# WESTMINSTER SCHOOL DISTRICT

## WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

### DSA SUBMITTAL

03/31/23



**OWNER**

**WESTMINISTER SCHOOL DISTRICT**
14121 Cedarwood Avenue
Westminster, CA 92683
t: 714-894-7311
Contact: Brian Johnson

**ARCHITECT**

**PBK Architects**
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
t: 949-548-5000
Contact: Laura McLucas

**STRUCTURAL ENGINEER**

**NIC Structural Engineering Consultants**
23 Corporate Plaza Dr., suite 150
Newport Beach, CA 92660
t: 909-937-9200
Contact: TJ (Touraj) Eimani

**MEP ENGINEER**

**LEAF Engineers**
8163 Rochester Ave. #100
Rancho Cucamonga, CA 91730
t: 909-937-9200
Contact: Rex Wang

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: ##-#####  DSA FILE NO.: ###

Architect

LICENSED ARCHITECT
Tong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

COVER SHEET

G0.00

G0.01 - TITLE SHEET

0"  1"

# DRAWING CONVENTIONS

- PROPERTY LINE
- AREA DRAIN
- EXISTING ELEVATION (NO.)
- FINISH GRADE ELEVATION (NO.)
- NORTH SYMBOL (NORTH / TRUE NORTH)
- COLUMN LINE (O)
- FLOOR LINE (Name / Elevation)
- MATCH LINE
- SECTION CALLOUT SYMBOL (1 / A101)
- EXTERIOR ELEVATION SYMBOL (A1.01 / 12)
- INTERIOR ELEVATION SYMBOL (A1.01 / 1, 2, 3, 4)
- DOOR DESIGNATION (101)
- WINDOW DESIGNATION (A / 1t)
- PARTITION TYPE (1i)
- EXISTING PARTITION
- NEW PARTITION
- REVISION NUMBER (1)
- DETAIL ENLARGED (1 / A-100)
- PLAN OR DETAIL ENLARGED (1 / A-100)
- DETAIL SECTIONS AND VERTICAL SECTIONS (1 / A101)
- DIMENSIONS (6'-0" / 4'-0" / 10'-0")
  *NOTE: all dimensions to face of wall unless otherwise noted*
- SPOT ELEVATION (18'-6")
- SPOT COORDINATE (N - 58' 2" / E - 150' 11")
- MATCH LINE / SEE XX/X-XXX — SHEET NUMBER ON WHICH CONTINUATION IS FOUND
- FENCING (WITH POSTS)
- BREAK LINE
- KEY NOTE (12.34)
- ROOM NAME AND NUMBER (**Room name** / 101 / 150 SF)
- FIRE HOSE CABINET (RECESSED AND SURFACE MOUNTED) (FHC)
- FIRE EXTINGUISHER CABINET (RECESSED AND SURFACE MOUNTED) (FEC)
- EQUIPMENT DESIGNATION (25C)
- TOILET ACCESSORY SYMBOL (TA1)
- SHOWER HEAD
- FLOOR SINK (F.S.)
- FLOOR DRAIN (F.D.)
- OVERFLOW DRAIN AND ROOF DRAIN (OVERFLOW DRAIN / ROOF DRAIN)
- ROOF TOP UNIT REFER TO MECHANICAL FOR TYPE (RTU)
- GRAPHIC SCALE (0 2' 4' 8' SCALE: 1" = 4'-0")

# STATEMENT OF GENERAL CONFORMANCE

FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS
(Application No. 04-121954 File No. 30-43)

[x] The drawings or sheets listed on the cover or index sheet (see asterisk *)
[ ] This drawing, page of specifications/calculations

have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. It has been examined by me for:

1) design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and
2) coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.

The Statement of General Conformance "shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Sections 4-336, 4-341 and 4-344" of Title 24, Part 1. *(Title 24, Part 1, Section 4-317 (b))*

I certify that: [x] The drawings or sheets listed on the cover or index
[x] This drawing or page

| | |
|---|---|
| [x] is/are in general conformance and | [ ] is/are in general conformance and |
| [x] have been coordinated | [ ] have been coordinated |
| Signature: (signed) Date: 03/31/2023 | Signature Date |
| Architect or Engineer designated to be in general responsible charge | Architect or Engineer deligated responsibility for this portion of the work |
| Print Name: Yong Yoo | Print Name |
| License Number: C-31162 Expiration Date: 10/31/2023 | License Number Expiration Date |

# DSA NOTES

1. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART I, TITLE 24, CCR
2. A 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; CLASS 3
3. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
4. ALL WORK SHALL CONFORM TO 2022 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
5. THE SCOPE OF WORK - CLEARLY INDICATE THE SCOPE OF WORK ON THE COVER SHEET OR GENERAL NOTE SHEET OF THE DRAWINGS.
6. FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY DSA. LIST DEFERRED SUBMITTAL ITEMS FOR THIS PROJECT.
7. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TEST AND INSPECTIONS FOR THE PROJECT.
8. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERNATION, 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).

# SCOPE OF WORK

SITE IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO:

FIRE ALARM ONLY
- EXISTING RESOURCE CENTER BLDG (MPR - MULTI-PURPOSE BLDG)
- EXISTING BLDG E (EXISTING CLASSROOMS)
- EXISTING BLDG G (EXISTING CLASSROOMS)
- EXISTING RELOCATABLE CLASSROOM BLDGS 1A & 2A, 4A & 3A, & 6A

ADMIN BUILDING (EXISTING ADMINISTRATION BUILDING)
- (N) HVAC, CEILINGS, WINDOWS, DOORS, LIGHTS, FINISHES
- (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTURE
- TOILET MODERNIZATION
- FIRE ALARM UPGRADE

SL BUILDING (EXISTING LOCKER ROOM BUILDING)
- (N) HVAC, CEILINGS, WINDOWS, DOORS, LIGHTS, FINISHES
- (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTURE
- TOILET MODERNIZATION
- FIRE ALARM UPGRADE

BUILDINGS IA1 & IA2, C1, C2, C3, C4, C5, C6, C7, & C8 (EXISTING CLASSROOMS)
- (N) HVAC, CEILINGS, WINDOWS, DOORS, LIGHTS, FINISHES
- (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTURE
- FIRE ALARM UPGRADE
- TOILET MODERNIZATION (WHERE APPLICABLE)

EXISTING COVERED WALKWAYS
- (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTURE

NEW INTERIOR AND EXTERIOR PAINT IN ALL BUILDINGS AND STRUCTURES INCLUDING LUNCH SHELTER AND ALL RELOCATABLES.

**NOTE:**
FIRE SAFETY DURING DEMOLITION AND/OR CONSTRUCTION SHALL COMPLY WITH 2022 CBC & CFC CHAPTER 33

# DRAWING INDEX

## GENERAL

| | |
|---|---|
| G0.00 | COVER SHEET |
| G0.01 | TITLE SHEET |
| G0.02 | SITE ACCESSIBILITY PLAN |
| G0.03 | FIRE ACCESS SITE PLAN |
| G0.04 | SITE DETAILS |
| G0.05 | SITE DETAILS |
| G0.06 | ENLARGED SITE PLAN |
| TOTAL: 7 | |

## DEMOLITION

| | |
|---|---|
| AD1.01 | DEMO FLOOR PLANS BUILDINGS C7, C8, SL, & ADMIN. |
| AD1.02 | DEMO FLOOR PLANS BUILDINGS C1, C3, C5, IA1, & IA2 |
| AD1.03 | DEMO FLOOR PLANS BUILDINGS C2, C4, & C6 |
| AD2.01 | DEMO RCP BLDG C7, C8, SL & ADMIN |
| AD2.02 | DEMO RCP BLDG C1, C3, C5, IA1 & IA2 |
| AD2.03 | DEMO RCP BLDG C2, C4, & C6 |
| TOTAL: 6 | |

## ARCHITECTURAL

| | |
|---|---|
| A1.01 | BUILDING FLOOR PLANS C7, C8, SL, & ADMIN. |
| A1.02 | BUILDING FLOOR PLANS C1, C3, C5, IA1, & IA2 |
| A1.03 | BUILDING FLOOR PLANS C2, C4, & C6 |
| A2.01 | REFLECTED CEILING PLANS BLDG C7, C8, SL, & ADMIN. |
| A2.02 | REFLECTED CEILING PLANS BLDG C1, C3, C5, IA1, & IA2 |
| A2.03 | REFLECTED CEILING PLANS BLDG C2, C4, & C6 |
| A3.01 | OVERALL ROOF PLAN & GENERAL INFORMATION |
| A3.02 | ENLARGED ROOF PLAN |
| A3.03 | GENERAL ROOF DETAILS |
| A4.01 | BLDG C7, C8, SL & ADMIN BLDG SECTIONS |
| A4.02 | BLDG C1, C3, C5, SL, IA1, & IA2 BLDG SECTIONS |
| A4.03 | BLDG C2, C4, & C6 BLDG SECTIONS |
| A4.04 | LONGITUDINAL BLDG SECTIONS |
| A5.01 | ENLARGED RR PLANS & INTERIOR ELEVATIONS |
| A5.02 | ENLARGED RR PLANS & INTERIOR ELEVATIONS |
| A5.03 | ENLARGED RR PLANS & INTERIOR ELEVATIONS |
| A5.04 | ENLARGED PLANS & INTERIOR ELEVATIONS |
| A5.05 | ENLARGED PLANS & INTERIOR ELEVATIONS |
| A5.06 | ENLARGED RR PLANS & INTERIOR ELEVATIONS |
| A6.01 | EXTERIOR ELEVATIONS - ADMIN, SL BLDGS |
| A6.02 | EXTERIOR ELEVATIONS - C7, C8 BLDGS |
| A6.03 | EXTERIOR ELEVATIONS - C1, C3, C5 BLDGS |
| A6.04 | EXTERIOR ELEVATIONS - C2, C4, C6 BLDGS |
| A6.05 | EXTERIOR ELEVATIONS - IA1 & IA2 BLDGS |
| A8.01 | DOORS, WINDOW FRAME DETAILS |
| A8.02 | PARTITION TYPES AND MISC. DETAILS |
| A8.03 | MISCELLANEOUS DETAILS |
| A8.04 | CEILING DETAILS |
| A9.01 | DOOR SCHEDULE |
| A9.02 | WINDOW SCHEDULE |
| A10.01 | FINISH PLANS & SCHEDULE - BLDGS C1-C8 |
| A10.02 | FINISH PLANS & SCHEDULE - BLDGS IA1, IA2, SL, & ADMIN |
| TOTAL: 32 | |

## STRUCTURAL *

| | |
|---|---|
| SN1 | GENERAL NOTES |
| S1 | FLOOR/ROOF PLANS C7, C8, S-L & ADMIN |
| S2 | FLOOR/ROOF PLANS C1, C3, C5, IA-1, & IA-2 |
| S3 | FLOOR/ROOF PLANS C2, C4, & C6 |
| SD1 | CONCRETE DETAILS |
| SD2 | RTU DETAILS |
| SD2A | RTU DETAILS |
| SD3 | HUNG UNITS DETAILS |
| SD4 | MECHANICAL ENCLOSURE |
| TOTAL: 9 | |

## MECHANICAL *

| | |
|---|---|
| M0.00 | MECHANICAL SHEET INDEX, LEGEND, AND NOTES |
| M0.01 | MECHANICAL TITLE 24 FORMS |
| M0.02 | MECHANICAL TITLE 24 FORMS |
| M0.03 | MECHANICAL TITLE 24 FORMS |
| M0.04 | MECHANICAL TITLE 24 FORMS |
| M0.05 | MECHANICAL TITLE 24 FORMS |
| M0.06 | MECHANICAL TITLE 24 FORMS |
| M0.07 | MECHANICAL TITLE 24 FORMS |
| M0.08 | MECHANICAL TITLE 24 FORMS |
| M0.09 | MECHANICAL TITLE 24 FORMS |
| M0.10 | MECHANICAL TITLE 24 FORMS |
| M0.11 | MECHANICAL TITLE 24 FORMS |
| M0.12 | MECHANICAL TITLE 24 FORMS |
| M0.13 | MECHANICAL TITLE 24 FORMS |
| M0.14 | MECHANICAL TITLE 24 FORMS |
| M0.15 | MECHANICAL TITLE 24 FORMS |
| M0.16 | MECHANICAL TITLE 24 FORMS |
| M0.17 | MECHANICAL TITLE 24 FORMS |
| M0.18 | MECHANICAL TITLE 24 FORMS |
| M0.19 | MECHANICAL TITLE 24 FORMS |
| M0.20 | MECHANICAL TITLE 24 FORMS |
| M0.21 | MECHANICAL TITLE 24 FORMS |
| M0.22 | MECHANICAL TITLE 24 FORMS |
| M1.01 | MECHANICAL SITE PLAN |
| MD2.01 | DEMO MECHANICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| MD2.02 | DEMO MECHANICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| MD2.03 | DEMO MECHANICAL BUILDING FLOOR PLANS C2, C4 & C6 |
| MD6.01 | DEMO MECHANICAL DETAILS |
| M2.01 | MECHANICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| M2.02 | MECHANICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| M2.03 | MECHANICAL BUILDING FLOOR PLANS C2, C4 & C6 |
| M4.01 | MECHANICAL BUILDING ROOF PLANS C7, C8, S-L & ADMIN |
| M4.02 | MECHANICAL BUILDING ROOF PLANS C1, C3, C5, IA-1 & IA-2 |
| M4.03 | MECHANICAL BUILDING ROOF PLANS C2, C4 & C6 |
| M5.01 | MECHANICAL SCHEDULES |
| M5.02 | MECHANICAL SCHEDULES |
| M6.01 | MECHANICAL DETAILS |
| M6.02 | MECHANICAL DETAILS |
| M6.03 | MECHANICAL DETAILS - VARIABLE REFRIGERANT SYSTEM |
| TOTAL: 39 | |

## ELECTRICAL *

| | |
|---|---|
| E0.00 | ELECTRICAL SYMBOLS, NOTES, AND ABBREVIATIONS |
| E0.01 | ELECTRICAL TITLE 24 FORMS |
| E0.02 | ELECTRICAL TITLE 24 FORMS |
| E1.01 | ELECTRICAL SITE PLAN |
| ED2.01 | DEMO ELECTRICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| ED2.02 | DEMO ELECTRICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| ED2.03 | DEMO ELECTRICAL BUILDING FLOOR PLANS C2, C4 & C6 |
| ED3.01 | DEMO LIGHTING PLAN BLDG C7, C8, S-L & ADMIN |
| ED3.02 | DEMO LIGHTING PLAN BLDG C1, C3, C5, IA-1 & IA-2 |
| ED3.03 | DEMO LIGHTING PLAN BLDG C2, C4 & C6 |
| E2.01 | ELECTRICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| E2.02 | ELECTRICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| E2.03 | ELECTRICAL BUILDING FLOOR PLANS C2, C4 & C6 |
| E3.01 | ELECTRICAL BUILDING LIGHTING PLANS C7, C8, S-L & ADMIN |
| E3.02 | ELECTRICAL BUILDING LIGHTING PLANS BLDG C1, C3, C5, IA-1 & IA-2 |
| E3.03 | ELECTRICAL BUILDING LIGHTING PLAN BLDG C2, C4 & C6 |
| E4.01 | ELECTRICAL BUILDING ROOF PLANS C7, C8, S-L & ADMIN |
| E4.02 | ELECTRICAL BUILDING ROOF PLANS C1, C3, C5, IA-1 & IA-2 |
| E4.03 | ELECTRICAL BUILDING ROOF PLANS C2, C4 & C6 |
| E5.01 | ELECTRICAL SINGLE LINE DIAGRAM |
| E6.01 | ELECTRICAL SCHEDULES |
| E6.02 | ELECTRICAL SCHEDULES |
| E7.01 | ELECTRICAL DETAILS |
| TOTAL: 23 | |

## PLUMBING *

| | |
|---|---|
| P0.00 | PLUMBING SHEET INDEX, LEGEND, AND NOTES |
| P1.01 | PLUMBING SITE PLAN |
| PD2.01 | DEMO PLUMBING BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| PD2.02 | DEMO PLUMBING BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| PD2.03 | DEMO PLUMBING BUILDING FLOOR PLANS C2, C4 & C6 |
| P2.01 | PLUMBING BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| P2.02 | PLUMBING BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| P2.03 | PLUMBING BUILDING FLOOR PLANS C2, C4 & C6 |
| P4.01 | PLUMBING BUILDING ROOF PLANS C7, C8, S-L & ADMIN |
| P4.02 | PLUMBING BUILDING ROOF PLANS C1, C3, C5, IA-1 & IA-2 |
| P4.03 | PLUMBING BUILDING ROOF PLANS C2, C4 & C6 |
| P5.01 | PLUMBING SCHEDULES |
| P6.01 | PLUMBING DETAILS |
| P6.02 | PLUMBING DETAILS |
| TOTAL: 14 | |

## FIRE ALARM *

| | |
|---|---|
| FA0.00 | FIRE ALARM SYMBOLS, NOTES, AND ABBREVIATIONS |
| FA1.01 | FIRE ALARM SITE PLAN |
| FA2.01 | FIRE ALARM BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| FA2.02 | FIRE ALARM BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| FA2.03 | FIRE ALARM BUILDING FLOOR PLANS C2, C4 & C6 |
| FA2.04 | FIRE ALARM BUILDING 1A/2A, MPR, E1, E2 |
| FA2.05 | FIRE ALARM BUILDING G, 3A/4A, 6A |
| FA2.06 | FIRE ALARM BUILDING G, 3A/4A, 6A |
| FA5.01 | FIRE ALARM RISER DIAGRAM |
| FA5.02 | FIRE ALARM CALCULATIONS |
| FA6.01 | FIRE ALARM DETAILS |
| TOTAL: 11 | |

**GRAND TOTAL: 141**

# ABBREVIATIONS

| | |
|---|---|
| A.D. | AREA DRAIN |
| A.D.A. | AMERICANS WITH DISABILITIES ACT |
| A.F.F. | ABOVE FINISH FLOOR |
| A.F.G. | ABOVE FINISH GRADE |
| A.H.J. | ATHORITY HAVING JURISDICTION |
| A/C | AIR CONDITIONING |
| ACP. | ACOUSTICAL PANEL |
| ACT. | ACOUSTICAL TILE |
| ADJ. | ABADJUSTABLE |
| ALT. | ALTERNATE |
| ALUM. | ALUMINUM |
| ASPH. | ASPHALT |
| ∠ | ANGLE |
| B.U.R. | BUILT-UP ROOF |
| BD. | BOARD |
| BLDG. | BUILDING |
| BLK. | BLOCK |
| BM. | BEAM |
| C | CHANNEL |
| C.J. | CONTROL JOINT |
| C.M.U. | CONCRETE MASONRY UNIT |
| C.W. | COLD WATER |
| CAB, CABT | CABINET |
| CFMF | COLD FORMED METAL FRAMING |
| CL | CENTERLINE |
| CLG. | CEILING |
| CLR | CLEAR |
| COL. | COLUMN |
| COMP. | COMPRESSIBLE |
| CONC. | CONCRETE |
| COND. | CONDITION |
| CORR. | CORRIDOR |
| CPT. | CARPET (ED) |
| CT. | CERAMIC TILE |
| CTG | CLEAR TEMPERED GLAZING |
| CTSK. | COUNTER SINK |
| D | DRYER |
| D.F. | DRINKING FOUNTAIN |
| D.P. | DAMPPROOFING |
| D.S. | DOWN SPOUT |
| DIA. | DIAMETER |
| DIM. | DIMENSION |
| DTL. | DETAIL |
| DWG. | DRAWING |
| E.J. | EXPANSION JOINT |
| E.Q. | EQUAL |
| EA. | EACH |
| EDF | ELECTRIC DRINKING FOUNTAIN |
| EL. | ELEVATION (HEIGHT) |
| ELECT. | ELECTRICAL |
| ELEV | ELEVATION (DRAWING) |
| EQUIP | EQUIPMENT |
| EXIST | EXISTING |
| EXP | EXPANSION |
| EXT | EXTERIOR |
| F.E. | FIRE EXTINGUISHER |
| F.E.C. | FIRE EXTINGUISHER CABINET |
| F.H.C. | FIRE HOSE CABINET |
| FB. | FACE BRICK |
| FD. | FLOOR DRAIN |
| FIN. | FINISH (ED) |
| FIXT. | FIXTURE |
| FLR. | FLOOR (ING) |
| FLSHG. | FLASHING |
| FLUOR | FLUORESCENT |
| G.B. | GRAB BAR |
| G.I. | GALVANIZED IRON |
| GA. | GAUGE |
| GALV. | GALVANIZED |
| GCMU | GLAZED CONCRETE MASONRY UNIT |
| GEN. | GENERAL |
| GEN. | GENERAL |
| GL. | GLASS / GLAZING |
| GL. | GLASS |
| GR. | GRADE |
| GTP. | GLAZED TILE PAVER |
| GYP. | GYPSUM DRYWALL |
| H.W. | HOT WATER |
| HM | HOLLOW METAL FRAME |
| HORIZ. | HORIZONTAL |
| HT. | HEIGHT |
| I.D. | INSIDE DIAMETER |
| I.P.S. | IRON PIPE SIZE |
| INSUL | INSULATE (ED), (ION) |
| INT. | INTERIOR |
| ISA | INTERNATIONL SYMBOL OF ACCESSIBILITY |
| JT. | JOINT |
| L.P. | LIGHT POLE |
| LAM. | LAMINATE (D) |
| LAV. | LAVATORY |
| LT. | LIGHT |
| LT. WT. | LIGHTWEIGHT |
| M.O. | MASONRY OPENING |
| MAS. | MASONRY |
| MATL. | MATERIAL (S) |
| MAX. | MAXIMUM |
| MB. | MARKER BOARD |
| MECH. | MECHANICAL |
| MEM | MEMBRANE |
| MEM. WP. | MEMBRANE WATERPROOFING |
| MEP | MECHANICAL, ELECTRICAL AND PLUMBING |
| MEZZ. | MEZZANINE |
| MFR. | MANUFACTURE (R) |
| MH. | MANHOLE |
| MIN. | MINIMUM |
| MISC. | MISCELLANEOUS |
| MOD | MODULAR |
| MTL | METAL |
| MTP. | METAL TOILET PARTITION |
| N.D. | NAPKIN DISPOSAL |
| N.I.C. | NOT IN CONTRACT |
| N.R. | NOT RATED |
| N.T.S. | NOT TO SCALE |
| N.V. | NAPKIN VENDOR |
| NO. | NUMBER |
| O.C. | ON CENTER (S) |
| O.C.E.W. | ON CENTER EACH WAY |
| O.D. | OUTSIDE DIAMETER |
| O.F.C.I. | OWNER FURNISHED, CONTRACTOR INSTALLED |
| O.H. | OPPOSITE HAND |
| OPNG. | OPENING |
| OPP. | OPPOSITE |
| P. LAM. | PLASTIC LAMINATE |
| P.C. | PRECAST |
| P.H. | PAPER HOLDER |
| P.L. | PROPERTY LINE |
| P.P. | POWER POLE |
| P.W.B. | PREFINISHED WALL BOARD |
| PL. | PLATE |
| PLUMB. | PLUMBING |
| PLYWD. | PLYWOOD |
| POL. | POLISHED |
| PR. | PAIR |
| PREFIN. | PRE-FINISHED |
| PT. | POINT |
| PTD. | PAINTED |
| Q.T. | QUARRY TILE |
| R / RAD | RADIUS |
| RD | ROOF DRAIN |
| RE. , REF. | REFER TO / REFERENCE / SEE |
| RECP. | RECEPTACLE |
| REINF. | REINFORCE (D), (ING) |
| REQ'D. | REQUIRED |
| RES. | RESILIENT |
| REV. | REVISION (S), REVISED |
| RF | RECREATIONAL RESILIENT FLOORING |
| RPG. | RELOCATABLE PAINTED GYPSUM BOARD |
| RSS. | ROD STOCK AND SEALANT |
| S.C. | SEALED CONCRETE |
| S.D. | SOAP DISPENSER |
| SCHED | SCHEDULE |
| SCPL | SOLID CORE PLASTIC LAMINATE |
| SECT | SECTION |
| SHT | SHEET |
| SIM | SIMILAR |
| SPC | SPECIAL COATING SYSTEM |
| SPEC | SPECIFICATION (S) |
| SQ. | SQUARE |
| SS. | SOUND STRIP |
| SS. STL. | STAINLESS STEEL |
| STD | STANDARD |
| STL | STEEL |
| STRUC | STRUCTURAL |
| SUSP | SUSPENDED |
| SVDF | SHEET VINYL DANCE FLOORING |
| SYS | SYSTEM |
| T.B. | TACK BOARD |
| T.D.R. | TOWEL DISPENSER AND RECEPTACL |
| T.O. | TOP OF |
| T.O.B. | TOP OF (WOOD) BLOCKING |
| T.O.M. | TOP OF MASONRY |
| T.O.S. | TOP OF STEEL |
| T.T.D. | TOILET TISSUE DISPENSER |
| TCNA | TILE COUNCIL OF NORTH AMERICA |
| TEL | TELEPHONE |
| TERR | TERRAZZO |
| THK | THICK (NESS) |
| TYP | TYPICAL |
| U.N.O. | UNLESS NOTED OTHERWISE |
| UR. | URINAL |
| V | VENT |
| V.C.T. | VINYL COMPOSITION TILE |
| V.I.F. | VERIFY IN FIELD |
| VENT. | VENTILATING, VENTILATED |
| VER. | VERIFY |
| VERT. | VERTICAL |
| VGB | (PREFINISHED) VINYL CLAD GYPSUM BOARD |
| VWC | VINYL WALL COVERING |
| W | WASHING MACHINE |
| W.P. | WATER PROOFING |
| W.S. | WEATHERSTRIP |
| W.W. | WATER WELL |
| W.W.F | WELDED WIRE FABRIC |
| W/ | WITH |
| WC | WATER CLOSET |
| WD | WOOD |
| WDW | WINDOW |
| WT | WEIGHT |

# GENERAL NOTES

1. CONSTRUCTION DOCUMENTS DESCRIBE THE PRODUCTS, SYSTEMS, QUANTITIES, CONFIGURATION AND PERFORMANCE SPECIFICATIONS THAT DELIVER THE OVERALL DESIGN INTENT OF THE PROJECT.
2. THE CONSTRUCTION DOCUMENT DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY BOTH.
3. PERFORMANCE BY THE CONSTRUCTION TEAM SHALL BE CONSISTENT WITH THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS AS NECESSARY TO DELIVER THE INDICATED RESULTS OF THE DESIGN INTENT.
4. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL GOVERNING CODES, ORDINANCES, REGULATIONS AND LAWS.
5. THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS AND SCAFFOLDING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
6. WHERE ANY CONFLICT OCCURS BETWEEN THE REQUIREMENTS OF LAWS, CODES, ORDINANCES, RULES AND REGULATIONS, THE MOST STRINGENT SHALL GOVERN.
7. ENACT ALL MEASURES TO PROTECT AND SAFEGUARD ALL EXISTING ELEMENTS TO REMAIN FROM BEING DAMAGED. REPLACE OR REPAIR EXISTING ELEMENTS DAMAGED BY THE EXECUTION OF THIS CONTRACT TO EQUAL OR BETTER CONDITION.
8. CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE EXISTING OR NEW STRUCTURAL ELEMENTS SHALL NOT BE STARTED UNTIL THE DETAILS HAVE BEEN REVIEWED AND APPROVED BY THE ARCHITECT, AND STRUCTURAL ENGINEER OF RECORD.
9. VERIFY DIMENSIONS AND EXISTING CONDITIONS BEFORE COMMENCING WORK. REPORT DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING WITH AFFECTED WORK.
10. REFLECTED CEILING PLAN DIMENSIONS ARE REFERENCED FROM FINISHED SURFACES UNLESS NOTED OTHERWISE. CEILING HEIGHTS ARE DIMENSIONED FROM FLOOR TO FINISHED CEILING HEIGHT.
11. DIMENSIONS NOTED AS "FIELD VERIFY" SHALL BE CHECKED AT THE SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCHITECT BEFORE INCORPORATING INTO THE WORK.
12. DO NOT SCALE DRAWING. WRITTEN DIMENSIONS TAKE PRECEDENCE. IF CLARIFICATION IS REQUIRED IN ORDER TO DETERMINE THE INTENT OF THE CONTRACT DOCUMENTS, CONTACT THE ARCHITECT.
13. NOTES OR DIMENSIONS LABELED "TYPICAL" SHALL APPLY TO SITUATIONS THAT ARE THE SAME OR SIMILAR.
14. ALL DIMENSIONS ARE TO FACE OF STUD, UNLESS NOTED OTHERWISE.
15. ALL SPACES WITH FLOOR DRAINS TO HAVE FINISHED FLOORS SLOPED TO DRAIN NOT TO EXCEED ONE IN FIFTY.
16. ALL FLOORS FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. ALL FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCER STRIPS.
17. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED.
18. ALL DOORS IN INTERIOR GYP. BD STUD WALLS SHALL BE SET 4" OFF THE PERP. ADJ. WALL ON THE HINGE SIDE OF THE DOOR UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL CONTACT THE ARCHITECT IF ANY CONFLICTS OCCUR.
19. ALUM. THRESHOLDS TO BE SET IN FULL BED OF SEALANT AT ALL EXT. DOORS.
20. COORDINATE ROOF DRAIN LEADER LOCATIONS WITH FLOOR PLAN PRIOR TO SLAB CONSTRUCTION.
21. PROVIDE VINYL REDUCER AT ALL DISSIMILAR FLOOR MATERIALS UNLESS OTHERWISE NOTED.
22. UNLESS OTHERWISE NOTED, ALL ELECTRICAL AND MECHANICAL OPERABLE DEVICES SHALL BE MOUNTED WITH THE HIGHEST OPERABLE CONTROL AT MAX. OF 42" AFF.
23. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE DSA APPROVED DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK, PER CAC, 2013, 4-317(c)
24. MAINTAIN THE INTEGRITY OF ALL EXISTING RATED ASSEMBLIES U.O.N.

THIS PROJECT SHALL NOT BE CLOSED AND CERTIFIED PRIOR TO THE CERTIFICATION OF A#04 121964 (WARNER INTERIM HOUSING)

# CODES & STANDARDS

**PARTIAL LIST OF APPLICABLE CODES**

| | |
|---|---|
| **2022 California Administrative Code (CAC)** | (Part 1, Title 24, CCR) |
| **2022 California Building Code (CBC)** | (Part 2, Title 24, CCR) |
| **2022 California Electrical Code (CEC)** | (Part 3, Title 24, CCR) |
| **2022 California Mechanical Code (CMC)** | (Part 4, Title 24, CCR) |
| **2022 California Plumbing Code (CPC)** | (Part 5, Title 24, CCR) |
| **2022 California Energy Code (CEC)** | (Part 6, Title 24, CCR) |
| **2022 California Fire Code (CFC)** | (Part 9, Title 24, CCR) |
| **2022 California Existing Building Code (CEBC)** | (Part 10, Title 24, CCR) |
| **2022 California Green Building Standards Code (CAL Green)** | (Part 11, Title 24, CCR) |
| **2022 California Referenced Standards Code** | (Part 12, Title 24, CCR) |

**Title 19 CCR, Public Safety, State Fire Marshall Regulations**
**2019 ASME A17.1/CSA B44-13 Safety Code For Elevators and Escalators (per 2022 CBC Part 2, Ch 35)**
Note: Cal/OSHA Elevator Unit enforces CCR Title 8 and uses the 2004 ASME A17.1 by adoption

**PARTIAL LIST OF APPLICABLE STANDARDS**

| | |
|---|---|
| **NFPA 13** Automatic Fire Sprinkler Systems | (2022 Edition) |
| **NFPA 14** Standpipe and Hose Systems | (2019 Edition) |
| **NFPA 17** Dry Chemical Extinguishing Systems | (2021 Edition) |
| **NFPA 17a** Wet Chemical Extinguishing Systems | (2021 Edition) |
| **NFPA 20** Stationary Pumps for Fire Protection | (2019 Edition) |
| **NFPA 24** Standard for the Installation of Private Fire Service Mains & their Appurtenances (CA amended) | (2019 Edition) |
| ***NFPA 25** Standard for Inspection, Testing and Maintenance of Water-Based Fire Protection Systems (CA amended)* | *(2013 Edition)* |
| **NFPA 72** National Fire Alarm & Signaling Code (CA amended) | (2022 Edition) |
| **NFPA 80** Fire Doors and Other Opening Protectives | (2019 Edition) |
| **NFPA 92** Standard for Smoke Control Systems | (2018 Edition) |
| **NFPA 253** Critical Radiant Flux of Floor Covering Systems | (2019 Edition) |
| **NFPA 2001** Clean Agent Fire Extinguishing Systems (CA amended) | (2018 Edition) |
| **ICC 300** ICC Stds on Bleachers, Folding and Telescoping Seating and Grand stands | (2017 Edition) |
| **UL 300** Fire Testing of Fire Extinguishing Sys for Protection of Restaurant Cooking Areas | 2005 (R2010) |
| **UL 464** Audible Signal Appliances | (2003 Edition) |
| **UL 521** Heat Detectors for Fire Protective Signaling Systems | (1999 Edition) |

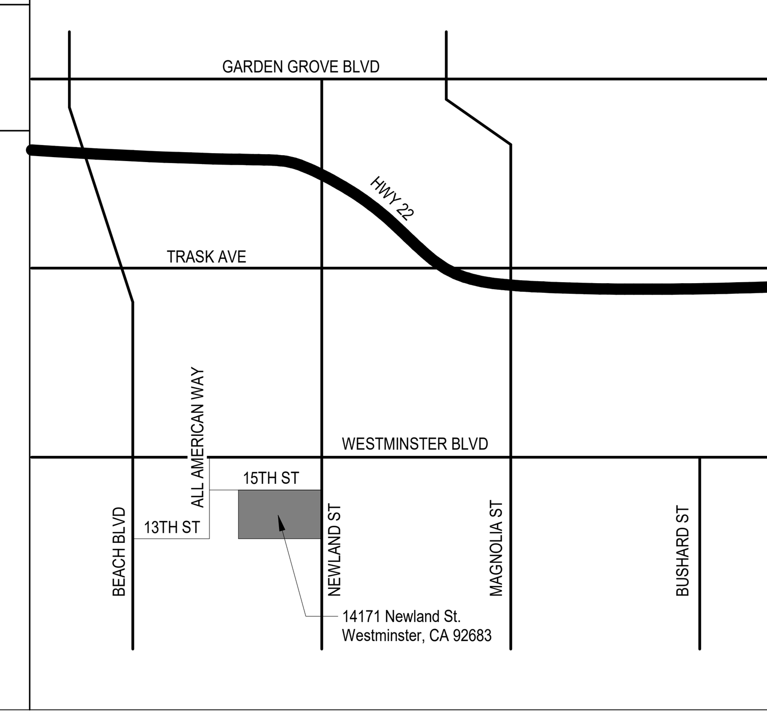
For a complete list of applicable NFPA standards refer to 2022 CBC (SFM) Chapter 35 and California Fire Code Chapter 80

See California Building Code Chapter 35 for State of California amendments to the NFPA Standards.

# CALIFORNIA ENERGY CODE NOTES

1. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.
2. LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).
3. MECHANICAL SYSTEM ACCEPTANCE TEST MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.
4. ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER / ARCHITECT OF RECORD OR THE OWNER'S AGENT.
5. A LISTING OF CERTIFIED ATT CAN BE FOUND AT: HTTPS.//WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICSPROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE.
6. THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.
7. PROJECT INSPECTORS WILL CORRECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

# VICINITY MAP




# SHEET NUMBERING

A2.01A
- **BUILDING AREA**
- **SEQUENCE (.01 - .99......etc.)**
- **SHEET DISCIPLINE TYPE**
  - 0 - GENERAL
  - 1 - SITE PLANS & DETAILS
  - 2 - FLOOR PLANS (Note: Flip Sheets are Schedules)
  - 3 - ROOF
  - 4 - ADA & ENLARGED PLANS
  - 5 - PLAN DETAILS
  - 6 - EXTERIOR/INTERIOR ELEVATIONS
  - 7 - PARTITION TYPES & WALL SECTIONS
  - 8 - CASEWORK ELEVATIONS
  - 9 - WINDOWS, DOORS, FRAME ELEVATIONS & DETAILS
  - 10 - REFLECTED CEILING PLANS & DETAILS
- **DISCIPLINE**
  - G - GENERAL (Cover, A0 Sheets)
  - C - CIVIL
  - L - LANDSCAPE
  - D - DEMO
  - A - ARCHITECTURAL
  - S - STRUCTURAL
  - I - INTERIORS
  - M - MECHANICAL
  - E - ELECTRICAL
  - P - PLUMBING
  - T - TECHNOLOGY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

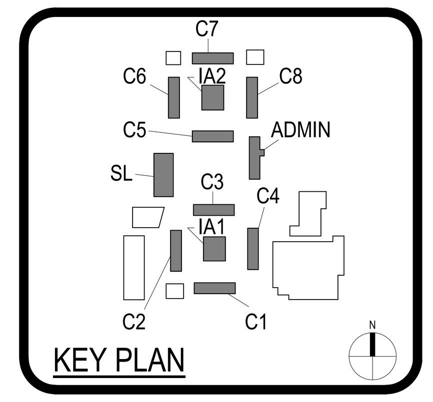
**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST
WESTMINSTER CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872



KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|

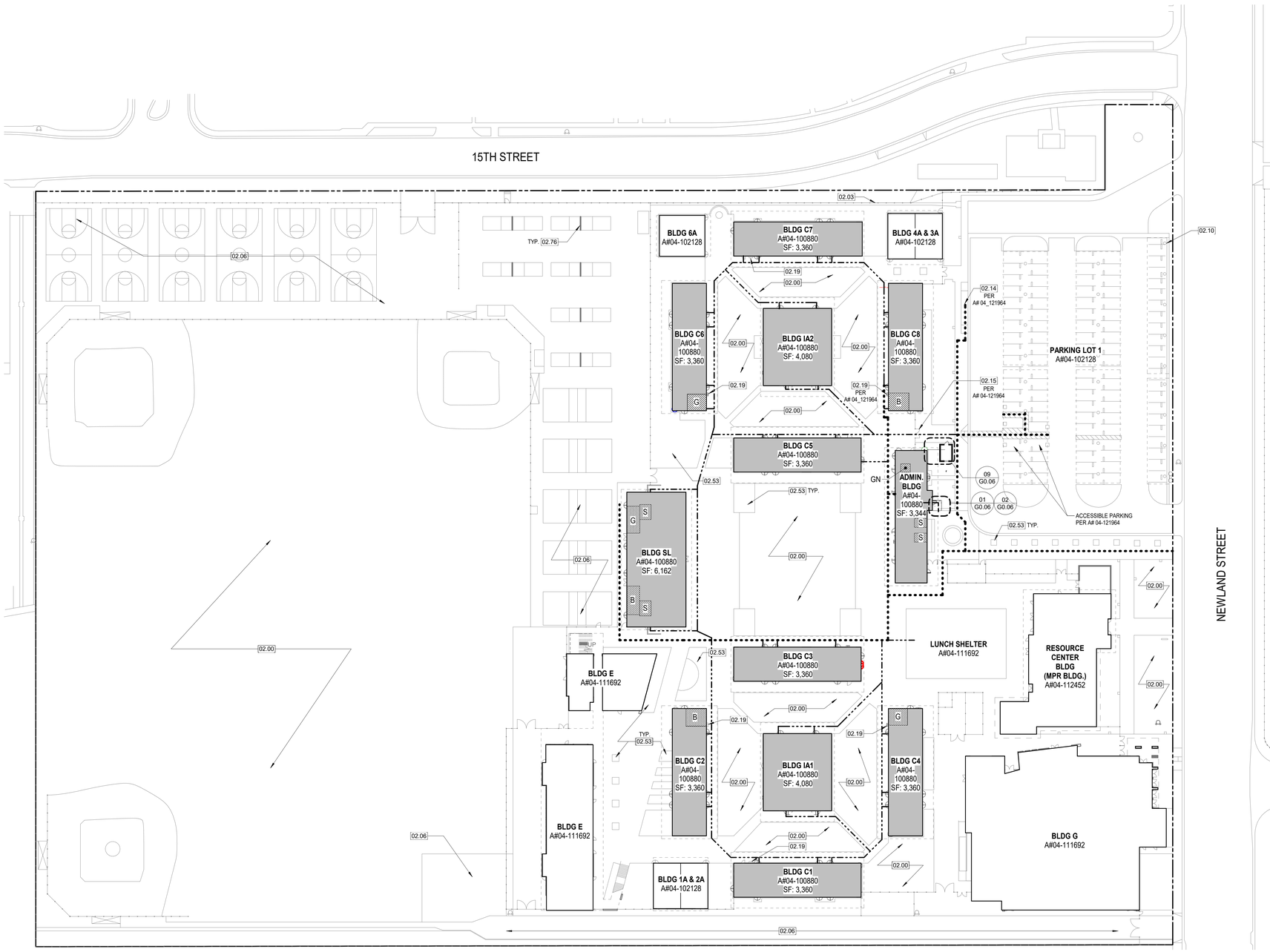
**DSA SUBMITTAL**

**TITLE SHEET**

**G0.01**

**FILE PATH:** Z:\Projects\...
9/27/2023 4:06:47 PM

0" 1"




5 SITE PLAN
1" = 40'-0"

## PATH OF TRAVEL

**DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:**
THE POT INDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR **PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS**, AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) 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 THRESHHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS. DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

## ACCESSIBILITY LEGEND

- (N) PATH OF TRAVEL
- PATH OF TRAVEL PER A#04_121964
- PATH OF TRAVEL PER A#04-111692
- PROPERTY LINE

- (E) BUILDING - FIRE ALARM UPGRADES ONLY
- BUILDING TO BE REMODELED
- ACCESSIBLE TOILET ROOMS TO BE PROVIDED AS PART OF THE SCOPE OF WORK.
  GN = GENDER NEUTRAL RESTROOM
  B = BOYS
  G = GIRLS
  S = STAFFS

## ACCESSIBILITY KEYED NOTES

| # | Description |
|---|---|
| 02.00 | (E) TURF TO REMAIN |
| 02.03 | (E) CHAIN LINK FENCE TO REMAIN |
| 02.06 | (E) ASPHALT TO REMAIN |
| 02.10 | (E) TOW AWAY SIGN PER A#04-121964 |
| 02.14 | (E) PASSENGER DROP OFF ZONE |
| 02.15 | (E) ACCESSIBLE GATE |
| 02.19 | (E) DRINKING FOUNTAIN TO REMAIN |
| 02.53 | (E) PLANTER TO REMAIN |
| 02.76 | (E) BALL WALLS PER A#04-65024 |

## BUILDING USE LEGEND

**ADMIN BUILDING - ADMINISTRATION**
**BUILDING C1 - CLASSROOM**
**BUILDING C2 - CLASSROOM**
**BUILDING C3 - CLASSROOM**
**BUILDING C4 - CLASSROOM**
**BUILDING C5 - CLASSROOM**
**BUILDING C6 - CLASSROOM**
**BUILDING C7 - CLASSROOM**
**BUILDING C8 - CLASSROOM**
**BUILDING IA1 - CLASSROOM**
**BUILDING IA2 - CLASSROOM**
**BUILDING SL - LOCKER ROOM**
**BUILDING E - CLASSROOM**
**BUILDING G - GYM**
**BUILDING 1A & 2A - RELOCATABLE CLASSROOM**
**BUILDING 4A & 3A - RELOCATABLE CLASSROOM**
**BUILDING 6A - RELOCATABLE CLASSROOM**
**RESOURCE CENTER BUILDING - MULTI-PURPOSE**

## DSA CERTIFICATION LIST

1. THE FOLLOWING PROJECT... **A# 04-100880** CLOSED WITH DSA CERTIFICATION ON 07/24/2008
2. THE FOLLOWING PROJECT... **A# 04-102128** CLOSED WITH DSA CERTIFICATION ON 07/12/2010
3. THE FOLLOWING PROJECT... **A# 04-111692** CLOSED WITH DSA CERTIFICATION ON 05/20/2015
4. THE FOLLOWING PROJECT... **A# 04-112452** CLOSED WITH DSA CERTIFICATION ON 08/05/2015
5. THE FOLLOWING PROJECT... **A# 04-114776** CLOSED WITH DSA CERTIFICATION ON 03/07/2017

## PARKING CALCULATION

**(E) PARKING LOT 1:**

| | |
|---|---|
| STANDARD STALLS | 95 |
| VAN ACCESSIBLE STALLS | 2 |
| STD ACCESSIBLE STALLS | 3 |
| TOTAL P-LOT 1 STALLS | **100** |
| **TOTAL STALLS ON SITE** | **100** |

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SS ☑ FLS ☑ ACS ☑
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PBK

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2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
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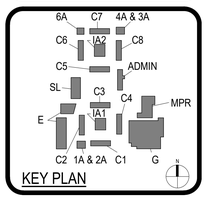
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

**PROJECT ADDRESS:**
14171 NEWLAND ST
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN

Consultant

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LICENSED ARCHITECT
Yong You
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WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|

**DSA SUBMITTAL**

## SITE ACCESSIBILITY PLAN

# G0.02

G0.03 - FIRE ACCESS SITE PLAN

0" 1"

## BLDG CONSTRUCTION TYPE/SPRINKLER INFO

1. ADMIN BLDG (EXISTING ADMINISTRATION BLDG) - TYPE V-N , NON SPRINKLERED
2. BLDG SL (EXISTING LOCKER ROOM BUILDING) - TYPE V-N , NON SPRINKLERED
3. BLDG IA1 & 1A2, C1, C2, C3, C4, C5, C6, C7 & C8 (EXISTING CLASSROOMS) - TYPE V-N , NON SPRINKLERED
4. BLDG E (EXISTING CLASSROOMS) - TYPE IIB , FULLY SPRINKLERED
5. BLDG G (EXISTING GYMNASIUM) - TYPE IIB , FULLY SPRINKLERED
6. EXISTING RELOCATABLE CLASSROOM BLDGS 1A & 2A, 4A & 3A AND 6A - TYPE V-N , NON SPRINKLERED
7. RESOURCE CENTER (EXISTING MULTI-PURPOSE BUILDING) - TYPE V-N , FULLY SPRINKLERED

## GENERAL FIRE NOTES

1. FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED FOR EVERY FACILITY, BUILDING OR PORTION OF A BUILDING HEREAFTER CONSTRUCTED OR MOVED INTO OR WITHIN THE JURISDICTION WHEN ANY PORTION OF THE FACILITY OR ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY OF THE BUILDING IS LOCATED MORE THAN 150'-0" FOR BUILDING EQUIPPED WITH FIRE SPRINKLERS AS APPROVED BY THE FIRE DEPARTMENT FOR FIRE APPARATUS ACCESS AS MEASURED BY AN PPROVED ROUTE AROUND THE EXTERIOR OF THE BUILDING OR FACILITY. PER CFC 503.1.1 EXCEPTION 1, THE FIRE CODE OFFICIAL IS AUTHORIZED TO INCREASE THE DIMENSION OF 150 FEET (45 720 MM) WHERE ANY OF THE FOLLOWING CONDITIONS OCCUR: 1.1. THE BUILDING IS EQUIPPED THROUGHOUT WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.1, 903.3.1.2 OR 903.3.1.3.
2. PER 2022 CFC, SECTION 503.2: FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20'-0" AND AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13'6".
3. PER 2022 CFC, SECTION 506, WHEN ACCESS TO OR WITHIN A STRUCTURE OR AN AREA IS UNDULY DIFFICULT BECAUSE OF SECURED OPENINGS OR WHERE IMMEDIATE ACCESS IS NECESSARY FOR LIFE SAVING OR FIREFIGHTING PURPOSES, A KNOX KEY BOX SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION.
4. KNOX KEY SWITCHES, KNOX LOCKS, OR FRANGIBLE PADLOCKS/CHAINS SHALL BE PROVIDED FOR ALL GATES AND BARRIERS IN THE PATH OF VEHICLE OR FIREFIGHTER ACCESS AND SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES.
5. FIRE DEPARTMENT VEHICULAR ACCESS MUST BE INSTALLED MAINTAINED IN A SERVICEABLE MANNER PRIOR AND DURING THE TIME OF CONST. PER 2022 CFC 501.4.
6. FIRE DEPARTMENT VEHICULAR ACCESS ROADS SHALL BE HARDSCAPE ALL WEATHER ACCESS IN ACCORDANCE WITH THE DEPARTMENT'S ALL WEATHER ACCESS REQUIREMENTS PER 2022 CFC 503.2.3.
7. PER 2022 CFC, SECTION 503.3: POST "NO PARKING" SIGNS ALONG FIRE VEHICULAR ACCESS ROAD(S).
8. APPROVED BUILDING ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION SHALL BE PROVIDED AND MAINTAINED SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET FRONTING THE PROPERTY. THE NUMBERS SHALL CONTRAST WITH THEIR BACKGROUND, BE ARABIC NUMERALS OR ALPHABET LETTERS, AND BE A MINIMUM OF 4" HIGH WITH A MINIMUM STROKE WIDTH OF 0.5". PER 2022 CFC 505.1.
9. ALL-WEATHER ACCESS ROADWAYS AND ALL REQUIRED PUBLIC FIRE HYDRANTS SHALL BE IN PLACE AND OPERATIONAL BEFORE BRINGING COMBUSTIBLE BUILDING MATERIALS OR PORTABLE UNITS ON-SITE.
10. FIRE EXTINGUISHER REQUIREMENTS SHALL BE IN COMPLIANCE WITH CFC 2002 SECTION 906
11. ALL POLES, BACKBOARDS, AND OTHER OBSTRUCTIONS ON PLAYGROUNDS NEAR A FIRE ACCESS ROADWAY SHALL BE PROVIDED WITH REFLECTIVE TAPE OR PAINT.
12. ALL STRIPING TO BE FINISHED PER DISTRICT STANDARDS.
13. ALL EXISTING TABLES AND BENCHES WITHIN THE SCOPE OF WORK ARE TO BE STORED DURING CONSTRUCTION AND RETURNED TO THEIR ORIGINAL LOCATIONS UPON COMPLETION OF SITEWORK, U.N.O.
16. THE PROJECT SHALL COMPLY WITH 2022 CALIFORNIA BUILDING CODE, 2022 CALIFORNIA FIRE CODE, AND OTHER CURRENTLY ADOPTED CODES, STANDARDS, REGULATIONS AND REQUIREMENTS AS ENFORCED BY THE ORANGE COUNTY FIRE AUTHORITY.
17. THE EGRESS PATH SHALL REMAIN FREE AND CLEAR OF ALL OBSTRUCTIONS AT ALL TIMES. NO STORAGE IS PERMITTED .

## BUILDING I.D. SIGN LEGEND

| BUILDING | I.D. LABEL |
|---|---|
| ADMIN BUILDING - | "ADM" |
| BUILDING C1 - | "C1" |
| BUILDING C2 - | "C2" |
| BUILDING C3 - | "C3" |
| BUILDING C4 - | "C4" |
| BUILDING C5 - | "C5" |
| BUILDING C6 - | "C6" |
| BUILDING C7 - | "C7" |
| BUILDING C8 - | "C8" |
| BUILDING IA1 - | "IA1" |
| BUILDING IA2 - | "IA2" |
| BUILDING SL - | "SL" |
| BUILDING E - | "E" |
| BUILDING G - | "G" |
| BUILDING 1A & 2A - | "1A" & "2A" |
| BUILDING 4A & 3A - | "4A" & "3A" |
| BUILDING 6A - | "6A" |
| RESOURCE CENTER BUILDING - | "MPR" |

**NOTE:**
BUILDING I.D. LABELS TO MATCH LETTERS WITHIN QUOTATIONS ("X"), DISTRICT TO CONFIRM LETTERS PRIOR TO INSTALL. BLDG I.D. LETTERS TO FACE FIRE ACCESS ROADS AND BE VISIBLE WITHOUT OBSTRUCTION.

FOR LETTERING, REFER TO DETAIL 29 / A8.02

REQUIRED BLDG ID SIGNAGE LOCATIONS INDICATED BY "( ID )"

FOR MORE INFORMATION ON SIGNAGE LOCATIONS, REFER TO EXTERIOR ELEVATIONS.

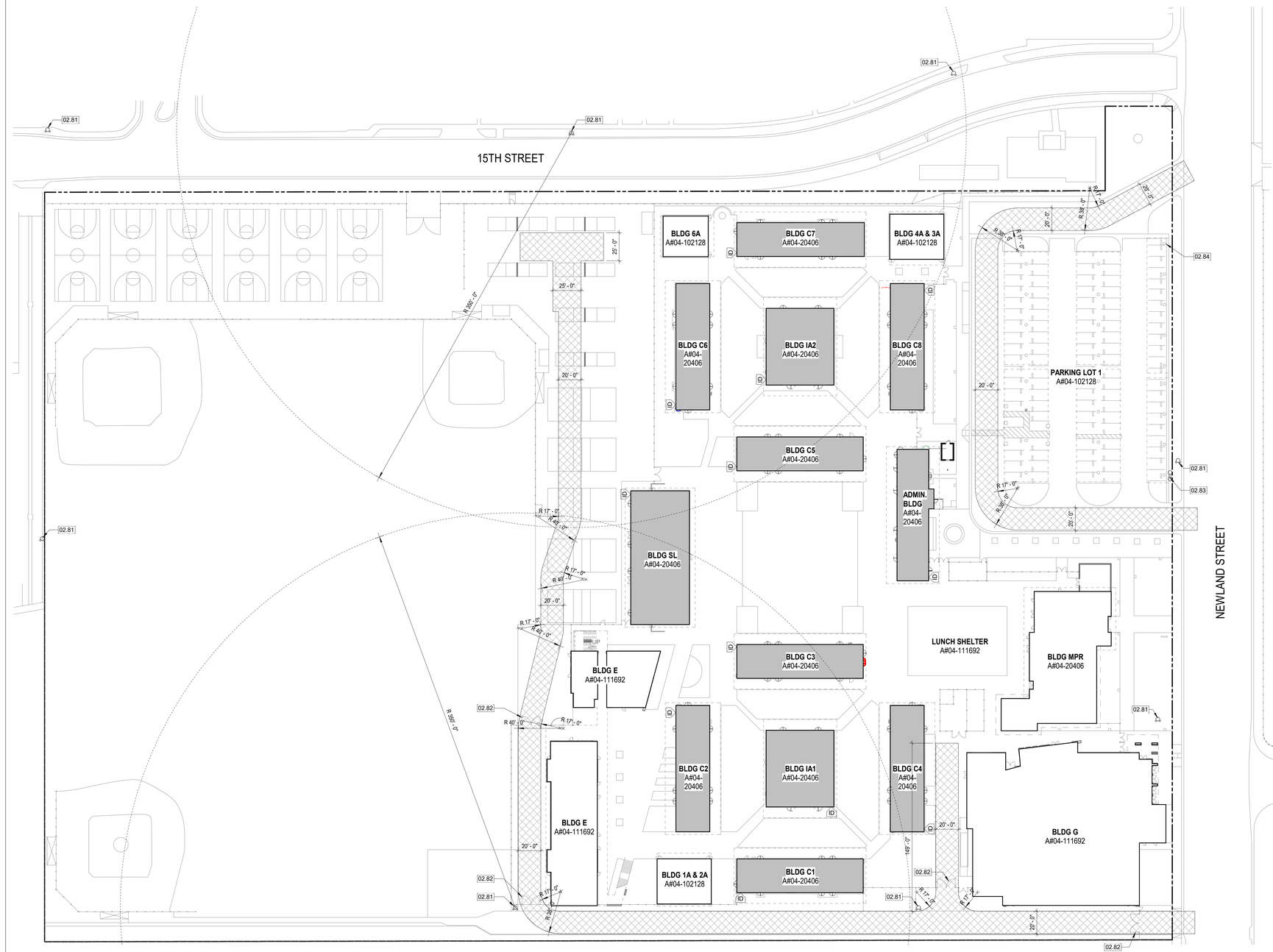
CONFIRM BLDG ID LETTERS WITH DISTRICT PRIOR TO PAINTING.

## FIRE ACCESS KEYED NOTES

| # | Description |
|---|---|
| 02.81 | (E) FIRE HYDRANT |
| 02.82 | (E) SERVICE GATE |
| 02.83 | (E) FIRE SUPPRESSION BACKFLOW PREVENTER |
| 02.84 | (E) SOLAR PANEL COLUMNS |

## FIRE ACCESS LEGEND

- PROPERTY LINE
- (E) BUILDING NOT IN SCOPE
- BUILDING IN SCOPE
- (E) FIRE ACCESS LANE PER #04-111692




**SoCal Flow Testing**
**3741 Rose Dr, Yorba Linda, CA 92886**
**714-261-5716**
**email: info@socalflowtest.com**

### Hydrant Flow Test Report

Project **Warner Middle School** Test date **11/17/22**
Address **14171 Newland St** Test time **10:15**
City **Westminster** State **CA** File no.

Test hydrant location **1st hydrant east of Wilson St on north side of 15th St**
Hydr # **18H** Elev (ft +/-) **Grade**
Flow hydrant location **1st hydrant west of Wilson St on north side of 15th St**
Hydr # **17H** Elev (ft +/-) **Grade**

Static Pressure **61** PSI Report Date **11/2/22**

| Outlet | C-value | Diam | Pitot | | Volume | |
|---|---|---|---|---|---|---|
| A | 0.9 | 2.0 | **0** | PSI | **0** | GPM |
| B | 0.9 | 2.5 | **27** | PSI | **872** | GPM |
| C | 0.9 | 3.0 | **0** | PSI | **0** | GPM |
| D | 0.83 | 4.0 | **0** | PSI | **0** | GPM |

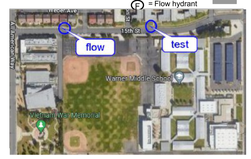
Residual Pressure **57** PSI at an observed volume of **872** GPM

Projected Pressure 20 PSI calculates to a volume of **3064** GPM

Although the results are accurate for the date and time given, they may not accurately reflect higher or lower readings which vary due to seasonal conditions and time of day.
Per NFPA 24-10, Table C.4.10.1(a), note 1, $Q=29.84 \times c(d)^2 (p)^{0.5}$
Per NFPA 24-10, Paragraph C.4.10.1.2, $Q_r = Q_t \times (h/h_r)^{0.54}$
Test by: Hildebrandt

Witness Tony Thomas, Westminster Water, (714) 548-3696
Client Brad Seaver, Westminster School District, (714) 894-7311 x1123
cc: tthomas@westminster-ca.gov, bseaver@wsdk8.us

Symbols: = Test hydrant, = Flow hydrant




**NOTE:** FIRE FLOW TEST PERFORMED AS PART OF **A# 04_121964**

**DSA** **810**

## FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

*For additional information refer to the instructions at the end of this form and DSA Policy PL 09-01: Fire Flow for Buildings.*

| PROJECT INFORMATION | |
|---|---|
| School District/Owner: | Westminster School District |
| Project Name/School: | Warner Middle School - Modernization Project |
| Project Address: | 14171 Newland St., Westminster, CA 92683 |

| FIRE & LIFE SAFETY INFORMATION | | | | |
|---|---|---|---|---|
| 1. | Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)* | Yes ☑ | | No ☐ |
| 2. | Was the fire hydrant water flow test performed as part of this LFA review? | Yes ☐ | | No ☑ |
| 3. | Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)* | Yes ☐ | | No ☑ |
| | Refer to the following website for FHSZ locations: http://egis.fire.ca.gov/FHSZ/ | Moderate ☐ | High ☐ | Very High ☐ |
| | Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)* | | | WIFA ☐ |



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000


# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

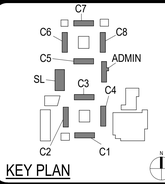
PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

KEY PLAN




Consultant

Architect

LICENSED ARCHITECT
Tong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

FIRE ACCESS SITE PLAN

G0.03

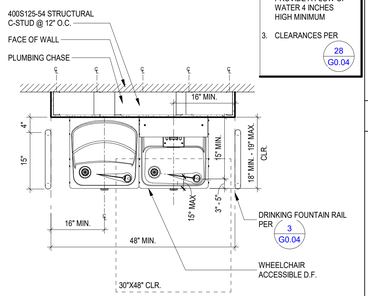
FILE PATH: Z:\Projects\...
9/27/2023 4:06:54 PM

30 FIRE ACCESS SITE PLAN
1" = 40'-0"

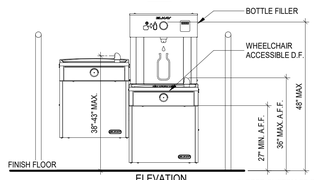
0" 1"

DRINKING FOUNTAIN
MFR: EXLAY
MODEL: EZH2O
DESCRIPTION: BOTTLE FILLER REFER TO PLUMBING SPOUT TO PROVIDE A FLOW OF WATER 4" HIGH MIN.

NOTES:
1. UNDERSIDE OF D.F. IS FREE OF SHARP OR ABRASIVE EDGES OR SURFACES
2. THE SPOT SHALL PROVIDE A FLOW OF WATER 4 INCHES HIGH MINIMUM
3. CLEARANCES PER 28 G0.04

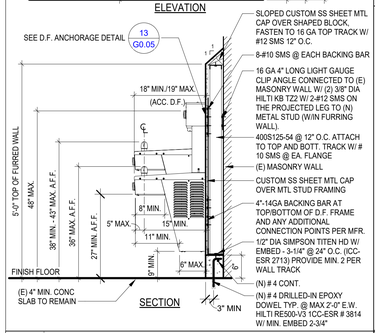



PLAN

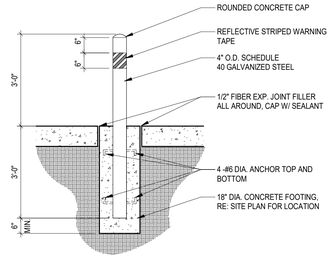



ELEVATION

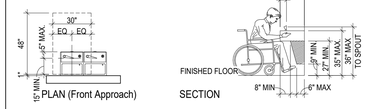
## 18 ACCESSIBLE DRINKING FOUNTAIN
3/4" = 1'-0"




SECTION




## 17 GUARD POST/ BOLLARD
1/2" = 1'-0"




PLAN (Front Approach)

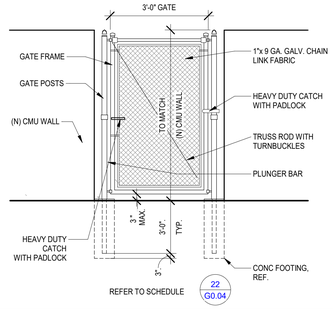



SECTION

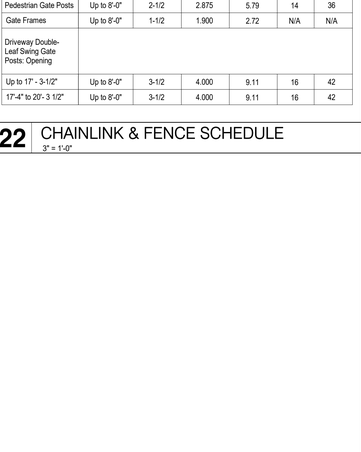
## 28 DRINKING FOUNTAIN GUIDELINE
1/4" = 1'-0"

| Item | Height | Nominal Pipe Size (Inches) | Outside Diameter (Inches) | Weight (pounds per foot) | Conc Footings f'c=3000 psi min. | |
|---|---|---|---|---|---|---|
| | | | | | Diameter (Inches) | Depth (Inches) |
| Top Rail, Brace Rails and Transom Rails | Up to 10'-0" | 1-1/4 | 1.660 | 2.27 | N/A | N/A |
| | 10'-1" to 16'-0" | 1-1/2 | 1.900 | 2.72 | N/A | N/A |
| Line Posts | Up to 6'-0" | 2 | 2.375 | 2.65 | 12 | 30 |
| | 6'-1" to 8'-0" | 2 | 2.375 | 2.65 | 12 | 36 |
| | 8'-1" to 10'-0" | 2-1/2 | 2.875 | 5.79 | 12 | 42 |
| | 10'-1" to 16'-0" | 3 | 3.500 | 7.58 | 14 | 60 |
| Terminal, Corner, Angle & Pull Posts | Up to 8'-0" | 2-1/2 | 2.875 | 5.79 | 12 | 36 |
| | 8'-1" to 10'-0" | 2-1/2 | 2.875 | 5.79 | 14 | 42 |
| | 10'-1" to 16'-0" | 3 | 3.500 | 7.58 | 14 | 60 |
| Pedestrian Gate Posts | Up to 8'-0" | 2-1/2 | 2.875 | 5.79 | 14 | 36 |
| Gate Frames | Up to 8'-0" | 1-1/2 | 1.900 | 2.72 | N/A | N/A |
| Driveway Double-Leaf Swing Gate Posts: Opening | | | | | | |
| Up to 17' - 3-1/2" | Up to 8'-0" | 3-1/2 | 4.000 | 9.11 | 16 | 42 |
| 17'-4" to 20'- 3 1/2" | Up to 8'-0" | 3-1/2 | 4.000 | 9.11 | 16 | 42 |

## 22 CHAINLINK & FENCE SCHEDULE
3" = 1'-0"

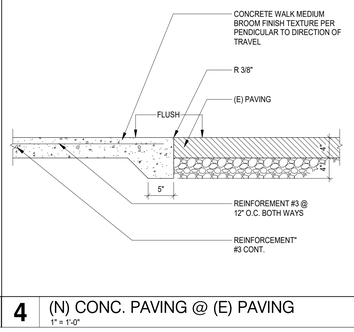



## 21 CHAINLINK SINGLE SERVICE GATE
1 1/2" = 1'-0"

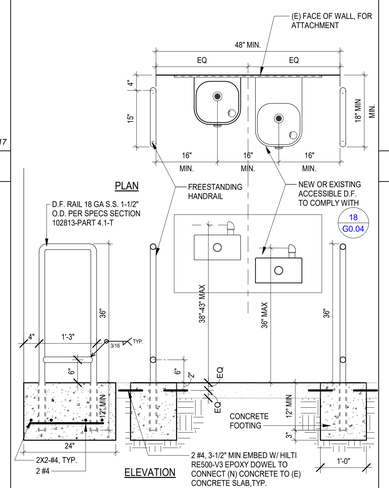



*033053.01-S* *Rev 10/17*

## 10 CONC CONTROL JOINT - TYP.
3" = 1'-0"




## 4 (N) CONC. PAVING @ (E) PAVING
1" = 1'-0"




## 3 DRINKING FOUNTAIN RAILS
3/4" = 1'-0"

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PBK

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P 949--548-5000

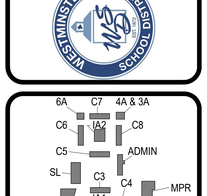
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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| 03/31/23 | 220526 |

REVISIONS

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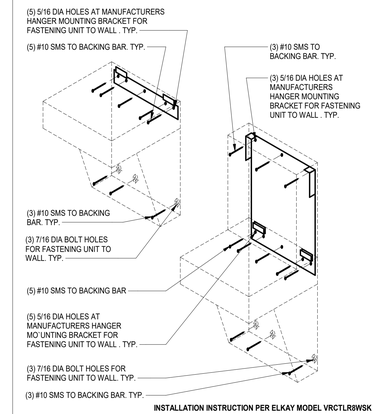
DSA SUBMITTAL

SITE DETAILS

G0.04

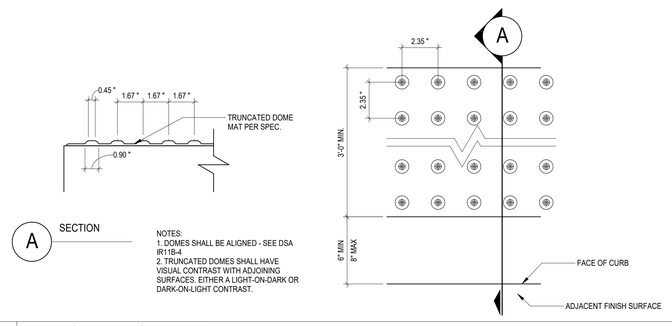
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0" 1"



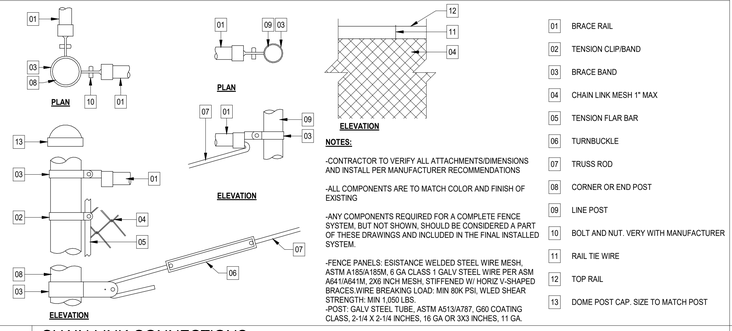

**INSTALLATION INSTRUCTION PER ELKAY MODEL VRCTLR8WSK**

**13** D.F. ANCHORAGE DETAIL
1/4" = 1'-0"




NOTES:
1. DOMES SHALL BE ALIGNED - SEE DSA IR11B-4
2. TRUNCATED DOMES SHALL HAVE VISUAL CONTRAST WITH ADJOINING SURFACES, EITHER A LIGHT-ON-DARK OR DARK-ON-LIGHT CONTRAST.

**6** TRUNCATED DOME MAT
3" = 1'-0"




**NOTES:**

-CONTRACTOR TO VERIFY ALL ATTACHMENTS/DIMENSIONS AND INSTALL PER MANUFACTURER RECOMMENDATIONS

-ALL COMPONENTS ARE TO MATCH COLOR AND FINISH OF EXISTING

-ANY COMPONENTS REQUIRED FOR A COMPLETE FENCE SYSTEM, BUT NOT SHOWN, SHOULD BE CONSIDERED A PART OF THESE DRAWINGS AND INCLUDED IN THE FINAL INSTALLED SYSTEM.

-FENCE PANELS: ESISTANCE WELDED STEEL WIRE MESH, ASTM A185/A185M, 6 GA CLASS 1 GALV STEEL WIRE PER ASM A641/A641M, 2X6 INCH MESH, STIFFENED W/ HORIZ V-SHAPED BRACES.WIRE BREAKING LOAD: MIN 80K PSI, WLED SHEAR STRENGTH: MIN 1,050 LBS.
-POST: GALV STEEL TUBE, ASTM A513/A787, G60 COATING CLASS, 2-1/4 X 2-1/4 INCHES, 16 GA OR 3X3 INCHES, 11 GA.

| | |
|---|---|
| 01 | BRACE RAIL |
| 02 | TENSION CLIP/BAND |
| 03 | BRACE BAND |
| 04 | CHAIN LINK MESH 1" MAX |
| 05 | TENSION FLAR BAR |
| 06 | TURNBUCKLE |
| 07 | TRUSS ROD |
| 08 | CORNER OR END POST |
| 09 | LINE POST |
| 10 | BOLT AND NUT. VERY WITH MANUFACTURER |
| 11 | RAIL TIE WIRE |
| 12 | TOP RAIL |
| 13 | DOME POST CAP. SIZE TO MATCH POST |

**4** CHAIN LINK CONNECTIONS
1 1/2" = 1'-0"

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PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave. #910
Anaheim, CA 92806
P 949-548-8000

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

**PROJECT ADDRESS:**
14171 NEWLAND ST
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121814 DSA FILE NO.: 30-43







Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

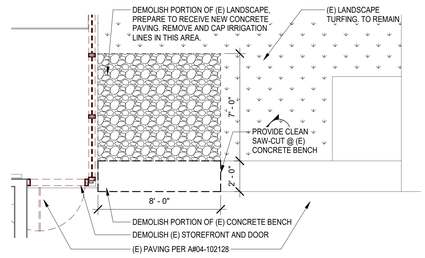
**DSA SUBMITTAL**

## SITE DETAILS

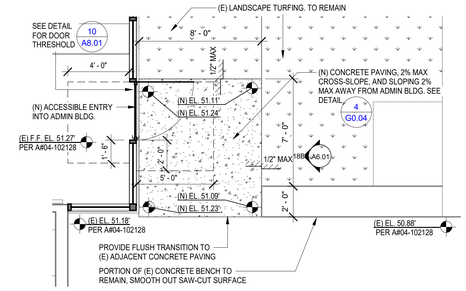
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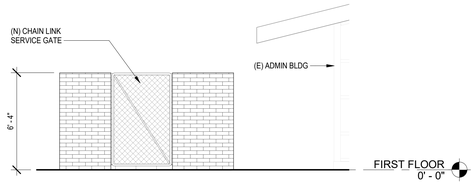
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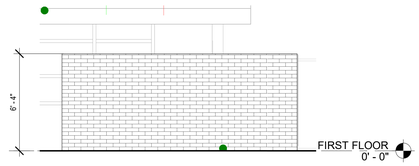

**01** ADMIN ENTRY - DEMOLITION
1/4" = 1'-0"



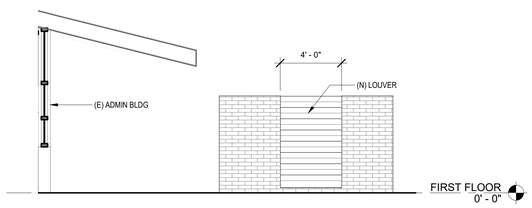

**02** ADMIN ENTRY - NEW
1/4" = 1'-0"



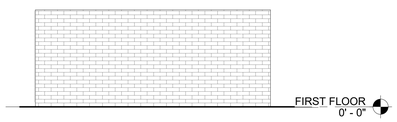

24A EXTERIOR ELEVATION - CMU ENCLOSURE - NORTH
1/4" = 1'-0"




24B EXTERIOR ELEVATION - CMU ENCLOSURE - EAST
1/4" = 1'-0"

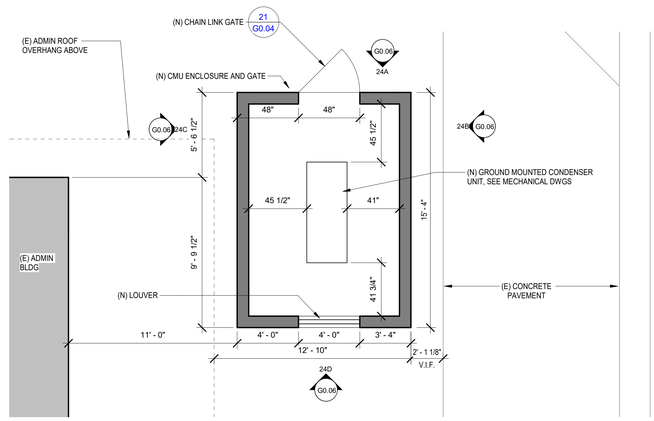



24D EXTERIOR ELEVATION - CMU ENCLOSURE - SOUTH
1/4" = 1'-0"




24C EXTERIOR ELEVATION - CMU ENCLOSURE - WEST
1/4" = 1'-0"

**24** BLDG C5 - EXTERIOR ELEVATIONS
1/8" = 1'-0"




NOTE:
REFER TO STRUCTURAL DRAWINGS ON 2/SD4

**09** MECHANICAL ENCLOSURE
1/4" = 1'-0"

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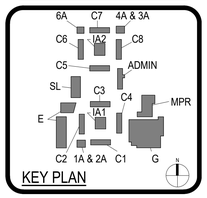
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

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REVISIONS

| No. | Description | Date |
|---|---|---|
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DSA SUBMITTAL

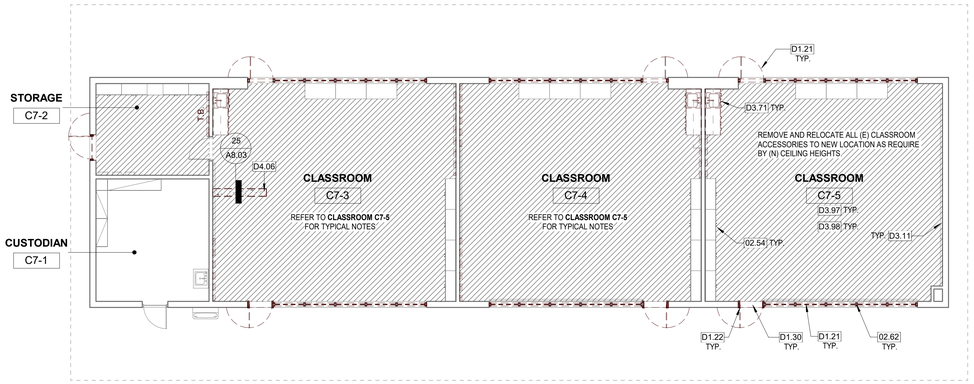
## ENLARGED SITE PLAN

# G0.06

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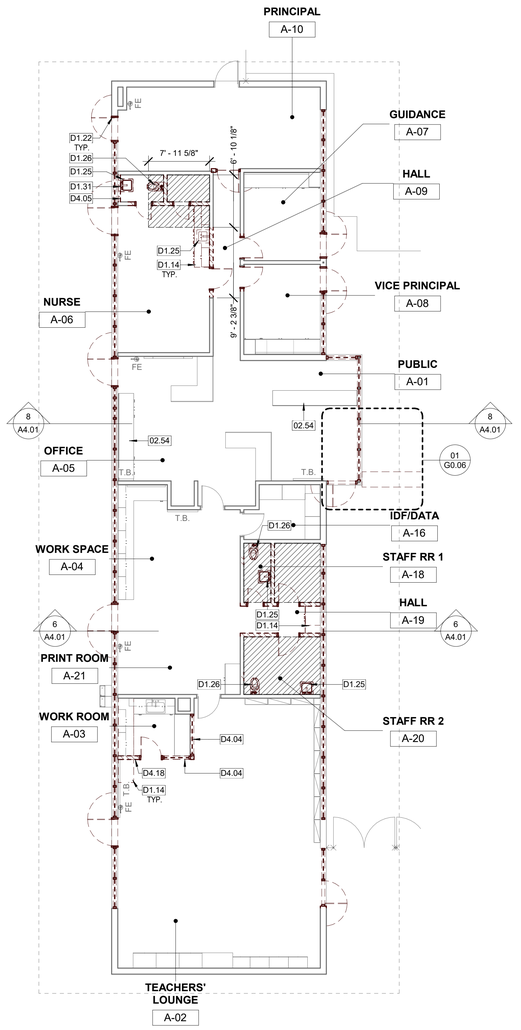
AD1.01 - DEMO FLOOR PLANS BUILDINGS C7, C8, SL, & ADMIN.

0" 1"



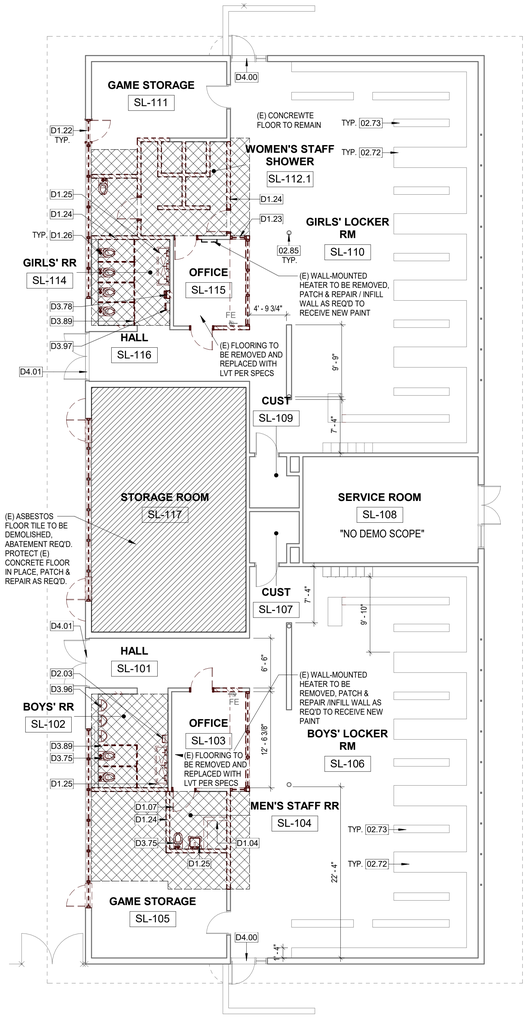

N

## 06 DEMOLITION FLOOR PLAN - BUILDING C7
1/8" = 1'-0"



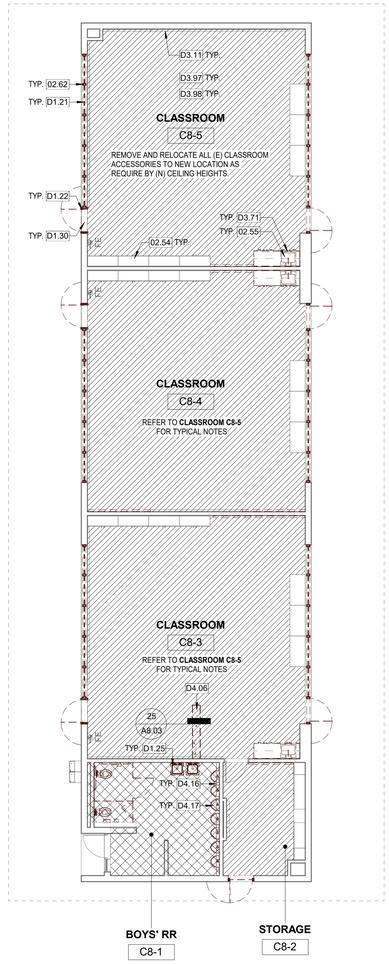

N

## 30 DEMOLITION FLOOR PLAN - ADMINISTRATION BUILDING
1/8" = 1'-0"




N

## 20 DEMOLITION FLOOR PLAN - BUILDING S-L
1/8" = 1'-0"




N

## 10 DEMOLITION FLOOR PLAN - BUIDLING C8
1/8" = 1'-0"

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 02.54 | (E) CASEWORK TO REMAIN. PROTECT IN PLACE WHERE POSSIBLE, REMOVE & REINSTALL AS REQ'D. |
| 02.55 | (E) ACCESSIBLE SINK TO REMAIN. PROTECT IN PLACE |
| 02.62 | (E) TUBE STEEL COLUMN WITHIN WINDOW SYSTEM TO REMAIN, PROTECT IN PLACE, WHERE OCCURS |
| 02.72 | (E) LOCKERS TO REMAIN, PROTECT IN PLACE. |
| 02.73 | (E) BENCH TO REMAIN, PROTECT IN PLACE. |
| 02.85 | (E) STEEL PIPE COLUMN. TO REMAIN. PROTECT IN PLACE |

## DEMOLITION KEYED NOTES

| # | Description |
|---|---|
| D1.04 | REMOVE (E) CONCRETE CURB AS INDICATED |
| D1.07 | (E) DOOR TO BE REMOVED AND DISPOSED |
| D1.14 | (E) CASEWORK TO BE REMOVED. |
| D1.21 | (E) ALUMINUM FRAME & GLAZING STOREFRONT SYSTEM TO BE REMOVED AND DISPOSED |
| D1.22 | (E) HM DOOR FRAME & (E) DOOR PANEL TO BE REMOVED AND DISPOSED |
| D1.23 | (E) ALUMINUM FRAME & GLAZING WINDOW SYSTEM TO BE REMOVED AND DISPOSED |
| D1.24 | (E) INTERIOR PARTITION TO BE REMOVED |
| D1.25 | (E) LAVATORY TO BE REMOVED AND DISPOSED, PATCH AND REPLACE WALL FINISH MATERIALS TO MATCH EXISTING |
| D1.26 | (E) WATERCLOSET TO BE REMOVED AND DISPOSED, PATCH AND REPLACE FLOOR AND WALL FINISH MATERIALS TO MATCH EXISTING |
| D1.30 | (E) TRANSOM WINDOW TO BE REMOVED AND DISPOSED |
| D1.31 | (E) MIRROR TO BE REMOVED AND DISPOSED, PATCH AND REPLACE WALL FINISH MATERIALS TO MATCH EXISTING AS REQ'D |
| D2.03 | REMOVE (E) PAPER TOWEL DISPENSER, SALVAGE TO DISTRICT, PATCH AND REPLACE WALL FINISH MATERIALS TO MATCH EXISTING |
| D3.11 | REMOVE (E) MARKER/TACKBOARD AND DISPOSE, PATCH & REPAIR AS REQ'D, PREPARE SURFACE TO RECEIVE NEW MARKER BOARD/TACK BOARD, TYP ON ALL WALLS. |
| D3.71 | (E) CABINET DOORS TO BE REMOVED AND DISPOSED AT ACCESSIBLE SINK |
| D3.75 | (E) WATER CLOSET TO BE REMOVED AND RELOCATED PER PLAN, PATCH AND REPLACE FLOOR AND WALL FINISH MATERIALS TO MATCH EXISTING |
| D3.78 | (E) PAPER TOWEL DISPENSER TO BE REMOVED AND RELOCATED PER PLAN, PATCH AND REPLACE WALL FINISH MATERIALS TO MATCH EXISTING |
| D3.89 | REMOVE (E) SOLID PLASTIC TOILET PARTITION, PREPARE FOR NEW TOILET PARTITION, PATCH AND REPLACE FLOOR AND WALL FINISH MATERIALS TO MATCH EXISTING |
| D3.96 | (E) URINAL TO BE REMOVED AND REPLACED, PATCH AND REPLACE WALL FINISH MATERIALS TO MATCH EXISTING |
| D3.97 | REMOVE (E) WALL PANELS AND REPLACE WITH NEW PER SPECS, WHERE OCCURS |
| D3.98 | REMOVE (E) INSULATION BELOW ROOF, BETWEEN RAFTERS & DISPOSE |
| D4.00 | REMOVE (E) FIXED LOUVER ABOVE DOOR FRAME, PROTECT (E) SINGLE DOOR, FRAME & FIXED PANEL IN PLACE |
| D4.01 | REMOVE (E) FIXED LOUVER ABOVE DOOR FRAME, PROTECT (E) DOUBLE DOOR & FRAME IN PLACE |
| D4.04 | REMOVE (E) WINDOW SYSTEM AND FRAME, PROTECT PORTION OF (E) PONY WALL ADJACENT TO THE COUNTERTOP IN PLACE |
| D4.05 | REMOVE (E) FURRING WALL, PROTECT (E) ADJACENT EXTERIOR WALL IN PLACE |
| D4.06 | DEMOLISH (E) PIPE TRENCH, CHANNELS, & METAL COVER PLATE. CAP (E) PIPES AT ADJACENT CUSTODIAL/STORAGE ROOMS. INFILL TRENCH TO MATCH ADJACENT SLAB LEVEL & FINISH. PROTECT (E) ADJACENT FLOOR & WALL IN PLACE. REFER TO DETAIL CALLOUT |
| D4.16 | REMOVE (E) FURRING WALL AND DISPOSE, PATCH AND REPAIR AS REQ'D. |
| D4.17 | (E) URINAL TO BE REMOVED AND DISPOSED, PATCH AND REPLACE WALL FINISH MATERIALS TO MATCH EXISTING |
| D4.18 | REMOVE (E) WALL AND DISPOSE, PATCH AND REPAIR AS REQ'D. |

## DEMOLITION LEGEND

- EXISTING NON-BEARING WALL TO BE REMOVED
- EXISTING DOOR & DOOR FRAME TO BE REMOVED
- WINDOW TO BE REMOVED (SEE SCHEDULE), PROTECT (E) COLUMNS WITHIN WINDOW SYSTEM IN PLACE
- DEMO ALL (E) WALL FINISH, FLOOR SLAB, DUCTS, PIPES, CONDUITS & FIXTURES, U.N.O.
- (E) DUCT OPENINGS IN SLAB TO BE REMOVED AND IN-FILLED WITH CONCRETE WHERE OCCURS.
- DEMO AND DISPOSE (E) FLOOR FINISH & PATCH AND REPAIR AS REQ'D TO RECEIVE NEW FLOOR FINISH
- (E) 1-HR RATED WALL TO REMAIN, PROTECT IN PLACE. REFER TO A# 04-20405

## GENERAL DEMOLITION NOTES:

1. DEMOLITION PLANS INDICATE SOME OF THE SCOPE-OF-WORK INVOLVED FOR THE DEMOLITION PHASE OF THIS PROJECT. CONTRACTOR SHALL REVIEW ALL SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
2. CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING.
4. CONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER OF ANY POSSIBLE ASBESTOS CONTAINING MATERIALS DISCOVERED BEFORE PROCEEDING WITH WORK, PROTECT INTERIOR CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.
6. CONTRACTOR SHALL NOT SCALE DRAWINGS.
7. ALL FURNITURE WILL BE REMOVED OR RELOCATED BY THE OWNER AS NECESSARY PRIOR TO THE DEMOLITION WORK OF THIS PROJECT. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED.
8. REMOVE EXISTING CONSTRUCTION TO THE EXTENT INDICATED ON THE DRAWINGS. SHOULD ANY DAMAGE OCCUR TO ANY EXISTING CONSTRUCTION TO REMAIN, THE CONTRACTOR SHALL REPAIR THE DAMAGE TO MATCH EXISTING AND OR ADJACENT CONSTRUCTION.
9. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES AND WORK.
10. NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUIRESTED ITEMS TO THE BUILDING OWNER IN GOOD CONDITION.
11. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
12. MAINTAIN ANY AND ALL EXISTING FIRE-RATED ASSEMBLIES THAT ARE TO REMAIN, AND THEIR ASSOCIATED FIRE-RATINGS, INCLUDING BUT NOT LIMITED TO ALL ASSOCIATED EXISTING FIRE-RATED OPENINGS, ALL ASSOCIATED EXISTING FIRE-RATED PENETRATIONS, AND ALL ASSOCIATED EXISTING FIRE-RATED FIRESTOPPING CONDITIONS.
13. WHEN UNANTICIPATED MECHANICAL ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, DETERMINE THE NATURE AND EXTENT OF THE CONFLICT AND NOTIFY THE ARCHITECT IMMEDIATELY FOR RESOLUTION.
14. CONTRACTOR SHALL RE-LOCATE UTILITIES AND EQUIPMENT AS REQUIRED TO ACCOMMODATE NEW HVAC, ELECTRICAL, PLUMBING, AND TECHNOLOGY REQUIREMENTS FOR NEW WORK.
15. SAW-CUT AND REMOVE EXISTING FLOOR FINISHES AND FLOOR SLAB AS REQUIRED TO INSTALL NEW FIXTURES, ITEMS, AND OR DEVICES FOR ALL SCOPE-OF-WORK PERTAINING TO NEW MECHANICAL WORK, NEW PLUMBING UTILITIES, NEW PLUMBING WORK, NEW ELECTRICAL WORK, AND NEW TECHNOLOGY WORK. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE AND PROVIDE NEW VAPOR RETARDER AND NEW CONTINUOUS WATERSTOPS AT JOINT BETWEEN NEW CONCRETE FLOOR SLAB AND EXISTING CONCRETE FLOOR SLAB. PATCH WITH NEW 3,500 PSI MINIMUM CONCRETE AND PREPARE FLOOR, INCLUDING NEW CONCRETE TO RECEIVE NEW FLOOR FINISHES. COORDINATE WITH STRUCTURAL.
16. EXISTING WALLS (OR PORTIONS OF WALLS) TO BE REMOVED SHALL BE CUT FLUSH WHERE INTERSECTING WITH WALLS TO REMAIN. REMAINING WALLS TO BE PATCHED AND FINISHED SMOOTH.
17. NEW OPENING TO BE CUT IN EXISTING WALLS SHALL BE SAW-CUT ONLY AT LOCATIONS INDICATED IN DRAWINGS TO THE HEIGHT AND WIDTH INDICATED. NEW LINTELS SHALL BE INSTALLED TO SUPPORT EXISTING WALL CONSTRUCTION ABOVE AS INDICATED ON THE DRAWINGS, OR IF NOT INDICATED, AS REQUIRED FOR NEW WALL CONSTRUCTION PER STRUCTURAL DRAWINGS.
18. WHERE EXISTING INTERIOR WALLS ARE REPLACED OR REMOVED, REMOVE MEPT SYSTEMS BACK TO PANEL, OR MECHANICAL ROOM, OR FARTHEST POSSIBLE POINT WITHOUT DISTURBING EXISTING CONSTRUCTION. REMOVE EXISTING MECHANICAL EQUIPMENT, RELOCATE POWER PER MEPT DRAWINGS.
19. PATCH FLOORS, WALLS CEILINGS WHICH REMAIN AT LOCATIONS WHERE PIPES, CONDUITS, ETC. ARE REMOVED AS REQUIRED TO MATCH EXISTING CONDITIONS OR TO RECEIVE NEW FINISHES.
20. WHERE EXISTING FINISH FLOOR IS REMOVED, PREPARE FLOOR SURFACE TO RECEIVE NEW FLOORING.
21. ALL DASHED LINES ARE DEMOLITION LINES UNLESS NOTED OTHERWISE.
22. REMOVE ALL EXISTING ROOM AND BUILDING SIGNAGE.
23. DEMOLISH PORTION OF (E) WALL AS REQ'D TO PROVIDE ACCESSIBLE SIDE STRIKE CLEARANCE, RE: TO REMODEL PLAN FOR EXTENT.
24. EXISTING HHW BOILERS TO BE DECOMMISSIONED. DISCONNECT EXISTING HHW PIPING AT BOILER ROOM, DRAIN PIPING SYSTEM AND CAP. EXISTING RADIATORS IN CLASSROOMS TO BE REMOVED. EXPOSED HHW PIPING IN CLASSROOMS SHALL BE REMOVED BACK TO WALL PENETRATION AND CAPPED INSIDE WALL. ALL WALL OPENINGS, INCLUDING EXTERIOR WALL, SHALL BE SEALED AIR AND WATER TIGHT AND PAINTED TO MATCH EXISTING WALL COLOR. COORDINATE WITH DISTRICT ON REMOVAL OF EXISTING BOILER, PUMPS AND ASSOCIATED EQUIPMENT IN BOILER ROOM.
25. EXISTING EXHAUST FANS AND DUCTWORK IN RESTROOMS TO BE REMOVED.
26. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES AND DISPOSE OF IN A LEGAL MANNER. RETAIN EXISTING CIRCUITS TO ALLOW EXTENSION TO NEW LIGHT FIXTURES.
27. CONTRACTOR TO DEMOLISH PLUMPING PIPING BACK TO POINTS OF CONNECTION (POC) AS IDENTIFIED ON ENGINEERING DRAWINGS FOR WATER AND SANITARY SEWER.
28. CONTRACTOR WILL REMOVE FROM SITE AND PATCH AND REPAIR AS NECESSARY TO ACCOMMODATE NEW WORK.
29. CONTRACTOR TO REMOVE ALL EXISTING WINDOW SHADES.
30. ALL EXISTING FIRE ALARM SYSTEM TO BE REMOVED.
31. ALL EXISTING ROUTERS TO BE REMOVED AND RELOCATED.
32. ALL CONTRACTORS SHALL PROTECT ALL EXISTING WALL MURALS AND SCHEDULE A MEETING WITH THE OWNER AND ARCHITECT TO REVIEW ALL PROTECTION IN PLACE PRIOR TO INITIATING DEMOLITION.
33. CONTRACTOR TO REMOVE AND REINSTALL ALL (E) CLOCKS, PROJECTORS, EMERGENCY EXIT SIGNAGE, SPEAKERS, AND OTHER CLASSROOM ACCESSORIES AT THE NEW APPROPRIATE HEIGHTS AND LOCATIONS PER PLANS.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
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2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
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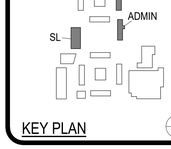
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN. 08-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

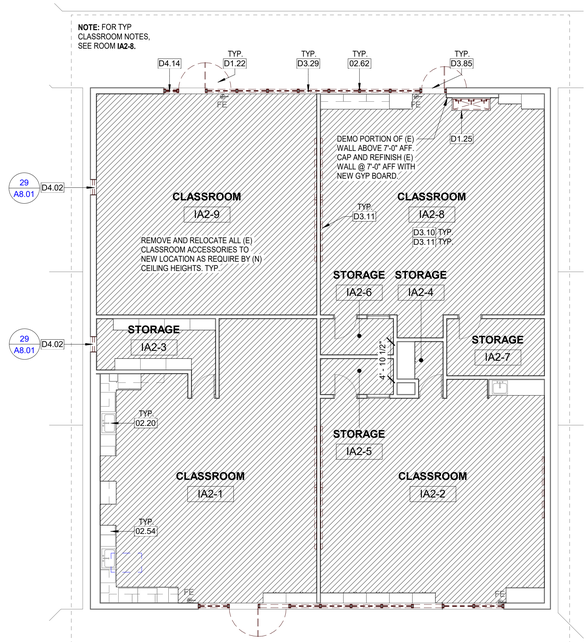
**DEMO FLOOR PLANS BUILDINGS C7, C8, SL, & ADMIN.**

**AD1.01**

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AD1.02 - DEMO FLOOR PLANS BUILDINGS C1, C3, C5, IA1, & IA2

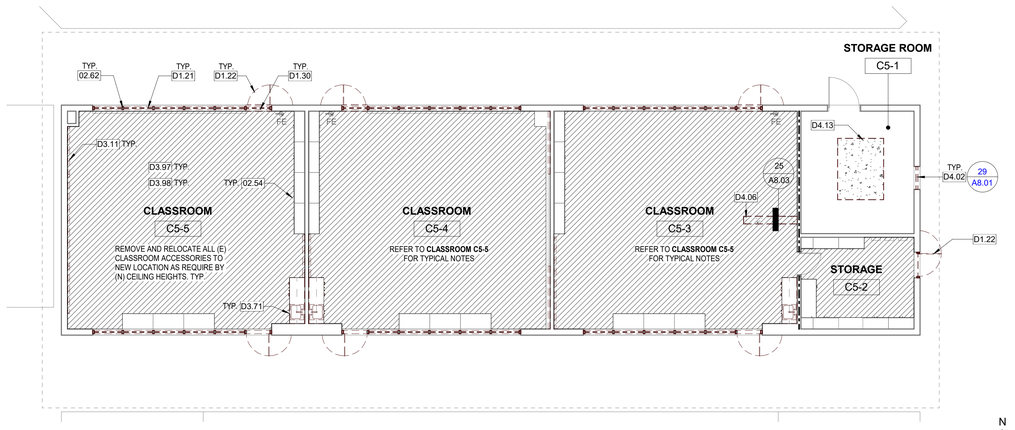
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N

## 22 DEMOLITION FLOOR PLAN - BUILDING IA2

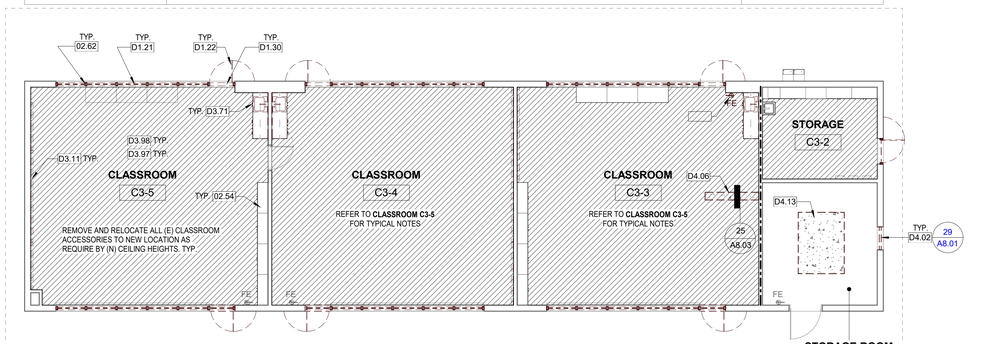
1/8" = 1'-0"



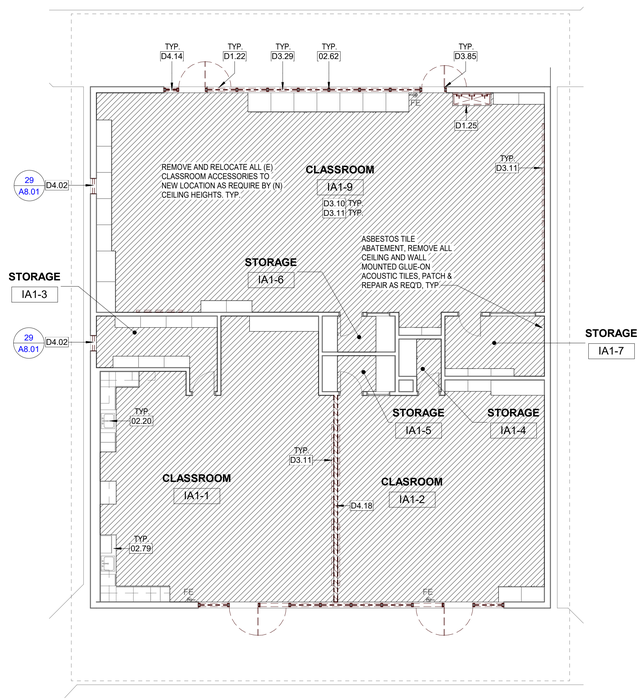

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## 06 FLOOR PLAN - BUILDING C5

1/8" = 1'-0"



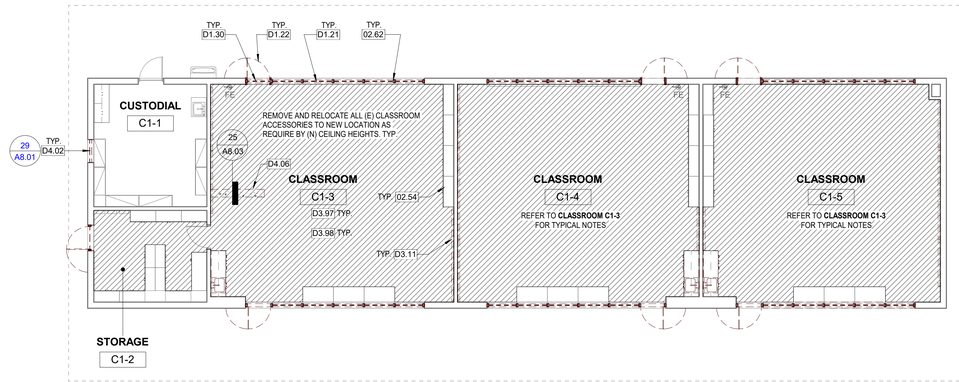

N




N

## 25 DEMOLITION FLOOR PLAN - BUILDING IA1

1/8" = 1'-0"




N

## 08 DEMOLITION FLOOR PLAN - BUILDING C3

1/8" = 1'-0"




N

## 10 DEMOLITION FLOOR PLAN - BUILDING C1

1/8" = 1'-0"

## DEMOLITION KEYED NOTES

| # | Description |
|---|---|
| D1.21 | (E) ALUMINUM FRAME & GLAZING STOREFRONT SYSTEM TO BE REMOVED AND DISPOSED |
| D1.22 | (E) HM DOOR FRAME & (E) DOOR PANEL TO BE REMOVED AND DISPOSED |
| D1.25 | (E) LAVATORY TO BE REMOVED AND DISPOSED, PATCH AND REPLACE WALL FINISH MATERIALS TO MATCH EXISTING |
| D1.30 | (E) TRANSOM WINDOW TO BE REMOVED AND DISPOSED |
| D3.10 | REMOVE (E) FLOOR FINISH, PROTECT (E) CONCRETE SLAB IN PLACE, PATCH AND REPAIR AS REQ'D. PREPARE SLAB TO RECEIVE NEW FLOOR FINISHES. |
| D3.11 | REMOVE (E) MARKER/TACKBOARD AND DISPOSE, PATCH & REPAIR AS REQ'D, PREPARE SURFACE TO RECEIVE NEW MARKER BOARD/TACK BOARD, TYP ON ALL WALLS. |
| D3.29 | (E) TRANSOM WINDOW & FRAME TO BE REMOVED AND DISPOSED |
| D3.71 | (E) CABINET DOORS TO BE REMOVED AND DISPOSED AT ACCESSIBLE SINK |
| D3.85 | (E) TRANSOM DOOR PANEL/LOUVER & FRAME TO BE REMOVED |
| D3.97 | REMOVE (E) WALL PANELS AND REPLACE WITH NEW PER SPECS, WHERE OCCURS |
| D3.98 | REMOVE (E) INSULATION BELOW ROOF, BETWEEN RAFTERS & DISPOSE |
| D4.02 | (E) LOUVERED VENT TO BE REMOVED & DISPOSED. (E) MECH DUCT CAVITY TO BE INFILLED WITH PLASTER WALL ASSEMBLY PER DETAIL CALLOUT. |
| D4.06 | DEMOLISH (E) PIPE TRENCH, CHANNELS, & METAL COVER PLATE. CAP (E) PIPES AT ADJACENT CUSTODIAL/STORAGE ROOMS. INFILL TRENCH TO MATCH ADJACENT SLAB LEVEL & FINISH. PROTECT (E) ADJACENT FLOOR & WALL IN PLACE. REFER TO DETAIL CALLOUT |
| D4.13 | (E) BOILER, CONCRETE PAD, AND ALL ASSCIATED ACCESSORIES TO BE DEMOLISHED AND DISPOSED. |
| D4.14 | REMOVE (E) ASBESTOS SOLID PANELS & FRAME AND DISPOSE, ASBESTOS ABATEMENT AS REQ'D. |
| D4.18 | REMOVE (E) WALL AND DISPOSE, PATCH AND REPAIR AS REQ'D. |

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 02.20 | (E) LAVATORY TO REMAIN |
| 02.54 | (E) CASEWORK TO REMAIN. PROTECT IN PLACE WHERE POSSIBLE, REMOVE & REINSTALL AS REQ'D. |
| 02.62 | (E) TUBE STEEL COLUMN WITHIN WINDOW SYSTEM TO REMAIN, PROTECT IN PLACE, WHERE OCCURS |
| 02.79 | (E) CASEWORK TO REMAIN. TO RE-PAINT TYP. |

## DEMOLITION LEGEND

- EXISTING NON-BEARING WALL TO BE REMOVED
- EXISTING DOOR & DOOR FRAME TO BE REMOVED
- WINDOW TO BE REMOVED (SEE SCHEDULE), PROTECT (E) COLUMNS WITHIN WINDOW SYSTEM IN PLACE
- DEMO ALL (E) WALL FINISH, FLOOR SLAB, DUCTS, PIPES, CONDUITS & FIXTURES, U.N.O.
- (E) DUCT OPENINGS IN SLAB TO BE REMOVED AND IN-FILLED WITH CONCRETE WHERE OCCURS.
- DEMO AND DISPOSE (E) FLOOR FINISH & PATCH AND REPAIR AS REQ'D TO RECEIVE NEW FLOOR FINISH
- (E) 1-HR RATED WALL TO REMAIN, PROTECT IN PLACE. REFER TO A# 04-20405

## GENERAL DEMOLITION NOTES:

1. DEMOLITION PLANS INDICATE SOME OF THE SCOPE-OF-WORK INVOLVED FOR THE DEMOLITION PHASE OF THIS PROJECT. CONTRACTOR SHALL REVIEW ALL SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
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4. CONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER OF ANY POSSIBLE ASBESTOS CONTAINING MATERIALS DISCOVERED BEFORE PROCEEDING WITH WORK, PROTECT INTERIOR CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.
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8. REMOVE EXISTING CONSTRUCTION TO THE EXTENT INDICATED ON THE DRAWINGS. SHOULD ANY DAMAGE OCCUR TO ANY EXISTING CONSTRUCTION TO REMAIN, THE CONTRACTOR SHALL REPAIR THE DAMAGE TO MATCH EXISTING AND OR ADJACENT CONSTRUCTION.
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11. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
12. MAINTAIN ANY AND ALL EXISTING FIRE-RATED ASSEMBLIES THAT ARE TO REMAIN, AND THEIR ASSOCIATED FIRE-RATINGS, INCLUDING BUT NOT LIMITED TO ALL ASSOCIATED EXISTING FIRE-RATED OPENINGS, ALL ASSOCIATED EXISTING FIRE-RATED PENETRATIONS, AND ALL ASSOCIATED EXISTING FIRE-RATED FIRESTOPPING CONDITIONS.
13. WHEN UNANTICIPATED MECHANICAL ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, DETERMINE THE NATURE AND EXTENT OF THE CONFLICT AND NOTIFY THE ARCHITECT IMMEDIATELY FOR RESOLUTION.
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15. SAW-CUT AND REMOVE EXISTING FLOOR FINISHES AND FLOOR SLAB AS REQUIRED TO INSTALL NEW FIXTURES, ITEMS, AND OR DEVICES FOR ALL SCOPE-OF-WORK PERTAINING TO NEW MECHANICAL WORK, NEW PLUMBING UTILITIES, NEW PLUMBING WORK, NEW ELECTRICAL WORK, AND NEW TECHNOLOGY WORK. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE AND PROVIDE NEW VAPOR RETARDER AND NEW CONTINUOUS WATERSTOPS AT JOINT BETWEEN NEW CONCRETE FLOOR SLAB AND EXISTING CONCRETE FLOOR SLAB. PATCH WITH NEW 3,500 PSI MINIMUM CONCRETE AND PREPARE FLOOR, INCLUDING NEW CONCRETE TO RECEIVE NEW FLOOR FINISHES. COORDINATE WITH STRUCTURAL.
16. EXISTING WALLS (OR PORTIONS OF WALLS) TO BE REMOVED SHALL BE CUT FLUSH WHERE INTERSECTING WITH WALLS TO REMAIN. REMAINING WALLS TO BE PATCHED AND FINISHED SMOOTH.
17. NEW OPENING TO BE CUT IN EXISTING WALLS SHALL BE SAW-CUT ONLY AT LOCATIONS INDICATED IN DRAWINGS TO THE HEIGHT AND WIDTH INDICATED. NEW LINTELS SHALL BE INSTALLED TO SUPPORT EXISTING WALL CONSTRUCTION ABOVE AS INDICATED ON THE DRAWINGS, OR IF NOT INDICATED, AS REQUIRED FOR NEW WALL CONSTRUCTION PER STRUCTURAL DRAWINGS.
18. WHERE EXISTING INTERIOR WALLS ARE REPLACED OR REMOVED, REMOVE MEPT SYSTEMS BACK TO PANEL, OR MECHANICAL ROOM, OR FARTHEST POSSIBLE POINT WITHOUT DISTURBING EXISTING CONSTRUCTION. REMOVE EXISTING MECHANICAL EQUIPMENT, RELOCATE POWER PER MEPT DRAWINGS.
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21. ALL DASHED LINES ARE DEMOLITION LINES UNLESS NOTED OTHERWISE.
22. REMOVE ALL EXISTING ROOM AND BUILDING SIGNAGE.
23. DEMOLISH PORTION OF (E) WALL AS REQ'D TO PROVIDE ACCESSIBLE SIDE STRIKE CLEARANCE, RE: TO REMODEL PLAN FOR EXTENT.
24. EXISTING HHW BOILERS TO BE DECOMMISSIONED, DISCONNECT EXISTING HHW PIPING AT BOILER ROOM, DRAIN PIPING SYSTEM AND CAP. EXISTING RADIATORS IN CLASSROOMS TO BE REMOVED. EXPOSED HHW PIPING IN CLASSROOMS SHALL BE REMOVED BACK TO WALL PENETRATION AND CAPPED INSIDE WALL. ALL WALL OPENINGS, INCLUDING EXTERIOR WALL, SHALL BE SEALED AIR AND WATER TIGHT AND PAINTED TO MATCH EXISTING WALL COLOR. COORDINATE WITH DISTRICT ON REMOVAL OF EXISTING BOILER, PUMPS AND ASSOCIATED EQUIPMENT IN BOILER ROOM.
25. EXISTING EXHAUST FANS AND DUCTWORK IN RESTROOMS TO BE REMOVED.
26. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES AND DISPOSE OF IN A LEGAL MANNER. RETAIN EXISTING CIRCUITS TO ALLOW EXTENSION TO NEW LIGHT FIXTURES.
27. CONTRACTOR TO DEMOLISH PLUMPING PIPING BACK TO POINTS OF CONNECTION (POC) AS IDENTIFIED ON ENGINEERING DRAWINGS FOR WATER AND SANITARY SEWER.
28. CONTRACTOR WILL REMOVE FROM SITE AND PATCH AND REPAIR AS NECESSARY TO ACCOMMODATE NEW WORK.
29. CONTRACTOR TO REMOVE ALL EXISTING WINDOW SHADES.
30. ALL EXISTING FIRE ALARM SYSTEM TO BE REMOVED.
31. ALL EXISTING ROUTERS TO BE REMOVED AND RELOCATED.
32. ALL CONTRACTORS SHALL PROTECT ALL EXISTING WALL MURALS AND SCHEDULE A MEETING WITH THE OWNER AND ARCHITECT TO REVIEW ALL PROTECTION IN PLACE PRIOR TO INITIATING DEMOLITION.
33. CONTRACTOR TO REMOVE AND REINSTALL ALL (E) CLOCKS, PROJECTORS, EMERGENCY EXIT SIGNAGE, SPEAKERS, AND OTHER CLASSROOM ACCESSORIES AT THE NEW APPROPRIATE HEIGHTS AND LOCATIONS PER PLANS.

IDENTIFICATION STAMP
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APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

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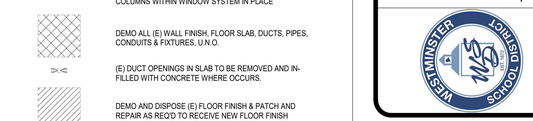

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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Tong You
No. C-31162
REN. 10-31-2013
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
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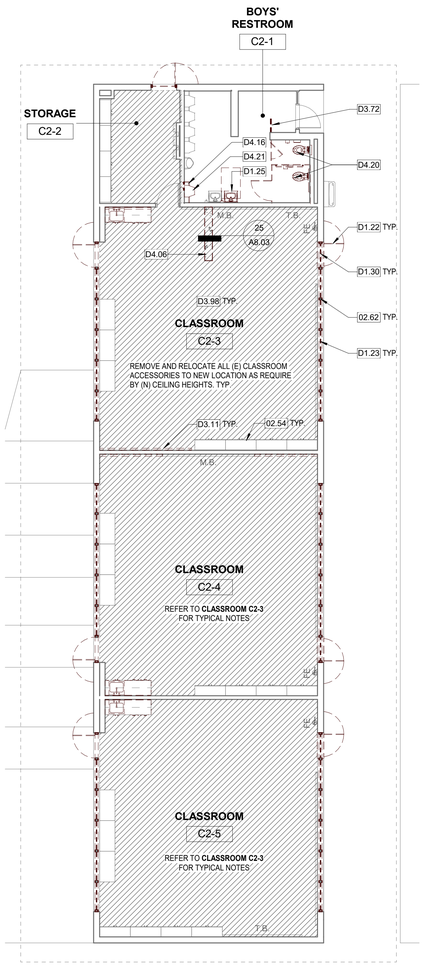
**DSA SUBMITTAL**

**DEMO FLOOR PLANS BUILDINGS C1, C3, C5, IA1, & IA2**

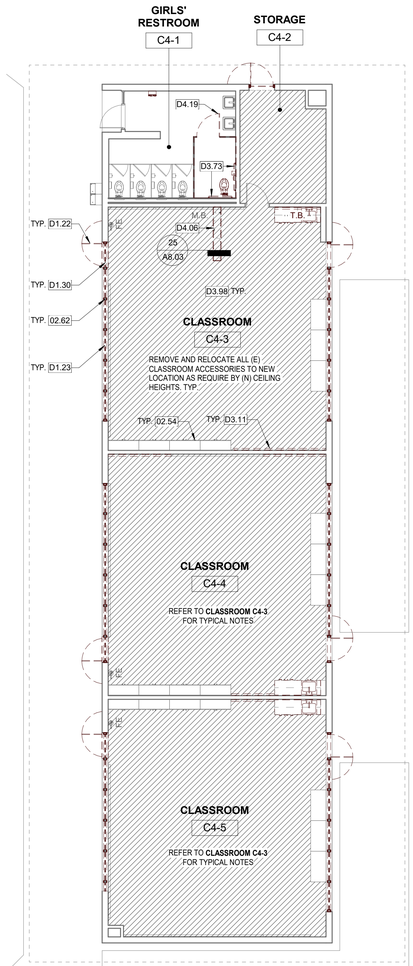
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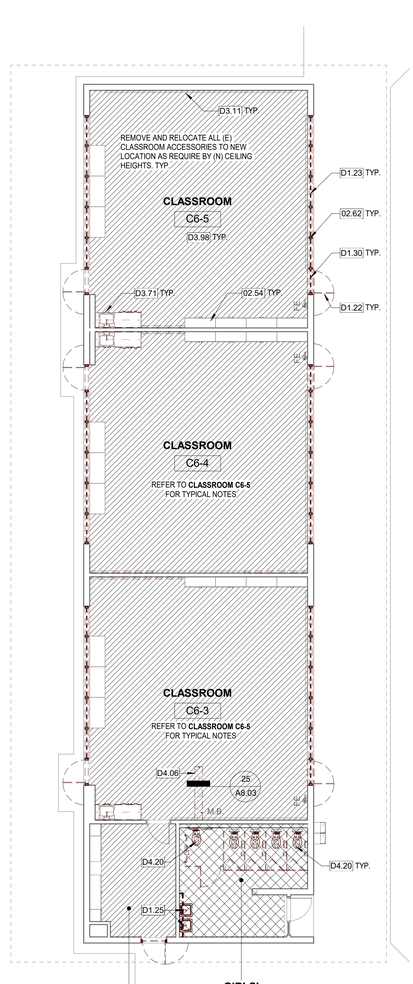
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30 DEMOLITION FLOOR PLAN - BUILDING C2
1/8" = 1'-0"




20 DEMOLITION FLOOR PLAN - BUILDING C4
1/8" = 1'-0"




10 DEMOLITION FLOOR PLAN - BUILDING C6
1/8" = 1'-0"

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 02.54 | (E) CASEWORK TO REMAIN. PROTECT IN PLACE WHERE POSSIBLE, REMOVE & REINSTALL AS REQ'D. |
| 02.62 | (E) TUBE STEEL COLUMN WITHIN WINDOW SYSTEM TO REMAIN, PROTECT IN PLACE, WHERE OCCURS |

## DEMOLITION KEYED NOTES

| # | Description |
|---|---|
| D1.22 | (E) HM DOOR FRAME & (E) DOOR PANEL TO BE REMOVED AND DISPOSED |
| D1.23 | (E) ALUMINUM FRAME & GLAZING WINDOW SYSTEM TO BE REMOVED AND DISPOSED |
| D1.25 | (E) LAVATORY TO BE REMOVED AND DISPOSED, PATCH AND REPLACE WALL FINISH MATERIALS TO MATCH EXISTING |
| D1.30 | (E) TRANSOM WINDOW TO BE REMOVED AND DISPOSED |
| D3.11 | REMOVE (E) MARKER/TACKBOARD AND DISPOSE, PATCH & REPAIR AS REQ'D, PREPARE SURFACE TO RECEIVE NEW MARKER BOARD/TACK BOARD, TYP ON ALL WALLS. |
| D3.71 | (E) CABINET DOORS TO BE REMOVED AND DISPOSED AT ACCESSIBLE SINK |
| D3.72 | (E) TOILET PARTITION TO BE REMOVED AND DISPOSED, PATCH AND REPLACE FLOOR AND WALL FINISH MATERIALS TO MATCH EXISTING |
| D3.73 | REMOVE (E) GRAB BAR AND RELOCATE PER ELEVATION, PATCH AND REPLACE WALL FINISH MATERIALS TO MATCH EXISTING |
| D3.98 | REMOVE (E) INSULATION BELOW ROOF, BETWEEN RAFTERS & DISPOSE |
| D4.06 | DEMOLISH (E) PIPE TRENCH, CHANNELS, & METAL COVER PLATE. CAP (E) PIPES AT ADJACENT CUSTODIAL/STORAGE ROOMS. INFILL TRENCH TO MATCH ADJACENT SLAB LEVEL & FINISH. PROTECT (E) ADJACENT FLOOR & WALL IN PLACE. REFER TO DETAIL CALLOUT |
| D4.16 | REMOVE (E) FURRING WALL AND DISPOSE, PATCH AND REPAIR AS REQ'D. |
| D4.19 | REMOVE (E) TOILET PARTITION DOOR, REVERSE SWING PER PLAN, AND REINSTALL (E) TOILET PARTITION DOOR. PATCH AND REPAIR AS REQ'D. |
| D4.20 | REMOVE AND DISPOSE (E) TOILET PARTITION AND DOOR, (E) TOILET ACCESSORIES, (E) GRAB BARS AND (E) WATER CLOSET. PATCH AND REPAIR AS REQ'D. |
| D4.21 | (E) URINAL TO BE REMOVED AND DISPOSED, PATCH AND REPLACE WALL FINISH AND FLOOR FINISH MATERIALS TO MATCH EXISTING |

## DEMOLITION LEGEND

- EXISTING NON-BEARING WALL TO BE REMOVED
- EXISTING DOOR & DOOR FRAME TO BE REMOVED
- WINDOW TO BE REMOVED (SEE SCHEDULE), PROTECT (E) COLUMNS WITHIN WINDOW SYSTEM IN PLACE
- DEMO ALL (E) WALL FINISH, FLOOR SLAB, DUCTS, PIPES, CONDUITS & FIXTURES, U.N.O.
- (E) DUCT OPENINGS IN SLAB TO BE REMOVED AND IN-FILLED WITH CONCRETE WHERE OCCURS.
- DEMO AND DISPOSE (E) FLOOR FINISH & PATCH AND REPAIR AS REQ'D TO RECEIVE NEW FLOOR FINISH
- (E) 1-HR RATED WALL TO REMAIN, PROTECT IN PLACE. REFER TO A# 04-20405

## BUILDING DEMOLITION NOTES

1. DEMOLITION PLANS INDICATE SOME OF THE SCOPE-OF-WORK INVOLVED FOR THE DEMOLITION PHASE OF THIS PROJECT. CONTRACTOR SHALL REVIEW ALL SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
2. CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING.
4. CONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER OF ANY POSSIBLE ASBESTOS CONTAINING MATERIALS DISCOVERED BEFORE PROCEEDING WITH WORK, PROTECT INTERIOR CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.
6. CONTRACTOR SHALL NOT SCALE DRAWINGS.
7. ALL FURNITURE WILL BE REMOVED OR RELOCATED BY THE OWNER AS NECESSARY PRIOR TO THE DEMOLITION WORK OF THIS PROJECT. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED.
8. REMOVE EXISTING CONSTRUCTION TO THE EXTENT INDICATED ON THE DRAWINGS. SHOULD ANY DAMAGE OCCUR TO ANY EXISTING CONSTRUCTION TO REMAIN, THE CONTRACTOR SHALL REPAIR THE DAMAGE TO MATCH EXISTING AND OR ADJACENT CONSTRUCTION.
9. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES AND WORK.
10. NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUESTED ITEMS TO THE BUILDING OWNER IN GOOD CONDITION.
11. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
12. MAINTAIN ANY AND ALL EXISTING FIRE-RATED ASSEMBLIES THAT ARE TO REMAIN, AND THEIR ASSOCIATED FIRE-RATINGS, INCLUDING BUT NOT LIMITED TO ALL ASSOCIATED EXISTING FIRE-RATED OPENINGS, ALL ASSOCIATED EXISTING FIRE-RATED PENETRATIONS, AND ALL ASSOCIATED EXISTING FIRE-RATED FIRESTOPPING CONDITIONS.
13. WHEN UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, DETERMINE THE NATURE AND EXTENT OF THE CONFLICT AND NOTIFY THE ARCHITECT IMMEDIATELY FOR RESOLUTION.
14. CONTRACTOR SHALL RE-LOCATE UTILITIES AND EQUIPMENT AS REQUIRED TO ACCOMMODATE NEW HVAC, ELECTRICAL, PLUMBING, AND TECHNOLOGY REQUIREMENTS FOR NEW WORK.
15. SAW-CUT AND REMOVE EXISTING FLOOR FINISHES AND FLOOR SLAB AS REQUIRED TO INSTALL NEW FIXTURES, ITEMS, AND OR DEVISES FOR ALL SCOPE-OF-WORK PERTAINING TO NEW MECHANICAL WORK, NEW PLUMBING UTILITIES, NEW PLUMBING WORK, NEW ELECTRICAL WORK, AND NEW TECHNOLOGY WORK. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE AND PROVIDE NEW VAPOR RETARDER AND NEW CONTINUOUS WATERSTOPS AT JOINT BETWEEN NEW CONCRETE FLOOR SLAB AND EXISTING CONCRETE FLOOR SLAB. PATCH WITH NEW 3,500 PSI MINIMUM CONCRETE AND PREPARE FLOOR, INCLUDING NEW CONCRETE, TO RECEIVE NEW FLOOR FINISHES. COORDINATE WITH STRUCTURAL.
16. EXISTING WALLS (OR PORTIONS OF WALLS) TO BE REMOVED SHALL BE CUT FLUSH WHERE INTERSECTING WITH WALLS TO REMAIN. REMAINING WALLS TO BE PATCHED AND FINISHED SMOOTH.
17. WHERE EXISTING INTERIOR WALLS ARE REPLACED OR REMOVED, REMOVE MEPT SYSTEMS BACK TO PANEL, OR MECHANICAL ROOM, OR FARTHEST POSSIBLE POINT WITHOUT DISTURBING EXISTING CONSTRUCTION. REMOVE EXISTING MECHANICAL EQUIPMENT, RELOCATE POWER PER MEPT DRAWINGS.
18. PATCH FLOORS, WALLS CEILINGS WHICH REMAIN AT LOCATIONS WHERE PIPES, CONDUITS, ETC. ARE REMOVED AS REQUIRED TO MATCH EXISTING CONDITIONS OR TO RECEIVE NEW FINISHES.
19. WHERE EXISTING FINISH FLOOR IS REMOVED, PREPARE FLOOR SURFACE TO RECEIVE NEW FLOORING.
20. ALL DASHED LINES ARE DEMOLITION LINES UNLESS NOTED OTHERWISE.
21. REMOVE ALL EXISTING ROOM AND BUILDING SIGNAGE.
22. DEMOLISH PORTION OF (E) WALL AS REQ'D TO PROVIDE ACCESSIBLE SIDE STRIKE CLEARANCE, RE: TO REMODEL PLAN FOR EXTENT.
23. EXISTING HHW BOILERS TO BE DECOMMISSIONED, DISCONNECT EXISTING HHW PIPING AT BOILER ROOM, DRAIN PIPING SYSTEM AND CAP. EXISTING RADIATORS IN CLASSROOMS TO BE REMOVED. EXPOSED HHW PIPING IN CLASSROOMS SHALL BE REMOVED BACK TO WALL PENETRATION AND CAPPED INSIDE WALL. ALL WALL OPENINGS, INCLUDING EXTERIOR WALL, SHALL BE SEALED AIR AND WATER TIGHT AND PAINTED TO MATCH EXISTING WALL COLOR. COORDINATE WITH DISTRICT ON REMOVAL OF EXISTING BOILER, PUMPS AND ASSOCIATED EQUIPMENT IN BOILER ROOM.
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**NOTE: CONTRACTOR SHALL PROTECT ALL EXISTING WALL MURALS AND SCHEDULE A MEETING WITH THE OWNER AND ARCHITECT TO REVIEW ALL PROTECTION IN PLACE PRIOR TO INITIATING DEMOLITION.**

## BUILDING MPE NOTES

1. EXISTING GAS AND WATER PIPES REMOVE AND REPLACE ANY RUSTED OR DETERIORATED PIPES, VALVES AND YARD BOXES TO REMAIN.
2. RELOCATE / RE-ROUTE ANY ELECTRICAL CONDUITS AND LOW VOLTAGE RACEWAYS AND WIRING ABOVE & BELOW CEILING TO ACCOMMODATE NEW WORK.
3. RELOCATE / RE-ROUTE ANY VENT PIPES INTERFERING WITH NEW WORK.
4. REMOVE AND DISPOSE OLD CLOCK AND SPEAKERS NO LONGER IN USE.
5. REMOVE AND DISPOSE ELECTRICAL CABLING AND DEVICES NOT IN USE.
6. REMOVE AND DISPOSE FAU HEATING UNITS IN EACH ROOM AND ALL ASSOCIATED DUCTWORK, REGISTERS, CONDUITS AND WIRING.
7. REMOVE PROJECTORS IN WORKROOM AND LIBRARY ROOMS RETURN TO DISTRICT

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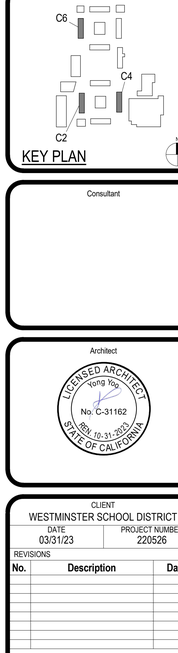
ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

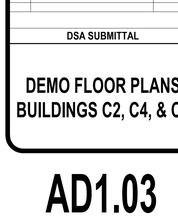
DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect




CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
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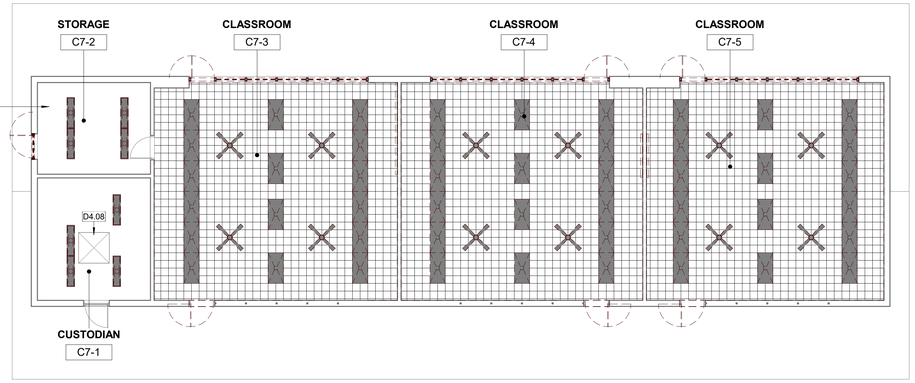
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**DEMO FLOOR PLANS BUILDINGS C2, C4, & C6**

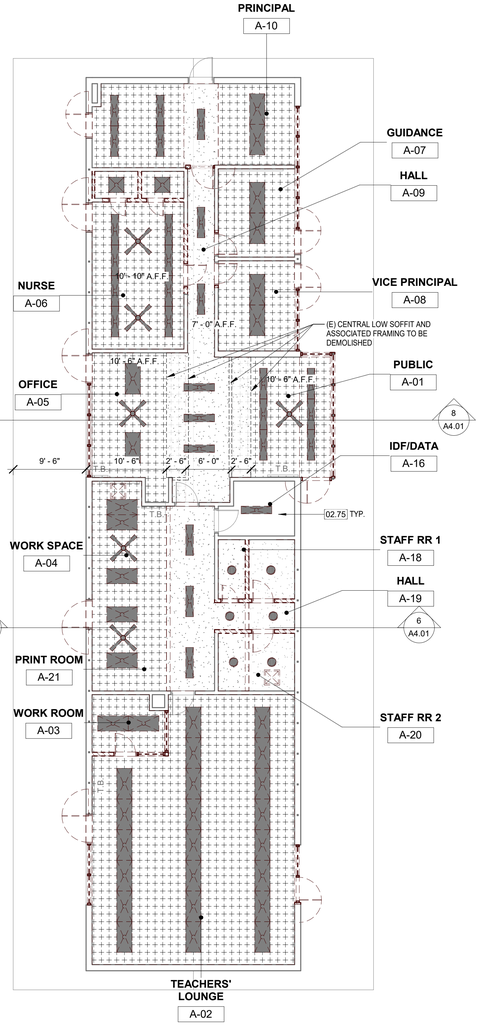
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AD2.01 - DEMO RCP BLDG C7, C8, SL & ADMIN

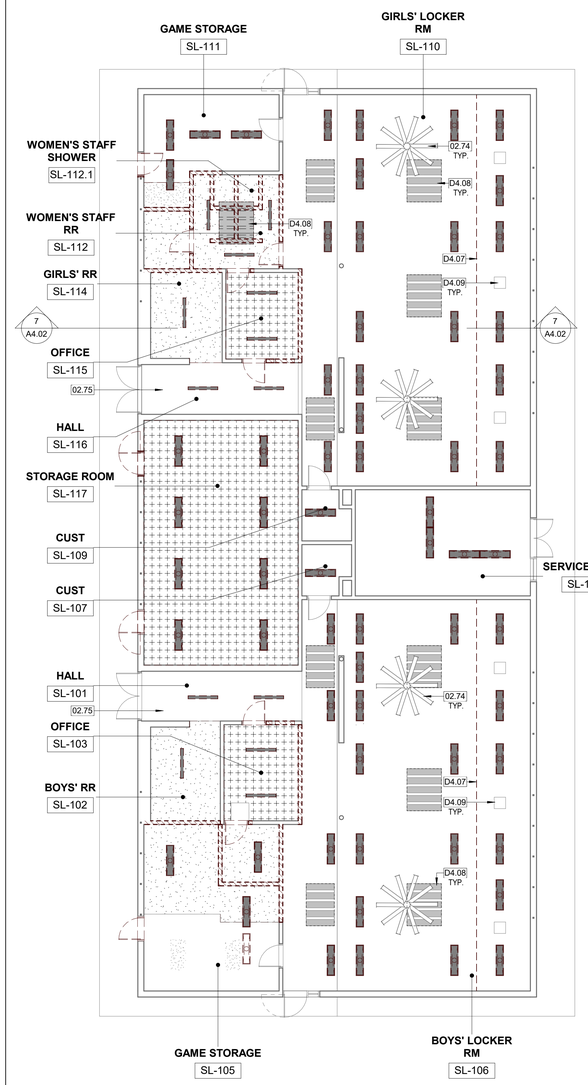
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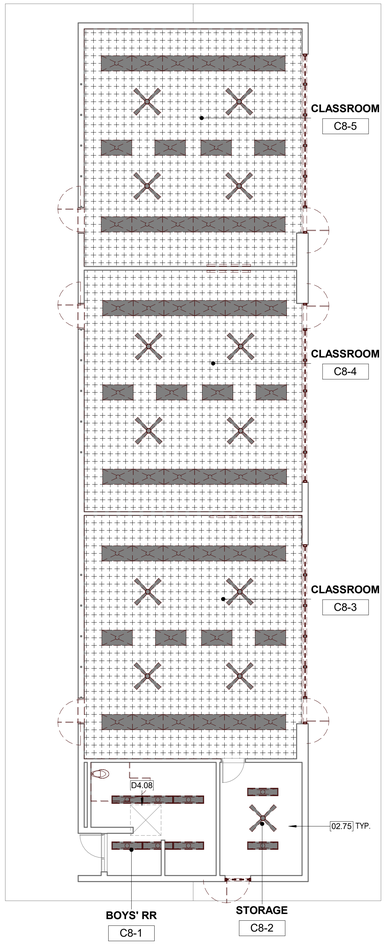

## 06 DEMO RCP BUILDING C7
1/8" = 1'-0"




## 30 DEMO RCP BUILDING ADMIN
1/8" = 1'-0"




## 20 DEMO RCP BUILDING SL
1/8" = 1'-0"




## 10 DEMO RCP BUILDING C8
1/8" = 1'-0"

## DEMOLITION KEYED NOTES

| # | Description |
|---|---|
| D4.07 | REMOVE (E) CEILING MOUNTED DIVIDER FIN, PATCH & REPAIR |
| D4.08 | REMOVE (E) SKYLIGHT AND ALL SUPPORT ASSEMBLY, INFILL AT ROOF AND CEILING TO MATCH ADJACENT, SEE DETAIL 16/SD1 |
| D4.09 | REMOVE (E) EXHAUST FAN WHERE APPLICABLE, INFILL AT ROOF AND CEILING TO MATCH ADJACENT, SEE DETAIL 15/SD1 |

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 02.74 | (E) CEILING FANS TO REMAIN INSIDE LOCKER ROOMS, REMOVE & REINSTALL AS REQ'D. TYP. |
| 02.75 | (E) CEILING TO REMAIN, PATCH & REPAIR AS REQ'D, PROVIDE (N) PAINT, TYP. |

## DEMOLITION RCP LEGEND

- EXISTING PLASTER CEILING TO REMAIN, PATCH & REPAIR AS REQ'D TO RECEIVE (N) PAINT, TYP.
- EXISTING PLASTER CEILING TO BE REMOVED
- EXISTING NON-BEARING WALL TO BE REMOVED
- EXISTING 12"x12" GLUE UP / STAPLED ACOUSTIC TILE AND (E) SUBSTRATES TO BE REMOVED AND DISPOSED
- WHEN SHOWN SHADED, REMOVE (E) LIGHT FIXTURES, OTHERWISE, LIGHT FIXTURES ARE TO REMAIN.
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS (REMOVE WHEN SHOWN DASHED)
- (E) CEILING FAN TO BE REMOVED AND DISPOSED.
- (E) ACCESS PANEL
- REMOVE (E) SKYLIGHT AND ALL SUPPORT ASSEMBLY, INFILL AT ROOF AND CEILING TO MATCH ADJACENT

NOTE:
1. REMOVE & DISPOSE OF (E) ROOF INSULATION ABOVE CEILING RAFTERS, WHERE OCCURS.

## GENERAL DEMOLITION NOTES:

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13. WHEN UNANTICIPATED MECHANICAL ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, DETERMINE THE NATURE AND EXTENT OF THE CONFLICT AND NOTIFY THE ARCHITECT IMMEDIATELY FOR RESOLUTION.
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16. EXISTING WALLS (OR PORTIONS OF WALLS) TO BE REMOVED SHALL BE CUT FLUSH WHERE INTERSECTING WITH WALLS TO REMAIN. REMAINING WALLS TO BE PATCHED AND FINISHED SMOOTH.
17. NEW OPENING TO BE CUT IN EXISTING WALLS SHALL BE SAW-CUT ONLY AT LOCATIONS INDICATED IN DRAWINGS TO THE HEIGHT AND WIDTH INDICATED. NEW LINTELS SHALL BE INSTALLED TO SUPPORT EXISTING WALL CONSTRUCTION ABOVE AS INDICATED ON THE DRAWINGS, OR IF NOT INDICATED, AS REQUIRED FOR NEW WALL CONSTRUCTION PER STRUCTURAL DRAWINGS.
18. WHERE EXISTING INTERIOR WALLS ARE REPLACED OR REMOVED, REMOVE MEPT SYSTEMS BACK TO PANEL, OR MECHANICAL ROOM, OR FARTHEST POSSIBLE POINT WITHOUT DISTURBING EXISTING CONSTRUCTION. REMOVE EXISTING MECHANICAL EQUIPMENT, RELOCATE POWER PER MEPT DRAWINGS.
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27. CONTRACTOR TO DEMOLISH PLUMPING PIPING BACK TO POINTS OF CONNECTION (POC) AS IDENTIFIED ON ENGINEERING DRAWINGS FOR WATER AND SANITARY SEWER.
28. CONTRACTOR WILL REMOVE FROM SITE AND PATCH AND REPAIR AS NECESSARY TO ACCOMMODATE NEW WORK.
29. CONTRACTOR TO REMOVE ALL EXISTING WINDOW SHADES.
30. ALL EXISTING FIRE ALARM SYSTEM TO BE REMOVED.
31. ALL EXISTING ROUTERS TO BE REMOVED AND RELOCATED.
32. ALL CONTRACTORS SHALL PROTECT ALL EXISTING WALL MURALS AND SCHEDULE A MEETING WITH THE OWNER AND ARCHITECT TO REVIEW ALL PROTECTION IN PLACE PRIOR TO INITIATING DEMOLITION.
33. CONTRACTOR TO REMOVE AND REINSTALL ALL (E) CLOCKS, PROJECTORS, EMERGENCY EXIT SIGNAGE, SPEAKERS, AND OTHER CLASSROOM ACCESSORIES AT THE NEW APPROPRIATE HEIGHTS AND LOCATIONS PER PLANS.

## GENERAL DEMOLITION NOTES:

1. EXISTING GAS AND WATER PIPES: REMOVE AND REPLACE ANY RUSTED OR DETERIORATED PIPES, VALVES AND YARD BOXES TO REMAIN.
2. RELOCATE / RE-ROUTE ANY ELECTRICAL CONDUITS AND LOW VOLTAGE RACEWAYS AND WIRING ABOVE & BELOW CEILING TO ACCOMMODATE NEW WORK.
3. RELOCATE / RE-ROUTE ANY VENT PIPES INTERFERING WITH NEW WORK.
4. REMOVE AND DISPOSE OLD CLOCK AND SPEAKERS NO LONGER IN USE.
5. REMOVE AND DISPOSE ELECTRICAL CABLING AND DEVICES NOT IN USE.
6. REMOVE AND DISPOSE FAU HEATING UNITS IN EACH ROOM AND ALL ASSOCIATED DUCTWORK, REGISTERS, CONDUITS AND WIRING.
7. REMOVE PROJECTORS IN WORKROOM AND LIBRARY ROOMS. RETURN TO DISTRICT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000


# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43







Consultant

Architect




CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
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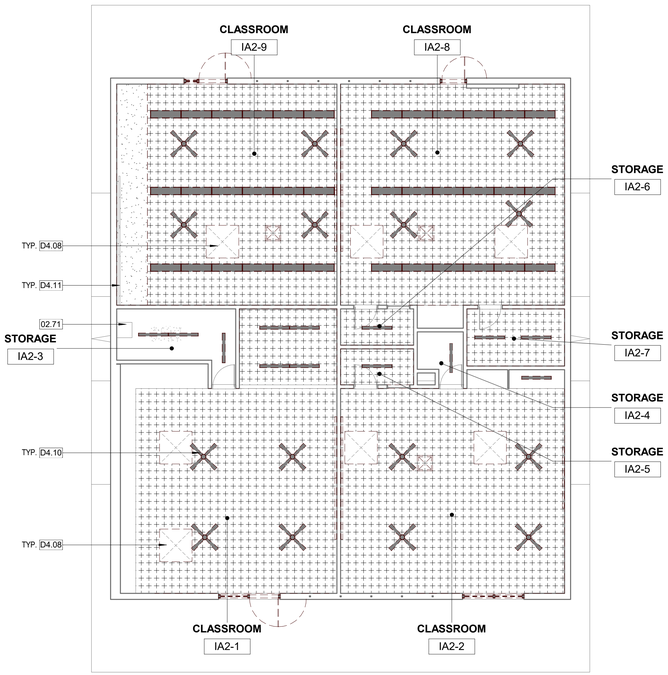
DSA SUBMITTAL

# DEMO RCP BLDG C7, C8, SL & ADMIN

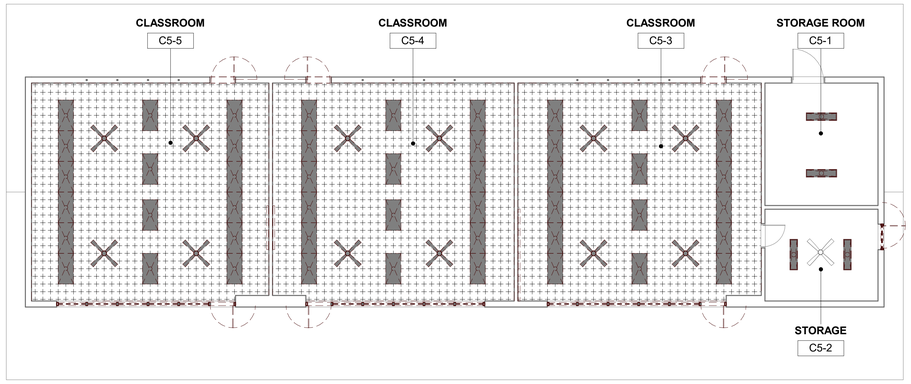
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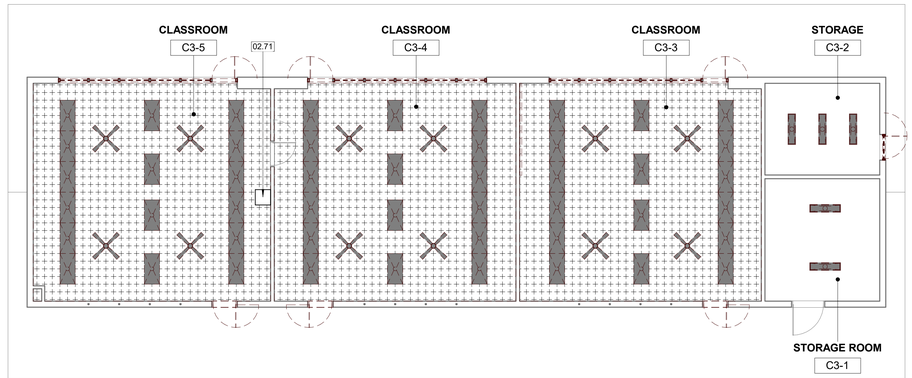
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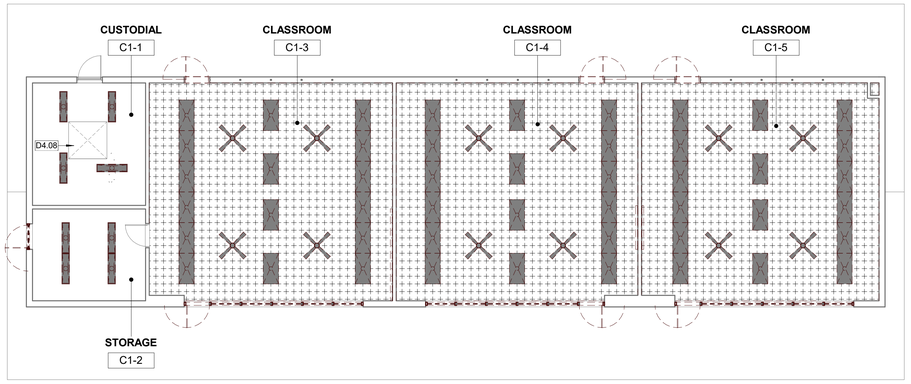

## 22 DEMO RCP BUILDING IA2
1/8" = 1'-0"



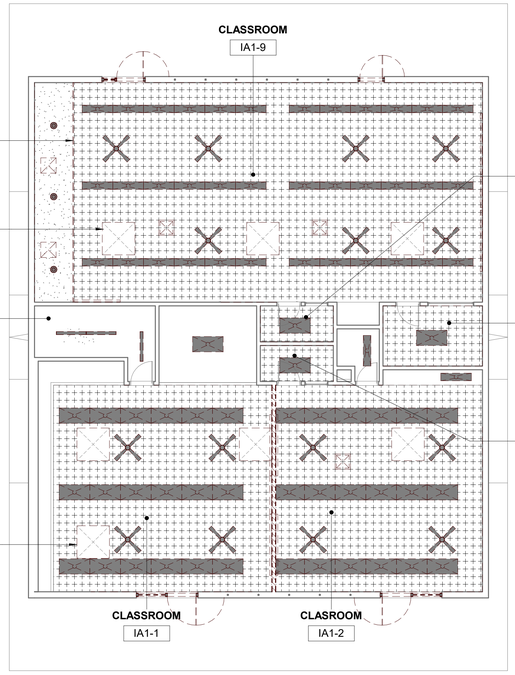

## 06 DEMO RCP BUILDING C5
1/8" = 1'-0"




## 08 DEMO RCP BUILDING C3
1/8" = 1'-0"




## 10 DEMO RCP BUILDING C1
1/8" = 1'-0"




## 25 DEMO RCP BUILDING IA1
1/8" = 1'-0"

## DEMOLITION KEYED NOTES

| # | Description |
|---|---|
| D4.07 | REMOVE (E) CEILING MOUNTED DIVIDER FIN, PATCH & REPAIR |
| D4.08 | REMOVE (E) SKYLIGHT AND ALL SUPPORT ASSEMBLY, INFILL AT ROOF AND CEILING TO MATCH ADJACENT, SEE DETAIL 16/SD1 |
| D4.10 | REMOVE (E) CEILING FAN AND RETURN TO DISTRICT |
| D4.11 | REMOVE (E) PIPES AND CAP AT SOURCE, PATCH AND REPAIR AS REQ'D. |

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 02.71 | (E) IDF/MDF TO REMAIN, PROTECT IN PLACE, SEE ELECTRICAL DWGS. |

## DEMOLITION RCP LEGEND

- EXISTING PLASTER CEILING TO REMAIN, PATCH & REPAIR AS REQ'D TO RECEIVE (N) PAINT, TYP.
- EXISTING PLASTER CEILING TO BE REMOVED
- EXISTING NON-BEARING WALL TO BE REMOVED
- EXISTING 12"x12" GLUE UP / STAPLED ACOUSTIC TILE AND (E) SUBSTRATES TO BE REMOVED AND DISPOSED
- WHEN SHOWN SHADED, REMOVE (E) LIGHT FIXTURES, OTHERWISE, LIGHT FIXTURES ARE TO REMAIN.
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS (REMOVE WHEN SHOWN DASHED)
- (E) CEILING FAN TO BE REMOVED AND DISPOSED.
- (E) ACCESS PANEL
- REMOVE (E) SKYLIGHT AND ALL SUPPORT ASSEMBLY, INFILL AT ROOF AND CEILING TO MATCH ADJACENT

NOTE:
1. REMOVE & DISPOSE OF (E) ROOF INSULATION ABOVE CEILING RAFTERS, WHERE OCCURS.

## GENERAL DEMOLITION NOTES:

1. DEMOLITION PLANS INDICATE SOME OF THE SCOPE-OF-WORK INVOLVED FOR THE DEMOLITION PHASE OF THIS PROJECT. CONTRACTOR SHALL REVIEW ALL SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
2. CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING.
4. CONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER OF ANY POSSIBLE ASBESTOS CONTAINING MATERIALS DISCOVERED BEFORE PROCEEDING WITH WORK. PROTECT INTERIOR CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.
6. CONTRACTOR SHALL NOT SCALE DRAWINGS.
7. ALL FURNITURE WILL BE REMOVED OR RELOCATED BY THE OWNER AS NECESSARY PRIOR TO THE DEMOLITION WORK OF THIS PROJECT. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED.
8. REMOVE EXISTING CONSTRUCTION TO THE EXTENT INDICATED ON THE DRAWINGS. SHOULD ANY DAMAGE OCCUR TO ANY EXISTING CONSTRUCTION TO REMAIN, THE CONTRACTOR SHALL REPAIR THE DAMAGE TO MATCH EXISTING AND OR ADJACENT CONSTRUCTION.
9. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES AND WORK.
10. NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUIRESTED ITEMS TO THE BUILDING OWNER IN GOOD CONDITION.
11. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
12. MAINTAIN ANY AND ALL EXISTING FIRE-RATED ASSEMBLIES THAT ARE TO REMAIN, AND THEIR ASSOCIATED FIRE-RATINGS, INCLUDING BUT NOT LIMITED TO ALL ASSOCIATED EXISTING FIRE-RATED OPENINGS, ALL ASSOCIATED EXISTING FIRE-RATED PENETRATIONS, AND ALL ASSOCIATED EXISTING FIRE-RATED FIRESTOPPING CONDITIONS.
13. WHEN UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, DETERMINE THE NATURE AND EXTENT OF THE CONFLICT AND NOTIFY THE ARCHITECT IMMEDIATELY FOR RESOLUTION.
14. CONTRACTOR SHALL RE-LOCATE UTILITIES AND EQUIPMENT AS REQUIRED TO ACCOMMODATE NEW HVAC, ELECTRICAL, PLUMBING, AND TECHNOLOGY REQUIREMENTS FOR NEW WORK.
15. SAW-CUT AND REMOVE EXISTING FLOOR FINISHES AND FLOOR SLAB AS REQUIRED TO INSTALL NEW FIXTURES, ITEMS, AND OR DEVICES FOR ALL SCOPE-OF-WORK PERTAINING TO NEW MECHANICAL WORK, NEW PLUMBING UTILITIES, NEW PLUMBING WORK, NEW ELECTRICAL WORK, AND NEW TECHNOLOGY WORK. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE AND PROVIDE NEW VAPOR RETARDER AND NEW CONTINUOUS WATERSTOPS AT JOINT BETWEEN NEW CONCRETE FLOOR SLAB AND EXISTING CONCRETE FLOOR SLAB. PATCH WITH NEW 3,500 PSI MINIMUM CONCRETE AND PREPARE FLOOR, INCLUDING NEW CONCRETE TO RECEIVE NEW FLOOR FINISHES. COORDINATE WITH STRUCTURAL.
16. EXISTING WALLS (OR PORTIONS OF WALLS) TO BE REMOVED SHALL BE CUT FLUSH WHERE INTERSECTING WITH WALLS TO REMAIN. REMAINING WALLS TO BE PATCHED AND FINISHED SMOOTH.
17. NEW OPENING TO BE CUT IN EXISTING WALLS SHALL BE SAW-CUT ONLY AT LOCATIONS INDICATED IN DRAWINGS TO THE HEIGHT AND WIDTH INDICATED. NEW LINTELS SHALL BE INSTALLED TO SUPPORT EXISTING WALL CONSTRUCTION ABOVE AS INDICATED ON THE DRAWINGS, OR IF NOT INDICATED, AS REQUIRED FOR NEW WALL CONSTRUCTION PER STRUCTURAL DRAWINGS.
18. WHERE EXISTING INTERIOR WALLS ARE REPLACED OR REMOVED, REMOVE MEPT SYSTEMS BACK TO PANEL, OR MECHANICAL ROOM, OR FARTHEST POSSIBLE POINT WITHOUT DISTURBING EXISTING CONSTRUCTION. REMOVE EXISTING MECHANICAL EQUIPMENT, RELOCATE POWER PER MEPT DRAWINGS.
19. PATCH FLOORS, WALLS CEILINGS WHICH REMAIN AT LOCATIONS WHERE PIPES, CONDUITS, ETC. ARE REMOVED AS REQUIRED TO MATCH EXISTING CONDITIONS OR TO RECEIVE NEW FINISHES.
20. WHERE EXISTING FINISH FLOOR IS REMOVED, PREPARE FLOOR SURFACE TO RECEIVE NEW FLOORING.
21. ALL DASHED LINES ARE DEMOLITION LINES UNLESS NOTED OTHERWISE.
22. REMOVE ALL EXISTING ROOM AND BUILDING SIGNAGE.
23. DEMOLISH PORTION OF (E) WALL AS REQ'D TO PROVIDE ACCESSIBLE SIDE STRIKE CLEARANCE, RE: TO REMODEL PLAN FOR EXTENT.
24. EXISTING HHW BOILERS TO BE DECOMMISSIONED, DISCONNECT EXISTING HHW PIPING AT BOILER ROOM. DRAIN PIPING SYSTEM AND CAP. EXISTING RADIATORS IN CLASSROOMS TO BE REMOVED. EXPOSED HHW PIPING IN CLASSROOMS SHALL BE REMOVED BACK TO WALL PENETRATION AND CAPPED INSIDE WALL. ALL WALL OPENINGS, INCLUDING EXTERIOR WALL, SHALL BE SEALED AIR AND WATER TIGHT AND PAINTED TO MATCH EXISTING WALL COLOR. COORDINATE WITH DISTRICT ON REMOVAL OF EXISTING BOILER, PUMPS AND ASSOCIATED EQUIPMENT IN BOILER ROOM.
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PBK

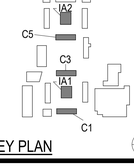
ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

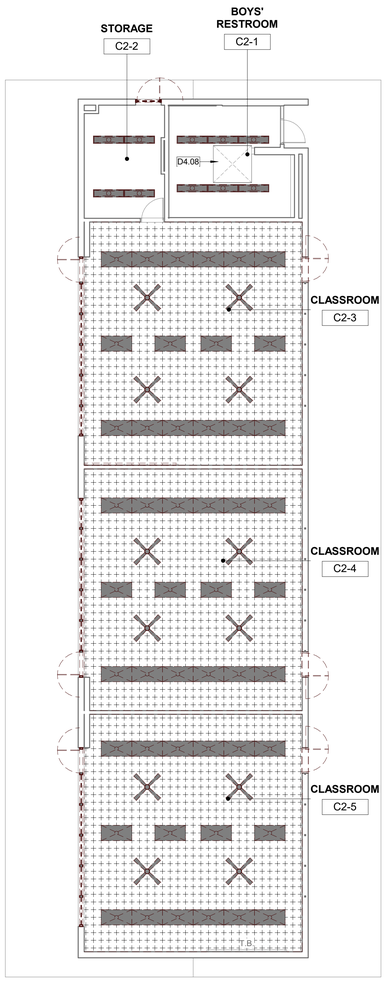
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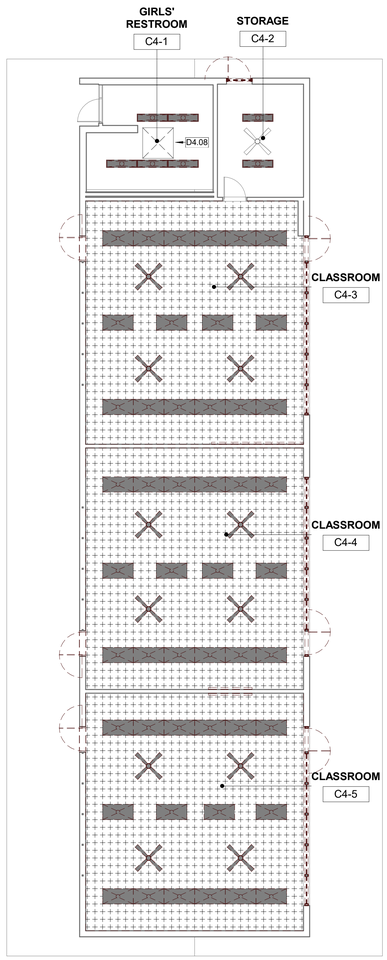
**DEMO RCP BLDG C1, C3, C5, IA1 & IA2**

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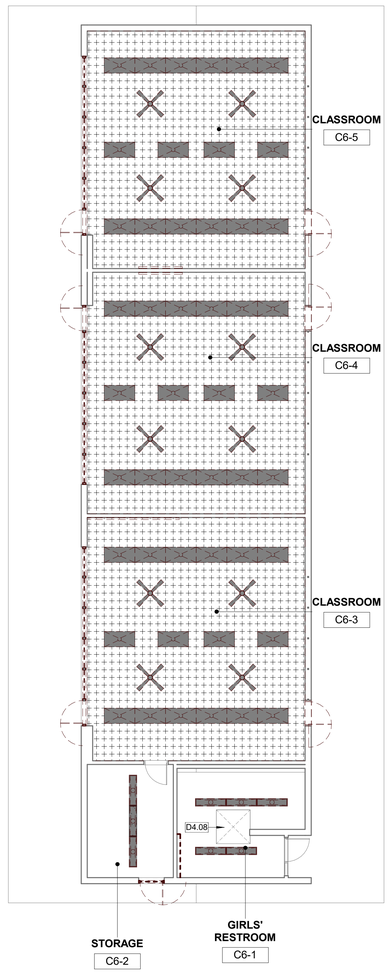
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30 DEMO RCP BUILDING C2
1/8" = 1'-0"




20 DEMO RCP BUILDING C4
1/8" = 1'-0"




10 DEMO RCP BUILDING C6
1/8" = 1'-0"

## DEMOLITION KEYED NOTES

| # | Description |
|---|---|
| D4.08 | REMOVE (E) SKYLIGHT AND ALL SUPPORT ASSEMBLY, INFILL AT ROOF AND CEILING TO MATCH ADJACENT, SEE DETAIL 16/SD1 |

## KEYNOTE LEGEND

| # | Description |
|---|---|

## DEMOLITION RCP LEGEND

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Not for permitting or construction

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ARC s, Inc.
Anaheim, CA 92805
P 949--548-5000

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DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Tong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|

DSA SUBMITTAL

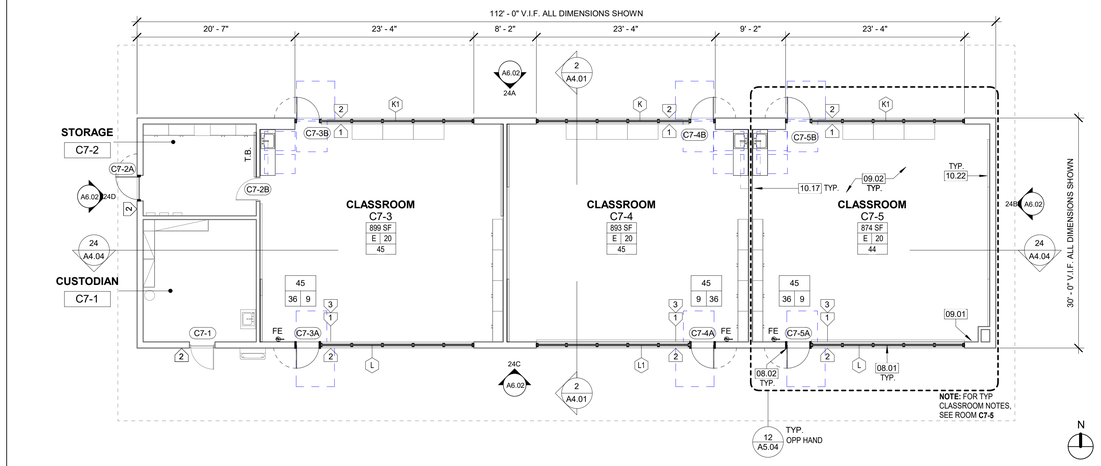
# DEMO RCP BLDG C2, C4, & C6

This document is for plan review only

AD2.03

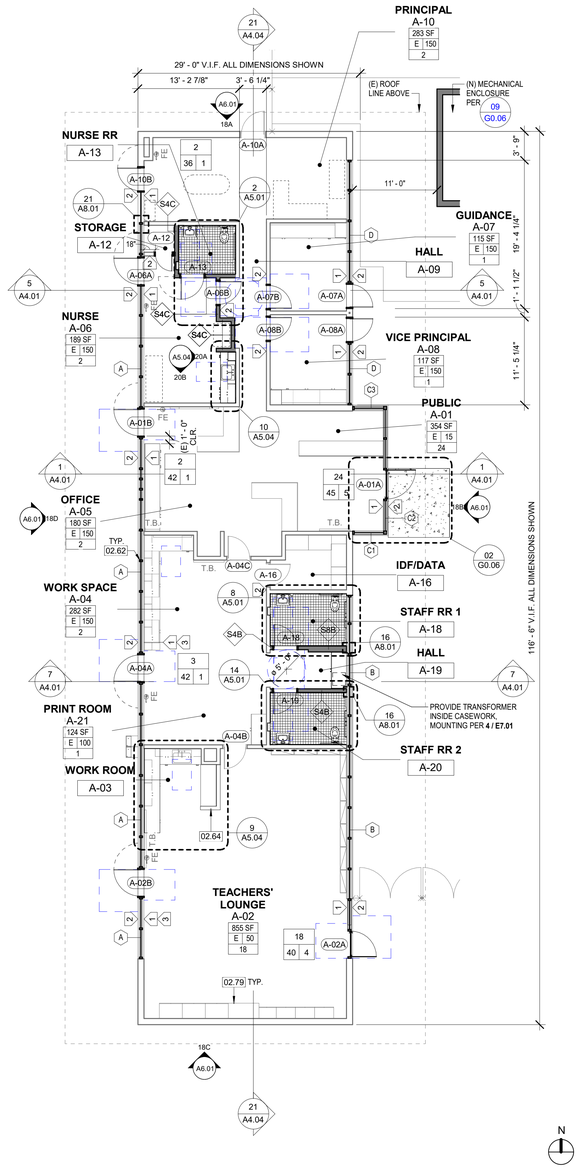
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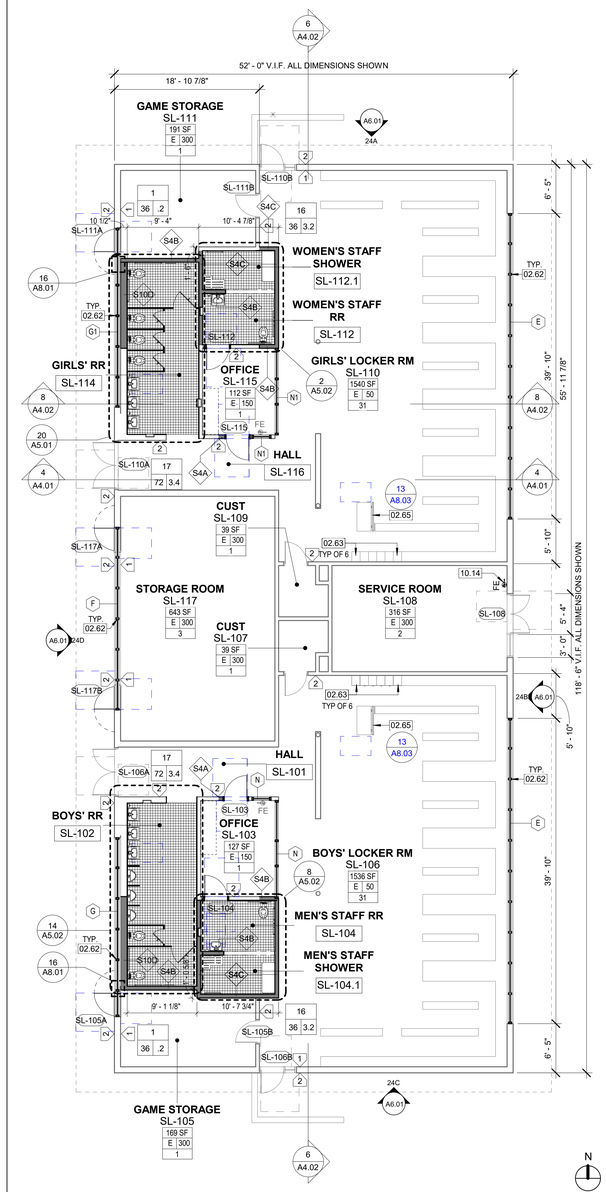

## 06 FLOOR PLAN - BUILDING C7

1/8" = 1'-0"



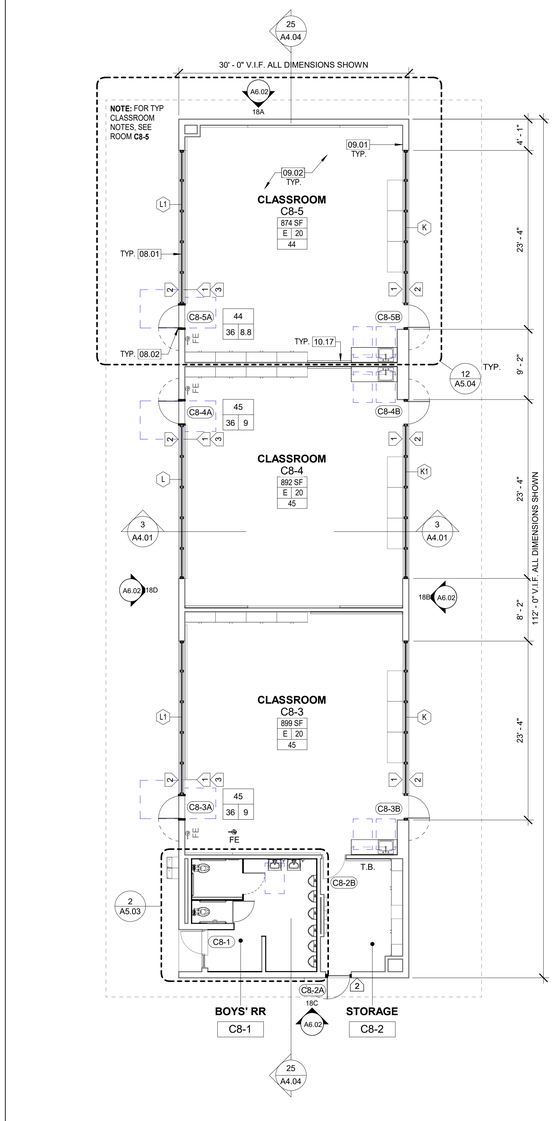

## 30 FLOOR PLAN - ADMINISTRATION BUILDING

1/8" = 1'-0"




## 20 FLOOR PLAN - BUILDING SL

1/8" = 1'-0"




## 10 FLOOR PLAN - BUIDLING C8

1/8" = 1'-0"

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 02.62 | (E) TUBE STEEL COLUMN WITHIN WINDOW SYSTEM TO REMAIN, PROTECT IN PLACE, WHERE OCCURS |
| 02.63 | (E) ACCESSIBLE LOCKERS, PROTECT IN PLACE |
| 02.64 | (E) PONY WALL TO REMAIN, RAISE HEIGHT TO 40" AFF WITH COUNTERTOP CAP, REFINISH AS REQ'D TO RECEIVE NEW PAINT, SEE ELEV 29A,29C,29D/A5.04 |
| 02.65 | (E) WIDE BENCH, PROTECT IN PLACE, ATTACH BACK REST TO CREATE AN ACCESSIBLE BENCH PER DETAIL 13/A8.03 |
| 02.79 | (E) CASEWORK TO REMAIN. TO RE-PAINT TYP. |
| 08.01 | (N) ALUMINUM FRAME & GLAZING WINDOW SYSTEM.SEE WINDOWS FRAMING ELEVATION A9.02, PER ALUMINUM-FRAMED STOREFRONT & ALUMINUM WINDOWS & GLAZING SPEC SECTION |
| 08.02 | (N) INTEGRAL ALUMINUM FRAME DOOR SYSTEM.SEE FRAMING ELEVATION A9.01 & DOOR SCHEDULE, PER ALUMINUM-FRAMED STOREFRONT & DOOR SPEC SECTION |
| 09.01 | (N) INTERIOR PAINT FINISH, PER DISTRICT REQUIREMENTS |
| 09.02 | (N) FLOOR FINISH AND BASEBOARD, SEE FINISH SCHEDULE |
| 10.14 | (N) FIRE EXTINGUISHER, SURFACE MOUNTED TO (E) WALL |
| 10.17 | (N) TACKABLE SURFACE, TO (E) WALL, SEE DETAIL 6/A8.02 |
| 10.22 | (N) MARKER BOARD, SEE DETAIL 5/A8.02 |

## EXTERIOR PAINT SCOPE OF WORK

1. CONTRACTOR SHALL PAINT ALL EXTERIOR AND INTERIOR SURFACES OF ALL BUILDINGS INCLUDING PORTABLES PER SPECIFICATION, THIS WORK INCLUDES ALL FLASHING, FASCIA, PLASTER, LOUVER, DRYWALL, DOORS AND FRAMES WITH THE EXCEPTION OF BRICK SURFACES. MINIMUM OF 4 COLORS TO BE SELECTED BY THE ARCHITECTS.
2. CONTRACTOR SHALL PAINT ALL COLUMN AND BEAMS OF SOLAR SHADE STRUCTURE PER SPECIFICATION, EXCEPT GALVANIZED AND SOLAR PANEL SURFACES, MINIMUM OF 2 COLORS TO BE SELECTED BY ARCHITECT.
3. GENERAL CONTRACTOR TO NOTIFY AND DOCUMENT ANY AREAS WITH DRYROT AND / OR TERMITE DAMAGE IN WRITTEN FORMAT PRIOR TO BID.
4. PROVIDE APPROPRIATE PREPARATION , CLEANING AND BASE MATERIAL AT EXISTING EXTERIOR FINISHES BEFORE RECEIVING NEW FINISHES. PER FINISH SPECIFICATION.

