CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School
Bakersfield City School District
District No. 22214-37-MP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

SHEET INDEX

110 SHEETS

Architectural Sheets — 36 SHEETS

A0.00	TITLE SHEET
A1.00	CAMPUS SITE PLAN
A1.11	PARTIAL DEMOLITION SITE PLAN
A1.21	PARTIAL SITE PLAN
A2.00	SCHEDULES (INTERIOR FINISH/ DOOR)
A2.01	SCHEDULES (ACCESSORY/ WINDOW)
A2.02	SCHEDULES (WINDOW)
A2.10	DEMOLITION FLOOR PLANS
A2.11	DEMOLITION FLOOR PLANS
A2.12	PARTIAL DEMOLITION FLOOR PLANS
A2.20	FLOOR PLANS
A2.21	FLOOR PLANS
A2.22	PARTIAL FLOOR PLANS
A3.00	OVERALL ROOF PLAN
A3.10	ROOF PLANS
A3.11	ROOF PLANS
A3.12	ROOF PLAN
A4.00	EXTERIOR ELEVATIONS
A4.01	EXTERIOR ELEVATIONS
A4.10	BUILDING SECTIONS
A5.10	DEMOLITION REFLECTED CEILING PLANS
A5.11	DEMOLITION REFLECTED CEILING PLANS
A5.20	REFLECTED CEILING PLANS
A5.21	REFLECTED CEILING PLANS
A6.00	INTERIOR ELEVATIONS
A6.01	INTERIOR ELEVATIONS
A6.02	INTERIOR ELEVATIONS
A6.03	INTERIOR ELEVATIONS
A6.04	INTERIOR ELEVATIONS
A6.05	INTERIOR ELEVATIONS
A8.00	DETAILS
A8.01	DETAILS
A8.02	DETAILS
A8.03	DETAILS
A8.04	DETAILS
A8.05	DETAILS

Structural Sheets — 8 SHEETS

S0.01	GENERAL NOTES
S0.02	GENERAL NOTES
S2.00	ROOF FRAMING PLANS
S2.01	ROOF FRAMING PLANS
S2.02	ROOF FRAMING PLANS
S3.01	SECTIONS AND DETAILS
S3.02	SECTIONS AND DETAILS
S3.03	SECTIONS AND DETAILS

Mechanical Sheets — 26 SHEETS

M1.00	MECHANICAL SITE PLAN, SCHEDULES, AND NOTES
M2.10	MECHANICAL DEMOLITION PLAN - BUILDING M-1 & M-2
M2.11	MECHANICAL DEMOLITION PLAN - BUILDING M-3
M2.12	MECHANICAL DEMOLITION PLAN - BUILDING B,C,D,E
M2.20	MECHANICAL PLAN - BUILDING M-1 & M-2
M2.21	MECHANICAL PLAN - BUILDING M-3
M2.22	MECHANICAL PLAN - BUILDING B,C,D,E
M3.10	MECHANICAL ROOF PLAN - BUILDING M-1 & M-2
M3.11	MECHANICAL ROOF PLAN - BUILDING M-3
M3.12	MECHANICAL ROOF PLAN - BUILDING B,C,D,E
M4.10	MECHANICAL SECTIONS
M4.11	MECHANICAL DETAILS
M4.12	DUCT BRACING DETAILS
M4.13	DUCT BRACING DETAILS

17-01-21M

Mechanical Sheets (Cont.) — 26 SHEETS

M5.10	TITLE 24
M5.11	TITLE 24
M5.12	TITLE 24
M5.13	TITLE 24
M5.14	TITLE 24
M5.15	TITLE 24
M5.16	TITLE 24
M5.17	TITLE 24
M5.18	TITLE 24
M5.19	TITLE 24
M5.20	TITLE 24
M5.21	TITLE 24

Plumbing Sheets — 8 SHEETS

P1.00	PLUMBING SITE PLAN, SCHEDULES, DETAILS, AND NOTES
P2.10	PLUMBING DEMOLITION PLANS - BUILDING M-1 & M-2
P2.11	PLUMBING DEMOLITION PLAN - BUILDING M-3
P2.12	PLUMBING DEMOLITION PLANS - BUILDING B, C, D, & E
P2.20	PLUMBING PLANS - BUILDINGS M-1 & M-2
P2.21	PLUMBING PLAN - BUILDING M-3
P2.22	PLUMBING PLAN - BUILDINGS B, C, D, & E
P4.10	PIPE BRACING DETAILS

Electrical Sheets — 32 SHEETS

E0.01	SINGLE LINE DIAGRAM GENERAL NOTES
E0.02	PANEL SCHEDULES
E0.03	FIRE ALARM RISER
E0.04	FIRE ALARM CALCULATIONS
E0.05	FIRE ALARM DETAILS
E0.06	INDOOR T24
E1.00	ELECTRICAL SITE PLAN
E2.20	BUILDING M-1 AND M-2 ELECTRICAL PLANS
E2.21	BUILDING M-3 ELECTRICAL PLAN
E2.22	BUILDING B-E ELECTRICAL PLANS
E3.20	BUILDING M-1 AND M-2 ELECTRICAL ROOF PLANS
E3.21	BUILDING M-1 AND M-2 ELECTRICAL ROOF PLAN
E3.22	BUILDING B-E ELECTRICAL ROOF PLAN
E3.23	BUILDING B-E ELECTRICAL ROOF PLAN
E5.00	DEMOLITION & LIGHTING PLAN
E5.10	DEMOLITION LIGHTING PLANS
E5.11	DEMOLITION LIGHTING PLANS
E5.20	LIGHTING PLANS
E5.21	LIGHTING PLANS
E6.00	FIRE ALARM SITE PLAN
E6.10	BUILDING R1 AND R25 FIRE ALARM DEMOLITION PLAN
E6.11	BUILDING B-E DEMOLITION PLAN
E6.12	BUILDINGS M-1,M-2,M-3 DEMOLITION PLANS
E6.13	BUILDING A,R1, & R2 DEMOLITION PLAN
E6.15	CLASSROOMS B5-B8 & B15-B20 FIRE ALARM DEMOLITION PLANS
E6.20	BUILDINGS R1 AND R25 FIRE ALARM PLAN
E6.21	BUILDING B-E PLAN
E6.22	BUILDING M-1 & M-2 FIRE ALARM PLAN
E6.23	BUILDING M-3 FIRE ALARM PLAN
E6.24	BUILDING R2-R4, R5-R6, AND A FIRE ALARM PLAN
E6.25	CLASSROOMS B5-B8 AND B15-B20 FIRE ALARM
E6.26	BUILDING G FIRE ALARM PLAN

GENERAL NOTES (TBE)

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CALIFORNIA CODE OF REGULATIONS (TITLE DOCUMENTS) AND ALL OTHER LOCAL CODES AND ORDINANCES OF THE GOVERNING AUTHORITY HAVING JURISDICTION AND AS IDENTIFIED UNDER APPLICABLE CODES ON THIS SHEET. IT IS THE INTENT OF THESE DOCUMENTS TO COMPLY HERETO.
2. ALL DRAWINGS SHALL BE USED IN CONCERT WITH EACH OTHER. IF THE CONTRACTOR DISCOVERS ANY DISCREPANCY BETWEEN THE DOCUMENTS, THE CONTRACTOR SHALL REQUEST IN WRITING A CLARIFICATION FROM THE ARCHITECT. REFER TO THE ARCHITECTURAL AND ENGINEERING DRAWINGS FOR PLACEMENT, ORIENTATION AND COORDINATION OF WORK. INFORMATION SHOWN IN LARGER SCALE IS INTENDED TO SUPPLEMENT INFORMATION OF SMALLER, PRECEDING REFERENCE DRAWINGS. LARGER SCALE DRAWINGS TAKE PRECEDENCE OVER SMALLER SCALE DRAWINGS.
3. NOTATION MARKED "TYPICAL" (TYP) SHALL BE CONSISTENT THROUGHOUT ALL SUCH REFERENCE NOMENCLATURE, SYMBOLS AND DRAWING INDICATIONS OF LIKE OR SIMILAR KIND.
4. DO NOT SCALE DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY CONSTRUCTION CONDITIONS AND DIMENSIONS PRIOR TO ORDERING, FABRICATING OR INSTALLING ANY ASSOCIATED WORK. IF DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL REQUEST IN WRITING A CLARIFICATION FROM THE ARCHITECT PRIOR TO COMMENCEMENT OF ANY ASSOCIATED WORK.
5. CONTRACTOR SHALL VERIFY, AT THE SITE, ALL EXISTING CONDITIONS PRIOR TO SUBMITTAL OF BIDS. SITE VISITS DURING BIDDING SHALL BE COORDINATED WITH THE OWNER IN ACCORDANCE WITH THE PROVISIONS OF THE SPECIFICATIONS.
6. CONTRACTOR SHALL PROTECT ALL EXISTING WORK. ANY DAMAGED WORK SHALL BE REPLACED WITH THE SAME MATERIALS, INCLUDING MATCHING THE EXISTING COLORS AND TEXTURES.
7. EXISTING WORK IS SHOWN FOR REFERENCE ONLY. THE OWNER AND/OR ARCHITECT DO NOT GUARANTEE EXISTING CONDITIONS AS SHOWN ON THESE DOCUMENTS.
8. CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THEIR OWN CLEANUP AS WORK PROGRESSES.
9. MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS THAT ARE DISCOVERED DURING THE PROGRESS OF THE WORK SHALL BE REPORTED TO THE OWNER IN WRITING. WORK IN THAT PARTICULAR AREA SHALL BE SUSPENDED UNTIL THE OWNER TESTS THE SUSPECT MATERIAL AND IT IS FOUND TO BE SAFE, OR THE MATERIAL HAS BEEN PROPERLY ABATED.
10. ALL WORK IS NEW UNLESS OTHERWISE NOTED.
11. IN THE EVENT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE CONSTRUCTION DOCUMENTS, THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS THAT ARE SHOWN.
12. STORAGE OF CONSTRUCTION MATERIAL AND EFFECT OF WORK ON EXISTING OCCUPIED AREAS SHALL BE APPROVED BY THE LOCAL FIRE AUTHORITY.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL WORK PROVIDED BY OTHERS UNDER SEPARATE CONTRACT(S).
14. KEYNOTES USED ON THE ARCHITECTURAL DRAWINGS ARE FOR ASSEMBLIES, MATERIAL REFERENCES AND NOTES. REFER TO THE KEYNOTES LIST ON THE RESPECTIVE DRAWING FOR THE INFORMATION TO EACH KEYNOTE.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH CBC CHAPTER 33, SAFETY DURING CONSTRUCTION.
17. NO CHANGES OR REVISIONS SHALL BE MADE FOLLOWING WRITTEN APPROVAL WHICH AFFECTS ACCESS COMPLIANCE ITEMS UNLESS SUCH CHANGES OR REVISIONS ARE SUBMITTED TO DSA FOR APPROVAL.
18. SUBSTITUTIONS AFFECTING DSA REGULATIONS SHALL BE SUBMITTED AS A CONSTRUCTION CHANGE DOCUMENT (DSA 140) OR ADDENDA AND APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION.
19. ALL EXITS SHALL BE OPERABLE DURING BUSINESS HOURS FROM INSIDE WITHOUT USE OF A KEY OR ANY SPECIAL KNOWLEDGE. NO DEAD OR SLIDING BOLTS. NO LATCH OR LATCHING DEVICE EXCEPT HARDWARE PERMITTED UNDER CBC 1010.2.4.

17-01-19

DSA NOTES

1. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CCD APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY TITLE 24, CCR, PART 1, SECTION 4, GROUP 1, 4-338.
3. A CLASS 3 PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
4. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS OF DSA AND OTHER APPROVING/PERMITING AUTHORITIES IN THE EVENT OF ANY DISCREPANCIES, CONFLICTS OR DUAL REQUIREMENTS THE MORE RESTRICTIVE REQUIREMENTS WILL PREVAIL.
5. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
6. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
7. THE PATH OF TRAVEL (P.O.T.) IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISION FOR THE POT REQUIREMENTS FOR ALTERATION, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NON COMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENT.
8. DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THIS PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT TO COMPLIANCE WITH THE CBC AS PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.
9. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR).
10. FIRE ALARM TESTS SHALL BE WITNESSED BY THE DSA INSPECTOR.
11. CONSTRUCTION SITE MUST BE IN COMPLIANCE WITH CFC CHAPTER 14 AT ALL TIMES.
12. ONE COPY OF TITLE 24 CCR PARTS 1-6 SHALL BE KEPT ON SITE DURING CONSTRUCTION.

17-01-24M

APPLICABLE CODES

Title 19, CCR

CCR	PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

Title 24, CCR

PART 1	2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE
PART 2	2019 CALIFORNIA BUILDING CODE VOLUME 1 AND 2 (2018 IBC)
PART 3	2019 CALIFORNIA ELECTRICAL CODE (2017 NATIONAL ELECTRICAL CODE)
PART 4	2019 CALIFORNIA MECHANICAL CODE (2018 EDITION IAPMO UNIFORM MECHANICAL CODE)
PART 5	2019 CALIFORNIA PLUMBING CODE (2018 EDITION IAPMO UNIFORM PLUMBING CODE)
PART 6	2019 CALIFORNIA ENERGY CODE
PART 8	2019 CALIFORNIA HISTORICAL BUILDING CODE
PART 9	2019 CALIFORNIA FIRE CODE (2018 EDITION, INTERNATIONAL FIRE CODE)
PART 9	2019 CALIFORNIA FIRE CODE CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION
PART 10	2019 CALIFORNIA EXISTING BUILDING CODE (2018 INTERNATIONAL EXISTING BUILDING CODE)
PART 11	2019 CALIFORNIA GREEN BUILDING STANDARDS CODE
PART 12	2019 CALIFORNIA REFERENCED STANDARDS CODE
NFPA 13	2016 EDITION, STANDARD INSTALLATION OF SPRINKLER SYSTEMS (AS AMENDED)
NFPA 14	2016 EDITION, STANDARD INSTALLATION OF STANDPIPE AND HOSE SYSTEMS (AS AMENDD)
NFPA 17	2017 EDITION, STANDARD DRY CHEMICAL EXTINGUISHING SYSTEMS
NFPA 17A	2017 EDITION, STANDARD WET CHEMICAL EXTINGUISHING SYSTEMS
NFPA 20	2016 EDITION, STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
NFPA 22	2018 EDITION, STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION
NFPA 24	2016 EDITION, STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES (AS AMENDED)
NFPA 25 CA	2013 EDITION, INSPECTION, TESTING AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS (CA AMENDED)
NFPA 72	2016 EDITION, NATIONAL FIRE ALARM AND SIGNALING CODE
NFPA 80	2016 EDITION, STANDARD FOR FIRE DOOR AND OPENING PROTECTIVES

17-01-12

BUILDING CODE ANALYSIS

BUILDING B

OCCUPANCY CLASSIFICATION:	A-3/ B
TYPE OF CONSTRUCTION:	VN
ALLOWABLE AREA:	6000 SF/ 8000 SF
ACTUAL AREA:	4694 SF/ 1811 SF

BUILDING C

OCCUPANCY CLASSIFICATION:	E-1
TYPE OF CONSTRUCTION:	VN
ALLOWABLE AREA:	9100 SF
ACTUAL AREA:	6451 SF

BUILDING D

OCCUPANCY CLASSIFICATION:	E-1
TYPE OF CONSTRUCTION:	VN
ALLOWABLE AREA:	9100 SF
ACTUAL AREA:	6451 SF

BUILDING E

OCCUPANCY CLASSIFICATION:	E-1
TYPE OF CONSTRUCTION:	VN
ALLOWABLE AREA:	9100 SF
ACTUAL AREA:	6451 SF

BUILDING M-1

OCCUPANCY CLASSIFICATION:	E-1/A-3
TYPE OF CONSTRUCTION:	VN
ALLOWABLE AREA:	9100 SF
ACTUAL AREA:	3432 SF
FIRE SPRINKLER SYSTEM:	YES (ONLY ROOMS M18 MPR, M19 STAGE - NOT IN SCOPE)

BUILDING M-2

OCCUPANCY CLASSIFICATION:	E-1
TYPE OF CONSTRUCTION:	VN
ALLOWABLE AREA:	9100 SF
ACTUAL AREA:	980 SF

BUILDING M-3

OCCUPANCY CLASSIFICATION:	E-1
TYPE OF CONSTRUCTION:	VN
ALLOWABLE AREA:	9100 SF
ACTUAL AREA:	980 SF

17-01-01M C

OCCUPANT LOAD ANALYSIS

BUILDING B

Room #	Room Name	Area (SF)	Factor	Occupants	Remarks
25	CLASSROOM	914	20	45.7	EDUCATIONAL - E
26	CLASSROOM	914	20	45.7	EDUCATIONAL - E
27	CLASSROOM	914	20	45.7	EDUCATIONAL - E
	SUBTOTAL			137.1	

BUILDING C

Room #	Room Name	Area (SF)	Factor	Occupants	Remarks
23	CLASSROOM	914	20	45.7	EDUCATIONAL - E
24	CLASSROOM	914	20	45.7	EDUCATIONAL - E
	SUBTOTAL			91.4	

BUILDING D

Room #	Room Name	Area (SF)	Factor	Occupants	Remarks
17	CLASSROOM	914	20	45.7	EDUCATIONAL - E
18	CLASSROOM	914	20	45.7	EDUCATIONAL - E
19	CLASSROOM	914	20	45.7	EDUCATIONAL - E
	SUBTOTAL			137.1	

BUILDING E

Room #	Room Name	Area (SF)	Factor	Occupants	Remarks
20	CLASSROOM	906	20	45.3	EDUCATIONAL - E
21	CLASSROOM	914	20	45.7	EDUCATIONAL - E
22	CLASSROOM	1138	20	56.9	EDUCATIONAL - E
	SUBTOTAL			147.9	

BUILDING M-1

Room #	Room Name	Area (SF)	Factor	Occupants	Remarks
M15	LIBRARY	976	50	19.5	ASSEMBLY A-3
M16	CLASSROOM	956	20	47.8	EDUCATIONAL - E
	SUBTOTAL			67.3	

BUILDING M-2

Room #	Room Name	Area (SF)	Factor	Occupants	Remarks
M09	CLASSROOM	964	20	48.2	EDUCATIONAL - E
M10	CLASSROOM	964	20	48.2	EDUCATIONAL - E
M11	CLASSROOM	964	20	48.2	EDUCATIONAL - E
M12	CLASSROOM	964	20	48.2	EDUCATIONAL - E
M13	CLASSROOM	964	20	48.2	EDUCATIONAL - E
M14	CLASSROOM	964	20	48.2	EDUCATIONAL - E
	SUBTOTAL			289.2	

BUILDING M-3

Room #	Room Name	Area (SF)	Factor	Occupants	Remarks
M01	CLASSROOM	965	20	48.25	EDUCATIONAL - E
M02	CLASSROOM	947	20	47.35	EDUCATIONAL - E
M03	CLASSROOM	902	20	45.1	EDUCATIONAL - E
M04	CLASSROOM	944	20	47.2	EDUCATIONAL - E
M05	CLASSROOM	867	20	43.4	EDUCATIONAL - E
M06	CLASSROOM	867	20	43.4	EDUCATIONAL - E
M07	CLASSROOM	844	20	42.2	
M08	CLASSROOM	936	20	46.8	
	SUBTOTAL			363.7 1,233.7 TOTAL	

17-01-01M C

DIRECTORY

Owner

BAKERSFIELD CITY SCHOOL DISTRICT
1300 BAKER STREET
BAKERSFIELD, CA 93305
PHONE: (661) 831-7851
FAX: (661)831-7813
ATTN: ROBERT VAN TASSEL

Architect

AP ARCHITECTS
3434 TRUXTUN AVENUE, SUITE #240
BAKERSFIELD, CA 93301
PHONE: (661) 327-1690
FAX: (661) 327-7204
ATTN: J. PATRICK FOGARTY, AIA

Structural Engineer

JOHN A. MARTIN & ASSOCIATES, INC.
850 SOUTH GRAND AVENUE
LOS ANGELES, CA 90015
PHONE: (213) 483-6490
ATTN: SHANE FITZGERALD

Mechanical Engineer

BASKIN MECHCANICAL ENGINEERING
175 FULTON STREET
FRESNO, CA 93721
PHONE: (559) 237-0376
ATTN: MARK BASKIN

Electrical Engineer

JMPE ELECTRICAL ENGINEERING
5500 MING AVENUE
BAKERSFIELD, CA 93309
PHONE: (661) 831-7851
ATTN: JOHN MALONEY

17-01-15M

SCOPE OF WORK

THE FOLLOWING IS A BRIEF DESCRIPTION OF THE SCOPE OF WORK AS REQUIRED BY DSA. CONTRACTOR SHALL DETERMINE/VERIFY THE ENTIRE SCOPE AS SHOWN ON THE DRAWINGS AND SPECIFICATIONS PRIOR TO SUBMITTING BIDS.

1. ALTERATIONS TO BUILDINGS A, B, C, D, E, M-1, M-2 AND M-3 INCLUDING BUT NOT LIMITED TO HVAC SYSTEM UPGRADES.
2. HAZARDOUS MATERIALS ABATEMENT. SEE REPORT
3. CAMPUSWIDE FIRE ALARM SYSTEM UPGRADE.

FIRE PROTECTION

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE RESUBMITTED TO THE DIVISION OF THE STATE ARCHITECT FOR REVIEW. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

PROVIDE ONE 4A 10 BC RATED EXTINGUISHER FOR EACH CLASSROOM WITHIN THE PROJECT AREA.

17-01-20N

ABBREVIATIONS

AB	ANCHOR BOLT
AC	ASPHALT CONCRETE, AIR CONDITIONING
ACC	ACCESS CONTROL
ACOUS	ACOUSTICAL
ADDIT	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISH FLOOR
AGG	AGGREGATE
ALT	ALTERNATE
ALUM	ALUMINUM
ANOD	ANODIZED
APRROX	APPROXIMATE
ARCH	ARCHITECT (URAL)
AS	ADJUSTABLE SHELF(S)
AWS	ARCHITECTURAL WOODWORK STANDARDS
B	BLANK CABINET PANEL
BD	BOARD
BLK	BLOCK
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM
BUR	BUILT UP ROOF(ING)
CAB	CABINET
CEM	CEMENT
CI	CAST IRON
CJ	CONTROL JOINT
CJF	CONTROL/CONSTRUCTION JOINT FILLED
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR(ANCE)/COLOR
CMU	CONCRETE MASONRY UNIT
CNTR	COUNTER
CO	CLEAN OUT
COB	CITY OF BAKERSFIELD
COC	CITY OF COALINGA
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS OR CONTINUE(D)
COP	CONTROL OPERATIONS PANEL
CPT	CARPET(ED)
CR	CARD READER
CSVB	COVED SHEET VINYL BASE
CTSK	COUNTER SINK
CU	CONDENSER UNIT
d	PENNY (NAILS)
D	DRAWER
DBL	DOUBLE
DEMO	DEMOLITION
DET	DETAIL
DF	DRINKING FOUNTAIN
DG	DECOMPOSED GRANITE
DIA	DIAMETER
DIM	DIMENSION
DIS	DISABLED
DL	DEAD LOAD
DN	DOWN
DS	DOWN SPOUT
DTL	DETAIL
DTR	DUCT THRU ROOF
DWG(S)	DRAWING(S)
E	EAST
EA	EACH

EDF	ELECTRIC DRINKING FOUNTAIN
EF	EXHAUST FAN
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM
EJ	EXPANSION JOINT
ELEC	ELECTRIC(AL)
ELEV	ELEVATION
EPC	ELECTROSTATIC POWDER COATING
EPS	ELECTROSTATIC PAINTING SYSTEM
EQ	EQUAL
EQUIP	EQUIPMENT
ES	ELASTOMERIC SEALANT
EX/EXIST	EXISTING
EXH	EXHAUST
EXT	EXTERIOR
EW	EACH WAY
F, (F)	FUTURE
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDN	FOUNDATION
FEX	FIRE EXTINGUISHER
FG	FINISH GRADE
FIN	FINISH(ED)
FLR	FLOOR(ING)
FLOUR	FLOURESCENT
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUDS
FOIC	FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR
FRMG	FRAMING
FRS	FIRE RETARDANT SEALANT
FS	FIXED SHELF
FTG	FOOTING
FURR	FURRED (ING)
FV	FIELD VERIFY
GA	GAGE, GAUGE
GI	GALVINIZED IRON
GL	GLASS, GLAZING
GS	GLAZING SIDE
GWT	GLAZED WALL TILE
GYP	GYPSUM
HB	HOSE BIBB
HC	HOLLOW CORE
HD	HEAVY DUTY
HDR	HEADER
HDBD	HARDBOARD
HDWD	HARDWOOD
HDWR	HARDWARE
HFEX	HALON FIRE EXTINGUISHER
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING/VENTILATING/ AIR CONDITIONING
ID	INSIDE DIAMETER
INFO	INFORMATION
INSUL	INSULATE (D), (ION)
INT	INTERIOR
JST	JOIST
JT(S)	JOINTS
K	KICKER
KS	KNEE SPACE
LAV	LAVATORY

LL	LIVE LOAD
LT	LIGHT
MAX	MAXIMUM
MB	MACHINE BOLT
MBL	MINI BLIND
MC	MEDICINE CABINET
MDO	MEDIUM DENSITY OVERLAY
MECH	MECHANICAL(AL)
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MET	METAL
MFR	MANUFACTURE(R)
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MRT	MOLDED RUBBER FLOOR TILE
MT	METAL THRESHOLD
MTD	MOUNTED
MTL	MATERIAL
N	NORTH
NAT	NATURAL
NIC	NOT IN CONTRACT
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OBS	OBSCURE
OC	ON CENTER(S)
OD	OUTSIDE DIAMETER
OFRD	OVERFLOW ROOF DRAIN
OH	OVERHEAD
OPNG	OPENING
PA	PLANTING AREA
PFR ROOFING	POLYURETHANE FOAM
PJ	POUR JOINT
PL	PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS LAM	PLASTIC LAMINATE
PLAS	PLASTER
PLBG	PLUMBING
PRC COATING	POLYURETHANE ROOF
P.O.T.	PATH OF TRAVEL
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PVMT	PAVEMENT
PWD	PLYWOOD
RA	RETURN AIR, RUBBER ACCESSORY
RASF	RUBBERIZED ASPHALT SHEET FLASHING
RASWD	RUBBER ASPHALT SHEET WATER PROOFING
RAD	RADIUS
RD	ROOF DRAIN
REF	REFRIGERATOR
REFL	REFLECTED
REG	REGISTER
REQ(S)	REQUIREMENT(S)
REQ'D	REQUIRED
REQD	REQUIRED
REV	REVISION(S), REVISED
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY

RR	ROOF RAFTER
RS	REDUCER STRIP
RSTA	RUBBER STAIR TREAD ACCESSORY
RWB	RUBBER WALL BASE
S	SOUTH
SC	SOLID CORE
SCHED	SCHEDULE
SD	STORM DRAIN
SF	SQUARE FOOT/STOREFRONT
SFRM	SPRAYED FIRE-RESISTIVE MATERIAL
SG	SAFETY GLAZING (FULLY TEMPERED)
SHTG	SHEATHING
SHT(S)	SHEET(S)
SIM	SIMILAR
SJ	SEALED JOINT
SJF	SAWN JOINT FILLED
SP	SOLID POLYMER
SPEC (S)	SPECIFICATION(S)
SQ	SQUARE
SS	STAINLESS STEEL
STD(S)	STANDARD(S)
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
T	TEMPERED
T/M/B	TOP/MIDDLE/BOTTOM
TAC	TOP OF ASPHALT CONCRETE
TC	TOP OF CONCRETE
TER	TERRAZZO
TH	THICK(NESS)
TOC	TOP OF CONCRETE
TOS	TOP OF SEAT
TOW	TOP OF WALL
TP	TOP OF PAVING
TV	TELEVISION
TW	TOP OF WALK
TWP	TRANSLUCENT WALL PANEL
TYP	TYPICAL
UCMT	UNGLAZED CERAMIC MOSAIC TILE
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
URI	URINAL
VCT	VINYL COMPOSITION FLOOR TILE
VCTB	VINYL COVERED TACKBOARD
VER	VERIFY
VERT	VERTICAL
VTS	VINYL TACK SURFACE
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
WC	WATER CLOSET
WD	WOOD
WH/	WHERE
WI	WROUGHT IRON
W/O	WITHOUT
WP	WATERPROOFING
WRB	WEATHER RESISTIVE BARRIER
WT	WEIGHT
WWF	WELDED WIRE FABRIC
XFMR	TRANSFORMER

17-01-11

ASSISTIVE LISTENING SYSTEMS 33

ASSISTIVE LISTENING SYSTEM SHALL BE PROVIDED AT EACH CLASSROOM IN ACCORDANCE WITH SECTION 11B-219 AND 11B-706 OF THE CBC.

1. THE NUMBER OF RECEIVERS FOR EACH CLASSROOM SHALL BE EQUAL TO 4% OF THE TOTAL NUMBER OF SEATS BUT NO LESS THAN 2.
2. SIGNAGE SHALL BE PROVIDED IN EACH CLASSROOM IN COMPLIANCE WITH SECTION 11B-216.10 AND 11B-703.7.2.4. SEE DTL 46/A8.00

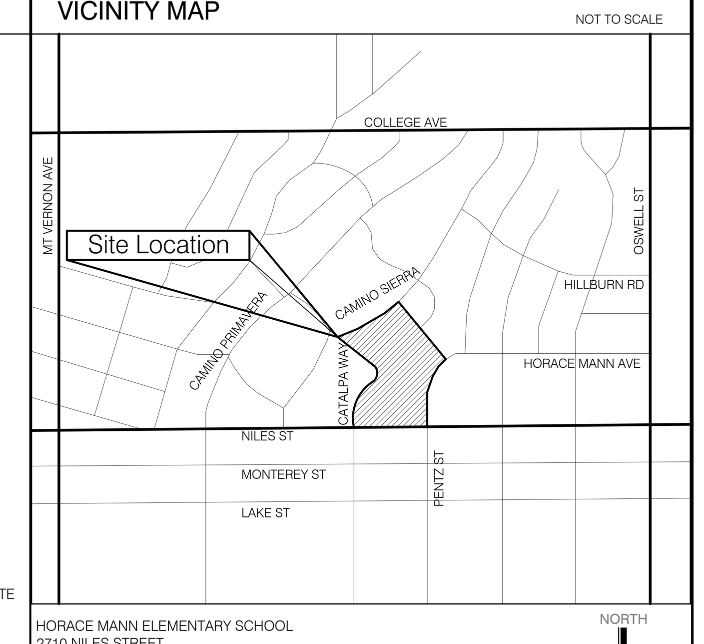
SYMBOLS

Symbol	Description
03	COORDINATE LINE
	BUILDING SECTION NUMBER / SHEET NUMBER
01 / A1.00	DETAIL NUMBER / SHEET NUMBER
	ELEVATION, X REFERENCE OR DATUM
100	DOOR NUMBER
A	WINDOW LETTER(S)
01	REVISION NUMBER WITH CLOUD
01	ACCESSORY NUMBER, REFER TO ACCESSORY SCHEDULE (A2.01)
	COLUMNS - SIZE AS NOTED ON STRUCTURAL SHEETS
	FLUSH SURFACES THAT MEET
NIC	NOT IN CONTRACT BY OTHERS (NIC HAS TO BE WRITTEN WITH DASHED LINES)
04	KEYNOTE
2 1 W1	WALL TYPE W/ LOCATION OF MULTIPLE LAYERS WH/ NOTED
RA#	REDUCER STRIP/FLOOR ASSEMBLY- SEE SCHEDULE
ES#	SEALANT DESIGNATION- SEE SCHEDULE
FRS#	FIRE RETARDANT SEALANT- SEE SCHEDULE
100 ELEC	ROOM REFERENCE
	WOOD FINISH
	WOOD CONTINUOUS
	WOOD BLOCKING
	PLYWOOD
	GYP BD
	DETAIL NUMBER/LETTER SHEET NUMBER
	EARTH MATERIAL
	GRANULAR FILL
	METAL FRAMING
	INSULATION - BATT
	STEEL
	PLASTIC, AS NOTED
	SAND
	INSULATION - RIGID FOAM, FIBERGLASS
	ASPHALTIC CONCRETE INSULATION - RIGID PERLITE
	CONCRETE

17-01-25

VICINITY MAP

NOT TO SCALE



HORACE MANN ELEMENTARY SCHOOL
2710 NILES STREET
BAKERSFIELD, CA 93306
BAKERSFIELD CITY SCHOOL DISTRICT

17-01-03

ap architects

3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School
2710 Niles St. Bakersfield. CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

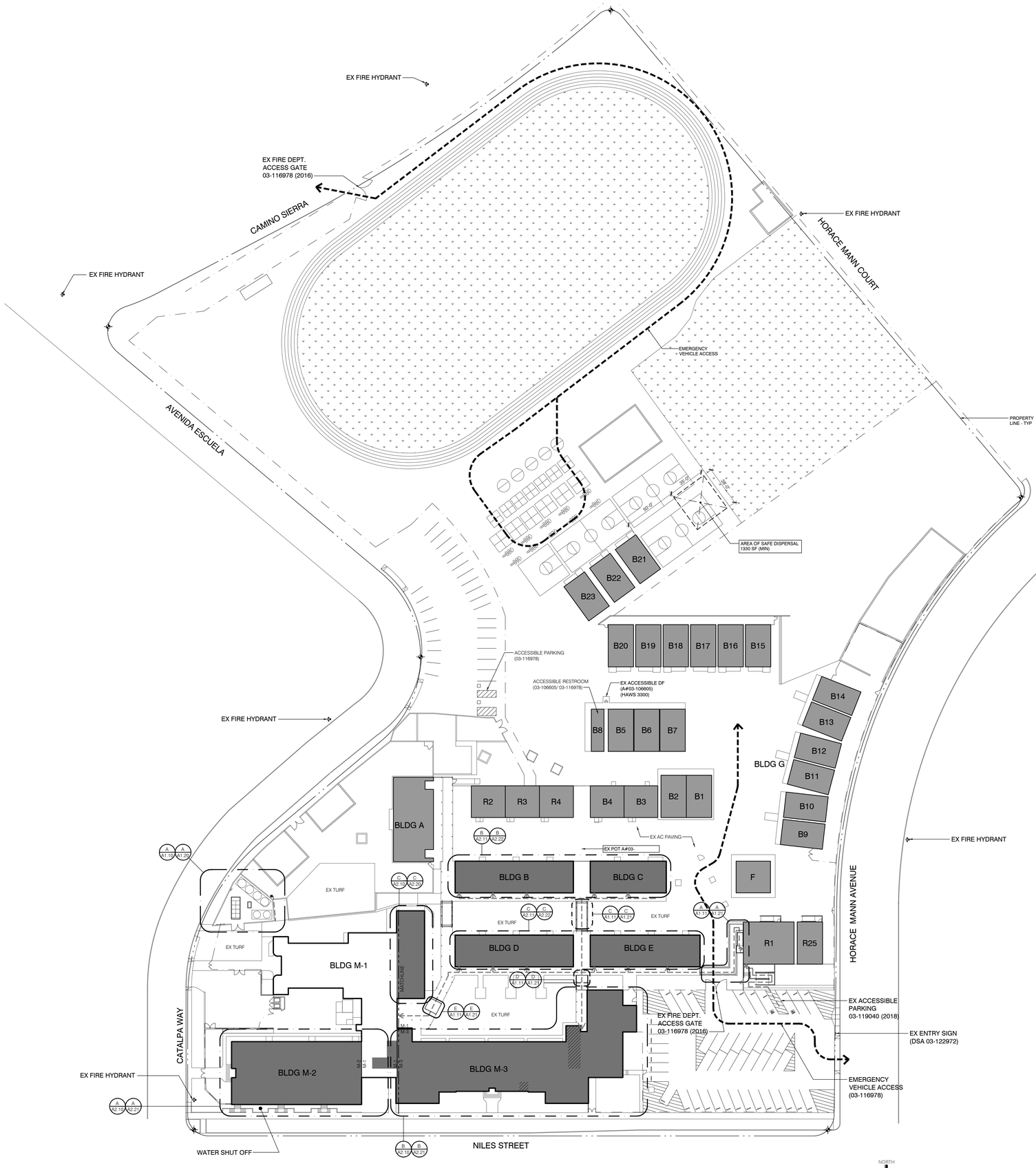
No	Date	Item
△	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:36

TITLE SHEET

A0.00



Campus Site Plan

Scale: 1" = 40'-0"

BUILDING DIRECTORY

M-1	1900/11363/51532/41306	MULTIPURP/ CAFETERIA/ TOILETS/ ADMIN	B23	03-118412	CLASSROOM
M-2	3234/11363/51532/41306	4 CLASSROOMS/ LIBRARY/ STORAGE	B22	03-118412	WORKROOM
M-3	10977/51532/41306	4 CLASSROOMS/ TOILETS/ ADMIN/ STORAGE	B21	03-119917	CLASSROOM
A	41306	2 KINDERGARTEN/ TOILETS/ STORAGE	R-17	03-119040	ADMINISTRATION
B	11363/51532	3 CLASSROOMS/ TOILETS	R-25	03-119040	ADMINISTRATION
C	11363/51532	2 CLASSROOMS/ STORAGE			
D	11363/51532	3 CLASSROOMS/ STORAGE			
E	11363/51532	3 CLASSROOMS			
F	41306	TOILETS			
G	101692/41306/30116	6 RELO CLASSROOMS/ TOILETS/ SPECIAL ED			
R-1 R-25	03-119040	ADMINISTRATION			
R-2,R-3, R-4	17766/43987	STAFF LOUNGE			
B3,B4	17766	2 CLASSROOMS			
B1	03-106605	CLASSROOM			
B2	03-106605	CLASSROOM			
B5	03-106605	CLASSROOM			
B6	03-106605	CLASSROOM			
B7	03-106605	CLASSROOM			
B8	03-106605/116978	TOILETS (09/27/05 CERTIFICATION)			
B15	03-116978	CLASSROOM (08/14/17 CERTIFICATION)			
B16	03-116978	CLASSROOM (08/14/17 CERTIFICATION)			
B17	03-116978	CLASSROOM (08/14/17 CERTIFICATION)			
B18	03-116978	CLASSROOM (08/14/17 CERTIFICATION)			
B19	03-116978	CLASSROOM (08/14/17 CERTIFICATION)			
B20	03-117375	CLASSROOM			

FIRE ACCESS ROAD LEGEND

EXISTING 20' WIDE FIRE ACCESS ROAD WITH MINIMUM 20' WIDE NOMINAL OPENING AT EXISTING GATES PER A#03-119218 - CLOSED WITH CERTIFICATION.
(LOCAL FIRE AUTHORITY APPROVAL DATE 07/25/18.)

ACCESSIBLE PATH OF TRAVEL (P.O.T.)

ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAXIMUM AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP-RESISTANT. CROSS-SLOPE SHALL NOT BE STEEPER THAN 1:48 AND SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT BE STEEPER THAN 1:20. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND FREE OF OBJECTS PROTRUDING MORE THAN 4" FROM THE WALL, ABOVE 27" AND LESS THAN 80" ABOVE THE FLOOR. ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

SEE ENLARGED PLANS FOR MORE INFORMATION.

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NON COMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECTS WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

1. HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 34 INCHES AND 44 INCHES ABOVE FLOOR. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE. BY PANIC BARS, PUSH-PULL ACTIVATION BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP AND TURN OPENING HARDWARE. LOCKED EXIT DOORS SHALL OPERATE AS ABOVE IN EGRESS DIRECTION.
2. MAXIMUM EFFORT TO OPERATE SHALL NOT EXCEED 5 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS. SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS WHEN FIRE DOORS ARE REQUIRED. THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED NOT TO EXCEED 15 POUNDS.
3. CONSTRUCTION: THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHERE NARROW FRAMES ARE USED, A 10" HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH SIDE OF THE DOOR, WHICH WILL ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.
4. FOR HINGED DOORS, THE OPENING WIDTH SHALL BE MEASURED WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION. AT LEAST ONE OF A PAIR OF DOORS SHALL MEET THIS OPENING WIDTH REQUIREMENT.
5. IN ADDITION TO ALL LOCAL CODES, ACCESSIBILITY REQUIREMENTS SHALL COMPLY WITH THE CALIFORNIA BUILDING CODE, TITLE 24, AS WELL AS FEDERAL ADA (AMERICANS WITH DISABILITIES ACT).

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

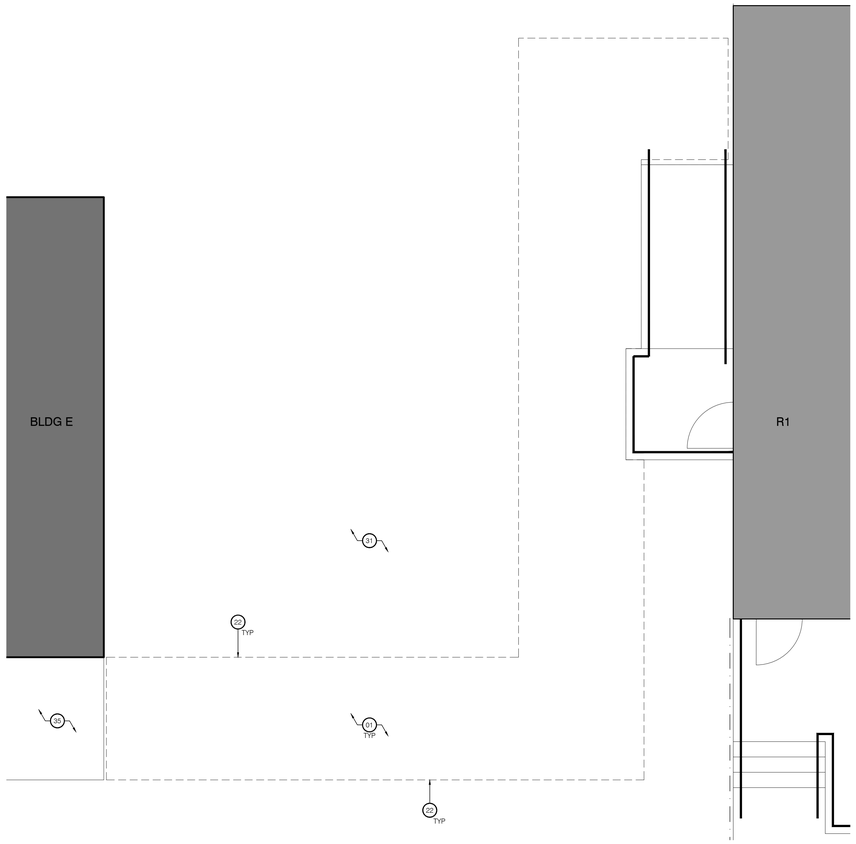
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:36

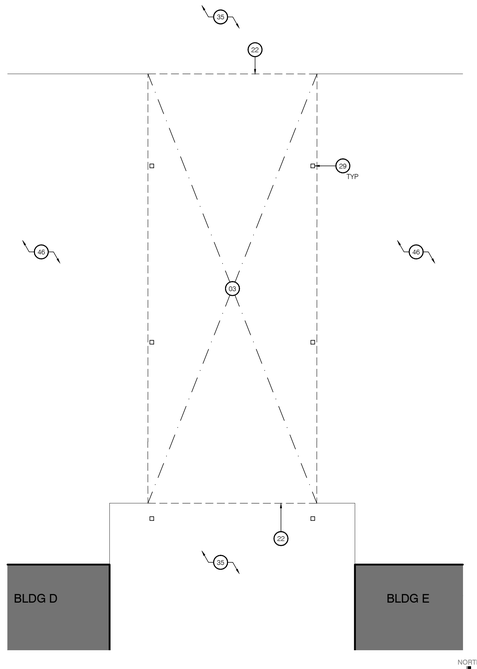
CAMPUS SITE PLAN

A1.00



A. Partial Demolition Site Plan

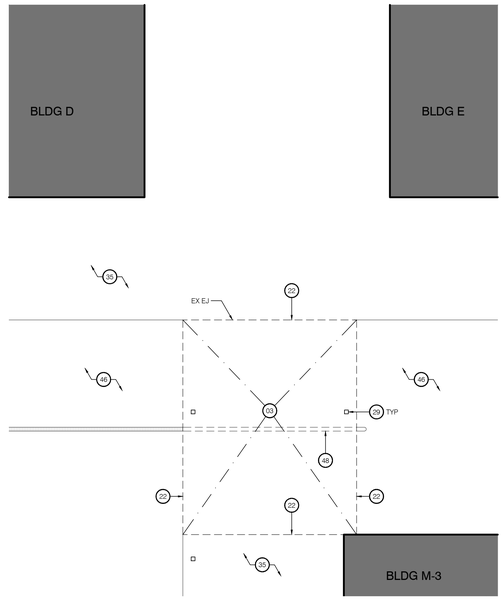
Scale: 1/4" = 1'-0"



C. Partial Demolition Site Plan

Scale: 1/4" = 1'-0"

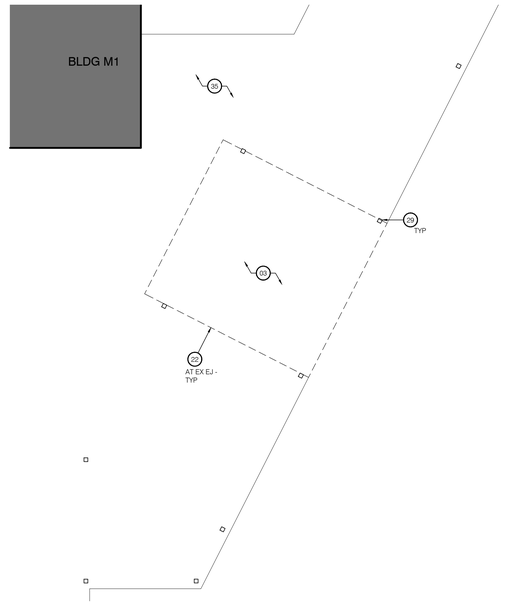
NORTH



D. Partial Demolition Site Plan

Scale: 1/4" = 1'-0"

NORTH



E. Partial Demolition Site Plan

Scale: 1/4" = 1'-0"

NORTH

GENERAL DEMO SITE PLAN NOTES

1. ALL EXISTING ITEMS, LOCATIONS AND SIZES ARE INDICATED AS ADVISORY. CONTRACTOR TO FIELD VERIFY ACTUAL DIMENSIONS, LOCATIONS AND CONDITIONS AS REQUIRED FOR INTENDED WORK AND MAKE ADJUSTMENTS ACCORDINGLY.
2. CONTRACTOR TO VERIFY ALL EXISTING UNDERGROUND UTILITIES WITH APPROPRIATE UTILITY COMPANIES AND FIELD VERIFY ACUTAL LOCATIONS, DIMENSIONS AND CONDITIONS AS REQUIRED FOR INTENDED WORK.
3. FIELD VERIFY EX UTILITY BOXES/COVERS TO REMAIN AT WORK AREA AND ADJUST TOP TO MATCH NEW FINISH GRADE WHERE OCCURS.
4. FIELD VERIFY, LOCATE AND TAKE NECESSARY CARE TO PROTECT EX UNDERGROUND UTILITIES DURING CONSTRUCTION.
5. SEE CIVIL, ELECTRICAL, MECHANICAL AND PLUMBING SHEETS FOR ADDITIONAL WORK SCOPE AND COORDINATE.
6. PROVIDE TEMPORARY FENCES, DUST BARRIERS, SIGNAGE AND OTHER SAFETY MEASURES AS REQUIRED FOR WORK AND PUBLIC.
7. SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
8. SEE MECHANICAL, PLUMBING AND ELECTRICAL FOR ADDITIONAL UTILITIES. ADJUST UTILITY/TRENCH DEPTH AS REQUIRED AT INTERSECTIONS.
9. OWNER HAS FIRST RIGHT OF REFUSAL OF ALL ITEMS REMOVED AND NOT TO BE SALVAGED.
10. CONTRACTOR TO COMPLY W/ SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT REQUIREMENTS FOR RULE 9510 INDIRECT SOURCE REVIEW (ISR).
11. PRIOR TO ANY UNDERGROUND SITE WORK, VERIFY LOCATION OF ALL EX UTILITIES W/ UNDERGROUND SERVICE ALERT (U.S.A.).

DEMO SITE PLAN KEYNOTES

01 REMOVE EX ASPHALT CONC PAVING AND BASE MATERIAL
02 REMOVE EX CONC WHEEL STOP
03 REMOVE EX CONC PAVING AND BASE MATERIAL
04 REMOVE EX CONC CURB
05 REMOVE EX CONC CURB AND GUTTER AND BASE MATERIAL
06 REMOVE EX CONC GUTTER AND BASE MATERIAL
07 REMOVE EX CONC RAMP AND BASE MATERIAL
08 REMOVE EX CONC STAIRS AND BASE MATERIAL
09 REMOVE EX CONC MOW STRIP
10 REMOVE EX CONC PAD AND BASE MATERIAL
11 REMOVE EX MASONRY WALL AND FOOTING
12 REMOVE EX FENCE AND FOOTINGS
13 REMOVE EX BOLLARD AND FOOTING
14 REMOVE EX GUARDRAIL
15 REMOVE EX HANDRAIL
16 REMOVE LANDSCAPING AND IRRIGATION LINES
17 REMOVE EX TURF
18 REMOVE EX SIGNAGE
19 REMOVE EX SIGNAGE, POST(S) AND FOOTING(S)
20 REMOVE EX DETECTABLE WARNING SURFACE
21 REMOVE EX EQUIPMENT
22 LINE OF SAWCUT
23 REMOVE EX UTILITY BOX AND BASE MATERIAL
24 GRIND EX PAVEMENT MARKINGS
25 REMOVE EX CONC UTILITY TRENCH, PIPING, SUPPORTS AND ASSOCIATED ANCHORAGE WITH STL COVER/ANGLES
26 REMOVE EX CONC LANDING W/ UTILITY TRENCH BELOW
27 REMOVE EX WOOD HEADER
28 REMOVE EX UTILITY PIPING IN CONC TRENCH BELOW SLAB
29 EX CANOPY COL TO REMAIN - PROTECT
30 EX WHEEL STOP TO REMAIN
31 EXISTING AC PAVING TO REMAIN
32 EXISTING CONCRETE CURB TO REMAIN
33 EXISTING CONCRETE CURB AND GUTTER TO REMAIN
34 EXISTING VALLEY GUTTER TO REMAIN
35 EXISTING CONCRETE PAVING TO REMAIN
36 EXISTING ACCESSIBLE CONCRETE RAMP TO REMAIN
37 EXISTING CONCRETE WALL TO REMAIN
38 EXISTING MASONRY WALL (CMU OR BRICK) TO REMAIN
39 EXISTING CHAINLINK FENCE AND GATE(S) TO REMAIN
40 EXISTING UTILITY BOX TO REMAIN. ADJUST TO GRADE WH/ CHANGE TO FIN GRADE OCCURS
41 EXISTING CROSSWALK STRIPING TO REMAIN
42 EXISTING POST AND PANEL SIGNAGE TO REMAIN
43 EXISTING CONCRETE STAIR, LANDING AND RAILING TO REMAIN
44 EXISTING HANDRAIL TO REMAIN
45 EXISTING GUARDRAIL TO REMAIN
46 EXISTING LANDSCAPE AND IRRIGATION TO REMAIN
47 EXISTING CONCRETE RAMP, LANDING AND RAILING TO REMAIN
48 REMOVE EXISTING CHANNEL DRAIN METAL LID/ DRAIN BODY/ PIPE AS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

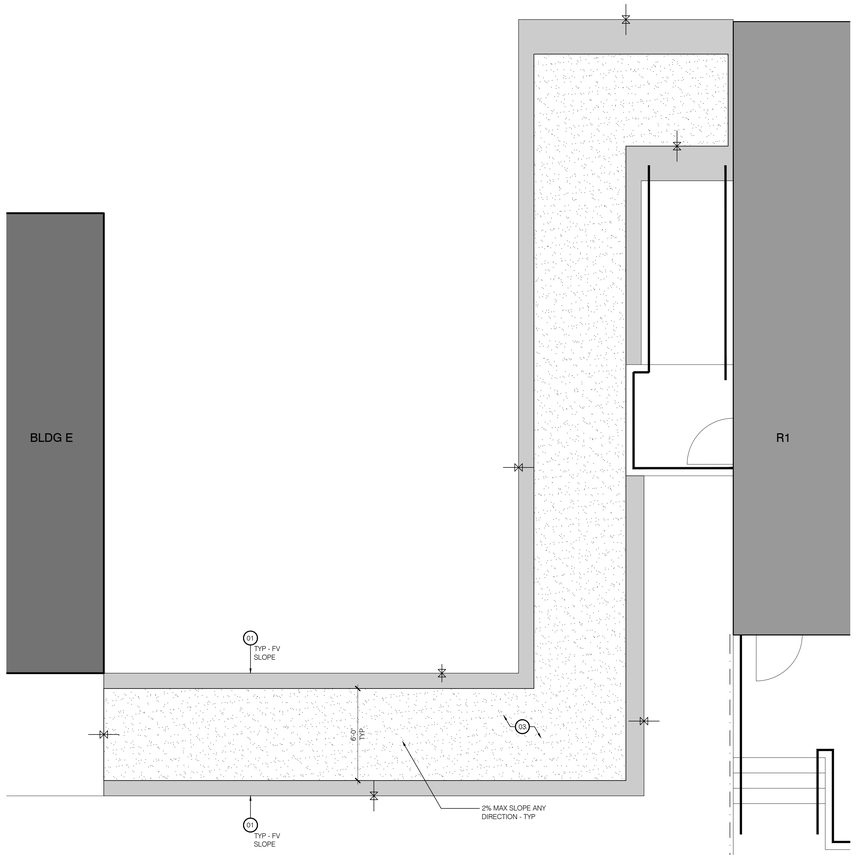
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:36

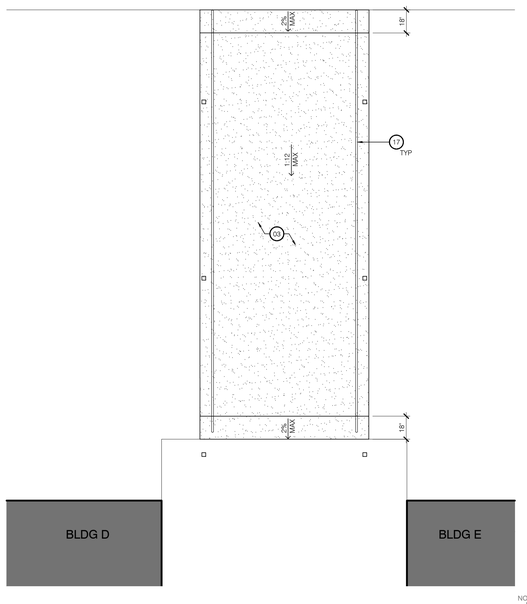
PARTIAL DEMOLITION SITE PLAN

A1.11



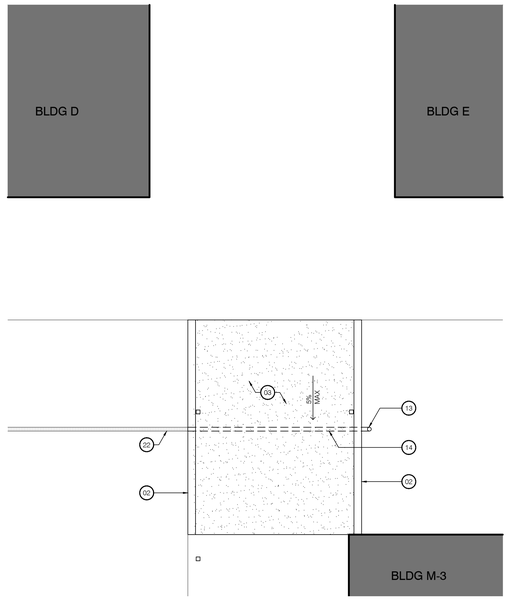
A. Partial Site Plan

Scale: 1/4" = 1'-0"



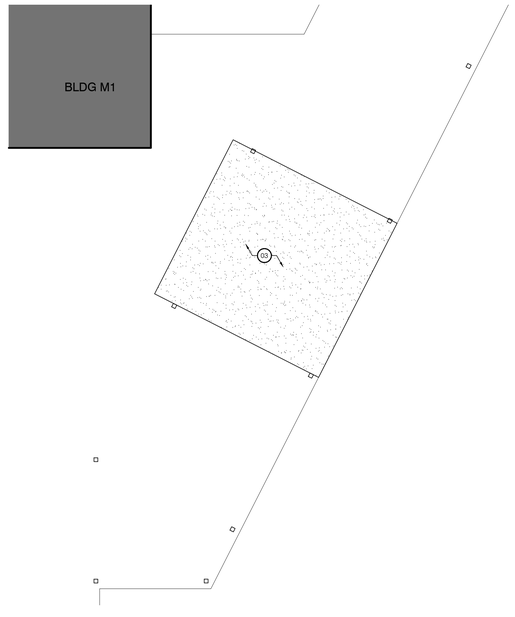
C. Partial Site Plan

Scale: 1/4" = 1'-0"



D. Partial Site Plan

Scale: 1/4" = 1'-0"



E. Partial Site Plan

Scale: 1/4" = 1'-0"

SITE PLAN KEYNOTES

1. REFER TO CIVIL, PLUMBING AND ELECTRICAL DRAWINGS FOR UNDERGROUND UTILITIES.
2. PRIOR TO ANY UNDERGROUND SITE WORK, VERIFY LOCATION OF ALL EX UTILITIES W/ UNDERGROUND SERVICE ALERT (U.S.A.).
3. CONC SHALL BE REMOVED TO THE NEAREST EX JOINT UNO. VER EXTENT OF CONC DEMO PRIOR TO START OF WORK.
4. REFER TO FLOOR AND ROOF DEMO PLANS FOR ADDITIONAL INFORMATION NOT SHOWN HERE.
5. ALL EXISTING ITEMS NOTED FOR REMOVAL TO BE PROTECTED IN PLACE.
6. CONTRACTOR TO COMPLY W/ SAN JOAQUIN VALLY AIR POLUTION CONTROL DISTRICT REQUIREMENTS FOR RULE 9510 INDIRECT SOURCE REVIEW (ISR).
7. SEE DTL 41/A8.07 FOR UNDERGROUND UTILITIES.

SITE PLAN KEYNOTES

01. 2 1/2" TH AC PAVING OVER 11" CLASS II AGGREGATE BASE — 42/A8.01
02. CONCRETE CURB — 12/A8.01
03. 4" TH CONCRETE PAVING — 11/A8.01
04. 6" TH CONCRETE PAVING — 11/A8.01
05. NOT USED
06. NOT USED
07. NOT USED
08. ACCESSIBLE PARKING STALL — 12/A8.01
09. PARKING STRIPES — 13/A8.01
10. NOT USED
11. PAINT CONC CURB - SEE SITE PLAN
12. CROSS WALK STRIPING — 23/A8.01
13. DRAIN SPILL OVER GRATE
14. CONNECT 4" PVC PIPE TO EX CHANNEL DRAIN
15. NOT USED
16. REDWOOD HEADER — 33/A8.01
17. GROUND MOUNTED RAMP HANDRAIL — 51/A8.05
18. NOT USED
19. DETECTABLE WARNING SURFACE — 30/A8.01
20. ELEC PULL BOX — 43/A8.01
21. TOW AWAY NOTIFICATION SIGN [24]
22. EX CHANNEL DRAIN
23. CHAINLINK FENCE — 01/A8.07
24. REPLACE/ REINSTALL LANDSCAPE AND IRRIGATION TO MATCH EX AT UTILITY TRENCH
25. AC PAVING TO MATCH EX AT UTILITY TRENCH/ PULL BOX(ES)
26. REPLACE/ REINSTALL LANDSCAPE AND IRRIGATION TO MATCH EX AS REQUIRED AT SIRE IMPROVEMENTS
27. FLUSH CONCRETE PAVING AT EX FINISH FLR (DOOR)
28. EXPOSED SOIL

17-04-01

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:36

PARTIAL SITE PLAN

A1.21

INTERIOR FINISH SCHEDULE

Floor			Base			Walls			Finish		
1	CARPET TILE 1	5 RESILIENT SHT FLRG	1	4" RWB		1	GYP BD	5 VTS	A	PAINT-EGGSHELL	E BROOM FINISH/ SEALER
2	CARPET TILE 2	6 NOT USED	2	EX BASE		2	EX FIN	6 CEM PLAS	B	PAINT-SEMI GLOSS	F NOT USED
3	EX FIN	7 NOT USED	3	COVED GWT		3	GWT	7 NOT USED	C	FACTORY	G NOT USED
4	UCMT	8 NOT USED	4	COVED SHEET FLRG		4	PWD	8 NOT USED	D	TRANSPARENT FINISH OVER STAIN	H NOT USED

No	Room	FLOOR MTL	FLOOR FIN	BASE MTL	BASE FIN	WALLS NORTH MTL	WALLS NORTH FIN	WALLS EAST MTL	WALLS EAST FIN	WALLS SOUTH MTL	WALLS SOUTH FIN	WALLS WEST MTL	WALLS WEST FIN	WAINS MTL	WAINS FIN	JAMB/ TRIM/ DOOR FIN	Remarks
Building B																	
25	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
26	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
27	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
-	GIRLS	4 (EX)	C	3	C	6 (EX)	C	6 (EX)	C	6 (EX)	C	6 (EX)	C	3 (EX)	C	B	*
-	BOYS	4 (EX)	C	3	C	6 (EX)	C	6 (EX)	C	6 (EX)	C	6 (EX)	C	3 (EX)	C	B	*
Building C																	
23	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
23A	STORAGE																
23B	STORAGE																
24	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
Building D																	
17	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
18	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
19	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
19A	MECH ROOM																PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE
19B	STORAGE																
Building E																	
20	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
21	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
22	CLASSROOM	1	C	1	C	4 (EX)	A	5	C	5/4(EX)	C/A	4 (EX)	A	-	-	B	-
Building M-1																	
M15	LIBRARY	1	C	1	C	6(EX)	A	5	A	5/6(EX)	C	5/6(EX)	C/A	-	-	B	-
M16	CLASSROOM	1	C	1	C	6(EX)	A	5	A	5/6(EX)	C	5/6(EX)	C/A	-	-	B	-
M17																	
M17A																	
M17B																	
M17C																	
M17D																	
M18																	
M18A																	
M18B																	
M18C																	
M18D																	
M19G	MEN	4(EX)	C	3(EX)	C	3 (EX)	C	3 (EX)	C	3 (EX)	C	3 (EX)	C	-	-	B	*
M20B	WOMEN	4(EX)	C	3(EX)	C	3 (EX)	C	3 (EX)	C	3 (EX)	C	3 (EX)	C	-	-	B	*
M20A	MUSIC PRACTICE																PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE
M21																	PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE
Building M-2																	
M09	CLASSROOM	1	C	1	C	5/6(EX)	C/A	6(EX)	A	6(EX)	A	5	C	-	-	B	-
M10	CLASSROOM	1	C	1	C	6(EX)	A	5	C	5/6(EX)	C/A	6(EX)	A	-	-	B	-
M11	CLASSROOM	1	C	1	C	5/6(EX)	C/A	6(EX)	A	6(EX)	A	5	C	-	-	B	-
M12	CLASSROOM	1	C	1	C	6(EX)	A	5	C	5/6(EX)	C/A	6(EX)	A	-	-	B	-
M13	CLASSROOM	1	C	1	C	5/6(EX)	C/A	6(EX)	A	6(EX)	A	5	C	-	-	B	-
M14	CLASSROOM	1	C	1	C	6(EX)	A	5	C	5/6(EX)	C/A	6(EX)	A	-	-	B	-
M20	CORRIDOR																PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE

General Interior Finish Notes

1. REMOVE AND REINSTALL EX ACCESSORIES AT WALLS TO RECEIVE FINISH(ES). REINSTALL EX ACCESSORIES AT EX LOCATION UNO.
2. PATCH ALL HOLES FLUSH W/ ADJ SURFACE AT WALLS TO RECEIVE FINISH.
3. PATCH VOIDS FROM DEMOLITION FLUSH W/ ADJ SURFACE AT FLOORS, WALLS AND CEILINGS TO MATCH EX ADJ SURFACES - SEE ELEC, MECH AND PLBG SHTS FOR ADDITIONAL INFO.
4. SEE WALL LEGEND AND DETAILS FOR MULTIPLE LAYERS OF FINISH.

JOINT SEALANT SCHEDULE

INSTALL SEALANT INDICATED IN JOINTS FITTING DESCRIPTIONS AND LOCATIONS LISTED AS WELL AS IN LOCATIONS IDENTIFIED BY DRAWING DESIGNATIONS IN FIRST COLUMN BELOW

No	Joint Sealer	Description
ES1	TWO PART POLYSULIFED POURABLE SEALANT	EXTERIOR JOINTS IN HORIZONTAL SURFACES OF CONCRETE WHERE SLOPE IS LESS THAN 1/8" /FT USE BULKHEAD POUR. WHERE SLOPE IS GREATER THAN 1/8"/FT USE GUN-GRADE MATERIAL.
ES2	ONE-PART MILDEW RESISTANT SILICONE SEALANT	INTERIOR JOINTS IN VERTICAL SURFACES OF CERAMIC TILE IN TOILET ROOMS AND SIMILAR USES AND HORIZONTAL NON TRAFFIC SURFACES OF CERAMIC TILE TOILET ROOMS AND SIMILAR USES
ES3	MULTI-PART POURABLE URETHANE SEALANT	INTERIOR JOINTS IN HORIZONTAL SURFACES OF TILE WITH TRAFFIC SURFACES
ES4	ONE-PART NEUTRAL CURE SILICONE SEALANT	EXTERIOR AND INTERIOR JOINTS IN VERTICAL SURFACES OF CONCRETE AND MASONRY; BETWEEN CONCRETE MASONRY AND STONE; BETWEEN METAL AND CONCRETE, MORTAR, OR STONE. INTERIOR AND EXTERIOR PERIMETER OF JOINTS OF METAL FRAMES IN EXTERIOR WALLS, EXTERIOR OVERHEAD JOINTS, ROOFING SHEET METAL JOINTS, ETC.
ES5	ONE-PART NEUTRAL CURE SEALANT	EXPOSED JOINTS WITHIN GLAZED CURTAIN WALL FRAMING SYSTEMS, SKYLIGHT FRAMING SYSTEMS, AND ALUM ENTRANCE FRAMING SYSTEMS (NOT TO BE USED ON EIFS)
ES6	ACRYLIC-EMULSION SEALANT	INTERIOR JOINTS IN FIELD-PAINTED VERTICAL AND OVERHEAD SURFACES AT PERIMETER OF ELEVATOR DOOR FRAMES AND HOLLOW METAL DOOR FRAMES, IN GYPSUM DRYWALL, PLASTER, CONCRETE, AND CONCRETE MASONRY, AND ALL OTHER JOINTS NOT INDICATED OTHERWISE.
ES7	ACOUSTICAL JOINT SEALANT	JOINTS IN AREAS REQUIRED TO REDUCE AIRBORNE SOUND TRANSMISSION INCLUDING WALLS AND ELECTRICAL BOXES
ES8	BUTYL SEALANT TAPE-DBL FACED	1" WIDE DBL FACED SEALANT TAPE METAL ROOFING
ES9	ONE-PART NEUTRAL CURE SILICONE SEALANT	EIFS SEALANT AS RECOMMENDED BY MFR.
FRS1	FIRE RESISTIVE JOINT SEALANT	SINGLE COMPONENT NEUTRAL CURE SILICON FIRESTOP SEALANT.

INTERIOR FINISH SCHEDULE (CONT)

No	Room	FLOOR MTL	FLOOR FIN	BASE MTL	BASE FIN	WALLS NORTH MTL	WALLS NORTH FIN	WALLS EAST MTL	WALLS EAST FIN	WALLS SOUTH MTL	WALLS SOUTH FIN	WALLS WEST MTL	WALLS WEST FIN	WAINS MTL	WAINS FIN	JAMB/ TRIM/ DOOR FIN	Remarks
Building M-3																	
M01	CLASSROOM	1(EX)	C	1	C	5/6(EX)	C/A	6(EX)	A	6(EX)	A	5/6(EX)	C/A	-	-	B	** NEW FINS AT NEW WALL
M01A	TOILET	5	C	4	C	6	A	6(EX)	A	6(EX)	A	6(EX)	C			B	* PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ POPOSED SCOPE ** NEW FINS AT NEW WALL
M01B	COATS	5	C	4	C	6(EX)	A	6(EX)	A	6	A	6(EX)	C			B	* NORTH WALL
M01C	TOILET																
M01D	STOR																
M01E	STOR																
M01F	STOR																
M02	CLASSROOM	1(EX)	C	1	C	6(EX)	A	6(EX)	A	5/6(EX)	C/A	5/6(EX)	C/A	-	-	B	** NEW FINS AT NEW WALL
M02A	TOILET	5	C	4	C	6(EX)	B	6(EX)	B	6(EX)	B	6(EX)	B			B	
M02B	TOILET	5	C	4	C	6	B	6(EX)	B	6(EX)	B	6(EX)	B			B	* PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE ** NEW FINS AT NEW WALL
M03	CLASSROOM	1	C	1	C	5/6(EX)	C/A	5	C	6(EX)	A	6(EX)	A	-	-	B	* PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE ** NEW FINS AT NEW WALL
M04	CLASSROOM	1(EX)	C	1	C	6(EX)	A	6(EX)	A	5/6(EX)	C/A	5	C	-	-	B	* NEW FINS AT NEW WALL
M05	CLASSROOM	1(EX)	C	1	C	6(EX)	A	6(EX)	A	5/6(EX)	C/A	5	C	-	-	B	* NEW FINS AT NEW WALL
M06	CLASSROOM	1(EX)	C	1	C	6(EX)	A	6(EX)	A	5/6(EX)	C/A	5	C	-	-	B	* NEW FINS AT NEW WALL
M07	CLASSROOM	1(EX)	C	1	C	6(EX)	A	6(EX)	A	5/6(EX)	C/A	5	C	-	-	B	* NEW FINS AT NEW WALL
M08	CLASSROOM	1(EX)	C	1	C	5/6(EX)	C/A	6(EX)	A	6(EX)	A	5	C	-	-	B	* NORTH WALL
M19	CORRIDOR																* PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE ** NEW FINS AT NEW WALL
M19A	BOOK STORAGE																PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE
M19B	LANGUAGE RM																PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE
M19B1	CLOSET																
M19B2	TOILET																
M19C	SPEECH RM																PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE
M19D	IMC OFFICE																PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE
M19E	TOILET																
M19E1	TOILET																
M19F	IMC OFFICE																PATCH/ REPAIR/ FINISH AREAS AFFECTED BY DEMO/ PROPOSED SCOPE
M19H	GIRLS	4(EX)	C	3(EX)	C	3 (EX)	C	3 (EX)	C	3 (EX)	C	3 (EX)	C			B	** NEW FINS AT NEW WALL
M19I	BOYS	4(EX)	C	3(EX)	C	3 (EX)	C	3 (EX)	C	3 (EX)	C	3 (EX)	C			B	** NEW FINS AT NEW WALL
M19M	STOR	4(EX)	C	3(EX)	C	6	A	3 (EX)	C	3 (EX)	C	3 (EX)	C			B	

DOOR SCHEDULE

TYPICAL DETAILS

NOT USED | NOT USED | NOT USED
NOT USED | NOT USED | NOT USED

Door NO	Door SIZE	Door TH	Door MTL	Door TYPE	FRAME	FIRE RATING	Details HEAD	Details JAMB	Details SILL	RA	HDWR NO	PANIC HDWR	SIGNS	ACCESS CONTROL	CARD READER	Remarks
Building B																
101	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	02	N	32	N	N	6" x 24" VISION LITE
103	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	02	N	32	N	N	6" x 24" VISION LITE
107	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	02	N	32	N	N	6" x 24" VISION LITE
108	3'-0"x7'-0"	1 3/4"	HM	B	HM	-	23 A8.03	33 A8.03	23 A8.03	-	03	N	28	N	N	24" x 12" LOUVER
109	3'-0"x7'-0"	1 3/4"	HM	B	HM	-	23 A8.03	33 A8.03	23 A8.03	-	03	N	28	N	N	24" x 12" LOUVER
Building C																
122	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	02	N	32	N	N	6" x 24" VISION LITE
123	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	02	N	32	N	N	6" x 24" VISION LITE
Building D																
111	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	02	N	32	N	N	6" x 24" VISION LITE
114	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	02	N	32	N	N	6" x 24" VISION LITE
115	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	02	N	32	N	N	6" x 24" VISION LITE
Building E																
124	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	02	N	32	N	N	6" x 24" VISION LITE
121	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	02	N	32	N	N	6" x 24" VISION LITE
122	3'-6"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.03	34 A8.03	24 A8.03	-	13	Y	32	N	N	6" x 24" VISION LITE
125	3'-6"x7'-0"	1 3/4"	HM	A	HM	-	24 A8.03	34 A8.03	24 A8.03	-	13	Y	32	N	N	6" x 24" VISION LITE
Building M-1																
M15	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	33 A8.04	33 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
M16	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	33 A8.04	33 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
M17A	3'-0"x7'-0"	1 3/4"	WD	A	HM	90 MIN	32 A8.04	32 A8.04	24 A8.04	-	10	N	28	N	N	
M17C	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	11	N	32	N	N	
M17D	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	07	N	28	N	N	
M17	3'-0"x7'-0" (2)	1 3/4"	HM	B	HM	-	24 A8.04	34 A8.04	24 A8.04	-	05	N	32	N	N	24" TALL HALF LITE
Building M-2																
M09	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
M10	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	33 A8.04	33 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
M11	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	33 A8.04	33 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
M12	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	33 A8.04	33 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
M13	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	33 A8.04	33 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
M14	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	33 A8.04	33 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE

DOOR SCHEDULE (CONT)

TYPICAL DETAILS

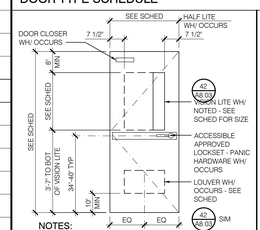
NOT USED | NOT USED | NOT USED
NOT USED | NOT USED | NOT USED

Door NO	Door SIZE	Door TH	Door MTL	Door TYPE	FRAME	FIRE RATING	Details HEAD	Details JAMB	Details SILL	RA	HDWR NO	PANIC HDWR	SIGNS	ACCESS CONTROL	CARD READER	Remarks
Building M-3																
MA	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
MA1	3'-0"x7'-0"	1 3/4"	WD	A	HM	-	31 A8.04	31 A8.04	-	-	01	N	28	N	N	24" x 12" LOUVER
MA2	3'-0"x7'-0"	1 3/4"	WD	B	HM	-	31 A8.04	31 A8.04	-	-	12	N	32	N	N	24" TALL HALF LITE
MA3	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	04	N	32	N	N	3" x 30" VISION LITE
MA5	3'-4"x7'-0"	1 3/4"	WD	A	HM	-	31 A8.04	31 A8.04	-	-	01	N	32	N	N	24" x 12" LOUVER
MA6	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
MA7	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	29 A8.04	33 A8.04	23 A8.04	-	04	N	32	N	N	6" x 24" VISION LITE
MA8	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
MA9	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
MA10	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
MA11	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
MA12	3'-4"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	04	N	32	N	N	6" x 24" VISION LITE
MA13	3'-0"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	06	N	32	N	N	6" x 24" VISION LITE
MA14	3'-0"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	07	N	32	N	N	6" x 24" VISION LITE
MA15	3'-0"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	07	N	32	N	N	6" x 24" VISION LITE
MA16	3'-0"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	11	N	32	N	N	6" x 24" VISION LITE
MA17	3'-0"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	-	-	07	N	32	N	N	6" x 24" VISION LITE
MA18	3'-0"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	24 A8.04	-	07	N	28	N	N	
MA19	3'-0"x7'-0"	1 3/4"	WD	A	HM	20 MIN	31 A8.04	31 A8.04	24 A8.04	-	07	N	28	N	N	
MA20	3'-0"x7'-0"	1 3/4"	WD	A	HM	60 MIN	31 A8.04	31 A8.04	-	-	08	N	28	N	N	
MA21	3'-0"x7'-0"	1 3/4"	HM	B	HM	-	24 A8.04	34/48 A8.04	24 A8.04	-	12	N	32	N	N	24" TALL HALF LITE
MA19	3'-4"x7'-0"	1 3/4"	HM	B	HM	-	31 A8.04	31 A8.04	24 A8.04	-	09	N	32	N	N	24" TALL HALF LITE

General Door Notes

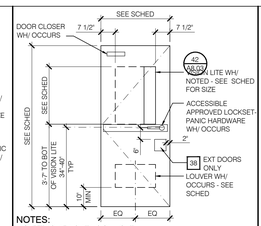
1. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT
2. RATED DOORS TO BE POSITIVE LATCHING WITH SMOKE AND DRAFT STOP ASSEMBLIES.
3. MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE FOR ALL RATED DOOR ASSEMBLIES AND RELATED HARDWARE.
4. MAXIMUM EFFORT TO OPERATE FIRE DOORS SHALL NOT EXCEED 15 LBS WHEN APPROVED BY ADMINISTRATIVE AUTHORITY.
5. MAXIMUM EFFORT TO OPERATE NON-RATED DOORS SHALL NOT EXCEED 5 LBS FOR EXTERIOR AND 5 LBS FOR INTERIOR DOORS.
6. DOOR SIZES INDICATED ARE NOMINAL DIMENSIONS.
7. REFER TO HARDWARE SPECIFICATIONS FOR COORDINATION OF HARDWARE INDICATED.
8. GLASS IN RATED ASSEMBLIES SHALL BE LABELED FOR SUCH.
9. MOUNTING HTS OF ACCESSIBLE APPROVED LOCKSETS, PANIC DEVICES AND OTHER DOOR OPERATION HARDWARE SHALL BE APPROVED BY ARCHITECT PRIOR TO INSTALLATION.
10. FIELD VERIFY CONDITIONS AT ALL DOORS TO RECEIVE NEW FRAME/ DOOR/ HARDWARE IN EXISTING WALL OPENING. PATCH/ REPAIR WALL/ FLOOR/ CEILING FINS AS REQUIRED.
11. REFER TO DETAIL FOR DOORS INCLUDING ACCESS CONTROL FOR WIRING DIAGRAM. (16 / A8.05)

DOOR TYPE SCHEDULE



NOTES:
1. SAFETY GLAZING AT VISION LITE
2. SINGLE PANE CLEAR GLAZING AT VISION LITE
3. RATED GLAZING AT RATED DOORS VISION LIGHTS. SEE SCHED.

(A) SOLID CORE WOOD DOOR



NOTES:
1. SAFETY GLAZING AT VISION LIGHT
2. SINGLE PANE CLR GLAZING VISION LITE. TINTED GLAZING AT EXT DOOR
3. EXTERIOR DOORS TO BE 16 GA, INTERIOR DOORS TO BE 18 GA.
4. RATED GLAZING AT RATED DOORS VISION LIGHTS. SEE SCHED.

(B) HOLLOW METAL DOOR

(C) NOT USED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA
JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:36

SCHEDULES (INTERIOR FINISH/ DOOR)

A2.00

ACCESSORY SCHEDULE

Typical Details

36/A8.00 TYPICAL BACKING AT SURFACE MTD ACCESSORY

36/A8.00 TYPICAL RECESSED ACCESSORY FRAMING

22/A8.00 TYPICAL ACCESSORY MOUNTING HEIGHTS

15/A8.00 TYPICAL DOOR SIGN INSTALLATION

No	Mfr/Model No	Description	Mtg Ht	Dtls
01	"BOBRICK" NO B-6806 SERIES(PEENED)	RECESSED GRAB BAR SET W/ CONCEALED MOUNTING (SIDE 48", REAR 36")	SEE DET	41/A8.00
02	"BOBRICK" NO B-66997	SURFACE MOUNTED TOILET PAPER DISPENSER (KINDER)	SEE INT ELEVS	-
03	"BOBRICK" NO B-3888	RECESSED TOILET PAPER DISPENSER (BCSD)	SEE DET	41/A8.00
04	"BOBRICK" NO B-221	SURFACE MTD TOILET SEAT COVER DISPENSER (BCSD)	SEE DET	41/A8.00
05	"BOBRICK" NO B-2888	SURFACE MTD TOILET PAPER DISPENSER (BCSD)		-
06	NOT USED			-
07	"SCRANTON"	SOLID PLASTIC OVERHEAD BRACED TOILET PARTITIONS	SEE DET	42/A8.00
08	"SCRANTON"	SOLID PLASTIC SURFACE MTD URINAL SCREEN	SEE DET	42/A8.00
09	"BOBRICK" 290 SERIES	MIRROR W/ STAINLESS STEEL FRAME (CUSTOM SIZE)	SEE INT ELEV	-
10	"BOBRICK" NO B-359	RECESSED PAPER TOWEL DISPENSER	SEE DET	-
11	"BOBRICK" NO 47069	SURFACE MTD SANITARY NAPKIN DISPENSER (BCSD)	SEE DET	-
12	"BOBRICK" NO B-3644	RECESSED WASTE RECEPTACLE	SEE DET	-
13	"BOBRICK" NO B-270	SURFACE MTD SANITARY NAPKIN RECEPTACLE (BCSD)	SEE DET	-
14	NOT USED			-
15	"BOBRICK" NO B-682	HOOK +4'-0" AFF AT ACCESSIBLE STALL +5'-0" AFF AT NON ACCESSIBLE STALLS	AS NOTED	-
16	NOT USED			-
17	"WORLD DRYER CORP" Q-974A2	SURFACE MTD ELECTRIC HAND DRYER W/ HEPA FILTER (BCSD)	SEE DET	-
18	"BOBRICK" NO B-2111/2112	SURFACE MTD SOAP DISPENSER (BCSD)	+3'-4"	-
19	"BOBRICK" NO B-263	SURFACE MTD PAPER TOWEL DISPENSER (BCSD)	+3'-4"	-
20	"PETER PEPPER" #2001AL	SINGLE COAT HOOK 3 3/4"HIGH X 3/4"WIDE X 3"DEEP	+48" TO LOWER HOOK	-
21	NOT USED			-
22	NOT USED			-
23	SEE DETAILS	ACCESSIBLE PARKING SIGN AT PARKING LOT ENTRY	SEE DET	54/A8.00
24	SEE DETAILS	ACCESSIBLE PARKING SIGN AT PARKING STALL	SEE DET	46/A8.00
25	NOT USED			-
26	NOT USED			-
27	NOT USED			-
28	SEE DETAILS	TOILET IDENTIFICATION SIGNS	SEE DET	51/A8.00
29	SEE DETAILS	DIRECTIONAL SIGN		56/A8.00
30	NOT USED			-
31	NOT USED			-
32	SEE DETAILS	ROOM SIGN	SEE DET	25/A8.00
33	SEE DETAILS	ASSISTIVE LISTENING SYSTEM SIGN	SEE DET	46/A8.05
34	NOT USED			-
35	NOT USED			-
36	NOT USED			-
37	OWNER (TBD)	MONITOR PROVIDED AND INSTALLED BY OWNER		-
38	NOT USED			-
51	LE CROSSE TECHNOLOGY/SEE PROJECT MANUAL	BATTERY OPERATED CLOCK	SEE INT ELEV	-
55	SEE PROJECT MANUAL	VISUAL DISPLAY BOARD - SIZE AS NOTED ON INT. - SEE INTERIORS FOR SEAMS	+7'-0" TOP	-
61	NOT USED			-
63	NOT USED			-
68	NOT USED			-
74	NOT USED			-
78	SEE PROJECT MANUAL	10# FIRE EXTINGUISER SURFACE MTD W/ SURFACE MOUNT BRACKET "60-B C"	SEE DET	36/A8.00
87	NOT USED			-

REDUCER STRIP/FLOOR ACCESSORY TYPES SCHEDULE

No	Type	Mfr	Model #	Size	Remarks	Profile
RA1	REDUCER STRIP	MERCER	633	1" x 1/8"	TILE REDUCER 1/8" TO 0"	
RA2	REDUCER STRIP	MERCER	705	2.5/8" x 5/16"	GLUE DOWN CARPET - 5/16" TO 0"	
RA3	REDUCER STRIP	MERCER	710	2.3/8" x 5/16"	GLUE DOWN CARPET TO 1/8" TILE - 5/16" TO 1/8" TRIM REDUCER STRIP TO BUTT TO TILE	
RA4	REDUCER STRIP	MERCER	930	1.1/2" x 1/4"	GLUE DOWN CARPET TO GLUE DOWN CARPET - 1/4" TO 1/4" 970 SINGLE FLANGE TRACK	
RA5	FEATURE STRIP	MERCER	643	1" x 1/8"	FEATURE STRIP - 1/8" TO 1/8"	
RA6	REDUCER STRIP	MERCER	920	3/4"x1/4"	SNAP DOWN T - BRIDGE AT FLOORS/DOOR AT VCT ACCESS FLOOR	
RA7	REDUCER STRIP	SCHLUTER	RENO-AEU	VER W/ PAVER THICKNESS	GLUE DOWN CARPET TO PAVER TILE	

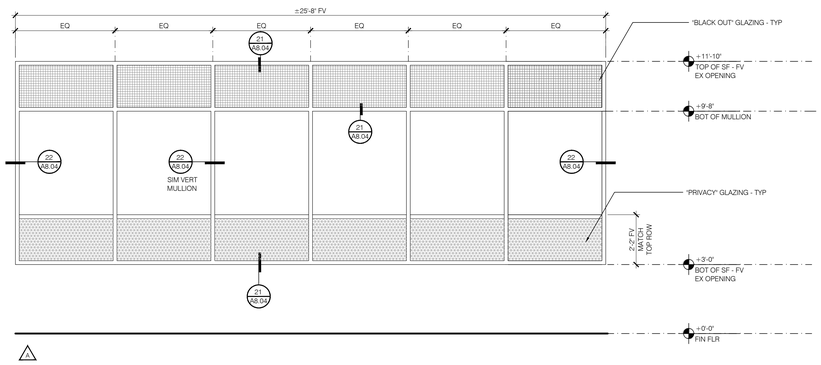
ACCESS DOOR SCHEDULE

NOTE: ACCESS DOORS FOR VALVES, HVAC DAMPERS AND SIM MECH ITEMS SHALL BE LOCATED FOR ACCESS. INDICATE LOCATIONS ON COORDINATION DRAWINGS AND RECORD DRAWINGS AT MIN SIZE A3

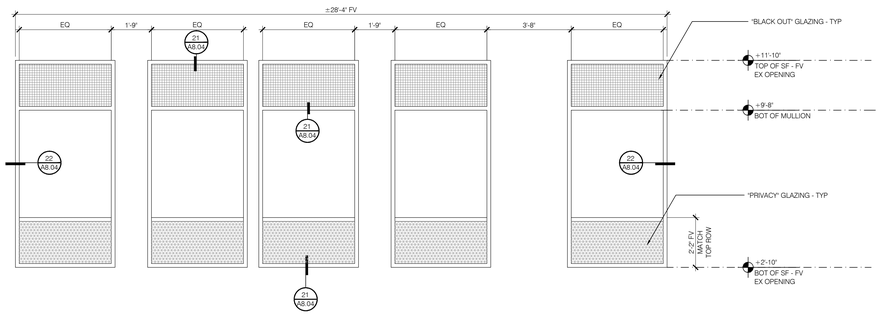
No	Size	Mtl	Frame	Fr	Dtl	Dtl	Remark
A1	24"x36"	MET	MET	NONE	-	-	14 GAGE STEEL FRAME AND DOOR PANEL - PAINT TO MATCH CEILING SOFFIT - CYLINDER LOCKS - THICKNESS TO MATCH EIFS
A2	24"x36"	MET	MET	NONE	-	-	14 GAGE STEEL FRAME AND DOOR PANEL - PAINT TO MATCH CEILING SOFFIT - CYLINDER LOCKS - THICKNESS TO MATCH GYP BD
A3	16"x16"	MET	MET	NONE	-	-	14 GAGE STEEL FRAME AND DOOR PANEL - PAINT TO MATCH CEILING VERIFY WITH MECH, ELEC, FIRE PROTECTION DRAWINGS/SPECIFICATIONS FOR REQUIRED ACCESS DOOR FOR EQUIP, VALVES, MAINTENANCE ITEMS AND ETC - FIRE RATED IN RATED WALLS, SS IN RESTROOMS - SEE PROJECT MANUAL FOR REQ LOCATIONS.

WINDOW SCHEDULE

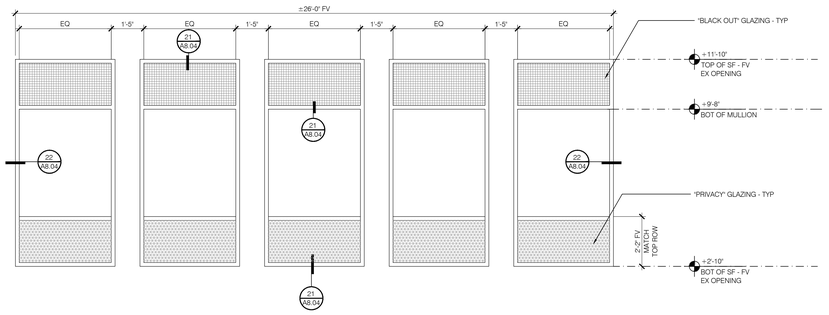
SCALE: 3/8" = 1'-0"



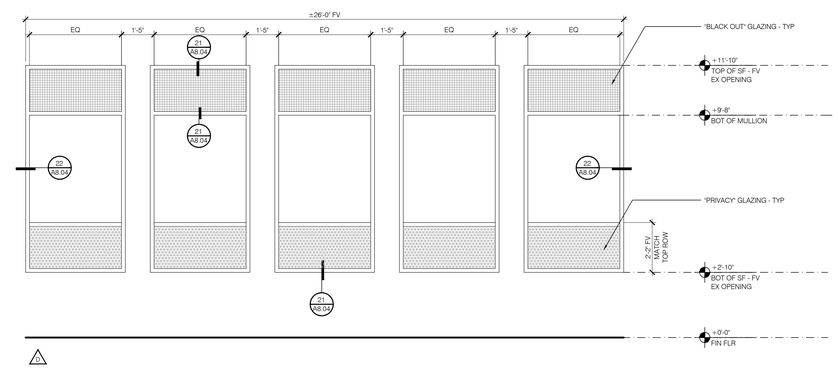
1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING



1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING



1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING



1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

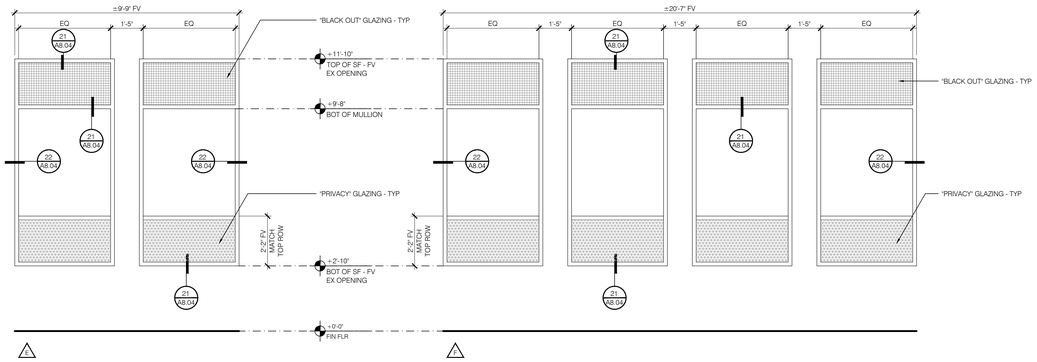
11.03.23 11:36

SCHEDULES (ACCESSORY/ WINDOWS)

A2.01

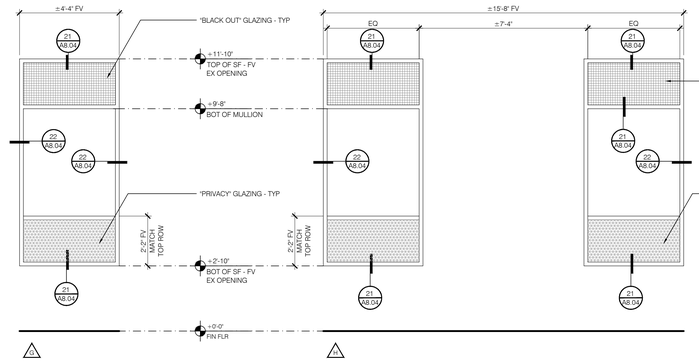
WINDOW SCHEDULE

SCALE: 3/8" = 1'-0"



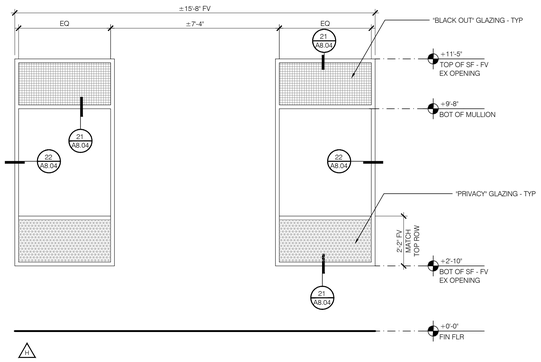
1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING

1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING

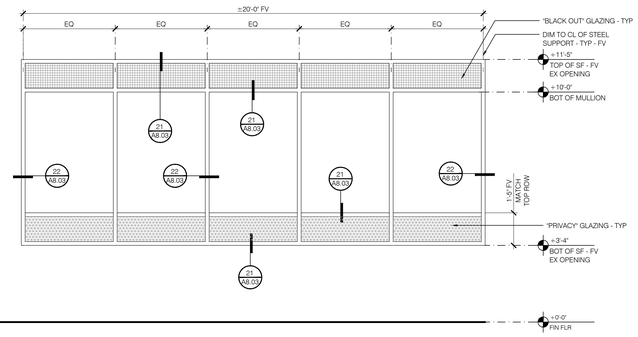


3 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING

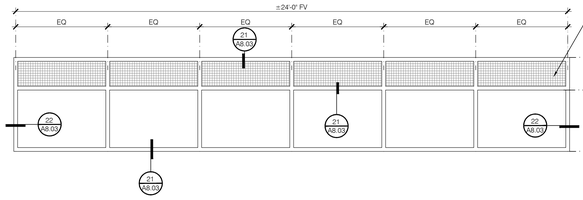
1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING



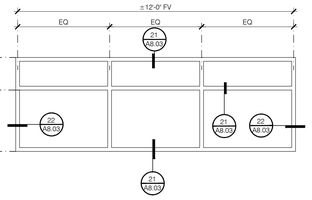
1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING



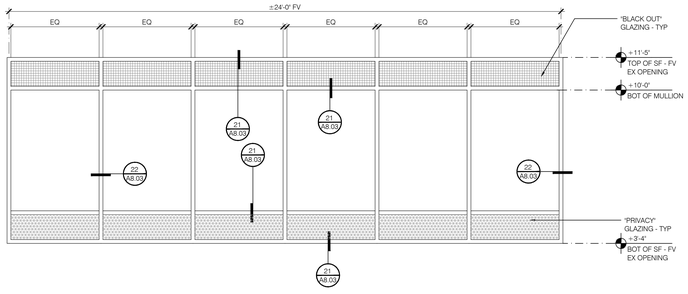
1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING



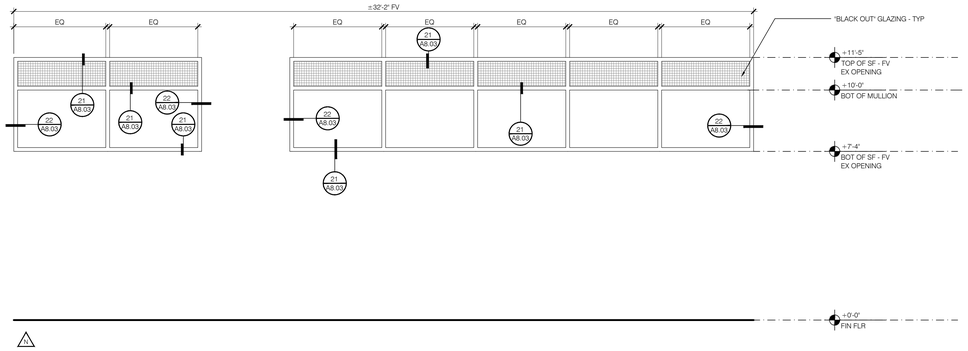
1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING



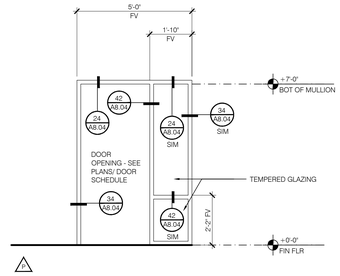
1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING



3 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING



1 ALUM WINDOW SYSTEM W/ 1" INSULATED GLAZING



1 HM FRAME WINDOW SYSTEM W/ 1" UNSULATED GLAZING

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

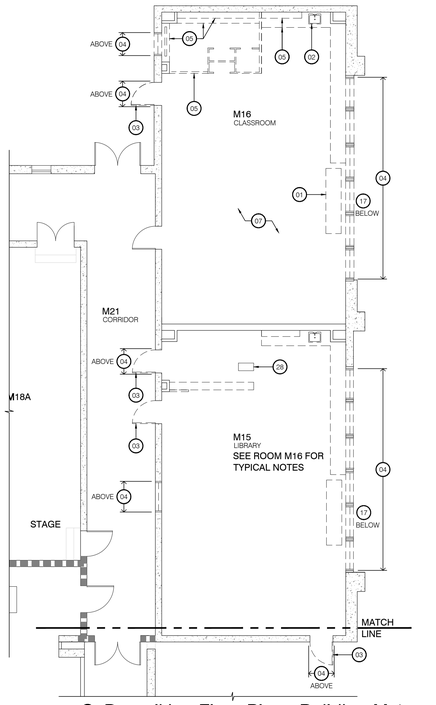
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:36

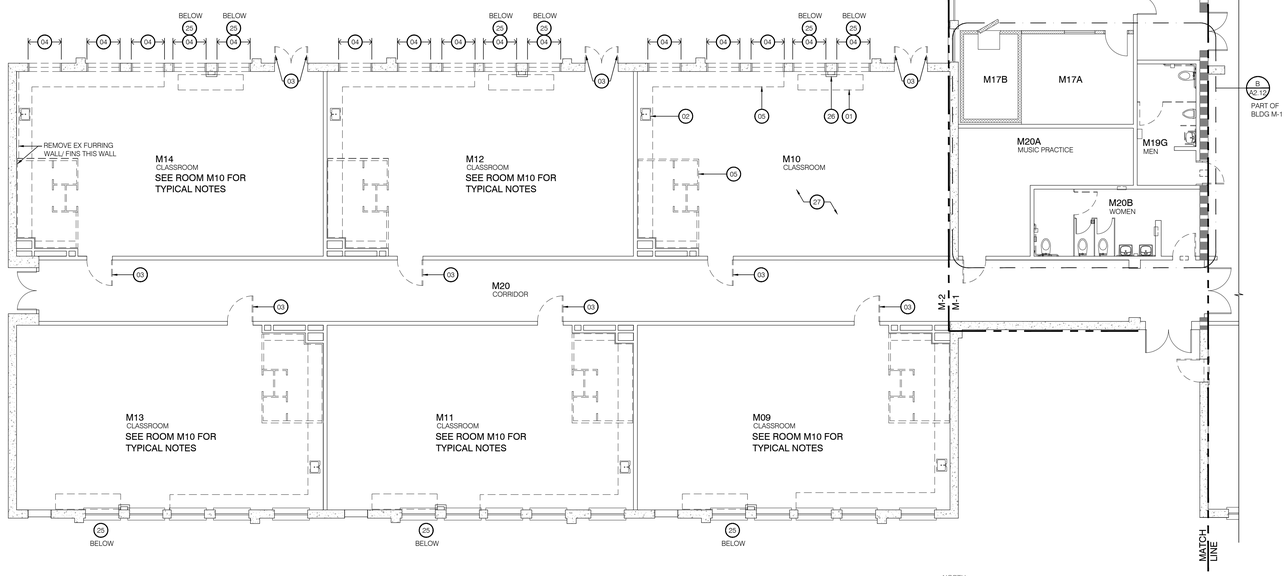
SCHEDULES
(WINDOWS)

A2.02



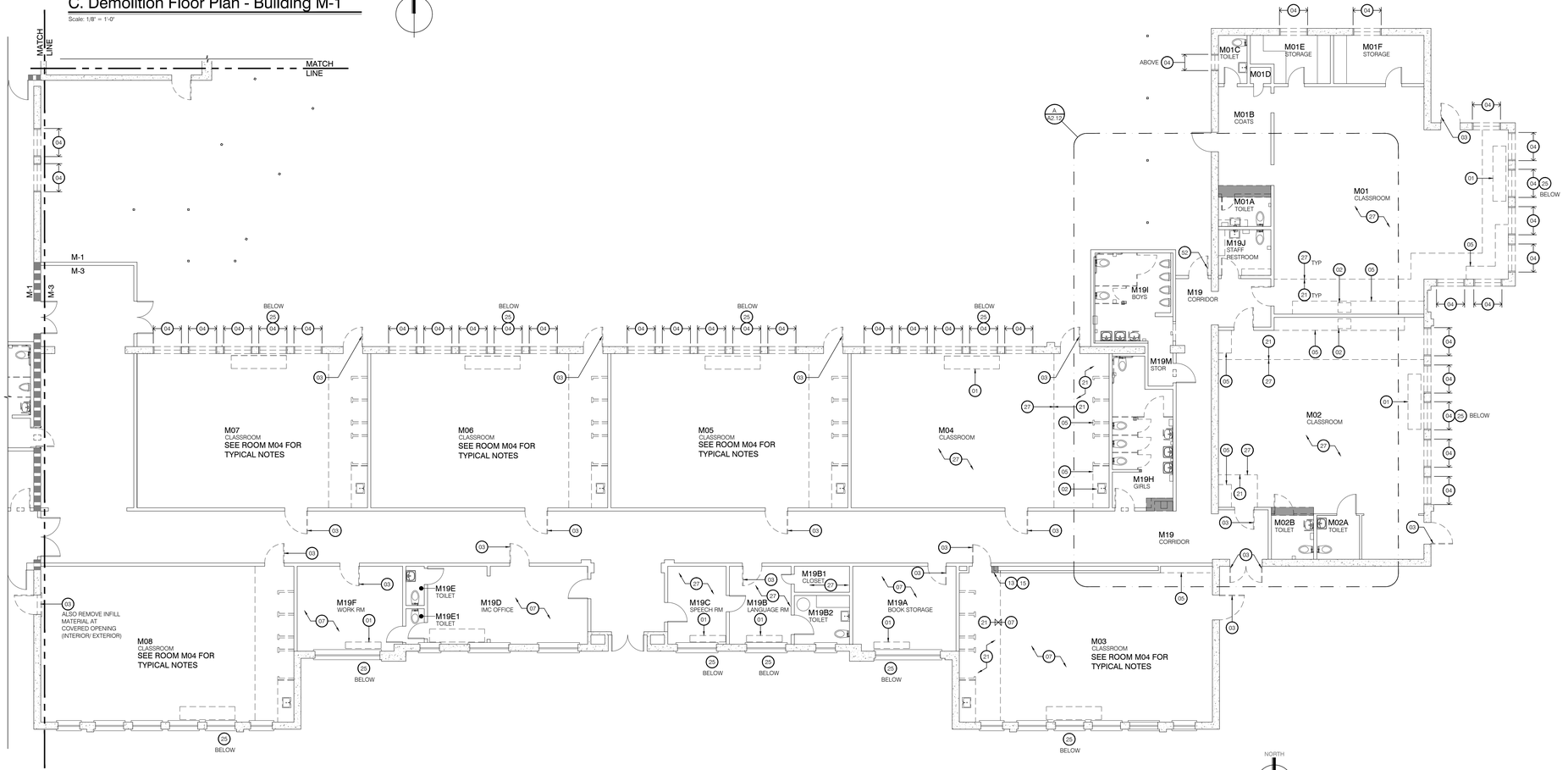
C. Demolition Floor Plan - Building M-1

Scale: 1/8" = 1'-0"



A. Demolition Floor Plan - Building M-2

Scale: 1/8" = 1'-0"



B. Demolition Floor Plan - Building M-3

Scale: 1/8" = 1'-0"

DEMOLITION LEGEND

Line Style	Description
	EX WALL TO REMAIN
	EX WALL TO BE REMOVED
	EX 2-HR RATED WALL TO REMAIN
	EX ITEM TO BE REMOVED (DASHED LINE)

17-02-10

GENERAL DEMOLITION NOTES

1. SEE INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION ON ITEMS TO BE REMOVED.
2. REMOVE EX ANCHORS, CONNECTORS, FASTENERS ETC. AT ITEMS INDICATED TO BE REMOVED.
3. REMOVE AND SALVAGE EX FLOOR MTD DOOR STOPS AT FLOORING INDICATED TO BE REMOVED.
4. REMOVE AND SALVAGE EX DOOR THRESHOLDS AT FLOORING INDICATED TO BE REMOVED.
5. REMOVE EX ELECTRICAL CONDUIT, BOXES AND DEVICES AT WALLS INDICATED TO BE REMOVED-SEE ELEC SHTS FOR ADDITIONAL INFO.
6. REMOVE EX UTILITY LINES AT WALLS INDICATED TO BE REMOVED-SEE MECH/PLBG SHTS FOR ADDITIONAL INFO.
7. SEE REFLECTED CLG PLAN FOR ADDITIONAL INFORMATION ON ITEMS TO BE REMOVED.
8. EXISTING ACCESSORIES LOCATED IN ROOMS TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION. UNO.
9. EX EMS DEVICES AND CONDUITS TO BE REMOVED BY OWNERS CONTROL CONTRACTOR.
10. GRIND EX CONC FLOOR AS REQ TO RECEIVE FLOOR FINISHES.
11. EXISTING ROOM SIGNAGE TO BE SALVAGED AND DELIVERED TO OWNER INCLUDING EXT DOOR SIGNAGE WH/ OCCURS.
12. EQUIPMENT, MATERIALS AND SUPPLIES TEMPORARILY REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.
13. CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT, UTILITY LINES AND MATERIALS TO REMAIN. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE SMALLER AREA IF POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION/ DEMOLITION OF THIS WORK.
14. EX DOOR HARDWARE TO BE SALVAGED AND DELIVERED TO OWNER WHERE INDICATED TO BE REMOVED.
15. SEE ELEC, MECH, AND PLBG SHTS FOR ADDITIONAL DEMOLITION REQS.
16. ALL FINISHES (WALLS/FLOOR/CLG/ETC) AFFECTED BY DEMOLITION SCOPE (INCLUDING AREAS OF ITEM REMOVAL) SHALL BE PATCHED/ REPAIRED TO MATCH ADJACENT FINISH MATERIAL/ COLOR/ TEXTURE/ ETC.
17. COORDINATE WITH HAZARDOUS MATERIAL REPORTS FOR ANY APPLICABLE ABATEMENT OF DEMOLITION SCOPE.

