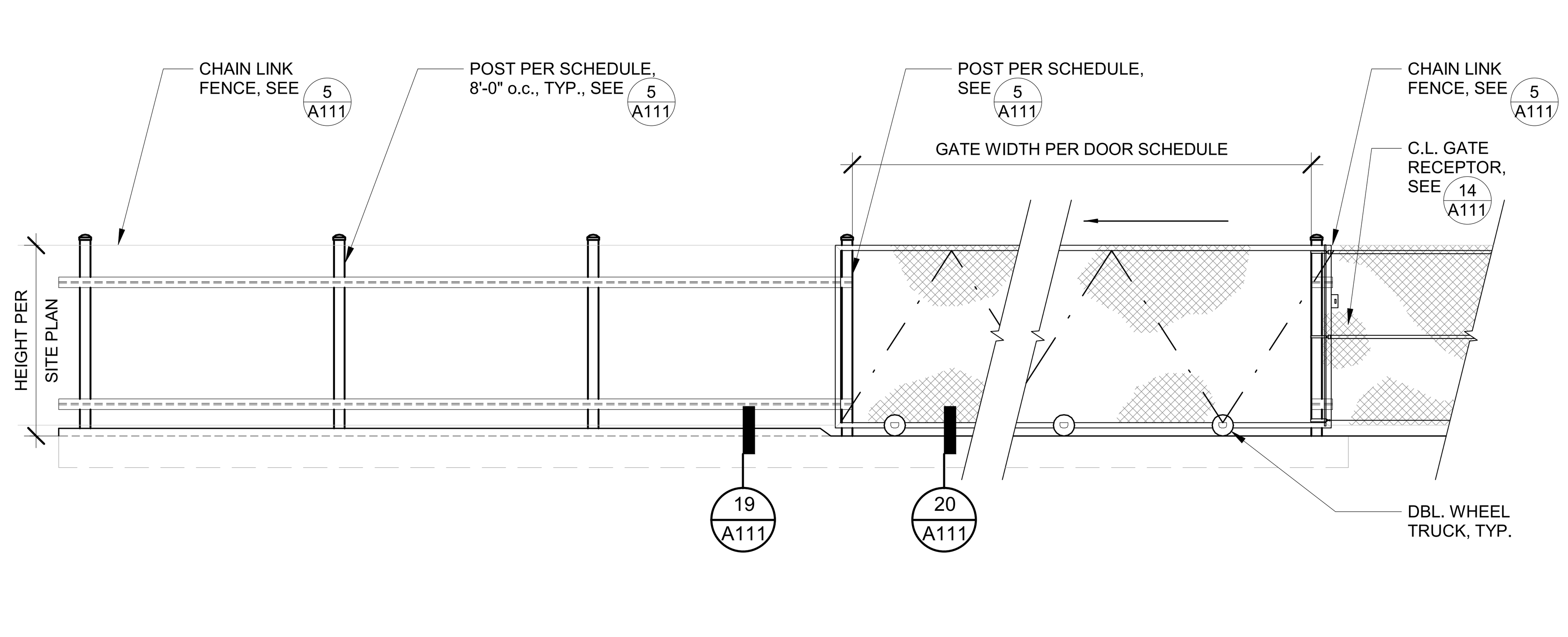
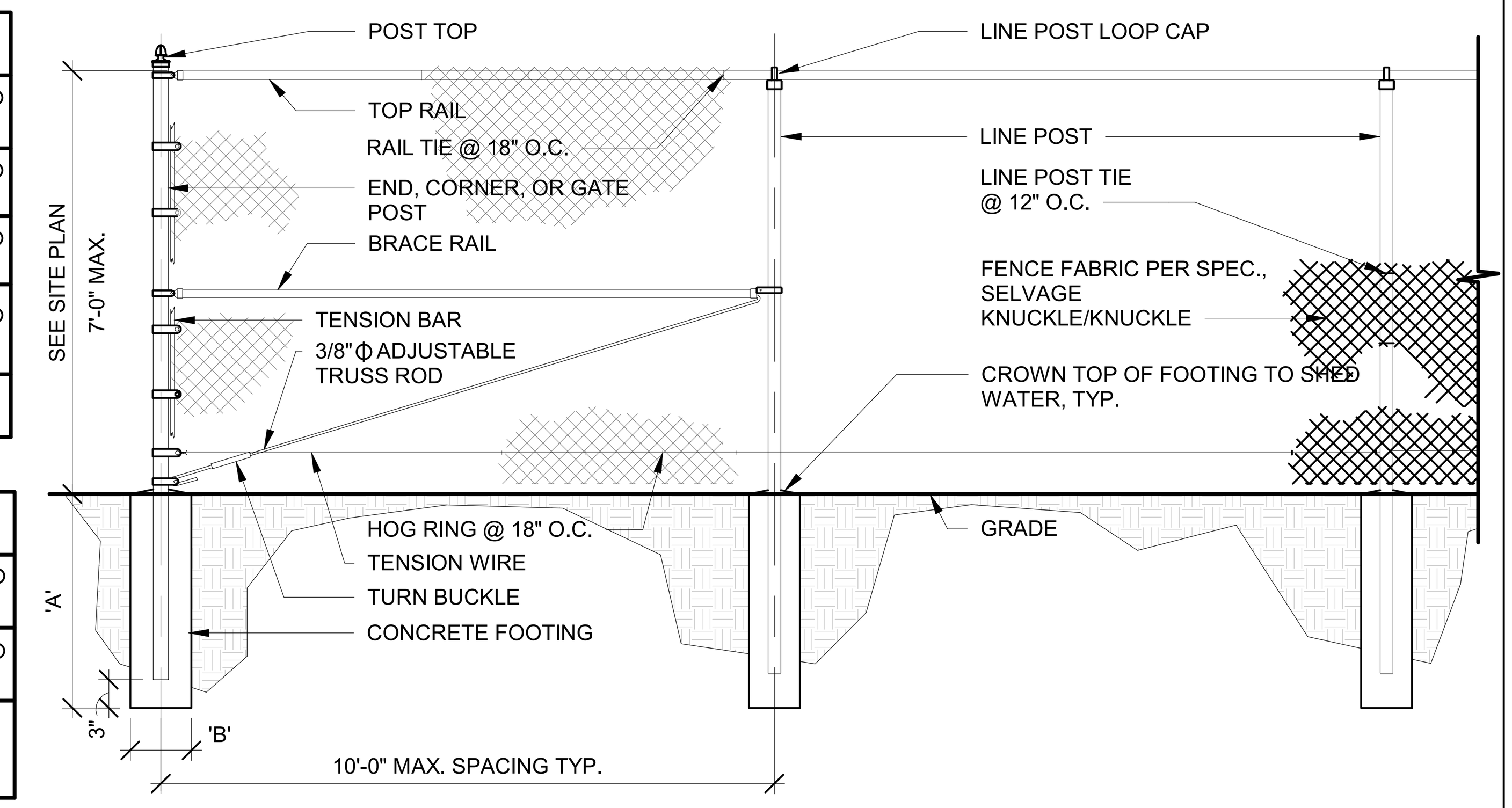