## GENERAL NOTES

1. COORD. ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL
2. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1 % MINIMUM, 2 % MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO, SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
3. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5 % FOR A HORIZ. DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O
4. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS
5. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.

NOTE: ALL BUILDINGS ARE NON-SPRINKLERED

## REMODEL PLAN LEGEND

- EXISTING WALL TO REMAIN
- NEW NON-BEARING WALL WALL TO BE PROVIDED. SEE WALL PARTITION TAG FOR TOP & BOTTOM CONNECTION
- X — DOOR MARK
- W4 — WINDOW TAG REFER TO 30 / A9.02 FOR WINDOW FRAMES AND GLAZING TYPES
- (N) DOOR TO BE PROVIDED. REFER TO A9.01 FOR DOOR SCHEDULE AND TYPES
- PROVIDE NEW CONCRETE AS REQ'D TO ALLOW FOR 2% SLOPE AWAY FROM BUILDING AND 2% MAX CROSS SLOPE, TYP AT EXTERIOR DOOR CLEARANCE LANDINGS. WHERE IT APPLIES
- (N) WINDOW (SEE WINDOW FRAMING ELEVATION ON SHEET **A9.02**)
- S4A — WALL PARTITIONS TAG
- LETTER INDICATES PARTITION TYPE, REF. DETAILS 1 A8.02, 2 A8.02, 4 A8.02
- # INDICATES CORE WIDTH
- LETTER INDICATES CORE TYPE (S=STUD)
- CLASSROOM — ROOM NAME
- 400 — ROOM NUMBER
- 960 — ROOM AREA (SQ. FT.)
- E 20 — OCCUPANT LOAD FACTOR
- 48 — ROOM OCCUPANT
- OCCUPANCY TYPE
- 100 — COMBINED EXIT LOAD
- 32 / 20 — REQUIRED CLEAR EXIT WIDTH (IN INCHES) / PROVIDED CLEAR EXIT WIDTH (IN INCHES)
- 60" CLEAR TURNAROUND SPACE
- 30" x 48" CLEAR FLOOR SPACE
- (E) FF&E, FOR REFERENCE ONLY
- FE — WHERE EXISTING FIRE EXTINGUISHER IS MISPLACED IN CLASSROOM, MOVE (E) FIRE EXTINGUISHER WITH WALL BRACKET TO LOCATION SHOWN ON PLAN. IF FIRE EXTINGUISHER AND/OR MOUNTING BRACKET IS MISSING PROVIDE PER SPEC 10 44 00 AND REFER TO DETAIL 18 / A8.02

**NOTE:** ALL EXTERIOR CLASSROOM/ADMIN WINDOW FRAMES AND GLAZING TO BE REPLACED. PATCH AND REPAIR WALLS, AS NEEDED, FOLLOWING WINDOW INSTALLATION. VERIFY IN FIELD ALL DIMENSIONS SHOWN.

## SIGNAGE LEGEND

ALL SIGNAGE IS (E) TO REMAIN. WHERE (E) SIGNAGE IS MISSING OR DAMAGED PROVIDE NEW SIGNAGE TO MATCH EXISTING PER DETAIL REFERENCES BELOW...

**SIGNAGE TAG** (#)

1. TACTILE EXIT SIGNAGE, SEE DETAIL 16 / A8.02 AND/OR SEE ELECTRICAL PLANS FOR ILLUMINATED EXIT REQUIREMENTS.
2. ROOM IDENTIFICATION SIGNAGE, SEE DETAIL 19 / A8.02 (VERIFY ROOM NAME & NUMBER w/ OWNER). WHERE TWO ROOMS ADJOIN ONE ANOTHER, PROVIDE SIGNAGE ON EACH SIDE OF THE WALL, TYP. ALL ROOMS
3. ASSISTIVE LISTENING SIGNAGE, SEE DETAIL 23 / A8.02
4. MAXIMUM OCCUPANT LOAD SIGNAGE, SEE DETAIL 17 / A8.02

## ASSISTIVE LISTENING SYSTEMS AND SIGNAGE 11B-219

1) PROVIDE AN ASSISTIVE LISTENING SYSTEM, COMPLYING WITH CBC 11B-219 & 11B-706. PROVIDE EACH ASSEMBLY WITH A SIGN WHICH INCLUDES THE SYMBOL FOR HEARING LOSS IN COMPLIANCE WITH 11B-216.10 & 11B-703.7.2.4.

2) ASSISTIVE-LISTENING SYSTEMS SHALL BE PROVIDED IN ACCORDANCE WITH CBC SECTION 11B-219 AND SHALL COMPLY WITH CBC SECTION 11B-706.

## ALTERNATIVE ALS SYSTEM REQUIREMENTS

PROVIDE 2 PORTABLE ASSISTIVE LISTENING SYSTEMS, EACH WITH A TRANSMITTER AND A MINIMUM OF 2 RECEIVERS, FOR USE IN CLASSROOMS WITHOUT AUDIO AMPLIFICATION. THE ASSISTIVE LISTENING RECEIVERS AND TRANSMITTER SHALL BE STORED IN THE SCHOOL SITE ADMINISTRATION OFFICE UNTIL REQUESTED.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

C7 C8 ADMIN SL
KEY PLAN

Consultant

Architect
LICENSED ARCHITECT Tong You No. C-31162 REN. 10-31-2023 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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| 03/31/23 | 220526 |

REVISIONS

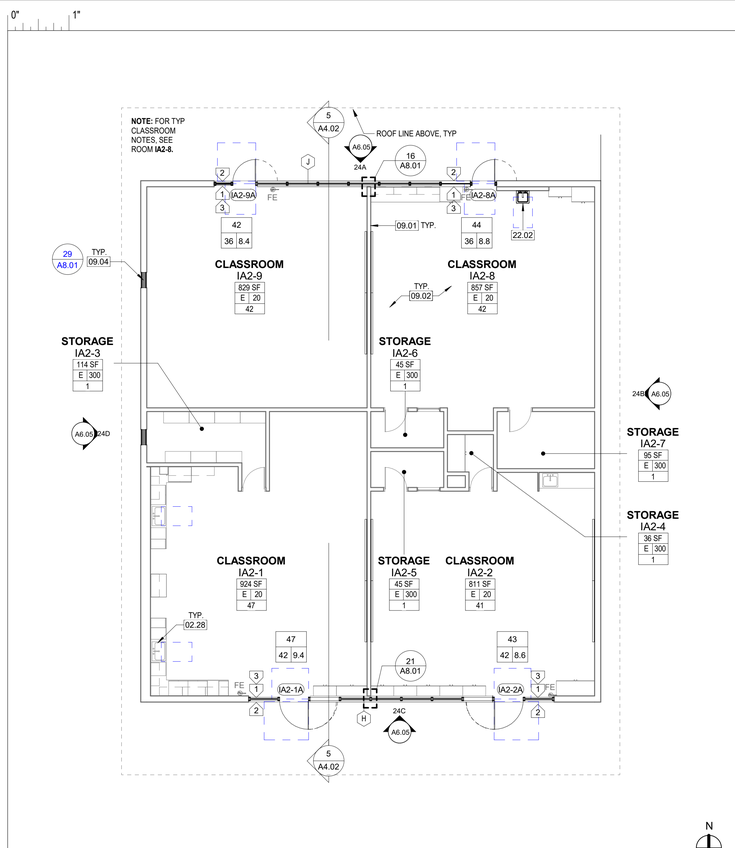
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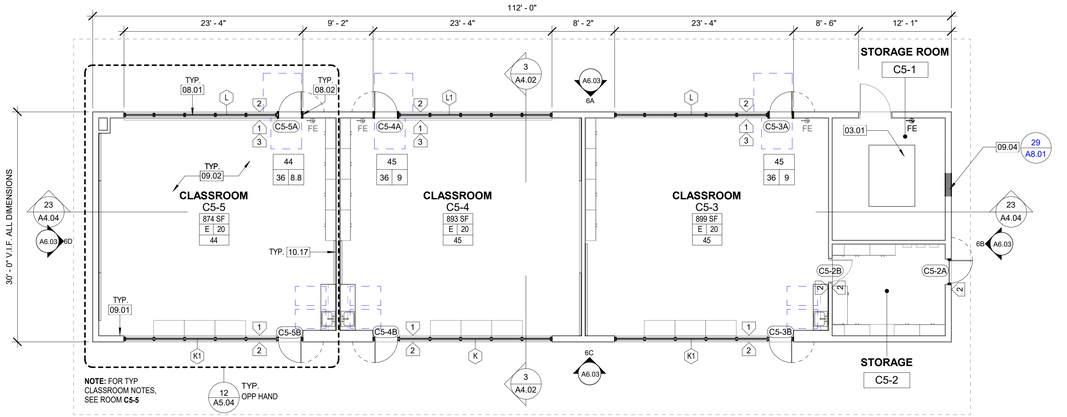
**BUILDING FLOOR PLANS C7, C8, SL, & ADMIN.**

**A1.01**

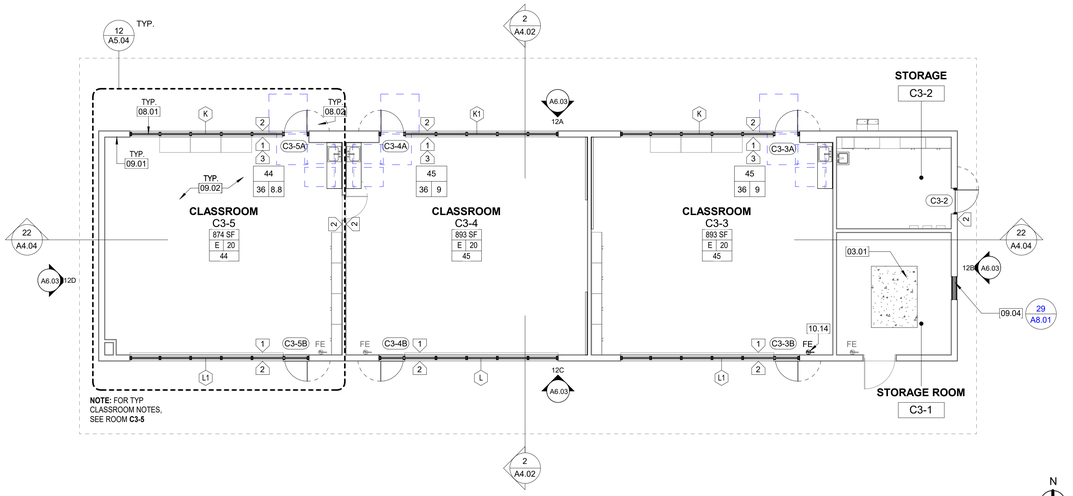
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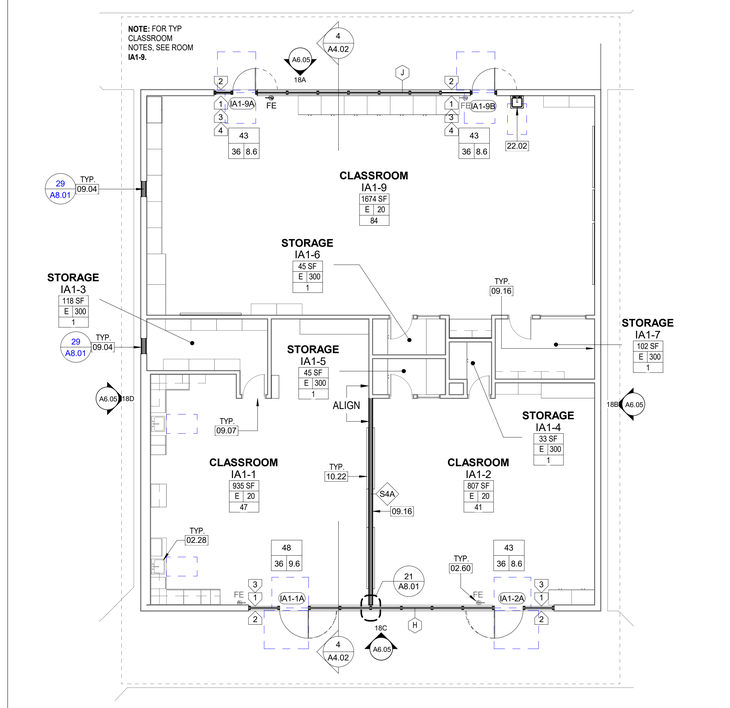

## 22 FLOOR PLAN - BUILDING IA2
1/8" = 1'-0"



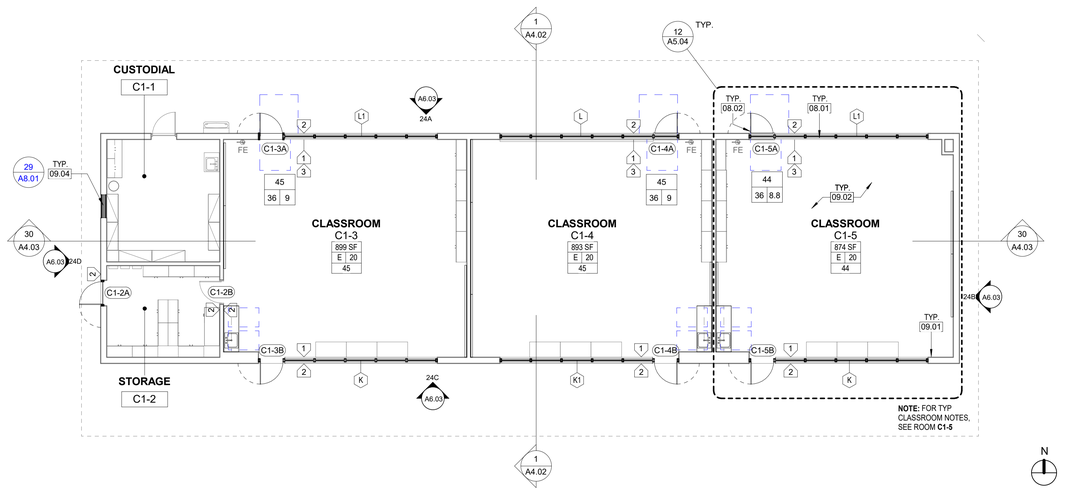

## 06 FLOOR PLAN - BUILDING C5
1/8" = 1'-0"




## 08 FLOOR PLAN - BUILDING C3
1/8" = 1'-0"




## 25 FLOOR PLAN - BUILDING IA1
1/8" = 1'-0"




## 10 FLOOR PLAN - BUILDING C1
1/8" = 1'-0"

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 02.28 | (E) ACCESSIBLE LAVATORY TO REMAIN, REFER TO DETAIL 9/A8.03 SIM |
| 02.60 | (E) FIRE EXTINGUISHER, TO REMAIN |
| 03.01 | CONCRETE SLAB INFILL PER STRUCTURAL DRAWINGS |
| 08.01 | (N) ALUMINUM FRAME & GLAZING WINDOW SYSTEM.SEE WINDOWS FRAMING ELEVATION A9.02, PER ALUMINUM-FRAMED STOREFRONT & ALUMINUM WINDOWS & GLAZING SPEC SECTION |
| 08.02 | (N) INTEGRAL ALUMINUM FRAME DOOR SYSTEM.SEE FRAMING ELEVATION A9.01 & DOOR SCHEDULE, PER ALUMINUM-FRAMED STOREFRONT & DOOR SPEC SECTION |
| 09.01 | (N) INTERIOR PAINT FINISH, PER DISTRICT REQUIREMENTS |
| 09.02 | (N) FLOOR FINISH AND BASEBOARD, SEE FINISH SCHEDULE |
| 09.04 | (N) PLASTER INFILL @ (E) DEMOLISHED DUCT/LOUVER CAVITY, SEE DETAIL CALLOUT |
| 09.07 | (E) DOOR TO TO REMAIN AND REPAINT, PER DISTRICT REQUIREMENTS |
| 09.16 | (N) DRYWALL WITH INTERIOR PAINT FINISH, PER DISTRICT REQUIREMENTS |
| 10.14 | (N) FIRE EXTINGUISHER, SURFACE MOUNTED TO (E) WALL |
| 10.17 | (N) TACKABLE SURFACE, TO (E) WALL, SEE DETAIL 6/A8.02 |
| 10.22 | (N) MARKER BOARD, SEE DETAIL 5/A8.02 |
| 22.02 | (N) WALL-MOUNTED LAVATORY |

## EXTERIOR PAINT SCOPE OF WORK

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## GENERAL NOTES

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4. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS
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NOTE: ALL BUILDINGS ARE NON-SPRINKLERED

## REMODEL PLAN LEGEND

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- NEW NON-BEARING WALL WALL TO BE PROVIDED. SEE WALL PARTITION TAG FOR TOP & BOTTOM CONNECTION
- DOOR MARK
- WINDOW TAG — REFER TO 30 / A9.02 FOR WINDOW FRAMES AND GLAZING TYPES
- (N) DOOR TO BE PROVIDED. REFER TO A9.01 FOR DOOR SCHEDULE AND TYPES
- PROVIDE NEW CONCRETE AS REQ'D TO ALLOW FOR 2% SLOPE AWAY FROM BUILDING AND 2% MAX CROSS SLOPE, TYP AT EXTERIOR DOOR CLEARANCE LANDINGS. WHERE IT APPLIES
- (N) WINDOW (SEE WINDOW FRAMING ELEVATION ON SHEET **A9.02**)
- WALL PARTITIONS TAG
  - LETTER INDICATES PARTITION TYPE, REF. DETAILS
  - # INDICATES CORE WIDTH
  - LETTER INDICATES CORE TYPE (S=STUD)
- CLASSROOM — ROOM NAME
- 400 — ROOM NUMBER
- 960 — ROOM AREA (SQ. FT.)
- E 20 — OCCUPANT LOAD FACTOR
- 48 — ROOM OCCUPANT
- OCCUPANCY TYPE
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- PROVIDED CLEAR EXIT WIDTH (IN INCHES)
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**NOTE:** ALL EXTERIOR CLASSROOM/ADMIN WINDOW FRAMES AND GLAZING TO BE REPLACED. PATCH AND REPAIR WALLS, AS NEEDED, FOLLOWING WINDOW INSTALLATION. VERIFY IN FIELD ALL DIMENSIONS SHOWN.

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3. ASSISTIVE LISTENING SIGNAGE, SEE DETAIL 23 / A8.02
4. MAXIMUM OCCUPANT LOAD SIGNAGE, SEE DETAIL 17 / A8.02

## ASSISTIVE LISTENING SYSTEMS AND SIGNAGE 11B-219

1) PROVIDE AN ASSISTIVE LISTENING SYSTEM, COMPLYING WITH CBC 11B-219 & 11B-706. PROVIDE EACH ASSEMBLY WITH A SIGN WHICH INCLUDES THE SYMBOL FOR HEARING LOSS IN COMPLIANCE WITH 11B-216.10 & 11B-703.7.2.4.

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## ALTERNATIVE ALS SYSTEM REQUIREMENTS

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

**PROJECT ADDRESS:**
14171 NEWLAND ST.
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

KEY PLAN




Consultant

Architect

LICENSED ARCHITECT Yong You No. C-31162 REN. 10-31-2023 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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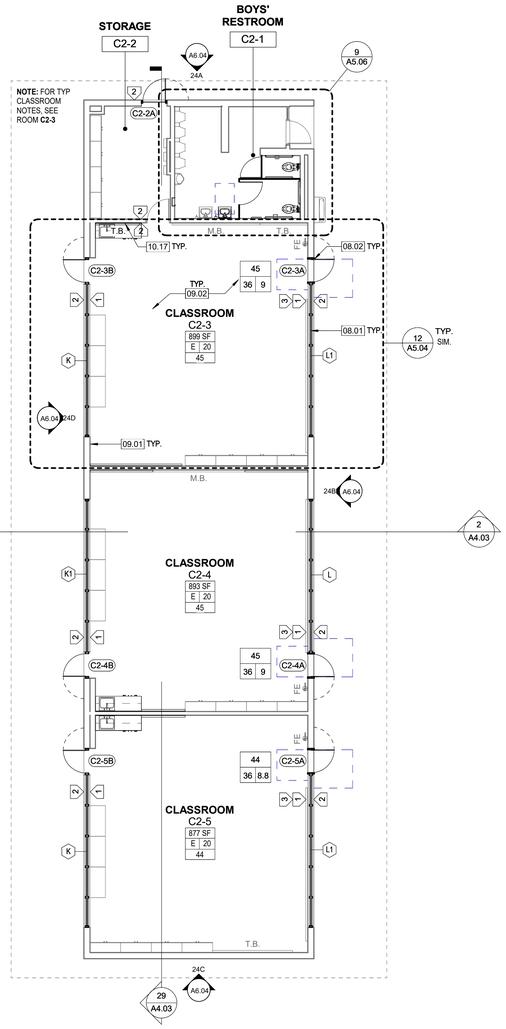
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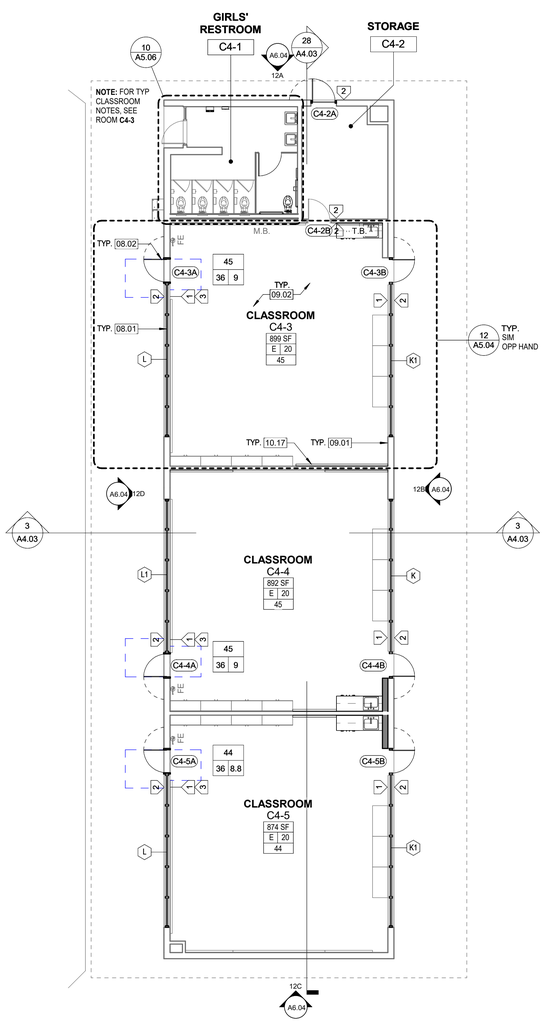
**BUILDING FLOOR PLANS C1, C3, C5, IA1, & IA2**

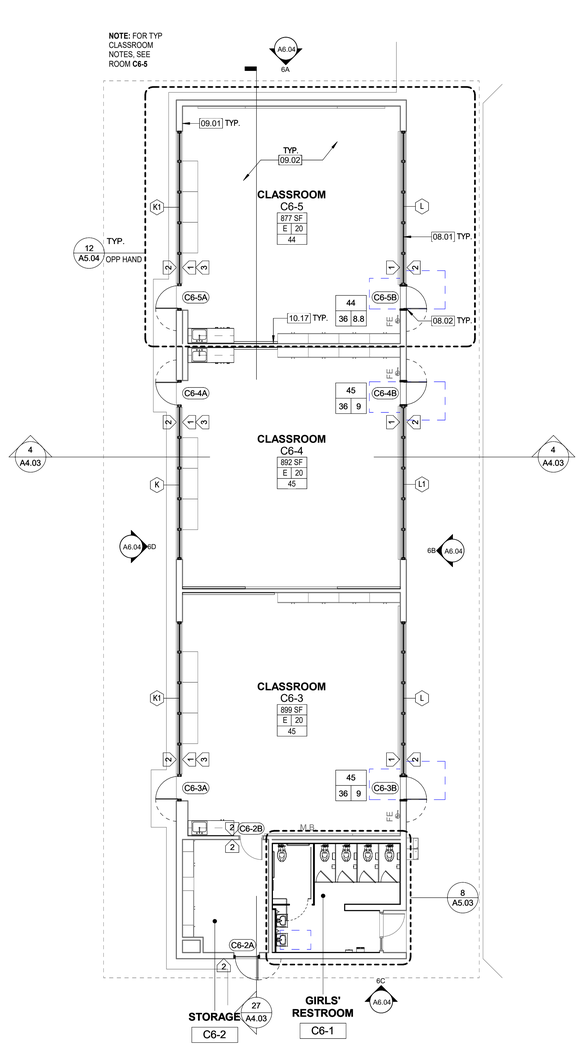
**A1.02**

A1.03 - BUILDING FLOOR PLANS C2, C4, & C6

0" 1"




## KEYNOTE LEGEND

| # | Description |
|---|---|
| 08.01 | (N) ALUMINUM FRAME & GLAZING WINDOW SYSTEM.SEE WINDOWS FRAMING ELEVATION A9.02. PER ALUMINUM-FRAMED STOREFRONT & ALUMINUM WINDOWS & GLAZING SPEC SECTION |
| 08.02 | (N) INTEGRAL ALUMINUM FRAME DOOR SYSTEM.SEE FRAMING ELEVATION A9.01 & DOOR SCHEDULE, PER ALUMINUM-FRAMED STOREFRONT & DOOR SPEC SECTION |
| 09.01 | (N) INTERIOR PAINT FINISH, PER DISTRICT REQUIREMENTS |
| 09.02 | (N) FLOOR FINISH AND BASEBOARD, SEE FINISH SCHEDULE |
| 10.17 | (N) TACKABLE SURFACE, TO (E) WALL, SEE DETAIL 6/A8.02 |

## GENERAL NOTES

1. COORD. ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL
2. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1 % MINIMUM, 2 % MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO, SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
3. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5 % FOR A HORIZ. DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O
4. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS
5. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.

NOTE: ALL BUILDINGS ARE NON-SPRINKLERED

## REMODEL PLAN LEGEND

EXISTING WALL TO REMAIN

NEW NON-BEARING WALL WALL TO BE PROVIDED. SEE WALL PARTITION TAG FOR TOP & BOTTOM CONNECTION

DOOR MARK

WINDOW TAG
REFER TO 30 / A9.02 FOR WINDOW FRAMES AND GLAZING TYPES

(N) DOOR TO BE PROVIDED. REFER TO A9.01 FOR DOOR SCHEDULE AND TYPES

PROVIDE NEW CONCRETE AS REQ'D TO ALLOW FOR 2% SLOPE AWAY FROM BUILDING AND 2% MAX CROSS SLOPE. TYP AT EXTERIOR DOOR CLEARANCE LANDINGS. WHERE IT APPLIES

(N) WINDOW (SEE WINDOW FRAMING ELEVATION ON SHEET **A9.02**)

WALL PARTITIONS TAG

LETTER INDICATES PARTITION TYPE, REF. DETAILS 1 A8.02 2 A8.02 4 A8.02
# INDICATES CORE WIDTH
LETTER INDICATES CORE TYPE (S=STUD)

CLASSROOM 400 — ROOM NAME, ROOM NUMBER
960 — ROOM AREA (SQ. FT.)
E 20 — OCCUPANT LOAD FACTOR
48 — ROOM OCCUPANT
OCCUPANCY TYPE

60" CLEAR TURNAROUND SPACE

30" x 48" CLEAR FLOOR SPACE

100 — COMBINED EXIT LOAD
32 20 — REQUIRED CLEAR EXIT WIDTH (IN INCHES)
PROVIDED CLEAR EXIT WIDTH (IN INCHES)

(E) FF&E, FOR REFERENCE ONLY

FE — WHERE EXISTING FIRE EXTINGUISHER IS MISPLACED IN CLASSROOM, MOVE (E) FIRE EXTINGUISHER WITH WALL BRACKET TO LOCATION SHOWN ON PLAN. IF FIRE EXTINGUISHER AND/OR MOUNTING BRACKET IS MISSING PROVIDE PER SPEC 10 44 00 AND REFER TO DETAIL 18 / A8.02

**NOTE:** ALL EXTERIOR CLASSROOM/ADMIN WINDOW FRAMES AND GLAZING TO BE REPLACED. PATCH AND REPAIR WALLS, AS NEEDED, FOLLOWING WINDOW INSTALLATION. VERIFY IN FIELD ALL DIMENSIONS SHOWN.

## SIGNAGE LEGEND

ALL SIGNAGE IS (E) TO REMAIN. WHERE (E) SIGNAGE IS MISSING OR DAMAGED PROVIDE NEW SIGNAGE TO MATCH EXISTING PER DETAIL REFERENCES BELOW...

SIGNAGE TAG #

1. TACTILE EXIT SIGNAGE, SEE DETAIL 16 / A8.02 AND/OR SEE ELECTRICAL PLANS FOR ILLUMINATED EXIT REQUIREMENTS.
2. ROOM IDENTIFICATION SIGNAGE, SEE DETAIL 19 / A8.02 (VERIFY ROOM NAME & NUMBER w/ OWNER). WHERE TWO ROOMS ADJOIN ONE ANOTHER, PROVIDE SIGNAGE ON EACH SIDE OF THE WALL, TYP. ALL ROOMS
3. ASSISTIVE LISTENING SIGNAGE, SEE DETAIL 23 / A8.02
4. MAXIMUM OCCUPANT LOAD SIGNAGE, SEE DETAIL 17 / A8.02

## ASSISTIVE LISTENING SYSTEMS AND SIGNAGE 11B-219

1) PROVIDE AN ASSISTIVE LISTENING SYSTEM, COMPLYING WITH CBC 11B-219 & 11B-706. PROVIDE EACH ASSEMBLY WITH A SIGN WHICH INCLUDES THE SYMBOL FOR HEARING LOSS IN COMPLIANCE WITH 11B-216.10 & 11B-703.7.2.4.

2) ASSISTIVE-LISTENING SYSTEMS SHALL BE PROVIDED IN ACCORDANCE WITH CBC SECTION 11B-219 AND SHALL COMPLY WITH CBC SECTION 11B-706.

## ALTERNATIVE ALS SYSTEM REQUIREMENTS

PROVIDE 2 PORTABLE ASSISTIVE LISTENING SYSTEMS, EACH WITH A TRANSMITTER AND A MINIMUM OF 2 RECEIVERS, FOR USE IN CLASSROOMS WITHOUT AUDIO AMPLIFICATION. THE ASSISTIVE LISTENING RECEIVERS AND TRANSMITTER SHALL BE STORED IN THE SCHOOL SITE ADMINISTRATION OFFICE UNTIL REQUESTED.

30 A-FPAP-BLDG C2 — 1/8" = 1'-0"

20 FLOOR PLAN - BUILDING C4 — 1/8" = 1'-0"

10 FLOOR PLAN - BUILDING C6 — 1/8" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

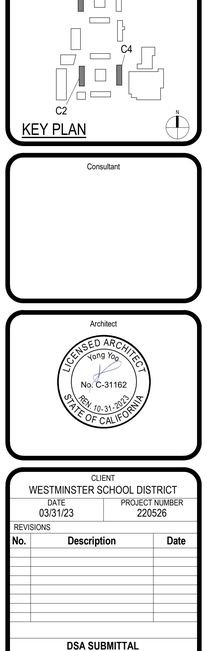

ARCHITECT PBK Architects, Inc.
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

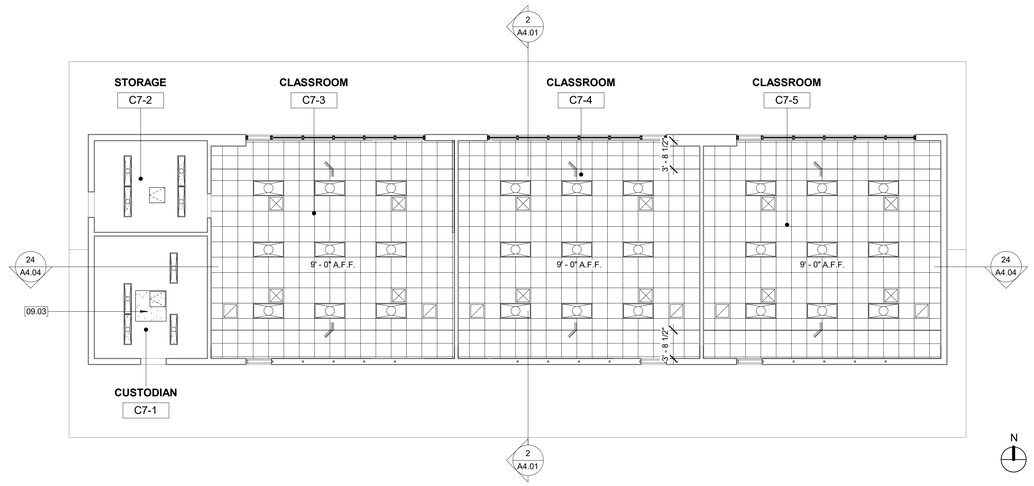
BUILDING FLOOR PLANS C2, C4, & C6

A1.03

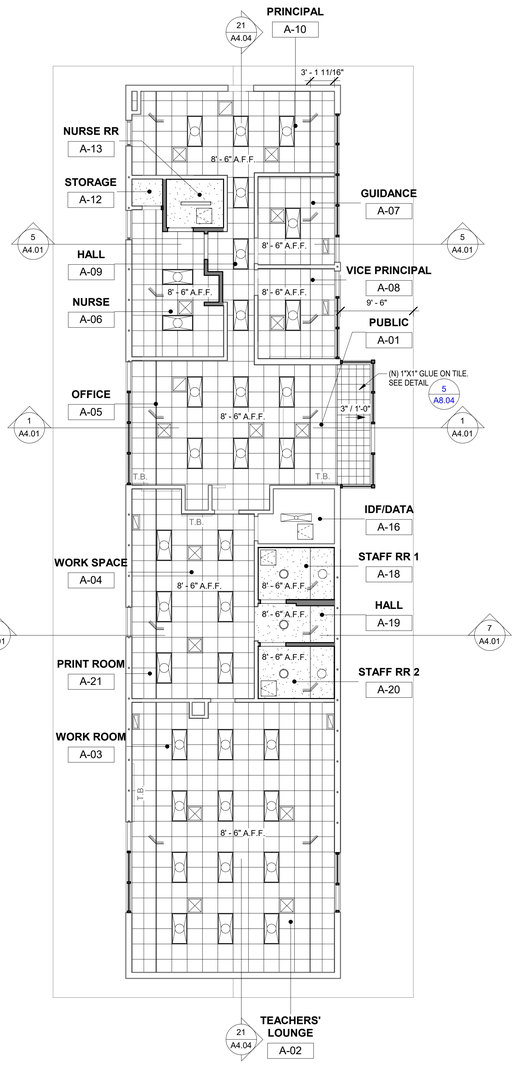
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A2.01 - REFLECTED CEILING PLANS BLDG C7, C8, SL, & ADMIN.

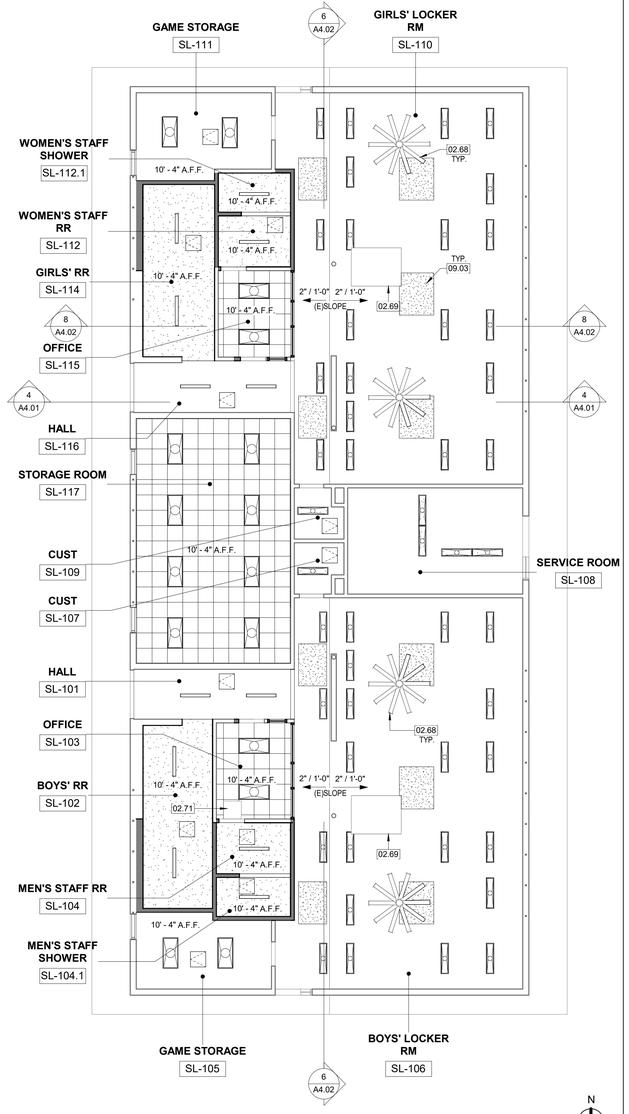
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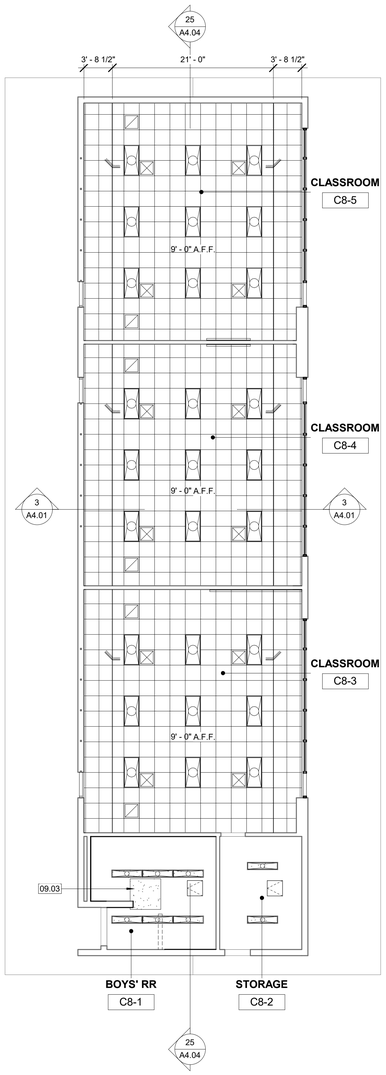

**06** REFLECTED CEILING PLAN - BLDG C7
1/8" = 1'-0"




**30** REFLECTED CEILING PLAN - BLDG ADMIN
1/8" = 1'-0"




**20** REFLECTED CEILING PLAN - BLDG SL
1/8" = 1'-0"




**10** REFLECTED CEILING PLAN - BLDG C8
1/8" = 1'-0"

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 02.68 | (E) CEILING FAN TO REMAIN. |
| 02.69 | (E) CEILING-MOUNTED HEATING UNIT TO REMAIN. |
| 02.71 | (E) IDF/MDF TO REMAIN. PROTECT IN PLACE, SEE ELECTRICAL DWGS. |
| 09.03 | (N) GYP CEILING INFILL @ (E) SKYLIGHT CAVITY, SEE STRUCTURAL DETAIL 15&16/SD1 |

## REFLECTED CEILING PLAN LEGEND

- EXISTING PLASTER /GYP. BD. CEILING TO REMAIN. PATCH AND REPAIR AS REQ'D. PAINT TO MATCH EXISTING.
- NEW PAINTED MOISTURE RESISTANT GYPSUM BOARD CEILING ATTACHED TO (E) CEILING JOIST. SEE DETAIL 5 A8.04
- NEW 24" x 24" SUSPENDED ACOUSTIC CEILING TILE. SEE DETAIL 7 A8.04
- NEW LIGHT FIXTURE(S). SEE ELECTRICAL DRAWINGS. SEE TYPICAL SUSPENDED LIGHT FIXTURE DETAIL 1 A8.04
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS AND STRUCTURAL DETAILS FOR HUNG UNITS. 08 M6.01 4 SD3
- ACCESS PANEL. SEE DETAIL 4 A8.04
- CEILING SLOPE TRANSITION. (30 DEGREE MAX ANGLE) 11 A8.04
- CEILING HEIGHT

NOTE:
ALL (E) BLDGS ARE NON-SPRINKLERED

## GENERAL CEILING PLAN NOTES

1. REFER TO AND COORD. WITH ROOM FINISH SCHEDULES FOR SPECIFIC CEILING TYPES.
2. ALL SCHEDULED CEILING HEIGHTS ARE FROM THE MAIN FLOOR LEVEL WITHIN THE ROOM AND OR SPACE, AND ARE NOT FROM AN ELEVATED FLOOR LEVEL, AND ARE NOT FROM A RECESSED FLOOR LEVEL.
3. NO FIRE SPRINKLER HEADS ARE SHOWN ON ARCH. CEILING PLANS. ALL SPRINKLER HEADS SHALL BE CENTERED WITHIN CEILING TILES U.N.O.
4. ONLY CEILING MOUNTED FIXTURES AND EQUIP. IS SHOWN ON ARCH. CEILING PLANS. REFER TO INTERIOR ELEVATIONS FOR WALL MOUNTED FIXTURES. REFER TO MEPT DOCUMENTS FOR ADDITIONAL INFORMATION CONCERNING CEILING MOUNTED FIXTURES AND OR WALL MOUNTED FIXTURES.
5. CEILING MOUNTED LIGHT FIXTURES ARE SHOWN FOR LOCATION PURPOSES ONLY. COORD. WITH ELEC. DOCUMENTS FOR LIGHT FIXTURE DESIGNATIONS.
6. CEILING MOUNTED LIGHT FIXTURES WITHIN FIRE RATED CEILING ASSEMBLIES SHALL HAVE LIGHT FIXTURE PROTECTION AND BE TENTED OR OTHERWISE FIRE RATED TO MATCH CEILING ASSEMBLY FIRE RATING.
7. VERIFY LOCATIONS OF ALL CEILING ACCESS PANELS WITH MEPT DOCUMENTS. COORD. LOCATIONS OF CEILING ACCESS PANELS WITH ARCH. PRIOR TO INSTALLATION. CEILING ACCESS PANEL FIRE RATINGS SHALL MATCH CEILING ASSEMBLY FIRE RATINGS.
8. REFER TO WALL SECTIONS FOR WALL-CEILING INTERFACE
9. EXISTING CEILING ACCESS PANEL TO REMAIN.
10. PROVIDE NEW CEILING ACCESS PANEL WHERE REQUIRED PER CODE.

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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:** 14171 NEWLAND ST. WESTMINSTER,CA 92683
**DSA SUBMITTAL**
DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

C7 C8 ADMIN SL
KEY PLAN
N

Consultant

Architect
LICENSED ARCHITECT Tong You No. C-31162 REN. 10-31-2023 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 03/31/23
PROJECT NUMBER 220526

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

**DSA SUBMITTAL**

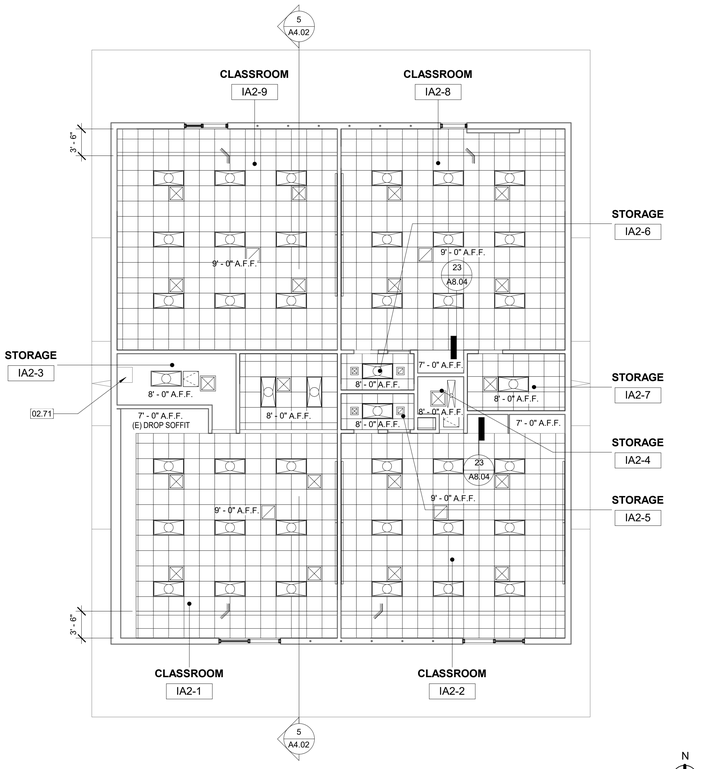
**REFLECTED CEILING PLANS BLDG C7, C8, SL, & ADMIN.**

**A2.01**

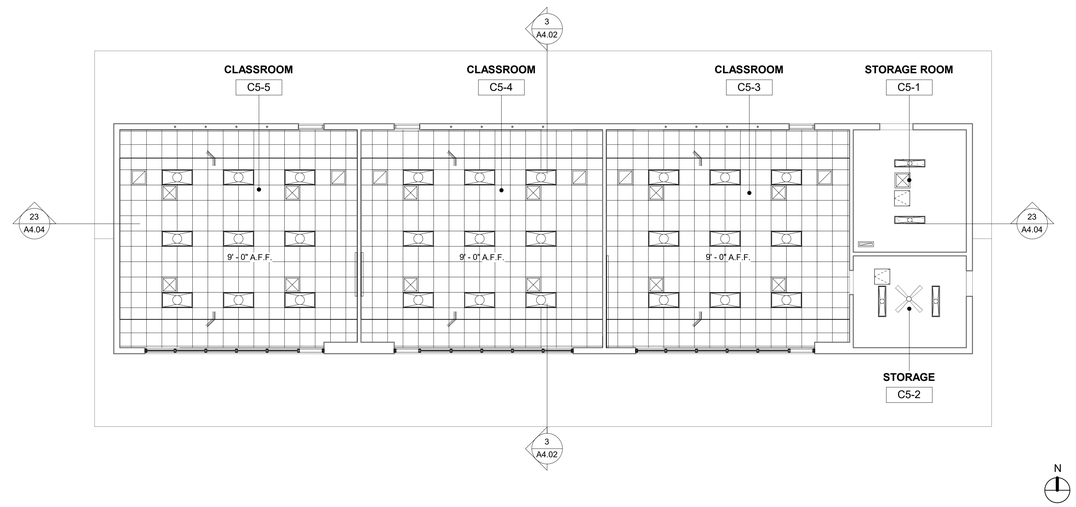
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A2.02 - REFLECTED CEILING PLANS BLDG C1, C3, C5, IA1, & IA2

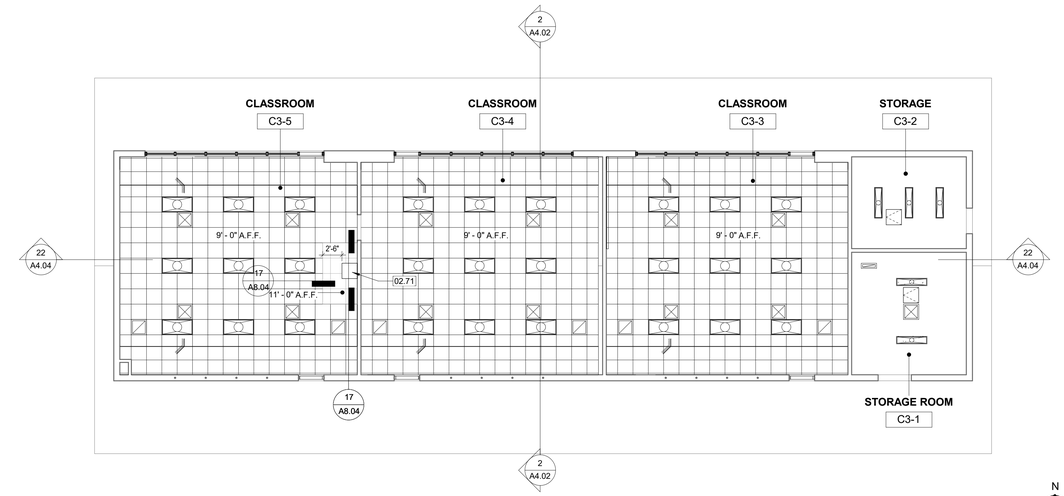
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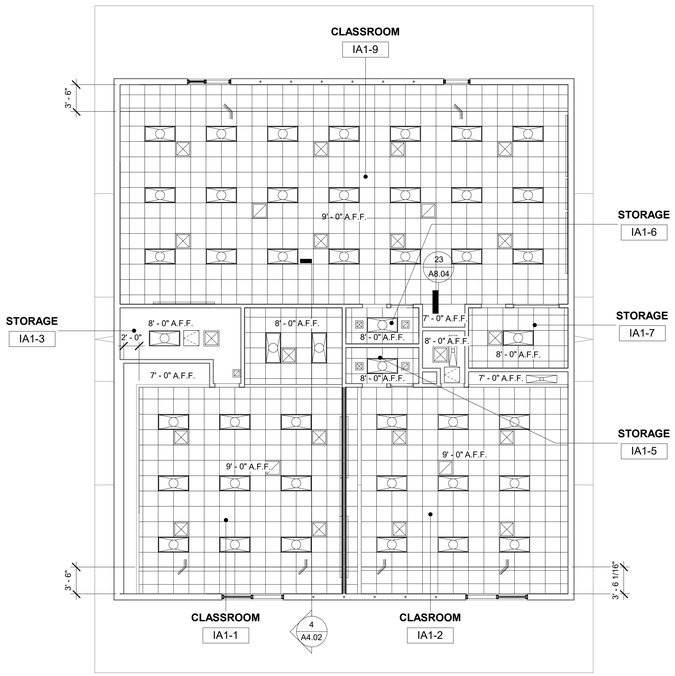

## 22 A-RCP-BLDG IA2
1/8" = 1'-0"



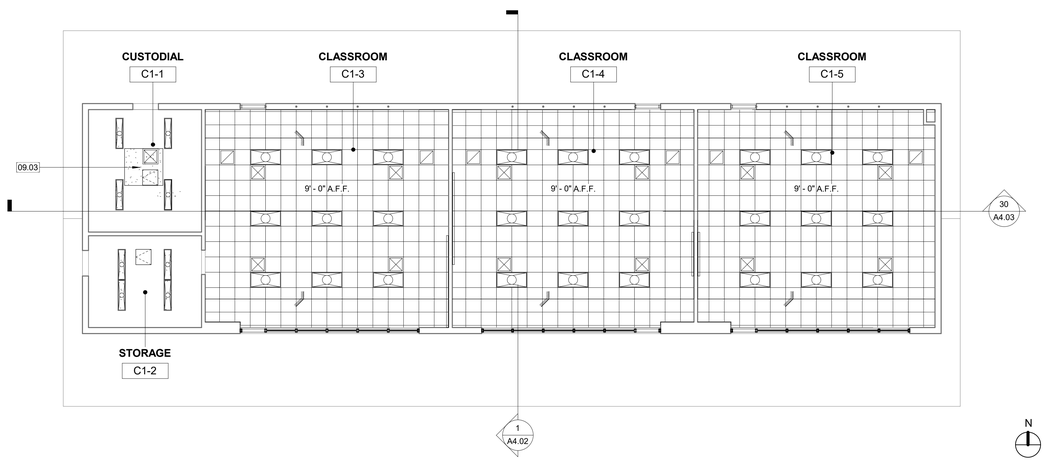

## 06 A-RCP-BLDG C5
1/8" = 1'-0"




## 08 A-RCP-BLDG C3
1/8" = 1'-0"




## 25 A-RCP-BLDG IA1
1/8" = 1'-0"




## 10 A-RCP-BLDG C1
1/8" = 1'-0"

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 02.71 | (E) IDF/MDF TO REMAIN, PROTECT IN PLACE, SEE ELECTRICAL DWGS. |
| 09.03 | (N) GYP CEILING INFILL @ (E) SKYLIGHT CAVITY, SEE STRUCTURAL DETAIL 15&16/SD1 |

## REFLECTED CEILING PLAN LEGEND

- EXISTING PLASTER /GYP. BD. CEILING TO REMAIN. PATCH AND REPAIR AS REQ'D. PAINT TO MATCH EXISTING.
- NEW PAINTED MOISTURE RESISTANT GYPSUM BOARD CEILING ATTACHED TO (E) CEILING JOIST. SEE DETAIL 5 / A8.04
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- NEW LIGHT FIXTURE(S). SEE ELECTRICAL DRAWINGS. SEE TYPICAL SUSPENDED LIGHT FIXTURE DETAIL 1 / A8.04
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS AND STRUCTURAL DETAILS FOR HUNG UNITS. 08 / M6.01 & 4 / SD3
- ACCESS PANEL. SEE DETAIL 4 / A8.04
- CEILING SLOPE TRANSITION. (30 DEGREE MAX ANGLE) 11 / A8.04
- CEILING HEIGHT

NOTE:
ALL (E) BLDGS ARE NON-SPRINKLERED

## GENERAL CEILING PLAN NOTES

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PBK


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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN: 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

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DSA SUBMITTAL

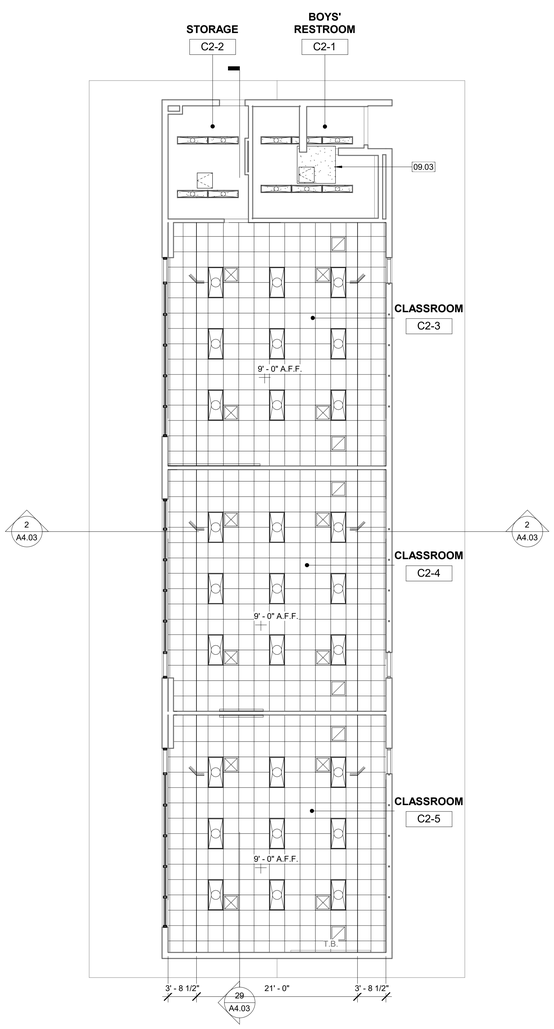
# REFLECTED CEILING PLANS BLDG C1, C3, C5, IA1, & IA2

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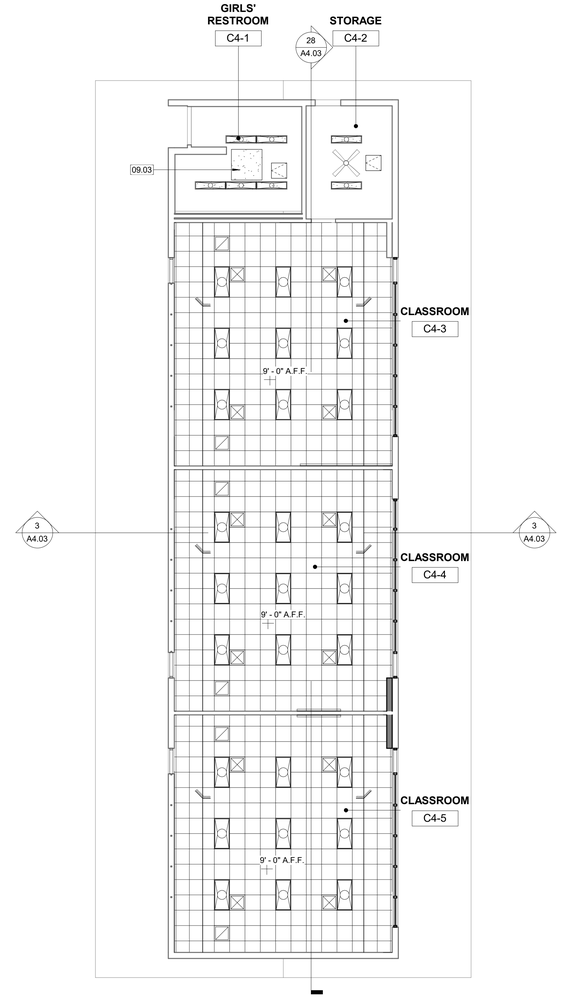
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A2.03 - REFLECTED CEILING PLANS BLDG C2, C4, & C6

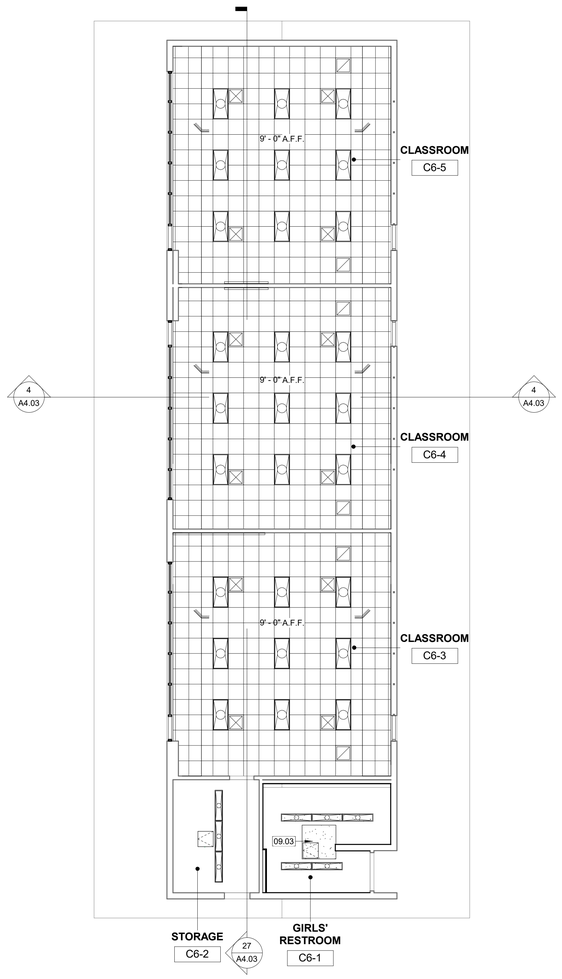
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30 A-RCP-BLDG C2
1/8" = 1'-0"




20 A-RCP-BLDG C4
1/8" = 1'-0"




10 A-RCP-BLDG C6
1/8" = 1'-0"

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 09.03 | (N) GYP CEILING INFILL @ (E) SKYLIGHT CAVITY, SEE STRUCTURAL DETAIL 15&16/SD1 |

## REFLECTED CEILING PLAN LEGEND

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- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS AND STRUCTURAL DETAILS FOR HUNG UNITS. 08 / M6.01 4 / SD3
- ACCESS PANEL. SEE DETAIL 4 / A8.04
- CEILING SLOPE TRANSITION. (30 DEGREE MAX ANGLE) 11 / A8.04
- CEILING HEIGHT

NOTE:
ALL (E) BLDGS ARE NON-SPRINKLERED

## GENERAL CEILING PLAN NOTES

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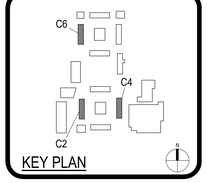

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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Tong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

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WESTMINSTER SCHOOL DISTRICT

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DSA SUBMITTAL

REFLECTED CEILING PLANS BLDG C2, C4, & C6

A2.03

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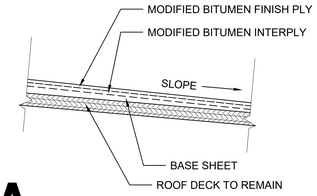
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## 30 VICINITY MAP
NOT TO SCALE

## 28 NOT USED
NOT TO SCALE

## 27 NOT USED
NOT TO SCALE




A

## 26 NEW NOMENCLATURE
NOT TO SCALE

| AREA | APROX. SQ. FT. | EXISTING NOMENCLATURE | NEW NOMENCLATURE | REMARKS |
|---|---|---|---|---|
| A1 | 356 | WD/SS/BUR-A | A | C.W. |
| A2 | 888 | WD/SS/BUR-A | A | C.W. |
| A3 | 345 | WD/SS/BUR-A | A | C.W. |
| A4 | 3,604 | WD/SS/BUR-A | A | C.W. |
| A5 | 2,748 | WD/SS/BUR-A | A | C.W. |
| A6 | 376 | WD/SS/BUR-A | A | C.W. |
| A7 | 865 | WD/SS/BUR-A | A | C.W. |
| A8 | 371 | WD/SS/BUR-A | A | C.W. |
| IA-1 | 5,819 | WD/SS/BUR-A | A | - |
| IA-2 | 5,819 | WD/SS/BUR-A | A | - |
| ADMIN | 5,886 | WD/SS/BUR-A | A | - |
| C1 | 5,885 | WD/SS/BUR-A | A | - |
| C2 | 5,909 | WD/SS/BUR-A | A | - |
| C3 | 5,909 | WD/SS/BUR-A | A | - |
| C4 | 5,893 | WD/SS/BUR-A | A | - |
| C5 | 5,909 | WD/SS/BUR-A | A | - |
| C6 | 5,885 | WD/SS/BUR-A | A | - |
| C7 | 5,893 | WD/SS/BUR-A | A | - |
| C8 | 5,893 | WD/SS/BUR-A | A | - |
| S-L | 7,505 | WD/SS/BUR-A | A | - |
| RCB | 6,092 | WD/SS/BUR-A | A | - |
| RCB-1 | 4,613 | WD/SS/BUR-A | A | - |
| TOTAL | 92463 | | | |

NOTE: SQUARE FOOTAGES SHOWN ARE FOR REFERENCE ONLY - (FIELD VERIFY) CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND FOR ENSURING NEW CONDITIONS ADHERE TO ALL LOCAL AND FEDERAL CODES ALONG WITH INDUSTRY STANDARD GUIDELINES AND REMAIN IN A WATERTIGHT CONDITION.

NOTE: SQUARE FOOTAGES SHOWN ARE FOR REFERENCE ONLY - (FIELD VERIFY) CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND FOR ENSURING NEW CONDITIONS ADHERE TO ALL LOCAL AND FEDERAL CODES ALONG WITH INDUSTRY STANDARD GUIDELINES AND REMAIN IN A WATERTIGHT CONDITION.

SEE SPECIFICATION DIVISION 7 FOR OTHER ROOF RELATED COMPONENTS.

SEE DETAIL 26/- FOR NEW NOMENCLATURE

**REMARKS:**

C.W. = COVERED WALKWAYS

1. REMOVE AND PROPERLY DISPOSE OF EXISTING ROOFING (WEIGHING APPROXIMATELY 8 LBS/SF) / INSULATION ( RE: 3/A4.11) DOWN TO EXISTING ROOF DECK AT ROOF AREAS ADMIN, KINDERGARTEN, BLDG C1, C2, C3, C4, C5,C6, MPR & ALL RELOCATABLES. PREPARE / REPAIR EXISTING VERTICAL FASCIA NAILER (INCLUDE 100 IN FT OF REPLACEMENT) FOR INSTALLATION OF NEW CLASS "A" ROOF SYSTEM. PREPARE / REPAIR EXISTING ROOF DECK WITH LIKE KIND MATERIAL AND ATTACHMENT. MECHANICALLY ATTACH NEW BASE SHEET, HEAT WELD MODIFIED BITUMEN BASE PLY ROOF MEMBRANE, ENSURE IS WATER TIGHT PRIOR TO COVERING UP. HEAT WELD MODIFIED BITUMEN TITLE 24 FINISH PLY ROOF MEMBRANE WITH ASSOCIATED ROOF RELATED SHEET METAL, GUTTERS, DOWNSPOUTS, EDGE METALS AND TRIM. THE TOTAL WEIGHT OF THE NEW COMPLETED ROOF IS NOT TO EXCEED 5 LBS/SF.
2. PROVIDE R-30 BATT INSULATION UNDER ROOF DECK PER SPEC SECTION 07 21 00.
3. REPLACE OR REPAIR ALL EXISTING ROOF DAMAGE.
4. REPLACE EXISTING ROOF FASCIA WITH "TREX" COMPOSITE FASCIA, MATCH EXISTING FASCIA PROFILE.
5. EXISTING ROOF SLOPE TO REMAIN.
6. SEE DIVISION 7 FOR ROOFING SPECIFICATIONS FOR MORE INFORMATION.

## 21 NOT USED
NOT TO SCALE

## 19 SCOPE OF WORK
NOT TO SCALE

A. CONTRACTOR SHALL VISIT SITE TO ASCERTAIN EXACT EXISTING CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUEST FOR ADDITIONAL MONEY SHALL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING THE SITE VISIT BY THE CONTRACTOR, ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS & WARRANTY REQUIREMENTS.

B. DIMENSIONS,DETAILS, EQUIPMENT SIZE AND LOCATION SHOWN IN THESE DOCUMENTS ARE FOR INFORMATION AND REFERENCE ONLY. EXACT SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF EXISTING CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN & CONFIRM.

C. ALL NEW CRICKETS AND TAPERED INSULATION SHALL BE INSTALLED WITH A FINISHED 1/4" PER FOOT MIN. SLOPE. CRICKET THE UP SLOPE SIDE OF ALL SQUARE CURBS AND PROJECTIONS.

D. REMOVE ALL ABANDONED EQUIP. IDENTIFIED ON ROOF TOP AND AS SHOWN ON DRAWINGS -(PATCH DECK) HOLES LESS THAN 10" WIDE- SCREW 22 GA. STAINLESS STEEL SHEET METAL TO EXISTING DECK HOLES GREATER THAN 10" WIDE- SCREW NEW METAL DECK (MATCH EXISTING) SPAN FROM JOIST TO JOIST.

E. ALL HVAC AND/OR DX UNITS, ELECTRICAL TRANSFORMERS, ROOF TOP EQUIPMENT, ETC. THAT ARE ON SLEEPERS SHALL BE DISCONNECTED/REMOVED, RAISED, & PLACED ON NEW CURBED PLATFORMS (RE: DETAIL), AND RECONNECTED/RE-INSTALLED. VERIFY ALL EXISTING CURB MOUNTED UNITS, EQUIPMENT, ETC. HAVE A MINIMUM 10" CURB HEIGHT (RAISED AS REQUIRED) - ALL DISCONNECTS AND RECONNECTS SHALL BE PERFORMED BY A LICENSED ELECTRICIAN.

F. IF EXISTING ELECTRICAL/GAS/WATER/ETC. LINES ARE MODIFIED- ONLY LICENSED SUBCONTRACTORS SPECIALIZING IN HVAC, PLUMBING AND ELECTRICAL SHALL PERFORM THAT TYPE OF WORK. PERMITS AND INSPECTIONS REQUIRED- PROVIDE "MERCURY" GAS LINE TEST (COORDINATE OWNER/ARCHITECT WITNESS OF TEST), REPAIR ALL LEAKS AND RE-TEST

G. REPLACE AND RAISE (AS REQUIRED) ALL EXISTING EXPANSION JOINTS/AREA DIVIDERS/ CURB MOUNTED EQUIPMENT/ SKYLIGHTS A MIN. 10" ABOVE ROOF DECK. (UNLESS INDICATED OTHER WISE ON DRAWING.)

H. ENSURE ALL SOIL STACK FLASHING IS MIN. 10" ABOVE ROOF. COUPLE PVC PIPE ABOVE DECK, COUPLE CAST IRON PIPE UNDER DECK.

I. PROVIDE SHEET METAL HOODED (w/METAL FACE CLOSURE), WOOD CURB, BOX COVER AT ALL GAS LINE AND WATER LINE ROOF PENETRATIONS (RE: DETAILS). ENSURE LINES SLOPE AWAY FROM FACE COVER.

J. PROVIDE WALKWAY PROTECTION PADS (AS ACCEPTABLE TO MANUFACTURER-RE: SPECS.) AROUND ALL ROOF HATCHES, A/C UNITS, DOORS THAT OPEN ONTO ROOF, AND AT ALL ROOF TOP ACCESS LADDERS (TOP & BOTTOM)

K. ISOLATE ALL HEAT PIPES/FLUES AS RECOMMENDED & OUTLINED IN THE NRCA MANUAL FOR ISOLATED STACK FLASHING- (RE:DETAILS)

L. ALL OUTSIDE AIR INTAKES SHALL BE COVERED TO ELIMINATE ODORS AND FUMES FROM ENTERING INTO THE BUILDING DURING WORK.

M. EXAMINE AND CLEAN EXISTING DRAIN LINES OF DEBRIS AND BLOCKAGE, FLUSH WITH WATER TO ENSURE THAT DRAINS FLOW FREELY.

N. OWNER WILL VERIFY CORRECT OPERATION OF ALL ROOF TOP EQUIPMENT BEFORE AND AFTER PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL INOPERABLE EQUIPMENT PRIOR TO RELEASE OF RETAINAGE.

O. REPLACE ALL RUSTED/DETERIORATED EXISTING METAL VENT FLASHING AND FLUES.

P. COORDINATE WALK OF ENTIRE ROOF (PRIOR TO STARTING) WITH ROOFING MANUFACTURER'S TECHNICAL REP. TO IDENTIFY AND LOCATE ALL AREAS OF HIGH SLOPE WHICH MIGHT REQUIRE SPECIAL PROCEDURES FOR SYSTEM ATTACHMENT.

Q. PROVIDE ONE-WAY MOISTURE VENTS 1 PER 900 SF AT ALL LT. WT. OVER POUR AREAS

## 15 NOT USED
NOT TO SCALE

## 14 EXISTING NOMENCLATURE
NOT TO SCALE

WD: WOOD DECK
SS: SLIP AHEET
BUR-A: MULTI-PLY BUILT UP ROOF SYSTEM W/ ALUMINUM COATING
(E): EXISTING
TYP: TYPICAL
SIM: SIMILAR
PLYWD: PLYWOOD
SHTHG: SHEATHING
COMPO: COMPOSITION MODIFIED BITUMEN ROOFING
BLDG: BUILDING

## 9 NOT USED
NOT TO SCALE

## 8 ABREVIATIONS
NOT TO SCALE

- PLUMBING VENT (RE: 9/A3.03)
- FLANGE VENT (RE: 9/A3.03)
- EXIST. ROOF DRAIN (RE: 11/A3.03)
- CURB MOUNTED VENT (RE: 3/A3.03)
- ABANDONED CURB TO BE REMOVED/PATCHED
- POWER VENT (RE: 13/A3.03)
- HEATER VENT (RE: 13/A3.03)
- BOILER VENT (RE: 13/A3.03)
- POWER/ELEC. SIGNAL (RE: 9/A3.03)
- T-TOP VENT (RE: 9/A3.03)
- A1 ROOF AREA DESIGNATION
- EB ELECTRICAL BOX (RE: 9/A3.03)
- FL FLOOD LIGHTS (RE: 5/A3.03)
- PB PIPE BOX (RE: 7/A3.03)
- GOOSE NECK VENT (RE: 3/A3.03)
- A/C CURB MOUNTED A/C (RE: 2/A3.03)
- A/C ON POSTS (RE: 14/A3.03)
- SL SKYLIGHT
- ANTENNA
- EXISTING AREAS TO REMAIN - NIC
- WALKPAD (RE: 15/A3.03)
- DS GUTTER EDGE (RE: 4/A3.03)
- E ELEC. LINE (RE: 7/A3.03)

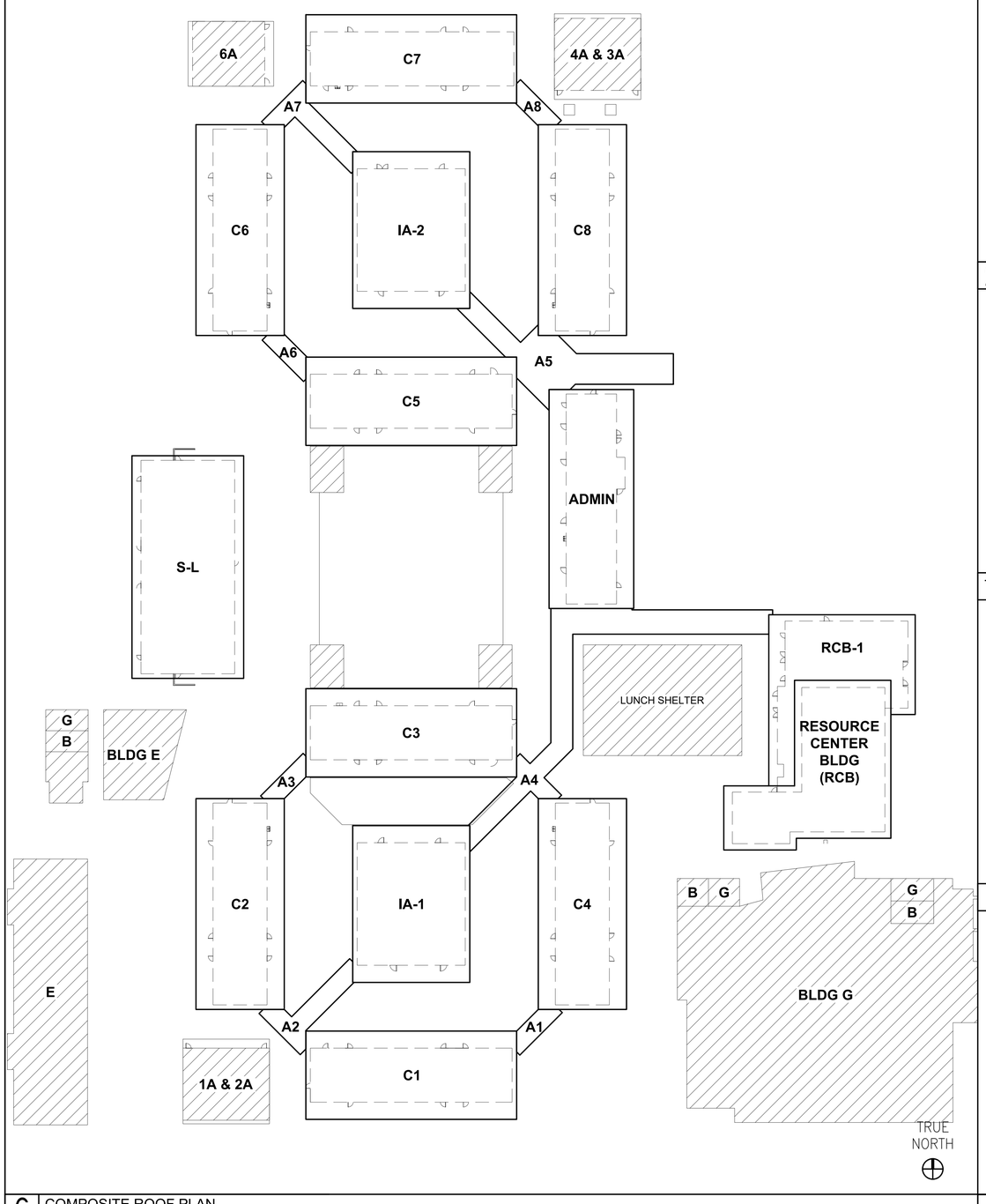
## 7 GENERAL NOTES
NOT TO SCALE

**GENERAL:**

| SHEET NUMBER | SHEET NAMES |
|---|---|
| A3.01 | GENERAL INFORMATION |

**BUILDING ENVELOPE:**

| | |
|---|---|
| A3.02 | ENLARGED ROOF PLAN |
| A3.03 | GENERAL ROOF DETAILS |




## 6 COMPOSITE ROOF PLAN
1"=30'-0"

## 3 NOT USED
NOT TO SCALE

## 2 GENERAL LEGEND
NOT TO SCALE

## 1 INDEX OF DRAWINGS
NOT TO SCALE

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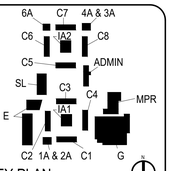
PBK

ARCHITECT PBK Architects, Inc.
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BEAMprof.com

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA APPL NO.: ## ##### DSA FILE NO.: ###




Consultant

BEAM PROFESSIONALS

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 09-22-2023 | 220526 |

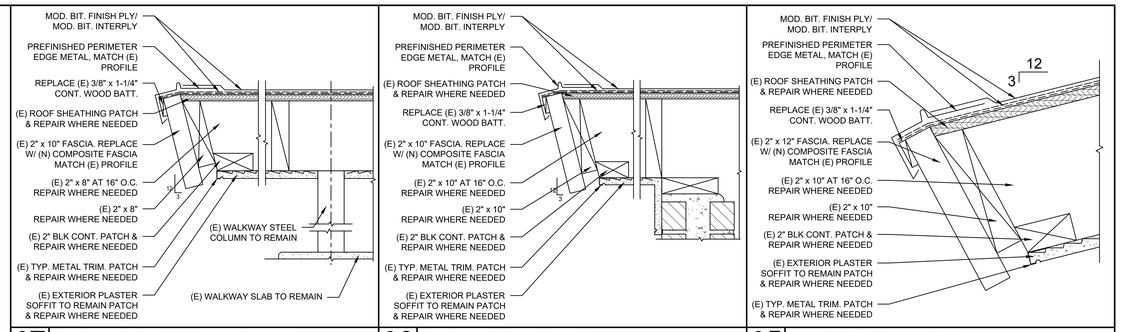
REVISIONS

| No. | DESCRIPTION | DATE |
|---|---|---|

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**GENERAL INFORMATION**

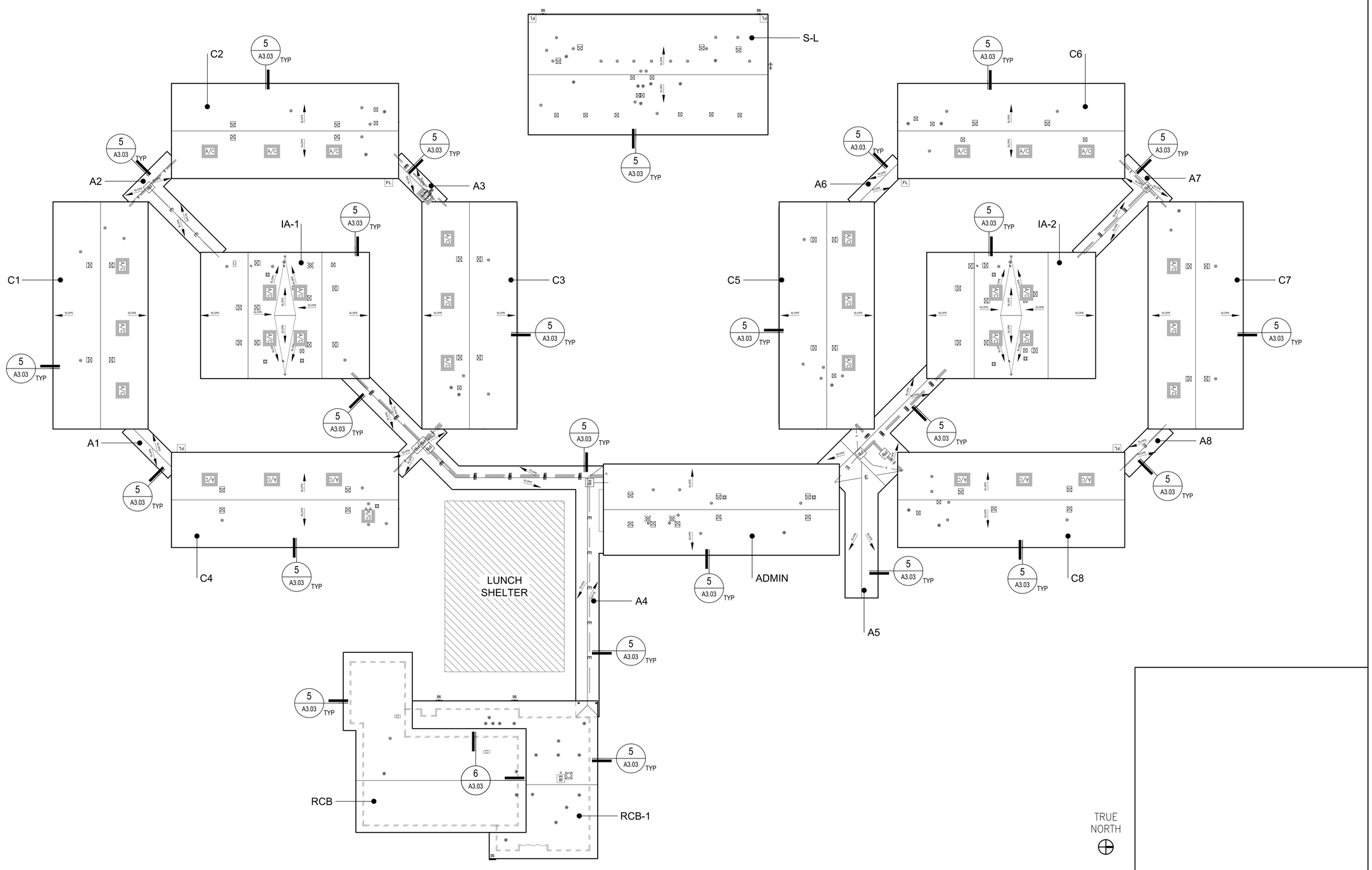
**A3.01**




27 TYPICAL COVERED WALKWAY
NOT TO SCALE

26 TYPICAL ROOF RAKE
NOT TO SCALE

25 TYPICAL ROOF EAVE
NOT TO SCALE




6 ROOF PLAN
1"=20'-0"

1 KEYED NOTES
NOT TO SCALE

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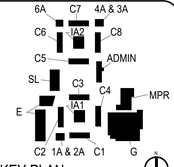
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## ENLARGED ROOF PLAN

# A3.02

0" 1"

## 30 NOT USED
NOT TO SCALE

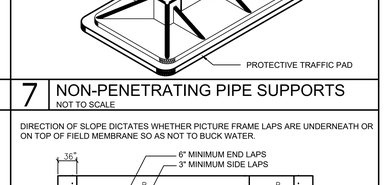
## 29 NOT USED
NOT TO SCALE

## 28 NOT USED
NOT TO SCALE

## 27 NOT USED
NOT TO SCALE

## 26 NOT USED
NOT TO SCALE

## 25 NOT USED
NOT TO SCALE




a = 6.0 feet
h = mean roof height 15.0 feet

## 24 NOT USED
NOT TO SCALE

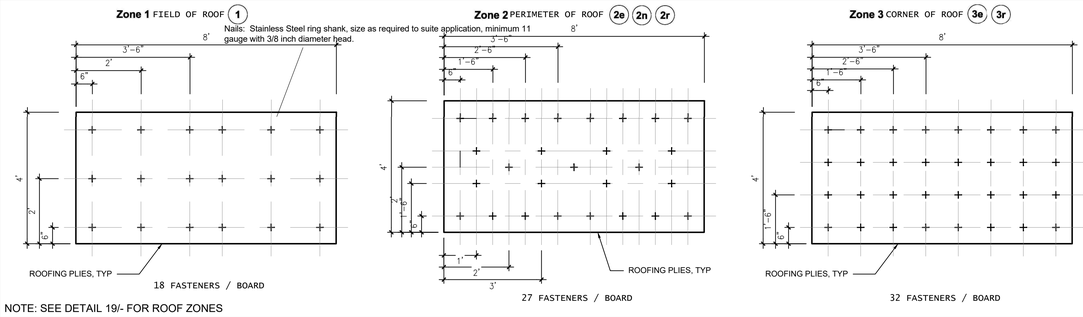
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## 22 NOT USED
NOT TO SCALE

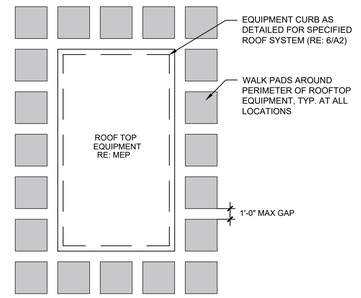
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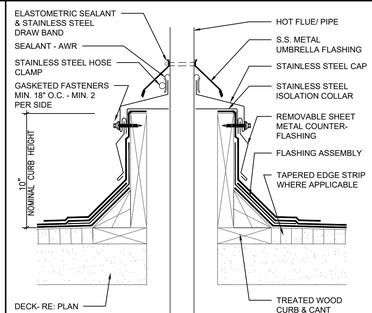
## 20 NOT USED
NOT TO SCALE

## 19 ROOF ZONES
NOT TO SCALE

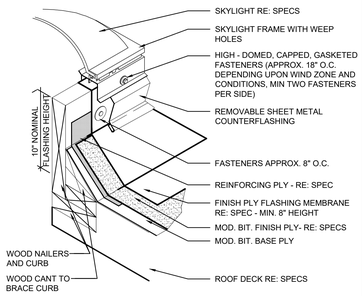



NOTE: SEE DETAIL 19/- FOR ROOF ZONES

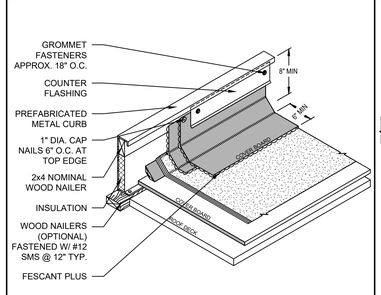


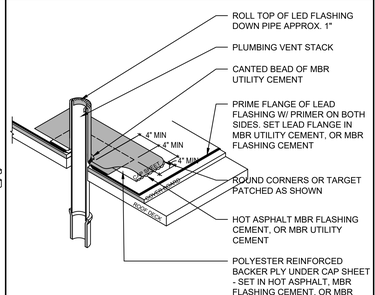



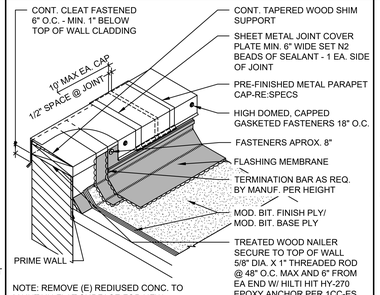

## 18 FASTENERS PATTERN
NOT TO SCALE



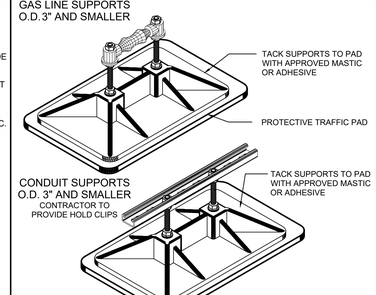

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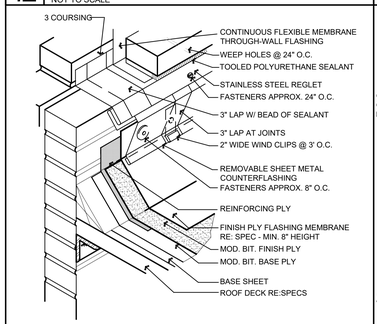



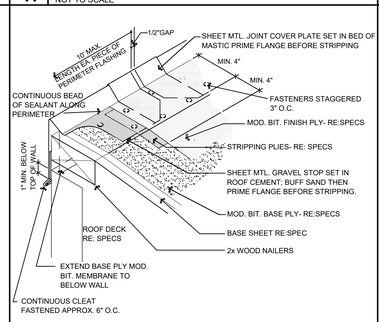

NOTE: REMOVE (E) REDIUSED CONC. TO MAINTAIN FLAT SURFACE FOR NEW 2X WOOD NAILER



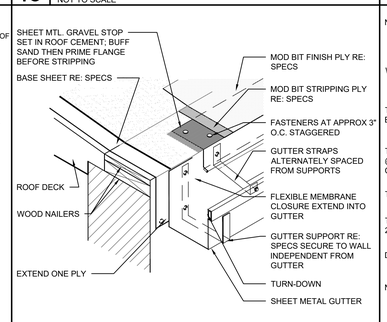

## 12 SKYLIGHT CURB
NOT TO SCALE



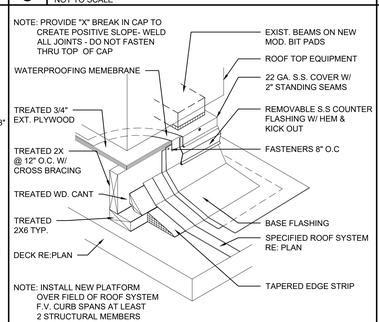

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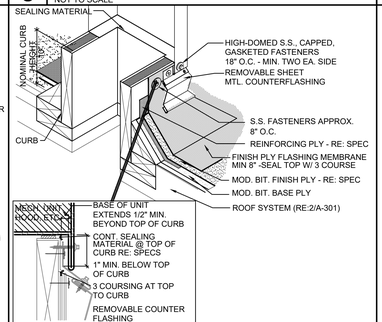

## 10 PREFABRICATED CURB
NOT TO SCALE




## 9 PLUMBING VENT THRU ROOF
NOT TO SCALE

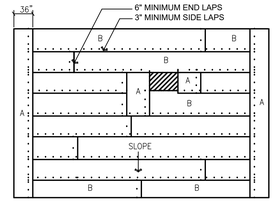



## 8 PARPAET BASE AND CAP
NOT TO SCALE




## 7 NON-PENETRATING PIPE SUPPORTS
NOT TO SCALE

DIRECTION OF SLOPE DICTATES WHETHER PICTURE FRAME LAPS ARE UNDERNEATH OR ON TOP OF FIELD MEMBRANE SO AS NOT TO BUCK WATER.




PICTURE FRAME BOTH MOD. BIT. BASE PLY & FINISH PLY
A = PICTURE FRAME SHEETS
B = NATURAL PICTURE FRAME SHEETS
= CURB MOUNTED EQUIPMENT

FOLLOW MANUFACTURER'S GUIDELINES FOR MAX. ROLL LENGTHS.

## 6 BASE FLASHING
NOT TO SCALE

## 5 PERIMETER EDGE
NOT TO SCALE

## 4 GUTTER EDGE
NOT TO SCALE

## 3 CURBED PLATFORM
NOT TO SCALE

## 2 EQUPIMENT CURB
NOT TO SCALE

## 1 PICTURE FRAME
NOT TO SCALE

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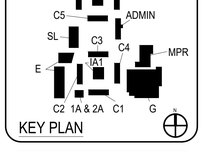
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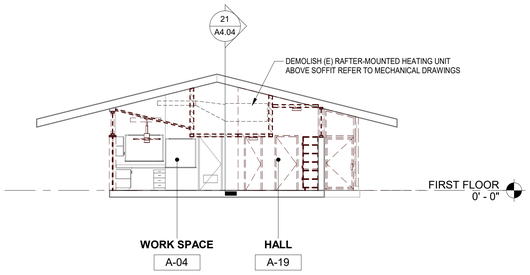
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**GENERAL ROOF DETAILS**

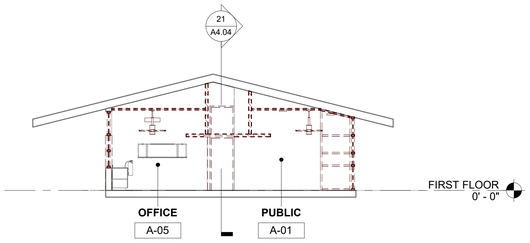
**A3.03**

A4.01 - BLDG C7, C8, SL & ADMIN BLDG SECTIONS

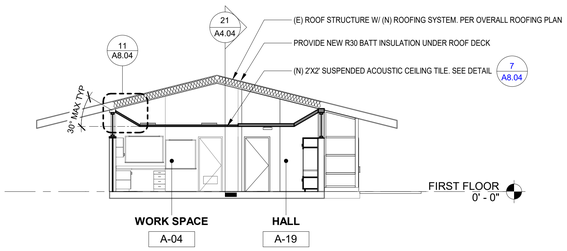
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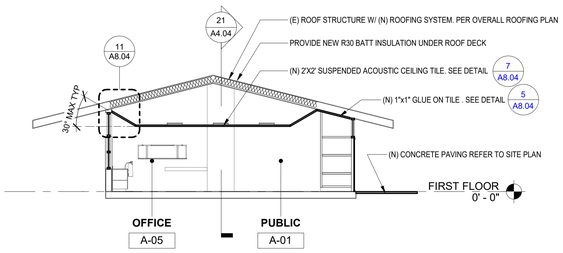

**6** BLDG ADMIN BLDG SECTION TRANSVERSE - DEMO
1/8" = 1'-0"



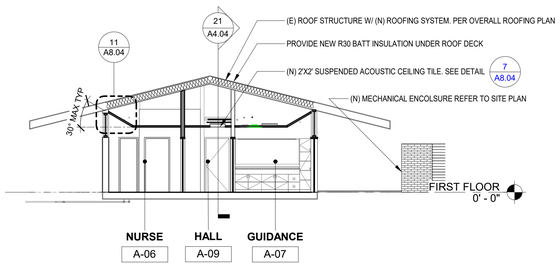

**8** BLDG ADMIN BLDG SECTION TRANSVERSE - LOBBY - DEMO
1/8" = 1'-0"



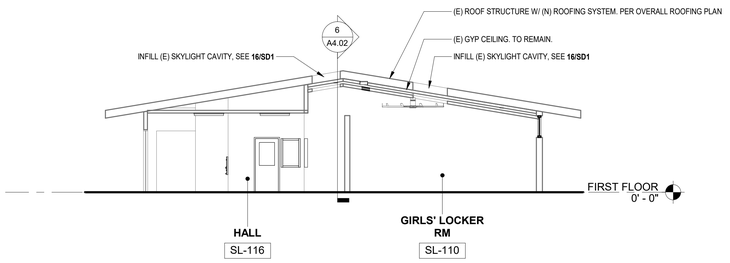

**7** BLDG ADMIN BLDG SECTION TRANSVERSE - NEW
1/8" = 1'-0"



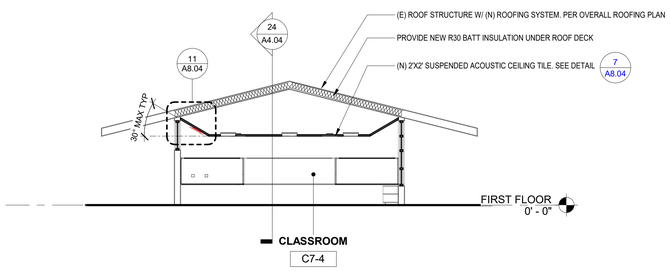

**1** BLDG ADMIN BLDG SECTION TRANSVERSE - LOBBY - NEW
1/8" = 1'-0"



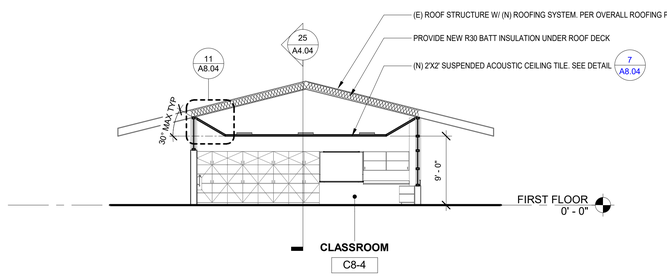

**5** BLDG ADMIN BLDG SECTION TRANSVERSE 2
1/8" = 1'-0"




**4** BLDG SL BLDG SECTION
1/8" = 1'-0"




**2** BLDG C7 BLDG SECTION TRANSVERSE
1/8" = 1'-0"




**3** BLDG C8 BLDG SECTION TRANSVERSE
1/8" = 1'-0"

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9/27/2023 4:05:02 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000


# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

C7
C8
ADMIN
SL
KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

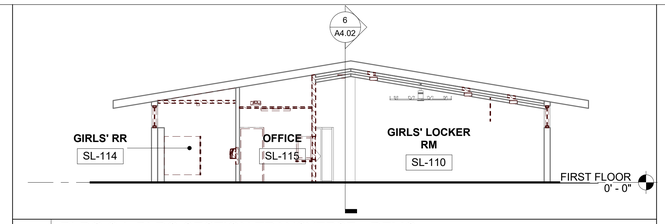
REVISIONS

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|---|---|---|
| | | |

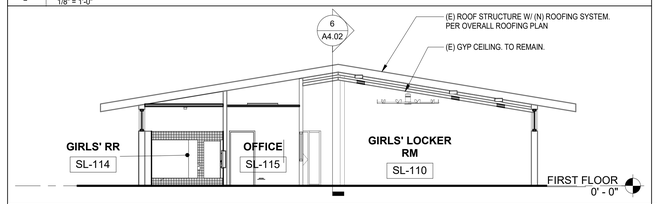
DSA SUBMITTAL

**BLDG C7, C8, SL & ADMIN BLDG SECTIONS**

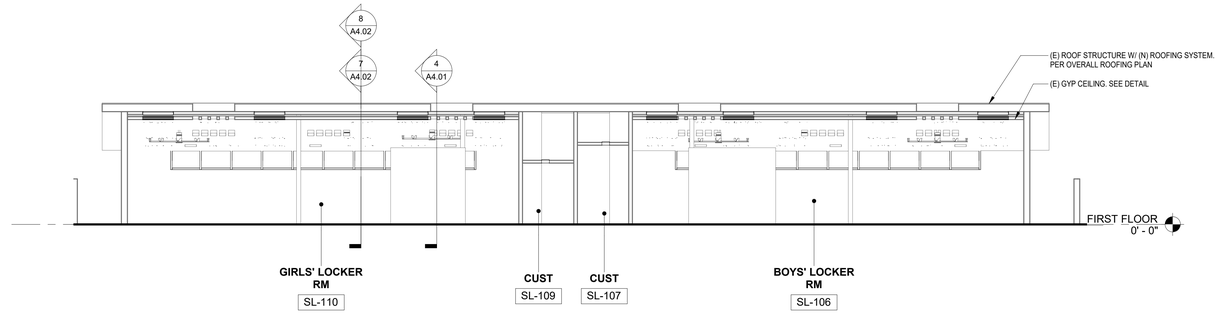
**A4.01**



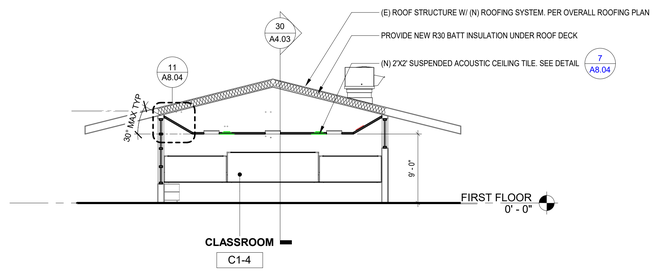

**7** BLDG S-L BLDG SECTION TRANSVERSE - DEMO
1/8" = 1'-0"



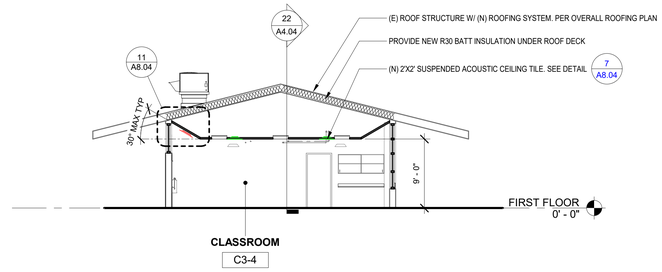

**8** BLDG S-L BLDG SECTION TRANSVERSE - NEW
1/8" = 1'-0"



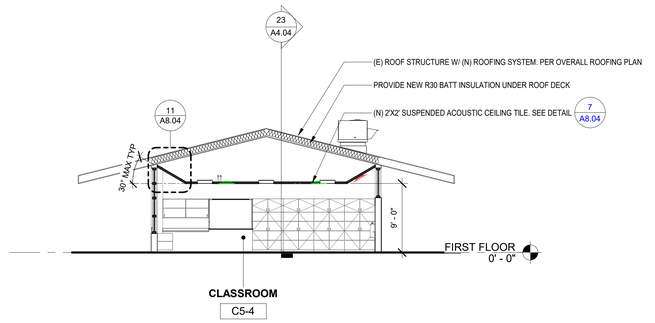

**6** BLDG SL BLDG SECTION LONGITUDINAL
1/8" = 1'-0"



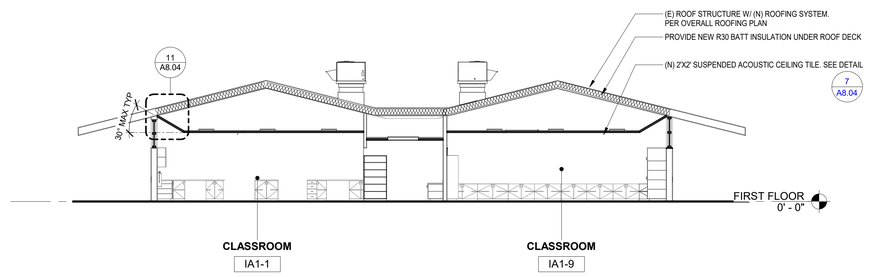

**1** BLDG C1 BLDG SECTION TRANSVERSE
1/8" = 1'-0"



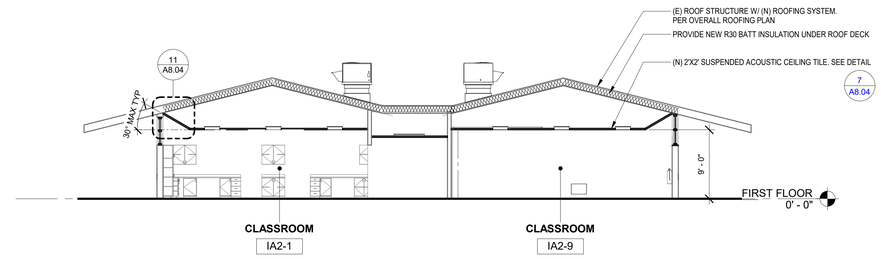

**2** BLDG C3 BLDG SECTION TRANSVERSE
1/8" = 1'-0"




**3** BLDG C5 BLDG SECTION TRANSVERSE
1/8" = 1'-0"




**4** BLDG IA1 BLDG SECTION
1/8" = 1'-0"




**5** BLDG IA2 BLDG SECTION
1/8" = 1'-0"

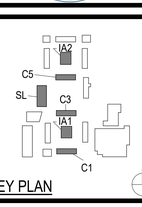
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:** 14171 NEWLAND ST. WESTMINSTER,CA 92683
**DSA SUBMITTAL** DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43



KEY PLAN

Consultant

Architect
LICENSED ARCHITECT
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REVISIONS

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| | | |

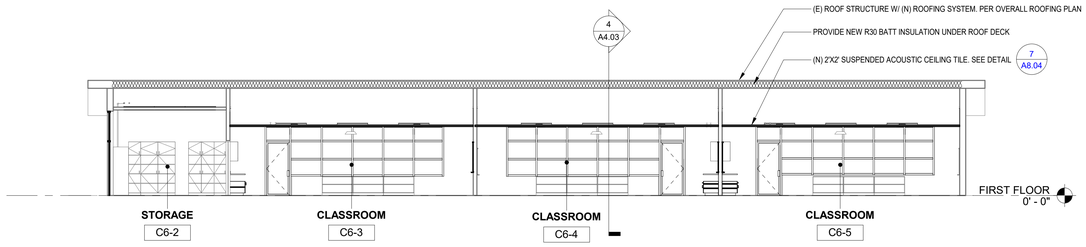
**DSA SUBMITTAL**

**BLDG C1, C3, C5, SL, IA1, & IA2 BLDG SECTIONS**

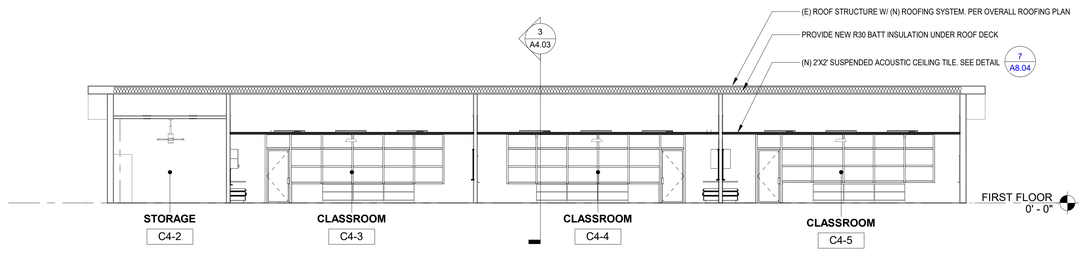
**A4.02**

A4.03 - BLDG C2, C4, & C6 BLDG SECTIONS

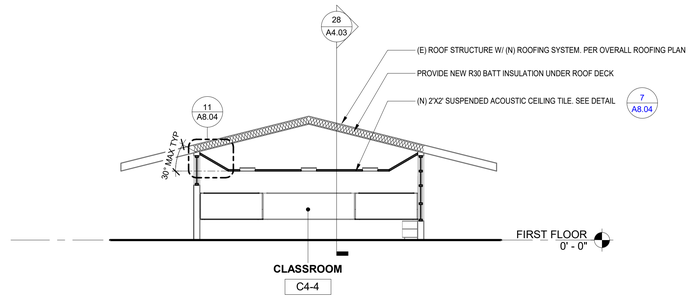
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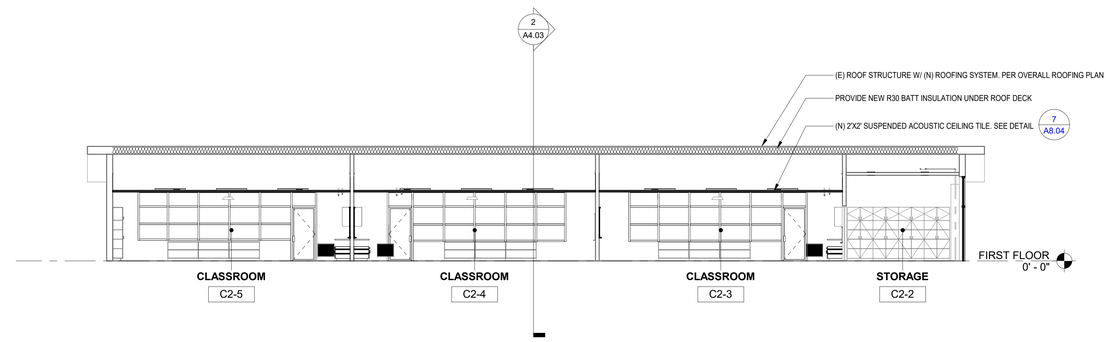

**27** BLDG C6 BLDG SECTION LONGITUDINAL
1/8" = 1'-0"



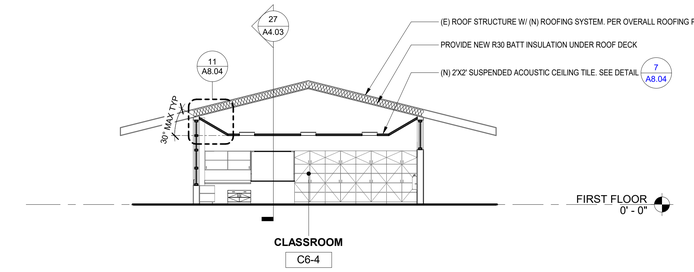

**28** BLDG C4 BLDG SECTION LONGITUDINAL
1/8" = 1'-0"



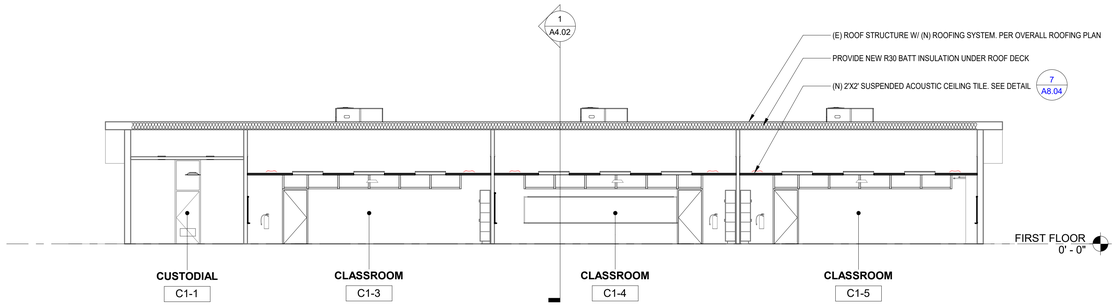

**3** BLDG C4 BLDG SECTION TRANSVERSE
1/8" = 1'-0"



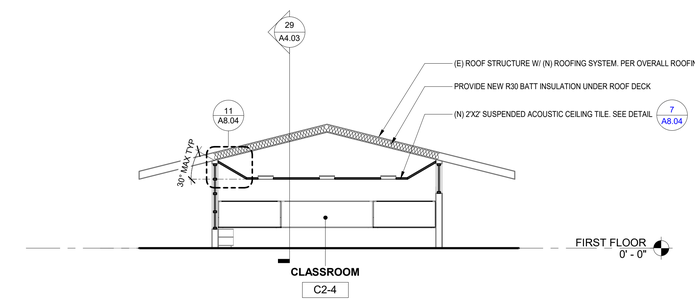

**29** BLDG C2 BLDG SECTION LONGITUDINAL
1/8" = 1'-0"




**4** BLDG C6 BLDG SECTION TRANSVERSE
1/8" = 1'-0"




**30** BLDG C1 BLDG SECTION LONGITUDINAL
1/8" = 1'-0"




**2** BLDG C2 BLDG SECTION TRANSVERSE
1/8" = 1'-0"

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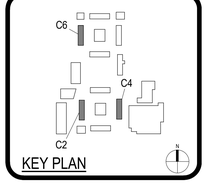

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




Consultant

Architect




CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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| 03/31/23 | 220526 |

REVISIONS

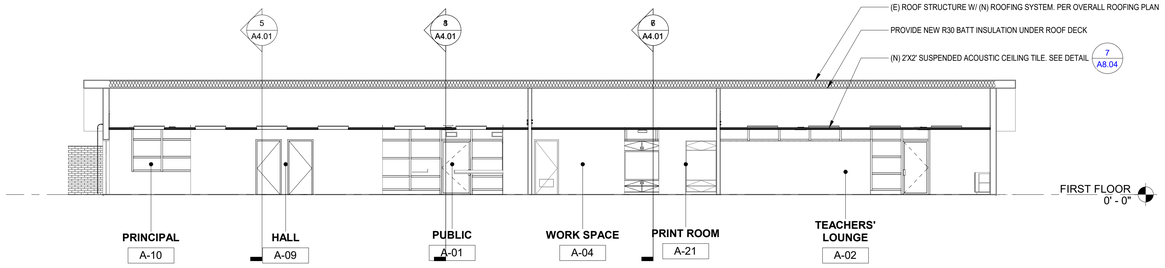
| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

## BLDG C2, C4, & C6 BLDG SECTIONS

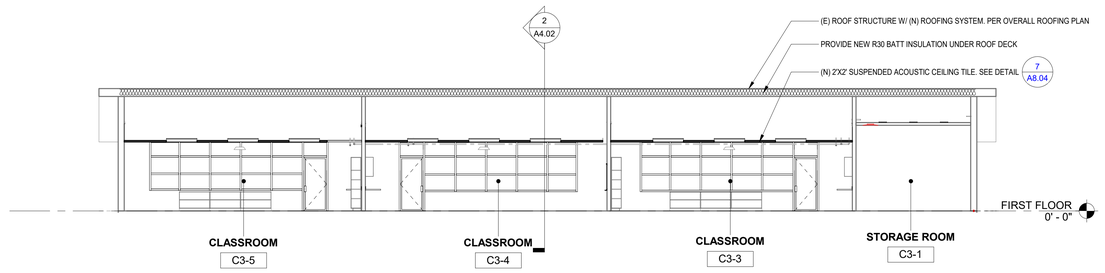
# A4.03

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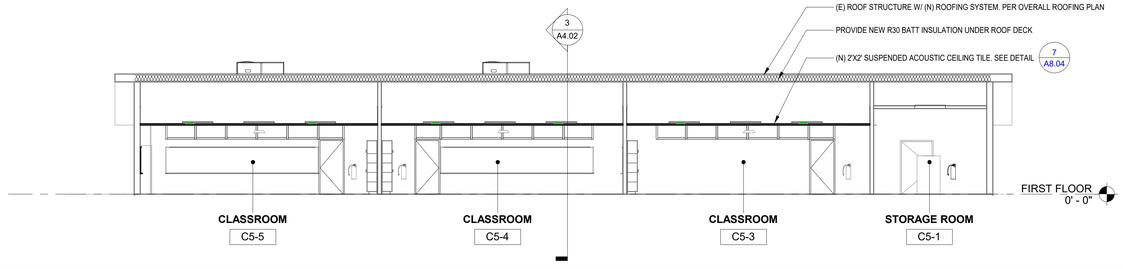

## 21 BLDG ADMIN BLDG SECTION LONGITUDINAL

1/8" = 1'-0"



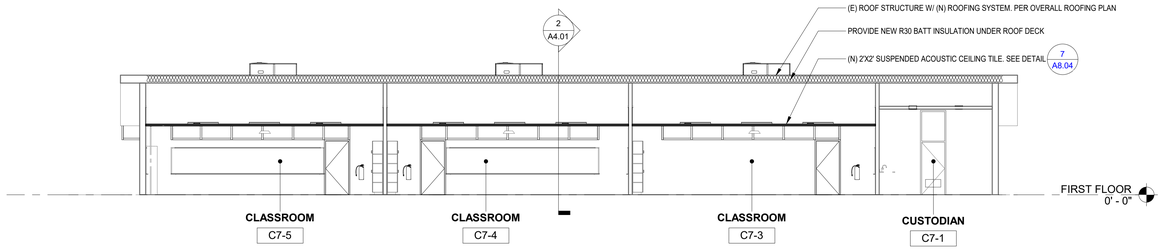

## 22 BLDG C3 BLDG SECTION LONGITUDINAL

1/8" = 1'-0"



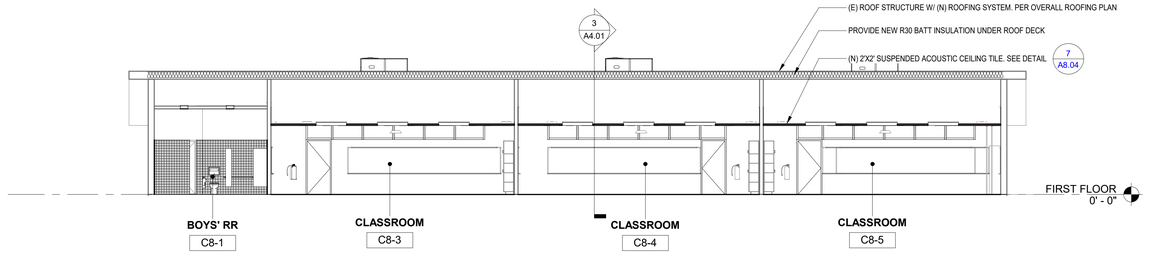

## 23 BLDG C5 BLDG SECTION LONGITUDINAL

1/8" = 1'-0"




## 24 BLDG C7 BLDG SECTION LONGITUDINAL

1/8" = 1'-0"




## 25 BLDG C8 BLDG SECTION LONGITUDINAL

1/8" = 1'-0"

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PBK

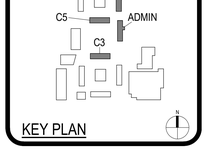
ARCHITECT PBK Architects, Inc.
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DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

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**DSA SUBMITTAL**

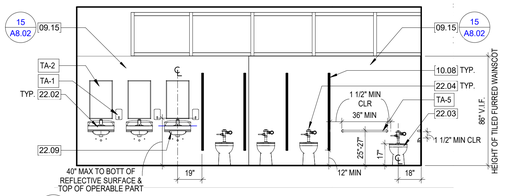
## LONGITUDINAL BLDG SECTIONS

# A4.04

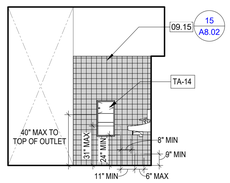
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A5.01 - ENLARGED RR PLANS & INTERIOR ELEVATIONS

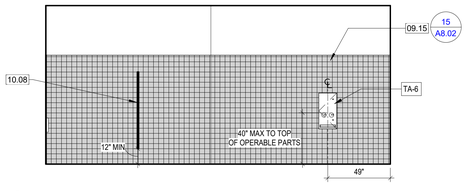
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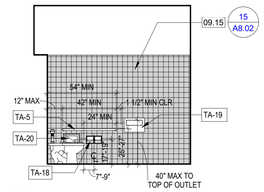

24D WEST
1/4" = 1'-0"




24C SOUTH
1/4" = 1'-0"

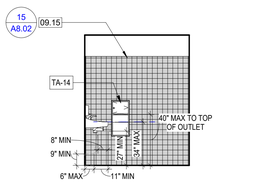



24B EAST
1/4" = 1'-0"

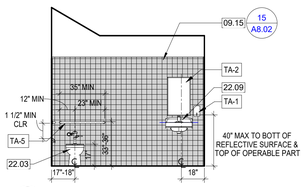



24A NORTH
1/4" = 1'-0"

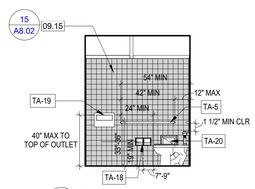
## 24 ELEVATIONS - S-L-114 GIRLS RR (AGES 9-12)
1/4" = 1' - 0"



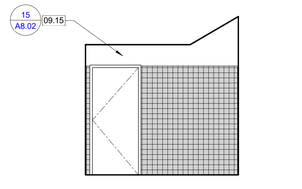

18D WEST
1/4" = 1'-0"




18C SOUTH
1/4" = 1'-0"

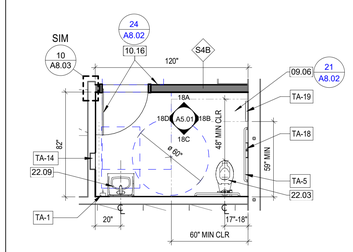



18B EAST
1/4" = 1'-0"




18A NORTH
1/4" = 1'-0"

## 20 PLAN - S-L-114 GIRLS RR (AGES 9-12)
1/4" = 1'-0"




## CONSTRUCTION KEYED NOTES

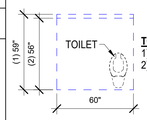
| # | Description |
|---|---|
| 09.06 | (N) FLOOR TILE TO REPLACE (E) FLOOR TILE, SEE DETAIL CALLOUT |
| 09.15 | (N) WALL TILE, SEE DETAIL CALLOUT |
| 10.08 | (N) SOLID PLASTIC TOILET PARTITION |
| 10.16 | (N) TACTILE RESTROOM DOOR & WALL SIGN, SEE DETAIL CALLOUT |
| 22.02 | (N) WALL-MOUNTED LAVATORY |
| 22.03 | (N) FLOOR-MOUNTED ACCESSIBLE WATER CLOSET |
| 22.04 | (N) FLOOR-MOUNTED WATER CLOSET |
| 22.09 | (N) ACCESSIBLE WALL-MOUNTED LAVATORY, SEE 9/ & 16/A8.03. |

## PLAN LEGEND

WALL PARTITIONS TAG
S4A
LETTER INDICATES PARTITION TYPE, REF. DETAILS
# INDICATES CORE WIDTH
LETTER INDICATES CORE TYPE (S=STUD)
1 A8.02 2 A8.02 4 A8.02

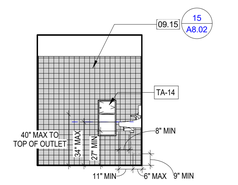
## RESTROOM LEGEND

60" CLEAR TURNAROUND SPACE
30" x 48" CLEAR FLOOR SPACE

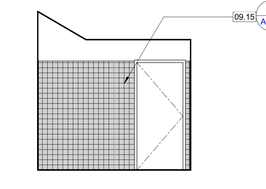



**TOILET CLEAR FLOOR SPACE PER CBC 11B-604.8.1**
1) FLOOR-MOUNTED TOILET = 59" x 60"
2) WALL-MOUNTED TOILET = 56" x 60"

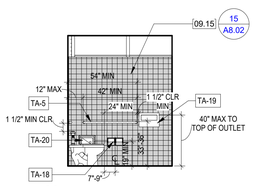
## 18 ELEVATIONS - ADM-20 STAFF RR 2 (ADULT)
1/4" = 1' - 0"



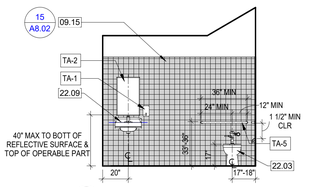

12D WEST
1/4" = 1'-0"




12C SOUTH
1/4" = 1'-0"

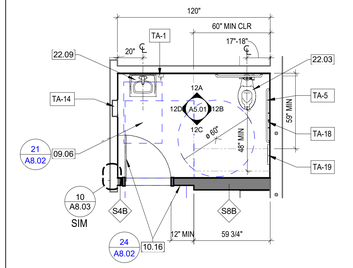



12B EAST
1/4" = 1'-0"

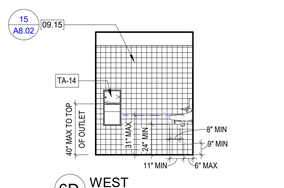



12A NORTH
1/4" = 1'-0"

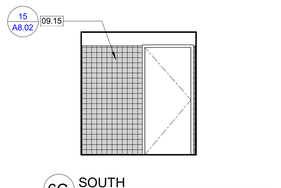
## 14 PLAN - ADM-20 STAFF RR 2 (ADULT)
1/4" = 1'-0"



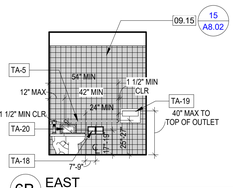

## 12 ELEVATIONS - ADM-18 STAFF RR 1 (ADULT)
1/4" = 1' - 0"



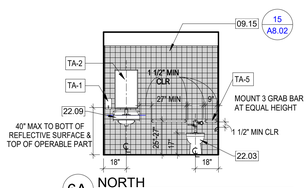

6D WEST
1/4" = 1'-0"




6C SOUTH
1/4" = 1'-0"

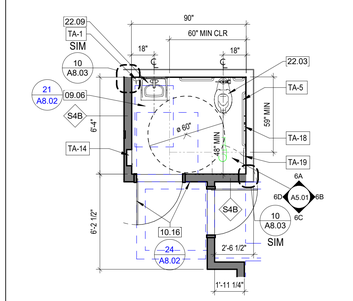



6B EAST
1/4" = 1'-0"




6A NORTH
1/4" = 1'-0"

## 8 PLAN - ADM-18 STAFF RR 1 (ADULT)
1/4" = 1'-0"




## 6 ELEVATIONS - ADM-13 NURSE RR (AGES 9-12)
1/4" = 1' - 0"

## 2 PLAN - ADM-13 NURSE RR (AGES 9-12)
1/4" = 1'-0"

**RESTROOM ACCESSORY SCHEDULE**

| LABEL | DESCRIPTION | REMARKS |
|---|---|---|
| TA1 | SOAP DISPENSER | |
| TA2 | MIRROR (24"x36" U.N.O.) | |
| TA3 | TOILET PAPER DISPENSER (WALL MOUNT) | |
| TA4 | PAPER TOWEL DISPENSER (WALL MOUNT) | |
| TA5 | GRAB BARS AT TYPICAL ACCESSIBLE TOILET STALLS | |
| TA6 | SANITARY NAPKIN DISPENSER (SEMI-RECESSED) | |
| TA7 | SANITARY NAPKIN DISPOSAL | |
| TA8 | SANITARY NAPKIN DISPENSER (WALL MOUNTED) | |
| TA9 | GRAB BARS AT AMBULATORY ACCESSIBLE TOILET STALL | |
| TA10 | FOLDING SHOWER BENCH | |
| TA11 | 48" x 20" ACCESSIBLE WALL-MOUNTED BENCH | |
| TA12 | SOAP DISPENSER AND BABY CHANGING STATION | |
| TA13 | CLOTHES DRYER | |
| TA14 | COMBO PAPER TOWEL DISPENSER/TRASH RECEPTACLE | |
| TA15 | GRAB BARS AT AMBULATORY ACCESSIBLE TOILET STALL | |
| TA16 | CHANGING STATION | |
| TA17 | TRASH RECEPTACLE | |
| TA18 | TOILET PAPER DISPENSER, SEMI-RECESSED | |
| TA19 | TOILET SEAT COVER DISPENSER | |
| TA20 | SANITARY NAPKIN DISPOSAL, SEMI-RECESSED | |

**NOTES:**

1. ALL TOILET ACCESSORIES SHALL BE CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE
2. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
3. CONTRACTOR IS TO VERIFY ALL HEIGHTS OF ACCESSORIES TO COMPLY WITH ADA.
4. REFER TO ALL FINISHES AND COLORS IN FINISH SCHEDULE.VERIFY ALL PATTERNS WITH ARCHITECT.

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000


**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST.
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

ADMIN
SL
KEY PLAN

Consultant

Architect
LICENSED ARCHITECT
Tong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 03/31/23
PROJECT NUMBER 220526

| REVISIONS | | |
|---|---|---|
| No. | Description | Date |

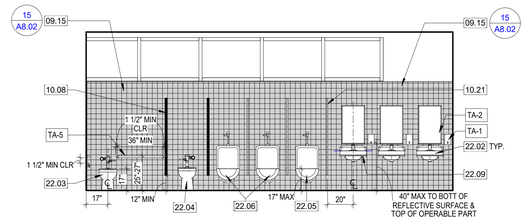
**DSA SUBMITTAL**

**ENLARGED RR PLANS & INTERIOR ELEVATIONS**

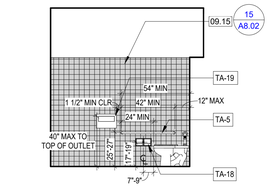
**A5.01**

A5.02 - ENLARGED RR PLANS & INTERIOR ELEVATIONS

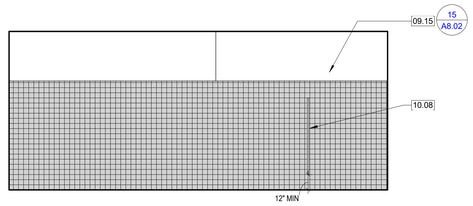
0" 1"



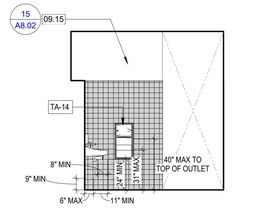

18D WEST
1/4" = 1'-0"




18C SOUTH
1/4" = 1'-0"

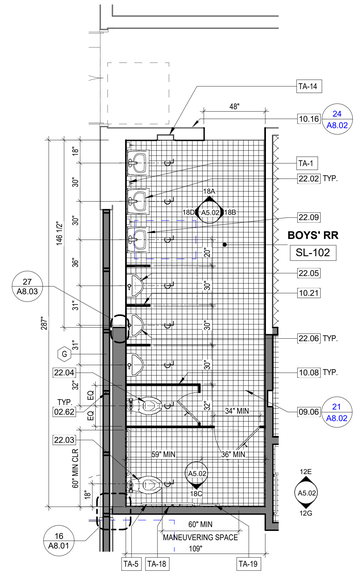



18B EAST
1/4" = 1'-0"

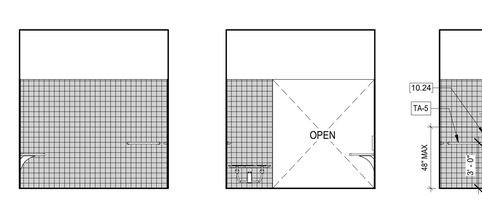



18A NORTH
1/4" = 1'-0"

**18** ELEVATIONS - S-L-102 BOYS RR (AGES 9-12)
1/4" = 1' - 0"



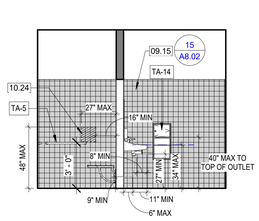

**14** PLAN - S-L-102 BOYS RR (AGES 9-12)
1/4" = 1'-0"



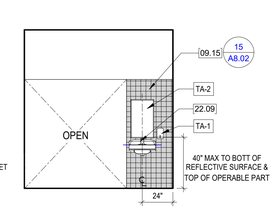

12G SOUTH SHOWER
1/4" = 1'-0"



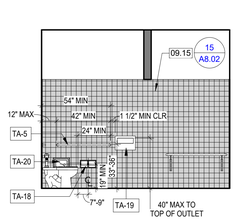

12E NORTH SHOWER
1/4" = 1'-0"



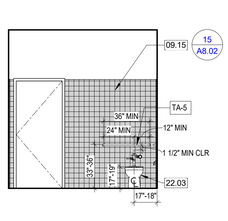

12D WEST
1/4" = 1'-0"




12C SOUTH
1/4" = 1'-0"

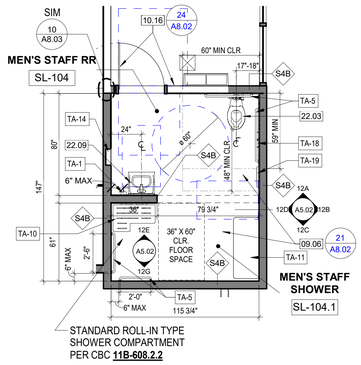



12B EAST
1/4" = 1'-0"

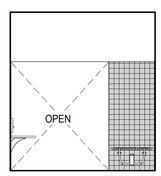



12A NORTH
1/4" = 1'-0"

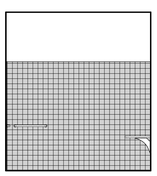
**12** ELEVATIONS - S-L-104 MENS STAFF RR (ADULT)
1/4" = 1' - 0"



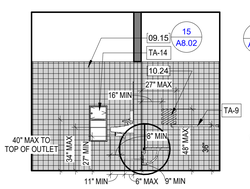

**8** PLAN - S-L-104 MENS STAFF RR (ADULT)
1/4" = 1'-0"



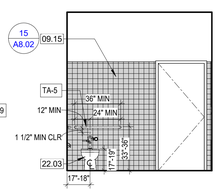

6G SOUTH SHOWER
1/4" = 1'-0"



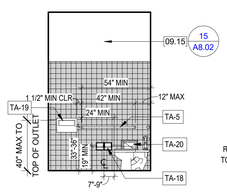
6E NORTH SHOWER
1/4" = 1'-0"



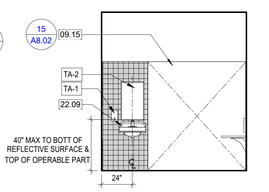

6D WEST
1/4" = 1'-0"




6C SOUTH
1/4" = 1'-0"

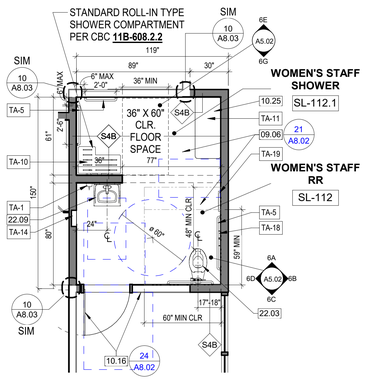



6B EAST
1/4" = 1'-0"




6A NORTH
1/4" = 1'-0"

**6** ELEVATIONS - S-L-112 WOMENS STAFF RR (ADULT)
1/4" = 1' - 0"




**2** PLAN - S-L-112 WOMENS STAFF RR (ADULT)
1/4" = 1'-0"

## CONSTRUCTION KEYED NOTES

| # | Description |
|---|---|
| 02.62 | (E) TUBE STEEL COLUMN WITHIN WINDOW SYSTEM TO REMAIN, PROTECT IN PLACE, WHERE OCCURS |
| 09.06 | (N) FLOOR TILE TO REPLACE (E) FLOOR TILE, SEE DETAIL CALLOUT |
| 09.15 | (N) WALL TILE, SEE DETAIL CALLOUT |
| 10.08 | (N) SOLID PLASTIC TOILET PARTITION |
| 10.16 | (N) TACTILE RESTROOM DOOR & WALL SIGN, SEE DETAIL CALLOUT |
| 10.21 | (N) SOLID PLASTIC URINAL PARTITION |
| 10.24 | (N) SHOWER COMPARTMENT CONTROL LOCATION PER CBC 11B-608.5.2 |
| 10.25 | (N) 48" x 20" ACCESSIBLE WALL-MOUNTED BENCH PER CBC 11B-903. |
| 22.02 | (N) WALL-MOUNTED LAVATORY |
| 22.03 | (N) FLOOR-MOUNTED ACCESSIBLE WATER CLOSET |
| 22.04 | (N) FLOOR-MOUNTED WATER CLOSET |
| 22.05 | (N) ACCESSIBLE WALL-MOUNTED URINAL |
| 22.06 | (N) WALL-MOUNTED URINAL |
| 22.09 | (N) ACCESSIBLE WALL-MOUNTED LAVATORY, SEE 9/ & 16/A8.03. |

## PLAN LEGEND

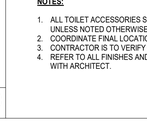
WALL PARTITIONS TAG

34A

- LETTER INDICATES PARTITION TYPE, REF. DETAILS — 1 A8.02, 2 A8.02, 4 A8.02
- # INDICATES CORE WIDTH
- LETTER INDICATES CORE TYPE (S=STUD)

## RESTROOM LEGEND

- 60" CLEAR TURNAROUND SPACE
- 30" x 48" CLEAR FLOOR SPACE
- TOILET CLEAR FLOOR SPACE PER CBC 11B-604.8.1
  1) FLOOR-MOUNTED TOILET = 59" x 60"
  2) WALL-MOUNTED TOILET = 56" x 60"




**RESTROOM ACCESSORY SCHEDULE**

| LABEL | DESCRIPTION | REMARKS |
|---|---|---|
| TA1 | SOAP DISPENSER | |
| TA2 | MIRROR (24"x36" U.N.O.) | |
| TA3 | TOILET PAPER DISPENSER (WALL MOUNT) | |
| TA4 | PAPER TOWEL DISPENSER (WALL MOUNT) | |
| TA5 | GRAB BARS AT TYPICAL ACCESSIBLE TOILET STALLS | |
| TA6 | SANITARY NAPKIN DISPENSER (SEMI-RECESSED) | |
| TA7 | SANITARY NAPKIN DISPOSAL | |
| TA8 | SANITARY NAPKIN DISPENSER (WALL MOUNTED) | |
| TA9 | GRAB BARS AT ACCESSIBLE SHOWER | |
| TA10 | FOLDING SHOWER BENCH | |
| TA11 | 48" x 20" ACCESSIBLE WALL-MOUNTED BENCH | |
| TA12 | SHOWER CURTAIN, ROD AND HOOKS | |
| TA13 | ELECTRIC HAND DRYER | |
| TA14 | COMBO PAPER TOWEL DISPENSER/TRASH RECEPTACLE | |
| TA15 | GRAB BAR AT AMBULATORY ACCESSIBLE TOILET STALL | |
| TA16 | CHANGING STATION | |
| TA17 | TOILET PAPER DISPENSER | |
| TA18 | TOILET PAPER DISPENSER, SEMI-RECESSED | |
| TA19 | TOILET SEAT COVER DISPENSER | |
| TA20 | SANITARY NAPKIN DISPOSAL, SEMI-RECESSED | |

**NOTES:**

1. ALL TOILET ACCESSORIES SHALL BE CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE
2. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
3. CONTRACTOR IS TO VERIFY ALL HEIGHTS OF ACCESSORIES TO COMPLY WITH ADA.
4. REFER TO ALL FINISHES AND COLORS IN FINISH SCHEDULE. VERIFY ALL PATTERNS WITH ARCHITECT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
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DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000


**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA FILE NO.: 30-43
DSA APPL NO.: 04-121954

WESTMINSTER SCHOOL DISTRICT

SL

KEY PLAN

N

Consultant

Architect

LICENSED ARCHITECT
Ronald Yoo
No. C-31162
REN: 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 03/31/23
PROJECT NUMBER 220526

REVISIONS

| No. | Description | Date |
|---|---|---|

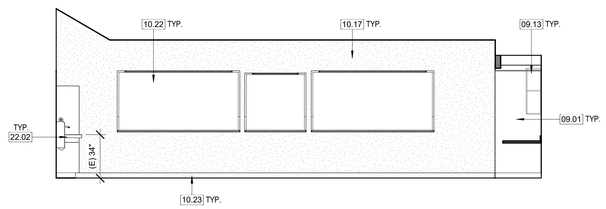
**DSA SUBMITTAL**

**ENLARGED RR PLANS & INTERIOR ELEVATIONS**

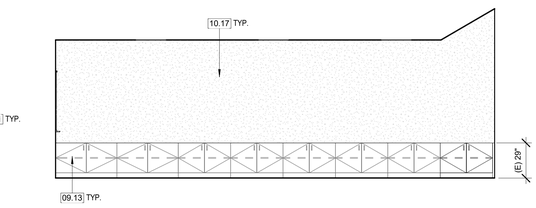
**A5.02**

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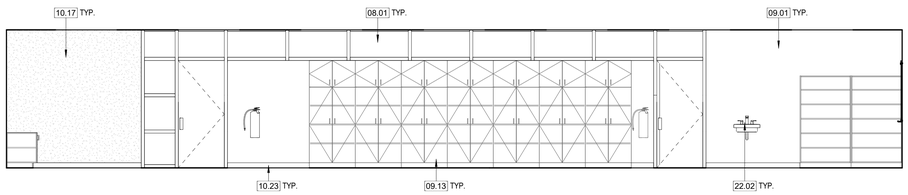
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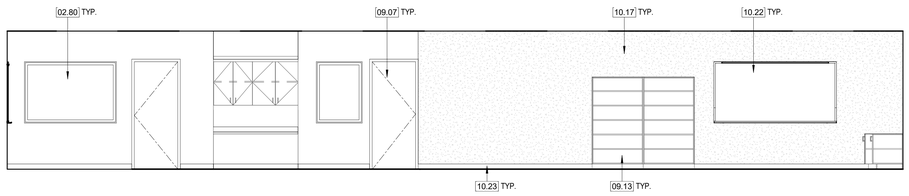

18B CLASSROOM IA1-9 - EAST ELEVATION
1/4" = 1'-0"




18D CLASSROOM IA1-9 - WEST ELEVATION
1/4" = 1'-0"

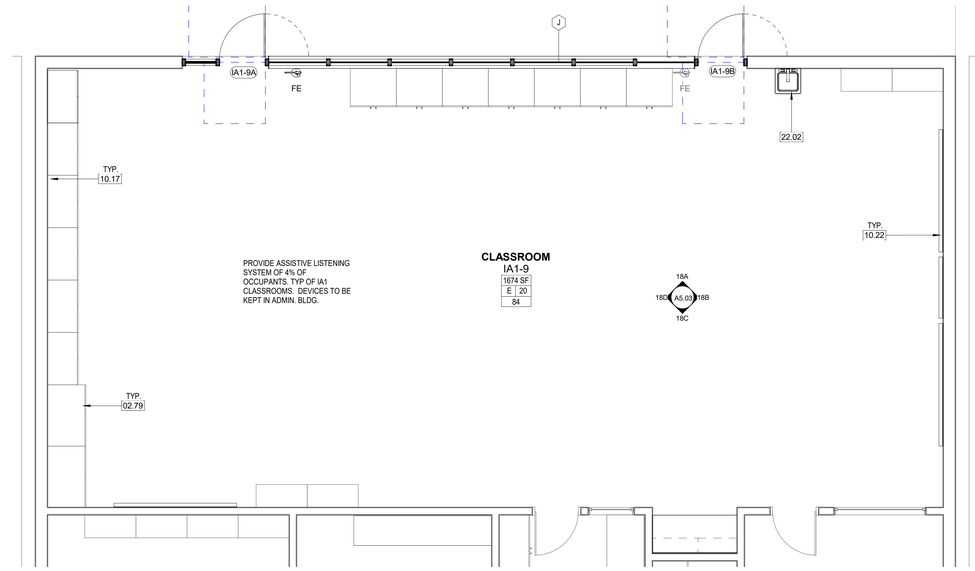



18A CLASSROOM IA1-9 - NORTH ELEVATION
1/4" = 1'-0"




18C CLASSROOM IA1-9 - SOUTH ELEVATION
1/4" = 1'-0"

## 18 INTERIOR ELEVATIONS - CLASSROOM IA1-9
1/4" = 1' - 0"

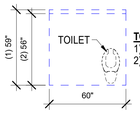



## 15 ENLARGED CLASSROOM PLAN - ROOM IA1-9
1/4" = 1'-0"

### RESTROOM LEGEND

ø 5'-0" — 60" CLEAR TURNAROUND SPACE

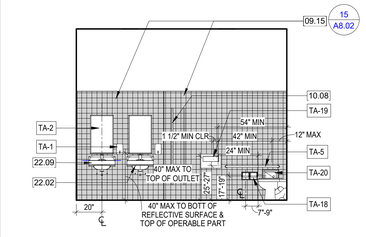
30" x 48" CLEAR FLOOR SPACE



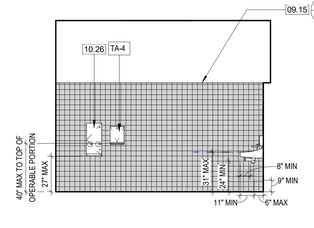

**TOILET CLEAR FLOOR SPACE PER CBC 11B-604.8.1**
1) FLOOR-MOUNTED TOILET = 59" x 60"
2) WALL-MOUNTED TOILET = 56" x 60"

### KEYNOTE LEGEND

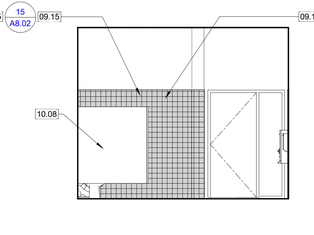
| # | Description |
|---|---|
| 02.79 | (E) CASEWORK TO REMAIN. TO RE-PAINT TYP. |
| 02.80 | (E) WINDOW TO REMAIN. |
| 08.01 | (N) ALUMINUM FRAME & GLAZING WINDOW SYSTEM.SEE WINDOWS FRAMING ELEVATION A9.02. PER ALUMINUM-FRAMED STOREFRONT & ALUMINUM WINDOWS & GLAZING SPEC SECTION |
| 09.01 | (N) INTERIOR PAINT FINISH, PER DISTRICT REQUIREMENTS |
| 09.05 | (N) WALL TILE @ (E) WALLS TO REPLACE (E) TILE, SEE DETAIL CALLOUT |
| 09.06 | (N) FLOOR TILE TO REPLACE (E) FLOOR TILE, SEE DETAIL CALLOUT |
| 09.07 | (E) DOOR TO TO REMAIN AND REPAINT, PER DISTRICT REQUIREMENTS |
| 09.13 | (E) CASEWORK TO REMAIN. REPAINT PER DISTRICT STANDARDS, COLOR TO BE CONFIRMED BY ARCHITECT AND CLIENT |
| 09.15 | (N) WALL TILE, SEE DETAIL CALLOUT |
| 10.08 | (N) SOLID PLASTIC TOILET PARTITION |
| 10.16 | (N) TACTILE RESTROOM DOOR & WALL SIGN, SEE DETAIL CALLOUT |
| 10.17 | (N) TACKABLE SURFACE, TO (E) WALL, SEE DETAIL 6/A8.02 |
| 10.22 | (N) MARKER BOARD, SEE DETAIL 5/A8.02 |
| 10.23 | (N) 6" RUBBER BASE |
| 10.26 | (N) ACCESSIBLE SANITARY NAPKIN DISPENSER, 4" MAX PROTRUSION. |
| 12.04 | OWNER-FURNISHED FREE-STANDING TRASH RECEPTACLE |
| 22.02 | (N) WALL-MOUNTED LAVATORY |
| 22.03 | (N) FLOOR-MOUNTED ACCESSIBLE WATER CLOSET |
| 22.04 | (N) FLOOR-MOUNTED WATER CLOSET |
| 22.05 | (N) ACCESSIBLE WALL-MOUNTED URINAL |
| 22.06 | (N) WALL-MOUNTED URINAL |
| 22.09 | (N) ACCESSIBLE WALL-MOUNTED LAVATORY, SEE 9/ & 16/A8.03. |



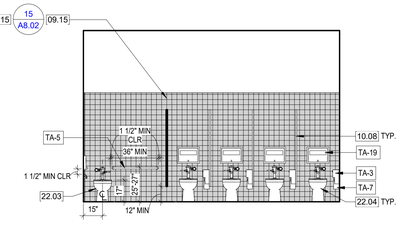

12D WEST
1/4" = 1'-0"




12C SOUTH
1/4" = 1'-0"

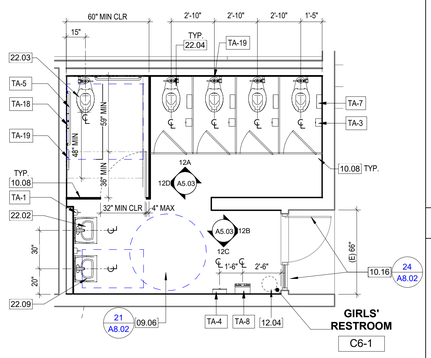



12B EAST
1/4" = 1'-0"




12A NORTH
1/4" = 1'-0"

## 12 ELEVATIONS - C6-1 GIRLS' RR (AGES 9-12)
1/4" = 1' - 0"



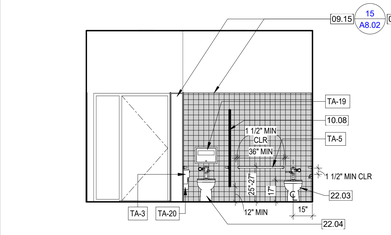

## 8 PLAN - C6-1 GIRLS RR (AGES 9-12)
1/4" = 1'-0"

### PLAN LEGEND

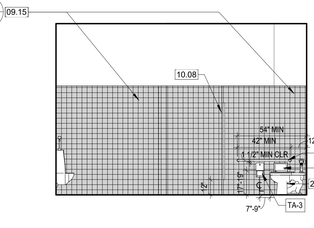
WALL PARTITIONS TAG

S4A
- LETTER INDICATES PARTITION TYPE, REF. DETAILS
- # INDICATES CORE WIDTH
- LETTER INDICATES CORE TYPE (S=STUD)

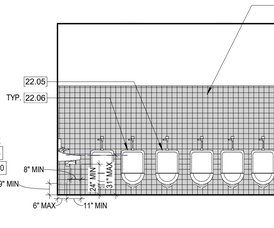
1 A8.02 2 A8.02 4 A8.02



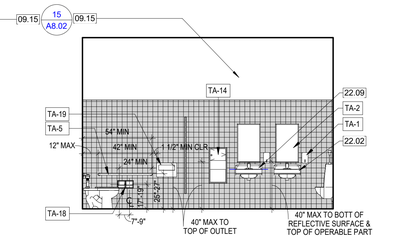

2D WEST
1/4" = 1'-0"




2C SOUTH
1/4" = 1'-0"

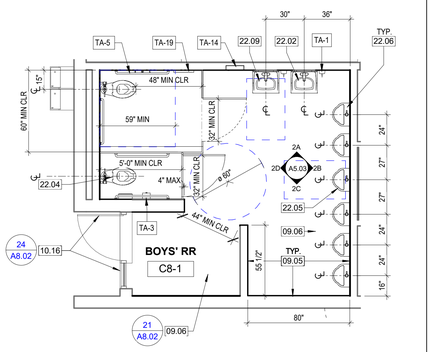



2B EAST
1/4" = 1'-0"




2A NORTH
1/4" = 1'-0"

## 6 ELEVATIONS - C8-1 BOYS' RR (AGES 9-12)
1/4" = 1' - 0"




## 2 PLAN - C8-1 BOYS' RR (AGES 9-12)
1/4" = 1'-0"

### RESTROOM ACCESSORY SCHEDULE

| LABEL | DESCRIPTION | REMARKS |
|---|---|---|
| TA1 | SOAP DISPENSER | |
| TA2 | MIRROR (24"x36" U.N.O.) | |
| TA3 | TOILET PAPER DISPENSER (WALL MOUNT) | |
| TA4 | PAPER TOWEL DISPENSER (WALL MOUNT) | |
| TA5 | GRAB BARS AT TYPICAL ACCESSIBLE TOILET STALLS | |
| TA6 | SANITARY NAPKIN DISPENSER (SEMI-RECESSED) | |
| TA7 | SANITARY NAPKIN DISPOSAL | |
| TA8 | SANITARY NAPKIN DISPENSER (WALL MOUNTED) | |
| TA9 | GRAB BARS AT SHOWER & BOTTOM OF DOOR | |
| TA10 | FOLDING SHOWER BENCH | |
| TA11 | 48" x 20" ACCESSIBLE WALL-MOUNTED BENCH | |
| TA12 | SPECIALTY PORTABLE BODY AID DOORS | |
| TA13 | CLOTHING CHANGING TOWEL | |
| TA14 | COMBO PAPER TOWEL DISPENSER/TRASH RECEPTACLE | |
| TA15 | GRAB BAR AT ASSEMBLY INACCESSIBLE TOILET STALL | |
| TA16 | CHANGING STATION | |
| TA17 | TRASH RECEPTACLE | |
| TA18 | TOILET PAPER DISPENSER, SEMI-RECESSED | |
| TA19 | TOILET SEAT COVER DISPENSER | |
| TA20 | SANITARY NAPKIN DISPOSAL, SEMI-RECESSED | |

**NOTES:**

1. ALL TOILET ACCESSORIES SHALL BE CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE
2. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
3. CONTRACTOR IS TO VERIFY ALL HEIGHTS OF ACCESSORIES TO COMPLY WITH ADA.
4. REFER TO ALL FINISHES AND COLORS IN FINISH SCHEDULE.VERIFY ALL PATTERNS WITH ARCHITECT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Tong Yoo
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

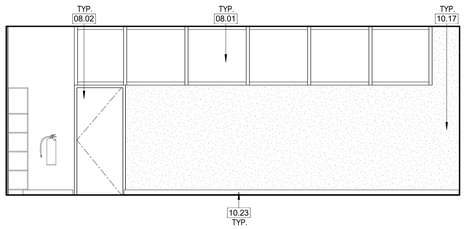
| No. | Description | Date |
|---|---|---|

**DSA SUBMITTAL**

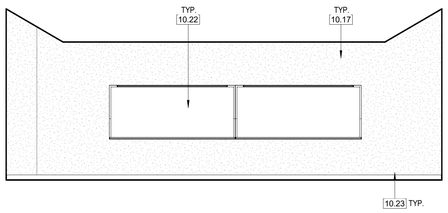
**ENLARGED RR PLANS & INTERIOR ELEVATIONS**

**A5.03**

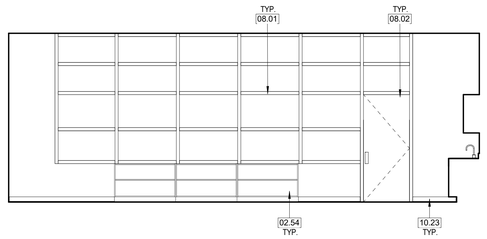
0" 1"



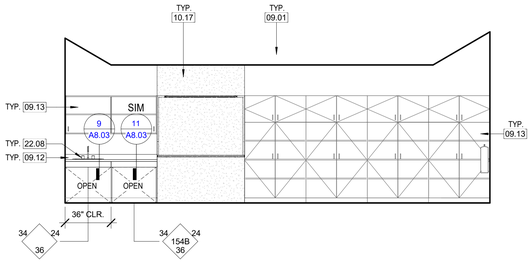

26A TYPICAL CLASSROOM INTERIOR ELEVATION 1
1/4" = 1'-0"




26B TYPICAL CLASSROOM INTERIOR ELEVATION 2
1/4" = 1'-0"

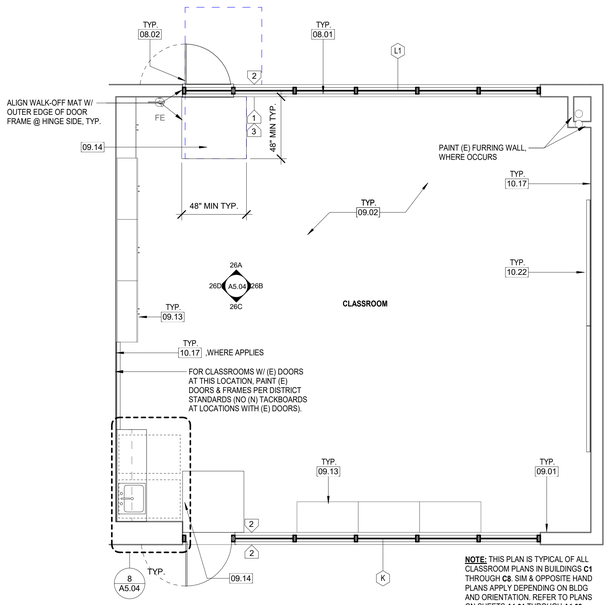



26C TYPICAL CLASSROOM INTERIOR ELEVATION 3
1/4" = 1'-0"




26D TYPICAL CLASSROOM INTERIOR ELEVATION 4
1/4" = 1'-0"

**26** INTERIOR ELEVATIONS - TYPICAL CLASSROOM (BLDGS C1-C8)
1/4" = 1' - 0"




**NOTE:** THIS PLAN IS TYPICAL OF ALL CLASSROOM PLANS IN BUILDINGS **C1** THROUGH **C8**. SIM & OPPOSITE HAND PLANS APPLY DEPENDING ON BLDG AND ORIENTATION. REFER TO PLANS ON SHEETS **A1.01** THROUGH **A1.03**.

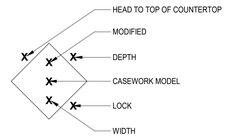
**12** ENLARGED TYPICAL CLASSROOM PLAN
1/4" = 1'-0"

## KEYNOTE LEGEND

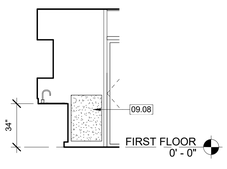
| # | Description |
|---|---|
| 02.54 | (E) CASEWORK TO REMAIN. PROTECT IN PLACE WHERE POSSIBLE, REMOVE & REINSTALL AS REQ'D. |
| 02.64 | (E) PONY WALL TO REMAIN, RAISE HEIGHT TO 40" AFF WITH COUNTERTOP CAP, REFINISH AS REQ'D TO RECEIVE NEW PAINT, SEE ELEV 29A,29C,29D/A5.04 |
| 02.77 | (E) COUNTERTOP TO REMAIN. PROTECT IN PLACE WHERE POSSIBLE, REMOVE & REINSTALL AS REQ'D. |
| 08.01 | (N) ALUMINUM FRAME & GLAZING WINDOW SYSTEM.SEE WINDOWS FRAMING ELEVATION A9.02, PER ALUMINUM-FRAMED STOREFRONT & ALUMINUM WINDOWS & GLAZING SPEC SECTION |
| 08.02 | (N) INTEGRAL ALUMINUM FRAME DOOR SYSTEM.SEE FRAMING ELEVATION A9.01 & DOOR SCHEDULE, PER ALUMINUM-FRAMED STOREFRONT & DOOR SPEC SECTION |
| 09.01 | (N) INTERIOR PAINT FINISH, PER DISTRICT REQUIREMENTS |
| 09.02 | (N) FLOOR FINISH AND BASEBOARD, SEE FINISH SCHEDULE |
| 09.08 | (N) GYP INFILL @ (E) MECHANICAL DUCT CAVITY |
| 09.10 | INFILL GAP BETWEEN (E) CASEWORK WITH BASE CABINET FILLER PANEL TO MATCH (E) ADJACENT CASEWORK |
| 09.12 | PROVIDE (N) PLAM COUNTERTOP WITH BACKSPLASH, SEE SPECS |
| 09.13 | (E) CASEWORK TO REMAIN. REPAINT PER DISTRICT STANDARDS, COLOR TO BE CONFIRMED BY ARCHITECT AND CLIENT |
| 09.14 | PROVIDE (N) WALK-OFF MAT, SEE SPECS 09-68-00 |
| 10.17 | (N) TACKABLE SURFACE, TO (E) WALL, SEE DETAIL 6/A8.02 |
| 10.22 | (N) MARKER BOARD, SEE DETAIL 5/A8.02 |
| 10.23 | (N) 6" RUBBER BASE |
| 12.01 | (N) COUNTERTOP WITH HOLE FOR (N) COUNTER-MOUNTED LAVATORY, SEE SPECS |
| 12.02 | (N) BASE CABINETS, PER PLAN |
| 12.03 | (N) ACCESSIBLE CASEWORK BELOW COUNTER WITH NO DOORS, PER PLAN |
| 22.08 | (N) ACCESSIBLE COUNTER-MOUNTED LAVATORY |
| 22.10 | (N) PIPE INSULATION PER PLUMBING. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER SINKS, REFER TO DETAIL 9/A8.03 SIM |

## INTERIOR ELEVATION SYMBOLS

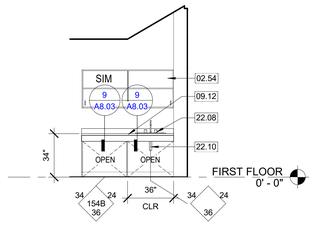
**CASEWORK SYMBOL**




NOTE: DIMENSIONS ARE TO THE NEAREST WHOLE NUMBER, CONTRACTOR TO FIELD VERIFY DIMENSIONS PRIOR TO FABRICATION

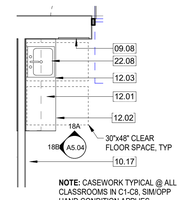



18A TYP. CR CASEWORK ELEVATION - SIDE
1/4" = 1'-0"



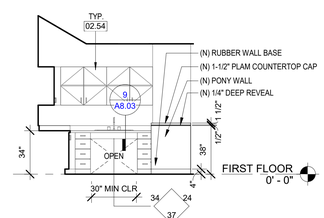

18B TYP. CR CASEWORK ELEVATION - FRONT
1/4" = 1'-0"

**18** INTERIOR ELEVATIONS - TYPICAL CLASSROOM (BLDGS C1-C8)
1/4" = 1' - 0"

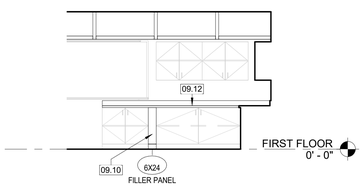



**NOTE:** CASEWORK TYPICAL @ ALL CLASSROOMS IN C1-C8, SIM/OPP HAND CONDITION APPLIES

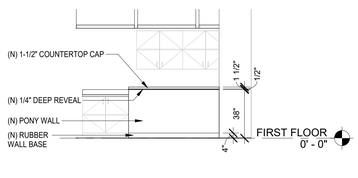
**8** ENLARGED PLAN - TYP CR SINK CASEWORK
1/4" = 1'-0"



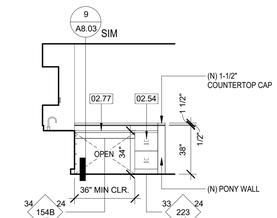

29A CASEWORK ELEVATION - SOUTH
1/4" = 1'-0"




29B CASEWORK ELEVATION - EAST 2
1/4" = 1'-0"

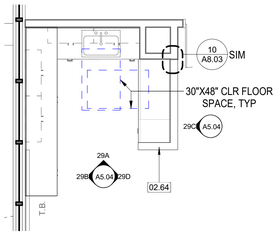



29C CASEWORK ELEVATION - EAST
1/4" = 1'-0"

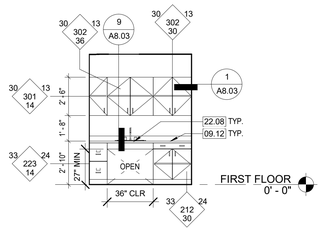



29D CASEWORK ELEVATION - WEST
1/4" = 1'-0"

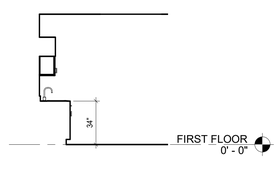
**29** INTERIOR ELEVATIONS - SINK CASEWORK (ADMIN BLDG)
1/4" = 1' - 0"




**9** FLOOR PLAN - ADMINISTRATION BUILDING
1/4" = 1'-0"

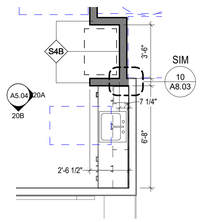



20A CASEWORK ELEVATION - EAST
1/4" = 1'-0"




20B CASEWORK ELEVATION - SOUTH
1/4" = 1'-0"

**20** INTERIOR ELEVATIONS - SINK CASEWORK (NURSE)
1/4" = 1' - 0"




**10** FLOOR PLAN - ADMINISTRATION BUILDING
1/4" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

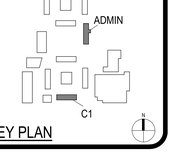
ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST.
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

**DSA SUBMITTAL**

**ENLARGED PLANS & INTERIOR ELEVATIONS**

**A5.04**

**FILE PATH:** Z:\Projects\...
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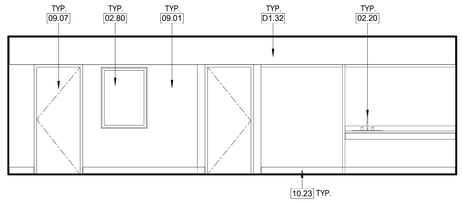
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## DEMOLITION KEYED NOTES

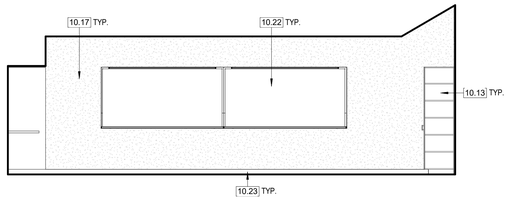
| # | Description |
|---|---|
| D1.32 | REMOVE (E) 12"X12" GLUE-ON ACT TILE AND SUBSTRATE. REPLACE WITH (N) DRYWALL, WHERE OCCURS. |

## CONSTRUCTION KEYED NOTES

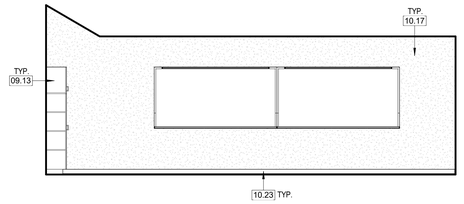
| # | Description |
|---|---|
| 02.20 | (E) LAVATORY TO REMAIN |
| 02.80 | (E) WINDOW TO REMAIN. |
| 08.01 | (N) ALUMINUM FRAME & GLAZING WINDOW SYSTEM.SEE WINDOWS FRAMING ELEVATION A9.02, PER ALUMINUM-FRAMED STOREFRONT & ALUMINUM WINDOWS & GLAZING SPEC SECTION |
| 09.01 | (N) INTERIOR PAINT FINISH, PER DISTRICT REQUIREMENTS |
| 09.07 | (E) DOOR TO TO REMAIN AND REPAINT, PER DISTRICT REQUIREMENTS |
| 09.13 | (E) CASEWORK TO REMAIN, REPAINT PER DISTRICT STANDARDS, COLOR TO BE CONFIRMED BY ARCHITECT AND CLIENT |
| 10.13 | (N) SURFACE MOUNT TOILET PAPER DISPENSER, 4" MAX PROTRUSION |
| 10.17 | (N) TACKABLE SURFACE, TO (E) WALL, SEE DETAIL 6/A8.02 |
| 10.22 | (N) MARKER BOARD, SEE DETAIL 5/A8.02 |
| 10.23 | (N) 6" RUBBER BASE |



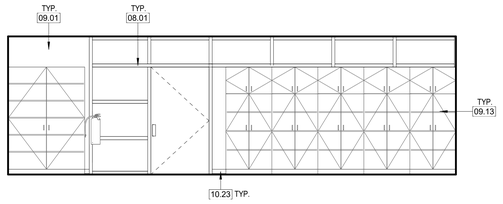

18A INTERIOR ELEVATION - IA2-2 - NORTH
1/4" = 1'-0"




18B INTERIOR ELEVATION - IA2-2 - EAST
1/4" = 1'-0"

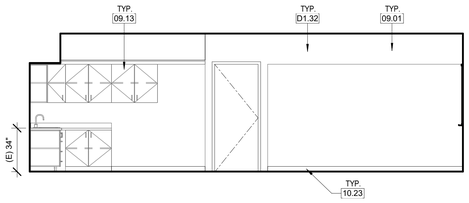



18D INTERIOR ELEVATION - IA2-2 - WEST
1/4" = 1'-0"

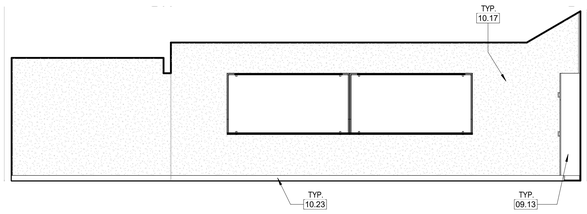



18C INTERIOR ELEVATION - IA2-2 - SOUTH
1/4" = 1'-0"

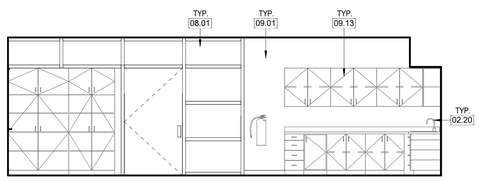
18 INTERIOR ELEVATIONS - CLASSROOM IA2 - 2
1/4" = 1' - 0"



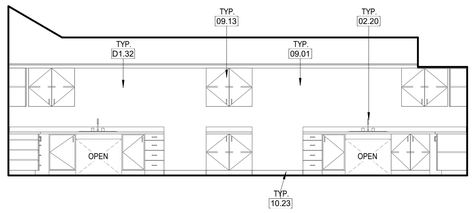

6A INTERIOR ELEVATION - IA2-1 - NORTH
1/4" = 1'-0"




6B INTERIOR ELEVATION - IA2-1 - EAST
1/4" = 1'-0"

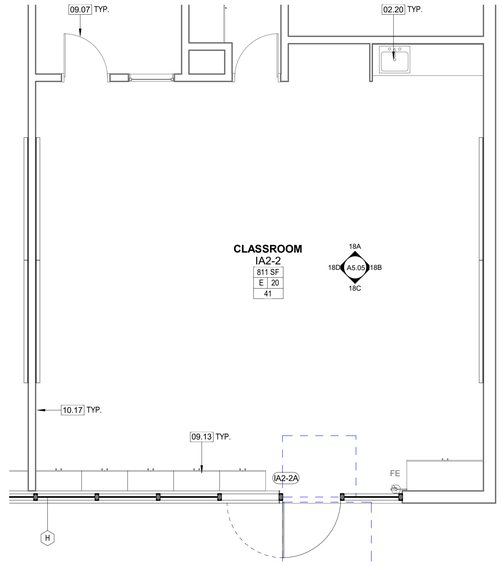



6C INTERIOR ELEVATION - IA2-1 - SOUTH
1/4" = 1'-0"

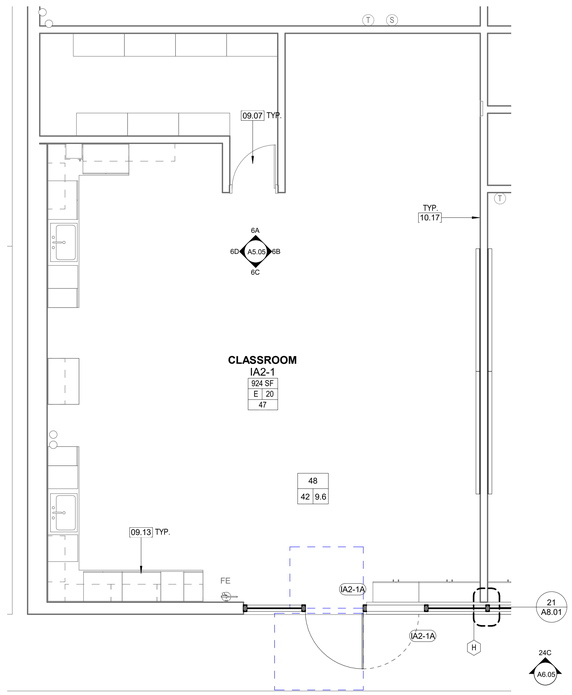



6D INTERIOR ELEVATION - IA2-1 - WEST
1/4" = 1'-0"

6 INTERIOR ELEVATIONS - CLASSROOM IA2 - 1
1/4" = 1' - 0"




14 ENLARGED TYPICAL CLASSROOM PLAN - IA2-2
1/4" = 1'-0"




5 ENLARGED TYPICAL CLASSROOM PLAN - IA2-1
1/4" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Tong Yoo
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 03/31/23
PROJECT NUMBER 220526

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

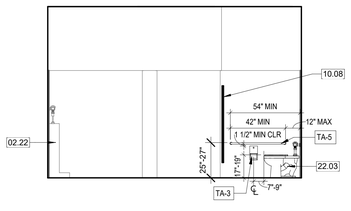
ENLARGED PLANS & INTERIOR ELEVATIONS

A5.05

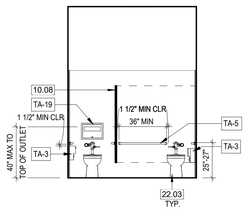
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A5.06 - ENLARGED RR PLANS & INTERIOR ELEVATIONS

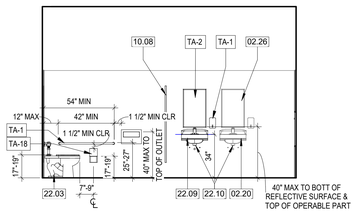
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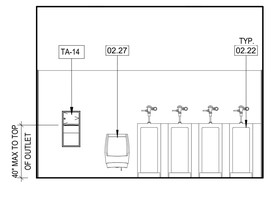

26A NORTH
1/4" = 1'-0"




26B EAST
1/4" = 1'-0"

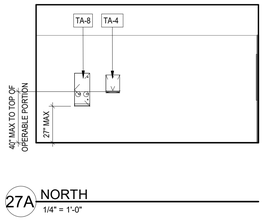



26C SOUTH
1/4" = 1'-0"

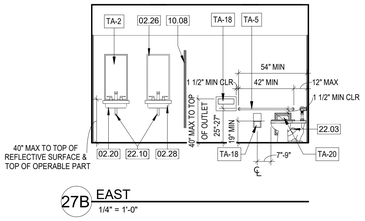



26D WEST
1/4" = 1'-0"

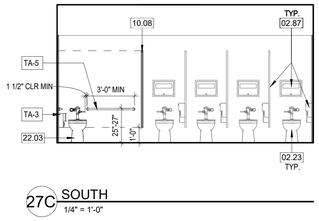
## 26 ELEVATIONS - C2-1 BOYS' RR (AGES 9-12)
1/4" = 1' - 0"



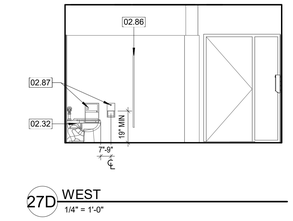

27A NORTH
1/4" = 1'-0"




27B EAST
1/4" = 1'-0"

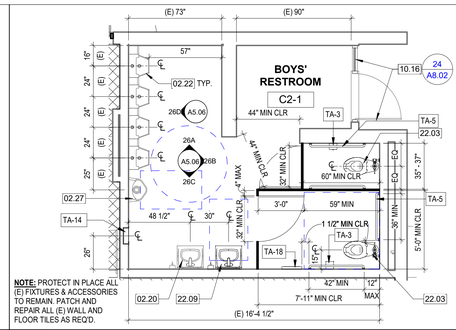



27C SOUTH
1/4" = 1'-0"



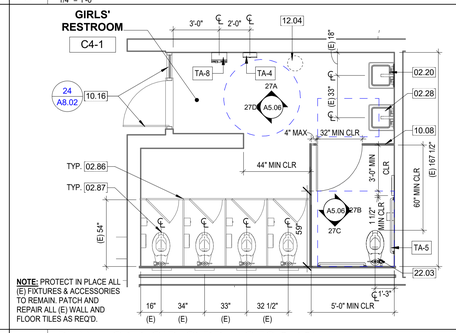

27D WEST
1/4" = 1'-0"

## 27 ELEVATIONS - C4-1 GIRLS' RR (AGES 9-12)
1/4" = 1' - 0"




**NOTE:** PROTECT IN PLACE ALL (E) FIXTURES & ACCESSORIES TO REMAIN. PATCH AND REPAIR ALL (E) WALL AND FLOOR TILES AS REQ'D.

