazards Assessment dated January 30, 2019

BSK Associates Geologic and Seismic Hazards Assessment dated January 30, 2019

#### **END OF BID CLARIFICATION**

Project No.: 1925.00

**Bid Clarification 03** 

#### **BID CLARIFICATION 03**

#### **BID FORM**

**FOR** 

## New Classroom Buildings Liberty High School 850 Second Street, Brentwood, CA 94513

Project No. 1925.00 Bid No. U2225L

**FOR** 

#### LIBERTY UNION HIGH SCHOOL DISTRICT

CONTRACTOR NAME:					
ADDRESS:					
TELEPHONE:	_(	)			
FAX:	_(	)			
EMAIL					

- TO: Liberty Union High School District, acting by and through its Governing Board, herein called "District".
- 1. Pursuant to and in compliance with your Notice Inviting Bids and other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the Contract, the local conditions affecting the performance of the Contract, the cost of the work at the place where the work is to be done, with the Drawings and Specifications, and other Contract Documents, hereby proposes and agrees to perform within the time stipulated, the Contract, including all of its component parts, and everything required to be performed, including its acceptance by the District, and to provide and furnish any and all labor, materials, tools, expendable equipment, and utility and transportation services necessary to perform the Contract and complete all of the Work in a workmanlike manner required in connection with the construction of:

### LIBERTY HIGH SCHOOL NEW CLASSROOM BUILDINGS SCOPE OF WORK (as described below):

This project is for the demolition of three (3) existing single-story buildings (currently designated as Buildings B, C, and D) and construction of two (2) new classroom buildings for Liberty High School in Brentwood, California.

Building A is a two-story, steel-framed, Type II-B construction building with 14 general education classrooms at 960-sf each; 2 Special Day classrooms at 1,045-sf each, each with a restroom and sensory room; shared staff prep room and restroom; elevator and machine room; and utility rooms, including fire riser, electrical, tele/com and custodial closets. The second floor of Building A will be accessible by an elevator as well as exterior stairs and walkway at 2,715-sf.

Building B is a single-story, wood-framed, Type V-B construction building with 2 science labs at 1,656-sf; two (2) multi-stall student restrooms; and maintenance/custodial accessory spaces.

The project site will be accessible by an upgraded, adjacent drop-off lane. The two buildings will form a learning and gathering courtyard and have 2 gated entry points to control access after hours. No new parking is required.

Both buildings will be E-occupancy, with the pupil per square foot load factor for general education rooms being 20 and 50 for science labs. Exterior finishes include cement plaster, fiber cement boards, aluminum storefront windows, metal sunshade canopies, built-up roof and standing seam metal roof. Interior finishes including custom teaching-wall casework, painted gyp bd walls with tackable surface at general education classrooms, linoleum and carpeted flooring. Ceilings shall be suspended acoustic ceiling tile at classrooms, exposed structure ceilings at labs, and painted gypsum board at restrooms and utility areas.

#### For the:

#### LIBERTY HIGH SCHOOL NEW CLASSROOM BUILDINGS

BID SCHEDULE NO. U2225L

Liberty High School New Classroom Buildings

in the District described above, all in strict conformance with the drawings and other Contract Documents on file at the Facilities Office of said District for amounts set forth herein.

2.	BIDDER AC	CKNOWLEDGE	S THE FOLLOW	ING BID CLAR	IFICATION/AL	DDENDUM:
	Bid Clarification Number	Bid Clarification Number	Bid Clarification Number	Addendum Number	Addendum Number	Addendum Number
	may render yo	clusion of all adde ur bid non-respon SH PURCHASE	sive.		-	ye. Your failure to
						DOLLARS
	(\$		)			
shall thore and j for the In the (90) notice Cont	ward of the bid complete the woughly studied the proper completion is Project, Rain e event that the day period, it is the to proceed maractor, that the completion is the complete that the complete the work that the complete tha	by the District. Ovork in the time sonis Project and ag	specified in the A rees that the Contract ental Delays, and so postpone giving tood that with reast by the District.	or has received the greement. By stract Time for this tor has included the requisite time g the notice to personable notice to It is further exany claim of additional and the requisite time.	e notice to proce ubmitting this b is Project is adeq in the analysis of the to complete Pu roceed beyond to the Contractor, pressly understo	his ninety giving the od by the
term Cont as a	inate the contractor of the Dis result of a notice	lieves that a post et with written no strict's notice of p e of postponemen sponsible bidder,	otice to the Distriction of the District Shart, the District shart	ct within ten (10 nould the Contrac	) days after rece ctor terminate the	eipt by the e Contract
	ularities or info		id or in the bid pr	ocess. The Con	tractor understar	and/or waive any not ds.
5.	Attached is b	oid security in the	amount of not le	ss than ten perce	nt (10%) of the b	oid:
	Bid	bond (10% of the	Bid), certified ch	eck, or cashier's	check (circle on	e)
6.	The required	List of Designate	ed Subcontractors	s is attached here	to.	
7.	The required	l Non-Collusion I	Declaration is atta	ched hereto.		
8.	The Substitu	tion Request For	m, if applicable, i	s attached hereto		

or delivered to the undersigned after the opening of the bid, and within the time this bid is require open, or at any time thereafter before this bid is withdrawn, the undersigned will execute and d District a Contract in the form attached hereto in accordance with the bid as accepted, and the will also furnish and deliver to the District the Performance Bond and Payment Bond, all wire calendar days after award of Contract, and that the work under the Contract shall be comme undersigned bidder, if awarded the Contract, by the start date provided in the District's Notice and shall be completed by the Contractor in the time specified in the Contract Documents.	leliver to the leat he or she thin five (5) enced by the
10. The names of all persons interested in the foregoing proposal as principals are as follo	ws:
(IMPORTANT NOTICE: If bidder or other interested person is a corporation, state the legal not corporation, as well as the names of the president, secretary, treasurer, and manager there partnership, state the true names of the firm, as well as the names of all individual co-partners the firm; if bidder or other interested person is an individual, state the first and last names in further true names in further true names in further true names of the president person is an individual, state the first and last names in further true names in further true names of the president person is an individual, state the first and last names in further true names of the president person is an individual person in the president person in the president person is an individual person in the president person in the president person is an individual person in the president person in the president person is an individual person person in the president person in the president person is an individual person	eof; if a co- s comprising
11. <u>PROTEST PROCEDURES</u> . If there is a bid protest, the grounds shall be submitted as the Instructions to Bidders.	s set forth in
12. The undersigned bidder shall be licensed and shall provide the following California clicense information:	Contractor's
License Number:	
License Expiration Date:	
Name on License:	
Class of License:	
DIR Registration Number:	
If the bidder is a joint venture, each member of the joint venture must include information.	the above
13. Time is of the essence regarding this Contract, therefore, in the event the bidder to Contract is awarded fails or refuses to post the required bonds and return executed copies of the form within five (5) calendar days from the date of receiving the Notice of Award, the District the bidder's bid deposit or bond forfeited as damages.	Agreement
14. The bidder declares that he/she has carefully examined the location of the proposed he/she has examined the Contract Documents, including the Plans, General Conditions, Secondary 1988.	
Liberty High School New Classroom Buildings	Rid Form

It is understood and agreed that if written notice of the acceptance of this bid is mailed, telegraphed,

9.

Conditions, Addenda, and Specifications, all others documents and requirements that are attached to and/or contained in the Project Manual, all other documents issued to bidders and read the accompanying instructions to bidders, and hereby proposes and agrees, if this proposal is accepted, to furnish all materials and do all work required to complete the said work in accordance with the Contract Documents, in the time and manner therein prescribed for the unit cost and lump sum amounts set forth in this Bid Form.

- 15. <u>DEBARMENT</u>. In addition to seeking remedies for False Claims under Government Code section 12650 et seq. and Penal Code section 72, the District may debar a Contractor pursuant to Article 15 of the General Conditions if the Board, or the Board may designate a hearing officer who, in his or her discretion, finds the Contractor has done any of the following:
  - a. Intentionally or with reckless disregard, violated any term of a contract with the District;
- b. Committed an act or omission which reflects on the Contractor's quality, fitness or capacity to perform work for the District;
- c. Committed an act or offense which indicates a lack of business integrity or business honesty; or
- d. Made or submitted a false claim against the District or any other public entity. (See Government Code section 12650, et seq., and Penal Code section 72)
- 16. <u>DESIGNATION OF SUBCONTRACTORS</u>. In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code section 4100 et seq.) and any amendments thereof, each bidder shall list subcontractors on the District's form Subcontractor list. This subcontractor list shall be submitted with the bid and is a required form

I agree to receive service of notices at the e-mail address listed below.

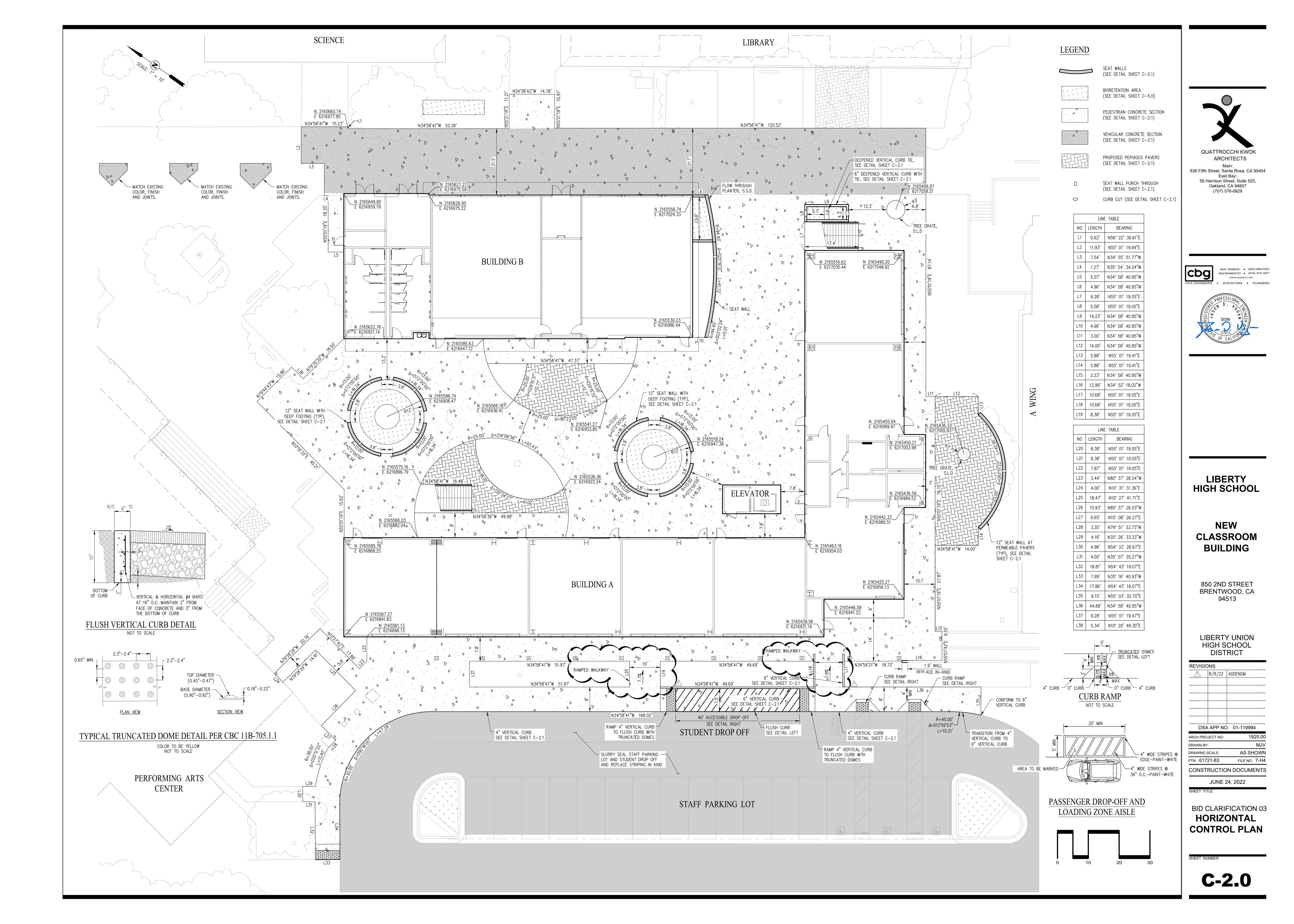
I the below-indicated bidder, declare under penalty of perjury that the information provided and representations made in this bid are true and correct.

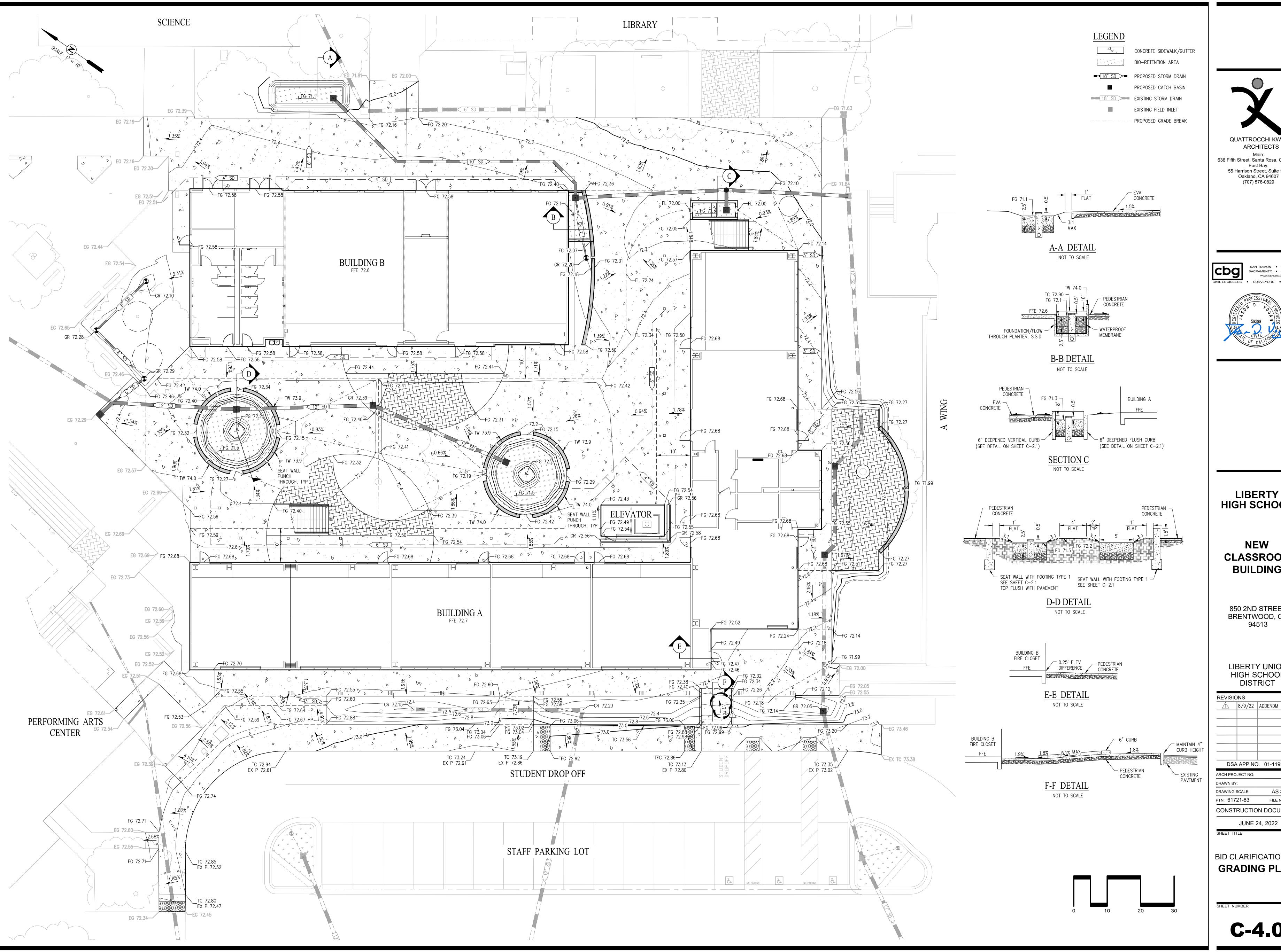
Proper Name of Company		
Name of Bidder Representative		
Street Address		
City, State, and Zip		
( ) Phone Number		
( <u>)</u>		
Fax Number		

E-Mail			
By:		Date:	
<i>J</i> ·	Signature of Bidder Representative		

<u>NOTE</u>: If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of authorized officers or agents and the document shall bear the corporate seal; if bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his signature shall be placed above.

