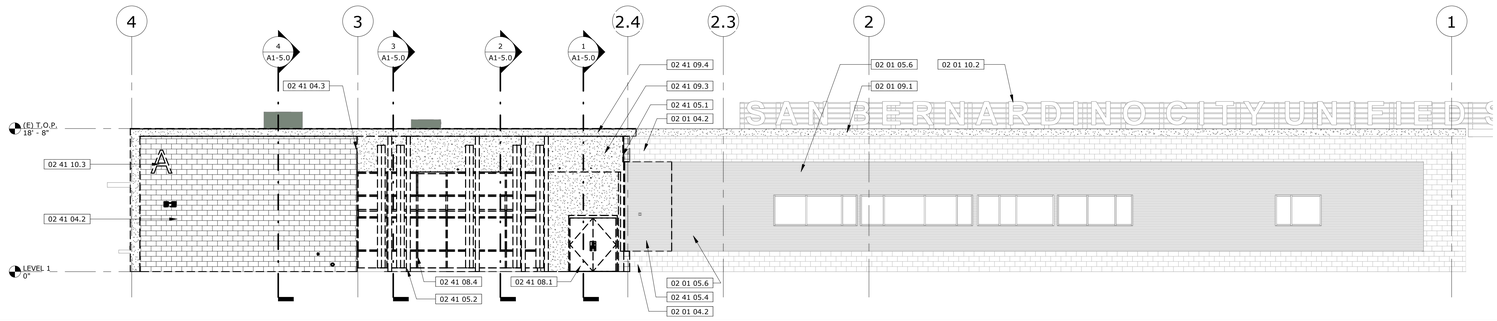
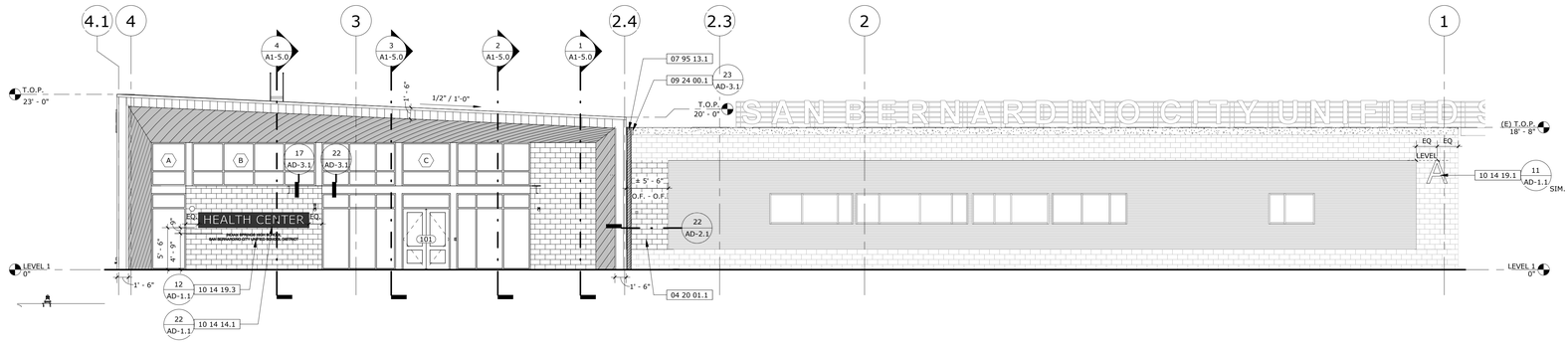
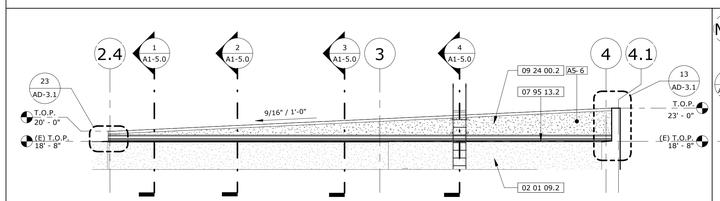


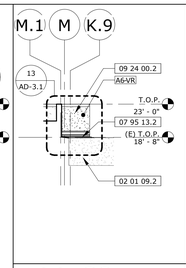
DEMOLITION EAST ELEVATION — SCALE: 1/8" = 1'-0" — 6



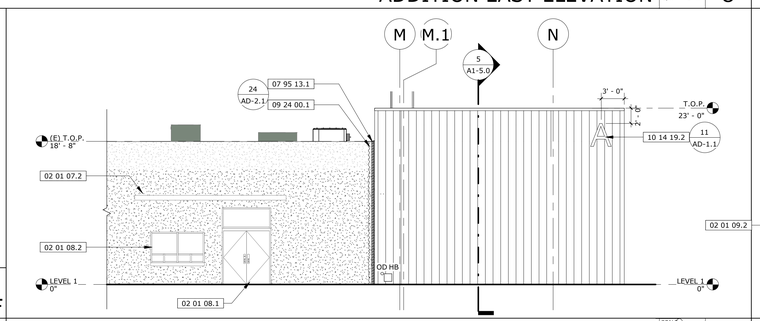
ADDITION EAST ELEVATION — SCALE: 1/8" = 1'-0" — 8



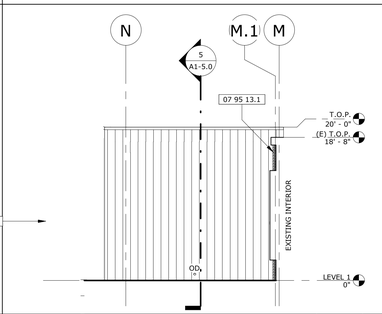
ADDITION WEST ELEVATION AT ROOF — SCALE: 1/8" = 1'-0" — 24



ADD. SOUTH ELEV. AT ROOF . — SCALE: 1/8" = 1'-0" — 19



ADDITION SOUTH ELEVATION — SCALE: 1/8" = 1'-0" — 9



ADDITION NORTH ELEVATION — SCALE: 1/8" = 1'-0" — 4

AGENCY APPROVAL
File No.: 36-H7 A\#04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

LICENSED ARCHITECT JEFFREY CLARKE No. C-41540 Exp.10-31-25 STATE OF CALIFORNIA

STAMPS

RUHNAU CLARKE ARCHITECTS

CONSULTANT BRANDING

GENERAL NOTES

1. SEE DETAIL 22 / AD-2.0 FOR TYPICAL EXTERIOR PLASTER CONTROL JOINT AND TYPICAL EXTERIOR PLASTER CORNER.

KEYNOTES

02 01 04.2	(E) CMU VENEER SYSTEM TO REMAIN, PROTECT IN PLACE
02 01 05.6	(E) CORRUGATED STEEL SIDING TO REMAIN, PROTECT IN PLACE
02 01 07.2	EXISTING SHADE CANOPY TO REMAIN, PROTECT IN PLACE
02 01 08.1	EXISTING DOOR AND FRAME TO REMAIN, PROTECT IN PLACE
02 01 08.2	EXISTING WINDOW TO REMAIN, PROTECT IN PLACE
02 01 09.1	(E) EXTERIOR PLASTER SYSTEM & COPING TO REMAIN, PROTECT IN PLACE
02 01 09.2	EXISTING PLASTER TO REMAIN, PROTECT IN PLACE
02 01 10.2	EXISTING SCHOOL IDENTIFICATION SIGNAGE & RAIL MOUNTS TO REMAIN, PROTECT IN PLACE
02 41 04.2	(E) CMU VENEER SYSTEM TO BE REMOVED FROM THIS FACE OF WALL. (E) WOOD STUD WALL TO REMAIN, PROTECT IN PLACE
02 41 04.3	(E) CMU VENEER SYSTEM & METAL PANEL TO BE REMOVED FROM THIS FACE OF WALL. (E) WOOD STUD WALL & INTERIOR FINISH TO REMAIN, PROTECT IN PLACE
02 41 05.1	(E) CORRUGATED STEEL SIDING & (E) CMU VENEER SYSTEM TO BE REMOVED FROM FACE OF WALL AT EXTENTS OF NEW WALL TIE-IN. (E) WOOD STUD & INTERIOR FINISH TO REMAIN
02 41 05.2	DEMO EXISTING METAL PIPE COLUMN, THE STRUCTURAL SUPPORT OF WINGWALLS, ABOVE GROUND. CUT & GRIND SMOOTH
02 41 05.4	(E) CORRUGATED STEEL SIDING TO BE REMOVED FROM FACE OF WALL
02 41 08.1	DEMO EXISTING DOOR AND FRAME
02 41 08.4	DEMO EXISTING STOREFRONT
02 41 09.3	(E) EXTERIOR PLASTER SYSTEM TO BE REMOVED FROM THIS FACE OF WALL. (E) WOOD STUD WALL & PLASTER SYSTEM ABOVE (E) ROOF TO REMAIN, PROTECT IN PLACE
02 41 09.4	(E) EXTERIOR PLASTER SYSTEM & COPING TO BE REMOVED FROM THIS FACE OF WALL. (E) WOOD STUD WALL & PLASTER SYSTEM ABOVE (E) ROOF TO REMAIN, PROTECT IN PLACE
02 41 10.3	REMOVE (E) BUILDING INDENTIFYING DIMENSIONAL LETTER SIGNAGE; SALVAGE, PROTECT, & STORE FOR RELOCATION.
04 20 01.1	NEW CONCRETE MASONRY UNIT VENEER SYSTEM TO MATCH IN KIND & TO BE INSTALLED FLUSH WITH EXISTING ADJACENT MASONRY VENEER CONDITION
07 95 13.1	EXTERIOR WALL EXPANSION JOINT COVER
07 95 13.2	EXTERIOR ROOF EXPANSION JOINT COVER
09 24 00.1	PATCH & REPAIR PLASTER IN KIND TO MATCH EXISTING CONDITION
09 24 00.2	NEW CEMENT PLASTER WALL PER WALL TYPE
10 14 14.1	CUSTOM DECORATIVE BUILDING SIGNAGE
10 14 19.1	RELOCATE (E) BUILDING INDENTIFICATION DIMENSIONAL LETTER SIGNAGE
10 14 19.2	NEW BUILDING IDENTIFICATION DIMENSIONAL LETTER SIGNAGE
10 14 19.3	NEW DIMENSIONAL LETTER SIGNAGE

EXTERIOR ELEVATIONS LEGEND

- MASONRY VENEER **(CMU-1)** *SEE SPECIFICATION SECTION 04 26 13*
- METAL COMPOSITE PANEL **(MCP-1)** *SEE SPECIFICATION SECTION 07 42 13.23* — 30 / AD-2.0 TYP. ATTACHMENT DETAIL
- METAL WALL PANEL **(MWP-1)** *SEE SPECIFICATION SECTION 07 42 13* — 25 / AD-2.0 TYP. ATTACHMENT DETAIL
- CEMENT PLASTER - PLASTER FINISH **(CPL-1)** *SEE SPECIFICATION SECTION 09 24 00* — 22 / AD-2.0 TYP. ATTACHMENT DETAILS
- HB — RECESSED HOSE BIBB BOX, PER PLUMBING DRAWINGS
- OD — ROOF OVERFLOW DRAIN, PER PLUMBING DRAWINGS & ARCH. DETAIL 3 / AD-2.1

NOTE:
REFER TO COLORS, MATERIALS AND FINISHES LEGEND ON **SHEET ID-1.0** FOR ADDITIONAL INFORMATION

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:01:02 AM

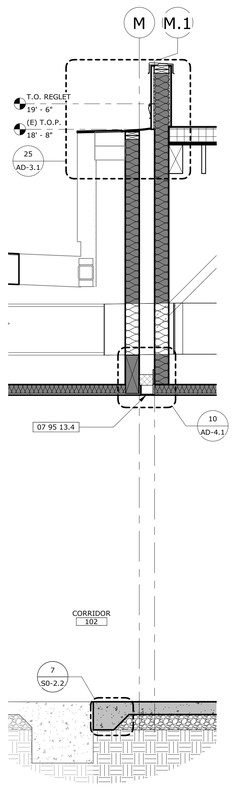
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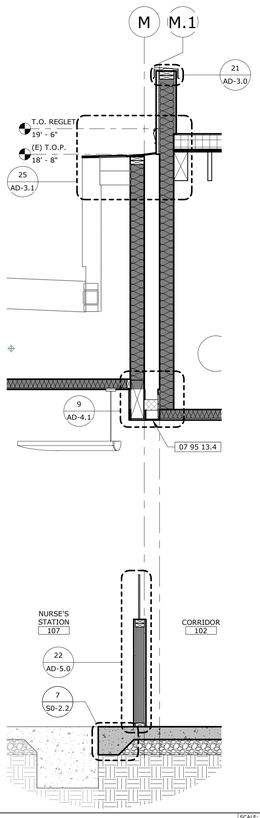
RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

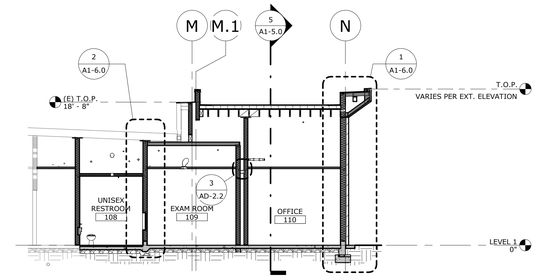
EXTERIOR ELEVATIONS — **A1-4.0**



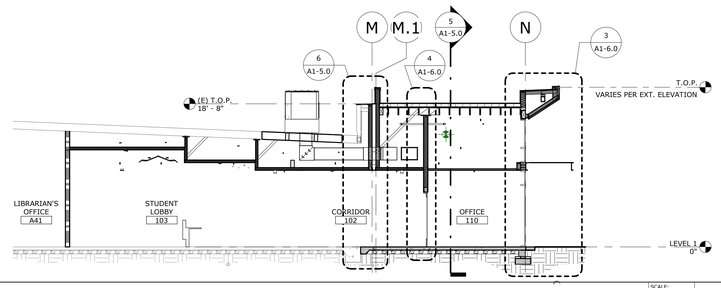
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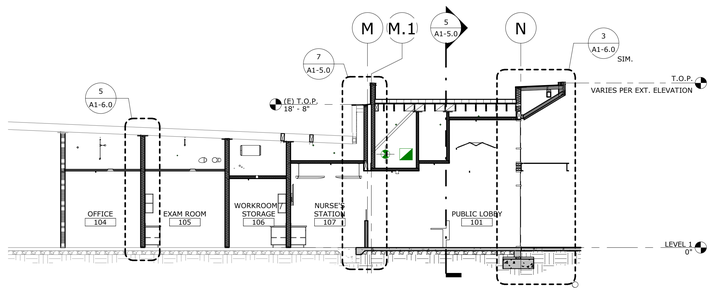
WALL SECTION | SCALE: 1/2" = 1'-0" | 7



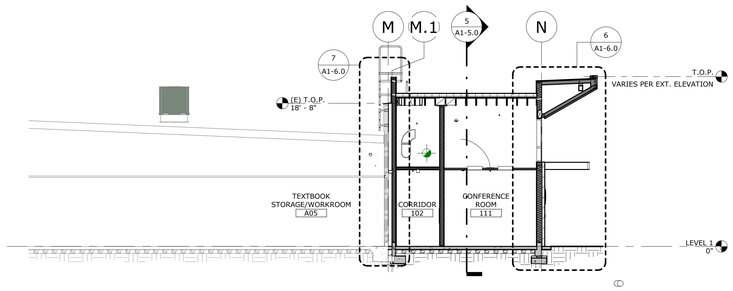
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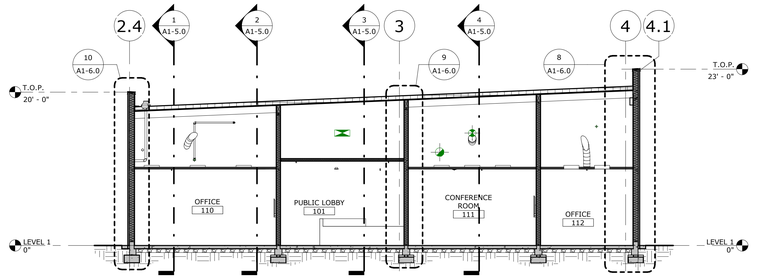
BUILDING SECTION | SCALE: 1/8" = 1'-0" | 2



BUILDING SECTION | SCALE: 1/8" = 1'-0" | 3



BUILDING SECTION | SCALE: 1/8" = 1'-0" | 4



BUILDING SECTION | SCALE: 1/8" = 1'-0" | 5

GENERAL NOTES

1. CONTRACTOR TO COORDINATE ALL EXTERIOR ROOF OPENINGS & VENTS WITH MECHANICAL, ELECTRICAL, STRUCTURAL & PLUMBING DRAWINGS PRIOR TO ROUGH-IN.
2. SEE DETAILS 8/AD-3.0 & 13/AD-3.0 FOR TYPICAL ROOF VENT PENETRATION DETAIL.
3. PROVIDE **R-30** RIGID INSULATION AT NEW ROOFS OVER CONDITIONED SPACE.
4. SEE DETAIL 2/AD-3.0 FOR TYPICAL ROOF CONSTRUCTION ASSEMBLY.
5. PROVIDE **R-25** BATT INSULATION AT ALL EXTERIOR WALLS, U.N.O. GYPSUM BOARD AND INSULATION SHALL EXTEND FULL HEIGHT OF WALL TO UNDERSIDE OF ROOF STRUCTURE
6. ALL EXPOSED STRUCTURE, INCLUDING MECHANICAL & PLUMBING EQUIPMENT TO BE PAINTED **P-1**

KEYNOTES

07 95 13.4 INTERIOR CEILING EXPANSION JOINT COVER

AGENCY APPROVAL
File No: 36-H7 Ltr#04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
Exp. 10-31-25
REVIEWED FOR
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DATE: 03/18/2025

STAMPS

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:01:07 AM

DRAWN BY: VR, SK, AT
CHECKED BY: JC

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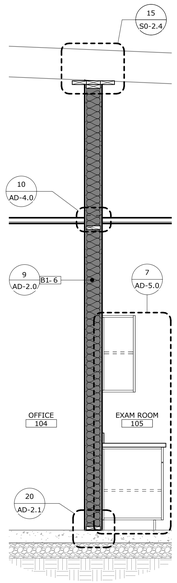
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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

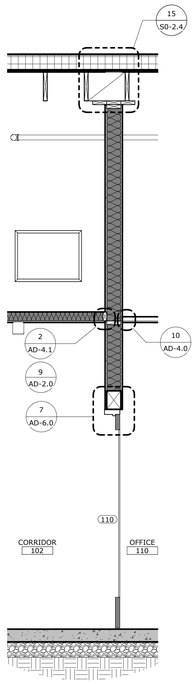
BUILDING SECTIONS

A1-5.0

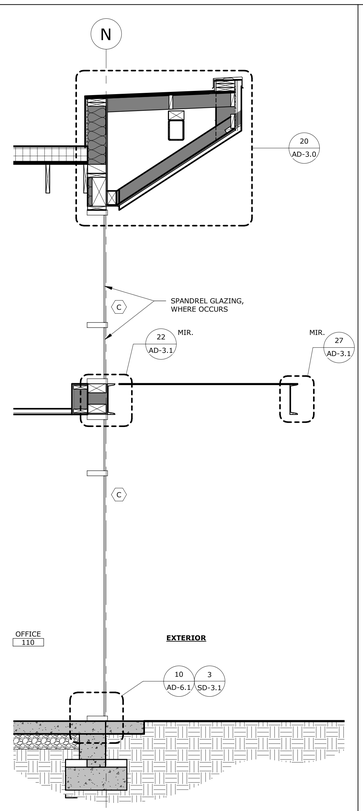
1-78-50



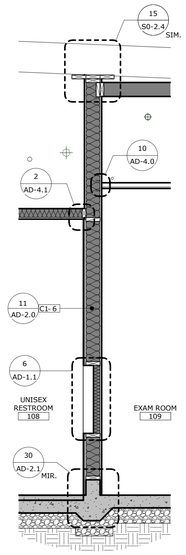
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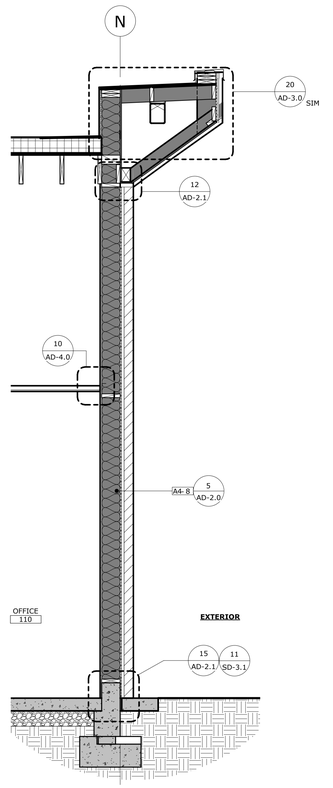
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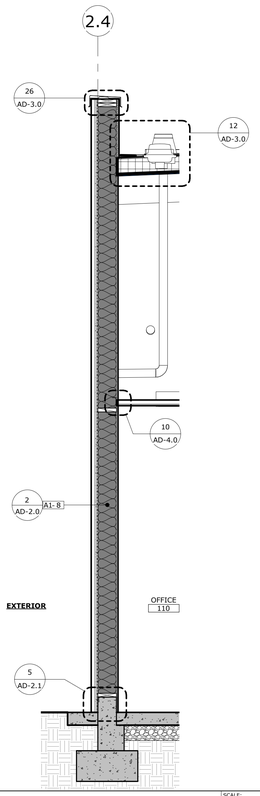
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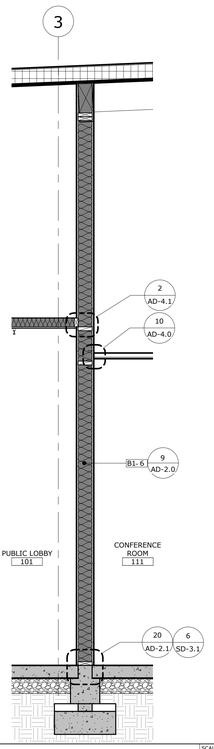
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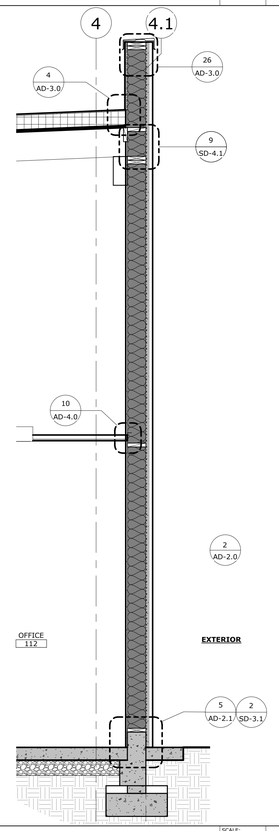
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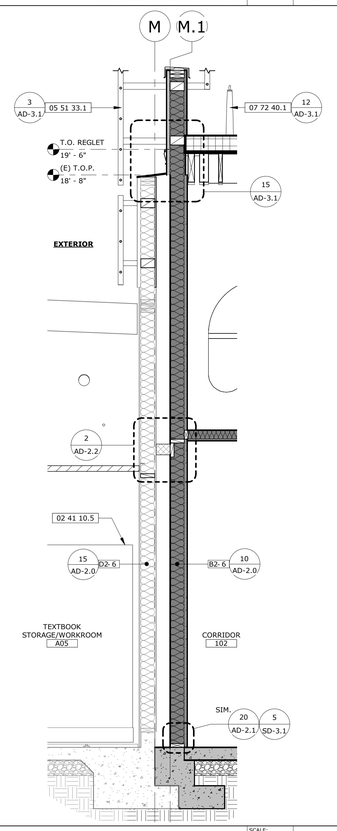
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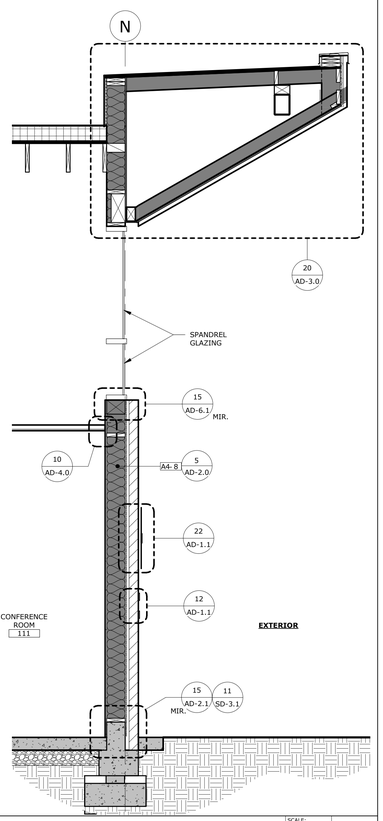
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WALL SECTION SCALE: 1/2" = 1'-0" 8



WALL SECTION SCALE: 1/2" = 1'-0" 7



WALL SECTION SCALE: 1/2" = 1'-0" 6

PROJECT No. :1-78-50
3/14/2025 10:01:11 AM

DRAWN BY: VR, SK, AT CHECKED BY: JC

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DELTA #	DATE	ADD	AFO	CCD	REV

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

WALL SECTIONS

A1-6.0

1-78-50

AGENCY APPROVAL
File No.: 36-H7 Ltr#04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

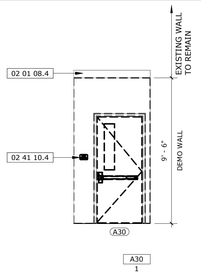
GENERAL NOTES

1. CONTRACTOR TO COORDINATE ALL EXTERIOR ROOF OPENINGS & VENTS WITH MECHANICAL, ELECTRICAL, STRUCTURAL & PLUMBING DRAWINGS PRIOR TO ROUGH-IN.
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3. PROVIDE **R-30** RIGID INSULATION AT NEW ROOFS OVER CONDITIONED SPACE.
4. SEE DETAIL 2/AD-3.0 FOR TYPICAL ROOF CONSTRUCTION ASSEMBLY.
5. PROVIDE **R-25** BATT INSULATION AT ALL EXTERIOR WALLS, U.N.O. GYPSUM BOARD AND INSULATION SHALL EXTEND FULL HEIGHT OF WALL TO UNDERSIDE OF ROOF STRUCTURE
6. ALL EXPOSED STRUCTURE, INCLUDING MECHANICAL & PLUMBING EQUIPMENT TO BE PAINTED **P-1**

KEYNOTES

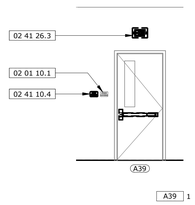
02 41 10.5	CONTRACTOR TO UNINSTALL, PROTECT, STORE & REINSTALL PORTION OF EXISTING MOBILE STORAGE SHELVING SYSTEM AS REQUIRED TO PERFORM NEW WORK IN THIS AREA
05 51 33.1	METAL CROSSOVER LADDER
07 72 40.1	FALL PROTECTION ANCHOR

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:



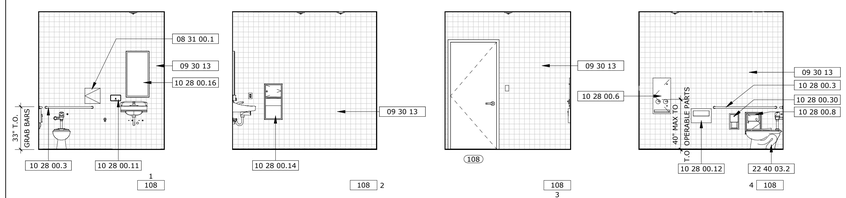
HALLWAY # A30 - DEMO

SCALE: 1/4" = 1'-0" | 21



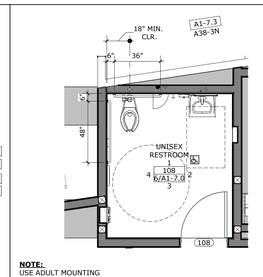
HALLWAY # A39 - DEMO

SCALE: 1/4" = 1'-0" | 16



ROOM # 108 - UNISEX RESTROOM

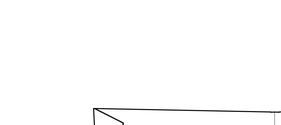
SCALE: 1/4" = 1'-0" | 6



NOTE:
USE ADULT MOUNTING HEIGHTS. FOR ADDITIONAL INFO. ON RESTROOM ACCESSORIES, SEE DETAIL 24 / AD-1.0

RM. #108 UNISEX RR. PLAN

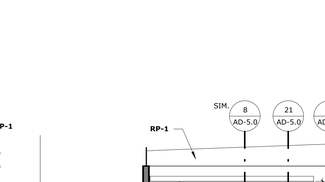
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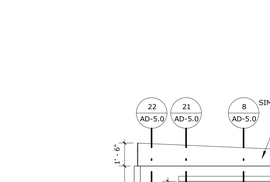


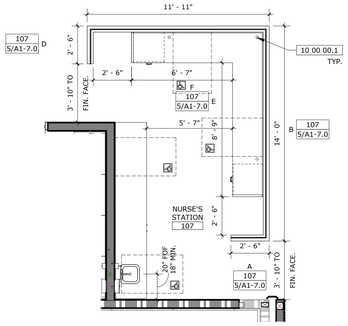
A **PERSPECTIVE A**
N.T.S.



B **PERSPECTIVE B**
N.T.S.





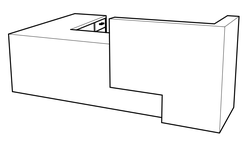


ROOM #101 PUBLIC LOBBY RECEPTION DESK

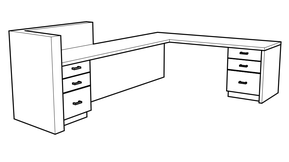
SCALE: 1/4" = 1'-0" | 2

GENERAL NOTES

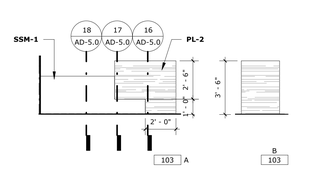
1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
2. PROVIDE STUD BRACING AND SUPPORT FOR ALL WALL MOUNTED FIXTURES AND ACCESSORIES, PER DETAIL
3. FOR MORE INFO ON COLORS, MATERIALS, & FINISHES SEE **SHEET ID-1.0**
4. FOR WALL TILE INFO., SEE DETAIL 17 / AD-2.0
5. FOR MORE INFO ON RESTROOM ACCESSORIES, REFER TO SPEC SECTION 10 28 00
6. FOR ACCESSIBILITY INFORMATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES & ACCESSORIES, SEE ADULT DIMENSIONS PER DETAIL 24 / AD-1.0
7. FOR TACKABLE WALL PANEL ATTACHMENT, SEE DETAIL 14 / AD-1.1
8. FOR TYPICAL ATTACHMENT OF ACOUSTICAL WALL PANEL, SEE DETAIL 9 / AD-1.1
9. AT ACCESSIBLE TOILET STALLS, THE DOOR SHALL BE SELF CLOSING WITH A DOOR PULL PLACED ON BOTH SIDES OF DOOR NEAR THE LATCH, PER CBC SECTION 11B-404.2.7, 11B-604.8.1.2, & 11B-604.8.2.2.

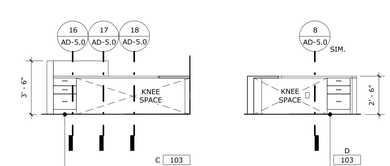


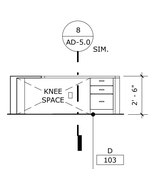
A **PERSPECTIVE A**
N.T.S.



B **PERSPECTIVE B**
N.T.S.









ROOM #103 STUDENT LOBBY RECEPTION DESK

SCALE: 1/4" = 1'-0" | 3

KEYNOTES

02 01 08.4	EXISTING SOFFIT TO REMAIN, PATCH & REPAIR WALL TO MATCH EXISTING
02 01 10.1	EXISTING 'ADMIN ACCESS' SIGN TO REMAIN, PROTECT IN PLACE
02 41 10.4	REMOVE EXISTING 'EXIT ROUTE' SIGN, PATCH BACK WALL & PAINT TO MATCH
02 41 26.3	REMOVE EXISTING ILLUMINATED EXIT SIGN, PATCH BACK WALL & PAINT TO MATCH
08 31 00.1	FULLY RECESSED ACCESS PANEL
09 30 13	TILE, PER FINISH SCHEDULE
10 00 00.1	GROMMETS IN COUNTERTOP
10 28 00.3	GRAB BAR
10 28 00.6	NEW SEMI-RECESSED SANITARY NAPKIN DISPENSER
10 28 00.8	NEW RECESSED SANITARY NAPKIN DISPOSAL
10 28 00.11	SURFACE MOUNTED SOAP DISPENSER
10 28 00.12	NEW SURFACE MOUNTED TOILET SEAT COVER DISPENSER
10 28 00.14	RECESSED PAPER TOWEL DISPENSER AND WASTE COMBO
10 28 00.16	TEMPERED GLASS MIRROR
10 28 00.30	RECESSED MOUNTED MULTI-ROLL TOILET PAPER DISPENSER
22 40 03.2	ACCESSIBLE WATER CLOSET PER PLUMBING DRAWINGS

INTERIOR ELEVATIONS LEGEND

INTERIOR PAINTS

- **P-1** ('COLD MORNING')
- **P-2** ('WESTERN RED')
- **P-3** ('WILDFLOWER HONEY')
- **P-4** ('RIVERBED')
- **P-5** ('FINE GRAIN')
- **P-6** ('WODDEN PEG')

WALL COVERINGS

- **VWC-1**

WALL TILE

- **T-4**

TACKABLE WALL PANELS

- **TWP-1**

SOUND ABSORBING WALL PANELS

- **AWP-1**

RESIN PANEL

- **RP-1**

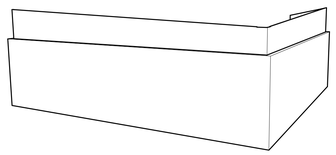
PLASTIC LAMINATE

- **PL-1**
- **PL-2**

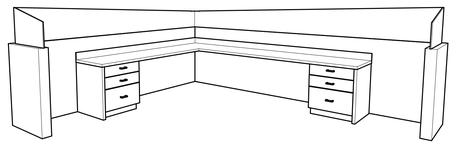
NOTE:
REFER TO COLORS, MATERIALS AND FINISHES LEGEND ON **SHEET ID-1.0** FOR ADDITIONAL INFORMATION

FLOOR PLAN LEGEND

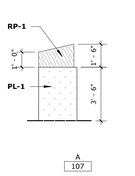
- 101 — DOOR NO., SEE DOOR SCHEDULE ON **SHEET A1-8.0**
- 30" x 48" ACCESSIBLE CLEAR SPACE
- 60" MIN. DIA. ACCESSIBLE CLEAR SPACE

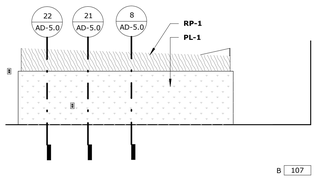


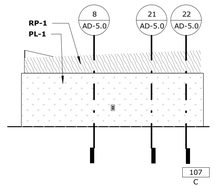
A **PERSPECTIVE A**
N.T.S.



B **PERSPECTIVE B**
N.T.S.

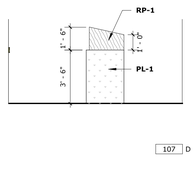


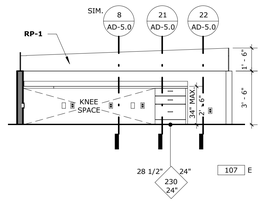


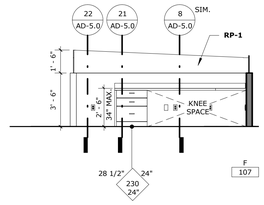


NOTE:
FOR MORE INFO. ON NURSE'S STATION, SEE DTL. 19 / A1-7.1

B **PERSPECTIVE B**
N.T.S.







ROOM #107 NURSE'S STATION DESK

SCALE: 1/4" = 1'-0" | 5

RUHNAU CLARKE ARCHITECTS

CONSULTANT BRANDING

AGENCY APPROVAL
File No.: 36-H7 A°#04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
Exp. 6-30-26
Exp. 10-31-25
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

PROJECT No. :1-78-50
3/14/2025 10:01:21 AM

DRAWN BY: VR, SK, AT CHECKED BY: JC

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DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV

RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

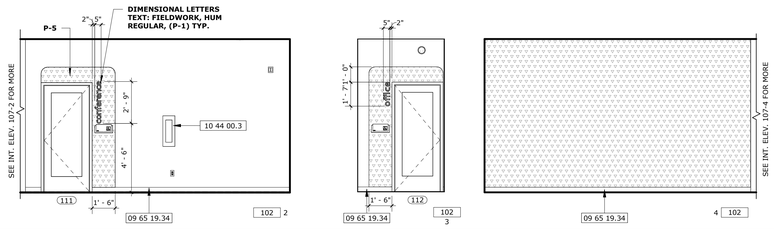
INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

ENLARGED PLANS / INTERIOR ELEVATIONS

A1-7.0

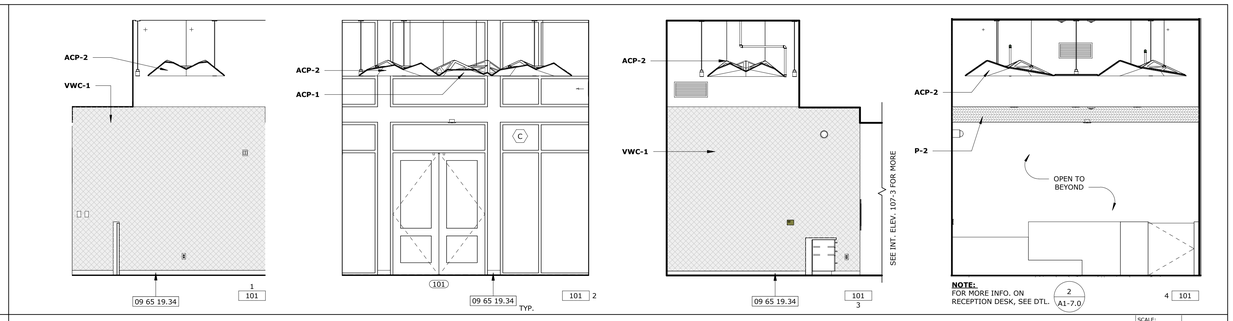
1-78-50

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:



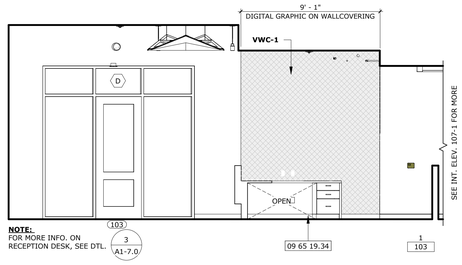
ROOM # 102 - CORRIDOR

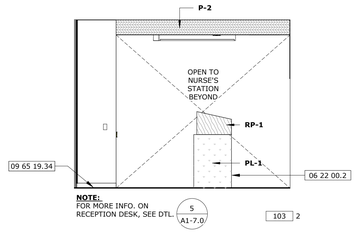
SCALE: 1/4" = 1'-0" | 16

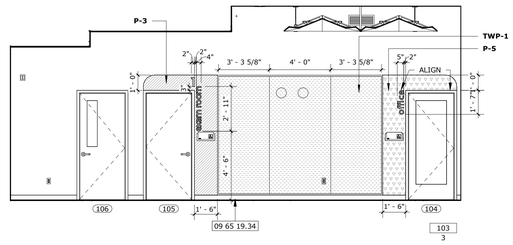


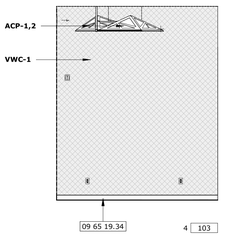
ROOM # 101 - PUBLIC LOBBY

SCALE: 1/4" = 1'-0" | 1



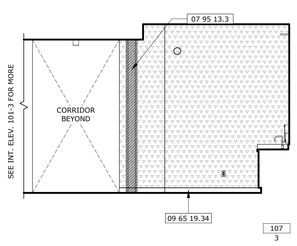


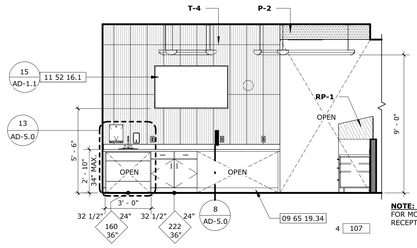




ROOM # 103 - STUDENT LOBBY

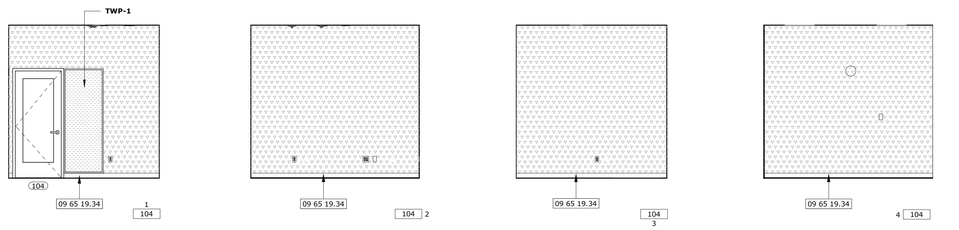
SCALE: 1/4" = 1'-0" | 2





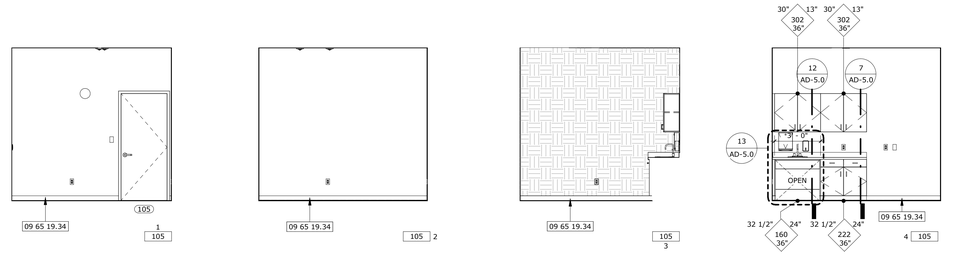
ROOM # 107 - NURSE'S STATION

SCALE: 1/4" = 1'-0" | 19



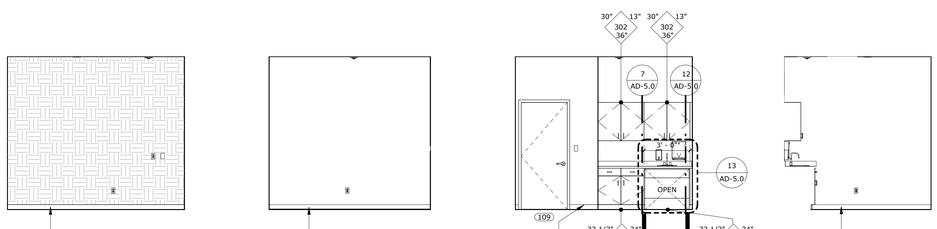
ROOM # 104 - OFFICE

SCALE: 1/4" = 1'-0" | 3



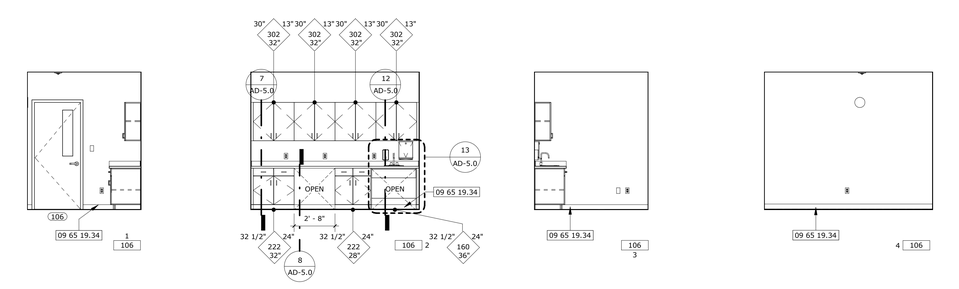
ROOM # 105 - EXAM ROOM

SCALE: 1/4" = 1'-0" | 4



ROOM # 109 - EXAM ROOM

SCALE: 1/4" = 1'-0" | 20



ROOM # 106 - WORKROOM/STORAGE

SCALE: 1/4" = 1'-0" | 5

GENERAL NOTES

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
2. PROVIDE STUD BRACING AND SUPPORT FOR ALL WALL MOUNTED FIXTURES AND ACCESSORIES, PER DETAIL
3. FOR MORE INFO ON COLORS, MATERIALS, & FINISHES SEE **SHEET ID-1.0**
4. FOR WALL TILE INFO., SEE DETAIL 17 / AD-2.0
5. FOR MORE INFO ON RESTROOM ACCESSORIES, REFER TO SPEC SECTION 10 28 00
6. FOR ACCESSIBILITY INFORMATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES & ACCESSORIES, SEE ADULT DIMENSIONS PER DETAIL 24 / AD-1.0
7. FOR TACKABLE WALL PANEL ATTACHMENT, SEE DETAIL 14 / AD-1.1
8. FOR TYPICAL ATTACHMENT OF ACOUSTICAL WALL PANEL, SEE DETAIL 9 / AD-1.1
9. AT ACCESSIBLE TOILET STALLS, THE DOOR SHALL BE SELF CLOSING WITH A DOOR PULL PLACED ON BOTH SIDES OF DOOR NEAR THE LATCH, PER CBC SECTION 11B-404.2.7, 11B-604.8.1.2, & 11B-604.8.2.2.

KEYNOTES

06 22 00.2	NURSE STATION'S SPECIALTY RECEPTION DESK BEYOND
07 95 13.3	INTERIOR WALL EXPANSION JOINT COVER
09 65 19.34	RUBBER BASE
10 44 00.3	RECESSED FIRE EXTINGUISHER CABINET
11 52 16.1	TELEVISION, O.F.C.I., SURFACE MOUNTED, MAX 4" PROJECTION WITH TV MOUNT, REMOTE CONTROLLED

INTERIOR ELEVATIONS LEGEND

INTERIOR PAINTS

- **P-1** ('COLD MORNING')
- **P-2** ('WESTERN RED')
- **P-3** ('WILDFLOWER HONEY')
- **P-4** ('RIVERBED')
- **P-5** ('FINE GRAIN')
- **P-6** ('WODDEN PEG')

WALL COVERINGS

- **VWC-1**

WALL TILE

- **T-4**

TACKABLE WALL PANELS

- **TWP-1**

SOUND ABSORBING WALL PANELS

- **AWP-1**

RESIN PANEL

- **RP-1**

PLASTIC LAMINATE

- **PL-1**
- **PL-2**

NOTE:
REFER TO COLORS, MATERIALS AND FINISHES LEGEND ON **SHEET ID-1.0** FOR ADDITIONAL INFORMATION

STAMPS

AGENCY APPROVAL
File No.: 36-H7 A\#04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:01:34 AM

DRAWN BY:VR, SK, AT CHECKED BY: JC

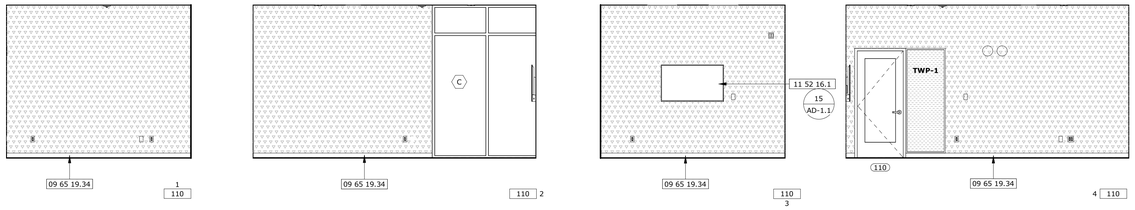
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DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV

RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

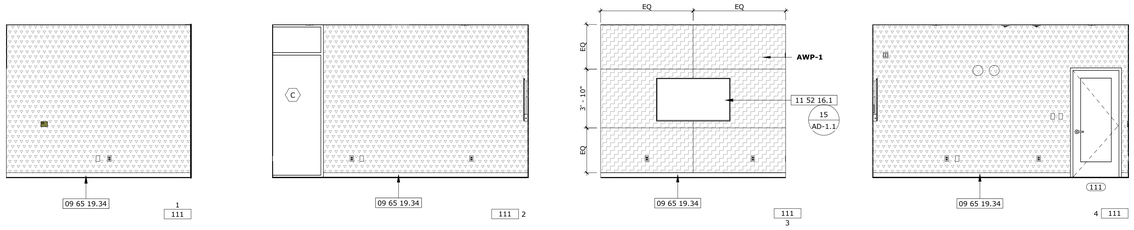
INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

INTERIOR ELEVATIONS | **A1-7.1**

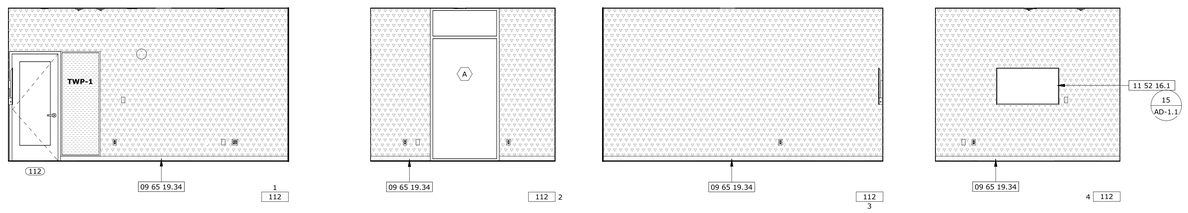
1-78-50



ROOM # 110 - OFFICE | SCALE: 1/4" = 1'-0" | 1



ROOM # 111 - CONFERENCE ROOM | SCALE: 1/4" = 1'-0" | 2



ROOM # 112 - OFFICE | SCALE: 1/4" = 1'-0" | 3

GENERAL NOTES

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
2. PROVIDE STUD BRACING AND SUPPORT FOR ALL WALL MOUNTED FIXTURES AND ACCESSORIES, PER DETAIL
3. FOR MORE INFO ON COLORS, MATERIALS, & FINISHES SEE **SHEET ID-1.0**
4. FOR WALL TILE INFO., SEE DETAIL 17 / AD-2.0
5. FOR MORE INFO ON RESTROOM ACCESSORIES, REFER TO SPEC SECTION 10 28 00
6. FOR ACCESSIBILITY INFORMATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES & ACCESSORIES, SEE ADULT DIMENSIONS PER DETAIL 24 / AD-1.0
7. FOR TACKABLE WALL PANEL ATTACHMENT, SEE DETAIL 14 / AD-1.1
8. FOR TYPICAL ATTACHMENT OF ACOUSTICAL WALL PANEL, SEE DETAIL 9 / AD-1.1
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KEYNOTES

09 65 19.34 RUBBER BASE

11 52 16.1 TELEVISION, O.F.C.I., SURFACE MOUNTED, MAX 4" PROJECTION WITH TV MOUNT, REMOTE CONTROLLED

INTERIOR ELEVATIONS LEGEND

INTERIOR PAINTS

- **P-1** ('COLD MORNING')
- **P-2** ('WESTERN RED')
- **P-3** ('WILDFLOWER HONEY')
- **P-4** ('RIVERBED')
- **P-5** ('FINE GRAIN')
- **P-6** ('WOODEN PEG')

WALL COVERINGS

- **VWC-1**

WALL TILE

- **T-4**

TACKABLE WALL PANELS

- **TWP-1**

SOUND ABSORBING WALL PANELS

- **AWP-1**

RESIN PANEL

- **RP-1**

PLASTIC LAMINATE

- **PL-1**
- **PL-2**

NOTE:
REFER TO COLORS, MATERIALS AND FINISHES LEGEND ON **SHEET ID-1.0** FOR ADDITIONAL INFORMATION

AGENCY APPROVAL
File No.: 36-H7 A©04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:01:39 AM

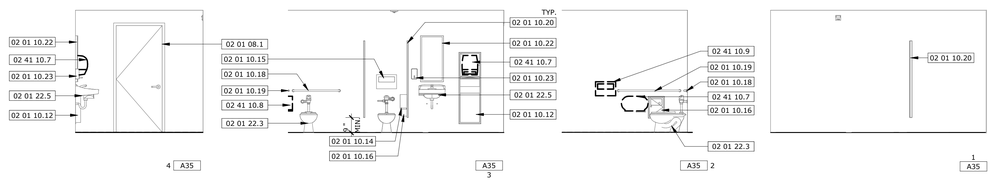
DRAWN BY: VR, SK, AT
CHECKED BY: JC

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DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV

RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

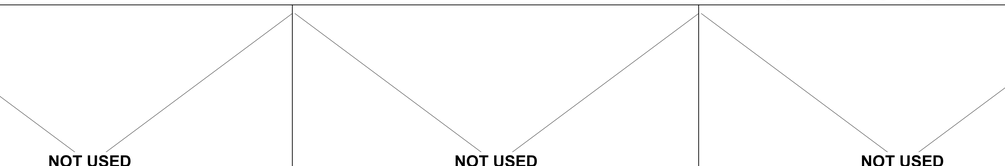
INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

INTERIOR ELEVATIONS | A1-7.2



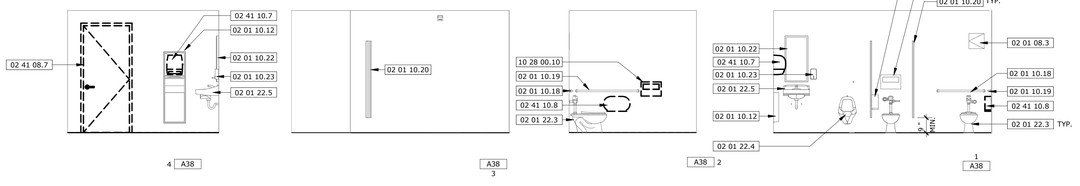
DEMO ROOM # A35 - WOMEN'S RESTROOM

SCALE: 1/4" = 1'-0" | 11



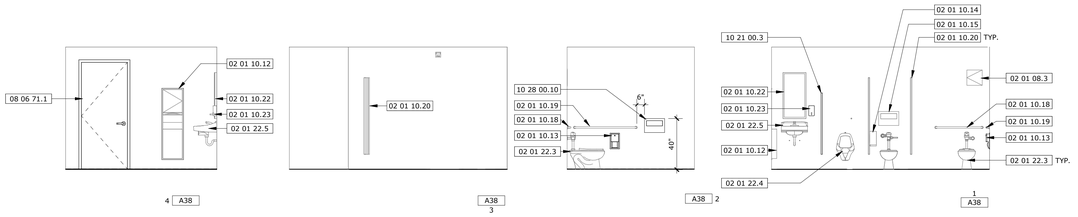
NEW ROOM # A35 - WOMEN'S RESTROOM

SCALE: 1/4" = 1'-0" | 12



DEMO ROOM # A38 - MEN'S RESTROOM

SCALE: 1/4" = 1'-0" | 13



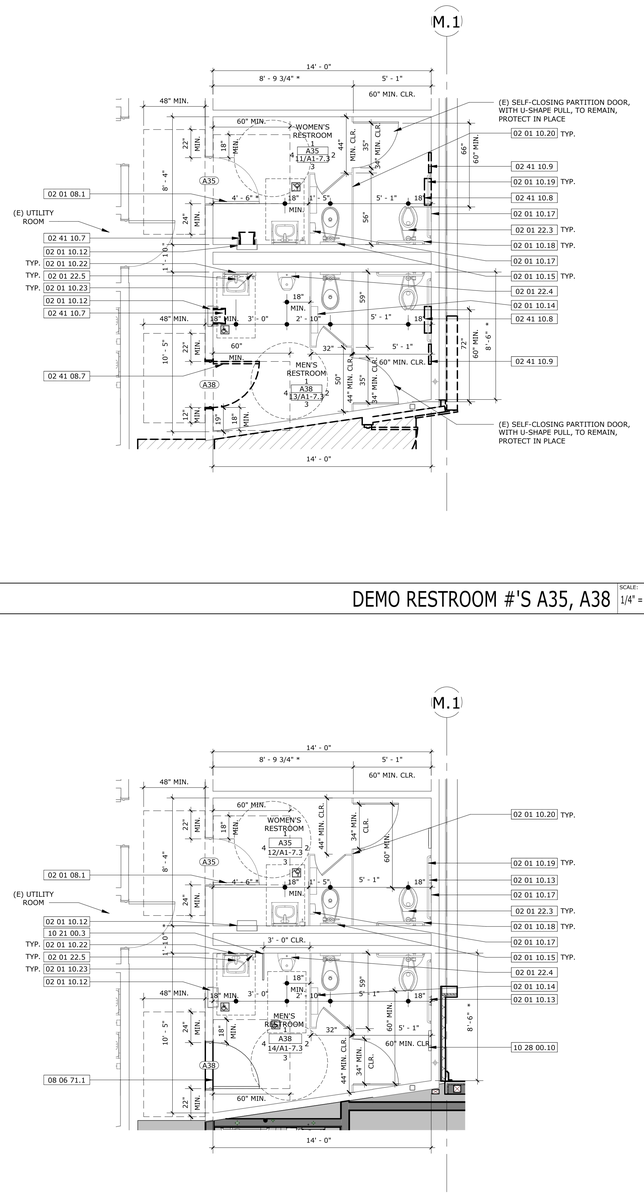
NEW ROOM # A38 - MEN'S RESTROOM

SCALE: 1/4" = 1'-0" | 14

NOT USED

NOT USED

NOT USED



DEMO RESTROOM #'S A35, A38

SCALE: 1/4" = 1'-0" | 7

NEW RESTROOM #'S A35, A38

SCALE: 1/4" = 1'-0" | 2

NOT USED

NOT USED

NOT USED

AGENCY APPROVAL
File No: 36-H7 A\#04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

GENERAL NOTES

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
2. PROVIDE STUD BRACING AND SUPPORT FOR ALL WALL MOUNTED FIXTURES AND ACCESSORIES, PER DETAIL
3. FOR MORE INFO ON COLORS, MATERIALS, & FINISHES SEE **SHEET ID-1.0**
4. FOR WALL TILE INFO., SEE DETAIL 17 / AD-2.0
5. FOR MORE INFO ON RESTROOM ACCESSORIES, REFER TO SPEC SECTION 10 28 00
6. FOR ACCESSIBILITY INFORMATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES & ACCESSORIES, SEE ADULT DIMENSIONS PER DETAIL 24 / AD-1.0
7. FOR TACKABLE WALL PANEL ATTACHMENT, SEE DETAIL 14 / AD-1.1
8. FOR TYPICAL ATTACHMENT OF ACOUSTICAL WALL PANEL, SEE DETAIL 9 / AD-1.1
9. AT ACCESSIBLE TOILET STALLS, THE DOOR SHALL BE SELF CLOSING WITH A DOOR PULL PLACED ON BOTH SIDES OF DOOR NEAR THE LATCH, PER CBC SECTION 11B-404.2.7, 11B-604.8.1.2, & 11B-604.8.2.2.

KEYNOTES

02 01 08.1	EXISTING DOOR AND FRAME TO REMAIN, PROTECT IN PLACE
02 01 08.3	EXISTING RECESSED ACCESS PANEL TO REMAIN, PROTECT IN PLACE
02 01 10.12	EXISTING SEMI-RECESSED PAPER TOWEL DISPENSER & WASTE, IF FUNCTIONAL TO REMAIN & PROTECT IN PLACE. IF NOT FUNCTIONAL NOTIFY ARCHITECT.
02 01 10.13	EXISTING RECESSED TOILET PAPER DISPENSER. IF FUNCTIONAL TO REMAIN & PROTECT IN PLACE. IF NOT FUNCTIONAL NOTIFY ARCHITECT.
02 01 10.14	EXISTING SURFACE MOUNTED TOILET PAPER DISPENSER TO REMAIN, PROTECT IN PLACE
02 01 10.15	EXISTING SURFACE MOUNTED TOILET SEAT COVER DISPENSER TO REMAIN, PROTECT IN PLACE
02 01 10.16	EXISTING SURFACE MOUNTED SANITARY NAPKIN DISPOSAL TO REMAIN, PROTECT IN PLACE
02 01 10.17	EXISTING RECESSED SANITARY NAPKIN DISPOSAL TO REMAIN, PROTECT IN PLACE
02 01 10.18	EXISTING 36" LONG X 1-1/2" DIA. STAINLESS STEEL ACCESSIBLE GRAB BAR TO REMAIN, PROTECT IN PLACE
02 01 10.19	EXISTING 42" LONG X 1-1/2" DIA. STAINLESS STEEL ACCESSIBLE GRAB BAR TO REMAIN, PROTECT IN PLACE
02 01 10.20	EXISTING TOILET STALL PARTITION TO REMAIN, PROTECT IN PLACE
02 01 10.22	EXISTING MIRROR TO REMAIN, PROTECT IN PLACE
02 01 10.23	EXISTING SOAP DISPENSER (4" MAX PROJECTION) TO REMAIN, PROTECT IN PLACE
02 01 22.3	EXISTING TOILET TO REMAIN, PROTECT IN PLACE
02 01 22.4	EXISTING URINAL TO REMAIN, PROTECT IN PLACE
02 01 22.5	EXISTING LAVATORY TO REMAIN, PROTECT IN PLACE
02 41 08.7	EXISTING FRAME TO REMAIN, RETROFIT EXISTING DOOR & FRAME TO FLIP DOOR SWING
02 41 10.7	REMOVE EXISTING SURFACE MOUNTED PAPER TOWEL DISPENSER
02 41 10.8	REMOVE EXISTING SURFACE MOUNTED TOILET PAPER DISPENSER
02 41 10.9	REMOVE EXISTING SURFACE MOUNTED TOILET SEAT COVER DISPENSER & SALVAGE FOR REINSTALLATION
08 06 71.1	DOOR AND DOOR FRAME, PER DOOR SCHEDULE
10 21 00.3	REINSTALL SALVAGED URINAL PARTITION
10 28 00.10	REINSTALL SURFACE MOUNTED TOILET SEAT COVER DISPENSER 6" AWAY FROM GRAB BAR PER INTERIOR ELEVATION

INTERIOR ELEVATIONS LEGEND

INTERIOR PAINTS

- **P-1** ('COLD MORNING')
- **P-2** ('WESTERN RED')
- **P-3** ('WILDFLOWER HONEY')
- **P-4** ('RIVERBED')
- **P-5** ('FINE GRAIN')
- **P-6** ('WODDEN PEG')

WALL TILE

- **T-4**

TACKABLE WALL PANELS

- **TWP-1**

SOUND ABSORBING WALL PANELS

- **AWP-1**

RESIN PANEL

- **RP-1**

WALL COVERINGS

- **VWC-1**

PLASTIC LAMINATE

- **PL-1**
- **PL-2**

NOTE:
REFER TO COLORS, MATERIALS AND FINISHES LEGEND ON **SHEET ID-1.0** FOR ADDITIONAL INFORMATION

FLOOR PLAN LEGEND

- 101 — DOOR NO., SEE DOOR SCHEDULE ON **SHEET A1-8.0**
- 30" x 48" ACCESSIBLE CLEAR SPACE
- 60" MIN. DIA. ACCESSIBLE CLEAR SPACE

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:01:49 AM

DRAWN BY: VR, SK, AT
CHECKED BY: JC

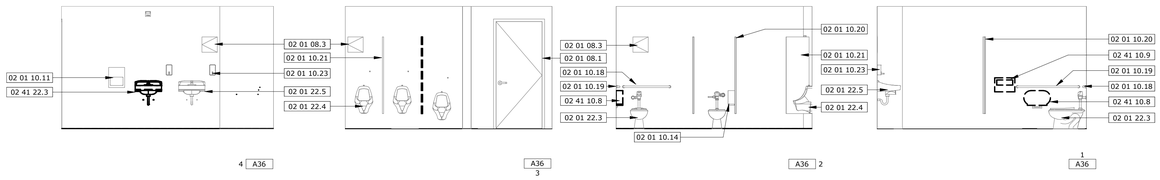
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DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV

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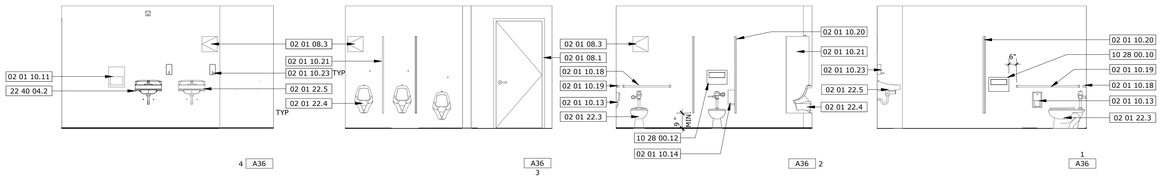
PLANS / INTERIOR ELEVATIONS

A1-7.3



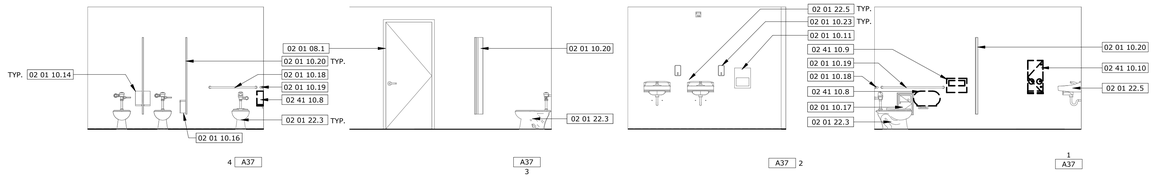
DEMO ROOM # A36 - BOY'S RESTROOM

SCALE: 1/4" = 1'-0" | 11



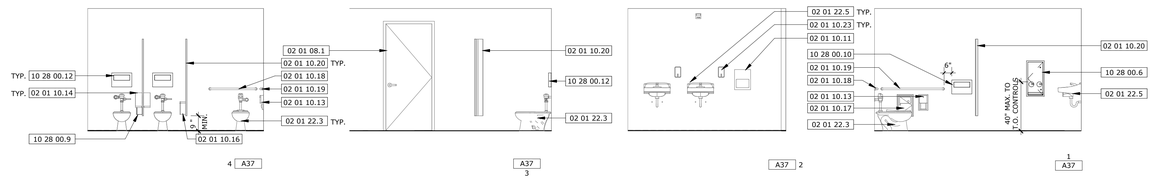
NEW ROOM # A36 - BOY'S RESTROOM

SCALE: 1/4" = 1'-0" | 12



DEMO ROOM # A37 - GIRL'S RESTROOM

SCALE: 1/4" = 1'-0" | 13



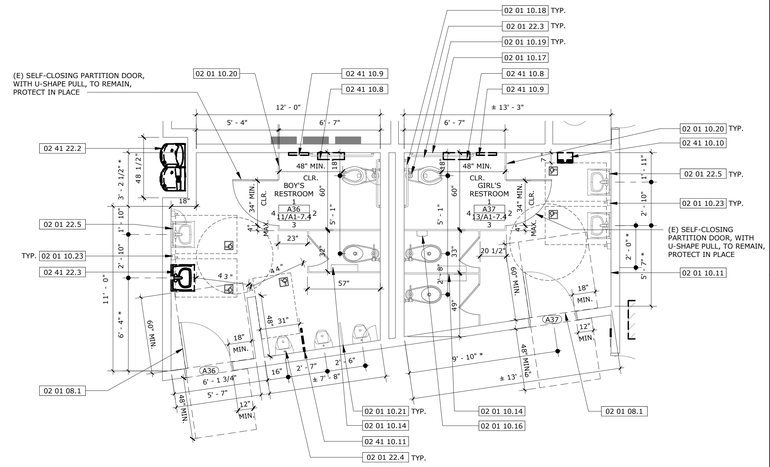
NEW ROOM # A37 - GIRL'S RESTROOM

SCALE: 1/4" = 1'-0" | 14

NOT USED

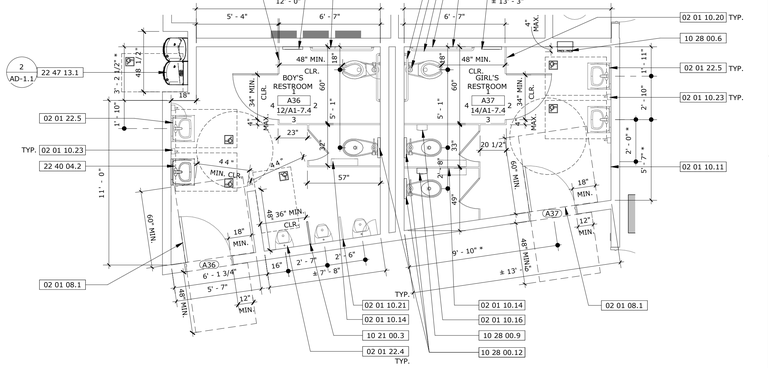
NOT USED

NOT USED



DEMO ROOM #'S A36, A37 BOY'S & GIRL'S RESTROOM

SCALE: 1/4" = 1'-0" | 1



NEW ROOM #'S A36, A37 BOY'S & GIRL'S RESTROOM

SCALE: 1/4" = 1'-0" | 2

NOT USED

NOT USED

NOT USED

AGENCY APPROVAL
File No: 36-H7 A\#04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
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SS ☑ FLS ☑ ACS ☑
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STAMPS

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RUHNAU CLARKE ARCHITECTS

GENERAL NOTES

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KEYNOTES

02 01 08.1	EXISTING DOOR AND FRAME TO REMAIN, PROTECT IN PLACE
02 01 08.3	EXISTING RECESSED ACCESS PANEL TO REMAIN, PROTECT IN PLACE
02 01 10.11	EXISTING RECESSED ELECTRIC HAND DRYER TO REMAIN, PROTECT IN PLACE
02 01 10.13	EXISTING RECESSED TOILET PAPER DISPENSER. IF FUNCTIONAL TO REMAIN & PROTECT IN PLACE. IF NOT FUNCTIONAL NOTIFY ARCHITECT.
02 01 10.14	EXISTING SURFACE MOUNTED TOILET PAPER DISPENSER TO REMAIN, PROTECT IN PLACE
02 01 10.16	EXISTING SURFACE MOUNTED SANITARY NAPKIN DISPOSAL TO REMAIN, PROTECT IN PLACE
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02 01 10.18	EXISTING 36" LONG X 1-1/2" DIA. STAINLESS STEEL ACCESSIBLE GRAB BAR TO REMAIN, PROTECT IN PLACE
02 01 10.19	EXISTING 42" LONG X 1-1/2" DIA. STAINLESS STEEL ACCESSIBLE GRAB BAR TO REMAIN, PROTECT IN PLACE
02 01 10.20	EXISTING TOILET STALL PARTITION TO REMAIN, PROTECT IN PLACE
02 01 10.21	EXISTING URINAL SCREEN TO REMAIN
02 01 10.23	EXISTING SOAP DISPENSER (4" MAX PROJECTION) TO REMAIN, PROTECT IN PLACE
02 01 22.3	EXISTING TOILET TO REMAIN, PROTECT IN PLACE
02 01 22.4	EXISTING URINAL TO REMAIN, PROTECT IN PLACE
02 01 22.5	EXISTING LAVATORY TO REMAIN, PROTECT IN PLACE
02 41 10.8	REMOVE EXISTING SURFACE MOUNTED TOILET PAPER DISPENSER
02 41 10.9	REMOVE EXISTING SURFACE MOUNTED TOILET SEAT COVER DISPENSER & SALVAGE FOR REINSTALLATION
02 41 10.10	REMOVE EXISTING SURFACE MOUNTED SANITARY NAPKIN DISPENSER
02 41 10.11	REMOVE EXISTING URINAL PARTITION & MOUNTS, SALVAGE FOR REINSTALLATION. PATCH & REPAIR WALL AS NECESSARY
02 41 22.2	DEMO EXISTING DUAL HEIGHT DRINKING FOUNTAIN WITH BOTTLE FILLER PER PLUMBING DRAWINGS
02 41 22.3	REMOVE EXISTING LAVATORY PER PLUMBING DRAWINGS
10 21 00.3	REINSTALL SALVAGED URINAL PARTITION
10 28 00.6	NEW SEMI-RECESSED SANITARY NAPKIN DISPENSER
10 28 00.9	NEW SURFACE MOUNTED SANITARY NAPKIN DISPOSAL.
10 28 00.10	REINSTALL SURFACE MOUNTED TOILET SEAT COVER DISPENSER 6" AWAY FROM GRAB BAR PER INTERIOR ELEVATION
10 28 00.12	NEW SURFACE MOUNTED TOILET SEAT COVER DISPENSER
22 40 04.2	NEW LAVATORY SINK PER PLUMBING DRAWINGS
22 47 13.1	DUAL HEIGHT DRINKING FOUNTAIN WITH BOTTLE FILLER PER PLUMBING DRAWINGS

INTERIOR ELEVATIONS LEGEND

INTERIOR PAINTS

- **P-1** ('COLD MORNING')
- **P-2** ('WESTERN RED')
- **P-3** ('WILDFLOWER HONEY')
- **P-4** ('RIVERBED')
- **P-5** ('FINE GRAIN')
- **P-6** ('WODDEN PEG')

WALL COVERINGS

- **VWC-1**

WALL TILE

- **T-4**

TACKABLE WALL PANELS

- **TWP-1**

SOUND ABSORBING WALL PANELS

- **AWP-1**

RESIN PANEL

- **RP-1**

PLASTIC LAMINATE

- **PL-1**
- **PL-2**

NOTE:
REFER TO COLORS, MATERIALS AND FINISHES LEGEND ON **SHEET ID-1.0** FOR ADDITIONAL INFORMATION

FLOOR PLAN LEGEND

- 101 — DOOR NO., SEE DOOR SCHEDULE ON **SHEET A1-8.0**
- 30" x 48" ACCESSIBLE CLEAR SPACE
- 60" MIN. DIA. ACCESSIBLE CLEAR SPACE

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:02:00 AM

DRAWN BY: VR, SK, AT
CHECKED BY: JC

DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV

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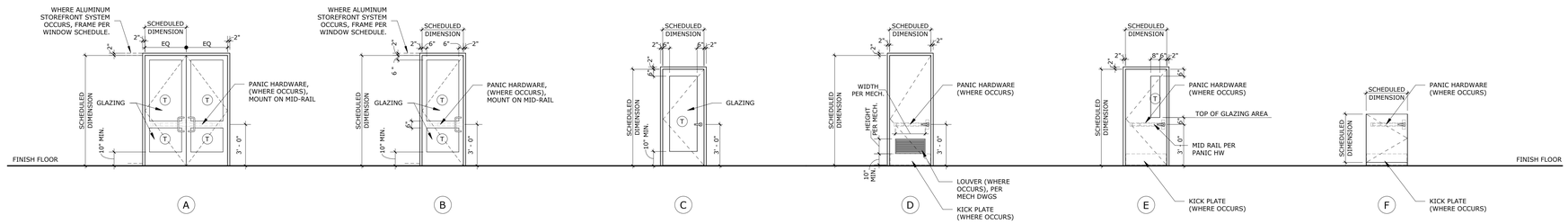
INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

PLANS / INTERIOR ELEVATIONS

A1-7.4

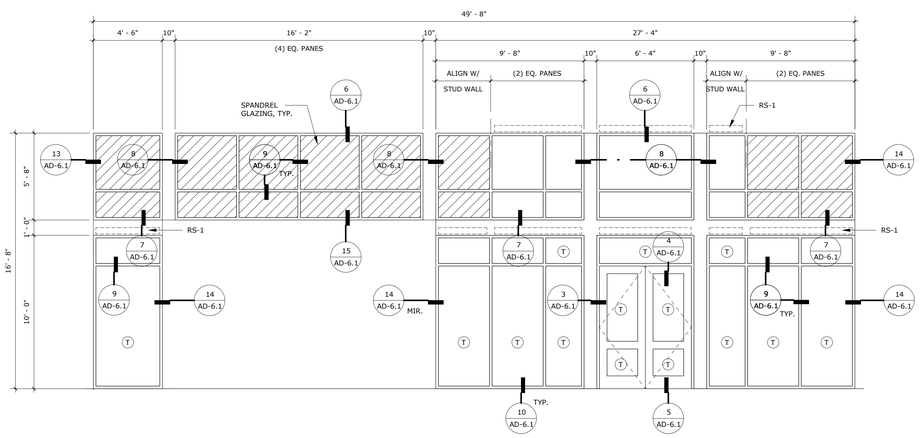
DOOR SCHEDULE

DOOR NO.	DOOR								FRAME													REMARKS
	DOOR TYPE	EXTERIOR	WIDTH	HEIGHT	THICKNESS	MATERIAL	FINISH	COLOR	MATERIAL	FINISH	COLOR	HEAD	JAMB 1	JAMB 2	SILL/THRESHOLD	GLAZING TYPE	CLOSER	HARDWARE GROUP	PANIC HARDWARE	FIRE RATING	ELECTRONIC ACS. CTRL.	DOOR NO.	
101	A	Yes	6' - 0"	8' - 0"	2"	ALUM/GLASS	FF	ALUM-1	ALUM	FF	ALUM-1	4/AD-6.1	3/AD-6.1	3/AD-6.1	5/AD-6.1	GL-1	YES	1.0	Yes	N/A	Yes	101	
102	F	No	3' - 0"	3' - 5"	1 3/4"	WOOD	FF	PL-2	HM	PSG	P-8	N/A	21/AD-6.0	21/AD-6.0	22/AD-6.0	-	NO	3.0	Yes	N/A	No	102	PROVIDED BY MILLWORK
103	B	No	3' - 0"	8' - 0"	2"	ALUM/GLASS	FF	ALUM-1	ALUM	FF	ALUM-1	12/AD-6.0	14/AD-6.0 SIM.	14/AD-6.0 SIM.	15/AD-6.0	FPG-1	YES	2.0	No	60 MIN.	No	103	
104	C	No	3' - 0"	7' - 0"	1 3/4"	HM	PSG	P-8	HM	PSG	P-8	7/AD-6.0	6/AD-6.0	8/AD-6.0	18/AD-6.0	G-2	YES	6.0	No	N/A	No	104	ACOUSTICALLY RATED TO STC 42
105	D	No	3' - 0"	7' - 0"	1 3/4"	HM	PSG	P-7	HM	PSG	P-7	7/AD-6.0	8/AD-6.0	8/AD-6.0	18/AD-6.0	-	NO	4.0	No	N/A	No	105	ACOUSTICALLY RATED TO STC 42
106	E	No	3' - 0"	7' - 0"	1 3/4"	HM	PSG	P-9	HM	PSG	P-9	7/AD-6.0	8/AD-6.0	8/AD-6.0	18/AD-6.0	G-2	YES	5.0	No	N/A	No	106	
108	D	No	3' - 0"	7' - 0"	1 3/4"	HM	PSG	P-8	HM	PSG	P-8	9/AD-6.0	10/AD-6.0	10/AD-6.0	18/AD-6.0	-	YES	7.0	No	N/A	No	108	
109	D	No	3' - 0"	7' - 0"	1 3/4"	HM	PSG	P-7	HM	PSG	P-7	4/AD-6.0	5/AD-6.0	8/AD-6.0	18/AD-6.0	-	NO	4.0	No	N/A	No	109	ACOUSTICALLY RATED TO STC 42
110	C	No	3' - 0"	7' - 0"	1 3/4"	HM	PSG	P-8	HM	PSG	P-8	7/AD-6.0	8/AD-6.0	8/AD-6.0	18/AD-6.0	G-2	YES	5.0	No	N/A	No	110	ACOUSTICALLY RATED TO STC 42
111	C	No	3' - 0"	7' - 0"	1 3/4"	HM	PSG	P-8	HM	PSG	P-8	7/AD-6.0	8/AD-6.0	8/AD-6.0	18/AD-6.0	G-2	YES	5.0	No	N/A	No	111	ACOUSTICALLY RATED TO STC 42
112	C	No	3' - 0"	7' - 0"	1 3/4"	HM	PSG	P-8	HM	PSG	P-8	7/AD-6.0	8/AD-6.0	8/AD-6.0	18/AD-6.0	G-2	YES	5.0	No	N/A	No	112	ACOUSTICALLY RATED TO STC 42
A01	B	Yes	3' - 0"	7' - 0"	2"	ALUM/GLASS	(E)	(E)	ALUM	(E)	(E)	(E)	(E)	(E)	5/AD-6.1	(E)	KEEP (E)	KEEP (E)	Yes	N/A	No	A01	EXISTING DOOR & FRAME TO REMAIN, PROTECT IN PLACE
A04	A	Yes	6' - 0"	7' - 0"	2"	ALUM/GLASS	(E)	(E)	ALUM	(E)	(E)	(E)	(E)	(E)	5/AD-6.1	(E)	KEEP (E)	KEEP (E)	Yes	N/A	No	A04	EXISTING DOOR & FRAME TO REMAIN, PROTECT IN PLACE
A35	D	No	3' - 0"	7' - 0"	1 3/4"	HM	(E)	(E)	HM	(E)	(E)	(E)	(E)	(E)	18/AD-6.0	N/A	KEEP (E)	10.0	No	N/A	No	A35	EXISTING DOOR & FRAME TO REMAIN, PROTECT IN PLACE
A36	D	No	3' - 0"	7' - 0"	1 3/4"	HM	(E)	(E)	HM	(E)	(E)	(E)	(E)	(E)	18/AD-6.0	N/A	KEEP (E)	10.0	No	N/A	No	A36	EXISTING DOOR & FRAME TO REMAIN, PROTECT IN PLACE
A37	D	No	3' - 0"	7' - 0"	1 3/4"	HM	(E)	(E)	HM	(E)	(E)	(E)	(E)	(E)	18/AD-6.0	N/A	KEEP (E)	10.0	No	N/A	No	A37	EXISTING DOOR & FRAME TO REMAIN, PROTECT IN PLACE
A38	D	No	3' - 0"	7' - 0"	1 3/4"	HM	MATCH (E)	MATCH (E)	HM	MATCH (E)	MATCH (E)	9/AD-6.0	10/AD-6.0	10/AD-6.0	18/AD-6.0	N/A	KEEP (E)	10.0	No	N/A	No	A38	EXISTING FRAME TO REMAIN, RETROFIT EXISTING DOOR & FRAME TO FLIP DOOR SWING PER ENLARGED PLAN
A39	E	No	3' - 0"	7' - 0"	1 3/4"	HM	(E)	(E)	HM	(E)	(E)	(E)	(E)	(E)	(E)	(E)	KEEP (E)	11.0	No	60 MIN.	No	A39	EXISTING DOOR & FRAME TO REMAIN, HARDWARE TO BE REPLACED PER NEW HARDWARE GROUP



DOOR TYPES

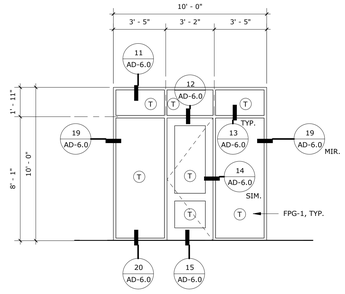
SCALE: 1/4" = 1'-0" | 1



A EXT.WINDOW ALUM. FRAME

B EXTERIOR WINDOW ALUMINUM FRAME

C EXTERIOR WINDOW ALUMINUM FRAME



D INTERIOR WINDOW ALUMINUM FRAME

(60 MIN. FIRE RATED)

WINDOW SCHEDULE

SCALE: 1/4" = 1'-0" | 2

GENERAL NOTES

1. SEE SHEETS **AD-6.0 & AD-6.1** FOR HOLLOW METAL FRAME DETAILS
2. SET DOORS ADJACENT TO WALLS A MIN. OF 4" AWAY FROM WALL U.N.O.
3. ALL GLAZING IN DOORS, AND WINDOWS BELOW 8'-0" A.F.F., ARE TEMPERED OR AS REQUIRED BY SECTION 2406 OF THE 2022 CBC
4. PROVIDE DOOR STOPS AT ALL INTERIOR DOORS. PROVIDE BACKING PLATE PER DETAIL 11/S0-2.4
5. ALL EXTERIOR DOORS ARE TO SWING OUT AND OPEN TO A MIN. OF 110 DEGREES FROM ITS CLOSED POSITION WHERE POSSIBLE, U.N.O.
   - EXCEPTION: WHERE TACTILE SIGNAGE IS LOCATED ON HINGE SIDE OF DOOR, DOORS TO HAVE A 90 DEGREE SWING LIMIT
6. ALL EXTERIOR H.M. DOORS SHALL HAVE A THERMAL RESISTANCE CORE, PER SPEC SECTION 08 11 13
7. PROVIDE AIR SEALS/WEATHER STRIPPING AT ALL EXTERIOR DOORS TO CONDITIONED SPACES.
8. ALL FLOOR MATERIAL CHANGE SHALL BE LOCATED UNDER THE CENTERLINE OF DOOR WHERE OCCURS, TYP.
9. ALL EXTERIOR DOORS SHALL BE OPERABLE FROM THE INTERIOR WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. DEAD BOLTS ARE ONLY PERMITTED WHEN OPERABLE WITH A SINGLE EFFORT LEVER TYPE HARDWARE.
10. HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE MOUNTED 34"-44" A.F.F., PER CBC SECTION 11B-404.2.7
11. ALL DOORS SHALL BE LOCKABLE FROM THE INTERIOR SIDE, PER HARDWARE SPEC SECTION 08 06 71 & 08 71 00
12. PER SECTION 1010.2.9 IN THE CBC 2022, DOOR SERVING ROOMS OR SPACES WITH AN OCCUPANT LOAD OF 50 OR MORE ARE REQUIRED TO HAVE PANIC HARDWARE OR FIRE EXIT HARDWARE.
13. PER CBC 2022 11B-404.2.5, THRESHOLDS SHALL BE 1/2" HIGH MAX.
14. THE BOTTOM 10" OF ALL DOORS EXTENDING THE FULL WIDTH SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. CBC 2022 11B-404.2.10
15. PER CBC 2022 11B-404.2.9, MAXIMUM EFFORT TO OPERATE ALL DOORS SHALL NOT EXCEED 5 LBS FOR BOTH EXTERIOR AND INTERIOR DOORS. FIRE DOORS SHALL NOT EXCEED 5 LBS.
16. REFER TO SPECIFICATION SECTION 08 71 00 FOR DOOR HARDWARE INFORMATION
17. WHERE WINDOW SHADE OCCURS AT SUSPENDED T-BAR CEILING, SEE DTL.
18. PER CBC 2022 CH. 24 SEC. 2403.1, EACH PANE SHALL BEAR THE MANUFACTURE'S MARK DESIGNATING THE TYPE AND THICKNESS OF THE GLASS OR GLAZING MATERIAL.
19. FOR TYPICAL WINDOW SHADE ATTACHMENT, SEE DETAIL 25/AD-4.1
20. ALL EXISTING DOORS & GATES ON THE POT SHALL BE TESTED AND ADJUSTED TO MEET CBC SECTION 11B-404.2.8 FOR CLOSING SPEED AND CBC SECTION 11B-404.2.9 FOR DOOR OPENING FORCE (5 lbs. MAX.)