## 9 PLAN - C2-1 BOYS' RR (AGES 9-12)
1/4" = 1'-0"




**NOTE:** PROTECT IN PLACE ALL (E) FIXTURES & ACCESSORIES TO REMAIN. PATCH AND REPAIR ALL (E) WALL AND FLOOR TILES AS REQ'D.

## 10 PLAN - C4-1 GIRLS' RR (AGES 9-12)
1/4" = 1'-0"

## CONSTRUCTION KEYED NOTES

| # | Description |
|---|---|
| 02.20 | (E) LAVATORY TO REMAIN |
| 02.22 | (E) URINAL TO REMAIN |
| 02.23 | (E) TOILET FIXTURE TO REMAIN |
| 02.26 | (E) MIRROR TO REMAIN |
| 02.27 | (E) ACCESSIBLE URINAL TO REMAIN |
| 02.28 | (E) ACCESSIBLE LAVATORY TO REMAIN; REFER TO DETAIL 5/A8.03 SIM |
| 02.32 | (E) FLOOR MOUNTED WATER CLOSET TO REMAIN |
| 02.86 | (E) SOLID PLASTIC PARTITION TO REMAIN. PROTECT IN PLACE |
| 02.87 | (E) TOILET STALL AND ACCESSORIES TO REMAIN. PROTECT IN PLACE |
| 10.08 | (N) SOLID PLASTIC TOILET PARTITION |
| 10.16 | (N) TACTILE RESTROOM DOOR & WALL SIGN, SEE DETAIL CALLOUT |
| 12.04 | OWNER-FURNISHED FREE-STANDING TRASH RECEPTACLE |
| 22.03 | (N) FLOOR-MOUNTED ACCESSIBLE WATER CLOSET |
| 22.09 | (N) ACCESSIBLE WALL-MOUNTED LAVATORY, SEE 9/ & 16/A8.03. |
| 22.10 | (N) PIPE INSULATION PER PLUMBING. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER SINKS, REFER TO DETAIL 5/A8.03 SIM |

## PLAN LEGEND




## RESTROOM LEGEND




**TOILET CLEAR FLOOR SPACE PER CBC 11B-604.8.1**
1) FLOOR-MOUNTED TOILET = 59" x 60"
2) WALL-MOUNTED TOILET = 56" x 60"

**RESTROOM ACCESSORY SCHEDULE**

| LABEL | DESCRIPTION | REMARKS |
|---|---|---|
| TA1 | SOAP DISPENSER | |
| TA2 | MIRROR (24"x36" U.N.O.) | |
| TA3 | TOILET PAPER DISPENSER (WALL MOUNT) | |
| TA4 | PAPER TOWEL DISPENSER (WALL MOUNT) | |
| TA5 | GRAB BARS AT TYPICAL ACCESSIBLE TOILET STALLS | |
| TA6 | SANITARY NAPKIN DISPENSER (SEMI-RECESSED) | |
| TA7 | MIRROR | |
| TA8 | SANITARY NAPKIN DISPENSER (WALL MOUNTED) | |
| TA9 | FOLDING SHOWER BENCH | |
| TA10 | FOLDING SHOWER BENCH | |
| TA11 | 48" x 20" ACCESSIBLE WALL-MOUNTED BENCH | |
| TA12 | SHOWER CURTAIN, ROD AND HOOKS | |
| TA13 | ELECTRIC HAND DRYER | |
| TA14 | COMBO PAPER TOWEL DISPENSER/TRASH RECEPTACLE | |
| TA15 | GRAB BAR AT AMBULATORY ACCESSIBLE TOILET STALL | |
| TA16 | CHANGING STATION | |
| TA17 | TRASH RECEPTACLE | |
| TA18 | TOILET PAPER DISPENSER, SEMI-RECESSED | |
| TA19 | TOILET SEAT COVER DISPENSER | |
| TA20 | SANITARY NAPKIN DISPOSAL, SEMI-RECESSED | |

**NOTES:**

1. ALL TOILET ACCESSORIES SHALL BE CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE
2. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
3. CONTRACTOR IS TO VERIFY ALL HEIGHTS OF ACCESSORIES TO COMPLY WITH ADA.
4. REFER TO ALL FINISHES AND COLORS IN FINISH SCHEDULE.VERIFY ALL PATTERNS WITH ARCHITECT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

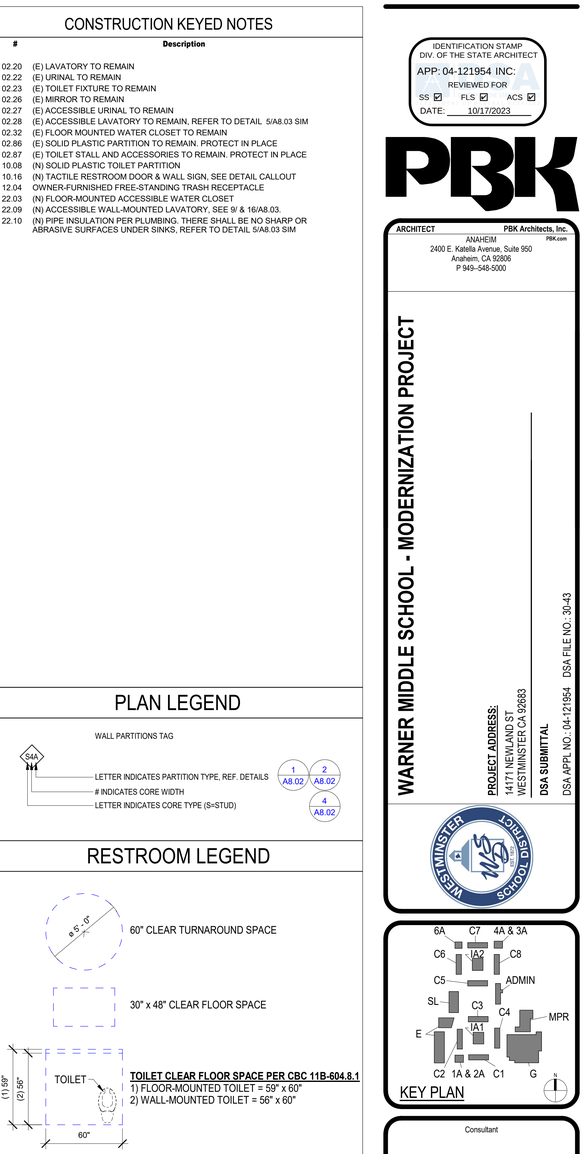
ARCHITECT
PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
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WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

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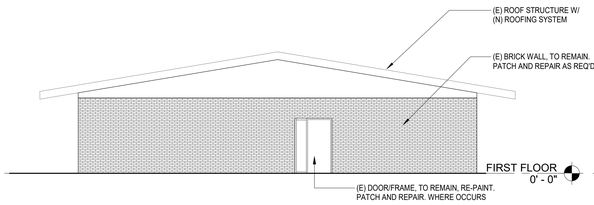
**DSA SUBMITTAL**

**ENLARGED RR PLANS & INTERIOR ELEVATIONS**

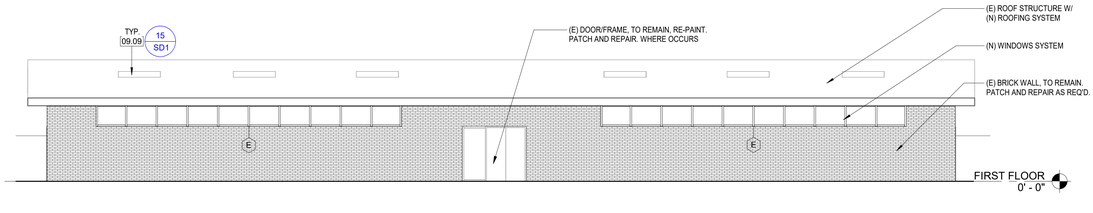
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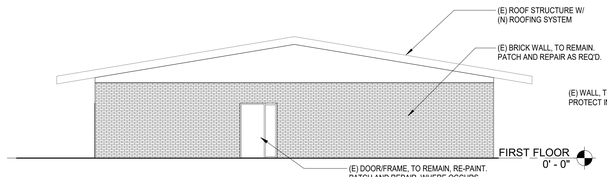



24A BLDG S-L - EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"

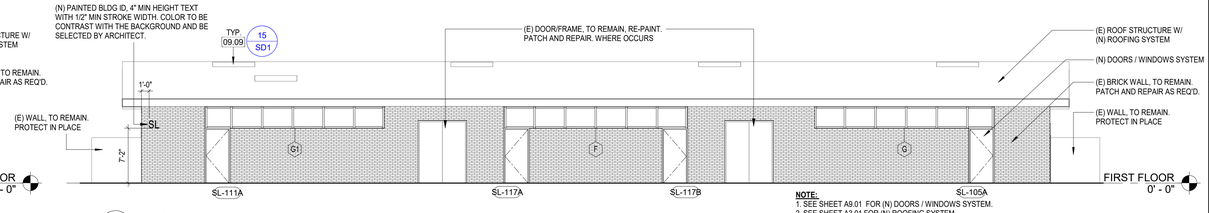



**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

24B BLDG S-L - EXTERIOR ELEVATION - EAST
1/8" = 1'-0"



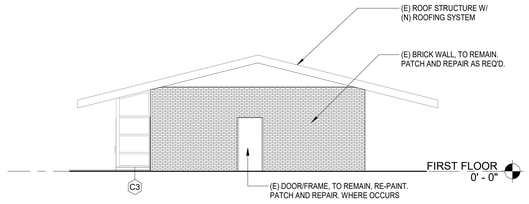

24C BLDG S-L - EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"



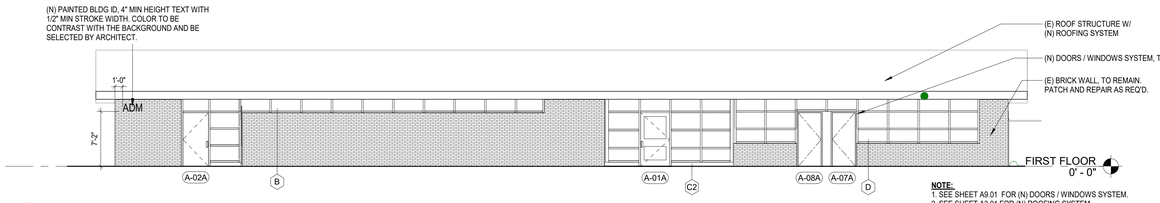

**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

24D BLDG S-L - EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

**24** SL BLDG - EXTERIOR ELEVATIONS
1/8" = 1'-0"

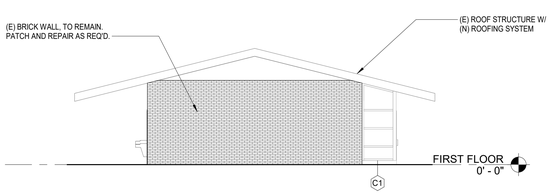



18A ADMIN BLDG - EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"

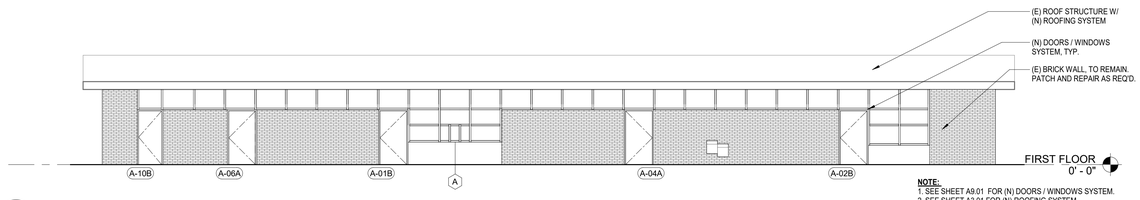



**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

18B ADMIN BLDG - EXTERIOR ELEVATION - EAST
1/8" = 1'-0"




18C ADMIN BLDG - EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"




**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

18D ADMIN BLDG - EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

**18** ADMIN BLDG - EXTERIOR ELEVATIONS
1/8" = 1'-0"

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 09.09 | INFILL (E) SKYLIGHT CAVITY WITH (N) FRAMING & ROOFING, SEE DETAIL CALLOUT |

## EXTERIOR PAINT SCOPE OF WORK

1. CONTRACTOR SHALL PAINT ALL EXTERIOR AND INTERIOR SURFACES OF ALL BUILDINGS INCLUDING PORTABLES PER SPECIFICATION, THIS WORK INCLUDES ALL FLASHING, FASCIA, PLASTER, LOUVER, DRYWALL, DOORS AND FRAMES WITH THE EXCEPTION OF BRICK SURFACES. MINIMUM OF 4 COLORS TO BE SELECTED BY THE ARCHITECTS.
2. CONTRACTOR SHALL PAINT ALL COLUMN AND BEAMS OF SOLAR SHADE STRUCTURE PER SPECIFICATION, EXCEPT GALVANIZED AND SOLAR PANEL SURFACES, MINIMUM OF 2 COLORS TO BE SELECTED BY ARCHITECT.
3. GENERAL CONTRACTOR TO NOTIFY AND DOCUMENT ANY AREAS WITH DRYROT AND / OR TERMITE DAMAGE IN VRIITTEN FORMAT PRIOR TO BID.
4. PROVIDE APPROPRIATE PREPARATION , CLEANING AND BASE MATERIAL AT EXISTING EXTERIOR FINISHES BEFORE RECEIVING NEW FINISHES. PER FINISH SPECIFICATION.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

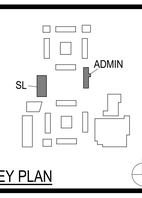
ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
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Architect

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REVISIONS

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| | | |

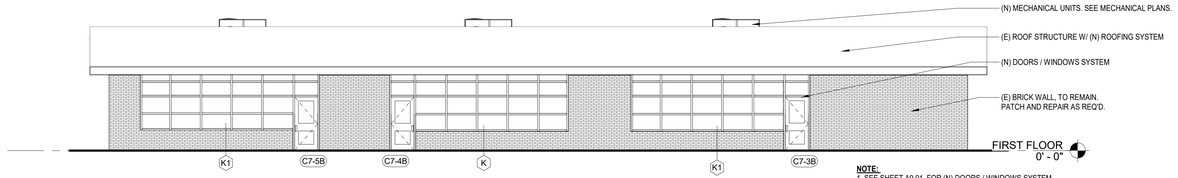
**DSA SUBMITTAL**

**EXTERIOR ELEVATIONS - ADMIN, SL BLDGS**

**A6.01**

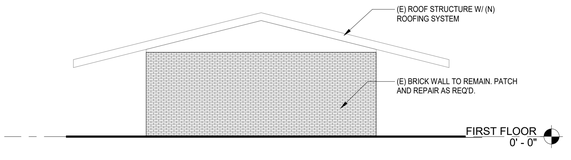
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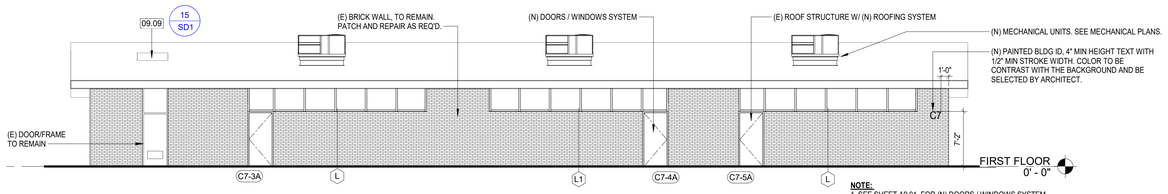



**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

24A BLDG C7 - EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"

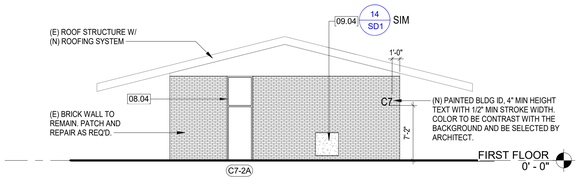



24B BLDG C7 - EXTERIOR ELEVATION - EAST
1/8" = 1'-0"



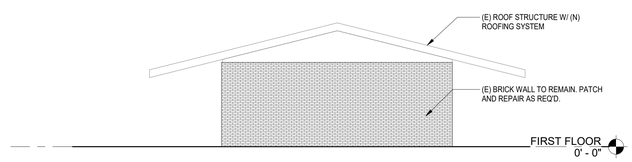

**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

24C BLDG C7 - EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"

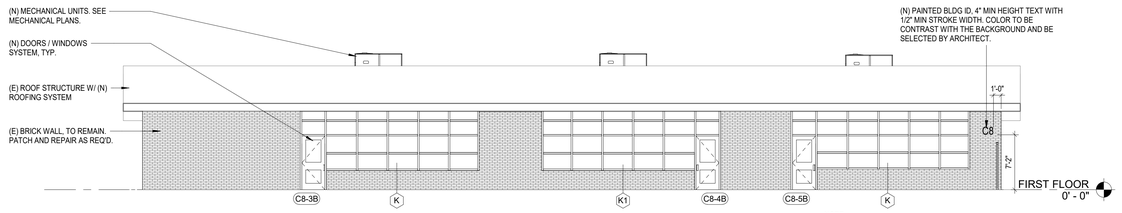



24D BLDG C7 - EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

## 24 BLDG C7 - EXTERIOR ELEVATIONS
1/8" = 1'-0"

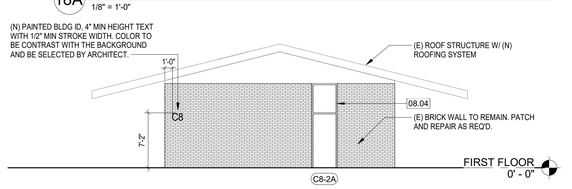



18A BLDG C8 - EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"

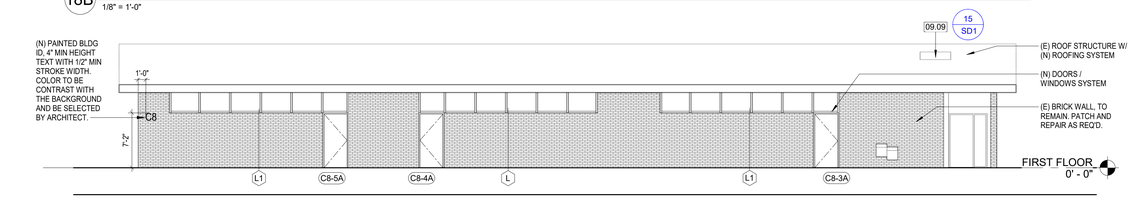



**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

18B BLDG C8 - EXTERIOR ELEVATION - EAST
1/8" = 1'-0"




18C BLDG C8 - EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"




**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

18D BLDG C8 - EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

## 18 BLDG C8 - EXTERIOR ELEVATIONS
1/8" = 1'-0"

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 08.04 | (N) INTEGRAL HOLLOW METAL DOOR FRAME WITH TRANSOM FRAME AND FIXED WINDOW ABOVE. FOR MORE INFORMATION, REFER TO DOOR & WINDOW SCHEDULES. |
| 09.04 | (N) PLASTER INFILL @ (E) DEMOLISHED DUCT/LOUVER CAVITY, SEE DETAIL CALLOUT |
| 09.09 | INFILL (E) SKYLIGHT CAVITY WITH (N) FRAMING & ROOFING, SEE DETAIL CALLOUT |

## EXTERIOR PAINT SCOPE OF WORK

1. CONTRACTOR SHALL PAINT ALL EXTERIOR AND INTERIOR SURFACES OF ALL BUILDINGS INCLUDING PORTABLES PER SPECIFICATION, THIS WORK INCLUDES ALL FLASHING, FASCIA, PLASTER, LOUVER, DRYWALL, DOORS AND FRAMES WITH THE EXCEPTION OF BRICK SURFACES. MINIMUM OF 4 COLORS TO BE SELECTED BY THE ARCHITECTS.
2. CONTRACTOR SHALL PAINT ALL COLUMN AND BEAMS OF SOLAR SHADE STRUCTURE PER SPECIFICATION, EXCEPT GALVANIZED AND SOLAR PANEL SURFACES, MINIMUM OF 2 COLORS TO BE SELECTED BY ARCHITECT.
3. GENERAL CONTRACTOR TO NOTIFY AND DOCUMENT ANY AREAS WITH DRYROT AND / OR TERMITE DAMAGE IN VRIITTEN FORMAT PRIOR TO BID.
4. PROVIDE APPROPRIATE PREPARATION , CLEANING AND BASE MATERIAL AT EXISTING EXTERIOR FINISHES BEFORE RECEIVING NEW FINISHES. PER FINISH SPECIFICATION.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK
ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST.
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

C7 C8
KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

**DSA SUBMITTAL**

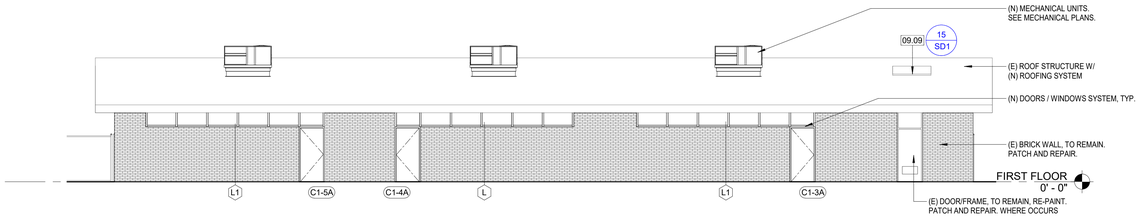
**EXTERIOR ELEVATIONS - C7, C8 BLDGS**

**A6.02**

**FILE PATH:** Z:\Projects\...
9/27/2023 4:05:44 PM

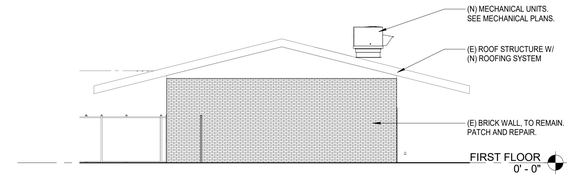
A6.03 - EXTERIOR ELEVATIONS - C1, C3, C5 BLDGS

0" 1"



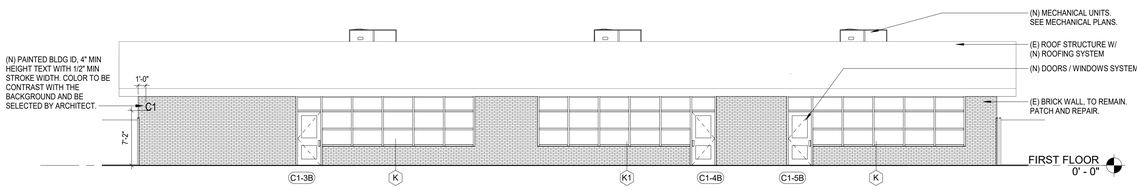

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

24A BLDG C1 - EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"



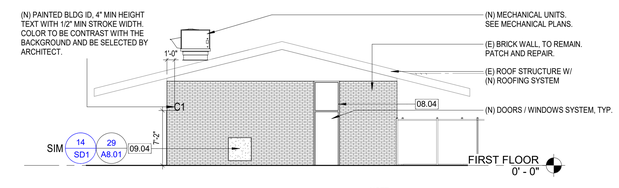

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

24B BLDG C1 - EXTERIOR ELEVATION - EAST
1/8" = 1'-0"




NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

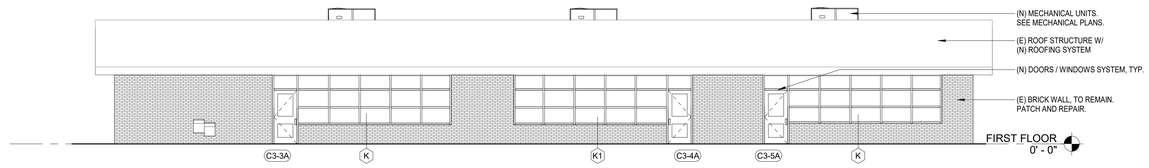
24C BLDG C1 - EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"




NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

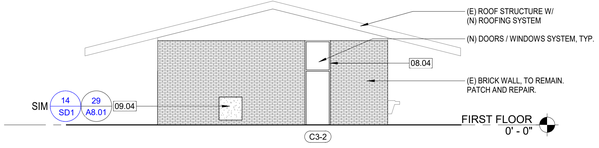
24D BLDG C1 - EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

## 24 BLDG C1 - EXTERIOR ELEVATIONS
1/8" = 1'-0"



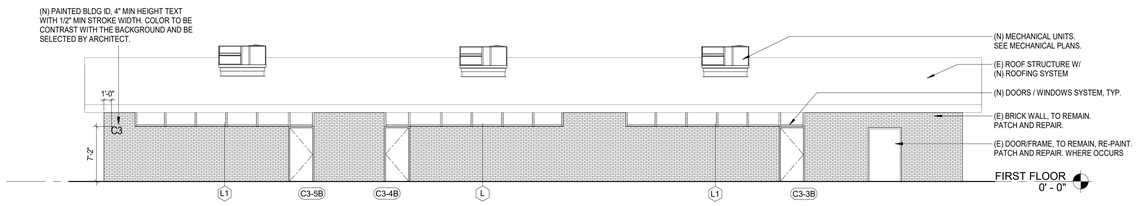

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

12A BLDG C3 - EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"



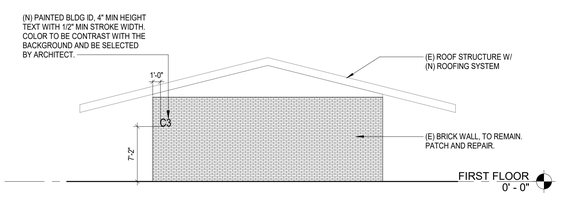

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

12B BLDG C3 - EXTERIOR ELEVATION - EAST
1/8" = 1'-0"




NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

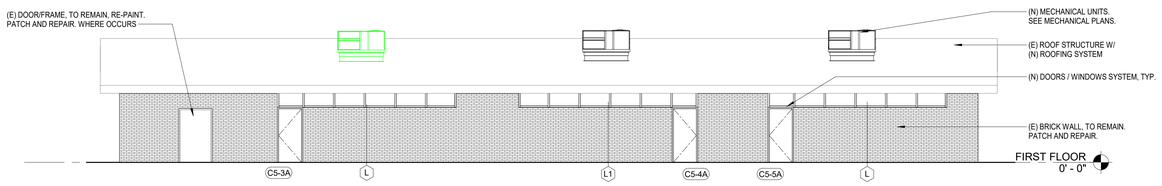
12C BLDG C3 - EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"




NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

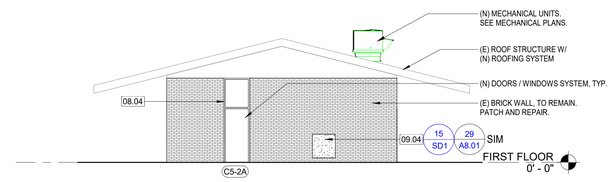
12D BLDG C3 - EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

## 12 BLDG C3 - EXTERIOR ELEVATIONS
1/8" = 1'-0"



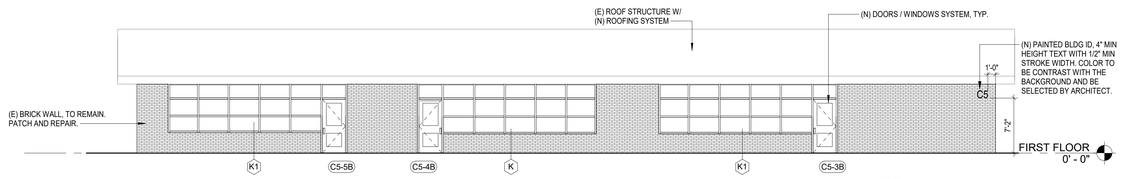

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

6A BLDG C5 - EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"



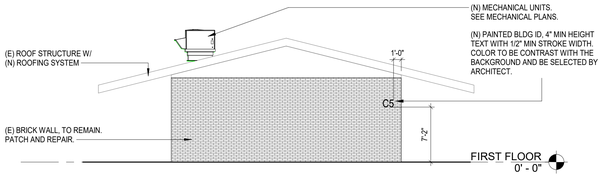

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

6B BLDG C5 - EXTERIOR ELEVATION - EAST
1/8" = 1'-0"




NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

6C BLDG C5 - EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"




NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

6D BLDG C5 - EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

## 6 BLDG C5 - EXTERIOR ELEVATIONS
1/8" = 1'-0"

## KEYNOTE LEGEND

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|---|---|
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| 09.04 | (N) PLASTER INFILL @ (E) DEMOLISHED DUCT/LOUVER CAVITY, SEE DETAIL CALLOUT |
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4. PROVIDE APPROPRIATE PREPARATION , CLEANING AND BASE MATERIAL AT EXISTING EXTERIOR FINISHES BEFORE RECEIVING NEW FINISHES. PER FINISH SPECIFICATION.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

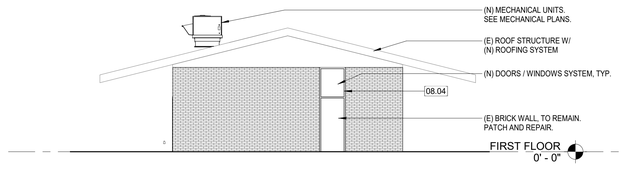
EXTERIOR ELEVATIONS - C1, C3, C5 BLDGS

A6.03

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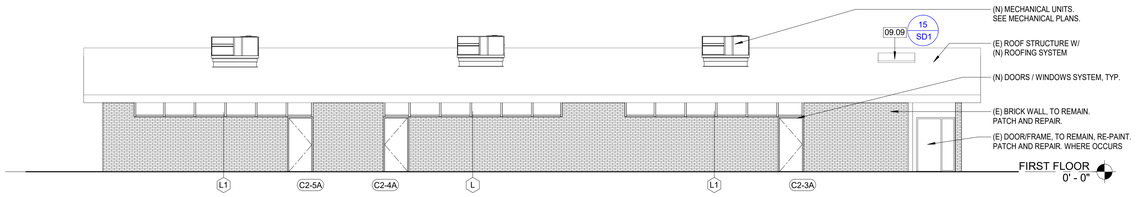
A6.04 - EXTERIOR ELEVATIONS - C2, C4, C6 BLDGS

0" 1"



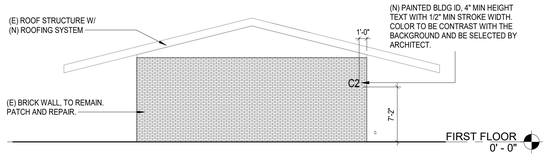

24A BLDG C2 - EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.



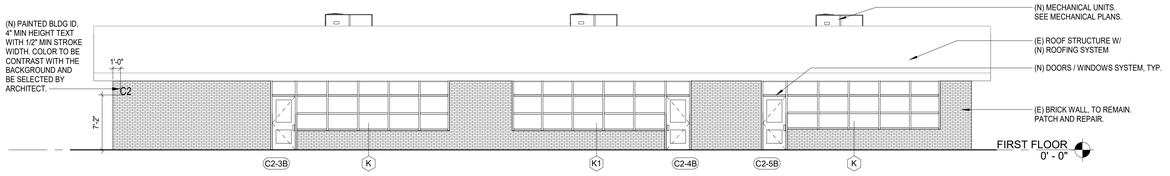

24B BLDG C2 - EXTERIOR ELEVATION - EAST
1/8" = 1'-0"

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.




24C BLDG C2 - EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"

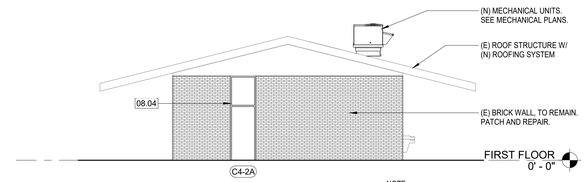
NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
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24D BLDG C2 - EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

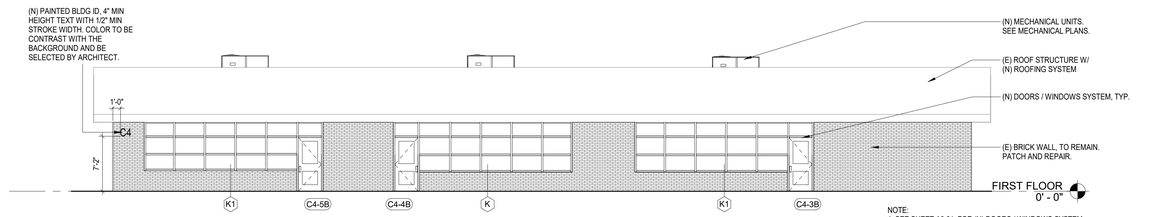
NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

## 24 BLDG C2 - EXTERIOR ELEVATIONS
1/8" = 1'-0"



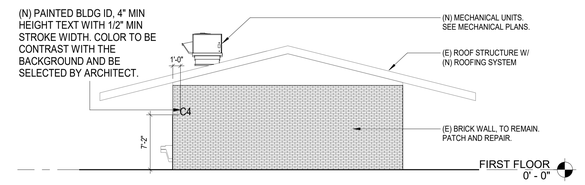

12A BLDG C4 - NORTH
1/8" = 1'-0"

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.



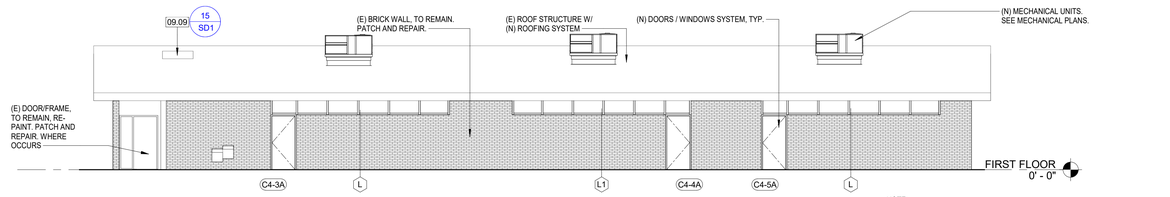

12B BLDG C4 - EAST
1/8" = 1'-0"

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.




12C BLDG C4 - SOUTH
1/8" = 1'-0"

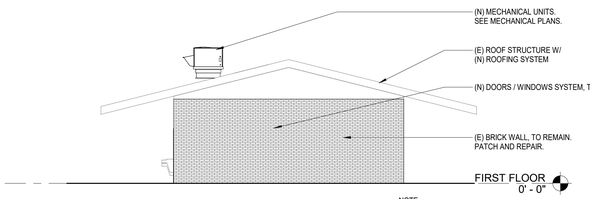
NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.




12D BLDG C4 - WEST
1/8" = 1'-0"

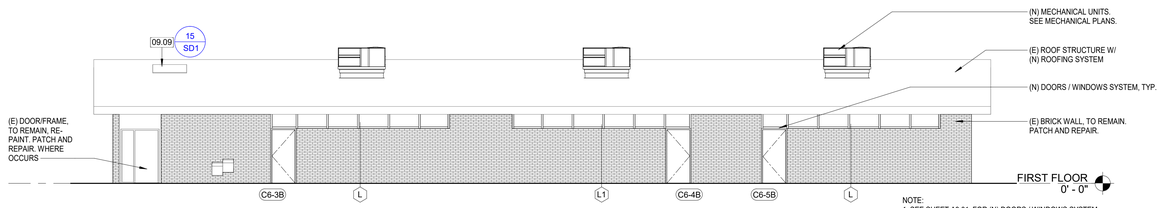
NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

## 12 BLDG C4 - EXTERIOR ELEVATIONS
1/8" = 1'-0"



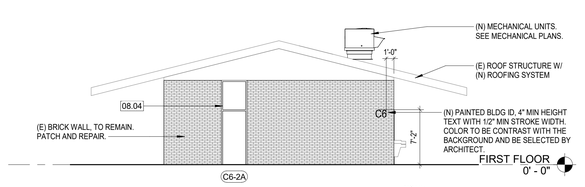

6A BLDG C6 - NORTH
1/8" = 1'-0"

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.



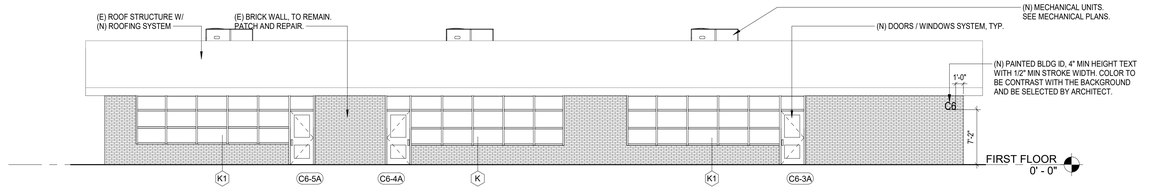

6B BLDG C6 - EAST
1/8" = 1'-0"

NOTE:
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2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.




6C BLDG C6 - SOUTH
1/8" = 1'-0"

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.




6D BLDG C6 - WEST
1/8" = 1'-0"

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

## 6 BLDG C6 - EXTERIOR ELEVATIONS
1/8" = 1'-0"

## KEYNOTE LEGEND

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|---|---|
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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43







KEY PLAN

Consultant

Architect




CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

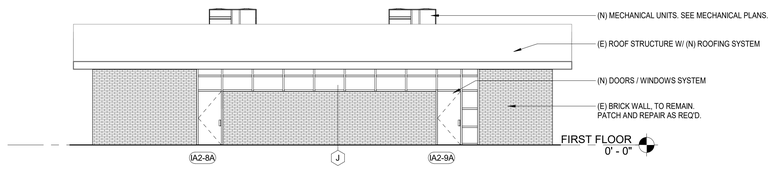
DSA SUBMITTAL

EXTERIOR ELEVATIONS - C2, C4, C6 BLDGS

A6.04

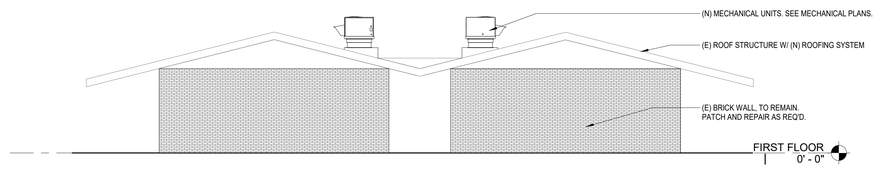
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0" 1"



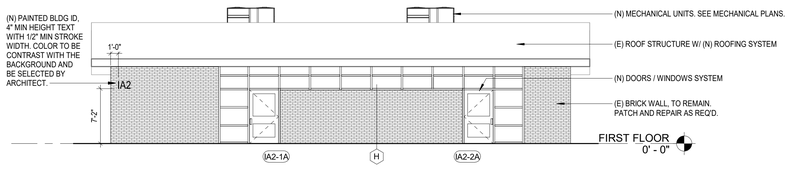

24A BLDG IA2 - EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"

**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.



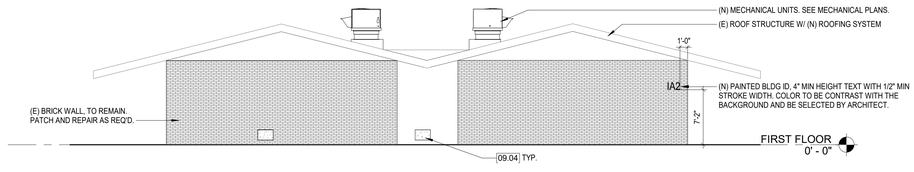

24B BLDG IA2 - EXTERIOR ELEVATION - EAST
1/8" = 1'-0"

**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.




24C BLDG IA2 - EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"

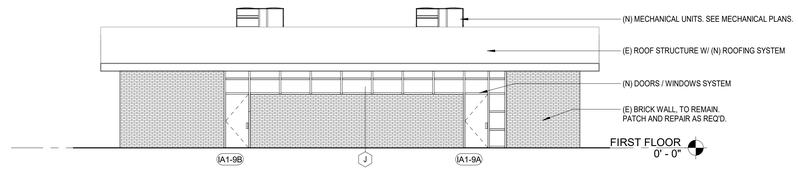
**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.




24D BLDG IA2 - EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

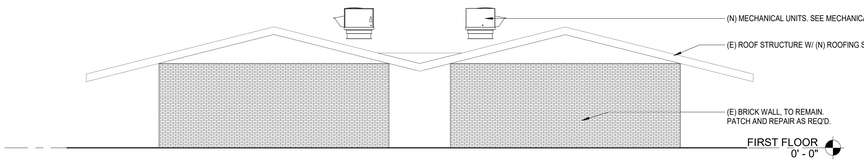
**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

## 24 BLDG IA2 - EXTERIOR ELEVATIONS
1/8" = 1'-0"



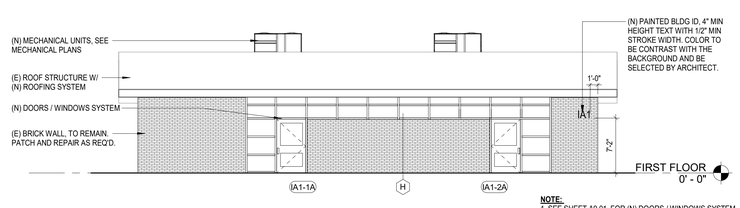

18A BLDG IA1 - EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"

**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.



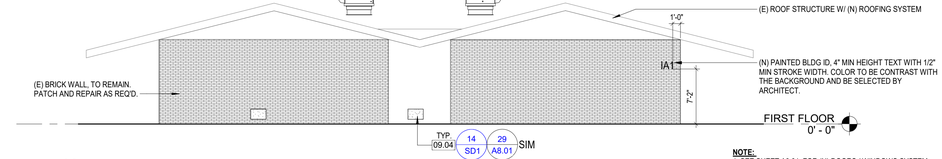

18B BLDG IA1 - EXTERIOR ELEVATION - EAST
1/8" = 1'-0"

**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.




18C BLDG IA1 - EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"

**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.




18D BLDG IA1 - EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

**NOTE:**
1. SEE SHEET A9.01 FOR (N) DOORS / WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

## 18 BLDG IA1 - EXTERIOR ELEVATIONS
1/8" = 1'-0"

## KEYNOTE LEGEND

| # | Description |
|---|---|
| 09.04 | (N) PLASTER INFILL @ (E) DEMOLISHED DUCT/LOUVER CAVITY, SEE DETAIL CALLOUT |

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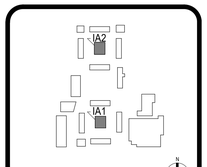
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DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

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**DSA SUBMITTAL**

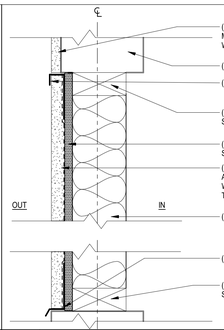
**EXTERIOR ELEVATIONS - IA1 & IA2 BLDGS**

**A6.05**

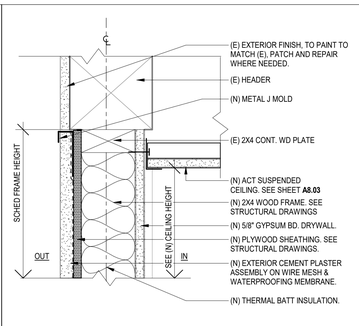
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A8.01 - DOORS, WINDOW FRAME DETAILS

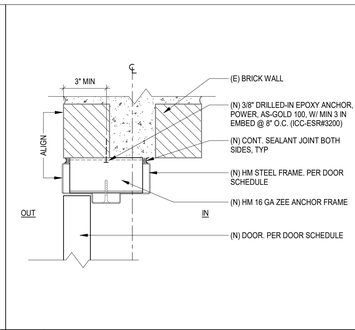
0" 1"




**29** WINDOW / LOUVER INFILL
3" = 1'-0"

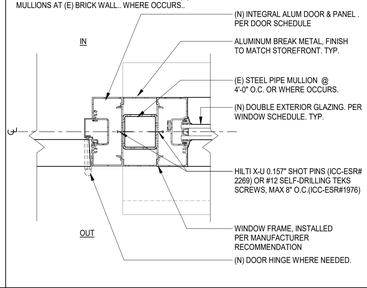



**28** WALL IN-FILL @ (E) HEADER BEAM
3" = 1'-0"



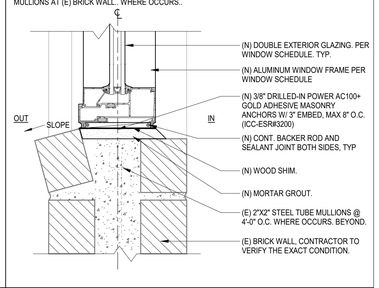

**27** DOOR JAMB/HEAD @ (E) BRICK
3" = 1'-0"

NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) BRICK WALL.. WHERE OCCURS..

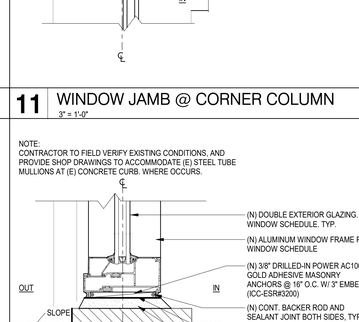



**26** WINDOW/DOOR JAMB @ (E) COLUMN
3" = 1'-0"

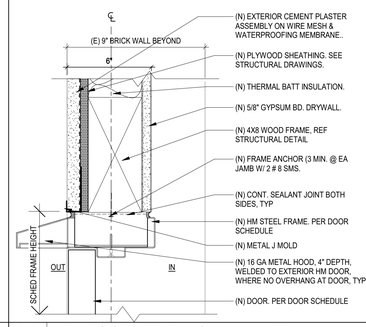
NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) BRICK WALL.. WHERE OCCURS..




**25** WINDOW SILL @ (E) BRICK WALL
3" = 1'-0"

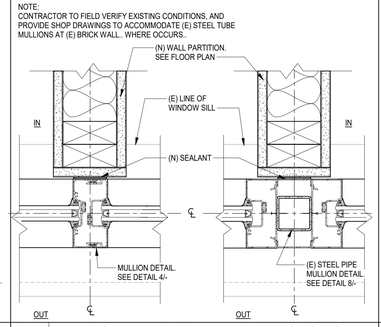



**23** WINDOW HEAD @ (E) BRICK
3" = 1'-0"

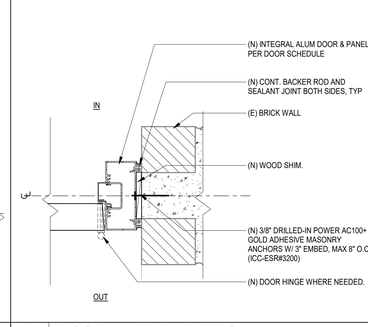



**22** HM DOOR HEAD W/ WALL IN-FILL
3" = 1'-0"

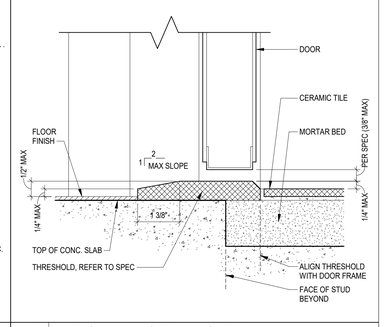
NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) BRICK WALL.. WHERE OCCURS..




**21** WINDOW JAMB @ WALL INTERSECTION
3" = 1'-0"

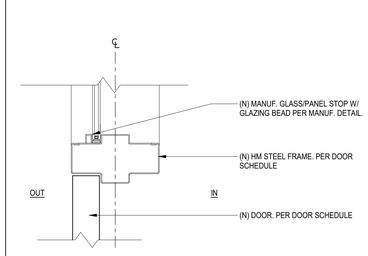



**20** DOOR JAMB @ (E) BRICK
3" = 1'-0"

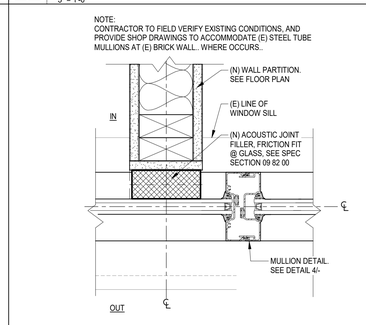



**19** INT SILL AT CERAMIC TILE
6" = 1'-0"

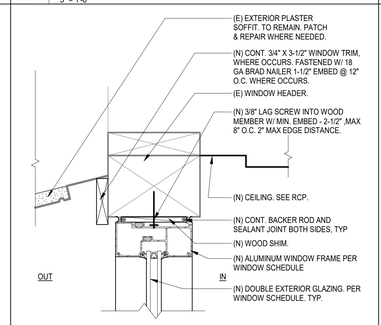
**NOTES:**
1. FRAME DEPTH TO BE DETERMINED BY OVERALL WALL THICKNESS (TYP.)



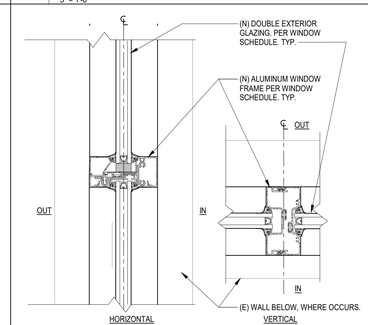

**17** HM DOOR HEAD @ TRANSOM
3" = 1'-0"



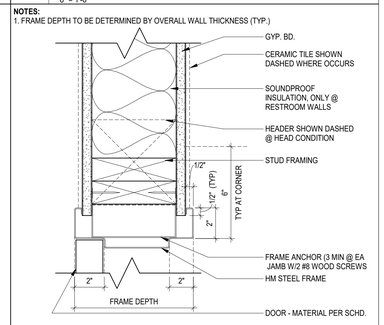

**16** GLAZING @ WALL INTERSECTION
3" = 1'-0"




**15** WINDOW HEAD @ (E) HEADER
3" = 1'-0"

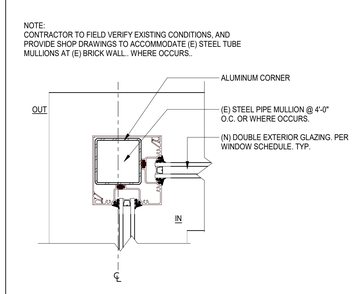



**14** WINDOW MULLION VERT/HORIZ
3" = 1'-0"

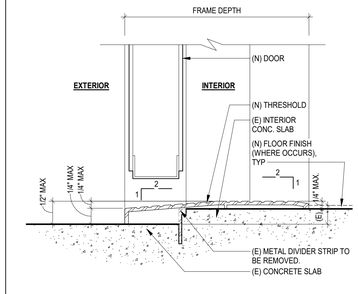



**13** DOOR JAMB / HEAD @ (N) WALL
3" = 1'-0"

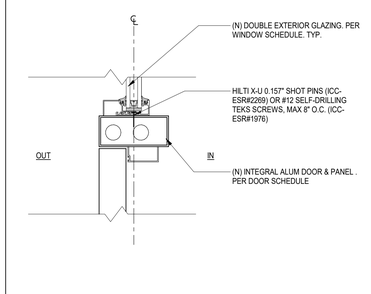
NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) BRICK WALL.. WHERE OCCURS..




**11** WINDOW JAMB @ CORNER COLUMN
3" = 1'-0"

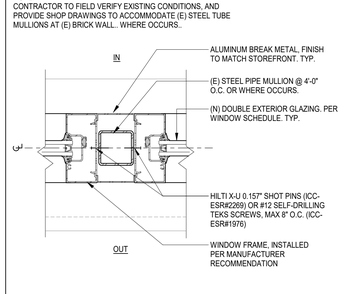



**10** EXT SILL DOOR THRESHOLD
6" = 1'-0"

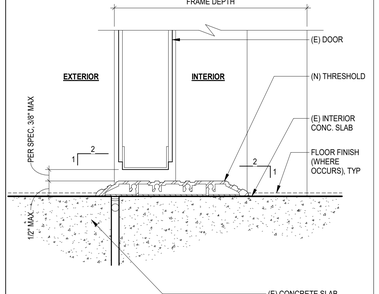



**9** WINDOW/DOOR INTEGRAL ALUM HEAD
3" = 1'-0"

NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) BRICK WALL.. WHERE OCCURS..

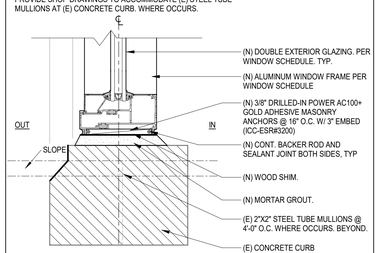



**8** WINDOW MULLION ATTACHMENT
3" = 1'-0"

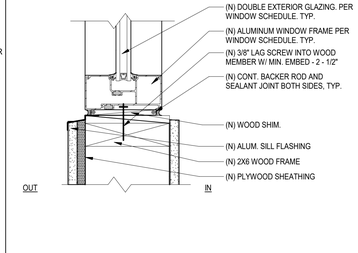



**7** EXT SILL @ (E) DOOR
6" = 1'-0"

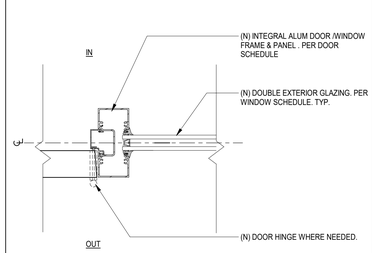
NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) CONCRETE CURB. WHERE OCCURS.



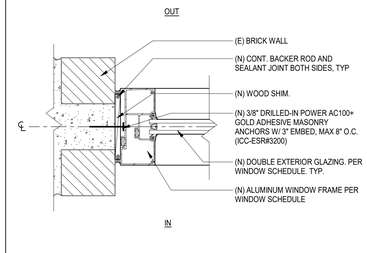

**5** WINDOW SILL @ (E) CONCRETE CURB
3" = 1'-0"



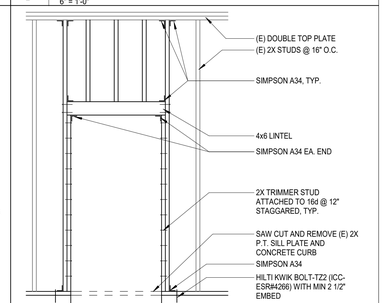

**4** WINDOW SILL@ (E) STUD WALL
3" = 1'-0"




**3** WINDOW/DOOR MULLION ATTACHMENT
3" = 1'-0"




**2** WINDOW JAMB @ BRICK WALL
3" = 1'-0"




**1** (N) DOOR OPENING
1/2" = 1'-0"

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Architect

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Tong Yoo
No. C-31162
REN. 10-31-2023
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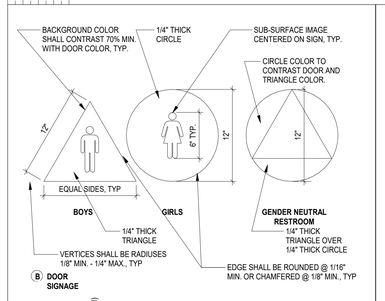
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|---|---|---|
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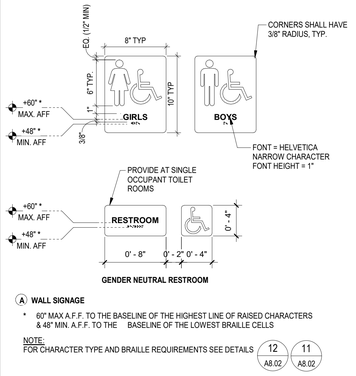
**DSA SUBMITTAL**

**DOORS, WINDOW FRAME DETAILS**

**A8.01**




**(B) DOOR SIGNAGE**

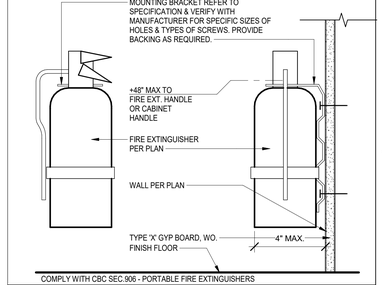



**(A) WALL SIGNAGE**

* 60" MAX A.F.F. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS & 48" MIN. A.F.F. TO THE BASELINE OF THE LOWEST BRAILLE CELLS

NOTE:
FOR CHARACTER TYPE AND BRAILLE REQUIREMENTS SEE DETAILS (12 A8.02) (11 A8.02)

## 24 RESTROOM DOOR & WALL SIGNS
1 1/2" = 1'-0"




## 18 WALL MOUNT FIRE EXTINGUISHER
3" = 1'-0"

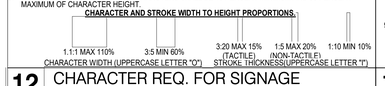
CHARACTER REQUIREMENTS:

**A. CHARACTER REQUIREMENTS FOR ALL SIGNS PER 2022 CBC 11B-703:**
1. CHARACTERS SHALL BE UPPERCASE.
2. CHARACTERS SHALL BE SANS SERIF. CHARTERS SHALL NOT BE ITALLIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.
3. CHARACTER SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I".
4. SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE CHARACTER HEIGHT.
5. TEXT SHALL BE IN HORIZONTAL FORMAT.
6. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH AND CONTRAST WITH ONE ANOTHER

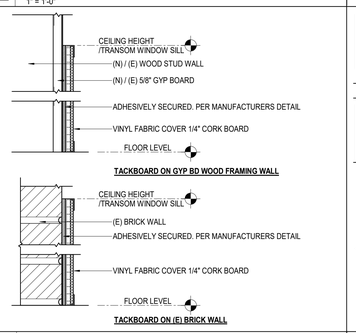
**B. RAISED CHARACTER REQUIREMENTS FOR SIGNS WITH BRAILLE PER 2022 CBC 11B-703.2:**
1. RAISED CHARACTERS SHALL COMPLY WITH REQUIREMENTS NOTED IN PARAGRAPH 'A' ABOVE
2. RAISED CHARACTERS SHALL BE 1/32 INCH MIN ABOVE BACKGROUND.
3. RAISED CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8 INCH MINIMUM AND 2 INCHES MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "I".
4. STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10 PERCENT MINIMUM AND 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.
5. CHARACTER SPACING BETWEEN INDIVIDUAL RAISED LETTERS SHALL BE 1/8 INCH MINIMUM AND FOUR (4) TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM.

**C. VISUAL CHARACTER REQUIREMENTS FOR SIGNS WITHOUT BRAILLE PER 2022 CBC 11B-703.5:**
1. VISUAL CHARACTERS SHALL COMPLY WITH REQUIREMENTS NOTED IN PARAGRAPH 'A' ABOVE
2. MINIMUM CHARACTER HEIGHT SHALL CONFORM TO 2022 CBC TABLE 11B-703.5.5 BUT IN NO CASE SHALL BE LESS THAN 5/8 INCH.
3. HEIGHT FROM FINISH FLOOR SHALL BE NO LESS THAN 40 INCHES.
4. STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10 PERCENT MINIMUM AND 20 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.
5. SPACING BETWEEN INDIVIDUAL CHARACTERS SHALL BE 10 PERCENT MINIMUM AND 35 PERCENT MAXIMUM OF CHARACTER HEIGHT.

**CHARACTER AND STROKE WIDTH TO HEIGHT PROPORTIONS**

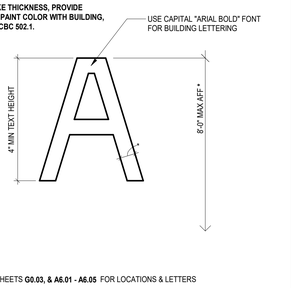



## 12 CHARACTER REQ. FOR SIGNAGE
1" = 1'-0"




## 6 TACKBOARD DETAIL
3" = 1'-0"

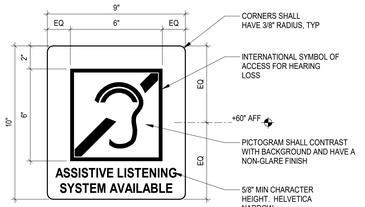
* **1/2" MIN STROKE THICKNESS, PROVIDE CONTRASTING PAINT COLOR WITH BUILDING, COMPLY WITH CBC 502.1.**




NOTE: REFER TO SHEETS **G0.03, & A6.01 - A6.05** FOR LOCATIONS & LETTERS

*101400.15-S* CBC 2022 Rev 7/23

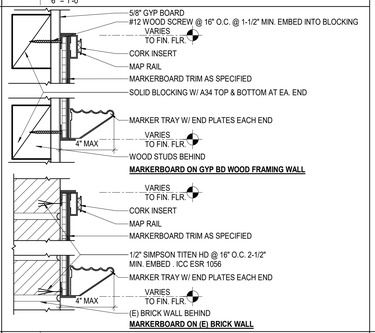
## 29 BUILDING IDENTIFICATION SIGN
6" = 1'-0"




NOTES:
1. SIGN MATERIAL SHALL BE 1/4" THICK PLASTIC W/ 1/32" RAISED LETTERS
2. MOUNT W/ VANDAL RESISTANT FASTENERS
3.COMPLY WITH VISUAL CHARACTERS PER CBC 1143A.5

*101400.13-S* CBC 2022 - Rev 7/23

## 23 ASSISTIVE LISTENING SIGNAGE
3" = 1'-0"

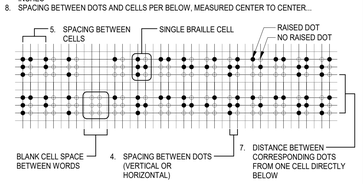



NOTES:
1. SIGN MATERIAL SHALL BE 1/4" THICK PLASTIC
2. MOUNT W/ VANDAL RESISTANT FASTENERS
3.COMPLY WITH VISUAL CHARACTERS PER CBC 1143A.5

*101400.14-S* CBC 2022 - Rev 7/23

## 17 OCCUPANT LOAD SIGN
3" = 1'-0"

**BRAILLE REQUIREMENTS PER 2022 CBC 11B-703.3:**
1. CONTRACTED CALIFORNIA GRADE 2 BRAILLE SHALL COMPLY WITH SECTIONS 11B-703.3 AND 11B-703.4
2. BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND COMPLY WITH TABLE 11B-703.3.1
3. DOT BASE DIAMETER = 0.059 TO 0.063 INCHES
4. DISTANCE BETWEEN TWO DOTS IN THE SAME CELL = 0.100 INCHES
5. DISTANCE BETWEEN CORRESPONDING DOTS IN ADJACENT CELLS = 0.300 INCHES
6. DOT HEIGHT = 0.025 TO 0.037 INCHES
7. DISTANCE BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW = 0.395 TO 0.400 INCHES
8. SPACING BETWEEN DOTS AND CELLS PER BELOW, MEASURED CENTER TO CENTER...




9. BRAILE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8" (9.5MM) MIN. AND 1/2 INCH (12.7MM) MAXIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8" MIN. FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

## 11 BRAILLE STANDARDS FOR SIGNAGE
6" = 1'-0"




## 5 MARKERBOARD DETAIL
3" = 1'-0"

* **MORTAR BED** TO BE USED IN MULTI - OCCUPANT RESTROOMS
**THIN - SET** TO BE USED IN SINGLE - OCCUPANT RESTROOMS




* 60" MAX A.F.F. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS & 48" MIN. A.F.F. TO THE BASELINE OF THE LOWEST BRAILLE CELLS

*101400.11-S* CBC 2022- Rev 09/19

## 28 RESTROOM SIGNAGE
1/2" = 1'-0"




*101400.04-S* CBC 2022 - Rev 7/23

## 22 TYP. ROOM ID SIGN
6" = 1'-0"




* 60" MAX A.F.F. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS & 48" MIN. A.F.F. TO THE BASELINE OF THE LOWEST BRAILLE CELLS

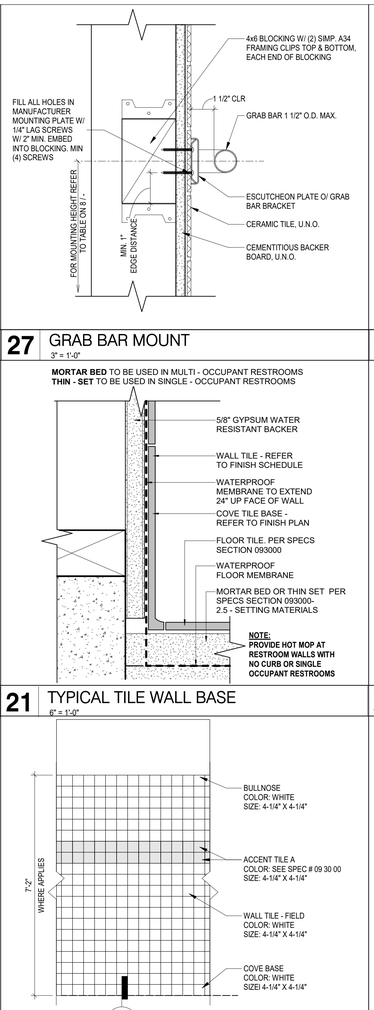
*101400.12-S* CBC 2022 - Rev 7/23

## 16 TACTILE EXIT SIGNS
3" = 1'-0"

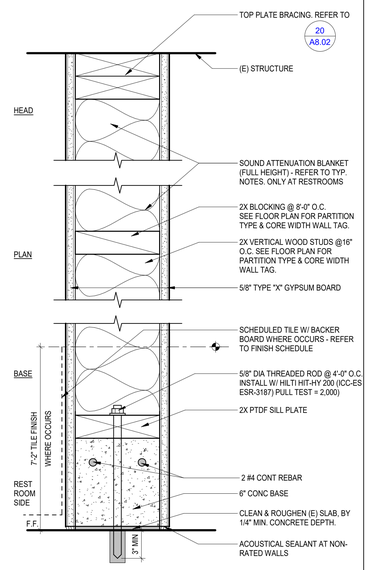



NOTE:
SEE WOOD FRAMING AT STRUCTURAL DWGS SN1

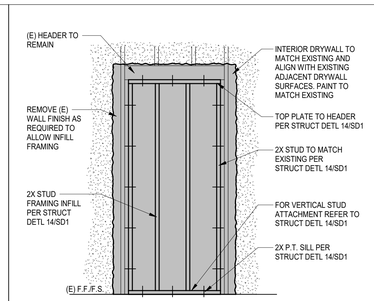
## 4 D - TYPE WALL FURRING TO WINDOW SILL
3" = 1'-0"



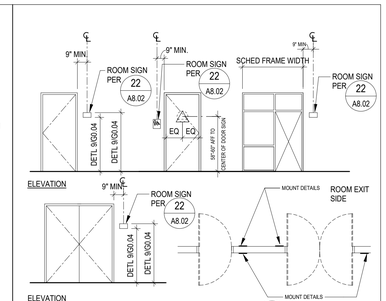

## 15 TILE FINISH ELEVATION
1/2" = 1'-0"



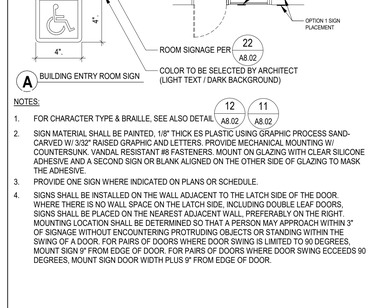

## 3 C - PARTITION TYPE
3" = 1'-0"



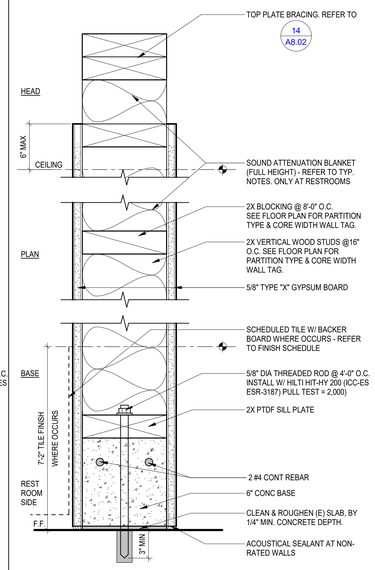

## 27 GRAB BAR MOUNT
3" = 1'-0"



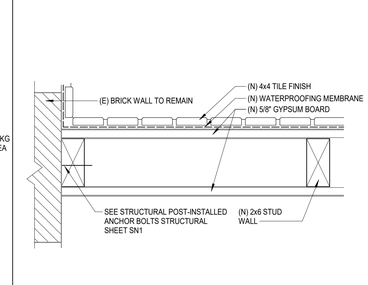

## 26 DOOR INFILL DETAIL
1/2" = 1'-0"



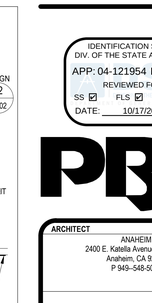

## 14 TOP CONNECTION - BRACING
1 1/2" = 1'-0"




## 2 B - PARTITION TYPE
3" = 1'-0"

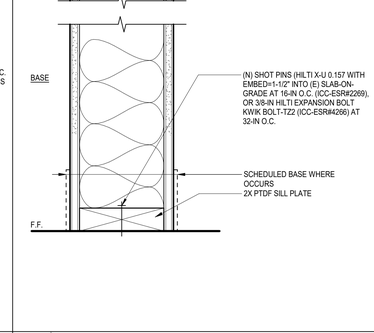



## 20 TOP CONNECTION - PERPENDICULAR
1 1/2" = 1'-0"

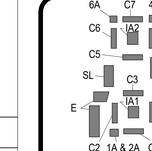



NOTES:
1. FOR CHARACTER TYPE & BRAILLE. SEE ALSO DETAIL (12 A8.02) (11 A8.02)
2. SIGN MATERIAL SHALL BE PAINTED, 1/8" THICK ES PLASTIC USING GRAPHIC PROCESS SAND-CARVED W/ 3/32" RAISED GRAPHIC AND LETTERS. PROVIDE MECHANICAL MOUNTING W/ COUNTERSUNK, VANDAL RESISTANT #8 FASTENERS. MOUNT ON GLAZING WITH CLEAR SILICONE ADHESIVE AND A SECOND SIGN OR BLANK ALIGNED ON THE OTHER SIDE OF GLAZING TO MASK THE ADHESIVE.
3. PROVIDE ONE SIGN WHERE INDICATED ON PLANS OR SCHEDULE.
4. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR. FOR PAIRS OF DOORS WHERE DOOR SWING IS LIMITED TO 90 DEGREES, MOUNT SIGN 9" FROM EDGE OF DOOR. FOR PAIRS OF DOORS WHERE DOOR SWING EXCEEDS 90 DEGREES, MOUNT SIGN DOOR WIDTH PLUS 9" FROM EDGE OF DOOR.

## 19 ROOM IDENTIFICATION SIGNAGE
1 1/2" = 1'-0"




## 13 (N) WALL TO (E) BRICK WALL
3" = 1'-0"




PBK

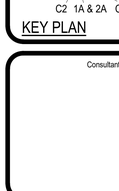
ARCHITECT PBK Architects, Inc. PBK.com
ANAHEIM
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect




CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

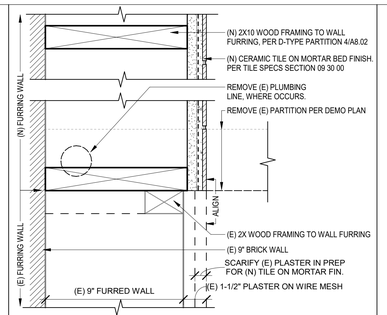
**DSA SUBMITTAL**

**PARTITION TYPES AND MISC. DETAILS**

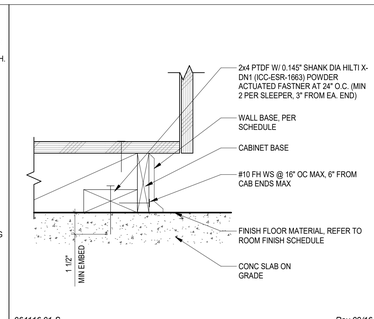
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0" 1"

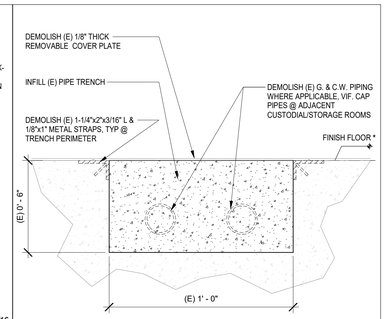



## 27 FURRED WAINSCOT DETAIL
3" = 1'-0"



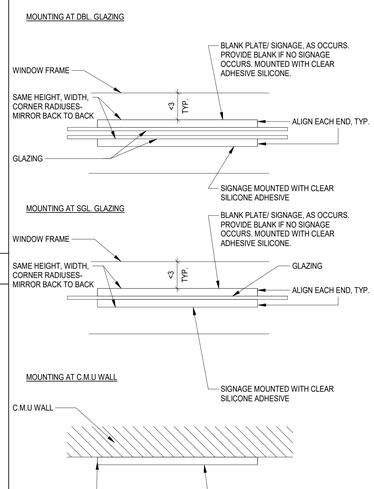

064116.01-S Rev 09/16

## 26 CABINET ANCHORAGE - KICK
3" = 1'-0"

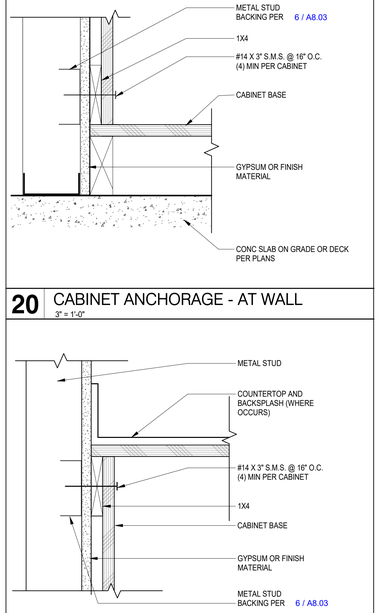



## 25 (E) PIPE TRENCH DEMO DETAIL
3" = 1'-0"

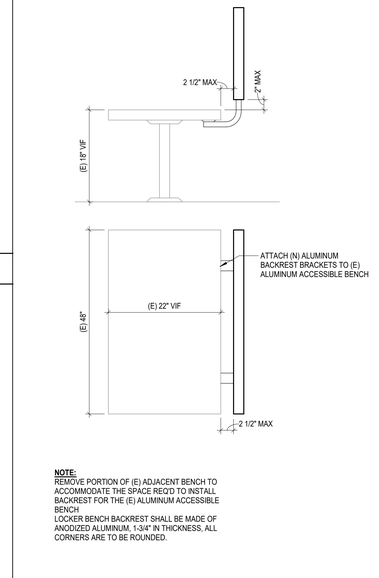
NOTE:
PROVIDE SPACES AS NEEDED SO SIGNAGE IS WITHIN 3" OF WINDOW FRAME




## 20 CABINET ANCHORAGE - AT WALL
3" = 1'-0"

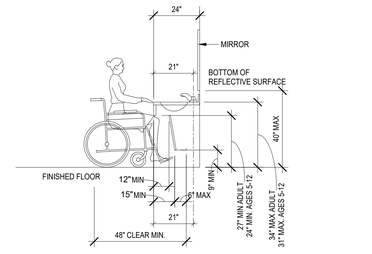



## 8 CABINET ANCHORAGE - INTERM.
3" = 1'-0"




**NOTE:**
REMOVE PORTION OF (E) ADJACENT BENCH TO ACCOMMODATE THE SPACE REQ'D TO INSTALL BACKREST FOR THE (E) ALUMINUM ACCESSIBLE BENCH.
LOCKER BENCH BACKREST SHALL BE MADE OF ANODIZED ALUMINUM, 1-3/4" IN THICKNESS, ALL CORNERS ARE TO BE ROUNDED.

## 13 (N) ACCESSIBLE LOCKER ROOM BENCH
1" = 1'-0"




NOTE:
1. COMPLY WITH CBC 11B-306 - KNEE & TOE CLEARANCE
2. COMPLY WITH CBC 11B-308.2 - FORWARD REACH

## 16 TYP ACCESSIBLE SINK CLEARANCES
3/8" = 1'-0"



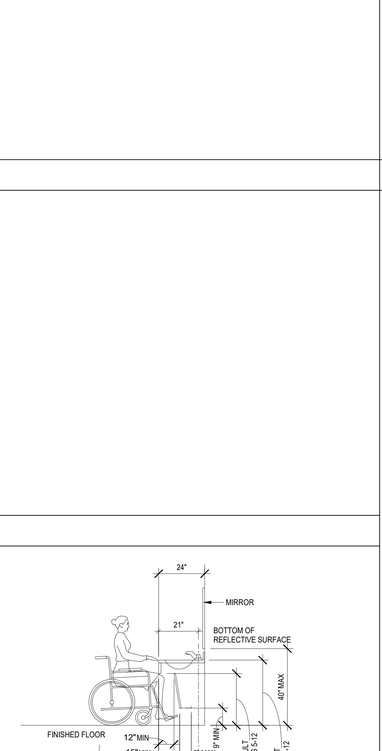

## 15 ROOM IDENTIFICATION SIGN MOUNTING
3" = 1'-0"




## 14 CABINET ANCHORAGE - TOP
3" = 1'-0"




## 11 ADA COUNTER WORK SPACE
1" = 1'-0"




NON-BEARING WALL

## 10 (E) WALL TO (N) WALL "T" CONNECTION
1 1/2" = 1'-0"




**NOTE:**
UNDERSIDE OF SINK AND PIPES MUST CONFORM TO REQ'D KNEE CLEARANCES PER CBC 11B-306.3.

ALSO REFER TO 16 / A8.03

## 9 TYP COUNTER WITH SINK
1" = 1'-0"




## 1 BASE & UPPER CABINET, TYP
1" = 1'-0"

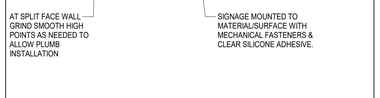



## 6 CASEWORK BACKING @ MTL STUD WALL
3" = 1'-0"




**NOTE:**
UNDERSIDE OF SINK AND PIPES MUST CONFORM TO REQ'D KNEE CLEARANCES PER CBC 11B-306.3. SEE DETAIL 9 / A8.03

## 5 MOUNTING @ TYPICAL LAVATORIES
1/2" = 1'-0"




## 4 GRAB BAR ANCHORS TO TOILET PARTITIONS
6" = 1'-0"




## 3 COUNTER EDGES
6" = 1'-0"




## 2 COUNTER SUPPORT
1 1/2" = 1'-0"

064116.10-S Rev 04/17

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

6A C7 4A & 3A
C6 IA2 C8
C5 ADMIN
SL C3 C4 MPR
E IA1
C2 1A & 2A C1 G
KEY PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

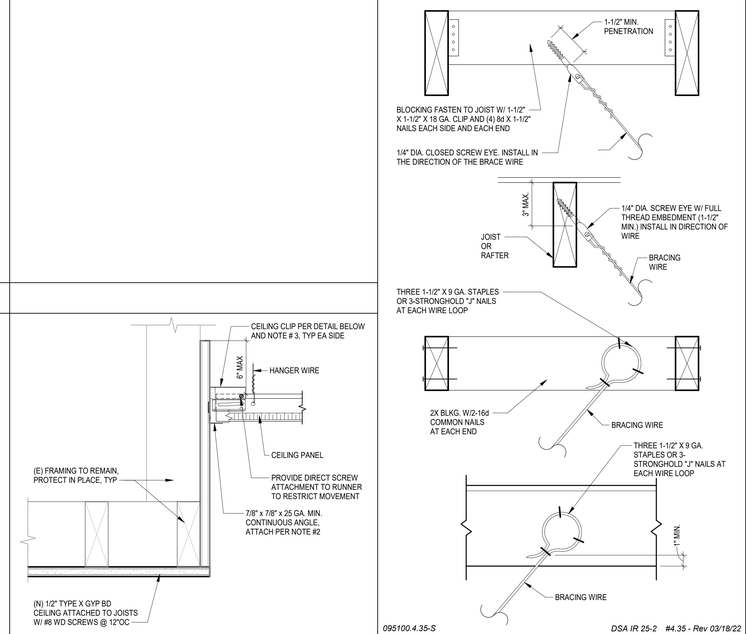
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DSA SUBMITTAL

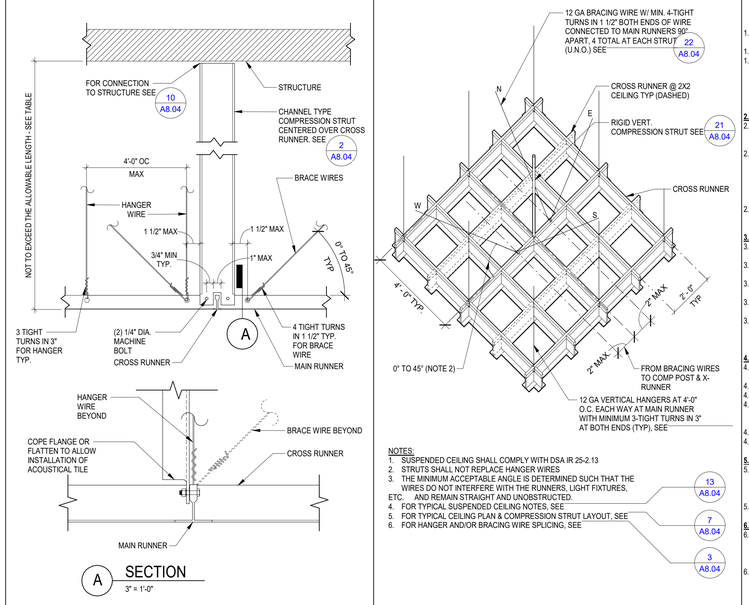
MISCELLANEOUS DETAILS

A8.03

0" 1"




095100.4.35-S DSA IR 25-2 #4.35 - Rev 03/18/22




095100.3.10-S DSA IR 25-2.13 #3.10 - Rev 03/18/22




NOTES:
1. SUSPENDED CEILING SHALL COMPLY WITH DSA IR 25-2.13
2. STRUTS SHALL NOT REPLACE HANGER WIRES
3. THE MINIMUM ACCEPTABLE ANGLE IS DETERMINED SUCH THAT THE WIRES DO NOT INTERFERE WITH THE RUNNERS, LIGHT FIXTURES, ETC. AND REMAIN STRAIGHT AND UNOBSTRUCTED.
4. FOR TYPICAL SUSPENDED CEILING NOTES, SEE 13 A8.04
5. FOR TYPICAL CEILING PLAN & COMPRESSION STRUT LAYOUT, SEE 7 A8.04
6. FOR HANGER AND/OR BRACING WIRE SPLICING, SEE 3 A8.04

095100.2.35-S DSA IR 25-2 #2.35 - Rev 03/18/22

**1. CEILING SYSTEM GENERAL NOTES: PER IR 25-2 REV 3/18/22**

1.01 CEILING SYSTEM COMPONENTS SHALL COMPLY WITH ASTM C635-07 AND SECTION 5.1 OF ASTM E580-10a.
1.02 THE CEILING GRID SYSTEM MUST BE RATED HEAVY DUTY AS DEFINED BY ASTM C635-08.
1.03 CEILING SYSTEMS. THE FOLLOWING CEILING SYSTEM(S) IS/ARE PART OF THE SCOPE OF THIS PROJECT:
MANUFACTURER'S NAME ARMSTRONG WORLD INDUSTRIES, INC.
PRODUCT EVALUATION REPORT TYPE AND NUMBER ICC ESR-1308
MANUFACTURER'S MODEL NUMBER - MAIN RUNNER ARMSTRONG HEAVY DUTY PRELUDE XL 7301
MANUFACTURER'S CATALOG NUMBER - CROSS RUNNER ARMSTRONG XL7328
1.04 SEISMIC WALL CLIP:
MANUFACTURER'S MODEL BERC2
1.05 CEILING PANELS SHALL NOT SUPPORT ANY LIGHT FIXTURES, AIR TERMINALS OR DEVICES.
1.06 FOR CEILING INSTALLATIONS UTILIZING ACOUSTICAL TILE PANELS OF MINERAL OR GLASS FIBER, IT IS NOT MANDATORY TO PROVIDE 3/4" 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 3/4" 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 (GALVINIZED) CARBON STEEL CONFORMING TO ASTM A641-09a. WIRE SHALL BE #12 GAGE (0.106" DIAMETER) WITH SOFT TEMPER AND MINIMUM TENSILE STRENGTH = 70 KSI.
2.02 GALVANIZED SHEET STEEL (INCLUDING THAT USED FOR METAL STUD AND TRACK COMPRESSION STRUT/POST) SHALL CONFORM TO ASTM A653-11, OR OTHER EQUIVALENT SHEET STEEL LISTED IN SECTION A2.1 OF THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS 2007, INCLUDING SUPPLEMENT 2 DATED 2010 (AISI S100-07/S2-10). MATERIAL 43 MIL (18 GAGE) AND LIGHTER SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI. MATERIAL 54 MIL (16 GAGE) 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 SIX (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, ETC.)

**4. FASTENERS AND WELDING:**

4.01 SHEET METAL SCREWS SHALL COMPLY WITH ASTM C1513-10, ASME B18.6.4-89 (R2005). PENETRATION OF SCREWS THROUGH JOINED MATERIAL SHALL NOT BE LESS THAN THREE EXPOSED THREADS.
4.02 EXPANSION ANCHORS SHALL BE: NA
4.03 POWER-ACTUATED FASTENERS SHALL BE: NA
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 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 ANCHOR.

**5. TESTING:** ALL FIELD TESTING MUST BE PERFORMED IN THE PRESENCE OF THE PROJECT INSPECTOR.

5.01 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 LBS. IN TENSION. ALL OTHER POST-INSTALLED ANCHORS IN CONCRETE SHALL BE TESTED IN ACCORDANCE WITH CBC SECTION 1913A.7.
5.02 POST-INSTALLED ANCHORS IN CONCRETE USED TO ATTACH BRACING WIRES SHALL BE TESTED AT A FREQUENCY OF 50 PERCENT IN ACCORDANCE WITH CBC SECTION 1913A.7.

**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 FIXTURE. A MINIMUM OF TWO SCREWS OR APPROVED FASTENERS ARE REQUIRED AT EACH LUMINAIRES, 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 GAGE. ROTATIONAL SPRING CATCHES DO NOT COMPLY. A #12 GAGE SLACK SAFETY WIRE SHALL BE CONNECTED FROM EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE EIGHT (8) FEET OR LONGER OR EXCEED 56 LB. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED EIGHT (8) FEET.
6.03 LUMINAIRES WEIGHING LESS THAN OR EQUAL TO 10 LB. SHALL HAVE A MINIMUM OF ONE (1) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.
6.04 LUMINAIRES WEIGHING GREATER THAN 10 LB. BUT LESS THAN OR EQUAL TO 56 LBS. MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, BUT THEY SHALL HAVE A MINIMUM OF TWO (2) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS TO THE STRUCTURE ABOVE.
EXCEPTION: ALL LUMINAIRES GREATER THAN TWO BY FOUR FEET WEIGHING LESS THAN 56LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE AT EACH CORNER.
6.05 ALL LUMINAIRES WEIGHING GREATER THAN 56 LB. SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR (4) TAUT #12 GAGE HANGER WIRES (ONE AT EACH CORNER) ATTACHED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS. THE FOUR (4) TAUT #12 GAGE WIRES OR OTHER APPROVED HANGERS, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, SHALL BE CAPABLE OF SUPPORTING FOUR (4) 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 LB. SHALL HAVE ONE (1) #12 GAGE 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 LB. BUT LESS THAN OR EQUAL TO 56 LB. SHALL HAVE TWO (2) #12 GAGE 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 LB. SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY NOT LESS THAN FOUR (4) TAUT #12 GAGE 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 LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE ANCHORED TO THE STRUCTURE ABOVE. DEVICES WEIGHING MORE THAN 20 LB. SHALL BE SUPPORTED INDEPENDENTLY FROM THE STRUCTURE ABOVE.

095100.1.00-S DSA IR 25-2 #1.00-1.03 - Rev 03/18/22

## 23 SOFFIT ELEVATION TRANSITION
3" = 1'-0"




## 17 SOFFIT CEILING SYSTEM
3" = 1'-0"

## 22 BRACING WIRE TO WOOD
3" = 1'-0"




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.

095100.5.60-S DSA IR 25-2 #5.60 - Rev 03/18/22

## 21 COMPRESSION STRUT - CHANNEL
1 1/2" = 1'-0"




NOTE:
(1) WHEN FIRE RATED GYP. BOARD IS INSTALLED ON THE BOTTOM FLANGES, USE SCREW EYES W/ SUFFICIENT LENGTH TO AVOID DAMAGING THE FIRE RATED GYP. BOARD AND MEET MIN. PENETRATION.

095100.4.25-S DSA IR 25-2 #4.25 - Rev 03/18/22

## 20 SUSPENDED CEILING SYSTEM
3/8" = 1'-0"




095100.1.00-S DSA IR 25-2 #1.00-1.03 - Rev 03/18/22

## 11 SLOPED CEILING
6" = 1'-0"

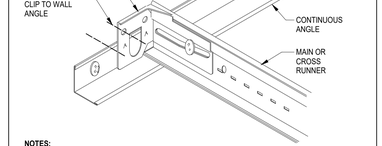



NOTES:
1. SEE DETAIL 8/- FOR SUSPENDED CEILING PERIMETER JOINTS.
2. SEE DETAIL 8/- NOTE # 4 FOR SLOPED CEILING REQUIREMENTS.
3. TYP. CEILING PLAN PER 7/-.
4. SEE RCP SKETCH FOR TYPICAL PMHDC LOCATIONS

## 10 STRUT TO WOOD FRAMING
1" = 1'-0"

## 9 HANGER WIRE TO WOOD
3" = 1'-0"

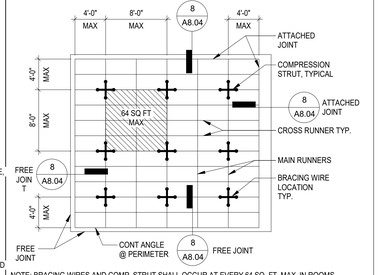
## 8 SUSPENDED CEILING PERIMETER JOINTS
6" = 1'-0"




NOTES:
1. PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (8) INCHES OF THE SUPPORT OF WITHIN ONE-FORTH (1/4) OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS, FOR THE PERIMETER OF THE CEILING AREA. PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS EIGHT (8) INCHES OR LESS.
2. AT METAL STUD FRAMING: (1) #10 SMS TO 20 GA. MIN. WALL STUD @ 24" O.C. AT WOOD STUD FRAMING: (1) #10 WOOD SCREW TO 2X MIN. WALL STUD @ 24" O.C.
3. CEILING CLIP: ARMSTRONG BERC2 CLIP, OR EQUAL
4. SLOPED CEILING: USE ACCEPTABLE SUSPENSION SYSTEM & ACCESSORIES. WALL ANGLE ARE PAINTED AND WALL SHIMMED TO ACHIEVE THE CORRECT ANGLE. 7/8" WALL ANGLE ITEM 7800 SHOULD BE USED. PER MANUFACTURERS RECOMMENDATION.

095100.2.60-S DSA IR 25-2 #2.60 - Rev 03/18/22

## 13 SUSPENDED CEILING NOTES
1/2" = 1'-0"




NOTE: BRACING WIRES AND COMP. STRUT SHALL OCCUR AT EVERY 64 SQ. FT. MAX. IN ROOMS OVER 144 SQ. FT.

095100.2.10-S DSA IR 25-2 #2.10 - Rev 03/18/22

## 7 TYP CEILING PLAN
1/8" = 1'-0"

## 5 GYP. BD. WALL / CEILING
3" = 1'-0"




## 4 ACCESS PANEL
3" = 1'-0"




095000.12-S

## 3 CEILING WIRE SPLICES
6" = 1'-0"




NOTES:
WIRE SPLICES ARE SHOWN LOOSELY TIED FOR ILLUSTRATIVE PURPOSES ONLY AND SHALL BE DRAWN TIGHT TO COMPLETE INSTALLATION WHEN CONSTRUCTED.

095100.6.10-S DSA IR 25-2 #6.10 - Rev 03/18/22

## 2 COMPRESSION STRUT TABLE
1/2" = 1'-0"

| EMT COMPRESSION STRUT | MAXIMUM LENGTH |
|---|---|
| 1/2" DIAMETER EMT (0.042" WALL THICKNESS) | 3'-10" |
| 3/4" DIAMETER EMT (0.049" WALL THICKNESS) | 6'-4" |
| 1" DIAMETER EMT (0.057" WALL THICKNESS) | 9'-9" |
| 1 1/4" DIAMETER EMT (0.065" WALL THICKNESS) | 12'-9" |
| 1 1/2" DIAMETER EMT (0.065" WALL THICKNESS) | 14'-9" |
| 2" DIAMETER EMT (0.065" WALL THICKNESS) | 18'-10" |

| CHANNEL COMPRESSION STRUT | MAXIMUM LENGTH |
|---|---|
| 250S125-33 | 5'-10" |
| 250S137-33 | 6'-10" |
| 362S137-33 | 8'-0" |
| 250137-43 | 8'-10" |
| 400S137-43 | 10'-10" |

095100.3.21-S DSA IR 25-2 #3.21 - Rev 03/18/22

## 1 SUSPENDED LIGHT FIXT./AIR TERMINALS
3" = 1'-0"




095100.2.80-S DSA IR 25-2 #2.80 - Rev 03/18/22

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc. PBK.com
ANAHEIM
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

C7
C6 IA2 C8
C5 ADMIN
SL C3 C4
IA1
C2 C1
N
KEY PLAN

Consultant

Architect
LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2024 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 03/31/23
PROJECT NUMBER 220526

REVISIONS

| No. | Description | Date |
|---|---|---|

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CEILING DETAILS

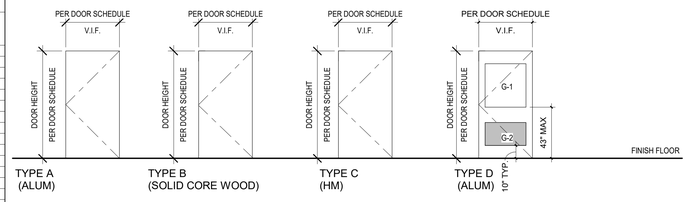
A8.04

A9.01 - DOOR SCHEDULE

0" 1"

# DOOR SCHEDULE

| DOOR # | ROOM NAME | BUILDING NAME | DOOR TYPE | PAIR/SINGLE | DOOR SIZE W x H WIDTH | DOOR SIZE W x H HEIGHT | MATL | FINISH | FRAME TYPE | FRAME MATL | FRAME FINISH | DETAILS SILL | DETAILS JAMB | DETAILS HEAD | HARDWARE | FIRE RATING | PANIC HARDWARE | ACCESSIBLE SECURITY LOCKING HARDWARE | EXISTING TO REMAIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A-01A | A-01 | BLDG ADMIN | D | SINGLE | 3' - 9 1/2" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 26/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| A-01B | A-01 | BLDG ADMIN | A | SINGLE | 3' - 6" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| A-02A | A-02 | BLDG ADMIN | A | SINGLE | 3' - 4" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| A-02B | A-02 | BLDG ADMIN | A | SINGLE | 3' - 6" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| A-04A | A-04 | BLDG ADMIN | A | SINGLE | 3' - 6" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| A-04B | A-04 | BLDG ADMIN | A | SINGLE | 2' - 10" | 7' - 0" | WOOD | | 1 | HM | | | | | 5 | | Yes | Yes | YES |
| A-04C | A-04 | BLDG ADMIN | A | SINGLE | 2' - 10" | 7' - 0" | WOOD | | 1 | HM | | | | | 5 | | Yes | No | YES |
| A-06A | A-06 | BLDG ADMIN | A | SINGLE | 3' - 6" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 2 | | Yes | Yes | NO |
| A-06B | A-06 | BLDG ADMIN | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | PT | 2 | HM | PT | 19/A8.01 | 13/A8.01 | 13/8.01 | 3 | | No | Yes | NO |
| A-07A | A-07 | BLDG ADMIN | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 2 | | Yes | Yes | NO |
| A-07B | A-07 | BLDG ADMIN | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | PT | 2 | HM | PT | 19/A8.01 | 13/A8.01 | 13/8.01 | 4 | | No | Yes | NO |
| A-08A | A-08 | BLDG ADMIN | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 2 | | Yes | Yes | NO |
| A-08B | A-08 | BLDG ADMIN | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | PT | 2 | HM | PT | 19/A8.01 | 13/A8.01 | 13/8.01 | 4 | | No | Yes | NO |
| A-10A | A-10 | BLDG ADMIN | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | | | HM | PT | | | | | | Yes | Yes | YES |
| A-10B | A-10 | BLDG ADMIN | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | PT | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 2 | | Yes | Yes | NO |
| A-12 | A-12 | BLDG ADMIN | A | SINGLE | 2' - 2" | 7' - 0" | WOOD | PT | 2 | HM | | 19/A8.01 | 13/A8.01 | 13/8.01 | 5 | | No | No | NO |
| A-13 | A-13 | BLDG ADMIN | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | PT | 2 | HM | PT | 19/A8.01 | 13/A8.01 | 13/8.01 | 6 | | No | No | NO |
| A-16 | A-16 | BLDG ADMIN | A | SINGLE | 2' - 10" | 7' - 0" | WOOD | | 2 | HM | | | | | 5 | | Yes | No | YES |
| A-18 | A-18 | BLDG ADMIN | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | PT | 2 | HM | PT | 19/A8.01 | 13/A8.01 | 13/8.01 | 7 | | No | No | NO |
| A-19 | A-19 | BLDG ADMIN | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | PT | 2 | HM | PT | 19/A8.01 | 13/A8.01 | 13/8.01 | 7 | | No | No | NO |
| C1-2A | C1-2 | BLDG C1 | C | SINGLE | 3' - 0" | 7' - 0" | HM | PT | 3 | HM | PT | 7/A8.01 | 27/A8.01 | 17/A8.01 | 8 | | No | No | NO |
| C1-2B | C1-2 | BLDG C1 | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | Yes | YES |
| C1-3A | C1-3 | BLDG C1 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C1-3B | C1-3 | BLDG C1 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C1-4A | C1-4 | BLDG C1 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C1-4B | C1-4 | BLDG C1 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C1-5A | C1-5 | BLDG C1 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C1-5B | C1-5 | BLDG C1 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C2-1 | C2-1 | BLDG C2 | | | 3' - 0" | 6' - 10" | WOOD | | | HM | | | | | | | | No | YES |
| C2-2A | C2-2 | BLDG C2 | C | SINGLE | 3' - 0" | 7' - 0" | HM | PT | 3 | HM | PT | 7/A8.01 | 27/A8.01 | 17/A8.01 | 8 | | No | No | NO |
| C2-2B | C2-2 | BLDG C2 | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | Yes | YES |
| C2-2C | C2-2 | BLDG C2 | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | | | HM | PT | | | | | | No | Yes | YES |
| C2-3A | C2-3 | BLDG C2 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C2-3B | C2-3 | BLDG C2 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C2-4A | C2-4 | BLDG C2 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C2-4B | C2-4 | BLDG C2 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C2-5A | C2-5 | BLDG C2 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | PT | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C2-5B | C2-5 | BLDG C2 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C3-2 | C3-2 | BLDG C3 | C | SINGLE | 3' - 0" | 7' - 0" | HM | PT | 3 | HM | PT | 7/A8.01 | 27/A8.01 | 17/A8.01 | 8 | | No | No | NO |
| C3-3A | C3-3 | BLDG C3 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C3-3B | C3-3 | BLDG C3 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C3-4A | C3-4 | BLDG C3 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C3-4B | C3-4 | BLDG C3 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C3-5A | C3-5 | BLDG C3 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C3-5B | C3-5 | BLDG C3 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C4-1 | C4-1 | BLDG C4 | | | 3' - 0" | 6' - 10" | WOOD | | | HM | | | | | | | | No | YES |
| C4-2A | C4-2 | BLDG C4 | C | SINGLE | 3' - 0" | 7' - 0" | HM | PT | 3 | HM | PT | 7/A8.01 | 27/A8.01 | 17/A8.01 | 8 | | No | No | NO |
| C4-2B | C4-2 | BLDG C4 | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | Yes | YES |
| C4-3A | C4-3 | BLDG C4 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C4-3B | C4-3 | BLDG C4 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C4-4A | C4-4 | BLDG C4 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C4-4B | C4-4 | BLDG C4 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C4-5A | C4-5 | BLDG C4 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C4-5B | C4-5 | BLDG C4 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C5-2A | C5-2 | BLDG C5 | C | SINGLE | 3' - 0" | 7' - 0" | HM | PT | 3 | HM | PT | 7/A8.01 | 27/A8.01 | 17/A8.01 | 8 | | No | No | NO |
| C5-2B | C5-2 | BLDG C5 | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | Yes, No Closer | YES |
| C5-3A | C5-3 | BLDG C5 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C5-3B | C5-3 | BLDG C5 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C5-4A | C5-4 | BLDG C5 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C5-4B | C5-4 | BLDG C5 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C5-5A | C5-5 | BLDG C5 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C5-5B | C5-5 | BLDG C5 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C6-2A | C6-2 | BLDG C6 | C | SINGLE | 3' - 0" | 7' - 0" | HM | PT | 3 | HM | PT | 7/A8.01 | 27/A8.01 | 17/A8.01 | 8 | | No | No | NO |
| C6-2B | C6-2 | BLDG C6 | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | Yes | YES |
| C6-3A | C6-3 | BLDG C6 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C6-3B | C6-3 | BLDG C6 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C6-4A | C6-4 | BLDG C6 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C6-4B | C6-4 | BLDG C6 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C6-5A | C6-5 | BLDG C6 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C6-5B | C6-5 | BLDG C6 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C7-1 | C7-1 | BLDG C7 | | | 3' - 0" | 6' - 10" | WOOD | | | HM | | | | | | | | No | YES |
| C7-2A | C7-2 | BLDG C7 | C | SINGLE | 3' - 0" | 7' - 0" | HM | PT | 3 | HM | PT | 7/A8.01 | 27/A8.01 | 17/A8.01 | 8 | | No | No | NO |
| C7-2B | C7-2 | BLDG C7 | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | Yes | YES |
| C7-3A | C7-3 | BLDG C7 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C7-3B | C7-3 | BLDG C7 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C7-4A | C7-4 | BLDG C7 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C7-4B | C7-4 | BLDG C7 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C7-5A | C7-5 | BLDG C7 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C7-5B | C7-5 | BLDG C7 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C8-1 | C8-1 | BLDG C8 | | | 3' - 0" | 6' - 10" | WOOD | | | HM | | | | | | | | No | YES |
| C8-2A | C8-2 | BLDG C8 | C | SINGLE | 3' - 0" | 7' - 0" | HM | PT | 3 | HM | PT | 7/A8.01 | 27/A8.01 | 17/A8.01 | 8 | | No | No | NO |
| C8-2B | C8-2 | BLDG C8 | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | Yes | YES |
| C8-3A | C8-3 | BLDG C8 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C8-3B | C8-3 | BLDG C8 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C8-4A | C8-4 | BLDG C8 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C8-4B | C8-4 | BLDG C8 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| C8-5A | C8-5 | BLDG C8 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| C8-5B | C8-5 | BLDG C8 | D | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | No | Yes | NO |
| IA1-1A | IA1-1 | BLDG IA1 | A | SINGLE | 3' - 9 1/2" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| IA1-2A | IA1-2 | BLDG IA1 | A | SINGLE | 3' - 9 1/2" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| IA1-9A | IA1-9 | BLDG IA1 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| IA1-9B | IA1-9 | BLDG IA1 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| IA2-1A | IA2-1 | BLDG IA2 | A | SINGLE | 3' - 9 1/2" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| IA2-2A | IA2-2 | BLDG IA2 | A | SINGLE | 3' - 9 1/2" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| IA2-8A | IA2-8 | BLDG IA2 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| IA2-9A | IA2-9 | BLDG IA2 | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 1 | | Yes | Yes | NO |
| SL-103 | SL-103 | BLDG SL | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | PT | 2 | HM | PT | 19/A8.01 | 13/A8.01 | 13/8.01 | 3 | | No | Yes | NO |
| SL-104 | SL-104 | BLDG SL | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | PT | 2 | HM | PT | 19/A8.01 | 13/A8.01 | 13/8.01 | 9 | | No | No | NO |
| SL-104.1 | SL-104.1 | BLDG SL | - | - | 6' - 7 3/4" | 7' - 1 1/4" | - | - | - | - | - | 19/A8.01 | - | - | - | | | CASED OPENING | NO |
| SL-105A | SL-105 | BLDG SL | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 10 | | No | No | NO |
| SL-105B | SL-105 | BLDG SL | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | Yes | YES |
| SL-106A | SL-106 | BLDG SL | | PAIR | 6' - 0" | 8' - 0" | WOOD | | 2 | HM | PT | | | | | | Yes | Yes | YES |
| SL-106B | SL-106 | BLDG SL | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | | | HM | PT | | | | | | Yes | Yes | YES |
| SL-107 | SL-107 | BLDG SL | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | No | YES |
| SL-108 | SL-108 | BLDG SL | | | 5' - 0" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | No | YES |
| SL-109 | SL-109 | BLDG SL | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | No | YES |
| SL-110A | SL-110 | BLDG SL | | PAIR | 6' - 0" | 8' - 0" | WOOD | | 2 | HM | PT | | | | | | Yes | Yes | YES |
| SL-110B | SL-110 | BLDG SL | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | | | HM | PT | | | | | | Yes | Yes | YES |
| SL-111A | SL-111 | BLDG SL | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 10 | | No | No | NO |
| SL-111B | SL-111 | BLDG SL | | | 2' - 10" | 7' - 0" | WOOD | | | HM | | | | | | | Yes | No | YES |
| SL-112 | SL-112 | BLDG SL | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | PT | 2 | HM | PT | 19/A8.01 | 13/A8.01 | 13/8.01 | 9 | | No | No | NO |
| SL-112.1 | SL-112.1 | BLDG SL | - | - | 6' - 4 7/8" | 7' - 1 1/4" | - | - | - | - | - | 19/A8.01 | - | - | - | | | CASED OPENING | NO |
| SL-115 | SL-115 | BLDG SL | B | SINGLE | 3' - 0" | 7' - 0" | SC/WD | PT | 2 | HM | PT | 19/A8.01 | 13/A8.01 | 13/8.01 | 3 | | No | Yes | NO |
| SL-117A | SL-117 | BLDG SL | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 10 | | No | No | NO |
| SL-117B | SL-117 | BLDG SL | A | SINGLE | 3' - 0" | 7' - 0" | ALUM | AC | 1 | ALUM | AC | 7/A8.01 | 20/A8.01 | 9/A8.01 | 10 | | No | No | NO |




TYPE A (ALUM) TYPE B (SOLID CORE WOOD) TYPE C (HM) TYPE D (ALUM)

**NOTE:**

ALL (E) DOORS TO REMAIN @ ROOMS WITH MORE THAN 5 OCCUPANTS, SHALL RECEIVE (N) DOOR HARDWARE WHICH ALLOWS FOR LOCKING FROM THE INSIDE.

## DOOR & WINDOW SCHEDULE ABBREVIATIONS

| | |
|---|---|
| ALUM | ALUMINUM |
| AC | ANODIZED CLEAR |
| FF | FACTORY FINISH |
| HM | HOLLOW METAL |
| N/A | NOT APPLICABLE |
| PT | PAINT |
| SC | SOLID CORE |
| WD | WOOD |

**NOTE:**

G-1 = TG (TEMPERED GLASS)
G-2 = TG/TINT (TEMPERED GLASS/TINTED GLASS)

GLASS COLOR TO BE VERIFIED BY THE DISTRICT

## 27 DOOR TYPE LEGEND

1/4" = 1'-0"




TYPE 1 (ALUM) TYPE 2 (HM) TYPE 3 (HM)

## 22 FRAME TYPE LEGEND

1/4" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc. PBK.com
ANAHEIM
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

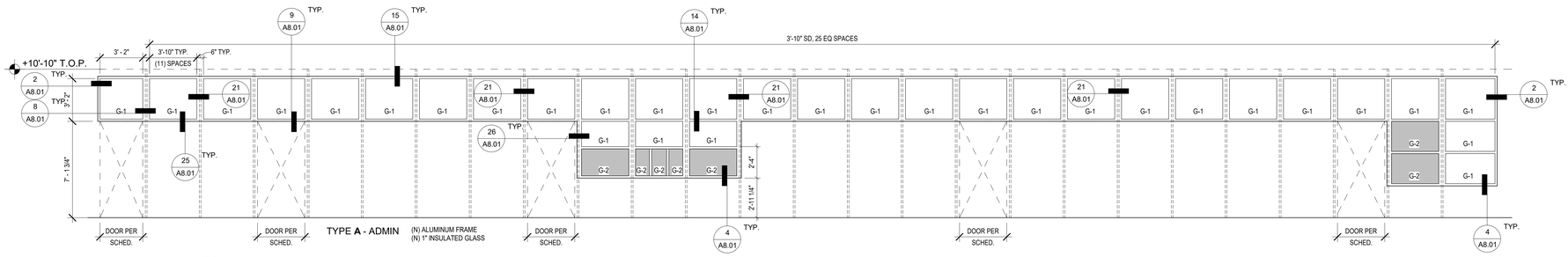
DOOR SCHEDULE

A9.01

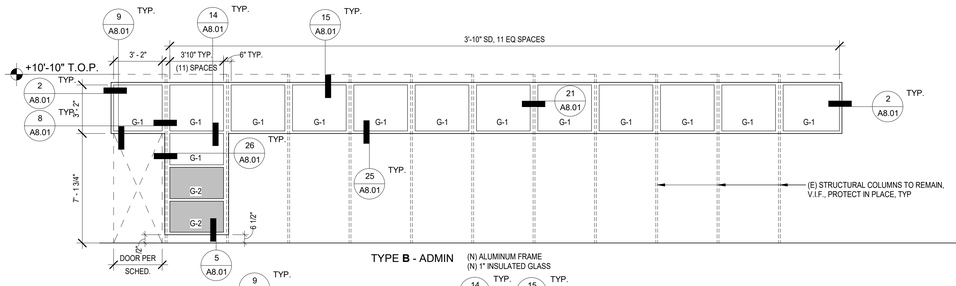
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9/27/2023 4:06:07 PM

A9.02 - WINDOW SCHEDULE

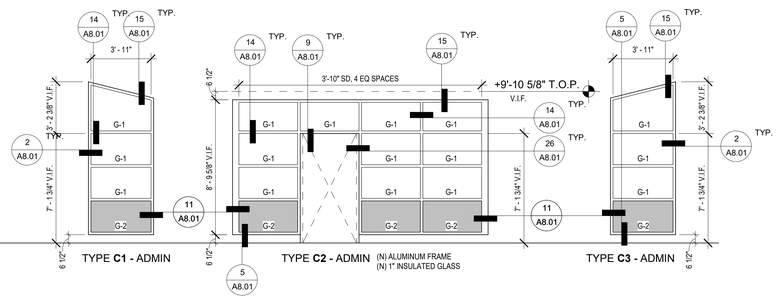
0" 1"



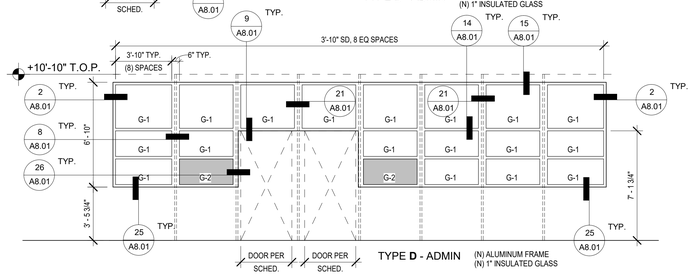

TYPE **A** - ADMIN (N) ALUMINUM FRAME (N) 1" INSULATED GLASS



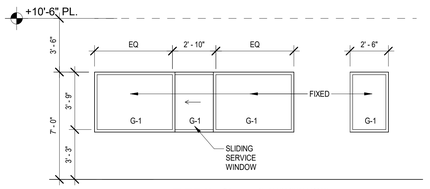

TYPE **B** - ADMIN (N) ALUMINUM FRAME (N) 1" INSULATED GLASS



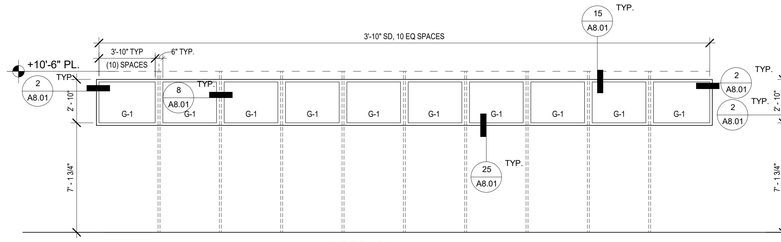

TYPE **C1** - ADMIN TYPE **C2** - ADMIN (N) ALUMINUM FRAME (N) 1" INSULATED GLASS TYPE **C3** - ADMIN



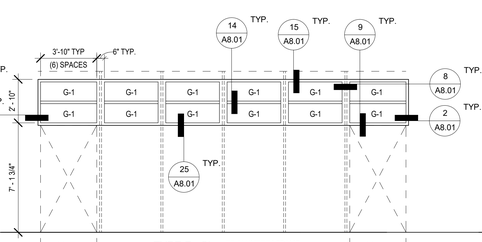

TYPE **D** - ADMIN (N) ALUMINUM FRAME (N) 1" INSULATED GLASS



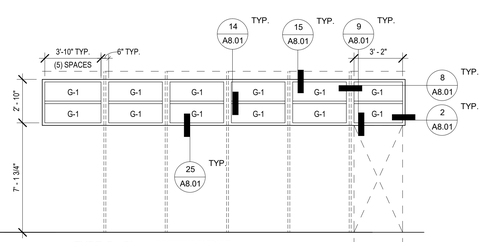

TYPE **N** - SL (N) ALUMINUM FRAME
TYPE **N1** - SL, (N) 1/4" PLEXIGLASS
OPP HAND



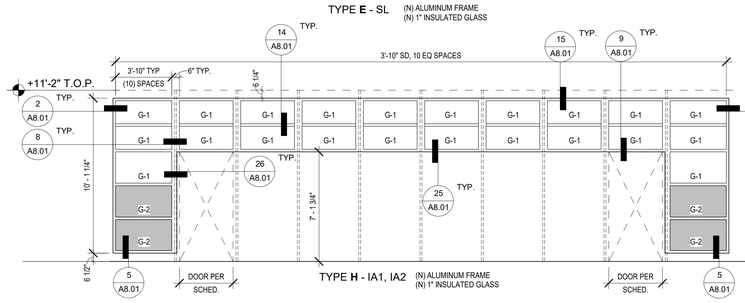

TYPE **E** - SL (N) ALUMINUM FRAME (N) 1" INSULATED GLASS



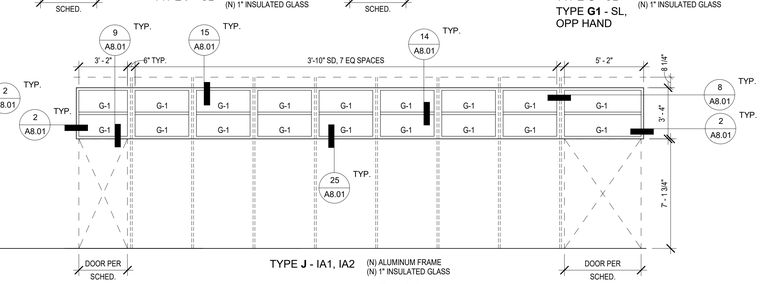

TYPE **F** - SL (N) ALUMINUM FRAME (N) 1" INSULATED GLASS



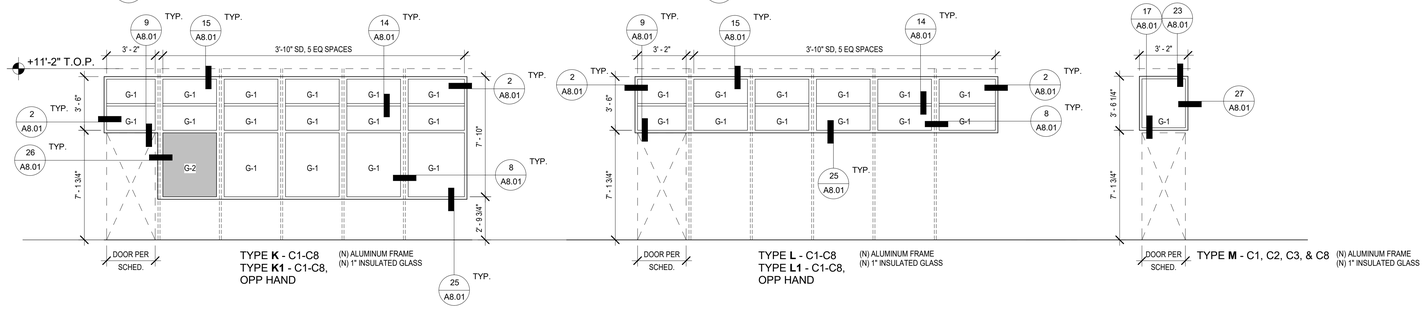

TYPE **G** - SL (N) ALUMINUM FRAME
TYPE **G1** - SL, (N) 1" INSULATED GLASS
OPP HAND




TYPE **H** - IA1, IA2 (N) ALUMINUM FRAME (N) 1" INSULATED GLASS




TYPE **J** - IA1, IA2 (N) ALUMINUM FRAME (N) 1" INSULATED GLASS




TYPE **K** - C1-C8 (N) ALUMINUM FRAME
TYPE **K1** - C1-C8, (N) 1" INSULATED GLASS
OPP HAND




TYPE **L** - C1-C8 (N) ALUMINUM FRAME
TYPE **L1** - C1-C8, (N) 1" INSULATED GLASS
OPP HAND




TYPE **M** - C1, C2, C3, & C8 (N) ALUMINUM FRAME (N) 1" INSULATED GLASS

## GENERAL WINDOW FRAMING NOTES

1. (N) ALUMINUM FRAME . PER SPEC SEC. 08 41 13
2. G-1 : TG (TEMPERED GLASS) (N) 1" INSULATED GLASS. SEE GLAZING SPECS.
3. USE BRONZE GLAZING COLOR
4. G-2: TG/SP (TEMPERED GLASS/SPANDREL GLASS) (N) 1" INSULATED / TINTED GLASS
5. FIELD VERIFY ALL DIMENSIONS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000


# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Tong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

WINDOW SCHEDULE

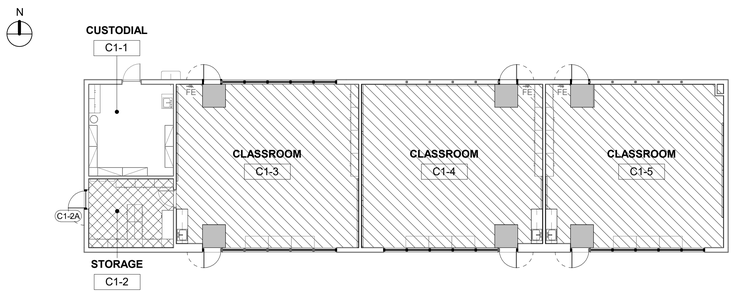
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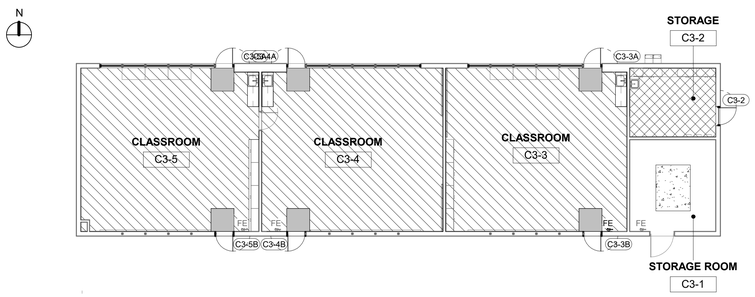
30 WINDOW TYPES
1/4" = 1'-0"

A10.01 - FINISH PLANS & SCHEDULE - BLDGS C1-C8

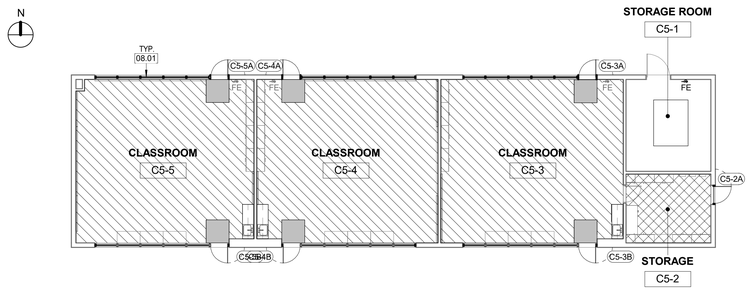
0" 1"



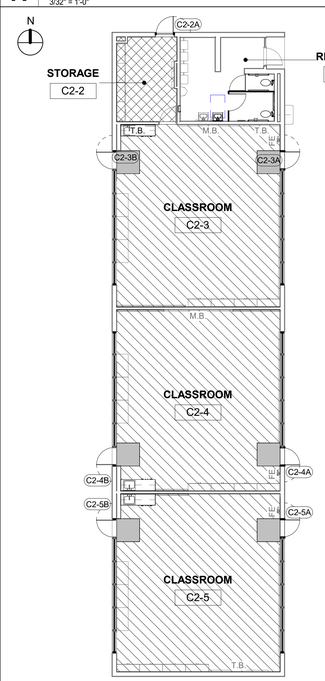

## 29 FLOOR PLAN - BUILDING C1
3/32" = 1'-0"



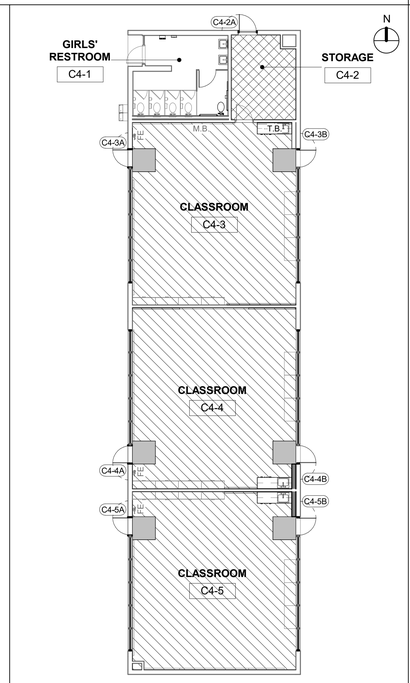

## 23 FLOOR PLAN - BUILDING C3
3/32" = 1'-0"




## 17 FLOOR PLAN - BUILDING C5
3/32" = 1'-0"



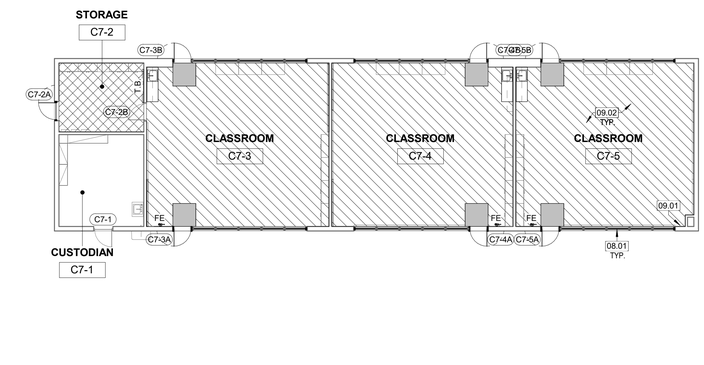

## 4 FLOOR PLAN - BUILDING C2
3/32" = 1'-0"



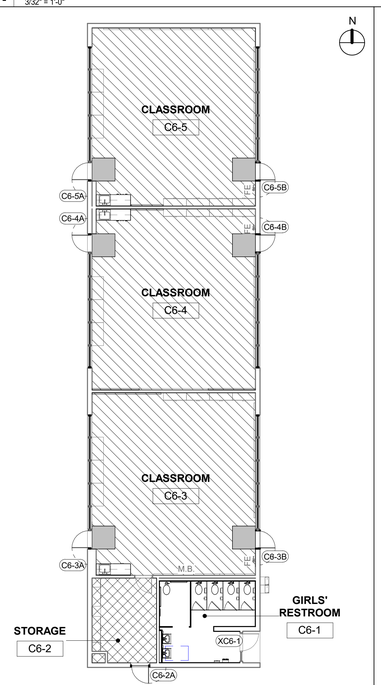

## 3 FLOOR PLAN - BUILDING C4
3/32" = 1'-0"

## FINISH SCHEDULE - BLDGS C1-C8

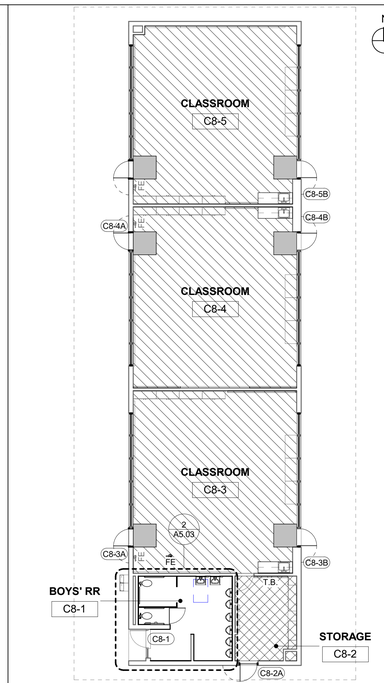
| ROOM NUMBER | ROOM NAME | (E) FLOOR MATERIAL | FLOOR MATERIAL | FLOOR FINISH | BASE MATERIAL | BASE FINISH | NORTH WALL MATERIAL | NORTH WALL FINISH | EAST WALL MATERIAL | EAST WALL FINISH | SOUTH WALL MATERIAL | SOUTH WALL FINISH | WEST WALL MATERIAL | WEST WALL FINISH | CEILING MATERIAL | CEILING FINISH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C1-1 | CUSTODIAL | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| C1-2 | STORAGE | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) | (E) |
| C1-3 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C1-4 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C1-5 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C2-1 | BOYS' RESTROOM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| C2-2 | STORAGE | VCT | VCT | VCT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) | (E) |
| C2-3 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C2-4 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C2-5 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C3-1 | STORAGE ROOM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| C3-2 | STORAGE | CPT | VCT | VCT1 | RB | RB1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) | (E) |
| C3-3 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C3-4 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C3-5 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C4-1 | GIRLS' RESTROOM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| C4-2 | STORAGE | VCT | VCT | VCT1 | RB | RB1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) | (E) |
| C4-3 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C4-4 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C4-5 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C5-1 | GIRLS' RESTROOM | CT | CT | CT1 | CTB | CTB1 | (E) GYP | CT1 & P1 | (E) BRICK | CT1 & P1 | (E) BRICK | CT1 & P1 | (E) GYP | CT1 & P1 | GYP | P1 |
| C5-2 | STORAGE | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) | (E) |
| C5-3 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C5-4 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C5-5 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C6-1 | BOYS' RR | CT | CT | CT1 | CTB | CTB1 | (E) GYP | CT1 & P1 | (E) GYP | CT1 & P1 | (E) BRICK | CT1 & P1 | (E) GYP | CT1 & P1 | GYP | P1 |
| C6-2 | STORAGE | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) | (E) |
| C6-3 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C6-4 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C6-5 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C7-1 | CUSTODIAN | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| C7-2 | STORAGE | VCT | VCT | VCT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) | (E) |
| C7-3 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C7-4 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C7-5 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| C8-1 | BOYS' RR | CT | CT | CT1 | CTB | CTB1 | (E) GYP | CT1 & P1 | (E) GYP | CT1 & P1 | (E) BRICK | CT1 & P1 | (E) GYP | CT1 & P1 | GYP | P1 |
| C8-2 | STORAGE | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) | (E) |
| C8-3 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C8-4 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| C8-5 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |




## 14 FLOOR PLAN - BUILDING C7
3/32" = 1'-0"




## 2 FLOOR PLAN - BUIDLING C6
3/32" = 1'-0"




## 1 FLOOR PLAN - BUIDLING C8
3/32" = 1'-0"

## FINISH FLOOR MATERIALS LEGEND

- (E) FLOOR FINISHES TO REMAIN
- CPT-1, CARPET FLOORING TYPE 1
  *RE: FINISH SCHEDULE*
- VCT-1, VINYL COMPOSITION TILE
  *RE: FINISH SCHEDULE*
- CT-1 CERAMIC TILE FLOORING
  *RE: FINISH SCHEDULE*
- WALK-OFF MAT,
  TRANSITION FLUSHED W/ ADJACENT CARPET.
  RE: FLOOR FINISH PLAN
  48" DEPTH, 12" EXTEND ON PUSH SIDE, UNLESS SHOWN AS FLUSH TO DOOR WIDTH OR EDGE OF WALL
- PATCH & REPAIR EXISTING CONCRETE FLOOR, PROVIDE AN EVEN & LEVEL FINISH

## GENERAL FINISH LEGEND NOTES

1. ALL FINISH MATERIALS SHALL MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP. HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS, ETC. TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR FLOORING MATERIAL TRANSITIONS.
6. ALL FLOORING TRANSITIONS AT DOORS SHALL BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, U.N.O.
7. PROTECT ALL FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE AND INSTALL BULLNOSE TRIM AT ALL TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL U.N.O.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE U.N.O.
11. ALL CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, U.N.O.
12. PAINT ALL HOLLOW METAL DOOR FRAMES TO MATCH ADJACENT WALL COLOR U.N.O.
13. REMOVE EXISTING PAINT AT EXISTING BRICK WALL, PREPARE BRICK WALL SMOOTH TO RECEIVE NEW PAINT FINISH. WHERE OCCURS.
14. RE-PAINT ALL EXISTING CASEWORK (EXCLUDE PLAM/STONE COUNTERTOPS).
15. PROVIDE APPROPRIATE PREPARATION, CLEANING AND BASE MATERIAL TO EXISTING INTERIOR SURFACES TO RECEIVE NEW FINISHES PER FINISH SPECS.
16. PROVIDE APPROPRIATE PREPARATION, CLEANING AND BASE MATERIALTO EXISTING BRICK WALL BEFORE RECEIVING NEW FINISH MATERIAL. PER FINISH SPECIFICATION.
17. PROVIDE CONSISTENT FLAT SURFACE USING CEMENT FLOAT AND APPROPRIATE BASE MATERIAL AT EXISTING BRICK WALL TO RECEIVE NEW TILE FINISH, PER FINISH SPECIFICATIONS.

## GENERAL NOTES

1. ALL FINISH MATERIALS MUST MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED DUCTWORK, CONDUIT, ELECTRICAL EQUIPMENT, ETC TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR ALL FLOORING MATERIALS.
6. FLOORING TRANSITIONS AT DOORS SHOULD BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, UNLESS NOTED OTHERWISE.
7. CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE BULLNOSE TRIM AT TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL, UNLESS NOTED OTHERWISE.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE UNLESS NOTED OTHERWISE.
11. CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, UNLESS NOTED OTHERWISE.
12. ALL HOLLOW METAL DOOR FRAMES TO BE PAINTED TO MATCH ADJACENT WALL COLOR.

## MATERIAL FINISH ABBREVIATIONS

| | |
|---|---|
| ACP1 | 2'X2' ACOUSTICAL CEILING PANEL , SEE SPECIFICATIONS |
| CPT1 | CARPET TYPE 1 , SEE SPECIFICATIONS |
| CT1 | CERAMIC TILE 1, SEE SPECIFICATIONS |
| CTB1 | CERAMIC TILE BASE 1, SEE SPECIFICATIONS |
| VCT1 | VINYL COMPOSITE TILE 1, SEE SPECIFICATIONS |
| P1 | PAINT TO BE SELECTED BY OWNER, SEE SPECIFICATIONS |
| RB1 | RUBBER BASE , SEE SPECIFICATIONS |
| (E) | (E) FINISH TO REMAIN |
| MF | MANUFACTURERS FINISH, SEE SPECIFICATIONS |

## MATERIAL ABBREVIATIONS

| | |
|---|---|
| ACP | ACOUSTIC CEILING PANEL |
| CONC | CONCRETE |
| CPT | CARPET |
| CT | CERAMIC TILE |
| CTB | CERAMIC TILE BASE |
| GUT | GLUE UP TILE |
| GYP | GYPSUM BOARD |
| P | PAINT |
| RB | RUBBER BASE |
| VCT | VINYL COMPOSITE TILE |
| (E) | (E) FINISH TO REMAIN |

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

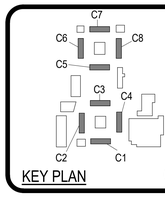

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

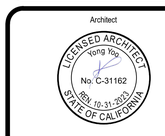



KEY PLAN

Consultant

Architect




CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

**FINISH PLANS & SCHEDULE - BLDGS C1-C8**

**A10.01**

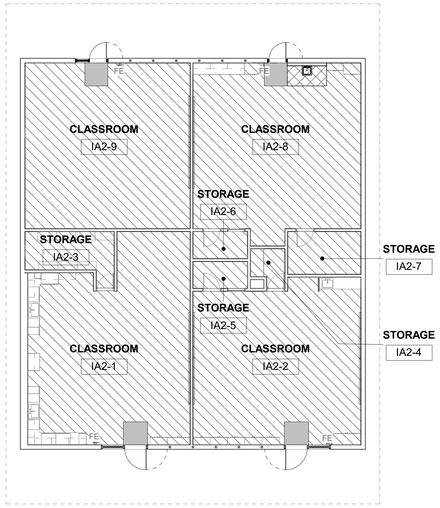
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A10.02 - FINISH PLANS & SCHEDULE - BLDGS IA1, IA2, SL, & ADMIN

0" 1"

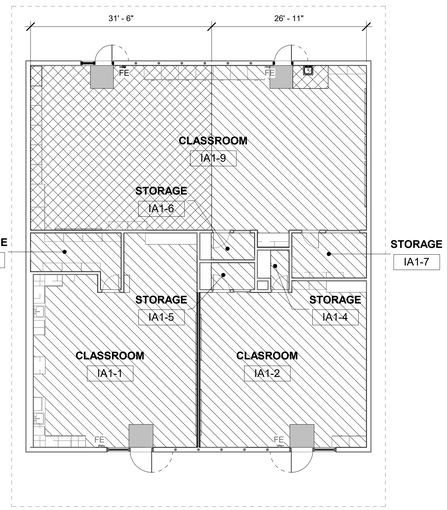
# FINISH SCHEDULE - BLDGS ADMIN, SL, IA1 & IA2

| | | | FLOOR | | BASE | | NORTH WALL | | EAST WALL | | SOUTH WALL | | WEST WALL | | CEILING | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROOM NUMBER | ROOM NAME | (E) FLOOR MATERIAL | MATERIAL | FINISH | MATERIAL | FINISH | MATERIAL | FINISH | MATERIAL | FINISH | MATERIAL | FINISH | MATERIAL | FINISH | MATERIAL | FINISH |
| A-01 | PUBLIC | VCT | VCT | VCT1 | RB | RB1 | (E) BRICK | P1 | - | - | (E) GYP | P1 | - | - | ACP | ACP1 |
| A-02 | TEACHERS' LOUNGE | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) BRICK | P1 | ACP | ACP1 |
| A-03 | WORK ROOM | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | ACP | ACP1 |
| A-04 | WORK SPACE | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| A-05 | OFFICE | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | - | - | (E) GYP | P1 | - | - | ACP | ACP1 |
| A-06 | NURSE | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) & (N) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| A-07 | GUIDANCE | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| A-08 | VICE PRINCIPAL | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| A-09 | HALL | VCT | VCT | VCT1 | RB | RB1 | - | - | (E) GYP | P1 | - | - | (E) & (N) GYP | P1 | ACP | ACP1 |
| A-10 | PRINCIPAL | VCT | VCT | VCT1 | RB | RB1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| A-12 | STORAGE | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (N) GYP | P1 | - | - | (E) BRICK | P1 | GYP | P1 |
| A-13 | NURSE RR | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | CT1 & P1 | (E) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | GYP | P1 |
| A-16 | IDF/DATA | VCT | VCT | VCT1 | RB | RB1 | (E) BRICK | P1 | - | - | (E) GYP | P1 | - | - | ACP | ACP1 |
| A-18 | STAFF RR 1 | CT | CT | CT1 | CTB | CTB1 | (N) GYP | CT1 & P1 | (E) BRICK | CT1 & P1 | (N) GYP | CT1 & P1 | (E) GYP | CT1 & P1 | ACP | ACP1 |
| A-19 | HALL | VCT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | - | - | ACP | ACP1 |
| A-20 | STAFF RR 2 | CT | CT | CT1 | CTB | CTB1 | (E) GYP | CT1 & P1 | (E) BRICK | CT1 & P1 | (E) GYP | CT1 & P1 | (E) GYP | CT1 & P1 | ACP | ACP1 |
| A-21 | PRINT ROOM | VCT | VCT | VCT1 | RB | RB1 | - | - | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| IA1-1 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | ACP | ACP1 |
| IA1-2 | CLASROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| IA1-3 | STORAGE | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| IA1-4 | STORAGE | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | CT1 & P1 | - | - | (E) GYP | P1 | GYP | P1 |
| IA1-5 | STORAGE | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| IA1-6 | STORAGE | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| IA1-7 | STORAGE | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| IA1-9 | CLASSROOM | CPT & VCT | CPT & VCT | CPT1 & VCT1 | RB | RB1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| IA2-1 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | ACP | ACP1 |
| IA2-2 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | ACP | ACP1 |
| IA2-3 | STORAGE | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| IA2-4 | STORAGE | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| IA2-5 | STORAGE | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| IA2-6 | STORAGE | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| IA2-7 | STORAGE | CPT | CPT | CPT1 | RB | RB1 | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| IA2-8 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| IA2-9 | CLASSROOM | CPT | CPT | CPT1 | RB | RB1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) BRICK | P1 | ACP | ACP1 |
| SL-101 | HALL | - | - | - | - | - | (E) BRICK | P1 | - | - | (E) BRICK & (E) GYP | CT1 & P1 | (E) BRICK | P1 | GYP | P1 |
| SL-102 | BOYS' RR | CT | CT | CT1 | CTB | CTB1 | (E) BRICK | CT1 & P1 | (E) GYP | CT1 & P1 | (E) GYP | CT1 & P1 | (E) BRICK & (E) GYP | P1 | GYP | P1 |
| SL-103 | OFFICE | CT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| SL-104 | MEN'S STAFF RR | CT | CT | CT1 | CTB | CTB1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | (N) GYP | P1 | GYP | P1 |
| SL-104.1 | MEN'S STAFF SHOWER | CT | CT | CT1 | CTB | CTB1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | (N) GYP | P1 | GYP | P1 |
| SL-105 | GAME STORAGE | - | - | - | - | - | (N) GYP | P1 | (E) GYP | P1 | (E) BRICK | - | (E) BRICK | - | - | - |
| SL-106 | BOYS' LOCKER RM | - | - | - | - | - | (E) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | (E) & (N) GYP | CT1 & P1 | GYP | P1 |
| SL-107 | CUST | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| SL-108 | SERVICE ROOM | - | - | - | - | - | (E) GYP | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) GYP | P1 | GYP | P1 |
| SL-109 | CUST | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| SL-110 | GIRLS' LOCKER RM | - | - | - | - | - | (E) BRICK | P1 | (E) BRICK | P1 | (E) GYP | P1 | (E) & (N) GYP | CT1 & P1 | GYP | P1 |
| SL-111 | GAME STORAGE | - | - | - | - | - | - | - | (E) GYP | P1 | (E) GYP | P1 | - | - | - | - |
| SL-112 | WOMEN'S STAFF RR | CT | CT | CT1 | CTB | CTB1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | GYP | P1 |
| SL-112.1 | WOMEN'S STAFF SHOWER | CT | CT | CT1 | CTB | CTB1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | (E) BRICK & (E) GYP | CT1 & P1 | GYP | P1 |
| SL-114 | GIRLS' RR | CT | CT | CT1 | CTB | CTB1 | (N) GYP | CT1 & P1 | (N) GYP | CT1 & P1 | (E) BRICK | CT1 & P1 | (E) BRICK & (E) GYP | CT1 & P1 | GYP | P1 |
| SL-115 | OFFICE | CT | VCT | VCT1 | RB | RB1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | (E) GYP | P1 | ACP | ACP1 |
| SL-116 | HALL | - | - | - | - | - | (E) BRICK & (E) GYP | CT1 & P1 | - | - | (E) BRICK | P1 | (E) BRICK | P1 | GYP | P1 |
| SL-117 | STORAGE ROOM | (E) CONCRETE | - | - | RB | RB1 | (E) BRICK | P1 | (N) GYP | P1 | (E) BRICK | P1 | (E) BRICK | P1 | GYP | P1 |



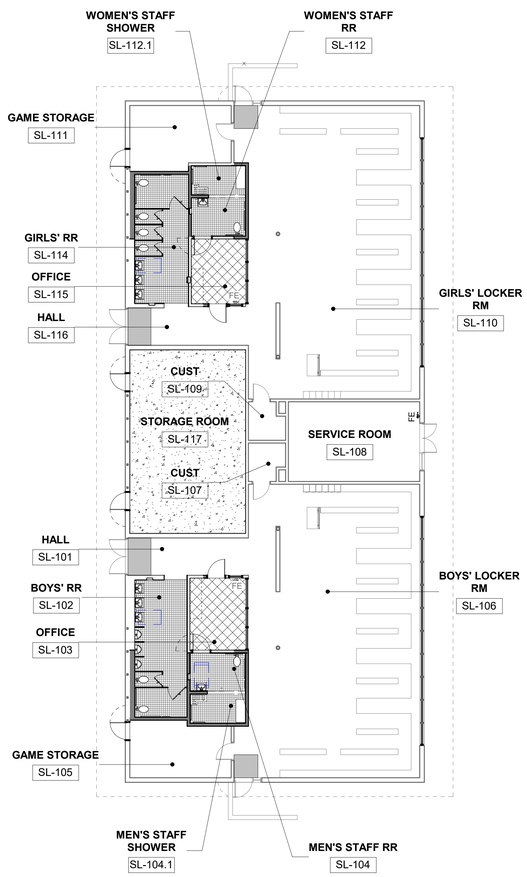

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## 18 FLOOR PLAN - BUILDING IA-2
3/32" = 1'-0"



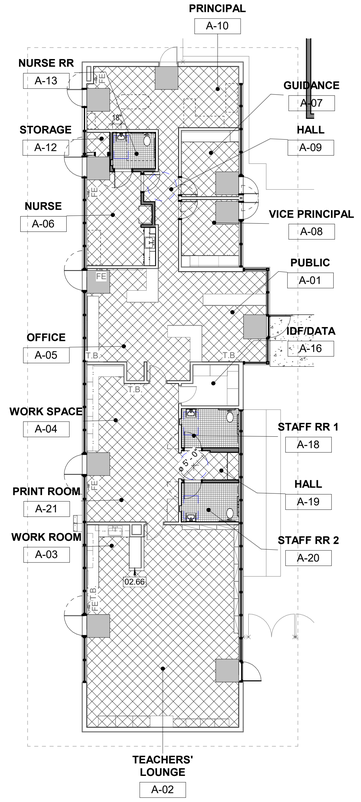

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## 6 FLOOR PLAN - BUILDING IA-1
3/32" = 1'-0"




N

## 3 FLOOR PLAN - BUILDING S-L
3/32" = 1'-0"




N

## 1 FLOOR PLAN - ADMINISTRATION BUILDING
3/32" = 1'-0"

## FINISH FLOOR MATERIALS LEGEND

- (E) FLOOR FINISHES TO REMAIN
- CPT-1, CARPET FLOORING TYPE 1
  *RE: FINISH SCHEDULE*
- VCT-1, VINYL COMPOSITION TILE
  *RE: FINISH SCHEDULE*
- CT-1 CERAMIC TILE FLOORING
  *RE: FINISH SCHEDULE*
- WALK-OFF MAT,
  TRANSITION FLUSHED W/ ADJACENT CARPET.
  RE: FLOOR FINISH PLAN
  48" DEPTH, 12" EXTEND ON PUSH SIDE, UNLESS SHOWN AS FLUSH TO DOOR WIDTH OR EDGE OF WALL
- PATCH & REPAIR EXISTING CONCRETE FLOOR, PROVIDE AN EVEN & LEVEL FINISH

## GENERAL FINISH LEGEND NOTES

1. ALL FINISH MATERIALS SHALL MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP. HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS, ETC. TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR FLOORING MATERIAL TRANSITIONS.
6. ALL FLOORING TRANSITIONS AT DOORS SHALL BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, U.N.O.
7. PROTECT ALL FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE AND INSTALL BULLNOSE TRIM AT ALL TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL U.N.O.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE U.N.O.
11. ALL CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, U.N.O.
12. PAINT ALL HOLLOW METAL DOOR FRAMES TO MATCH ADJACENT WALL COLOR U.N.O.
13. REMOVE EXISTING PAINT AT EXISTING BRICK WALL, PREPARE BRICK WALL SMOOTH TO RECEIVE NEW PAINT FINISH. WHERE OCCURS.
14. RE-PAINT ALL EXISTING CASEWORK (EXCLUDE PLAM/STONE COUNTERTOPS).
15. PROVIDE APPROPRIATE PREPARATION, CLEANING AND BASE MATERIAL TO EXISTING INTERIOR SURFACES TO RECEIVE NEW FINISHES PER FINISH SPECS.
16. PROVIDE APPROPRIATE PREPARATION, CLEANING AND BASE MATERIALTO EXISTING BRICK WALL BEFORE RECEIVING NEW FINISH MATERIAL. PER FINISH SPECIFICATION.
17. PROVIDE CONSISTENT FLAT SURFACE USING CEMENT FLOAT AND APPROPRIATE BASE MATERIAL AT EXISTING BRICK WALL TO RECEIVE NEW TILE FINISH, PER FINISH SPECIFICATIONS.

## GENERAL NOTES

1. ALL FINISH MATERIALS MUST MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED DUCTWORK, CONDUIT, ELECTRICAL EQUIPMENT, ETC TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR ALL FLOORING MATERIALS.
6. FLOORING TRANSITIONS AT DOORS SHOULD BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, UNLESS NOTED OTHERWISE.
7. CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE BULLNOSE TRIM AT TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL, UNLESS NOTED OTHERWISE.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE UNLESS NOTED OTHERWISE.
11. CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, UNLESS NOTED OTHERWISE.
12. ALL HOLLOW METAL DOOR FRAMES TO BE PAINTED TO MATCH ADJACENT WALL COLOR.

## MATERIAL FINISH ABBREVIATIONS

| | |
|---|---|
| ACP1 | 2'X2' ACOUSTICAL CEILING PANEL , SEE SPECIFICATIONS |
| CPT1 | CARPET TYPE 1 , SEE SPECIFICATIONS |
| CT1 | CERAMIC TILE 1, SEE SPECIFICATIONS |
| CTB1 | CERAMIC TILE BASE 1, SEE SPECIFICATIONS |
| VCT1 | VINYL COMPOSITE TILE 1, SEE SPECIFICATIONS |
| P1 | PAINT TO BE SELECTED BY OWNER, SEE SPECIFICATIONS |
| RB1 | RUBBER BASE , SEE SPECIFICATIONS |
| (E) | (E) FINISH TO REMAIN |
| MF | MANUFACTURERS FINISH, SEE SPECIFICATIONS |

## MATERIAL ABBREVIATIONS

| | |
|---|---|
| ACP | ACOUSTIC CEILING PANEL |
| CONC | CONCRETE |
| CPT | CARPET |
| CT | CERAMIC TILE |
| CTB | CERAMIC TILE BASE |
| GUT | GLUE UP TILE |
| GYP | GYPSUM BOARD |
| P | PAINT |
| RB | RUBBER BASE |
| VCT | VINYL COMPOSITE TILE |
| (E) | (E) FINISH TO REMAIN |

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
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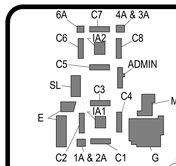

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST
WESTMINSTER,CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

Architect

LICENSED ARCHITECT
Tong You
No. C-31162
REN. 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/23 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

**DSA SUBMITTAL**

**FINISH PLANS & SCHEDULE - BLDGS IA1, IA2, SL, & ADMIN**

**A10.02**

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## GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH TITLE 24 CALIFORNIA BUILDING CODE, 2022 EDITION.
2. ALL DRAWINGS AND SPECIFICATIONS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE EOR, THE ARCHITECT AND THE OWNER REPRESENTATIVE. PRIOR TO THE START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER.
3. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE EOR AND THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
4. ALL DIMENSIONS AND THE SITE CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOB SITE PRIOR TO BID SUBMITTAL, START OF SHOP DRAWINGS, START OF CONSTRUCTION, AND/OR FABRICATION OF MATERIALS. IF DISCREPANCIES ARE ENCOUNTERED, OR CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, THE OWNER SHALL BE NOTIFIED FOR CLARIFICATION.
5. CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ADJACENT EXISTING SURFACES AND AREAS WHICH MAY BE DAMAGED AS A RESULT OF NEW WORK.
6. DO NOT SCALE DRAWINGS. PRINTED DIMENSIONS HAVE PRECEDENCE OVER SCALED DRAWINGS AND LARGE SCALE OVER SMALL.
7. TYPICAL DETAILS SHALL APPLY IN GENERAL CONSTRUCTION UNLESS SPECIFICALLY DETAILED. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK & PER TYP DETAILS.
8. THE CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THESE DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE AND SAFETY OF WORKMEN DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE CITY OR STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS AND DOES NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES FOR THE ABOVE.
9. FOR TRENCHES OR EXCAVATIONS (5) FIVE FEET OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND, THE CONTRACTOR IS TO OBTAIN THE NECESSARY PERMIT FROM THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY, PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
10. NO HOLES, NOTCHES, BLOCKOUTS, ETC. ARE ALLOWED IN STRUCTURAL ELEMENTS UNLESS DETAILED ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER AND OWNER.
11. ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE FROM PLANS SUPPLIED BY THE OWNER, BUT WITHOUT GUARANTEE OF ACCURACY. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS, THEY SHALL BE REPORTED TO THE UNIVERSITY REPRESENTATIVE OR ENGINEER SO THAT PROPER CLARIFICATION MAY BE MADE. MODIFICATION OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF STRUCTURAL ENGINEER AND OWNER.
12. IN CASE OF DISCREPANCIES BETWEEN NOTES ON THIS SHEET & PROJECT SPECIFICATIONS, THE PROVIDED NOTES SHALL TAKE PRECEDENCE OVER SPECS.
13. CUTTING, BORING, SAW CUTTING OR DRILLING INTO (E) OR (NEW) STRUCTURAL ELEMENTS SHALL BE SPECIFICALLY DETAILED OR OTHERWISE APPROVED BY EOR.

## QUALITY ASSURANCE PROGRAM

### A) STRUCTURAL TESTS AND SPECIAL INSPECTION PROGRAM.

PER SECTION 4-335 OF CALIFORNIA ADMINISTRATION CODE, THE ARCHITECT OR REGISTERED ENGINEER IN GENERAL RESPONSIBLE CHARGE OF THE PROJECT, OR WITHIN THEIR DELEGATED PORTION OF THE WORK, SHALL ESTABLISH THE EXTENT OF THE STRUCTURAL TESTS AND SPECIAL INSPECTION PROGRAM CONSISTENT WITH THE NEEDS OF THE PROJECT, AND A COMPLETED AND SIGNED DSA-103.

THE ARCHITECT OR REGISTERED ENGINEER SHALL RECEIVE VERIFIED REPORTS FROM THE PROJECT INSPECTOR, SPECIAL INSPECTORS, TESTING FACILITY, THE GEOTECHNICAL ENGINEER, CONTRACTORS AND THE OTHER ARCHITECTS AND ENGINEERS ARE SUBMITTED AS REQUIRED. THE RESPONSIBLE PARTY SHALL NOTIFY DSA AS TO THE DISPOSITION OF MATERIALS NOTED ON LABORATORY TESTING, AND/ OR SPECIAL INSPECTION, REPORTS AS NOT CONFORMING TO THE DSA APPROVED DOCUMENTS.

### B) STRUCTURAL OBSERVATION

PERIODIC STRUCTURAL OBSERVATION SHALL BE CONDUCTED, PER SECTION 1710A OF THE CALIFORNIA BUILDING CODE AND SECTION 4-341(F) OF THE CALIFORNIA ADMINISTRATION CODE, TO ASSURE CONFORMANCE WITH THE DESIGN INTENT AND THE APPROVED PLANS AND SPECIFICATIONS. STRUCTURAL OBSERVATION DOES NOT WAIVE THE REQUIREMENT ANS/OR RESPONSIBILITY FOR THE INSPECTION BY IOR.

A REGISTERED PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OF THE PROJECT, INCLUDING LICENSED ARCHITECT OR STRUCTURAL ENGINEER, SHALL OBSERVE HIS/HER PORTION OF WORK DURING THE CONSTRUCTION OF THE PROJECT.

OBSERVATION SHOULD INCLUDE VISITS TO THE PROJECT SITE BY THE ARCHITECT AND/OR ENGINEER OR THEIR QUALIFIED REPRESENTATIVES IN COORDINATION WITH THE DISTRICT AND DSA. PRIOR NOTIFICATION SHALL BE MADE TO REQUEST THE REQUIRED OBSERVATIONS. DEMOLITION OF COVERING MATERIAL MAY BE REQUIRE TO FACILITATE OBSERVATION.

STRUCTURAL OBSERVATIONS MAY CONSIST OF VISUAL OBSERVATION OF MAJOR STRUCTURAL MEMBERS, AND THEIR IMMEDIATE CONNECTIONS, AT SIGNIFICANT CONSTRUCTION STAGES. THE FREQUENCY OF SUCH OBSERVATION SHALL BE COORDINATED WITH THE DISTRICT ENGINEER OR ASSIGNED IOR PER SECTION 4-336.

AT THE COMPLETION OF THE PROJECT, A FINAL OBSERVATION REPORT (DSA-6) MUST BE SUBMITTED WHICH SHOWS THAT THE STRUCTURAL SYSTEM IS COMPLETE AND GENERALLY CONFORMS TO THE APPROVED PLANS AND SPECIFICATIONS.

## DEMOLITION

1. REFER TO MECH. SHEETS FOR DEMOLITION NOTES. SEE DEMOLITION PLANS ON SHEET MD2 SERIES
2. ALL (E) UTILITIES, DUCTS, CONDUITS, PIPES, SIGNS, JOINTS, ELEC PANELS & BOXES, DOOR, WINDOW, CHAIN FRAME CEILINGS & OTHER ARCH'L TREATMENTS SHALL BE REMOVED TEMPORARILY AS NEEDED & REINSTALLED TO IT'S ORIGINAL CONDITION & IN AGREEMENT WITH CODE STANDARDS. SUPPORTS & BRACES FOR DUCT WORK SHALL BE IN ACCORDANCE WITH SMACNA GUIDELINES.
3. DEMOLITION WORK SHALL BE FULLY COORDINATED WITH THE DISTRICT & DSA 'S REPRESENTATIVES FOR SEQUENCE AND TIME FRAME.
4. CONTRACTOR TO PROVIDE TEMP. SHORING, AS REQUIRED.
5. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT.

## CONCRETE AND REINFORCEMENT

1. ALL CEMENT SHALL CONFORM AT ASTM C-150, TYPE II OR V
2. FINE AND COARSE AGGREGATE SHALL CONFORM TO ASTM C-33.
3. AGGREGATE GRADATION FOR CONCRETE SHALL CONFORM TO ASTM C-33 AND CBC 2022. AGGREGATE FOR ELEMENT WITH 4 HOURS RATING SHALL BE SILICEOUS.
4. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM 28 DAY STRENGTH:
   - ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 PSI, UNLESS NOTED OTHERWISE.
   - CAST IN DRILLED-HOLE PILES - 4000 PSI.
   - CONCRETE SLAB ON GRADE/HOUSEKEEPING PAD - 3000 PSI.
   - EXTERIOR CONCRETE WALKS, CURBS, ETC. AND MISC. CONCRETE - 2500 PSI STONE.
5. LIGHTWEIGHT CONCRETE . (NOT APPLICABLE)
6. CONCRETE DESIGN MIXES SHALL CONFORM TO THE STANDARD SPECIFICATIONS. MIX DESIGNS SHALL BE SIGNED BY A CALIFORNIA LICENSED ENGINEER & SUBMITTED FOR REVIEW & APPROVAL. SUPPORTING DATA SHALL BE PROVIDED PER CBC 1903A. THE TEST DATA SHALL BE REPORTED BY AN INDEPENDENT TESTING AGENCY.
7. PLACING OF ALL CONCRETE SHALL BE INSPECTED BY THE JOB INSPECTOR TO VERIFY THAT REINFORCING STEEL IS SECURELY SUPPORTED IN PLACE DURING THE POUR. CONTRACTOR TO PROVIDE NECESSARY MEASURE TO PROTECT REINFORCING AND TENDONS DURING PLACEMENT USING TIES AND SUPPORTS. USE TREMY FOR PLACEMENT OF CONCRETE FOR POURS DEEPER THAN 6'-0". USE OF BUCKET OR DROPPING IS NOT ALLOWED TO AVOID SEGREGATION.
8. LOCATION OF CONSTRUCTION JOINTS OR POUR JOINTS SHALL BE AS SHOWN ON PLANS OR AS APPROVED BY THE ENGINEER OR THE ARCHITECT PRIOR TO POURING CONCRETE. SEE NOTE 19 BELOW.
9. ANCHOR BOLTS, DOWELS, REINFORCING STEEL, INSERTS, ETC., SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING CONCRETE. CONCRETE BLOCKS ONLY SHALL BE USED TO SUPPORT REINFORCING OFF GRADE.
10. CONCRETE SLABS SHALL BE CURED BY KEEPING CONTINUOUSLY WET FOR 7 DAYS. FORMS FOR CONCRETE WALLS SHALL BE LEFT IN PLACE FOR 7 DAYS OR THEY MAY BE STRIPPED AFTER 3 DAYS AND THEN COVERED WITH BURLAP WHICH SHALL BE KEPT WET FOR AN ADDITIONAL 7 DAYS. IN LIEU OF BURLAP, CURING COMPOUNDS MAY BE USED IF APPROVED BY THE STRUCTURAL ENGINEER. FORMS FOR CONCRETE COLUMNS SHALL BE LEFT IN PLACE FOR 3 DAYS. IF STRIPPED EARLY, THEN SHALL BE COVERED FOR ANOTHER 3 DAYS. OR BE PROTECTED BY CURRING COMPONDS CONTRACTOR SELECTS TO DEVIATE FROM THESE INSTRUCTIONS, ALL CRACKS AND OTHER DEFECTS SHALL BE PER EOR RECOMMENDATIONS IN CONTRACTORS EXPENSE.
11. NOTIFY THE STRUCTURAL ENGINEER 48 HOURS MINIMUM PRIOR TO ALL POURS.
12. PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE CORNERS.
13. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL COMPLY WITH CBC SECTION TABLE 1808A.8.2
14. ALL CONCRETE SHALL BE VIBRATED IN PLACE BY MECHANICAL MEANS DURING PLACING OF CONCRETE.
15. THE STRUCTURAL STEEL AND STEEL FORM WILL DEFLECT WHILE CONCRETE IS BEING PLACED ON IT. THIS WILL RESULT IN THE NEED TO ADJUST THE SCREEDS AFTER THE CONCRETE HAS BEEN PLACED TO PRODUCE A LEVEL CONCRETE SURFACE. ALSO, THERE WILL BE ADDITIONAL CONCRETE REQUIRED, WHICH IS TO BE ANTICIPATED, AND NO REQUEST FOR EXTRA COST WILL BE CONSIDERED.
16. NO STAKES, STEEL OR WOOD, SHALL BE PERMITTED IN ANY CONCRETE POUR. SUSPEND FORMS FROM ABOVE GRADE.
17. DRYPACK SHALL BE 1:3-1/2 PORTLAND CEMENT TO SAND WITH A MINIMUM 28 DAY STRENGTH OF 4500 PSI. OR SET GROUT BY AN APPROVED EOR.
18. NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 7000 PSI.
19. CONSTRUCTION JOINTS: CONSTRUCTION JOINTS SHALL HAVE ENTIRE SURFACE REMOVED TO MIN 1/4" TO EXPOSE CLEAN, SOLIDLY EMBEDDED AGGREGATE. PER TYP. DETAILS PROVIDED IN THIS SET, CONSTRUCTION JOINTS SHALL BE PROVIDED TO LIMIT SHRINKAGE CRACKS. A MAX DISTANCE OF 30 x SLAB THICKNESS (IN) SHALL BE CONSIDERED IF NO CONSTRUCTION JOINTS IS CALLED ON PLANS. THE CONTRACTOR SHALL OBTAIN THE ENGINEER'S APPROVAL OF CONSTRUCTION & CONTROL JOINT LOCATION IN SLABS, WALLS AND BEAMS.
20. TEMPERATURE AND SHRINKAGE REINFORCEMENT: SHALL HAVE A LAP OF THIRTY (30) BAR DIAMETERS, BUT NOT LESS THAN 18 IN. AND THE SPLICES IN ADJACENT BARS SHALL BE NOT LESS THAN FIVE (5) FEET APART.
21. REBAR GRADES: **ALL REINFORCING STEEL SHALL BE NEW STOCK DEFORMED BARS CONFORMING TO ASTM A615 AS FOLLOWS:**
   - ALL SIZES NOT SUBJECT TO WELDING.......................................GRADE 60.

   ALL REINFORCING BARS TO BE WELDED SHOULD CONFORM TO ASTM A706.
22. TYP. REBAR COVER: MINIMUM REBAR COVER FOR PRESTRESSED CONCRETE SHALL BE AS SHOWN IN THIS TABLE:
23. MAX W/C RATIO = 0.45

| EXPOSURE CONDITION | COVER | TOLERANCE (-) |
|---|---|---|
| CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: | 3" | 3/8 INCH |
| EXPOSED TO EARTH OR WEATHER: | | |
| NO. 5 AND SMALLER BARS | 1-1/2" | 1/4 INCH |
| NO. 6 AND LARGER BARS | 2" | 1/4 INCH |
| NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND: | | |
| ROOF SLAB | 1" | 1/8 INCH |
| STRUCTURAL SLABS & WALLS | 1" | 1/8 INCH |
| BEAMS AND COLUMNS (PRIMARY REINFORCEMENT, TIES, STIRRUPS & SPIRALS) | 1-1/2" | 1/4 INCH |
| SLABS ON GRADE | 1-1/2" | 1/4 INCH |

## NON-SHRINK GROUT

"NON-SHRINK GROUT" SHALL BE DEFINED AS A HIGH-STRENGTH MORTAR OR GROUT WHICH DOES NOT SHRINK IN THE PLASTIC STATE, IS DIMENSIONALLY STABLE IN THE HARDENED STATE, AND BONDS PERMANENTLY TO CLEAN METAL SURFACES AND CONCRETE SUBSTRATE.

DRY PACK OR NON-SHRINK GROUT SHALL CONFORM TO THE ASTM C1107, SPECIFICATION FOR PACKAGED DRY, HYDRAULIC-CEMENT GROUT (NON-SHRINKABLE). NO SHRINKAGE BEFORE HARDENING (0.00 SHRINKAGE WHEN TESTED IN ACCORDANCE WITH ASTM C827), IS ALLOWED

COMPRESSIVE STRENGTH, SHALL REACH THE FOLLOWING COMPRESSIVE STRENGTH

a. AT ONE DAY: 1000 PSI
b. AT THREE DAYS: 2500 PSI
c. AT SEVEN DAYS: 4000 PSI
d. AT 28 DAYS: 7000 PSI

A MANUFACTURER'S PRODUCT DATA SHALL BE SUBMITTED PRIOR TO THE INSTALLATION, SHOWING THE MATERIAL MEET SPECIFIED SHRINKAGE AND COMPRESSIVE STRENGTH REQUIREMENTS, ABOVE.

## SHOP DRAWINGS:

1. SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT, AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.
2. SHOP DRAWINGS SHALL BE SUBMITTED BY CONTRACTOR TO ENGINEER OF RECORD (EOR) FOR REVIEW AND APPROVAL, AND IF REUIRED TO THE BUILDING OFFICIALS FOR THEIR REVIEW AND APPROVAL, ALSO SEE SUBMITTALS AND DEFERRED APPROVAL.
3. A SET OF APPROVED SHOP DRAWINGS SHALL BE MAINTAINED @ THE JOB SITE & PRESENTED TO THE INSPECTOR PRIOR TO PLACEMENT OF THE REINFORCEMENT.