All signatures must be made in permanent blue ink.







SACRAMENTO • (916) 375-1877

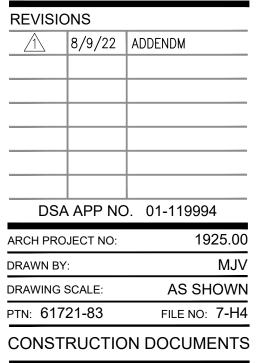


LIBERTY HIGH SCHOOL

**NEW** CLASSROOM **BUILDING** 

850 2ND STREET BRENTWOOD, CA

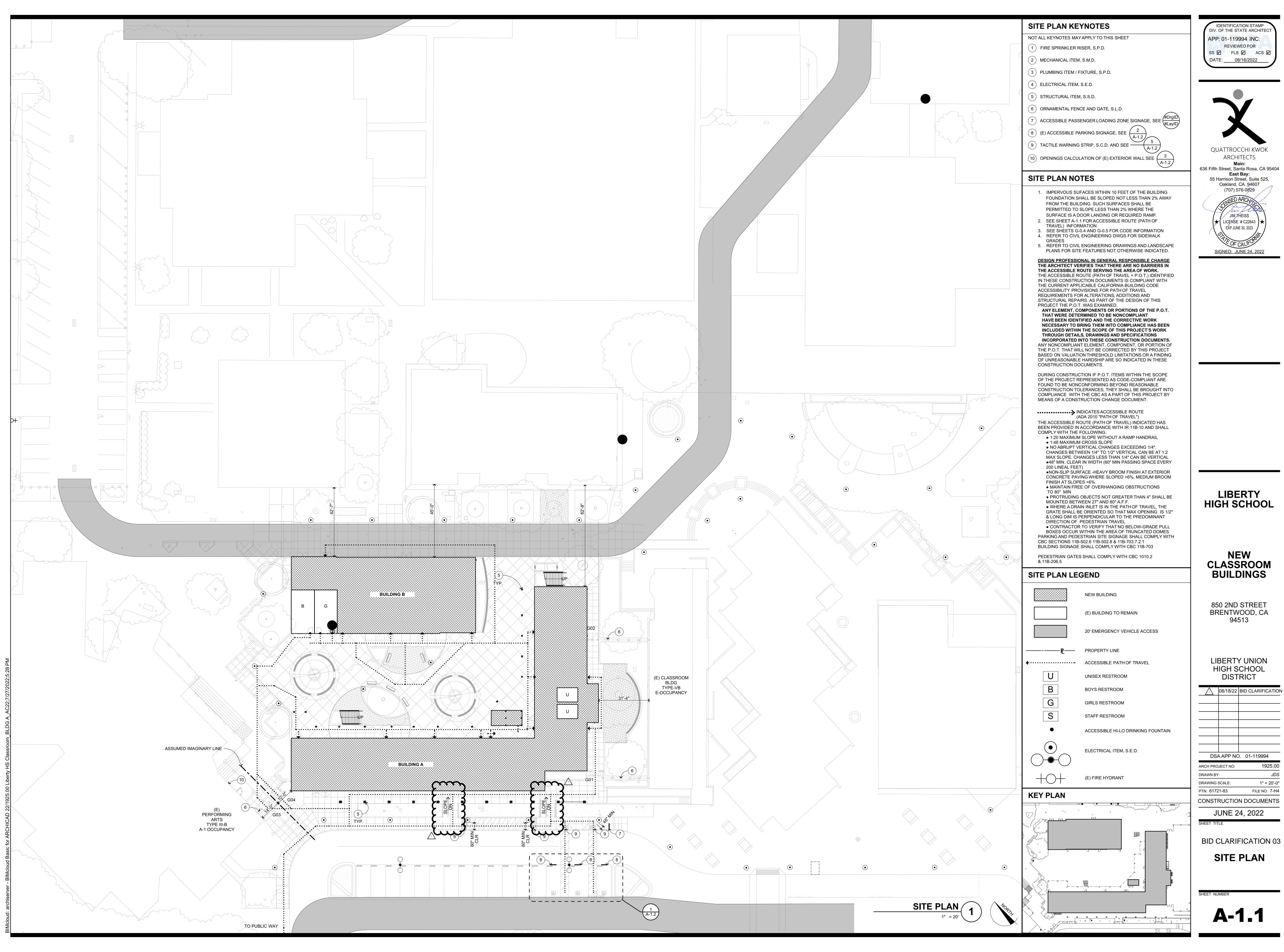
LIBERTY UNION HIGH SCHOOL DISTRICT



BID CLARIFICATION 03

**GRADING PLAN** 

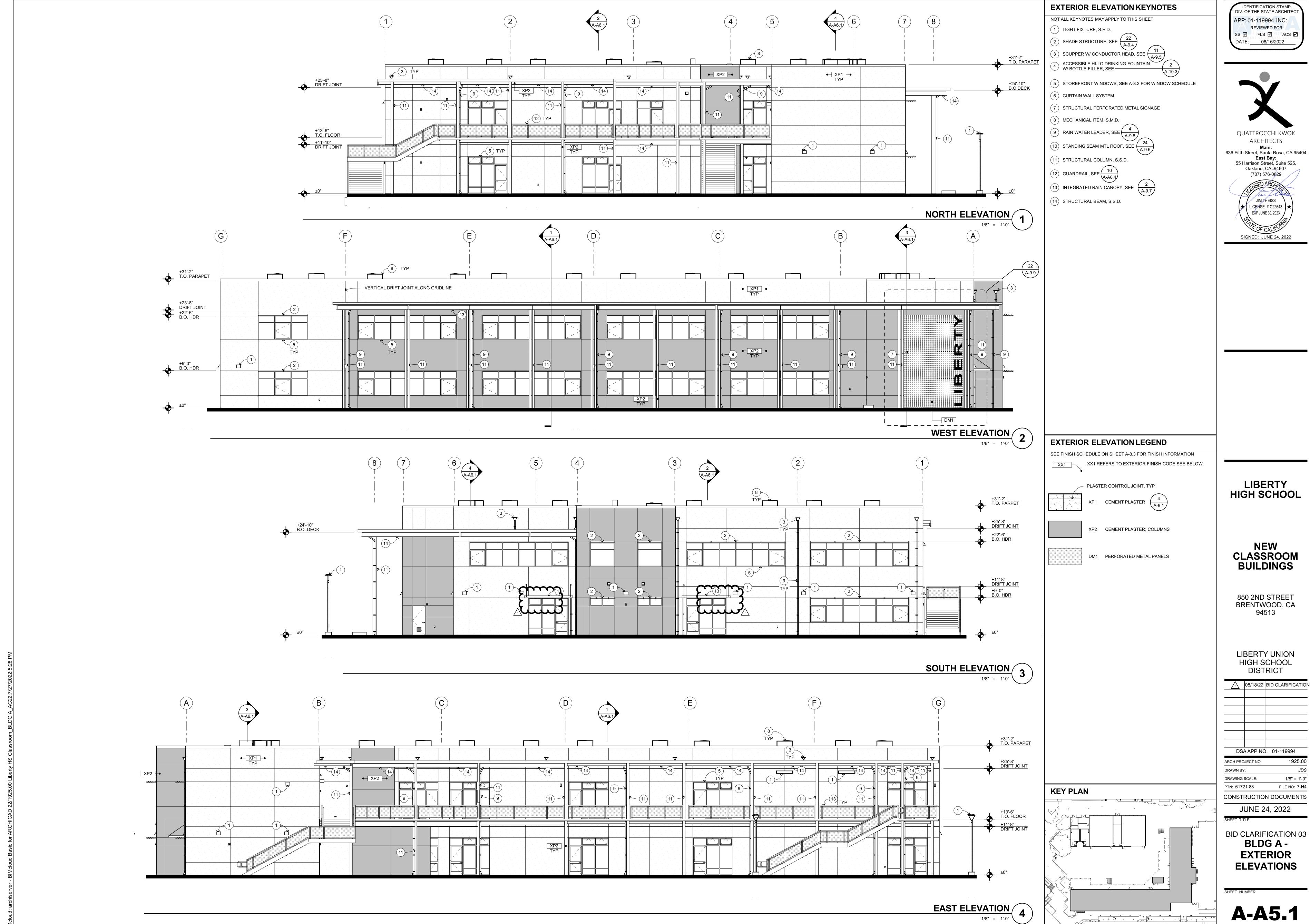
**C-4.0** 



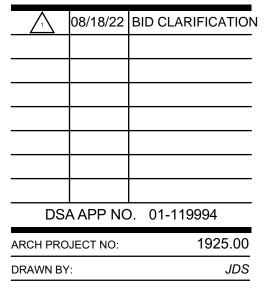
636 Fifth Street, Santa Rosa, CA 95404

1	08/18/22	BID CLARIFICATION
DS/	A APP NO	). 01-119994
ARCH PRO	JECT NO:	1925.00
DRAWN BY	<b>'</b> :	JDS
DRAWING	SCALE:	1" = 20'-0"