ROLLING GATE ELEVATION 1/4" = 1'-0" 13

6'-0" TALL CHAIN LINK FENCE	MEMBER SIZE:	'A'	'B'
LINE POSTS 10'-0" O.C. MAX.	1.90"Φ O.D. 2.72 PLF	30"	12"Φ
CORNER AND END POST	2.375"Φ O.D. 3.65 PLF	36"	12"Φ
GATE POST FOR LEAF TO 6'-0" WIDE	2.875"Φ O.D. 5.79 PLF	42"	12"Φ
GATE POST FOR LEAF 6'-0" TO 12'-0" WIDE	4.00"Φ O.D. 9.11 PLF	48"	16"Φ
TOP AND BRACE RAILS	1.66"Φ O.D. 2.27 PLF	--	--

6'-0" TALL CHAIN LINK ROLLING GATE	MEMBER SIZE:	'A'	'B'
LINE POSTS 8'-0" O.C. MAX.	4.00"Φ O.D. 9.11 PLF	30"	12"Φ
GATE POST FOR LEAF TO 30'-0" WIDE	4.00"Φ O.D. 9.11 PLF	48"	18"Φ
TOP AND BRACE RAILS	1.66" O.D. 2.27 PLF	--	--



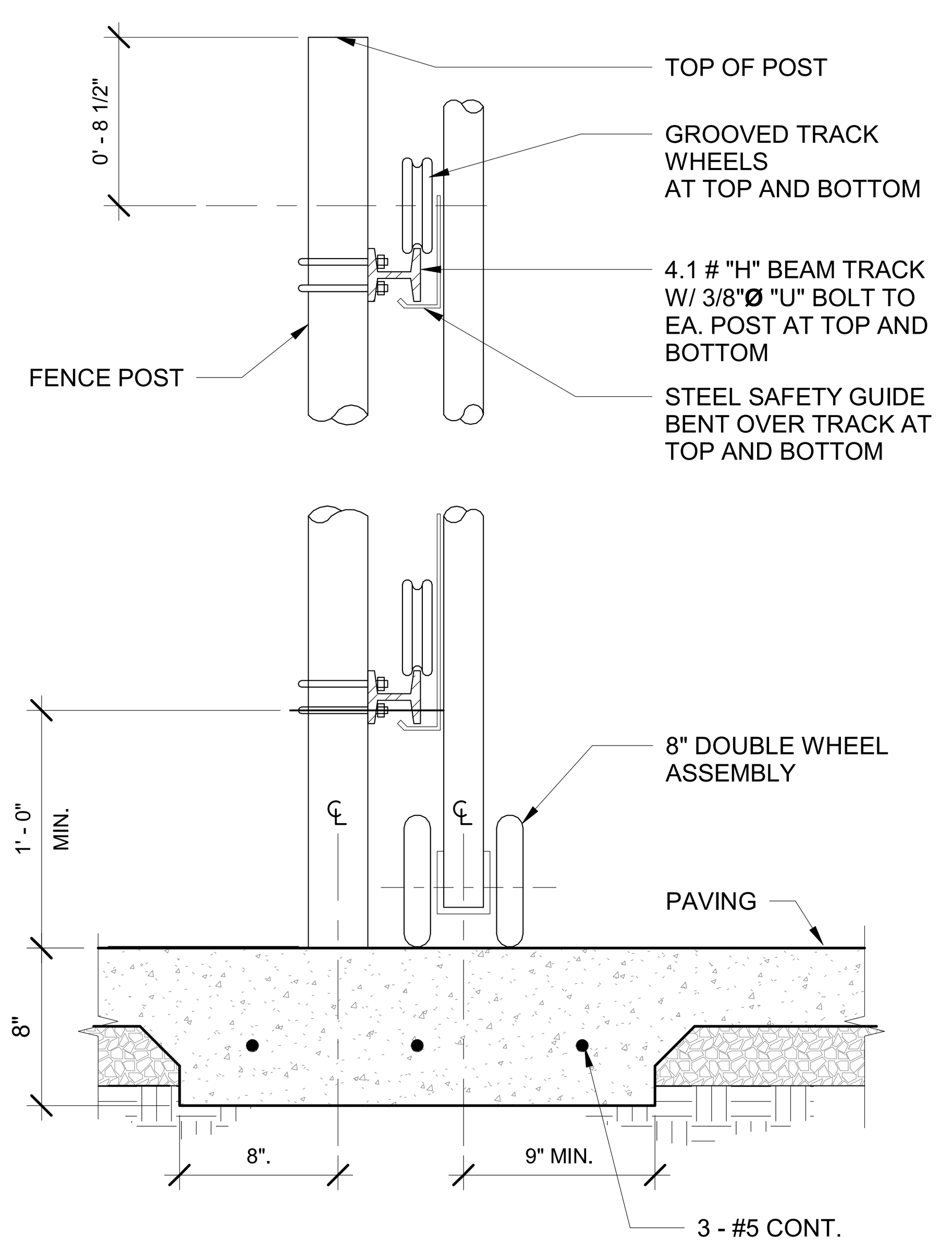
CHAIN LINK FENCING, TYP. 1/2" = 1'-0" 5

GATE SCHEDULE		
	6'-0" TALL CHAIN LINK FENCE, TYP.	WIDTH
G1	SINGLE ACCESSIBLE PEDESTRIAN GATE W/ PANIC HARDWARE 4 / A111	48"
G2	SINGLE ACCESSIBLE PEDESTRIAN GATE W/ PANIC HARDWARE 4 / A111	48"
G3	SINGLE ACCESSIBLE PEDESTRIAN GATE W/ PANIC HARDWARE 4 / A111	48"
G4	SINGLE ACCESSIBLE PEDESTRIAN GATE W/ PANIC HARDWARE 4 / A111	48"
G5	SINGLE SERVICE GATE W/ PADLOCK LATCH	48"
G6	SINGLE SERVICE GATE W/ PADLOCK LATCH	48"
G7	DOUBLE SERVICE GATE W/ PADLOCK LATCH	96"
G8	10' ROLLING GATE W/ PADLOCK LATCH	120"
G10	SINGLE SERVICE GATE W/ PADLOCK LATCH	48"
G11	SINGLE SERVICE GATE W/ PADLOCK LATCH	48"
G12	DOUBLE SERVICE GATE W/ PADLOCK LATCH	96"