## STRUCTURAL STEEL AND MISC. IRON

1. WELDING SHALL BE DONE IN CONFORMANCE WITH AWS-D1.1 & OTHER APPLICABLE CODES & STANDARDS USE ELECTRIC SHIELDED ARC PROCESS USING E-70XX ELECTRODES. ALL WELDS SHALL BE UNIFORM IN SIZE AND APPEARANCE, AND FREE OF PINHOLES, POROSITY, UNDERCUTTING, OR OTHER DEFECTS. ALL BUTT WELDS SHALL BE FULL PENETRATION.
2. WELDS SHALL BE DONE IN THE SHOP OF AN ICC OR AISC APPROVED FABRICATOR UNLESS OTHERWISE NOTED ON PLANS. ALL FIELD WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS APPROVED BY THE BUILDING OFFICIAL.
3. CONTINUOUS INSPECTION BY AN APPROVED DEPUTY INSPECTOR IS REQUIRED FOR ALL ON SITE WELDING, U.N.O.
4. STRUCTURAL STEEL NOT ENCASED IN CONCRETE OR MASONRY SHALL BE SHOP PAINTED AS SPECIFIED. ANY ABRASIONS SHALL BE TOUCHED UP AFTER ERECTION.
5. FABRICATOR SHALL SUBMIT SHOP DRAWINGS TO STRUCTURAL ENGINEER FOR REVIEW PRIOR TO START OF FABRICATION. FABRICATION SHALL CONFORM TO A.I.S.C. SPECIFICATION.
6. ALL FULL PENETRATION WELDS IN FIELD AND SHOP SHALL BE ULTRASONICALLY TESTED AND APPROVED.
7. CONTINUOUS INSPECTION IS REQUIRED FOR ALL HIGH STRENGTH BOLTING CONNECTIONS.
8. SPLICE MEMBERS ONLY WHERE INDICATED.
9. BOLT HOLES IN STEEL SHALL BE STANDARD HOLES, 1/16 INCH LARGER IN DIAMETER THAN NORMAL SIZE OF BOLT USED, UNLESS NOTED OTHERWISE. BOLT HOLES IN BASE PLATES MAY BE OVERSIZED PER AISC TABLE 14-2 IF WASHERS ARE PROVIDED IN ACCORDANCE WITH THIS TABLE.
10. STRUCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION AS INDICATED BELOW UNLESS NOTED OTHERWISE:
   - ALL WIDE FLANGE AND WT SHAPES — A992, GRADE 50
   - STEEL ANGLES AND CHANNELS — A36 U.N.O.
   - BEAM SHEAR PLATES, STIFFENER PLATES, ALL OTHER PLATES — A572, GRADE 50 U.N.O.
   - MACHINE BOLTS USE ONLY WHERE INDICATED) — A307
   - THREADED AND SMOOTH ROD — F1554, GR50
   - NUTS FOR BOLTS AND MACHINE BOLTS — A563
   - HARDENED WASHERS — F436
   - UNHARDENED WASHERS — F844
   - PLAIN WASHERS — ANSI B18.22.1
   - STRUCTURAL TUBES — A-500, GRADE C
   - STRUCTURAL PIPES — A-53, TYPE E OR S, GRADE B
12. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIP ZINC GALVANIZED

## WOOD FRAMING

1. ALL SAWN LUMBER SHALL BE DOUGLAS FIR OR WESTERN LARCH, U.N.O.
2. GRADE MARKED BY A RECOGNIZED GRADING AGENCY (WWPA OR WCLIB). WOOD GRADES ARE TO BE AS FOLLOWS U.N.O.:
   - BEAMS____LSL OR PRL OR GLB UNO
   - HEADERS____NO.1
   - POSTS AND TIMBERS____NO.1
   - PLATES____NO.2
   - STUDS @ NON-BEARING WALLS____NO.2
   - STUDS @ BEARING/SHEAR WALLS NO.2 U.N.O.____NO.2
   - RAFTERS AND ROOF JOISTS____NO.2
   - FLOOR JOIST____NO.1
   - SILL PLATES PRESSURE TREATED FOR MOISTURE RESISTANCE (SEE NOTE #23.)____NO.1
   - TJI____PER PLAN OR EQ.
   - OPEN WEB TRUSSES____PER PLAN & APPROVED MANUF.
   - ROOF TRUSSES____PER PLAN & APPROVED MANUF.
3. WHERE WOOD IS IN CONTACT WITH CONCRETE OR MASONRY USE FOUNDATION REDWOOD OR DOUGLAS FIR PRESSURE TREATED FOR MOISTURE RESISTANCE. CORROSION RESISTANCE BOLTS ARE REQUIRED FOR "CHEMICALLY THREATED SILLS".
4. PLYWOOD SHALL BE DOUGLAS FIR CONFORMING TO U.S. PRODUCT STANDARDS PS 1-83, WITH EXTERIOR GLUE AND SHALL BE GRADE MARKED BY APA. PLYWOOD AT EXPOSED EAVES SHALL BE EXPOSURE I GRADE PLYWOOD. PLYWOOD SHALL BE STRUCTURAL- I FOR FLOOR DIAPHRAGMS & SHEAR WALLS. OSB PANELS MAY BE USED IF HAVE EQUIVALENT PROPERTIES.
5. U.N.O. ALL DAMAGED OR DETERIORATED LUMBER SHALL BE REPLACED WITH EQUAL SECTION AND EQUAL OR BETTER GRADE AS SPECIFIED ON THESE DRAWINGS.
6. ALL BOLTS FOR WOOD CONNECTIONS SHALL BE A307, GRADE A. WHERE WOOD IS BOLTED TO STEEL, USE A LOCK WASHER UNDER THE NUT ON THE STEEL SIDE.
7. ALL BOLT HEADS AND NUTS THAT BEAR AGAINST THE FACE OF WOOD MEMBERS SHALL BE PROVIDED WITH METAL SQUARE WASHERS AS INDICATED ON PLANS.
8. ALL STUD WALLS SHALL HAVE FIRE BLOCKING AT 5'-0" O.C. MAXIMUM, VERTICAL UNLESS ALLOWED BY CODE.
9. BLOCKING SHALL BE INSTALLED AT THE TOP OF ALL BEARING AND SHEAR WALLS.
10. PROVIDE DOUBLE FLOOR JOISTS UNDER PARALLEL PARTITIONS.
11. PROVIDE 2X3 CROSS-BRIDGING OR 2X SOLID BLOCKING AT A MINIMUM OF 8'-0" O.C. FOR FLOOR JOISTS (CONTACT METAL BRIDGING OR EQUAL MAY BE USED).
12. HOLES AND NOTCHES IN STRUCTURAL MEMBERS FOR PIPES AND CONDUIT SHALL COMPLY WITH THE BUILDING CODE & PROVIDED TYP. DETAILS.
13. ALL BOLT HOLES SHALL BE DRILLED A MIN. OF 1/32" TO A MAX. OF 1/16" LARGER IN DIAMETER THAN THE NOMINAL SIZE OF BOLT USED.
14. EACH SHEET OF PLYWOOD SHALL HAVE 2' MIN. SHEET DIMENSION UNLESS ALL EDGES OF THE UNDERSIZED SHEETS ARE SUPPORTED BY FRAMING MEMBERS OR BLOCKING.
15. THREADED PORTION OF LAG SCREWS SHALL BE TURNED NOT DRIVEN INTO THE PRE-DRILLED HOLE.
16. ALL NAILS SHALL BE COMMON WIRE NAILS U.N.O.
17. IF GUN NAILING IS USED, REDUCE THE SPECIFIED NAIL SPACING BY 20% UNLESS THE HEADS DO NOT PENETRATE INTO THE SHT'G..
18. ALL NAILS SHALL BE GALVANIZED WHERE EXPOSED TO WEATHER.
19. EXCEPT WHERE TOE NAIL IS REQUIRED, NAILS SHALL BE DRIVEN PERPENDICULAR. PRE-DRILL FOR ALL NAILS 20d OR LARGER.
20. TJI, PARALLAM, AND TIMBER STRANDS SHALL BE ICC APPROVED PER SPECIFICATIONS. ALSO SEE SPECIAL INSPECTION & SHOP DRAWING NOTES ON THIS SHEET.
21. USE SIMPSON OR OTHER EQUIVALENT ICC APPROVED HARDWARE FOR ALL CONNECTION PER PLAN NOTES AND SPECIFICATIONS.
22. ROOF TRUSSES SHALL BE DESIGNED & STAMPED BY MANUFACTURE'S ENGINEER. SHOP DRAWING SHALL BE PREPARED PER NOTES ON THIS SHEET.
23. FASTENERS AND ANCHOR BOLTS INSTALLED IN CHEMICALLY OR PRESSURE TREATED LUMBERS SHALL BE CORROSION RESISTANT USING HOT-DIPPED ZINC COATED GALVANIZED OR STAINLESS STEEL PER CBC SECTION 2304A.3
24. EDGE OF SHEATHING PLYWOOD PANELS SHALL BE BLOCKED OR T&G AS SPECIFIED ON PLANS.
25. PARTICLE PANELS (OSB) MAY BE USED IN LIEU OF PLYWOOD, IF IT IS PROVED TO BE EQUIVALENT TO CDX-STRUCT-I, AND MEETS UL-FIRE-RATED ASSEMBLY FOR THE FLOOR SYSTEM, AS SPECIFIED ON THE PROJECT REQUIREMENTS. PLYWOOD SHEATHING PANELS SHALL HAVE TONGUE & GROOVE EDGES FOR INTERLOCKING OR BE SUPPORTED BY 3X BLOCKING ALONG THE PANEL WITH SQUARE EDGES. PLACING DECK CLIPS FOR SUPPORT OF PANELS IS NOT ACCEPTABLE AS ALTERNATIVE SUPPORT METHODS ALONG FREE EDGES.

## POST-INSTALLED ANCHOR BOLTS

ANCHOR BOLTS SHALL BE ONE OF THE FOLLOWING ACCEPTABLE PRODUCTS, OR AN EQUIVALENT. NO DRILLED-IN ANCHOR IS ALLOWED IN POST TENSIONED SLABS TO AVOID DAMAGING/CUTTING TENDONS & REINFORCEMENT, UNLESS THE LOCATION IS CLEARED BY NONDESTRUCTIVE TESTING OF UNDERGROUND PENETRATING RADAROR X-RAY. (PACHOMETER READING IS NOT ACCEPTABLE)

- EXPANSION-TYPE ANCHORS
  HILTI -TZ2 (ESR#4266) (FOR CONCRETE)
  HILTI -TZ2 (ESR#4561) (FOR MASONRY)
  (FOR INSTALLATION SEE TABLE A)
- EPOXY/ADHESIVE ANCHORS
  HILTI RESD500-V3 ADHESIVE SYSTEM, ESR#3814
  (FOR TEST FREQUENCY SEE NOTES BELOW AND FOR TESTING LOADS SEE TABLE B)
- SCREW TYPE ANCHORS
  SIMPSON TITEN HD (ESR#1056) (FOR MASONRY)

1. EQUIVALENT PRODUCTS, WITH VALID & CURRENT ICC REPORTS WHICH ALLOW APPLICATION FOR SEISMIC LOADING, ARE ACCEPTABLE.
2. FOR MIN. EMBEDMENT AND OTHER INFO., REFER TO DETAILS.
3. FOR REPRESSION AND INSTALLATION, REFER TO MANUFACTURES' RECOMMENDATIONS & NOTE/TABLES BELOW

## POST-INSTALLED EXPANSIVE ANCHOR BOLTS

TABLE A

| SETTING INFORMATION | SYM. | UNITS | NOMINAL ANCHOR DIAMETER (IN.) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1/4 | 3/8 | | | 1/2 | | | | 5/8 | | | 3/4 | | |
| NOMINAL BIT DIAMETER | $d_0$ | IN | 1/4 | 3/8 | | | 1/2 | | | | 5/8 | | | 3/4 | | |
| EFFECTIVE MIN. EMBEDMENT | $h_{ef}$ | IN | 1 1/2 | 1 1/2 | 2 | 2 1/2 | 1 1/2 | 2 | 2 1/2 | 3 1/4 | 2 3/4 | 3 1/4 | 4 | 3 1/4 | 3 3/4 | 4 3/4 |
| NOMINAL EMBEDMENT | $h_{nom}$ | IN | 1 3/4 | 1 7/8 | 2 1/2 | 3 | 2 | 2 1/2 | 3 | 3 3/4 | 3 1/4 | 3 3/4 | 4 1/2 | 4 | 4 1/2 | 5 1/2 |
| MIN. HOLE DEPTH | $h_o$ | IN | 2 | 2 | 2 3/4 | 3 1/4 | 2 1/4 | 2 3/4 | 3 1/4 | 4 1/4 | 3 3/4 | 4 1/4 | 4 3/4 | 4 1/4 | 4 3/4 | 5 3/4 |
| INSTALLATION TORQUE C.S. | $T_{inst}$ | FT-LB | 4 | 30 | | | 50 | | | | 40 | | | 110 | | |
| INSTALLATION TORQUE S.S. | $T_{inst}$ | FT-LB | 6 | 30 | | | 40 | | | | 60 | | | 125 | | |
| FIXTURE HOLE DIAMTER | $d_h$ | IN | 5/16 | 7/16 | | | 9/16 | | | | 11/16 | | | 13/16 | | |

## ADHESIVE ANCHOR BOLTS AND DOWELS:

1. MANUFACTURER'S FIELD REPRESENTATIVE SHALL PROVIDE INSTALLATION TRAINING FOR ALL PRODUCTS TO BE USED PRIOR TO COMMENCEMENT OF WORK; INSTALLATION.
2. INSTALLATION OF ADHESIVE ANCHORS IN HORIZONTAL TO VERTICAL ORIENTATION SHALL BE DONE BY A CERTIFIED ADHESIVE INSTALLER (AAI) AS CERTIFIED THROUGH ACI AND IN ACCORDANCE WITH THE CURRENT EDITION OF ACI 318.
3. EMBEDMENT DEPTH FOR ANCHORS AND DOWELS IS AS FOLLOWS, UNLESS OTHERWISE NOTED THE TESTING LABORATORY WILL PERFORM TENSION TESTS ON 25% OF ANCHORS AND DOWELS TO THE SPECIFIED TEST LOADS:

TABLE B

| ROD DIA. OR BAR SIZE | EMBEDMENT | TEST LOAD | BASE MATERIAL |
|---|---|---|---|
| 3/8" | 4" | 3,000# | CONCRETE |
| 1/2" | 5" | 4,500# | CONCRETE |
| 5/8" | 6" | 6,500# | CONCRETE |
| 3/4" | 7" | 9,000# | CONCRETE |
| 7/8" | 9" | 11,000# | CONCRETE |
| 1" | 11" | 15,000# | CONCRETE |
| 1-1/4" | 14" | 20,000# | CONCRETE |
| #3 | 5" | 3,500# | CONCRETE |
| #4 | 6-1/2" | 5,500# | CONCRETE |
| #5 | 8" | 8,500# | CONCRETE |
| #6 | 10" | 12,000# | CONCRETE |
| #7 | 12" | 16,500# | CONCRETE |
| #8 | 14" | 12,500# | CONCRETE |
| #9 | 16" | 23,000# | CONCRETE |
| #10 | 19" | 26,000# | CONCRETE |

4. ANCHORS SHALL CONFORM WITH ASTM A193 GRADE B7 THREADED RODS USING ASTM A 563 GRADE DH HEAVY HEX NUTS AND ASTM F436 WASHERS U.N.O..
5. REPLACE ANCHORS AND DOWELS THAT FAIL DURING TESTING AND RETEST. IF MORE THAN 10% OF THE TESTED DOWELS AND ANCHORS FAIL TO ACHIEVE THE SPECIFIED TEST LOAD, TEST 100% OF THE DOWELS AND ANCHORS INSTALLED IN THE LAST 2 DAYS OF ANCHOR INSTALLATION.
6. CENTER BAR IN THE HOLE AND WEDGE TIGHT WITH WOODEN WEDGES TO HOLD IT IN PLACE UNTIL THE ADHESIVE SETS.
7. 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 ENGINEER WILL DETERMINE A NEW LOCATION.
8. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLES ATTACHED WITH ADHESIVE ANCHORS.
9. BOLTS SET IN EXPOSED SURFACE SHALL BE STAINLESS STEEL OR CORROSION RESISTANT
10. **TEST REQUIRMENT:**
   - **A. FREQUENCY** 50% OR ALTERNATE BOLTS IN A GROUP, INCLUDING AT LEAST ONE-HALF THE ANCHORS IN EACH GROUP, SHALL BE TESTED.
   - **B. TEST LOADS:** TEST LOADS SHALL BE TWICE THE MAXIMUM ALLOWABLE TENSION LOAD OR ONE AND A QUARTER ($1\frac{1}{4}$) TIMES THE MAXIMUM DESIGN STRENGTH OF ANCHORS AS PROVIDED IN THE APPROVED ICC REPORT TENSION TEST LOAD NEED NOT EXCEED 80% OF THE NOMINAL YIELD STRENGTH OF THE ANCHOR ELEMENT.

## STRUCTURAL INDEX OF DRAWINGS


SN1........GENERAL NOTES
S1......... FLOOR/ROOF PLANS - C7, C8, S-L & ADMIN
S2......... FLOOR/ROOF PLANS - C1, C3, C5, IA-1, & IA-2
S3......... FLOOR/ROOF PLANS - C2, C4, & C6
SD1........CONCRETE DETAILS
SD2........RTU DETAILS
SD2A......RTU DETAILS
SD3........HUNG UNITS DETAILS
SD4........MECH. ENCLOSURE


## DESIGN LOADS:

THE SEISMIC DESIGN CRITERIA:

LATITUDE: 33.756614° N
LONGITUDE: -117.982682° W

$S_S$ = 1.385 $S_{DS}$= 1.108
$S_1$=0.493 $S_{D1}$ = N/A

SITE CLASS "DEFAULT"
SEISMIC DESIGN CATEGORY "D"
$I_e$ =1.25 RISK CATEGORY: III

COMPONENTS:

$a_p$= 1
$R_p$= 2.5
$\Omega_o$= 2.0
$I_p$ = 1.0

WIND CRITERIA:

BASIC WIND SPEED 101 MPH
EXPOSURE "C"
$I_W$ = 1.00

## STRUCTURAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| # | NUMBER OR POUNDS | FRMG. | FRAMING |
| CL | CENTER LINE | FLR. | FLOOR |
| BM. | BEAM | MTL. | METAL |
| BEAM | BEAM | PL. | PLATE |
| DET. | DETAIL | REINF. | REINFORCING |
| CLR. | CLEAR | PLCS. | PLACES |
| CONT. | CONTINUOUS | P.H. | PENTHOUSE |
| CONC. | CONCRETE | O.C. | ON CENTER |
| COL. | COLUMN | NO. | NUMBER |
| BTWN. | BETWEEN | PSF | POUNDS PGR SQ.FT. |
| BOTT. | BOTTOM | N.T.S. | NOT TO SCALE |
| B.O.F. | BOTTOM OF FOOTING | N.I.C. | NOT IN CONTRACT |
| ANCH. | ANCHOR | SIM. | SIMILAR |
| A.B. | ANCHOR BOLT | SIMP. | SIMPSON |
| DWG. | DRAWING | SEPN. | SEPARATION |
| DIM. | DIMENSION | SECT. | SECTION |
| -3" | SLAB DEPRESSION | S.W.S. | SHEAR WALL |
| EA. | EACH | SCHL. | SCHEDULE |
| FIN. | FINISH | S. | FOOTING STEP |
| EXP. | EXPANSION | MIN. | MINIMUM |
| EXIST. | EXISTING | STL. | STEEL |
| ELECTL. | ELECTRICAL | THK. | THICK |
| EL | ELEVATION | STIFF. | STIFFENER |
| E.W. | EACH WAY | T.O.W. | TOP OF WALL |
| E.F. | EACH FACE | T.O.S. | TOP OF STEEL |
| EXTR. | EXTERIOR | T.O. | TOP OF DRAWINGS |
| F.O.W. | FACE OF WALL | S.O.G. | SLAB ON GRADE |
| F.O.S. | FACE OF STUD | S.A.D. | SEE ARCHITECTURAL |
| F.O.C. | FACE OF CONCRETE | SYM. | SYMMETRICAL |
| FDN. | FOUNDATION | SUPPT. | SUPPORT |
| ELEV. | ELEVATOR OR ELEVATION | STD. | STANDARD |
| GA. | GAUGE | SQ. | SQUARE |
| JT. | JOINT | V.O.S. | VERIFY ON SITE |
| INTR. | INTERIOR | V.O.J. | VERIFY ON JOB |
| MFR. | MANUFACTURER | TYP. | TYPICAL |
| MECHL. | MECHANICAL | SPEC. | SPECIFICATION |
| MAX. | MAXIMUM | U.N.O. | UNLESS NOTED OTHERWISE |
| M.B. | MACHINE BOLT | DWL. | DOWEL |
| LT. | WT. LIGHTWEIGHT | W/ | WITH |
| HORIZ. | HORIZONTAL | WT. | WEIGHT |
| H.S.B. | HIGH STRENGTH BOLT | WJ. | WALL JOINT |
| GR. BM. | GRADE BEAM | VERT. | VERTICAL |
| FRT. | FIRE RETARDANT | | |

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949--548-5000

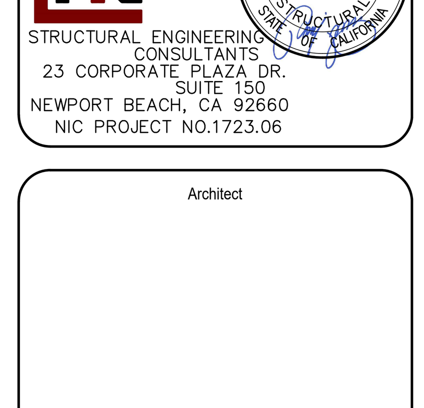
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872




Consultant

STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR. SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.1723.06

REGISTERED PROFESSIONAL ENGINEER TOURAJ EIMANI No. S4302 Exp. 09/30/23 STRUCTURAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| Issue Date | P22XXX00AR |

REVISIONS

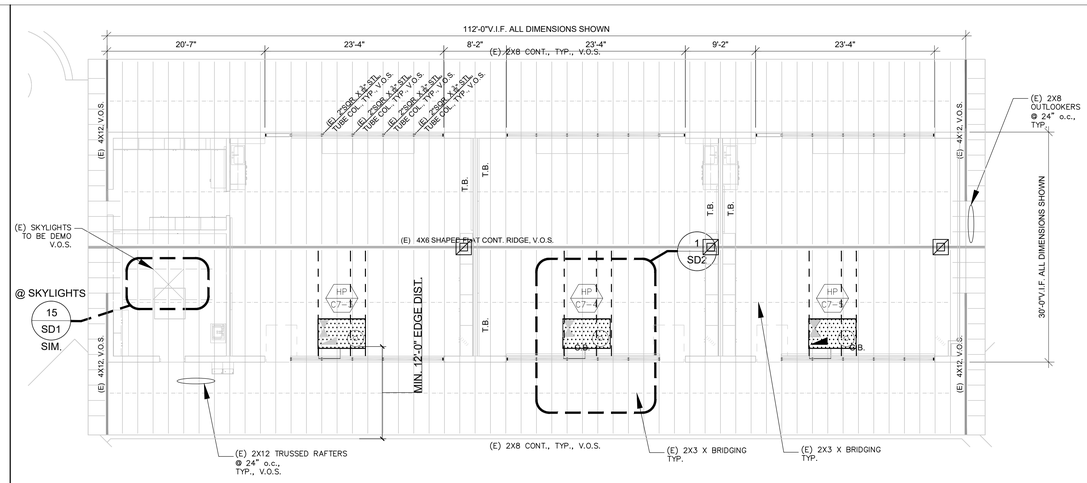
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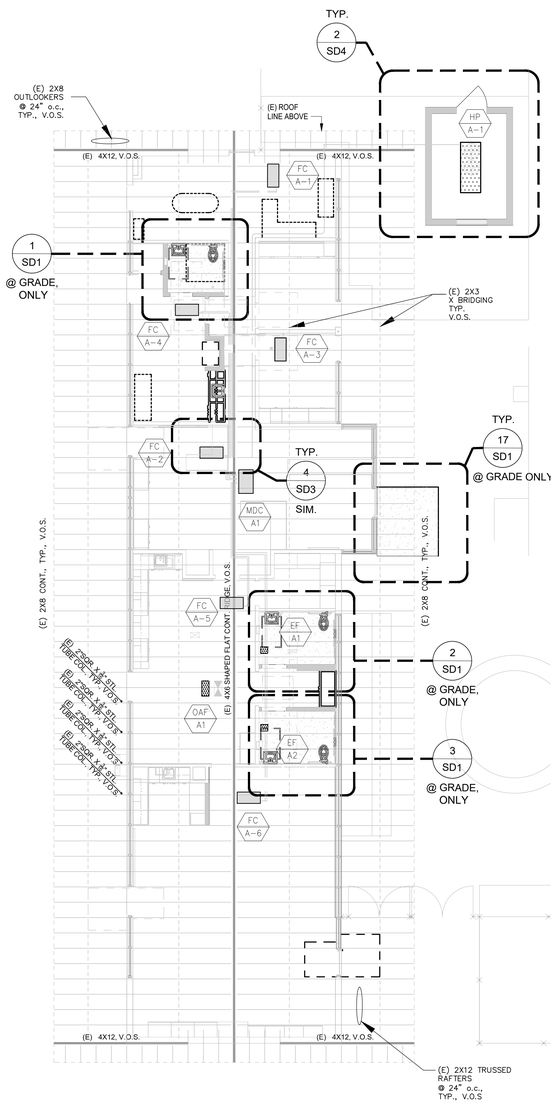
GENERAL NOTES

SN1

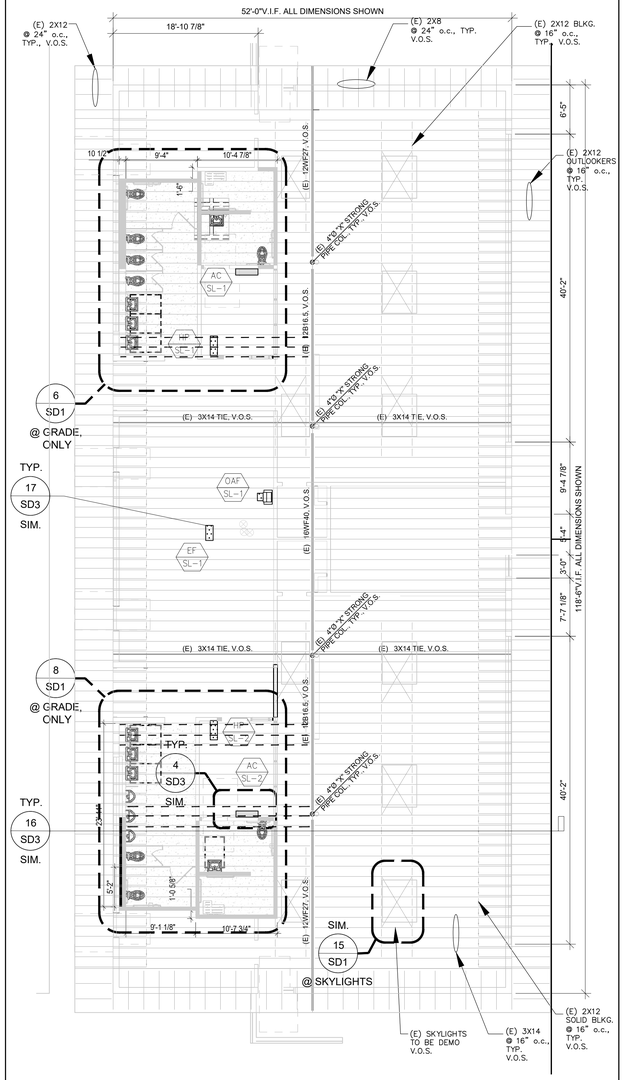
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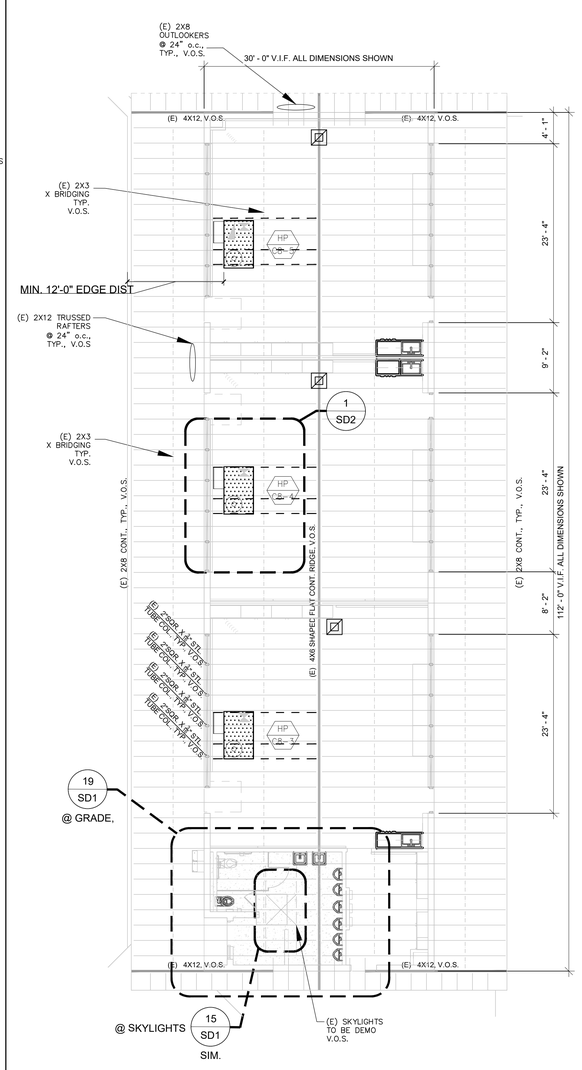

2 FLOOR PLAN – BUILDING C7
1/8" = 1'-0"




4 FLOOR PLAN – ADMINISTRATION BUILDING
1/8" = 1'-0"




3 FLOOR PLAN – BUILDING S–L




1 FLOOR PLAN – BUIDLING C8

1. THE MAXIMUM OPERATIONAL WEIGHTS OF NEW UNITS ARE LISTED IN THE ANCHORAGE SCHEDULE IN DETAIL 18/SD2. EXACT SIZE AND WEIGHT OF UNITS MAY SLIGHTLY DIFFER FROM THE ONES SPECIFIED ON THESE DRAWINGS/SCHEDULE. SHOULD THE ACTUAL WEIGHT OF ANY UNITS EXCEED MORE THAN 10% OF THE LISTED WEIGHTS, IMMEDIATELY NOTIFY SE OR AND DSA DISTRICT ENGINEER FOR FURTHER INSTRUCTION.
2. THE OPERATABLE WEIGHT OF UNITS SHALL BE LESS OR EQUAL TO THE VALUES SHOWN, CONTRACTOR SHALL NOTIFY SEoR ABOUT HEAVIER UNITS. ( MORE THAN 5% OF LISTED VALUES)
3. UNIT DIMENSION SHOWN HERE REPRESENT THE BEST ESTIMATE BASED ON THE AVAILABLE DATA.
4. MINOR ADJUSTMENTS IN UNIT POSITION WITH RESPECT TO EXISTING ROOF FRAMING MAY BE NECESSARY TO MISS CONFLICT, ALIGN NEW BLOCKINGS TO MATCH THE EXACT UNIT LOCATION/DIMENSIONS.
5. FINAL CONFIGURATION OF EACH UNIT, WITH RESPECT TO THE EXISTING ROOF FRAMING, SHALL BE FIELD VERIFY TO AVOID CONFLICT. SEE ALTERNATIVE CONFIGURATIONS SHOWN ON TYPICAL DETAIL 4/SD2
6. THE EXACT LOCATION AND SIZE OF MECH UNIT SHALL BE VERIFIED BY VENDOR/INSTALLER IN COORDINATION WITH THE LATEST MECH DRAWING/ CUT SHEETS.

A. PRIOR TO DEMOLITION WORK, SEE GENERAL NOTES ON SN1. FOR EXACT EXTENT OF DEMOLITION WORK REFER TO THE ARCH. DWG'S.
B. ALL EXISTING FRAMING MEMBERS THAT ARE BEING CUT/NOTCHED/TRIMMED SHALL BE PROPERLY SECURED BY SHORING.
C. SIZES SPACING LOCATIONS OF ALL EXISTING STRUCTURAL ELEMENTS SHALL BE FIELD VERIFIED & ANY DISCREPANCIES BE REPORTED TO SEoR.
D. IF EXISTING MEMBERS ARE SMALLER THAN WHAT IS SHOWN IN DRAWINGS AND CONSIDERED IN CALCULATIONS, PLEASE NOTICE SEOR FOR DETAIL OR FURTHER INFO

## LEGEND

| | |
|---|---|
| | (E) BEAM, V.O.S., PER PLAN SEE NOTE A-D |
| | (E) HEADER, V.O.S., PER PLAN, SEE NOTES A-D |
| | (E) ROOF FRAMING, PER PLAN, SEE NOTES A-D |
| | |
| | (N) MATCHING SISTER JOIST, PER PLAN FOR EXACT LOCATION, SEE DETAIL 1/SD2,SD2A |
| | (N) CONC. SLAB-ON-GRADE |
| UF HP | (N) ROOFTOP UNIT, PER PLAN, SEE 4/SD2 SEE NOTE 1-6 |
| FC | (N) SUSPENDED UNIT, PER PLAN, SEE 4/SD3 SEE NOTE 1-6 |
| | (N) HVAC UNIT, PER MECH. PLANS SEE NOTE 1-6 |
| | DUCT THROUGH ROOF PENETRATION PER MECH. |

## EQUIPMENT SCHEDULE (*)

| UNIT DESCRIPTION | MAX TOTAL WEIGHT(LBS) | DIMENSIONS | DETAIL REF. |
|---|---|---|---|
| | | HP D-1 HP D-2 HP D-3 HP D-4 HP D-5 HP D-6 HP D-7 | |
| HEAT PUMP (ON ROOF) | 1152 | | 1/SD2 |
| | | FC A-1 FC A-2 FC A-3 FC A-5 FC A-6 FC A-7 | |
| FAN COIL | 80...125 | | 4/SD3 |
| | | HP A-1 | |
| OUTDOOR HEAT | 1137 | | |
| | | EF A-1 EF A-2 | |
| EXHAUST FAN | 8...39 | | |
| | | OAF A-1 OAF A-2 | |
| OUTSIDE AIR FAN | 24...39 | | |
| | | MDC A-1 | |
| OUTSIDE AIR FAN | 132 | | |
| | | | |

(*) SUBJECT TO CHANGE REFER TO LATEST MECHANICAL PACKAGE. SEE NOTES 1-7

ON GROUND ARCH. ELEMENTS ARE SHOWN FOR COORDINATION ONLY

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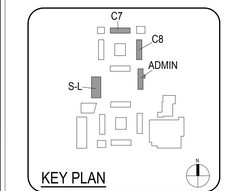
**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST.
WESTMINSTER CA 92683

**DSA SUBMITTAL**

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR.
SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.1723.06

REGISTERED PROFESSIONAL ENGINEER TODD JAY EIMAN No. S4302 Exp. 09/30/23 STRUCTURAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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REVISIONS

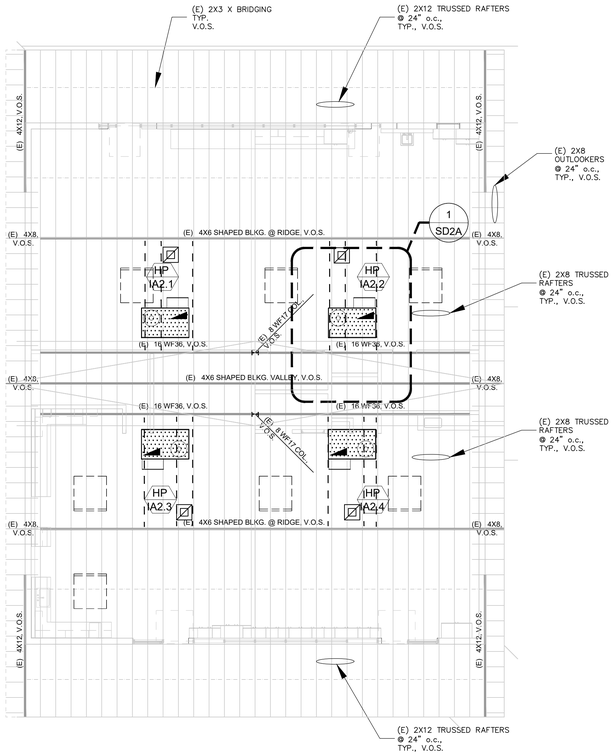
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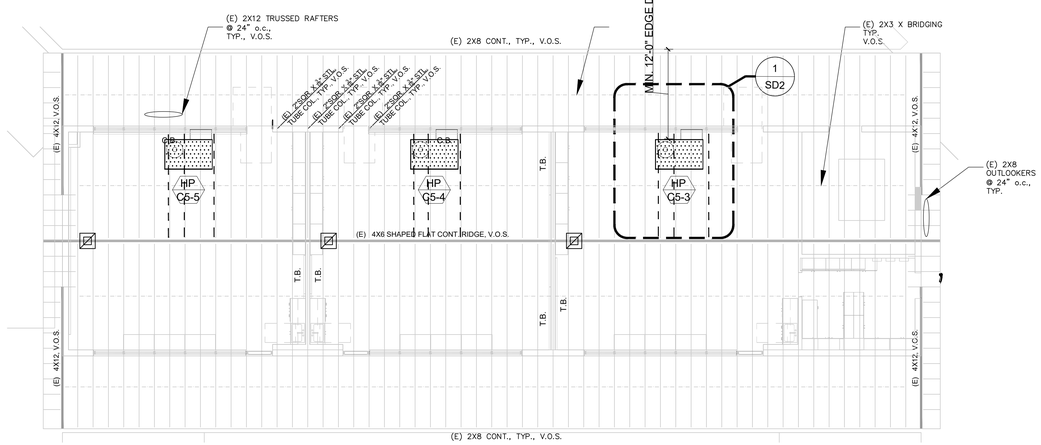
**FLOOR/ROOF PLANS C7, C8, S-L & ADMIN**

**S1**

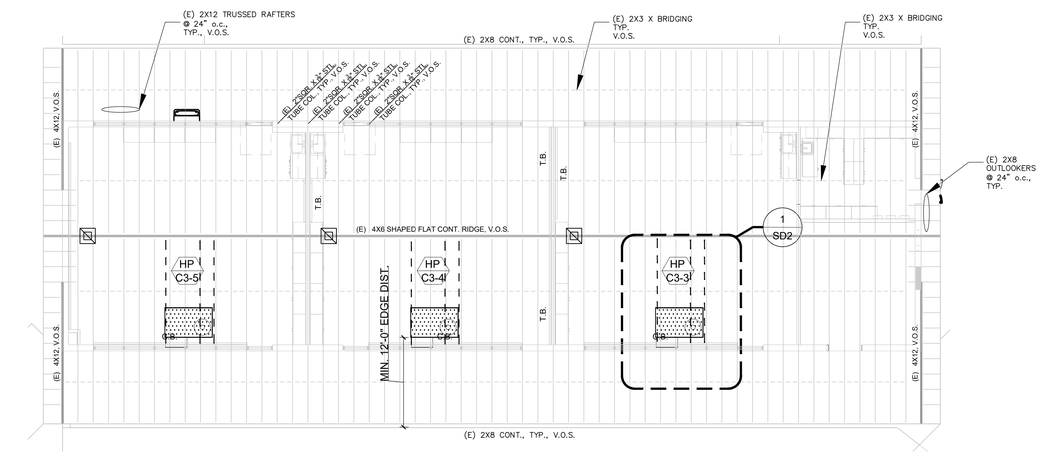
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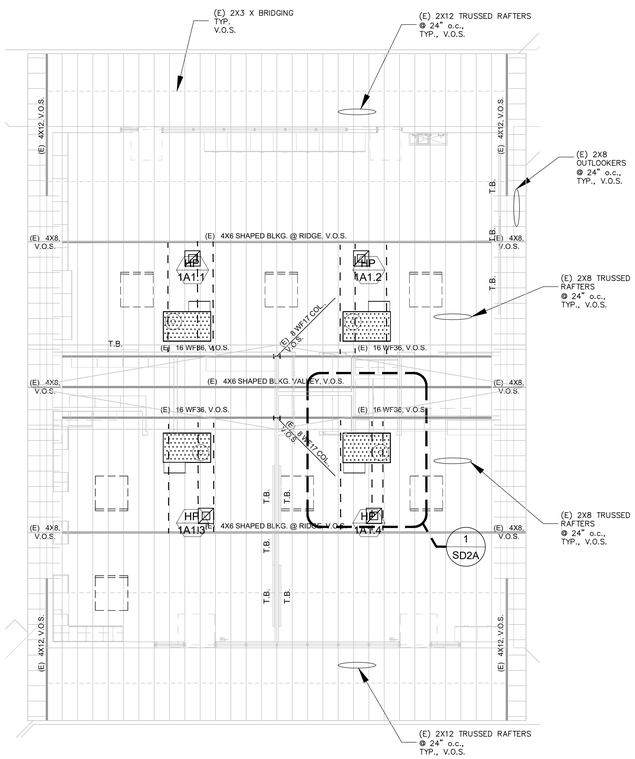



5 FLOOR PLAN – BUILDING IA–2
1/8" = 1'-0"

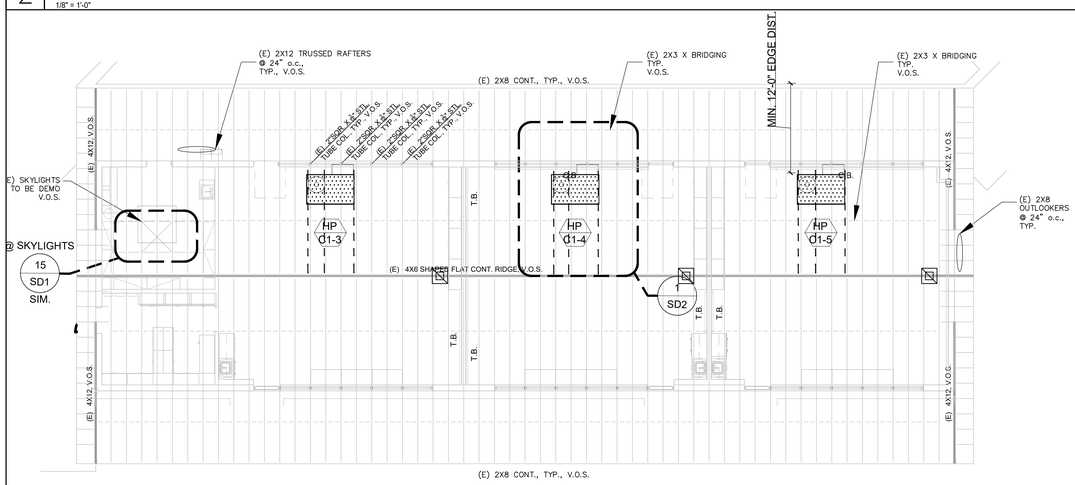



3 FLOOR PLAN – BUILDING C5
1/8" = 1'-0"




4 FLOOR PLAN – BUILDING IA–1
1/8" = 1'-0"




2 FLOOR PLAN – BUILDING C3
1/8" = 1'-0"

1 FLOOR PLAN – BUILDING C1
1/8" = 1'-0"

1. THE MAXIMUM OPERATIONAL WEIGHTS OF NEW UNITS ARE LISTED IN THE ANCHORAGE SCHEDULE IN DETAIL 18/SD2. EXACT SIZE AND WEIGHT OF UNITS MAY SLIGHTLY DIFFER FROM THE ONES SPECIFIED ON THESE DRAWINGS/SCHEDULE. SHOULD THE ACTUAL WEIGHT OF ANY UNITS EXCEED MORE THAN 10% OF THE LISTED WEIGHTS, IMMEDIATELY NOTIFY SE OR AND DSA DISTRICT ENGINEER FOR FURTHER INSTRUCTION.
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6. THE EXACT LOCATION AND SIZE OF MECH UNIT SHALL BE VERIFIED BY VENDOR/INSTALLER IN COORDINATION WITH THE LATEST MECH DRAWING/ CUT SHEETS.

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## LEGEND

| | |
|---|---|
| | (E) BEAM, V.O.S., PER PLAN SEE NOTE A-D |
| | (E) HEADER, V.O.S., PER PLAN, SEE NOTES A-D |
| | (E) ROOF FRAMING, PER PLAN, SEE NOTES A-D |
| | (E) COLUMN PER PLAN, V.O.S. |
| | (N) MATCHING SISTER JOIST, PER PLAN FOR EXACT LOCATION, SEE DETAIL 1/SD2,SD2A |
| | (N) CONC. SLAB-ON-GRADE |
| UT HP | (N) ROOFTOP UNIT, PER PLAN, SEE 4/SD2 SEE NOTE 1-6 |
| FC | (N) SUSPENDED UNIT, PER PLAN, SEE 4/SD3 SEE NOTE 1-6 |
| | (N) HVAC UNIT, PER MECH. PLANS SEE NOTE 1-6 |
| | DUCT THROUGH ROOF PENETRATION PER MECH. |

## EQUIPMENT SCHEDULE (*)

| UNIT DESCRIPTION | TOTAL WEIGHT(LBS) | DIMENSIONS | DETAIL REF. |
|---|---|---|---|
| | | HP W1 HP W2 HP W3 HP W4 HP W1 HP W2 HP W3 HP W4 | |
| HEAT PUMP | 1152 | | 1/SD2A |
| | | HP D-2 HP D-2 HP D-3 HP D-4 HP D-3 HP D-4 HP D-5 HP D-5 | |
| HEAT PUMP | 1152 | | 1/SD2 |
| | | HP W1 HP W2 HP W3 HP W4 HP W1 HP W2 HP W3 HP W4 | |
| POWER EXHAUSTER | 195 | | |
| | | | |
| | | | |

(*) SUBJECT TO CHANGE REFER TO LATEST MECHANICAL PACKAGE. SEE NOTES 1-7

ON GROUND ARCH. ELEMENTS ARE SHOWN FOR COORDINATION ONLY

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DIV. OF THE STATE ARCHITECT
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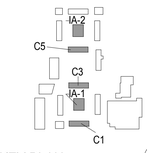
ARCHITECT PBK Architects, Inc.
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PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER CA 92683

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DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant
STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA, DR. SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.1723.06

REGISTERED PROFESSIONAL ENGINEER No. S4302 Exp. 09/30/23 STRUCTURAL STATE OF CALIFORNIA

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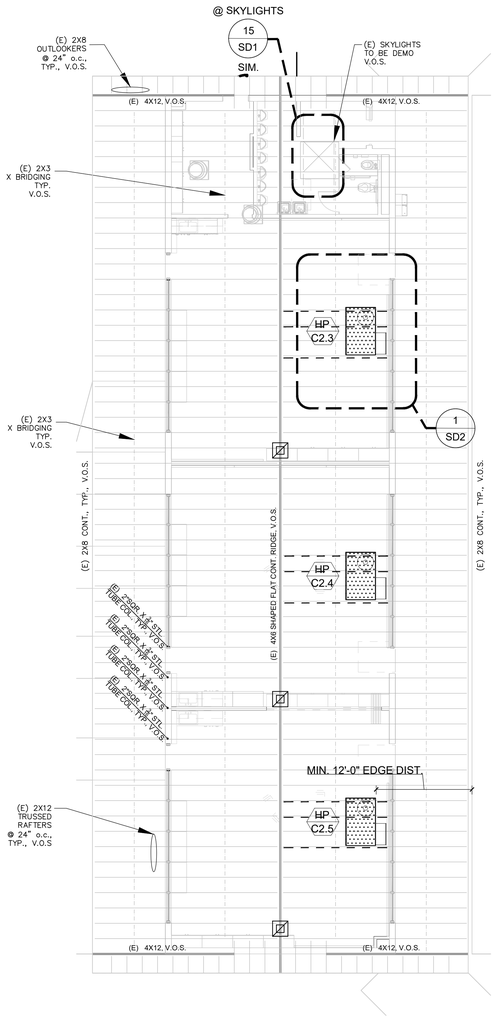
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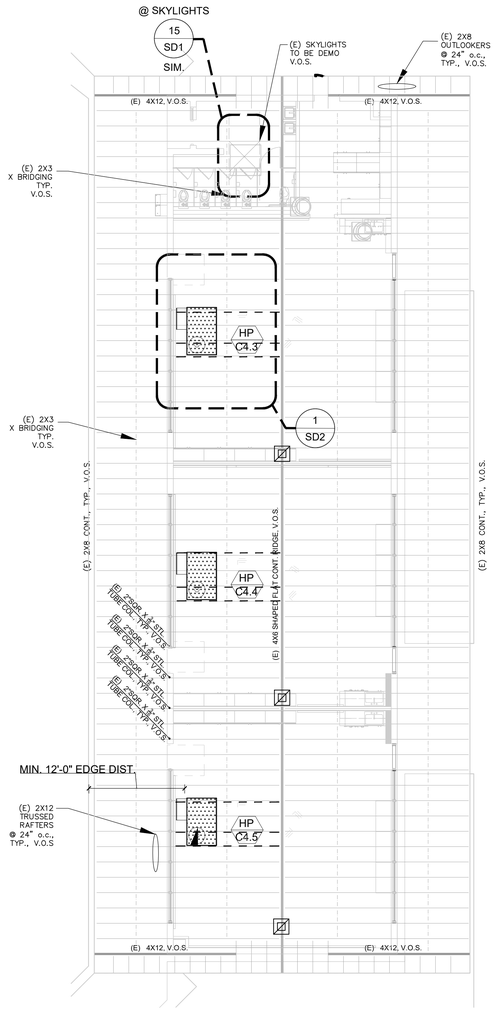
**FLOOR/ROOF PLANS C1, C3, C5, IA-1, & IA-2**

**S2**

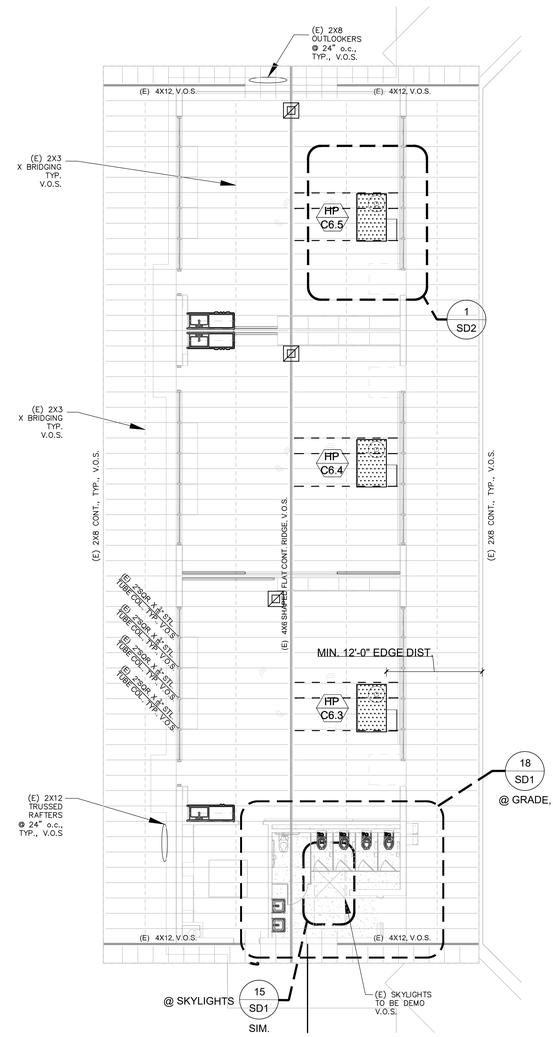
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3 FLOOR PLAN – BUILDING C2
1/8" = 1'-0"




2 FLOOR PLAN – BUILDING C4
1/8" = 1'-0"




1 FLOOR PLAN – BUIDLING C6
1/8" = 1'-0"

1. THE MAXIMUM OPERATIONAL WEIGHTS OF NEW UNITS ARE LISTED IN THE ANCHORAGE SCHEDULE IN DETAIL 18/SD2. EXACT SIZE AND WEIGHT OF UNITS MAY SLIGHTLY DIFFER FROM THE ONES SPECIFIED ON THESE DRAWINGS/SCHEDULE. SHOULD THE ACTUAL WEIGHT OF ANY UNITS EXCEED MORE THAN 10% OF THE LISTED WEIGHTS, IMMEDIATELY NOTIFY SE OR AND DSA DISTRICT ENGINEER FOR FURTHER INSTRUCTION.
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## LEGEND

| | |
|---|---|
| | (E) BEAM, V.O.S., PER PLAN SEE NOTE A-D |
| | (E) HEADER, V.O.S., PER PLAN, SEE NOTES A-D |
| | (E) ROOF FRAMING, PER PLAN, SEE NOTES A-D |
| | (E) STL POST, V.O.S. |
| | (N) MATCHING SISTER JOIST, PER PLAN FOR EXACT LOCATION, SEE DETAIL 1/SD2,SD2A |
| | (N) CONC. SLAB-ON-GRADE |
| | (N) ROOFTOP UNIT, PER PLAN, SEE 1/SD2 SEE NOTE 1-6 |
| | (N) SUSPENDED UNIT, PER PLAN, SEE 4/SD3 SEE NOTE 1-6 |
| | (N) HVAC UNIT, PER MECH. PLANS SEE NOTE 1-6 |
| | DUCT THROUGH ROOF PENETRATION PER MECH. |

## EQUIPMENT SCHEDULE (*)

| UNIT DESCRIPTION | OVERALL WEIGHT(LBS) | DIMENSIONS | DETAIL REF. |
|---|---|---|---|
| | HP C2.3 HP C2.4 HP C2.5 HP C4.3 HP C4.4 HP C4.5 HP C6.5 HP C6.4 HP C6.3 | | |
| HEAT PUMP | 1152 | | 1/SD2 |
| | | | |
| | | | |
| | | | |
| | | | |

(*) SUBJECT TO CHANGE REFER TO LATEST MECHANICAL PACKAGE. SEE NOTES 1-7

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DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

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23 CORPORATE PLAZA DR. SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.1723.06

REGISTERED PROFESSIONAL ENGINEER YUSUF EMAM No. S4302 Exp. 09/30/23 STRUCTURAL

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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REVISIONS

| No. | Description | Date |
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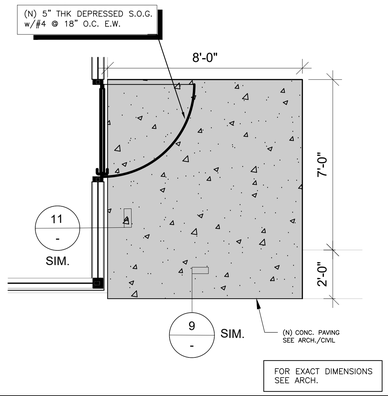
DSA SUBMITTAL

## FLOOR/ROOF PLANS C2, C4, & C6

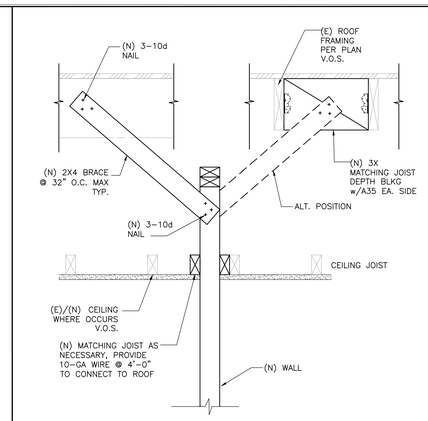
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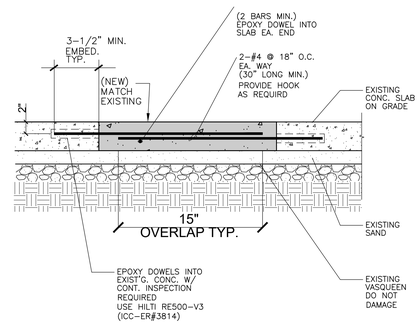
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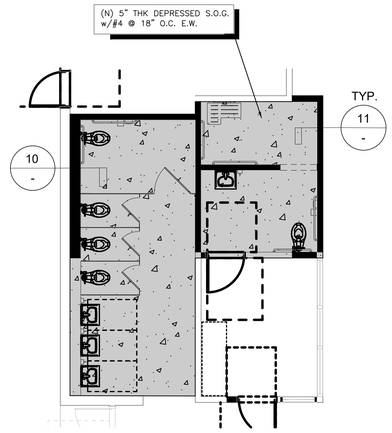

NEW ENTRY @ ADMIN BLDG. | 17

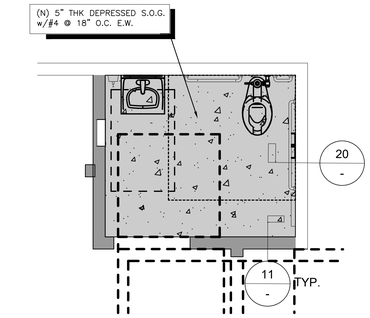



TYP. TOP CONN. @ (N) PARTN. | 13

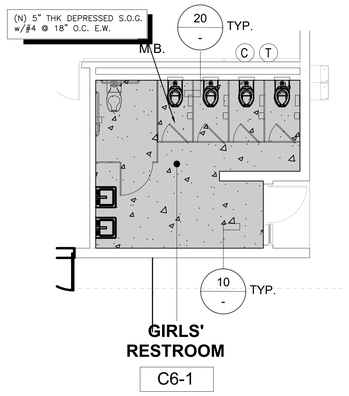



TYPICAL REPAIR AT SLAB ON GRADE | 9

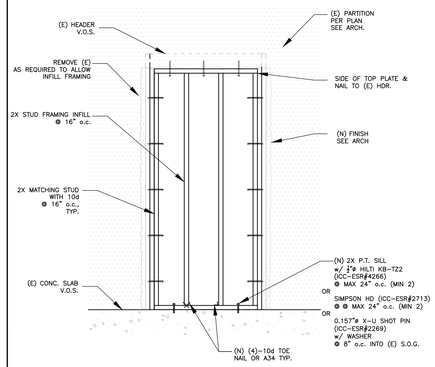


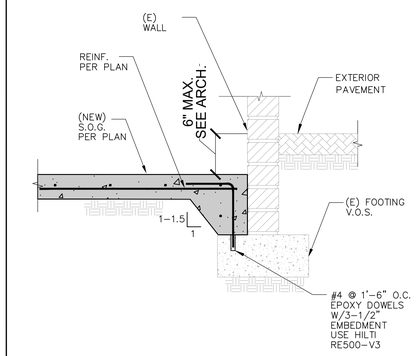

NURSE RR @ ADMIN BLDG. | 1



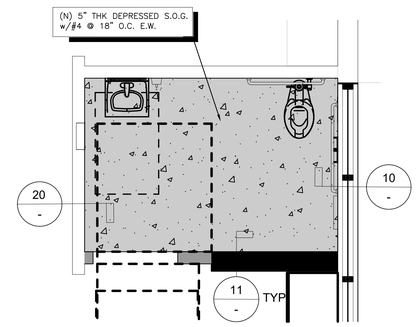

GIRLS' RR @ BLDG. 6 | 18



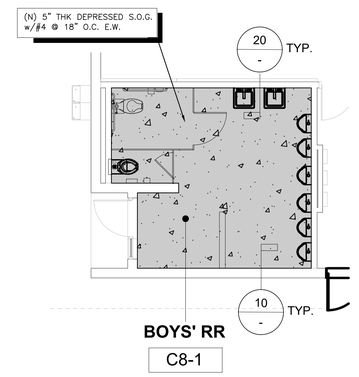

TYP. INFILL @ DOOR OPNG. | 14



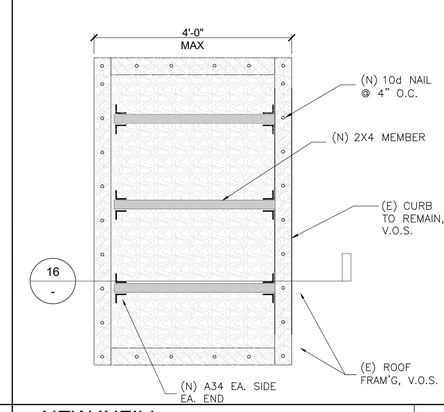

NEW DEPRESSED SLAB @ EXT. WALL | 10



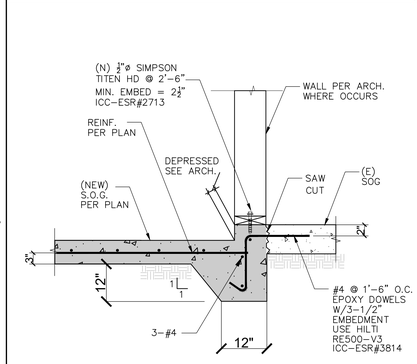

STAFF RR1 @ ADMIN BLDG. | 2



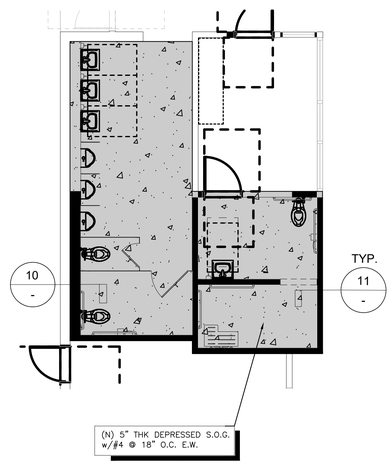

BOYS' RR @ BLDG. 8 | 19

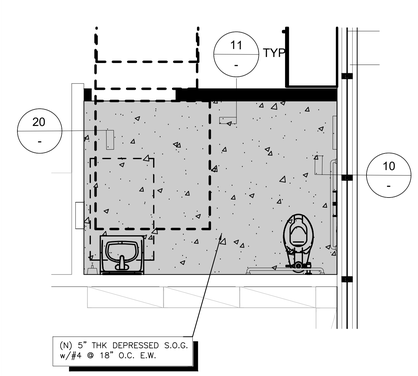



NEW INFILL | 15

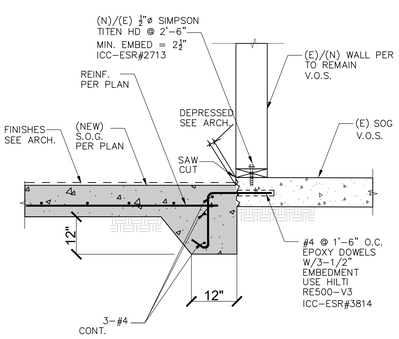



NEW DEPRESSED SLAB @ INT. WALL | 11

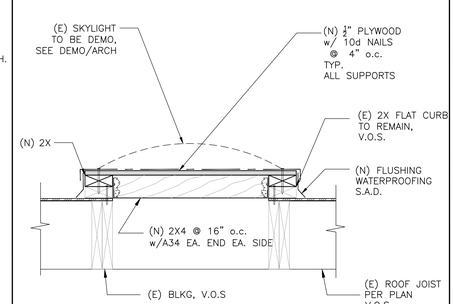


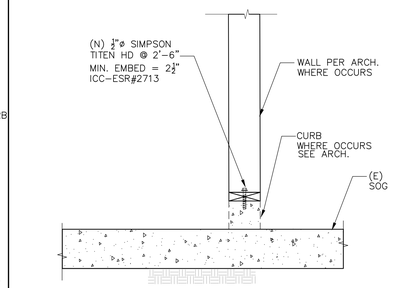

STAFF RR2 @ ADMIN BLDG. | 3




NEW DEPRESSED SLAB @ INT. WALL | 20




SECTION | 16




(FOR REFERENCE ONLY)

TYP. BOT. CONN. @ PARTN. WALL | 12




BOYS' RR@ S-L BLDG. | 8




**90 DEGREE HOOK** **135 DEGREE HOOK** **180 DEGREE HOOK**

| | TYPE OF HOOK | BAR SIZE | MIN D (IN) | $l_{EXT}$ (IN) |
|---|---|---|---|---|
| STIRRUP | 90-DEGREE HOOK | #3-5 | $4d_b$ | GREATER OF $6d_b$ AND 3" |
| | | #6-8 | $6d_b$ | $12d_b$ |
| | 135-DEGREE HOOK | #3-5 | $4d_b$ | GREATER OF $6d_b$ AND 3" |
| | | #6-8 | $6d_b$ | |
| | 180-DEGREE HOOK | #3-5 | $4d_b$ | GREATER OF $4d_b$ AND 2.5" |
| | | #6-8 | $6d_b$ | |
| BENT BAR | 90-DEGREE HOOK | #3-8 | $6d_b$ | $12d_b$ |
| | | #9-11 | $8d_b$ | |
| | 180-DEGREE HOOK | #3-8 | $6d_b$ | GREATER OF $4d_b$ AND 2.5" |
| | | #9-11 | $8d_b$ | |

D = INSIDE BENT DIAMTER

BAR BENDING & STIRRUPS | 4

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DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
P 949-548-9000

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

KEY PLAN

Consultant
STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR.
SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.1723.06
REGISTERED PROFESSIONAL ENGINEER (SJ) ERIC J. STEELE No. S4302 Exp. 09/30/23 STRUCTURAL CIVIL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE: Issue Date
PROJECT NUMBER: P22XXX00AR

REVISIONS

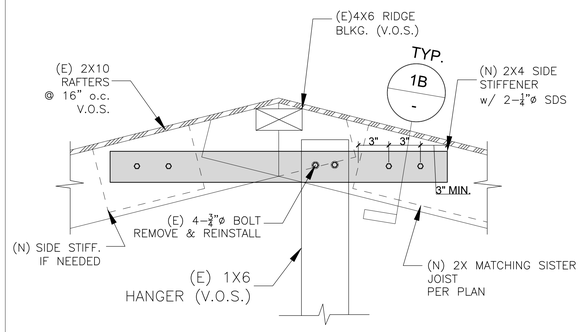
| No. | Description | Date |
|---|---|---|

DSA SUBMITTAL

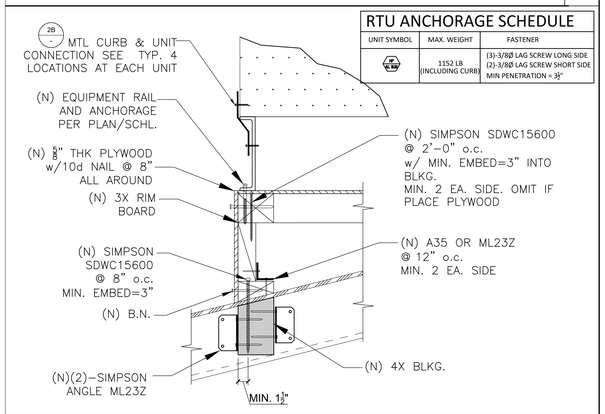
**CONCRETE DETAILS**

**SD1**

FILE PATH: Z:\Projects\...

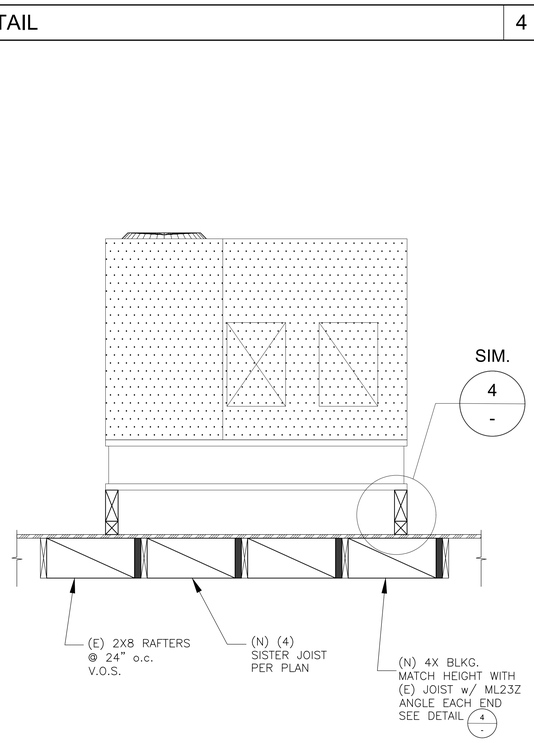



## DETAIL 3

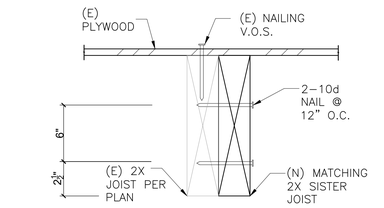



| RTU ANCHORAGE SCHEDULE | | |
|---|---|---|
| UNIT SYMBOL | MAX. WEIGHT | FASTENER |
| RTU | 1152 LB (INCLUDING CURB) | (3)-3/8ø LAG SCREW LONG SIDE (2)-3/8ø LAG SCREW SHORT SIDE MIN PENETRATION = 3½" |

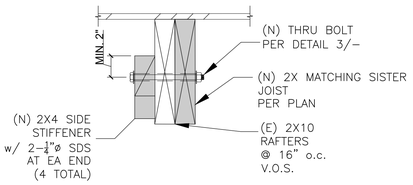
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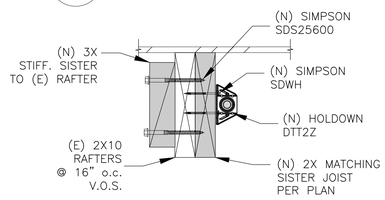

## SECTION 6



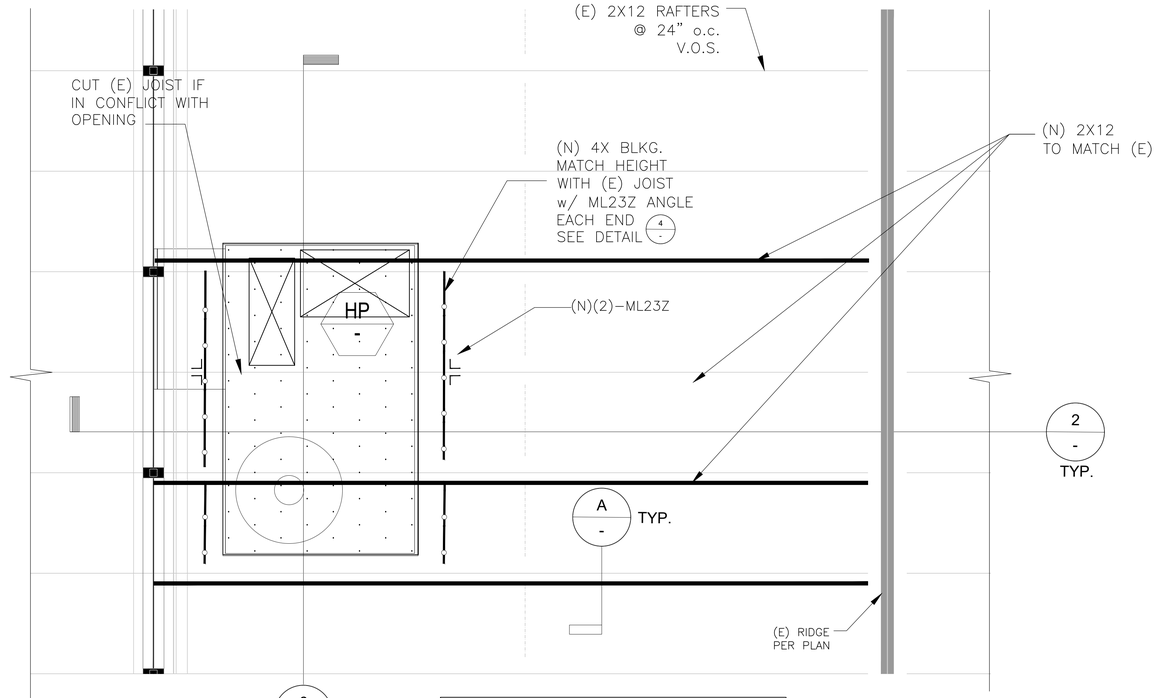

A TYP. SISTER JOIST CONN.



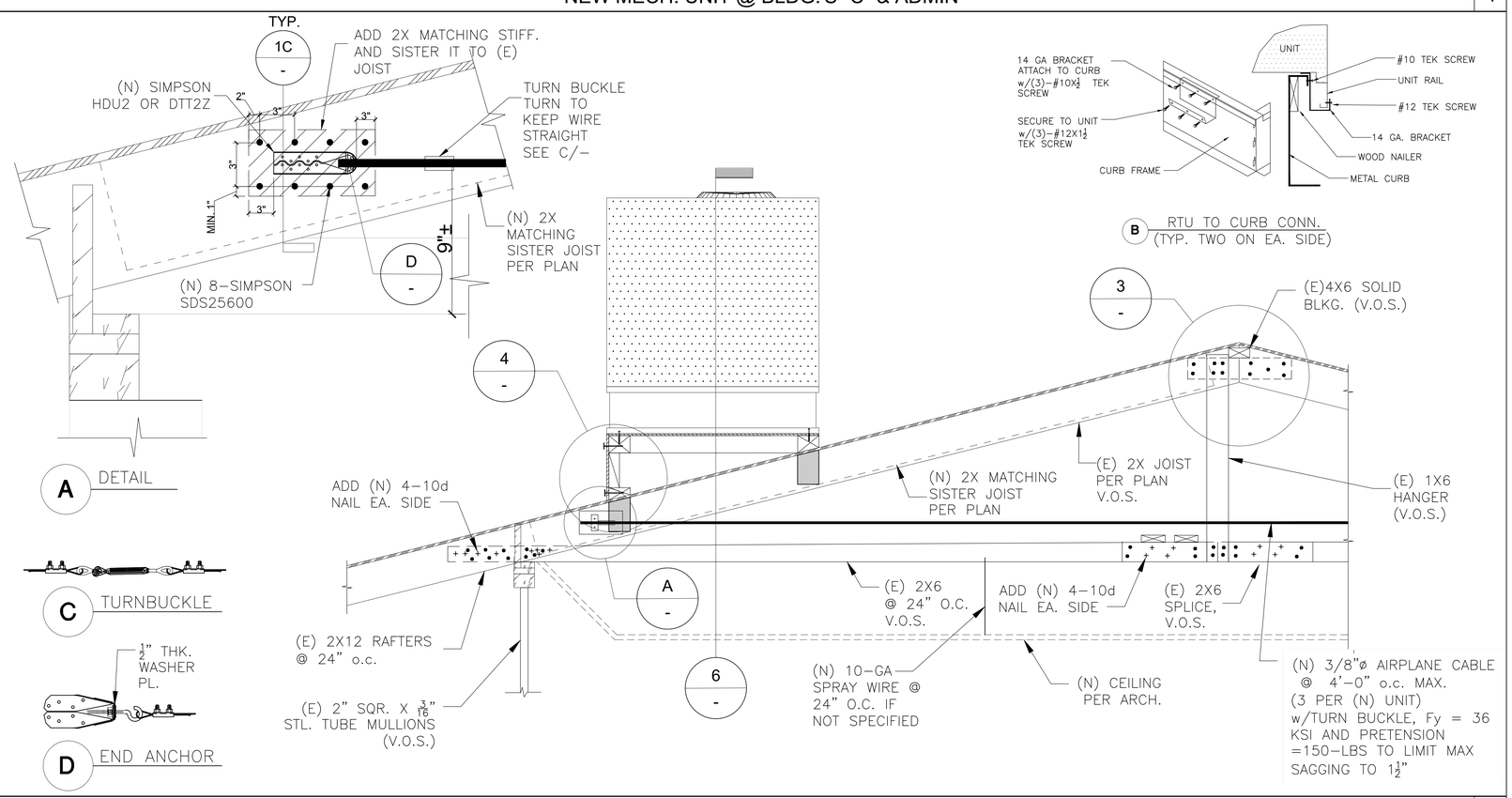

B TYP. SISTER JOIST CONN.




C TYP. SISTER JOIST CONN.




## NEW MECH. UNIT @ BLDG.'S "C" & ADMIN 1




## NEW MECH. UNIT @ BLDG.'S "C" & ADMIN 2

FILE PATH: Z:\Projects\...

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ANAHEIM
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14771 NEWLAND ST.
WESTMINSTER CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

KEY PLAN


Consultant
STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR. SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.1723.06


REGISTERED PROFESSIONAL ENGINEER TURAJ EMAMI No. S4302 Exp. 09/30/23 STRUCTURAL CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| Issue Date | P22XXX00AR |

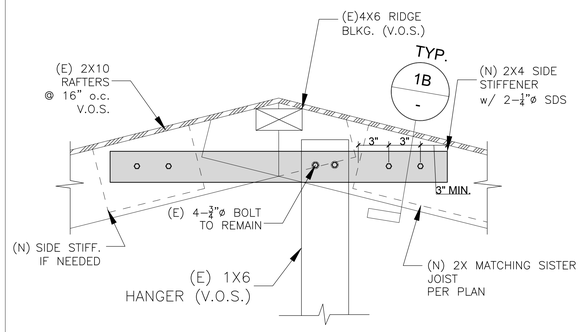
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|---|---|---|
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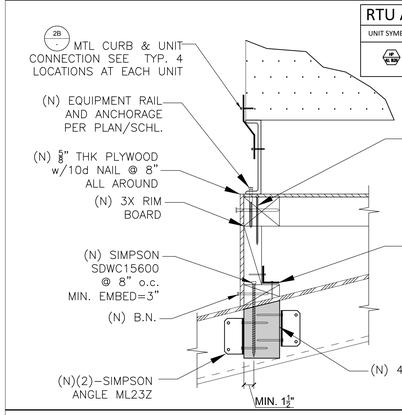
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RTU DETAILS

SD2

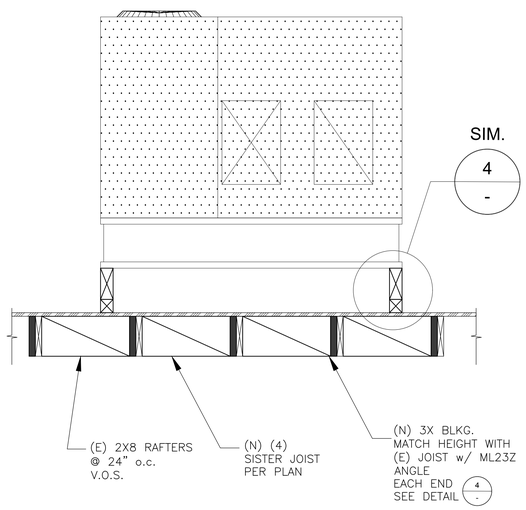



DETAIL | 3




| RTU ANCHORAGE SCHEDULE | | |
|---|---|---|
| UNIT SYMBOL | MAX. WEIGHT | FASTENER |
| 4 EA. | 1152 LB (INCLUDING CURB) | (3)-3/8ø LAG SCREW LONG SIDE (2)-3/8ø LAG SCREW SHORT SIDE MIN PENETRATION = 3½" |

DETAIL | 4



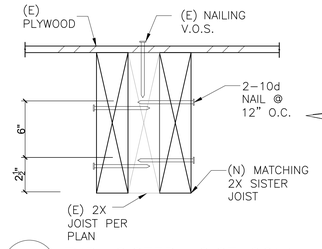

SECTION | 6

(N) 2X TO MATCH (E)

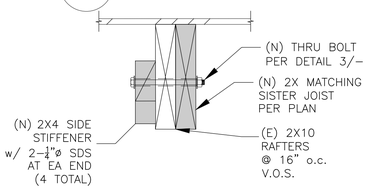
(N) 4X BLKG. TO MATCH (E)

(*)EXACT FRAMING CONFIGURATION AND SIZES MAY VARY ON DIFFERENT AREAS SEE CONFIG./OPTIONS BELOW

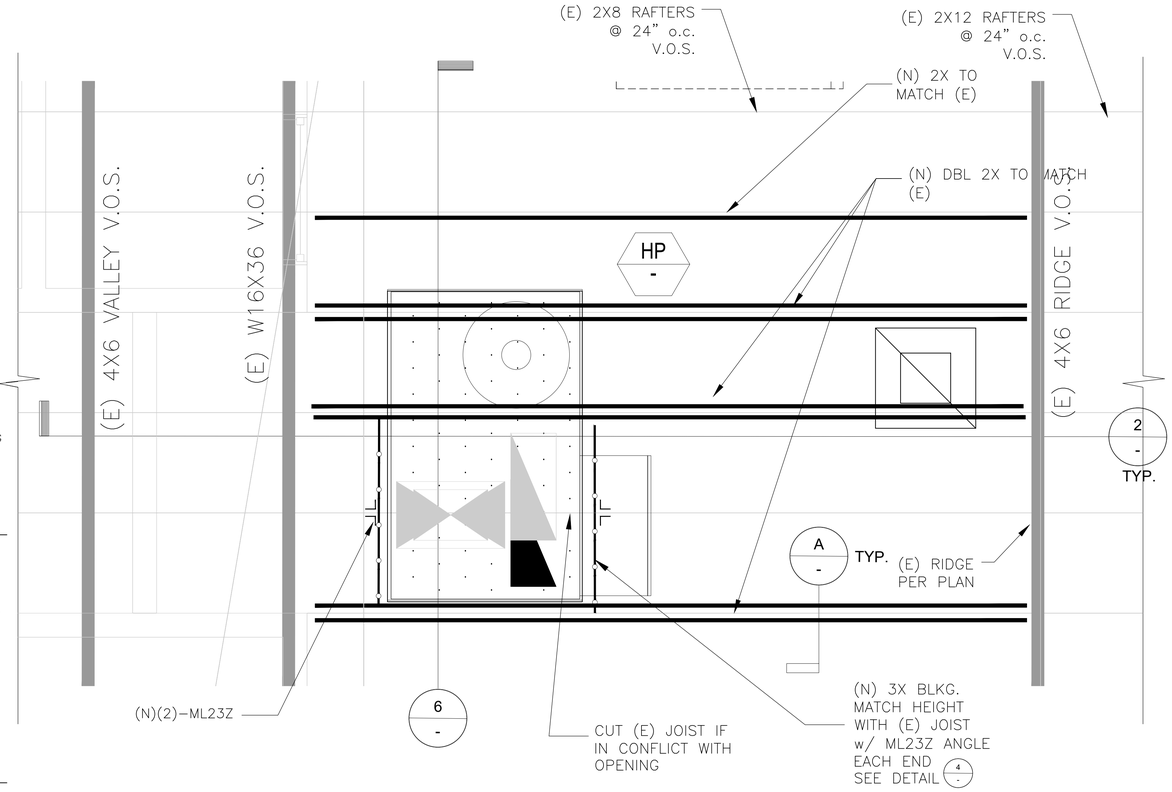
(**)FOR DIMENSION/LOCATION OF NEW UNITS, SEE NOTE 1-7 ON ROOF PLANS



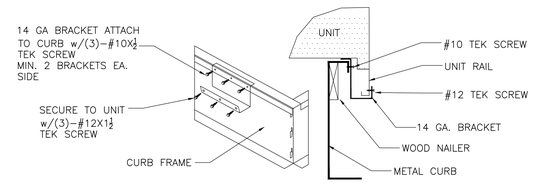

A TYP. SISTER JOIST CONN.



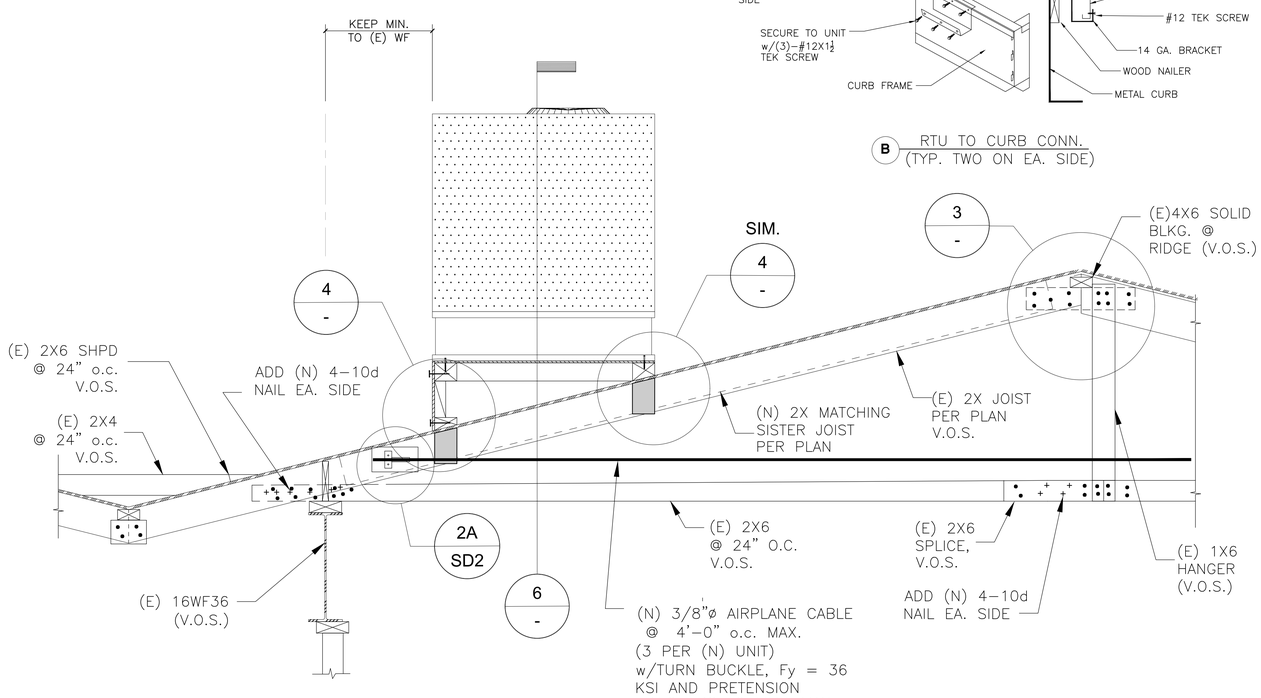

B TYP. SISTER JOIST CONN.




NEW MECH. UNIT @ BLDG. IA1 & IA2 | 1




B RTU TO CURB CONN. (TYP. TWO ON EA. SIDE)




NEW MECH. UNIT @ BLDG. IA1 & IA2 | 2

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KEY PLAN

Consultant

STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR.
SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.1723.06

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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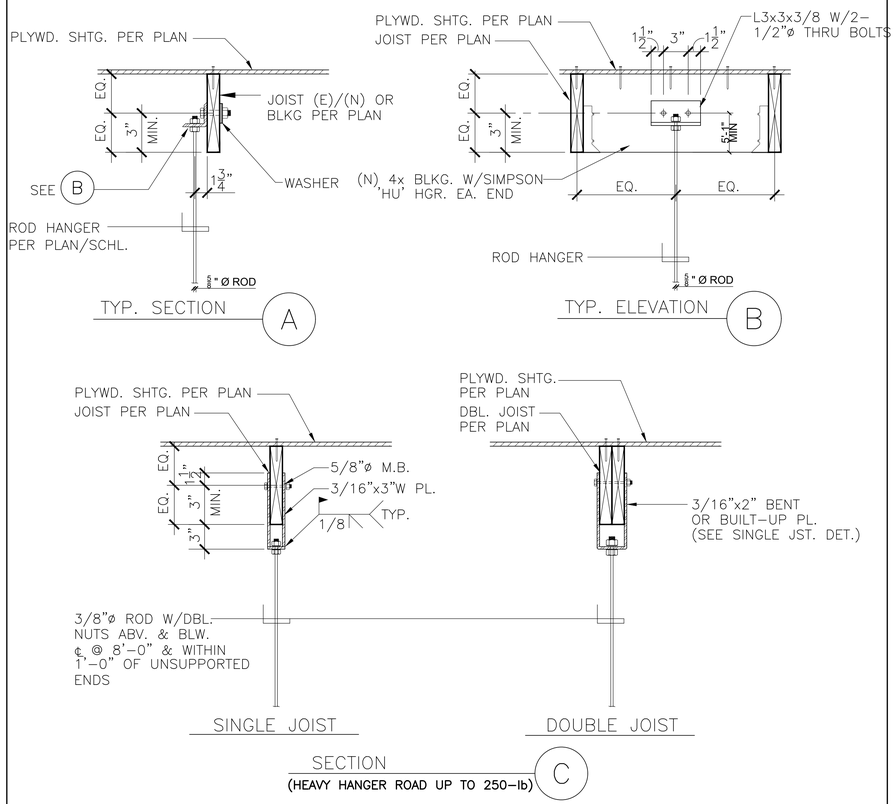
REVISIONS

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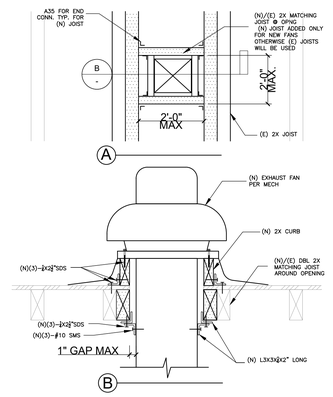
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**RTU DETAILS**

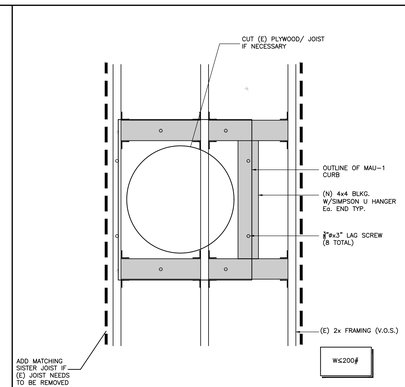
**SD2A**



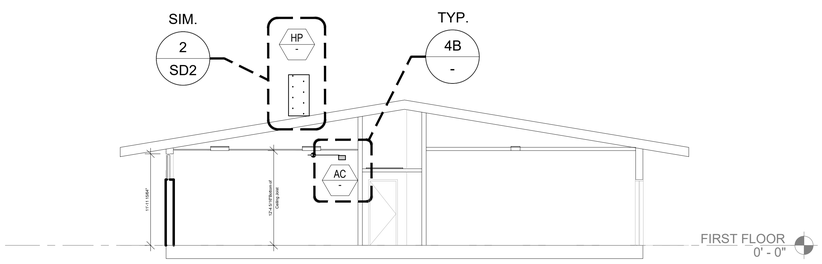

## HANGER FOR SAWN LUMBER (UP TO 250 LB) | 14



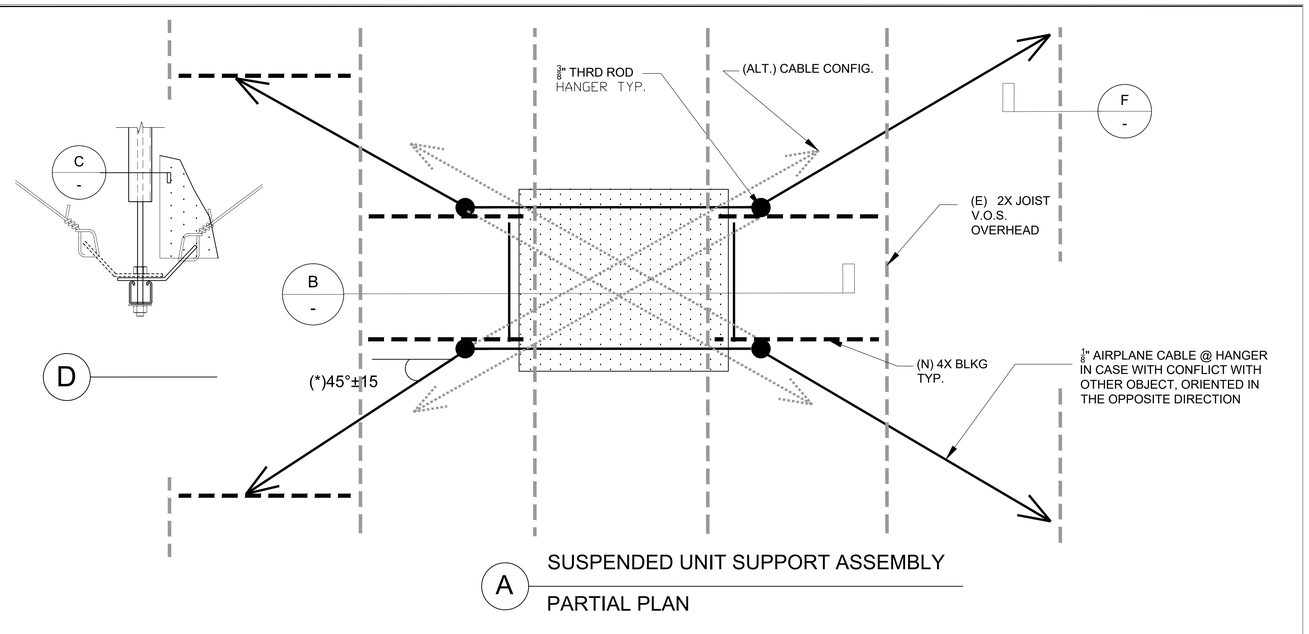

## DETAIL | 17



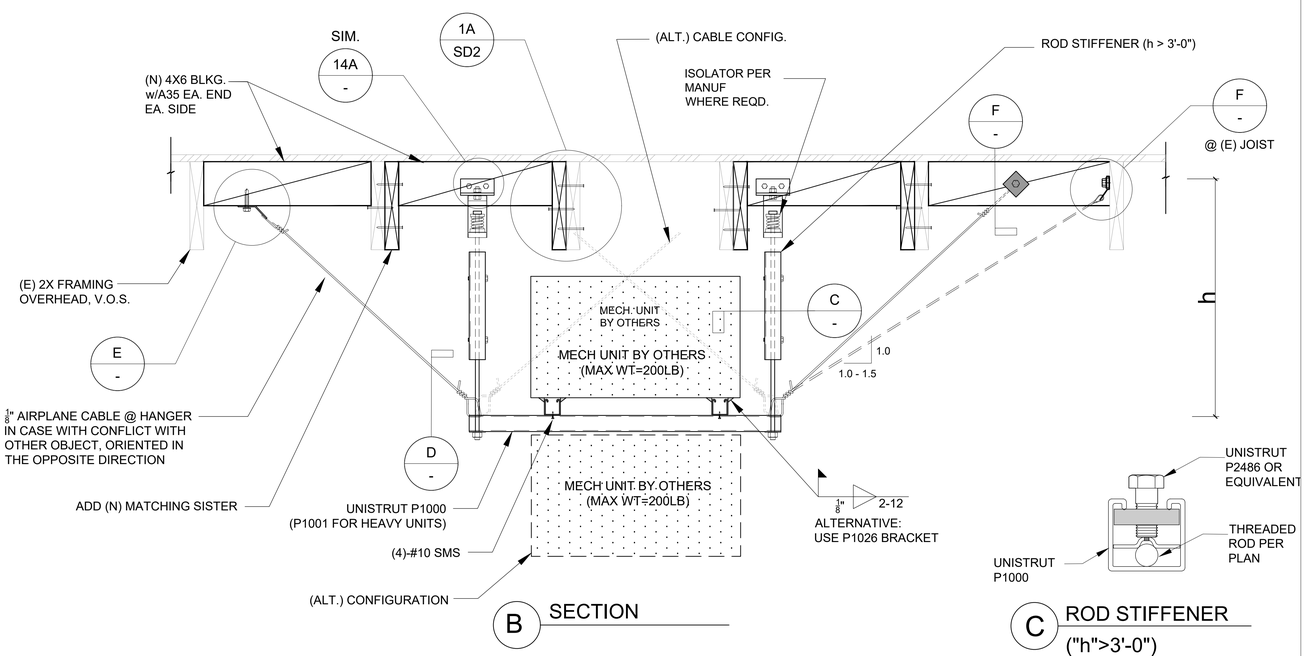

## LIGHT WT EQUIP. SUPPORT FRAMING | 15




## SECTION @ BLDG. "S-L" | 16

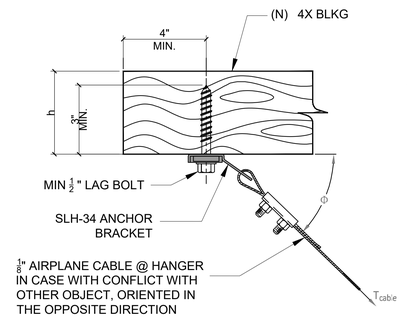



A SUSPENDED UNIT SUPPORT ASSEMBLY
PARTIAL PLAN



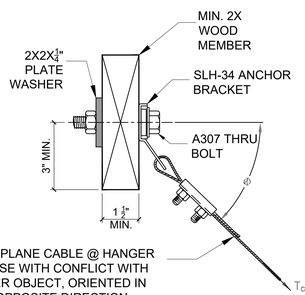

B SECTION

C ROD STIFFENER ("h">3'-0")




MAX SERVICE LOAD: 100 lbs

PROVIDE ADDITIONAL SUPPORT POINT & LATERAL BRACES FOR HEAVY UNITS (>500-LB) COORDINATE WITH MEP




MAX SERVICE LOAD: 100 lbs

E LAG BOLT TO WOOD MEMBER

F THRU BOLT PERPENDICULAR TO WOOD MEMBER

## HANGER SUPPORT/ SEISMIC BRACING @ HUNG UNITS (MAX 400-lbs) | 4

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REVISIONS

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| | | |

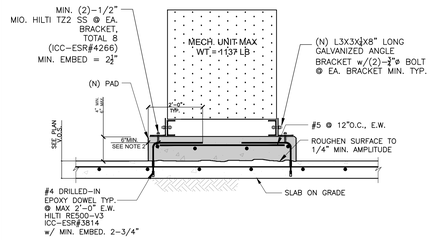
DSA SUBMITTAL

**HUNG UNITS DETAILS**

**SD3**

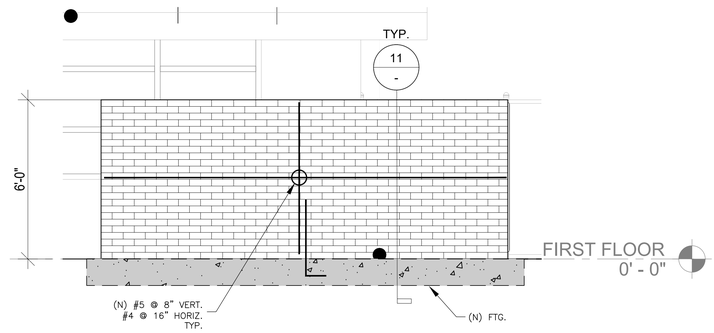
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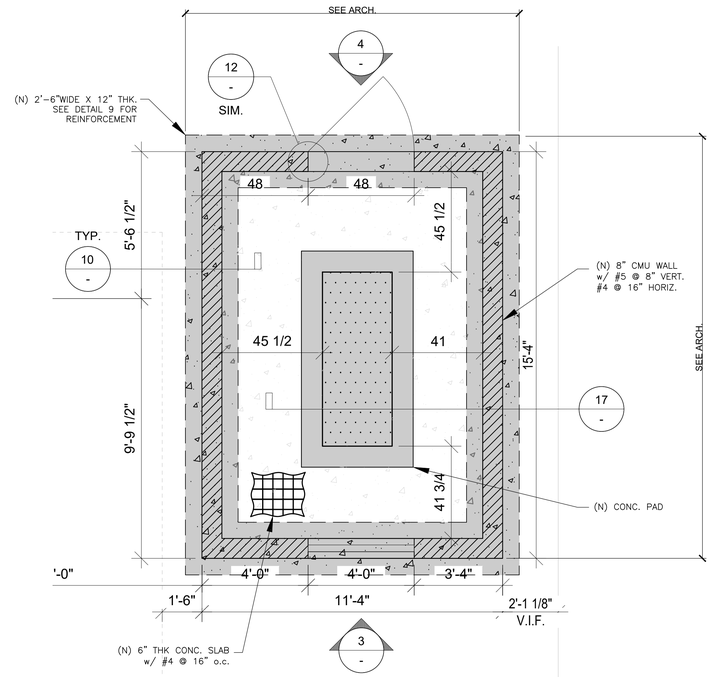



NOTE:
1. SEE DWGS. BY OTHERS FOR HEIGHT, SIZE, CHAMFERS & LOCATION OF CONC. PADS.
2. COORDINATE REINF. LOCATIONS TO AVOID INTERFERENCE WITH INSTALLATION OF EXP. ANCHORS IF USED.

EQUIP. PADS FOR UNITS | 17




EAST ELEVATION @ CMU ENCLOSURE | 9

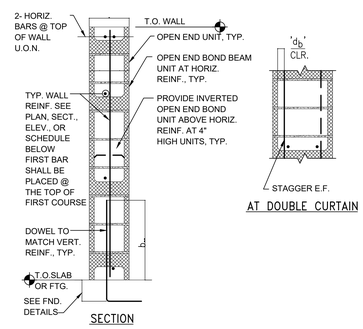


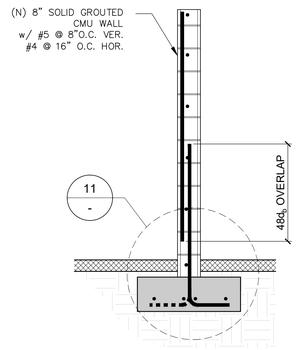

FOR EXACT DIMENSIONS SEE ARCH.

FOR REINFORCEMENT SEE 4/SD1

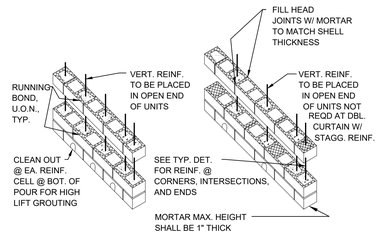
ENLARGED PLAN VIEW @ MECHANICAL ENCLOSURE | 2

18




SECTION | 10

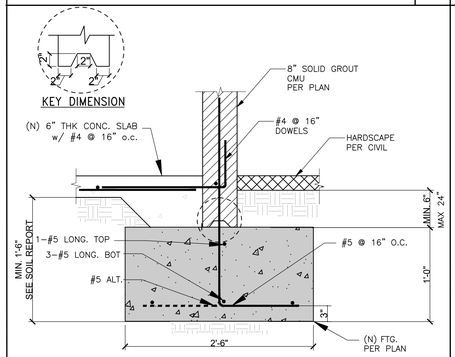



16" LONG UNITS W/ VERT. REINF. @ 16"O.C. (32"O.C. & 40"O.C. SIM.)
24" LONG UNITS W/ VERT. REINF. @ 24"O.C. (48"O.C. SIM.)

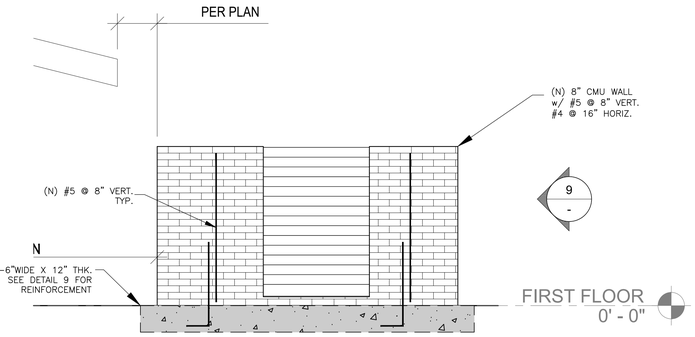
16" LONG UNITS W/ VERT. REINF. @ 24"O.C. (40"O.C. SIM.)
24" LONG UNITS W/ VERT. REINF. @ 36"O.C.

ISOMETRIC (DBL. CURTAIN SIM.)

19 | TYP. WALL REINFORCING | 15

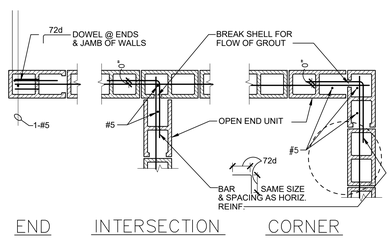



TYP. STRIP FOOTING | 11



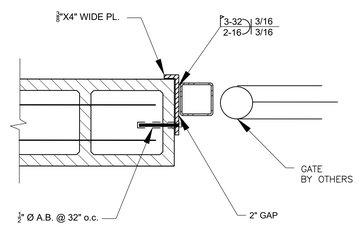

SOUTH ELEVATION @ CMU ENCLOSURE | 3

20

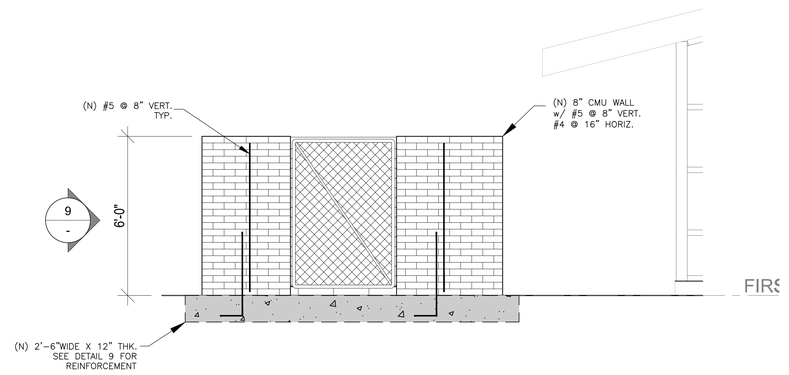



NOTES:
1. USE DOUBLE OPEN END BOND BEAM UNITS, SINGLE OPEN END UNITS AT CORNERS & ENDS OF WALL.

TYP. WALL REINFORCING | 16




TYP. GATE POST CONNECTION | 12




NORTH ELEVATION @ CMU ENCLOSURE | 4

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
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DATE: 10/17/2023

PBK

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2400 E. Katella Avenue, Suite 950
Anaheim, CA 92806
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER, CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant
STRUCTURAL ENGINEERING CONSULTANTS
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SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.1723.06

REGISTERED PROFESSIONAL ENGINEER
No. S4302
Exp. 09/30/23
STRUCTURAL
CIVIL
CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE: Issue Date
PROJECT NUMBER: P22XXX00AR

REVISIONS

| No. | Description | Date |
|---|---|---|

DSA SUBMITTAL

MECHANICAL ENCLOSURE

SD4

M0.00 - MECHANICAL SHEET INDEX, LEGEND, AND NOTES

## TITLE 24 NOTES

THE FOLLOWING SHALL BE REQUIRED WHETHER OR NOT SPECIFICALLY SHOWN OR MENTIONED IN DRAWINGS AND/OR SPECIFICATIONS:

1. EQUIPMENT SHALL MEET EFFICIENTY REQUIREMENTS OF TABLES 110.2-A THROUGH 110.2-K.
2. ALL AIR-COOLED, UNITARY, DX UNITS (PACKAGED, SPLIT-SYSTEM, HEAT PUMPS AND VRF) WITH ECONOMIZERS SHALL BE EQUIPPED WITH FAULT DETECTION AND DIAGNOSTICS SYSTEMS.
3. PIPE INSULATION FOR SPACE CONDITIONING AND SERVICE WATER-HEATING WITH FLUID TEMPERATURES LISTED IN TABLE 120.3-A SHALL HAVE INSULATION LEVELS AS SPECIFIED IN SUBSECTION (A) AND (B).
4. MECHANICAL HEATING AND COOLING EQUIPMENT SHALL BE THE SMALLEST SIZE, WITHIN THE AVAILABLE OPTIONS OF THE DESIRED EQUIPMENT LINE, NECESSARY TO MEET THE DESIGN HEATING AND COOLING LOADS OF THE BUILDING, AS CALCULATED ACCORDING TO THE REQUIREMENTS OF SECTION 140.4(B).
5. HVAC MOTORS FOR FANS THAT ARE LESS THAN 1 HP AND 1/12 HP OR GREATER SHALL BE ECM OR HAVE A MINIMUM MOTOR EFFICIENCY OF 70%. MOTORS SHALL ALSO HAVE MEANS TO ADJUST MOTOR SPEED FOR BALANCING OR REMOTE CONTROL.
6. ELECTRIC RESISTANCE HEATING SYSTEMS ARE NOT PROVIDED FOR SPACE HEATING.
7. IN DRIER CLIMATES AND WHEN LARGE OUTDOOR AIR FRACTIONS ARE REQUIRED, EVAPORATIVE PRE-COOLING PACKAGES WERE EVALUATED TO PRE-COOL OUTSIDE AIR AND COOL THE AIR FLOWING OVER THE DX CONDENSING UNIT.
8. ZONE EACH AIR HANDLER TO SERVE ONLY AREAS WITH COMMON LOADS TO ALLOW MORE AGGRESSIVE CONTROL STRATEGIES AND IMPROVE COMFORT. HAVE DIFFERENT AHU'S SERVING CORE VS. PERIMETER AREAS.
9. THE DESIGN ACCOMMODATES PARTIAL OCCUPANCY ENERGY SAVINGS WHEN THE OWNER'S REQUIREMENTS OR NARRATIVE DESCRIBE ANY POSSIBLITY OF PARTIAL OCCUPANCY, BY ZONING AIR HANDLERS BY FLOOR OR BY PART OF A FLOOR, OR BY INCORPORATING CONTROLLED FLOOR DAMPERS, OR VAV AIR TERMINALS GOING TOTALLY SHUT WHEN NOT OCCUPIED, ETC.
10. EACH ZONE IS CONTROLLED BY AN INDIVIDUAL THERMOSTATIC CONTROL. CONTROLS SHALL BE CAPABLE OF SETTING TEMPERATURES TO 55 DEG F FOR HEATING AND 85 DEG F FOR COOLING AND PROVIDE A TEMPERATURE DEADBAND OF AT LEAST 5 DEG F IF CONTROLLING BOTH HEATING AND COOLING.
11. EACH SPACE CONDITIONING SYSTEM SHALL BE EQUIPPED WITH CONTROLS TO SHUT THE SYSTEM OFF DURING PERIODS OF NONUSE AND WILL TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN SETBACK AND SETUP TEMPERATURES WHILE KEEPING VENTILATION DAMPERS CLOSED.
12. SYSTEMS SERVING MULTIPURPOSE ROOMS LESS THAN 100 SF AND CLASSROOMS, CONFERENCE, AUDITORIUM OR MEETING CENTER ROOMS GREATER THAN 750 SF SHALL HAVE OCCUPANCY SENSORS THAT INTERFACE WITH HVAC CONTROLS TO AUTOMATICALLY SETUP THE COOLING SETPOINT BY 2F OR MORE AND AUTOMATICALLY RESET THE MINIMUM REQUIRED VENTILATION RATE. THESE OCCUPANT SENSOR VENTILATION CONTROL DEVICES MUST MEET THE REQUIREMENTS OF SECTION 120.1(C)5.
13. OUTDOOR AIR SUPPLY AND EXHAUST EQUIPMENT SHALL BE INSTALLED WITH DAMPERS THAT AUTOMATICALLY CLOSE UPON EF FAN SHUTDOWN.
14. HVAC SYSTEMS WITH DDC TO THE ZONE LEVEL SHALL BE PROGRAMMED TO ALLOW CENTRALIZED DEMAND SHED FOR NON-CRITICAL ZONES.
15. ZONE CONTROLS PREVENT REHEATING, RECOOLING AND SIMULTANEOUS PROVISIONS OF HEATING AND COOLING TO THE SAME ZONE.
16. EACH WALL MOUNTED THRMOSTAT SHALL BE LOCATED AWAY FROM POTENTIAL SOURCES THAT WOULD ADVERSELY AFFECT THE READING (CLOSE TO COPIERS, DIRECT SUNLIGHT, BELOW OR ABOVE A SUPPLY AIR DIFFUSER OR CONVECTOR, ETC.). ANY THERMOSTATS MOUNTED ON EXTERIOR WALLS SHALL BE INSTALLED IN SEALED AND INSULATED JUNCTION BOXES.
17. CORNER OFFICE SHALL ALWAYS HAVE THEIR OWN THERMOSTATS, AIR TERMINAL BOXES OR FIN-TUBE RADIATORS.
18. CONTROL SEQUENCES SHALL BE LISTED FOR EQUIPMENT OPERATED BY STAND-ALONE PACKAGED CONTROLS. UNOCCUPIED SEQUENCES SHALL BE INCLUDED.
19. CONTROL SEQUENCES SHALL BE PROVIDED FOR EACH PIECE OF EQUIPMENT LISTED IN THE EQUIPMENT SCHEDULE THAT IS MONITORED OR CONTROLLED BY THE BUILDING AUTOMATION SYSTEM (BAS). UNOCCUPIED SEQUENCES SHALL BE INCLUDED.
20. OUTSIDE AIR TEMPERATURE SENSORS SHALL BE IN A COMMERCIALLY DESIGNED SOLAR SHIELD LOCATED ON A NORTH WALL OR SOME OTHER LOCATION OUT OF DIRECT SUNLIGHT AND AWAY FROM BUILDING EXHAUST OR HEAT REJECTION EQUIPMENT.
21. THE OUTDOOR AIR-VENTILATION RATE AND AIR-DISTRIBUTION ASSUMPTIONS MADE IN THE DESIGN OF THE VENTILATING SYSTEM ARE CLEARLY IDENTIFIED ON THE PLANS.
22. EACH SPACE IS DESIGNED TO HAVE NATURAL VENTILATION OR MECHANICAL VENTILATION THAT IS NO LESS THAN THE LARGER OF CONDITIONED FLOOR AREA TIMES THE REQUIREMENTS IN TABLE 120.1-A OR 15 CFM TIMES THE EXPECTED NUMBER OF OCCUPANTS.
23. THE MINIMUM AND MAXIMUM OUTDOOR AIR RATES FOR EACH AIR HANDLER ARE LISTED ON THE EQUIPMENT SCHEDULES.
24. THE OUTDOOR AIR-VENTILATION RATES ARE BASED ON PLANNED OWNER OCCUPANCY AS DEFINED IN OWNER'S DESIGN INTENT AND ARE NOT BASED ON MAXIMUM EGRESS OCCUPANCY RATES.
25. HVAC SYSTEMS THAT HAVE AN ECONOMIZER, SERVE A SPACE WITH A DESIGN OCCUPANT DENSITY GREATER THAN OR EQUAL TO 25 PEOPLE PER 1000 SF, AND ARE EITHER A SINGLE ZONE SYSTEM WITH ANY CONTROLS OR MULTIPLE ZONE SYSTEM WITH DDC CONTROLS TO THE ZONE LEVEL MUST HAVE DEMAND CONTROL VENTILATION CONTROLS. THE FOLLOWING MUST BE MET:
   A. CO2 SENSORS INSTALLED IN EACH ROOM SERVED BY SYSTEMS WITH DCV CONTROLS.
   B. CO2 SENSORS ARE LOCATED BETWEEN 3 FT AND 6 FT ABOVE THE FLOOR.
   C. CO2 CONCENTRATIONS MAINTAINED AT LESS THAN OR EQUAL TO 600 PPM PLUS OUTDOOR PPM.
   D. DURING HOURS OF EXPECTED OCCUPANCY, CONTROLS MAINTAIN THE SYSTEM VENTILATION RATE.
26. EACH COOLING FAN SYSTEM THAT HAS A DESIGN MECHANICAL COOLING CAPACITY OVER 54,000 BTU/H SHALL HAVE AN AIR ECONOMIZER OR A WATER ECONOMIZER. AIR ECONOMIZERS MUST COMPLY WITH THE HIGH LIMIT SHUTOFF CONTROLS SHOWN IN TABLE 140.4-B.
27. INTEGRATED ECONOMIZER CONTROLS SHALL BE SET UP SUCH THAT PARTIAL COOLING IS PROVIDED BY THE ECONOMIZER EVEN WHEN ADDITIONAL MECHANICAL COOLING ID REQUIRED.
28. ECONOMIZER DAMPERS SHALL BE DRIVEN BY DIRECT DRIVE ACTUATORS RATHER THAN ROD LINKAGES, WHICH CAN BE A MAJOR CAUSE OF ECONOMIZER MALFUNCTION.
29. BAROMETRIC RELIEF IS USED, IF POSSIBLE. IF NOT, RELIEF FANS (RATHER THAN RETURN FANS) SHALL BE USED IN MOST CASES.
30. OUTDOOR AND RETURN AIR SENSORS SHALL BE PROPERLY SELECTED, PROPERLY LOCATED TO PROVIDE ACCURATE AND REPEATABLE MEASUREMENTS FOR CONTROLLING ECONOMIZER OPERATION. AVERAGING SENSORS COVER THE ENTIRE DUCT OR COIL FACE AREAS.
31. ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS MUST BE INSTALLED, SEALED AND INSULATED AS REQUIRED BY 120.4(A).
32. DUCT SEALING LEAKAGE RATES SHALL BE NO MORE THAN 6% OF AIR FLOW FOR NEW DUCT SYSTEMS AND NO MORE THAN 15% OF AIR FLOW FOR ALTERED EXISTING DUCT SYSTEMS.
33. DUCT SHALL UTILIZE LOW STATIC PRESSURE DESIGN. IDENTIFY THE MOST RESTRICTIVE BRANCH FROM THE FAN TO THE LAST AIR TERMINAL UNIT. IDENTIFY POSSIBLE MEANS OF SIGNIFICANTLY REDUCING THE PRESSURE DROP. BRANCH DUCT SYSTEMS SHALL DESIGNED FOR EQUAL PRESSURE DROP, WHEN POSSIBLE.
34. DUCT BRANCHES WITH SIGNIFICANTLY DIFFERING STATIC PRESSURE REQUIREMENTS SHALL HAVE VOLUME CONTROL STRATEGICALLY PLACED TO AID IN TAB WORK.
35. FAN SHALL DISCHARGE INTO DUCT SECTIONS THAT REMAIN STRAIGHT FOR AS LONG AS POSSIBLE (IDEALLY 10 DUCT DIAMETERS) TO REDUCE FAN INEFFICIENCIES FROM SYSTEM EFFECTS.
36. DUCT VELOCITIES SHALL GENERALLY BE BELOW 2,000 FPM FOR DUCTS IN CEILING PLENUMS, 1500 FPM FOR EXPOSED DUCTS AND 3500 FPM IN MECHANICAL ROOMS AND NON-NOISE SENSITIVE SHAFTS AND DO NOT REDUCE ANY DUCT SIZES LISTED ON PLANS.
37. DUCT FRICTION RATES SHALL GENERALLY BE LESS THAN O.25" WC PER 100 LINEAL FEET NEARER THE FAN, 0.15 TO 0.20" IN THE MAIN DUCTS AND 0.08 TO 0.12" WC/100' NEARER THE END OF THE SYSTEM. DESIGNS OVER THESE RATES SHALL BE QUESTIONED. VERY ENERGY EFFICIENT DESIGN CAN LOWER THESE VALUES BY UP TO 40%.
38. CONTRACTOR SHOP DRAWINGS SHALL BE SUFFICIENTLY DETAILED TO ENSURE THAT DISTRIBUTION SYSTEM DESIGN INTENT IS ADEQUATELY CONVEYED TO MATCH PLANS. IF SUFFICIENT DETAIL IS NOT INCLUDED IN DRAWINGS, INSTALLATIONS MAY RESULT IN SIGNIFICANTLY HIGHER PRESSURE DROPS AND HENCE HIGHER ENERGY CONSUMPTION AND OTHER OPERATING ISSUES.
39. ACCEPTANCE REQUIREMENTS ARE CLEARLY IDENTIFIED IN CONSTRUCTION DOCUMENTS.
40. COMMISSIONING MEASURES OR REQUIREMENTS ARE REFLECTED IN THE CONSTRUCTION DOCUMENTS.
41. REQUIREMENTS FOR FUNCTIONAL PERFORMANCE TESTS ARE REFLECTED IN THE CONSTRUCTION DOCUMENTS.
42. COOLING SYSTEMS IDENTIFIED IN TABLE 140.4-D SHALL HAVE FAN CONTROLS TO VARY THE INDOOR FAN AIRFLOW AS A FUNCTION OF LOAD:
   A. DX AND CHILLED WATER COOLING SYSTEMS THAT CONTROL CAPACITY BASED ON OCCUPIED SPACE TEMPERATURE SHALL HAVE A MINIMUM OF 2 STAGES OF CONTROL.
   B. SYSTEMS THAT CONTROL SPACE TEMPERATURE BY MODULATING AIRFLOW TO THE SPACE SHALL HAVE PROPORTIONAL FAN CONTROL.
   C. SYSTEMS WITH AIR SIDE ECONOMIZER SHALL HAVE A MINIMUM OF 2 SPEEDS OF FAN CONTROL DURING ECONOMIZER OPERATION.
43. FAN CABINET ENCLOSURE AND INTERNAL COMPONENTS SHALL BE ELECTED TO MINIMIZE PRESSURE DROP, E.G. FACE VELOCITY IS LESS THAN 500 FPM, LOW PRESSURE DROP COILS, FILTERS, ETC.
44. FAN WHEEL SHALL BE SELECTED FOR EFFICIENT OPERATION, E.G. LARGER DIAMETER ROTATING AT LOWER SPEED.
45. SYSTEMS THAT SERVE MULTIPLE ZONES SHALL HAVE CONTROLS THAT AUTOMATICALLY RESET SUPPLY AIR TEMPERATURE. ZONES WITH HIGH INTERNAL LOADS WITH NEAR CONSTANT AIRFLOW SHALL BE DESIGNED FOR THE ELEVATED RESET SUPPLY AIR TEMPERATURE. RESET CONTROLS SHALL BE IN RESPONSE TO BUILDING LOADS OR TO OUTDOOR AIT TEMPERATURE AND SHALL BE AT LEAST 25% OF THE DIFFERENCE BETWEEN SUPPLY AIR AND DESIGN ROOM AIR TEMPERATURE. CONTROL SEQUENCES ARE IDENTIFIED IN CONSTRUCTION DOCUMENTS.
46. SAT RESET SHALL BE ESTABLISHED WITH AN AGGRESSIVE RESET SCHEDULE OF 10F, E.G. 55F DURING WARM WEATHER AND 65F DURING COOL WEATHER.

## GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH CURRENT CALIFORNIA CODE OF REGULATIONS TITLE 24, ALL OTHER APPLICABLE CODES AND REGULATIONS, SMACNA AND ASHRAE GUIDELINES, AND LOCAL CODES.
2. ALL HVAC EQUIPMENT SHALL BE COMPLIANT WITH EFFICIENCY STANDARDS PER TITLE-24, PART 6.
3. ALL FRESH AIR INTAKES SHALL BE AT LEAST 10 FEET IN A HORIZONTAL DIRECTION FROM ALL EXHAUST, FLUE, FUEL BURNING APPLIANCE AND PLUMBING VENT OUTLETS. FOR GAS/ELECTRIC AIR CONDITIONING UNITS WHERE THE CODE REQUIRED CLEARANCES ARE NOT MET, A FACTORY FLUE GAS DEFLECTOR AND EXTENSION SHALL BE USED TO MINIMIZE THESE CLEARANCES. CONTRACTOR SHALL DETERMINE LOCATIONS WHERE REQUIRED PRIOR TO BID. THIS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
4. AIR FILTERS SHALL BE STATE FIRE MARSHAL APPROVED AND LISTED. PREFORMED FILTERS HAVING COMBUSTIBLE FRAMING SHALL BE TESTED AS A COMPLETE ASSEMBLY. AIR FILTERS IN ALL OCCUPANCIES SHALL BE PER TITLE-24 PART 6 AND APPLICABLE ASHRAE REQUIREMENTS. FILTERS SHALL BE ACCESSIBLE
5. REVIEW THESE PLANS AND SPECIFICATIONS PRIOR TO BID. REVIEW PLANS AND SPECIFICATIONS OF OTHER RELATED TRADES INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND FIRE PROTECTION.
6. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AS THESE ARE PART OF THE CONTRACT DOCUMENTS. WHERE A CONFLICT OCCURS BETWEEN THIS SPECIFICATION AND OTHER SPECIFICATIONS ISSUED AS A PART OF THE CONTRACT DOCUMENTS, THE MORE STRINGENT REQUIREMENT SUPERCEDES.
7. THESE DRAWINGS ARE DIAGRAMMATIC ONLY AND NOT INTENDED TO INDICATE ALL REQUIRED OFFSETS, BENDS, ELBOWS, TRANSITIONS, FITTINGS AS REQUIRED TO CONFORM TO THE BUILDING STRUCTURE, CLEARANCE INSIDE CEILINGS, AVOIDANCE OF OBSTRUCTIONS, AND MAINTAINING HEAD CLEARANCE.
8. COORDINATE INSTALLATION WITH ALL OTHER TRADES PRIOR TO INSTALLATION OF EQUIPMENT OR MATERIALS, INCLUDING BUT NOT LIMITED TO, STRUCTURAL, ARCHITECTURAL, ELECTRICAL, AND PLUMBING.
9. COORDINATE THE LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH THE ARCHITECTURAL REFLECTIVE CEILING PLANS, ELECTRICAL LIGHTING LAYOUT, AND ARCHITECTURAL ROOM ELEVATIONS. THE ARCHITECT AND ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY CONFLICTS PRIOR TO FABRICATION AND INSTALLATION.
10. COORDINATE THE LOCATION OF ALL ROOF OPENINGS AND THE LOCATIONS OF ALL ROOF MOUNTED EQUIPMENT WITH THE STRUCTURAL AND ARCHITECTURAL WEIGHTS FOR PLATFORM AND CURB SIZES, FOR ROOF AND WALL PENETRATION DETAILS AND REQUIREMENTS, SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS. REQUIRED PLATFORMS AND FLASHINGS FOR MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON THE STRUCTURAL AND ARCHITECTURAL PLANS, UNLESS NOTED OTHERWISE.
11. HIRE A TEST AND BALANCE AGENCY TO PERFORM THE TESTING PROCEDURES, REQUIRED BY THE MECH-2A THROUGH MECH-11A CERTIFICATE OF ACCEPTANCE FORMS, AS APPLICABLE FOR ALL NEWLY INSTALLED HEATING AND COOLING SYSTEMS. THE CONTRACTOR AND TEST AND BALANCE AGENCY ARE RESPONSIBLE FOR OBTAINING THE CERTIFICATE OF ACCEPTANCE FORMS REQUIRED BY THE IOR. THE TEST AND BALANCE AGENCY SHALL BE WELL VERSED WITH ALL THE REQUIREMENTS OF THESE CERTIFICATE OF ACCEPTANCE FORMS, AND SHALL COORDINATE AND WORK WITH THE EQUIPMENT AND CONTROLS INSTALLERS TO COMPLY WITH THESE REQUIREMENTS IN A TIMELY MANNER WITHIN THE PROJECT SCHEDULE. THE AIR BALANCE CONTRACTOR SHALL BE A MEMBER OF AABC (ASSOCIATED AIR BALANCE COUNCIL).
12. PAINT ALL EXPOSED DUCTWORK, DUCT SUPPORTS, ACCESSORIES, REGISTERS, GRILLES, DIFFUSERS, AND APPURTENANCES, WHETHER OR NOT COLORS ARE DESIGNATED IN SCHEDULES, EXCEPT WHERE A SURFACE OR MATERIAL IS SPECIFICALLY INDICATED NOT TO BE PAINTED OR IS TO REMAIN NATURAL. WHERE AN ITEM OR SURFACE IS NOT SPECIFICALLY MENTIONED, PAINT THE SAME AS SIMILAR ADJACENT MATERIALS OR SURFACES. IF COLOR OR FINISH IS NOT DESIGNATED, THE ARCHITECT WILL SELECT FROM STANDARD COLORS OR FINISHES AVAILABLE. PAINTING INCLUDES FIELD PAINTING EXPOSED BARE AND COVERED PIPES AND DUCTS (INCLUDING COLOR CODING), HANGERS, EXPOSED STEEL AND IRON WORK, AND PRIMED METAL SURFACES OF MECHANICAL EQUIPMENT.
13. PROVIDE ALL LABOR, MATERIAL, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, AND OTHER WORK AS REQUIRED. FOR A COMPLETE AND PROPERLY OPERATING MECHANICAL SYSTEM.
14. ALL MATERIALS SHALL BE NEW AND OF THE SAME MANUFACTURER FOR EACH CLASS OR GROUP OF EQUIPMENT. EQUIPMENT SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES, AND SHALL BEAR THE INSPECTION LABEL WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH THE APPROVAL OF THE GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY THE LATEST EDITION OF CMC, CBC U.L., SMACNA AND ASHRAE GUIDELINES. INSTALL PER MANUFACTURERS' RECOMMENDATIONS, AND INSTALLATION INSTRUCTIONS.
15. OBTAIN AND PAY FOR ALL NECESSARY BUILDING PERMITS AND VARIANCES. COORDINATE TEMPORARY CONSTRUCTION REQUIREMENTS WITH ALL TRADES PRIOR TO CONSTRUCTION. INCLUDE ALL COSTS IN THE BID.
16. IF THE CONTRACTOR PROPOSES ALTERNATE EQUIPMENT OR MATERIAL, THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL DSA APPROVALS, PAY ALL RELATED FEES AND OBTAIN APPROVAL FROM OWNER & ENGINEER OF RECORD. PROVIDE TITLE-24 COMPLIANCE CERTIFICATION AND ALL ASSOCIATED FEES REQUIRED. COORDINATE SUBMITTED EQUIPMENT WITH OTHER TRADES. INCLUDE IN THE SHOP DRAWINGS THE EQUIPMENT SUBMITTED FOR APPROVAL WITH A DIFFERENT PHYSICAL SIZE OR ARRANGEMENT FROM THAT SHOWN.
17. PROVIDE SHOP DRAWINGS PER PROJECT SCHEDULE, SEE 23 00 00 SPECIFICATIONS FOR REQUIREMENTS. IF SHOP DRAWINGS ARE NOT PROVIDED TO THE ENGINEER FOR REVIEW, AND ANY CONFLICTS OCCUR BETWEEN TRADES, DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY TO RESOLVE THE CONFLICT AND BEAR ALL COSTS INCURRED FOR ALL REVISIONS, AT NO ADDITIONAL COST TO THE DISTRICT. THE DISTRICT AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY PRIOR TO FABRICATION AND INSTALLATION OF ALL WORK THAT CAUSES CONFLICTS BETWEEN TRADES.
18. PROVIDE ALL MANUFACTURER'S PRODUCT DATA CLEARLY INDICATING MODEL NUMBERS, CAPACITIES, CONSTRUCTION, ELECTRICAL INFORMATION, AND OPTIONAL ACCESSORIES, PER PROJECT SCHEDULE AND PRIOR TO THE START OF WORK. THESE SHALL BE REVIEWED BY THE MECHANICAL ENGINEER PRIOR TO PURCHASING.
19. SUBMIT TO THE OWNER ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, "AS-BUILTS", ETC. AT THE COMPLETION OF THE JOB. PROVIDE THE OWNER WITH COMPLETE MECHANICAL "AS-BUILTS" INDICATING FINAL EQUIPMENT LOCATIONS, DUCTWORK AND PIPE ROUTING, ETC.
20. OBTAIN APPROVAL FROM THE OWNER ON ALL ADDENDA AND CONSTRUCTION CHANGE DOCUMENT (CCD) PRIOR TO DOING THE WORK.
21. INSTALL ALL EQUIPMENT, ACCESSORIES, AND MATERIAL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.
22. PROVIDE FIRESTOPPING FOR PIPE AND DUCT PENETRATIONS THROUGH RATED WALLS. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AS NECESSARY PRIOR TO INSTALLATION.
23. ANY MATERIAL EXPOSED WITHIN A PLENUM OR DUCT MUST HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25, AND A SMOKE DEVELOPED RATING OF NOT MORE THAN 50, AND A MOLD/HUMIDITY RESISTANCE PER U.L. 181.
24. ALL EQUIPMENT, DUCTS, PIPING, AND OTHER DEVICES AND MATERIALS OUTSIDE OF THE BUILDING OR OTHERWISE EXPOSED TO THE WEATHER SHALL BE COMPLETELY WEATHERPROOFED.
25. LOCATE ALL EQUIPMENT SUCH THAT CODE REQUIRED ACCESS IS MAINTAINED, INCLUDING N.E.C. REQUIREMENTS. ACCESS PANELS WHERE REQUIRED, SHALL BE COORDINATED WITH ARCHITECT, AND PROVIDED BY FACTORY OR BE FIELD-PROVIDED. FOR ATTIC EQUIPMENT, G.C. TO PROVIDE A CATWALK & LIGHT PER CMC FOR ATTIC EQUIPMENT.
26. FOR INACCESSIBLE AREAS THE CONTRACTOR SHALL PROVIDE ACCESS PANELS FOR ALL DAMPERS, EQUIPMENT, SMOKE DETECTORS, AND CONTROL DEVICES. THESE PANELS SHALL MATCH THE RATING OF THE WALL AND/OR CEILING WHERE THEY ARE LOCATED IN. MINIMUM ACCESS PANEL SIZES SHALL BE AS FOLLOWS:
   1) HAND ACCESS: 12"x12" MIN.
   2) BODY ACCESS: 30"x30" MIN.
27. ALL EQUIPMENT WITH MOVING PARTS SHALL BE PROVIDED WITH FLEXIBLE DUCT AND PIPE CONNECTIONS.
28. LABEL ALL EQUIPMENT AS TO THE SPACE IT SERVES. SEE SPECIFICATIONS FOR IDENTIFICATION STANDARDS. LABEL DUCT SMOKE DETECTOR LOCATIONS (AT CEILING) AS TO THE EQUIPMENT IT SERVES.
29. A/C UNITS PROVIDED WITH ECONOMIZER CYCLE DAMPERS SHALL HAVE OSA DAMPERS SET UP TO CLOSE AUTOMATICALLY ON FAN SHUT DOWN.
30. PROVIDE MANUAL VOLUME DAMPERS AND BACKDRAFT DAMPERS FOR FRESH AIR INTAKES ON ALL AIR HANDLING EQUIPMENT AND EXHAUST FANS SERVING CONDITIONED SPACES. EXCEPTION: EQUIPMENT WITH FACTORY-ECONOMIZERS.
31. DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY EXISTING CONDITION PRIOR TO BID DATE.
32. OWNER RETAINS SALVAGE RIGHTS, PROVIDE A MINIMUM OF 72 HOURS NOTICE PRIOR TO REMOVAL OF ROOF TOP UNITS AND EXHAUST FANS.
33. PATCH AND SEAL ALL SLAB, ROOF AND WALL OPENINGS WITH LIKE MATERIAL WHERE MECHANICAL EQUIPMENT ONCE PENETRATED.
34. REMOVE EXISTING AND PROVIDE ALL NEW DUCT AND PIPE HANGER SUPPORTS WHERE DUCT AND PIPE IS BEING REPLACED.
35. PROVIDE ALL NEW PIPE SUPPORTS WHERE PIPING IS SCHEDULED TO BE REPLACED.
36. OUTDOOR REFRIGERANT PIPING TO BE INSULATED AND ALUMINUM WRAPPED.
37. CONTRACTOR IS RESPONSIBLE FOR COMPLETE AND OPERABLE SYSTEM.
38. ALL MECHANICAL EQUIPMENTS, PIPES AND DUCTS SHALL BE SUPPORTED AND BRACED PER THE CURRENT CALIFORNIA BUILDING CODE. ALL MECHANICAL COMPONENTS SHALL BE ABLE TO RESIST THE EFFECTS OF SEISMIC FORCES.
39. MECHANICAL WORK SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS.
40. CONTRACTOR SHALL PROTECT EXISTING BUILDING INFRASTRUCTURE DURING CONSTRUCTION FROM OUTDOOR ELEMENT. IF DAMAGED, CONTRACTOR SHALL REPLACE DAMAGED BUILDING COMPONENTS WITH NEW AT NO ADDITIONAL COST TO THE OWNER.
41. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS.
42. ALL DUCT JOINTS SHALL BE MADE WITH MASTIC SEALANT, SHEET METAL SCREWS AND TAPED AIR TIGHT WITH HARDCAST OR EQUIV., MINIMUM 2-1/2" WIDTH.
43. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND DSA FIELD ENGINEER.
44. A COPY OF THE GUIDELINES PUBLISHED BY SMACNA AND APPROVED BY DSA SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON THE JOB AT ALL TIMES.
45. CONTRACTOR SHALL COORDINATE ALL DUCTWORK ROUTING WITH WORK OF OTHER TRADES AND MAKE ANY OFFSET AS REQUIRED TO AVOID CONFLICT WITH PIPING, LIGHT FIXTURES, TRUSSES, ETC.
46. COORDINATE ALL EQUIPMENT VOLTAGES WITH ELECTRICAL PRIOR TO ORDERING ANY EQUIPMENT.

## PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING 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 2022 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 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 ELECTRIC, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT 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 FEET OR 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:

1. 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.
2. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUND 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.

## MEP COMPONENT ANCHORAGE NOTE

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 2022 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 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.

MECHANICALPIPING (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 & DETAILS.

MP ☒ MD ☒ PP ☐ E ☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) # 0203-13.

## CAL GREEN NOTES

1. TESTING AND ADJUSTING. TESTING AND ADJUSTING OF SYSTEMS SHALL BE REQUIRED FOR NEW BUILDING LESS THAN 10,000 SQUARE FEET OR NEW SYSTEMS TO SERVE AN ADDITION OR ALTERATION SUBJECT TO SECTION 303.1
2. SYSTEMS. DEVELOP A WRITTEN PLAN OF PROCEDURES FOR TESTING AND ADJUSTING SYSTEMS. SYSTEMS TO BE INCLUDED FOR TESTING AND ADJUSTING SHALL INCLUDE, AS APPLICABLE TO THE PROJECT:
   A. HVAC SYSTEMS AND CONTROLS.
   B. INDOOR AND OUTDOOR LIGHTING AND CONTROLS.
   C. WATER HEATING SYSTEMS.
   D. RENEWABLE ENERGY SYSTEMS.
   E. LANDSCAPE IRRIGATION SYSTEMS.
   F. WATER REUSE SYSTEMS.
3. PROCEDURES. PERFORM TESTING AND ADJUSTING PROCEDURES IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND APPLICABLE STANDARDS ON EACH SYSTEM.
   A. HVAC BALANCING. IN ADDITION TO TESTING AND ADJUSTING, BEFORE A NEW SPACE-CONDITIONING SYSTEM SERVING A BUILDING OR SPACE IS OPERATED FOR NORMAL USE, BALANCE THE SYSTEM IN ACCORDANCE WITH THE PROCEDURES DEFINED BY THE TESTING ADJUSTING AND BALANCING BUREAU NATIONAL STANDARDS; THE NATIONAL ENVIRONMENTAL BALANCING BUREAU PROCEDURAL STANDARDS; ASSOCIATED AIR BALANCE COUNCIL NATIONAL STANDARDS OR AS APPROVED BY THE ENFORCING AGENCY.
4. REPORTING. AFTER COMPLETION OF TESTING, ADJUSTING AND BALANCING, PROVIDE A FINAL REPORT OF TESTING SIGNED BY THE INDIVIDUAL RESPONSIBLE FOR PERFORMING THESE SERVICES.
5. OPERATION AND MAINTENANCE (O & M) MANUAL. PROVIDE THE BUILDING OWNER OR REPRESENTATIVE WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF GUARANTIES/WARRANTIES FOR EACH SYSTEM. O & M INSTRUCTIONS SHALL BE CONSISTENT WITH OSHA REQUREMENTS IN CCR, TITLE 8, SECTION 5142, AND OTHER RELATED REGULATIONS.
   A. INSPECTIONS AND REPORTS. INCLUDE A COPY OF ALL INSPECTION VERIFICATIONS AND REPORTS REQUIRED BY THE ENFORCING AGENCY.
6. TEMPORARY VENTILATION. THE PERMANENT HVAC SYSTEM SHALL ONLY BE USED DURING CONSTRUCTION IF NECESSARY TO CONDITION THE BUILDING WITHIN THE REQUIRED TEMPERATURE RANGE FOR MATERIAL AND EQUIPMENT INSTALLATION. IF THE HVAC SYSTEM IS USED DURING CONSTRUCTION, USE RETURN AIR FILTERS WITH A MINIMUM REPORTING VALUE (MERV 13) OF 13, BASED ON ASHRAE 52.2-1999 OR AN AVERAGE EFFICIENCY OF 30 PERCENT BASED ON ASHRAE 52.1-1992. REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY, OR, IF THE BUILDING IS OCCUPIED DURING ALTERATIONS, AT THE CONCLUSION OF CONSTRUCTION.
7. COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. AT THE TIME OF ROUGH INSTALLATION AND DURING STORAGE ON THE CONSTRUCTION SITE UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATION EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH WRAP, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY ENTER THE SYSTEM.
8. FILTERS. IN MECHANICALLY VENTILATED BUILDINGS, PROVIDE REGULARLY OCCUPIED AREAS OF THE BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR PRIOR TO OCCUPANCY THAT PROVIDE AT LEAST A MINIMUM EFFICIENCY REPORTING VALUE (MERV 13) OF 13. MERV 13 FILTERS SHALL BE INSTALLED PRIOR TO OCCUPANCY AND RECOMMENDATIONS FOR MAINTENANCE WITH FILTERS OF THE SAME VALUE SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL.

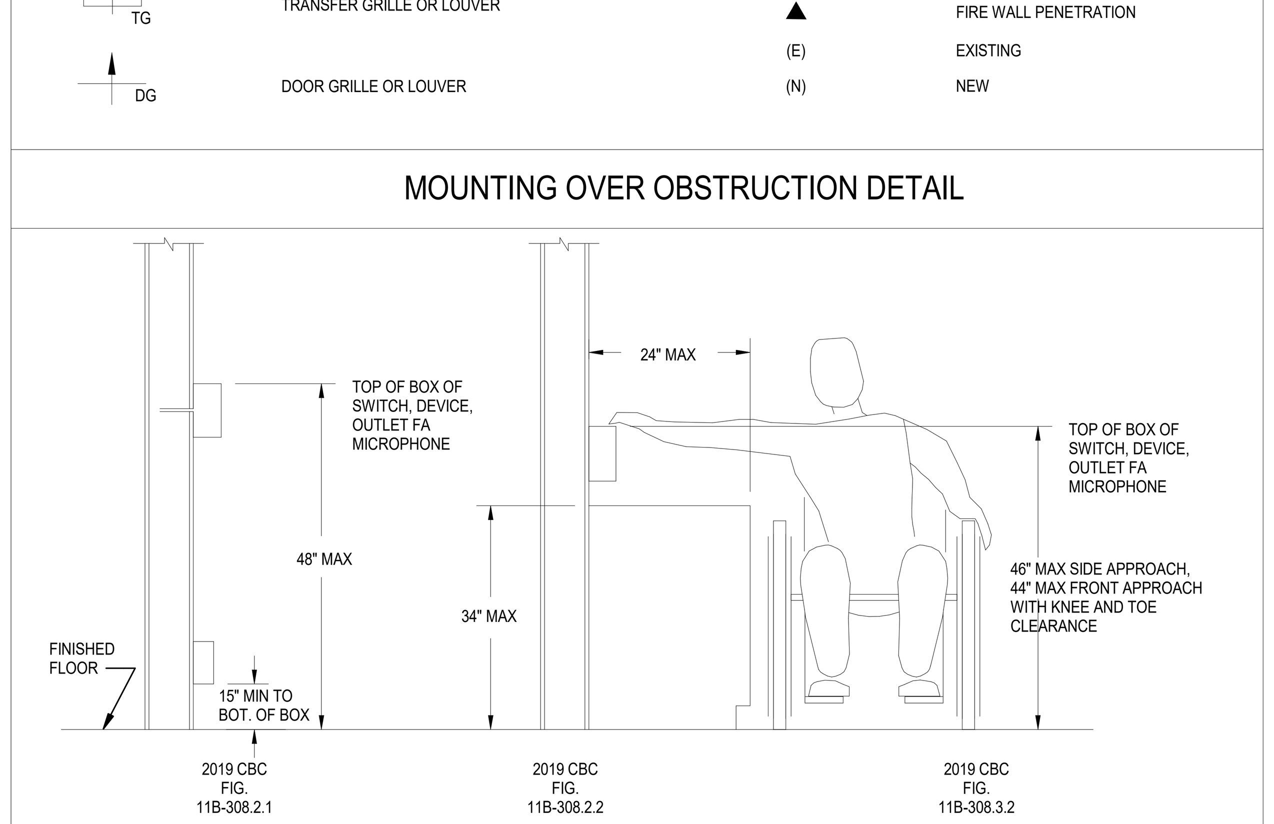
   EXCEPTIONS:
   A. AN ASHRAE 10-PERCENT TO 15-PERCENT EFFICIENCY FILTER SHALL BE PERMITTED FOR AN HVAC UNIT MEETING THE 2019 CALIFORNIA ENERGY CODE HAVING 60,000 BTU/H OR LESS CAPACITY PER FAN COIL, IF THE ENERGY USE OF THE AIR DELIVERY SYSTEM IS 0.4 W/CFM OR LESS AT DESIGN AIR FLOW.
   B. EXISTING MECHANICAL EQUIPMENT.
9. OZONE DEPLETION AND GREENHOUSE GAS REDUCTIONS. INSTALLATIONS OF HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT SHALL COMPLY WITH SECTIONS 5.508.1.1 AND 5.508.1.2.
   A. CHLOROFLOUROCARBONS (CFCS). INSTALL HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT THAT DO NOT CONTAIN CFCS.
   B. HALONS. INSTALL HVAC REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT THAT DO NOT CONTAIN HALONS.
10. ADHESIVES, ADHESIVE BONDING PRIMERS, ADHESIVE PRIMERS, SEALANTS, SEALANT PRIMERS AND CAULKS SHALL COMPLY WITH LOCAL OR REGIONAL AIR POLLUTION CONTROL OR AIR QUALITY MANAGEMENT DISTRICT RULES WHERE APPLICABLE, OR SCAQMD RULE 1168 VOC LIMITS, AS SHOWN IN TABLES 5.504.4.1.

## MECHANICAL LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| 1 | KEY NOTES |
| 1 | DEMOLITION KEY NOTES |
| 01 / M-2 | DETAIL DESIGNATION<br>DETAIL NUMBER<br>SHEET NO. WHERE SHOWN |
| AC / 1 | EQUIPMENT DESIGNATION<br>UNIT ABBREVIATION<br>NUMBER |
| 10X10-3 / 120 F/S | GRILLE DESIGNATION<br>NECK SIZE & BLOW<br>FIRE/SMOKE DAMPER WHERE REQ'D<br>CFM |
| | SECTION CALLOUT |
| | POINT OF CONNECTION |
| | POINT OF DISCONNECTION |
| | NEW LINEWORK |
| | EXISTING LINEWORK |
| | DEMOLITION LINEWORK |
| 16"x12" | SHEET METAL DUCT |
| 16"x12" | HIDDEN SHEET METAL DUCT |
| 16"x12" | INTERNALLY INSULATED SHEET METAL DUCT |
| | DIRECTION OF FLOW |
| | STANDARD BRANCH FOR SUPPLY AND RETURN |
| | ROUND ELBOW DOWN |
| | ROUND ELBOW UP |
| | RECTANGULAR TO ROUND TRANSITION |
| 8" | FLEXIBLE DUCT |
| FC | FLEX CONNECTION |
| BDD | BACK DRAFT DAMPER |
| FD | FIRE DAMPER |
| F/S | COMBINATION FIRE AND SMOKE DAMPER |
| M | MOTORIZED DAMPER |
| | SUPPLY DIFFUSER: 2-WAY/3-WAY/4-WAY |
| | GRILLE: RETURN/EXHAUST |
| | 1'x2' RETURN AIR GRILLE |
| | 2'x2' RETURN AIR GRILLE |
| UP DN | SUPPLY AIR DUCT SECTION |
| UP DN | RETURN AIR DUCT SECTION |
| UP DN | EXHAUST AIR DUCT SECTION |
| | POWER OR GRAVITY ROOF VENTILATOR - EXHAUST |
| | POWER OR GRAVITY ROOF VENTILATOR - SUPPLY |
| UC | UNDERCUT DOOR |
| TG | TRANSFER GRILLE OR LOUVER |
| DG | DOOR GRILLE OR LOUVER |

| SYMBOL | DESCRIPTION |
|---|---|
| D / X | DX COOLING COIL |
| H / C | HEATING COIL |
| | DAMPER, OPPOSED BLADE |
| | DAMPER, PARALLEL BLADE |
| | FILTER |
| | HUMIDIFIER |
| | LOUVER |
| AD | ACCESS DOOR OR ACCESS PANEL (AP) IN DUCTWORK |
| 1" 2" | STATIC PRESSURE CHANGE TAG |
| 2" | STATIC PRESSURE TAG |
| | TURNING VANES (RECTANGULAR) |
| | DRAIN, FUNNEL |
| | CENTRIFUGAL FAN |
| | ANALOG SIGNAL |
| | DIGITAL SIGNAL |
| | ELECTRIC LEAD |
| | INSTRUMENT CAPILLARY TUBING |
| | ELECTRONIC 3-WAY VALVE |
| | ELECTRONIC 2-WAY VALVE |
| | DDC INPUT |
| | DDC OUTPUT |
| | LOCALLY MOUNTED INSTRUMENT |
| C02 | CARBON DIOXIDE SENSOR |
| DPS | DIFFERENTIAL PRESSURE SENSOR |
| FM | FLOW METER |
| FS | AIRFLOW SENSOR |
| HS | RELATIVE HUMIDITY SENSOR |
| TS | TEMPERATURE SENSOR |
| TS | AVERAGING TEMPERATURE SENSOR |
| | METAL DUCT |
| R | EMS CO2 SENSOR |
| T | THERMOSTAT |
| PS | PRESSURE SWITCH |
| SD | SMOKE DETECTOR |
| SP | STATIC PRESSURE SENSOR |
| RS | REFRIGERANT SENSOR |
| D | DEW POINT SENSOR |
| H | SPACE HUMIDITY SENSOR |
| S | SWITCH |
| ▲ | FIRE WALL PENETRATION |
| (E) | EXISTING |
| (N) | NEW |

## MOUNTING OVER OBSTRUCTION DETAIL




NOTE:
1. THIS DETAIL APPLIES TO MOUNTING OF ANY MECHANICAL AND ELECTRICAL DEVICE WHICH CONTAINS AN OPERABLE PART THAT IS ADJUSTABLE BY THE OCCUPANT. THIS DOES NOT APPLY TO SENSORS OR CONTROLS THAT ARE ONLY ADJUSTABLE THROUGH THE BUILDING AUTOMATION SYSTEM (IE: TEMPERATURE AND HUMIDITY SENSORS).