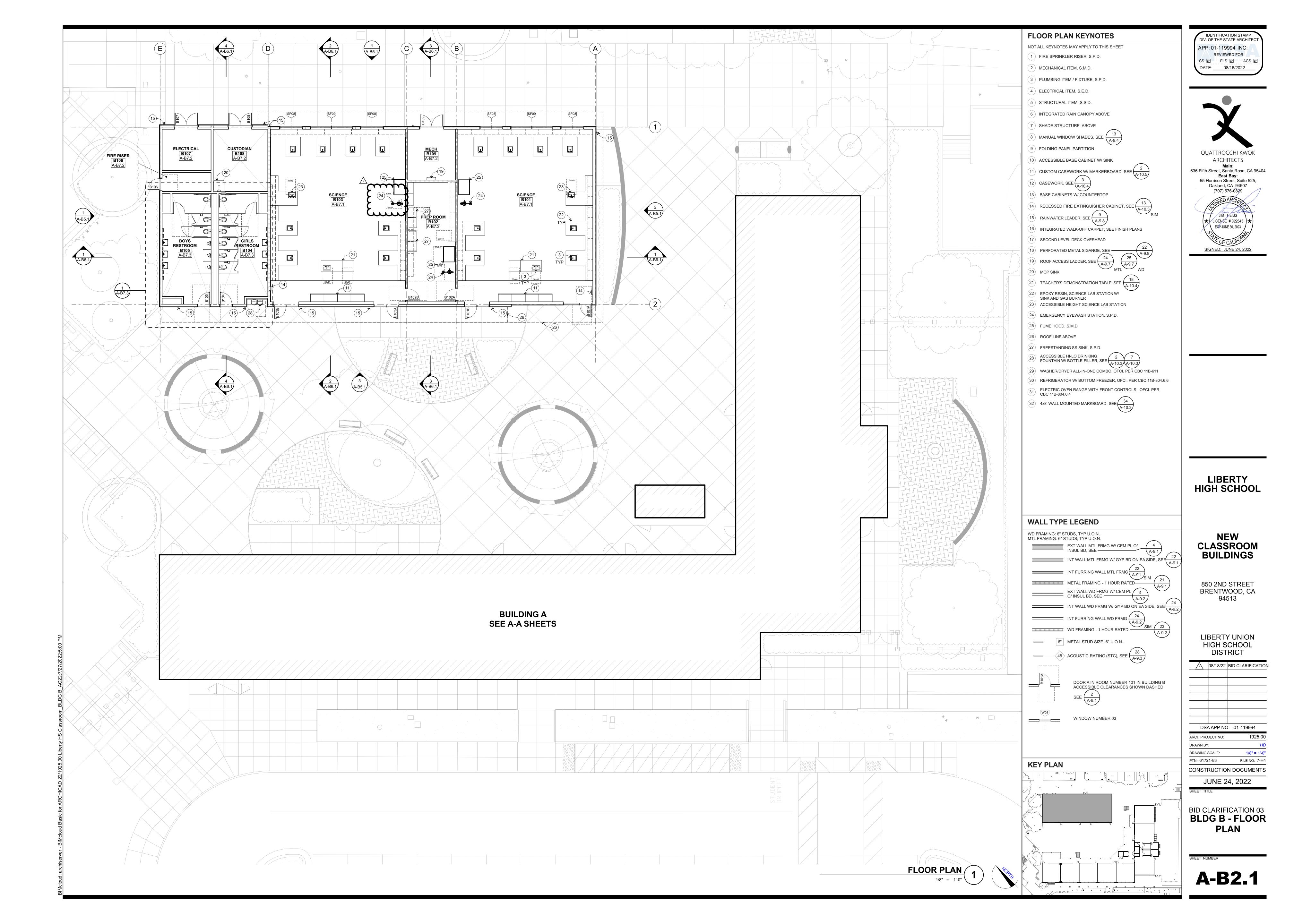
FILE NO: 7-H4

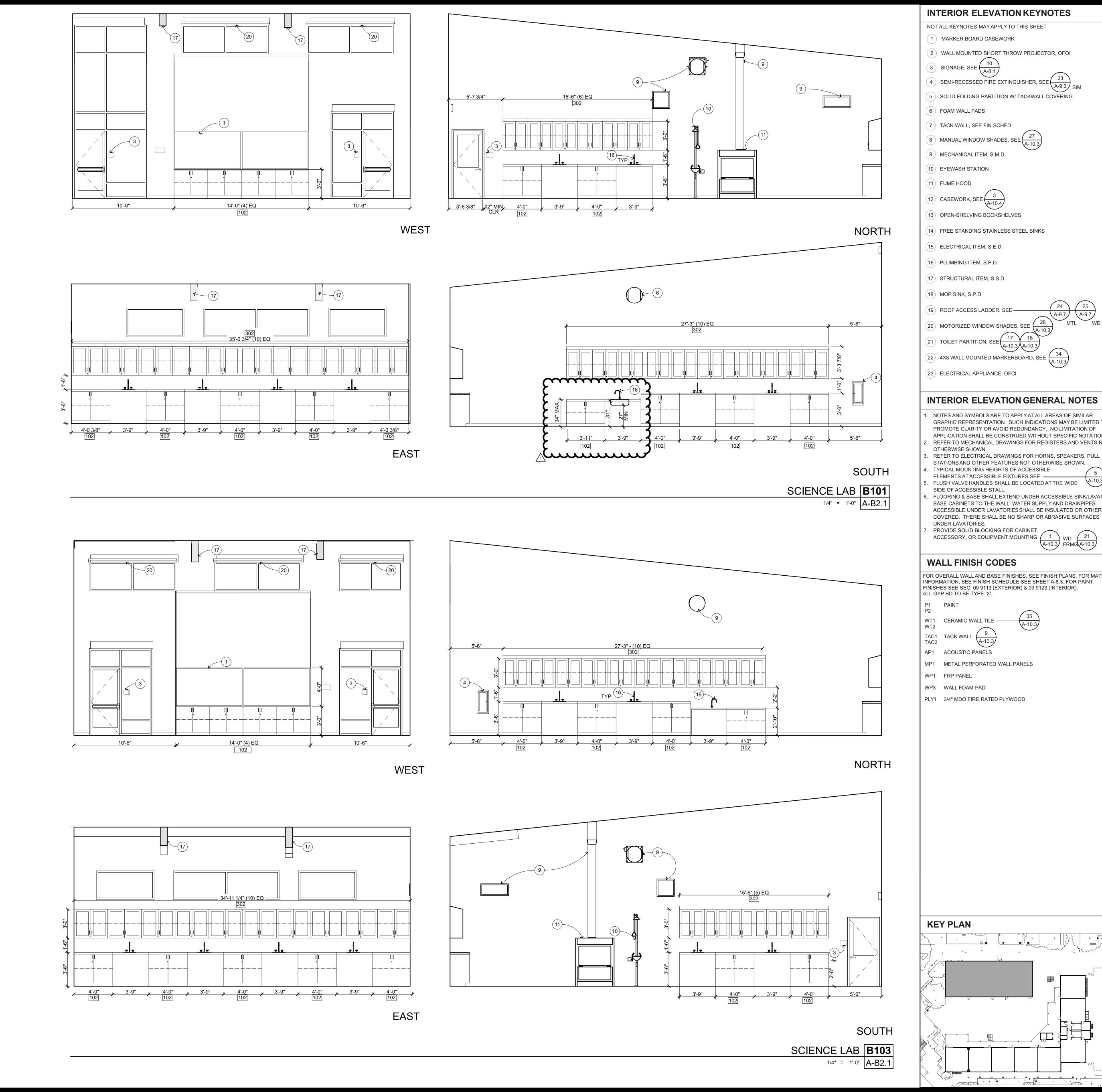






1/8" = 1'-0" FILE NO: 7-H4





**INTERIOR ELEVATION KEYNOTES** 

NOT ALL KEYNOTES MAY APPLY TO THIS SHEET

(1) MARKER BOARD CASEWORK

(2) WALL MOUNTED SHORT THROW PROJECTOR, OFOI

(3) SIGNAGE, SEE (A-8.1)

4 SEMI-RECESSED FIRE EXTINGUISHER, SEE (23) SIM (5) SOLID FOLDING PARTITION W/ TACKWALL COVERING

(6) FOAM WALL PADS

(7) TACK-WALL, SEE FIN SCHED 8 MANUAL WINDOW SHADES, SEE  $\frac{27}{A-10.3}$ 

(9) MECHANICAL ITEM, S.M.D.

(10) EYEWASH STATION

(12) CASEWORK, SEE  $\frac{3}{(A-10.4)}$ 

(13) OPEN-SHELVING BOOKSHELVES

(14) FREE STANDING STAINLESS STEEL SINKS

(15) ELECTRICAL ITEM, S.E.D.

(16) PLUMBING ITEM, S.P.D.

(17) STRUCTURAL ITEM, S.S.D.

(20) MOTORIZED WINDOW SHADES, SEE

(21) TOILET PARTITION, SEE

(23) ELECTRICAL APPLIANCE, OFCI

#### INTERIOR ELEVATION GENERAL NOTES

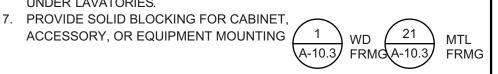
NOTES AND SYMBOLS ARE TO APPLY ATALL AREAS OF SIMILAR APPLICATION SHALL BE CONSTRUED WITHOUT SPECIFIC NOTATION. REFER TO MECHANICAL DRAWINGS FOR REGISTERS AND VENTS NOT

REFER TO ELECTRICAL DRAWINGS FOR HORNS, SPEAKERS, PULL STATIONS AND OTHER FEATURES NOT OTHERWISE SHOWN. TYPICAL MOUNTING HEIGHTS OF ACCESSIBLE ELEMENTS AT ACCESSIBLE FIXTURES SEE ———

FLUSH VALVE HANDLES SHALL BE LOCATED AT THE WIDE

A-10.3 SIDE OF ACCESSIBLE STALL. FLOORING & BASE SHALL EXTEND UNDER ACCESSIBLE SINK/LAVATORY BASE CABINETS TO THE WALL. WATER SUPPLY AND DRAINPIPES ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES

UNDER LAVATORIES. PROVIDE SOLID BLOCKING FOR CABINET,



### WALL FINISH CODES FOR OVERALL WALL AND BASE FINISHES, SEE FINISH PLANS. FOR MATERIAL INFORMATION, SEE FINISH SCHEDULE SEE SHEET A-8.3. FOR PAINT FINISHES SEE SEC. 09 9113 (EXTERIOR) & 09 9123 (INTERIOR). ALL GYP BD TO BE TYPE 'X'.

WT1 CERAMIC WALL TILE -TAC1 TACK WALL (A-10.3)

AP1 ACOUSTIC PANELS

WP1 FRP PANEL

WP3 WALL FOAM PAD

NEW CLASSROOM BUILDINGS

850 2ND STREET BRENTWOOD, CA 94513

LIBERTY HIGH SCHOOL

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC

REVIEWED FOR

SS 🗹 FLS 🗹 ACS 🗹

QUATTROCCHI KWOK ARCHITECTS

636 Fifth Street, Santa Rosa, CA 95404

East Bay: 55 Harrison Street, Suite 525,

Oakland, CA 94607

(707) 576-0829

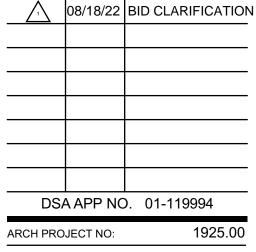
JIM THEISS ★ LICENSE # C22643

EXP JUNE 30, 2023

SIGNED: JUNE 24, 2022

APP: 01-119994 INC:

LIBERTY UNION HIGH SCHOOL DISTRICT



DRAWN BY: 1/8" = 1'-0" DRAWING SCALE: PTN: 61721-83 FILE NO: 7-H4

CONSTRUCTION DOCUMENTS JUNE 24, 2022

BID CLARIFICATION 03 **INTERIOR ELEVATIONS** 

**A-B7.1** 



IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 01-119994 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

**INTERIOR ELEVATION KEYNOTES** 

(2) WALL MOUNTED SHORT THROW PROJECTOR, OFOI

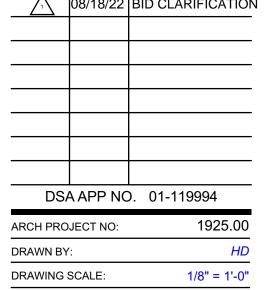
NOT ALL KEYNOTES MAY APPLY TO THIS SHEET

(1) MARKER BOARD CASEWORK



636 Fifth Street, Santa Rosa, CA 95404

NEW CLASSROOM BUILDINGS

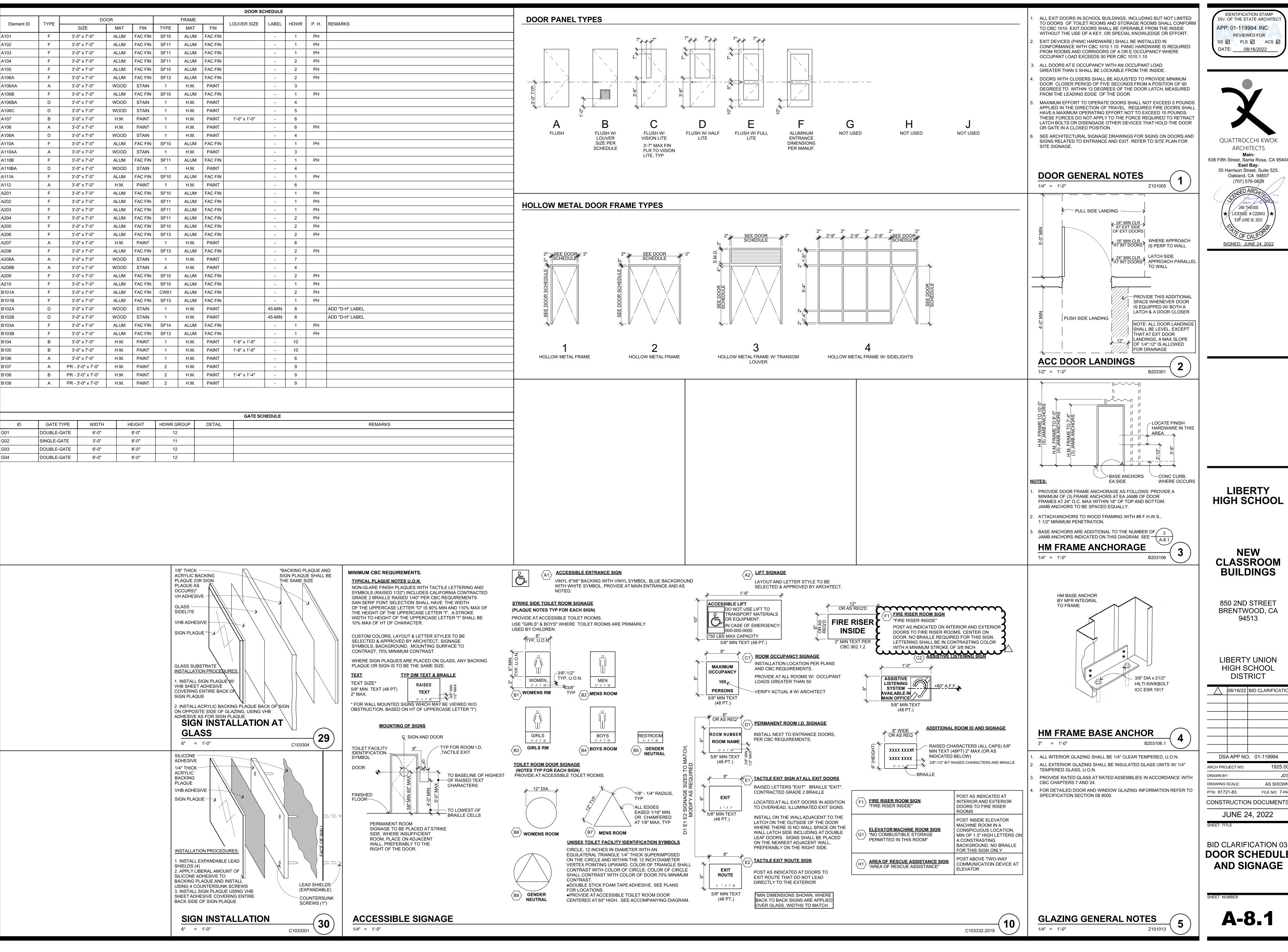


FILE NO: 7-H4 CONSTRUCTION DOCUMENTS

JUNE 24, 2022

**ELEVATIONS** 

**A-B7.2** 



IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 01-119994 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹



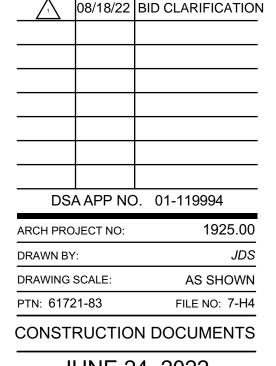


**LIBERTY** 

NEW **BUILDINGS** 

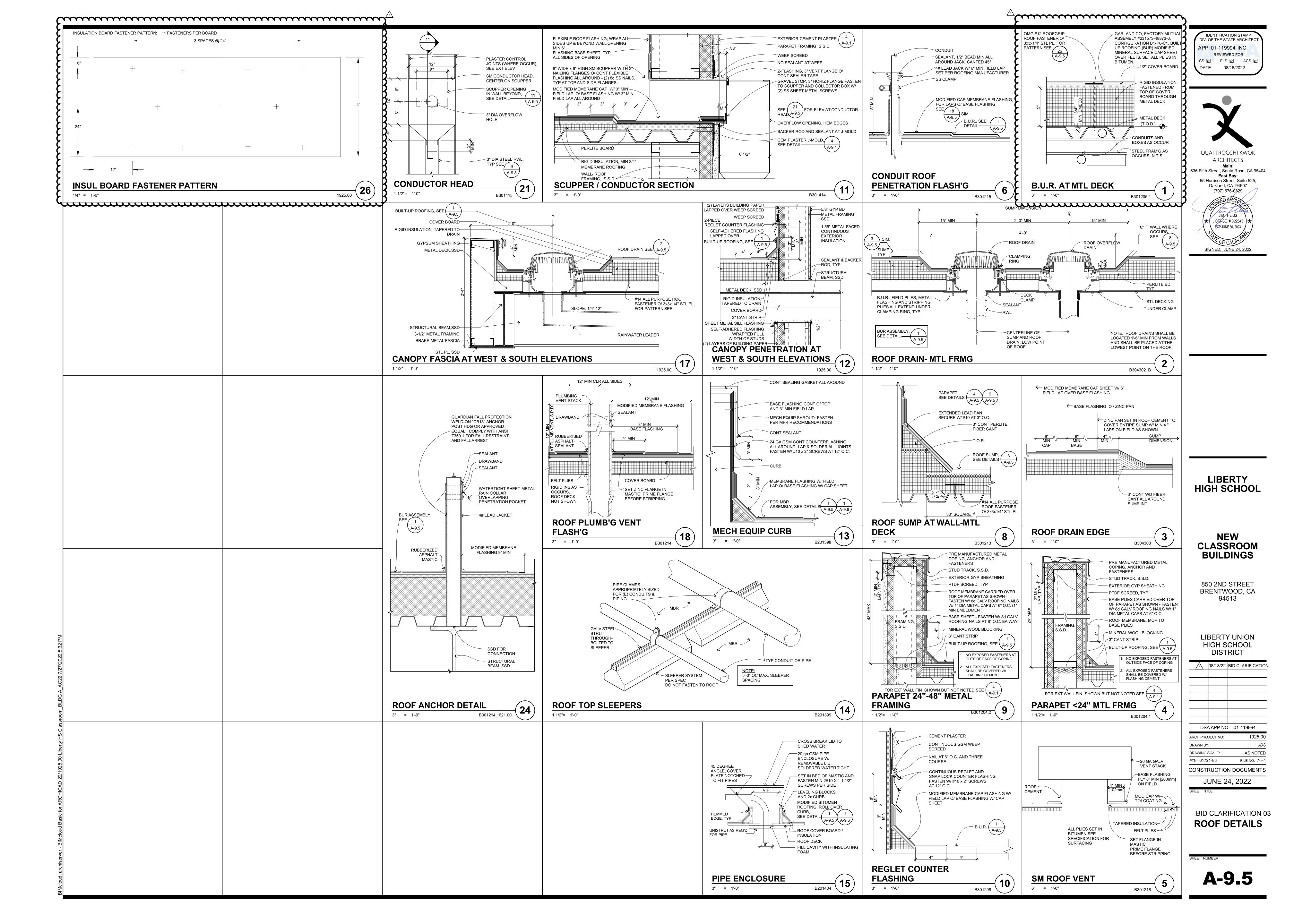
850 2ND STREET BRENTWOOD, CA

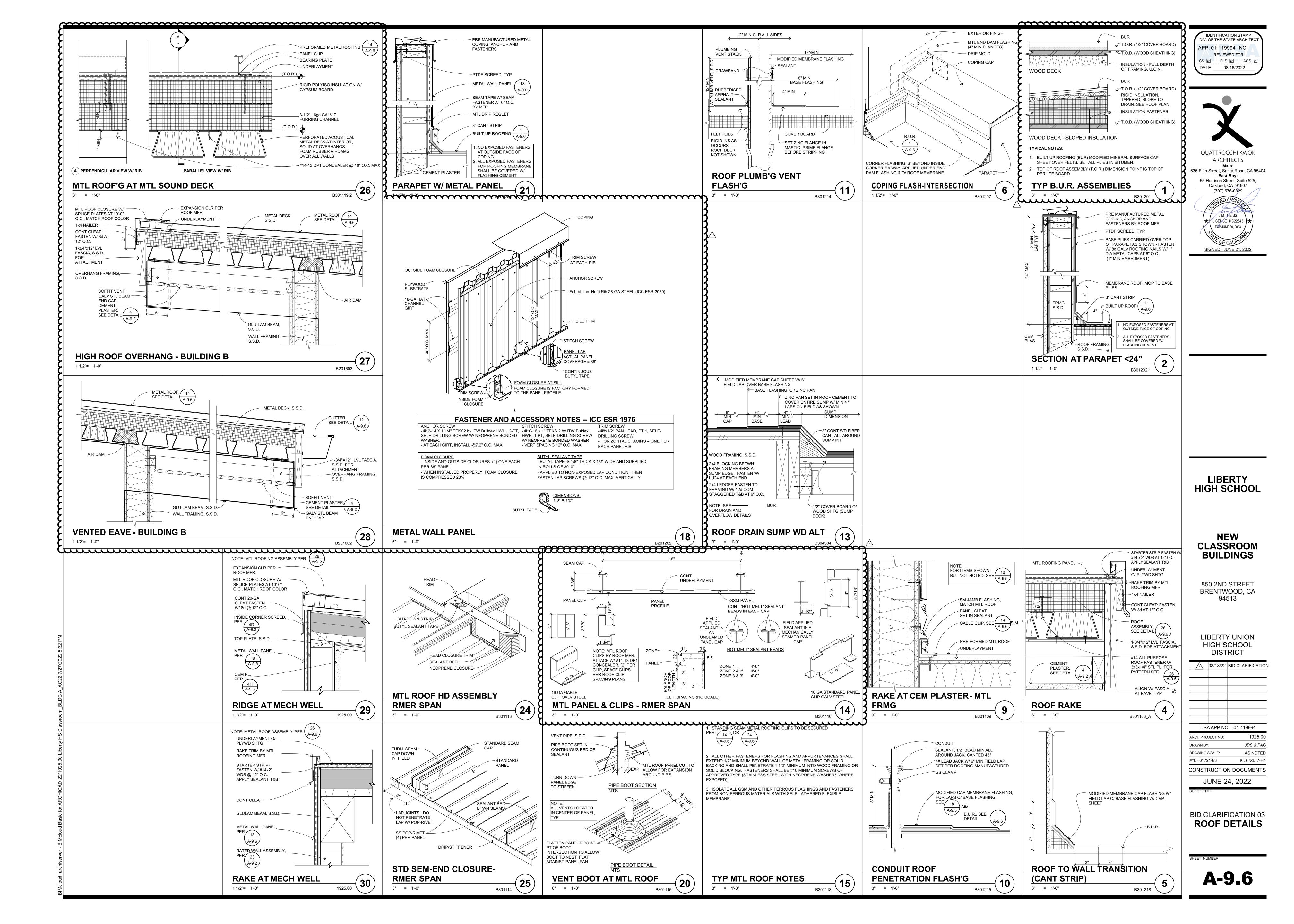
LIBERTY UNION HIGH SCHOOL DISTRICT

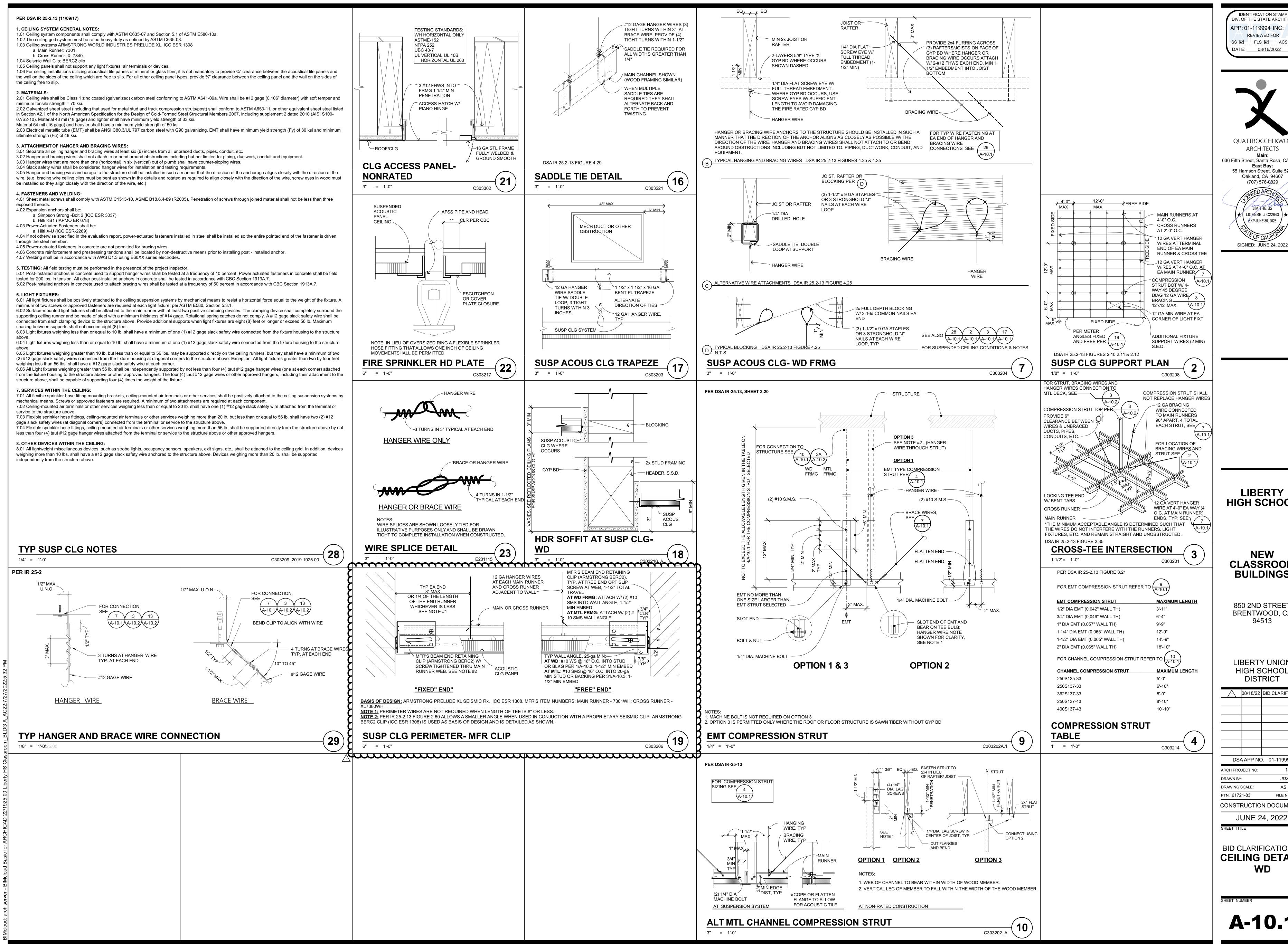


JUNE 24, 2022

DOOR SCHEDULE **AND SIGNAGE** 







IDENTIFICATION STAME DIV. OF THE STATE ARCHITEC APP: 01-119994 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹



LIBERTY HIGH SCHOOL

CLASSROOM BUILDINGS

850 2ND STREET BRENTWOOD, CA

LIBERTY UNION HIGH SCHOOL

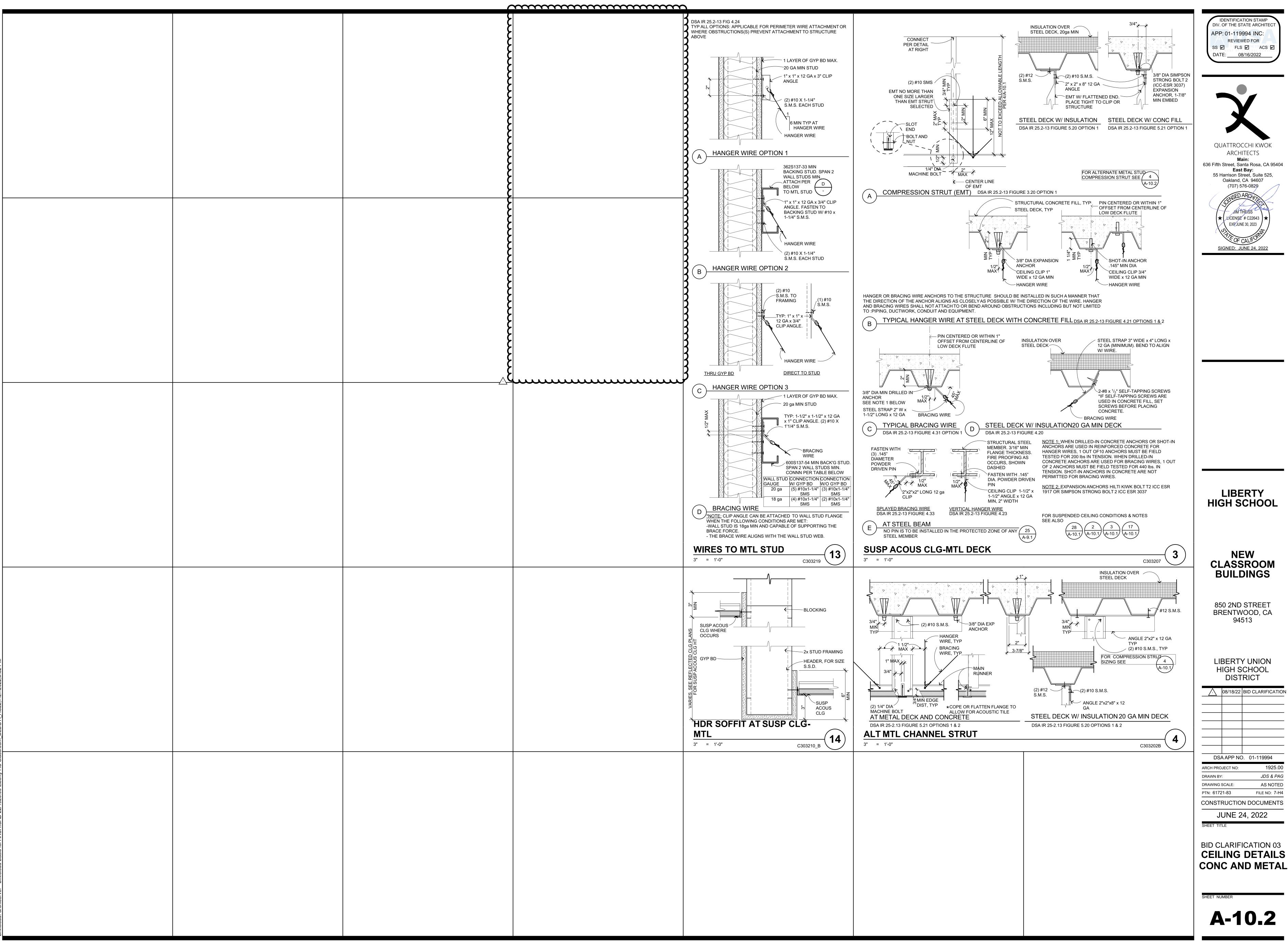
08/18/22 BID CLARIFICATION DSA APP NO. 01-119994

ARCH PROJECT NO: JDS & PAG AS NOTED FILE NO: 7-H4 CONSTRUCTION DOCUMENTS

JUNE 24, 2022

BID CLARIFICATION 03 **CEILING DETAILS** 

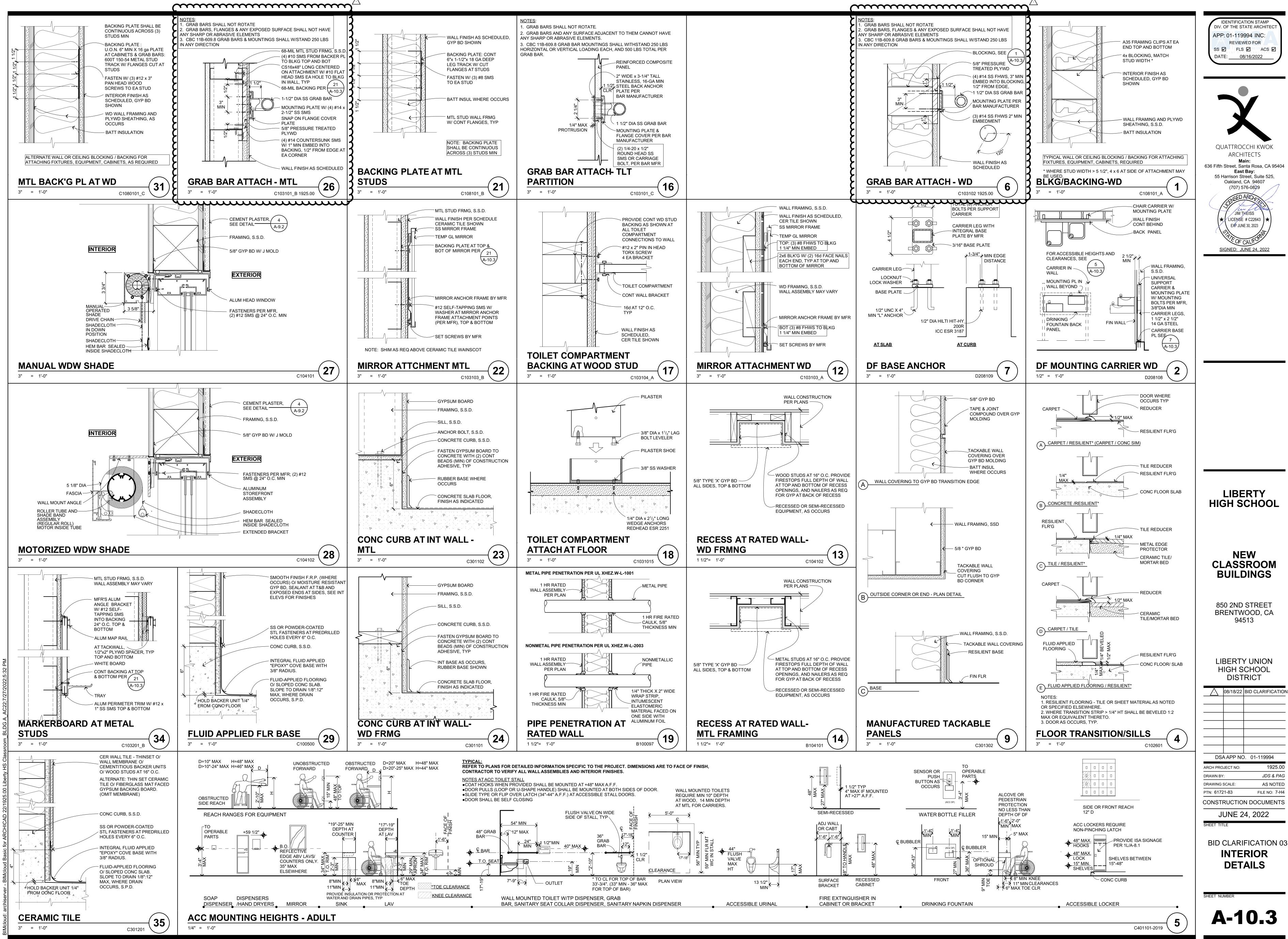
A-10.1





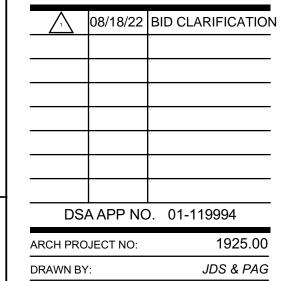
		00/10/22	B1B GE; (( () 10; ( ) 10;
ŀ			
	DSA	A APP NC	D. 01-119994
	ARCH PRO	JECT NO:	1925.00
	DRAWN BY	<b>'</b> :	JDS & PAG
	DRAWING	SCALE:	AS NOTED
	PTN: 6172	21-83	FILE NO: 7-H4
	CONST	DUCTIO	N DOCUMENTS