17-02-12

DEMOLITION FLOOR PLAN KEYNOTES

01 REMOVE EX HVAC EQUIPMENT, WALL LOUVER AND ASSOCIATED PIPING - SEE MECH SHTS FOR ADDIT INFO - SEE FLOOR PLAN FOR FLOOR INFILL AT REMOVED DUCTING
02 REMOVE EX PLBG FIXTURE, HARDWARE AND ASSOCIATED PIPING - SEE PLUMBING SHTS FOR ADDIT INFO. SALVAGE FOR REINSTALLATION WH/ NOTED
03 REMOVE EXISTING DOOR, FRAME AND ASSOCIATED HARDWARE/ APPURTENANCES
04 REMOVE EX WINDOW SYSTEM AND ASSOCIATED HARDWARE
05 REMOVE EX CABINET(S)/SHELF/ WALL PANELING AND ASSOCIATED HARDWARE. REMOVE SUPPORTING WALL AND FLOOR MOUNTED CARPENTRY AS REQD. SEE FLOOR PLAN FOR ADDIT INFO
06 REMOVE EX VINYL FLOORING, ADHESIVE AND BASE
07 REMOVE EX CARPET, ADHESIVE AND BASE
08 REMOVE EX CARPET TILE, AND ADHESIVE AS REQUIRED FOR CABINETRY REPLACEMENT. REMOVE EX HD CARPET TILE AND ADHESIVE AT REMOVED DOOR WH/OCCURS.
09 REMOVE EX FEX - DELIVER TO OWNER
10 REMOVE EX DRINKING FOUNTAIN AND ASSOCIATED PLUMBING - SEE PLBG SHTS FOR ADDIT INFO
11 REMOVE EX TOILET PARTITION SYSTEM AND ASSOCIATED HARDWARE
12 REMOVE EX WASHROOM ACCESSORY AND ASSOCIATED ANCHORS. SALVAGE AND DELIVER TO OWNER AT REQUESTED LOCATION WITHIN CAMPUS
13 REMOVE EX PARTITION WALL, CURB, AND ASSOCIATED ANCHORS
14 REMOVE EX PORTION OF WALL/ FINISH AS REQUIRED TO COMPLETE ALTERATIONS. SEE INT ELEVATIONS FOR ADDIT INFO.
15 REMOVE PORTION OF EXISTING FLOOR/ FIN AS REQUIRED
16 REMOVE EX UCMT AND SETTING BED (MUD SET)
17 REMOVE VINYL TACK SURFACE DOWN TO PLASTER WALL FINISH
18 REMOVE EX ELEC HAND DRYER AND EXPOSED CONDUIT AND WIRING. SEE ELEC SHTS FOR ADDIT INFO.
19 REMOVE EX WALL FINISH AS REQUIRED TO COMPLETE ALTERATIONS - SEE INT ELEVATIONS FOR ADDIT INFO.
20 SAWCUT AND REMOVE EX CONC SLAB AS REQUIRED FOR PLBG ALTERATIONS
21 REMOVE EX SHEET VINYL, ADHESIVE AND BASE. REMOVE TRANSITION STRIP WH/ OCCURS
22 REMOVE WHITE BOARD/CHALK BOARD, HARDWARE AND ASSOCIATED ANCHOR - DELIVER TO OWNER
23 REMOVE SMART BOARD SYSTEM, HARDWARE AND ASSOCIATED ANCHOR - DELIVER TO OWNER
24 REMOVE CLASSROOM ACCESSORY AND ASSOCIATED HARDWARE
25 REMOVE EX LOUVERS AT HVAC EQUIPMENT. INFILL WALL. INSTALL INT/EXT FINS TO MATCH ADJACENT.
26 EX FURRING WALL AND HYDRONIC LINES WITHIN TO REMAIN
27 EX CARPET FIN TO REMAIN
28 EX FLOOR ACCESS PANEL. REPLACE CARPET INSERT
29 EX CER TILE FLOORING TO REMAIN
30 EX VINYL FLOORING FIN TO REMAIN
31 EX FLOOR MOUNTED PARTITION SYSTEM TO REMAIN
32 EX WASHROOM ACCESSORY TO REMAIN

17-02-09

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

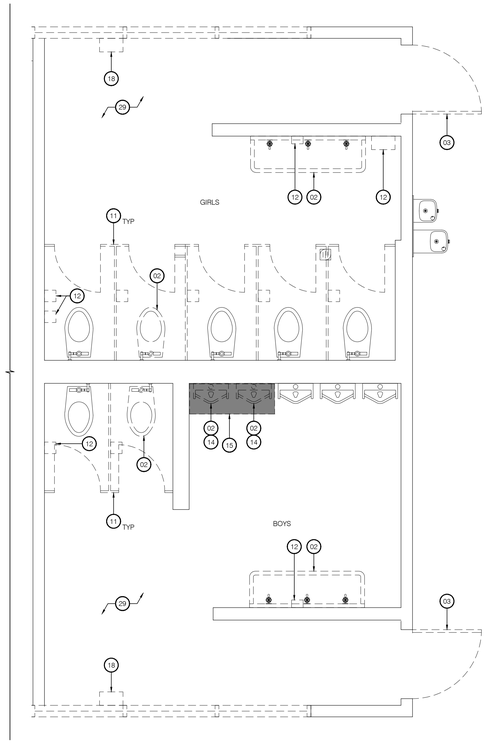
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:36

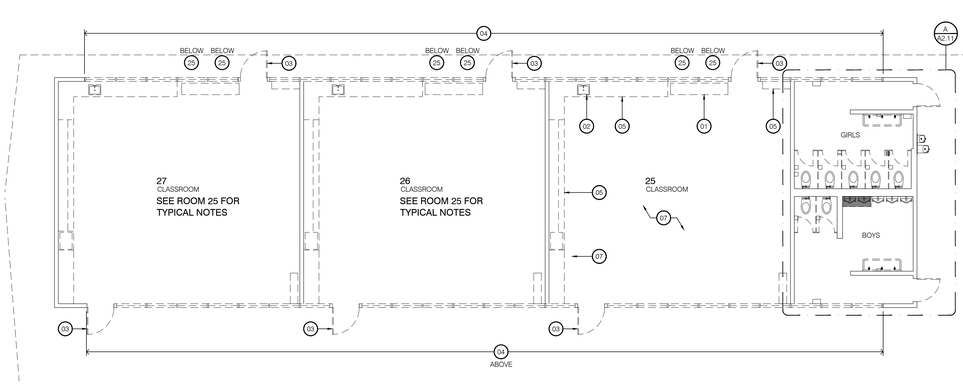
DEMOLITION FLOOR PLANS

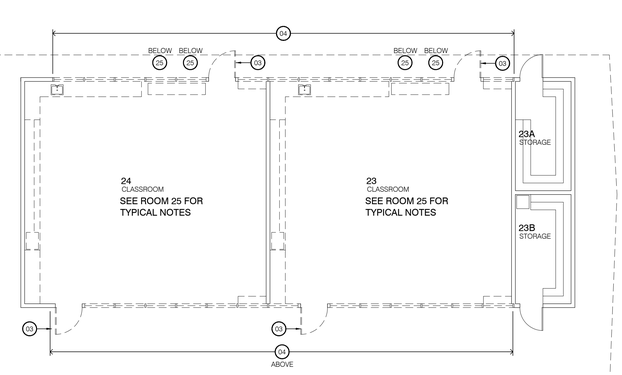
A2.10



A. Partial Demolition Floor Plan - Building B

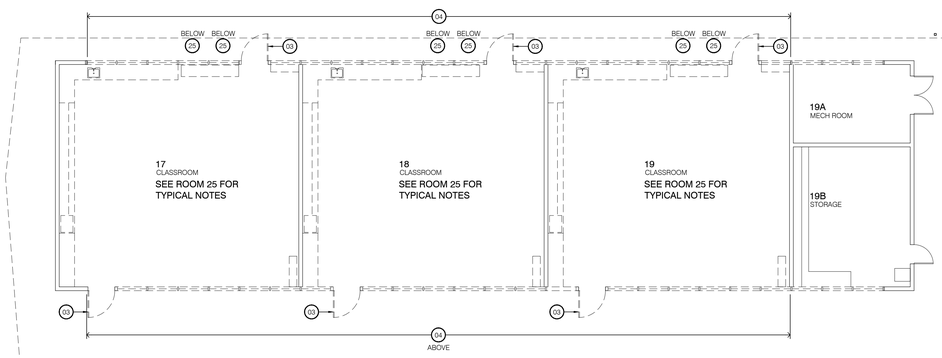
Scale: 3/8" = 1'-0"

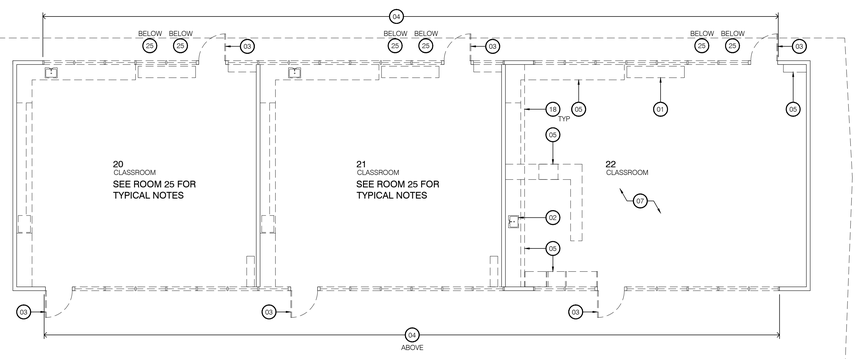




B. Demolition Floor Plan - Buildings B & C

Scale: 1/8" = 1'-0"





C. Demolition Floor Plan - Buildings D & E

Scale: 1/8" = 1'-0"

DEMOLITION LEGEND

Line Style	Description
	EX WALL TO REMAIN
	EX WALL TO BE REMOVED
	EX 2-HR RATED WALL TO REMAIN
	EX ITEM TO BE REMOVED (DASHED LINE)

17-02-10

GENERAL DEMOLITION NOTES

1. SEE INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION ON ITEMS TO BE REMOVED.
2. REMOVE EX ANCHORS, CONNECTORS, FASTENERS ETC. AT ITEMS INDICATED TO BE REMOVED.
3. REMOVE AND SALVAGE EX FLOOR MTD DOOR STOPS AT FLOORING INDICATED TO BE REMOVED.
4. REMOVE AND SALVAGE EX DOOR THRESHOLDS AT FLOORING INDICATED TO BE REMOVED.
5. REMOVE EX ELECTRICAL CONDUIT, BOXES AND DEVICES AT WALLS INDICATED TO BE REMOVED-SEE ELEC SHTS FOR ADDITIONAL INFO.
6. REMOVE EX UTILITY LINES AT WALLS INDICATED TO BE REMOVED-SEE MECH/PLBG SHTS FOR ADDITIONAL INFO.
7. SEE REFLECTED CLG PLAN FOR ADDITIONAL INFORMATION ON ITEMS TO BE REMOVED.
8. EXISTING ACCESSORIES LOCATED IN ROOMS TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION. UNO.
9. EX EMS DEVICES AND CONDUITS TO BE REMOVED BY OWNERS CONTROL CONTRACTOR.
10. GRIND EX CONC FLOOR AS REQ TO RECEIVE FLOOR FINISHES.
11. EXISTING ROOM SIGNAGE TO BE SALVAGED AND DELIVERED TO OWNER INCLUDING EXT DOOR SIGNAGE WH/ OCCURS.
12. EQUIPMENT, MATERIALS AND SUPPLIES TEMPORARILY REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.
13. CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT, UTILITY LINES AND MATERIALS TO REMAIN. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE SMALLER AREA IF POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION/ DEMOLITION OF THIS WORK.
14. EX DOOR HARDWARE TO BE SALVAGED AND DELIVERED TO OWNER WHERE INDICATED TO BE REMOVED.
15. SEE ELEC, MECH, AND PLBG SHTS FOR ADDITIONAL DEMOLITION REQS.
16. ALL FINISHES (WALLS/FLOOR/CLG/ETC) AFFECTED BY DEMOLITION SCOPE (INCLUDING AREAS OF ITEM REMOVAL) SHALL BE PATCHED/ REPAIRED TO MATCH ADJACENT FINISH MATERIAL/ COLOR/ TEXTURE/ ETC.
17. COORDINATE WITH HAZARDOUS MATERIAL REPORTS FOR ANY APPLICABLE ABATEMENT OF DEMOLITION SCOPE.

17-02-12

DEMOLITION FLOOR PLAN KEYNOTES

01 REMOVE EX HVAC EQUIPMENT, WALL LOUVER AND ASSOCIATED PIPING - SEE MECH SHTS FOR ADDIT INFO - SEE FLOOR PLAN FOR FLOOR INFILL AT REMOVED DUCTING
02 REMOVE EX PLBG FIXTURE, HARDWARE AND ASSOCIATED PIPING - SEE PLUMBING SHTS FOR ADDIT INFO. SALVAGE FOR REINSTALLATION WH/ NOTED
03 REMOVE EXISTING DOOR, FRAME AND ASSOCIATED HARDWARE/ APPURTENANCES
04 REMOVE EX WINDOW SYSTEM AND ASSOCIATED HARDWARE
05 REMOVE EX CABINET(S)/SHELF/ WALL PANELING AND ASSOCIATED HARDWARE. REMOVE SUPPORTING WALL AND FLOOR MOUNTED CARPENTRY AS REQD. SEE FLOOR PLAN FOR ADDIT INFO
06 REMOVE EX VINYL FLOORING, ADHESIVE AND BASE
07 REMOVE EX CARPET, ADHESIVE AND BASE
08 REMOVE EX CARPET TILE, AND ADHESIVE AS REQUIRED FOR CABINETRY REPLACEMENT. REMOVE EX HD CARPET TILE AND ADHESIVE AT REMOVED DOOR WH/OCCURS.
09 REMOVE EX FEX - DELIVER TO OWNER
10 REMOVE EX DRINKING FOUNTAIN AND ASSOCIATED PLUMBING - SEE PLBG SHTS FOR ADDIT INFO
11 REMOVE EX TOILET PARTITION SYSTEM AND ASSOCIATED HARDWARE
12 REMOVE EX WASHROOM ACCESSORY AND ASSOCIATED ANCHORS. SALVAGE AND DELIVER TO OWNER AT REQUESTED LOCATION WITHIN CAMPUS
13 REMOVE EX PARTITION WALL, CURB, AND ASSOCIATED ANCHORS
14 REMOVE EX PORTION OF WALL/ FINISH AS REQUIRED TO COMPLETE ALTERATIONS. SEE INT ELEVATIONS FOR ADDIT INFO.
15 REMOVE PORTION OF EXISTING FLOOR/ FIN AS REQUIRED
16 REMOVE EX UCMT AND SETTING BED (MUD SET)
17 REMOVE VINYL TACK SURFACE DOWN TO PLASTER WALL FINISH
18 REMOVE EX ELEC HAND DRYER AND EXPOSED CONDUIT AND WIRING. SEE ELEC SHTS FOR ADDIT INFO.
19 REMOVE EX WALL FINISH AS REQUIRED TO COMPLETE ALTERATIONS - SEE INT ELEVATIONS FOR ADDIT INFO.
20 SAWCUT AND REMOVE EX CONC SLAB AS REQUIRED FOR PLBG ALTERATIONS
21 REMOVE EX SHEET VINYL, ADHESIVE AND BASE. REMOVE TRANSITION STRIP WH/ OCCURS
22 REMOVE WHITE BOARD/CHALK BOARD, HARDWARE AND ASSOCIATED ANCHOR - DELIVER TO OWNER
23 REMOVE SMART BOARD SYSTEM, HARDWARE AND ASSOCIATED ANCHOR - DELIVER TO OWNER
24 REMOVE CLASSROOM ACCESSORY AND ASSOCIATED HARDWARE
25 REMOVE EX LOUVERS AT HVAC EQUIPMENT. INFILL WALL. INSTALL INT/EXT FINS TO MATCH ADJACENT.
26 EX FURRING WALL AND HYDRONIC LINES WITHIN TO REMAIN
27 EX CARPET FIN TO REMAIN
28 EX FLOOR ACCESS PANEL. REPLACE CARPET INSERT
29 EX CER TILE FLOORING TO REMAIN
30 EX VINYL FLOORING FIN TO REMAIN
31 EX FLOOR MOUNTED PARTITION SYSTEM TO REMAIN
32 EX WASHROOM ACCESSORY TO REMAIN

17-02-09

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

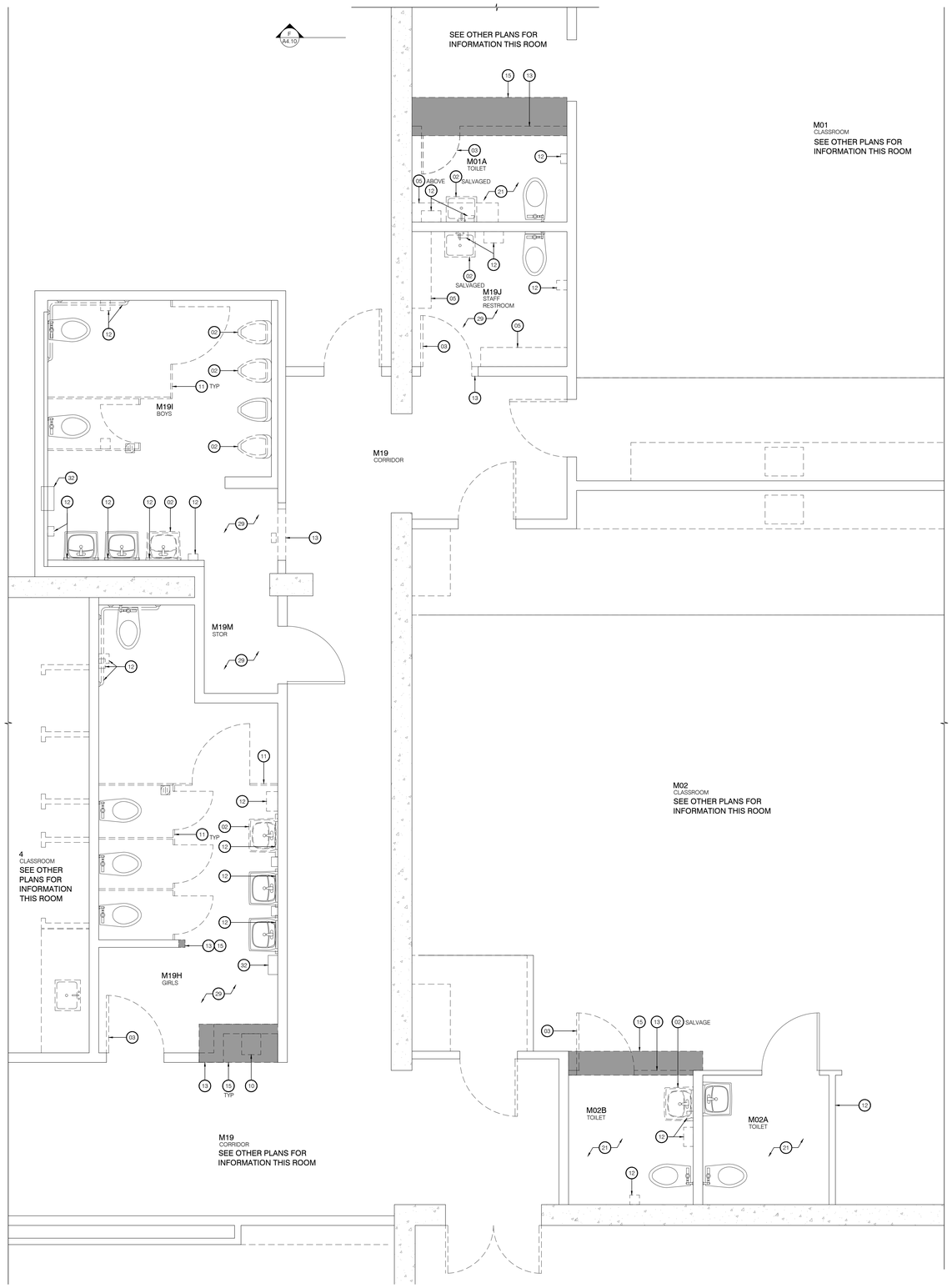
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

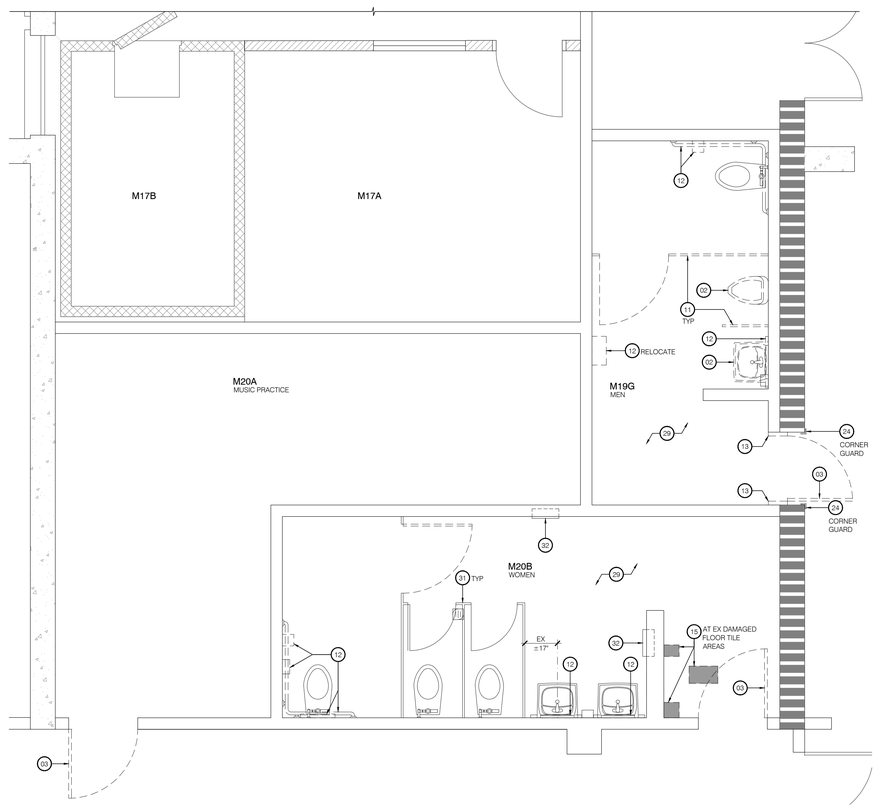
DEMOLITION FLOOR PLANS

A2.11



A. Partial Demolition Floor Plan - Building M-3

Scale: 3/8" = 1'-0"



B. Partial Demolition Floor Plan - Building M-1

Scale: 3/8" = 1'-0"

DEMOLITION LEGEND

Line Style	Description
	EX WALL TO REMAIN
	EX WALL TO BE REMOVED
	EX 2-HR RATED WALL TO REMAIN
	EX ITEM TO BE REMOVED (DASHED LINE)

17-02-10

GENERAL DEMOLITION NOTES

1. SEE INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION ON ITEMS TO BE REMOVED.
2. REMOVE EX ANCHORS, CONNECTORS, FASTENERS ETC. AT ITEMS INDICATED TO BE REMOVED.
3. REMOVE AND SALVAGE EX FLOOR MTD DOOR STOPS AT FLOORING INDICATED TO BE REMOVED.
4. REMOVE AND SALVAGE EX DOOR THRESHOLDS AT FLOORING INDICATED TO BE REMOVED.
5. REMOVE EX ELECTRICAL CONDUIT, BOXES AND DEVICES AT WALLS INDICATED TO BE REMOVED-SEE ELEC SHTS FOR ADDITIONAL INFO.
6. REMOVE EX UTILITY LINES AT WALLS INDICATED TO BE REMOVED-SEE MECH/PLBG SHTS FOR ADDITIONAL INFO.
7. SEE REFLECTED CLG PLAN FOR ADDITIONAL INFORMATION ON ITEMS TO BE REMOVED.
8. EXISTING ACCESSORIES LOCATED IN ROOMS TO BE REMOVED BY OWNER PRIOR TO CONSTRUCTION. UNO.
9. EX EMS DEVICES AND CONDUITS TO BE REMOVED BY OWNERS CONTROL CONTRACTOR.
10. GRIND EX CONC FLOOR AS REQ TO RECEIVE FLOOR FINISHES.
11. EXISTING ROOM SIGNAGE TO BE SALVAGED AND DELIVERED TO OWNER INCLUDING EXT DOOR SIGNAGE WH/ OCCURS.
12. EQUIPMENT, MATERIALS AND SUPPLIES TEMPORARILY REMOVED FOR PROTECTION SHALL BE REPLACED IN ORIGINAL LOCATIONS. ANY MATERIALS DAMAGED SHALL BE REPLACED WITH NEW MATERIALS OF LIKE KIND AND QUALITY.
13. CAREFULLY PROTECT ALL WALLS, TRIM, FLOORS, EQUIPMENT, UTILITY LINES AND MATERIALS TO REMAIN. WHEN WORKING ON FINISHED SURFACES, LIMIT DAMAGE TO THE SMALLER AREA IF POSSIBLE AND RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION/ DEMOLITION OF THIS WORK.
14. EX DOOR HARDWARE TO BE SALVAGED AND DELIVERED TO OWNER WHERE INDICATED TO BE REMOVED.
15. SEE ELEC, MECH, AND PLBG SHTS FOR ADDITIONAL DEMOLITION REQS.
16. ALL FINISHES (WALLS/FLOOR/CLG/ETC) AFFECTED BY DEMOLITION SCOPE (INCLUDING AREAS OF ITEM REMOVAL) SHALL BE PATCHED/ REPAIRED TO MATCH ADJACENT FINISH MATERIAL/ COLOR/ TEXTURE/ ETC.
17. COORDINATE WITH HAZARDOUS MATERIAL REPORTS FOR ANY APPLICABLE ABATEMENT OF DEMOLITION SCOPE.

17-02-12

DEMOLITION FLOOR PLAN KEYNOTES

01 REMOVE EX HVAC EQUIPMENT, WALL LOUVER AND ASSOCIATED PIPING - SEE MECH SHTS FOR ADDIT INFO - SEE FLOOR PLAN FOR FLOOR INFILL AT REMOVED DUCTING
02 REMOVE EX PLBG FIXTURE, HARDWARE AND ASSOCIATED PIPING - SEE PLUMBING SHTS FOR ADDIT INFO. SALVAGE FOR REINSTALLATION WH/ NOTED
03 REMOVE EXISTING DOOR, FRAME AND ASSOCIATED HARDWARE/ APPURTENANCES
04 REMOVE EX WINDOW SYSTEM AND ASSOCIATED HARDWARE
05 REMOVE EX CABINET(S)/SHELF/ WALL PANELING AND ASSOCIATED HARDWARE. REMOVE SUPPORTING WALL AND FLOOR MOUNTED CARPENTRY AS REQD. SEE FLOOR PLAN FOR ADDIT INFO
06 REMOVE EX VINYL FLOORING, ADHESIVE AND BASE
07 REMOVE EX CARPET, ADHESIVE AND BASE
08 REMOVE EX CARPET TILE, AND ADHESIVE AS REQUIRED FOR CABINETRY REPLACEMENT. REMOVE EX HD CARPET TILE AND ADHESIVE AT REMOVED DOOR WH/OCCURS.
09 REMOVE EX FEX - DELIVER TO OWNER
10 REMOVE EX DRINKING FOUNTAIN AND ASSOCIATED PLUMBING - SEE PLBG SHTS FOR ADDIT INFO
11 REMOVE EX TOILET PARTITION SYSTEM AND ASSOCIATED HARDWARE
12 REMOVE EX WASHROOM ACCESSORY AND ASSOCIATED ANCHORS. SALVAGE AND DELIVER TO OWNER AT REQUESTED LOCATION WITHIN CAMPUS
13 REMOVE EX PARTITION WALL, CURB, AND ASSOCIATED ANCHORS
14 REMOVE EX PORTION OF WALL/ FINISH AS REQUIRED TO COMPLETE ALTERATIONS. SEE INT ELEVATIONS FOR ADDIT INFO.
15 REMOVE PORTION OF EXISTING FLOOR/ FIN AS REQUIRED
16 REMOVE EX UCMT AND SETTING BED (MUD SET)
17 REMOVE VINYL TACK SURFACE DOWN TO PLASTER WALL FINISH
18 REMOVE EX ELEC HAND DRYER AND EXPOSED CONDUIT AND WIRING. SEE ELEC SHTS FOR ADDIT INFO.
19 REMOVE EX WALL FINISH AS REQUIRED TO COMPLETE ALTERATIONS - SEE INT ELEVATIONS FOR ADDIT INFO.
20 SAWCUT AND REMOVE EX CONC SLAB AS REQUIRED FOR PLBG ALTERATIONS
21 REMOVE EX SHEET VINYL, ADHESIVE AND BASE. REMOVE TRANSITION STRIP WH/ OCCURS
22 REMOVE WHITE BOARD/CHALK BOARD, HARDWARE AND ASSOCIATED ANCHOR - DELIVER TO OWNER
23 REMOVE SMART BOARD SYSTEM, HARDWARE AND ASSOCIATED ANCHOR - DELIVER TO OWNER
24 REMOVE CLASSROOM ACCESSORY AND ASSOCIATED HARDWARE
25 REMOVE EX LOUVERS AT HVAC EQUIPMENT. INFILL WALL. INSTALL INT/EXT FINS TO MATCH ADJACENT
26 EX FURRING WALL AND HYDRONIC LINES WITHIN TO REMAIN
27 EX CARPET FIN TO REMAIN
28 EX FLOOR ACCESS PANEL. REPLACE CARPET INSERT
29 EX CER TILE FLOORING TO REMAIN
30 EX VINYL FLOORING FIN TO REMAIN
31 EX FLOOR MOUNTED PARTITION SYSTEM TO REMAIN
32 EX WASHROOM ACCESSORY TO REMAIN

17-02-09

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

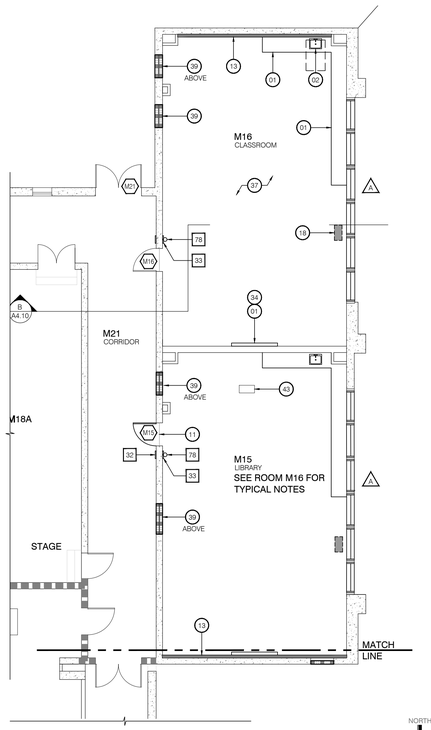
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

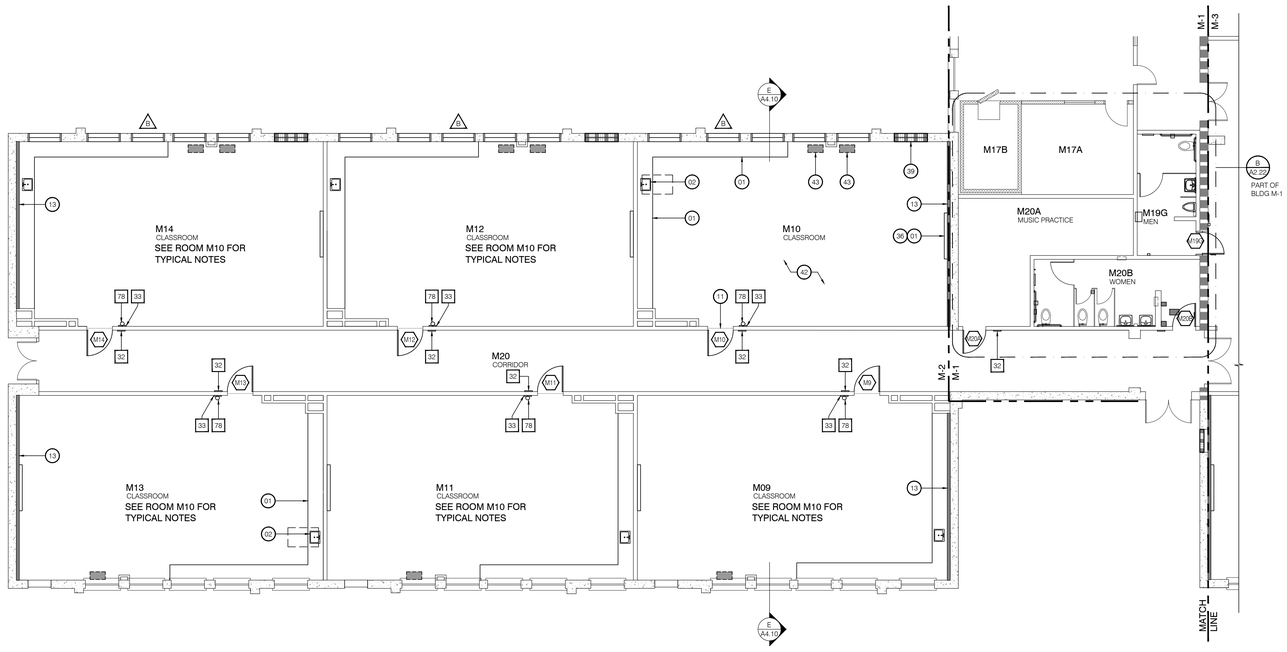
PARTIAL DEMOLITION FLOOR PLANS

A2.12



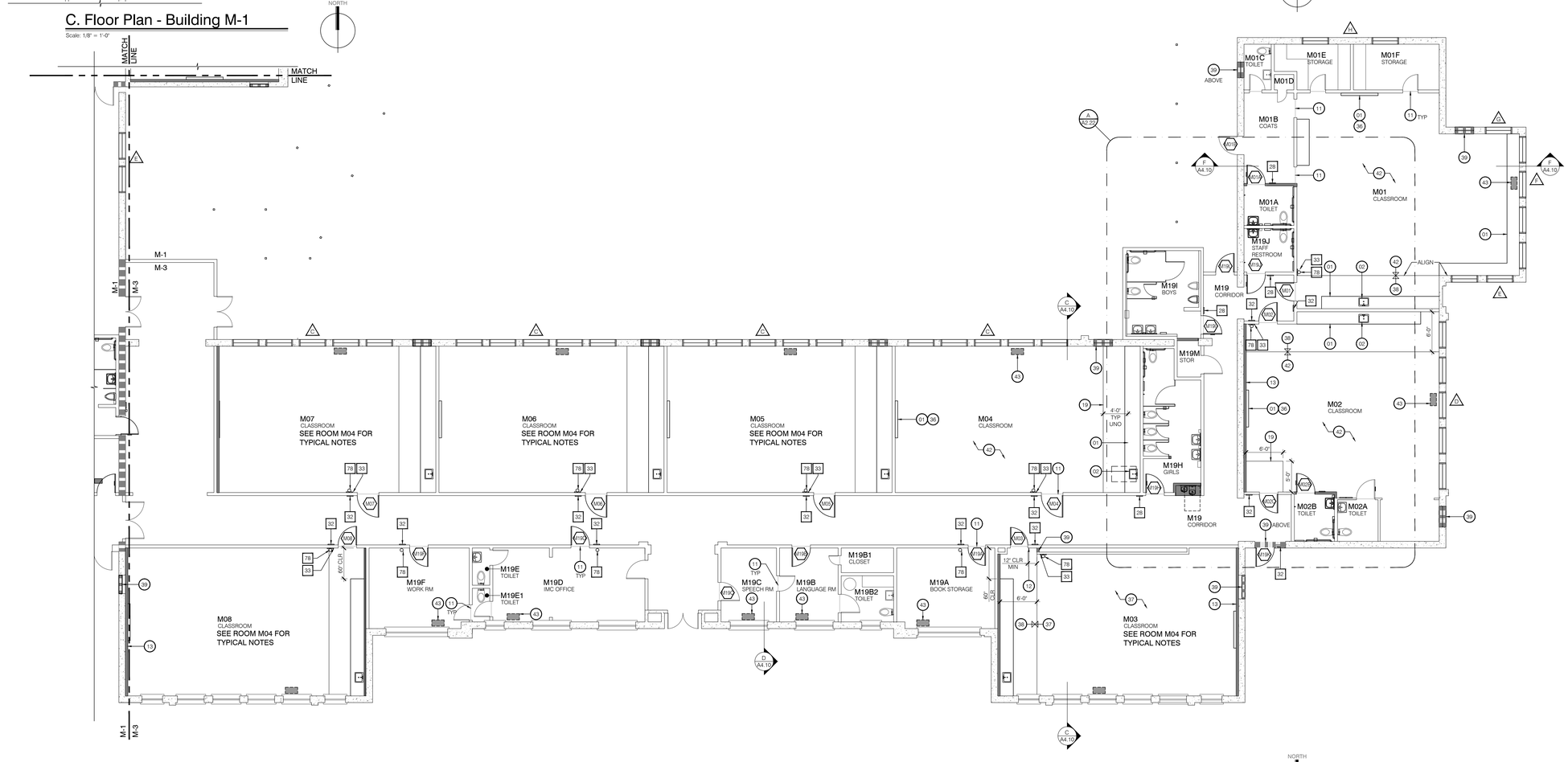
C. Floor Plan - Building M-1

Scale: 1/8" = 1'-0"



A. Floor Plan - Building M-2

Scale: 1/8" = 1'-0"



B. Floor Plan - Building M-3

Scale: 1/8" = 1'-0"

GENERAL FLOOR PLAN NOTES

1. PATCH WALL AND CEILING PENETRATIONS FLUSH TO MATCH ADJACENT FINISH WHERE ITEMS INDICATED TO BE REMOVED. RATED WALLS TO BE PATCHED OR SEALED W/ MATERIALS TO MAINTAIN REQUIRED WALL RATING.
2. SEAL EX HVAC DUCTWORK TO REMAIN IN AREA OF CONSTRUCTION PRIOR TO START OF CONSTRUCTION.
3. PATCH WALL AND CLG FINISH(ES) FLUSH TO MATCH ADJACENT FINISH WHERE EX MECH, PLBG AND ELEC ITEMS ARE INDICATED TO BE REMOVED IN EX WALLS AND CEILINGS.
4. PATCH CONC FLOOR FLUSH TO MATCH ADJACENT FINISH WHERE ITEMS INDICATED TO BE REMOVED.
5. REINSTALL EX SALVAGED FLOOR MTD DOOR STOPS AT EX DOORS TO REMAIN UNO.
6. REINSTALL EX SALVAGED DOOR THRESHOLDS AT EX DOORS TO REMAIN UNO.
7. RESEAL PERIMETER OF EX EXTERIOR DOOR AND WINDOW FRAMES W/ ES4 SEALANT.
8. SEE DTL 53/A8.05 54/A8.07 FOR TYP WALL INFILL AT EXISTING WALL
9. SEE DTL 35/A8.05 FOR TYP BACKING AT SURFACE MTD ACCESSORY
10. SEE DTL 36/A8.05 FOR TYP RECESSED ACCESSORY FRMG
11. SEE DTL 22/A8.04 FOR TYP ACCESSORY MTG HEIGHTS
12. SEE DTL 15/A8.04 FOR TYP DOOR SIGN INSTALLATION

17-02-08

FLOOR PLAN LEGEND

Line Style	Description	Detail
	EX 2x WD STUD AT 16" OC	
	EX 2x WD STUD AT 16" OC W/ MUDSET TILE FINISH	
	EX 2-HR RATED WALL	
	2x WD STUD AT 16" OC W/ BATT INSUL IN CAVITIES. INFILL WH/ OCCURS	25/A8.04
	2x6 (2x4 AS REQ'D AT EXISTING WALL INFILL) WD STUD AT 16" OC W/ TILE WH/OCCURS	26/A8.04
	2x WD STUD AT 16" OC	23/A8.03
	EX CONC WALL	

17-02-11

FLOOR PLAN KEYNOTES (TBE)

01 CABINETRY - SEE INT ELEVS FOR ADDIT INFO 28/A8.05
02 COUNTER MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO 16/A8.05
03 WALL MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO 43/A8.05
04 WALL MTD URINAL AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO 21/A8.05
05 WALL MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO 41/A8.05
06 FLR MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO 41/A8.05
07 FLR DRAIN - SEE PLBG SHTS FOR ADDIT INFO
08 DUAL (HIGH-LOW) DRINKING FOUNTAIN - SEE PLBG SHTS FOR ADDIT INFO 28/A8.05
09 WALL MTD HOSE BIBB - SEE PLBG SHTS FOR ADDIT INFO
10 INSTALL GYP BD FIN AS REQUIRED AT REMOVED DOOR FRAME. CONTINUE TO PROPOSED DOOR FRAME LOCATION - PAINT (SEMI-GLOSS)
11 INSTALL FLOOR FIN TRANSITION/ REDUCER AS REQUIRED
12 INSTALL WALL FIN AT AREA OF REMOVED WALL - SEE GENERAL NOTES FOR ADDIT INFO
13 2x4 FURRING WALL
14 AUTO-DOOR OPERATOR - SEE DETAIL/ ELECTRICAL 16/A8.05
15 ALUM WINDOW SYSTEM - EX WH/ NOTED - SEE PLANS/ WINDOW SCHEDULE FOR ADDIT INFO
16 MUDSET UCMT TO MATCH EX - AREA AS REQUIRED FOR ALTERATION 24/A8.05
17 CONC SLAB INFILL AT DEPRESSED SLAB 55/A8.05
18 CONC SLAB INFILL AT UTILITY TRENCH 55/A8.05 SIM
19 LINE OF REPLACED/ REINSTALLED CARPET TILES AS REQUIRED
20 EXISTING FLOOR MOUNTED TOILET WITH TOILET SET AT +17" AND TOUCHLESS FLUSH VALVE
21 EXISTING WALL MOUNTED URINAL WITH RIM AT +17" AND TOUCHLESS FLUSH VALVE
22 EXISTING COUNTER AT +33" WITH +29" CLEAR BELOW
23 EXISTING WALL MOUNTED SINK WITH FAUCET AT +34" MAX AND +29" MIN CLEARANCE
24 EXISTING SOAP DISPENSER MOUNTED AT +40" TO OPERATOR
25 EXISTING MIRROR MOUNTED AT MAX +40" TO MIRROR SURFACE
26 EXISTING FLOOR MOUNTED PARTITION SYSTEM
27 EXISTING ACCESSIBLE DUAL HEIGHT DRINKING FOUNTAIN
28 EXISTING RESTROOM SIGNAGE
29 EXISTING WALL MOUNTED HAND DRYER WITH CONTROLS AT 40" MAX AFF
30 EXISTING WALL MOUNTED TOILET PAPER DISPENSER
31 EXISTING WALL MOUNTED DISPENSER WITH CONTROLS AT +40" MAX AFF
32 EX BUILDING OVERHANG
33 EXISTING COUNTER MOUNTED SINK WITH TOUCHLESS FAUCET
34 EXISTING WALL MOUNTED TOILET W/ TOILET SEAT AT +17"
35 EXISTING FLOOR ACCESS PANEL TO REMAIN
36 SMART WALL DISPLAY SYSTEM
37 CARPET TILE FLOORING
38 SHEET VINYL FLOORING
39 INFILL WALL AT REMOVED DOOR/ WINDOW/ WALL
40 CARPET/ TRIM AT EX FLOOR ACCESS PANEL
41 METAL HANDRAILS AT EX DF 44/A8.05
42 EX CARPET TO REMAIN
43 RAISED FLOOR INFILL 56/A8.05

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

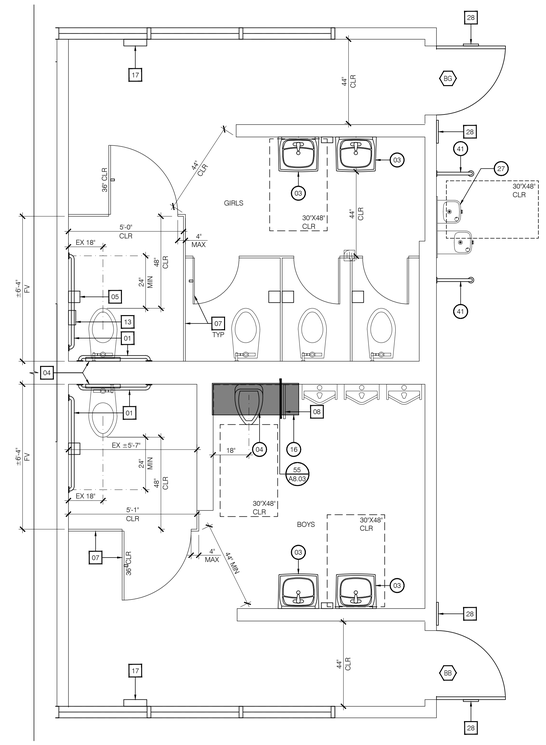
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

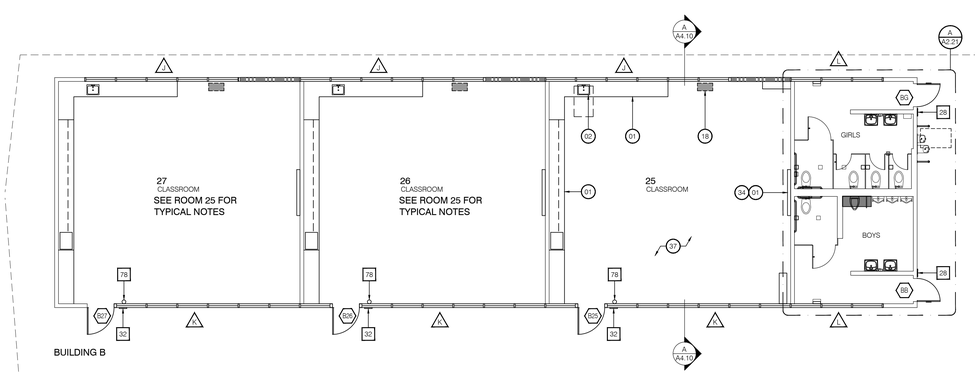
FLOOR PLANS

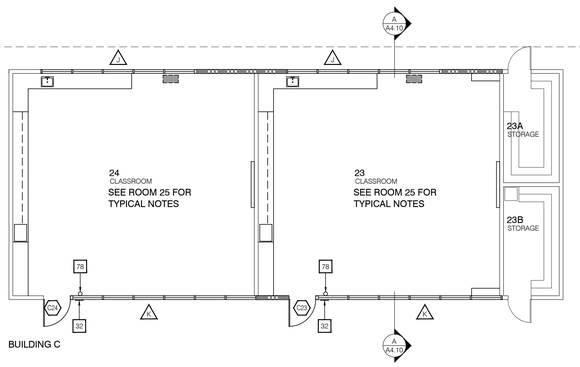
A2.20



A. Partial Floor Plan - Building B

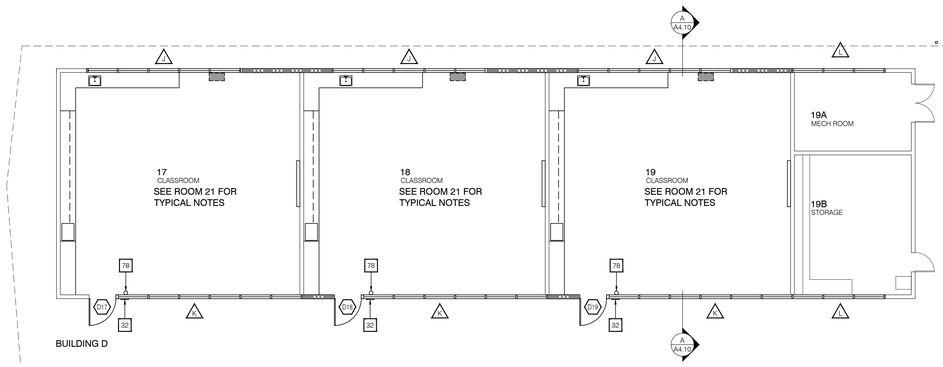
Scale: 3/8" = 1'-0"

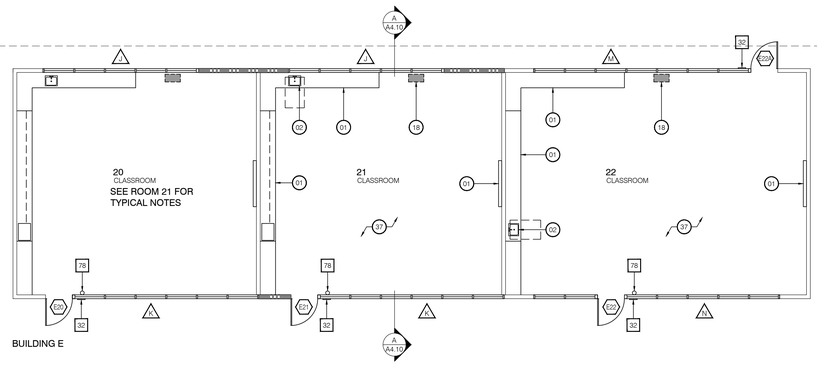




B. Floor Plan (Buildings B & C)

Scale: 1/8" = 1'-0"





C. Floor Plan (Buildings D & E)

Scale: 1/8" = 1'-0"

GENERAL FLOOR PLAN NOTES

1. PATCH WALL AND CEILING PENETRATIONS FLUSH TO MATCH ADJACENT FINISH WHERE ITEMS INDICATED TO BE REMOVED. RATED WALLS TO BE PATCHED OR SEALED W/ MATERIALS TO MAINTAIN REQUIRED WALL RATING.
2. SEAL EX HVAC DUCTWORK TO REMAIN IN AREA OF CONSTRUCTION PRIOR TO START OF CONSTRUCTION.
3. PATCH WALL AND CLG FINISH(ES) FLUSH TO MATCH ADJACENT FINISH WHERE EX MECH, PLBG AND ELEC ITEMS ARE INDICATED TO BE REMOVED IN EX WALLS AND CEILINGS.
4. PATCH CONC FLOOR FLUSH TO MATCH ADJACENT FINISH WHERE ITEMS INDICATED TO BE REMOVED.
5. REINSTALL EX SALVAGED FLOOR MTD DOOR STOPS AT EX DOORS TO REMAIN UNO.
6. REINSTALL EX SALVAGED DOOR THRESHOLDS AT EX DOORS TO REMAIN UNO.
7. RESEAL PERIMETER OF EX EXTERIOR DOOR AND WINDOW FRAMES W/ ES4 SEALANT.
8. SEE DTL 53/A8.03 AND 54/A8.03 FOR TYP WALL INFILL AT EXISTING WALL
9. SEE DTL 56/A8.05 FOR TYP BACKING AT SURFACE MTD ACCESSORY
10. SEE DTL 36/A8.03 FOR TYP RECESSED ACCESSORY FRMG
11. SEE DTL 22/A8.04 FOR TYP ACCESSORY MTG HEIGHTS
12. SEE DTL 15/A8.05 FOR TYP DOOR SIGN INSTALLATION

17-02-08

FLOOR PLAN LEGEND

Line Style	Description	Detail
	EX 2x WD STUD AT 16" OC	
	EX 2x WD STUD AT 16" OC W/ MUDSET TILE FINISH	
	EX 2-HR RATED WALL	
	2x WD STUD AT 16" OC W/ BATT INSUL IN CAVITIES. INFILL WH/ OCCURS	25/A8.04
	2x6 (2x4 AS REQ'D AT EXISTING WALL INFILL) WD STUD AT 16" OC W/ TILE WH/OCCURS	25/A8.04
	2x WD STUD AT 16" OC	25/A8.03
	EX CONC WALL	

17-02-11

FLOOR PLAN KEYNOTES (TBE)

01 CABINETRY - SEE INT ELEVS FOR ADDIT INFO 25/A8.00
02 COUNTER MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO 16/A8.00
03 WALL MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO 43/A8.00
04 WALL MTD URINAL AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO 21/A8.00
05 WALL MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO 41/A8.00
06 FLR MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO 41/A8.00
07 FLR DRAIN - SEE PLBG SHTS FOR ADDIT INFO
08 DUAL (HIGH-LOW) DRINKING FOUNTAIN - SEE PLBG SHTS FOR ADDIT INFO 28/A8.00
09 WALL MTD HOSE BIBB - SEE PLBG SHTS FOR ADDIT INFO
10 INSTALL GYP BD FIN AS REQUIRED AT REMOVED DOOR FRAME. CONTINUE TO PROPOSED DOOR FRAME LOCATION - PAINT (SEMI-GLOSS)
11 INSTALL FLOOR FIN TRANSITION/ REDUCER AS REQUIRED
12 INSTALL WALL FIN AT AREA OF REMOVED WALL - SEE GENERAL NOTES FOR ADDIT INFO
13 2x4 FURRING WALL
14 AUTO-DOOR OPERATOR - SEE DETAIL/ ELECTRICAL 16/A8.05
15 ALUM WINDOW SYSTEM - EX WH/ NOTED - SEE PLANS/ WINDOW SCHEDULE FOR ADDIT INFO
16 MUDSET UCMT TO MATCH EX - AREA AS REQUIRED FOR ALTERATION 24/A8.02
17 CONC SLAB INFILL AT DEPRESSED SLAB 55/A8.03
18 CONC SLAB INFILL AT UTILITY TRENCH 55/A8.03 SIM
19 LINE OF REPLACED/ REINSTALLED CARPET TILES AS REQUIRED
20 EXISTING FLOOR MOUNTED TOILET WITH TOILET SET AT +17" AND TOUCHLESS FLUSH VALVE
21 EXISTING WALL MOUNTED URINAL WITH RIM AT +17" AND TOUCHLESS FLUSH VALVE
22 EXISTING COUNTER AT +33" WITH +29" CLEAR BELOW
23 EXISTING WALL MOUNTED SINK WITH FAUCET AT +34" MAX AND +29" MIN CLEARANCE
24 EXISTING SOAP DISPENSER MOUNTED AT +40" TO OPERATOR
25 EXISTING MIRROR MOUNTED AT MAX +40" TO MIRROR SURFACE
26 EXISTING FLOOR MOUNTED PARTITION SYSTEM
27 EXISTING ACCESSIBLE DUAL HEIGHT DRINKING FOUNTAIN
28 EXISTING RESTROOM SIGNAGE
29 EXISTING WALL MOUNTED HAND DRYER WITH CONTROLS AT 40" MAX AFF
30 EXISTING WALL MOUNTED TOILET PAPER DISPENSER
31 EXISTING WALL MOUNTED DISPENSER WITH CONTROLS AT +40" MAX AFF
32 EX BUILDING OVERHANG
33 EXISTING COUNTER MOUNTED SINK WITH TOUCHLESS FAUCET
34 EXISTING WALL MOUNTED TOILET W/ TOILET SEAT AT +17"
35 EXISTING FLOOR ACCESS PANEL TO REMAIN
36 SMART WALL DISPLAY SYSTEM
37 CARPET TILE FLOORING
38 SHEET VINYL FLOORING
39 INFILL WALL AT REMOVED DOOR/ WINDOW/ WALL
40 CARPET/ TRIM AT EX FLOOR ACCESS PANEL
41 METAL HANDRAILS AT EX DF 44/A8.05
42 EX CARPET TO REMAIN
43 RAISED FLOOR INFILL 56/A8.05

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

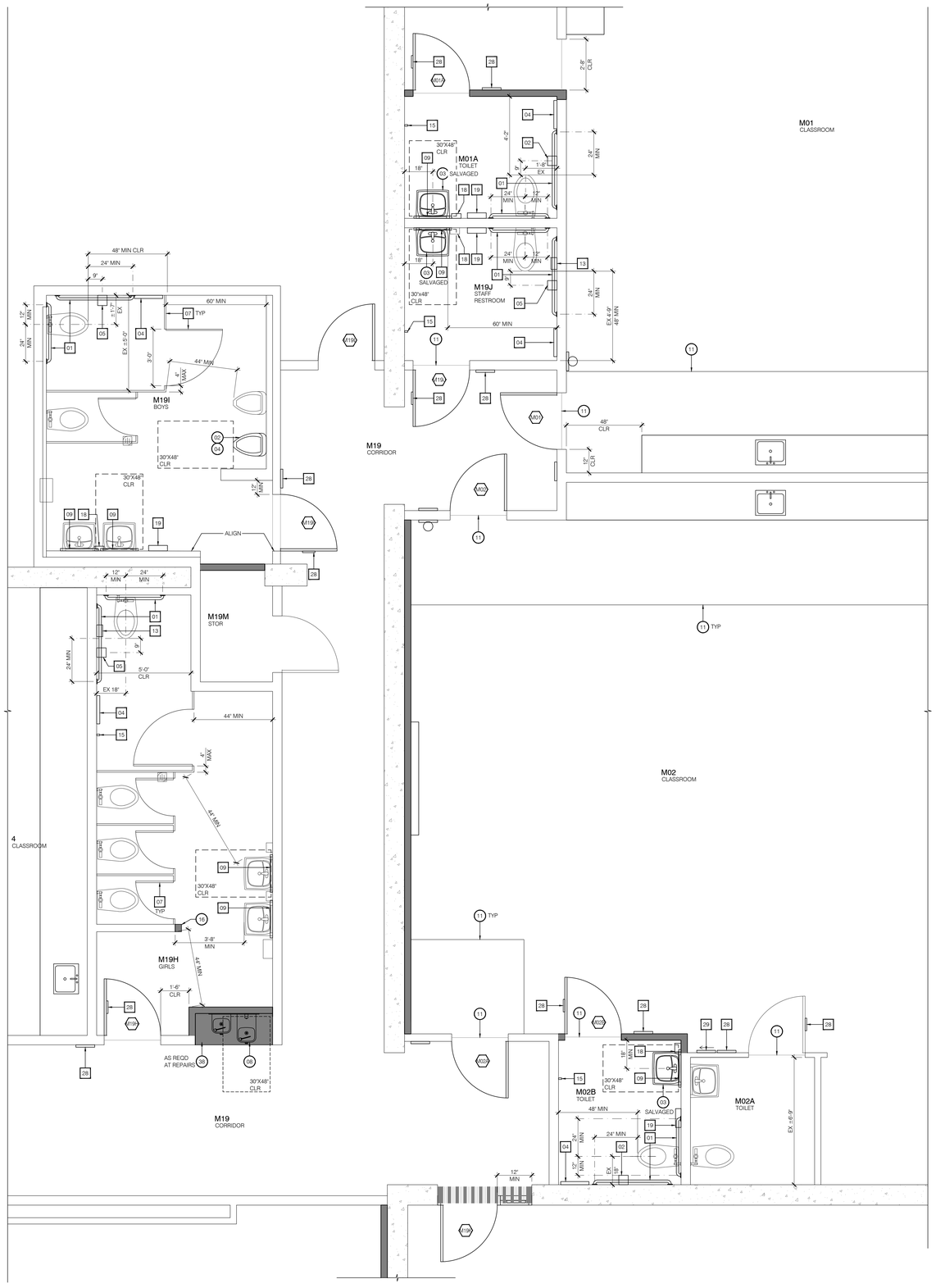
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

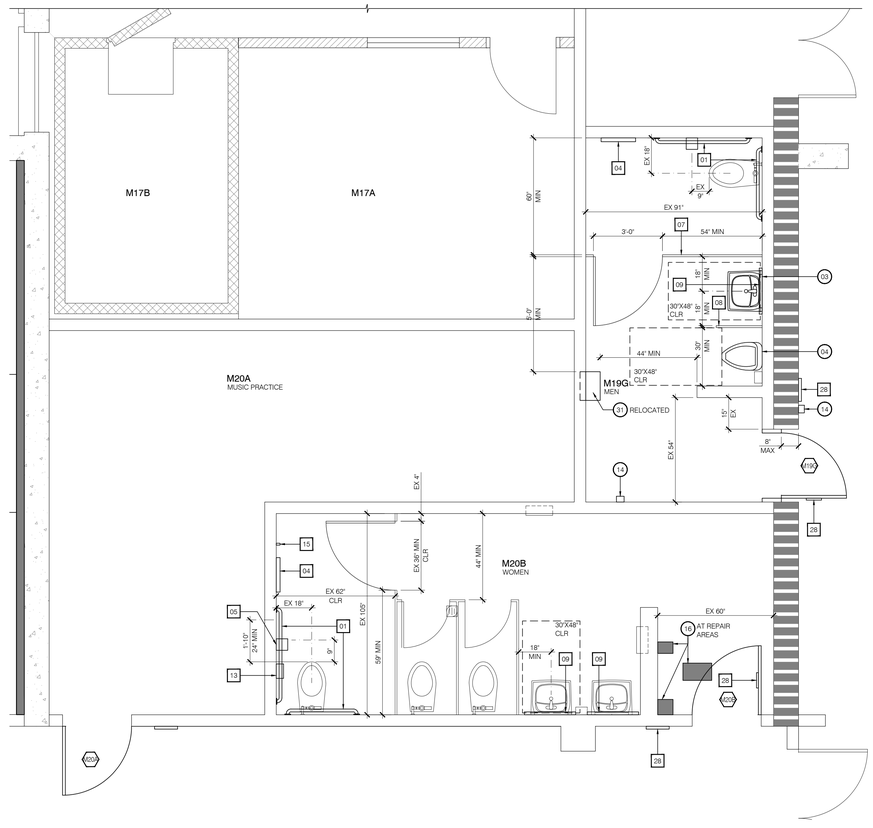
FLOOR PLANS

A2.21



A. Partial Floor Plan - Building M-3

Scale: 3/8" = 1'-0"



B. Partial Floor Plan - Building M-1

Scale: 3/8" = 1'-0"

GENERAL FLOOR PLAN NOTES

1. PATCH WALL AND CEILING PENETRATIONS FLUSH TO MATCH ADJACENT FINISH WHERE ITEMS INDICATED TO BE REMOVED. RATED WALLS TO BE PATCHED OR SEALED W/ MATERIALS TO MAINTAIN REQUIRED WALL RATING.
2. SEAL EX HVAC DUCTWORK TO REMAIN IN AREA OF CONSTRUCTION PRIOR TO START OF CONSTRUCTION.
3. PATCH WALL AND CLG FINISH(ES) FLUSH TO MATCH ADJACENT FINISH WHERE EX MECH, PLBG AND ELEC ITEMS ARE INDICATED TO BE REMOVED IN EX WALLS AND CEILINGS.
4. PATCH CONC FLOOR FLUSH TO MATCH ADJACENT FINISH WHERE ITEMS INDICATED TO BE REMOVED.
5. REINSTALL EX SALVAGED FLOOR MTD DOOR STOPS AT EX DOORS TO REMAIN UNO.
6. REINSTALL EX SALVAGED DOOR THRESHOLDS AT EX DOORS TO REMAIN UNO.
7. RESEAL PERIMETER OF EX EXTERIOR DOOR AND WINDOW FRAMES W/ ES4 SEALANT.
8. SEE DTL 53/A8.03 AND 54/A8.03 FOR TYP WALL INFILL AT EXISTING WALL
9. SEE DTL 56/A8.05 FOR TYP BACKING AT SURFACE MTD ACCESSORY
10. SEE DTL 30/A8.03 FOR TYP RECESSED ACCESSORY FRMG
11. SEE DTL 22/A8.00 FOR TYP ACCESSORY MTG HEIGHTS
12. SEE DTL 15/A8.00 FOR TYP DOOR SIGN INSTALLATION

17-02-08

FLOOR PLAN LEGEND

Line Style	Description	Detail
	EX 2x WD STUD AT 16" OC	
	EX 2X WD STUD AT 16" OC W/ THINSET TILE FINISH	
	EX 2-HR RATED WALL	
	EXT 2x WD STUD AT 16" OC W/ BATT INSUL IN CAVITIES. INFILL WH/ OCCURS	25/A8.04
	2x6 (2x4 AS REQ'D AT EXISTING WALL INFILL) WD STUD AT 16" OC W/ TILE WH/OCCURS	26/A8.04
	2x WD STUD AT 16" OC	25/A8.03
	EX CONC WALL	

17-02-11

FLOOR PLAN KEYNOTES (TBE)

01 CABINETRY - SEE INT ELEVS FOR ADDIT INFO (25/A8.00)
02 COUNTER MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (16/A8.00)
03 WALL MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (43/A8.00)
04 WALL MTD URINAL AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (21/A8.00)
05 WALL MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41/A8.00)
06 FLR MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41/A8.00)
07 FLR DRAIN - SEE PLBG SHTS FOR ADDIT INFO
08 DUAL (HIGH-LOW) DRINKING FOUNTAIN - SEE PLBG SHTS FOR ADDIT INFO (26/A8.00)
09 WALL MTD HOSE BIBB - SEE PLBG SHTS FOR ADDIT INFO
10 INSTALL GYP BD FIN AS REQUIRED AT REMOVED DOOR FRAME. CONTINUE TO PROPOSED DOOR FRAME LOCATION - PAINT (SEMI-GLOSS)
11 INSTALL FLOOR FIN TRANSITION/ REDUCER AS REQUIRED
12 INSTALL WALL FIN AT AREA OF REMOVED WALL - SEE GENERAL NOTES FOR ADDIT INFO
13 2x4 FURRING WALL
14 AUTO-DOOR OPERATOR - SEE DETAIL/ ELECTRICAL (18/A8.05)
15 ALUM WINDOW SYSTEM - EX WH/ NOTED - SEE PLANS/ WINDOW SCHEDULE FOR ADDIT INFO
16 MUDSET UCMT TO MATCH EX - AREA AS REQUIRED FOR ALTERATION (24/A8.02)
17 CONC SLAB INFILL AT DEPRESSED SLAB (55/A8.03)
18 CONC SLAB INFILL AT UTILITY TRENCH (50/A8.03) SIM
19 LINE OF REPLACED/ REINSTALLED CARPET TILES AS REQUIRED
20 EXISTING FLOOR MOUNTED TOILET WITH TOILET SET AT +17" AND TOUCHLESS FLUSH VALVE
21 EXISTING WALL MOUNTED URINAL WITH RIM AT +17" AND TOUCHLESS FLUSH VALVE
22 EXISTING COUNTER AT +33" WITH +29" CLEAR BELOW
23 EXISTING WALL MOUNTED SINK WITH FAUCET AT +34" MAX AND +29" MIN CLEARANCE
24 EXISTING SOAP DISPENSER MOUNTED AT +40" TO OPERATOR
25 EXISTING MIRROR MOUNTED AT MAX +40" TO MIRROR SURFACE
26 EXISTING FLOOR MOUNTED PARTITION SYSTEM
27 EXISTING ACCESSIBLE DUAL HEIGHT DRINKING FOUNTAIN
28 EXISTING RESTROOM SIGNAGE
29 EXISTING WALL MOUNTED HAND DRYER WITH CONTROLS AT 40" MAX AFF
30 EXISTING WALL MOUNTED TOILET PAPER DISPENSER
31 EXISTING WALL MOUNTED DISPENSER WITH CONTROLS AT +40" MAX AFF
32 EX BUILDING OVERHANG
33 EXISTING COUNTER MOUNTED SINK WITH TOUCHLESS FAUCET
34 EXISTING WALL MOUNTED TOILET W/ TOILET SEAT AT +17"
35 EXISTING FLOOR ACCESS PANEL TO REMAIN
36 SMART WALL DISPLAY SYSTEM
37 CARPET TILE FLOORING
38 SHEET VINYL FLOORING
39 INFILL WALL AT REMOVED DOOR/ WINDOW/ WALL
40 CARPET/ TRIM AT EX FLOOR ACCESS PANEL
41 METAL HANDRAILS AT EX DF (44/A8.05)
42 EX CARPET TO REMAIN
43 RAISED FLOOR INFILL (56/A8.05)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

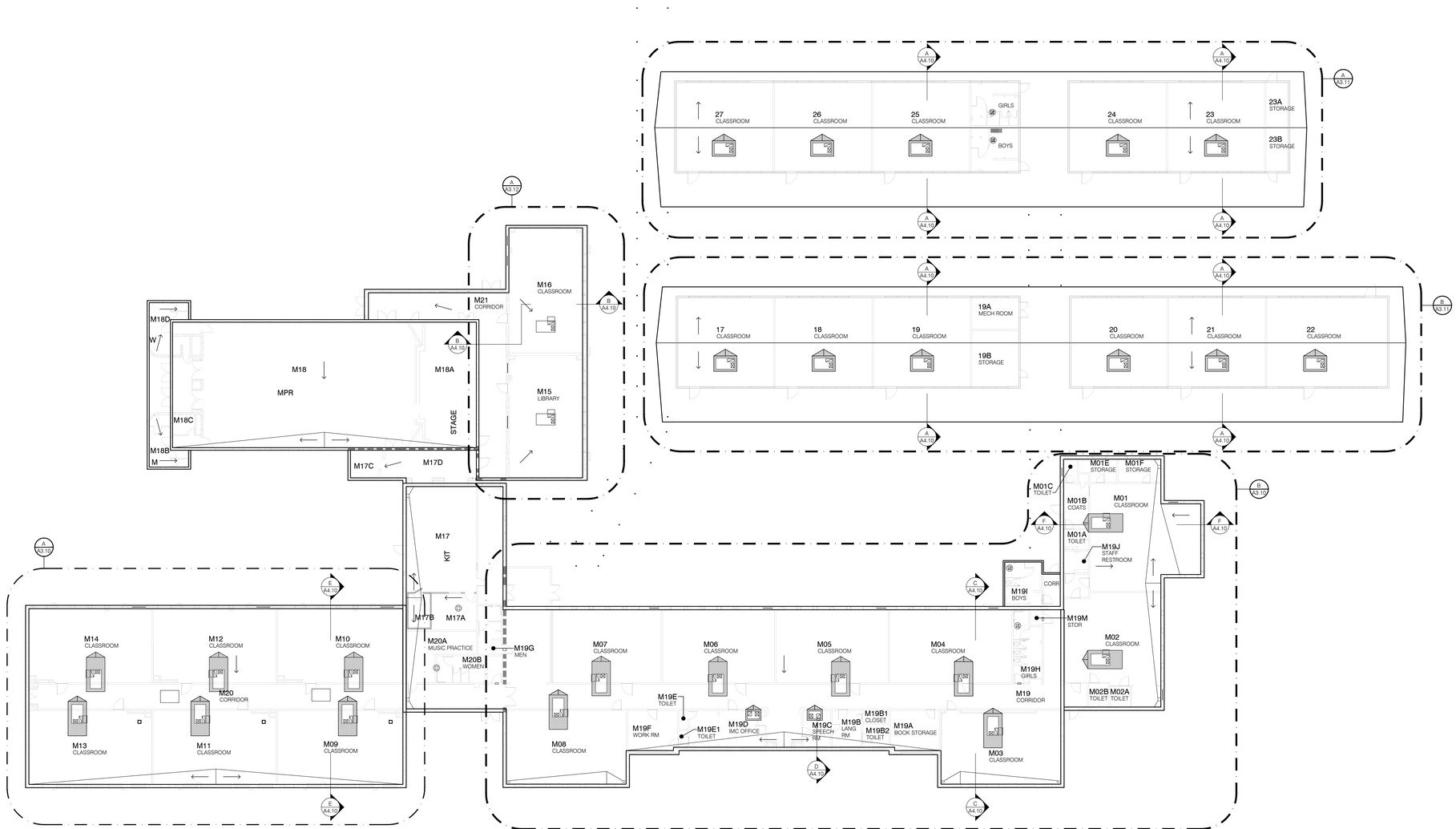
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

PARTIAL FLOOR PLANS

A2.22



Overall Roof Plan

Scale: 1/16" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

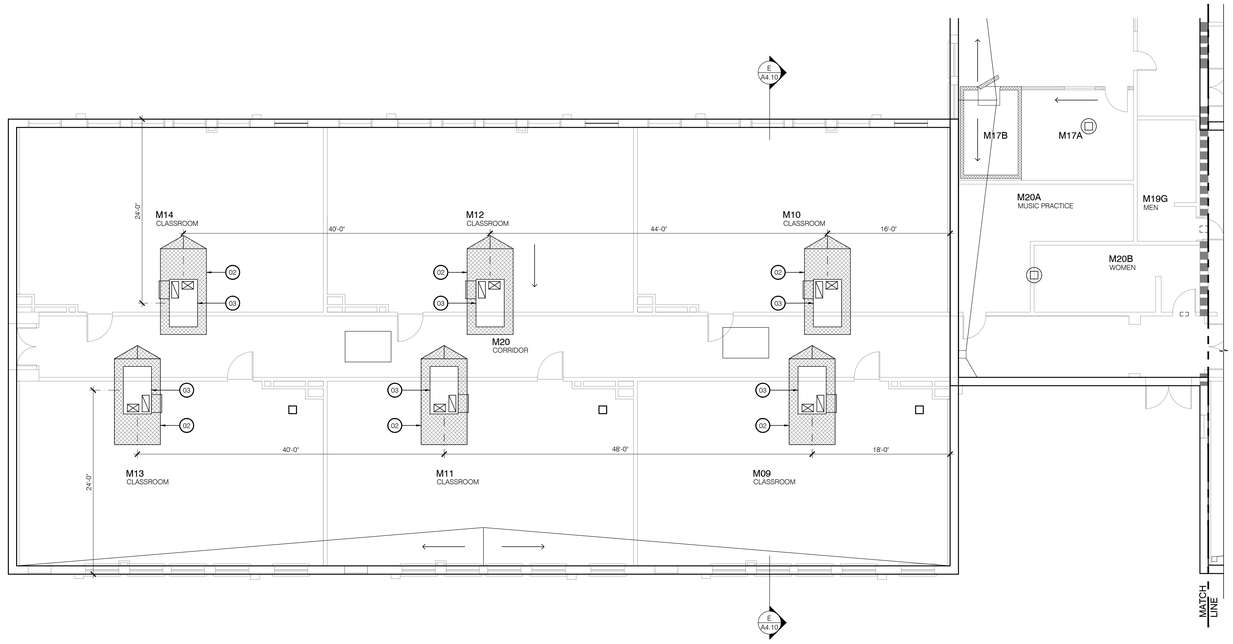
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

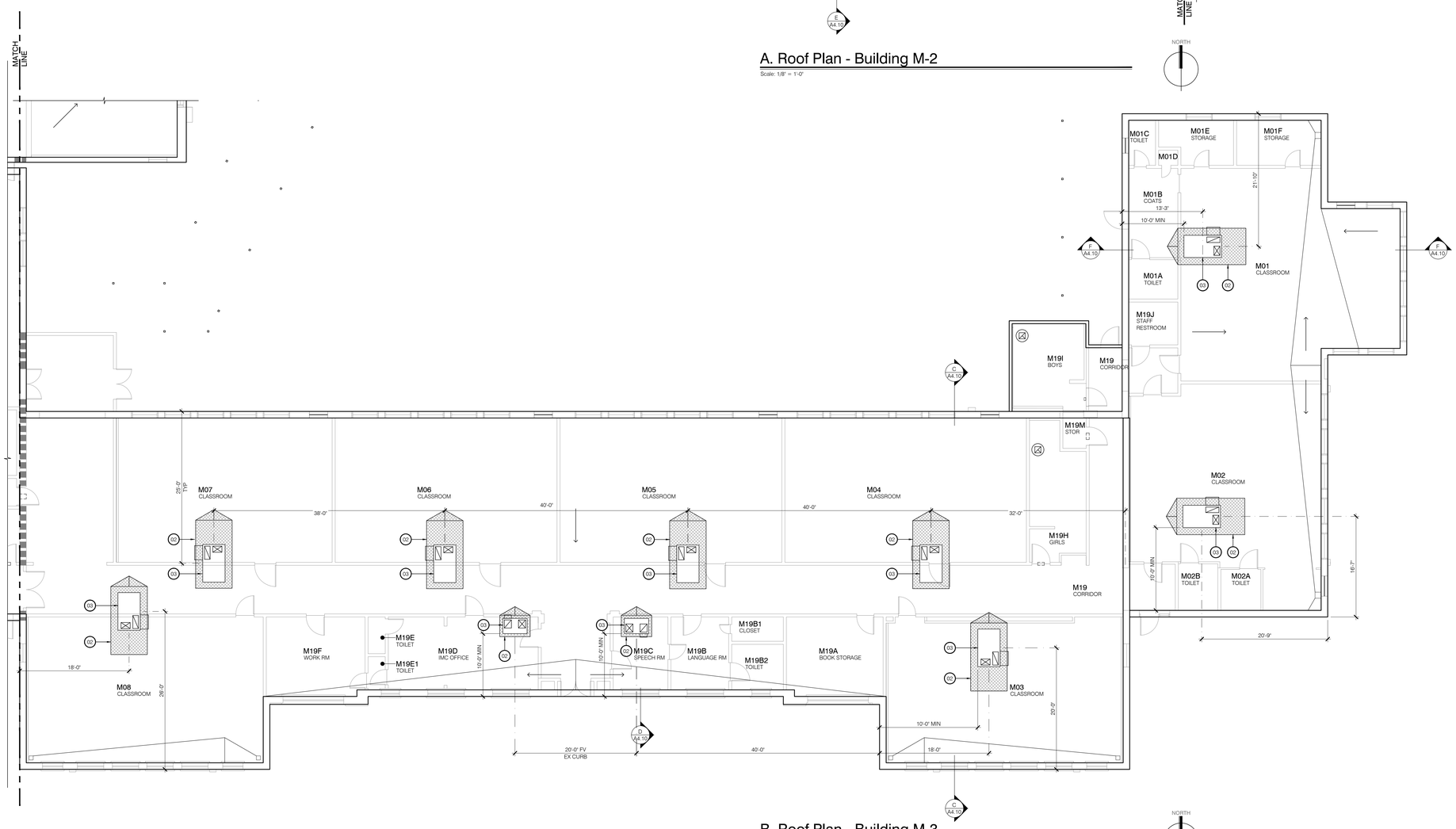
OVERALL ROOF PLAN

A3.00



A. Roof Plan - Building M-2

Scale: 1/8" = 1'-0"



B. Roof Plan - Building M-3

Scale: 1/8" = 1'-0"

ROOF NOTES

1. IT IS THE INTENT OF THE CONTRACT DOCUMENTS TO PLACE THE RESPONSIBILITY FOR THE WATER-TIGHTNESS OF THE ROOF ALTERATIONS UNDER THE ROOFING CONTRACTOR. IN SUBMITTING A BID, THE ROOFING CONTRACTOR AND MANUFACTURER WHOSE MATERIAL HE PROPOSES TO USE, AGREE TO THE CONDITIONS SET FORTH IN ALL THE CONTRACT DOCUMENTS.
2. CONTRACTOR AGREES THAT ALL CONDITIONS AS SET FORTH IN SAID DOCUMENTS ARE COMPLETE AND MEET THEIR SPECIFIC REQUIREMENTS FOR A ROOF OF THE PERIOD SPECIFIED.
3. IN THE EVENT THE DOCUMENTS DO NOT COMPLETELY OR CORRECTLY COVER THE MANUFACTURERS SPECIFIC REQUIREMENTS, THE ROOFING CONTRACTOR SHALL PROVIDE THE SAME IN HIS BID. UNDER NO CIRCUMSTANCES WILL AN EXTRA BE ALLOWED FOR HIS FAILURE TO COMPLY WITH REQUIREMENTS HEREIN AND MANUFACTURERS WRITTEN REQUIREMENTS.
4. THE DETAILS SHOWN ON THE CONSTRUCTION DOCUMENTS SHALL BE INCORPORATED INTO THE PROJECT AT ALL APPROPRIATE LOCATIONS WHETHER SPECIFICALLY REFLECTED AT EACH LOCATION OR NOT.
5. ALL NEW VENTS THRU ROOF SHALL BE EXTENDED TO 12" MINIMUM DISTANCE ABOVE ROOF DECK.
6. ALL ROOF SLOPES SHOWN ARE APPROXIMATE. SEE SECTIONS FOR ELEVATIONS AND SIMILAR REFERENCES.
7. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL ROOF PENETRATIONS NOT SHOWN HERE.

TYPICAL ROOF DETAILS

PFR Roofing

1/A8.01	PFR SYSTEM	3/A8.01	PIPE/CONDUIT PENETRATION	*	NOT USED
2/A8.01	EQUIPMENT MFR CURB	*	NOT USED	*	NOT USED

ROOFING MATERIAL REQS

1. PFR ROOFING:
   CLASS A - SEE PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS

ROOF PLAN KEYNOTES

01. EX PFR ROOFING OVER EX COMP SHINGLE ROOF / BUR.
02. REMOVE AND REPLACE PFR ROOFING AS REQUIRED FOR ROOF FRAMING MODIFICATIONS AND HVAC INSTALLATION. PFR ROOFING TO MATCH EX. PROVIDE POSITIVE DRAINAGE AROUND HVAC CURB.
03. HVAC EQUIPMENT ON TAPERED ROOF CURB - SEE MECH SHTS FOR ADDIT INFO. SEE ELEC SHTS FOR REQUIRED ELECTRICAL CONNECTIONS AND ROOF PENETRATIONS.
04. PFR ROOFING TO MATCH EX AT EX ROOF RELIEF VENT REMOVED. INFILL ROOF FRMG PER STRUCT SHTS
05. REPLACE EX ROOF EXHAUST FAN W/ TAPERED ROOF CURB - SEE MECH SHTS FOR ADDIT INFO
06. REMOVE AND REPLACE EX PFR ROOFING AS REQUIRED FOR MECH EQUIP REPLACEMENT
07. MECH ROOF VENT - SEE MECH SHTS FOR ADDIT INFO

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

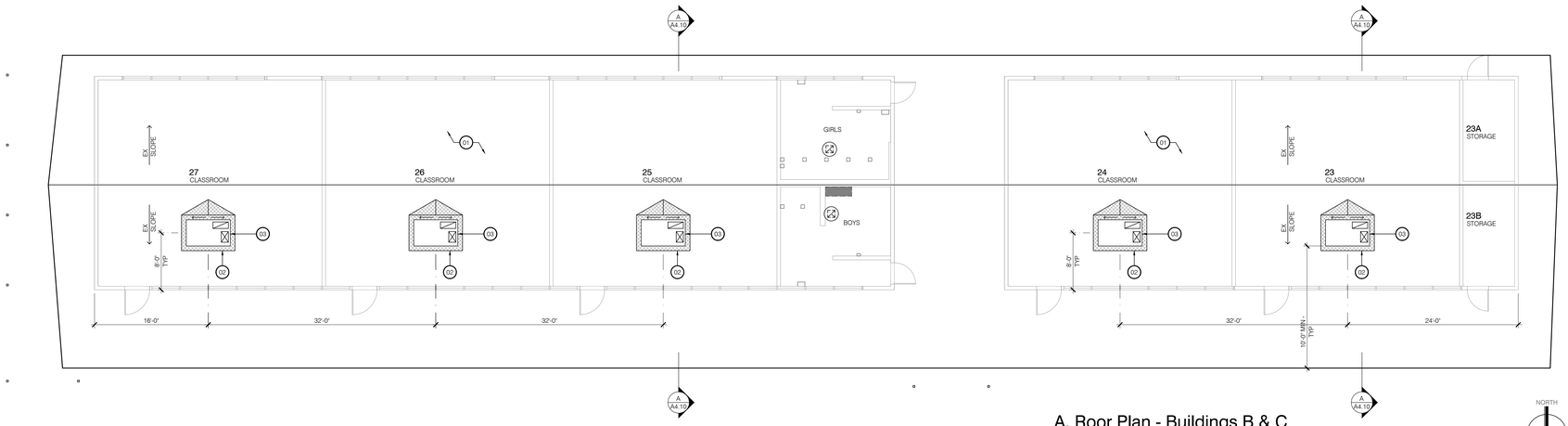
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

ROOF PLANS

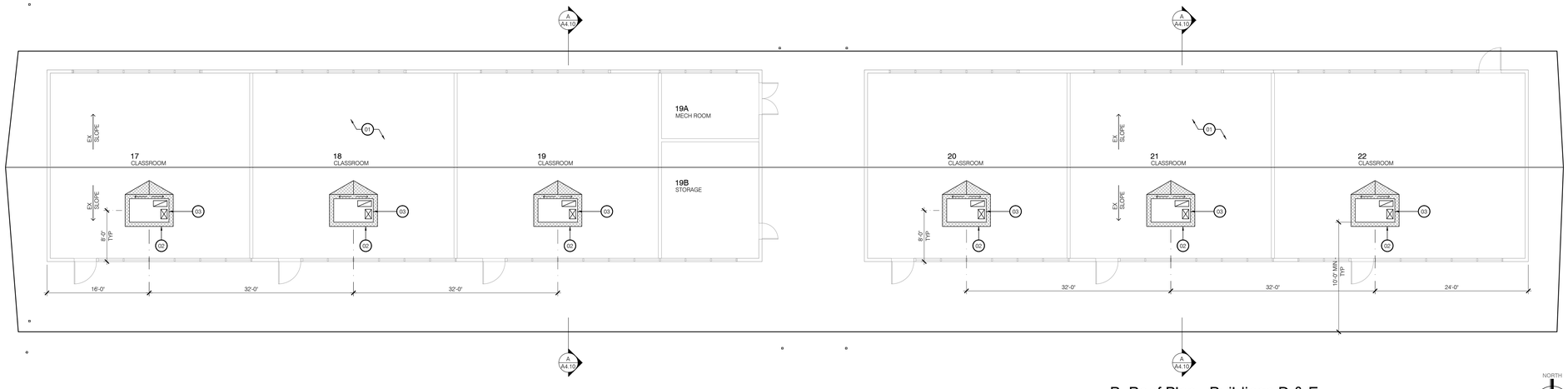
A3.10



A. Roor Plan - Buildings B & C

Scale: 1/8" = 1'-0"

NORTH



B. Roof Plan - Buildings D & E

Scale: 1/8" = 1'-0"

NORTH

ROOF NOTES

1. IT IS THE INTENT OF THE CONTRACT DOCUMENTS TO PLACE THE RESPONSIBILITY FOR THE WATER-TIGHTNESS OF THE ROOF ALTERATIONS UNDER THE ROOFING CONTRACTOR. IN SUBMITTING A BID, THE ROOFING CONTRACTOR AND MANUFACTURER WHOSE MATERIAL HE PROPOSES TO USE, AGREE TO THE CONDITIONS SET FORTH IN ALL THE CONTRACT DOCUMENTS.
2. CONTRACTOR AGREES THAT ALL CONDITIONS AS SET FORTH IN SAID DOCUMENTS ARE COMPLETE AND MEET THEIR SPECIFIC REQUIREMENTS FOR A ROOF OF THE PERIOD SPECIFIED.
3. IN THE EVENT THE DOCUMENTS DO NOT COMPLETELY OR CORRECTLY COVER THE MANUFACTURERS SPECIFIC REQUIREMENTS, THE ROOFING CONTRACTOR SHALL PROVIDE THE SAME IN HIS BID. UNDER NO CIRCUMSTANCES WILL AN EXTRA BE ALLOWED FOR HIS FAILURE TO COMPLY WITH REQUIREMENTS HEREIN AND MANUFACTURERS WRITTEN REQUIREMENTS.
4. THE DETAILS SHOWN ON THE CONSTRUCTION DOCUMENTS SHALL BE INCORPORATED INTO THE PROJECT AT ALL APPROPRIATE LOCATIONS WHETHER SPECIFICALLY REFLECTED AT EACH LOCATION OR NOT.
5. ALL NEW VENTS THRU ROOF SHALL BE EXTENDED TO 12" MINIMUM DISTANCE ABOVE ROOF DECK.
6. ALL ROOF SLOPES SHOWN ARE APPROXIMATE. SEE SECTIONS FOR ELEVATIONS AND SIMILAR REFERENCES.
7. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL ROOF PENETRATIONS NOT SHOWN HERE.

TYPICAL ROOF DETAILS

PFR Roofing

1 A A8.01	PFR SYSTEM	34 A8.01	PIPE/CONDUIT PENETRATION	-	NOT USED
24 A8.01	EQUIPMENT MFR CURB	-	NOT USED	-	NOT USED

ROOFING MATERIAL REQS

1. PFR ROOFING:
   CLASS A - SEE PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS

ROOF PLAN KEYNOTES

01 EX PFR ROOFING OVER EX COMP SHINGLE ROOF / BUR.

02 REMOVE AND REPLACE PFR ROOFING AS REQUIRED FOR ROOF FRAMING MODIFICATIONS AND HVAC INSTALLATION. PFR ROOFING TO MATCH EX. PROVIDE POSITIVE DRAINAGE AROUND HVAC CURB.

03 HVAC EQUIPMENT ON TAPERED ROOF CURB - SEE MECH SHTS FOR ADDIT INFO. SEE ELEC SHTS FOR REQUIRED ELECTRICAL CONNECTIONS AND ROOF PENETRATIONS.

04 PFR ROOFING TO MATCH EX AT EX ROOF RELIEF VENT REMOVED. INFILL ROOF FRMG PER STRUCT SHTS

05 REPLACE EX ROOF EXHAUST FAN W/ TAPERED ROOF CURB - SEE MECH SHTS FOR ADDIT INFO

06 REMOVE AND REPLACE EX PFR ROOFING AS REQUIRED FOR MECH EQUIP REPLACEMENT

07 MECH ROOF VENT - SEE MECH SHTS FOR ADDIT INFO

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

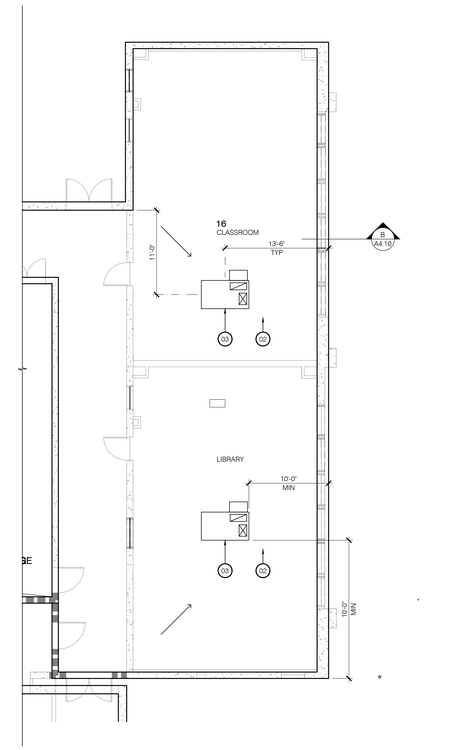
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

ROOF PLANS

A3.11



A. Roor Plan - Building M-1

Scale: 1/8" = 1'-0"

NORTH

ROOF NOTES

1. IT IS THE INTENT OF THE CONTRACT DOCUMENTS TO PLACE THE RESPONSIBILITY FOR THE WATER-TIGHTNESS OF THE ROOF ALTERATIONS UNDER THE ROOFING CONTRACTOR. IN SUBMITTING A BID, THE ROOFING CONTRACTOR AND MANUFACTURER WHOSE MATERIAL HE PROPOSES TO USE, AGREE TO THE CONDITIONS SET FORTH IN ALL THE CONTRACT DOCUMENTS.
2. CONTRACTOR AGREES THAT ALL CONDITIONS AS SET FORTH IN SAID DOCUMENTS ARE COMPLETE AND MEET THEIR SPECIFIC REQUIREMENTS FOR A ROOF OF THE PERIOD SPECIFIED.
3. IN THE EVENT THE DOCUMENTS DO NOT COMPLETELY OR CORRECTLY COVER THE MANUFACTURERS SPECIFIC REQUIREMENTS, THE ROOFING CONTRACTOR SHALL PROVIDE THE SAME IN HIS BID. UNDER NO CIRCUMSTANCES WILL AN EXTRA BE ALLOWED FOR HIS FAILURE TO COMPLY WITH REQUIREMENTS HEREIN AND MANUFACTURERS WRITTEN REQUIREMENTS.
4. THE DETAILS SHOWN ON THE CONSTRUCTION DOCUMENTS SHALL BE INCORPORATED INTO THE PROJECT AT ALL APPROPRIATE LOCATIONS WHETHER SPECIFICALLY REFLECTED AT EACH LOCATION OR NOT.
5. ALL NEW VENTS THRU ROOF SHALL BE EXTENDED TO 12" MINIMUM DISTANCE ABOVE ROOF DECK.
6. ALL ROOF SLOPES SHOWN ARE APPROXIMATE. SEE SECTIONS FOR ELEVATIONS AND SIMILAR REFERENCES.
7. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL ROOF PENETRATIONS NOT SHOWN HERE.

TYPICAL ROOF DETAILS

PFR Roofing

1/A 5.01	PFR SYSTEM	3/A 5.01	PIPE/CONDUIT PENETRATION	* / *	NOT USED
2/A 5.01	EQUIPMENT MFR CURB	* / *	NOT USED	* / *	NOT USED

ROOFING MATERIAL REQS

1. PFR ROOFING:
   CLASS A - SEE PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS

ROOF PLAN KEYNOTES

01 EX PFR ROOFING OVER EX COMP SHINGLE ROOF / BUR.

02 REMOVE AND REPLACE PFR ROOFING AS REQUIRED FOR ROOF FRAMING MODIFICATIONS AND HVAC INSTALLATION. PFR ROOFING TO MATCH EX. PROVIDE POSITIVE DRAINAGE AROUND HVAC CURB.

03 HVAC EQUIPMENT ON TAPERED ROOF CURB - SEE MECH SHTS FOR ADDIT INFO. SEE ELEC SHTS FOR REQUIRED ELECTRICAL CONNECTIONS AND ROOF PENETRATIONS.