## DRAWING INDEX


| SHEET | DESCRIPTION |
|---|---|
| M0.00 | MECHANICAL SHEET INDEX, LEGEND, AND NOTES |
| M0.01 | MECHANICAL TITLE 24 FORMS |
| M0.02 | MECHANICAL TITLE 24 FORMS |
| M0.03 | MECHANICAL TITLE 24 FORMS |
| M0.04 | MECHANICAL TITLE 24 FORMS |
| M0.05 | MECHANICAL TITLE 24 FORMS |
| M0.06 | MECHANICAL TITLE 24 FORMS |
| M0.07 | MECHANICAL TITLE 24 FORMS |
| M0.08 | MECHANICAL TITLE 24 FORMS |
| M0.09 | MECHANICAL TITLE 24 FORMS |
| M0.10 | MECHANICAL TITLE 24 FORMS |
| M0.11 | MECHANICAL TITLE 24 FORMS |
| M0.12 | MECHANICAL TITLE 24 FORMS |
| M0.13 | MECHANICAL TITLE 24 FORMS |
| M0.14 | MECHANICAL TITLE 24 FORMS |
| M0.15 | MECHANICAL TITLE 24 FORMS |
| M0.16 | MECHANICAL TITLE 24 FORMS |
| M0.17 | MECHANICAL TITLE 24 FORMS |
| M0.18 | MECHANICAL TITLE 24 FORMS |
| M0.19 | MECHANICAL TITLE 24 FORMS |
| M0.20 | MECHANICAL TITLE 24 FORMS |
| M0.21 | MECHANICAL TITLE 24 FORMS |
| M0.22 | MECHANICAL TITLE 24 FORMS |
| M1.01 | MECHANICAL SITE PLAN |
| MD2.01 | DEMO MECHANICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| MD2.02 | DEMO MECHANICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| MD2.03 | DEMO MECHANICAL BUILDING FLOOR PLANS C2, C4 & C6 |
| MD6.01 | DEMO MECHANICAL DETAILS |
| M2.01 | MECHANICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMINISTRATION |
| M2.02 | MECHANICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| M2.03 | MECHANICAL BUILDING FLOOR PLANS C2, C4 & C6 |
| M4.01 | MECHANICAL BUILDING ROOF PLANS C7, C8, S-L & ADMIN |
| M4.02 | MECHANICAL BUILDING ROOF PLANS C1, C3, C5, IA-1 & IA-2 |
| M4.03 | MECHANICAL BUILDING ROOF PLANS C2, C4 & C6 |
| M5.01 | MECHANICAL SCHEDULES |
| M5.02 | MECHANICAL SCHEDULES |
| M6.01 | MECHANICAL DETAILS |
| M6.02 | MECHANICAL DETAILS |
| M6.03 | MECHANICAL DETAILS - VARIABLE REFRIGERANT SYSTEM |


## ABBREVIATIONS

| ABBREVIATION | DESCRIPTION |
|---|---|
| AAV | AUTOMATIC AIR VENT |
| ABV | ABOVE |
| AC | AIR CONDITIONING UNIT |
| AD | ACCESS DOOR |
| AFF | ABOVE FINISHED FLOOR |
| AHU | AIR HANDLING UNIT |
| AI | ANALOG INPUT |
| ALUM | ALUMINUM |
| AO | ANALOG OUTPUT |
| AP | ACCESS PANEL |
| B | BOILER |
| BDD | BACK DRAFT DAMPER |
| BEL | BELOW |
| BFC | BELOW FINISHED CEILING |
| BFP | BACK FLOW PREVENTER |
| BG | BLAST GATE |
| BHP | BREAK HORSEPOWER |
| BLDG | BUILDING |
| BOB | BOTTOM OF BEAM |
| BOP | BOTTOM OF PIPE |
| BSMT | BASEMENT |
| BTU | BRITISH THERMAL UNIT |
| CD | CEILING DIFFUSER |
| CFM | CUBIC FEET PER MINUTE |
| CI | CAST IRON |
| CL | CENTER LINE |
| CLG | CEILING |
| CO | CLEANOUT |
| COL | COLUMN |
| CP | CONDENSATE PUMP |
| CT | COOLING TOWER |
| CU | CONDENSING UNIT |
| CV | CONSTANT VOLUME BOX |
| D | DRAIN |
| DB | DRY BULB |
| DEG | DEGREES |
| DI | DIGITAL INPUT |
| DIA | DIAMETER |
| DL | DOOR LOUVER |
| DN | DOWN |
| DO | DIGITAL OUTPUT |
| DP | DIFFERENATIAL PRESSURE |
| DS | DUCT SILENCER |
| DX | DIRECT EXPANSION |
| EA | EACH |
| EAT | ENTERING AIR TEMPERATURE |
| EC | ELECTRICAL CONTRACTOR |
| EF | EXHAUST FAN |
| EFF | EFFICIENCY |
| EGC | EGGCRATE GRILLE |
| EJ | EXPANSION JOINT |
| EL | ELEVATION |
| EQ | EQUAL |
| ER | EXHAUST REGISTER |
| ESP | EXTERNAL STATIC PRESSURE |
| ET | EXPANSION TANK |
| EWC | ELECTRIC WATER COOLER |
| EXIST / (E) | EXISTING |
| °F | DEGREES FAHRENHEIT |
| FA | FREE AREA |
| FC | FAN COIL UNIT |
| FD | FIRE DAMPER |
| FG | FILTER GRILLE |
| FLA | FULL LOAD AMPS |
| FLR | FLOOR |
| FOB | FLAT ON BOTTOM |
| FOT | FLAT ON TOP |
| FP | FIRE PUMP |
| FPI | FINS PER INCH |
| FPM | FEET PER MINUTE |
| FS | FLOW SWITCH |
| FT | FEET / FOOT |
| FX | FLEXIBLE CONNECTION |
| GA | GAUGE |
| GALV | GALVANIZED |
| GC | GENERAL CONTRACTOR |
| GPH | GALLONS PER HOUR |
| GPM | GALLONS PER MINUTE |
| HB | HOSE BIBB |
| HD | HEAD |
| HOA | HANDS OFF AUTO |
| HP | HEAT PUMP |
| HP | HORSEPOWER |
| HT | HEIGHT |
| HV | HEATING AND VENTILATING UNIT |
| HWC | HOT WATER CONVERTER |
| HWP | HEATING HOT WATER RETURN |
| HWR | HOT WATER PUMP |
| HWS | HEATING HOT WATER SUPPLY |
| HZ | HERTZ |
| IC | MOTOR STATUS |
| ICW | INDUSTRIAL COLD WATER |
| ID | INSIDE DIAMETER |
| IN | INCHES |
| IW | INDIRECT WASTE |

| ABBREVIATION | DESCRIPTION |
|---|---|
| KW | KILOWATTS |
| LAT | LEAVING AIR TEMPERATURE |
| LBS | POUNDS |
| LD | LINEAR DIFFUSER |
| LF | LINEAR FEET |
| LWT | LEAVING WATER TEMPERATURE |
| MAX | MAXIMUM |
| MBH | THOUSAND BTU PER HOUR |
| MC | MECHANICAL CONTRACTOR |
| MCA | MINIMUM CIRCUIT AMPS |
| MH | MANHOLE |
| MIN | MINIMUM |
| MOCP | MAXIMUM OVERLOAD CIRCUIT PROTECTION |
| MOD | MOTOR OPERATED DAMPER |
| MTD | MOUNTED |
| MUA | MAKE-UP AIR UNIT |
| (N) | NEW |
| NC | NORMALLY CLOSED |
| NIC | NOT IN CONTRACT |
| NO | NORMALLY OPEN |
| OAT | OUTSIDE AIR TEMPERATURE |
| OBD | OPPOSED BLADE DAMPER |
| OC | ON CENTER |
| OD | OUTSIDE DIAMETER |
| OSA | OUTSIDE AIR |
| PBD | PARALLEL BLADE DAMPER |
| PD | PRESSURE DROP |
| PERF | PERFORATED |
| PH | PHASE |
| PR | PRESSURE RELIEF |
| PS | PRESSURE SWITCH |
| PSID | POUNDS PER SQUARE INCH DIFFERENTIAL |
| PSIG | POUNDS PER SQUARE INCH GAUGE |
| PT | PRESSURE TRANSMITTER |
| PTAC | PACKAGED TERMINAL AIR CONDITIONER |
| PVC | POLYVINYL CHLORIDE |
| RA | RETURN AIR |
| RAR | RETURN AIR REGISTER |
| RD | ROOF DRAIN |
| RF | RETURN FAN |
| RG | RETURN AIR GRILLE |
| RH | RELATIVE HUMIDITY |
| RHC | REHEAT COIL |
| RLA | RATED LOAD AMPS |
| RPM | REVOLUTIONS PER MINUTE |
| SA | SUPPLY AIR |
| SAR | SUPPLY AIR REGISTER |
| SAV | STAGED AIR VOLUME |
| SD | SMOKE DAMPER |
| SF | SUPPLY FAN |
| SI | SPEED INDICATOR |
| SK | SPEED CONTROL |
| SMBH | SENSIBLE MBH |
| SP | STATIC PRESSURE |
| SPEC | SPECIFICATION |
| SS | STAINLESS STEEL |
| STD | STANDARD |
| TAD | TRANSFER AIR DUCT |
| TEFC | TOTALLY ENCLOSED FAN COOLED |
| TEMP | TEMPERATURE |
| TG | TRANSFER GRILLE |
| TI | TEMPERATURE INDICATOR |
| TMBH | TOTAL MBH |
| TSP | TOTAL STATIC PRESSURE |
| TYP | TYPICAL |
| UC | UNDERCUT |
| UH | UNIT HEATER |
| UON | UNLESS OTHERWISE NOTED |
| UTR | UP THROUGH ROOF |
| V | VOLTS |
| VA | DAMPER/VALVE ACTUATOR |
| VAV | VARIABLE AIR VOLUME UNIT |
| VD | VOLUME DAMPER |
| VFD | VARIABLE FREQUENCY DRIVE |
| VP | VELOCITY PRESSURE |
| VTR | VENT THROUGH ROOF |
| W/ | WITH |
| W/O | WITHOUT |
| WB | WET BULB |
| WC | WATER COLUMN |
| WG | WATER GAUGE |
| WT | WEIGHT |

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023


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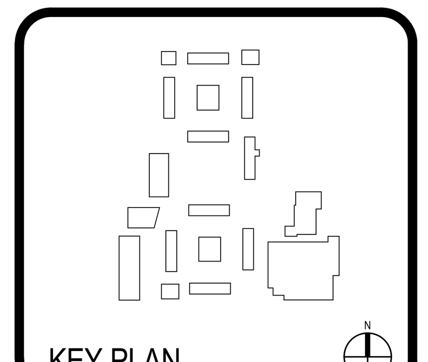

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872



KEY PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL SHEET INDEX, LEGEND, AND NOTES**

**M0.00**

FILE PATH: Z:\Projects\...
9/26/2023 3:28:55 PM

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E
**Nonresidential Performance Compliance Method** — (Page 1 of 17)
**Project Name:** Warner Modernization - Building C1 — **Date Prepared:** 2023-03-25

**A. General Information**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building C1 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing addition and alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope ($ft^2$) | 2940 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area ($ft^2$) | 180 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 2940 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E
**Nonresidential Performance Compliance Method** — (Page 2 of 17)

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E
**Nonresidential Performance Compliance Method** — (Page 3 of 17)

**C1. COMPLIANCE SUMMARY**

| COMPLIES[3] | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | Efficiency[3] (kBtu/$ft^2$ - yr) | Total[2] (kBtu/$ft^2$ - yr) | Total[2] (kBtu/$ft^2$ - yr) |
| Standard Design | 217.26 | 217.26 | 15.8 |
| Proposed Design | 132.8 | 132.8 | 10 |
| **Compliance Margins** | **84.46** | **84.46** | **5.8** |
| | **Pass** | **Pass** | **Pass** |

[2] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[3] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E
**Nonresidential Performance Compliance Method** — (Page 4 of 17)

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/$ft^2$ - yr)**

| COMPLIES[2] | | | |
|---|---|---|---|
| **Energy Component** | **Standard Design (TDV)** | **Proposed Design (TDV)** | **Compliance Margin (TDV)[1]** |
| Space Heating | 1.82 | 2.58 | -0.76 |
| Space Cooling | 43.87 | 21.01 | 22.86 |
| Indoor Fans | 110.77 | 48.37 | 62.4 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 29.27 | 29.31 | -0.04 |
| Indoor Lighting | 31.53 | 31.53 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **217.26** | **132.8** | **84.46 (38.9%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **217.26** | **132.8** | **84.46 (38.9%)** |

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E
**Nonresidential Performance Compliance Method** — (Page 5 of 17)

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 71.02 | 71.02 | --- |
| Process | --- | --- | --- |
| Other Ltg | 1.32 | 1.32 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **289.6** | **205.14** | **84.46 (29.2%)** |

[1] *Notes: This table is not used for Energy Code Compliance.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E
**Nonresidential Performance Compliance Method** — (Page 6 of 17)

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/$ft^2$ /yr)**

| COMPLIES[2] | | | |
|---|---|---|---|
| **Energy Component** | **Standard Design (SOURCE)** | **Proposed Design (SOURCE)** | **Compliance Margin (SOURCE)[1]** |
| Space Heating | 0.23 | 0.34 | -0.11 |
| Space Cooling | 1.27 | 0.5 | 0.77 |
| Indoor Fans | 9.15 | 4.01 | 5.14 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 2.65 | 2.65 | 0 |
| Indoor Lighting | 2.5 | 2.5 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **15.8** | **10** | **5.8 (36.7%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **15.8** | **10** | **5.8 (36.7%)** |

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E
**Nonresidential Performance Compliance Method** — (Page 7 of 17)

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 5.22 | 5.22 | --- |
| Process | --- | --- | --- |
| Other Ltg | 0.1 | 0.1 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **21.12** | **15.32** | **5.8 (27.5%)** |

[1] *Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E
**Nonresidential Performance Compliance Method** — (Page 8 of 17)

**C7. 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 | 0.1 | 0.2 | -0.1 | --- | --- | --- |
| Space Cooling | 3.8 | 1.7 | 2.1 | --- | --- | --- |
| Indoor Fans | 11.4 | 5 | 6.4 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 3.4 | 3.4 | 0 | --- | --- | --- |
| Indoor Lighting | 3.5 | 3.5 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **22.2** | **13.8** | **8.4** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **22.2** | **13.8** | **8.4** | **0** | **0** | **0** |
| Receptacle | 8.3 | 8.3 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | 0.1 | 0.1 | 0 | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **30.6** | **22.2** | **8.4** | **0** | **0** | **0** |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E
**Nonresidential Performance Compliance Method** — (Page 9 of 17)

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/$ft^2$ / yr) | Proposed Design (kBtu/$ft^2$ / yr) | Margin (kBtu/$ft^2$ / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 33.46 | 24.28 | 9.18 | 27.44 |
| NET EUI[1] | 33.46 | 24.28 | 9.18 | 27.44 |

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DC System Size (kWdc) | Exception[1] | Module Type | Array Type | Power Electronics | CFI | Azimuth (deg) | Tilt Input | Array Angle (deg) | Tilt: (x in 12) | Inverter Eff. (%) | Annual Solar Access (%) |

[1] *See Table D1 for any PV exceptions used.*



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.01**

**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V) | Conditioned Floor Area (ft²) | Unconditioned Floor Area (ft²) |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 2940 | 180 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

*Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Opaque Surfaces & Orientation | Total Gross Surface Area (ft²) | Total Fenestration Area (ft²) | Window to Wall Ratio (%) |
| North-Facing[1] | 1332 | 252 | 18.92 |
| East-Facing[2] | 360 | 0 | 0 |
| South-Facing[3] | 1152 | 375 | 32.55 |
| West-Facing[4] | 198 | 0 | 0 |
| **Total** | **3042** | **627** | **20.61** |
| Roof | 2940 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*





**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| Building Story Name | Air Barrier |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Surface Name | Construction Type | Area (ft²) | Framing Type | Cavity R-Value | Continuous R-Value | | Units | Value | Description of Assembly Layers | Status[1] |
| | | | | | Interior | Exterior | | | | |
| R30 Wood Frame Roof6 | Roof | 3,120 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 3,120 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 3,378 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

[1] *Status: N - New, A - Altered, E - Existing*





**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Assembly Name | Area (ft²) | Overall U-factor | Status[1] |
| NewDoor13 | 120 | 0.6 | E |
| ExistDoor25 | 40 | 0.5 | E |

[1] *Status: N - New, A - Altered, E - Existing*

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| Fenestration Assembly Name | Fenestration Type/ Product Type / Frame Type | Certification Method[1] | Assembly Method | Area (ft²) | Overall U-factor | Overall SHGC | Overall VT | Status[2] |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 627 | 0.35 | 0.35 | 0.6 | E |

[1] *Notes: 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.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| HP-C1-3 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C1-4 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C1-5 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

[1] *Status: N - New, A - Altered, E - Existing*

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Name or Item Tag | Qty | Design OA CFM | Supply Fan | | | | Return / Relief Fan | | | | | Status[1] |
| | | | CFM | Power | Power Units | Control | Fan Type | CFM | Power | Power Units | Control | |
| HP-C1-3 | 1 | 378 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C1-4 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C1-5 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

[1] *Status: N - New, A - Altered, E - Existing*





**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| System Name | Equipment Type | Interlocks per 140.4(n)[1] | Other Special Features and Controls |
| HP-C1-3 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C1-4 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C1-5 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |

*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.*

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Zone Name | Mechanical Ventilation | | | | Conditioned Area (sf) | DCV or Occupant Sensor Controls, or Both |
| | Ventilation Function | # of People# of People | Supply OA CFM | Exhaust CFM | | |
| 1-Classroom | Education - Classrooms (ages 9-18) Misc - All others | 23.7 | 378 | 0 | 1140 | DCV |
| 3-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 4-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |





**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System ID | System Type | Qty | Rated Capacity (kBtuh) | | Airflow (cfm) | | | Fan | | | VSD |
| | | | Heating | Cooling | Design | Min. | Min. Ratio | Power | Power Units | Cycles | |
| 1-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 3-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 4-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| Occupancy Type[1] | Conditioned Floor Area[2] (ft²) | Installed Lighting Power (Watts) | Lighting Control Credits (Watts) | Additional (Custom) Allowance | |
| | | | | Area Category Footnotes (Watts) | Area Category Footnotes (Watts) |
| All Other Space Types | 240 | 96 | 0 | 0 | 0 |
| Classroom, Lecture, or Training Vocational | 2700 | 1620 | 0 | 0 | 0 |
| **Building Totals:** | **2940** | **1716** | **0** | **0** | **0** |

[1]*See Table 140.6-C*
[2]*See NRCC-LTI-E for uncconditioned spaces*
[3]*Lighting information for existing spaces modeled is not included in this table*

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**





**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

| Building Component | Form/Title |
|---|---|
| Mechanical | NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to ) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints. |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**





**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Maseed | Documentation Author Signature: Faisal Maseed |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamunga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: | |
| Company: PBK | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: Kristen Sansom | |
| Company: LEAF Engineers | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909,987,0909 | Title: | Scope: |





IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.02**

| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 1 of 17) |
| **Project Name:** Warner Modernization - Building C2 | **Date Prepared:** 2023-03-25 |

**A. General Information**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building C2 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing addition and alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope ($ft^2$) | 2700 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area ($ft^2$) | 420 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 2700 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 2 of 17) |

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 3 of 17) |

**C1. COMPLIANCE SUMMARY**

| COMPLIES[3] | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | Efficiency[1] (kBtu/$ft^2$ - yr) | Total[2] (kBtu/$ft^2$ - yr) | Total[2] (kBtu/$ft^2$ - yr) |
| Standard Design | 240.54 | 240.54 | 17.36 |
| Proposed Design | 147.35 | 147.35 | 10.95 |
| **Compliance Margins** | **93.19** | **93.19** | **6.41** |
| | **Pass** | **Pass** | **Pass** |

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 4 of 17) |

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/$ft^2$ - yr)**

| COMPLIES[2] | | | |
|---|---|---|---|
| **Energy Component** | **Standard Design (TDV)** | **Proposed Design (TDV)** | **Compliance Margin (TDV)[1]** |
| Space Heating | 1.87 | 2.51 | -0.64 |
| Space Cooling | 55.33 | 27.09 | 28.24 |
| Indoor Fans | 118.96 | 53.34 | 65.62 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 31.97 | 32 | -0.03 |
| Indoor Lighting | 32.41 | 32.41 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **240.54** | **147.35** | **93.19 (38.7%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **240.54** | **147.35** | **93.19 (38.7%)** |

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 5 of 17) |

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 77.33 | 77.33 | --- |
| Process | --- | --- | --- |
| Other Ltg | 3.36 | 3.36 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **321.23** | **228.04** | **93.19 (29%)** |

[1] *Notes: This table is not used for Energy Code Compliance.*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 6 of 17) |

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/$ft^2$ /yr)**

| COMPLIES[2] | | | |
|---|---|---|---|
| **Energy Component** | **Standard Design (SOURCE)** | **Proposed Design (SOURCE)** | **Compliance Margin (SOURCE)[1]** |
| Space Heating | 0.24 | 0.33 | -0.09 |
| Space Cooling | 1.83 | 0.74 | 1.09 |
| Indoor Fans | 9.83 | 4.42 | 5.41 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 2.89 | 2.89 | 0 |
| Indoor Lighting | 2.57 | 2.57 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **17.36** | **10.95** | **6.41 (36.9%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **17.36** | **10.95** | **6.41 (36.9%)** |

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 7 of 17) |

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 5.68 | 5.68 | --- |
| Process | --- | --- | --- |
| Other Ltg | 0.27 | 0.27 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **23.31** | **16.9** | **6.41 (27.5%)** |

[1] *Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 8 of 17) |

**C7. 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 | 0.1 | 0.2 | -0.1 | --- | --- | --- |
| Space Cooling | 4.4 | 1.9 | 2.5 | --- | --- | --- |
| Indoor Fans | 11.3 | 5.1 | 6.2 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 3.4 | 3.4 | 0 | --- | --- | --- |
| Indoor Lighting | 3.3 | 3.3 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **22.5** | **13.9** | **8.6** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **22.5** | **13.9** | **8.6** | **0** | **0** | **0** |
| Receptacle | 8.3 | 8.3 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | 0.3 | 0.3 | 0 | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **31.1** | **22.5** | **8.6** | **0** | **0** | **0** |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 9 of 17) |

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/$ft^2$ / yr) | Proposed Design (kBtu/$ft^2$ / yr) | Margin (kBtu/$ft^2$ / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 34.01 | 24.61 | 9.4 | 27.64 |
| NET EUI[1] | 34.01 | 24.61 | 9.4 | 27.64 |

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **DC System Size (kWdc)** | **Exception[1]** | **Module Type** | **Array Type** | **Power Electronics** | **CFI** | **Azimuth (deg)** | **Tilt Input** | **Array Angle (deg)** | **Tilt: (x in 12)** | **Inverter Eff. (%)** | **Annual Solar Access (%)** |

[1] *See Table D1 for any PV exceptions used.*



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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

# MECHANICAL TITLE 24 FORMS

# M0.03

0" 1"



**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V) | Conditioned Floor Area (ft²) | Unconditioned Floor Area (ft²) |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 2700 | 420 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

*Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Opaque Surfaces & Orientation | Total Gross Surface Area (ft²) | Total Fenestration Area (ft²) | Window to Wall Ratio (%) |
| North-Facing[1] | 0 | 0 | 0 |
| East-Facing[2] | 1152 | 252 | 21.88 |
| South-Facing[3] | 360 | 0 | 0 |
| West-Facing[4] | 1152 | 375 | 32.55 |
| **Total** | **2664** | **627** | **23.54** |
| Roof | 2700 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*





**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| Building Story Name | Air Barrier |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Surface Name | Construction Type | Area (ft²) | Framing Type | Cavity R-Value | Continuous R-Value | | Units | Value | Description of Assembly Layers | Status[1] |
| | | | | | Interior | Exterior | | | | |
| R30 Wood Frame Roof6 | Roof | 3,120 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 3,120 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 3,378 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

*[1] Status: N - New, A - Altered, E - Existing*





**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Assembly Name | Area (ft²) | Overall U-factor | Status[1] |
| NewDoor13 | 120 | 0.6 | E |
| ExistDoor25 | 40 | 0.5 | E |

*[1] Status: N - New, A - Altered, E - Existing*

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| Fenestration Assembly Name | Fenestration Type/ Product Type / Frame Type | Certification Method[1] | Assembly Method | Area (ft²) | Overall U-factor | Overall SHGC | Overall VT | Status[2] |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 627 | 0.35 | 0.35 | 0.6 | E |

*[1] Notes: 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.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| HP-C2-3 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C2-4 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C2-5 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

*[1] Status: N - New, A - Altered, E - Existing*

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Name or Item Tag | Qty | Design OA CFM | Supply Fan | | | | Return / Relief Fan | | | | | Status[1] |
| | | | CFM | Power | Power Units | Control | Fan Type | CFM | Power | Power Units | Control | |
| HP-C2-3 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C2-4 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C2-5 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

*[1] Status: N - New, A - Altered, E - Existing*





**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| System Name | Equipment Type | Interlocks per 140.4(n)[1] | Other Special Features and Controls |
| HP-C2-3 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control<br>Fixed DB |
| HP-C2-4 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control<br>Fixed DB |
| HP-C2-5 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control<br>Fixed DB |

*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.*
*[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Zone Name | Mechanical Ventilation | | | | Conditioned Area (sf) | DCV or Occupant Sensor Controls, or Both |
| | Ventilation Function | # of People# of People | Supply OA CFM | Exhaust CFM | | |
| 1-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 4-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 5-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |





**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System ID | System Type | Qty | Rated Capacity (kBtuh) | | Airflow (cfm) | | | Fan | | | VSD |
| | | | Heating | Cooling | Design | Min. | Min. Ratio | Power | Power Units | Cycles | |
| 1-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 4-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 5-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| Occupancy Type[1] | Conditioned Floor Area[2] (ft²) | Installed Lighting Power (Watts) | Lighting Control Credits (Watts) | Additional (Custom) Allowance | |
| | | | | Area Category Footnotes (Watts) | Area Category Footnotes (Watts) |
| Classroom, Lecture, or Training Vocational | 2700 | 1620 | 0 | 0 | 0 |
| **Building Totals:** | **2700** | **1620** | **0** | **0** | **0** |

*[2]See Table 140.6-C*
*[3]See NRCC-LTI-E for unconditioned spaces*
*[1]Lighting information for existing spaces modeled is not included in this table*

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**





**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

| Building Component | Form/Title |
|---|---|
| Mechanical | NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to ) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints. |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**





**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Mased | Documentation Author Signature: Faisal Mased |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamunga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: | |
| Company: PBK | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909,987,0909 | Title: | Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: Adrian Lorenzo | |
| Company: LEAF Engineers | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909,987,0909 | Title: | Scope: |



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

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LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.04**

| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 1 of 17) |
| **Project Name:** Warner Modernization - Building C3 | **Date Prepared:** 2023-03-25 |

**A. General Information**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building C3 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing addition and alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope (ft²) | 2940 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area (ft²) | 180 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 2940 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 2 of 17) |

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 3 of 17) |

**C1. COMPLIANCE SUMMARY**

| COMPLIES[3] | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | Efficiency[1] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) |
| Standard Design | 216.87 | 216.87 | 15.87 |
| Proposed Design | 132.21 | 132.21 | 10.02 |
| **Compliance Margins** | **84.66** | **84.66** | **5.85** |
| | **Pass** | **Pass** | **Pass** |

*[1] Efficiency measures include improvements like a better building envelope and more efficient equipment*
*[2] Compliance Totals include efficiency, photovoltaics and batteries*
*[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 4 of 17) |

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)**

| COMPLIES[2] | | | |
|---|---|---|---|
| **Energy Component** | **Standard Design (TDV)** | **Proposed Design (TDV)** | **Compliance Margin (TDV)[1]** |
| Space Heating | 3.65 | 2.96 | 0.69 |
| Space Cooling | 46.45 | 20.1 | 26.35 |
| Indoor Fans | 105.98 | 48.32 | 57.66 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 29.26 | 29.3 | -0.04 |
| Indoor Lighting | 31.53 | 31.53 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **216.87** | **132.21** | **84.66 (39%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **216.87** | **132.21** | **84.66 (39%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 5 of 17) |

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 71.02 | 71.02 | --- |
| Process | --- | --- | --- |
| Other Ltg | 1.32 | 1.32 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **289.21** | **204.55** | **84.66 (29.3%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 6 of 17) |

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)**

| COMPLIES[2] | | | |
|---|---|---|---|
| **Energy Component** | **Standard Design (SOURCE)** | **Proposed Design (SOURCE)** | **Compliance Margin (SOURCE)[1]** |
| Space Heating | 0.48 | 0.39 | 0.09 |
| Space Cooling | 1.48 | 0.47 | 1.01 |
| Indoor Fans | 8.76 | 4.01 | 4.75 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 2.65 | 2.65 | 0 |
| Indoor Lighting | 2.5 | 2.5 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **15.87** | **10.02** | **5.85 (36.9%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **15.87** | **10.02** | **5.85 (36.9%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 7 of 17) |

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 5.22 | 5.22 | --- |
| Process | --- | --- | --- |
| Other Ltg | 0.1 | 0.1 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **21.19** | **15.34** | **5.85 (27.6%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 8 of 17) |

**C7. 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 | 0.3 | 0.3 | 0 | --- | --- | --- |
| Space Cooling | 4.1 | 1.6 | 2.5 | --- | --- | --- |
| Indoor Fans | 10.9 | 5 | 5.9 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 3.4 | 3.4 | 0 | --- | --- | --- |
| Indoor Lighting | 3.5 | 3.5 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **22.2** | **13.8** | **8.4** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **22.2** | **13.8** | **8.4** | **0** | **0** | **0** |
| Receptacle | 8.3 | 8.3 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | 0.1 | 0.1 | 0 | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **30.6** | **22.2** | **8.4** | **0** | **0** | **0** |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| Nonresidential Performance Compliance Method | (Page 9 of 17) |

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/ft² / yr) | Proposed Design (kBtu/ft² / yr) | Margin (kBtu/ft² / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 33.46 | 24.28 | 9.18 | 27.44 |
| NET EUI[1] | 33.46 | 24.28 | 9.18 | 27.44 |

*[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DC System Size (kWdc) | Exception[1] | Module Type | Array Type | Power Electronics | CFI | Azimuth (deg) | Tilt Input | Array Angle (deg) | Tilt: (x in 12) | Inverter Eff. (%) | Annual Solar Access (%) |

*[1]See Table D1 for any PV exceptions used.*



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

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WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

MECHANICAL TITLE 24 FORMS

M0.05

**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V) | Conditioned Floor Area (ft²) | Unconditioned Floor Area (ft²) |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 2940 | 180 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

*Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Opaque Surfaces & Orientation | Total Gross Surface Area (ft²) | Total Fenestration Area (ft²) | Window to Wall Ratio (%) |
| North-Facing[1] | 1152 | 375 | 32.55 |
| East-Facing[2] | 198 | 0 | 0 |
| South-Facing[3] | 1332 | 252 | 18.92 |
| West-Facing[4] | 360 | 0 | 0 |
| **Total** | **3042** | **627** | **20.61** |
| Roof | 2940 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*





**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| Building Story Name | Air Barrier |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Surface Name | Construction Type | Area (ft²) | Framing Type | Cavity R-Value | Continuous R-Value | | Units | Value | Description of Assembly Layers | Status[1] |
| | | | | | Interior | Exterior | | | | |
| R30 Wood Frame Roof6 | Roof | 3,120 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 3,120 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 3,378 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

[1] *Status: N - New, A - Altered, E - Existing*





**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Assembly Name | Area (ft²) | Overall U-factor | Status[1] |
| NewDoor13 | 120 | 0.6 | E |
| ExistDoor25 | 40 | 0.5 | E |

[1] *Status: N - New, A - Altered, E - Existing*

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| Fenestration Assembly Name | Fenestration Type/ Product Type / Frame Type | Certification Method[1] | Assembly Method | Area (ft²) | Overall U-factor | Overall SHGC | Overall VT | Status[2] |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 627 | 0.35 | 0.35 | 0.6 | E |

[1] *Notes: 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.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| HP-C3-3 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C3-4 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C3-5 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

[1] *Status: N - New, A - Altered, E - Existing*

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Name or Item Tag | Qty | Design OA CFM | Supply Fan | | | | Return / Relief Fan | | | | | Status[1] |
| | | | CFM | Power | Power Units | Control | Fan Type | CFM | Power | Power Units | Control | |
| HP-C3-3 | 1 | 378 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C3-4 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C3-5 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

[1] *Status: N - New, A - Altered, E - Existing*





**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| System Name | Equipment Type | Interlocks per 140.4(n)[1] | Other Special Features and Controls |
| HP-C3-3 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C3-4 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C3-5 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |

*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.*
[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Zone Name | Mechanical Ventilation | | | | Conditioned Area (sf) | DCV or Occupant Sensor Controls, or Both |
| | Ventilation Function | # of People# of People | Supply OA CFM | Exhaust CFM | | |
| 1-Classroom | Education - Classrooms (ages 9-18) Misc - All others | 23.7 | 378 | 0 | 1140 | DCV |
| 3-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 4-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |





**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System ID | System Type | Qty | Rated Capacity (kBtuh) | | Airflow (cfm) | | | Fan | | | VSD |
| | | | Heating | Cooling | Design | Min. | Min. Ratio | Power | Power Units | Cycles | |
| 1-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 3-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 4-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| Occupancy Type[1] | Conditioned Floor Area[2] (ft²) | Installed Lighting Power (Watts) | Lighting Control Credits (Watts) | Additional (Custom) Allowance | |
| | | | | Area Category Footnotes (Watts) | Area Category Footnotes (Watts) |
| All Other Space Types | 240 | 96 | 0 | 0 | 0 |
| Classroom, Lecture, or Training Vocational | 2700 | 1620 | 0 | 0 | 0 |
| **Building Totals:** | **2940** | **1716** | **0** | **0** | **0** |

[1]*See Table 140.6-C*
[2]*See NRCC-LTI-E for uncconditioned spaces*
[3]*Lighting information for existing spaces modeled is not included in this table*

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**





**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

| Building Component | Form/Title |
|---|---|
| Mechanical | NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to ) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints. |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**





**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Mased | Documentation Author Signature: Faisal Mased |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamunga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: | |
| Company: PBK | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909,987,0909 | Title: | Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: Adrian Cervera | |
| Company: LEAF Engineers | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909,987,0909 | Title: | Scope: |



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

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leafengineers.com

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.06**

M0.06 - MECHANICAL TITLE 24 FORMS

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**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 1 of 17)**

**Project Name:** Warner Modernization - Building C4 — **Date Prepared:** 2023-03-25

**A. General Information**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building C4 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing addition and alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope (ft²) | 2700 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area (ft²) | 370 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 2700 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 2 of 17)**

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 3 of 17)**

**C1. COMPLIANCE SUMMARY**

**COMPLIES[3]**

| | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | **Efficiency[1] (kBtu/ft² - yr)** | **Total[2] (kBtu/ft² - yr)** | **Total[2] (kBtu/ft² - yr)** |
| Standard Design | 233.9 | 233.9 | 16.85 |
| Proposed Design | 146.35 | 146.35 | 10.88 |
| **Compliance Margins** | **87.55** | **87.55** | **5.97** |
| | **Pass** | **Pass** | **Pass** |

*[1] Efficiency measures include improvements like a better building envelope and more efficient equipment*
*[2] Compliance Totals include efficiency, photovoltaics and batteries*
*[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 4 of 17)**

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)**

**COMPLIES[2]**

| Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Space Heating | 1.94 | 2.5 | -0.56 |
| Space Cooling | 53.97 | 26.4 | 27.57 |
| Indoor Fans | 113.8 | 53.2 | 60.6 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 31.78 | 31.84 | -0.06 |
| Indoor Lighting | 32.41 | 32.41 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **233.9** | **146.35** | **87.55 (37.4%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **233.9** | **146.35** | **87.55 (37.4%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 5 of 17)**

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 76.09 | 76.09 | --- |
| Process | --- | --- | --- |
| Other Ltg | 2.96 | 2.96 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **312.95** | **225.4** | **87.55 (28%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 6 of 17)**

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)**

**COMPLIES[2]**

| Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Space Heating | 0.25 | 0.33 | -0.08 |
| Space Cooling | 1.76 | 0.7 | 1.06 |
| Indoor Fans | 9.39 | 4.4 | 4.99 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 2.88 | 2.88 | 0 |
| Indoor Lighting | 2.57 | 2.57 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **16.85** | **10.88** | **5.97 (35.4%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **16.85** | **10.88** | **5.97 (35.4%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 7 of 17)**

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 5.59 | 5.59 | --- |
| Process | --- | --- | --- |
| Other Ltg | 0.23 | 0.23 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **22.67** | **16.7** | **5.97 (26.3%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 8 of 17)**

**C7. 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 | 0.1 | 0.2 | -0.1 | --- | --- | --- |
| Space Cooling | 4.4 | 1.9 | 2.5 | --- | --- | --- |
| Indoor Fans | 10.8 | 5.1 | 5.7 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 3.4 | 3.4 | 0 | --- | --- | --- |
| Indoor Lighting | 3.3 | 3.3 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **22** | **13.9** | **8.1** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **22** | **13.9** | **8.1** | **0** | **0** | **0** |
| Receptacle | 8.1 | 8.1 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | 0.3 | 0.3 | 0 | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **30.4** | **22.3** | **8.1** | **0** | **0** | **0** |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 9 of 17)**

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/ft² / yr) | Proposed Design (kBtu/ft² / yr) | Margin (kBtu/ft² / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 33.79 | 24.78 | 9.01 | 26.66 |
| NET EUI[1] | 33.79 | 24.78 | 9.01 | 26.66 |

*[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **DC System Size (kWdc)** | **Exception[1]** | **Module Type** | **Array Type** | **Power Electronics** | **CFI** | **Azimuth (deg)** | **Tilt Input** | **Array Angle (deg)** | **Tilt: (x in 12)** | **Inverter Eff. (%)** | **Annual Solar Access (%)** |

*[1]See Table D1 for any PV exceptions used.*



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

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LEAF ENGINEERS
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Rancho Cucamonga, CA 91730
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leafengineers.com

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

# MECHANICAL TITLE 24 FORMS

# M0.07

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**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V) | Conditioned Floor Area (ft²) | Unconditioned Floor Area (ft²) |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 2700 | 370 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

*Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Opaque Surfaces & Orientation | Total Gross Surface Area (ft²) | Total Fenestration Area (ft²) | Window to Wall Ratio (%) |
| North-Facing[1] | 0 | 0 | 0 |
| East-Facing[2] | 1152 | 375 | 32.55 |
| South-Facing[3] | 360 | 0 | 0 |
| West-Facing[4] | 1152 | 252 | 21.88 |
| **Total** | **2664** | **627** | **23.54** |
| Roof | 2700 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*





**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| Building Story Name | Air Barrier |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Surface Name | Construction Type | Area (ft²) | Framing Type | Cavity R-Value | Continuous R-Value | | Units | Value | Description of Assembly Layers | Status[1] |
| | | | | | Interior | Exterior | | | | |
| R30 Wood Frame Roof6 | Roof | 3,070 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 3,070 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 3,378 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

*[1] Status: N - New, A - Altered, E - Existing*





**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Assembly Name | Area (ft²) | Overall U-factor | Status[1] |
| NewDoor13 | 120 | 0.6 | E |
| ExistDoor25 | 40 | 0.5 | E |

*[1] Status: N - New, A - Altered, E - Existing*

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| Fenestration Assembly Name | Fenestration Type/ Product Type / Frame Type | Certification Method[1] | Assembly Method | Area (ft²) | Overall U-factor | Overall SHGC | Overall VT | Status[2] |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 627 | 0.35 | 0.35 | 0.6 | E |

*[1] Notes: 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.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| HP-C4-3 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C4-4 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C4-5 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

*[1] Status: N - New, A - Altered, E - Existing*

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Name or Item Tag | Qty | Design OA CFM | Supply Fan | | | | Return / Relief Fan | | | | | Status[1] |
| | | | CFM | Power | Power Units | Control | Fan Type | CFM | Power | Power Units | Control | |
| HP-C4-3 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C4-4 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C4-5 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

*[1] Status: N - New, A - Altered, E - Existing*





**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| System Name | Equipment Type | Interlocks per 140.4(n)[1] | Other Special Features and Controls |
| HP-C4-3 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C4-4 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C4-5 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |

*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.*
*[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Zone Name | Mechanical Ventilation | | | | Conditioned Area (sf) | DCV or Occupant Sensor Controls, or Both |
| | Ventilation Function | # of People# of People | Supply OA CFM | Exhaust CFM | | |
| 1-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 4-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 5-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |





**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System ID | System Type | Qty | Rated Capacity (kBtuh) | | Airflow (cfm) | | | Fan | | | VSD |
| | | | Heating | Cooling | Design | Min. | Min. Ratio | Power | Power Units | Cycles | |
| 1-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 4-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 5-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| Occupancy Type[1] | Conditioned Floor Area[2] (ft²) | Installed Lighting Power (Watts) | Lighting Control Credits (Watts) | Additional (Custom) Allowance | |
| | | | | Area Category Footnotes (Watts) | Area Category Footnotes (Watts) |
| Classroom, Lecture, or Training Vocational | 2700 | 1620 | 0 | 0 | 0 |
| **Building Totals:** | **2700** | **1620** | **0** | **0** | **0** |

*[2]See Table 140.6-C*
*[3]See NRCC-LTI-E for unconditioned spaces*
*[3]Lighting information for existing spaces modeled is not included in this table*

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**





**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

| Building Component | Form/Title |
|---|---|
| Mechanical | NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to ) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints. |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**





**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Mased | Documentation Author Signature: Faisal Mased |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamunga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: | |
| Company: PBK | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909,987,0909 | Title: | Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: Kaiser Kareem | |
| Company: LEAF Engineers | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909,987,0909 | Title: | Scope: |



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.08**

M0.08 - MECHANICAL TITLE 24 FORMS

FILE PATH: Z:\Projects\...
9/26/2023 3:28:58 PM

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 1 of 17)

**Project Name:** Warner Modernization - Building C5 — **Date Prepared:** 2023-03-25

**A. General Information**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building C5 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing addition and alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope (ft²) | 2940 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area (ft²) | 180 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 2940 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 2 of 17)

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 3 of 17)

**C1. COMPLIANCE SUMMARY**

**COMPLIES[1]**

| | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | Efficiency[2] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) |
| Standard Design | 217.47 | 217.47 | 15.82 |
| Proposed Design | 132.85 | 132.85 | 10 |
| **Compliance Margins** | **84.62** | **84.62** | **5.82** |
| | **Pass** | **Pass** | **Pass** |

*[1] Efficiency measures include improvements like a better building envelope and more efficient equipment*
*[2] Compliance Totals include efficiency, photovoltaics and batteries*
*[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 4 of 17)

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)**

**COMPLIES[1]**

| Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Space Heating | 1.82 | 2.58 | -0.76 |
| Space Cooling | 43.99 | 21.06 | 22.93 |
| Indoor Fans | 110.86 | 48.37 | 62.49 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 29.27 | 29.31 | -0.04 |
| Indoor Lighting | 31.53 | 31.53 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **217.47** | **132.85** | **84.62 (38.9%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **217.47** | **132.85** | **84.62 (38.9%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 5 of 17)

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 71.02 | 71.02 | --- |
| Process | --- | --- | --- |
| Other Ltg | 1.32 | 1.32 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **289.81** | **205.19** | **84.62 (29.2%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 6 of 17)

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)**

**COMPLIES[1]**

| Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Space Heating | 0.23 | 0.34 | -0.11 |
| Space Cooling | 1.28 | 0.5 | 0.78 |
| Indoor Fans | 9.16 | 4.01 | 5.15 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 2.65 | 2.65 | 0 |
| Indoor Lighting | 2.5 | 2.5 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **15.82** | **10** | **5.82 (36.8%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **15.82** | **10** | **5.82 (36.8%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 7 of 17)

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 5.22 | 5.22 | --- |
| Process | --- | --- | --- |
| Other Ltg | 0.1 | 0.1 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **21.14** | **15.32** | **5.82 (27.5%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 8 of 17)

**C7. 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 | 0.1 | 0.2 | -0.1 | --- | --- | --- |
| Space Cooling | 3.8 | 1.7 | 2.1 | --- | --- | --- |
| Indoor Fans | 11.4 | 5 | 6.4 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 3.4 | 3.4 | 0 | --- | --- | --- |
| Indoor Lighting | 3.5 | 3.5 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **22.2** | **13.8** | **8.4** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **22.2** | **13.8** | **8.4** | **0** | **0** | **0** |
| Receptacle | 8.3 | 8.3 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | 0.1 | 0.1 | 0 | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **30.6** | **22.2** | **8.4** | **0** | **0** | **0** |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 9 of 17)

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/ft² / yr) | Proposed Design (kBtu/ft² / yr) | Margin (kBtu/ft² / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 33.46 | 24.28 | 9.18 | 27.44 |
| NET EUI[1] | 33.46 | 24.28 | 9.18 | 27.44 |

*[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DC System Size (kWdc) | Exception[1] | Module Type | Array Type | Power Electronics | CFI | Azimuth (deg) | Tilt Input | Array Angle (deg) | Tilt: (x in 12) | Inverter Eff. (%) | Annual Solar Access (%) |

*[1] See Table D1 for any PV exceptions used.*



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DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
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DATE: 10/17/2023

PBK

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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.09**

0" 1"

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 10 of 17)

**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V) | Conditioned Floor Area (ft²) | Unconditioned Floor Area (ft²) |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 2940 | 180 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

*Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Opaque Surfaces & Orientation | Total Gross Surface Area (ft²) | Total Fenestration Area (ft²) | Window to Wall Ratio (%) |
| North-Facing[1] | 1332 | 252 | 18.92 |
| East-Facing[2] | 198 | 0 | 0 |
| South-Facing[3] | 1152 | 375 | 32.55 |
| West-Facing[4] | 360 | 0 | 0 |
| **Total** | **3042** | **627** | **20.61** |
| Roof | 2940 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 11 of 17)

**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| Building Story Name | Air Barrier |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Surface Name | Construction Type | Area (ft²) | Framing Type | Cavity R-Value | Continuous R-Value | | Units | Value | Description of Assembly Layers | Status[1] |
| | | | | | Interior | Exterior | | | | |
| R30 Wood Frame Roof6 | Roof | 3,120 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 3,120 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 3,378 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

[1] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 12 of 17)

**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Assembly Name | Area (ft²) | Overall U-factor | Status[1] |
| NewDoor13 | 120 | 0.6 | E |
| ExistDoor25 | 40 | 0.5 | E |

[1] *Status: N - New, A - Altered, E - Existing*

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| Fenestration Assembly Name | Fenestration Type/ Product Type / Frame Type | Certification Method[1] | Assembly Method | Area (ft²) | Overall U-factor | Overall SHGC | Overall VT | Status[2] |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 627 | 0.35 | 0.35 | 0.6 | E |

[1] *Notes: 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*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 13 of 17)

**H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| HP-C5-3 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C5-4 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C5-5 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

[1] *Status: N - New, A - Altered, E - Existing*

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Name or Item Tag | Qty | Design OA CFM | Supply Fan | | | | Return / Relief Fan | | | | | Status[1] |
| | | | CFM | Power | Power Units | Control | Fan Type | CFM | Power | Power Units | Control | |
| HP-C5-3 | 1 | 378 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C5-4 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C5-5 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

[1] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 14 of 17)

**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| System Name | Equipment Type | Interlocks per 140.4(n)[1] | Other Special Features and Controls |
| HP-C5-3 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C5-4 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C5-5 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |

*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.*

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Zone Name | Mechanical Ventilation | | | | Conditioned Area (sf) | DCV or Occupant Sensor Controls, or Both |
| | Ventilation Function | # of People# of People | Supply OA CFM | Exhaust CFM | | |
| 1-Classroom | Education - Classrooms (ages 9-18) Misc - All others | 23.7 | 378 | 0 | 1140 | DCV |
| 3-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 4-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 15 of 17)

**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System ID | System Type | Qty | Rated Capacity (kBtuh) | | Airflow (cfm) | | | Fan | | | VSD |
| | | | Heating | Cooling | Design | Min. | Min. Ratio | Power | Power Units | Cycles | |
| 1-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 3-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 4-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| Occupancy Type[1] | Conditioned Floor Area[2] (ft²) | Installed Lighting Power (Watts) | Lighting Control Credits (Watts) | Additional (Custom) Allowance | |
| | | | | Area Category Footnotes (Watts) | Area Category Footnotes (Watts) |
| All Other Space Types | 240 | 96 | 0 | 0 | 0 |
| Classroom, Lecture, or Training Vocational | 2700 | 1620 | 0 | 0 | 0 |
| **Building Totals:** | **2940** | **1716** | **0** | **0** | **0** |

[1]*See Table 140.6-C*
[2]*See NRCC-LTI-E for uncconditioned spaces*
[3]*Lighting information for existing spaces modeled is not included in this table*

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 16 of 17)

**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

| Building Component | Form/Title |
|---|---|
| Mechanical | NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to ) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints. |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 17 of 17)

**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Mased | Documentation Author Signature: Faisal Mased |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamunga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: | |
| Company: PBK | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: Khoren Gevorgian | |
| Company: LEAF Engineers | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |





IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.10**

0" 1"

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 1 of 17)**

**Project Name:** Warner Modernization - Building C6 — **Date Prepared:** 2023-03-25

**A. General Information**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building C6 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing addition and alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope (ft²) | 2700 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area (ft²) | 370 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 2700 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 2 of 17)**

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 3 of 17)**

**C1. COMPLIANCE SUMMARY**

**COMPLIES[1]**

| | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | **Efficiency[2] (kBtu/ft² - yr)** | **Total[2] (kBtu/ft² - yr)** | **Total[2] (kBtu/ft² - yr)** |
| Standard Design | 231.11 | 231.11 | 16.68 |
| Proposed Design | 145.98 | 145.98 | 10.91 |
| **Compliance Margins** | **85.13** | **85.13** | **5.77** |
| | **Pass** | **Pass** | **Pass** |

*[1] Efficiency measures include improvements like a better building envelope and more efficient equipment*
*[2] Compliance Totals include efficiency, photovoltaics and batteries*
*[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 4 of 17)**

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)**

**COMPLIES[2]**

| Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Space Heating | 2.13 | 2.69 | -0.56 |
| Space Cooling | 52.98 | 25.83 | 27.15 |
| Indoor Fans | 111.78 | 53.23 | 58.55 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 31.81 | 31.82 | -0.01 |
| Indoor Lighting | 32.41 | 32.41 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **231.11** | **145.98** | **85.13 (36.8%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **231.11** | **145.98** | **85.13 (36.8%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 5 of 17)**

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 76.09 | 76.09 | --- |
| Process | --- | --- | --- |
| Other Ltg | 2.96 | 2.96 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **310.16** | **225.03** | **85.13 (27.4%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 6 of 17)**

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)**

**COMPLIES[2]**

| Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Space Heating | 0.27 | 0.36 | -0.09 |
| Space Cooling | 1.73 | 0.69 | 1.04 |
| Indoor Fans | 9.23 | 4.41 | 4.82 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 2.88 | 2.88 | 0 |
| Indoor Lighting | 2.57 | 2.57 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **16.68** | **10.91** | **5.77 (34.6%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **16.68** | **10.91** | **5.77 (34.6%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 7 of 17)**

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 5.59 | 5.59 | --- |
| Process | --- | --- | --- |
| Other Ltg | 0.23 | 0.23 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **22.5** | **16.73** | **5.77 (25.6%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 8 of 17)**

**C7. 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 | 0.1 | 0.2 | -0.1 | --- | --- | --- |
| Space Cooling | 4.3 | 1.9 | 2.4 | --- | --- | --- |
| Indoor Fans | 10.6 | 5.1 | 5.5 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 3.4 | 3.4 | 0 | --- | --- | --- |
| Indoor Lighting | 3.3 | 3.3 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **21.7** | **13.9** | **7.8** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **21.7** | **13.9** | **7.8** | **0** | **0** | **0** |
| Receptacle | 8.1 | 8.1 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | 0.3 | 0.3 | 0 | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **30.1** | **22.3** | **7.8** | **0** | **0** | **0** |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 9 of 17)**

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/ft² / yr) | Proposed Design (kBtu/ft² / yr) | Margin (kBtu/ft² / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 33.45 | 24.78 | 8.67 | 25.92 |
| NET EUI[1] | 33.45 | 24.78 | 8.67 | 25.92 |

*[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **DC System Size (kWdc)** | **Exception[1]** | **Module Type** | **Array Type** | **Power Electronics** | **CFI** | **Azimuth (deg)** | **Tilt Input** | **Array Angle (deg)** | **Tilt: (x in 12)** | **Inverter Eff. (%)** | **Annual Solar Access (%)** |

*[1]See Table D1 for any PV exceptions used.*



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.11**

FILE PATH: Z:\Projects\...
9/26/2023 3:28:59 PM

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 10 of 17)**

**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| **Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V)** | **Conditioned Floor Area (ft²)** | **Unconditioned Floor Area (ft²)** |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 2700 | 370 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

** Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **Opaque Surfaces & Orientation** | **Total Gross Surface Area (ft²)** | **Total Fenestration Area (ft²)** | **Window to Wall Ratio (%)** |
| North-Facing[1] | 360 | 0 | 0 |
| East-Facing[2] | 1152 | 375 | 32.55 |
| South-Facing[3] | 0 | 0 | 0 |
| West-Facing[4] | 1152 | 252 | 21.88 |
| **Total** | **2664** | **627** | **23.54** |
| Roof | 2700 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 11 of 17)**

**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| **Building Story Name** | **Air Barrier** |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Surface Name** | **Construction Type** | **Area (ft²)** | **Framing Type** | **Cavity R-Value** | **Continuous R-Value** | | **Units** | **Value** | **Description of Assembly Layers** | **Status[1]** |
| | | | | | **Interior** | **Exterior** | | | | |
| R30 Wood Frame Roof6 | Roof | 3,070 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 3,070 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 3,378 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

*[1] Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 12 of 17)**

**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **Assembly Name** | **Area (ft²)** | **Overall U-factor** | **Status[1]** |
| NewDoor13 | 120 | 0.6 | E |
| ExistDoor25 | 40 | 0.5 | E |

*[1] Status: N - New, A - Altered, E - Existing*

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| **Fenestration Assembly Name** | **Fenestration Type/ Product Type / Frame Type** | **Certification Method[1]** | **Assembly Method** | **Area (ft²)** | **Overall U-factor** | **Overall SHGC** | **Overall VT** | **Status[2]** |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 627 | 0.35 | 0.35 | 0.6 | E |

*[1] Notes: 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*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 13 of 17)**

**H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Heating** | | | | **Cooling** | | | | |
| **Equipment Name** | **Equipment Type** | **Qty** | **Total Heating Output (kBtu/h)** | **Supp Heat Output (kBtu/h)** | **Efficiency Unit** | **Efficiency** | **Total Cooling Output (kBtu/h)** | **Efficiency Unit** | **Efficiency** | **Economizer Type (if present)** | **Status[1]** |
| HP-C6-3 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C6-4 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C6-5 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

*[1] Status: N - New, A - Altered, E - Existing*

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Supply Fan** | | | | **Return / Relief Fan** | | | | | |
| **Name or Item Tag** | **Qty** | **Design OA CFM** | **CFM** | **Power** | **Power Units** | **Control** | **Fan Type** | **CFM** | **Power** | **Power Units** | **Control** | **Status[1]** |
| HP-C6-3 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C6-4 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C6-5 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

*[1] Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 14 of 17)**

**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **System Name** | **Equipment Type** | **Interlocks per 140.4(n)[1]** | **Other Special Features and Controls** |
| HP-C6-3 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C6-4 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C6-5 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |

*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.*
*[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| | | **Mechanical Ventilation** | | | | |
| **Zone Name** | **Ventilation Function** | **# of People# of People** | **Supply OA CFM** | **Exhaust CFM** | **Conditioned Area (sf)** | **DCV or Occupant Sensor Controls, or Both** |
| 1-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 4-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 5-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 15 of 17)**

**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Rated Capacity (kBtuh)** | | **Airflow (cfm)** | | | | **Fan** | | |
| **System ID** | **System Type** | **Qty** | **Heating** | **Cooling** | **Design** | **Min.** | **Min. Ratio** | **Power** | **Power Units** | **Cycles** | **VSD** |
| 1-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 4-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 5-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| | | | | **Additional (Custom) Allowance** | |
| **Occupancy Type[1]** | **Conditioned Floor Area[2] (ft²)** | **Installed Lighting Power (Watts)** | **Lighting Control Credits (Watts)** | **Area Category Footnotes (Watts)** | **Area Category Footnotes (Watts)** |
| Classroom, Lecture, or Training Vocational | 2700 | 1620 | 0 | 0 | 0 |
| **Building Totals:** | **2700** | **1620** | **0** | **0** | **0** |

*[2]See Table 140.6-C*
*[2]See NRCC-LTI-E for unconditioned spaces*
*[3]Lighting information for existing spaces modeled is not included in this table*

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 16 of 17)**

**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

| Building Component | Form/Title |
|---|---|
| Mechanical | NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to ) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints. |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 17 of 17)**

**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Mased | Documentation Author Signature: Faisal Mased |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamunga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: | |
| Company: PBK | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: Khiren Ramani | |
| Company: LEAF Engineers | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |





IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT — PBK Architects, Inc.
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CONSULTANT — LEAF Engineers
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

MECHANICAL TITLE 24 FORMS

M0.12

0" 1"

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 1 of 17)

**Project Name:** Warner Modernization - Building C7 **Date Prepared:** 2023-03-25

**A. General Information**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building C7 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing addition and alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope (ft²) | 2700 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area (ft²) | 420 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 2700 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 2 of 17)

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 3 of 17)

**C1. COMPLIANCE SUMMARY**

**COMPLIES[1]**

| | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | Efficiency[3] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) |
| Standard Design | 230.44 | 230.44 | 16.89 |
| Proposed Design | 140.21 | 140.21 | 10.64 |
| **Compliance Margins** | **90.23** | **90.23** | **6.25** |
| | **Pass** | **Pass** | **Pass** |

*[1] Efficiency measures include improvements like a better building envelope and more efficient equipment*
*[2] Compliance Totals include efficiency, photovoltaics and batteries*
*[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 4 of 17)

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)**

**COMPLIES[1]**

| Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Space Heating | 5.04 | 2.52 | 2.52 |
| Space Cooling | 52.82 | 20.71 | 32.11 |
| Indoor Fans | 108.21 | 52.6 | 55.61 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 31.96 | 31.97 | -0.01 |
| Indoor Lighting | 32.41 | 32.41 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **230.44** | **140.21** | **90.23 (39.2%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **230.44** | **140.21** | **90.23 (39.2%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 5 of 17)

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 77.33 | 77.33 | --- |
| Process | --- | --- | --- |
| Other Ltg | 3.36 | 3.36 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **311.13** | **220.9** | **90.23 (29%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 6 of 17)

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)**

**COMPLIES[1]**

| Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Space Heating | 0.68 | 0.33 | 0.35 |
| Space Cooling | 1.81 | 0.49 | 1.32 |
| Indoor Fans | 8.94 | 4.36 | 4.58 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 2.89 | 2.89 | 0 |
| Indoor Lighting | 2.57 | 2.57 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **16.89** | **10.64** | **6.25 (37%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **16.89** | **10.64** | **6.25 (37%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 7 of 17)

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 5.68 | 5.68 | --- |
| Process | --- | --- | --- |
| Other Ltg | 0.27 | 0.27 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **22.84** | **16.59** | **6.25 (27.4%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 8 of 17)

**C7. 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 | 0.4 | 0.2 | 0.2 | --- | --- | --- |
| Space Cooling | 4.5 | 1.5 | 3 | --- | --- | --- |
| Indoor Fans | 10.3 | 5 | 5.3 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 3.4 | 3.4 | 0 | --- | --- | --- |
| Indoor Lighting | 3.3 | 3.3 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **21.9** | **13.4** | **8.5** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **21.9** | **13.4** | **8.5** | **0** | **0** | **0** |
| Receptacle | 8.3 | 8.3 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | 0.3 | 0.3 | 0 | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **30.5** | **22** | **8.5** | **0** | **0** | **0** |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 9 of 17)

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/ft² / yr) | Proposed Design (kBtu/ft² / yr) | Margin (kBtu/ft² / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 33.35 | 24.06 | 9.29 | 27.86 |
| NET EUI[1] | 33.35 | 24.06 | 9.29 | 27.86 |

*[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DC System Size (kWdc) | Exception[1] | Module Type | Array Type | Power Electronics | CFI | Azimuth (deg) | Tilt Input | Array Angle (deg) | Tilt: (x in 12) | Inverter Eff. (%) | Annual Solar Access (%) |

*[1]See Table D1 for any PV exceptions used.*



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

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LEAF ENGINEERS
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leafengineers.com

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.13**

FILE PATH: Z:\Projects\...
9/26/2023 3:28:59 PM

0" 1"

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 10 of 17)**

**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| **Building Occupancy Type* (from Table 140.10-A/B and 170.2-U/V)** | **Conditioned Floor Area (ft²)** | **Unconditioned Floor Area (ft²)** |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 2700 | 420 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

*Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **Opaque Surfaces & Orientation** | **Total Gross Surface Area (ft²)** | **Total Fenestration Area (ft²)** | **Window to Wall Ratio (%)** |
| North-Facing[1] | 1152 | 375 | 32.55 |
| East-Facing[2] | 360 | 0 | 0 |
| South-Facing[3] | 1152 | 252 | 21.88 |
| West-Facing[4] | 0 | 0 | 0 |
| **Total** | **2664** | **627** | **23.54** |
| Roof | 2700 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 11 of 17)**

**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| **Building Story Name** | **Air Barrier** |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Surface Name** | **Construction Type** | **Area (ft²)** | **Framing Type** | **Cavity R-Value** | **Continuous R-Value** | | **Units** | **Value** | **Description of Assembly Layers** | **Status[1]** |
| | | | | | **Interior** | **Exterior** | | | | |
| R30 Wood Frame Roof6 | Roof | 3,120 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 3,120 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 3,378 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

*[1] Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 12 of 17)**

**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **Assembly Name** | **Area (ft²)** | **Overall U-factor** | **Status[1]** |
| NewDoor13 | 120 | 0.6 | E |
| ExistDoor26 | 40 | 0.5 | E |

*[1] Status: N - New, A - Altered, E - Existing*

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| **Fenestration Assembly Name** | **Fenestration Type/ Product Type / Frame Type** | **Certification Method[1]** | **Assembly Method** | **Area (ft²)** | **Overall U-factor** | **Overall SHGC** | **Overall VT** | **Status[2]** |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 627 | 0.35 | 0.35 | 0.6 | E |

*[1] Notes: 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*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 13 of 17)**

**H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Heating** | | | | **Cooling** | | | | |
| **Equipment Name** | **Equipment Type** | **Qty** | **Total Heating Output (kBtu/h)** | **Supp Heat Output (kBtu/h)** | **Efficiency Unit** | **Efficiency** | **Total Cooling Output (kBtu/h)** | **Efficiency Unit** | **Efficiency** | **Economizer Type (if present)** | **Status[1]** |
| HP-C7-3 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C7-4 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C7-5 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

*[1] Status: N - New, A - Altered, E - Existing*

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Supply Fan** | | | | **Return / Relief Fan** | | | | | |
| **Name or Item Tag** | **Qty** | **Design OA CFM** | **CFM** | **Power** | **Power Units** | **Control** | **Fan Type** | **CFM** | **Power** | **Power Units** | **Control** | **Status[1]** |
| HP-C7-3 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C7-4 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C7-5 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

*[1] Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 14 of 17)**

**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **System Name** | **Equipment Type** | **Interlocks per 140.4(n)[1]** | **Other Special Features and Controls** |
| HP-C7-3 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C7-4 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C7-5 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |

*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.*
*[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| | | **Mechanical Ventilation** | | | | |
| **Zone Name** | **Ventilation Function** | **# People# of People** | **Supply OA CFM** | **Exhaust CFM** | **Conditioned Area (sf)** | **DCV or Occupant Sensor Controls, or Both** |
| 1-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 3-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 4-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 15 of 17)**

**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Rated Capacity (kBtuh)** | | **Airflow (cfm)** | | | | **Fan** | | |
| **System ID** | **System Type** | **Qty** | **Heating** | **Cooling** | **Design** | **Min.** | **Min. Ratio** | **Power** | **Power Units** | **Cycles** | **VSD** |
| 1-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 3-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 4-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| | | | | **Additional (Custom) Allowance** | |
| **Occupancy Type[1]** | **Conditioned Floor Area[2] (ft²)** | **Installed Lighting Power (Watts)** | **Lighting Control Credits (Watts)** | **Area Category Footnotes (Watts)** | **Area Category Footnotes (Watts)** |
| Classroom, Lecture, or Training Vocational | 2700 | 1620 | 0 | 0 | 0 |
| **Building Totals:** | **2700** | **1620** | **0** | **0** | **0** |

*[2]See Table 140.6-C*
*[3]See NRCC-LTI-E for unconditioned spaces*
*[1]Lighting information for existing spaces modeled is not included in this table*

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 16 of 17)**

**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

| Building Component | Form/Title |
|---|---|
| Mechanical | NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to ) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints. |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 17 of 17)**

**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Mased | Documentation Author Signature: Faisal Mased |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamunga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: | |
| Company: PBK | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: Adrian Lozano | |
| Company: LEAF Engineers | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

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leafengineers.com

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.14**

0" 1"

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 1 of 17)

**Project Name:** Warner Modernization - Building C8 — **Date Prepared:** 2023-03-25

**A. General Information**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building C8 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing addition and alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope (ft²) | 2700 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area (ft²) | 391 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 2700 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 2 of 17)

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 3 of 17)

**C1. COMPLIANCE SUMMARY**

**COMPLIES[1]**

| | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | Efficiency[3] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) |
| Standard Design | 231.06 | 231.06 | 16.67 |
| Proposed Design | 146.08 | 146.08 | 10.91 |
| **Compliance Margins** | **84.98** | **84.98** | **5.76** |
| | **Pass** | **Pass** | **Pass** |

*[1] Efficiency measures include improvements like a better building envelope and more efficient equipment*
*[2] Compliance Totals include efficiency, photovoltaics and batteries*
*[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 4 of 17)

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)**

**COMPLIES[1]**

| Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Space Heating | 2.13 | 2.68 | -0.55 |
| Space Cooling | 52.96 | 25.83 | 27.13 |
| Indoor Fans | 111.65 | 53.24 | 58.41 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 31.91 | 31.92 | -0.01 |
| Indoor Lighting | 32.41 | 32.41 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **231.06** | **146.08** | **84.98 (36.8%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **231.06** | **146.08** | **84.98 (36.8%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 5 of 17)

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 76.62 | 76.62 | --- |
| Process | --- | --- | --- |
| Other Ltg | 3.13 | 3.13 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **310.81** | **225.83** | **84.98 (27.3%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 6 of 17)

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)**

**COMPLIES[1]**

| Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Space Heating | 0.27 | 0.36 | -0.09 |
| Space Cooling | 1.73 | 0.69 | 1.04 |
| Indoor Fans | 9.22 | 4.41 | 4.81 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 2.88 | 2.88 | 0 |
| Indoor Lighting | 2.57 | 2.57 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **16.67** | **10.91** | **5.76 (34.6%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **16.67** | **10.91** | **5.76 (34.6%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 7 of 17)

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 5.63 | 5.63 | --- |
| Process | --- | --- | --- |
| Other Ltg | 0.25 | 0.25 | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **22.55** | **16.79** | **5.76 (25.5%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 8 of 17)

**C7. 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 | 0.1 | 0.2 | -0.1 | --- | --- | --- |
| Space Cooling | 4.3 | 1.9 | 2.4 | --- | --- | --- |
| Indoor Fans | 10.6 | 5.1 | 5.5 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 3.4 | 3.4 | 0 | --- | --- | --- |
| Indoor Lighting | 3.3 | 3.3 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **21.7** | **13.9** | **7.8** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **21.7** | **13.9** | **7.8** | **0** | **0** | **0** |
| Receptacle | 8.2 | 8.2 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | 0.3 | 0.3 | 0 | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **30.2** | **22.4** | **7.8** | **0** | **0** | **0** |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 9 of 17)

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/ft² / yr) | Proposed Design (kBtu/ft² / yr) | Margin (kBtu/ft² / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 33.34 | 24.73 | 8.61 | 25.82 |
| NET EUI[1] | 33.34 | 24.73 | 8.61 | 25.82 |

*[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DC System Size (kWdc) | Exception[1] | Module Type | Array Type | Power Electronics | CFI | Azimuth (deg) | Tilt Input | Array Angle (deg) | Tilt: (x in 12) | Inverter Eff. (%) | Annual Solar Access (%) |

*[1]See Table D1 for any PV exceptions used.*



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

# MECHANICAL TITLE 24 FORMS

# M0.15

FILE PATH: Z:\Projects\...
9/26/2023 3:29:00 PM

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 10 of 17)**

**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| **Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V)** | **Conditioned Floor Area (ft²)** | **Unconditioned Floor Area (ft²)** |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 2700 | 391 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

** Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **Opaque Surfaces & Orientation** | **Total Gross Surface Area (ft²)** | **Total Fenestration Area (ft²)** | **Window to Wall Ratio (%)** |
| North-Facing[1] | 360 | 0 | 0 |
| East-Facing[2] | 1152 | 375 | 32.55 |
| South-Facing[3] | 0 | 0 | 0 |
| West-Facing[4] | 1152 | 252 | 21.88 |
| **Total** | **2664** | **627** | **23.54** |
| Roof | 2700 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 11 of 17)**

**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| **Building Story Name** | **Air Barrier** |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Surface Name** | **Construction Type** | **Area (ft²)** | **Framing Type** | **Cavity R-Value** | **Continuous R-Value** | | **Units** | **Value** | **Description of Assembly Layers** | **Status[1]** |
| | | | | | **Interior** | **Exterior** | | | | |
| R30 Wood Frame Roof6 | Roof | 3,091 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 3,091 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 3,378 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

*[1] Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 12 of 17)**

**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **Assembly Name** | **Area (ft²)** | **Overall U-factor** | **Status[1]** |
| NewDoor13 | 120 | 0.6 | E |
| ExistDoor25 | 40 | 0.5 | E |

*[1] Status: N - New, A - Altered, E - Existing*

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| **Fenestration Assembly Name** | **Fenestration Type/ Product Type / Frame Type** | **Certification Method[1]** | **Assembly Method** | **Area (ft²)** | **Overall U-factor** | **Overall SHGC** | **Overall VT** | **Status[2]** |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 627 | 0.35 | 0.35 | 0.6 | E |

*[1] Notes: 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*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 13 of 17)**

**H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Heating** | | | | **Cooling** | | | | |
| **Equipment Name** | **Equipment Type** | **Qty** | **Total Heating Output (kBtu/h)** | **Supp Heat Output (kBtu/h)** | **Efficiency Unit** | **Efficiency** | **Total Cooling Output (kBtu/h)** | **Efficiency Unit** | **Efficiency** | **Economizer Type (if present)** | **Status[1]** |
| HP-C8-3 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C8-4 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-C8-5 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

*[1] Status: N - New, A - Altered, E - Existing*

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Supply Fan** | | | | **Return / Relief Fan** | | | | | |
| **Name or Item Tag** | **Qty** | **Design OA CFM** | **CFM** | **Power** | **Power Units** | **Control** | **Fan Type** | **CFM** | **Power** | **Power Units** | **Control** | **Status[1]** |
| HP-C8-3 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C8-4 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-C8-5 | 1 | 342 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

*[1] Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 14 of 17)**

**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **System Name** | **Equipment Type** | **Interlocks per 140.4(n)[1]** | **Other Special Features and Controls** |
| HP-C8-3 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C8-4 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-C8-5 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |

*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.*
*[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| | | **Mechanical Ventilation** | | | | |
| **Zone Name** | **Ventilation Function** | **# People# of People** | **Supply OA CFM** | **Exhaust CFM** | **Conditioned Area (sf)** | **DCV or Occupant Sensor Controls, or Both** |
| 1-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 4-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |
| 5-Classroom | Education - Classrooms (ages 9-18) | 22.5 | 342 | 0 | 900 | DCV |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 15 of 17)**

**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Rated Capacity (kBtuh)** | | **Airflow (cfm)** | | | | **Fan** | | |
| **System ID** | **System Type** | **Qty** | **Heating** | **Cooling** | **Design** | **Min.** | **Min. Ratio** | **Power** | **Power Units** | **Cycles** | **VSD** |
| 1-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 4-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 5-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| | | | | **Additional (Custom) Allowance** | |
| **Occupancy Type[1]** | **Conditioned Floor Area[2] (ft²)** | **Installed Lighting Power (Watts)** | **Lighting Control Credits (Watts)** | **Area Category Footnotes (Watts)** | **Area Category Footnotes (Watts)** |
| Classroom, Lecture, or Training Vocational | 2700 | 1620 | 0 | 0 | 0 |
| **Building Totals:** | **2700** | **1620** | **0** | **0** | **0** |

*[2]See Table 140.6-C*
*[2]See NRCC-LTI-E for unconditioned spaces*
*[3]Lighting information for existing spaces modeled is not included in this table*

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 16 of 17)**

**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

| Building Component | Form/Title |
|---|---|
| Mechanical | NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to ) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints. |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 17 of 17)**

**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Mased | Documentation Author Signature: Faisal Mased |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamunga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: | |
| Company: PBK | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: Khrisa Garcia | |
| Company: LEAF Engineers | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |





IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
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CONSULTANT LEAF Engineers
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.16**

0" 1"

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 1 of 16)**

**Project Name:** Warner Modernization - Building A1 — **Date Prepared:** 2023-03-25

**A. General Information**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building A1 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing addition and alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope (ft²) | 2839 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area (ft²) | 0 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 2839 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 2 of 16)**

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 3 of 16)**

**C1. COMPLIANCE SUMMARY**

**COMPLIES[3]**

| | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | Efficiency[1] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) |
| Standard Design | 243.98 | 243.98 | 19.36 |
| Proposed Design | 177.8 | 177.8 | 13.64 |
| **Compliance Margins** | **66.18** | **66.18** | **5.72** |
| | **Pass** | **Pass** | **Pass** |

*[1] Efficiency measures include improvements like a better building envelope and more efficient equipment*
*[2] Compliance Totals include efficiency, photovoltaics and batteries*
*[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 4 of 16)**

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)**

**COMPLIES[2]**

| Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Space Heating | 3.97 | 6.77 | -2.8 |
| Space Cooling | 65.94 | 50.83 | 15.11 |
| Indoor Fans | 127.97 | 74.1 | 53.87 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 8.73 | 8.73 | 0 |
| Indoor Lighting | 37.37 | 37.37 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **243.98** | **177.8** | **66.18 (27.1%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **243.98** | **177.8** | **66.18 (27.1%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 5 of 16)**

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 106.22 | 106.22 | --- |
| Process | --- | --- | --- |
| Other Ltg | --- | --- | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **350.2** | **284.02** | **66.18 (18.9%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 6 of 16)**

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)**

**COMPLIES[2]**

| Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Space Heating | 0.58 | 0.98 | -0.4 |
| Space Cooling | 3.26 | 2.16 | 1.1 |
| Indoor Fans | 11.94 | 6.92 | 5.02 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 0.75 | 0.75 | 0 |
| Indoor Lighting | 2.83 | 2.83 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **19.36** | **13.64** | **5.72 (29.5%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **19.36** | **13.64** | **5.72 (29.5%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 7 of 16)**

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 7.54 | 7.54 | --- |
| Process | --- | --- | --- |
| Other Ltg | --- | --- | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **26.9** | **21.18** | **5.72 (21.3%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 8 of 16)**

**C7. 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 | 0.3 | 0.6 | -0.3 | --- | --- | --- |
| Space Cooling | 6.3 | 4.7 | 1.6 | --- | --- | --- |
| Indoor Fans | 12.8 | 7.4 | 5.4 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 0.9 | 0.9 | 0 | --- | --- | --- |
| Indoor Lighting | 4.2 | 4.2 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **24.5** | **17.8** | **6.7** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **24.5** | **17.8** | **6.7** | **0** | **0** | **0** |
| Receptacle | 12.2 | 12.2 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | --- | --- | --- | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **36.7** | **30** | **6.7** | **0** | **0** | **0** |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — **NRCC-PRF-E**

**Nonresidential Performance Compliance Method** — **(Page 9 of 16)**

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/ft² / yr) | Proposed Design (kBtu/ft² / yr) | Margin (kBtu/ft² / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 44.11 | 36.05 | 8.06 | 18.27 |
| NET EUI[1] | 44.11 | 36.05 | 8.06 | 18.27 |

*[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DC System Size (kWdc) | Exception[1] | Module Type | Array Type | Power Electronics | CFI | Azimuth (deg) | Tilt Input | Array Angle (deg) | Tilt: (x in 12) | Inverter Eff. (%) | Annual Solar Access (%) |

*[1]See Table D1 for any PV exceptions used.*



IDENTIFICATION STAMP
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APP: 04-121954 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
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Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M58155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

# MECHANICAL TITLE 24 FORMS

# M0.17

FILE PATH: Z:\Projects\...
9/26/2023 3:29:01 PM

**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V) | Conditioned Floor Area (ft²) | Unconditioned Floor Area (ft²) |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 2839 | 0 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

*Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Opaque Surfaces & Orientation | Total Gross Surface Area (ft²) | Total Fenestration Area (ft²) | Window to Wall Ratio (%) |
| North-Facing[1] | 0 | 0 | 0 |
| East-Facing[2] | 1557 | 300 | 19.27 |
| South-Facing[3] | 336 | 0 | 0 |
| West-Facing[4] | 1413 | 200 | 14.15 |
| **Total** | **3306** | **500** | **15.12** |
| Roof | 2839 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*





**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| Building Story Name | Air Barrier |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Surface Name | Construction Type | Area (ft²) | Framing Type | Cavity R-Value | Continuous R-Value | | Units | Value | Description of Assembly Layers | Status[1] |
| | | | | | Interior | Exterior | | | | |
| R30 Wood Frame Roof6 | Roof | 2,839 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 2,839 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 3,306 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

[1] *Status: N - New, A - Altered, E - Existing*

**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Assembly Name | Area (ft²) | Overall U-factor | Status[1] |
| NewDoor14 | 264 | 0.6 | E |

[1] *Status: N - New, A - Altered, E - Existing*





**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| Fenestration Assembly Name | Fenestration Type/ Product Type / Frame Type | Certification Method[1] | Assembly Method | Area (ft²) | Overall U-factor | Overall SHGC | Overall VT | Status[2] |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 500 | 0.35 | 0.35 | 0.6 | E |

[1] *Notes: 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.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| HP-A1 VRF | Variable Refrigerant Flow | 1 | 160 | N/A | COP | 3.79 | 144 | EER | 12.7 | N/A | N |

[1] *Status: N - New, A - Altered, E - Existing*





**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Name or Item Tag | Qty | Design OA CFM | Supply Fan | | | | Return / Relief Fan | | | | | Status[1] |
| | | | CFM | Power | Power Units | Control | Fan Type | CFM | Power | Power Units | Control | |
| 2-FC-A1-VRF | 1 | 42.45 | 430 | 0.1 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| 3-FC-A2-VRF | 1 | 80.1 | 1,070 | 0.3 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| 4-FC-A3-VRF | 1 | 34.5 | 800 | 0.3 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| 5-FC-A4-VRF | 1 | 37.5 | 535 | 0.21 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| 6-FC-A5-VRF | 1 | 82.5 | 1,070 | 0.3 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| 7-FC-A6-VRF | 1 | 148.8 | 1,370 | 0.33 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

[1] *Status: N - New, A - Altered, E - Existing*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|---|
| Zone Name | Mechanical Ventilation | | | | | Conditioned Area (sf) | DCV or Occupant Sensor Controls, or Both |
| | Ventilation Function | # of People# of People | | Supply OA CFM | Exhaust CFM | | |
| 1-FC-A1 | Office - Office space | 1.42 | | 42.45 | 0 | 283 | N/A |
| 2-FC-A2 | Office - Office space | 2.67 | | 80.1 | 0 | 534 | N/A |
| 3-FC-A3 | Office - Office space | 1.15 | | 34.5 | 0 | 230 | N/A |
| 4-FC-A4 | Office - Office space | 1.25 | | 37.5 | 0 | 250 | N/A |
| 5-FC-A5 | Office - Office space | 2.75 | | 82.5 | 0 | 550 | N/A |
| 6-FC-A6 | Office - Office space | 4.96 | | 148.8 | 0 | 992 | N/A |





**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System ID | System Type | Qty | Rated Capacity (kBtuh) | | Airflow (cfm) | | | Fan | | | VSD |
| | | | Heating | Cooling | Design | Min. | Min. Ratio | Power | Power Units | Cycles | |
| 2-FC-A1-VRF | Variable Refrigerant Flow | 1 | 11.2 | 11.7 | 430 | N/A | N/A | 0.1 | BHP | Continuous | ☐ |
| 3-FC-A2-VRF | Variable Refrigerant Flow | 1 | 28.3 | 20.4 | 1,070 | N/A | N/A | 0.3 | BHP | Continuous | ☐ |
| 4-FC-A3-VRF | Variable Refrigerant Flow | 1 | 22.5 | 23.4 | 800 | N/A | N/A | 0.3 | BHP | Continuous | ☐ |
| 5-FC-A4-VRF | Variable Refrigerant Flow | 1 | 14.2 | 14.2 | 535 | N/A | N/A | 0.21 | BHP | Continuous | ☐ |
| 6-FC-A5-VRF | Variable Refrigerant Flow | 1 | 28.3 | 29.3 | 1,070 | N/A | N/A | 0.3 | BHP | Continuous | ☐ |
| 7-FC-A6-VRF | Variable Refrigerant Flow | 1 | 45 | 48.9 | 1,370 | N/A | N/A | 0.33 | BHP | Continuous | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| Occupancy Type[1] | Conditioned Floor Area[2] (ft²) | Installed Lighting Power (Watts) | Lighting Control Credits (Watts) | Additional (Custom) Allowance | |
| | | | | Area Category Footnotes (Watts) | Area Category Footnotes (Watts) |
| Office ( 250 square feet) | 2839 | 1845.35 | 0 | 0 | 0 |
| **Building Totals:** | **2839** | **1845.35** | **0** | **0** | **0** |

[1]*See Table 140.6-C*
[2]*See NRCC-LTI-E for unconditioned spaces*
[3]*Lighting information for existing spaces modeled is not included in this table*

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**





**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

**There are no Certificates of Acceptance applicable to this project**

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**





**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Mased | Documentation Author Signature: Faisal Mased |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamumga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: | |
| Company: PBK | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: Kiran Lonsani | |
| Company: LEAF Engineers | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |





IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

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CONSULTANT LEAF Engineers
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leafengineers.com

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.18**

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 1 of 16)

**Project Name:** Warner Modernization - Building IA-1 — **Date Prepared:** 2023-03-25

**A. General Information**

| | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building IA-1 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope (ft²) | 3850 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area (ft²) | 0 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 3850 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 2 of 16)

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 3 of 16)

**C1. COMPLIANCE SUMMARY**

**COMPLIES[3]**

| | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | Efficiency[1] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) | Total[2] (kBtu/ft² - yr) |
| Standard Design | 199.81 | 199.81 | 14.76 |
| Proposed Design | 128.52 | 128.52 | 9.82 |
| **Compliance Margins** | **71.29** | **71.29** | **4.94** |
| | **Pass** | **Pass** | **Pass** |

*[1] Efficiency measures include improvements like a better building envelope and more efficient equipment*
*[2] Compliance Totals include efficiency, photovoltaics and batteries*
*[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 4 of 16)

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)**

**COMPLIES[2]**

| Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Space Heating | 7.92 | 2.58 | 5.34 |
| Space Cooling | 45.59 | 16.44 | 29.15 |
| Indoor Fans | 85.8 | 49.01 | 36.79 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 28.09 | 28.08 | 0.01 |
| Indoor Lighting | 32.41 | 32.41 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **199.81** | **128.52** | **71.29 (35.7%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **199.81** | **128.52** | **71.29 (35.7%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 5 of 16)

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 66.92 | 66.92 | --- |
| Process | --- | --- | --- |
| Other Ltg | --- | --- | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **266.73** | **195.44** | **71.29 (26.7%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 6 of 16)

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)**

**COMPLIES[2]**

| Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Space Heating | 1.1 | 0.35 | 0.75 |
| Space Cooling | 1.55 | 0.39 | 1.16 |
| Indoor Fans | 7.1 | 4.07 | 3.03 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 2.44 | 2.44 | 0 |
| Indoor Lighting | 2.57 | 2.57 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **14.76** | **9.82** | **4.94 (33.5%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **14.76** | **9.82** | **4.94 (33.5%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 7 of 16)

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 4.92 | 4.92 | --- |
| Process | --- | --- | --- |
| Other Ltg | --- | --- | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **19.68** | **14.74** | **4.94 (25.1%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 8 of 16)

**C7. 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 | 0.9 | 0.3 | 0.6 | --- | --- | --- |
| Space Cooling | 5.4 | 1.7 | 3.7 | --- | --- | --- |
| Indoor Fans | 11.6 | 6.6 | 5 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 4.4 | 4.4 | 0 | --- | --- | --- |
| Indoor Lighting | 4.7 | 4.7 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **27** | **17.7** | **9.3** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **27** | **17.7** | **9.3** | **0** | **0** | **0** |
| Receptacle | 10.2 | 10.2 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | --- | --- | --- | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **37.2** | **27.9** | **9.3** | **0** | **0** | **0** |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** — NRCC-PRF-E

**Nonresidential Performance Compliance Method** — (Page 9 of 16)

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/ft² / yr) | Proposed Design (kBtu/ft² / yr) | Margin (kBtu/ft² / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 32.97 | 24.73 | 8.24 | 24.99 |
| NET EUI[1] | 32.97 | 24.73 | 8.24 | 24.99 |

*[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DC System Size (kWdc) | Exception[1] | Module Type | Array Type | Power Electronics | CFI | Azimuth (deg) | Tilt Input | Array Angle (deg) | Tilt: (x in 12) | Inverter Eff. (%) | Annual Solar Access (%) |

*[1] See Table D1 for any PV exceptions used.*



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

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P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

# MECHANICAL TITLE 24 FORMS

# M0.19

| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 10 of 16)** |

**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| **Building Occupancy Type* (from Table 140.10-A/B and 170.2-U/V)** | **Conditioned Floor Area (ft²)** | **Unconditioned Floor Area (ft²)** |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 3850 | 0 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

*Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **Opaque Surfaces & Orientation** | **Total Gross Surface Area (ft²)** | **Total Fenestration Area (ft²)** | **Window to Wall Ratio (%)** |
| North-Facing[1] | 720 | 125 | 17.36 |
| East-Facing[2] | 720 | 0 | 0 |
| South-Facing[3] | 744 | 100 | 13.44 |
| West-Facing[4] | 744 | 0 | 0 |
| **Total** | **2928** | **225** | **7.68** |
| Roof | 3850 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 11 of 16)** |

**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| **Building Story Name** | **Air Barrier** |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Surface Name** | **Construction Type** | **Area (ft²)** | **Framing Type** | **Cavity R-Value** | **Continuous R-Value** | | **Units** | **Value** | **Description of Assembly Layers** | **Status[1]** |
| | | | | | **Interior** | **Exterior** | | | | |
| R30 Wood Frame Roof6 | Roof | 3,850 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 3,850 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 2,928 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

[1] *Status: N - New, A - Altered, E - Existing*

**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **Assembly Name** | **Area (ft²)** | **Overall U-factor** | **Status[1]** |
| NewDoor13 | 80 | 0.6 | E |

[1] *Status: N - New, A - Altered, E - Existing*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 12 of 16)** |

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| **Fenestration Assembly Name** | **Fenestration Type/ Product Type / Frame Type** | **Certification Method[1]** | **Assembly Method** | **Area (ft²)** | **Overall U-factor** | **Overall SHGC** | **Overall VT** | **Status[2]** |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 225 | 0.35 | 0.35 | 0.6 | E |

[1] *Notes: 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.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Equipment Name** | **Equipment Type** | **Qty** | **Heating** | | | | **Cooling** | | | **Economizer Type (if present)** | **Status[1]** |
| | | | **Total Heating Output (kBtu/h)** | **Supp Heat Output (kBtu/h)** | **Efficiency Unit** | **Efficiency** | **Total Cooling Output (kBtu/h)** | **Efficiency Unit** | **Efficiency** | | |
| HP-IA-1-1 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-IA-1-2 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-IA-1-3&4 | Single Zone Heat Pump (SZHP) Air System | 2 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

[1] *Status: N - New, A - Altered, E - Existing*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 13 of 16)** |

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Name or Item Tag** | **Qty** | **Design OA CFM** | **Supply Fan** | | | | **Return / Relief Fan** | | | | | **Status[1]** |
| | | | **CFM** | **Power** | **Power Units** | **Control** | **Fan Type** | **CFM** | **Power** | **Power Units** | **Control** | |
| HP-IA-1-1 | 1 | 361 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-IA-1-2 | 1 | 361 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-IA-1-3&4 | 2 | 370.5 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

[1] *Status: N - New, A - Altered, E - Existing*

**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| **System Name** | **Equipment Type** | **Interlocks per 140.4(s)[1]** | **Other Special Features and Controls** |
| HP-IA-1-1 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-IA-1-2 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-IA-1-3&4 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |

*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.*
[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| **Zone Name** | **Mechanical Ventilation** | | | | **Conditioned Area (sf)** | **DCV or Occupant Sensor Controls, or Both** |
| | **Ventilation Function** | **# of People# of People** | **Supply OA CFM** | **Exhaust CFM** | | |
| 1-Classroom | Education - Classrooms (ages 9-18) | 23.75 | 361 | 0 | 950 | DCV |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 14 of 16)** |

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| **Zone Name** | **Mechanical Ventilation** | | | | **Conditioned Area (sf)** | **DCV or Occupant Sensor Controls, or Both** |
| | **Ventilation Function** | **# of People# of People** | **Supply OA CFM** | **Exhaust CFM** | | |
| 2-Classroom | Education - Classrooms (ages 9-18) | 23.75 | 361 | 0 | 950 | DCV |
| 3-Classroom | Education - Classrooms (ages 9-18) | 48.75 | 741 | 0 | 1950 | DCV |

**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **System ID** | **System Type** | **Qty** | **Rated Capacity (kBtuh)** | | **Airflow (cfm)** | | | **Fan** | | | **VSD** |
| | | | **Heating** | **Cooling** | **Design** | **Min.** | **Min. Ratio** | **Power** | **Power Units** | **Cycles** | |
| 1-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 2-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 3-Classroom-Trm | Uncontrolled | 2 | N/A | N/A | 3,200 | N/A | 0 | N/A | N/A | N/A | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| **Occupancy Type[1]** | **Conditioned Floor Area[2] (ft²)** | **Installed Lighting Power (Watts)** | **Lighting Control Credits (Watts)** | **Additional (Custom) Allowance** | |
| | | | | **Area Category Footnotes (Watts)** | **Area Category Footnotes (Watts)** |
| Classroom, Lecture, or Training Vocational | 3850 | 2310 | 0 | 0 | 0 |
| **Building Totals:** | **3850** | **2310** | **0** | **0** | **0** |

[1] *See Table 140.6-C*
[2] *See NRCC-LTI- E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 15 of 16)** |

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**

**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

| Building Component | Form/Title |
|---|---|
| Mechanical | NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to ) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints. |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 16 of 16)** |

**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Mased | Documentation Author Signature: Faisal Mased |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamunga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | |
|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: |
| Company: PBK | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: |
| Phone: 909-987-0909 | Title: Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: |
| Company: LEAF Engineers | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: |
| Phone: 909-987-0909 | Title: Scope: |





IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

**DSA Submittal**

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
CIVIL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

**DSA Submittal**

**MECHANICAL TITLE 24 FORMS**

**M0.20**

| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | | | NRCC-PRF-E |
|---|---|---|---|
| **Nonresidential Performance Compliance Method** | | | **(Page 1 of 17)** |
| **Project Name:** | **Warner Modernization - Building IA-2** | **Date Prepared:** | **2023-03-25** |

| A. General Information | | | | | |
|---|---|---|---|---|---|
| 1 | Project Name | Warner Modernization - Building IA-2 | | | |
| 2 | Run Title | Title 24 Analysis | | | |
| 3 | Project Location | 14171 Newland St | | | |
| 4 | City | Westminster | 5 | Standards Version | Compliance 2022 |
| 6 | Zip code | 92683 | 7 | Compliance Software (version) | EnergyPro 9.1 |
| 8 | Climate Zone | 6 | 9 | Building Orientation (deg) | 0 |
| 10 | Building Type(s) | • Nonresidential | 11 | Weather File | TORRANCE-MUNI-AP_STYP20.epw |
| 12 | Project Scope | • Existing alteration | 13 | Number of Dwelling Units | 0 |
| 14 | Total Conditioned Floor Area in Scope (ft²) | 3400 | 15 | Total # of hotel/motel rooms | 0 |
| 16 | Total Unconditioned Floor Area (ft²) | 0 | 17 | Fuel Type | Natural gas |
| 18 | Nonresidential Conditioned Floor Area | 3400 | 19 | Total # of Stories (Habitable Above Grade) | 1 |
| 20 | Residential Conditioned Floor Area | 0 | | | |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 2 of 17)** |

**B. PROJECT SUMMARY**

*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 the permit application.*

| Building Components Complying via Performance | | | | | Building Components Complying Prescriptively | |
|---|---|---|---|---|---|---|
| Envelope (See Table G) | Nonres | Performance | Solar Thermal Water Heating (See Table I3) | ☐ 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). | |
| | MultiFam | Not Included | | ☒ Not Included | | |
| Mechanical (See Table H) | Nonres | Performance | Covered Process: Commercial Kitchens (see Table J) | ☐ Performance | Indoor Lighting (Unconditioned) 140.6 & 170.2(e) | NRCC-LTI-E is required |
| | MultiFam | Not Included | | ☒ Not Included | Outdoor Lighting 140.7 & 170.2(e) | NRCC-LTO-E is required |
| Domestic Hot Water (See Table I) | Nonres | Not Included | Covered Process: Laboratory Exhaust (see Table J) | ☐ Performance | Sign Lighting 140.8 & 170.2(e) | NRCC-LTS-E is required |
| | MultiFam | Not Included | | ☒ Not Included | **Building Components Complying with Mandatory Measures** | |
| Lighting (Indoor Conditioned, see Table K) | Nonres | Performance | Photovoltaics (see Table F) | ☒ Performance | Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.) | |
| | MultiFam | Not Included | | ☐ Not Included | Electrical Power Distribution 110.11 | NRCC-ELC-E is required |
| | | | Battery (see Table F) | ☐ Performance | Commissioning 120.8 | NRCC-CXR-E is required |
| | | | | ☒ Not Included | Solar and Battery 110.10 | NRCC-SAB-E is required |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 3 of 17)** |

**C1. COMPLIANCE SUMMARY**

| COMPLIES[3] | Time Dependent Valuation (TDV) | | Source Energy Use |
|---|---|---|---|
| | **Efficiency[1] (kBtu/ft² - yr)** | **Total[2] (kBtu/ft² - yr)** | **Total[2] (kBtu/ft² - yr)** |
| Standard Design | 204.74 | 204.74 | 15.21 |
| Proposed Design | 136.23 | 136.23 | 10.47 |
| **Compliance Margins** | **68.51** | **68.51** | **4.74** |
| | **Pass** | **Pass** | **Pass** |

*[1] Efficiency measures include improvements like a better building envelope and more efficient equipment*
*[2] Compliance Totals include efficiency, photovoltaics and batteries*
*[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 4 of 17)** |

**C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)**

| COMPLIES[2] | | | |
|---|---|---|---|
| **Energy Component** | **Standard Design (TDV)** | **Proposed Design (TDV)** | **Compliance Margin (TDV)[1]** |
| Space Heating | 8.26 | 2.72 | 5.54 |
| Space Cooling | 45.77 | 16.72 | 29.05 |
| Indoor Fans | 89.26 | 55.33 | 33.93 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 29.04 | 29.05 | -0.01 |
| Indoor Lighting | 32.41 | 32.41 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **204.74** | **136.23** | **68.51 (33.5%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **204.74** | **136.23** | **68.51 (33.5%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 5 of 17)** |

**C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (TDV) | Proposed Design (TDV) | Compliance Margin (TDV)[1] |
|---|---|---|---|
| Receptacle | 66.92 | 66.92 | --- |
| Process | --- | --- | --- |
| Other Ltg | --- | --- | --- |
| Process Motors | --- | --- | --- |
| **TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **271.66** | **203.15** | **68.51 (25.2%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 6 of 17)** |

**C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)**

| COMPLIES[2] | | | |
|---|---|---|---|
| **Energy Component** | **Standard Design (SOURCE)** | **Proposed Design (SOURCE)** | **Compliance Margin (SOURCE)[1]** |
| Space Heating | 1.14 | 0.36 | 0.78 |
| Space Cooling | 1.55 | 0.39 | 1.16 |
| Indoor Fans | 7.39 | 4.59 | 2.8 |
| Heat Rejection | 0 | 0 | 0 |
| Pumps & Misc. | 0 | 0 | 0 |
| Domestic Hot Water | 2.56 | 2.56 | 0 |
| Indoor Lighting | 2.57 | 2.57 | 0 |
| Flexibility | --- | --- | --- |
| **EFFICIENCY COMPLIANCE TOTAL** | **15.21** | **10.47** | **4.74 (31.2%)** |
| Photovoltaics | --- | --- | --- |
| Batteries | --- | --- | --- |
| **TOTAL COMPLIANCE** | **15.21** | **10.47** | **4.74 (31.2%)** |

*[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 7 of 17)** |

**C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]**

| Non-Regulated Energy Component | Standard Design (SOURCE) | Proposed Design (SOURCE) | Compliance Margin (SOURCE)[1] |
|---|---|---|---|
| Receptacle | 4.92 | 4.92 | --- |
| Process | --- | --- | --- |
| Other Ltg | --- | --- | --- |
| Process Motors | --- | --- | --- |
| **TOTAL ( TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)** | **20.13** | **15.39** | **4.74 (23.5%)** |

*[1] Notes: This table is not used for Energy Code Compliance.*

**C6. 'ABOVE CODE' QUALIFICATIONS**

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 8 of 17)** |

**C7. 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 | 0.9 | 0.3 | 0.6 | --- | --- | --- |
| Space Cooling | 4.8 | 1.5 | 3.3 | --- | --- | --- |
| Indoor Fans | 10.7 | 6.6 | 4.1 | --- | --- | --- |
| Heat Rejection | --- | --- | --- | --- | --- | --- |
| Pumps & Misc. | --- | --- | --- | --- | --- | --- |
| Domestic Hot Water | 4 | 4 | 0 | --- | --- | --- |
| Indoor Lighting | 4.2 | 4.2 | 0 | --- | --- | --- |
| Flexibility | --- | --- | --- | --- | --- | --- |
| **EFFICIENCY TOTAL** | **24.6** | **16.6** | **8** | **0** | **0** | **0** |
| Photovoltaics | --- | --- | --- | --- | --- | --- |
| Batteries | --- | --- | --- | --- | --- | --- |
| **ENERGY USE SUBTOTAL** | **24.6** | **16.6** | **8** | **0** | **0** | **0** |
| Receptacle | 9 | 9 | 0 | --- | --- | --- |
| Process | --- | --- | --- | --- | --- | --- |
| Other Ltg | --- | --- | --- | --- | --- | --- |
| Process Motors | --- | --- | --- | --- | --- | --- |
| **ENERGY USE TOTAL** | **33.6** | **25.6** | **8** | **0** | **0** | **0** |



| CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD | NRCC-PRF-E |
|---|---|
| **Nonresidential Performance Compliance Method** | **(Page 9 of 17)** |

**C8. ENERGY USE INTENSITY (EUI)**

| | Standard Design (kBtu/ft² / yr) | Proposed Design (kBtu/ft² / yr) | Margin (kBtu/ft² / yr) | Margin Percentage |
|---|---|---|---|---|
| GROSS EUI[1] | 33.72 | 25.69 | 8.03 | 23.81 |
| NET EUI[1] | 33.72 | 25.69 | 8.03 | 23.81 |

*[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

**D1. EXCEPTIONAL CONDITIONS**

• The aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

**F1. REQUIRED PV SYSTEMS**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **DC System Size (kWdc)** | **Exception[1]** | **Module Type** | **Array Type** | **Power Electronics** | **CFI** | **Azimuth (deg)** | **Tilt Input** | **Array Angle (deg)** | **Tilt: (x in 12)** | **Inverter Eff. (%)** | **Annual Solar Access (%)** |

*[1]See Table D1 for any PV exceptions used.*



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

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LEAF ENGINEERS
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M58155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL TITLE 24 FORMS**

**M0.21**

0" 1"

**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 10 of 17)

**F1B. PV BATTERY BUILDING TYPE(S)**

| 01 | 02 | 03 |
|---|---|---|
| Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V) | Conditioned Floor Area (ft²) | Unconditioned Floor Area (ft²) |
| Grocery | 0 | 0 |
| High-Rise Multifamily | 0 | 0 |
| Office, Financial Institutions, Unleased Tenant Space | 3400 | 0 |
| Retail | 0 | 0 |
| School | 0 | 0 |
| Warehouse | 0 | 0 |
| Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater | 0 | 0 |
| None | 0 | 0 |

*Building Occupancy Types are defined in Section 100.1 of the Energy Code*

**G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Opaque Surfaces & Orientation | Total Gross Surface Area (ft²) | Total Fenestration Area (ft²) | Window to Wall Ratio (%) |
| North-Facing[1] | 720 | 100 | 13.89 |
| East-Facing[2] | 720 | 0 | 0 |
| South-Facing[3] | 744 | 100 | 13.44 |
| West-Facing[4] | 744 | 0 | 0 |
| **Total** | **2928** | **200** | **6.83** |
| Roof | 3400 | 0 | 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 west (NW), but excluding 45 00'00" south of west (SW),*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 11 of 17)

**G4. NONRESIDENTIAL AIR BARRIER**

| 01 | 02 |
|---|---|
| Building Story Name | Air Barrier |
| Com-Floor 1 | No air barrier |

**G5. OPAQUE SURFACE ASSEMBLY SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | | 07 | 08 | 09 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Surface Name | Construction Type | Area (ft²) | Framing Type | Cavity R-Value | Continuous R-Value | | Units | Value | Description of Assembly Layers | Status[1] |
| | | | | | Interior | Exterior | | | | |
| R30 Wood Frame Roof6 | Roof | 3,400 | Wood | 30 | N/A | N/A | U-factor | 0.0344 | Single Ply Roofing - 1/4 in.<br>Vapor permeable felt - 1/8 in.<br>Plywood - 1/2 in.<br>Air - Ceiling - 3/4 in.<br>Composite-1<br>Gypsum Board - 1/2 in. | E |
| Slab on Grade8 | Underground Floor | 3,400 | N/A | 0 | N/A | N/A | F-factor | 0.73 | Slab Type =Unheated slab on grade<br>Insulation Orientation =None<br>Insulation R-Value =none | E |
| ExteriorWallExisting10 | Exterior Wall | 2,928 | Wood | 11 | N/A | N/A | U-factor | 0.1098 | Stucco - 7/8 in.<br>Vapor permeable felt - 1/8 in.<br>Composite-2<br>Gypsum Board - 1/2 in. | E |

[1] *Status: N - New, A - Altered, E - Existing*

**G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| Assembly Name | Area (ft²) | Overall U-factor | Status[1] |
| NewDoor13 | 80 | 0.6 | E |

[1] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 12 of 17)

**G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 |
|---|---|---|---|---|---|---|---|---|
| Fenestration Assembly Name | Fenestration Type/ Product Type / Frame Type | Certification Method[1] | Assembly Method | Area (ft²) | Overall U-factor | Overall SHGC | Overall VT | Status[2] |
| NewWindows | Vertical fenestration<br>Fixed window<br>N/A | NFRC | Manufactured | 200 | 0.35 | 0.35 | 0.6 | E |

[1] *Notes: 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.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| HP-IA-2-1 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-IA-2-2 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |
| HP-IA-2-3 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

[1] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 13 of 17)

**H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Equipment Name | Equipment Type | Qty | Heating | | | | Cooling | | | Economizer Type (if present) | Status[1] |
| | | | Total Heating Output (kBtu/h) | Supp Heat Output (kBtu/h) | Efficiency Unit | Efficiency | Total Cooling Output (kBtu/h) | Efficiency Unit | Efficiency | | |
| HP-IA-2-4 | Single Zone Heat Pump (SZHP) Air System | 1 | 45.5 | 0 | N/A | NA | 47.5 | EER2<br>SEER2 | 12.2<br>16.2 | Fixed DB | N |

[1] *Status: N - New, A - Altered, E - Existing*

**H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Name or Item Tag | Qty | Design OA CFM | Supply Fan | | | | Return / Relief Fan | | | | | Status[1] |
| | | | CFM | Power | Power Units | Control | Fan Type | CFM | Power | Power Units | Control | |
| HP-IA-2-1 | 1 | 323 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-IA-2-2 | 1 | 323 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-IA-2-3 | 1 | 323 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |
| HP-IA-2-4 | 1 | 323 | 1,600 | 0.42 | BHP | Constant Vol | N/A | N/A | N/A | N/A | N/A | N |

[1] *Status: N - New, A - Altered, E - Existing*



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 14 of 17)

**H8. SYSTEM SPECIAL FEATURES**

| 01 | 02 | 03 | 04 |
|---|---|---|---|
| System Name | Equipment Type | Interlocks per 140.4(n)[1] | Other Special Features and Controls |
| HP-IA-2-1 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-IA-2-2 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-IA-2-3 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |
| HP-IA-2-4 | Single Zone Heat Pump (SZHP) Air System | N/A | Zone(s) With CO2 Sensor Vent. Control Fixed DB |

*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.*
[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

**H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Zone Name | Mechanical Ventilation | | | | Conditioned Area (sf) | DCV or Occupant Sensor Controls, or Both |
| | Ventilation Function | # of People# of People | Supply OA CFM | Exhaust CFM | | |
| 1-Classroom | Education - Classrooms (ages 9-18) | 21.25 | 323 | 0 | 850 | DCV |
| 2-Classroom | Education - Classrooms (ages 9-18) | 21.25 | 323 | 0 | 850 | DCV |
| 3-Classroom | Education - Classrooms (ages 9-18) | 21.25 | 323 | 0 | 850 | DCV |
| 4-Classroom | Education - Classrooms (ages 9-18) | 21.25 | 323 | 0 | 850 | DCV |



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 15 of 17)

**H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY**

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| System ID | System Type | Qty | Rated Capacity (kBtuh) | | Airflow (cfm) | | | Fan | | | VSD |
| | | | Heating | Cooling | Design | Min. | Min. Ratio | Power | Power Units | Cycles | |
| 1-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 2-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 3-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |
| 4-Classroom-Trm | Uncontrolled | 1 | N/A | N/A | 1,600 | N/A | 0 | N/A | N/A | N/A | ☐ |

**K1. INDOOR CONDITIONED LIGHTING GENERAL INFO**

| 01 | 02 | 03 | 04 | 05 | 06 |
|---|---|---|---|---|---|
| Occupancy Type[1] | Conditioned Floor Area[2] (ft²) | Installed Lighting Power (Watts) | Lighting Control Credits (Watts) | Additional (Custom) Allowance | |
| | | | | Area Category Footnotes (Watts) | Area Category Footnotes (Watts) |
| Classroom, Lecture, or Training Vocational | 3400 | 2040 | 0 | 0 | 0 |
| **Building Totals:** | **3400** | **2040** | **0** | **0** | **0** |

[1] *See Table 140.6-C*
[2] *See NRCC-LTI-E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*

**K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL**

**See NRCC-LTI-E for mandatory controls**



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 16 of 17)

**L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

**Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

| Building Component | Form/Title |
|---|---|
| Envelope | NRCI-ENV-E - Envelope (for all buildings) |
| Mechanical | NRCI-MCH-01-E - Must be submitted for all buildings |
| Mechanical | NRCI-MCH-E - For all buildings with Mechanical Systems |
| Indoor Lighting | NRCI-LTI-E - Indoor Lighting (for all buildings) |

**M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

**Selections made by Documentation Author 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).**

| Building Component | Form/Title |
|---|---|
| Mechanical | NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap |
| Mechanical | NRCA-MCH-03-A - Constant Volume Single Zone HVAC |
| Mechanical | NRCA-MCH-05-A - Air Economizer Controls |
| Mechanical | NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to ) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints. |

**N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION**

**Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online**

**There are no Certificates of Verification applicable to this project**



**CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD** NRCC-PRF-E

**Nonresidential Performance Compliance Method** (Page 17 of 17)

**Documentation Author's Declaration Statement**

**1. I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Faisal Mased | Documentation Author Signature: Faisal Mased |
| Company: Leaf Engineers | Signature Date: |
| Address: 8163 Rochester Ave Suite 100 | CEA/HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamunga, CA 91730 | Phone: |

**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 understand that a registered 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, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

| | | |
|---|---|---|
| Responsible Designer Name: PBK | Responsible Designer Signature: | |
| Company: PBK | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |
| Responsible Designer Name: LEAF Egineers | Responsible Designer Signature: | |
| Company: LEAF Engineers | | |
| Address: 8163 Rochester Ave Suite 100 | Date Signed: 3/25/2023 | |
| City/State/Zip: Rancho Cucamonga, CA 91730 | License #: | |
| Phone: 909-987-0909 | Title: | Scope: |





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ARCHITECT PBK Architects, Inc.
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER, CA 92683

**DSA Submittal**

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

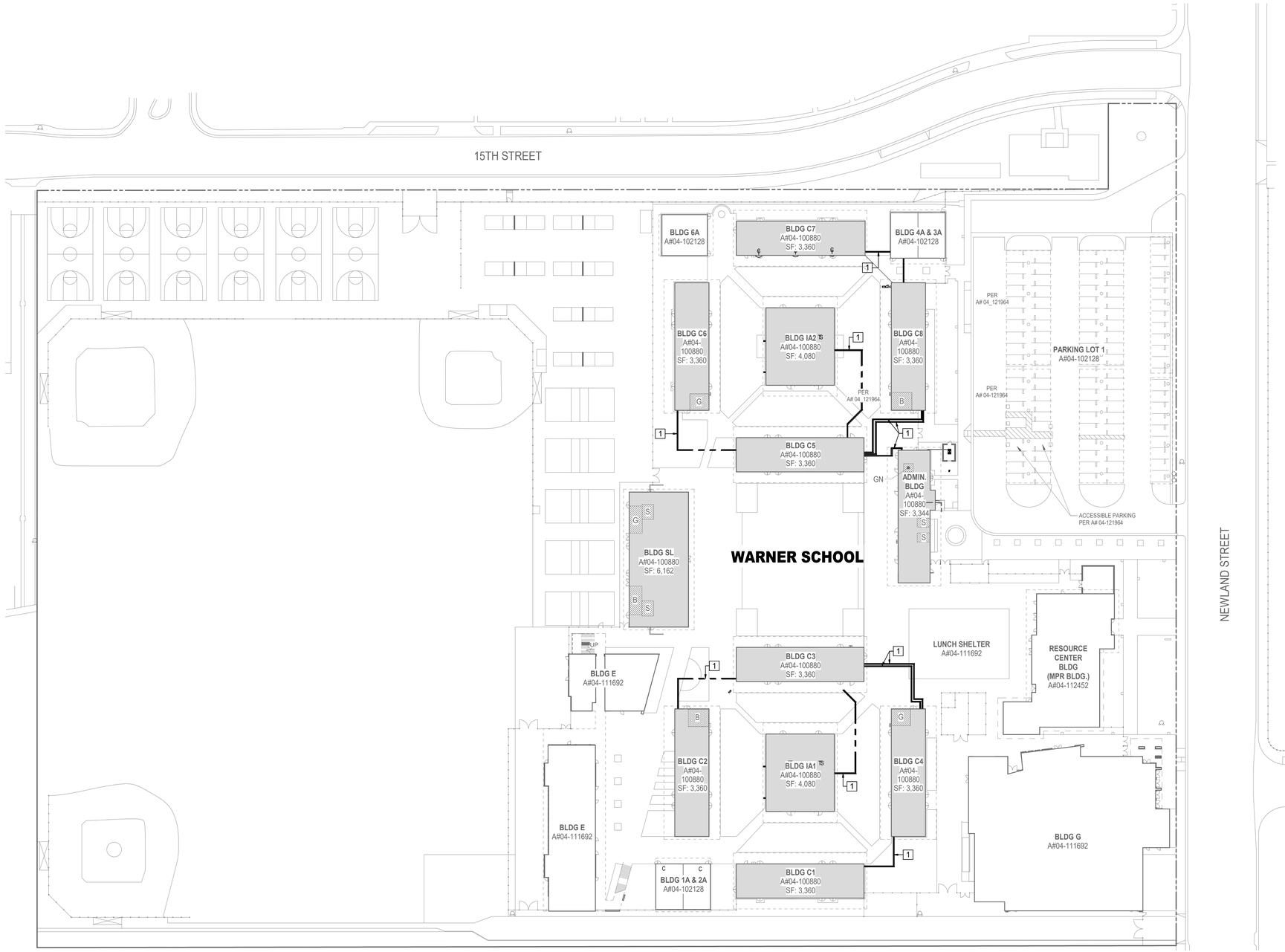
**DSA Submittal**

**MECHANICAL TITLE 24 FORMS**

**M0.22**

M1.01 - MECHANICAL SITE PLAN

0" 1"




## KEY NOTES

1 CAP ALL HYDRONIC PIPING INSIDE OF THE BUILDING AND ABANDON UNUSED UNDERGROUND PIPING.

1 SITE PLAN
NOT TO SCALE

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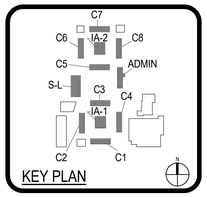
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

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DSA APPL NO.: 121954 DSA FILE NO.: 30-43



KEY PLAN

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REGISTERED PROFESSIONAL ENGINEER
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No.M36155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

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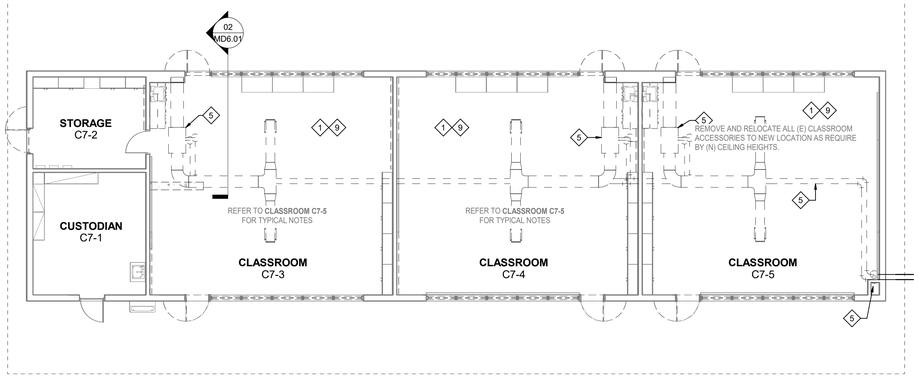
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MECHANICAL SITE PLAN

M1.01

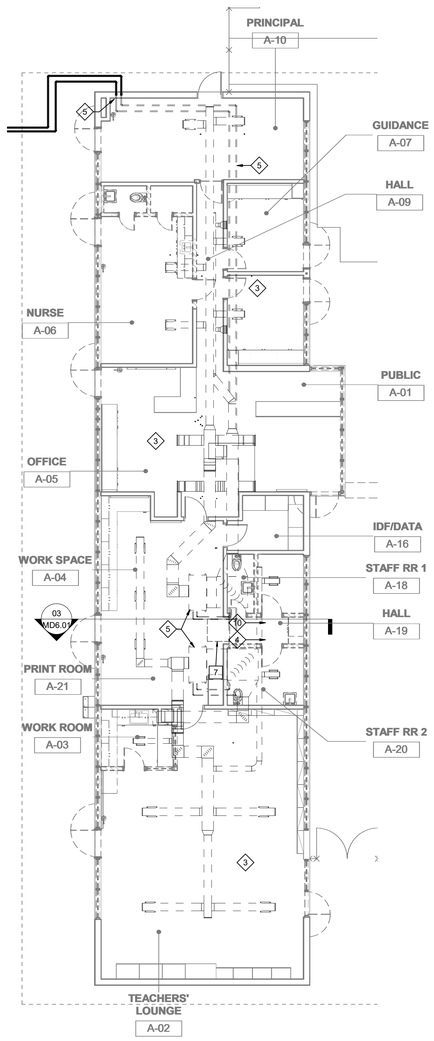
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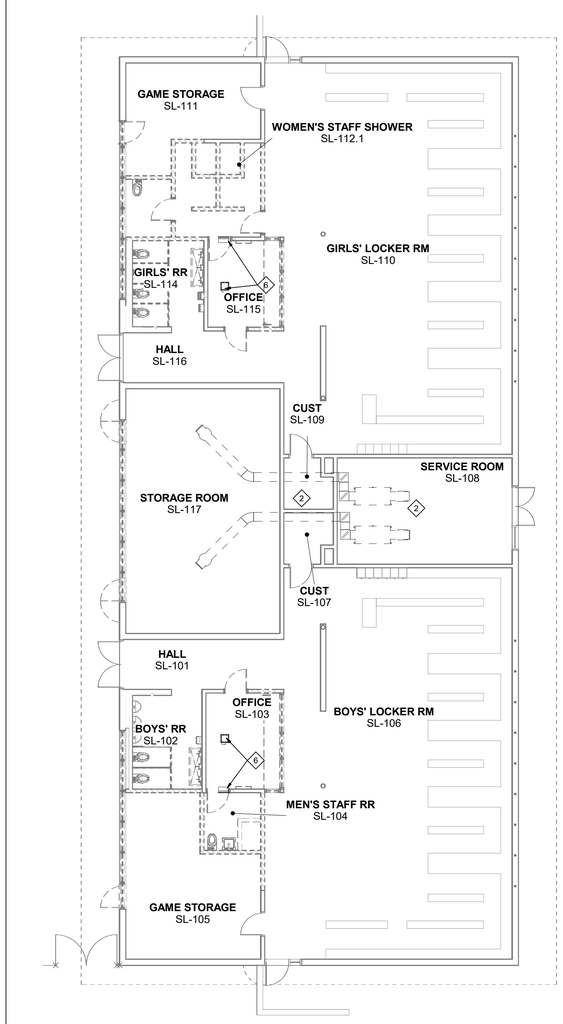

**4** FLOOR PLAN - BLDG C7
1/8" = 1'-0"

## DEMO KEY NOTES

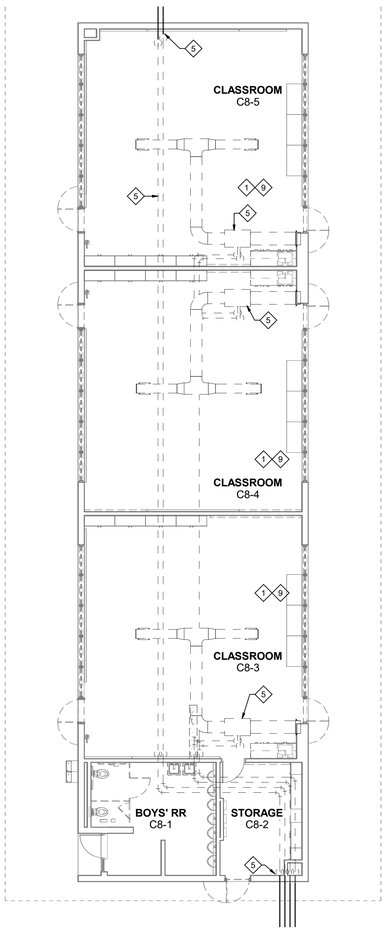
1. DEMO ANY EXISTING GRILLES, DUCTWORK, AIR HANDLERS, HVAC EQUIPMENT, AND HYDRONIC PIPING IN CEILING SPACE.
2. DEMO TWO EXISTING AIR HANDLERS, INCLUDING SUPPLY AND RETURN DUCTING, AND ALL PIPING TO THE AIR HANDLERS. DEMO ALSO ALL DUCTS DOWNSREAM OF AIR HANDLERS UP TO AND INCLUDING THE DUCTS AND AIR OUTLETS IN THE STORAGE ROOM S-L-117.
3. DEMO ALL EXISTING DUCTWORK, HEATING PIPING AND FURNACE IN ADMINISTRATION BUILDING (TYP.).
4. DEMO EXISTING AIR HANDLERS, AND ALL MECHANICAL EQUIPMENT IN SPACE ABOVE THE HALL ADM-19.
5. CAP PIPING LEAVING THE BUILDING, REMOVE PIPING, DUCTS AND (E) AIR HANDLERS.
6. DEMOLISH WALL GRILLES & EXHAUST FANS
7. EXISTING ACCESS HATCH TO MECHANICAL ROOM ABOVE.
8. REFER TO DEMO DETAIL 04 ON M6.01 FOR ROOM C-5 AND DEMO DETAIL 01 ON M6.01 FOR ROOM C-3.
9. REFER TO DETAIL 2 ON M6.01 FOR TYPICAL CLASSROOM BUILDINGS DEMO.
10. REFER TO DETAIL 3 ON MD6.01 FOR DEMO OF THE ADMINISTRATION BLDG SHOWN ON THIS SHEET.




**3** FLOOR PLAN - ADMINISTRATION BLDG
NOT TO SCALE




**2** FLOOR PLAN - BLDG S-L
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C8
1/8" = 1'-0"

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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

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DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

C7 C8 ADMIN S-L
KEY PLAN

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STATE OF CALIFORNIA

Architect

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WESTMINSTER SCHOOL DISTRICT
DATE 03/31/2023
PROJECT NUMBER 220526

REVISIONS

| No. | Description | Date |
|---|---|---|

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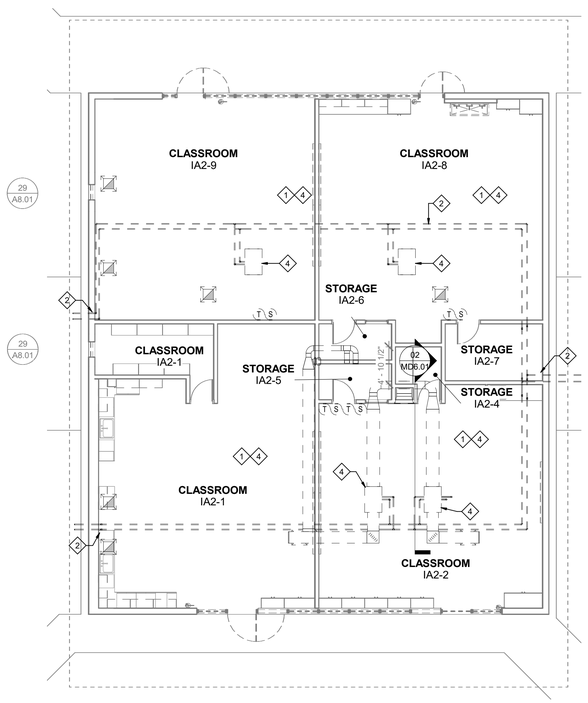
**DEMO MECHANICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMIN**

**MD2.01**

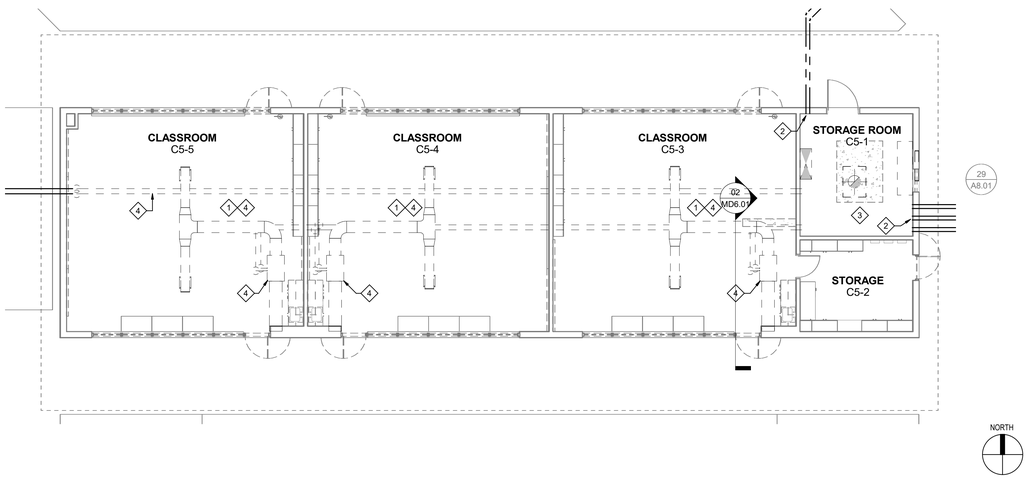
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MD2.02 - DEMO MECHANICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2

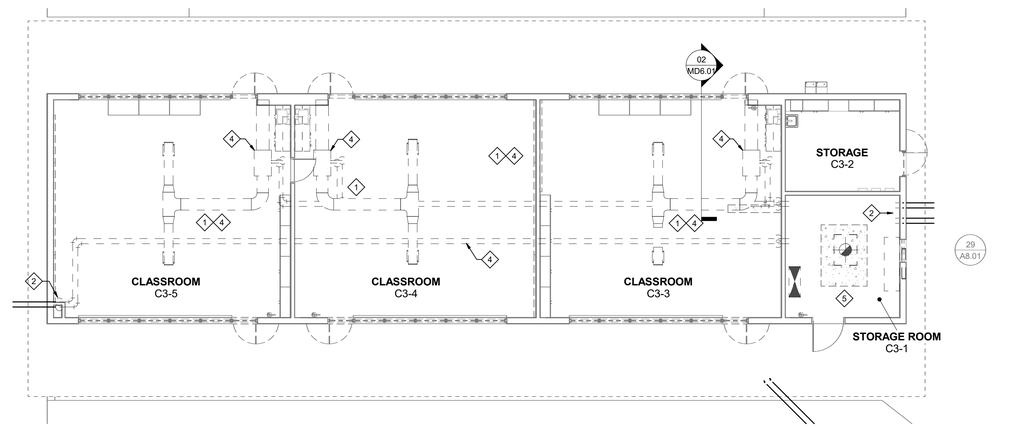
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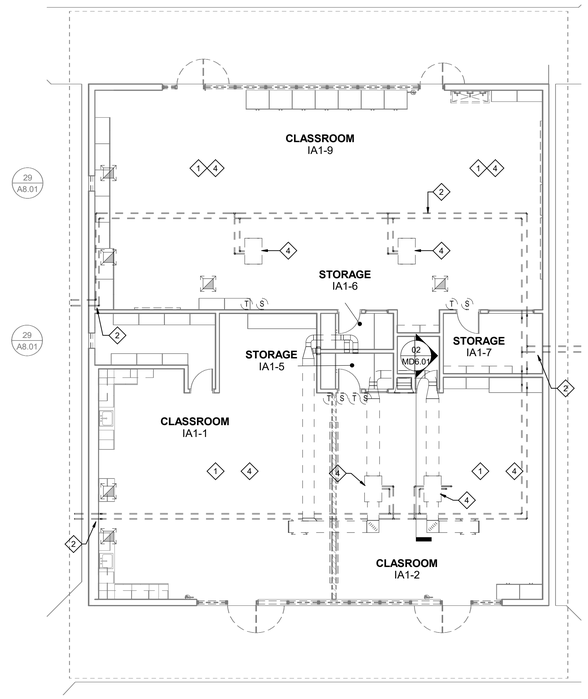

**5** FLOOR PLAN - BLDG IA-2
1/8" = 1'-0"



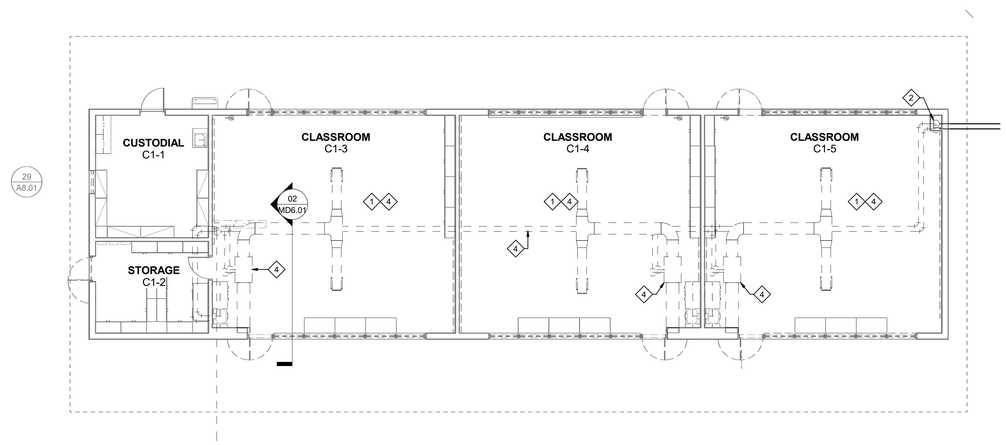

**3** FLOOR PLAN - BLDG C5
1/8" = 1'-0"




**2** FLOOR PLAN - BLDG C3
1/8" = 1'-0"




**4** FLOOR PLAN - BLDG IA-1
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C1
1/8" = 1'-0"

## DEMO KEY NOTES

1. DEMO ANY EXISTING GRILLES, DUCTWORK, AIR HANDLERS, HVAC EQUIPMENT, AND HYDRONIC PIPING IN CEILING SPACE.
2. CAP PIPING LEAVING THE BUILDING, REMOVE PIPING, DUCTS AND (E) AIR HANDLERS.
3. REFER TO DETAIL 04 ON MD6.01 FOR ROOM C-5.
4. REFER TO DETAIL 2 ON M6.01 FOR TYPICAL CLASSROOM BUILDINGS DEMO.
5. REFER TO DETAIL 01 ON MD6.01 FOR ROOM C-3.

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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
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WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant




Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

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DSA Submittal

**DEMO MECHANICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2**

# MD2.02

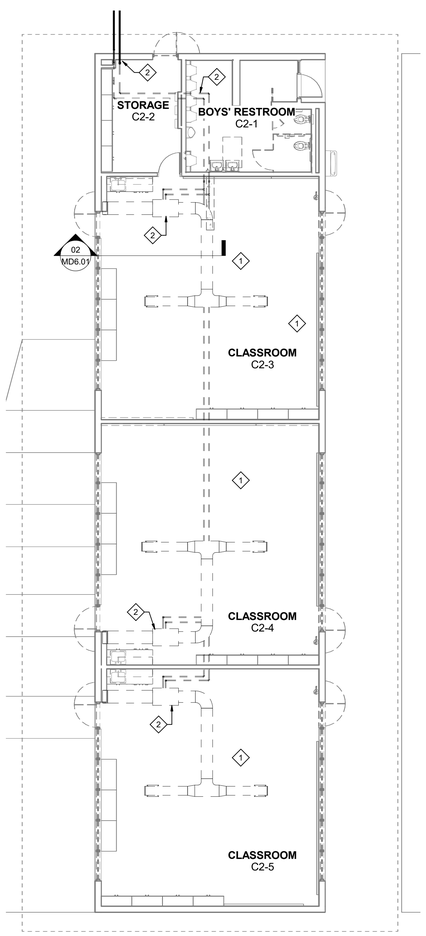
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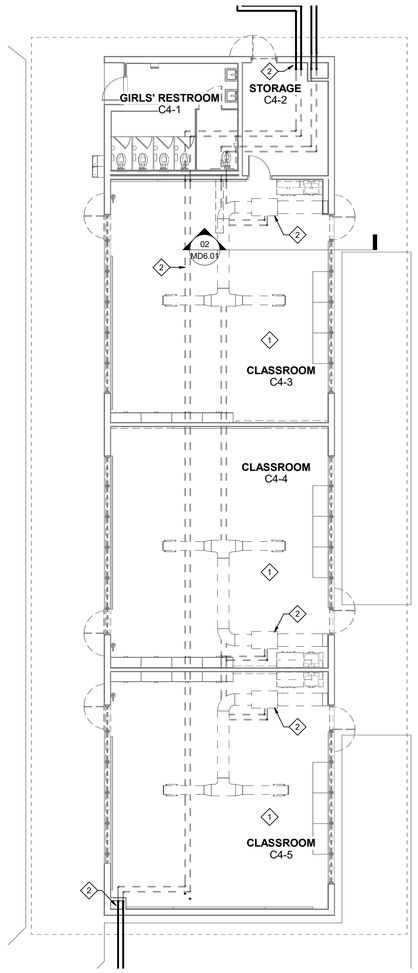
MD2.03 - DEMO MECHANICAL BUILDING FLOOR PLANS C2, C4 & C6

## DEMO KEY NOTES

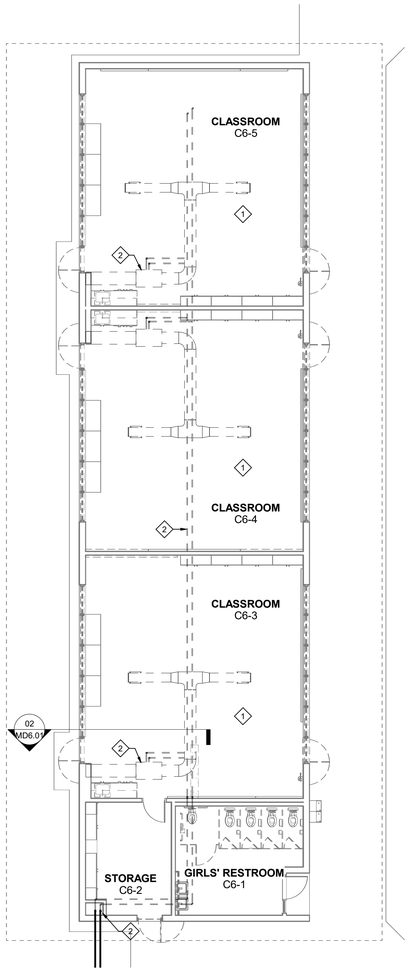
1. DEMO ANY EXISTING GRILLES, DUCTWORK, AIR HANDLERS, HVAC EQUIPMENT, AND HYDRONIC PIPING IN CEILING SPACE OF CLASSROOMS.
2. CAP PIPING LEAVING THE BUILDING, REMOVE PIPINE, DUCTS AND (E) AIR HANDLERS.




3 FLOOR PLAN - BLDG C2
1/8" = 1'-0"




2 FLOOR PLAN - BLDG C4
1/8" = 1'-0"




1 FLOOR PLAN - BLDG C6
1/8" = 1'-0"

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2400 E. Katella Ave., Suite 950
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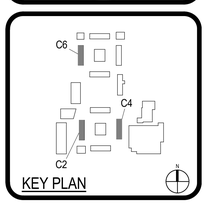
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Rancho Cucamonga, CA 91730
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43



KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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| 03/31/2023 | 220526 |

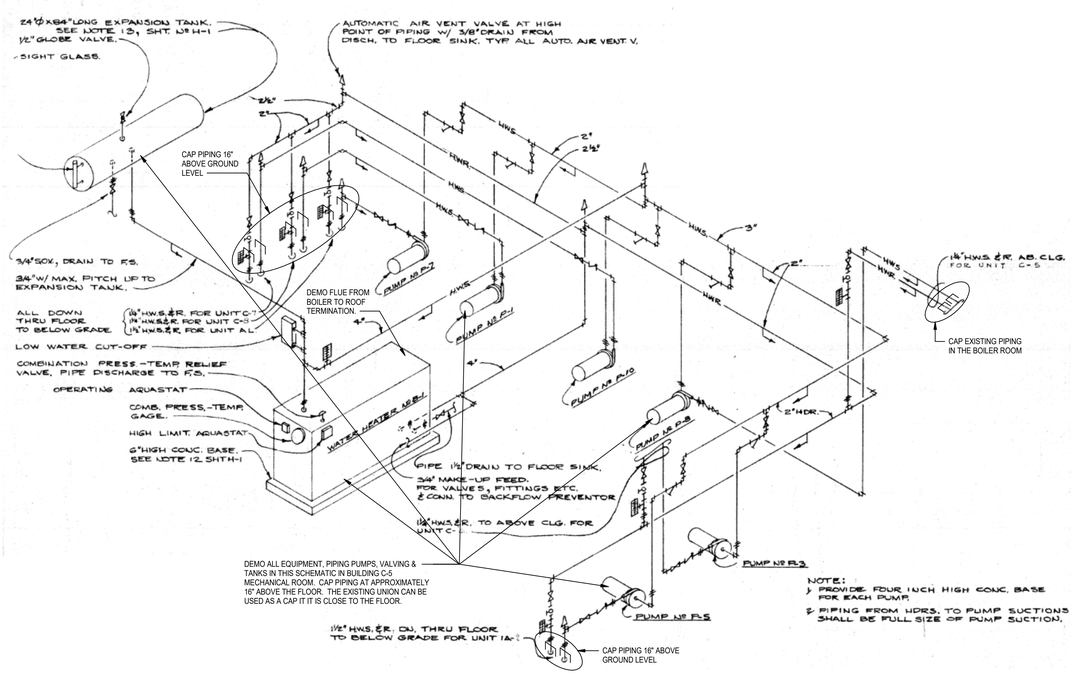
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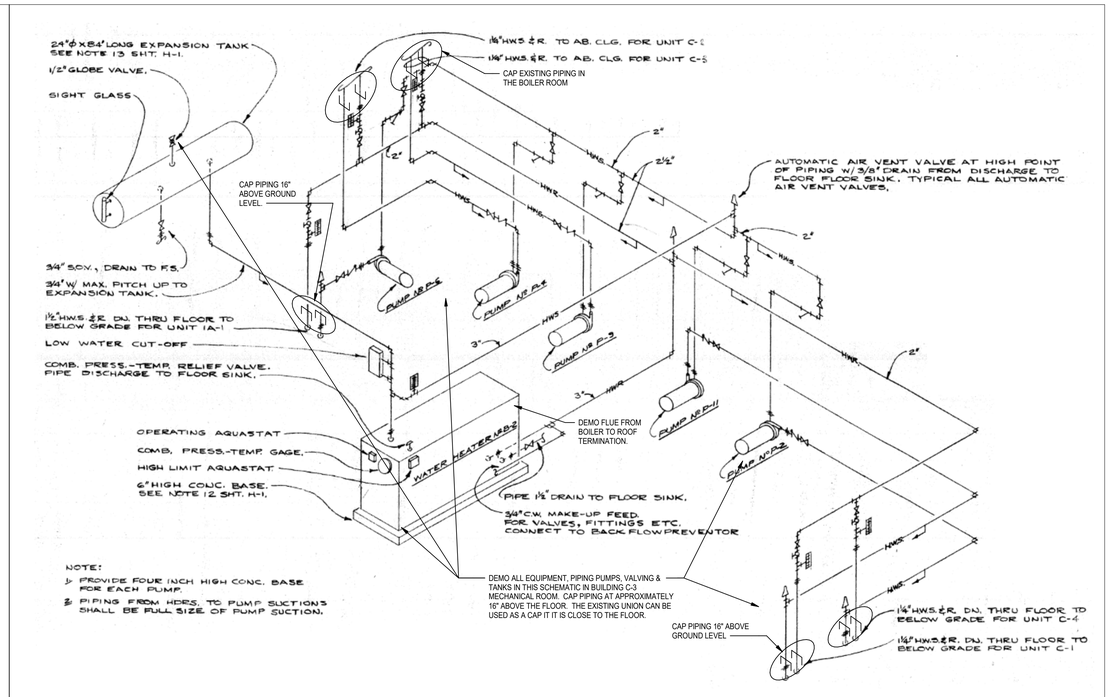
DEMO MECHANICAL BUILDING FLOOR PLANS C2, C4 & C6

MD2.03

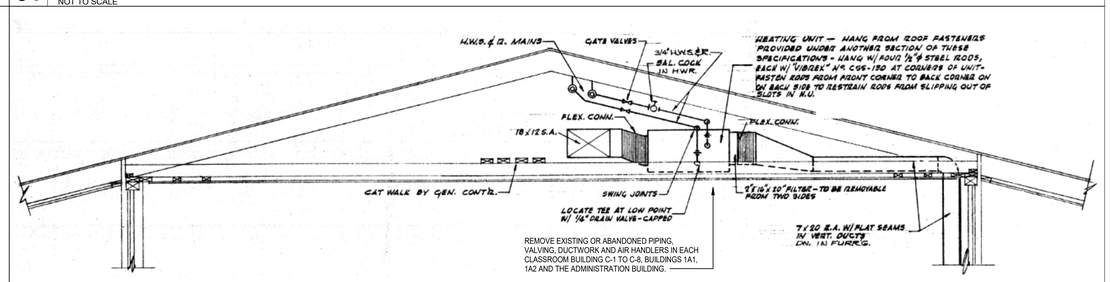
MD6.01 - DEMO MECHANICAL DETAILS



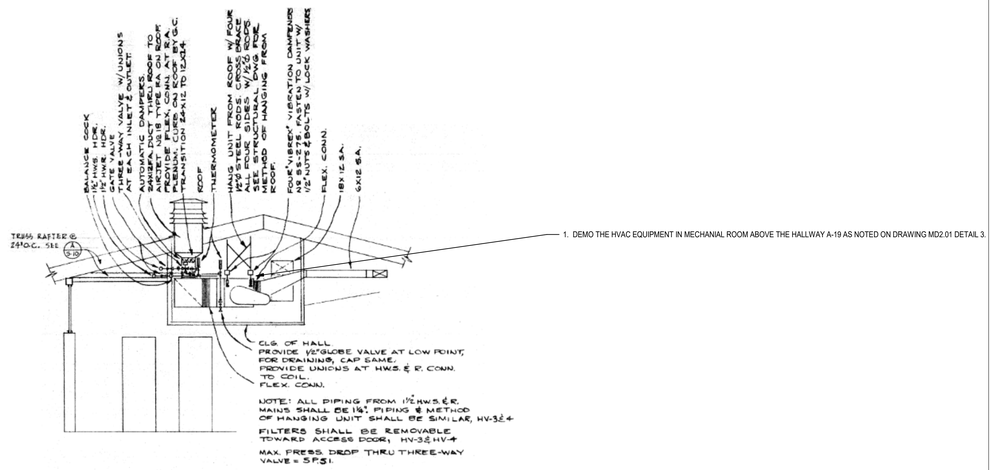

**04** PIPING DIAGRAM - HEATER ROOM UNIT C-5 - DEMO EXISTING EQUIPMENT
NOT TO SCALE




**01** PIPING DIAGRAM - HEATER ROOM UNIT C-3 - DEMO EXISTING EQUIPMENT
NOT TO SCALE




**02** SECTION TYPICAL CLASSROOM - DEMO EXISTING EQUIPMENT
NOT TO SCALE




**03** SECTION - ADMINISTRATION BUILDING - DEMO EXISTNG EQUIPMENT
NOT TO SCALE

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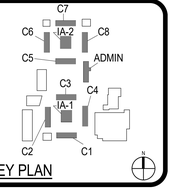

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WESTMINSTER SCHOOL DISTRICT



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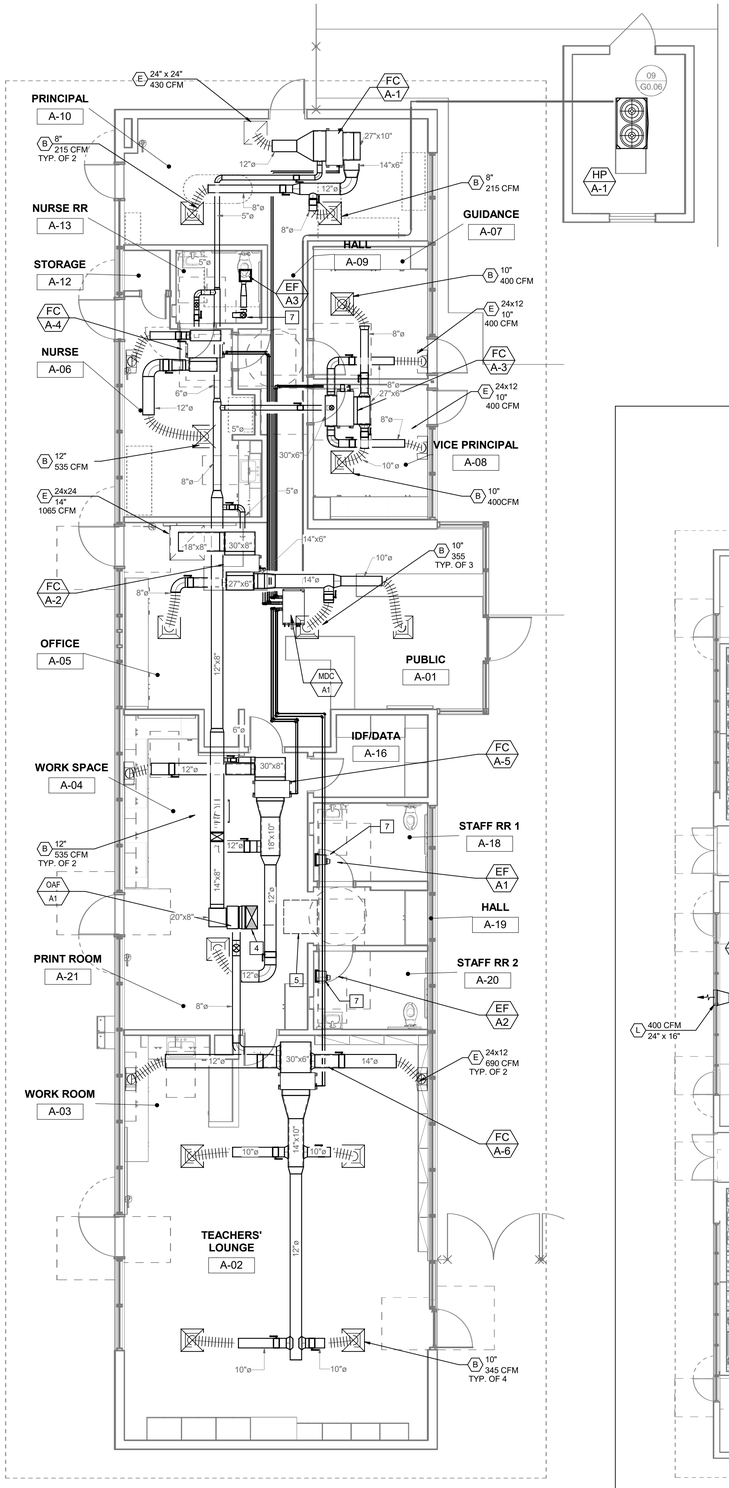
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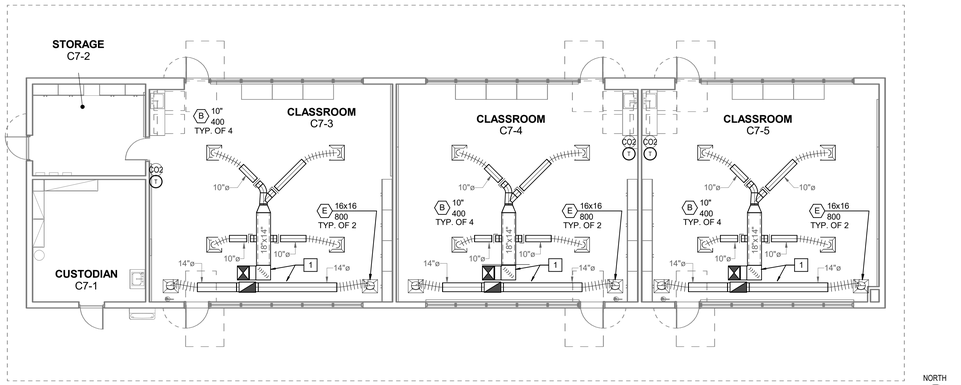
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**DEMO MECHANICAL DETAILS**

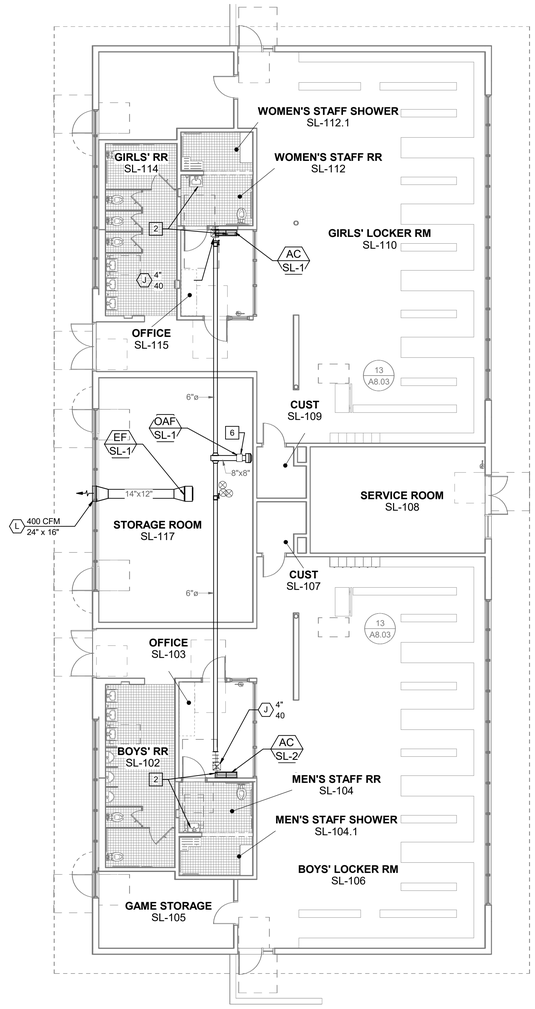
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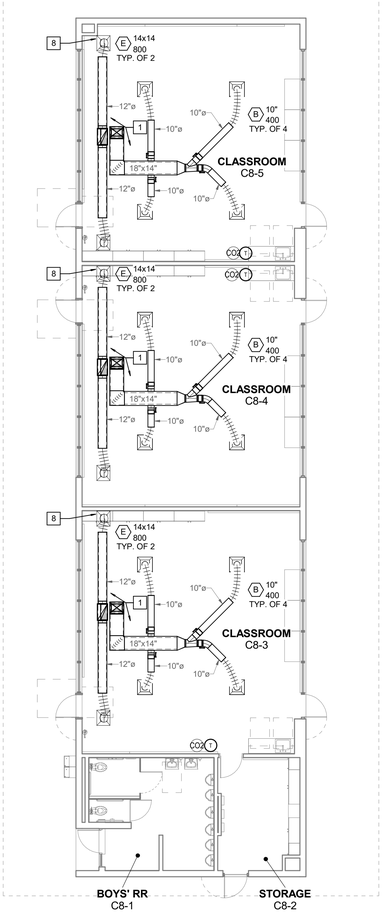

3 FLOOR PLAN - ADMINISTRATION BLDG
3/16" = 1'-0"




4 FLOOR PLAN - BLDG C7
1/8" = 1'-0"




2 FLOOR PLAN - BLDG S-L
1/8" = 1'-0"




1 FLOOR PLAN - BLDG C8
1/8" = 1'-0"

## KEY NOTES

1. RETURN DUCTS SHALL HAVE 1" INTERNAL INSULATION LINING WHERE SHOWN. SUPPLY DUCTS SHALL HAVE 2" INTERNAL INSULATION LINING WHERE SHOWN. DUCT DIMENSIONS SHOWN ARE NET INSIDE DIMENSIONS.
2. CONNECT CONDENSATE DRAIN FROM AC UNITS ON WALL TO TAILPIECE OF SINK. WALL AC UNITS SHALL COME WITH A FACTORY INSTALLED CONDENSATE PUMP.
3. RUN 4" OUTSIDE AIR DUCT FROM ROOF VENT TO DISCHARGE ABOVE THE WALL AC UNIT.
4. RUN 24 x 12 OUTSIDE AIR DUCT UP TO EXISTING ROOF INLET. CONNECT IN SMALL MECH RM. ABOVE ACCESS HATCH.
5. EXISTING ACCESS HATCH TO MECHANICAL ROOM ABOVE. REFER ALSO TO DRAWING MD2.01 PLAN NUMBER 3.
6. 8" OA DUCT FROM ROOF TO SUPPLY AIR OUTLETS DISCHARGING ABOVE THE NEW WALL MOUNTED AC UNITS. ROOF VENT TO INCLUDE BIRD SCREEN AND BACKDRAFT DAMPER.
7. 6" EXHAUST DUCT UP TO ROOF CAP.
8. MOUNT 24x24 RA GRILLE ON SLOPED PORTION OF CEILING NEAR EXTERIOR WALL. (TYP.)

## GENERAL NOTES

1. ALL DIMENSIONS ON DUCTS REPRESENT THE NET AREA AVAILABLE TO AIRFLOW. FOR LINED DUCTS THIS IS THE DIMENSIONS FROM INSIDE TO INSIDE OF THE INSULATION. FOR SUPPLY DUCTS THE DIMENSIONS ARE FOR THE ACTUAL DUCT SIZE AND INSULATION WILL BE ON THE OUTSIDE OF THE DUCT. LINED DUCTS OUTSIDE THE BUILDING ENVELOPE SHALL HAVE 2" INTERNAL LINING. INSIDE THE ENVELOPE SHALL BE 1" INTERNAL LINING WHERE SHOWN ON THE PLANS.
2. PROVIDE FILTER BOXES ON INLET SIDE OF EACH FAN COIL.

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PROJECT ADDRESS:
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WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

C7 C8 ADMIN S-L
KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M38155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

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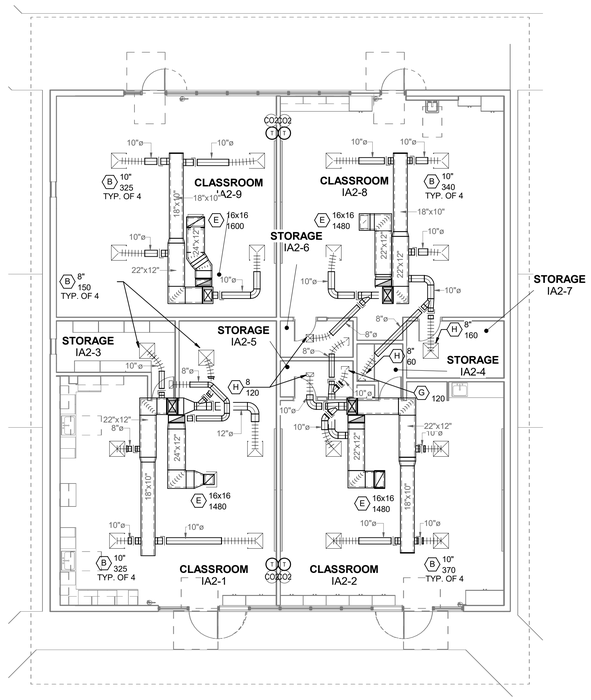
DSA Submittal

**MECHANICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMINISTRATION**

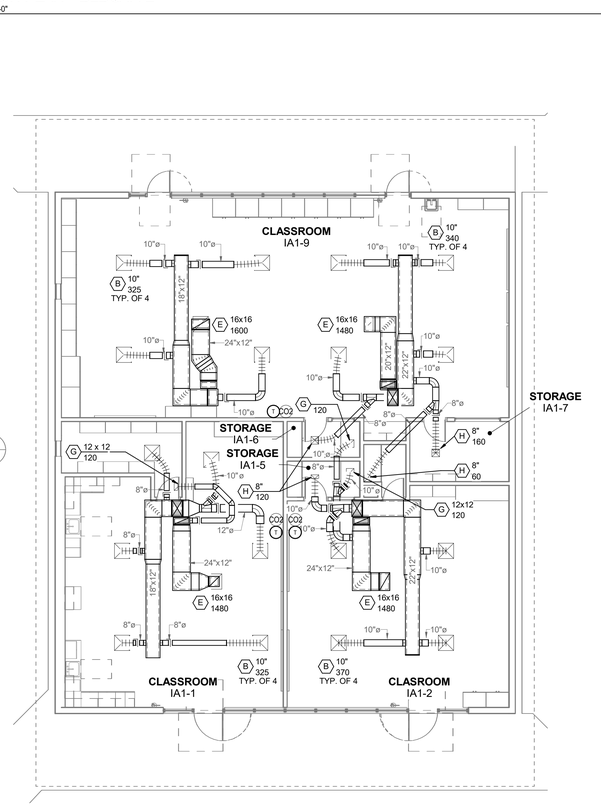
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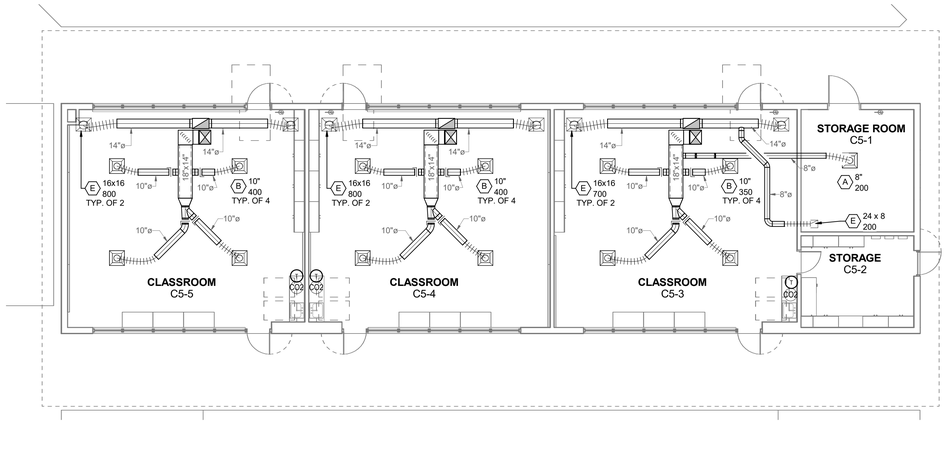
M2.02 - MECHANICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2



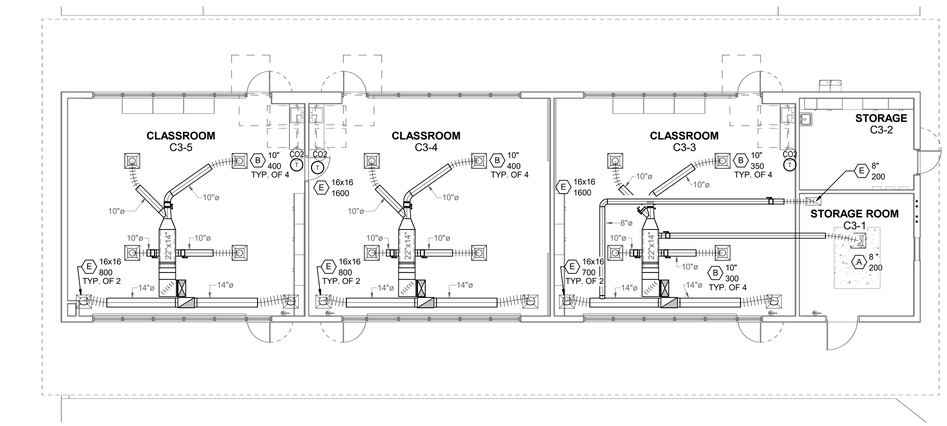

5 FLOOR PLAN - BLDG IA-2
1/8" = 1'-0"



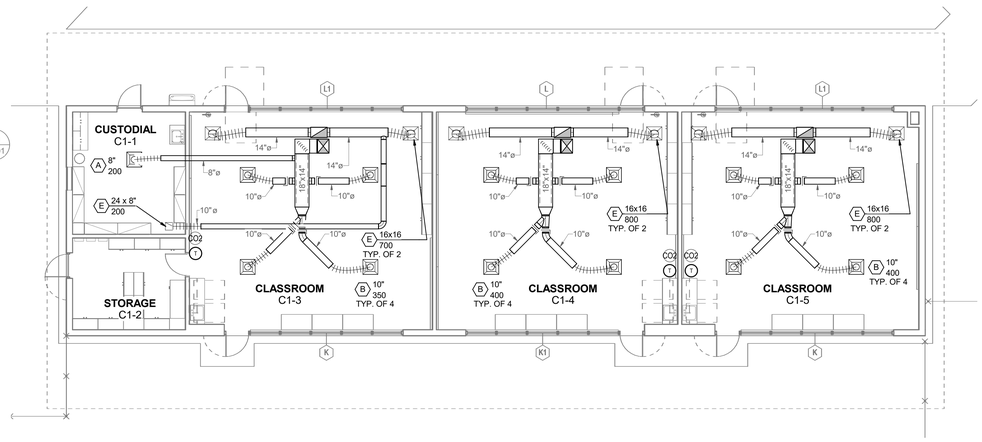

4 FLOOR PLAN - BLDG IA-1
1/8" = 1'-0"




3 FLOOR PLAN - BLDG C5
1/8" = 1'-0"




2 FLOOR PLAN - BLDG C3
1/8" = 1'-0"




1 FLOOR PLAN - BLDG C1
1/8" = 1'-0"

## KEY NOTES

1. RETURN DUCTS SHALL HAVE 1" INTERNAL INSULATION LINING WHERE SHOWN. SUPPLY DUCTS SHALL HAVE 2" INTERNAL INSULATION LINING WHERE SHOWN. DUCT DIMENSIONS SHOWN ARE NET INSIDE DIMENSIONS.
2. CONNECT CONDENSATE DRAIN FROM AC UNITS ON WALL TO TAILPIECE OF SINK. WALL AC UNITS SHALL COME WITH A FACTORY INSTALLED CONDENSATE PUMP.
3. RUN 4" OUTSIDE AIR DUCT FROM ROOF VENT TO DISCHARGE ABOVE THE WALL AC UNIT.

## GENERAL NOTES

1. ALL DIMENSIONS ON DUCTS REPRESENT THE NET AREA AVAILABLE TO AIRFLOW. FOR LINED DUCTS THIS IS THE DIMENSIONS FROM INSIDE TO INSIDE OF THE INSULATION. FOR SUPPLY DUCTS THE DIMENSIONS ARE FOR THE ACTUAL DUCT SIZE AND INSULATION WILL BE ON THE OUTSIDE OF THE DUCT. LINED DUCTS OUTSIDE THE BUILDING ENVELOPE SHALL HAVE 2" INTERNAL LINING. INSIDE THE ENVELOPE SHALL BE 1" INTERNAL LINING WHERE SHOWN ON THE PLANS.
2. PROVIDE FILTER BOXES ON INLET SIDE OF EACH FAN COIL.

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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

IA-2
C5
C3
IA-1
C1
N
KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M38155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

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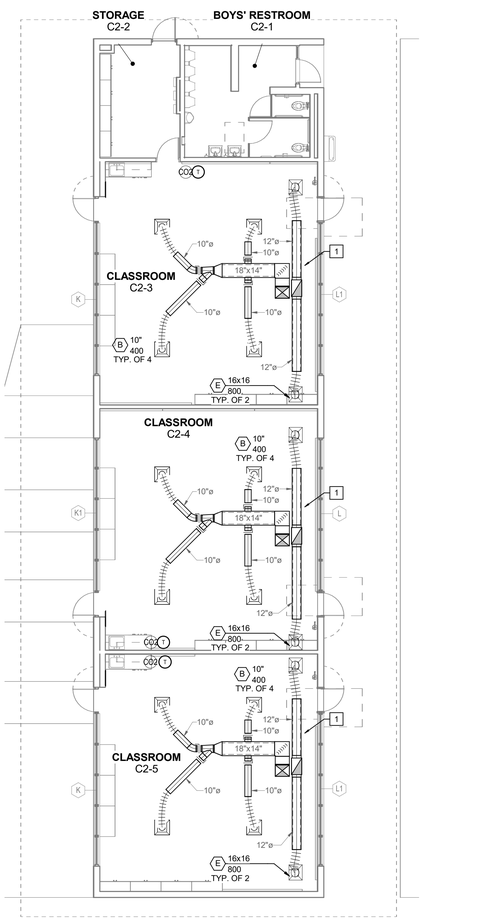
MECHANICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2

M2.02

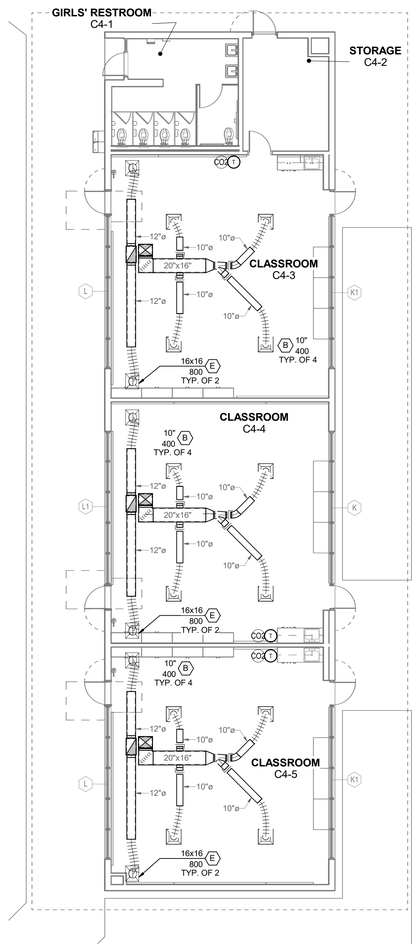
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M2.03 - MECHANICAL BUILDING FLOOR PLANS C2, C4 & C6

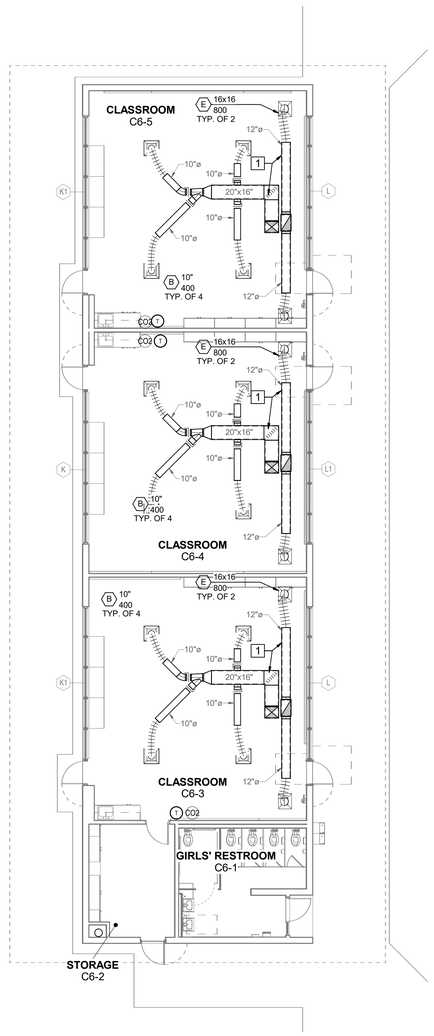
0" 1"




3 FLOOR PLAN - BLDG C2
1/8" = 1'-0"




2 FLOOR PLAN - BLDG C4
1/8" = 1'-0"




1 FLOOR PLAN - BLDG C6
1/8" = 1'-0"

## KEY NOTES

1 SUPPLY & RETURN DUCTS SHALL HAVE 2" INTERNAL INSULATION LINING WHERE SHOWN. DUCT DIMENSIONS SHOWN ARE NET INSIDE DIMENSIONS.

## GENERAL NOTES

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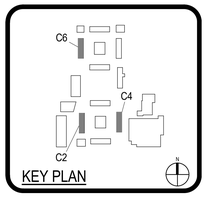
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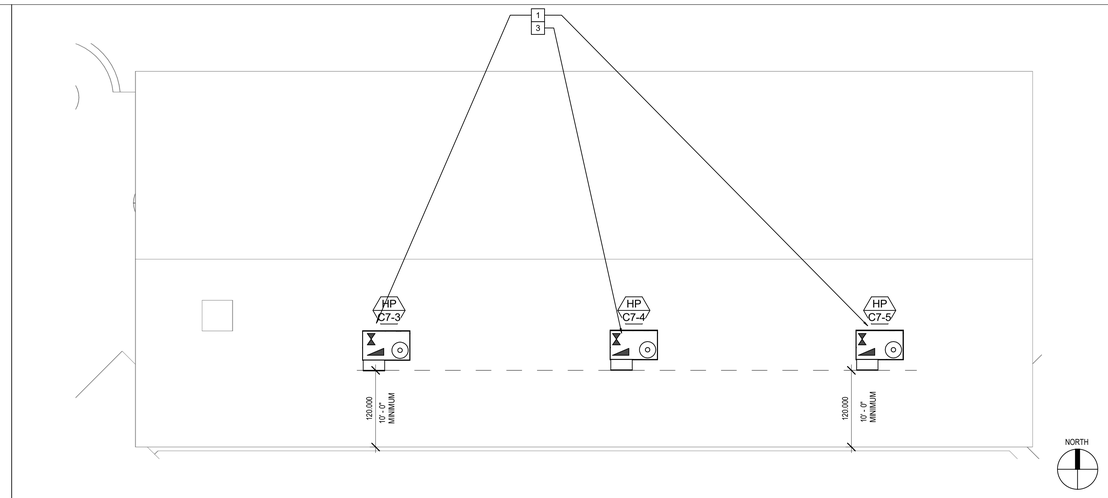
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# MECHANICAL BUILDING FLOOR PLANS C2, C4 & C6

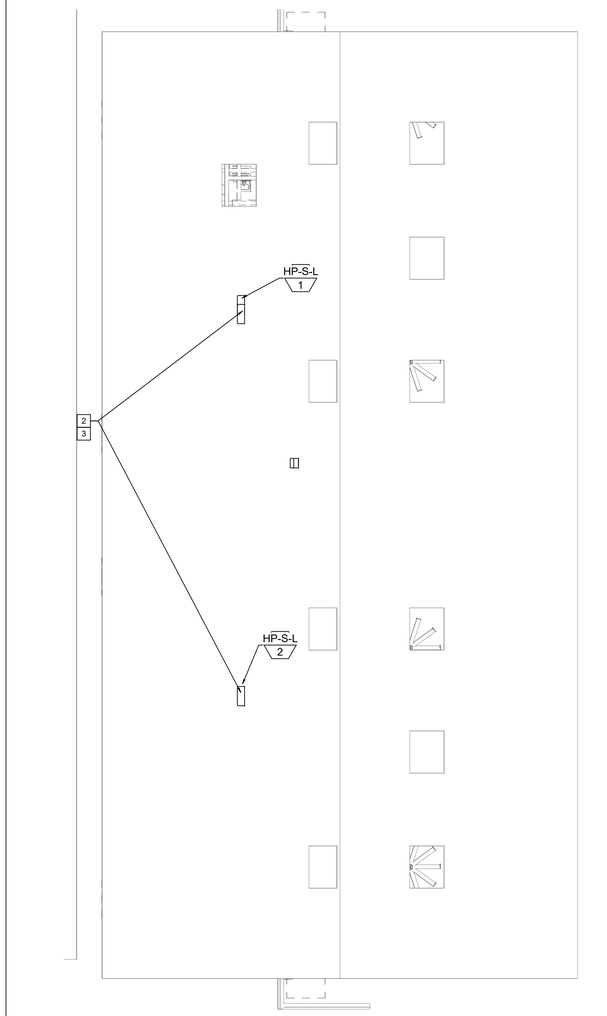
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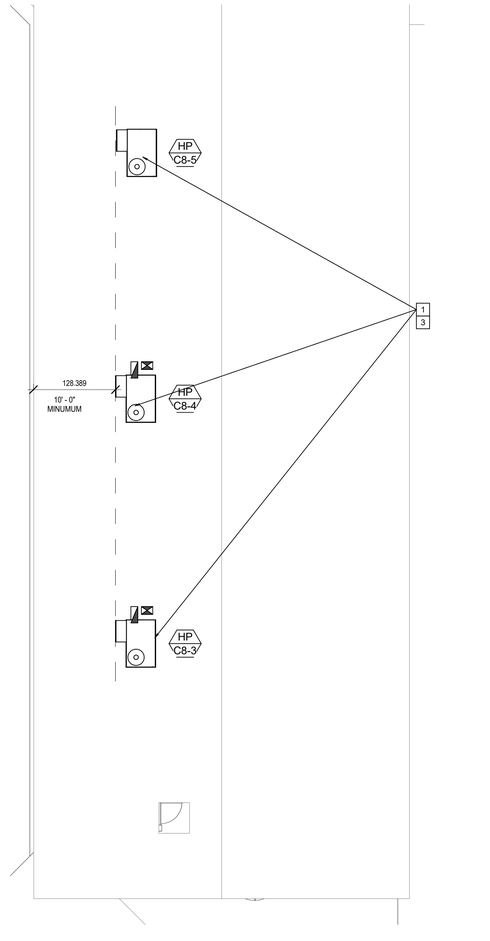
0" 1"




**3** BLDG C7 - ROOF
1/8" = 1'-0"




**2** BLDG S-L - ROOF
1/8" = 1'-0"




**1** BLDG C8 - ROOF
1/8" = 1'-0"

## KEY NOTES

1. MOUNT ROOFTOP UNITS ON SEISMIC CURB ON TOP OF SLOPING CURB FRAMING.
2. MOUNT HEAT PUMPS ON LEVEL CURB PROVIDED BY OTHER DIVISIONS.
3. ALL ROOFTOP EQUIPMENT SHALL BE LOCATED GREATER THAN OR EQUAL TO 10' - 0" AWAY FROM EDGE OF ROOF, MEASURED HORIZONTALLY FROM THE CLOSEST PART OF THE EQUIPMENT TO THE EDGE OF THE ROOF.

## GENERAL NOTES

1. ALL DIMENSIONS ON DUCTS REPRESENT THE NET AREA AVAILABLE TO AIRFLOW. FOR LINED DUCTS THIS IS THE DIMENSIONS FROM INSIDE TO INSIDE OF THE INSULATION. FOR SUPPLY DUCTS THE DIMENSIONS ARE FOR THE ACTUAL DUCT SIZE AND INSULATION WILL BE ON THE OUTSIDE OF THE DUCT. LINED DUCTS OUTSIDE THE BUILDING ENVELOPE SHALL HAVE 2" INTERNAL LINING. INSIDE THE ENVELOPE SHALL BE 1" INTERNAL LINING WHERE SHOWN ON THE PLANS.

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C7
C8
S-L
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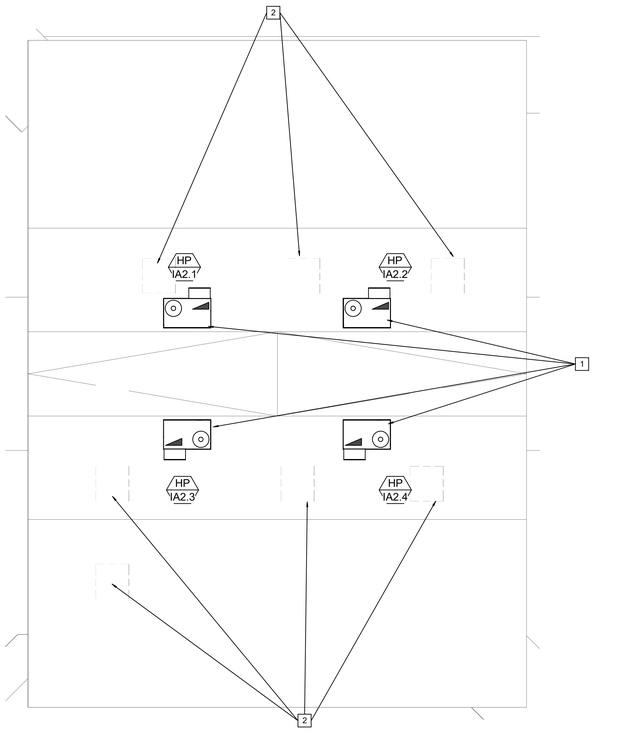
**MECHANICAL BUILDING ROOF PLANS C7, C8, S-L & ADMIN**

**M4.01**

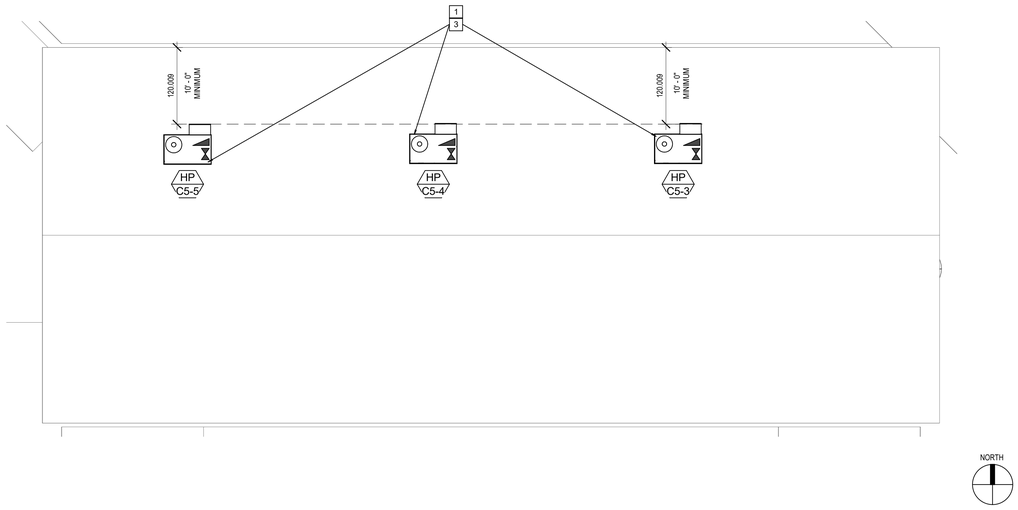
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M4.02 - MECHANICAL BUILDING ROOF PLANS C1, C3, C5, IA-1 & IA-2

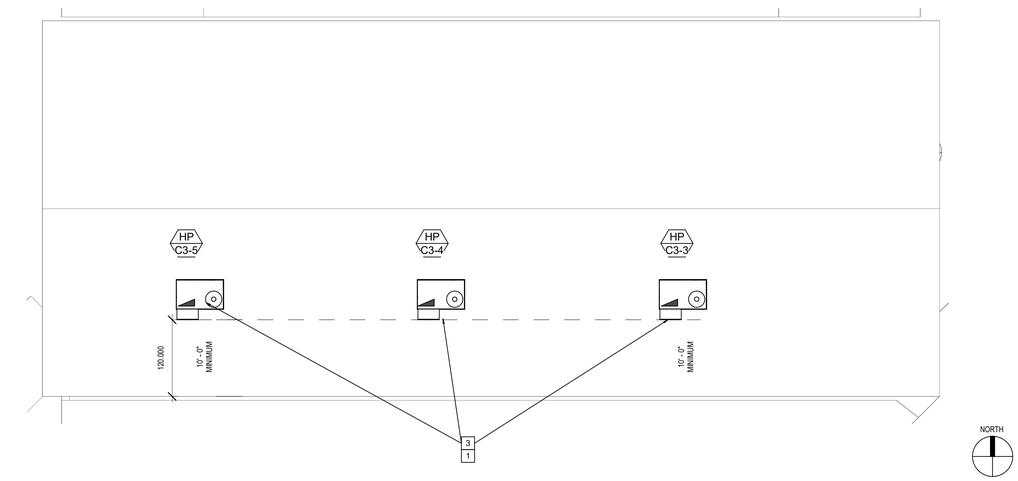
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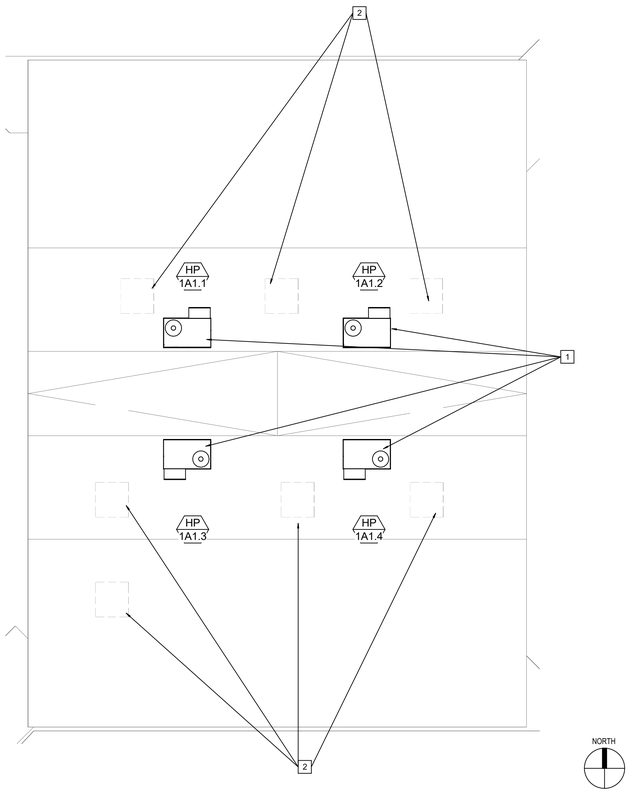

**5** BLDG IA-2 - ROOF
1/8" = 1'-0"



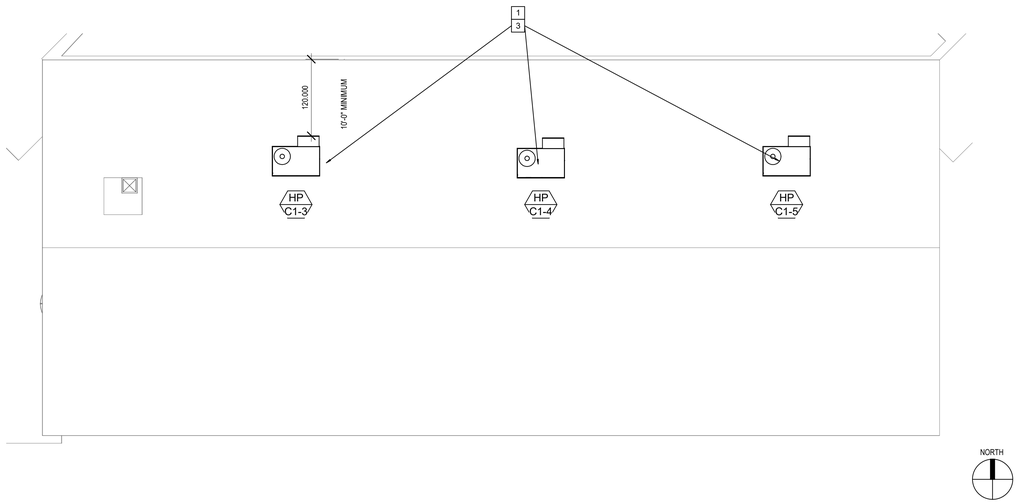

**3** BLDG C5 - ROOF
1/8" = 1'-0"




**2** BLDG C3 - ROOF
1/8" = 1'-0"




**4** BLDG IA-1 - ROOF
1/8" = 1'-0"




**1** BLDG C1 - ROOF
1/8" = 1'-0"

## KEY NOTES

1. MOUNT ROOFTOP UNITS ON SEISMIC CURB ON TOP OF SLOPING CURB FRAMING.
2. SKYLIGHTS REMOVED AND ROOFED OVER BY OTHER DIVISIONS.
3. ALL ROOFTOP EQUIPMENT SHALL BE LOCATED GREATER THAN OR EQUAL TO 10' - 0" AWAY FROM EDGE OF ROOF, MEASURED HORIZONTALLY FROM THE CLOSEST PART OF THE EQUIPMENT TO THE EDGE OF THE ROOF.

## GENERAL NOTES

1. ALL DIMENSIONS ON DUCTS REPRESENT THE NET AREA AVAILABLE TO AIRFLOW. FOR LINED DUCTS THIS IS THE DIMENSIONS FROM INSIDE TO INSIDE OF THE INSULATION. FOR SUPPLY DUCTS THE DIMENSIONS ARE FOR THE ACTUAL DUCT SIZE AND INSULATION WILL BE ON THE OUTSIDE OF THE DUCT. LINED DUCTS OUTSIDE THE BUILDING ENVELOPE SHALL HAVE 2" INTERNAL LINING. INSIDE THE ENVELOPE SHALL BE 1" INTERNAL LINING WHERE SHOWN ON THE PLANS.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


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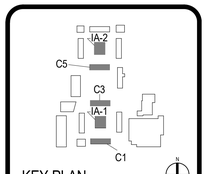

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN

Consultant




Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

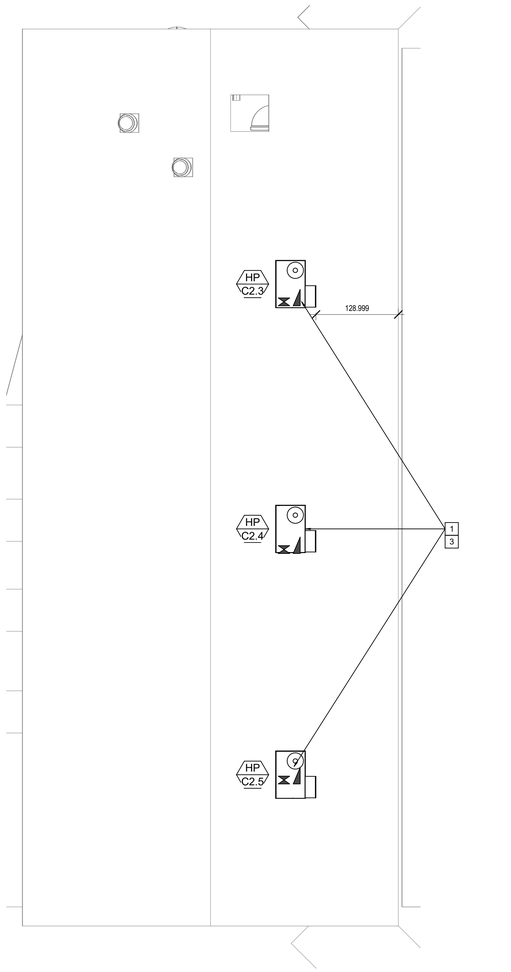
**MECHANICAL BUILDING ROOF PLANS C1, C3, C5, IA-1 & IA-2**

**M4.02**

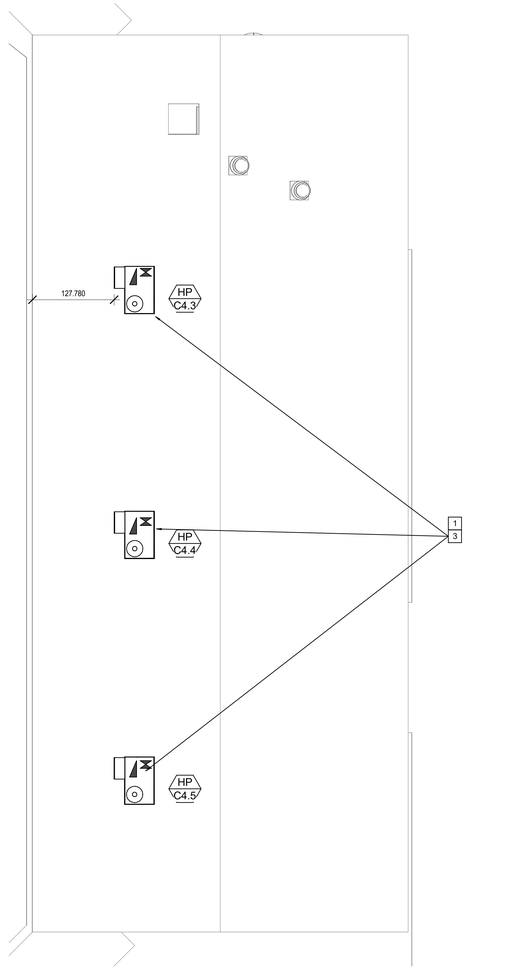
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M4.03 - MECHANICAL BUILDING ROOF PLANS C2, C4 & C6

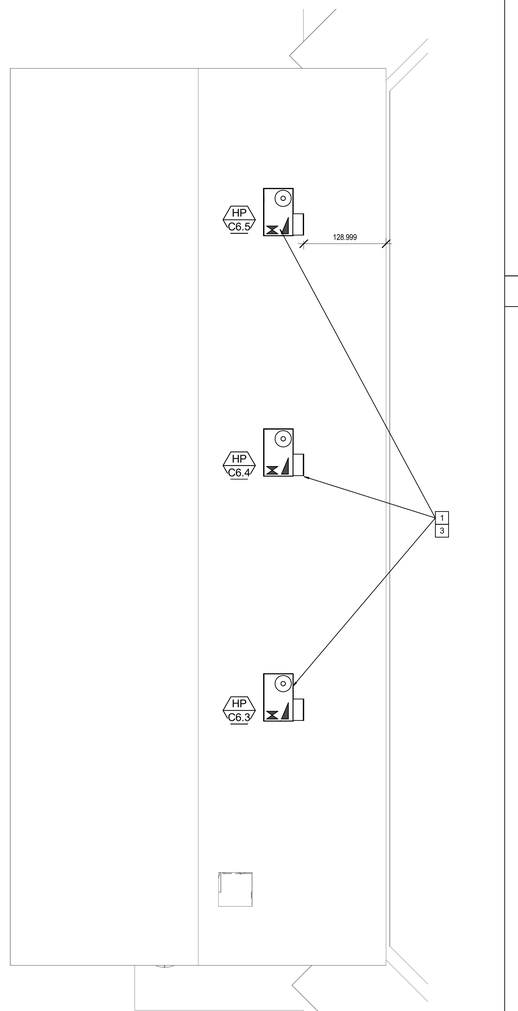
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3 BLDG C2 - ROOF
1/8" = 1'-0"




2 BLDG C4 - ROOF
1/8" = 1'-0"




1 BLDG C6 - ROOF
1/8" = 1'-0"

## KEY NOTES

1. MOUNT ROOFTOP UNITS ON SEISMIC CURB ON TOP OF SLOPING CURB FRAMING.
2. MOUNT HEAT PUMPS ON LEVEL CURB PROVIDED BY OTHER DIVISIONS.
3. ALL ROOFTOP EQUIPMENT SHALL BE LOCATED GREATER THAN OR EQUAL TO 10' - 0" AWAY FROM EDGE OF ROOF, MEASURED HORIZONTALLY FROM THE CLOSEST PART OF THE EQUIPMENT TO THE EDGE OF THE ROOF.