**CEILING DETAILS CONC AND METAL** 

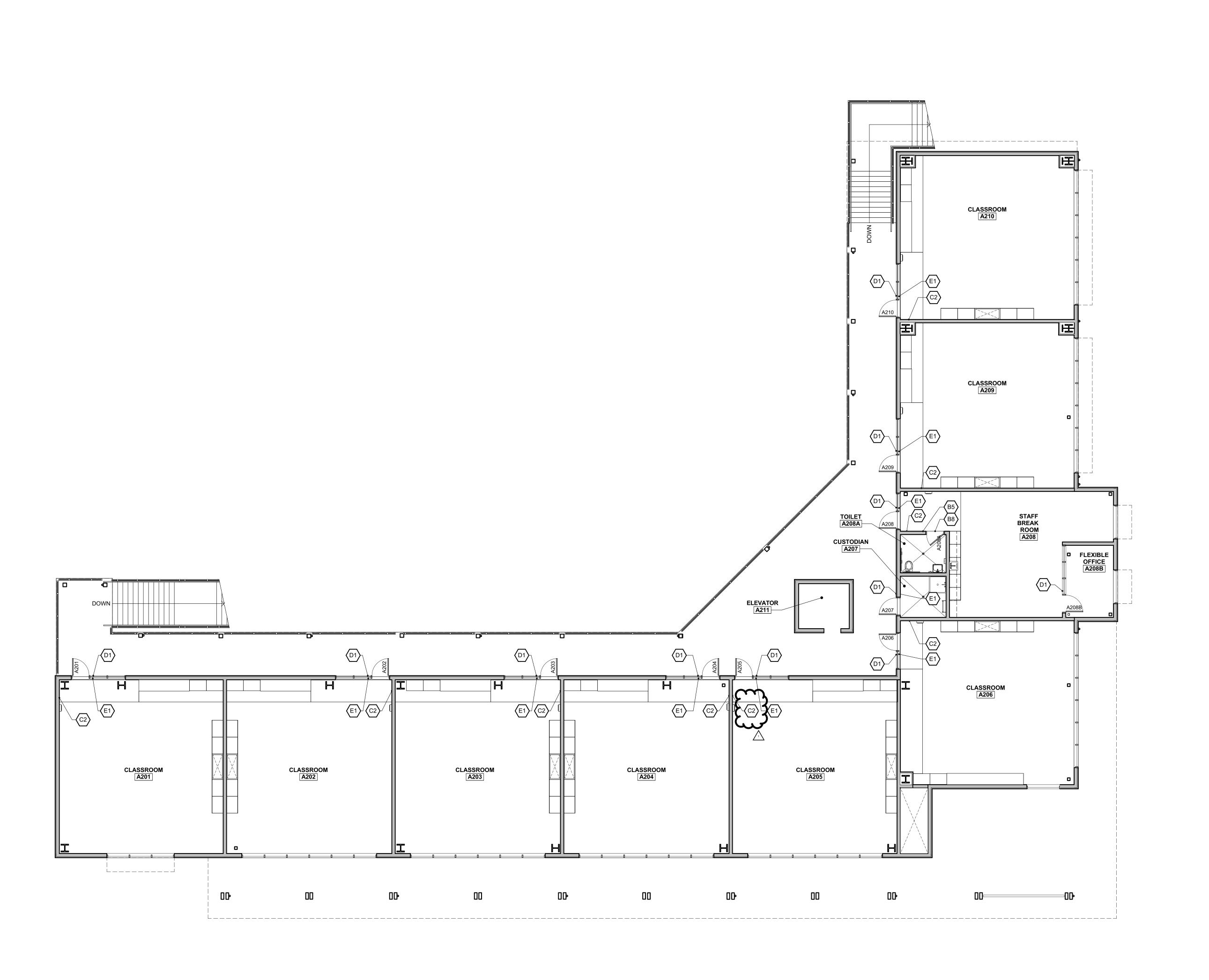


SS 🗹 FLS 🗹 ACS 🗹





AS NOTED FILE NO: 7-H4 CONSTRUCTION DOCUMENTS



SIGNAGE PLAN GENERAL NOTES

. REFER TO SHEET A-8.1 FOR SIGNAGE DETAILS

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 01-119994 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹



LIBERTY HIGH SCHOOL

NEW CLASSROOM BUILDINGS

850 2ND STREET BRENTWOOD, CA 94513

LIBERTY UNION HIGH SCHOOL DISTRICT

	\(\)	08/18/22	BID CLARIFICATION
<b>l</b> ,	DSA	A APP NO	). 01-119994
	ARCH PRO	JECT NO:	1925.00
	DRAWN BY	<b>'</b> :	JDS
	DRAWING :	SCALE:	1/8" = 1'-0"

PTN: 61721-83 FILE NO: 7-H4

JUNE 24, 2022

BID CLARIFICATION 03 **BLDG A - SECOND** FLOOR SIGNAGE PLAN

**AG-A2.2** 

SECOND FLOOR GRAPHICS PLAN

1/8" = 1'-0"

1



**KEY PLAN** 

CONCRETE 28-DAY MINIMUM DESIGN STRENGTH: CEMENT: PORTLAND CEMENT, ASTM C150, TYPE II F'<sub>c</sub> = 3,000 PSI FOUNDATIONS F'<sub>c</sub> = 3,000 PSI INTERIOR SLAB ON GRADE

REINFORCING STEEL: ASTM A615 GRADE 60 OR A706 GRADE 60 ( $F_y = 60,000 \text{ PSI}$ )

STRUCTURAL STEEL (UNO) W SHAPES - ASTM A992 (Fy = 50,000 PSI) ANGLES, CHANNELS, AND PLATES - ASTM A36 (Fy = 36,000 PSI) RECTANGULAR HSS - ASTM A500 GRADE C (Fy = 50,000 PSI) ROUND HSS - ASTM A500 GRADE C (Fy = 46,000 PSI) PIPES - ASTM A53 GRADE B (Fy = 35,000 PSI)

FASTENERS: MACHINE BOLTS SHALL BE ASTM A307 GRADE A HIGH STRENGTH BOLTS SHALL BE ASTM F3125 GRADE A325 OR F1852 UNO ANCHOR RODS SHALL BE ASTM F1554 GR 36 UNO ARC-WELDING ELECTRODES SHALL BE E70

COLD FORMED METAL FRAMING YIELD STRENGTH: F<sub>v</sub> = 33,000 PSI 33 & 43 MILS (20 & 18 GAUGE) F<sub>y</sub> = 50,000 PSI 54, 68, & 97 MILS (16, 14, & 12 GAUGE)

WO	OD BASE DESIGN STRESS SAWN LUMBER MEMBER	ES (UNO): SPECIES AND MINIMUM GRADE, UNO	F <sub>b</sub> (PSI)	F <sub>v</sub> (PSI)	E (PSI
	6x POSTS	DOUGLAS FIR - #1	1200	170	1.6x10
	6x BEAMS	DOUGLAS FIR - #1	1350	170	1.6x10
	4x POSTS & BEAMS	DOUGLAS FIR - #1	1000	180	1.7x10
	2x JOISTS, RAFTERS	DOUGLAS FIR - #1	1000	180	1.7x10
	₽ MATERIAL	DOUGLAS FIR - #1	1000	180	1.7x10
	2x STUDS	DOUGLAS FIR - #1	1000	180	1.7x10

GLUE-LAMINATED WOOD DESIGN STRESSES:  $F_b = 2,400 \text{ PSI}, F_v = 265 \text{ PSI}, E = 1.8 \times 10^6 \text{ psi}$ 

24F-V4 FOR SIMPLE SPAN BEAMS, 24F-V8 FOR CANTILEVERED BEAMS

MANUFACTURED WOOD PRODUCTS: LVL (JOISTS, STUDS, POSTS)  $F_b = 2,600 \text{ PSI}$  Fv = 285 psi  $E = 2.0 \times 10^6 \text{ PSI}$ REDBUILT REDLAM LAMINATED VENEER LUMBER - ICC ESR 2993.

FOR METAL CONNECTOR DESIGNATION REFER TO SIMPSON STRONG-TIE PER SPECIFICATIONS.

### COLD-FORMED STEEL FRAMING NOTES

- 1. SEE PLANS, DETAILS, AND ARCHITECTURAL DRAWINGS FOR METAL FRAMING LOCATIONS. SEE ARCHITECTURAL DRAWINGS FOR WALL WIDTHS AND CONFIGURATIONS.
- 2. EACH FRAMING MEMBER IS DESIGNATED BY A FOUR PART CODE INDICATING THE SIZE (BOTH DEPTH AND FLANGE WIDTH), STYLE, AND MATERIAL THICKNESS. FOR EXAMPLE, 600S162-54:

600 - MEMBER DEPTH IN 1/100" (6") S - MEMBER STYLE - S=STUD, T=TRACK 162 - FLANGE WIDTH IN 1/100" (1%") 54 - MATERIAL THICKNESS IN MILS (0.054")

- 3. TYPICAL METAL STUDS AND FRAMING ARE PER SCHEDULE 1/S-1.6 UNO. MANUFACTURER'S INFORMATION SHOWING CONFORMANCE TO CRITERIA SHOWN ON DRAWINGS AND SPECIFICATIONS. MINIMUM METAL THICKNESS = 33MILS (20GA).
- 4. TYPICAL TRACKS ARE SAME GAUGE (MILS) AS STUD, 43 MILS MINIMUM UNO. FLANGE TO BE 1½" MIN.
- 5. ALL STUDS TO BE CONTINUOUS. ALL TRACKS IN HEADERS AND SILLS TO BE CONTINUOUS SINGLE-PIECE BETWEEN JAMB STUDS OR PARAPET POSTS.
- 6. FASTENING OF COMPONENTS SHALL BE WITH SELF-DRILLING SCREWS OR WELDING. SCREWS OR WELDS NOT SHOWN SHALL BE OF SUFFICIENT SIZE TO ENSURE THE STRENGTH OF THE CONNECTION. ALL WELDS OF GALVANIZED STEEL SHALL BE TOUCHED-UP WITH A ZINC-RICH PAINT. WIRE TYING OF COMPONENTS SHALL NOT BE PERMITTED.
- 7. EXPANSION ANCHOR OR SCREW ANCHOR SIZE AND EMBEDMENT ARE AS REQUIRED PER DRAWINGS. MINIMUM STEEL EDGE DISTANCE IN TRACK IS 2x ANCHOR DIAMETER AND MINIMUM SPACING IS 3x ANCHOR DIAMETER UNO. SEE EXPANSION OR SCREW ANCHOR SCHEDULE FOR CONCRETE REQUIREMENTS. FOR EXPANSION ANCHOR THROUGH METAL TRACK, USE 3" SQUARE x 1/4" PLATE WASHER (OR EQUIVALENT ROUND WASHER) AT TRACK. DRILL HOLE IN PLATE WASHER FOR EXPANSION ANCHOR AS NEEDED TO ACHIEVE MINIMUM EDGE DISTANCES.
- 8. METAL STUDS TO BE LATERALLY BRACED WITH GYPSUM BOARD BOTH SIDES PER CBC OR BRACED AT 4'-0"oc MAXIMUM PER 1/S-1.7
- 9. TYPICAL STUD-TO-TRACK CONNECTIONS PER 6/S-1.6 UNO. MAXIMUM GAP OF 1/8" IS ALLOWED BETWEEN STUDS AND TRACK AT STANDARD WALLS. TRIM STUDS TO
- 10. TYPICAL WALL INTERSECTIONS PER 3/S-1.7 UNO.
- 11. PROVIDE LIGHT GAUGE METAL BACKING FOR ARCHITECTURAL FINISHES AND FURNISHINGS, SAD.
- 12. CEILING FRAMING PER 4/S-1.7
- 13. TYPICAL PUNCHOUTS PER 7/S-1.7
- 14. WALLS AT SEISMIC SEPARATION JOINTS SHALL BE FRAMED AS EXTERIOR WALLS
- 15. FOR POWER ACTUATED FASTENERS (PAF) UNO:

BASE MATERIAL	FASTENER TYPE	SIZE	MINIMUM SPACING	MINIMUM DISTANCE	NOTES
CONCRETE	HILTI X-U (ICC ESR-2269)	0.157"Ø MIN 1¼" LONG	4"	3"	DO NOT USE PAF AT CONCRETE CURB
STRUCTURAL STEEL	HILTI X-U (ICC ESR-2269)	0.157 <b>"ø</b> x%" LONG	1"	1/2"	

### SHEAR WALL NOTES

1. PEN = PLYWOOD/OSB SHEATHING EDGE NAILING. BLOCK ALL UNSUPPORTED EDGES WITH 2x MATERIAL UNO. BLOCK EDGES WITH 3x MATERIAL WHERE NAILING IS 4"oc OR LESS. SEE <u>11/S-1.2</u>FOR NAIL STAGGER AT ALL 3x.

- 2. FIELD NAILING TO BE 12"oc UNO.
- 3. ALL SHEATHING NAILS TO BE COMMON WIRE. SEE <u>D/S-0.1</u>AND SPECIFICATIONS FOR OTHER NAIL REQUIREMENTS.
- 4. ALL EXTERIOR WALLS NOT DESIGNATED AS SHEAR WALLS ON PLANS TO HAVE SHEATHING AND PEN NAILING PER SHEAR WALL TYPE 'A'.
- 5. SHEAR WALL LENGTHS, WHERE NOTED, ARE MINIMUM. DO NOT LOCATE HOLDOWNS FROM THESE DIMENSIONS. SAD FOR ACTUAL WALL LENGTHS.
- 6. HOLDOWN REFERS TO SIMPSON STRONG TIE CO. HOLDOWNS. INSTALL HOLDOWNS AND REQUIRED POSTS PER 8/S-1.2AND 9/S-1.2 SEE PLANS FOR OTHER
- 7. EDGE NAIL WALL SHEATHING TO STUDS OR POSTS WITH HOLDOWNS.
- 8. PORTIONS OF INTERIOR WALL SURFACES ADJACENT TO SPECIFIED SHEAR WALLS SHALL BE SHEATHED FOR THE FULL, UNINTERRUPTED LENGTH TO MATCH EXTERIOR WALLS OR WITH GYPSUM BOARD OF THE SAME THICKNESS TO PROVIDE AN EVEN WALL SURFACE FOR FINISH MATERIALS.
- 9. SHEAR WALLS MORE THAN ONE VERTICAL PANEL IN HEIGHT SHALL HAVE STAGGERED HORIZONTAL OR VERTICAL SPLICE JOINTS.
- 10. WHERE PANELS ARE APPLIED ON BOTH FACES OF A WALL AND NAIL SPACING IS LESS THAN 6"oc ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3x OR THICKER AND NAILS ON EACH SIDE SHALL BE STAGGERED.
- 11. ANCHOR BOLTS (AB) FOR SHEAR WALLS SHALL INCLUDE STEEL PLATE WASHERS. A MINIMUM OF 0.229 INCH BY 3 INCHES SQUARE IN SIZE, BETWEEN THE SILL PLATE AND NUT. THE HOLE IN THE PLATE WASHER IS PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 3/16" LARGER THAN THE AB DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1¾", PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT. PLATE WASHER TO EXTEND WITHIN ½" OF SHEAR WALL SHEATHING UNO. PROVIDE OVERSIZED PLATE WASHER OR OFFSET AB AS REQUIRED. AB TO BE PLACED A MINIMUM OF 41/2" AND A MAXIMUM OF 12" FROM ENDS OF ALL SILL PLATES AND AT NOTCHES IN SILL PLATES. SEE <u>7/S-1.2</u>
- 12. NO OPENINGS ARE ALLOWED IN SHEAR WALLS UNLESS SHOWN ON THE STRUCTURAL PLANS. OPENINGS NOTED ARE PER 6/S-1.2 COORDINATE ANY OPENINGS NOT SHOWN WITH THE STRUCTURAL ENGINEER.