04 PFR ROOFING TO MATCH EX AT EX ROOF RELIEF VENT REMOVED. INFILL ROOF FRMG PER STRUCT SHTS

05 REPLACE EX ROOF EXHAUST FAN W/ TAPERED ROOF CURB - SEE MECH SHTS FOR ADDIT INFO

06 REMOVE AND REPLACE EX PFR ROOFING AS REQUIRED FOR MECH EQUIP REPLACEMENT

07 MECH ROOF VENT - SEE MECH SHTS FOR ADDIT INFO

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

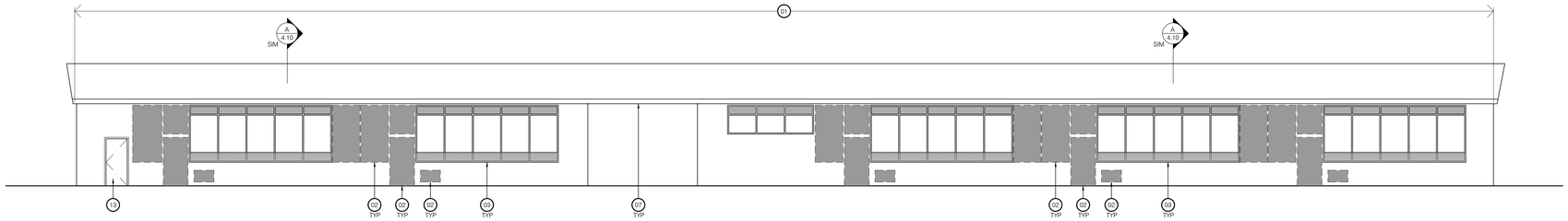
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

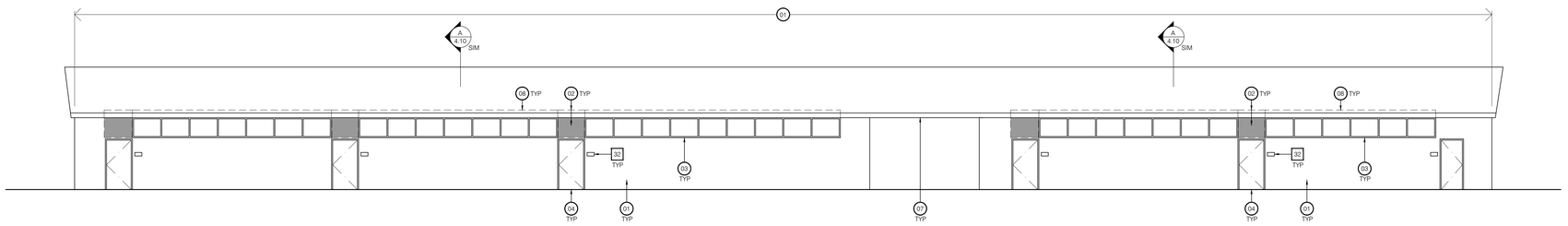
ROOF PLAN

A3.12



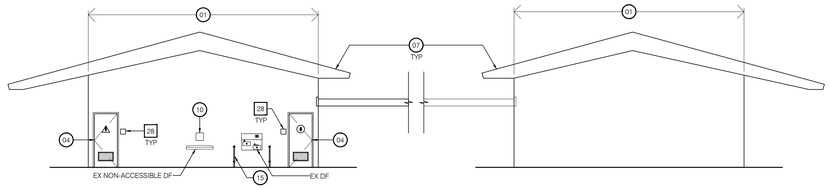
North Elevation- Building B & C

Scale: 1/8" = 1'-0"



South Elevation- Building B & C

Scale: 1/8" = 1'-0"

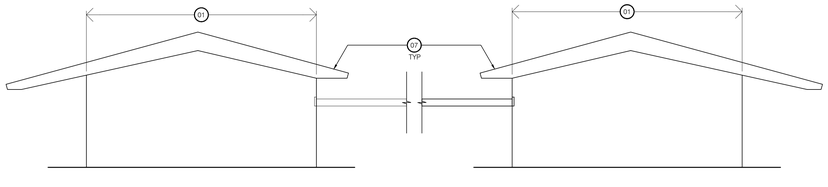


East Elevation- Building B

Scale: 1/8" = 1'-0"

West Elevation- Building B

Scale: 1/8" = 1'-0"

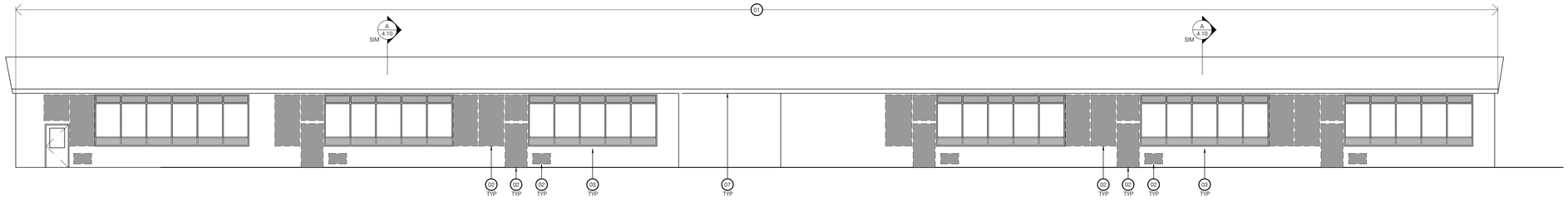


East Elevation- Building C

Scale: 1/8" = 1'-0"

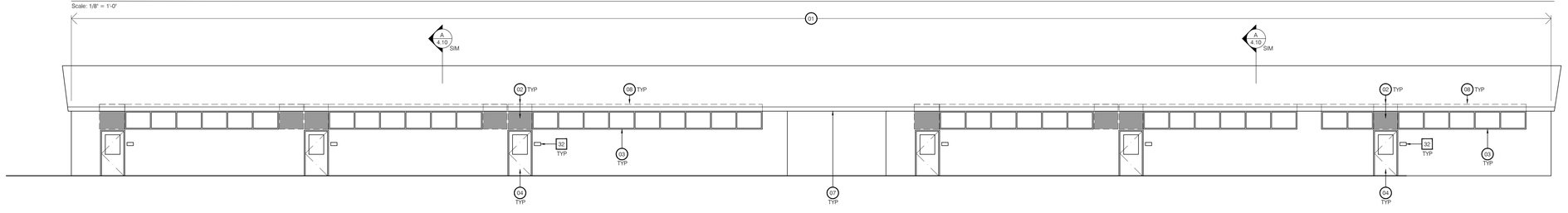
West Elevation- Building C

Scale: 1/8" = 1'-0"



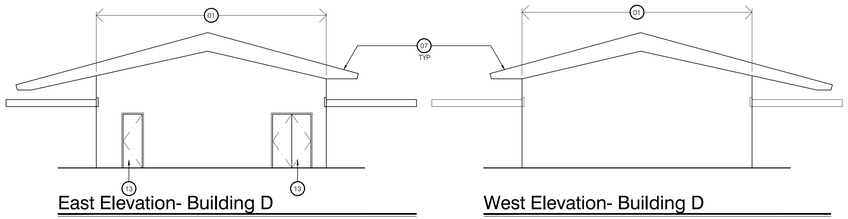
North Elevation- Building D & E

Scale: 1/8" = 1'-0"



South Elevation- Building D & E

Scale: 1/8" = 1'-0"

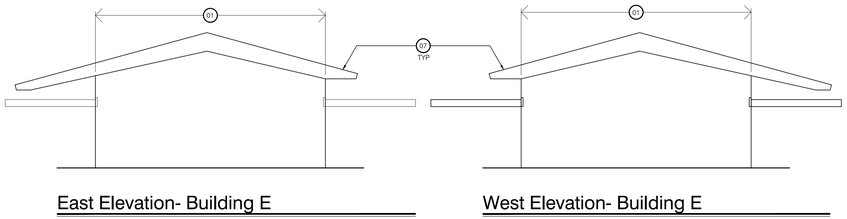


East Elevation- Building D

Scale: 1/8" = 1'-0"

West Elevation- Building D

Scale: 1/8" = 1'-0"



East Elevation- Building E

Scale: 1/8" = 1'-0"

West Elevation- Building E

Scale: 1/8" = 1'-0"

EXTERIOR ELEVATIONS KEYNOTES

01 CEM PLAS FIN AT EXT WALL - PAINT FULL HT. PAINT OTHER COMPONENTS, INCLUDING, BUT NOT LIMITED TO, METAL LOUVERS TO REMAIN
02 CEM PLAS FINISH OVER WD STUD INFILL FRMG - FIN TO MATCH EX
03 NAT ALUM WINDOW SYSTEM - SEE WINDOW SCHEDULE FOR ADDIT INFO
04 HM DOOR AND FRAME - PAINT
05 EX WINDOW SYSTEM
06 EX WD DOOR AND FRAME - PAINT
07 EX FASCIA - PAINT
08 LINE OF WINDOW SYSTEM BEYOND
09 HM DOOR AND EX FRAME - PAINT
10 REMOVE/ REINSTALL EX SIGN
11 EX WINDOW SYSTEM TO REMAIN
12 EX CEM PLAS FIN AT EXT WALL
13 EX HM DOOR AND FRAME TO REMAIN - PAINT
14 REMOVE EX PIPING HOUSING. REMOVE PIPE INTO WALL. INFILL WALL OPENING. PATCH WALL FIN TO MATCH ADJACENT SURFACES AT REMOVED HOUSING/ INFILLED OPENING
15 METAL RAIL GUARDS - SEE PLAN. PATCH/ REPAIR WALL FIN
16 REMOVE EX EXT METAL LOUVERS

17-02-15

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC: S3 (AB 03) S4 (AB 03)
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

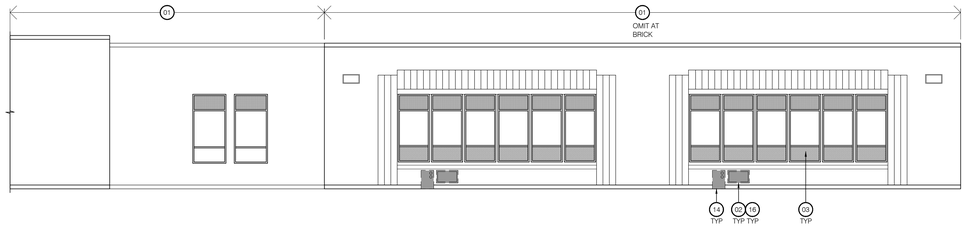
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

EXTERIOR ELEVATIONS

A4.00

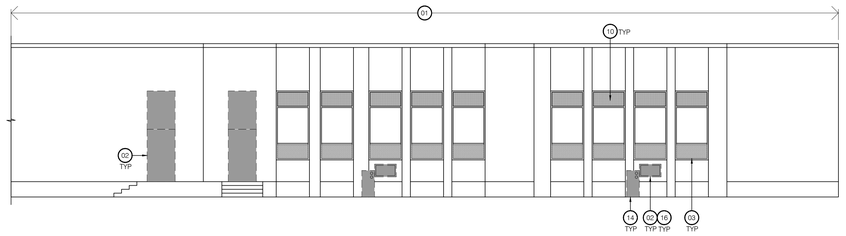


East Partial Elevation- Building M-1

Scale: 1/8" = 1'-0"

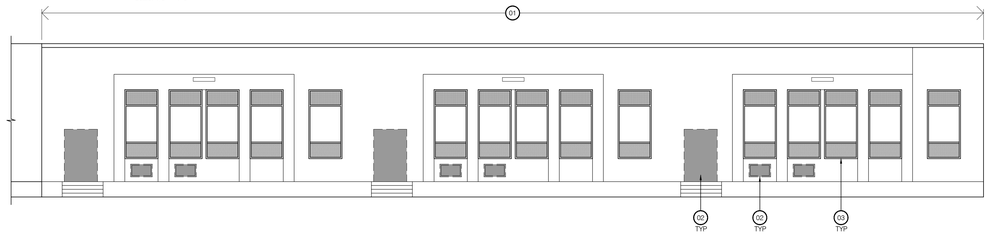
South Elevation- Building M-2

Scale: 1/8" = 1'-0"



East Elevation- Building M-3

Scale: 1/8" = 1'-0"

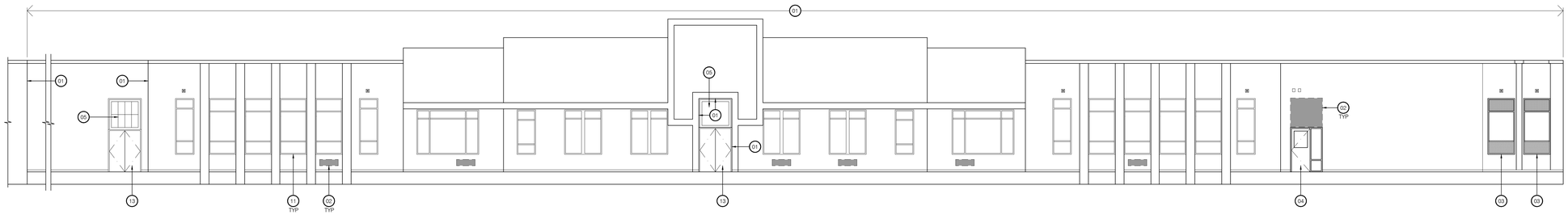


North Elevation- Building M-2

Scale: 1/8" = 1'-0"

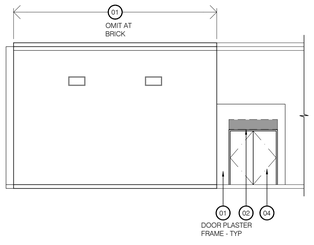
North Elevation- Building M-3

Scale: 1/8" = 1'-0"



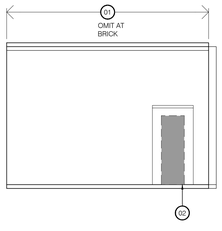
South Elevation- Building M-3

Scale: 1/8" = 1'-0"



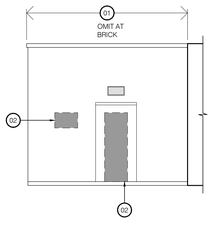
North Elevation- Building M-1

Scale: 1/8" = 1'-0"



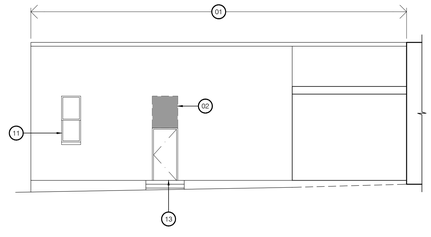
South Elevation- Building M-1

Scale: 1/8" = 1'-0"



West Elevation- Building M-1

Scale: 1/8" = 1'-0"



West Elevation- Building M-3

Scale: 1/8" = 1'-0"

EXTERIOR ELEVATIONS KEYNOTES

01 CEM PLAS FIN AT EXT WALL - PAINT FULL HT. PAINT OTHER COMPONENTS, INCLUDING, BUT NOT LIMITED TO, METAL LOUVERS TO REMAIN

02 CEM PLAS FINISH OVER WD STUD INFILL FRMG - FIN TO MATCH EX

03 NAT ALUM WINDOW SYSTEM - SEE WINDOW SCHEDULE FOR ADDIT INFO

04 HM DOOR AND FRAME - PAINT

05 EX WINDOW SYSTEM

06 EX WD DOOR AND FRAME - PAINT

07 EX FASCIA - PAINT

08 LINE OF WINDOW SYSTEM BEYOND

09 HM DOOR AND EX FRAME - PAINT

10 REMOVE/ REINSTALL EX SIGN

11 EX WINDOW SYSTEM TO REMAIN

12 EX CEM PLAS FIN AT EXT WALL

13 EX HM DOOR AND FRAME TO REMAIN - PAINT

14 REMOVE EX PIPING HOUSING. REMOVE PIPE INTO WALL. INFILL WALL OPENING. PATCH WALL FIN TO MATCH ADJACENT SURFACES AT REMOVED HOUSING/ INFILLED OPENING

15 METAL RAIL GUARDS - SEE PLAN. PATCH/ REPAIR WALL FIN

16 REMOVE EX EXT METAL LOUVERS

17-02-15

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC: S3 (AB 03) S4 (AB 03)
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

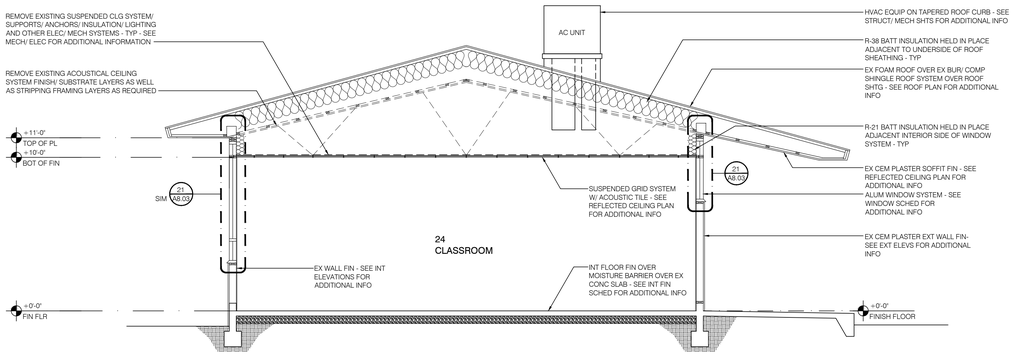
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:37

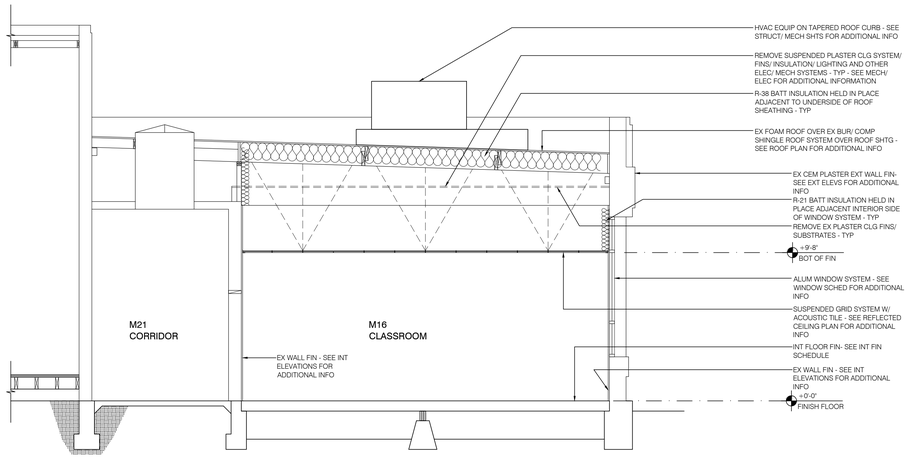
EXTERIOR ELEVATIONS

A4.01



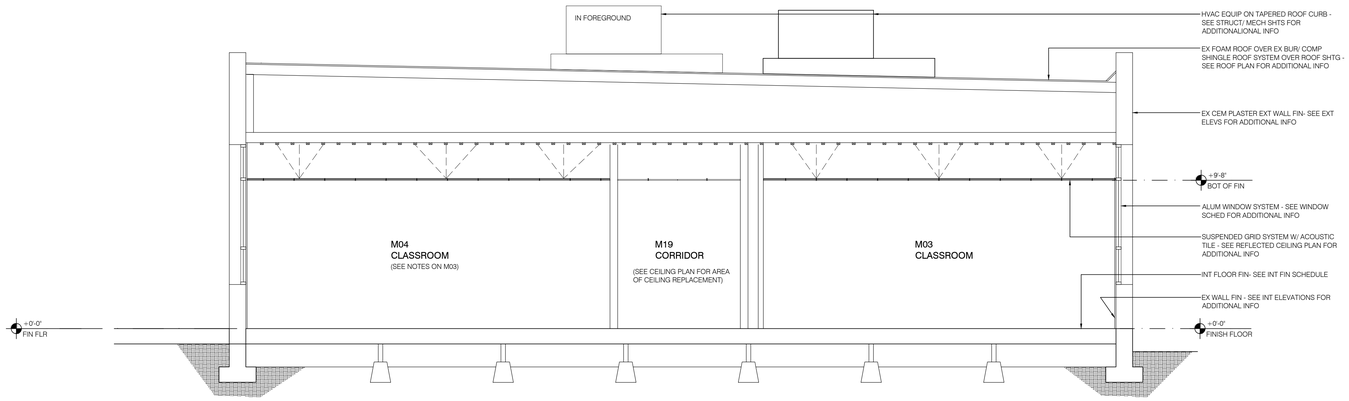
A. Classroom Section (Bldgs B,C,D & E)

Scale: 1/4" = 1'-0"



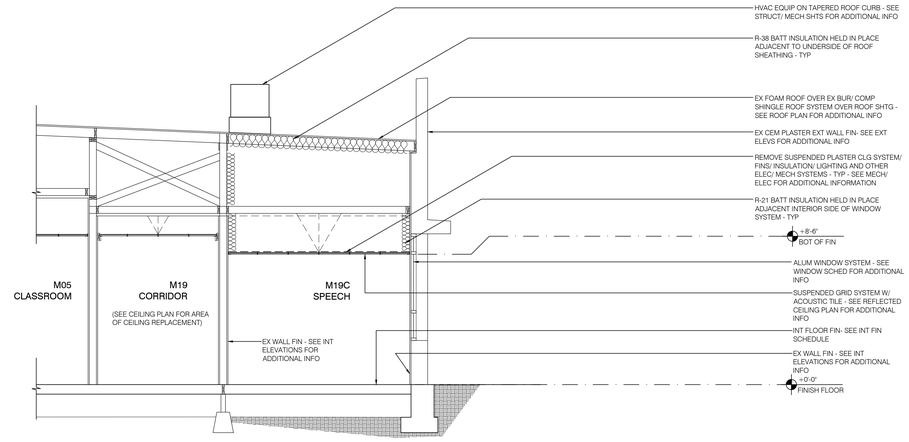
B. Building M-1 Partial Section

Scale: 1/4" = 1'-0"



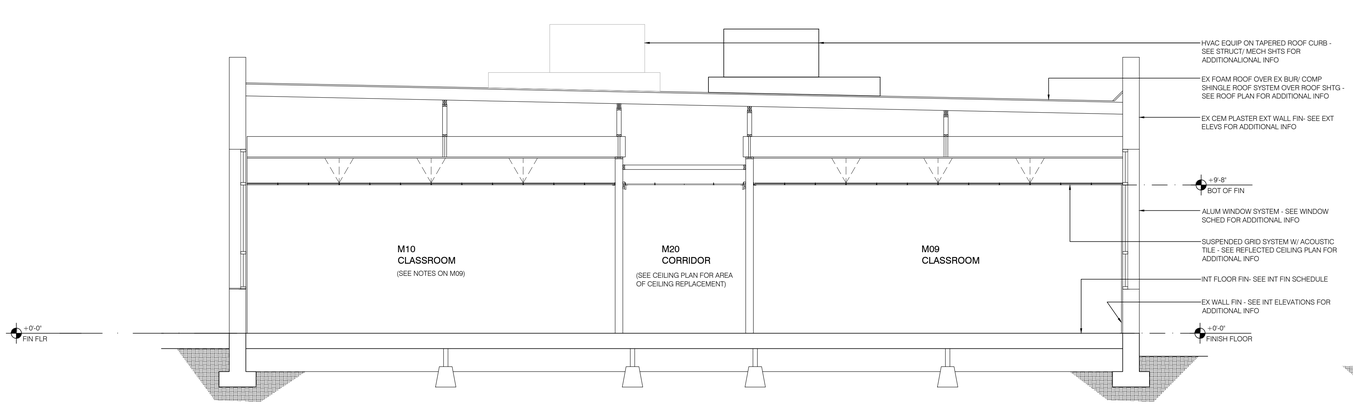
C. Building M-3 Section

Scale: 1/4" = 1'-0"



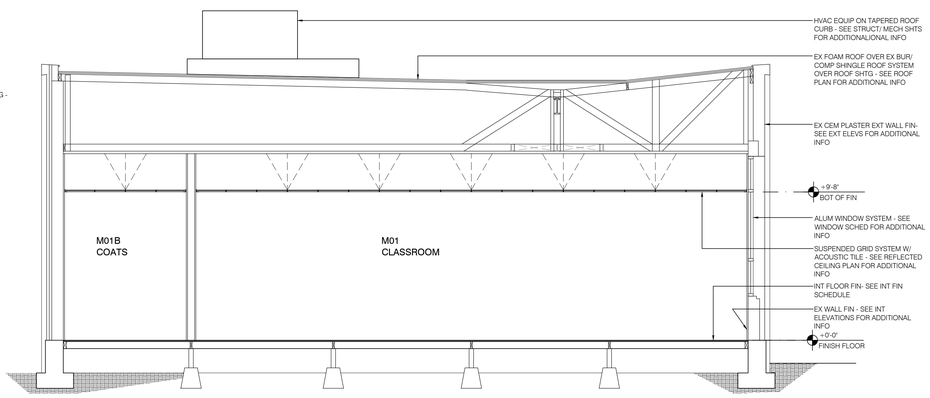
D. Building M-3 Partial Section

Scale: 1/4" = 1'-0"



E. Building M-2 Section

Scale: 1/4" = 1'-0"



F. Building M-3 Section

Scale: 1/4" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

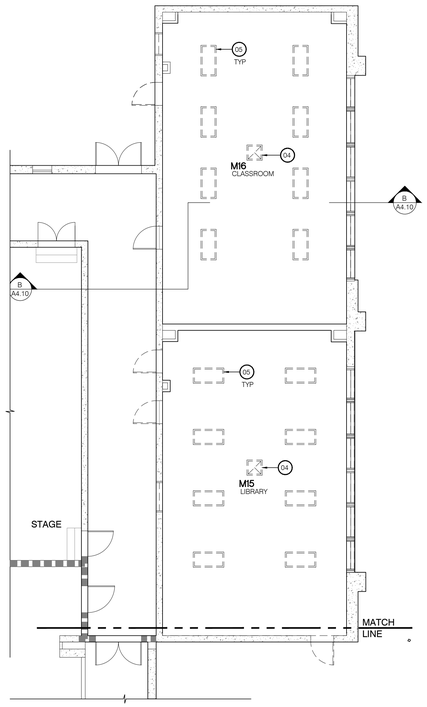
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:36

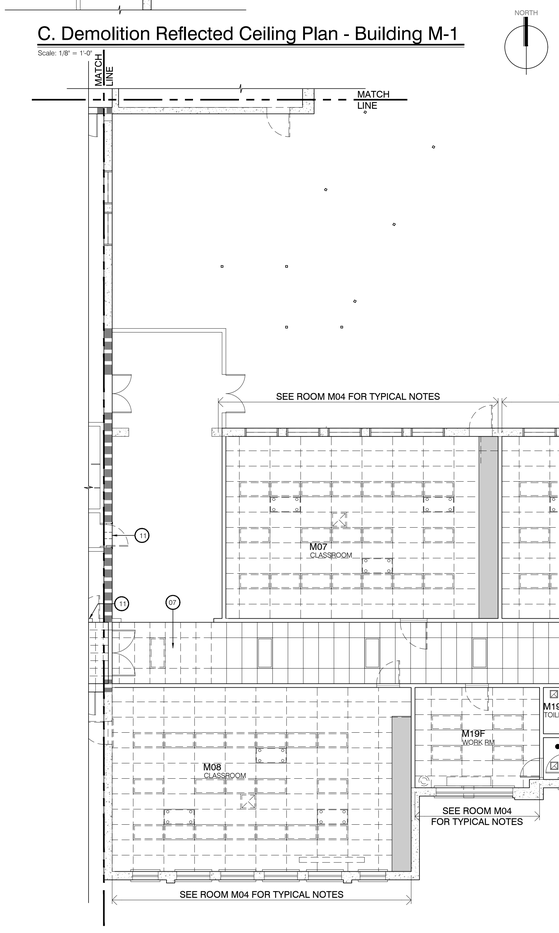
BUILDING SECTIONS

A4.10



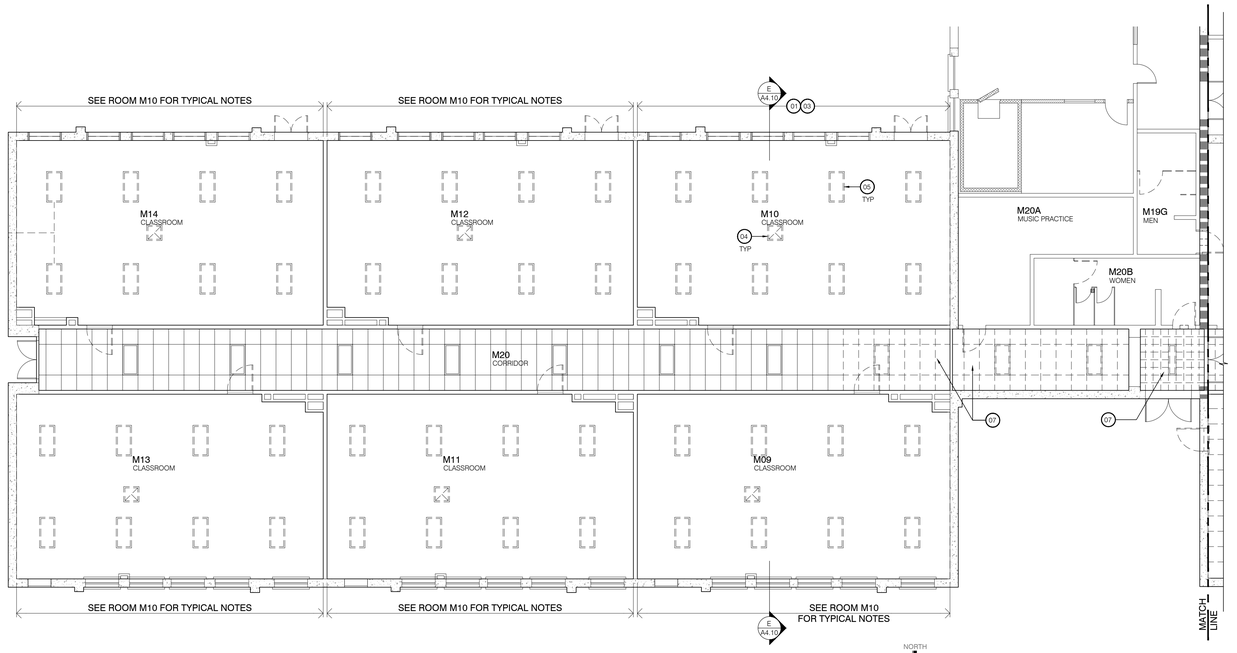
C. Demolition Reflected Ceiling Plan - Building M-1

Scale: 1/8" = 1'-0"



B. Demolition Reflected Ceiling Plan - Buildings M-3

Scale: 1/8" = 1'-0"



A. Demolition Reflected Ceiling Plan - Buildings M-2

Scale: 1/8" = 1'-0"

GENERAL CLG DEMO NOTES

1. REMOVE EX LIGHT FIXTURES, HGRS AND ASSOC CONNECTORS AT EX CLGS INDICATED TO BE REMOVED. SEE ELEC SHTS FOR ADDIT INFO
2. REMOVE EX HVAC REGISTERS, HGRS AND ASSOC CONNECTORS AT EX CLGS INDICATED TO BE REMOVED. SEE MECH SHTS FOR ADDIT INFO.
3. REMOVE EX INSULATION AT CLGS INDICATED TO BE REMOVED.
4. REMOVE EX ANCHORS, CONNECTORS, FASTENERS, ETC. AT ITEMS INDICATED TO BE REMOVED.
5. REMOVE EX ELEC CONDUIT, BOXES, SUPPORTS AND CONNECTORS AT LIGHT FIXTURES INDICATED TO BE REMOVED. SEE ELEC SHTS FOR ADDITIONAL INFO.
6. REMOVE EX HVAC DUCTWORK, SUPPORTS AND CONNECTORS AT HVAC REGISTERS INDICATED TO BE REMOVED. SEE MECH SHTS FOR ADDITIONAL INFO.
7. EX EMS AND SECURITY DEVICES TO BE REMOVED BY OWNER. CONDUITS AND BOXES TO BE REMOVED BY CONTRACTOR. SEE ELEC SHTS FOR ADDITIONAL INFO.
8. REMOVE EX FASTENERS AT CLG FINISH(ES) INDICATED TO BE REMOVED. PROTECT EX ADJACENT FINISHES DURING REMOVAL TO ALLOW FOR NEW FINISH TRANSITIONS.
9. REMOVE EX AIR PURIFER SYSTEM AT EX CEILINGS INDICATED TO BE REMOVED. SALVAGE FOR REINSTALLATION. SEE ELEC SHTS FOR ADDITIONAL INFO.
10. REMOVE EX FIRE ALARM DEVICES. SEE ELEC SHTS FOR ADDITIONAL INFO.
11. EX WIRELESS ACCESS NODES TO BE REMOVED BY OWNER. CONDUITS AND BOXES TO BE REMOVED.
12. EX SPEAKERS TO BE REMOVED BY OWNER. CONDUITS AND BOXES TO BE REMOVED BY CONTRACTOR. SEE ELEC SHTS FOR ADDITIONAL INFORMATION.
13. COORDINATE WITH HAZARDOUS MATERIAL REPORTS FOR ANY APPLICABLE ABETMENT OF DEMOLITION SCOPE.

17-03-04

CEILING DEMOLITION KEYNOTES

- 01 REMOVE EX SUSPENDED CEILING SYSTEM INCLUDING WIRES, ANCHORS, CONNECTORS AND INSULATION
- 02 REMOVE EX 12x12 ADHERED ACOUSTIC TILES, GYP BD SUBSTRATE, ASSOC CONNECTORS AND INSULATION AT UNDERSIDE OF TRUSSES INCLUDING AREA ABOVE EX SUSPENDED CEILING SYSTEM. REMOVE EXPOSED WOOD TRIM WH/ OCCURS
- 03 REMOVE EX CEILING MOUNTED CURTAIN TRACKS, DRAPES, AND ASSOC SUPPORTS
- 04 REMOVE EX HVAC DIFFUSERS, DUCTWORK (CLG EXHAUST FAN WH/ OCCURS) AND ASSOC SUPPORTS - SEE MECH SHTS FOR ADDIT INFO
- 05 REMOVE EX LIGHT FIXTURES, CONDUITS AND ASSOC SUPPORTS - SEE ELEC SHTS FOR ADDIT INFO
- 06 REMOVE EX SURFACE MOUNTED LIGHT FIXTURE AND ASSOCIATED CONNECTORS - SEE ELEC SHTS FOR ADDIT INFO
- 07 REFER TO ELEC/ MECH/ PLBG SHEETS FOR COORDINATION OF AREAS OF CLG REQUIRING REMOVAL/REPLACEMENT FOR INSTALLATION OF MECH/ ELEC/ PLBG SYSTEMS
- 08 NOT USED
- 09 REMOVE EX ULTRAVIOLET AIR FIXTURE, CONDUIT AND ASSOCIATED SUPPORTS - SALVAGE FOR REINSTALLATION - SEE ELEC SHTS FOR ADDIT INFO
- 10 REMOVE/ REINSTALL EX CONDUIT, BOX AND DEVICE AS REQUIRED - SEE ELEC SHTS FOR ADDIT INFO
- 11 TRANSFER GRILLE ABOVE DOOR - EXISTING TO BE PROTECTED WHERE NOTED - SEE MECH
- 12 REMOVE PORTION OF CEILING AS REQUIRED FOR ALTERATIONS

17-03-03

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA
JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

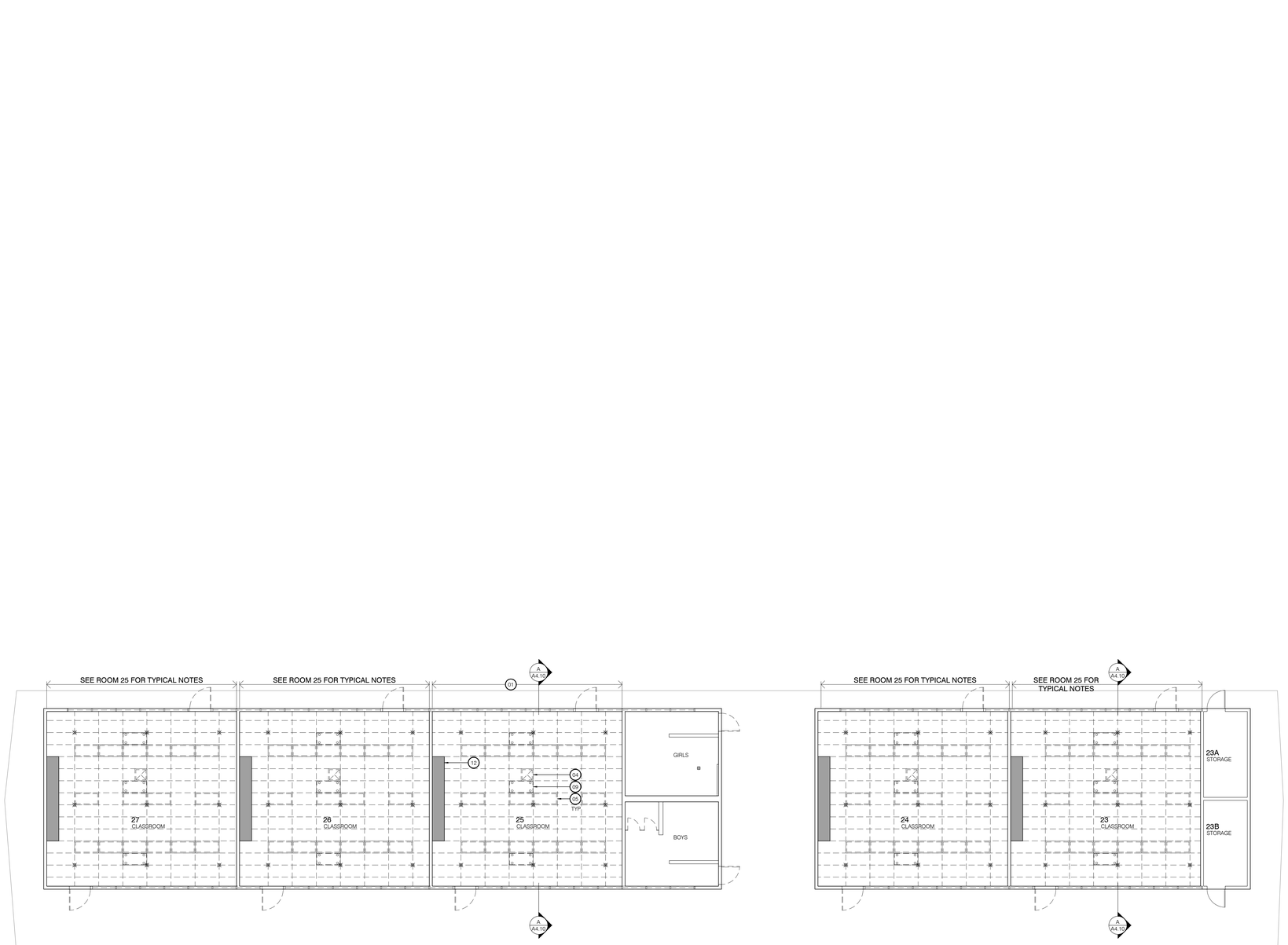
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:38

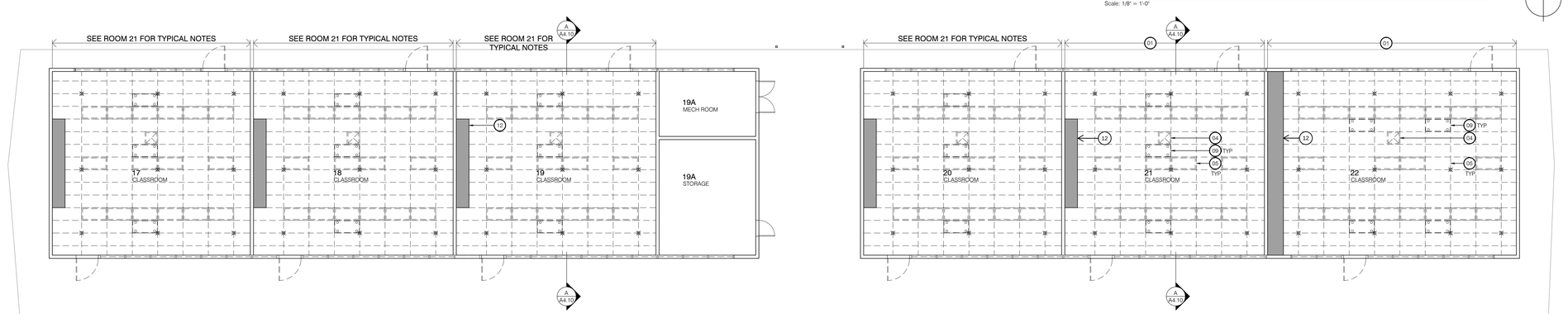
DEMOLITION REFLECTED CEILING PLANS

A5.10



A. Demolition Reflected Ceiling Plan - Buildings B & C

Scale: 1/8" = 1'-0"



B. Demolition Reflected Ceiling Plan - Buildings D & E

Scale: 1/8" = 1'-0"

GENERAL CLG DEMO NOTES

1. REMOVE EX LIGHT FIXTURES, HGRS AND ASSOC CONNECTORS AT EX CLGS INDICATED TO BE REMOVED. SEE ELEC SHTS FOR ADDIT INFO
2. REMOVE EX HVAC REGISTERS, HGRS AND ASSOC CONNECTORS AT EX CLGS INDICATED TO BE REMOVED. SEE MECH SHTS FOR ADDIT INFO.
3. REMOVE EX INSULATION AT CLGS INDICATED TO BE REMOVED.
4. REMOVE EX ANCHORS, CONNECTORS, FASTENERS, ETC. AT ITEMS INDICATED TO BE REMOVED.
5. REMOVE EX ELEC CONDUIT, BOXES, SUPPORTS AND CONNECTORS AT LIGHT FIXTURES INDICATED TO BE REMOVED. SEE ELEC SHTS FOR ADDITIONAL INFO.
6. REMOVE EX HVAC DUCTWORK, SUPPORTS AND CONNECTORS AT HVAC REGISTERS INDICATED TO BE REMOVED. SEE MECH SHTS FOR ADDITIONAL INFO.
7. EX EMS AND SECURITY DEVICES TO BE REMOVED BY OWNER. CONDUITS AND BOXES TO BE REMOVED BY CONTRACTOR. SEE ELEC SHTS FOR ADDITIONAL INFO.
8. REMOVE EX FASTENERS AT CLG FINISH(ES) INDICATED TO BE REMOVED. PROTECT EX ADJACENT FINISHES DURING REMOVAL TO ALLOW FOR NEW FINISH TRANSITIONS.
9. REMOVE EX AIR PURIFER SYSTEM AT EX CEILINGS INDICATED TO BE REMOVED. SALVAGE FOR REINSTALLATION. SEE ELEC SHTS FOR ADDITIONAL INFO.
10. REMOVE EX FIRE ALARM DEVICES. SEE ELEC SHTS FOR ADDITIONAL INFO.
11. EX WIRELESS ACCESS NODES TO BE REMOVED BY OWNER. CONDUITS AND BOXES TO BE REMOVED.
12. EX SPEAKERS TO BE REMOVED BY OWNER. CONDUITS AND BOXES TO BE REMOVED BY CONTRACTOR. SEE ELEC SHTS FOR ADDITIONAL INFORMATION.
13. COORDINATE WITH HAZARDOUS MATERIAL REPORTS FOR ANY APPLICABLE ABETMENT OF DEMOLITION SCOPE.

17-03-04

CEILING DEMOLITION KEYNOTES

- 01 REMOVE EX SUSPENDED CEILING SYSTEM INCLUDING WIRES, ANCHORS, CONNECTORS AND INSULATION
- 02 REMOVE EX 12x12 ADHERED ACOUSTIC TILES, GYP BD SUBSTRATE, ASSOC CONNECTORS AND INSULATION AT UNDERSIDE OF TRUSSES INCLUDING AREA ABOVE EX SUSPENDED CEILING SYSTEM. REMOVE EXPOSED WOOD TRIM WH/ OCCURS
- 03 REMOVE EX CEILING MOUNTED CURTAIN TRACKS, DRAPES, AND ASSOC SUPPORTS
- 04 REMOVE EX HVAC DIFFUSERS, DUCTWORK (CLG EXHAUST FAN WH/ OCCURS) AND ASSOC SUPPORTS - SEE MECH SHTS FOR ADDIT INFO
- 05 REMOVE EX LIGHT FIXTURES, CONDUITS AND ASSOC SUPPORTS - SEE ELEC SHTS FOR ADDIT INFO
- 06 REMOVE EX SURFACE MOUNTED LIGHT FIXTURE AND ASSOCIATED CONNECTORS - SEE ELEC SHTS FOR ADDIT INFO
- 07 REFER TO ELEC/ MECH/ PLBG SHEETS FOR COORDINATION OF AREAS OF CLG REQUIRING REMOVAL/REPLACEMENT FOR INSTALLATION OF MECH/ ELEC/ PLBG SYSTEMS
- 08 NOT USED
- 09 REMOVE EX ULTRAVIOLET AIR FIXTURE, CONDUIT AND ASSOCIATED SUPPORTS - SALVAGE FOR REINSTALLATION - SEE ELEC SHTS FOR ADDIT INFO
- 10 REMOVE/ REINSTALL EX CONDUIT, BOX AND DEVICE AS REQUIRED - SEE ELEC SHTS FOR ADDIT INFO
- 11 TRANSFER GRILLE ABOVE DOOR - EXISTING TO BE PROTECTED WHERE NOTED - SEE MECH
- 12 REMOVE PORTION OF CEILING AS REQUIRED FOR ALTERATIONS

17-03-03

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

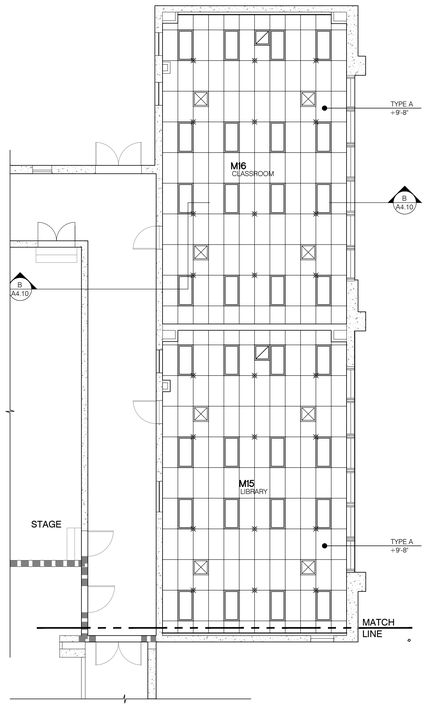
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:38

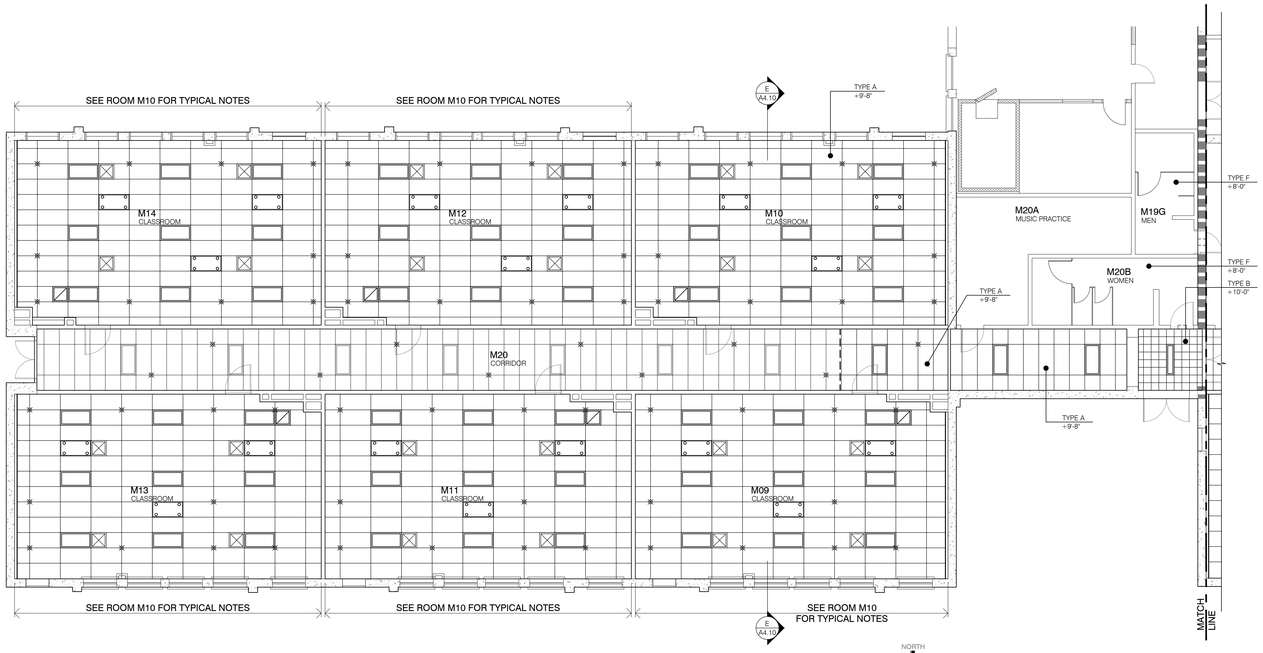
DEMOLITION REFLECTED CEILING PLANS

A5.11



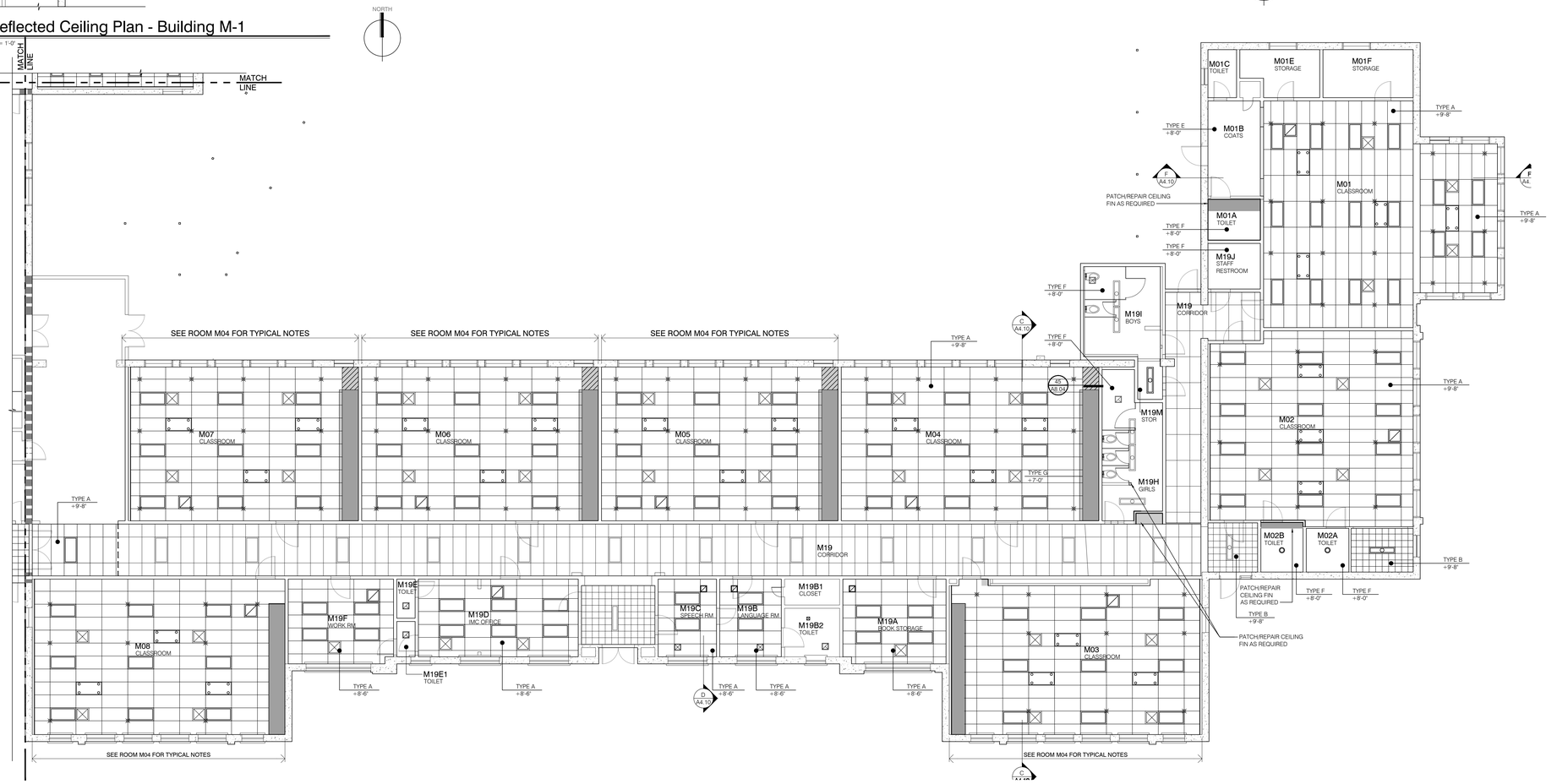
C. Reflected Ceiling Plan - Building M-1

Scale: 1/8" = 1'-0"



A. Reflected Ceiling Plan - Building M-2

Scale: 1/8" = 1'-0"



B. Reflected Ceiling Plan - Building M-3

Scale: 1/8" = 1'-0"

GENERAL CEILING NOTES

1. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE REFLECTED CEILING PLAN AND AT THE DIRECTION OF THE ARCHITECT.
2. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL AIR-CONDITIONING GRILLES WITH LIGHT FIXTURE LAYOUTS, REFLECTED CEILING PLAN AND AT THE DIRECTION OF THE ARCHITECT.
3. REFER TO MECHANICAL DRAWINGS FOR SIZE, TYPE AND LOCATION OF ALL HVAC GRILLES, EXHAUST FANS AND OTHER MECHANICAL EQUIPMENT LOCATED IN THE CEILING.
4. ENVELOPE INSULATION: CEILING SHALL HAVE THERMAL BATTS ABOVE CEILING FINISH. FOIL FACE INSULATION EXCEPT SOUND WALLS-SEE SECTIONS FOR ATTICS/ CAVITIES TO BE INSULATED. WALLS SHALL HAVE THERMAL BATTS AT ALL EXTERIOR WALLS. SEE FLOOR PLAN FOR SOUND INSULATION. INTENT IS TO INSULATE ENTIRE ENVELOPE EXCEPT GLAZING/ DOORS UNO. PROVIDE ATTIC WALL INSULATION IF INSULATION IS PROVIDED AT ROOF LINE. SEE SECTION(S) FOR ADDITIONAL INFORMATION.
5. SURFACE MTD, RECESSED AND SUSPENDED LIGHT FIXTURES SHALL BE LOCATED EQUALLY BETWEEN OPPOSITE WALLS UNO.
6. HVAC REGISTERS AND GRILLES SHALL BE LOCATED EQUALLY BETWEEN OPPOSITE WALLS UNO.
7. CEILING HEIGHTS NOTED ARE TO BOTTOM OF CEILING. FINISH UNO.

CEILING TYPE LEGEND

Type	Description	Fire Sprinkler	Dtl
TYPE A	24x48 CEILING GRID W/ LAY IN ACOUS PANELS. ARMSTRONG CORTEGA COLORTONE. WHITE GRID AND PANELS	NONE	31 / A8.02
TYPE B	12x12 ACOUS PANELS (ARMSTRONG SANSERRA SQ EDGE WHITE FULLY ADHERED) OVER 5/8" TYPE X GYP BD, MTL CLG JST- 1 HOUR RATED	NONE	
TYPE C	GYP BD- TAPE, TEXTURE AND PAINT 100% ACRYLIC ENAMEL EGGSHELL - LEVEL 4 FIN	NONE	
TYPE D	GYP BD - TAPE, TEXTURE AND PAINT 100% ACRYLIC ENAMEL SEMI GLOSS - LEVEL 4 FIN	NONE	
TYPE E	EX PLASTER FINISH - PAINT	NONE	
TYPE F	EX FINISH - PAINT 100% ACRYLIC ENAMEL SEMI GLOSS	NONE	
TYPE G	INSTALL PLASTER TO MATCH ADJACENT CLG/ WALL AS REQUIRED AT REMOVED/ RELOCATED COMPONENTS	NONE	
TYPE H	INSTALL SOFFIT HORIZONTAL/ VERTICAL FRAMING AND PLASTER TO MATCH ADJACENT CLG/ WALL AS REQUIRED - PAINT	NONE	

CEILING LEGEND

- 2X4 SUSPENDED LED LIGHT FIXTURE - SEE ELEC SHTS FOR ADDIT INFO
- 2x4 SURFACE MTD LED LIGHT FIXTURE - SEE ELEC SHTS FOR ADDIT INFO
- 1X4 SURFACE MTD LED LIGHT FIXTURE - SEE ELEC SHTS FOR ADDIT INFO
- RECESSED LED LIGHT FIXTURE - SEE ELEC SHTS FOR ADDIT INFO
- SUPPLY AIR REGISTER - SEE MECH SHTS FOR ADDIT INFO
- RETURN AIR REGISTER - SEE MECH SHTS FOR ADDIT INFO
- EXHAUST AIR REGISTER/ FAN - SEE MECH SHTS FOR ADDIT INFO
- BRACING AND COMPRESSION STRUT LOCATION (MINIMUM LOCATIONS)
- SALVAGED ULTRAVIOLET AIR FIXTURE - SEE ELEC SHTS FOR ADDIT INFO
- EX 2x4 SURFACE MTD LIGHT FIXTURE
- EX 1X4 SURFACE MTD LIGHT FIXTURE
- EX RECESSED LIGHT FIXTURE

TYP CLG CONSTRUCTION DTLS

T-bar Suspension System-Lay In Panel

31A / A8.02	WIRE SUSPENSION SYSTEM	31C / A8.02	FREE END OF SUSPENDED CLG	31F / A8.02	TYP SUSPENDED CLG LAYOUT
31D / A8.02	SUSPENDED CLG GRID	31B / A8.02	FIXED END OF SUSPENDED CLG	*	NOT USED

17-03-01

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

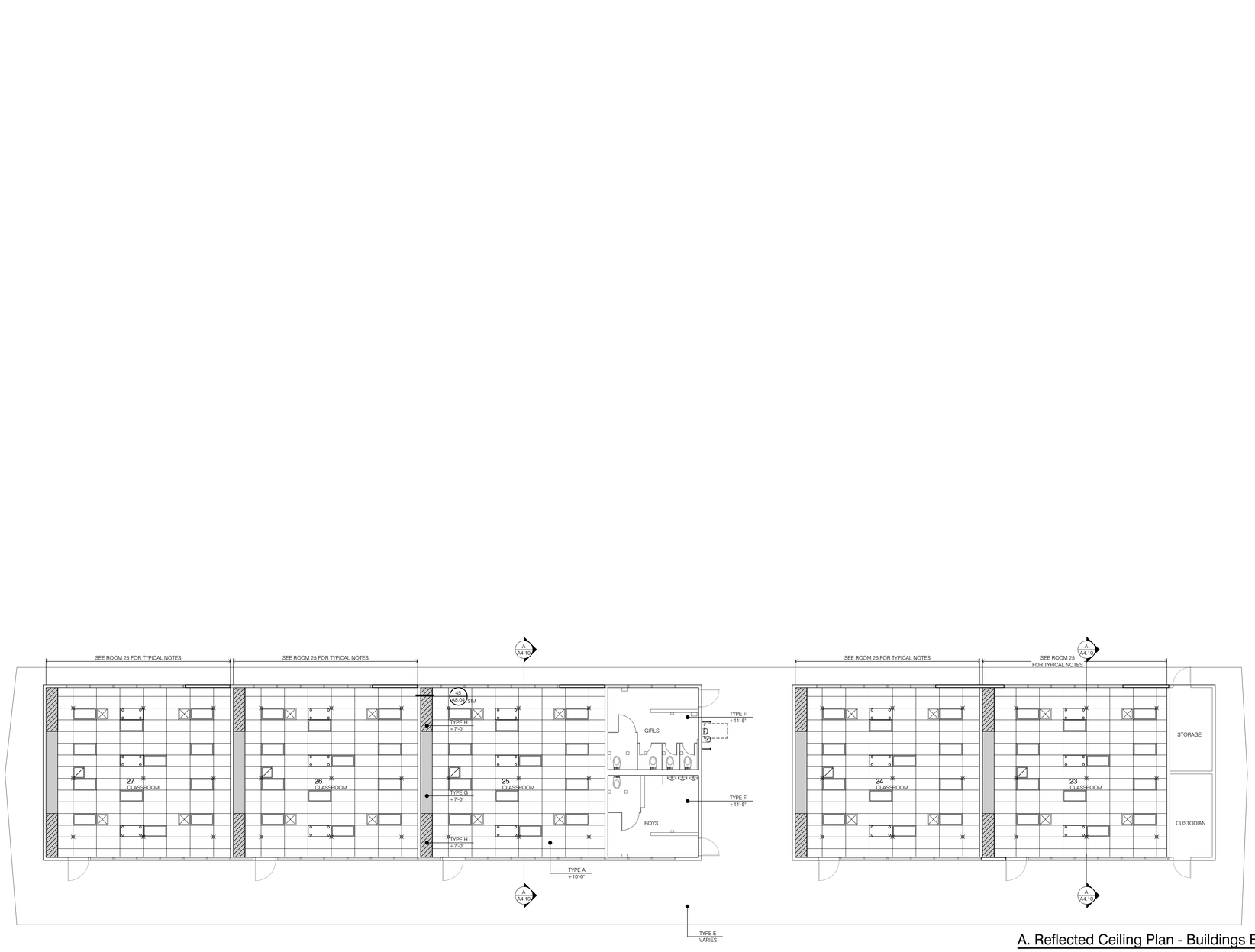
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:38

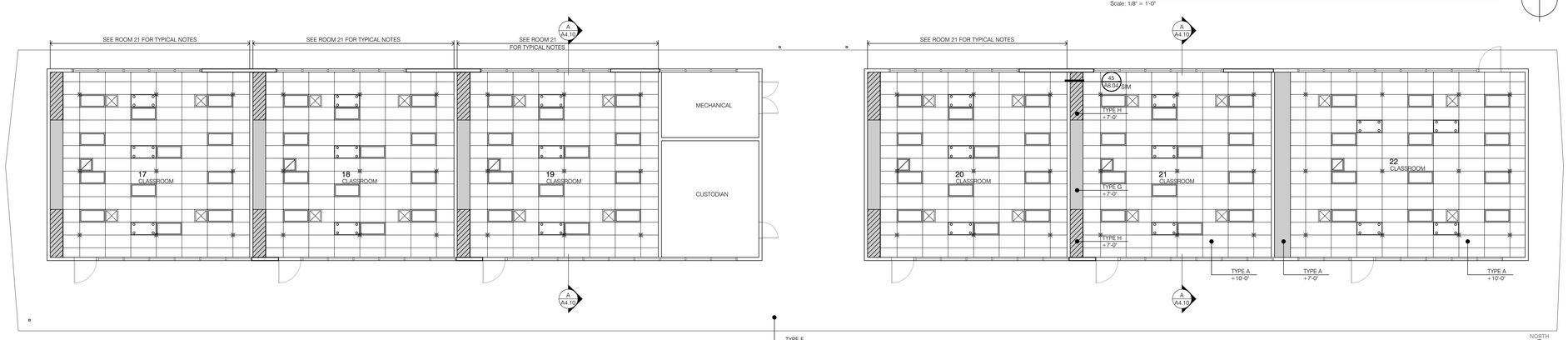
REFLECTED CEILING PLAN

A5.20



A. Reflected Ceiling Plan - Buildings B & C

Scale: 1/8" = 1'-0"



B. Reflected Ceiling Plan - Buildings D & E

Scale: 1/8" = 1'-0"

GENERAL CEILING NOTES

1. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE REFLECTED CEILING PLAN AND AT THE DIRECTION OF THE ARCHITECT.
2. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL AIR-CONDITIONING GRILLES WITH LIGHT FIXTURE LAYOUTS, REFLECTED CEILING PLAN AND AT THE DIRECTION OF THE ARCHITECT.
3. REFER TO MECHANICAL DRAWINGS FOR SIZE, TYPE AND LOCATION OF ALL HVAC GRILLES, EXHAUST FANS AND OTHER MECHANICAL EQUIPMENT LOCATED IN THE CEILING.
4. ENVELOPE INSULATION: CEILING SHALL HAVE THERMAL BATTS ABOVE CEILING FINISH. FOIL FACE INSULATION EXCEPT SOUND WALLS-SEE SECTIONS FOR ATTICS/ CAVITIES TO BE INSULATED. WALLS SHALL HAVE THERMAL BATTS AT ALL EXTERIOR WALLS. SEE FLOOR PLAN FOR SOUND INSULATION. INTENT IS TO INSULATE ENTIRE ENVELOPE EXCEPT GLAZING/ DOORS UNO. PROVIDE ATTIC WALL INSULATION IF INSULATION IS PROVIDED AT ROOF LINE. SEE SECTION(S) FOR ADDITIONAL INFORMATION.
5. SURFACE MTD, RECESSED AND SUSPENDED LIGHT FIXTURES SHALL BE LOCATED EQUALLY BETWEEN OPPOSITE WALLS UNO.
6. HVAC REGISTERS AND GRILLES SHALL BE LOCATED EQUALLY BETWEEN OPPOSITE WALLS UNO.
7. CEILING HEIGHTS NOTED ARE TO BOTTOM OF CEILING. FINISH UNO.

CEILING TYPE LEGEND

Type	Description	Fire Sprinkler	Dtl
TYPE A	24x48 CEILING GRID W/ LAY IN ACOUS PANELS. ARMSTRONG CORTEGA COLORTONE. WHITE GRID AND PANELS	NONE	31 A8.00
TYPE B	12x12 ACOUS PANELS (ARMSTRONG SANSERRA SQ EDGE WHITE FULLY ADHERED) OVER 5/8" TYPE X GYP BD, MTL CLG JST- 1 HOUR RATED	NONE	
TYPE C	GYP BD- TAPE, TEXTURE AND PAINT 100% ACRYLIC ENAMEL EGGSHELL - LEVEL 4 FIN	NONE	
TYPE D	GYP BD - TAPE, TEXTURE AND PAINT 100% ACRYLIC ENAMEL SEMI GLOSS - LEVEL 4 FIN	NONE	
TYPE E	EX PLASTER FINISH - PAINT	NONE	
TYPE F	EX FINISH - PAINT 100% ACRYLIC ENAMEL SEMI GLOSS	NONE	
TYPE G	INSTALL PLASTER TO MATCH ADJACENT CLG/ WALL AS REQUIRED AT REMOVED/ RELOCATED COMPONENTS	NONE	
TYPE H	INSTALL SOFFIT HORIZONTAL/ VERTICAL FRAMING AND PLASTER TO MATCH ADJACENT CLG/ WALL AS REQUIRED - PAINT	NONE	

CEILING LEGEND

- 2X4 SUSPENDED LED LIGHT FIXTURE - SEE ELEC SHTS FOR ADDIT INFO
- 2x4 SURFACE MTD LED LIGHT FIXTURE - SEE ELEC SHTS FOR ADDIT INFO
- 1X4 SURFACE MTD LED LIGHT FIXTURE - SEE ELEC SHTS FOR ADDIT INFO
- RECESSED LED LIGHT FIXTURE - SEE ELEC SHTS FOR ADDIT INFO
- SUPPLY AIR REGISTER - SEE MECH SHTS FOR ADDIT INFO
- RETURN AIR REGISTER - SEE MECH SHTS FOR ADDIT INFO
- EXHAUST AIR REGISTER/ FAN - SEE MECH SHTS FOR ADDIT INFO
- BRACING AND COMPRESSION STRUT LOCATION (MINIMUM LOCATIONS)
- SALVAGED ULTRAVIOLET AIR FIXTURE - SEE ELEC SHTS FOR ADDIT INFO
- EX 2x4 SURFACE MTD LIGHT FIXTURE
- EX 1X4 SURFACE MTD LIGHT FIXTURE
- EX RECESSED LIGHT FIXTURE

TYP CLG CONSTRUCTION DTLS

T-bar Suspension System-Lay In Panel

31A A8.00	WIRE SUSPENSION SYSTEM	31C A8.00	FREE END OF SUSPENDED CLG	31F A8.00	TYP SUSPENDED CLG LAYOUT
31D A8.00	SUSPENDED CLG GRID	31B A8.00	FIXED END OF SUSPENDED CLG	*	NOT USED

17-03-01

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

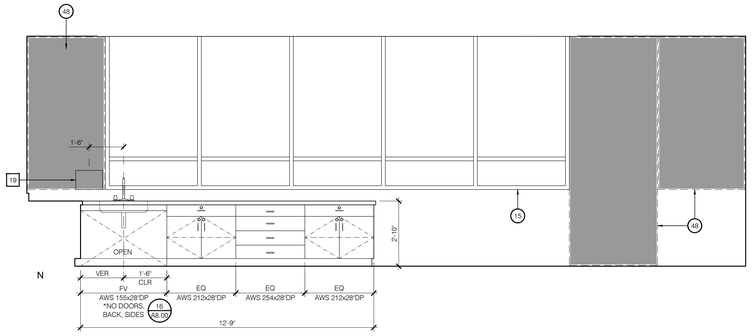
No	Date	Item
1	00.00.00	DESCRIPTION

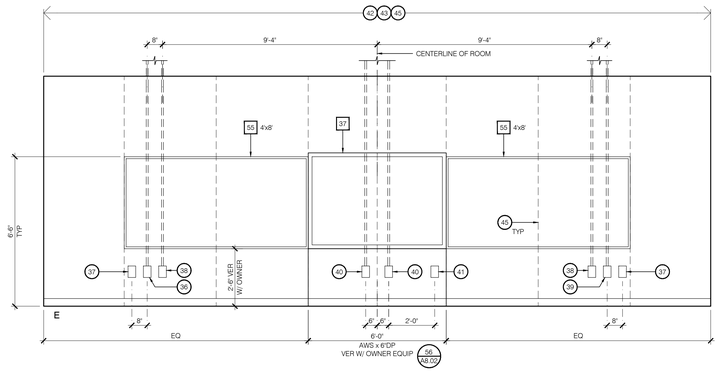
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:38

REFLECTED CEILING PLANS

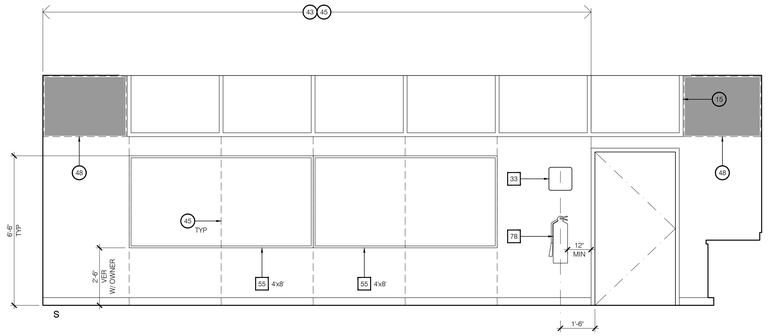
A5.21

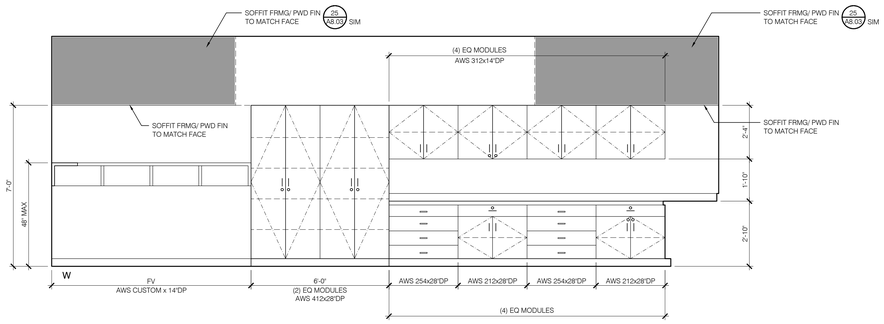




Typical Classroom - Buildings B,C,D, & E (25)

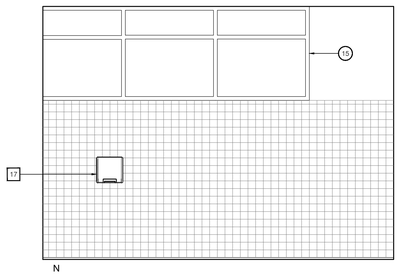
Scale: 3/8" = 1'-0"

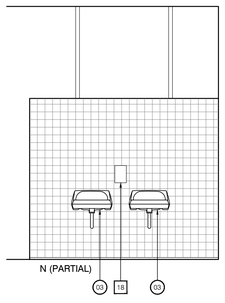


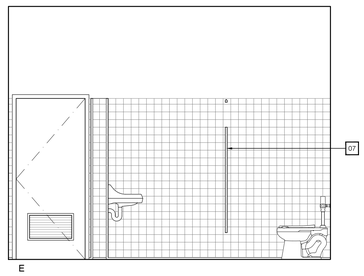


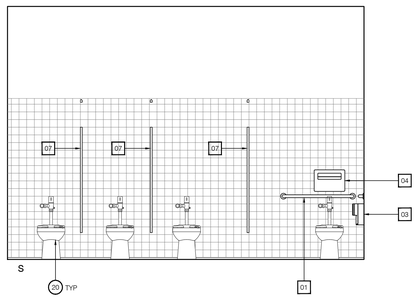
Typical Classroom - Buildings B,C,D, & E (25)(Cont.)

Scale: 3/8" = 1'-0"



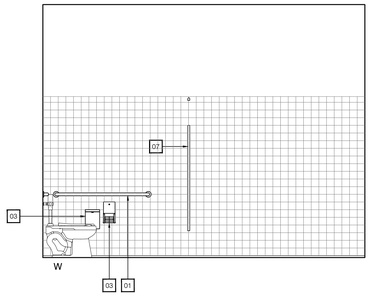


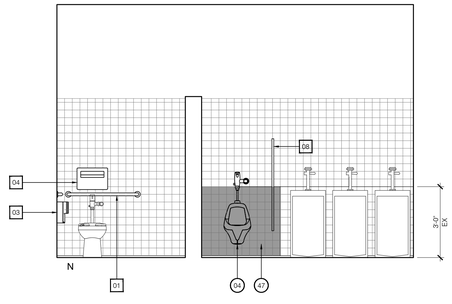


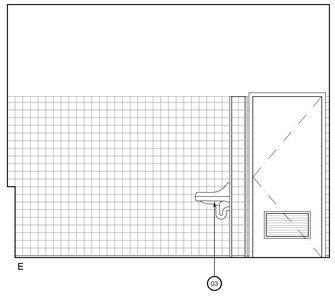


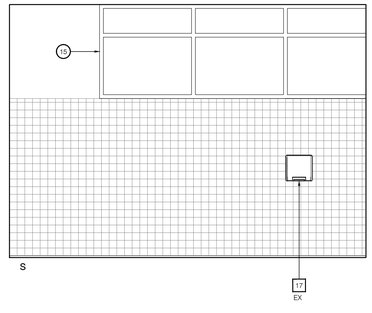
Building B - Girls

Scale: 3/8" = 1'-0"









Building B - Girls (Cont.)

Scale: 3/8" = 1'-0"

Building B - Boys

Scale: 3/8" = 1'-0"

INTERIOR ELEVATION KEYNOTES

01 CABINETRY - SEE INT ELEVS FOR ADDIT INFO (25 A8.00)
02 COUNTER MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (16 A8.00)
03 WALL MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (A8.00)
04 WALL MTD URINAL AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (21 A8.00)
05 WALL MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41 A8.00)
06 FLR MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41 A8.00)
07 FLR DRAIN SEE FLUSH WITH TILE - SEE PLBG SHTS FOR ADDIT INFO
08 NOT USED
09 NOT USED
10 NOT USED
11 NOT USED
12 NOT USED
13 NOT USED
14 NOT USED
15 EX ALUM WINDOW SYSTEM- EX WH/ NOTED- SEE WINDOW SCHEDULE FOR ADDIT INFO
16 NOT USED
17 CONC SLAB INFILL AT DEPRESSED SLAB (A8.00)
18 CONC SLAB INFILL AT UTILITY TRENCH (56 A8.00) SIM
19 LINE OF REPLACED/ REINSTALLED CARPET TILES AS REQUIRED
20 EXISTING FLOOR MOUNTED TOILET WITH TOILET SET AT +17" AND TOUCHLESS FLUSH VALVE
21 EXISTING WALL MOUNTED URINAL WITH RIM AT +17" AND TOUCHLESS FLUSH VALVE
22 NOT USED
23 EXISTING WALL MOUNTED SINK WITH FAUCET AT +34" MAX AND +29" MIN CLEARANCE
24 NOT USED
25 EXISTING MIRROR MOUNTED AT MAX +40" TO MIRROR SURFACE
26 EXISTING FLOOR MOUNTED PARTITION SYSTEM
27 NOT USED
28 NOT USED
29 NOT USED
30 EXISTING WALL MOUNTED TOILET PAPER DISPENSER
31 NOT USED
32 NOT USED
33 NOT USED
34 EXISTING WALL MOUNTED TOILET W/ TOILET SEAT AT +17"
35 NOT USED
36 J-BOX ONLY (DATA OUTLET) - 3/4" CONDUIT STUBBED ABOVE CEILING
37 STANDARD SURGE PROTECTED DUPLEX OUTLET. LOCATE OUTLETS AS INDICATED ON THE PLAN
38 DOUBLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RING. PROVIDE PULL STRING.
39 SINGLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING
40 SINGLE GANG DEEP MUD RING AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING.
41 WALL MOUNTED SURGE PROTECTED QUADPLEX OUTLET. LOCATE AT STANDARD WALL OUTLET HEIGHT.
42 REMOVE AND REPLACE EX WALL FIN AS REQUIRED TO INSTALL ELEC/ COMM CONDUITS AND BOXES
43 REMOVE EX WD TRIM AS REQUIRED TO INSTALL VTS WALL FIN. PATCH/ REPAIR WALL FIN AS REQD - TYP
44 PWD SHTG TO MATCH EX
45 VTS FIN - SEAMS AS INDICATED UNO - SEE PLANS/ DTLS FOR SUBSTRATE
46 NOT USED
47 INT FIN TO MATCH EX
48 WALL INFILL AT REMOVED DOOR/ WINDOW

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

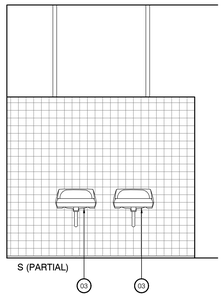
No	Date	Item
1	00.00.00	DESCRIPTION

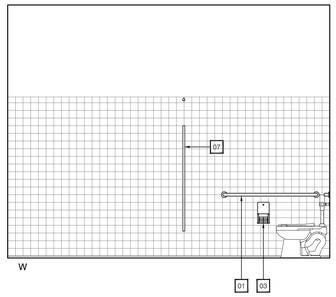
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:38

INTERIOR ELEVATIONS

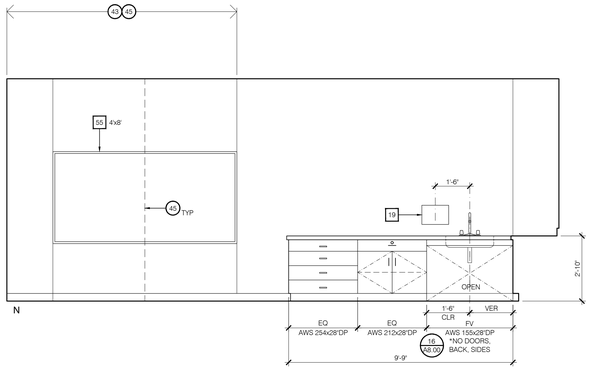
A6.00

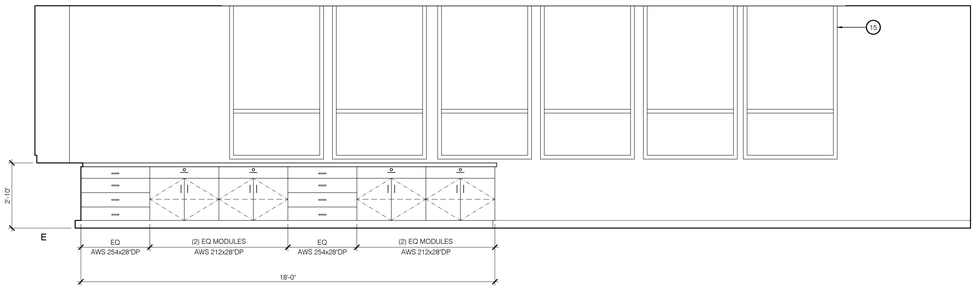




Building B - Boys (Cont.)

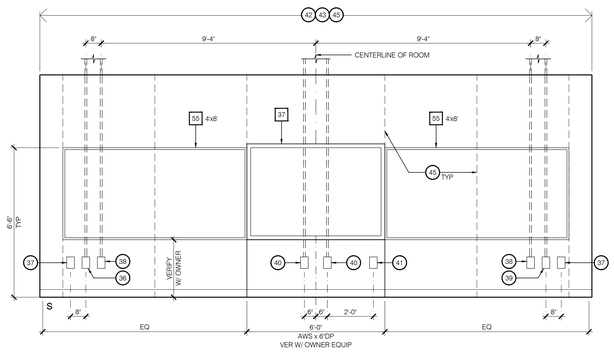
Scale: 3/8" = 1'-0"

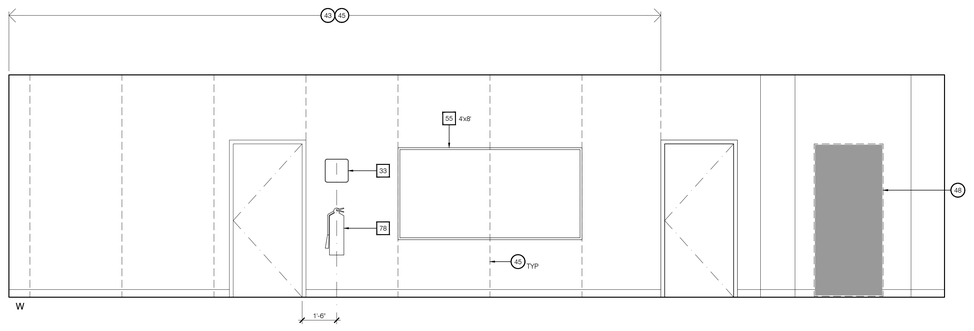




M16 - Building M-1 (M-15 SIM)

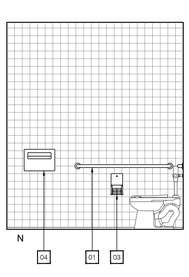
Scale: 3/8" = 1'-0"

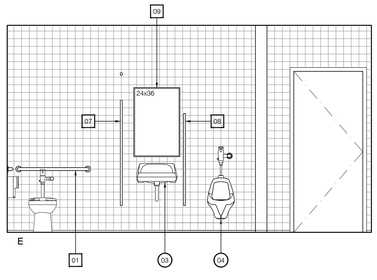


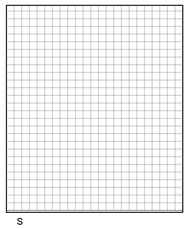


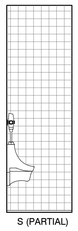
M16 - Building M-1 (Cont.)(M-15 SIM)

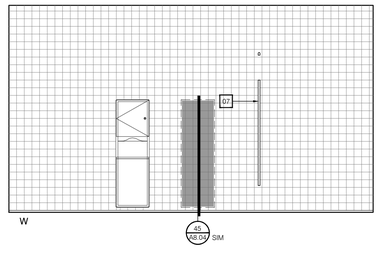
Scale: 3/8" = 1'-0"











M19G Men - Building M-1

Scale: 3/8" = 1'-0"

INTERIOR ELEVATION KEYNOTES

01 CABINETRY - SEE INT ELEVS FOR ADDIT INFO (22 / A8.00)
02 COUNTER MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (16 / A8.00)
03 WALL MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (16 / A8.00)
04 WALL MTD URINAL AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (21 / A8.00)
05 WALL MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41 / A8.00)
06 FLR MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41 / A8.00)
07 FLR DRAIN SEE FLUSH WITH TILE - SEE PLBG SHTS FOR ADDIT INFO
08 NOT USED
09 NOT USED
10 NOT USED
11 NOT USED
12 NOT USED
13 NOT USED
14 NOT USED
15 EX ALUM WINDOW SYSTEM- EX WH/ NOTED- SEE WINDOW SCHEDULE FOR ADDIT INFO
16 NOT USED
17 CONC SLAB INFILL AT DEPRESSED SLAB (20 / A8.00)
18 CONC SLAB INFILL AT UTILITY TRENCH (20 / A8.00) SIM
19 LINE OF REPLACED/ REINSTALLED CARPET TILES AS REQUIRED
20 EXISTING FLOOR MOUNTED TOILET WITH TOILET SET AT +17" AND TOUCHLESS FLUSH VALVE
21 EXISTING WALL MOUNTED URINAL WITH RIM AT +17" AND TOUCHLESS FLUSH VALVE
22 NOT USED
23 EXISTING WALL MOUNTED SINK WITH FAUCET AT +34" MAX AND +29" MIN CLEARANCE
24 NOT USED
25 EXISTING MIRROR MOUNTED AT MAX +40" TO MIRROR SURFACE
26 EXISTING FLOOR MOUNTED PARTITION SYSTEM
27 NOT USED
28 NOT USED
29 NOT USED
30 EXISTING WALL MOUNTED TOILET PAPER DISPENSER
31 NOT USED
32 NOT USED
33 NOT USED
34 EXISTING WALL MOUNTED TOILET W/ TOILET SEAT AT +17"
35 NOT USED
36 J-BOX ONLY (DATA OUTLET) - 3/4" CONDUIT STUBBED ABOVE CEILING
37 STANDARD SURGE PROTECTED DUPLEX OUTLET. LOCATE OUTLETS AS INDICATED ON THE PLAN
38 DOUBLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RING. PROVIDE PULL STRING.
39 SINGLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING
40 SINGLE GANG DEEP MUD RING AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING.
41 WALL MOUNTED SURGE PROTECTED QUADPLEX OUTLET. LOCATE AT STANDARD WALL OUTLET HEIGHT.
42 REMOVE AND REPLACE EX WALL FIN AS REQUIRED TO INSTALL ELEC/ COMM CONDUITS AND BOXES
43 REMOVE EX WD TRIM AS REQUIRED TO INSTALL VTS WALL FIN. PATCH/ REPAIR WALL FIN AS REQD - TYP
44 PWD SHTG TO MATCH EX
45 VTS FIN - SEAMS AS INDICATED UNO - SEE PLANS/ DTLS FOR SUBSTRATE
46 NOT USED
47 INT FIN TO MATCH EX
48 WALL INFILL AT REMOVED DOOR/ WINDOW

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

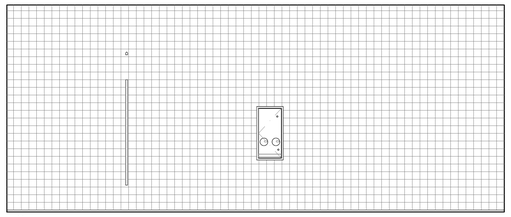
No	Date	Item
1	00.00.00	DESCRIPTION

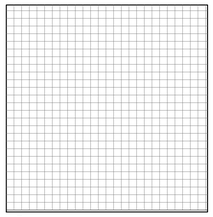
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

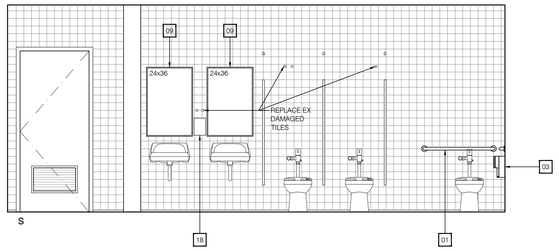
11.03.23 11:38

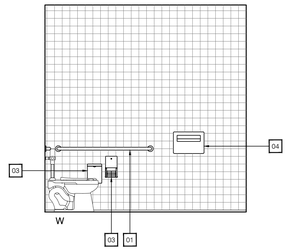
INTERIOR ELEVATIONS

A6.01



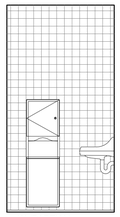


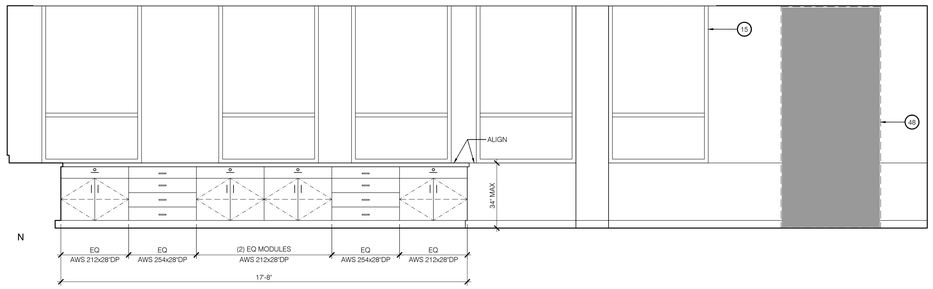


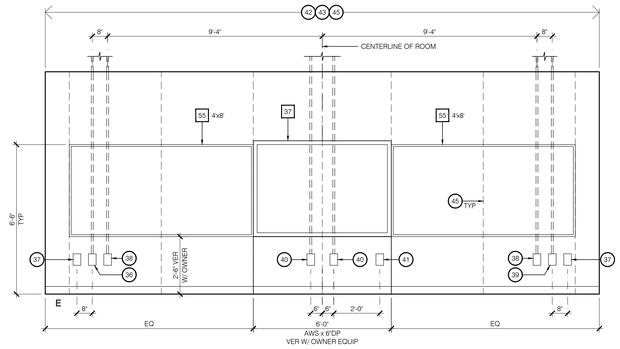


M20B Women - Building M-1

Scale: 3/8" = 1'-0"

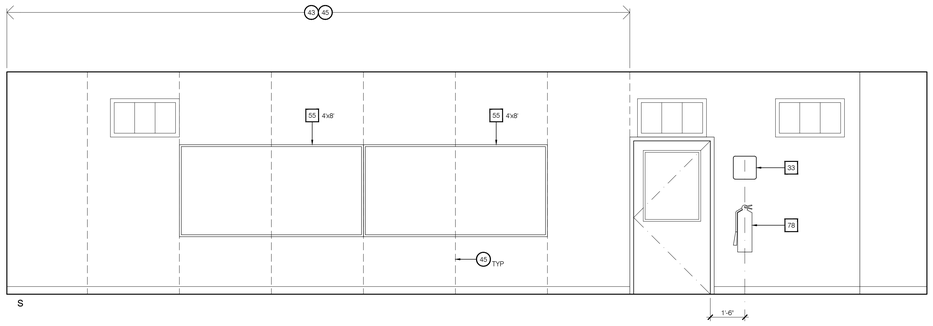






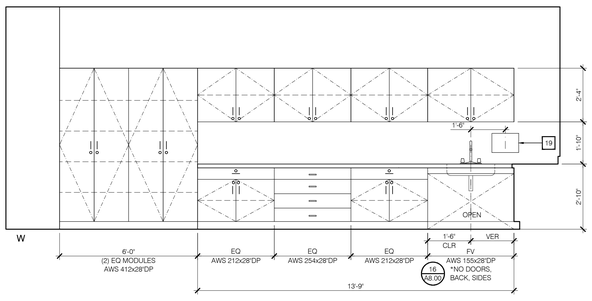
M20B Women - Building M-1

Scale: 3/8" = 1'-0"



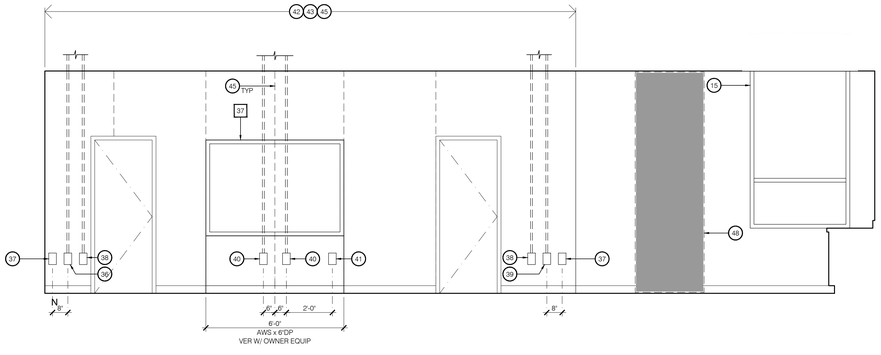
Typical Classroom - Building M-2 (M10)

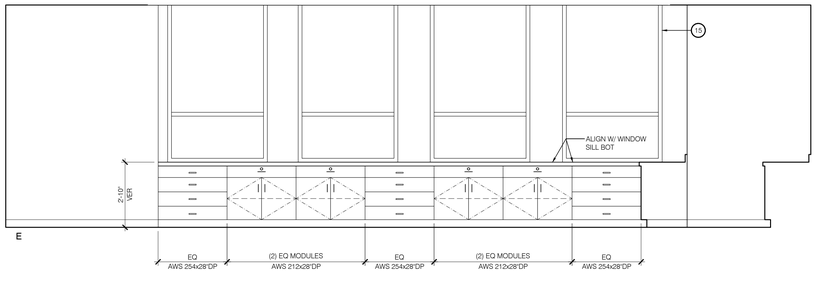
Scale: 3/8" = 1'-0"



Typical Classroom - Building M-2 (M10) (Cont.)

Scale: 3/8" = 1'-0"





M01 - Building M-3

Scale: 3/8" = 1'-0"

INTERIOR ELEVATION KEYNOTES

01 CABINETRY - SEE INT ELEVS FOR ADDIT INFO (22/A8.00)
02 COUNTER MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (16/A8.00)
03 WALL MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (18/A8.00)
04 WALL MTD URINAL AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (21/A8.00)
05 WALL MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41/A8.00)
06 FLR MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41/A8.00)
07 FLR DRAIN SEE FLUSH WITH TILE - SEE PLBG SHTS FOR ADDIT INFO
08 NOT USED
09 NOT USED
10 NOT USED
11 NOT USED
12 NOT USED
13 NOT USED
14 NOT USED
15 EX ALUM WINDOW SYSTEM- EX WH/ NOTED- SEE WINDOW SCHEDULE FOR ADDIT INFO
16 NOT USED
17 CONC SLAB INFILL AT DEPRESSED SLAB (20/A8.00)
18 CONC SLAB INFILL AT UTILITY TRENCH (20/A8.00) SIM
19 LINE OF REPLACED/ REINSTALLED CARPET TILES AS REQUIRED
20 EXISTING FLOOR MOUNTED TOILET WITH TOILET SET AT +17" AND TOUCHLESS FLUSH VALVE
21 EXISTING WALL MOUNTED URINAL WITH RIM AT +17" AND TOUCHLESS FLUSH VALVE
22 NOT USED
23 EXISTING WALL MOUNTED SINK WITH FAUCET AT +34" MAX AND +29" MIN CLEARANCE
24 NOT USED
25 EXISTING MIRROR MOUNTED AT MAX +40" TO MIRROR SURFACE
26 EXISTING FLOOR MOUNTED PARTITION SYSTEM
27 NOT USED
28 NOT USED
29 NOT USED
30 EXISTING WALL MOUNTED TOILET PAPER DISPENSER
31 NOT USED
32 NOT USED
33 NOT USED
34 EXISTING WALL MOUNTED TOILET W/ TOILET SEAT AT +17"
35 NOT USED
36 J-BOX ONLY (DATA OUTLET) - 3/4" CONDUIT STUBBED ABOVE CEILING
37 STANDARD SURGE PROTECTED DUPLEX OUTLET. LOCATE OUTLETS AS INDICATED ON THE PLAN
38 DOUBLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RING. PROVIDE PULL STRING.
39 SINGLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING
40 SINGLE GANG DEEP MUD RING AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING.
41 WALL MOUNTED SURGE PROTECTED QUADPLEX OUTLET. LOCATE AT STANDARD WALL OUTLET HEIGHT.
42 REMOVE AND REPLACE EX WALL FIN AS REQUIRED TO INSTALL ELEC/ COMM CONDUITS AND BOXES
43 REMOVE EX WD TRIM AS REQUIRED TO INSTALL VTS WALL FIN. PATCH/ REPAIR WALL FIN AS REQD - TYP
44 PWD SHTG TO MATCH EX
45 VTS FIN - SEAMS AS INDICATED UNO - SEE PLANS/ DTLS FOR SUBSTRATE
46 NOT USED
47 INT FIN TO MATCH EX
48 WALL INFILL AT REMOVED DOOR/ WINDOW

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

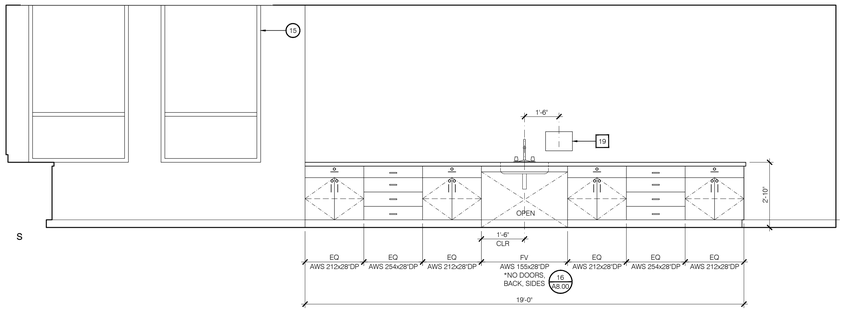
No	Date	Item
1	00.00.00	DESCRIPTION

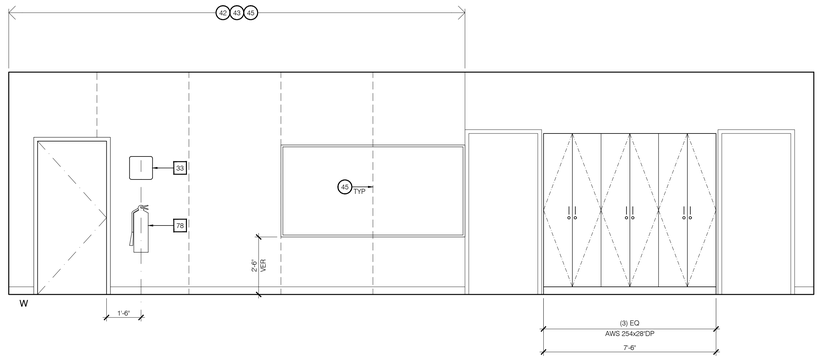
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:38

INTERIOR ELEVATIONS

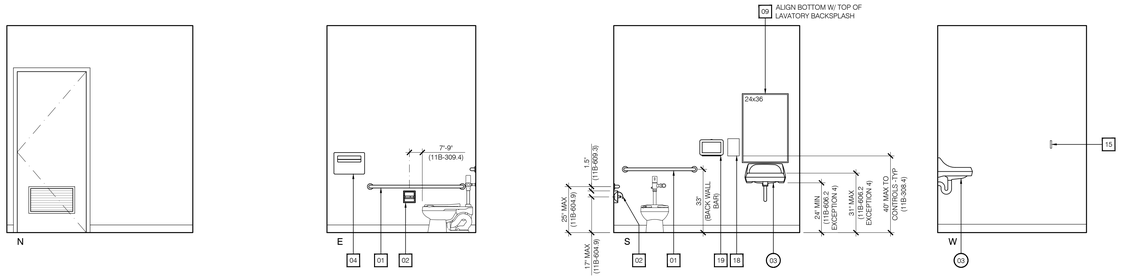
A6.02





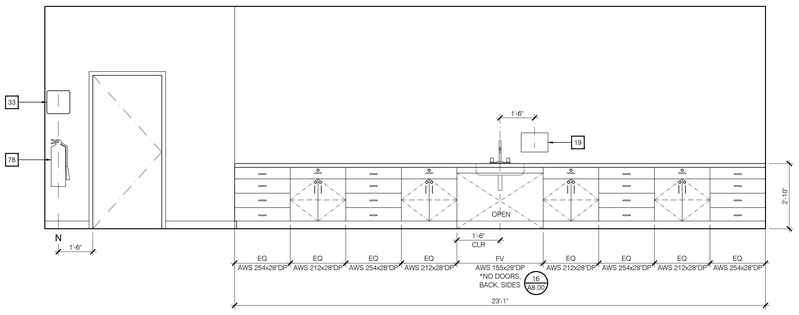
M01 - Building M-3 (Cont.)

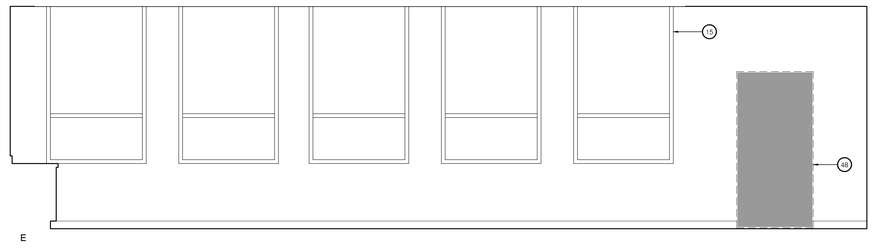
Scale: 3/8" = 1'-0"



M01A Toilet - Building M-3

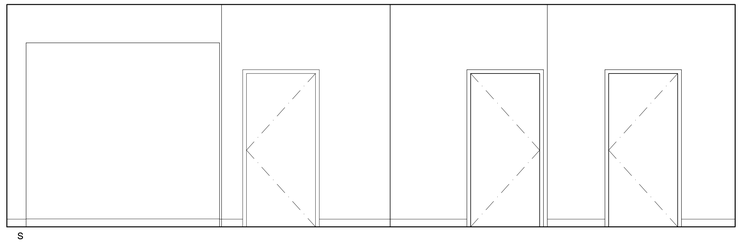
Scale: 3/8" = 1'-0"

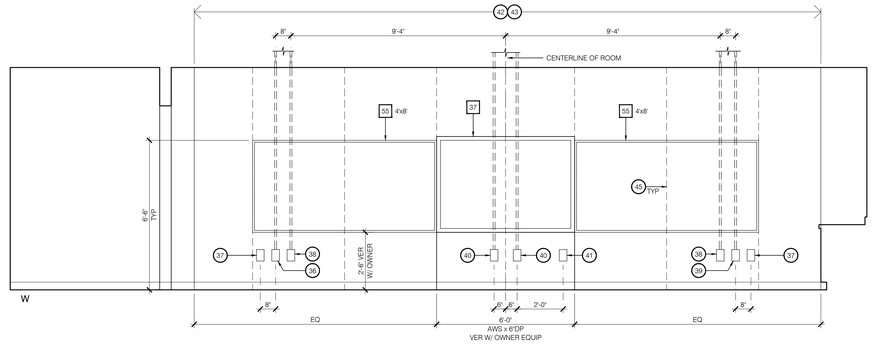




M02 - Building M-3

Scale: 3/8" = 1'-0"





M02 - Building M-3 (Cont.)

Scale: 3/8" = 1'-0"

INTERIOR ELEVATION KEYNOTES

01 CABINETRY - SEE INT ELEVS FOR ADDIT INFO (22, A8.00)
02 COUNTER MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (16, A8.00)
03 WALL MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (16, A8.00)
04 WALL MTD URINAL AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (21, A8.00)
05 WALL MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41, A8.00)
06 FLR MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41, A8.00)
07 FLR DRAIN SEE FLUSH WITH TILE - SEE PLBG SHTS FOR ADDIT INFO
08 NOT USED
09 NOT USED
10 NOT USED
11 NOT USED
12 NOT USED
13 NOT USED
14 NOT USED
15 EX ALUM WINDOW SYSTEM- EX WH/ NOTED- SEE WINDOW SCHEDULE FOR ADDIT INFO
16 NOT USED
17 CONC SLAB INFILL AT DEPRESSED SLAB (20, A8.00)
18 CONC SLAB INFILL AT UTILITY TRENCH (20, A8.00) SIM
19 LINE OF REPLACED/ REINSTALLED CARPET TILES AS REQUIRED
20 EXISTING FLOOR MOUNTED TOILET WITH TOILET SET AT +17" AND TOUCHLESS FLUSH VALVE
21 EXISTING WALL MOUNTED URINAL WITH RIM AT +17" AND TOUCHLESS FLUSH VALVE
22 NOT USED
23 EXISTING WALL MOUNTED SINK WITH FAUCET AT +34" MAX AND +29" MIN CLEARANCE
24 NOT USED
25 EXISTING MIRROR MOUNTED AT MAX +40" TO MIRROR SURFACE
26 EXISTING FLOOR MOUNTED PARTITION SYSTEM
27 NOT USED
28 NOT USED
29 NOT USED
30 EXISTING WALL MOUNTED TOILET PAPER DISPENSER
31 NOT USED
32 NOT USED
33 NOT USED
34 EXISTING WALL MOUNTED TOILET W/ TOILET SEAT AT +17"
35 NOT USED
36 J-BOX ONLY (DATA OUTLET) - 3/4" CONDUIT STUBBED ABOVE CEILING
37 STANDARD SURGE PROTECTED DUPLEX OUTLET. LOCATE OUTLETS AS INDICATED ON THE PLAN
38 DOUBLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RING. PROVIDE PULL STRING.
39 SINGLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING
40 SINGLE GANG DEEP MUD RING AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING.
41 WALL MOUNTED SURGE PROTECTED QUADPLEX OUTLET. LOCATE AT STANDARD WALL OUTLET HEIGHT.
42 REMOVE AND REPLACE EX WALL FIN AS REQUIRED TO INSTALL ELEC/ COMM CONDUITS AND BOXES
43 REMOVE EX WD TRIM AS REQUIRED TO INSTALL VTS WALL FIN. PATCH/ REPAIR WALL FIN AS REQD - TYP
44 PWD SHTG TO MATCH EX
45 VTS FIN - SEAMS AS INDICATED UNO - SEE PLANS/ DTLS FOR SUBSTRATE
46 NOT USED
47 INT FIN TO MATCH EX
48 WALL INFILL AT REMOVED DOOR/ WINDOW

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School
2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

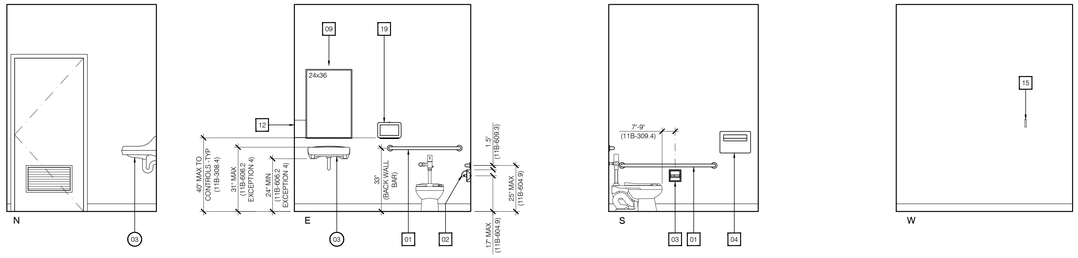
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:39

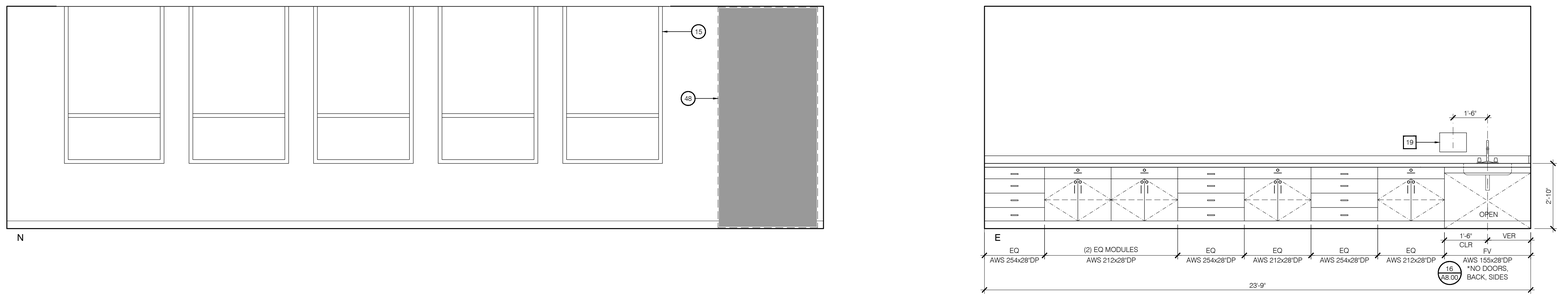
INTERIOR ELEVATIONS

A6.03



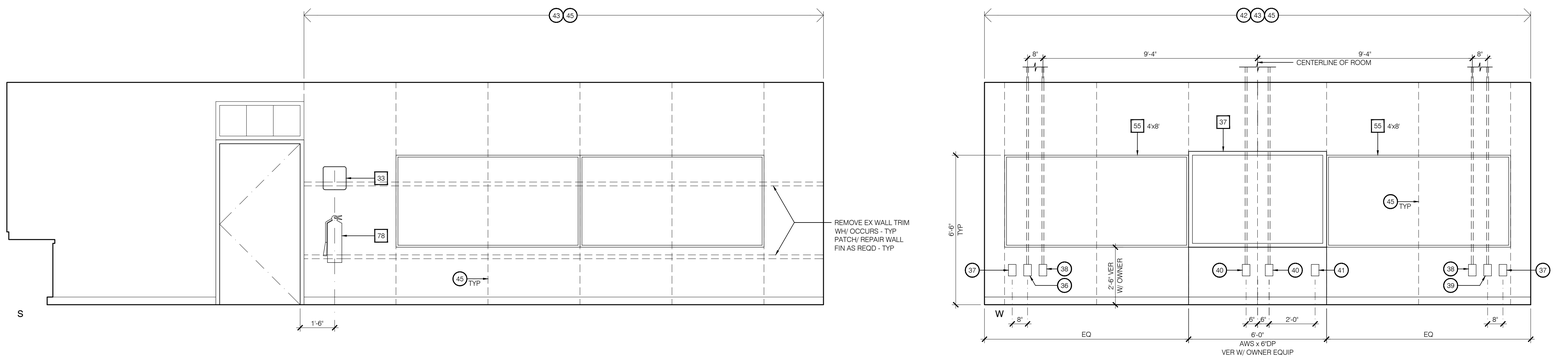
M02B - Building M-3

Scale: 3/8" = 1'-0"



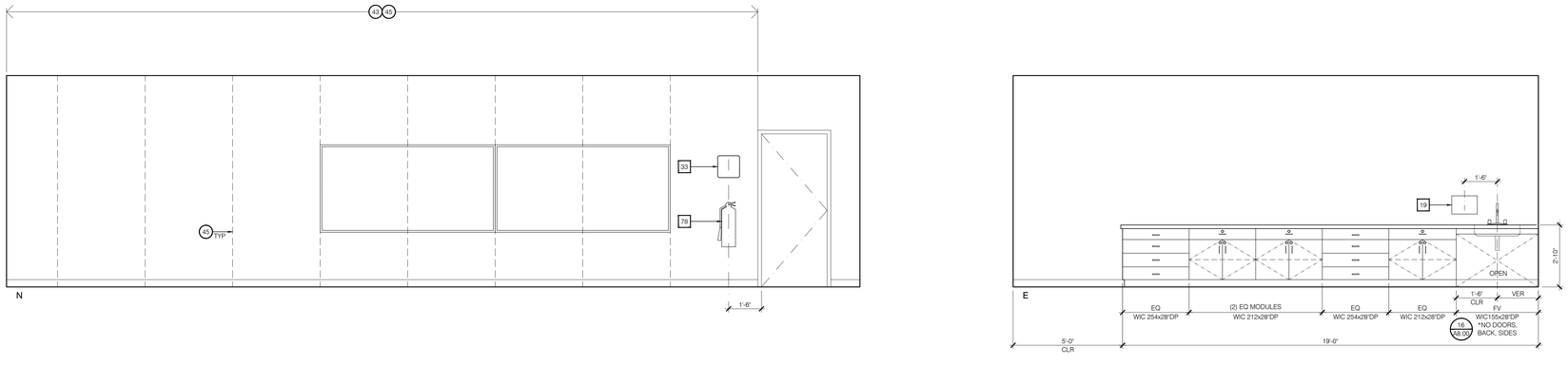
Typical Classroom (M04) - Building M-3

Scale: 3/8" = 1'-0"



Typical Classroom (M04) - Building M-3 (Cont.)

Scale: 3/8" = 1'-0"



M08 (M03 SIM) - Building M-3

Scale: 3/8" = 1'-0"

INTERIOR ELEVATION KEYNOTES

01 CABINETRY - SEE INT ELEVS FOR ADDIT INFO (22 A8.00)
02 COUNTER MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (16 A8.00)
03 WALL MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (16 A8.00)
04 WALL MTD URINAL AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (21 A8.00)
05 WALL MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41 A8.00)
06 FLR MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41 A8.00)
07 FLR DRAIN SEE FLUSH WITH TILE - SEE PLBG SHTS FOR ADDIT INFO
08 NOT USED
09 NOT USED
10 NOT USED
11 NOT USED
12 NOT USED
13 NOT USED
14 NOT USED
15 EX ALUM WINDOW SYSTEM- EX WH/ NOTED- SEE WINDOW SCHEDULE FOR ADDIT INFO
16 NOT USED
17 CONC SLAB INFILL AT DEPRESSED SLAB (20 A8.00)
18 CONC SLAB INFILL AT UTILITY TRENCH (20 A8.00) SIM
19 LINE OF REPLACED/ REINSTALLED CARPET TILES AS REQUIRED
20 EXISTING FLOOR MOUNTED TOILET WITH TOILET SET AT +17" AND TOUCHLESS FLUSH VALVE
21 EXISTING WALL MOUNTED URINAL WITH RIM AT +17" AND TOUCHLESS FLUSH VALVE
22 NOT USED
23 EXISTING WALL MOUNTED SINK WITH FAUCET AT +34" MAX AND +29" MIN CLEARANCE
24 NOT USED
25 EXISTING MIRROR MOUNTED AT MAX +40" TO MIRROR SURFACE
26 EXISTING FLOOR MOUNTED PARTITION SYSTEM
27 NOT USED
28 NOT USED
29 NOT USED
30 EXISTING WALL MOUNTED TOILET PAPER DISPENSER
31 NOT USED
32 NOT USED
33 NOT USED
34 EXISTING WALL MOUNTED TOILET W/ TOILET SEAT AT +17"
35 NOT USED
36 J-BOX ONLY (DATA OUTLET) - 3/4" CONDUIT STUBBED ABOVE CEILING
37 STANDARD SURGE PROTECTED DUPLEX OUTLET. LOCATE OUTLETS AS INDICATED ON THE PLAN
38 DOUBLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RING. PROVIDE PULL STRING.
39 SINGLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RING. PROVIDE PULL STRING
40 SINGLE GANG DEEP MUD RING AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING.
41 WALL MOUNTED SURGE PROTECTED QUADPLEX OUTLET. LOCATE AT STANDARD WALL OUTLET HEIGHT.
42 REMOVE AND REPLACE EX WALL FIN AS REQUIRED TO INSTALL ELEC/ COMM CONDUITS AND BOXES
43 REMOVE EX WD TRIM AS REQUIRED TO INSTALL VTS WALL FIN. PATCH/ REPAIR WALL FIN AS REQD - TYP
44 PWD SHTG TO MATCH EX
45 VTS FIN - SEAMS AS INDICATED UNO - SEE PLANS/ DTLS FOR SUBSTRATE
46 NOT USED
47 INT FIN TO MATCH EX
48 WALL INFILL AT REMOVED DOOR/ WINDOW

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

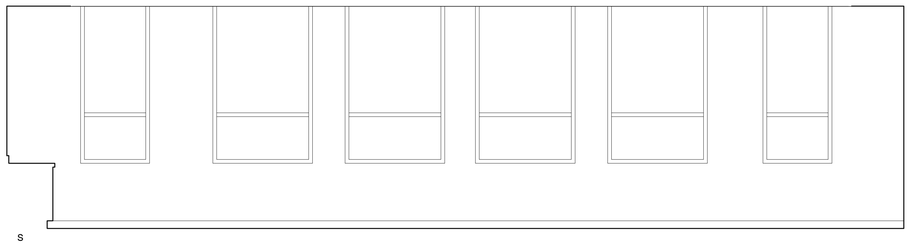
No	Date	Item
1	00.00.00	DESCRIPTION

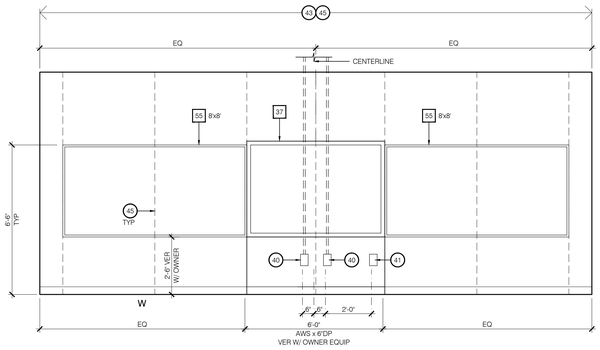
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:39

INTERIOR ELEVATIONS

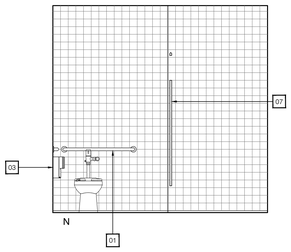
A6.04

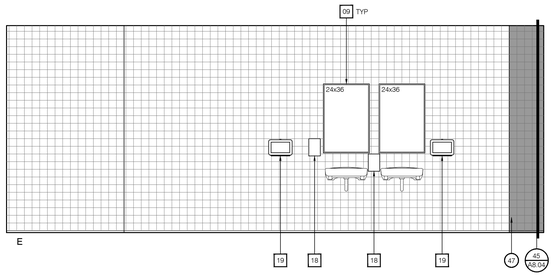


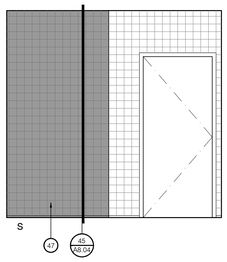


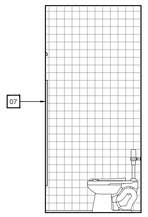
M08 (M03 SIM) - Building M-3 (Cont.)