## GENERAL NOTES

1. ALL DIMENSIONS ON DUCTS REPRESENT THE NET AREA AVAILABLE TO AIRFLOW. FOR LINED DUCTS THIS IS THE DIMENSIONS FROM INSIDE TO INSIDE OF THE INSULATION. FOR SUPPLY DUCTS THE DIMENSIONS ARE FOR THE ACTUAL DUCT SIZE AND INSULATION WILL BE ON THE OUTSIDE OF THE DUCT. LINED DUCTS OUTSIDE THE BUILDING ENVELOPE SHALL HAVE 2" INTERNAL LINING. INSIDE THE ENVELOPE SHALL BE 1" INTERNAL LINING WHERE SHOWN ON THE PLANS.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
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2400 E. Katella Ave., Suite 950
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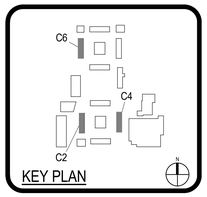
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43



KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M38155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL BUILDING ROOF PLANS C2, C4 & C6**

**M4.03**

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## ROOFTOP HEAT PUMP SCHEDULE

| UNIT | MANUFACTURER & MODEL NO. | SERVED | CFM | EXT. STATIC PRESS. (IN. W.G.) | COOLING CAPACITY (MBH) NOMINAL | HEATING CAPACITY (MBH) NOMINAL | COOLING SEER/EER | HEATING HSPF | FILTERS MERV 8 | O.S.A. INTAKE (CFM) | AMBIENT TEMP. (°F) | BASE UNIT ELECTICAL | | | | POWER (VOLT) | OPER. WT. (BASE UNIT) (LBS.) | OPTIONS WT. (LBS.) | ROOF CURB WT. (LBS.) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | MCA | MFS | FLA | LRA | | | | | |
| **CLASSROOM BUILDING C1** | | | | | | | | | | | | | | | | | | | | |
| HP C1.3 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V-3PH | 591 | 261 | 105 | 1, 2, 3 |
| HP C1.4 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C1.5 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| **CLASSROOM BUILDING C2** | | | | | | | | | | | | | | | | | | | | |
| HP C2.3 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C2.4 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C2.5 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| **CLASSROOM BUILDING C3** | | | | | | | | | | | | | | | | | | | | |
| HP C3.3 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C3.4 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C3.5 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| **CLASSROOM BUILDING C4** | | | | | | | | | | | | | | | | | | | | |
| HP C4.3 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C4.4 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C4.5 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| **CLASSROOM BUILDING C5** | | | | | | | | | | | | | | | | | | | | |
| HP C5.3 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C5.4 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C5.5 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| **CLASSROOM BUILDING C6** | | | | | | | | | | | | | | | | | | | | |
| HP C6.3 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C6.4 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C6.5 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| **CLASSROOM BUILDING C7** | | | | | | | | | | | | | | | | | | | | |
| HP C7.3 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C7.4 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C7.5 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| **CLASSROOM BUILDING C8** | | | | | | | | | | | | | | | | | | | | |
| HP C8.3 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C8.4 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP C8.5 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 46 | 50 | 42 | 71 | 460V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |

## POWER EXHAUSTER/ECONOMISER PACKAGE SCHEDULE

| UNIT | MANUFACTURER | MODEL NO. | CFM | EXT. STATIC PRESS. (IN. W.G.) | POWERED EXHAUST | | | | INTERNALLY PROVIDED FUSES | POWER (VOLT) | OPER. WT. (LBS.) | REMARKS | TOTAL INSTALLED WT. (HP + OPTION +CURB + ECONO-MIZER) (LBS.) | STRUCTURAL ANCHORAGE DETAILS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | HP | FLA | MCA | MOCP | | | | | | |
| PE C1.3 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C1.4 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C1.5 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C2.3 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C2.4 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C2.5 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C3.3 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C3.4 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C3.5 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C4.3 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C4.4 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C4.5 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C5.3 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C5.4 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C5.5 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C6.3 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C6.4 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C6.5 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C7.3 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C7.4 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C7.5 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C8.3 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C8.4 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |
| PE C8.5 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 2.8 | 3.5 | 6.3 | 10 A | 460V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 1 SD2, 2 SD2, 4 SD2, 6 SD2 |

NOTES:

1. SCHEDULED LOADS INCLUDE FAN AND MOTOR HEAT.
2. PROVIDE ANTI-RECYCLE TIMER, CRANKCASE HEATER, LOW AMBIENT KIT AND HIGH CAPACITY FILTER RACK. BYPASS UNIT ANTI-RECYCLE TIMER WHEN ANTI-RECYCLE FUNCTION IS INCLUDED IN THE THERMOSTAT.
3. PROVIDE "MICROMETL" MODULATING ECONOMIZER WITH POWER EXHAUST. HP UNIT SHALL HAVE DCV CONTROLLED BY C02 SENSORS. PROVIDE WITH LOCKING MESH COVER. POWER EXHAUST SHALL BE PROVIDED WITH A SEPARATE DISCONNECT SWITCH, FIELD WIRED BY ELECTRICAL.
4. PROVIDE WITH FACTORY MOUNTED NON-FUSED DISCONNECT SWITCH.
5. PROVIDE T-24 COMPLIANT INTERNET PROGRAMMABLE THERMOSTAT "NT" MODEL X7C WITH DEMAND CONTROL VENTILATION (DCV), C02 SENSORS AND CONNECT TO EXISTING EMS.
6. UNITS SHALL HAVE DUCT FLEX CONNECTIONS INSTALLED WITHIN ROOF CURB. REFER TO DETAIL 15 ON M6.01 FOR ROOF CURB.
7. ALL HP UNITS SHALL HAVE R-410A REFRIGERANT.
8. PROVIDE WITH FACTORY MOUNTED NON-POWERED CONVENIENCE OUTLET.
9. UNIT SHALL BE INSTALLED ON LEVEL MICROMETL SEISMIC CURB. CURB SHALL BE INSTALLED ON A LEVELED PLATFORM PROVIDED BY OTHER DIVISIONS.
10. UNIT SHALL HAVE DUCT FLEX CONNECTIONS INSTALLED ON THE DISCHARGE AND INTAKE SIDES OF THE UNIT.

## VRF SYSTEM OUTDOOR HEAT RECOVERY UNIT SCHEDULE

| UNIT | MANUFACTURER AND MODEL NO. | AREA SERVED | CAPACITY | | CORRECTED CAPACITY | | COP | COP | AMB. TEMP.(°F) | | SCHE | E.E.R. I.E.E.R. | ELECTRICAL | | | | | | | OPER WT. (LBS) | REMARKS | STRUCTURAL ANCHORAGE DETAILS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | NOMINAL COOLING (TOTAL) (MBH) | NOMINAL HEATING (MBH) | COOLING (TOTAL) (MBH) | NOMINAL HEATING (MBH) | | | SUMMER (DB/WB) | WINTER (DB) | | | COMPRESSOR QTY. | COMPRESSOR MOTOR | OUTDOOR FAN QTY. | MCA | MOCP | RFS | VOLTAGE | | | | |
| HP A1 | CARRIER 38VMA144RDL5-1 | ADMINISTRATION | 144 | 160 | 144 | 160 | 3.79 @ 47 F | NA @ 17 F | 95/72 | 37.8 | 26.5 | 12.7/24.2 | - | - | 2 | 70 | 99 | 80 | 230V / 3Ø / 60HZ | 1137 | 1, 2, 3, 4, 5, 6, 7, 8, 9 | 2 SD4 | 17 SD4 |

NOTES:
1. PROVIDE CRANKCASE HEATER, HIGH & LOW PRESSURE SWITCHES.
2. PROVIDE LOW AMBIENT KIT.
3. PROVIDE 3/4" EXPAND METAL CONDENSING COIL GUARD.
4. PROVIDE MINIMUM CLEARANCE AROUND EACH UNIT PER THE MANUFACTURER'S RECOMMENDATIONS.
5. SIZE REFRIGERANT (R410A) LINES PER MANUFACTURERS RECOMMENDATIONS. PROVIDE LONG LINE KIT IF REQUIRED.
6. PROVIDE HAIL-GUARD.
7. BOLTED TO CONCRETE PAD PER MANUFACTURERS INSTRUCTIONS
8. ALL HEAT PUMP UNITS ARE ROOF MOUNTED.
9. PROVIDE UNIT WITH HEAT RECOVERY.

## VRF SYSTEM INDOOR FAN COIL UNIT SCHEDULE

| UNIT | MANUFACTURER AND MODEL NO. | SERVICE/ LOCATION | TYPE | CAPACITY (MBH) | | OSA TEMP. (°F) | | COOLING | | SUPPLY FAN | | | CAPACITY (MBH) | | HEATING | | ELECTRICAL | | | | OPER. WT. (LBS.) | REMARKS | STRUCTURAL ANCHORAGE DETAILS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TOTAL COOLING NOMINAL | TOTAL HEATING NOMINAL | SUMMER (DB/WB) | WINTER (DB) | EAT, (°F) (DB/WB) | LAT. (°F) (DB/WB) | CFM (H/M/L) | E.S.P. (IN.) | OUTSIDE AIR CFM | | COOLING SENSIBLE /TOTAL | TOTAL HEATING | EAT, (°F) (DB) | LAT. (°F) (DB) | VOLTAGE | UNIT FLA | UNIT MCA | MOCP | | | |
| FC 1 | CARRIER 40VMM012A--3 | PRINCIPAL A-10 | CONCEALED DUCT | 12.0 | 13.6 | 95.0/72.0 | 33.0 | 80.0/67.0 | 62.2 | 430 | 0.6 | 60 | - | 8.0/11.7 | 11.2 | 70 | 94.2 | 230V/1ø/60HZ | - | 3.1 | 15 | 80 | 1, 2, 3, 4, 5, 6, 7, 8 | 4 SD3 |
| FC 2 | CARRIER 40VMM030A--3 | RECEPTION / PUBLIC A-05 & A-01 | CONCEALED DUCT | 30.0 | 34.0 | 95.0/72.0 | 33.0 | 80.0/67.0 | 62.0 | 1070 | 0.6 | 30 | - | 29.3/20.4 | 28.3 | 70 | 94.5 | 230V/1ø/60HZ | - | 5.0 | 15 | 125 | 1, 2, 3, 4, 5, 6, 7, 8 | 4 SD3 |
| FC 3 | CARRIER 40VMM024A--3 | VICE PRINC/GUIDANCE A-08 & A-07 | CONCEALED DUCT | 24.0 | 27.0 | 95.0/72.0 | 33.0 | 80.0/67.0 | 60.7 | 800 | 0.6 | 145 | - | 16.3/23.4 | 22.5 | 70 | 96.0 | 230V/1ø/60HZ | - | 3.1 | 15 | 100 | 1, 2, 3, 4, 5, 6, 7, 8 | 4 SD3 |
| FC 4 | CARRIER 40VMM015A--3 | NURSES RM A-06 | CONCEALED DUCT | 15.0 | 17.0 | 95.0/72.0 | 33.0 | 80.0/67.0 | 61.8 | 535 | 0.6 | 25 | - | 10.3/14.7 | 14.2 | 70 | 94.5 | 230V/1ø/60HZ | - | 3.1 | 15 | 100 | 1, 2, 3, 4, 5, 6, 7, 8 | 4 SD3 |
| FC 5 | CARRIER 40VMM030A--3 | WORKSPACE/PRINT RM A-04 & 1-21 | CONCEALED DUCT | 30.0 | 34.0 | 95.0/72.0 | 33.0 | 80.0/67.0 | 62.0 | 1070 | 0.6 | 45 | - | 20.4/29.3 | 28.3 | 70 | 94.5 | 230V/1ø/60HZ | - | 5.0 | 15 | 125 | 1, 2, 3, 4, 5, 6, 7, 8 | 4 SD3 |
| FC 6 | CARRIER 40VMM048A--3 | TEACHERS LOUNGE A-02 & A-03 | CONCEALED DUCT | 48.0 | 54.0 | 95.0/72.0 | 33.0 | 80.0/67.0 | 57.6 | 1370 | 0.6 | 40 | - | 32.5/48.9 | 45.0 | 70 | 100.4 | 230V/1ø/60HZ | - | 5.0 | 15 | 124 | 1, 2, 3, 4, 5, 6, 7, 8 | 4 SD3 |

NOTES:
1. PROVIDE WITH CONDENSATE DRAIN PAN (PRIMARY AND SECONDARY) FOR FAN COIL UNIT AND ASSOCIATED PIPING.
2. PROVIDE WITH FACTORY FURNISHED & INSTALLED CONDENSATE DRAIN LIFT PUMP (CONDENSATE PUMP SHALL BE POWERED THRU INDOOR FAN COIL UNIT).
3. SIZE REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS.
4. PROVIDE T-24 COMPLIANT INTERNET PROGRAMMABLE THERMOSTAT "NT" MODEL X7C AND CONNECT TO EXISTING EMS.
5. PROVIDE DISCONNECT SWITCH.
6. PROVIDE WITH MEDIUM STATIC MOTOR.
7. NOMINAL HEATING CAPACITIES ARE BASED ON INDOOR AIR TEMPERATURE OF 70°F DB, OUTDOOR AIR TEMPERATURE OF 47°F DB / 43°F WB
8. NOMINAL COOLING CAPACITIES ARE BASED ON INDOOR AIR TEMPERATURE OF 80°F DB / 67°F WB, OUTDOOR AIR TEMPERATURE OF 95°F DB



IDENTIFICATION STAMP
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APP: 04-121954 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

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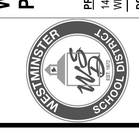
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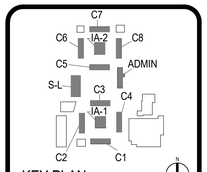
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43



KEY PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER
DAVID WANG
No.M36155
Exp.09-30-2024
CIVIL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 03/31/2023
PROJECT NUMBER 220526

REVISIONS

| No. | Description | Date |
|---|---|---|

DSA Submittal

MECHANICAL SCHEDULES

M5.01

## ROOFTOP HEAT PUMP SCHEDULE

| UNIT | MANUFACTURER & MODEL NO. | SERVED | CFM | EXT. STATIC PRESS. (IN. W.G.) | COOLING CAPACITY (MBH) NOMINAL | HEATING CAPACITY (MBH) NOMINAL | COOLING SEER/EER | HEATING HSPF | FILTERS MERV 8 | O.S.A. INTAKE (CFM) | AMBIENT TEMP. (°F) | BASE UNIT ELECTICAL MCA | MFS | FLA | LRA | POWER (VOLT) | OPER. WT. (BASE UNIT) (LBS.) | OPTIONS WT. (LBS.) | ROOF CURB WT. (LBS.) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CLASSROOM BUILDING 1A-1** | | | | | | | | | | | | | | | | | | | | |
| HP 1A1.1 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 52/58 | 60/60 | 51/55 | 119/122 | 208V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP 1A1.2 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 52/58 | 60/60 | 51/55 | 119/122 | 208V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP 1A1.3 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 52/58 | 60/60 | 51/55 | 119/122 | 208V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP 1A1.4 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 52/58 | 60/60 | 51/55 | 119/122 | 208V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| **CLASSROOM BUILDING 1A-2** | | | | | | | | | | | | | | | | | | | | |
| HP 1A2.1 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 52/58 | 60/60 | 51/55 | 119/122 | 208V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP 1A2.2 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 52/58 | 60/60 | 51/55 | 119/122 | 208V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP 1A2.3 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 52/58 | 60/60 | 51/55 | 119/122 | 208V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |
| HP 1A2.4 | CARRIER 50GCQM05 | CLASSROOM | 1600 | 0.75 | 47.5 | 45.5 | 16.2 / 12.2 | 8.3 | 2 in. | 700 | 95 | 52/58 | 60/60 | 51/55 | 119/122 | 208V/3PH/60HZ | 591 | 261 | 105 | 1, 2, 3 |

NOTES:

1. SCHEDULED LOADS INCLUDE FAN AND MOTOR HEAT.
2. PROVIDE ANTI-RECYCLE TIMER, CRANKCASE HEATER, LOW AMBIENT KIT AND HIGH CAPACITY FILTER RACK. BYPASS UNIT ANTI-RECYCLE TIMER WHEN ANTI-RECYCLE FUNCTION IS INCLUDED IN THE THERMOSTAT.
3. PROVIDE "MICROMETL" MODULATING ECONOMIZER WITH POWER EXHAUST. HP UNIT SHALL HAVE DCV CONTROLLED BY C02 SENSORS. PROVIDE WITH LOCKING MESH COVER. POWER EXHAUST SHALL BE PROVIDED WITH A SEPARATE DISCONNECT SWITCH, FIELD WIRED BY ELECTRICAL.
4. PROVIDE WITH FACTORY MOUNTED NON-FUSED DISCONNECT SWITCH.
5. PROVIDE T-24 COMPLIANT INTERNET PROGRAMMABLE THERMOSTAT "NT" MODEL X7C WITH DEMAND CONTROL VENTILATION (DCV), C02 SENSORS AND CONNECT TO EXISTING EMS.
6. UNITS SHALL HAVE DUCT FLEX CONNECTIONS INSTALLED WITHIN ROOF CURB.
7. ALL HP UNITS SHALL HAVE R-410A REFRIGERANT.
8. PROVIDE WITH FACTORY MOUNTED NON-POWERED CONVENIENCE OUTLET.
9. UNIT SHALL BE INSTALLED ON LEVEL MICROMETL SEISMIC CURB. CURB SHALL BE INSTALLED ON A LEVELED PLATFORM PROVIDED BY OTHER DIVISIONS.
10. UNIT SHALL HAVE DUCT FLEX CONNECTIONS INSTALLED ON THE DISCHARGE AND INTAKE SIDES OF THE UNIT.

## POWER EXHAUSTER/ECONOMISER PACKAGE SCHEDULE

| UNIT | MANUFACTURER | MODEL NO. | CFM | EXT. STATIC PRESS. (IN. W.G.) | POWERED EXHAUST HP | FLA | MCA | MOCP | INTERNALLY PROVIDED FUSES | POWER (VOLT) | OPER. WT. (LBS.) | REMARKS | TOTAL INSTALLED WT. (HP + OPTION +CURB + ECONO-MIZER) (LBS.) | STRUCTURAL ANCHORAGE DETAILS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PE 1A1.1 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 6.4 | 8.0 | 14.4 | 12 A | 208V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 4 SD2A, 6 SD2A, 2 SD2A, 1 SD2A |
| PE 1A1.2 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 6.4 | 8.0 | 14.4 | 12 A | 208V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 4 SD2A, 6 SD2A, 2 SD2A, 1 SD2A |
| PE 1A1.3 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 6.4 | 8.0 | 14.4 | 12 A | 208V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 4 SD2A, 6 SD2A, 2 SD2A, 1 SD2A |
| PE 1A1.4 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 6.4 | 8.0 | 14.4 | 12 A | 208V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 4 SD2A, 6 SD2A, 2 SD2A, 1 SD2A |
| PE 1A2.1 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 6.4 | 8.0 | 14.4 | 12 A | 208V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 4 SD2A, 6 SD2A, 2 SD2A, 1 SD2A |
| PE 1A2.2 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 6.4 | 8.0 | 14.4 | 12 A | 208V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 4 SD2A, 6 SD2A, 2 SD2A, 1 SD2A |
| PE 1A2.3 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 6.4 | 8.0 | 14.4 | 12 A | 208V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 4 SD2A, 6 SD2A, 2 SD2A, 1 SD2A |
| PE 1A2.4 | MICROMETL | 50GCQ M05 | 1200 | 0.25 | 1.0 | 6.4 | 8.0 | 14.4 | 12 A | 208V/3PH/60HZ | 195 | SEE NOTES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 | 1152 | 4 SD2A, 6 SD2A, 2 SD2A, 1 SD2A |

## FAN SCHEDULE

| UNIT | MANUFACTURER & MODEL NO. | SERVICE | TYPE | CFM | SP IN W.G. | FAN RPM | MOTOR WATTS | MOTOR FLA | MOTOR VOLT | MOTOR PH | MOTOR HZ | SONES | OPER WT. (LBS) | REMARKS | STRUCTUAL ANCHORAGE DETAILS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OAF SL1 | GREENHECK CSP-A200 | BLDG S-L COACHES OFFICES VENTILATION AIR | CEILING/SUSPENDED | 100 | 0.5 | 825 | 118 | 0.5 | 115 | 1 | 60 | 1.4 | 24 | NOTES 1, 2, 3, 4 | 4 SD3 |
| OAF A1 | GREENHECK CSP-A700-VG | VENTILATION AIR ADMINISTRATION BUILDING | CEILING/SUSPENDED | 400 | 0.7 | 1299 | 107 | 4.1 | 115 | 1 | 60 | 2.4 | 39 | NOTES 1, 2, 3, 4 | 4 SD3 |
| EF SL-1 | GREENHECK CSP-A510-VG | STORAGE RM EXHAUST S-L BUILDING | CEILING/SUSPENDED | 400 | 0.7 | 1299 | 107 | 4.1 | 115 | 1 | 60 | 2.4 | 39 | NOTES 1, 2, 3 | 4 SD3 |
| EF A1 | GREENHECK SP-AP511W-1 | ADMINISTRATION RRs | CEILING | 100 | 0.35 | 880 | 21 | 0.3 | 115 | 1 | 60 | 4.7 | 8 | NOTES 1, 2, 3, 5 | 4 SD3 |
| EF A2 | GREENHECK SP-AP511W-1 | ADMINISTRATION RRs | CEILING | 100 | 0.35 | 880 | 21 | 0.3 | 115 | 1 | 60 | 4.7 | 8 | NOTES 1, 2, 3, 5 | 4 SD3 |
| EF A3 | GREENHECK SP-AP511W-1 | ADMINISTRATION RRs | CEILING | 100 | 0.35 | 880 | 21 | 0.3 | 115 | 1 | 60 | 4.7 | 8 | NOTES 1, 2, 3, 5 | 4 SD3 |

NOTES:

1. FAN SHALL OPERATE ON A TIME CLOCK SCHEDULE PROVIDED BY THE SCHOOL DISTRICT.
2. PROVIDE BACKDRAFT DAMPER.
3. PROVIDE FACTORY SOLID STATE CONTROLLER MOUNTED WITHIN THE FAN'S CASING.
4. PROVIDE WITH MERV 13 FILTERS.
5. FAN INTERLOCKED WITH LIGHT SWITCH.

## AIR DISTRIBUTION SCHEDULE

| SYMBOL | TYPE | MAKE & MODEL | DESCRIPTION | REMARKS |
|---|---|---|---|---|
| A | CEILING SUPPLY | PRICE MODEL SPD | SQUARE PLAQUE DIFFUSER WITH FRAME FOR SURFACE MOUNTING. ALUMINUM, FLUSH FACE MOUNTING. ROUND INLET. 24x24 SIZE. | NOTES 1, 2, 3, 5 — 16 M6.01 |
| B | CEILING SUPPLY | PRICE MODEL SPD | SQUARE PLAQUE DIFFUSER FOR T-BAR MOUNTING. ALUMINUM, FLUSH FACE MOUNTING. ROUND INLET. 24x24 SIZE. | NOTES 1, 2, 3, 5 — 16 M6.01 |
| C | SIDEWALL RETURN OR EXHAUST | PRICE MODEL 535L | LOUVERED RETURN OR EXHAUST GRILLE WITH FIXED BLADES AT 45 DEGREES, ALUMINUM, RAPID MOUNT FRAME MODEL TRIM FOR SURFACE MOUNTING. | NOTES 1, 3, 5 — 16 M6.01 |
| D | CEILING RETURN OR EXHAUST | PRICE MODEL 535L | LOUVERED RETURN OR EXHAUST GRILLE WITH FIXED BLADES AT 45 DEGREES, ALUMINUM, RAPID MOUNT FRAME MODEL TRIM FOR SURFACE MOUNTING. | NOTES 1, 3, 5 — 16 M6.01 |
| E | CEILING RETURN OR EXHAUST | PRICE MODEL 535L | LOUVERED RETURN OR EXHAUST GRILL WITH FIXED BLADES AT 45 DEGREES, ALUMINUM, RAPID MOUNT FRAME MODEL TRIM FOR T-BAR MOUNTING. ALL SIZES ARE 24" WIDE BY 6", 8", 10", 12" 16", 20" OR 24" AS NOTED ON THE PLANS. | NOTES 1, 3, 5 — 16 M6.01 |
| G | SIDEWALL SUPPLY | PRICE MODEL | DOUBLE DEFECTION SUPPLY, ALUMINUM, SURFACE MOUNTING. FLUSH FACE MOUNTING. OPPOSED BLADE DAMPERS, OFF WHITE. | NOTES 1, 3 |
| L | INTAKE OR EXHAUST LOUVER | GREENHECK MODEL ESD-435 | EXTRUDED ALUMINUM LOUVER, C/W BIRDSCREEN, FOXED BLADES, 4" WIDE, MOUNTING FLANGES, PRIME COATED. | NOTES 1, 3, 4 |

NOTES:

1. REFER TO THE FLOOR PLANS FOR NECK SIZE, CFM, AIR DIFFUSION PATTERN AND FIRE/DAMPER, IF REQUIRED.
2. PROVIDE AIR CONTROL GRID FOR ALL CEILING SUPPLY DIFFUSERS SET AT 90°.
3. ARCHITECT TO SELECT COLOR ON SUBMITTALS.
4. PROVIDE 2" FILTERS (MERV 13) IN INLET LOUVER TO SF-A1 IN ADMINISTRATION BLDG.
5. REFER TO SUPPORT DETAIL 16 ON M6.01.

## VRF HEAT RECOVERY MDC

| UNIT | MANUFACTURER & MODEL NO. | SERVICE | TYPE (MAIN / SUB) | NUMBER OF PORTS | | | MOTOR MCA | MOTOR VOLT | MOTOR PH | MOTOR HZ | | OPER WT. (LBS) | REMARKS | STRUCTURAL ANCHORAGE DETAIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MDC A1 | CARRIER MODEL 40VD006M--3 | CLASSROOM BLDG A HEATER ROOM | MAIN | 6 | | | 0.73 | 208-230 | 1 | 60 | | 132 | NOTES 1, 2, 3, 4, 5 | 4 SD3 |

NOTES & OPTIONS:

1. FOR INDOOR UNITS WITH CAPACITIES GREATER THAN 54 MBH, TWO PORTS MUST BE TWINNED USING Y-JOINTS TO CREATE A SINGLE PORT.
2. UP TO 2 SUB MDCs CAN BE CONNECTED TO 1 MAIN MDC USING Y-JOINT ASSEMBLY.
3. NO PORT ASSIGNMENTS ARE NEEDED FOR COMMUNICATION WIRE BETWEEN IDUs AND MDC.
4. COMMUNICATION WIRING BETWEEN MDC AND IDUs SHALL USE "QUICK CONNECTS".
6. MAX IDU CAPACITY FOR STANDARD MAIN MDCs IS 324 MBH; FOR LARGE MAIN MDCS, IT IS 504 MBH. MAX IDU CAPACITY FOR A SINGLE SUB MDC IS 126 MBH, WHEN TWO SUB MDCs ARE CONNECTED, THEIR COMBINED MAX IDU CAPACITY IS 168 MBH.

## SPLIT SYSTEM HEAT PUMP SCHEDULE

### INDOOR FAN COILS

| UNIT | MANUFACTURER & MODEL NO. | AREA SERVED | CFM | EXT. STATIC PRESS. (IN. W.G.) | O.S.A. INTAKE (CFM) | COOLING CAPACITY (TONS) | HEATING CAPACITY (MBH) | SEER/ EER | IEER | ENTERING CONDENSER TEMP. (°F) SUMMER DB °F | SUMMER WB °F | WINTER DB °F | HEATING CAPACITIES (MBH) TOTAL @ 47 °F | TOTAL @ 17 °F | HSPF | COIL TEMPERATURES EDB (°F) | EWB (°F) | LDB (°F) | LWB (°F) | COP @ 47 °F | COP @ 17 °F | FILTERS | ELECTRICAL FAN MOTOR HP | FAN MOTOR VOLT | OPER. WT. (LBS.) | REMARKS | STRUCTURAL ANCHORAGE DETAILS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AC SL1 | CARRIER 48MBDQ12---3 | OFFICE SL-115 | 400 | 0.6 | 40 | 1.0 | 12.0 | 21.5/13.0 | NA | 98.0 | 69.0 | 39.2 | 12.9 | 8.35 | 11.5 | 75.9 | 65.6 | 61.2 | 60.2 | 3.52 | 2.0 | 2 IN. | 1.11 MCA | 208/1PH | 44 | 4, 5, 9, 10, 11 &12 | 4B SD3 |
| AC SL2 | CARRIER 48MBDQ12---3 | OFFICE SL-103 | 400 | 0.6 | 40 | 1.0 | 12.0 | 21.5/13.0 | NA | 98.0 | 69.0 | 39.2 | 12.9 | 8.35 | 11.5 | 81.7 | 65.6 | 60.2 | 58.1 | 3.52 | 2.0 | 2 IN. | 1.11 MCA | 208/1PH | 44 | 4, 5, 9, 10, 11 &12 | 4B SD3 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |

### OUTDOOR HEAT PUMPS

| UNIT | MCA | MOCP MANUFACTURER & MODEL NO. | AMBIENT TEMP. (°F) DB/WB | ELECTRICAL POWER SUPPLY MCA | POWER SUPPLY MFS | COMPRESSOR RLA | FAN MAX. INPUT (W) | POWER (VOLT) | OPER. WT. (LBS.) | REMARKS | STRUCTURAL ANCHORAGE DETAILS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HP SL1 | 15 | CARRIER 38MARBQ12AA3 | 104/70 | 15 | 25 | 8.5 | 100.3 | 208V/1PH/60HZ | 74 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 & 13 | 4B SD3, 16 SD3, 2 SD2 |
| HP SL2 | 15 | CARRIER 38MARBQ12AA3 | 104/70 | 15 | 25 | 8.5 | 100.3 | 208V/1PH/60HZ | 74 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 & 13 | 4B SD3, 16 SD3, 2 SD2 |

NOTES:

1. PROVIDE CRANKCASE HEATER, HIGH & LOW PRESSURE SWITCHES.
2. PROVIDE LOW AMBIENT KIT.
3. MOUNT ON MOUNTING PAD DIVERSITECH E LITE PLASTIC EQUIPMENT PAD ON TOP OF 1/2" NEOPRENE. 18" x 38" x 3" PAD.
4. PROVIDE MINIMUM CLEARANCE AROUND EACH UNIT PER THE MANUFACTURER'S RECOMMENDATIONS.
5. SIZE REFRIGERANT (R410A) LINES PER MANUFACTURERS RECOMMENDATIONS. PROVIDE LONG LINE KIT IF REQUIRED.
6. PROVIDE HAIL-GUARD.
7. ALL HEAT PUMP UNITS ARE ROOF MOUNTED.
8. SEE STRUCTURAL DRAWINGS FOR ANCHORAGE DETAILS.
9. POWERED FROM OUTDOOR UNIT.

WALL MOUNTED AC UNITS & HEAT PUMPS
NOT TO SCALE



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

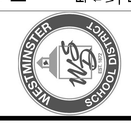
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

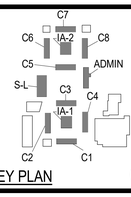
**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant




Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 03/31/2023
PROJECT NUMBER 220526

REVISIONS

| No. | Description | Date |
|---|---|---|

DSA Submittal

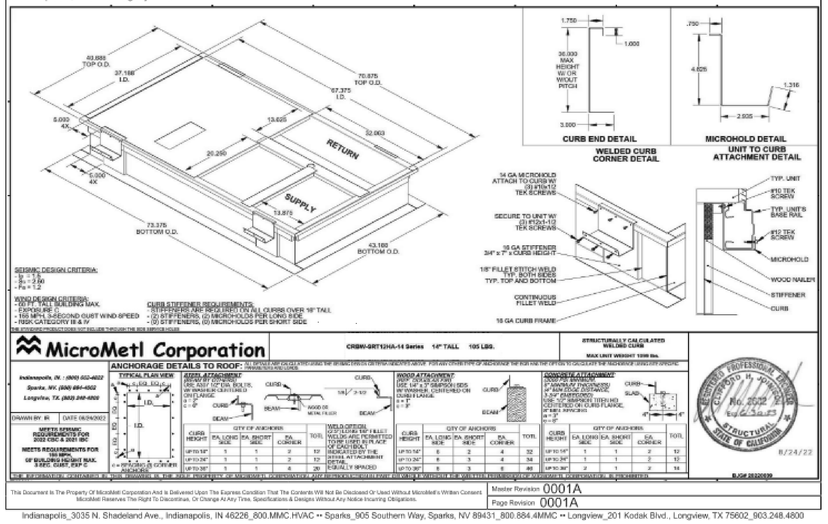
**MECHANICAL SCHEDULES**

**M5.02**

0" 1"

MicroMetl | Date: | Weight: 105lbs (US) 47.63kg (Metric) | Part Number: CRBW-SRT12HA-1441
RTU:
Submitted to: | Approved by: | Notes:

Welded Structurally Calculated Curb - 14 Inches Tall Insulated Full Perimeter Welded Structurally Calculated Curb Curb, California State Standard, Standard Seismic Criteria, "Structurally" Stamped By A Professional Engineer, Without Pitch, Insulated Deck Pan If Applicable, Includes Wood Nailer & Hold Down Brackets. Meets Seismic Requirements for 2022 CBC & 2021 IBC. Wind Design Criteria: 60 Foot Tall Building Maimum, Exposure C, 155 MPH - 3 Second Gust Speed, Risk Category III & IV.




MicroMetl Corporation | CRBW-SRT12HA-14 Series 14" TALL 105 LBS. | STRUCTURALLY CALCULATED WELDED CURB | MAX UNIT WEIGHT 1200 lbs.

ANCHORAGE DETAILS TO ROOF:




Indianapolis, IN : (317) 632-4022
Sparks, NV: (800) 884-4562
Longview, TX: (903) 248-4800

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Master Revision 0001A
Page Revision 0001A

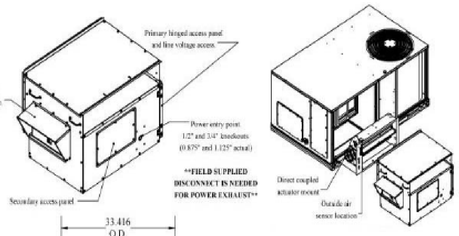
Indianapolis_3035 N. Shadeland Ave., Indianapolis, IN 46228_800.MMC.HVAC •• Sparks_905 Southern Way, Sparks, NV 89431_800.884.4MMC •• Longview_201 Kodak Blvd., Longview, TX 75602_903.248.4800

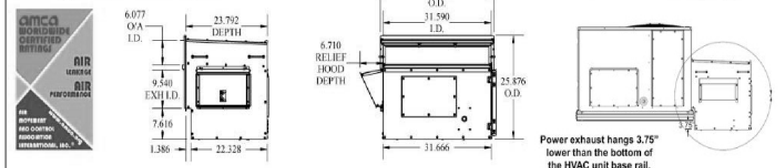
## 15 ROOF CURB DETAIL FOR A/C UNITS
NOT TO SCALE

MicroMetl | Date: 1/18/2023 | Weights: 191lbs/86.64kg | Units: 50GCQ M04 | Part Number: PECD-SRT12CB-D2EH-2LH
Submitted To: guest@micrometl.com | Job: | Notes:

Economizer & Power Exhaust Combination Package. Genesis Ultra Low Leak Vertical with Honeywell Jade W7220 Single/Multiple Speed Electromechanical Controller, Honeywell Actuator, Enthalpy Sensor, 208-230 Volt Three Phase, Modulating, Designed To Operate At 1850 CFM @ 1/2" - 1/2 HP. Power Exhaust Painted To Match RTU, All Necessary Panels And Hardware Included. Electrical junction box provided. High voltage cable to be field supplied and installed. Power Exhaust VFD is BacNet Compatible. For Differential sensor please order 9901-2022-DIFF JC2..

**FEATURES:**
- Includes ECD-SRT12CB series economizer.
- External gear driven dampers with roll formed blades.
- Designed for vertical applications only.
- Factory assembled rain hood, with aluminum water entrainment filters.
- Filter access door supplied with RTU.
- Hinged filter access door is ordered separately.
  - MMC P/# for Chassis 1 - ECD-SRT1CA-HDOOR
  - MMC P/# for Chassis 2 - ECD-SRT2CA-HDOOR
- Rain hood is sloped for water run off.
- All harnesses and plugs needed are supplied.
- Economizer is class 1A & AMCA certified.
- Relief blades are AMCA certified.
- Uses filter rack with unit.
- Field supplied and installed disconnect is required.
- Blower is forward curved, double inlet, with pre-lubricated ball bearings, have a dynamically balanced wheel, and are mounted on rubber isolators.
- Thermally protected motors.
- Adjustable motor pulleys
- See page 2 for PE performance and electrical data.

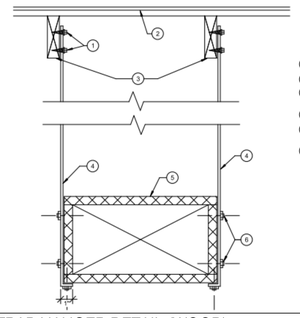


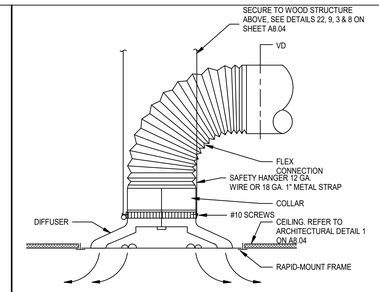

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## 14 POWER EXHAUST DETAIL - VERTICAL DISCHARGE & RETURN ROOFTOP UNITS
NOT TO SCALE

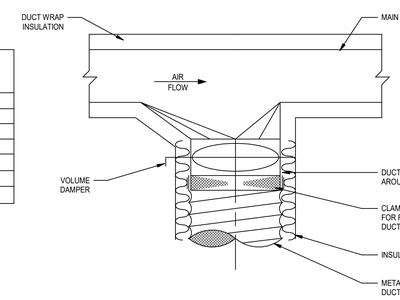



## 16 DUCT STRAP HANGER DETAIL (WOOD)
NOT TO SCALE

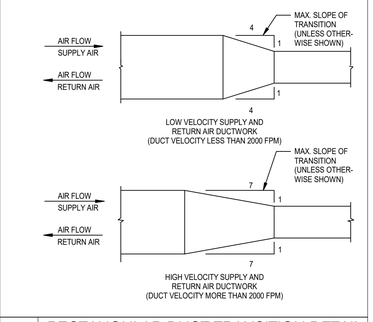



## 13 HARD LID DIFFUSER CONNECTION DETAIL
NOT TO SCALE

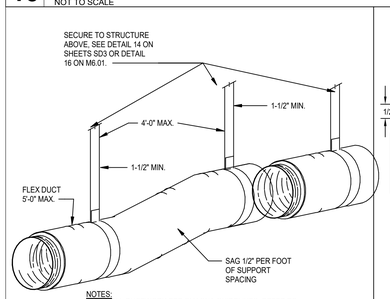
| ROUND DUCT SIZE | BUCKLEY TAKE-OFF SIZE | MINIMUM MAIN DUCT DEPTH |
|---|---|---|
| 6" | 6"X12" | 8" |
| 8" | 6"X12" | 8" |
| 9" | 6"X14" | 8" |
| 10" | 6 1/2"X16" | 8 1/2" |
| 12" | 7 3/4"X18" | 9 3/4" |
| 14" | 9"X20" | 11" |
| 16" | 10"X20" | 12" |




## 12 RECTANGULAR TO ROUND TRANSITION TAKE-OFF DETAIL .
NOT TO SCALE

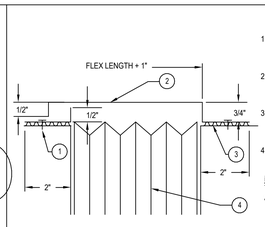



## 11 RECTANGULAR DUCT TRANSITION DETAIL .
NOT TO SCALE




NOTES:
1. INSTALL DUCTWORK PER SMACNA GUIDELINES. REFER TO "SMACNA DUCT CONSTRUCTION STANDARDS" LATEST EDITION.

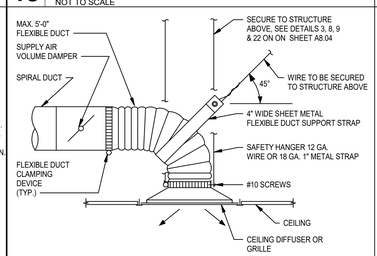
## 10 FLEXIBLE DUCTWORK HANGER DETAIL .
NOT TO SCALE




1. SHEET METAL SCREWS @ 16" O.C. SET IN MASTIC (TYPICAL).
2. 24 GAUGE GALVANIZED SHEET METAL COVER (TOP AND SIDES).
3. DUCT SEAL; DURO-DYNE, GLEN-KOTE OR EQUIVALENT. NO MASTIC TO METAL SEAM.
4. FLEXIBLE DUCT CONNECTION.

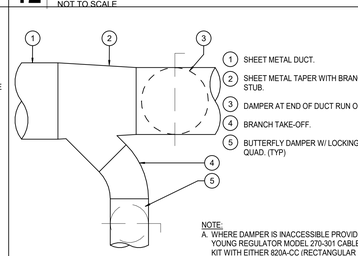
NOTE:
TO BE INSTALLED ON ALL FLEXIBLE DUCT

## 09 FLEX CONNECTOR DETAIL .
NOT TO SCALE



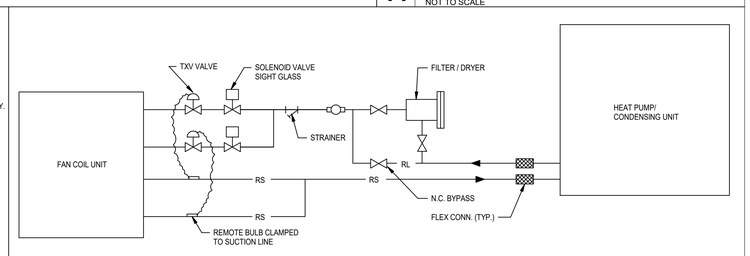

NOTES:
1. REFER TO DETAIL #12/M5.01 FOR FLEXIBLE DUCTWORK DETAIL.
2. LOCATE VOLUME DAMPER AS FAR AWAY FROM DIFFUSER OR GRILLE AS POSSIBLE.

## 08 LAY IN DIFFUSER CONNECTION DETAIL .
NOT TO SCALE



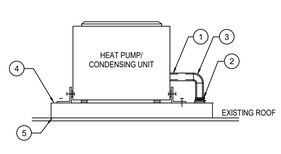

NOTE:
A. WHERE DAMPER IS INACCESSIBLE PROVIDE YOUNG REGULATOR MODEL 270-301 CABLE KIT WITH EITHER 820A-CC (RECTANGULAR OR 5020-CC (ROUND) DAMPER.
B. PROVIDE DAMPER WITH LOCKING QUADRANT AT ALL SINGLE RUNOUTS.

## 07 BRANCH DUCT DAMPER DETAIL .
NOT TO SCALE



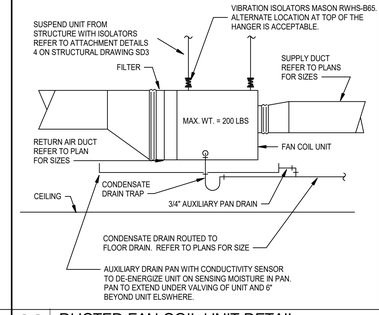

NOTE:
1. TYPICAL OF 2 INDEPENDENT CIRCUITS.
2. ALL REFRIGERANT PIPING TO BE SIZED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

## 06 REFRIGERANT PIPING SCHEMATIC DETAIL .
NOT TO SCALE

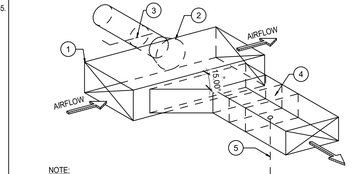



NOTES:
- INSULATED REFRIGERANT PIPES THRU CURB. PIPES, THRU CURB.
1. PROVIDE GRADUATED STEP BOOT WITH STAINLESS STEEL CLAMPS BY THE PATE COMPANY. BOOT JOINT AT CURB, SHALL BE MADE WATER TIGHT.
- INSULATED, ALUMINUM WRAP REFRIGERANT PIPES, THRU CURB.
3. HEAT PUMP/CONDENSING UNIT'S PLATFORM WITH NEOPRENE PAD.
4. SEE STRUCTURAL DETAILS ON STRUCTURAL DRAWINGS SD2 & SD2A FOR
5. ATTACHEMENT TO STRUCTURE.

## 05 HP/CU ROOF MOUNTING DETAIL .
NOT TO SCALE

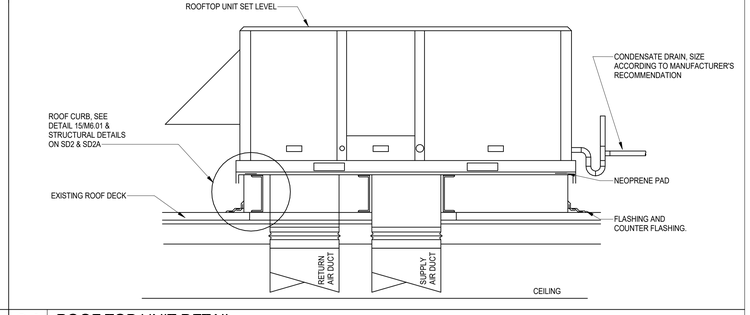



## 03 DUCTED FAN COIL UNIT DETAIL .
NOT TO SCALE




NOTE:
WHERE DAMPER IS INACCESSIBLE PROVIDE YOUNG REGULATOR MODEL 270-301 CABLE KIT WITH EITHER 830A-CC (RECTANGULAR) OR 5020-CC (ROUND) DAMPER.
1. RECTANGULAR GALVANIZED SHEET METAL SUPPLY AIR DUCT - SEE MECHANICAL PLAN FOR SIZE.
2. CUT OPENING ACCURATELY FOR SPIN IN (FLARED) FITTING - WHERE POSSIBLE.
3. BUTTERFLY DAMPER W/ LOCKING QUAD. (TYP)
4. VOLUME CONTROL DAMPER WITH LOCKING QUADRANT.
5. DAMPER REGULATOR

## 02 BRANCH DUCT TAKE-OFF & DMP. DETAIL .
NOT TO SCALE




## 01 ROOF TOP UNIT DETAIL .
NOT TO SCALE

FILE PATH: Z:\Projects\...
9/26/2023 3:29:17 PM

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APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

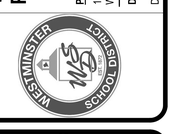
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2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
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8163 Rochester Avenue, Suite 100
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leafengineers.com

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**
PROJECT ADDRESS: 14171 NEWLAND ST. WESTMINSTER,CA 92683
DSA Submittal
DSA-APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 03/31/2023 | PROJECT NUMBER 220526

REVISIONS

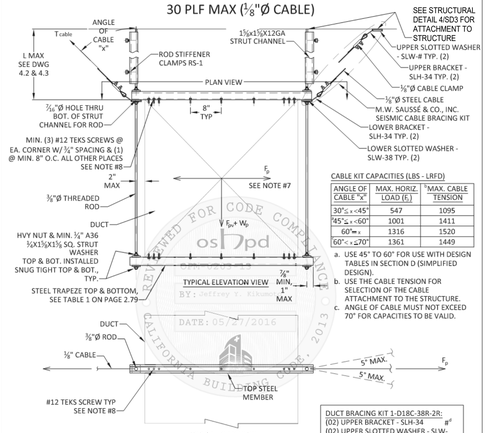
| No. | Description | Date |
|---|---|---|

DSA Submittal

**MECHANICAL DETAILS**

**M6.01**

## CABLE BRACING SYSTEM - TRAPEZE HUNG DUCT - TRANSVERSE 30 PLF MAX (⅛"Ø CABLE)




| CABLE KIT CAPACITIES (LBS - LRFD) | | |
|---|---|---|
| ANGLE OF CABLE "x" | MAX. HORIZ. LOAD ($F_h$) | MAX. CABLE TENSION |
| 30°≤ x <45° | 547 | 1095 |
| 45°≤ x <60° | 1001 | 1411 |
| 60°= x | 1316 | 1520 |
| 60° < x ≤70° | 1361 | 1449 |

a. USE 45° TO 60° FOR USE WITH DESIGN TABLES IN SECTION D (SIMPLIFIED DESIGN).
b. USE THE CABLE TENSION FOR SELECTION OF THE CABLE ATTACHMENT TO THE STRUCTURE.
c. ANGLE OF CABLE MUST NOT EXCEED 70° FOR CAPACITIES TO BE VALID.

DUCT BRACING KIT 1-D18C-38R-2R:
(02) UPPER BRACKET - SLH-34
(02) UPPER SLOTTED WASHER - SLW-#
(02) LOWER BRACKET - SLH-34
(02) LOWER SLOTTED WASHER - SLW-38
(04) ROD STIFFENER CLAMPS - RS-1
(02) ⅛" CABLE - 10 FT.
(04) ⅛" CABLE CLAMPS

d. UPPER SLOTTED WASHER TO MATCH SELECTED ATTACHMENT.

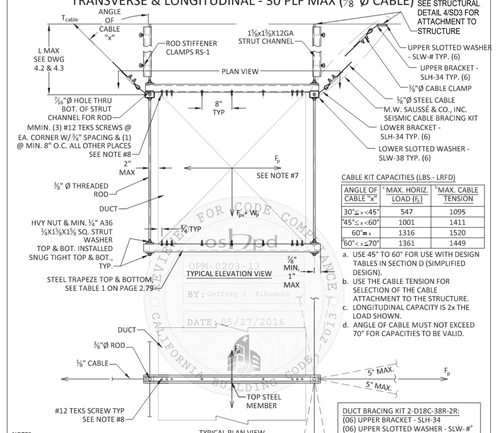
NOTES:
1. CABLE IS 7 X 19 GALVANIZED STEEL CABLE. SEE PG 4.5
2. CABLES TO BE INSTALLED TAUT W/O SLACK. CAUTION - CABLE MUST NOT SUSTAIN ANY DEAD LOAD.
3. SEE PAGE 4.2 & 3 FOR ROD STIFFENER DETAIL & REQUIREMENTS.
4. SEE PAGE 4.4 FOR BRACKET - SLH-34 AND SLOTTED WASHER - SLW-XX DETAIL.
5. SEE PAGE 4.5 FOR CABLE CLAMP DETAIL.
6. TEKS SCREWS MUST BE PER ICC ESR-1976.
7. RDP SHALL CONSIDER THE ECCENTRIC LOAD DISTRIBUTION WHEN DETERMINING THE $F_h$ VALUE USED IN THE DESIGN.
8. USE SHORTEST SMS POSSIBLE WHEN PENETRATING DUCTWORK TO MINIMIZE AIRFLOW NOISE INSIDE THE DUCT (FEMA 414).

REVIEWED FOR CODE COMPLIANCE OSHPD OPM-0203-13 BY: Jeffrey T. Kikumoto DATE: 05/27/2016 CALIFORNIA BUILDING CODE 2013

Vibrex vibration & seismic control systems
M.W. Saussé & Co., Inc.
28744 Witherspoon Parkway | Valencia, CA 91355
Ph: (661) 257-3311 | Fax: (661) 257-6050
Civil Engineer: P.K. Sachdeva
California PE No. C59644
Page No.: 2.37
Date: May 9, 2016



## CABLE BRACING SYSTEM - TRAPEZE HUNG DUCT TRANSVERSE & LONGITUDINAL - 30 PLF MAX (⅛"Ø CABLE)




| CABLE KIT CAPACITIES (LBS - LRFD) | | |
|---|---|---|
| ANGLE OF CABLE "x" | MAX. HORIZ. LOAD ($F_h$) | MAX. CABLE TENSION |
| 30°≤ x <45° | 547 | 1095 |
| 45°≤ x <60° | 1001 | 1411 |
| 60°= x | 1316 | 1520 |
| 60° < x ≤70° | 1361 | 1449 |

a. USE 45° TO 60° FOR USE WITH DESIGN TABLES IN SECTION D (SIMPLIFIED DESIGN).
b. USE THE CABLE TENSION FOR SELECTION OF THE CABLE ATTACHMENT TO THE STRUCTURE.
c. LONGITUDINAL CAPACITY IS 2x THE LOAD SHOWN.
d. ANGLE OF CABLE MUST NOT EXCEED 70° FOR CAPACITIES TO BE VALID.

DUCT BRACING KIT 2-D18C-38R-2R:
(06) UPPER BRACKET - SLH-34
(06) UPPER SLOTTED WASHER - SLW-#
(06) LOWER BRACKET - SLH-34
(06) LOWER SLOTTED WASHER - SLW-38
(04) ROD STIFFENER CLAMPS - RS-1
(06) ⅛" CABLE - 10 FT.
(12) ⅛" CABLE CLAMPS

e. UPPER SLOTTED WASHER TO MATCH SELECTED ATTACHMENT.

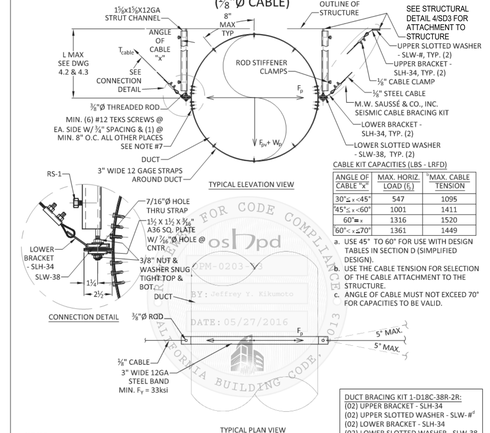
NOTES:
1. CABLE IS 7 X 19 GALVANIZED STEEL CABLE. SEE PG 4.5
2. CABLES TO BE INSTALLED TAUT W/O SLACK. CAUTION - CABLE MUST NOT SUSTAIN ANY DEAD LOAD.
3. SEE PAGE 4.2 & 3 FOR ROD STIFFENER DETAIL & REQUIREMENTS.
4. SEE PAGE 4.4 FOR BRACKET - SLH-34 AND SLOTTED WASHER - SLW-XX DETAIL.
5. SEE PAGE 4.5 FOR CABLE CLAMP DETAIL.
6. TEKS SCREWS MUST BE PER ICC ESR-1976.
7. RDP SHALL CONSIDER THE ECCENTRIC LOAD DISTRIBUTION WHEN DETERMINING THE $F_h$ VALUE USED IN THE DESIGN.
8. USE SHORTEST SMS POSSIBLE WHEN PENETRATING DUCTWORK TO MINIMIZE AIRFLOW NOISE INSIDE THE DUCT (FEMA 414).

REVIEWED FOR CODE COMPLIANCE OSHPD OPM-0203-13 BY: Jeffrey T. Kikumoto DATE: 05/27/2016 CALIFORNIA BUILDING CODE 2013

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Civil Engineer: P.K. Sachdeva
California PE No. C59644
Page No.: 2.38
Date: May 9, 2016



## CABLE BRACING SYSTEM - HUNG ROUND DUCT - TRANSVERSE - 30 PLF MAX (⅛"Ø CABLE)




| CABLE KIT CAPACITIES (LBS - LRFD) | | |
|---|---|---|
| ANGLE OF CABLE "x" | MAX. HORIZ. LOAD ($F_h$) | MAX. CABLE TENSION |
| 30°≤ x <45° | 547 | 1095 |
| 45°≤ x <60° | 1001 | 1411 |
| 60°= x | 1316 | 1520 |
| 60° < x ≤70° | 1361 | 1449 |

a. USE 45° TO 60° FOR USE WITH DESIGN TABLES IN SECTION D (SIMPLIFIED DESIGN).
b. USE THE CABLE TENSION FOR SELECTION OF THE CABLE ATTACHMENT TO THE STRUCTURE.
c. ANGLE OF CABLE MUST NOT EXCEED 70° FOR CAPACITIES TO BE VALID.

DUCT BRACING KIT 1-D18C-38R-2R:
(02) UPPER BRACKET - SLH-34
(02) UPPER SLOTTED WASHER - SLW-#
(02) LOWER BRACKET - SLH-34
(02) LOWER SLOTTED WASHER - SLW-38
(04) ROD STIFFENER CLAMPS - RS-1
(02) ⅛" CABLE - 10 FT.
(04) ⅛" CABLE CLAMPS

d. UPPER SLOTTED WASHER TO MATCH SELECTED ATTACHMENT.

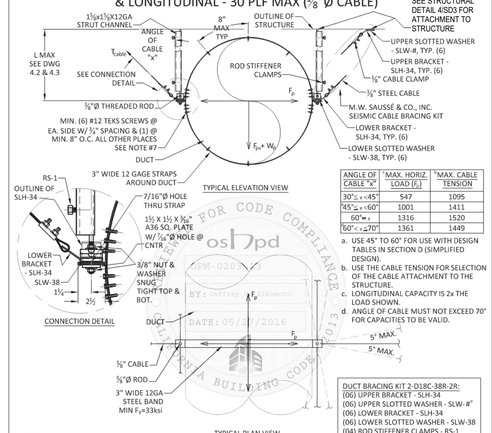
NOTES:
1. CABLE IS 7 X 19 GALVANIZED STEEL CABLE. SEE PAGE 4.5.
2. CABLES TO BE INSTALLED TAUT W/O SLACK. CAUTION - CABLE MUST NOT SUSTAIN ANY DEAD LOAD.
3. SEE PAGE 4.2 & 3 FOR ROD STIFFENER DETAIL & REQUIREMENTS.
4. SEE PAGE 4.4 FOR BRACKET - SLH-34 AND SLOTTED WASHER - SLW-XX DETAIL.
5. SEE PAGE 4.5 FOR CABLE CLAMP DETAIL.
6. TEKS SCREWS MUST BE PER ICC ESR-1976.
7. USE SHORTEST SMS POSSIBLE WHEN PENETRATING DUCTWORK TO MINIMIZE AIRFLOW NOISE INSIDE THE DUCT (FEMA 414).

REVIEWED FOR CODE COMPLIANCE OSHPD OPM-0203-13 BY: Jeffrey T. Kikumoto DATE: 05/27/2016 CALIFORNIA BUILDING CODE 2013

Vibrex vibration & seismic control systems
M.W. Saussé & Co., Inc.
28744 Witherspoon Parkway | Valencia, CA 91355
Ph: (661) 257-3311 | Fax: (661) 257-6050
Civil Engineer: P.K. Sachdeva
California PE No. C59644
Page No.: 2.49
Date: May 9, 2016



## CABLE BRACING SYSTEM - HUNG ROUND DUCT - TRANSVERSE & LONGITUDINAL - 30 PLF MAX (⅛"Ø CABLE)




| CABLE KIT CAPACITIES (LBS - LRFD) | | |
|---|---|---|
| ANGLE OF CABLE "x" | MAX. HORIZ. LOAD ($F_h$) | MAX. CABLE TENSION |
| 30°≤ x <45° | 547 | 1095 |
| 45°≤ x <60° | 1001 | 1411 |
| 60°= x | 1316 | 1520 |
| 60° < x ≤70° | 1361 | 1449 |

a. USE 45° TO 60° FOR USE WITH DESIGN TABLES IN SECTION D (SIMPLIFIED DESIGN).
b. USE THE CABLE TENSION FOR SELECTION OF THE CABLE ATTACHMENT TO THE STRUCTURE.
c. LONGITUDINAL CAPACITY IS 2x THE LOAD SHOWN.
d. ANGLE OF CABLE MUST NOT EXCEED 70° FOR CAPACITIES TO BE VALID.

DUCT BRACING KIT 2-D18C-38R-2R:
(06) UPPER BRACKET - SLH-34
(06) UPPER SLOTTED WASHER - SLW-#
(06) LOWER BRACKET - SLH-34
(06) LOWER SLOTTED WASHER - SLW-38
(04) ROD STIFFENER CLAMPS - RS-1
(06) ⅛" CABLE - 10 FT.
(12) ⅛" CABLE CLAMPS

e. UPPER SLOTTED WASHER TO MATCH SELECTED ATTACHMENT.

NOTES:
1. CABLE IS 7 X 19 GALVANIZED STEEL CABLE. SEE PAGE 4.5.
2. CABLES TO BE INSTALLED TAUT W/O SLACK. CAUTION - CABLE MUST NOT SUSTAIN ANY DEAD LOAD.
3. SEE PAGE 4.2 & 3 FOR ROD STIFFENER DETAIL & REQUIREMENTS.
4. SEE PAGE 4.4 FOR BRACKET - SLH-34 AND SLOTTED WASHER - SLW-XX DETAIL.
5. SEE PAGE 4.5 FOR CABLE CLAMP DETAIL.
6. TEKS SCREWS MUST BE PER ICC ESR-1976.
7. USE SHORTEST SMS POSSIBLE WHEN PENETRATING DUCTWORK TO MINIMIZE AIRFLOW NOISE INSIDE THE DUCT (FEMA 414).

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Civil Engineer: P.K. Sachdeva
California PE No. C59644
Page No.: 2.50
Date: May 9, 2016



## RS-1 - ROD STIFFENER DETAILS & REQUIREMENTS

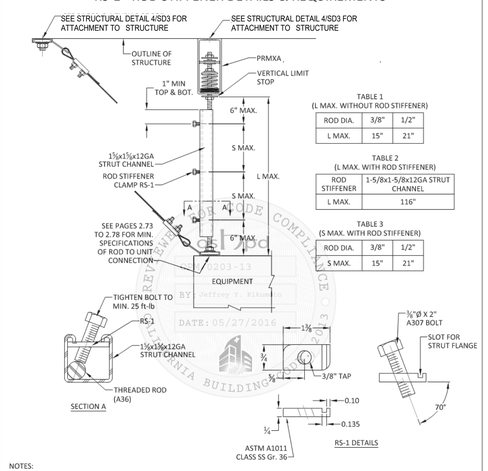



TABLE 1 (L MAX. WITHOUT ROD STIFFENER)

| ROD DIA. | 3/8" | 1/2" |
|---|---|---|
| L MAX. | 15" | 21" |

TABLE 2 (L MAX. WITH ROD STIFFENER)

| ROD STIFFENER | 1-5/8x1-5/8x12GA STRUT CHANNEL |
|---|---|
| L MAX. | 116" |

TABLE 3 (S MAX. WITH ROD STIFFENER)

| ROD DIA. | 3/8" | 1/2" |
|---|---|---|
| S MAX. | 15" | 21" |

NOTES:
1. SEE TABLE 1 FOR MAXIMUM LENGTH OF ⅜" THRU ⅞"Ø RODS WITHOUT ROD STIFFENER.
2. SEE TABLE 2 FOR MAXIMUM LENGTH OF ⅜" THRU ⅞"Ø RODS WITH ROD STIFFENER.
3. SEE TABLE 3 TO DETERMINE NUMBER OF ROD STIFFENER CLIPS REQUIRED.
4. PROVIDE ROD STIFFENING ONLY WHERE SEISMIC BRACKETS ARE ATTACHED TO THE ROD.
5. SEE SECTION 3 FOR STRUCTURAL ATTACHMENTS FOR HANGER BOX AND CABLE BRACING

REVIEWED FOR CODE COMPLIANCE OSHPD OPM-0203-13 BY: Jeffrey T. Kikumoto DATE: 05/27/2016 CALIFORNIA BUILDING CODE 2013

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Page No.: 4.2
Date: May 9, 2016



## RS-1 - ROD STIFFENER DETAILS & REQUIREMENTS

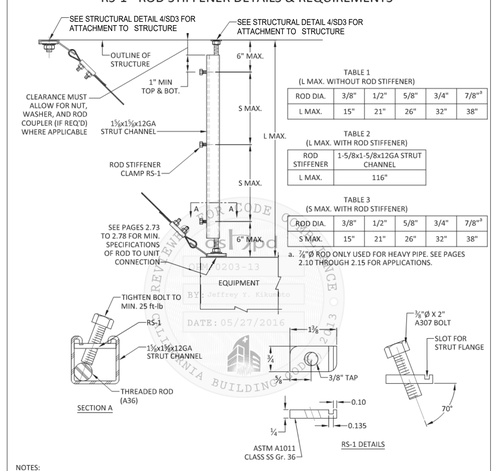



TABLE 1 (L MAX. WITHOUT ROD STIFFENER)

| ROD DIA. | 3/8" | 1/2" | 5/8" | 3/4" | 7/8"[a] |
|---|---|---|---|---|---|
| L MAX. | 15" | 21" | 26" | 32" | 38" |

TABLE 2 (L MAX. WITH ROD STIFFENER)

| ROD STIFFENER | 1-5/8x1-5/8x12GA STRUT CHANNEL |
|---|---|
| L MAX. | 116" |

TABLE 3 (S MAX. WITH ROD STIFFENER)

| ROD DIA. | 3/8" | 1/2" | 5/8" | 3/4" | 7/8"[a] |
|---|---|---|---|---|---|
| S MAX. | 15" | 21" | 26" | 32" | 38" |

a. ⅞"Ø ROD ONLY USED FOR HEAVY PIPE. SEE PAGES 2.10 THROUGH 2.15 FOR APPLICATIONS.

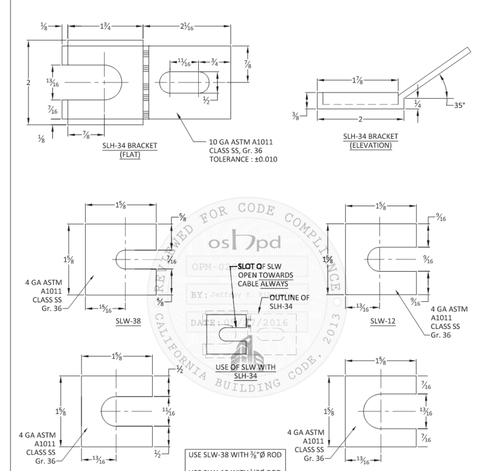
NOTES:
1. SEE TABLE 1 FOR MAXIMUM LENGTH OF ⅜" THRU ⅞"Ø RODS WITHOUT ROD STIFFENER.
2. SEE TABLE 2 FOR MAXIMUM LENGTH OF ⅜" THRU ⅞"Ø RODS WITH ROD STIFFENER.
3. SEE TABLE 3 TO DETERMINE NUMBER OF ROD STIFFENER CLIPS REQUIRED.
4. PROVIDE ROD STIFFENING ONLY WHERE SEISMIC BRACKETS ARE ATTACHED TO THE ROD.
5. SEE SECTION 3 FOR STRUCTURAL ATTACHMENTS FOR HANGER BOX AND CABLE BRACING

REVIEWED FOR CODE COMPLIANCE OSHPD OPM-0203-13 BY: Jeffrey T. Kikumoto DATE: 05/27/2016 CALIFORNIA BUILDING CODE 2013

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California PE No. C59644
Page No.: 4.3
Date: May 9, 2016



## SLH-34 & SLW-38, 12, 58, & 34 DETAILS

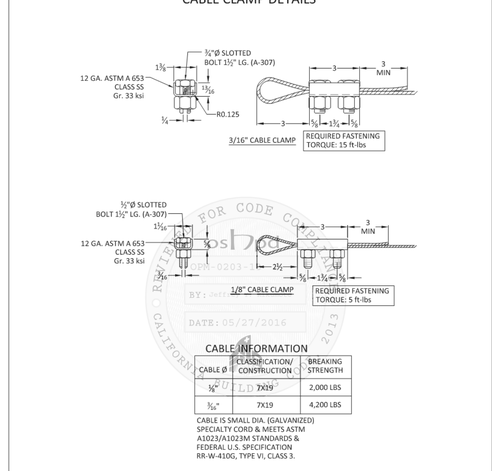



REVIEWED FOR CODE COMPLIANCE OSHPD OPM-0203-13 BY: Jeffrey T. Kikumoto DATE: 05/27/2016 CALIFORNIA BUILDING CODE 2013

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California PE No. C59644
Page No.: 4.4
Date: May 9, 2016



## CABLE CLAMP DETAILS




CABLE INFORMATION

| CABLE Ø | CLASS/DESCRIPTION/ CONSTRUCTION | BREAKING STRENGTH |
|---|---|---|
| ⅛" | 7X19 | 2,000 LBS |
| 3/16" | 7X19 | 4,200 LBS |

CABLE IS SMALL DIA. (GALVANIZED) SPECIALTY CORD & MEETS ASTM A1023/A1023M STANDARDS & FEDERAL U.S. SPECIFICATION RR-W-410G, TYPE VI, CLASS 3.

REVIEWED FOR CODE COMPLIANCE OSHPD OPM-0203-13 BY: Jeffrey T. Kikumoto DATE: 05/27/2016 CALIFORNIA BUILDING CODE 2013

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California PE No. C59644
Page No.: 4.5
Date: May 9, 2016



01 PRE-APPROVED OPM HANGER DETAILS .
NOT TO SCALE

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
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CONSULTANT LEAF Engineers
LEAF ENGINEERS
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Rancho Cucamonga, CA 91730
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WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT
PROJECT ADDRESS: 14171 NEWLAND ST. WESTMINSTER CA 92683
DSA Submittal
DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

C7
C6 IA-2 C8
C5 ADMIN
S-L C3 C4
IA-1
C2 C1 N
KEY PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 03/31/2023
PROJECT NUMBER 220526
REVISIONS

| No. | Description | Date |
|---|---|---|

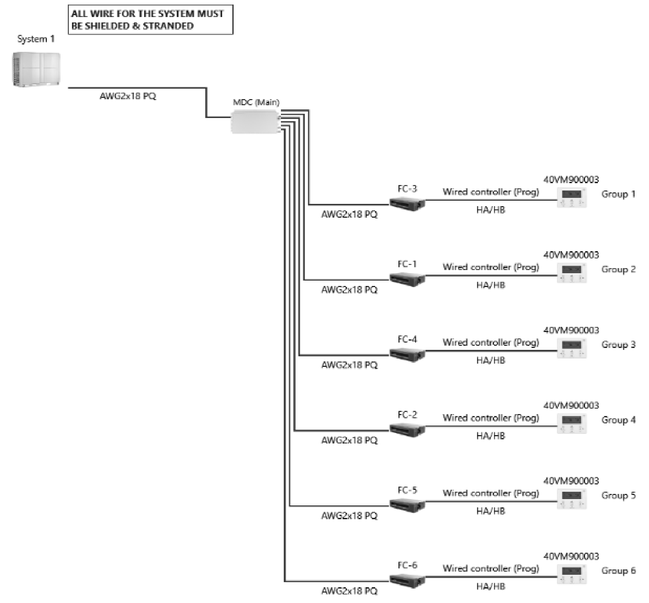
DSA Submittal

MECHANICAL DETAILS

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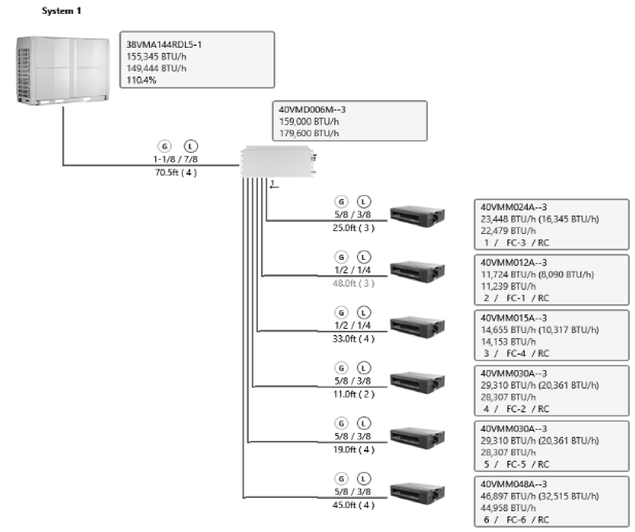
## System Control Wiring




**01** VRF SYSTEM CONTROL WIRING
NOT TO SCALE

## Piping Diagram

Note: Installing Contractor must verify actual piping lengths and update selection file necessary to check for errors and calculate correct additional refrigerant charge.




**02** VRF SYSTEM PIPING SCHEMATIC
NOT TO SCALE

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

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...rbk.com
Anaheim, CA 92805
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CONSULTANT LEAF Engineers

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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

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DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

**MECHANICAL DETAILS - VARIABLE REFRIGERANT SYSTEM**

**M6.03**

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0" 1"

## ELECTRICAL SYMBOL LEGEND

1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS.
2. DASHED ELEECTRICAL EQUIPMENT GENERALLY INDICATES EXISTING EQUIPMENT.
3. LONG-SHORT-SHORT-LONG DASHING GENERALLY INDICATES MATCH LINE OR DEFINES AREA FOR SPECIAL NOTE.

### CIRCUIT RELATED:

- LIGHTING OR POWER CIRCUIT(S). ARROW INDICATES HOME RUN, LONGER TICK(S) INDICATE NEUTRAL WIRE(S), SHORTER STRAIGHT TICK(S) INDICATE PHASE WIRE(S), SLANTED SHORTER TICK(S) INDICATE SWITCH LEG(S), DOT(S) INDICATE GROUNDING CONDUCTOR(S), DASHED WIRING (LONG-SHORT-LONG DASHES) INDICATES WIRING BELOW SLAB OR GRADE, DASHED WIRING (SERIES OF SHORT DASHES) INDICATES EXISTING WIRING, SLASH THROUGH ARROW INDICATES PARTIAL CIRCUIT, "D" ON HOMERUN ARROW INDICATES DEDICATED CIRCUIT: PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR FOR ENTIRE LENGTH OF CIRCUIT FROM PANEL TO OUTLET; COUNT EACH NEUTRAL AS CURRENT-CARRYING AND GROUP A MAXIMUM OF SIX THHN/THWN CONDUCTORS IN A SINGLE RACEWAY; GROUNDING CONDUCTOR IS NOT COUNTED.
  NOTE: HOMERUN INDICATES INSTALLATION OF NEW WIRE AND CONDUIT (#12 WIRE, 3/4"C, UNLESS OTHERWISE NOTED) FROM SOURCE PANELBOARD TO LOAD. HOMERUN INDICATES CONNECTION OF NEW LOADS TO EXISTING CIRCUITS IN LIEU OF PANELBOARD WHERE NOTED ON PLANS.
- (J) JUNCTION BOX
- GROUNDING FIXTURE

### LIGHTING:

- LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, CROSS HATCHING INDICATES FIXTURE ON EMERGENCY SYSTEM, FOR SOLID CIRCLE WITHIN FIXTURE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL
- STRIP TYPE LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE ATTACHED TO FIXTURE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL
- LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL
- DESIGNATES FIXTURE ON EMERGENCY POWER. RE: LIGHTING PLAN NOTES AND FIXTURE SCHEDULE NOTES FOR ADDITIONAL INFORMATION
- WALL OR BRACKET MOUNTED FIXTURE OR DEVICE
- EXIT LIGHT FIXTURE. LETTER INDICATES TYPE, NUMBER INDICATES CIRCUIT, NUMBER AND LOCATION OF SHADED TRIANGLE SECTIONS INDICATE NUMBER OF EXIT SIGN FACES AND DIRECTION OF EACH FACE. PROVIDE CHEVRON DIRECTIONAL INDICATORS AS SHOWN ON DRAWINGS

### CONTROL:

- \$ SWITCH. SMALL LETTER INDICATES FIXTURES CONTROLLED, "P" INDICATES PILOT LIGHT, "WP" INDICATES WEATHERPROOF, "K" INDICATES KEY POERATED, "MO" INDICATES SPDT MOMENTARY CONTACT, "2" INDICATES DPDT, "3" INDICATES 3-WAY, "4" INDICATES 4-WAY, "M" INDICATES MANUAL MOTOR STARTER, CIRCUIT DESIGNATION NEXT TO SWITCH INDICATES BRANCH CIRCUIT NUMBER
- \$D WALL BOX DIMMER SWITCH. "MARK" INDICATES WATTAGE IF OTHER THAN 600, "3D" INDICATES 3-WAY DIMMER
- \$\$ MULTI-LEVEL SWITCH. CIRCUIT DESIGNATION NEXT TO SWITCH INDICATES BRANCH CIRCUIT NUMBER
- \$T DIGITAL TIME SWITCH
- (PC) PHOTOELECTRIC CONTROL
- EMERGENCY POWER OFF (EPO) PUSHBUTTON
- PUSH BUTTON
- \$OC WALL MOUNT OCCUPANCY SENSOR
- \$OC/D WALL MOUNT OCCUPANCY SENSOR WITH DIMMING CONTROLS
- DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR
- (R) CEILING MOUNTED RESTROOM OCCUPANCY SENSOR
- (C) CEILING MOUNTED CORRIDOR OCCUPANCY SENSOR
- (HB) CEILING MOUNTED HIGH CEILING OCCUPANCY SENSOR

### POWER OUTLETS:

- 20A-125V DUPLEX RECEPTACLE
- 20A-125V GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE. "WP" INDICATES WEATHER PROOF DEVICE
- 20A-125V DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP. REFER TO ARCHITECT FOR EXACT HEIGHT ABOVE COUNTER
- C: 20A-125V CONTROLLED DUPLEX RECEPTACLE
- 20A-125V ISOLATED GROUND TYPE DUPLEX RECEPTACLE
- CH: 20A-125V DUPLEX TAMPER RESISTANT RECEPTACLE WITH (2) USB CHARGING PORTS
- 20A-125V FOURPLEX RECEPTACLE. SAME SYMBOLOGY AS DUPLEX RECEPTACLE
- SPECIAL PURPOSE SINGLE POWER RECEPTACLE. RATED AS INDICATED (IF NO RATING INDICATED, RECEPTACLE RATING SHALL MATCH BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE AND SHALL MEET REQUIREMENTS OF EQUIPMENT BEING CONNECTED), "C" INDICATES CLOCK OUTLET
- 20A-125V FLUSH FLOOR DUPLEX RECEPTACLE. 20A WHEN INDICATED OR IF BRANCH CIRCUIT SERVES ONLY SINGLE DUPLEX. PROVIDE CARPED FLANGE WHERE APPLICABLE
- LC1-X CIRCUIT DESIGNATION NEXT TO RECEPTACLE DEVICES INDICATES BRANCH CIRCUIT NUMBER. SEE PANEL SCHEDULES FOR INFORMATION.

### TELEPHONE/DATA:

- FLUSH FLOOR TELEPHONE OUTLET WITH CARPET FLANGE WHERE APPLICABLE
- WALL COMMUNICATIONS OR DATA OUTLET. REFER TO 'TS' SERIES SHEETS FOR EXACT BOX / CONDUIT REQUIREMENTS
- FLUSH FLOOR COMMUNICATIONS OR DATA OUTLET. REFER TO 'TS' SERIES SHEETS FOR EXACT BOX / CONDUIT REQUIREMENTS. PROVIDE CARPET FLANGE WHERE APPLICABLE
- SURFACE FLOOR COMMUNICATIONS OR DATA OUTLET. REFER TO 'TS' SERIES SHEETS FOR EXACT BOX / CONDUIT REQUIREMENTS. PROVIDE CARPET FLANGE WHERE APPLICABLE

### EQUIPMENT:

- +42" A NOTATION INDICATING THE MOUNTING HEIGHT OF A DEVICE AS MEASURED FROM FINISHED FLOOR OR GRADE TO CENTER LINE OF DEVICE
- MOTOR
- DISCONNECT SWITCH. FRAME SIZE/FUSE SIZE/POLES AS INDICATED, "NF" INDICATES NON-FUSIBLE. NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED. PROVIDE FUSED BUSWAY PLUG WHEN SWITCH IS INDICATED ON BUSWAY. ALL DISCONNECT SWITCHES SHALL BE 30/NF/3 UNLESS OTHERWISE NOTED
- SINGLE CIRCUIT BREAKER IN INDIVIDUAL ENCLOSURE
- MAGNETIC MOTOR CONTROLLER. NUMBER INDICATES NEMA SIZE. STARTER NEMA SIZE SHALL BE "NEMA 1" UNLESS OTHERWISE NOTED
- COMBINATION DISCONNECT SWITCH / MOTOR CONTROLLER
- CONTACTOR
- PANELBOARD
- SWITCHBOARD / DP
- T TRANSFORMER
- GROUNDING CONNECTION TO GROUNDING ELECTRODE AS DEFINED IN CEC ARTICLE 250
- B BELL. "WP" INDICATED OUTDOOR RATED

### REMODEL:

- (E) EQUIPMENT WITH "E" ADJACENT IS EXISTING TO REMAIN.
- (R) EXISTING EQUIPMENT WITH "R" ADJACENT IS TO BE COMPLETELY DISCONNECTED AND REMOVED.
- (RR) EXISTING EQUIPMENT WITH "RR" ADJACENT IS TO BE DISCONNECTED, REMOVED AND RELOCATED TO NEW LOCATION AND RECONNECTED AS REQUIRED.
- (ER) EQUIPMENT WITH "ER" ADJACENT IS RELOCATED EQUIPMENT SHOWN IN NEW LOCATION.
- NO TAG INDICATES NEW EQUIPMENT.
- (E) PNL-CKT CIRCUIT DESIGNATION WITH PREFIX "(E)" DENOTES EXISTING CIRCUIT AND EQUIPMENT IS TO REMAIN.

## GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT THE SITE INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND BY SUBMITTING A BID, ACCEPTS THE CONDITIONS UNDER WHICH HE SHALL BE REQUIRED TO PERFORM HIS WORK.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COMPLETE SET OF CONTRACT DOCUMENTS AND ADDENDA (DRAWINGS AND SPECIFICATIONS.) HE SHALL CHECK THE CONTRACT DOCUMENTS OF THE OTHER TRADES AND DETERMINE HIS RESPONSIBILITIES. FAILURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM COMPLETING ALL RESPONSIBLE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SECURE AND PAY FOR ALL PERMITS, FEES, CHARGES, AND INCIDENTAL COSTS NECESSARY FOR EXECUTION AND COMPLETION OF ELECTRICAL WORK, INCLUDING ALL CHARGES BY STATE, COUNTY AND LOCAL GOVERNMENTAL AGENCIES.
4. ALL ELECTRICAL WORK REFERENCED HEREIN SHALL BE COORDINATED WITH OTHER TRADES AND SITE CONDITIONS. ANY COSTS TO INSTALL WORK TO ACCOMPLISH SAID COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE CONTRACT DOCUMENTS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED PRIOR TO BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
5. PROVIDE TEMPORARY POWER FACILITIES AND CONNECTIONS FOR ALL FEEDERS, BRANCH CIRCUITS OR SIGNAL AND COMMUNICATIONS SYSTEMS BEING DISCONNECTED IN ORDER TO MAINTAIN SYSTEMS IN OPERATION.
6. ALL INTERRUPTION OF ELECTRICAL POWER SHALL BE KEPT TO A MINIMUM. HOWEVER WHEN AN INTERRUPTION IS NECESSARY, THE SHUTDOWN MUST BE COORDINATED WITH THE OWNER AND ENGINEER 14 DAYS PRIOR TO THE OUTAGE AND OVERTIME PAY SHALL BE INCLUDED IN THE CONTRACTOR'S BID. WORK IN EXISTING SWITCHBOARDS OR PANEL BOARDS SHALL BE COORDINATED WITH THE OWNER PRIOR TO REMOVING ACCESS PANELS OR DOORS.
7. AFTER ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS HAVE BEEN FULLY COMPLETED. REPRESENTATIVES OF THE OWNERS WILL INSPECT THE WORK. THE CONTRACTOR SHALL PROVIDE COMPETENT PERSONNEL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCETANCE FROM EACH REPRESENTATIVE.
8. FURNISH A ONE YEAR WRITTEN GUARANTEE OF MATERIALS AND WORKMANSHIP FROM THE DATE OF PUNCH LIST COMPLETION.
9. ALL FINAL CONNECTIONS TO OWNER FURNISHED EQUIPMENT SHALL BE MADE BY THE CONTRACTOR.
10. EXACT METHOD AND LOCATION OF CONDUIT PENETRATION AND OPENINGS IN CONCRETE OR MASONARY WALLS, GRADEBEAMS, FLOORS OR STRUCTURAL STEEL MEMBER SHALL BE AS DIRECTED BY THE STRUCTURAL ENGINEER. PERFORM CORING, SAWCUTTING, PATCHING, AND REFINISHING OF WALLS AND SURFACES WHEREVER IT IS NECESSARY TO PENETRATE. OPENINGS SHALL BE SEALED IN AN APPROVED METHOD TO MEET THE FIRE RATING OF THE PARTICULAR WALL. FLOOR OR CEILING EXACT METHOD AND LOCATION OF CONDUIT PENETRATIONS AND OPENINGS IN CONCRETE WALLS OR FLOORS SHALL BE UL APPROVED.
11. FINAL CONNECTIONS TO VIBRATING EQUIPMENT AND AT SEISMIC SEPARATIONS SHALL BE FLEXIBLE STEEL CONDUIT IN DRY INTERIOR LOCATIONS, AND LIQUID-TIGHT FLEXIBLE STEEL CONDUIT IN AREAS EXPOSED TO WEATHER, DAMP LOCATIONS, CONNECTIONS TO TRANSFORMER ENCLOSURES, AND FINAL CONNECTIONS TO MOTORS.
12. EQUIPMENT OUTLETS, LIGHTING FIXTURES, CONDUIT, WIRE AND CONNECTION METHODS IN HVAC AIR-PLENUMS SHALL BE APPROVED FOR USE IN PLENUMS AND SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE.
13. ROUTE EXPOSED CONDUIT AND CONDUIT ABOVE ACCESSIBLE CEILING SPACES PARALLEL AND PERPENDICULAR TO WALLS AND ADJACENT PIPING, ARRANGE CONDUIT TO MAINTAIN HEADROOM AND TO PRESENT A NEAT APPEARANCE.
14. CONDUIT SHALL NOT BE INSTALLED IN ANY FLOOR SLAB. CONDUIT SHALL BE INSTALLED CONCEALED IN THE CEILING SPACE, CONCEALED WALLS, OR 24" MINIMUM BELOW SLAB ON GRADE UNLESS NOTED OTHERWISE.
15. LOCATE ELECTRICAL EQUIPMENT AND BOXES IN ACCESSIBLE CEILING SPACE OR PROVIDE AN ACCESS PANEL FOR INACCESSIBLE CEILING SYSTEMS. ACCESS DOORS SHALL BE A MINIMUM DIMENSION OF 24" x 24" ACCESS DOOR LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.
16. COORDINATE REQUIRED ACCESS DOORS IN NON-ACCESSIBLE CEILING TO SUIT FIELD CONDITIONS. THE EXACT SIZES AND PHYSICAL LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL BE PROVIDED IN OTHER SECTIONS OF THE SPECIFICATIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.
17. WHENEVER A DISCREPANCY OF ANY SYSTEM AND/OR EQUIPMENT ARISES ON THE CONTRACT DOCUMENTS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQUIRED BY THE STRICTEST CONDITIONS NOTED ON THE DRAWINGS OR SPECIFICATIONS TO ENSURE COMPLETE AND OPERABLE SYSTEMS AS REQUIRED BY THE OWNER AND ARCHITECT/ENGINEER.
18. STRAIGHT FEEDER BRANCH CIRCUIT AND CONDUIT RUNS SHALL BE PROVIDED WITH SUFFICIENT PULL BOXES OR JUNCTION BOXES TO LIMIT THE MAXIMUM LENGTH OF ANY SINGLE CABLE PULL TO 100 FEET. PULL BOXES SHALL BE SIZED PER CODE OR AS INDICATED ON DRAWINGS.
19. PANEL SCHEDULES SHALL BE REVISED TO REFLECT FINAL ROOM NAMES AND NUMBERS USING OWNER'S ROOM NAMES AND NUMBERS DESIGNATIONS. CONTRACTOR TO PROVIDE FINAL PANEL SCHEDULE TO EEOR AT COMPLETION OF PROJECT.
20. WHERE OUTLETS OCCUR AT TACKABLE WALL PANELS OR OTHER WALL FINISHES. PROVIDE EXTENSION RINGS AS REQUIRED SO THAT NO SPACE WILL EXIST BETWEEN DEVICE PLATE AND BACKBOX PER CALIFORNIA ELECTRICAL CODE 314.20 SEE ARCHITECTURAL ELEVATIONS FOR WALL FINISHES AND LOCATIONS.
21. COORDINATE LOCATIONS OF ALL SEISMIC SEPARATIONS.
22. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF ALL LOW VOLTAGE / TECHNOLOGY SYSTEMS SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHEN AVAILABLE. CABLING CONTRACTOR SHALL COORDINATE ALL 120V POWER REQUIREMENTS AND LOCATIONS WITH ELECTRICAL CONTRACTOR FOR ALL EQUIPMENT.
23. SYSTEM WIRING AND EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH GOOD ENGINEERING PRACTICES AS ESTABLISHED BY THE EIA AND THE CEC.
24. ALL AC POWER CABLES ARE TO BE INSTALLED WITH A MINIMUM OF 12 INCHES OF SEPARATION FROM TECHNOLOGY LOW VOLTAGE CABLES, INTERCOM, FIRE ALARM, SECURITY CABLES IN ANY PARALLEL OPEN WIRE RUN.
25. CONTRACTOR SHALL PROVIDE AND INSTALL ALL SLEEVES REQUIRED TO INSTALL COMMUNICATION CABLING THROUGH RATED WALLS. ALL TECHNOLOGY SYSTEM CONDUIT SLEEVES SHALL HAVE PROTECTIVE BUSHING ON BOTH ENDS, BE DEDICATED FOR TECHNOLOGY SYSTEMS ONLY AND SHALL NOT SHARE WITH OTHER BUILDING TRADES.
26. CONTRACTOR SHALL MAINTAIN WALL RATING WITH PROPER FIRE BLOCKING METHODS.
27. ALL CONDUCTORS SHALL BE UL LISTED, COPPER #12 MINIMUM SIZE, TYPE THHN/THWN THERMOPLASTIC, 600 VOLT, 75 DEGREES CELSIUS WET AND 90 DEGREES CELSIUS DRY, UNLESS NOTED OTHERWISE.
28. ALL CABLING SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH MAXIMUM 40% CABLE FILL. MINIMUM CONDUIT SIZE SHALL BE 3/4" INTERIOR & 1" EXTERIOR.
29. ALL CONDUIT STUB OUTS AND SLEEVES SHALL HAVE PROTECTIVE BUSHINGS TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED.

## DRAWING INDEX


| SHEET | DESCRIPTION |
|---|---|
| E0.00 | ELECTRICAL SYMBOLS, NOTES, AND ABBREVIATIONS |
| E0.01 | ELECTRICAL TITLE 24 FORMS |
| E0.02 | ELECTRICAL TITLE 24 FORMS |
| E1.01 | ELECTRICAL SITE PLAN |
| ED2.01 | DEMO ELECTRICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| ED2.02 | DEMO ELECTRICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| ED2.03 | DEMO ELECTRICAL BUILDING FLOOR PLANS C2, C4 & C6 |
| ED3.01 | DEMO LIGHTING PLAN BLDG C7, C8, S-L & ADMIN |
| ED3.02 | DEMO LIGHTING PLAN BLDG C1, C3, C5, IA-1 & IA-2 |
| ED3.03 | DEMO LIGHTING PLAN BLDG C2, C4 & C6 |
| E2.01 | ELECTRICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| E2.02 | ELECTRICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| E2.03 | ELECTRICAL BUILDING FLOOR PLANS C2, C4 & C6 |
| E3.01 | ELECTRICAL BUILDING LIGHTING PLANS C7, C8, S-L & ADMIN |
| E3.02 | ELECTRICAL BUILDING LIGHTING PLANS BLDG C1, C3, C5, IA-1 & IA-2 |
| E3.03 | ELECTRICAL BUILDING LIGHTING PLAN BLDG C2, C4 & C6 |
| E4.01 | ELECTRICAL BUILDING ROOF PLANS C7, C8, S-L & ADMIN |
| E4.02 | ELECTRICAL BUILDING ROOF PLANS C1, C3, C5, IA-1 & IA-2 |
| E4.03 | ELECTRICAL BUILDING ROOF PLANS C2, C4 & C6 |
| E5.01 | ELECTRICAL SINGLE LINE DIAGRAM |
| E6.01 | ELECTRICAL SCHEDULES |
| E6.02 | ELECTRICAL SCHEDULES |
| E7.01 | ELECTRICAL DETAILS |


## DIAGRAMMATIC NOTE

DRAWINGS ARE DIAGRAMMATIC AND DO NOT INDICATE DETAILED CONDUIT ROUTING OR LENGTHS REQUIRED FOR COMPLETE INSTALLATION. ROUTING OF RACEWAYS SHALL BE AT THE OPTION OF THE CONTRACTOR BUT SHALL BE IN STRICT COMPLIANCE WITH STRUCTURAL REQUIREMENTS, CONTRACT DOCUMENTS AND SPECS UNLESS OTHERWISE NOTED. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES. DO NOT SCALE THE ELECTRICAL DRAWINGS FOR LOCATIONS OF ANY ELECTRICAL, ARCHITECTURAL, STRUCTURAL AND/OR MECHANICAL ITEMS OR FEATURES. REFER TO ARCHITECTURAL AND STRUCTURAL CONTRACT DOCUMENTS FOR FEATURES, REFER TO ARCHITECTURAL AND STRUCTURAL CONTRACT DOCUMENTS FOR DIMENSIONS.

## DEVICE LOCATIONS NOTE

THE LOCATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE COORDINATED WITH THE ARCHITECTURAL ELEVATIONS, DETAILS, OR SECTIONS PRIOR TO INSTALLATION. ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE RECESSED IN WALLS UNLESS OTHERWISE NOTED. OUTLETS NOT INDICATED ON ARCHITECTURAL ELEVATIONS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO ROUGH-IN, UNLESS OTHERWISE NOTED. ELECTRICAL DEVICES SHALL BE MOUNTED PER "ACCESSIBLE DEVICE MOUNTING HEIGHT" DETAIL.

COORDINATE WITH OTHER TRADES AS TO THE EXACT LOCATION OF THEIR RESPECTIVE EQUIPMENT SUPPLY POWER AND MAKE CONNECTION TO MOTORS AND EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AS INDICATED ON THE SINGLE LINE DIAGRAM, ELECTRICAL DRAWINGS, AND DRAWINGS OF OTHER TRADES. REVIEW THE DRAWINGS OF OTHER TRADES FOR CONTROL DIAGRAMS, SIZE AND LOCATION OF EQUIPMENT, DISCONNECT SWITCHES, STARTERS, WIRING, CONTROLS, AND CONDUIT FOR MECHANICAL AND PLUMBING OPERATIONS.. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING MANUFACTURER'S SHOP DRAWINGS PRIOR TO ROUGHING IN ALL CONDUIT TO THIS EQUIPMENT.

## UTILITY PENETRATIONS NOTE

UTILITY PENETRATIONS OF ANY KIND IN FIRE AND SMOKE PARTITIONS AND CEILING ASSEMBLIES SHALL BE FIRESTOPPED AND SEALED WITH AN APPROVED UL LISTED SYSTEM OR MATERIAL.

STEEL ELECTRICAL OUTLET BOXES WHICH DO NOT EXCEED 16 SQUARE INCHES IN AREA, NEED NOT BE PROTECTED IN ONE HOUR OR TWO HOUR FIRE RATED WALLS, PARTITIONS, CEILING, OR AREA SEPARATION UNLESS THEY:

1. OCCUR ON OPPOSITE SIDES OF THE WALL WITHIN 24 INCH HORIZONTAL DISTANCE OF ONE ANOTHER IN THIS CASE , ONLY ONE OUTLET BOX NEEDS TO BE PROTECTED BY AN APPROVED FIRESTOP MATERIAL OR DETAIL TO CORRECT THIS CONDITION.
2. OCCUR IN COMBINATION WITH OUTLET BOXES OF ANY SIZE SUCH THAT THE AGGREGATE AREA OF UNPROTECTED OUTLET BOXES EXCEEDS 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF WALL AREA IN THIS CASE, ONLY A SUFFICIENT NUMBER OF OUTLET BOXES NEED TO BE PROTECTED BY AN APPROVED MATERIAL OR DETAIL TO DECREASE THE AGGREGATE AREA OF UNPROTECTED UTILITY BOXES TO LESS THAN 100 SQUARE FEET OF WALL.

STEEL ELECTRICAL OUTLET BOXES WHICH EXCEED 16 SQUARE INCHES IN AREA, AND ALL OTHER STEEL UTILITY OUTLET BOXES REGARDLESS OF SIZE, SHALL BE PROTECTED BY AN APPROVED FIRESTOP MATERIAL AS LISTED OR EQUAL.

FIRESTOPPING MATERIAL:
MPP-1 MOLDABLE PUTTY PADS

3M CONTRACTOR PRODUCTS
MINNEAPOLIS,
MN 3M TEST REPORT NO. 1167
DATED AUGUST 21, 1987

FLAMESAFE FSP 1077 FIRESTOP PADS
INTERNATIONAL PROTECTIVE COATINGS
OAKHURST, NJ

FSP FIRESTOP PUTTY PADS
HEVI-DUTY NELSON PRODUCTS
TULSA, OK

STEEL UTILITY BOXES WHICH EXCEED 100 SQUARE INCHES IN AREA SHALL BE PROTECTED BY ENCASEMENT.

UTILITY AND ELECTRICAL OUTLETS OR BOXES SHALL BE SECURELY FASTENED TO THE STUD FRAMING OF THE WALL, PARTITION OR CEILING ASSEMBLY. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT SO THAT THE CLEARANCE BETWEEN THE BOX AND THE GYPSUM BOARD DOES NOT EXCEED 1/8 INCH IN SMOKE WALLS OR PARTITIONS, THE 1/8 INCH CLEARANCE SHALL BE FILLED WITH AN APPROVED FIRE-RATED SEALANT.

## APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2020 *
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR *
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

## EQUIPMENT ANCHORAGE NOTES

MEP COMPONENT 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 2022CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 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 ELECTRIC, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT 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 FEET OR 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:

1. 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.
2. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUND 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 2022 CBC, SECTION 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 PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO START OF AND DURING THE HANGING AND BRACING OF DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

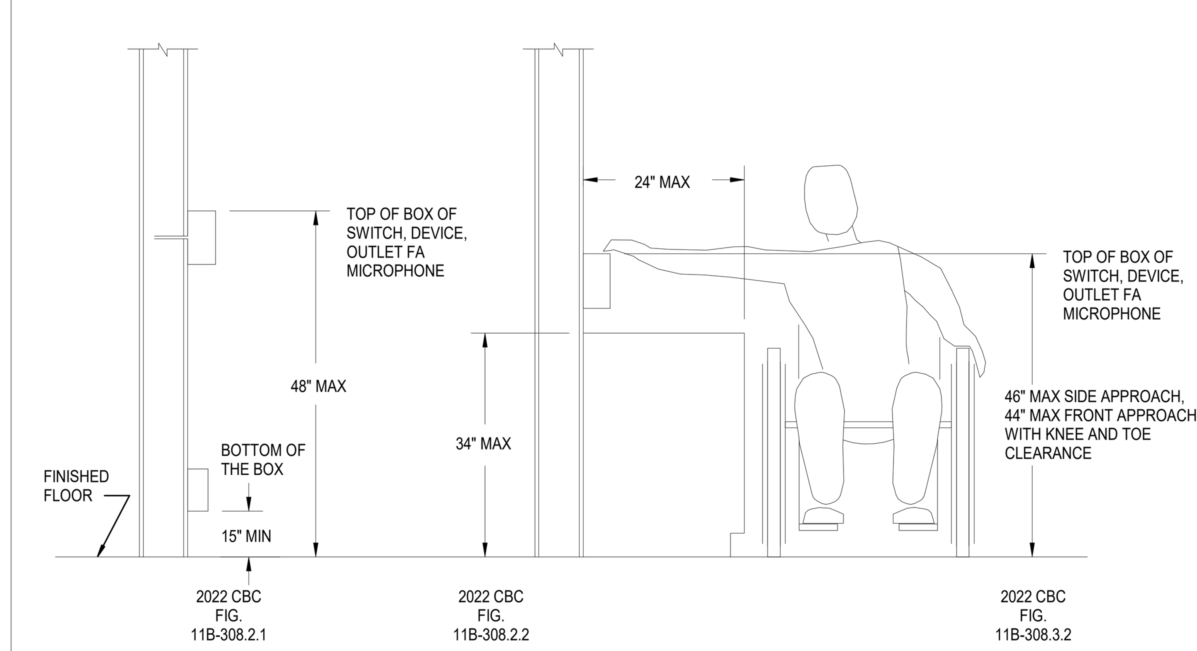
MP ☐ MD ☐ PP ☐ E ☒ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES & DETAILS.

MP ☐ MD ☐ PP ☐ E ☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #____________.

## STRUCTURAL NOTE

UNLESS SPECIFICALLY SHOWN ON THESE PLANS, STRUCTURAL MEMBERS SHALL NOT BE CUT, DRILLED, OR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.

## MOUNTING OVER OBSTRUCTION DETAIL




NOTE:

1. THIS DETAIL APPLIES TO MOUNTING OF ANY MECHANICAL AND ELECTRICAL DEVICE WHICH CONTAINS AN OPERABLE PART THAT IS ADJUSTABLE BY THE OCCUPANT. THIS DOES NOT APPLY TO SENSORS OR CONTROLS THAT ARE ONLY ADJUSTABLE THROUGH THE BUILDING AUTOMATION SYSTEM (IE: TEMPERATURE AND HUMIDITY SENSORS).

## UL LISTINGS NOTE

ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY UNDERWRITER'S LABORATIES (UL) AND BEAR THEIR LABEL OR LISTED AND CERTIFIED BY A NATIONALLY RECOGNIZED TESTING AUTHORITY.

ALL EQUIPMENT/DEVICES INSTALLED RECESSED IN FIRE RATED CEILINGS OR WALLS SHALL BE ENCLOSED WITH AN APPROVED UL LISTED ENCLOSURE CARRYING THE SAME FIRE RATING AS THE CEILING OR WALL.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

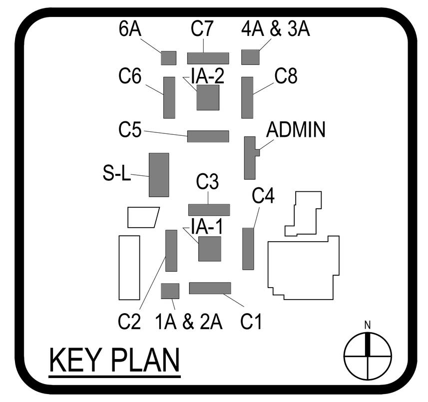

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST
WESTMINSTER CA 92683

**DSA Submittal**

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872




KEY PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23576
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|

DSA Submittal

**ELECTRICAL SYMBOLS, NOTES, AND ABBREVIATIONS**

**E0.00**

E0.01 - ELECTRICAL TITLE 24 FORMS

STATE OF CALIFORNIA
## Indoor Lighting
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 for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.* | | | |
| **Project Name:** | Warner MS - Modernization | **Report Page:** | **(Page 1 of 7)** |
| **Project Address:** | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-27T20:10:51-04:00 |

### A. GENERAL INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| 01 | Project Location (city) | Westminster | 04 | Total Conditioned Floor Area (ft²) | 46,786 |
| 02 | Climate Zone | 6 | 05 | Total Unconditioned Floor Area (ft²) | 0 |
| 03 | Occupancy Types Within Project (select all that apply): | | 06 | # of Stories (Habitable Above Grade) | 1 |

● Classroom ● Office

### B. PROJECT SCOPE

*This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.*

| 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 | N/A | 0 | N/A | 0 |
| ☐ New Lighting System - Parking Garage | N/A | 0 | N/A | 0 |
| ☒ Altered Lighting System | Area Category Method | 3400 | N/A | 0 |
| ☒ Altered Lighting System | Area Category Method | 6136 | N/A | 0 |
| ☒ Altered Lighting System | Area Category Method | 33600 | N/A | 0 |
| ☒ Altered Lighting System | Area Category Method | 3650 | N/A | 0 |
| **Total Area of Work (ft²)** | 46786 | | | |



STATE OF CALIFORNIA
## Indoor Lighting
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | | NRCC-LTI-E |
|---|---|---|---|
| **Project Name:** | Warner MS - Modernization | **Report Page:** | **(Page 2 of 7)** |
| | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-27T20:10:51-04:00 |

### C. COMPLIANCE RESULTS

*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 / 170.2(e)* | Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts) | | | | | | Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts) | | | | Compliance Results |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 01 | 02 | 03 | 04 | 05 | | 06 | 07 | | 08 | 09 |
| | Complete Building 140.6(c)1 (See Table I) | Area Category 140.6(c)2 / 170.2(e)4 (See Table I) | Area Category Additional 140.6(c)2G / 170.2(e)4Av ( + ) (See Table J) | Tailored 140.6(c)3 / 170.2(e)4B ( + ) (See Table K) | **Total Allowed** (Watts) | | Total Designed (Watts) (See Table F) | Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B ( - ) (See Table P) | | **Total Adjusted** (Watts) *Includes Adjustments | **05 must be >= 08 140.6 / 170.2(e)** |
| **Conditioned** | | 24,943.2 | | | 24,943.2 | ≥ | 13,396 | | = | 13396 | COMPLIES |
| **Unconditioned** | | | | | | ≥ | | | = | | |
| **Controls Compliance (See Table H for Details)** | | | | | | | | | | | COMPLIES |
| **Rated Power Reduction Compliance (See Table Q for Details)** | | | | | | | | | | | |

### D. EXCEPTIONAL CONDITIONS

*This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.*

### E. ADDITIONAL REMARKS

*This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.*



STATE OF CALIFORNIA
## Indoor Lighting
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | | NRCC-LTI-E |
|---|---|---|---|
| **Project Name:** | Warner MS - Modernization | **Report Page:** | **(Page 3 of 7)** |
| | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-27T20:10:51-04:00 |

### F. INDOOR LIGHTING FIXTURE SCHEDULE

*This table includes all planned permanent and partable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.*

**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 is Wattage determined | Total Number of Luminaires | Excluded per 140.6(a)3 / 170.2(e)2C | Design Watts | Field Inspector | |
| | | | | | | | | | Pass | Fail |
| FX-A | 2X4 TROFFER | No | NA | 30.3 | Mfr. Spec | 320 | No | 9,696 | ☐ | ☐ |
| FX-E | E6.02 | No | NA | 37 | Mfr. Spec | 100 | No | 3,700 | ☐ | ☐ |
| | | | | | | | **Total Designed Watts: CONDITIONED SPACES** | 13,396 | | |

[1]*FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% 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) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.*

### G. MODULAR LIGHTING SYSTEMS

*This section does not apply to this project.*

### H. INDOOR LIGHTING CONTROLS (Not including PAFs)

*This table includes lighting controls for conditioned and unconditioned spaces.*

**Building Level Controls**

| 01 | 02 | 03 | |
|---|---|---|---|
| | | Field Inspector | |
| | | Pass | Fail |
| Mandatory Demand Response 110.12(c) | Shut-off controls 130.1(c) / 160.5(b)4C | ☐ | ☐ |
| Required >= 4,000W subject to multilevel | See Area/Space Level Controls | | |



STATE OF CALIFORNIA
## Indoor Lighting
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | | NRCC-LTI-E |
|---|---|---|---|
| **Project Name:** | Warner MS - Modernization | **Report Page:** | **(Page 4 of 7)** |
| | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-27T20:10:51-04:00 |

### H. INDOOR LIGHTING CONTROLS (Not including PAFs)

**Area Level Controls**

| 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | |
|---|---|---|---|---|---|---|---|---|---|
| Area Description | Complete Building or Area Category Primary Function Area | Manual Area Controls 130.1(a) / 160.5(b)4A | Multi-Level Controls 130.1(b) / 160.5(b)4B | Shut-Off Controls 130.1(c) // 160.5(b)4C | Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D | Secondary Daylighting 130.1(d) / 160.5(b)4D | Interlocked Systems 140.6(a)1/ 170.2(e)2A | Field Inspector | |
| | | | | | | | | Pass | Fail |
| ADMIN | Office ( >250 square feet) | Readily Accessible | Dimmer | Occupancy Sensor | NA: Not daylit zone | NA: Not daylit zone | No | ☐ | ☐ |
| CLASSROOM | Classroom, Lecture, or Training Vocational | Readily Accessible | Dimmer | Occupancy Sensor | Included | Included | No | ☐ | ☐ |
| LOCKER ROOM | Locker/Dressing Room | Auth. Personnel | Dimmer | Occupancy Sensor | NA: Not daylit zone | NA: Not daylit zone | No | ☐ | ☐ |
| | | | | | 13 | | | | |
| | | | | | Plan Sheet Showing Daylit Zones: | | | | |
| | | | | | 1/E3.01 | | | | |

### I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

*Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates 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 Allowance / Adjustment | |
| | | | | | Area Category | PAF |
| ADMIN | Office ( >250 square feet) | 0.6 | 3,370 | 2,022 | No | No |
| LOCKER ROOM | Locker/Dressing Room | 0.45 | 6,136 | 2,761.2 | No | No |
| CLASSROOM | Classroom, Lecture, or Training Vocational | 0.6 | 33,600 | 20,160 | No | No |
| | **TOTALS:** | | 43,106 | 24,943.2 | See Tables J, or P for detail | |



STATE OF CALIFORNIA
## Indoor Lighting
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | | NRCC-LTI-E |
|---|---|---|---|
| **Project Name:** | Warner MS - Modernization | **Report Page:** | **(Page 5 of 7)** |
| | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-27T20:10:51-04:00 |

### J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

*This section does not apply to this project.*

### K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

*This section does not apply to this project.*

### L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

*This section does not apply to this project.*

### M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

*This section does not apply to this project.*

### N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

*This section does not apply to this project.*

### O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

*This section does not apply to this project.*

### P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

*This section does not apply to this project.*

### Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

*This section does not apply to this project.*



STATE OF CALIFORNIA
## Indoor Lighting
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | | NRCC-LTI-E |
|---|---|---|---|
| **Project Name:** | Warner MS - Modernization | **Report Page:** | **(Page 6 of 7)** |
| | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-27T20:10:51-04:00 |

### R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

*This section does not apply to this project.*

### S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

*This section does not apply to this project.*

### T. DWELLING UNIT LIGHTING

*This section does not apply to this project.*

### U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

| Form/Title |
|---|
| NRCI-LTI-E - Must be submitted for all buildings |

### V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

| Form/Title | Systems/Spaces To Be Field Verified |
|---|---|
| NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls. | ADMIN; CLASSROOM; LOCKER ROOM |
| NRCA-LTI-03-A - Must be submitted for automatic daylight controls. | CLASSROOM |
| NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls. | ADMIN; CLASSROOM; LOCKER ROOM |



STATE OF CALIFORNIA
## Indoor Lighting
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | | NRCC-LTI-E |
|---|---|---|---|
| **Project Address:** | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-27T20:10:51-04:00 |

### DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

**I certify that this Certificate of Compliance documentation is accurate and complete.**

| Documentation Author Name: | Documentation Author Signature: |
|---|---|
| Nicole Oropeza | Nicole Oropeza |
| Company: LEAF Engineers | Signature Date: 3-27-23 |
| Address: 8163 Rochester Ave. | CEA/ HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamonga CA. 91730 | Phone: 909-987-0909 |

### 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: Ronald Dela Cruz | Responsible Designer Signature: |
|---|---|
| Company: LEAF Engineers | Date Signed: 3-27-23 |
| Address: 8163 Rochester Ave. | License: E23576 |
| City/State/Zip: Rancho Cucamonga CA. 91730 | Phone: 909-987-0909 |



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DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com


# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

6A C7 4A & 3A C6 1A-2 C8 C5 ADMIN S-L C3 C4 1A-1 C2 1A & 2A C1

KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER RONALD C. DELA CRUZ No. E 23576 Exp. 09-30-2024 ELECTRICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

ELECTRICAL TITLE 24 FORMS

E0.01

STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | | NRCC-ELC-E |
|---|---|---|---|
| *This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.6 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii* | | | |
| **Project Name:** | Warner MS - Modernization | **Report Page:** | **(Page 1 of 4)** |
| **Project Address:** | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-28T16:09:14-04:00 |

**A. GENERAL INFORMATION**

| | | | | | |
|---|---|---|---|---|---|
| 01 | Project Location (city) | Westminster | 02 | Climate Zone | 6 |
| | | | 03 | Occupancy Types Within Project: | ClassroomOffice |

**B. PROJECT SCOPE**

*This table includes electrical systems that are within the scope of the permit application.*

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Electrical Service Designation/ Description | Scope of Work[1] | Rating[2] (kVA) | Utility Provided Metering System Exception to 130.5(a)/ 160.6(a)[3] | System subject to CA Elec Code Article 517 Exception to 130.5(a)and (b) | Demand Response Controls | Provides power to dwelling units/common living areas only in multifamily occupancy |
| E-101 "(E) Main Service Switchboard" & Meter Location | Add/Alt to feeders and branch circuits only | --- | ☐ | ☐ | Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/ 160.3, 130.1/ 160.5, and 130.3/ 160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required. | ☐ |

[1] *FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.*
[2] *If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.*
[3] *Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.*

Registration Number:
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101

Documentation Software: Energy Code Ace
Compliance ID: 97401-0323-0002
Report Generated: 2023-03-28 13:09:16

STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | | NRCC-ELC-E |
|---|---|---|---|
| **Project Name:** | Warner MS - Modernization | **Report Page:** | **(Page 2 of 4)** |
| | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-28T16:09:14-04:00 |

**C. COMPLIANCE RESULTS**

*Results in this table are automatically calculated from data input and calculations in Tables F through J. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.*

| 01 | | 02 | | 03 | | 04 | 05 | 06 |
|---|---|---|---|---|---|---|---|---|
| Service Electrical Metering 130.5(a)/ 160.6(a) (See Table F) | AND | Separation for Monitoring 130.5(b)/ 160.6(b) (See Table G) | AND | Voltage Drop 130.5(c)/ 160.6(c) (See Table H) | AND | Controlled Receptacles 130.5(d)/ 160.6(d) (See Table I) | Electric Ready 160.9 (See Table J) | **Compliance Results** |
| | AND | | AND | Yes | AND | | | COMPLIES |

**D. EXCEPTIONAL CONDITIONS**

*This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.*

**E. ADDITIONAL REMARKS**

*This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.*

**H. VOLTAGE DROP**

*This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/ 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Piii/ 180.2(b)4Biic.*

| 01 | 02 | | | | 03 | 04 | 05 | |
|---|---|---|---|---|---|---|---|---|
| Electrical Service Designation/Description | Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method | | | | Location of Voltage Drop Calculations[1] | Sheet Number for Voltage Drop Calculations in Construction Documents | Field Inspector | |
| | | | | | | | Pass | Fail |
| E-101 "(E) Main Service Switchboard" & Meter Location | ☒ | Voltage drop less than 5% | ☐ | Permitted by CA Elec Code (Exception to 130.5(c))* | Contractor Responsible | | ☐ | ☐ |

** NOTES: If "Permitted by CA Elec Code *" is selected under Compliance Method above, please indicate where the exception applies in the space provided below.*

[1] *FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".*

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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Schema Version: rev 20220101

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STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | | NRCC-ELC-E |
|---|---|---|---|
| **Project Name:** | Warner MS - Modernization | **Report Page:** | **(Page 3 of 4)** |
| | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-28T16:09:14-04:00 |

**K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION**

| Form/Title |
|---|
| NRCI-ELC-E - Must be submitted for all buildings |

**L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE**

*There are no forms required for this project.*

Registration Number:
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101

Documentation Software: Energy Code Ace
Compliance ID: 97401-0323-0002
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STATE OF CALIFORNIA
## Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

| CERTIFICATE OF COMPLIANCE | | | NRCC-ELC-E |
|---|---|---|---|
| **Project Name:** | Warner MS - Modernization | **Report Page:** | **(Page 4 of 4)** |
| **Project Address:** | 14171 Newland St. Westminster CA. 92683 | **Date Prepared:** | 2023-03-28T16:09:14-04:00 |

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

**I certify that this Certificate of Compliance documentation is accurate and complete.**

| | |
|---|---|
| Documentation Author Name: Nicole Oropeza | Documentation Author Signature: Nicole Oropeza |
| Company: LEAF Engineers | Signature Date: 3-27-23 |
| Address: 8163 Rochester Ave. | CEA/ HERS Certification Identification (if applicable): |
| City/State/Zip: Rancho Cucamonga CA. 91730 | Phone: 909-987-0909 |

**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: Ronald Dela Cruz | Responsible Designer Signature: |
| Company: LEAF Engineers | Date Signed: 3-27-23 |
| Address: 8163 Rochester Ave. | License: E23576 |
| City/State/Zip: Rancho Cucamonga CA. 91730 | Phone: 909-987-0909 |

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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Documentation Software: Energy Code Ace
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APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

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ANAHEIM PBK.com
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CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

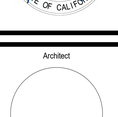
DSA APPL NO.: 121954 DSA FILE NO.: 30-43






KEY PLAN

Consultant




Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

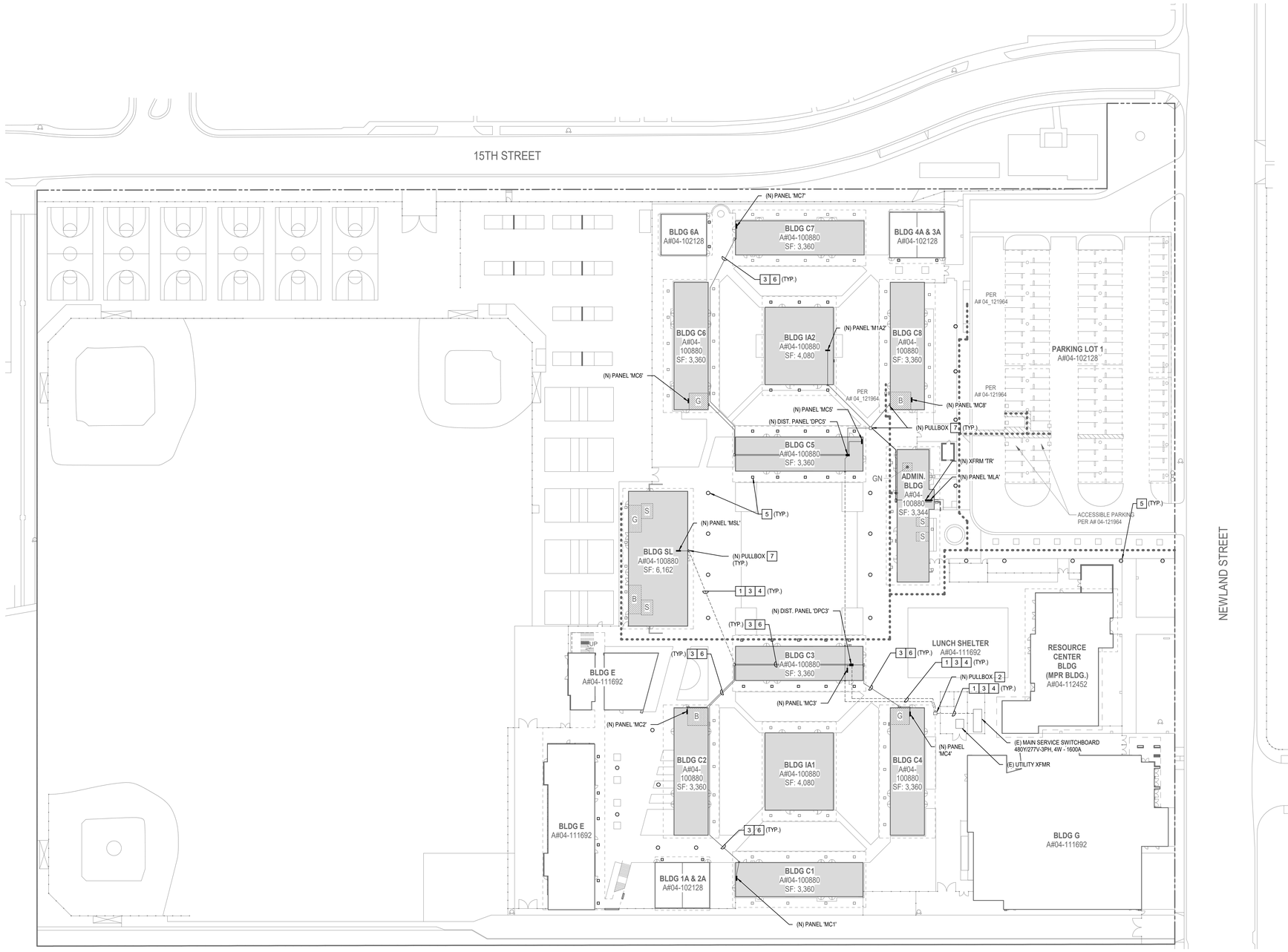
DSA Submittal

# ELECTRICAL TITLE 24 FORMS

E0.02

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**CONDUIT LEGEND**

- UNDERGROUND
- SURFACE

NORTH

## 1 SITE PLAN
1" = 40'-0"

## GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
2. COORDINATE ROUTING FOR ALL UNDERGROUND ELECTRICAL BRANCH CIRCUITS AND FEEDERS WITH OTHER DISCIPLINES PRIOR TO TRENCHING.

## KEY NOTES

1. PROVIDE UNDERGROUND CONDUIT AND WIRING.
2. PROVIDE AND INSTALL IN-GROUND H-20 TRAFFIC RATED PULLBOX . CONTRACTOR TO SIZE PER NEC 314.28(A).
3. SEE SINGLE LINE DIAGRAM FOR WIRE SIZING AND QUANTITY ON SHEET E5.01.
4. SAWCUT, TRENCH AND EXCAVATE AS REQUIRED TO INSTALL CONDUITS AND FEEDERS AS INDICATED. BACKFILL, TAMP AND RESURFACE TO ORIGINAL CONDITION. STUB UP INTO EXTERIOR ABOVE GROUND JUNCTION BOX AND CONNECT LOAD SIDE TO NEW PANELBOARD. REFER TO DETAIL 6/E6.01 FOR FURTHER CONDUIT TRENCHING REQUIREMENTS.
5. EXISTING EXTERIOR LIGHT FIXTURE/S TO REMAIN AND BE PROTECTED IN PLACE. (TYP.)
6. ALL CONDUITS TO NEW PANELS SHALL BE ROUTED IN CEILING SPACE AND ALONG BREEZEWAYS UNLESS NOTED OTHERWISE.
7. PROVIDE SURFACE MOUNTED PULLBOX, NEMA 3R. CONTRACTOR TO SIZE PER NEC 314.28(A).

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DATE: 10/17/2023

PBK

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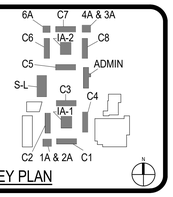
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DE LA CRUZ
No. E 22576
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

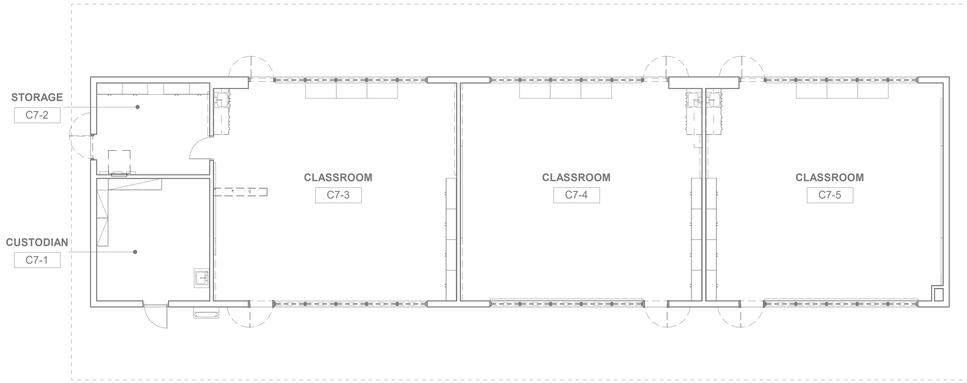
DSA Submittal

ELECTRICAL SITE PLAN

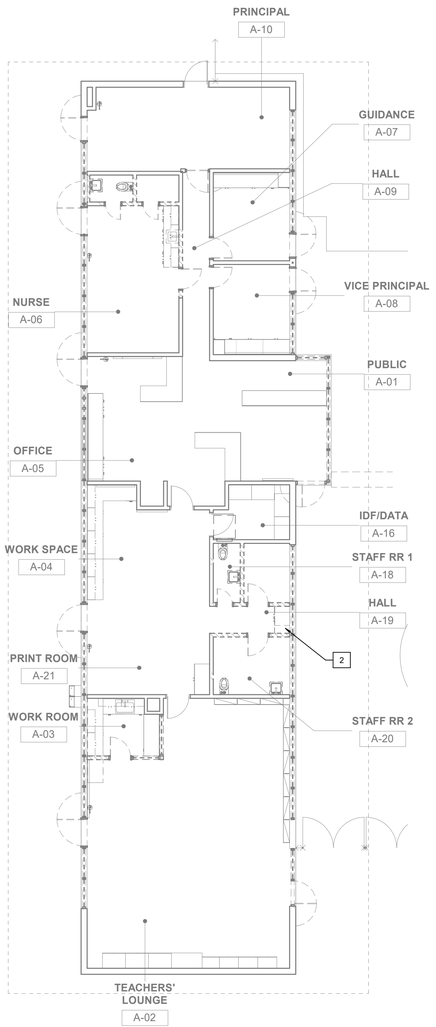
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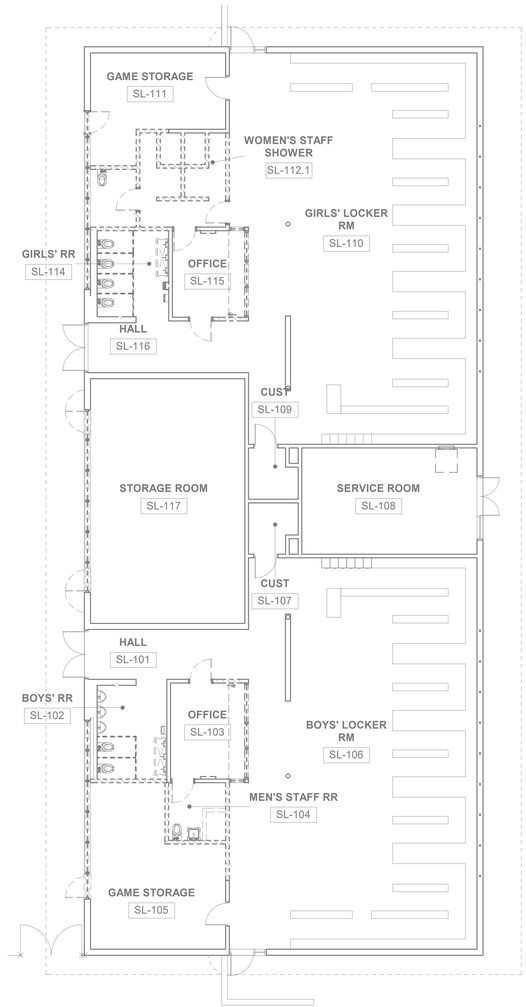
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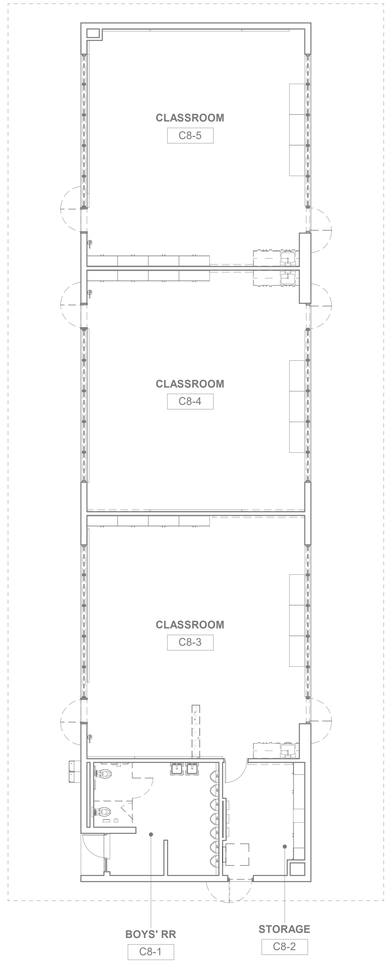

**4** FLOOR PLAN - BLDG C7
1/8" = 1'-0"




**3** FLOOR PLAN - ADMINISTRATION BLDG
1/8" = 1'-0"




**2** FLOOR PLAN - BLDG S-L
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C8
1/8" = 1'-0"

## GENERAL NOTES

1. ELECTRICAL ENGINEERING FOR THIS PROJECT IS BASED ON AS-BUILT DRAWINGS AND A FIELD VISIT OF THE ELECTRICAL SYSTEM. IN CASE OF ANY DISCREPANCIES WITH EXISTING FIELD CONDITIONS, ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT DIFFERENCES AND NOTIFY THE ELECTRICAL ENGINEER FOR POSSIBLE REVISION TO THESE DOCUMENTS.
2. ANY ELECTRICAL AND/OR SIGNAL UTILITY SHUTDOWNS WITHIN THE AREA OF WORK SHALL BE COORDINATED AND SCHEDULED IN ADVANCE WITH THE OWNER'S REPRESENTATIVE.
3. **FOR ALL EXISTING CIRCUITS AND DEVICES THAT ARE TO REMAIN, CONTRACTOR TO INCLUDE IN THEIR BID TO REMOVE AND REPLACE ALL MC CABLES ABOVE CEILING SPACES, INTERCEPT ALL CONDUITS ABOVE THE CEILING, AND PROVIDE NEW HOMERUNS WITH MINIMUM 3/4" EMT AND NEW WIRING THAT MATCHES THE EXISTING, BACK TO PANEL SOURCE.**

## KEY NOTES

1. CONTRACTOR SHALL DEMOLISH EXISTING HEATER AND ALL ASSOCIATED CONDUIT, WIRING AND DEVICES. SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
2. EXISTING WATER HEATER TO BE DEMOLISHED, SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. DISCONNECT AND REMOVE ALL POWER CONNECTIONS, CONDUIT AND WIRING BACK TO SOURCE.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

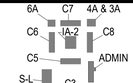
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
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leafengineers.com

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23576
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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| 03/31/2023 | 220526 |

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| | DSA Submittal | |

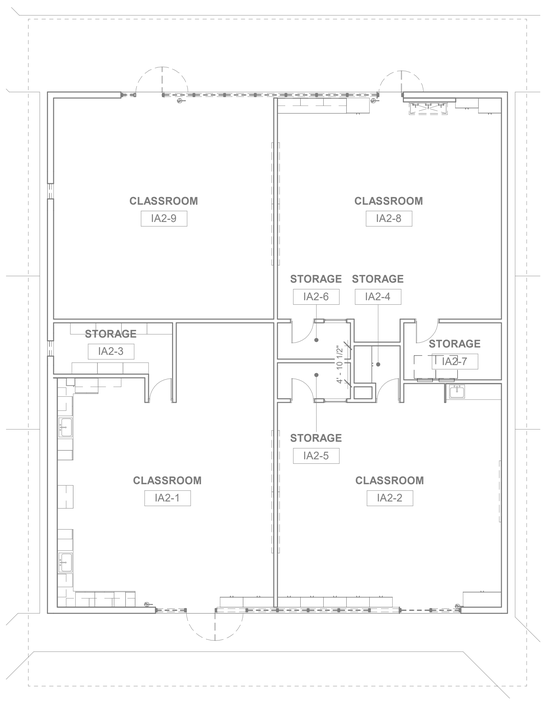
**DEMO ELECTRICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMIN**

**ED2.01**

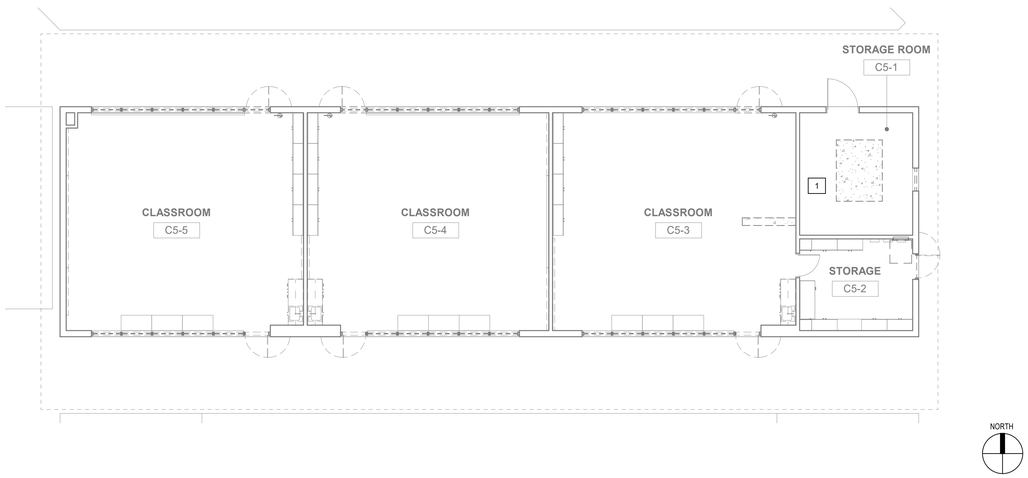
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ED2.02 - DEMO ELECTRICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2

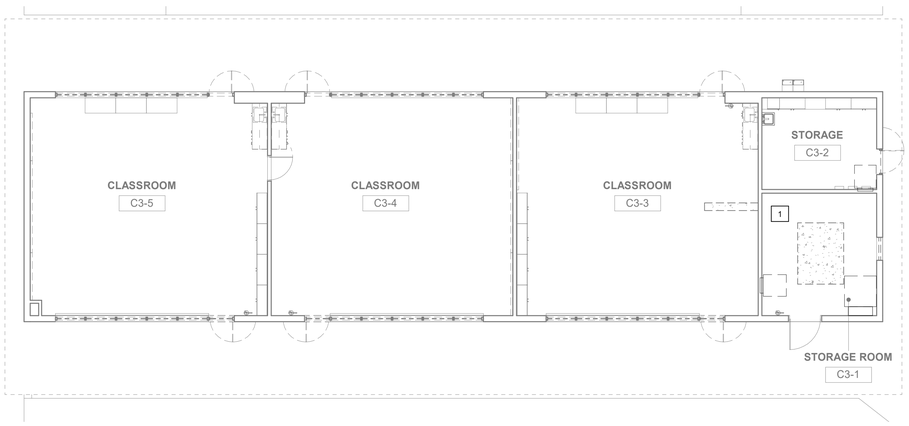
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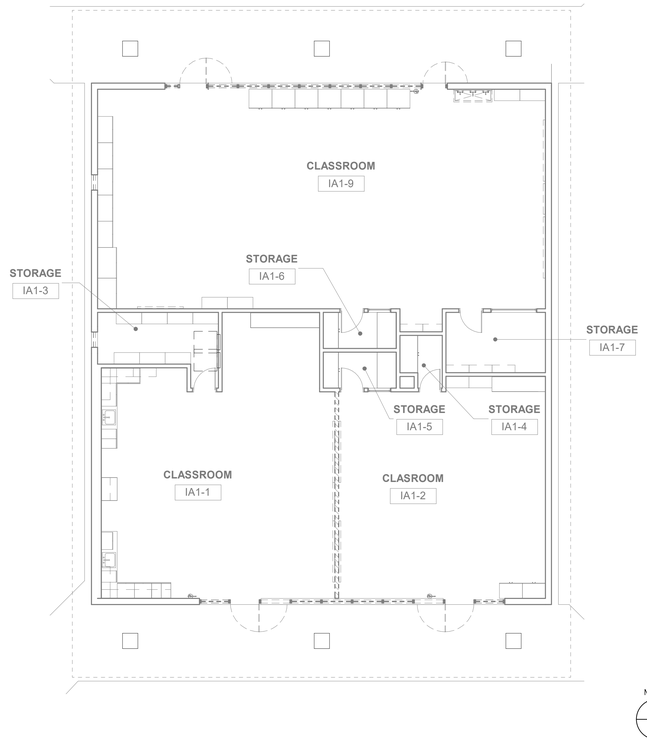

**5** FLOOR PLAN - BLDG IA-2
1/8" = 1'-0"



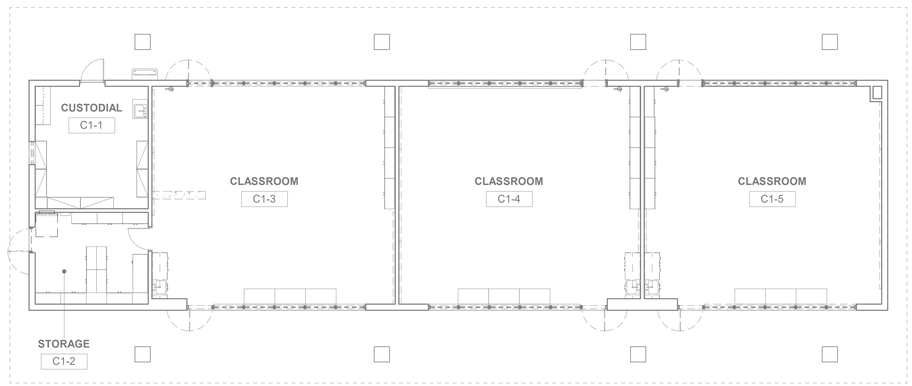

**3** FLOOR PLAN - BLDG C5
1/8" = 1'-0"




**2** FLOOR PLAN - BLDG C3
1/8" = 1'-0"




**4** FLOOR PLAN - BLDG IA-1
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C1
1/8" = 1'-0"

## GENERAL NOTES

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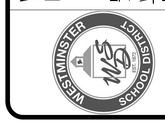
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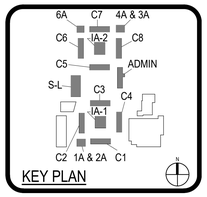

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:**
14171 NEWLAND ST
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**DSA Submittal**

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant




Architect

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**DSA Submittal**

**DEMO ELECTRICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2**

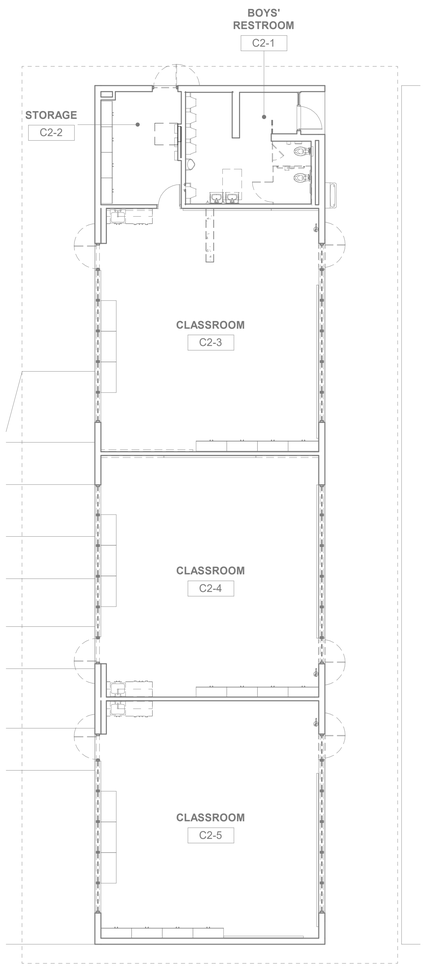
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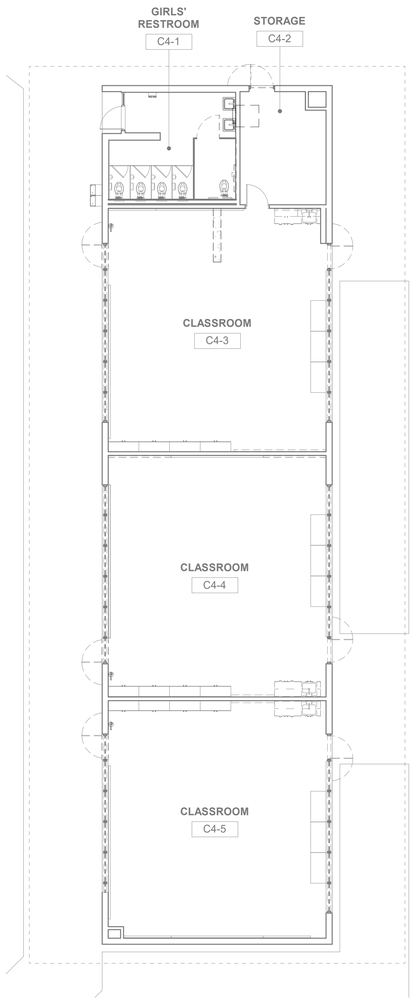
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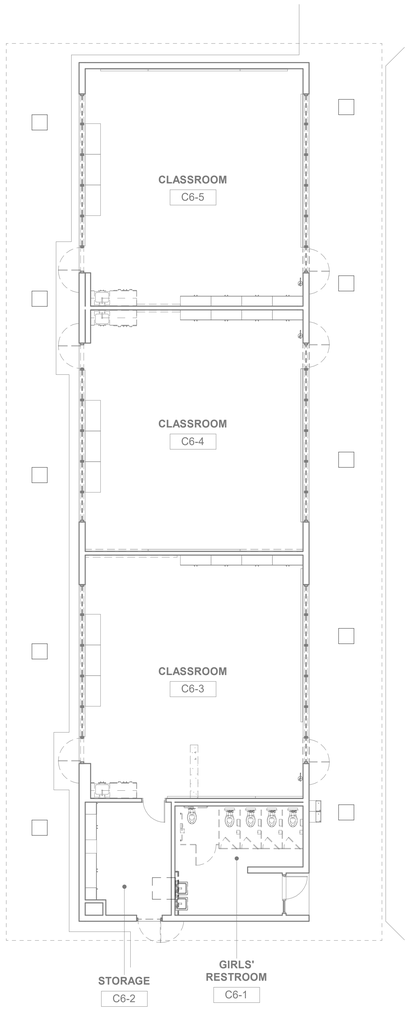

NORTH

**3** FLOOR PLAN - BLDG C2
1/8" = 1'-0"




NORTH

**2** FLOOR PLAN - BLDG C4
1/8" = 1'-0"




NORTH

**1** FLOOR PLAN - BLDG C6
1/8" = 1'-0"

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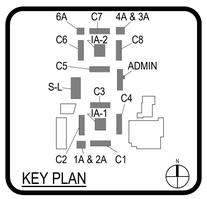
CONSULTANT LEAF Engineers
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

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WESTMINSTER,CA 92683

**DSA Submittal**

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

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REGISTERED PROFESSIONAL ENGINEER
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No. E 23578
Exp. 09-30-2025
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**DSA Submittal**

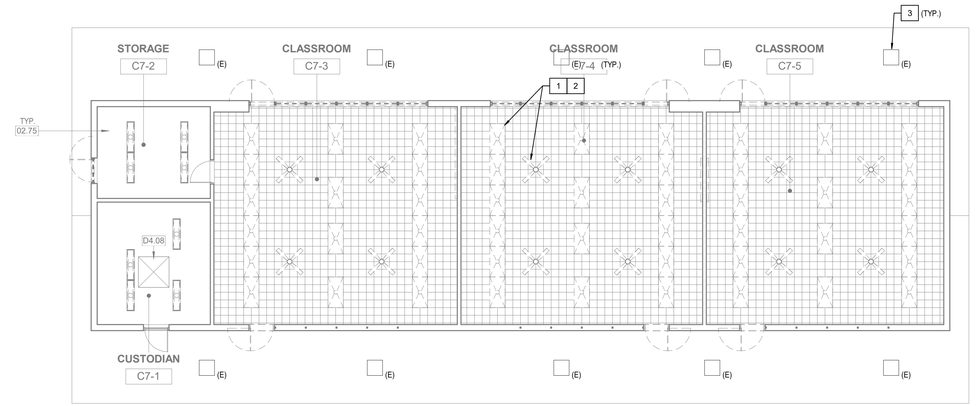
**DEMO ELECTRICAL BUILDING FLOOR PLANS C2, C4 & C6**

**ED2.03**

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ED3.01 - DEMO LIGHTING PLAN BLDG C7, C8, S-L & ADMIN

0" 1"




## 4 RCP - BLDG C7 DEMO

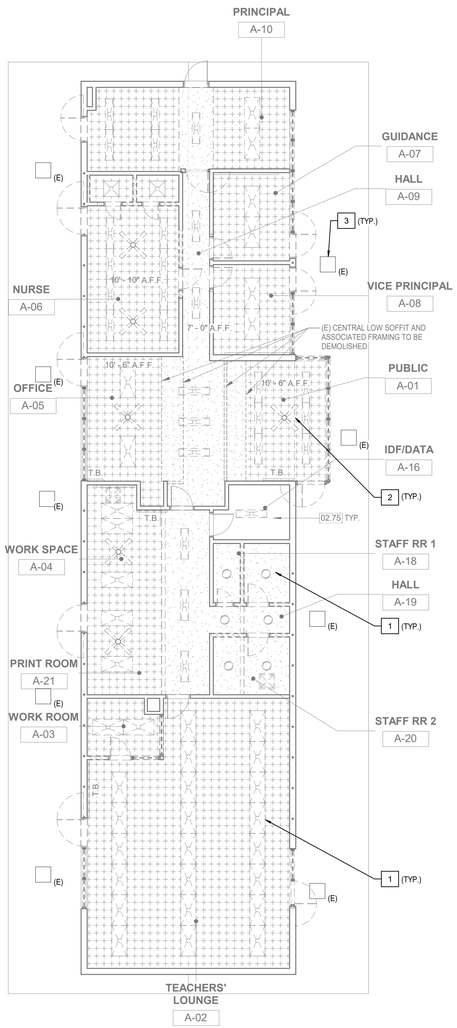
1/8" = 1'-0"

## GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
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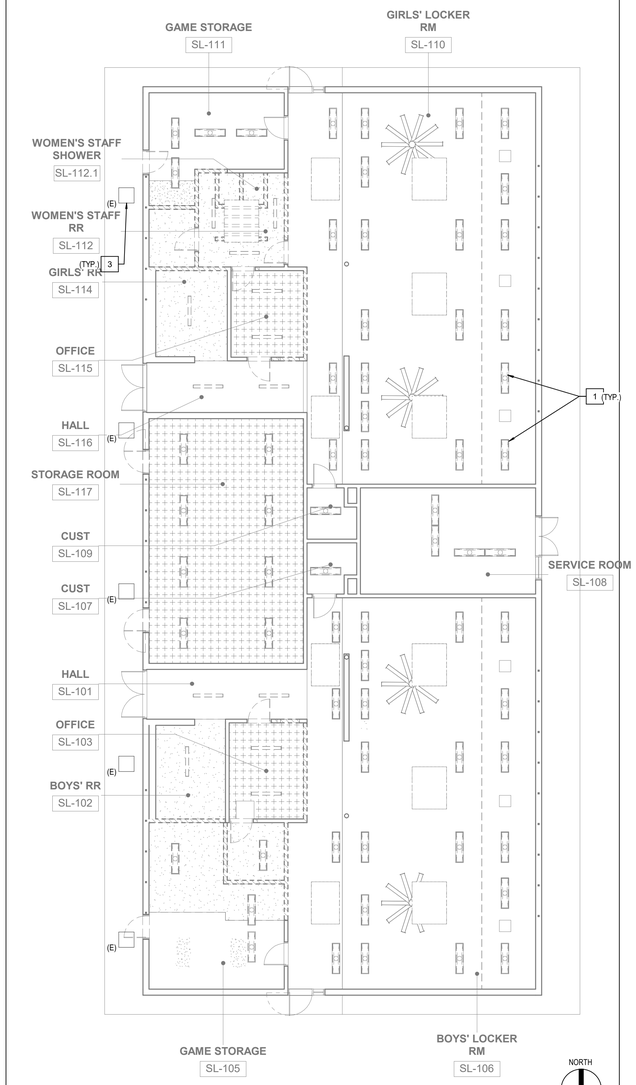
## KEY NOTES

1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE/S. ALL ASSOCIATED CONTROL AND POWER CONNECTIONS SHALL BE DEMOLISHED BACK TO THE SOURCE PANEL.
2. EXISTING CEILING MOUNTED FAN SHALL BE REMOVED AND STORED AS DIRECTED BY OWNER'S REPRESENTATIVE DURING DEMOLITION. DEMOLISH EXISTING CONDUIT AND WIRING BACK TO SOURCE.
3. EXISTING EXTERIOR EGRESS LIGHTING FIXTURES SHALL REMAIN AND BE PROTECTED IN PLACE.



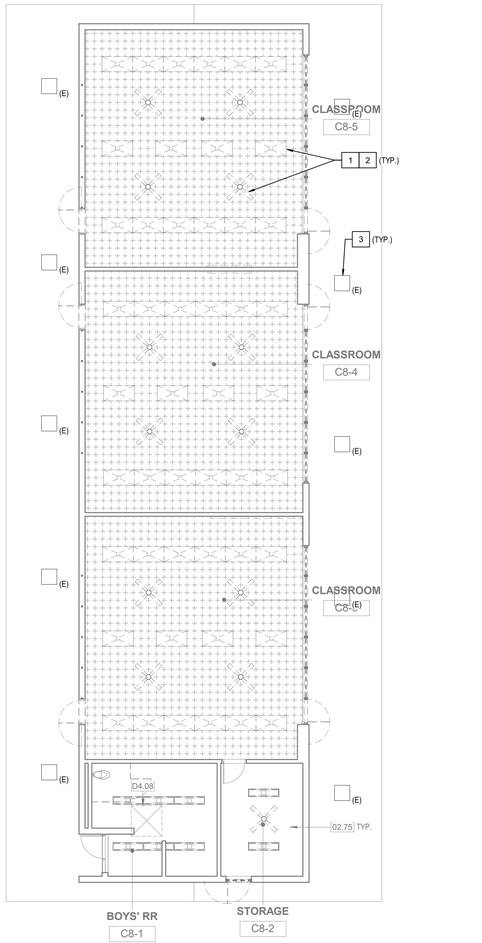

## 3 RCP - ADMINISTRATION BLDG

1/8" = 1'-0"




## 2 RCP - BLDG S-L DEMO

1/8" = 1'-0"




## 1 RCP - BLDG C8 DEMO

1/8" = 1'-0"

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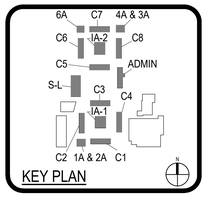
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C. DELA CRUZ
No. E 23576
Exp. 08-30-2024
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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| 03/31/2023 | 220526 |

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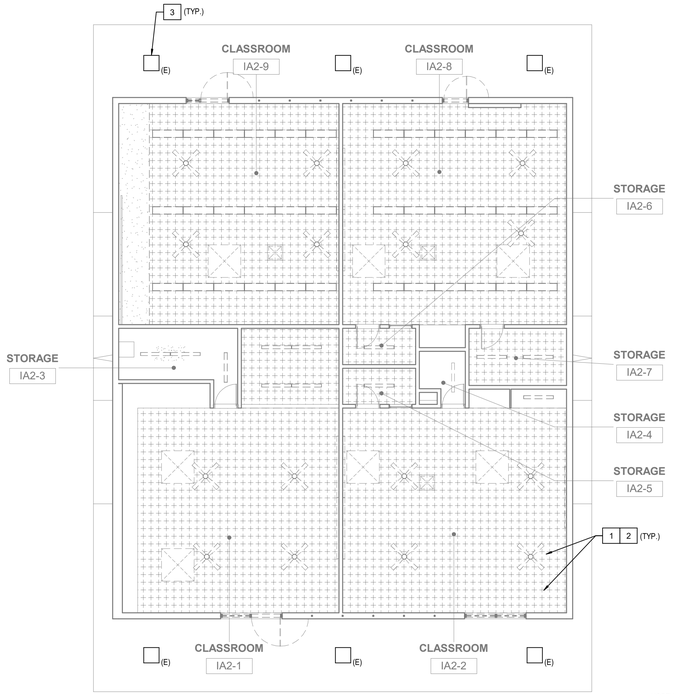
DSA Submittal

**DEMO LIGHTING PLAN BLDG C7, C8, S-L & ADMIN**

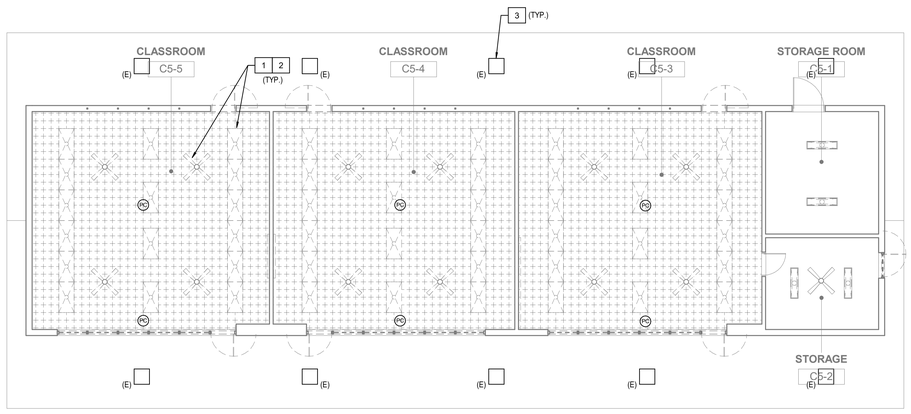
**ED3.01**

ED3.02 - DEMO LIGHTING PLAN BLDG C1, C3, C5, IA-1 & IA-2

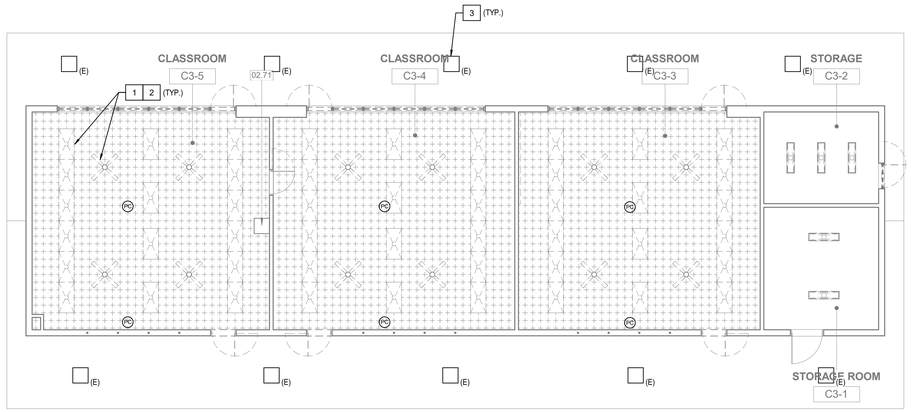
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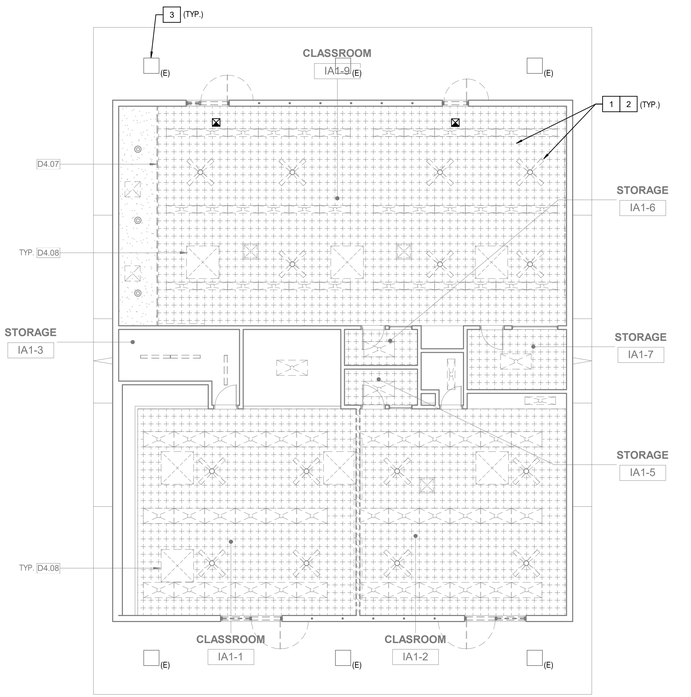

## 5 RCP - BLDG IA-2 DEMO
1/8" = 1'-0"



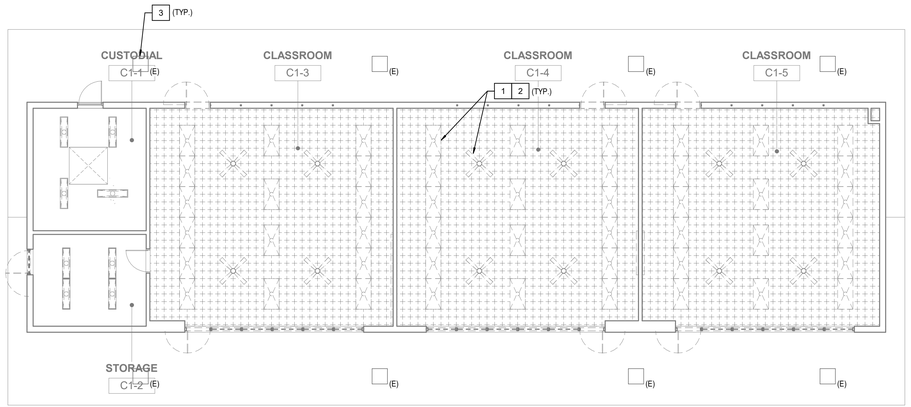

## 3 RCP - BLDG C5 DEMO
1/8" = 1'-0"




## 2 RCP - BLDG C3 DEMO
1/8" = 1'-0"




## 4 RCP - BLDG IA-1 DEMO
1/8" = 1'-0"




## 1 RCP - BLDG C1
1/8" = 1'-0"

## GENERAL NOTES

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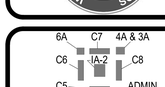
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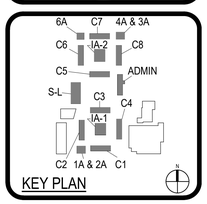

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**DEMO LIGHTING PLAN BLDG C1, C3, C5, IA-1 & IA-2**

**ED3.02**

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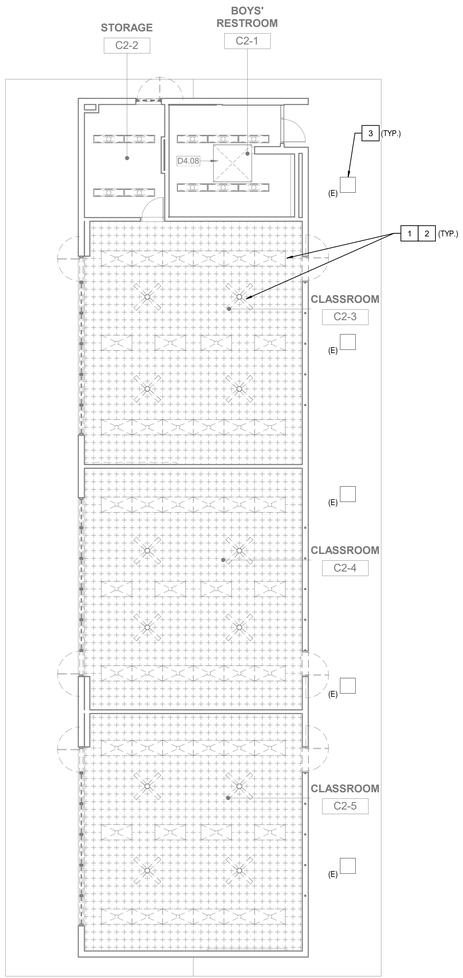
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## GENERAL NOTES

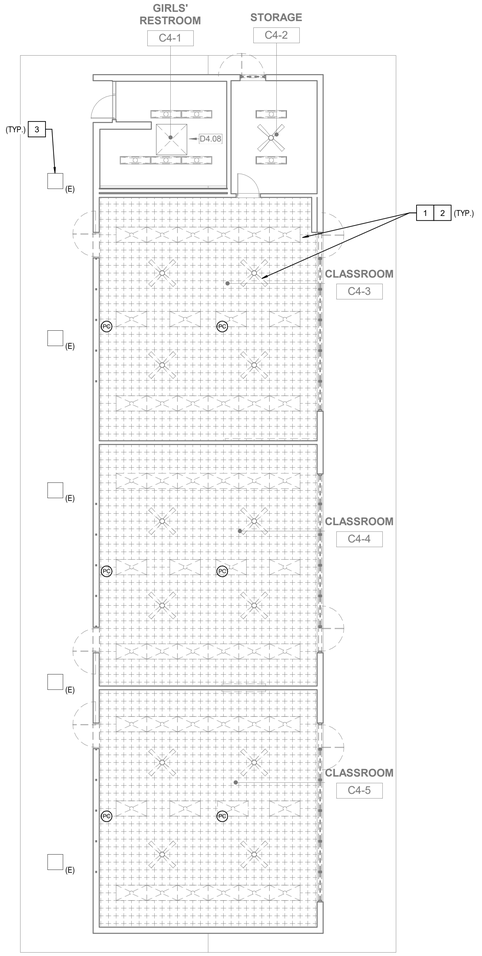
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2. **FOR ALL EXISTING CIRCUITS AND DEVICES THAT ARE TO REMAIN, CONTRACTOR TO INCLUDE IN THEIR BID TO REMOVE AND REPLACE ALL MC CABLES ABOVE CEILING SPACES, INTERCEPT ALL CONDUITS ABOVE THE CEILING, AND PROVIDE NEW HOMERUNS WITH MINIMUM 3/4" EMT AND NEW WIRING THAT MATCHES THE EXISTING, BACK TO PANEL SOURCE.**

## KEY NOTES

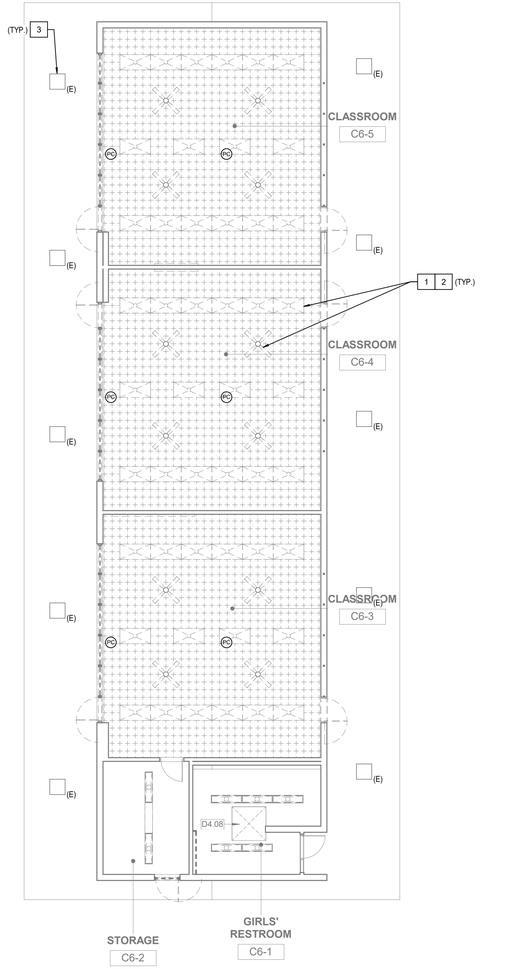
1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURE/S. ALL ASSOCIATED CONTROL AND POWER CONNECTIONS SHALL BE DEMOLISHED BACK TO THE SOURCE PANEL.
2. EXISTING CEILING MOUNTED FAN SHALL BE REMOVED AND STORED AS DIRECTED BY OWNER'S REPRESENTATIVE DURING DEMOLITION. DEMOLISH EXISTING CONDUIT AND WIRING BACK TO SOURCE.
3. EXISTING EXTERIOR EGRESS LIGHTING FIXTURES SHALL REMAIN AND BE PROTECTED IN PLACE.




**3** RCP - BLDG C2 DEMO
1/8" = 1'-0"




**2** RCP - BLDG C4 DEMO
1/8" = 1'-0"




**1** RCP - BLDG C6 DEMO
1/8" = 1'-0"

IDENTIFICATION STAMP
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APP: 04-121954 INC:
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DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

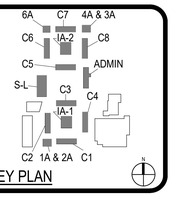
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 22576
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

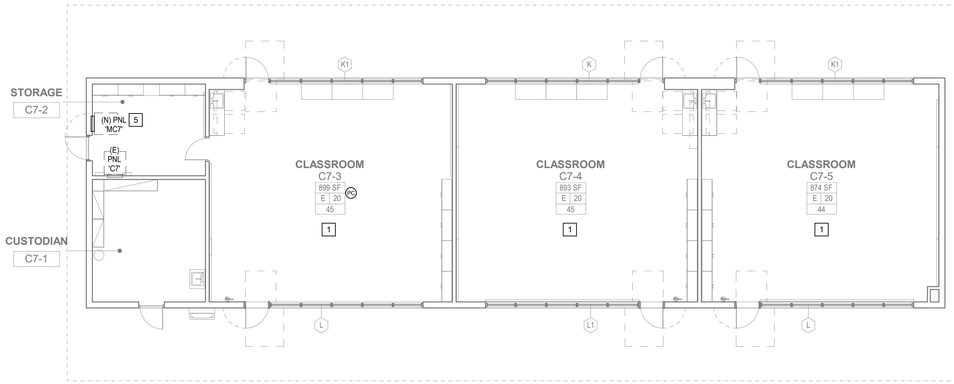
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|---|---|---|
| | DSA Submittal | |

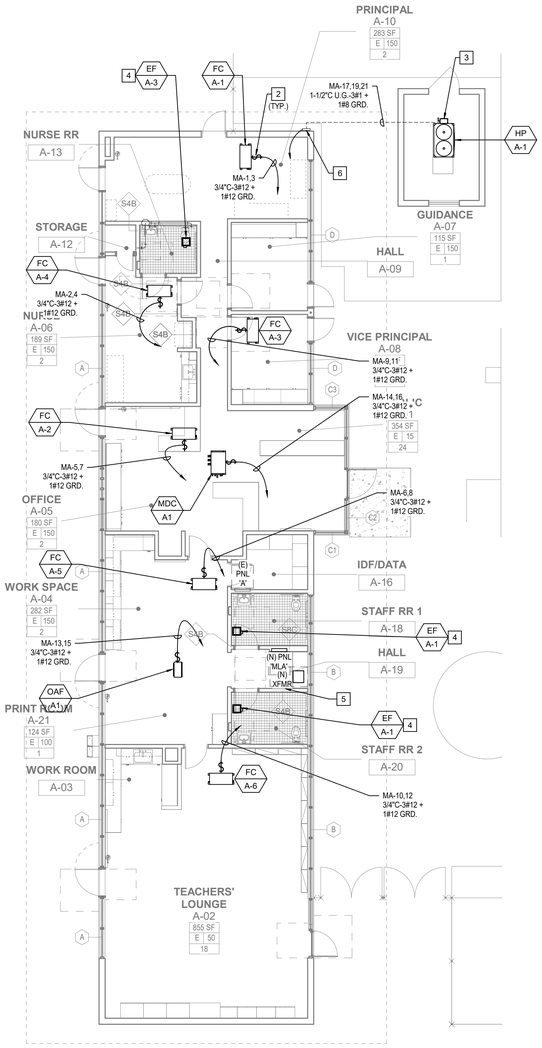
**DEMO LIGHTING PLAN BLDG C2, C4 & C6**

**ED3.03**

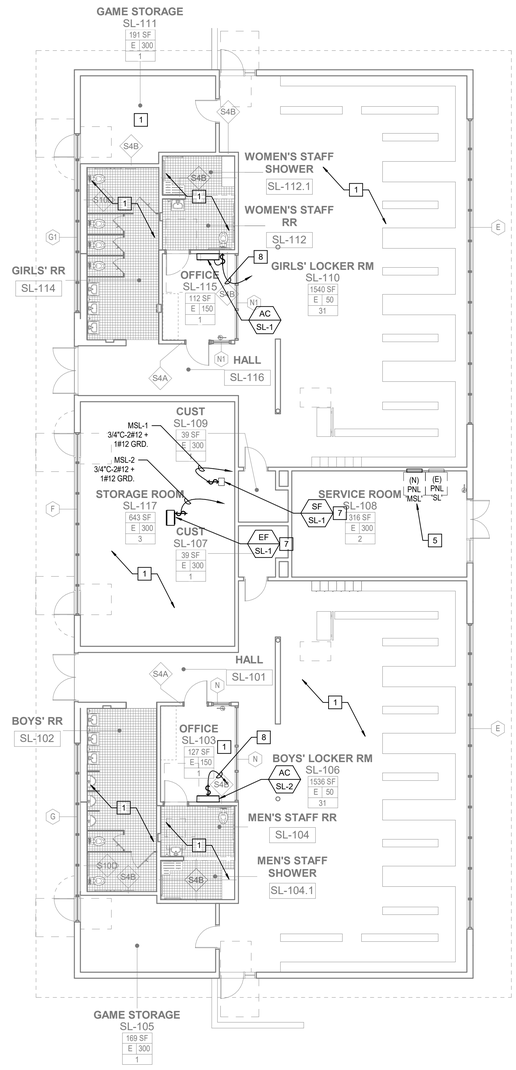
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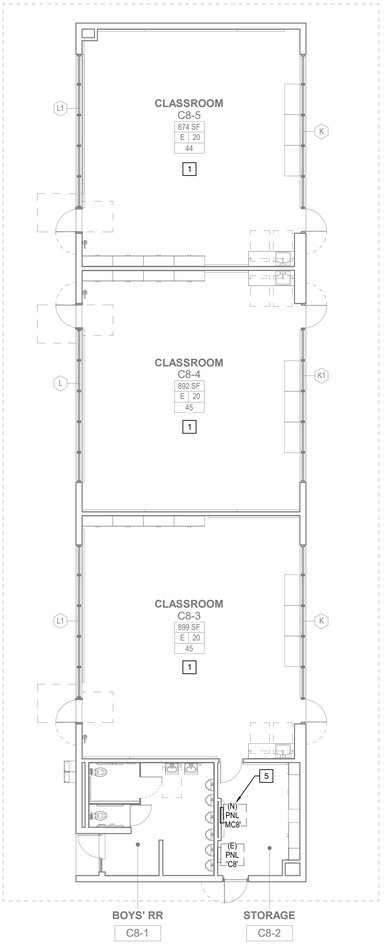

**4** FLOOR PLAN - BLDG C7
1/8" = 1'-0"




**3** FLOOR PLAN - ADMINISTRATION BLDG
1/8" = 1'-0"




**2** FLOOR PLAN - BLDG S-L
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C8
1/8" = 1'-0"

## GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.

2. ALL EXISTING CEILING MOUNTED DEVICES SHALL BE REMOVED, STORED AND PROTECTED FOR RE-INSTALLATION.

## KEY NOTES

1. EXISTING POWER/DATA OUTLETS SHALL REMAIN AND BE PROTECTED IN PLACE. (TYP.)
2. PROVIDE 208V/1PH POWER CONNECTION TO LOCAL DISCONNECT SWITCH PROVIDED BY MECHANICAL, WIRED BY ELECTRICAL.
3. PROVIDE 208V/3PH POWER CONNECTION TO 100A/3P/NF/NEMA 3R DISCONNECT SWITCH FOR HEAT PUMP.
4. EXTEND (E) LIGHTING CIRCUIT TO (N) EXHAUST FAN. INTERLOCK WITH LIGHTING SWITCH. SEE MECHANICAL 'FAN SCHEDULE' NOTE #5 ON SHEET M5.02.
5. NEW 208/120V-3PH PANEL DEDICATED TO NEW MECHANICAL EQUIPMENT.
6. NEW WALL MOUNTED PULLBOX, 12"x12"xDEPTH REQ'D.
7. PROVIDE 120V CONNECTION TO FAN/S, INSTALL LOCAL DISCONNECT SWITCH.
8. PROVIDE 208V/1PH POWER CONNECTION TO LOCAL DISCONNECT SWITCH. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT. 3/4"C-3#12 + 1#12 GRD. STUB UP TO OUTDOOR UNIT ON ROOF.