	SHEA	R WALL SCH	HEDUL	E.	
SW	APA RATED SHEATHING	NAILING		ORAGE OLT FDN	REMARKS
	SHEATHING	(PEN)	2x SILL	3x SILL	
$\langle A \rangle$	<sup>15</sup> / <sub>32</sub> " (32/16) EXP 1	10d @ 6"oc	32"oc	48"oc	
$\langle B \rangle$	<sup>15</sup> / <sub>32</sub> " (32/16) EXP 1	10d @ 4"oc	24"oc	32"oc	3x MIN AT
$\langle c \rangle$	<sup>15</sup> / <sub>32</sub> " (32/16) EXP 1	10d @ 3"oc	16"oc	24"oc	ALL ADJOINING
					PANEL EDGES

AT LVL FRAMED WALLS, PROVIDE 2.5" MIN LVL STUD IN LEIU OF 3x STUD

### STEEL NOTES

1. COORDINATE TOP OF FOOTING ELEVATIONS AS INDICATED PER STRUCTURAL DRAWINGS.

- 2. TOP OF STEEL ELEVATIONS ARE PER ARCHITECTURAL DRAWINGS.
- 3. WHERE INDICATED ON PLAN "C" INDICATES MIDSPAN CAMBER IN INCHES.
- 4. ALL FRAMING AND CONNECTIONS ALONG GRID LINES OR OTHERWISE INDICATED AS (SFRS) ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM. TESTING AND INSPECTION OF FRAMING AND CONNECTIONS INDICATED AS SFRS SHALL MEET ALL REQUIREMENTS OF AISC 341 AND AWS D1.8. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 5. ALL BOLTS THAT ARE A PART OF THE SFRS ARE TO BE SLIP CRITICAL WITH CLASS A FAYING SURFACE PREPARATION, UNO.
- 6. DEMAND CRITICAL WELDS ARE AS INDICATED ON PLANS, ADDITIONALLY ALL COLUMN SPLICES AND COLUMN TO BASE PLATE WELDS IN THE SFRS ARE DEMAND CRITICAL. DEMAND CRITICAL WELDS AND THE TESTING AND INSPECTION OF THEM ARE TO MEET ALL REQUIREMENTS OF AISC 341, AWS D1.1, AND AWS D1.8. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 7. SFRS MEMBERS (INCLUDING COLUMNS) WITH FLANGE THICKNESS EQUAL TO OR GREATER THAN 11/2" SHALL HAVE A MINIMUM CHARPY V-NOTCH (CVN) TOUGHNESS OF 20 FT-LB AT + 70°F. THE TEST SHALL BE IN ACCORDANCE WITH ASTM A6 SUPPLEMENTARY REQUIREMENTS \$30. SFRS BRACED FRAME GUSSET PLATES AND MOMENT FRAME CONTINUITY AND CAP PLATES WITH THICKNESS EQUAL TO OR GREATER THAN 2" SHALL HAVE A MINIMUM CHARPY V-NOTCH (CVN) TOUGHNESS OF 20 GT-LB +70°F. THE TEST SHALL BE IN ACCORDANCE WITH ASTM A673
- 8. CONCRETE OVER METAL DECK TO BE PLACED PRIOR TO INSTALLATION OF NON-BEARING WALLS BELOW. SPECIFIED NON-BEARING DEFLECTION GAPS IN TRACKS OR TOP PLATES SHALL BE MAINTAINED AFTER PLACEMENT OF CONCRETE.
- 9. MOMENT FRAME BEAM TO COLUMN CONNECTIONS ARE PREQUALIFIED SPECIAL WELDED UNREINFORCED FLANGE WELDED WEB (WUFW) CONNECTIONS. WORK, INSPECTIONS, AND TESTING IS TO MEET ALL REQUIREMENTS OF AISC 358 CHAPTERS 3, AND 8, AISC 341, AND AWS D1.8. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

### FOUNDATION NOTES

1. ALLOWABLE (ASD) FOUNDATION DESIGN PRESSURES ARE:

**SHALLOW FOOTINGS:** DEAD LOAD + LIVE LOAD = 2,500 PSF DEAD LOAD + LIVE LOAD + LATERAL = 3,300 PSF

2. ALL SOILS WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND THE REQUIREMENTS OF THE GEOTECHNICAL REPORT NOTED BELOW, AND CHAPTER 18A OF THE CBC. ALL FOUNDATIONS SHALL BEAR ON FIRM, UNDISTURBED, NATIVE SOILS OR ENGINEERED FILL AT OR EXCEEDING DEPTHS SHOWN ON THE DRAWINGS. ENGINEERED FILL TO BE COMPACTED PER GEOTECHNICAL REPORT. INCREASE FILL AND OR FOOTING DEPTH AS REQUIRED BY GEOTECHNICAL ENGINEER. ALL FOOTING EXCAVATIONS SHALL BE AS NEAT AS PRACTICABLE. MAXIMUM OVER EXCAVATION IN WIDTH SHALL BE LESS THAN 12 INCHES OR 25% OF FOOTING WIDTH, WHICH EVER IS LESS. 6 INCHES MAXIMUM PER SIDE. LARGER OVER-EXCAVATIONS IN WIDTH SHALL BE FILLED WITH ADDITIONAL REINFORCED CONCRETE AS DIRECTED BY THE ENGINEER, OR FORMWORK SHALL BE PROVIDED. OVER-EXCAVATIONS IN DEPTH MAY BE FILLED WITH LEAN CONCRETE OR COMPACTED APPROVED BACKFILL. ALL LOOSE SOILS SHALL BE REMOVED FROM EXCAVATIONS PRIOR TO PLACEMENT OF REINFORCING OR CONCRETE. GEOTECHNICAL REPORT BY:

> **BSK ASSOCIATES** REPORT NO. G21-225-11L DATED: 09-17-2021

- 3. WHERE BOTTOM OF ADJACENT FOOTINGS ARE DIFFERENT PROVIDE STEPPED FOOTING PER <u>5/S-1.1</u>
- 4. FOR WOOD STUD WALLS, USE 5/8" DIAMETER x 12" (18" AT CURBS) ANCHOR BOLTS (AB) AT 48"oc WHERE NOT OTHERWISE NOTED. MINIMUM EMBEDMENT INTO CONCRETE IS 7" (EXCLUDING CURB) UNLESS DETAILED OTHERWISE. ANCHOR BOLTS ARE TO BE TIED IN PLACE PRIOR TO PLACEMENT OF CONCRETE. SEE SHEAR WALL SCHEDULE FOR ADDITIONAL REQUIREMENTS. MINIMUM TWO ANCHOR BOLTS
- 5. TYPICAL SLAB: 5" CONCRETE REINFORCED WITH #4 @ 16"oc EACH WAY 1 1/2" CLEAR FROM TOP OF SLAB OVER VAPOR RETARDER (PER SPECIFICATIONS) AND 6" MINIMUM FREE DRAINING COMPACTED CRUSHED ROCK ON SUBGRADE PER THE GEOTECHNICAL RECOMMENDATIONS, AND AS APPROVED BY THE GEOTECHNICAL ENGINEER. DO NOT DRIVE CONCRETE TRUCKS OR LARGE SCREED MACHINES ON VAPOR RETARDER WITHOUT ADDITIONAL BUFFER MATERIAL AND APPROVAL FROM THE STRUCTURAL ENGINEER.
- 6. REFER TO ARCHITECTURAL AND PLUMBING DRAWINGS FOR DEPRESSED SLABS FOR ARCHITECTURAL FLOORING OR INSERTS, SLOPED SLABS TO DRAIN AND PIPES OR CONDUITS AT SLAB. SEE 8/S-1.1 AT DEPRESSED SLAB & 7/S-1.1 FOR PIPES AND
- 7. PROVIDE CONTROL JOINTS PER 6/S-1.1(OR CONSTRUCTION/DOWEL JOINTS AT CONTRACTOR'S OPTION) AS SHOWN ON PLAN AND AS REQUIRED TO MEET A MAXIMUM SPACING IN FEET OF 3 TIMES THE SLAB DEPTH IN INCHES (FOR EXAMPLE 3x4" = 12'-0"oc MAX) AND 15'-0"oc MAX. INSTALL JOINTS TO DIVIDE SLAB INTO RECTANGULAR AREAS WITH LONG DIMENSION LESS THAN 1.5 x SHORT DIMENSION. INSTALL JOINTS AT FACE OF STUDS OF WALL WHERE POSSIBLE. SUBMIT JOINT LAYOUT PLAN FOR REVIEW PRIOR TO PLACEMENT.
- 8. DO NOT UNDERCUT EXISTING FOUNDATIONS. NOTIFY ENGINEER FOR REVIEW AND POSSIBLE REVISIONS, IF EXISTING FOUNDATION CONDITIONS ARE NOT AS SHOWN.
- 9. TOP OF FOOTING ELEVATIONS TO BE DETERMINED BY THE CONTRACTOR BASED ON INFORMATION FROM THE CIVIL DRAWINGS, GEOTECHNICAL REPORT, LANDSCAPE, ETC.

### WOOD FRAMING NOTES

- 1. HEADERS, BEAMS, POSTS, TOP PLATE SPLICES, AND ETC., ARE PER 1/S-1.2AND 3/S-1.2 WHERE NOT NOTED ON PLAN AND DETAILS. WALLS AT SEISMIC SEPARATIONS SHALL BE CONSIDERED EXTERIOR WALLS.
- 2. ALL BEAMS AND JOISTS (EXCLUDING I JOISTS) SHALL BE SEAT CUT FOR FULL UNIFORM BEARING AT SUPPORTS, INCLUDING BEAM SEATS AND COLUMN CAPS.
- 3. ALL GLULAM BEAMS SHALL BE APPEARANCE GRADE UNLESS ENTIRELY CONCEALED BY FINISHES PER THE ARCHITECTURAL DRAWINGS.
- 4. THE GENERAL CONTRACTOR SHALL MEASURE GLULAM BEAM SIZES AND CAMBERS AS DELIVERED TO THE JOB SITE AND SHALL REPORT FINDINGS TO THE ENGINEER PRIOR TO ERECTION. PROVIDE 5,000 FT. RADIUS CAMBER ON ALL SIMPLE SPAN GLULAM BEAMS
- UNO. WHERE INDICATED ON PLAN, C = 3/4" INDICATES MIDSPAN CAMBER IN INCHES. 5. 3½" AND 5½" WIDTHS MAY BE SUBSTITUTED FOR 3½" & 5½" WIDTHS, RESPECTIVELY, AT
- INDUSTRIAL APPEARANCE GRADE GLULAM MEMBERS UNO. 6. SEE <u>11/S-1.2</u>FOR SHEATHING NAILING REQUIREMENTS. ALL NAILING NOT NOTED OR DETAILED OTHERWISE SHALL BE PER 10/S-1.2 NAIL LENGTH TO BE SUFFICIENT TO MEET CBC PENETRATION REQUIREMENTS. NAILS INTO PRESSURE TREATED MATERIAL SHALL BE HOT DIP GALVANIZED. NAILS AT BORATE TREATED LUMBER MAY BE CLEAR ZINC COATED. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AT EXTERIOR
- EXPOSURES. 7. EXTERIOR STUD WALL SHALL BE 2x6 @ 16"oc UNLESS NOTED OTHERWISE. SEE STUD PLAN ON S-B2.1. INTERIOR BEARING WALLS AND SHEAR WALLS SHALL BE 2x6 @ 16"oc UNLESS NOTED OTHERWISE. SEE ARCHITECTURAL DRAWINGS FOR OTHER INTERIOR WALL FRAMING SIZES. COORDINATE STUD AND PLATE SIZES WITH THE REQUIREMENTS OF THE SHEAR WALL SCHEDULE.
- 8. WOOD POST SIZES ARE TO MATCH BEAM AND STUD WIDTH, UNO. WHERE POST OCCURS ABOVE RAISED FLOOR, PROVIDE SOLID BLOCKING AT FLOOR FRAMING TO MATCH WIDTH OF POST. PEN PER <u>E/S-0.1</u>TO POSTS AT ALL EXTERIOR WALLS AND INTERIOR SHEAR WALLS. POSTS AT HOLDOWNS TO BE FULL HEIGHT AND PER 8/S-1.2
- 9. ALL MECHANICAL SUPPLY AND RETURN OPENINGS TO BE BETWEEN FRAMING UNO.
- 10. HSS OR PIPE COLUMNS IN STUD WALLS ARE TO BE TRIMMED PER 6/S-1.3REFER TO PLANS AND DETAILS FOR OTHER REQUIREMENTS.
- 11. JOISTS AND RAFTERS ARE PER PLAN. UNLESS NOTED OTHERWISE, "HU" HANGER. HANGER SIZE TO BE CORRECT FULL SIZE FOR JOIST SIZE (I.E. LU210 FOR 2x10). FILL ALL NAIL HOLES.
- 12. PROVIDE SOLID BLOCKING @ 8'-0"oc MAX FOR ALL 2x12 REPETITIVE FRAMING. PROVIDE SOLID BLOCKING OR SIMPSON TB X-BRIDGING @ 8'-0"oc MAX FOR ALL 11/2" LSL AND 13/4" LVL REPETITIVE FRAMING WITH A DEPTH OF 111/4" OR GREATER.
- 13. ROUND HOLES IN STEEL PLATES TO BE 1/16" OVERSIZE. SLOTTED HOLES IN STEEL PLATES SHALL BE 1/16" WIDER THAN THE BOLT DIAMETER AND HAVE A LENGTH OF 2 TIMES THE BOLT DIAMETER. THE DIRECTION OF THE SLOTTED LENGTH IS INDICATED ON THE DETAILS (VSH OR HSH). INSTALL BOLT AT THE CENTER LINE OF THE HOLE. BOLT HOLES IN WOOD SHALL BE ROUND AND 1/22" OVERSIZE. CUT OFF BOLT THREADED END FLUSH WITH NUT WHEN REQUIRED BY FINISHES AND 1" MAXIMUM FROM NUT OTHERWISE. PROVIDE STANDARD CUT WASHERS UNDER HEAD AND NUT WHERE BOLT BEARS ON WOOD. USE PLATE OR MALLEABLE IRON WASHERS AT EXPOSED CONDITIONS OR AS INDICATED.
- 14. ALL BOLTED OR NAILED STRAP CONNECTIONS SHALL HAVE AN EQUAL NUMBER OF BOLTS OR NAILS EACH SIDE OF THE SPLICE JOINT. THE FIRST BOLT OR NAIL FROM EACH SIDE OF THE SPLICED OR STRAPPED MEMBER SHALL BE EQUIDISTANT FROM THE SPLICE. STRAPS USING 16d NAILS ON 2x MATERIAL TO BE INSTALLED ON THE 11/2" EDGE OF THE MEMBER.
- ALL STRAPS SHALL BE INSTALLED WITH 10d NAILS, AS SPECIFIED BY THE MANUFACTURER, FOR FULL STRAP CAPACITY. NO NAIL SUBSTITUTIONS. FILL ALL NAIL HOLES FOR PRECUT STRAPS (EG: LSTA, MSTA, MSTC, MTS, HTS, ETC). FOR COILED STRAPS, SEE 3/S-1.3 FOR NAILING REQUIREMENTS.
- 15. THE CONTRACTOR SHALL VERIFY THAT THE MOISTURE CONTENT OF ALL FRAMING LUMBER AND SHEATHING MEET THE REQUIREMENTS OF THE SPECIFICATIONS AT THE TIME OF INSTALLATION AND AT CLOSE-IN. THE CONTRACTOR SHALL PROVIDE ALLOWANCE FOR DIFFERENTIAL SHRINKAGE BETWEEN FLOORS, ETC.
- 16. VENTING IS REQUIRED IN ENCLOSED FRAMING AREAS, SAD. DRILL BLOCKING AND LEDGERS AND PROVIDE SKIP BLOCKING AS DETAILED.
- 17. SAD FOR CEILING INFO. WHERE REQUIRED PROVIDE CEILING JOISTS PER 4/S-1.3, UNO.
- 18. ALL SHEATHING SHALL HAVE 1/8" GAP AT ALL EDGES AND JOINTS. TYPICAL SHEATHING:
- A. FLAT ROOF SHEATHING (SLOPE 2:12 OR LESS): 1/3/2 " T&G APA RATED SHEATHING (40/20) EXP 1 WITH 10d @ 6"oc EDGES (PEN) AND 12"oc FIELD UNO ON PLANS. LAY PERPENDICULAR TO FRAMING MEMBERS. BLOCK EDGES WITH 2x4 LAID FLAT WHERE NOTED ON THE PLANS AND DETAILS. NO PANELS LESS THAN 24" WIDE SHALL BE USED. STAGGER SHEETS.