Scale: 3/8" = 1'-0"



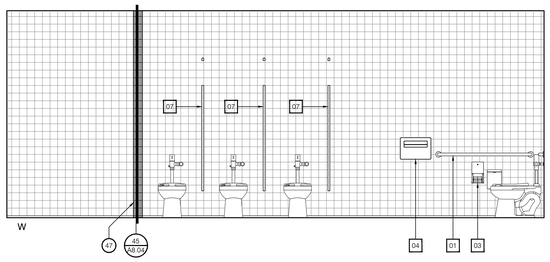






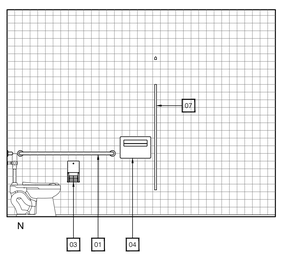
M19H Girls - Building M-3

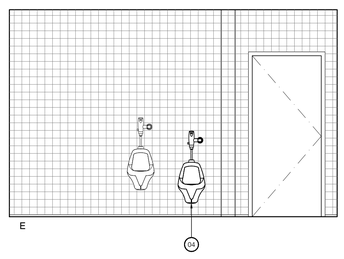
Scale: 3/8" = 1'-0"

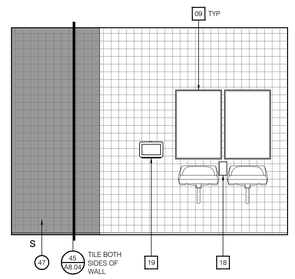


M19I Boys - Building M-3

Scale: 3/8" = 1'-0"

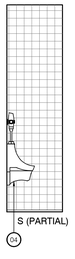


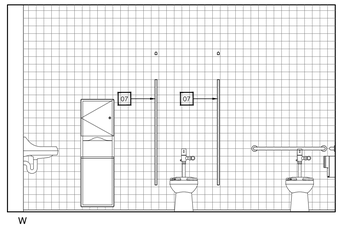




M19I Boys (Cont) - Building M-3

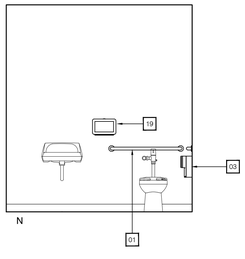
Scale: 3/8" = 1'-0"

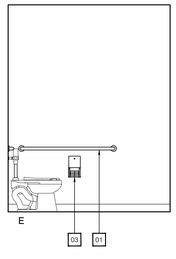


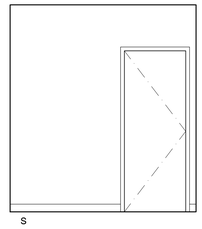


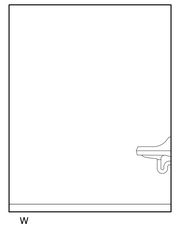
M19J Staff Restroom - Building M-3

Scale: 3/8" = 1'-0"









INTERIOR ELEVATION KEYNOTES

01 CABINETRY - SEE INT ELEVS FOR ADDIT INFO (22/A8.02)
02 COUNTER MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (16/A8.00)
03 WALL MTD SINK AND FAUCET - SEE PLBG SHTS FOR ADDIT INFO (A8.00)
04 WALL MTD URINAL AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (21/A8.00)
05 WALL MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41/A8.00)
06 FLR MTD WATER CLOSET AND FLUSH VALVE - SEE PLBG SHTS FOR ADDIT INFO (41/A8.00)
07 FLR DRAIN SEE FLUSH WITH TILE - SEE PLBG SHTS FOR ADDIT INFO
08 NOT USED
09 NOT USED
10 NOT USED
11 NOT USED
12 NOT USED
13 NOT USED
14 NOT USED
15 EX ALUM WINDOW SYSTEM- EX WH/ NOTED- SEE WINDOW SCHEDULE FOR ADDIT INFO
16 NOT USED
17 CONC SLAB INFILL AT DEPRESSED SLAB (47/A8.02)
18 CONC SLAB INFILL AT UTILITY TRENCH (52/A8.02) SIM
19 LINE OF REPLACED/ REINSTALLED CARPET TILES AS REQUIRED
20 EXISTING FLOOR MOUNTED TOILET WITH TOILET SET AT +17" AND TOUCHLESS FLUSH VALVE
21 EXISTING WALL MOUNTED URINAL WITH RIM AT +17" AND TOUCHLESS FLUSH VALVE
22 NOT USED
23 EXISTING WALL MOUNTED SINK WITH FAUCET AT +34" MAX AND +29" MIN CLEARANCE
24 NOT USED
25 EXISTING MIRROR MOUNTED AT MAX +40" TO MIRROR SURFACE
26 EXISTING FLOOR MOUNTED PARTITION SYSTEM
27 NOT USED
28 NOT USED
29 NOT USED
30 EXISTING WALL MOUNTED TOILET PAPER DISPENSER
31 NOT USED
32 NOT USED
33 NOT USED
34 EXISTING WALL MOUNTED TOILET W/ TOILET SEAT AT +17"
35 NOT USED
36 J-BOX ONLY (DATA OUTLET) - 3/4" CONDUIT STUBBED ABOVE CEILING
37 STANDARD SURGE PROTECTED DUPLEX OUTLET. LOCATE OUTLETS AS INDICATED ON THE PLAN
38 DOUBLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RING. PROVIDE PULL STRING.
39 SINGLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING
40 SINGLE GANG DEEP MUD RING AT STANDARD HEIGHT. PROVIDE 1" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTION AT MUD RING. PROVIDE PULL STRING.
41 WALL MOUNTED SURGE PROTECTED QUADPLEX OUTLET. LOCATE AT STANDARD WALL OUTLET HEIGHT.
42 REMOVE AND REPLACE EX WALL FIN AS REQUIRED TO INSTALL ELEC/ COMM CONDUITS AND BOXES
43 REMOVE EX WD TRIM AS REQUIRED TO INSTALL VTS WALL FIN. PATCH/ REPAIR WALL FIN AS REQD - TYP
44 PWD SHTG TO MATCH EX
45 VTS FIN - SEAMS AS INDICATED UNO - SEE PLANS/ DTLS FOR SUBSTRATE
46 NOT USED
47 INT FIN TO MATCH EX
48 WALL INFILL AT REMOVED DOOR/ WINDOW

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

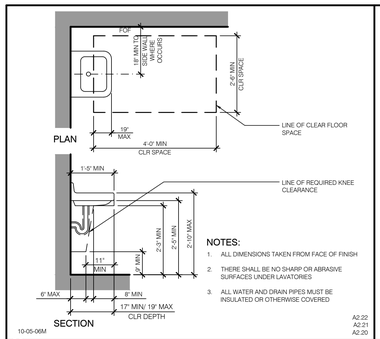
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:39

INTERIOR ELEVATIONS

A6.05



NOTES:
1. ALL DIMENSIONS TAKEN FROM FACE OF FINISH
2. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES
3. ALL WATER AND DRAIN PIPES MUST BE INSULATED OR OTHERWISE COVERED

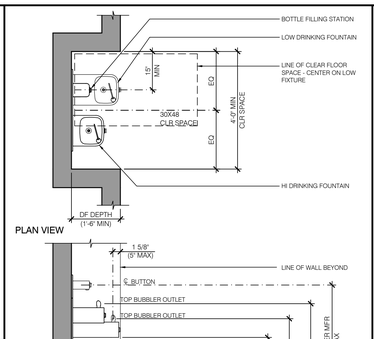
10-05-06M

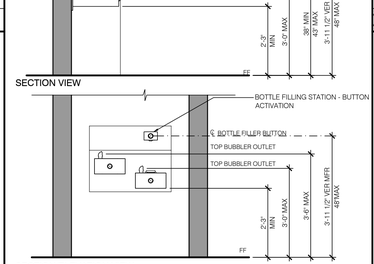
A2.22
A2.21
A2.20

11 ACCESSIBLE LAVATORY REQUIREMENTS : 1/2"

12 NOT USED

13 NOT USED



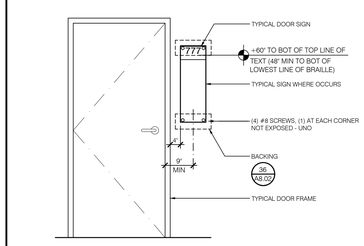


NOTE:
1. THIS DETAIL SHOWS MINIMUM AND MAXIMUM DIMENSIONS - SEE PLANS FOR ACTUAL DIMENSIONS WHICH VARY WITHIN THESE GUIDELINES.
2. DF ACTIVATOR MUST BE WITHIN 6" OF THE FRONT EDGE OF THE DF.
3. SPOUT MUST PROVIDE A FLOW OF WATER AT LEAST 4" HIGH.
4. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL NOT EXCEED 5 LBF.
5. ALL DIMENSION TAKEN FROM FOF.
6. VERIFY DIMENSIONS WITH MFR FOR ADA COMPLIANCE.
7. DF SHALL BE LOCATED COMPLETELY W/IN ALCOVE.

10-05-33M

A2.22
A2.21
A2.20

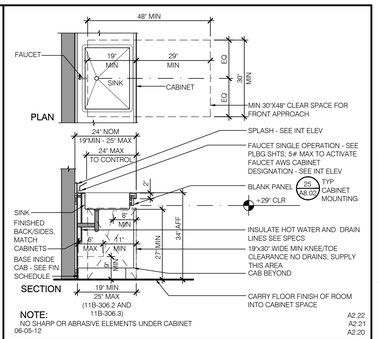
24 ACCESSIBLE DF REFERENCE W/ BOTTLE FILLER : 1/2"



10-04-05M

A2.00

15 TYPICAL DOOR SIGN INSTALLATION : 1/2"

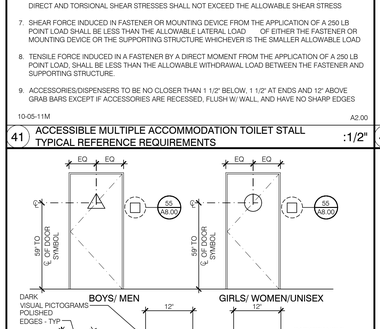


NOTE:
NO SHARP OR ABRASIVE ELEMENTS UNDER CABINET

06-05-12

A2.22
A2.21
A2.20

16 ACCESSIBLE SINK AT CABINET : 1/2"

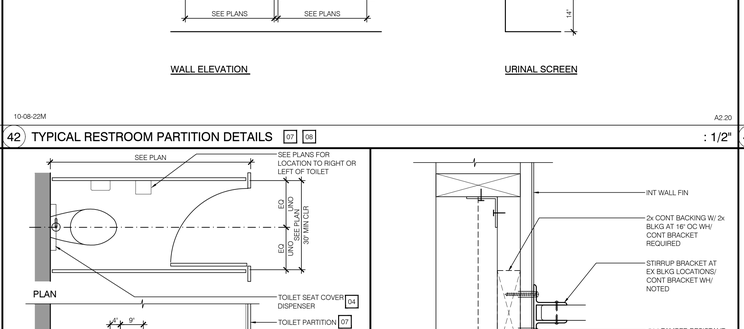


NOTES:
1. THIS DETAIL SHOWS MINIMUM AND MAXIMUM DIMENSIONS - SEE PLANS FOR ACTUAL UNIT TYPE, FLOOR SPACE, AND INSTALLATION DIMENSIONS
2. URINAL SCREEN SHALL PROJECT 24" MAX FOR 30" CLEAR STALLS
3. ALL DIMENSIONS TAKEN FROM FACE OF FINISH

10-05-01M

A2.22
A2.21
A2.20

21 ACCESSIBLE URINAL REQUIREMENTS : 1/2"

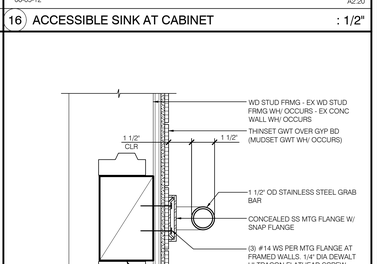


NOTE:
ALL DIMENSIONS TAKEN FROM FACE OF FINISH

10-05-03M

A2.00

22 ACCESSORY MOUNTING HEIGHTS (UNO) : 3/4"

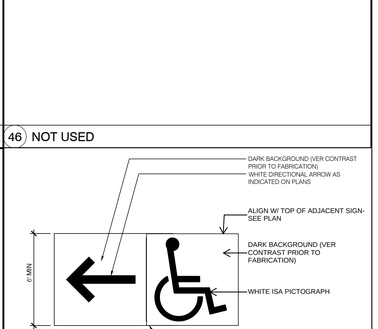


NOTES:
1. CHARACTERS: WIDTH TO HEIGHT RATIO BTW 3:5 AND 1:1
2. STROKE WIDTH TO HEIGHT RATIO BTW 1:5 AND 1:10
3. PROVIDED AND INSTALLED BY OWNER

10-04-10M

A2.00

25 ROOM SIGN (BCSD) : 3"



10-05-26M

A2.00

26 GRAB BAR AT WOOD STUD : 3"

ALL DIMENSIONS TAKEN FROM FACE OF FIN - TYP

GRAB BAR NOTES:
1. GRAB BARS DIA OR WIDTH OF GRIPPING SURFACE IS REQUIRE TO BE 1 1/2" OUTSIDE DIA
2. THE SPACE BETWEEN WALL FIN AND BAR IS TO BE 1 1/2" CLR
3. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS
4. GRAB BARS AND ANY ADJACENT SURFACE SHALL NOT HAVE ANY SHARP OR ABRASIVE ELEMENTS, EDGES ARE TO HAVE A MINIMUM RADIUS OF 1/8"
5. BENDING STRESS IN A GRAB BAR OR SEAT INDUCED BY THE MAXIMUM BENDING MOMENT FROM THE APPLICATION OF A 250 LBS POINT LOAD SHALL BE LESS THAN THE ALLOWABLE STRESS FOR THE MTL OF THE GRAB BAR OR SEAT
6. SHEAR STRESS INDUCED IN A GRAB BAR OR SEAT BY THE APPLICATION OF A 250 LB POINT LOAD SHALL BE LESS THAN THE ALLOWABLE SHEAR STRESS FOR THE MTL OF THE GRAB BAR OR SEAT, AND ITS MOUNTING BRACKET OR OTHER SUPPORT IS CONSIDERED TO BE FULLY RESTRAINED, THEN DIRECT AND TORSIONAL SHEAR STRESSES SHALL NOT EXCEED THE ALLOWABLE SHEAR STRESS
7. SHEAR FORCE INDUCED IN FASTENER OR MOUNTING DEVICE FROM THE APPLICATION OF A 250 LB POINT LOAD SHALL BE LESS THAN THE ALLOWABLE LATERAL LOAD OF EITHER THE FASTENER OR MOUNTING DEVICE OR THE SUPPORTING STRUCTURE WHICHEVER IS THE SMALLER ALLOWABLE LOAD
8. TENSILE FORCE INDUCED IN A FASTENER BY A DIRECT MOMENT FROM THE APPLICATION OF A 250 LB POINT LOAD, SHALL BE LESS THAN THE ALLOWABLE WITHDRAWAL LOAD BETWEEN THE FASTENER AND SUPPORTING STRUCTURE
9. ACCESSORIES/DISPENSERS TO BE NO CLOSER THAN 1 1/2" BELOW, 1 1/2" AT ENDS AND 12" ABOVE GRAB BARS EXCEPT IF ACCESSORIES ARE RECESSED, FLUSH W/ WALL, AND HAVE NO SHARP EDGES

10-05-11M

A2.00

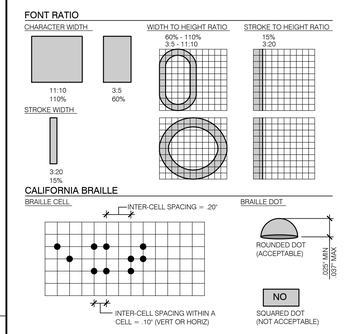
41 ACCESSIBLE MULTIPLE ACCOMMODATION TOILET STALL TYPICAL REFERENCE REQUIREMENTS :1/2"

10-08-22M

A2.20

42 TYPICAL RESTROOM PARTITION DETAILS 07 08 : 1/2"

44 NOT USED



NOTE:
1. CHARACTER TYPE: CHARACTERS ON SIGNS SHALL BE RAISED 1/32" MINIMUM AND SHALL BE ARIAL UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 CONTRACTED BRAILLE - SEE NOTE 5 BELOW (11B-703.2.1).
2. CHARACTER SIZE: RAISED CHARACTERS SHALL BE A MINIMUM OF 5/8" AND MAXIMUM OF 2" HIGH (CBC 11B-703.2.5).
3. FINISH AND CONTRAST: CONTRAST BETWEEN CHARACTERS, SYMBOLS AND THEIR BACKGROUND MAY BE LIGHT CHARACTERS ON DARK BACKGROUND OR DARK CHARACTERS ON LIGHT BACKGROUND AND HAVE A NON-GLARE FINISH (CBC 11B-703.5.1).
4. PROPORTIONS: CHARACTERS OF AN UPPERCASE "O" TO AN UPPERCASE "I" ON SIGNS SHALL HAVE A WIDTH-TO-HEIGHT RATIO OF BETWEEN 3:5 (60%) AND 11:10 (110%) AND A STROKE WIDTH-HEIGHT RATIO 3:20 (15%) (CBC 11B-703.2.4 AND 11B-703.2.6).
5. BRAILLE: CALIFORNIA CONTRACTED GRADE 2 BRAILLE SHALL BE USED WHEREVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS; DOTS SHALL BE .10" ON CENTERS IN EACH CELL WITH .29" SPACE BETWEEN CELLS; MEASURED IN THE SECOND COLUMN OF DOTS IN THE FIRST CELL TO THE COLUMN OF DOTS IN THE SECOND CELL; DOTS SHALL BE RAISED A MINIMUM OF .025" AND A MAXIMUM OF .037" ABOVE THE BACKGROUND (CBC TABLE 11B-703.3.1).
6. VISUAL CHARACTERS MAY BE SERIF OR SANS SERIF AND UPPER OR LOWER CASE CAN BE USED (CBC 11B-703.5.2 AND 11B-703.5.3).
7. VISUAL AND TACTILE LINE SPACING BETWEEN BASELINES (BOTTOM) OF SEPARATE LINES OF CHARACTERS W/IN MESSAGE SHALL BE 135% MIN AND 170% MAX OF CHARACTER HT.

10-04-40

A8.00

45 ACCESSIBLE SIGN REQUIREMENTS : NTS

46 NOT USED

NOTES:
1. CHARACTERS: WIDTH TO HEIGHT RATIO BTW 3:5 AND 11:10
2. STROKE WIDTH TO HEIGHT RATIO BTW 3:20.

45
A8.00

28

10-04-43M

A2.01

55 TOILET IDENTITY SIGNS : 3"

NOTE:
1. LOCATE SIGNS PER PLANS AND AS DIRECTED BY ARCHITECT.
2. PROVIDED AND INSTALLED BY OWNER.

29

10-04-43M

A2.01

56 DIRECTIONAL SIGNAGE : 3"

1/4" THICK CIRCLE AND TRIANGLE AND VISUAL PICTOGRAMS.

NOTE:
1. DOOR COLOR TO CONTRAST W/ GEOMETRIC DOOR SIGN BACKGROUND COLOR. PICTOGRAM COLOR TO CONTRAST W/ GEOMETRIC SIGN BACKGROUND COLOR.

10-04-03M

A2.00

51 TOILET IDENTITY SIGNS : NTS

10-08-28M

A8.10

52 NON ACCESSIBLE TOILET STALL : 1/2"

53 TOILET PARTITION BRACKET/ BACKING DTL : 3"

54 NOT USED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

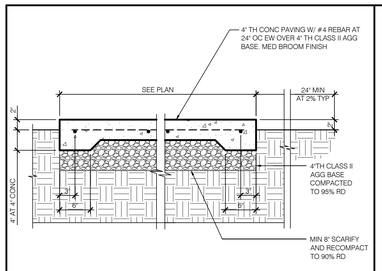
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:39

DETAILS

A8.00

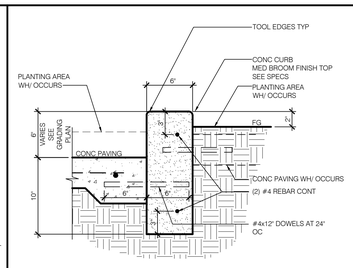


NOTE:
PROVIDE DEEP TOOL JOINTS (DTJ) AT 5'-0" OC MAX AND EXPANSION JOINTS (EJ) AT 20'-0" OC MAX (UNO) AND AT START/ FIN OF ALL RAD AND DIRECTION CHANGES. SEE PLANS FOR ADDITIONAL JOINTS. #4x12" GALV DOWEL AT 24" OC AT CONCRETE PAVING/ SLAB/ FOUNDATIONS AND ATTACHMENT TO OTHER WALLS AND RELATED ITEMS.

21 / A8.01

02-01-04

11 CONCRETE PAVING : 1"



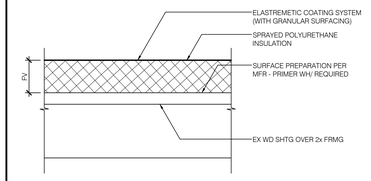
NOTE:
PROVIDE DTJ AT 5'-0" OC MAX AND EJ AT 20'-0" OC MAX (UNO) AND AT START/FINISH OF ALL RADIUS AND DIRECTION CHANGES, SEE PLANS FOR ADDITIONAL JOINTS. #4 x12" DOWELS AT 24" OC AT CONC PAVING/SLAB/FOUNDATIONS AND ATTACHMENT TO OTHER WALLS AND RELATED ITEMS. GREASED 12"x1/2" DOWELS AT EJ'S - 6" EA SIDE - STOP REBARS AT EJ'S

21 / A8.01

02-01-19M

12 PLANTER CURB : 1 1/2"

13 NOT USED



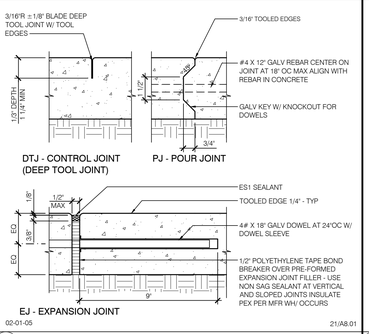
ICC-ES EVALUATION REPORT
ESR-2298
"BASF" SKYTITE OR EQUAL

A3.11
A3.10

14 SPRAYED POLYURETHANE ROOFING SYSTEM (PFR) : 3"

15 NOT USED

16 NOT USED

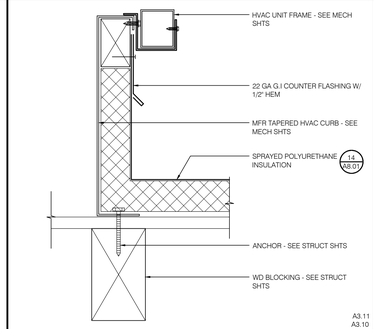


02-01-05 21/A8.01

21 TYP JOINTS AT CONCRETE - SITE : 3"

22 NOT USED

23 NOT USED



A3.11
A3.10

24 PFR FLASHING AT MFR CURB : 3"

25 NOT USED

26 NOT USED

02-01-24

31 CONCRETE TO EXISTING CONCRETE : 1 1/2"

32 NOT USED

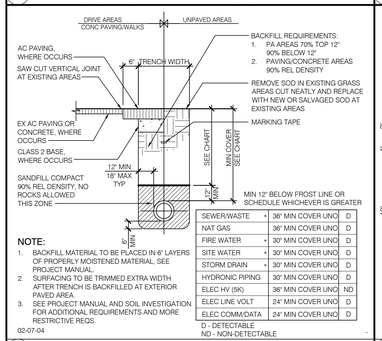
33 NOT USED

A3.11
A3.10

34 PFR FLASHING AT PIPE/ CONDUIT PENETRATION : 3"

35 NOT USED

36 NOT USED



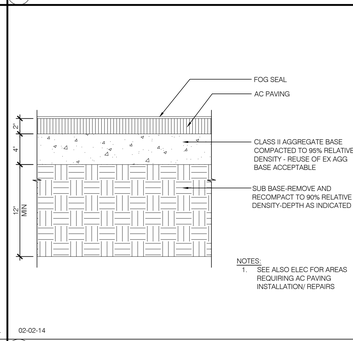
NOTE:
1. BACKFILL MATERIAL TO BE PLACED IN 6" LAYERS OF PROPERLY MOISTENED MATERIAL, SEE PROJECT MANUAL
2. SURFACING TO BE TRIMMED EXTRA WIDTH AFTER TRENCH IS BACKFILLED AT EXTERIOR PAVED AREA.
3. SEE PROJECT MANUAL AND SOIL INVESTIGATION FOR ADDITIONAL REQUIREMENTS AND MORE RESTRICTIVE REQS.

SEWER/WASTE	36" MIN COVER UNO	D
NAT GAS	36" MIN COVER UNO	D
FIRE WATER	30" MIN COVER UNO	D
SITE WATER	30" MIN COVER UNO	D
STORM DRAIN	30" MIN COVER UNO	D
HYDRONIC PIPING	30" MIN COVER UNO	D
ELEC HV (5K)	36" MIN COVER UNO	ND
ELEC LINE VOLT	24" MIN COVER UNO	D
ELEC COMM/DATA	24" MIN COVER UNO	D

D - DETECTABLE
ND - NON-DETECTABLE

02-07-04

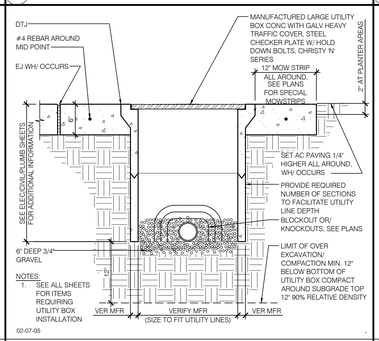
41 TYPICAL UTILITY TRENCH (SEE ELEC FOR ADDIT INFO) : 1/2"



NOTES:
1. SEE ALSO ELEC FOR AREAS REQUIRING AC PAVING INSTALLATION/ REPAIRS

02-02-14

42 AC PAVING SECTION : 1 1/2"



NOTES:
1. SEE ALL SHEETS FOR ITEMS REQUIRING UTILITY BOX INSTALLATION

02-07-05

43 LARGE UTILITY BOX : 1"

44 NOT USED

45 NOT USED

46 NOT USED

51 NOT USED

52 NOT USED

53 NOT USED

54 NOT USED

55 NOT USED

56 NOT USED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:39

DETAILS

A8.01

NOTE:
TUBING AND CONDUIT SHALL BUTT TIGHT AGAINST STRUCTURE

EXISTING FRAMING MEMBERS - INSTALL 2x BLOCKING WHERE COMPRESSION STRUT DOES NOT ALIGN WITH EXISTING FRAMING MEMBER

34 / A8.02

EMT - EXTEND TUBE TO BE TIGHT TO CEILING GRID AND STRUCTURE ABOVE THEN INSTALL BOLT TO SECURE ONE TUBE TO THE OTHER - SEE TABLE FOR CONDUIT SIZE BELOW

SEE DETAILS FOR CONDITION

34 / A8.02

#12 GA VERT WIRE HANGER IN TUBING - LEVEL CEILING GRID PRIOR TO SETTING TUBE

(2) #12 SPLAY BRACING WIRES IN LINE WITH CROSS TEE

EMT/CONDUIT AT 90° TO RUNNER - SEE SCHEDULE; NOTCH BOTTOM 1" TO RECEIVE MAIN RUNNER

DRILL 3/32" HOLE AND INSTALL 1/8" BOLT AND LOCKING NUT

(2) #12 SPLAY BRACING WIRES IN LINE WITH MAIN RUNNER

33 / A8.02

#12 HANGER WIRE AT 4'-0" OC (MAX) 8" (MAX) FROM WALL

NOTE:
SLOPE WIRES AT 45° MIN FROM VERT

(4) TURNS IN 1 1/2" MAX AT EACH END OF WIRE, TYP

8" MAX, TYP

2'-0" MAX, TYP

1/4" MACHINE BOLT TO MAIN RUNNER

8" MAX

TYPICAL FOR (4) WIRES

MAIN RUNNER INTERMEDIATE DUTY

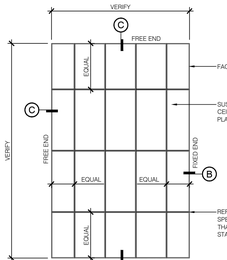
PROVIDE 14 GA CONNECTOR AT ALL INTERSECTIONS

CROSS RUNNER INTERMEDIATE DUTY

TRADE SIZES	TUBING THICKNESS INCHES	ALLOWABLE LENGTH EMT CONDUIT L/r = 200 MAX
1/2"	0.042	3'-11"
3/4"	0.049	5'-2"
1"	0.057	6'-6"
1 1/4"	0.065	8'-6"
1 1/2"	0.065	9'-10"
2"	0.065	12'-6"

EMT - ELECTRICAL METALLIC TUBING

A WIRE SUSPENSION SYSTEM : NTS



F TYPICAL SUSPENDED CEILING LAYOUT :1/4"

09-02-01M

8" MAX OR 1/4 OF THE LENGTH OF THE END RUNNER, WHICHEVER IS LESS

12 GA HANGER WIRE

MINIMUM (3) TIGHT TURNS IN 1 1/2"

1 1/2"

1/2"

2" x 2" x 25 GA MIN CONT WALL ANGLE

#6 WOOD SCREW AT 16" OC TO WOOD FRAMING; MINIMUM 1" EMBEDMENT INTO FRAMING

FACE OF FINISH

POP RIVET PERIMETER MEMBER AT EACH MAIN RUNNER MAX OF (2) ADJACENT SIDES - RIVET COLOR TO MATCH RUNNER

MAIN OR CROSS RUNNER

CEILING PANEL

B FIXED END T-BAR DETAIL : 3"

8" MAX OR 1/4 OF THE LENGTH OF THE END RUNNER, WHICHEVER IS LESS

12 GA HANGER WIRE

MIN (3) TIGHT TURNS IN 1 1/2"

1 1/2"

"V" STRUT

3/4" MIN

2" x 2" x 25 GA MFR WALL ANGLE

#6 WOOD SCREW AT 16" OC TO WOOD FRAMING; MINIMUM 1" EMBEDMENT INTO FRAMING
#6 SS SDST SCREW AT WINDOW MULLION - SEE PLANS

FACE OF FINISH

MAIN OR CROSS RUNNER

10d RING SHANK NAIL

CEILING PANEL

C FREE END T-BAR DETAIL : 3"

TYPICAL COMPRESSION STRUTS - SEE DETAIL

33 / A8.02

TYPICAL 12 GA GALV VERTICAL HANGER WIRE AT 4' OC EACH WAY WITH MINIMUM (3) TIGHT TURNS IN 1 1/2" BOTH ENDS OF WIRE INSTALL HANGER WIRES MAXIMUM 8" FROM EACH PERIMETER WALL

33 / A8.02 33 / A8.02 WIRE SPLICE W/H OCCURS

TYPICAL 12 GA GALV SPLAY WIRE AT 12' OC EACH WAY; 96 SF MAX OF FIRE RATED CEILING WITH MIN (4) TIGHT TURNS IN 1 1/2" BOTH ENDS OF WIRE, TYP OF (4) PER LOCATION INSTALL COMPRESSION STRUT AND SPLAY WIRES AT MAX 6' FROM EACH PERIMETER WALL 4' AT FIRE RATED CEILINGS

33 / A8.02 33 / A8.02 WIRE SPLICE W/H OCCURS

4'-0" MAX

4'-0" MAX

45° MAX TYP

45° MAX TYP

WALL OVER 24" DP

WALL

TYPICAL CROSS RUNNER

TYPICAL MAIN RUNNER

NOTES:
SEE DETAILS FOR:

1. CONNECTIONS OF SPLAY AND HANGER WIRES TO THE STRUCTURE ABOVE.
2. ELECTRICAL FIXTURES AND MECHANICAL EQUIPMENT TO BE SUPPORTED BY SEPARATE 12 GA WIRES AT EACH CORNER MIN - SEE STRUCTURAL DETAILS FOR CONNECTIONS TO STRUCTURE ABOVE
3. REFER TO IR 25-2.10 FOR ADDITIONAL REQUIREMENTS
4. DO NOT ATTACH TO BOTTOM CHORD OF EX WOOD TRUSS.
5. DO NOT ATTACH TO EX STEEL TRUSS.

D SUSPENDED CEILING GRID : NTS

A5.11
A5.10

51 WIRE SUSPENSION SYSTEM NOTES

1. CEILING SYSTEM GENERAL NOTES
   - 1.01 CEILING SYSTEM COMPONENTS SHALL COMPLY WITH ASTM C635 AND SECTION 5.1 OF ASTM E580.
   - 1.02 THE CEILING GRID SYSTEM MUST BE RATED HEAVY DUTY AS DEFINED BY ASTM C635.
   - 1.03 CEILING SYSTEMS. THE FOLLOWING CEILING SYSTEM(S) IS/ARE PART OF THE SCOPE OF THIS PROJECT:
     MANUFACTURER: ARMSTRONG CEILING SOLUTIONS
     PRODUCT NAME: PRELUDE XL 15/16" EXPOSED TEE SYSTEM
     EVALUATION REPORT TYPE AND NUMBER: ICC-ESR-1308
     MAIN RUNNER PART, MODEL, OR CATALOG NUMBER: NO. 7301(HEAVY DUTY)
     CROSS RUNNER PART, MODEL, CATALOG NUMBER: NO. XL 7341
   - 1.04 SEISMIC WALL CLIP:
     MANUFACTURER'S MODEL: N/A
   - 1.05 CEILING PANELS SHALL NOT SUPPORT ANY LUMINAIRES, AIR TERMINALS OR DEVICES.
   - 1.06 FOR CEILING INSTALLATIONS UTILIZING ACOUSTICAL TILE PANELS OF MINERAL OR GLASS FIBER, IT IS NOT MANDATORY TO PROVIDE ¼" CLEARANCE BETWEEN THE ACOUSTICAL TILE PANELS AND THE WALL ON THE SIDES OF THE CEILING WHICH ARE FREE TO SLIP. FOR ALL OTHER CEILING PANEL TYPES, PROVIDE ½" CLEARANCE BETWEEN THE CEILING PANEL AND THE WALL ON THE SIDES OF THE CEILING FREE TO SLIP. CLEARANCE BETWEEN CEILING GRID RUNNERS/MEMBERS AND WALLS SHALL COMPLY WITH THE DETAILS ON THESE DRAWINGS REGARDLESS OF CEILING TILE MATERIAL.

2. MATERIALS
   - 2.01 CEILING WIRE SHALL BE CLASS 1 ZINC COATED (GALVANIZED) CARBON STEEL CONFORMING TO ASTM A641. WIRE SHALL BE #12 GAUGE (0.106" DIAMETER) WITH SOFT TEMPER AND MINIMUM ULTIMATE TENSILE STRENGTH = 70 KSI.
   - 2.02 GALVANIZED SHEET STEEL (INCLUDING THAT USED FOR METAL STUD AND TRACK COMPRESSION STRUTS/POST) SHALL CONFORM TO ASTM A653, OR OTHER EQUIVALENT SHEET STEEL LISTED IN SECTION A3.1 OF THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, (AISI S100). MATERIAL 43 MIL (18 GAUGE) AND LIGHTER SHALL HAVE MINIMUM YIELD STRENGTH OF 33 KSI. MATERIAL 54 MIL (16 GAUGE) AND HEAVIER SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI.
   - 2.03 ELECTRICAL METALLIC TUBE (EMT) SHALL BE ANSI C80.3/UL 797 CARBON STEEL WITH G90 GALVANIZING. EMT SHALL HAVE MINIMUM YIELD STRENGTH (FY) OF 30 KSI AND MINIMUM ULTIMATE STRENGTH (FU) OF 48 KSI.

3. ATTACHMENT OF HANGER AND BRACING WIRES
   - 3.01 SEPARATE ALL CEILING HANGER AND BRACING WIRES AT LEAST 6 INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT, ETC.
   - 3.02 HANGER AND BRACING WIRES SHALL NOT ATTACH TO OR BEND AROUND OBSTRUCTIONS INCLUDING, BUT NOT LIMITED TO PIPING, DUCTWORK, CONDUIT AND EQUIPMENT.
   - 3.03 HANGER WIRES THAT ARE MORE THAN ONE (HORIZONTAL) IN SIX (VERTICAL) OUT OF PLUMB SHALL HAVE COUNTER-SLOPING WIRES.
   - 3.04 SLACK SAFETY WIRES SHALL BE CONSIDERED HANGER WIRES FOR INSTALLATION AND TESTING REQUIREMENTS.
   - 3.05 HANGER AND BRACING WIRE ANCHORAGE TO THE STRUCTURE SHALL BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE ANCHORAGE ALIGNS CLOSELY WITH THE DIRECTION OF THE WIRE (E.G., BRACING WIRE CEILING CLIPS MUST BE BENT AS SHOWN IN THE DETAILS AND ROTATED AS REQUIRED TO ALIGN CLOSELY WITH THE DIRECTION OF THE WIRE. SCREW EYES IN WOOD MUST BE INSTALLED SO THEY ALIGN CLOSELY WITH THE DIRECTION OF THE WIRE, ETC.).

4. FASTENERS AND WELDING
   - ~~4.01 SHEET METAL SCREWS SHALL COMPLY WITH ASTM C1513 AND ASME B18.6.3. PENETRATION OF SCREWS THROUGH JOINED MATERIAL SHALL NOT BE LESS THAN THREE EXPOSED THREADS.~~
   - ~~4.02 EXPANSION ANCHORS SHALL BE: (HILTI KBTZ, ICC-ESR-1266)~~
   - ~~4.03 POWER-ACTUATED FASTENERS SHALL BE: (HILTI X-U SHOT PINS, ICC-ESR-2269)~~
   - ~~4.04 IF NOT OTHERWISE SPECIFIED IN THE EVALUATION REPORT, POWER-ACTUATED FASTENERS INSTALLED IN STEEL SHALL BE INSTALLED SO THE ENTIRE POINTED END OF THE FASTENER IS DRIVEN THROUGH THE STEEL MEMBER.~~
   - ~~4.05 POWER-ACTUATED FASTENERS IN CONCRETE OR MASONRY ARE NOT PERMITTED FOR BRACING WIRES.~~
   - ~~4.06 CONCRETE REINFORCEMENT AND PRESTRESSING TENDONS SHALL BE LOCATED BY NON-DESTRUCTIVE MEANS PRIOR TO INSTALLING POST-INSTALLED ANCHORS.~~
   - ~~4.07 WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 USING E60XX SERIES ELECTRODES.~~

5. TESTING
   - 5.01 ALL FIELD TESTING MUST BE PERFORMED IN THE PRESENCE OF THE PROJECT INSPECTOR.
   - 5.02 POST-INSTALLED ANCHORS IN CONCRETE USED TO SUPPORT HANGER WIRES SHALL BE TESTED AT A FREQUENCY OF 10 PERCENT. POWER-ACTUATED FASTENERS IN CONCRETE SHALL BE FIELD TESTED FOR 200 POUNDS IN TENSION. ALL OTHER POST-INSTALLED ANCHORS IN CONCRETE SHALL BE TESTED IN ACCORDANCE WITH CBC SECTION 1910A.5.
   - 5.03 POST-INSTALLED ANCHORS IN CONCRETE USED TO ATTACH BRACING WIRES SHALL BE TESTED AT A FREQUENCY OF 50 PERCENT IN ACCORDANCE WITH CBC SECTION 1910A.5.

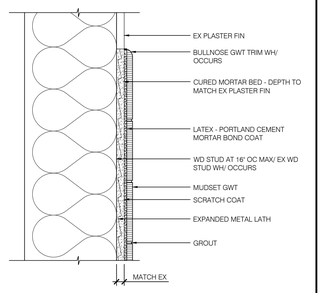
6. LUMINAIRES
   - 6.01 ALL LUMINAIRES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE LUMINAIRE. A MINIMUM OF TWO SCREWS OR APPROVED FASTENERS ARE REQUIRED AT EACH LUMINAIRE, PER ASTM E580 SECTION 5.3.1.
   - 6.02 SURFACE-MOUNTED LUMINAIRES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST TWO POSITIVE CLAMPING DEVICES. THE CLAMPING DEVICE SHALL COMPLETELY SURROUND THE SUPPORTING CEILING RUNNER AND BE MADE OF STEEL WITH A MINIMUM THICKNESS OF #14 GAUGE. ROTATIONAL SPRING CATCHES DO NOT COMPLY. A #12 GAUGE SLACK SAFETY WIRE SHALL BE CONNECTED FROM EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN A LUMINAIRE IS 8 FEET OR LONGER OR EXCEEDS 56 POUNDS. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED 8 FEET.
   - 6.03 LUMINAIRES WEIGHING LESS THAN OR EQUAL TO 10 POUNDS MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, SHALL HAVE A MINIMUM OF ONE #12 GAUGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.
   - 6.04 LUMINAIRES WEIGHING GREATER THAN 10 POUNDS BUT LESS THAN OR EQUAL TO 56 POUNDS MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, BUT THEY SHALL HAVE A MINIMUM OF TWO #12 GAUGE SLACK SAFETY WIRES CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS TO THE STRUCTURE ABOVE.
     EXCEPTION: ALL LUMINAIRES GREATER THAN TWO BY FOUR FEET WEIGHING LESS THAN 56 POUNDS SHALL HAVE A #12 GAUGE SLACK SAFETY WIRE AT EACH CORNER.
   - 6.05 ALL LUMINAIRES WEIGHING GREATER THAN 56 POUNDS SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR TAUT #12 GAUGE HANGER WIRES (ONE AT EACH CORNER) ATTACHED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS. THE FOUR TAUT #12 GAUGE WIRES OR OTHER APPROVED HANGERS, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, SHALL BE CAPABLE OF SUPPORTING FOUR TIMES THE WEIGHT OF THE FIXTURE.

7. SERVICES WITHIN THE CEILING
   - 7.01 ALL FLEXIBLE SPRINKLER HOSE FITTING MOUNTING BRACKETS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS. SCREWS OR APPROVED FASTENERS ARE REQUIRED. A MINIMUM OF TWO ATTACHMENTS ARE REQUIRED AT EACH COMPONENT.
   - 7.02 CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING LESS THAN OR EQUAL TO 20 POUNDS SHALL HAVE ONE #12 GAUGE SLACK SAFETY WIRE ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.
   - 7.03 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 20 POUNDS BUT LESS THAN OR EQUAL TO 56 POUNDS SHALL HAVE TWO #12 GAUGE SLACK SAFETY WIRES (AT DIAGONAL CORNERS) CONNECTED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.
   - 7.04 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 56 POUNDS SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY NOT LESS THAN FOUR TAUT #12 GAUGE HANGER WIRES ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS.

8. OTHER DEVICES WITHIN THE CEILING
   - 8.01 ALL LIGHTWEIGHT MISCELLANEOUS DEVICES, SUCH AS STROBE LIGHTS, OCCUPANCY SENSORS, SPEAKERS, EXIT SIGNS, ETC., SHALL BE ATTACHED TO THE CEILING GRID. IN ADDITION, DEVICES WEIGHING MORE THAN 10 POUNDS SHALL HAVE A #12 GAUGE SLACK SAFETY WIRE ANCHORED TO THE STRUCTURE ABOVE. DEVICES WEIGHING MORE THAN 20 POUNDS SHALL BE SUPPORTED INDEPENDENTLY FROM THE STRUCTURE ABOVE.

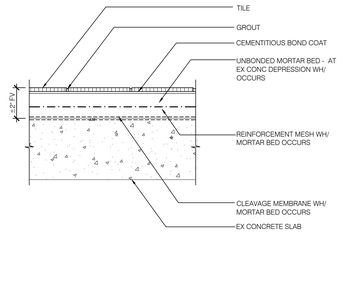
13 NOT USED

14 NOT USED



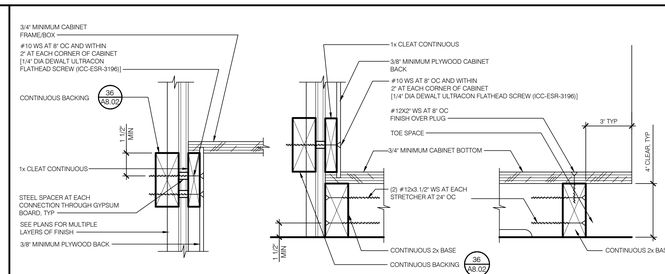
A2.20

23 MUDSET TILE AT STUD WALL (TCNA W202E) : 3"



A2.20

24 TILE AT EX CONC SLAB (TCNA) : 3"

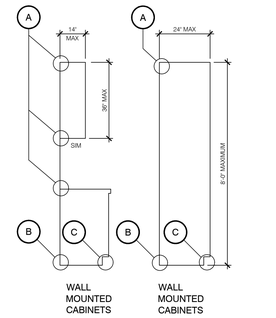


A - WALL CONNECTION :3"

NOTE: MINIMUM (4) FASTENERS PER CABINET MODULE

B - WALL CONNECTION :3"

C - TOE SPACE :3"

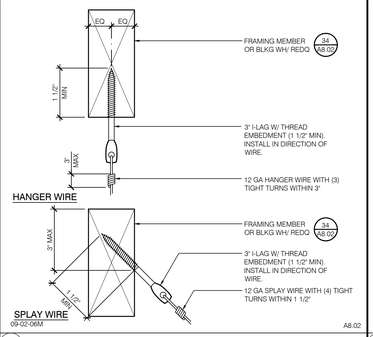


CABINET PROFILES NTS

A2.22
A2.21
A2.20

06-05-31M

25 TYPICAL CABINET MOUNTING DETAIL - WOOD FRAMING (ANCHORS AT CONC SUBSTRATE SHOWN IN BRACKETS"[]") (NUMBER AND SPACING DOES NOT DIFFER) : AS NOTED

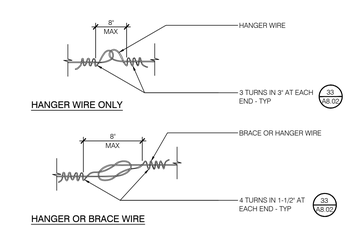


SPLAY WIRE

09-02-06M

A8.02

33 WIRE SUPPORT AT WOOD MEMBER : 6"

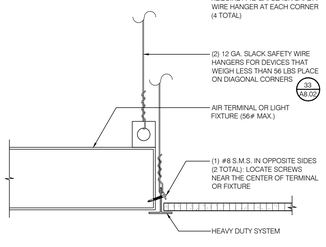


NOTES:

1. WIRE SPLICES ARE SHOWN LOOSELY TIED FOR ILLUSTRATIVE PURPOSES ONLY AND SHALL BE DRAWN TIGHT TO COMPLETE INSTALLATION WHEN CONSTRUCTED.
2. WIRE LOOPS SHALL BE TIGHTLY WRAPPED AND SHARPLY BENT TO PREVENT ANY VERTICAL MOVEMENT OR ROTATION WITHIN THE LOOPS.
3. EACH HANGER AND BRACE WIRE SHALL BE SPLICED NO MORE THAN ONCE ALONG ITS LENGTH.

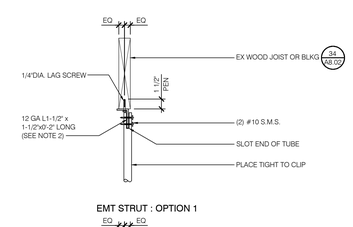
A8.02

43 TYPICAL CEILING WIRE SPLICES : 1 1/2"



A8.02

53 TYPICAL LUMINAIRE/ AIR TERMINAL SUPPORT : 1 1/2"



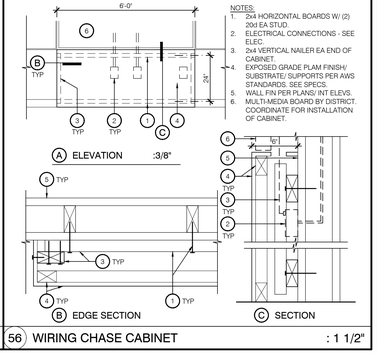
NOTES:

1. WEB OF CHANNEL TO BEAR WITHIN WIDTH OF WOOD MEMBER.
2. VERTICAL LEG OF MEMBER TO FALL WITHIN THE WIDTH OF THE WOOD MEMBER.
3. PEN. = MINIMUM PENETRATION OF LAG SCREW THREADS INTO THE WOOD MEMBER.
4. #14 WOOD SCREW MAY BE USED IN LIEU OF 1/4" LAG SCREW.

54 EMT STRUT : 1 1/2"

55 NOT USED

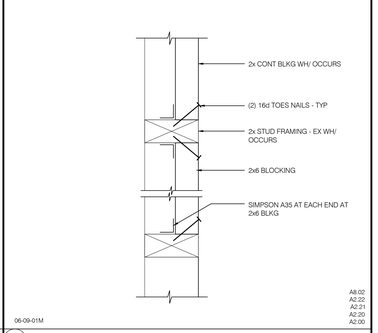
46 NOT USED



NOTES:

1. 2x4 HORIZONTAL BOARDS W/ (2) 20d EA STUD.
2. ELECTRICAL CONNECTIONS - SEE ELEC.
3. 2x4 VERTICAL NAILER EA END OF CABINET.
4. EXPOSED GRADE PLAM FINISH/ SUBSTRATE/ SUPPORTS PER AWS STANDARDS; SEE SPECS.
5. WALL FIN PER PLANS/ INT ELEVS.
6. MULTI-MEDIA BOARD BY DISTRICT. COORDINATE FOR INSTALLATION OF CABINET.

56 WIRING CHASE CABINET : 1 1/2"



A8.02
A2.22
A2.21
A2.20
A2.00

06-09-01M

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

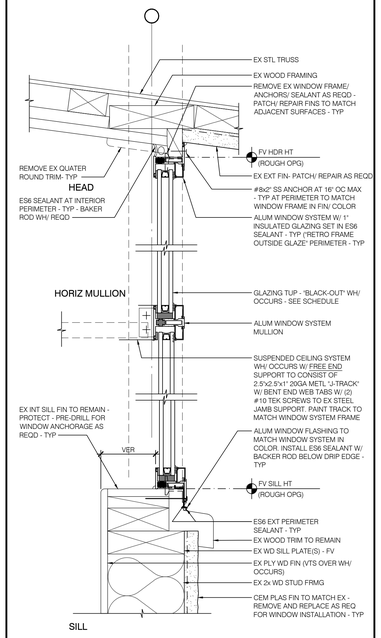
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

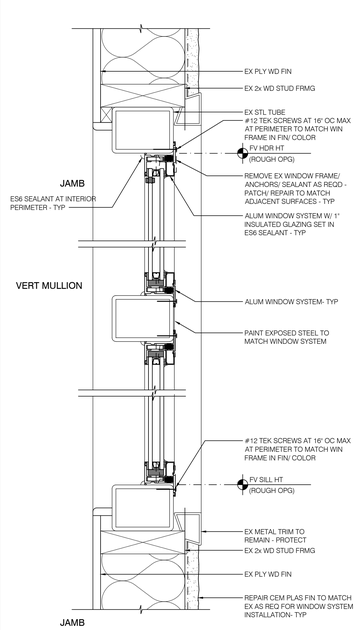
11.03.23 11:39

DETAILS

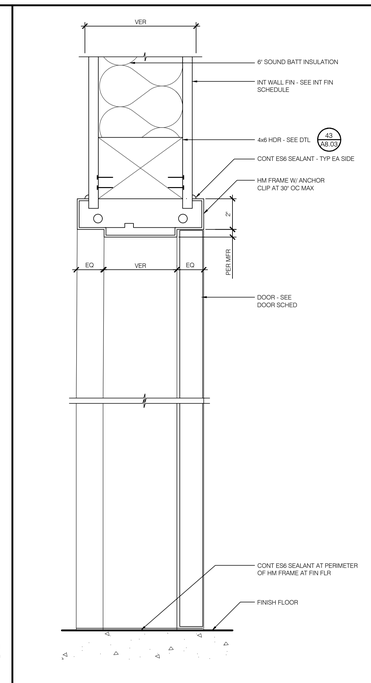
A8.02



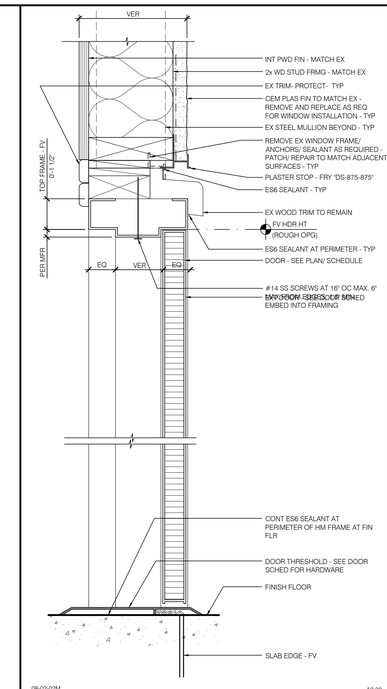
21 ALUM WINDOW SYSTEM : 3"



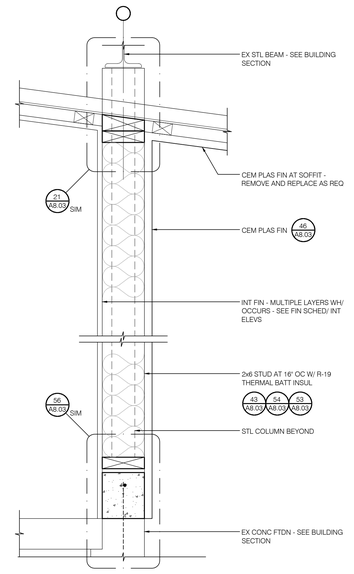
22 ALUM WINDOW SYSTEM : 3"



23 HM DOOR FRAME HEAD/SILL (INT WALL) : 3"



24 HM FRAME HEAD/SILL (EXT WALL) : 3"

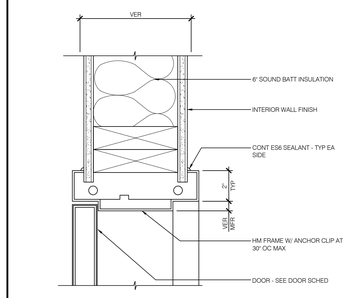


25 EXT WALL INFILL FRMG :1 1/2"

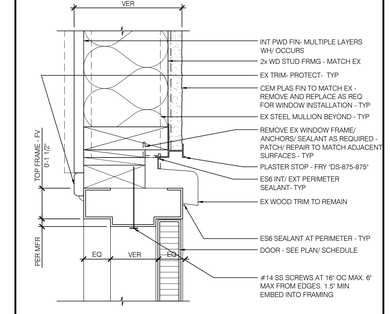
26 NOT USED

31 NOT USED

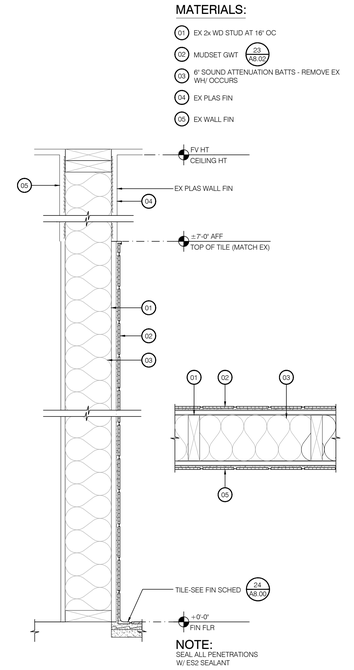
32 NOT USED



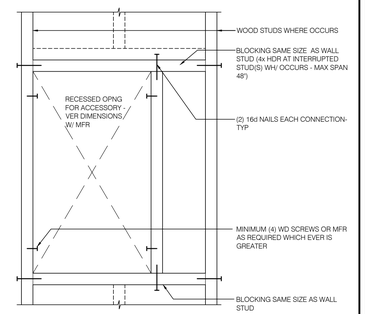
33 HM DOOR FRAME JAMB (INT WALL) : 3"



34 HM DOOR JAMB (EXT WALL) : 3"

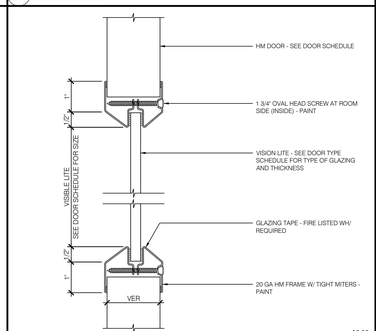


35 PARTITION (EXISTING) :1 1/2"

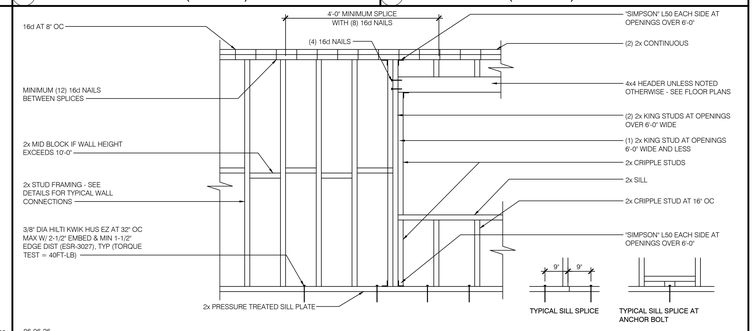


36 TYP RECESSED ACC BACKING - WOOD STUD : 1 1/2"

41 NOT USED



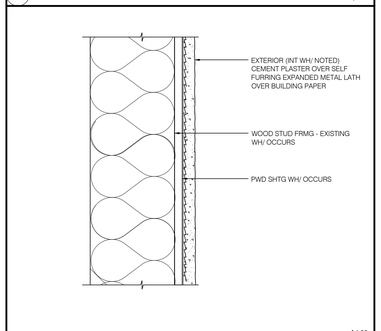
42 VISION LITE : 6"



43 TYPICAL INTERIOR PARTITION WALL FRAMING

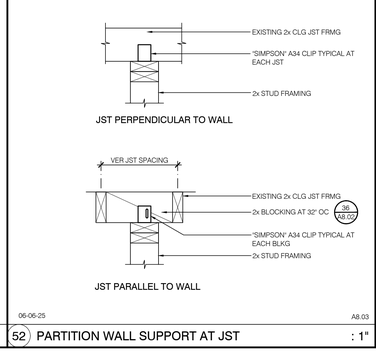
WINDOW FRAMING SHOWN; DOOR FRAMING SIMILAR : 1/2"

45 PARTITION (EXISTING WALL) :1 1/2"

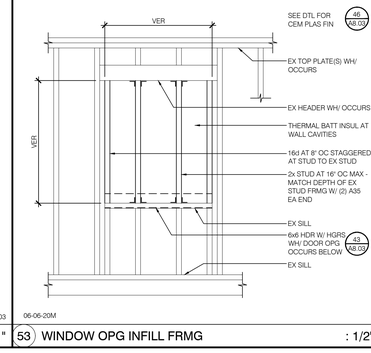


46 CEM PLAS FINISH : 3"

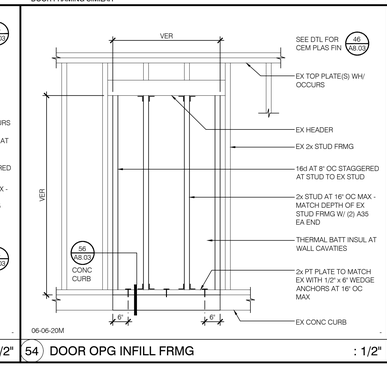
51 NOT USED



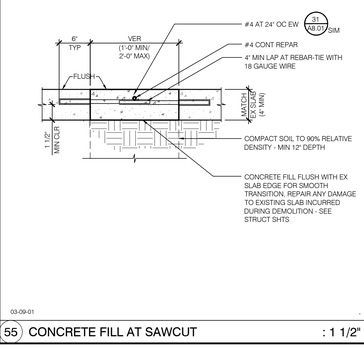
52 PARTITION WALL SUPPORT AT JST : 1"



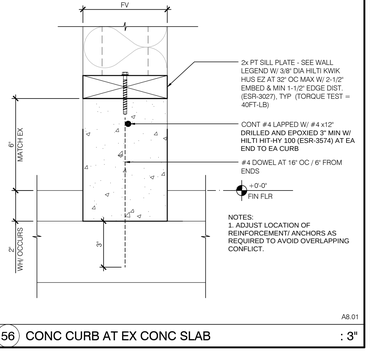
53 WINDOW OPG INFILL FRMG : 1/2"



54 DOOR OPG INFILL FRMG : 1/2"



55 CONCRETE FILL AT SAWCUT : 1 1/2"



56 CONC CURB AT EX CONC SLAB : 3"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

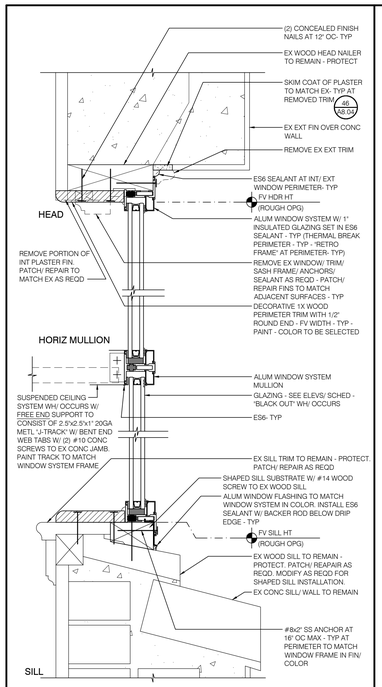
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

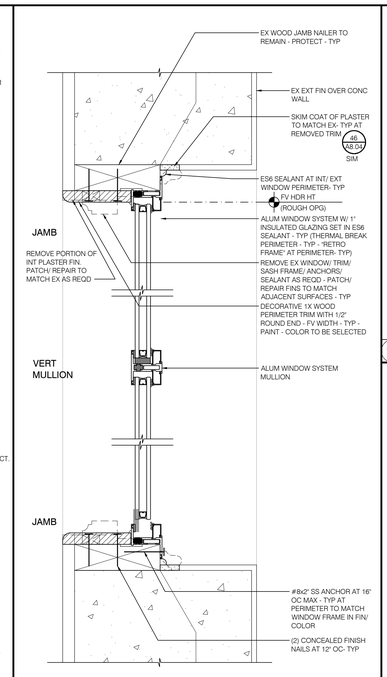
11.03.23 11:39

DETAILS

A8.03



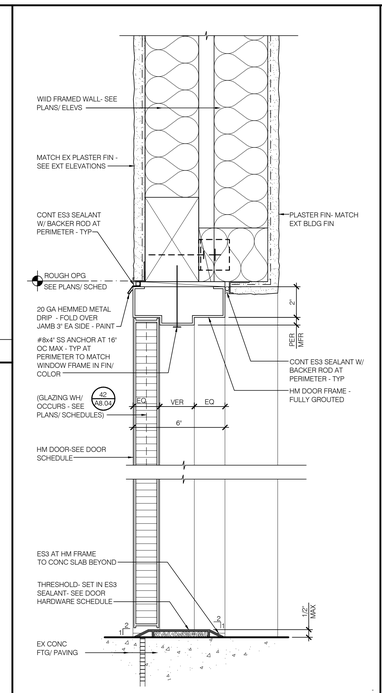
21 ALUM WINDOW SYSTEM : 3"



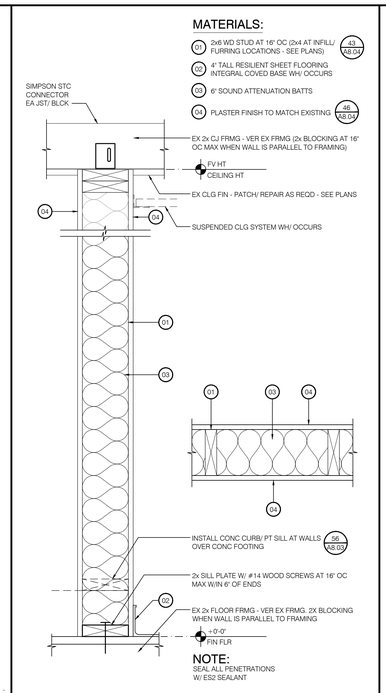
22 ALUM WINDOW SYSTEM : 3"

13 NOT USED

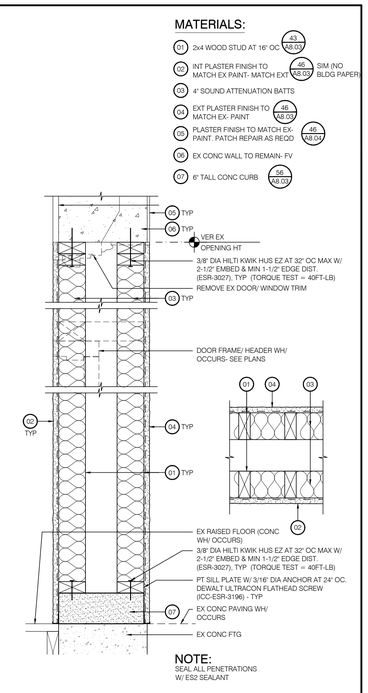
23 NOT USED



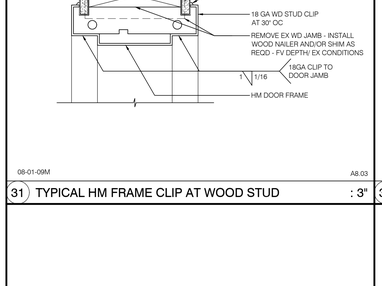
24 EXT HM DOOR HEAD/SILL AT CONC WALL : 3"



25 INTERIOR PARTITION :1 1/2"

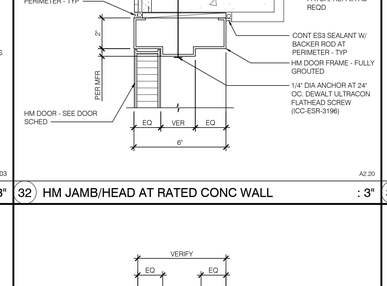


26 EXT INFILL AT CONC WALL :1 1/2"



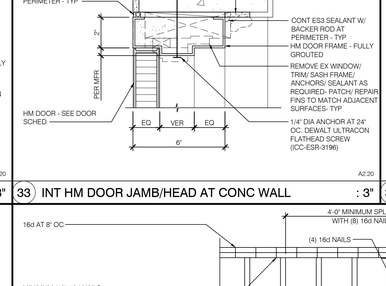
08-01-09M A8.03

31 TYPICAL HM FRAME CLIP AT WOOD STUD : 3"



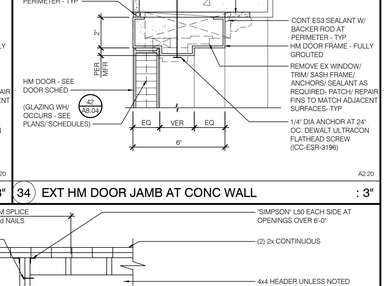
A2.20

32 HM JAMB/HEAD AT RATED CONC WALL : 3"



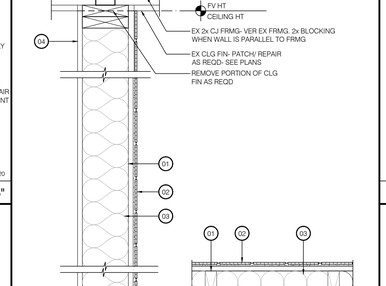
A2.20

33 INT HM DOOR JAMB/HEAD AT CONC WALL : 3"

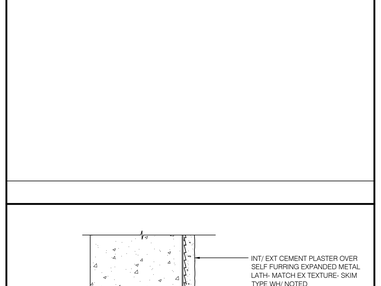


A2.20

34 EXT HM DOOR JAMB AT CONC WALL : 3"



45 INTERIOR PARTITION (TILE FIN ONE SIDE) :1 1/2"

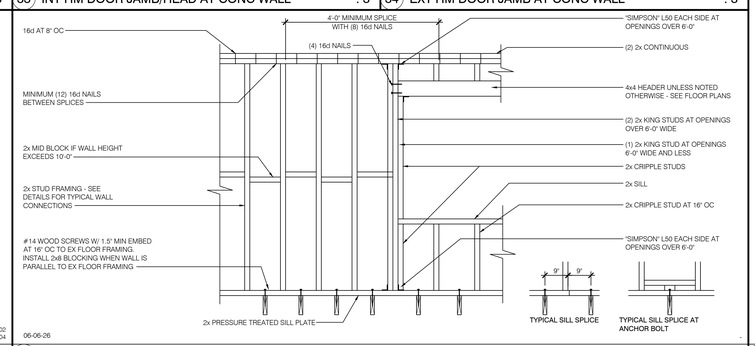


A4.00

46 TYP CEM PLAS FINISH (AT CONC SUBSTRATE) : 3"

A2.02
A8.04

42 HM DOOR/WINDOW JAMB : 3"



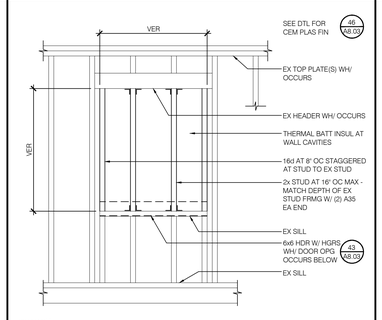
06-06-26

43 TYPICAL INTERIOR PARTITION WALL FRAMING AT WOOD FRAMED FLOOR WINDOW FRAMING SHOWN; DOOR FRAMING SIMILAR : 1/2"

41 NOT USED

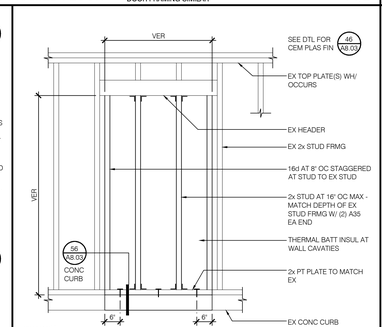
51 NOT USED

52 NOT USED



06-06-20M A2.20

53 WINDOW OPG INFILL FRMG (EXT WALL) : 1/2"



06-06-20M A2.20

54 DOOR OPG INFILL FRMG (EXT WALL) : 1/2"

55 NOT USED

56 NOT USED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:39

DETAILS

A8.04

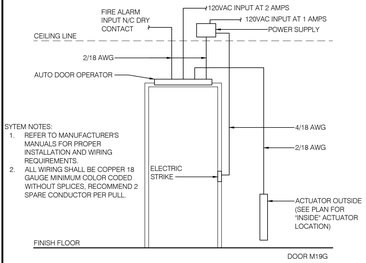
11 NOT USED

12 NOT USED

13 NOT USED

14 NOT USED

15 NOT USED



16 WIRING DIAGRAM :NTS

21 NOT USED

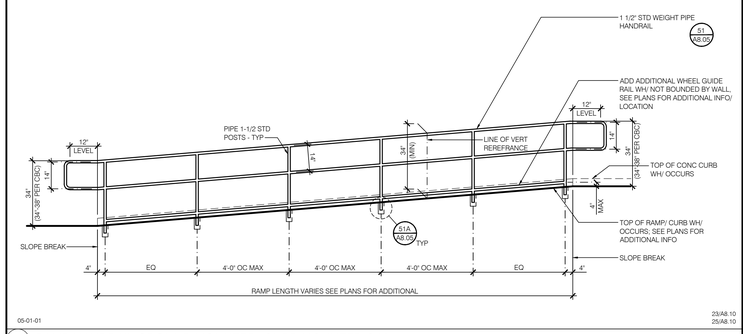
22 NOT USED

23 NOT USED

24 NOT USED

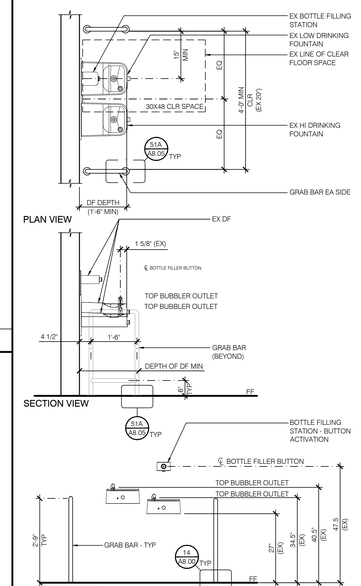
25 NOT USED

26 NOT USED



31 RAMP HANDRAIL GROUND MOUNTED (CURB MOUNTED SIM) : 3/8"

33 NOT USED

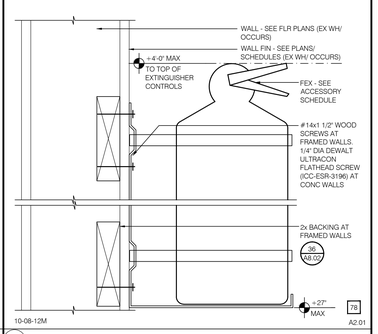


NOTE:
1. THIS DETAIL SHOWS MINIMUM AND MAXIMUM DIMENSIONS - SEE PLANS FOR ACTUAL DIMENSIONS WHICH VARY WITHIN THESE GUIDELINES.
2. DF ACTIVATOR MUST BE WITHIN 6" OF THE FRONT EDGE OF THE DF.
3. SPOUT MUST PROVIDE A FLOW OF WATER AT LEAST 4" HIGH.
4. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL NOT EXCEED 5 LBF.
5. ALL DIMENSION TAKEN FROM FOF.
6. DF COMPLIANCE VERIFIED IN FIELD.
7. HORIZONTAL BAR TO BE LOCATED WITHIN 6" VERTICALLY FROM THE FLOOR OR GROUND SURFACE.

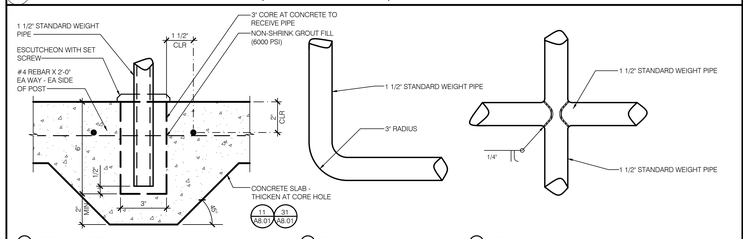
10-05-33M

44 ACCESSIBLE DF REFERENCE W/ BOTTLE FILLER : 1/2"

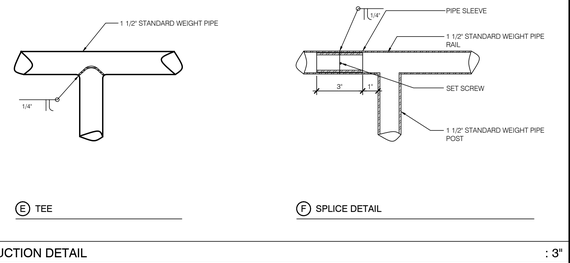
45 NOT USED



46 SURFACE MTD FIRE EXTINGUISHER : 3"



NOTES:
1. ALL HORIZONTAL RAILS SHALL BE 1 1/2" STANDARD WEIGHT PIPE - ALL RAIL POSTS SHALL BE PIPE 1-1/2" STD.
2. ALL PIPING SHALL BE GALVANIZED AFTER FABRICATION AND PAINTED



05-01-05M

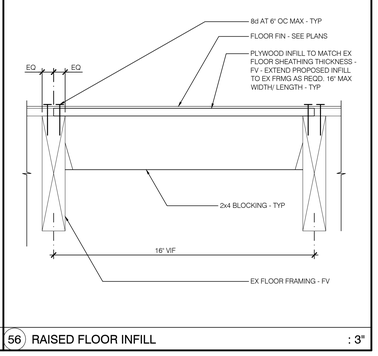
51 TYPICAL RAIL CONSTRUCTION DETAIL : 3"

53 NOT USED

54 NOT USED

55 NOT USED

46 ASSISTIVE LISTENING SYSTEM SIGN : 3"



56 RAISED FLOOR INFILL : 3"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

11.03.23 11:39

DETAILS

A8.05

STRUCTURAL ABBREVIATIONS

AB	ANCHOR BOLT	JST	JOIST
ABV	ABOVE	JT	JOINT
ADDL	ADDITIONAL		
ALT	ALTERNATE	KSI	KIP PER SQUARE INCH
ANCH	ANCHOR		
&	AND	LBS	POUNDS
ARCH	ARCHITECT(URAL)	LLBB	LONG LEG BACK-BACK
@	AT	LLH	LONG LEG HORIZONTAL
		LLV	LONG LEG VERTICAL
BF	BRACE FRAME	LONG	LONGITUDINAL
BLDG	BUILDING	LT WT	LIGHT WEIGHT
BLK	BLOCK	LVL	LAMINATED VENEER (LUMBER)
BLKG	BLOCKING	LVL	LEVEL (FLOOR)
BEL	BELOW		
BM	BEAM	MAX	MAXIMUM
BN	BOUNDARY NAILING	MB	MACHINE BOLT
B or BOT	BOTTOM	MECH	MECHANICAL
BRG	BEARING	MEZZ	MEZZANINE
BTWN	BETWEEN	MFR	MANUFACTURER
BU	BUILT-UP	MIN	MINIMUM
BUB	BACK-UP BAR	MISC	MISCELLANEOUS
		MTL	METAL
CAMB(C)	CAMBER(ED)	MS	MIDDLE STRIP
CBC	CALIFORNIA BUILDING CODE		
CG	CENTER OF GRAVITY	(N)	NEW
CIP	CAST IN PLACE	NIC	NOT IN CONTRACT
CJ	CONSTRUCTION JOINT	NO (#)	NUMBER
	OR CONTROL JOINT	NS	NEAR SIDE
CJP	COMPLETE JOINT PENETRATION	NTS	NOT TO SCALE
CL(IR)	CENTERLINE	NORM WT	NORMAL WEIGHT
CLG	CEILING		
CLR	CLEAR	OC	ON CENTER (NOT NECESSARY)
CMU	CONCRETE MASONRY UNIT	OD	OUTSIDE DIAMETER
COL	COLUMN	OF	OUTSIDE FACE
CONC	CONCRETE	OH	OPPOSITE HAND
CONN	CONNECTION	O-O	OUT TO OUT
CONT	CONTINUOUS	OPNG	OPENING
CS	COLUMN STRIP		
CRC	COLD ROLLED CHANNEL	PARA	PARALLEL
CTR	CENTER(ED)	P/C	PRECAST
CTRSK	COUNTERSINK	PERP	PERPENDICULAR
C-C	CENTER TO CENTER	PJP	PARTIAL JOINT PENETRATION
		PL (IP)	PLATE
d	PENNEY(NAILS)	PLY	PLYWOOD
DBL	DOUBLE	PSF	POUNDS PER SQUARE FOOT
DET	DETAIL	PSI	POUNDS PER SQUARE INCH
DF	DOUGLAS FIR	PT	PRESSURE TREATED
DIA(IQ)	DIAMETER	P/T	POSTTENSIONED(PRESTRESSED)
DIAG	DIAGONAL		
DIM	DIMENSION	RAD (R)	RADIUS
DN	DOWN	REF	REFERENCE
DO	DITTO (REPEAT)	REQ'D	REQUIRED
DP	DEEP	REINF	REINFORCEMENT(ING)
DWG	DRAWING	RJ	ROOF JOIST
DWL	DOWELS		
		SC	SLIP CRITICAL
EA	EACH	SEP	SEPARATION
EBF	ECCENTRIC BRACE FRAME	SCHED	SCHEDULE
EF	EACH FACE	SFRS	SEISMIC FORCE RESISTING SYSTEM
EJ	EXPANSION JOINT	SIM	SIMILAR
ELEC	ELECTRICAL	SIMP	SIMPSON
ELEV	ELEVATION/ELEVATOR	SHT	SHEET
EMBED	EMBEDMENT	SHTG	SHEATHING
EN	EDGE NAILING	SLBB	SHORT LEB BACH-BACK
EQ	EQUAL	SLV	SHORT LEB VERTICAL
EQUIP	EQUIPMENT	SMS	SHEET METAL SCREWS
ES	SIDE EACH	SOG	SLAB ON GRADE
EW	EACH WAY	SPECS	SPECIFICATIONS
EXIST(E)	EXISTING	SP	SPACE (S)
EXP	EXPANSION	SQ	SQUARE
EXT	EXTERIOR	SSC	SINGLE SHEAR CONNECTION
		STAGG	STAGGER(ED)
FIN	FINISH(ED)	SS	STAINLESS STEEL
FLR	FLOOR	STD	STANDARD
FDN	FOUNDATION	STIFF	STIFFENER
FLG	FLANGE	STL	STEEL
FN	FIELD NAILING	STRUC	STRUCTURAL
FOB	FACE OF BLOCK OR BRICK	SYMM	SYMMETRICAL
FOC	FACE OF CONCRETE		
FO PLY	FACE OF PLYWOOD	T & B	TOP AND BOTTOM
FOS	FACE OF STUDS	T & G	TONGUE AND GROOVE
FMG	FRAMING	TEMP	TEMPORARY
FS	FAR SIDE	THK	THICK(NESS)
FT	FOOT	THRD	THREADED
FTG	FOOTING	THRU	THROUGH
		TP	TOP OF PARAPET
GA	GAGE	T PLY	TOP OF PLYWOOD
GALV	GALVANIZED	TRANS	TRANSVERSE
GB	GRADE BEAM	TOC	TOP OF CONCRETE
GL	GRID LINE	TOS	TOP OF STEEL
GLB	GLUE-LAMINATED BEAM	TSG	TAPERED STEEL GIRDER
		TOW	TOP OF WALL
HCA	HEADED CONCRETE ANCHOR	TYP	TYPICAL
HD	HOLD DOWN		
HDR	HEADER	UNO	UNLESS NOTED OTHERWISE
HGR	HANGER		
HORIZ	HORIZONTAL	VERT	VERTICAL
HSB	HIGH STRENGTH BOLT		
HS	HIGH STRENGTH	W/	WITH
HT	HEIGHT	WBS	WELDED BEAM SEAT
		WD	WOOD
IBC	INTERNATIONAL BUILDING CODE	WP	WORK POINT
ID	INSIDE DIAMETER	WPJ	WEAKENED PLANE JOINT
IF	INSIDE FACE	WS	WELDED STUDS
IN	INCH	WT	WEIGHT
INFO	INFORMATION	WWF	WELDED WIRE FABRIC
INT	INTERIOR		

STRUCTURAL STEEL AND MISCELLANEOUS METAL (ALL OTHER STEEL) WELDING

1. ALL WELDING SHALL BE IN STRICT CONFORMANCE WITH THE LATEST EDITION OF AWS D1.1 AND THE CALIFORNIA BUILDING CODE WITH ALL APPLICABLE AMENDMENTS. ALL WELDED JOINTS SHALL BE PRE-QUALIFIED PER THE LATEST EDITION OF AWS D1.1. NON PRE- QUALIFIED WELDED JOINTS SHALL BE QUALIFIED BY TEST & PROCEDURE QUALIFICATION TEST RECORD INCLUDED PER THE LATEST EDITION OF AWS D1.1.

2. WELDING OF SHEET METAL AND METAL STUDS SHALL BE IN ACCORDANCE WITH AWS D1.3.

3. WELD LENGTHS CALLED FOR ON PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WELD SIZE SHALL BE AISC MINIMUM UNLESS A LARGER SIZE IS NOTED. WHERE LENGTH OF WELD IS NOT SHOWN IT SHALL BE FULL LENGTH OF JOINT. ALL BUTT AND GROOVE WELDS SHALL BE FULL PENETRATION, UNLESS NOTED OTHERWISE.

4. ALL WELDING ELECTRODES AND ELECTRODE FLUX COMBINATIONS (FILLER METAL) SHALL BE E7XTX, E7XTXX OR E70XXX (MINIMUM 70 KSI), UNLESS NOTED OTHERWISE, AND SHALL MEET THE REQUIREMENTS FOR H16 PER AISC SEISMIC PROVISIONS.

5. GMAW AND FCAW-G WELDING PROCESSES SHALL NOT BE PERMITTED WHEN WIND SPEED EXCEEDS 3 MPH.

6. WHERE WELDING IS NOTED, THE DESIGNATION IS GIVEN AS A SUGGESTED CONSTRUCTION PROCEDURE ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR IDENTIFYING THE METHOD OF FABRICATION.

7. ALL SHOP WELDS SHALL BE PERFORMED BY A FABRICATOR LICENSED BY THE LOCAL JURISDICTION.

8. ALL WELDERS SHALL BE QUALIFIED FOR THE WORK THEY WILL BE PERFORMING AND SHALL HAVE CURRENT VALID CERTIFICATIONS ISSUED BY AWS AND THE GOVERNING JURISDICTION.

9. FACES OF FILLET WELDS EXPOSED TO VIEW SHALL HAVE AS-WELDED SURFACES THAT ARE REASONABLY SMOOTH AND UNIFORM. NO FINISHING OR GRINDING SHALL BE REQUIRED, EXCEPT WHERE CLEARANCES OR FIT OF OTHER ITEMS MAY SO NECESSITATE.

10. WELDS SHALL BE TERMINATED AT THE END OF A JOINT IN A MANNER THAT WILL ENSURE SOUND WELDS. WHENEVER NECESSARY THIS SHALL BE DONE BY USE OF EXTENSION BARS AND RUN OFF TABS.

11. A WRITTEN "WELDING PROCEDURE SPECIFICATION" (WPS), PER AWS D1.1, SHALL BE DEVELOPED BY THE FABRICATOR/ERECTOR, AND REVIEWED BY THE OWNER'S REPRESENTATIVE AND BUILDING DEPARTMENT. THE WPS SHALL CONTAIN ALL THE NECESSARY INFORMATION REQUIRED BY THE CODE, THE SPECIFICATIONS, AND ANY OTHER INFORMATION NECESSARY TO PRODUCE WELDS THAT ARE IN COMPLIANCE WITH THESE REQUIREMENTS. THE WPS SHALL INCLUDE THE WELDING PARAMETERS RECOMMENDED BY THE ELECTRODE MANUFACTURER. ALL WELDERS AND INSPECTORS SHALL ADHERE TO THE WPS AND SHALL RETAIN A COPY.

GENERAL CONTINUED

22. ALLOW SEVEN WORKING DAYS FOR PROCESSING SHOP DRAWINGS OTHER THAN STRUCTURAL STEEL & DESIGN-BUILD ITEMS AFTER RECEIPT BY THE STRUCTURAL ENGINEER. ALLOW FOURTEEN WORKING DAYS FOR PROCESSING STRUCTURAL STEEL & DESIGN-BUILD ITEMS SHOP DRAWINGS. SHOP DRAWINGS AND SUBMITTALS WILL BE REVIEWED A MAXIMUM OF TWO TIMES.

23. THE LATERAL SYSTEM OF THE STRUCTURE IS DESIGNED WITH LATERAL RESTRAINT AT THE GROUND FLOOR. STRUCTURAL FRAMES ARE NOT LATERALLY SELF SUPPORTING UNTIL THE ENTIRE DESIGN LATERAL RESTRAINT FLOOR AND STRUCTURAL WALLS BELOW ARE IN PLACE.

24. DO NOT SPLICE STRUCTURAL MEMBERS UNLESS SPECIFICALLY DETAILED AND INDICATED IN THIS SET OF DRAWINGS. DO NOT PLACE OPENINGS, POCKETS, ETC. IN STRUCTURAL MEMBERS UNLESS SPECIFICALLY DETAILED AND INDICATED IN THIS SET OF STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER IF DRAWINGS BY OTHERS REQUIRE MODIFICATIONS TO STRUCTURAL MEMBERS AS SHOWN IN THIS SET OF STRUCTURAL DRAWINGS PRIOR TO PROCEEDING WITH THE WORK.

25. DESIGN LOADS:
   A. DEAD LOADS: CONSIST OF BUILDING SELF-WEIGHT PLUS SUPERIMPOSED DEAD LOADS. REFER TO COMPLETE SET OF DRAWINGS FOR DETERMINING DEAD LOADS.
   B. LIVE LOADS:

AREA	DESIGN LIVE LOAD	REMARK
ROOF	20 PSF	REDUCIBLE

   C. SEISMIC DESIGN LOADS:

SEISMIC IMPORTANCE FACTOR I_p	= 1.0
RISK CATEGORY	= III
A_p	= 2.5
R_p	= 6.0
SITE CLASS	= D (DEFAULT)
S_{DS}	= 0.746
SEISMIC DESIGN CATEGORY	= D
z/h	= 1

   D. WIND DESIGN LOADS:

BASIC WIND SPEED (3 SEC GUST)	= 101 MPH
RISK CATEGORY	= III
WIND EXPOSURE	= B
MAIN WIND FORCE RESISTING SYSTEM WIND PRESSURE	= 14 PSF

STRUCTURAL STEEL AND MISCELLENEOUS METAL (ALL OTHER STEEL)

1. ALL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND THE LATEST EDITION OF AISC SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS. WHERE THE STRUCTURAL STEEL IS EXPOSED AND INDICATED AS 'AESS' ON PLANS OR DETAILS, FABRICATION AND ERECTION SHALL ALSO BE IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL.

2. GENERAL CONTRACTOR TO DETERMINE SCOPE OF WORK FOR BOTH STRUCTURAL STEEL AND MISCELLANEOUS METAL SUBCONTRACTORS (IF MULTIPLE SUBCONTRACTORS ARE USED). THE COMBINED SCOPE OF WORK FOR ALL SUBCONTRACTORS SHALL INCLUDE ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK SHOWN ON THE CONTRACT DRAWINGS.

3. STRUCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION AS INDICATED BELOW UNLESS NOTED OTHERWISE:

STEEL ANGLES AND CHANNELS	A36 UNO
ALL OTHER STRUCTURAL SECTIONS	A572, GRADE 50
THREADED AND HANGER ROD	A36
NUTS FOR BOLTS AND MACHINE BOLTS	A563
HARDENED (FLAT OR BEVELED) WASHERS	F436
PLAIN, UNHARDENED WASHERS	F844
STEEL PIPE (NOT LABELED AS HSS)	A53, GRADE B

4. SPLICE MEMBERS ONLY WHERE INDICATED.

5. AFTER FABRICATION, ALL STEEL SHALL BE CLEANED FREE OF RUST, LOOSE MILL SCALE AND OIL.

6. BOLT HOLES IN STEEL SHALL BE STANDARD HOLES, 1/16 INCH LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT USED, UNLESS NOTED OTHERWISE. BOLT HOLES IN BASE PLATES MAY BE OVERSIZED PER AISC MANUAL TABLE 14-2 IF WASHERS ARE PROVIDED IN ACCORDANCE WITH THIS TABLE.

7. ALL STRUCTURAL STEEL SURFACES TO BE WELDED OR HIGH-STRENGTH BOLTED, TO BE ENCASED IN CONCRETE OR TO RECEIVE SPRAY-APPLIED FIREPROOFING SHALL BE LEFT UNPAINTED.

8. HOT DIP GALVANIZE IN ACCORDANCE WITH ASTM A123 AND ASTM A153 STRUCTURAL STEEL, MISCELLANEOUS METAL AND FASTENERS THAT ARE EXPOSED TO THE WEATHER. REPAIR GALVANIZING AFTER WELDING IN ACCORDANCE WITH ASTM A780.

GENERAL

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.

2. INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS THE PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. REPORT CONDITIONS THAT CONFLICT WITH THE CONTRACT DOCUMENTS TO THE OWNER'S REPRESENTATIVE. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE OWNER'S REPRESENTATIVE.

3. DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DRAWINGS. DRAWINGS SHALL NOT BE SCALED.

4. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NOTES AND DETAILS ON DRAWINGS AND THESE GENERAL NOTES AND TYPICAL DETAILS ARE IN CONFLICT WITH THE PROJECT SPECIFICATIONS THE MOST STRINGENT SHALL APPLY. CONDITIONS NOT SPECIFICALLY SHOWN SHALL BE CONSTRUCTED AS SHOWN FOR SIMILAR WORK.

5. ALL WORK SHALL CONFORM TO THE STANDARDS OF THE FOLLOWING:

   CALIFORNIA BUILDING CODE, 2019 EDITION

   AND ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING BUT NOT LIMITED TO CAL/OSHA, DIVISION OF OCCUPATIONAL SAFETY AND HEALTH, AND THOSE CODES AND STANDARDS LISTED IN THE CONTRACT DOCUMENTS.

6. SPECIFICATIONS, CODES, AND STANDARDS NOTED IN THE CONTRACT DOCUMENTS SHALL BE OF THE LATEST APPROVED ISSUE, INCLUDING SUPPLEMENTS, UNLESS OTHERWISE NOTED. MATERIAL SPECIFICATIONS SHALL COMPLY WITH ASTM REFERENCED STANDARDS LATEST EDITION.

7. MANUFACTURED MATERIALS SHALL BE APPROVED BY THE CHECKING AGENCY PRIOR TO THEIR USE. ALL REQUIREMENTS OF THOSE APPROVALS SHALL BE FOLLOWED.

8. SEE ARCHITECTURAL DRAWINGS FOR THE FOLLOWING:
   A. SIZE AND LOCATION OF ALL NON-BEARING PARTITIONS.
   B. SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS.
   C. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.

9. SEE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
   A. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL, ROOF AND FLOOR OPENINGS, ETC., NOT SHOWN OR NOTED.
   B. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS AND SLABS.
   C. ANCHORAGE AND BRACING FOR ELECTRICAL, MECHANICAL OR PLUMBING EQUIPMENT TO THE STRUCTURE.
   D. ANCHOR BOLTS FOR EQUIPMENT MOUNTS.
   E. SIZE, WEIGHT, AND LOCATION OF MACHINE AND EQUIPMENT BASES.

10. OPENINGS, POCKETS, ETC. SHALL NOT BE PLACED IN STRUCTURAL MEMBERS UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER OF RECORD WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC., NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN STRUCTURAL MEMBERS.

11. CONTRACTOR SHALL CAREFULLY REVIEW THE DRAWINGS TO IDENTIFY THE EXTENT OF THE SCOPE OF WORK. VISIT THE SITE TO RELATE THE SCOPE OF WORK TO EXISTING CONDITIONS AND DETERMINE THE EXTENT TO WHICH THOSE CONDITIONS AND PHYSICAL SURROUNDINGS WILL IMPACT THE WORK.

12. THE CONTRACTOR SHALL RESOLVE ANY CONFLICTS ON THE CONSTRUCTION DOCUMENTS WITH THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK.

13. UNLESS NOTED OTHERWISE, COLUMNS, WALLS, BEAMS, FOOTINGS, ETC, ARE CENTERED AT GRIDLINES. WHERE BEAM TO BEAM SPACING IS NOT SHOWN, BEAM SHALL BE EQUALLY SPACED BETWEEN GRIDLINES.

14. ANY DEVIATION FROM THE APPROVED SET OF STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW/APPROVAL BEFORE PROCEEDING WITH THE WORK. SUBSTITUTIONS OF PRODUCTS OR MATERIALS SPECIFIED ON THE CONSTRUCTION DOCUMENTS ARE NOT ALLOWED WITHOUT OWNER'S REPRESENTATIVE'S APPROVAL.

15. THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE MEANS, METHOD, TECHNIQUES, SEQUENCE AND PROCEDURE OF CONSTRUCTION AS REQUIRED. SITE VISITS PERFORMED BY THE OWNER'S REPRESENTATIVE DO NOT INCLUDE INSPECTIONS OF MEANS AND METHODS OF CONSTRUCTION PERFORMED BY CONTRACTOR.

16. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORES, BRACES AND GUYS REQUIRED TO SUPPORT ALL LOADS TO WHICH THE BUILDING STRUCTURE AND COMPONENTS, SOILS, OTHER STRUCTURES AND UTILITIES MAY BE SUBJECTED DURING CONSTRUCTION. SHORING SYSTEMS SHALL BE DESIGNED AND STAMPED BY A CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE OF CALIFORNIA. VISITS TO THE SITE BY THE OWNER'S REPRESENTATIVE WILL NOT INCLUDE OBSERVATION OF THE ABOVE NOTED ITEMS.

17. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOFS. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT SPECIFIED ON THIS SET OF DRAWINGS. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH OR WHERE OVERLOAD IS ANTICIPATED.

18. STRUCTURAL OBSERVATIONS PERFORMED BY THE STRUCTURAL ENGINEER DURING CONSTRUCTION ARE NOT THE REQUIRED CONTINUOUS AND SPECIAL INSPECTION SERVICES AND DO NOT WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED OF THE BUILDING INSPECTOR OR THE DEPUTY INSPECTOR. OBSERVATIONS ALSO DO NOT GUARANTEE CONTRACTOR'S PERFORMANCE AND SHALL NOT BE CONSIDERED AS SUPERVISION OF CONSTRUCTION.

19. CONTRACTOR SHALL REVIEW SHOP DRAWINGS FOR COMPLETENESS AND COMPLIANCE WITH CONTRACT DOCUMENTS AND SHALL STAMP SHOP DRAWINGS PRIOR TO SUBMISSION TO THE OWNER'S REPRESENTATIVE.

20. ARCHITECT'S / ENGINEER'S REVIEW OF THE SHOP DRAWINGS SHALL NOT B CONSTRUED AS AN AUTHORIZATION TO DEVIATE FROM CONTRACT DOCUMENTS.

21. SHOP DRAWINGS WILL NOT BE PROCESSED DUE TO INCOMPLETENESS, LACK OF COORDINATION WITH RELEVANT PORTION OF CONTRACT DOCUMENTS, LACK OF CALCULATIONS IF REQUIRED AND WHERE DEVIATIONS, MODIFICATIONS AND SUBSTITUTIONS ARE INDICATED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

MARTIN & associates
JOHN A. MARTIN & ASSOCIATES
Structural Engineers
950 S. Grand Avenue
Los Angeles, Calif. 90015
Phone (213) 483-6490
WWW.JOHNMARTIN.COM
J22061

REGISTERED PROFESSIONAL ENGINEER
No. 47577
CIVIL
STRUCTURAL
STATE OF CALIFORNIA

DATE SIGNED:
OCTOBER 30, 2023

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 08:16

GENERAL NOTES

S0.01

CONCRETE

1. ALL CONCRETE IS REINFORCED AND CAST-IN-PLACE UNLESS OTHERWISE NOTED.
2. ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE 'BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318, WITH MODIFICATIONS AS NOTED IN THE CONTRACT DOCUMENTS.
3. CONCRETE MIXING OPERATION, ETC., SHALL CONFORM TO C-94.
4. PLACEMENT OF CONCRETE SHALL CONFORM TO ACI 304 AND CONTRACT DOCUMENTS.
5. ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS FOLLOWS:

LOCATION	STRENGTH	TYPE OF CONCRETE
MISC, CURBS AND PADS	4000 PSI	NORMAL WEIGHT

6. CONCRETE MIXES SHALL BE DESIGNED BY AN APPROVED LABORATORY. THE DESIGN SHALL BE STAMPED BY A CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE OF CALIFORNIA AND SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL. ADMIXTURES CONTAINING CALCIUM CHLORIDE ARE NOT ALLOWED.
7. NORMAL WEIGHT CONCRETE AGGREGATES SHALL CONFORM TO ASTM C-33. DRY DENSITY OF NORMAL WEIGHT SHALL NOT EXCEED 145 PCF.
8. NON-SHRINK CEMENT GROUT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 6000 PSI. USE "SIKA GROUT 212" OR "MASTERFLOW 928".
9. THOROUGHLY CLEAN AND ROUGHEN ALL EXISTING CONCRETE, CONCRETE PREVIOUSLY POURED AND HARDENED AND MASONRY SURFACES TO RECEIVE NEW CONCRETE. INTERFACE SHALL BE ROUGHENED TO A FULL AMPLITUDE OF 1/4" UNLESS NOTED OTHERWISE.
10. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT PLACED IN CAST-IN-PLACE CONCRETE:

A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH — 3"

B. FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
- #6 THROUGH # 18 BARS — 2"
- #5 BAR, W31 OR D31 WIRE, AND SMALLER — 1 1/2"

C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
SLABS, WALLS AND JOISTS:
- #14 AND #18 BARS — 1 1/2"
- #11 BAR AND SMALLER — 1"

BEAMS, COLUMNS AND WALL JAMBS:
PRIMARY REINFORCEMENT, TIES, STIRRUPS, AND SPIRALS:
- #3 THROUGH #11 — 1 1/2"
- #14 AND #18 BARS — 2 1/2"

11. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.

INSPECTION / TESTING

1. AN INDEPENDENT TESTING AGENCY AND SPECIAL INSPECTORS SHALL BE RETAINED BY THE OWNER TO PERFORM THE TESTS AND INSPECTION AS REQUIRED BY SECTION 1704A OF THE CALIFORNIA BUILDING CODE. THE CONTRACTOR SHALL PROVIDE ACCESS TO THE SPECIAL INSPECTOR TO THE SITE OR FABRICATION SHOPS AND SHALL FURNISH SAMPLES OF MATERIALS FOR TESTING AS REQUESTED BY THE TESTING AGENCY AND THE GOVERNING CODE.
2. IF INITIAL TESTS OR INSPECTIONS MADE BY THE OWNER'S TESTING AGENCY REVEAL THAT ANY PORTION OF THE WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, ADDITIONAL TESTS, INSPECTIONS, AND NECESSARY REPAIRS WILL BE MADE AT THE CONTRACTOR'S EXPENSE.
3. PROVIDE CONTINUOUS OR PERIODIC SPECIAL INSPECTION FOR ITEMS NOTED IN "TEST AND INSPECTION LIST", AS REQUIRED PER THE CHAPTER 17A OF THE CALIFORNIA BUILDING CODE AND ALL APPLICABLE AMENDMENTS, UNLESS NOTED OTHERWISE IN SPECIFICATIONS.
4. SPECIAL INSPECTIONS MAY NOT BE REQUIRED WHEN THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED BY THE BUILDING OFFICIAL OR GOVERNING AGENCY HAVING JURISDICTION OVER THE PROJECT TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION.
5. APPROVAL BY THE INSPECTOR OF MATTERS NOT SPECIFICALLY CONSTRUCTED PER THE APPROVED DRAWINGS DOES NOT MEAN THE FAILURE TO COMPLY WITH THE CONSTRUCTION DOCUMENTS HAS BEEN ACCEPTED. ANY DETAIL THAT FAILS TO BE CLEAR OR IS AMBIGUOUS MUST BE REFERRED TO THE STRUCTURAL ENGINEER FOR INTERPRETATION OR CLARIFICATION.
6. INSPECTION AND TESTING REPORTS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER WITHIN SEVEN DAYS OF WHEN THE INSPECTION WAS MADE OR WHEN THE TESTING WAS PERFORMED.
7. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY INSPECTION OR TESTING WHICH DOES NOT COMPLY WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
8. SEE APPROVED DSA 103 FOR ADDITIONAL STRUCTURAL AND SPECIAL INSPECTIONS INFORMATION.

REINFORCING STEEL

1. ALL REINFORCING STEEL SHALL BE DETAILED AND PLACED IN CONFORMANCE WITH THE 'BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE' (ACI 318), AND THE 'MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION' BY THE C.R.S.I. AND THE W.C.R.S.I., OR AS MODIFIED BY THE CONSTRUCTION DOCUMENTS.
2. REINFORCING BARS SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED OTHERWISE.

CLASSIFICATION	TYPE
REINFORCING STEEL IN GRAVITY BEAMS, GRAVITY COLUMNS, STIRRUPS, TIES, FOUNDATIONS, PILECAPS, AND GRADE BEAMS (UNO):	ASTM A615, 60 KSI*

3. DRAWINGS SHOW TYPICAL REINFORCING CONDITIONS. CONTRACTOR SHALL PREPARE DETAILED PLACEMENT DRAWINGS OF ALL CONDITIONS SHOWING QUANTITY, SPACING, SIZE, CLEARANCES, LAPS, INTERSECTIONS AND COVERAGE REQUIRED BY STRUCTURAL DETAILS, APPLICABLE CODE AND TRADE STANDARDS. CONTRACTOR SHALL NOTIFY REINFORCING DEPUTY INSPECTOR OF ANY ADJUSTMENTS FROM TYPICAL CONDITIONS THAT ARE PROPOSED IN PLACEMENT DRAWINGS TO FACILITATE FIELD PLACEMENT OF REINFORCING STEEL AND CONCRETE.
4. ALL REINFORCING BAR BENDS SHALL BE MADE COLD. RE-BENDING OF REINFORCING IS NOT PERMITTED.
5. REINFORCING SPLICES SHALL ONLY BE MADE AS INDICATED ON THE DRAWINGS.
6. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE.

LUMBER

1. UNLESS NOTED OTHERWISE, LUMBER SHALL BE DOUGLAS FIR-LARCH, GRADE MARKED, WITH A MAXIMUM MOISTURE CONTENT OF 19% AT THE TIME OF INSTALLATION.
2. UNLESS NOTED OTHERWISE ON THE DRAWINGS, LUMBER GRADES SHALL BE AS FOLLOWS:

A. HORIZONTAL FRAMING MEMBERS

BEAMS	SELECT STRUCTURAL.
JOISTS AND RAFTERS	No 1
ALL OTHER HORIZONTAL MEMBERS	No 1

3. PLYWOOD SHEATHING SHALL BE DOUGLAS FIR AND SHALL COMPLY WITH THE LATEST EDITION OF U.S. PRODUCT STANDARD PS 1. GRADES SHALL BE MARKED STRUCTURAL 1 BY APA AND BONDED WITH EXTERIOR GLUE UNLESS NOTED OTHERWISE. REFER TO PLANS AND DETAILS FOR THICKNESS. ALL PLYWOOD SHEATHING SHALL BE BLOCKED AT UNSUPPORTED EDGES
4. NAILS SHALL BE COMMON WIRE NAILS AND SHALL CONFORM TO ASTM F1667. UNLESS NOTED OTHERWISE ON THE PLANS, NAILING SHALL COMPLY AS A MINIMUM WITH NAILING AND FASTENING SCHEDULES PRESCRIBED BY THE GOVERNING BUILDING CODE.
5. CONNECTOR REFERENCES, UNLESS NOTED OTHERWISE ARE FROM THE LATEST EDITION OF "SIMPSON STRONG-TIE" CATALOG. APPROVED EQUALS SHALL HAVE MATCHING ICC-ES RATINGS AND USED WITH PRIOR APPROVAL OF THE ARCHITECT OR STRUCTURE ENGINEER.

A. WHERE MORE THAN ONE TYPE OF FASTENER IN THE REFERENCE SERIES IS SCHEDULED FOR A JOIST OR RAFTER, THE CONTRACTOR SHALL SUPPLY THE FASTENER WITH THE GREATEST CAPACITY.

B. WHERE THERE ARE A NUMBER OF NAILING ALTERNATIVES LISTED IN THE MANUFACTURER'S CATALOG FOR A PARTICULAR CONNECTOR, THE NAILING ALTERNATIVE PROVIDING THE HIGHEST LOAD CAPACITY SHALL BE USED UNLESS NOTED OTHERWISE.

C. ALL NAIL HOLES IN THE CONNECTOR SHALL BE FILLED WITH PROPER NAILS UNLESS NOTED OTHERWISE ELSEWHERE. (INCLUDING TRIANGULAR HOLES IN "HU" HANGERS.