ABBREVIATIONS

ALUM	ALUMINUM
FF	FACTORY FINISH
HM	HOLLOW METAL
HC	HOLLOW CORE
GALV.	GALVANIZED
STL	STEEL
PSG	PAINT: SEMI-GLOSS

GLAZING NOTES

GLAZING COLOR

GLAZING

08 80 00 — **GL-1 &** (T) **GL-1T** VITRO, SOLARBAN 90 (2) CLEAR + CLEAR, SEALED INSULATED GLASS UNIT, **GL-1T** WHERE SAFETY RATED

08 80 00 — **G-2** MONOLITHIC INTERIOR VISION GLAZING, CLEAR

08 80 00 — (T) **G-2T** MONOLITHIC SAFETY GLAZING, CLEAR

08 44 35 — (T) **FPG-1** FIRE-PROTECTION-RATED GLAZING

GENERAL GLAZING NOTES

1. VERIFY ALL DIMENSIONS IN FIELD PRIOR TO FABRICATION
2. ALL EXTERIOR GLAZED DOORS AND WINDOWS TO RECEIVE TYPE **GL-1** GLAZING, U.N.O.
   PPG, SOLARBAN 90 (2) CLEAR + CLEAR
3. GLAZING TO BE TEMPERED (T) SHALL INCLUDE:
   - ALL GLAZING IN DOORS
   - ALL DOOR SIDELIGHTS WITHIN 24" OF DOOR FRAME
   - ALL DOOR TRANSOMS
   - ALL WINDOW GLAZING WITHIN A DISTANCE OF 36" HORIZONTALLY FROM A WALKING PATH AND UP TO 60" FROM GRADE
   - ALL GLAZING WITHIN THE SWING OF A DOOR
4. ALL INTERIOR DOORS AND WINDOWS TO RECEIVE TYPE **G-2** GLAZING, U.N.O.
5. ALL GLAZING SHALL MEET THE MIN. GLAZING REQUIREMENTS LISTED IN 2022 CBC TABLE 2403.2.1 TABLE 2406.2(1)

SPANDREL GLAZING

AGENCY APPROVAL
File No: 36-H7 04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:02:03 AM

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CHECKED BY: JC

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

DOOR & WINDOW SCHEDULE

A1-8.0

1-78-50

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR		BASE		WALLS												CEILING			REMARKS	ROOM NO.
						ELEVATION 1			ELEVATION 2			ELEVATION 3			ELEVATION 4							
		MATERIAL	COLOR	MATERIAL	COLOR	MATERIAL	FINISH	COLOR	MATERIAL	FINISH	COLOR	MATERIAL	FINISH	COLOR	MATERIAL	FINISH	COLOR	MATERIAL	FINISH	COLOR		
101	PUBLIC LOBBY	LVT	LVT-1	RB	RB-1	GWB/VWC	PSG/FF	P-1/VWC-1	GWB	PSG	P-1	GWB/VWC	PSG/FF	P-1/VWC-1	-	-	-	UOS/ACP/PL	PSG/FF/FF	P-1/ACP-1,2/PL-2		101
102	CORRIDOR	LVT	LVT-2	RB	RB-1				GWB	PSG	P-1,5	GWB	PSG	P-1,5	GWB	PSG	P-5	GWB	PSG	P-2		102
103	STUDENT LOBBY	LVT	LVT-1	RB	RB-1	GWB/VWC	PSG/FF	VWC-1	GWB	PSG	P-1,2	GWB/TWP	PSG/FF	P-1,3,5/TWP-1	GWB/VWC	PSG/FF	P-1/VWC-1	UOS/ACP/PL	PSG/FF/FF	P-1/ACP-1,2/PL-2		103
104	OFFICE	CPT	CPT-1	RB	RB-1	GWB/TWP	PSG/FF	P-5/TWP-1	GWB	PSG	P-5	GWB	PSG	P-5	GWB	PSG	P-5	ACT	FF	ACT-1		104
105	EXAM ROOM	LVT	LVT-1	RB	RB-1	GWB	PSG	P-5	GWB	PSG	P-5	GWB	PSG	P-6	GWB	PSG	P-5	ACT	FF	ACT-1		105
106	WORKROOM / STORAGE	LVT	LVT-1	RB	RB-1	GWB	PSG	P-1	GWB	PSG	P-1	GWB	PSG	P-1	GWB	PSG	P-1	ACT	FF	ACT-1		106
107	NURSE'S STATION	LVT	LVT-1	RB	RB-1	GWB	PSG	P-1,3,5	GWB	PSG	P-1,5	GWB	PSG	P-5	GWB/T	PSG/FF	P-2/T-4	GWB/PL	PSG/FF	P-2/PL2		107
108	UNISEX RESTROOM	T	T-1	T	TB-1	T	FF	T-2,3	T	FF	T-2,3	T	FF	T-2,3	T	FF	T-2,3	GWB	PSG	P-1		108
109	EXAM ROOM	LVT	LVT-1	RB	RB-1	GWB	PSG	P-6	GWB	PSG	P-5	GWB	PSG	P-5	GWB	PSG	P-5	ACT	FF	ACT-1		109
110	OFFICE	CPT	CPT-1	RB	RB-1	GWB	PSG	P-5	GWB	PSG	P-5	GWB	PSG	P-5	GWB/TWP	PSG/FF	P-5/TWP-1	ACT	FF	ACT-1		110
111	CONFERENCE ROOM	CPT	CPT-1	RB	RB-1	GWB	PSG	P-5	GWB	PSG	P-5	GWB/AWP	PSG/FF	P-5/AWP-1	GWB	PSG	P-5	ACT	FF	ACT-1		111
112	OFFICE	CPT	CPT-1	RB	RB-1	GWB/TWP	PSG/FF	P-5/TWP-1	GWB	PSG	P-5	GWB	PSG	P-5	GWB	PSG	P-5	ACT	FF	ACT-1		112

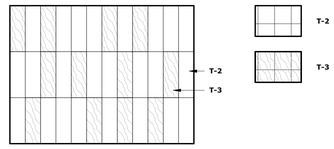
ITEM	MATERIAL	LOCATION
04 05 11 - MASONRY MORTARING AND GROUTING		
M-1	ORCO, TO MATCH CMU-1	TYPICAL
04 26 13 - MASONRY VENEER		
CMU-1	ORCO, MOTAR 'NATURAL GRAY', MEDIUM WEIGHT	TYPICAL
06 20 00 - FINISH CARPENTRY		
FC-1	CUSTOM MDF PANELS, FINISH: PL-2, ARBORITE, 'ESSENTIAL ARTISAN WALNUT' W2011 AW	SOFFITS
06 41 00 - ARCHITECTURAL WOOD CASEWORK		
PL-1	PIONITE, 'NIMBUS WHITE' SW888, HEX FINISH	HALF WALL @NURSE STATION
PL-2	ARBORITE, 'ESSENTIAL ARTISAN WALNUT' W2011 AW	TYPICAL @CASEWORK / ACCENT @RECEPTION COUNTERS/ SOFFITS
RP-1	3-FORM, VARIA, RIDGE 'SABLE', 1/2"THICK	ACCENT @NURSE STATION
07 42 13 - METAL WALL PANELS		
MWP-1	METAL SALES, STRUCTURAL STANDING SEAM, MAGNA-LOC, 22GA, 16" PANEL W/STRIATTIONS 'METALLIC SILVER'	EXTERIOR
07 42 13.23 - METAL COMPOSITE PANELS		
MCP-1	CITADEL, ENVELOPE 2000 DEEP REVEAL (DRV), 'REGAL RED'	ACCENT @ EXTERIOR
07 62 00 - SHEET METAL FLASHING AND TRIM		
SMF-#	HICKMAN, PERMASNAP & PERMASNAP PLUS COPING, FINISH TBD	TYPICAL
08 43 13 - ALUMINUM-FRAMED STOREFRONTS		
ALUM-1	ARCADIA, 'BLACK' #AB-8	TYPICAL
09 30 00 - TILING		
T-1	DALTILE, VOLUME 1.0 GLAZED PORCELAIN, 'ELECTRIC MOSS', 12"x24"	RESTROOM FLOORING
T-2	DALTILE, ASTHETIC, 'FLAT GLOSSY' AS21, 12"X24", GLOSSY FINISH	RESTROOM WALL TILE
T-3	DALTILE, ASTHETIC, 'FREQUENCY' AS22, 12x"36", SATIN FINISH	RESTROOM WALL TILE
T-4	TILEBAR, KENRIDGE, 'MAPLE RIBBON' MATTE, 24"X48"	ACCENT WALL TILE @NURSE STATION
09 30 00 - TILING (ACCESSORY)		
TB-1	SCHLUTER, DILEX-AHK #AHK-1S-80-ACG, 'POLISHED CHROME ANODIZED ALUMINUM' #ACG, 5/16"H, INTEGRATED RIGID PVC TRAPEZOID PROFILE	RESTROOM BASE
09 30 00 - TILING (GROUT)		
G-1	CUSTOM BUILDING PRODUCTS, #545 'BLEACHED WOOD'	WALL TILE @RESTROOMS
G-2	CUSTOM BUILDING PRODUCTS, #185 'NEW TAUPE'	FLOOR TILE @RESTROOMS
G-3	CUSTOM BUILDING PRODUCTS, #380 'HAYSTACK'	WALL TILE @NURSE STATION
09 51 00 - ACOUSTICAL CEILINGS		
ACT-1	ARMSTRONG, ULTIMA, SQUARE LAY-IN #1910-WH, WHITE, 24"x24"x3/4" W/ 15/16" PRELUDE SUSPENSION SYSTEM, NRC: 0.75	TYPICAL @ ENCLOSED ROOMS
09 65 00 - RESILIENT FLOORING		
LVT-1	SHAW CONTRACT, UNITE II COLLECTION, INLET II 4372V, 'SPINDLE' #72140, 9"x48", 5MM THICK, INSTALLED IN ASHLAR PATTERN	TYPICAL
LVT-2	SHAW CONTRACT, UNITE II COLLECTION, INLET II 4372V, 'VALLEY' #72103, 9"x48", 5MM THICK, INSTALLED IN ASHLAR PATTERN	ACCENT
09 65 00 - RESILIENT FLOORING (RUBBER BASE)		
RB-1	FLEXCO WALL BASE, 'NICKEL' #090 4"H, JOHNSONITE	TYPICAL
09 68 13 - TILE CARPETING		
CPT-1	SHAW CONTRACT, COLLECTIVE COLLECTION, IN TUNE TILE #ST496, 'INCLUDE COLOR' #50678, 9"x36", INSTALLED IN HERRINGBONE PATTERN	TYPICAL @OFFICES/ CONFERENCE ROOMS
09 72 00 - WALL COVERINGS		
VWC-1	KOROSEAL, DIGITAL SURFACES, CANVAS #DS0108, CUSTOM GRAPHICS TO BE PROVIDED BY ARCHITECT	PUBLIC & STUDENT LOBBY
09 84 30 - SOUND-ABSORBING WALL AND CEILING UNITS		
ACP-1	ARKUTURA, SOUNDSTAR, SOFT SOUND ESSENTIALS 'SAND' w/ FRAME POWDER COAT COLOR: 'OAT', 5'x5'-9 5/16", 12" DEPTH MODULE	ACCENT @PUBLIC/ STUDENT LOBBY
ACP-2	ARKUTURA, SOUNDSTAR, SOFT SOUND ELEMENTALS, COLOR: 'SIENNA'w/ FRAME POWDER COAT COLOR: 'TO MATCH SIENNA', 5'x5'-9 5/16", 12" DEPTH MODULE	ACCENT @PUBLIC/ STUDENT LOBBY
AWP-1	KIREI, ECHOLINE, STUCCO PANELS, ETCHED ACOUSTIC PANELS, COLOR: 'PEBBLE' #022, 46"X108"x.47" THICK	ACCENT @CONFERENCE ROOM
09 91 23 - INTERIOR PAINTING		
P-1	DUNN EDWARDS, DE6365 'COLD MORNING'	TYPICAL
P-2	DUNN EDWARDS, DE6090 'WESTERN RED'	ACCENT @SOFFIT/ GRAPHICS
P-3	DUNN EDWARDS, DET486 'WILDFLOWER HONEY'	ACCENT @AROUND EXAM ROOM DOORS/ GRAPHICS
P-4	DUNN EDWARDS, DEC676 'RIVERBED'	ACCENT @AROUND OFFICE/CONFERENCE ROOM DOORS/ GRAPHICS
P-5	DUNN EDWARDS, DE6213 'FINE GRAIN'	ACCENT
P-6	DUNN EDWARDS, DE6215 'WOODEN PEG'	ACCENT
09 96 00 - HIGH-PERFORMANCE COATINGS		
P-7	TNEMEC , CUSTOM COLOR TO MATCH P-3	INT HM DOORS/FRAMES @EXAM ROOMS
P-8	TNEMEC , CUSTOM COLOR TO MATCH P-5	INT HM DOORS/FRAMES @OFFICES/CONFERENCE ROOM
P-9	TNEMEC , CUSTOM COLOR TO MATCH P-1	INT HM DOOR/FRAME @WORKROOM/STORAGE

ITEM	MATERIAL	LOCATION
10 11 00 - VISUAL DISPLAY UNITS		
TWP-1	CARNEGIE, XOREL, METEOR, #6427 W767	TYPICAL
10 14 23 - SIGNAGE		
SIGN-1	CUSTOM COLOR TO MATCH P-1	TYPICAL @ GRAPHICS/ SYMBOLS
SIGN-2	CUSTOM COLOR TO MATCH P-6	TYPICAL @ BACKGROUND
10 26 00 - WALL AND DOOR PROTECTION		
CG-1	KOROSEAL, KOROGUARD CORNER GUARD #GS10, STAINLESS STEEL TYPE 304 W/ #4 SATIN FINISH, ADHESIVE MOUNTED (NO TAPE OR SCREWS), 1" LEG	WHERE NOTED IN PLANS
12 24 00 - WINDOW SHADES		
RS-1	DRAPER, INFINITY 2, #IN2-QG1 'BARLEY', 5% OPENNESS, MOTORIZED	TYPICAL
12 36 00 - COUNTERTOPS		
SSM-1	CORIAN SOLID SURFACE, 'WITCH HAZEL'	TYPICAL/ RECEPTION COUNTERS
32 13 13 - SITE CONCRETE		
CONC-1	NATURAL CONCRETE TO MATCH EXISTING	HARDSCAPE
32 31 19 - DECORATIVE METAL FENCES AND GATES		
OSF-1	AMERISTAR MONTAGE II MAGESTIC, 'BLACK' TO MATCH EXISTING	EXTERIOR

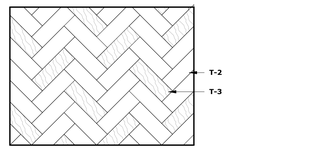
COLORS, MATERIALS & FINISHES LEGEND



FINISH FLOOR PLAN | SCALE: 1/8" = 1'-0" | 1



TYPICAL RESTROOM WALL TILE PATTERN



ACCENT RESTROOM WAL TILE PATTERN @ SINK

NOTE:
REFER TO COLORS, MATERIALS AND FINISHES LEGEND FOR ADDITIONAL INFORMATION

RESTROOM WALL TILE PATTERNS

FINISH NOTES

1. ALL FINISHES SHALL COMPLY WITH CBC CHAPTERS 3, 8, & 10, CFC AND CCR TITLE 19 AND STATE OF CALIFORNIA TECHNICAL BULLETIN 117-2013.
2. WALL AND CEILING MATERIALS SHALL NOT EXCEED THE FLAME SPREAD CLASSIFICATIONS IN CBC TABLE 803.13.
3. ALL ADJACENT DISSIMILAR FINISH MATERIALS TO RECEIVE SEALANT PER MFR INSTRUCTIONS, U.N.O.
4. SEE INTERIOR ELEVATION SHEETS FOR ACCENT PAINT LOCATIONS.
5. ALL EXPOSED STEEL, LOUVERS, ACCESS PANELS AND WALL GRILLES TO BE PAINTED TO MATCH ADJACENT SURFACE, U.N.O.
6. TOILET ROOM, TOILET ROOM VESTIBULES, AND FOOD SERVICE AREA WALLS AND CEILINGS NOT COVERED BY EITHER TILE OR F.R.P. TO HAVE MOISTURE RESISTANT GYPSUM BOARD, U.N.O.
7. COORDINATE FINISHES WITH MECHANICAL FOR PLUMBING FIXTURES.
8. FOR EXTENT AND PATTERN OF CEILING FINISH, SEE REFLECTED CEILING PLAN. REFER TO RCP GENERAL NOTE #4 FOR FINISH AT U.O.S.
9. AT COVE BASE, PROVIDE CONTINUOUS 3/8" RADIUS
10. FOR TYPICAL CERAMIC TILE DETAILS, REFER TO DETAIL
11. SEE **SHEET AD-6.0** FOR ALL TRANSITION DETAILS IF IT IS NOT A FLUSH TRANSITION BETWEEN ANY TWO FLOOR FINISHES.
12. ALL WALL BASE SHOULD BE INSTALLED USING WHOLE UNITS. NO PIECE SHALL BE SMALLER THAN 1'-0". PREFORMED CORNERS STANDARDIZED.
13. FOR MORE INFORMATION ON COLORS, MATERIALS, & FINISHES, REFER TO **SHEET ID-1.0**
14. ALL FLOOR FINISHES SHALL BE STABLE, FIRM, & SLIP RESISTANT PER CBC SECTION 11B-302.1.
15. CARPET / CARPET TILE FLOORING, INCLUDING EXPOSED EDGES, SHALL BE SECURELY ATTACHED / FASTENED TO FLOOR SURFACES WITH TRIM ON ENTIRE LENGTH, FIRM BACKING AND PILE HEIGHT OF 1/2" MAX. PER CBC SECTION 11B-302.2. CARPET EDGES SHALL COMPLY WITH CBC SECTION 11B-303.
16. ALL FLOOR FINISHES SHALL EXTEND BELOW ACCESSIBLE WORKSTATIONS, SINKS, ETC. FOR THE REQUIRED TOE/KNEE CLEARANCE.
17. REFER TO CORRESPONDING SPECIFICATIONS FOR BURNING CHARACTERISTICS AND TESTING REQ.

FINISH ABBREVIATIONS

ACP	ACOUSTICAL CEILING PANEL (SUSPENDED)
ACT	ACOUSTICAL CEILING TILE
AWP	ACOUSTIC WALL PANEL
CG	CORNER GUARD
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CPL	CEMENT PLASTER
CPT	CARPET
ECO	ECORESIN PANEL
EPOXY	EPOXY FLOOR
EPT	EPOXY TERRAZZO
EXP	EXPOSED
FF	FACTORY FINISH
FRP	FIBERGLASS REINFORCED PANEL
G	GROUT
GPL	GYPSUM PLASTER
GWB	GYPSUM WALLBOARD
GWWB	WATER RESISTANT GWB
LVT	LUXURY VINYL TILE
MESH	METAL MESH SYSTEM
MPS	METAL PANEL SYSTEM
OP	OPERABLE PARTITION
PCPL	PORTLAND CEMENT PLASTER OVER METAL LATH, SAND FINISH
PES	PAINT - EGGSHELL
PL	PLASTIC LAMINATE
PLAS	PLASTER
PF	PAINT, FLAT
PSG	PAINT, SEMI-GLOSS
RB	RUBBER BASE
RES	RESINOUS/EPOXY FLOORING
RF	RUBBER FLOORING
RS	ROLLER SHADE SYSTEM
S	SEAL
SAF	SYNTHETIC ATHLETIC FLOORING
SCW	SOLID CORE WOOD
SEAL	SEALED
SSM	SOLID SURFACE MATERIAL
ST	STAIN WOOD COLOR
STV	STONE TILE VENEER
SV	SHEET VINYL
T	TILE
TWP	TACKABLE WALL PANEL
U.O.S.	UNDERSIDE OF STRUCTURE
VCT	VINYL COMPOSITION TILE
VF	VINYL FABRIC
VWC	VINYL WALL COVERING
WACP	WASHABLE ACOUSTICAL CEILING PANEL (SUSPENDED)
WAF	WOOD ATHLETE FLOORING
WD	WOOD
WDM	WOOD MASIVE FLOORING
WP	WALL PADDING
WS	WALL SYSTEM

FLOOR FINISH LEGEND

RESILIENT FLOORING

LVT-1

LVT-2

VCT-1

CARPET TILE

CPT-1

TILE FLOORING

T-1

CORNER GUARDS

CG — CORNER GUARD (CG-1), PER SPEC SECTION 10 26 00 & DETAIL 10/AD-1.1

NOTE:
REFER TO COLORS, MATERIALS AND FINISHES LEGEND FOR ADDITIONAL INFORMATION

STAMPS

LICENSED ARCHITECT — JEFFREY C. CLARKE — Exp. 10-31-25 — STATE OF CALIFORNIA

AGENCY APPROVAL
File No.: 36-H7 A\#04-123900

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APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:22:45 AM

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DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
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3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

FINISHES PLAN / SCHED & CMF LEGEND

ID-1.0

1-78-50

MOUNTING HEIGHTS

DIMENSIONS	ADULTS	PRE-KINDER AGES 3-4	KINDER AGES 5-8	ELEMENTARY AGES 9-12
TOILET OFFSET (CENTERLINE FROM WALL)	17"-18" (USE 17 1/2")	12"	12"-15"	15"-18"
TOILET SEAT HEIGHT (TO TOP OF SEAT)	17"-19"	11"-12"	12"-15"	15"-17"
TOP OF GRAB BAR GRIPPING SURFACE	33"-36"	18"-20"	20"-25"	25"-27"
T.P. DISPENSER OUTLET (CENTERLINE HEIGHT)	19" MIN.	14"	14"-17"	17"-19"
T.P DISPENSER IN FRONT OF W.C. (CENTERLINE)	7"-9"	7"-9"	7"-9"	7"-9"
LAVATORY/SINK RIM HEIGHT	34" MAX.	31" MAX.	31" MAX.	31" MAX.
LAVATORY/SINK KNEE CLEARANCE	27" MIN. (29"MIN FOR APRON AT LAVATORY)	PARALLEL APPROACH PERMITTED	AGES 6-8: 24" MIN. AGE 5: PARALLEL APPROACH PERMITTED	24" MIN.
URINAL HEIGHT	17" MAX.	17" MAX.	17" MAX.	17" MAX.
URINAL PROJECTION	13 1/2" MAX.	13 1/2" MAX.	13 1/2" MAX.	13 1/2" MAX.
URINAL FLUSH CONTROL HEIGHT	44" MAX.	44" MAX.	44" MAX.	44" MAX.
HIGH DRINKING FOUNTAIN SPOUT HEIGHT	38"-43"	38"-43"	38"-43"	38"-43"
LOW DRINKING FOUNTAIN APPROACH, SPOUT HEIGHT, AND SPOUT LOCATION FROM FRONT EDGE OF THE UNIT INCLUDING BUMPERS	FRONT APPROACH PER, 11B-306, 36"MAX A.F.F. & 5" MAX FROM FRONT EDGE OF UNIT.	PARALLEL APPROACH PERMITTED IF SPOUT IS 30" MAX.A.F.F & 3-1/2" MAX FROM FRONT EDGE OF UNIT	PARALLEL APPROACH PERMITTED IF SPOUT IS 30" MAX.A.F.F & 3-1/2" MAX FROM FRONT EDGE OF UNIT	PARALLEL APPROACH PERMITTED IF SPOUT IS 30" MAX.A.F.F & 3-1/2" MAX FROM FRONT EDGE OF UNIT
DRINKING FOUNTAIN OPERABLE PARTS	5" MAX. FROM FRONT EDGE OF THE UNIT	6" MAX. FROM FRONT EDGE OF THE UNIT	6" MAX. FROM FRONT EDGE OF THE UNIT	6" MAX. FROM FRONT EDGE OF THE UNIT
CANTILEVER DRINKING FOUNTAIN PROJECTION	18"-19"	18"-19"	18"-19"	18"-19"
TOE CLEARANCE AT TOILET PARTITION	9" MIN.	12" MIN.	12" MIN.	12" MIN.
SHELF HEIGHT	40"-48"	40"-48"	40"-48"	40"-48"
MIRROR HEIGHT(BOTTOM EDGE OF REFLECTING SURFACE)	40" MAX (ABOVE LAV. OR COUNTERTOP) 35" MAX. (NOT ABOVE LAV. OR COUNTERTOP)	40" MAX (ABOVE LAV. OR COUNTERTOP) 35" MAX. (NOT ABOVE LAV. OR COUNTERTOP)	40" MAX (ABOVE LAV. OR COUNTERTOP) 35" MAX. (NOT ABOVE LAV. OR COUNTERTOP)	40" MAX (ABOVE LAV.OR COUNTERTOP) 35" MAX. (NOT ABOVE LAV. OR COUNTERTOP)
MIRROR HEIGHT (BOTTOM EDGE OF REFLECTING SURFACE) IN DRESSING, FITTING & LOCKER ROOMS	20" MAX.	20" MAX.	20" MAX.	20" MAX.
RESTROOM DISPENSER & OTHER ACCESSORIES (HEIGHT OF ALL OPERABLE PARTS)	40" MAX.	40" MAX.	40" MAX.	40" MAX.

NOTE:
1. ALL HEIGHT DIMENSIONS ARE A.F.F.(OR A.F.G. FOR EXTERIOR). ALL HORIZONTAL DIMENSIONS ARE TO FACE FINISH.
2. CONTRACTOR TO PROVIDE MOUNTING HEIGHTS INDICATED, VERIFY INTENDED USE OF EACH RESTROOM PRIOR TO ROUGH IN. PROVIDE BACKING PER STRUCTURAL DRAWING AS REQUIRED. THE PROJECTION FROM A SURFACE OR SEMI-RECESSED FIXTURE FROM THE FACE OF THE WALL OR PARTITION SHALL BE LIMITED TO 3" AND NO CLOSER THAN 1-1/2" TO THE TANGENT POINT OF GRAB BAR.

ACCESSORIES & EQUIP. KEYNOTES

ACCESSORIES

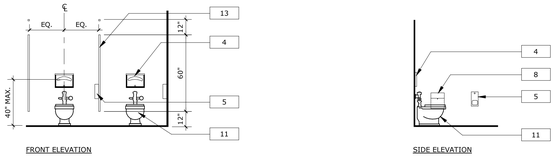
1. 18"WX30"H TEMPERED GLASS MIRROR
2. RECESSED PAPER TOWEL DISPENSER
3. RECESSED ELECTRIC HAND DRYER
4. SURFACE MOUNTED TOILET SEAT COVER DISPENSER
5. SURFACE MOUNTED TOILET TISSUE DISPENSER. 3" MAX PROJECTION.
6. SURFACE MOUNTED LIQUID SOAP DISPENSER INSTALLED AT +40" A.F.F (OVER OBSTRUCTION)
7. GRAB BARS (SIDE=48"L x 1-1/2" DIA, REAR=36"L x 1-1/2" DIA.) — 20 / AD-1.0
8. SURFACE MOUNTED FEMININE NAPKIN DISPOSAL (WOMENS ONLY). 3" MAX PROJECTION.
9. MIRROR

EQUIPMENT

10. ACCESSIBLE LAVATORY
11. NON-ACCESSIBLE WATER CLOSET.
12. NON-ACCESSIBLE URINAL.
13. TOILET PARTITION.
14. URINAL SCREEN.
15. ACCESSIBLE WATER CLOSET.
16. ACCESSIBLE URINAL.

MECHANICAL/PLUMBING

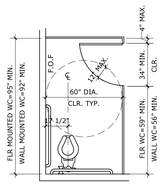
17. INSULATE DRAIN AND SUPPLY PIPING TO PREVENT CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER THE LAVATORY, PER CBC 2022 SEC. 11B-606.5



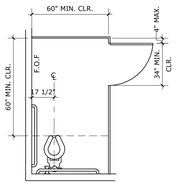
FRONT ELEVATION

SIDE ELEVATION

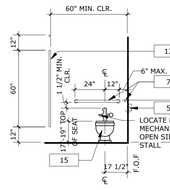
NON-ACCESSIBLE TOILET ROOM STALL



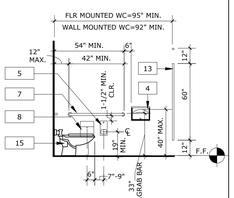
PLAN VIEW
SIDE ENTRY
IN-SWING DOOR



PLAN VIEW
SIDE ENTRY
OUT-SWING DOOR

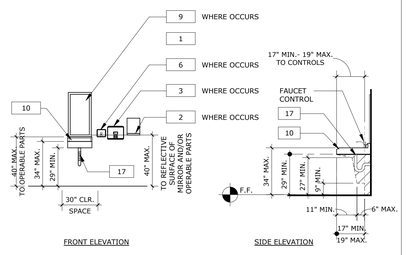


FRONT ELEVATION

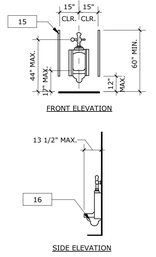


SIDE ELEVATION

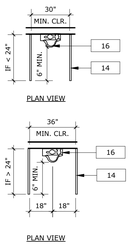
ACCESSIBLE TOILET ROOM STALL



FRONT ELEVATION | SIDE ELEVATION



FRONT ELEVATION | SIDE ELEVATION



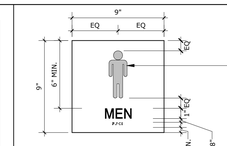
PLAN VIEW | PLAN VIEW

ACCESSIBLE TOILET ROOM FIXTURES & ACCESSORIES

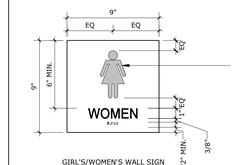
ACCESSIBLE URINAL

TOILET ROOM FIXTURE & ACCESSORIES CLEARANCES

SCALE: 1/4" = 1'-0" | 24



BOY'S/MEN'S WALL SIGN



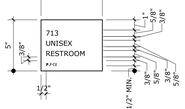
GIRL'S/WOMEN'S WALL SIGN

NOTES:
1. ALL TEXT/GRAPHICS TO BE WHITE ON CONTRASTING BACKGROUND, TYP.
2. ALL VERTICIES TO BE 1/8" RADIUS MIN. -1/4" RADIUS
3. ALL SYMBOL EDGES TO BE EASED 1/16" RADIUS MIN OR CHAMFERED 1/8" MAX. PER 2022 CBC 11B-703.7.2.6.4

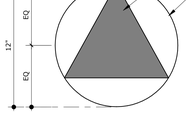
1/4" THK. PANEL, COLOR TO CONTRAST FROM BACKGROUNG COLOR PER 2022 CBC SEC. 11B-703.7.2.6

(E) RESTROOM WALL SIGNS

SCALE: 2" = 1'-0" | 16



UNISEX WALL SIGN
(USE FOR ALL SINGLE-USER RESTROOMS)



TITLE 24 UNISEX DOOR SIGN
(USE FOR ALL SINGLE-USER RESTROOMS)

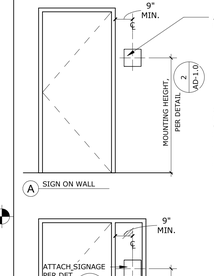
1/4" THK. TRIANGLE SYMBOL, COLOR TO CONTRAST FROM DOOR AND TRIANGLE COLOR PER 2022 CBC SEC. 11B-703.7.2.6

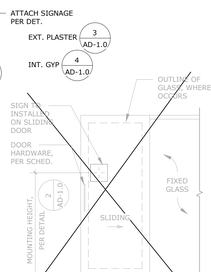
1/4" THK. CIRCLE SYMBOL, COLOR TO CONTRAST FROM DOOR AND TRIANGLE COLOR PER 2022 CBC SEC. 11B-703.7.2.6

NOTES:
1. ALL TEXT/GRAPHICS TO BE WHITE ON CONTRASTING BACKGROUND, TYP.
2. BACKGROUND COLOR T.B.D. BY ARCHITECT, TYP.
3. ALL VERTICIES TO BE 1/8" RADIUS MIN. -1/4" RADIUS
4. ALL SYMBOL EDGES TO BE EASED 1/16" RADIUS MIN OR CHAMFERED 1/8" MAX. PER 2022 CBC 11B-703.7.2.6.4
5. FOR MORE INFORMATION ON SIGN PLACEMENT AND MOUNTING HEIGHT, REFER TO DETAIL — 14 / AD-1.0

UNISEX RESTROOM SIGNS

SCALE: 2" = 1'-0" | 12

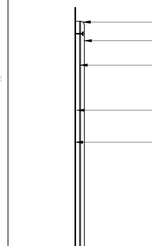




NOTES:
1. SIGNS TO BE LOCATED ADJACENT TO LATCH SIDE OF DOOR.
2. WHERE NO SPACE ON LATCH SIDE IS AVAILABLE, SIGNS TO BE LOCATED @ NEAREST ADJACENT WALL.
3. SIGNS TO BE LOCATED ON APPROACH SIDE OF DOOR AS ONE ENTERS ROOM OR SPACE.
4. SIGNS THAT IDENTITY EXITS ARE TO BE LOCATED ON APPROACH SIDE OF DOOR AS ONE EXITS ROOM OR SPACE.
5. FOR MOUNTING HEIGHTS, REFER TO DETAIL — 2 / AD-1.0
6. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT OBSTRUCTION ,OR STANDING WITHIN THE SWING OF THE DOOR.
7. DOOR SIGN SIZE: FOR MORE INFORMATION ON SIZES OF EXTERIOR, INTERIOR, AND TOILET ROOM DOOR SIGNS, REFER TO DETAILS ON SHEET **AD-1.0** AND SPECIFICATION SECTION 10 14 23

DOOR SIGN LOCATIONS

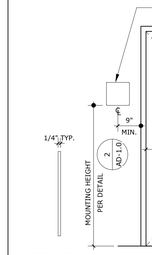
SCALE: 3/8" = 1'-0" | 19



NOTES:
1. ATTACH SIGNS USING (3) THREE FLATHEAD COUNTERSUNK SCREWS TO SOLID BACKING AND ADHESIVE TO BACK.
2. MOUNTING HEIGHT PER DETAIL — 14 / AD-1.0
3. SIGNS ARE TO DISTINCTLY DIFFERENT FROM THE WALL IN COLOR AND CONTRAST.

RESTROOM SIGN ATTACHMENT

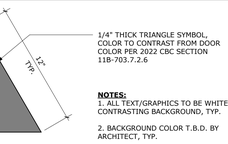
SCALE: 6" = 1'-0" | 13



NOTES:
1.FOR SIGNAGE REQUIREMENTS, REFER TO DETAIL — 2 / AD-1.0
2. FOR MORE INFO., REFER TO SPEC. SECTION 10 14 23

TOILET SIGNS LOCATIONS

SCALE: 1/2" = 1'-0" | 14



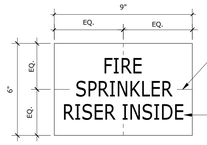
NOTES:
1. PROVIDE ONE SIGN WHERE INDICATED PER DOOR SCHEDULE, LOCATE SIGN MAX. 9" MIN. O.C. AWAY FROM DOOR STRIKE SIDE.
2. WHEN MOUNTED ON GLASS, PROVIDE BACK PANEL TO MATCH
3. FOR WALL SIGN PLACEMENT, SEE DETAIL — 19 / AD-1.0
4. FOR MORE INFO. ON COLOR, SEE **SHEET ID-1.0**

INTERNATIONAL SYMBOL OF ACCESSIBILITY, BACKGROUND COLOR WITHIN THE SYMBOL BORDER SHALL APPROXIMATE BLUE FS 15090 PER FEDERAL STANDARD 595C. SYMBOL/BORDER COLOR SHALL BE WHITE. REFER TO SIGNAGE PLANS FOR LOCATIONS.

ROOM NUMBER/NAME TEXT, RAISED 1/32" WHITE HELVETICA STYLE (ALL CAPS) ON CONTRASTING BACKGROUND COLOR T.B.D. BY ARCHITECT

ROOM SIGN

SCALE: 1 1/2" = 1'-0" | 6



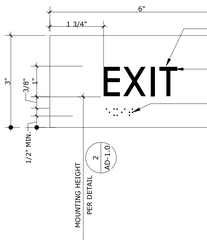
CL OF DOOR SIGN

1" HIGH LETTERS, PORCELAIN OR BAKED ON ENAMEL ON STEEL OR 0.050 GA. T-3 ALUM

NOTES:
1. LETTERS TO BE WHITE ON CONTRASTING RED (No. 31350 PER SAE AMS-STD-595A) COLOR BACKGROUND
2. MOUNTING HEIGHT PER DETAIL — 2 / AD-1.0

FIRE RISER DOOR SIGN

SCALE: 3" = 1'-0" | 7

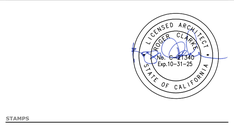


RAISED 1/32" HELVETICA STYLE, ALL CAPS
WHITE BACKGROUND
RED , TYP.
1/8" THICK SIGN
GRADE 2 BRAILLE OF MESSAGE ABOVE SEE BRAILLE SPECS PER DETAIL — 25 / AD-1.0

NOTE:
1. PLACE AT ALL FIRE EXIT DOORS .LOCATE SIGN TO WITHIN 9" MIN. O.C. OF DOOR LATCH. ATTACH WITH PERMANENT ADHESIVE LOCATED AT INTERIOR
2. FOR SIGNAGE REQUIREMENTS, SEE DETAIL — 2 / AD-1.0
3. FOR LOCATION REQUIREMENTS, SEE DETAIL — 19 / AD-1.0

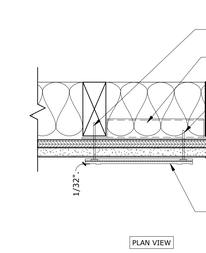
EXIT SIGN

SCALE: 6" = 1'-0" | 8



SIGN ATTACH @ PLASTER WALL

SCALE: 3" = 1'-0" | 3



NOTES:
1. 1-1/2" HIGH LETTERS PORCELAIN OR BAKED ON ENAMEL ON STEEL OR 0.050 GA. T-3 ALUM. NO VINYL OR STICK ON LETTERING, TYP. INFORMATION SHALL BE A PERMANENT PART OF SIGN FABRICATION.
2. LETTERS TO BE WHITE ON CONTRASTING BACKROUND, COLOR T.B.D BY ARCHITECT
3. USE TAMPER PROOF SCREWS FOR ATTACHMENT, TYP.
4. FOR MOUNTING HEIGHT, SEE DETAIL — 19 / AD-1.0

MAXIMUM OCCUPANCY SIGN

SCALE: 3" = 1'-0" | 9



SIGN ATTACHMENT @ INTERIOR

SCALE: 3" = 1'-0" | 4

CHARACTER TYPE: WHERE INDICATED, CHARACTERS ON SIGNS SHALL BE RAISED 1/32" MINIMUM AND SHALL BE SAN SERIF UPPERCASE CHARACTERS ACCOMPANIED BY CONTRACTED GRADE 2 BRAILLE.

CHARACTER SIZE: RAISED CHARACTERS SHALL BE A MINIMUM OF 5/8" AND A MAXIMUM OF 2" HIGH.

FINISH AND CONTRAST: CONTRAST BETWEEN CHARACTERS, SYMBOLS, AND THEIR BACKGROUNDS MUST BE 70% MINIMUM AND HAVE A NON-GLARE FINISH

PROPORTIONS: VISUAL CHARACTERS ON SIGNS 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" . STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10 PERCENT MINIMUM AND 20 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.

BRAILLE: BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH SECTIONS 11B-703.3 AND 11B-703.4. BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH TABLE 11B-703.3.1. THE INDICATION OF AN UPPERCASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS. SEE DETAIL — 25 / AD-1.0

MOUNTING HEIGHT: SIGNS WITH RAISED CHARACTERS AND BRAILLE SHALL BE LOCATED 48" MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE ,MEASURED FROM THE BASELINE OF THE LOWEST BRAILLE CELL AND 60" MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE ,MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS.

LINE SPACING: SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE RAISED CHARACTER HEIGHT, PER SECTION 11B-703.2.8 & 11B-703.5.9

SIGNAGE REQUIREMENT

SCALE: 1" = 1'-0" | 2



1/8" THICK WHITE SIGN
RAISED 1/32" HELVETICA STYLE (ALL CAPS AND RED) TYP.
RAISED 1/32" RED ARROW
GRADE 2 BRAILLE OF MESSAGE ABOVE SEE BRAILLE SPECS PER DETAIL — 25 / AD-1.0

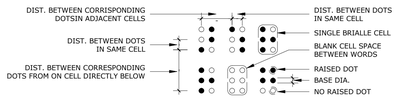
NOTE:
1. PLACE AT ALL FIRE EXIT DOORS .LOCATE SIGN TO WITHIN 9" MIN. O.C. OF DOOR LATCH. ATTACH WITH PERMANENT ADHESIVE LOCATED AT INTERIOR
2. FOR SIGNAGE REQUIREMENTS, SEE DETAIL — 2 / AD-1.0
3. FOR LOCATION REQUIREMENTS, SEE DETAIL — 19 / AD-1.0

DIRECTIONAL EXIT ROUTE SIGN

SCALE: 6" = 1'-0" | 30

TABLE PER CBC 11B-703.3.1 - BRAILLE DIMENSIONS

MEASURMENT RANGE	MIN. TO MAX IN INCHES
DOT BASE DIA.	.059 - .063
DISTANCE BETWEEN DOTS	.100
DISTANCE BETWEEN DOTS IN COORESPONDING CELLS	.300
DOT HEIGHT	.025 - .037
DISTANCE BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW	.395 - .400
1. MEASURED CENTER TO CENTER	

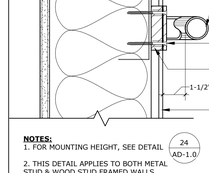


BRAILLE TEMPLATE

POSITION PER 11B-703.3.2 - BRAILLE 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 INCH (9.5 MM) MINIMUM AND 1/2 INCH (12.7 MM) MAXIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8 INCH (9.5 MM) MINIMUM FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

BRAILLE REQUIREMENTS

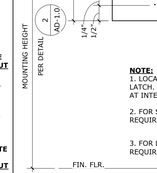
SCALE: 1" = 1'-0" | 25



NOTES:
1. FOR MOUNTING HEIGHT, SEE DETAIL — 24 / AD-1.0
2. THIS DETAIL APPLIES TO BOTH METAL STUD & WOOD STUD FRAMED WALLS

GRAB BAR @ STUD WALL

SCALE: 3" = 1'-0" | 20



1/8" THICK WHITE SIGN
RAISED 1/32" HELVETICA STYLE (ALL CAPS AND RED) TYP.
GRADE 2 BRAILLE OF MESSAGE ABOVE SEE BRAILLE SPECS PER DETAIL — 25 / AD-1.0

NOTE:
1. LOCATE SIGN TO WITHIN 9" MIN. O.C. OF DOOR LATCH. ATTACH WITH PERMANENT ADHESIVE LOCATED AT INTERIOR
2. FOR SIGNAGE REQUIREMENTS, SEE DETAIL — 2 / AD-1.0
3. FOR LOCATION REQUIREMENTS, SEE DETAIL — 19 / AD-1.0

NOT AN EXIT SIGN

SCALE: 6" = 1'-0" | 15



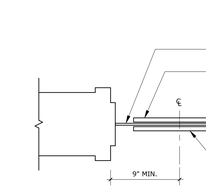
PROPORTIONS SHALL MATCH CBC 11B-703.7.2.4

5/8" MIN. HIGH LETTERS PORCELAIN OR BAKED ON ENAMEL ON STEEL OR 0.050 GA. T-3 ALUM. PER TABLE 11B-703.5.5

NOTE:
1. LETTERS TO BE WHITE ON CONTRASTING BACKGROUND
2. FOR MOUNTING HEIGHT, SEE DETAIL — 2 / AD-1.0
3. FOR MORE INFO. ON ASSITIVE LISTENING SYSTEM, SEE ELECT. DETAIL — 6 / ED-1.1

ASSISTIVE LISTENING SIGN

SCALE: 3" = 1'-0" | 10



SIGN ATTACHMENT @ GLASS

SCALE: 1 1/2" = 1'-0" | 5

PROJECT No. :1-78-50
3/14/2025 10:21:00 AM

DRAWN BY:.VR, SK, AT
CHECKED BY:. JC

DELTA # _____ DATE _____ ☐ADD ☐AFO ☐CCD ☐REV
DELTA # _____ DATE _____ ☐ADD ☐AFO ☐CCD ☐REV
DELTA # _____ DATE _____ ☐ADD ☐AFO ☐CCD ☐REV
DELTA # _____ DATE _____ ☐ADD ☐AFO ☐CCD ☐REV

RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

ACCESSIBILITY AND SIGNAGE DETAILS

AD-1.0

1-78-50

AGENCY APPROVAL
File No.: 36-147 ☐FDA 04-123900

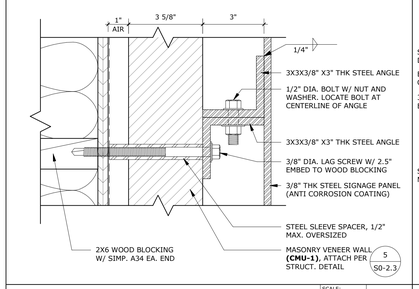
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

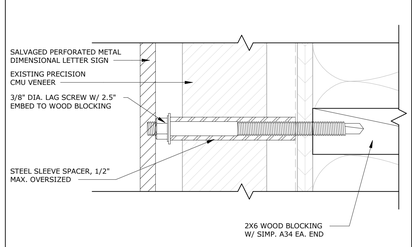
CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

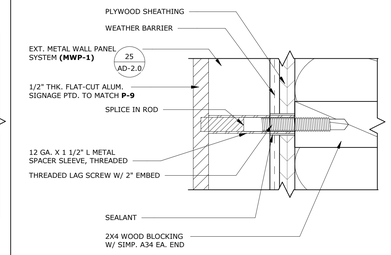
INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:



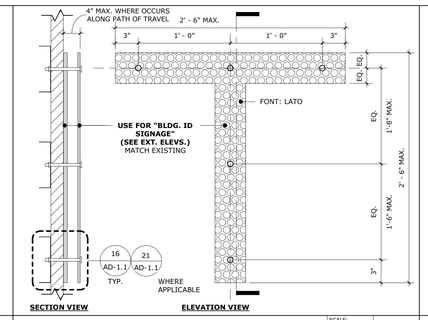
SIGN ATTACHMENT AT CMU-1 WALL | SCALE: 1 : 3 | 26



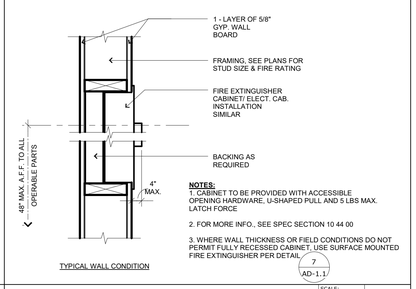
(E) BUILDING ID SIGN ATTACH | SCALE: 6" = 1'-0" | 21



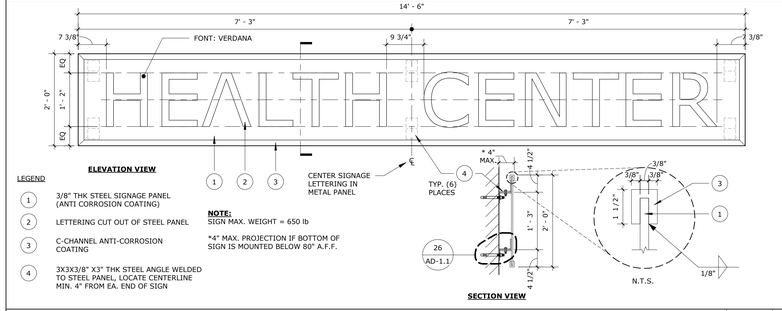
BUILDING ID SIGN ATTACH | SCALE: 6" = 1'-0" | 16



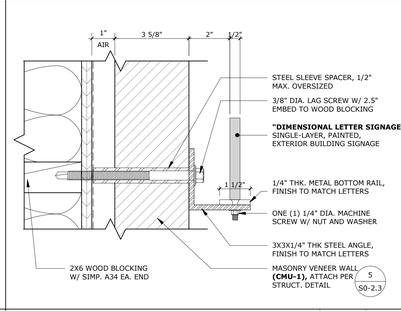
BUILDING ID SIGNAGE | SCALE: 1 1/2" = 1'-0" | 11



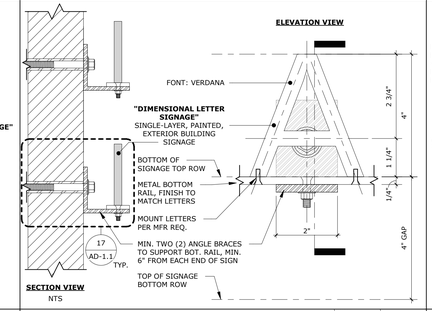
RECESSED FIRE CABINET | SCALE: 1 1/2" = 1'-0" | 6



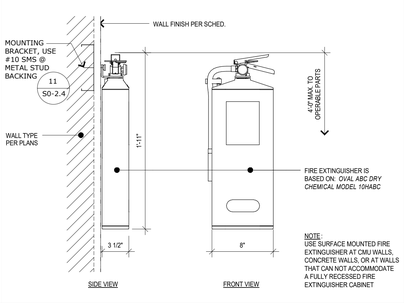
CUSTOM DECORATIVE BUILDING SIGNAGE | SCALE: 3/4" = 1'-0" | 22



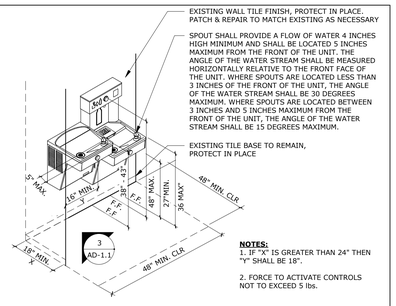
DECORATIVE SIGN ATTACH. | SCALE: 1 : 3 | 17



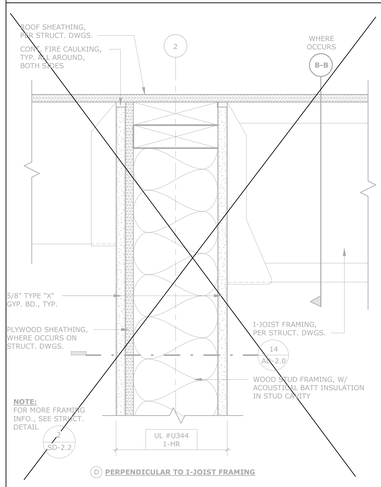
DIMENSIONAL LETTER SIGNAGE | SCALE: 6" = 1'-0" | 12

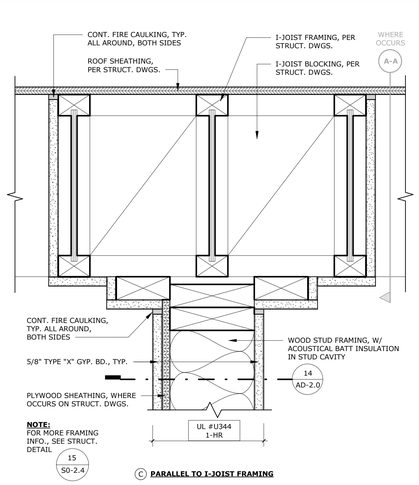


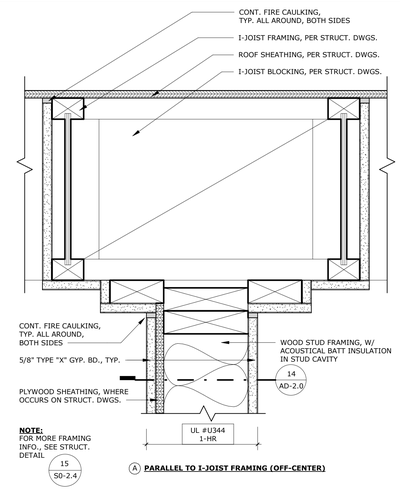
SURF. MOUNTED FIRE EXTING. | SCALE: 1 1/2" = 1'-0" | 7

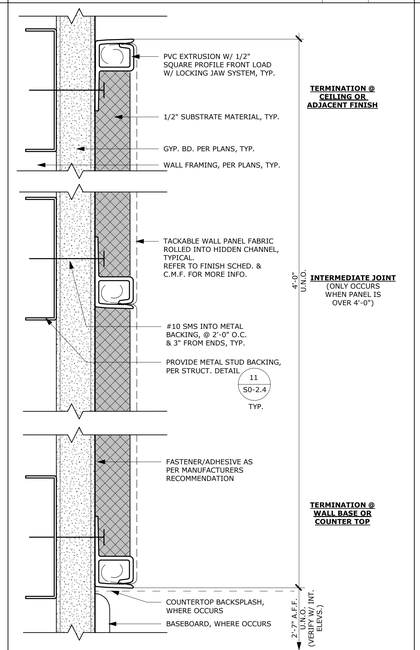


ACCESSIBLE D.F. @ ALCOVE | SCALE: 1/2" = 1'-0" | 2

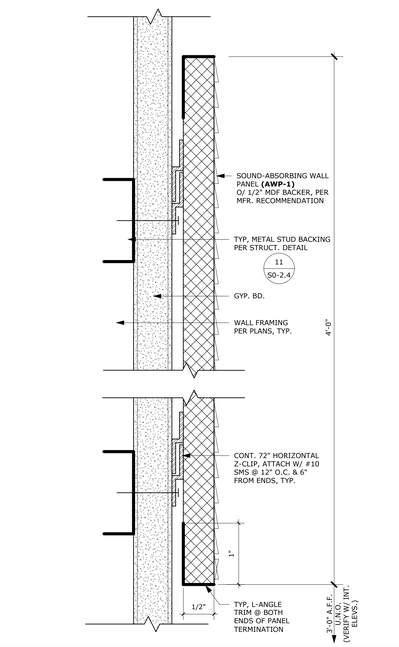




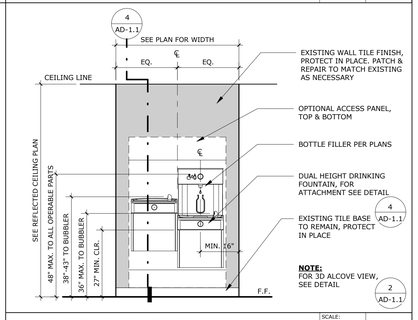




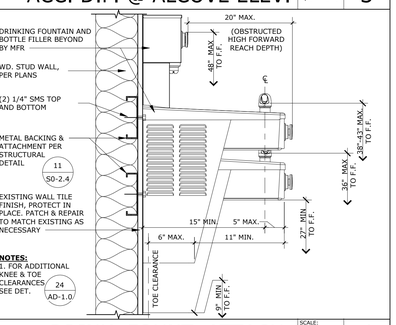
TYP. TACKABLE WALL PANEL | SCALE: 12" = 1'-0" | 14



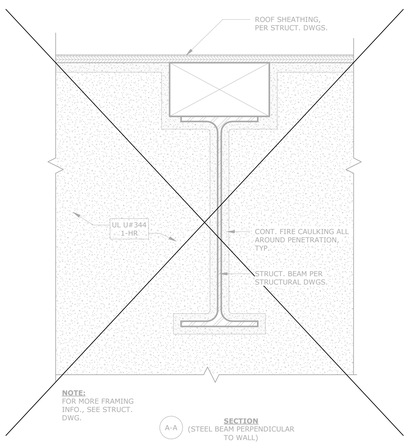
SOUND-ABSORB. W.P. ATTACH. | SCALE: 12" = 1'-0" | 9

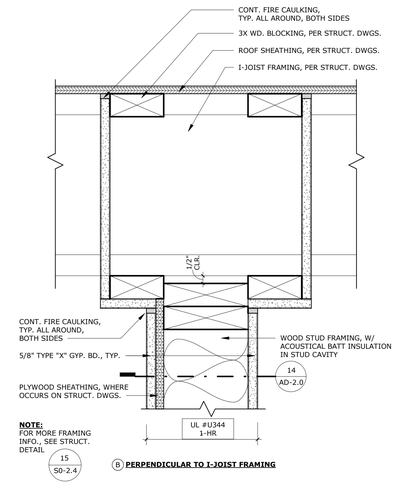


ACC. D.F. @ ALCOVE ELEV. | SCALE: 1/2" = 1'-0" | 3

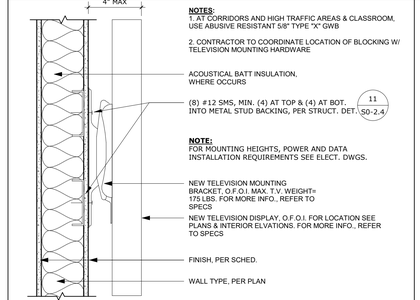


DRINK. FOUNT. ATTACH. | SCALE: 1 1/2" = 1'-0" | 4

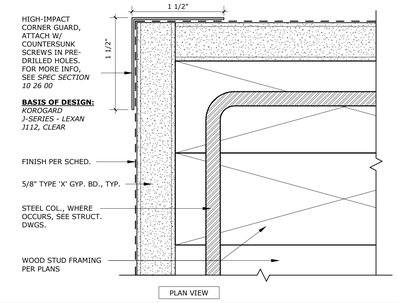




FIRE RATED TOP OF WALL | SCALE: 3" = 1'-0" | 20



TELEVISION ATTACHMENT DET. | SCALE: 1 1/2" = 1'-0" | 15



CORNER GUARD | SCALE: 12" = 1'-0" | 10

NOT USED

PROJECT No. :1-78-50
3/14/2025 10:21:03 AM

DRAWN BY:VR, SK, AT CHECKED BY: JC

DELTA #	DATE	ADD	AFO	CCD	REV
DELTA #	DATE	ADD	AFO	CCD	REV
DELTA #	DATE	ADD	AFO	CCD	REV
DELTA #	DATE	ADD	AFO	CCD	REV

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3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

ACCESSIBILITY, SIGNAGE & MISC.

AD-1.1

1-78-50

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

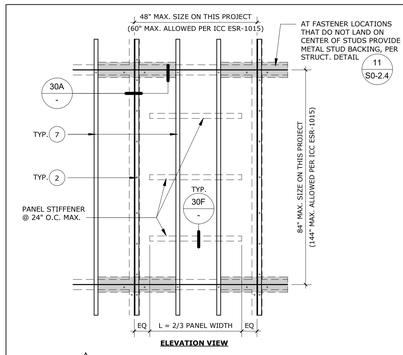
AGENCY APPROVAL
File No.: 36-167 A\D04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

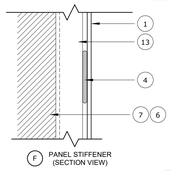
STAMPS

CONSULTANT BRANDING

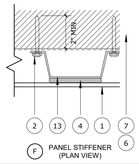
RUHNAU CLARKE ARCHITECTS



ELEVATION VIEW



F PANEL STIFFENER (SECTION VIEW)

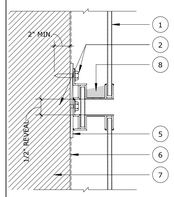


F PANEL STIFFENER (PLAN VIEW)

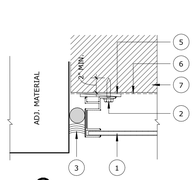
KEYNOTES LEGEND

1. METAL COMPOSITE PANEL **(MCP-1)**
2. **@ WD. STUD**: #12 LOW PROFILE S.S. WD. SCREWS @ 16" O.C., 4" FROM ENDS (W/ 2" MIN. PENETRATION INTO STUD FRAMING) **@ METAL BACKING**: #10 S.M.S @ 16" O.C., 4" FROM ENDS
3. SEALANT, WITH BACKER ROD
4. ADHESIVE
5. WOOD SHIM AS NEEDED
6. WEATHER BARRIER
7. 2x WOOD STUD FRAMING @ 16" O.C. (SEE PLANS) **OR** METAL STUD BACKING AS REQUIRED PER ELEVATION
8. WEEP BAFFLE
9. CONT. METAL FLASHING, FINISH TO MATCH ADJACENT WALL PANELS
10. ALUM. ATTACHMENT EXTRUSION, PER MFR.
11. CONCRETE CURB
12. (1) 3/16" DIA. TAPCON SCREW W/ 1-1/2" MIN. EMBED CENTERED ON BASE FLASHING FLANGE @ 2'-0" O.C. AND 6" MAX. FROM ENDS PER ICC ESR-2202
13. CONT. METAL HAT CHANNEL TOBE USED AS PANEL STIFFENERS

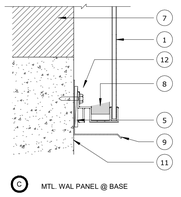
NOTE: FOR MORE INFO. ON METAL COMPOSITE PANEL **(MCP-1)** SEE SPEC SECTION 07 42 13.23 & ICC ESR-1015



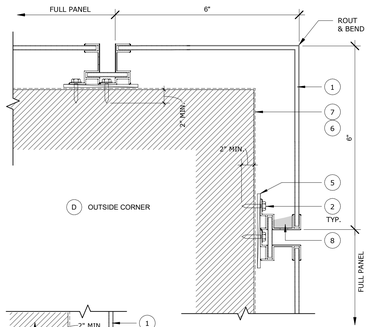
A HORIZONTAL / VERTICAL, REVEAL



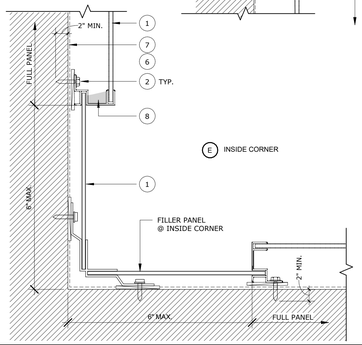
B MTL. WALL PANEL @ ADJ. MATERIAL



C MTL. WAL PANEL @ BASE

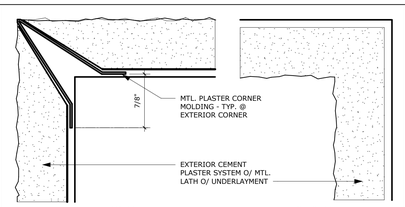


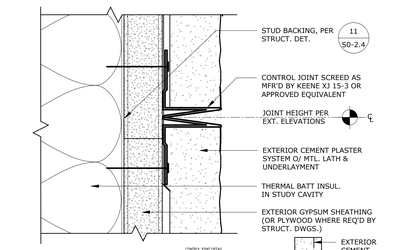
D OUTSIDE CORNER

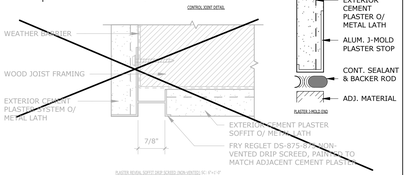


E INSIDE CORNER

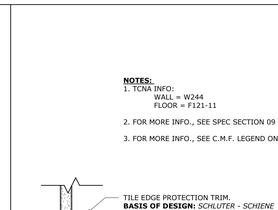
MTL COMPOSITE PANEL (MCP-1) | SCALE: 6" = 1'-0" | 30



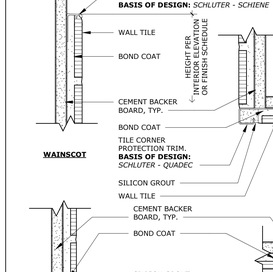




TYP. PLASTER DETAILS | SCALE: 12" = 1'-0" | 22



WAINSCOT



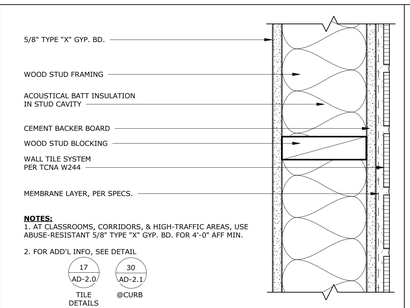
OUTSIDE CORNER (PLAN VIEW)

FLOOR

INSIDE CORNER (PLAN VIEW)

WALL TILE DETAILS | SCALE: 3" = 1'-0" | 17

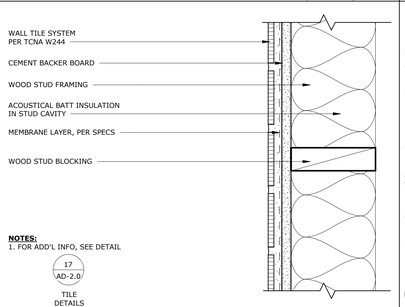
NOTES:
1. TCNA INFO:
   WALL = W244
   FLOOR = F121-11
2. FOR MORE INFO., SEE SPEC SECTION 09 30 00
3. FOR MORE INFO., SEE C.M.F. LEGEND ON SHEET ID-1.1



NOTES:
1. AT CLASSROOMS, CORRIDORS, & HIGH-TRAFFIC AREAS, USE ABUSE-RESISTANT 5/8" TYPE "X" GYP. BD. FOR 4'-0" AFF MIN.
2. FOR ADD'L INFO, SEE DETAIL

17 AD-2.0 TILE DETAILS
30 AD-2.1 @CURB

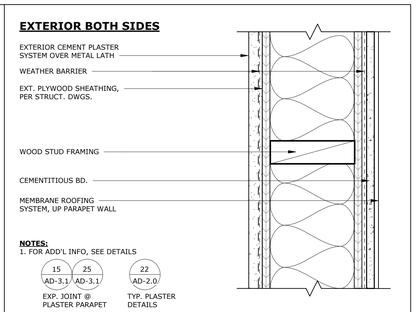
WALL TYPE "C1" | SCALE: 3" = 1'-0" | 11



NOTES:
1. FOR ADD'L INFO, SEE DETAIL

17 AD-2.0 TILE DETAILS

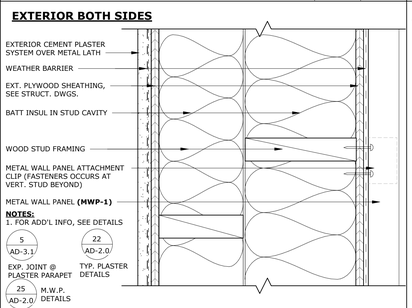
WALL TYPE "C2" | SCALE: 3" = 1'-0" | 12



NOTES:
1. FOR ADD'L INFO, SEE DETAILS

15 AD-3.1 EXP. JOINT @ PLASTER PARAPET
25 AD-3.1
22 AD-2.0 TYP. PLASTER DETAILS

WALL TYPE "A5" | SCALE: 3" = 1'-0" | 6



NOTES:
1. FOR ADD'L INFO, SEE DETAILS

5 AD-3.1 EXP. JOINT @ PLASTER PARAPET
22 AD-2.0 TYP. PLASTER DETAILS
25 AD-2.0 M.W.P. DETAILS

WALL TYPE "A6" | SCALE: 3" = 1'-0" | 7



NOTES:
1. AT CLASSROOMS, CORRIDORS, & HIGH-TRAFFIC AREAS, USE ABUSE-RESISTANT 5/8" TYPE "X" GYP. BD. FOR 4'-0" AFF MIN.
2. FOR ADD'L INFO, SEE DETAILS

5 AD-2.1 CURB @ M.W.P.
25 AD-2.0 M.W.P. DETAILS

WALL TYPE "A1" | SCALE: 3" = 1'-0" | 2

NOT USED

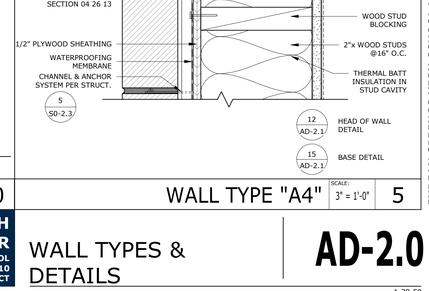
NOT USED

NOT USED

NOT USED

NOT USED

NOT USED



NOTES:
1. FOR ADD'L INFO, SEE DETAILS

5 AD-2.1 CURB @ M.W.P.
25 AD-2.0 M.W.P. DETAILS

WALL TYPE "A2" | SCALE: 3" = 1'-0" | 3

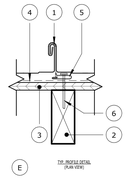
B MTL. WALL PANEL @ ADJ. MATERIAL

C MTL. WAL PANEL @ BASE

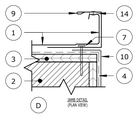
KEYNOTES LEGEND

1. STANDING SEAM METAL WALL PANEL **(MWP-1)**
2. WOOD STUD FRAMING, SEE PLANS
3. @ WD STUD: PLYWOOD SHEATHING, PER STRUCT DWG.
4. WEATHER BARRIER
5. PANEL ATTACHMENT CLIP, PER MANUF. TYPE G90 (2-1/8" X 3-1/2", 0.034" THICKNESS, SEE (6) FOR ATTACHMENT
6. CLIP ATTACHMENT: @ WOOD STUDS: (2) #12-11 x 1 1/2" STAINLESS LP WOOD SCREWS PER CLIP INTO EA. STUD @ 12" O.C., ALONG STUD HEIGHT (4" FROM END) TYP.
7. FLASHING ATTACHMENT @ WOOD FRAMING: 1/4"X1 1/2" LAG SCREW @ 24" O.C. & 6" MAX. FROM ENDS
8. FLASHING ATTACHMENT @ CONC. CURB: (1) 3/16" DIA TAPCON SCREW W/ 1-1/2" MIN. EMBED CENTERED ON BASE FLASHING FLANGE @ 2'-0" O.C. AND 6" MAX FROM ENDS PER ICC ESR-2202
9. CONT. PRE-FINISHED METAL FLASHING PER MANUF. (COLOR TO MATCH ADJ. WALL PANEL)
10. CONT. PRE-FINISHED BREAK METAL (COLOR TO MATCH ADJ. WALL PANEL)
11. CONCRETE CURB
12. CONT. PRE-FIN. OUTSIDE CORNER TRIM, COLOR TO MATCH ADJACENT FINISH, TYP.
13. Z-CLOSURE, PER MANUF.
14. 1/8"x3/16" POP REVIT @ 1'-0" O.C.
15. Z-CLOSURE ATTACHMENT

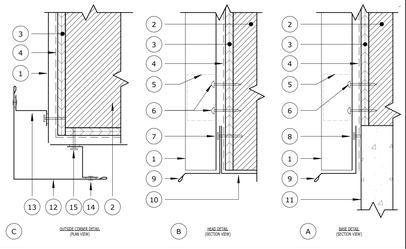
NOTES:
1.) FOR ADDITIONAL INFO ON COLORS, MATERIAL & FINISH SEE **SHEET ID-1.0**
2.) FOR MORE INFO ON METAL PANEL SYSTEM **(MWP-1)** SEE SPEC SECTION 07 42 13



E TYP. PROFILE DETAIL (PLAN VIEW)



D JAMB DETAIL (PLAN VIEW)

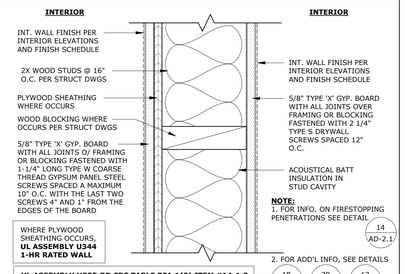


METAL WALL PANEL (MWP-1) | SCALE: 3" = 1'-0" | 25

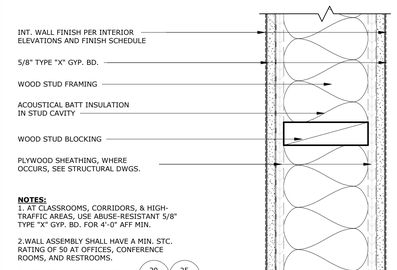
NOT USED

NOT USED

INTERIOR



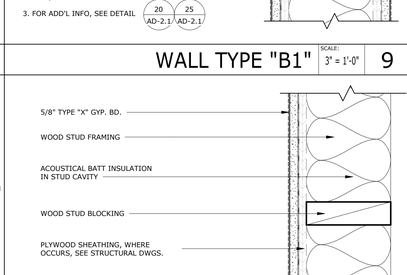
INTERIOR



NOTE:
1. FOR INFO. ON FIRESTOPPING PENETRATIONS SEE DETAIL 14 AD-2.1
2. FOR ADD'L INFO, SEE DETAILS

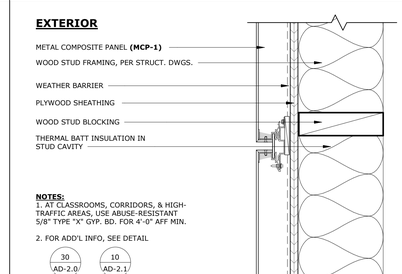
18 AD-2.1 BASE
20 AD-1.1 HEAD
17 AD-2.1 SIGNAGE

WALL TYPE "D1" | SCALE: 3" = 1'-0" | 14



NOTES:
1. AT CLASSROOMS, CORRIDORS, & HIGH-TRAFFIC AREAS, USE ABUSE-RESISTANT 5/8" TYPE "X" GYP. BD. FOR 4'-0" AFF MIN.
2.WALL ASSEMBLY SHALL HAVE A MIN. STC. RATING OF 50 AT OFFICES, CONFERENCE ROOMS, AND RESTROOMS.
3. FOR ADD'L INFO, SEE DETAIL 20 AD-2.1 25 AD-2.1

WALL TYPE "B1" | SCALE: 3" = 1'-0" | 9



NOTES:
1. AT CLASSROOMS, CORRIDORS, & HIGH-TRAFFIC AREAS, USE ABUSE-RESISTANT 5/8" TYPE "X" GYP. BD. FOR 4'-0" AFF MIN.
2. FOR ADD'L INFO, SEE DETAIL

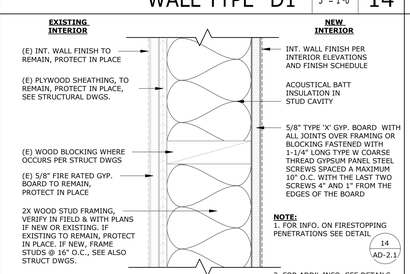
30 AD-2.0 MCP-1 DETAILS
10 AD-2.1 CURB @ MCP-1

WALL TYPE "A3" | SCALE: 3" = 1'-0" | 4

NOT USED

NOT USED

EXISTING INTERIOR



NEW INTERIOR

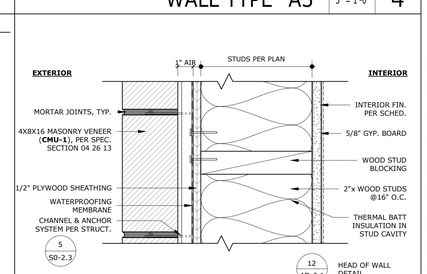
NOTE:
1. FOR INFO. ON FIRESTOPPING PENETRATIONS SEE DETAIL 14 AD-2.1
2. FOR ADD'L INFO, SEE DETAILS

18 AD-2.1 BASE
20 AD-1.1 HEAD
17 AD-2.1 SIGNAGE

WALL TYPE "D2" | SCALE: 3" = 1'-0" | 15

NOTES:
1. AT CLASSROOMS, CORRIDORS, & HIGH-TRAFFIC AREAS, USE ABUSE-RESISTANT 5/8" TYPE "X" GYP. BD. FOR 4'-0" AFF MIN.

WALL TYPE "B2" | SCALE: 3" = 1'-0" | 10



5 S0-2.3
12 AD-2.1 HEAD OF WALL DETAIL
15 AD-2.1 BASE DETAIL

WALL TYPE "A4" | SCALE: 3" = 1'-0" | 5

PROJECT No. :1-78-50
3/14/2025 10:21:08 AM

DRAWN BY: VR, SK, AT
CHECKED BY: JC

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DELTA # _____ DATE _____ ☐ ADD ☐ AFO ☐ CCD ☐ REV
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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

WALL TYPES & DETAILS

AD-2.0

1-78-50

AGENCY APPROVAL
File No.: 36-H7 A\\:04-123900

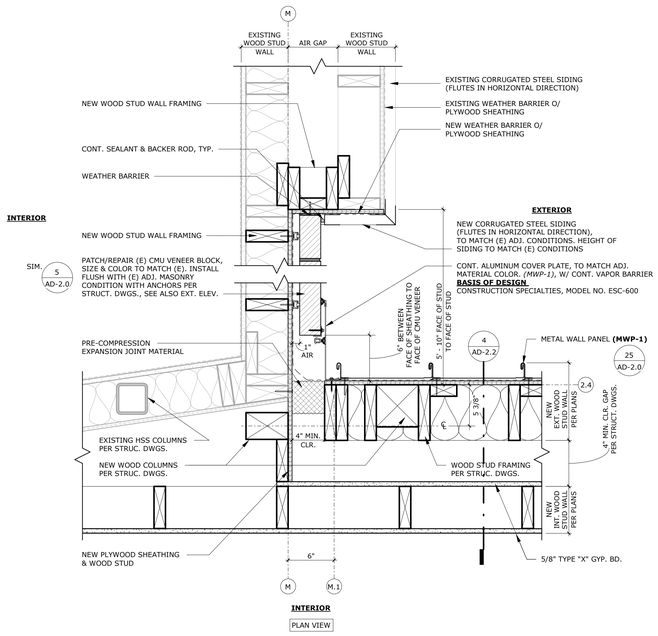
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

CONSULTANT BRANDING

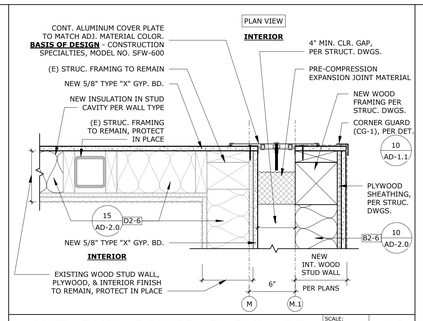
RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:



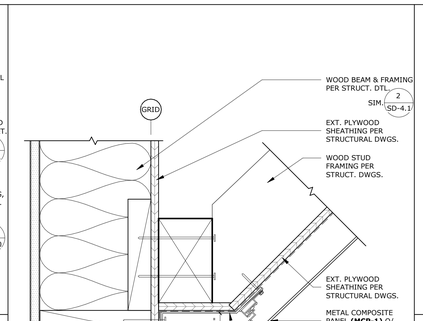
EXT. EXP. COVER @ MWP, CMU, & CORRUGATED. STL. SIDING

SCALE: 1 1/2" = 1'-0" | 22



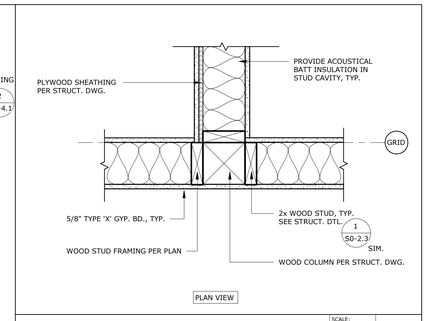
INT. EXP. COVER @ GYP. BD.

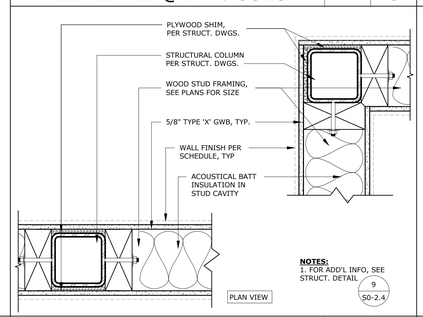
SCALE: 1 1/2" = 1'-0" | 16



WALL DETAIL @ INT. COLUMN

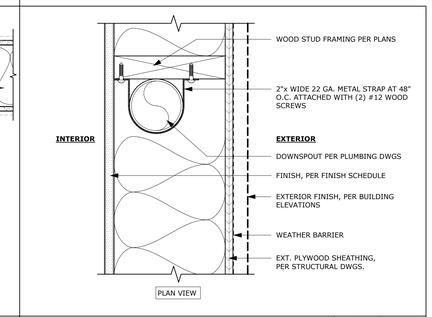
SCALE: 1 1/2" = 1'-0" | 6





COLUMN IN WOOD STUD

SCALE: 1 1/2" = 1'-0" | 7



DOWNSPOUT ATTACHMENT

SCALE: 3" = 1'-0" | 2

EXT. EXP. COVER @ MWP & EXISTING PLASTER

SCALE: 1 1/2" = 1'-0" | 24

FIRE BARRIER MARKINGS

SCALE: 3/8" = 1'-0" | 17

FIRE RATED BOT. OF WALL

SCALE: 3" = 1'-0" | 18

EXT. CMU-1 HEAD @ MCP1

SCALE: 3" = 1'-0" | 12

EXTERIOR WALL DTL. @ MCP

SCALE: 1 1/2" = 1'-0" | 8

OVRFLW DRAIN NOZZLE@WALL

SCALE: 3" = 1'-0" | 3

1. WALL ASSEMBLY

1A WOOD STUD FRAMING (MIN. 2X4 LUMBER SPACED @ 16" O.C.)

1B 1-HR RATED 5/8" THICK GYPSUM WALL BOARD ASSEMBLY

2. THROUGH PENETRANTS

2A STEEL PIPE, NOM. 3" DIA (OR SMALLER) SCHED 5 (OR HEAVIER)

2B IRON PIPE, NOM. 2" DIA (OR SMALLER) CAST OR DUCTILE

2C CONDUIT, NOM. 3" DIA (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR STEEL

2F PVC PIPE, NOM. 2" DIA. (OR SMALLER) SCHED 40

3 PIPE COVERING

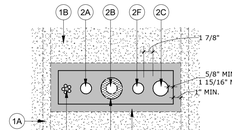
4 ELECTRICAL, TELEPHONE OR DATA CABLES (MAX. SIX CABLES) (NOTE: ROMEX CABLE IS APPROVED FOR USE IN THIS SYSTEM.)

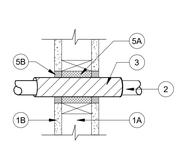
5. FIRESTOP SYSTEM

5A **PACKING MATERIAL.** IN 1-HR FIRE-RATED ASSEMBLIES, MIN. 2 1/4" THICKNESS OF MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMODATE THE REQUIRED THICKNESS OF FILL MATERIAL

5B **FILL, VOID OR CAVITY MATERIAL (CAULK).** MIN. 1 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, ON BOTH SURFACES OF WALL. CAULK TO BE FORCED INTO INTERSTICES OF CABLE GROUP TO MAX EXTENT POSSIBLE. ADDITIONAL CAULK TO BE INSTALLED SUCH THAT A MIN. 1" IS LAPPING BEYOND PERIPHERY OF THE OPENING.

(PER UL# W-L-8003, SEALANT SHALL BE SpecSeal SERIES SSS SEALANT OR SpecSeal SERIES LCI SEALANT)

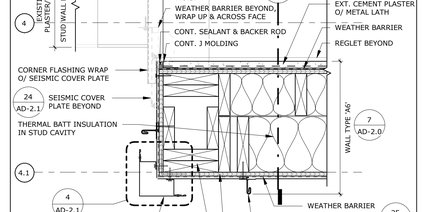




GENERAL NOTE:
1 HR. FIRE RATED THROUGH PENETRATION FIRESTOP ASSEMBLY SHALL BE CONSTRUCTED PER UL# W-L-8003, SEE UL FOR MORE INFO.