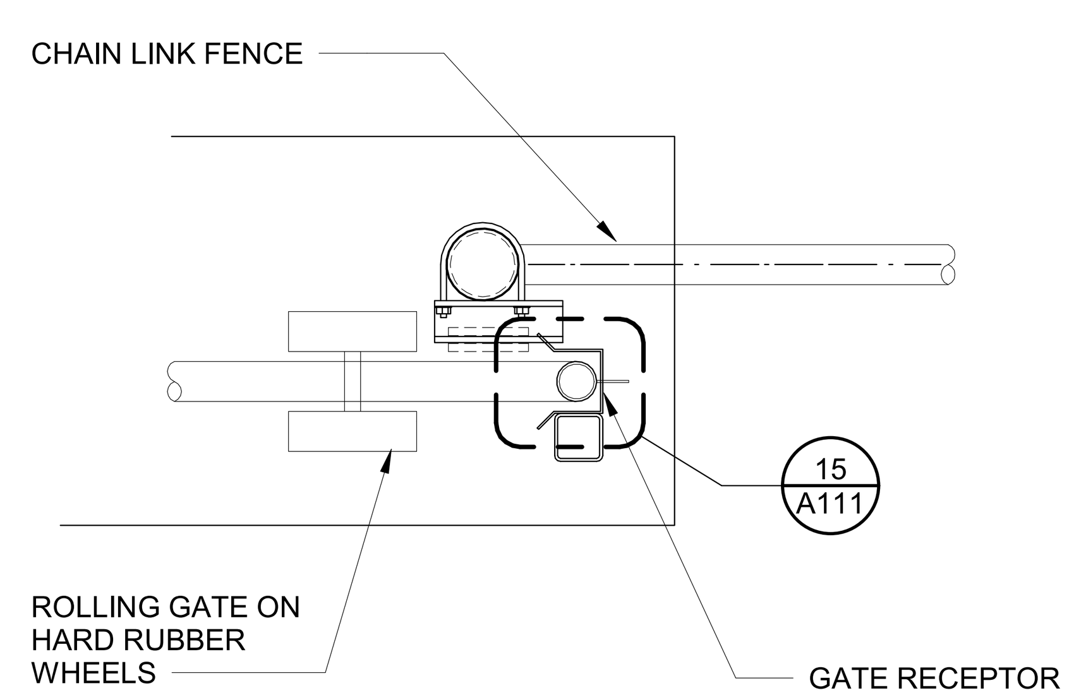
SEE SITE PLAN

GATE SCHEDULE 1

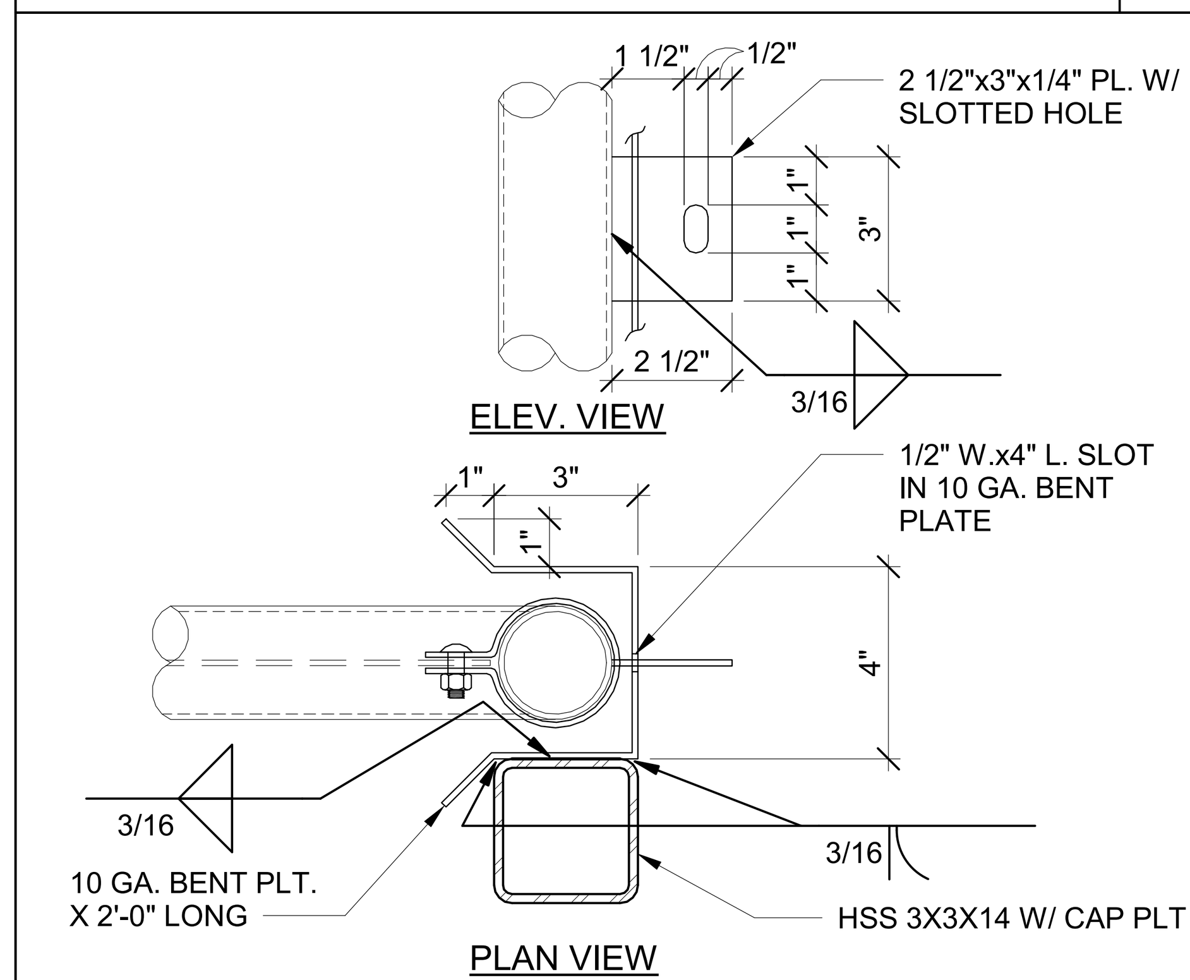
NOTE: CHAIN LINK FENCE FABRIC NOT SHOWN FOR CLARITY