D. USE NAILS AT ALL "MST" STRAP HOLES, UNLESS NOTED OTHERWISE.

6. SILL PLATES AND OTHER WOOD MEMBERS BEARING DIRECTLY ON THE CONCRETE SLAB THAT IS IN DIRECT CONTACT WITH EARTH OR WOOD MEMBERS IN DIRECT CONTACT WITH CONCRETE OR MASONRY FOUNDATIONS SHALL BE PRESERVATIVE-TREATED LUMBER.
7. FASTENERS AND HARDWARE IN CONTACT WITH PRESERVATIVE-TREATED OR FIRE-RETARDANT-TREATED LUMBER SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL AND SHALL COMPLY WITH SECTION 2304.9.5 OF THE CALIFORNIA BUILDING CODE.
8. FASTENERS AND HARDWARE EXPOSED TO WEATHER SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL AND SHALL COMPLY WITH ASTM 153.
9. SCREWS AND LAG SCREWS SHALL COMPLY WITH ANSI/ASME B18.6.1. PREDRILLED SCREW HOLES SHALL BE 2/3 THE SCREW NOMINAL DIAMETER. MINIMUM SCREW YIELD STRENGTH SHALL BE AS FOLLOWS:

SCREW NOMINAL DIAMETER	YIELD STRENGTH (F_{YB})
¼"	70,000 PSI
5/16"	60,000 PSI
⅜ AND GREATER	45,000 PSI

10. BOLTS:

A. ALL BOLTS SHALL CONFORM TO ASTM A307, GRADE A.

B. ALL ANCHOR RODS (ANCHOR BOLTS) SHALL CONFORM TO ASTM F1554, GRADE 36.

C. BOLT HOLES SHALL NOT BE MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER.

D, ALL BOLT HEADS AND NUTS BEARING ON WOOD SHALL HAVE STANDARD CUT STEEL WASHERS MEETING THE REQUIREMENTS OF ANSI/ASME B18.22.1 UNDER BOLT HEADS AND NUTS.

E. RE-TIGHTEN ALL NUTS PRIOR TO CLOSING IN.

11. LAG SCREWS SHALL BE TURNED, NOT DRIVEN, INTO PRE DRILLED HOLES OF 2/3 THE SHANK DIAMETER.
12. PROVIDE FULL BEARING AT END OF ALL BLOCKING, U.N.O.

MECHANICAL ANCHORS

1. 'MECHANICAL ANCHORS' REFER TO POST-INSTALLED EXPANSION OR SCREW ANCHORS INTO CONCRETE.
2. WHEN A SPECIFIC MECHANICAL, ANCHOR PRODUCT, DIAMETER, AND EMBEDMENT IS CALLED OUT ON PLANS/DETAILS, THE CONTRACTOR SHALL PROVIDE AND INSTALL IT IN ACCORDANCE WITH THE LATEST ICC/IAPMO REPORT AND MANUFACTURER RECOMMENDATIONS. CONTRACTOR MAY SUBMIT SUBSTITUTIONS REQUESTS FOR SEOR REVIEW AND APPROVAL PRIOR TO PROCUREMENT. SUBSTITUTION REQUESTS SHALL INCLUDE RELEVANT PRODUCT DATA, CODE APPROVALS, AND CALCULATIONS TO JUSTIFY THAT THE PERFORMANCE OF THE SUBSTITUTE IS EQUAL TO OR BETTER THAT THE ANCHOR BEING SPECIFIED.
3. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.
4. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, THE STRUCTURAL ENGINEER WILL DETERMINE A NEW LOCATION.
5. PROVIDE MINIMUM EMBEDMENT OF ANCHORS AS SHOWN IN APPROVED DETAILS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School
2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

MARTIN & associates
JOHN A. MARTIN & ASSOCIATES
Structural Engineers
950 S. Grand Avenue
Los Angeles, Calif. 90015
Phone (213) 483-6490
WWW.JOHNMARTIN.COM
J22061

REGISTERED PROFESSIONAL ENGINEER
No. 47577
STRUCTURAL
STATE OF CALIFORNIA

DATE SIGNED:
OCTOBER 30, 2023

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-8
DSA No	03-122671

REVISIONS

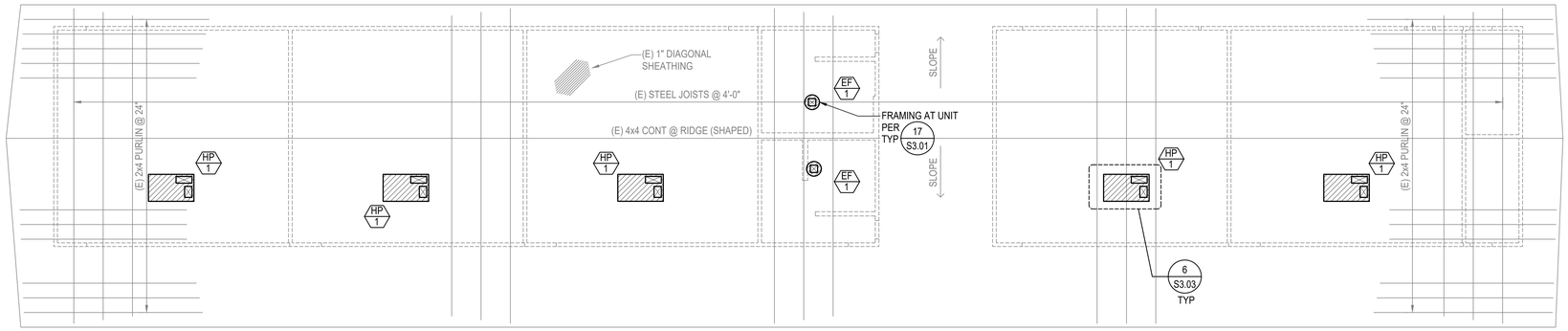
No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 12:06

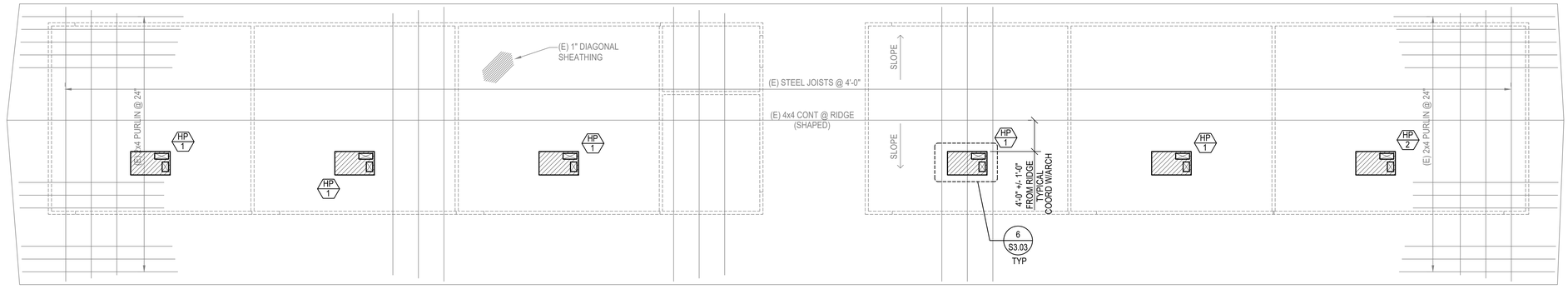
GENERAL NOTES

S0.02



ROOF FRAMING PLAN - BUILDING B AND C

1/8" = 1'-0"



ROOF FRAMING PLAN - BUILDING D AND E

1/8" = 1'-0"

ROOF FRAMING NOTES:

1. REFER TO GENERAL NOTES ON SHEETS S0.01 THUR S0.02.
2. REFER TO AND CHECK WITH ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
3. REFER TO AND CHECK WITH MECHANICAL DRAWING FOR DUCT OPENINGS, EQUIPMENT SIZE AND LOCATION, ETC. LOCATE SUPPORTING MEMBERS ACCORDINGLY.
4. HATCHED AREA INDICATES MECH UNIT SEE MECHANICAL DRAWINGS FOR EXACT LOCATION.
5. XXX / X INDICATES MECHANICAL UNIT. SEE SCHEDULE ON THIS SHEET FOR EQUIPMENT WEIGHTS. COORDINATE WITH MEP DRAWINGS, TYPICAL. CONTRACTOR TO COORDINATE UNIT LOCATIONS AND THE REQUIRED ROOF OPENINGS SO THAT NO EXISTING JOISTS/TRUSS MEMBERS NEED TO BE CUT OR NOTCHED.

ROOF EQUIPMENT WEIGHT SCHEDULE

UNIT MARK	MAX OPER WT (LBS)
HP1	950
HP-2	950
HP-3	450
EF-1	37
EF-2	12

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

MARTIN & associates
JOHN A. MARTIN & ASSOCIATES
Structural Engineers
950 S. Grand Avenue
Los Angeles, Calif. 90015
Phone (213) 483-6490
WWW.JOHNMARTIN.COM
J22061

REGISTERED PROFESSIONAL ENGINEER
No. 47577
STRUCTURAL
STATE OF CALIFORNIA

DATE SIGNED:
OCTOBER 30, 2023

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

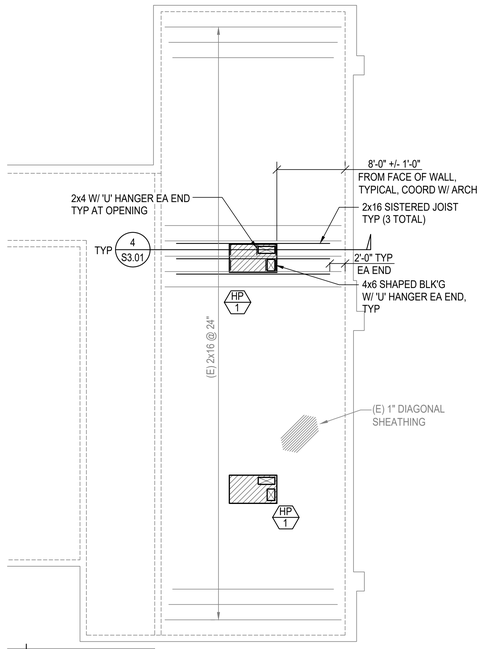
No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 08:43

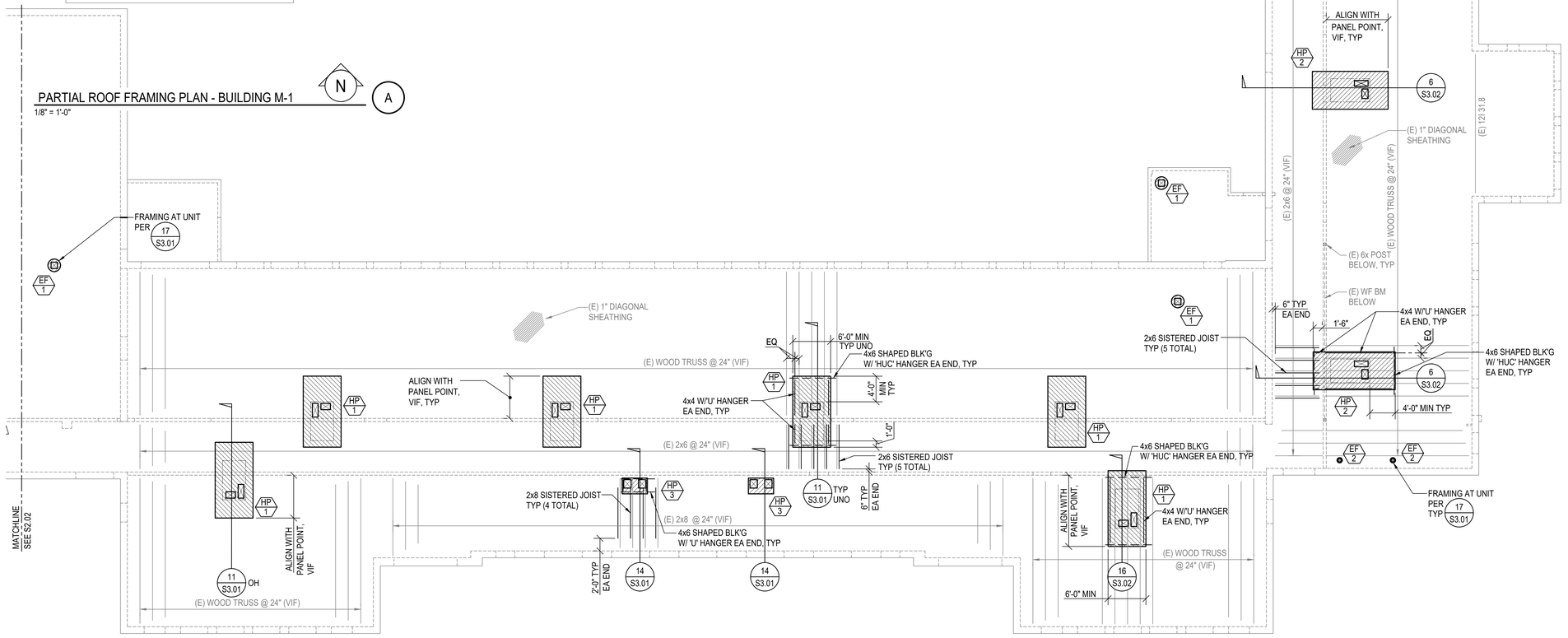
ROOF FRAMING PLANS

S2.00



PARTIAL ROOF FRAMING PLAN - BUILDING M-1

1/8" = 1'-0"



ROOF FRAMING PLAN - BUILDING M-3

1/8" = 1'-0"

ROOF FRAMING NOTES:

1. REFER TO GENERAL NOTES ON SHEETS S0.01 THUR S0.02.
2. REFER TO AND CHECK WITH ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
3. REFER TO AND CHECK WITH MECHANICAL DRAWING FOR DUCT OPENINGS, EQUIPMENT SIZE AND LOCATION, ETC. LOCATE SUPPORTING MEMBERS ACCORDINGLY.
4. HATCHED AREA INDICATES MECH UNIT SEE MECHANICAL DRAWINGS FOR EXACT LOCATION.
5. XXX / X INDICATES MECHANICAL UNIT. SEE SCHEDULE ON THIS SHEET FOR EQUIPMENT WEIGHTS. COORDINATE WITH MEP DRAWINGS, TYPICAL. CONTRACTOR TO COORDINATE UNIT LOCATIONS AND THE REQUIRED ROOF OPENINGS SO THAT NO EXISTING JOISTS/TRUSS MEMBERS NEED TO BE CUT OR NOTCHED.

ROOF EQUIPMENT WEIGHT SCHEDULE

UNIT MARK	MAX OPER WT (LBS)
HP1	950
HP-2	950
HP-3	450
EF-1	37
EF-2	12

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

MARTIN & associates
JOHN A. MARTIN & ASSOCIATES
Structural Engineers
950 S. Grand Avenue
Los Angeles, Calif. 90015
Phone (213) 483-6490
WWW.JOHNMARTIN.COM
J22061

REGISTERED PROFESSIONAL ENGINEER
No. 47577
STRUCTURAL
STATE OF CALIFORNIA

DATE SIGNED:
OCTOBER 30, 2023

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

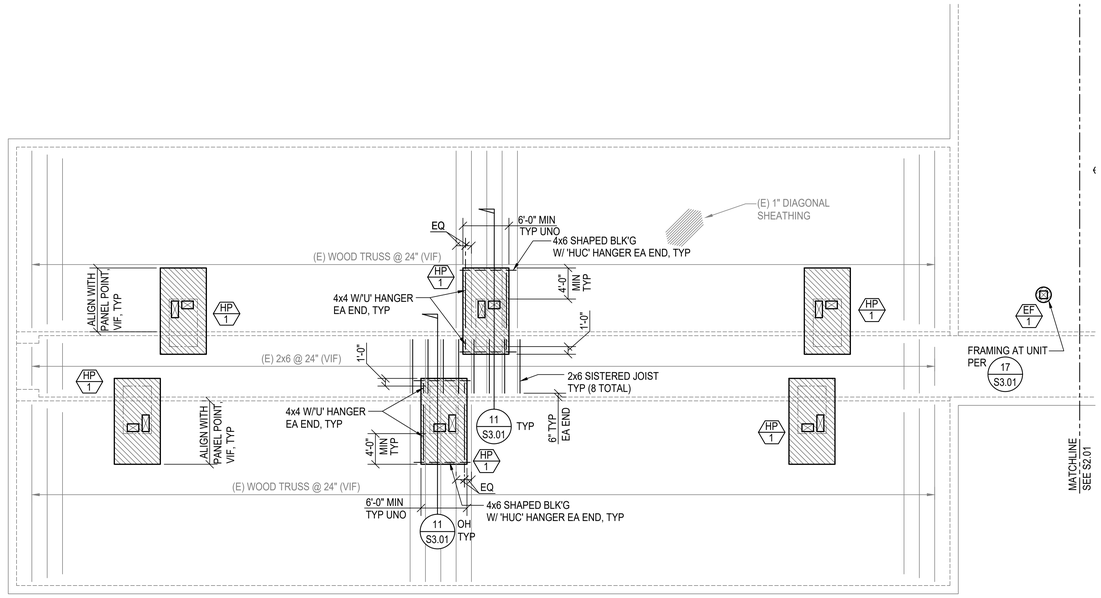
No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 08:43

ROOF FRAMING PLANS

S2.01



ROOF FRAMING PLAN - BUILDING M-2

1/8" = 1'-0"

N

A

ROOF FRAMING NOTES:

1. REFER TO GENERAL NOTES ON SHEETS S0.01 THUR S0.02.
2. REFER TO AND CHECK WITH ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
3. REFER TO AND CHECK WITH MECHANICAL DRAWING FOR DUCT OPENINGS, EQUIPMENT SIZE AND LOCATION, ETC. LOCATE SUPPORTING MEMBERS ACCORDINGLY.
4. HATCHED AREA INDICATES MECH UNIT SEE MECHANICAL DRAWINGS FOR EXACT LOCATION.
5. XXX/X INDICATES MECHANICAL UNIT. SEE SCHEDULE ON THIS SHEET FOR EQUIPMENT WEIGHTS. COORDINATE WITH MEP DRAWINGS, TYPICAL. CONTRACTOR TO COORDINATE UNIT LOCATIONS AND THE REQUIRED ROOF OPENINGS SO THAT NO EXISTING JOISTS/TRUSS MEMBERS NEED TO BE CUT OR NOTCHED.

ROOF EQUIPMENT WEIGHT SCHEDULE

UNIT MARK	MAX OPER WT (LBS)
HP1	950
HP-2	950
HP-3	450
EF-1	37
EF-2	12

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

MARTIN & associates
JOHN A. MARTIN & ASSOCIATES
Structural Engineers
950 S. Grand Avenue
Los Angeles, Calif. 90015
Phone (213) 483-6490
WWW.JOHNMARTIN.COM
J22061

REGISTERED PROFESSIONAL ENGINEER
No. 47577
STRUCTURAL
STATE OF CALIFORNIA

DATE SIGNED:
OCTOBER 30, 2023

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

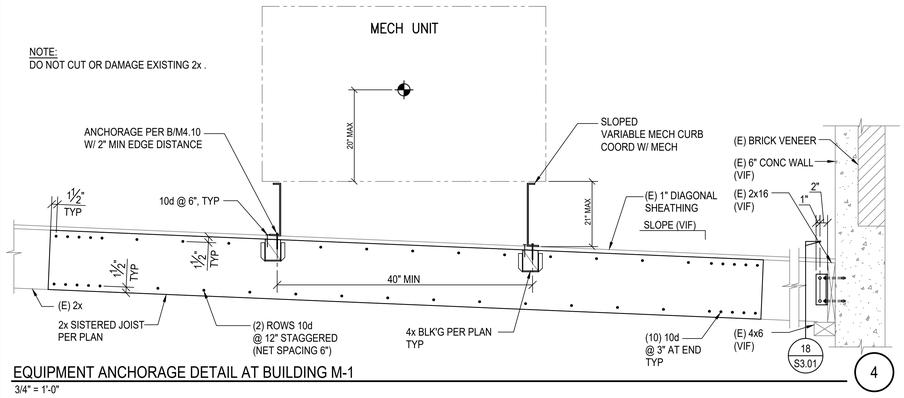
No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 08:41

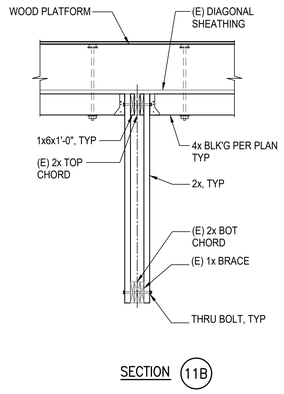
ROOF FRAMING PLANS

S2.02

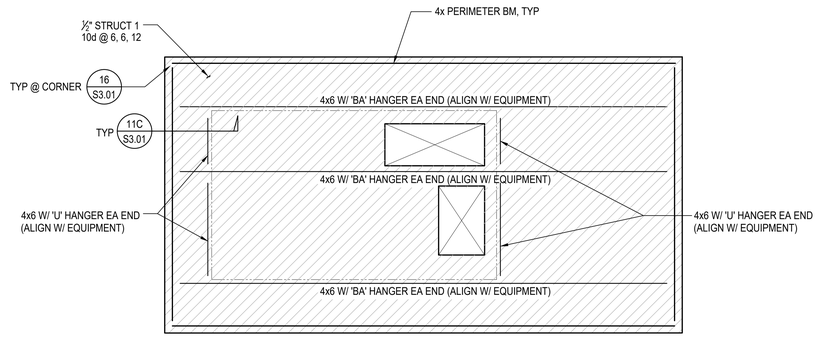


EQUIPMENT ANCHORAGE DETAIL AT BUILDING M-1

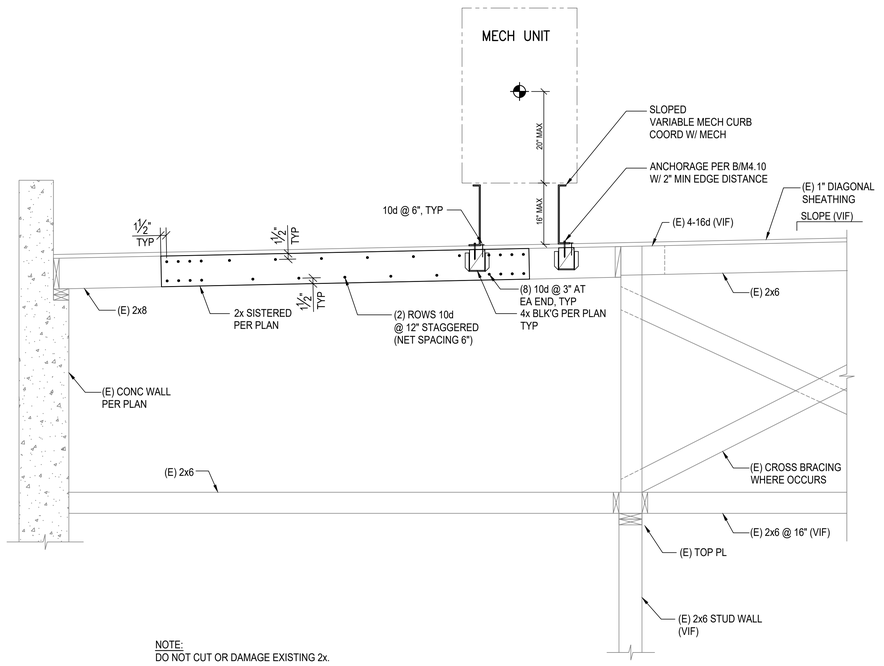
3/4" = 1'-0"



SECTION 11B



PLATFORM PLAN VIEW 11A

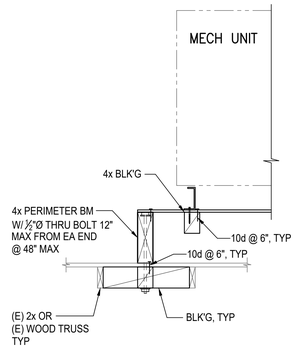


NOTE:
DO NOT CUT OR DAMAGE EXISTING 2x.

EQUIPMENT ANCHORAGE DETAIL AT BUILDING M-3

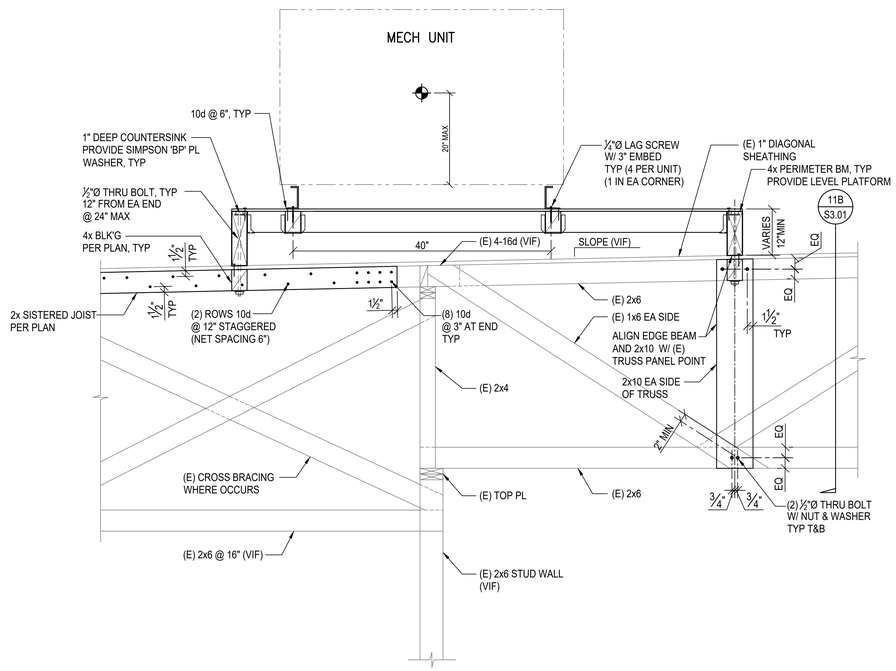
3/4" = 1'-0"

14



SECTION 11C

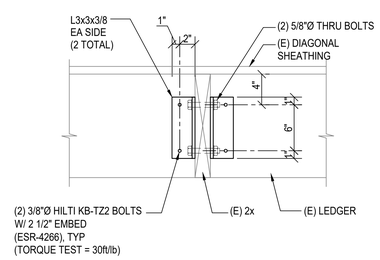
NOTE:
DO NOT CUT OR DAMAGE EXISTING
WOOD TRUSS.



EQUIPMENT ANCHORAGE DETAIL AT BUILDING M-3

3/4" = 1'-0"

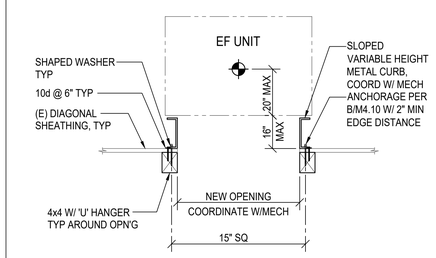
11



SECTION

1 1/2" = 1'-0"

18

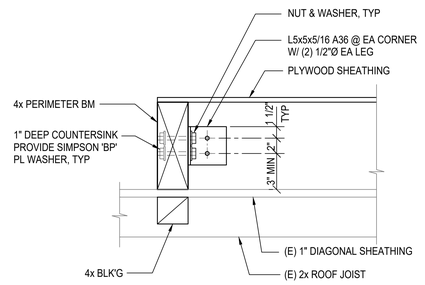


NOTE:
DO NOT CUT OR DAMAGE EXISTING
ROOF RAFTERS.

FRAMING AT EF UNIT

1" = 1'-0"

17



TYPICAL PLATFORM CORNER CONNECTION DETAIL

1 1/2" = 1'-0"

16

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

MARTIN & associates
JOHN A. MARTIN & ASSOCIATES
Structural Engineers
950 S. Grand Avenue
Los Angeles, Calif. 90015
Phone (213) 483-6490
WWW.JOHNMARTIN.COM
J22061

REGISTERED PROFESSIONAL ENGINEER
No. 4757
STRUCTURAL
STATE OF CALIFORNIA

DATE SIGNED:
OCTOBER 30, 2023

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

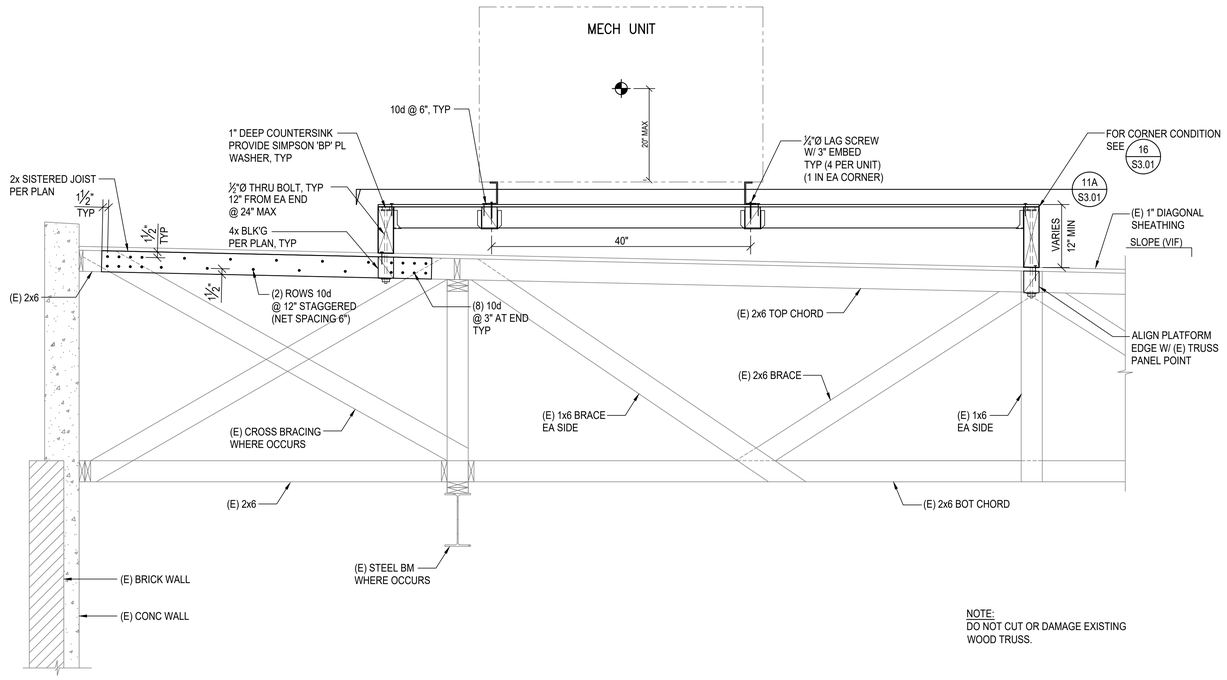
No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 08:04

SECTIONS AND DETAILS

S3.01

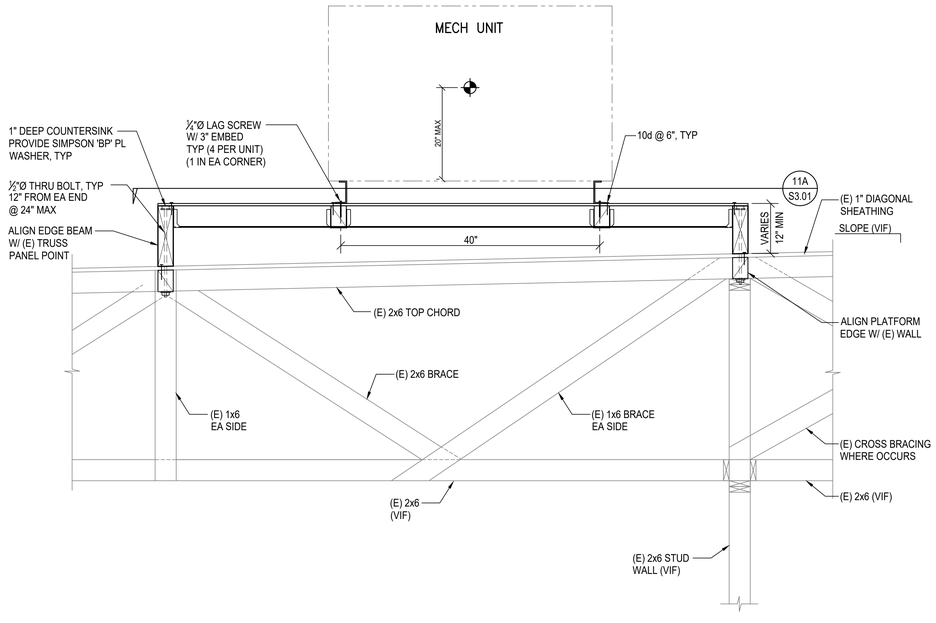


NOTE:
DO NOT CUT OR DAMAGE EXISTING
WOOD TRUSS.

EQUIPMENT ANCHORAGE DETAIL AT BUILDING M-3

3/4" = 1'-0"

6



EQUIPMENT ANCHORAGE DETAIL AT BUILDING M-3

3/4" = 1'-0"

16

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

MARTIN & associates
JOHN A. MARTIN & ASSOCIATES
Structural Engineers
950 S. Grand Avenue
Los Angeles, Calif. 90015
Phone (213) 483-6490
WWW.JOHNMARTIN.COM
J22061

REGISTERED PROFESSIONAL ENGINEER
No. 47577
STRUCTURAL
STATE OF CALIFORNIA

DATE SIGNED:
OCTOBER 30, 2023

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
OSA No	03-122671

REVISIONS

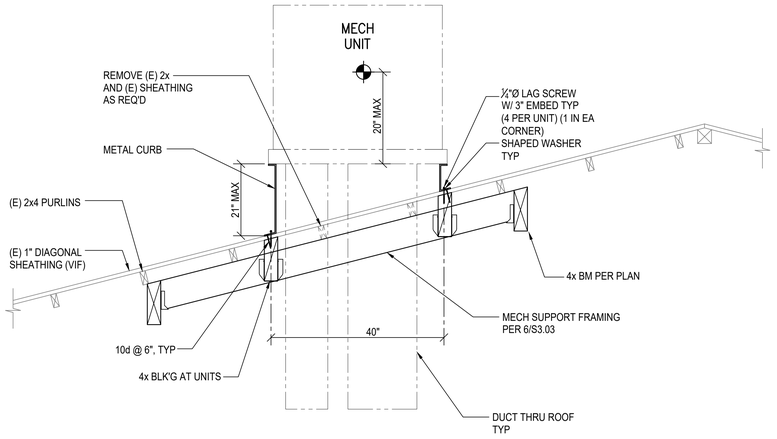
No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 08:02

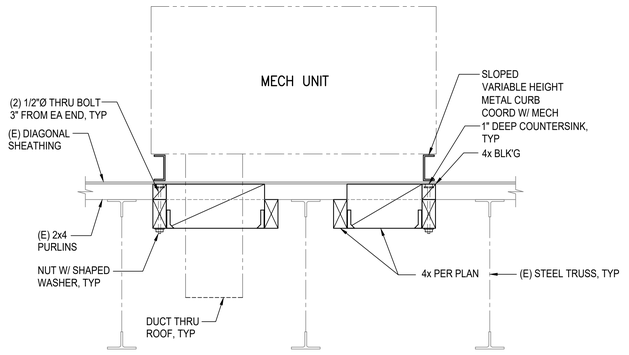
SECTIONS AND DETAILS

S3.02

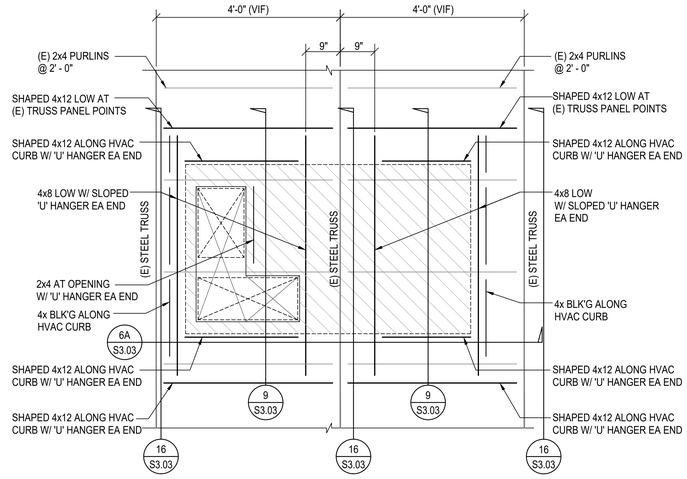


SECTION AT MECH UNIT 9

3/4" = 1'-0"



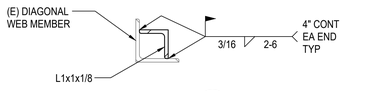
SECTION 6A



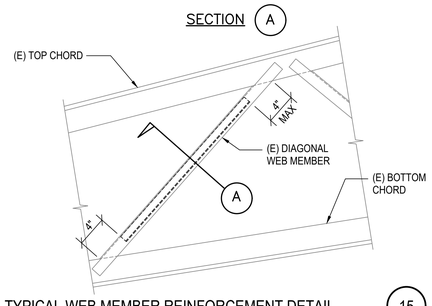
NOTE:
DO NOT CUT OR DAMAGE EXISTING ROOF RAFTERS.

ENLARGED FRAMING PLAN AT HVAC UNIT 6

3/4" = 1'-0"

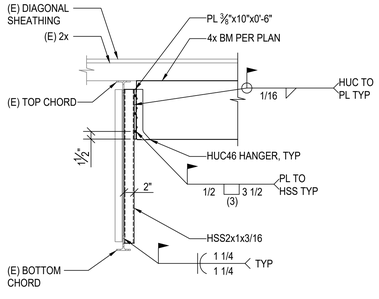


SECTION A



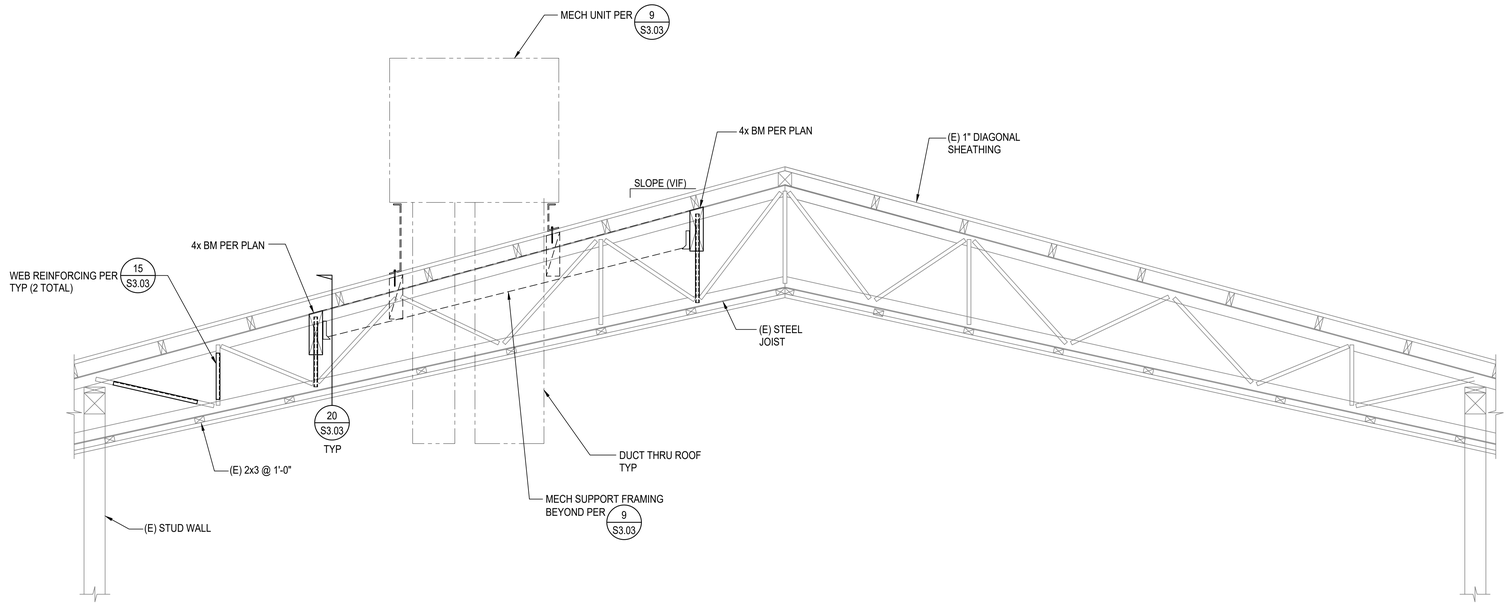
TYPICAL WEB MEMBER REINFORCEMENT DETAIL 15

1 1/2" = 1'-0"



SECTION 20

1" = 1'-0"



TRUSS REINFORCEMENT AT MECH UNIT 16

3/4" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

MARTIN & associates
JOHN A. MARTIN & ASSOCIATES
Structural Engineers
950 S. Grand Avenue
Los Angeles, Calif. 90015
Phone (213) 483-6490
WWW.JOHNMARTIN.COM
J22061

REGISTERED PROFESSIONAL ENGINEER
No. 47577
STRUCTURAL
STATE OF CALIFORNIA

DATE SIGNED:
OCTOBER 30, 2023

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 08:11

SECTIONS AND DETAILS

S3.03

TITLE 24 MECHANICAL & PLUMBING REQUIREMENTS (CODE REFERENCES ARE TO 2019 BUILDING ENERGY EFFICIENCY STANDARDS):

1. All air cooled HVAC units shall have minimum efficiencies per Table 110.2-A.
2. All furnaces shall have minimum efficiencies per Table 110.2-L.
3. All furnaces shall have stand by loss controls per section 110.2 (d).
4. All thermostats shall comply with 110 (b) or (c), as applicable.
5. All HVAC systems shall have outside (ventilation) air per 120.1 (b) 2. Also see mechanical plans for minimum outside air settings. Refer to table on plan.
6. When CO2 ventilation demand controls are specified, provide in accordance with 120.1 C. 4.
7. Minimum ventilation rates shall be initiated one hour prior to scheduled occupancy per 120.1 (c) 2.
8. Each HVAC system shall have shut-off and reset controls complying with 120.2 (e).
9. All outside and exhaust dampers shall automatically close per 120.2 (f).
10. All systems greater than a nominal 54 MBH cooling capacity shall have economizers equipped with fault detection and diagnostics per 120.2 (i).
11. All ductwork insulation shall comply with 120.4.
12. Set up all thermostats with a dead band of no less than three degrees to prevent cycling between heating and cooling.
13. Acceptance tests required prior to granting occupancy. NA refers to Non Residential appendices:
    - Outdoor air ventilation systems per NA 7.5.1.
    - Constant volume single zone system controls per NA 7.5.2.
    - Air economizers per NA 7.5.4.
    - Demand control (CO2) controls, when required, per NA 7.5.5.
    - Fault Detection & diagnostics (FDD) per NA 7.5.11.

Piping, Ductwork, and Electrical Distribution System Bracing Note:

Piping, ductwork, and Electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Section 13.6.5., 13.6.6, 13.6.7, 13.6.8, and 2019 CBC, Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a pre-approved installation guide (e.g., OSHPD OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP),
Electrical Distribution Systems (E):

MP ☐ MD ☐
PP ☐ E ☐ **Option 1:** Detailed on the approved drawings with project specific notes and details

MP ☐ MD ☑
PP ☐ E ☐ **Option 2:** Shall comply with the applicable OSHPD Pre-Approval (OPM#) #Tolco/B-line OPM-052.

Equipment Anchorage Notes:

All Mechanical, Plumbing, and Electrical components shall be anchored and installed per the details on the DSA approved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2019 CBC, Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16 Chapters 13, 26 and 30.

1. All permanent equipment and components.
2. Temporary, movable or mobile equipment that is permanently attached (E.G. hard wired) to the building utility services such as electricity, gas or water. "Permanently attached" shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
3. Temporary, moveable or mobile equipment which is heavier than 400 pounds or has a center mass located 4 feet or more above the adjacent floor or roof level that directly support the component are required to be restrained in a manner approved by DSA.

The following Mechanical and Electrical components shall be positively attached to the structure, but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping and conduit. Flexible connections must allow movement in both transverse and longitudinal directions:

A. Components weighing less than 400 pounds and have a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.
B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all Mechanical, Electrical and Plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with above requirements.

Codes:

California Code of Regulations (C.C.R)
Part 1 - 2022 California Standards Administrative Code, Title 24, C.C.R.
Part 2 - 2019 California Building Code (C.B.C.), Title 24, C.C.R. Volumes 1-3.
Part 3 - 2019 California Electrical Code, Title 24, C.C.R.
Part 4 - 2019 California Mechanical Code (C.M.C.), Title 24, C.C.R.
Part 5 - 2019 California Plumbing Code (C.P.C.), Title 24, C.C.R.
Part 6 - 2019 California Energy Code, Title 24, C.C.R.
Part 9 - 2019 California Fire Code, Title 24, C.C.R.
Part 11 - 2019 California Green Code, Title 24, C.C.R.

Standards and Guides:

ADAAG - American with Disabilities Act, Accessibility Guidelines.
Fixtures - Plumbing fixtures to comply with table 5.303.6 of the California Green Building Standards - 2019 Edition.

General Project Note:

1. Coordination of work: Layout of materials, equipment and systems is generally diagrammatic unless specifically dimensioned. Some work may be shown offset for clarity. The actual location of all materials, piping, ductwork, fixtures, equipment, supports, etc. shall be carefully planned, prior to installation of any work to avoid all interferences with each other, or with structural, electrical, architectural or other elements. Verify the proper voltage and phase of all equipment with the electrical plans. All conflicts shall be called to the attention of the architect and the engineer prior to the installation of any work or the ordering of any equipment.

2. Cutting, boring, saw cutting or drilling through the new or existing structural elements to be done only when so detailed in the drawings or accepted by the Architect and Structural engineer with the approval of DSA representative.

Air Conditioning Legend

SYMBOL	ABBR.	ITEM	SYMBOL	ABBR.	ITEM
	A.C.	Air-Conditioning		H.W.R.	Heating Water Return
	A.D.	Access Door		H.W.S.	Heating Water Supply
	A.F.F.	Above Finished Floor		INT.	Internal
	A.H.	Air Handler		LOC.	Location
	B.A.S.	Building Automation System		M.O.	Motor Operated
	B.V.	Butterfly Valve		(N)	New
	C.D.	Condensate Drain		N.C.	Normally Closed
	C.E.	Ceiling Exhaust Register		N.I.C.	Not in Contract
	C.W.R.	Condensor Water Return		N.O.	Normally Open
	C.W.S.	Condensor Water Supply		O.S.A.	Outside Air
	C.H.W.R.	Chilled/Hot Water Return		O.B.D.	Opposed Blade Damper
	C.H.W.S.	Chilled/Hot Water Supply		P.O.C.	Point of Connection
	COMB.	Combustion		P.P.	Pete's Plug
	CONN.	Connection		PROV.	Provide
	CONT.	Continuation		P.R.V.	Pressure Reducing Valve
	C.R.	Ceiling Return Register		SIM.	Similar
	C.G.	Ceiling		S.F.D.	Smoke / Fire Damper
	C.S.	Ceiling Supply Register			w/ access panel
	C.V.	Check Valve		S.M. or S/M	Sheet Metal
	D.C.W.	Domestic Cold Water		S.O.V.	Shut Off Valve
	DIA.	Diameter		S.P.S.T.	Single Pole Single Throw
	D.L.	Door Louver		STAT.	Thermostat or Room Sensor
	DN.	Down		SURF.	Surface
	D.P.D.T.	Double Pole Double Throw		(TYP)	Typical
	D.T.R.	Duct Thru Roof		U.G.	Underground
	(E)	Existing		U.N.O.	Unless Noted Otherwise
	E.F.	Exhaust Fan		V.D.	Volume Damper
	E.M.S.	Energy Management System		V.D.	Valt Damper w/ Remote Operator
	EX.	Exhaust		W/	With
	F.D.	Fire Damper w/ acc. panel		W.R.	Wall Return Register
	Flex. Conn	Flexible Connection		W.S.	Wall Supply Register
	FLR.	Floor			Duct w/ Acoustic Lining
	F.T.R.	Flue Thru Roof		T.V.	Turning Vanes
	Furn.	Furnace			Extractor
	GA.	Gauge			
	GAL.	Gallon			
	GALV.	Galvanized			CO2 SENSOR
	G.P.M.	Gallons per Minute			
	GRD.	Grade			Union
	G.V.	Gate Valve			Reducer or Increaser

EQUIPMENT SCHEDULE

HP-1 F M4.10

Carrier 50GCQM06 Rooftop Heat Pump, 1,800 CFM @ 0.60 E.S.P., 0.66 BHP direct drive supply fan drive vane-axial fan with electrically commutated motor, 1,200 CFM low speed (staged air volume), 61,300 BTUH total / 46,320 sensible gross cooling / 54,860 heating capacity / 16.2 SEER / 11.7 EER / 8.3 HSPF at ARI conditions. Two stage cooling, 5 year compressor warranty, high and low pressure switches, adjustable defrost timer, and anti-short cycle timer. (4) 16" x 16" x 2" MERV 13 return air filters, 5.5 kW electric strip heater factory mounted and wired, single point power connection for heat pump and strip heater. Integrated modulating economizer with dry bulb control, fault diagnostics and detection per T24 regulations, modulating power exhaust fan module, demand control ventilation package with wall mounted CO2 sensor set to 1000 ppm. Adjust outside airflow to modulate between hi-low settings per O.A. schedule on plans. Include information on both settings in air balance report. Provide sperate power feed and disconnect for economizer power exhaust fan. Sloped roof curb with seismic hold down clips, internal high and low compressor protection.

Electrical: Operating Weight:
26 MCA / 30 MOCP @ 460v-3ph. (HP Unit) Unit and Accessories: 816 Lbs.
1.9 MCA / 3.4 MOCP @ 460v-3ph. (Power Exhaust) Curb: 107 Lbs.

HP-2 F M4.10

Carrier 50FCQM07 Rooftop Heat Pump, 2,100 CFM @ 0.60 E.S.P., 0.83 direct drive supply fan drive vane-axial fan with electrically commutated motor, 1,400 CFM low speed (staged air volume), 73,450 BTUH total / 55,300 sensible gross cooling / 63,550 heating capacity / 11.2 EER / 15.0 IEER / 3.6 COP at ARI conditions. Two stage cooling, 5 year compressor warranty, high and low pressure switches, adjustable defrost timer, and anti-short cycle timer. (4) 16" x 16" x 2" MERV 13 return air filters, 5.5 kW electric strip heater factory mounted and wired, single point power connection for heat pump and strip heater. Integrated modulating economizer with dry bulb control, fault diagnostics and detection per T24 regulations, modulating power exhaust fan module, demand control ventilation package with wall mounted CO2 sensor set to 1000 ppm. Adjust outside airflow to modulate between hi-low settings per O.A. schedule on plans. Include information on both settings in air balance report. Provide sperate power feed and disconnect for economizer power exhaust fan. Sloped roof curb with seismic hold down clips, internal high and low compressor protection.

Electrical: Operating Weight:
23 MCA / 25 MOCP @ 460v-3ph. (HP Unit) Unit and Accessories: 809 Lbs.
3.5 MCA / 6.3 MOCP @ 460v-3ph. (Power Exhaust) Curb: 107 Lbs.

HP-3 F M4.10

Carrier 50VT-C30 Rooftop Heat Pump, 950 CFM @ 0.40 E.S.P., 0.38 BHP direct drive supply fan motor, 28,430 BTUH total / 20,840 sensible net cooling / 28,310 heating capacity / 14.0 SEER / 8.2 HSPF at ARI conditions. Single stage cooling, 5 year compressor warranty, high and low pressure switches, adjustable defrost timer, and anti-short cycle timer. 2" Deep MERV 13 return air filters in factory filter rack, 3.8 kW electric strip heater, factory mounted and wired, single point power connection for heat pump and strip heater. Motorized two-position outside air damper. Sloped roof curb with seismic hold down clips internal high and low compressor protection.

Electrical: Operating Weight:
44.8 MCA / 45 MOCP @ 208v-1ph. (HP Unit) Unit and Accessories: 366 Lbs.
Curb: 65 Lbs.

EF-1 G M4.11

Greenheck CUE-099-VG Centrifugal Upblast Roof Mounted Exhaust Fan. 250 - 300 CFM @ 0.50" E.S.P., 1172 RPM, .07 BHP, 5.8 sones, 1/6 HP direct drive ECM motor. Provide with sloped roof curb, backdraft damper, dial on motor for balancing, bird screen, and NEMA-1 toggle switch. Interlock fan operation with Pelican EMS system.

Electrical: 1/6 HP @ 115v-1ph. Operating Weight: 37 Lbs.

EF-2

Greenheck SPA-50-90-VG Ceiling Mounted Exhaust Fan. 90 CFM @ 0.20" E.S.P., 887 RPM, 6 watts ECM motor, 0.7 sones. Provide with backdraft damper, full size discharge to roof cap, and NEMA-1 toggle switch. Interlock fan operation with light circuit. Dial on fan speed control with time delay set to fifteen minutes.

Electrical: 6 Watts @ 115v-1ph. Operating Weight: 12 Lbs.

GRILLE SCHEDULE

CD-1

Titus Model TDC Louvered Face Diffuser with T-Bar mount frame and O.B.D. See diffuser sizing chart for neck sizes.

CD-2

Titus Model TDC Louvered Face Diffuser with flat surface mount frame and O.B.D. See diffuser sizing chart for neck size.

CR-1

Titus Model 50F eggcrate T-Bar mount return grille.

CR-2

Titus Model 50F eggcrate surface mount return grille.

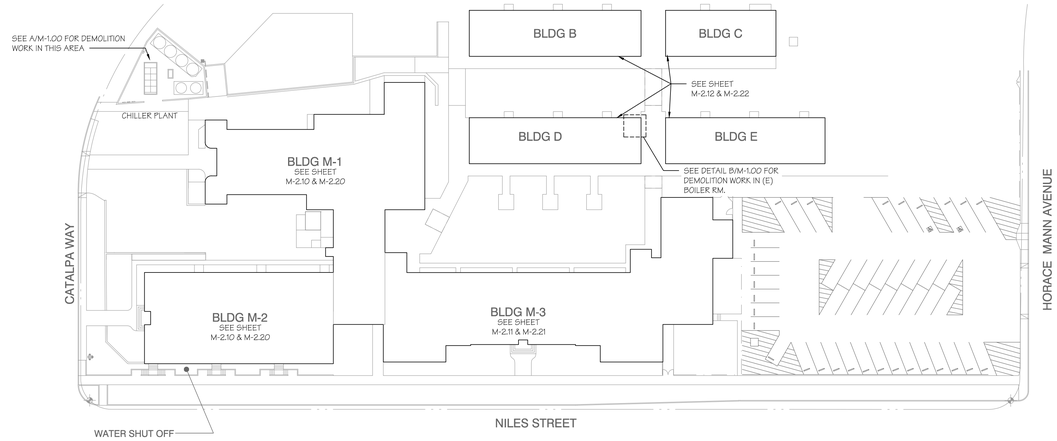
CE-1

Titus Model 35RL, 35 degree deflection, surface mounting frame, O.B.D.

Note: Paint all visible surfaces behind diffusers and grilles flat black.

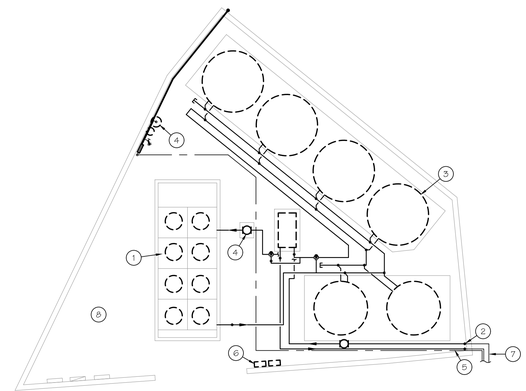
DIFFUSER SIZING CHART

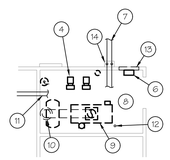
CFM	TITUS MCD, SQUARE NECK	CFM	TITUS TDC, SQUARE NECK
0 - 200	6" x 6"	0 - 150	6" x 6"
201 - 325	8" x 8"	151 - 275	9" x 9"
326 - 450	10" x 10"	276 - 475	12" x 12"
451 - 600	12" x 12"	476 - 700	15" x 15"
601 - 700	14" x 14"	701 - 950	18" x 18"
701 - 850	16" x 16"	951 - 1250	21" x 21"
851 - 950	18" x 18"	1251 - 1700	24" x 24"
951 - 1150	20" x 20"	1701 - 2500	30" x 30"



MECHANICAL SITE PLAN

SCALE: 1"=40'-0"





BOILER ROOM DEMOLITION PLAN B

SCALE: 1/8"=1'-0"

CHILLER YARD DEMOLITION PLAN A

SCALE: 1/8"=1'-0"

Central Plant Demo Keynotes:

1. Remove existing chillers, all chilled water piping, supports, etc.
2. Cap mechanical piping at 1" above grade.
3. Remove existing thermal storage tanks, all piping supports, etc.
4. Remove all existing pumps, expansion tanks, pot feeder, supports, controls, accessories, etc.
5. Demo back domestic CW pipe back to entry into chiller yard and cap.
6. Remove existing EMS and / or analog control panel, all related conduits, wiring, controls, etc.
7. Existing chilled / hot water piping abandoned below grade.
8. Note: Entire central plant chiller yard and boiler room shall be made free of all mechanical, plumbing, electrical, and control items related to items being removed. Confirm exact details based on field conditions.
9. Remove existing boiler, all hot water piping, supports, etc.
10. Remove existing flue thru roof, roof jack, etc. Cap and patch / weatherproof opening to match existing.
11. Demo hydronic piping at wall, drain system, cap, and seal.
12. Demo gas pipe back to drop thru ceiling and cap.
13. Remove existing combustion air louver and patch wall to match existing.
14. Remove existing exterior pipe chase, piping, pipe supports etc., and patch wall to match existing. Remove piping to 12" below grade. Cap piping and abandon in place.

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MECHANICAL ENGINEERING
No. M26577
REN 8-30-24
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

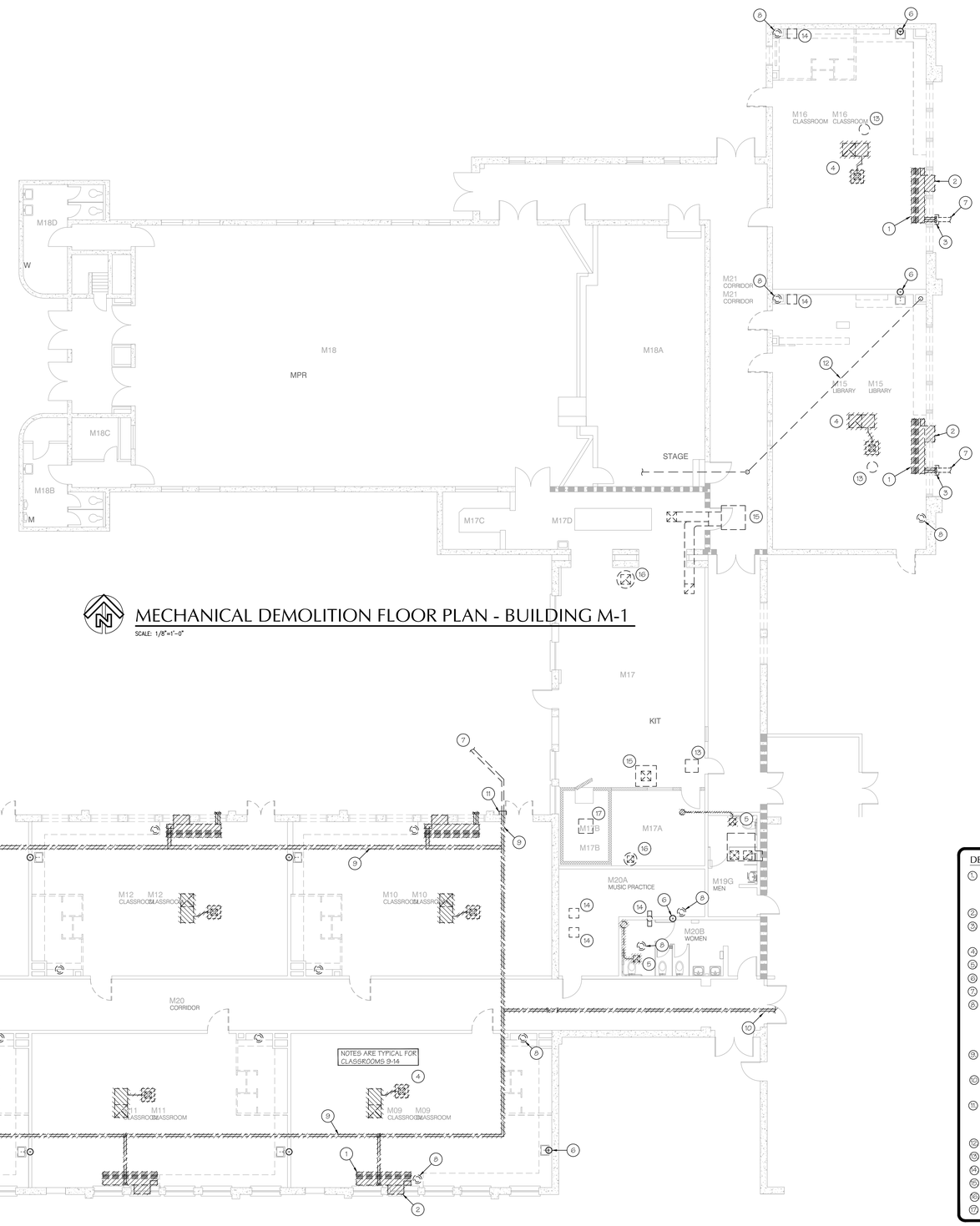
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:48

MECHANICAL SITE PLAN, SCHEDULES, AND NOTES

M1.00



MECHANICAL DEMOLITION FLOOR PLAN - BUILDING M-1

SCALE: 1/8"=1'-0"

MECHANICAL DEMOLITION FLOOR PLAN - BUILDING M-2

SCALE: 1/8"=1'-0"

DEMOLITION KEY NOTES:

1. REMOVE EXISTING FLOOR MOUNTED UNIT VENTILATOR, ALL RELATED MECHANICAL PIPING, CONDENSATE PIPING, CONTROLS, SUPPORTS, ANCHORAGE, ETC. PATCH EXISTING SURFACES TO MATCH EXISTING.
2. REMOVE EXISTING OUTSIDE AIR LOUVERS. INFILL / PATCH WALL TO MATCH EXISTING.
3. REMOVE EXISTING HYDRONIC AND CONDENSATE PIPING AND EXTERIOR CHASE. REMOVE PIPING TO 12" BELOW GRADE. CAP PIPING AND ABANDON IN PLACE.
4. REMOVE EXISTING GRAVITY RELIEF VENT, ROOF CURB, DUCTWORK, RELIEF GRILLE, ETC.
5. REMOVE EXISTING EXHAUST FAN, DUCTWORK, ETC.
6. EXISTING WASTE VENT, TYPICAL. CONFIRM EXACT LOCATION IN FIELD.
7. ABANDON IN PLACE BELOW GRADE SITE HYDRONIC PIPING.
8. ABANDONED FURNACE FLUE, TYPICAL. CONFIRM QUANTITY AND LOCATION IN FIELD. REMOVE ANY AND ALL FLUES AS REQUIRED TO INSTALL NEW HVAC UNITS, AND ALL FLUES WITHIN 10'-0" OF ANY OUTSIDE AIR INTAKE. DEMO TO BELOW ROOF AND PATCH TO MATCH EXISTING.
9. DEMO ALL HYDRONIC PIPING ABOVE ROOF, PIPE SUPPORTS, PIPE DROPS THRU ROOF, ROOF JACK, ETC. PATCH / WEATHERPROOF ROOF TO MATCH EXISTING.
10. DEMO HYDRONIC PIPE THRU PARAPET WALL AND PATCH / WEATHERPROOF WALL TO MATCH EXISTING.
11. REMOVE EXISTING EXTERIOR PIPE CHASE, HYDRONIC PIPE RISERS ON WALL, ANCHORAGE, PATCH AND SEAL PIPE OPENINGS IN PARAPET WALL TO MATCH EXISTING. DEMO PIPING TO 12" BELOW GRADE AND CAP.
12. EXISTING EVAPORATIVE COOLER DRAIN PIPING TO REMAIN.
13. EXISTING ROOF VENT TO REMAIN.
14. EXISTING ABANDONED MECHANICAL VENT TO REMAIN.
15. EXISTING ROOFTOP EVAPORATIVE COOLER TO REMAIN.
16. EXISTING ROOF EXHAUST FAN TO REMAIN.
17. EXISTING COLD BOX CONDENSER TO REMAIN.

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES SCHAFER
No. M26537
EXP. 6-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

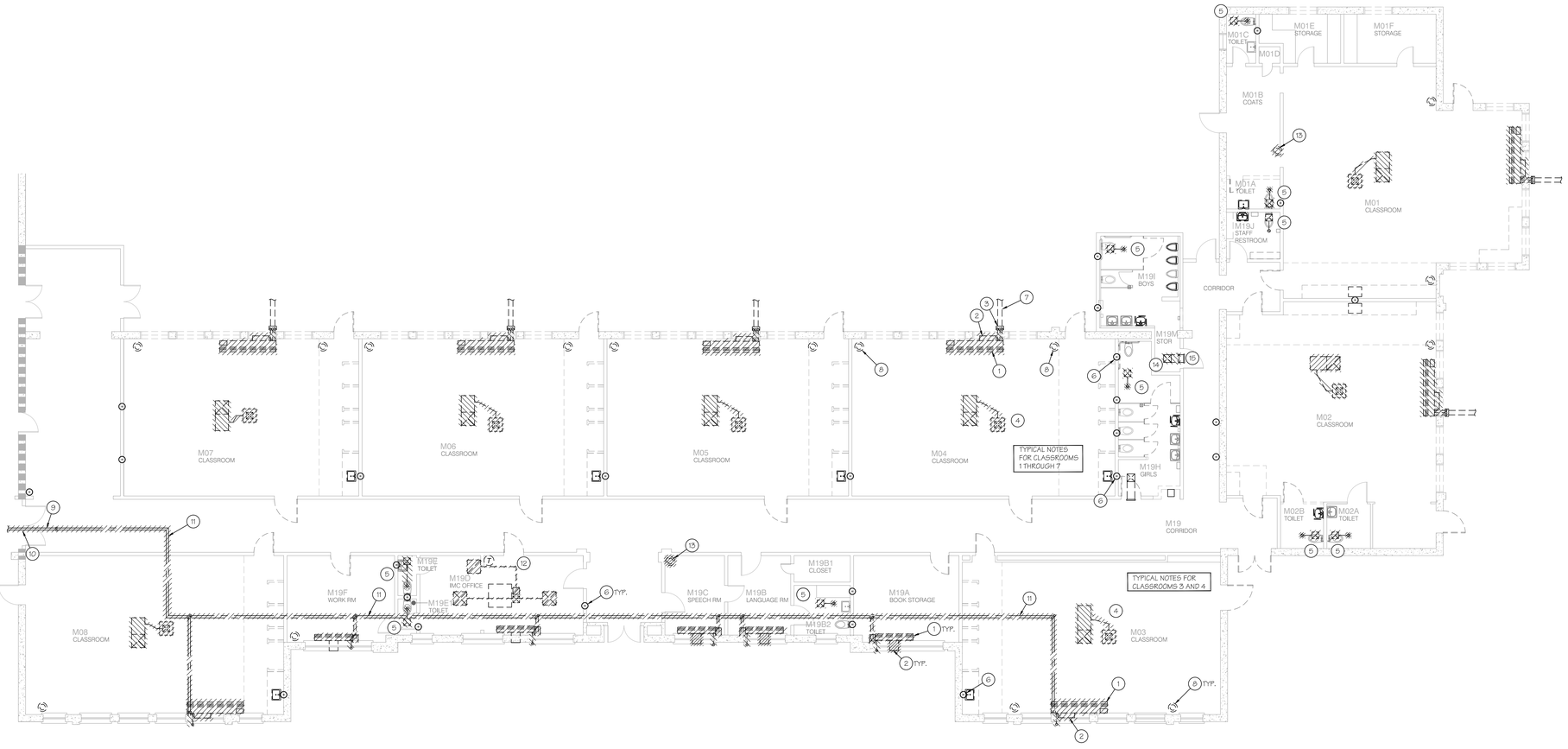
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:48

MECHANICAL DEMOLITION PLAN - BUILDING M-1 & M-2

M2.10



MECHANICAL DEMO FLOOR PLAN - BUILDING M-3

SCALE: 1/8"=1'-0"

DEMOLITION KEY NOTES:

1. REMOVE EXISTING FLOOR MOUNTED UNIT VENTILATOR, ALL RELATED MECHANICAL PIPING, CONDENSATE PIPING, CONTROLS, SUPPORTS, ANCHORAGE, ETC. PATCH EXISTING SURFACES TO MATCH EXISTING.
2. REMOVE EXISTING OUTSIDE AIR LOUVERS. INFILL / PATCH WALL TO MATCH EXISTING.
3. REMOVE EXISTING HYDRONIC AND CONDENSATE PIPING AND EXTERIOR CHASE. REMOVE PIPING TO 12" BELOW GRADE. CAP PIPING AND ABANDON IN PLACE.
4. REMOVE EXISTING GRAVITY RELIEF VENT, ROOF CURB, DUCTWORK, RELIEF GRILLE, ETC.
5. REMOVE EXISTING EXHAUST FAN, DUCTWORK, ETC.
6. EXISTING WASTE VENT, TYPICAL. CONFIRM EXACT LOCATION IN FIELD.
7. ABANDON IN PLACE BELOW GRADE SITE HYDRONIC PIPING.
8. ABANDONED FURNACE FLUE, TYPICAL. CONFIRM QUANTITY AND LOCATION IN FIELD. REMOVE ANY AND ALL FLUES AS REQUIRED TO INSTALL NEW HVAC UNITS, AND ALL FLUES WITHIN 10'-0" OF ANY OUTSIDE AIR INTAKE. DEMO TO BELOW ROOF AND PATCH TO MATCH EXISTING.
9. DEMO ALL HYDRONIC PIPING ABOVE ROOF, PIPE SUPPORTS, PIPE DROPS THRU ROOF, ROOF JACK, ETC. PATCH / WEATHERPROOF ROOF TO MATCH EXISTING.
10. DEMO HYDRONIC PIPE THRU PARAPET WALL AND PATCH / WEATHERPROOF WALL TO MATCH EXISTING.
11. DEMO ALL HYDRONIC PIPING BELOW ROOF, PIPE SUPPORTS, ETC.
12. REMOVE EXISTING ROOFTOP PACKAGED AC UNIT, DUCTWORK, GRILLES, CONDENSATE DRAIN, CONTROLS, ETC. DEMO GAS BACK TO ROOF JACK AND CAP.
13. REMOVE THIS FLUE ASSEMBLY AS REQUIRED TO INSTALL NEW ROOF MOUNTED AC UNIT. SEE M3.11
14. DEMO CEILING TRANSFER GRILLE AND PARTIAL DEMO OF 14"x8" TRANSFER DUCT BACK TO P.O.C. NOTED.
15. RETAIN TRANSFER GRILLE FOR RE-USE.

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
ROBERT JAMES BASKIN
No. M26577
EXP. 6-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

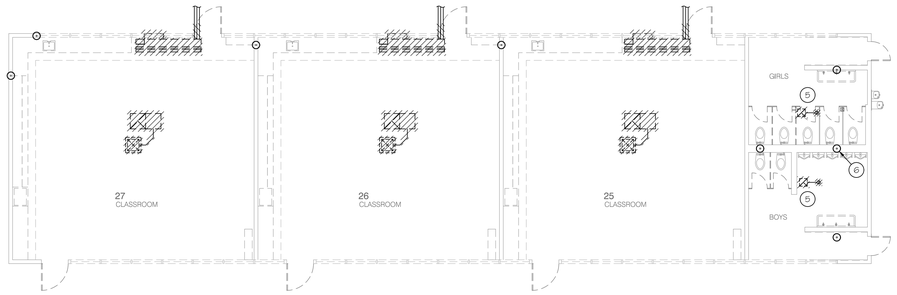
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:48

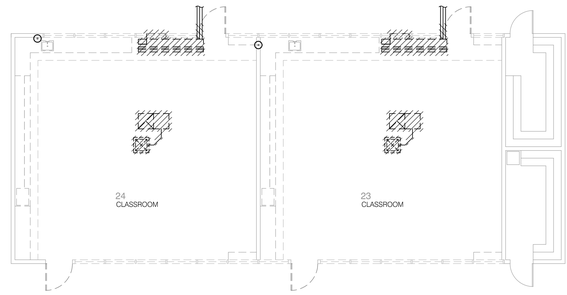
MECHANICAL DEMOLITION PLAN - BUILDING M-3

M2.11



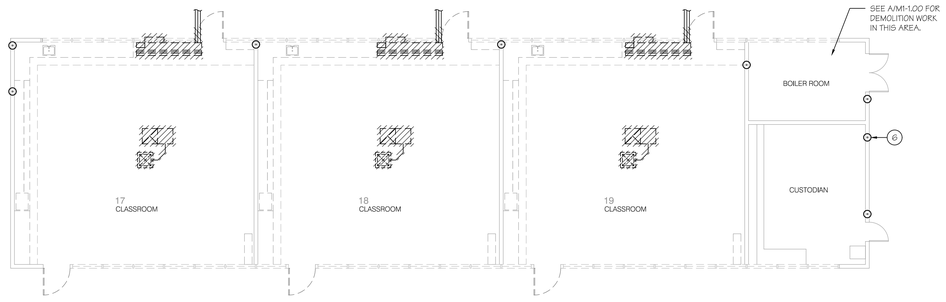
MECHANICAL DEMOLITION FLOOR PLAN-BLDG B

SCALE: 1/8"=1'-0"



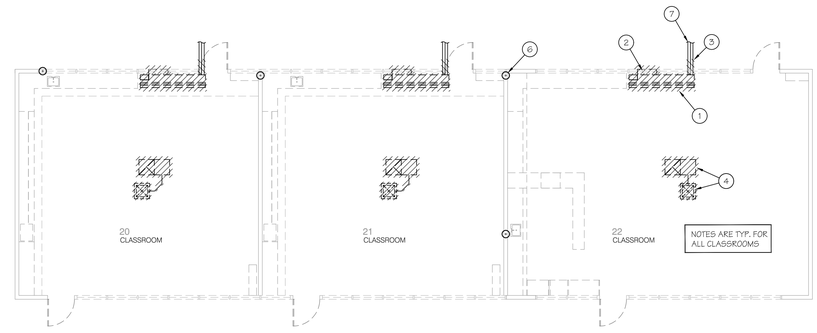
MECHANICAL DEMOLITION FLOOR PLAN-BLDG C

SCALE: 1/8"=1'-0"



MECHANICAL DEMOLITION FLOOR PLAN-BLDG D

SCALE: 1/8"=1'-0"



MECHANICAL DEMOLITION FLOOR PLAN-BLDG E

SCALE: 1/8"=1'-0"

Demolition Key Notes:

1. Remove existing floor mounted unit ventilator, all related mechanical piping, condensate piping, controls, supports, anchorage, etc. Patch existing surfaces to match existing.
2. Remove existing outside air louvers. Infill / patch wall to match existing.
3. Remove existing hydronic and condensate piping and exterior chase. Remove piping to 12" below grade. Cap piping and abandon in place.
4. Remove existing gravity relief vent, roof curb, ductwork, relief grille, etc.
5. Remove existing exhaust fan, ductwork, etc.
6. Existing waste vent, typical. Confirm exact location in field.
7. Abandon in place below grade site hydronic piping.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES SCHULTZ
No. M26537
EXP. 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.08	DESCRIPTION

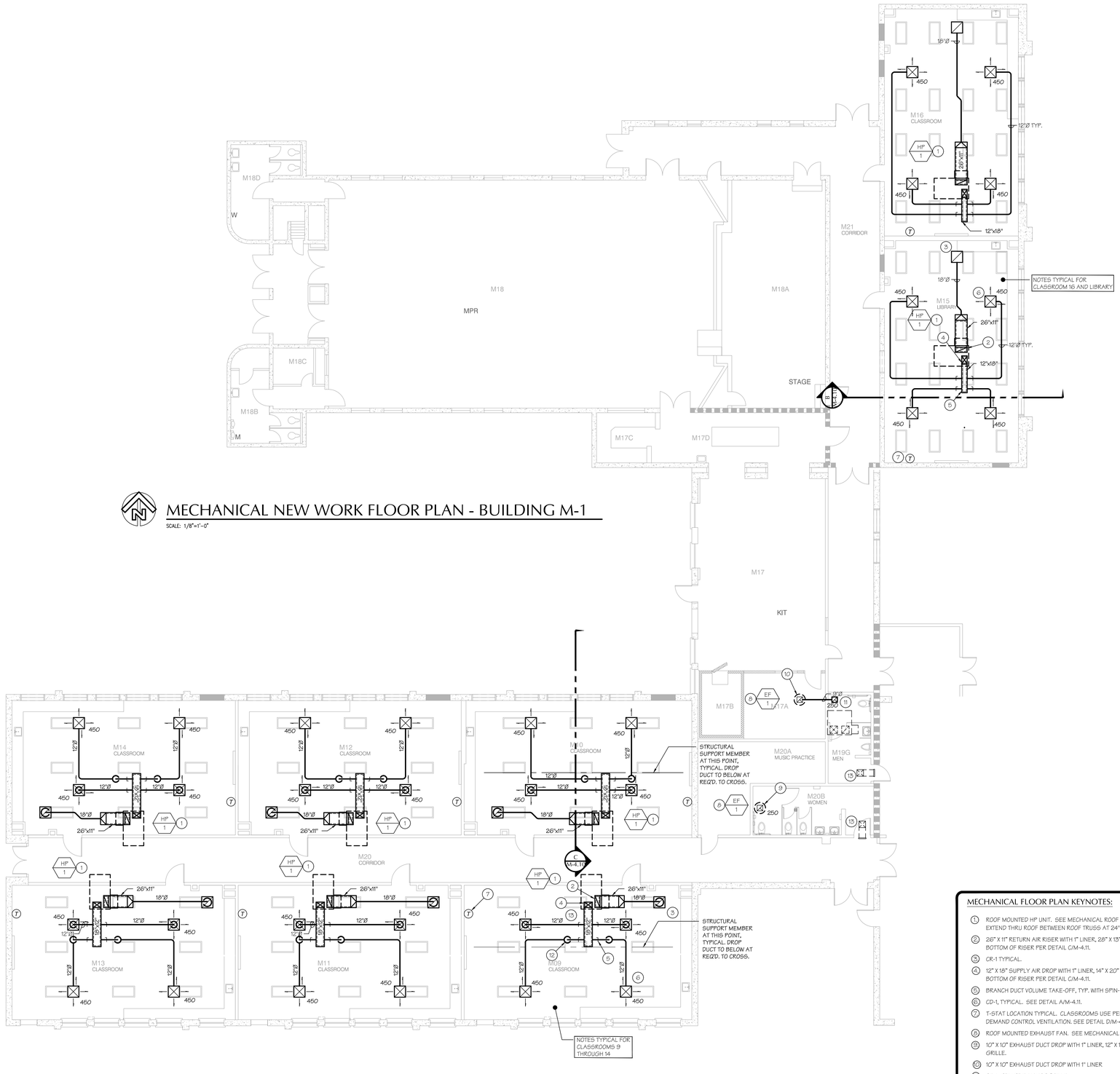
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:48

MECHANICAL DEMOLITION
PLAN - B,C,D,E

M2.12

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23



MECHANICAL NEW WORK FLOOR PLAN - BUILDING M-1

SCALE: 1/8"=1'-0"

MECHANICAL FLOOR PLAN - BUILDING M-2

SCALE: 1/8"=1'-0"

MECHANICAL FLOOR PLAN KEYNOTES:

1. ROOF MOUNTED HP UNIT. SEE MECHANICAL ROOF PLAN. LOCATE UNIT SO THAT DUCT DROPS EXTEND THRU ROOF BETWEEN ROOF TRUSS AT 24" O.C. DO NOT CUT ANY ROOF FRAMING.
2. 26" X 11" RETURN AIR RISER WITH 1" LINER, 26" X 15" NET. ELBOW w/ TURNING VANES AT BOTTOM OF RISER PER DETAIL C/M-4.11.
3. CR-1 TYPICAL.
4. 12" X 18" SUPPLY AIR DROP WITH 1" LINER, 14" X 20" NET. ELBOW w/ TURNING VANES AT BOTTOM OF RISER PER DETAIL C/M-4.11.
5. BRANCH DUCT VOLUME TAKE-OFF, TYP. WITH SPIN-IN FITTING AND VOLUME DAMPER.
6. CD-1, TYPICAL. SEE DETAIL A/M-4.11.
7. T-STAT LOCATION TYPICAL. CLASSROOMS USE PELICAN T5250 WITH CO2 SENSOR AND DEMAND CONTROL VENTILATION. SEE DETAIL D/M-4.11.
8. ROOF MOUNTED EXHAUST FAN. SEE MECHANICAL ROOF PLAN.
9. 10" X 10" EXHAUST DUCT DROP WITH 1" LINER, 12" X 12" NET, WITH CE-1, 12" X 12" EXHAUST GRILLE.
10. 10" X 10" EXHAUST DUCT DROP WITH 1" LINER
11. CE-1, 12" X 12" EXHAUST GRILLE.
12. ELBOW DOWN TO BELOW FRAMING MEMBER AND EXTEND TO GRILLE CONNECTION. SEE SECTION C/-M-4.10.
13. (E) TRANSFER GRILLE AND TRANSFER DUCT TO REMAIN.

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MONIC JAMES ROSE
No. M26577
10-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

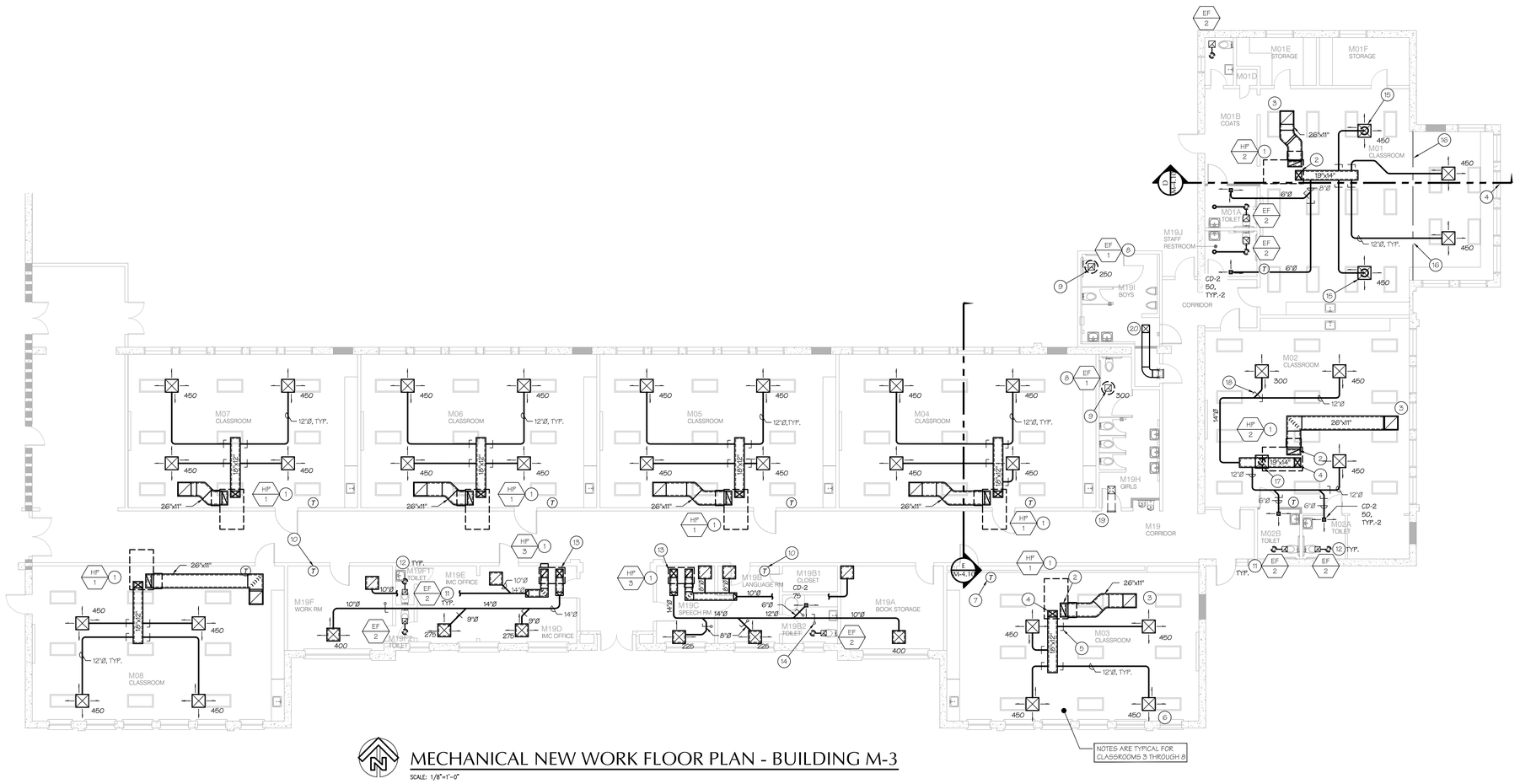
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:48

MECHANICAL PLAN - BUILDING M-1 & M-2

M2.20



MECHANICAL NEW WORK FLOOR PLAN - BUILDING M-3

SCALE: 1/8"=1'-0"

MECHANICAL FLOOR PLAN KEYNOTES:

1. ROOF MOUNTED HP UNIT. SEE MECHANICAL ROOF PLAN. LOCATE UNIT SO THAT DUCT DROPS EXTEND THRU ROOF BETWEEN ROOF TRUSS AT 24" O.C. DO NOT CUT ANY ROOF FRAMING.
2. 26" X 11" RETURN AIR RISER WITH 1" LINER, 28" X 13" NET, ELBOW w/ TURNING VANES AT BOTTOM OF RISER PER DETAIL C/M-4.11.
3. CR-1 TYPICAL, SEE TYP. DETAIL A/M-4.11.
4. 12" X 18" SUPPLY AIR DROP WITH 1" LINER, 14" X 20" NET, ELBOW w/ TURNING VANES AT BOTTOM OF RISER PER DETAIL C/M-4.11.
5. BRANCH DUCT TAKE-OFF w/ SPIN-IN FITTING AND VOLUME DAMPER, TYP.
6. CD-1, TYPICAL. SEE DETAIL A/M-4.11.
7. T-STAT LOCATION TYPICAL. CLASSROOMS USE PELICAN TS250 WITH CO2 SENSOR AND DEMAND CONTROL VENTILATION. SEE DETAIL D/M-4.11.
8. ROOF MOUNTED EXHAUST FAN. SEE MECHANICAL ROOF PLAN.
9. 10" X 10" EXHAUST DUCT DROP WITH 1" LINER, 12" X 12" NET, WITH CE-1, 12" X 12" EXHAUST GRILLE.
10. PELICAN TS200 THERMOSTAT AT THIS LOCATION.
11. CEILING EXHAUST FAN, TYPICAL.
12. 6" ROUND DUCT THRU ROOF TO ROOF CAP, TYPICAL.
13. 12" X 14" LINED SUPPLY AND RETURN DUCT DROPS WITH 1" LINER, 14" X 16" NET, ELBOW w/ TURNING VANES AT BOTTOM OF RISERS.
14. BRANCH DUCT VOLUME DAMPERS LOCATED ABOVE A GYP BOARD CEILING SHALL BE PROVIDED WITH A BELDON CABLE AND CEILING MOUNTED ACTUATOR, YOUNG REGULATOR OR EQUAL. SEE DETAIL B/M-4.11.
15. ELBOW DOWN FROM TRUSS SPACE TO CONNECTION AT GRILLE.
16. ROUTE BELOW BEAM AND ABOVE BOTTOM CHORD OF TRUSS AT THIS POINT.
17. 12"Ø BRANCH DUCT DROP w/ VOLUME DAMPER TO GRILLE CONN.
18. BRANCH DUCT VOLUME DAMPER, TYP. SEE DETAIL B/M-4.11.
19. (E) TRANSFER GRILLE AND TRANSFER DUCT TO REMAIN.
20. (E) TRANSFER GRILLE TO BE RE-USED, EXTEND (E) 14"x8" DUCT AS SHOWN AND PROVIDE (N) 12"x12" CE-1 TO BE USED FOR AIR TRANSFER.

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
JOHN JAMES BASKIN
No. M26570
EXP. 12-31-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

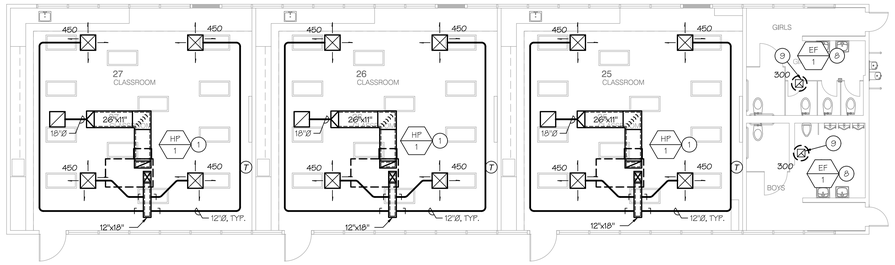
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:48

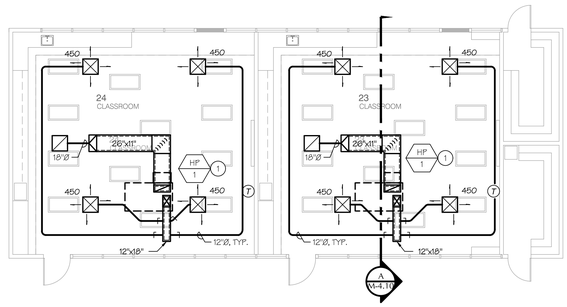
MECHANICAL PLAN - BUILDING M-3

M2.21



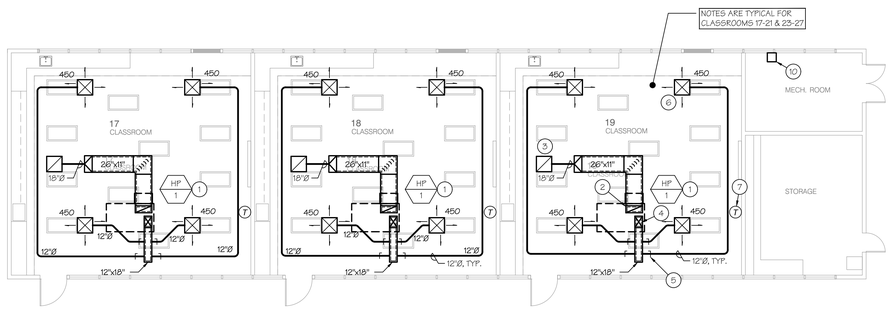
MECHANICAL FLOOR PLAN-BLDG B

SCALE: 1/8"=1'-0"



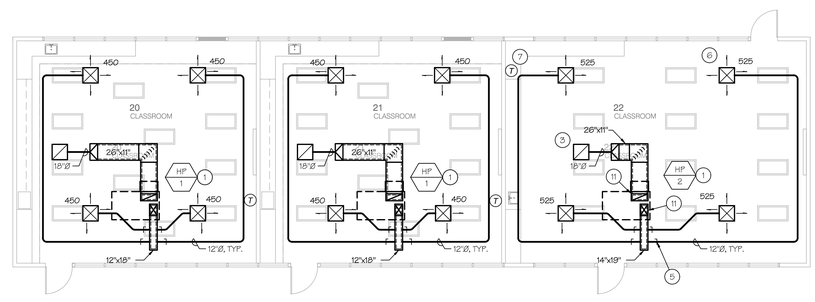
MECHANICAL FLOOR PLAN-BLDG C

SCALE: 1/8"=1'-0"



MECHANICAL FLOOR PLAN-BLDG D

SCALE: 1/8"=1'-0"



MECHANICAL FLOOR PLAN-BLDG E

SCALE: 1/8"=1'-0"

MECHANICAL FLOOR PLAN KEYNOTES:

1. ROOF MOUNTED HP UNIT. SEE MECHANICAL ROOF PLAN. LOCATE UNIT SO THAT DUCT DROPS EXTEND THRU ROOF BETWEEN ROOF TRUSS AT 24" O.C. DO NOT CUT ANY ROOF FRAMING.
2. 26" X 11" RETURN AIR RISER WITH 1" LINER, 28" X 13" NET, ELBOW w/ TURNING VANES AT BOTTOM OF RISER PER DETAIL C/M-4.11.
3. CR-1 TYPICAL.
4. 12" X 18" SUPPLY AIR DROP WITH 1" LINER, 14" X 20" NET, ELBOW w/ TURNING VANES AT BOTTOM OF RISER PER DETAIL C/M-4.11.
5. BRANCH DUCT TAKE-OFF, w/ 5#/IN-IN AND VOLUME DAMPERS, TYP.
6. CD-1, TYPICAL. SEE DETAIL A/M-4.11.
7. T-STAT LOCATION TYPICAL. CLASSROOMS USE PELICAN TS250 WITH CO2 SENSOR AND DEMAND CONTROL VENTILATION. SEE DETAIL D/M-4.11.
8. ROOF MOUNTED EXHAUST FAN. SEE MECHANICAL ROOF PLAN.
9. 10" X 10" EXHAUST DUCT DROP WITH 1" LINER, 12" X 12" NET, WITH CE-1, 12" X 12" EXHAUST GRILLE.
10. PELICAN WIRELESS GATEWAY w/ 115 PLUG CONNECTED TO WALL OUTLET AND CONN. TO LOCAL ROUTER. PROVIDE WALL MTD. BRACKET. SEE DETAILS D&E/M-4.11.
11. 14"x19" SUPPLY DROP w/ 1" LINER, 16"x21" NET. ELBOW w/ TURNING VANES AT BOTTOM OF RISER PER DETAIL C/M-4.11.

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BASKIN
No. M26537
EXP. 11-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

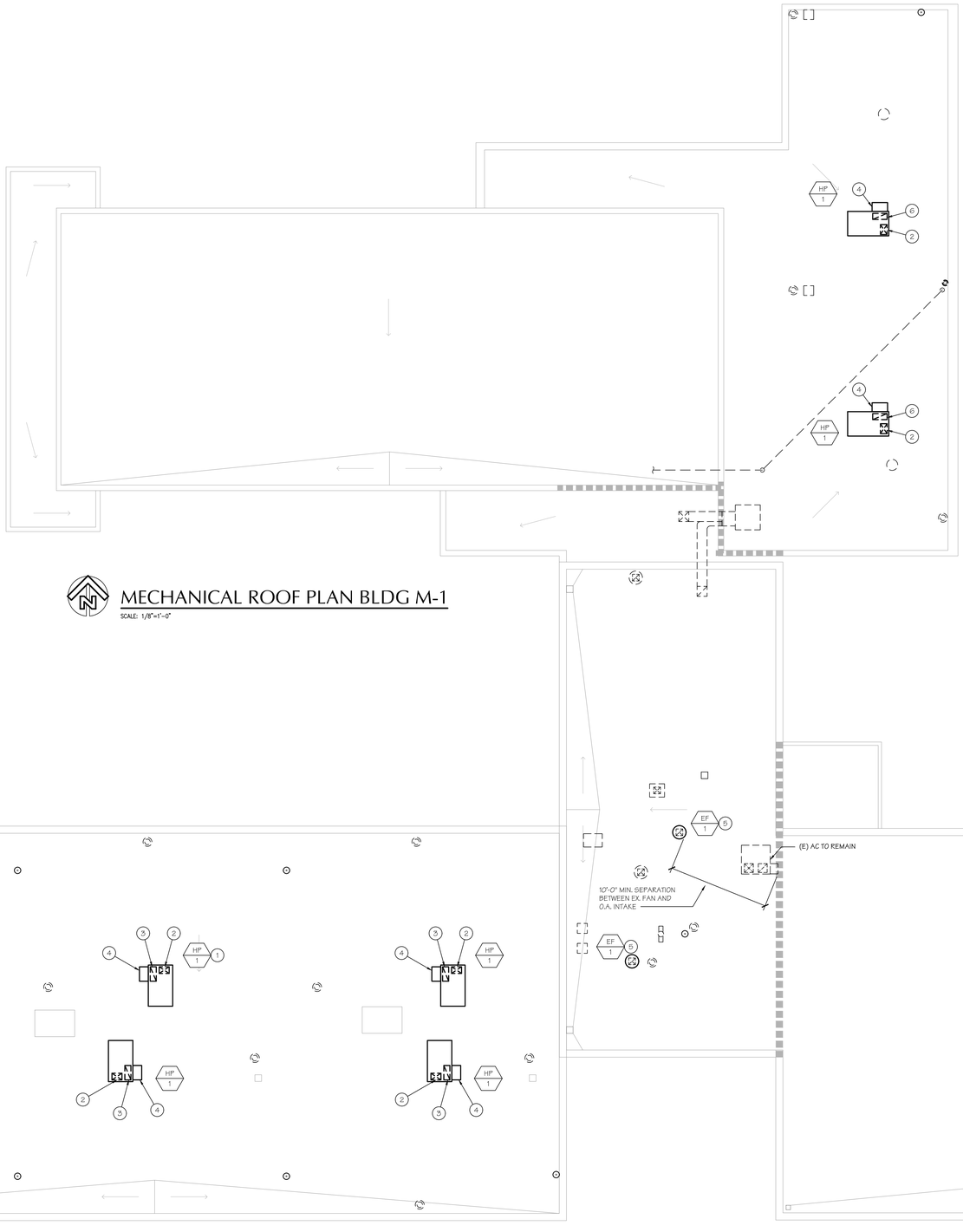
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:48

MECHANICAL PLAN - BUILDING B,C,D,E

M2.22



MECHANICAL ROOF PLAN BLDG M-1

SCALE: 1/8"=1'-0"

MECHANICAL ROOF PLAN BLDG M-2

SCALE: 1/8"=1'-0"

MECHANICAL ROOF PLAN KEYNOTES:

1. ROOF MOUNTED HP UNIT. SEE MECHANICAL ROOF PLAN. LOCATE UNIT SO THAT DUCT DROPS EXTEND THRU ROOF BETWEEN ROOF TRUSS AT 24" O.C. DO NOT CUT ANY ROOF FRAMING. SEE DETAIL F/M-4.10. FOR ANCHORAGE.
2. 12" X 18" SUPPLY DUCT DROP THRU ROOF WITH 1" LINER, 14" X 20" NET.
3. 26" X 11" RETURN DUCT RISER THRU ROOF WITH 1" LINER, 28" X 13" NET.
4. ECONOMIZER WITH POWER EXHAUST MODULE. SET MINIMUM OUTSIDE EQUAL TO 150 CFM WITH DEMAND CONTROL VENTILATION OVERRIDE TO 400 CFM.
5. NEW ROOF MOUNTED EXHAUST FAN WITH 10" X 10" LINED EXHAUST RISER THRU ROOF, 12" X 12" NET. COORDINATE EXACT LOCATION SO THAT EX. FAN IS A MIN. 10'-0" FROM OUTSIDE AIR INTAKE. SEE DETAIL G/M-4.11. FOR ANCHORAGE.
6. TRANSITION R.A. DUCT WITHIN CURB SPACE TO 18" X 18" w/ 1" LINER, 20" X 20" NET, AS REQ'D. TO EXTEND DUCT THRU ROOF BETWEEN ROOF TRUSS AT 24" O.C.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BASKIN
No. M26537
EXP. 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

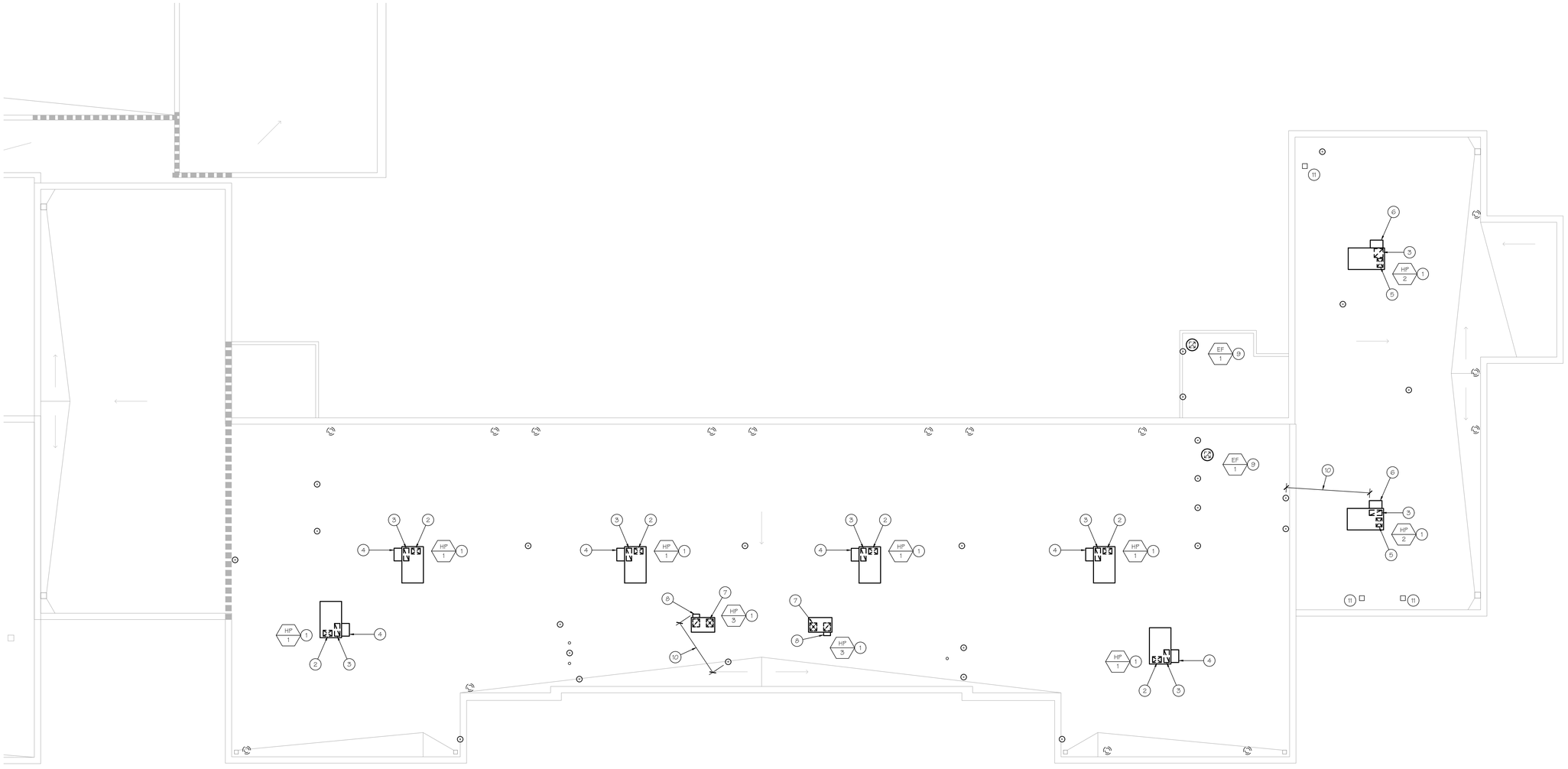
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

MECHANICAL ROOF PLAN - BUILDING M-1 & M-2

M3.10

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23



MECHANICAL ROOF PLAN BLDG M-3

SCALE: 1/8"=1'-0"

MECHANICAL ROOF PLAN KEYNOTES:

1. NEW ROOF MOUNTED HP UNIT. SEE ANCHORAGE DETAIL F/M4.10 . LOCATE UNIT SO THAT DUCT DROPS EXTEND THRU ROOF BETWEEN ROOF TRUSS AT 24" O.C. DO NOT CUT ANY ROOF FRAMING.
2. 12" X 18" SUPPLY DUCT DROP THRU ROOF WITH 1" LINER, 14" X 20" NET.
3. 26" X 11" RETURN DUCT RISER THRU ROOF WITH 1" LINER, 28" X 13" NET.
4. ECONOMIZER WITH POWER EXHAUST MODULE. SET MINIMUM OUTSIDE EQUAL TO 150 CFM WITH DEMAND CONTROL VENTILATION OVERRIDE TO 400 CFM.
5. 14" X 19" SUPPLY DUCT DROP THRU ROOF WITH 1" LINER, 16" X 21" NET.
6. ECONOMIZER WITH POWER EXHAUST MODULE. SET MINIMUM OUTSIDE EQUAL TO 200 CFM WITH DEMAND CONTROL VENTILATION OVERRIDE TO 500 CFM.
7. 12" X 14" SUPPLY AND RETURN DUCTS THRU ROOF WITH 1" LINER, 14" X 16" NET.
8. MOTORIZED OUTSIDE AIR DAMPER. SET TO 150 CFM.
9. NEW ROOF MOUNTED EXHAUST FAN WITH 10" X 10" LINED EXHAUST RISER THRU ROOF, 12" X 12" NET. SEE DETAIL G/M4.11. FOR ANCHORAGE.
10. MAINTAIN A A MIN. 10'-0" BETWEEN O.A. INTAKE AT A.C. UNIT AND VENT RISER LOC., TYP. OFFSET ANY CONFLICTING VENT LOCATION BELOW ROOF AND RISE THRU ROOF w/ NEW ROOF JACK, TYP. CONFIRM EXACT LOCATIONS OF (E) VENTS IN FIELD.
11. CEILING EX. FAN VENT CAP LOCATION, TYP.