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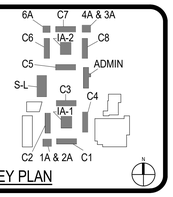
**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
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WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DE LA CRUZ
No. E 23576
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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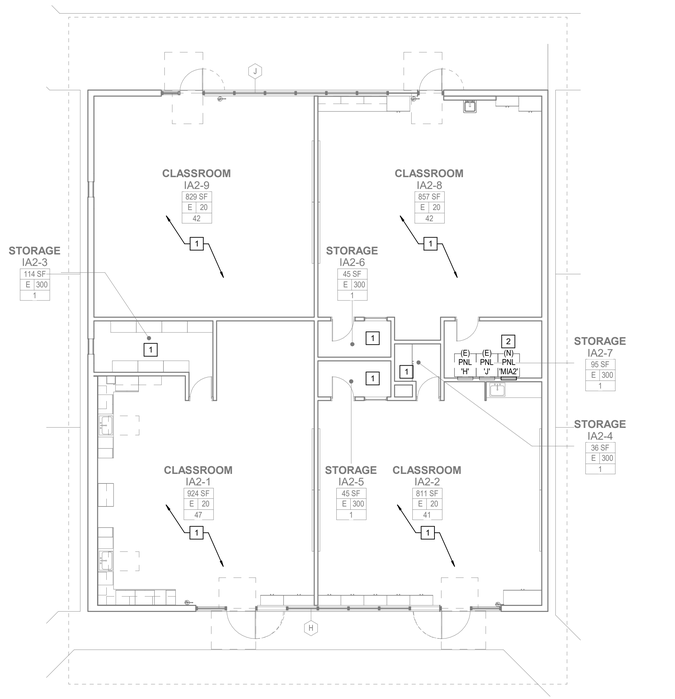
**ELECTRICAL BUILDING FLOOR PLANS C7, C8, S-L & ADMIN**

**E2.01**

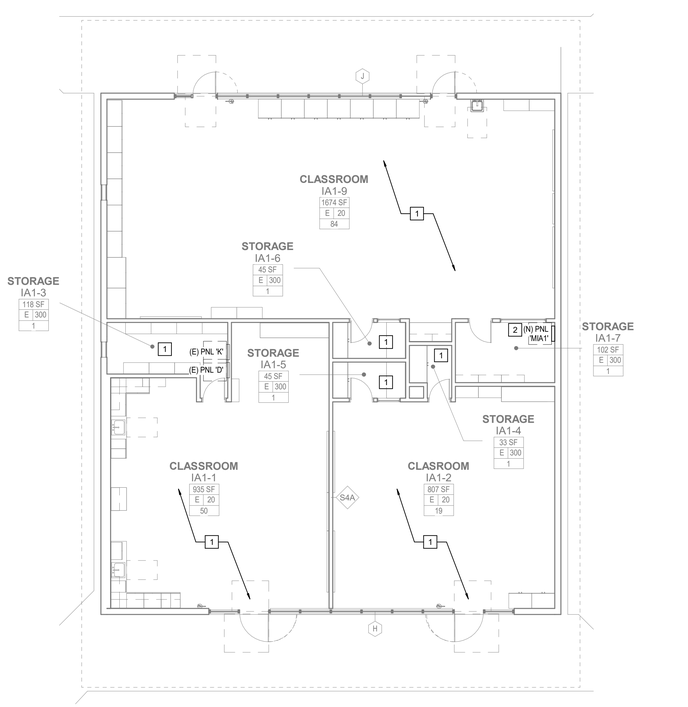
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E2.02 - ELECTRICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2

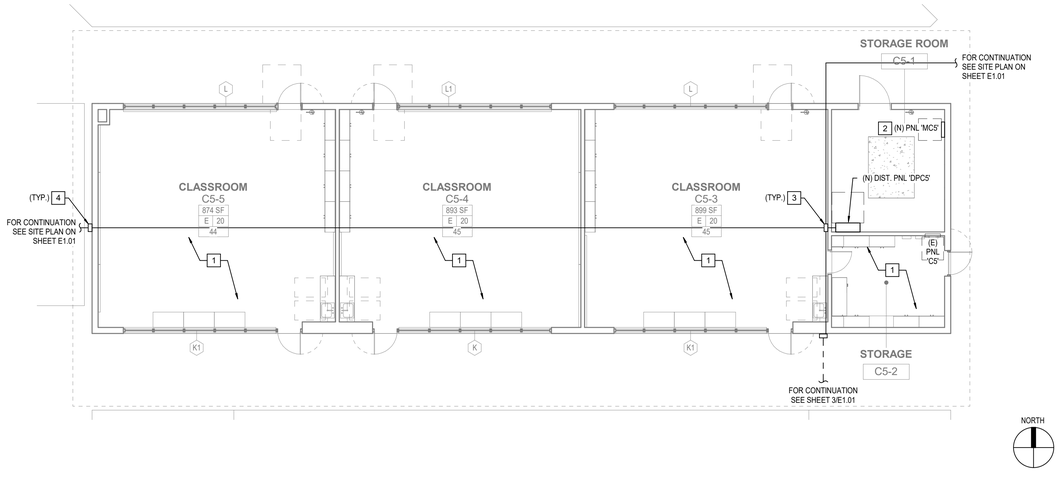
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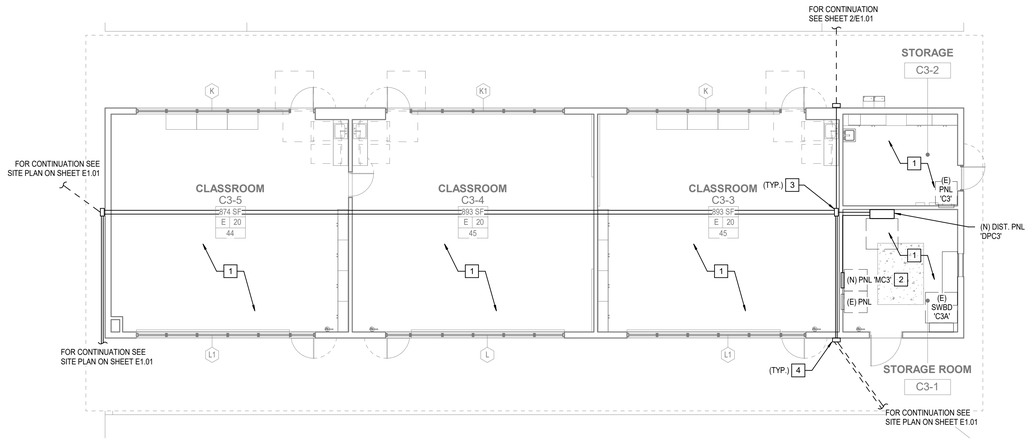

**5** FLOOR PLAN - BLDG IA-2
1/8" = 1'-0"



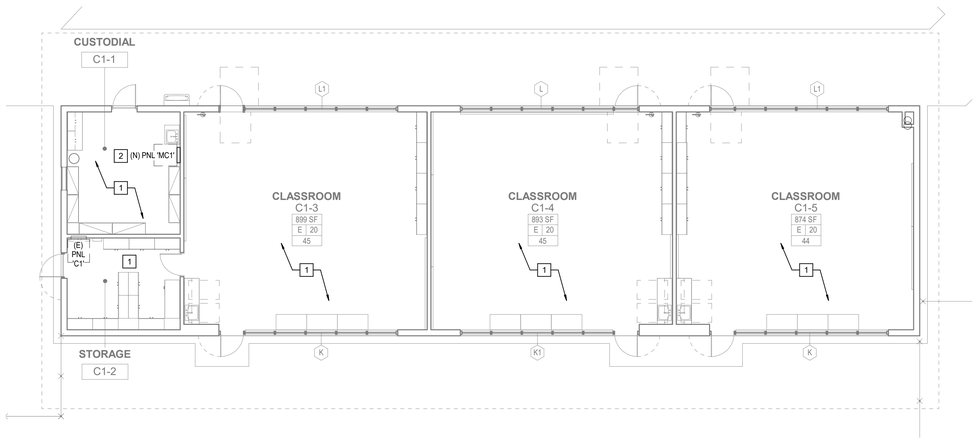

**4** FLOOR PLAN - BLDG IA-1
1/8" = 1'-0"




**3** FLOOR PLAN - BLDG C5
1/8" = 1'-0"




**2** FLOOR PLAN - BLDG C3
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C1
1/8" = 1'-0"

## GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
2. ALL EXISTING CEILING MOUNTED DEVICES SHALL BE REMOVED, STORED AND PROTECTED FOR RE-INSTALLATION.
3. REFER TO SINGLE LINE DIAGRAM AND SITE PLAN FOR CONDUIT AND WIRING SIZING.

## KEY NOTES

1. EXISTING POWER/DATA OUTLETS SHALL REMAIN AND BE PROTECTED IN PLACE.
2. NEW 208/120V-3PH PANEL DEDICATED TO NEW MECHANICAL EQUIPMENT.
3. PROVIDE AND INSTALL NEW WALL MOUNTED PULLBOX, SIZE PER NEC 314.28(A).
4. PROVIDE WALL MOUNTED PULLBOX, NEMA 3R. CONTRACTOR TO SIZE PER NEC 314.28(A).

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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43



KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23576
Exp. 12-31-2024
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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| 03/31/2023 | 220526 |

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DSA Submittal

**ELECTRICAL BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2**

**E2.02**

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E2.03 - ELECTRICAL BUILDING FLOOR PLANS C2, C4 & C6

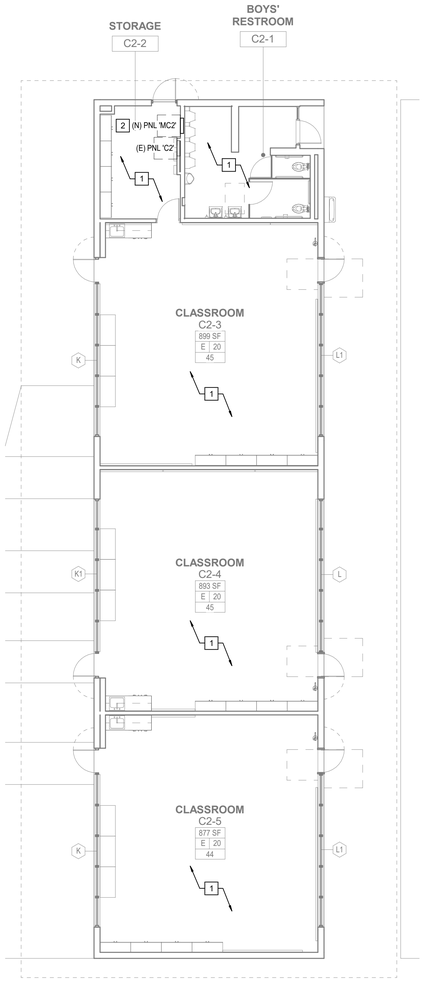
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## GENERAL NOTES

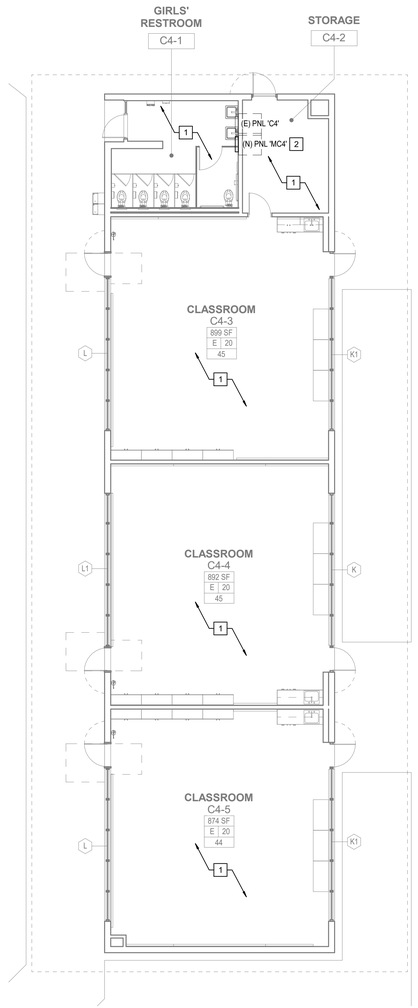
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2. ALL EXISTING POWER/DATA OUTLETS SHALL REMAIN AND BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
3. ALL EXISTING CEILING MOUNTED DEVICES SHALL BE REMOVED, STORED AND PROTECTED FOR RE-INSTALLATION.

## KEY NOTES

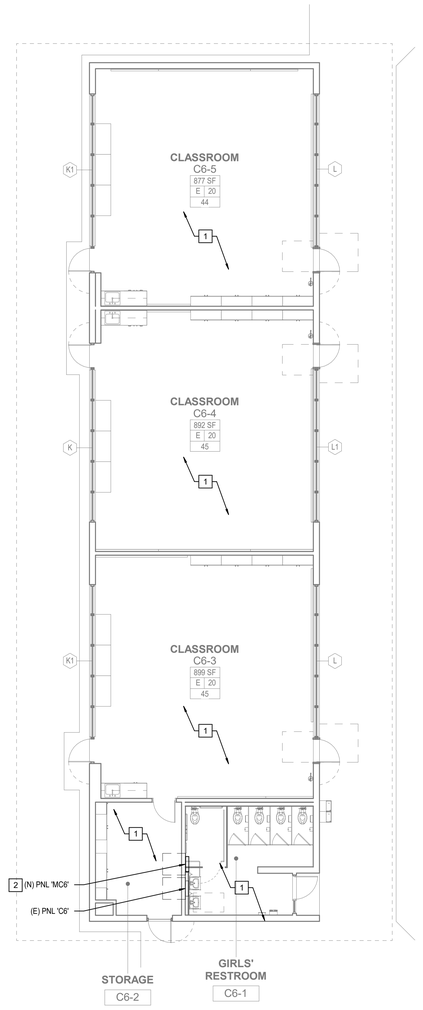
1. EXISTING POWER/DATA OUTLETS SHALL REMAIN AND BE PROTECTED IN PLACE.
2. NEW 208/120V-3PH PANEL DEDICATED TO NEW MECHANICAL EQUIPMENT.




3 FLOOR PLAN - BLDG C2
1/8" = 1'-0"




2 FLOOR PLAN - BLDG C4
1/8" = 1'-0"




1 FLOOR PLAN - BLDG C6
1/8" = 1'-0"

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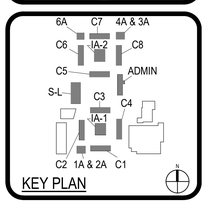
CONSULTANT LEAF Engineers
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Rancho Cucamonga, CA 91730
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43



KEY PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER
RONALD C DE LA CRUZ
No. E 23578
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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| | DSA Submittal | |

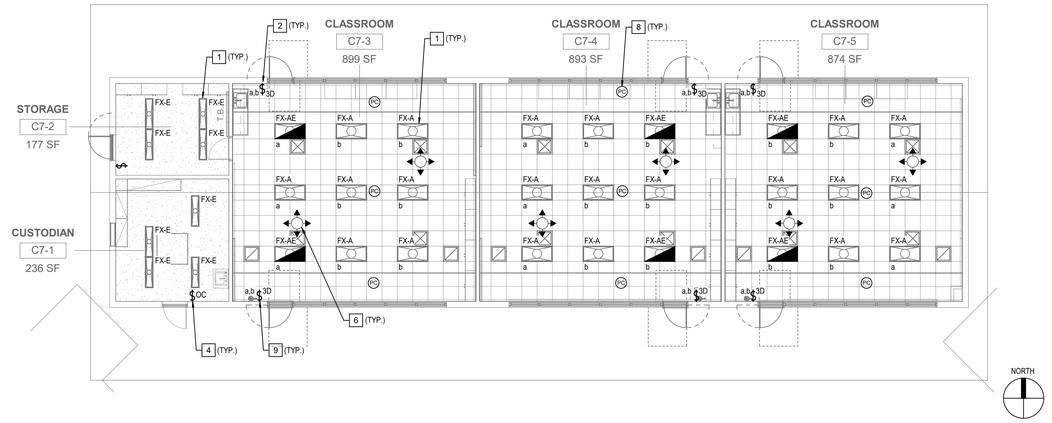
# ELECTRICAL BUILDING FLOOR PLANS C2, C4 & C6

E2.03

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E3.01 - ELECTRICAL BUILDING LIGHTING PLANS C7, C8, S-L & ADMIN

0" 1"



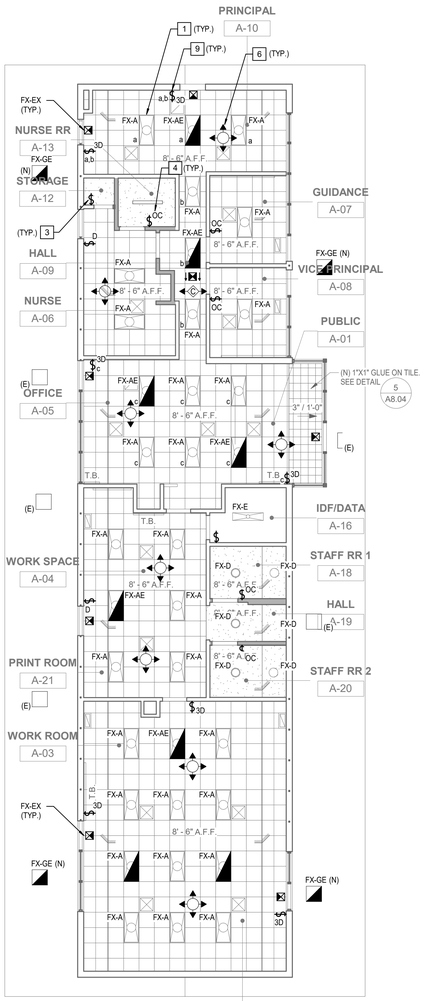

**4** RCP - BLDG C7
1/8" = 1'-0"

## GENERAL NOTES

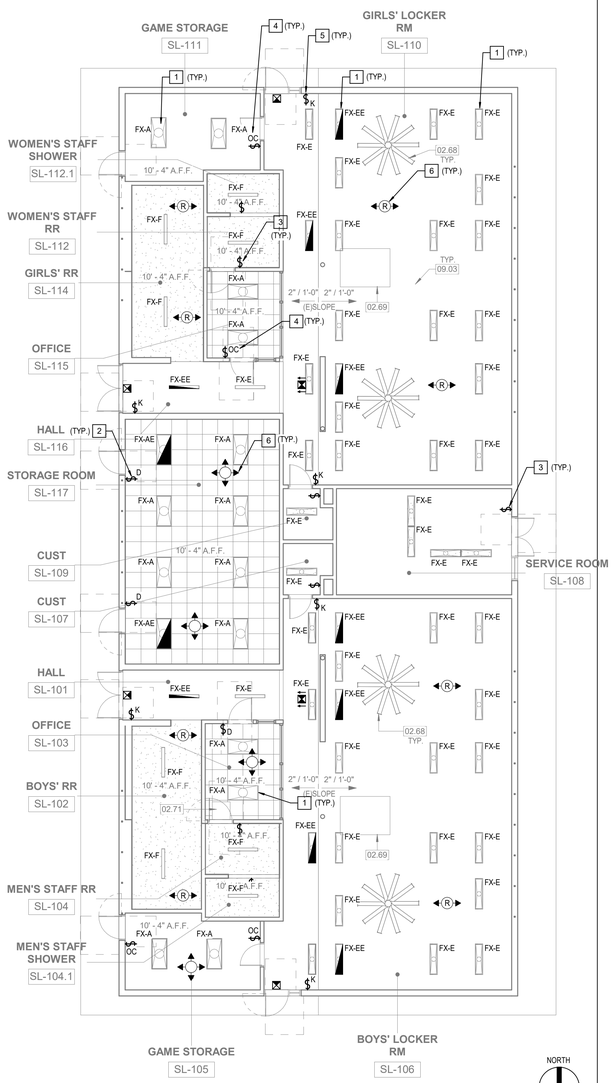
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2. NEW LIGHT FIXTURES SHALL BE PROVIDED NEW FIXTURE WHIPS WITH 2#12, #12G WIRING AND ADDITIONAL LOW VOLTAGE WIRING FOR DIMMING AS REQUIRED.
3. PROVIDE A COMPLETE AND OPERATIONAL SYSTEM OF OCCUPANCY SENSORS FOR ON/OFF CONTROL OF ALL LIGHT FIXTURES INCLUDING BUT NOT LIMITED TO POWER PACKS, WIRING, ETC. RE: DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4. PROVIDE EMERGENCY BATTERY PACKS FOR ALL LIGHTING FIXTURES DESIGNATED TO BE ON EMERGENCY POWER AND EXIT SIGNS. PROVIDE CONNECTION TO CENTER LAMP BALLAST ONLY. PROVIDE UNSWITCHED HOT TO BATTERY SO THAT LAMPS CAN BE SWITCHED OFF AND ON WITHOUT DRAINING BATTERY. RE: DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE 20A UNSWITCHED BRANCH CIRCUIT (2#12, 1#12G, 3/4"C) FROM LIGHTING PANEL TO ALL EXIT SIGNS IN THIS AREA.

## KEY NOTES

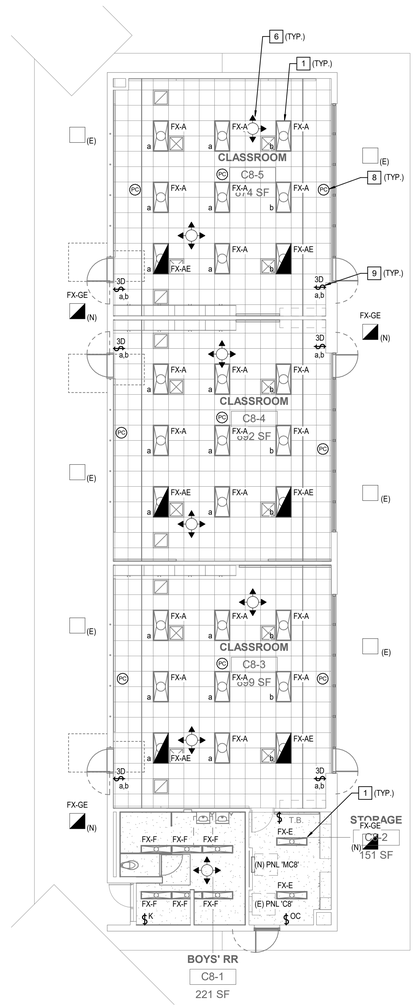
| | |
|---|---|
| 1 | REMOVE AND REPLACE EXSTING LIGHT FIXTURE WITH NEW LED LIGHT FIXTURE. PROVIDE NEW FIXTURE WHIPS AS REQUIRED WITH 2#12, #12GRD FOR LINE VOLTAGE, PLUS DIMMING WIRES AS REQUIRED. SEE LIGHT FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION. |
| 2 | LOW VOLTAGE WALL ON/OFF SWITCH WITH DIMMING, LUTRON MAESTRO SERIES |
| 3 | LOW VOLTAGE WALL ON/OFF MANUAL SWITCH, LUTRON MAESTRO SERIES |
| 4 | LOW VOLTAGE WALL ON/OFF SWITCH WITH DIMMING AND OCCUPANCY SENSOR, LUTRON MAESTRO SERIES |
| 5 | LOW VOLTAGE WALL ON/OFF KEYED SWITCH WITH DIMMING |
| 6 | LOW VOLTAGE CEILING MOUNTED WIRELESS OCCUPANCY SENSOR, RADIO PWR SAVR SERIES |
| 7 | LOW VOLTAGE LIGHTING CONTROLS POWER/RELAY PACK, RADIO PWR SAVR SERIES |
| 8 | LOW VOLTAGE CEILING MOUNTED WIRELESS DAYLIGHT HARVESTING SENSOR, RADIO PWR SAVR SERIES |
| 9 | LOW VOLTAGE WALL ON/OFF 3-WAY SWITCH WITH DIMMING, LUTRON MAESTRO SERIES |




**3** RCP - ADMINISTRATION BLDG
1/8" = 1'-0"




**2** RCP - BLDG S-L
1/8" = 1'-0"




**1** RCP - BLDG C8
1/8" = 1'-0"

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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

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DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

6A C7 4A & 3A
C6 1A-2 C8
C5 ADMIN
S-L C3 C4
1A-1
C2 1A & 2A C1
KEY PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER RONALD C DE LA CRUZ No. E 23578 Exp. 12-31-2023 ELECTRICAL STATE OF CALIFORNIA

Architect

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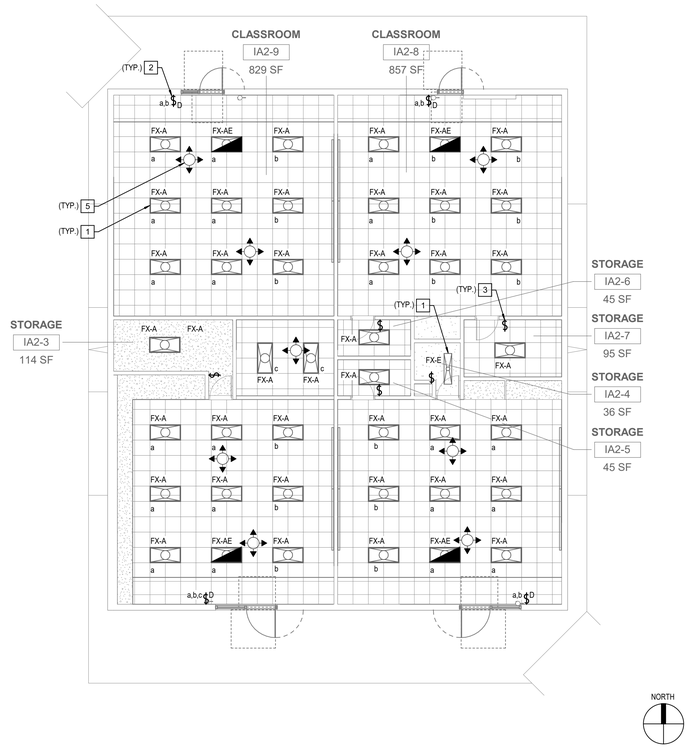
**ELECTRICAL BUILDING LIGHTING PLANS C7, C8, S-L & ADMIN**

**E3.01**

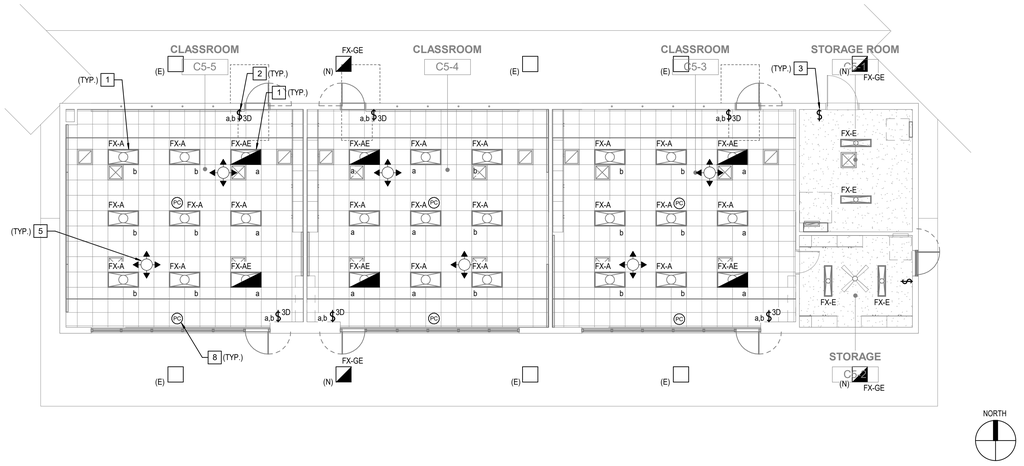
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E3.02 - ELECTRICAL BUILDING LIGHTING PLANS BLDG C1, C3, C5, IA-1 & IA-2

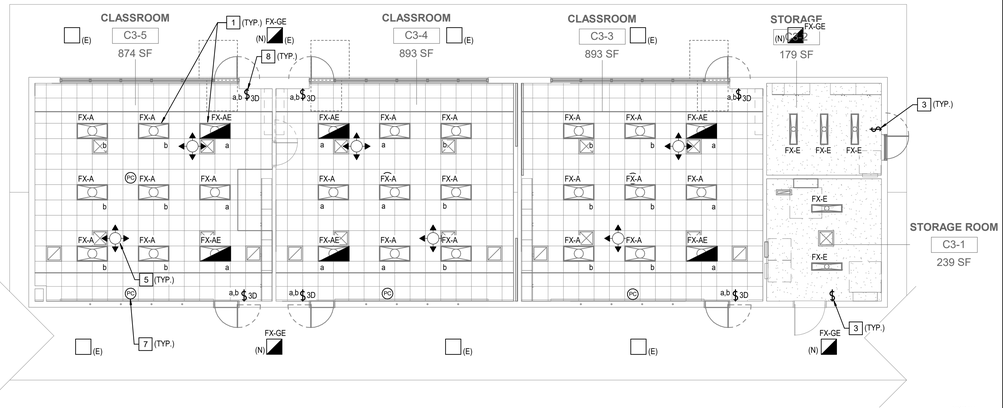
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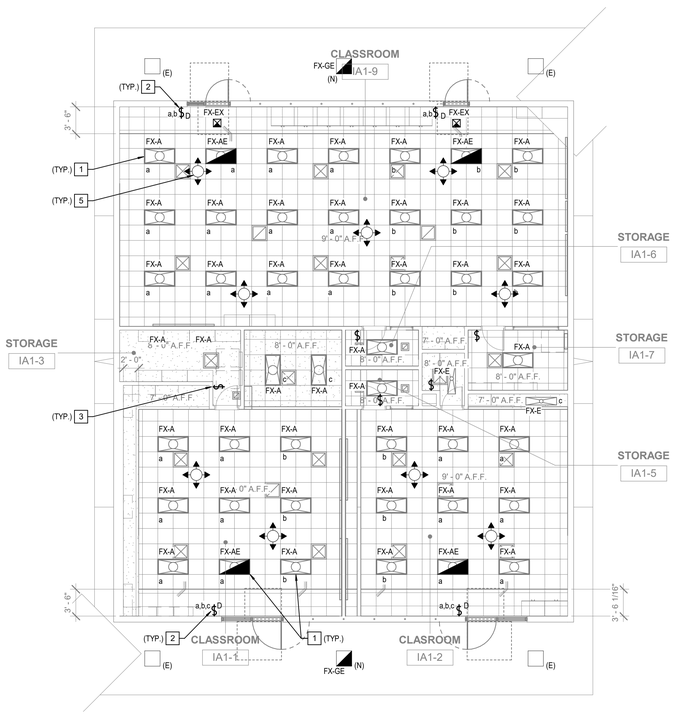

**5** RCP - BLDG IA-2
1/8" = 1'-0"



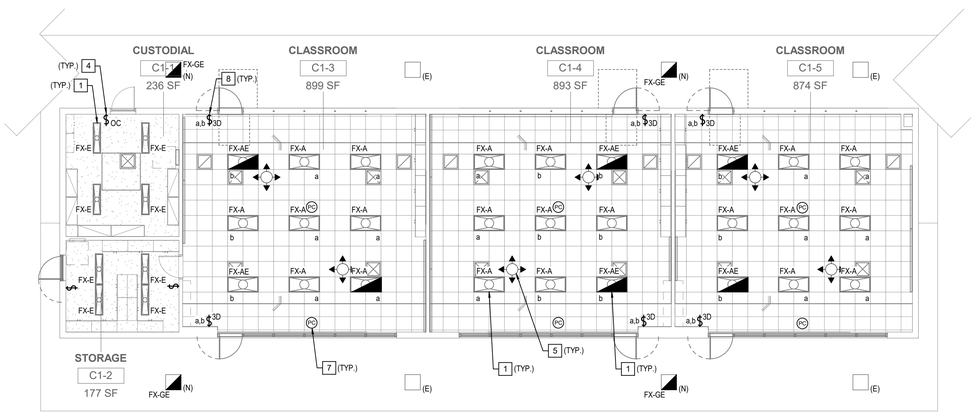

**3** RCP - BLDG C5
1/8" = 1'-0"




**2** RCP - BLDG C3
1/8" = 1'-0"




**4** RCP - BLDG IA-1
1/8" = 1'-0"




**1** RCP - BLDG C1
1/8" = 1'-0"

## GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
2. NEW LIGHT FIXTURES SHALL BE PROVIDED NEW FIXTURE WHIPS WITH 2#12, #12G WIRING AND ADDITIONAL LOW VOLTAGE WIRING FOR DIMMING AS REQUIRED.
3. PROVIDE A COMPLETE AND OPERATIONAL SYSTEM OF OCCUPANCY SENSORS FOR ON/OFF CONTROL OF ALL LIGHT FIXTURES INCLUDING BUT NOT LIMITED TO POWER PACKS, WIRING, ETC. RE: DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4. PROVIDE EMERGENCY BATTERY PACKS FOR ALL LIGHTING FIXTURES DESIGNATED TO BE ON EMERGENCY POWER AND EXIT SIGNS. PROVIDE CONNECTION TO CENTER LAMP BALLAST ONLY. PROVIDE UNSWITCHED HOT TO BATTERY SO THAT LAMPS CAN BE SWITCHED OFF AND ON WITHOUT DRAINING BATTERY. RE: DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE 20A UNSWITCHED BRANCH CIRCUIT (2#12, 1#12G, 3/4"C) FROM LIGHTING PANEL TO ALL EXIT SIGNS IN THIS AREA.

## KEY NOTES

1. REMOVE AND REPLACE EXISTING LIGHT FIXTURE WITH NEW LED LIGHT FIXTURE. PROVIDE NEW FIXTURE WHIPS AS REQUIRED WITH 2#12, #12GRD FOR LINE VOLTAGE, PLUS DIMMING WIRES AS REQUIRED. SEE LIGHT FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
2. LOW VOLTAGE WALL ON/OFF SWITCH WITH DIMMING, LUTRON MAESTRO SERIES
3. LOW VOLTAGE WALL ON/OFF MANUAL SWITCH, LUTRON MAESTRO SERIES
4. LOW VOLTAGE WALL ON/OFF SWITCH WITH DIMMING AND OCCUPANCY SENSOR, LUTRON MAESTRO SERIES
5. LOW VOLTAGE CEILING MOUNTED WIRELESS OCCUPANCY SENSOR, RADIO PWR SAVR SERIES
6. LOW VOLTAGE LIGHTING CONTROLS POWER/RELAY PACK, RADIO PWR SAVR SERIES
7. LOW VOLTAGE CEILING MOUNTED WIRELESS DAYLIGHT HARVESTING SENSOR, RADIO PWR SAVR SERIES
8. LOW VOLTAGE WALL ON/OFF 3-WAY SWITCH WITH DIMMING, LUTRON MAESTRO SERIES.

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DATE: 10/17/2023

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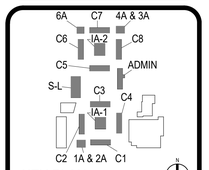

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C. DELA CRUZ
No. E 23576
Exp. 12-31-2024
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
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DSA Submittal

**ELECTRICAL BUILDING LIGHTING PLANS BLDG C1, C3, C5, IA-1 & IA-2**

**E3.02**

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E3.03 - ELECTRICAL BUILDING LIGHTING PLAN BLDG C2, C4 & C6

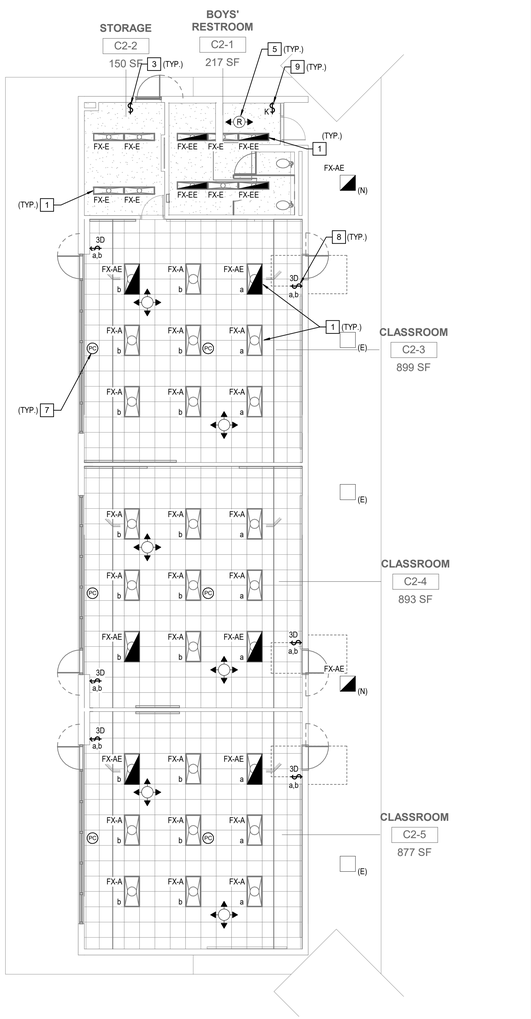
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## GENERAL NOTES

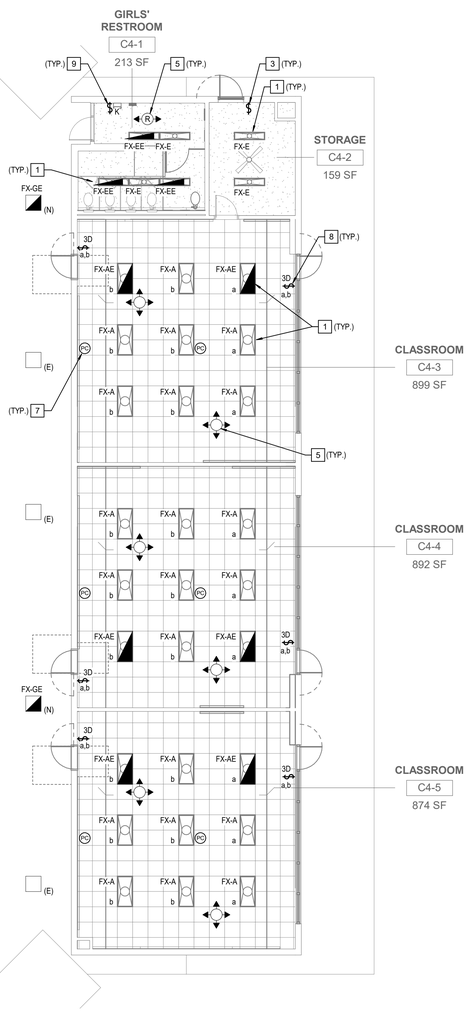
1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
2. NEW LIGHT FIXTURES SHALL BE PROVIDED WITH NEW FIXTURE WHIPS WITH 2#12, #12G WIRING AND ADDITIONAL LOW VOLTAGE WIRING FOR DIMMING AS REQUIRED.
3. PROVIDE A COMPLETE AND OPERATIONAL SYSTEM OF OCCUPANCY SENSORS FOR ON/OFF CONTROL OF ALL LIGHT FIXTURES INCLUDING BUT NOT LIMITED TO POWER PACKS, WIRING, ETC. RE: DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4. PROVIDE EMERGENCY BATTERY PACKS FOR ALL LIGHTING FIXTURES DESIGNATED TO BE ON EMERGENCY POWER AND EXIT SIGNS. PROVIDE CONNECTION TO CENTER LAMP BALLAST ONLY. PROVIDE UNSWITCHED HOT TO BATTERY SO THAT LAMPS CAN BE SWITCHED OFF AND ON WITHOUT DRAINING BATTERY. RE: DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE 20A UNSWITCHED BRANCH CIRCUIT (2#12, 1#12G, 3/4"C) FROM LIGHTING PANEL TO ALL EXIT SIGNS IN THIS AREA.

## KEY NOTES

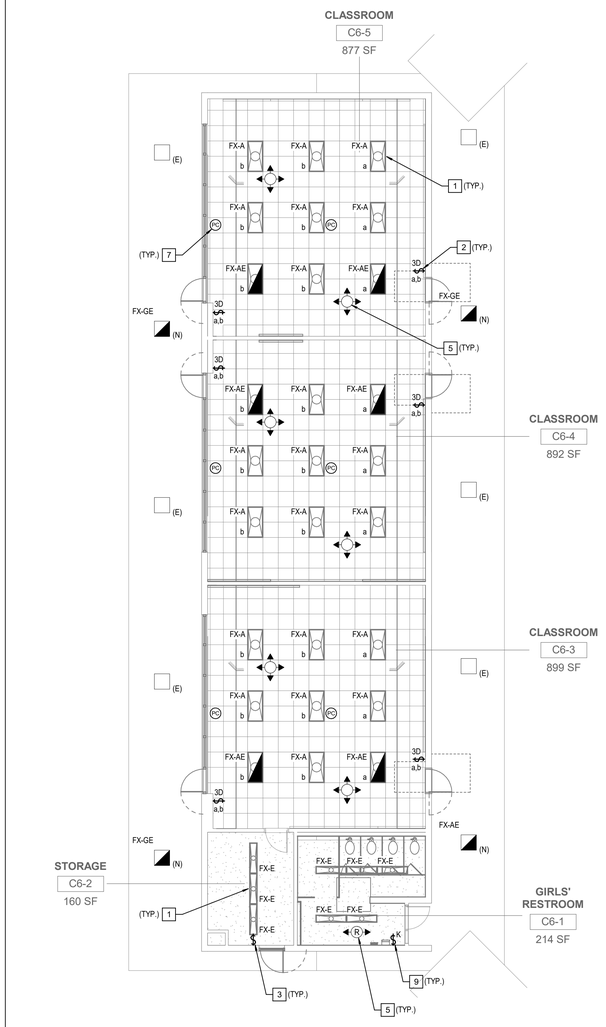
1. REMOVE AND REPLACE EXISTING LIGHT FIXTURE WITH NEW LED LIGHT FIXTURE. PROVIDE NEW FIXTURE WHIPS AS REQUIRED WITH 2#12, #12GRD FOR LINE VOLTAGE, PLUS DIMMING WIRES AS REQUIRED. SEE LIGHT FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
2. LOW VOLTAGE WALL ON/OFF SWITCH WITH DIMMING, LUTRON MAESTRO SERIES
3. LOW VOLTAGE WALL ON/OFF MANUAL SWITCH, LUTRON MAESTRO SERIES
4. LOW VOLTAGE WALL ON/OFF SWITCH WITH DIMMING AND OCCUPANCY SENSOR, LUTRON MAESTRO SERIES
5. LOW VOLTAGE CEILING MOUNTED WIRELESS OCCUPANCY SENSOR, RADIO PWR SAVR SERIES
6. LOW VOLTAGE LIGHTING CONTROLS POWER/RELAY PACK, RADIO PWR SAVR SERIES
7. LOW VOLTAGE CEILING MOUNTED WIRELESS DAYLIGHT HARVESTING SENSOR, RADIO PWR SAVR SERIES
8. LOW VOLTAGE WALL ON/OFF 3-WAY SWITCH WITH DIMMING, LUTRON MAESTRO SERIES.
9. LOW VOLTAGE WALL ON/OFF KEYED SWITCH WITH DIMMING




3 RCP - BLDG C2
1/8" = 1'-0"




2 RCP - BLDG C4
1/8" = 1'-0"




1 RCP - BLDG C6
1/8" = 1'-0"

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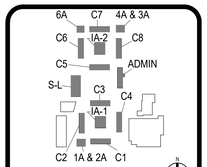

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 22576
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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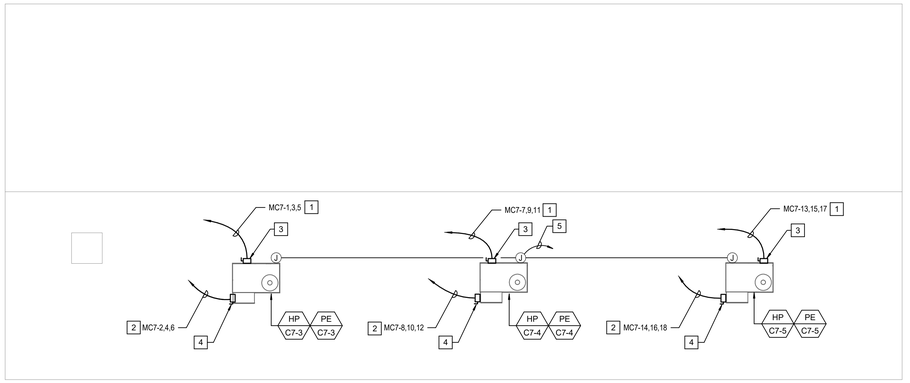
DSA Submittal

ELECTRICAL BUILDING LIGHTING PLAN BLDG C2, C4 & C6

E3.03

0" 1"

E4.01 - ELECTRICAL BUILDING ROOF PLANS C7, C8, S-L & ADMIN




**3** ROOF PLAN - BLDG C7
1/8" = 1'-0"




**2** ROOF PLAN - BLDG S-L
1/8" = 1'-0"




**1** ROOF PLAN - BLDG C8
1/8" = 1'-0"

## GENERAL NOTES

1. CONTRACTOR TO PROVIDE CONNECTION FROM EXHAUST FANS TO ALL MOTORIZED BACKDRAFT DAMPERS AS REQUIRED, COORDINATE WITH MECHANICAL.

## KEY NOTES

1 PROVIDE 208V/3PH POWER CONNNECTION TO HEAT PUMP, 3/4"C - 3 #6 + 1 #10 GRD.

2 PROVIDE 208/3PH POWER CONNECTION TO POWER EXHAUST, 3/4"C - 3 #12 + 1 #12 GRD.

3 NON-FUSED DISCONNECT SWITCH, NEMA 3R FACTORY MOUNTED BY MECHANICAL. SEE MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION. TYPICAL.

4 PROVIDE NON-FUSED NEMA-3R/30A/3P DISCONNECT SWITCH FOR POWER EXHAUST. TYPICAL.

5 PROVIDE 120V POWER CONNECTION TO FACTORY MOUNTED WP/GFCI CONVENIENCE OUTLET. CONNECT TO NEAREST 120V CIRCUIT, NOT TO EXCEED 16 AMPS.

6 PROVIDE NON-FUSED NEMA-3R/30A/2P DISCONNECT SWITCH FOR HEAT PUMP 'HP-SL1' AND 'HP-SL2'.

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PBK.com

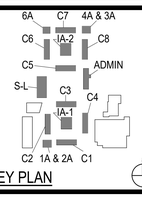
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

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REGISTERED PROFESSIONAL ENGINEER
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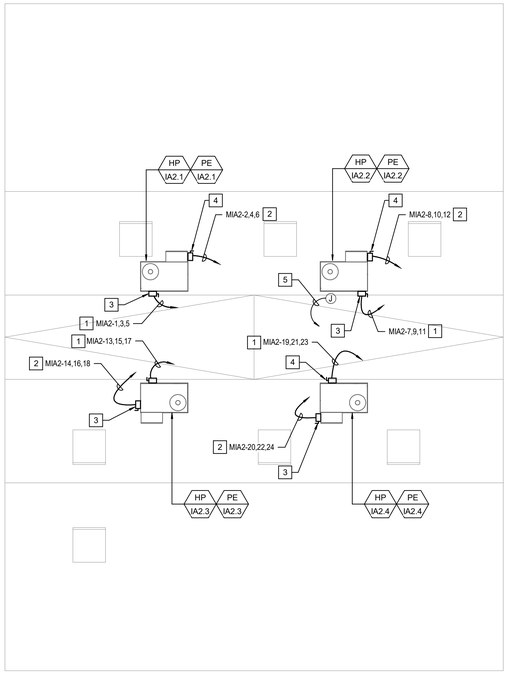
DSA Submittal

**ELECTRICAL BUILDING ROOF PLANS C7, C8, S-L & ADMIN**

**E4.01**

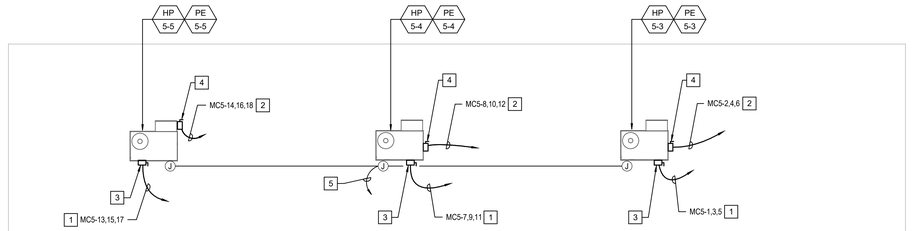
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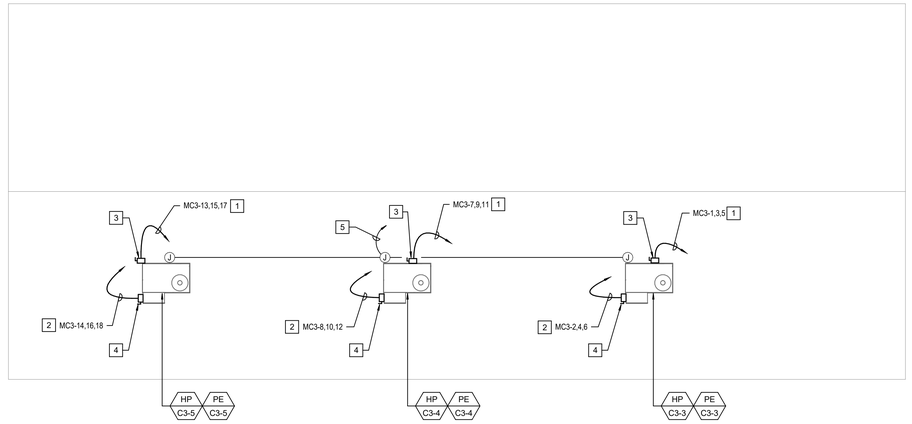

NORTH

## 5 ROOF PLAN - BLDG IA-2
1/8" = 1'-0"



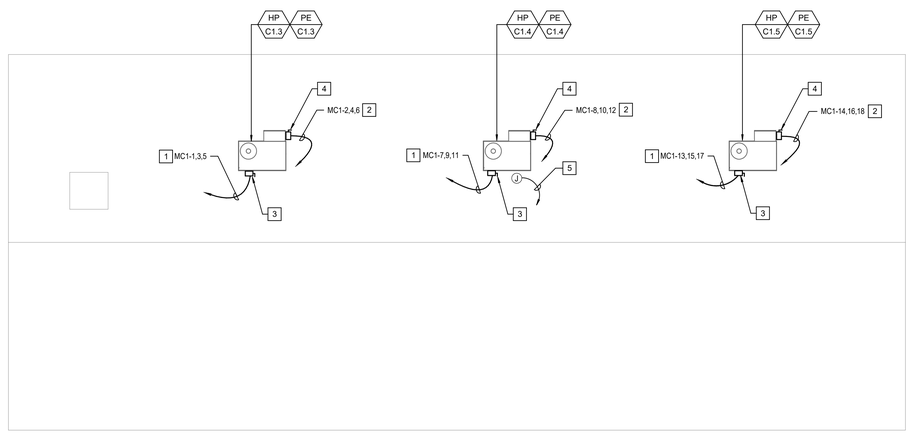

NORTH

## 3 ROOF PLAN - BLDG C5
1/8" = 1'-0"



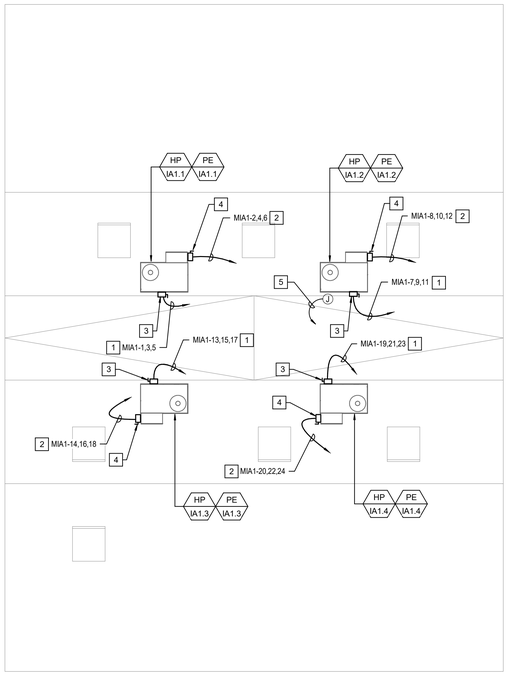

NORTH

## 2 ROOF PLAN - BLDG C3
1/8" = 1'-0"




NORTH

## 1 ROOF PLAN - BLDG C1
1/8" = 1'-0"




NORTH

## 4 ROOF PLAN - BLDG IA-1
1/8" = 1'-0"

## GENERAL NOTES

1. CONTRACTOR TO PROVIDE CONNECTION FROM EXHAUST FANS TO ALL MOTORIZED BACKDRAFT DAMPERS AS REQUIRED, COORDINATE WITH MECHANICAL.

## KEY NOTES

1. PROVIDE 208V/3PH POWER CONNNECTION TO HEAT PUMP, 3/4"C - 3 #6 + 1 #10 GRD.
2. PROVIDE 208/3PH POWER CONNECTION TO POWER EXHAUST, 3/4"C - 3 #12 + 1 #12 GRD.
3. NON-FUSED DISCONNECT SWITCH, NEMA 3R FACTORY MOUNTED BY MECHANICAL. SEE MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION. TYPICAL.
4. PROVIDE NON-FUSED NEMA-3R/30A/3PH DISCONNECT SWITCH FOR POWER EXHAUST. TYPICAL.
5. PROVIDE 120V POWER CONNECTION TO FACTORY MOUNTED WP/GFCI CONVENIENCE OUTLET. CONNECT TO NEAREST 120V CIRCUIT, NOT TO EXCEED 16 AMPS.

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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

6A C7 4A & 3A
C6 IA-2 C8
C5 ADMIN
S-L C3 C4
IA-1
C2 1A & 2A C1
N
KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 22576
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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| 03/31/2023 | 220526 |

REVISIONS

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| | DSA Submittal | |

**ELECTRICAL BUILDING ROOF PLANS C1, C3, C5, IA-1 & IA-2**

**E4.02**

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E4.03 - ELECTRICAL BUILDING ROOF PLANS C2, C4 & C6

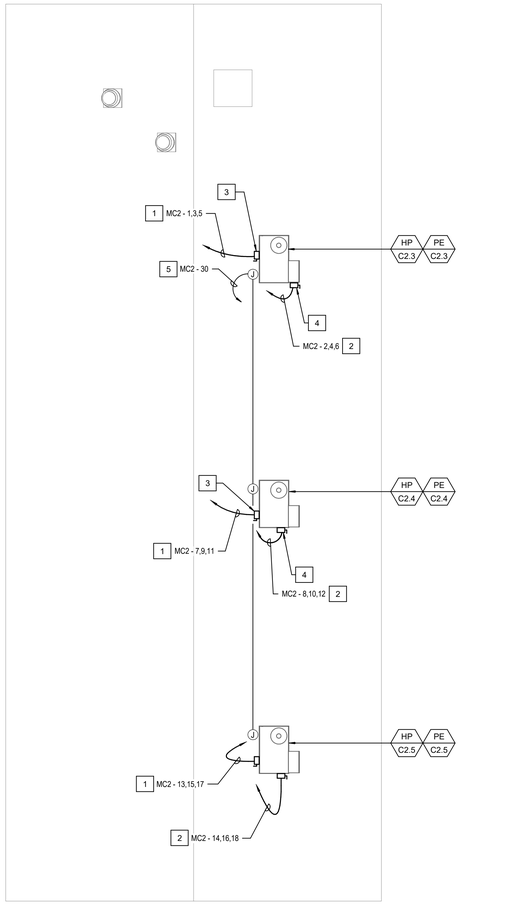
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## GENERAL NOTES

1. CONTRACTOR TO PROVIDE CONNECTION FROM EXHAUST FANS TO ALL MOTORIZED BACKDRAFT DAMPERS AS REQUIRED, COORDINATE WITH MECHANICAL.

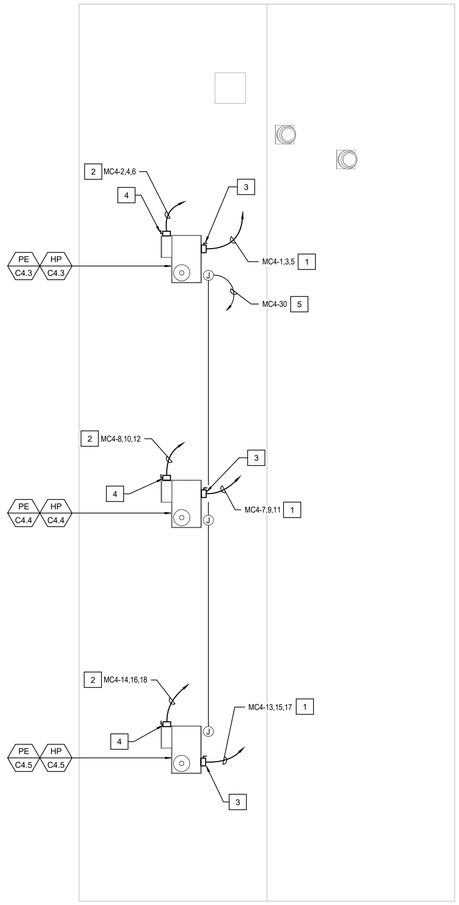
## KEY NOTES

1. PROVIDE 208V/3PH POWER CONNNECTION TO HEAT PUMP, 3/4"C - 3 #6 + 1 #10 GRD.
2. PROVIDE 208/3PH POWER CONNECTION TO POWER EXHAUST, 3/4"C - 3 #12 + 1 #12 GRD.
3. NON-FUSED DISCONNECT SWITCH, NEMA 3R FACTORY MOUNTED BY MECHANICAL. SEE MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION. TYPICAL
4. PROVIDE NON-FUSED NEMA-3R/30A/3PH DISCONNECT SWITCH FOR POWER EXHAUST.
5. PROVIDE 120V POWER CONNECTION TO FACTORY MOUNTED WP/GFCI CONVENIENCE OUTLET. CONNECT TO NEAREST 120V CIRCUIT, NOT TO EXCEED 16 AMPS.



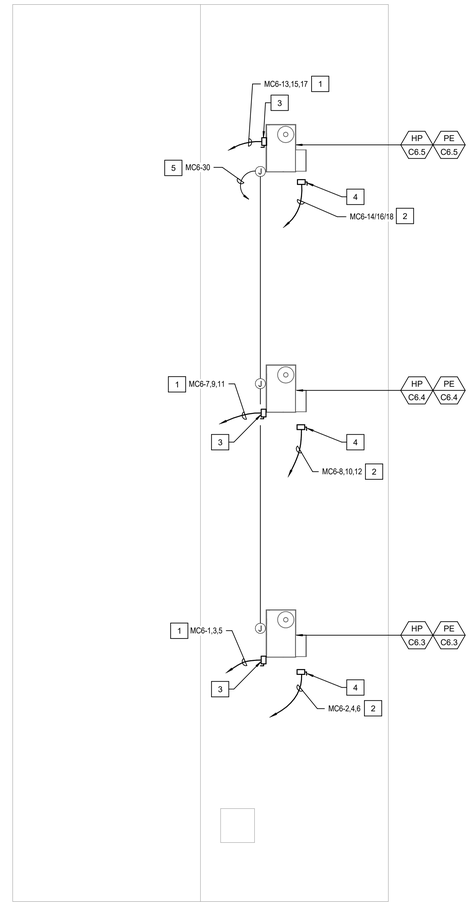

NORTH

3 ROOF PLAN - BLDG C2
1/8" = 1'-0"




NORTH

2 ROOF PLAN - BLDG C4
1/8" = 1'-0"




NORTH

1 ROOF PLAN - BLDG C6
1/8" = 1'-0"

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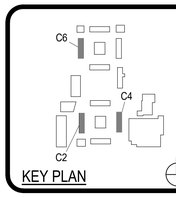
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WESTMINSTER,CA 92683

DSA Submittal

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No. E 22576
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STATE OF CALIFORNIA

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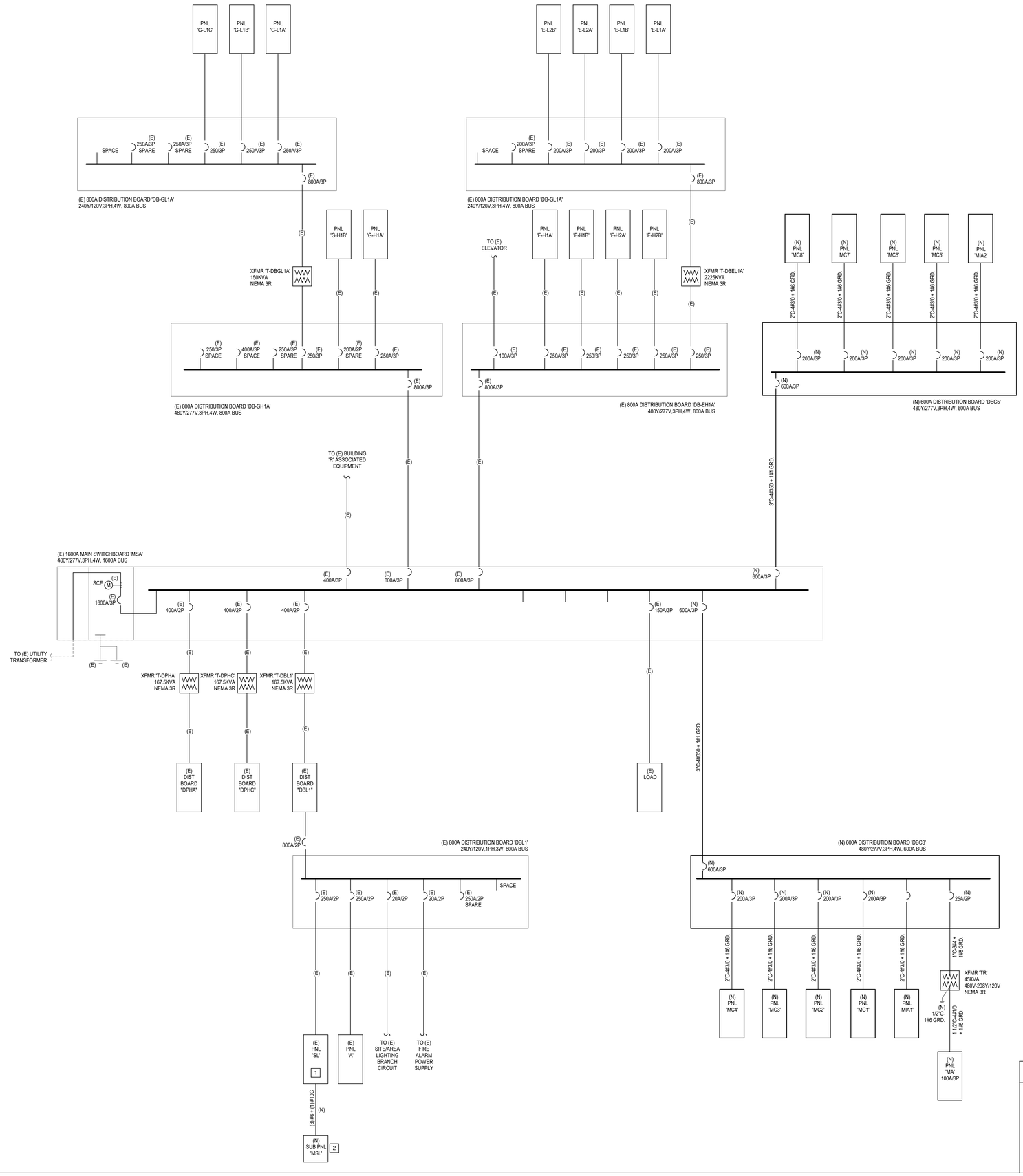
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| | | |

DSA Submittal

# ELECTRICAL BUILDING ROOF PLANS C2, C4 & C6

# E4.03

FILE PATH: Z:\Projects\...
9/22/2023 1:55:38 PM




## KEY NOTES

1. RELOCATE (2) 20A/1P BREAKER FROM PNL 'SL' TO (N) PNL 'MSL'. EXTEND EXISTING BRANCH CIRCUIT WIRING AS REQUIRED.
2. PROVIDE NEW 60A/2P BREAKER IN SPACES 39 & 41 TO FEED NEW 'MSL'. ROUTE NEW 3 #6, #10G 1" CONDUIT.

**1** SINGLE LINE DIAGRAM
NOT TO SCALE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

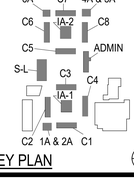
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DE LA CRUZ
No. E 23576
Exp. 09-30-2024
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA Submittal

## ELECTRICAL SINGLE LINE DIAGRAM

E5.01

Job:WARNER MOD. Job No.220526

Mounting**RECESSED** Main Type**MCB (225A)** Neutral**100%** Voltage: **480Y/277V-3PH 4W** Main Size: **225 AMPS** AIC Rating**10000** Ground**Equipment Ground** Lugs**SINGLE**

PANEL: **MC1**

| ALL LOADS IN VA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 6287 | | | | | 0.0 | HP-C1.3 | 50/3 | #6 | 1 | A | 2 | #12 | 15/3 | PE-C1.3 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 3 | B | 4 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 5 | C | 6 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C1.4 | 50/4 | #6 | 7 | A | 8 | #12 | 15/3 | PE-C1.4 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 9 | B | 10 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 11 | C | 12 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C1.5 | 50/5 | #6 | 13 | A | 14 | #12 | 15/3 | PE-C1.5 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 15 | B | 16 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 17 | C | 18 | - | - | - | | | 537 | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 19 | A | 20 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 21 | B | 22 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 23 | C | 24 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.0 |
| 0 | 0 | 56580 | 0 | 0 | 0 | 0 | 0 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 4830 | 0 | 0 | 0 | 0 | 0.0 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

| Phase Load | |
|---|---|
| Ph | KVA |
| A | 20.5 |
| B | 20.5 |
| C | 20.5 |

Panel Remarks: *NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 61.4 | 73.9 | | 61.4 | 73.9 |

PANEL: **MC1**

Date: 8/17/2023 By: N.OROPEZA

Job:WARNER MOD. Job No.220526

Mounting**RECESSED** Main Type**MCB (225A)** Neutral**100%** Voltage: **480Y/277V-3PH 4W** Main Size: **225 AMPS** AIC Rating**10000** Ground**Equipment Ground** Lugs**SINGLE**

PANEL: **MC5**

| ALL LOADS IN VA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 6287 | | | | | 0.0 | HP-C5.3 | 50/3 | #6 | 1 | A | 2 | #12 | 15/3 | PE-C5.3 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 3 | B | 4 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 5 | C | 6 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C5.4 | 50/3 | #6 | 7 | A | 8 | #12 | 15/3 | PE-C5.4 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 9 | B | 10 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 11 | C | 12 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C5.5 | 50/3 | #6 | 13 | A | 14 | #12 | 15/3 | PE-C5.5 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 15 | B | 16 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 17 | C | 18 | - | - | - | | | 537 | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 19 | A | 20 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 21 | B | 22 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 23 | C | 24 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.0 |
| 0 | 0 | 56580 | 0 | 0 | 0 | 0 | 0 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 4830 | 0 | 0 | 0 | 0 | 0.0 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

| Phase Load | |
|---|---|
| Ph | KVA |
| A | 20.5 |
| B | 20.5 |
| C | 20.5 |

Panel Remarks: *NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 61.4 | 73.9 | | 61.4 | 73.9 |

PANEL: **MC5**

Date: 8/17/2023 By: N.OROPEZA

Job:WARNER MOD. Job No.220526

Mounting**RECESSED** Main Type**MCB (225A)** Neutral**100%** Voltage: **480Y/277V-3PH 4W** Main Size: **225 AMPS** AIC Rating**10000** Ground**Equipment Ground** Lugs**SINGLE**

PANEL: **MC2**

| ALL LOADS IN VA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 6287 | | | | | 0.0 | HP-C2.3 | 50/3 | #6 | 1 | A | 2 | #12 | 15/3 | PE-C2.3 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 3 | B | 4 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 5 | C | 6 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C2.4 | 50/4 | #6 | 7 | A | 8 | #12 | 15/3 | PE-C2.4 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 9 | B | 10 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 11 | C | 12 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C2.5 | 50/5 | #6 | 13 | A | 14 | #12 | 15/3 | PE-C2.5 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 15 | B | 16 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 17 | C | 18 | - | - | - | | | 537 | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 19 | A | 20 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 21 | B | 22 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 23 | C | 24 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.0 |
| 0 | 0 | 56580 | 0 | 0 | 0 | 0 | 0 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 4830 | 0 | 0 | 0 | 0 | 0 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

| Phase Load | |
|---|---|
| Ph | KVA |
| A | 20.5 |
| B | 20.5 |
| C | 20.5 |

Panel Remarks: *NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 61.4 | 73.9 | | 61.4 | 73.9 |

PANEL: **MC2**

Date: 8/17/2023 By: N.OROPEZA

Job:WARNER MOD. Job No.220526

Mounting**RECESSED** Main Type**MCB (225A)** Neutral**100%** Voltage: **480Y/277V-3PH 4W** Main Size: **225 AMPS** AIC Rating**10000** Ground**Equipment Ground** Lugs**SINGLE**

PANEL: **MC6**

| ALL LOADS IN VA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 6287 | | | | | 0.0 | HP-C6.3 | 50/3 | #6 | 1 | A | 2 | #12 | 15/3 | PE-C6.3 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 3 | B | 4 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 5 | C | 6 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C6.4 | 50/3 | #6 | 7 | A | 8 | #12 | 15/3 | PE-C6.4 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 9 | B | 10 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 11 | C | 12 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C6.5 | 50/3 | #6 | 13 | A | 14 | #12 | 15/3 | PE-C6.5 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 15 | B | 16 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 17 | C | 18 | - | - | - | | | 537 | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 19 | A | 20 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 21 | B | 22 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 23 | C | 24 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.0 |
| 0 | 0 | 56580 | 0 | 0 | 0 | 0 | 0.0 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 4830 | 0 | 0 | 0 | 0 | 0.0 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

| Phase Load | |
|---|---|
| Ph | KVA |
| A | 20.5 |
| B | 20.5 |
| C | 20.5 |

Panel Remarks: *NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 61.4 | 73.9 | | 61.4 | 73.9 |

PANEL: **MC6**

Date: 8/17/2023 By: N.OROPEZA

Job:WARNER MOD. Job No.220526

Mounting**RECESSED** Main Type**MCB (225A)** Neutral**100%** Voltage: **480Y/277V-3PH 4W** Main Size: **225 AMPS** AIC Rating**10000** Ground**Equipment Ground** Lugs**SINGLE**

PANEL: **MC3**

| ALL LOADS IN VA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 6287 | | | | | 0.0 | HP-C3.3 | 50/3 | #6 | 1 | A | 2 | #12 | 15/3 | PE-C3.3 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 3 | B | 4 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 5 | C | 6 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C3.4 | 50/3 | #6 | 7 | A | 8 | #12 | 15/3 | PE-C3.4 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 9 | B | 10 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 11 | C | 12 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C3.5 | 50/3 | #6 | 13 | A | 14 | #12 | 15/3 | PE-C3.5 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 15 | B | 16 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 17 | C | 18 | - | - | - | | | 537 | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 19 | A | 20 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 21 | B | 22 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 23 | C | 24 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.0 |
| 0 | 0 | 56580 | 0 | 0 | 0 | 0 | 0 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 4830 | 0 | 0 | 0 | 0 | 0.0 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

| Phase Load | |
|---|---|
| Ph | KVA |
| A | 20.5 |
| B | 20.5 |
| C | 20.5 |

Panel Remarks: *NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 61.4 | 73.9 | | 61.4 | 73.9 |

PANEL: **MC3**

Date: 8/17/2023 By: N.OROPEZA

Job:WARNER MS - MODERNIZATION Job No.220526

Mounting**RECESSED** Main Type**MCB (225A)** Neutral**100%** Voltage: **480Y/277V-3PH 4W** Main Size: **225 AMPS** AIC Rating**10000** Ground**Equipment Ground** Lugs**SINGLE**

PANEL: **MC7**

| ALL LOADS IN VA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 6287 | | | | | 0.00 | HP-C7.3 | 50/3 | #6 | 1 | A | 2 | #12 | 15/3 | PE-C7.3 | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 3 | B | 4 | - | - | - | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 5 | C | 6 | - | - | - | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | HP-C7.4 | 50/3 | #6 | 7 | A | 8 | #12 | 15/3 | PE-C7.4 | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 9 | B | 10 | - | - | - | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 11 | C | 12 | - | - | - | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | HP-C7.5 | 50/3 | #6 | 13 | A | 14 | #12 | 15/3 | PE-C7.5 | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 15 | B | 16 | - | - | - | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 17 | C | 18 | - | - | - | | | 537 | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 19 | A | 20 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 21 | B | 22 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 23 | C | 24 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.00 |
| 0 | 0 | 56580 | 0 | 0 | 0 | 0 | 0.00 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 4830 | 0 | 0 | 0 | 0 | 0.00 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

| Phase Load | |
|---|---|
| Ph | KVA |
| A | 20.5 |
| B | 20.5 |
| C | 20.5 |

Panel Remarks: *NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 61.4 | 73.9 | | 61.4 | 73.9 |

PANEL: **MC7**

Date: 8/17/2023 By: N.OROPEZA

10/22/03

Job:WARNER MOD. Job No.220526

Mounting**RECESSED** Main Type**MCB (225A)** Neutral**100%** Voltage: **480Y/277V-3PH 4W** Main Size: **225 AMPS** AIC Rating**10000** Ground**Equipment Ground** Lugs**SINGLE**

PANEL: **MC4**

| ALL LOADS IN VA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 6287 | | | | | 0.0 | HP-C4.3 | 50/3 | #6 | 1 | A | 2 | #12 | 15/3 | PE-C4.3 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 3 | B | 4 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 5 | C | 6 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C4.4 | 50/3 | #6 | 7 | A | 8 | #12 | 15/3 | PE-C4.4 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 9 | B | 10 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 11 | C | 12 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-C4.5 | 50/3 | #6 | 13 | A | 14 | #12 | 15/3 | PE-C4.5 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 15 | B | 16 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 17 | C | 18 | - | - | - | | | 537 | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 19 | A | 20 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 21 | B | 22 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 23 | C | 24 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.0 |
| 0 | 0 | 56580 | 0 | 0 | 0 | 0 | 0 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 4830 | 0 | 0 | 0 | 0 | 0 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

| Phase Load | |
|---|---|
| Ph | KVA |
| A | 20.5 |
| B | 20.5 |
| C | 20.5 |

Panel Remarks: *NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 61.4 | 73.9 | | 61.4 | 73.9 |

PANEL: **MC4**

Date: 8/17/2023 By: N.OROPEZA

Job:WARNER MS - MODERNIZATION Job No.220526

Mounting**RECESSED** Main Type**MCB (225A)** Neutral**100%** Voltage: **480Y/277V-3PH 4W** Main Size: **225 AMPS** AIC Rating**10000** Ground**Equipment Ground** Lugs**SINGLE**

PANEL: **MC8**

| ALL LOADS IN VA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 6287 | | | | | 0.00 | HP-C8.3 | 50/3 | #6 | 1 | A | 2 | #12 | 15/3 | PE-C8.3 | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 3 | B | 4 | - | - | - | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 5 | C | 6 | - | - | - | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | HP-C8.4 | 50/3 | #6 | 7 | A | 8 | #12 | 15/3 | PE-C8.4 | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 9 | B | 10 | - | - | - | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 11 | C | 12 | - | - | - | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | HP-C8.5 | 50/3 | #6 | 13 | A | 14 | #12 | 15/3 | PE-C8.5 | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 15 | B | 16 | - | - | - | | | 537 | | | | | 0.00 |
| | | 6287 | | | | | 0.00 | - | - | - | 17 | C | 18 | - | - | - | | | 537 | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 19 | A | 20 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 21 | B | 22 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 23 | C | 24 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.00 |
| 0 | 0 | 56580 | 0 | 0 | 0 | 0 | 0.00 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 4830 | 0 | 0 | 0 | 0 | 0.00 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

| Phase Load | |
|---|---|
| Ph | KVA |
| A | 20.5 |
| B | 20.5 |
| C | 20.5 |

Panel Remarks: *NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 61.4 | 73.9 | | 61.4 | 73.9 |

PANEL: **MC8**

Date: 8/17/2023 By: N.OROPEZA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
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P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

**PROJECT ADDRESS:** 14171 NEWLAND ST. WESTMINSTER,CA 92683

**DSA Submittal**

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

6A C7 4A & 3A
C6 1A-2 C8
C5 ADMIN
S-L C3 C4
1A-1
C2 1A & 2A C1
N
KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER RONALD C DE LA CRUZ No. E 23576 Exp. 09-30-2025 ELECTRICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|

**DSA Submittal**

**ELECTRICAL SCHEDULES**

**E6.01**

**FILE PATH:** Z:\Projects\...
9/22/2023 1:55:42 PM

Job:WARNER MOD. Job No.220526

Mounting:**RECESSED** Voltage: **480Y/277V-3PH 4W** AIC Rating:**10000**
Main Type:**MCB (225A)** Main Size: **225 AMPS** Ground:**Equipment Ground**
Neutral:**100%** Lugs:**SINGLE**

PANEL: **MIA1**

| | | | | | | | | | | ALL LOADS IN VA | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 6287 | | | | | 0.0 | HP-IA1.1 | 50/3 | #6 | 1 | A | 2 | #12 | 15/3 | PE-IA1.1 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 3 | B | 4 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 5 | C | 6 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-IA1.2 | 50/3 | #6 | 7 | A | 8 | #12 | 15/3 | PE-IA1.2 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 9 | B | 10 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 11 | C | 12 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-IA1.3 | 50/3 | #6 | 13 | A | 14 | #12 | 15/3 | PE-IA1.3 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 15 | B | 16 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 17 | C | 18 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-IA1.4 | 50/3 | #6 | 19 | A | 20 | #12 | 15/3 | PE-IA1.3 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 21 | B | 22 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 23 | C | 24 | - | - | - | | | 537 | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.0 |
| 0 | 0 | 75440 | 0 | 0 | 0 | 0 | 0 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 6440 | 0 | 0 | 0 | 0 | 0 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 81.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 81.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

Phase Load

| Ph | KVA |
|---|---|
| A | 20.5 |
| B | 20.5 |
| C | 20.5 |

Panel Remarks:

*NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 81.9 | 98.5 | | 81.9 | 98.5 |

PANEL: **MIA1**

Date: 8/17/2023 By: N.OROPEZA

Job:WARNER MOD. Job No.220526

Mounting:**RECESSED** Voltage: **480Y/277V-3PH 4W** AIC Rating:**10000**
Main Type:**MCB (225A)** Main Size: **225 AMPS** Ground:**Equipment Ground**
Neutral:**100%** Lugs:**SINGLE**

PANEL: **MIA2**

| | | | | | | | | | | ALL LOADS IN VA | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 6287 | | | | | 0.0 | HP-IA1.1 | 50/3 | #6 | 1 | A | 2 | #12 | 15/3 | PE-IA1.1 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 3 | B | 4 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 5 | C | 6 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-IA1.2 | 50/3 | #6 | 7 | A | 8 | #12 | 15/3 | PE-IA1.2 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 9 | B | 10 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 11 | C | 12 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-IA1.3 | 50/3 | #6 | 13 | A | 14 | #12 | 15/3 | PE-IA1.3 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 15 | B | 16 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 17 | C | 18 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | HP-IA1.4 | 50/3 | #6 | 19 | A | 20 | #12 | 15/3 | PE-IA1.3 | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 21 | B | 22 | - | - | - | | | 537 | | | | | 0.0 |
| | | 6287 | | | | | 0.0 | - | - | - | 23 | C | 24 | - | - | - | | | 537 | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.0 |
| | | | | | | | 0.0 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.0 |
| 0 | 0 | 75440 | 0 | 0 | 0 | 0 | 0 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 6440 | 0 | 0 | 0 | 0 | 0 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 81.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 81.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

Phase Load

| Ph | KVA |
|---|---|
| A | 20.5 |
| B | 20.5 |
| C | 20.5 |

Panel Remarks:

*NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 81.9 | 98.5 | | 81.9 | 98.5 |

PANEL: **MIA2**

Date: 8/17/2023 By: N.OROPEZA

Job:WARNER MS - MODERNIZATION Job No.220526

Mounting:**RECESSED** Voltage: **208Y/120V-3PH 4W** AIC Rating:**14000**
Main Type:**MCB (225A)** Main Size: **225 AMPS** Ground:**Equipment Ground**
Neutral:**100%** Lugs:**SINGLE**

PANEL: **MLA**

| | | | | | | | | | | ALL LOADS IN VA | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S |
| | | 725 | | | | | 0.00 | FC-A1 | 15/2 | 12 | 1 | A | 2 | 12 | 15/2 | FC-A4 | | | 725 | | | | | 0.00 |
| | | 725 | | | | | 0.00 | ---- | -/2 | 12 | 3 | B | 4 | 12 | -/2 | ---- | | | 725 | | | | | 0.00 |
| | | 1170 | | | | | 0.00 | FC-A2 | 15/2 | 12 | 5 | C | 6 | 12 | 15/2 | FC-A5 | | | 1170 | | | | | 0.00 |
| | | 1170 | | | | | 0.00 | ---- | -/2 | 12 | 7 | A | 8 | 12 | -/2 | ---- | | | 1170 | | | | | 0.00 |
| | | 725 | | | | | 0.00 | FC-A3 | 15/2 | 12 | 9 | B | 10 | 12 | 15/2 | FC-A6 | | | 1170 | | | | | 0.00 |
| | | 725 | | | | | 0.00 | ---- | -/2 | 12 | 11 | C | 12 | 12 | -/2 | ---- | | | 1170 | | | | | 0.00 |
| | | 959 | | | | | 0.00 | OAF-A1 | 15/2 | 12 | 13 | A | 14 | 12 | 15/2 | MDC-A1 | | | 171 | | | | | 0.00 |
| | | 959 | | | | | 0.00 | ---- | -/2 | 12 | 15 | B | 16 | 12 | -/2 | ---- | | | 171 | | | | | 0.00 |
| | | | 4853 | | | | 0.00 | HP-A1 | 100/3 | 1 | 17 | C | 18 | | | SPACE | | | | | | | | 0.00 |
| | | | 4853 | | | | 0.00 | ---- | -/3 | 1 | 19 | A | 20 | | | SPACE | | | | | | | | 0.00 |
| | | | 4853 | | | | 0.00 | ---- | -/3 | 1 | 21 | B | 22 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 23 | C | 24 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 25 | A | 26 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 27 | B | 28 | | | SPACE | | | | | | | | 0.00 |
| | | | | | | | 0.00 | SPACE | | | 29 | C | 30 | | | SPACE | | | | | | | | 0.00 |
| 0 | 0 | 7160 | 14560 | 0 | 0 | 0 | 0.00 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 6472 | 0 | 0 | 0 | 0 | 0.00 |

LOAD SUMMARY

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 13.6 | 14.6 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Design Factors |
| 0.0 | 0.0 | 13.6 | 14.6 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

Phase Load

| Ph | KVA |
|---|---|
| A | 9.8 |
| B | 9.3 |
| C | 9.1 |

Panel Remarks:

*NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 28.2 | 78.3 | | 28.2 | 78.3 |

PANEL: **MLA**

Date: 8/17/2023 By: N.OROPEZA

Job:WARNER MS - MODERNIZATION Job No.220526

Mounting:**SURFACE** Voltage: **240V/120-2PH-3W** AIC Rating:**10000**
Main Type:**MCB (60A)** Main Size: **100 AMPS** Ground:**Equipment Ground**
Neutral:**100%** Lugs:**FEED THRU**

PANEL: **MSL**

| | | | | | | | | | | ALL LOADS IN VA | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ltg. | Recept | Motor | Heat | Cool | Equip. | | S/S | Description | Amp/P | Wire | Cir. No. | Ph | Cir. No. | Wire | Amp/P | Description | Ltg. | Recept | Motor | Heat | Cool | Equip. | Kitchen | S/S |
| | | 107 | | | | | 0.00 | SF-SL-1 | 15/1 | 12 | 1 | A | 2 | 12 | 15/1 | EF-SL-1 | | | 107 | | | | | 0.00 |
| | | 884 | | | | | 0.00 | HP-SL1 | 15/2 | 12 | 3 | B | 4 | 12 | 15/2 | HP-SL2 | | | 884 | | | | | 0.00 |
| | | 884 | | | | | 0.00 | ---- | -/2 | 12 | 5 | A | 6 | 12 | -/2 | ---- | | | 884 | | | | | 0.00 |
| | 180 | | | | | | 0.00 | ROOF RECEPT. | 20/1 | 12 | 7 | B | 8 | | | EXISTING LOAD 'SL' | | | | | | | | 0.00 |
| | | | | | | | 0.00 | | | | 9 | A | 10 | | | EXISTING LOAD 'SL' | | | | | | | | 0.00 |
| | | | | | | | 0.00 | | | | 11 | B | 12 | | | | | | | | | | | 0.00 |
| | | | | | | | 0.00 | | | | 13 | A | 14 | | | | | | | | | | | 0.00 |
| | | | | | | | 0.00 | | | | 15 | B | 16 | | | | | | | | | | | 0.00 |
| | | | | | | | 0.00 | | | | 17 | A | 18 | | | | | | | | | | | 0.00 |
| | | | | | | | 0.00 | | | | 19 | B | 20 | | | | | | | | | | | 0.00 |
| | | | | | | | 0.00 | | | | 21 | A | 22 | | | | | | | | | | | 0.00 |
| | | | | | | | 0.00 | | | | 23 | B | 24 | | | | | | | | | | | 0.00 |
| 0 | 180 | 1875 | 0 | 0 | 0 | 0 | 0.00 | **TOTALS** | | | | | | | | **TOTALS** | 0 | 0 | 1875 | 0 | 0 | 0 | 0 | 0.00 |

LOAD SUMMARY (KVA)

| Ltg. | Recept | Motor | Heat | Cool | Other | Kitchen | S/S | Description |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.2 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Connected KVA |
| 1.25 | ** | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 0.50 | *Div. Factor |
| 0.0 | 0.2 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Design KVA |

Phase Load (KVA)

| Phase | | Phase |
|---|---|---|
| A | | B |
| 2.0 | | 1.9 |

Panel Remarks:

*NEW PANEL*

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

| | Con. KVA | Con. Amps | | Des. KVA | Des. Amps |
|---|---|---|---|---|---|
| TOTAL | 3.9 | 16.4 | | 3.9 | 16.4 |

PANEL: **MSL**

Date: 8/17/2023 By: Designer

| TYPE | DESCRIPTION | VOLTAGE | MOUNTING | MANUFACTURER & NO. | REMARKS |
|---|---|---|---|---|---|
| FX-A | 2X4 TROFFER | MVOLT | RECESSED | LITHONIA LIGHTING<br>EPANL 2X4 4000LM 80CRI 35K MIN1 MVOLT | |
| FX-AE | 2X4 TROFFER - EMERG. | MVOLT | RECESSED | LITHONIA LIGHTING<br>EPANL 2X4 4000LM 80CRI 35K MIN1 MVOLT E10WCP | PROVIDE 90 MIN. EMERGENCY BATTERY BACKUP 'E10WCP' |
| FX-B | 1X4 TROFFER | MVOLT | RECESSED | LITHONIA LIGHTING<br>EPANL 1X4 4000LM 80CRI 35K MIN1 MVOLT | |
| FX-BE | 1X4 TROFFER - EMERG. | MVOLT | RECESSED | LITHONIA LIGHTING<br>EPANL 1X4 4000LM 80CRI 35K MIN1 MVOLT E10WCP | PROVIDE 90 MIN. EMERGENCY BATTERY BACKUP 'E10WCP' |
| FX-C | 2X4 TROFFER | MVOLT | SURFACE | LITHONIA LIGHTING<br>EPANL 2X4 4000LM 80CRI 35K MIN1 MVOLT | PROVIDE SURFACE MOUNT KIT 'SMKSH'. |
| FX-D | 5" DOWNLIGHT | MVOLT | SURFACE | JUNO LIGHTING<br>JSF SIN 07LM 35K 90CRI 120 FRPC WH E10WLCP | PROVIDE EMERGENCY BATTERY BACKUP 'E10WLCP' |
| FX-E | 1X4 TROFFER | MVOLT | SURFACE | LITHONIA LIGHTING<br>EPANL 1X4 4000LM 80CRI 35K MIN1 MVOLT | PROVIDE SURFACE MOUNT KIT 'SMKSH'. |
| FX-EE | 1X4 TROFFER | MVOLT | SURFACE | LITHONIA LIGHTING<br>EPANL 1X4 4000LM 80CRI 35K MIN1 MVOLT E10WCP | PROVIDE 90 MIN. EMERGENCY BATTERY BACKUP 'E10WCP' |
| FX-F | 2' LINEAR | MVOLT | SURFACE | LUMINAIRE LED<br>VPF4 4FT MIN10 25W 40K MVOLT CLP FINISH | FINISH BY ARCHITECT |
| FX-GE | BREEZEWAY LIGHTS | MVOLT | SURFACE | CHSC-LED<br>11-LED F1Q-4-BB10 | FINISH BY ARCHITECT |
| FX-EX | EMERGENCY EXIT | MVOLT | SURFACE | LITHONIA LIGHTING<br>LE S 1 R EL N SD - WITH MOUNTING KIT 'ELA WG1' | COORDINATE WITH MANUFACTURER AND ARCHITECT PRIOR TO PROCUREMENT. |

Electrical Load Calculations AIC Rating:**65000**

Job:WARNER MS - MODERNIZATION Volts - Phase:**480Y/277V-3PH 4W**

Job No.:220526 DISTRIBUTION PANEL:**DBHC1** Served From:UTILITY CO TRANSFORMER

Connected Load (KVA)

| Cir. No. | Load Served | Amp/Poles | Wire and Conduit Size | Lighting | Conv. Outlets | Motors | Heating | Cooling | Others | Elect. Cooking | Spare/ Spaces | Elevators | Residential | Total KVA | Total Amps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MC1 | 200A/3P | 2"C 4 #3/0 | 0.0 | 0.0 | 81.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 81.9 | 98.5 |
| 2 | | | | 0.0 | 0.0 | 81.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 81.9 | 98.5 |
| 3 | | | | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 4 | MC2 | 200A/3P | 2"C 4 #3/0 | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 5 | | | | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 6 | | | | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 7 | MC3 | 200A/3P | 2"C 4 #3/0 | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 8 | | | | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 9 | | | | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 10 | MC4 | 200A/3P | 2"C 4 #3/0 | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 11 | | | | 0.0 | 0.0 | 13.6 | 14.6 | 0.0 | 0.0 | 0.0 | 0.0 | | | 28.2 | 33.9 |
| 12 | | | | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | | | #REF! | #REF! |
| Total Connected Load | | | | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | 0.0 | 0.0 | #REF! | #REF! |
| Demand Factor | | | | 1.25 | * | ** | 1.0 | 1.0 | 1.00 | 0.65 | 0.5 | *** | **** | -- | -- |
| Total Demand Load | | | | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | 0.0 | 0.0 | #REF! | #REF! |

* 100% of 1st 10 KVA, 50% of remaining.
** 125% of largest motor + 100% sum of remaining motors
*** Elevator Demand Factor based on T620-14.
**** Residential Demand Factor based on T220-32.

Largest Motor:_____KVA

| DISTRIBUTION PANEL: | | DBHC1 |
|---|---|---|
| MAINS | TYPE: | MAIN BREAKER |
| | SIZE: | 225 AMP |
| BUS SIZE | PHASE: | 225 AMP |
| | NEUTRAL: | 225 AMP |
| | GROUND: | PER NEC |

Date:8/18/2023 By: N.OROPEZA

Electrical Load Calculations AIC Rating:**65000**

Job:WARNER MS - MODERNIZATION Volts - Phase:**480Y/277V-3PH 4W**

Job No.:220526 DISTRIBUTION PANEL:**DBHC2** Served From:UTILITY CO TRANSFORMER

Connected Load (KVA)

| Cir. No. | Load Served | Amp/Poles | Wire and Conduit Size | Lighting | Conv. Outlets | Motors | Heating | Cooling | Others | Elect. Cooking | Spare/ Spaces | Elevators | Residential | Total KVA | Total Amps |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MC5 | 200A/3P | 2"C 4 #3/0 | 0.0 | 0.0 | 81.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 81.9 | 98.5 |
| 2 | | | | 0.0 | 0.0 | 81.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 81.9 | 98.5 |
| 3 | | | | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 4 | MC6 | 200A/3P | 2"C 4 #3/0 | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 5 | | | | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 6 | | | | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 7 | MC7 | 200A/3P | 2"C 4 #3/0 | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 8 | | | | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 9 | | | | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 10 | MC8 | 200A/3P | 2"C 4 #3/0 | 0.0 | 0.0 | 61.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | 61.4 | 73.9 |
| 11 | | | | 0.0 | 0.0 | 13.6 | 14.6 | 0.0 | 0.0 | 0.0 | 0.0 | | | 28.2 | 33.9 |
| 12 | | | | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | | | #REF! | #REF! |
| Total Connected Load | | | | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | 0.0 | 0.0 | #REF! | #REF! |
| Demand Factor | | | | 1.25 | * | ** | 1.0 | 1.0 | 1.00 | 0.65 | 0.5 | *** | **** | -- | -- |
| Total Demand Load | | | | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | #REF! | 0.0 | 0.0 | #REF! | #REF! |

* 100% of 1st 10 KVA, 50% of remaining.
** 125% of largest motor + 100% sum of remaining motors
*** Elevator Demand Factor based on T620-14.
**** Residential Demand Factor based on T220-32.

Largest Motor:_____KVA

| DISTRIBUTION PANEL: | | DBHC2 |
|---|---|---|
| MAINS | TYPE: | MAIN BREAKER |
| | SIZE: | 225 AMP |
| BUS SIZE | PHASE: | 225 AMP |
| | NEUTRAL: | 225 AMP |
| | GROUND: | PER NEC |

Date:8/18/2023 By: N.OROPEZA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


ARCHITECT PBK Architects, Inc.
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P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com


# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

**DSA Submittal**

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

6A C7 4A & 3A
C6 IA-2 C8
C5 ADMIN
S-L C3 C4
IA-1
C2 1A & 2A C1
N
KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DE LA CRUZ
No. E 23576
Exp. 09-30-2025
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
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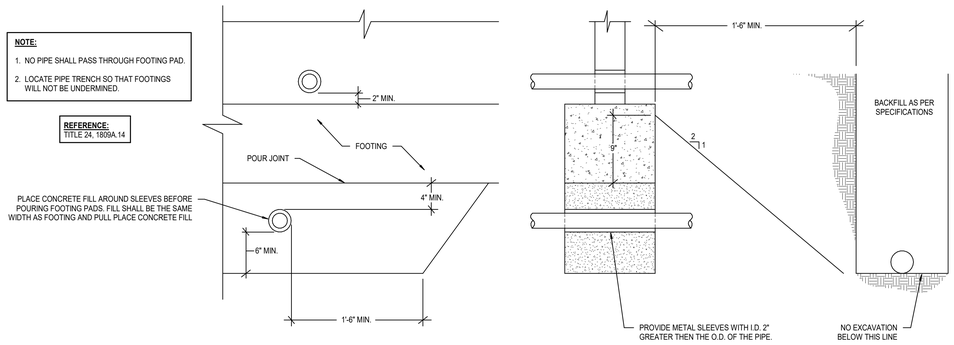
**DSA Submittal**

# ELECTRICAL SCHEDULES

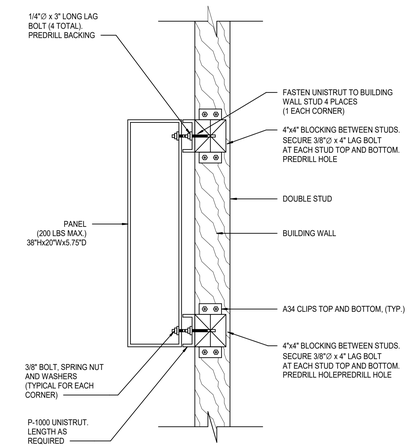
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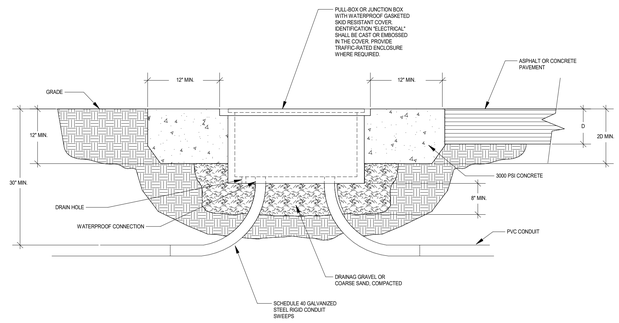
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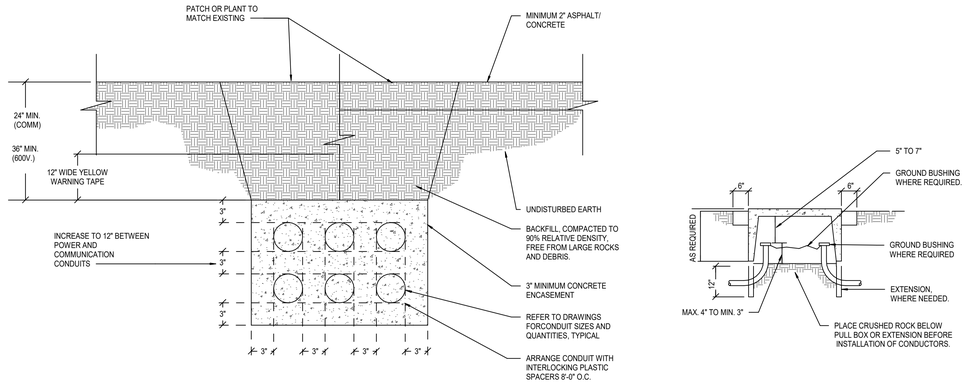

**6** TYPICAL PIPE TRENCH/FOOTING DETAIL
NOT TO SCALE



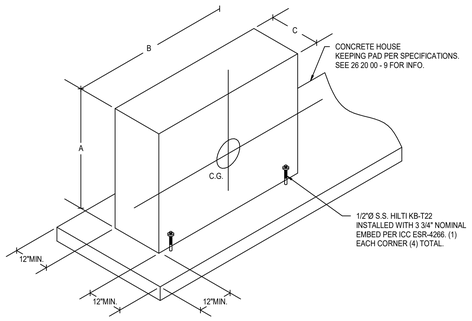

**3** SURFACE MOUNTED PANEL/CABINET AT WOOD FRAMING DETAIL
12" = 1'-0"




**5** EXTERIOR JUNCTION BOX
NOT TO SCALE

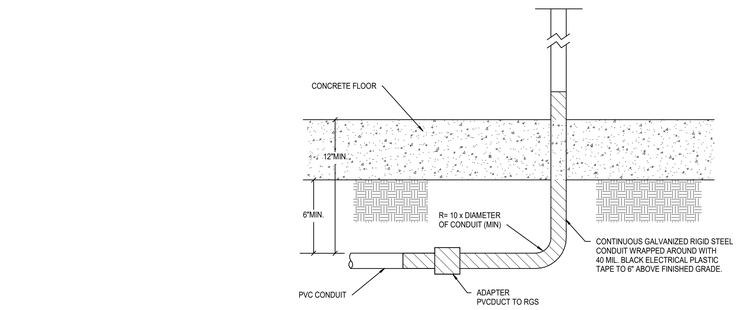



**2** TYPICAL PULL BOX AND CONDUIT PLACEMENT DETAIL
NOT TO SCALE




| SYMBOL | A | B | C | WEIGHT | MIN. NO ANCHORS | SIZE OF ANCHORS | MINIMUM EMBEDMENT |
|---|---|---|---|---|---|---|---|
| "TR" | 30" | 20" | 20" | 340 | 4 | 1/2Ø | 3 1/2" |
| | | | | | | | |
| | | | | | | | |

**4** TRANSFORMER MOUNTING DETAIL
12" = 1'-0"




**1** CONDUIT RISER DETAIL
NOT TO SCALE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
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P 949-548-5000

CONSULTANT LEAF Engineers
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8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

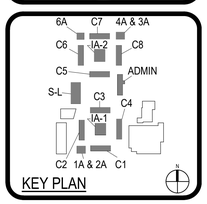
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23576
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |
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DSA Submittal

## ELECTRICAL DETAILS

# E7.01

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0" 1"

## PLUMBING LEGEND

NOTE: NOT ALL SYMBOLS TABULATED BELOW ARE NECESSARILY USED ON THE DRAWINGS.

| SYMBOL | ITEM | ABBR. |
|---|---|---|
| S / 1 | FIXTURE DESIGNATION<br>UNIT ABBREVIATION<br>NUMBER | |
| 01 / P-1 | DETAIL DESIGNATION<br>DETAIL NUMBER<br>SHEET NO. WHERE SHOWN | |
| | DOMESTIC COLD WATER | CW |
| | DOMESTIC HOT WATER | HW |
| | DOMESTIC HW RETURN | HWR |
| | EXISTING PIPING | |
| X | POINT OF CONNECTION | POC |
| C | CONDENSATE DRAIN | |
| | SHUT-OFF VALVE IN BOX | SOV |
| | PIPING RISE | |
| | PIPING DROP | |
| S / W | SOIL OR WASTE | S OR W |
| V | VENT | V |
| | VENT THRU ROOF | VTR |
| FCO | FLOOR CLEANOUT | FCO |
| COTG | CLEANOUT TO GRADE | COTG |
| | WALL CLEANOUT | WCO |
| | HOSE BIBB | HB |
| RD | ROOF DRAIN | RD |
| OD | OVERFLOW DRAIN | OD |
| | DOWN SPOUT | DS |
| | UNDERGROUND | UG |
| TP | TRAP PRIMER | TP |
| SD | STORM DRAIN | SD |
| (E) | EXISTING | EXIST. |
| (N) | NEW | NEW |
| | UNDERFLOOR | UF |
| | OVERHEAD | OH |
| R | RELIEF | |
| D | DRAIN | |
| | CONDENSATE DRAIN CLEAN OUT | CO |
| SC | SECONDARY CONDENSATE DRAIN | |
| FC | FURNACE CONDENSATE | |
| | GAS SHUT OFF VALVE | GSOV |
| | CONDENSATE DRAIN TRAP | CDT |
| LPG | LIQUIFIED PETROLEUM GAS | LPG |
| G | NATURAL GAS | G |
| | FIRE SPRINKLER RISER | FSR |
| FSL | FIRE SPRINKLER LINE | FSL |
| | FIRE DEPARTMENT CONNECTION | FDC |
| | FINISHED FLOOR | FF |
| | FLOW LINE | FL |
| ▲ | FIRE RATED PENETRATION | |
| | POINT OF DISCONNECTION | POD |
| | POINT OF CONNECTION | POC |

## CALIFORNIA GREEN BUILDING STANDARDS

THE FOLLOWING SHALL BE REQUIRED WHETHER OR NOT SPECIFICALLY SHOWN OR MENTIONED IN DRAWINGS AND/OR SPECIFICATIONS:

5.303.1 METERS: SEPARATE SUBMETERS OR METERING DEVICES SHALL BE INSTALLED FOR USES DESCRIBED IN SECTIONS
5.303.1.1 AND 5.303.1.2.

5.303.1.1 NEW BUILDINGS OR ADDITIONS IN EXCESS OF 50,000 SQUARE FEET:

1. FOR EACH INDIVIDUAL LEASED, RENTED, OR OTHER TENANT SPACE WITHIN THE BUILDING PROJECTEED TO CONSUME MORE THAN 100 GAL/DAY, INCLUDING, BUT NOT LIMITED TO, SPACES USED FOR LAUNDRY OR CLEANERS, RESTAURANT OR FOOD SERVICE, MEDICAL OR DENTAL OFFICE, LABORATORY, OR BEAUTY SALON OR BARBER SHOP.
2. WHERE SEPARATE SUBMETERS FOR INDIVIDUAL BUILDING TENANTS ARE UNFEASIBLE, FOR WATER SUPPLIED TO THE FOLLOWING SUBSYSTEMS:
   a. MAKE-UP WATER FOR COOLING TOWERS WHERE FLOW THROUGH IS GREATER THAN 500 GPM.
   b. MAKE-UP WATER FOR EVAPORATIVE COOLERS GREATER THAN 6 GPM.
   c. STEAM AND HOT-WATER BOILERS WITH ENERGY INPUT MORE THAN 500,000 BTUH/H.

5.303.1.2 EXCESS CONSUMPTION: A SEPARATE SUBMETER OR BE PROVIDED FOR ANY TENANT WITHIN A NEW BUILDING OR WITHIN AN ADDITION THAT IS PROJECTED TO CONSUME MORE THAN 1,000 GAL/DAY.

5.303.2 RESERVED

5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS: PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL COMPLY WITH THE FOLLOWING:

5.303.3.1 WATER CLOSETS: THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR TANK-TYPE TOILETS. NOTE: THE EFFECTIVE FLUSH VOLUME OF DUAL FLUSH TOILETS IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH.

5.303.3.2 URINALS:

5.303.3.2.1 WALL-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH.

5.303.3.2.2 FLOOR-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF FLOOR-MOUNTED URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.

5.303.3.2.1 WALL-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH.

5.303.3.2.2 FLOOR-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF FLOOR-MOUNTED URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.

5.303.3.3 SHOWERHEADS:

5.303.3.3.1 SINGLE SHOWERHEAD: SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 2.0 GALLONS PER MINUTE AT 80 PSI. SHOWERHEADS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR SHOWERHEADS.

5.303.3.3.2 MULTIPLE SHOWERHEADS SERVING ONE SHOWER: WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 2.0 GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME. NOTE: A HAND-HELD SHOWER SHALL BE CONSIDERED A SHOWERHEAD.

5.303.3.4 FAUCETS AND FOUNTAINS:

5.303.3.4.1 NONRESIDENTIAL LAVATORY FAUCETS: LAVATORY FAUCETS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 0.5 GALLONS PER MINUTE AT 60 PSI.

5.303.3.4.2 KITCHEN FAUCETS: KITCHEN FAUCETS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GALLONS PER MINUTE AT 60 PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTE AT 60 PSI.

5.303.3.4.3 WASH FOUNTAINS: WASH FOUNTAINS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE/20 [RIM SPACE (INCHES) AT 60 PSI].

5.303.3.4.4 METERING FAUCETS: METERING FAUCETS SHALL NOT DELIVER MORE THAN 0.20 GALLONS PER CYCLE.

5.303.3.4.5 METERING FAUCETS FOR WASH FOUNTAINS: METERING FAUCETS FOR WASH FOUNTAINS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 0.20 GALLONS PER CYCLE/20 [RIM SPACE (INCHES) AT 60 PSI]. NOTE: WHERE COMPLYING FAUCETS ARE UNAVAILABLE, AERATORS OR OTHER MEANS MAY BE USED TO ACHIEVE REDUCTION.

## PLUMBING TESTING

1. ALL EQUIPMENT AND/OR SYSTEMS NOTED ON THE DRAWINGS "TO REMAIN" SHALL BE INSPECTED AND TESTED ON SITE TO CERTIFY WORKING CONDITION. A WRITTEN REPORT ON THE CONDITION OF ALL EQUIPMENT TO REMAIN, INCLUDING A COPY OF THE TEST RESULTS AND RECOMMENDED REMEDIAL ACTIONS AND COSTS SHALL BE MADE BY THIS CONTRACTOR TO THE ARCHITECT/ENGINEER FOR REVIEW.

2. PIPE COVER AND BACKFILLING:
   A. AFTER HYDROSTATIC TEST, EVENLY BACKFILL ENTIRE TRENCH WIDTH BY HAND PLACING BACKFILL MATERIAL AND HAND TAMPING IN FOUR (4) ICHES COMPACTED LAYERS TO 12 INCHES MINIMUM COVER OVER TOP OF JACKET. COMPACT TO 95 PERCENT MAXIMUM DENSITY.
   B. EVENLY AND CONTINUOUSLY BACKFILL REMAINING TRENCH DEPTH IN
   C. UNIFORM LAYERS WITH BACKFILL MATERIAL.
   D. DO NOT USE WHEELED OR TRACKED VEHICLES FOR TAMPING.

3. PRESSURE TEST ALL DOMESTIC WATER PIPING, AFTER INSTALLATION AND PRIOR TO BACKFILL OR COVER-UP. RINSE PIPING SYSTEM OF PARTICULATE CONTAMINANTS, CAP AND SUBJECT TO STATIC WATER PRESSURE OF 125 PSIG FOR FOUR (4) HOURS. REPAIR LEAKS AND DEFECTS AND RE-TEST ANY PORTION OF PIPING SYSTEM THAT FAILS. PROVIDE WRITTEN TEST REPORT INCLUDING DATE AND TIME OF TEST, PASS OR FAIL INDICATION, SUMMARY OF REMEDIAL WORK REQUIRED AND DATE AND TIME OF EACH RE-TEST.

4. PRIOR TO COVER UP, WATER PIPE, SANITARY PIPE, AND GAS PIPING SHALL BE PRESSURE TESTED. TESTS SHALL BE WITNESSED BY CONSULTANT AND OWNER. NOTIFY OWNER 48 HOURS PRIOR TO TEST. TEST SHALL BEWITNESSED BY CLIENT PLUMBING TECHNICIAN.

5. UPON COMPLETION OF THE SANITARY PIPING SYSTEM, THE CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER TO OBSERVE A SMOKE TEST OF THE SYSTEM. SMOKE TESTING SHALL BE PERFORMED ON SANITARY PIPING SYSTEM TWICE DURING CONSTRUCTION.

6. PRESSURE TEST NATURAL GAS PIPING IN ACCORDANCE WITH NFPA 54. CA PLUMBING CODE SECTION 1213

## GENERAL PLUMBING NOTES

1. ALL BRACING OF PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, HAZARD LEVEL 'A'.
2. WHERE BRACING DETALS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND FIELD INSPECTOR.
3. SUPPORT AND BRACING OF ALL PIPING SHALL BE IN ACCORDANCE WITH THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF PLUMBING PIPING SYSTEMS", OR THE "SUPERSTRUT SEISMIC RESTRAINT SYSTEM" FOR PIPING ONLY.
4. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL PIPE ROUTING WITH WORK OF OTHER TRADES AND MAKE ANY OFFSETS AS REQUIRED TO AVOID CONFLICT WITH DUCTWORK, LIGHT FIXTURES, SKYLIGHTS, ETC.
6. PLUMBING CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL CONDENSATE DRAIN CONNECTIONS TO MECHANICAL EQUIPMENT.
7. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PLUMBING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. CONTRACTOR SHALL NOTIFY ARCHITECT/ ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.
8. FOR PLUMBING FIXTURE MOUNTING HEIGHTS AND LOCATIONS, REFER TO THE ARCHITECTURAL DRAWINGS.
9. ALL PLUMBING CONVEYING OR DISPENSING WATER FOR HUMAN CONSUMPTION SHALL COMPLY WITH AB 1953 FOR LEAD CONTENT.
10. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.
11. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.
12. PROVIDE A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.
13. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER.
14. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.
15. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.
16. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.
17. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED TO PREVENT FREEZING.
18. ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS ADOPTED BY THE INSPECTION AUTHORITY. NOTHING IN THESE PLANS IS TO BE CONSTUED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHER APPLICABLE PROJECT SPECIFICATIONS:
    A. CALIFORNIA BUILDING CODE - 2019
    B. CALIFORNIA PLUMBING CODE - 2019
    C. CALIFORNIA MECHANICAL CODE - 2019
    D. CALIFORNIA ELECTRICAL CODE - 2019
    E. CALIFORNIA GREEN CODE - 2019
    F. NATIONAL FIRE PROTECTION ASSOCIATION
    G. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
19. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE FACILITY, UTILITIES AND APPURTENANCE CAUSED BY THE WORK IN THEIR SCOPE. CONTRACTOR SHALL RESTORE AND REPAIR ANY DAMAGE AT NO ADDITIONAL COST TO THE OWNERS BY INSTALLATION THE FACILITY OF NEW WORK.
20. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT STRUCTURAL FROM THE DIVISION OF THE STATE ARCHITECT.

## MEP COMPONENT 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 CHAPTER 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 ELECTRIC, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT 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 FEET OR 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:

1. 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.
2. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUND 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, SECTION 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 PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FORM2013 CBC OR LATER) COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO START OF AND DURING THE HANGING AND BRACING OF DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY 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 & DETAILS.

MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #_____.

## DRAWING INDEX


| SHEET | DESCRIPTION |
|---|---|
| P0.00 | PLUMBING SHEET INDEX, LEGEND, AND NOTES |
| P1.01 | PLUMBING SITE PLAN |
| PD2.01 | DEMO PLUMBING BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| PD2.02 | DEMO PLUMBING BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| PD2.03 | DEMO PLUMBING BUILDING FLOOR PLANS C2, C4 & C6 |
| P2.01 | PLUMBING BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| P2.02 | PLUMBING BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| P2.03 | PLUMBING BUILDING FLOOR PLANS C2, C4 & C6 |
| P4.01 | PLUMBING BUILDING ROOF PLANS C7, C8, S-L & ADMIN |
| P4.02 | PLUMBING BUILDING ROOF PLANS C1, C3, C5, IA-1 & IA-2 |
| P4.03 | PLUMBING BUILDING ROOF PLANS C2, C4 & C6 |
| P5.01 | PLUMBING SCHEDULES |
| P6.01 | PLUMBING DETAILS |
| P6.02 | PLUMBING DETAILS |


## ABBREVIATIONS

NOTE: 1. ALL ABBREVIATIONS MAY NOT BE USED ON THESE DRAWINGS.

| | | | |
|---|---|---|---|
| AAP | AREA ALARM PANEL | MH | MANHOLE |
| AAV | AUTOMATIC AIR VENT | MS | MOP SINK |
| A.F.F. | ABOVE FINISHED FLOOR | N.C. | NORMALLY CLOSED |
| AP | ACCESS PANEL | NIC | NOT IN CONTRACT |
| B.F.F. | BELOW FINISHED FLOOR | N.O. | NORMALLY OPEN |
| BFP | BACKFLOW PREVENTER | O.F./C.I. | OWNER FURNISHED/CONTRACTOR INSTALLED |
| BOB | BOTTOM OF BEAM | O.F./O.I. | OWNER FURNISHED/OWNER INSTALLED |
| BOP | BOTTOM OF PIPE | OFD | OVERFLOW DRAIN |
| BTUH | BRITISH THERMAL UNITS PER HOUR | PH | PHASE |
| CA | COMPRESSED AIR | PIV | POST INDICATOR VALVE |
| C/C | CUT AND CAP | PRV | PRESSURE REDUCING VALVE |
| CFH | CUBIC FEET PER HOUR | RD | ROOF DRAIN |
| CFS | CUBIC FEET PER SECOND | RE: | REFER TO |
| CI | CAST IRON | R.I.C. | ROUGH-IN AND CONNECT |
| CLG | CEILING | RO | REVERSE OSMOSIS |
| CO | CLEANOUT | RPBFP | REDUCED PRESSURE BACKFLOW PREVENTER |
| CONN | CONNECTION | RPM | REVOLUTIONS PER MINUTE |
| CONT. | CONTINUATION | RVB | REFRIGERATOR VALVE BOX |
| DF | DRINKING FOUNTAIN | SD | STORM DRAIN |
| DPV | DRY PIPE VALVE | S.F. | SQUARE FEET |
| DWG. | DRAWING | SIA. | SIAMESE |
| EA | EACH | SK | SINK |
| EL. | ELEVATION | T.O.P. | TOP OF PIPE |
| EDF | ELECTRIC DRINKING FOUNTAIN | TP | TRAP PRIMER |
| FCO | FLOOR CLEANOUT | TYP | TYPICAL |
| FD | FLOOR DRAIN | U | URINAL |
| FDV | FIRE DEPARTMENT VALVE | U/F | UNDERFLOOR |
| F.F. | FINISHED FLOOR | U/S | UNDERSLAB |
| FHC | FIRE HOSE CABINET | VAC. BRKR. | VACUUM BREAKER |
| F.L. | FLOW LINE | VIF | VERIFY IN FIELD |
| FS | FLOOR SINK | VTR | VENT THRU ROOF |
| FT | FEET | WC | WATER CLOSET |
| FU | FIXTURE UNITS | WCO | WALL CLEANOUT |
| GC | GENERAL CONTRACTOR | WH | WALL HYDRANT |
| GPH | GALLONS PER HOUR | WMB | WASHING MACHINE BOX |
| GPM | GALLONS PER MINUTE | YH | YARD HYDRANT |
| HB | HOSE BIBB | ZV | ZONE VALVE |
| HP | HORSEPOWER | (A) | ITEM NOTED TO BE ABANDONED |
| I.E. | INVERT ELEVATION | (D) | ITEM NOTED TO BE DEMOLISHED |
| KW | KILOWATTS | (E) | EXISTING ITEM |
| LAV | LAVATORY | (N) | NEW ITEM |
| MAP | MASTER ALARM PANEL | (R) | ZFITEM NOTED TO RELOCATED |
| MECH | MECHANICAL | | |

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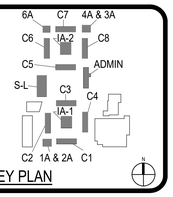
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WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




Consultant

REGISTERED PROFESSIONAL ENGINEER REE DAVID RAD No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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| 03/31/2023 | 220526 |

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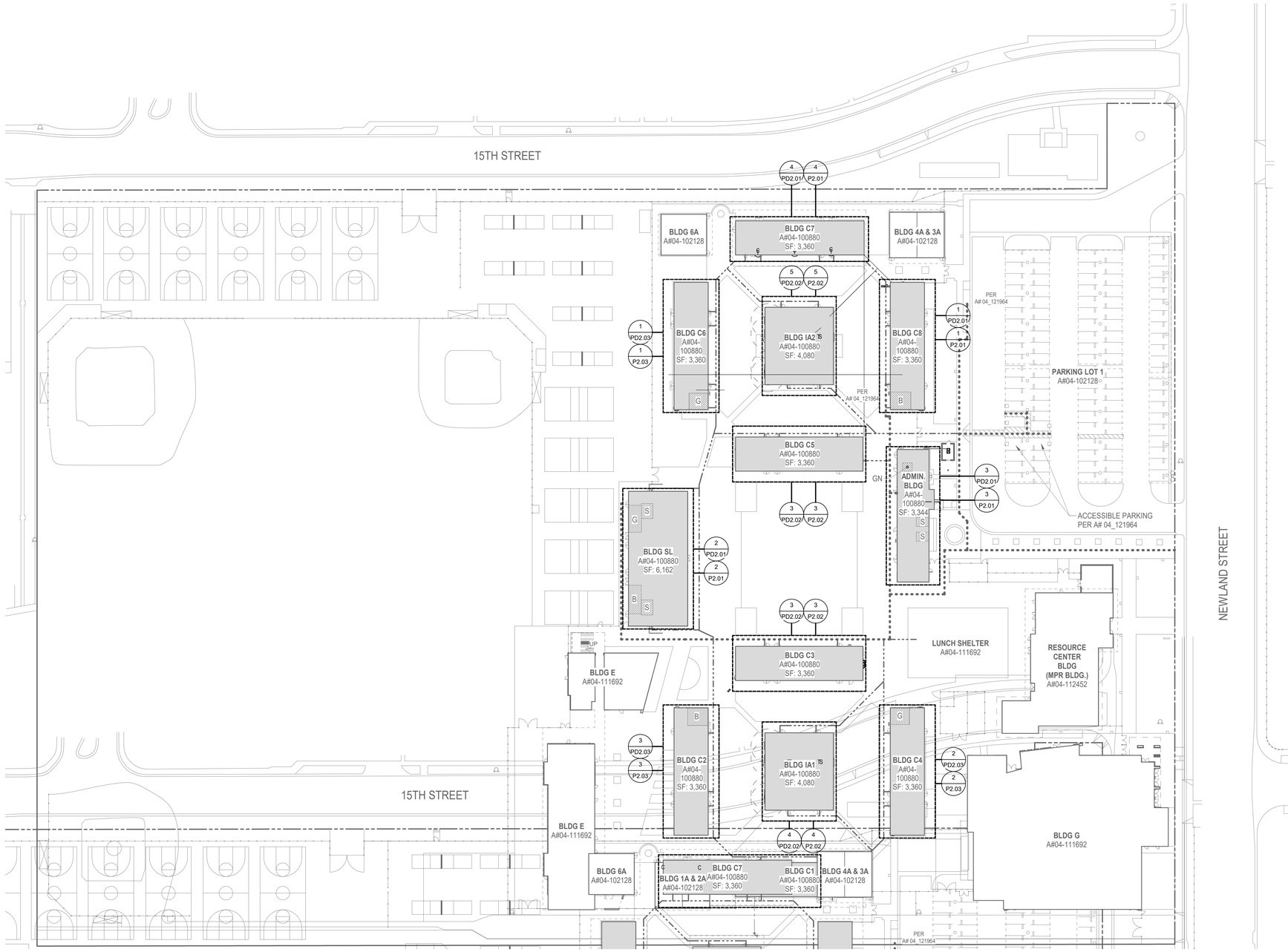
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PLUMBING SHEET INDEX, LEGEND, AND NOTES

P0.00

P1.01 - PLUMBING SITE PLAN

0" 1"




1 SITE PLAN
1" = 40'-0"

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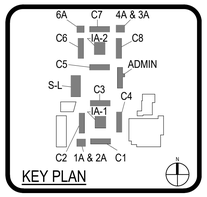
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WESTMINSTER SCHOOL DISTRICT



KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
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STATE OF CALIFORNIA

Architect

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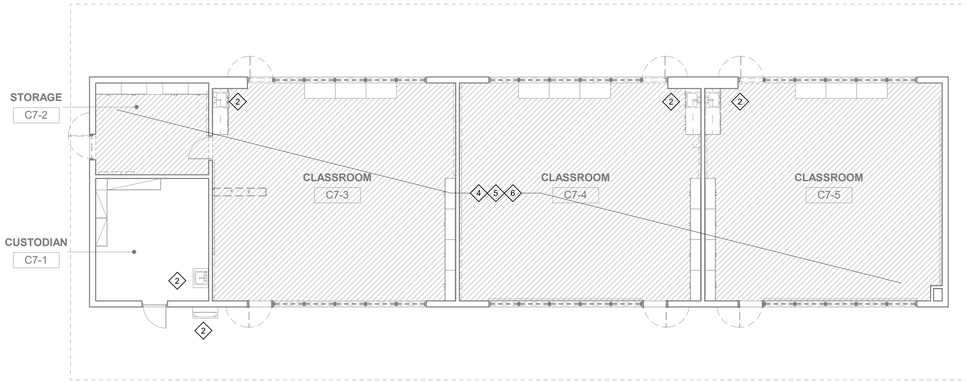
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PLUMBING SITE PLAN

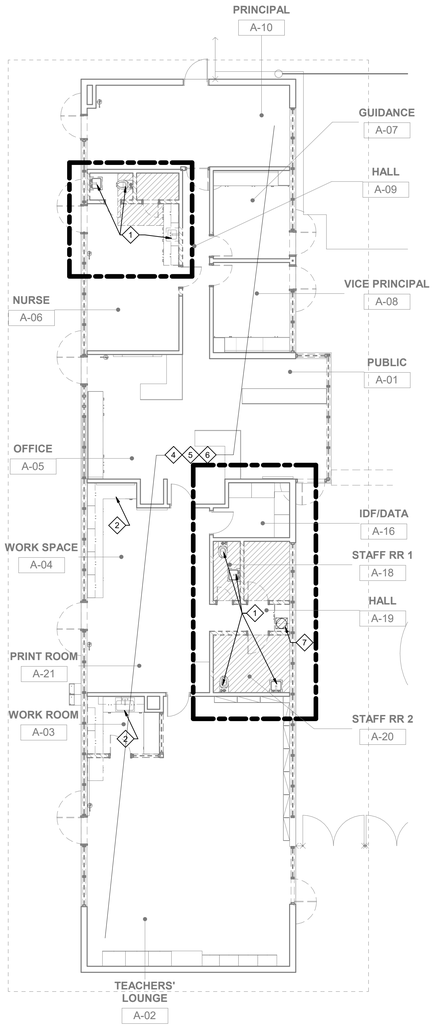
P1.01

PD2.01 - DEMO PLUMBING BUILDING FLOOR PLANS C7, C8, S-L & ADMIN

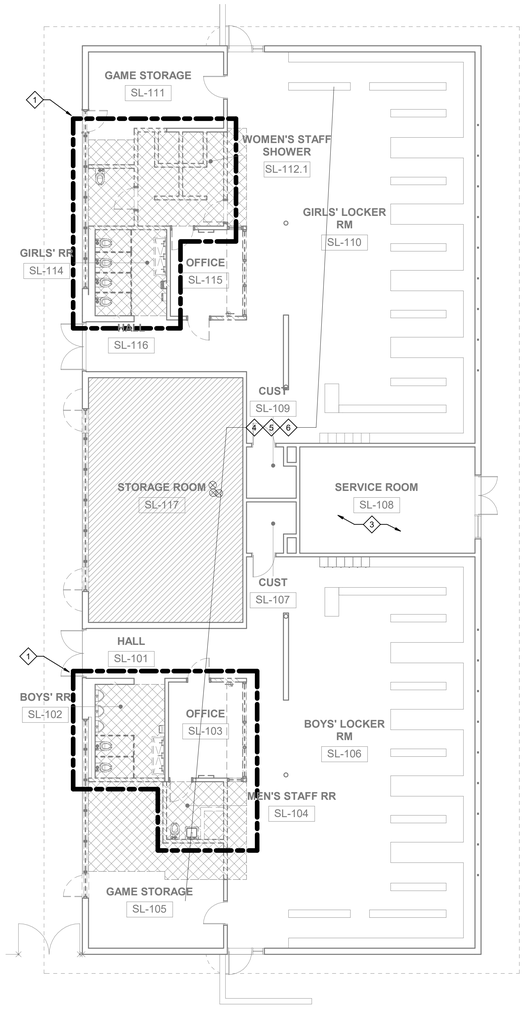
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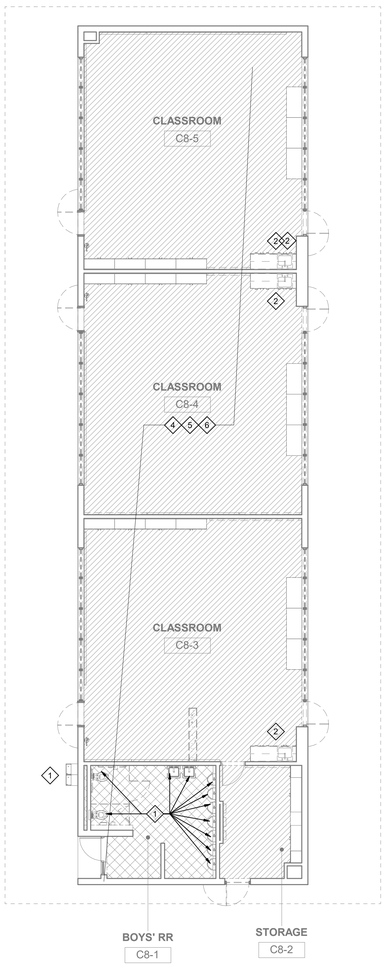

**4** FLOOR PLAN - BLDG C7
1/8" = 1'-0"




**3** FLOOR PLAN - ADMINISTRATION BLDG
1/8" = 1'-0"




**2** FLOOR PLAN - BLDG S-L
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C8
1/8" = 1'-0"

## GENERAL NOTES

1. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILTS
2. BEFORE COMMENCEMENT OF WORK , THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTIONS PRIOR TO BIDDING THE PROJECT.
4. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND OR EXTEND EXISTING PIPING OR ROUGH INS AS REQUIRED TO SUIT THE NEW FIXTURE.
5. PROVIDE BID ALTERNATE TO REPLACE ALL INTERIOR PIPING.

## DEMOLITION KEY NOTES

1. REMOVE EXISTING PLUMBING FIXTURE, RELATED ROUGH-IN & PIPING. CAP EXISTING PIPING BELOW GRADE, IN WALL OR OVERHEAD. PREPARE FOR RECONNECTION UNDER RENOVATION PHASE.
2. EXISTING PLUMBING FIXTURE TO REMAIN
3. MECHANICAL EQUIPMENT TO BE DEMOLISHED. REFER TO HVAC PLANS. CAP EXISTING 1 1/2" GAS AND 2" MAKE UP WATER AND ALL APPURTENENACES TO MECHANICAL BOILER
4. PROTECT EXISTING DOMESTIC WATER AND SHUT-OFF VALVE AT BUILDING INTERIOR UP TO THE LATERAL SERVICE FIVE FEET OUTSIDE THE BUILDING AND FOR EXISTING SERVICE OVERHEAD, ABOVE CEILING AND OR IN WALL. AS ALTERNATE PREPARE FOR RECONNECTION UNDER REMODEL PLAN TO RUN NEW WATER SERVICE TO THE BUILDING..
5. PROTECT EXISTING SANITARY SEWER/VENT AND CLEANOUT AT BUILDING INTERIOR UP TO THE LATERAL SERVICE FIVE FEET OUTSIDE THE BUILDING. CAP EXISTING SERVICE AND PREPARE FOR RECONNECTION UNDER REMODEL PLAN.
6. PROTECT EXISTING NATURAL GAS CONNECTION AND CAP AT SHUT-OFF COCK. PROTECT EXISTING GAS, FIRE PROTECTION AND STORM DRAINAGE PIPING FROM DAMAGE DURING CONSTRUCTION. CAP EXISTING PIPING OVERHEAD.
7. REMOVE EXISTING WATER HEATER AND ALL ASSOCIATED PIPING.

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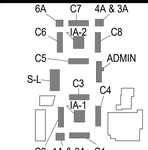
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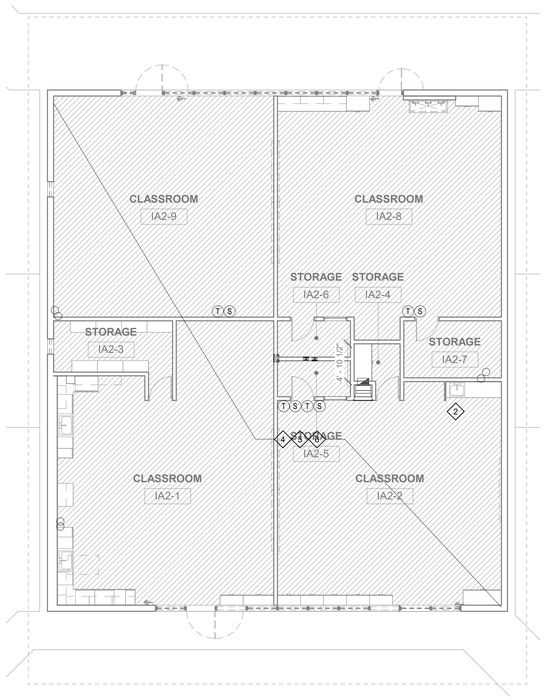
**DEMO PLUMBING BUILDING FLOOR PLANS C7, C8, S-L & ADMIN**

**PD2.01**

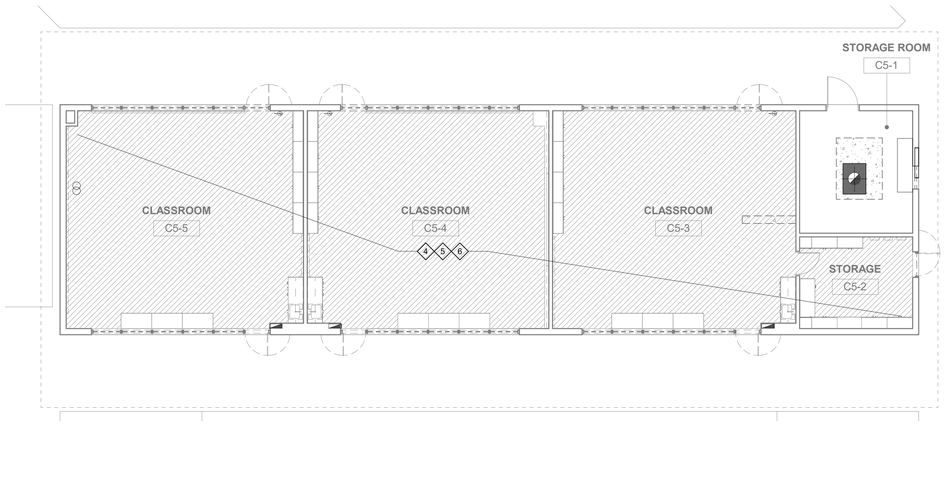
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PD2.02 - DEMO PLUMBING BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2

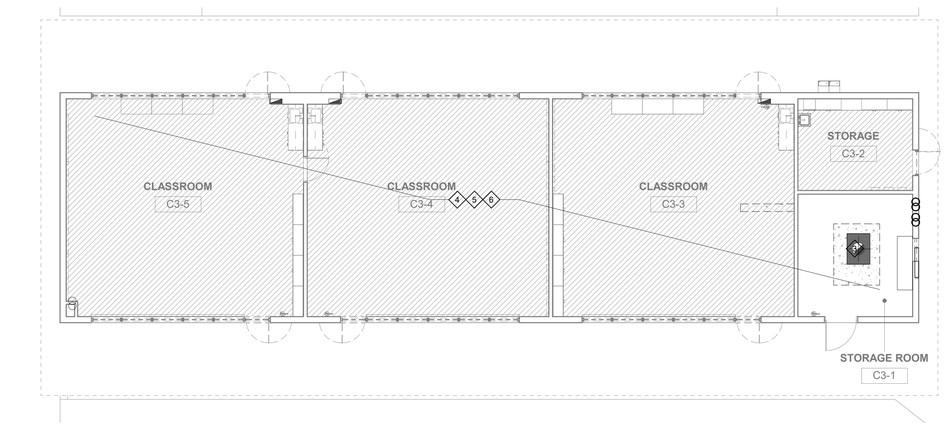
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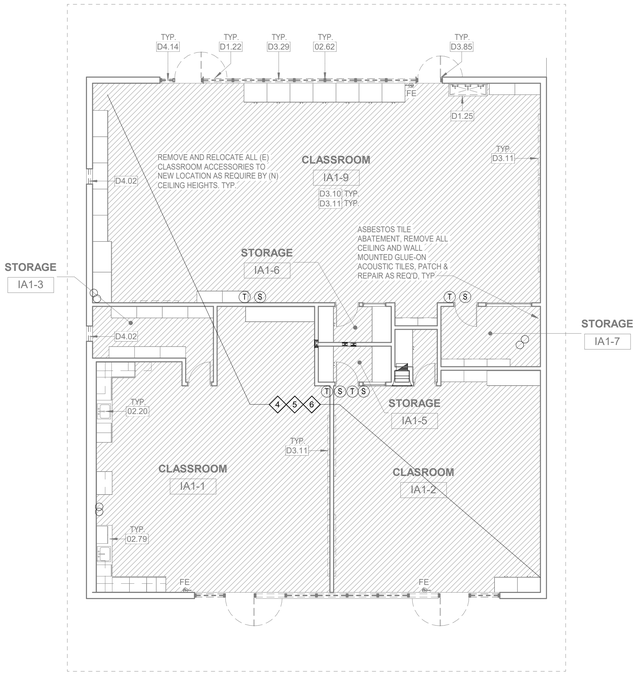

**5** FLOOR PLAN - BLDG IA-2
1/8" = 1'-0"



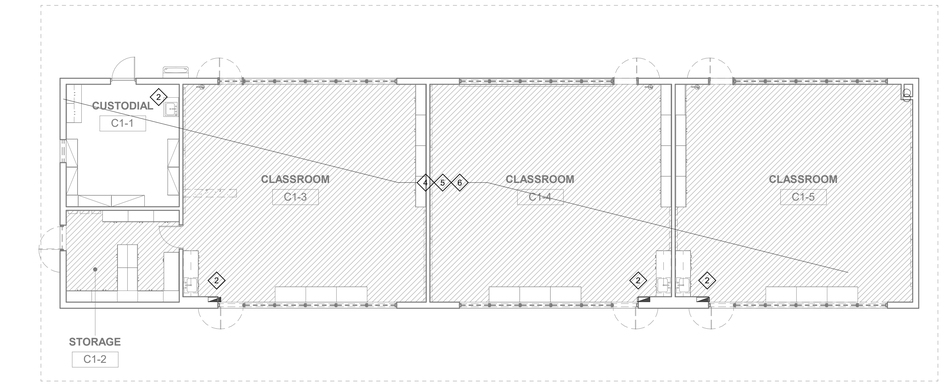

**3** FLOOR PLAN - BLDG C5
1/8" = 1'-0"




**2** FLOOR PLAN - BLDG C3
1/8" = 1'-0"




**4** FLOOR PLAN - BLDG IA-1
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C1
1/8" = 1'-0"

## GENERAL NOTES

1. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILTS
2. BEFORE COMMENCEMENT OF WORK , THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION AND SHALL IMMEDIATLEY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTIONS PRIOR TO BIDDING THE PROJECT.
4. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND OR EXTEND EXISTING PIPING OR ROUGH INS AS REQUIRED TO SUIT THE NEW FIXTURE.
5. PROVIDE BID ALTERNATE TO REPLACE ALL INTERIOR PIPING.

## DEMOLITION KEY NOTES

1. REMOVE EXISTING PLUMBING FIXTURE, RELATED ROUGH-IN & PIPING. CAP EXISTING PIPING BELOW GRADE, IN WALL OR OVERHEAD. PREPARE FOR RECONNECTION UNDER RENOVATION PHASE.
2. EXISTING PLUMBING FIXTURE TO REMAIN
3. MECHANICAL EQUIPMENT TO BE DEMOLISHED. REFER TO HVAC PLANS. CAP EXISTING 1 1/2" GAS AND 2" MAKE UP WATER AND ALL APPURTENENACES TO MECHANICAL BOILER
4. PROTECT EXISTING DOMESTIC WATER AND SHUT-OFF VALVE AT BUILDING INTERIOR UP TO THE LATERAL SERVICE FIVE FEET OUTSIDE THE BUILDING. CAP EXISTING SERVICE AND PREPARE FOR RECONNECTION UNDER REMODEL PLAN.
5. PROTECT EXISTING SANITARY SEWER/VENT AND CLEANOUT AT BUILDING INTERIOR UP TO THE LATERAL SERVICE FIVE FEET OUTSIDE THE BUILDING. CAP EXISTING SERVICE AND PREPARE FOR RECONNECTION UNDER REMODEL PLAN.
6. PROTECT EXISTING NATURAL GAS CONNECTION AND CAP AT SHUT-OFF COCK. PROTECT EXISTING GAS, FIRE PROTECTION AND STORM DRAINAGE PIPING FROM DAMAGE DURING CONSTRUCTION. CAP EXISTING PIPING OVERHEAD.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK


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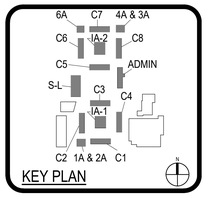

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER ALEX DAVID RAMOS No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

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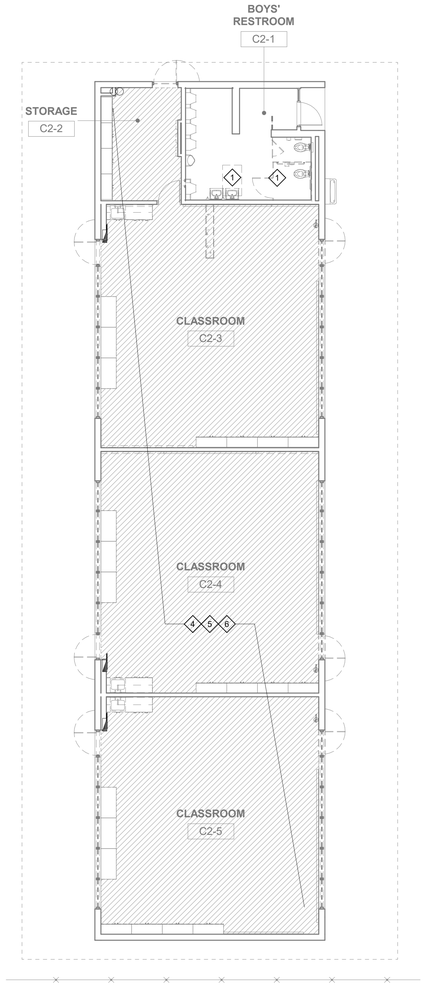
**DEMO PLUMBING BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2**

**PD2.02**

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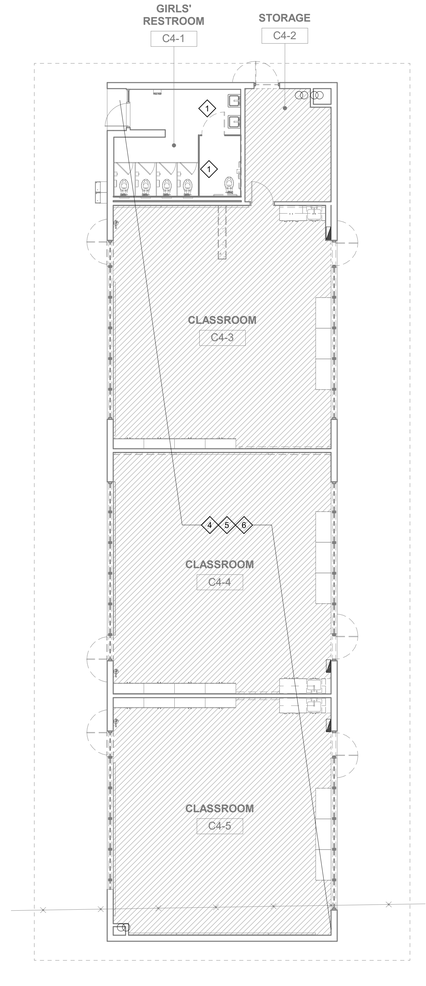
PD2.03 - DEMO PLUMBING BUILDING FLOOR PLANS C2, C4 & C6

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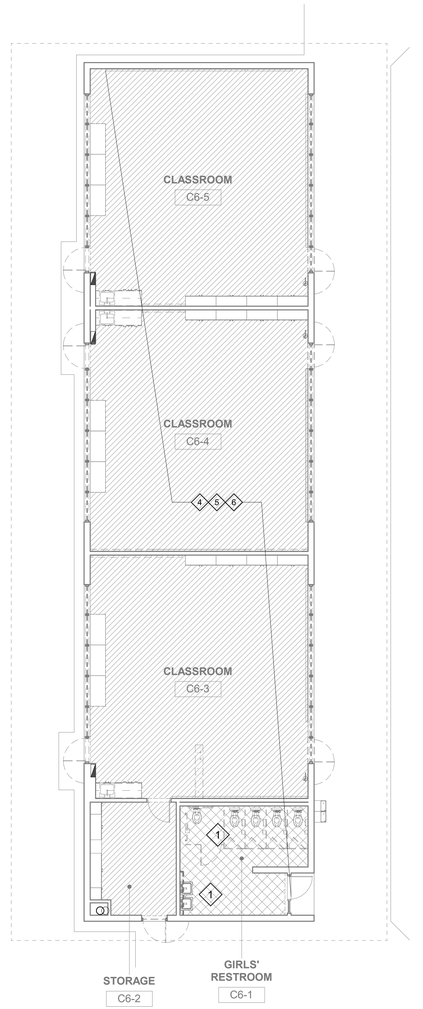

3 FLOOR PLAN - BLDG C2
1/8" = 1'-0"

NORTH




2 FLOOR PLAN - BLDG C4
1/8" = 1'-0"

NORTH




1 FLOOR PLAN - BLDG C6
1/8" = 1'-0"

NORTH

## GENERAL KEY NOTES

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2. BEFORE COMMENCEMENT OF WORK , THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION AND SHALL IMMEDIATLEY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTIONS PRIOR TO BIDDING THE PROJECT.
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5. PROVIDE BID ALTERNATE TO REPLACE ALL INTERIOR PIPING.

## DEMOLITION KEY NOTES

1. REMOVE EXISTING PLUMBING FIXTURE, RELATED ROUGH-IN & PIPING. CAP EXISTING PIPING BELOW GRADE, IN WALL OR OVERHEAD. PREPARE FOR RECONNECTION UNDER RENOVATION PHASE.
2. EXISTING PLUMBING FIXTURE TO REMAIN
3. MECHANICAL EQUIPMENT TO BE DEMOLISHED. REFER TO HVAC PLANS. CAP EXISTING 1 1/2" GAS AND 2" MAKE UP WATER AND ALL APPURTENENACES TO MECHANICAL BOILER
4. PROTECT EXISTING DOMESTIC WATER AND SHUT-OFF VALVE AT BUILDING INTERIOR UP TO THE LATERAL SERVICE FIVE FEET OUTSIDE THE BUILDING. CAP EXISTING SERVICE AND PREPARE FOR RECONNECTION UNDER REMODEL PLAN.
5. PROTECT EXISTING SANITARY SEWER/VENT AND CLEANOUT AT BUILDING INTERIOR UP TO THE LATERAL SERVICE FIVE FEET OUTSIDE THE BUILDING. CAP EXISTING SERVICE AND PREPARE FOR RECONNECTION UNDER REMODEL PLAN.
6. PROTECT EXISTING NATURAL GAS CONNECTION AND CAP AT SHUT-OFF COCK. PROTECT EXISTING GAS, FIRE PROTECTION AND STORM DRAINAGE PIPING FROM DAMAGE DURING CONSTRUCTION. CAP EXISTING PIPING OVERHEAD.

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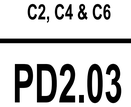
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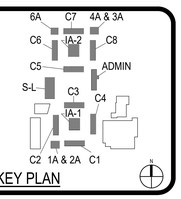

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REZ. DAVID RAD
No.M36155
Exp.09-30-2024
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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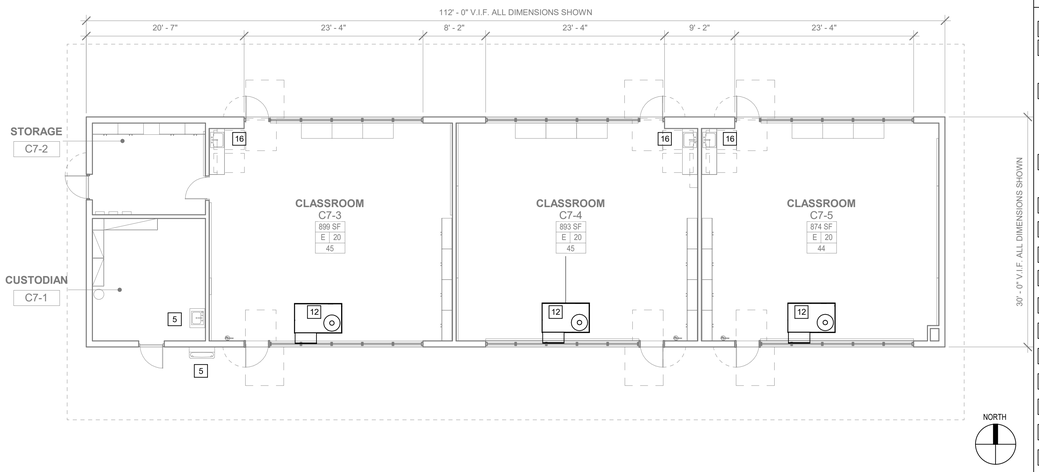
DSA SUBMITTAL

# DEMO PLUMBING BUILDING FLOOR PLANS C2, C4 & C6

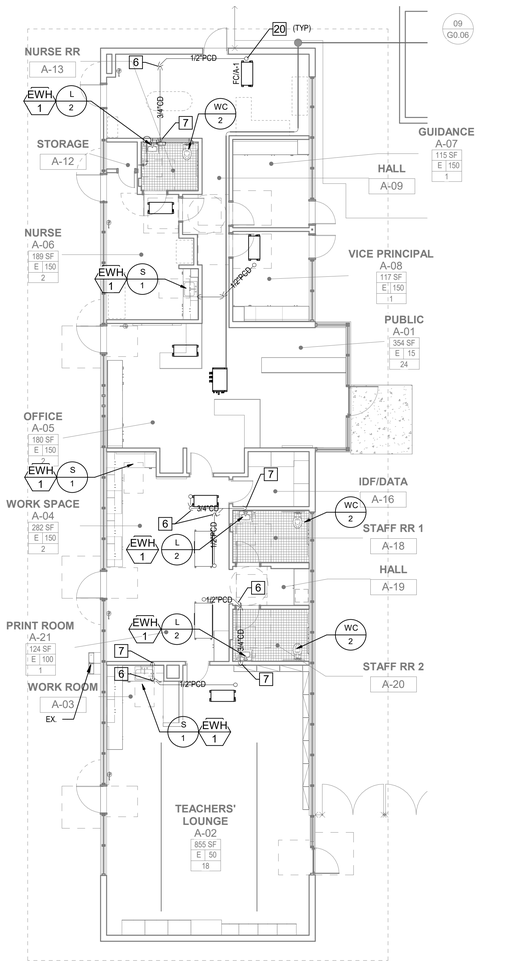
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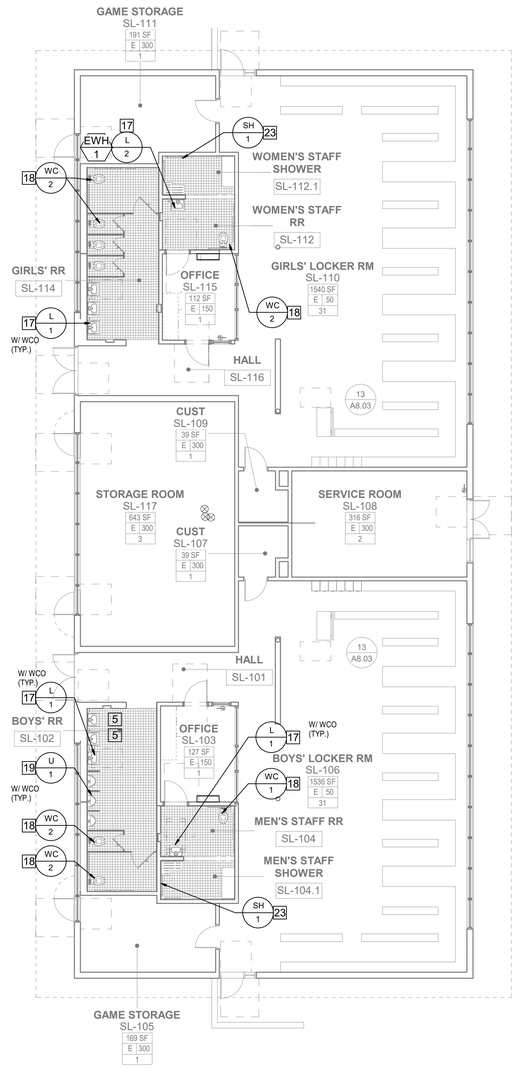
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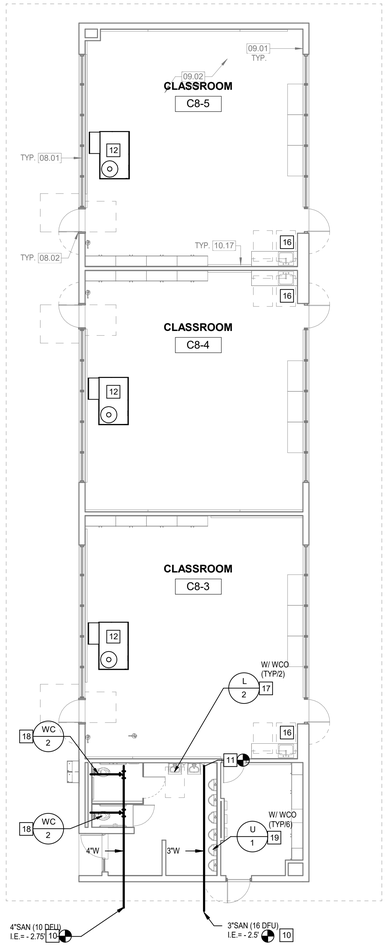

**4** FLOOR PLAN - BLDG C7
1/8" = 1'-0"




**3** FLOOR PLAN - ADMINISTRATION BLDG
1/8" = 1'-0"




**2** FLOOR PLAN - BLDG S-L
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C8
1/8" = 1'-0"

## KEY NOTES

1. PIPING ABOVE IN ATTIC SPACE
2. ROUGH IN AND CONNECT 4" SANITARY SEWER , 2" VENT AND 1 -1/4" CW TO WATER CLOSET. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING OR ROUGH-INS AS REQUIRED TO SUIT THE NEW FIXTURE.
3. LAVATORY AND FAUCET TO BE INSTALLED ADA COMPLIANT . PLUMBING CONTRACTOR TO SUPPLY & INSTALL NEW ANGLE STOP, SINK SUPPLY, COMPLETE WITH LOOSE KEY, CHROME ESCUTCHEON PLATE COMPRESSION INLET, HEAVY DUTY OUTLET RISER. ROUGH IN AND CONNECT 2" SANITARY SEWER , 2" VENT AND 1/2" H/ CW. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING OR ROUGH-INS AS REQUIRED TO SUIT THE NEW FIXTURE.
4. DRINKING FOUNTAIN POC TO (E) 2" SS AND 2" VENT AND (E) 3/4" CW. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING OR ROUGH-INS AS REQUIRED TO SUIT THE NEW FIXTURE.
5. EXISTING PLUMBING FIXTURE.
6. RISE AND CONNECT 1/2" PCD TO UPPER GRAVITY CONDENSATE DRAIN ABOVE CEILING.
7. 3/4" CONDENSATE FROM ABOVE. DROP DN. IN WALL TO LAV /SINK TAIL PIECE SEE DETAIL 03/ P6.02
8. 3/4" CONDENSATE IN ATTIC SPACE SLOPE @ 1%
9. 1-1/2" COLD WATER DOWN TO HEADER IN WALL WITH SHUT-OFF VALVE BEHIND ACCESS PANEL.
10. EXTEND AND CONNECT 4" WASTE TO EXISTING 4" WASTE BELOW GRADE.
11. EXTEND AND CONNECT 3" WASTE TO EXISTING 2" WASTE BELOW GRADE.
12. 3/4" CONDENSATE UP TO A/C UNIT ON ROOF.
13. EXTEND AND CONNECT 1-1/2" COLD WATER TO EXISTING PIPING OVERHEAD.
14. EXTEND AND CONNECT 4" WASTE TO EXISTING 4" WASTE BELOW GRADE.
15. 3/4" CONDENSATE UP TO A/C UNIT ON ROOF.
16. MODIY ROUGH-IN SINK, EXTEND AND CONNECT 3/4" COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPING IN WALL, BELOW FLOOR OR OVERHEAD.
17. MODIFY ROUGH-IN TO LAVATORY, EXTEND, AND CONNECT 3/4"COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPNG IN WALL, BELOW FLOOR OR OVERHEAD.
18. MODIFY ROUGH-IN TO WATER CLOSET, EXTEND, AND CONNECT 1-1/2"COLD WATER, 4" WASTE AND 2" VENT TO EXISTING PIPNG IN WALL, BELOW FLOOR OR OVERHEAD.
19. MODIFY ROUGH-IN TO URINAL, EXTEND, AND CONNECT 3/4"COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPNG IN WALL, BELOW FLOOR OR OVERHEAD.
20. 1/2" PUMPED CONDENSATE UP FROM FAN COIL UNIT.
21. RISE AND CONNECT 1/2" PCD TO UPPER GRAVITY CONDENSATE DRAIN ABOVE CEILING.
22. MODIY ROUGH-IN DRINKING FOUNTAIN, EXTEND AND CONNECT 3/4" COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPING IN WALL, BELOW FLOOR OR OVERHEAD.
23. MODIY ROUGH-IN FOR SHOWER, EXTEND AND CONNECT 3/4" COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPING IN WALL, BELOW FLOOR OR OVERHEAD. PROVIDE EWH-1 COMPLETE WITH THERMOSTATIC MIXING VALVE WATTS #LFMMV AND FD-1 FOR SHOWER DRAINAGE.

## CONSTRUCTION NOTES

1. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILTS
2. BEFORE COMMENCEMENT OF WORK , THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTIONS PRIOR TO BIDDING THE PROJECT.
4. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND OR EXTEND EXISTING PIPING OR ROUGH INS AS REQUIRED TO SUIT THE NEW FIXTURE.

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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

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WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

6A C7 4A & 3A
C6 1A-2 C8
C5 ADMIN
S-L C3 C4
1A-1
C2 1A & 2A C1
KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RAY DAVID HOLMES
No.M36155
Exp.09-30-2024
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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| 03/31/2023 | 220526 |

REVISIONS

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DSA SUBMITTAL

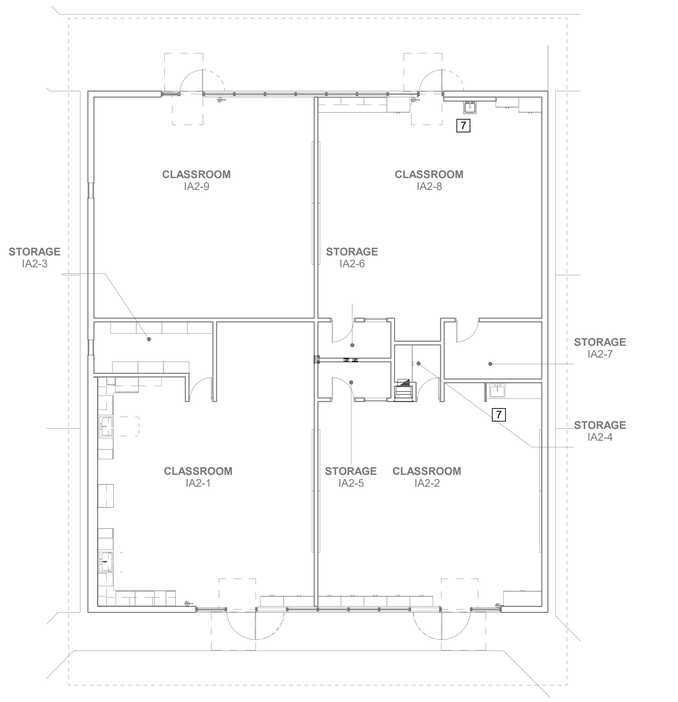
**PLUMBING BUILDING FLOOR PLANS C7, C8, S-L & ADMIN**

**P2.01**

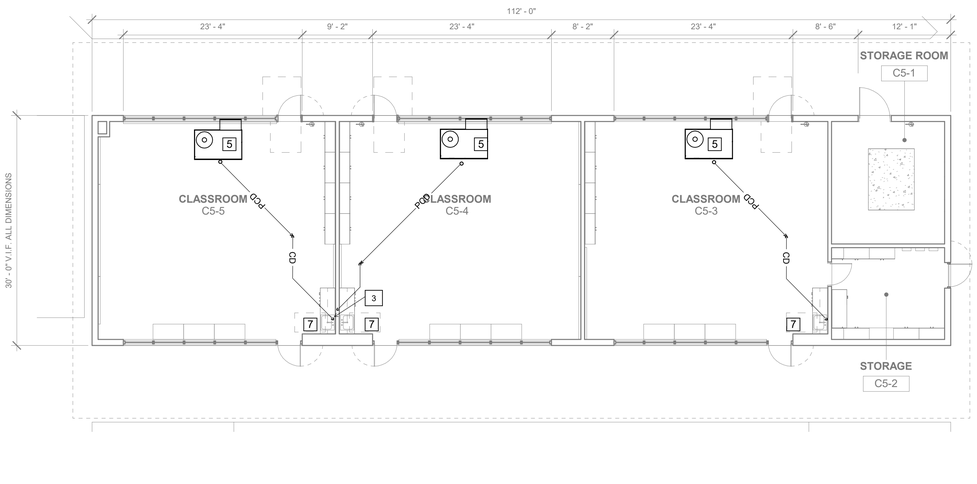
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P2.02 - PLUMBING BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2

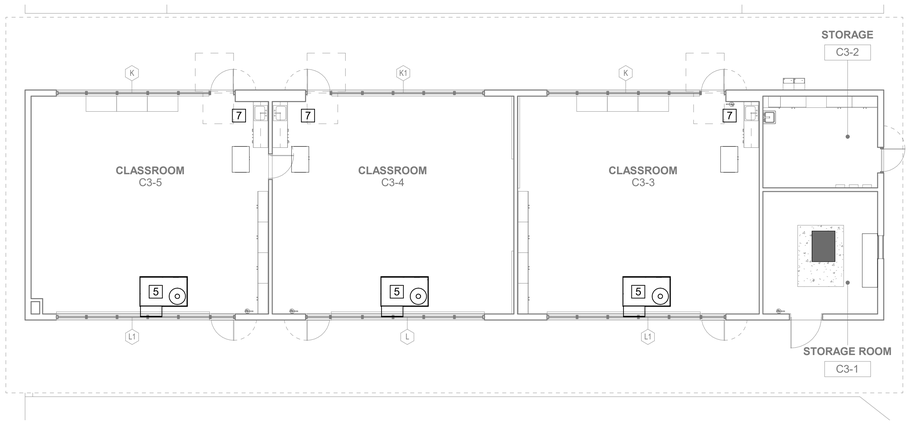
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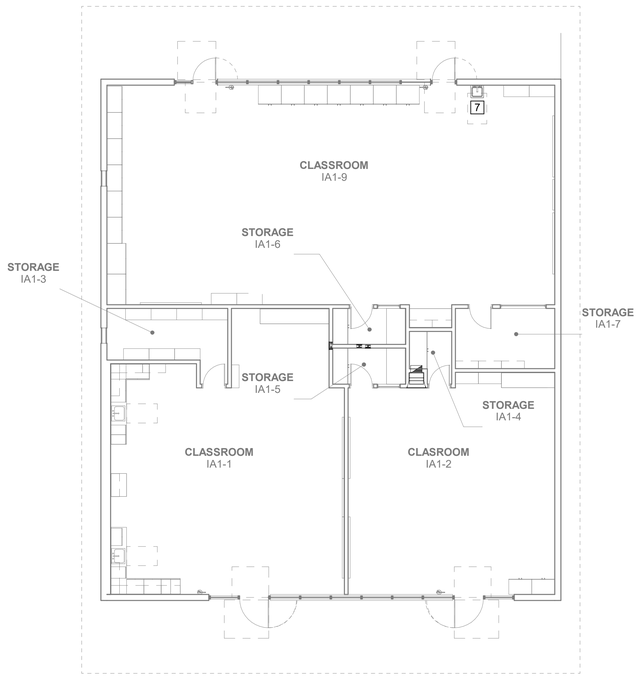

**5** FLOOR PLAN - BLDG IA-2
1/8" = 1'-0"



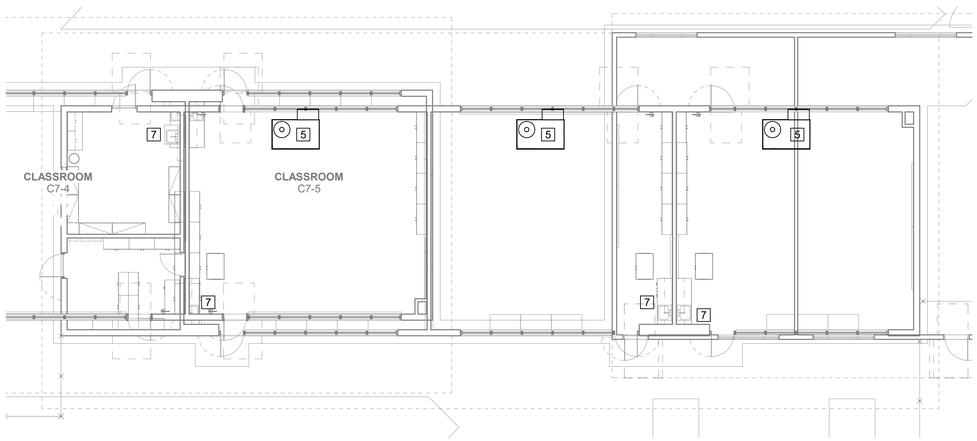

**3** FLOOR PLAN - BLDG C5
1/8" = 1'-0"




**2** FLOOR PLAN - BLDG C3
1/8" = 1'-0"




**4** FLOOR PLAN - BLDG IA-1
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C1
1/8" = 1'-0"

## GENERAL NOTES

1. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILTS
2. BEFORE COMMENCEMENT OF WORK , THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION AND SHALL IMMEDIATLEY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
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## KEY NOTES

| | |
|---|---|
| 1 | EXISTING PLUMBING FIXTURE TO REMAIN |
| 2 | 3/4" CONDENSATE UP TO A/C UNIT ON ROOF. |
| 3 | 3/4" CONDENSATE FROM ABOVE. DROP DN. IN WALL TO LAV /SINK TAIL PIECE SEE DETAIL 03/ P6.02 (TYP). |
| 4 | 3/4" CONDENSATE IN ATTIC SPACE SLOPE @ 1% |
| 5 | 3/4" CONDENSATE UP TO A/C UNIT ON ROOF(TYP). |
| 6 | 3/4" CONDENSATE UP TO A/C UNIT ON ROOF. |
| 7 | MODIY ROUGH-IN SINK. EXTEND AND CONNECT 3/4" COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPING IN WALL, BELOW FLOOR OR OVERHEAD. |
| 8 | MODIFY ROUGH-IN TO LAVATORY, EXTEND, AND CONNECT 3/4"COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPNG IN WALL, BELOW FLOOR OR OVERHEAD. |
| 9 | MODIFY ROUGH-IN TO WATER CLOSET, EXTEND, AND CONNECT 1-1/2"COLD WATER, 4" WASTE AND 2" VENT TO EXISTING PIPNG IN WALL, BELOW FLOOR OR OVERHEAD. |
| 10 | MODIFY ROUGH-IN TO URINAL, EXTEND, AND CONNECT 3/4"COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPNG IN WALL, BELOW FLOOR OR OVERHEAD. |
| 11 | 1/2" PUMPED CONDENSATE UP FROM FAN COIL UNIT. |
| 12 | RISE AND CONNECT 1/2" PCD TO UPPER GRAVITY CONDENSATE DRAIN ABOVE CEILING. |
| 13 | MODIY ROUGH-IN DRINKING FOUNTAIN, EXTEND AND CONNECT 3/4" COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPING IN WALL, BELOW FLOOR OR OVERHEAD. |
| 14 | MODIY ROUGH-IN FOR SHOWER, EXTEND AND CONNECT 3/4" COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPING IN WALL, BELOW FLOOR OR OVERHEAD. PROVIDE EWH-1 COMPLETE WITH THERMOSTATIC MIXING VALVE WATTS #LFMMV AND FD-1 FOR SHOWER DRAINAGE. |

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
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DATE: 10/17/2023

PBK


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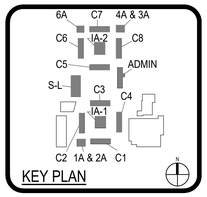

# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
ALEX DAVID HWANG
No.M38155
Exp.09-30-2024
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
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| | | |

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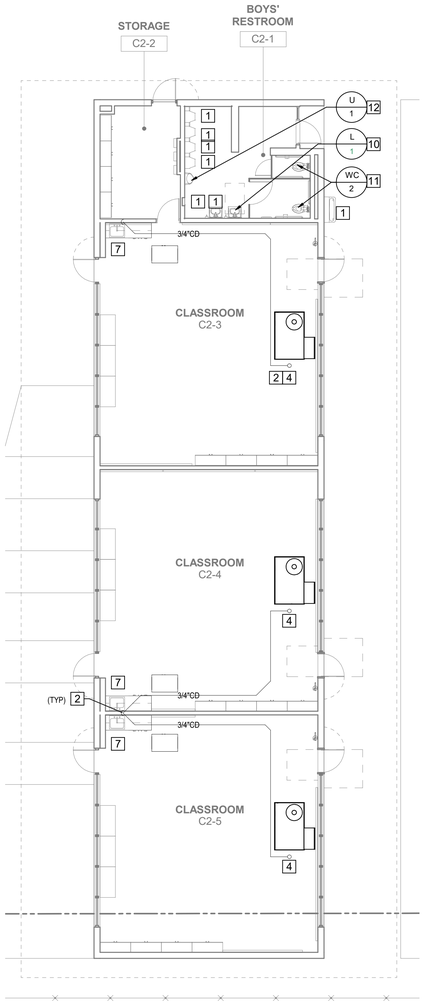
**PLUMBING BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2**

**P2.02**

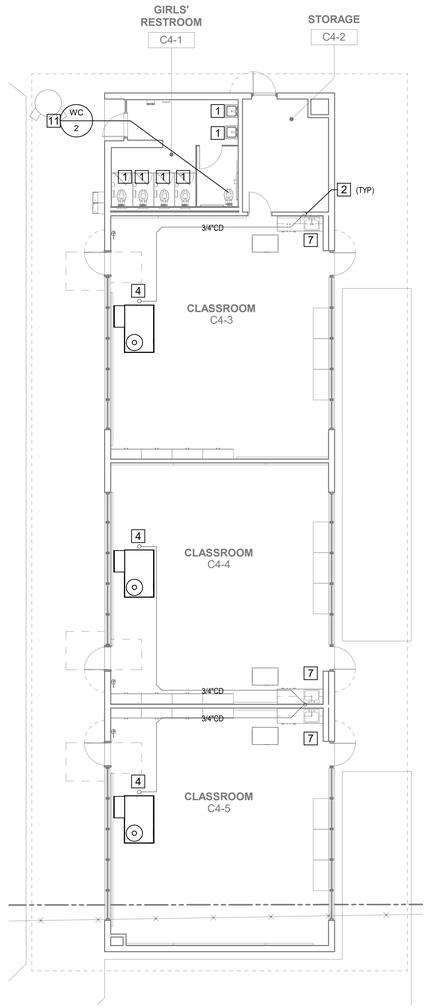
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P2.03 - PLUMBING BUILDING FLOOR PLANS C2, C4 & C6

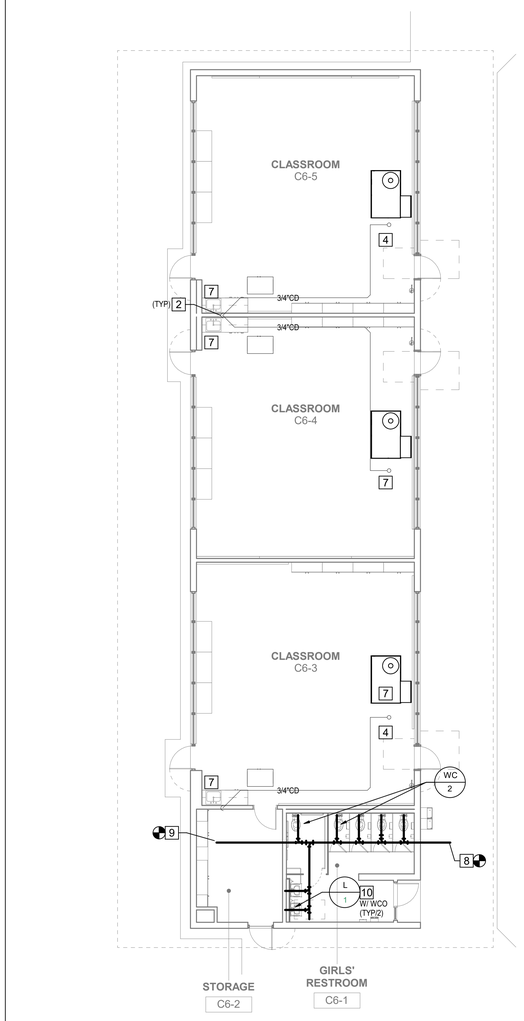
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3 FLOOR PLAN - BLDG C2
1/8" = 1'-0"




2 FLOOR PLAN - BLDG C4
1/8" = 1'-0"




1 FLOOR PLAN - BLDG C6
1/8" = 1'-0"

## GENERAL NOTES

1. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILTS
2. BEFORE COMMENCEMENT OF WORK , THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTIONS PRIOR TO BIDDING THE PROJECT.
4. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND OR EXTEND EXISTING PIPING OR ROUGH INS AS REQUIRED TO SUIT THE NEW FIXTURE.