### DESIGN CRITERIA

3 PSF

FLOOR LIVE LOAD: ROOF LIVE LOAD: FUTURE SOLAR: RISK CATEGORY: <u>WIND DATA</u>:

2019 CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2 (CBC) 50 PSF (REDUCIBLE) + 15 PSF PARTITION. 100 PSF AT EXITWAYS. 20 PSF (REDUCIBLE)

ULTIMATE WIND SPEED (3 SEC GUST) IN MPH: 99 WIND EXPOSURE: C INTERNAL WIND PRESSURE COEFFICIENT (GCPI) = ±0.18 COMPONENTS AND CLADDING DESIGN PRESSURES FOR SYSTEMS DESIGNED BY OTHERS SHALL COMPLY WITH THE FOLLOWING LOADS. LOADS ARE ULTIMATE, IN PSF, AND ARE UNREDUCED FOR TRIBUTARY

**BUILDING A:** ROOF (ZONE 1): 37.7 WALL (ZONE 4): 23.5 ROOF (ZONE 2): 49.8 WALL (ZONE 5): 28.9 ROOF (ZONE 3): 67.9

BUILDING B: ROOF (ZONE 1): 24.1 WALL (ZONE 4): 24.1 ROOF (ZONE 2): 33.5 WALL (ZONE 5): 29.7 ROOF (ZONE 3): 52.3

EARTHQUAKE DATA:

SEISMIC IMPORTANCE FACTOR, Ia: 1.25 MAPPED SPECTRAL RESPONSE ACCELERATIONS: S<sub>S</sub> = 1.369; S<sub>1</sub> = 0.481 SITE CLASS: D SPECTRAL RESPONSE COEFFICIENTS:  $S_{DS} = 0.913$ ;  $S_{D1} = 0.583$ SEISMIC DESIGN CATEGORY: D

SEISMIC FORCE RESISTING SYSTEM(S): SPECIAL STEEL MOMENT FRAMES REENTRANT CORNER IRREGULARITY RESPONSE MODIFICATION FACTOR(S): R = 8.0

SEISMIC RESPONSE COEFFICIENT(S), C<sub>S</sub> = 0.148 (ULTIMATE) ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE BUILDING B SEISMIC FORCE RESISTING SYSTEM(S): WOOD FRAMED SHEAR

RESPONSE MODIFICATION FACTOR(S): R = 6.5 SEISMIC RESPONSE COEFFICIENT(S),  $C_s = 0.176$  (ULTIMATE) ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE

MAXIMUM ANTICIPATED INELASTIC STORY DRIFT = 0.015 x HEIGHT **BUILDING A: 2.4" PER STORY** 

BUILDING B: 3.2"

PROVIDE DEFORMATION COMPATIBILITY PER ASCE 7 SECTION 12.12.5 FOR NON-STRUCTURAL ITEMS, INCLUDING CLADDING, STAIRS, GLAZING, ETC.

### **GENERAL NOTES**

- 1. REFER TO SHEETS \$1.1. THROUGH \$1.7 FOR STANDARD DETAILS OF CONSTRUCTION, REFER TO THE PROJECT SPECIFICATIONS FOR MATERIALS AND
- 2. BUILDING DIMENSIONS SHOWN ARE FOR GENERAL REFERENCE ONLY. SEE ARCHITECTURAL DRAWINGS (SAD) FOR ALL ACTUAL BUILDING DIMENSIONS, ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER SO CLARIFICATION CAN BE MADE PRIOR TO COMMENCING
- 3. STRUCTURAL DRAWINGS SHALL NOT BE SCALED, ALL DIMENSIONS AND FIT SHALL BE DETERMINED AND VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING
- 4. DETAILS NOT FULLY OR SPECIFICALLY SHOWN SHALL BE OF SAME NATURE AS OTHER SIMILAR CONDITIONS.
- 5. REFER TO ARCHITECTURAL DRAWINGS FOR SIDEWALK SLABS AND DIMENSIONS.
- 6. COORDINATION OF MECHANICAL, ELECTRICAL, PLUMBING, AND SITE UTILITY SYSTEMS WITH THE STRUCTURAL SYSTEM IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, USE DETAILS ON SHEETS \$1.1 THROUGH \$1.7, AT CONDITIONS WHERE THESE DETAILS DO NOT APPEAR TO APPLY, NOTIFY THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION. AT CONDITIONS WHERE FIELD MODIFICATIONS OF MECHANICAL, ELECTRICAL, PLUMBING, OR SITE UTILITIES AFFECT STRUCTURAL SYSTEMS, NOTIFY STRUCTURAL ENGINEER PRIOR TO INSTALLATION.
- 7. VERIFY WEIGHTS AND LOCATIONS OF MECHANICAL UNITS WITH MECHANICAL ENGINEER PRIOR TO PLACEMENT. UNITS VARYING OVER 10% IN WEIGHT SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION (MECHANICAL WEIGHTS SHOWN ARE MAXIMUM). CONTRACTOR TO VERIFY MECHANICAL UNIT SIZES AND WEIGHTS AS INSTALLED PRIOR TO INSTALLATION OF SPECIAL FRAMING TO ENSURE CORRECT PLACEMENT UNDER CURBS, ETC. SEE 9/S-1.3 AND 1/S-1.5
- 8. SHORING AND BRACING DESIGN, MATERIALS AND INSTALLATION SHALL BE PROVIDED BY THE GENERAL CONTRACTOR, AND SHALL BE ADEQUATE FOR ALL LOADS. LEAVE IN PLACE AS LONG AS MAY BE REQUIRED FOR SAFETY AND UNTIL FINAL STRUCTURAL CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL ENGAGE A LICENSED CIVIL OR STRUCTURAL ENGINEER TO PROVIDE SHORING.
- 9. SPECIAL INSPECTIONS ARE REQUIRED PER THE DSA 103 TESTING AND INSPECTION
- 10. VEHICULAR TRAFFIC, HEAVY EQUIPMENT AND MATERIAL STAGING SHALL NOT BE ALLOWED ADJACENT TO ANY RETAINING/BASEMENT WALL, NEW OR EXISTING WITHIN A HORIZONTAL DISTANCE EQUAL TO THE WALL HEIGHT MEASURED FROM THE BOTTOM OF FOOTING OR 5'-0" WHICHEVER IS GREATER, UNLESS APPROVED BY THE STRUCTURAL ENGINEER OR NOTED OTHERWISE. WITHIN THIS ZONE, ONLY HAND-OPERATED EQUIPMENT ("WHACKERS", VIBRATORY PLATES, OR PNEUMATIC COMPACTORS) SHALL BE USED TO COMPACT THE BACKFILL SOILS.
- 11. SUBMIT ENGINEERING FOR DEFERRED APPROVAL ITEMS TO ARCHITECT/ENGINEER FOR REVIEW AND SUBMITTAL TO THE BUILDING DEPARTMENT FOR APPROVAL PRIOR TO FABRICATION. DEFERRED APPROVAL ITEMS SHALL BE DESIGNED AND DETAILED BY MANUFACTURER TO ACCOMMODATE HORIZONTAL AND VERTICAL MOVEMENTS AS NOTED IN STRUCTURAL DRAWINGS. GENERAL CONTRACTOR SHALI REVIEW AND APPROVE DIMENSIONS AND DETAILS SHOWN ON THE SHOP DRAWINGS PRIOR TO SUBMITTAL. MANUFACTURER TO PROVIDE DRAWINGS AND CALCULATIONS DESIGNED IN ACCORDANCE WITH THE CBC AND SPECIFICATIONS, PREPARED AND SIGNED BY A CALIFORNIA LICENSED CIVIL OR STRUCTURAL ENGINEER FOR THE FOLLOWING ITEMS, UNLESS NOTED OTHERWISE:
- A. ELEVATOR STRUCTURAL DESIGN AND DRAWINGS OF ELEVATOR GUIDES, RAILS, SUPPORTS, ETC, SHALL BE PROVIDED BY THE ELEVATOR MANUFACTURER/SUPPLIER. CONFORM TO CAL OSHA REQUIREMENTS.
- B. STORE FRONT, CURTAIN WALL, GLAZING AND SKYLIGHT SYSTEMS: INCLUDE ATTACHMENTS TO STRUCTURE.

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S-0.1	GENERAL NOTES
S-1.1	TYPICAL CONCRETE DETAILS
S-1.2	TYPICAL WOOD DETAILS
S-1.3	TYPICAL WOOD DETAILS
S-1.4	TYPICAL METAL DECKING DETAILS
S-1.5	TYPICAL METAL DECKING DETAILS
S-1.6	TYPICAL CFS ELEVATION AND CONNECTION DETAILS
S-1.7	TYPICAL CFS DETAILS
S-A2.1	FOUNDATION PLAN - BLDG-A
S-A2.2	SECOND FLOOR FRAMING PLAN - BLDG A
S-A2.3	ROOF FRAMING PLAN - BLDG-A
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S-A5.4	STEEL STAIR AND RAIN CANOPY DETAILS
S-B2.1	FOUNDATION PLAN - BLDG-B
S-B2.2	ROOF FRAMING PLAN - BLDG-B
S-B3.1	ELEVATIONS & SCHEDULES
S-B4.1	FOUNDATION DETAILS
S-B6.1	WOOD DETAILS
S-B6.2	WOOD DETAILS



Main Office: 636 Fifth Street, Santa Rosa, CA 95404 East Bay Office: 55 Harrison Street, Suite 525, Oakland, CA 94607 (707) 576-0829

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LIBERTY HIGH

# **CLASSROOM**

850 2nd STREET BRENTWOOD, CA

LIBERTY UNION HIGH SCHOOL

REVISIONS 1 8/17/2022 Bid Clarification DSA APP NO. 01-119994

PTN: 61721-83 FILE NO: 7-H4 CONSTRUCTION DOCUMENTS

JUNE 24, 2022

ARCH PROJECT NO:

DRAWING SCALE

DRAWN BY:

BID CLARIFICATION 03 **GENERAL NOTES** 



FOOTING GAGE or GAUGE GALVANIZED GRADE BEAM

GLUE LAMINATED BEAM GRADE

HOLD DOWN HOT-DIP GALVANIZED

HIGH STRENGTH BOI

HORIZONTAL SLOTTED HOLE HOLLOW STRUCTURAL

PANEL POUNDS PER SQUARE FOC

POUNDS PER SQUARE INCH PARALLEL STRAND LUMBER

PRESSURE TREATED

RADIUS REDUCED BEAM SECTION RAFTER

AMERICAN STANDARD BEAT

OUGLAS FIR

REFERENCE REINFORCING

REQUIRED RETAINING REVISION

ABBREVIATIONS

ANCHOR BOLT ABOVE

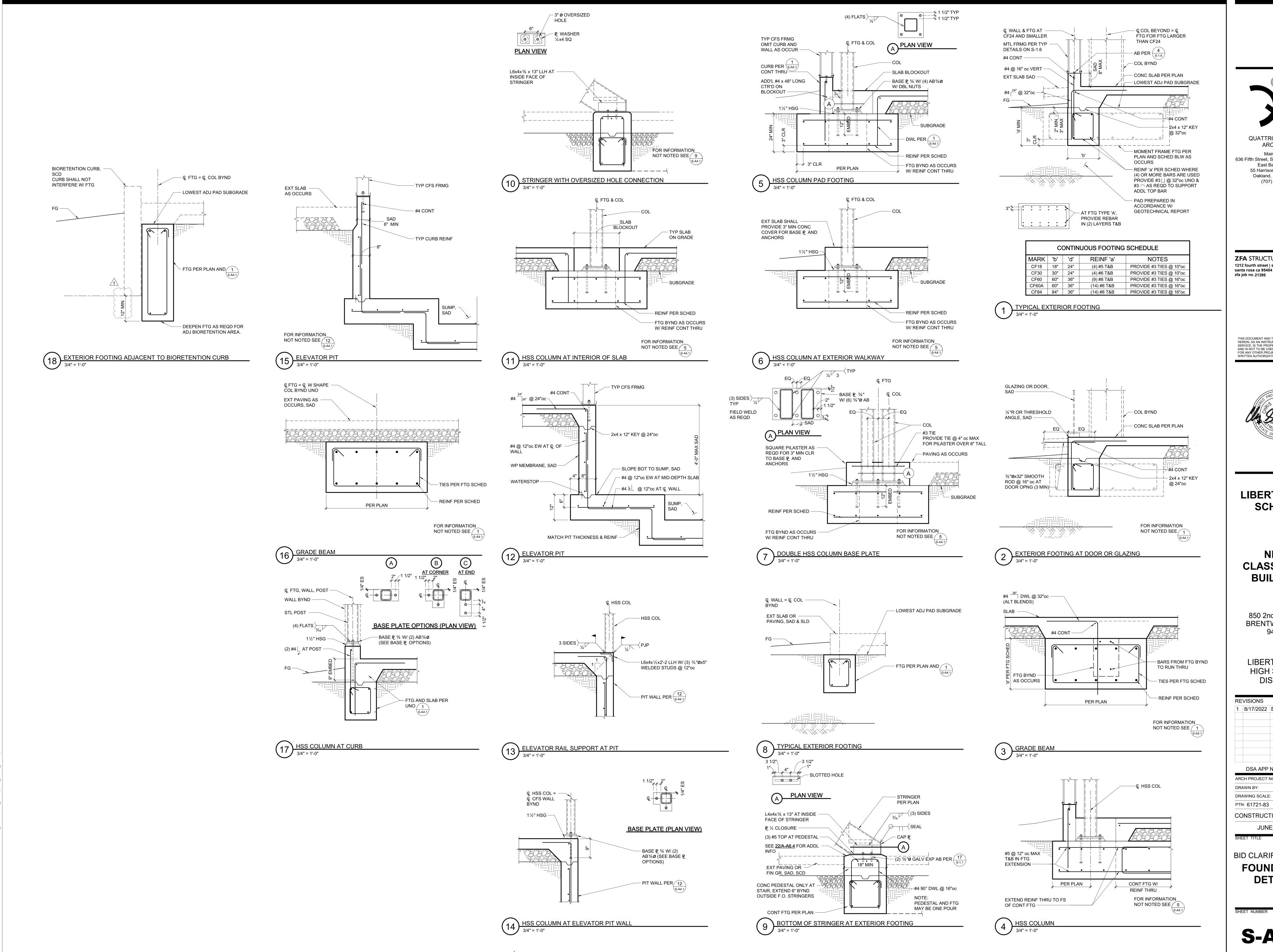
ADDITIONAL ALTERNATE

AIR CONDITIONING ADJACENT

BLOCK/BLOCKING

BEAM BOUNDARY NAIL

ALUMINUM GR
ARCHITECT HD
ALASKAN YELLOW CEDAR HDG



QUATTROCCHI KWOK ARCHITECTS

Main Office: 636 Fifth Street, Santa Rosa, CA 95404 East Bay Office: 55 Harrison Street, Suite 525, Oakland, CA 94607 (707) 576-0829