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
ROGER JAMES BASKIN
No. M26537
EXP. 6-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

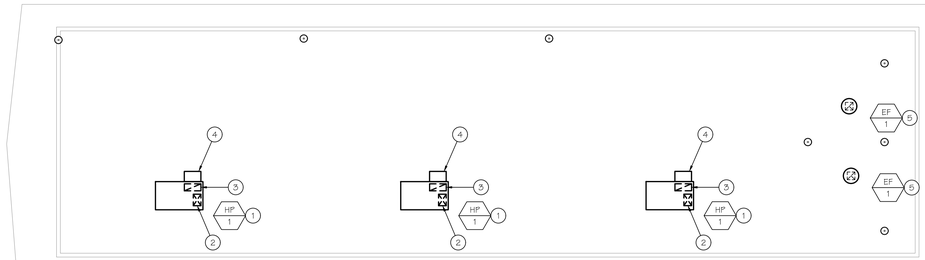
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

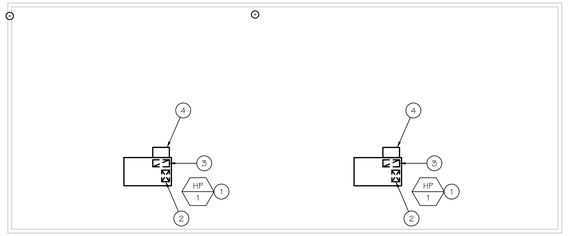
MECHANICAL ROOF PLAN - BUILDING M-3

M3.11



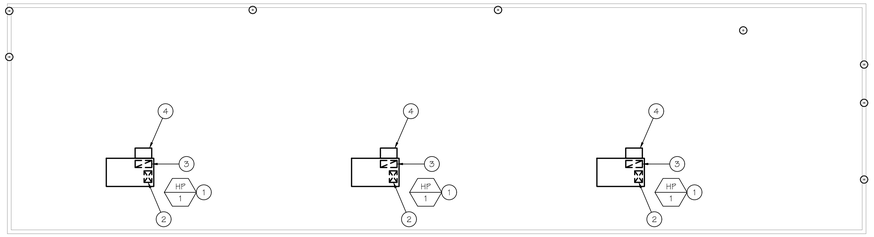
MECHANICAL ROOF PLAN-BLDG B

SCALE: 1/8"=1'-0"



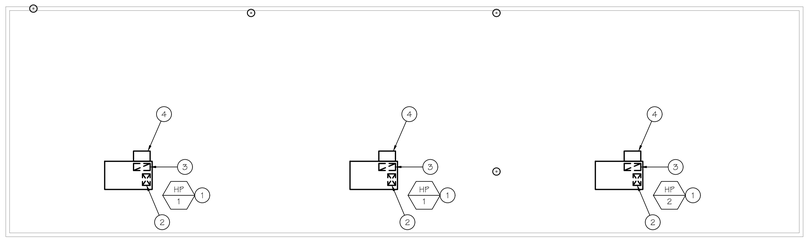
MECHANICAL ROOF PLAN-BLDG C

SCALE: 1/8"=1'-0"



MECHANICAL ROOF PLAN-BLDG D

SCALE: 1/8"=1'-0"



MECHANICAL ROOF PLAN-BLDG E

SCALE: 1/8"=1'-0"

MECHANICAL ROOF PLAN KEYNOTES:

1. ROOF MOUNTED HP UNIT. SEE ANCHORAGE DETAIL F/M4.10. SEE MECHANICAL ROOF PLAN. LOCATE UNIT SO THAT DUCT DROPS EXTEND THRU ROOF BETWEEN ROOF TRUSS AT 24" O.C. DO NOT CUT ANY ROOF FRAMING.
2. 12" X 18" SUPPLY DUCT DROP THRU ROOF WITH 1" LINER, 14" X 20" NET.
3. 26" X 11" RETURN DUCT RISER THRU ROOF WITH 1" LINER, 28" X 13" NET.
4. ECONOMIZER WITH POWER EXHAUST MODULE. SET MINIMUM OUTSIDE EQUAL TO 150 CFM WITH DEMAND CONTROL VENTILATION OVERRIDE TO 400 CFM.
5. NEW ROOF MOUNTED EXHAUST FAN WITH 10"x10" LINED EXHAUST RISER THRU ROOF, 12"x12" NET. SEE ANCHORAGE DETAIL G/M4.11.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES SCHAEFER
No. M26537
EXP. 09-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

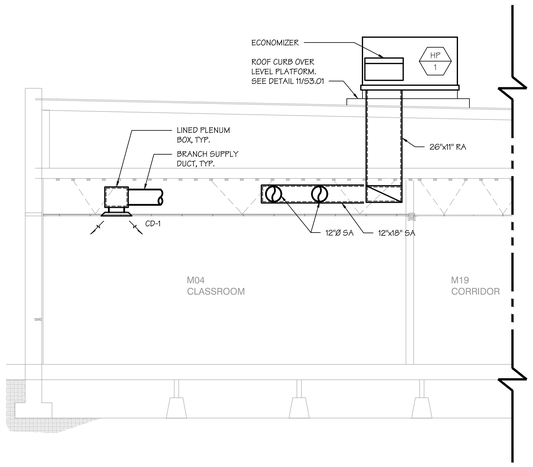
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

MECHANICAL ROOF PLAN - BUILDING B,C,D,E

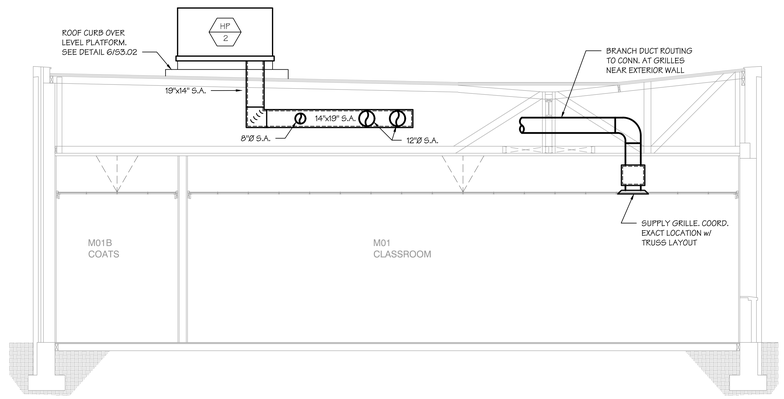
BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

M3.12



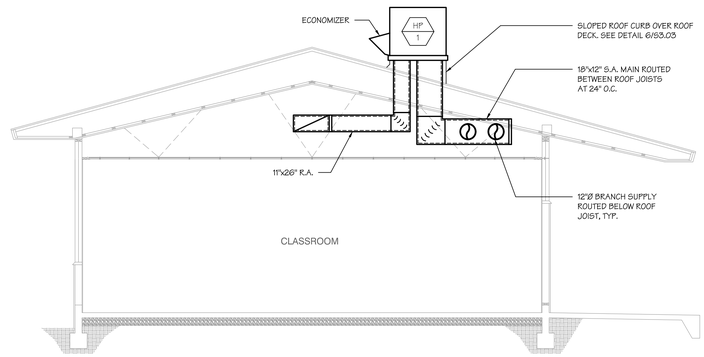
MECHANICAL SECTION BUILDING M-3 CLASSROOM 4 (E)

SCALE: 1/4"=1'-0"



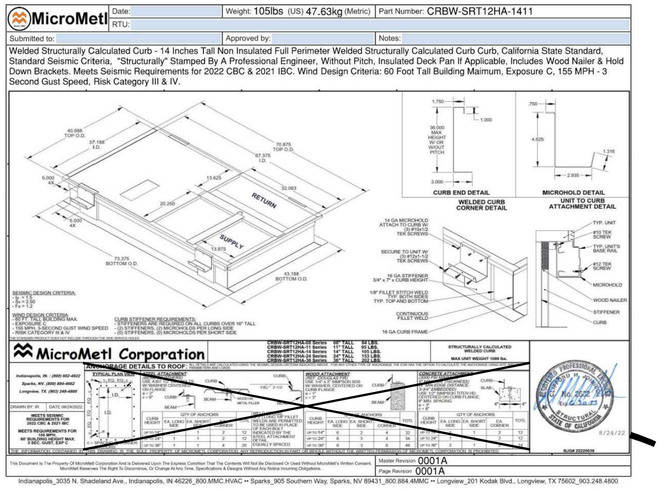
MECHANICAL SECTION BUILDING M-3 CLASSROOM 1 (D)

SCALE: 1/4"=1'-0"

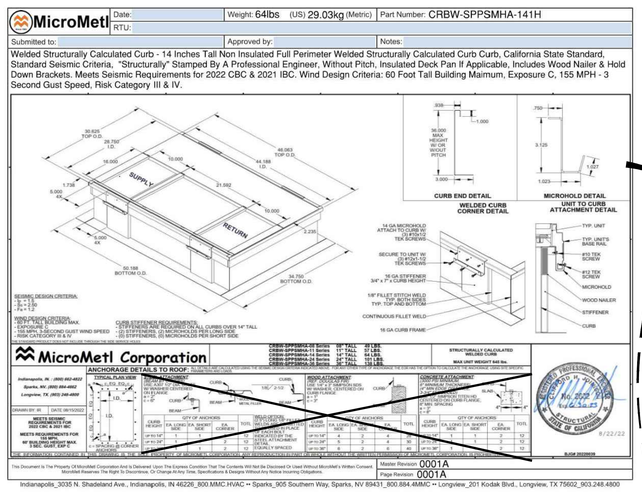


MECHANICAL SECTION BUILDING C CLASSROOM 23 (A)

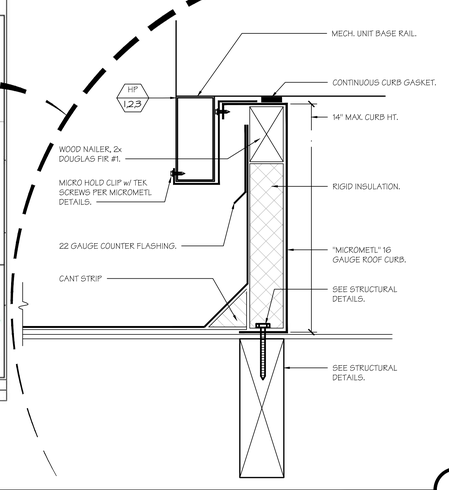
SCALE: 1/4"=1'-0"



(HP-1,HP-2) TON UNIT CURB 843 lb. MAX UNIT WT.



(HP-3)2.5 TON UNIT CURB 371 lb. MAX UNIT WT.

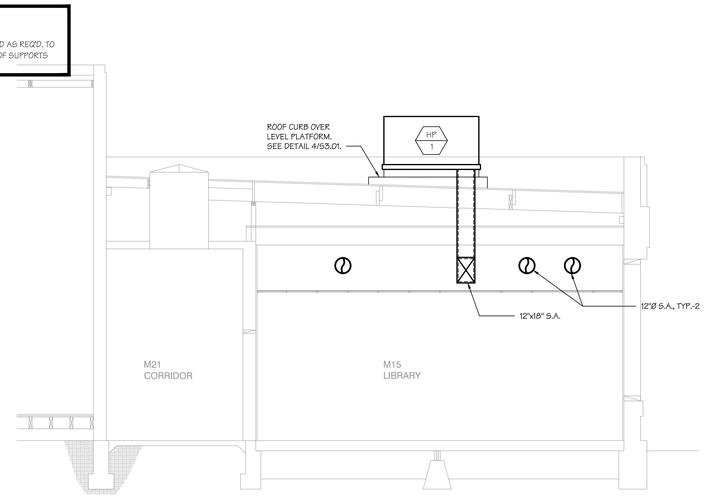


UNIT ANCHORAGE (F)

SCALE: N.T.S.

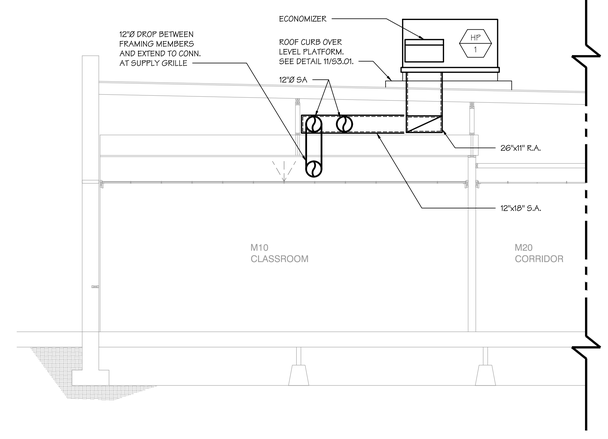
GENERAL NOTE:

UNITS SHALL BE FIELD LOCATED AND DUCTS TRANSITIONED AS REQ'D. TO PASS THRU ROOF W/O CUTTING EXISTING STRUCTURAL ROOF SUPPORTS



MECHANICAL SECTION BUILDING M-1 LIBRARY (B)

SCALE: 1/4"=1'-0"



MECHANICAL SECTION BUILDING M-2 CLASSROOM 10 (C)

SCALE: 1/4"=1'-0"

Baskin Mechanical Engineers
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES SCHULTZ
No. M26537
EXP. 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

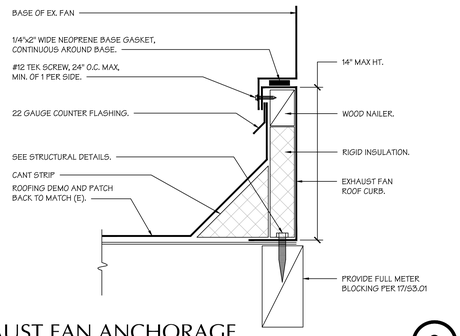
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

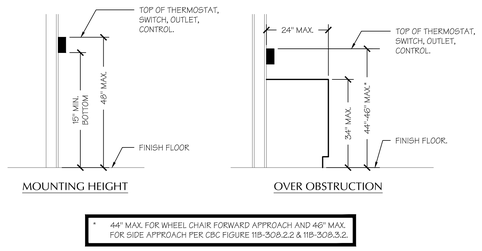
MECHANICAL SECTIONS

M4.10



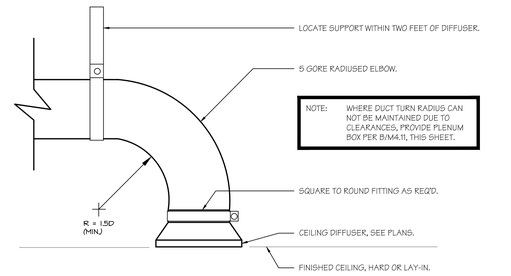
EXHAUST FAN ANCHORAGE — G

SCALE: N.T.S.



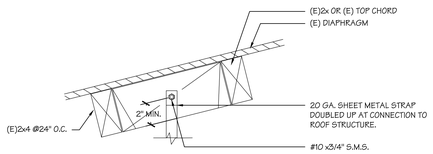
THERMOSTAT MOUNTING LOCATION — D

SCALE: N.T.S.



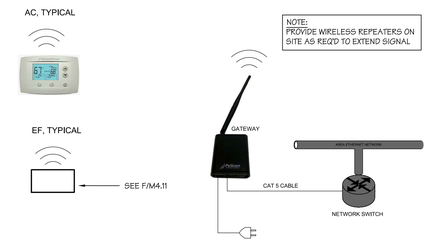
CEILING DIFFUSER/REGISTER CONNECTION — A

SCALE: N.T.S.



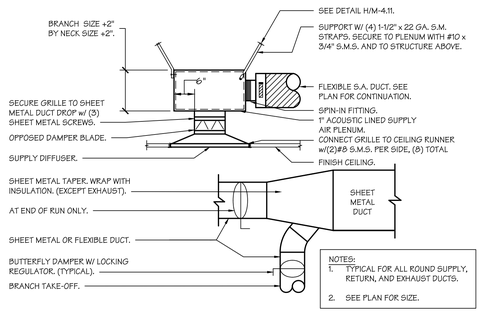
DUCT HANGER UPPER ATTACHMENT — H

SCALE: N.T.S.



LAN ARCHITECTURE — E

SCALE: N.T.S.



SUPPLY AIR PLENUM & BRANCH TAKE-OFFS — B

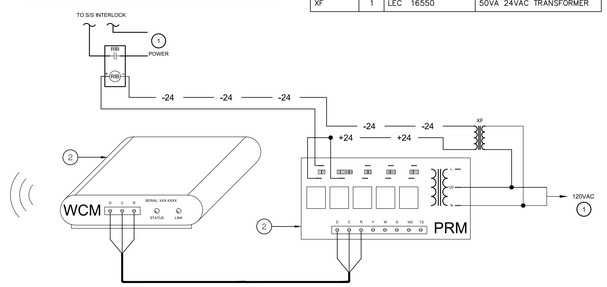
SCALE: N.T.S.

Sheet Notes

1. LINE VOLTAGE & CONDUIT BY DIVISION 16, ELEC. CONTRACTOR
2. INSTALL IN ATM ROOM ADJACENT TO WIRELESS GATEWAY

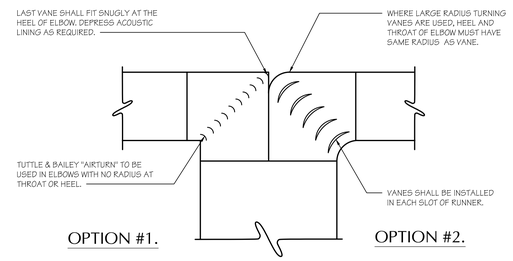
Control Components

TAG	QTY	PART NUMBER	DESCRIPTION
WCM+PRM	1	PEL PM5	WIRELESS RELAY MODULE KIT
RIB	2	FUN RUBU1C	RELAY IN A BOX
XF	1	LEC 16550	50VA 24VAC TRANSFORMER



EX. FAN CONTROL DETAIL — F

SCALE: N.T.S.



NOTE:
1. TYPICAL FOR ALL RECTANGULAR SUPPLY AND RETURN DUCTS.
2. REFER TO SMACNA FIG. 2-1 & 2-2, TYPICAL.

NINETY DEGREE ELBOW — C

SCALE: N.T.S.

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
JAMES BASKIN
No. M26570
EXP. 09-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

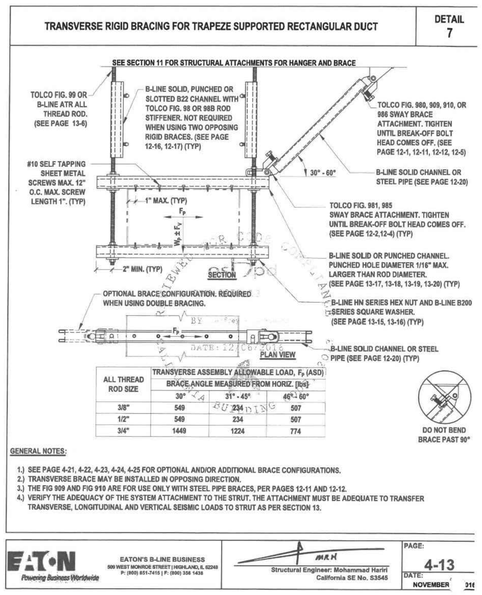
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

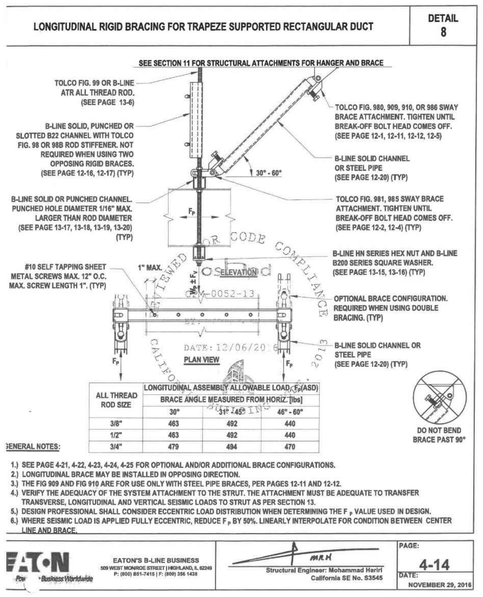
MECHANICAL DETAILS

M4.11



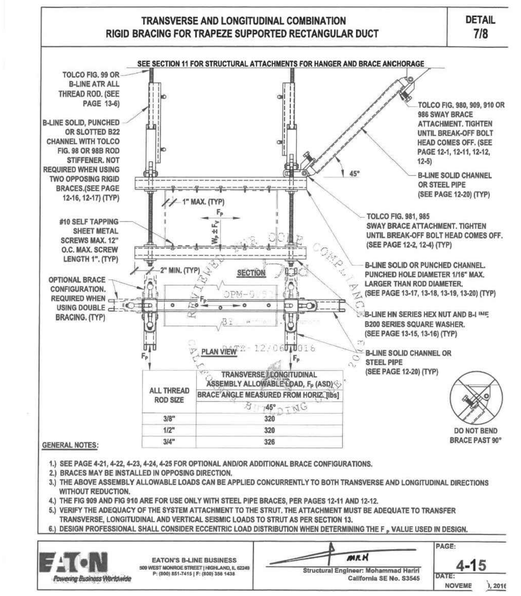
TRANSVERSE RIGID BRACING FOR TRAPEZE SUPPORTED RECTANGULAR DUCT (A)

SCALE: N.T.S.



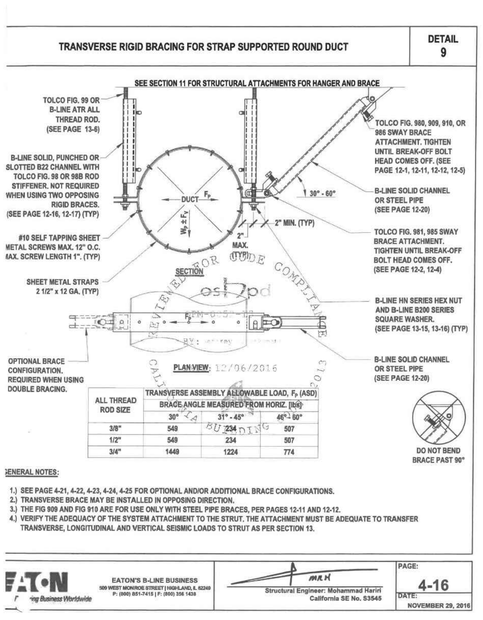
LONGITUDINAL RIGID BRACING FOR TRAPEZE SUPPORTED RECTANGULAR DUCT (B)

SCALE: N.T.S.



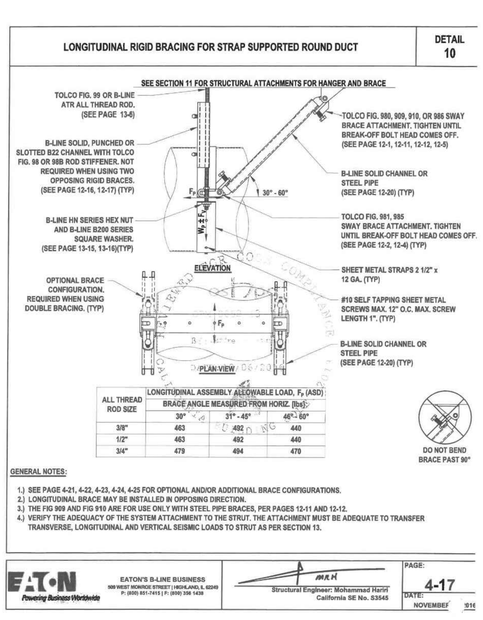
TRANSVERSE & LONGITUDINAL COMBINATION RIGID BRACING FOR TRAPEZE SUPPORTED RECTANGULAR DUCT (C)

SCALE: N.T.S.



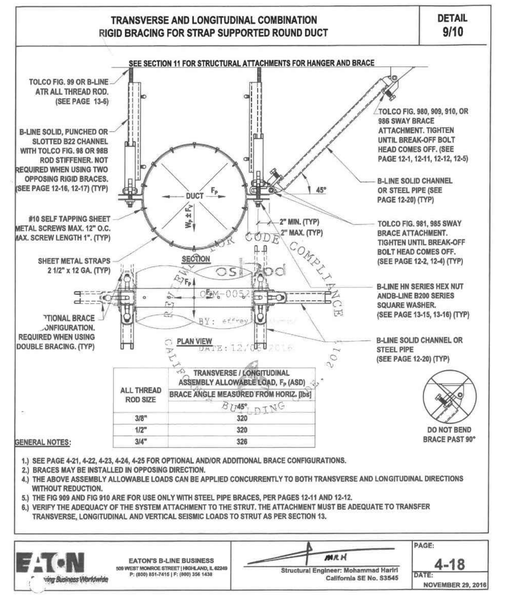
TRANSVERSE RIGID BRACING FOR STRAP SUPPORTED ROUND DUCT (D)

SCALE: N.T.S.



LONGITUDINAL RIGID BRACING FOR STRAP SUPPORTED ROUND DUCT (E)

SCALE: N.T.S.



TRANSVERSE & LONGITUDINAL COMBINATION RIGID BRACING FOR STRAP SUPPORTED ROUND DUCT (F)

SCALE: N.T.S.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES HERSHEY
No. M26537
EXP. 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

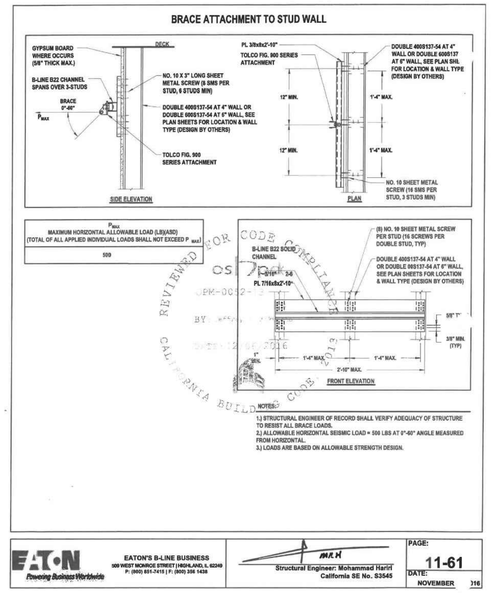
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

DUCT BRACING DETAILS

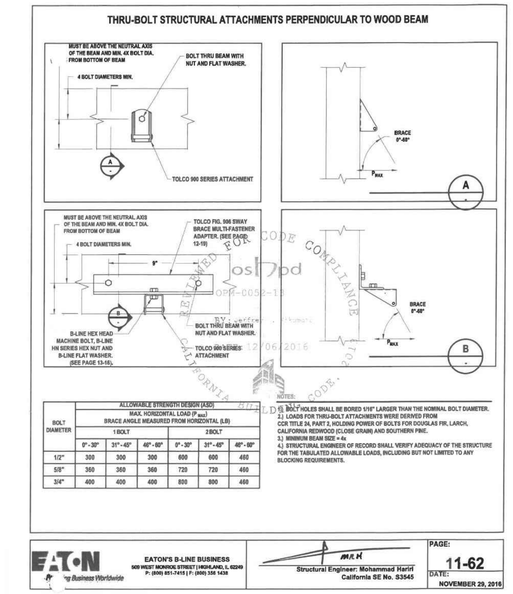
M4.12

BME BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23



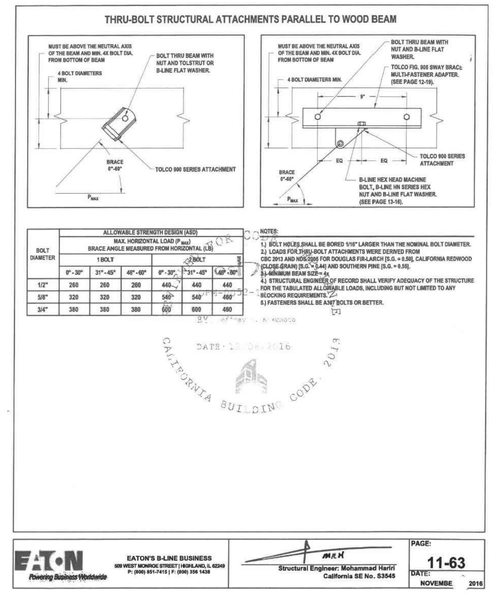
BRACE ATTACHMENT TO STUD WALL **A**

SCALE: N.T.S.



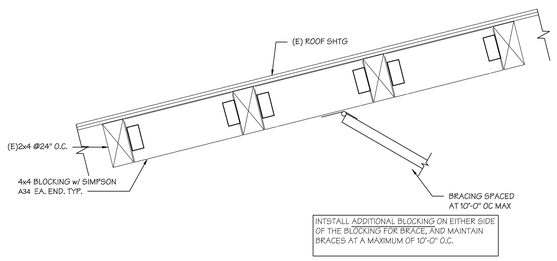
THRU-BOLT STRUCTURAL ATTACHMENTS PERPENDICULAR TO WOOD BEAM **B**

SCALE: N.T.S.



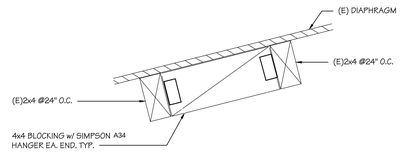
THRU-BOLT STRUCTURAL ATTACHMENTS PARALLEL TO WOOD BEAM **C**

SCALE: N.T.S.



BLOCKING FOR BRACE CONN. **D**

SCALE: N.T.S.



BLOCKING FOR HANGER CONN. **E**

SCALE: N.T.S.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BASKIN
No. M26570
EXP. 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

DUCT BRACING DETAILS

M4.13

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

Project Name:	Horace Mann School Bld B	NRCC-PRF-01-E	Page 1 of 12
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	15:57, Thu, Sep 01, 2022
Input File Name:	Horace Mann B.cibd19x		

A. GENERAL INFORMATION

1	Project Location (city)	Bakersfield	8	Standards Version	Compliance2019
2	CA Zip Code	93308	9	Compliance Software (version)	EnergyPro 8.3
3	Climate Zone	13	10	Weather File	BAKERSFIELD_723840_CZ2010.epw
4	Total Conditioned Floor Area in Scope	2,880 ft²	11	Building Orientation (deg)	(S) 180 deg
5	Total Unconditioned Floor Area	0 ft²	12	Permitted Scope of Work	ExistingAdditionAndAlteration
6	Total # of Stories (Habitable Above Grade)	1	13	Building Type(s)	Nonresidential
7	Total # of dwelling units	0	14	Gas Type	NaturalGas

B. PROJECT SUMMARY

Table Instructions: Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (see Table G)	☒	Performance	Covered Process: Commercial Kitchens	☐	Performance	*The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).*	
	☐	Not Included		☒	Not Included		
Mechanical (see Table H)	☒	Performance	Covered Process: Computer Rooms	☐	Performance	Indoor Lighting (Unconditioned)§140.6	*NRCC-LTI-E*
	☐	Not Included		☒	Not Included	Outdoor Lighting §140.7	*NRCC-LTO-E*
Domestic Hot Water (see Table I)	☐	Performance	Covered Process: Laboratory Exhaust	☐	Performance	Sign Lighting §140.8	*NRCC -LTS-E*
	☒	Not Included		☒	Not Included	Mandatory Measures	
Lighting (Indoor Conditioned, see Table K)	☒	Performance				*Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)*	
	☐	Not Included				Electrical Power Distribution 5110.11	*NRCC-ELC-E*
Solar Thermal Water Heating (see Table I)	☐	Performance				Commissioning 5120.8	*NRCC-CXR-E*
	☒	Not Included				Solar Ready 5110.10	*NRCC-SRA-E*

Project Name:	Horace Mann School Bld B	NRCC-PRF-01-E	Page 2 of 12
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	15:57, Thu, Sep 01, 2022
Input File Name:	Horace Mann B.cibd19x		

C1. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft ²-yr)

COMPLIES

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	15.22	25.72	-10.50
Space Cooling	148.46	106.65	41.81
Indoor Fans	200.53	84.53	116.00
Heat Rejection	--	--	--
Pumps & Misc.	--	--	--
Domestic Hot Water	15.62	15.62	--
Indoor Lighting	40.01	40.01	--
ENERGY STANDARDS COMPLIANCE TOTAL	**419.84**	**272.53**	**147.31 (35.1%)**

[1] Notes: The number in parenthesis following the Compliance Margin in column 4. represents the Percent Better than Standard.

C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS[1]

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	72.74	72.74	--
Process	--	--	--
Other Ltg	--	--	--
Process Motors	--	--	--
COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS	**492.58**	**345.27**	**147.3 (29.9%)**

[1] Notes: This table is used to document compliance with programs OTHER THAN Title 24 Part 6, if applicable.

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 15:57:39

Project Name:	Horace Mann School Bld B	NRCC-PRF-01-E	Page 3 of 12
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	15:57, Thu, Sep 01, 2022
Input File Name:	Horace Mann B.cibd19x		

C3. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	--	--	--	21.2	35.8	-14.6
Space Cooling	10.0	7.0	3.0	--	--	--
Indoor Fans	19.2	7.7	11.5	--	--	--
Heat Rejection	--	--	--	--	--	--
Pumps & Misc.	--	--	--	--	--	--
Domestic Hot Water	--	--	--	25.0	25.0	0.0
Indoor Lighting	4.1	4.1	0.0	--	--	-->
Compliance Total	**33.3**	**18.8**	**14.5**	**46.2**	**60.8**	**-14.6**
Receptacle	7.6	7.6	0.0	--	--	--
Process	--	--	--	--	--	--
Other Ltg	--	--	--	--	--	--
Process Motors	--	--	--	--	--	--
TOTAL	**40.9**	**26.4**	**14.5**	**46.2**	**60.8**	**-14.6**

D. EXCEPTIONAL CONDITIONS

The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

E. HERS VERIFICATION

This Section Does Not Apply

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 15:57:39

Project Name:	Horace Mann School Bld B	NRCC-PRF-01-E	Page 4 of 12
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	15:57, Thu, Sep 01, 2022
Input File Name:	Horace Mann B.cibd19x		

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

1	2	3	4
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
North-Facing[1]	1,152 ft²	576 ft²	50.0%
East-Facing[2]	360 ft²	0 ft²	00.0%
South-Facing[3]	1,152 ft²	288 ft²	25.0%
West-Facing[4]	360 ft²	0 ft²	00.0%
Total	**3,024 ft²**	**864 ft²**	**28.6%**
Roof	2,880 ft²	0 ft²	00.0%

Notes:
[1] North-Facing is oriented to within 45 degrees of true north, including 45°00'00" east of north (NE), but excluding 45°00'00" west of north (NW).
[2] East-Facing is oriented to within 45 degrees of true east, including 45°00'00" south of east (SE), but excluding 45°00'00" north of east (NE).
[3] South-Facing is oriented to within 45 degrees of true south, including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).
[4] West-Facing is oriented to within 45 degrees of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9	10
Surface Name	**Surface Type**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**	**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
R-30 Roof Attic6	Roof	2880	Wood	30	NA	U-Factor	0.038	Asphalt shingles - 1/4 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Wood framed roof, 24in. OC, 3.5in., R-30 Gypsum Board - 1/2 in.	E
R-11 Wall8	ExteriorWall	3024	Wood	11	NA	U-Factor	0.110	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Wood framed wall, 16in. OC, 3.5in., R-11 Gypsum Board - 1/2 in.	E

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 15:57:39

Project Name:	Horace Mann School Bld B	NRCC-PRF-01-E	Page 5 of 12
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	15:57, Thu, Sep 01, 2022
Input File Name:	Horace Mann B.cibd19x		

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9	10
Surface Name	**Surface Type**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**	**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
Slab On Grade14	UndergroundFloor	2880	NA	0	NA	F-Factor	0.73	Slab Type = UnheatedSlabOnGrade Insulation Orientation = None Insulation R-Value = R0	E

[1] Status: N - New, A – Altered, E – Existing

G5. FENESTRATION ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9
Fenestration Assembly Name / Tag or I.D.	**Fenestration Type / Product Type / Frame Type**	**Certification Method[1]**	**Assembly Method**	**Area ft²**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status[2]**
Single Metal Clear	VerticalFenestration FixedWindow MetalFraming	Default Performance	SiteBuilt	864	1.19	0.83	0.77	E

[1] Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N – New, A – Altered, E – Existing

G6. OVERHANG DETAILS

1	2	3	4	5	6
Fenestration Tag/ID	**Orientation**	**Depth(ft.)**	**Height from Bottom of Sill to Overhang(ft)**	**Right Extent(ft)**	**Left Extent(ft)**
Window11	South	12.0	4	10.0	10.0
Window19	South	12.0	4	10.0	10.0
Window25	South	12.0	4	10.0	10.0

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 15:57:39

Project Name:	Horace Mann School Bld B	NRCC-PRF-01-E	Page 6 of 12
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	15:57, Thu, Sep 01, 2022
Input File Name:	Horace Mann B.cibd19x		

H1. DRY SYSTEM EQUIPMENT (furnaces, air handling units, heat pumps, VRF, economizers etc.)

1	2	3	4	5	6	7	8	9	10	11	12
			Heating				Cooling				
Equipment Name	**Equipment Type**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Output (kBtuh)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Economizer Type (if present)**	**Status[1]**
AC1 B1	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 B2	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 B3	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N

[1] Status: N - New, A – Altered, E – Existing

H2. FAN SYSTEMS SUMMARY

1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Design OA	Supply Fan					Return Fan					
Name or Item Tag	**Qty**	**CFM**	**CFM**	**Modeling Method**	**Power**	**Power Units**	**Control**	**CFM**	**Modeling Method**	**Power**	**Power Units**	**Control**	**Status[1]**
AC1 B1	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 B2	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 B3	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N

[1] Status: N – New, A – Altered, E – Existing

H3. EXHAUST FAN SUMMARY

This Section Does Not Apply

H4. Wet System Equipment(boilers,chillers,cooling towers,etc.)

This Section Does Not Apply

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 15:57:39

Project Name:	Horace Mann School Bld B	NRCC-PRF-01-E	Page 7 of 12
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	15:57, Thu, Sep 01, 2022
Input File Name:	Horace Mann B.cibd19x		

H5. PUMPS

This Section Does Not Apply

H6. SYSTEM SPECIAL FEATURES

1	2	3	4
System Name	**Equipment Type**	**Window Interlocks per §140.4(n)**	**Other Special Features and Controls**
AC1 B1	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 B2	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 B3	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

H7. NONRESIDENTIAL VENTILATION

1	2	3	4	5	6	7
	Mechanical Ventilation					
Zone Name	**Ventilation Function**	**# of people**	**Supply OA CFM**	**Exhaust CFM**	**Conditioned Area (sf)**	**DCV or Occupant Sensor Controls, or Both**
1-Classoom B27	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
2-Classroom B26	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
3-Classroom B25	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV

H8. HIGH-RISE RESIDENTIAL DWELLING UNIT AND HOTEL/MOTEL VENTILATION

This Section Does Not Apply

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 15:57:39

Project Name:	Horace Mann School Bld B	NRCC-PRF-01-E	Page 8 of 12
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	15:57, Thu, Sep 01, 2022
Input File Name:	Horace Mann B.cibd19x		

H9. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

1	2	3	4	5	6	7	8	9	10	11	12	13
				Rated Capacity (kBtuh)		Airflow (cfm)			Fan			
System ID	**Zone Name**	**System Type**	**Qty**	**Heating**	**Cooling**	**Design**	**Min.**	**Min. Ratio**	**Power**	**Power Units**	**Cycles**	**VSD**
1-Classoom B27-Trm	1-Classoom B27	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
2-Classroom B26-Trm	2-Classroom B26	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
3-Classroom B25-Trm	3-Classroom B25	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐

H10. EVAPORATIVE COOLER SUMMARY

This Section Does Not Apply

H11. HEAT RECOVERY SUMMARY

This Section Does Not Apply

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

1	2	3	4	5	6
				Additional (Custom) Allowance	
Occupancy Type [1]	**Conditioned Floor Area [2] (ft²)**	**Installed Lighting Power (Watts)**	**Lighting Control Credits (Watts)**	**Area Category Footnotes (Watts)**	**Tailored Method (Watts)**
Classroom, Lecture, Training, Vocational Areas	2,880	2,016	0	0	0
Building Totals:	**2,880**	**2,016**	**0**	**0**	**0**

[1] See Table 140.6-C
[2] See NRCC-LTI-01-E for unconditioned spaces
[3] Lighting information for existing spaces modeled is not included in the table

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 15:57:39

Project Name:	Horace Mann School Bld B	NRCC-PRF-01-E	Page 9 of 12
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	15:57, Thu, Sep 01, 2022
Input File Name:	Horace Mann B.cibd19x		

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS

Building Level Controls

1	2
Mandatory Demand Response §110.12(c)	**Shut-Off Controls §130.1(c)**

Area Level Controls (includes all lighting controls installed in conditioned space to meet mandatory requirements per §130.1)

4	5	6	7	8	9	10
Area Description	**Area Category Primary Function Area**	**Area Controls 130.1(a)**	**Multi-Level Controls 130.1(b)**	**Shut-Off Controls 130.1(c)**	**Primary Daylighting 130.1(d)**	**Secondary Daylighting 140.5(d)**

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 15:57:39

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
JAMES BRIAN BASKIN
No. M26578
EXP 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.10

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents bust be retained and provided to the building inspector during construction and can be found online at: https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Building Component	Form/Title
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit:https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Building Component	Form/Title
Mechanical	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
	NRCA-MCH-05-A Air Economizer Controls
	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints
	NRCA-MCH-07-A Supply Fan Variable Flow Controls
	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
	NRCA-MCH-16-A Supply Air Temperature Reset Controls

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mark Baskin	Signature: Mark Baskin, P.E. (Digitally signed by Mark Baskin, P.E. DN: C=US, E=MBaskin@BaskinME.com, O=Baskin Mechanical Engineers, CN=Mark Baskin, P.E. Reason: I have reviewed this document Date: 2022.09.01 16:02:50-07'00')
Company: Baskin Mechanical Engineers	
Address: 175 Fulton St.	Signature Date: 2022-09-01
City/State/Zip: Fresno CA 93721	CEA/ HERS Certification Identification (if applicable): M26578
Phone: 5592370376	

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Envelope Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Lighting Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Mechanical Designer Name: Mark Baskin, P.E.	Signature: Mark Baskin, P.E. (Digitally signed by Mark Baskin, P.E. DN: C=US, E=MBaskin@BaskinME.com, O=Baskin Mechanical Engineers, CN=Mark Baskin, P.E. Reason: I have reviewed this document Date: 2022.09.01 16:03:04-07'00')	
Company: Baskin Mechanical Engineers		
Address: 5500 Ming Avenue, #251	Date Signed: 09/01/22	
City/State/Zip: Bakersfield CA 93309		
Phone: (661) 397-2114	Title: P.E.	License #: M26578

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BASKIN
No. M26578
EXP 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.11

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 1 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

A. GENERAL INFORMATION

1	Project Location (city)	Bakersfield	8	Standards Version	Compliance2019
2	CA Zip Code	93308	9	Compliance Software (version)	EnergyPro 8.3
3	Climate Zone	13	10	Weather File	BAKERSFIELD_723840_CZ2010.epw
4	Total Conditioned Floor Area in Scope	1,920 ft²	11	Building Orientation (deg)	(S) 180 deg
5	Total Unconditioned Floor Area	0 ft²	12	Permitted Scope of Work	ExistingAdditionAndAlteration
6	Total # of Stories (Habitable Above Grade)	1	13	Building Type(s)	Nonresidential
7	Total # of dwelling units	0	14	Gas Type	NaturalGas

B. PROJECT SUMMARY

Table Instructions: Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (see Table G)	☒	Performance	Covered Process: Commercial Kitchens	☐	Performance	*The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).*	
	☐	Not Included		☒	Not Included		
Mechanical (see Table H)	☒	Performance	Covered Process: Computer Rooms	☐	Performance	Indoor Lighting (Unconditioned)§140.6	*NRCC-LTI-E*
	☐	Not Included		☒	Not Included	Outdoor Lighting §140.7	*NRCC-LTO-E*
Domestic Hot Water (see Table I)	☐	Performance	Covered Process: Laboratory Exhaust	☐	Performance	Sign Lighting §140.8	*NRCC -LTS-E*
	☒	Not Included		☒	Not Included	Mandatory Measures	
Lighting (Indoor Conditioned, see Table K)	☒	Performance				*Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)*	
	☐	Not Included				Electrical Power Distribution 5110.11	*NRCC-ELC-E*
Solar Thermal Water Heating (see Table I)	☐	Performance				Commissioning 5120.8	*NRCC-CXR-E*
	☒	Not Included				Solar Ready 5110.10	*NRCC-SRA-E*

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 2 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

C1. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft ²-yr)

COMPLIES

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	15.92	27.27	-11.35
Space Cooling	152.28	109.33	42.95
Indoor Fans	206.30	84.83	121.47
Heat Rejection	--	--	--
Pumps & Misc.	--	--	--
Domestic Hot Water	17.64	17.64	--
Indoor Lighting	40.01	40.01	--
ENERGY STANDARDS COMPLIANCE TOTAL	**432.15**	**279.08**	**153.07 (35.4%)**

[1] Notes: The number in parenthesis following the Compliance Margin in column 4. represents the Percent Better than Standard.

C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS[1]

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	72.74	72.74	--
Process	--	--	--
Other Ltg	--	--	--
Process Motors	--	--	--
COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS	**504.89**	**351.82**	**153.1 (30.3%)**

[1] Notes: This table is used to document compliance with programs OTHER THAN Title 24 Part 6, if applicable.

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 16:11:48

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 3 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

C3. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	--	--	--	14.8	25.3	-10.5
Space Cooling	6.8	4.7	2.1	--	--	--
Indoor Fans	13.1	5.2	7.9	--	--	--
Heat Rejection	--	--	--	--	--	--
Pumps & Misc.	--	--	--	--	--	--
Domestic Hot Water	--	--	--	18.8	18.8	0.0
Indoor Lighting	2.7	2.7	0.0	--	--	-->
Compliance Total	**22.6**	**12.6**	**10.0**	**33.6**	**44.1**	**-10.5**
Receptacle	5.1	5.1	0.0	--	--	--
Process	--	--	--	--	--	--
Other Ltg	--	--	--	--	--	--
Process Motors	--	--	--	--	--	--
TOTAL	**27.7**	**17.7**	**10.0**	**33.6**	**44.1**	**-10.5**

D. EXCEPTIONAL CONDITIONS

The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

E. HERS VERIFICATION

This Section Does Not Apply

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 16:11:48

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 4 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

1	2	3	4
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
North-Facing[1]	768 ft²	384 ft²	50.0%
East-Facing[2]	360 ft²	0 ft²	00.0%
South-Facing[3]	768 ft²	192 ft²	25.0%
West-Facing[4]	360 ft²	0 ft²	00.0%
Total	**2,256 ft²**	**576 ft²**	**25.5%**
Roof	1,920 ft²	0 ft²	00.0%

Notes:
[1] North-Facing is oriented to within 45 degrees of true north, including 45°00'00" east of north (NE), but excluding 45°00'00" west of north (NW).
[2] East-Facing is oriented to within 45 degrees of true east, including 45°00'00" south of east (SE), but excluding 45°00'00" north of east (NE).
[3] South-Facing is oriented to within 45 degrees of true south, including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).
[4] West-Facing is oriented to within 45 degrees of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9	10
Surface Name	**Surface Type**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**	**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
R-30 Roof Attic6	Roof	1920	Wood	30	NA	U-Factor	0.038	Asphalt shingles - 1/4 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Wood framed roof, 24in. OC, 3.5in., R-30 Gypsum Board - 1/2 in.	E
R-11 Wall8	ExteriorWall	2256	Wood	11	NA	U-Factor	0.110	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Wood framed wall, 16in. OC, 3.5in., R-11 Gypsum Board - 1/2 in.	E

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 16:11:48

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 5 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9	10
Surface Name	**Surface Type**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**	**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
Slab On Grade14	UndergroundFloor	1920	NA	0	NA	F-Factor	0.73	Slab Type = UnheatedSlabOnGrade Insulation Orientation = None Insulation R-Value = R0	E

[1] Status: N - New, A – Altered, E – Existing

G5. FENESTRATION ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9
Fenestration Assembly Name / Tag or I.D.	**Fenestration Type / Product Type / Frame Type**	**Certification Method[1]**	**Assembly Method**	**Area ft²**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status[2]**
Single Metal Clear	VerticalFenestration FixedWindow MetalFraming	Default Performance	SiteBuilt	576	1.19	0.83	0.77	E

[1] Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N - New, A – Altered, E – Existing

G6. OVERHANG DETAILS

1	2	3	4	5	6
Fenestration Tag/ID	**Orientation**	**Depth(ft.)**	**Height from Bottom of Sill to Overhang(ft)**	**Right Extent(ft)**	**Left Extent(ft)**
Window11	South	12.0	4	10.0	10.0
Window19	South	12.0	4	10.0	10.0

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 16:11:48

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 6 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

H1. DRY SYSTEM EQUIPMENT (furnaces, air handling units, heat pumps, VRF, economizers etc.)

1	2	3	4	5	6	7	8	9	10	11	12
			Heating				Cooling				
Equipment Name	**Equipment Type**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Output (kBtuh)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Economizer Type (if present)**	**Status[1]**
AC1 C1	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 C2	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N

[1] Status: N - New, A – Altered, E – Existing

H2. FAN SYSTEMS SUMMARY

1	2	3	4	5	6	7	8	9	10	11	12	13	14
				Supply Fan					Return Fan				
Name or Item Tag	**Qty**	**Design OA**	**Modeling Method**		**Power**	**Power Units**	**Control**	**Modeling Method**		**Power**	**Power Units**	**Control**	**Status[1]**
		CFM	**CFM**					**CFM**					
AC1 C1	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 C2	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N

[1] Status: N - New, A – Altered, E – Existing

H3. EXHAUST FAN SUMMARY

This Section Does Not Apply

H4. Wet System Equipment(boilers,chillers,cooling towers,etc.)

This Section Does Not Apply

H5. PUMPS

This Section Does Not Apply

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 16:11:48

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 7 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

H6. SYSTEM SPECIAL FEATURES

1	2	3	4
System Name	**Equipment Type**	**Window Interlocks per §140.4(n)**	**Other Special Features and Controls**
AC1 C1	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 C2	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

H7. NONRESIDENTIAL VENTILATION

1	2	3	4	5	6	7
	Mechanical Ventilation					
Zone Name	**Ventilation Function**	**# of people**	**Supply OA CFM**	**Exhaust CFM**	**Conditioned Area (sf)**	**DCV or Occupant Sensor Controls, or Both**
1-Classoom C24	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
2-Classroom C23	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV

H8. HIGH-RISE RESIDENTIAL DWELLING UNIT AND HOTEL/MOTEL VENTILATION

This Section Does Not Apply

H9. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

1	2	3	4	5	6	7	8	9	10	11	12	13
				Rated Capacity (kBtuh)		Airflow (cfm)			Fan			
System ID	**Zone Name**	**System Type**	**Qty**	**Heating**	**Cooling**	**Design**	**Min.**	**Min. Ratio**	**Power**	**Power Units**	**Cycles**	**VSD**
1-Classoom C24-Trm	1-Classoom C24	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
2-Classroom C23-Trm	2-Classroom C23	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐

H10. EVAPORATIVE COOLER SUMMARY

This Section Does Not Apply

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 16:11:48

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 8 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

H11. HEAT RECOVERY SUMMARY

This Section Does Not Apply

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

1	2	3	4	5	6
				Additional (Custom) Allowance	
Occupancy Type [1]	**Conditioned Floor Area [2] (ft²)**	**Installed Lighting Power (Watts)**	**Lighting Control Credits (Watts)**	**Area Category Footnotes (Watts)**	**Tailored Method (Watts)**
Classroom, Lecture, Training, Vocational Areas	1,920	1,344	0	0	0
Building Totals:	**1,920**	**1,344**	**0**	**0**	**0**

[1] See Table 140.6-C
[2] See NRCC-LTI-01-E for unconditioned spaces
[3] Lighting information for existing spaces modeled is not included in the table

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS

Building Level Controls

1	2
Mandatory Demand Response §110.12(c)	**Shut-Off Controls §130.1(c)**

Area Level Controls (includes all lighting controls installed in conditioned space to meet mandatory requirements per §130.1)

4	5	6	7	8	9	10
Area Description	**Area Category Primary Function Area**	**Area Controls 130.1(a)**	**Multi-Level Controls 130.1(b)**	**Shut-Off Controls 130.1(c)**	**Primary Daylighting 130.1(d)**	**Secondary Daylighting 140.5(d)**

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 16:11:48

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 9 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
HARRIS JAMES BASKIN
No. M36637
EXP. 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.12

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 10 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents bust be retained and provided to the building inspector during construction and can be found online at: https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Building Component	Form/Title
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 11 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit:https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Building Component	Form/Title
Mechanical	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
	NRCA-MCH-05-A Air Economizer Controls
	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints
	NRCA-MCH-07-A Supply Fan Variable Flow Controls
	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
	NRCA-MCH-16-A Supply Air Temperature Reset Controls

Project Name:	Horace Mann School Bld C	NRCC-PRF-01-E	Page 12 of 12
Project Address:	270 Niles Street Bakersfield 93308	Calculation Date/Time:	16:11, Thu, Sep 01, 2022
Input File Name:	Horace Mann C.cibd19x		

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mark Baskin	Signature: Mark Baskin, P.E. (Digitally signed by Mark Baskin, P.E. DN: C=US, E=MBaskin@Baskin-ME.com, O=Baskin Mechanical Engineers, CN=Mark Baskin, P.E. Reason: I have reviewed this document Date: 2022.09.01 16:13:58-07'00')
Company: Baskin Mechanical Engineers	
Address: 175 Fulton St.	Signature Date: 2022-09-01
City/State/Zip: Fresno CA 93721	CEA/ HERS Certification Identification (if applicable): M26578
Phone: 5592370376	

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Envelope Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Lighting Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Mechanical Designer Name: Mark Baskin, P.E.	Signature: Mark Baskin, P.E. (Digitally signed by Mark Baskin, P.E. DN: C=US, E=MBaskin@Baskin-ME.com, O=Baskin Mechanical Engineers, CN=Mark Baskin, P.E. Reason: I have reviewed this document Date: 2022.09.01 16:13:26-07'00')	
Company: Baskin Mechanical Engineers		
Address: 5500 Ming Avenue, #251	Date Signed: 09/01/2022	
City/State/Zip: Bakersfield CA 93309		
Phone: (661) 397-2114	Title: P.E.	License #: M26578

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BASKIN
No. M26578
EXP 6-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.13

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

A. GENERAL INFORMATION

1	Project Location (city)	Bakersfield	8	Standards Version	Compliance2019
2	CA Zip Code	93308	9	Compliance Software (version)	EnergyPro 8.3
3	Climate Zone	13	10	Weather File	BAKERSFIELD_723840_CZ2010.epw
4	Total Conditioned Floor Area in Scope	3,040 ft²	11	Building Orientation (deg)	(S) 180 deg
5	Total Unconditioned Floor Area	0 ft²	12	Permitted Scope of Work	ExistingAdditionAndAlteration
6	Total # of Stories (Habitable Above Grade)	1	13	Building Type(s)	Nonresidential
7	Total # of dwelling units	0	14	Gas Type	NaturalGas

B. PROJECT SUMMARY

Table Instructions: Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively
Envelope (see Table G)	☒	Performance	Covered Process: Commercial Kitchens	☐	Performance	*The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).*
	☐	Not Included		☒	Not Included	
Mechanical (see Table H)	☒	Performance	Covered Process: Computer Rooms	☐	Performance	Indoor Lighting (Unconditioned)§140.6 — *NRCC-LTI-E*
	☐	Not Included		☒	Not Included	Outdoor Lighting §140.7 — *NRCC-LTO-E*
Domestic Hot Water (see Table I)	☐	Performance	Covered Process: Laboratory Exhaust	☐	Performance	Sign Lighting §140.8 — *NRCC -LTS-E*
	☒	Not Included		☒	Not Included	Mandatory Measures
Lighting (Indoor Conditioned, see Table K)	☒	Performance				*Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)*
	☐	Not Included				Electrical Power Distribution 5110.11 — *NRCC-ELC-E*
Solar Thermal Water Heating (see Table I)	☐	Performance				Commissioning 5120.8 — *NRCC-CXR-E*
	☒	Not Included				Solar Ready 5110.10 — *NRCC-SRA-E*

C1. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft ²-yr)

COMPLIES

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	15.62	23.65	-8.03
Space Cooling	138.61	109.42	29.19
Indoor Fans	173.84	90.79	83.05
Heat Rejection	--	--	--
Pumps & Misc.	--	--	--
Domestic Hot Water	15.41	15.41	--
Indoor Lighting	40.01	40.01	--
ENERGY STANDARDS COMPLIANCE TOTAL	**383.49**	**279.28**	**104.21 (27.2%)**

[1] Notes: The number in parenthesis following the Compliance Margin in column 4. represents the Percent Better than Standard.

C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS[1]

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	72.74	72.74	--
Process	--	--	--
Other Ltg	--	--	--
Process Motors	--	--	--
COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS	**456.23**	**352.02**	**104.2 (22.8%)**

[1] Notes: This table is used to document compliance with programs OTHER THAN Title 24 Part 6, if applicable.

C3. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	--	--	--	22.9	34.8	-11.9
Space Cooling	9.9	7.6	2.3	--	--	--
Indoor Fans	17.4	8.8	8.6	--	--	--
Heat Rejection	--	--	--	--	--	--
Pumps & Misc.	--	--	--	--	--	--
Domestic Hot Water	--	--	--	26.1	26.1	0.0
Indoor Lighting	4.4	4.4	0.0	--	--	-->
Compliance Total	**31.7**	**20.8**	**10.9**	**49.0**	**60.9**	**-11.9**
Receptacle	8.0	8.0	0.0	--	--	--
Process	--	--	--	--	--	--
Other Ltg	--	--	--	--	--	--
Process Motors	--	--	--	--	--	--
TOTAL	**39.7**	**28.8**	**10.9**	**49.0**	**60.9**	**-11.9**

D. EXCEPTIONAL CONDITIONS

The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

E. HERS VERIFICATION

This Section Does Not Apply

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing[1]	1,152 ft²	576 ft²	50.0%
East-Facing[2]	360 ft²	0 ft²	00.0%
South-Facing[3]	1,152 ft²	288 ft²	25.0%
West-Facing[4]	360 ft²	0 ft²	00.0%
Total	**3,024 ft²**	**864 ft²**	**28.6%**
Roof	3,040 ft²	0 ft²	00.0%

Notes:
[1] North-Facing is oriented to within 45 degrees of true north, including 45°00'00" east of north (NE), but excluding 45°00'00" west of north (NW).
[2] East-Facing is oriented to within 45 degrees of true east, including 45°00'00" south of east (SE), but excluding 45°00'00" north of east (NE).
[3] South-Facing is oriented to within 45 degrees of true south, including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).
[4] West-Facing is oriented to within 45 degrees of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

Surface Name	Surface Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value	Units	Value	Description of Assembly Layers	Status[1]
R-30 Roof Attic6	Roof	3040	Wood	30	NA	U-Factor	0.038	Asphalt shingles - 1/4 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Wood framed roof, 24in. OC, 3.5in., R-30 Gypsum Board - 1/2 in.	E
R-11 Wall8	ExteriorWall	3024	Wood	11	NA	U-Factor	0.110	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Wood framed wall, 16in. OC, 3.5in., R-11 Gypsum Board - 1/2 in.	E

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

Surface Name	Surface Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value	Units	Value	Description of Assembly Layers	Status[1]
Slab On Grade14	UndergroundFloor	3040	NA	0	NA	F-Factor	0.73	Slab Type = UnheatedSlabOnGrade Insulation Orientation = None Insulation R-Value = R0	E

[1] Status: N - New, A – Altered, E – Existing

G5. FENESTRATION ASSEMBLY SUMMARY

Fenestration Assembly Name / Tag or I.D.	Fenestration Type / Product Type / Frame Type	Certification Method[1]	Assembly Method	Area ft²	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Single Metal Clear	VerticalFenestration FixedWindow MetalFraming	Default Performance	SiteBuilt	864	1.19	0.83	0.77	E

[1] Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N – New, A – Altered, E – Existing

G6. OVERHANG DETAILS

Fenestration Tag/ID	Orientation	Depth(ft.)	Height from Bottom of Sill to Overhang(ft)	Right Extent(ft)	Left Extent(ft)
Window11	South	12.0	4	10.0	10.0
Window19	South	12.0	4	10.0	10.0
Window25	South	12.0	4	10.0	10.0

H1. DRY SYSTEM EQUIPMENT (furnaces, air handling units, heat pumps, VRF, economizers etc.)

Equipment Name	Equipment Type	Qty	Heating: Total Heating Output (kBtu/h)	Heating: Supp Heat Output (kBtuh)	Heating: Efficiency Unit	Heating: Efficiency	Cooling: Total Cooling Output (kBtu/h)	Cooling: Efficiency Unit	Cooling: Efficiency	Economizer Type (if present)	Status[1]
AC1 E1	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 E2	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 E3	SZVAVAC (Packaged3Phase)	1	54	0	AFUE	81.0	68	EER	11.0	FixedDryBulb	N

[1] Status: N - New, A – Altered, E – Existing

H2. FAN SYSTEMS SUMMARY

Name or Item Tag	Qty	Design OA	Supply Fan: CFM	Supply Fan: Modeling Method	Supply Fan: Power	Supply Fan: Power Units	Supply Fan: Control	Return Fan: CFM	Return Fan: Modeling Method	Return Fan: Power	Return Fan: Power Units	Return Fan: Control	Status[1]
AC1 E1	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 E2	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 E3	1	420	2400	BrakeHorsePower	1.110	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N

[1] Status: N – New, A – Altered, E – Existing

H3. EXHAUST FAN SUMMARY

This Section Does Not Apply

H4. Wet System Equipment(boilers,chillers,cooling towers,etc.)

This Section Does Not Apply

H5. PUMPS

This Section Does Not Apply

H6. SYSTEM SPECIAL FEATURES

System Name	Equipment Type	Window Interlocks per §140.4(n)	Other Special Features and Controls
AC1 E1	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 E2	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 E3	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

H7. NONRESIDENTIAL VENTILATION

Zone Name	Mechanical Ventilation: Ventilation Function	# of people	Supply OA CFM	Exhaust CFM	Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
1-Classoom E20	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
2-Classroom E21	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
3-Classroom E22	Education - Classrooms (ages 5-8)	28.00	420	0	1120	DCV

H8. HIGH-RISE RESIDENTIAL DWELLING UNIT AND HOTEL/MOTEL VENTILATION

This Section Does Not Apply

H9. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

System ID	Zone Name	System Type	Qty	Rated Capacity (kBtuh): Heating	Rated Capacity (kBtuh): Cooling	Airflow (cfm): Design	Airflow (cfm): Min.	Airflow (cfm): Min. Ratio	Fan: Power	Fan: Power Units	Fan: Cycles	Fan: VSD
1-Classoom E20-Trm	1-Classoom E20	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
2-Classroom E21-Trm	2-Classroom E21	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
3-Classroom E22-Trm	3-Classroom E22	VAVNoReheatBox	1	NA	NA	2400	1600	0.67	1.110	bhp	NA	☐

H10. EVAPORATIVE COOLER SUMMARY

This Section Does Not Apply

H11. HEAT RECOVERY SUMMARY

This Section Does Not Apply

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

Occupancy Type [1]	Conditioned Floor Area [2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance: Area Category Footnotes (Watts)	Additional (Custom) Allowance: Tailored Method (Watts)
Classroom, Lecture, Training, Vocational Areas	3,040	2,128	0	0	0
Building Totals:	**3,040**	**2,128**	**0**	**0**	**0**

[1] See Table 140.6-C
[2] See NRCC-LTI-01-E for unconditioned spaces
[3] Lighting information for existing spaces modeled is not included in the table

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS

Building Level Controls

1	2
Mandatory Demand Response §110.12(c)	Shut-Off Controls §130.1(c)

Area Level Controls (includes all lighting controls installed in conditioned space to meet mandatory requirements per §130.1)

4	5	6	7	8	9	10
Area Description	Area Category Primary Function Area	Area Controls 130.1(a)	Multi-Level Controls 130.1(b)	Shut-Off Controls 130.1(c)	Primary Daylighting 130.1(d)	Secondary Daylighting 140.5(d)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT JAMES PATRICK FOGARTY No. C-19670 REN 11-30-25 STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER JAMES BASKIN No. M26576 EXP. 06-30-24 MECHANICAL STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.14

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents bust be retained and provided to the building inspector during construction and can be found online at: https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Building Component	Form/Title
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit:https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Building Component	Form/Title
Mechanical	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
	NRCA-MCH-05-A Air Economizer Controls
	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints
	NRCA-MCH-07-A Supply Fan Variable Flow Controls
	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
	NRCA-MCH-16-A Supply Air Temperature Reset Controls

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mark Baskin	Signature: Mark Baskin, P.E. Digitally signed by Mark Baskin, P.E. DN: C=US, E=MBaskin@BaskinME.com, O=Baskin Mechanical Engineers, CN=Mark Baskin, P.E. Reason: I have reviewed this document Date: 2022.09.01 16:24:56-07'00'
Company: Baskin Mechanical Engineers	
Address: 175 Fulton St.	Signature Date: 2022-09-01
City/State/Zip: Fresno CA 93721	CEA/ HERS Certification Identification (if applicable): M26578
Phone: 5592370376	

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Envelope Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Lighting Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Mechanical Designer Name: Mark Baskin, P.E.	Signature: Mark Baskin, P.E. Digitally signed by Mark Baskin, P.E. DN: C=US, E=MBaskin@BaskinME.com, O=Baskin Mechanical Engineers, CN=Mark Baskin, P.E. Reason: I have reviewed this document Date: 2022.09.01 16:24:47-07'00'	
Company: Baskin Mechanical Engineers		
Address: 5500 Ming Avenue, #251	Date Signed: 09-01-2022	
City/State/Zip: Bakersfield CA 93309		
Phone: (661) 397-2114	Title: P.E.	License #: M26578

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BASKIN
No. M26578
EXP 09-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.15

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 1 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

A. GENERAL INFORMATION

1	Project Location (city)	Bakersfield	8	Standards Version	Compliance2019
2	CA Zip Code	93308	9	Compliance Software (version)	EnergyPro 8.3
3	Climate Zone	13	10	Weather File	BAKERSFIELD_723840_CZ2010.epw
4	Total Conditioned Floor Area in Scope	1,920 ft²	11	Building Orientation (deg)	(S) 180 deg
5	Total Unconditioned Floor Area	0 ft²	12	Permitted Scope of Work	ExistingAdditionAndAlteration
6	Total # of Stories (Habitable Above Grade)	1	13	Building Type(s)	Nonresidential
7	Total # of dwelling units	0	14	Gas Type	NaturalGas

B. PROJECT SUMMARY

Table Instructions: Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively
Envelope (see Table G)	☒	Performance	Covered Process: Commercial Kitchens	☐	Performance	*The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).*
	☐	Not Included		☒	Not Included	
Mechanical (see Table H)	☒	Performance	Covered Process: Computer Rooms	☐	Performance	Indoor Lighting (Unconditioned)§140.6 — *NRCC-LTI-E*
	☐	Not Included		☒	Not Included	Outdoor Lighting §140.7 — *NRCC-LTO-E*
Domestic Hot Water (see Table I)	☐	Performance	Covered Process: Laboratory Exhaust	☐	Performance	Sign Lighting §140.8 — *NRCC -LTS-E*
	☒	Not Included		☒	Not Included	Mandatory Measures
Lighting (Indoor Conditioned, see Table K)	☒	Performance				*Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)*
	☐	Not Included				Electrical Power Distribution §110.11 — *NRCC-ELC-E*
Solar Thermal Water Heating (see Table I)	☐	Performance				Commissioning §120.8 — *NRCC-CXR-E*
	☒	Not Included				Solar Ready §110.10 — *NRCC-SRA-E*

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 2 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

C1. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft ²-yr)

COMPLIES

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	7.57	13.63	-6.06
Space Cooling	181.72	159.31	22.41
Indoor Fans	188.00	104.82	83.18
Heat Rejection	--	--	--
Pumps & Misc.	--	--	--
Domestic Hot Water	17.64	17.64	--
Indoor Lighting	40.01	40.01	--
ENERGY STANDARDS COMPLIANCE TOTAL	**434.94**	**335.41**	**99.53 (22.9%)**

[1] Notes: The number in parenthesis following the Compliance Margin in column 4. represents the Percent Better than Standard.

C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS[1]

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	72.74	72.74	--
Process	--	--	--
Other Ltg	--	--	--
Process Motors	--	--	--
COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS	**507.68**	**408.15**	**99.5 (19.6%)**

[1] Notes: This table is used to document compliance with programs OTHER THAN Title 24 Part 6, if applicable.

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 17:56:08

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 3 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

C3. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	--	--	--	6.9	12.5	-5.6
Space Cooling	8.9	7.7	1.2	--	--	--
Indoor Fans	11.6	6.6	5.0	--	--	--
Heat Rejection	--	--	--	--	--	--
Pumps & Misc.	--	--	--	--	--	--
Domestic Hot Water	--	--	--	18.8	18.8	0.0
Indoor Lighting	2.7	2.7	0.0	--	--	-->
Compliance Total	**23.2**	**17.0**	**6.2**	**25.7**	**31.3**	**-5.6**
Receptacle	5.1	5.1	0.0	--	--	--
Process	--	--	--	--	--	--
Other Ltg	--	--	--	--	--	--
Process Motors	--	--	--	--	--	--
TOTAL	**28.3**	**22.1**	**6.2**	**25.7**	**31.3**	**-5.6**

D. EXCEPTIONAL CONDITIONS

The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

E. HERS VERIFICATION

This Section Does Not Apply

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 17:56:08

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 4 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

1	2	3	4
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
North-Facing[1]	288 ft²	0 ft²	00.0%
East-Facing[2]	960 ft²	486 ft²	50.6%
South-Facing[3]	288 ft²	0 ft²	00.0%
West-Facing[4]	240 ft²	0 ft²	00.0%
Total	**1,776 ft²**	**486 ft²**	**27.4%**
Roof	1,920 ft²	0 ft²	00.0%

Notes:
[1] North-Facing is oriented to within 45 degrees of true north, including 45°00'00" east of north (NE), but excluding 45°00'00" west of north (NW).
[2] East-Facing is oriented to within 45 degrees of true east, including 45°00'00" south of east (SE), but excluding 45°00'00" north of east (NE).
[3] South-Facing is oriented to within 45 degrees of true south, including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).
[4] West-Facing is oriented to within 45 degrees of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9	10
Surface Name	**Surface Type**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**	**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
R-30 Roof Attic6	Roof	1920	Wood	30	NA	U-Factor	0.038	Asphalt shingles - 1/4 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Wood framed roof, 24in. OC, 3.5in., R-30 Gypsum Board - 1/2 in.	E
8 CMU Wall furred8	ExteriorWall	1776	Wood	0	NA	U-Factor	0.281	Concrete - Part Grouted and Empty - 125 lb/ft3 - 8 in. Wood framed wall, 16in. OC, 3.5in., R-0 Gypsum Board - 1/2 in.	E

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 17:56:08

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 5 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9	10
Surface Name	**Surface Type**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**	**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
Slab On Grade12	UndergroundFloor	1920	NA	0	NA	F-Factor	0.73	Slab Type = UnheatedSlabOnGrade Insulation Orientation = None Insulation R-Value = R0	E

[1] Status: N - New, A – Altered, E – Existing

G5. FENESTRATION ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9
Fenestration Assembly Name / Tag or I.D.	**Fenestration Type / Product Type / Frame Type**	**Certification Method[1]**	**Assembly Method**	**Area ft²**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status[2]**
Single Metal Clear	VerticalFenestration FixedWindow MetalFraming	Default Performance	SiteBuilt	486	1.19	0.83	0.77	E

[1] Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N – New, A – Altered, E – Existing

H1. DRY SYSTEM EQUIPMENT (furnaces, air handling units, heat pumps, VRF, economizers etc.)

1	2	3	4	5	6	7	8	9	10	11	12
			Heating				Cooling				
Equipment Name	**Equipment Type**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Output (kBtuh)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Economizer Type (if present)**	**Status[1]**
AC1 M1	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 M2	SZVAVAC (Packaged3Phase)	1	54	0	AFUE	81.0	68	EER	11.0	FixedDryBulb	N

[1] Status: N - New, A – Altered, E – Existing

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 17:56:08

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 6 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

H2. FAN SYSTEMS SUMMARY

1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Design OA	Supply Fan					Return Fan					
Name or Item Tag	**Qty**	**CFM**	**CFM**	**Modeling Method**	**Power**	**Power Units**	**Control**	**CFM**	**Modeling Method**	**Power**	**Power Units**	**Control**	**Status[1]**
AC1 M1	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M2	1	360	2400	BrakeHorsePower	1.110	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N

[1] Status: N – New, A – Altered, E – Existing

H3. EXHAUST FAN SUMMARY

This Section Does Not Apply

H4. Wet System Equipment(boilers,chillers,cooling towers,etc.)

This Section Does Not Apply

H5. PUMPS

This Section Does Not Apply

H6. SYSTEM SPECIAL FEATURES

1	2	3	4
System Name	**Equipment Type**	**Window Interlocks per §140.4(n)**	**Other Special Features and Controls**
AC1 M1	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M2	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 17:56:08

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 7 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

H7. NONRESIDENTIAL VENTILATION

1	2	3	4	5	6	7
	Mechanical Ventilation					
Zone Name	**Ventilation Function**	**# of people**	**Supply OA CFM**	**Exhaust CFM**	**Conditioned Area (sf)**	**DCV or Occupant Sensor Controls, or Both**
1-Library M1	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
2-Classoom M1-16	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV

H8. HIGH-RISE RESIDENTIAL DWELLING UNIT AND HOTEL/MOTEL VENTILATION

This Section Does Not Apply

H9. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

1	2	3	4	5	6	7	8	9	10	11	12	13
				Rated Capacity (kBtuh)		Airflow (cfm)			Fan			
System ID	**Zone Name**	**System Type**	**Qty**	**Heating**	**Cooling**	**Design**	**Min.**	**Min. Ratio**	**Power**	**Power Units**	**Cycles**	**VSD**
1-Library M1-Trm	1-Library M1	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
2-Classoom M1-16-Trm	2-Classoom M1-16	VAVNoReheatBox	1	NA	NA	2400	1600	0.67	1.110	bhp	NA	☐

H10. EVAPORATIVE COOLER SUMMARY

This Section Does Not Apply

H11. HEAT RECOVERY SUMMARY

This Section Does Not Apply

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 17:56:08

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 8 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

1	2	3	4	5	6
				Additional (Custom) Allowance	
Occupancy Type [1]	**Conditioned Floor Area [2] (ft²)**	**Installed Lighting Power (Watts)**	**Lighting Control Credits (Watts)**	**Area Category Footnotes (Watts)**	**Tailored Method (Watts)**
Classroom, Lecture, Training, Vocational Areas	1,920	1,344	0	0	0
Building Totals:	**1,920**	**1,344**	**0**	**0**	**0**

[1] See Table 140.6-C
[2] See NRCC-LTI-01-E for unconditioned spaces
[3] Lighting information for existing spaces modeled is not included in the table

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS

Building Level Controls

1	2
Mandatory Demand Response §110.12(c)	**Shut-Off Controls §130.1(c)**

Area Level Controls (includes all lighting controls installed in conditioned space to meet mandatory requirements per §130.1)

4	5	6	7	8	9	10
Area Description	**Area Category Primary Function Area**	**Area Controls 130.1(a)**	**Multi-Level Controls 130.1(b)**	**Shut-Off Controls 130.1(c)**	**Primary Daylighting 130.1(d)**	**Secondary Daylighting 140.5(d)**

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 17:56:08

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 9 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents bust be retained and provided to the building inspector during construction and can be found online at: https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Building Component	Form/Title
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 17:56:08

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT JAMES PATRICK FOGARTY No. C-19670 REN 11-30-25 STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER DANIEL JAMES BASKIN No. M26576 EXP 06-30-24 MECHANICAL STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.16

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 10 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit:https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Building Component	Form/Title
Mechanical	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
	NRCA-MCH-05-A Air Economizer Controls
	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints
	NRCA-MCH-07-A Supply Fan Variable Flow Controls
	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
	NRCA-MCH-16-A Supply Air Temperature Reset Controls

Project Name:	Horace Mann School Bld M1	NRCC-PRF-01-E	Page 11 of 11
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:55, Thu, Sep 01, 2022
Input File Name:	Horace Mann M1.cibd19x		

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mark Baskin	Signature: Mark Baskin, P.E. (Digitally signed by Mark Baskin, P.E. DN: C=US, E=MBaskin@BaskinME.com, O=Baskin Mechanical Engineers, CN=Mark Baskin, P.E. Reason: I have reviewed this document Date: 2022.09.01 18:01:39-07'00')
Company: Baskin Mechanical Engineers	
Address: 175 Fulton St.	Signature Date: 2022-09-01
City/State/Zip: Fresno CA 93721	CEA/ HERS Certification Identification (if applicable): M26578
Phone: 5592370376	

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Envelope Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Lighting Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Mechanical Designer Name: Mark Baskin, P.E.	Signature: Mark Baskin, P.E. (Digitally signed by Mark Baskin, P.E. DN: C=US, E=MBaskin@BaskinME.com, O=Baskin Mechanical Engineers, CN=Mark Baskin, P.E. Reason: I have reviewed this document Date: 2022.09.01 18:01:56-07'00')	
Company: Baskin Mechanical Engineers		
Address: 5500 Ming Avenue, #251	Date Signed: 09-01-2022	
City/State/Zip: Bakersfield CA 93309		
Phone: (661) 397-2114	Title: P.E.	License #: M26578

CA Building Energy Efficiency Standards- 2019 Nonresidential Compliance Report Version: NRCC-PRF-01-E-12092021-6844 Report Generated at: 2022-09-01 17:56:08

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BASKIN
No. M26578
EXP 09-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.17

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

Project Name:	Horace Mann School Bld M2	NRCC-PRF-01-E	Page 1 of 13
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	18:27, Thu, Sep 01, 2022
Input File Name:	Horace Mann M2.cibd19x		

A. GENERAL INFORMATION

1	Project Location (city)	Bakersfield	8	Standards Version	Compliance2019
2	CA Zip Code	93308	9	Compliance Software (version)	EnergyPro 8.3
3	Climate Zone	13	10	Weather File	BAKERSFIELD_723840_CZ2010.epw
4	Total Conditioned Floor Area in Scope	5,760 ft²	11	Building Orientation (deg)	(S) 180 deg
5	Total Unconditioned Floor Area	0 ft²	12	Permitted Scope of Work	ExistingAdditionAndAlteration
6	Total # of Stories (Habitable Above Grade)	1	13	Building Type(s)	Nonresidential
7	Total # of dwelling units	0	14	Gas Type	NaturalGas

B. PROJECT SUMMARY

Table Instructions: Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively
Envelope (see Table G)	☒	Performance	Covered Process: Commercial Kitchens	☐	Performance	*The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).*
	☐	Not Included		☒	Not Included	
Mechanical (see Table H)	☒	Performance	Covered Process: Computer Rooms	☐	Performance	Indoor Lighting (Unconditioned)§140.6 *NRCC-LTI-E*
	☐	Not Included		☒	Not Included	Outdoor Lighting §140.7 *NRCC-LTO-E*
Domestic Hot Water (see Table I)	☐	Performance	Covered Process: Laboratory Exhaust	☐	Performance	Sign Lighting §140.8 *NRCC -LTS-E*
	☒	Not Included		☒	Not Included	Mandatory Measures
Lighting (Indoor Conditioned, see Table K)	☒	Performance				*Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)*
	☐	Not Included				Electrical Power Distribution 5110.11 *NRCC-ELC-E*
Solar Thermal Water Heating (see Table I)	☐	Performance				Commissioning 5120.8 *NRCC-CXR-E*
	☒	Not Included				Solar Ready 5110.10 *NRCC-SRA-E*

Project Name:	Horace Mann School Bld M2	NRCC-PRF-01-E	Page 2 of 13
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	18:27, Thu, Sep 01, 2022
Input File Name:	Horace Mann M2.cibd19x		

C1. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft ²-yr)

COMPLIES

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	18.01	11.42	6.59
Space Cooling	179.72	104.47	75.25
Indoor Fans	199.89	82.05	117.84
Heat Rejection	--	--	--
Pumps & Misc.	--	--	--
Domestic Hot Water	13.61	13.61	--
Indoor Lighting	40.01	40.01	--
ENERGY STANDARDS COMPLIANCE TOTAL	**451.24**	**251.56**	**199.68 (44.3%)**

[1] Notes: The number in parenthesis following the Compliance Margin in column 4. represents the Percent Better than Standard.

C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS[1]

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	72.74	72.74	--
Process	--	--	--
Other Ltg	--	--	--
Process Motors	--	--	--
COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS	**523.98**	**324.30**	**199.7 (38.1%)**

[1] Notes: This table is used to document compliance with programs OTHER THAN Title 24 Part 6, if applicable.

Project Name:	Horace Mann School Bld M2	NRCC-PRF-01-E	Page 3 of 13
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	18:27, Thu, Sep 01, 2022
Input File Name:	Horace Mann M2.cibd19x		

C3. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	--	--	--	50.2	31.7	18.5
Space Cooling	25.8	14.5	11.3	--	--	--
Indoor Fans	38.2	14.7	23.5	--	--	--
Heat Rejection	--	--	--	--	--	--
Pumps & Misc.	--	--	--	--	--	--
Domestic Hot Water	--	--	--	43.6	43.6	0.0
Indoor Lighting	8.2	8.2	0.0	--	--	-->
Compliance Total	**72.2**	**37.4**	**34.8**	**93.8**	**75.3**	**18.5**
Receptacle	15.3	15.3	0.0	--	--	--
Process	--	--	--	--	--	--
Other Ltg	--	--	--	--	--	--
Process Motors	--	--	--	--	--	--
TOTAL	**87.5**	**52.7**	**34.8**	**93.8**	**75.3**	**18.5**

D. EXCEPTIONAL CONDITIONS

The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

E. HERS VERIFICATION

This Section Does Not Apply

Project Name:	Horace Mann School Bld M2	NRCC-PRF-01-E	Page 4 of 13
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	18:27, Thu, Sep 01, 2022
Input File Name:	Horace Mann M2.cibd19x		

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

1	2	3	4
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
North-Facing[1]	1,440 ft²	540 ft²	37.5%
East-Facing[2]	240 ft²	0 ft²	00.0%
South-Facing[3]	1,440 ft²	540 ft²	37.5%
West-Facing[4]	480 ft²	0 ft²	00.0%
Total	**3,600 ft²**	**1,080 ft²**	**30.0%**
Roof	5,760 ft²	0 ft²	00.0%

Notes:
[1] North-Facing is oriented to within 45 degrees of true north, including 45°00'00" east of north (NE), but excluding 45°00'00" west of north (NW).
[2] East-Facing is oriented to within 45 degrees of true east, including 45°00'00" south of east (SE), but excluding 45°00'00" north of east (NE).
[3] South-Facing is oriented to within 45 degrees of true south, including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).
[4] West-Facing is oriented to within 45 degrees of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9	10
Surface Name	**Surface Type**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**	**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
R-30 Roof Attic6	Roof	5760	Wood	30	NA	U-Factor	0.038	Asphalt shingles - 1/4 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Wood framed roof, 24in. OC, 3.5in., R-30 Gypsum Board - 1/2 in.	E
8 CMU Wall furred8	ExteriorWall	3600	Wood	0	NA	U-Factor	0.281	Concrete - Part Grouted and Empty - 125 lb/ft3 - 8 in. Wood framed wall, 16in. OC, 3.5in., R-0 Gypsum Board - 1/2 in.	E

Project Name:	Horace Mann School Bld M2	NRCC-PRF-01-E	Page 5 of 13
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	18:27, Thu, Sep 01, 2022
Input File Name:	Horace Mann M2.cibd19x		

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9	10
Surface Name	**Surface Type**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**	**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
Slab On Grade12	UndergroundFloor	5760	NA	0	NA	F-Factor	0.73	Slab Type = UnheatedSlabOnGrade Insulation Orientation = None Insulation R-Value = R0	E

[1] Status: N - New, A – Altered, E – Existing

G5. FENESTRATION ASSEMBLY SUMMARY

1	2	3	4	5	6	7	8	9
Fenestration Assembly Name / Tag or I.D.	**Fenestration Type / Product Type / Frame Type**	**Certification Method[1]**	**Assembly Method**	**Area ft²**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status[2]**
Single Metal Clear	VerticalFenestration FixedWindow MetalFraming	Default Performance	SiteBuilt	1080	1.19	0.83	0.77	E

[1] Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N - New, A – Altered, E – Existing

H1. DRY SYSTEM EQUIPMENT (furnaces, air handling units, heat pumps, VRF, economizers etc.)

1	2	3	4	5	6	7	8	9	10	11	12
			Heating				Cooling				
Equipment Name	**Equipment Type**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Output (kBtuh)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Economizer Type (if present)**	**Status[1]**
AC1 M2-9	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 M2-10	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N

Project Name:	Horace Mann School Bld M2	NRCC-PRF-01-E	Page 6 of 13
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	18:27, Thu, Sep 01, 2022
Input File Name:	Horace Mann M2.cibd19x		

H1. DRY SYSTEM EQUIPMENT (furnaces, air handling units, heat pumps, VRF, economizers etc.)

1	2	3	4	5	6	7	8	9	10	11	12
			Heating				Cooling				
Equipment Name	**Equipment Type**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Output (kBtuh)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Economizer Type (if present)**	**Status[1]**
AC1 M2-11	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 M2-12	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 M2-13	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 M2-14	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N

[1] Status: N - New, A – Altered, E – Existing

H2. FAN SYSTEMS SUMMARY

1	2	3	4	5	6	7	8	9	10	11	12	13	14
				Supply Fan					Return Fan				
Name or Item Tag	**Qty**	**Design OA CFM**	**CFM**	**Modeling Method**	**Power**	**Power Units**	**Control**	**CFM**	**Modeling Method**	**Power**	**Power Units**	**Control**	**Status[1]**
AC1 M2-9	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M2-10	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M2-11	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M2-12	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M2-13	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M2-14	1	360	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N

[1] Status: N - New, A – Altered, E – Existing

Project Name:	Horace Mann School Bld M2	NRCC-PRF-01-E	Page 7 of 13
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	18:27, Thu, Sep 01, 2022
Input File Name:	Horace Mann M2.cibd19x		

H3. EXHAUST FAN SUMMARY

This Section Does Not Apply

H4. Wet System Equipment(boilers,chillers,cooling towers,etc.)

This Section Does Not Apply

H5. PUMPS

This Section Does Not Apply

H6. SYSTEM SPECIAL FEATURES

1	2	3	4
System Name	**Equipment Type**	**Window Interlocks per §140.4(n)**	**Other Special Features and Controls**
AC1 M2-9	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M2-10	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M2-11	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M2-12	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M2-13	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M2-14	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

Project Name:	Horace Mann School Bld M2	NRCC-PRF-01-E	Page 8 of 13
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	18:27, Thu, Sep 01, 2022
Input File Name:	Horace Mann M2.cibd19x		

H7. NONRESIDENTIAL VENTILATION

1	2	3	4	5	6	7
	Mechanical Ventilation					
Zone Name	**Ventilation Function**	**# of people**	**Supply OA CFM**	**Exhaust CFM**	**Conditioned Area (sf)**	**DCV or Occupant Sensor Controls, or Both**
1-Classoom M2-9	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
2-Classoom M2-10	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
3-Classoom M2-11	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
4-Classoom M2-12	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
5-Classoom M2-13	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV
6-Classoom M2-14	Education - Classrooms (ages 5-8)	24.00	360	0	960	DCV

H8. HIGH-RISE RESIDENTIAL DWELLING UNIT AND HOTEL/MOTEL VENTILATION

This Section Does Not Apply

H9. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

1	2	3	4	5	6	7	8	9	10	11	12	13
				Rated Capacity (kBtuh)		Airflow (cfm)			Fan			
System ID	**Zone Name**	**System Type**	**Qty**	**Heating**	**Cooling**	**Design**	**Min.**	**Min. Ratio**	**Power**	**Power Units**	**Cycles**	**VSD**
1-Classoom M2-9-Trm	1-Classoom M2-9	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
2-Classoom M2-10-Trm	2-Classoom M2-10	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
3-Classoom M2-11-Trm	3-Classoom M2-11	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
4-Classoom M2-12-Trm	4-Classoom M2-12	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
5-Classoom M2-13-Trm	5-Classoom M2-13	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
6-Classoom M2-14-Trm	6-Classoom M2-14	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐

Project Name:	Horace Mann School Bld M2	NRCC-PRF-01-E	Page 9 of 13
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	18:27, Thu, Sep 01, 2022
Input File Name:	Horace Mann M2.cibd19x		

H10. EVAPORATIVE COOLER SUMMARY

This Section Does Not Apply

H11. HEAT RECOVERY SUMMARY

This Section Does Not Apply

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

1	2	3	4	5	6
				Additional (Custom) Allowance	
Occupancy Type [1]	**Conditioned Floor Area [2] (ft²)**	**Installed Lighting Power (Watts)**	**Lighting Control Credits (Watts)**	**Area Category Footnotes (Watts)**	**Tailored Method (Watts)**
Classroom, Lecture, Training, Vocational Areas	5,760	4,032	0	0	0
Building Totals:	**5,760**	**4,032**	**0**	**0**	**0**

[1] See Table 140.6-C
[2] See NRCC-LTI-01-E for unconditioned spaces
[3] Lighting information for existing spaces modeled is not included in the table

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT JAMES PATRICK FOGARTY No. C-19670 REN 11-30-25 STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER MARK JAMES BASKIN No. M26577 EXP 06-30-24 MECHANICAL STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.18

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS

Building Level Controls

1	2
Mandatory Demand Response §110.12(c)	Shut-Off Controls §130.1(c)

Area Level Controls (includes all lighting controls installed in conditioned space to meet mandatory requirements per §130.1)

4	5	6	7	8	9	10
Area Description	Area Category Primary Function Area	Area Controls 130.1(a)	Multi-Level Controls 130.1(b)	Shut-Off Controls 130.1(c)	Primary Daylighting 130.1(d)	Secondary Daylighting 140.5(d)

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents bust be retained and provided to the building inspector during construction and can be found online at: https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Building Component	Form/Title
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit:https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Building Component	Form/Title
Mechanical	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
	NRCA-MCH-05-A Air Economizer Controls
	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints
	NRCA-MCH-07-A Supply Fan Variable Flow Controls
	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
	NRCA-MCH-16-A Supply Air Temperature Reset Controls

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mark Baskin	Signature: Mark Baskin, P.E. (Digitally signed by Mark Baskin, P.E. DN: C=US, E=JeffBaskin@BaskinME.com, O=Baskin Mechanical Engineers, CN="Mark Baskin, P.E." Reason: I have reviewed this document Date: 2022.09.01 18:31:06-07'00')
Company: Baskin Mechanical Engineers	
Address: 175 Fulton St.	Signature Date: 2022-09-01
City/State/Zip: Fresno CA 93721	CEA/ HERS Certification Identification (if applicable): MZ6578
Phone: 5592370376	

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Envelope Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Lighting Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Mechanical Designer Name: Mark Baskin, P.E.	Signature: Mark Baskin, P.E. (Digitally signed by Mark Baskin, P.E. DN: C=US, E=JeffBaskin@BaskinME.com, O=Baskin Mechanical Engineers, CN="Mark Baskin, P.E." Reason: I have reviewed this document Date: 2022.09.01 18:31:06-07'00')	
Company: Baskin Mechanical Engineers		
Address: 5500 Ming Avenue, #251	Date Signed: 09-01-2022	
City/State/Zip: Bakersfield CA 93309		
Phone: (661) 397-2114	Title: P.E.	License #: M26578

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BASKIN
No. M26578
EXP 12-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.19

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

Project Name:	Horace Mann School Bld M3	NRCC-PRF-01-E	Page 1 of 14
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:36, Thu, Sep 01, 2022
Input File Name:	Horace Mann M3.cibd19x		

A. GENERAL INFORMATION

1	Project Location (city)	Bakersfield	8	Standards Version	Compliance2019
2	CA Zip Code	93308	9	Compliance Software (version)	EnergyPro 8.3
3	Climate Zone	13	10	Weather File	BAKERSFIELD_723840_CZ2010.epw
4	Total Conditioned Floor Area in Scope	8,724 ft²	11	Building Orientation (deg)	(S) 180 deg
5	Total Unconditioned Floor Area	0 ft²	12	Permitted Scope of Work	ExistingAdditionAndAlteration
6	Total # of Stories (Habitable Above Grade)	1	13	Building Type(s)	Nonresidential
7	Total # of dwelling units	0	14	Gas Type	NaturalGas

B. PROJECT SUMMARY

Table Instructions: Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (see Table G)	☒	Performance	Covered Process: Commercial Kitchens	☐	Performance	*The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).*	
	☐	Not Included		☒	Not Included		
Mechanical (see Table H)	☒	Performance	Covered Process: Computer Rooms	☐	Performance	Indoor Lighting (Unconditioned)§140.6	*NRCC-LTI-E*
	☐	Not Included		☒	Not Included	Outdoor Lighting §140.7	*NRCC-LTO-E*
Domestic Hot Water (see Table I)	☐	Performance	Covered Process: Laboratory Exhaust	☐	Performance	Sign Lighting §140.8	*NRCC -LTS-E*
	☒	Not Included		☒	Not Included	Mandatory Measures	
Lighting (Indoor Conditioned, see Table K)	☒	Performance				*Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)*	
	☐	Not Included				Electrical Power Distribution 5110.11	*NRCC-ELC-E*
Solar Thermal Water Heating (see Table I)	☐	Performance				Commissioning 5120.8	*NRCC-CXR-E*
	☒	Not Included				Solar Ready 5110.10	*NRCC-SRA-E*

Project Name:	Horace Mann School Bld M3	NRCC-PRF-01-E	Page 2 of 14
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:36, Thu, Sep 01, 2022
Input File Name:	Horace Mann M3.cibd19x		

C1. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft ²-yr)

COMPLIES

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	14.52	9.34	5.18
Space Cooling	158.38	107.08	51.30
Indoor Fans	173.40	84.00	89.40
Heat Rejection	--	--	--
Pumps & Misc.	--	--	--
Domestic Hot Water	12.53	12.53	--
Indoor Lighting	40.01	40.01	--
ENERGY STANDARDS COMPLIANCE TOTAL	**398.84**	**252.96**	**145.88 (36.6%)**

[1] Notes: The number in parenthesis following the Compliance Margin in column 4. represents the Percent Better than Standard.

C2. RESULTS FOR 'ABOVE CODE' QUALIFICATIONS[1]

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

Miscellaneous Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	76.54	76.54	--
Process	--	--	--
Other Ltg	--	--	--
Process Motors	--	--	--
COMPLIANCE TOTAL PLUS MISCELLANEOUS COMPONENTS	**475.38**	**329.50**	**145.9 (30.7%)**

[1] Notes: This table is used to document compliance with programs OTHER THAN Title 24 Part 6, if applicable.

Project Name:	Horace Mann School Bld M3	NRCC-PRF-01-E	Page 3 of 14
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:36, Thu, Sep 01, 2022
Input File Name:	Horace Mann M3.cibd19x		

C3. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	--	--	--	61.3	39.2	22.1
Space Cooling	34.7	23.1	11.6	--	--	--
Indoor Fans	50.0	23.3	26.7	--	--	--
Heat Rejection	--	--	--	--	--	--
Pumps & Misc.	--	--	--	--	--	--
Domestic Hot Water	0.3	0.3	0.0	56.7	56.7	0.0
Indoor Lighting	12.5	12.5	0.0	--	--	-->
Compliance Total	**97.5**	**59.2**	**38.3**	**118.0**	**95.9**	**22.1**
Receptacle	24.3	24.3	0.0	--	--	--
Process	--	--	--	--	--	--
Other Ltg	--	--	--	--	--	--
Process Motors	--	--	--	--	--	--
TOTAL	**121.8**	**83.5**	**38.3**	**118.0**	**95.9**	**22.1**

D. EXCEPTIONAL CONDITIONS

The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

E. HERS VERIFICATION

This Section Does Not Apply

Project Name:	Horace Mann School Bld M3	NRCC-PRF-01-E	Page 4 of 14
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:36, Thu, Sep 01, 2022
Input File Name:	Horace Mann M3.cibd19x		

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing[1]	936 ft²	456 ft²	48.7%
East-Facing[2]	1,296 ft²	324 ft²	25.0%
South-Facing[3]	1,884 ft²	564 ft²	29.9%
West-Facing[4]	408 ft²	0 ft²	00.0%
Total	**4,524 ft²**	**1,344 ft²**	**29.7%**
Roof	8,724 ft²	0 ft²	00.0%

Notes:
[1] North-Facing is oriented to within 45 degrees of true north, including 45°00'00" east of north (NE), but excluding 45°00'00" west of north (NW).
[2] East-Facing is oriented to within 45 degrees of true east, including 45°00'00" south of east (SE), but excluding 45°00'00" north of east (NE).
[3] South-Facing is oriented to within 45 degrees of true south, including 45°00'00" west of south (SW), but excluding 45°00'00" east of south (SE).
[4] West-Facing is oriented to within 45 degrees of true west, including 45°00'00" north of due west (NW), but excluding 45°00'00" south of west (SW).

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

Surface Name	Surface Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value	Units	Value	Description of Assembly Layers	Status[1]
R-30 Roof Attic6	Roof	8724	Wood	30	NA	U-Factor	0.038	Asphalt shingles - 1/4 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Wood framed roof, 24in. OC, 3.5in., R-30 Gypsum Board - 1/2 in.	E
8 CMU Wall furred8	ExteriorWall	4524	Wood	0	NA	U-Factor	0.281	Concrete - Part Grouted and Empty - 125 lb/ft3 - 8 in. Wood framed wall, 16in. OC, 3.5in., R-0 Gypsum Board - 1/2 in.	E

Project Name:	Horace Mann School Bld M3	NRCC-PRF-01-E	Page 5 of 14
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:36, Thu, Sep 01, 2022
Input File Name:	Horace Mann M3.cibd19x		

G3. OPAQUE SURFACE ASSEMBLY SUMMARY

Surface Name	Surface Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value	Units	Value	Description of Assembly Layers	Status[1]
Slab On Grade15	UndergroundFloor	8724	NA	0	NA	F-Factor	0.73	Slab Type = UnheatedSlabOnGrade Insulation Orientation = None Insulation R-Value = R0	E

[1] Status: N - New, A – Altered, E – Existing

G5. FENESTRATION ASSEMBLY SUMMARY

Fenestration Assembly Name / Tag or I.D.	Fenestration Type / Product Type / Frame Type	Certification Method[1]	Assembly Method	Area ft²	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Single Metal Clear	VerticalFenestration FixedWindow MetalFraming	Default Performance	SiteBuilt	1344	1.19	0.83	0.77	E

[1] Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N – New, A – Altered, E – Existing

H1. DRY SYSTEM EQUIPMENT (furnaces, air handling units, heat pumps, VRF, economizers etc.)

Equipment Name	Equipment Type	Qty	Heating: Total Heating Output (kBtu/h)	Heating: Supp Heat Output (kBtuh)	Heating: Efficiency Unit	Heating: Efficiency	Cooling: Total Cooling Output (kBtu/h)	Cooling: Efficiency Unit	Cooling: Efficiency	Economizer Type (if present)	Status[1]
AC2 M1	SZVAVAC (Packaged3Phase)	1	54	0	AFUE	81.0	68	EER	11.0	FixedDryBulb	N
AC2 M2	SZVAVAC (Packaged3Phase)	1	54	0	AFUE	81.0	68	EER	11.0	FixedDryBulb	N

Project Name:	Horace Mann School Bld M3	NRCC-PRF-01-E	Page 6 of 14
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:36, Thu, Sep 01, 2022
Input File Name:	Horace Mann M3.cibd19x		

H1. DRY SYSTEM EQUIPMENT (furnaces, air handling units, heat pumps, VRF, economizers etc.)

Equipment Name	Equipment Type	Qty	Heating: Total Heating Output (kBtu/h)	Heating: Supp Heat Output (kBtuh)	Heating: Efficiency Unit	Heating: Efficiency	Cooling: Total Cooling Output (kBtu/h)	Cooling: Efficiency Unit	Cooling: Efficiency	Economizer Type (if present)	Status[1]
AC1 M3	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 M4	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 M5	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 M6	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 M7	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC1 M8	SZVAVAC (Packaged3Phase)	1	49	0	AFUE	81.0	57	SEER/EER	16.10/12.20	FixedDryBulb	N
AC3 Speech	SZAC (Packaged3Phase)	1	32	0	AFUE	78.0	29	SEER/EER	15.00/12.00	NoEconomizer	N
AC3 ESL	SZAC (Packaged3Phase)	1	32	0	AFUE	78.0	29	SEER/EER	15.00/12.00	NoEconomizer	N

[1] Status: N – New, A – Altered, E – Existing

H2. FAN SYSTEMS SUMMARY

Name or Item Tag	Qty	Design OA CFM	Supply Fan CFM	Supply Fan Modeling Method	Supply Fan Power	Supply Fan Power Units	Supply Fan Control	Return Fan CFM	Return Fan Modeling Method	Return Fan Power	Return Fan Power Units	Return Fan Control	Status[1]
AC1 M1	1	432	2400	BrakeHorsePower	1.110	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M2	1	392	2400	BrakeHorsePower	1.110	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M3	1	351	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N

Project Name:	Horace Mann School Bld M3	NRCC-PRF-01-E	Page 7 of 14
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:36, Thu, Sep 01, 2022
Input File Name:	Horace Mann M3.cibd19x		

H2. FAN SYSTEMS SUMMARY

Name or Item Tag	Qty	Design OA CFM	Supply Fan CFM	Supply Fan Modeling Method	Supply Fan Power	Supply Fan Power Units	Supply Fan Control	Return Fan CFM	Return Fan Modeling Method	Return Fan Power	Return Fan Power Units	Return Fan Control	Status[1]
AC1 M4	1	351	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M5	1	351	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M6	1	351	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M7	1	351	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC1 M8	1	351	1800	BrakeHorsePower	0.720	bhp	VariableSpeedDrive	NA	NA	NA	NA	NA	N
AC3 Speech	1	65	900	BrakeHorsePower	0.240	bhp	ConstantVolume	NA	NA	NA	NA	NA	N
AC3 ESL	1	72	900	BrakeHorsePower	0.240	bhp	ConstantVolume	NA	NA	NA	NA	NA	N

[1] Status: N – New, A – Altered, E – Existing

H3. EXHAUST FAN SUMMARY

This Section Does Not Apply

H4. Wet System Equipment(boilers,chillers,cooling towers,etc.)