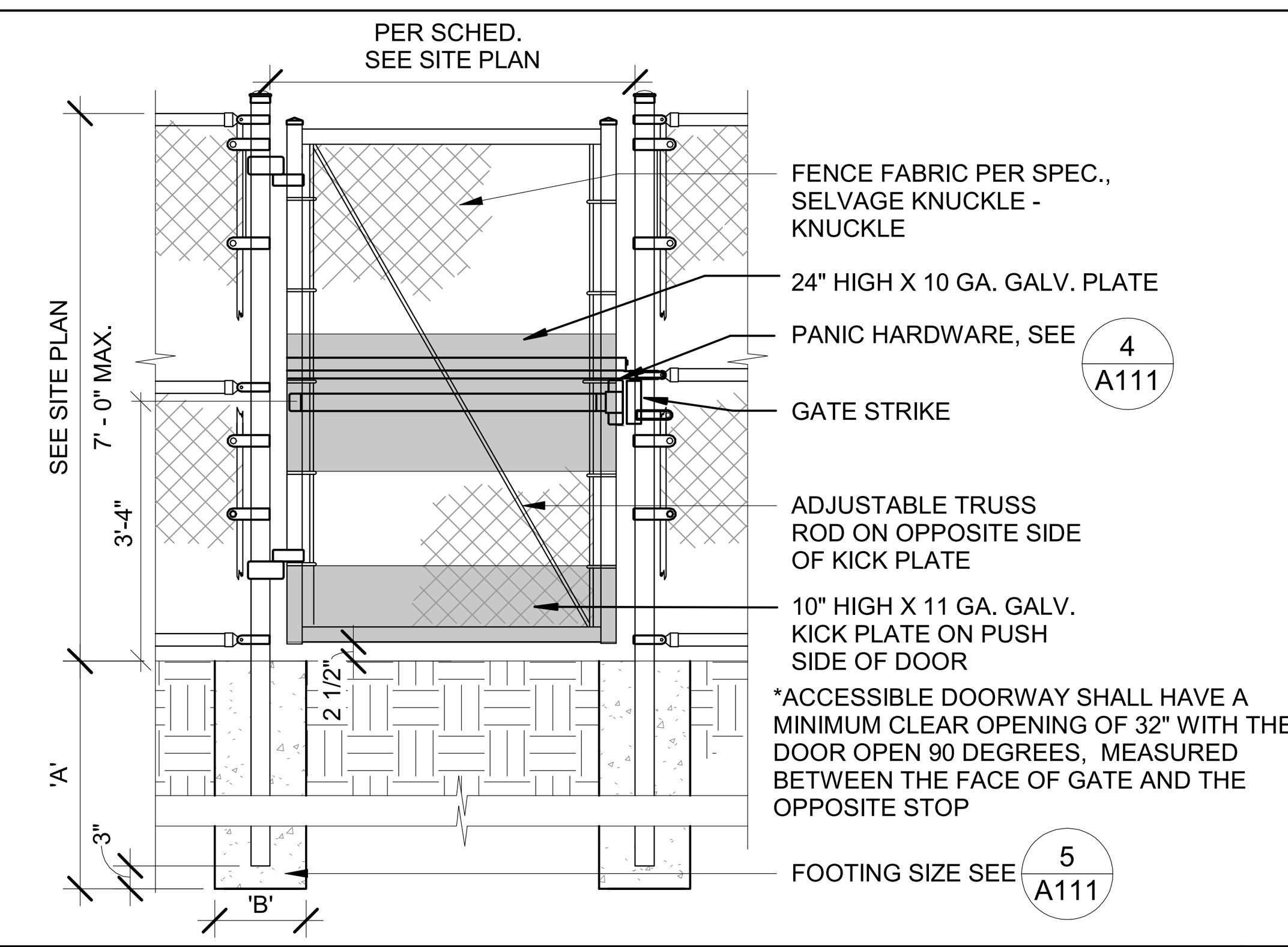
ROLLING C.L. GATE 1 1/2" = 1'-0" 19



C.L. GATE RECEPTOR 1" = 1'-0" 14