## KEY NOTES

1. EXISTING PLUMBING FIXTURE TO REMAIN
2. 3/4" CONDENSATE FROM ABOVE. DROP DN. IN WALL TO LAV/SINK TAIL PIECE SEE DETAIL# 013/ P6.02
3. 3/4" CONDENSATE IN ATTIC SPACE SLOPE @ 1%
4. 3/4" CONDENSATE UP TO A/C UNIT ON ROOF.
5. EXTEND AND CONNECT 4" WASTE TO EXISTING 4" WASTE BELOW GRADE.
6. EXTEND AND CONNECT 3" WASTE TO EXISTING 2" WASTE BELOW GRADE.
7. MODIY ROUGH-IN SINK, EXTEND AND CONNECT 3/4" COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPING IN WALL, BELOW FLOOR OR OVERHEAD.
8. EXTEND AND CONNECT 4" WASTE TO EXISTING 4" WASTE BELOW GRADE.
9. EXTEND AND CONNECT 3" WASTE TO EXISTING 2" WASTE BELOW GRADE. FOR EXACT MOUNTING HEIGHT, SEE ACCESSIBLE HEIGHT PLANS.
10. MODIFY ROUGH-IN TO LAVATORY, EXTEND, AND CONNECT 3/4"COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPNG IN WALL, BELOW FLOOR OR OVERHEAD.
11. MODIFY ROUGH-IN TO WATER CLOSET, EXTEND, AND CONNECT 1-1/2"COLD WATER, 4" WASTE AND 2" VENT TO EXISTING PIPNG IN WALL, BELOW FLOOR OR OVERHEAD.
12. MODIFY ROUGH-IN TO URINAL, EXTEND, AND CONNECT 3/4"COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPNG IN WALL, BELOW FLOOR OR OVERHEAD. FOR EXACT MOUNTING HEIGHT, SEE ACCESSIBLE HEIGHT PLANS.
13. 1/2" PUMPED CONDENSATE UP FROM FAN COIL UNIT.
14. RISE AND CONNECT 1/2" PCD TO UPPER GRAVITY CONDENSATE DRAIN ABOVE CEILING.
15. MODIY ROUGH-IN DRINKING FOUNTAIN, EXTEND AND CONNECT 3/4" COLD WATER, 2" WASTE AND 2" VENT TO EXISTING PIPING IN WALL, BELOW FLOOR OR OVERHEAD.

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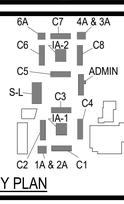
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

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DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
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No.M36155
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Architect

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WESTMINISTER SCHOOL DISTRICT

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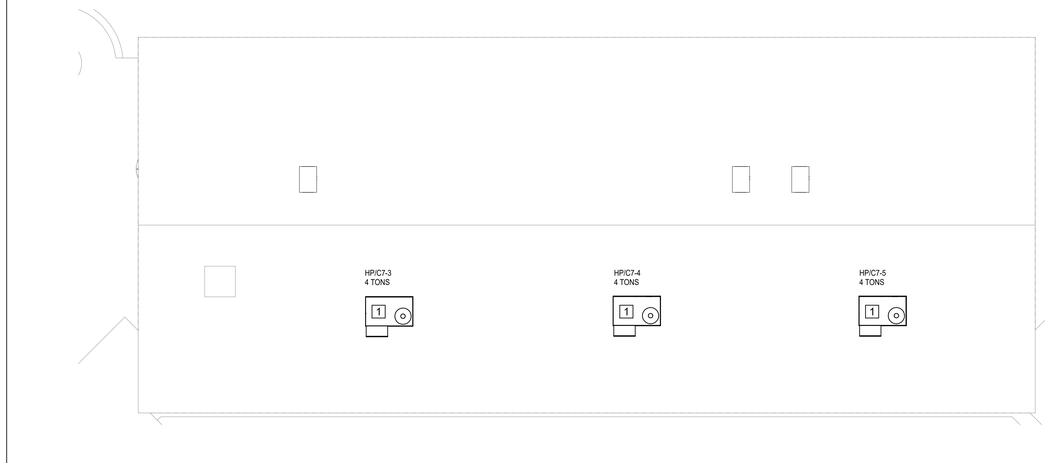
**PLUMBING BUILDING FLOOR PLANS C2, C4 & C6**

**P2.03**

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P4.01 - PLUMBING BUILDING ROOF PLANS C7, C8, S-L & ADMIN

0" 1"



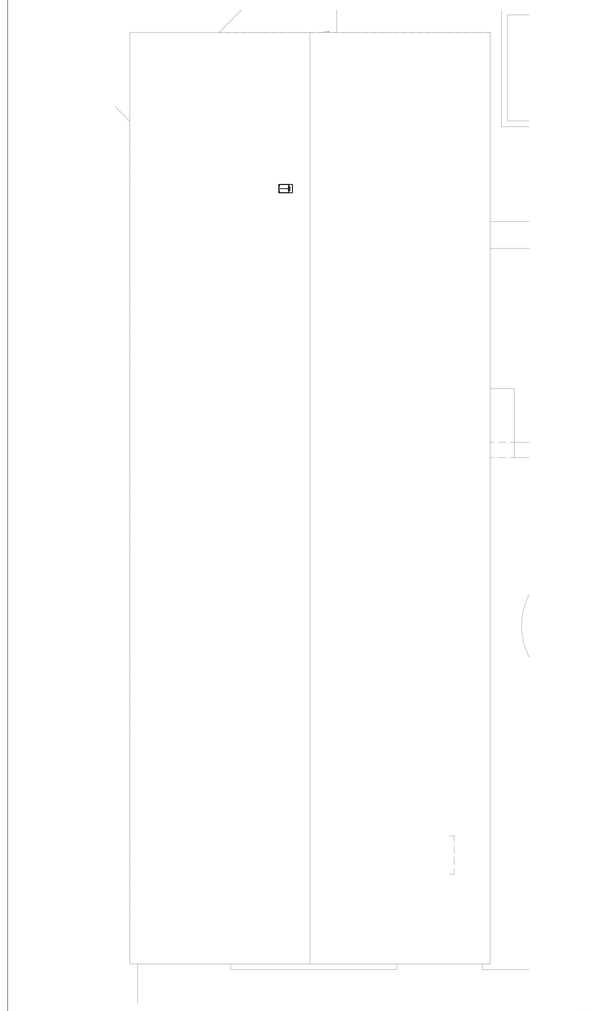

**4** ROOF PLAN - BLDG C7
1/8" = 1'-0"

## GENERAL NOTES

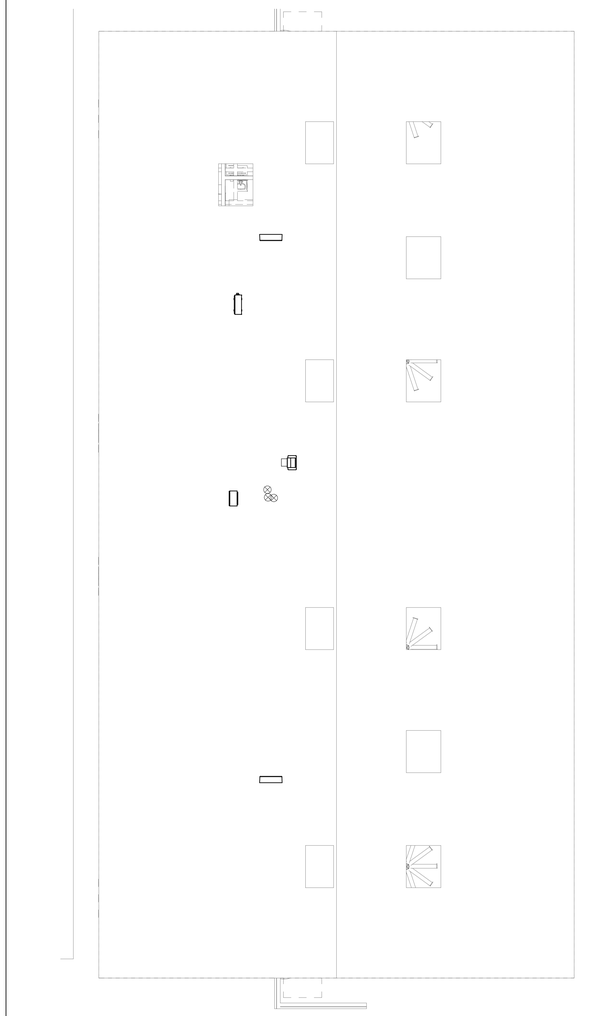
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5. FOR EXACT SIZE, LOCATION, CAPACITY & ORIENTATION OF HVAC UNIT AND CONDENSATE OUTLET, SEE MECHANICAL PLANS.

## KEY NOTES

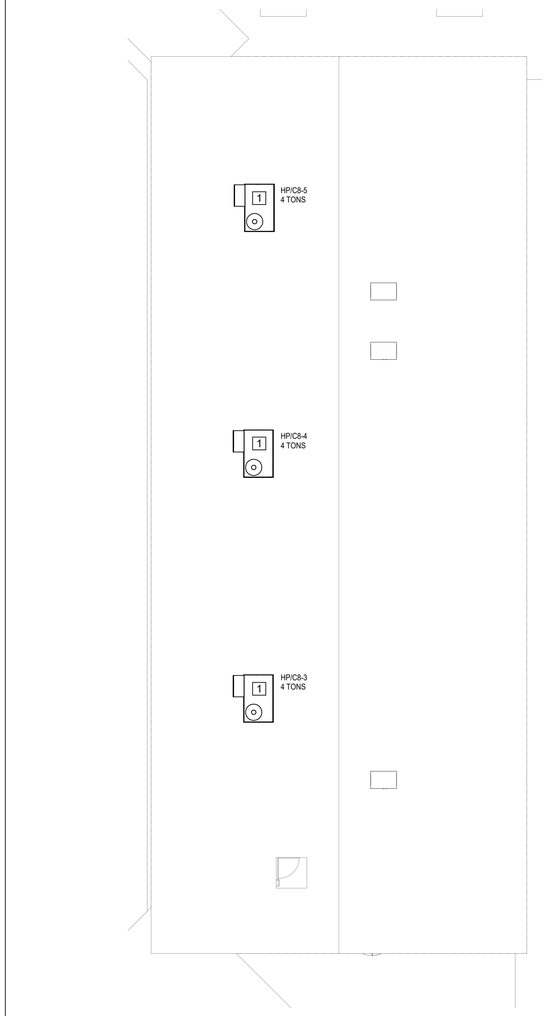
1 NEW A/C UNITS (BY MECHANICAL) PROVIDE 3/4" CONDENSATE LINE, TRAP AND VENT AS REQUIRED. ROUTE 3/4" CONDENSATE DOWN THROUGH ROOF / ABOVE CEILING AND CONNECT TO SINK TAILPIECE. SEE DETAIL #3/P6.01.




**3** ROOF PLAN - ADMIN BLDG
1/8" = 1'-0"




**2** ROOF PLAN - BLDG S-L
1/8" = 1'-0"




**1** ROOF PLAN - BLDG C8
1/8" = 1'-0"

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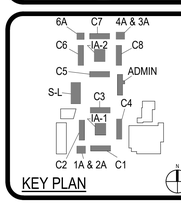
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

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14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43



KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REZ DAVID RAD
No.M36155
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MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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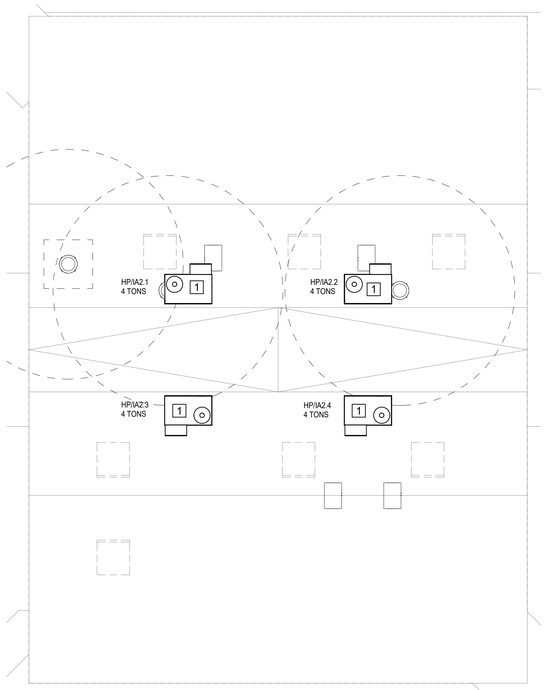
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**PLUMBING BUILDING ROOF PLANS C7, C8, S-L & ADMIN**

**P4.01**

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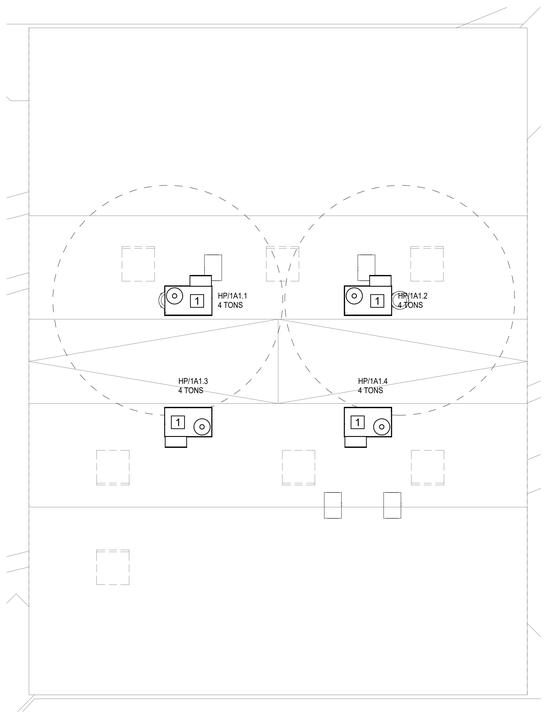

**5** ROOF PLAN - BLDG IA-2
1/8" = 1'-0"




**3** ROOF PLAN - BLDG C5
1/8" = 1'-0"




**2** ROOF PLAN - BLDG C3
1/8" = 1'-0"




**4** ROOF PLAN - BLDG IA-1
1/8" = 1'-0"




**1** ROOF PLAN - BLDG C1
1/8" = 1'-0"

## GENERAL NOTES

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5. FOR EXACT SIZE. LOCATION, CAPACITY & ORIENTATION OF HVAC UNIT AND CONDENSATE OUTLET, SEE MECHANICAL PLANS.

## KEY NOTES

1 NEW A/C UNITS (BY MECHANICAL) PROVIDE 3/4" CONDENSATE LINE, TRAP AND VENT AS REQUIRED. ROUTE 3/4" CONDENSATE DOWN THROUGH ROOF / ABOVE CEILING AND CONNECT TO SINK TAILPIECE. SEE DETAIL #3/P6.01.

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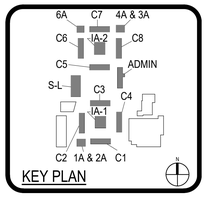
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

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WESTMINSTER,CA 92683

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DSA APPL NO.: 121954 DSA FILE NO.: 30-43



KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID TRAND
No.M36155
Exp.09-30-2024
STATE OF CALIFORNIA

Architect

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WESTMINISTER SCHOOL DISTRICT

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**PLUMBING BUILDING ROOF PLANS C1, C3, C5, IA-1 & IA-2**

**P4.02**

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P4.03 - PLUMBING BUILDING ROOF PLANS C2, C4 & C6

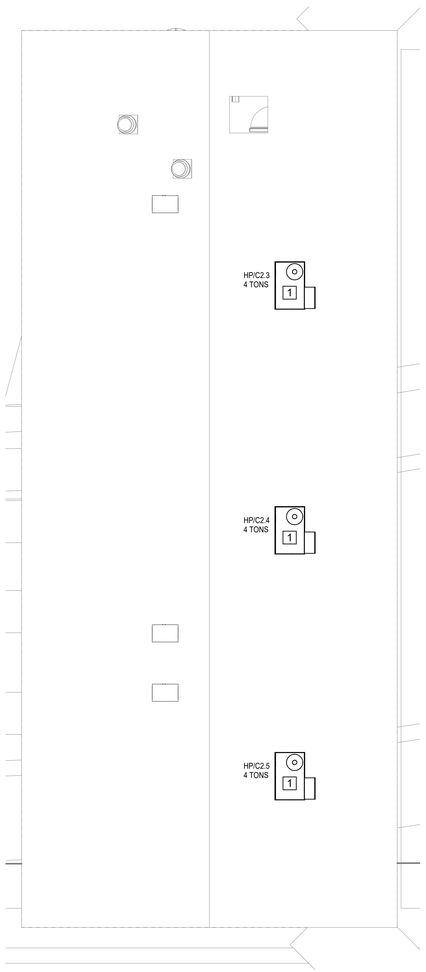
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## GENERAL NOTES

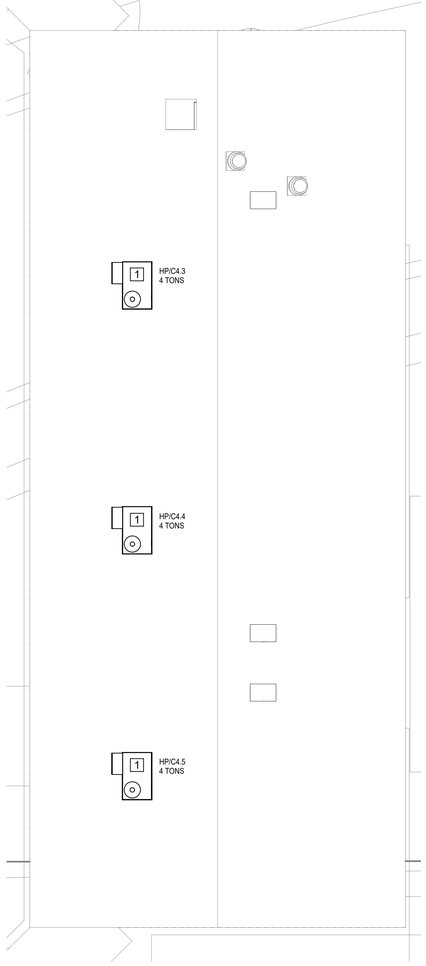
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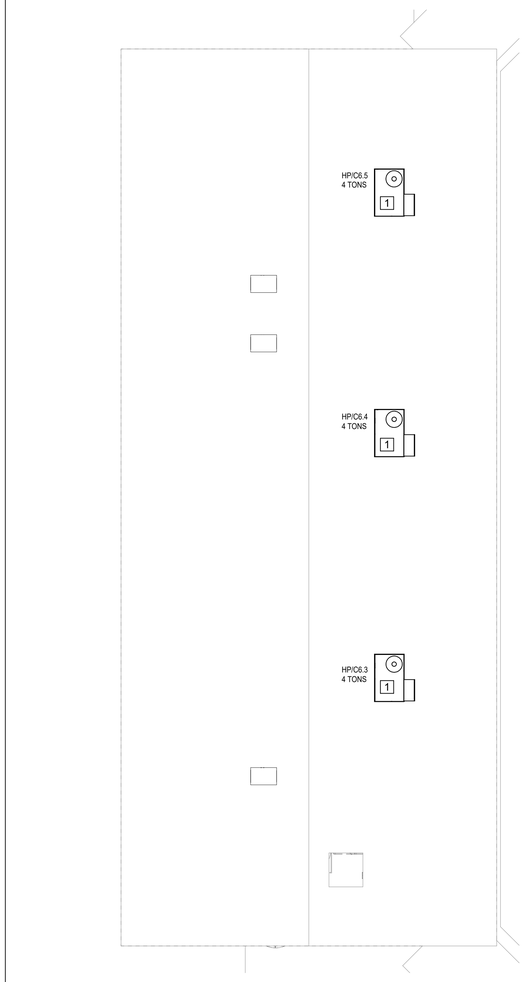
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3 ROOF PLAN - BLDG C2
1/8" = 1'-0"




2 ROOF PLAN - BLDG C4
1/8" = 1'-0"




1 ROOF PLAN - BLDG C6
1/8" = 1'-0"

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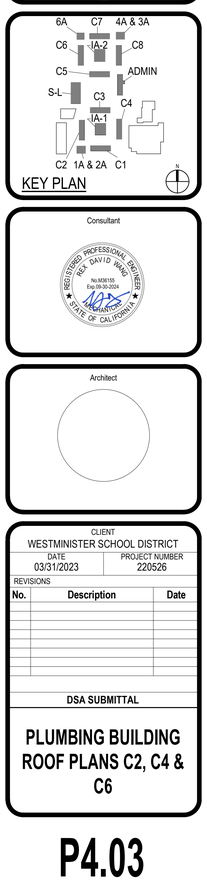
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No.M36155
Exp.09-30-2024
STATE OF CALIFORNIA

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**PLUMBING BUILDING ROOF PLANS C2, C4 & C6**

**P4.03**

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P5.01 - PLUMBING SCHEDULES

0" 1"

## ELECTRIC WATER HEATER SCHEDULE

| UNIT | MANUFACTURER & MODEL NO. | LOCATION | SERVICE | INLET TEMP. °F | OUTLET TEMP. °F | ELEC. REQ. | DIMENSIONS | OPER. WT. (LBS) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| EWH 1 | CHRONOMITE R-48L / 208/ 3PH | ADMIN. JAN. RM & BLDG "K" | ADMIN. & BLDG. "K" | 55 | 120 | 10 KW | 9-7/8" (H) X 10-5/8" X 4-1/4" | 10 | T & P VALVE TO JANITORS SINK |

## PLUMBING FIXTURE SCHEDULE

| MARK | FIXTURE | S or W | V | CW | HW | DESCRIPTION |
|---|---|---|---|---|---|---|
| WC 1 | WATER CLOSET (STAFF / ACCESSIBLE) | 4" | 2" | 1-1/2" | --- | AMERICAN STANDARD # 2859.128 AFWAL FLOWISE -WATER SENSE. WALL HUNG WITH ELONGATED BOWL. VITREOUS CHINA. 1.28 GPF SLOAN ROYAL # 111-1.28 GPF MANUAL FLUSH VALVE. OLSONITE 95SSC WHITE ELONGATED OPEN FRONT SEAT LESSCOVER. J.R.SMITH SERIES 0100-0200 CARRIERS. BRASSCRAFT STOPS AND SUPPLIES. OR EQUAL PROVIDE ADJUSTABLE CARRIER. ADA COMPLIANT |
| WC 2 | WATER CLOSET (STUDENT / ACCESSIBLE) | 4" | 2" | 1-1/2" | --- | AMERICAN STANDARD # 2698.001.128 MADERA YOUTH FLOWISE 14" HEIGHT WITH ELONGATED BOWL. VITREOUS CHINA. 1.28 GPF SLOAN ROYAL # 111-1.28 GPF MANUAL FLUSH VALVE. WHITE ELONGATED OPEN FRONT SEAT LESS COVER. BRASSCRAFT STOPS AND SUPPLIES. OR EQUAL |
| L 1 | LAVATORY (AGE GROUP 9-12) | 2" | 2" | 1/2" | - | AMERICAN STANDARD NO. 0356.041"LUCERNE WALL HUNG LAVATORY" 20"X18" WALL HUNG, COMPLETE WITH FAUCET WITH 0.5 GPM AERATOR AND VANDAL RESISTANT COVER PLATE, MCGUIRE NO. 155A 1-1/4" OUTLET "OPEN GRID P.O. PLUG" MCGUIRE NO. PW8090NC0 1-1/4" L.A. PATTERN P-TRAP WITH TRAP AND SUPPLYCOVERS, GALVANIZED NIPPLE AND CHROMIUM PLATED BRASS CASING, CHICAGO NO. 1017 -ABCP LOOSE KEY STOPSWITH RIGID SUPPLIES, AND ZURN NO. Z-1231CARRIER WITH STEEL PLATE, MOUNT AT ADA ACCESIBLE HEIGHT. |
| L 2 | LAVATORY (STAFF) | 2" | 2" | 1/2" | 1/2" | AMERICAN STANDARD NO. 0356.028"LUCERNE WALL HUNG LAVATORY" 20"X18" WALL HUNG, COMPLETE WITH CHICAGO NO. 2200-ABCP FAUCET WITH 0.5 GPM AERATOR AND VANDAL RESISTANT COVER PLATE, SYMMONS "MAXLINE" NO. 7-225-CK-MS-BT-X THERMOSTATIC MIXING VALVE WITH STAINLES STEEL CABINET, MCGUIRE NO. 155A 1-1/4" OUTLET "OPEN GRID P.O. PLUG" MCGUIRE NO. PW8090NC0 1-1/4" L.A. PATTERN P-TRAP WITH TRAP AND SUPPLYCOVERS, GALVANIZED NIPPLE AND CHROMIUM PLATED BRASS CASING, CHICAGO NO. 1017 -ABCP LOOSE KEY STOPS WITH RIGID SUPPLIES, AND ZURN NO. Z-1231CARRIER WITH STEEL PLATE, |
| S 1 | SINK (STAFF) | 2" | 2" | 1/2" | 1/2" | JUST SL -ADA ,2225 - B - GR 18 GA STAINLESS STEEL , SINGLE COMPARTMENT , 25" X 22" X 6-1/2", 3-HOLE PUNCH WITH CHICAGO 1100-GN8AE35-369AB WRISTBLADE LEVER, FAUCET WITH 1.5 GPM FLOW RETRICTOR, J-35-FS PERFORATED GRID DRAIN , SPEEDWAY COMPRESSION WALL STOPS & SUPPLY, P-TRAP. SYMMONS "MAXLINE" NO. 7-225-CK-MS-BT-X THERMOSTATIC MIXING VALVE WITH STAINLES STEEL CABINET,CBC COMPLIANT FOR ACCESS. |
| S 2 | CLASSROOM (BLDG."C") | 2" | 2" | 1/2" | - | ELKAY CDKR2517VRC GR 18 GA STAINLESS STEEL , SINGLE COMPARTMENT , 25" X 17" X 6 7/8" , (REAR DRAIN) FAUCET WITH 1.5 GPM FLOW RETRICTOR, J-35-FS PERFORATED GRID DRAIN , SPEEDWAY COMPRESSION WALL STOPS & SUPPLY, P-TRAP . , CBC COMPLIANT FOR ACCESS. (OR EQUAL) |
| SH 1 | SHOWER (STAFF) | 2" | 2" | 3/4" | 3/4" | SYMMONS NO. S-9603-PLR "HAND SHOWERSYSTEM" COMPLETE WIH INTGERAL VOLUME CONTROL & TEMPTROL PRESSURE BALANCING SHOWER VALVE WITH LEVER HANDLE & INTEGRAL STOPS AND 1.5 GPM FLOW RESTRICTOR, ADJUSTABLE GRAB BAR INSTALLED AT ACCESSIBLE HEIGHT WITH 60" FLEXIBLE METAL HOSE. INSTALLATION SHALL BE IN ACCORDANCE TO CBC COMPLIANT FOR ACCESSIBILITY. |
| DF 1 | DRINKING FOUNTAIN | 2" | 2" | 1/2" | --- | ELKAY NO. LZS8WSLP / FILTERED SINGLE LZ COOLER, WALL MOUNTED. W TOUCHLESS BOTTLE FILLER EZH2O, W/ SOLENOID VALVE, CONTROLLED BY TRANSFORMER 115 / 60HZ / 4.2 FLA 14 GAUGE STAINLESS STEEL W/ INTEGRAL 1/4" STAINLESS STEEL MOUNTING PLATE, ADA APPROVED, COMPLETE WITH VANDAL PROOF BOTTOM CHICAGO NO. 45LKABCP ANGLE STOP W/ 1/2" FEMALE INLET & OUTLET. MOUNT AT ADA ACCESSIBLE HEIGHT. |
| U 1 | URINAL W/ WCO (ACCESSIBLE) | 2" | 2" | 3/4" | --- | AMERICAN STANDARD #6590.001 WASHBROOK FLOWISE WALL-HUG URINAL 0.125 GPF. VITREOUC CHINA COMPLETE WITH SLOAN ROYAL #186-0.125 GPF EXPOSED MANUAL FLUSH VALVE AND WITH JR #0600 SERIES URINAL SUPPORTS. PROVIDE WALL CLEANOUT ABOVE EACH URINAL. |
| HB 1 | HOSE BIBB | --- | --- | 3/4" | --- | WOODFORD 24P-3/4 WITH WALL FLANGE AT WALLS; WOODFORD Y24 AT STAND PIPES.BRASS FAUCET, SHIELDED LOOSE KEY HANDLE, NON REMOVABLE VACUUM BREAKER, & ROUGH CHROME FINISH FOR OUTDOORS; POLISHED CHROME INDOORS. |
| TP 1 | TRAP PRIMER | --- | --- | VARIES | VARIES | SIOUX CHIEF 650 SERIES HYDRA-RESTER, SEAMLESS COPPER CHAMBER SUITABLE FOR CONCEALED INSTALLATION, PDI SIZE INDICATED ON PLANS. INSTALL PER MANUFACTURER RECOMMENDATION. |
| WHA 1 | WATER HAMMER ARRESTER | --- | --- | VARIES | VARIES | SIOUX CHIEF 650 SERIES HYDRA-RESTER, SEAMLESS COPPER CHAMBER SUITABLE FOR CONCEALED INSTALLATION, PDI SIZE INDICATED ON PLANS. INSTALL PER MANUFACTURER RECOMMENDATION. |
| FD 1 | FLOOR DRAIN | 2" | 2" | 1/2" TP | - | JR SMITH #2005- WITH TRAP PRIMER CONNECTION. |

NOTES:

1. ALL PLUMBING FIXTURES, FLUSH VALVES, FAUCETS, FLOOR DRAINS, FLOOR SINKS, DRINKING FOUNTAINS, ETC. SHALL BE VANDAL RESISTANT.
2. ALL PLUMBING FIXTURES SHALL COMPLY WITH CAL GREEN FLOW RATES FOR 20 PERCENT FLOW RATE REDUCTION PER TABLE 5.303.2.3.
3. COORDINATE ALL FIXTURES WITH ARCHITECT
4. FOR PLUMBING FIXTURE HEIGHTS REFER TO ARCHITECT PLAN G0.04

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WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 04-121818 DSA FILE NO.: 30-43

Consultant

REGISTERED PROFESSIONAL ENGINEER
REZ DAVID RAD
No.M36155
Exp.09-30-2024
CIVIL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|

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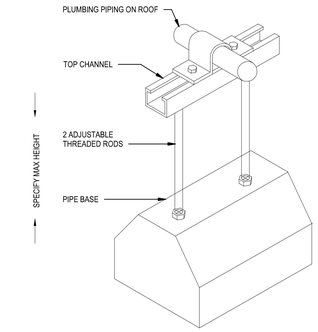
PLUMBING SCHEDULES

P5.01

P6.01 - PLUMBING DETAILS

0" 1"

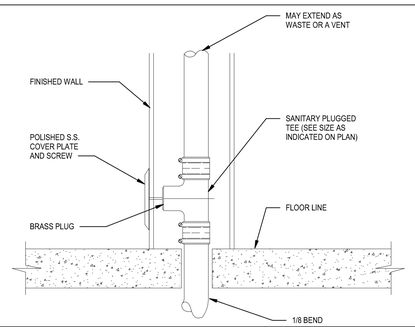
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NOT TO SCALE



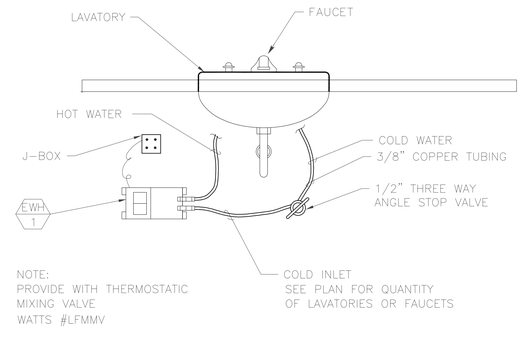

NOTES:
1. ALL PIPING ON ROOF SHALL BE SUPPORTED BY COOPER B-LINE DURA-BLOCK ROOFTOP SUPPORT MODEL NO. DBE 10-16 WITH CLDP 10 LOAD DISTRIBUTION PLATE. DIMENSIONS: ADJUSTABLE HEIGHT x WIDTH x LENGTH - 5'12-16"x6"x9.6" TOTAL WEIGHT: 5.76 LBS. TOTAL LOAD RATED FOR 200 LBS.
2. CONSTRUCTION: BASE WITH (2) 1/2" ELECTRO ZINC ALL THREADED ROD RISERS TOP CHANNEL IS 1" TALL. BASE IS CONSTRUCTED OF 100% RECYCLE RUBBER, UV RESISTANT.
3. PAINT PVC CONDENSATE DRAIN PIPE WITH APPROVED ULTRA VIOLET RESISTANT PAINT, VERIFY ARCHITECT FOR COLOR.
4. PROVIDE SPEARS PVC PIPE SCHEDULE 80 CONDENSATE DRAIN OR APPROVED EQUAL.
5. MAXIMUM HORIZONTAL SPACING SHALL BE 5'-0".

## 20 CONDENSATE DRAIN ROOF SUPPORT
NOT TO SCALE

## 18 NOT USED / NOT APPLICABLE
NOT TO SCALE

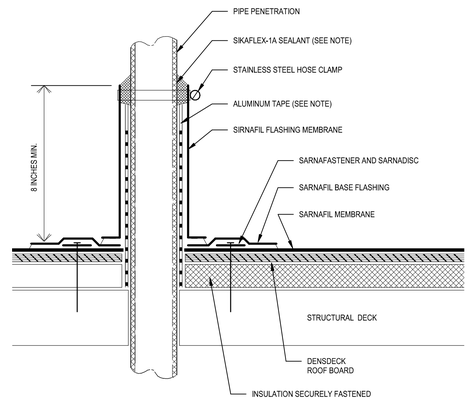



## 12 WALL CLEANOUT DETAIL
NOT TO SCALE




NOTE:
PROVIDE WITH THERMOSTATIC MIXING VALVE WATTS #LFMMV

## 10 INSTA-HOT WATER HEATER DETAIL
NOT TO SCALE

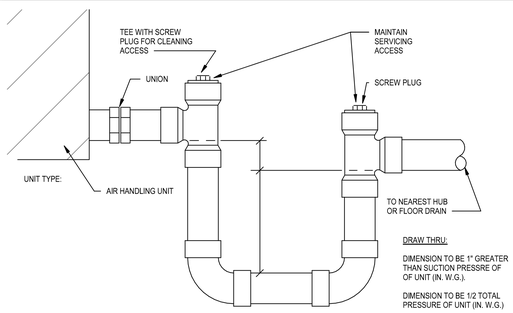



NOTES:
1. ALUMINUM TAPE IS REQUIRED IF EXISTING PENETRATION IS CONTAMINATED.
2. SEALANT IS A MAINTENANCE ITEM, MAINTENANCE IS NOT COVERED UNDER THE SARNAFIL WARRANTY.

## 08 PIPE PENETRATION FLASHING
NOT TO SCALE

## 06 NOT USED / NOT APPLICABLE
NOT TO SCALE

## 05 NOT USED / NOT APPLICABLE
NOT TO SCALE




DRAW THRU:
DIMENSION TO BE 1" GREATER THAN SUCTION PRESSRE OF OF UNIT (IN. W.G.).
DIMENSION TO BE 1/2 TOTAL PRESSURE OF UNIT (IN. W.G.)

BLOW THRU:
DIMENSION TO BE 1"
DIMENSION TO BE EQUAL TO TOTAL PRESSURE OF UNIT (IN. W.G.)

## 04 CONDENSATE TRAP PIPING DETAIL
NOT TO SCALE

## 02 NOT USED / NOT APPLICABLE
NOT TO SCALE

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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA Submittal

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

6A C7 4A & 3A
C6 1A-2 C8
C5 ADMIN
S-L C3 C4
1A-1
C2 1A & 2A C1
N
KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
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Exp.09-30-2024
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Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

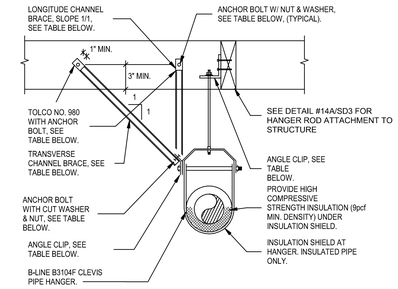
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PLUMBING DETAILS

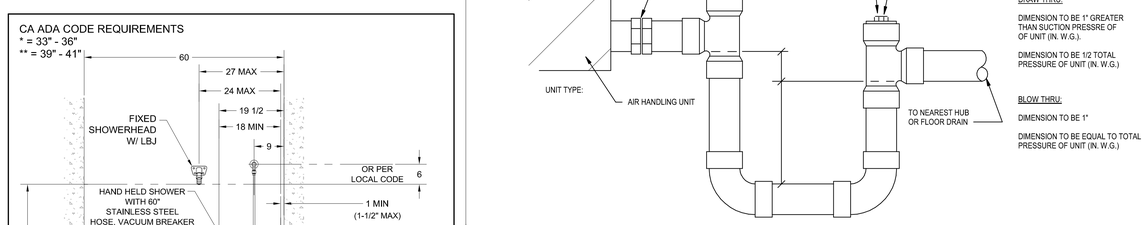
P6.01



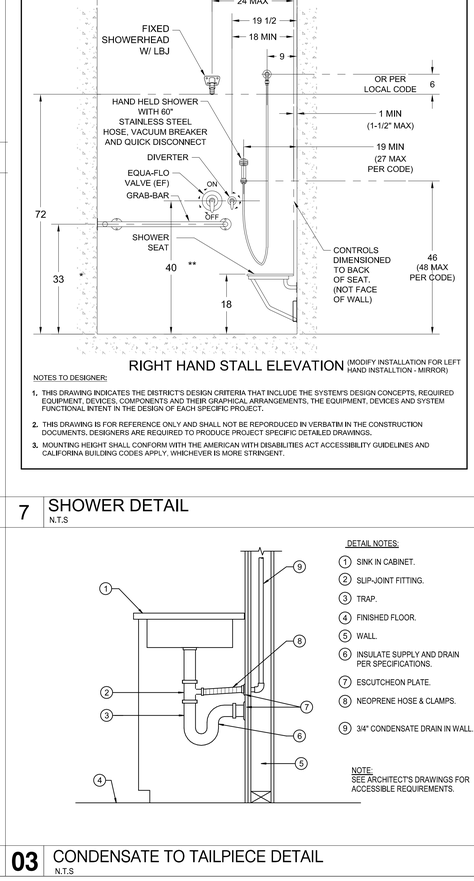

TYPICAL SEISMIC BRACING FOR PIPE

| PIPE SIZE | * CHANNEL BRACE | ROD SIZE | MAX. VERT. SUPPORT SPACING | MAX. TRANS./ LONGITUDE SUPPORT SPACING | ANCHOR BOLT SIZE | ANGLE CLIP |
|---|---|---|---|---|---|---|
| 1/2" | 1-5/8"x1-5/8"x12 GA | 1/4" | 5' | 10' | 1/4" | 2"x2"x1/8"x0'-2" |
| 3/4" | 1-5/8"x1-5/8"x12 GA | 1/4" | 6' | 12' | 3/8" | 2"x2"x1/8"x0'-2" |
| 1" | 1-5/8"x1-5/8"x12 GA | 3/8" | 7' | 14' | 3/8" | 3"x3"x1/4"x0'-3" |
| 1-1/4" | 1-5/8"x1-5/8"x12 GA | 3/8" | 8' | 16' | 3/8" | 3"x3"x1/4"x0'-3" |
| 1-1/2" | 1-5/8"x1-5/8"x12 GA | 3/8" | 9' | 18' | 3/8" | 3"x3"x1/4"x0'-3" |
| 2" | 1-5/8"x1-5/8"x12 GA | 3/8" | 10' | 20' | 3/8" | 3"x3"x1/4"x0'-3" |
| 2-1/2" | 1-5/8"x1-5/8"x12 GA | 3/8" | 10' | 22' | 3/8" | 3"x3"x1/4"x0'-3" |
| 3", 4" | 1-5/8"x1-5/8"x12 GA | 3/8" | 11' | 24' | 1/2" | 3"x3"x1/4"x0'-3" |

## 20 PIPE SEISMIC BRACING DETAIL (WOOD)
12" = 1'-0"




## 14 CONDENSATE TRAP PIPING DETAIL
12" = 1'-0"




RIGHT HAND STALL ELEVATION (MODIFY INSTALLATION FOR LEFT HAND INSTALLTION - MIRROR)

NOTES TO DESIGNER:

1. THIS DRAWING INDICATES THE DISTRICT'S DESIGN CRITERIA THAT INCLUDE THE SYSTEM'S DESIGN CONCEPTS, REQUIRED EQUIPMENT, DEVICES, COMPONENTS AND THEIR GRAPHICAL ARRANGEMENTS, THE EQUIPMENT, DEVICES AND SYSTEM FUNCTIONAL INTENT IN THE DESIGN OF EACH SPECIFIC PROJECT.
2. THIS DRAWING IS FOR REFERENCE ONLY AND SHALL NOT BE REPORDUCED IN VERBATIM IN THE CONSTRUCTION DOCUMENTS; DESIGNERS ARE REQUIRED TO PRODUCE PROJECT SPECIFIC DETAILED DRAWINGS.
3. MOUNTING HEIGHT SHALL CONFORM WITH THE AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES AND CALIFORINA BUILDING CODES APPLY, WHICHEVER IS MORE STRINGENT.

## 7 SHOWER DETAIL
N.T.S

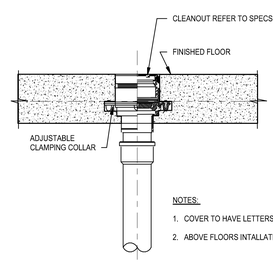



DETAIL NOTES:

1. SINK IN CABINET.
2. SLIP-JOINT FITTING.
3. TRAP.
4. FINISHED FLOOR.
5. WALL.
6. INSULATE SUPPLY AND DRAIN PER SPECIFICATIONS.
7. ESCUTCHEON PLATE.
8. NEOPRENE HOSE & CLAMPS.
9. 3/4" CONDENSATE DRAIN IN WALL.

NOTE:
SEE ARCHITECT'S DRAWINGS FOR ACCESSIBLE REQUIREMENTS.

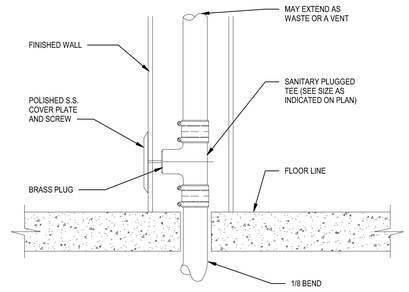
## 03 CONDENSATE TO TAILPIECE DETAIL
N.T.S




NOTES:

1. COVER TO HAVE LETTERS "CO" CAST ON TOP.
2. ABOVE FLOORS INTALLATION SHALL BE WATER PROOFED AS REQUIRED.

## 08 FLOOR CLEANOUT DETAIL
12" = 1'-0"




## 02 WALL CLEANOUT - 1
N.T.S



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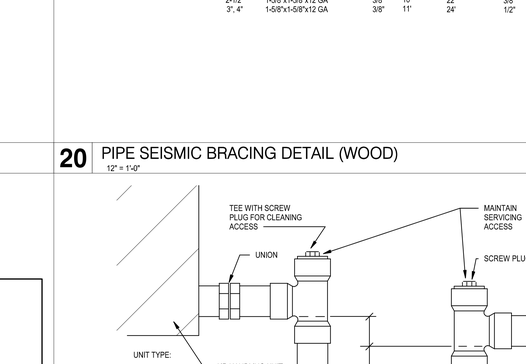
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
1417 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REZ - DAVID RAD No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
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**PLUMBING DETAILS**

**P6.01**

0" 1"

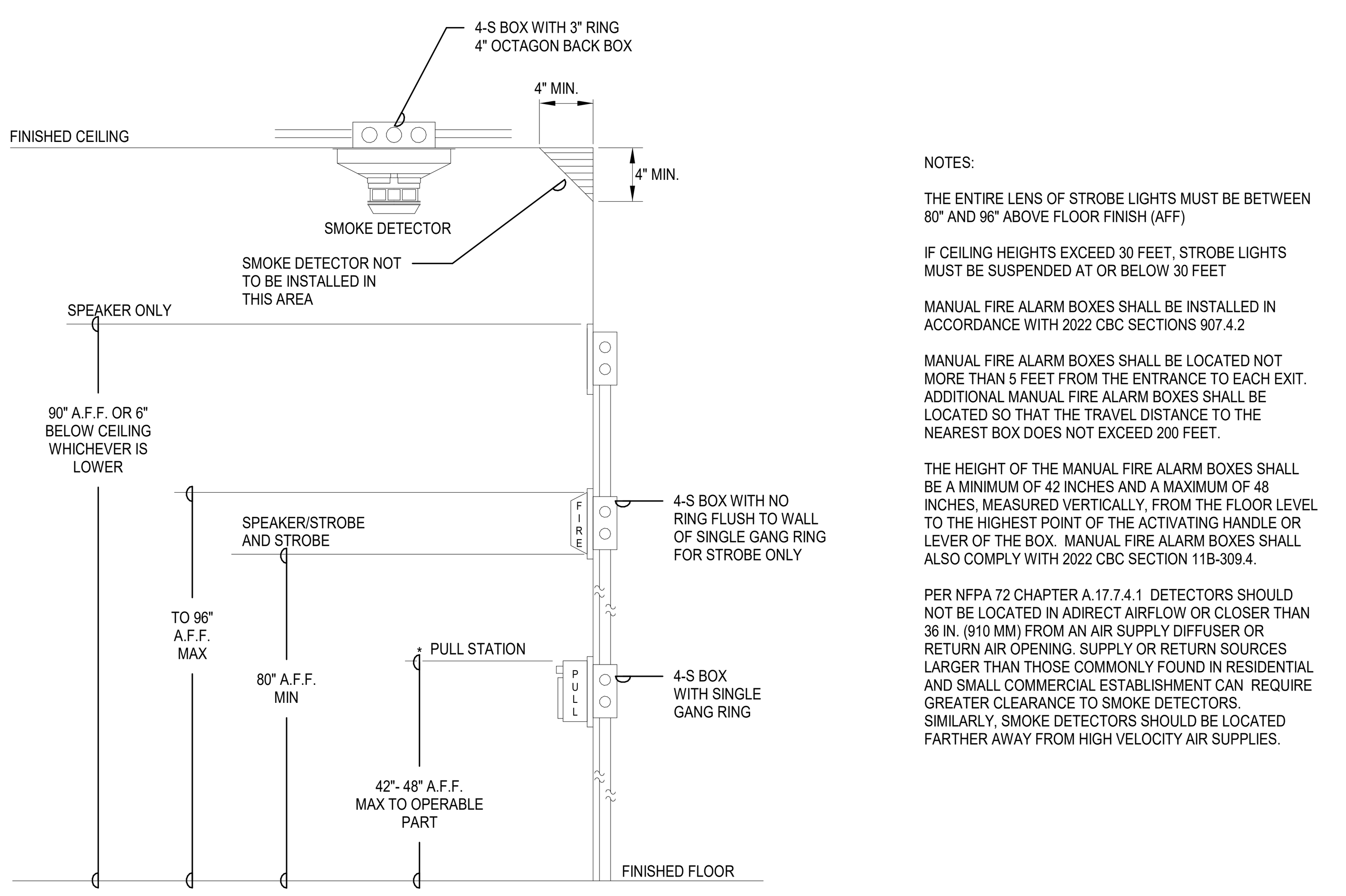
FA0.00 - FIRE ALARM SYMBOLS, NOTES, AND ABBREVIATIONS

## DEVICE SCHEDULE

| SYMBOL | DESCRIPTION | MODEL | MANUFACTURER | BACKBOX | MOUNTING HEIGHT | C.S.F.M. NUMBER |
|---|---|---|---|---|---|---|
| FACP | NEW FIRE ALARM CONTROL PANEL AND VOICE EVAC MICROPHONE | IFP-2100ECS ECS-RPU | FARENHYT BY SILENT KNIGHT | PROVIDED | | 7165-0559:0505 7300-0559:0175 |
| ANN | FIRE ALARM ANUNCIATOR | RA-2000 | FARENHYT BY SILENT KNIGHT | N/A | | 7165-0559:0505 |
| FATC | FIRE ALARM TERMINAL CABINET | N/A | BY ELECTRICAL CONTRACTOR | N/A | | N/A |
| FAPS | FIRE ALARM POWER SUPPLY | RPS-1000 | FARENHYT BY SILENT KNIGHT | N/A | | 7165-0559:0135 |
| AMP | FIRE ALARM AMPLIFIER | ECS-DUAL50W | FARENHYT BY SILENT KNIGHT | N/A | | 7165-0559:0505 |
| SM | AUDIBLE/VISUAL SYNC MODULE | MDL3 | SILENT KNIGHT | 5S DEEP BOX W/ 5S EXTENSION | | 7300-1653:0202 |
| S P | ADDRESSABLE AREA SMOKE DETECTOR (PHOTOELECTRIC) | IDP-PHOTO B300-6 | FARENHYT BY SILENT KNIGHT | 4S DEEP BOX W/ 3-0 RING | CEILING | 7272-0559:0149 7300-1653:0109 |
| A / C | ADDRESSABLE AREA HEAT DETECTOR | IDP-HEAT-HT-W B300-6 | FARENHYT BY SILENT KNIGHT | 4S DEEP BOX W/ 3-0 RING | ATTIC/ CEILING | 7270-0559:0147 7300-1653:0109 |
| F | FIRE ALARM ADDRESSABLE MANUAL PULL STATION | IDP-PULL-DA | FARENHYT BY SILENT KNIGHT | 4S DEEP BOX W/ 3-0 RING | | 7150-0559:0140 |
| CR | FIRE ALARM ADDRESSABLE CONTROL RELAY MODULE | IDP-RELAY | FARENHYT BY SILENT KNIGHT | 4S DEEP BOX W/ 3-0 RING | | 7300-0559:0155 |
| BD R RTS | SINGLE ENDED REFLECTED TYPE BEAM SMOKE SENSOR WITH REMOTE TEST STATION | IDP-BEAM-T W/ BEAMMMK RTS151KEY | FARENHYT SYSTEM SENSOR | 4S DEEP BOX W/ 4S EXTENSION | | 7260-0559:0148 7300-1653:0171 7300-1653:0212 |
| | FIRE ALARM WALL MOUNTED STROBE | SRL | SYSTEM SENSOR | 4S DEEP BOX W/ 3-0 RING | | 7125-1653:0504 |
| | FIRE ALARM WALL MOUNTED SPEAKER/STROBE | SPSRL | SYSTEM SENSOR | 4S DEEP BOX W/ 4S EXTENSION | | 7320-1653:0505 |
| WP | FIRE ALARM EXTERIOR WEATHERPROOF SPEAKER | SPRK | SYSTEM SENSOR | 4S DEEP BOX W/ 4S EXTENSION | | 7320-1653:0201 |
| | FIRE ALARM CEILING MOUNTED SPEAKER/STROBE | SPSCRL/ SPSCWL-P | SYSTEM SENSOR | 4S DEEP BOX W/ 4S EXTENSION | "P" SYMBOLIZE "PLAIN" | 7320-1653:0505 |
| | FIRE ALARM CEILING MOUNTED STROBE | SCW | SYSTEM SENSOR | 4S DEEP BOX W/ 4S EXTENSION | | 7125-1653:0186 |
| JB | FIRE ALARM JUNCTION BOX | N/A | BY ELECTRICAL CONTRACTOR | N/A | | N/A |
| EOL | END OF LINE RESISTOR | N/A | N/A | N/A | | N/A |
| M | FIRE ALARM ADDRESSABLE MONITOR MODULE | IDP-MONITOR | FARENHYT BY SILENT KNIGHT | 4S DEEP BOX W/ 3-0 RING | | 7300-0559:0155 |
| ! WP | WEATHERPROOF HEAT DETECTOR | 302-ET-194 | SILENT KNIGHT | 4S DEEP BOX W/ 3-0 RING | | 7270-0021:0001 |
| CO | COMBINATION SMOKE/CO DETECTOR | IDP-FIRE -CO B200S-WH | FARENHYT BY SILENT KNIGHT | 4S DEEP BOX W/ 3-0 RING | CEILING | 7275-0559:0170 7300-1653:0213 |

* ALL FIRE ALARM DEVICES AND EQUIPMENTS ARE NEW UNLESS NOTED AS EXISTING.

## ELEVATION MOUNTING DETAIL




NOTES:

THE ENTIRE LENS OF STROBE LIGHTS MUST BE BETWEEN 80" AND 96" ABOVE FLOOR FINISH (AFF)

IF CEILING HEIGHTS EXCEED 30 FEET, STROBE LIGHTS MUST BE SUSPENDED AT OR BELOW 30 FEET

MANUAL FIRE ALARM BOXES SHALL BE INSTALLED IN ACCORDANCE WITH 2022 CBC SECTIONS 907.4.2

MANUAL FIRE ALARM BOXES SHALL BE LOCATED NOT MORE THAN 5 FEET FROM THE ENTRANCE TO EACH EXIT. ADDITIONAL MANUAL FIRE ALARM BOXES SHALL BE LOCATED SO THAT THE TRAVEL DISTANCE TO THE NEAREST BOX DOES NOT EXCEED 200 FEET.

THE HEIGHT OF THE MANUAL FIRE ALARM BOXES SHALL BE A MINIMUM OF 42 INCHES AND A MAXIMUM OF 48 INCHES, MEASURED VERTICALLY, FROM THE FLOOR LEVEL TO THE HIGHEST POINT OF THE ACTIVATING HANDLE OR LEVER OF THE BOX. MANUAL FIRE ALARM BOXES SHALL ALSO COMPLY WITH 2022 CBC SECTION 11B-309.4.

PER NFPA 72 CHAPTER A.17.7.4.1 DETECTORS SHOULD NOT BE LOCATED IN ADIRECT AIRFLOW OR CLOSER THAN 36 IN. (910 MM) FROM AN AIR SUPPLY DIFFUSER OR RETURN AIR OPENING. SUPPLY OR RETURN SOURCES LARGER THAN THOSE COMMONLY FOUND IN RESIDENTIAL AND SMALL COMMERCIAL ESTABLISHMENT CAN REQUIRE GREATER CLEARANCE TO SMOKE DETECTORS. SIMILARLY, SMOKE DETECTORS SHOULD BE LOCATED FARTHER AWAY FROM HIGH VELOCITY AIR SUPPLIES.

## SEQUENCE OF OPERATIONS

| ACTION \ DEVICE | MANUAL PULL STATION | AREA SMOKE/ BEAM DETECTOR | HEAT DETECTOR | 120VAC POWER FAILURE | SHORT CIRCUIT | GROUND FAULT | BATTERY FAILURE | SPRINKLER VALVE / PIV TAMPER SWITCH | SPRINKLER WATER FLOW SWITCH | CO/SMOKE DETECTOR | ELEV. SHAFT/EQ. RM SMOKE DETECTOR | ELEV. SHAFT/EQ. RM HEAT DETECTOR | KITCHEN FIRE SUPPRESSION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SOUND ALARM AT "FACP" | YES | YES | YES | NO | NO | NO | NO | NO | YES | YES | YES | YES | NO |
| SOUND TROUBLE BUZZER AT "FACP" | NO | NO | NO | YES | YES | YES | YES | YES | NO | NO | NO | NO | YES |
| ANNUNCIATE AT "FACP" AND THE REMOTE ANNUNCIATOR (ALARM OR TROUBLE) | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| ACTIVATE AUDIBLE / VISUAL ALARM SIGNAL THROUGHOUT BUILDING | YES | YES | YES | NO | NO | NO | NO | NO | YES | YES | YES | YES | YES |
| ACTIVATE AUDIBLE TEMPORAL-4 SIGNAL AT CO DETECTOR BASE | NO | NO | NO | NO | NO | NO | NO | NO | NO | YES | NO | NO | NO |
| ACTIVATE HVAC UNIT SHUTDOWN/ CLOSE COMBINATION FIRE/SMOKE DAMPERS | NO | YES | NO | NO | NO | NO | NO | NO | YES | YES | YES | YES | YES |
| ACTIVATE SIGNAL FOR OFF-SITE MONITORING | YES | YES | YES | YES | NO | NO | NO | NO | YES | YES | YES | YES | YES |
| MUTE AUTONOMOUS LOCAL SOUND SYSTEM | YES | YES | YES | YES | NO | NO | NO | NO | NO | NO | YES | YES | YES |
| SHUT DOWN ELEVATOR POWER SUPPLY | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | NO | YES | NO |

## LEGENDS

| ABBREVIATION | DESCRIPTION | ABBREVIATION | DESCRIPTION |
|---|---|---|---|
| A OR AMP | AMPERES | NIC | NOT IN CONTRACT |
| AFF | ABOVE FINISHED FLOOR | NO. | NUMBER |
| AIC | AMPERES INTERRUPTING CAPACITY | PH. OR Ø | PHASE |
| ARCH. | ARCHITECT; ARCHITECTURAL | PNL | PANEL |
| AWG | AMERICAN WIRE GAUGE | PWR | POWER |
| C | CONDUIT | REC/RECEPT | RECEPTACLE |
| CKT | CIRCUIT | REQ'D | REQUIRED |
| CL. | CEILING MOUNTED DEVICE | RM | ROOM |
| C.O. | CONDUIT ONLY WITH PULL WIRE | SF | SQUARE FEET |
| CU | COPPER | SHT | SHEET |
| DWG | DRAWING | SP | SINGLE POLE |
| ER | EXISTING DEVICE TO BE REMOVED | SPECS | SPECIFICATIONS |
| EMT | ELECTRICAL METALLIC TUBING | SW | SWITCH |
| EQUIP | EQUIPMENT | TYP | TYPICAL |
| EXIST / (E) | EXISTING | UG | UNDERGROUND |
| FIN. | FINISH | U.O.N. | UNLESS OTHERWISE NOTED |
| FLR | FLOOR | V | VOLTS |
| FT | FEET | V-A | VOLT-AMPERES |
| GFI | GROUND FAULT INTERRUPTER | W | WATTS |
| GND | GROUND | W/ | WITH |
| LTG. | LIGHTING | W/O | WITHOUT |
| MTG | MOUNTING | WP | WEATHERPROOF |
| N | NEW | CEC | CALIFORNIA ELECTRICAL CODE |
| FS | FLOW SWITCH | | PULL BOX (WEATHERPROOF) |
| JB | JUNCTION BOX | ## | RISER UP AND DOWN |
| PIV | POST INDICATOR VALVE | TS | TAMPER SWITCH |
| DCDV | DOUBLE CHECK DETECTOR VALVE | SFD | COMBINATION SMOKE FIRE DAMPER |

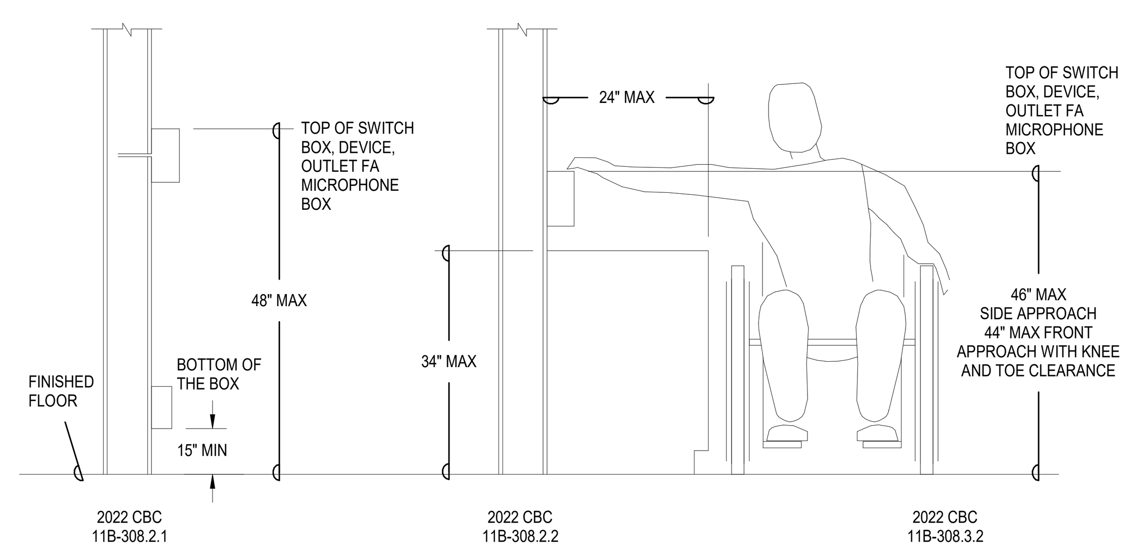
## FIRE WATCH NOTE

A FIRE WATCH SHALL BE ESTABLISHED AND THE FIRE DEPARTMENT & FIRE CODE OFFICIAL SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS RENDERED OUT OF SERVICE. A FIRE WATCH SHALL BE STAGED WHENEVER THE BUILDING IS OCCUPIED (PARTIAL OR WHOLE) PER DSA IR F-2 AND CFC 901.7.

## SCOPE OF WORK

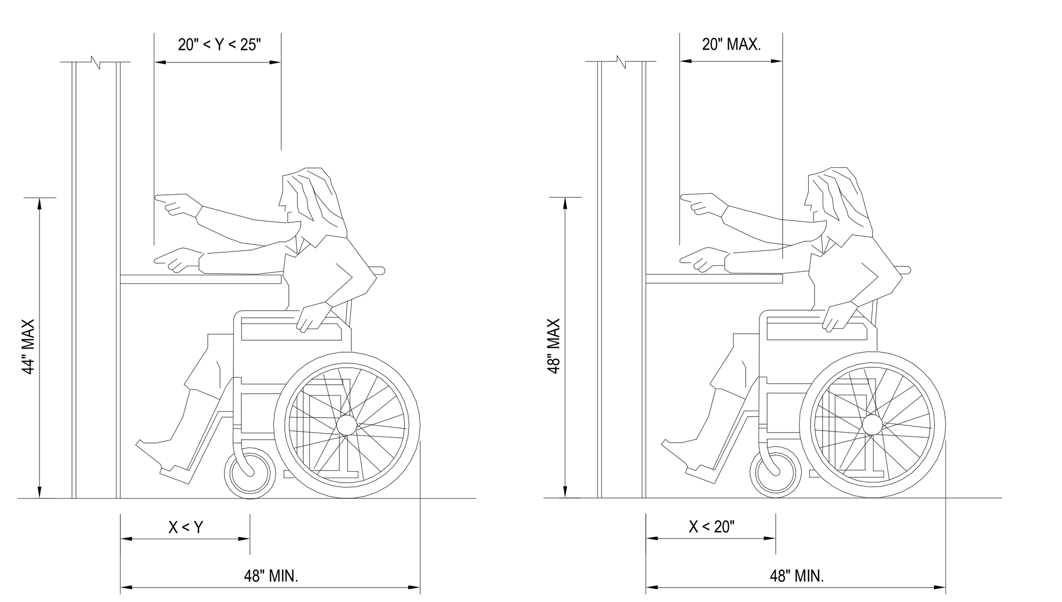
PROVIDE COMPLETE FULL AUTOMATIC ADDRESSABLE FIRE ALARM SYSTEM WITHIN THE AREA OF WORK. PROVIDE FIRE ALARM SYSTEM DEVICES AS SHOWN IN EQUIPMENT LEGEND, FLOOR PLANS, AND SPECIFICATIONS IN THIS CONSTRUCTION DOCUMENT SET. USE NEW FIRE ALARM CONTROL PANEL TO CONNECT NEW FIRE ALARM SYSTEM DEVICES SHOWN PER DRAWING AND SPECIFICATION DOCUMENT. UPON COMPLETION, A COMPLETE PRE TEST SHALL BE PERFORMED TO VERIFY FUNCTIONALITY, IF FUNCTIONALITY IS COMPLETE THEN THE PROPER DOCUMENTATION SHALL BE SUBMITTED TO THE AUTHORITY HAVING JURISDICTION PRIOR TO SCHEDULING A FINAL INSPECTION.

## MOUNTING OVER OBSTRUCTION DETAIL




NOTES:

1. THIS DETAIL APPLIES TO MOUNTING OF ANY MECHANICAL AND ELECTRICAL DEVICE WHICH CONTAINS AN OPERABLE PART THAT IS ADJUSTABLE BY THE OCCUPANT. THIS DOES NOT APPLY TO SENSORS OR CONTROLS THAT ARE ONLY ADJUSTABLE THROUGH THE BUILDING AUTOMATION SYSTEM (IE: TEMPERATURE AND HUMIDITY SENSORS).
2. FORWARD OR FRONT APPROACH FOR DEVICES MOUNTED ABOVE COUNTERS ASSUMES THAT DIRECTLY BELOW THE DEVICE, THE COUNTER HAS A 30"MIN. WIDTH x27" HIGH x19" MIN. DEEP CLEAR OPENING. CBC SECTIONS 11B-306 & 11B-308.




## FIRE ALARM ELEVATOR SEQUENCE OF OPERATIONS

| ACTION \ DEVICE | HEAT DETECTOR 1ST FLOOR ELEVATOR LOBBY | HEAT DETECTOR 2ND FLOOR ELEVATOR LOBBY | SMOKE DETECTOR ELEVATOR MACHINE ROOM | HEAT DETECTOR ELEVATOR MACHINE ROOM | HEAT DETECTOR ELEVATOR HOISTWAY |
|---|---|---|---|---|---|
| PRIMARY FLOOR RECALL | NO | YES | YES | NO | NO |
| SECONDARY FLOOR RECALL | YES | NO | NO | NO | NO |
| ELEVATOR SHUNT TRIP SHUTDOWN | NO | NO | NO | YES | YES |
| FIREMAN'S HAT ALARM | YES | YES | YES | YES | YES |

## APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES:
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

PARTIAL LIST OF APPLICABLE STANDARDS
NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED): 2022 EDITION
NFPA 720 STANDARD FOR THE INSTALLATION OF CARBON MONOXIDE DETECTION AND WARNING EQUIPMENT; 2015 EDITION
NFPA 80 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES; 2019 EDITION
UL 464 AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES; 2003 EDITION
UL 521 STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS; 1999 EDITION
UL 1971 STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED; 2018 EDITION (R2010)

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

SEE CALIFORNIA BUILDING CODE, CHAPTER 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

## ANCHORAGE AND BRACING NOTES

ALL WORK SHALL BE IN CONFORMANCE WITH TITLE 24, 2022 CALIFORNIA CODE OF REGULATIONS (CCR), 2022 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 CCR, 2022 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 CCR

CUTTING, BORING, SAWCUTTING 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.

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 2022 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, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR 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 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 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 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 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.

MECHANICALPIPING (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.
MP [ ] MD [ ] PP [ ] E [ ] OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #_____.

## WIRE SCHEDULE

| WIRE DESIGNATION | WIRE IN CONDUIT | WIRE IN CONDUIT UNDERGROUND/WET LOC. | UNDERGROUND/WET WIRE DESIGNATION |
|---|---|---|---|
| INIT. LOOP Z | 2 CONDUCTOR #16 FPL TWISTED/ SHIELDED WEST PENN #D991 | 2 CONDUCTOR #16 FPLP SHIELDED WEST PENN #AQ-294 | INIT. LOOP Z |
| SBUS B | 4 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE | 4 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE | SBUS B |
| VBUS C | 2 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE | 2 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE | VBUS C |
| SPEAKER CKT. S | 2 CONDUCTOR #14 THHN/THWN STRANDED | 2 CONDUCTOR #14 THHN/THWN STRANDED | SPEAKER CKT. S |
| VISUAL CKT. V | 2 CONDUCTOR #12 THHN/THWN STRANDED | 2 CONDUCTOR #12 THHN/THWN STRANDED | VISUAL CKT. V |
| POWER CKT. P | 2 CONDUCTOR #12 THHN/THWN STRANDED | 2 CONDUCTOR #12 THHN/THWN STRANDED | POWER CKT. P |

NOTE:

ALL WIRE MODEL NUMBERS ARE WEST PENN.
EQUIVALENT BY OTHER MANUFACTURER IS ACCEPTABLE.

## FIRE ALARM REQUIREMENTS

THE CONTRACTOR SHALL PROVIDE AND SUBMIT THE FIRE ALARM SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION OF THE FIRE ALARM SYSTEM. THE SUBMITTAL SHALL CONTAIN THE FOLLOWING:

A. SHOP DRAWINGS: COMPLETE 1/8" SCALE FLOOR PLANS SHOWING ALL DEVICES, COMPONENTS, CONDUIT AND WIRING INDICATING A COMPLETE AND OPERABLE SYSTEM AS DESIGNED AND SPECIFIED. REPRODUCED COPIES OF BID SET FIRE ALARM PLANS ARE NOT ACCEPTABLE AS SHOP DRAWINGS. SHOP DRAWINGS MUST ALSO INDICATE DEVICE MOUNTING HEIGHTS, ROOM NAMES AND NUMBERS AND THE LOCATION OF ALL FIRE RATED WALLS.
B. ELECTRICAL CONTRACTOR'S AND FIRE ALARM SYSTEM INSTALLER'S NAME, ADDRESS, PHONE NUMBER AND C-10 LICENSE NUMBER.
C. LIST OF SYSTEM COMPONENTS, EQUIPMENT AND DEVICES, INCLUDING MANUFACTURERS' MODEL NUMBER(S) AND CALIFORNIA STATE FIRE MARSHALL LISTING NUMBERS.
D. ORIGINAL COPIERS OF MANUFACTURERS' SPECIFICATION SHEETS FOR ALL EQUIPMENT AND DEVICES INDICATED.
E. VOLTAGE DROP CALCULATIONS -- INCLUDE THE FOLLOWING INFORMATION FOR THE WORST CASE:
   1. POINT-TO-POINT OR OHMS LAW CALCULATIONS.
   2. IDENTIFICATION OF ZONE USED IN CALCULATIONS.
   3. VOLTAGE DROP PERCENT (NOT TO EXCEED MANUFACTURERS' REQUIREMENTS).
      a. NOTE: IF VOLTAGE DROP EXCEEDS 10%, INDICATE MANUFACTURERS' LISTED OPERATING RANGE(S) OR EQUIPMENT AND DEVICES.
   4. NOTE CIRCUIT NUMBER FOR WORST CASE CALCULATION.
F. BATTERY TYPE(S), AMPS HOURS AND LOAD CALCULATIONS -- INCLUDE THE FOLLOWING INFORMATION:
   1. NORMAL OPERATION: 100% OF APPLICABLE DEVICES FOR 24 HOURS = CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY POWER -- I.E.:
      a. ZONE MODULES
      b. DETECTORS
      c. OTHER DEVICES (IDENTIFY)
   2. ALARM CONDITION: 100% OF APPLICABLE DEVICES FOR 15 MINUTES = CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY POWER -- I.E.:
      a. ZONE MODULES
      b. SIGNAL MODULES
      c. DETECTORS
      d. SIGNAL DEVICES
      e. ANNUNCIATOR
      f. OTHER DEVICES (IDENTIFY)
   3. NORMAL OPERATION + ALARM OPERATION
      a. TOTAL AMP HOURS REQUIRED.
      b. TOTAL AMP HOURS PROVIDED.

10% OF EXISTING FIRE ALARM DEVICES AND APPLIANCES SHALL BE ADDED TO THE NEW FIRE ALARM DEVICES AND APPLIANCES FOR TESTING.

## DRAWING INDEX


| SHEET | DESCRIPTION |
|---|---|
| FA0.00 | FIRE ALARM SYMBOLS, NOTES, AND ABBREVIATIONS |
| FA1.01 | FIRE ALARM SITE PLAN |
| FA2.01 | FIRE ALARM BUILDING FLOOR PLANS C7, C8, S-L & ADMIN |
| FA2.02 | FIRE ALARM BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2 |
| FA2.03 | FIRE ALARM BUILDING FLOOR PLANS C2, C4 & C6 |
| FA2.04 | FIRE ALARM BUILDING 1A/2A, MPR |
| FA2.05 | FIRE ALARM BUILDING FLOOR PLANS E BLDG |
| FA2.06 | FIRE ALARM BUILDING G, 3A/4A, 6A |
| FA5.01 | FIRE ALARM RISER DIAGRAM |
| FA5.02 | FIRE ALARM CALCULATIONS |
| FA6.01 | FIRE ALARM DETAILS |


## GENERAL NOTES

1. APPLICABLE STANDARD 2022, NFPA 72, AS ADOPTED AND AMENDED IN CBC CHAPTER 35
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 SYSTEM INSTALLATION, 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 APPROVED LAB TESTING CRITERIA. APPROVED TYPES OF MATERIALS SHALL BE IDENTIFIED WITHIN THE PROJECT SPECIFICATIONS WITHIN THE FIRE ALARM SECTION.
8. WALL MOUNTED VISIBLE NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM FINISHED FLOOR.
9. WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM FROM FINISHED FLOOR AND NO CLOSER THEN 6" TO A HORIZONTAL STRUCTURE.
10. AUDIBLE DEVICES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 DECIBELS (DBA) ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR FIVE DBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPIABLE SPACE WITHIN THE BUILDING.
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. VISIBLE DEVICES SHOULD NOT EXCEED TWO FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN ONE FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISIBLE DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.
14. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.
15. ALL FIRE ALARM WIRING SHALL BE FPL OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE TYPE 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. 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.
19. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
20. FIRE ALARM PANEL, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS.
21. 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.
22. THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED "SYSTEM RECORD OF COMPLETION" PER NFPA 72, FIGURE 7.8.2.
23. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
24. MICROPHONES ASSOCIATED WITH EMERGENCY VOICE ALARM COMMUNICATION SYSTEMS (EVAC) SHALL BE ACCESSIBLE FOR USE, INSTALLED IN COMPLIANCE WITH CBC SECTIONS 11B-305 AND 11B-308.
25. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
26. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
27. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
28. ALL CARBON MONOXIDE SIGNALS SHALL SOUND A FOUR-PULSE TEMPORAL PATTERN PER NFPA 720, 5.8.6.5.1.
29. ALL EQUIPMENT SHALL BE U.L. AND C.S.F.M. LISTED.
30. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE ACCESS FOR ATTIC HEAT DETECTOR, SERVICING, TROUBLESHOOTING, ETC.
31. DO NOT DEVIATE FROM CONDUIT RUNS AS SHOWN ON FLOOR PLANS WITHOUT PRIOR APPROVAL FROM SYSTEM SUPPLIER. FACTORS SUCH AS EXCESSIVE VOLTAGE DROP, ADDITIONAL PARTS, ENGINEERING, ETC., THAT ARE A RESULT OF CONDUIT RUN DEVIATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
32. ALL FAN SHUTDOWN FUNCTIONS, DAMPER CLOSURES, AND ASSOCIATED MECHANICAL SYSTEM FIRE ALARM I NTERFACE SHALL BE BY MECHANICAL CONTRACTOR.
34. ALL 120VAC POWER REQUIREMENTS FOR THE FIRE ALARM SYSTEM SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR AND SHALL MEET ALL REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
35. ALL FIRE ALARM DEVICE BACKBOXES, FIRE ALARM TERMINAL CABINETS, GUTTERS, JUNCTION BOXES, AND ASSOCIATED CONDUITS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED. REFER TO FIRE ALARM SYMBOL LIST AND/OR MOUNTING DETAILS FOR ADDITIONAL INFORMATION. SYSTEM SUPPLIER PROVIDED BACKBOXES SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.
36. SMOKE DETECTOR TESTING SHALL BE ACCOMPLISHED PER THE MANUFACTURER'S INSTRUCTIONS.
37. ALL WIRING, INITIATING DEVICES AND ANNUNCIATOR PANEL SHALL BE SUPERVISED TO THE PRINCIPAL POINT OF ANNUNCIATION. THE FIRE ALARM CONTROL PANEL TO SUPERVISE THE ANNUNCIATOR PANEL, ALL INITIATING AND INDICATING DEVICE CIRCUITS.
38. ALL WIRING SHALL BE CUT FOR IN AND OUT. WIRING SHALL NOT BE LOOPED THROUGH DEVICES.
39. POINT, COMMON ANNUNCIATION, AND T-TAPPING ARE PROHIBITED.
40. PROVIDE 3/4" CONDUIT FROM FIRE ALARM CONTROL PANEL TO TELEPHONE BACKBOARD FOR OWNER PROVIDED CENTRAL STATION MONITORING.
41. ALL CONDUIT SHALL BE 3/4" UNLESS OTHERWISE NOTED.
42. ALL FLOW SWITCHES SHALL BE 2 WIRE WITH NON-ELECTRONIC RETARD TYPE SIMILAR TO THE SYSTEM SENSOR MODEL "WFD SERIES" ONLY.
43. ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
44. FIRE ALARM SYSTEM SHALL BE UL LISTED.
45. CBC 907.6.6.3 (SFM AMENDMENT) REQUIRES FIRE ALARM TO... "TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISORY STATION IN ACCORDANCE WITH NFPA 72. THE SUPERVISORY STATION SHALL BE LISTED AS EITHER UUFX (CENTRAL STATION) OR UUJS (REMOTE AND PROPRIETARY) BY THE UNDERWRITERS LABORATORY INC. (UL) OR OTHER APPROVED LISTING AND TESTING LABORATORY OR SHALL COMPLY WITH THE REQUIREMENTS OF STANDARD, FM 3011)."
46. SUBSTITUTION OF SYSTEM COMPONENTS OR MANUFACTURER WILL REQUIRE THE CONTRACTOR TO SEPARATELY OBTAIN APPROVAL WITH THE DSA AT CONTRACTOR'S EXPENSE AND SHALL MEET ALL REQUIREMENTS OF THE SYSTEM AS DESIGNED AND PRE-APPROVED. ALL PROPOSED SUBSTITUTIONS SHALL BE LISTED WITH THE CALIFORNIA STATE FIRE MARSHAL.
47. FINAL ACCEPTANCE TEST TO INCLUDE TESTING THE CONNECTION BETWEEN THE FIRE ALARM PANEL AND THE SUPERVISING STATION.
48. COORDINATE WITH THE ENGINEER FOR USE OF EXISTING CONDUIT ON A CASE BY CASE BASIS.
49. PRIOR TO DEMOLITION, CONTRACTOR SHALL TEST THE INTERCOM SYSTEM TO ENSURE FULL FUNCTIONALITY. GENERATE A LIST OF FAULTY EQUIPMENT AND PROVIDE TO THE OWNER AND THE ARCHITECT. PROVIDE PRICING FOR ANY REQUIRED EQUIPMENT REPAIRS OR REPLACEMENT.
50. CONTRACTOR SHALL DISCONNECT EXISTING FIRE ALARM SYSTEM FROM THE EXISTING INTERCOM SYSTEM. ENSURE THE INTERCOM SYSTEM IS COMPLETELY FUNCTIONAL AFTER DISCONNECTION.
51. CONTRACTOR SHALL CLEARLY MARK THE ABANDON SECTION OF PUBLIC ADDRESS SYSTEM.
52. PROVIDE A FIRE ALARM DOCUMENTATION CABINET PER NFPA72,7.7.
53. FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH CBC CHAPTER 33 AND CFC CHAPTER 33.
54. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE DSA APRROVED DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATION CHANGE DOCUMENT, OR A SEPERATE SET OF PLANS AND SPECIFICATIONS,DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK (CAC 4-317(C)).
55. CHANGES TO THE DIVISION OF THE STATE ARCHITECT APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENTS FOR CHANGES TO THE STRUCTURAL, ACCESSIBILITY OR FIRE -SAFETY PORTIONS OF THE PROJECT. CHANGES SHALL BE SUBMITTED TO AND APPROVED BY DSA PRIOR TO COMMENCEMENT OF THE WORK SHOWN THEREON CAC 4-338(C)).
56. PROJECT INSPECTOR TO APPROVE SYSTEM VOICE-EVACUATION INTELLIGIBILITY DURING TESTING PHASE.
57. CONTRACTOR SHALL PROVIDE ALL CABLING, RELAYS, MOUNTING HARDWARE AND ANY OTHER DEVICES (FIRE ALARM SYSTEM DEVICES) TO PROVIDE A FULLY FUNCTIONING FIRE ALARM OVERRIDE SYSTEM. WHEN FIRE ALARM CEASES, EACH LOCAL SOUND SYSTEM SHALL AUTOMATICALLY REVERT TO NORMAL OPERATION. FIRE ALARM MODULES AND CABLING BY FIRE ALARM CONTRACTOR.
58. FOR ALL HEAT DETECTORS THAT ARE LOCATED ABOVE CEILING/ATTIC SPACES, CONTRACTOR SHALL PROVIDE STICKER AND LABEL "HD" AT THE REFLECTED CEILING DIRECTLY BELOW THE DEVICE TO INDICATE LOCATION.
59. NOTIFICATION APPLIANCES USED FOR SIGNALING OTHER THAN FIRE SHALL NOT HAVE THE WORD "FIRE" OR ANY FIRE SYMBOL, IN ANY FORM (I.E., STAMPED, IMPRINTED, ETC. ) ON THE APPLIANCE VISIBLE TO THE PUBLIC. NOTIFICATION APPLIANCES WITH MULTIPLE VISIBLE ELEMENTS SHALL BE PERMITTED TO HAVE FIRE MARKING ONLY ON THOSE VISIBLE ELEMENTS USED FOR FIRE SIGNALING. PER NFPA 72, 18.3.3.2/ NFPA 720, 6.3.3.2/ IR 9-2, 5.4.4 & 5.4.5.
60. AUTOMATIC FIRE ALARM SYSTEMS SHALL BE MONITORED AND SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION IN ACCORDANCE WITH NFPA 72. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX (CENTRAL STATION) OR UUJS (REMOTE & PROPRIETARY) BY THE UNDERWRITERS LABORATORY INC. (UL) OR OTHER APPROVED LISTING AND TESTING LABORATORY OR SHALL COMPLY WITH THE REQUIREMENTS OF FM 3011. TERMINATION OF MONITORING SERVICES SHALL BE IN ACCORDANCE WITH SECTION 907.6.6.2.
61. THE NEW PROJECT SUBMITTAL TO INCLUDE DIRECTION THAT FIRE ALARM SYSTEM RECORD OF COMPLETION AND FIRE ALARM SYSTEM RECORD OF INSPECTION AND TESTING FORM THESE TWO DOCUMENTS FROM NFPA 72 ARE TO BE COMPLETED AND SUBMITTED PRIOR TO CLOSE OUT OF THE PROJECT. A COPY OF COMPLETED AND SIGNED FORM SHALL BE GIVEN TO THE ARCHITECT OR ENGINEER OF RECORD, THE PROJECT INSPECTOR, THE OWNER (SCHOOL DISTRICT) AND LOCAL FIRE AUTHORITY.
62. INTELLIGIBILITY SHALL BE TESTED ACCORDING TO NFPA 72 ANNEX D.2 (SPEECH INTELLIGIBILITY).
63. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT STRUCTURAL ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT.

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DIV. OF THE STATE ARCHITECT
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DATE: 10/17/2023


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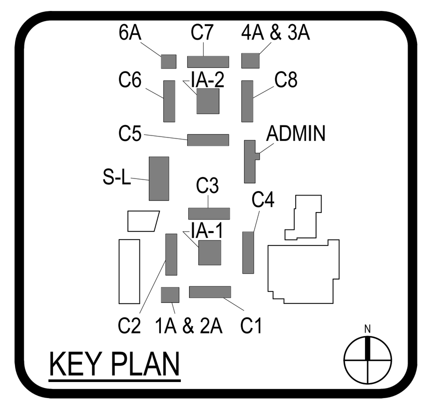

**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER RONALD C DELA CRUZ No. E 23576 Exp. 09-30-2025 ELECTRICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

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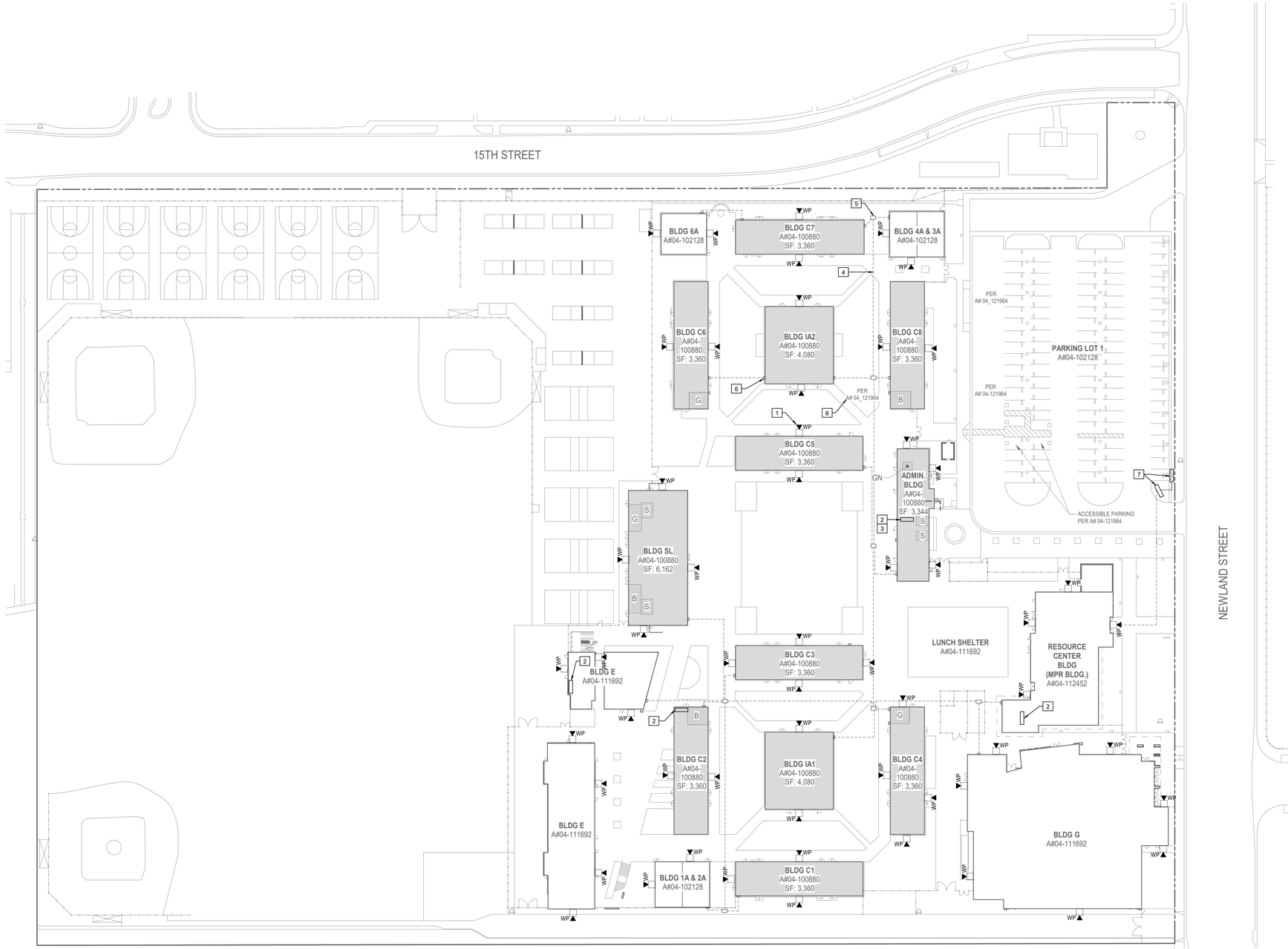
**FIRE ALARM SYMBOLS, NOTES, AND ABBREVIATIONS**

**FA0.00**

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FA1.01 - FIRE ALARM SITE PLAN

0" 1"




## KEY NOTES

1. PROVIDE NEW FIRE ALARM WEATHERPROOF SPEAKER DEVICE AS SHOWN (TYP). PLEASE REFERENCE FLOOR PLANS FOR MORE DETAIL LOCATION.
2. PROVIDE NEW FIRE ALARM CONTROL PANELAS SHOWN. FIELD VERIFY THE EXACT LOCATION.
3. PROVIDE FIRE ALARM POWER SUPPLY AND TERMINAL CABINET AS SHOWN.
4. SAWCUT AND TRENCH EXISTING ASPHALT. PROVIDE (2) 2" UNDERGROUND CONDUIT (PVC, SCHEDULE 40, 24" BELOW GRADE),ONE CONDUIT IS FOR SPARE AND FIRE ALARM CABLE AS INDICATED. BACK FILL TO MATCH EXISTING SURFACES. RUN CONDUIT IN DIRT/PLANNER AREA AS MUCH AS POSSIBLE.
5. PROVIDE CONCRETE UNDERGROUND PULL BOXES AS 11" X 17" X 18" DEEP ON A 6" DEEP GRAVEL BASE (TYP).
6. PROVIDE NEMA 3R WEATHERPROOF PULLBOX 18"x18"X6" FOR FIRE-ALARM (TYP).
7. PROVIDE MONITOR MODULE DEVICES TO MONITOR POST INDICATOR VALVE AND DOUBLE CHECK DETECTOR VALVE. FIELD VERIFY THE EXACT LOCATION.

NORTH

1 SITE PLAN
1" = 40'-0"

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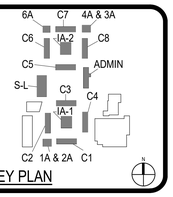
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
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WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER RONALD C DELA CRUZ No. E 23076 Exp. 06-30-25 ELECTRICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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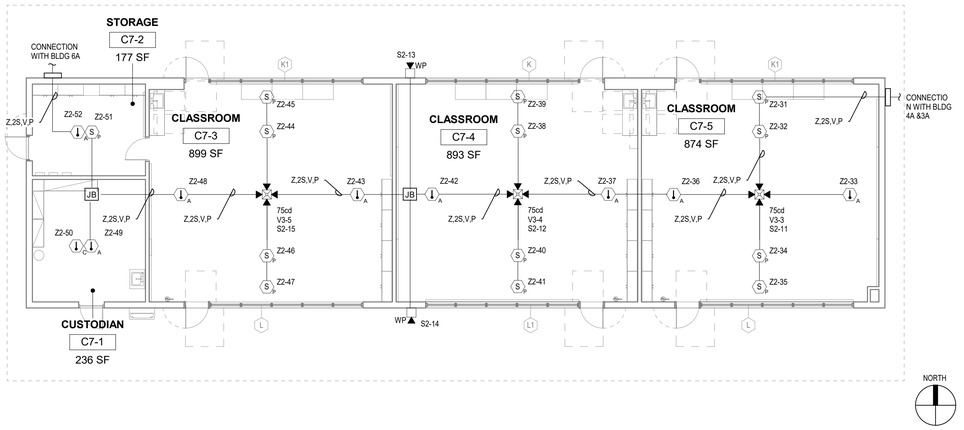
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FIRE ALARM SITE PLAN

FA1.01



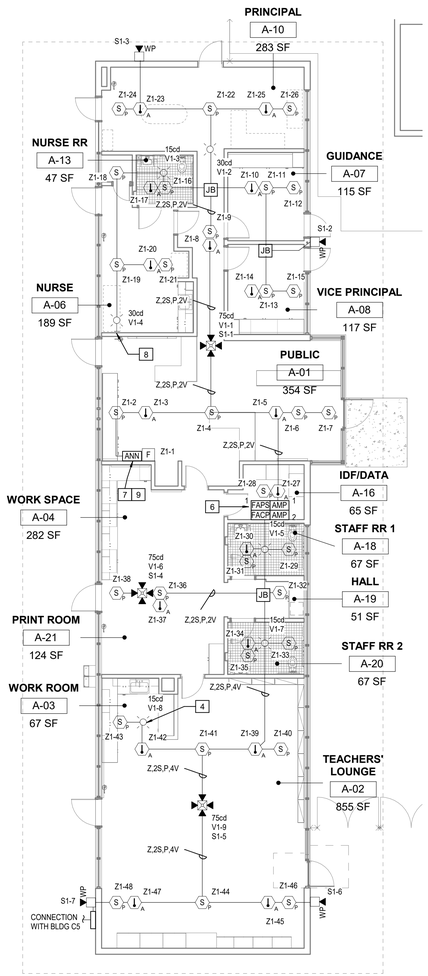

## 4 FLOOR PLAN - BLDG C7
1/8" = 1'-0"

## GENERAL NOTES

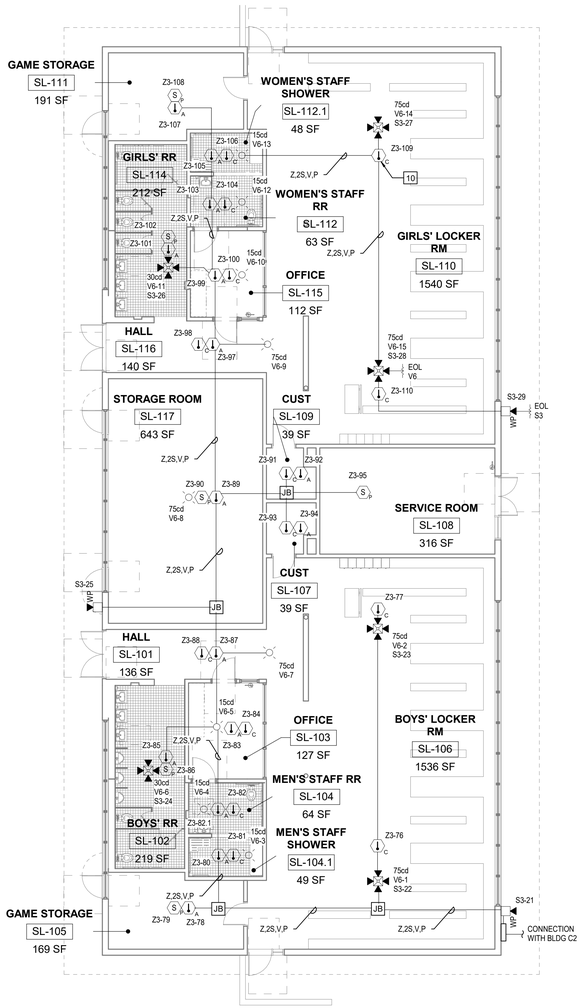
1. ALL SPEAKER TAP SETTING SHALL BE SET AT 1/2 WATT FOR INTERIOR SPEAKER AND 2 WATT FOR EXTERIOR SPEAKERS UNLESS NOTED OTHERWISE (U.N.O.)
2. RUN FIRE ALARM CABLES IN CONDUIT CONCEALED IN WALLS AND CEILING WHEN POSSIBLE. EXPOSED CONDUITS ARE NOT ACCEPTABLE.
3. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN 36 IN. (910 MM) HORIZONTAL PATH FROM THE SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND SHALL BE INSTALLED OUTSIDE OF THE DIRECT AIRFLOW FROM THOSE REGISTERS PER CBC 907.2.11.8.
4. DEMOLISH AND REMOVE ALL THE EXISTING FIRE ALARM DEVICES WHETHER SHOWN ON THE PLAN OR NOT AND REPLACE WITH BLANK COVER PLATES IF NECESSARY. DISCONNECT AND REMOVE ALL THE EXISTING CABLES BACK TO CONTROL PANEL.
5. EXISTING FIRE ALARM SYSTEM SHALL BE OPERATIONAL UNTIL NEW SYSTEMS ARE FULLY FUNCTIONAL.
6. FOR ALL HEAT DETECTORS THAT ARE LOCATED ABOVE CEILING/ATTIC SPACES, CONTRACTOR SHALL PROVIDE STICKER AND LABEL "HD" AT THE REFLECTED CEILING DIRECTLY BELOW THE DEVICE TO INDICATE LOCATION.
7. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE ACCESS FOR ATTIC HEAT DETECTOR, SERVICING, TROUBLESHOOTING, ETC.

## KEY NOTES

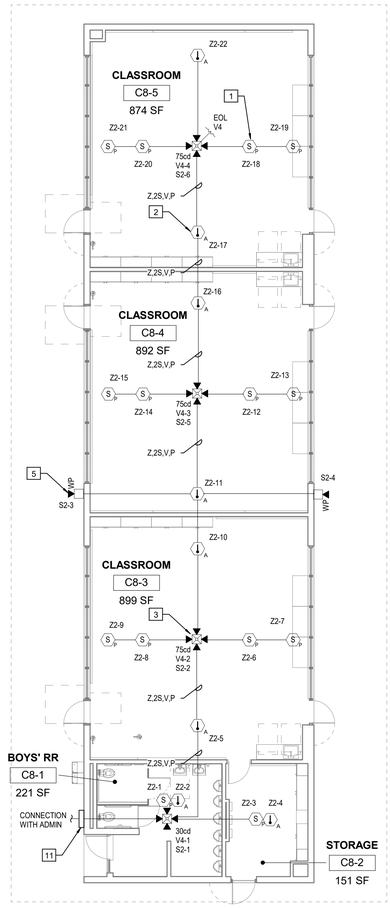
1. PROVIDE FIRE ALARM ADDRESSABLE SMOKE DETECTOR AS SHOWN (TYP).
2. PROVIDE FIRE ALARM ADDRESSABLE ATTIC HEAT DETECTOR AS SHOWN (TYP).
3. PROVIDE FIRE ALARM CEILING MOUNTED SPEAKER STROBE AS SHOWN (TYP).
4. PROVIDE FIRE ALARM CEILING MOUNTED STROBE DEVICE AS SHOWN (TYP).
5. PROVIDE FIRE ALARM WALL MOUNTED WEATHERPROOF SPEAKER DEVICE AS SHOWN (TYP).
6. PROVIDE NEW FIRE ALARM POWER SUPPLY PANEL, FIRE ALARM CONTROL PANEL AND AMPLIFIER AS SHOWN.
7. PROVIDE FIRE ALARM ANNUNCIATOR AS SHOWN.
8. PROVIDE WALL MOUNTED STROBES AS SHOWN.
9. PROVIDE FIRE ALARM ADDESSABLE PULL STATION AS SHOWN NEXT TO THE NEW ANNUNCIATOR PANEL AS SHOWN.
10. PROVIDE CEILING MOUNTED HEAT DETECTOR AS SHOWN (TYP).
11. PROVIDE NEMA 3R WEATHERPROOF PULLBOX 18"x18"X6" FOR FIRE-ALARM (TYP).




## 3 FLOOR PLAN - ADMINISTRATION BLDG
1/8" = 1'-0"




## 2 FLOOR PLAN - BLDG S-L
1/8" = 1'-0"




## 1 FLOOR PLAN - BLDG C8
1/8" = 1'-0"

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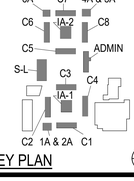
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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43



KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER RONALD S. F. DE LA CRUZ No. E 22874 Exp. 06/30/25 ELECTRICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

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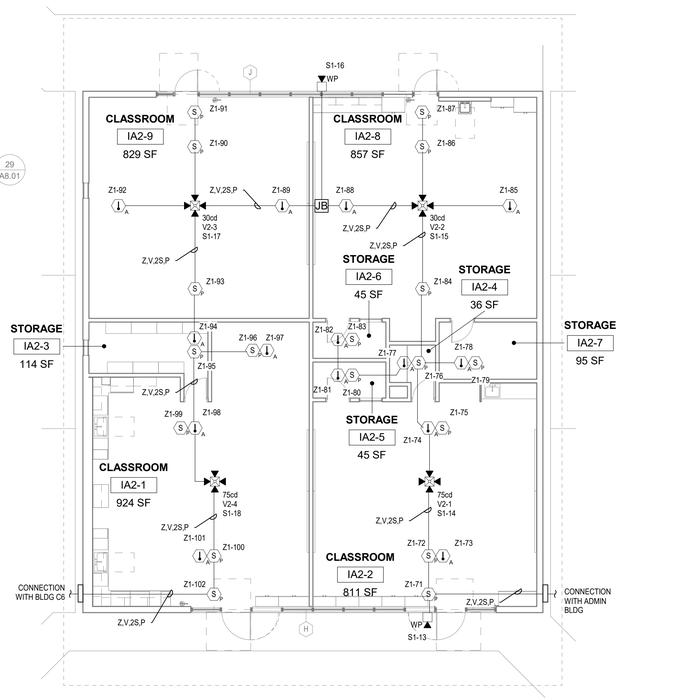
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FIRE ALARM BUILDING FLOOR PLANS C7, C8, S-L & ADMIN

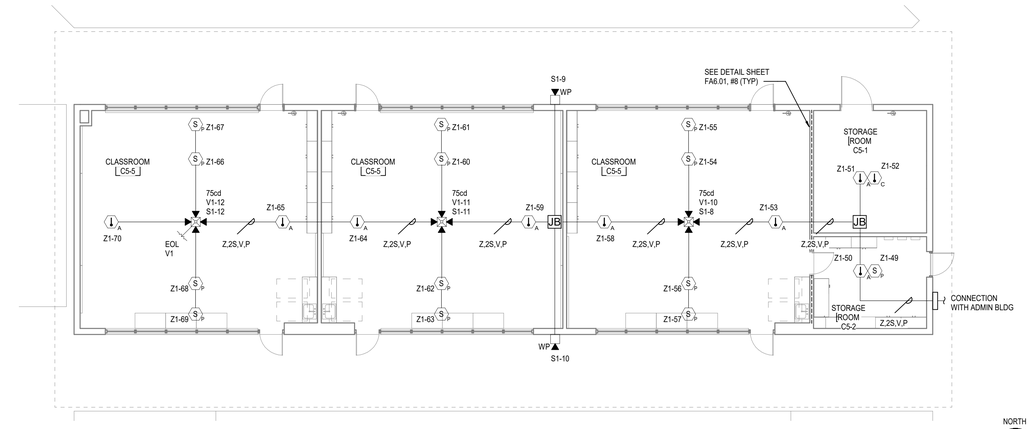
FA2.01

FA2.02 - FIRE ALARM BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2

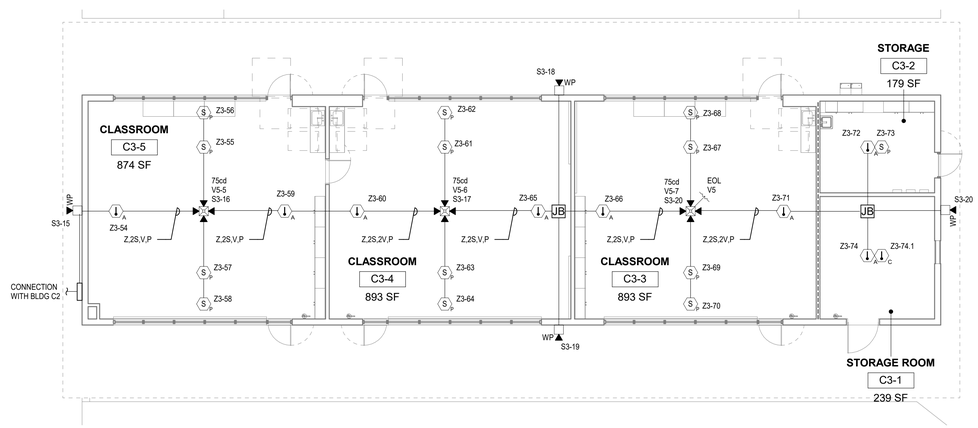
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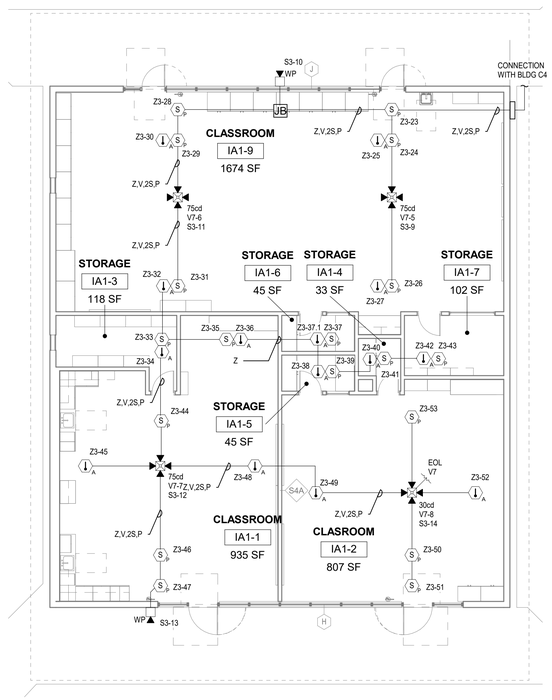

**5** FLOOR PLAN - BLDG IA-2
1/8" = 1'-0"



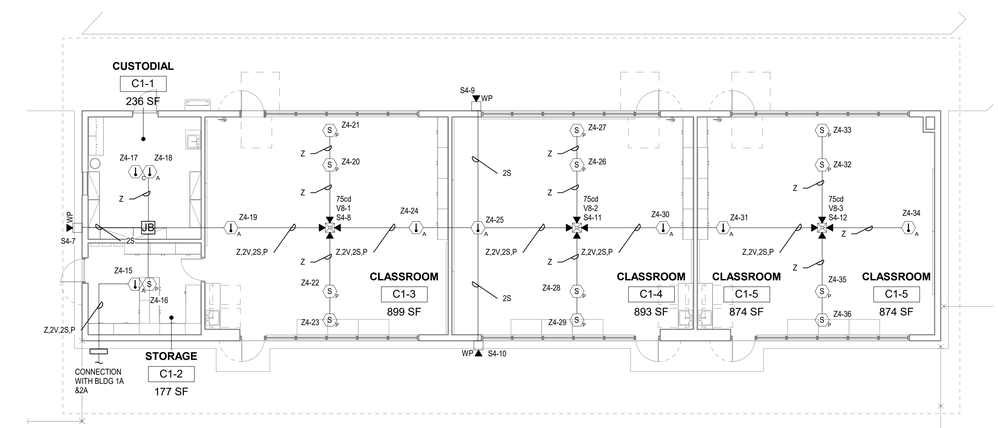

**3** FLOOR PLAN - BLDG C5
1/8" = 1'-0"




**2** FLOOR PLAN - BLDG C3
1/8" = 1'-0"




**4** FLOOR PLAN - BLDG IA-1
1/8" = 1'-0"




**1** FLOOR PLAN - BLDG C1
1/8" = 1'-0"

## GENERAL NOTES

1. ALL SPEAKER TAP SETTING SHALL BE SET AT 1/2 WATT FOR INTERIOR SPEAKER AND 2 WATT FOR EXTERIOR SPEAKERS UNLESS NOTED OTHERWISE (U.N.O.)
2. RUN FIRE ALARM CABLES IN CONDUIT CONCEALED IN WALLS AND CEILING WHEN POSSIBLE. EXPOSED CONDUITS ARE NOT ACCEPTABLE.
3. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN 36 IN. (910 MM) HORIZONTAL PATH FROM THE SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND SHALL BE INSTALLED OUTSIDE OF THE DIRECT AIRFLOW FROM THOSE REGISTERS PER CBC 907.2.11.8.
4. DEMOLISH AND REMOVE ALL THE EXISTING FIRE ALARM DEVICES WHETHER SHOWN ON THE PLAN OR NOT AND REPLACE WITH BLANK COVER PLATES IF NECESSARY. DISCONNECT AND REMOVE ALL THE EXISTING CABLES BACK TO CONTROL PANEL.
5. EXISTING FIRE ALARM SYSTEM SHALL BE OPERATIONAL UNTIL NEW SYSTEMS ARE FULLY FUNCTIONAL.
6. FOR ALL HEAT DETECTORS THAT ARE LOCATED ABOVE CEILING/ATTIC SPACES, CONTRACTOR SHALL PROVIDE STICKER AND LABEL "HD" AT THE REFLECTED CEILING DIRECTLY BELOW THE DEVICE TO INDICATE LOCATION.
7. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE ACCESS FOR ATTIC HEAT DETECTOR, SERVICING, TROUBLESHOOTING, ETC.

1-HOUR RATED WALL
PER DETAIL B/FA6.01

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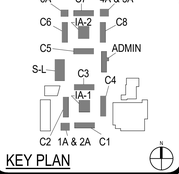
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**WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT**

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER, CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RANDALL F. DE LA
No. E 22874
09/30/23
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

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**FIRE ALARM BUILDING FLOOR PLANS C1, C3, C5, IA-1 & IA-2**

**FA2.02**

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FA2.03 - FIRE ALARM BUILDING FLOOR PLANS C2, C4 & C6

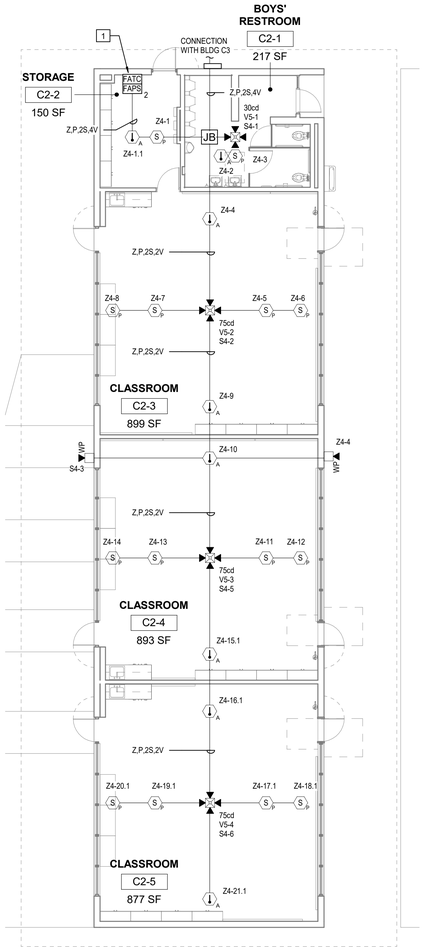
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## GENERAL NOTES

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2. RUN FIRE ALARM CABLES IN CONDUIT CONCEALED IN WALLS AND CEILING WHEN POSSIBLE. EXPOSED CONDUITS ARE NOT ACCEPTABLE.
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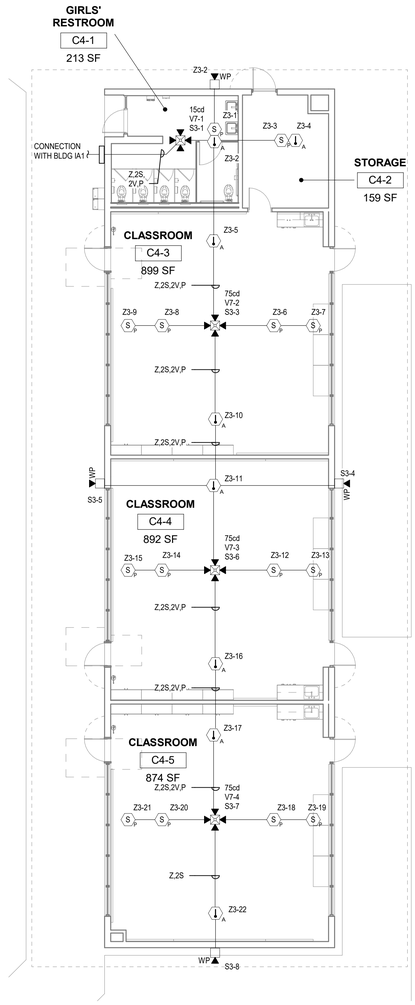
## KEY NOTES

1 PROVIDE FIRE ALARM POWER SUPPLY AND TERMINAL CABINET AS SHOWN.



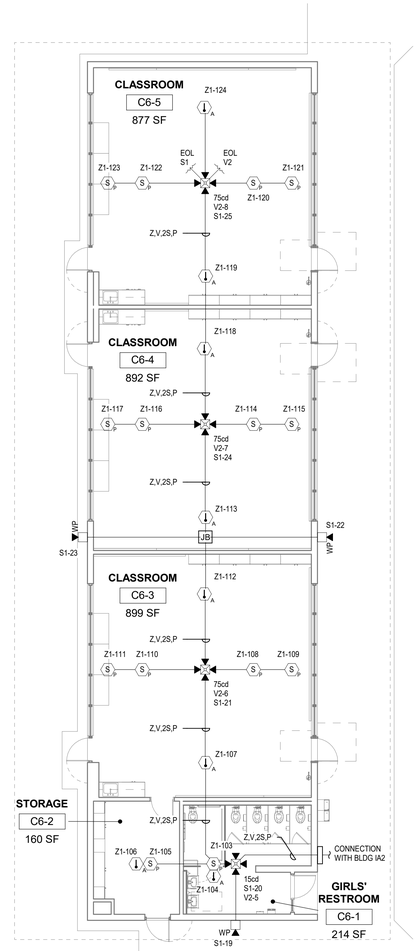

NORTH

3 FLOOR PLAN - BLDG C2
1/8" = 1'-0"




NORTH

2 FLOOR PLAN - BLDG C4
1/8" = 1'-0"




NORTH

1 FLOOR PLAN - BLDG C6
1/8" = 1'-0"

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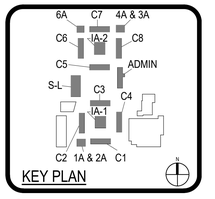
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER RONALD C DE LA CRUZ No. E 23026 ELECTRICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

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| No. | Description | Date |
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| | | |

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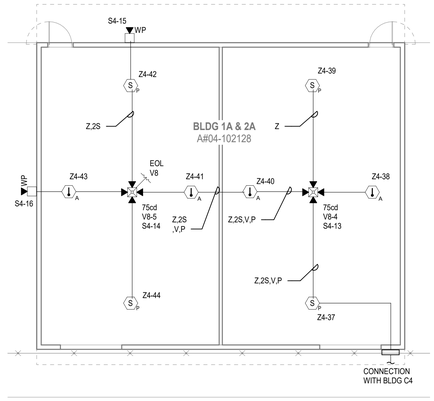
FIRE ALARM BUILDING FLOOR PLANS C2, C4 & C6

FA2.03

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FA2.04 - FIRE ALARM BUILDING 1A/2A, MPR

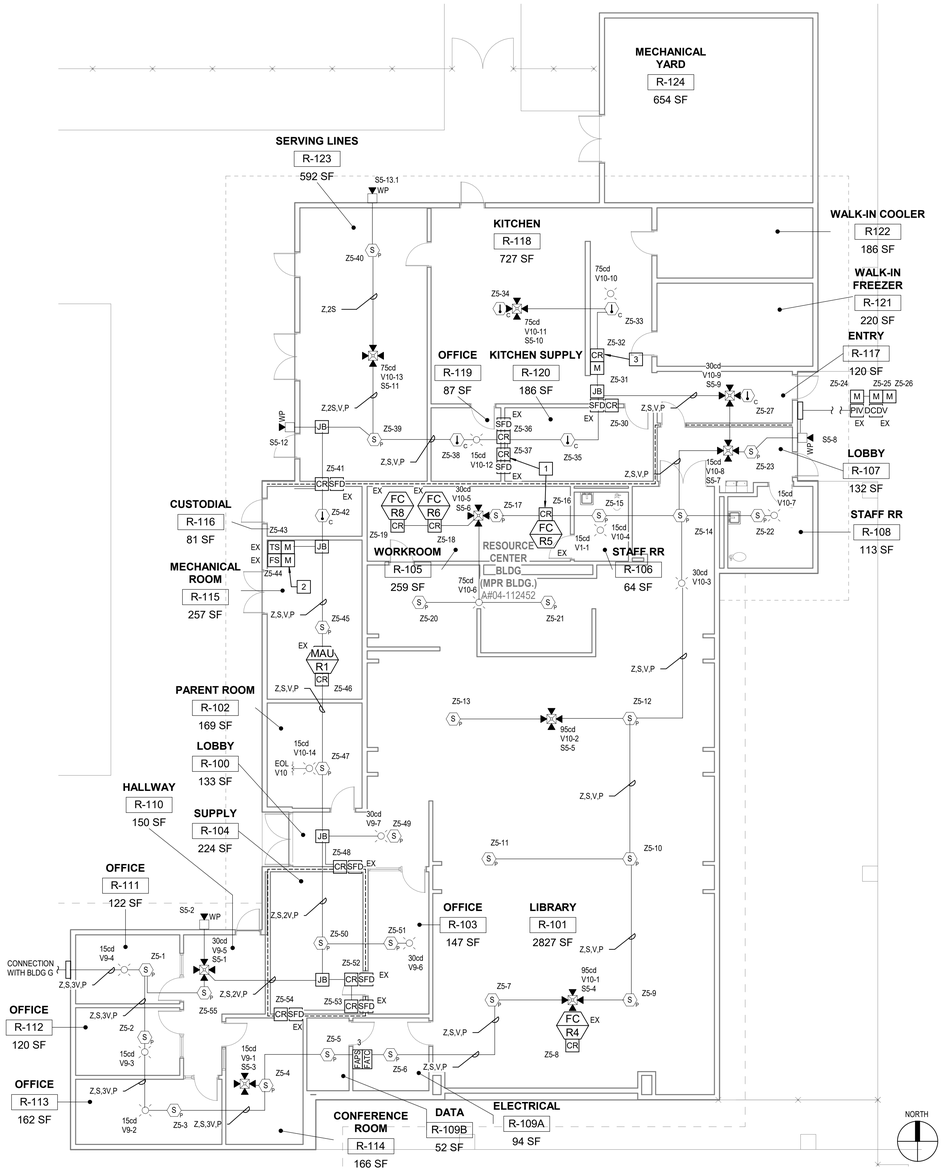
0" 1"




NORTH

## 2 FLOOR PLAN - BLDG 1A/2A

1/8" = 1'-0"




## 1 FLOOR PLAN - MRP BLDG

1/8" = 1'-0"

## GENERAL NOTES

1. ALL SPEAKER TAP SETTING SHALL BE SET AT 1/2 WATT FOR INTERIOR SPEAKER AND 2 WATT FOR EXTERIOR SPEAKERS UNLESS NOTED OTHERWISE (U.N.O.)
2. RUN FIRE ALARM CABLES IN CONDUIT CONCEALED IN WALLS AND CEILING WHEN POSSIBLE. EXPOSED CONDUITS ARE NOT ACCEPTABLE.
3. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN 36 IN. (910 MM) HORIZONTAL PATH FROM THE SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND SHALL BE INSTALLED OUTSIDE OF THE DIRECT AIRFLOW FROM THOSE REGISTERS PER CBC 907.2.11.8.
4. DEMOLISH AND REMOVE ALL THE EXISTING FIRE ALARM DEVICES WHETHER SHOWN ON THE PLAN OR NOT AND REPLACE WITH BLANK COVER PLATES IF NECESSARY. DISCONNECT AND REMOVE ALL THE EXISTING CABLES BACK TO CONTROL PANEL.
5. EXISTING FIRE ALARM SYSTEM SHALL BE OPERATIONAL UNTIL NEW SYSTEMS ARE FULLY FUNCTIONAL.
6. UNLESS NOTED OR IDENTIFIED AS EXISTING ALL THE DEVICES ARE NEW.
7. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE ACCESS FOR ATTIC HEAT DETECTOR, SERVICING, TROUBLESHOOTING, ETC.
8. ALL THE COMBINATION SMOKE FIRE DAMPERS AND/OR MECHANICAL UNITS SHOWING IN THIS MPR BUILDING ARE EXISTING.
9. FOR ALL HEAT DETECTORS THAT ARE LOCATED ABOVE CEILING/ATTIC SPACES, CONTRACTOR SHALL PROVIDE STICKER AND LABEL "HD" AT THE REFLECTED CEILING DIRECTLY BELOW THE DEVICE TO INDICATE LOCATION.

## KEY NOTES

1. PROVIDE FIRE ALARM CONTROL RELAYS TO SHUT DOWN THE MECHANICAL UNITS AND/ OR COMBINATION SMOKE FIRE DAMPER AS SHOWN (TYP). CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION (TYP). ALL THE MECHANICAL UNIT AND/ OR COMBINATION SMOKE FIRE DAMPES SHOWN (PER A#04-112452) IN THIS BUILDING ARE EXISTING TO REMAIN.
2. PROVIDE ADDRESSABLE MONITOR MODULE DEVICES TO MONITOR FLOW SWITCH AND TAMPER SWITCHE LOCATED AT THE FIRE RISER. PROVIDE 120V POWER TO THE BELL. CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION (TYP).
3. PROVIDE CONTROL RELAY AND MONITOR MODULE TO MONITOR THE KITCHEN HOOD SUPPRESSION SYSTEM.

========== 1-HOUR RATED WALL
PER DETAIL 8/FA6.01

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# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

6A C7 4A & 3A
C6 1A-2 C8
C5 ADMIN
S-L C3 C4
1A-1
C2 1A & 2A C1
KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23578
EXP. 06/30/2024
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

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| No. | Description | Date |
|---|---|---|

DSA SUBMITTAL

FIRE ALARM BUILDING 1A/2A, MPR

FA2.04

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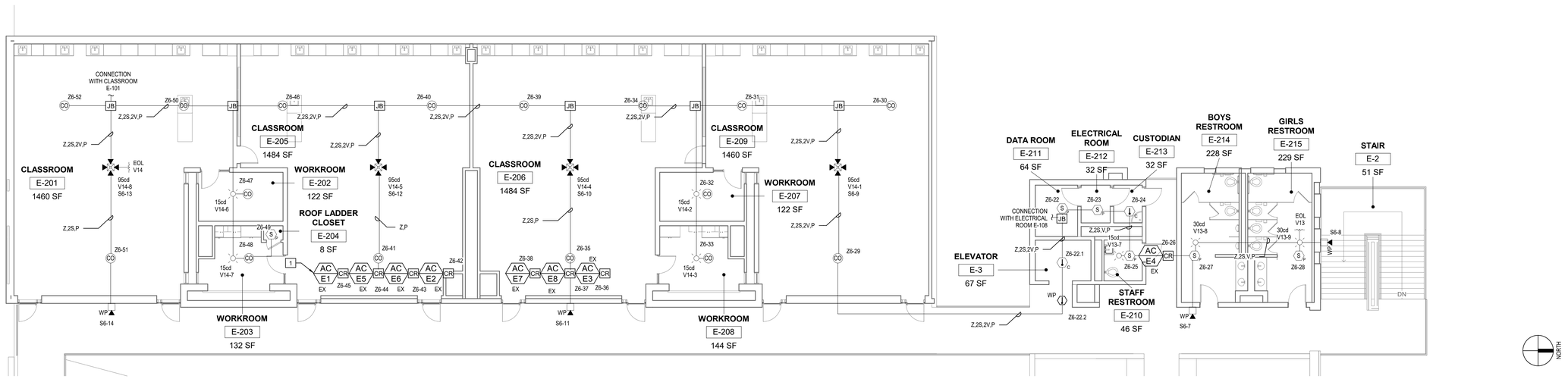
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## KEY NOTES

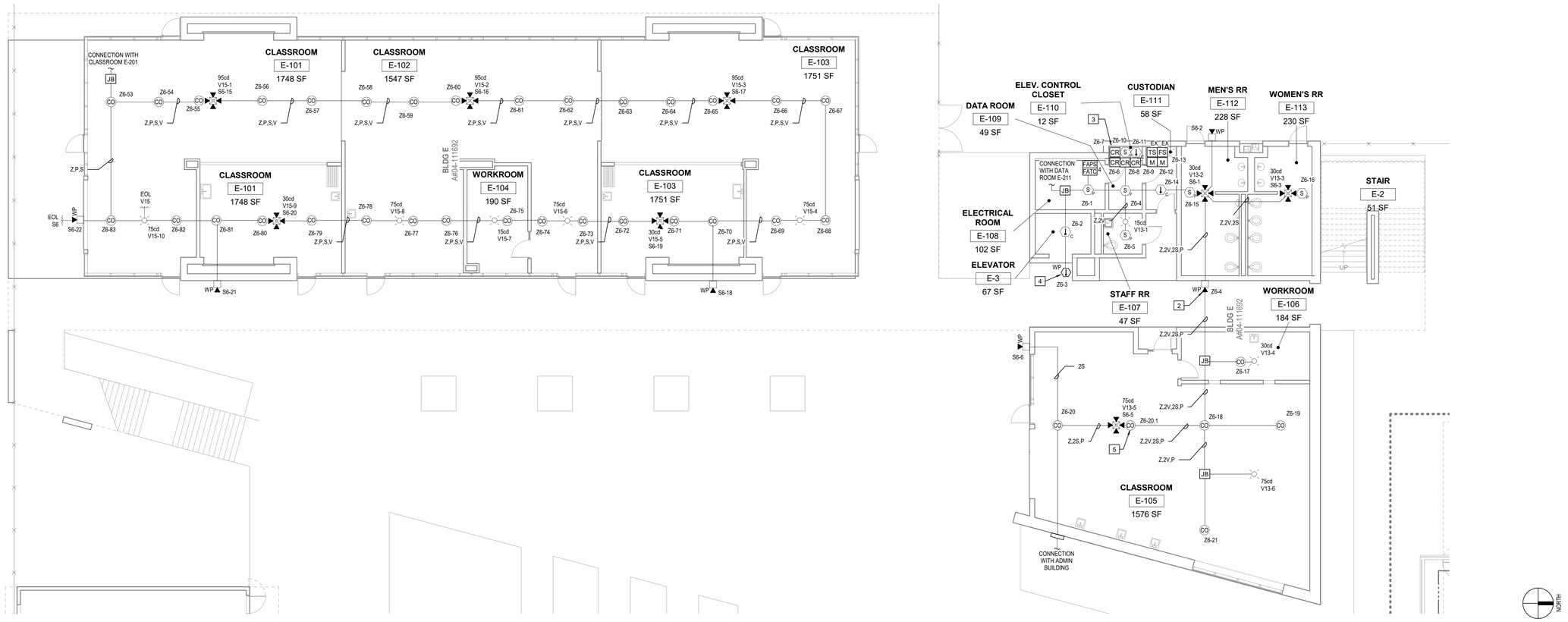
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2. PROVIDE FIRE ALARM WALL MOUNTED WEATHERPROOF SPEAKER DEVICE AS SHOWN (TYP).
3. PROVIDE CONTROL RELAYS FOR ELEVATOR CONTROL SYSTEM (PRIMARY RECALL, SECONDARY RECALL, ILLUMINATE FIREMAN'S HAT AND FOR SHUNT TRIP).
4. PROVIDE WEATHERPROOF HEAT DETECTOR AS SHOWN.
5. PROVIDE FIRE ALARM COMBINATION SMOKE/ CARBON MONOXIDE DETECTOR AS SHOWN (TYP).

## GENERAL NOTES

1. ALL SPEAKER TAP SETTING SHALL BE SET AT 1/2 WATT FOR INTERIOR SPEAKER AND 2 WATT FOR EXTERIOR SPEAKERS UNLESS NOTED OTHERWISE (U.N.O.)
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**2** BLDG E - SECOND FLOOR
1/8" = 1'-0"




**1** BLDG E - FIRST FLOOR
1/8" = 1'-0"

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DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

6A C7 4A & 3A
C6 1A-2 C8
C5 ADMIN
S-L C3 C4
1A-1
C2 1A & 2A C1
KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
No. E 22829
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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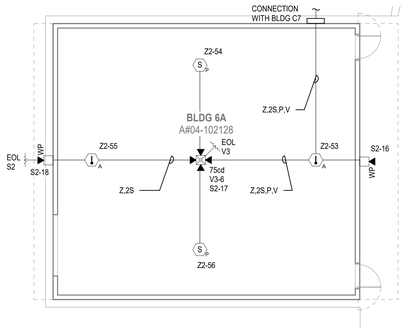
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FIRE ALARM BUILDING FLOOR PLANS E BLDG

FA2.05

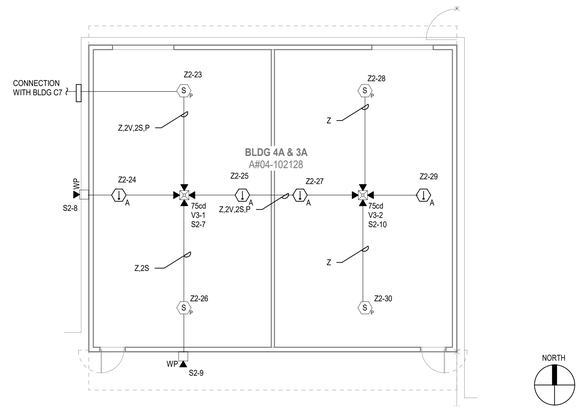
FA2.06 - FIRE ALARM BUILDING G, 3A/4A, 6A

0" 1"




## 3 FLOOR PLAN - BLDG 6A

1/8" = 1'-0"

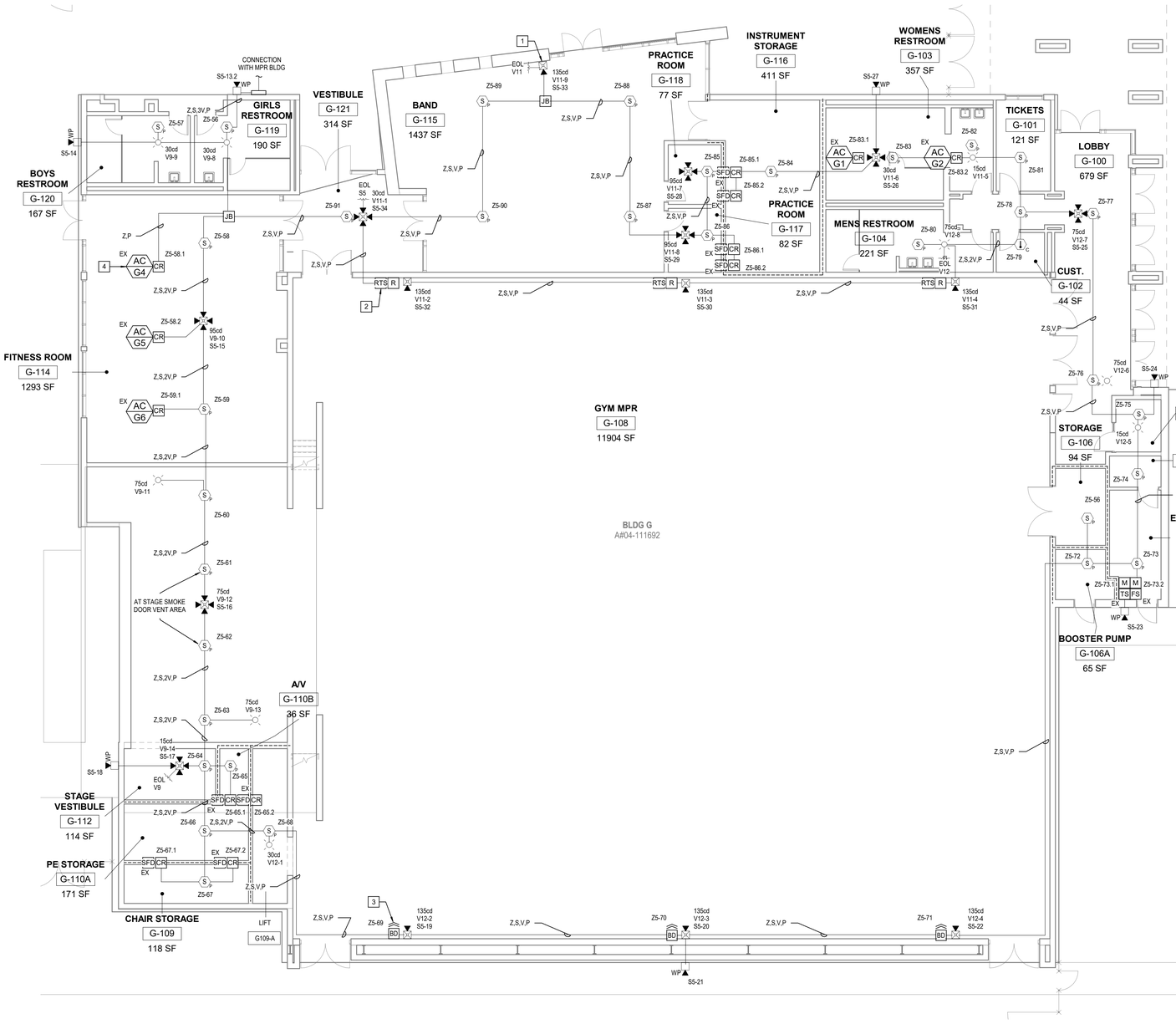



## 2 FLOOR PLAN - BLDG 3A/4A

1/8" = 1'-0"

## GENERAL NOTES

1. ALL SPEAKER TAP SETTING SHALL BE SET AT 1/2 WATT FOR INTERIOR SPEAKER AND 2 WATT FOR EXTERIOR SPEAKERS UNLESS NOTED OTHERWISE (U.N.O.)
2. RUN FIRE ALARM CABLES IN CONDUIT CONCEALED IN WALLS AND CEILING WHEN POSSIBLE. EXPOSED CONDUITS ARE NOT ACCEPTABLE.
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4. DEMOLISH AND REMOVE ALL THE EXISTING FIRE ALARM DEVICES WHETHER SHOWN ON THE PLAN OR NOT AND REPLACE WITH BLANK COVER PLATES IF NECESSARY. DISCONNECT AND REMOVE ALL THE EXISTING CABLES BACK TO CONTROL PANEL.
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7. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE ACCESS FOR ATTIC HEAT DETECTOR, SERVICING, TROUBLESHOOTING, ETC.
8. ALL THE COMBINATION SMOKE FIRE DAMPERS AND/OR MECHANICAL UNITS SHOWING IN THIS BUILDING "G" ARE EXISTING.
9. UNLESS NOTED AS EXISTING ALL THE DEVICES ARE NEW.




## 1 FLOOR PLAN - BLDG G

1/8" = 1'-0"

## KEY NOTES

1. PROVIDE FIRE ALARM WALL MOUNTED SPEAKER STROBE AS SHOWN (TYP).
2. PROVIDE BEAM DETECTOR REMOTE TEST SWITCH AS SHOWN. LAYOUT SWITCHES TO REPRESENT ACTUAL BEAM DETECTOR LOCATIONS. PROVIDE RACEWAY WITH 1B/S TO EACH BEAM DETECTOR. PROVIDE PLAQUE WITH 1" LETTERS TO READ "BEAM DETECTOR TEST SWITCHES".
3. PROVIDE BEAM DETECTOR AND RECEIVER AS SHOWN (TYP).
4. PROVIDE FIRE ALARM CONTROL RELAYS TO SHUT DOWN THE MECHANICAL UNITS AND/ OR COMBINATION SMOKE FIRE DAMPER AS SHOWN (TYP). CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION (TYP). ALL THE MECHANICAL UNIT AND/ OR COMBINATION SMOKE FIRE DAMPES SHOWN (PER A#04-111692) IN THIS BUILDING ARE EXISTING TO REMAIN.

1-HOUR RATED WALL
PER DETAIL B/FA6.01

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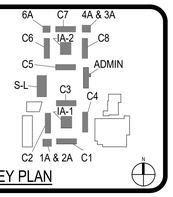
# WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

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WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23578
EXP. 06-30-2024
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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| 03/31/2023 | 220526 |

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DSA SUBMITTAL

FIRE ALARM BUILDING G, 3A/4A, 6A

FA2.06

FA5.01 - FIRE ALARM RISER DIAGRAM

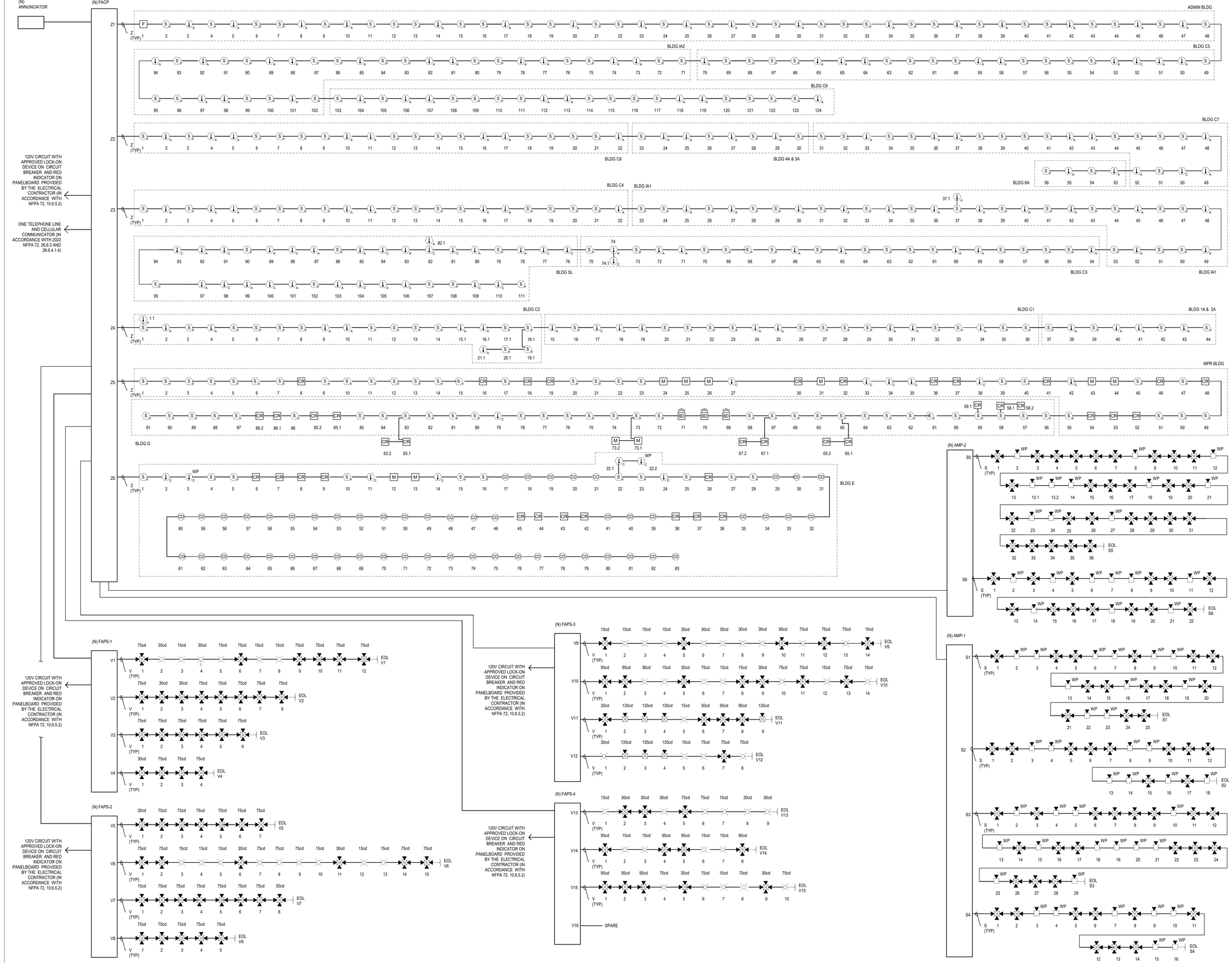
0" 1"

(N) ANNUNCIATOR

(N) FACP

120V CIRCUIT WITH APPROVED LOCK-ON DEVICE ON CIRCUIT BREAKER AND RED INDICATOR ON PANELBOARD PROVIDED BY THE ELECTRICAL CONTRACTOR (IN ACCORDANCE WITH NFPA 72, 10.6.5.2)

ONE TELEPHONE LINE AND CELLULAR COMMUNICATOR (IN ACCORDANCE WITH 2022 NFPA 72, 26.6.3 AND 26.6.4.1.4)













1 FIRE ALARM RISER DIAGRAM
NOT TO SCALE

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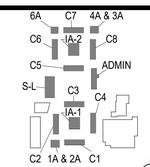
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WESTMINSTER SCHOOL DISTRICT




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REGISTERED PROFESSIONAL ENGINEER
RONALD C DELORO
No. E 22676
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

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FIRE ALARM RISER DIAGRAM

FA5.01

0" 1"

## FACP BATTERY CALCULATION SHEET

FACP
LOCATION: ADMIN

| QUANTITY | | UNIT STANDBY CURRENT(A) | TOTAL STANDBY CURRENT(A) | UNIT ALARM CURRENT(A) | TOTAL ALARM CURRENT(A) |
|---|---|---|---|---|---|
| 1 | MAIN BOARD | 0.23000 | 0.23000 | 0.45000 | 0.45000 |
| 1 | SUPPLEMENT BOARD | 0.08100 | 0.08100 | 0.15000 | 0.15000 |
| 1 | INTERFACE MAIN BOARD | 0.05000 | 0.05000 | 0.09100 | 0.09100 |
| 1 | INTERFACE SUPPLEMENT BOARD | 0.05000 | 0.05000 | 0.09100 | 0.09100 |
| 1 | 120V POWER SUPPLY SUB-ASSEMPLY | 0.04000 | 0.04000 | 0.16000 | 0.16000 |
| 1 | DIGITAL COMMUNICATOR (DACT-E3) | 0.01800 | 0.01800 | 0.01800 | 0.01800 |
| 1 | ANNUNCIATOR | 0.02500 | 0.02500 | 0.05000 | 0.05000 |
| 1 | REMOTE PAGING UNIT | 0.00700 | 0.00700 | 0.00100 | 0.00100 |
| 1 | FIRE PHONE CARD | 0.05300 | 0.05300 | 0.07500 | 0.07500 |
| 2 | AMPLIFIER | 0.11000 | 0.22000 | 1.20000 | 2.40000 |
| 265 | SMOKE DETECTOR | 0.00019 | 0.05035 | 0.00019 | 0.05035 |
| 165 | HEAT DETECTOR | 0.00020 | 0.03284 | 0.00200 | 0.33000 |
| 1 | PULL STATION | 0.00035 | 0.00035 | 0.00035 | 0.00035 |
| 53 | CO DETECTOR | 0.05000 | 2.65000 | 0.03500 | 1.85500 |
| 9 | MONITOR MODULE | 0.00039 | 0.00351 | 0.00038 | 0.00338 |
| 40 | RELAY MODULE | 0.00030 | 0.01200 | 0.00550 | 0.22000 |
| | SUB TOTAL | | 3.523 | | 5.945 |
| | STANDBY CURRENT x 24 Hrs. (AH) | | 84.553 | AH | |
| | ALARM CURRENT x 15 MINUTES (AH) | | 1.486 | AH | |
| | TOTAL (AH) | | 86.039 | AH | |
| | 25% DERATING | | 21.510 | AH | |
| | TOTAL DEMAND (AH) | | 107.549 | AH | |
| | BATTERY REQUIRED | | 120 | AH | |

## BATTERY CAPACITY CALCULATION SHEET

FAPS-1

| QUANTITY | Description | Unit Standby Current(A) | Total Standby Current(A) | Unit Alarm Current(A) | Total Alarm Current(A) |
|---|---|---|---|---|---|
| 1 | NAC TRIP | 0.040 | 0.040 | 0.160 | 0.160 |
| 1 | 30cd wall strobes | 0.000 | 0.000 | 0.086 | 0.086 |
| 4 | 15cd ceiling strobes | 0.000 | 0.000 | 0.071 | 0.284 |
| 1 | 30cd ceiling strobes | 0.000 | 0.000 | 0.096 | 0.096 |
| 1 | 15cd ceiling speaker/strobe | 0.000 | 0.000 | 0.060 | 0.060 |
| 3 | 30cd ceiling speaker/strobe | 0.000 | 0.000 | 0.086 | 0.258 |
| 20 | 75cd ceiling speaker/strobe | 0.000 | 0.000 | 0.142 | 2.840 |
| | Sub Total | | 0.040 | | 3.784 |
| | A - Battery Backup - Standby (Hour) | 24 | | | |
| | B - Battery Backup (minutes) | 15 | | | |
| | C - Allowable Error (%) | 25 | | | |
| | D - Total Standby Backup (Amp-Hour) | 0.960 | | | |
| | E - Total Alarm Backup (Amp-Hour) | 0.946 | | | |
| | F - Allowable Error (C x (D + E)) | 0.477 | | | |
| | Total Amp-Hour Required (D + E + F) | 2.383 | | | |
| | Battery Submitted | 7 Amp-Hour | | | |

## BATTERY CAPACITY CALCULATION SHEET

FAPS-2

| QUANTITY | Description | Unit Standby Current(A) | Total Standby Current(A) | Unit Alarm Current(A) | Total Alarm Current(A) |
|---|---|---|---|---|---|
| 1 | NAC TRIP | 0.040 | 0.040 | 0.160 | 0.160 |
| 6 | 15cd ceiling strobes | 0.000 | 0.000 | 0.071 | 0.426 |
| 5 | 75cd ceiling strobes | 0.000 | 0.000 | 0.153 | 0.765 |
| 4 | 30cd ceiling speaker/strobe | 0.000 | 0.000 | 0.086 | 0.344 |
| 20 | 75cd ceiling speaker/strobe | 0.000 | 0.000 | 0.142 | 2.840 |
| | Sub Total | | 0.040 | | 4.535 |
| | A - Battery Backup - Standby (Hour) | 24 | | | |
| | B - Battery Backup (minutes) | 15 | | | |
| | C - Allowable Error (%) | 25 | | | |
| | D - Total Standby Backup (Amp-Hour) | 0.960 | | | |
| | E - Total Alarm Backup (Amp-Hour) | 1.134 | | | |
| | F - Allowable Error (C x (D + E)) | 0.523 | | | |
| | Total Amp-Hour Required (D + E + F) | 2.617 | | | |
| | Battery Submitted | 7 Amp-Hour | | | |

## BATTERY CAPACITY CALCULATION SHEET

FAPS-3

| QUANTITY | Description | Unit Standby Current(A) | Total Standby Current(A) | Unit Alarm Current(A) | Total Alarm Current(A) |
|---|---|---|---|---|---|
| 1 | NAC TRIP | 0.040 | 0.040 | 0.160 | 0.160 |
| 9 | 15cd ceiling strobes | 0.000 | 0.000 | 0.071 | 0.639 |
| 7 | 30cd ceiling strobes | 0.000 | 0.000 | 0.096 | 0.672 |
| 6 | 75cd ceiling strobes | 0.000 | 0.000 | 0.153 | 0.918 |
| 7 | 135cd wall speaker/strobe | 0.000 | 0.000 | 0.209 | 1.463 |
| 3 | 15cd ceiling speaker/strobe | 0.000 | 0.000 | 0.060 | 0.180 |
| 4 | 30cd ceiling speaker/strobe | 0.000 | 0.000 | 0.086 | 0.344 |
| 4 | 75cd ceiling speaker/strobe | 0.000 | 0.000 | 0.142 | 0.568 |
| 5 | 95cd ceiling speaker/strobe | 0.000 | 0.000 | 0.164 | 0.820 |
| | Sub Total | | 0.040 | | 5.764 |
| | A - Battery Backup - Standby (Hour) | 24 | | | |
| | B - Battery Backup (minutes) | 15 | | | |
| | C - Allowable Error (%) | 25 | | | |
| | D - Total Standby Backup (Amp-Hour) | 0.960 | | | |
| | E - Total Alarm Backup (Amp-Hour) | 1.441 | | | |
| | F - Allowable Error (C x (D + E)) | 0.600 | | | |
| | Total Amp-Hour Required (D + E + F) | 3.001 | | | |
| | Battery Submitted | 7 Amp-Hour | | | |

## BATTERY CAPACITY CALCULATION SHEET

FAPS-4

| QUANTITY | Description | Unit Standby Current(A) | Total Standby Current(A) | Unit Alarm Current(A) | Total Alarm Current(A) |
|---|---|---|---|---|---|
| 1 | NAC TRIP | 0.040 | 0.040 | 0.160 | 0.160 |
| 7 | 15cd ceiling strobes | 0.000 | 0.000 | 0.071 | 0.497 |
| 3 | 30cd ceiling strobes | 0.000 | 0.000 | 0.096 | 0.288 |
| 5 | 75cd ceiling strobes | 0.000 | 0.000 | 0.153 | 0.765 |
| 4 | 30cd ceiling speaker/strobe | 0.000 | 0.000 | 0.086 | 0.344 |
| 1 | 75cd ceiling speaker/strobe | 0.000 | 0.000 | 0.142 | 0.142 |
| 7 | 95cd ceiling speaker/strobe | 0.000 | 0.000 | 0.164 | 1.148 |
| | Sub Total | | 0.040 | | 3.344 |
| | A - Battery Backup - Standby (Hour) | 24 | | | |
| | B - Battery Backup (minutes) | 15 | | | |
| | C - Allowable Error (%) | 25 | | | |
| | D - Total Standby Backup (Amp-Hour) | 0.960 | | | |
| | E - Total Alarm Backup (Amp-Hour) | 0.836 | | | |
| | F - Allowable Error (C x (D + E)) | 0.449 | | | |
| | Total Amp-Hour Required (D + E + F) | 2.245 | | | |
| | Battery Submitted | 7 Amp-Hour | | | |

## BATTERY CALCULATION SHEET

AMP-1
LOCATION: ADMIN. BUILDING

| QUANTITY | | UNIT STANDBY CURRENT(A) | TOTAL STANDBY CURRENT(A) | UNIT ALARM CURRENT(A) | TOTAL ALARM CURRENT(A) |
|---|---|---|---|---|---|
| 1 | 50 WATT AMPLIFIER | 0.110 | 0.110 | 1.2000 | 1.2000 |
| 46 | SPEAKER (1/2 W) | 0.000 | 0.000 | 0.0071 | 0.3266 |
| 42 | WP SPEAKER (2W) | 0.000 | 0.000 | 0.1790 | 7.5180 |
| | SUB TOTAL | | 0.110 | | 9.045 |
| | STANDBY CURRENT x 24 Hrs. (AH) | | 2.640 | AH | |
| | ALARM CURRENT x 15 MINUTES (AH) | | 2.261 | AH | |
| | TOTAL (AH) | | 4.901 | AH | |
| | 25% DERATING | | 1.225 | AH | |
| | TOTAL DEMAND (AH) | | 6.126 | AH | |
| | BATTERY REQUIRED | | 12 | AH | |

## BATTERY CALCULATION SHEET

AMP-2
LOCATION: ADMIN. BUILDING

| QUANTITY | | UNIT STANDBY CURRENT(A) | TOTAL STANDBY CURRENT(A) | UNIT ALARM CURRENT(A) | TOTAL ALARM CURRENT(A) |
|---|---|---|---|---|---|
| 1 | 50 WATT AMPLIFIER | 0.110 | 0.110 | 1.2000 | 1.2000 |
| 36 | SPEAKER (1/2 W) | 0.000 | 0.000 | 0.0071 | 0.2556 |
| 21 | WP SPEAKER (2W) | 0.000 | 0.000 | 0.1790 | 3.7590 |
| | SUB TOTAL | | 0.110 | | 5.215 |
| | STANDBY CURRENT x 24 Hrs. (AH) | | 2.640 | AH | |
| | ALARM CURRENT x 15 MINUTES (AH) | | 1.304 | AH | |
| | TOTAL (AH) | | 3.944 | AH | |
| | 25% DERATING | | 0.986 | AH | |
| | TOTAL DEMAND (AH) | | 4.930 | AH | |
| | BATTERY REQUIRED | | 7 | AH | |

## SPEAKER CIRCUIT LOAD CALCULATION

MFG. REC. MAXIMUM LOSS IS: -0.5dB

| SPEAKER CIRCUIT DESCRIPTION | | PANEL CIRCUIT NUMBER | WIRE GAUGE (18, 16,14 12) | CIRCUIT VOLTAGE (25 OR 70 VRMS) | APPLIANCES QUANTITIES / TAP VALUES | | | | TOTAL CIRCUIT LOAD (WATT) | ESTIMATED CIRCUIT LENGTH (FEET) | ACTUAL WIRE/LOSS (dB) | MAXIMUM ALLOWABLE CKT, LENGTH (FEET) | TOTAL CIRCUIT RESISTANCE (OHMS) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AMPLIFIER# | CIRCUIT LOCATION | | | | SPEAKER TAPPED AT 0.25 WATTS | SPEAKER TAPPED AT 0.5 WATTS | SPEAKER TAPPED AT 1 WATTS | SPEAKER TAPPED AT 2 WATTS | | | | | |
| AMP 1 | ADMIM, BLDG IA2, C6,C5 | S1 | 14 AWG | 70 | | 14 | | 11 | 29.00 | 902 | -0.25 | 1,950 | 4.65 |
| | BLDG C8, 4A &3A, C7, 6A | S2 | 14 AWG | 70 | | 8 | | 10 | 24.00 | 1000 | -0.23 | 2,600 | 5.15 |
| | BLDG C4, IA1, C3, SL | S3 | 14 AWG | 70 | | 15 | | 14 | 35.50 | 1390 | -0.47 | 1,480 | 7.16 |
| | BLDG C2, C1, 1A &2A | S4 | 14 AWG | 70 | | 9 | | 7 | 18.50 | 850 | -0.15 | 2,800 | 4.38 |
| | | | | | | | | TOTAL | 107.00 | | | | |
| AMP 2 | MPR BLDG, BLDG G | S5 | 14 AWG | 70 | | 24 | | 11 | 34.00 | 1400 | -0.46 | 1,640 | 7.21 |
| | BLDG E | S6 | 14 AWG | 70 | | 12 | | 10 | 26.00 | 900 | -0.22 | 2,000 | 4.64 |
| | (SPARE) | S7 | 14 AWG | 70 | | | | | 0.00 | | 0.00 | | 0.00 |
| | (SPARE) | S8 | 14 AWG | 70 | | | | | 0.00 | | 0.00 | | 0.00 |
| | | | | | | | | TOTAL | 60.00 | | | | |

## STROBES WORST CASE VOLTAGE DROP

| PANEL NAME | CIRCUIT NUMBER | WALL STROBE 15cd 0.060 | 30cd 0.086 | 75cd 0.142 | 95 0.164 | CEILING STROBE 15cd 0.071 | 30cd 0.096 | 75cd 0.153 | 95cd 0.176 | WALL SPEAKER/STROBE 15cd 0.060 | 30cd 0.083 | 75cd 0.136 | 95 0.155 | 135 0.209 | CEILING SPEAKER/STROBE 15cd 0.060 | 30cd 0.086 | 75cd 0.142 | 95cd 0.164 | TOTAL CURRENT (AMPS) | TOTAL DISTANCE (FEET) | TOTAL VOLTAGE DROP (%) | TOTAL DEVICES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FAPS-1 | V1 | | 1 | | | 4 | 1 | | | | | | | | | | 6 | | 1.318 | 484 | 8.79% | 12 |
| | V2 | | | | | | | | | | | | | | 1 | 2 | 5 | | 0.942 | 600 | 7.79% | 8 |
| | V3 | | | | | | | | | | | | | | | | 6 | | 0.852 | 763 | 8.96% | 6 |
| | V4 | | | | | | | | | | | | | | | 1 | 3 | | 0.512 | 400 | 2.82% | 4 |
| TOTAL | | 0 | 1 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 20 | 0 | | | | |
| FAPS-2 | V5 | | | | | | | | | | | | | | | 1 | 6 | | 0.938 | 385 | 4.98% | 7 |
| | V6 | | | | | 6 | | 5 | | | | | | | | 2 | 2 | | 1.647 | 395 | 8.97% | 15 |
| | V7 | | | | | | | | | | | | | | | 1 | 7 | | 1.080 | 490 | 7.29% | 8 |
| | V8 | | | | | | | | | | | | | | | | 5 | | 0.710 | 500 | 4.89% | 5 |
| TOTAL | | 0 | 0 | 0 | 0 | 6 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 20 | 0 | | | | |
| FAPS-3 | V9 | | | | | 3 | 5 | 2 | | | | | | | 2 | | 1 | 1 | 1.425 | 465 | 9.13% | 14 |
| | V10 | | | | | 4 | 1 | 2 | | | | | | | 1 | 2 | 2 | 2 | 1.530 | 426 | 8.98% | 14 |
| | V11 | | | | | 1 | | | | | | | | 4 | | 2 | | 2 | 1.407 | 425 | 8.24% | 9 |
| | V12 | | | | | 1 | 1 | 2 | | | | | | 3 | | | 1 | | 1.242 | 525 | 8.99% | 8 |
| TOTAL | | 0 | 0 | 0 | 0 | 9 | 7 | 6 | 0 | 0 | 0 | 0 | 0 | 7 | 3 | 4 | 4 | 5 | | | | |
| FAPS-4 | V13 | | | | | 2 | 3 | 1 | | | | | | | | 2 | 1 | | 0.897 | 300 | 3.71% | 9 |
| | V14 | | | | | 4 | | | | | | | | | | | | 4 | 0.940 | 400 | 5.18% | 8 |
| | V15 | | | | | 1 | | 4 | | | | | | | | 2 | | 3 | 1.347 | 450 | 8.35% | 10 |
| | V16 (spare) | | | | | | | | | | | | | | | | | | 0.000 | | 0.00% | 0 |
| TOTAL | | 0 | 0 | 0 | 0 | 7 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 7 | | | | |

1 FIRE ALARM VOLTAGE DROP AND BATTERY CALCULATIONS
NOT TO SCALE

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

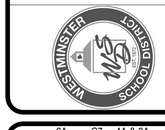
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

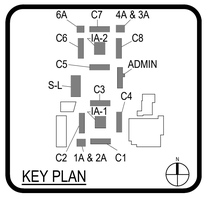
WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST
WESTMINSTER CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43



KEY PLAN

Consultant




Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

FIRE ALARM CALCULATIONS

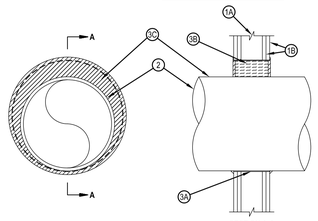
FA5.02

0" 1"

## System No. W-L-1058

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

| ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Rating — 2 Hr | F Rating — 2 Hr |
| T Rating — 0 and 1/4 Hr (See Item 2) | FT Rating — 0 and 1/4 Hr (See Item 2) |
| | FH Rating — 2 Hr |
| | 0 and 1/4 Hr (See Item 2) |



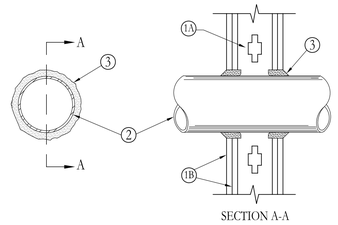

SECTION A-A

1. Wall Assembly — The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in, (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
   B. Gypsum Board* — Two layers of nom 5/8 in. (16 mm) thick gypsum wallboard, as specified in the individual Wall and Partition Design. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls and 20 in. (508 mm) for steel stud walls. Diam of circular through opening to be min 3/8 in. (5 mm) to max 2-3/4 in. (70 mm) larger than diam of through penetrants (Item 2).
2. Through-Penetrants — One metallic pipe or tubing to be installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:
   A. Steel Pipe — 17-1/4 in. (438 mm) diam (or smaller) by 0.125 (3.2 mm) (or heavier) steel pipe. The annular space shall be min 0 to max 2-3/4 in. (70 mm). The T, FT and FTH Rating is 1/4 hr when steel pipe is used.
   B. Copper Tubing — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing. The annular space shall be min 0 to max 3 in. (76 mm). The T, FT and FTH rating is 0 hr when copper tubing is used.

## System No. W-L-1001

June 15, 2005

F Ratings – 1, 2, 3 and 4 Hr (See Items 2 and 3)
T Ratings – 0, 1, 2, 3, and 4 Hr (See Item 3)
L Rating At Ambient – less than 1 CFM/sq ft
L Rating At 400 F – less than 1 CFM/sq ft




SECTION A-A

1. **Wall Assembly** – The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs** – Wall framing may consist of either wood studs (max 2 hr fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC with nom 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board*** – Nom 1/2 or 5/8 in. (13 or 16 mm) thick, 4 ft. (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm).
2. **Through Penetrant** – One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. **Steel Pipe** – Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe** – Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
   C. **Conduit** – Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing
   D. **Copper Tubing** – Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing
   E. **Copper Pipe** – Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
   F. **Through Penetrating Product*** – **Flexible Metal Piping** – The following types of steel flexible metal gas piping may be used:
      1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.
         **OMEGA FLEX INC**
      2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.
         **TITEFLEX CORP**
         **A BUNDY CO**
      3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.



## System No. W-L-1058

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

C. Copper Pipe — Nom 4 in. (102 mm) diam (or smaller) regular (or heavier) copper pipe. The annular space shall be min, 0 to max 3 in. (76 mm), The T, FT and FTH rating is 0 hr when copper pipe is used.
3. Firestop System — The firestop system shall consist of the following:
   A. Steel Wire Mesh — No. 8 steel wire mesh having a min 1 in. (25 mm) lap along the longitudinal seam. Length of steel wire mesh to be 4-3/4 in., (121 mm) centered and formed to fit periphery of through opening.
   B. Packing Material — Min 4-1/2 in. (114 mm) thickness of flexible urethane sheet or mineral wool insulation firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.
   C. Fill, Void or Cavity Material* — Sealant — Min 1/4 in. (6 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point contact location between pipe and wall, a min 1/2 in. (13 mm) diam bead of caulk shall be applied at the wall/pipe interface on both surfaces of wall assembly.

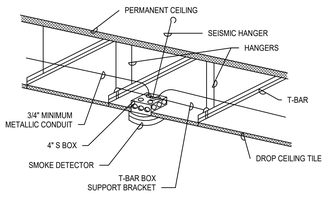
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant or FS-ONE MAX Intumescent Sealant
* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

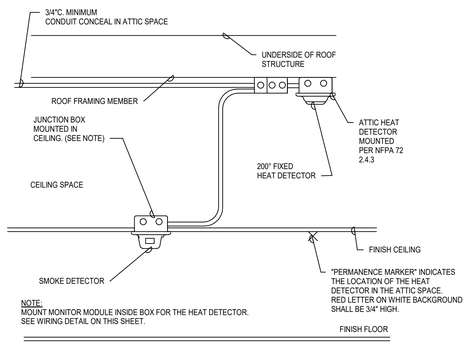
UKI 1H42

3. **Fill, Void or Cavity Material*** – **Caulk or Sealant** – Min 5/8, 1-1/4,1-7/8 and 2-1/2 in. (16, 32, 48 and 64 mm) thickness of caulk for 1, 2, 3 and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board penetrant interface at point contact location on both sides of wall. The hourly F Rating of the firestop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following table. The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

| Max Pipe or Conduit Diam In. (mm) | F Rating Hr | T Rating Hr |
|---|---|---|
| 1 (25) | 1 or 2 | 0+, 1 or 2 |
| 1 (25) | 3 or 4 | 3 or 4 |
| 4 (102) | 1 or 2 | 0 |
| 6 (152) | 3 or 4 | 0 |
| 12 (305) | 1 or 2 | 0 |

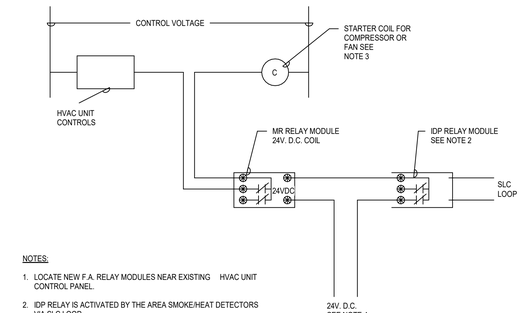
+When copper pipe is used, T Rating is 0 hr.
**3M COMPANY** – CP 25WB+ caulk or FB-3000 WT sealant,
*Bearing the UL Classification Marking




NOTE:
MOUNT MONITOR MODULE INSIDE BOX FOR THE HEAT DETECTOR.
SEE WIRING DETAIL ON THIS SHEET.

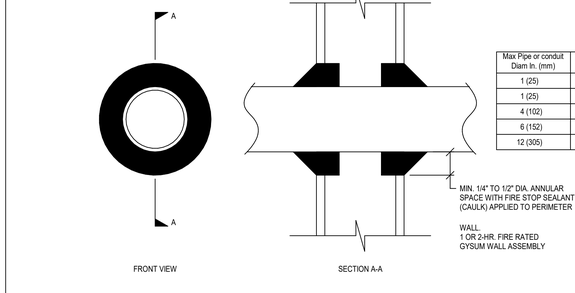
**7** DROP CEILING DEVICE INSTALLATION DETAILS
NOT TO SCALE




NOTES:

1. LOCATE NEW F.A. RELAY MODULES NEAR EXISTING HVAC UNIT CONTROL PANEL.
2. IDP RELAY IS ACTIVATED BY THE AREA SMOKE/HEAT DETECTORS VIA SLC LOOP.
3. VERIFY NUMBER OF STARTER COILS AT EACH HVAC UNIT. SOME UNITS REQUIRE 2 OR MORE RELAYS FOR SHUTDOWN OF COMPRESSORS AND FANS.
4. PROVIDE 24V. D.C. SOURCE (LOW VOLTAGE TRANSFORMER) FROM POWER SUPPLY UNIT.
5. A LISTED RELAY TO THE FIRE ALARM SYSTEM SHALL BE LOCATED WITHIN 3 FEET OF THE CONTROLLED CIRCUIT PER 2022 NFPA 72 6.16.2.2.

**6** HVAC UNIT SHUT-DOWN DETAIL
NOT TO SCALE




| Max Pipe or conduit Diam In. (mm) | F Rating Hr | T Rating Hr |
|---|---|---|
| 1 (25) | 1 or 2 | 0+, 1 or 2 |
| 1 (25) | 3 or 4 | 3 or 4 |
| 4 (102) | 1 or 2 | 0 |
| 6 (152) | 3 or 4 | 0 |
| 12 (305) | 1 or 2 | 0 |

DETAIL NOTES:

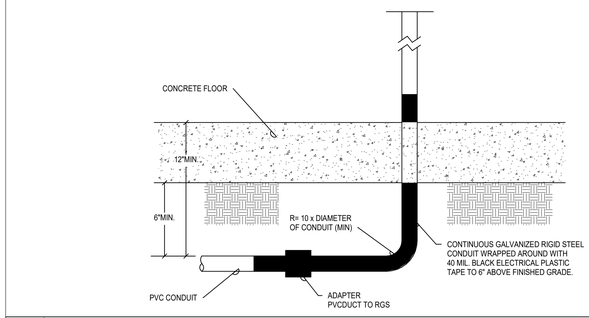
WALL CONSTRUCTION:
A. STEEL STUDS PER ARCHITECTURAL/STRUCTURAL.
B. 5/8" TYPE x GYPSUM BOARD PER ARCHITECTURAL.

CONDUIT SIZE PER DRAWINGS.

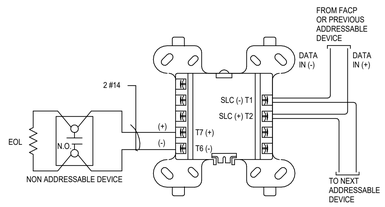
FIRE STOP SYSTEM - ONE HOUR CAULK. APPLY TO INTERFACE WITH WALL SURFACE.

U.L. SYSTEM NO. W-L-1001

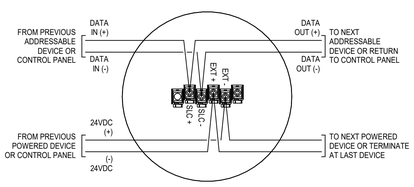
**8** CONDUIT PENETRATION AT 1-HR FIRE RATED WALL DETAIL
NOT TO SCALE




**4** CONDUIT RISER DETAIL
NOT TO SCALE



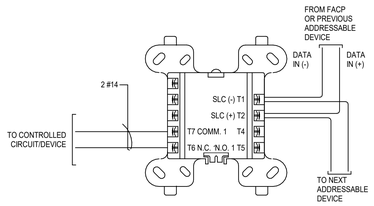

**5** MONITOR MODULE DETAIL
NOT TO SCALE



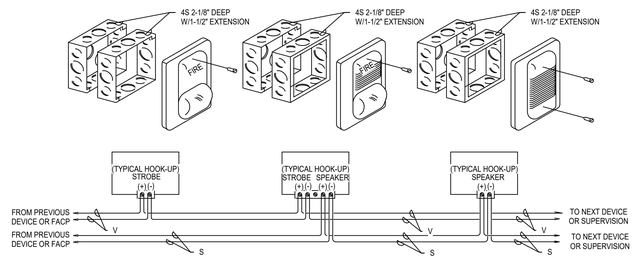

**9** SOUNDER BASE DETAIL
NOT TO SCALE




**3** SMOKE/HEAT DETECTOR DETAIL
NOT TO SCALE




**2** RELAY MODULE DETAIL
NOT TO SCALE




**1** SPEAKER/STROBE DETAIL
NOT TO SCALE

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IDENTIFICATION STAMP
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APP: 04-121954 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 10/17/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
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8163 Rochester Avenue, Suite 100
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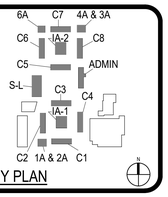
WARNER MIDDLE SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
14171 NEWLAND ST.
WESTMINSTER,CA 92683

DSA SUBMITTAL

DSA APPL NO.: 121954 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT




KEY PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER RONALD C. DELA CRUZ No. E 23076 Exp. 06-30-2025 ELECTRICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

| DATE | PROJECT NUMBER |
|---|---|
| 03/31/2023 | 220526 |

REVISIONS

| No. | Description | Date |
|---|---|---|
| | | |

DSA SUBMITTAL

FIRE ALARM DETAILS

FA6.01