This Section Does Not Apply

H5. PUMPS

This Section Does Not Apply

Project Name:	Horace Mann School Bld M3	NRCC-PRF-01-E	Page 8 of 14
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:36, Thu, Sep 01, 2022
Input File Name:	Horace Mann M3.cibd19x		

H6. SYSTEM SPECIAL FEATURES

System Name	Equipment Type	Window Interlocks per §140.4(n)	Other Special Features and Controls
AC2 M1	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC2 M2	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M3	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M4	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M5	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M6	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M7	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer
AC1 M8	SZVAVAC	NA	Zones With CO2Sensor Vent. Control Fixed Drybulb Economizer

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

H7. NONRESIDENTIAL VENTILATION

Zone Name	Ventilation Function	# of people	Mechanical Ventilation: Supply OA CFM	Mechanical Ventilation: Exhaust CFM	Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
1-Classoom M3-1	Education - Classrooms (ages 5-8)	28.80	432	0	1152	DCV
2-Classoom M3-2	Education - Classrooms (ages 5-8)	26.10	392	0	1044	DCV
3-Classoom M3-3	Education - Classrooms (ages 5-8)	23.40	351	0	936	DCV
4-Classoom M3-4	Education - Classrooms (ages 5-8)	23.40	351	0	936	DCV
5-Classoom M3-5	Education - Classrooms (ages 5-8)	23.40	351	0	936	DCV
6-Classoom M3-6	Education - Classrooms (ages 5-8)	23.40	351	0	936	DCV

Project Name:	Horace Mann School Bld M3	NRCC-PRF-01-E	Page 9 of 14
Project Address:	2719 Niles Street Bakersfield 93308	Calculation Date/Time:	17:36, Thu, Sep 01, 2022
Input File Name:	Horace Mann M3.cibd19x		

H7. NONRESIDENTIAL VENTILATION

Zone Name	Ventilation Function	# of people	Mechanical Ventilation: Supply OA CFM	Mechanical Ventilation: Exhaust CFM	Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
7-Classoom M3-7	Education - Classrooms (ages 5-8)	23.40	351	0	936	DCV
8-Classoom M3-8	Education - Classrooms (ages 5-8)	23.40	351	0	936	DCV
9-Speech & Book Storage	Office - Office space	2.16	65	0	432	NA
10-ESL	Office - Office space	2.40	72	0	480	NA

H8. HIGH-RISE RESIDENTIAL DWELLING UNIT AND HOTEL/MOTEL VENTILATION

This Section Does Not Apply

H9. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

System ID	Zone Name	System Type	Qty	Rated Capacity (kBtuh): Heating	Rated Capacity (kBtuh): Cooling	Airflow (cfm): Design	Airflow (cfm): Min.	Airflow (cfm): Min. Ratio	Fan: Power	Fan: Power Units	Fan: Cycles	Fan: VSD
1-Classoom M3-1-Trm	1-Classoom M3-1	VAVNoReheatBox	1	NA	NA	2400	1600	0.67	1.110	bhp	NA	☐
2-Classoom M3-2-Trm	2-Classoom M3-2	VAVNoReheatBox	1	NA	NA	2400	1600	0.67	1.110	bhp	NA	☐
3-Classoom M3-3-Trm	3-Classoom M3-3	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
4-Classoom M3-4-Trm	4-Classoom M3-4	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
5-Classoom M3-5-Trm	5-Classoom M3-5	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
6-Classoom M3-6-Trm	6-Classoom M3-6	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
7-Classoom M3-7-Trm	7-Classoom M3-7	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
8-Classoom M3-8-Trm	8-Classoom M3-8	VAVNoReheatBox	1	NA	NA	1800	1200	0.67	0.720	bhp	NA	☐
9-Speech & Book Storage-Trm	9-Speech & Book Storage	Uncontrolled	1	NA	NA	900	NA	0.00	0.240	bhp	NA	☐
10-ESL-Trm	10-ESL	Uncontrolled	1	NA	NA	900	NA	0.00	0.240	bhp	NA	☐

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BASKIN
No. M26577
07-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.20

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

H10. EVAPORATIVE COOLER SUMMARY

This Section Does Not Apply

H11. HEAT RECOVERY SUMMARY

This Section Does Not Apply

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

1	2	3	4	5	6
				Additional (Custom) Allowance	
Occupancy Type [1]	Conditioned Floor Area [2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Area Category Footnotes (Watts)	Tailored Method (Watts)
Classroom, Lecture, Training, Vocational Areas	7,812	5,467	0	0	0
Office Area (<250 square feet)	912	638	0	0	0
Building Totals:	**8,724**	**6,105**	**0**	**0**	**0**

[1] See Table 140.6-C
[2] See NRCC-LTI-01-E for unconditioned spaces
[3]Lighting information for existing spaces modeled is not included in the table

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS

Building Level Controls

1	2
Mandatory Demand Response §110.12(c)	**Shut-Off Controls §130.1(c)**

Area Level Controls (includes all lighting controls installed in conditioned space to meet mandatory requirements per §130.1)

4	5	6	7	8	9	10
Area Description	**Area Category Primary Function Area**	**Area Controls 130.1(a)**	**Multi-Level Controls 130.1(b)**	**Shut-Off Controls 130.1(c)**	**Primary Daylighting 130.1(d)**	**Secondary Daylighting 140.5(d)**

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents bust be retained and provided to the building inspector during construction and can be found online at: https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Building Component	Form/Title
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections shall be made by Documentation Author to indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit:https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Building Component	Form/Title
Mechanical	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
	NRCA-MCH-03-A Constant Volume Single Zone HVAC
	NRCA-MCH-05-A Air Economizer Controls
	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints
	NRCA-MCH-07-A Supply Fan Variable Flow Controls
	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
	NRCA-MCH-16-A Supply Air Temperature Reset Controls

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mark Baskin	Signature: Mark Baskin, P.E. (Digitally signed by Mark Baskin, P.E. DN: C=US, E=MBaskin@BaskinME.com, O=Baskin Mechanical Engineers, CN="Mark Baskin, P.E." Reason: I have reviewed this document Date: 2022.09.01 17:36:15 07'00')
Company: Baskin Mechanical Engineers	
Address: 175 Fulton St.	Signature Date: 2022-09-01
City/State/Zip: Fresno CA 93721	CEA/ HERS Certification Identification (if applicable): M26578
Phone: 5592370376	

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Envelope Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Lighting Designer Name:	Signature:	
Company:		
Address:	Date Signed:	
City/State/Zip:		
Phone:	Title:	License #:
Responsible Mechanical Designer Name: Mark Baskin, P.E.	Signature: Mark Baskin, P.E. (Digitally signed by Mark Baskin, P.E. DN: C=US, E=MBaskin@BaskinME.com, O=Baskin Mechanical Engineers, CN="Mark Baskin, P.E." Reason: I have reviewed this document Date: 2022.09.01 17:36:33 07'00')	
Company: Baskin Mechanical Engineers		
Address: 5500 Ming Avenue, #251	Date Signed: 09-01-2022	
City/State/Zip: Bakersfield CA 93309		
Phone: (661) 397-2114	Title: P.E.	License #: M26578

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT JAMES PATRICK FOGARTY No. C-19670 REN 11-30-25 STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER MARK JAMES BASKIN No. M26578 Exp. 06-30-24 MECHANICAL STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:49

TITLE 24

M5.21

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

PLUMBING LEGEND

SYMBOL	ABBR.	ITEM	SYMBOL	ABBR.	ITEM
	ACC.	ACCESSIBLE		GRD.	GRADE
	A.D.	ACCESS DOOR/WALL BOX	G.W.	G.W.	GREASE WASTE
	A.F.F.	ABOVE FINISHED FLOOR		H.B.	HOSE BIBB
	C.D.	CONDENSATE DRAIN		H.V.(A-C)	AIR CONDITIONING EQPT.
	C.I.	CAST IRON		L.	LAVATORY
	CLG.	CEILING		LOC.	LOCATION
	C.O.	CLEANOUT		(N)	NEW
	COMB.	COMBUSTION		N.I.C.	NOT IN CONTRACT
	CONN.	CONNECTION	OR	P.O.C.	POINT OF CONNECTION
	CONT.	CONTINUATION		PROV.	PROVIDE
	COTG	CLEANOUT TO GRADE		P.R.V.	PRESSURE REDUCING VALVE
	(D)C.W.	(DOMESTIC) COLD WATER		R.D.	ROOF DRAIN
	D.H.	DEMO HATCH		RAIN.	RAINWATER LEADER
	(D)H.W.	(DOMESTIC) HOT WATER		S.	SINK
	(D)HWR	(DOMESTIC) HOT WATER RETURN		S.&W.	SOIL AND WASTE
	DN.	DOWN		SIM.	SIMILAR
	DR'N.	DRAIN	OR OR	S.O.V.	SHUT OFF VALVE
	(E).	EXISTING		SS	STAINLESS STEEL
	(E)C.W.	EXISTING COLD WATER		S.S.	SERVICE SINK
	(E)H.W.	EXISTING HOT WATER		SURF.	SURFACE
	(E)H.W.R	EXISTING HOT WATER RETURN		T.&P.	TEMPERATURE AND PRESSURE RELIEF
	(E)C.D	EXISTING CONDENSATE DRAIN		T.P.	TRAP PRIMER
	E.D.F.	ELECTRIC DRINKING FOUNTAIN		(TYP)	TYPICAL
	E.W.H.	ELECTRIC WATER HEATER		UR.	URINAL
	F.C.O.	FLOOR CLEANOUT		V.O.	VENT OFFSET
	F.D.	FLOOR DRAIN		V.T.R.	VENT THRU ROOF
	FLR.	FLOOR		(E) W.	EXISTING WASTE
	F.S.	FLOOR SINK		W.	WASTE
	G.	GAS		W.C.	WATER CLOSET
	(E) G.	EXISTING GAS		W.H.	WATER HEATER
	G.D.	GARBAGE DISPOSAL		W.C.O.	WALL CLEANOUT

Plumbing Fixture Schedule:

UR

Wall mt'd. accessible urinal, "Kohler" # K-4991-ET-0 Bardon,"Zurn" # ZER6003AV-ULF-CP battery powered (pint) sensor flush-valve, wall hanger, (mount hanger per detail on plans) see manufacturers installation instructions for mounting heights, 3/4" C.W., 2" W., 2" W.C.O., 1-1/2" V.O.

L-1

Wall hung vitreous china accessible lavatory, "Kohler" # K-2867 (20" x 18") Hudson, offset grid drain, "Chicago" #3400-ABCP metering faucet (0.5 GPM), (2) threaded angle wall stops with braided S.S. supplies, 17 ga. C.P. trap/offset tailpiece, 1/2" C.W., 2" W., 2" W.C.O., 1-1/2" V., provide "Zurn" #Z1251 Concealed arm system wall support.

L-2

Wall hung vitreous china accessible lavatory, "Kohler" # K-2867 (20" x 18") Hudson, offset grid drain, "Chicago" #3600-E2805AB metering faucet (0.5 GPM), (2) threaded angle wall stops with braided S.S. supplies, 17 ga. C.P. trap/offset tailpiece, 1/2" C.W., 1/2" H.W., 2" W., 2" W.C.O., 1-1/2" V., provide "Zurn" #Z1251 Concealed arm system wall support.

S

Counter mounted stainless steel accessible classroom sink with U-channel type mounting system, "Elkay" #PSDKADQ2517C with "Haws" #5510LF gooseneck faucet and "Haws" # 5054LF bubbler, strainer / grid drain, (2) threaded angled wall stops with braided stainless steel supplies, supplies from each stop (one to bubbler and faucet), 17 ga. C.P. trap/tailpiece, 1/2" C.W., 2" W., 2" W.C.O., 1-1/2" V.O.

DF

"Haws" #1501-1920W dual high/low drinking fountain with bottle filler, white enameled iron basins with14 GA. powder-coated type 304 SS bottle filler bracket with "Haws" #6700 backing plate and #6800 support carrier. Refer to the architectural drawings for mounting elevations. 1/2" C.W., 2" W., 2" W.C.O. , 2" V.O.

Equipment Anchorage Notes:

All Mechanical, Plumbing, and Electrical components shall be anchored and installed per the details on the DSA approved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2019 CBC, Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16 Chapters 13, 26 and 30.

1. All permanent equipment and components.
2. Temporary, movable or mobile equipment that is permanently attached (E.G. hard wired) to the building utility services such as electricity, gas or water. "Permanently attached" shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
3. Temporary, moveable or mobile equipment which is heavier than 400 pounds or has a center mass located 4 feet or more above the adjacent floor or roof level that directly support the component are required to be restrained in a manner approved by DSA.

The following Mechanical and Electrical components shall be positively attached to the structure, but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping and conduit. Flexible connections must allow movement in both transverse and longitudinal directions:

A. Components weighing less than 400 pounds and have a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.
B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all Mechanical, Electrical and Plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with above requirements.

Piping, Ductwork, and Electrical Distribution System Bracing Note:

Piping, ductwork, and Electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Section 13.6.5., 13.6.6, 13.6.7, 13.6.8, and 2019 CBC, Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a pre-approved installation guide (e.g., OSHPD OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP),
Electrical Distribution Systems (E):

MP ☐ MD ☐
PP ☐ E ☐ **Option 1:** Detailed on the approved drawings with project specific notes and details

MP ☐ MD ☐
PP ☑ E ☐ **Option 2:** Shall comply with the applicable OSHPD Pre-Approval (OPM#) #Tolco/B-line OPM-052.

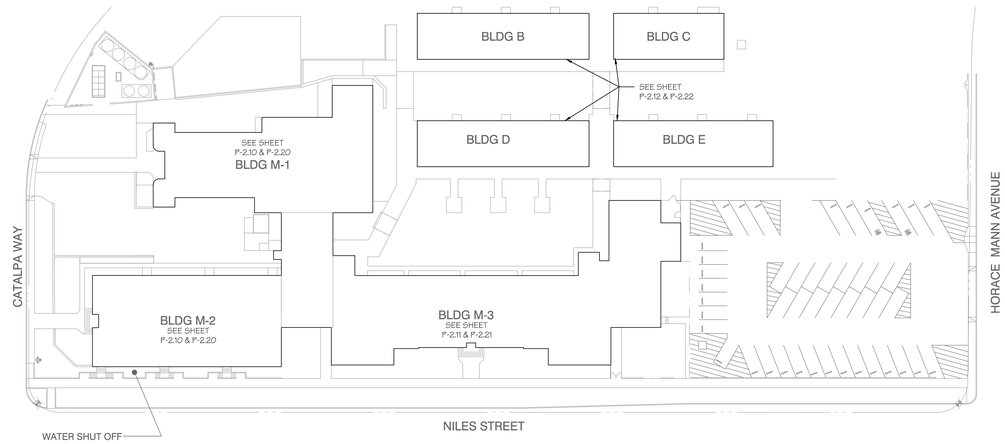
Codes:

California Code of Regulations (C.C.R)
Part 1 - 2022 California Standards Administrative Code, Title 24, C.C.R.
Part 2 - 2019 California Building Code (C.B.C.), Title 24, C.C.R. Volumes 1-2.
Part 3 - 2019 California Electrical Code, Title 24, C.C.R.
Part 4 - 2019 California Mechanical Code (C.M.C.), Title 24, C.C.R.
Part 5 - 2019 California Plumbing Code (C.P.C.), Title 24, C.C.R.
Part 6 - 2019 California Energy Code, Title 24, C.C.R.
Part 9 - 2019 California Fire Code, Title 24, C.C.R.
Part 10- 2019 California Existing Building Code, Title 24, C.C.R.
Part 11- 2019 California Green Building Standards Code. Title-24, C.C.R.
Part 12- 2019 California Referenced Standards Code. Title-24, C.C.R.
Title 19 C.C.R., Public Safety, State Fire Marshal Regulations

Standards and Guides:

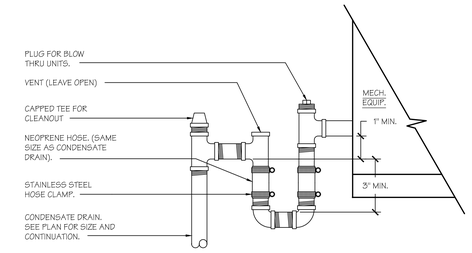
ADAAG - American with Disabilities Act, Accessibility Guidelines.
Fixtures - Plumbing fixtures to comply with table 5.303.6 of the California Green Building Standards - 2019 Edition.

For a list of other applicable standards, including California amendments to the NFPA Standards, refer to CBC Chapter 35 and CFC Chapter 80



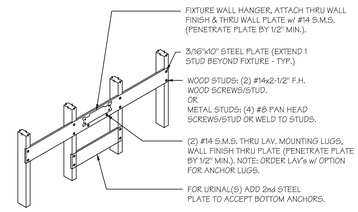
PLUMBING SITE PLAN

SCALE: 1"=40'-0"



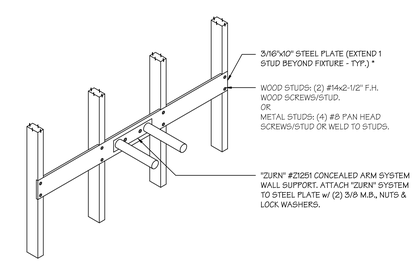
CONDENSATE DRAIN CONNECTION — A

SCALE: N.T.S.



URINAL MOUNTING — B

SCALE: N.T.S.



LAV. MOUNTING — C

SCALE: N.T.S.

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BASKIN
No. M26537
EXP. 6-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

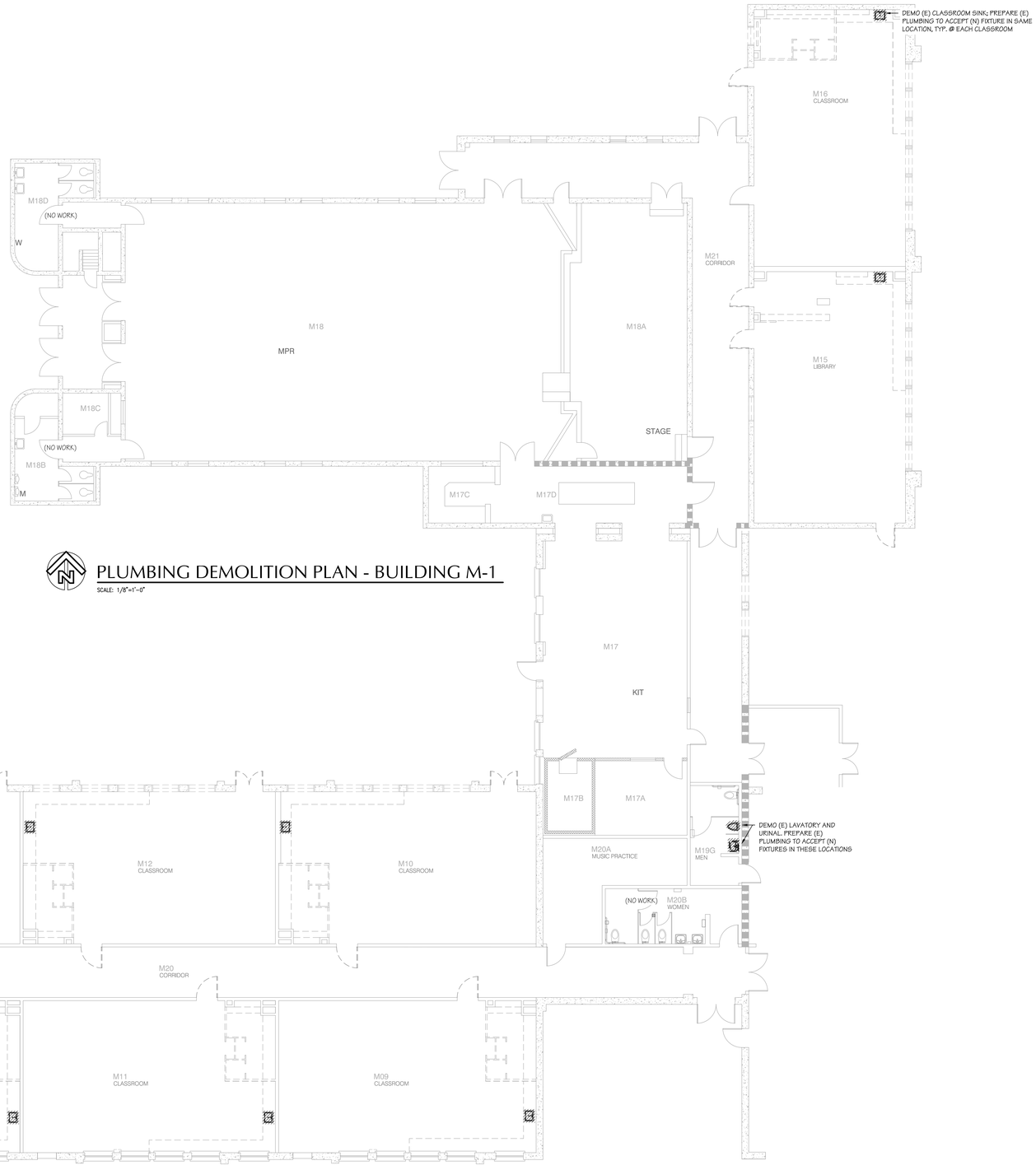
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:53

PLUMBING SITE PLAN, SCHEDULES, DETAILS, AND NOTES

P1.00



PLUMBING DEMOLITION PLAN - BUILDING M-1

SCALE: 1/8"=1'-0"

PLUMBING DEMOLITION PLAN - BUILDING M-2

SCALE: 1/8"=1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES SCHAEFER
No. M26537
EXP. 6-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

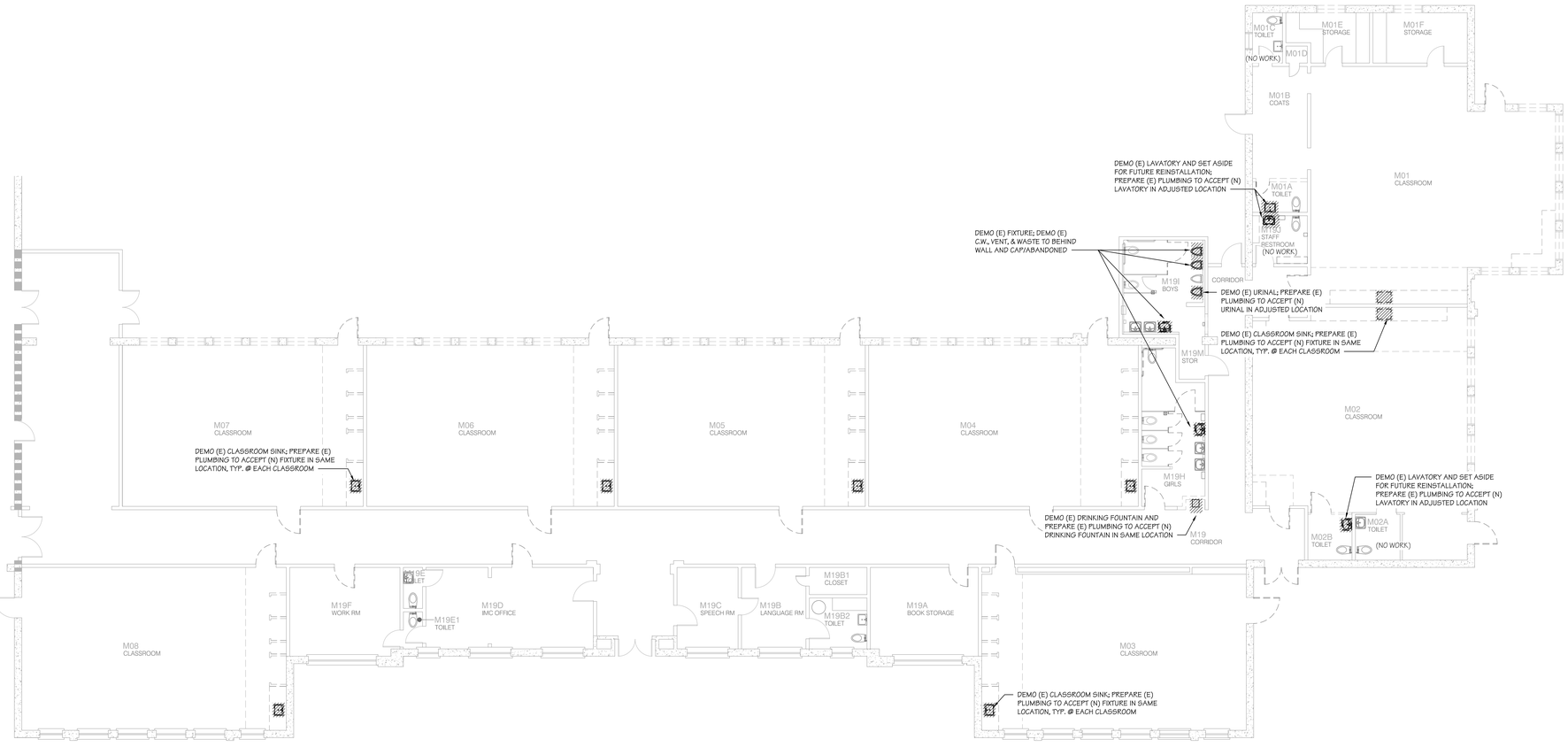
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:53

PLUMBING DEMOLITION PLANS -
BUILDING M-1 & M-2

P2.10

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23



PLUMBING DEMO PLAN - BUILDING M-3

SCALE: 1/8"=1'-0"

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
ISAAC JAMES BASKIN
No. M26537
EXP. 6-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

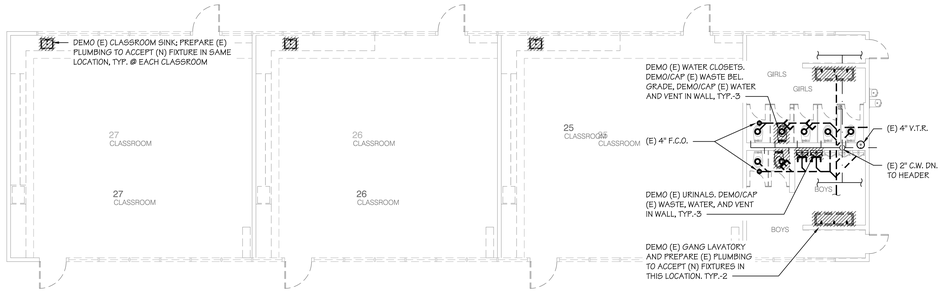
No	Date	Item
1	00.00.00	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:53

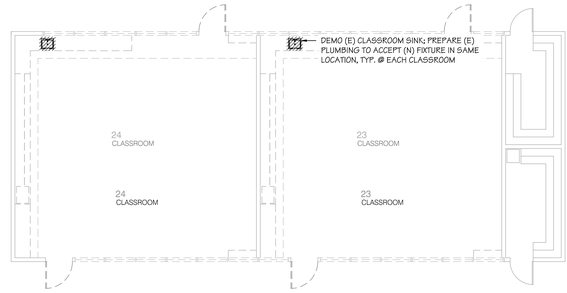
PLUMBING DEMOLITION PLAN - BUILDING M-3

P2.11



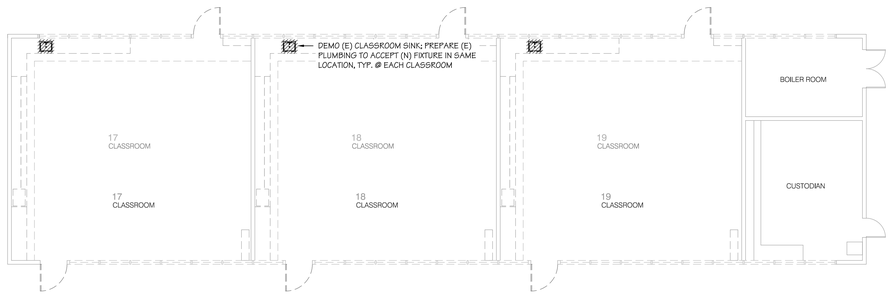
PLUMBING DEMOLITION PLAN-BLDG B

SCALE: 1/8"=1'-0"



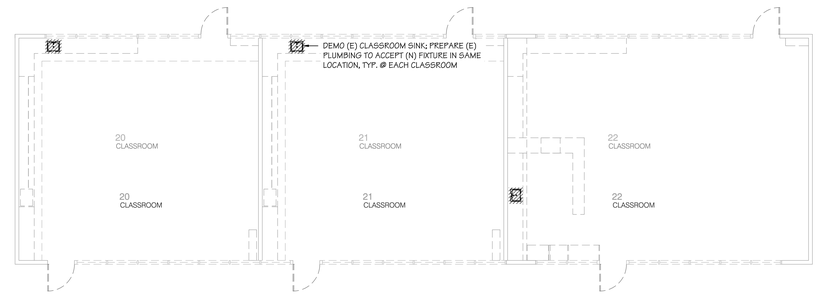
PLUMBING DEMOLITION PLAN-BLDG C

SCALE: 1/8"=1'-0"



PLUMBING DEMOLITION PLAN-BLDG D

SCALE: 1/8"=1'-0"



PLUMBING DEMOLITION PLAN-BLDG E

SCALE: 1/8"=1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES SCHAEFER
No. M26537
EXP 6-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

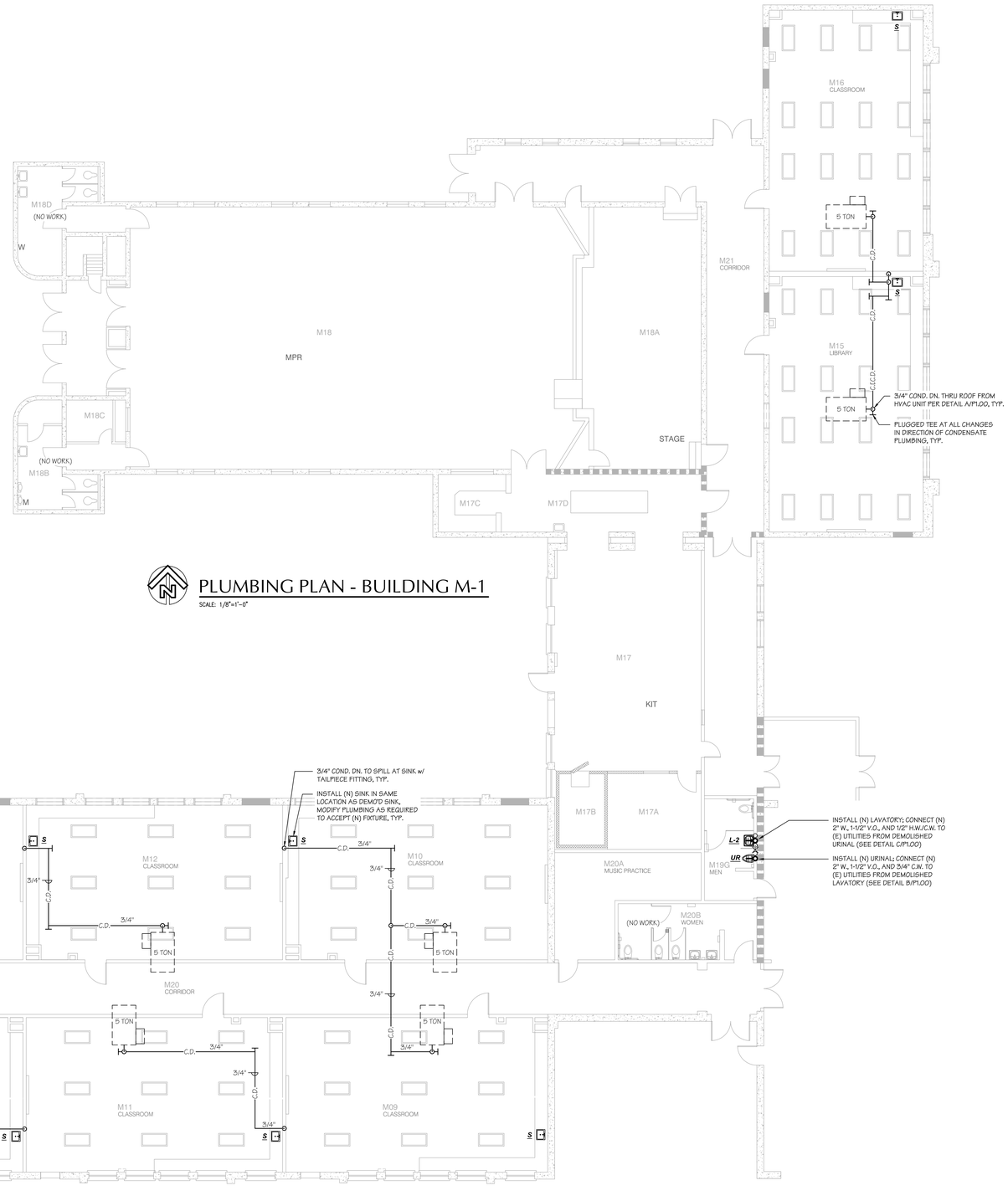
No	Date	Item
1	00.00.08	DESCRIPTION

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:53

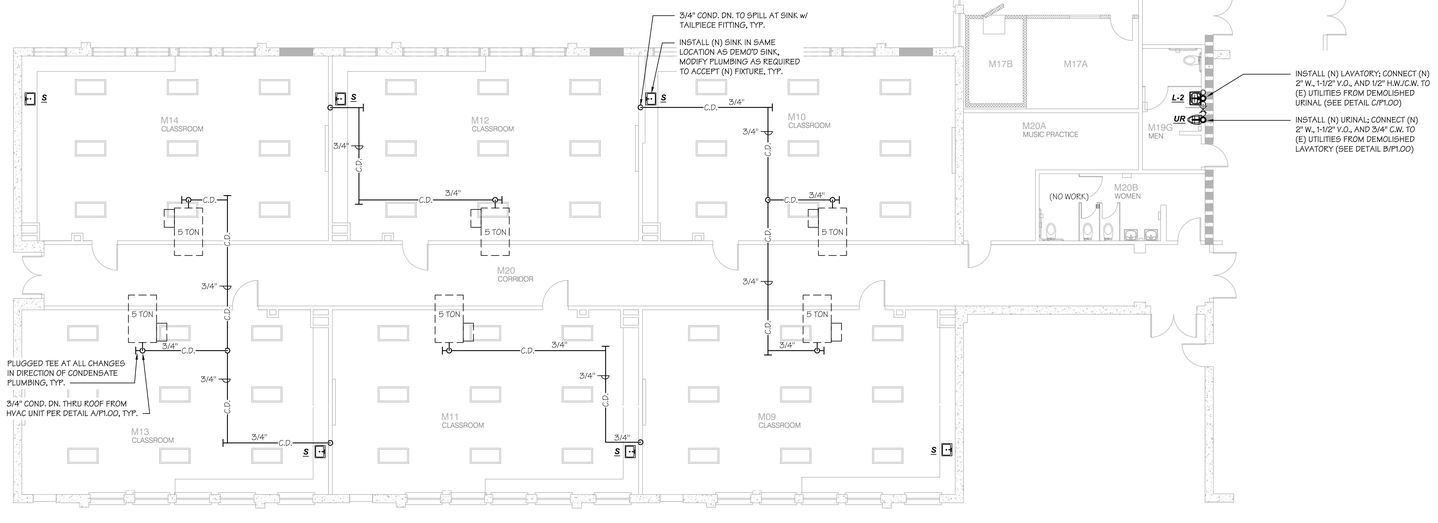
PLUMBING DEMOLITION PLANS - BUILDING B, C, D, & E

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23



PLUMBING PLAN - BUILDING M-1

SCALE: 1/8"=1'-0"



PLUMBING PLAN - BUILDING M-2

SCALE: 1/8"=1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES ROSE
No. M26577
EXP. 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

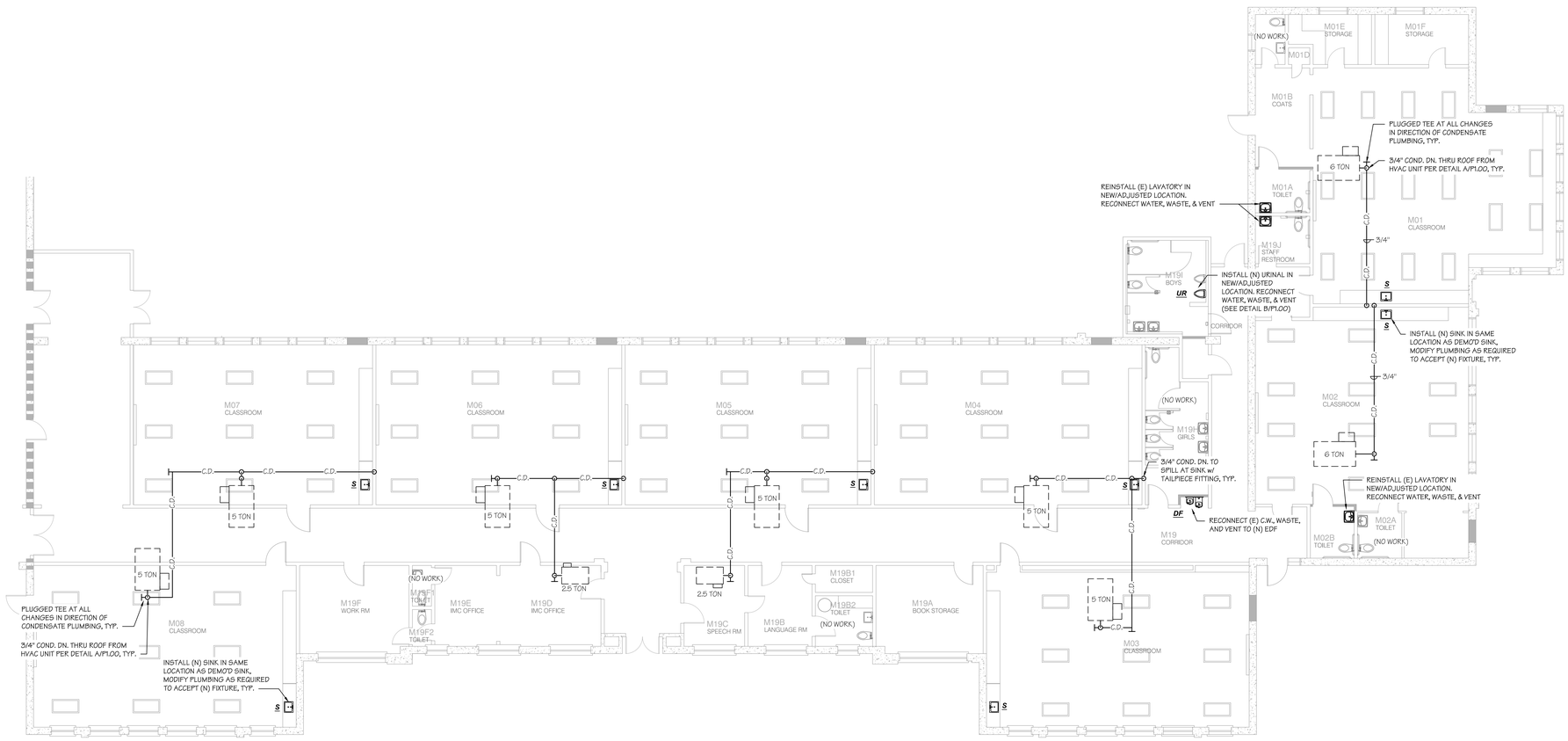
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:53

PLUMBING PLANS -
BUILDINGS M-1 & M-2

P2.20

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23



PLUMBING PLAN - BUILDING M-3

SCALE: 1/8"=1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
JAMES WILLIAM BASKIN
No. M26570
EXP. 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

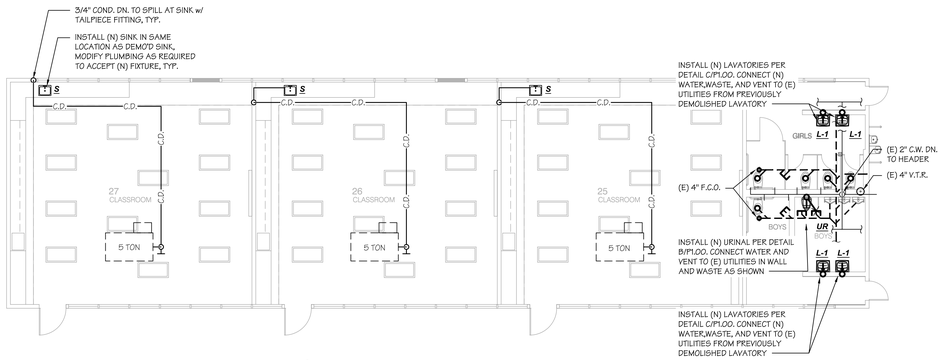
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:53

PLUMBING PLAN - BUILDING M-3

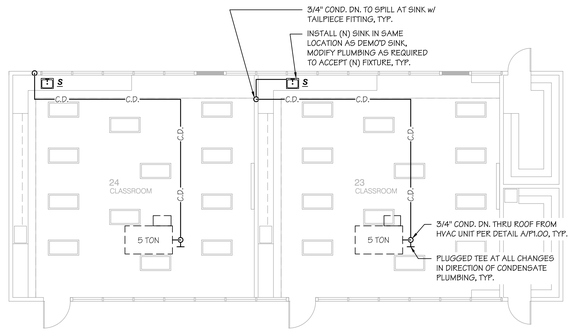
P2.21

BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23



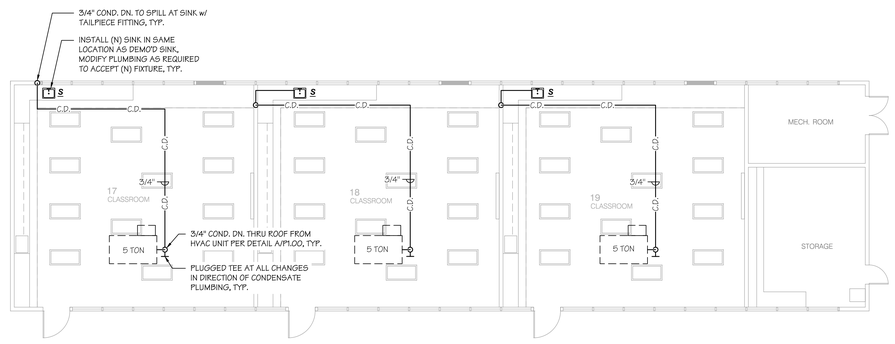
PLUMBING PLAN-BLDG B

SCALE: 1/8"=1'-0"



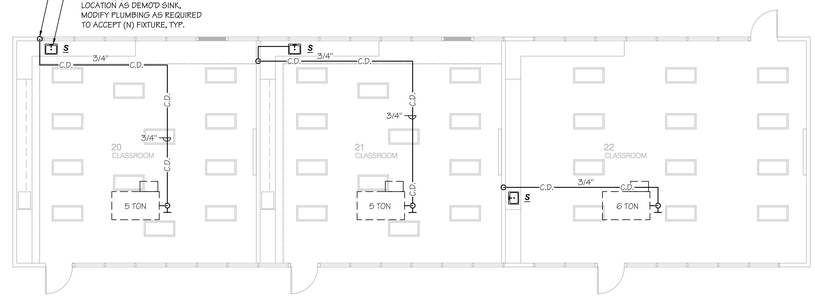
PLUMBING PLAN-BLDG C

SCALE: 1/8"=1'-0"



PLUMBING PLAN-BLDG D

SCALE: 1/8"=1'-0"



PLUMBING PLAN-BLDG E

SCALE: 1/8"=1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES ROSE
No. M26537
EXP 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

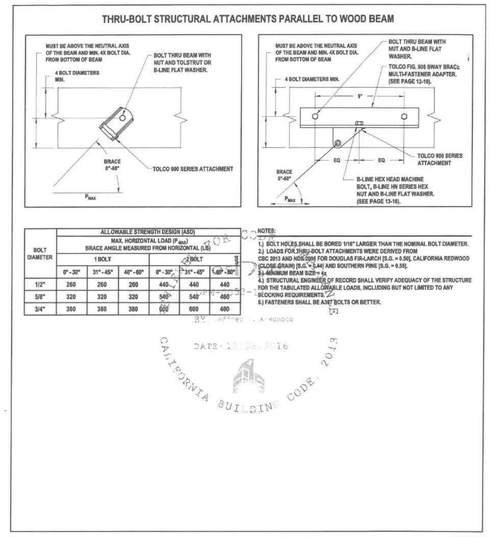
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:53

PLUMBING PLANS -
BUILDINGS B, C, D, & E

P2.22

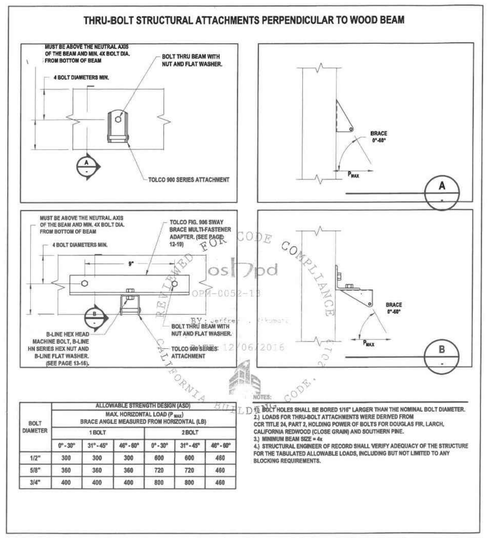
BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23



12/06/2016 OPM-0052-13: Reviewed for Code Compliance by Jeffrey Kikumoto Page 406 of 501

THRU-BOLT STRUCTURAL ATTACHMENTS PARALLEL TO WOOD BEAM (C)

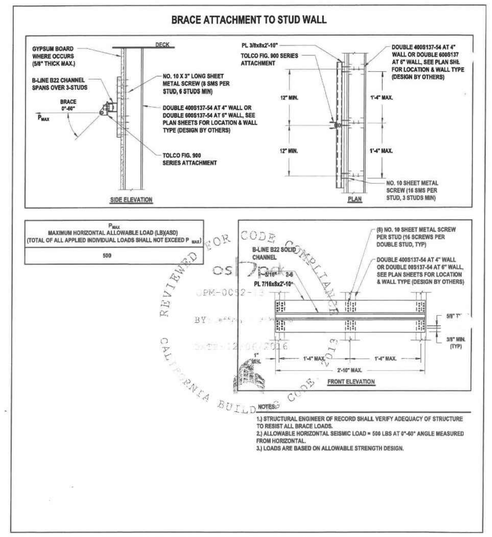
SCALE: N.T.S.



12/06/2016 OPM-0052-13: Reviewed for Code Compliance by Jeffrey Kikumoto Page 405 of 501

THRU-BOLT STRUCTURAL ATTACHMENTS PERPENDICULAR TO WOOD BEAM (B)

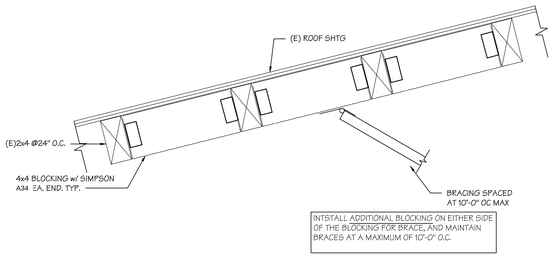
SCALE: N.T.S.



12/06/2016 OPM-0052-13: Reviewed for Code Compliance by Jeffrey Kikumoto Page 404 of 501

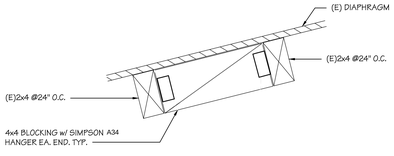
BRACE ATTACHMENT TO STUD WALL (A)

SCALE: N.T.S.



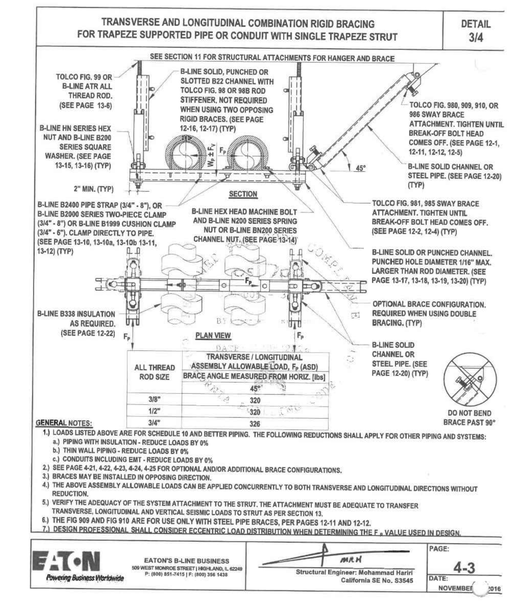
BLOCKING FOR BRACE CONN. (G)

SCALE: N.T.S.



BLOCKING FOR HANGER CONN. (H)

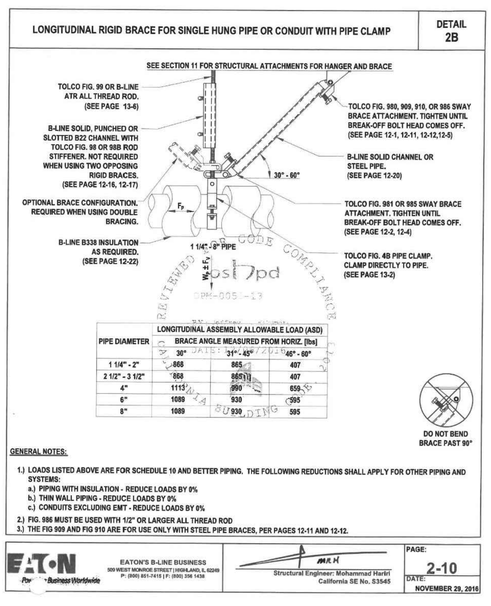
SCALE: N.T.S.



12/06/2016 OPM-0052-13: Reviewed for Code Compliance by Jeffrey Kikumoto Page 132 of 501

TRAVERSE AND LONGITUDINAL COMBINATION RIGID BRACING FOR TRAPEZE SUPPORTED PIPE OR CONDUIT WITH SINGLE TRAPEZE STRUT (F)

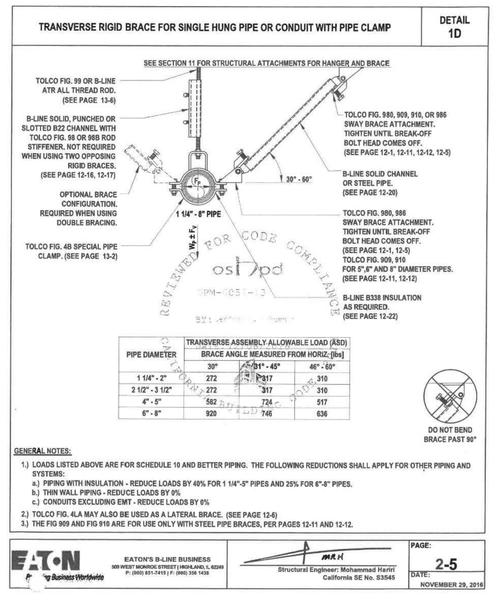
SCALE: N.T.S.



12/06/2016 OPM-0052-13: Reviewed for Code Compliance by Jeffrey Kikumoto Page 85 of 501

LONGITUDINAL RIGID BRACE SINGLE HUNG PIPE OR CONDUIT WITH PIPE CLAMP (E)

SCALE: N.T.S.



12/06/2016 OPM-0052-13: Reviewed for Code Compliance by Jeffrey Kikumoto Page 81 of 501

TRANSVERSE RIGID BRACE FOR SINGLE HUNG PIPE OR CONDUIT WITH PIPE CLAMP (D)

SCALE: N.T.S.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue , Suite 240
Bakersfield , California , 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

REGISTERED PROFESSIONAL ENGINEER
MARK JAMES BARNES
No. M26537
EXP. 06-30-24
MECHANICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item
1	00.00.00	DESCRIPTION

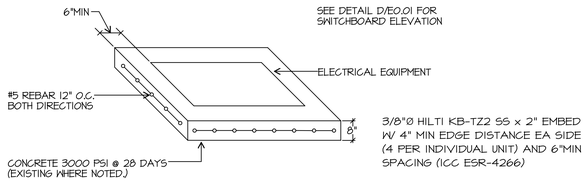
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

10.31.23 13:53

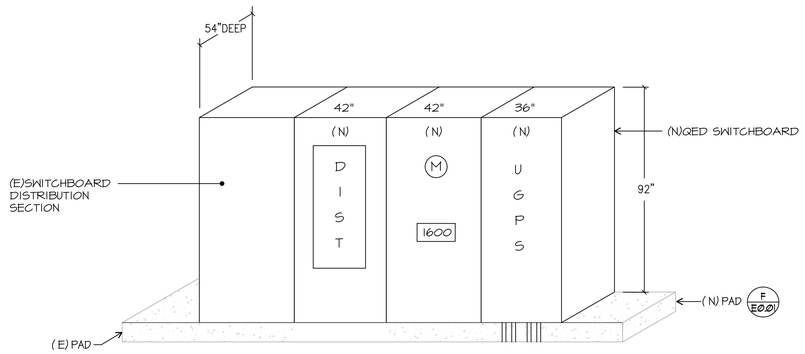
PIPE BRACING DETAILS

P4.10

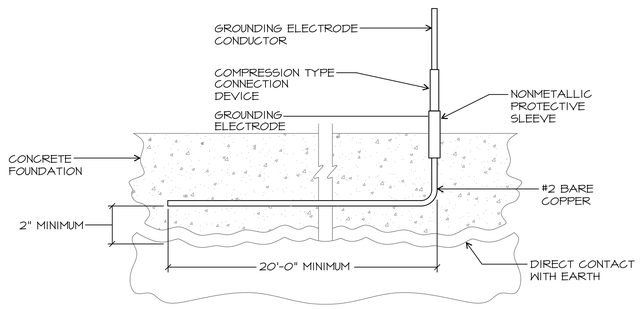
BME BASKIN MECHANICAL ENGINEERS
175 Fulton Street
Fresno, CA 93721
Tel: (559) 237-0376
Job: 22014
Plt: 10-19-23



HOUSEKEEPING PAD DETAIL (F)
SCALE: NONE

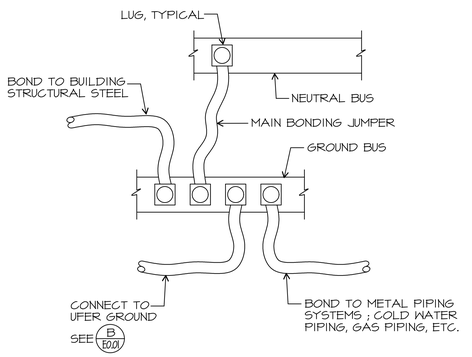


SWITCHBOARD ELEVATION (D)
SCALE: NONE



THE GROUNDING SYSTEM SHALL CONSIST OF A "UFER" TYPE 20' LONG OF #2 BARE COPPER CONDUCTOR EMBEDDED ALONG THE BOTTOM OF A CONCRETE FOOTING OR GRADE BEAM THAT IS IN DIRECT CONTACT WITH THE EARTH.

UFER GROUND DETAIL (C)
SCALE: NONE



BONDING DIAGRAM (B)
SCALE: NONE

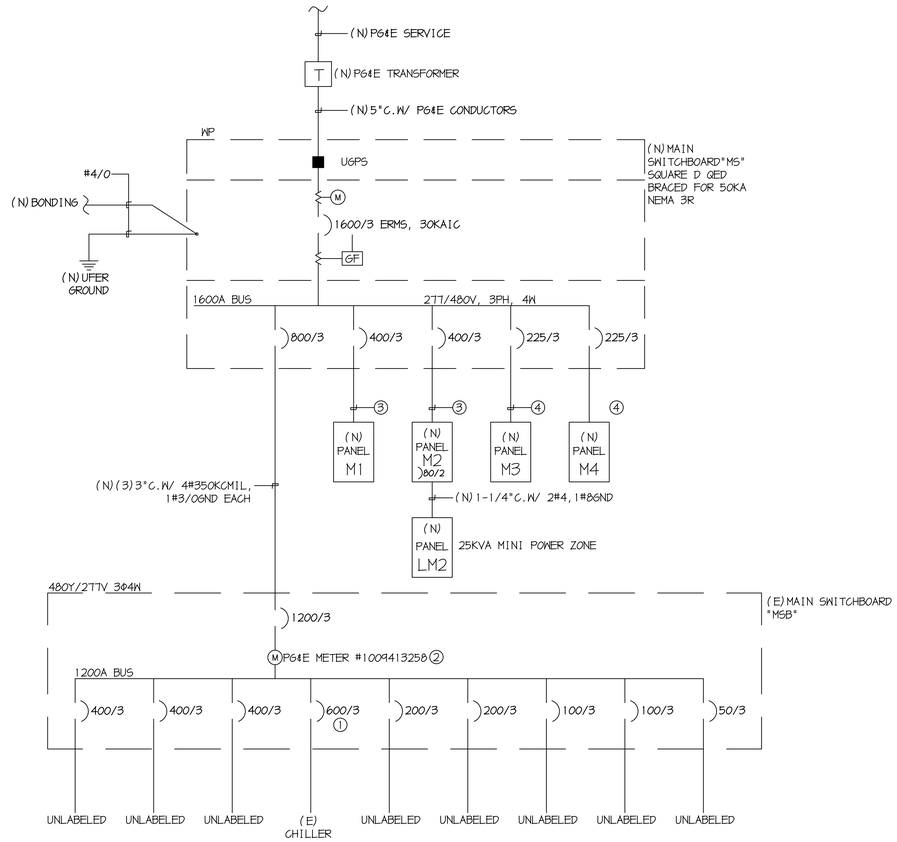
ELECTRICAL LOAD CALCULATIONS

EXISTING MAXIMUM DEMAND
MINUS CHILLER LOAD = 382A
382A X 1.25 = 478A

PANEL M1 ; 289A
PANEL M2 ; 393A
PANEL M3 ; 216A
PANEL M4 ; 180A

TOTAL = 1556A

AT277/480 VOLTS 3 PHASE = 1,296,148VA



SINGLE LINE DIAGRAM (A)

SINGLE LINE NOTES

1. REMOVE EXISTING CHILLER FEED BREAKER
2. EXISTING METER SOCKET TO BE BLANKED OFF
3. (N)(2) 2-1/2"C. W/(4) #3/0 (1) #3GND
4. (N)(1) 2-1/2"C. W/(4) #4/0, (1) #6GND

GENERAL NOTES

1. VISIT JOB SITE AND VERIFY EXISTING CONDITIONS PRIOR TO BID.
2. THE ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2019 CALIFORNIA ELECTRICAL CODE AND ALL APPLICABLE LOCAL ORDINANCES. WHERE PLANS CALL FOR A HIGHER STANDARD THAN APPLICABLE CODES, THE PLANS SHALL GOVERN.
3. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS.
4. ALL ELECTRICAL EQUIPMENT, APPLIANCES AND LIGHTING FIXTURES SHALL BE LISTED BY A RECOGNIZED TEST LAB AND BEAR THAT LABEL OF APPROVAL.
5. CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT ALL MATERIAL AND EQUIPMENT FOR THIS WORK UNLESS OTHERWISE NOTED.
6. FURNISH DISCONNECT SWITCHES AT REMOTE MOTORS.
7. ALL SPACES AS INDICATED ON PANELS OR SWITCHBOARDS SHALL BE COMPLETE WITH HARDWARE AND BUSSING FOR FUTURE BREAKER OR SWITCH.
8. CHECK ARCHITECTURAL PLANS FOR DOOR SWINGS BEFORE INSTALLING SWITCH OUTLETS.
9. GROUNDING AND BONDING SHALL BE PER CODE PLUS ANY ADDITIONAL PROVISIONS SPECIFIED OR SHOWN ON DRAWINGS.
10. ALL CONDUIT RUNS SHALL CONTAIN A CODE SIZED GREEN GROUND WIRE.
11. THESE PLANS ARE NOT COMPLETE UNTIL APPROVED BY THE AUTHORITY HAVING JURISDICTION.
12. ALL FEEDER CONDUCTORS SHALL BE IN CONDUIT. BRANCH CIRCUITS MAY BE NON-METALLIC SHEATHED CABLE.
13. ALL CONDUCTORS SHALL BE COPPER WITH TYPE THHN/THWN INSULATION.
14. COORDINATE WITH SERVING ELECTRICAL UTILITY COMPANY AND MAKE PROVISIONS FOR ELECTRICAL SERVICE ACCORDINGLY. INCLUDE ALL SERVICE COSTS AND UTILITY COMPANY CHARGES IN BID.

SYMBOLS

	CONDUIT EXISTING
	CONDUIT CONCEALED IN WALL OR CEILING
	CONDUIT CONCEALED UNDER FLOOR OR BELOW GRADE
	CONDUIT STUBBED OUT AND CAPPED
	CONDUIT TURNED UP
	CONDUIT TURNED DOWN
	HATCH MARKS INDICATE NO. OF #12 WIRES IN CODE SIZED CONDUIT (3) MAX. IN 1/2" C., (5) MAX. IN 3/4" C., (8) MAX. IN 1"C., NO MARKS = 2#12
A-3 / 5	HOME RUN: LETTER INDICATES PANEL, NUMBER(S) INDICATES CIRCUIT(S).
	SAWCUT
	GROUND CONNECTION
	DISTRIBUTION SWITCHBOARD OR PANEL
	PANEL, BRANCH CIRCUIT TYPE, SURFACE AND FLUSH
	SIGNAL TERMINAL CABINET, SURFACE & FLUSH
	LINEAR SURFACE FIXTURE
2	OUTLET DATA: BAR INDICATES WALL MOUNT, LETTER INDICATES SWITCH CONTROL, NO. INDICATES CIRCUIT.
	SURFACE FIXTURE ON FLUSH OUTLET.
	RECESSED FIXTURE WITH JUNCTION BOX FOR THRU WIRING
	EXIT LIGHT WITH ARROWS AS SHOWN ON PLANS, WALL AND CEILING MOUNT.
	LOW LEVEL EXIT SIGN, +6" AFF, +4" FROM DOOR JAMB
A / 100	LIGHT FIXTURE DESIGNATION, LETTER INDICATES TYPE, NO. INDICATES WATTAGE. SEE FIXTURE SCHEDULE.
FC / 1	MECHANICAL EQUIPMENT DESIGNATION. SEE MECHANICAL DRAWINGS.
	SPECIAL RECEPTACLE - SEE PLAN
M	METER
	FLUSH FLOOR RECEPTACLE
	RECEPTACLE, DUPLEX, 15A, 125V, NEMA 5-15R +18" U.N.O.
	DUPLEX RECEPTACLE MTD. ABOVE BACKSPLASH
	DUPLEX RECEPTACLE W/LOWER HALF SWITCHED
GFI	GROUND FAULT CIRCUIT INTERRUPTING RECEPTACLE
	DOUBLE DUPLEX RECEPTACLE
	CEILING RECEPTACLE
	RECEPTACLE, DUPLEX, 20A, 125V, NEMA 5-20R +18" U.N.O.
J	JUNCTION BOX 4" SQUARE, 1-1/2" DEEP U.N.O.
T	THERMOSTAT F.B.O. +48"
2	MOTOR, NO. INDICATES HORSEPOWER
	CLOCK OUTLET +7'-6" U.N.O.
	DISCONNECT SWITCH, NON-FUSED
F	DISCONNECT SWITCH FUSED HORSEPOWER RATED OR SIZED AS NOTED
	COMBINATION MAGNETIC STARTER WITH DISCONNECT SWITCH AND FUSES
	MAGNETIC MOTOR STARTER W/OVERLOADS IN EACH PHASE
D	DIMMER W/INTEGRAL "ON-OFF" SW.
	PUSHBUTTON
PC	PHOTOCELL
SD	SMOKE DETECTOR
	TELEPHONE/COMPUTER/DATA OUTLET, TWO GANG BOX W/1 GANG COVERPLATE & GROMMETED OPENING +18" U.N.O.
CATV	CABLE TV OUTLET +18" U.N.O.
M	MOTION SENSOR
$	EXISTING SWITCH
S	SINGLE POLE SWITCH
^{2}	DOUBLE POLE SWITCH
^{3}	THREE WAY SWITCH
^{P}	SWITCH W/PILOT LT.
	QUIET TOGGLE TYPE RATED AT 20A, 120/277V AC. +42" U.N.O.
^{M}	MANUAL MOTOR STARTER
FACP	FIRE ALARM CONTROL PANEL
GFI	GROUND FAULT CIRCUIT INTERRUPTING
LST	LABOR SAVING TANDEM
MLO	MAIN LUGS ONLY
W/	WITH
C.O.	CONDUIT ONLY
W.P.	WEATHERPROOF
F.B.O.	FURNISHED BY OTHERS, INSTALL & CONNECT
U.N.O.	UNLESS NOTED OTHERWISE
N.E.C.	NATIONAL ELECTRICAL CODE
N.I.C.	NOT IN CONTRACT
(E)	EXISTING
(N)	NEW
(R)	REMOVE
(RL)	RELOCATE
S/M	SURFACE MOUNT
U/G	UNDERGROUND
CWP	COLD WATER PIPE
AFF	ABOVE FINISHED FLOOR
HACR	HEATING AND AIR CONDITIONING RATED CIRCUIT BREAKER
N.L.	NIGHT LIGHT

NOTE: NOT ALL SYMBOLS SHOWN ARE USED ON THIS PROJECT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-23
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9210
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

LICENSED PROFESSIONAL ENGINEER
ELECTRICAL
No. E13083
EXP. 09/30/2024
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

SINGLE LINE DIAGRAM
GENERAL NOTES

E0.01

(N) PANEL " M3 "

SERVICE: 277/480V 3Φ 4W | MAIN BKR.: 225A | BUS: 225A | LOC.: SEE PLAN | MTG :SURFACE

REMARKS	LOAD ΦA	LOAD ΦB	LOAD ΦC	REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	LOAD ΦC	REMARKS
HP-1	7401						3	30	1	2	30	3				7401			HP-1
"		7401							3	4							7401		"
"			7401						5	6								7401	"
HP-1	7401						3	30	7	8	30	3				7401			HP-1
"		7401							9	10							7401		"
"			7401						11	12								7401	"
HP-1	7401						3	30	13	14	30	3				7401			HP-1
"		7401							15	16							7401		"
"			7401						17	18								7401	"
									19	20									
									21	22									
									23	24									
									25	26									
									27	28									
									29	30									
									31	32									
									33	34									
									35	36									
									37	38									
									39	40									
									41	42									
	22203	22203	22203													22203	22203	22203	

TOTAL WATTS= 133218 | ΦA= 44406 | ΦB= 44406 | ΦC= 44406

AMPS= 160.24 +8.97(1.25 X LARGEST MOTOR)=169.21A | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM

(N) PANEL " M4 "

SERVICE: 277/480V 3Φ 4W | MAIN BKR.: 225A | BUS: 225A | LOC.: SEE PLAN | MTG :

REMARKS	LOAD ΦA	LOAD ΦB	LOAD ΦC	REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	LOAD ΦC	REMARKS
HP-1	7401						3	40	1	2	40	3				7401			HP-1
"		7401							3	4							7401		"
"			7401						5	6								7401	"
HP-1	7401						3	40	7	8	40	3				7401			HP-1
"		7401							9	10							7401		"
"			7401						11	12								7401	"
HP-1	7401						3	40	13	14									
"		7401							15	16									
"			7401						17	18									
									19	20									
									21	22									
									23	24									
									25	26									
									27	28									
									29	30									
									31	32									
									33	34									
									35	36									
									37	38									
									39	40									
									41	42									
	22203	22203	22203													14802	14802	14802	

TOTAL WATTS= 111015 | ΦA= 37005 | ΦB= 37005 | ΦC= 37005

AMPS= 133.53 +8.97(1.25 X LARGEST MOTOR)=142.5A | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM

(N) PANEL " M1 "

SERVICE: 277/480V 3Φ 4W | MAIN BKR.: 400A | BUS: 400A | LOC.: SEE PLAN | MTG :

REMARKS	LOAD ΦA	LOAD ΦB	LOAD ΦC	REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	LOAD ΦC	REMARKS
HP-1A	7401						3	30	1	2	30	3				7401			HP-1E
"		7401							3	4							7401		"
"			7410						5	6								7401	"
HP-1B	7401						3	30	7	8	30	3				7401			HP-1F
"		7401							9	10							7401		"
"			7401						11	12								7401	"
HP-1C	7401						3	30	13	14	30	3				7401			HP-1G
"		7401							15	16							7401		"
"			7401						17	18								7401	"
HP-1D	7401						3	30	19	20	30	3				7401			HP-1H
"		7401							21	22							7401		"
"			7401						23	24								7401	"
									25	26									
									27	28									
									29	30									
									31	32									
									33	34									
									35	36									
									37	38									
									39	40									
									41	42									
	29604	29604	29613													29604	29604	29604	

TOTAL WATTS= 177633 | ΦA= 59208 | ΦB= 59208 | ΦC= 59217

AMPS= 213.66 +8.97(1.25 X LARGEST MOTOR)=222.63A | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM

(N)PANEL ' LM2 '

SERVICE: 120/240V 1Φ 3W | MAIN BREAKER: 100A | BUS: 100A | LOC.: SEE PLAN

SQUARE D 25KVA MINI POWER ZONE | MTG.: SURFACE

REMARKS	LOAD ΦA	LOAD ΦB	REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	REMARKS
HP-3	4638					2	45	1	2	45	2				4638		HP-3
"		4638				X	X	3	4	X	X					4638	"
								5	6								
								7	8								
								9	10								
	4638	4638													4638	4638	

TOTAL WATTS= 18552 | ΦA= 9276 | ΦB= 9276

AMPS= 89.192 | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM

(N) PANEL " M2 "

SERVICE: 277/480V 3Φ 4W | MAIN BKR.: 400A | BUS: 400A | LOC.: SEE PLAN | MTG :

REMARKS	LOAD ΦA	LOAD ΦB	LOAD ΦC	REC	LTG	MISC	POLE	TRIP	CIRC	CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	LOAD ΦC	REMARKS
HP-1	7401						3	30	1	2	30	3				7401			HP-1
"		7401							3	4							7401		"
"			7401						5	6								7401	"
HP-1	7401						3	30	7	8	30	3				7401			HP-1
"		7401							9	10							7401		"
"			7401						11	12								7401	"
HP-1	7401						3	30	13	14	30	3				7401			HP-1
"		7401							15	16							7401		"
"			7401						17	18								7401	"
HP-2	7030						3	30	19	20	30	3				7030			HP-2
"		7030							21	22							7030		"
"			7030						23	24								7030	"
									25	26									
									27	28									
									29	30									
									31	32									
									33	34									
									35	36									
									37	38									
									39	40	60	2					9276		PANEL LM2
									41	42	——	——						9276	"
	29233	29233	29233													29233	38509	38509	

TOTAL WATTS= 193950 | ΦA= 58466 | ΦB= 67742 | ΦC= 67742

AMPS= 233.29 +13.9(1.25 X LARGEST MOTOR)=257.19 | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22104
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9216
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
MATTHEW C. MALONEY
No. E013083
EXP. 06/30/2025
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

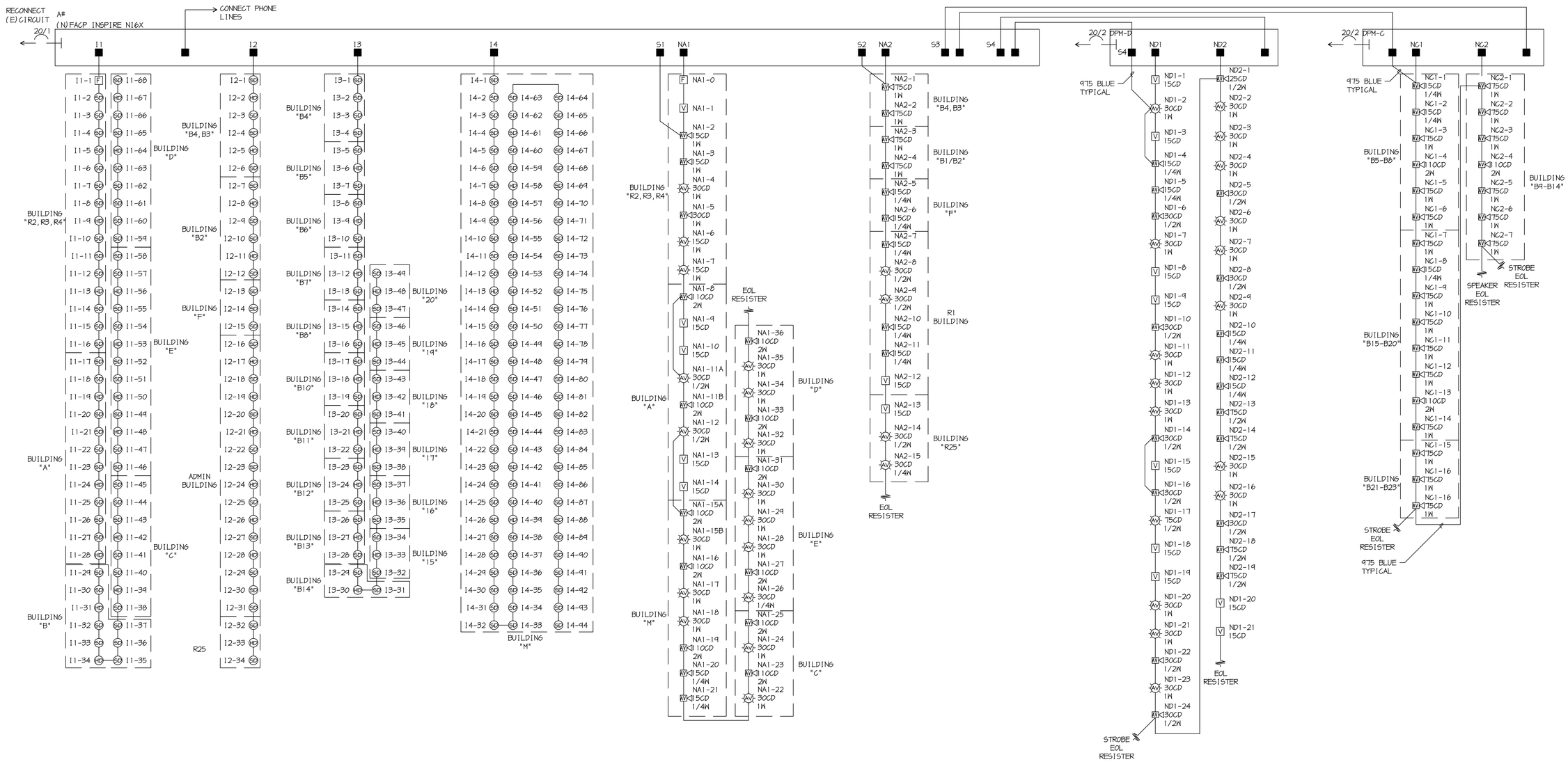
REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

PANEL SCHEDULES

E0.02



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
EDWARD J. MALONEY
No. E13083
EXP. 06/30/2024
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	11.04.22
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF THE ADDINGTON PARTNERSHIP. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THE ADDINGTON PARTNERSHIP. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

FIRE ALARM RISER

E0.03

FIRE ALARM SEQUENCE OF OPERATION

	INPUT & OUTPUT MATRIX	SYSTEM INPUTS: AREA SMOKE DETECTOR	AREA HEAT DETECTOR	FIRE ALARM SYSTEM AC POWER FAILURE	FIRE ALARM SYSTEM LOW BATTERY	OPEN CIRCUIT	GROUND FAULT	NOTIFICATION APPLIANCE CIRCUIT SHORT
	SYSTEM OUTPUTS							
Control Unit Annunciation	ACTUATE COMMON ALARM 516NAL INDICATOR (RED LED)	●	●					
	ACTUATE AUDIBLE ALARM 516NAL (PIEZO BUZZER)	●	●					
	ACTUATE COMMON SUPERVISORY 516NAL INDICATOR (AMBER LED)							
	ACTUATE AUDIBLE SUPERVISORY 516NAL (PIEZO BUZZER)							
	ACTUATE COMMON TROUBLE 516NAL INDICATOR (AMBER LED)			●	●	●	●	●
	ACTUATE AUDIBLE COMMON TROUBLE 516NAL (PIEZO BUZZER)			●	●	●	●	●
Notification	ACTUATE EVACUATION SIGNAL THROUGHOUT THE BUILDING SPEAKERS & SPEAKER/STROBES	●	●					
	TRANSMIT FIRE ALARM 516NAL TO SUPERVISING STATION	●	●					
	TRANSMIT SUPERVISORY 516NAL TO SUPERVISING STATION							
	TRANSMIT TROUBLE 516NAL TO SUPERVISING STATION			●	●	●	●	●
Supplementary								

FIRE ALARM SYMBOL LIST MATRIX

SYMBOL	DEVICE	MFR & CAT#	REMARKS	CSFM LISTING
■	MAIN FIRE ALARM PANEL	NOTIFIER NFS2-640	SURFACE MOUNT W/ SOFTWARE UPDATE	7165-0028:0243
DPM	ADDRESSABLE DISTRIBUTED POWER MODULE	NOTIFIER ACPS-210	SURFACE MOUNT U.N.O.	7315-0028:0243
DVC	DIGITAL VOICE COMMAND	NOTIFIER DVM EM	SURFACE MOUNT	7165-0028:0224
DAA-5025	DIGITAL AUDIO AMPLIFIER	NOTIFIER DAA-5025	PART OF DVC	7165-0028:0224
DAC	FIRE ALARM COMMUNICATOR	NOTIFIER 411UDACT	PART OF NFS2-640	7300-0075:0174
SD	SMOKE DETECTOR	NOTIFIER FSP-851	PROVIDE BASE B210 LP(A) ON 4"SQ. DEEP BOX	7272-0028:0206
QD	MULTI-CRITERIA DETECTOR	NOTIFIER FSC-851QD	PROVIDE BASE B210 LP(A) ON 4"SQ. DEEP BOX	7272-0028:0255
HD	HEAT DETECTOR (IN ATTIC SPACE)	NOTIFIER FST-851H	PROVIDE BASE B210 LP(A) ON 4"SQ. DEEP BOX	7270-0028:0196
F	ADDRESSABLE MANUAL PULL STATION	NOTIFIER NBG-12X	PROVIDE 4" SQ. DEEP BOX	7150-0028:0199
MM	MONITOR MODULE	NOTIFIER FMM-1(A)	4"SQ. DEEP EXTENSION & DBL GANG	7300-0028:0219
RM	RELAY MODULE	NOTIFIER FMM-1(A)	4"SQ. DEEP BOX	7300-0028:0219
ANN	ANNUNCIATOR	NOTIFIER NCA-2	S/M	7165-0028:0224
AV	SPEAKER STROBE	NOTIFIER SPSCR AV CM	PROVIDE DEEP SQ. J-BOX	7320-1653:0201
AV	SPEAKER STROBE	NOTIFIER SPSR AV WM	PROVIDE DEEP SQ. J-BOX	7320-1653:0505
WP S	EXTERIOR SPEAKER	SYSTEM SENSOR SPRK	PROVIDE MWBB BACKBOX	7320-1653:0201
———	FPLR CABLE	WESTPENN 975	18/2 BARE, CU, SHEILDED	7161-0859:0101
———	FPLR CABLE	WESTPENN 998	12/2 SOLID, CU, UNSHIELDED	7161-0859:0101
———	FPLR CABLE	WESTPENN AQ294	16/2 STRANDED, CU, SHIELDED W/ AQUASEAL	7161-0859:0101
———	FPLR CABLE	WESTPENN AQC294	16/2 STRANDED, CU, SHIELDED W/ AQUASEAL	7161-0859:0101

FIRE LIFE SAFETY NOTES

1 CBC 3401.12 - BUILDING AND PARTS OF THEREOF SHALL BE MAINTAINED IN A SAFE AND SANITARY CONDITION. DEVICES OR SAFEGUARDS WHICH ARE REQUIRED BY THIS CODE SHALL BE MAINTAINED IN CONFORMANCE WITH THE CODE EDITION UNDER WHICH INSTALLED. THE OWNER OR THE OWNERS DESIGNATED AGENT SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF BUILDING.

2 CFC 503.1; TITLE 19 DIVISION 1 §3.05 MAINTAIN FIRE ACCESS ROUTE(S).
PUBLIC STREET ACCESS - PROVIDE SIGN(S) 'NO PARKING FIRE LANE WITH CALIFORNIA VEHICLE CODE 22500.1' AND DETAIL. (OR INCLUDE NOTE - EXISTING NO PARKING FIRE LANE SIGN TO BE FIELD VERIFIED BY IOR)

3 CFC 503.1 - MAINTAIN / PROVIDE KEY BOXES FOR FIRE DEPARTMENT ACCESS, AS APPROPRIATE.

4 CFC 701.2 - WHERE ANY COMPONENTS IN THIS CHAPTER ARE NOT MAINTAINED AND DO NOT FUNCTION AS INTENDED OR DO NOT HAVE THE FIRE RESISTANCE REQUIRED BY THE CODE UNDER WHICH THE BUILDING WAS CONSTRUCTED, REMODELED OR ALTERED, SUCH COMPONENT(S) OR PORTIONS THEREOF SHALL BE DEEMED AN UNSAFE CONDITION, IN ACCORDANCE WITH SECTION 110.1.1. COMPONENTS OR PORTIONS THEREOF DETERMINED TO BE UNSAFE SHALL BE REPAIRED OR REPLACED TO CONFORM TO THAT CODE UNDER WHICH THE BUILDING WAS CONSTRUCTED, REMODELED, ALTERED OR THIS CHAPTER, AS DEEMED APPROPRIATE BY THE FIRE CODE OFFICIAL.

5 CFC 703.1 AND TITLE 19 DIVISION 1 §1.14 - THE REQUIRED FIRE-RESISTANCE RATING OF FIRE-RESISTANCE CONSTRUCTION (INCLUDING WALLS, FIRESTOPS, SHAFT ENCLOSURES, PARTITIONS, SMOKE-BARRIERS, FLOORS, FIRE-RESISITIVE COATINGS AND SPRAYED FIRE-RESISTANT MATERIALS APPLIED TO STRUCTURAL MEMBERS AND FIRE-RESISTANT JOINTS SYSTEMS) SHALL BE MAINTAINED. SUCH ELEMENTS SHALL BE VISUALLY INSPECTED BY THE OWNER AND PROPERLY REPAIRED, RESTORED OR REPLACED WHEN DAMAGED, ALTERED, BREACHED OR PENETRATED. OPENINGS THROUGH FIRE-RESTANCE-RATED ASSEMBLIES SHALL BE PROTECTED BY SELF- OR AUTOMATIC-CLOSING DOORS OF APPROVED CONSTRUCTION MEETING THE FIRE PROTECTION REQUIRMENTS FOR THE ASSEMBLY.

6 CFC 703.2 - OPENING PROTECTIVE SHALL BE MAINTAINED IN AN OPERATIVE CONDITION IN ACCORDANCE WITH NFPA 80. FIRE DOORS AND SMOKE BARRIER DOORS SHALL NOT BE BLOCKED OR OBSTRUCTED OR OTHERWISE BE MADE INOPERABLE. FUSIBLE LINKS SHALL BE REPLACED PROMPTLY WHENEVER FUSED OR DAMAGED. FIRE ASSEMBLIES SHALL NOT BE MODIFIED.

7 CFC 901.4; 907.8.5 AND TITLE 19 DIVISION 1 1.14 - INSTALLATION FIRE PROTECTION SYSTEM SHALL BE MAINTAINED IN ACCORDANCE WITH ORIGINAL INSTALLATION STANDARDS FOR THAT SYSTEM. REQUIRED SYSTEMS SHALL BE EXTENDED, ALTERED OR AUGMENTED AS NECESSARY TO MAINTAIN AND CONTINUE PROTECTION WHENEVER THE BUILDING IS ALTERED, REMODELED OR ADDED TO. ALTERATIONS TO FIRE PROTECTION SYSTEM SHALL BE DONE IN ACCORDANCE WITH APPLICABLE STANDARDS.

8 TITLE 19 DIVISION 1 §1.14 - EVERY FIRE ALARM SYSTEM OR DEVICE, SPRINKLER SYSTEM, FIRE EXTINGUISHER, FIRE HOSE, FIRE-RESISTIVE ASSEMBLY OR ANY OTHER FIRE SAFETY ASSEMBLY, DEVICE MATERIAL OR EQUIPMENT INSTALLED AND RETAINED IN SERVICE IN ANY BUILDING OR STRUCTURE SUBJECT TO CALIFORNIA CODE OF REGULATIONS, TITLE 19 DIVISION 1 REGULATIONS SHALL BE MAINTAINED IN AN OPERABLE CONDITION AT ALL TIMES IN ACCORDANCE WITH CALIFORNIA CODE OF REGULATIONS TITLE 19 DIVISION 1 REGULATIONS AND WITH THEIR INTENDED USE.

9 TITLE 19 DIVISION 1 §3.24 - UPON DISRUPTION OF DIMINISHMENT OF THE FIRE PROTECTIVE QUALITIES OF SUCH EQUIPMENT, MATERIAL OR SYSTEMS IMMEDIATE ACTION SHALL BE INSTITUTED TO EFFECT A REESTABLISHMENT OF SUCH EQUIPMENT MATERIAL OR SYSTEMS TO THEIR ORIGINAL NORMAL OPERATIONAL CONDITION.

10 CFC 901.5.1 - IT SHALL BE UNLAWFUL TO OCCUPY ANY PORTION OF A BUILDING OR STRUCTURE UNTIL THE REQUIRED FIRE DETECTION, ALARM SYSTEM HAS BEEN TESTED AND APPROVED.

11 CFC 901.5.1 - IT SHALL BE UNLAWFUL TO OCCUPY ANY PORTION OF A BUILDING OR STRUCTURE UNTIL THE REQUIRED FIRE DETECTION, ALARM SYSTEM HAS BEEN TESTED AND APPROVED.

12 FIRE ALARM SCOPE REQUIRES DSA APPROVED DRAWINGS FOR REFERENCE OF AREAS IN SCOPE INCLUDE COMPLIANT FIRE ALARM COMPONENTS (SMOKE-HEAT-AUDIBLE-VISUAL-MANUAL). (STATEMENT OF COMPLIANCE PER CFC 901.2.1; 901.6.2.1 & TITLE 19 DIVISION 1§ 904.1(b) 904.2(c) RECORD AS-BUILT DRAWINGS AND TEST REPORTS.) ROOMS / AREAS IN SCOPE TO INCLUDE EXISTING FIRE ALARM COMPONENTS.

13 CFC 1030.1 - THE MEANS OF EGRESS FOR BUILDING OR PORTIONS THEREOF SHALL BE MAINTAINED IN ACCORDANCE WITH THIS SECTION.

14 CFC 1030.4 - EXIT SIGNS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH SECTION 1011.

15 CFC CHAPTER 11, PROVISIONS APPLICABLE TO EXISTING BUILDING.

16 CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION APPLICABLE PROVISIONS TO BE REPLICATED VERBATIM - SAMPLE SECTIONS - 3304 PRECAUTIONS AGAINST FIRE: 3304.2 WASTE DISPOSAL; 3304.5 FIRE WATCH; 3304.6 CUTTING AND WELDING; 3305 FLAMMABLE AND COMBUSTIBLE LIQUIDS; 3308 OWNERS RESPONSIBILITY; 3310 ACCESS FOR FIREFIGHTING; 3311 MEANS OF EGRESS; 3315 FIRE EXTINGUISHERS.

FIRE ALARM SYSTEM REQUIREMENTS

1) APPLICABLE STANDARD 2016 NFPA 72
2) INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAS BEEN APPROVED BY DSA.
3) UPON COMPLETION OF THE INSTALLATION OF THE SYSTEMS, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.
4) A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
5) ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.
6) DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND /OR TESTING.
7) ALL PENETRATIONS THROUGH RATED ASSEMBLIES, REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER LAB TESTING CRITERIA. APPROVED TYPE OF MATERIALS SHALL BE IDENTFIED WITHIN THE SPECIFICATION WITHIN THE FIRE ALARM SECTION.
8) WALL MOUNTED VISUAL NOTIFICATION DEVICES SHALL HAVE THEIR ENTIRE LENS TO BE BETWEEN 80" AND 90" FROM FINISHED FLOOR.
9) WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THEN 6" TO A HORIZONTAL STRUCTURE.
10) AUDIBLE DEVICES TO BE AT LEAST 15 DBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL BUT NOT LESS THAN 75 DBA AT 10 FEET OR MORE THAN 110 DBA AT THE MINIM HEARING DISTANCE. SOUND LEVEL SHALL BE MAINTAIND FOR DURATION OF AT LEAST 60 SECTIONS 5 DBA MUST BE MAINTAINED.
11) AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN.
12) THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
13) VISUAL DEVICES SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISUAL DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.
14) UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRE TO BE APPROVAL FOR WET LOCATIONS.
15) ALL FIRE ALARM WIRING SHALL BE FLP OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE THHN OR THWN.
16) PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. THERE MUST BE AT LEAST 6' OF LEAD WIRE FROM THE BOX TO THE DEVICE. ALL BOXES TO BE SIZED PER CEC.
17) SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER.
18) ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANOR AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMETS.
19) FIRE ALARM PANEL, REMOTES, AND COMPONENETS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED THE WEIGHT OF 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS.
20) A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL". CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXTENDERS.
21) THE INSTALLING CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION PER NFPA 72, REQUIREMENTS.
22) CONTROL PANELS, REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" 23) THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.3.
24) SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
25) OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
26) A DSA CLASS 3 INSPECTOR SHALL BE HIRED BY THE DISTRICT AND APPROVED BY DSA TO INSPECT THIS PROJECT.

CONTROL STATION MONITORING
COMPANY NAME: KIMBERLITE CORP. DBA SONITROL
ADDRESS: 6321 W BEECHWOOD AVE, FRESNO, CA 93711
PHONE: 661-324-6446
LICENSE: ACO-2549
U.L. LISTING CERTIFICATE: WFX #58535-I

MEP Component Anchorage Note

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSA-approved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2019 CBC Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16 Chapters 13, 26, and 30:

1. All permanent equipment and components.
2. Temporary, movable or mobile equipment that is permanently attached (e.g. hard wired) to the building utility services such as electricity, gas or water. "Permanently attached" shall include all electrical connections except for plugs for 110/220 volt receptacles having a flexible cable.
3. Temporary, movable or mobile equipment which is heavier than 400 pounds or has a center of mass located 4 feed for more above the adjacent floor or roof level that directly support the component is required to be restrained in a manner approved by DSA.

The following mechanical and electrical components shall be positively attached to the structure but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping, and conduit. Flexible connections must allow movement in both transverse and longitudinal directions:

A. Components weighing less than 400 pounds and having a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.

B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all mechanical, electrical and plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with the above requirements.

Piping, Ductwork, and Electrical Distribution System Bracing Note

Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Sections 13.6.5, 13.6.6, 13.6.7, 13.6.8; and 2019 CBC, Sections 1617.1.24, 1617A1.25 and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a preapproved installation guide (e.g., OSHPD OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E):

MP MD PP E x Option 1: Detailed on the approved drawings with project specific notes and details.

#_____

FIRE WATCH, FIRE MARSHAL REQUIREMENTS:

REQUIREMENTS FOR DISABLING THE FIRE ALARM SYSTEM;

1. AS REQUIRED BY THE **2019 CALIFORNIA FIRE CODE**, STANDBY PERSONNEL OR SYSTEMS TEMPORARILY "OUT OF SERVICE". THE LOCAL FIRE MARSHAL IS AUTHORIZED TO REQUIRE THE CONTRACTOR TO PROVIDE STANDBY PERSONNEL AS SET FORTH IN THESE SECTIONS, UNTIL THE SYSTEM IS RESTORED TO OPERATION.

2. SUCH INDIVIDUAL SHALL BE SUBJECT TO THE LOCAL FIRE MARSHAL'S ORDER AT ALL TIMES WHEN SO EMPLOYED AND SHALL REMAIN ON DUTY DURING THE TIME SUCH PLACES ARE OPEN TO THE PUBLIC OR WHEN SUCH PUBLIC ACTIVITY IS BEING CONDUCTED. FIRE WATCH PERSONNEL SHALL BE PROVIDED WITH AT LEAST ONE APPROVED MEANS FOR NOTIFICATION OF THE FIRE DEPARTMENT.

3. SUCH INDIVIDUALS SHALL KEEP A DILIGENT WATCH FOR FIRES AND BE ABLE TO TAKE PROMPT AND APPROPRIATE ACTION IN THE EVENT OF A FIRE. SUCH INDIVIDUALS SHALL NOT BE REQUIRED OR PERMITTED, WHILE ON DUTY, TO PERFORM ANY OTHER DUTIES THAN THESE HEREIN SPECIFIED.

APPLICABLE CODE REQUIREMENTS

PERFORMANCE OF THE WORK OF THIS CONTRACT SHALL CONFORM TO THE REQUIREMENTS OF APPLICABLE GOVERNING CODES AND ORDINANCES INCLUDING THE FOLLOWING:

2022 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.

2019 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 C.C.R. (2012 IBC, VOLUMES 1-3 WITH CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 C.C.R. (2011 N.E.C. WITH CALIFORNIA AMENDMENTS)

2019 CALIFORNIA MECHANICAL CODE, PART 4, TITLE 24 C.C.R (2012 U.M.C. WITH CALIFORNIA AMENDMENTS)

2019 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 C.C.R. (2012 U.P.C. WITH CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.

2019 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2012 I.F.C. WITH CALIFORNIA AMENDMENTS)

2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R. TITLE 19 C.C.R. PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

NFPA 13 AUTOMATIC SPRINKLER SYSTEM ----------2016 EDITION

NFPA 14 STANDPIPE SYSTEM ----------2016 EDITION

NFPA 17A WET CHEMICAL SYSTEM ----------2017 EDITION

NFPA 24 PRIVATE SERVICE MAINS ----------2016 EDITION

NFPA 72 NATIONAL FIRE ALARM CODE ----------2016 EDITION (NOTE SEE UL STANDARDS 1971 FOR ("VISUAL DEVICES")

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT JAMES PATRICK FOGARTY No. C-19670 REN 11-30-23 STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9210
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER CHRISTOPHER MALONEY ELECTRICAL EXP 6/30/2024 STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

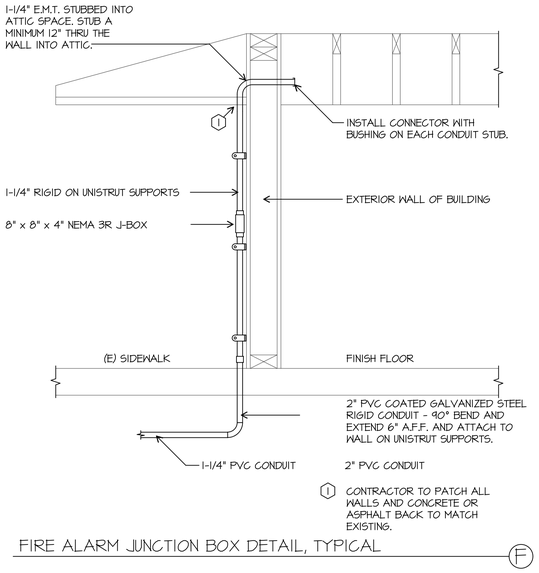
REVISIONS

No	Date	Item

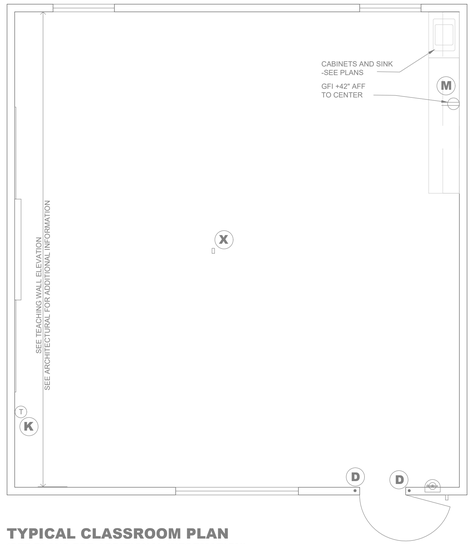
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

FIRE ALARM CALCULATIONS

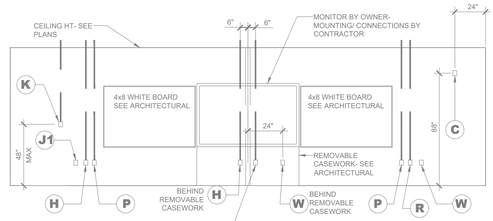
E0.04



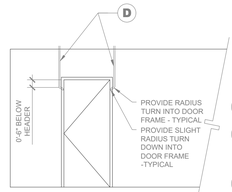
FIRE ALARM JUNCTION BOX DETAIL, TYPICAL (F)



TYPICAL CLASSROOM PLAN
(SEE PLANS FOR ADDITIONAL INFORMATION)



TEACHING WALL ELEVATION



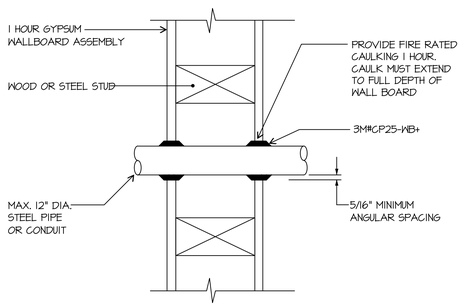
DOOR CONDUIT DETAIL

GENERAL ELECTRICAL CLASSROOM NOTES:

1. PATCH/REPAIR EXISTING FINISHES AS REQUIRED AT INSTALLATION OF PROPOSED ELECTRICAL COMPONENTS AS WELL AS MODIFIED/ ADJUSTED EXISTING COMPONENTS.
2. REMOVE/ REPLACE ALL EXISTING WALL ELECTRICAL OUTLETS AND SWITCHES. RELOCATE AS APPLICABLE TO ACCOMMODATE PROPOSED WORK.
3. RECONNECT ALL EXISTING CIRCUITS.
4. ALL PROPOSED WALL ELECTRICAL/ COMMUNICATIONS RACEWAYS TO BE CONCEALED EXCEPT WHERE MOUNTED ON MASONRY OR CONCRETE WALLS UNLESS NOTED OTHERWISE.
5. REVIEW ALL PLANS FOR SPECIFIC CONDITIONS AT EACH CLASSROOM.
6. REFER TO MECHANICAL FOR ADDITIONAL

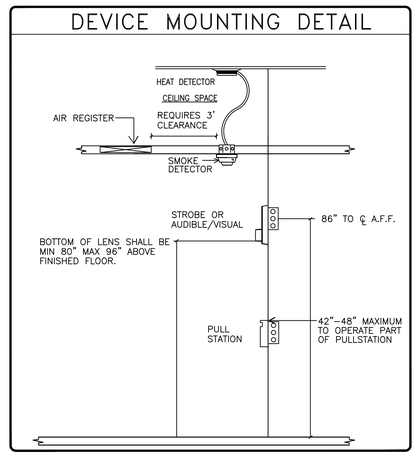
KEYNOTES

- (C) PROVIDE SURGE PROTECTED DUPLEX OUTLET FOR FUTURE IDF CABINET- 3/4" CONDUIT STUBBED ABOVE CEILING. PROVIDE SEPARATE CIRCUIT IN ELECTRICAL PANEL.
- (D) PROVIDE 1" CONDUIT FROM ATTIC TO 6" BELOW HEADER. SWEEP THROUGH KING STUD AND TRIMMER INTO VOID AREA OF DOOR JAMB FOR FUTURE DOOR LOCK CONTROLS. PROVIDE SLIGHT TURN DOWN ONCE INTO JAMB AREA. AT MASONRY/ CONCRETE WALLS, RUN SURFACE MOUNTED RACEWAY ON INTERIOR SIDE OF DOOR INTO ATTIC SPACE. ADDRESS ONE DOOR PER CLASSROOM MINIMUM.
- (H) J-BOX ONLY (DATA OUTLET) - 3/4" CONDUIT STUBBED ABOVE CEILING.
- (J1) STANDARD SURGE PROTECTED DUPLEX OUTLET. LOCATE OUTLETS AS INDICATED ON THE PLAN.
- (K) CONNECTION TO THERMOSTAT. REFER TO MECHANICAL FOR ADDITIONAL INFORMATION AND FOR LOCATION AT ALL CLASSROOMS. COORDINATE LOCATION WITH ALL PROPOSED WORK.
- (M) G.F.I. RECEPTACLE. MOUNT AS INDICATED ON PLAN AT CABINET LOCATION. MOUNT AT STANDARD HEIGHT IN CLASSROOM AREAS.
- (P) DOUBLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE 2" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RING. PROVIDE PULL STRING.
- (R) SINGLE GANG DEEP MUD RING. LOCATE AT STANDARD HEIGHT. PROVIDE 2" CONDUIT ANCHORED TO FRAMING FROM MUD RING TO ABOVE CEILING. NO HARD CONNECTIONS AT MUD RING. PROVIDE PULL STRING.
- (W) WALL MOUNTED SURGE PROTECTED QUADPLEX OUTLET. LOCATE AT STANDARD OUTLET WALL HEIGHT
- (X) PROVIDE SINGLE GANG BOX WITH CEILING MOUNTING BRACKET AT CENTER OF ROOM IN T-BAR CEILING.



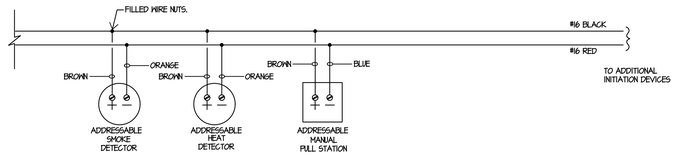
FIRE STOP PENETRATION STUD WALL (B)

DEVICE MOUNTING DETAIL

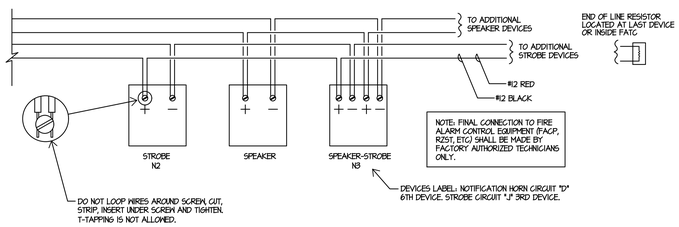


FIRE ALARM MOUNTING DETAIL (C)

TYPICAL CLASSROOM DETAIL

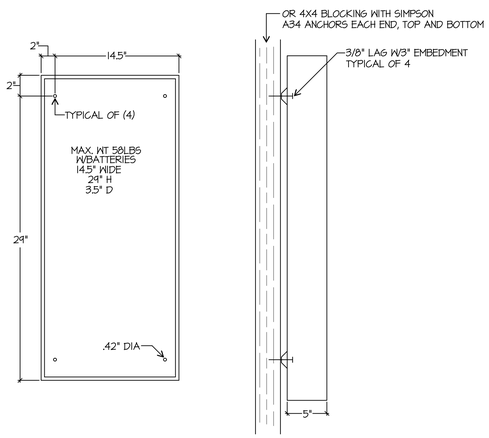


INITIATION DEVICES

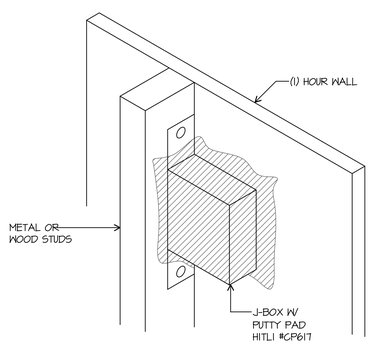


NOTIFICATION DEVICES

FIRE ALARM DEVICES TYPICAL MOUNTING DETAIL (A)



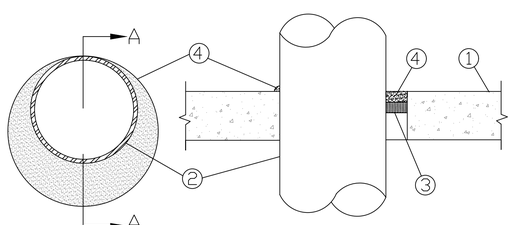
FIRE ALARM ANNUNCIATOR MOUNTING DETAIL (E)



J-BOX FIRESTOP DETAIL (G)

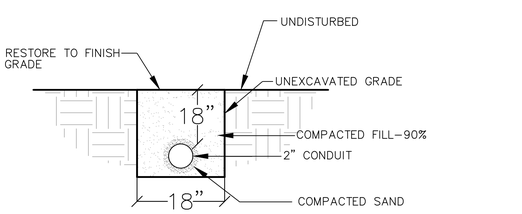
* NOTE
THIS MATERIAL WAS EXTRACTED BY 3M FIRE PROTECTION PRODUCTS FROM THE 2004 EDITION OF THE UL FIRE RESISTANCE DIRECTORY.

System No. C-AJ-1001
June 15, 2005
F Rating - 3 Hr
T Rating - 0 Hr
W Rating - Class I (See Item 4)



SECTION A-A

BLOCK WALL FIRE BARRIER DETAIL (D)



TRENCH DETAIL (I)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93101
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
ED LOE
EXP. 09/30/2023
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

FIRE ALARM DETAILS

E0.05

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
This document is used to demonstrate compliance with requirements in §110.9, §110.12(c), §130.0, §130.1, §140.6, and §141.0(b)2 for indoor lighting scopes using the prescriptive path.	
Project Name: HORACE MANN ELEMENTARY SCHOOL	Report Page: Page 1 of 6
Project Address: 2710 NILES STREET	Date Prepared: 10-12-22

A. GENERAL INFORMATION

01	Project Location (city)	BAKERSFIELD	04	Total Conditioned Floor Area (ft²)	5,800
02	Climate Zone	13	05	Total Unconditioned Floor Area (ft²)	
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	

☐ Office ☐ Retail ☐ Warehouse ☐ Hotel/Motel ☑ School ☐ Support Areas
☐ Parking Garage ☐ High-Rise Residential ☐ Relocatable ☐ Healthcare ☐ Other (write in):

B. PROJECT SCOPE
Table Instructions: Include any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)2 for alterations. WARNING: Changing the Calculation Method in this table will result in the deletion of data previously input. If you need to change the calculation method, please open a new form or use "Save As".

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☑ New Lighting System	Area Category	940		
	Add Parking Garage-Complete Bldg Method		Remove Parking Garage	
☐ Altered Lighting System				
	Add Altered Lighting System		Remove Last Altered System	
Total Area of Work (ft²)	**940**			

C. COMPLIANCE RESULTS
Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)1.	Allowed Lighting Power per §140.6(b) (Watts)						Adjusted Lighting Power per §140.6(a) (Watts)				Compliance Results
	01	02	03	04	05		06	07		08	09
	Complete Building §140.6(c)1	Area Category §140.6(c)2	Area Category Additional §140.6(c)2G (+)	Tailored §140.6(c)3 (+)	**Total Allowed** (Watts)	≥	Total Designed (Watts)	Adjustments: PAF Control Credits §140.6(a)2 (-)	=	**Total Adjusted** (Watts) *Includes Adjustments	**05 Must be ≥ 08** §140.6
	(See Table I)	(See Table I)	(See Table J)	(See Table K)			(See Table F)	(See Table P)			
Conditioned:		658			= **658**	≥	516		=	**516**	**COMPLIES**
Unconditioned:					=	≥			=		

Table Continued

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: HORACE MANN ELEMENTARY SCHOOL	Report Page: Page 2 of 6
Project Address: 2710 NILES STREET	Date Prepared: 10-12-22

Controls Compliance (See Table H for Details)	COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)	Not Applicable

D. EXCEPTIONAL CONDITIONS
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

No exceptional conditions apply to this project.

E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. INDOOR LIGHTING FIXTURE SCHEDULE
Table Instructions: Include all permanent designed lighting and all portable lighting in offices.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How Wattage is determined	Total number luminaires	Exempt per §140.6(a)3	Design Watts	Field Inspector: Pass	Field Inspector: Fail
A	LED 2X4 TROFFER	☐	☐	43	Mfr. Spec[2]	12	☐	516	☐	☐
							Total Designed Watts CONDITIONED SPACES:	**516**		

Reset | Add Row | Remove Last

[1] *FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)4B is adjusted to be 75% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.*
[2] *Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c) Wattage used must be the maximum rated for the luminaire, not the lamp.*

G. MODULAR LIGHTING SYSTEMS
This Section Does Not Apply

H. INDOOR LIGHTING CONTROLS (Not Including PAFs)
*Table Instructions: Please include lighting controls for conditioned and unconditioned spaces in this table. When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.*

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: HORACE MANN ELEMENTARY SCHOOL	Report Page: Page 3 of 6
Project Address: 2710 NILES STREET	Date Prepared: 10-12-22

Building Level Controls

01	02	03	
Mandatory Demand Response §110.12(c)	Shut-Off Controls §130.1(c)	Field Inspector: Pass	Field Inspector: Fail
	See Area/Space Level Controls	☐	☐

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Area Controls §130.1(a)	Multi-Level Controls §130.1(b)	Shut-Off Controls §130.1(c)	Primary/Skylit Daylighting §130.1(d)	Secondary Daylighting §140.6(d)	Interlocked Systems §140.6(a)1	Field Inspector: Pass	Field Inspector: Fail
TYP. CLASSROOM	Classroom, Lecture, Training, Vocational	Manual ON/ OFF	Dimmer	Vacancy	NA	NA	☐	☐	☐

*NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.
EX: Conference 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting;
EXCEPTION 1 to §130.1(d)2

13
Plan Sheet Showing Daylit Zones:

Reset | Add Row | Remove Last

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS
Table Instructions: Complete the table for each area complying using the Complete Building or Area Category Methods per §140.6(b). Indicate if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used.