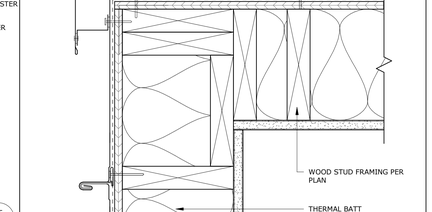
1 HR. FIRE RATED FIRESTOP

SCALE: 12" = 1'-0" | 14



EXT. WALL MWP TO PLSTR END WRAP

SCALE: 1 1/2" = 1'-0" | 9



TYP. EXT. WALL CORNER @ MWP

SCALE: 3" = 1'-0" | 4

INT. TILE WALL BASE 'C1/C2'

SCALE: 1 1/2" = 1'-0" | 30

INT. WL. BASE 'B1/B2/D1/D2' - CURB

SCALE: 1 1/2" = 1'-0" | 25

INT. WL. BASE 'B1/B2/D1/D2'- FLUSH

SCALE: 1 1/2" = 1'-0" | 20

EXT. CMU VNR. WALL BASE 'A4'

SCALE: 3" = 1'-0" | 15

EXT. MCP WALL BASE 'A3'

SCALE: 3" = 1'-0" | 10

EXT MWP WALL BASE 'A1/A2'

SCALE: 3" = 1'-0" | 5

AGENCY APPROVAL
File No.: 36-H7 04-123900
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS FLS ACS
DATE: 03/18/2025
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CONSULTANT BRANDING
RUHNAU CLARKE ARCHITECTS

PROJECT No. :1-78-50
3/14/2025 10:21:11 AM

DRAWN BY:VR, SK, AT CHECKED BY: JC

DELTA #	DATE	ADD	AFO	CCD	REV
DELTA #	DATE	ADD	AFO	CCD	REV
DELTA #	DATE	ADD	AFO	CCD	REV
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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

WALL DETAILS

AD-2.1

1-78-50

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

NOT USED

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STAMPS

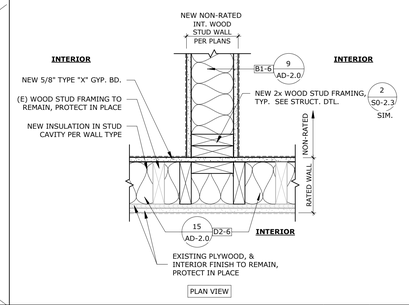
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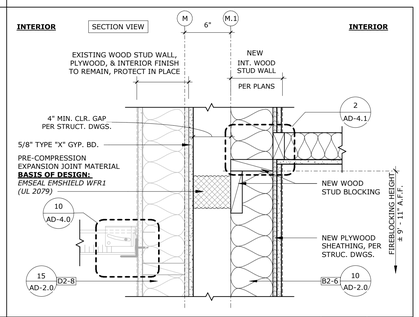
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DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR:
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

CONSULTANT BRANDING

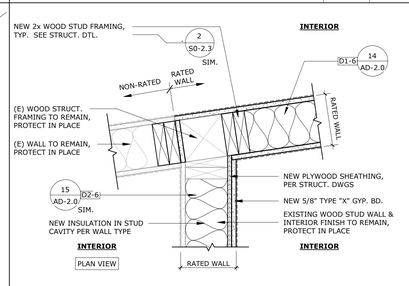
RUHNAU CLARKE ARCHITECTS



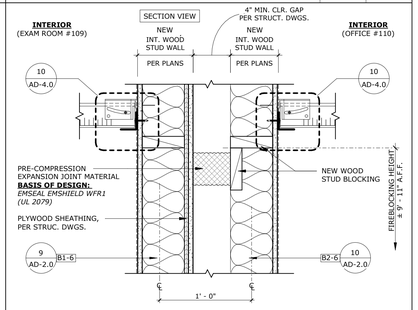
INT. D2 & B1 WALL JOIN — SCALE: 1 1/2" = 1'-0" — 7



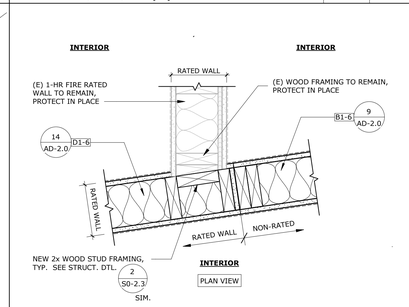
FIREBLOCKING @ DOUBLE WALL — SCALE: 1 1/2" = 1'-0" — 2



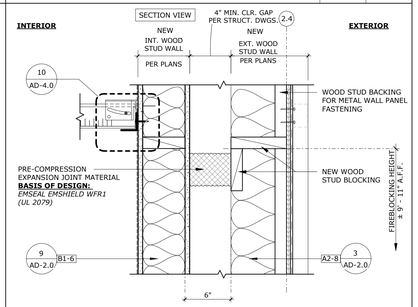
INT. D2, D1, & (E) WALL INTERSEC. — SCALE: 1 1/2" = 1'-0" — 8



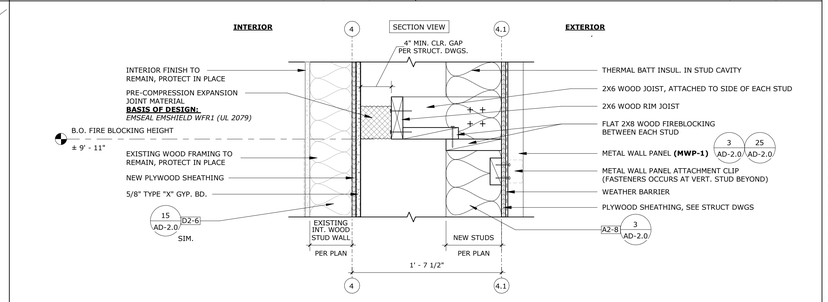
FIREBLOCKING @ DOUBLE WALL — SCALE: 1 1/2" = 1'-0" — 3



INT. D1, B1, & (E) WALL INTERSEC. — SCALE: 1 1/2" = 1'-0" — 9



FIREBLOCKING @ DOUBLE WALL — SCALE: 1 1/2" = 1'-0" — 4



FIREBLOCKING @ DOUBLE WALL — SCALE: 1 1/2" = 1'-0" — 5

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:21:14 AM

DRAWN BY: VR, SK, AT — CHECKED BY: JC

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DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
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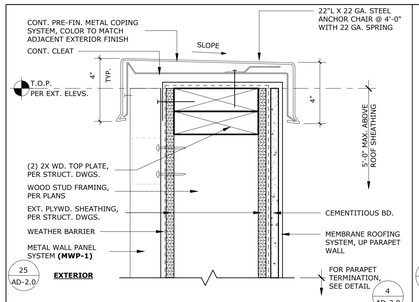
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SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

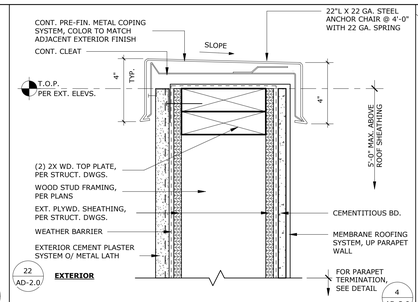
WALL DETAILS

AD-2.2

1-78-50

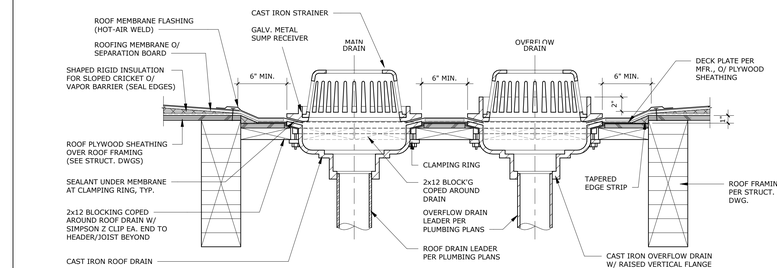


MWP PARAPET | SCALE: 3" = 1'-0" | 26



PLASTER PARAPET | SCALE: 3" = 1'-0" | 21

NOT USED



ROOF DRAIN SECTION (WD) | SCALE: 1 1/2" = 1'-0" | 6

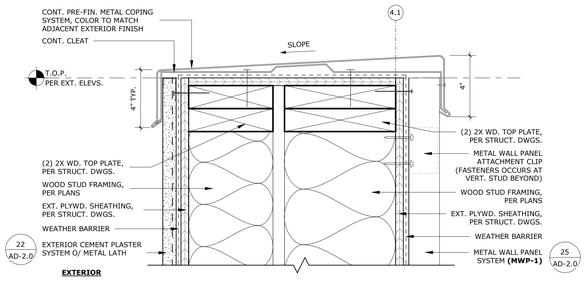
AGENCY APPROVAL
File No.: 36-H7 04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR:
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

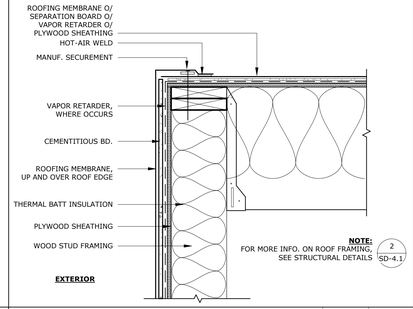
STAMPS

RUHNAU CLARKE ARCHITECTS

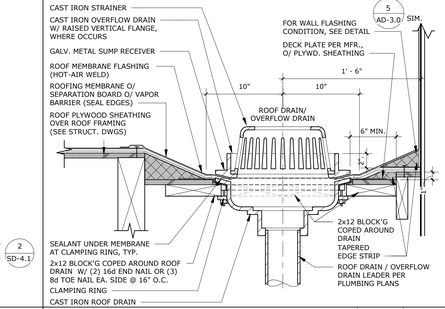
CONSULTANT BRANDING



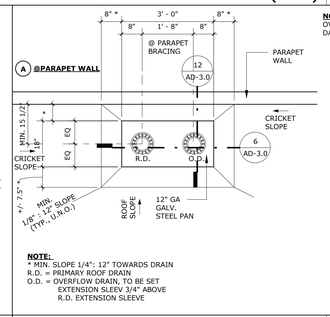
PLASTER & MWP PARAPET | SCALE: 3" = 1'-0" | 22



ROOF EDGE @ ROOF STEP | SCALE: 1 1/2" = 1'-0" | 17

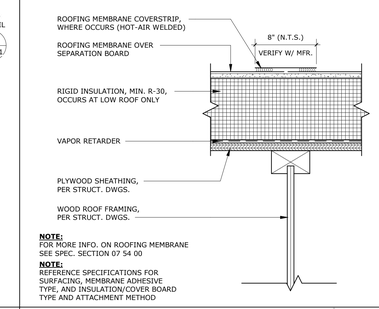


ROOF DRAIN SECTION (WD) | SCALE: 1 1/2" = 1'-0" | 12



ROOF DRAIN/OVERFLOW PLAN | SCALE: 1/2" = 1'-0" | 7

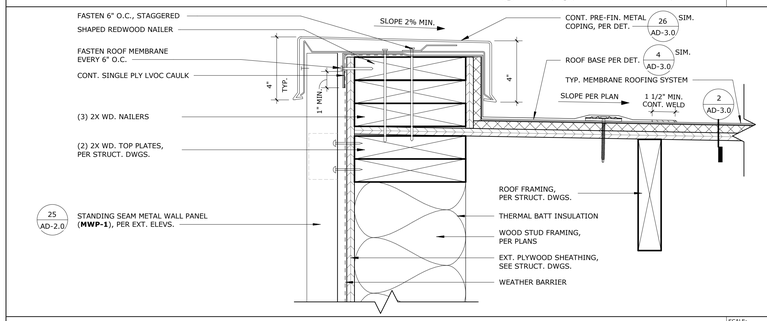
NOTE:
OVERFLOW DRAIN TO DAYLIGHT, PER DETAIL 3 AD-2.1



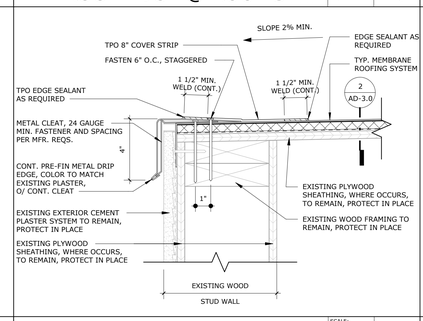
NOTE:
FOR MORE INFO. ON ROOFING MEMBRANE SEE SPEC. SECTION 07 54 00

NOTE:
REFERENCE SPECIFICATIONS FOR SURFACING, MEMBRANE ADHESIVE TYPE, AND INSULATION/COVER BOARD TYPE AND ATTACHMENT METHOD

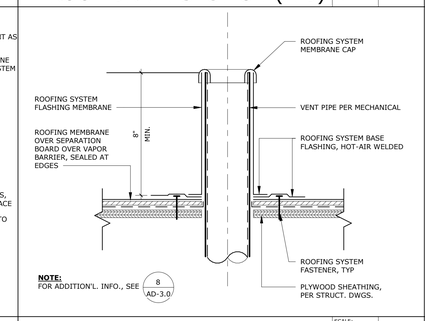
TYP. ROOF ASSEMBLY | SCALE: 3" = 1'-0" | 2



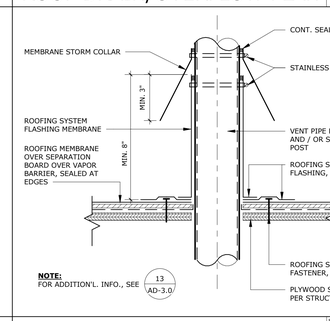
MWP ROOF EDGE AT HIGH ROOF | SCALE: 3" = 1'-0" | 23



(E) PLASTER ROOF EDGE | SCALE: 3" = 1'-0" | 18

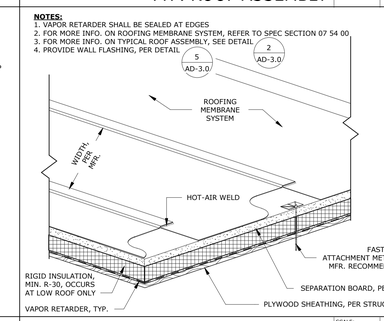


ROOF VENT (TYP.) | SCALE: 3" = 1'-0" | 13

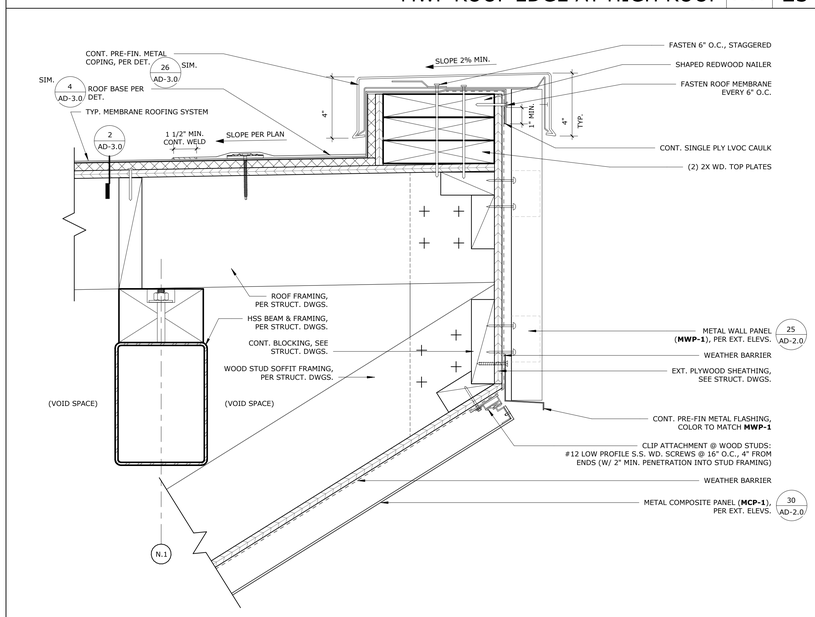


ROOF PIPE PENETRATION(TYP.) | SCALE: 3" = 1'-0" | 8

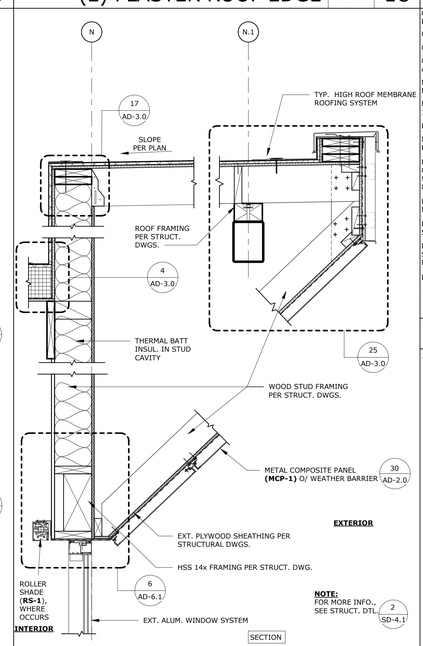
NOTES:
1. VAPOR RETARDER SHALL BE SEALED AT EDGES
2. FOR MORE INFO. ON ROOFING MEMBRANE SYSTEM, REFER TO SPEC SECTION 07 54 00
3. FOR MORE INFO. ON TYPICAL ROOF ASSEMBLY, SEE DETAIL 2 AD-3.0
4. PROVIDE WALL FLASHING, PER DETAIL 5 AD-3.0



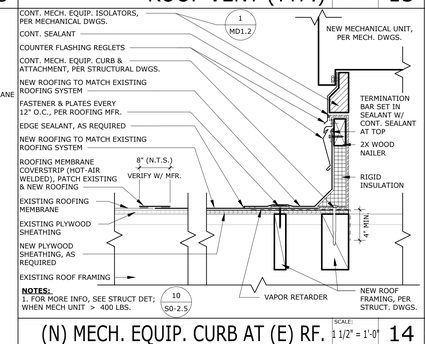
TYP. ROOF MEMBRANE LAYOUT | SCALE: 1 1/2" = 1'-0" | 3



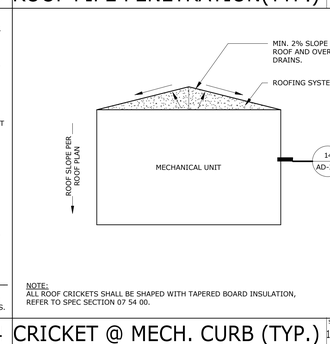
MWP ROOF EDGE AT HIGH ROOF | SCALE: 3" = 1'-0" | 25



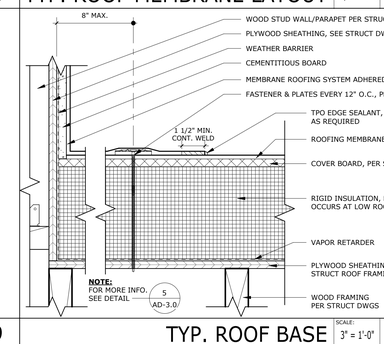
ENLARGED HIGH ROOF EDGE SOFFIT | SCALE: 1" = 1'-0" | 20



(N) MECH. EQUIP. CURB AT (E) RF. | SCALE: 1 1/2" = 1'-0" | 14



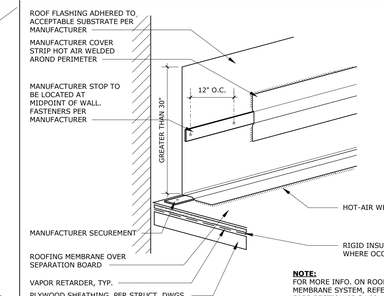
CRICKET @ MECH. CURB (TYP.) | SCALE: 1 1/2" = 1'-0" | 9



TYP. ROOF BASE | SCALE: 3" = 1'-0" | 4

NOT USED

NOT USED



ROOF FLASHING @ WALL | SCALE: 3" = 1'-0" | 5

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:21:17 AM

DRAWN BY: VR, SK, AT
CHECKED BY: JC

DELTA # _____ DATE _____ ☐ ADD ☐ AFO ☐ CCD ☐ REV
DELTA # _____ DATE _____ ☐ ADD ☐ AFO ☐ CCD ☐ REV
DELTA # _____ DATE _____ ☐ ADD ☐ AFO ☐ CCD ☐ REV
DELTA # _____ DATE _____ ☐ ADD ☐ AFO ☐ CCD ☐ REV

RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

ROOF DETAILS

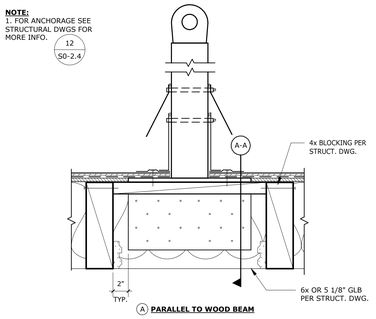
AD-3.0

1-78-50

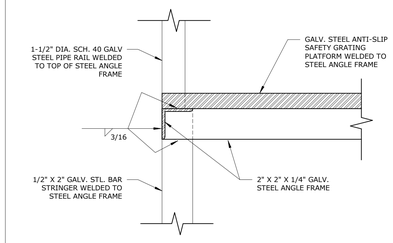
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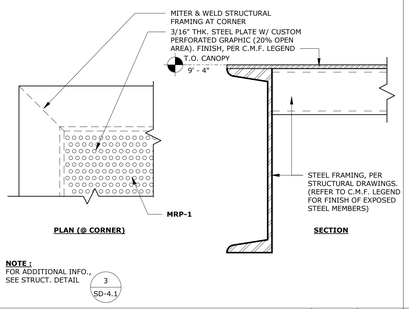
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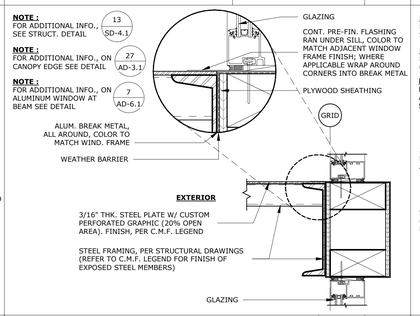
Ⓐ **PARALLEL TO WOOD BEAM**



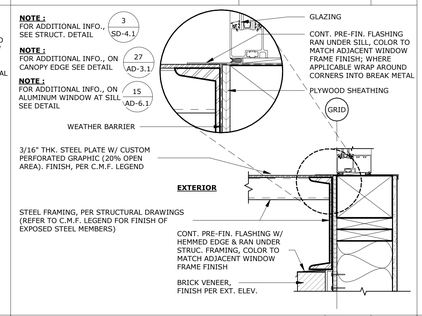
LADDER PLATFORM — SCALE: 3" = 1'-0" — 6



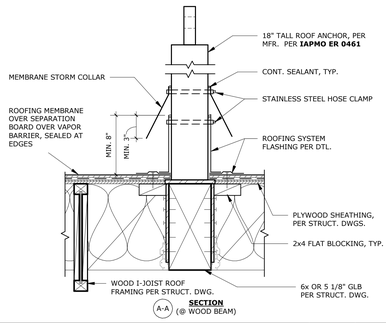
STL. SHADE CANOPY-EDGE — SCALE: 3" = 1'-0" — 27



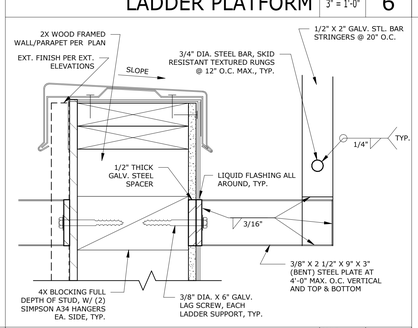
STL. SHADE CANOPY @ WINDOW — SCALE: 1 1/2" = 1'-0" — 22



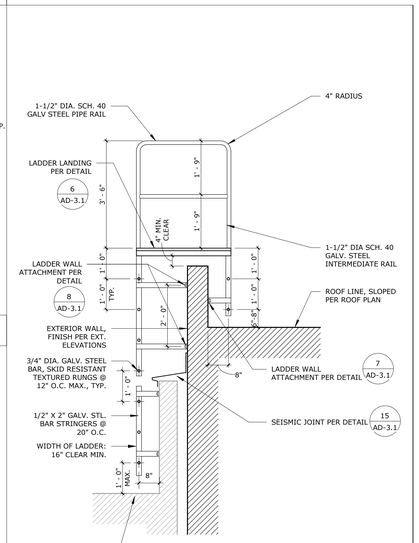
STL. SHADE CANOPY @ WALL — SCALE: 1 1/2" = 1'-0" — 17



FALL PROTECTION - ROOF ANCHOR — SCALE: 1 1/2" = 1'-0" — 12



LADDER ANCHORAGE AT ROOF — SCALE: 3" = 1'-0" — 7



ISOMETRIC PLASTER PARAPET AT EXPANSION JOINT — SCALE: N.T.S. — 23

ISOMETRIC PLASTER PARAPET AT EXPANSION JOINT — SCALE: N.T.S. — 13

LADDER ANCHOR PLASTER — SCALE: 3" = 1'-0" — 8

CROSSOVER LADDER SEISMIC — SCALE: 1/2" = 1'-0" — 3

NOTE:
FOR MORE INFO. SEE ALSO DET. 23 AD-3.1 | 2 SD-4.2 | 11 SD-4.2

ROOF EXPANSION JOINT @ EXISTING CEMENT PLASTER — SCALE: 1 1/2" = 1'-0" — 25

NOTE:
FOR MORE INFO. SEE ALSO DET. 13 AD-3.1

ROOF EXPANSION JOINT @ EXISTING CEMENT PLASTER — SCALE: 1 1/2" = 1'-0" — 15

NOTE:
FOR MORE INFO. SEE ALSO DET. 13 AD-3.1 | 19 SD-4.2

ROOF EXPANSION JOINT @ EXISTING CEMENT PLASTER — SCALE: 1 1/2" = 1'-0" — 5

AGENCY APPROVAL
File No.: 36-H7 Ltr04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:21:20 AM

DRAWN BY: VR, SK, AT
CHECKED BY: JC

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DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
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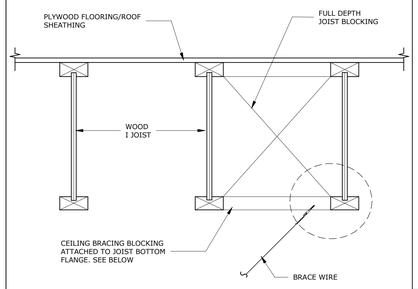
RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

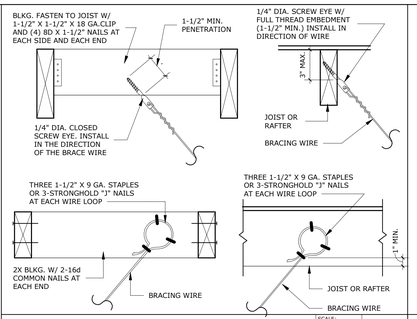
INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

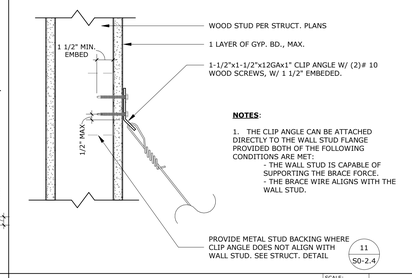
ROOF DETAILS

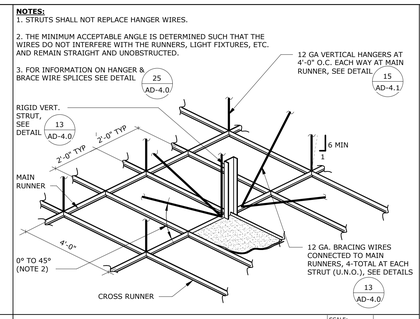
AD-3.1

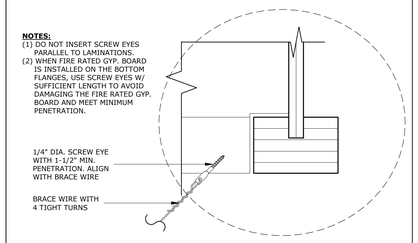
1-78-50

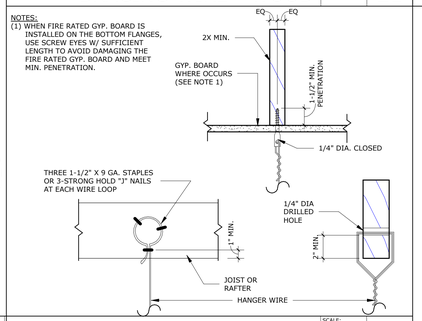


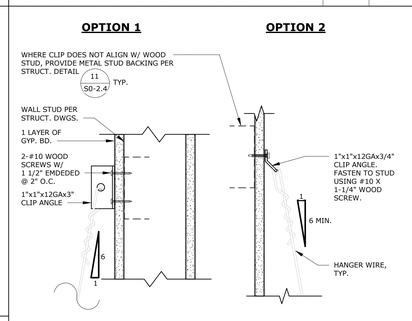


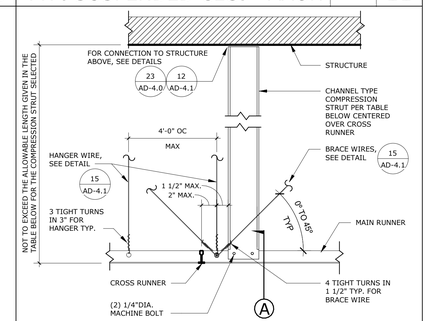


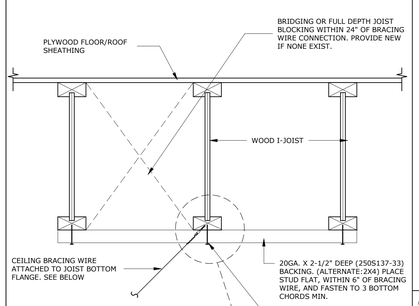


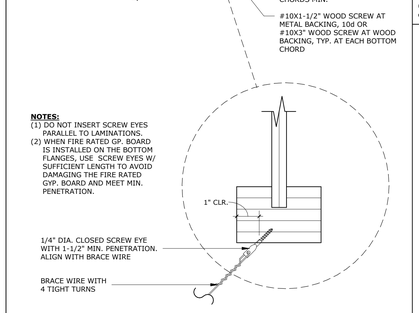


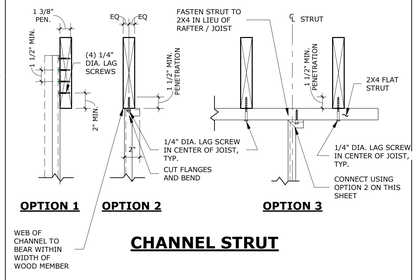


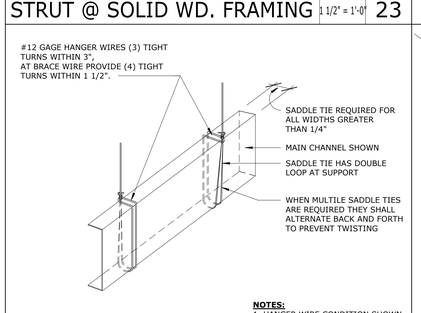






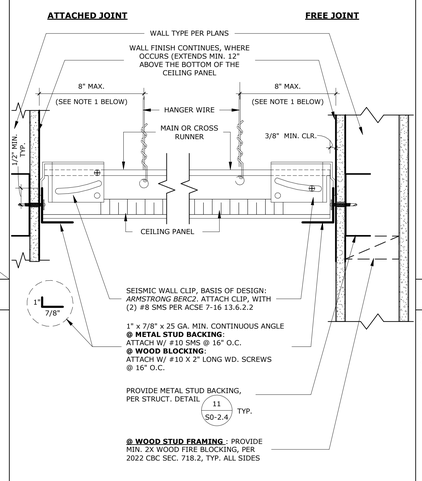


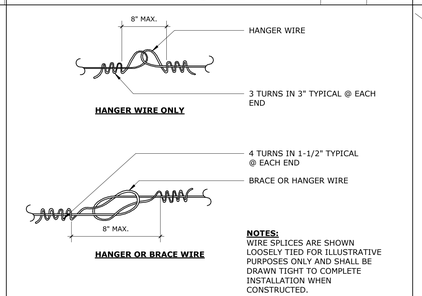




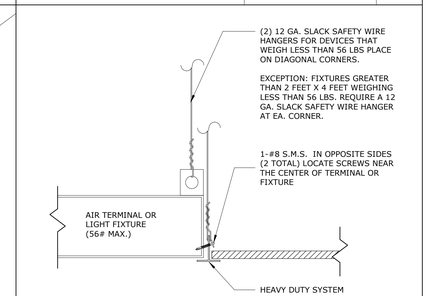
NOT USED

NOT USED





NOT USED



METAL SUSPENSION SYSTEMS FOR LAY -IN PANEL CEILINGS: 2022 CBC (PER DSA IR 25-2)

1. **CEILING SYSTEM GENERAL NOTES:**

1.01 CEILING SYSTEM COMPONENTS SHALL COMPLY WITH ASTM C635 AND SECTION 5.1 OF ASTM E580.

1.02 THE CEILING GRID SYSTEM MUST BE RATED HEAVY DUTY AS DEFINED BY ASTM C635.

1.03 CEILING SYSTEMS. THE FOLLOWING CEILING SYSTEM(S) IS/ARE PART OF THE SCOPE OF THIS PROJECT :

ACT ONLY:
MANUFACTURER'S NAME : ARMSTRONG WORLD INDUSTRIES
PRODUCT EVALUATION REPORT TYPE AND NUMBER : ICC ESR -1308
MANUFACTURER'S MODEL NUMBER -MAIN RUNNER :7301
MANUFACTURER'S CATALOG NUMBER-CROSS RUNNER :XL7341,XL7328
FOR OTHER SYSTEMS, SEE SPEC 09 51 00

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 ACOUSTICAL TILE PANELS OF ANY MATERIAL OTHER THAN MINERAL OR GLASS FIBER, A 3/4" CLEARANCE SHALL BE PROVIDED BETWEEN THE PANEL AND THE WALL ON THE SIDES OF THE CEILING FREE TO SLIP. CLEARANCE BETWEEN THE CEILING GRID RUNNERS AND WALLS SHALL COMPLY WITH THE DETAILS ON THESE DRAWINGS REGARDLESS OF CEILING TILE MATERIAL.

2. **MATERIALS:**

2.01 CEILING WIRE SHALL BE CLASS 1 ZINC COATED (GALVANIZED) CARBON STEEL CONFORMING TO ASTM A641. WIRE SHALL BE #12 GAUGE (0.106" DIAMETER) WITH SOFT TEMPER AND MINIMUM TENSILE STRENGTH=70KSI

2.02 GALVANIZED SHEET STEEL (INCLUDING THAT USED FOR METAL STUD COMPRESSION STRUTS) SHALL CONFORM TO ASTM A653, OR OTHER EQUIVALENT SHEET STEEL LISTED IN SECTION A3.1 OF THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, (AISI S100). MATERIAL 43 MIL (18 GAUGE) THICK AND LIGHTER SHALL HAVE MINIMUM YIELD STRENGTH OF 33 KSI. MATERIAL 54 MIL (16 GAUGE) AND HEAVIER SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI.

2.03 ELECTRICAL METALLIC TUBE (EMT) SHALL CONFORM TO ANSI C80.3/UL 797 CARBON STEEL WITH G90 GALVANIZING. EMT SHALL HAVE MINIMUM YIELD STRENGTH OF 30 KSI AND MINIMUM ULTIMATE STRENGTH OF 48 KSI.

3. **ATTACHMENT OF HANGER AND BRACING WIRES:**

3.01 ALL CEILING HANGER AND BRACING WIRES SHALL BE SEPARATED 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 SUCH THAT THE DIRECTION OF THE ANCHORAGE ALIGNS WITH THE DIRECTION OF THE WIRE. BRACING WIRE CEILING CLIPS SHALL BE BENT AS SHOWN IN THE DETAILS AND ROTATED AS REQUIRED TO ALIGN WITH THE DIRECTION OF THE WIRE. SCREWS IN WOOD SHALL BE INSTALLED TO ALIGN WITH THE DIRECTION OF THE WIRE.

4. **FASTENERS AND WELDING:**

4.01 SHEET METAL SCREWS SHALL COMPLY WITH ASTM C1513 AND ASME B18.6.3. PENETRATION OF SCREWS THROUGH JOINED MATERIAL SHALL NOT BE LESS THAN THREE EXPOSED THREADS.

4.02 EXPANSION ANCHORS SHALL BE:
N/A

4.03 POWER-ACTUATED FASTENERS SHALL BE:
N/A

4.04 IF NOT OTHERWISE SPECIFIED IN THE EVALUATION REPORT, POWER-ACTUATED FASTENERS INSTALLED IN STEEL SHALL BE INSTALLED SO THE ENTIRE POINTED END OF THE FASTENER IS DRIVEN THROUGH THE STEEL MEMBER.

4.05 POWER-ACTUATED FASTENERS IN CONCRETE OR MASONRY ARE NOT PERMITTED FOR BRACING WIRES.

4.06 CONCRETE REINFORCEMENT AND PRESTRESSING TENDONS SHALL BE LOCATED BY NON-DESTRUCTIVE MEANS PRIOR TO INSTALLING POST-INSTALLED ANCHORS.

4.07 WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 USING E60XX SERIES ELECTRODES.

5. **TESTING**:

5.01 ALL FIELD TESTING MUST BE PERFORMED IN THE PRESENCE OF THE PROJECT INSPECTOR.

5.02 POST-INSTALLED ANCHORS IN CONCRETE USED TO SUPPORT HANGER WIRES SHALL BE TESTED AT A FREQUENCY OF 10 PERCENT. POWER-ACTUATED FASTENERS IN CONCRETE SHALL BE FIELD TESTED FOR 200 LBS. IN TENSION. ALL OTHER POST-INSTALLED ANCHORS IN CONCRETE SHALL BE TESTED IN ACCORDANCE WITH CBC SECTION 1910A.5.

5.03 POST-INSTALLED ANCHORS IN CONCRETE USED TO ATTACH BRACING WIRES SHALL BE TESTED AT A FREQUENCY OF 50 PERCENT IN ACCORDANCE WITH CBC SECTION 1910A.5.

6. **LIGHT FIXTURES:**

6.01 ALL LIGHT FIXTURES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE LIGHT FIXTURE. A MINIMUM OF TWO SCREWS OR APPROVED FASTENERS ARE REQUIRED AT EACH LIGHT FIXTURE, PER ASTM E580, SECTION 5.3.1.

6.02 SURFACE-MOUNTED LIGHT FIXTURES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST TWO POSITIVE CLAMPING DEVICES. THE CLAMPING DEVICE SHALL COMPLETELY SURROUND THE SUPPORTING CEILING RUNNER AND BE MADE OF STEEL WITH A MINIMUM THICKNESS OF #14 GAUGE. ROTATIONAL SPRING CATCHES ARE NOT PERMITTED. A #12 GAUGE SLACK SAFTEY WIRE SHALL BE CONNETED FROM EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. ADDITONAL SUPPORTS SHALL BE PROVIDED WHEN A LIGHT FIXTURE IS EIGHT (8) FEET OR LONGER OR EXCEEDS 56 LBS. MAXIUMM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED EIGHT (8) FEET.

6.03 LIGHT FIXTURES WEIGHING LESS THAN OR EQUAL TO 10 LBS. SUPPORTED DIRECTLY ON THE CEILING RUNNERS SHALL HAVE A MINIMUM OF ONE (1) #12 GAUGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.

6.04 LIGHT FIXTURES WEIGHING GREATER THAN 10 LBS. BUT LESS THAN OR EQUAL TO 56 LBS. SUPPORTED DIRECTLY ON THE CEILING RUNNERS SHALL HAVE A MINIMUM OF TWO (2) #12 GAUGE SLACK SAFETY WIRES CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS TO THE STRUCTURE ABOVE.
EXCEPTION: ALL LIGHT FIXTURES GREATER THAN TWO BY FOUR FEET WEIGHING LESS THAN 56 LBS. SHALL HAVE A #12 GAUGE SLACK SAFETY WIRE AT EACH CORNER.

6.05 ALL LIGHT FIXTURES WEIGHING GREATER THAN 56 LBS. SHALL BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE ABOVE. SEE SUPPORT DETAILS ON THESE DRAWINGS FOR MORE INFORMATION.

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 OTHER FASTENERS SPECIFIED ON THE DRAWINGS ARE REQUIRED. A MINIMUM OF TWO ATTACHMENTS ARE REQUIRED AT EACH COMPONENT.

7.02 CEILING-MOUNTED SERVICES WEIGHING LESS THAN OR EQUAL TO 20 LBS. SHALL HAVE ONE (1) #12 GAGE SLACK SAFETY WIRE ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.

7.03 CEILING-MOUNTED SERVICES WEIGHING MORE THAN 20 LBS. BUT LESS THAN OR EQUAL TO 56 LBS. SHALL HAVE TWO (2) #12 GAGE SLACK SAFETY WIRES (AT DIAGONAL CORNERS) CONNECTED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.

7.04 CEILING-MOUNTED SERVICES WEIGHING MORE THAN 56 LBS. SHALL BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE ABOVE. SEE SUPPORT DETAILS ON THESE DRAWINGS FOR MORE INFORMATION.

8. **OTHER DEVICES WITHIN THE CEILING:**

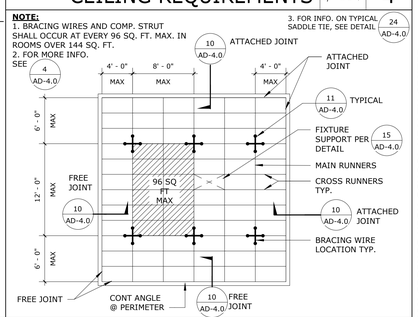
8.01 ALL LIGHT WEIGHT MISCELLANEOUS DEVICES, SUCH AS STROBE LIGHTS, OCCUPANCY SENSORS, SPEAKERS, EXIT SIGNS, ETC., SHALL BE ATTACHED TO THE CEILING GRID. DEVICES WEIGHING MORE THAN 10 LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE ANCHORED TO THE STRUCTURE ABOVE. DEVICES WEIGHING MORE THAN 20 LBS. SHALL BE SUPPORTED INDEPENDENTLY FROM THE STRUCTURE ABOVE.

TABLE 1
LATERAL FORCE BRACE ASSEMBLY SPACING

	DESIGN SPECTRAL ACCELERATION PARAMETER, S_{DS}	BRACE ASSEMBLY SPACING (ft.)	
		$z/h \le 0.5$ [a]	$z/h > 0.5$ [a,b]
THIS PROJECT (Sds = 1.480)	$S_{DS} \le 1.15$	12x12	12x12
	$1.15 < S_{DS} \le 1.73$	~~12x12~~	8x12
	$S_{DS} > 1.73$	8x12	8x8

FOOTNOTES:

a. WHERE,AS DEFINED IN ASCE 7, SECTION 13.3.1:
z=HEIGHT IN STRUCTURE OF POINT OF ATTACHMENT OF CEILING WITH RESPECT TO THE BASE.
h=AVERAGE ROOF HEIGHT OF THE STRUCTURE WITH RESPECT TO THE BASE.
b. IT SHALL BE PERMITTED TO USE THE BRACE ASSEMBLY SPACING FOR "z/h> 0.5" FOR THE FULL BUILDING HEIGHT.



RUHNAU CLARKE ARCHITECTS
CONSULTANT BRANDING

AGENCY APPROVAL
File No.: 36-H7 04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS FLS ACS
DATE: 03/18/2025

STAMPS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

	SCALE:	
BRACING WIRE - WOOD	1 1/2" = 1'-0"	21
BRACING WIRE - WOOD WALL	3" = 1'-0"	16
TYP. SUSPENDED CLG. - AXON	3" = 1'-0"	11
BRACE WIRE CONN. @ I-JOIST	1 1/2" = 1'-0"	27
HANGER WIRE - WOOD	1 1/2" = 1'-0"	22
BRACE WIRE CONN. @ I-JOIST	1 1/2" = 1'-0"	29
TYP. SADDLE TIE	N.T.S.	24
CEILING REQUIREMENTS	1/4" = 1'-0"	4
HANGER WIRE CONN.@I-JOIST	1 1/2" = 1'-0"	30
CEILING WIRE SPLICES	1 1/2" = 1'-0"	25
LIGHT FIX./AIR TERM. SUPPORT	3" = 1'-0"	15
STRUT @ SOLID WD. FRAMING	1 1/2" = 1'-0"	23
HANGER WIRE - WOOD WALL	3" = 1'-0"	18
STRUT-CHANNEL TYPE	1 1/2" = 1'-0"	13
CEILING PERIMETER	3" = 1'-0"	10
TYP. SUSPENDED CLG. - PLAN	1/8" = 1'-0"	5

PROJECT No. :1-78-50
3/14/2025 10:21:23 AM

DRAWN BY: VR, SK, AT
CHECKED BY: JC

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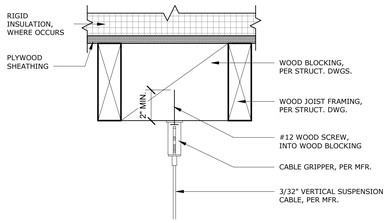
RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

CEILING DETAILS

AD-4.0

1-78-50

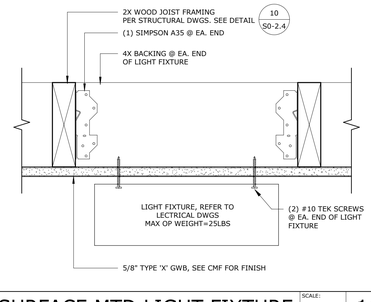


@ WOOD JOIST FRAMING

CEILING CLOUD CABLE HANGER

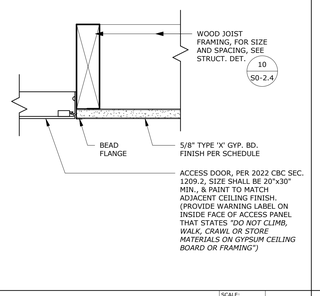
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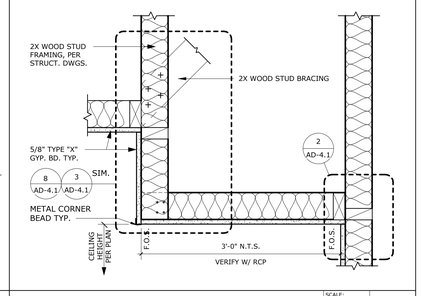
SURFACE MTD LIGHT FIXTURE

SCALE: 3" = 1'-0" | 16



ACCESS CEIL. PANEL

SCALE: 3" = 1'-0" | 11



HUNG GYP. SOFFIT @ WALL

SCALE: 1 1/2" = 1'-0" | 6

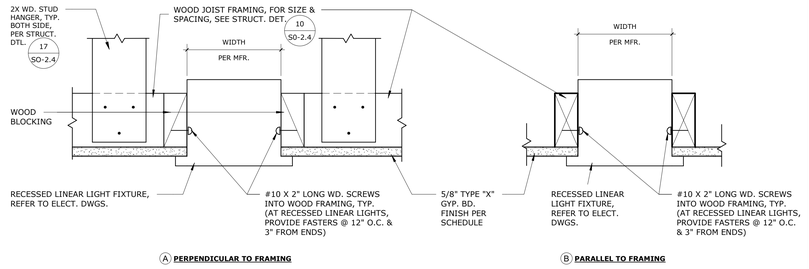
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File No.: 36-H7 A'd=04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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exp. 10-31-25
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

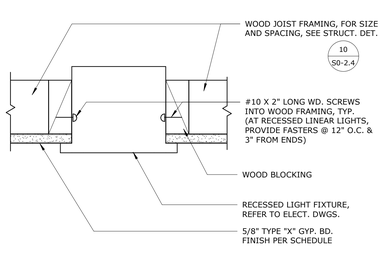
RUHNAU CLARKE ARCHITECTS

CONSULTANT BRANDING



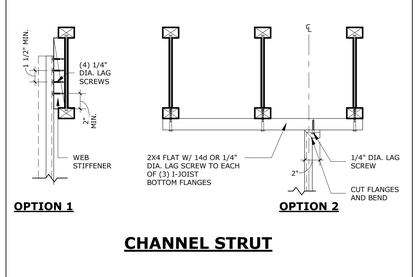
RECESSED LINEAR LIGHT FIXTURE

SCALE: 3" = 1'-0" | 22



RECESSED LIGHT FIXTURE

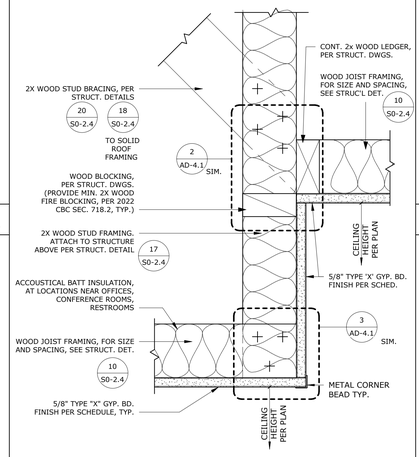
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CHANNEL STRUT

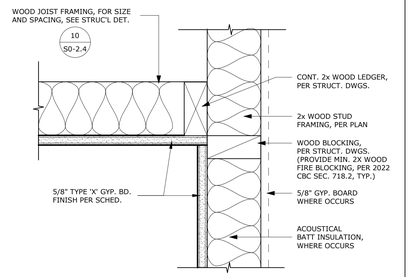
STRUT @ I-JOIST FRAMING

SCALE: 1 1/2" = 1'-0" | 12



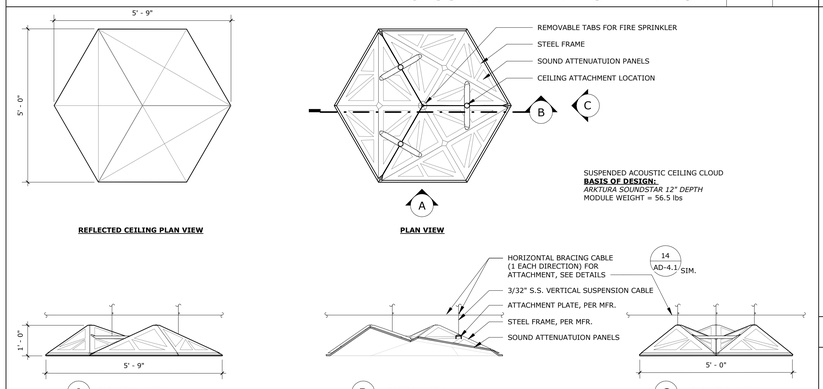
HUNG GYP. SOFFIT (STEP)

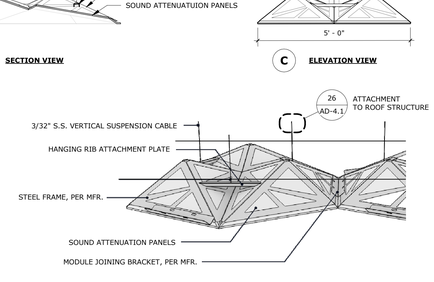
SCALE: 3" = 1'-0" | 8



GYP. BOARD CEILING

SCALE: 3" = 1'-0" | 2

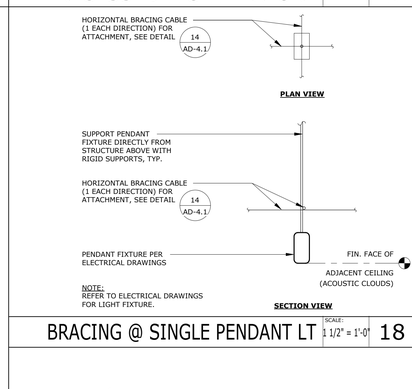




3D VIEW
N.T.S.

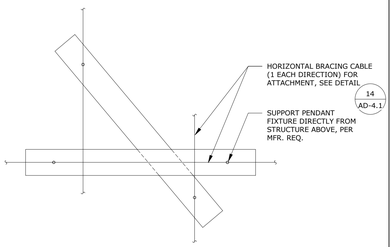
SUSPENDED ACOUSTIC CLOUDS ASSEMBLY

SCALE: 1/2" = 1'-0" | 24



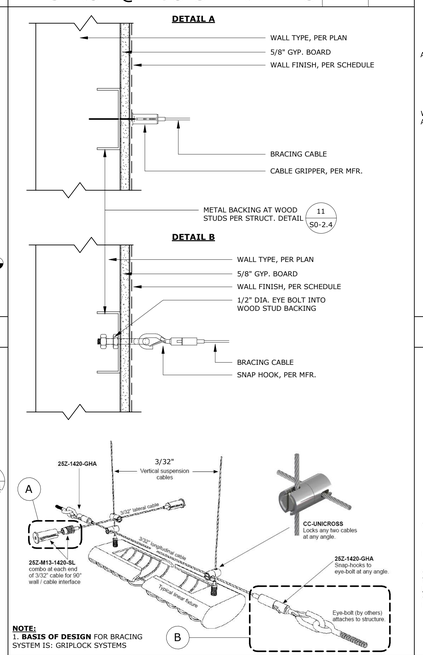
BRACING @ SINGLE PENDANT LT

SCALE: 1 1/2" = 1'-0" | 18



BRACING @ LINEAR PENDANT LT

SCALE: 1 1/2" = 1'-0" | 20

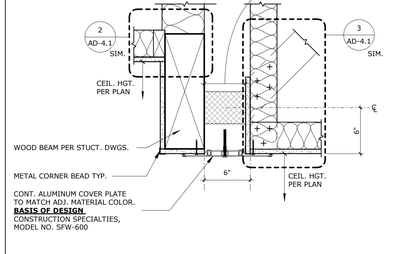


SUSPENDED LIGHT BRACING

SCALE: 3" = 1'-0" | 14

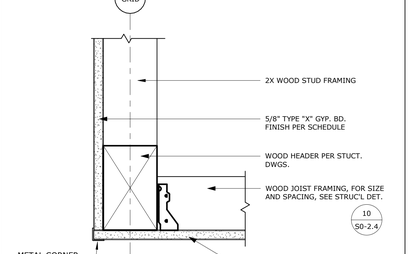
HANGER/BRACING WIRE CONN.

SCALE: 3" = 1'-0" | 15



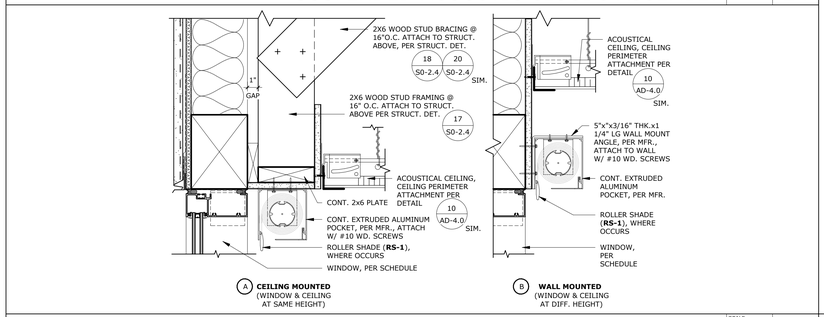
HUNG SOFFIT (STEP) AT EXP. GAP

SCALE: 1 1/2" = 1'-0" | 9



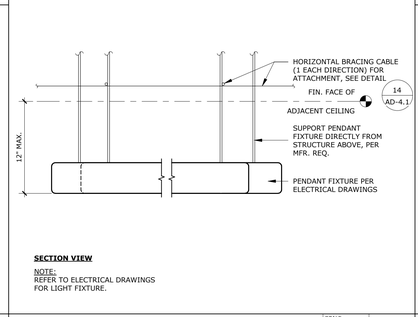
GYP. SOFFIT (HEADER)

SCALE: 3" = 1'-0" | 4



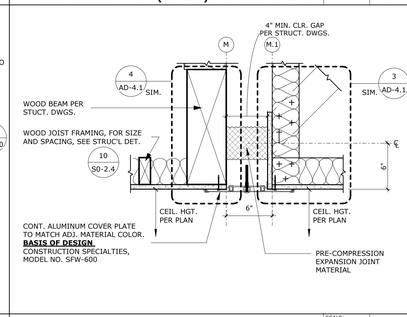
TYP. ROLLER SHADE ATTACH.

SCALE: 2" = 1'-0" | 25



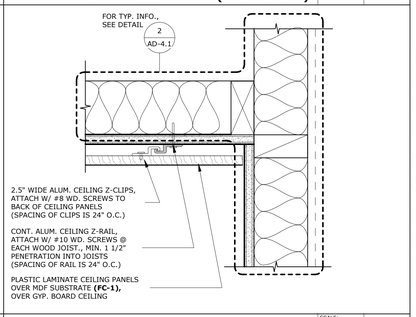
BRACING @ LINEAR PENDANT LT

SCALE: 1 1/2" = 1'-0" | 20



HUNG GYP. SOFFIT AT EXP. GAP

SCALE: 1 1/2" = 1'-0" | 10



P-LAM CEILING PANELS

SCALE: 3" = 1'-0" | 5

PROJECT No. :1-78-50
3/14/2025 10:21:26 AM

DRAWN BY: VR, SK, AT
CHECKED BY: JC

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DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

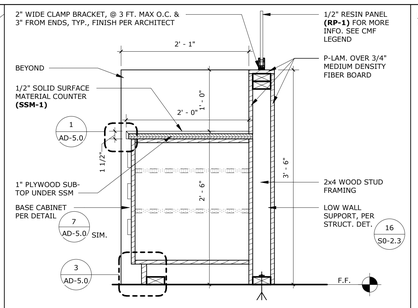
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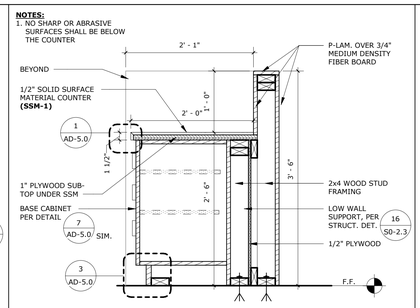
1-78-50

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

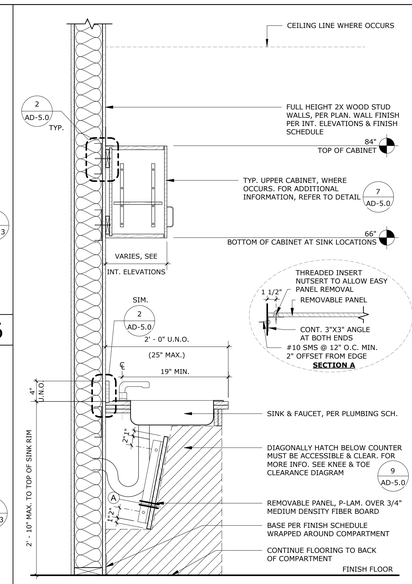
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NURSE'S STATION - SECTION | SCALE: 1" = 1'-0" | 21



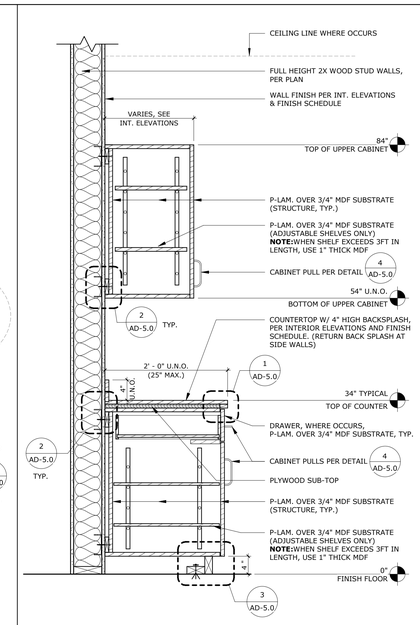
RECEPTION DESK - SECTION | SCALE: 1" = 1'-0" | 16



NOTES:
1.) ALL WATER SUPPLY AND DRAIN PIPES UNDER ACCESSIBLE LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED, AND HAVE THE FOLLOWING BURN CHARACTERISTICS, FLAME SPREAD OF 15 OR LESS SMOKE GENERATION OF 50 OR LESS PER CBC 11B-606.5

2.) THERE SHALL BE NO SHARP OR ABRASIVE OBJECTS OR SURFACE UNDER SINK

TYP. CASEWORK AT SINK | SCALE: 1" = 1'-0" | 12

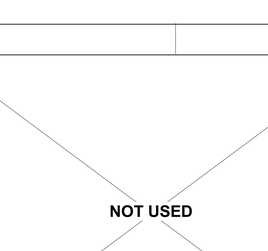


TYP. BASE & UPPER CABINET | SCALE: 1" = 1'-0" | 7

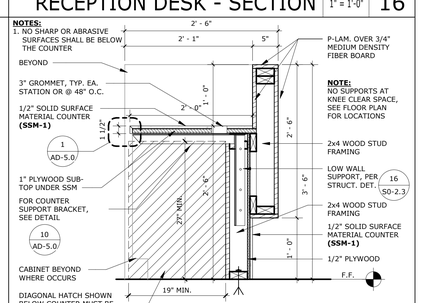


CASEWORK EDGE DETAIL | SCALE: 3" = 1'-0" | 1

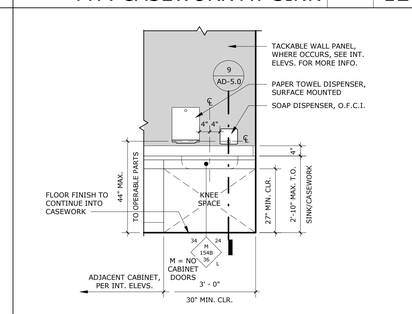
NOT USED



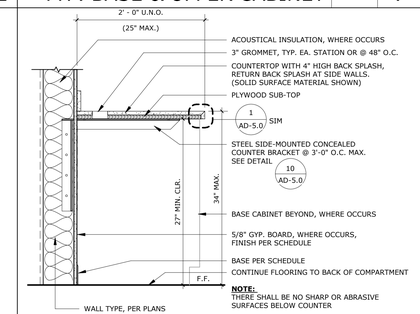
NURSE'S STATION - LOW WALL | SCALE: 1" = 1'-0" | 22



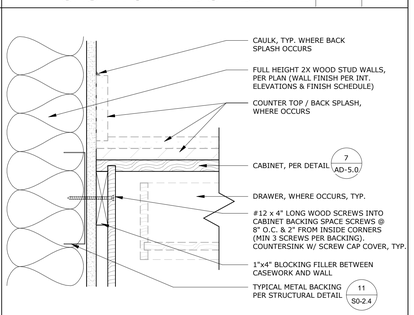
RECEPTION DESK - SECTION | SCALE: 1" = 1'-0" | 17



ACCESS. SINK & BASE CABINET | SCALE: 1/2" = 1'-0" | 13



COUNTERTOP DETAIL | SCALE: 1" = 1'-0" | 8



CABINET - WALL ATTACH. | SCALE: 3" = 1'-0" | 2

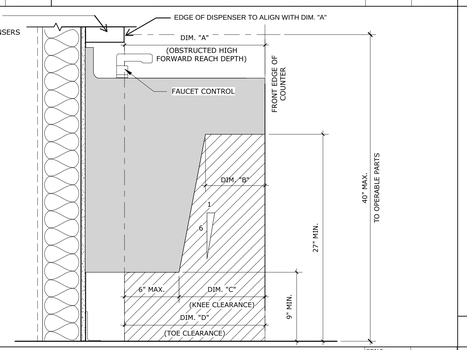
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NOT USED

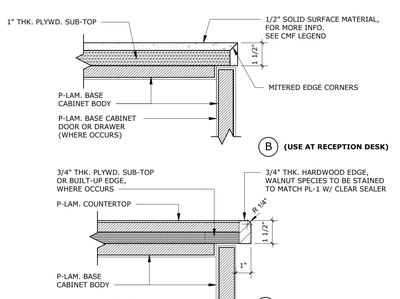
NOT USED

DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"
17" MAX.	8"	11"	17"
18" MAX.	9"	12"	18"
19" MAX.	10"	13"	19"
20" MAX.	11"	14"	20"
21" MAX.	12"	15"	21"
22" MAX.	13"	16"	22"
23" MAX.	14"	17"	23"
24" MAX.	15"	18"	24"
25" MAX.	16"	19"	25"

NOTE: DIMENSIONS ARE FROM FRONT EDGE OF COUNTER



KNEE & TOE CLEARANCE DIAGRAM | SCALE: 1 1/2" = 1'-0" | 9

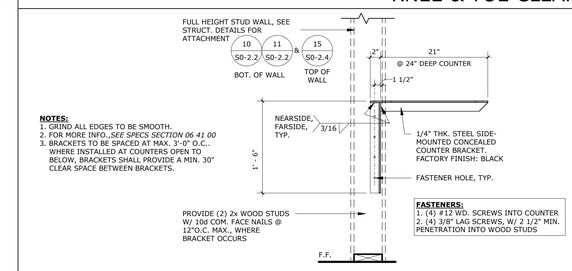


BASE CABINET - FLR. ATTACH | SCALE: 3" = 1'-0" | 3

NOT USED

NOT USED

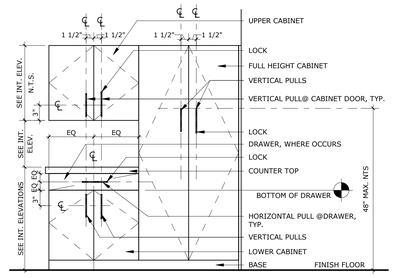
NOT USED



NOTES:
1. GRIND ALL EDGES TO BE SMOOTH.
2. FOR MORE INFO.,*SEE SPECS SECTION 06 41 00*
3. BRACKETS TO BE SPACED AT MAX. 3'-0" O.C.. WHERE INSTALLED AT COUNTERS OPEN TO BELOW, BRACKETS SHALL PROVIDE A MIN. 30" CLEAR SPACE BETWEEN BRACKETS.

FASTENERS:
1. (4) #12 WD. SCREWS INTO COUNTER
2. (4) 3/8" LAG SCREWS, W/ 2 1/2" MIN. PENETRATION INTO WOOD STUDS

COUNTER SUPPORT BRACKET | SCALE: 1" = 1'-0" | 10



TYP. CABINET PULLS | SCALE: 1" = 1'-0" | 4

AGENCY APPROVAL
File No.: 36-H7 A\D\A 04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

RUHNAU CLARKE ARCHITECTS

CONSULTANT BRANDING

PROJECT No. :1-78-50
3/14/2025 10:21:29 AM

DRAWN BY: VR, SK, AT	CHECKED BY: JC			
DELTA # _____ DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____ DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____ DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____ DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV

RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

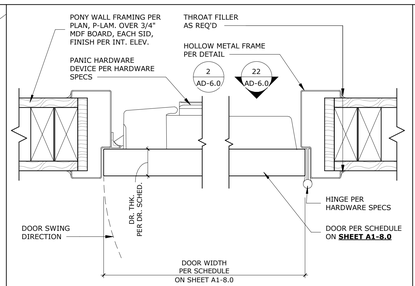
CASEWORK DETAILS

AD-5.0

1-78-50

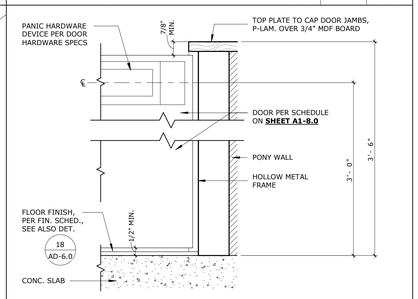
INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

NOT USED



INT. HALF HGT. DOOR JAMBS | SCALE: 3" = 1'-0" | 21

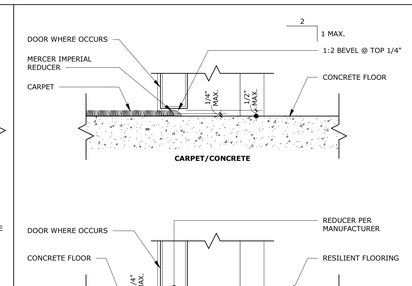
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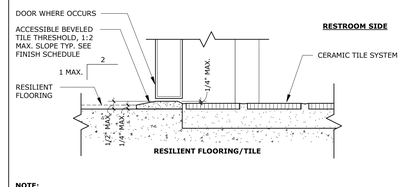


INT. HALF HGT. DR. JAMB ELV. | SCALE: 3" = 1'-0" | 22

NOT USED

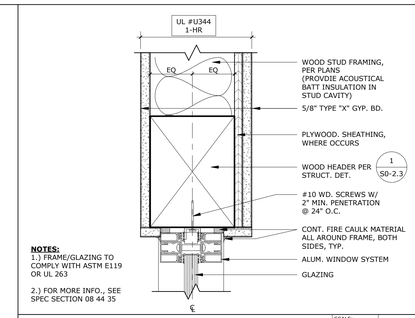
NOT USED





NOTE:
FURNISH AND INSTALL DOOR SEALS OR WEATHER STRIPPING AS SPECIFIED. NOT SHOWN HERE FOR SAKE OF CLARITY

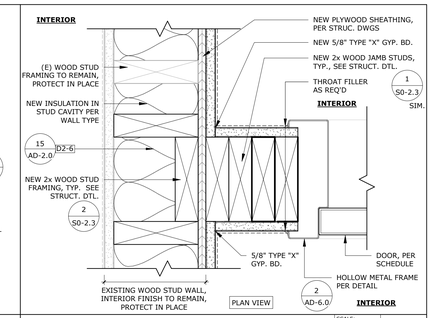
TYP. FLOOR TRANSITIONS | SCALE: 3" = 1'-0" | 18



NOTES:
1.) FRAME/GLAZING TO COMPLY WITH ASTM E119 OR UL 263

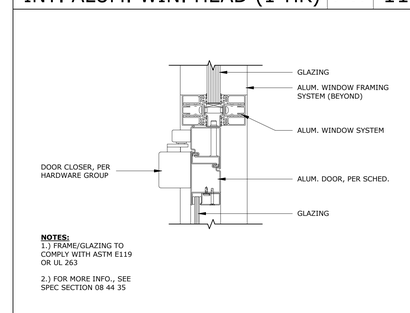
2.) FOR MORE INFO., SEE SPEC SECTION 08 44 35

INT. ALUM. WIN. HEAD (1-HR) | SCALE: 3" = 1'-0" | 11



INT. H.M. DOOR JAMB | SCALE: 3" = 1'-0" | 6

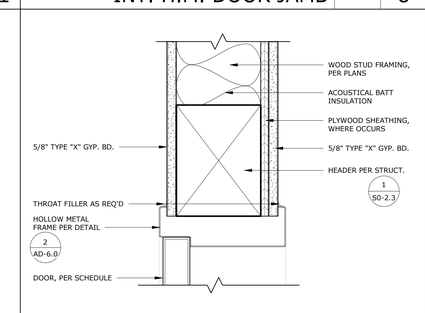




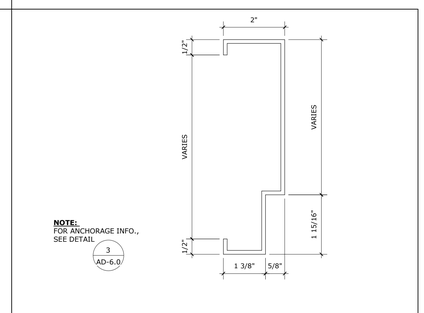
NOTES:
1.) FRAME/GLAZING TO COMPLY WITH ASTM E119 OR UL 263

2.) FOR MORE INFO., SEE SPEC SECTION 08 44 35

INT. ALUM. DOOR HEAD (1-HR) | SCALE: 3" = 1'-0" | 12



INT. HM. DOOR HEAD (TYP.) | SCALE: 3" = 1'-0" | 7

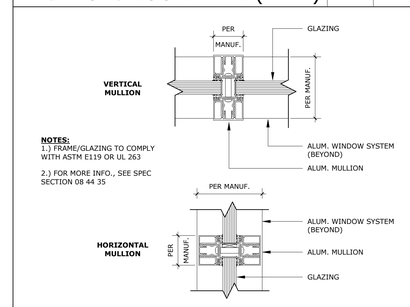


NOTE:
FOR ANCHORAGE INFO., SEE DETAIL 3 AD-6.0

TYPICAL H.M. DOOR FRAME | SCALE: 6" = 1'-0" | 2

NOT USED

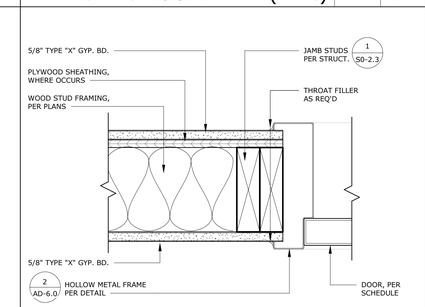
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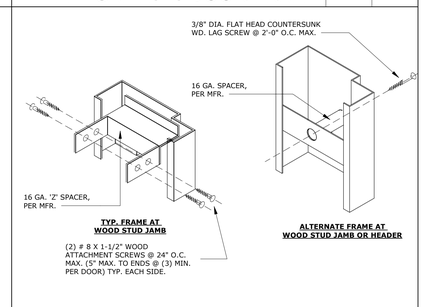
NOTES:
1.) FRAME/GLAZING TO COMPLY WITH ASTM E119 OR UL 263

2.) FOR MORE INFO., SEE SPEC SECTION 08 44 35

INT.ALUM.WIN.MULLION(1-HR) | SCALE: 3" = 1'-0" | 13



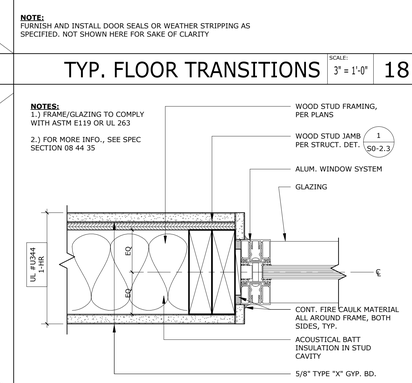
INT. H.M. DOOR JAMB (TYP.) | SCALE: 3" = 1'-0" | 8



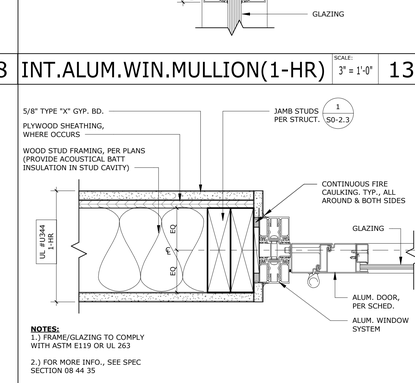
TYPICAL H.M. FRAME ANCHOR | SCALE: 12" = 1'-0" | 3

NOT USED

NOT USED



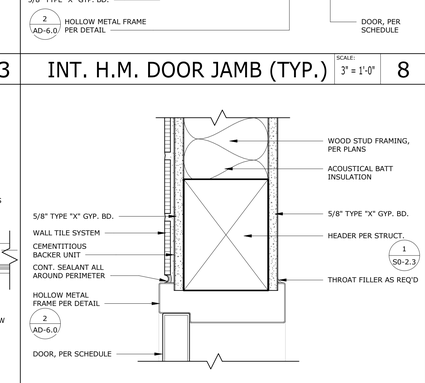
INT. ALUM. WIN. JAMB (1-HR) | SCALE: 3" = 1'-0" | 19



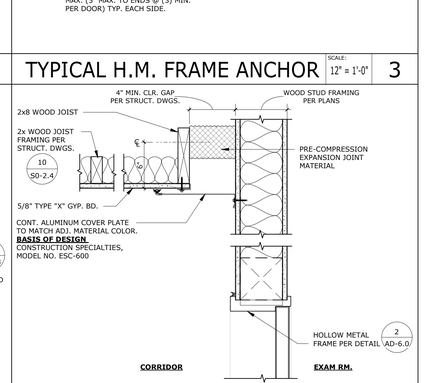
NOTES:
1.) FRAME/GLAZING TO COMPLY WITH ASTM E119 OR UL 263

2.) FOR MORE INFO., SEE SPEC SECTION 08 44 35

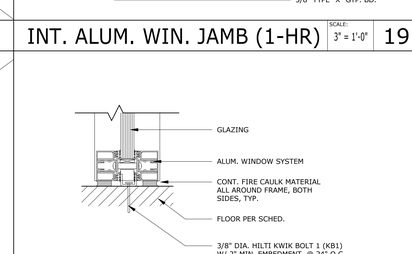
INT. ALUM. DOOR JAMB (1-HR) | SCALE: 3" = 1'-0" | 14



INT. HM. DOOR HEAD TILE | SCALE: 3" = 1'-0" | 9



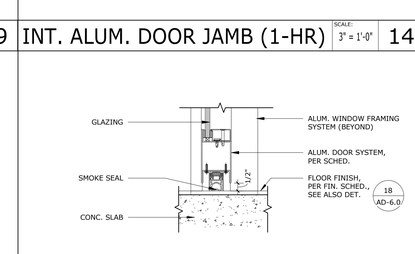
INT. HM. DR. HD. @ EXP. JOINT | SCALE: 1 1/2" = 1'-0" | 4



NOTES:
1.) FRAME/GLAZING TO COMPLY WITH ASTM E119 OR UL 263

2.) FOR MORE INFO., SEE SPEC SECTION 08 44 35

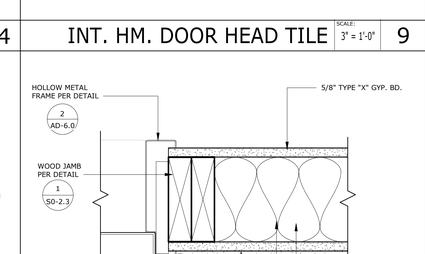
INT. ALUM. WIN. SILL (1-HR) | SCALE: 3" = 1'-0" | 20



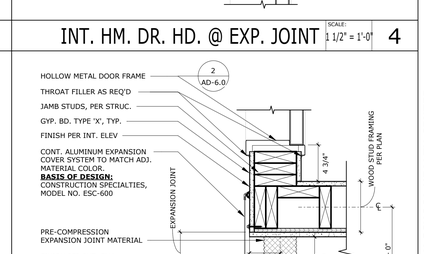
NOTES:
1.) FRAME/GLAZING TO COMPLY WITH ASTM E119 OR UL 263

2.) FOR MORE INFO., SEE SPEC SECTION 08 44 35

INT. ALUM. DR. THRSHLD (1-HR) | SCALE: 3" = 1'-0" | 15



INT. H.M. DOOR JAMB @TILE | SCALE: 3" = 1'-0" | 10



INT. H.M. DOOR JMB. @ EXP. GAP. | SCALE: 1 1/2" = 1'-0" | 5

PROJECT No. :1-78-50
3/14/2025 10:21:32 AM

DRAWN BY: VR, SK, AT CHECKED BY: JC

DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

DOOR & WINDOW DETAILS

AD-6.0

1-78-50

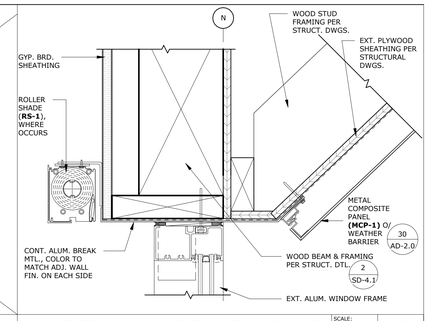
INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

NOT USED

NOT USED

NOT USED

NOT USED



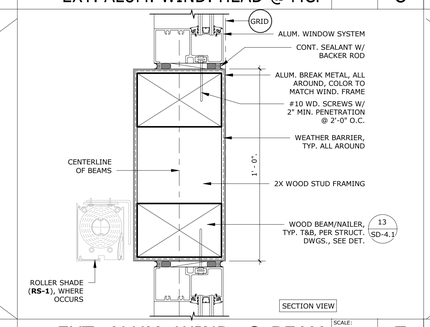
EXT. ALUM. WIND. HEAD @ MCP | SCALE: 3" = 1'-0" | 6

NOT USED

NOT USED

NOT USED

NOT USED



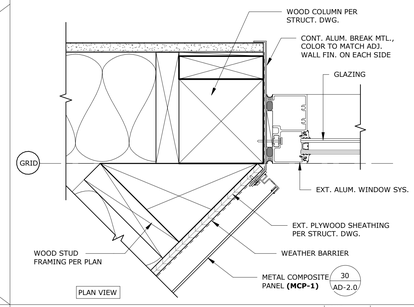
EXT. ALUM. WIND. @ BEAM | SCALE: 3" = 1'-0" | 7

NOT USED

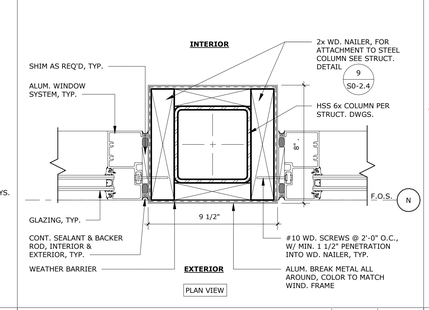
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NOT USED

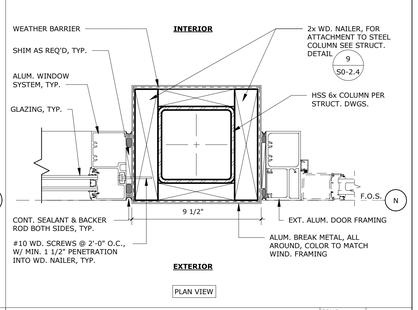
NOT USED



EXT. ALUM. WINDOW JAMB @ MCP | SCALE: 3" = 1'-0" | 13



EXT. ALUM. WIND. JAMB@COL. | SCALE: 3" = 1'-0" | 8



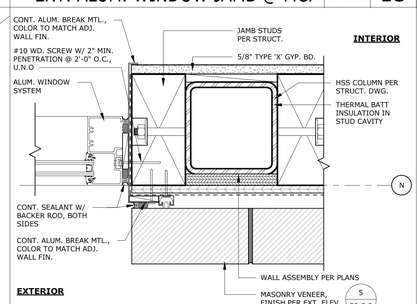
EXT.ALUM.WIN./DR.JMB.@COL. | SCALE: 3" = 1'-0" | 3

NOT USED

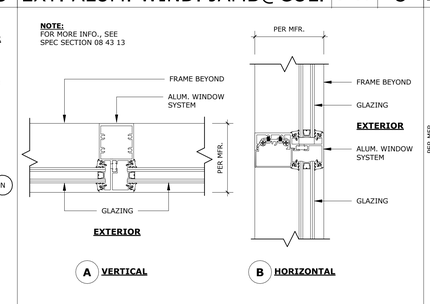
NOT USED

NOT USED

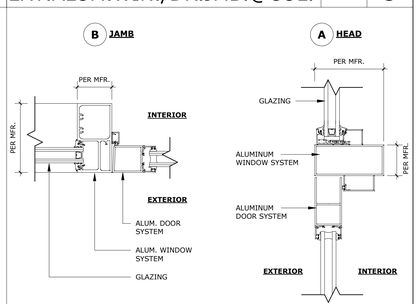
NOT USED



EXT. ALUM.WIND.JMB@CMU | SCALE: 3" = 1'-0" | 14



EXT. ALUM. WINDOW MULLION | SCALE: 3" = 1'-0" | 9



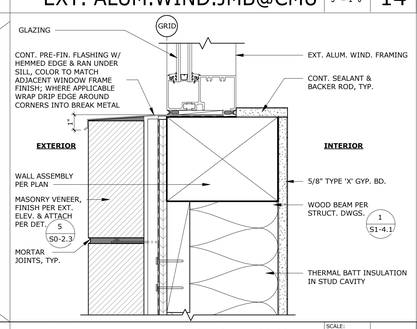
EXT.ALUM.DR.HD/JMB@GLZNG | SCALE: 3" = 1'-0" | 4

NOT USED

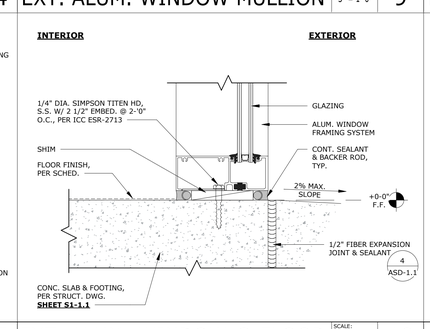
NOT USED

NOT USED

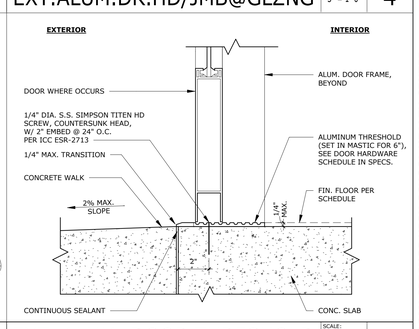
NOT USED



EXT.ALUM.WIND.SILL@CMU | SCALE: 3" = 1'-0" | 15



EXT. ALUM. WINDOW @ FLOOR | SCALE: 3" = 1'-0" | 10



EXT. ALUM. DOOR THRESHOLD | SCALE: 3" = 1'-0" | 5

AGENCY APPROVAL
File No.: 36-H7 A\#04-123900

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
3/14/2025 10:21:34 AM

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RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

DOOR & WINDOW DETAILS

AD-6.1

1-78-50

LIST OF ABBREVIATIONS

ADD'L.	ADDITIONAL
ALT.	ALTERNATE
ACI	AMERICAN CONCRETE INSTITUTE
APA	AMERICAN PLYWOOD ASSOCIATION
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
A.B.	ANCHOR BOLT(S)
APPROX.	APPROXIMATELY
ARCH.	ARCHITECT / ARCHITECTURAL
@	AT
B. PL.	BASE PLATE
BM.	BEAM
BRG.	BEARING
BTWN.	BETWEEN
BLK.	BLOCK
BLKG.	BLOCKING
B.E.	BOTH ENDS
BOT. OR BOTT.	BOTTOM
B.N.	BOUNDARY NAILS
BLDG.	BUILDING
C	CAMBER
CBC	CALIFORNIA BUILDING CODE
CIP	CAST IN PLACE
CLG.	CEILING
CJ	CEILING JOIST OR CONSTRUCTION JOINT OR CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION WELD
℄	CENTER LINE
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CMU	CONCRETE MASONRY UNIT
COND.	CONDITION
CONN.	CONNECTION
CONSTR.	CONSTRUCTION
CONT'D	CONTINUED
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
CSK.	COUNTERSINK
DL	DEAD LOAD
DP.	DEEP
DEMO.	DEMOLISH
DTL. OR DET.	DETAIL
DIAG.	DIAGONAL
DIA. OR ø	DIAMETER
DIM.	DIMENSION
DO	DITTO
DBL.	DOUBLE
D.F.	DOUGLAS FIR
DWL.	DOWEL
DN.	DOWN
DWG.	DRAWING
EA.	EACH
E.F.	EACH FACE
E.S.	EACH SIDE
E.W.	EACH WAY
E.N.	EDGE NAIL(S)
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EMBED.	EMBEDMENT
ENG.	ENGINEER
EQ.	EQUAL
EQUIP.	EQUIPMENT
EXCAV.	EXCAVATION
(E)	EXISTING
EXP.	EXPANSION
EJ	EXPANSION JOINT
ES	EVALUATION SERVICE
ESR	EVALUATION SERVICE REPORT
EXT.	EXTERIOR
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD OR FACE OF SLAB
F.S.	FAR SIDE
FIN.	FINISH
F.F.	FINISHED FLOOR
FHWS	FLAT HEAD WOOD SCREW
FLR.	FLOOR
FD	FLOOR DRAIN
FTG.	FOOTING
FNDN.	FOUNDATION
FRMG.	FRAMING
GALV.	GALVANIZE
GA.	GAUGE
GLU-LAM	GLUED LAMINATED
GLB	GLUED LAMINATED BEAM
GR.	GRADE
HGR.	HANGER
HR	HARDROCK
HDR.	HEADER
HT.	HEIGHT
HD	HOLD DOWN
HSS	HOLLOW STRUCTURAL SECTION
HORIZ.	HORIZONTAL
INFO.	INFORMATION
I.D.	INSIDE DIAMETER
INT.	INTERIOR
IBC	INTERNATIONAL BUILDING CODE
ICC	INTERNATIONAL CODE COUNCIL
INV.	INVERT
JST.	JOIST
KP	KING POST
KSI	KIPS PER SQUARE INCH
LAM.	LAMINATED
LDGR.	LEDGER
LT. WT. OR LW	LIGHT WEIGHT
LL	LIVE LOAD
LG.	LONG OR LENGTH
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LO-HY	LOW HYDROGEN
M.B.	MACHINE BOLT(S)
MFR.	MANUFACTURER
MAS.	MASONRY
M.O.	MASONRY OPENING
MATL.	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MTL.	METAL
MIN.	MINIMUM
MISC.	MISCELLANEOUS
MU	MECHANICAL UNIT
N.F.	NEAR FACE
N.S.	NEAR SIDE
NSA	NELSON STUD ANCHOR
(N)	NEW
NIC.	NOT IN CONTRACT
NTS.	NOT TO SCALE
NO. OR #	NUMBER
O.C.	ON CENTER
OPNG.	OPENING
OPP.	OPPOSITE
O.H.	OPPOSITE HAND
O.D.	OUTSIDE DIAMETER
PHWS	PAN HEAD WOOD SCREW
P.J.	PANEL JOINT
d	PENNY
PIL.	PILASTER
PL. OR ℙ	PLATE (STEEL OR WOOD)
PLY.	PLYWOOD
PWJ	PLYWOOD WEB JOIST
PCF	POUNDS PER CUBIC FOOT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PTDF	PRESSURE TREATED DOUGLAS FIR
PL	PROPERTY LINE

LIST OF ABBREVIATIONS (CONT'D)

RAD.	RADIUS
RFTR.	RAFTER
REF.	REFERENCE
REINF.	REINFORCING
REQ'D	REQUIRED
REQMT.	REQUIREMENT
RF.	ROOF
R.D.	ROOF DRAIN
RO.	ROUGH
R.O.	ROUGH OPENING
SCHED.	SCHEDULE
SEC.	SECTION
SEL.	SELECT
SEP.	SEPARATION
SFRS.	STRUCTURAL FORCE RESISTING SYSTEM
SHTG.	SHEATHING
SHT.	SHEET
S.M.	SHEET METAL
SMS	SHEET METAL SCREWS
SIM.	SIMILAR
SIMP.	SIMPSON
SPCG.	SPACING
SPECS.	SPECIFICATION
SQ.	SQUARE
STGR.	STAGGER
S.S.	STAINLESS STEEL
SPC	STANDARD PIPE COLUMN
STD.	STANDARD
STL.	STEEL
STIFF.	STIFFENER
STIRR.	STIRRUP
STRUCT.	STRUCTURAL
SYM.	SYMMETRICAL
TSG	TAPERED STEEL GIRDER
THK.	THICK
K OR KIP	1,000 POUNDS
THRU	THROUGH
TN	TOE NAIL
T&G	TONGUE AND GROOVE
T&B	TOP AND BOTTOM
T.O.F.	TOP OF FOOTING
T.O.L.	TOP OF LEDGER
T.O.S.	TOP OF STEEL OR TOP OF SHEATHING
T.O.W.	TOP OF WALL
TL	TOTAL LOAD
TS	TUBE STEEL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
VERT.	VERTICAL
WT.	WEIGHT
WWF	WELDED WIRE FABRIC
W/	WITH
W/O	WITHOUT
WD.	WOOD
WJ	WOOD-I-JOIST
WP	WORK POINT
W.S.	WOOD SCREW

GENERAL

1. THESE STRUCTURAL DRAWINGS AND SPECIFICATIONS, INCLUDING ANY ADDENDA (COLLECTIVELY "THE PLANS") INCORPORATE ALL LEGAL AND INDUSTRY REQUIREMENTS AND STANDARDS INCLUDING WITHOUT LIMITATION THE FOLLOWING:
   - THE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 1 (CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE), 2022 EDITION.
   - THE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2 (CALIFORNIA BUILDING CODE), 2022 EDITION.
   - OTHER REGULATING AGENCIES WHICH MAY HAVE AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY, AND THOSE CODES AND STANDARDS LISTED IN THESE NOTES AND SPECIFICATIONS.
   - THE FUNCTIONALITY STANDARDS SET FORTH IN TITLE 7 OF THE CALIFORNIA CIVIL CODE (THE RIGHT TO REPAIR ACT).
   - THE MANUFACTURER'S REQUIREMENTS OR RECOMMENDATIONS FOR ANY INCORPORATED PRODUCTS.
   - THE MOST CURRENT APPROVED ISSUES OF ANY NOTED SPECIFICATIONS, CODES AND STANDARDS, INCLUDING SUPPLEMENTS, UNLESS NOTED OTHERWISE.
2. THE PLANS REPRESENT ONLY THE FINISHED STRUCTURE, AND THEY ARE NOT INTENDED TO INDICATE OR REQUIRE ANY CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES. IN PARTICULAR AND WITHOUT LIMITATION, THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR ANY AND ALL EXCAVATION, DEMOLITION, SHORING AND ERECTION PROCEDURES AND FOR ANY AND ALL SAFETY PROGRAMS AND PRECAUTIONS.
3. IN USING THE PLANS FOR BIDDING OR CONSTRUCTION PURPOSES, THE CONTRACTOR IS REQUIRED TO REVIEW ALL OF THE PROJECT'S CONSTRUCTION DOCUMENTS AS A WHOLE IN ORDER TO IDENTIFY ALL REQUIREMENTS THAT DIRECTLY OR INDIRECTLY AFFECT ITS PORTION OF THE STRUCTURAL WORK, EVEN REQUIREMENTS LOCATED IN SECTIONS DESIGNATED AS APPLICABLE TO OTHER TRADES. IN CASE OF CONFLICTS, THE CONTRACTOR SHALL EITHER OBTAIN DIRECTION FROM AN APPROPRIATE OWNER REPRESENTATIVE OR OTHERWISE APPLY THE MORE STRINGENT REQUIREMENT.
4. IN INTERPRETING THE PLANS, THE FOLLOWING GENERAL RULES APPLY:
   - WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DRAWINGS.
   - SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
   - WORK NOT PARTICULARLY SHOWN OR SPECIFIED SHALL BE THE SAME AS SIMILAR PARTS THAT ARE SHOWN OR SPECIFIED.
   - SCALED DIMENSIONS AND GRAPHICALLY SHOWN LOCATIONS ARE TO BE CONSIDERED ONLY APPROXIMATE.
5. IN IMPLEMENTING THE PLANS, THE FOLLOWING GENERAL RULES APPLY:
   - BECAUSE THE PLANS ARE INTENDED TO SET FORTH THE REQUIREMENTS FOR CONSTRUCTION IN ONLY AN INDUSTRY-STANDARD LEVEL OF QUALITY AND DETAIL, AND THEREFORE ARE INTENDED TO BE SUPPLEMENTED BY APPROPRIATE REQUESTS FOR CLARIFICATION AND INFORMATION, ERRORS AND OMISSIONS ARE TO BE EXPECTED AND ANTICIPATED; AND THE CONTRACTOR IS REQUIRED TO CAREFULLY REVIEW THE PLANS FOR ERRORS AND OMISSIONS AND TO BRING THESE ERRORS AND OMISSIONS TO THE ATTENTION OF AN APPROPRIATE OWNER REPRESENTATIVE IN A TIMELY MANNER AND ASSUMES THE RISK OF THE CONSEQUENCES OF FAILING TO DO SO BEFORE BIDDING OR OTHERWISE PROCEEDING.
   - THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION, AND NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR INCONSISTENCIES.
6. SUBMITTALS WILL BE REVIEWED BY THE STRUCTURAL ENGINEER, IF AT ALL, ONLY PURSUANT TO THE INDUSTRY-STANDARD PROTOCOL SET FORTH IN AIA DOCUMENT A201, AND IN NO EVENT WILL THE SUBMITTAL REVIEW PROCESS RELIEVE OR LESSEN THE SUBMITTING CONTRACTOR'S RESPONSIBILITY FOR AN INAPPROPRIATE SUBMITTAL.
7. IN NO EVENT WILL ANY SITE VISITS BY THE STRUCTURAL ENGINEER CONCERN CONSTRUCTION MEANS AND METHODS OR CONSTRUCTION SAFETY, AND ALL SUCH MATTERS SHALL REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. COPIES OF THE PLANS PROVIDED IN ANY ELECTRONIC FORM ARE SUBJECT TO THE SAME PROVISIONS AS THE OTHER INSTRUMENTS OF SERVICE PREPARED BY OR ON BEHALF OF STRUCTURAL ENGINEER FOR THE PROJECT, INCLUDING WITHOUT LIMITATION THE ENGINEER'S COMMON LAW, STATUTORY OR OTHER RESERVED RIGHTS, INCLUDING COPYRIGHTS. A RECIPIENT IS GRANTED AT MOST A TRANSFERABLE NONEXCLUSIVE LICENSE TO REUSE THE PLANS SOLELY FOR PROJECT PURPOSES; AND NO RECIPIENT IS AUTHORIZED TO USE OR TO ALLOW THE USE OF ALL OR ANY PORTION OF THESE PLANS FOR ANY OTHER PURPOSE, AND ANY USE FOR ANY OTHER PURPOSE WOULD CONSTITUTE ACTIONABLE PLAGIARISM. STRUCTURAL ENGINEER PROVIDES DOCUMENTS IN AN ELECTRONIC FORM ONLY IN ITS STANDARD FORMATS AND CONVENTIONS AND WITH NO GUARANTEE OF COMPATIBILITY WITH ANY RECIPIENT'S SOFTWARE OR HARDWARE, AND ANY USE WITH OR CONVERSION TO OTHER FORMATS OR CONVENTIONS, OR THE USE WITH ANY PARTICULAR SOFTWARE OR HARDWARE, IS AT THE RECIPIENT'S SOLE RISK.

PROJECT DESIGN CRITERIA

1. BASIC DESIGN LIVE LOADS:

ROOF: 20 PSF (REDUCIBLE)

2. WIND LOADS

RISK CATEGORY: III
EXPOSURE CATEGORY: C
ULTIMATE DESIGN WIND SPEED (3-SECOND GUST), V_{ULT} = 102 MPH
NOMINAL DESIGN WIND SPEED, V_{ASD} = 79 MPH
VELOCITY PRESSURE EXPOSURE COEFFICIENT, K_z = 0.85
TOPOGRAPHIC FACTOR, K_{zt} = 1.0
WIND DIRECTIONALITY FACTOR, K_d = 0.85

A. COMPONENTS & CLADDING (ASCE 7-10, CH. 30)

q_h = 0.00256 K_z K_{zt} K_d V_{ULT}^2 = 24.5 PSF

P = q_h [(GC_p) - (GC_{pi})]

GUST EFFECT FACTOR, G = 0.85
EXTERNAL PRESSURE COEFFICIENT, (GC_p) = [FIG. 30.4-1 THRU 30.4-7]
INTERNAL PRESSURE COEFFICIENT, (GC_{pi}) = TABLE 26.11-1

B. SIGNS & FREESTANDING WALLS (ASCE 7-16, CH 30.)

q_h = 0.00256 K_z K_{zt} K_d V_{ULT}^2 = 24.5 PSF

P = q_h G Cf

GUST EFFECT FACTOR, G = 0.85
FORCE COEFFICIENT, (Cf) = [FIG. 29.5-1 THRU 29.5-3]

3. EARTHQUAKE LOADS

SEISMIC DESIGN CRITERIA

S_s = 2.234 g
S_1 = 0.82 g
SITE CLASS: D
F_a = 1.2
F_v = 1.4
S_{DS} = 1.787 g
S_{D1} = 0.765 g
RISK CATEGORY: III
SEISMIC DESIGN CATEGORY: D

SEISMIC DESIGN REQUIREMENTS

DESIGN BASE SHEAR — $V = C_sW$
WHERE — $C_s = S_{DS}/(R/I_e)$
BUT SHALL NOT BE LESS THAN — $C_s = 0.044S_{DS}I_e > 0.01$
BUT NEED NOT EXCEED — $C_s = S_{D1}/[T(R/I_e)]$

BUILDING	R	Ω_0	T	I_e	C_s	PRIMARY LATERAL FORCE RESISTING SYSTEM	ANALYSIS PROCEDURE	STRUCT. IRREG.	LOC. OF BASE
NEW ADDITION	6.5	2.5	0.18	1.25	0.344	(1)	(A)	NONE	T.O.F.

(1) LIGHT-FRAMED WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR (ASCE 7-16, TABLE 12.2-1, ITEM A.15)

(A) EQUIVALENT LATERAL FORCE PROCEDURE

DIMENSIONS

1. DIMENSIONS SHALL BE DEFINED TO INCLUDE BOTH HORIZONTAL DIMENSIONS AND VERTICAL DIMENSIONS (ELEVATIONS).
2. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DRAWINGS.
3. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT NOTED ON STRUCTURAL DRAWINGS.
4. SEE ARCHITECTURAL AND/OR CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS.
5. SEE ARCHITECTURAL DRAWINGS FOR ALL TOP OF SHEATHING AND/OR ROOF ELEVATIONS.
6. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES OR INCONSISTENCIES.

SUBMITTALS

1. SUBMITTALS, INCLUDING SHOP DRAWINGS AND CONCRETE MIX DESIGNS, REQUIRED BY THE SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THE ITEMS.
2. SHOP DRAWINGS SHALL INDICATE THE DATE OR REVISION OF DRAWING(S) FROM WHICH THE DRAWINGS WERE PREPARED. SUBMITTALS THAT DO NOT IDENTIFY THE LATEST DATE OR REVISION OF DRAWING(S) WILL BE RETURNED WITHOUT REVIEW. ONLY SHOP DRAWINGS THAT ARE COMPLETE WILL BE ACCEPTED FOR REVIEW.
3. IF, AFTER REVIEW, THE SHOP DRAWINGS MUST BE REVISED AND RESUBMITTED, THE SHOP DRAWINGS SHALL IDENTIFY EACH REVISION AND/OR ADDITION BY CLOUDING OR OTHER MEANS TO ASSURE PROPER REVIEW.
4. SUBMITTALS WILL NOT BE ACCEPTED DIRECTLY FROM SUBCONTRACTORS. SUBMITTALS WILL BE ACCEPTED FROM THE GENERAL CONTRACTOR ONLY AFTER BEING REVIEWED AND SIGNED BY THE GENERAL CONTRACTOR, INDICATING COMPLIANCE WITH THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS. SUBMITTALS NOT COMPLYING WITH THE REQUIREMENTS NOTED ABOVE OR IN THE SPECIFICATIONS WILL BE RETURNED WITHOUT REVIEW.