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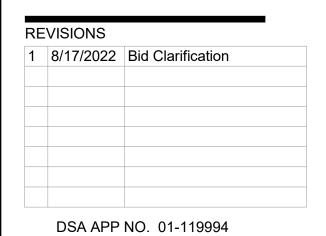


LIBERTY HIGH SCHOOL

**NEW** CLASSROOM **BUILDING** 

850 2nd STREET BRENTWOOD, CA 94513

LIBERTY UNION HIGH SCHOOL DISTRICT

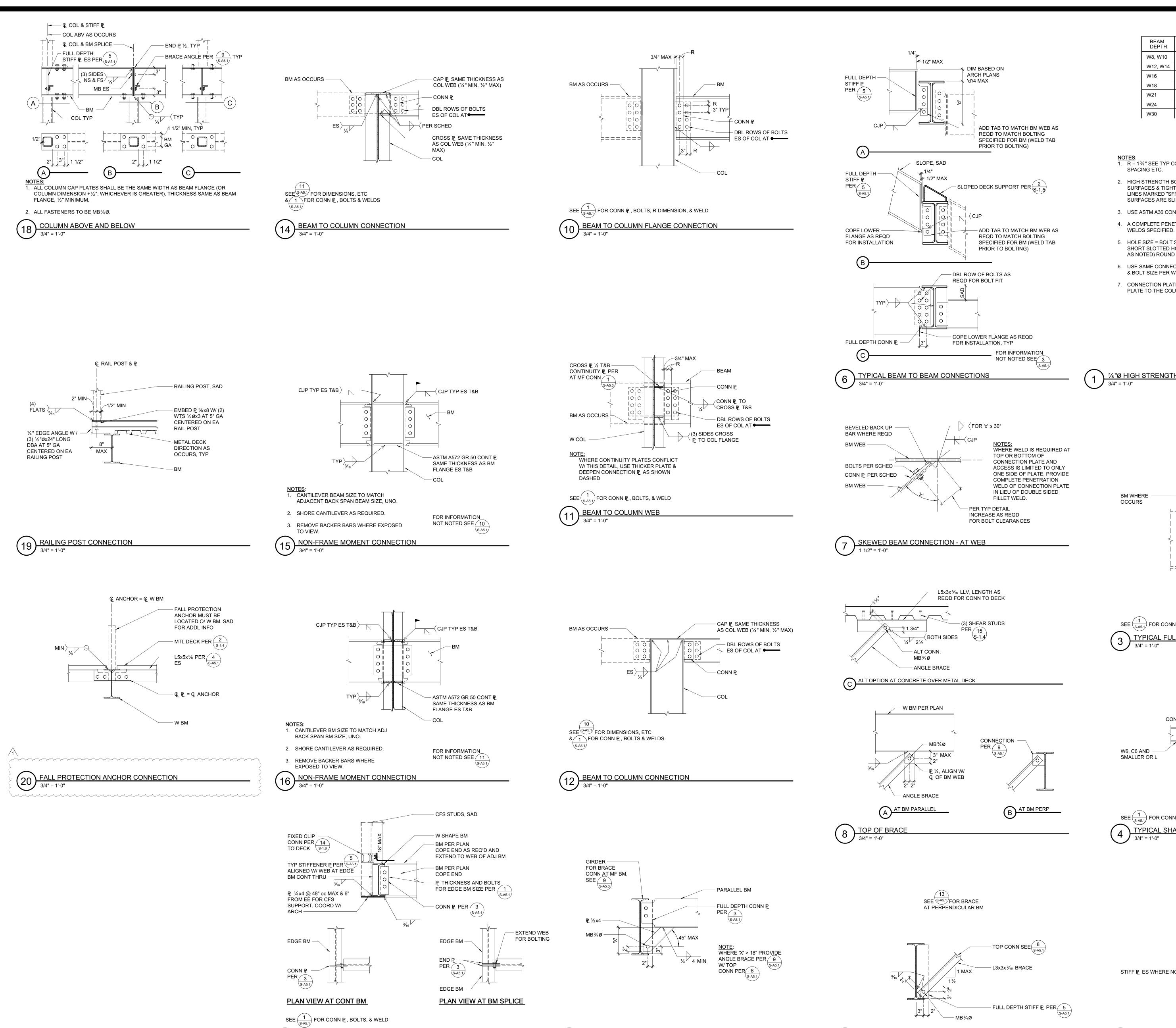


ARCH PROJECT NO: DRAWING SCALE: FILE NO: 7-H4 PTN: 61721-83 CONSTRUCTION DOCUMENTS

JUNE 24, 2022

BID CLARIFICATION 03 **FOUNDATION DETAILS** 

**S-A4.1** 



TYPICAL BOTTOM FLANGE BRACE TO PERPENDICULAR BEAM

3/4" = 1'-0"

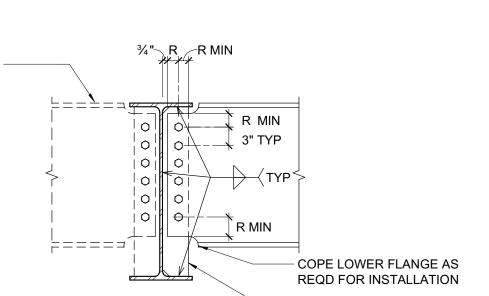
RAIN CANOPY BEAM CONNECTION

3/4" = 1'-0"

CONN. PLATE PER ROW 5/16" ₽% 5/<sub>16</sub>" ₽% 5/<sub>16</sub>" ₽% PL ½ PL ½ PL ½

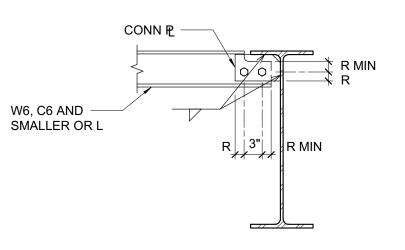
1. R = 1%" SEE TYP CONNECTION DETAILS FOR ADDITIONAL DIMENSIONS, BOLT

- 2. HIGH STRENGTH BOLTS (HSB) ARE GRADE A325-N UNO. PREPARE MATING SURFACES & TIGHTEN "SNUG TIGHT" AS DEFINED IN THE SPECIFICATIONS. AT LINES MARKED "SFRS" (SEISMIC FORCE RESISTING SYSTEM) HSB AND MATING SURFACES ARE SLIP CRITICAL CLASS A, UNO.
- 3. USE ASTM A36 CONNECTION PLATES, UNO.
- 4. A COMPLETE PENETRATION BEVEL WELD MAY BE SUBSTITUTED FOR THE FILLET
- 5. HOLE SIZE = BOLT SIZE + 1/16" (BOLT SIZE + 1/16" FOR 1"Ø AND LARGER BOLTS). SHORT SLOTTED HOLES (+1/16" VERT, +1/4" HORIZ) MAY BE SUBSTITUTED (EXCEPT AS NOTED) ROUND HOLES ARE REQUIRED AT SFRS CONNECTIONS.
- 6. USE SAME CONNECTIONS AT CHANNELS. FOR W6, C6 & ANGLES USE PLATE, WELD & BOLT SIZE PER W8 & SEE <u>4/S-A5.1</u>
- 7. CONNECTION PLATE WELD SIZE REFERS TO THE WELD FROM THE CONNECTOR PLATE TO THE COLUMN, ADJACENT BEAM, ETC.



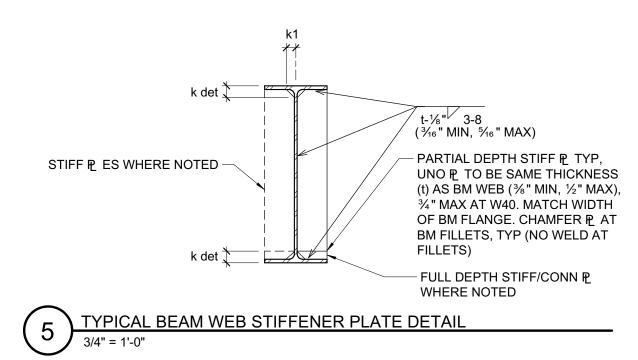
- FULL DEPTH CONN ₱

SEE (1) FOR CONN P., R DIMENSION, BOLTS, & WELD 3 TYPICAL FULL DEPTH BEAM TO BEAM CONNECTION



SEE 1 FOR CONN P, BOLTS, R DIMENSION, & WELD TYPICAL SHALLOW BEAM DETAIL

9 TYPICAL BEAM BOTTOM FLANGE BRACE
3/4" = 1'-0"



QUATTROCCHI KWOK ARCHITECTS

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**LIBERTY HIGH SCHOOL** 

**CLASSROOM BUILDING** 

850 2nd STREET BRENTWOOD, CA 94513

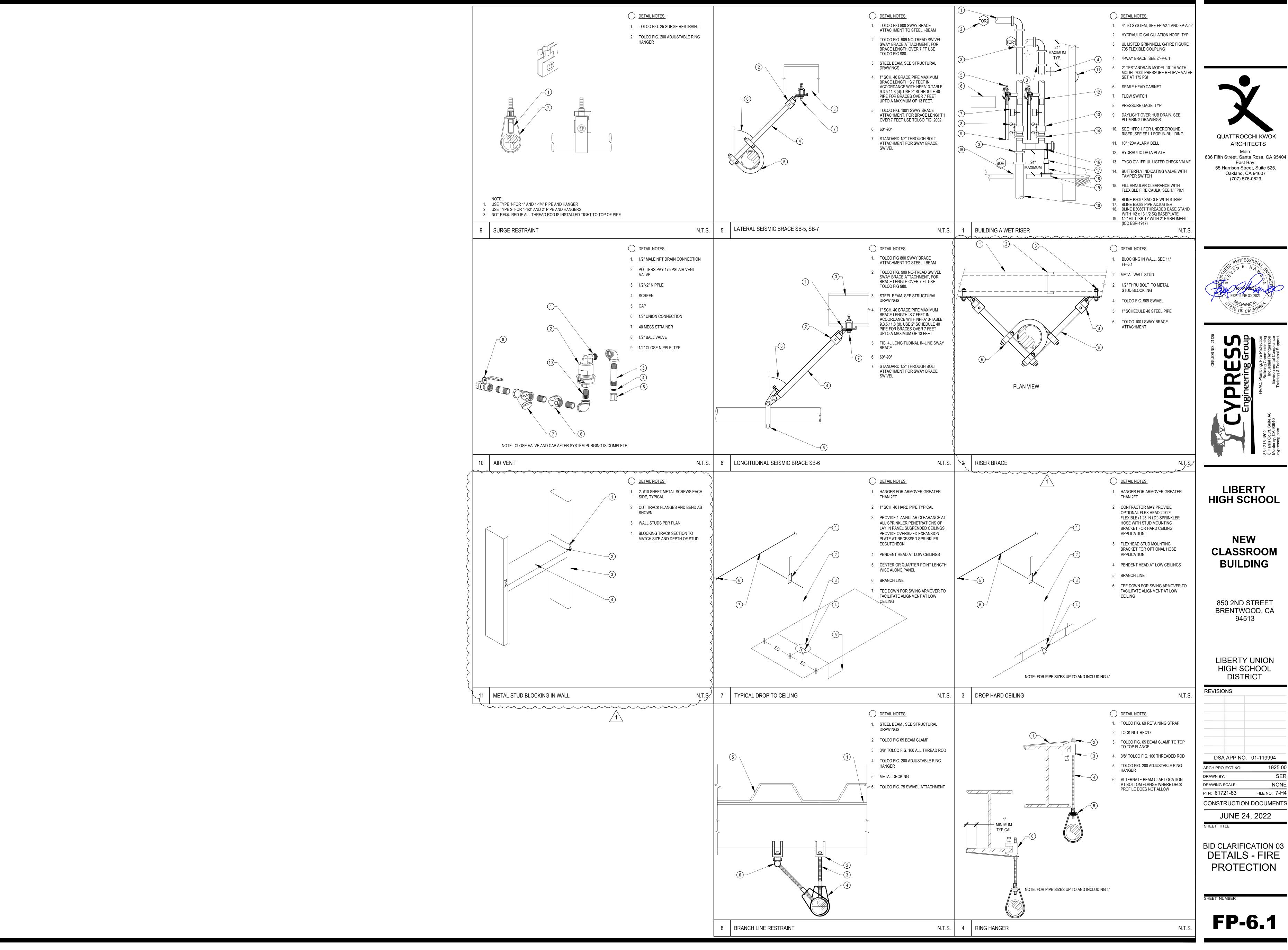
LIBERTY UNION HIGH SCHOOL DISTRICT

1	8/17/2022	Bid Clarification

DSA APP NO. 01-119994 ARCH PROJECT NO: DRAWN BY: DRAWING SCALE: FILE NO: 7-H4 PTN: 61721-83 CONSTRUCTION DOCUMENTS JUNE 24, 2022

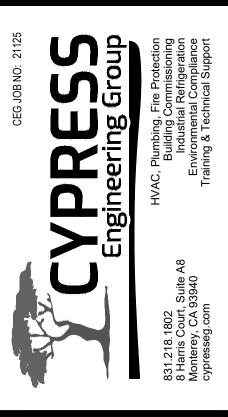
BID CLARIFICATION 03 STEEL **FRAMING DETAILS** 

S-A5.1







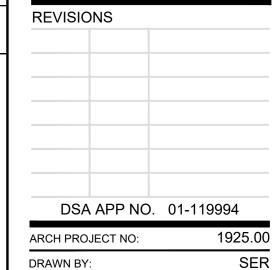


LIBERTY HIGH SCHOOL

CLASSROOM BUILDING

BRENTWOOD, CA

LIBERTY UNION



ARCH PROJECT NO:	1925.00			
DRAWN BY:	SER			
DRAWING SCALE:	NONE			
PTN: 61721-83	FILE NO: 7-H4			
CONSTRUCTION DOCUMENTS				
JUNE 24, 2022				

PROTECTION