Conditioned Spaces

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowances / Adjustment: Area Category	Additional Allowances / Adjustment: PAF
TYP. CLASSROOM	Classroom, Lecture, Training, Vocational	0.7	940	658	☐	☐
			TOTAL:	**940**	**658**	See Tables J or P for detail

Reset | Add Row | Remove Last

J. ADDITIONAL LIGHTING ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM
This Section Does Not Apply

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: HORACE MANN ELEMENTARY SCHOOL	Report Page: Page 4 of 6
Project Address: 2710 NILES STREET	Date Prepared: 10-12-22

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE
This Section Does Not Apply

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY
This Section Does Not Apply

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING
This Section Does Not Apply

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS
This Section Does Not Apply

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE
This Section Does Not Apply

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))
This Section Does Not Apply

Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS
This Section Does Not Apply

R. 80% LIGHTING POWER FOR ALTERATIONS - CONTROLS EXCEPTIONS
This Section Does Not Apply

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)
This Section Does Not Apply

T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://ww2.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: HORACE MANN ELEMENTARY SCHOOL	Report Page: Page 5 of 6
Project Address: 2710 NILES STREET	Date Prepared: 10-12-22

YES	NO	Form/Title	Field Inspector: Pass	Field Inspector: Fail
●	○	NRCI-LTI-01-E - Must be submitted for all buildings	☐	☐
○	●	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐	☐
○	●	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	☐	☐
○	●	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐	☐
○	●	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐	☐

U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

YES	NO	Form/Title	Field Inspector: Pass	Field Inspector: Fail
○	●	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐	☐
○	●	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐	☐
○	●	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐	☐
○	●	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	☐	☐
○	●	NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).	☐	☐

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 11/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-E
Project Name: HORACE MANN ELEMENTARY SCHOOL	Report Page: Page 6 of 6
Project Address: 2710 NILES STREET	Date Prepared: 10-12-22

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
I certify that this Certificate of Compliance documentation is accurate and complete

Documentation Author Name:	JOHN MALONEY P.E.	Documentation Author Signature:	
Company:	JMPE	Signature Date:	10-12-22
Address:	627 OLIVE STREET	CEA/ HERS Certification Identification (if applicable):	
City/State/Zip:	SANTA BARBARA, CA 93101	Phone:	805-569-9216

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	JOHN MALONEY P.E.	Responsible Designer Signature:	
Company :	JMPE	Date Signed:	10-12-22
Address:	627 OLIVE STREET	License:	E013083 06-23
City/State/Zip:	SANTA BARBARA, CA 93101	Phone:	805-569-9216

Add Responsible Person

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA
JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
221-09
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9216
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

CERTIFIED PROFESSIONAL ELECTRICAL ENGINEER
No. E013083
EXP. 06/30/2023
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

INDOOR T24

E0.06

INDOOR T24

DEMOLITION NOTES

1. IN CHILLER YARD REMOVE ALL ELECTRICAL EQUIPMENT FEEDING CHILLER/BOILER EQUIPMENT. 120/208V PANEL TO REMAIN.
2. (E) ABANDONED CABINETS TO BE REMOVED, REPLACED WITH (N) SERVICE. (D / E001)

ELECTRICAL SITE PLAN

SCALE: 1/16" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
2210A
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-8016
FAX (805) 569-2405
email - malcorp@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
EXP. 06/30/2024
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

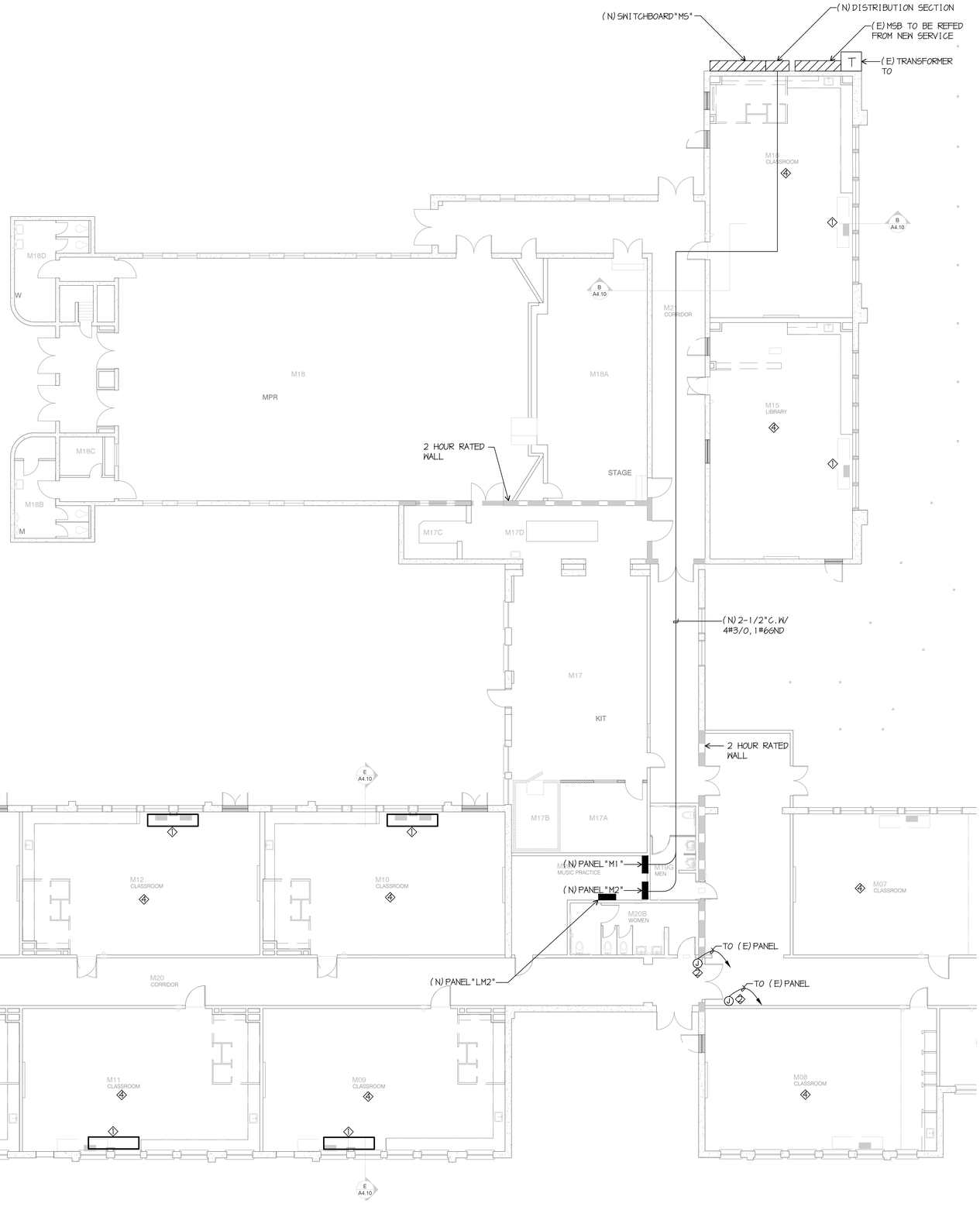
REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

ELECTRICAL SITE PLAN

E1.00



ELECTRICAL NOTES

1. UNIT VENTILATORS TO BE REMOVED. NEW JUNCTION BOX WITH BLANK COVER TO BE INSTALLED ON EXISTING CONDUIT
2. CONNECT POWER ASSISTED DOOR CIRCUIT TO BE RAN IN SURFACE MOUNTED WIREMOLD. SEE DETAIL 16 ON ARCHITECTURAL SHEET 0.005 FOR CONTROL DIAGRAM
3. AT WALLS TO BE REMOVED, DEMO ALL EXISTING DEVICES, CONDUIT, CONDUCTOR, AND CABLE TO PANEL
4. SEE TYPICAL CLASSROOM DETAIL SEE H E0.05

BUILDING M-1 AND M-2 ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
2210
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9216
FAX (805) 569-2406
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
MICHAEL J. MALONEY
No. E13083
EXP. 09/30/2024
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

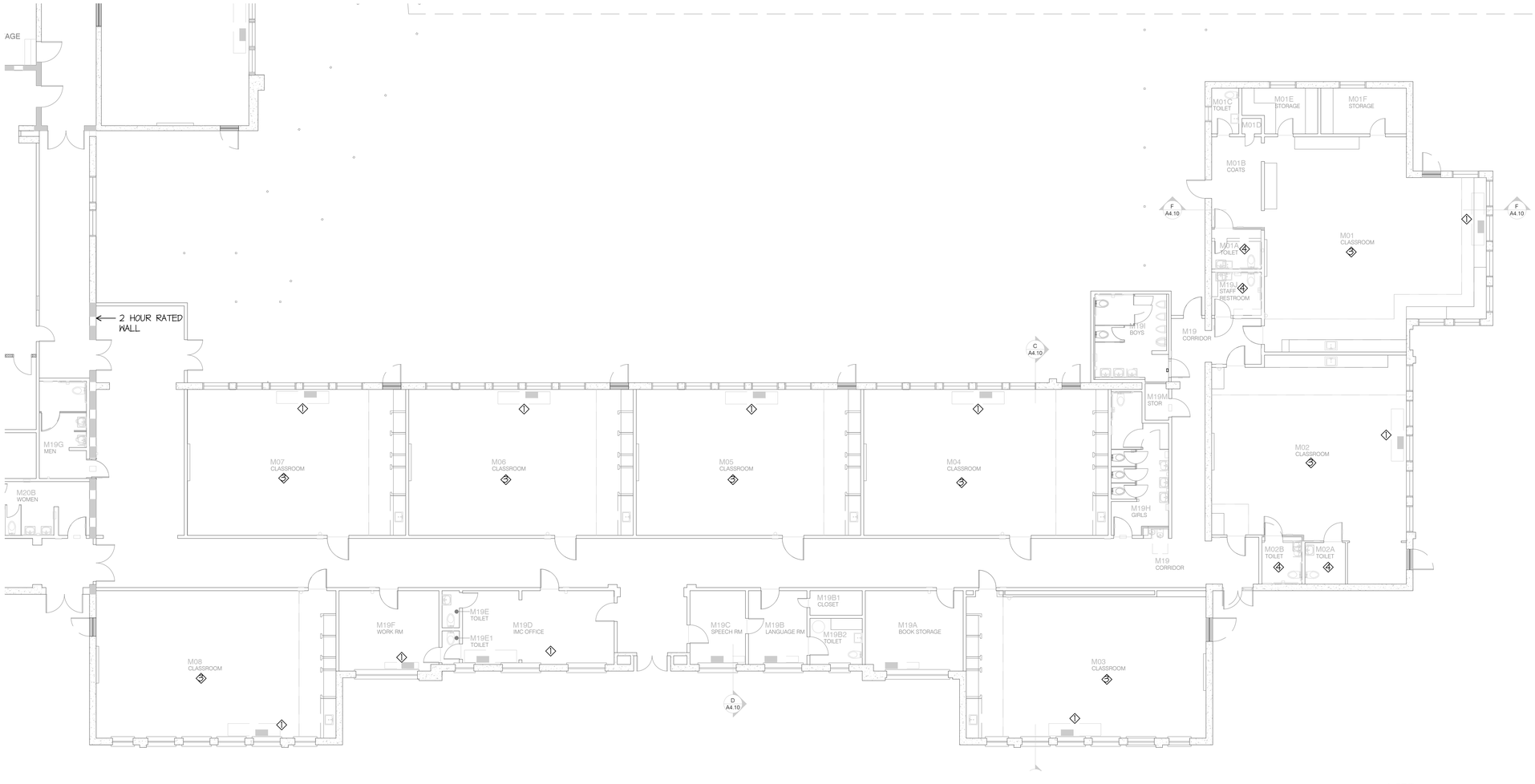
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING M-1 AND M-2 ELECTRICAL PLANS

E2.20

ELECTRICAL NOTES

1. UNIT VENTILATORS TO BE REMOVED. NEW JUNCTION BOX WITH BLANK COVER TO BE INSTALLED ON (E) CONDUIT
2. ON WALLS TO BE REMOVED, DEMO ALL DEVICES, CONDUIT, CONDUCTOR, AND CABLE TO PANEL.
3. SEE TYPICAL CLASSROOM DETAIL H E0.05
4. ON WALLS TO BE RELOCATED, RELOCATE SWITCHES AND OUTLETS. RECONNECT TO EXISTING CIRCUIT.



BUILDING M-3 ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects

3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9216
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
JAMES MALONEY
No. E13083
EXP. 08/31/2025
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

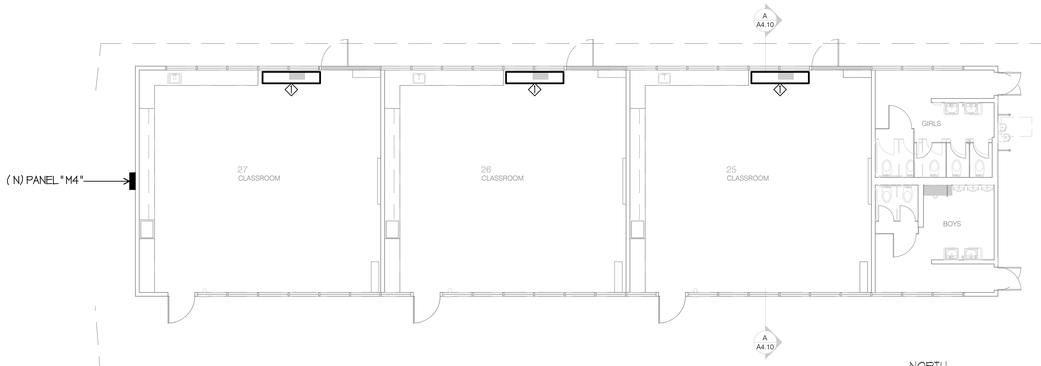
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING M-3 ELECTRICAL PLAN

E2.21

ELECTRICAL NOTES

1. UNIT VENTILATORS TO BE REMOVED. NEW JUNCTION BOX WITH BLANK COVER TO BE INSTALLED ON EXISTING CONDUIT



BUILDING B ELECTRICAL PLAN

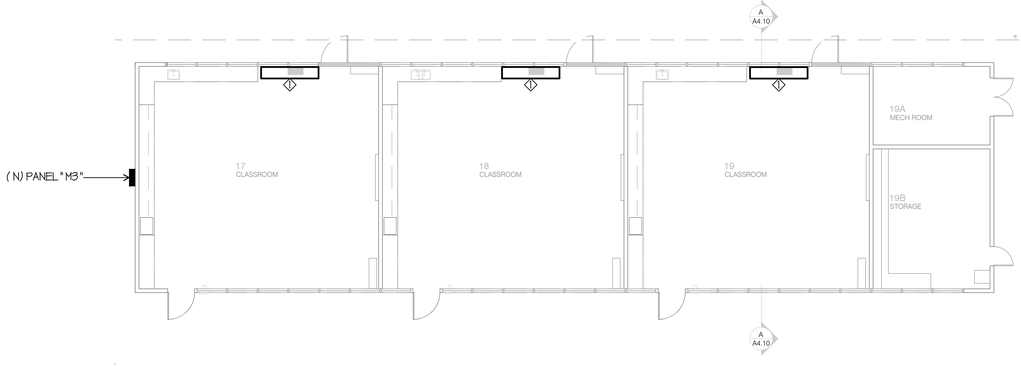
SCALE: 1/8" = 1'-0"

NORTH

BUILDING C ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"

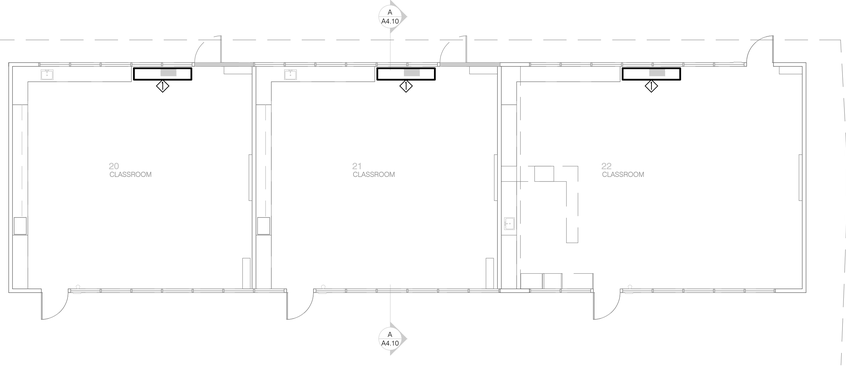
NORTH



BUILDING D ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"

NORTH



BUILDING E ELECTRICAL PLAN

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
EDWARD C. TRUJILLO
EXP. 09/30/2024
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

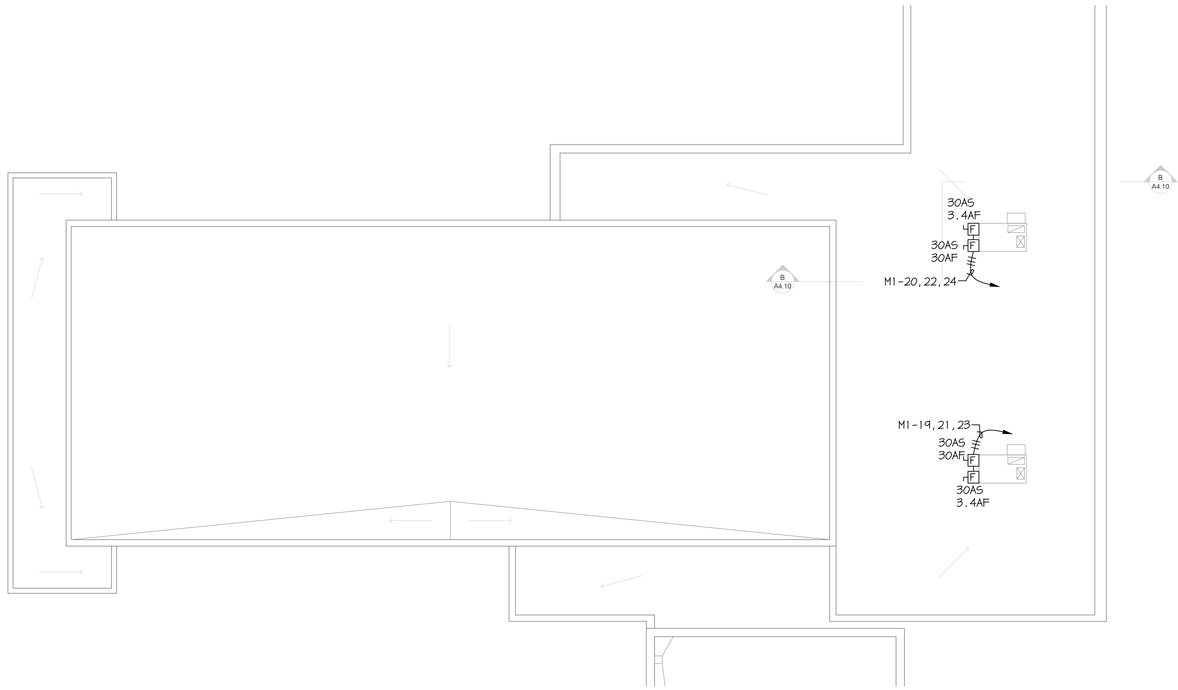
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDINGS B-E ELECTRICAL PLANS

E2.22

ELECTRICAL NOTES

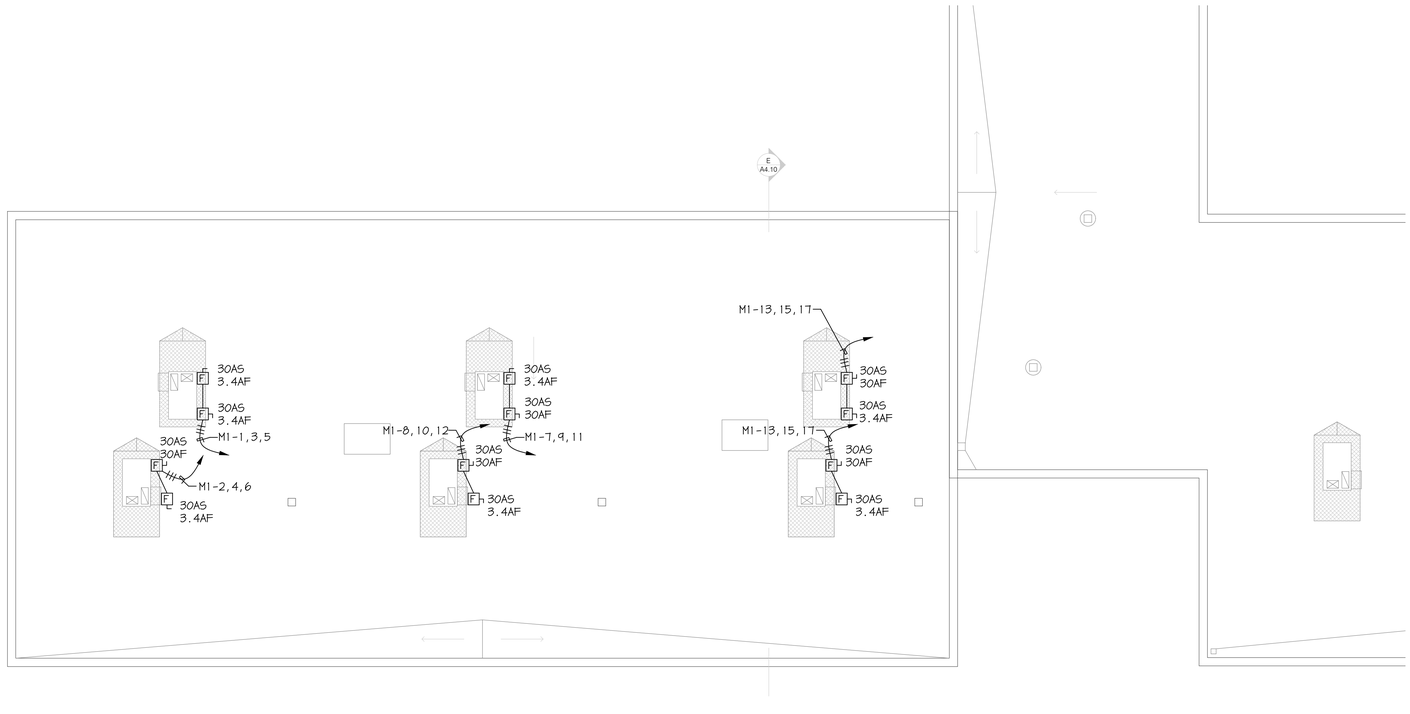
1. ALL ROOF PENETRATIONS SHALL BE SEALED WATER TIGHT
2. COORDINATE EXACT EQUIPMENT LOCATION WITH INSTALLER.



BUILDING M-1 ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

NORTH



BUILDING M-2 ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22104
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-0216
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
MATTHEW J. MALONEY
No. E013083
EXP. 08/31/2024
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

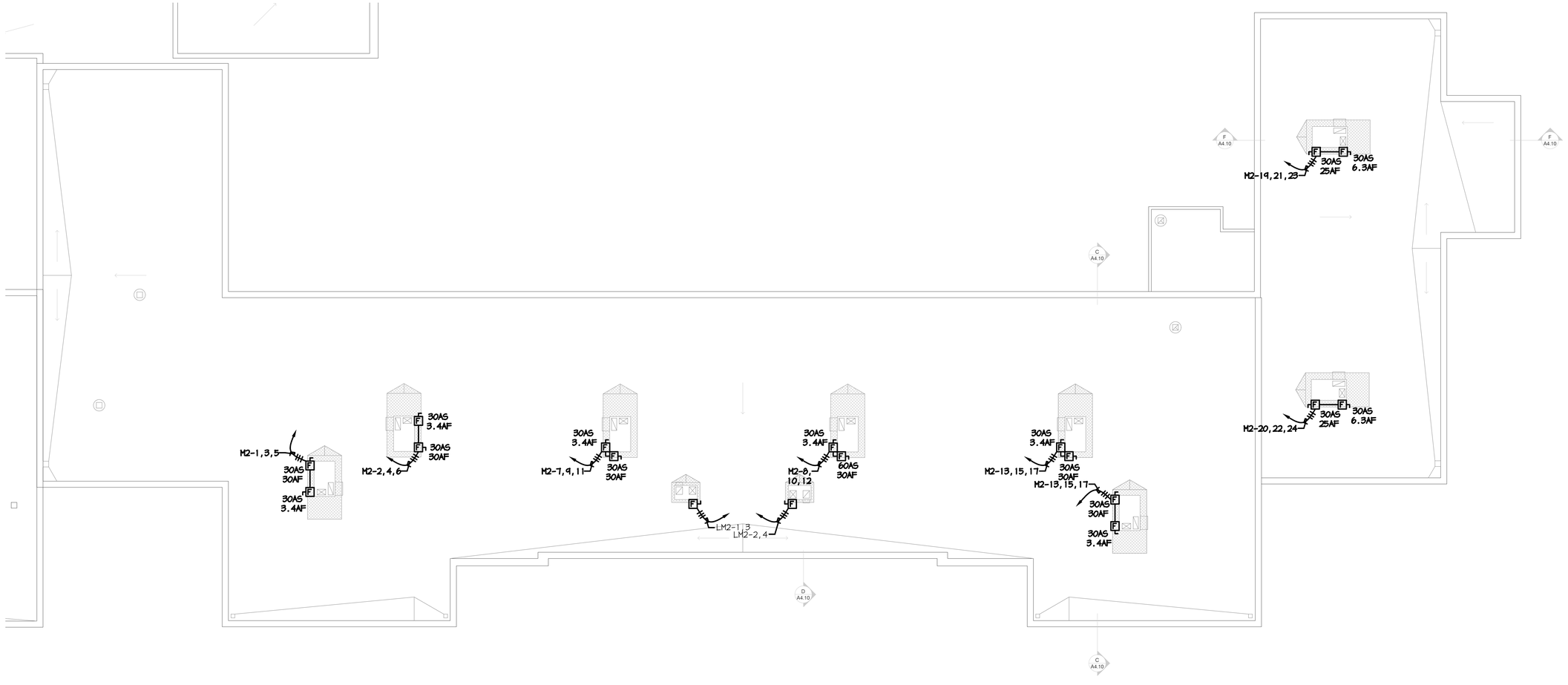
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING M-1 AND M-2 ELECTRICAL ROOF PLANS

E3.20

ELECTRICAL NOTES

1. ALL ROOF PENETRATIONS SHALL BE SEALED WATER TIGHT
2. COORDINATE EXACT EQUIPMENT LOCATION WITH INSTALLER.



BUILDING M-3 ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22104
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-8216
FAX (805) 569-2405
email : malcovy@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
MALCOLM VY
No. E13083
EXP. 06/30/2024
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

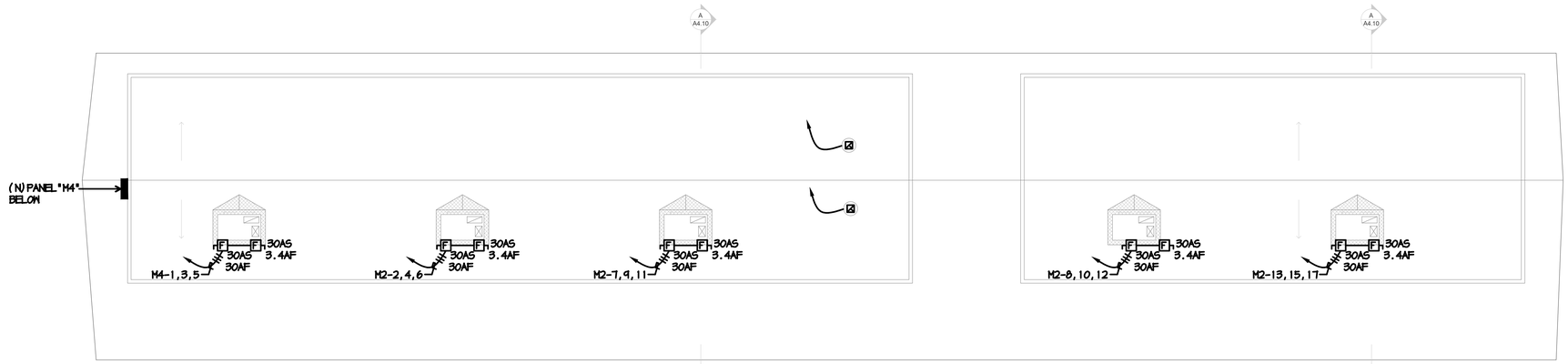
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING M-3 ELECTRICAL ROOF PLAN

E3.21

ELECTRICAL NOTES

1. ALL ROOF PENETRATIONS SHALL BE SEALED WATER TIGHT
2. COORDINATE EXACT EQUIPMENT LOCATION WITH INSTALLER.

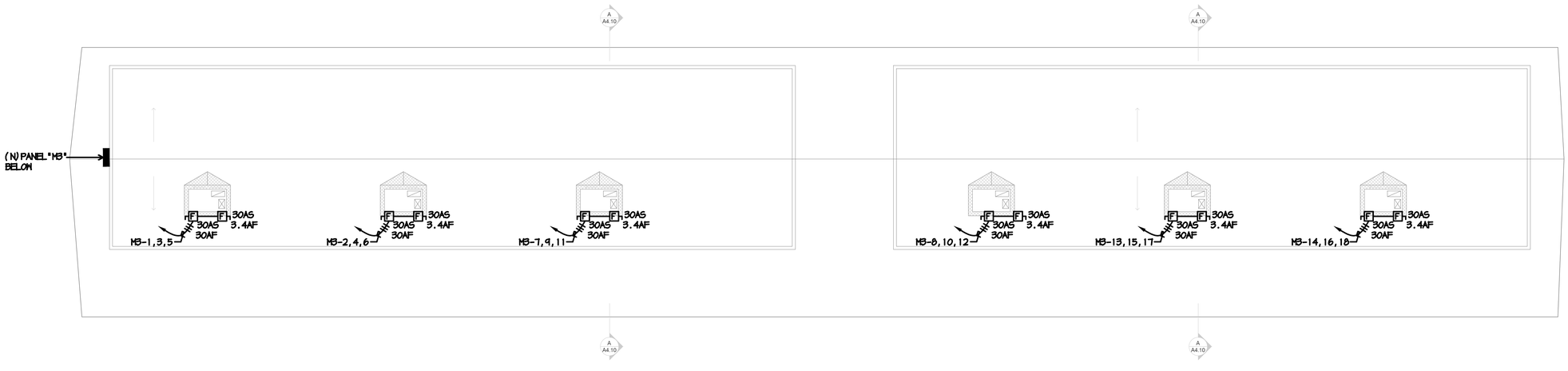


BUILDING B ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

BUILDING C ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"



BUILDING D ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

BUILDING E ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO #13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
EDWARD C. TRUJILLO
EXP. 09/30/2025
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

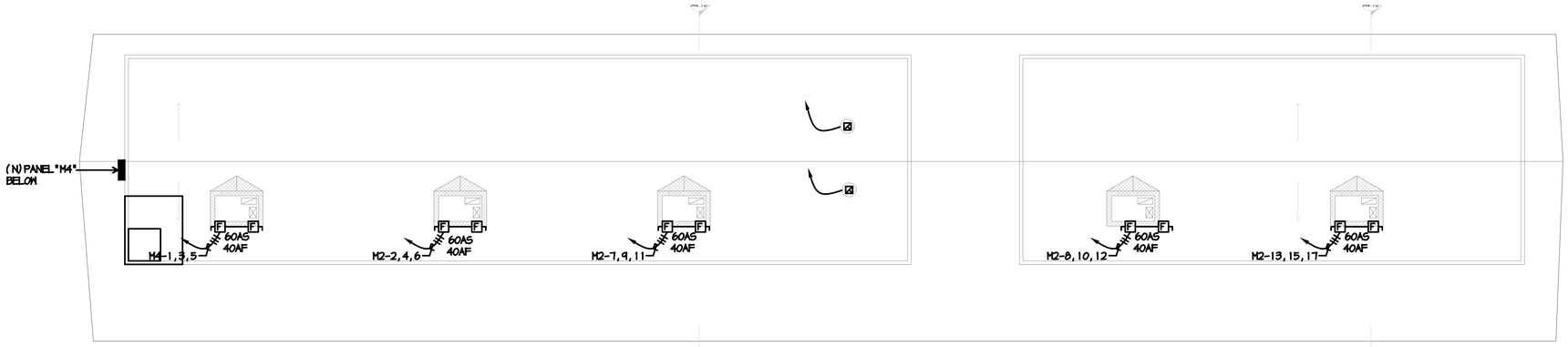
REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING B-E ELECTRICAL ROOF PLANS

E3.22



BUILDING B ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

BUILDING C ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

BUILDING D ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

BUILDING E ELECTRICAL ROOF PLAN

SCALE: 1/8" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9216
FAX (805) 569-2405
email : malcney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
JAMES MALCNEY
No. E13083
EXP. 08/31/2025
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

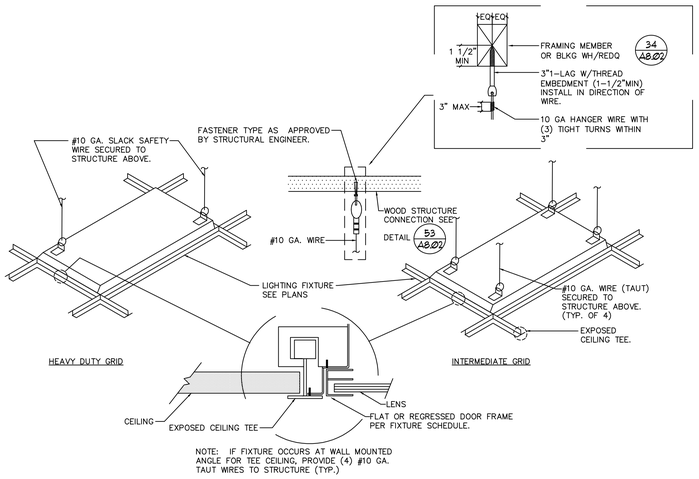
REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING B-E ELECTRICAL ROOF PLAN

E3.23



LIGHT FIXTURE SUPPORT DETAIL

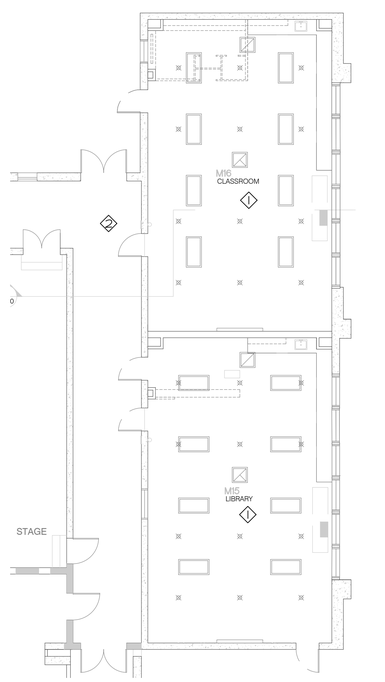
SCALE: NONE

LED FIXTURE SCHEDULE

		LED MODULE					
TYPE	MANUFACTURER AND CATALOG NUMBER	TYPE	COLOR TEMP	WATTS	DRIVER	OPTIC/LENS	REMARKS
A 43	LITHONIA SPX 2X4 6000LM 80CRI 35K BFR MPL MIN10 ZT MVOLT MW		3500K	43	0-10V 10%	DIFFUSE	2X4 LED
B 34	LITHONNIA FMLWL 848		4000K	34	0-10V	DIFFUSE	4 FT S/M WRAP
E 1	ISOLITE DTH SWW UN		GREEN	1	ELV	GREEN	DUAL TECH
EM 6	ISOLITE BU 6 WH		4000K	6	NICAD BATTERY	PRISMATIC	EM LIGHT WITH 90 MIN BATTERY BACKUP POWER

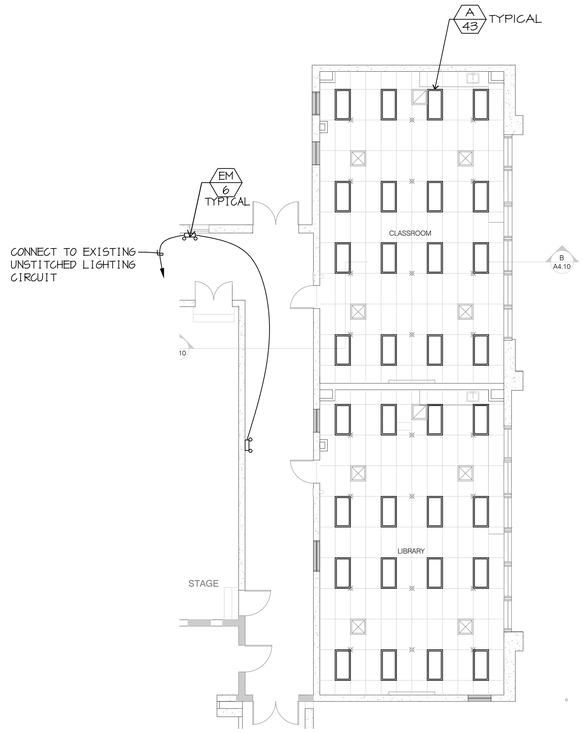
LIGHTING DEMOLITION PLAN

1. REMOVE LIGHTING COMPLETE
2. EXISTING LIGHTING TO REMAIN IN THIS SPACE



DEMOLITION LIGHTING PLAN - BUILDING M-1

SCALE: 1/8" = 1'-0"



LIGHTING PLAN - BUILDING M-1

SCALE: 1/8" = 1'-0"

LIGHTING NOTES

1. CONNECT NEW LIGHTS TO EXISTING CIRCUIT + CONTROL
2. SUPPORT LIGHT FIXTURES PER A E5.00
3. REMOVE AND REINSTALL EXISTING UV FILTERS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
JAMES MALONEY
No. E013083
EXP. 06/30/2023
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

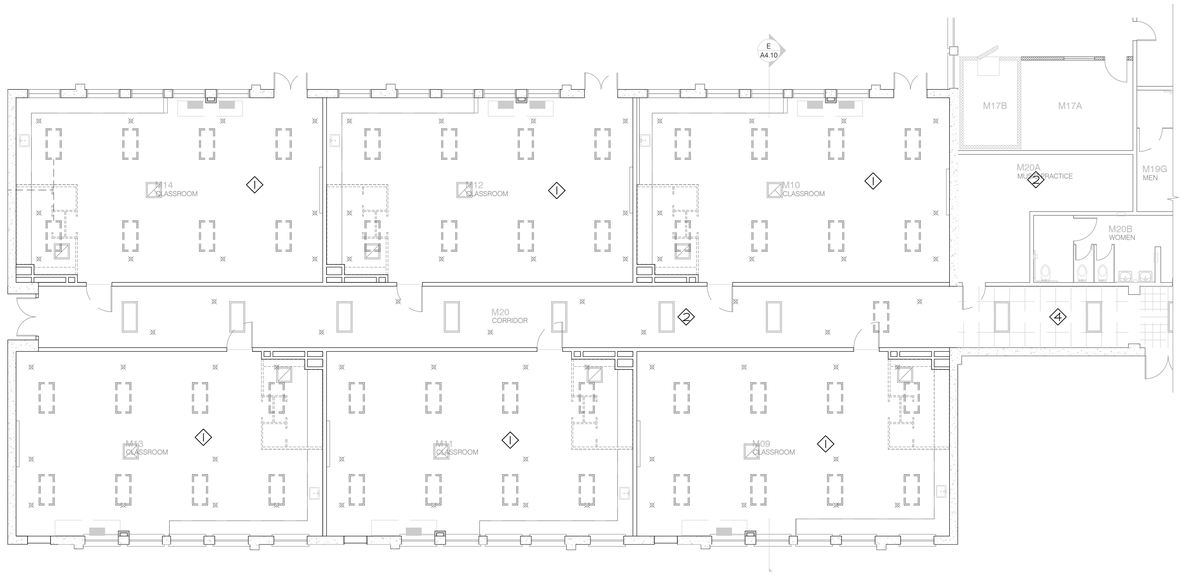
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING M1 DEMOLITION AND LIGHTING PLAN

E5.00

LIGHTING DEMOLITION PLAN

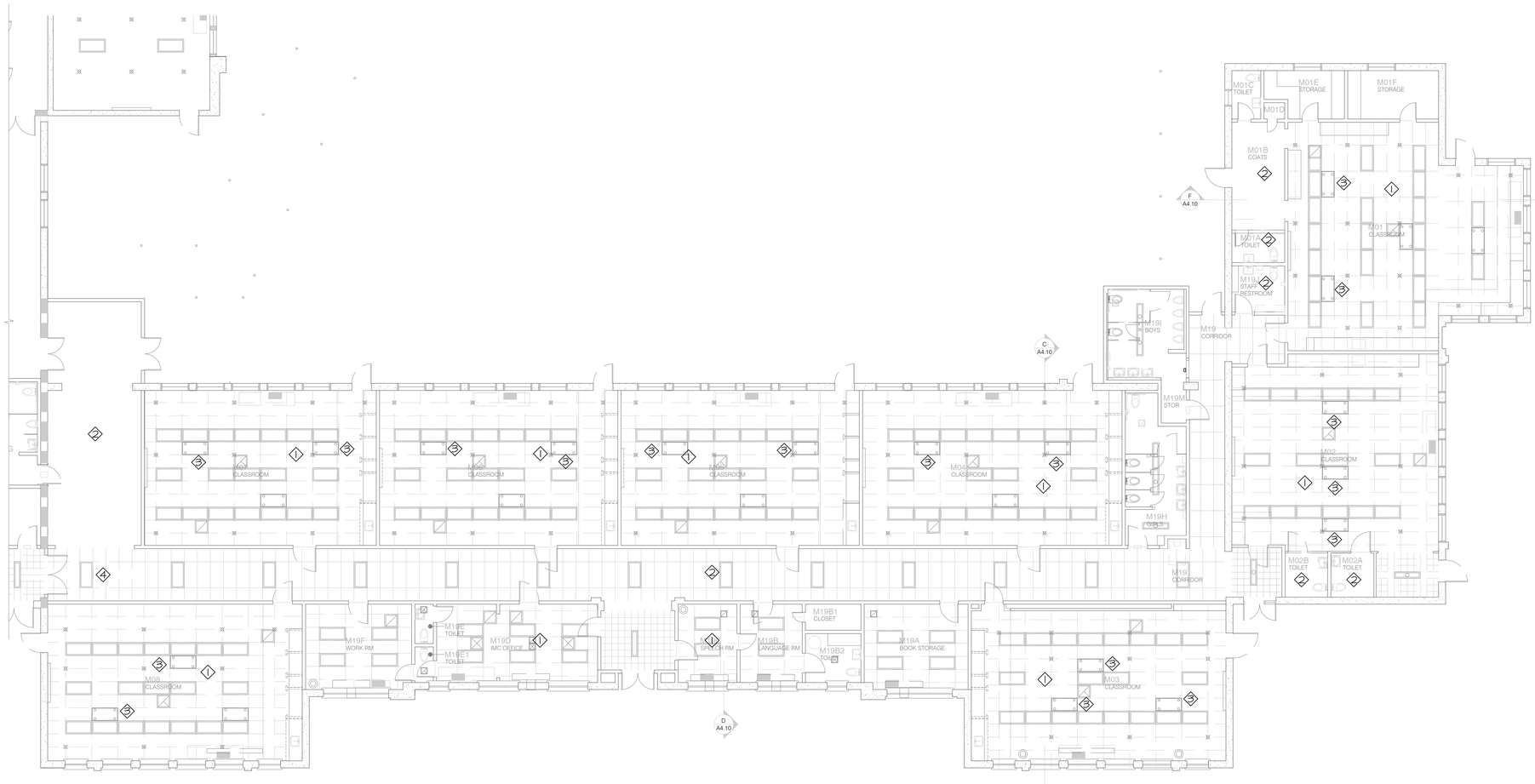
1. REMOVE LIGHTING COMPLETE
2. EXISTING LIGHTING TO REMAIN IN THIS SPACE
3. REMOVE/REINSTALL EX UV FILTERS
4. EXISTING LIGHTING TO REMAIN IN THIS SPACE, COORDINATE WITH MECH FOR REMOVAL OF HYDRONIC PIPING



DEMOLITION LIGHTING PLAN - BUILDING M-2

SCALE: 1/8" = 1'-0"

NORTH



DEMOLITION LIGHTING PLAN - BUILDING M-3

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
EDWARD J. MALONEY III
No. E13083
ELECTRICAL
EXP. 06/30/2025
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

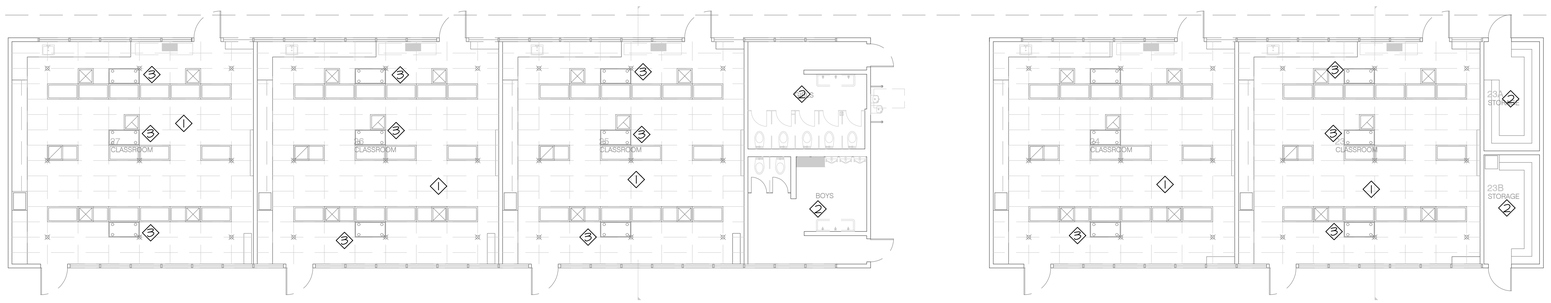
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDINGS M-2 AND M-3 DEMOLITION LIGHTING PLANS

E5.10

LIGHTING DEMOLITION PLAN

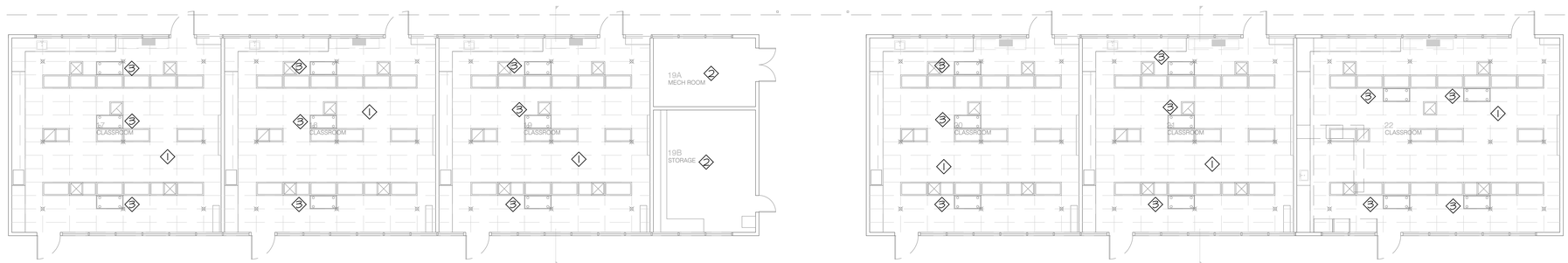
1. REMOVE LIGHTING COMPLETE
2. EXISTING LIGHTING TO REMAIN IN THIS SPACE
3. REMOVE/REINSTALL EX UV FILTERS



DEMOLITION LIGHTING PLAN - BUILDINGS B & C

SCALE: 1/8" = 1'-0"

NORTH



DEMOLITION LIGHTING PLAN - BUILDINGS D & E

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
No. E013083
EXP. 06/30/2025
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

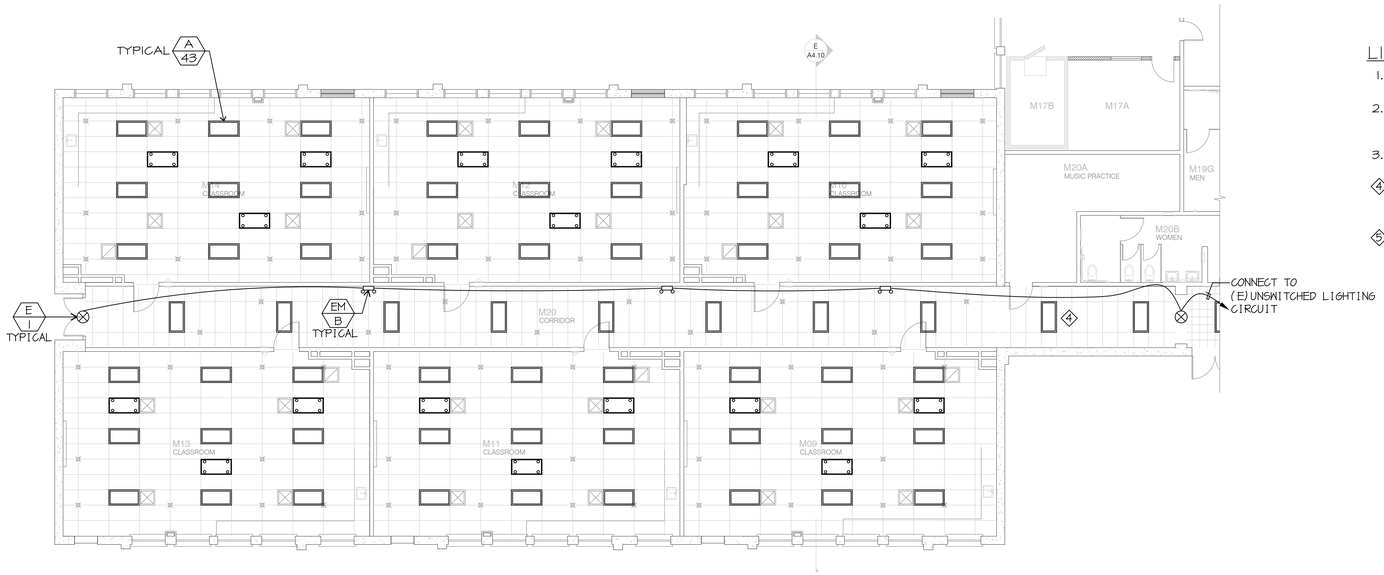
REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDINGS B-3 DEMOLITION LIGHTING PLAN

E5.11



LIGHTING PLAN - BUILDING M-2

SCALE: 1/8" = 1'-0"

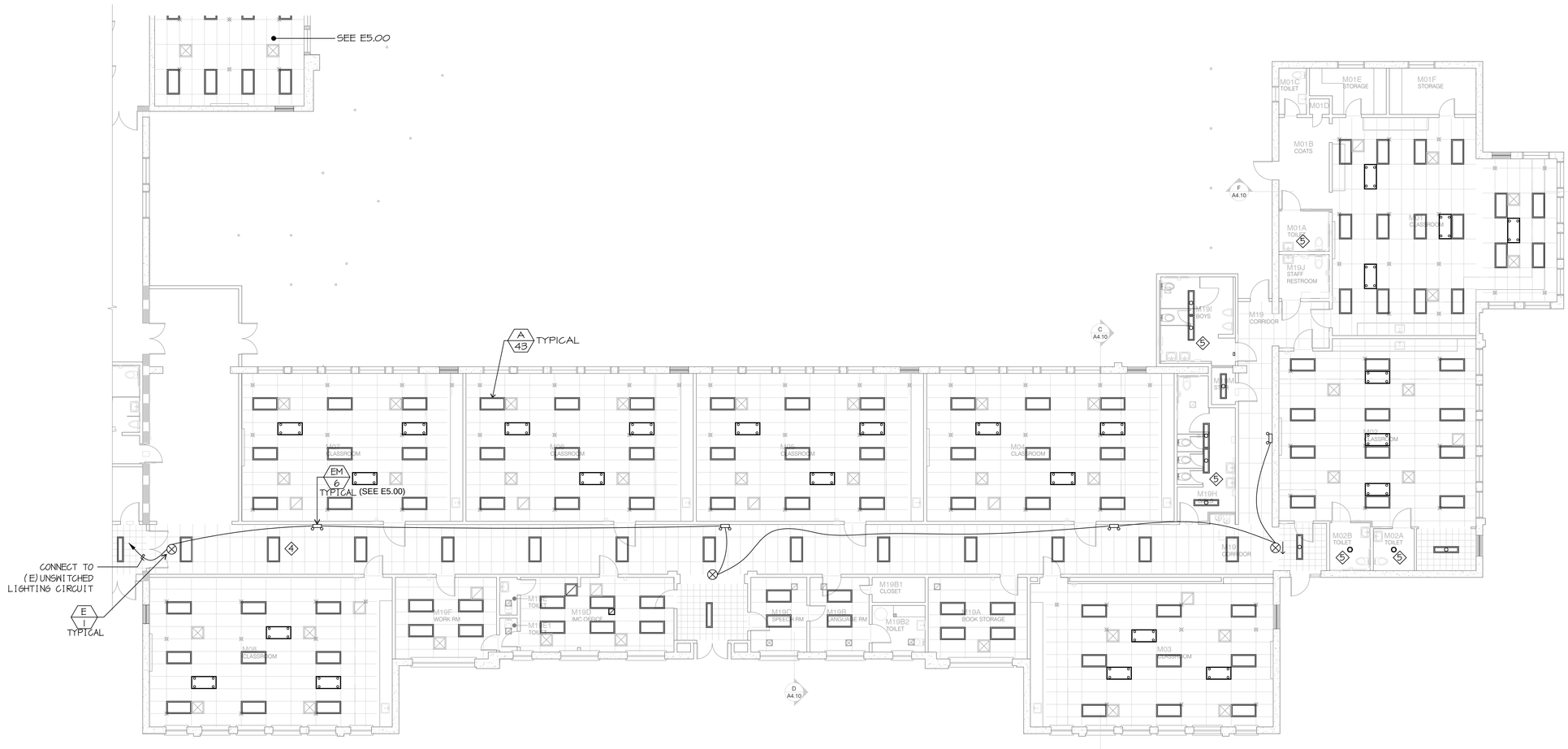
NORTH

LIGHTING NOTES

1. CONNECT NEW LIGHTS TO EXISTING CIRCUIT + CONTROL
2. SUPPORT LIGHT FIXTURES PER A/E5.00
3. REMOVE AND REINSTALL EXISTING UV FILTERS

4 EXISTING LIGHTING TO REMAIN, COORDINATE WITH MECHANICAL FOR REMOVAL OF HYDRONIC PIPING

5 RELOCATE SWITCHES TO MODIFIED WALLS



LIGHTING PLAN - BUILDING M-3

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
EDWARD J. MALONEY
No. E13083
EXP 08/31/2025
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

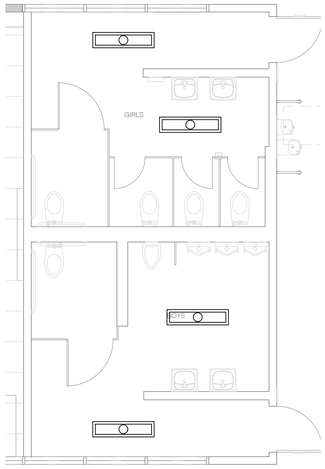
REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

LIGHTING PLANS

E5.20



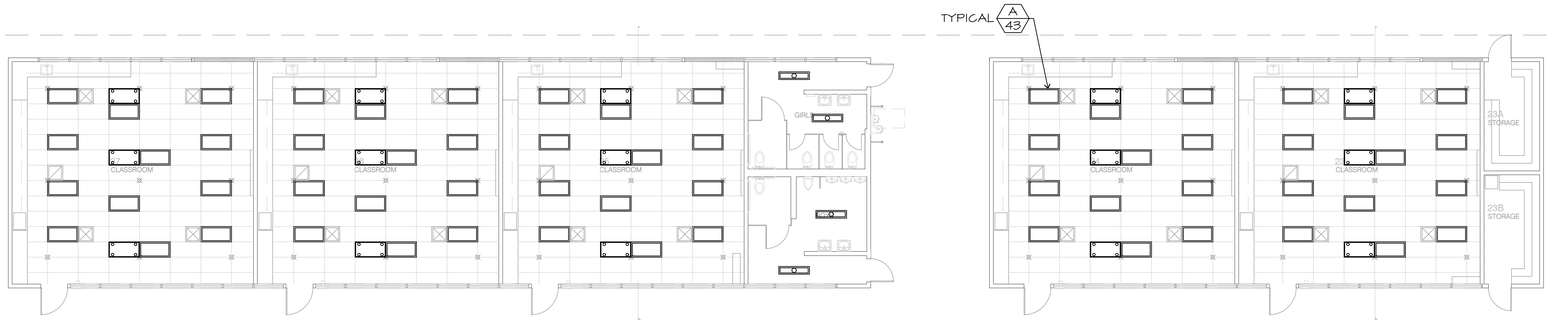
LIGHTING NOTES

1. CONNECT NEW LIGHTS TO EXISTING CIRCUIT + CONTROL
2. SUPPORT LIGHT FIXTURES PER A/5.00
3. REMOVE AND REINSTALL ALL EXISTING UV FILTERS

LIGHTING PLAN - BUILDING B RESTROOM

SCALE: 1/4" = 1'-0"

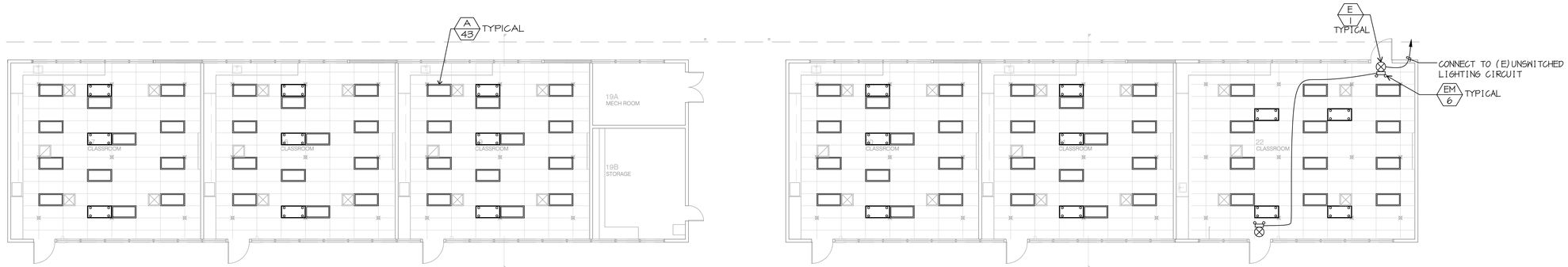
NORTH



LIGHTING PLAN - BUILDINGS B & C

SCALE: 1/8" = 1'-0"

NORTH



LIGHTING PLAN - BUILDINGS D & E

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

LICENSED PROFESSIONAL ENGINEER
MATTHEW J. MALONEY
No. E013083
EXP. 06/30/2025
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

LIGHTING PLANS

E5.21

FIRE ALARM SITE PLAN

SCALE: 1/32" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22108
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
EDWARD MALONEY
No. E013083
EXP. 08/30/2025
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

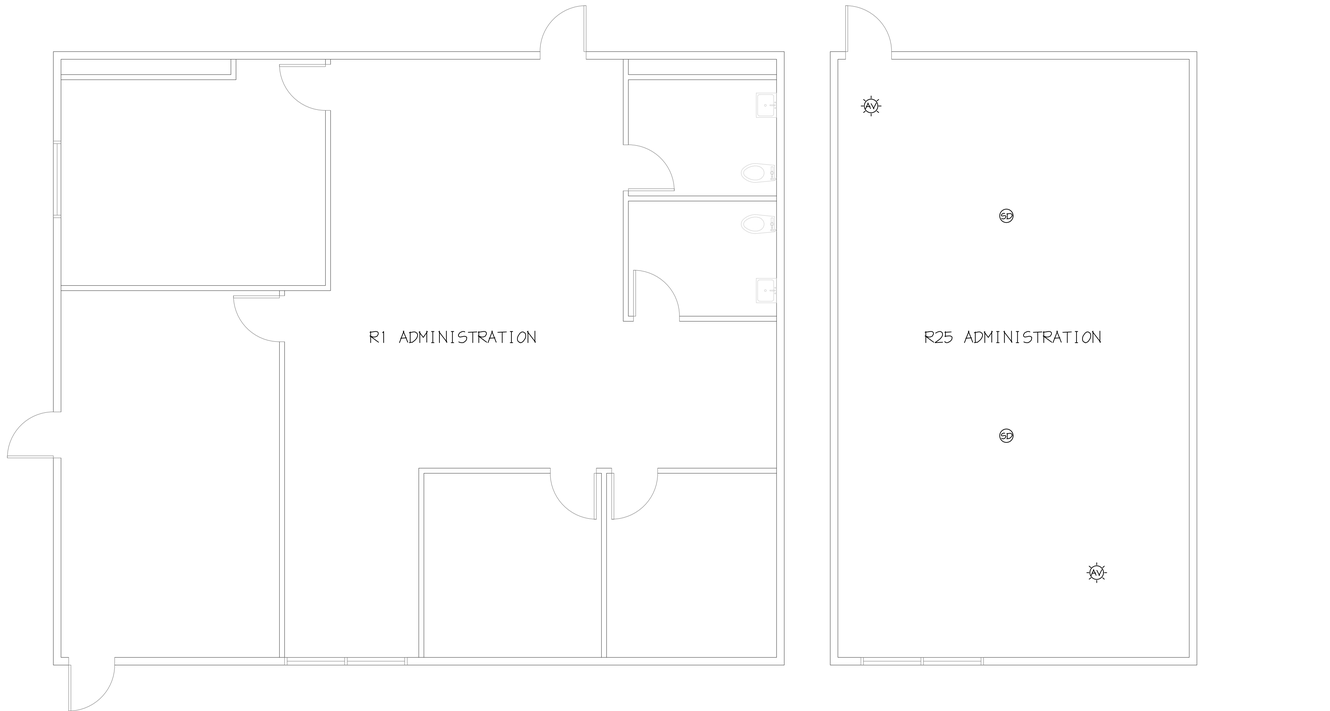
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

FIRE ALARM
SITE PLAN

E6.00

FIRE ALARM DEMOLITION NOTES

1. ALL EXISTING DEVICES TO BE REMOVED, DEVICE BASE TO REMAIN. NEW DEVICE TO BE INSTALLED AT EXISTING LOCATIONS WHERE POSSIBLE.



BUILDING R1 AND R25 FIRE ALARM DEMOLITION PLAN

SCALE: 1/4" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13085
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
EDWARD J. MALONEY III
No. E13085
EXP. 06/30/2024
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

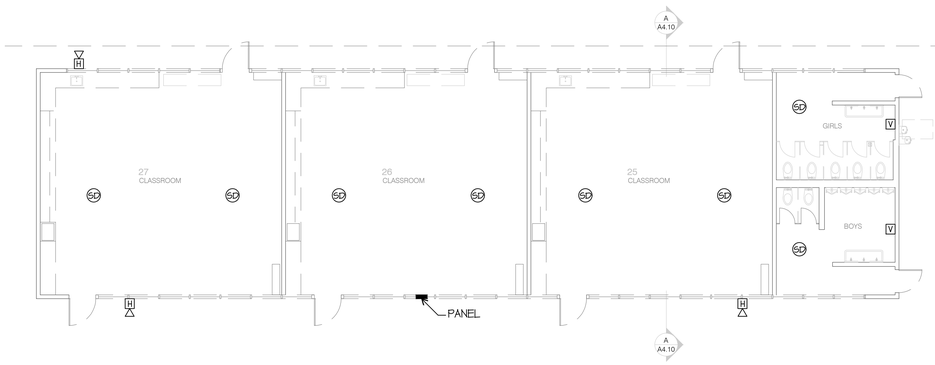
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING R1 AND R25 FIRE ALARM DEMOLITION PLAN

E6.10

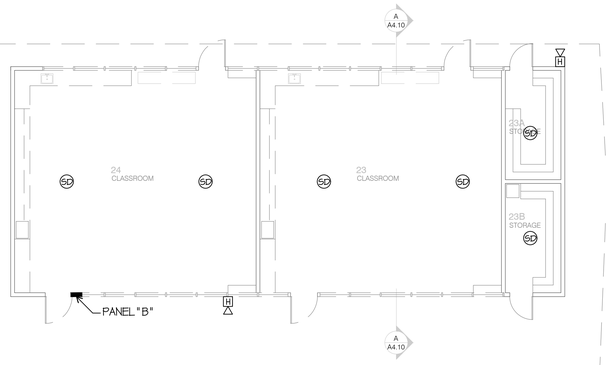
FIRE ALARM DEMOLITION NOTES

1. ALL INTERIOR DEVICES TO BE REMOVED COMPLETELY.
2. ALL EXTERIOR DEVICES TO BE REMOVED, BASE TO REMAIN. NEW DEVICE TO BE INSTALLED AT EXISTING LOCATION WHERE POSSIBLE.



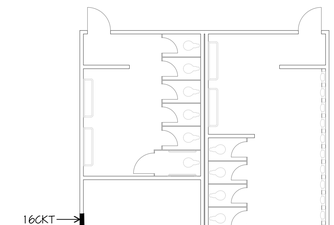
BUILDING B FIRE ALARM DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



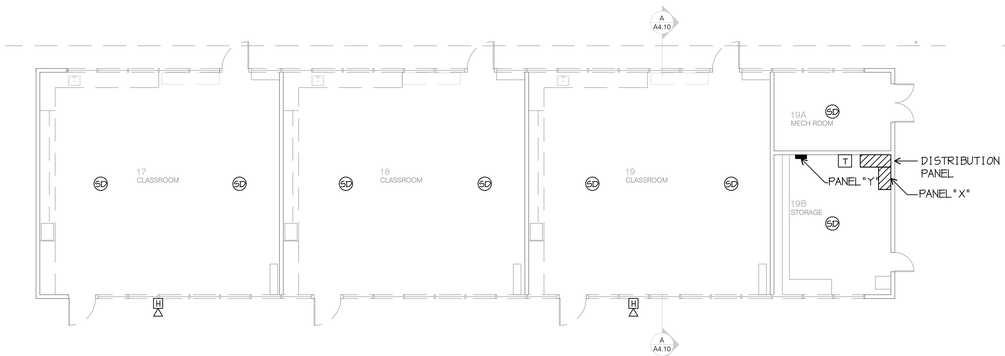
BUILDING C FIRE ALARM DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



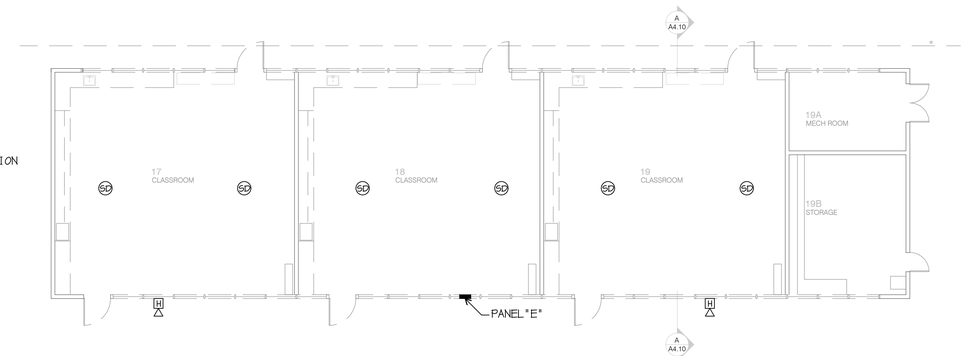
BUILDING F FIRE ALARM DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



BUILDING D FIRE ALARM DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



BUILDING E FIRE ALARM DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
EDWARD C. TRUMBO
No. E13083
EXP. 09/30/2024
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

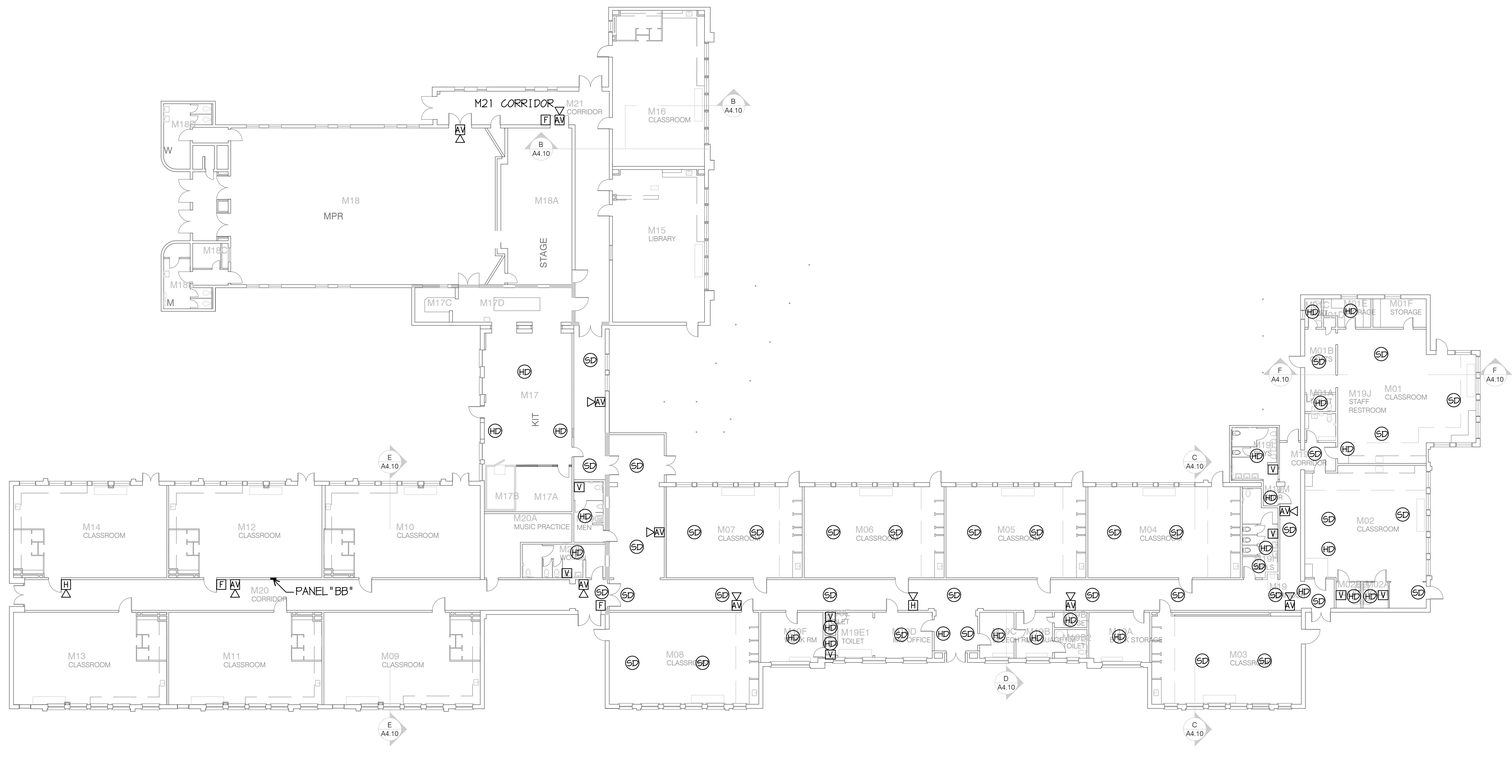
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING B-E DEMOLITION PLANS

E6.11

FIRE ALARM DEMOLITION NOTES

1. ALL INTERIOR DEVICES TO BE REMOVED COMPLETELY.
2. ALL EXTERIOR DEVICES TO BE REMOVED, BASE TO REMAIN. NEW DEVICE TO BE INSTALLED AT EXISTING LOCATION WHERE POSSIBLE.



BUILDINGS M-1,M-2,M-3 FIRE ALARM DEMOLITION PLAN

SCALE: 1/16" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
MALCOLM E. MALONEY
No. E013083
EXP. 06/30/2025
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

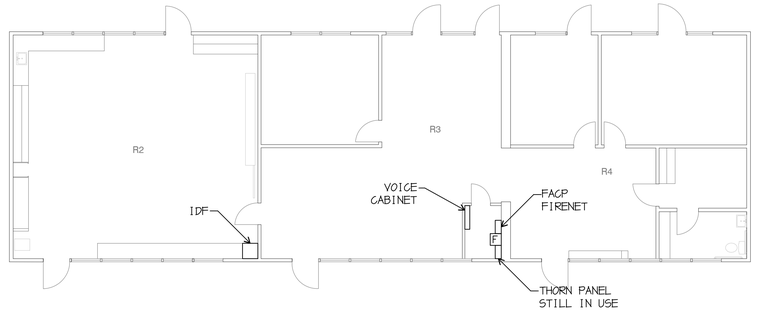
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDINGS M-1,M-2,M-3 DEMOLITION PLANS

E6.12

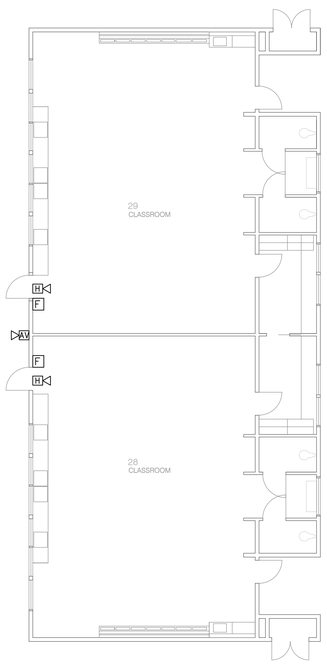
FIRE ALARM DEMOLITION NOTES

1. ALL EXISTING DEVICES TO BE REMOVED, DEVICE BASE TO REMAIN. NEW DEVICE TO BE INSTALLED AL EXISTING LOCATIONS WHERE POSSIBLE.



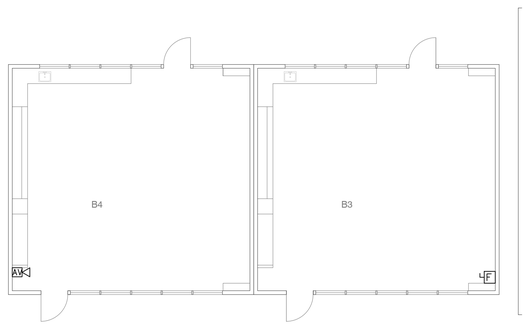
BUILDING R1, R2, R3, R4 FIRE ALARM DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



BUILDING A FIRE ALARM DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



BUILDING B3, B4 FIRE ALARM DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E15083
2210A
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9216
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

LICENSED PROFESSIONAL ENGINEER
No. E015083
EXP. 12/31/2023
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

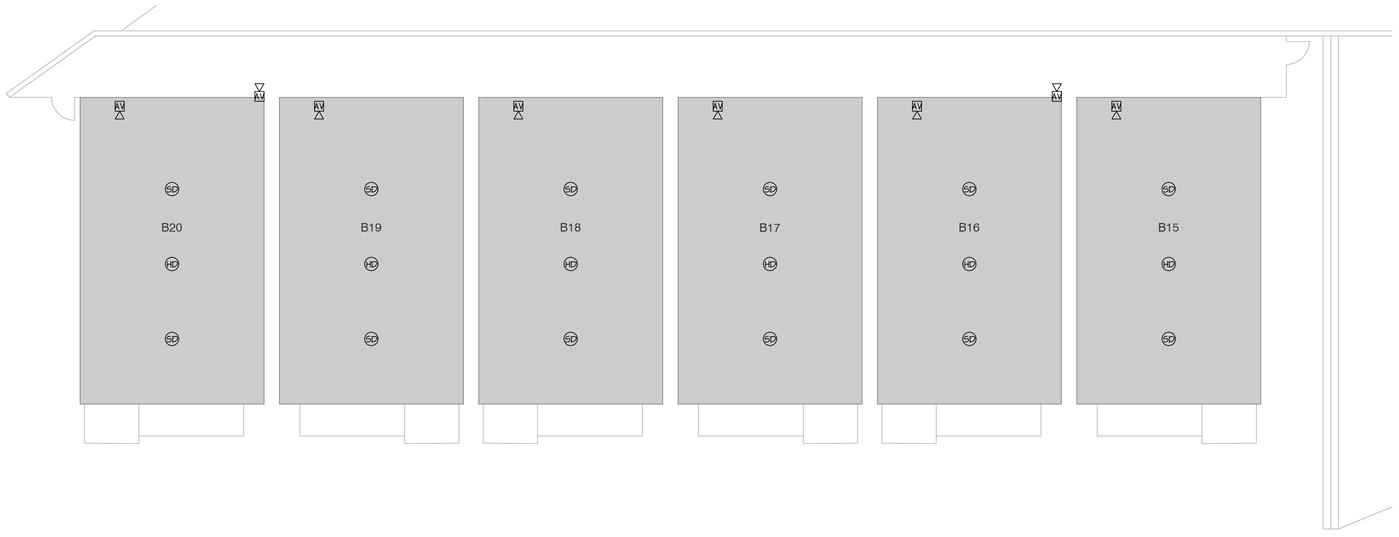
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

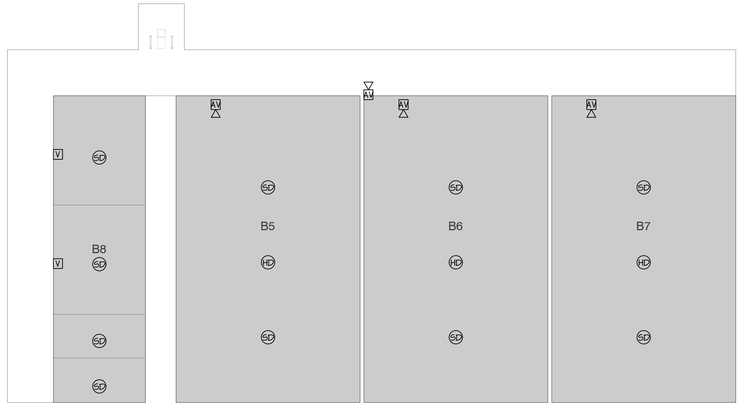
BUILDING A,R1, & R2 DEMOLITION PLAN

E6.13

FIRE ALARM DEMOLITION NOTES

1. ALL EXISTING DEVICES TO BE REMOVED, DEVICE BASE TO REMAIN. NEW DEVICE TO BE INSTALLED AT EXISTING LOCATIONS WHERE POSSIBLE.





CLASSROOMS B5-B8 & B15-B20 FIRE ALARM DEMOLITION PLANS

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22104
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
JOHN MALONEY
No. E13083
EXP. 09/30/2025
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

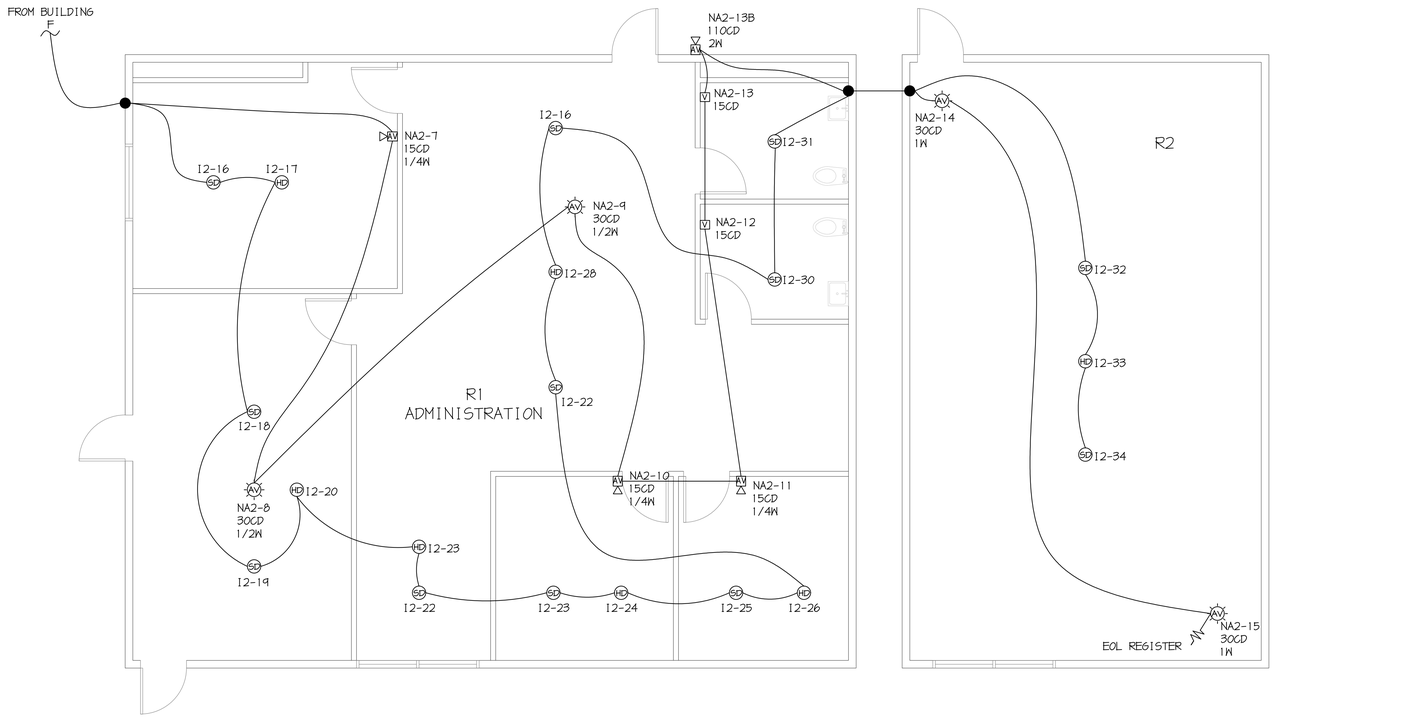
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

CLASSROOMS B5-B8 & B15-B20 FIRE ALARM DEMOLITION PLANS

E6.15

FIRE ALARM NOTES

1. NEW DEVICES TO BE INSTALLED ON EXISTING BASES WHERE APPLICABLE.



BUILDING R1 AND R25 FIRE ALARM PLAN

NORTH

SCALE: 1/4" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects

3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-9216
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
MATTHEW J. MALONEY
No. E013083
EXP. 06/30/2023
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

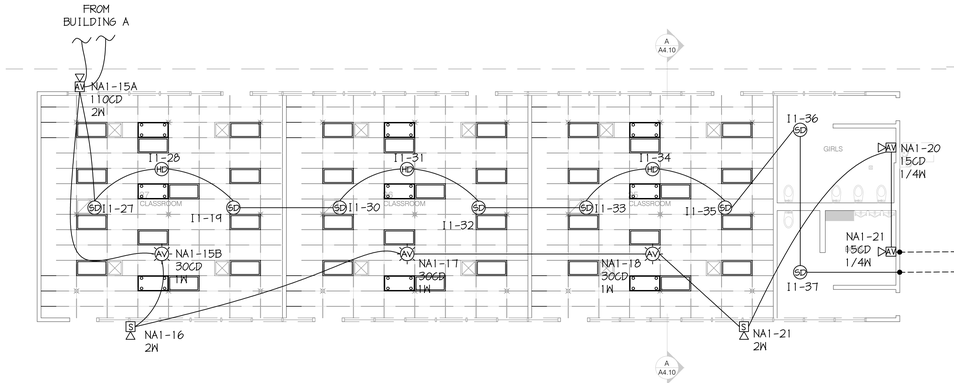
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDINGS R1 AND R25
FIRE ALARM PLAN

E6.20

FIRE ALARM NOTES

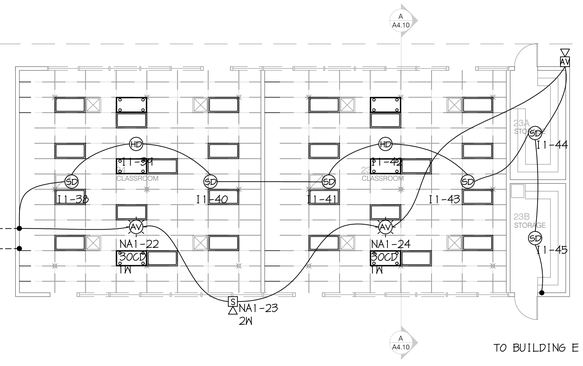
1. NEW DEVICES TO BE INSTALLED ON EXISTING BASES WHERE APPLICABLE.



BUILDING B FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"

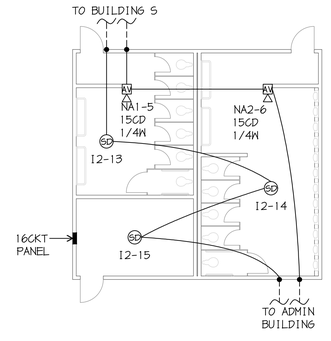
NORTH



BUILDING C FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"

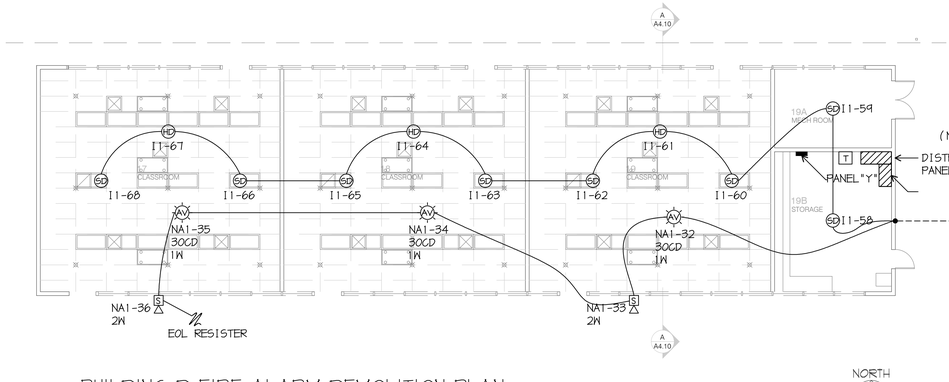
NORTH



BUILDING F FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"

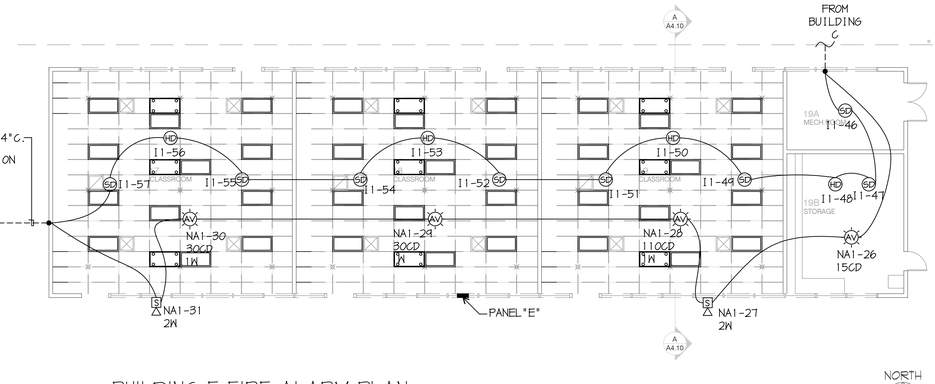
NORTH



BUILDING D FIRE ALARM DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

NORTH



BUILDING E FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA, CA 93105
(805) 569-0210
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
EDISON MALONEY
EXP. 09/30/2024
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

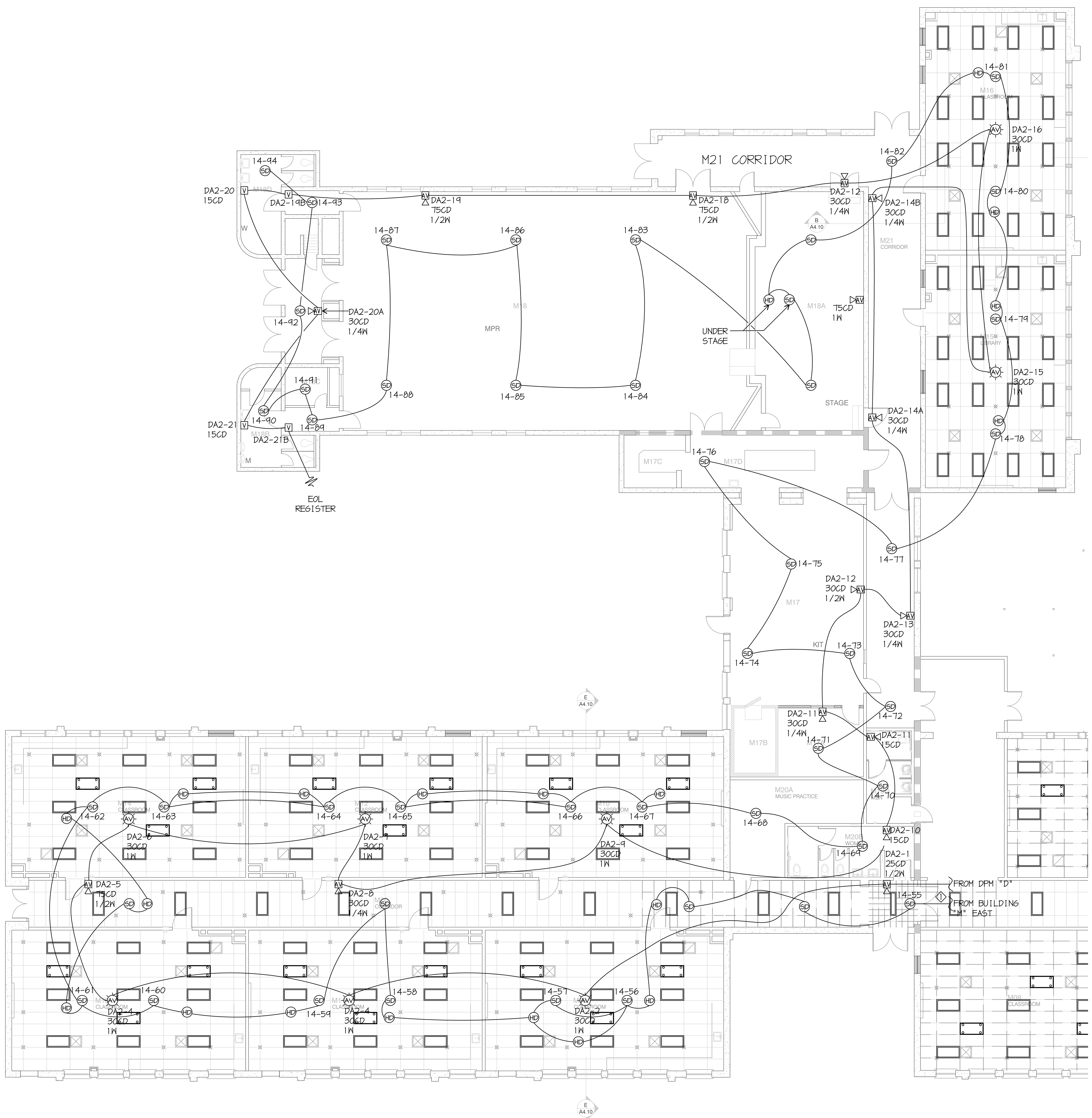
REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING B-E PLAN

E6.21



NOTES

1. FIRE WALL PENETRATIONS SEE B/E0.05
2. NEW DEVICES TO BE INSTALLED ON EXISTING BASES WHERE APPLICABLE

BUILDING M-1&M-2 FIRE ALARM PLAN

SCALE: 1/8" = 1'-0" 0 1 2 4 8 16

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects

3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield. CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT JAMES PATRICK FOGARTY No. C-19670 REN 11-30-25 STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22109
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9216
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER J.M. MALONEY No. E013083 EXP. 06/30/2025 ELECTRICAL STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

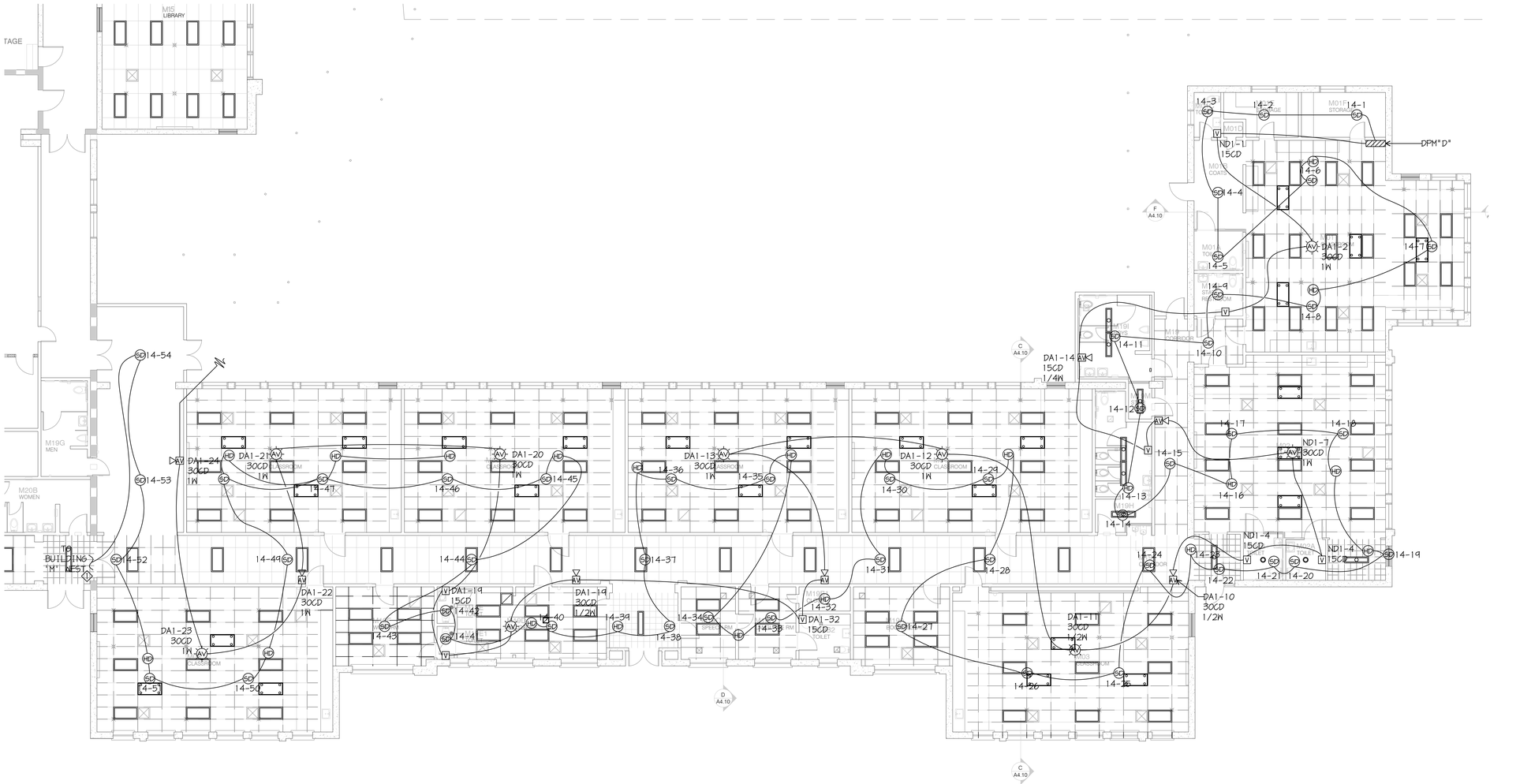
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING M-1 & M-2 FIRE ALARM PLANS

E6.22

NOTES

1. FIRE WALL PENETRATIONS SEE B/E005
2. NEW DEVICES TO BE INSTALLED ON EXISTING BASES WHERE APPLICABLE.



BUILDING M-3 FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
2210
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9216
FAX (805) 569-2405
email : malcom@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
MALCOM JAMES PEARCE
No. E13083
ELECTRICAL
EXP. 06/30/2025
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

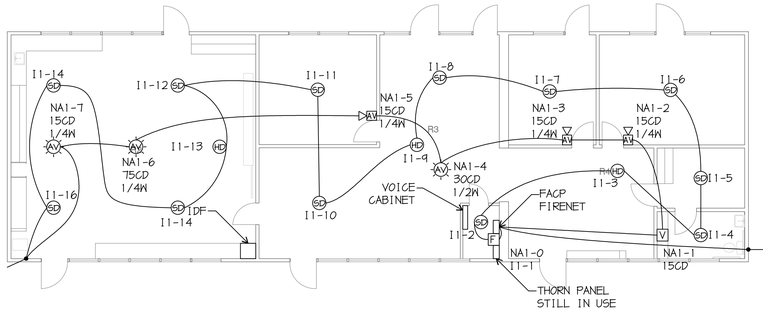
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING M-3 FIRE ALARM PLAN

E6.23

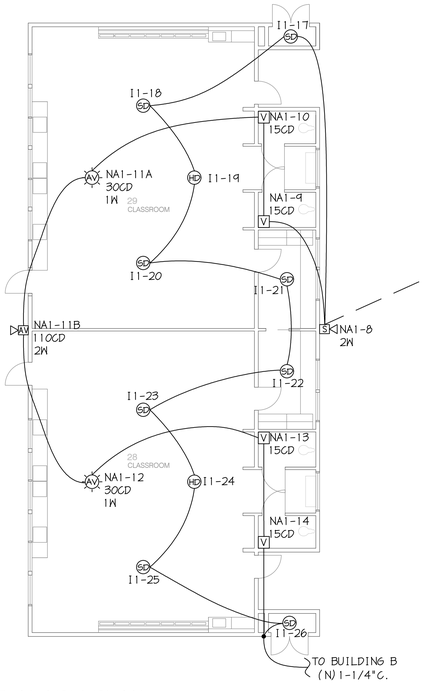
FIRE ALARM NOTES

1. NEW DEVICES TO BE INSTALLED ON EXISTING BASES WHERE APPLICABLE.



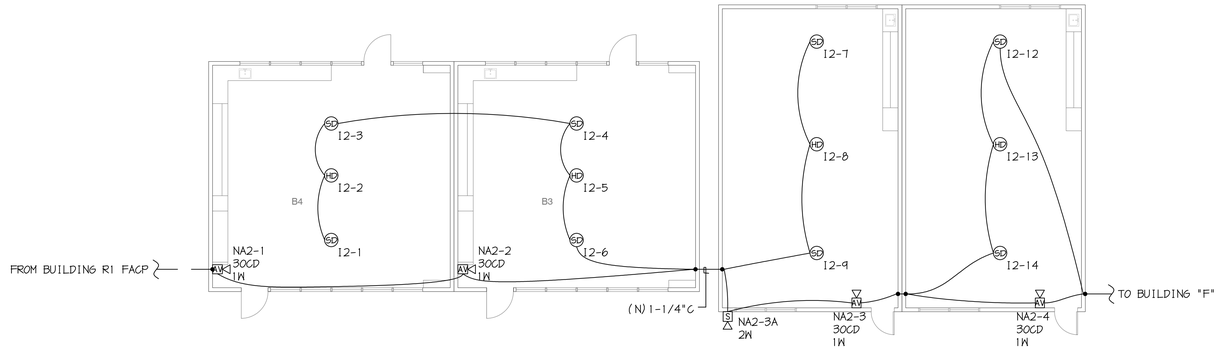
BUILDING R2,R3,R4 FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"



BUILDING A FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"



BUILDING B4 AND B3 FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN
11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22104
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-8216
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
EDITH MALONEY
EXP. 12/31/2024
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

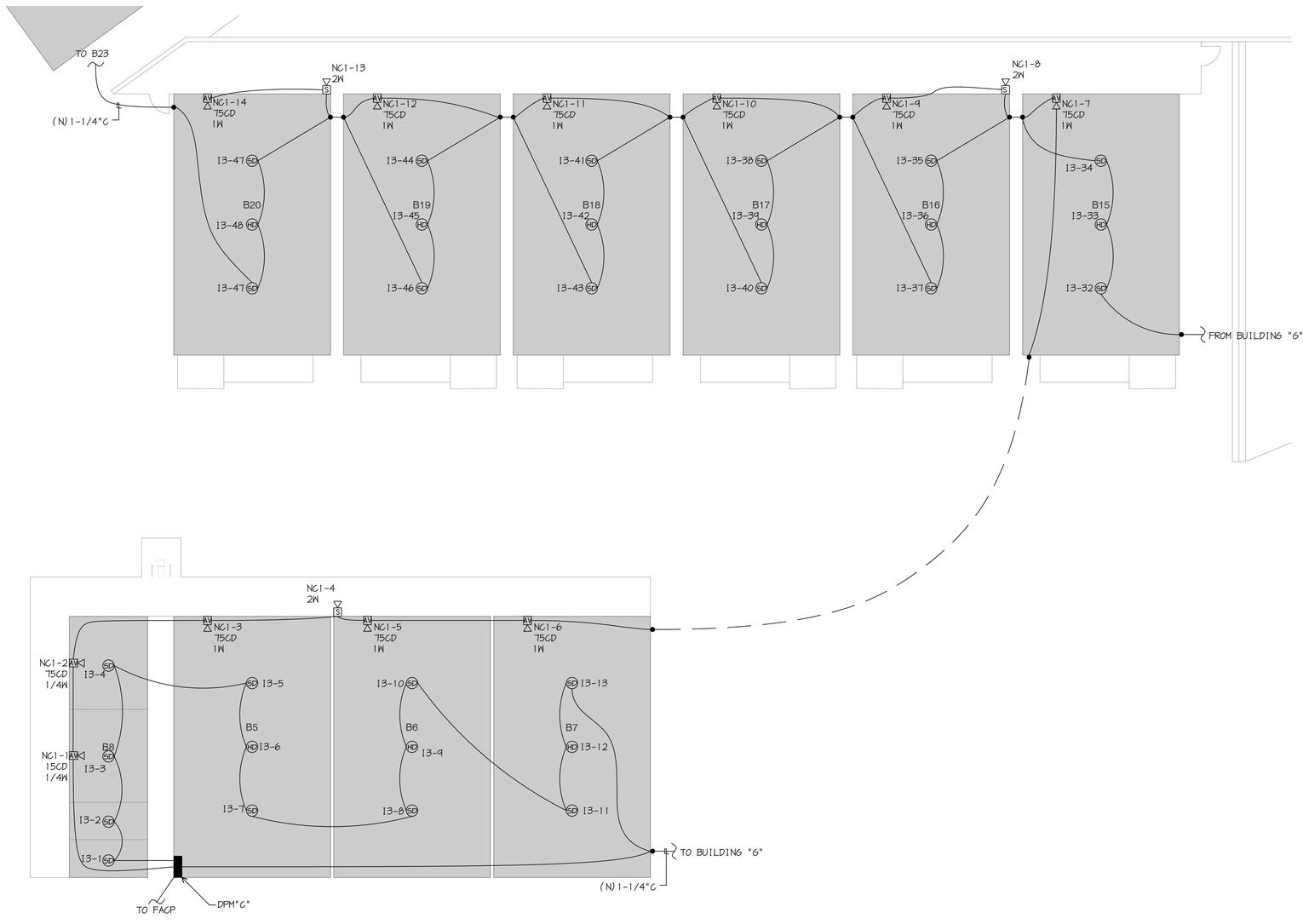
REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDINGS R2-R4, B4,B3, AND A FIRE ALARM PLAN

E6.24



CLASSROOMS B5-B8 AND B15-B20 FIRE ALARM PLANS

SCALE: 1/8" = 1'-0"

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22104
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9218
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
JOHN MALONEY
No. E13083
EXP. 06/30/2025
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

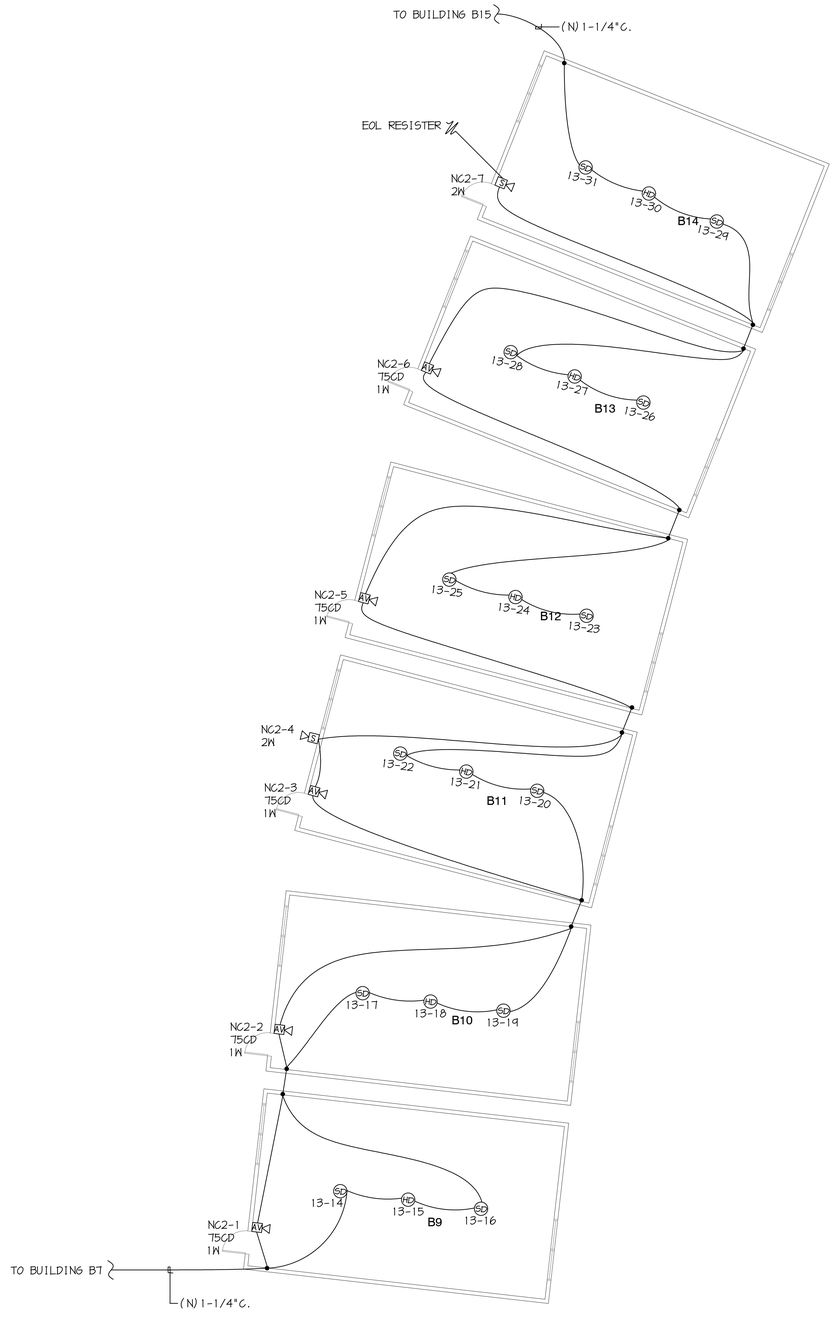
THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

CLASSROOMS B5-B8 AND B15-B20 FIRE ALARM PLANS

E6.25

FIRE ALARM NOTES

1. NEW DEVICES TO BE INSTALLED ON EXISTING BASES WHERE APPLICABLE.



BUILDING G FIRE ALARM PLAN

NORTH

SCALE: 1/8" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-122671 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 11/08/2023

ap architects
3434 Truxtun Avenue . Suite 240
Bakersfield . California . 93301
tel|661.327.1690 fax|661.327.7204
web|www.aparchitects.net

CAMPUS HVAC SYSTEM UPGRADE

Horace Mann
Elementary School

2710 Niles St. Bakersfield, CA. 93306
Bakersfield City School District

ARCHITECT

LICENSED ARCHITECT
JAMES PATRICK FOGARTY
No. C-19670
REN 11-30-25
STATE OF CALIFORNIA

JAMES PATRICK FOGARTY, AIA
ARCHITECT C-19670

CONSULTANT

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
2210
627 OLIVE STREET
SANTA BARBARA CA 93105
(805) 569-9216
FAX (805) 569-2405
email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
MALCOLM D. MALONEY
No. E13083
EXP. 06/30/2025
ELECTRICAL
STATE OF CALIFORNIA

PROJECT INFO

Project No	566-0016
Date	10.30.23
DSA File No	15-6
DSA No	03-122671

REVISIONS

No	Date	Item

THESE DRAWINGS ARE INSTRUMENTS OF SERVICE AND ARE THE PROPERTY OF AP ARCHITECTS. ALL DESIGNS AND DRAWINGS ARE FOR THE USE ON THE SPECIFIED PROJECT AND SHALL NOT BE USED OTHERWISE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF AP ARCHITECTS. WRITTEN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS SHALL BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.
© COPYRIGHT

BUILDING G FIRE ALARM PLAN

E6.26