EXISTING CONDITIONS

1. ALL INFORMATION SHOWN ON THE PLANS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE FROM PLANS SUPPLIED BY THE OWNER, BUT WITHOUT GUARANTEE OF ACCURACY.
2. WHERE ACTUAL CONDITIONS ARE NOT IN ACCORDANCE WITH THE INFORMATION PRESENTED, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY. NO MODIFICATIONS OF THE PLANS FOR NEW CONSTRUCTION SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT.

EXISTING UNDERGROUND UTILITIES

1. THE ARCHITECT AND ENGINEERS ARE NOT RESPONSIBLE FOR THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE DRAWINGS. THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS, IF ANY, IS APPROXIMATE. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING ON THE SITE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT SHOULD ANY SUCH UNIDENTIFIED CONDITIONS BE DISCOVERED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES WHICH MAY RESULT FROM HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES.

DEMOLITION

1. ALL DEMOLITION SHALL BE CARRIED ON IN SUCH A WAY AS NOT TO DAMAGE EXISTING ELEMENTS, WHICH ARE TO REMAIN IN THE FINISHED STRUCTURE.
2. ALL ELEMENTS OF THE STRUCTURE, WHICH ARE TO REMAIN, AND WHICH ARE DAMAGED DURING DEMOLITION WORK SHALL BE REPLACED AT NO ADDITIONAL COST. EXISTING ELEMENTS SHALL BE PROTECTED TO THE FULLEST EXTENT POSSIBLE, IN ORDER TO MITIGATE DAMAGE.
3. CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF ALL EXISTING ELEMENTS THAT ARE NECESSARY FOR THE INSTALLATION OF ALL NEW WORK.
4. DO NOT CORE OR CUT NEW OPENINGS IN EXISTING CONCRETE OR MASONRY WITHOUT SPECIFIC APPROVAL OF THE STRUCUTRAL ENGINEER. SUBMIT DIMENSIONED LAYOUT OF ALL PROPOSED NEW OPENINGS TO ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO CORING OR CUTTING OPENINGS. CONTRACTOR, AT HIS OWN EXPENSE, SHALL USE NON-DESTRUCTIVE METHODS TO LOCATE EXISTING REINFORCING. EXISTING REINFORCING SHALL NOT BE CUT WITHOUT SPECIFIC APPROVAL OF THE STRUCTURAL ENGINEER.

FOUNDATION

1. ALL PORTIONS OF WORK PERTAINING TO EXCAVATIONS, FOUNDATIONS AND RETAINING WALLS SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 18A.
2. AN ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF WAS USED FOR DESIGN. AN ALLOWABLE LATERAL PRESSURE OF 150 PSF/FT WAS USED PER CBC 2022 TABLE 1806A.2.

   CLASS OF MATERIALS: LOOSE TO MODERATELY DENSE SILTY SANDS
3. SEE SPECIFICATIONS FOR EARTHWORK OPERATIONS.
4. THE CONTRACTOR SHALL PROVIDE FOR DE-WATERING OF EXCAVATIONS FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE.
5. THE CONTRACTOR SHALL PROVIDE FOR THE DESIGN, APPROVALS, PERMITS, INSTALLATION AND MONITORING OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED TO SAFELY RETAIN TEMPORARY EXCAVATIONS.
6. EXCAVATIONS FOR FOOTINGS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE AND REINFORCING. THE CONTRACTOR SHALL NOTIFY THE GEOTECHNICAL ENGINEER WHEN EXCAVATIONS ARE READY FOR INSPECTION. THE GEOTECHNICAL ENGINEER SHALL SUBMIT A LETTER OF COMPLIANCE TO THE OWNER.
7. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO NOT PLACE BACKFILL BEHIND RETAINING WALLS BEFORE CONCRETE HAS ATTAINED FULL DESIGN STRENGTH. THE CONTRACTOR SHALL BRACE OR PROTECT ALL BUILDING AND PIT WALLS BELOW GRADE FROM LATERAL LOADS UNTIL ATTACHING FLOORS ARE COMPLETELY IN PLACE AND HAVE ATTAINED FULL DESIGN STRENGTH. THE CONTRACTOR SHALL PROVIDE FOR DESIGN, PERMITS AND INSTALLATION AND REMOVAL OF SUCH BRACING.
8. FOOTING BACKFILL AND UTILITY TRENCH BACKFILL WITHIN BUILDING AREA SHALL BE MECHANICALLY COMPACTED IN LAYERS, TO THE APPROVAL OF THE GEOTECHNICAL ENGINEER. FLOODING WILL NOT BE PERMITTED.
9. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION, SHALL BE REMOVED.
10. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT SHOULD ANY BURIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC., BE FOUND.

REGISTERED PROFESSIONAL ENGINEER — BRIAN K. KARPA — No. 2780 — Exp. 9-30-25 — STRUCTURAL — STATE OF CALIFORNIA
LICENSED ARCHITECT — ROGER CLARKE — No. 4730 — Exp. 10-31-25 — STATE OF CALIFORNIA
STAMPS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025
AGENCY APPROVAL
File No: 36-H7 4-H4-123900

rtm engineering consultants
1Ada, Suite 100, Irvine, CA 92618
Tel (949) 462-3200 • Fax (949) 462-3201
WWW.RTMEC.COM
RTM JOB NO. : 203.805
CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
2/19/2025 9:48 AM

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ISSUE No.	DATE	DESCRIPTION
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REVISION No.	DATE	DESCRIPTION
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RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRING HIGH SCHOOL
MODERNIZATION & EXPANSION
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY SCHOOL DISTRICT

GENERAL NOTES

S0-1.1

1-78-50

CONCRETE

1. ALL PORTIONS OF WORK PERTAINING TO CONCRETE CONSTRUCTION SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 19A.
2. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY. MIX DESIGNS SHALL CONFORM TO ACI 318, SEC. 26.4, CBC SEC.1903A AND 1904A. MIX DESIGNS SHALL INCORPORATE THE FOLLOWING CRITERIA:
   - MINIMUM OF 5 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE. MAXIMUM OF 7 SACKS OF CEMENT PER YARD OF CONCRETE.
   - MAXIMUM WATER/CEMENT RATIO (BY WEIGHT) OF CONCRETE IN CONTACT WITH SOIL SHALL BE 0.45.
   - MAXIMUM SLUMP SHALL NOT EXCEED 3" ± 1" FOR FOOTINGS, SLABS ON GRADE, AND MASS CONCRETE; AND 4" ± 1" FOR OTHER CONCRETE. SLUMP LIMITATIONS NOTED SHALL APPLY TO CONCRETE MIX PRIOR TO THE ADDITION OF ANY WATER-REDUCING ADMIXTURES OR SUPER-PLASTICIZERS. MAXIMUM SLUMP MAY BE INCREASED TO 5 +/- 1" FOR MIX INCLUDING WATER-REDUCING ADMIXTURES OR SUPER-PLASTICIZERS.
   - CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CHLORIDE(S) SHALL NOT BE USED.
3. SCHEDULE OF STRUCTURAL CONCRETE 28 DAY MINIMUM STRENGTHS AND TYPES:
   - FOOTINGS, CAISSONS, GRADE BEAMS — 145 PCF, f'c = 4500 PSI
   - SLABS ON GRADE (NOTE: 2,500 PSI USED FOR DESIGN) — 145 PCF, f'c = 4500 PSI
   - ELSEWHERE UNLESS NOTED — 145 PCF, f'c = 4500 PSI
4. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE II. CEMENT USED FOR CONCRETE IN CONTACT WITH SOIL SHALL CONFORM TO ASTM C-150, TYPE V.
5. AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C-33. COMBINED AGGREGATE GRADATION OF ⅜" MAXIMUM (PEA GRAVEL) SHALL NOT BE USED.
6. READY MIXED CONCRETE SHALL CONFORM TO ASTM C-94.
7. PLACEMENT OF CONCRETE SHALL CONFORM TO ACI 304. CLEAN AND ROUGHEN TO ¼" AMPLITUDE ALL CONCRETE SURFACES AGAINST WHICH CONCRETE IS TO BE PLACED.
8. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE SECURED IN POSITION PRIOR TO PLACING CONCRETE.
9. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING IN CONCRETE IS NOT PERMITTED EXCEPT AS SHOWN. NOTIFY THE STRUCTURAL ENGINEER, IN ADVANCE, OF CONDITIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
10. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

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

    CONCRETE EXPOSED TO EARTH OR WEATHER:
    #6 THROUGH #18 BARS ..... 2"
    #5 BARS, W31 OR D31 WIRE, AND SMALLER ..... 1½"

    CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
    SLABS, WALLS, JOISTS:
    #14 AND #18 BARS ..... 1½"
    #11 BAR AND SMALLER ..... ¾"
    BEAMS, COLUMNS:
    PRIMARY REINFORCEMENT STIRRUPS, TIES, SPIRALS ..... 1½"
11. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ALL MOLDS, GROOVES, REVEALS, ORNAMENTS AND GROUNDS TO BE CAST IN CONCRETE.
12. DRYPACK WHERE NOTED ON DRAWINGS SHALL CONSIST OF 1 PART PORTLAND CEMENT AND 2½ PARTS OF FINE AGGREGATE CONFORMING TO ASTM C-33 WITH ENOUGH WATER TO FORM A BALL WHEN SQUEEZED IN THE HAND. THE SPACE BETWEEN TWO SURFACES REQUIRING DRYPACK SHALL BE PACKED WITH THE DRYPACK MATERIAL BY TAMPING OR RAMMING WITH A BAR OR ROD UNTIL THE VOIDS ARE COMPLETELY FILLED.
13. NON-SHRINK GROUT WHERE NOTED ON DRAWINGS SHALL BE A PRE-MIXED COMPOUND CONSISTING OF NON-METALLIC AGGREGATE, CEMENT, WATER REDUCING AND PLASTICIZING ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI AT 28 DAYS. WHERE APPLICATION THICKNESS EXCEEDS MANUFACTURER'S LIMITATIONS, EXTEND WITH ⅜" (GRAVEL) AGGREGATE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
14. CONCRETE FOR SLAB ON GRADE DOES NOT REQUIRE BATCH PLANT INSPECTION. A MINIMUM OF ONE SET OF CYLINDERS SHALL BE TAKEN AND TESTED FOR EACH 50 CUBIC YARDS OF CONCRETE OR FRACTION THEREOF.

REINFORCING STEEL

1. ALL PORTIONS OF WORK PERTAINING TO FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 19A.
2. REINFORCING BARS SHALL CONFORM TO ASTM A-615 GRADE 60, EXCEPT #3 BARS MAY BE GRADE 40. REINFORCING BARS THAT ARE TO BE WELDED SHALL CONFORM TO ASTM A-706, GRADE 60.
3. WELDING OF REINFORCEMENT SHALL BE WITH LOW HYDROGEN ELECTRODES AND SHALL CONFORM TO STRUCTURAL WELDING CODE – REINFORCING STEEL, AWS D1.4, BY THE AMERICAN WELDING SOCIETY AND SEC. 1903A.8. WELDING RODS USED FOR THE WELDING OF REINFORCING SHALL BE E80XX. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
4. ALL REINFORCING BAR BENDS SHALL BE MADE COLD. ALL #5 OR LARGER REINFORCING BARS SHALL NOT BE RE-BENT.
5. FUSION WELDED REINFORCING STEEL ASSEMBLIES SHALL CONFORM TO SEC. 1903A.8. TIES/STIRRUP BARS IN FUSION WELDED ASSEMBLIES SHALL CONFORM TO ASTM A-706, AND LONGITUDINAL HOLDING WIRES SHALL CONFORM TO ASTM A-1064.
6. DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE, SPACING AND NUMBER AS THE VERTICAL REINFORCEMENT, RESPECTIVELY.
7. REINFORCING SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS.
8. ALL VERTICAL REINFORCING SHALL BE CONTINUOUS BETWEEN TWO DIAPHRAGM LEVELS, UNLESS NOTED OTHERWISE.

WOOD

1. ALL PORTIONS OF WORK PERTAINING TO WOOD CONSTRUCTION SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 23, INCLUDING ADDITIONAL REQUIREMENTS AND EXCEPTIONS, AS APPLICABLE.
2. LUMBER SHALL BE GRADED IN ACCORDANCE WITH THE STANDARD GRADING RULES NO. 17 OF THE WEST COAST LUMBER INSPECTION BUREAU, OR THE STANDARD GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION.
3. DIMENSION LUMBER SHALL BE DOUGLAS FIR-LARCH, NO. 1 AND BETTER GRADE, UNLESS NOTED OTHERWISE. TIMBERS SHALL BE DOUGLAS FIR LARCH, NO. 1 GRADE, UNLESS NOTED OTHERWISE. MOISTURE CONTENT AT TIME OF INSTALLATION SHALL BE 19% OR LESS.
4. ALL PLYWOOD SHALL BE STRUCTURAL 1 AND COMPLY WITH PRODUCT STANDARD PS-1. USE PLYWOOD NAILS SAME GAUGE AS COMMON WIRE NAILS WITH LENGTHS AT LEAST EQUAL TO PLYWOOD THICKNESS PLUS REQUIRED PENETRATION IN ACCORDANCE WITH SECTIONS 2306.2 (AWC SDPWS TABLE 4.2A) OR 2306.3 (AWC SDPWS TABLE 4.3A), AS APPLICABLE.
5. EXPOSED MEMBERS SHALL BE SELECT STRUCTURAL GRADE, FREE OF HEART CENTER (WHERE SIZE PERMITS), AND SELECTED FOR APPEARANCE AND STRAIGHTNESS.
6. BOLT HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER DIAMETER THAN NOMINAL SIZE OF BOLT USED. RETIGHTEN ALL NUTS PRIOR TO CLOSING IN.
7. STANDARD CUT WASHERS SHALL BE USED UNDER BOLT HEADS AND NUTS AGAINST WOOD. USE HEAVY PLATE OR MALLEABLE IRON WASHERS WHERE NOTED.
8. DO NOT BORE OR NOTCH MEMBERS, EXCEPT WHERE SHOWN IN DETAILS. OBTAIN ENFORCEMENT AGENCY AND STRUCTURAL ENGINEER'S APPROVAL FOR ANY HOLES OR NOTCHES NOT DETAILED.
9. METAL CONNECTORS FOR WOOD CONSTRUCTION SHALL BE SIMPSON "STRONG-TIE", KC METALS, OR APPROVED EQUAL, UNLESS NOTED OTHERWISE. PRODUCT CALLOUT ON PLANS REFERS TO SIMPSON "STRONG TIE" MODEL NUMBER AND KC METALS PRODUCT REFERENCE NUMBER. FILL ALL ROUND AND TRIANGLE HOLES WITH THE SPECIFIED NAILS. APPROVED EQUALS MAY ONLY BE USED WITH PRIOR APPROVAL FROM ENFORCEMENT AGENCY AND THE STRUCTURAL ENGINEER.
10. ALL SILL PLATES WHICH REST ON FOUNDATION OR SLAB ON GRADE SHALL BE PRESERVATIVE-TREATED IN ACCORDANCE WITH SEC. 2303.1.9, AND SHALL BEAR THE QUALITY MARK OF AN APPROVED INSPECTION AGENCY THAT MAINTAINS CONTINUING SUPERVISION, TESTING AND INSPECTION OVER THE QUALITY OF PRESERVATIVE-TREATED WOOD. CUTS AND HOLES SHALL BE RETREATED.
11. JOISTS MORE THAN 8-INCH DEPTH SHALL BE CONTINUOUSLY BRIDGED BY SOLID BLOCKING, 2 INCHES THICK AND THE FULL DEPTH OF THE JOIST, SPACED AT 8 FEET ON CENTER.
12. ALL NAILING SHALL CONFORM TO TABLE 2304.10.2 – FASTENING SCHEDULE, USING COMMON WIRE NAILS. PREDRILL ALL NAILS 20D AND LARGER AND WHERE REQUIRED TO PREVENT SPLITTING. FASTENERS IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL.
13. LAG BOLTS SHALL HAVE LEAD HOLES BORED BEFORE INSTALLING. HOLE DIAMETERS SHALL BE AS FOLLOWS:
    A. SHANK PORTION — SAME DIAMETER AND LENGTH OF SHANK
    B. THREAD PORTION — 0.40 TO 0.70 DIAMETER OF THREAD AND SAME LENGTH

MACHINE APPLIED NAILING

1. THE USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOB SITE DEMONSTRATION AND THE APPROVAL OF THE STRUCTURAL ENGINEER AND THE ENFORCEMENT AGENCY. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. IF NAILHEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER, OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY AND SHALL BE DISCONTINUED.

STRUCTURAL STEEL AND MISCELLANEOUS METAL

1. ALL PORTIONS OF WORK PERTAINING TO STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 22A.
2. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A-992, UNLESS NOTED OTHERWISE.
3. ROUND HOLLOW STRUCTURAL SECTION (HSS) SHALL CONFORM TO ASTM A-500, GRADE B.
4. SQUARE AND RECTANGULAR HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A-500, GRADE C.
5. CHANNELS, ANGLES AND PLATES SHALL CONFORM TO ASTM A-36, UNLESS NOTED OTHERWISE.
6. ALL BOLTS SHALL CONFORM TO THE FOLLOWING, UNLESS NOTED OTHERWISE:
   - ANCHOR BOLTS: ASTM F1554, GRADE 36
   - TYPICAL STEEL CONNECTIONS: ASTM A-325N OR F1852PT (NON-SLIP-CRITICAL)
   - MOMENT AND DRAG CONNECTIONS: ASTM A-325SC OR F1852PT (SLIP-CRITICAL)
   - MISCELLANEOUS CONNECTIONS NOT NOTED OTHERWISE: ASTM A-307
7. ALL BOLTS CONNECTING STEEL FRAMING MEMBERS SHALL BE FULLY PRETENSIONED AND INSPECTED PER AISC.
8. STRUCTURAL STEEL IN SFRS LINES SHALL BE CONNECTED IN SLIP-CRITICAL JOINTS COMPLYING WITH AISC 341-10, SECTION D.2.2.
9. ANCHOR BOLTS SHALL BE HEX HEADED. BENT BAR ANCHORS SHALL NOT BE USED.
10. STRUCTURAL STEEL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
11. ALL WELDING SHALL CONFORM TO THE STRUCTURAL WELDING CODE – STEEL, AWS D1.1 AND SUPPLEMENT AWS D1.8, BY THE AMERICAN WELDING SOCIETY. WELDING RODS SHALL BE E70XX.
12. THE FILLER METAL FOR ALL WELDING SHALL HAVE A NOTCH TOUGHNESS OF NOT LESS THAN 20 FT-LBS AT 0 DEGREES F, AS MEASURED BY A STANDARD CHARPY V-NOTCH TEST, ASTM E23, IN ACCORDANCE WITH THE APPLICABLE FILLER METAL SPECIFICATION REFERENCED IN AWS D1.1 AND SEISMIC SUPPLEMENT AWS D1.8.
13. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
14. ALL WELDS NOT SPECIFIED SHALL BE CONTINUOUS FILLET WELDS. SIZE OF WELDS SHALL BE BASED ON AWS D1.1 FOR THICKER PART JOINED.
15. BOLT HOLES SHALL BE 1/16" LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT USED, UNLESS NOTED OTHERWISE. BOLT HOLES AT COLUMN BASEPLATES MAY BE 3/16" MAXIMUM LARGER IN DIAMETER THAN NOMINAL SIZE OF ANCHOR BOLT USED, UNLESS NOTED OTHERWISE.
16. DO NOT PAINT STRUCTURAL STEEL SURFACES THAT ARE TO RECEIVE SPRAY-APPLIED FIREPROOFING OR TO BE ENCASED IN CONCRETE OR MASONRY.
17. ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL ITEMS, INCLUDING CONNECTORS, EXPOSED TO THE WEATHER SHALL BE HOT-DIPPED GALVANIZED, AFTER FABRICATION.
18. STRUCTURAL STEEL SHALL BE DELIVERED TO THE JOB SITE FREE OF EXCESSIVE RUST, MILL SCALE, GREASE, ETC.
19. OPENINGS SHALL NOT BE PLACED IN STEEL MEMBERS UNLESS SPECIFICALLY DETAILED.

GLUED LAMINATED WOOD

1. SEE WOOD NOTES FOR ADDITIONAL INFORMATION.
2. GLUED LAMINATED WOOD MEMBERS SHALL BE FABRICATED IN ACCORDANCE WITH ANSI/AITC A190.1 AND ASTM D-3737.
3. BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8 DF/DF, DRY SERVICE CONDITIONS. SIMPLE SPAN BEAMS MAY BE DOUGLAS FIR COMBINATION 24F-V4 DF/DF, DRY SERVICE CONDITIONS. ALL HEARTWOOD ALASKAN YELLOW CEDAR, COMBINATION 20F-V12 AC/AC, WET SERVICE CONDITIONS, SHALL BE USED FOR EXTERIOR EXPOSED MEMBERS. EXTERIOR TYPE ADHESIVES SHALL BE USED IN ALL CASES.
4. BEAMS SHALL BE ARCHITECTURAL APPEARANCE GRADE WHERE EXPOSED, AND INDUSTRIAL APPEARANCE GRADE ELSEWHERE.
5. ALL LAMINATIONS FOR GLUED LAMINATED BEAMS SHALL BE 2" NOMINAL THICKNESS AND OF THE WIDTH SHOWN OR NOTED. ALL LAMINATIONS SHALL BE PARALLEL TO THE BOTTOM EDGE OF THE BEAM, EXCEPT AS NOTED.
6. THE MAXIMUM MOISTURE CONTENT AT THE TIME OF GLUING SHALL NOT EXCEED 16 PERCENT. THE RANGE OF MOISTURE CONTENT OF LAMINATIONS ASSEMBLED INTO A SINGLE MEMBER SHALL NOT EXCEED 5 PERCENT AT THE TIME OF GLUING.
7. ALL GLUED LAMINATED TIMBER SHALL BE CONTINUOUSLY INSPECTED DURING FABRICATION BY A SPECIAL INSPECTOR SPECIFICALLY APPROVED BY THE ENFORCEMENT AGENCY FOR THAT PURPOSE. AN AITC CERTIFICATE WILL NOT MEET THIS REQUIREMENT. SPECIAL INSPECTION IS NOT REQUIRED FOR NONCUSTOM MEMBERS 5½" MAXIMUM WIDTH AND 18" MAXIMUM DEPTH, AND WITH A MAXIMUM CLEAR SPAN OF 32 FEET, MANUFACTURED AND MARKED IN ACCORDANCE WITH ANSI/AITC A190.1, SECTION 6.1.1 FOR NONCUSTOM MEMBERS.
8. WRAP AND PROTECT MEMBERS IN ACCORDANCE WITH AITC 111. BUNDLE WRAP CONCEALED BEAMS. INDIVIDUALLY WRAP BEAMS THAT WILL BE EXPOSED TO VIEW. LEAVE INDIVIDUAL WRAPPING IN PLACE UNTIL FINISHING OCCURS.
9. MEMBERS SHALL NOT BE DRAGGED OR DROPPED. CARE SHALL BE TAKEN IN HANDLING TO PREVENT DAMAGE TO FINISHED SURFACE.
10. NOTCHING OR BORING OF GLUED LAMINATED BEAMS SHALL NOT BE ALLOWED UNLESS SPECIFICALLY DETAILED.

POST-INSTALLED ANCHORS

1. ACCEPTABLE EQUIVALENT MANUFACTURERS OF POST-INSTALLED EXPANSION ANCHORS AND SCREW ANCHORS SHALL BE HILTI INC., SIMPSON STRONG-TIE COMPANY INC., OR DEWALT, UNO.
2. TESTS FOR POST-INSTALLED ANCHORS IN HARDENED CONCRETE SHALL CONFORM TO TITLE 24, PART 2, CHAPTER 19A, SECTION 1910A.5.
3. POST-INSTALLED ANCHOR INSTALLATION SHALL BE INSPECTED BY A SPECIAL INSPECTOR SPECIFICALLY APPROVED BY THE ENFORCEMENT AGENCY FOR THAT PURPOSE.
4. POST-INSTALLED ANCHOR TESTING SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR.
5. TEST QUANTITY OF POST-INSTALLED ANCHORS AS NOTED BELOW:

APPLICATION	QUANTITY
SILL PLATES	10% OF BOLTS
STRUCTURAL	100% OF BOLTS
NON-STRUCTURAL (EQUIP. ANCHORAGE, ETC.)	50% OF BOLTS

6. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS, THEN RESUME INITIAL TESTING FREQUENCY.
7. TORQUE TESTING SHALL BE APPLIED BY CALIBRATED WRENCH. TENSION TESTING (WHERE INDICATED) SHALL BE APPLIED BY HYDRAULIC JACK OR CALIBRATED SPRING LOADING DEVICE.
8. THE FOLLOWING CRITERIA SHALL APPLY FOR THE ACCEPTANCE OF INSTALLED POST-INSTALLED ANCHORS:
   A. TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE ATTAINED WITHIN ONE-HALF (½) TURN OF THE NUT. SLEEVE ANCHORS ⅜ INCH DIAMETER OR LESS MUST ATTAIN THE SPECIFIED TEST TORQUE WITHIN ONE-QUARTER (¼) TURN OF THE NUT, AND THREADED ANCHORS MUST ATTAIN THE SPECIFIED TEST TORQUE WITHIN ONE-QUARTER (¼) TURN OF THE SCREW AFTER INITIAL SEATING OF THE SCREW HEAD.
   B. HYDRAULIC RAM METHOD: (FOR TENSION TESTING WHERE INDICATED) ANCHORS SHALL MAINTAIN THE TENSION TEST LOAD FOR A MINIMUM OF 15 SECONDS AND SHALL EXHIBIT NO DISCERNABLE MOVEMENT DURING THE TENSION TEST. (AN EXAMPLE OF DISCERNABLE MOVEMENT WOULD BE LOOSENING OF THE WASHER UNDER THE NUT).
8. TEST LOADS (1)(2)(3)

TORQUE TEST VALUES – EXPANSION ANCHORS
NORMAL WEIGHT CONCRETE

ANCHOR DIAMETER (INCH)	ANCHOR DEPTH (INCHES)	TORQUE (FT-LBF)
⅜	2	25
½	2	40
	3¼	40
⅝	3⅜	60
	4	60
¾	3¾	110
	4¾	110

(1) TEST VALUES ARE BASED ON KWIK BOLT TZ2 (KB-TZ2) EXPANSION ANCHORS BY HILTI, INC. (ICC EVALUATION REPORT NUMBER ESR-4266).

(2) TEST VALUES ARE BASED ON CARBON STEEL ANCHORS.

(3) VERIFY TORQUE VALUES WITH MANUFACTURER FOR SIMPSON STRONG-BOLT 2 (ICC ESR-3037) OR DEWALT POWER-STUD+SD2 (ICC ESR-2502)

TORQUE TEST VALUES – SCREW ANCHORS
NORMAL WEIGHT CONCRETE

ANCHOR DIAMETER (INCH)	ANCHOR DEPTH (INCHES)	TORQUE (FT-LBF)
⅜	2¾	50
	3½	50
½	3¾	65
	4½	65
⅝	4½	100
	6	100
¾	6	150
	6¾	150

(1) TEST VALUES ARE BASED ON TITEN HD SCREW ANCHORS BY SIMPSON STRONG-TIE, (ICC EVALUATION REPORT NUMBER ESR-2713).

(3) VERIFY TORQUE VALUES WITH MANUFACTURER FOR HILTI HUS-EZ SCREW ANCHORS (ICC ESR-3027) OR DEWALT SCREW-BOLT+SCREW ANCHOR (ICC ESR-3889)

POWDER DRIVEN CONCRETE FASTENERS

1. THE USE OF POWDER DRIVEN FASTENERS FOR TENSION LOADS IS LIMITED TO SUPPORT OF MINOR LOADS, SUCH AS ACOUSTICAL CEILINGS, DUCTWORK, CONDUIT, ETC. POWDER DRIVEN CONCRETE FASTENERS MAY NOT BE USED IN CURBS.
2. ALLOWABLE TENSION LOADS SHALL BE LIMITED TO 100 POUNDS, OR 80% OF ICC APPROVED VALUES, WHICHEVER IS LESS. QUALIFICATION FOR USE OF ALL POWER ACTUATED TOOLS MUST MEET ANSI A10.3 STANDARD AS REQUIRED BY THE MANUFACTURER AND ALL OSHA REQUIREMENTS.
3. THE OPERATOR, TOOL, AND FASTENERS SHALL BE PREQUALIFIED BY THE PROJECT INSPECTOR. HE SHALL OBSERVE THE TESTING OF THE FIRST TEN FASTENER INSTALLATIONS. A "PULL-OUT" TEST LOAD OF 200 LBS. SHALL BE APPLIED TO THE PIN IN SUCH A MANNER AS NOT TO RESIST THE SPALLING TENDENCY OF THE CONCRETE SURROUNDING THE PIN. THEREAFTER, RANDOM TESTS, UNDER THE PROJECT INSPECTOR'S SUPERVISION, SHALL BE MADE OF APPROXIMATELY ONE IN TEN PINS. IF ANY PIN FAILS TESTING, TEST ALL PINS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED UNTIL TWENTY CONSECUTIVE PASS, THEN RESUME THE INITIAL TESTING FREQUENCY.
4. FASTENERS SHALL HAVE ICC APPROVAL FOR THE TYPE OF CONCRETE INTO WHICH THE FASTENERS ARE INSTALLED.
5. POWDER DRIVEN CONCRETE FASTENERS ARE NOT PERMITTED IN PRESTRESSED CONCRETE MEMBERS.
6. WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGE TO THE REINFORCING BARS. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND DRILLED-IN ANCHOR AND/OR PIN.

ANCHORS AND/OR DOWELS INSTALLED WITH ADHESIVE

1. ANCHORS AND/OR DOWELS SHALL BE INSTALLED WITH ADHESIVE ONLY WHERE INDICATED ON DRAWINGS.
2. ANCHORS AND/OR DOWELS SHALL BE INSTALLED IN CONCRETE USING ONE OF THE FOLLOWING PRODUCTS IN ACCORDANCE WITH THE APPLICABLE ICC/IAPMO REPORT:
   - HILTI HIT-HY 200 ADHESIVE — ICC NO. ESR-4868
   - SIMPSON SET-XP ADHESIVE — ICC NO. ESR-2508
   - DEWALT PURE110+ ADHESIVE — ICC NO. ESR-3298
3. ADHESIVE SYSTEMS OTHER THAN THOSE SPECIFIED SHALL BE SUBMITTED AS A SUBSTITUTION, AND ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE ENFORCEMENT AGENCY, THE ARCHITECT, AND THE STRUCTURAL ENGINEER.
4. HOLES SHALL BE DRILLED WITH NON-REBAR-CUTTING DRILL BITS.
5. HOLES SHALL BE CLEAN OF CONCRETE DUST AND DEBRIS USING A NYLON BRUSH AND OIL-FREE COMPRESSED AIR. HOLES SHALL ALSO BE FREE OF STANDING WATER.
6. PROJECT INSPECTOR SHALL VERIFY INSTALLATION OF ANCHORS OR DOWELS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, INCLUDING CLEANLINESS OF DRILL HOLES AND PROPER EMBEDMENT.
7. ANCHORS SET IN CONCRETE AND GROUTED MASONRY SHALL BE TESTED TO 2 TIMES THE ASD ALLOWABLE TENSION LOAD, 1.25 TIMES THE LRFD STRENGTH CAPACITY, OR 80% OF THE YIELD STRENGTH OF THE BOLT FOR THE SPECIFIC LOCATION OF THE ANCHOR TO BE TESTED, WHICHEVER IS LESS. TORQUE TESTING IS NOT PERMITTED. SEE DETAILS FOR TEST LOADS.
8. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL TO VERTICALLY OVERHEAD ORIENTATION TO SUPPORT SUSTAINED TENSION LOADS SHALL BE DONE BY A CERTIFIED ADHESIVE ANCHOR INSTALLER (AAI) AS CERTIFIED THROUGH ACI/CRSI (ACI 318-19 SECTION 26.7(E)). PROOF OF CURENT CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF INSTALLATION.
9. ADHESIVE ANCHORS MUST BE INSTALLED IN CONCRETE AGED A MINIMUM OF 21 DAYS.

STAMPS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR:
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025
AGENCY APPROVAL
File No: 36-H7 Ltr34-123900

rtm engineering consultants
1Ada, Suite 100, Irvine, CA 92618
Tel (949) 462-3200 • Fax (949) 462-3201
WWW.RTMEC.COM
RTM JOB NO. : 203.805
CONSULTANT BRANDING

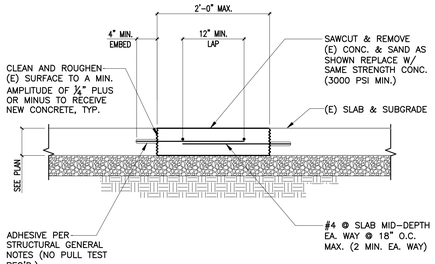
RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
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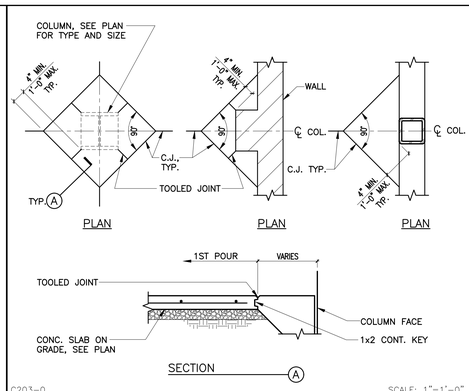
DRAWN BY: CHECKED BY:

ISSUE No.	DATE	DESCRIPTION	REVISION No.	DATE	DESCRIPTION
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2			2		
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4			4		



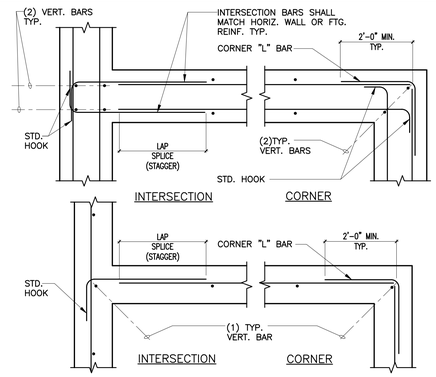
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TYPICAL SLAB PATCH DETAIL | 17



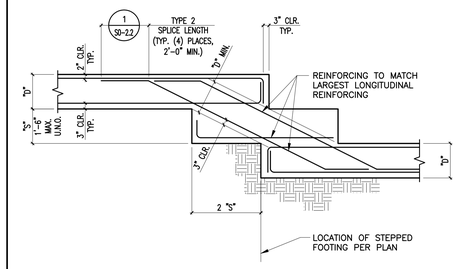
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S.O.G. CONST. JOINTS AT COL. | 13



C303–0 SCALE: NO SCALE

REINF. AT FTG. OR WALL INTERSECTION | 9



NOTES:
1. FOR FOOTING REINFORCING SEE FOOTING ELEVATIONS AND/OR SECTIONS.
2. VERTICAL WALL DOWELS SHALL EXTEND TO BOTTOM OF FOOTING.

C104–0 SCALE: NO SCALE

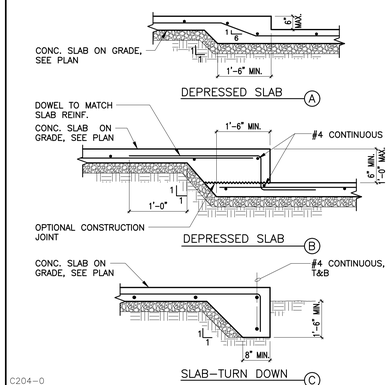
STEPPED FTG. TWO LAYERS OF REINF. | 5



PAD FOOTING SCHEDULE				
	A	B	REINF.	REMARKS
PF–2	2'–0"	2'–0"	(3)#5 EA. WAY	
PF–3	3'–0"	2'–0"	(5)#5 EA. WAY	
PF–4	4'–0"	2'–0"	(7)#5 EA. WAY	
PF–5	5'–0"	2'–0"	(9)#5 EA. WAY	
PF–6	6'–0"	2'–0"	(10)#5 EA. WAY	
PF–7	7'–0"	2'–0"	(12)#5 EA. WAY	
PF–3A	3'–0"	2'–0"	(5)#5 EA. WAY	T&B
PF–4A	4'–0"	2'–0"	(7)#5 EA. WAY	T&B

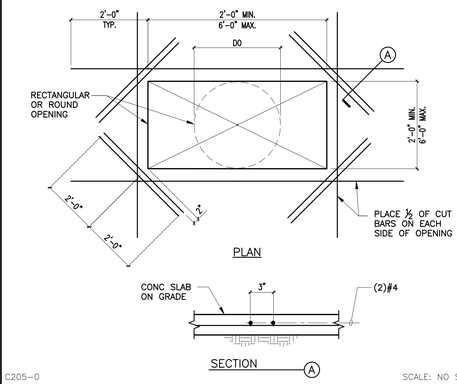
C107–0 SCALE: NO SCALE

PAD FOOTING SCHEDULE | 18



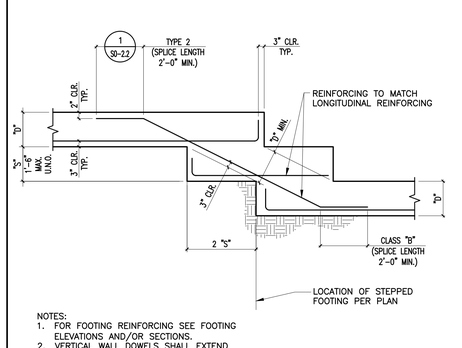
C204–0 SCALE: NO SCALE

DEPRESSED S.O.G. AND SLAB EDGE | 14



C205–0 SCALE: NO SCALE

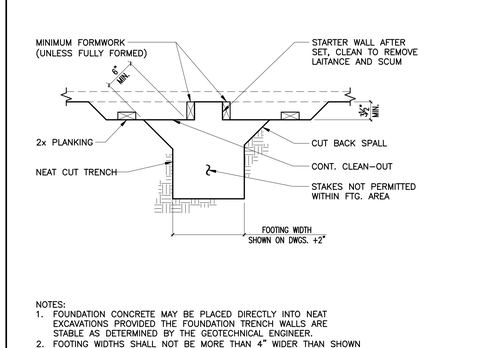
OPENING IN SLAB ON GRADE | 10



NOTES:
1. FOR FOOTING REINFORCING SEE FOOTING ELEVATIONS AND/OR SECTIONS.
2. VERTICAL WALL DOWELS SHALL EXTEND TO BOTTOM OF FOOTING.

C108–0 SCALE: NO SCALE

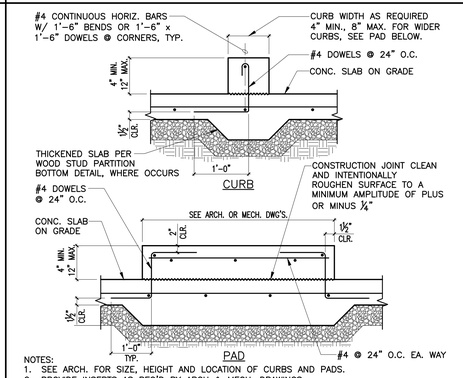
STEPPED FTG: ONE LAYER OF REINF. | 6



NOTES:
1. FOUNDATION CONCRETE MAY BE PLACED DIRECTLY INTO NEAT EXCAVATIONS PROVIDED THE FOUNDATION TRENCH WALLS ARE STABLE AS DETERMINED BY THE GEOTECHNICAL ENGINEER.
2. FOOTING WIDTHS SHALL NOT BE MORE THAN 4" WIDER THAN SHOWN ON PLAN.
3. FORMWORK NOT PERMITTED BELOW GRADE UNLESS FULLY FORMED.

C101–0 SCALE: NO SCALE

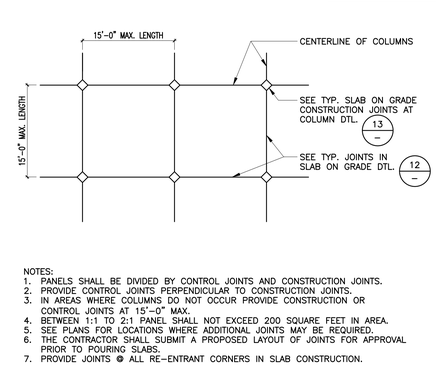
FOOTING POURED AGAINST EARTH | 1



NOTES:
1. SEE ARCH. FOR SIZE, HEIGHT AND LOCATION OF CURBS AND PADS.
2. PROVIDE INSERTS AS REQ'D BY ARCH & MECH. DRAWINGS.

C208–0 SCALE: NO SCALE

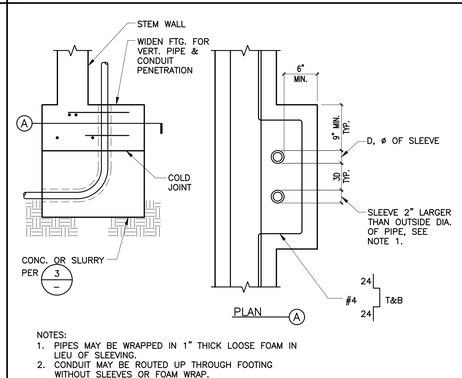
CONCRETE CURB AND PADS | 15



NOTES:
1. PANELS SHALL BE DIVIDED BY CONTROL JOINTS AND CONSTRUCTION JOINTS.
2. PROVIDE CONTROL JOINTS PERPENDICULAR TO CONSTRUCTION JOINTS.
3. IN AREAS WHERE COLUMNS DO NOT OCCUR PROVIDE CONSTRUCTION OR CONTROL JOINTS AT 15'–0" MAX.
4. BETWEEN 1:1 TO 2:1 PANEL SHALL NOT EXCEED 200 SQUARE FEET IN AREA.
5. SEE PLANS FOR LOCATIONS WHERE ADDITIONAL JOINTS MAY BE REQUIRED.
6. THE CONTRACTOR SHALL SUBMIT A PROPOSED LAYOUT OF JOINTS FOR APPROVAL PRIOR TO POURING SLABS.
7. PROVIDE JOINTS @ ALL RE–ENTRANT CORNERS IN SLAB CONSTRUCTION.

C201–0 SCALE: NO SCALE

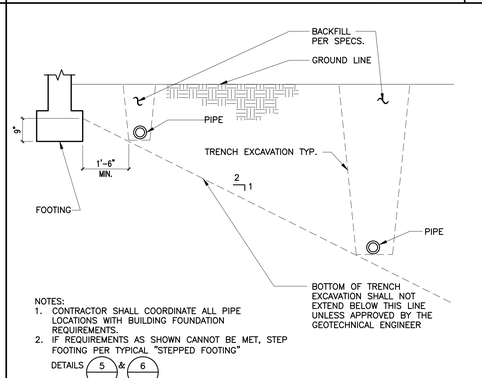
METHOD OF POURING S.O.G. | 11



NOTES:
1. PIPES MAY BE WRAPPED IN 1" THICK LOOSE FOAM IN LIEU OF SLEEVING.
2. CONDUIT MAY BE ROUTED UP THROUGH FOOTING WITHOUT SLEEVES OR FOAM WRAP.

C109–0 SCALE: NO SCALE

TYP. VERT. PIPES OR COND. THRU FTG. | 7



NOTES:
1. CONTRACTOR SHALL COORDINATE ALL PIPE LOCATIONS WITH BUILDING FOUNDATION REQUIREMENTS.
2. IF REQUIREMENTS AS SHOWN CANNOT BE MET, STEP FOOTING PER TYPICAL "STEPPED FOOTING"

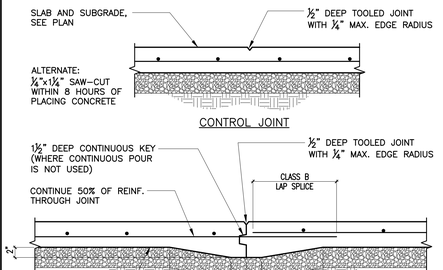
C102–0 SCALE: NO SCALE

PIPES PARALLEL TO FOOTINGS | 2

NOTES:
SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR THE FOLLOWING:
1. LOCATION AND DIMENSIONS OF BASES.
2. LOCATION, NUMBER, SIZE AND TYPE OF BOLTS.
3. EMBEDMENT OF EXPANSION ANCHORS WHERE OCCURS.
4. CURB HEIGHT, 4" MIN.

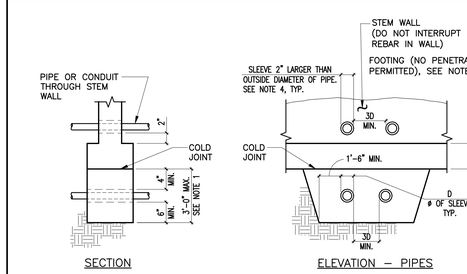
C209–0 SCALE: NO SCALE

CONCRETE BASE FOR EQUIPMENT | 20



C202–0 SCALE: NO SCALE

JOINT IN SLAB ON GRADE | 16



NOTES:
1. FOR PIPE/CONDUIT LESS THAN 3'–0" BELOW BOTTOM OF FOOTING, PROVIDE SLURRY AS SHOWN. FOR PIPE/CONDUIT MORE THAN 3'–0" BELOW BOTTOM OF FOOTING, COMPACT BACKFILL OVER PIPE TO 90% AS APPROVED BY GEOTECHNICAL ENGINEER OR STEP FTG SO THAT DIMENSION DOES NOT EXCEED 3'–0".
2. CONTRACTOR SHALL COORDINATE ALL PIPE AND CONDUIT LOCATIONS WITH BUILDING FOUNDATION REQUIREMENTS.
3. TRENCH BELOW FOOTING SHALL BE FILLED WITH CONCRETE OR 3–SACK SLURRY BEFORE POURING FOOTING. CONCRETE FILL SHALL BE SAME WIDTH AS FOOTING AND FULL WIDTH OF PIPE TRENCH.
4. PIPES MAY BE WRAPPED IN 1" THICK LOOSE FOAM IN LIEU OF SLEEVING.
5. CONDUIT MAY BE RUN THRU STEM OR ENCASEMENT UNDER FOOTING WITHOUT SLEEVES OR FOAM WRAP.
6. CONTRACTOR SHALL COORDINATE ALL UNDERGROUND UTILITIES WITH FOOTING ELEVATIONS. WHERE PIPES OR CONDUIT ARE IN CONFLICT WITH THE FOOTING, CONTRACTOR SHALL STEP THE FOOTING DOWN PER TYPICAL "STEPPED FTG." DETAIL ON THIS SHEET. NOT ALL REQUIRED STEPS IN THE FOOTING ARE SHOWN ON PLAN.

C103–0 SCALE: NO SCALE

PIPES AND CONDUIT PERPENDICULAR TO FOOTINGS | 3

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PROJECT No. :1-78-50
2/19/2025 9:50 AM

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650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNADINO CITY SCHOOL DISTRICT

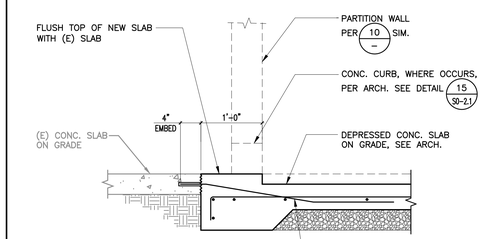
TYPICAL CONCRETE DETAILS

S0-2.1

1-78-50

17

13 NEW DEPRESSED SLAB TO (E) SLAB 9



NOTE:
CLEAN & ROUGHEN ALL (E) SURFACES TO A MIN. AMPLITUDE OF ¼"± TO RECEIVE NEW CONC.

ISHS-004 SCALE: 1"=1'-0"

5

STAMPS

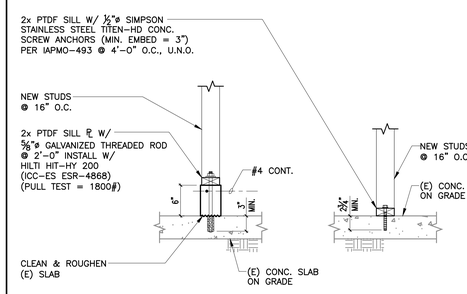
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025
AGENCY APPROVAL
File No: 36-H7 Ltr Rel:123900

rtm engineering consultants
1Ada, Suite 100, Irvine, CA 92618
Tel (949) 462-3200 • Fax (949) 462-3201
WWW.RTMEC.COM
RTM JOB NO. : 203.805
CONSULTANT BRANDING

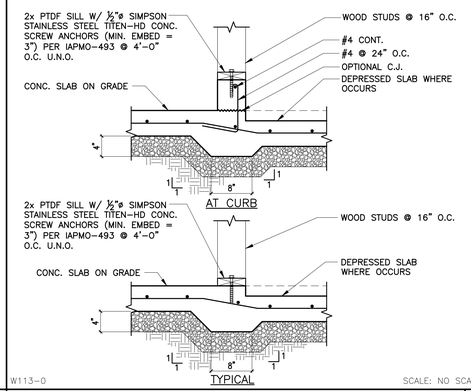
RUHNAU CLARKE ARCHITECTS

18

14 WOOD STUD PARTITION BOTTOM (NON-BEARING) 10



MW-112 SCALE: NO SCALE



W113-0 SCALE: NO SCALE

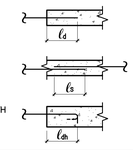
TYPE	BAR LOCATION	CONCRETE		BAR SIZE																												
		TYPE	STRENGTH	#3			#4			#5			#6			#7			#8			#9			#10			#11		
				ℓ_d	ℓ_s	ℓ_{dh}	ℓ_d	ℓ_s	ℓ_{dh}	ℓ_d	ℓ_s	ℓ_{dh}	ℓ_d	ℓ_s	ℓ_{dh}	ℓ_d	ℓ_s	ℓ_{dh}	ℓ_d	ℓ_s	ℓ_{dh}	ℓ_d	ℓ_s	ℓ_{dh}	ℓ_d	ℓ_s	ℓ_{dh}	ℓ_d	ℓ_s	ℓ_{dh}
1	VERT. REINF. IN CONC WALL	NWC	fc'>4ksi	14	18	6	19	25	7	24	31	9	28	37	10	42	54	12	47	62	14	54	70	15	61	79	17	67	87	19
2	HORIZ. REINF. IN CONC. WALL, FTGS., BEAMS, MISC. (SEE NOTE 5)	NWC	fc'>4ksi	18	24	6	25	32	7	31	40	9	37	48	10	54	70	12	62	80	14	70	91	15	79	102	17	87	113	19
3	SLAB ON GRADE (SEE NOTE 6)	NWC	fc'>4ksi	14	18	6	19	25	7	24	31	9	28	37	10	42	54	12	47	62	14	54	70	15	61	79	17	67	87	19

NOTES:

1. ℓ_d = DEVELOPMENT

ℓ_s = LAP SPLICE LENGTH

ℓ_{dh} = HOOK DEVELOPMENT LENGTH



2. THE ABOVE DEVELOPMENT & SPLICE LENGTHS ARE CLASS B & APPLY TO ALL REINF. U.N.O. ON DWGS.
3. FOR NONCONTACT LAP SPLICES AND ALL SPLICES IN SHOTCRETE WALLS, ADD 6" TO THE LENGTHS IN THE TABLE ABOVE.
4. WHEN SPLICING BARS OF DIFFERENT SIZE, USE THE LAP SPLICE LENGTH OF LARGER BAR.
5. TYPE 2 VALUES NOTED HAVE ALREADY BEEN INCREASED BY 1.3, ASSUMING A "TOP BAR" CONDITION.
6. FOR SLABS OR CURBS THICKER THAN 12", THE REBAR LAPS SHALL BE INCREASED TO COMPLY WITH TYPE 2 VALUES.

C415-0 SCALE: NO SCALE

19

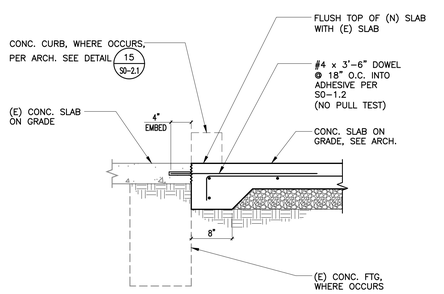
15 NEW WOOD STUD BOTTOM 11

20

16

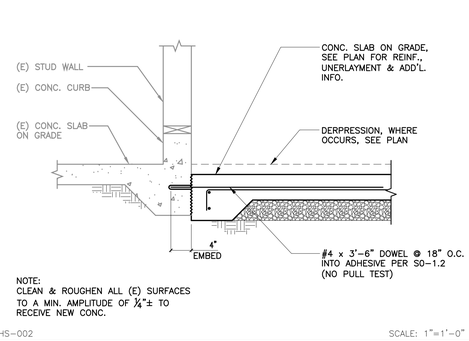
12

7 TYPICAL NEW SLAB TO (E) SLAB 2



NOTE:
CLEAN & ROUGHEN ALL (E) SURFACES TO A MIN. AMPLITUDE OF ¼"± TO RECEIVE NEW CONC.

ISHS-001 SCALE: 1"=1'-0"

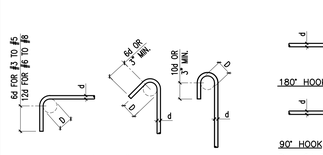


NOTE:
CLEAN & ROUGHEN ALL (E) SURFACES TO A MIN. AMPLITUDE OF ¼"± TO RECEIVE NEW CONC.

ISHS-002 SCALE: 1"=1'-0"

1

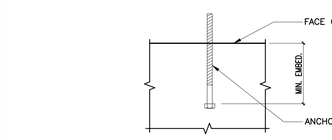
8 REINFORCING DEVELOPMENT & SPLICE LENGTHS



NOTES:
1. ALL BAR BENDS SHALL BE MADE COLD.
2. ALL REINFORCING BARS #5 & LARGER SHALL NOT BE RE-BENT.

C409-0 SCALE: NO SCALE

2 BAR BENDS



BOLT SIZE	EMBEDMENT FOR CONCRETE U.N.O.	EMBEDMENT FOR CONC. @ SHEAR WALLS
½"	4"	6"
⅝"	5"	7½"
¾"	6"	9"
⅞"	7"	10½"
1"	8"	12"
1⅛"	9"	13½"
1¼"	10"	15"

NOTES:
1. MINIMUM BOLT SPACING SHALL BE 12 BOLT DIAMETERS WITH A MINIMUM EDGE DISTANCE OF 12 DIAMETERS, UNLESS NOTED OTHERWISE.
2. PROVIDE AN ADDITIONAL 2" OF EMBEDMENT FOR ANCHOR BOLTS LOCATED IN THE TOP OF COLUMNS.
3. ANCHOR BOLTS SHALL BE HEX HEADED WITH THE DIMENSIONS OF THE HEX CONFORMING TO ANSI/ASME B18.2.1 BENT BAR ANCHORS SHALL NOT BE USED.

C501-0 SCALE: NO SCALE

3

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

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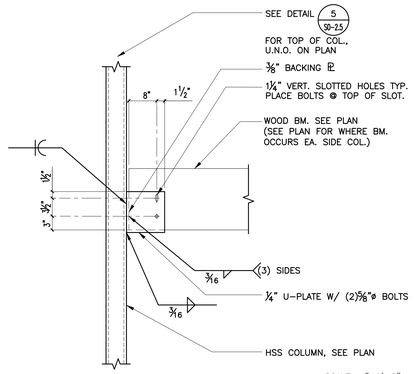
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650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNADINO CITY SCHOOL DISTRICT

TYPICAL CONCRETE DETAILS

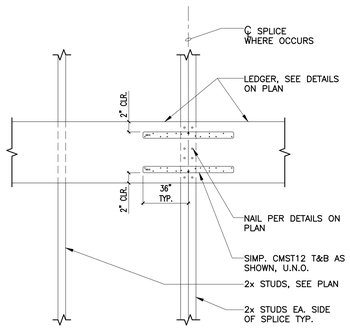
S0-2.2

1-78-50



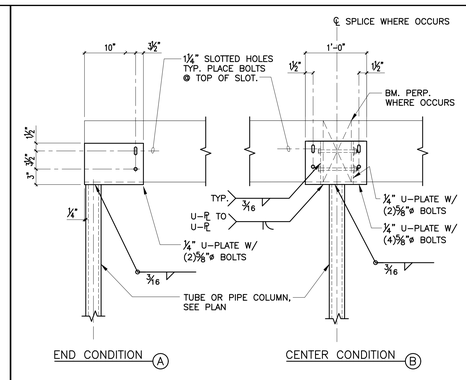
SCALE: 1"=1'-0"

WOOD BEAM TO HSS COL. (SIDE) 17



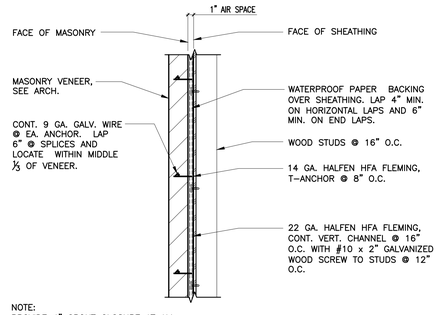
W119-0 SCALE: NO SCALE

TYPICAL LEDGER SPLICE 13



W108-0 SCALE: NO SCALE

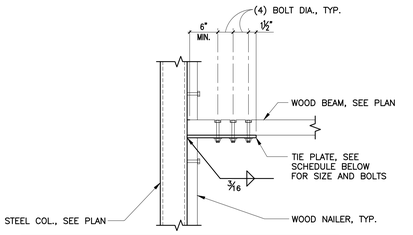
WOOD BEAM TO STEEL COLUMN 9



NOTE:
PROVIDE 4" GROUT CLOSURE AT ALL EDGES (TOP, ENDS & AROUND OPENINGS). GROUT SOLID BELOW GRADE.

M202-0 SCALE: NO SCALE

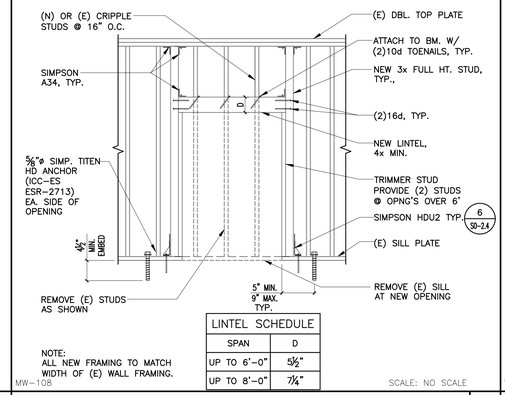
MASONRY VENEER ON WOOD STUDS 5



TIE PLATE SCHEDULE			
MARK	TIE PLATE	BOLTS	REMARKS
A	¼"x5"	(3)¾"ø	TYP. U.N.O. ON PLAN
B	⅜"x5"	(4)¾"ø	

W210-0 SCALE: NO SCALE

WOOD BEAM TO COLUMN 18

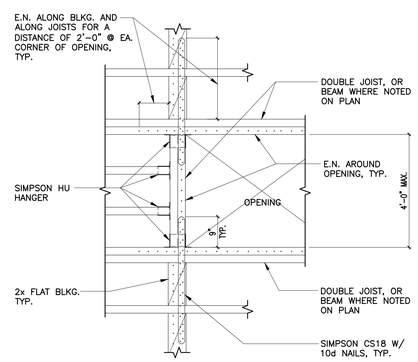


LINTEL SCHEDULE	
SPAN	D
UP TO 6'-0"	5½"
6'-1" TO 8'-0"	7¼"

NOTE:
ALL NEW FRAMING TO MATCH WIDTH OF (E) WALL FRAMING.

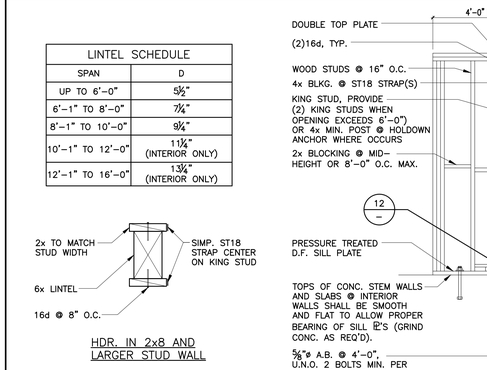
MW-108 SCALE: NO SCALE

NEW OPENING IN (E) WOOD STUD WALL 14



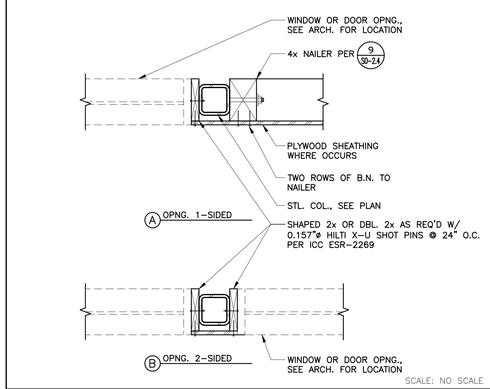
W111-0 SCALE: NO SCALE

OPENING IN HORIZ. WOOD FRAMING 10



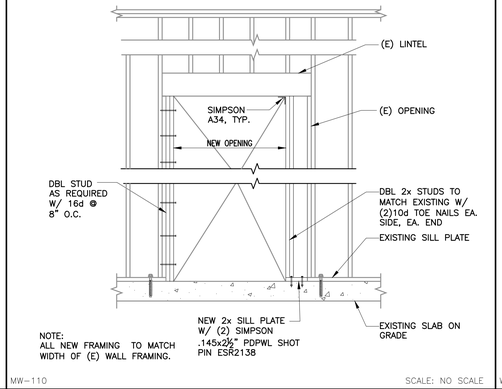
W101-0 SCALE: NO SCALE

WOOD STUD WALL FRAMING 1



SCALE: NO SCALE

TYP. HSS AT END OF WALL 19

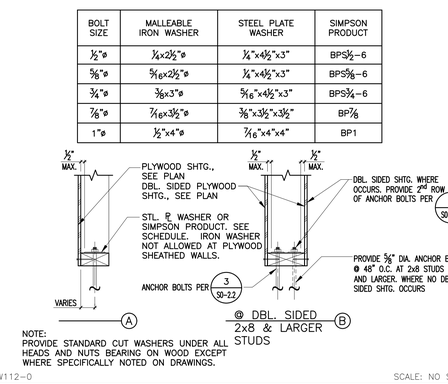


NOTE:
ALL NEW FRAMING TO MATCH WIDTH OF (E) WALL FRAMING.

MW-110 SCALE: NO SCALE

PARTIALY INFILL (E) DOOR OPENING 15

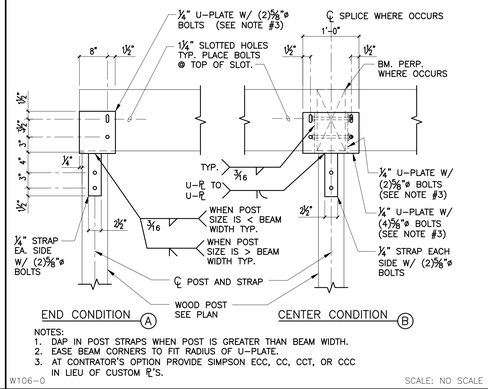
BOLT SIZE	MALLEABLE IRON WASHER	STEEL PLATE WASHER	SIMPSON PRODUCT
½"ø	¼"x2½"ø	¼"x4½"x3"	BPS½-6
⅝"ø	⅝"x2½"ø	¼"x4½"x3"	BPS⅝-6
¾"ø	⅜"x3"ø	⅝"x4½"x3"	BPS¾-6
⅞"ø	7/16"x3½"ø	⅜"x3½"x3½"	BP⅞
1"ø	½"x4"ø	7/16"x4"x4"	BP1



NOTE:
PROVIDE STANDARD CUT WASHERS UNDER ALL HEADS AND NUTS BEARING ON WOOD EXCEPT WHERE SPECIFICALLY NOTED ON DRAWINGS.

W112-0 SCALE: NO SCALE

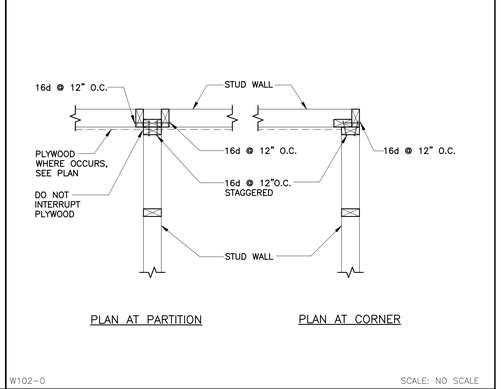
WOOD FRAMING WASHER SCHEDULE 11



NOTES:
1. DAP IN POST STRAPS WHEN POST IS GREATER THAN BEAM WIDTH.
2. EASE BEAM CORNERS TO FIT RADIUS OF U-PLATE.
3. AT CONTRATOR'S OPTION PROVIDE SIMPSON ECC, CC, CCT, OR CCC IN LIEU OF CUSTOM PL'S.

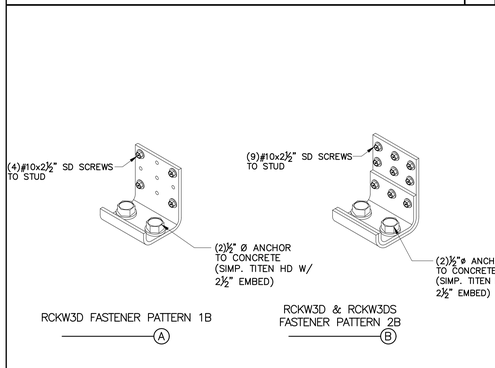
W106-0 SCALE: NO SCALE

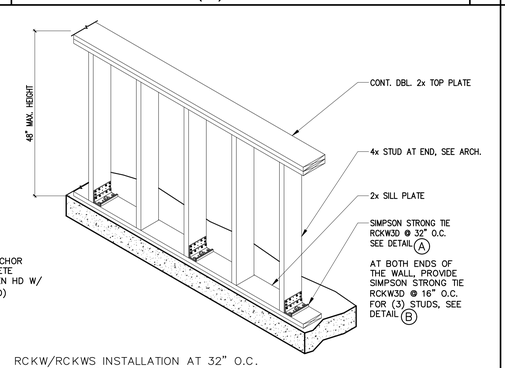
WOOD BEAM TO WOOD POST 7



W102-0 SCALE: NO SCALE

WOOD STUD WALL INTERSECTIONS 2

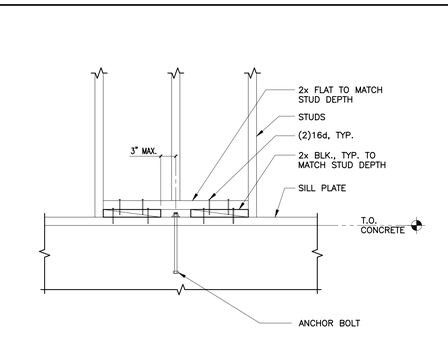




RCKW/RCKWS INSTALLATION AT 32" O.C. ON CONCRETE
(16" O.C. INSTALLATION SIMILAR)

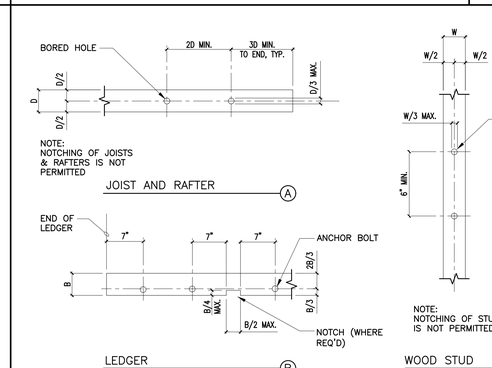
ISHS-023 SCALE: 1"=1'-0"

TYP., KNEE WALL SUPPORT 16



W114-0 SCALE: NO SCALE

ANCHOR BOLT AT WOOD STUD 12



W103 SCALE: NO SCALE

WOOD FRAMING HOLES AND NOTCHING 3

rtm engineering consultants
1Ada, Suite 100, Irvine, CA 92618
Tel (949) 462-3200 • Fax (949) 462-3201
WWW.RTMEC.COM
RTM JOB NO. : 203.805
CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

STAMPS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025
AGENCY APPROVAL
File No: 36-H7 Id:84-123900

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. : 1-78-50
2/19/2025 9:53 AM

DRAWN BY: CHECKED BY:

ISSUE No.	DATE	DESCRIPTION
ISSUE No.	DATE	DESCRIPTION
ISSUE No.	DATE	DESCRIPTION
ISSUE No.	DATE	DESCRIPTION

REVISION No.	DATE	DESCRIPTION
REVISION No.	DATE	DESCRIPTION
REVISION No.	DATE	DESCRIPTION
REVISION No.	DATE	DESCRIPTION

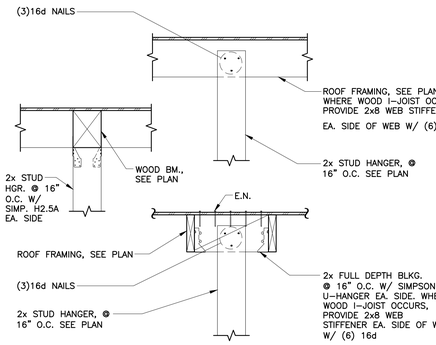
RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRING HIGH SCHOOL MODERNIZATION & EXPANSION
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNADINO CITY SCHOOL DISTRICT

TYPICAL WOOD DETAILS

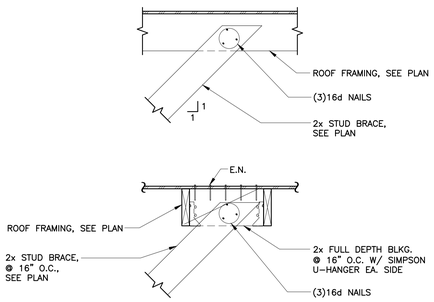
S0-2.3

1-78-50



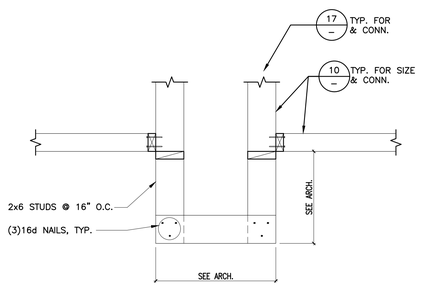
ISHS–041 SCALE: 1"=1'–0"

TYP. STUD SOFFIT TO ROOF FRAMING | 17



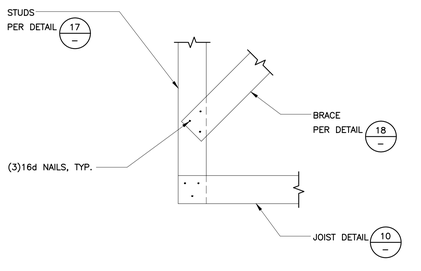
ISHS–042 SCALE: 1"=1'–0"

TYP. STUD BRACE TO ROOF FRAMING | 18



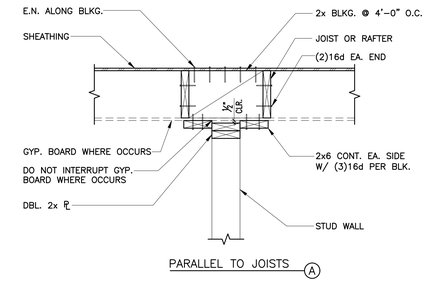
ISHS–043 SCALE: 1"=1'–0"

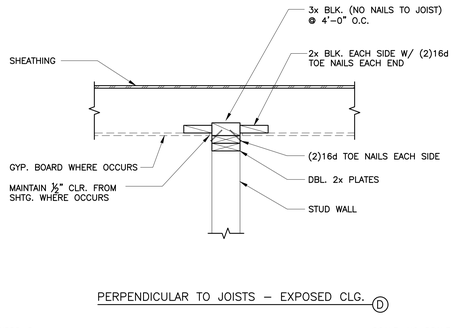
TYP. STUD SOFFIT ELEVATION CHANGE | 19



ISHS–044 SCALE: 1"=1'–0"

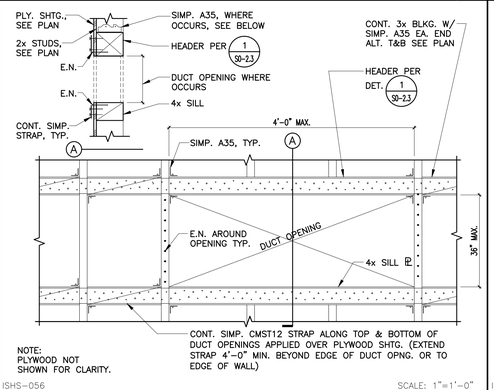
TYP. STUD BRACING | 20





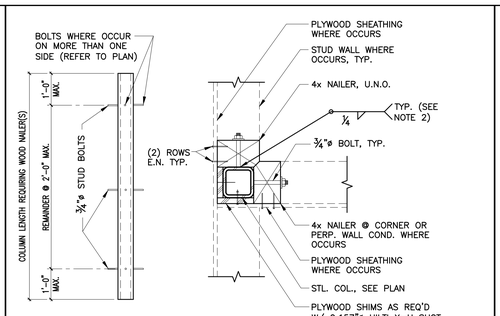
W302–0 SCALE: NO SCALE

WOOD PARTITION TOP SUPPORT | 15



ISHS–056 SCALE: 1"=1'–0"

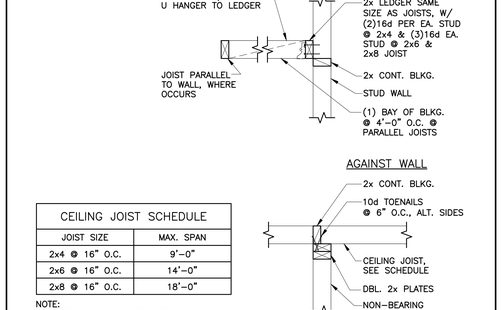
OPENING IN PLYWOOD SHEARWALL | 16



NOTES:
1. WHERE NAILER OCCURS @ END OF WALL OR ADJACENT TO OPENING IN WALL, COUNTERBORE STUDS IN NAILER, MAX.
2. ALTERNATE: NELSON THREADED STUD WELDED

W116–0 SCALE: NO SCALE

WOOD NAILERS TO STEEL COLUMNS | 9

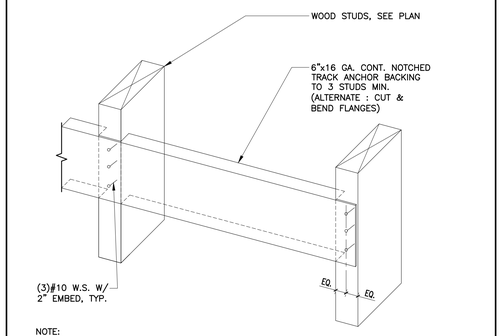


CEILING JOIST SCHEDULE	
JOIST SIZE	MAX. SPAN
2x4 @ 16" O.C.	9'–0"
2x6 @ 16" O.C.	14'–0"
2x8 @ 16" O.C.	18'–0"

NOTE:
THIS DETAIL IS INTENDED FOR CEILING JOISTS THAT SPAN FROM WALL TO WALL @ CONTRACTORS OPTION.

W212–0 SCALE: NO SCALE

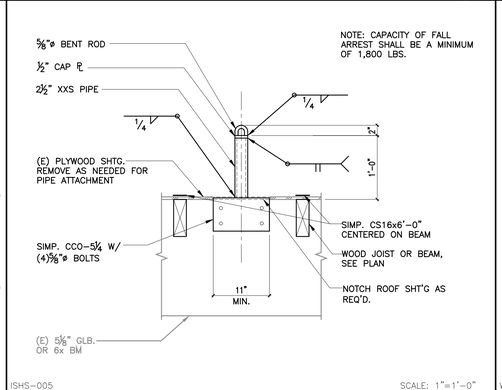
CEILING JOIST SCHEDULE & DETAIL | 10



NOTE:
USE #10 SMS WHEN ATTACHING ITEMS TO BACKING, U.N.O.

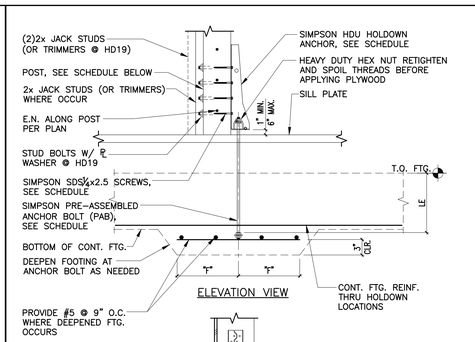
W216–0 SCALE: NO SCALE

BACKING AT WOOD STUDS | 11



ISHS–005 SCALE: 1"=1'–0"

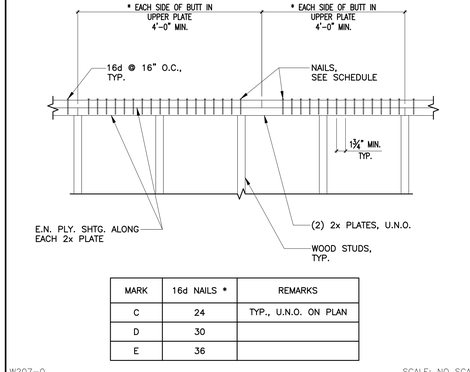
ROOF FALL AREST ANCHOR | 12



SCREW & BOLT SCHEDULE					
HOLDOWN	# OF SIMPSON SDS¼"x 2½" SCREWS U.N.O.	MIN. POST	"LE"	PAB SIZE	"F"
HDU2–SDS2.5	6	4x STUD DEPTH	6½"	PAB5 5/8"ø	10"
HDU4–SDS2.5	10	4x STUD DEPTH	6½"	PAB5 5/8"ø	10"
HDU5–SDS2.5	14	4x STUD DEPTH	6½"	PAB5 5/8"ø	10"
HD19	(5)1"ø STUD BOLTS	6x STUD DEPTH	14½"	PAB10 1¼"ø	22"

W215–0 SCALE: NO SCALE

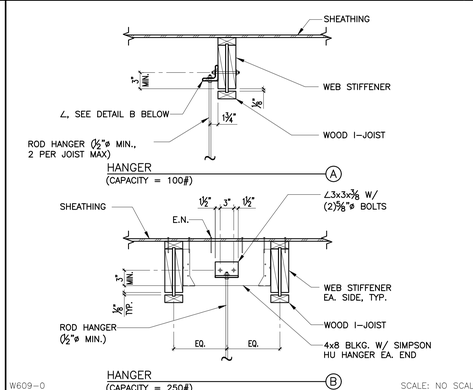
HOLDOWN ANCHORS | 6



MARK	16d NAILS *	REMARKS
C	24	TYP., U.N.O. ON PLAN
D	30	
E	36	

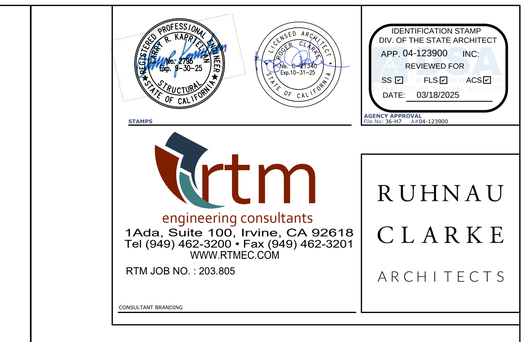
W207–0 SCALE: NO SCALE

TOP PLATE SPLICE | 7



W609–0 SCALE: NO SCALE

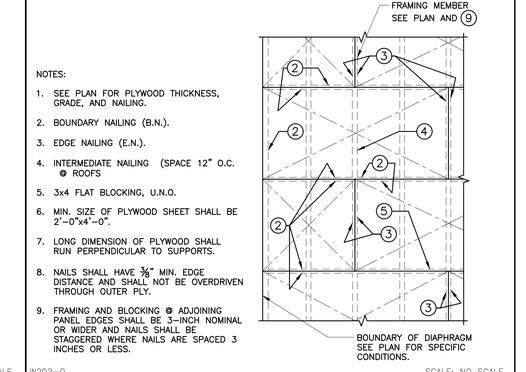
ROD HANGER AT WOOD I-JOISTS | 8



SHEATHED WALL SCHEDULE			
MARK	THICKNESS	E.N.	SILL BOLTS
A	15/32"	10d @ 6"	5/8" @ 32"
B	15/32"	10d @ 4"	5/8" @ 24"
* E	15/32"	10d @ 2"	5/8" @ 16"
* F	15/32" EA. SIDE	10d @ 4"	5/8" @ 16"

W201–0 SCALE: NO SCALE

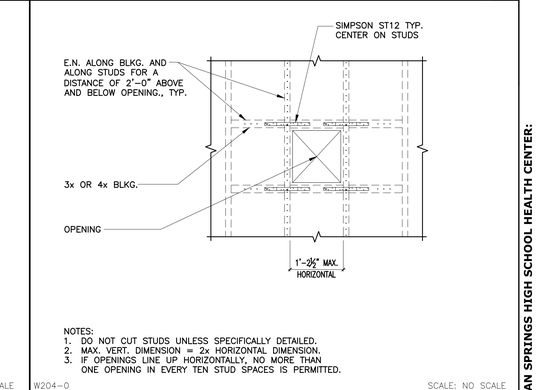
PLYWOOD SHEATHING - WALLS | 1



NOTES:
1. SEE PLAN FOR PLYWOOD THICKNESS, GRADE, AND NAILING.
2. BOUNDARY NAILING (B.N.).
3. EDGE NAILING (E.N.).
4. INTERMEDIATE NAILING (SPACE 12" O.C. @ ROOFS
5. 3x4 FLAT BLOCKING, U.N.O.
6. MIN. SIZE OF PLYWOOD SHEET SHALL BE 2'–0"x4'–0".
7. LONG DIMENSION OF PLYWOOD SHALL RUN PERPENDICULAR TO SUPPORTS.
8. NAILS SHALL HAVE 3/8" MIN. EDGE DISTANCE AND SHALL NOT BE OVERDRIVEN THROUGH OUTER PLY.
9. FRAMING AND BLOCKING @ ADJOINING PANEL EDGES SHALL BE 3–INCH NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED WHERE NAILS ARE SPACED 3 INCHES OR LESS.

W202–0 SCALE: NO SCALE

HORIZONTAL PLYWOOD SHEATHING | 2



NOTES:
1. DO NOT CUT STUDS UNLESS SPECIFICALLY DETAILED.
2. MAX. VERT. DIMENSION = 2x HORIZONTAL DIMENSION.
3. IF OPENINGS LINE UP HORIZONTALLY, NO MORE THAN ONE OPENING IN EVERY TEN STUD SPACES IS PERMITTED.