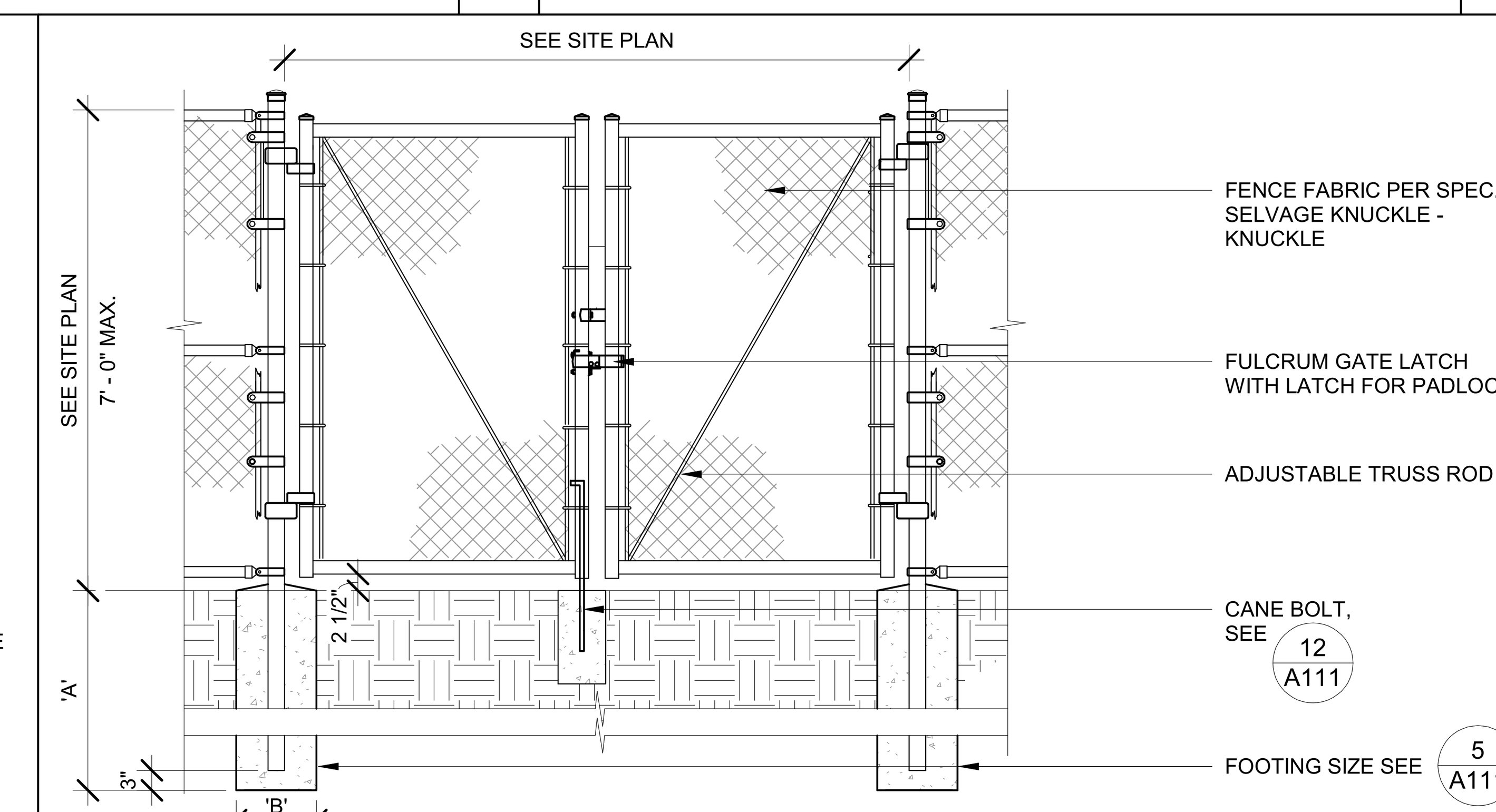
C.L. GATE RECEPTOR 3" = 1'-0" 15



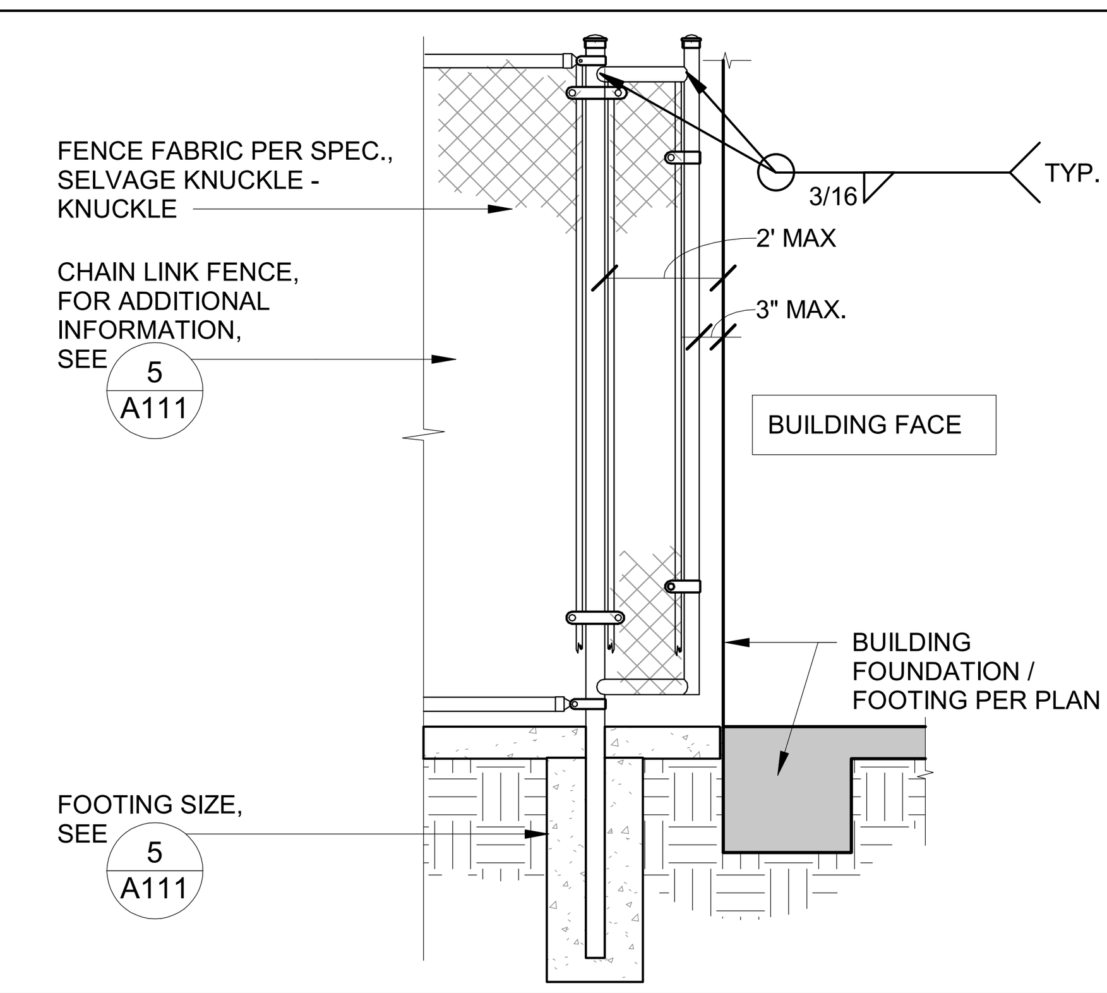
ANY CAVITIES CREATED BY KICK PLATE TO BE CAPPED PER 11B-404.2.10