W204–0 SCALE: NO SCALE

OPEN IN PLYWOOD SHEAR WALL | 3

REGISTERED PROFESSIONAL ENGINEER — VINCENT K. KARPATHIOS — No. 29882 — Exp. 9-30-25 — STRUCTURAL — STATE OF CALIFORNIA
LICENSED ARCHITECT — ROGER CLARKE — No. C-26170 — Exp. 10-31-25 — STATE OF CALIFORNIA

STAMPS

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DATE: 03/18/2025
AGENCY APPROVAL
File No: 36-H7 4-H4-123900

rtm engineering consultants
1Ada, Suite 100, Irvine, CA 92618
Tel (949) 462-3200 • Fax (949) 462-3201
WWW.RTMEC.COM
RTM JOB NO. : 203.805
CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
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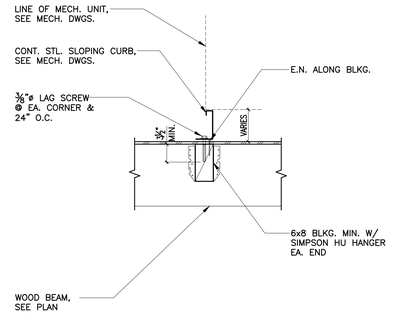
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SAN BERNADINO CITY SCHOOL DISTRICT

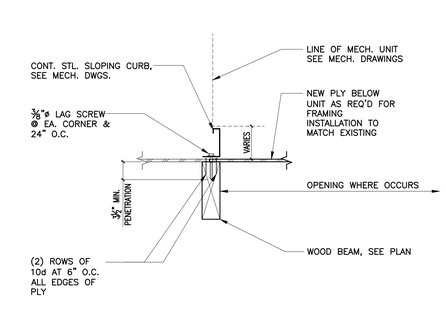
TYPICAL WOOD DETAILS

S0-2.4

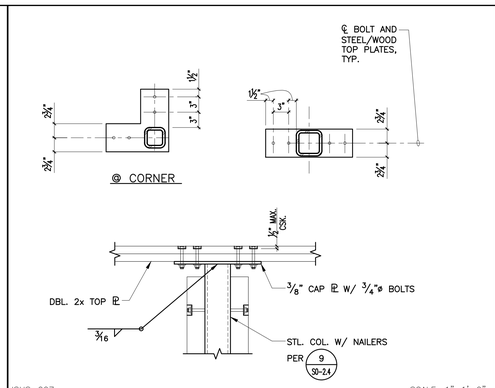
1-78-50



17 EQUIPMENT SUPPORT PERP. TO JOIST

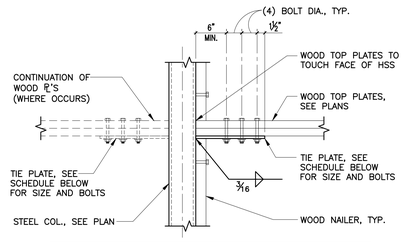


13 EQUIPMENT SUPPORT PARALLEL TO JOIST



9 HSS COL. TO TOP PLATE CONN.

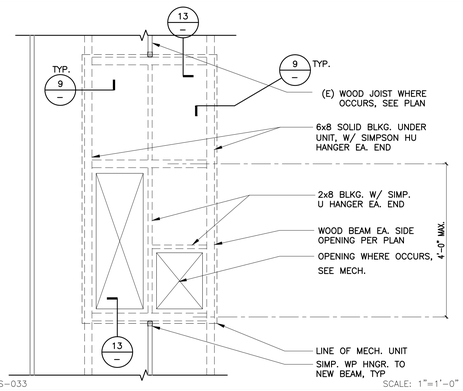
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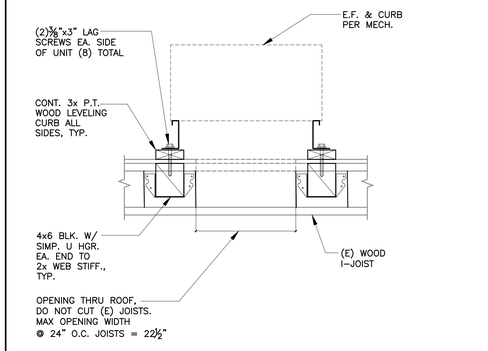
TIE PLATE SCHEDULE			
MARK	TIE PLATE	BOLTS	REMARKS
A	¼"x5"	(2)¾"ø	
B	¼"x5"	(3)¾"ø	

W210-0
SCALE: NO SCALE

18 TIE PLATE CONN. AND SCHEDULE

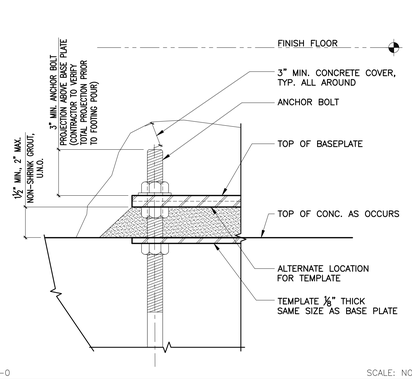


14 ROOF FRAMING AT MECH. UNIT

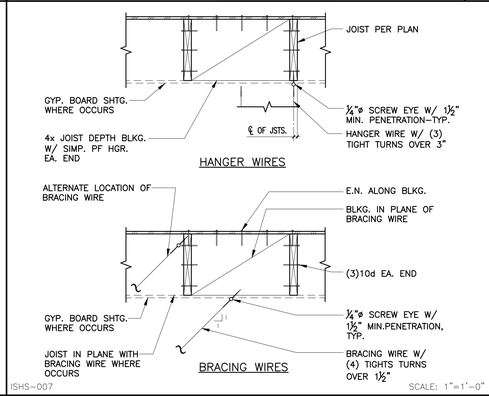


10 EXHAUST FAN SUPPORT

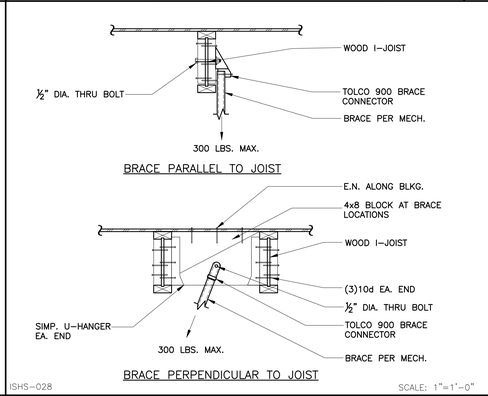
6



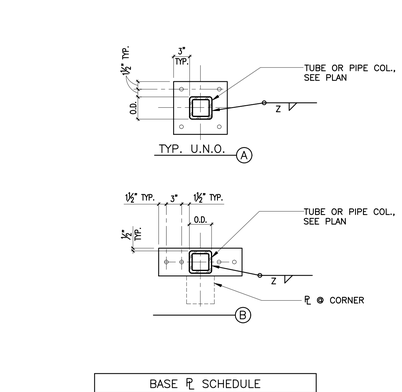
1 ANCHOR BOLT PROJECTION



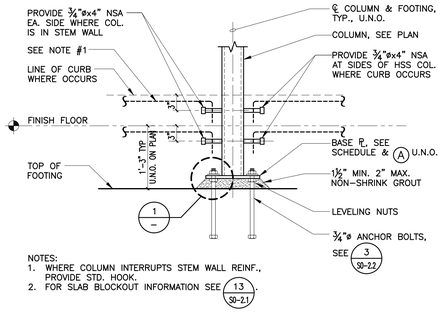
11 HANGER AND BRACING WIRES



7 BRACE CONN. @ I-JOIST



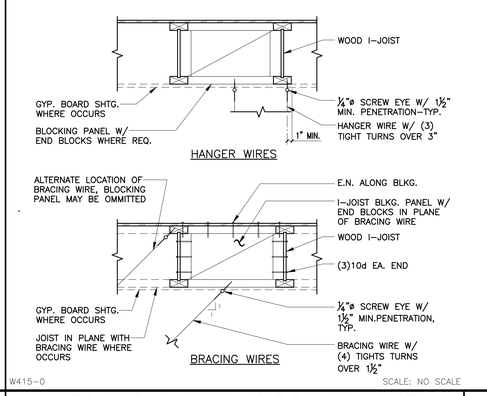
BASE ℄ SCHEDULE		
MEMBER SIZE O.D.	℄ THICKNESS	WELD Z
4" OR LESS	⅝"	¼"
GREATER THAN 4" TO 6"	¾"	¼"



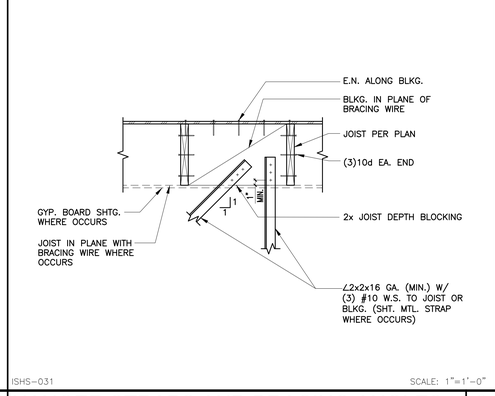
3 COLUMN BASE PLATES

19

15



16 HANGER AND BRACING WIRES @ I-JOIST



12 HANGER STRAPS AND BRACING ANGLES

8

20

16

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INDIAN SPRING HIGH SCHOOL MODERNIZATION & EXPANSION
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNADINO CITY SCHOOL DISTRICT

TYPICAL STEEL DETAILS

S0-2.5

1-78-50

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

REGISTERED PROFESSIONAL ENGINEER — BRENT R. KAPPEL — No. C 78... — Exp. 6-30-25 — STRUCTURAL — STATE OF CALIFORNIA

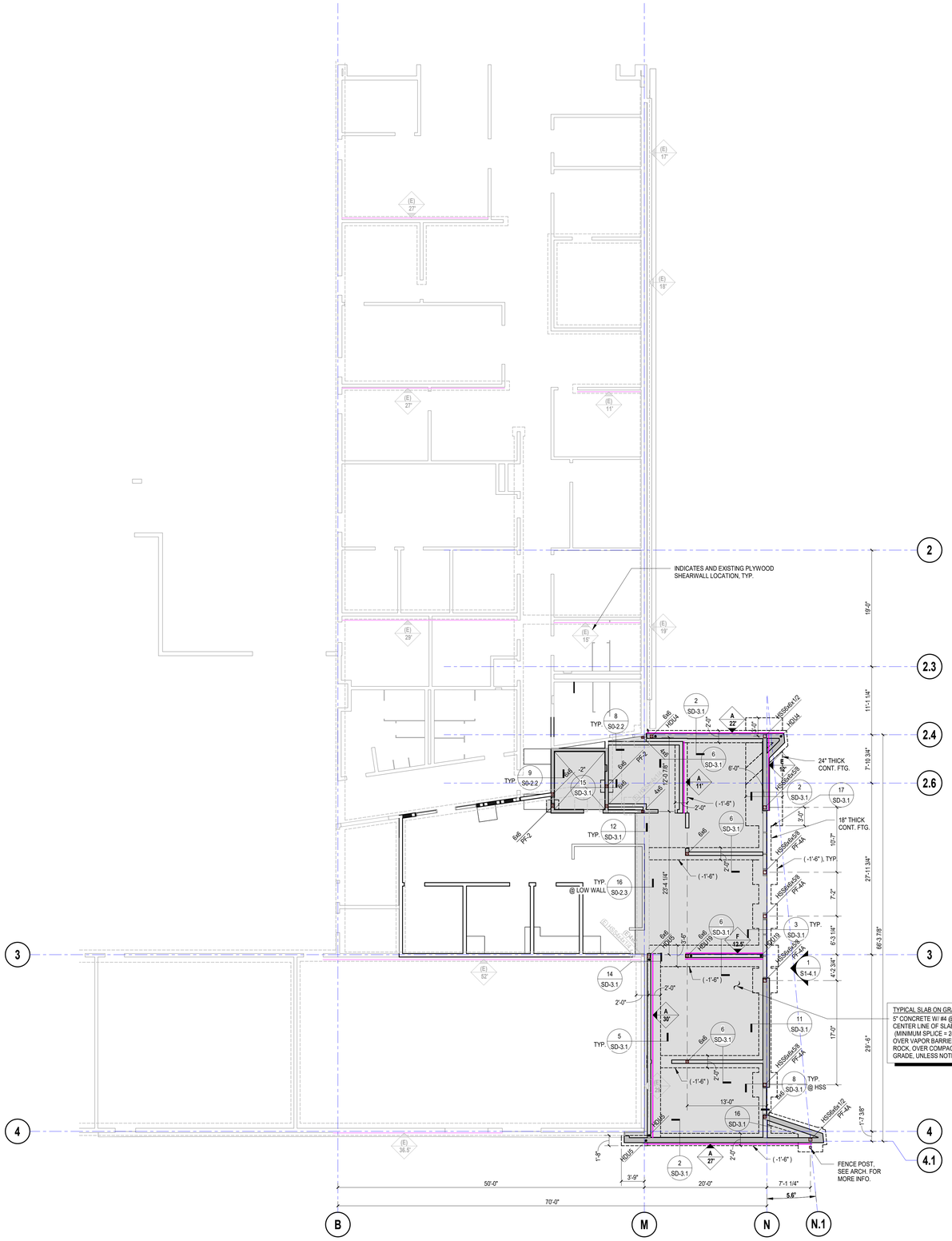
LICENSED ARCHITECT — CHRISTOPHER CLARKE — No. C-41... — Exp. 10-31-25 — STATE OF CALIFORNIA

STAMPS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
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DATE: 03/18/2025
AGENCY APPROVAL
File No: 36-H7 A1-04-123900

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RTM JOB NO. : 203.805
CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS



FOUNDATION PLAN

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

FOUNDATION PLAN NOTES

1. SEE SHEETS S0-1.1 THROUGH S0-2.5 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. SEE SPECIFICATIONS FOR ALL SITE AND SUBGRADE PREPARATIONS.
3. SEE ARCHITECTURAL AND/OR CIVIL DRAWINGS FOR FINISH FLOOR ELEVATIONS.
4. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR ALL EXTERIOR CONCRETE PAVING, SLABS, BASES, CURBS, SITE WALLS, ETC.
5. FOR ANY DIMENSIONAL INFORMATION NOT SHOWN, SEE ARCHITECTURAL DRAWINGS.
6. SEE PLANS AND ARCHITECTURAL DRAWINGS FOR DEPRESSIONS AND/OR SLOPES IN CONCRETE SLABS.
7. ALL DIMENSIONS SHOWN ARE FROM FACE OF STUD, CENTER LINE OF COLUMN, OR CENTER LINE OF WALL, UNLESS NOTED OTHERWISE. ALL COLUMNS ARE CENTERED IN STUD WALL, UNLESS NOTED OTHERWISE.
8. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS IN BEARING AND NON-BEARING WALLS.
9. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF INTERIOR NON-BEARING PARTITIONS. INTERIOR NON-BEARING PARTITION WALLS THAT DO NOT REQUIRE CONCRETE CURBS ARE NOT SHOWN ON STRUCTURAL DRAWINGS.
10. SEE ARCHITECTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL EMBEDDED ITEMS AND SLAB PENETRATIONS.
11. ALL WALLS SHOWN WITH PLYWOOD SHEAR PANELS SHALL BE CONTINUOUSLY SHEATHED FOR THE FULL LENGTH OF THE WALL WITH THE SAME SHEATHING AS INDICATED. ALL EXTERIOR WALLS SHALL HAVE TYPE A PLYWOOD SHEATHING APPLIED TO THE OUTSIDE FACE PER DETAIL 1/S0-2.4, UNLESS NOTED OTHERWISE.
12. FOR TYPICAL PIPE CHASE IN CONCRETE STEM WALL, SEE DETAIL 9/SD-3.1.
13. FOR TYPICAL SLAB JOINTS, SEE DETAIL 11/S0-2.1.

LEGEND

- HSS5x0.375 PF-3 : INDICATES STEEL COLUMN SIZE. SEE DETAIL 3/S0-2.5 FOR STEEL COLUMN BASE PLATE, U.N.O.
- : INDICATES CONCRETE FOOTING. SEE DETAIL 18/S0-2.1 FOR ADDITIONAL INFORMATION.
- (-1'-0") : INDICATES DEPTH OF TOP OF FOOTING BELOW FINISH FLOOR.
- A 19' : INDICATES PLYWOOD SHEAR WALL TYPE PER 1/S0-2.4.
- : INDICATES LENGTH OF WALL USED FOR DESIGN. ACTUAL LENGTH OF WALL MAY EXCEED, BUT SHALL NOT BE LESS THAN THE LENGTH SHOWN.
- HDU8 : INDICATES SIMPSON HOLDOWN ANCHOR. SEE DETAIL 6/S0-2.4 FOR ADDITIONAL INFORMATION.
- : INDICATES CONCRETE CURB. SEE PLANS AND DETAIL 15/S0-2.1 FOR ADDITIONAL INFORMATION.
- S S : INDICATES STEP IN CONTINUOUS FOOTING. SEE DETAILS .5 OR 6/S0-2.1 FOR ADDITIONAL INFORMATION. STEP CONTINUOUS FOOTING TO MATCH BOTTOM OF LOWEST ADJACENT FOOTING ELEVATION

STAMPS

REGISTERED PROFESSIONAL ENGINEER — JAMES R. KARNS — No. 3185 — Exp. 9-30-25 — STRUCTURAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — JENNIFER CLARKE — No. C-41185 — Exp. 10-31-25 — STATE OF CALIFORNIA

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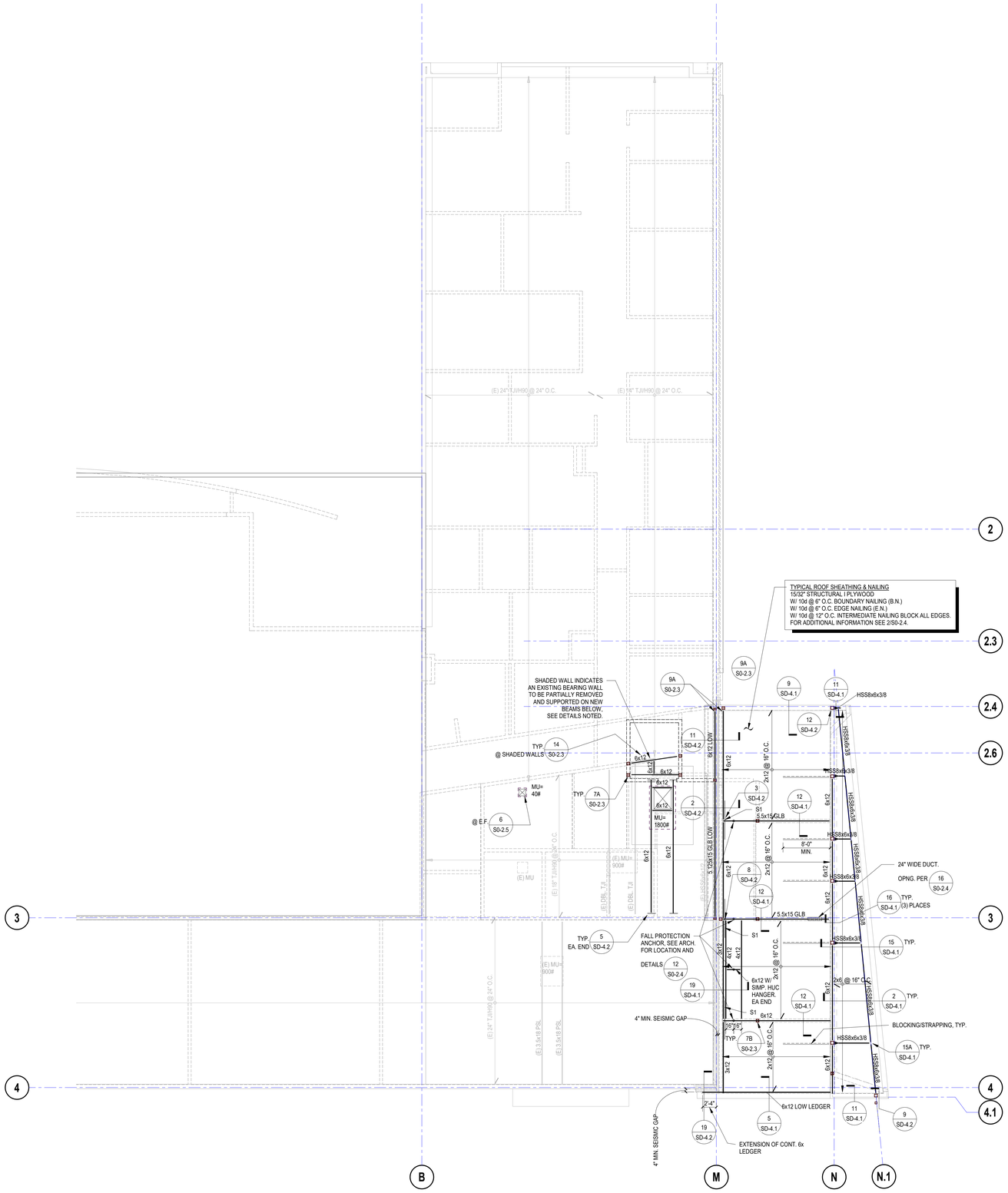
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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
2/19/2025 9:41:56 AM

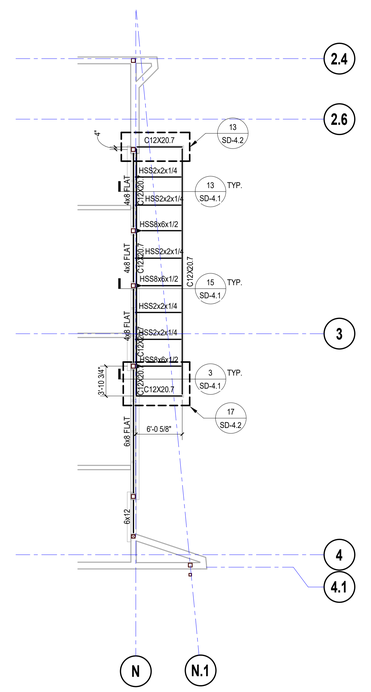
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ROOF FRAMING PLAN

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



CANOPY FRAMING PLAN

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

ROOF FRAMING PLAN NOTES

1. SEE SHEETS S0-1.1 THROUGH S0-2.5 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. SEE ARCHITECTURAL DRAWINGS FOR ALL TOP OF SHEATHING AND TOP OF WALL/PARAPET ELEVATIONS.
3. SEE ARCHITECTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATION OF ROOF OPENINGS NOT SHOWN ON ROOF FRAMING PLANS. SEE DETAIL 10/S0-2.3 FOR TYPICAL OPENINGS, UNLESS NOTED OTHERWISE.
4. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL DOOR AND WINDOW OPENINGS IN BEARING AND NON-BEARING WALLS.
5. PROVIDE 2" BY FULL DEPTH SOLID BLOCKING AT 8'-0" MAXIMUM FOR ROOF JOISTS OR RAFTERS MORE THAN 8" IN DEPTH.
6. ALL LINES AND/OR MEMBERS INDICATED AS "STRUT" SHALL RECEIVE (2) ROWS OF BOUNDARY NAILING (B.N.), STAGGERED.
7. "MU" DENOTES MECHANICAL UNIT. MAXIMUM ALLOWABLE WEIGHT IS SHOWN. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR EXACT SIZE AND WEIGHT OF MECHANICAL UNITS. FOR TYPICAL FRAMING AT MECHANICAL UNITS, SEE DETAILS 6 OR 10/S0-2.5.
8. SAWN LUMBER HANGERS SHALL BE SIMPSON B (LB @ 2X FRMG) HANGERS, UNLESS NOTED OTHERWISE.

LEGEND

- : INDICATES WOOD HEADER OVER OPENING BELOW. SEE DETAIL 1/S0-2.3 FOR SIZE & FRAMING UNLESS NOTED OTHERWISE ON PLAN.
- : INDICATES SPAN OF JOISTS.
- : INDICATES EXTENT OF JOISTS.
- c=1 1/2" : INDICATES AMOUNT OF CAMBER IN GLB. STANDARD CAMBER (RADIUS= 3500 FT.) REQUIRED WHERE NONE SHOWN.
- C : INDICATES TOP PLATE SPLICE. SEE DETAIL 7/S0-2.4. PROVIDE TOP PLATE SPLICE PER DETAIL 7C/S0-2.4, UNLESS NOTED OTHERWISE.
- S1 : INDICATES A LEDGER SPLICE STRAP INSTALLED OVER TOP OF PLYWOOD TO LEDGER. PROVIDE SIMP. CMSTC14x6'-6" CENTERED ON SPLICE WHERE OCCURS, UNO

STAMPS

REGISTERED PROFESSIONAL ENGINEER — JAMES R. KARNS — No. S-7135 — Exp. 9-30-25 — STRUCTURAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — ROGER CLARKE — No. C-41756 — Exp.10-31-25 — STATE OF CALIFORNIA

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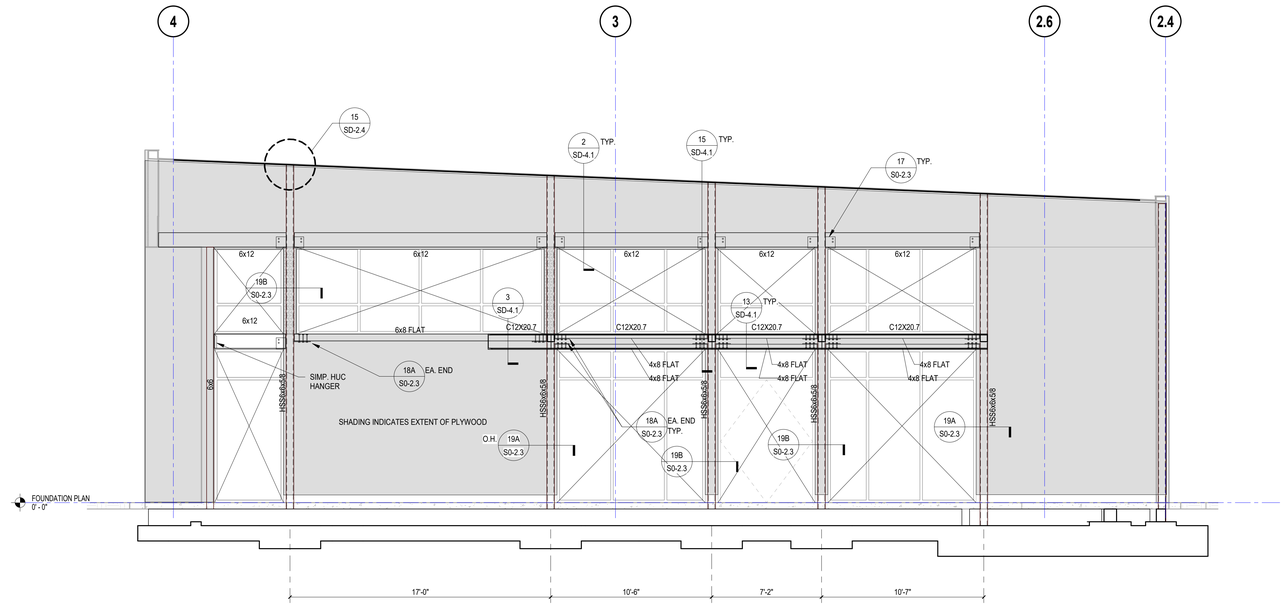
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DELTA #	DATE		ADD	AFO	CCD	REV



WALL FRAMING ELEVATION - LINE N

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

1

STAMPS

STRUCTURAL ENGINEER — STATE OF CALIFORNIA — Exp 9-30-25

LICENSED ARCHITECT — STATE OF CALIFORNIA — Exp. 10-31-25

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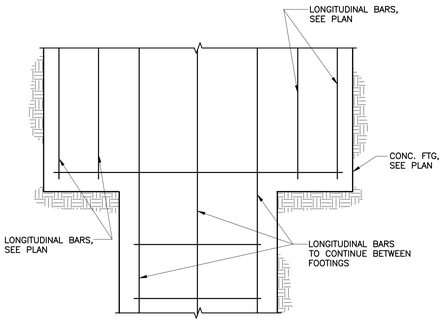
RUHNAU CLARKE ARCHITECTS

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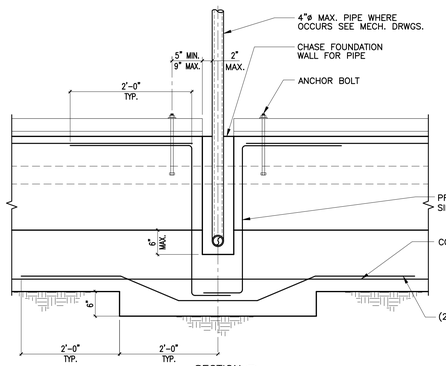
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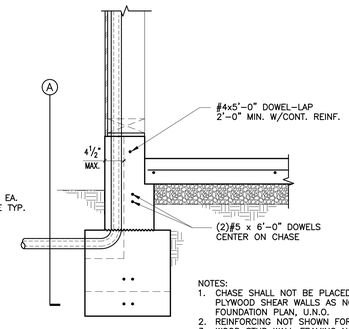
PLAN VIEW

ISHS-050 SCALE: 1"=1'-0"

DETAIL 17



SECTION (A)

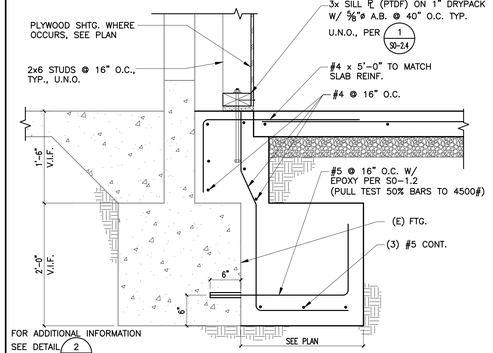


CHASE IN FOUNDATION WALL

NOTES:
1. CHASE SHALL NOT BE PLACED IN PLYWOOD SHEAR WALLS AS NOTED ON FOUNDATION PLAN, U.N.O.
2. REINFORCING NOT SHOWN FOR CLARITY.
3. WOOD STUD WALL FRAMING NOT SHOWN FOR CLARITY.

ISHS-013 SCALE: 1"=1'-0"

DETAIL 9



FOR ADDITIONAL INFORMATION SEE DETAIL 2

ISHS-036 SCALE: 1"=1'-0"

DETAIL 5

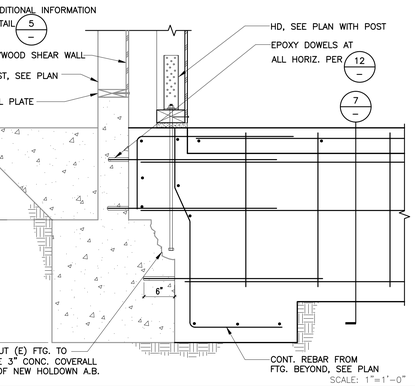


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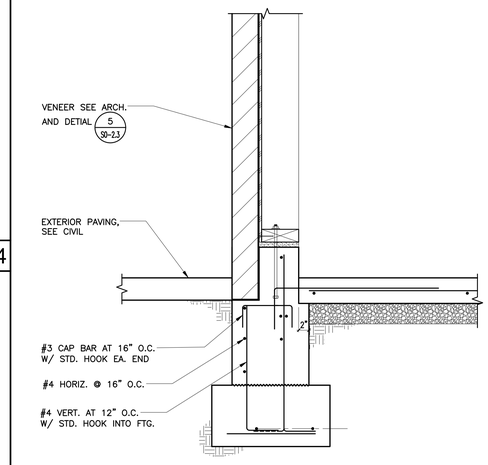
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ISHS-047 SCALE: 1"=1'-0"

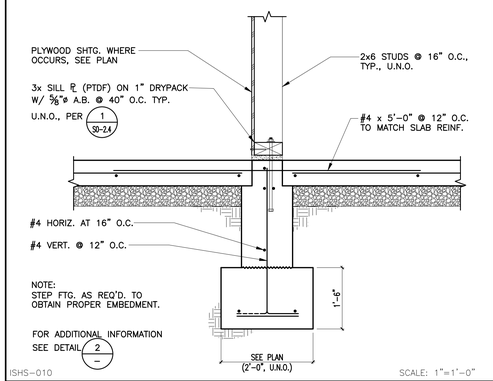
DETAIL 14



FOR ADDITIONAL INFORMATION SEE DETAIL 2

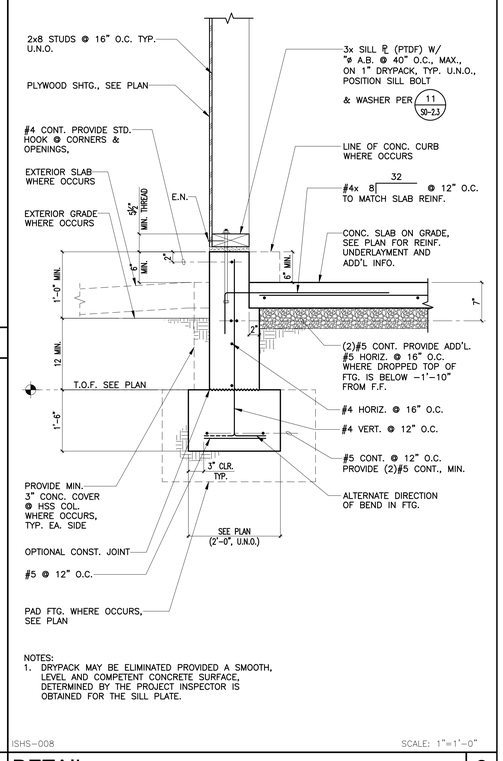
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DETAIL 11



ISHS-010 SCALE: 1"=1'-0"

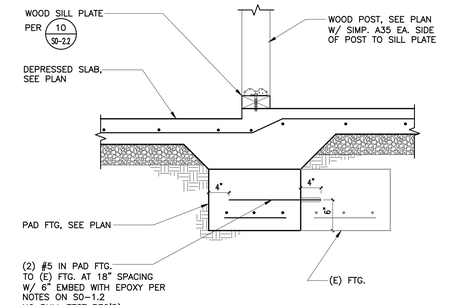
DETAIL 6



NOTES:
1. DRYPACK MAY BE ELIMINATED PROVIDED A SMOOTH, LEVEL AND COMPETENT CONCRETE SURFACE, DETERMINED BY THE PROJECT INSPECTOR IS OBTAINED FOR THE SILL PLATE.

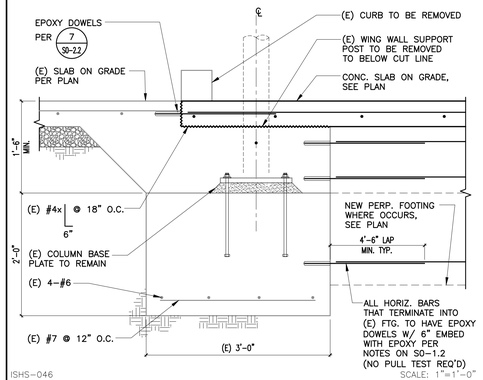
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DETAIL 2



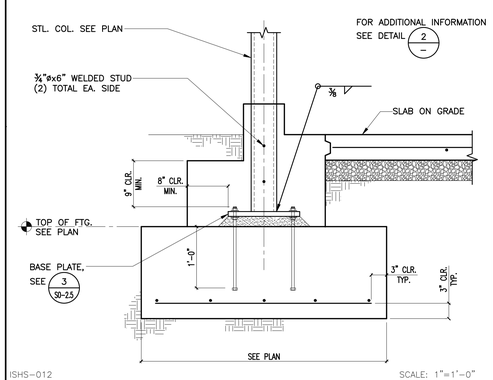
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DETAIL 15



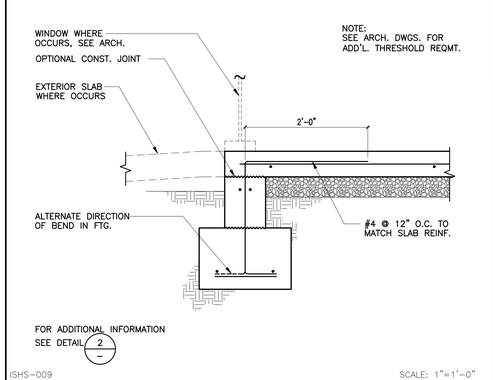
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DETAIL 12



ISHS-012 SCALE: 1"=1'-0"

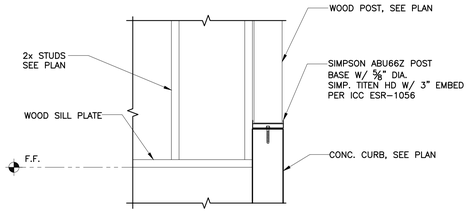
DETAIL 8



FOR ADDITIONAL INFORMATION SEE DETAIL 2

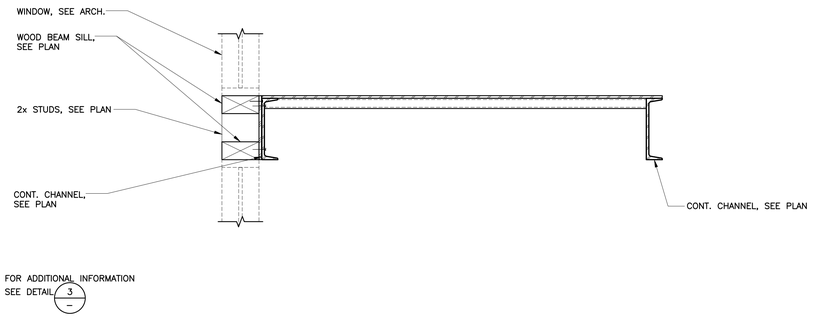
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DETAIL 3



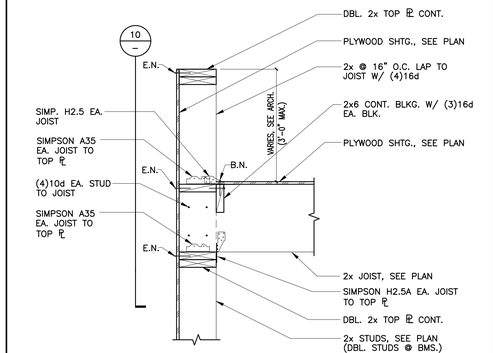
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DETAIL 16



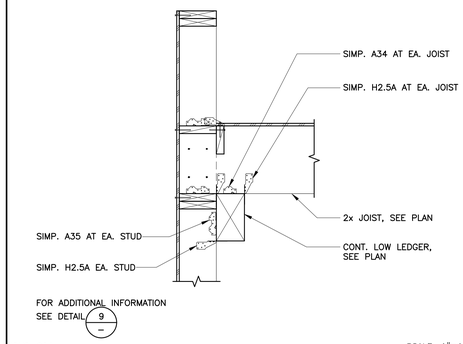
ISHS–021 SCALE: 1"=1'–0"

DETAIL 13



ISHS–017 SCALE: 1"=1'–0"

DETAIL 9



ISHS–024 SCALE: 1"=1'–0"

DETAIL 5

REGISTERED PROFESSIONAL ENGINEER — BRENT R. KAPPEL — No. 2780 — Exp. 9-30-25 — STRUCTURAL — STATE OF CALIFORNIA

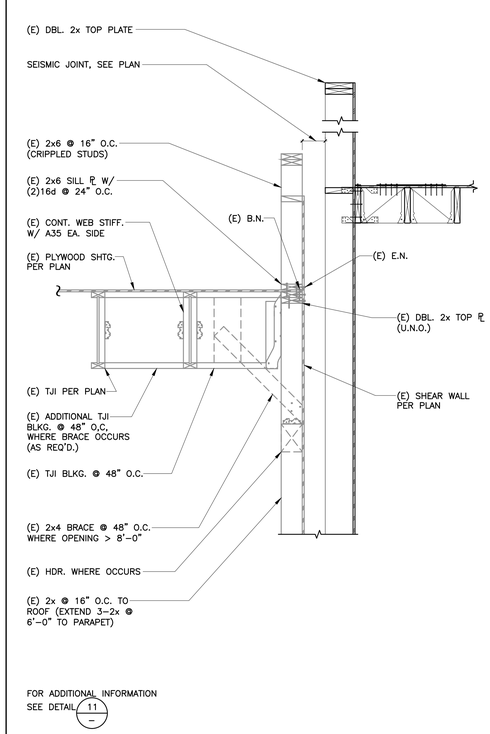
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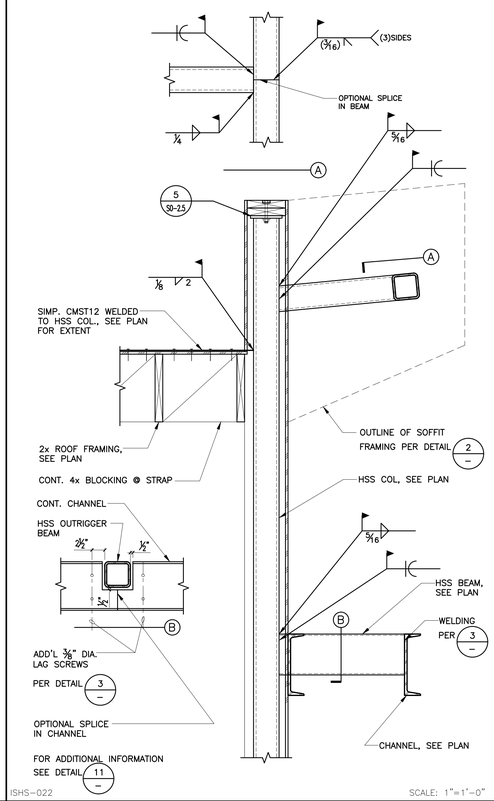
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RUHNAU CLARKE ARCHITECTS



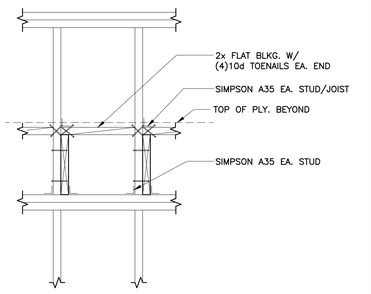
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DETAIL 19



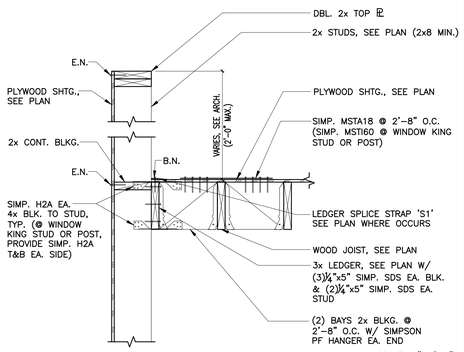
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DETAIL 15



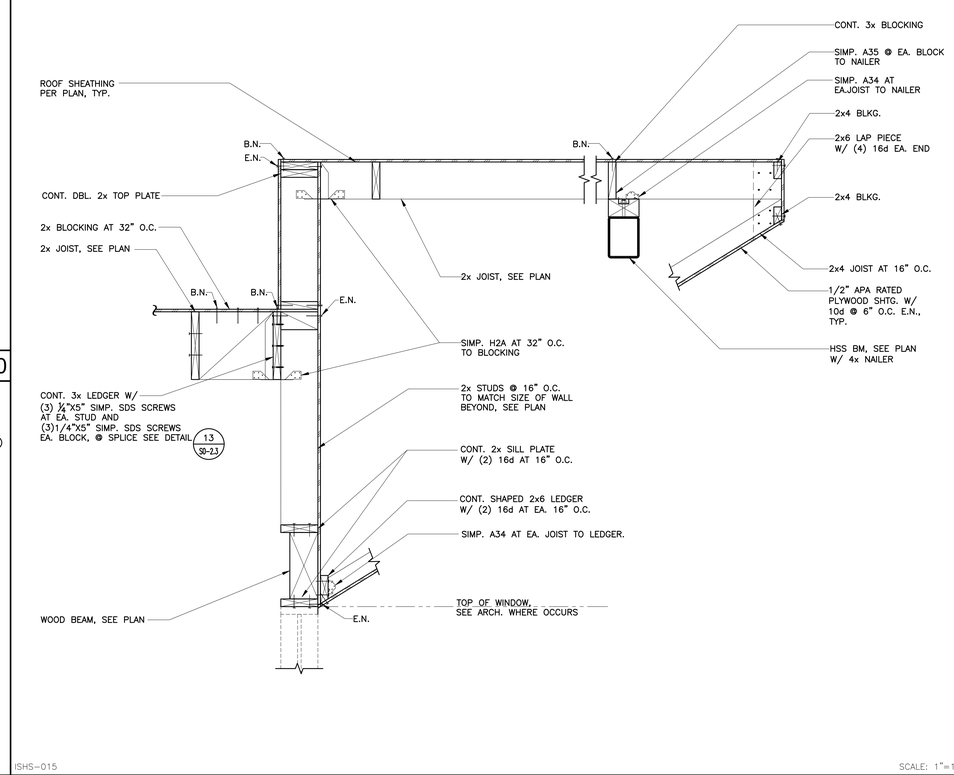
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DETAIL 10



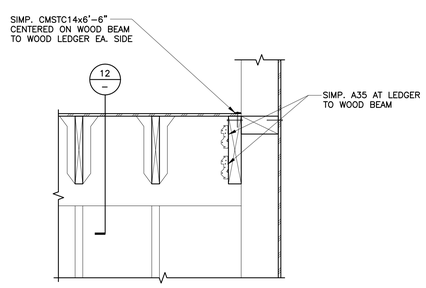
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DETAIL 11



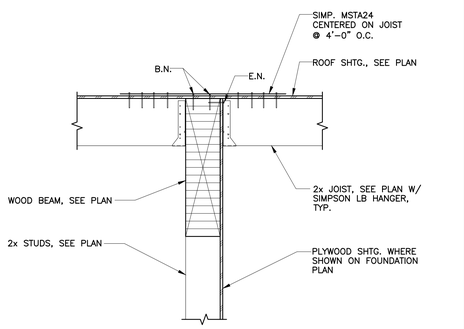
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DETAIL 2



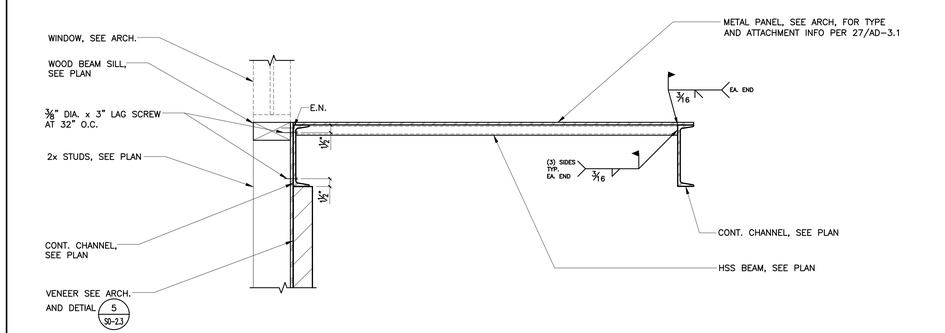
ISHS–051 SCALE: 1"=1'–0"

DETAIL 20



ISHS–020 SCALE: 1"=1'–0"

DETAIL 16



ISHS–016 SCALE: 1"=1'–0"

DETAIL 3

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
2/19/2025 9:58 AM

DRAWN BY: CHECKED BY:

ISSUE No.	DATE	DESCRIPTION
ISSUE No.	DATE	DESCRIPTION
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REVISION No.	DATE	DESCRIPTION
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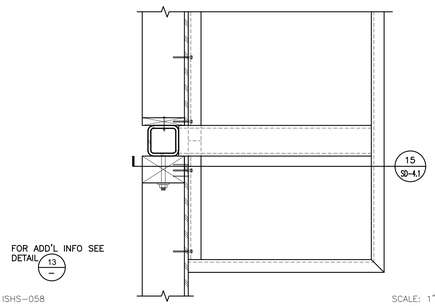
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INDIAN SPRING HIGH SCHOOL MODERNIZATION & EXPANSION
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNADINO CITY SCHOOL DISTRICT

ROOF FRAMING DETAILS

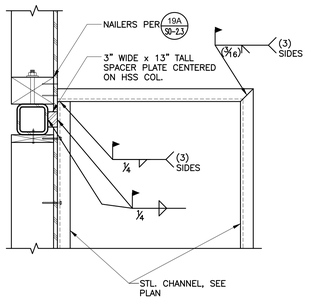
SD-4.1

1-78-50



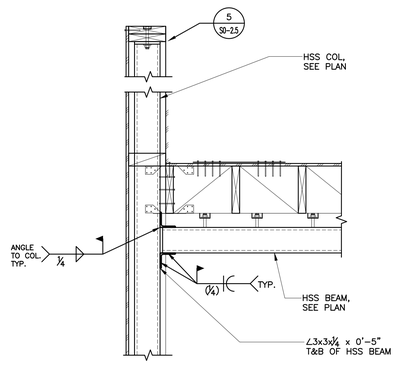
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DETAIL 17



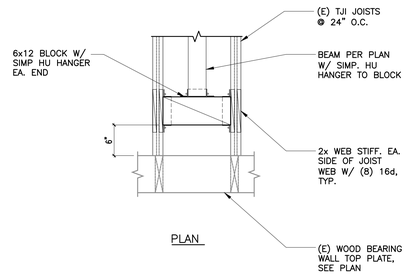
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DETAIL 13



ISHS-052 SCALE: 1"=1'-0"

DETAIL 9



ISHS-039 SCALE: 1"=1'-0"

DETAIL 5

REGISTERED PROFESSIONAL ENGINEER — ERIC T. KAPPLER — No. 2780 — Exp. 6-30-25 — STRUCTURAL — STATE OF CALIFORNIA

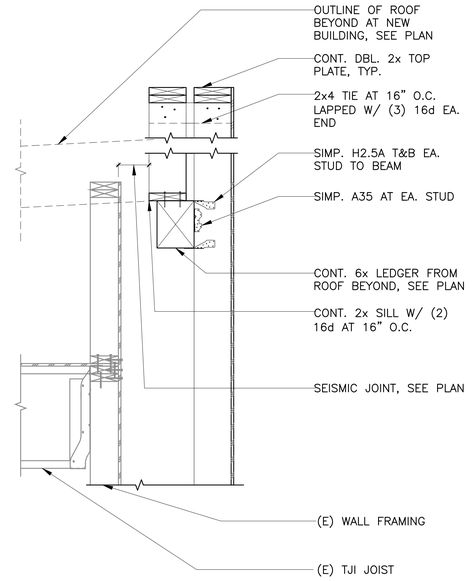
LICENSED ARCHITECT — ROBERT CLARKE — No. C-30674 — Exp. 10-31-25 — STATE OF CALIFORNIA

STAMPS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025
AGENCY APPROVAL
File No: 36-H7 Ltr Dtd: 123900

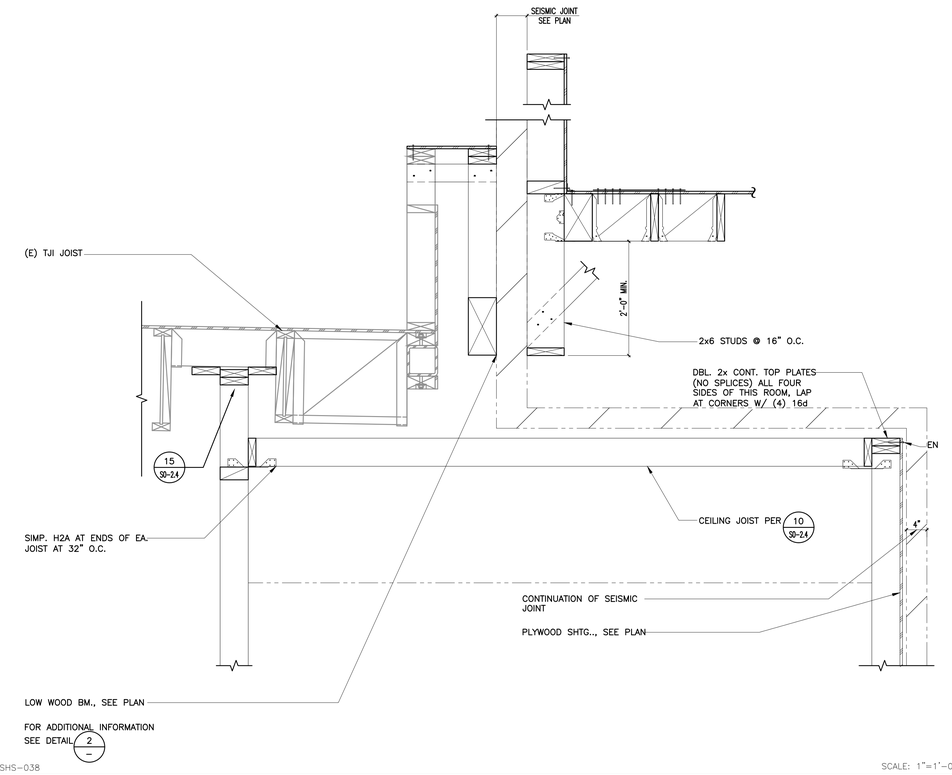
rtm engineering consultants
1Ada, Suite 100, Irvine, CA 92618
Tel (949) 462-3200 • Fax (949) 462-3201
WWW.RTMEC.COM
RTM JOB NO. : 203.805
CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS



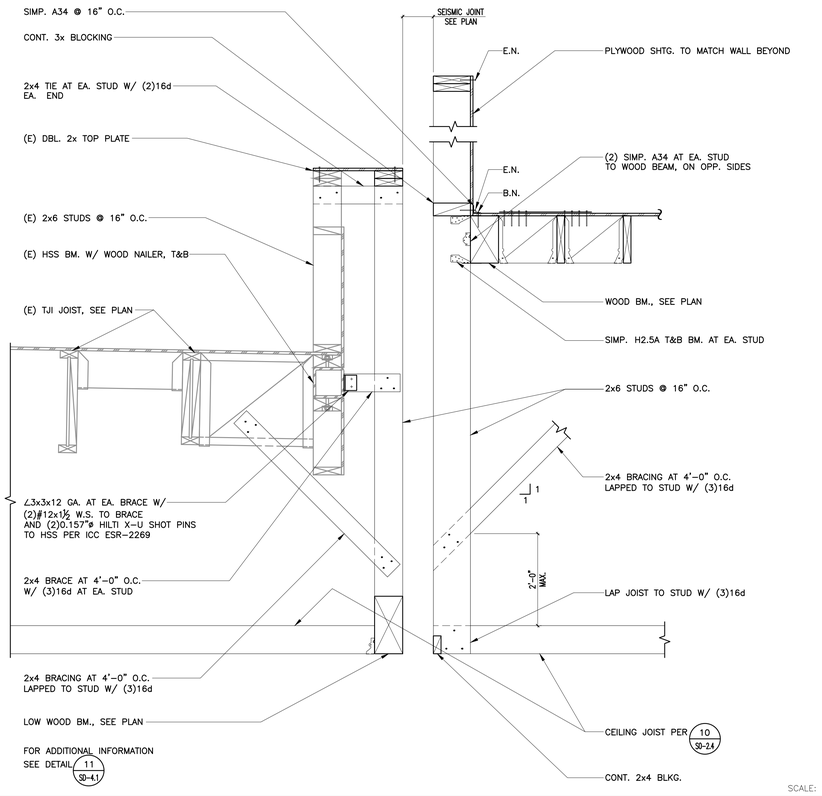
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DETAIL 19



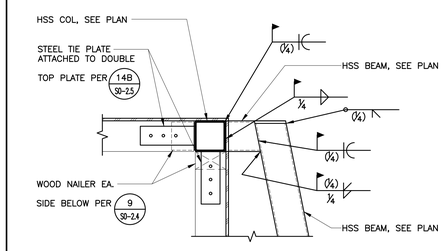
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DETAIL 11



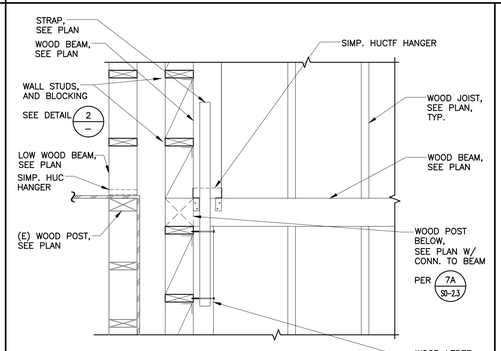
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DETAIL 2



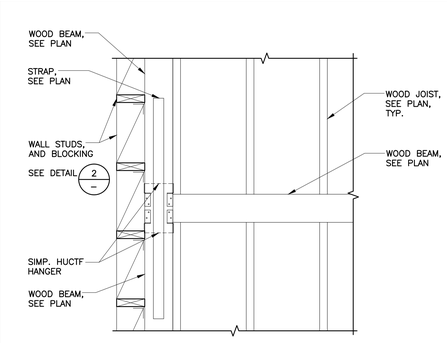
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DETAIL 12



ISHS-054 SCALE: 1"=1'-0"

DETAIL 8



ISHS-053 SCALE: 1"=1'-0"

DETAIL 3

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :1-78-50
2/19/2025 9:59 AM

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1ISSUE No.:_____	DATE:_____	DESCRIPTION:_____	REVISION No.:_____	DATE:_____	DESCRIPTION:_____

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INDIAN SPRING HIGH SCHOOL MODERNIZATION & EXPANSION
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNADINO CITY SCHOOL DISTRICT

ROOF FRAMING DETAILS

SD-4.2
1-78-50

MECHANICAL BASIS OF DESIGN

A. OUTDOOR DESIGN CONDITIONS:

1. SUMMER: 105°F DB/69°F WB
2. WINTER: 32°F

B. DESIGN CONDITIONS:

OCCUPANT SPACE	OCC DENSITY	LIGHTING DENSITY	COOLING TEMPERATURE	HEATING TEMPERATURE	RELATIVE HUMIDITY
OFFICE	100 SF/OCC	0.65 W/SF	74°F+/-2°F	70°F+/-2°F	50%
LOBBY	15 SF/OCC	0.7 W/SF	74°F+/-2°F	70°F+/-2°F	50%
CONF.	15 SF/OCC	0.75 W/SF	74°F+/-2°F	70°F+/-2°F	50%
CORRIDOR	100 SF/OCC	0.4 W/SF	74°F+/-2°F	70°F+/-2°F	50%

C. HVAC CONTROL METHOD:

1. VENSTAR THERMOSTAT

D. CALIFORNIA VENTILATION CRITERIA:

1. COMPLY WITH CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARD.

E. EXHAUST TO OUTDOORS (MINIMUM RATES)

1. RESTROOMS: 70 CFM/(WC or U)

F. BUILDING ENVELOPE:

1. REFER TO THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ENVELOPE REQUIREMENTS

G. DUCTWORK DESIGN CRITERIA (MAXIMUM ALLOWABLE AIR PRESSURE DROPS AND AIR VELOCITIES) TO MEET HIGH EFFICIENCY OPERATION WITH MINIMAL ACOUSTICAL NOISE. LOW PRESSURE SUPPLY AND EXHAUST DUCT STATIC PRESSURE FRICTION LOSS BASED ON A MAXIMUM OF 0.08" PER 100 FEET. LOW PRESSURE RETURN DUCT STATIC PRESSURE FRICTION LOSS BASED ON A MAXIMUM OF 0.05" PER 100 FEET.

1. IN ADDITION, MAXIMUM SUPPLY, RETURN AND EXHAUST DUCT AIR FLOW VELOCITIES, REGARDLESS OF PRESSURE DROP, SHALL NOT EXCEED THE FOLLOWING CRITERIA:
   A. MAINS ABOVE CEILING: 1750 FPM
   B. MAINS ABOVE OPEN OCCUPIED SPACES: 1450 FPM
   C. BRANCHES ABOVE CEILING: 1400 FPM
   D. BRANCHES ABOVE OPEN OCCUPIED SPACES: 1150 FPM
   E. RUN-OUTS TO DIFFUSERS: 725 FPM

H. ACOUSTICAL

1. THE FOLLOWING NOISE NC/RC CRITERIA LEVELS WILL BE DESIGNED AS DEFINED IN THE ASHRAE HVAC APPLICATIONS HANDBOOK. THESE LEVELS ADDRESS THE MECHANICAL SYSTEMS ONLY. ACTUAL SOUND PERFORMANCE REQUIREMENTS FOR EACH SPACE MUST BE VERIFIED WITH ACOUSTICAL CONSULTANT.
   A. CORRIDORS AND LOBBIES: 40
   B. OFFICES: 30

I. SEISMIC:

1. SEE ANCHORAGE AND BRACING NOTES ON THIS SHEET.

TITLE 24 PERFORMANCE TESTING 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 THE 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 TESTS 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 OR RECORD OF THE OWNER'S AGENT.
5. A LISTING OF CERTIFIED ATT CAN BE FOUND AT: HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE
6. THE ACCEPTANCE TESTING PROCEDURES MUST BE REPLACED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIC SYSTEM CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA. PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

APPLICABLE CODES

1. 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2. 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
3. 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
4. 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
5. 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
6. 2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
7. 2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
8. 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
9. 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
10. 2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
11. TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHALL REGULATIONS

APPLICABLE STANDARDS: FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

MECHANICAL GENERAL NOTES

1. THE TOTAL INSTALLATION SHALL COMPLY WITH ANY AND REQUIREMENTS OF THE LEGALLY CONSTITUTED AUTHORITIES HAVING JURISDICTION INCLUDING 2022 CBC (CALIFORNIA BUILDING CODE), 2022 CMC/CPC (CALIFORNIA MECHANICAL AND PLUMBING CODE), 2022 CAL GREEN REQUIREMENTS AND THE 2022 TITLE 24 ENERGY CODE.
2. VISIT THE SITE PRIOR TO BID AND SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS UNDER WHICH WORK WILL BE REQUIRED.
3. INDICATED DIMENSIONS ARE APPROXIMATE AND ARE GIVEN FOR ESTIMATE PURPOSES ONLY. BEFORE PROCEEDING WITH THE WORK CAREFULLY CHECK AND VERIFY DIMENSIONS, SIZES, REQUIRED CLEARANCES AND SHALL ASSUME FULL RESPONSIBILITY FOR THE FITTING OF EQUIPMENT AND MATERIALS HEREIN REQUIRED TO OTHER PARTS OF THE WORK OF OTHER TRADES. DUCT DIMENSIONS SHOWN ON PLANS ARE NET INSIDE CLEAR.
4. THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC TO THE EXTENT THAT OFFSETS, BENDS, SPECIAL FITTINGS AND LOCATIONS ARE NOT EXACTLY LOCATED. DUCTWORK DIMENSIONS SHOWN ON THE DRAWINGS ARE NET INSIDE DIMENSIONS. DO NOT FABRICATE DUCTWORK FROM THESE DRAWINGS. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR SUPPLYING SHOP DRAWINGS WHICH REFLECT THE PROPOSED INSTALLATION. THE SHOP DRAWINGS MUST BE APPROVED BY THE ENGINEER PRIOR TO ANY SHEET METAL FABRICATION. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ACCURATE AS-BUILT DRAWINGS AT THE COMPLETION OF THE PROJECT AND SUBMITTING THEM TO THE ENGINEER AND OWNER.
5. IN THE PREPARATION OF THESE DOCUMENTS, CERTAIN ASSUMPTIONS ARE MADE REGARDING EXISTING CONDITIONS. SOME OF THESE ASSUMPTIONS MAY NOT BE VERIFIABLE WITHOUT EXPENDING ADDITIONAL SUMS OF MONEY OR DESTROYING OTHERWISE ADEQUATE OR SERVICEABLE PORTIONS OF EXISTING BUILDINGS AND/OR EQUIPMENT. THEREFORE, THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR ANY CHANGES OR ADDITIONAL COSTS INCURRED DUE TO EXISTING CONDITIONS.
6. COMPLY WITH CONTRACT DOCUMENTS IN LAYING OUT WORK AND EQUIPMENT. COORDINATE THE WORK OF THIS SECTION WITH THE WORK OF OTHER TRADES AND JOB CONDITIONS.
7. THE INSTALLATION OF ACCESS PANELS OR OTHER INDICATING EQUIPMENT OR SPECIALTIES REQUIRING READING, ADJUSTMENT, INSPECTION, REPAIRS, REMOVAL OR REPLACEMENT SHALL BE CONVENIENTLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING.
8. WHERE MATERIAL IS SHOWN ON THE DRAWINGS BUT NOT SPECIFIED, IT SHALL BE OF THE SAME TYPE AND QUALITY AS EXISTING MATERIAL.
9. PROVIDE MANUAL VOLUME DAMPERS AT UPSTREAM PORTION OF TERMINAL AIR BRANCHES. THESE SHALL BE OF THE LOCKING QUADRANT TYPE. WHERE LOCATED OVER SLOPED OR HARD CEILINGS, PROVIDE DURO-DYNE ANGLE GEAR DRIVE OR BOWDEN CABLE CONTROL SYSTEM OR PROVIDE UNITED ENERTECH POWER/BALANCE SYSTEM. REMOTE PLATE LOCATIONS TO BE LOCATED AS DETERMINED BY ARCHITECT.
10. PROVIDE MINIMUM 1" ACOUSTICAL LINING IN DUCTWORK WITHIN 10 FEET OF AIR MOVING EQUIPMENT. PROVIDE DURO-DYNE FLEXIBLE CONNECTION AT DUCT AT EQUIPMENT LOCATIONS.
11. DUCTS IN AN UNCONDITIONED SPACE OR EXTERIOR DUCT WORK SHALL HAVE A MIN. OF R-8 INSULATION. DUCTS WITHIN THE CONDITIONED ENVELOPE ABOVE A CEILING SHALL HAVE A MIN. OF R-4.2 INSULATION. EXTERIOR DUCTWORK SHALL NOT HAVE INSULATION EXPOSED TO THE ENVIRONMENT.
12. WHERE NOT SPECIFICALLY INDICATED OTHERWISE, DUCTWORK AND EQUIPMENT SHALL BE SUPPORTED PER THE CURRENT APPLICABLE CALIFORNIA MECHANICAL CODE.
13. WHEN A FIRE ALARM SYSTEM WITH FULL COVERAGE SMOKE DETECTORS ARE PROVIDED, DUCT SMOKE DETECTORS MAY BE ELIMINATED. FIRE ALARM CONTRACTOR SHALL WIRE SMOKE/FIRE DAMPER ACTIVATORS TO AREA SMOKE DETECTORS.
14. TESTING, ADJUSTING, AND BALANCING (TAB) OF THE AIR CONDITIONING SYSTEMS AND RELATED ANCILLARY EQUIPMENT WILL BE PERFORMED BY A CERTIFIED, INDEPENDENT THIRD PARTY, AABC AGENCY PROCURED BY THE MECHANICAL CONTRACTOR. A COMPLETE AIR BALANCE REPORT TO BE SUBMITTED TO THE ADMINISTRATIVE AUTHORITY AND TO THE MECHANICAL ENGINEER AND APPROVED PRIOR TO FINAL PAYMENT.
15. AIR HANDLING DUCT SYSTEMS SHALL BE CONSTRUCTED, INSTALLED AND INSULATED AS PROVIDED IN CHAPTER 6 OF 2022 CMC.
16. MATERIALS EXPOSED WITHIN DUCTS OR PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE FLAME SPREAD INDEX NOT GREATER THAN 25 AND A SMOKE DEVELOPED INDEX NOT GREATER THAN 50 (2022 CMC SECTION 602.2).
17. DUCTWORK SHALL BE HARD DUCT. FLEXIBLE AIR DUCTS SHALL BE NOT MORE THAN 5' IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIDGED ELBOWS OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE (SEC 603.4.1 CMC).
18. ANY SUBSTITUTION MADE AFFECTING THE STRUCTURAL, ACCESS OR FIRE & SAFETY PORTIONS OF THE PROJECT SHALL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL AS REQUIRED BY 2022 CBC PART 1 SECTION 4-338. A CCD WILL BE REQUIRED.
19. THERMOSTATS SHALL COMPLY WITH THE 2022 ENERGY COMMISSION AND SHALL BE WIFI ENABLED.
20. AT THE TIME OF ROUGH INSTALLATION, OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING AND COOLING EQUIPMENT, DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENTS OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUCT OR DEBRIS WHICH MAY COLLECT IN THE SYSTEM.
21. WHERE MORE THAN ONE HEATING, COOLING, VENTILATING, OR REFRIGERATING SYSTEM IS INSTALLED ON THE ROOF OF A BUILDING OR WITHIN A BUILDING, IT SHALL BE PERMANENTLY IDENTIFIED AS TO THE AREA OR SPACE SERVED BY THE EQUIPMENT. (CMC 303.6) PROVIDE PERMANENT LABELING AND IDENTIFICATION FOR HVAC UNIT (SINGLE SYSTEM OR MULTIPLE) AND THERMOSTATS. IDENTIFICATION FOR THE THERMOSTATS SHALL CORRELATE TO THE HVAC UNIT THAT IT SERVES.
22. AIR CONDITIONING REFRIGERATION SERVICE PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING TYPE TAMPER RESISTANT CAP OR SHALL BE PROTECTED FROM UNAUTHORIZED ACCESS BY A MEANS ACCEPTABLE TO DSA PER CMC SECTION 1105.11.
23. UNLESS SPECIFICALLY SHOWN ON THESE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR AUTHORIZATION IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD AND DSA.

AIR DISTRIBUTION SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER & MODEL NO.	FINISH	ACCESSORIES
CD	CEILING DIFFUSER (FRAME 22 OR 23)	"KRUEGER" MODEL 1240	BRITISH WHITE	24"x24" PANEL AT T-BAR CEILING
CE / CR	CEILING REGISTER (FRAME 22 OR 23, 35° DEFLECTION)	"KRUEGER" MODEL S80	BRITISH WHITE	24"x24" PANEL AT T-BAR CEILING
SG	SIDEWALL REGISTER (FRAME 22, 35° DEFLECTION)	"KRUEGER" MODEL 80	BRITISH WHITE	-
RG / EG	SIDEWALL GRILLE (FRAME 22, 35° DEFLECTION)	"KRUEGER" MODEL S85	BRITISH WHITE	-

(1) AT ALL HARD LID CEILINGS, CONTRACTOR SHALL PROVIDE FOR "MAT" CABLE DRIVEN DAMPERS. MODEL RT-150. CABLE SHALL BE ROUTED BEHIND GRILLE OPENING AND INSTALLED PER MANUFACTURER'S REQUIREMENTS.

MECHANICAL SHEET INDEX

SHEET NUMBER	SHEET NAME
M0-1.0	MECHANICAL LEGENDS NOTES & SCHEDULES
M0-1.1	MECHANICAL SCHEDULES CONT.
M0-1.2	ENV TITLE 24 COMPLIANCE DOCUMENTS
M0-1.3	MCH TITLE 24 COMPLIANCE DOCUMENTS
M0-1.4	MCH TITLE 24 COMPLIANCE DOCUMENTS
M1-1.0	MECHANICAL DEMOLITION FLOOR PLAN
M1-1.1	MECHANICAL REMODEL FLOOR PLAN
M1-2.1	MECHANICAL REMODEL ROOF PLAN
MD-1.1	MECHANICAL DETAILS
MD-1.2	MECHANICAL DETAILS CONT.

HVAC LEGEND

SYMBOLS	ABBREVIATIONS	DESCRIPTIONS
		SQ., RECT., OR ROUND DUCT SIZE AS NOTED
		DUCT WITH ACOUSTICAL LINER
		EXISTING DUCT OR EQUIPMENT TO REMAIN
		EXISTING DUCT OR EQUIPMENT TO BE REMOVED
		FLEXIBLE DUCT
	CD	CEILING DIFFUSER, SUPPLY
	CR / CE	CEILING REGISTER, RETURN / EXHAUST
		SECTION THROUGH DUCT
		DUCT DOWN
		RECTANGULAR TO ROUND TRANSITION
		DUCT ACCESS DOOR
		MITERED DUCT ELBOW WITH TURNING VANES
	SFD	COMBINATION SMOKE / FIRE DAMPER WITH ACCESS DOOR
	MVD	MANUAL VOLUME DAMPER, LOCKING QUADRANT TYPE FOR ROUND DUCT OR OPPOSED BLADE TYPE FOR RECT DUCT.
DETAIL No. / SHEET No.		SECTION REFERENCE
		DETAIL REFERENCE
EQUIPMENT ID. No.		EQUIPMENT DESIGNATION AND NUMBER
	OBD	OPPOSED BLADE DAMPER
		PARALLEL DAMPER
T	T'STAT	THERMOSTAT
CO2	CO2 SENSOR	CO2 SENSOR
SD		DUCT DETECTOR
	A.F.F.	ABOVE FINISHED FLOOR
	CFM	CUBIC FEET OF AIR PER MINUTE
	CFMS	CFM SUPPLY
	CFMR	CFM RETURN
	CFME	CFM EXHAUST
	O.S.A.	OUTSIDE AIR
	(E) or EXIST.	EXISTING
	(N)	NEW
	30"x10"	INDICATES RECTANGULAR DUCT SIZE: WIDTH x HEIGHT
	12"Ø	INDICATES ROUND DUCT SIZE: DIAMETER
	POC	POINT OF CONNECTION
	POD	POINT OF DEMOLITION
M		MOTORIZED DAMPER
	REFR.	REFRIGERANT LINES

ANCHORAGE AND BRACING NOTES

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 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 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 THE ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 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., HACI 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 DISTRIBUTING SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☐ MD☒ PP ☐E☐ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP☐ MD☐ PP ☐E☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE HCAI PRE-APPROVAL (OPM #) #_____

STAMPS

AGENCY APPROVAL
File No.: ########/##-########

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com
DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PRINTED: 2/13/2025 11:26:26 AM
PATH: 80M:\01\77800_Wellness_Century\24-094 SBCUSD IS HS WC Mod Exp_MEP Central_M21.rvt

PROJECT No. :
2/13/2025 11:26:26 AM

DRAWN BY: JO CHECKED BY: SJ

DELTA # _____	DATE _____	☐ADD	☐AFO	☐CCD	☐REV
DELTA # _____	DATE _____	☐ADD	☐AFO	☐CCD	☐REV
DELTA # _____	DATE _____	☐ADD	☐AFO	☐CCD	☐REV
DELTA # _____	DATE _____	☐ADD	☐AFO	☐CCD	☐REV

A/C UNIT SCHEDULE

TAG	MANUFACTURER & MODEL NO.	AREA SERVED	COOLING PERFORMANCE				FILTER	HEATING PERFORMANCE				FAN SYSTEM						REFRIG. TYPE	ELECTRICAL		POWER EXHAUST/ ECONOMIZER ELECTRICAL (1)		FACTORY ACCESSORIES / REMARKS	OPR. WEIGHT WITH ACCESSORIES (LBS.)	ANCHORAGE DETAIL REFERENCE	AREA SMOKE DETECTOR FOR SHUTDOWN
			EAT DB/WB	LAT DB/WB	CAPACITY (MBH)	EFF.		EAT (°F)	LAT (°F)	CAPACITY (MBH)	EFF.	SUPPLY CFM	MIN./MAX. OSA	ESP ("W.C.)	RPM	DRIVE	POWER		V-PH-HZ	AMPS	V-PH-HZ	AMPS				
(E) AC-3	TRANE 4YCZ6048	STUDENT LOBBY 103, OFFICE 104, EXAM 105, STORAGE 106, NURSE STATION 107	79 / 63.3	55 / 54	42 TOTAL CAP. 38.6 SENS. CAP.	16 SEER 12 EER	30%	63.7	105	120 INPUT 96.5 OUTPUT	80% AFUE	1540	235	0.4"	1589	DIRECT	3/4 HP	R-410A	480V-3ø-60Hz	20 MOCP	N/A	N/A	EXISTING ISOLATION CURB, OSA HOOD, COIL GUARD	900	EXISTING	YES
AC-3B	TRANE WHK072A4S00	EXAM 109, OFFICE 110, LOBBY 101, CONFERENCE 111, OFFICE 112, CORR. 102	78.3 / 63.1	55.11 / 53.5	69.76 TOTAL CAP. 63.82 SENS. CAP.	16.3 IEER 12.8 EER	MERV-13	64	91.67	61.62 TOTAL	3.72 COP (HI) 2.25 COP (LOW)	2400	205 / 330	1.0"	1098	VARIABLE DIRECT	0.842 BHP	R-454B	480V-3ø-60Hz	20 MCA 25 MOCP	480V-3ø-60Hz	1.875 MCA 3.375 MOCP	(2)(3)(4)(5)(6)(7)(8)(9)	918 - UNIT 331 - PIECON 474 - 11" TALL CURB 1,723 - TOTAL	1 / MD-1.7	YES

EQUIPMENT NOTES:

1. SEPARATE DISCONNECT/POWER
2. THRU-THE-BASE ELECTRICAL CONNECTION
3. ECONOMIZER OUTSIDE AIR TEMPERATURE SENSOR TO BE LOCATED AWAY FROM DIRECT SUNLIGHT.
4. HAIL GUARDS
5. OSA DAMPER TO ACTUATE TO ALLOW MAX. OSA (NON-ECONOMIZER MODE) WHEN CO2 SENSOR READS 1,000 P.P.M. AND ABOVE, OTHERWISE, OSA DAMPER TO BE AT MIN. POSTITION.
6. CANFAB 11" TALL ISOLATION CURB P/N: 6042-IC
7. CANFAB ECONOMIZER & POWER EXHAUST P/N: 6144-PE/MPE
8. VENSTAR PROGRAMMABLE THERMOSTAT
9. VENSTAR CO2 SENSOR, SEE FLOOR PLANS FOR LOCATIONS

EXHAUST FAN SCHEDULE

TAG	MANUFACTURER & MODEL NO.	AREA SERVED	FAN SYSTEM				INLET / RADIATED SONES	ELECTRICAL		OPR. WT WITH ACCESSORIES (LBS.)	ANCHORAGE DETAIL REFERENCE	ACCESSORIES / REMARKS
			FLOW	ESP	RPM	POWER		V-PH-HZ	AMPS			
EF-3B	GREENHECK G-060-VG	UNISEX 108	70 CFM	0.296" W.G.	1472	0.01 BHP 1/15 HP	3.1 / -	120V-1Ø-60Hz	1.3 FLA	22 - UNIT 14 - 12" TALL CURB 36 - TOTAL	6 / MD-1.7	(1)(2)(3)(4)(5)(6)(7)(8)

EQUIPMENT NOTES:

1. VARI-GREEN MOTOR WITH BALANCING DIAL
2. JUNCTION BOX & SWITCH
3. GALV. BIRD SCREEN
4. DAMPER, WD-90-PB-8X8
5. ROOF CURB, GPI-17-8-G12
6. 1" LINER IN CURB
7. DAMPER TRAY
8. INTERCONNECT TO UNISEX RESTROOM LIGHT SWITCH, SEE ELECTRICAL PLANS

STAMPS

AGENCY APPROVAL
File No.: ########/##-########

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APP. 04-123900 INC:
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Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com

DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

PRINTED: 2/13/2025 11:26:27 AM
PATH: RVM 360//1080_Wellness_Center/24-094 SKD\SD IS HS WC Mod Exp_MEP Central_R21.rvt

PROJECT No. :
2/13/2025 11:26:27 AM

DRAWN BY: JQ CHECKED BY: SJ

DELTA # ____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # ____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # ____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # ____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV

STATE OF CALIFORNIA
Envelope Component Approach
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-ENV-E**

This document is used to demonstrate compliance with mandatory requirements in 110.8(g) and 120.7(b)/ 160.1 for newly constructed nonresidential, hotel/ motel, multifamily and mixed-use buildings, and 141.0(b)1/ 180.2 for alterations, related to roof, wall and floor assemblies. It is also used to demonstrate compliance with prescriptive requirements in 140.3/ 170.2 for newly constructed buildings, and 141.0/ 180.1/ 180.2 for additions and alterations, related to roof, wall, floor, door, fenestration and daylighting requirements.

Project Name:	Indian Springs HS Wellness Center	**Report Page:**	**(Page 1 of 12)**
Project Address:	1472 East 6th Street	**Date Prepared:**	8/13/2024

A. GENERAL INFORMATION

01	Project Location (city)	San Bernardino	05	# of Stories (Habitable Above Grade)	1
02	Zipcode	92410	06	Total Conditioned Floor Area (ft²)	2163
03	Climate Zone	10	07	Total Unconditioned Floor Area (ft²)	0
04	Occupancy Types Within Project: (select all that apply): If one occupancy constitutes >= 80% of the conditioned floor area, the entire building envelope may be designed to comply with the provisions of that occupancy per 100.0(f).		08	☐ Project includes unconditioned enclosed space(s) > 5,000 ft² under a roof with a ceiling height of at least 15 ft.[1]	

● Office ● Support Areas ● All Other Occupancies

[1] *FOOTNOTE: Enclosed spaces > 5,000 ft² directly under roof with ceiling height > 15 ft in climate zones 2 through 15 are required to meet the minimum daylighting requirements defined in 140.3(c)/ 170.2(b). Compliance with 140.3(c)/ 170.2(b) is documented in Table L. This is the only prescriptive requirement which applies to unconditioned spaces.*

B. PROJECT SCOPE

This table specifies project envelope components within the permit application demonstrating compliance using the prescriptive paths outlined in 140.3/ 170.2 and 141.0(a)1/ 180.1 and 141.0(b)1 and 2/ 180.2 for additions and alterations.

My project consists of (check all that apply)			Component Types				
			01				02
☐	New Construction or Newly Conditioned Space	☐	Roof	☐	Walls	☐	Exterior Opaque Doors
☐	One or more enclosed spaces > 5,000 ft² directly under roof with ceiling height > 15ft			☐	Floors	☐	Fenestration/ Glazed Doors[2]
☒	Addition of conditioned space	☒	Roof	☒	Walls	☐	Exterior Opaque Doors
☐	One or more enclosed spaces > 5,000 ft² directly under roof with ceiling height > 15ft						
☒	Addition is <=700 ft²			☐	Floors	☒	Fenestration/ Glazed Doors[3]
☐	Addition is >700 ft²						
☒	Alteration of conditioned space	☐	Roof Assembly	☒	Walls		
☐	One or more enclosed spaces > 5,000 ft² directly under roof with ceiling height > 15ft and lighting system installed for the first time	☐	Roofing Material[3]	☐	Floors	☒	Fenestration

B. PROJECT SCOPE

[1] *FOOTNOTE: Doors that are more than 25% glass in area are considered Glazed Doors and should be documented on table K with fenestration.*

[2] *Roof recovers and replacements must also check "Roof Assembly" box and document compliance with insulation requirements in Table F. Roof recoats may document compliance with roof material only in Table G.*

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through L. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see the applicable table referenced below.

Opaque Envelope Components							
Roof Assembly	Roofing Materials	Walls	Floors	Doors	Fenestration	Daylighting Spaces > 5,000ft²	Compliance Results
01	02	03	04	05	06	07	08
(See Table F)	(See Table G)	(See Table H)	(See Table I)	(See Table J)	(See Table K)	(See Table L)	COMPLIES
Yes	Yes	Yes			Yes		

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.

F. ROOF ASSEMBLY SCHEDULE

This table demonstrates compliance for prescriptive roof assembly requirements in 140.3(a)1B/ 170.2(e)1B for new construction, 141.0(a)/ 180.1 for additions, or 141.0(b)2Bii/ 180.2 for alterations.

01	Indicate roof types included in the project:	☒ Framed	☐ Framed-Multifamily	☐ SIPS	☐ Span Deck & Concrete	☐ Metal Panels	☐ Metal Building

Framed Roof Assemblies

01	☒	Include Framed Roof Assemblies in Area-Weighted Average U-factor Calculation[1]		
02	03	04	05	06

F. ROOF ASSEMBLY SCHEDULE

Framed Roof Assemblies

Tag/Plan Detail ID	Name/Description	Status	Exception to Roof Insulation Requirements in §141.0(b)2Bii (Alts. Only)	Occupancy Type
R-38 Roof No Attic	(N) Roof	New		Nonresidential/ Relocatable 1 CZ
R-38 Roof No Attic	(N) Roof	New		Nonresidential/ Relocatable 1 CZ
R-38 Roof No Attic	(N) Roof	New		Nonresidential/ Relocatable 1 CZ
R-38 Roof No Attic	(N) Roof	New		Nonresidential/ Relocatable 1 CZ
R-38 Roof No Attic	(N) Roof	New		Nonresidential/ Relocatable 1 CZ
R-38 Roof No Attic	(N) Roof	New		Nonresidential/ Relocatable 1 CZ

07	08	09	10	11	12	13	14	15		16
Tag/Plan Detail ID	How Design U-factor was determined	Roof Type & Frame Material	Frame Spacing Depth	Cavity Insulation per Design[2]	Continuous Insulation per Design[2]	Thermal Performance Unit	Required Thermal Performance[3]	U-factor per Design		Net Area[4] ft²
(N) Roof	JA4 Tables	Wood		38	0	U-factor	0.034	per JA4 per Software/ Other	0.029	159
(N) Roof	JA4 Tables	Wood		38	0	U-factor	0.034	per JA4 per Software/ Other	0.029	201
(N) Roof	JA4 Tables	Wood		38	0	U-factor	0.034	per JA4 per Software/ Other	0.029	50.2
(N) Roof	JA4 Tables	Wood		38	0	U-factor	0.034	per JA4 per Software/ Other	0.029	215

F. ROOF ASSEMBLY SCHEDULE

07	08	09	10	11	12	13	14	15		16
Tag/Plan Detail ID	How Design U-factor was determined	Roof Type & Frame Material	Frame Spacing Depth	Cavity Insulation per Design[2]	Continuous Insulation per Design[2]	Thermal Performance Unit	Required Thermal Performance[3]	U-factor per Design		Net Area[4] ft²
(N) Roof	JA4 Tables	Wood		38	0	U-factor	0.034	per JA4 per Software/ Other	0.029	221
(N) Roof	JA4 Tables	Wood		38	0	U-factor	0.034	per JA4 per Software/ Other	0.029	273.4

[1] *FOOTNOTES: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Metal building roofs may not be combined with other roof types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in Table 141.0-C.*

[2] *For alterations using U-factor as the Thermal Performance Unit, at least R-10 insulation must be above deck.*

[3] *If "R-value" is shown in cell 13 as the Thermal Performance Unit, the R-value shown here is for continuous insulation per Table 141.0-C.*

[4] *Roof area minus any fenestration/ skylight area*

Area-Weighted Average U-factor Compliance Calculation for Framed/ SIPs/ Span Deck & Concrete/ Metal Panel Roofs

01	02	03	04	05
Roof Type	Total Area of Roof Type (ft²)	Area-weighted U-factor for Roof Type		Compliance Results Using Area-Weighted Calculation Option
		Required	Designed	
Framed	1119.6	0.034	0.029	
Total for all Roof Types:	**1119.6**	**0.034**	**0.029**	**COMPLIES**

G. RATED ROOFING MATERIAL (COOL ROOF)

This table demonstrates compliance with prescriptive roof material requirements in 140.3(a)1A/ 170.2(e)1A for new construction, 141.0(a)/ 180.1 for additions, and 141.0(b)2B/ 180.2 for alterations. Roof recovers and replacements must also document compliance with insulation requirements in Table F. Roof recoats may document compliance with roof material only in Table G.

01	02	03	04	05	06	07	08		09		10
Tag/Plan Detail ID	Name/ Description/ Location	Status	Occupancy Type	Roof Slope	Roof Material	Compliance Method	Required Minimum Material Performance		Designed Material Performance		U-factor / R-value of Assembly
R-38 Roof No Attic	(N) Roof	Altered	Nonresidential	Low slope	To Be Determined	Aged solar reflectance and thermal emittance	Reflectance	0.63	Reflectance[1]	0.63	
							Emittance	0.75	Emittance	0.85	
							SRI		SRI		

H. WALL ASSEMBLY SCHEDULE

This table demonstrates compliance with prescriptive wall assembly requirements in 140.3(a)/ 170.2(e) for new constructions, 141.0(a)/ 180.1 for additions and 141.0(b)1B/ 180.2 for alterations.

01	Indicate wall types included in the project:[1]	☒ Framed	☐ Mass (new only)	☐ Concrete Sandwich Panel (new only)	☐ SIPS	☐ ICF (new only)
		☐ Metal Panels	☐ Metal Building	☐ Spandrel/ Curtain Wall	☐ Straw Bale	☐ Log Home (new only)

[1] *FOOTNOTES: Wall types indicated above as "(new only)" do not have Title 24, Part 6 requirements for alterations. New construction and additions do have requirements and should be clicked above and compliance demonstrated within this table.*

Framed Walls

01	☐	Calculate Area-Weighted Average U-factor for Metal Framed Walls[1]
02	☒	Include Wood Framed Walls in Area-Weighted Average U-factor Calculation[1]

03	04	05	06	07	08	09	10	11	12		13
Tag/Plan Detail ID	Occupancy & Status	How Design U-factor was determined	Location/ Fire Rating	Frame Material, Spacing & Depth	Cavity Insulation per Design	Continuous Insulation per Design	Thermal Performance Unit	Required Thermal Performance	U-factor per Design		Net Area[1] ft²
(N) E Wall 16.67x20	Nonresidential/ Relocatable 1 CZ: New	JA4 Tables	Exterior wall	Wood 1/2" gyp 16" OC 2x8	30	0	U-factor	0.059	per JA4 per Software/ Other	0.056	72.2

H. WALL ASSEMBLY SCHEDULE

03	04	05	06	07	08	09	10	11	12		13
Tag/Plan Detail ID	Occupancy & Status	How Design U-factor was determined	Location/ Fire Rating	Frame Material, Spacing & Depth	Cavity Insulation per Design	Continuous Insulation per Design	Thermal Performance Unit	Required Thermal Performance	U-factor per Design		Net Area[1] ft²
(N) E Wall 17.25x20	Nonresidential/ Relocatable 1 CZ: New	JA4 Tables	Exterior wall	Wood 1/2" gyp 16" OC 2x8	30	0	U-factor	0.059	per JA4 per Software/ Other	0.056	197.3
(N) N Wall4.8x20	Nonresidential/ Relocatable 1 CZ: New	JA4 Tables	Exterior wall	Wood 1/2" gyp 16" OC 2x8	30	0	U-factor	0.059	per JA4 per Software/ Other	0.056	96
(N) N Wall 14.08x20	Nonresidential/ Relocatable 1 CZ: New	JA4 Tables	Exterior wall	Wood 1/2" gyp 16" OC 2x8	30	0	U-factor	0.059	per JA4 per Software/ Other	0.056	281.6
(N) E Wall 19.67x20	Nonresidential/ Relocatable 1 CZ: New	JA4 Tables	Exterior wall	Wood 1/2" gyp 16" OC 2x8	30	0	U-factor	0.059	per JA4 per Software/ Other	0.056	282.5
(N) E Wall 13.25x20	Nonresidential/ Relocatable 1 CZ: New	JA4 Tables	Exterior wall	Wood 1/2" gyp 16" OC 2x8	30	0	U-factor	0.059	per JA4 per Software/ Other	0.056	194.5
(N) S Wall 20.08x20	Nonresidential/ Relocatable 1 CZ: New	JA4 Tables	Exterior wall	Wood 1/2" gyp 16" OC 2x8	30	0	U-factor	0.059	per JA4 per Software/ Other	0.056	401.6

H. WALL ASSEMBLY SCHEDULE

03	04	05	06	07	08	09	10	11	12	13
Tag/Plan Detail ID	Occupancy & Status	How Design U-factor was determined	Location/ Fire Rating	Frame Material, Spacing & Depth	Cavity Insulation per Design	Continuous Insulation per Design	Thermal Performance Unit	Required Thermal Performance	U-factor per Design	Net Area[1] ft²
(N) E Wall 16.67x20	Nonresidential/ Relocatable 1 CZ: New	JA4 Tables	Exterior wall	Wood 1/2" gyp 16" OC 2x8	30	0	U-factor	0.059	per JA4 per Software/ Other 0.056	72.2

[1] *FOOTNOTES: If any individual assembly is non-compliant, assemblies may show compliance using an area-weighted calculation. Metal framed walls may not be combined with other wall types. Wood framed walls are combined with SIPS, spandrel & curtain, metal panel and straw bale wall types. The area-weighted compliance option is not available for alterations demonstrating compliance with R-values in Table 141.0-C.*

[2] *If "R-value" is shown in cell 10 as the Thermal Performance Unit, the R-value shown here is for cavity insulation per 141.0(b)1B.*

[3] *Wall area minus any fenestration area*

Area-Weighted Average U-factor Compliance Calculation for Wood Framed/ SIPs/ Spandrel/ Curtain/ Metal Panel/ Straw Bale Wall Types

01	02	03	04	05
Wall Type	Total Area of Wall Type (ft²)	Area-weighted U-factor for Wall Type		Compliance Results Using Area-Weighted Calculation Option
		Required	Designed	
Framed	1525.6	0.059	0.056	
Total for all Wall Types:	1525.6	0.059	0.056	COMPLIES

I. FLOOR ASSEMBLY SCHEDULE

This section does not apply to this project.

J. EXTERIOR DOOR SCHEDULE

This section does not apply to this project.

K. FENESTRATION AND GLAZED DOOR SCHEDULE

This table demonstrates compliance with prescriptive fenestration requirements in 140.3(a)5/ 170.2(e)3 for new constructions, 141.0(a)/ 180.1 for additions, or 141.0(b)2A/ 180.2 for alterations. Exterior doors that are more than 25% glass in area are considered Glazed Doors and should be documented on this table with fenestration.

01	Indicate fenestration types included in the project:[1]	☒ Vertical (alterations)	☐ Vertical (new)	☐ Skylights	☐ Glazed Doors (new only)

K. FENESTRATION AND GLAZED DOOR SCHEDULE

[1] *FOOTNOTES: Fenestration types indicated above as "(new only)" do not have Title 24, Part 6 requirements for alterations. New construction and additions do have requirements and should be clicked above and compliance demonstrated within this table.*

Vertical Fenestration And Glazed Doors- U-factor, Solar Heat Gain Coefficient (RSHGC/ SHGC), Visible Transmittance (VT)

01	☒	Calculate Area-Weighted Average U-factor for Vertical Fenestration and Glazed Doors[1]
02	☒	Calculate Area-Weighted Average (R)SHGC for Vertical Fenestration and Glazed Doors[1]
03	☒	Calculate Area-Weighted Average VT for Vertical Fenestration and Glazed Doors[1]

Vertical Fenestration And Glazed Doors- U-factor, Solar Heat Gain Coefficient (RSHGC/ SHGC), Visible Transmittance (VT)

04	05	06	07	08	09		10	11	12	13
Tag/Plan Detail ID	Fenestration Type	Occupancy & Status	U-factor/ (R)SHGC Compliance Method	VT Compliance Method	Calculation Method for Performance Values per Design[2]		Product Performance Unit	Required Product Performance	Product Performance per Design	Area ft²
Window/Door 16.67x10	Curtain wall	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	NFRC Certified		U-factor (max)	0.41	0.41	166.7
					☐ Overhang/ Slats used for RSHGC		(R)SHGC (max)	0.26	0.26	
							VT (min)	0.46	0.5	
Window 16.67x5.67	Curtain wall	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	NFRC Certified		U-factor (max)	0.41	0.41	94.5
					☐ Overhang/ Slats used for RSHGC		(R)SHGC (max)	0.26	0.26	
							VT (min)	0.46	0.5	
Window 3.58x10	Curtain wall	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	NFRC Certified		U-factor (max)	0.41	0.41	35.8
					☐ Overhang/ Slats used for RSHGC		(R)SHGC (max)	0.26	0.26	
							VT (min)	0.46	0.5	
Window 3.58x5.67	Curtain wall	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	NFRC Certified		U-factor (max)	0.41	0.41	20.3
					☐ Overhang/ Slats used for RSHGC		(R)SHGC (max)	0.26	0.26	
							VT (min)	0.46	0.5	

K. FENESTRATION AND GLAZED DOOR SCHEDULE

Vertical Fenestration And Glazed Doors- U-factor, Solar Heat Gain Coefficient (RSHGC/ SHGC), Visible Transmittance (VT)

04	05	06	07	08	09		10	11	12	13
Tag/Plan Detail ID	Fenestration Type	Occupancy & Status	U-factor/ (R)SHGC Compliance Method	VT Compliance Method	Calculation Method for Performance Values per Design[2]		Product Performance Unit	Required Product Performance	Product Performance per Design	Area ft²
Window 16.16x5.67	Curtain wall	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	NFRC Certified		U-factor (max)	0.41	0.41	91.6
					☐ Overhang/ Slats used for RSHGC		(R)SHGC (max)	0.26	0.26	
							VT (min)	0.46	0.5	
Window 7.08x10	Curtain wall	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	NFRC Certified		U-factor (max)	0.41	0.41	70.8
					☐ Overhang/ Slats used for RSHGC		(R)SHGC (max)	0.26	0.26	
							VT (min)	0.46	0.5	
Window 7.08x5.67	Curtain wall	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	NFRC Certified		U-factor (max)	0.41	0.41	40.1
					☐ Overhang/ Slats used for RSHGC		(R)SHGC (max)	0.26	0.26	
							VT (min)	0.46	0.5	
Window 4.5x10	Curtain wall	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	NFRC Certified		U-factor (max)	0.41	0.41	45
					☐ Overhang/ Slats used for RSHGC		(R)SHGC (max)	0.26	0.26	
							VT (min)	0.46	0.5	
Window 4.5x5.67	Curtain wall	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	NFRC Certified		U-factor (max)	0.41	0.41	25.5
					☐ Overhang/ Slats used for RSHGC		(R)SHGC (max)	0.26	0.26	
							VT (min)	0.46	0.5	

K. FENESTRATION AND GLAZED DOOR SCHEDULE

[1] *FOOTNOTES: If any individual fenestration product is non-compliant, products may show compliance using an area-weighted calculation. Chromogenic glazing is not included in area-weighted calculations. Area-weighted calculation shown in separate area-weighted table below.*

[2] *The NA6 Default Calculation can only be used for alterations or dwelling units in buildings with <= 3 habitable stories. Alterations are limited to 200ft² of site built glazing and dwelling units are limited to 250ft² or 5% of conditioned floor area. If the fenestration does not meet these conditions, the only options for determining fenestration values are NFRC Certification or the Default Tables in 110.6.*

[3] *Overhangs must extend past the left and right window the same distance as the depth of the overhang or greater to show an effect on the RSHGC. If an overhang does not meet this requirement, the effect of the overhang will be ignored.*

[4] *Projecting includes casement and awning windows.*

Area-Weighted Average U-factor, SHGC, VT Compliance Calculation for Vertical Fenestration And Glazed Doors

01	02	03	04	05
Product Performance Unit	Total Area of Fenestration (ft²)	Area-weighted Calculation for Fenestration		Compliance Results Using Area-Weighted Calculation Option
		Required	Designed	
U-factor	590.4	0.41	0.41	COMPLIES
(R)SHGC	590.4	0.26	0.26	COMPLIES
VT	590.4	0.46	0.5	COMPLIES

L. DAYLIGHT IN LARGE ENCLOSED SPACES

This section does not apply to this project.

M. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by the permit applicant, an explanation should be included in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-ENV-01-E - Must be submitted for all buildings

N. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, form user must provide an explanation in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/. Individuals who perform the field testing and verification work, and provide the information required for completion of the fenestration Certificate of Acceptance documentation are not required to be licensed professionals. However, the person who signs the Certificate of Acceptance document to certify compliance with the acceptance requirements shall be licensed as specified in Standards Section 10-103(a)4 and NA7.3.1

Form/Title	Systems/Spaces To Be Field Verified
NRCA-ENV-02-F must be submitted for all new, added or altered site built fenestration.	Fenestration;

O. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no forms required for this project.

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Steven Johnson	Documentation Author Signature: Steven Johnson
Company:	Signature Date: 2024-08-13
Address: 412 E. Vanderbilt Way	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Bernardino CA 92408	Phone: 909.890.3700

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: Ruhnau Clarke	Responsible Designer Signature:
Company:	Date Signed: 2024-08-13
Address: 3775 Tenth Street	License:
City/State/Zip: Riverside CA 92501	Phone: 951.684.4664

AGENCY APPROVAL
File No.: ########-##-########

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

RUHNAU CLARKE ARCHITECTS

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com
DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

CONSULTANT BRANDING

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PATH: E:\M Jobs\21\2801 Wellness Center\24-094 SRC\SD\ IS HS WC Mod Eqp_ MEP Central_R21.rvt

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :
2/13/2025 11:26:28 AM

DRAWN BY: JO — CHECKED BY: SJ

DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV

RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SP

STATE OF CALIFORNIA
Mechanical Systems CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name:	Indian Springs HS Wellness Center	Report Page: (Page 1 of 13)
Project Address:	1472 East 6th Street	Date Prepared: 8/13/2024

A. GENERAL INFORMATION

01	Project Location (city)	San Bernardino	04	Total Conditioned Floor Area	2163
02	Climate Zone	10	05	Total Unconditioned Floor Area	0
03	Occupancy Types Within Project:		06	# of Stories (Habitable Above Grade)	1

● Office ● Support Areas ● All Other Occupancies

B. PROJECT SCOPE

This table includes mechanical systems or components that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, 170.2(b) or 141.0(b)2 and 180.2(b)2 for alterations.

01	02	03
Air System(s)	Wet System Components	Dry System Components
☒ Heating Air System	☐ Water Economizer	☒ Air Economizer
☒ Cooling Air System	☐ Pumps	☐ Electric Resistance Heat
Mechanical Controls	☐ System Piping	☒ Fan Systems
☒ Mechanical Controls (existing to remain, altered or new)	☐ Cooling Towers	☒ Ductwork (existing to remain, altered or new)
	☐ Chillers	☒ Ventilation
	☐ Boilers	☐ Zonal Systems/ Terminal Boxes

STATE OF CALIFORNIA
Mechanical Systems CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name:	Indian Springs HS Wellness Center	Report Page: (Page 2 of 13)
		Date Prepared: 8/13/2024

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements. This table is not editable by the user. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D., or the table indicated as not compliant for guidance.

01		02		03		04		05		06		07		08	09
System Summary 110.1, 110.2, 140.4, 170.2(c)	AND	Pumps 140.4(k), 170.2(c)4i	AND	Fans/ Economizers 140.4(c), 140.4(e), 170.2(c)	AND	System Controls 110.2, 120.2, 140.4(f), 170.2(c)	AND	Ventilation 120.1, 160.2	AND	Terminal Box Controls 140.4(d), 170.2(c)4B	AND	Distribution 120.1, 140.4(l), 160.2, 160.3	AND	Cooling Towers 110.2(e)2	Compliance Results
[See Table F]		[See Table G]		[See Table H]		[See Table I]		[See Table J]		[See Table K]		[See Table L]		[See Table M]	
Yes	AND		AND	Yes	AND	Yes	AND	Yes	AND		AND	Yes	AND		COMPLIES
Mandatory Measures Compliance (See Table Q for Details)															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.

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Space Conditioning System Information

01	02	03	04	05	06
System Name	Quantity	System Serving	System Status	Space Type	Utilizing Recovered Heat
(N) AC-3B	1	Single zone	New/ Addition		☐

STATE OF CALIFORNIA
Mechanical Systems CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name:	Indian Springs HS Wellness Center	Report Page: (Page 3 of 13)
		Date Prepared: 8/13/2024

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Dry System Equipment Sizing (Includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems)

01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category per Tables 110.2, 140.4(a)2 and 170.2(c)3aii	Equipment Type per Tables 110.2 and Title 20	Smallest Size Available[1] 140.4(a) and 170.2(c)1	Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2					Load Calculations[2,4]	
				Heating Output[2,3]		Cooling Output[2,3]				
				Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)
(N) AC-3B	Unitary Heat Pumps	Air-cooled, pkg (3 phase)	Yes	54.73	85.28	0	86.16	93.29	50.11	78.37

[1] *FOOTNOTES: 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 per 140.4(a) and 170.2(c)1. Healthcare facilities are excepted.*
[2] *It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.*
[3] *If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.*
[4] *Authority Having Jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c).*

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP), DX-DOAS and Dual Fuel Heat Pumps)

01	02	03	04	05	06	07	08	09
		Heating Mode				Cooling Mode		
Name or Item Tag	Size Category (Btu/h)	Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency
(N) AC-3B	>=65,000 and <135,000		COP	3.4	3.5	EER IEER	11 14.1	11.8 16

G. PUMPS

This section does not apply to this project.

STATE OF CALIFORNIA
Mechanical Systems CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
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		Date Prepared: 8/13/2024

H. FAN SYSTEMS & AIR ECONOMIZERS

This table is used to demonstrate compliance with prescriptive requirements found in 140.4(c), 140.4(e), 140.4(m), 170.2(c)3, and 170.2(c)4A for fan systems. Fan systems serving only process loads are exempt from these requirements and do not need to be included in Table H.

System Name	(N) AC-3B	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	3,000	Site Elevation	1,125	Economizer	Fixed Temperature
01	02	03	04			05		06	07	08		09		10	11
Fan Name or Item Tag	Fan Type	Qty	Component			Airflow through Component (%)		Water Gauge (w.g)	Allowance		Design				
									Component Allowance	Fan Allowance (watt/cfm)[1]	Design Electrical Input Power Method		Motor Nameplate Horsepower	Design Electrical Input Power (kW)	
SF	Supply	1	Base Allowance for system serving spaces <=6 floors away			100			696		Manufacturer provided			0.82	
			MERV 13-16 Filter upstream of thermal conditioning equipment			100			417						
			Hydronic/DX cooling coil or heat pump coil			100			417						
			Economizer Return Damper			100			138						
RF	Relief	1	Exhaust System Base Allowance			100			62		Manufacturer provided			0.45	
Supply Fan Base Allowance (kW)			Exhaust/Return/Relief/Transfer Fan Base Allowance(kW)						Fan System Allowance (kW)[3]		1.73		Fan System Electrical Output (kW)	1.27	

[1] *FOOTNOTES: Fans serving spaces with design background noise goals below NC35*
[2] *Low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.*
[3] *Fan system allowance includes fan system base allowance.*
[4] *Filter pressure loss can only be counted once per fan system.*
[5] *Complex Fan System means a fan system that combines a single cabinet fan system with other supply fans, exhaust fans, or both.*

STATE OF CALIFORNIA
Mechanical Systems CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name:	Indian Springs HS Wellness Center	Report Page: (Page 5 of 13)
		Date Prepared: 8/13/2024

H. FAN SYSTEMS & AIR ECONOMIZERS

[3] Computer room economizers must meet requirements of 140.9(a) and will be documented on the NRCC-PRC-E document.

H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)4O

01	02	03	04	05	06	07	08	09	10	11
Fan System Name	Qty	Hours of Operation per Year	Design Supply Airflow Rate	Outdoor Airflow	% Outdoor Air at Full Design Airflow	Exemptions to Exhaust Air Heat Recovery Requirement per 140.4(q) & 170.2(c)4O	Exhaust Air Heat Recovery 140.4(q) & 170.2(c)4O	Type Of Heat Recovery Rating	Required Recovery Ratio	Energy Recovery Bypass

Fan Energy Index (FEI)

01	02	03
Name or Item Tag	FEI Exception	FEI
(N) AC-3B	None Applies	1

I. SYSTEM CONTROLS

This table is used to demonstrate compliance with mandatory controls in 110.2 and 120.2 and prescriptive controls in 140.4(f) and (n), 170.2(c)4D 170.2(c)4L or requirements in 141.0(b)2E 180.2(b)2 for altered space conditioning systems.

01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft^2)	Thermostats 110.2(b) & (c)[1], 120.2(a) 160.3(a)2A or 141.0(b)2E & 180.2(b)2	Shut-Off Controls 120.2(e) & 160.3(a)2D	Isolation Zone Controls 120.2(g) & 160.3(a)2F	Demand Response 110.12 120.2(b) & 160.3(a)2B	Supply Air Temp. Reset 140.4(f) & 170.2(c)4D	Window Interlocks per 140.4(n) & 170.2(c)4D
(N) AC-3B	Single zone	<= 25,000 ft^2	EMCS	EMCS	NA: Single Zone	EMCS	Included	NA: No operable windows

[1] *FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.*

STATE OF CALIFORNIA
Mechanical Systems CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name:	Indian Springs HS Wellness Center	Report Page: (Page 6 of 13)
		Date Prepared: 8/13/2024

J. VENTILATION AND INDOOR AIR QUALITY

This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1 120.2(e)3B 140.4(p) and 140.4(q) for all nonresidential and hotel/motel and d:t24refonline/1160.2, 160.3(a)3D, 170.2(a)4N, 170.2(a)4O for high-rise residential occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet.

01	☐	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.
02	☒	Check this box if the project included Nonresidential, Hotel/Motel Spaces or Multifamily Common Use Spaces
	☐	
03	☐	Check the box if the project is using natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per 120.1(c)2.

Nonresidential and Hotel/ Motel Multifamily Common Use Ventilation Systems

04		05			06		07
System Name	(E) AC-3	System Design OA CFM Airflow[3]	232	System Design Transfer Air CFM	0		Air Filtration per 120.1(c) 141.0(b)2 and 160.2(c)21[2]
							Provided
08	09	10	11	12	13	14	15	16
Space Name or Item Tag	Mechanical Ventilation Required per 120.1(c)[3] & 160.2(c)3				Exh. Vent per 120.1(c)4 & 160.2(c)4		DCV or Sensor Controls per 120.1(d)3, 120.1(d)5, and 120.1(e)3[4] 160.2(c)5D 160.2(c)5E 160.2(c)5D	
	Occupancy Type[4]	Conditioned Floor Area (ft^2)	# of Shower/ heads/ toilets	# of people[5]	Required Min OA CFM	Required Min CFM	Provided per Design CFM	
Lobby	Main Entry Lobby	337			168.5	0	0	DCV: NA: Not required per §120.1(d)3
								Occ Sensor: NA: Not required space type
Office	Office space	484			72.6	0	0	DCV: NA: Not required per §120.1(d)3
								Occ Sensor: NA: Not required space type
17	Total System Required Min OA CFM				241	18	Ventilation for this System Complies?	Yes

STATE OF CALIFORNIA
Mechanical Systems CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name:	Indian Springs HS Wellness Center	Report Page: (Page 7 of 13)
		Date Prepared: 8/13/2024

J. VENTILATION AND INDOOR AIR QUALITY

04		05			06		07	
System Name	(N) AC-3B	System Design OA CFM Airflow[3]		327	System Design Transfer Air CFM	0	Air Filtration per 120.1(c) 141.0(b)2 and 160.2(c)21[2]	
							Provided	
08	09	10	11	12	13	14	15	16
Space Name or Item Tag	Mechanical Ventilation Required per 120.1(c)[3] & 160.2(c)3				Exh. Vent per 120.1(c)4 & 160.2(c)4		DCV or Sensor Controls per 120.1(d)3, 120.1(d)5, and 120.1(e)3[4] 160.2(c)5D 160.2(c)5E 160.2(c)5D	
	Occupancy Type[4]	Conditioned Floor Area (ft^2)	# of Shower/ heads/ toilets	# of people[5]	Required Min OA CFM	Required Min CFM	Provided per Design CFM	
Lobby	Main Entry Lobby	159			79.5	0	0	DCV: NA: Not required per §120.1(d)3
								Occ Sensor: NA: Not required space type
Conference	Conference/ meeting	201			100.5	0	0	DCV: Provided per §120.1(d)4
								Occ Sensor: NA: Not required space type
Office	Office space	551			82.6	0	0	DCV: NA: Not required per §120.1(d)3
								Occ Sensor: NA: Not required space type
Hall	Corridor	431.1			64.7	0	0	DCV: NA: Not required per §120.1(d)3
								Occ Sensor: NA: Not required space type
17	Total System Required Min OA CFM				327	18	Ventilation for this System Complies?	Yes

[1] *FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system*

STATE OF CALIFORNIA
Mechanical Systems CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name:	Indian Springs HS Wellness Center	Report Page: (Page 8 of 13)
		Date Prepared: 8/13/2024

J. VENTILATION AND INDOOR AIR QUALITY

[3] Air filtration requirements apply to the following three system types per 120.1(c)1A: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.
[3] Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.
[4] See Standards Tables 120.1-A and 120.1-B.
[5] For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.
[4] 120.2(e)3 requires systems serving rooms that are required by 130.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices 250ft^2 or smaller, multipurpose rooms less than 1,000 ft^2, classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by 130.1(c).

K. TERMINAL BOX CONTROLS

This section does not apply to this project.

L. DISTRIBUTION (DUCTWORK and PIPING)

This table is used to show compliance with mandatory pipe insulation requirements found in 120.3 and mandatory requirements found in 120.4(g) for duct sealing.

01	☐	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall have a Class I or Class II vapor retarder. All penetrations and joints of which shall be sealed.

Duct Leakage Testing

The answers to the questions below apply to the following duct systems:	(E) AC-3	**NR/ Common Use:** Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No

STATE OF CALIFORNIA
Mechanical Systems CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name:	Indian Springs HS Wellness Center	Report Page: (Page 9 of 13)
		Date Prepared: 8/13/2024

L. DISTRIBUTION (DUCTWORK and PIPING)

		Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems?	No
		Duct leakage testing per CMC Section 603.10.1 required for these systems?	Yes
11	No	The scope of the project includes only duct systems serving healthcare facilities	
12	Yes	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.	
13	Yes	The space conditioning system serves less than 5,000 ft^2 of conditioned floor area.	
14	No	The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system:	
15		The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.	
16	No	The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.	
17		All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A	
18		All ductwork is an extension of an existing duct system	
19		Ductwork serving individual dwelling unit	
20		< 25 ft of new or replacement space conditioning ducts installed	
21	R-8	Duct Insulation R-value	
22			
23			

The answers to the questions below apply to the following duct systems:	(N) AC-3B	**NR/ Common Use:** Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No

REGISTERED PROFESSIONAL ENGINEER — Steven M. Nguyen — No. 33209 — SIGNED 02/13/2025 — MECHANICAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — Exp. 10-31-26 — STATE OF CALIFORNIA

STAMPS

AGENCY APPROVAL
File No.: ########/##-#######

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com
DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS
CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

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PROJECT No. :
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STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 10 of 13)**
	Date Prepared:	8/13/2024

L. DISTRIBUTION (DUCTWORK and PIPING)

			Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems?	No
			Duct leakage testing per CMC Section 603.10.1 required for these systems?	Yes
11	No	The scope of the project includes only duct systems serving healthcare facilities		
12	Yes	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.		
13	Yes	The space conditioning system serves less than 5,000 ft² of conditioned floor area.		
14	No	The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system:		
15		The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.		
16	No	The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.		
17		All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A		
18		All ductwork is an extension of an existing duct system		
19		Ductwork serving individual dwelling unit		
20		< 25 ft of new or replacement space conditioning ducts installed		
21	R-8	Duct Insulation R-value		
22				
23				

M. COOLING TOWERS

This section does not apply to this project.

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 11 of 13)**
	Date Prepared:	8/13/2024

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

Form/Title
NRCI-MCH-01-E - Must be submitted for all buildings

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Form/Title	Systems/Spaces To Be Field Verified
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.	Trane WHC092;
NRCA-MCH-05-A - Air Economizer Controls	Trane WHC092;
NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to 120.1(c)3) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO_2) concentration setpoints.	Trane WHC092;
NRCA-MCH-07-A Supply Fan Variable Flow Controls	Trane WHC092;
NRCA-MCH-11-A Automatic Demand Shed Controls	Trane WHC092;
NRCA-MCH-12-A FDD for Packaged Direct Expansion Units	Trane WHC092;
NRCA-MCH-18-A Energy Management Control Systems	Trane WHC092;

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no NRCV forms required for this project.

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 12 of 13)**
	Date Prepared:	8/13/2024

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

This table is used to indicate where mandatory measures are documented in the plan set or construction documentation.

		01
		02
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block	Yes	Plan sheet or construction document location
		M-Sheets

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 13 of 13)**
Project Address: 1472 East 6th Street	**Date Prepared:**	8/13/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Steven Johnson	Documentation Author Signature: Steven Johnson
Company:	Signature Date: 2024-08-13
Address: 412 E. Vanderbilt Way	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Bernardino CA 92408	Phone: 909.890.3700

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: Steven Johnson	Responsible Designer Signature: Steven Johnson
Company: Design West Engineering	Date Signed: 2024-08-13
Address: 412 E. Vanderbilt Way	License: M-33209
City/State/Zip: San Bernardino CA 92408	Phone: 909.890.3700

STATE OF CALIFORNIA · REGISTERED PROFESSIONAL ENGINEER · Steven M. Johnson · No. 33209 · SIGNED:02/13/2025 · MECHANICAL · STATE OF CALIFORNIA

LICENSED ARCHITECT · Exp.10-31-25 · STATE OF CALIFORNIA

STAMPS

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File No.: ########/##-#######

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DATE: 03/18/2025

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com

DESIGN WEST ENGINEERING
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RUHNAU CLARKE ARCHITECTS

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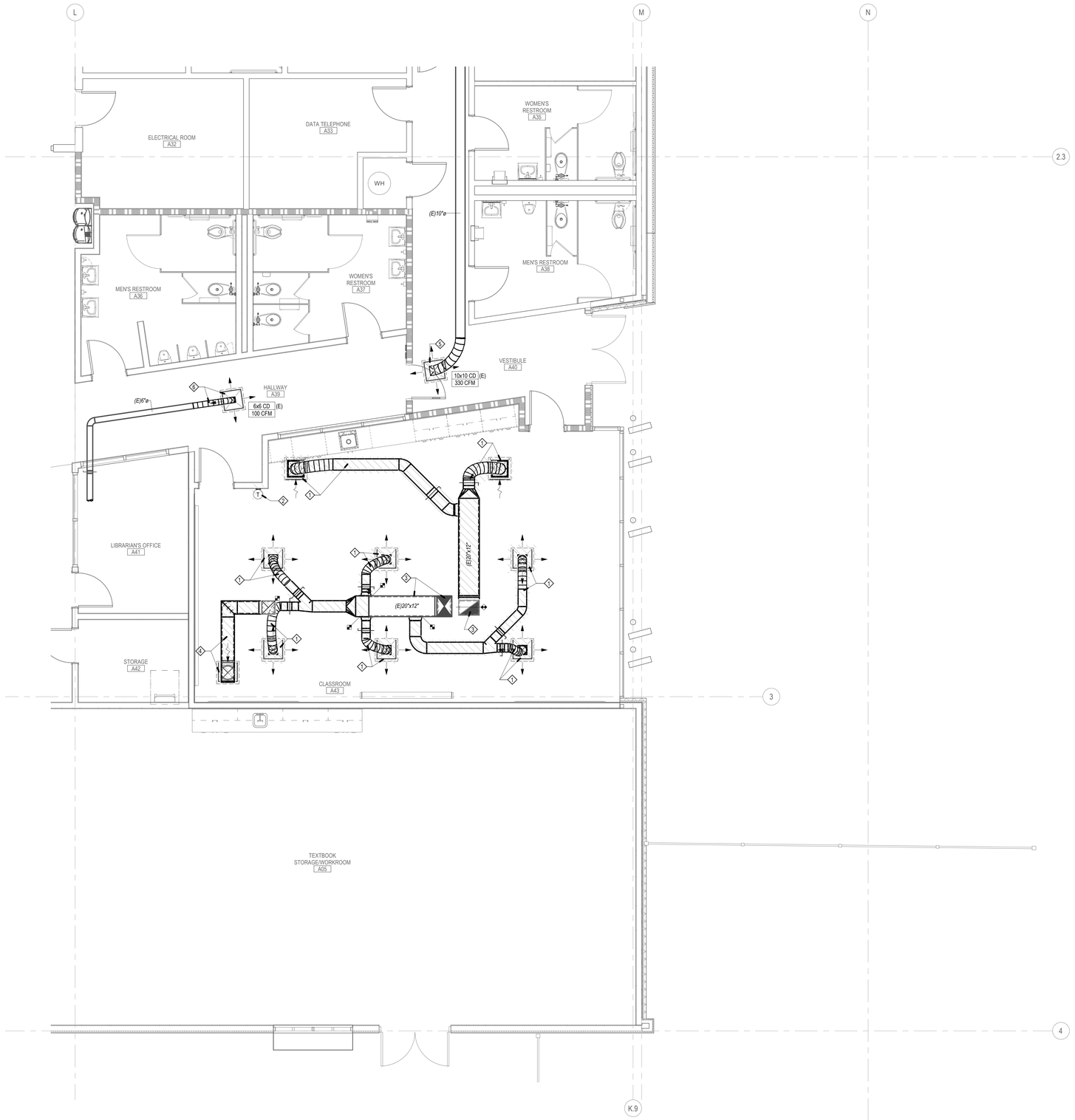
INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

MCH TITLE 24 COMPLIANCE DOCUMENTS

M0-1.4

24-094

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:



CONSTRUCTION NOTES

1. DEMOLISH CEILING REGISTER, DUCT & DUCT SUPPORTS BACK TO P.O.D.
2. REMOVE & RE-LOCATE EXISTING THERMOSTAT TO NEW LOCATION AS SHOWN ON REMODEL PLAN. REMOVE EXISTING LOW VOLTAGE WIRES AND CONDUIT DN IN WALL BACK TO (E) AC-3 UNIT ON ROOF.
3. EXISTING DUCT & DUCT UP THRU ROOF TO (E) AC-3 ON ROOF TO REMAIN. PROTECT IN PLACE.
4. DEMOLISH CEILING REGISTER, DUCT & DUCT SUPPORTS BACK TO P.O.D. AT DUCT RISER TO (E) GRAVITY VENT ON ROOF
5. REMOVE & RELOCATE EXISTING CEILING REGISTER TO NEW T-BAR CEILING.
6. EXISTING CEILING REGISTER & CONNECTED DUCT TO REMAIN. PROTECT IN PLACE.

RATED ASSEMBLY LEGEND

1-HR FIRE RATED WALL ASSEMBLY

NORTH

MECHANICAL DEMOLITION PLAN | SCALE: 1/4" = 1'-0" | 1

GENERAL NOTES

1. FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON SHEET M0-1.0.
2. PROVIDE PREREADS TO VERIFY EXISTING EQUIPMENT PERFORMANCE THAT SHALL INCLUDE: SUPPLY, RETURN, OSA AS WELL AS ANY LOCAL EXHAUST FANS.

REGISTERED PROFESSIONAL ENGINEER — STEVEN M. JOHNSON — No. 33209 — MECHANICAL — STATE OF CALIFORNIA — SIGNED 02/13/2025

LICENSED ARCHITECT — JOSE CLARKE — No. C-27350 — Exp.10-31-25 — STATE OF CALIFORNIA

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

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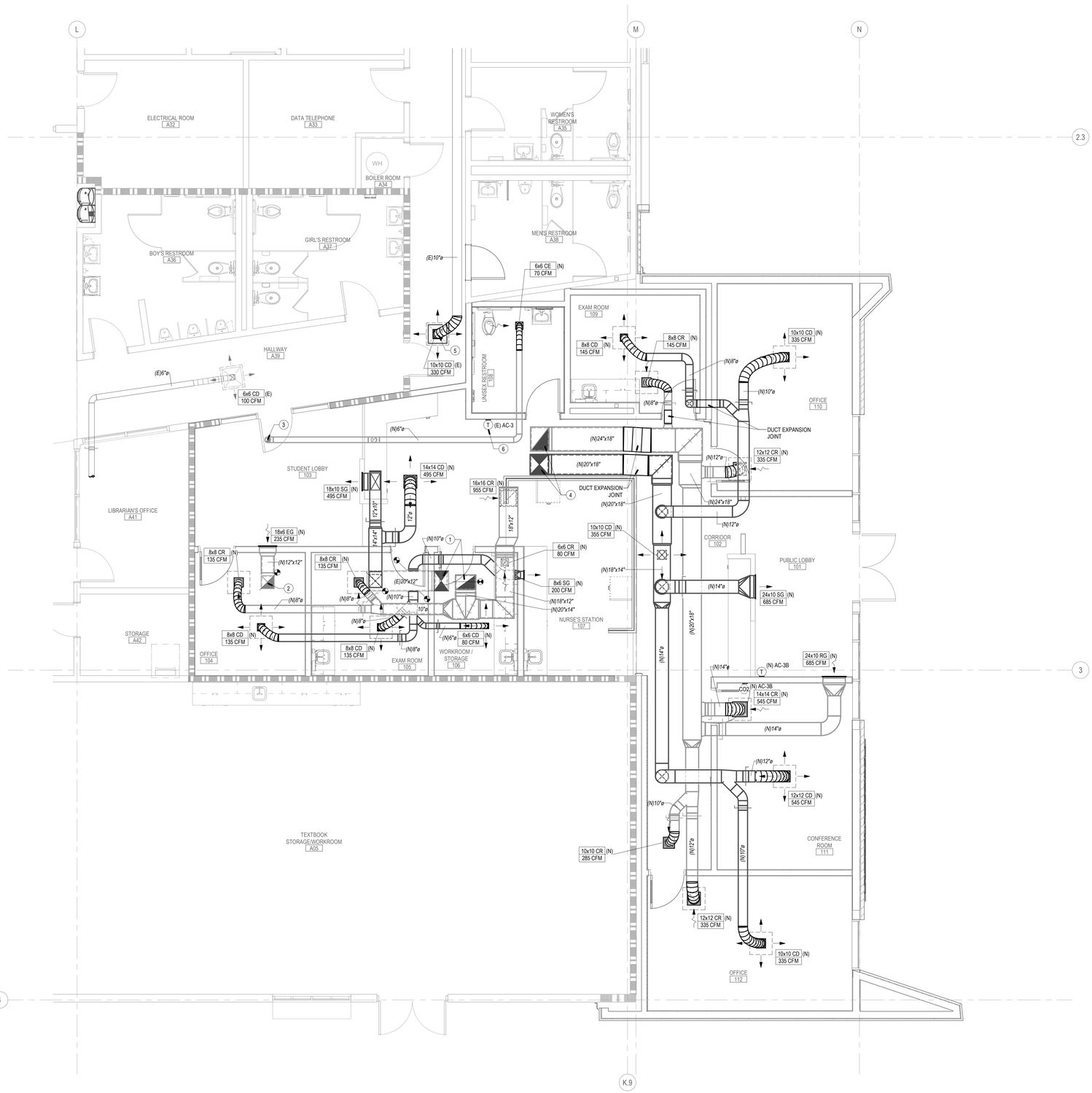
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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

MECHANICAL DEMOLITION FLOOR PLAN

M1-1.0

24-094



REGISTERED PROFESSIONAL ENGINEER
STEVEN M. JOHNSON
No. 33209
SIGNED:02/13/2025
MECHANICAL
STATE OF CALIFORNIA

LICENSED ARCHITECT
No. C-34536
Exp.10-31-25
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Fax: 909.890.3770
Email: caadd@designwesteng.com
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GENERAL NOTES

1. FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON SHEET M0-1.0.
2. SPIN-IN OR TAP TYPE DUCT CONNECTIONS SHALL BE PROVIDED WITH AN EXTRACTOR.
3. T-STATS SHALL NOT BE MOUNTED IN DIRECT LINE OF ANY SUPPLY DIFFUSER OR NEAR ANY HEAT REJECTION EQUIPMENT.
4. DUCT DIMENSIONS ARE NET INSIDE CLEAR.
5. NEW DUCTWORK SHALL BE HARD DUCT. FLEX DUCT MAY BE USED ONLY AT SUPPLY & RETURN OUTLETS AT A MAX. LENGTH OF 5'-0".
6. NEW DUCTWORK SHALL BE MOUNTED HIGH AND TIGHT TO ROOF STRUCTURE AS POSSIBLE.
7. PROVIDE 1" ACOUSTICAL LINING IN NEW DUCTWORK WITHIN 10 FEET OF ALL AIR MOVING EQUIPMENT.
8. THERMOSTATS SHALL BE PROGRAMMED TO RUN IN FAN MODE DURING OCCUPIED HOURS AND SHALL COORDINATE HOURS WITH OWNER. COOLING/ HEATING MODE SHALL RUN AS NEED, PER TEMPERATURE SET POINT AND OCCUPANT LOAD.
9. CONTRACTOR SHALL COORDINATE DUCT RUNS WITH FIRE SPRINKLER CONTRACTOR.
10. RESTROOM DOOR SHALL HAVE A 1" UNDERCUT.
11. FOR AIR DEVICE MOUNTING, SEE DETAILS 1/MD-1.1' 5/MD-1.1'
12. FOR DUCT SUPPORT, SEE DETAILS 2/MD-1.1' 3/MD-1.1'
13. FOR THERMOSTAT MOUNTING, SEE DETAIL 4/MD-1.1'
14. FOR DUCT EXPANSION JOINT AT SEISMIC SEPARATION, SEE DETAIL 7/MD-1.1'

CONSTRUCTION NOTES

1. EXISTING 20x12 SUPPLY & RETURN DUCTS UP THRU ROOF TO EXISTING AC UNIT ON ROOF
2. CONNECT NEW 12x12 RELIEF DUCT TO EXISTING RELIEF DUCT UP THRU ROOF TO EXISTING RV UNIT ON ROOF
3. NEW 6ø EXHAUST DUCT UP THRU ROOF TO EF-3B. TRANSITION TO FULL SIZE OF UNIT OPENING IN DUCT RISER. COORDINATE RISER LOCATION WITH EXISTING ROOF FRAMING SO EXISTING STUDS DO NOT NEED TO BE MODIFIED.
4. NEW 20x18 SUPPLY & 24x18 RETURN DUCTS UP THRU ROOF TO AC-3B. TRANSITION TO FULL SIZE OF UNIT OPENING IN DUCT RISERS. COORDINATE NEW OPENINGS IN EXISTING ROOF WITH STRUCTURAL DRAWINGS.
5. EXISTING AIR DEVICE RELOCATED TO NEW LOCATION. RE-WORK EXISTING FLEXT DUCT CONNECTION AS NEEDED FOR NEW LOCATION
6. NEW LOCATION FOR (E) THERMOSTAT. PROVIDE NEW CONDUIT AND LOW VOLTAGE WIRES FROM (E) AC UNIT ON ROOF.

RATED ASSEMBLY LEGEND

1-HR FIRE RATED WALL ASSEMBLY

NORTH

MECHANICAL REMODEL FLOOR PLAN | SCALE: 1/4" = 1'-0" | 1

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

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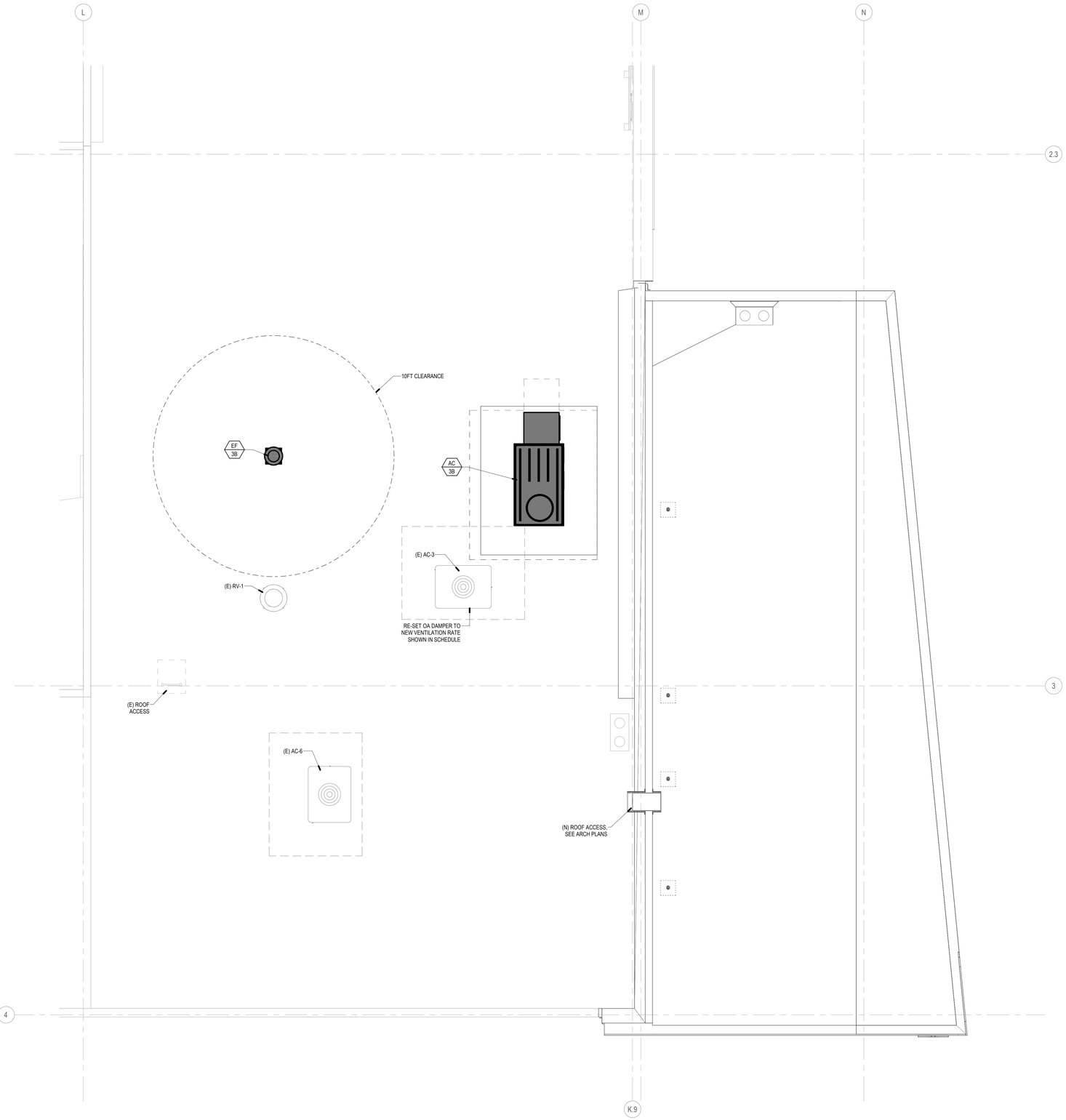
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INDIAN SPRINGS HIGH SCHOOL
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SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

MECHANICAL REMODEL FLOOR PLAN **M1-1.1**

24-094



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GENERAL NOTES

1. FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON SHEET M0-1.0
2. ENVIRONMENTAL EXHAUST AIR SHALL TERMINATE NOT LESS THAN 3 FEET FROM A PROPERTY LINE, 10 FEET FROM A FORCED AIR INLET, 10 FEET ABOVE A PUBLIC WALKWAY, AND 3 FEET FROM OPENINGS INTO THE BUILDING. THE DISCHARGE OF ENVIRONMENTAL EXHAUST AIR DUCTS SHALL NOT BE DIRECTED ONTO A PUBLIC WALKWAY. PER CMC SEC. 502.2.1
3. PROVIDE DURO-DYNE FLEXIBLE CONNECTION AT DUCT TO EQUIPMENT LOCATIONS.
4. CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR FOR BUILDING TO BE PURGED UPON COMPLETION AND PRIOR TO OCCUPANCY. FILTERS SHALL BE REPLACED BEFORE PURGE AND UPON COMPLETION OF PURGE CYCLE.

NORTH

MECHANICAL REMODEL ROOF PLAN | SCALE: 1/4" = 1'-0" | 1

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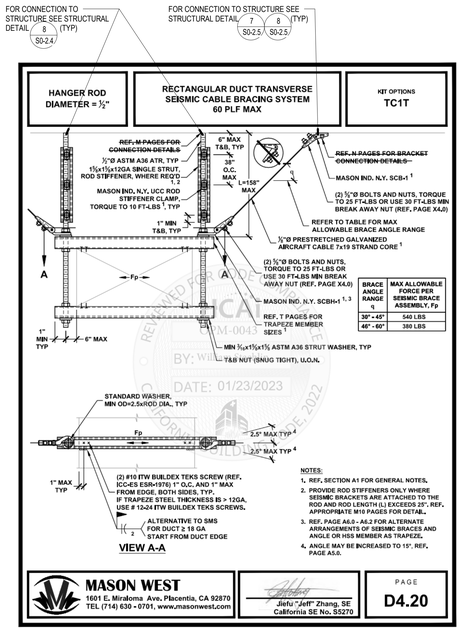
INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

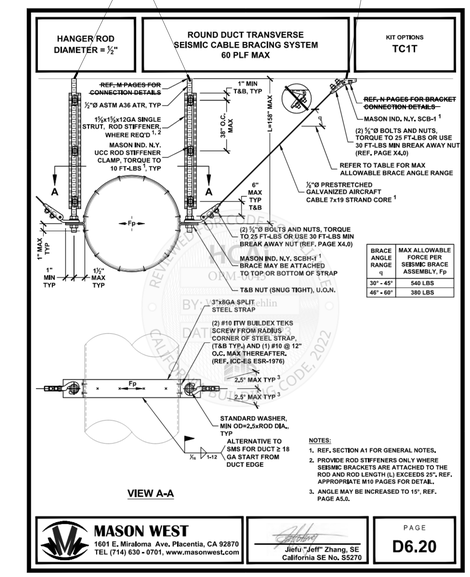
MECHANICAL REMODEL ROOF PLAN

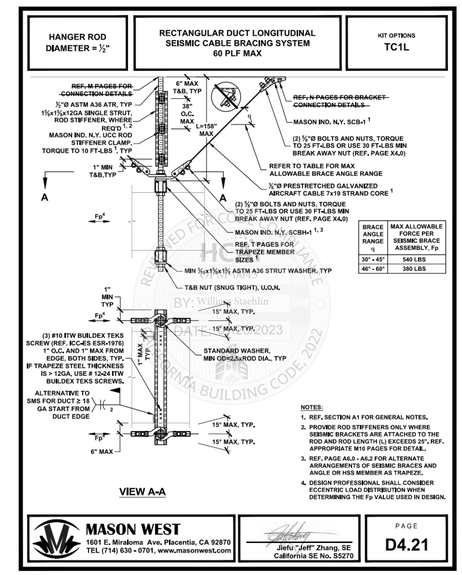
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24-094

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

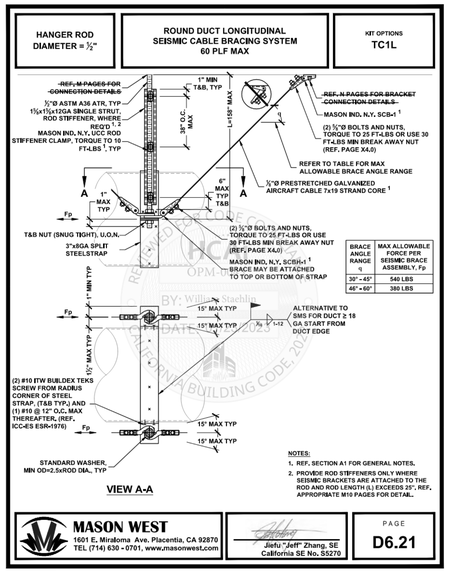






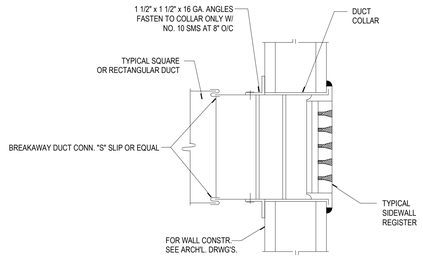
NOTES:
1. RECTANGULAR DUCT SUPPORT @ 10'-0" MAX O.C.
2. RECTANGULAR DUCT TRAVERSE CABLE BRACING @ 8'-0" MAX O.C.
3. RECTANGULAR DUCT LONGITUDINAL CABLE BRACING @ 16'-0" MAX O.C.

RECTANGULAR DUCT SUPPORT | 10

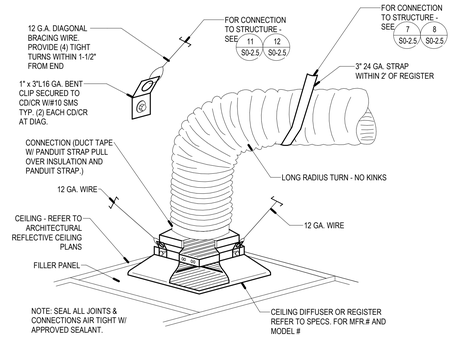


NOTES:
1. ROUND DUCT SUPPORT @ 10'-0" MAX O.C.
2. ROUND DUCT TRAVERSE CABLE BRACING @ 10'-0" MAX O.C.
3. ROUND DUCT LONGITUDINAL CABLE BRACING @ 20'-0" MAX O.C.

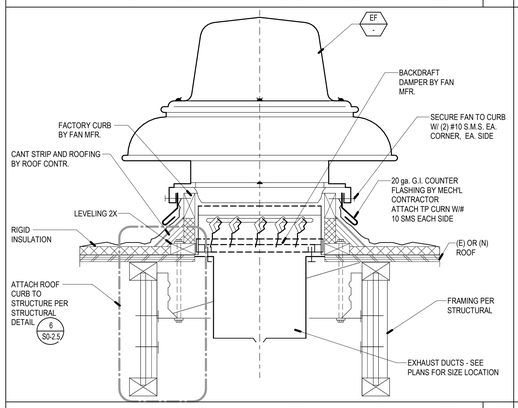
DUCT SUPPORT - ROUND WITH BRACING | 9



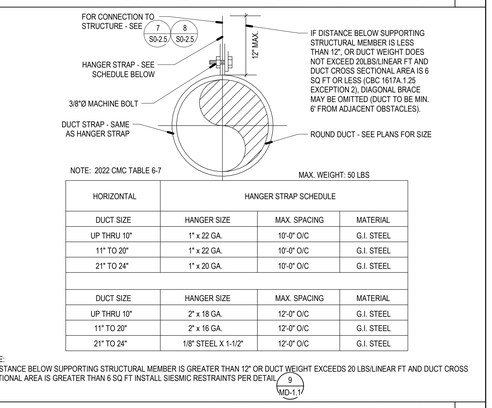
AIR DISTRIBUTION - SIDE WALL MOUNTED | 5



AIR DISTRIBUTION - CEILING MOUNTED | 1



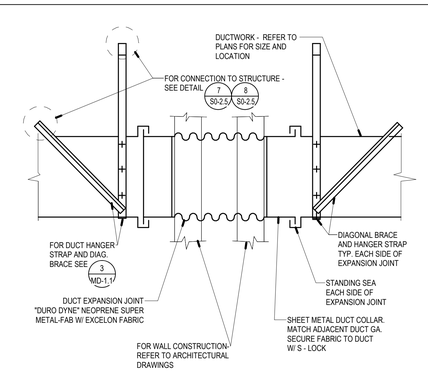
EXHAUST FAN MOUNTING | 6



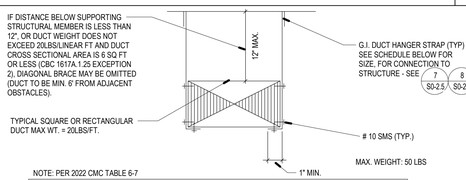
HORIZONTAL	HANGER STRAP SCHEDULE		
DUCT SIZE	HANGER SIZE	MAX. SPACING	MATERIAL
UP THRU 10"	1" x 22 GA.	10'-0" O/C	G.I. STEEL
11" TO 20"	1" x 22 GA.	10'-0" O/C	G.I. STEEL
21" TO 24"	1" x 20 GA.	10'-0" O/C	G.I. STEEL
DUCT SIZE	HANGER SIZE	MAX. SPACING	MATERIAL
UP THRU 10"	2" x 18 GA.	12'-0" O/C	G.I. STEEL
11" TO 20"	2" x 16 GA.	12'-0" O/C	G.I. STEEL
21" TO 24"	1/8" STEEL X 1-1/2"	12'-0" O/C	G.I. STEEL

NOTE:
IF DISTANCE BELOW SUPPORTING STRUCTURAL MEMBER IS GREATER THAN 12" OR DUCT WEIGHT EXCEEDS 20 LBS/LINEAR FT AND DUCT CROSS SECTIONAL AREA IS GREATER THAN 6 SQ FT INSTALL SIESMIC RESTRAINTS PER DETAIL 9 MD-1.1

DUCT SUPPORT - ROUND | 2



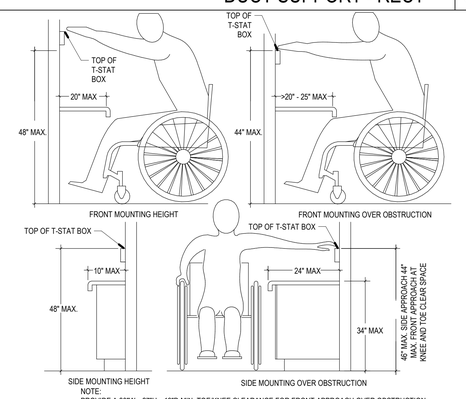
DUCT EXPANSION JOINT AT SEISMIC SEPARATION | 7



HANGER STRAP SCHEDULE			
10'-0" SPACING			
DUCT SIZE	HANGER SIZE	MAX. SPACING	MATERIAL
UP THRU 18"	1" x 18 GA.	10'-0" O/C	G.I. STEEL
19" TO 30"	1" x 18 GA.	10'-0" O/C	G.I. STEEL
12'-0" SPACING			
DUCT SIZE	HANGER SIZE	MAX. SPACING	MATERIAL
UP THRU 24"	1" x 1/8" STRAP	12'-0" O/C	G.I. STEEL
25" TO 36"	1" x 1" x 1/8" ANGLE	12'-0" O/C	G.I. STEEL

NOTE:
IF DISTANCE BELOW SUPPORTING STRUCTURAL MEMBER IS GREATER THAN 12" OR DUCT WEIGHT EXCEEDS 20 LBS/LINEAR FT AND DUCT CROSS SECTIONAL AREA IS GREATER THAN 6 SQ FT INSTALL SIESMIC RESTRAINTS PER DETAIL 10 MD-1.1

DUCT SUPPORT - RECT | 3



THERMOSTAT MOUNTING | 4

STAMPS
REGISTERED PROFESSIONAL ENGINEER — No. 53209 — SIGNED:02/13/2025 — MECHANICAL — STATE OF CALIFORNIA
LICENSED ARCHITECT — ROGER CLARKE — No. C-21145 — Exp. 10-31-25 — STATE OF CALIFORNIA
AGENCY APPROVAL
File No.: ########/##-########
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025
412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com
DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS
CONSULTANT BRANDING
RUHNAU CLARKE ARCHITECTS

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RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

MECHANICAL DETAILS
MD-1.1
24-094

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

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PHONE:(951)278-1830 FAX:(951)278-8444 www.canfab.com canfab@canfab.com

FOR: GROUP B ISO

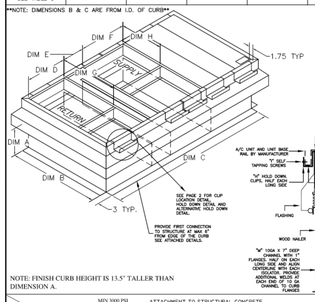
TRANE PRECEDENT 4 - 10 TONS

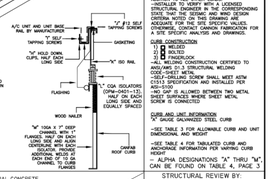
THC 048, 060 ; YHC 048F, 060F, 072F, 090F, 102F, 120F ; YHJ 048, 060 ; YSC 048F, 060F, 072F, 090F, 102F, 120F ; YCC 048E, 060E, 072E, 090E, 102E, 120E ; YCJ 048E, 060E, 072E, 090E, 102E, 120E ; YHC 048F, 060F, MHC 048-060N, SYH 152N, WSC 060-072N, CWSC 060N, GEPM 072-090

PART NO: 6042-IC

DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	DIM G	DIM H
VARIES MAX .36" SEE TABLE 3	46.375"	80.5"	18.5"	8.625"	18.5"	34.375"	34.375"

NOTE: DIMENSIONS B & C ARE FROM I.D. OF CURB





NOTE: FINISH CURB HEIGHT IS 13.5" TALLER THAN DIMENSION A.

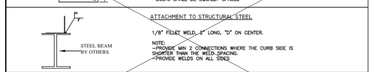
ALPHA DESIGNATIONS "A" THRU "M", CAN BE FOUND ON TABLE 4, PAGE 3



ATTACHMENT TO STRUCTURAL CONCRETE

"B" 5/8" HILTI KWIK BOLT TZ SS 304, HALF EACH LONG SIDE.
"C" 5/8" HILTI KWIK BOLT TZ SS 304, HALF EACH SHORT SIDE.

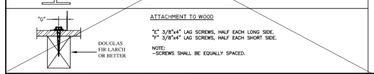
NOTE:
- MIN 5" AWAY FROM THE NEAREST CONCRETE EDGE (INSTALL PER ICC-ES ESR-1917).
- STRUCTURALLY ACCEPTABLE TO SUBSTITUTE HILTI KBTZ STAINLESS STEEL BOLTS WITH HILTI KBTZ CARBON STEEL BOLTS ONLY IF ALL THE BOLTS ARE COMPLETELY WATERPROOFED AND DISINFECTED AGAINST THE WEATHER.
- BOLTS SHALL BE EQUALLY SPACED



ATTACHMENT TO STRUCTURAL STEEL

1/8" FILLET WELD, 8" LONG, "D" ON CENTER.

NOTE:
- PROVIDE MIN 2 CONNECTIONS WHERE THE CURB SIDE IS SHORTER THAN THE WELD SPACING.
- PROVIDE WELDS ON ALL SIDES.



ATTACHMENT TO WOOD

"J" 3/8"x4" LAG SCREWS, HALF EACH LONG SIDE.
"I" 3/8"x4" LAG SCREWS, HALF EACH SHORT SIDE.

NOTE:
- SCREWS SHALL BE EQUALLY SPACED.

STRUCTURAL REVIEW BY:
MARTIN & associates
JOHN A. MARTIN AND ASSOCIATES
Structural Engineers
Los Angeles | Irvine | Las Vegas
Phone (213) 483-1040
Fax (213) 483-1041
Job No. 11001

REGISTERED PROFESSIONAL ENGINEER GREGORY LOUIS OROZCO No. 4957 STRUCTURAL STATE OF CALIFORNIA
12/7/2018

PROJECT: IBC 2018/ CBC 2019 UPDATE DATE: 11.30.18
ENGINEER: LD DISTRIBUTOR:
DRAWING NUMBER: GROUP_B_ISO.DWG PAGE 1 OF 3

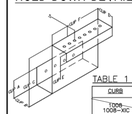
NOTE: FOR CURB ATTACHMENT TO ROOF, SEE DETAIL 10/S0-2.5

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CANNON FABRICATION INC
182 GRANITE STREET, SUITE 101, CORONA, CA 92879
PHONE:(951)278-1830 FAX:(951)278-8444 www.canfab.com canfab@canfab.com

FOR: GROUP B ISO

PART NO: SEE BELOW

HOLD DOWN DETAIL



NOTE:
SEE TABLE 1 FOR DESIGNATED HOLD DOWN CLIP PER CURB

TABLE 1 HOLD DOWN CLIP PER CURB

CURB	CLIP	BASE	CLIP A [IN]	CLIP B [IN]	CLIP C [IN]	CLIP D [IN]	CLIP E [IN]	CLIP F [IN]
1008, 1008-XIC	1909-SHDB-12	12 GA	1.5	2.625	4.5625	1.875	1.0	9.0
3012	3901-SHDB-12	12 GA	1.5	4.81	3.875	2.125	1.0	9.0
4028S	4901-SHDB-12	12 GA	2.0	3.0625	4.625	1.875	1.0	9.0
6042	6907-SHDB-12	12 GA	2.0	2.0	3.25	1.875	1.0	9.0
6042S	6907-SHDB-12	12 GA	2.0	2.0	3.25	1.875	1.0	9.0

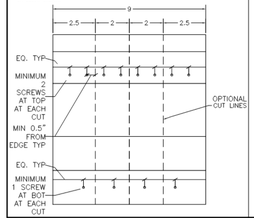
STRUCTURAL REVIEW BY:
MARTIN & associates
JOHN A. MARTIN AND ASSOCIATES
Structural Engineers
Los Angeles | Irvine | Las Vegas
Phone (213) 483-1040
Fax (213) 483-1041
Job No. 11001

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12/7/2018

ALTERNATIVE HOLD DOWN DETAIL

NOTE:
APPLICABLE ONLY FOR 9" LONG HOLD DOWN WITH (8) SCREWS AT TOP AND (4) SCREWS AT BOT EQUALLY SPACED

1. INFORMATION SHOWN ON THE STAMPED CANFAB CURB DRAWING IS THE MINIMUM REQUIREMENTS FOR THE CURB CONSTRUCTION AND INSTALLATION. NO STRUCTURAL OBJECTION TO THE USE OF ALTERNATIVE HOLD DOWN CLIP, ALTERNATIVE GAUGE SHEET METAL THAN THE INFORMATION SHOWN ON THE STAMPED CANFAB CURB DRAWING.
2. NO STRUCTURAL OBJECTION TO SHIFTING THE ATTACHMENT CLIPS ALONG THE CURB, FIRST AND LAST CLIP SHALL BE LOCATED AT 2" FROM THE END OF THE CURB. SEE ATTACHED STAMPED CANFAB CURB DRAWING. DISTANCE SHIFTED SHALL NOT BE LARGER THAN THE LENGTH OF THE CLIP.
3. NO STRUCTURAL OBJECTION TO CUTTING THE ATTACHMENT CLIPS PER REQUIREMENTS AS SHOWN ON BELOW SKETCH.



CLIP LOCATION DETAIL

NOTE:
SEE TABLE 2 FOR CLIP LOCATION

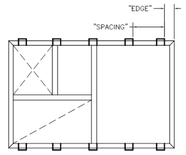


TABLE 2 CLIP LOCATION

CURB	EDGE [IN]	SPACING [IN]
1008, 1008-XIC	7.75	18.56
3012	7.75	13.09
4028S	7.75	25.70
6042	7.75	17.125
6042S	7.75	17.125

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FOR: GROUP B ISO

PART NO: SEE BELOW

TABLE 3 ALLOWABLE CURB AND UNIT DIMENSION AND WEIGHT

RELATED CURBS	CURB [IN]	INCHCURB [IN]	HCURB [IN]	WCURB (LBS)	LUNIT [IN]	WUNIT [IN]	HUNIT [IN]	WUNIT (LBS)	CG LONG [IN]	CG SHORT [IN]	CG HEIGHT [IN]
1008 1008-XIC	SEE PAGE 1	SEE PAGE 1	MIN 8	MIN 405.408	88.125	59.5	47	MIN 3038 1008 MAX 4144 1008-XIC	53.875	9.125	23.75
			11	436, 451							
			14	474, 477							
			18	519, 522							
			24	662, 665							
			MAX 36	MAX 828.831							
3012	SEE PAGE 1	SEE PAGE 1	MIN 8	MIN 406	89	59	50.75	MAX 1589	49.75	35.5	HUNIT/2
			11	438							
			14	469							
			18	510							
			24	647							
			MAX 36	MAX 801							
4028S	SEE PAGE 1	SEE PAGE 1	MIN 8	MIN 327	98.25	47	46.875	MAX 1316	47	22	HUNIT/2
			11	359							
			14	391							
			18	433							
			24	574							
			MAX 36	MAX 733							
6042	SEE PAGE 1	SEE PAGE 1	MIN 8	MIN 442	88.625	53.25	46.875	MAX 1565	49	24	HUNIT/2
			11	474							
			14	505							
			18	547							
			24	687							
			MAX 36	MAX 845							
6042S	SEE PAGE 1	SEE PAGE 1	MIN 8	MIN 473	99.688	63.188	50.875	MAX 1916	54	27	HUNIT/2
			11	507							
			14	540							
			18	584							
			24	733							
			MAX 36	MAX 899							

STRUCTURAL REVIEW BY:
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JOHN A. MARTIN AND ASSOCIATES
Structural Engineers
Los Angeles | Irvine | Las Vegas
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12/7/2018

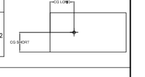


TABLE 4 TABULATED CURB AND ANCHORAGE INFORMATION PER VARYING HEIGHT

		0 < H ≤ 18"	18" < H ≤ 22"	22" < H ≤ 30"	30" < H ≤ 36"
A	CURB THICKNESS	14 GA	14 GA	12 GA	12 GA
B	EXP. ANCHOR	8	8	10	10
C	EXP. ANCHOR	6	6	8	8
D	WELD	18"	18"	18"	18"
E	SCREWS	36	38	38	40
F	SCREWS	24	24	24	24
G	DISTANCE	MAX. 0.75"	MAX. 0.75"	MAX. 0.75"	MAX. 0.76"
H	NO. OF CLIPS	10	10	10	10
I	CLIP SMS	(4) #14	(4) #14	(4) #14	(4) #14
J	CLIP SMS	(8) #14	(8) #14	(8) #14	(8) #14
K	ISO RAIL	10 GA 7.5" DEEP X 1" FLANGES			
L	NO. OF ISOLATORS	8 FOR 3012 AND 4028S, 10 FOR 1008, 6042 AND 6042S & 11 FOR 1008 XIC			
M	NO. OF STIFFENERS	8 FOR 3012 AND 4028S, 10 FOR 1008, 6042 AND 6042S & 11 FOR 1008 XIC			

PROJECT: IBC 2018/ CBC 2019 UPDATE DATE: 11.30.18
ENGINEER: LD DISTRIBUTOR:
DRAWING NUMBER: GROUP_B_ISO.DWG PAGE 3 OF 3

STAMPS

REGISTERED PROFESSIONAL ENGINEER STEVEN M. JOHNSON No. 33209 MECHANICAL STATE OF CALIFORNIA
SIGNED 02/13/2025

LICENSED ARCHITECT No. C-41350 Exp.10-31-25 STATE OF CALIFORNIA

AGENCY APPROVAL
File No.: ########/##-########

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

CONSULTANT BRANDING

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caad@designwesteng.com

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			AC UNIT MTG 1

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DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

MECHANICAL DETAILS CONT.

MD-1.2

24-094

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PLUMBING FIXTURE SCHEDULE

TAG	SPECIFICATION	CONNECTION SIZE: WASTE	TRAP	VENT	CW	HW	ELEC.
WC 1	WATERCLOSET: (ADA) AMERICAN STANDARD "MADERA" 3043.001, 16-1/2" HIGH RIM, (1.28 GPF), FLOOR MOUNTED, ELONGATED BOWL, SIPHON JET, 1-1/2" TOP SPUD, WHITE VITREOUS CHINA, SLOAN WES 111-1.6/1.1, (1.6/1.1 GPF), MANUAL REDUCE AND DUAL FLUSH, POLISHED CHROME FINISH, INCLUDES ANGLE STOP WITH BACK-FLOW PROTECTION, BEMIS PLASTIC SEAT MODEL 2L215ST, ELONGATED, OPEN FRONT, STAIN & CHEMICAL RESISTANT.	3"	INT.	2"	1"	-	-
L 1	LAVATORY: AMERICAN STANDARD "LUCERNE" 0355.012, WALL MOUNTED, WHITE VITREOUS CHINA, 4" CENTERS, FRONT OVERFLOW, SELF-DRAINING DECK, CONCEALED ARM SUPPORT. CHICAGO FAUCET MODEL 3600-E280S4AB, DECK MOUNTED METERING FAUCET, 4" CENTERS, ECONO-FLO NON-AERATING LAMINAR SPRAY 0.5 GPM (10 SEC MIN RUN TIME). PROVIDE ASSE 1070 APPROVED TMV SET TO 110°. ON ADA COMPLIANT PROVIDE TRUEBRO LAV GUARD PER ADA CODE 4.19.4. 1/4 TURN 1/2" LOOSE KEY ANGLE STOPS W/ 1/2" O.D. BRASS FLEXIBLE SUPPLIES AND BRASS WALL ESCUTCHEONS.	2"	INT.	1-1/2"	1/2"	1/2"	-
L 2	LAVATORY: AMERICAN STANDARD "DECLYN" 0321.026, WALL MOUNTED, WHITE VITREOUS CHINA, 4" CENTERS, FRONT OVERFLOW, SELF-DRAINING DECK, WALL HANGER. CHICAGO FAUCET MODEL 3600-E280S4AB, DECK MOUNTED METERING FAUCET, 4" CENTERS, ECONO-FLO NON-AERATING LAMINAR SPRAY 0.5 GPM (10 SEC MIN RUN TIME). PROVIDE ASSE 1070 APPROVED TMV SET TO 110°. ON ADA COMPLIANT PROVIDE TRUEBRO LAV GUARD PER ADA CODE 4.19.4. 1/4 TURN 1/2" LOOSE KEY ANGLE STOPS W/ 1/2" O.D. BRASS FLEXIBLE SUPPLIES AND BRASS WALL ESCUTCHEONS.	2"	INT.	1-1/2"	1/2"	1/2"	-
S 1	EXAM & NURSE SINK: ELKAY LUSTERTONE MODEL LRAD191950PD, STAINLESS STEEL, DROP-IN MOUNT, 5" DEPTH, SINGLE COMPARTMENT, SINGLE HOLE, PERFECT DRAIN AT REAR CENTER. CHICAGO FAUCET MODEL 50-E280S-5ABCP WITH 0.5 GPM AERATOR, SINGLE HOLE, 5-1/4" RIGID SWING NECK. PROVIDE ASSE 1070 APPROVED TMV SET TO 120. ON ADA COMPLIANT PROVIDE TRUEBRO LAV GUARD PER ADA CODE 4.24.6. 1/4 TURN 1/2" LOOSE KEY ANGLE STOPS W/ 1/2" O.D. BRASS FLEXIBLE SUPPLIES AND BRASS WALL ESCUTCHEONS.	2"	1-1/2"	1-1/2"	1/2"	1/2"	-
WHA 1	WATER HAMMER ARRESTOR: MIFAB MWH-A INSTALLED ON ALL QUICK CLOSING VALVES AND ALL VALVES WHICH CLOSE WITH THE FLOW OF FLUID, OR ON HEADERS SERVING MORE THAN ONE FIXTURE, PROVIDED WITH 12" X 12" ACCESS PANEL.	-	-	-	1-1/4"	-	-
HB 1	HOSE BIBB: (RECESSED WALL) ZURN NARROW WALL HYDRANT MODEL Z-1350 STAINLESS STEEL BOX W/ LOCKING DOOR, BRONZE BODY & INTERIOR PARTS WITH VACUUM BREAKER AND KEY OPERATED CONTROL VALVE.	-	-	-	3/4"	-	-
RD 1	ROOF DRAIN: JAY R SMITH MODEL 1310 COATED CAST IRON ROOF DRAIN WITH COMBINED FLASHING CLAMP AND GRAVEL STOP WITH POLYETHYLENE DOME, BOTTOM OUTLET. SEE PLANS FOR SIZE.	VARIES	-	-	-	-	-
OD 1	OVERFLOW DRAIN: JAY R SMITH MODEL 1310-WD COATED CAST IRON ROOF DRAIN WITH COMBINED FLASHING CLAMP AND GRAVEL STOPS WITH POLYETHYLENE DOME, 2" SOLID WATER DAM, BOTTOM OUTLET. SEE PLANS FOR SIZE.	VARIES	-	-	-	-	-
DF 1	DRINKING FOUNTAIN: ELKAY VRCTLDDMWSK VANDAL-RESISTANT WALL MOUNTED, HI-LO DUAL BUBBLER DRINKING WATER FOUNTAIN W/ BOTTLE FILLING STATION, STAINLESS STEEL BASIN W/ INTEGRAL DRAIN STRAINER, VANDAL-RESISTANT BUBBLER, FRONT PUSH BUTTON. ACCESSIBLE & LEAD FREE.	2"	1-1/4"	1-1/2"	1/2"	-	-

PIPE MATERIAL SCHEDULE

SERVICE	PIPE MATERIAL & WEIGHT	TYPE OF JOINTS	PRESSURE FITTINGS MATERIAL	SHUT-OFF RATINGS PSI-SwP	VALVE
COLD WATER ABV GROUND	COPPER L TUBE	SOLDERED	CAST BRONZE/ WROUGHT COPPER	125	BALL GATE CHECK
HOT WATER ABV GROUND	COPPER L TUBE	SOLDERED	CAST BRONZE/ WROUGHT COPPER	125	BALL CHECK
VENT	NO-HUB CAST IRON	NO-HUB	N/A	N/A	N/A
WASTE, SOIL & ROOF DRAINS BELOW GRADE	SCHEDULE 40 ABS	SOLVENT-WELD	ABS	N/A	N/A
WASTE, SOIL & ROOF DRAINS ABOVE GRADE	NO-HUB CAST IRON	NO-HUB	N/A	N/A	N/A
CONDENSATE	COPPER L TUBE	SOLDERED	BRONZE	125	N/A
FUEL GAS	STEEL 40, BLACK STEEL 40, BLACK	SCREWED WELDED	MALL. IRON STEEL WELD	150 150	SQR HEAD COCK

NOTE: ALL EXPOSED FUEL GAS PIPING SHALL BE PRIME AND PAINTED, COORDINATE COLOR WITH ARCHITECT.

PIPE INSULATION SCHEDULE

FLUID TEMPERATURE RANGE (°F)	CONDUCTIVITY RANGE (IN BTU-IN/HR PER SQFT/°F)	INSULATION MEAN RATING TEMPERATURE (°F)		PIPE SIZE (IN. DIA>)				
				< 1	1 to < 1.5	1.5 to < 4	4 to < 8	8 AND LARGER
				REQUIRED INSULATION THICKNESS (IN.)				
SPACE HEATING, HOT WATER SYSTEMS (STEAM, STEAM CONDENSATE AND HOT WATER) AND SERVICE WATER HEATING SYSTEMS								
105° - 140°	0.22 - 0.28	100°	INCHES	1.0	1.5	1.5	1.5	1.5
			R-VALUE	R-7.7	R-12.5	R-11	R-9	R-8

NOTE: WHERE INSULATED PIPING IS EXPOSED OUTDOORS, IT SHALL BE COVERED. COVER OUTDOOR EXPOSED INSULATED PIPING WITH 0.016 INCH THICK CORRUGATED ALUMINUM JACKET. PROVIDE VALVE STEM EXTENSIONS SUCH THAT INSULATION IS NOT DAMAGED WHEN VALVE IS CYCLED

CAL GREEN GENERAL NOTES

1. NEW NON-RESIDENTIAL WATER CLOSETS SHALL COMPLY WITH 2022 CAL-GREEN 5.303.3.1 AND 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.
2. NEW NON-RESIDENTIAL LAVATORY FAUCETS SHALL COMPLY WITH 2022 CAL-GREEN 5.303.3.4.1 AND SHALL NOT EXCEED 0.5 GALLONS PER MINUTE AT 60 PSI.
3. NEW NON-RESIDENTIAL KITCHEN FAUCETS SHALL COMPLY WITH 2022 CAL-GREEN 5.303.3.4.2 AND SHALL NOT EXCEED 1.8 GALLONS PER MIN AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE THE 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.

PLUMBING SIZING FORM

PIPE SIZE IS BASED ON CHART A 105.1(1) @ 3.0 P.S.I. / 100 FT.

FIXTURE UNITS ARE BASED ON TABLE A 103.1(2) FROM APPENDIX A

PIPE SIZE SCHEDULE

SIZE	FIXTURE UNITS F. TANK	F. VALVE	GPM	VELOCITY
1/2"	1	0	1.8	2.5
3/4"	5	0	4.8	3.0
1-1/4"	13	0	10	4.0
1-1/2"	24	0	17	4.5
1"	47	10	27	5.0
2"	158	64	56	6.0
2-1/2"	380	250	100	7.5
3"	850	800	160	8.0
4"	1750	1750	230	8.0

FIXTURE UNITS NUMBER	FIXTURE	UNIT	TOTAL
-	EXISTING	-	95
-	DEMO	-	-1.5
1	WC	5	5
1	L	1	1
4	S	1.0	4
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
TOTAL FIXTURE UNITS			103.5
TOTAL G.P.M.			70

VELOCITY FOR COLD WATER PIPING LESS THAN 8 FT. PER SECOND

VELOCITY FOR HOTWATER PIPING LESS THAN 5 FT. PER SECOND

MAXIMUM SIZE FOR HOT WATER PIPING SHALL BE 1-1/2"

GENERAL NOTES

1. THE TOTAL INSTALLATION SHALL COMPLY WITH ANY REQUIREMENTS OF THE LEGALLY CONSTITUTED AUTHORITIES HAVING JURISDICTION INCLUDING 2022 CBC (CALIFORNIA BUILDING CODE), 2022 CAL GREEN REQUIREMENTS AND 2022 CMC/CPC (CALIFORNIA MECHANICAL AND PLUMBING CODE).
2. VISIT THE SITE PRIOR TO BID AND SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS UNDER WHICH THEY WILL BE REQUIRED TO WORK. INDICATED DIMENSIONS ARE APPROXIMATE AND ARE GIVEN FOR ESTIMATE PURPOSES ONLY.
3. BEFORE PROCEEDING WITH THE WORK, CAREFULLY CHECK AND VERIFY DIMENSIONS, SIZES, REQUIRED CLEARANCES AND SHALL ASSUME FULL RESPONSIBILITY FOR THE FITTING OF EQUIPMENT AND MATERIALS HEREIN REQUIRED TO OTHER PARTS OF THE WORK OF OTHER TRADES.
4. THE DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC TO THE EXTENT THAT OFFSETS, BENDS, SPECIAL FITTINGS AND LOCATIONS ARE NOT EXACTLY LOCATED. IN THE PREPARATION OF THESE DOCUMENTS, CERTAIN ASSUMPTIONS ARE MADE REGARDING EXISTING CONDITIONS. SOME OF THESE ASSUMPTIONS MAY NOT BE VERIFIABLE WITHOUT EXPENDING ADDITIONAL SUMS OF MONEY OR DESTROYING OTHERWISE ADEQUATE OR SERVICEABLE PORTIONS OF EXISTING BUILDINGS AND/OR EQUIPMENT. THEREFORE, THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR ANY CHANGES OR ADDITIONAL COSTS INCURRED DUE TO EXISTING CONDITIONS.
5. COMPLY WITH CONTRACT DOCUMENTS IN LAYING OUT WORK AND EQUIPMENT. COORDINATE THE WORK OF THIS SECTION WITH THE WORK OF OTHER TRADES AND JOB CONDITIONS.
6. THE INSTALLATION OF ACCESS PANELS OR OTHER INDICATING EQUIPMENT OR SPECIALTIES REQUIRING READING, ADJUSTMENT, INSPECTION, REPAIRS, REMOVAL OR REPLACEMENT SHALL BE CONVENIENTLY LOCATED WITH REFERENCE TO THE FINISHED BUILDING.
7. EQUIPMENT AND FIXTURES INSTALLED UNDER THIS CONTRACT SHALL BE HUNG OR ANCHORED IN ACCORDANCE WITH 2022 CPC/CBC.
8. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS.
9. WHERE MATERIAL IS SHOWN ON THE DRAWINGS BUT NOT SPECIFIED, IT SHALL BE OF THE SAME TYPE AND QUALITY AS EXISTING MATERIAL.
10. TEST SYSTEM(S) IN ACCORDANCE WITH REQUIREMENTS OF THE GOVERNING AUTHORITIES.
11. CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE AND LOCATED AS PER CODE REQUIREMENTS. COORDINATE CLEANOUT LOCATIONS WITH EQUIPMENT CABINETS, ETC. AND THE ARCHITECT PRIOR TO ANY INSTALLATION.
12. PAVED AREAS WHICH ARE EXCAVATED AND/OR DAMAGED BY OPERATIONS SHALL BE PATCHED AND REPAIRED. IN ADDITION, RESTORE TO ORIGINAL PLANTED AREAS DAMAGED BY OPERATIONS.
13. CONNECTIONS TO EXISTING SERVICES SHALL BE MADE SUCH THAT INTERRUPTION TIME WILL BE AS SHORT AS POSSIBLE AND ONLY AT THE CONVENIENCE OF THE OWNERS REPRESENTATIVE SUFFICIENT NOTICE OF SUCH INTERRUPTIONS AND THE ACTUAL SHUT-DOWN TIME SHALL BE AT A TIME DESIGNATED BY THE OWNERS REPRESENTATIVE.
14. WHEN REQUIRED BY THE AUTHORITY HAVING JURISDICTION, POTABLE WATER SYSTEMS SHALL BE DISINFECTED AND FLUSHED PRIOR TO USE BY WATER-CHLORINATION SOLUTION AND HAVE BACTERIOLOGICAL EXAMINATION MADE BY AN APPROVED AGENCY PER 2022 CPC SEC. 609.10 AND AS PRESCRIBED IN AWWA C651. METHODS OF CLEANING/ DISINFECTING FOR NEW OR REPAIR PIPING AS DESCRIBED IN C651 OR NFPA 24.
15. PLUMBING PIPE, FITTINGS AND FIXTURES USED TO CONVEY OR DISPENSE WATER FOR HUMAN CONSUMPTION SHALL COMPLY WITH AB 1953.
16. ANY SUBSTITUTION MADE AFFECTING THE STRUCTURAL, ACCESS OR FIRE & SAFETY PORTIONS OF THE PROJECT SHALL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL AS REQUIRED BY 2022 CBC PART 1 SECTION 4-338. A CCD WILL BE REQUIRED.
17. SHUT-OFF VALVES SHALL BE PROVIDED IN MAIN BRANCHES, RUNS TO RISERS AND WHERE INDICATED ON DRAWINGS.
18. UNLESS SPECIFICALLY SHOWN ON THESE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR AUTHORIZATION IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD AND DSA

ANCHORAGE AND BRACING NOTES

MEP COMPONENT ANCHORAGE NOTE

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. 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 THE ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 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., HACI 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 DISTRIBUTING SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☐ MD☐ PP ☒E☐ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP☐ MD☐ PP☐E☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE HCAI PRE-APPROVAL (OPM #) #___OPM-0043___

PLUMBING LEGEND SYMBOLS

SYMBOL	ABBREVIATIONS	DESCRIPTION
DETAIL No. / SHEET No.		DETAIL REFERENCE
		SECTION REFERENCE
STACK RISER ID. No.		PLUMBING STACK OR RISER REFERENCE
EQUIPMENT ID. No.		EQUIPMENT REFERENCE
		EXISTING PIPE OR EQUIPMENT TO BE REMOVED
	CW	COLD WATER
	HW	HOT WATER
	HWR	HOT WATER RETURN
	-	POP-OFF DRAIN LINE OR HIDDEN WATER LINE
	S or W	SOIL or WASTE BELOW GRADE (or FLOOR)
CWV	CWV	COMBINATION WASTE AND VENT
RD/OD	RD/OD	ROOF & OVERFLOW DRAIN ABOVE & BELOW GRADE (or FLOOR)
SD	SD	STORM DRAIN
	S or W	SOIL or WASTE ABOVE GRADE (or FLOOR)
	V	PLUMBING VENT
COND	COND	CONDENSATE DRAIN
SEC COND	SEC COND	SECONDARY CONDENSATE DRAIN
G	G	GAS LOW PRESSURE
MPG	MPG	GAS MEDIUM PRESSURE
	BV	BALL VALVE
	SOV	SHUT OFF VALVE
	SOV or GC	SHUT OFF VALVE OR GAS COCK ON RISER
	CV	SWING CHECK VALVE
	PRV	PRESSURE REDUCING VALVE
	PTR	PRESSURE-TEMPERATURE RELIEF VALVE
	RPBFP	REDUCED PRESSURE BACKFLOW PREVENTER
	DN	PIPE DOWN
	UP	PIPE UP
	DN	TEE DOWN
	UP	TEE UP
G		PIPE RISER & PIPE DROP (UP AND DOWN)
	FCO	FLOOR CLEANOUT
	WCO	WALL CLEANOUT
	CO	CLEANOUT PLUG
	COTG	YARD CLEANOUT or CLEANOUT TO GRADE
		CAP ON END OF PIPE
	HB	HOSE BIBB WITH VACUUM BREAKER
	WHA & TP	WATER HAMMER ARRESTOR & TRAP PRIMER
	CS	CIRCUIT SETTER
	GR	GAS REGULATOR
	GC	GAS COCK (or GAS STOP)
	GS	GAS SOLENOID
		EXISTING PIPING TO BE DEMOLISHED
	P.O.C.	POINT OF CONNECTION
	P.O.D.	POINT OF DEMOLITION
	AP	ACCESS PANEL
	ABV	ABOVE
	BEL	BELOW
	AGA	AMERICAN GAS ASSOCIATION
	CONN	CONNECTION
	CONT	CONTINUATION
	(E)	EXISTING
	(N)	NEW
	DN	DOWN
	ADA	AMERICAN DISABILITY ACT
	IE	INVERT ELEVATION
	(TYP)	TYPICAL
	U.O.N.	UNLESS OTHER NOTED
	VTR	VENT THROUGH ROOF
	W/	WITH
	FU	PLUMBING FIXTURE UNIT
	B.F.F.	BELOW FINISH FLOOR
	R.I.C.	ROUGH IN CONNECT
CCO	CCO	CONDENSATE CLEAN OUT

APPLICABLE CODES

1. 2022 BUILDING STANDARDS ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
2. 2022 CALIFORNIA BUILDING CODE (CBC),PART 2, TITLE 24 C.C.R.
3. 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
4. 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
5. 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
6. 2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
7. 2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R.
8. 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 23 C.C.R.
9. 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
10. 2022 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
11. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS
FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

PLUMBING SHEET INDEX

SHEET NUMBER	SHEET NAME
P0-1.0	PLUMBING LEGENDS NOTES & SCHEDULES
P1-1.0	PLUMBING DEMOLITION FOUNDATION PLAN
P1-1.1	PLUMBING DEMOLITION FLOOR PLAN
P1-1.2	PLUMBING DEMOLITION ROOF PLAN
P1-2.0	PLUMBING REMODEL FOUNDATION PLAN
P1-2.1	PLUMBING REMODEL FLOOR PLAN - WASTE, VENT & COND
P1-2.2	PLUMBING REMODEL FLOOR PLAN - CW, HW & GAS
P1-2.3	PLUMBING ROOF PLAN
PD-1.1	PLUMBING DETAILS
PD-1.2	PLUMBING DETAILS CONT.

STAMPS

AGENCY APPROVAL
File No.: ########/##-#######

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SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com

DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

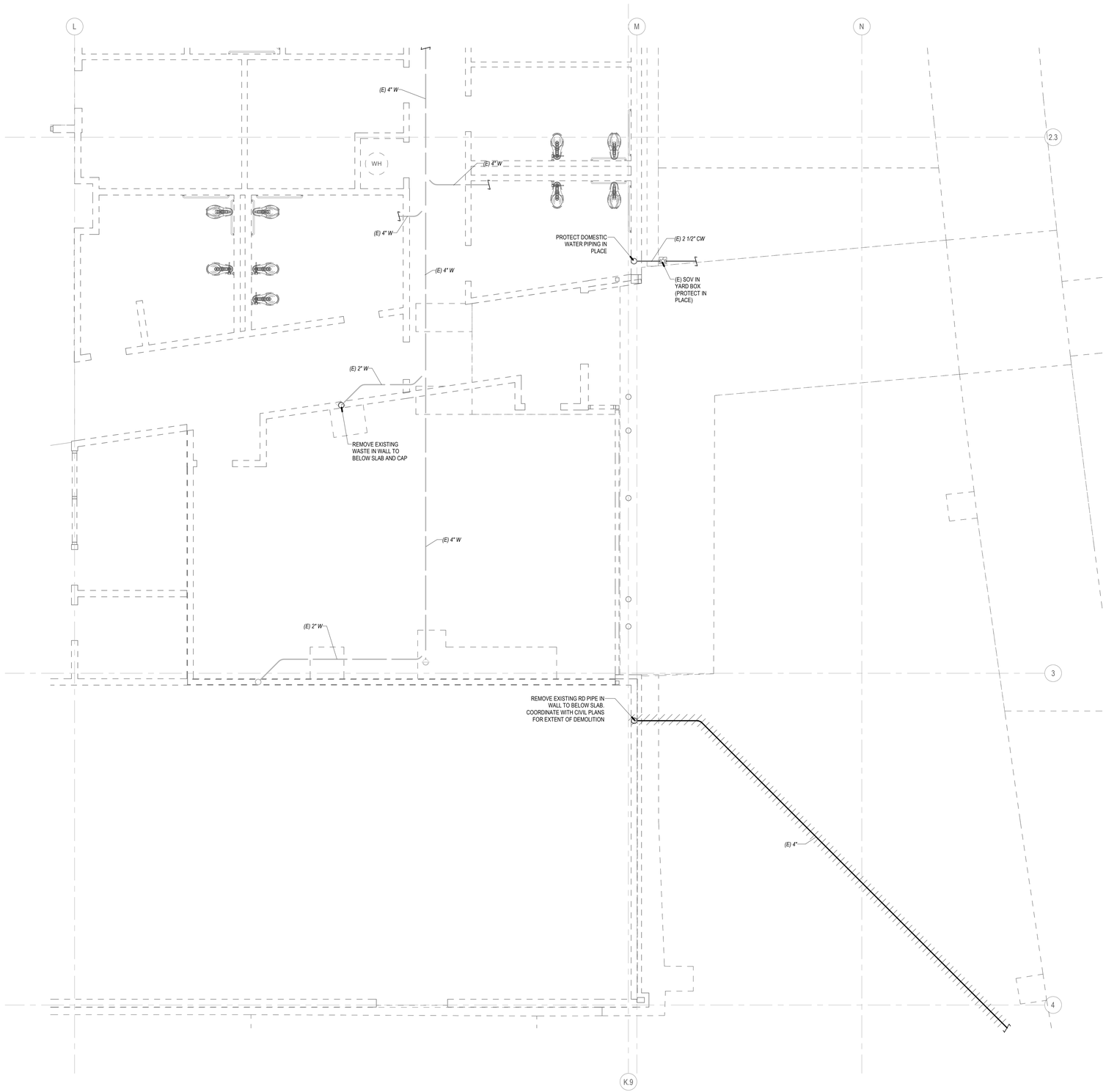
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NORTH

PLUMBING DEMOLITION FOUNDATION PLAN | SCALE: 1/4" = 1'-0" | 1

STAMPS

REGISTERED PROFESSIONAL ENGINEER — STEVEN JOHNSON — No. 33209 — SIGNED:02/13/2025 — MECHANICAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — JENNIFER CLARKE — No. C-27345 — Exp.10-31-25 — STATE OF CALIFORNIA

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CONSULTANT BRANDING

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com
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RUHNAU CLARKE ARCHITECTS

GENERAL NOTES

1. FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0.
2. CONTRACTOR SHALL PATCH FLOORS, WALLS & CEILINGS TO MATCH NEW CONSTRUCTION PER ARCHITECTS SPECIFICATIONS.
3. PRIOR TO CONSTRUCTION CONTRACTOR SHALL FIELD VERIFY FOR EXACT SIZE, LOCATION & INVERT ELEVATION OF EXISTING WASTE LINE & COORDINATE WITH PLUMBING ENGINEER FOR ANY CHANGES NEEDED.

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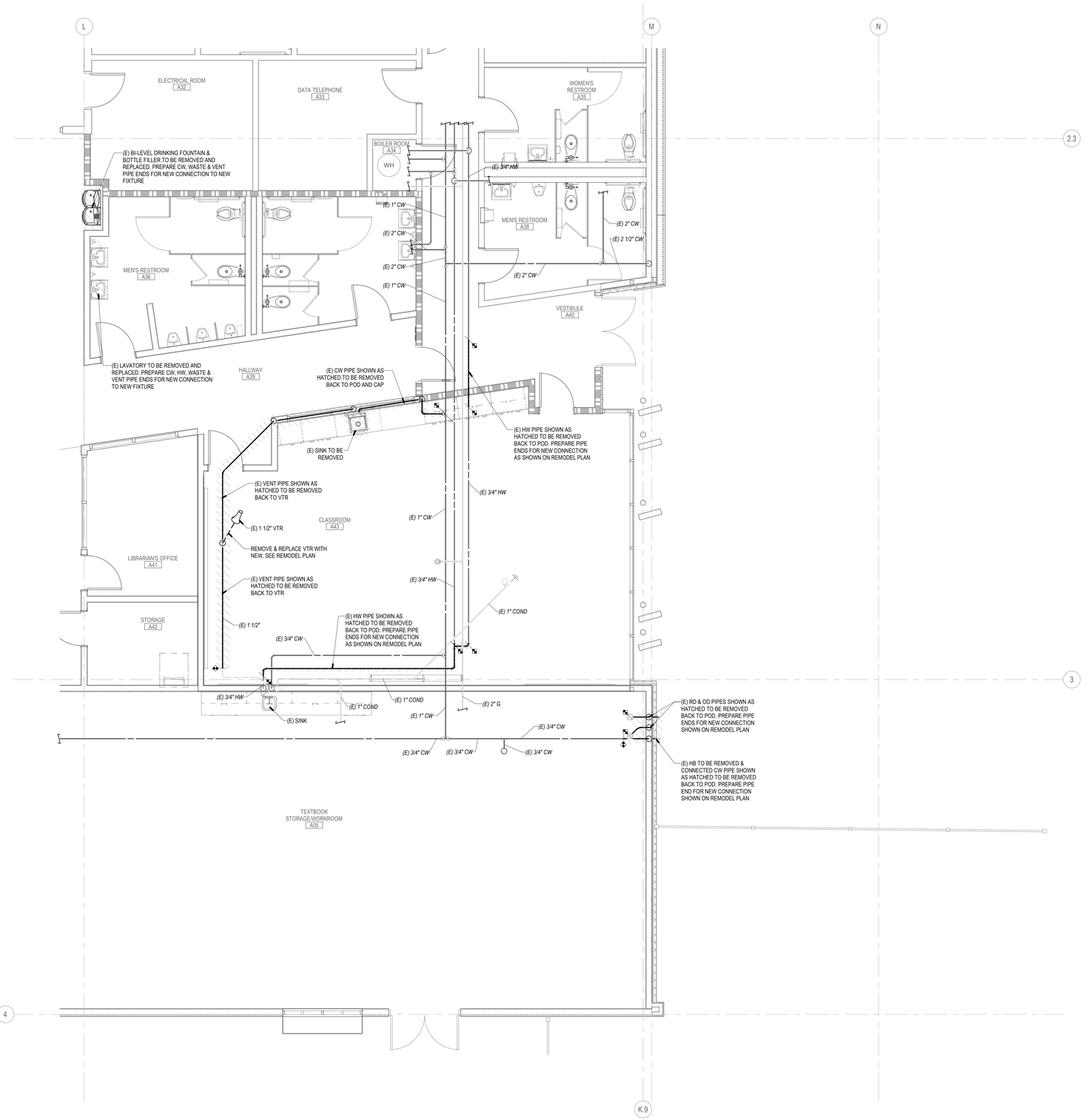
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INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

PLUMBING DEMOLITION FOUNDATION PLAN

P1-1.0

24-094



PLUMBING DEMOLITION FLOOR PLAN | SCALE: 1/4" = 1'-0" | 1

NORTH

RATED ASSEMBLY LEGEND

1-HR FIRE RATED WALL ASSEMBLY

GENERAL NOTES

1. FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0.
2. PRIOR TO CONSTRUCTION CONTRACTOR SHALL FIELD VERIFY FOR EXACT SIZE, LOCATION & INVERT ELEVATIONS OF EXISTING COLD WATER, HOT WATER & GAS PIPES. COORDINATE WITH PLUMBING ENGINEER FOR ANY CHANGES NEEDED.

STAMPS

REGISTERED PROFESSIONAL ENGINEER — STEPHEN M. JACKSON — No. 53209 — SIGNED 02/13/2025 — MECHANICAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — ROGER CLARKE — No. C-11536 — Exp 10-31-25 — STATE OF CALIFORNIA

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San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
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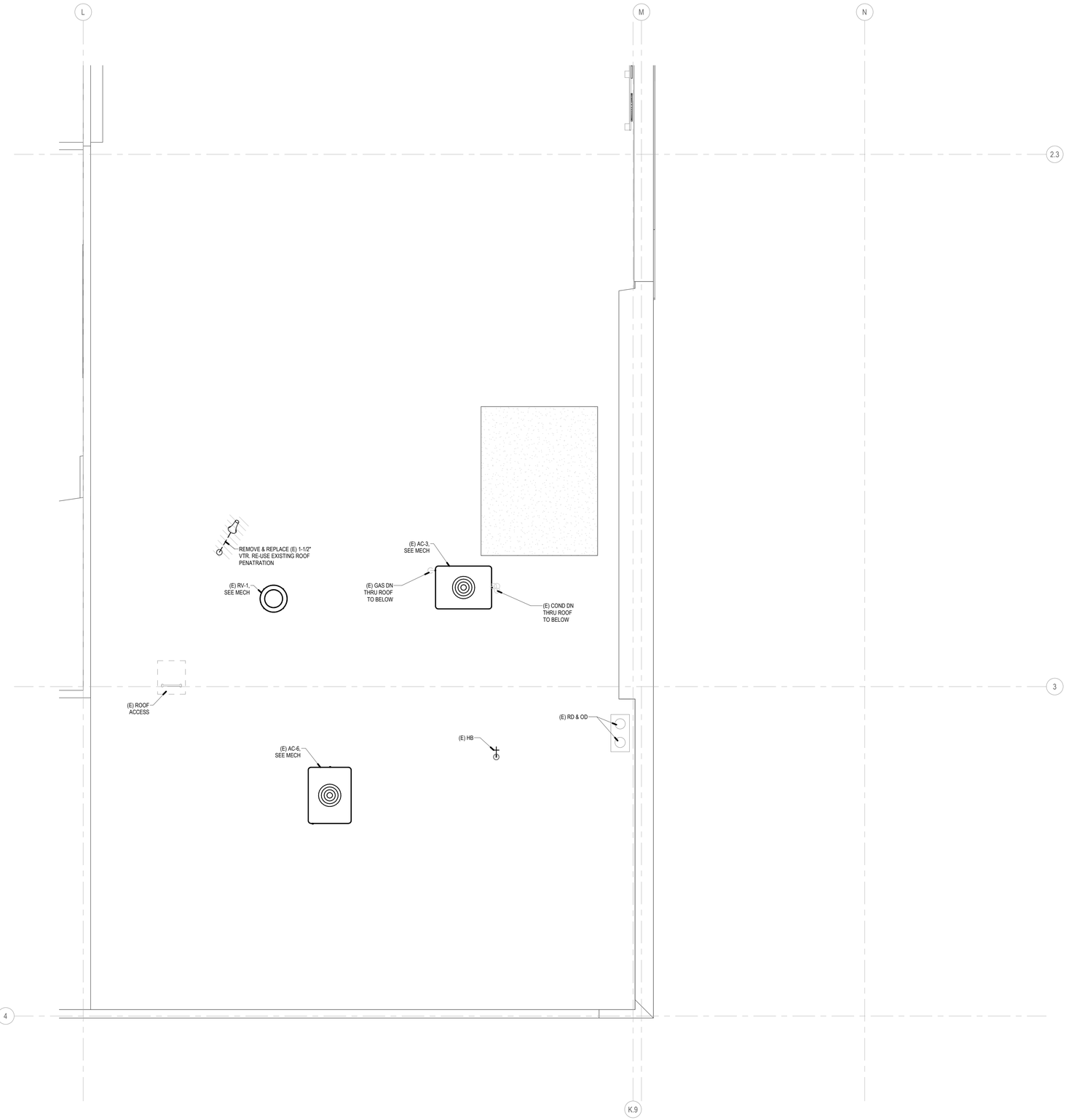
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INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

PLUMBING DEMOLITION FLOOR PLAN

P1-1.1

24-094



STATE OF CALIFORNIA — REGISTERED PROFESSIONAL ENGINEER — No. 33209 — MECHANICAL — SIGNED 02/13/2025

LICENSED ARCHITECT — ROGER CLARKE — No. C-18345 — Exp. 10-31-25 — STATE OF CALIFORNIA

STAMPS

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San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com

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RUHNAU CLARKE ARCHITECTS

GENERAL NOTES

1. FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0.

NORTH

PLUMBING ROOF DEMOLITION PLAN | SCALE: 1/4" = 1'-0" | 1

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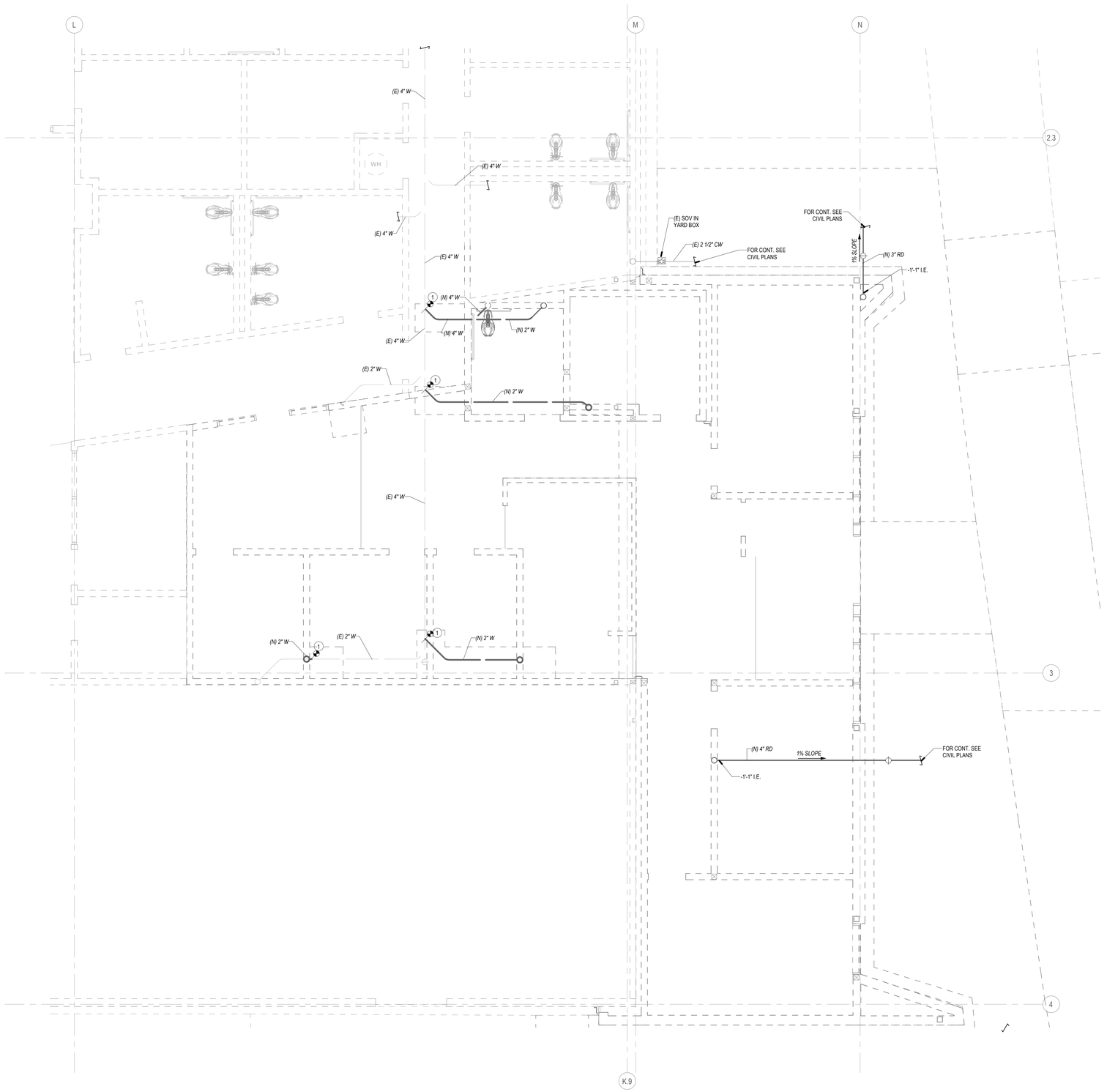
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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

PLUMBING DEMOLITION ROOF PLAN

P1-1.2

24-094



GENERAL NOTES

1. FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0.
2. PRIOR TO CONSTRUCTION CONTRACTOR SHALL FIELD VERIFY FOR EXACT SIZE, LOCATION & INVERT ELEVATION OF EXISTING WASTE LINE & COORDINATE WITH PLUMBING ENGINEER FOR ANY CHANGES NEEDED.
3. FOR ROOF DRAIN TERMINATION, SEE DETAIL 4/PD-1.1
4. FOR CLEAN OUT, SEE DETAIL 5/PD-1.1

CONSTRUCTION NOTES

1 CONNECT NEW PIPE TO EXISTING PIPE AT P.O.C. FIELD VERIFY FOR EXACT LOCATION OF CONNECTION.

PLUMBING REMODEL FOUNDATION PLAN | SCALE: 1/4" = 1'-0" | 1

NORTH

STAMPS

REGISTERED PROFESSIONAL ENGINEER — Steven M Johnson — No. 33209 — SIGNED:02/13/2025 — MECHANICAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — ROGER CLARKE — No. C-27335 — Exp.10-31-25 — STATE OF CALIFORNIA

AGENCY APPROVAL
File No.: ########/##-########

IDENTIFICATION STAMP
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APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

CONSULTANT BRANDING

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com
DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

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2/13/2025 11:32:09 AM

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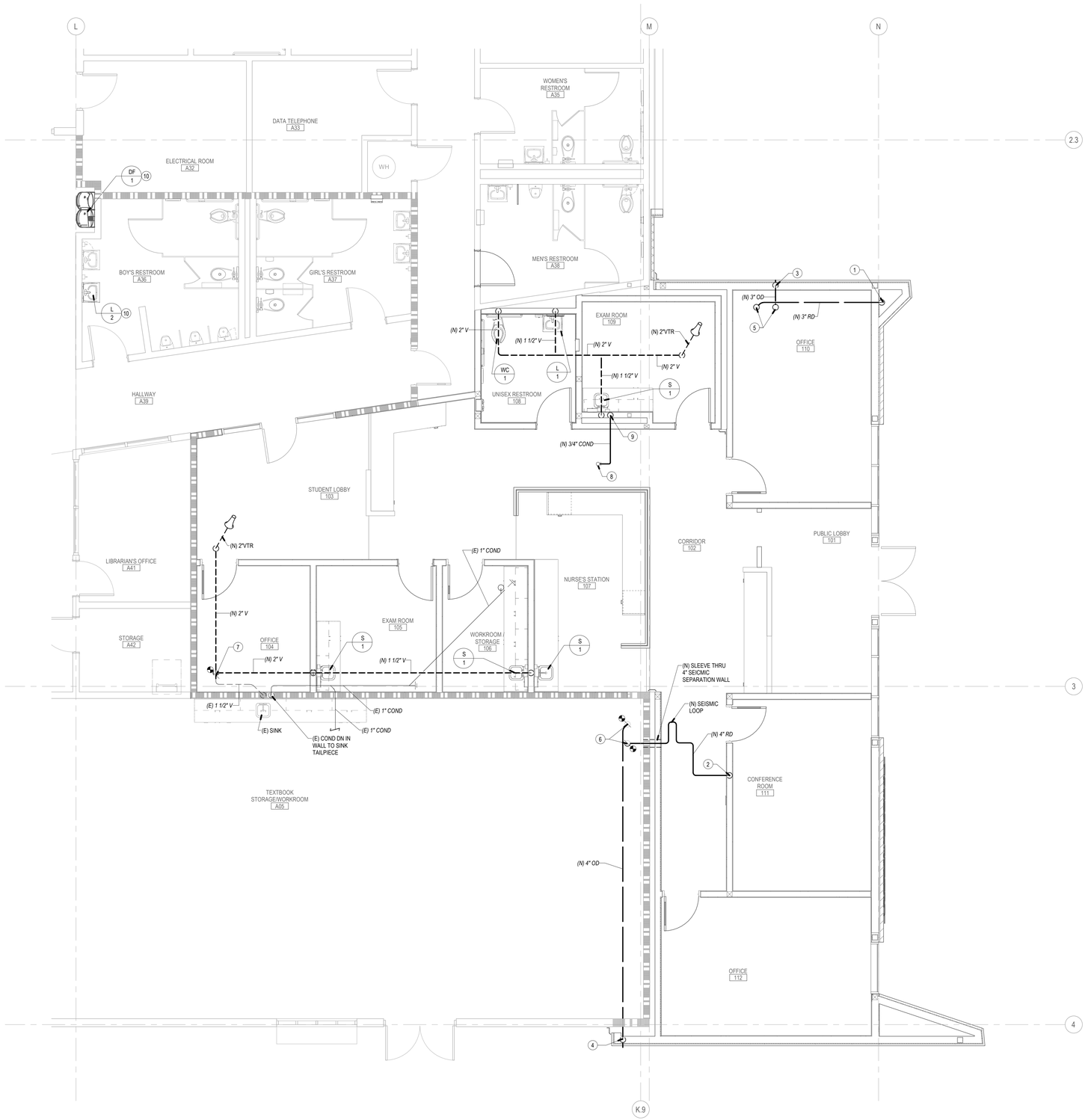
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SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

PLUMBING REMODEL FOUNDATION PLAN

P1-2.0

24-094



GENERAL NOTES

1. FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0.
2. CONTRACTOR SHALL PATCH FLOORS, WALLS & CEILINGS TO MATCH NEW CONSTRUCTION PER ARCHITECTS SPECIFICATIONS.
3. ROOF DRAIN & PIPES ARE BASED ON TABLE 1103.2 @ 3" OF RAIN FALL PER HOUR W/ 1/8" PIPE SLOPE.
4. FOR PIPE SUPPORT, SEE DETAIL 1/PD-1.1/
5. FOR CONDENSATE TERMINATION, SEE DETAIL 8/PD-1.1/
6. FOR PIPE THRU 4" SEICMIC SEPARATION, SEE DETAIL 9/PD-1.1/
7. FOR ROOF & OVERLOW DRAIN TERMINATION, SEE DETAIL 4/PD-1.1/
8. FOR CLEANOUT MOUNTING, SEE DETAIL 5/PD-1.1/
9. FOR VENT THRU ROOF, SEE DETAIL 6/PD-1.1/
10. FOR PIPE THRU RATED WALL, SEE DETAIL 1/PD-1.1/

CONSTRUCTION NOTES

1. NEW 3" RD DN IN WALL CAVITY TO BELOW GRADE, , SEE SHEET P1-2.0 FOR CONT.
2. NEW 4" RD DN IN WALL TO BELOW FLOOR, SEE SHEET P1-2.0 FOR CONT.
3. NEW 3" OD DN IN WALL AND DAYLIGHT @ + 6" A.F.G. EXTEND 1" BEYOND FACE OF WALL & TERMINATE WITH DOWNSPOUT COVER
4. NEW 4" OD DN IN WALL AND DAYLIGHT @ + 6" A.F.G. EXTEND 1" BEYOND FACE OF WALL & TERMINATE WITH DOWNSPOUT COVER
5. NEW 3" RD & OD DN FROM ROOF TO ABOVE CEILING
6. CONNECT NEW 4" RD & OD TO EXISTING AT P.O.C. FIELD VERIFY FOR EXACT LOCATION OF CONNECTION.
7. CONNECT NEW 1-1/2" V TO EXISTING AT P.O.C. FIELD VERIFY FOR EXACT LOCATION OF CONNECTION.
8. 3/4" COND DN FROM AC UNIT ON ROOF
9. 3/4" COND DN IN WALL TO SINK TAILPIECE
10. CONNECT NEW FIXTURE TO EXISTING PIPING. REWORK EXISTING PIPING (AS NEEDED) FOR CONNECTION TO NEW FIXTURE.

RATED ASSEMBLY LEGEND

1-HR FIRE RATED WALL ASSEMBLY

PLUMBING REMODEL FLOOR PLAN - WASTE, VENT & COND | SCALE: 1/4" = 1'-0" | 1

NORTH

STAMPS

REGISTERED PROFESSIONAL ENGINEER — STEVEN M. [illegible] — No. 33209 — SIGNED:02/13/2025 — MECHANICAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — ROGER CLARKE — Exp.10-31-25 — STATE OF CALIFORNIA

AGENCY APPROVAL
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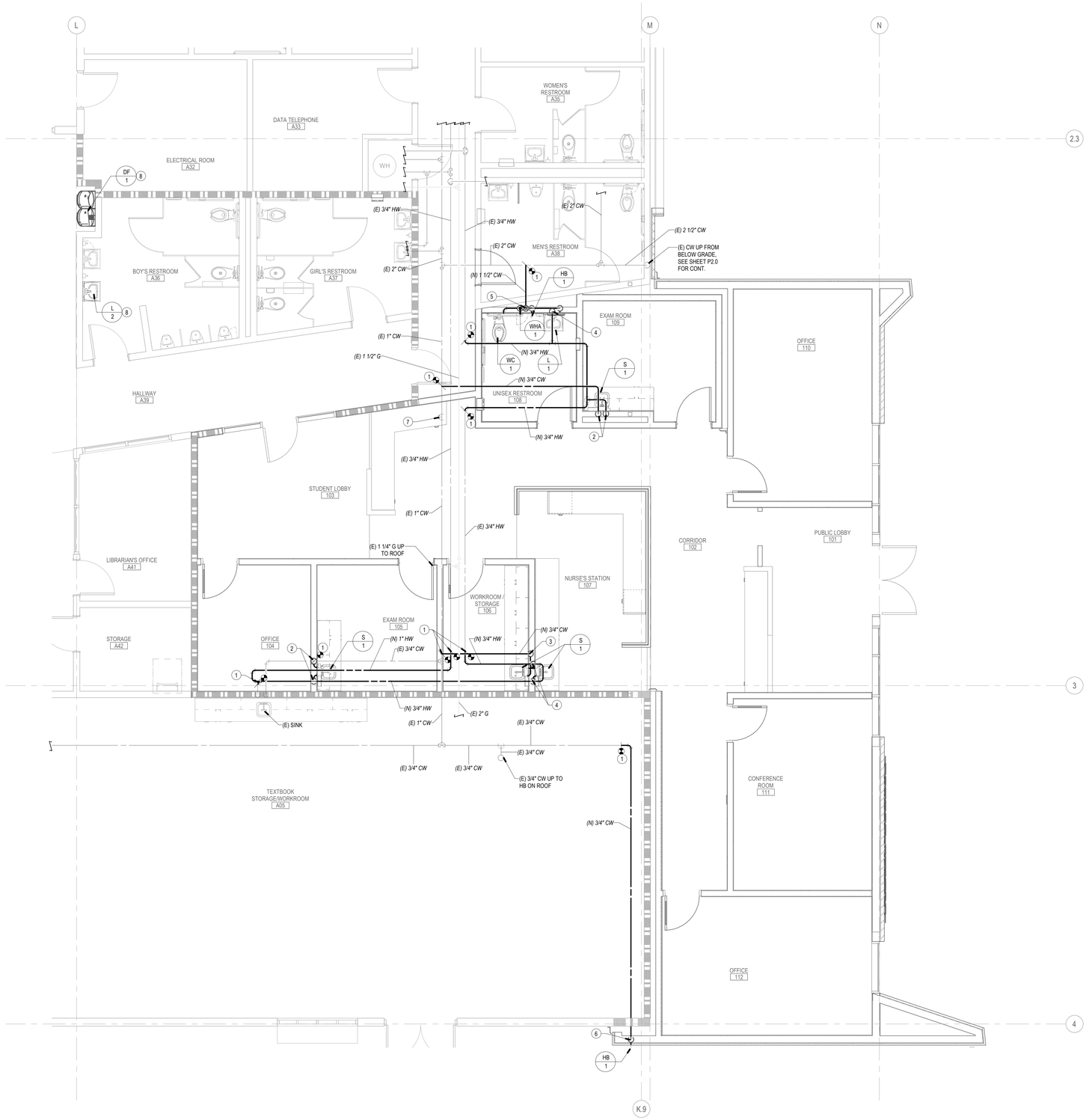
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PLUMBING REMODEL FLOOR PLAN - WASTE, VENT & COND

P1-2.1

24-094



PLUMBING REMODEL FLOOR PLAN - CW, HW & GAS | SCALE: 1/4" = 1'-0" | 1

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RUHNAU CLARKE ARCHITECTS

GENERAL NOTES

1. FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0.
2. ROUTE HOT WATER LOOP AS CLOSE AS POSSIBLE TO ALL FIXTURES.
3. NEW OR REPAIRED POTABLE WATER SYSTEMS SHALL BE DISINFECTED PRIOR TO USE, ACCORDING TO THE METHOD SET IN SECTION 609.9 OF THE CPC.
4. CONTRACTOR SHALL PATCH FLOORS, WALLS & CEILINGS TO MATCH NEW CONSTRUCTION PER ARCHITECTS SPECIFICATIONS.
5. SHUT-OFF VALVES SHALL BE PROVIDED ON ALL MAIN BRANCHES, RUNS TOO RISERS AND WHERE SHOWN ON DRAWING. LOCATE SHUT-OFF VALVES OVER T-BAR CEILING WHEN POSSIBLE. PROVIDE ACCESS PANELS WHEN SHUT-OFF VALVES ARE LOCATED OVER HARD LID CEILINGS.
6. FOR PIPE SUPPORT, SEE DETAIL 1/PD-1.1/
7. FOR HOSE BIB, SEE DETAIL 2/PD-1.1/
8. FOR WATER HAMMER ARRESTOR, SEE DETAIL 7/PD-1.1/
9. FOR PIPE THRU RATED WALL, SEE DETAIL 1/PD-1.2/

CONSTRUCTION NOTES

1. CONNECT NEW PIPE TO EXISTING PIPE AT P.O.C. FIELD VERIFY FOR EXACT LOCATION OF CONNECTION.
2. NEW 3/4" CW & HW DN IN WALL TO PLUMBING FIXTURE
3. NEW 3/4" CW DN IN WALL TO FULL SIZE HEADER
4. NEW 3/4" HW DN IN WALL TO PLUMBING FIXTURE
5. NEW 1-1/2" CW DN IN WALL TO FULLSIZE HEADER WITH SOV ON RISER BEHIND A.P.
6. NEW 3/4" CW DN IN WALL TO PLUMBING FIXTURE
7. CAP EXISTING CW PIPE
8. CONNECT NEW FIXTURE TO EXISTING PIPING. REWORK EXISTING PIPING (AS NEEDED) FOR CONNECTION TO NEW FIXTURE.

RATED ASSEMBLY LEGEND

1-HR FIRE RATED WALL ASSEMBLY

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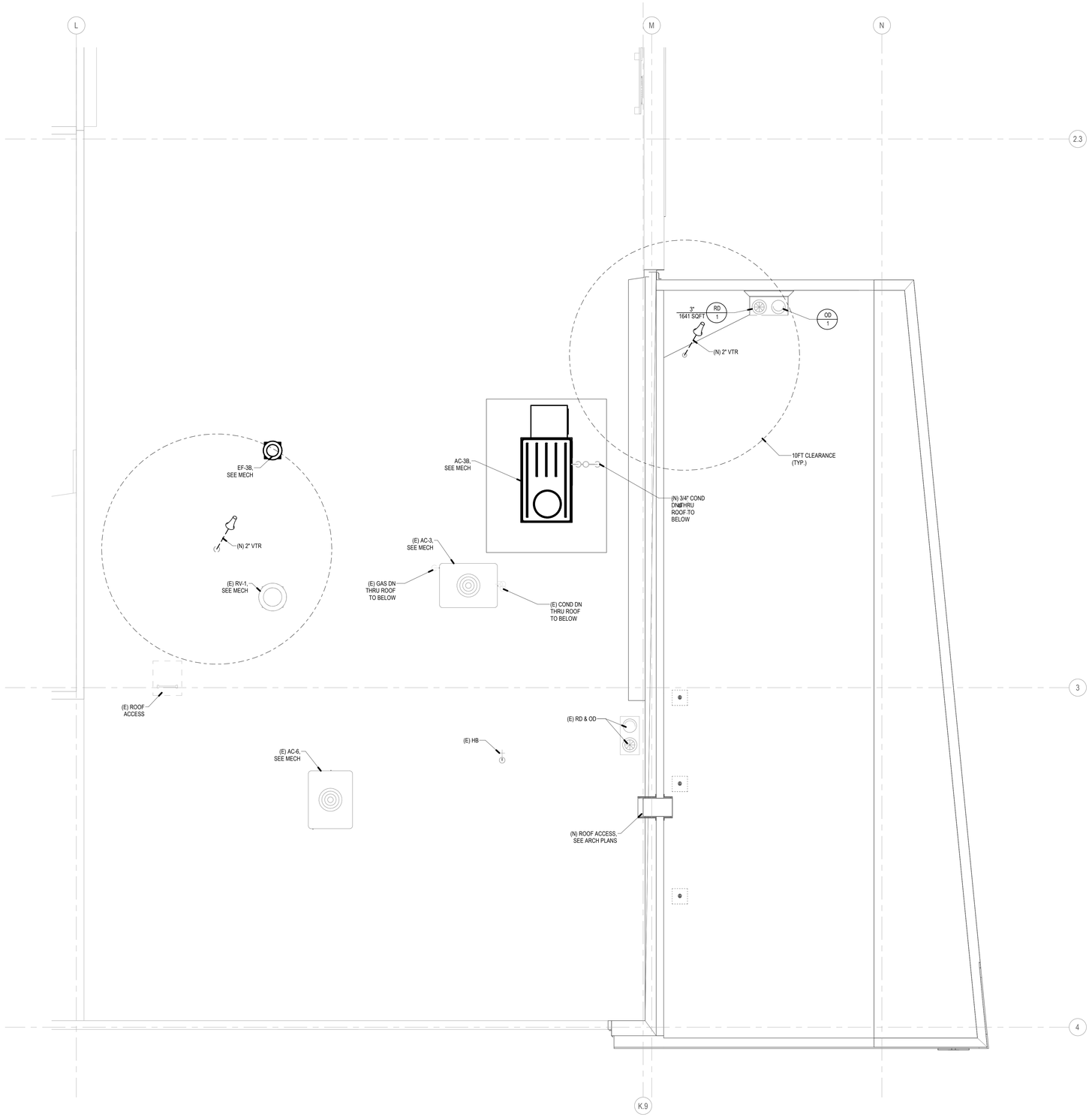
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3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

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SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

PLUMBING REMODEL FLOOR PLAN - CW, HW & GAS

P1-2.2

24-094



PLUMBING ROOF PLAN | SCALE: 1/4" = 1'-0" | 1

NORTH

GENERAL NOTES

1. FOR LINE TYPES, SYMBOLS & ABBREVIATIONS SEE LEGEND ON P0-1.0.
2. ALL VENTING SHALL HAVE A MIN. OF 10' CLEARANCE FROM ANY FORCED AIR INLET W/ A MIN. OF 3' CLEARANCE ABOVE & A MIN OF 4' CLEARANCE FROM ANY PROPERTY LINE EXCEPT A PUBLIC WAY PER CPC SEC. 906.
3. ROOF DRAIN & PIPES ARE BASED ON TABLE 1103.2 @ 3" OF RAIN FALL PER HOUR W/ 1/8" PIPE SLOPE.
4. FOR ROOF DRAIN, SEE DETAIL 3/P0-1.1
5. FOR VENT THRU ROOF, SEE DETAIL 6/P0-1.1
6. FOR CONDENSATE CONNECTION, SEE DETAIL 10/P0-1.1
7. FOR PIPE THRU ROOF, SEE DETAIL 11/P0-1.1

STAMPS

STEVEN M. JACOBSON — No. 33209 — SIGNED 02/13/2025 — REGISTERED PROFESSIONAL ENGINEER — MECHANICAL — STATE OF CALIFORNIA

REGISTERED ARCHITECT — No. C-34345 — Exp.10-31-25 — STATE OF CALIFORNIA

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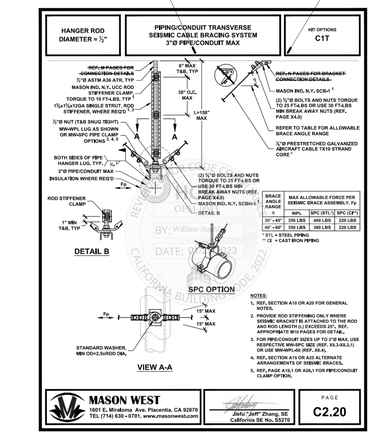
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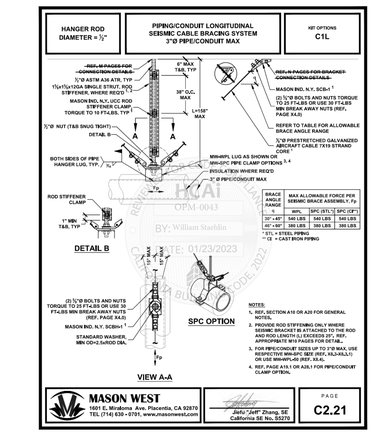
PLUMBING ROOF PLAN

P1-2.3

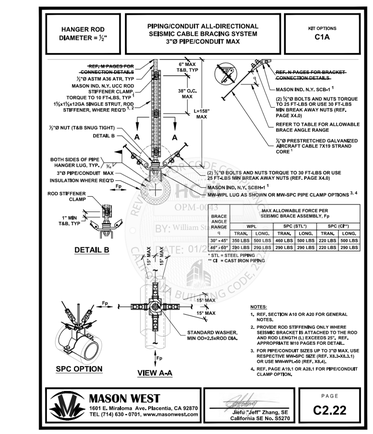
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1/23/2023 OPM-0043: Reviewed for Code Compliance by William Staehlin 269 of 792

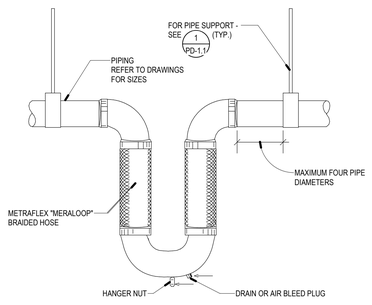


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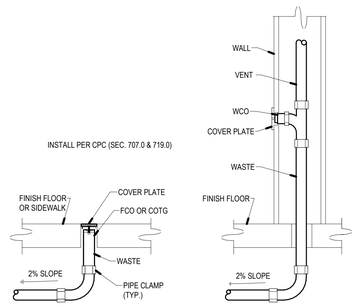


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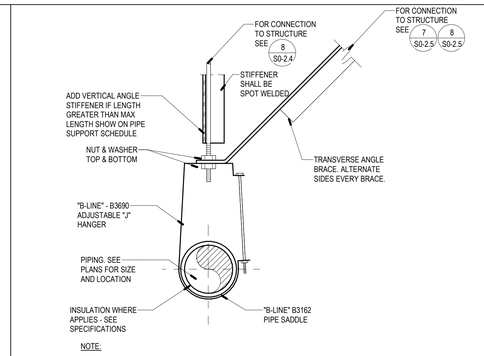
NOTES:
1. PIPE SUPPORT @ 8'-0" MAX O.C.
2. PIPE TRAVERSE CABLE BRACING @ 20'-0" MAX O.C.
3. PIPE LONGITUDINAL CABLE BRACING @ 20'-0" MAX O.C.



SEISMIC FLEX FOR PIPING 9

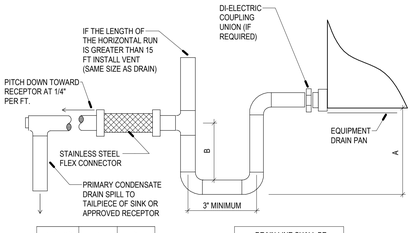


CLEAN OUT 5



NOTE:
1. DETAIL APPLIES TO PIPES WEIGHING LESS THAN 5 LB/ LINEAR FOOR OR SMALLER THAN CBC SECTION 1617.A.1.26
2. FOR PIPES WEIGHING 5 LBS/LINEAR FOOT OR GREATER PROVIDE BRACING PER 13 PD-1.1
3. HANG PIPE AT 6'-0" ON CENTER.

PIPE SUPPORT 1



UNIT TYPE	A	B
DRAW THRU	SPx1.5+2"	SPx1.0+1"
BLOW THRU	SPx1.5+2"	SPx1.5+2"

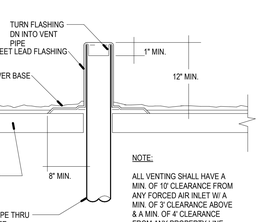
SP = EXTERNAL STATIC PRESSURE OF A/C UNIT

DIMENSION "B" SHALL NOT BE LESS THAN 3"

DRAIN LINE SHALL BE SIZED AS FOLLOWS	
0-20 TONS	3/4"
21-40 TONS	1"
41-90 TONS	1-1/4"
91-125 TONS	1-1/2"
126-250 TONS	2"

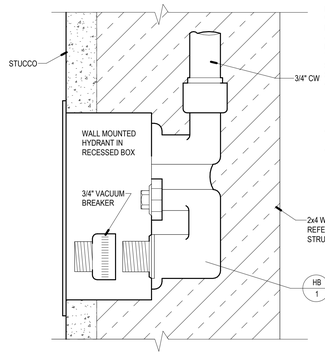
* NOT LESS THAN FULL SIZE OF UNIT CONNECTION

CONDENSATE CONNECTION 10



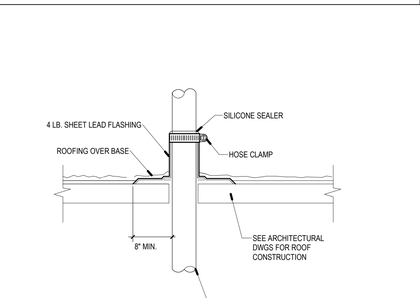
NOTE:
ALL VENTING SHALL HAVE A MIN. OF 10' CLEARANCE FROM ANY FORCED AIR INLET W/ A MIN. OF 3' CLEARANCE ABOVE & A MIN. OF 4' CLEARANCE FROM ANY PROPERTY LINE EXCEPT A PUBLIC WAY. PER CPC (SEC. 906)

VENT THRU ROOF 6

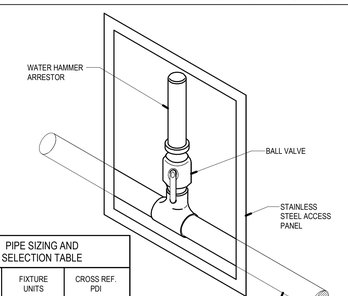


NOTE: SECONDARY SEALING OF HB-1 BOX WHEN INSTALLED INDOORS IN NECESSARY TO ELIMINATE LEAK PATHS WITHIN THE BOX ASSEMBLY ONCE THE BOX ASSEMBLY IS INSTALLED WITHIN THE WALL, ADJUSTED TO THE NECESSARY POSITION, AND THE SET SCREWS ARE TIGHTENED DOWN, FINISH SEALING THE BOX ASSEMBLY BY:
- USE A DURABLE METAL SEALANT, SUCH AS GE SILICONE II ALUMINUM AND METAL OR EQUAL, CAULK THE FOUR BACK CORNERS OF THE REAR BOX.
- ON THE SIDE WALLS, CAULK AROUND THE SET SCREW SLOTS.
- CAULK ALL SEAMS BETWEEN THE ADJUSTABLE SLEEVE, WHICH ARE AGAINST THE FACTORY GASKET MATERIAL. CAULK ALL EDGES WHERE THE FACTORY GASKET MEETS WITH THE REAR BOX.

HOSE BIBB 2



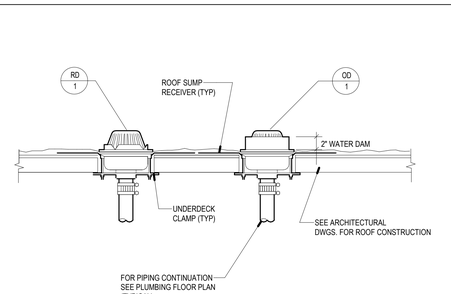
PIPE THRU ROOF 11



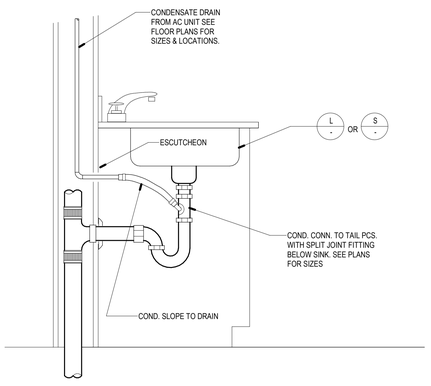
PIPE SIZING AND SELECTION TABLE		
PIPE SIZE	FIXTURE UNITS	CROSS REF. PDI
1/2"	1-11	A
3/4"	12-32	B
1"	33-60	C
1 1/4"	61-113	D
1 1/2"	114-154	E
2"	155-330	F

NOTE:
ACCESS PANEL SHALL NOT BE INSTALLED BEHIND GRAB BARS.

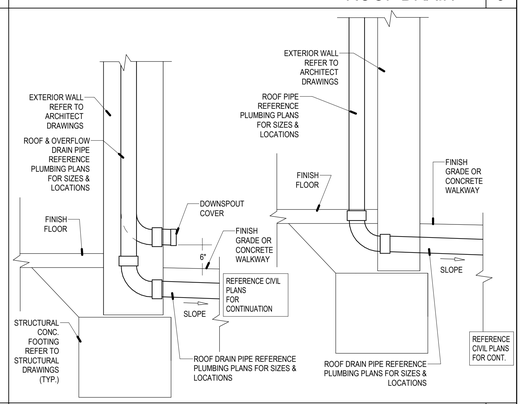
WATER HAMMER ARRESTOR 7



ROOF DRAIN 3



CONDENSATE CONNECTION 8



ROOF/OVERFLOW DRAIN TERMINATION 4

PIPE SUPPORT 13

RUHNAU CLARKE ARCHITECTS

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Fax: 909.890.3770
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SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

PLUMBING DETAILS

PD-1.1

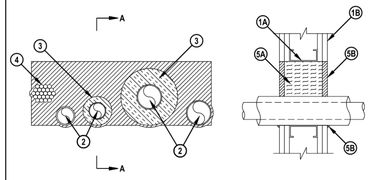
24-094

System No. W-L-8065

WL 8065

Classified by Underwriters Laboratories, Inc. to UL 1479 and CAN/ULC-S115

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 1 and 2 Hr (See Item 1)	F Rating — 1 and 2 Hr (See Item 1)
T Rating —0 Hr	FT Rating — 0 Hr
	FH Rating — 1 and 2 Hr (See Item 1)
	FTH Rating — 0 Hr



SECTION A-A

System tested with a pressure differential of 2.5 Pa between the exposed and the unexposed surfaces with the higher pressure on the exposed side.

1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 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 channel shaped steel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC. Additional framing members shall be installed in stud cavity containing through-penetrating item to form a rectangular box around the penetrants.
   B. Gypsum Board* — 5/8 in. (16 mm) thick with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Wall and Partition Design. If the through penetrants are installed in a wood stud/gypsum board assembly, the max area of opening is 116 in.2 (748 cm2), with max dimension of 14-1/2 in. (368 mm). If the through penetrants are installed in a steel stud/gypsum board assembly, max area of opening is 182 in2. (1174 cm2) with max dimension of 22-3/4 in. (578 mm) wide.
      The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

Hilti Firestop Systems

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2. Through-Penetrant — One or more pipes, conduit or tubes to be installed within the opening. The total number of through-penetrants is dependent on the size of the opening and the types and sizes of the penetrants. Any combination of the penetrants described below may be used provided that the following parameters relative to the annular spaces and the spacing between the through penetrants are maintained. The separation between the penetrants shall be min 1 in. (25 mm) to max 22 in. (560 mm). The annular space between penetrants and the periphery of opening shall be min 0 in. (0 mm, point contact) to max 22 in. (560 mm). Pipes, conduit or tubes to be rigidly supported on both sides of wall assembly. The following types and sizes of pipes, conduit or tubes may be used:
   A. Copper Tubing — Nom 3 in. (76 mm) diam (or smaller) Type L (or heavier) copper tube.
   B. Copper Pipe — Nom 3 in. (76 mm) diam (or smaller) Regular (or heavier) copper pipe.
   C. Steel Pipe — Nom 3 in. (76 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   D. Iron Pipe — Nom 3 in. (76 mm) diam (or smaller) cast or ductile iron pipe.
   E. Conduit — Nom 3 in. (76 mm) diam (or smaller) electric metallic tubing (EMT) or rigid steel conduit.
   F. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 cellular or solid core PVC pipe for use in closed (process or supply) or vented (drain, waste, or vent) piping systems.
   G. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
   H. Rigid Nonmetallic Conduit (RNC)+ — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Articles 347 and 710 of the National Electrical Code (NFPA No. 70).
   I. Cross Linked Polyethylene Tubing — Nom 1 in. (25 mm) diam (or smaller) cross-linked polyethylene tubing for use in closed (process or supply) piping systems.
   J. Aluminum Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 10 (or heavier) aluminum pipe for use in closed (process or supply) or vented (drain, waste or vent) systems.
   K. Aluminum Conduit — Nom 2 in. (51 mm) diam (or smaller) aluminum electric metallic tubing (EMT) or rigid aluminum conduit.
   L. Flexible Aluminum Conduit — Nom 2 in. (51 mm) diam (or smaller) No. 16 gauge (or heavier) flexible aluminum conduit.
      See Flexible Metal Conduit (DXUZ) category in the Electrical Construction Material Directory for names of manufacturers.
3. Pipe Insulation — One or more metallic penetrants (pipe or tubing) may be insulated with the following types of pipe coverings:
   A. Pipe Covering* — Min 1 in. (25 mm) to max 2 in. (51 mm) thick hollow cylindrical heavy density min 3.5 pcf (56 kg/m3) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.
      See Pipe and Equipment Covering - Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
   B. Tube Insulation-Plastics+ — Min 1/2 in. (13 mm) to max 3/4 in. (19 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing.
      See Plastics+ (QMFZZ) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.
   C. Pipe Covering Materials* — Min 1 in. (25 mm) to max 2 in. (51 mm) thick unfaced mineral fiber pipe insulation having a nom density of 3.5 pcf (56 kg/m3) or heavier and sized to fit the outside diam of pipe or tube. Pipe insulation secured with min 18 SWG steel wire spaced 12 in. (305 mm) OC.
      INDUSTRIAL INSULATION GROUP L L C — High Temperature Pipe Insulation 1200, High Temperature Pipe Insulation BWT and High Temperature Pipe Insulation Thermaloc

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C1. Sheathing Material — (Not shown) — Optional, used in conjunction with Item 3C. Foil-scrim-kraft or all service jacket material shall be wrapped around the outer circumference of the pipe covering material (Item 3B) with the kraft side exposed. Longitudinal joints sealed with metal fasteners.
   See Sheathing Materials (BVDV) category in the Building Materials Directory for names of manufacturers. Any sheathing material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread value of 25 or less and a Smoke Developed value of 50 or less may be used.
   The annular space between the insulated penetrants and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 5 in. (127 mm). The separation between the insulated penetrants and the other penetrants shall be a min 1 in. (25 mm) to max 22 in. (560 mm).
4. Cables — One max 3 in. (76 mm) diam bundle of cables installed within the opening and rigidly supported on both surfaces of wall. The annular space between the tightly-bundled cables and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 5 in. (127 mm). The separation between the cable bundle and the other penetrants shall be min 1 in. (25 mm) to max 22 in. (560 mm). Any combination of the following types and sizes of cables may be used:
   A. Max 100 pair No. 24 AWG telephone cable with polyvinyl chloride (PVC) insulation and jacket.
   B. Max 7/C No. 12 AWG copper conductor power and control cable with PVC or cross-linked polyethylene (XLPE) insulation and PVC jacket.
   C. Multiple fiber optical communication cable jacketed with PVC and having a max outside diam of 1/2 in. (13 mm).
   D. Max 3/C No. 8 AWG with bare aluminum ground, PVC insulated steel Metal-Clad+ Cable currently Classified under the Through Penetrating Product* (XHLY) category.
   E. Max 3/C No. 2/0 AWG (or smaller) copper conductor PVC jacketed aluminum clad or steel clad TECK 90 cable.
   F. Max 3/C (with ground) No. 12 AWG (or smaller) nonmetallic sheathed (Romex) cable with PVC insulation and jacket materials.
   G. RG/U coaxial cable with polyethylene (PE) insulation and polyvinyl chloride (PVC) jacket having a max outside diam of 1/2 in. (13 mm).
4A. Steel Sleeve — (Optional, Not Shown) Prior to the installation of the cable bundles, one of the following sleeves may be installed in conjunction with the cable bundle (Item No. 4). Sleeve to extend min 6 in. (152 mm) beyond both surfaces of wall.
   A. Max 2 in. (51 mm) steel conduit sleeve, EMT sleeve, or pipe sleeve (Sch 5 or heavier).
   B. Max 2 in. (51 mm) aluminum conduit sleeve, EMT sleeve, or pipe sleeve (Sch 10 or heavier).
   C. Max 2 in. (51 mm) flexible aluminum conduit sleeve (No. 16 Gauge or heavier).
5. Firestop System — The firestop system shall consist of the following:
   A. Packing Material — In 2 hr fire rated wall assemblies, min 4-3/4 in. (121 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. In 1 hr fire rated wall assemblies, min 3-1/2 in. (89 mm) thickness of min 4 pcf (64 kg/m3) mineral wool batt insulation firmly packed into opening as a permanent form. Packing material recessed from both surfaces of the wall to accommodate the required thickness of fill material.
   B. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within annulus, flush with both surfaces of wall. At the point contact location between through penetrants and gypsum board, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the concrete/aluminum penetrant/sleeve interface on both surfaces of wall. A min 1/4 in. (6 mm) diam bead of fill material shall be applied at the gypsum board/through penetrant interface (for all other penetrants other than aluminum) on both surfaces of wall.
      HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FS-ONE MAX Intumescent Sealant
6. Fill, Void or Cavity Materials* —(Not Shown) — For use with sleeve (Item 4A) Min. 1 in. (25 mm) thickness of fill material, sealant or putty into interstices of cable bundle within the sleeve and flush with the end of sleeve (Item 4A) on both sides of the wall.
   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.

+ Bearing the UL Listing Mark

Hilti Firestop Systems

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PIPE THRU RATED WALL | 1

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com

DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

STAMPS

AGENCY APPROVAL
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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

PLUMBING DETAILS CONT.

PD-1.2

24-094

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST CODE OF FEDERAL REGULATIONS (CFR), NATIONAL ELECTRICAL CODE EDITION AND ALL APPLICABLE LOCAL CODES AND REGULATIONS.
2. ALL WORK IS NEW UNLESS NOTED OTHERWISE.
3. ALL PANELS, SWITCHES, ETC. SHALL HAVE SUFFICIENT GUTTER SPACE AND LUGS IN COMPLIANCE TO UL REQUIREMENTS TO ACCOMMODATE CONDUCTORS SHOWN.
4. WHERE WIRE SIZES ARE INDICATED ON PLANS, FOR INDIVIDUAL CIRCUITS, THE WIRE SIZE INDICATED SHALL APPLY TO THE COMPLETE CIRCUIT, UNLESS OTHERWISE NOTED.
5. WHERE EXISTING CIRCUITS OR DEVICES ARE DEMOLISHED, MODIFIED, OR REUSED, ENSURE ALL EXISTING ELECTRICAL UTILIZATION DEVICES TO REMAIN ARE ENERGIZED UPON COMPLETION OF WORK.
6. CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF MECHANICAL, PLUMBING AND OTHER EQUIPMENT REQUIRING ELECTRICAL CONNECTION PRIOR TO ANY WORK.
7. CONTRACTOR SHALL EXTEND WIRING FROM ALL JUNCTION BOXES, SWITCHES, ETC. AND MAKE FINAL CONNECTION AS REQUIRED TO ALL BUILDING EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS.
8. LOCATION OF LOCAL WALL SWITCHES ARE SUBJECT TO MODIFICATIONS. AT OR NEAR DOORS, INSTALL SWITCHES ON SIDE OPPOSITE TO DOOR HINGE. VERIFY FINAL HINGE LOCATION IN FIELD PRIOR TO ANY WORK.
9. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OR OTHER TRADES RELATING TO WORK TO VERIFY SPACE IN WHICH WORK WILL BE INSTALLED. MAINTAIN HEADROOM AND MINIMUM CODE REQUIRED WORKING CLEARANCES AT ALL TIMES.
10. CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL WALL OUTLET BOXES FOR SWITCHES, BELL/STROBES, FIRE ALARM PULL STATIONS. RECEPTACLES ETC. WITH CABINETS, FURNITURE, EQUIPMENT ETC., TO AVOID CONFLICT.
11. WHERE ELECTRIC MOTORS OR HEATERS ARE INSTALLED IN HUNG CEILINGS, PROVIDE DISCONNECT SWITCH IN HUNG CEILING WITHIN REACH FROM ACCESS POINT.
12. FURNISH PULL STRING IN EACH RACEWAY RUN OVER 10' IN LENGTH, IN WHICH PERMANENT WIRING IS NOT INSTALLED.
13. NOT MORE THAN THREE LIGHTING OR CONVENIENCE OUTLET CIRCUITS ARE PERMITTED IN ONE CONDUIT, PROVIDE SEPARATE CONDUIT FOR EACH HOMERUN INDICATED ON THE DRAWING, UNLESS INDICATED OTHERWISE.
14. PROVIDE PULL BOXES WHEREVER NECESSARY TO FACILITATE PULLING OF CONDUCTORS. COORDINATE LOCATIONS OF BOXES WITH OTHER TRADES TO AVOID CONFLICT. PULL BOXES SHALL BE ACCESSIBLE. THE SIZE OF PULL BOX SHALL COMPLY WITH N.E.C. REQUIREMENTS.
15. OUTLET BOXES FOR FIXTURES RECESSED IN HUNG CEILING SHALL BE ACCESSIBLE THROUGH OPENING CREATED BY REMOVAL OF FIXTURES.
16. SEE MECHANICAL AND PLUMBING DRAWINGS AND SPECIFICATION FOR ADDITIONAL CONNECTION REQUIREMENTS TO CONTROL PANELS, CONTROL TRANSFORMERS, POWER FOR CONTROL SYSTEM EP AND PE SWITCHES, TIME CLOCKS, VALVES, STATS, RELAYS, DUCT SMOKE DETECTOR LOCATIONS, ETC. INDICATED ON CONTROL WIRING DIAGRAMS. ELECTRICAL CONTRACTOR SHALL VERIFY FINAL CONTROL WIRING REQUIREMENTS WITH MECHANICAL AND PLUMBING CONTRACTORS PRIOR TO ANY WORK AND PROVIDE ALL NECESSARY DEVICES AND CONNECTIONS AS REQUIRED.
17. ALL EXTERIOR ELECTRICAL DEVICES AND EQUIPMENT INCLUDING THOSE THAT ARE EXPOSED TO OUTSIDE ENVIRONMENT SHALL BE WEATHERPROOF TYPE, NEMA 3R.
18. NO CONDUIT RUNS SHALL BE ALLOWED IN CONCRETE SLABS. ALL CONDUITS WILL BE PLACED ABOVE ACCESSIBLE CEILING SPACES UNLESS SPECIFICALLY INDICATED TO BE UNDERGROUND.
19. LIGHTING, POWER, TELEPHONE AND COMMUNICATIONS OUTLETS SHALL NOT BE PLACED BACK-TO-BACK.
20. WHERE MORE THAN ONE LIGHT SWITCH OCCURS AT SAME LOCATION, SWITCHES SHALL BE MOUNTED IN A MULTIPLE GANG BOX UNDER A SINGLE COVER PLATE. PLATES WITH MORE THAN (3) LIGHT SWITCHES SHALL BE LABELED TO INDICATE THE LIGHT FIXTURES CONTROLLED.
21. DISCONNECT SWITCHES SHALL BE MOUNTED ON INDIVIDUAL SUPPORTS, OR OTHERWISE DIRECTLY ON EQUIPMENT, PROVIDED NO MODIFICATION TO EQUIPMENT IS NECESSARY.
22. ALL ELECTRICAL POWER, LIGHTING, TELEPHONE OR SIGNAL WIRING IN FIRE RATED WALL IS TO BE INSTALLED IN A METALLIC CONDUIT SYSTEM.
23. ALL ELECTRIC MATERIAL SHALL BE LISTED BY "UL" FOR THE TYPE OF APPLICATION AND "UL" LABEL SHALL APPEAR ON ALL ELECTRICAL EQUIPMENT.
24. ALL DISTRIBUTION AND CONTROL EQUIPMENT (SUCH AS CB's, SWITCHES, CONTACTORS, ETC.), TERMINATIONS SHALL BE FULLY RATED PER UL AS FOLLOWS:
    a. 100A OR LESS : 60°C OR MORE;
    b. MORE THAN 100A : 75°C OR MORE.
25. ANY ERRORS, OMISSIONS, OR DESIGN DISCREPANCIES ON PLANS OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ELECTRICAL ENGINEER FOR CLARIFICATION OR CORRECTION PRIOR TO CONSTRUCTION AND PREPARATION OF SUBMITTAL PACKAGES.
26. CONDUCTORS SHALL HAVE UNDERWRITER'S LABORATORIES, INC.(UL) LISTED, 600 VOLT INSULATION OF TYPE SPECIFIED BELOW OR ELSEWHERE IN THE SPECIFICATIONS. CONDUCTORS SHALL BE COPPER AND LISTED FOR 90 DEGREE APPLICATIONS.
    1. BRANCH CIRCUITS - LIGHTING AND POWER.
        a. #10 AWG AND SMALLER, SOLID WIRE TYPE THW OR THHN/THWN-2, THHW(THHN FOR DRY LOCATION ONLY).
        b. #8 AWG TO #2 AWG, STRANDED TYPE THW OR THHN/THHW.
        c. #1 AWG AND LARGER, STRANDED TYPE XHHW-2.
    2. FEEDERS : TYPE THW OR THHN/THWN-2, OR XHHW-2.
27. PROVIDE GREEN INSULATED GROUNDING CONDUCTOR IN EACH RACEWAY INCLUDING CONDUITS, PLUG STRIPS, WIREMOLD. SIZE OF GROUNDING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE ARTICLE 250.
28. WIRING METHOD SHALL BE EMT ABOVE GROUND AND MOUNTED IN CONCEALED SPACES AND SCHEDULE-40 PVC FOR UNDERGROUND INSTALLATION. USE RIGID WHEN ENCASED IN CONCRETE OR SUSCEPTIBLE TO DAMAGE.
29. ALL SWITCH LOCATIONS ARE REQUIRED TO HAVE A NEUTRAL CONDUCTOR PROVIDED AT THE SWITCH LOCATION PER NEC 404.2(C).
30. UNLESS OTHERWISE INDICATED, SHARING OF NEUTRAL/GROUNDED CONDUCTORS AMONG SINGLE PHASE BRANCH CIRCUITS OF DIFFERENT PHASES INSTALLED IN THE SAME RACEWAY IS NOT PERMITTED. PROVIDE DEDICATED NEUTRAL/GROUNDED CONDUCTOR FOR EACH INDIVIDUAL BRANCH CIRCUIT.
31. UNLESS OTHERWISE INDICATED, PROVIDE A SEPARATE SWITCHED AND UNSWITCHED PHASE CONDUCTOR TO ALL CONTROLLED RECEPTACLES REGARDLESS OF RECEPTACLE CONFIGURATION.
32. BASIS OF ELECTRICAL DESIGN LIMITS VOLTAGE DROP TO 2% FOR FEEDERS AND 3% FOR BRANCH CIRCUITS. ANY CHANGES MADE IN THE FIELD SHALL LIMIT VOLTAGE DROP TO THESE PERCENTAGES.
33. BRANCH CIRCUIT CONDUITS SHALL BE CONCEALED IN WALL OR CEILING SPACES. EXPOSED CONDUITS ARE NOT ALLOWED WHERE CONCEALED METHODS ARE AVAILABLE.
34. CONTRACTOR SHALL PROVIDE CONDUCTORS AND CONDUITS REQUIRED FOR ALL BRANCH CIRCUITS AND FEEDERS. FOR CIRCUIT SIZES NOT SHOWN, REFER TO PANEL SCHEDULES FOR CONDUCTOR AND CONDUIT SIZES.
35. ALL EMERGENCY CIRCUITS SHALL BE ENTIRELY INDEPENDENT OF ALL OTHER WIRING AND EQUIPMENT AND SHALL NOT ENTER SAME RACEWAY, BOXES OR CABINETS WITH OTHER WIRING EXCEPT WHERE PROVIDED IN NEC 700.9B.
36. REFER TO LIGHTING CONTROL DETAILS FOR WIRING AND CONDUIT REQUIREMENTS. CONTRACTOR SHALL PROVIDE ALL WIRING AND CONDUITS REQUIRED BY MANUFACTURER TO FIXTURES AND CONTROLS.
37. THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER TRADES. 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 OWNER'S REPRESENTATIVE DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED PRIOR TO BID SHALL BE SUBJECT TO THE INTERRUPTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.
38. EXACT ROUTING METHOD AND LOCATION OF CONDUIT PENETRATION AND OPENINGS IN WOOD ROOF DECKS, WALL, FLOORS OR STRUCTURAL STEEL MEMBERS SHALL BE DETERMINED BY THE CONTRACTOR IN FIELD. PERFORM CORING, SAWCUTTING, PATCHING AND REFINISHING OF EXISTING WALLS AND SURFACES WHEREVER IT IS NECESSARY TO PENETRATE. OPENINGS SHALL BE SEALED IN AN APPROVED METHOD TO MEET THE FIRE RATING AND WATER PROOFING REQUIREMENTS OF THE PARTICULAR WALL, FLOOR OR CEILING. ALL FIRE SEALS SHALL BE UL APPROVED. CONTRACTOR SHALL SCAN ALL CONCRETE WALLS AND SLABS FOR THE PRESENCE OF REBAR AND/OR UTILITIES PRIOR TO DRILLING OR CUTTING IF CONCRETE WORK IS INVOLVED. CONTRACTOR SHALL PROVIDE CERTIFICATION OF CALIBRATION OF CONCRETE SCANNING EQUIPMENT PRIOR TO PERFORMING WORK.
39. ALL 125 AND 250-VOLT, 15- AND 20-AMPERE NONLOCKING TYPE RECEPTACLES SHALL BE LISTED TAMPER RESISTANT RECEPTACLES IN AREAS SPECIFIED IN NEC 406.12.
40. ALL 125-VOLT THROUGH 250-VOLT RECEPTACLES SUPPLIED BY SINGLE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 50 AMPERES OR LESS, AND ALL RECEPTACLES SUPPLIED BY THREE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 100 AMPERES OR LESS, INSTALLED IN THE LOCATIONS SPECIFIED BELOW SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL AND ANY OTHER AREAS SPECIFIED IN NEC 210.8
    a. BATHROOMS
    b. KITCHENS OR AREAS WITH A SINK AND PERMANENT PROVISIONS FOR EITHER FOOD PREPARATION OR COOKING
    c. ROOFTOPS
    d. OUTDOORS
    e. SINKS — WHERE RECEPTACLES ARE INSTALLED WITHIN 6 FT FROM THE TOP
    f. INDOOR DAMP AND WET LOCATIONS
    g. LOCKER ROOMS WITH ASSOCIATED SHOWERING FACILITIES
    h. GARAGES, ACCESSORY BUILDINGS, SERVICE BAYS, AND SIMILAR AREAS OTHER THAN VEHICLE EXHIBITION HALLS AND SHOWROOMS
    i. CRAWL SPACES — AT OR BELOW GRADE LEVEL
    j. UNFINISHED AREAS OF BASEMENTS
    k. LAUNDRY AREAS
    l. BATHTUBS AND SHOWER STALLS — WHERE RECEPTACLES ARE INSTALLED WITHIN 6 FT OF THE OUTSIDE EDGE OF THE BATHTUB OR SHOWER STALL

ABBREVIATIONS

A	AMPERE
AF	AMPERE FRAME RATING
AFC	AVAILABLE FAULT CURRENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFU	AMPHERE FUSE RATING (FUSE)
AIC	AMPHERE INTERRUPTING CAPACITY
AS	AMPERE SWITCH RATING (FUSE)
AT	AMPERE TRIP RATING (CIRCUIT BREAKER)
AWG	AMERICAN WIRE GAUGE
BCG	BARE COPPER GROUND
BKBD	BACKBOARD
BLDG	BUILDING
BKR	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CFSD	COMBINATION FIRE SMOKE DAMPER
CO	CONDUIT ONLY
CONC	CONCRETE
CT	CURRENT TRANSFORMER
CU	COPPER
℄	CENTERLINE
DISC	DISCONNECT
DSBN	DISTRIBUTION SECTION
DN	DOWN
DWG	DRAWING
EA	EACH
EC	ELECTRICAL CONTRACTOR
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
EXIST, (E)	EXISTING
EXO	EXTERNAL OPERABLE DISCONNECT
F	FUSE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FF	FINISHED FLOOR
FG	FINISHED GRADE
FLA	FULL LOAD CURRENT
GEC	GROUNDING ELECTRODE CONDUCTOR
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTION
GND	GROUND
HD	HEAVY DUTY
HOA	HAND-OFF-AUTOMATIC
HP	HORSE POWER
HV	HIGH VOLTAGE
IDF	INTERMEDIATE DISTRIBUTION FRAME
IG	ISOLATED/INSULATED GROUND
ISC	SHORT CIRCUIT CURRENT AVAILABLE IN RMS SYMMETRICAL AMPERES
J-BOX	JUNCTION BOX
KCMIL	THOUSAND CIRCULAR MILS
KW	KILOWATT
KV	KILO VOLT
KVA	KILO VOLT-AMPERE
LDC	LOCAL DISTRIBUTION CABINET
LDF	LOCAL DISTRIBUTION FRAME
LCL	LONG CONTINUOUS LOAD
LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
LSIG	LONG, SHORT, INSTANTANEOUS, GROUND
LTG	LIGHTING
LV	LOW VOLTAGE
MFR	MANUFACTURER
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MIN	MINIMUM
MH	MANHOLE / METAL HALIDE
MLO	MAIN LUGS ONLY
M/M	METER AND MAIN SECTION
MV	MEDIUM VOLTAGE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NEW (N)	NEW, TO BE FURNISHED AND INSTALLED BY CONTRACTOR
NF	NON-FUSED
NIC	NOT IN CONTRACT
N/L	NIGHT LIGHT
NO	NUMBER, NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
PB	PULL BOX
PF	POWER FACTOR
PNL	PANEL
POC	POINT OF CONNECTION
PP	POWER POLE
PWR	POWER
PVC	POLYVINYL CHLORIDE
QUAD	QUADRUPLEX
QTY	QUANTITY
RGS	RIGID GALVANIZED STEEL
RMC	RIGID METALLIC CONDUIT
RM	ROOM
RNC	RIGID NONMETALLIC CONDUIT
SHT	SHEET
SN	SOLID NEUTRAL
SPEC	SPECIFICATIONS
SW	SWITCH
SWBD	SWITCHBOARD
TC	TIME CLOCK
TEL	TELEPHONE
TERM	TERMINAL
TP	TEMPORARY POLE
TYP	TYPICAL
UGPS	UNDERGROUND PULL SECTION
UL	UNDERWRITERS LABORATORY
UPS	UNINTERRUPTIBLE POWER SUPPLY
UON	UNLESS OTHERWISE NOTED
V	VOLT, VOLTAGE
VA	VOLT-AMPERE
VD	VOLTAGE DROP
VFC	VARIABLE FREQUENCY CONTROLLER
VFD	VARIABLE FREQUENCY DRIVE
W	WATT
WH	WATT-HOUR
WP	WEATHERPROOF
WW	WIREWAY
XP	EXPLOSION PROOF
Z	IMPEDANCE
4W	FOUR-WIRE
3W	THREE-WIRE
SS	JUNCTION BOX (4 11/16" SQUARED X2 1/8" DEEP)
Ø	DIAMETER, PHASE
#	NUMBER
°C	DEGREE CELSIUS
(E)	EXISTING DEVICE TO REMAIN
(R)	REMOVE EXISTING DEVICE AND ASSOCIATED CONDUIT AND WIRE
(RL)	REMOVE EXISTING DEVICE AND RELOCATE AS SHOWN ON PLAN
(NL)	NEW LOCATION OF RELOCATED DEVICE

GENERAL DEMOLITION NOTES

1. THE CONTRACTOR SHALL VISIT THE PROJECT SITE AND MAKE THEMSELVES COMPLETELY FAMILIAR WITH THE EXISTING INSTALLED CONDITIONS. A FIELD SURVEY VERIFICATION IS MANDATORY IN ORDER TO SUBMIT AN ELECTRICAL BID, FAILURE TO DO SO SHALL NOT RELIEVE THIS CONTRACTOR FROM PERFORMING THE WORK OF THIS CONTRACT.
2. ALL EQUIPMENT OR WORK REQUIRED TO CARRY OUT THE DEMOLITION SCOPE OF WORK IS CONSIDERED TO BE PART OF THE CONTRACTOR SCOPE OF WORK. NO EXTRAS WILL BE CONSIDERED TO PERFORM THE REQUIRED WORK.
3. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE FACILITY DIRECTOR PRIOR TO THE SCHEDULING OF ANY POWER OUTAGE. SUCH PERMISSION MUST BE OBTAINED IN WRITING AND BE GRANTED AT LEAST 7 DAYS PRIOR TO ANY SCHEDULE SHUT DOWN. THE SHUT DOWN SHALL NOT EXCEED A DURATION OF 4 HOURS.
4. THE CONTRACTOR SHALL NOT STORE ON SITE ANY ITEMS THAT WERE DEMOLISHED FOR ANY EXTENDED PERIOD OF TIME, WITHOUT THE WRITTEN PERMISSION OF THE CAMPUS FACILITY DIRECTOR.
5. ALL ELECTRICAL ITEMS DESIGNATED AS EXISTING TO REMAIN SHALL AS PART OF THIS SCOPE OF WORK BE CLEANED AND TESTED, TO INSURE PROPER OPERATION. ANY ITEMS THAT FAIL TO PASS THE TEST SHALL BE BROUGHT TO THE ATTENTION OF THE FIELD INSPECTOR AND THE ENGINEER OF RECORD FOR RESOLUTION.
6. THE CONTRACTOR SHALL REMOVE ALL EXISTING SWITCHBOARDS, DISTRIBUTION BOARDS, PANEL BOARDS, LIGHTING FIXTURES, CONDUITS, WIRES AND OTHER ELECTRICAL APPARATUS DESIGNATED AS EXISTING TO BE REMOVED. DEMOLITION ITEMS, IF NOT REQUIRED TO BE SALVAGED BY OWNER, BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN AN APPROPRIATE MANNER.
7. THE CONTRACTOR SHALL REMOVE ALL CONDUITS SERVING DEVICES WHICH ARE DESIGNATED AS EXISTING TO BE REMOVED, BACK TO THE SOURCE.
8. DEMOLITION AND/OR REMOVAL OF ELECTRICAL EQUIPMENT IN AREAS TO BE REMODELED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
9. WHERE OUTLETS ARE REMOVED IN EXISTING WALL, REMOVE DEVICES, OUTLETS AND WIRING BACK TO PANELBOARD OR BACK TO NEAREST OUTLET WITH OTHER EXISTING LOAD TO REMAIN.
10. WHERE EXISTING CONDUIT AND CONDUCTORS ARE TO BE REMOVED AND CONDUIT IS INSTALLED IN GROUND OR EMBEDDED IN CONCRETE, REMOVE WIRE AND CUT CONDUIT TO BELOW FLOOR, PLUG CONDUIT, PATCH FLOOR AND ABANDON CONDUIT.
11. WHERE ELECTRICAL DEVICES ARE TO BE REMOVED, REMOVE ALL CONDUIT AND CONDUCTORS BACK TO SOURCE, TERMINAL CABINETS AND RACKS, PROVIDE BLANK COVER PLATE FOR ABANDONED JUNCTION BOXES.
12. REMOVE ALL CONTROL PANELS, EQUIPMENT RACKS, PULL-BOXES, TERMINAL CABINETS, ETC. FOR SYSTEMS TO BE DEMOLISHED EXCEPT WHERE ANY OF THE EXISTING DEVICES, SYSTEMS, CONSOLES, ETC. ARE TO BE REUSED FOR UPGRADE.
13. PROVIDE BLANK COVER PLATE FOR ALL EMPTY OUTLET BOXES WHERE DEVICES AND/OR CONDUCTORS HAVE BEEN REMOVED AS PART OF THIS CONTRACT.
14. AFTER REMOVAL OF WIREMOLD AND ASSOCIATED FITTINGS, PATCH, REPAIR AND PAINT AFFECTED SURFACES TO MATCH EXISTING.
15. EXISTING CONDUIT CAN BE REUSED PROVIDING IT IS CODE COMPLIANT, IS CHECKED FOR CONTINUITY OF GROUND, CLEAN AND MANDREL, AND DOES NOT INTERFERE WITH NEW CONSTRUCTION.
16. REMOVALS AND REPAIRS TO EXISTING ELECTRICAL WORK REQUIRED TO AVOID CONFLICTS WITH NEW CONSTRUCTION TO MEET MINIMUM CODE REQUIREMENTS.

NOTE TO CONTRACTOR

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR THE SAME.

POWER LEGEND AND SYMBOLS

SYMBOL	DESCRIPTION
200-D	CONDUIT WIRING DESCRIPTION PER FEEDER SCHEDULE ON OTHER PLAN
PB	CONCRETE ELECTRICAL PULLBOX WITH LID APPROPRIATE FOR INSTALLATION LOCATION. LID SHALL BE LABELED ACCORDING TO USE.
	SMOKE FIRE DAMPER
SD	DUCT MOUNTED SMOKE DETECTOR.
T	THERMOSTAT SUPPLIED BY MECHANICAL CONTRACTOR, ELECTRICAL CONTRACTOR SHALL STUB 3/4" C.O. 6" ABOVE CEILING SPACE, PROVIDE BUSHING AND PULL WIRE. IF INSTALLED IN AREA WITH EXPOSED STRUCTURE ABOVE OR HARDLID CEILING, PROVIDE 3/4" C.O. BACK TO ASSOCIATED HVAC UNIT. REFER TO MECHANICAL DETAILS FOR T-STAT MOUNTING HEIGHT REQUIREMENTS.

LIGHTING LEGEND AND SYMBOLS

SYMBOL	DESCRIPTION
FN ab N/L	2'X4' RECESSED LUMINAIRE. FN INDICATES LUMINAIRE TYPE - REFER TO LUMINAIRE SCHEDULE, TYPICAL. SUBSCRIPT 2ab REFERS TO CIRCUIT AND SWITCH LEG 'a' AND 'b'. SUBSCRIPT N/L REFERS TO UNSWITCHED LEG.
FNE	2'X4' RECESSED FLUORESCENT LUMINAIRE WITH 90MIN. EMERGENCY BATTERY BACKUP
	SURFACE MOUNTED DOUBLE FACE EXIT SIGN (UNIVERSAL ARROWS INDICATED AS NEEDED)
	SURFACE MOUNTED SINGLE FACE EXIT SIGN (UNIVERSAL ARROWS INDICATED AS NEEDED)
Sab	SWITCH, SINGLE POLE 20A. MOUNTED 48" A.F.F. TO TOP OF DEVICE. SUBSCRIPTS INDICATE THE FOLLOWING: M - MOTOR RATED 3 - THREE WAY 4 - FOUR WAY K - KEY OPERATED D - DIMMER SWITCH T - TIMED SWITCH a, b, c, ETC. - DESIGNATES SWITCH-LEGS CONTROLLED AND QUANTITY OF SWITCHES AT EACH LOCATION.
Vab	OCCUPANCY SENSOR, DUAL-TECHNOLOGY, SURFACE CEILING MOUNTED. WATT STOPPER MODEL #DT-300 OR LEVITON MODEL #OSC20-M0W. PROVIDE WITH POWER PACK(S) AS REQUIRED.
Vab	DUAL TECHNOLOGY OCCUPANCY SENSOR, SURFACE WALL MOUNTED 180° U.O.N. LEVITON MODEL #OSSMT-GD (FOR SINGLE POLE SWITCHING) & LEVITON MODEL #OSSMD-GD FOR (DUAL SWITCHING)
1ab	LOW-VOLTAGE OVERRIDE SWITCH. NUMBER INDICATES OVERRIDE SWITCH. A,B,C, ETC. DESIGNATES ZONE AS SHOWN ON LIGHTING ZONE SCHEDULE.
Sab	LOW-VOLTAGE DIMMER SWITCH. MOUNTED 48" A.F.F. TO TOP OF DEVICE. a, b, c, ETC. - DESIGNATES SWITCH-LEGS CONTROLLED AND QUANTITY OF SWITCHES AT EACH LOCATION.
Mab	LOW-VOLTAGE OCCUPANCY SENSOR, DUAL-TECHNOLOGY, SURFACE CEILING MOUNTED INTERCONNECTED TO NETWORK LIGHTING CONTROLS.
	COMBINATION DIMMING SWITCH AND LOW-VOLTAGE OCCUPANCY SENSOR, DUAL-TECHNOLOGY. WALL MOUNTED 48" A.F.F. TO TOP OF DEVICE INTERCONNECTED TO NETWORK LIGHTING CONTROLS.
IG	CEILING MOUNTED DIGITAL ROOM CONTROLLER INTERCONNECTED TO NETWORK LIGHTING CONTROLS.

SIGNAL LEGEND AND SYMBOLS

SYMBOL	DESCRIPTION
▽	DATA OUTLET BOX 4S, MOUNTED +15" A.F.F. TO BOTTOM OF DEVICE U.O.N. STUB 3/4" C.O. 6" ABOVE CEILING SPACE, PROVIDE BUSHING AND PULL WIRE. IF INSTALLED IN AREA WITH EXPOSED STRUCTURE ABOVE OR HARD LID CEILING, PROVIDE 3/4" C.O. BACK TO LOCATION OF NEAREST IDF/MDF.
	COMBINATION TELEPHONE & DATA OUTLET BOX 4S, MOUNTED +15" A.F.F. TO BOTTOM OF DEVICE U.O.N. STUB 3/4" C.O. 6" ABOVE CEILING SPACE, PROVIDE BUSHING AND PULL WIRE. IF INSTALLED IN AREA WITH EXPOSED STRUCTURE ABOVE OR HARD LID CEILING, PROVIDE 3/4" C.O. BACK TO LOCATION OF NEAREST IDF/MDF.
	COMBINATION TELEPHONE & DATA OUTLET BOX 4S, MOUNTED HEIGHT HORIZONTALLY ABOVE COUNTER TOP PER ARCHITECTURAL PLANS OR APPROVAL STUB 3/4" C.O. 6" ABOVE CEILING SPACE, PROVIDE BUSHING AND PULL WIRE. IF INSTALLED IN AREA WITH EXPOSED STRUCTURE ABOVE OR HARD LID CEILING, PROVIDE 3/4" C.O. BACK TO LOCATION OF NEAREST IDF/MDF.
	FLUSH FLOOR MOUNTED COMBINATION TELEPHONE & DATA OUTLET BOX, U.O.N.
TV	TELEVISION OUTLET BOX 4S, MOUNTED +66" A.F.F. TO BOTTOM OF DEVICE U.O.N. STUB 1-1/4" C.O. 6" ABOVE CEILING SPACE, PROVIDE BUSHING AND PULL WIRE. IF INSTALLED IN AREA WITH EXPOSED STRUCTURE ABOVE OR HARD LID CEILING, PROVIDE 1-1/4" C.O. BACK TO LOCATION OF NEAREST IDF/MDF.
	CCTV CAMERA (PER DISTRICT STANDARDS). MOUNTING HEIGHT PER PLANS. PROVIDE 3/4" C. BACK TO LOCATION OF NEAREST IDF/MDF.
CR	CARD READER (PER DISTRICT STANDARDS) SURFACE MOUNTED ON WALL AT 48" A.F.F. PROVIDE 3/4" C. BACK TO LOCATION OF ACCESS CONTROL PANEL.
S	CEILING MOUNTED PA SPEAKER PER DISTRICT STANDARDS. PROVIDE 1-1/4" C. BACK TO LOCATION OF PA RACK.
C	WALL MOUNTED BATTERY POWERED, GPS RADIO CONTROLLED CLOCK (PER DISTRICT STANDARDS). MOUNT AT 84" A.F.F.
M	WALL MOUNTED MOTION SENSOR - PROVIDE MAKE/MODEL COMPATIBLE WITH EXISTING INTRUSION PANEL. MOUNT AT 96" A.F.F. PROVIDE 1-1/4"C. BACK TO INTRUSION PANEL.
	DOOR CONTACT - PROVIDE MAKE/MODEL COMPATIBLE WITH EXISTING INTRUSION PANEL. PROVIDE 1-1/4"C. BACK TO INTRUSION PANEL.
W	WALL MOUNTED WIRELESS ACCESS POINT (WAP) PER DISTRICT STANDARDS. MOUNT AT 84" A.F.F. STUB 3/4" C.O. 6" ABOVE CEILING SPACE. PROVIDE BUSHING AND PULL WIRE. IF INSTALLED IN AREA WITH EXPOSED STRUCTURE ABOVE OR HARD LID CEILING, PROVIDE 3/4" C.O. BACK TO LOCATION OF NEAREST IDF/MDF.

APPLICABLE CODES

1. 2022 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2. 2022 CALIFORNIA BUILDING CODE (CBC),PART 2, TITLE 24 C.C.R.
3. 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
4. 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
5. 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
6. 2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
7. 2022 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
8. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
9. 2022 CALIFORNIA ENERGY CODE (PART 6, TITLE 24 C.C.R.)
10. 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CGBSG), PART 11, TITLE 24 C.C.R.

ELECTRICAL SHEET INDEX

SHEET NUMBER	SHEET NAME
E0-0.1	ELECTRICAL LEGENDS & NOTES
E0-0.2	LUMINAIRE SCHEDULE
E0-0.3	TITLE 24 COMPLIANCE DOCUMENTS
E0-0.4	TITLE 24 COMPLIANCE DOCUMENTS
E0-0.5	TITLE 24 COMPLIANCE DOCUMENTS
E0-0.6	LIGHTING REMODEL CONTROL LAYOUT
E0-0.7	LIGHTING REMODEL CONTROL DETAILS
E0-0.8	SINGLE LINE DIAGRAM & PANEL SCHEDULES
E0-0.9	LOW VOLTAGE RISER DIAGRAMS
ES-1.0	ELECTRICAL OVERALL SITE PLAN
ES-2.1	ENLARGED ELECTRICAL DEMOLITION SITE PLAN
ES-2.2	ENLARGED ELECTRICAL REMODEL SITE PLAN
ES-2.3	ELECTRICAL SITE EGRESS PLAN
E1-1.1	ELECTRICAL DEMOLITION PLAN
E1-2.1	POWER & SIGNAL REMODEL PLAN
E1-2.2	ELECTRICAL REMODEL ROOF PLAN
E1-3.1	LIGHTING REMODEL PLAN
E1-3.2	NORMAL PHOTOMETRY PLAN
E1-3.3	EMERGENCY EGRESS PHOTOMETRY PLAN
ED-1.1	ELECTRICAL DETAILS
ED-1.2	ELECTRICAL DETAILS CONTINUED

POWER LEGEND AND SYMBOLS

SYMBOL	DESCRIPTION
A-1	SUBSCRIPT "A-1" REFERS TO PANEL DESIGNATION WITH CIRCUIT NUMBER. TYPICAL OF ALL RECEPTACLE OUTLETS.
	DUPLEX RECEPTACLE OUTLET, CONVENIENCE. (20 AMPS, 125 VOLTS) MOUNTED +15" A.F.F. T

LUMINAIRE SCHEDULE

TYPE	VOLTS	WATTAGE	LAMPS	MOUNTING	FIXTURE DESCRIPTION	MFR.	CATALOG #	NOTES
	120 V	75 W	FLUORESCENT	POLE TOP	ARCHITECTURAL POLE TOP			
F1	277 V	24 W	LED	RECESSED	2'X2' LAY-IN FIXTURE WITH CENTER ELEMENT	LITHONIA	STAK-2X2-80CRI-35K-COL-MIN1-MVOLT-SLD	
F1E	277 V	24 W	LED	RECESSED	2'X2' LAY-IN FIXTURE WITH CENTER ELEMENT AND CONNECTED TO LIGHTING INVERTER FOR EMERGENCY EGRESS.	LITHONIA	STAK-2X2-80CRI-35K-COL-MIN1-MVOLT-SLD	
F2	277 V	21 W	LED	RECESSED	RECESSED 2" LED DOWNLIGHT WITH 0-10V DIMMING BALLAST.	GOTHAM LIGHTING	EVO2-35/15-AR-LSS-MWD-MVOLT-LGZ-ALTAIR2	
F3A	277 V	11 W	LED (WITH UNIT)	PENDANT	4" PENDANT CYLINDER IN 5" LENGTH, SEMI-SPECULAR OPTIC, CLEAR TRIM AND A MATT BLACK FINISH	GOTHAM LIGHTING	IV04CYL-PC-D-10LM-35K-80CRI-MWD-MIN10-MVOLT-ZT-L5-JBX-CAN-S6-P-AR-LSS-DBL	STEM LENGTH TO BE 6'-0", BOTTOM OF FIXTURE TO BE AT 11'-0" AF.F. VERIFY HEIGHT WITH ARCHITECTURAL PRIOR TO ORDERING.
F3AE	277 V	11 W	LED (WITH UNIT)	PENDANT	4" PENDANT CYLINDER IN 5" LENGTH, SEMI-SPECULAR OPTIC, CLEAR TRIM WITH A MATT BLACK FINISH AND CONNECTED TO LIGHTING INVERTER FOR EMERGENCY EGRESS.	GOTHAM LIGHTING	IV04CYL-PC-D-10LM-35K-80CRI-MWD-MIN10-MVOLT-ZT-L5-JBX-CAN-S6-P-AR-LSS-DBL	STEM LENGTH TO BE 6'-0", BOTTOM OF FIXTURE TO BE AT 11'-0" AF.F. VERIFY HEIGHT WITH ARCHITECTURAL PRIOR TO ORDERING.
F3B	277 V	11 W	LED	PENDANT	4" PENDANT CYLINDER IN 5" LENGTH, SEMI-SPECULAR OPTIC, CLEAR TRIM AND A MATT BLACK FINISH	GOTHAM LIGHTING	IV04CYL-PC-D-10LM-35K-80CRI-MWD-MIN10-MVOLT-ZT-L5-JBX-CAN-S2-P-AR-LSS-DBL	STEM LENGTH TO BE 2'-0", BOTTOM OF FIXTURE TO BE AT 11'-0" AF.F. VERIFY HEIGHT WITH ARCHITECTURAL PRIOR TO ORDERING.
F3BE	277 V	11 W	LED	PENDANT	4" PENDANT CYLINDER IN 5" LENGTH, SEMI-SPECULAR OPTIC, CLEAR TRIM WITH A MATT BLACK FINISH AND CONNECTED TO LIGHTING INVERTER FOR EMERGENCY EGRESS.	GOTHAM LIGHTING	IV04CYL-PC-D-10LM-35K-80CRI-MWD-MIN10-MVOLT-ZT-L5-JBX-CAN-S2-P-AR-LSS-DBL	STEM LENGTH TO BE 2'-0", BOTTOM OF FIXTURE TO BE AT 11'-0" AF.F. VERIFY HEIGHT WITH ARCHITECTURAL PRIOR TO ORDERING.
F4E	277 V	16 W	LED	RECESSED	RECESSED LINEAR LUMINAIRE WITH WHITE TRIM AND CONNECTED TO LIGHTING INVERTER FOR EMERGENCY EGRESS.	AXIS LIGHTING	CLKLED-400-80-35-SO-4-W-277-DP-1-DS	
F5	277 V	75 W	LED	PENDANT	3" BEAM PENDANT FIXTURE IN X PATTERN. WITH ALUMINUM PAINTED FINISH, AIRCRAFT CABLE SUSPENSION AND 0-10V DIMMER.	AXIS LIGHTING	TB3DILEDPAT-X(4'X6'4'X2')-OPR(45)-300-300-90-35-SO-SO-NL-AP-277-DP-1-CA(36")-D	VERIFY PATTERN PRIOOR TO ORDERING.
F5E	277 V	75 W	LED	PENDANT	3" BEAM PENDANT FIXTURE IN X PATTERN. WITH ALUMINUM PAINTED FINISH, AIRCRAFT CABLE SUSPENSION, 0-10V DIMMING AND CONNECTED TO LIGHTING INVERTER FOR EMERGENCY EGRESS.	AXIS LIGHTING	TB3DILEDPAT-X(4'X6'4'X2')-OPR(45)-300-300-90-35-SO-SO-NL-AP-277-DP-1-CA(36")-D	VERIFY PATTERN PRIOOR TO ORDERING.
F6A	277 V	126 W	LED	RECESSED	RECESSED LINEAR LUMINAIRE WITH WHITE TRIM.	CORONET	LS1-36'-35-LOW-UNV-DB-W-SMTB9-FL-ACM-NA	VERIFY MOUNTING PRIOR TO ORDERING.
F6B	277 V	30 W	LED	RECESSED	RECESSED LINEAR LUMINAIRE WITH WHITE TRIM.	CORONET	LS1-11'-35-LOW-UNV-DB-W-SMTB9-FL-ACM-NA	VERIFY MOUNTING PRIOR TO ORDERING.
F6C	277 V	12 W	LED	RECESSED	RECESSED LINEAR LUMINAIRE WITH WHITE TRIM.	CORONET	LS1-5'-35-LOW-UNV-DB-W-SMTB9-FL-ACM-NA	VERIFY MOUNTING PRIOR TO ORDERING.
S1E	277 V	14 W	LED	WALL	MEDIUM WEDGE SCONCE IN STONE FINISH AND CONNECTED TO LIGHTING INVERTER FOR EMERGENCY EGRESS.	LIGMAN	LEEDSULEW-30011-14W-T4-W30-SU-3120/277V-F-DIM	
S2	277 V	6 W	LED	KNUCKLE	KNUCKLE MOUNT SIGN LIGHT IN BLACK FINISH. SOFT GLARE LENS AND WITH 45 DEGREE HOOD.	HYDREL	SAF1-LED-P1-80CRI-30K-MVOLT-70DEG-CWL-KMOUNT-L3-ZT-C3-BL	
S3	277 V	208 W	LED	POLE TOP	ARCHITECTURAL POLE TOP SHOEBOX-TYPE FIXTURE ON 25' POLE	VISIONAIRE LIGHTING	PGS-3-T4-128LC-5-4K-UNV-UBOA-WH-PCR-277 POLE - SNTS-5S-7-25'-128C-136-S1-WH	

LUMINAIRE NOTES

1. EQUALS SHALL BE CONSIDERED UPON SUBMITTAL REVIEW AND APPROVAL. PLEASE NOTE THAT IF AN ALTERNATE IS CONSIDERED:
   a. THE CONTRACTOR IS COMPLETELY AND SOLELY RESPONSIBLE FOR ALL ASPECTS OF THE SUBSTITUTION INCLUDING UPDATING CONSTRUCTION DOCUMENTS, OBTAINING APPROVALS AND PERMITS FROM LOCAL AUTHORITY, AND COORDINATING WITH ALL TRADES TO ENSURE CHANGES TO AFFECTED BUILDING SYSTEM ARE ACCOUNTED FOR AND ACCEPTABLE TO THE ENGINEERING TEAM. CONTRACTOR SHALL ENSURE SUBSTITUTED EQUIPMENT MEETS OR EXCEEDS DESIGN INTENT REGARDING RATINGS, PERFORMANCE, DIMENSIONAL CLEARANCES, PHYSICAL DIMENSIONS (MAX/MIN), WEIGHT LIMITATIONS, AND OTHER ASPECTS, PROVING SUBSTITUTION IS SUITABLE TO THE APPLICATION. ENGINEERS WILL REVIEW THE RATING AND PERFORMANCE OF SUBSTITUTED EQUIPMENT ONLY AND WILL NOT ASSUME RESPONSIBILITY FOR SUBSTITUTION AT ANY LEVEL.
   b. IF CONTRACTOR CANNOT MAKE SUBSTITUTED EQUIPMENT WORK IN THIS PROJECT, CONTRACTOR SHALL REVERT TO REQUIREMENTS OF PERMITTED CONSTRUCTION DOCUMENTS AT THEIR EXPENSE.
   c. IT IS UNDERSTOOD BY ALL PARTIES THAT ANY SUBSTITUTIONS OF SPECIFIED PRODUCTS ARE DONE FOR THE PURPOSE OF COST SAVINGS TO THE OWNER. THEREFORE, ANY MATERIAL SUBSTITUTION OR DEVIATIONS PROPOSED BY THE CONTRACTOR SHALL BE INCLUDED WITH THE INITIAL BID AND SHALL SHOW A LINE ITEMS CREDIT TO THE OWNER FOR EACH SUBSTITUTION IN LIEU OF SPECIFIED PRODUCTS.
   d. CONTRACTOR SHALL PROVIDE A POINT BY POINT PHOTOMETRIC STUDY FOR ALL AREAS WHERE ALTERNATE FIXTURES ARE SUBMITTED. LIGHT LEVELS WILL BE REVIEWED FOR COMPLIANCE WITH PROJECT REQUIREMENTS AND BASIS OF DESIGN VALUES.
2. THE FIXTURE SCHEDULE INDICATES GENERAL DESCRIPTION OF LIGHTING FIXTURES AND MANUFACTURERS CATALOG NUMBERS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE CORRECT CEILING CONFIGURATION AND PROVIDE THE FIXTURES WITH ALL NECESSARY TRIMS AND MOUNTING HARDWARE SO THAT BOTH THE CEILING SYSTEM AND THE FIXTURE CONSTRUCTION MATCHES. PROVIDE SEISMIC HANGERS AS REQUIRED.
3. IT SHALL BE CONTRACTORS RESPONSIBILITY TO VERIFY THE EXACT LOCATION OF ALL LIGHTING FIXTURES AND TYPE OF CEILING WITH ARCHITECTURAL REFLECTED CEILING PLAN PRIOR TO ANY WORK. SEE ARCHITECTURAL REFLECTED CEILING PLAN PRIOR TO ANY WORK. SEE ARCHITECTURAL ELEVATION DRAWING FOR MOUNTING HEIGHTS OF WALL MOUNTED FIXTURES.
4. A JUNCTION BOX MUST BE PROVIDED WITH ALL EXIT LIGHTS CONNECTED TO MORE THAN ONE SET OF CONDUCTORS UNLESS THE EXIT LIGHT FIXTURE IS FURNISHED WITH AN APPROVED OUTLET BOX FOR THROUGH WIRING.
5. A COMPLETE TITLE 24 COMPLIANT LIGHTING CONTROL SYSTEM SHALL BE PROVIDED TO CONTROL ALL INTERIOR AND EXTERIOR LIGHTING SYSTEMS. REFER TO LIGHTING CONTROL DIAGRAMS, SCHEDULES AND DETAILS.
6. BATTERY PACK EMERGENCY TEST SWITCHES SHALL BE INTEGRAL TO LIGHT FIXTURE. COORDINATION OF SWITCH LOCATION IS REQUIRED WITH DESIGN TEAM IF INTEGRAL INSTALLATION IS NOT POSSIBLE.
7. FIXTURES DESIGNATED AS EMERGENCY SHALL BE SUPPLIED WITH INTEGRAL BATTERY PACK CAPABLE OF POWERING TWO T8 LAMPS FOR 90 MINUTES WITH A TOTAL LIGHT OUTPUT OF 1100 LUMENS OR ONE F13 BIAX FOR 90 MINUTES WITH A TOTAL LIGHT OUTPUT OF 520 LUMENS.
8. PROVIDE ALL REQUIRED MOUNTING HARDWARE ANCHORAGE AND SUPPORTS TO INSTALL LIGHTING FIXTURES.
9. PROVIDE SWIVEL BASE AND STEMS. LENGTHS AS REQUIRED TO MOUNT THE PENDANT MOUNTED FIXTURES. THE INSTALLATION SHALL COMPLY WITH TITLE 24 SEISMIC AND APPLICABLE UBC REQUIREMENTS.
10. THE CONTRACTOR SHALL PROVIDE A COMPLETE AND OPERABLE LIGHTING SYSTEM AS PART OF THIS BUILDING CONTRACT.
11. SUSPENSION SYSTEM FOR LIGHT FIXTURES WHICH HAVE PASSED SHAKING TABLE TESTS APPROVED BY THE OFFICE OF THE STATE OF ARCHITECT, OR WHICH, AS INSTALLED, ARE FREE TO SWING A MINIMUM OF 45° FROM THE VERTICAL IN ALL DIRECTIONS WITHOUT CONTACTING OBSTRUCTIONS, SHALL BE ASSUMED TO COMPLY WITH THE LATERAL FORCE REQUIREMENTS FOR SECTION 2305, PART 2, TITLE 24, CCR. UNLESS OF THE CABLE TYPE FREE SWING SUSPENSION SYSTEM SHALL HAVE A SAFETY WIRE OR CABLE ATTACHED TO THE FIXTURE AND STRUCTURE AT EACH SUPPORT CAPABLE OF SUPPORTING FOUR TIMES THE SUPPORTED LOAD.
12. FOR SUSPENDED AND SURFACE MOUNTED LIGHT FIXTURES, THE PRODUCT OF ICP NEED NOT EXCEED 12 FOR ANY VALUE OF 1.
13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE FIXTURE BALLAST OR DRIVER VOLTAGE MATCHES THE CIRCUIT VOLTAGE SUPPLYING FIXTURE PRIOR TO ORDERING.
14. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY BALLAST/DRIVER DIMMING CONFIGURATION IS COMPATIBLE WITH CONTROLS BEING PROVIDED PRIOR TO ORDERING FIXTURES. EX. 2 WIRE, 3 WIRE, 4 WIRE, 0-10V, CAT 5, ETC.
15. LED LIGHT FIXTURES SHALL BE IN ACCORDANCE WITH IES, NFPA, UL, AS SHOWN ON THE DRAWINGS, AND AS SPECIFIED.
16. LED LIGHT FIXTURES SHALL BE REDUCTION OF HAZARDOUS SUBSTANCES (ROHS)-COMPLIANT.
17. LED DRIVERS SHALL INCLUDE THE FOLLOWING FEATURES UNLESS OTHERWISE INDICATED:
    - MINIMUM EFFICIENCY: 85% AT FULL LOAD.
    - MINIMUM OPERATING AMBIENT TEMPERATURE: -20 DEG C. (-4 DEG F.)
    - INPUT VOLTAGE: 120 - 277V (±10%) AT 60 HZ., UNLESS OTHERWISE INDICATED.
    - INTEGRAL SHORT CIRCUIT, OPEN CIRCUIT, AND OVERLOAD PROTECTION.
    - POWER FACTOR: >=0.95.
    - TOTAL HARMONIC DISTORTION: <=20%.
    - COMPLY WITH FCC 47 CFR PART 15.
18. LED MODULES SHALL INCLUDE THE FOLLOWING FEATURES UNLESS OTHERWISE INDICATED:
    - COMPLY WITH IES LM-79 AND LM-80 REQUIREMENTS.
    - MINIMUM CRI 80 AND COLOR TEMPERATURE 4000K UNLESS OTHERWISE SPECIFIED IN LUMINAIRE SCHEDULE.
    - MINIMUM RATED LIFE: 50,000 HOURS PER IES L70.
    - LIGHT OUTPUT LUMENS AS INDICATED IN THE LUMINAIRE SCHEDULE.
19. 23. LED DOWNLIGHTS:
    - HOUSING, LED DRIVER, AND LED MODULE SHALL BE PRODUCTS OF THE SAME MANUFACTURER.
20. 24. LED TROFFERS:
    - LED DRIVERS, MODULES, AND REFLECTOR SHALL BE ACCESSIBLE, SERVICEABLE, AND REPLACEABLE FROM BELOW THE CEILING.
    - HOUSING, LED DRIVER, AND LED MODULE SHALL BE PRODUCTS OF THE SAME MANUFACTURER.
21. ALL FIXTURES MOUNTED OUTDOORS SHALL BE LISTED FOR WET LOCATION.
22. ALL REMOTE DRIVERS SHALL BE CONCEALED ABOVE CEILING OR PLACED IN A REMOTE LOCATION WHEN ATTIC SPACE IS NOT AVAILABLE.