ACCESSIBLE GATE TO COMPLY WITH 11B-309.4

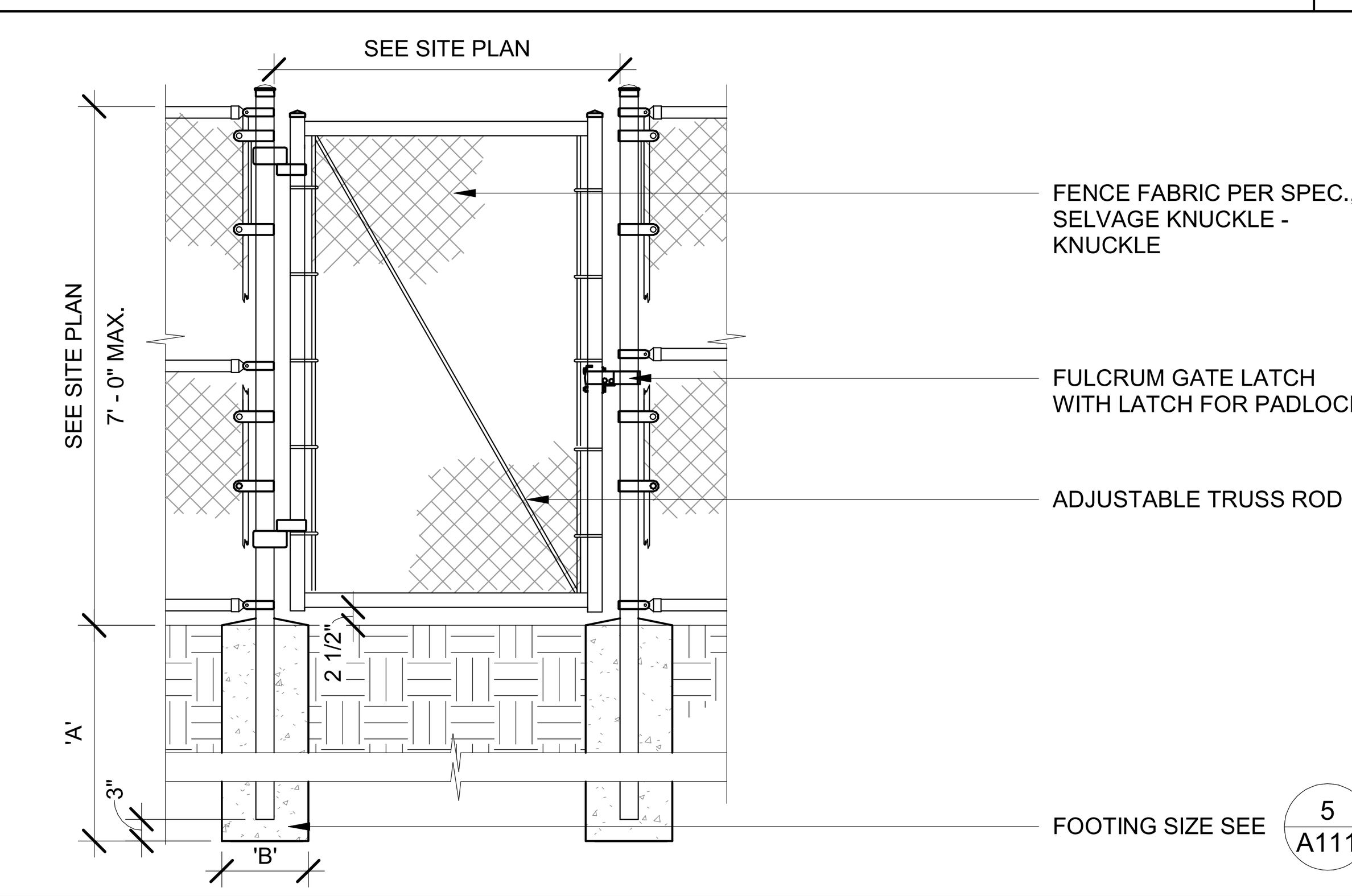
CHAIN LINK FENCE ACCESSIBLE GATE 1/2" = 1'-0" 6