LIGHTING CONTROLS SEQUENCE OF OPERATIONS

LIGHT CONTROLS SHALL PERFORM AS FOLLOWS:

ZONE	DELAY TO OFF (MIN)	ON/OFF METHOD	TECHNOLOGY	DAYLIGHTING	NOTES
RESTROOMS	5	AUTO ON/AUTO OFF	DUAL	N/A	TUNE FOR NOISE, DO NOT LOCATE NEAR AIR VENTS
OFFICE	10	AUTO ON TO 50%/MANUAL ON TO 100%/AUTO OFF	DUAL	DIM TO ALLOW 30 FC ON WORK SURFACE	
CONFERENCE ROOM	15	AUTO ON/AUTO OFF	DUAL	DIM TO ALLOW 35 FC ON WORK SURFACE	
NURSES STATION	15	AUTO ON/AUTO OFF	DUAL	N/A	
CORRIDORS	15	TIME CLOCK ON/OFF, DIM TO 50% AFTER DELAY	DUAL	DIM TO ALLOW 10 FC ON WORK SURFACE	
LOBBY	15	AUTO ON/AUTO OFF	DUAL	DIM TO ALLOW 20 FC ON WORK SURFACE	
EXAM ROOM	15	AUTO ON/AUTO OFF	DUAL	DIM TO ALLOW 40 FC ON WORK SURFACE	
EXTERIOR LIGHTING	10	PHOTOCELL ON/TIME CLOCK OFF, DIM TO 50% AFTER DELAY	INFRARED	N/A	N/A
NOTE: FOR ZONES WITH PLUG CONTROLLERS, DELAY TO OFF SHALL BE THE SAME AS THE LIGHTING IN THAT ZONE.					

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REGISTERED PROFESSIONAL ENGINEER — BRADEN KEMPER — No. 22839 — SIGNED:02/14/2025 — ELECTRICAL — STATE OF CALIFORNIA
LICENSED ARCHITECT — REGISTERED — No. C-47126 — Exp.10-31-25 — STATE OF CALIFORNIA
STAMPS

AGENCY APPROVAL
File No: ##########-#######
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com
DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS
CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PROJECT No. :
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DRAWN BY: JM/ST CHECKED BY: BK

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DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Indian Springs HS Wellness Center	Report Page:	(Page 1 of 9)
Project Address: 1472 East 6th Street	Date Prepared:	9/24/2024

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.

A. GENERAL INFORMATION

01	Project Location (city)	San Bernardino	04	Total Conditioned Floor Area (ft²)	2,163
02	Climate Zone	10	05	Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1

● Office ● Support Areas ● All Other Occupancies

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				
☐ New Lighting System - Parking Garage				
☒ Altered Lighting System	Area Category Method	2163	Area Category Method	0
Total Area of Work (ft²)	2163		0	

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Indian Springs HS Wellness Center	Report Page:	(Page 4 of 9)
	Date Prepared:	9/24/2024

F. INDOOR LIGHTING FIXTURE SCHEDULE

[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		
NA < 4,000W subject to multilevel	See Area/Space Level Controls	☐	☐

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Indian Springs HS Wellness Center	Report Page:	(Page 7 of 9)
	Date Prepared:	9/24/2024

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.

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.

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Indian Springs HS Wellness Center	Report Page:	(Page 2 of 9)
	Date Prepared:	9/24/2024

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		1,343.2	0		= 1,343	≥	1,339	0	=	1339	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.

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Indian Springs HS Wellness Center	Report Page:	(Page 5 of 9)
	Date Prepared:	9/24/2024

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/Skylit 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
Student Lobby 103	Main Entry Lobby	Readily Accessible	Dimmer	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Office 104	Office (>250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Exam Room 105	Hospital - Exam/Treatment	Readily Accessible	Dimmer	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Woorkroom/Storage 106	All Other Space Types	Readily Accessible	Dimmer	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Nurses Station 107	Hospital - Nurse Station	Readily Accessible	Dimmer	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Public Lobby 101	Main Entry Lobby (Low Vision)	Readily Accessible	Dimmer	Occupancy Sensor	Included	Included	No	☐	☐
Conference Room 111	Office (<=250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Exam Room 109	Hospital - Exam/Treatment	Readily Accessible	Dimmer	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
Office 110	Office (<=250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Office 112	Office (<=250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Unisex 108	Restroom	Readily Accessible	Dimmer	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Indian Springs HS Wellness Center	Report Page:	(Page 8 of 9)
	Date Prepared:	9/24/2024

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Student Lobby 103; Office 104; Exam Room 105; Woorkroom/Storage 106; Nurses Station 107; Public Lobby 101; Conference Room 111; Exam Room 109; Office 110; Office 112; Unisex 108; Corridor 102;
NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	Public Lobby 101;

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Indian Springs HS Wellness Center	Report Page:	(Page 3 of 9)
	Date Prepared:	9/24/2024

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable 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
F1	Type F1 - 2X2 Troffer	No	NA	24	Mfr. Spec	24	No	576	☐	☐
F1E	Type F1E - 2X2 Troffer	No	NA	24	Mfr. Spec	6	No	144	☐	☐
F2	Type F2 - 2" Downlight	No	NA	21	Mfr. Spec	7	No	147	☐	☐
F3A	Type F3A - 4" Pendant Cylinder	No	NA	11	Mfr. Spec	5	No	55	☐	☐
F3AE	Type F3AE - 4" Pendant Cylinder	No	NA	11	Mfr. Spec	1	No	11	☐	☐
F3B	Type F3B - 4" Pendant Cylinder	No	NA	11	Mfr. Spec	6	No	66	☐	☐
F3BE	Type F3BE - 4" Pendant Cylinder	No	NA	11	Mfr. Spec	1	No	11	☐	☐
F4E	Type F4E - 4' Recessed Linear	No	NA	16	Mfr. Spec	2	No	32	☐	☐
F5	Type F5 - 8'X8 Specialty Linear	No	NA	75	Mfr. Spec	1	No	75	☐	☐
F5E	Type F5E - 8'X8 Specialty Linear	No	NA	75	Mfr. Spec	1	No	75	☐	☐
F6A	Type F6A - 36' Recessed Linear	No	NA	105	Mfr. Spec	1	No	105	☐	☐
F6B	Type F6B - 11' Recessed Linear	No	NA	30	Mfr. Spec	1	No	30	☐	☐
F6C	Type F6C - 5' Recessed Linear	No	NA	12	Mfr. Spec	1	No	12	☐	☐
Total Designed Watts: CONDITIONED SPACES								1,339		

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Indian Springs HS Wellness Center	Report Page:	(Page 6 of 9)
	Date Prepared:	9/24/2024

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

Corridor 102	Corridor	Readily Accessible	Dimmer	Occupancy Sensor	NA: Rm < 24sf Glazing	NA: Rm < 24sf Glazing	No	☐	☐
							13		
							Plan Sheet Showing Daylit Zones:		

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
Lobby	Main Entry Lobby	0.7	337	235.9	No	No
Office	Office (<=250 square feet)	0.65	484	314.6	No	No
Lobby	Main Entry Lobby	0.7	159	111.3	No	No
Conference	Convention, Conference, Multipurpose and Meeting Center	0.75	201	150.8	No	No
Office	Office (<=250 square feet)	0.65	551	358.2	No	No
Hall	Corridor	0.4	431.1	172.4	No	No
	TOTALS:		2,163.1	1,343.2	See Tables J, or P for detail	

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.

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name: Indian Springs HS Wellness Center	Report Page:	(Page 9 of 9)
Project Address: 1472 East 6th Street	Date Prepared:	9/24/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Braden Kempton	Braden Kempton
Company:	Signature Date:
Design West Engineering	2024-09-24
Address:	CEA/ HERS Certification Identification (if applicable):
412 E. Vanderbilt Way	
City/State/Zip:	Phone:
San Bernardino CA 92408	909-890-3700

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:	Responsible Designer Signature:
Braden Kempton	Braden Kempton
Company:	Date Signed:
Design West Engineering	2024-09-24
Address:	License:
412 E. Vanderbilt Way	22839
City/State/Zip:	Phone:
San Bernardino CA 92408	909-890-3700

REGISTERED PROFESSIONAL ENGINEER — BRADEN KENNETH KEMPTON — No. 22839 — SIGNED:02/14/2025 — ELECTRICAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — BRADEN KEMPTON — No. C-41136 — Exp.10-31-25 — STATE OF CALIFORNIA

STAMPS

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com

DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

CONSULTANT BRANDING

AGENCY APPROVAL
File No: ##########-########

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

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PROJECT No. :
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DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV

RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

TITLE 24 COMPLIANCE DOCUMENTS

E0-0.3

24-094

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
This document is used to demonstrate compliance with requirements in 110.9, 130.0, 130.2, 140.7, and 141.0(b)2L for outdoor 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)6, 180.1(a) and 180.2(b)4Bv for outdoor lighting scopes using the prescriptive path for multifamily and mixed-use occupancies. Multifamily includes dormitory and senior living facilities.		
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 1 of 7)**
Project Address: 1472 East 6th Street	**Date Prepared:**	9/24/2024

A. GENERAL INFORMATION

01	Project Location (city)	San Bernardino	04	Total Illuminated Hardscape Area (ft²)	105
02	Climate Zone	10			
03	Outdoor Lighting Zone per Title 24 Part 1	10.114 or as designated by Authority Having Jurisdiction (AHJ):			
☐	LZ-0: Very Low - Undeveloped Parkland	☒ LZ-2: Moderate - Urban Clusters	☐	LZ-4: High - Must be reviewed by CA Energy Commission for Approval	
☐	LZ-1: Low - Rural Areas	☐ LZ-3: Moderately High - Urban Areas			
05	Occupancy Types within Project				

● Office ● Support Areas ● All Other Occupancies

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv for alterations.

My Project Consists of:

01	02		
☐ New Lighting System	Must Comply with Allowances from 140.7 / 170.2(e)6		
☒ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)?	● Yes	○ No

03	04	05
% of Existing Luminaires Being Altered[1]	Sum Total of Luminaires Being Added or Altered	Calculation Method
☐ < 10% ☐ >= 10% and < 50% ☐ >= 50%	0	

Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires.

[1] *FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.*

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 2 of 7)**
	Date Prepared:	9/24/2024

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through N. 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.

Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv												Compliance Results		
01		02		03		04		05	OR	06	=	07	08	09
General Hardscape Allowance 140.7(d)1 / 170.2(e)6 (See Table I)	+	Per Application 140.7(d)2 / 170.2(e)6 (See Table J)	+	Sales Frontage 140.7(d)2 (See Table K)	+	Ornamental 140.7(d)2 / 170.2(e)6 (See Table L)	+	Per Specific Area 140.7(d)2 / 170.2(e)6 (See Table M)	OR	Existing Power Allowance 141.0(b)2L / 180.2(b)4Bv (See Table N)	=	**Total Allowed** (Watts)	≥	**Total Actual** (Watts)	**07 must be >= 08**
208	+	---	+	---	+	---	+	---	OR	---	=	208	≥	28	COMPLIES
												Shielding Compliance (See Table G for Details)			N/A
												Controls Compliance (See Table H for Details)			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.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 3 of 7)**
	Date Prepared:	9/24/2024

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with 140.7 / 170.2(e)6 all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per 141.0(b)2L only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included). Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire[1, 2]	How is Wattage determined	Total Number Luminaires[2]	Luminaire Status[3]	Excluded per 140.7(a) / 170.2(e)6A	Design Watts	Cutoff Req. > 6,200 initial lumen output 130.2(b) / 160.5(c)1[4]	Field Inspector	
										Pass	Fail
S1E	Type S1E - Wedge Sconce	☐ Linear	14	Mfr. Spec	2	New	☐	28	NA: < 6200 lumens	☐	☐
							Total Design Watts:	28			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
EX: Luminaire is lighting a statue; EXCEPTION 2 to 130.2(b)

[1] *FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b)*
[2] *For linear luminaires, wattage should be indicated as W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.*
[3] *Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.*
[4] *Compliance with mandatory shielding requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 130.2(b)/ 160.5(c)*

G. SHIELDING REQUIREMENTS (BUG)

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 4 of 7)**
	Date Prepared:	9/24/2024

H. OUTDOOR LIGHTING CONTROLS

This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
Outdoor lighting for nonresidential buildings, parking garages and common service areas in multifamily buildings must be documented separately from outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit

Mandatory Controls for Nonresidential Occupancies, Parking Garages & Common Areas in Multifamily Buildings

01	02	03	04	05	
Area Description	Shut-Off 130.2(c)1 / 160.5(c)	Auto-Schedule 130.2(c)2 / 160.5(c)	Motion Sensor 130.2(c)3 / 160.5(c)	Field Inspector	
				Pass	Fail
Public Entrance	Astronomical Timer	Provided	NA: Each Luminaire <= 40 Watts	☐	☐
Clinic Signage	Astronomical Timer	Provided	NA: Each Luminaire <= 40 Watts	☐	☐

[1] *FOOTNOTE: Text has been abbreviated, please refer to Table 160.5-A to confirm compliance with the specific light source technologies listed.*
[2] *Authority having jurisdiction may ask for cutsheets or other documentation to confirm compliance of light source.*
[3] *Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are excepted from ii and iii.*

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 5 of 7)**
	Date Prepared:	9/24/2024

I. LIGHTING POWER ALLOWANCE (per 140.7 / 170.2(e))

This table includes areas using allowance calculations per 140.7 / 170.2(e). General Hardscape Allowance is per Table 140.7-A/Table 170.2-R while "Use it or lose it" Allowances are per Table 140.7-B /Table 170.2-S. Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance.
Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

	01			
		"Use it or lose it" Allowance (select all that apply) (select all that apply)		
☒ General Hardscape Allowance Table I (below)	☐ Per Application Table J	☐ Sales Frontage Table K	☐ Ornamental Table L	☐ Per Specific Area Table M

Calculated General Hardscape Lighting Power Allowance per Table 140.7-A for Nonresidential & Hotel/Motel

02	03	04	05	06	07	08	09
	Area Wattage Allowance (AWA)			Linear Wattage Allowance (LWA)			
Area Description	Illuminated Area (ft²)	Allowed Density (W/ft²)	Area Allowance (Watts)	Perimeter Length (lf)	Allowed Density (W/lf)	Linear Allowance (Watts)	Total General AWA + LWA (Watts)
Public entrance Lighting	105	0.019	2	42	0.2	6.3	8
					Initial Wattage Allowance for Entire Site (Watts):		200
					Instances of Initial Wattage Allowance (LZ 0 only)[1]		
					Total General Hardscape Allowance (Watts):		208

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 6 of 7)**
	Date Prepared:	9/24/2024

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This section does not apply to this project.

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTO-E - Must be submitted for all buildings

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	Public Entrance; Clinic Signage;

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 7 of 7)**
Project Address: 1472 East 6th Street	**Date Prepared:**	9/24/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Braden Kempton	Documentation Author Signature: Braden Kempton
Company: Design West Engineering	Signature Date: 2024-09-24
Address: 412 E. Vanderbilt Way	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Bernardino CA 92408	Phone: 909-890-3700

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: Braden Kempton	Responsible Designer Signature: Braden Kempton
Company: Design West Engineering	Date Signed: 2024-09-24
Address: 412 E. Vanderbilt Way	License: 22839
City/State/Zip: San Bernardino CA 92408	Phone: 909-890-3700

REGISTERED PROFESSIONAL ENGINEER — BRADEN KEMPTON — No. 22839 — SIGNED: 02/14/2025 — ELECTRICAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — JOSEPH CLARKE — No. C-34126 — Exp.10-31-25 — STATE OF CALIFORNIA

STAMPS

AGENCY APPROVAL
File No: ##########-#######

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com
DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

PRINTED: 2/14/2025 11:25:31 AM
PATH: BIM 360://1080_Wellness_Center/24-094 SBCUSD IS HS WC Mod Eqt_MEP Central_R21.rvt

PROJECT No. :
2/14/2025 11:25:31 AM

DRAWN BY: JM/ST CHECKED BY: BK

DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA # _____	DATE _____	☐ ADD	☐ AFO	☐ CCD	☐ REV

STATE OF CALIFORNIA
Sign Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTS-E
This document is used to demonstrate compliance with requirements in 110.9, 110.12, 130.0/ 160.5, 130.3/ 160.5(d), 140.8/ 170.2(e) and 141.0(b)2M/ 180.2(b)4Bvi for sign lighting scopes using the prescriptive path. Exit signs and traffic signs are not required to comply with prescriptive requirements per exceptions to 140.8/ 170.2(e) and do not need to complete this compliance document.		
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 1 of 5)**
Project Address: 1472 East 6th Street	**Date Prepared:**	9/24/2024

A. GENERAL INFORMATION

01	Project Location (city)	San Bernardino	
02	Climate Zone	10	
03	Occupancy Types within Project	☐	Healthcare Facility
		☐	Multifamily/ MF Mixed-use >= 4 stories (includes dormitory, senior living)

B. PROJECT SCOPE

This table includes illuminated signs that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.8/ 170.2(e) or 141.0(b)2M/ 180.2(b)4Bvi for alterations. Exit signs and traffic signs are not required to comply with prescriptive requirements per exceptions to 140.8/ 170.2(e) and do not need to complete this compliance document.

01	02	03	04	05
Name or Item Tag	Complete Sign Description	Sign Status[1]	Sign Type	Compliance Method[2]
Clinic	Clinic Signage	New	Outdoor	Max Allowed Lighting Power

[1]FOOTNOTE: Sign alterations that increase the connected lighting load, replace and rewire more that 50% of the ballasts, or relocate the sign to a different location must comply with 140.8/ 170.2(e). See 141.0(b)2M/ 180.2(b)4Bvi for more details.
[2]The ENERGY VERIFIED Label compliance method is only applicable if the sign has a permanent, factory-installed, ENERGY VERIFIED label certified by UL or comparable, confirming the sign complies with 140.8/ 170.2(e). Note that using an ENERGY VERIFIED label is an optional compliance path, not a mandatory requirement. See the tooltips for this table for more details.

STATE OF CALIFORNIA
Sign Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTS-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 2 of 5)**
	Date Prepared:	9/24/2024

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables B through H. 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	07
Name or Item Tag (See Table B)	Complete Sign Description (See Table B)	Total Allowed (Watts) (See Table F)	≥	Total Designed (Watts) (See Table F)	OR	Compliant Light Sources (See Table G)	OR	ENERGY VERIFIED Label (See Table H)	**Compliance Results**
Clinic	Clinic Signage	172.5	≥	18	**OR**		**OR**		COMPLIES
								Controls Compliance (See Table F/G/H for Details)	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.

Generated Date/Time: Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-4473-0924-3003 Report Generated: 2024-09-24 08:05:43

STATE OF CALIFORNIA
Sign Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTS-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 3 of 5)**
	Date Prepared:	9/24/2024

F. MAXIMUM ALLOWED LIGHTING POWER AND CONTROLS

This table includes illuminated signs using the Maximum Allowed Lighting Power compliance method per 140.8(a) / 170.2(e) as indicated on Table B of this compliance document. It also demonstrates compliance with mandatory controls requirements from 130.3 / 160.5(d) by indicating control types for each sign.

01	02	03	04	05	06	07	08			09	
							Mandatory Controls			Field Inspector	
Name or Item Tag	Complete Sign Description	Illumination Method	Sign Area (ft²)	Allowed Density (W/ft²)	Allowance (Watts)	Design Watts	Shut-Off	Dimming	Demand Response[1]	Pass	Fail
Clinic	Clinic Signage	Externally	75	2.3	172.5	18	Automatic Time Switch + Photocontrol (outdoor)			☐	☐
		10	11		12	13		14			
		Luminaire Name or Item Tag	Complete Luminaire Description		Watts per luminaire	How is Wattage determined		Total Number of Luminaires			
		Type S2	Type S2 - Sign Lighting		6	Mfr. Spec		3			

** NOTES: Controls with a * require a note in the space below explaining how compliance is achieved. EX: Sign within tunnel illuminated day and night; EXCEPTION to 130.3(a)2A.*

[1] FOOTNOTE: Demand response controls are only required for an Electronic Message Center having a new connected lighting power load greater than 15 kW per 110.12(d)

G. LIGHT SOURCES AND CONTROLS

This section does not apply to this project.

H. ENERGY VERIFIED LABELED SIGNS AND CONTROLS

This section does not apply to this project.

Generated Date/Time: Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-4473-0924-3003 Report Generated: 2024-09-24 08:05:43

STATE OF CALIFORNIA
Sign Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTS-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 4 of 5)**
	Date Prepared:	9/24/2024

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTS-E - Must be submitted for all buildings

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

Generated Date/Time: Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-4473-0924-3003 Report Generated: 2024-09-24 08:05:43

STATE OF CALIFORNIA
Sign Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTS-E
Project Name: Indian Springs HS Wellness Center	**Report Page:**	**(Page 5 of 5)**
Project Address: 1472 East 6th Street	**Date Prepared:**	9/24/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Braden Kempton	Documentation Author Signature: Braden Kempton
Company: Design West Engineering	Signature Date: 2024-09-24
Address: 412 E. Vanderbilt Way	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Bernardino CA 92408	Phone: 909-890-3700

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

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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.
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Company: Design West Engineering	Date Signed: 2024-09-24
Address: 412 E. Vanderbilt Way	License: 22839
City/State/Zip: San Bernardino CA 92408	Phone: 909-890-3700

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Schema Version: rev 20220101 Compliance ID: EnergyPro-4473-0924-3003 Report Generated: 2024-09-24 08:05:43

RECISTERED PROFESSIONAL ENGINEER BRADEN KEMPTON No. 22839 SIGNED 02/14/2025 ELECTRICAL STATE OF CALIFORNIA

LICENSED ARCHITECT ROGER CLARKE No. C-47326 Exp 10-31-25 STATE OF CALIFORNIA

STAMPS

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com

DESIGN WEST ENGINEERING
MECHANICAL · ELECTRICAL · ENERGY CONSULTANTS

CONSULTANT BRANDING

AGENCY APPROVAL
File No: ########-########

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

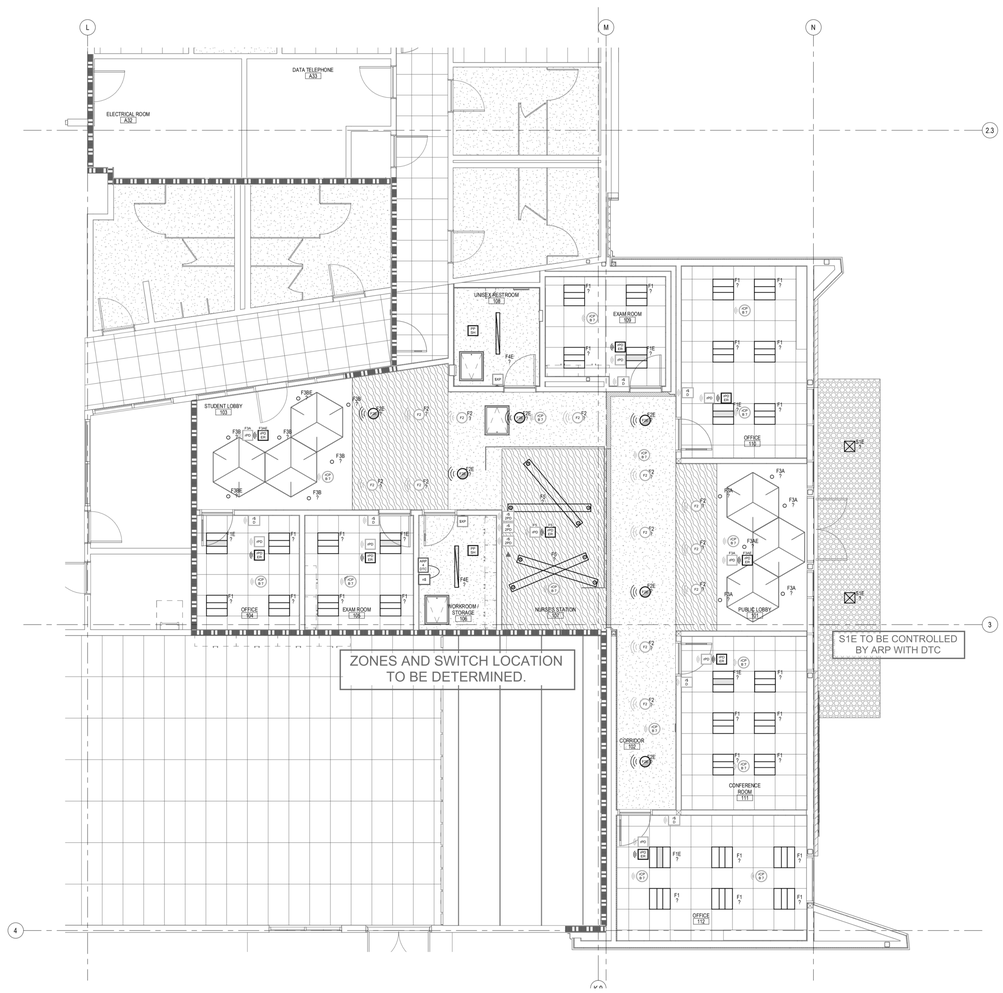
RUHNAU CLARKE ARCHITECTS

PRINTED: 2/14/2025 11:25:31 AM
PATH: BIM 360://17-001_Wellness_Center/24-094-SBCUSD IS HS WC Mod Exp_MEP Central_R21.rvt

PROJECT No. :
2/14/2025 11:25:31 AM

DRAWN BY: JM/ST CHECKED BY: BK

DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV
DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV



1 LIGHTING PLAN
1/4" = 1'

**CRITICAL NOTES (PLEASE READ) **
GENERAL NOTES
*THIS DESIGN IS BASED ON SHEET , DATED 7/26/2024
*ADDITIONAL SENSORS ARE PROVIDED FOR 90% COVERAGE
*OCCUPANCY SENSORS HAVE BEEN PROVIDED WHERE SHOWN.
*MULTI-GANG WALL SWITCHES HAVE BEEN CONSOLIDATED INTO A SINGLE GANG WALLPOD, PLEASE VERIFY IF THIS IS AN ACCEPTABLE SOLUTION.
*EXHAUST FAN CONTROLS IN RESTROOMS ARE NOT PROVIDED. IF REQUIRED, PLEASE SPECIFY AND NOTE THAT THE FAN IS LIMITED TO 10HP.

**THIS DESIGN IS FOR REVIEW PURPOSES ONLY AND IS SUBJECT TO CHANGE DEPENDING ON:
*SEQUENCE OF OPERATION
*FIXTURE SUBMITTAL INDICATING DIMMING TYPES
*UPDATED ELECTRICAL SET WITH CHANGES TO LIGHTING AND POWER CIRCUITING
*ENGINEER/CONTRACTOR'S REVIEW. PLEASE PROVIDE FULL INFORMATION AND ASK FOR A CLARIFICATION
*PROJECT SPECIFICATION DOCUMENTS

EMERGENCY SYSTEM
*EM SYSTEM IS CONSIDERED TO BE INVERTER.

PLUGLOAD
*PLUGLOADS HAVE BEEN EXCLUDED FROM THIS DESIGN. IF PLUG LOADS ARE REQUIRED PROVIDE POWER PLANS INDICATING CONTROLLED RECEPTACLES AND REQUEST A REVISED DESIGN.

SYSTEMS AND COMPONENTS TO BE PROVIDED BY OTHERS
*ALL CAT5 CABLE SHOWN IN THIS DESIGN IS TO BE SUPPLIED BY OTHERS. CONTRACTOR TO VERIFY LENGTH AND QUANTITY PRIOR TO PLACING ORDER.
*LINE VOLTAGE TOGGLE SWITCHES TO BE PROVIDED BY OTHERS.
*WEATHERPROOF AND OUTDOOR RATED ENCLOSURES TO BE PROVIDED BY OTHERS

FIXTURE DIMMING NOTES
*PLEASE PROVIDE AN APPROVED FIXTURE SUBMITTAL PRIOR TO RELEASING CONTROLS AS DIMMING STYLES NEED TO BE VERIFIED.
*POWER PACKS ARE PROVIDED BASED ON THE FOLLOWING FIXTURE DIMMING SYSTEMS.
*NLIGHT AIR ENABLED (NAE/) F2, F2E
*ALL OTHER FIXTURES ARE ASSUMED TO BE 0-10V.

DAYLIGHT HARVESTING
*DAYLIGHT HARVESTING IS NOT PROVIDED. PLANS DO NOT INDICATE FIXTURES IN THE PRIMARY DAYLIGHT ZONE TO HAVE A TOTAL WATTAGE GREATER THAN 120W. IF LUMEN PACKAGES ARE REVISED INCREADING FIXTURE WATTAGE AND/OR DAYLIGHT HARVESTING IS REQUIRED PLEASE SPECIFY DAYLIGHT ZONES AS WELL AS FIXTURE WATTAGE AND REQUEST A REVISED DESIGN.

DEMAND RESPONSE
*AUTOMATIC DEMAND RESPONSE HAS NOT BEEN PROVIDED. PLEASE VERIFY IF REQUIRED.

PROGRAMMING AND 3RD PARTY INTEGRATION
*PROGRAMMING AND START-UP TO BE COMPLETE START-UP PERFORMED BY THE MANUFACTURER'S TRAINED TECHNICIAN. CONTRACTOR SHALL COORDINATE WITH MANUFACTURER FOR START-UP REQUIREMENTS.
*INTEGRATION WITH BUILDING AUTOMATION SYSTEMS HAS NOT BEEN PROVIDED VIA BACNET-IP, MODBUS. CONTACT CLOSURE.
*GRAPHICAL PAGES NOT INCLUDED

NLIGHT WIRED SPECIFIC NOTES
*EXTERIOR LIGHTING IS FULLY NETWORKED AND OFFERS CENTRALIZED TIME CLOCK PROGRAMMING AND CONTROL CAPABILITIES VIA DIGITAL TIME-CLOCK INTEGRAL TO THE ARP PANEL.
*A LIGHTING ZONE CANNOT EXCEED 1500 FT. IN CAT5. IF EXCEEDING THIS LENGTH, THE ZONE WILL NEED TO BE BROKEN INTO SMALLER ZONES AND MAY REQUIRED ADDITIONAL MATERIAL AND/OR GLOBAL CHANNEL PROGRAMMING TO MEET THE SPECIFIED SEQUENCE OF OPERATIONS.

NLIGHT AIR SPECIFIC NOTES
*THIS DESIGN PROVIDES A STANDALONE NLIGHT SYSTEM. IF A NETWORK OR TIME CLOCK IS REQUIRED, PLEASE REQUEST A REVISED DESIGN

CRITICAL NOTES

PRODUCT LEGEND
CRITICAL NOTES, LC1.0 (E1-3.1)

ARP 4 DTC	ARP INTENC08 NLT 4FCR MVOLT 1VB SC SM DTC Acuity Relay Panel, Include INT and ENC, 8-Size, nLight, 4-field configurable relays, 120-277V, Screw Cover, Surface Mount, DTC
nS	NPODMA XX nLight Wired Aesthetic Wallpod
PP SH	PP16 SHUNT Bypass Relay Pack, Shunt
rCP B 7	RCMSB PDT 7 G2 Ceiling Mount Battery Powered Sensor, Passive Dual Technology, Mini-Low Bay 360° Lens, Generation Two
rS 2PD	RPODBA 2P DX XX G2 nLight Preset Wall control, 2-Pole, Raise/Lower Dimming, Generation Two
rS D	RPODBA DX XX G2 nLight Preset Wall control, Raise/Lower Dimming, Generation Two
rPD	RPP20 D EFP G2 nLight Air Power/Relay Pack, Networked Version, Dimming, External Fault Protection, Generation Two
rPD ER	RPP20 D ER EFP G2 nLight Air Power/Relay Pack, Networked Version, Dimming, UL924 Emergency Operation, External Fault Protection, Generation Two
$XP	WSXA PDT XX Wall Switch, Passive Dual Technology
IF2	Luminaire nLight Air enabled, wireless control
	Luminaire nLight Air enabled, wireless control Connected to emergency power circuit

Disclaimer

THIS CONTROLS SYSTEM LAYOUT DIAGRAM IS NOT A PROFESSIONAL ENGINEERING DRAWING, AND IS PROVIDED ONLY FOR INFORMATIONAL PURPOSES AND TO HELP THE CUSTOMER OR END-USER (AS APPLICABLE) UNDERSTAND HOW VARIOUS CONTROLS DEVICES ARE ARRANGED AND CONNECT TO EACH OTHER. THIS CONTROLS SYSTEM LAYOUT DIAGRAM IS STRICTLY BASED ON THE INFORMATION PROVIDED TO ACUITY BRANDS, AND IS PROVIDED WITHOUT WARRANTY AS TO ACCURACY, COMPLETENESS, RELIABILITY OR OTHERWISE. IF THE INFORMATION (INCLUDING BUT NOT LIMITED TO FLOOR-PLANS, REFLECTED CEILING PLANS, ELECTRICAL PLANS AND SPECIFICATIONS) PROVIDED TO ACUITY BRANDS IS INCOMPLETE OR NOT CURRENT (I.E., NEWER VERSIONS EXIST), THE ACCURACY OF THE LAYOUT DIAGRAM MAY BE ADVERSELY AFFECTED. ONCE THIS CONTROLS SYSTEM LAYOUT DIAGRAM IS RECEIVED BY THE CUSTOMER OR END-USER (AS APPLICABLE), IT IS THE OBLIGATION OF THE CUSTOMER OR END-USER (AS APPLICABLE) TO CONSULT WITH A PROFESSIONAL ENGINEERING ADVISOR TO DETERMINE WHETHER THE PROPOSED DESIGN MEETS THE APPLICABLE PROJECT REQUIREMENTS FOR THE CONTROLS SYSTEM'S PERFORMANCE, CODE COMPLIANCE, SAFETY, SUITABILITY AND EFFECTIVENESS FOR USE IN A PARTICULAR APPLICATION. IN NO EVENT WILL ACUITY BRANDS BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF THIS CONTROLS SYSTEM LAYOUT DIAGRAM.

Created in Visual Controls

performance lighting systems

S Jammer
Inside Sales - CA 1301
Customer.Service@acuitybrands.com
(866) 8788000

SBCUSD INDIAN SPRINGS HS WELLNESS CENTER
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410

Drawing Type:	Prepared For:
Lighting	
Date:	9/6/2024
Scale:	1/4"=1
Drawn By:	JAVIER.A
Project #:	642743
DWG Ref:	
	E1-3.1
Sheet:	LC1.0

REGISTERED PROFESSIONAL ENGINEER — BRADEN KEMPKER — No. 22839 — SIGNED:02/14/2025 — ELECTRICAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — JEFFREY D. CLARKE — No. C-26135 — Exp 10-31-25 — STATE OF CALIFORNIA

STAMPS

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caad@designwesteng.com

DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

CONSULTANT BRANDING

AGENCY APPROVAL
File No: ########-########

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DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

RATED ASSEMBLY LEGEND

1-HR FIRE RATED WALL ASSEMBLY

LIGHTING REMODEL CONTROL LAYOUT

E0-0.6

24-094

PRINTED: 2/14/2025 11:25:32 AM
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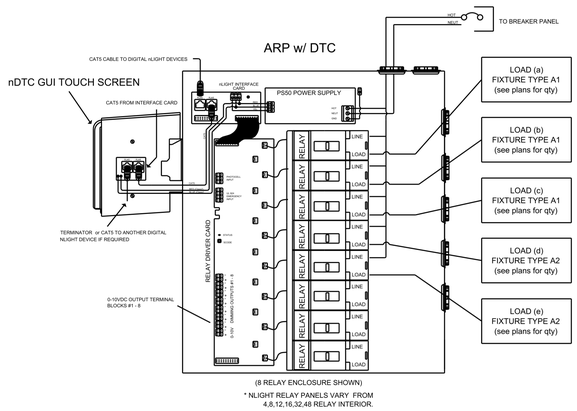
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DELTA #	DATE	☐ ADD	☐ AFO	☐ CCD	☐ REV

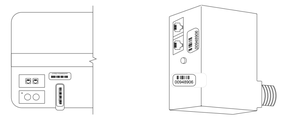
RUHNAUCLARKE.COM
3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 684 4664 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92010 (760) 438 5899

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT



ARP INTENC08 NLT 8FCR/8SPR DTC

N.T.S.



BAR CODE ON NLIGHT ENABLED FIXTURE
TOP VIEW

BAR CODE ON NLIGHT DEVICE

NOTES:

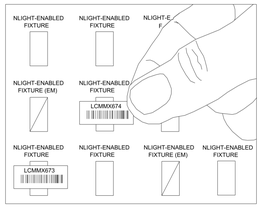
EVERY NLIGHT ENABLED DEVICE (INCLUDING NLIGHT EANABLED FIXTURES) IS FURNISHED WITH (1) PERMANENTLY ADHERED ID TAG AND (1) MATCHING, PARTIALLY ADHERED ID TAG TO BE PLACED ON THE RISER DIAGRAM SHEET PROVIDED AS PART OF AN NLIGHT SUBMITTAL DURING INSTALLATION AND PRIOR TO FACTORY STARTUP. CONTRACTOR SHALL PLACE EACH ID TAG BELOW EACH CORRESPONDING DEVICE SHOWN ON RISER DIAGRAM TO FACILITATE FACTORY STARTUP. FAILURE TO COMPLY MAY RESULT IN STARTUP DELAYS AND ADDITIONAL COSTS AT THE CONTRACTOR'S EXPENSE. DO NOT PLACE DEVICE ID STICKERS ON FLOOR PLAN UNLESS REQUIRED TO EXECUTE NFLOORPLAN SERVICES, REFERENCE NFLOORPLAN SERVICE NOTES ON THIS SHEET FOR SPECIFIC REQUIREMENTS.

THE SMALL BARCODE LABELS INCLUDED WITH ALL NLIGHT DEVICES AND NLIGHT ENABLED FIXTURES MUST BE PLACED ON A PRINTED PLAN BY THE INSTALLER PRIOR TO ONSITE SYSTEM STARTUP.

THE BARCODE INDICATES THE UNIQUE ID OF EACH NLIGHT DEVICE. THIS ID IS USED DURING SYSTEM STARTUP TO PROGRAM DEVICES WITH THE CORRECT GROUPINGS AND SETTINGS. WITHOUT THIS, SYSTEM STARTUP WILL REQUIRE ADDITIONAL DAYS ON THE JOB TO LOCATE DEVICE IDS.

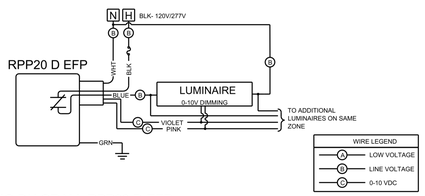
BARCODE INSTRUCTIONS:

1. PRINT A PLAN OF THE INSTALLATION AREA TO A MINIMUM D SIZE (24 ‘ X 36 ‘). THE PLAN MAY BE A REFLECTED CEILING PLAN, LIGHTING PLAN, OR ELECTRICAL PLAN, SO LONG AS ALL DEVICES CAN BE LOCATED BY THE FIELD SUPPORT ENGINEER.
2. PLACE THE SMALL BARCODE LABEL (0.875” LONG) FROM EACH LUMINAIRE AND DEVICE ON THE FLOORPLAN. THE LARGE BARCODE LABEL (1.25” LONG) CAN BE USED ON THE OUTSIDE OF ANY HOUSING OR JUNCTION BOX THAT OBSCURES THE ID NUMBER SHOWN ON THE DEVICE ITSELF.
3. SAVE THE PLAN AT THE JOB SITE, AND HAND OVER TO ACUITY FIELD SUPPORT ENGINEER OR OTHER PERSONNEL RESPONSIBLE FOR ONSITE SYSTEM STARTUP. IT IS ALSO ACCEPTABLE TO PROVIDE THE BARCODE PLAN AS SCANNED PDF FILES, EMAILED TO YOUR LOCAL LIGHTING AGENCY. IF YOU DO NOT KNOW YOUR LOCAL LIGHTING AGENCY, PLEASE REACH OUT TO TECH SUPPORT AT 1 (800) 535-2465, OPTION 1 FOR NLIGHT. THEY WILL BE ABLE TO IDENTIFY YOUR LOCAL REP.
4. DRAW ON PLAN ANY LOCATION CHANGES FOR A FIXTURE OR DEVICES, IF DIFFERENT THAN SHOWN ON PLAN.



NLIGHT BARCODE INSTRUCTIONS

N.T.S.



TYPICAL WIRING DIAGRAM: RPP20 D EFP

N.T.S.

Created in Visual Controls

NETWORKED DESIGN NOTES:

1. THE RELIABILITY OF ALL WIRELESS SIGNALS ARE HEAVILY DEPENDANT ON DEVICE LOCATION.
2. PHYSICAL OBJECT INTERFERENCE (ESPECIALLY METAL AND LARGE BARRIERS) CAN INHIBIT NLIGHT AIR WIRELESS COMMUNICATION FROM LOCAL DEVICES REACHING THE NLIGHT AIR ADAPTER.
3. FOR OPTIMAL PERFORMANCE INSTALL THE NLIGHT AIR ADAPTER VERTICALLY IN A CENTRAL LOCATION, SUCH AS IN A CORRIDOR OR A SPACE WITH LITTLE OBSTRUCTION BETWEEN THE ADAPTER AND THE RECEIVING DEVICES IN ITS INITIAL BROADCAST RANGE.
4. THE NLIGHT AIR ADAPTER CABLE WILL ALLOW FOR MOUNTING UP TO 15’ FROM THE NLIGHT ECLYPSE.
5. IF SITE CONDITIONS PREVENT UNOBSTRUCTED ACCESS, CONTACT LOCAL ACUITY BRANDS REPRESENTATIVE OR TECHNICAL SUPPORT.

LOCAL REP LOCATOR: https://www.acuitybrands.com/support/how-to-buy
ACUITY BRANDS TECH SUPPORT: (800) 535-2465

nLight AIR System Notes:

1. INITIAL NETWORKED NLIGHT AIR DEVICES SHOULD BE LOCATED WITHIN 100 FEET OF AN NLIGHT AIR ADAPTER IN INDOOR APPLICATIONS, UNLESS A SITE SURVEY HAS BEEN DONE TO CONFIRM OTHERWISE.
2. FOR MAXIMUM RANGE, THE NLIGHT AIR ADAPTER, WHICH IS USED FOR NETWORK COMMUNICATION, SHOULD BE MOUNTED IN AN OPEN INDOOR AREA (SUCH AS A CORRIDOR) AND SHOULD NOT BE LOCATED IN AN ENCLOSED SPACE (SUCH AS AN ELECTRICAL CLOSET).
3. A MAXIMUM 1,000-FOOT, LINE-OF-SIGHT DISTANCE SHOULD BE USED FOR OUTDOOR APPLICATIONS WHERE LINE OF SIGHT IS AVAILABLE BETWEEN THE NLIGHT AIR ADAPTER AND DEVICES RECEIVING AN INITIAL BROADCAST.
4. AN NLIGHT ECLYPSE WITH CONNECTED NLIGHT AIR ADAPTER CAN SUPPORT 750 DEVICES TOTAL. STANDALONE NLIGHT AIR GROUPS CAN CONTAIN UP TO 128 NLIGHT AIR DEVICES, AND ALL DEVICES SHOULD BE LOCATED WITHIN A MAXIMUM OF 1,000 FEET CLEAR LINE-OF-SIGHT OF EACH DEVICE WITHIN THE GROUP.
5. SOME CEILING MOUNTED NLIGHT AIR SENSORS WILL REQUIRE A CONNECTION TO A POWER SUPPLY OR NLIGHT AIR POWERPACK FOR LOW VOLTAGE POWER. SEE THE RCMS SPECIFICATION SHEETS FOR MORE INFORMATION. BATTERY POWERED SENSORS ARE AVAILABLE FOR INDOOR APPLICATIONS (RCMSB SENSORS). SEE THE RCMSB SPECIFICATION SHEETS FOR MORE INFORMATION.
6. SOME BATTERY POWERED NLIGHT AIR SWITCHES AND CEILING MOUNTED SENSORS (RPODB AND RCMSB SERIES) INCLUDE AN INTERNAL BATTERY, RATED FOR A 10-YEAR LIFE EXPECTANCY. LINE-VOLTAGE POWERED SWITCHES ARE AVAILABLE. SEE THE RPOD SPECIFICATION SHEET FOR MORE INFORMATION ON AVAILABLE OPTIONS.
7. NLIGHT AIR DEVICES MUST BE PROGRAMMED THROUGH THE CLAIRITY PRO MOBILE APPLICATION BEFORE THEY CAN BE CONTROLLED OR NETWORKED TO AN NLIGHT ECLYPSE WITH CORRESPONDING NLIGHT AIR ADAPTER.

performance lighting systems

5 Journey
Suite 100
Irvine, CA 92618
Controls@performancelighting.com
(949) 9788000

SBCUSD INDIAN SPRINGS HS WELLNESS CENTER
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410

Drawing Type: Details	Prepared For:
Date:	9/6/2024
Scale:	NOT TO SCALE
Drawn By:	JAVIER J.
Project #:	642743
DWG Ref:	
	NONE
Sheet:	LC0.1

REGISTERED PROFESSIONAL ENGINEER — BRADEN KENNEDY — No. 22839 — SIGNED:02/14/2025 — ELECTRICAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — ROGER CLARKE — No. C-21536 — Exp.10-31-25 — STATE OF CALIFORNIA

STAMPS

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File No: ########-##-#######

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
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DATE: 03/18/2025

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com

DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

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INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER
INDIAN SPRINGS HIGH SCHOOL
650 N DEL ROSA DR, SAN BERNARDINO, CA 92410
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

LIGHTING REMODEL
CONTROL DETAILS

E0-0.7

24-094

LIGHTING INVERTER 'INV1'

MOUNTING: *SURFACE*
FED FROM: *HA2*
NEMA: *1*
AIC RATING: *10kAIC*

NEW
LOCATION: *ELECTRICAL ROOM*

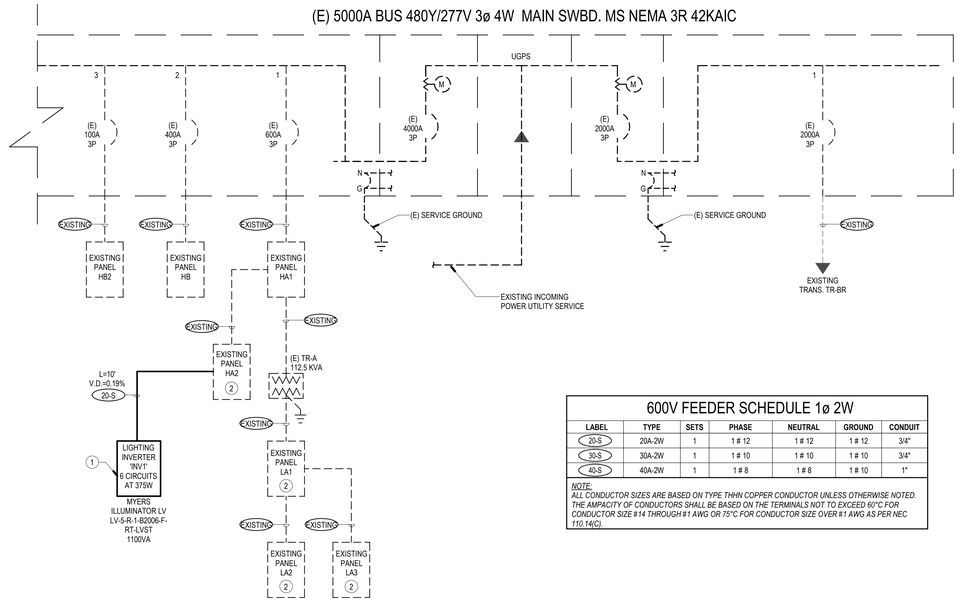
VOLTAGE: 277V 1PH 2W
BUS: 20 A
MAIN: *MLO*
FEEDER: *20-B*

NOTE	DESCRIPTION	TYPES	POLES	AMP	AWG /PH	DIS T	V.D. %	C.	A	B	C	C.	V.D. %	DIS T	AWG /PH	AMP	POLES	TYPES	DESCRIPTION	NOTE
	EM LTG - CLINIC INTERIOR	L	1	20 A	#10	132'	0.24	3/4"	1	348 28	2	3/4"	0.02	113'	#10	20 A	1	L	EM LTG - EXTERIOR	
	SPARE	--	1	20 A	--	--	--	--	3	0 0	4	--	--	--	--	20 A	1	--	SPARE	
	SPARE	--	1	20 A	--	--	--	--	5	0 0	6	--	--	--	--	20 A	1	--	SPARE	
	SUBTOTALS								*0 VA*	*375 VA*		*0 VA*								

DEMAND FACTORS:	CONNECTED	DEMAND	DEMAND	DEMAND	SUBTOTAL	PHASE
LOAD TYPE	**VA**	**FACTOR**	**VA**	**AMPS**	0 VA	**A**
(L) LIGHTING	375 VA	1.25	468 VA	2 A	375 VA	**B**
(R) RECEPTACLES		NEC 220.44			0 VA	**C**
(M) MOTOR		1.25			375 VA	**TOTAL**
LARGEST MOTOR		0.25			1 A	**AMPS**
(C) CONTINOUS	0 W	1.25	0 W	0 A		
(N) NON-CONTINOUS		1.00				
(K) KITCHEN (NEC 220.56)		0.65				
(S) SPECIAL DEMAND		1.00				
EXISTING LOAD		NEC 220.87				
TOTALS	**375 VA**		**468 VA**			
TOTAL AMPS AT 277V 1PH 2W	**WITH LCL:**			**2 A**		

NOTES:

(E) 5000A BUS 480Y/277V 3ø 4W MAIN SWBD. MS NEMA 3R 42KAIC



600V FEEDER SCHEDULE 1ø 2W

LABEL	TYPE	SETS	PHASE	NEUTRAL	GROUND	CONDUIT
20-S	20A-2W	1	1 # 12	1 # 12	1 # 12	3/4"
30-S	30A-2W	1	1 # 10	1 # 10	1 # 10	3/4"
40-S	40A-2W	1	1 # 8	1 # 8	1 # 10	1"

NOTE:
ALL CONDUCTOR SIZES ARE BASED ON TYPE THHN COPPER CONDUCTOR UNLESS OTHERWISE NOTED.
THE AMPACITY OF CONDUCTORS SHALL BE BASED ON THE TERMINALS NOT TO EXCEED 60°C FOR CONDUCTOR SIZE #14 THROUGH #1 AWG OR 75°C FOR CONDUCTOR SIZE OVER #1 AWG AS PER NEC 110.14(C).

SINGLE LINE DIAGRAM | 1

PANEL LA1

MOUNTING: *SURFACE*
FED FROM: *TRANS. TR-A*
NEMA: *1*
AIC RATING: *10,000*

EXISTING
LOCATION: *A32*

VOLTAGE: 208Y/120V 3PH 4W
BUS: 400 A
MAIN: *400A*
FEEDER: *EXISTING*

NOTE	DESCRIPTION	TYPES	POLES	AMP	AWG /PH	DIS T	V.D. %	C.	A	B	C	C.	V.D. %	DIS T	AWG /PH	AMP	POLES	TYPES	DESCRIPTION	NOTE
1	LIBRARY/OFFICE REC	--	1	20 A	--	--	--	--	1 1080 720		2	--	--	--	--	20 A	1	--	LIBRARY TABLES REC	1
1	LIBRARY/OFFICE REC	--	1	20 A	--	--	--	--	3	1080 720	4	--	--	--	--	20 A	1	--	LIBRARY TABLES REC	1
									5	6940 720	6	--	--	--	--	20 A	1	--	LIBRARY TABLES REC	1
2	**PANEL LA3**	-	3	**100 A**	**#1**	**19'**	**0.24**	**1-1/2 "**	7 5220 720		8	--	--	--	--	20 A	1	--	LIBRARY TABLES REC	1
									9	6588 1000	10	--	--	--	--	20 A	1	--	COPIER REC	1
1	CAREER CENTER REC	--	1	20 A	--	--	--	--	11	720 500	12	--	--	--	--	20 A	1	--	PROJECTOR	1
1	CAREER CENTER REC	--	1	20 A	--	--	--	--	13 720 360		14	--	--	--	--	20 A	1	--	CIRCULATION REC	1
1	CAREER CENTER REC	--	1	20 A	--	--	--	--	15	720 360	16	--	--	--	--	20 A	1	--	CIRCULATION REC	1
1	READING SMALL GROUP REC	--	1	20 A	--	--	--	--	17	720 540	18	--	--	--	--	20 A	1	--	STORAGE A42	1
1	READING SMALL GROUP REC	--	1	20 A	--	--	--	--	19 540 1080		20	--	--	--	--	20 A	1	--	CLASSROOM/TEA STORAGE REC	1
1	READING SMALL GROUP REC	--	1	20 A	--	--	--	--	21	720 1080	22	--	--	--	--	20 A	1	--	CLASSROOM/TEA STORAGE REC	1
1	READING SMALL GROUP REC	--	1	20 A	--	--	--	--	23	900 1080	24	--	--	--	--	20 A	1	--	CLASSROOM/TEA STORAGE REC	1
1	CLASSROOM A06 REC	--	1	20 A	--	--	--	--	25 720 0		26	--	--	--	--	20 A	1	--	SPARE (ON)	
1	CLASSROOM A06 REC	--	1	20 A	--	--	--	--	27	720 1560	28	--	--	--	--	30 A	2	--	CU-1/FC-1	1
1	CLASSROOM A06 REC	--	1	20 A	--	--	--	--	29	720 1560	30									
1	CLASSROOM A06 REC	--	1	20 A	--	--	--	--	31 720 1000		32	--	--	--	--	20 A	1	--	VAV BOXES	1
1	CLASSROOM A06 REC	--	1	20 A	--	--	--	--	33	1000 1000	34	--	--	--	--	20 A	1	--	VAV BOXES	1
1	CLASSROOM A06 REC	--	1	20 A	--	--	--	--	35	1000 1560	36	--	--	--	--	30 A	2	--	CU-1/FC-12	1
									37 11656 1560		38									
2	**PANEL LA2**	-	3	**100 A**	**#1**	**11'**	**0.22**	**1-1/2 "**	39	11032 540	40	--	--	--	--	20 A	1	--	CO-PRINCIPAL	1
									41	8840 540	42	--	--	--	--	20 A	1	--	CO-PRINCIPAL	1
	SUBTOTALS								*26096 VA*	*28120 VA*	*26340 VA*									

DEMAND FACTORS:	CONNECTED	DEMAND	DEMAND	DEMAND	SUBTOTAL	PHASE
LOAD TYPE	**VA**	**FACTOR**	**VA**	**AMPS**	26096 VA	**A**
(L) LIGHTING		1.25			28120 VA	**B**
(R) RECEPTACLES	13860 VA	NEC 220.44	11930 VA	33 A	26340 VA	**C**
(M) MOTOR		1.25			80556 VA	**TOTAL**
LARGEST MOTOR		0.25			224 A	**AMPS**
(C) CONTINOUS	65352 W	1.25	65352 W	181 A		
(N) NON-CONTINOUS	1344 VA	1.00	1344 VA	4 A		
(K) KITCHEN (NEC 220.56)		0.65				
(S) SPECIAL DEMAND		1.00				
EXISTING LOAD	65352 VA	NEC 220.87	65352 VA	181 A		
TOTALS	**80556 VA**		**78626 VA**			
TOTAL AMPS AT 208Y/120V 3PH 4W	**WITH LCL:**			**37 A**		

NOTES:
1. EXISTING BREAKER, EXISTING LOAD
2. EXISTING BREAKER, NEW LOAD

PANEL HA2

MOUNTING: *SURFACE*
FED FROM: *PANEL HA1*
NEMA: *1*
AIC RATING: *14,000*

EXISTING
LOCATION: *A32*

VOLTAGE: 480Y/277V 3PH 4W
BUS: 225 A
MAIN: *MLO*
FEEDER: *EXISTING*

NOTE	DESCRIPTION	TYPES	POLES	AMP	AWG /PH	DIS T	V.D. %	C.	A	B	C	C.	V.D. %	DIS T	AWG /PH	AMP	POLES	TYPES	DESCRIPTION	NOTE
1	LIBRARY A01 LTG	--	1	20 A	--	--	--	--	1 1810 1484		2	--	--	--	--	20 A	1	--	LIBRARY A01 LTG	1
1	LIBRARY A01 LTG	--	1	20 A	--	--	--	--	3	1812 1872	4	--	--	--	--	20 A	1	--	ROOMS A06, A07 LTG	1
1	LIBRARY A01 LTG	--	1	20 A	--	--	--	--	5		6	--	--	--	--	20 A	1	--	ROOMS A08, A11 LTG	1
1	OFFICE/WORKROOM LTG	--	1	20 A	--	--	--	--	7 2888 1348		8	--	--	--	--	20 A	1	--	HALLWAY LTG	1
1	OFFICE/WORKROOM LTG	--	1	20 A	--	--	--	--	9	3163 375	**10**	**3/4"**	**0.03**	**15'**	**#12**	**20 A**	**1**	**L**	**INV-1**	**2**
1	OFFICE/WORKROOM LTG	--	1	20 A	--	--	--	--	11		**12**	**3/4"**	**0.95**	**1'...**	**#12**	**20 A**	**1**	**L**	**WELLNESS LTG**	**2**
1	EXT. LTG - EAST LOT	--	1	20 A	--	--	--	--	13 2305 0		**14**	**3/4"**	**0**	**1'...**	**#10**	**20 A**	**1**	**L**	**EXERIOR SIGN LTG**	**2**
1	EXT. LTG - EAST LOT	--	1	20 A	--	--	--	--	15	2766 0	16	--	--	--	--	20 A	1	--	SPARE	
1	EXT. LTG - EAST LOT	--	1	20 A	--	--	--	--	17		18	--	--	--	--	20 A	1	--	EXT LTG - EAST LOAT	1
1	EXT. LTG - EAST LOT	--	1	20 A	--	--	--	--	19 2305 1260		20	--	--	--	--	20 A	1	--	EXT. LTG - EAST LOT	1
1	SITE LTG	--	1	20 A	--	--	--	--	21	348 928	22	--	--	--	--	20 A	1	--	SPARE (ON)	1
1	SITE LTG	--	1	20 A	--	--	--	--	23	464 812	24	--	--	--	--	20 A	1	--	SPARE (ON)	1
1	SITE LTG	--	1	20 A	--	--	--	--	25 306 420		26	--	--	--	--	20 A	1	--	BLDG LTG FACE	1
1	SITE LTG	--	1	20 A	--	--	--	--	27	306 420	28	--	--	--	--	20 A	1	--	BLDG LTG FACE	1
1	CANOPY LTG	--	1	20 A	--	--	--	--	29	288 468	30	--	--	--	--	20 A	1	--	SITE LTG	1
1	CANOPY LTG	--	1	20 A	--	--	--	--	31 288 434		32	--	--	--	--	20 A	1	--	SITE LTG	1
									33	4210 416	**34**									
3	**AC-3B**	**M**	3	**25 A**	**#10**	**96'**	**0.63**	**3/4"**	**35**	30 A	**36**	**3/4"**	**0.15**	**89'**	**#12**	**15 A**	**3**	**N**	**AC-3B POWER EXHAUST**	**3**
									37 4210 416		**38**									
	SPACE	--	1	--	--	--	--	--	39	-- 0	40	--	--	--	--	20 A	1	--	SPARE	
	SPACE	--	1	--	--	--	--	--	41		42	--	--	--	--	20 A	1	--	SPARE	
	SUBTOTALS								*19474 VA*	*16616 VA*	*18430 VA*									

DEMAND FACTORS:	CONNECTED	DEMAND	DEMAND	DEMAND	SUBTOTAL	PHASE
LOAD TYPE	**VA**	**FACTOR**	**VA**	**AMPS**	19474 VA	**A**
(L) LIGHTING	1558 VA	1.25	1947 VA	2 A	16616 VA	**B**
(R) RECEPTACLES		NEC 220.44			18430 VA	**C**
(M) MOTOR	12631 VA	1.25	15789 VA	19 A	54520 VA	**TOTAL**
LARGEST MOTOR		0.25			66 A	**AMPS**
(C) CONTINOUS	39084 W	1.25	39084 W	47 A		
(N) NON-CONTINOUS	1247 VA	1.00	1247 VA	1 A		
(K) KITCHEN (NEC 220.56)		0.65				
(S) SPECIAL DEMAND		1.00				
EXISTING LOAD	39084 VA	NEC 220.87	39084 VA	47 A		
TOTALS	**54520 VA**		**58067 VA**			
TOTAL AMPS AT 480Y/277V 3PH 4W	**WITH LCL:**			**23 A**		

NOTES:
1. EXISTING BREAKER, EXISTING LOAD
2. EXISTING BREAKER, NEW LOAD
3. NEW BREAKER, NEW LOAD

PANEL LA2

MOUNTING: *SURFACE*
FED FROM: *PANEL LA1*
NEMA: *1*
AIC RATING: *10,000*

(EXISTING)
LOCATION: *A32*

VOLTAGE: 208Y/120V 3PH 4W
BUS: 100 A
MAIN: *MLO*
FEEDER: *EXISTING*

NOTE	DESCRIPTION	TYPES	POLES	AMP	AWG /PH	DIS T	V.D. %	C.	A	B	C	C.	V.D. %	DIS T	AWG /PH	AMP	POLES	TYPES	DESCRIPTION	NOTE
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	1 540 800		2	--	--	--	--	20 A	1	--	PRINCIPAL OFFICE REC	1
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	3	540 800	4	--	--	--	--	20 A	1	--	PRINCIPAL OFFICE REC	1
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	5	720 800	6	--	--	--	--	20 A	1	--	PRINCIPAL OFFICE REC	1
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	7 540 540		**8**	**3/4"**	**1.33**	**89'**	**#12**	**20 A**	**1**	**R**	**ROOF RECEPTACLES**	**2**
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	9	540 1260	10	--	--	--	--	20 A	1	--	RESTROOM REC	1
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	11	720 500	12	--	--	--	--	20 A	1	--	BOOK THEFT DEVICE	1
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	13 720 720		14	--	--	--	--	20 A	1	--	WORKROOM VP OFFICE	1
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	15	720 720	16	--	--	--	--	20 A	1	--	WORKROOM VP OFFICE	1
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	17	540 900	18	--	--	--	--	20 A	1	--	OFFICE/RESTROOMS	1
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	19 720 720		20	--	--	--	--	20 A	1	--	OFFICE/RESTROOMS	1
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	21	720 540	22	--	--	--	--	20 A	1	--	OFFICE/RESTROOMS	1
1	COMPUTER WORKSTATIONS	--	1	20 A	--	--	--	--	23	180 500	24	--	--	--	--	20 A	1	--	DRINKING FOUNTAIN	1
1	WEST DOOR A01	--	1	20 A	--	--	--	--	25 500 720		26	--	--	--	--	20 A	1	--	OFFICES REC	1
1	OFFICES REC	--	1	20 A	--	--	--	--	27	900 720	28	--	--	--	--	20 A	1	--	OFFICES REC	1
1	OFFICES REC	--	1	20 A	--	--	--	--	29	720 720	30	--	--	--	--	20 A	1	--	OFFICES REC	1
1	OFFICES REC	--	1	20 A	--	--	--	--	31 720 720		32	--	--	--	--	20 A	1	--	ATTENDANCE/VISITOR	1
1	HAND DRYERS	--	1	20 A	--	--	--	--	33	2000 720	34	--	--	--	--	20 A	1	--	ATTENDANCE/VISITOR	1
1	HAND DRYERS	--	1	20 A	--	--	--	--	35	2000 540	36	--	--	--	--	20 A	1	--	ATTENDANCE/VISITOR	1
1	EF-3	--	1	20 A	--	--	--	--	37 696 3000		38	--	--	--	--	20 A	1	--	GWH-1 & CP-1	1
1	EF-4	--	1	20 A	--	--	--	--	39 696 156		**40**	**3/4"**	**0.26**	**61'**	**#12**	**20 A**	**1**	**N**	**EF-3B**	**2**
	SPARE (ON)	--	1	20 A	--	--	--	--	41	0 0	42	--	--	--	--	20 A	1	--	SPARE (ON)	
	SUBTOTALS								*11656 VA*	*11032 VA*	*8840 VA*									

DEMAND FACTORS:	CONNECTED	DEMAND	DEMAND	DEMAND	SUBTOTAL	PHASE
LOAD TYPE	**VA**	**FACTOR**	**VA**	**AMPS**	11656 VA	**A**
(L) LIGHTING		1.25			11032 VA	**B**
(R) RECEPTACLES	540 VA	NEC 220.44	540 VA	1 A	8840 VA	**C**
(M) MOTOR		1.25			31528 VA	**TOTAL**
LARGEST MOTOR		0.25			88 A	**AMPS**
(C) CONTINOUS	30832 W	1.25	30832 W	86 A		
(N) NON-CONTINOUS	156 VA	1.00	156 VA	0 A		
(K) KITCHEN (NEC 220.56)		0.65				
(S) SPECIAL DEMAND		1.00				
EXISTING LOAD	30832 VA	NEC 220.87	30832 VA	86 A		
TOTALS	**31528 VA**		**31528 VA**			
TOTAL AMPS AT 208Y/120V 3PH 4W	**WITH LCL:**			**2 A**		

NOTES:
1. EXISTING BREAKER, EXISTING LOAD
2. EXISTING BREAKER, NEW LOAD

PANEL LA3

MOUNTING: *SURFACE*
FED FROM: *PANEL LA1'*
NEMA: *1*
AIC RATING: *10,000*

(EXISTING)
LOCATION: *A32*

VOLTAGE: 208Y/120V 3PH 4W
BUS: 100 A
MAIN: *M.L.O.*
FEEDER: *EXISTING*

NOTE	DESCRIPTION	TYPES	POLES	AMP	AWG /PH	DIS T	V.D. %	C.	A	B	C	C.	V.D. %	DIS T	AWG /PH	AMP	POLES	TYPES	DESCRIPTION	NOTE
1	IRRIGATION	--	1	20 A	--	--	--	--	1 1000 540		2	--	--	--	--	20 A	1	--	BOOK SHELF A05 REC	1
	SPARE (ON)	--	1	20 A	--	--	--	--	3	0 540	4	--	--	--	--	20 A	1	--	BOOK SHELF A05 REC	1
1	CAREER CENTER A08 REC	--	1	20 A	--	--	--	--	5	720 1188	**6**	**3/4"**	**1.87**	**1'...**	**#12**	**20 A**	**1**	**N**	**ROLLER-SHADE MOTORS**	**2**
1	CAREER CENTER A08 REC	--	1	20 A	--	--	--	--	7 720 720		**8**	**3/4"**	**1.47**	**74'**	**#12**	**20 A**	**1**	**R**	**STUDENT LOBBY 103 REC**	**2**
1	CAREER CENTER A08 REC	--	1	20 A	--	--	--	--	9	720 360	**10**	**3/4"**	**0.56**	**56'**	**#12**	**20 A**	**1**	**R**	**STUDENT LOBBY 103 REC**	**2**
2	**OFFICE 104 REC**	**R**	**1**	**20 A**	**#12**	**65'**	**1.94**	**3/4"**	**11**	1080 900	**12**	**3/4"**	**1.85**	**74'**	**#12**	**20 A**	**1**	**R**	**EXAM ROOM 105 REC**	**2**
2	**WORKROOM/STORAGE 106 REC**	**R**	**1**	**20 A**	**#12**	**82'**	**1.47**	**3/4"**	**13** 1080 720		**14**	**3/4"**	**1.55**	**78'**	**#12**	**20 A**	**1**	**R**	**NURSE'S STATION 107 REC**	**2**
2	**NURSE'S STATION 107 REC**	**R**	**1**	**20 A**	**#12**	**92'**	**1.85**	**3/4"**	**15**	720 900	**16**	**3/4"**	**1.38**	**92'**	**#12**	**20 A**	**1**	**R**	**NURSE'S STATION 107 REC**	**2**
2	**CORRIDOR 102 REC**	**R**	**1**	**20 A**	**#12**	**1...**	**1.71**	**3/4"**	**17**	540 1080	**18**	**3/4"**	**1.34**	**74'**	**#12**	**20 A**	**1**	**R**	**UNISEX RR 108/EXAM RM 109 REC**	**2**
2	**OFFICE 110 REC**	**R**	**1**	**20 A**	**#12**	**98'**	**1.97**	**3/4"**	**19** 720 720		**20**	**3/4"**	**1.79**	**90'**	**#12**	**20 A**	**1**	**R**	**OFFICE 110 REC**	**2**
2	**PUBLIC LOBBY 101 REC**	**R**	**1**	**20 A**	**#12**	**1...**	**1.58**	**3/4"**	**21**	540 1440	**22**	**3/4"**	**1.29**	**1'...**	**#12**	**20 A**	**1**	**R**	**CONFERENCE ROOM 111 REC**	**2**
2	**CONFERENCE ROOM 111 FLOOR...**	**R**	**1**	**20 A**	**#12**	**1...**	**1.22**	**3/4"**	**23**	360 720	**24**	**3/4"**	**1.62**	**1'...**	**#12**	**20 A**	**1**	**R**	**OFFICE 112 REC**	**2**
2	**OFFICE 112 REC**	**R**	**1**	**20 A**	**#12**	**1...**	**1.73**	**3/4"**	**25** 720 0		**26**	--	--	--	--	20 A	1	--	SPARE (ON)	
	SPARE (ON)	--	1	20 A	--	--	--	--	27	0 0	28	--	--	--	--	20 A	1	--	SPARE (ON)	
	SPARE (ON)	--	1	20 A	--	--	--	--	29	0 0	30	--	--	--	--	20 A	1	--	SPARE (ON)	
	SPARE (ON)	--	1	20 A	--	--	--	--	31 0 0		32	--	--	--	--	20 A	1	--	SPARE (ON)	
	SPARE (ON)	--	1	20 A	--	--	--	--	33	0 0	34	--	--	--	--	20 A	1	--	SPARE (ON)	
	SPARE (ON)	--	1	20 A	--	--	--	--	35	0 0	36	--	--	--	--	20 A	1	--	SPARE (ON)	
	SPARE (ON)	--	1	20 A	--	--	--	--	37 0 0		38	--	--	--	--	20 A	1	--	SPARE (ON)	
	SPARE (ON)	--	1	20 A	--	--	--	--	39	0 0	40	--	--	--	--	20 A	1	--	SPARE (ON)	
	SPARE (ON)	--	1	20 A	--	--	--	--	41		42	--	--	--	--	20 A	1	--	SPARE (ON)	
	SUBTOTALS								*6940 VA*	*5220 VA*	*6588 VA*									

DEMAND FACTORS:	CONNECTED	DEMAND	DEMAND	DEMAND	SUBTOTAL	PHASE
LOAD TYPE	**VA**	**FACTOR**	**VA**	**AMPS**	6940 VA	**A**
(L) LIGHTING		1.25			5220 VA	**B**
(R) RECEPTACLES	13320 VA	NEC 220.44	11660 VA	32 A	6588 VA	**C**
(M) MOTOR		1.25			18748 VA	**TOTAL**
LARGEST MOTOR		0.25			52 A	**AMPS**
(C) CONTINOUS	4240 W	1.25	4240 W	12 A		
(N) NON-CONTINOUS	1188 VA	1.00	1188 VA	3 A		
(K) KITCHEN (NEC 220.56)		0.65				
(S) SPECIAL DEMAND		1.00				
EXISTING LOAD	4240 VA	NEC 220.87	4240 VA	12 A		
TOTALS	**18748 VA**		**17088 VA**			
TOTAL AMPS AT 208Y/120V 3PH 4W	**WITH LCL:**			**36 A**		

NOTES:
1. EXISTING BREAKER, EXISTING LOAD
2. EXISTING BREAKER, NEW LOAD

PANEL SCHEDULES | 2

AGENCY APPROVAL
File No: ##########-########

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123900 INC:
REVIEWED FOR:
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

STAMPS

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com
DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS
CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

GENERAL NOTES

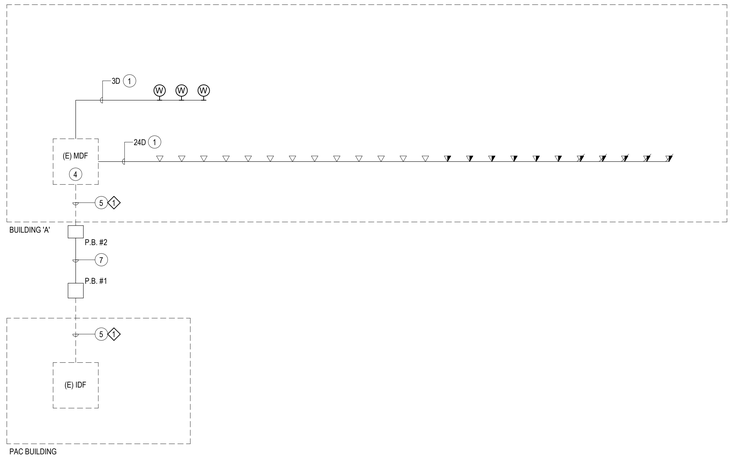
1. REFER TO 'GENERAL NOTES' ON ELECTRICAL LEGENDS AND NOTES SHEET FOR WIRING METHODS, MATERIALS, AND REQUIREMENTS.
2. ALL NEW CIRCUIT BREAKERS, PANELBOARDS AND TRANSFORMERS SHALL BE OF THE SAME MANUFACTURER.
3. ALL PANELBOARDS SHALL BE FULLY RATED FOR THE AVAILABLE FAULT UNLESS OTHERWISE NOTED.
4. THE FEEDER LENGTHS SHOWN ON THESE DRAWINGS ARE FOR CALCULATION PURPOSES ONLY AND ARE NOT VALID FOR BIDDING.
5. CONTRACTOR SHALL UPDATE ALL MODIFIED PANEL DIRECTORIES OR CREATE A NEW TYPED DIRECTORY, IF ONE DOES NOT EXIST, IDENTIFYING EACH CIRCUIT AND INSTALLED CIRCUIT LOADS, MOUNTED IN GLASS OR PLASTIC INSIDE DOOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING DIRECTORIES TO INDICATE ALL NEW CIRCUITS AND ACTUAL AREA SERVED WHICH IS NOT NECESSARILY THE DESCRIPTION INDICATED ON THE BID DOCUMENTS. USE A COMPUTER OR TYPEWRITER TO CREATE DIRECTORY; HANDWRITTEN DIRECTORIES ARE NOT ACCEPTABLE.
6. ALL SWITCHBOARDS, SWITCHGEAR AND PANELBOARDS AT OTHER THAN DWELLING UNITS SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT PER CEC 110.24. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT-CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. THE CALCULATION SHALL BE DOCUMENTED AND MADE AVAILABLE TO THOSE AUTHORIZED TO DESIGN, INSTALL, INSPECT, MAINTAIN, OR OPERATE THE SYSTEM. WHEN MODIFICATIONS TO THE ELECTRICAL INSTALLATION OCCUR THAT AFFECT THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SERVICE, THE MAXIMUM AVAILABLE FAULT CURRENT SHALL BE VERIFIED OR RECALCULATED AS NECESSARY TO ENSURE THE SERVICE EQUIPMENT RATINGS ARE SUFFICIENT FOR THE MAXIMUM AVAILABLE FAULT CURRENT AT THE LINE TERMINALS OF THE EQUIPMENT. THE REQUIRED FIELD MARKING(S) IN 110.24(A) SHALL BE ADJUSTED TO REFLECT THE NEW LEVEL OF MAXIMUM AVAILABLE FAULT CURRENT.
7. EQUIPMENT DATA AND CONFIGURATIONS SHOWN ON THE SINGLE LINE DIAGRAM PROVIDE GENERAL EQUIPMENT INFORMATION. CONTRACTOR SHALL REVIEW ELECTRICAL PLANS AND SPECIFICATIONS TO VERIFY ALL EQUIPMENT ASSOCIATED DESIGN INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY COMPONENTS REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION. ANY DISCREPANCIES BETWEEN DESCRIPTIONS, SPECIFICATIONS, AND EXISTING CONDITIONS ARE TO BE PRESENTED TO THE ENGINEER OF RECORD PRIOR TO COMPLETION OF THE BID PROCESS FOR CLARIFICATION. NO EQUIPMENT SHALL BE ORDERED UNTIL DISCREPANCIES ARE RESOLVED THROUGH A FORMAL RFI PROCESS.
8. GROUND ALL ELECTRICAL EQUIPMENT, BRANCH CIRCUITS, FEEDERS, PANEL AND DISTRIBUTION BOARDS, ELECTRICAL SERVICES, ETC. PER ADOPTED NEC ARTICLES 250.
9. ALL ELECTRICAL EQUIPMENT (I.E. SWITCHGEAR, TR

SIGNAL SYSTEM CABLE/CONDUIT SCHEDULE

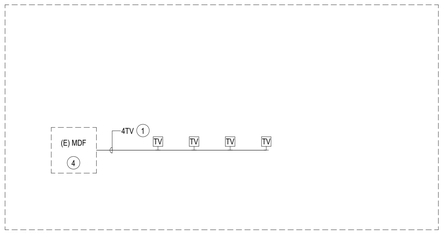
SYMBOL	SYSTEM	WIRE SIZE	DESCRIPTION	MAX NUMBER OF CABLE PER CONDUIT						
				3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
#D	DATA	8#24 UTP CAT 6		1	1	2-19	24	39	68	103
#F10	DATA	12MM 6 SM FIBER	FIBER OPTIC CABLE	-	-	3	4	7	12	16
#F20	DATA	18MM 12 SM FIBER	FIBER OPTIC CABLE	-	-	-	2	3	5	7
#PBB	PUBLIC ADDRESS	2#22 UTP 2#22 STP	CL2-355 WEST PENN	10	16	28	38	62	108	164
#UPAA	PUBLIC ADDRESS	2#22 STP	AQC-291 WEST PENN	6	10	18	25	41	71	107
#PC	PUBLIC ADDRESS	2#18 STP	CL2-293 WEST PENN	10	15	27	36	60	105	158
#PT	PUBLIC ADDRESS	2#18 STP	AQ-293 WEST PENN	3	5	8	11	18	31	47
#SEC	INTRUSION DETECTION	4#22 UTP	CL2-240 WEST PENN	12	19	33	45	74	129	195
#USEC	INTRUSION DETECTION	4#22 UTP	AQC-240 WEST PENN	7	11	20	27	44	77	116
#DS	INTRUSION DETECTION	2#22 UTP	CL2-221 WEST PENN	14	23	41	55	91	159	240
#CR	ACCESS CONTROL	2#14 UTP		1	3	6	8	14	24	37
#TV	TELEVISION	COAX CABLE		7	11	20	27	45	78	118

= QUANTITY OF CABLES NOTE:
CONDUIT SHALL BE SIZED AS LISTED ABOVE.

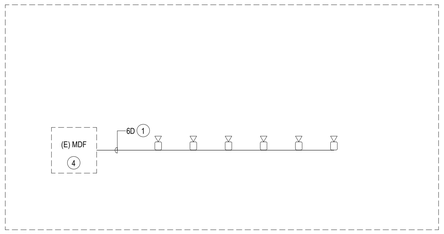
SIGNAL FEEDER SCHEDULE 4



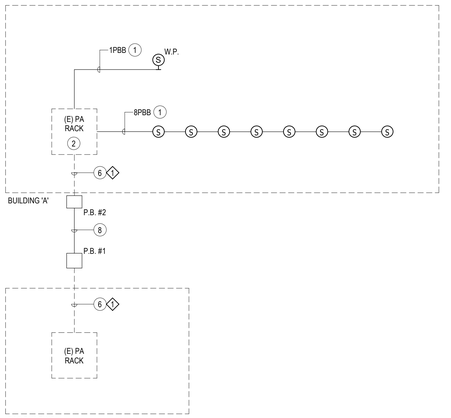
DATA RISER DIAGRAM 1



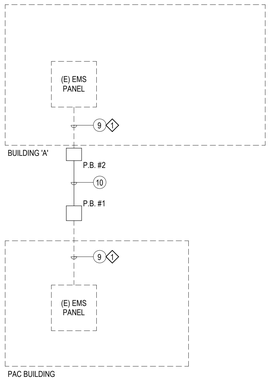
CATV RISER DIAGRAM 7



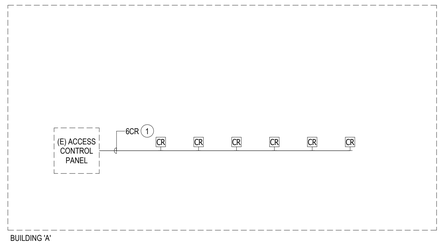
CCTV RISER DIAGRAM 5



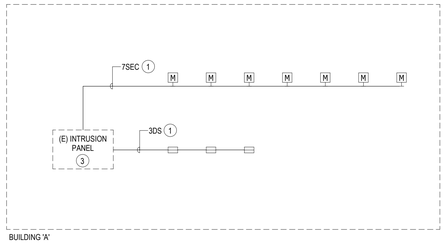
PA RISER DIAGRAM 2



EMS RISER DIAGRAM 8



ACCESS CONTROL RISER DIAGRAM 6



INTRUSION RISER DIAGRAM 3

GENERAL NOTES

1. REFER TO 'GENERAL NOTES' ON ELECTRICAL LEGENDS AND NOTES SHEET.
2. ALL SIGNAL CABLING, HARDWARE/SOFTWARE, PROGRAMMING AND TESTING SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR. ALL CABLING AND EQUIPMENT SHALL CONFORM TO SPECIFICATION SECTION 26 05 19.

DEMOLITION NOTES

1. REMOVE EXISTING CABLING BACK TO HEAD END EQUIPMENT IN PAC BUILDING. EXISTING CONDUIT TO REMAIN.

CONSTRUCTION NOTES

1. CABLING FURNISHED AND INSTALLED BY CONTRACTOR.
2. CONTRACTOR TO LAND NEW PA CABLES AT EXISTING PA RACK. PROGRAM NEW ZONES AT PA HEAD END EQUIPMENT LOCATED IN BUILDING 'A'. PROVIDE ALL NECESSARY HARDWARE, SOFTWARE, PROGRAMMING AND TESTING FOR A COMPLETE EXPANSION INSTALLATION.
3. CONTRACTOR TO LAND NEW INTRUSION CABLES AT EXISTING INTRUSION PANEL. PROGRAM NEW ZONES AT INTRUSION HEAD END EQUIPMENT LOCATED IN BUILDING 'A'. PROVIDE ALL NECESSARY HARDWARE, SOFTWARE, PROGRAMMING AND TESTING FOR A COMPLETE EXPANSION INSTALLATION.
4. CONTRACTOR TO LAND NEW DATA CABLES AT EXISTING MDF. PROVIDE ALL NECESSARY HARDWARE, SOFTWARE, PROGRAMMING AND TESTING FOR A COMPLETE INSTALLATION.
5. PROVIDE NEW DATA CABLING IN EXISTING CONDUITS AND RECONNECT EXISTING EQUIPMENT IN P.A.C. BUILDING TO EXISTING HEAD END EQUIPMENT IN BUILDING 'A'. QUANTITY AND SIZE OF CABLING TO MATCH EXISTING. CONTRACTOR SHALL PROVIDE ALL NECESSARY CONDUIT, CABLING, HARDWARE, SOFTWARE, PROGRAMMING AND TESTING AS NECESSARY FOR A COMPLETE RECONNECTION.
6. PROVIDE NEW PA CABLING IN EXISTING CONDUITS AND RECONNECT EXISTING EQUIPMENT IN P.A.C. BUILDING TO EXISTING HEAD END EQUIPMENT IN BUILDING 'A'. QUANTITY AND SIZE OF CABLING TO MATCH EXISTING. CONTRACTOR SHALL PROVIDE ALL NECESSARY CONDUIT, CABLING, HARDWARE, SOFTWARE, PROGRAMMING AND TESTING AS NECESSARY FOR A COMPLETE RECONNECTION.
7. PROVIDE NEW DATA CABLING IN NEW CONDUIT PATHWAY. REFER TO REMODEL SITE PLAN FOR CONDUIT SIZE.
8. PROVIDE NEW PA CABLING IN NEW CONDUIT PATHWAY. REFER TO REMODEL SITE PLAN FOR CONDUIT SIZE.
9. PROVIDE NEW EMS CABLING IN EXISTING CONDUITS AND RECONNECT EXISTING EQUIPMENT IN P.A.C. BUILDING TO EXISTING HEAD END EQUIPMENT IN BUILDING 'A'. QUANTITY AND SIZE OF CABLING TO MATCH EXISTING. CONTRACTOR SHALL PROVIDE ALL NECESSARY CONDUIT, CABLING, HARDWARE, SOFTWARE, PROGRAMMING AND TESTING AS NECESSARY FOR A COMPLETE RECONNECTION.
10. PROVIDE NEW EMS CABLING IN NEW CONDUIT PATHWAY. REFER TO REMODEL SITE PLAN FOR CONDUIT SIZE.

REGISTERED PROFESSIONAL ENGINEER — STEPHEN KENNEDY — No. 22839 — SIGNED:02/14/2025 — ELECTRICAL — STATE OF CALIFORNIA

LICENSED ARCHITECT — No. C-41126 — Exp.10-31-25 — STATE OF CALIFORNIA

STAMPS

AGENCY APPROVAL
File No: ########-##-#######

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-123900 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/18/2025

412 E. Vanderbilt Way
San Bernardino, CA 92408
Phone: 909.890.3700
Fax: 909.890.3770
Email: caadd@designwesteng.com
DESIGN WEST ENGINEERING
MECHANICAL - ELECTRICAL - ENERGY CONSULTANTS

CONSULTANT BRANDING

RUHNAU CLARKE ARCHITECTS

INDIAN SPRINGS HIGH SCHOOL HEALTH CENTER:

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