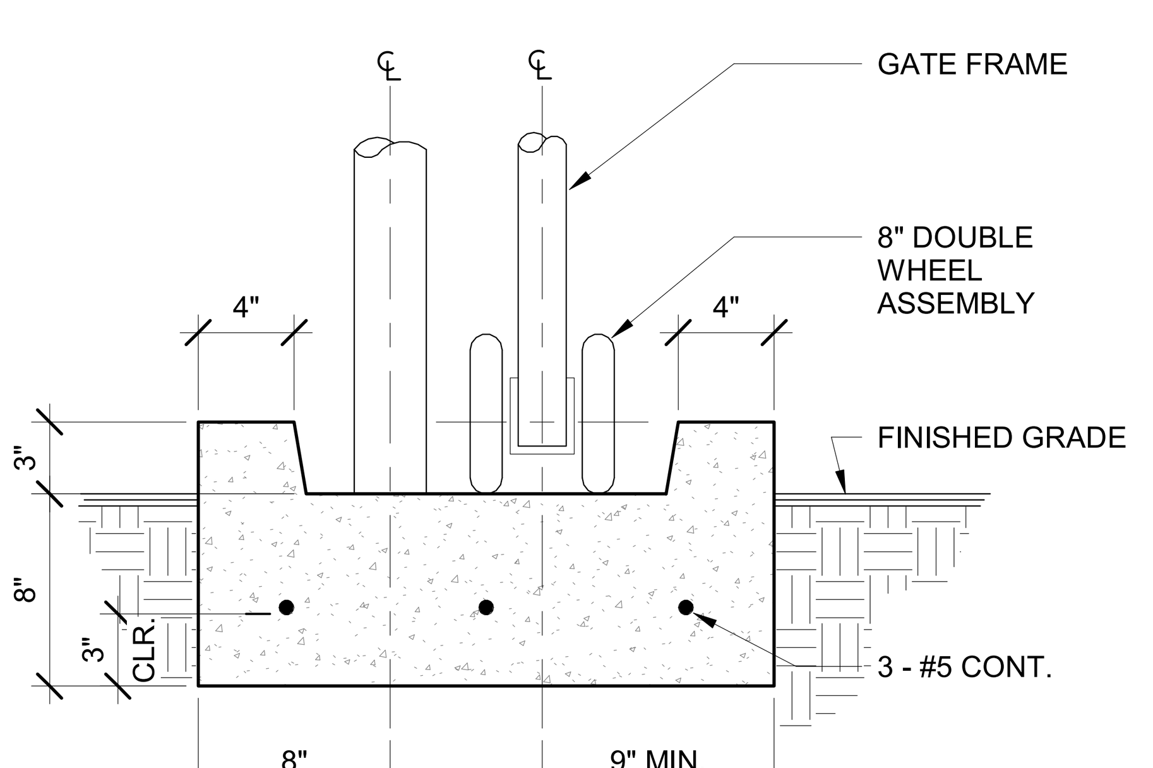
CHAIN LINK PAIR OF GATES 1/2" = 1'-0" 2



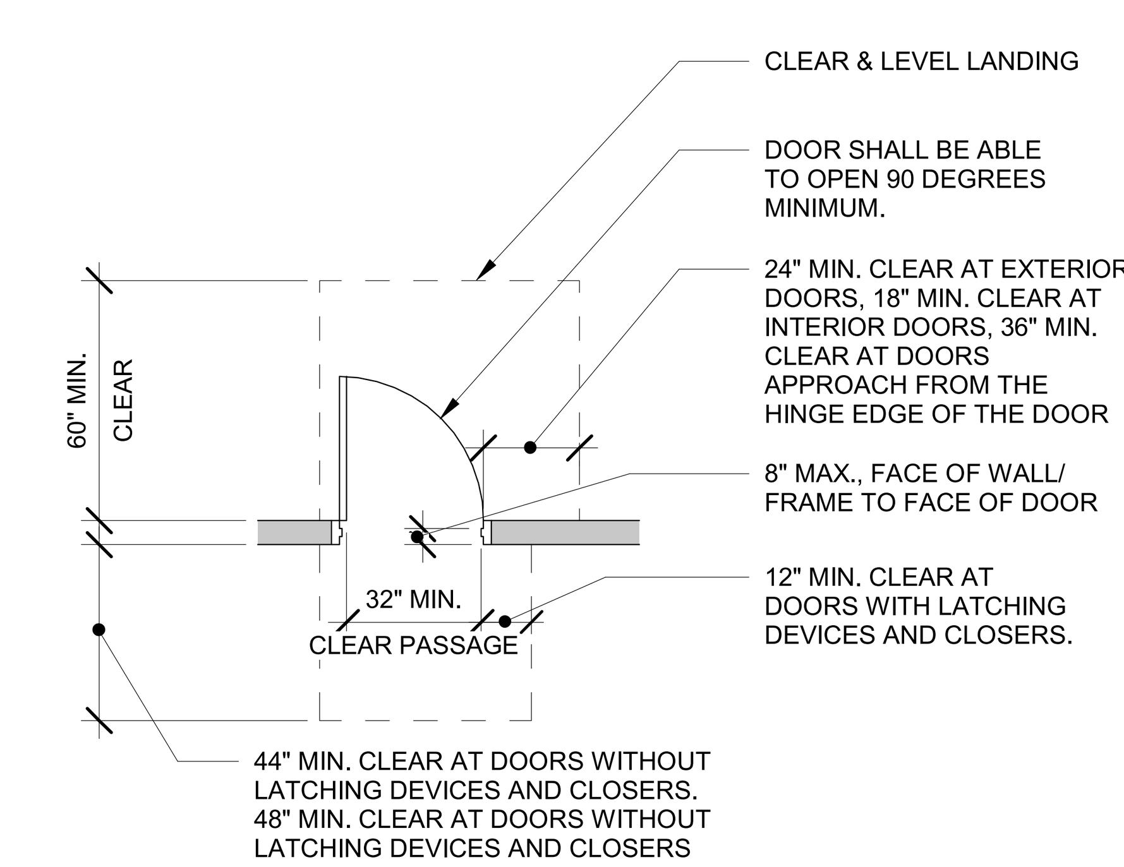
CHAIN LINK FENCE AT BLDG. 1/2" = 1'-0" 7



CHAIN LINK SERVICE GATE, TYP. 1/2" = 1'-0" 3

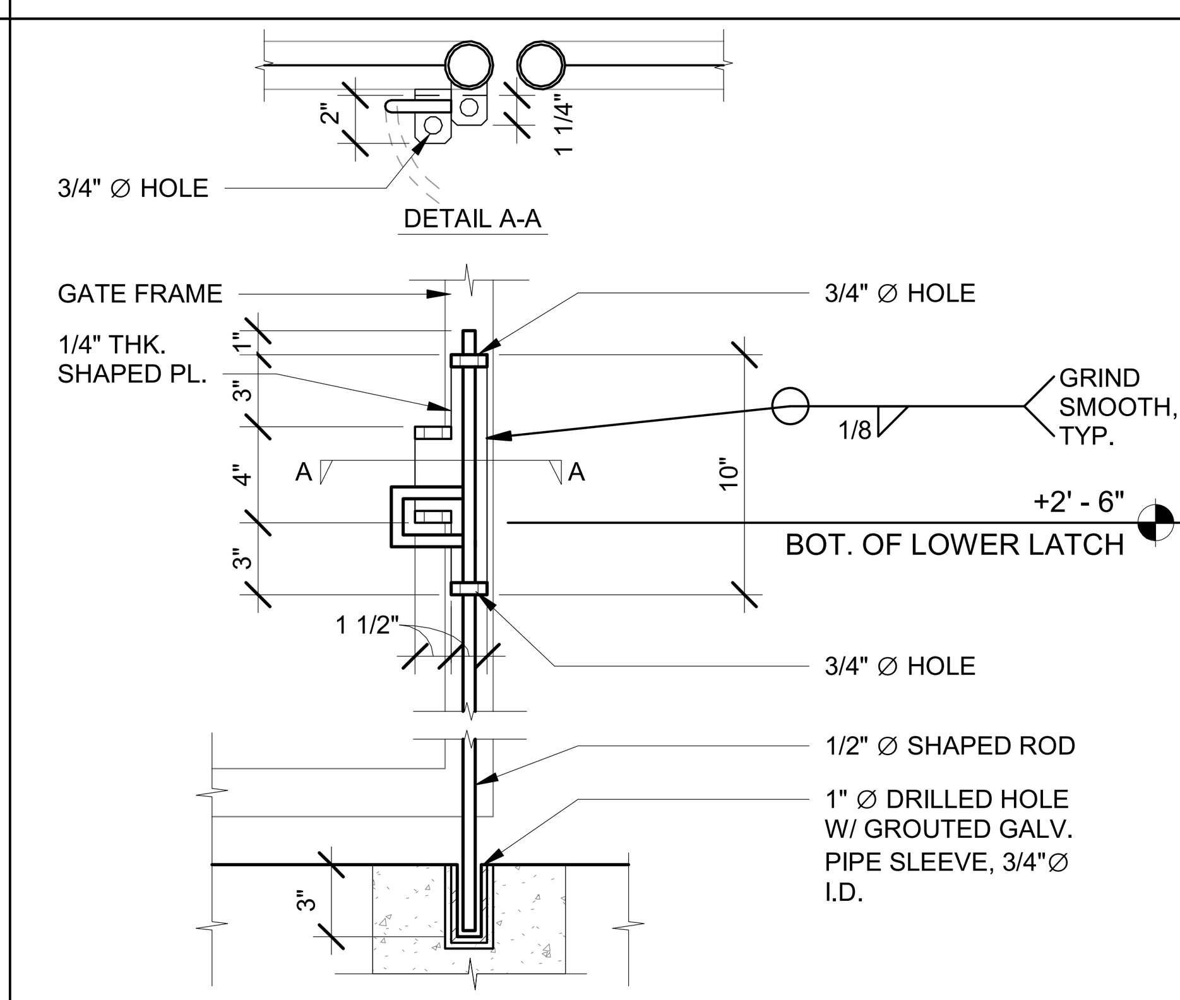


ROLLING GATE RETURN 1 1/2" = 1'-0" 20

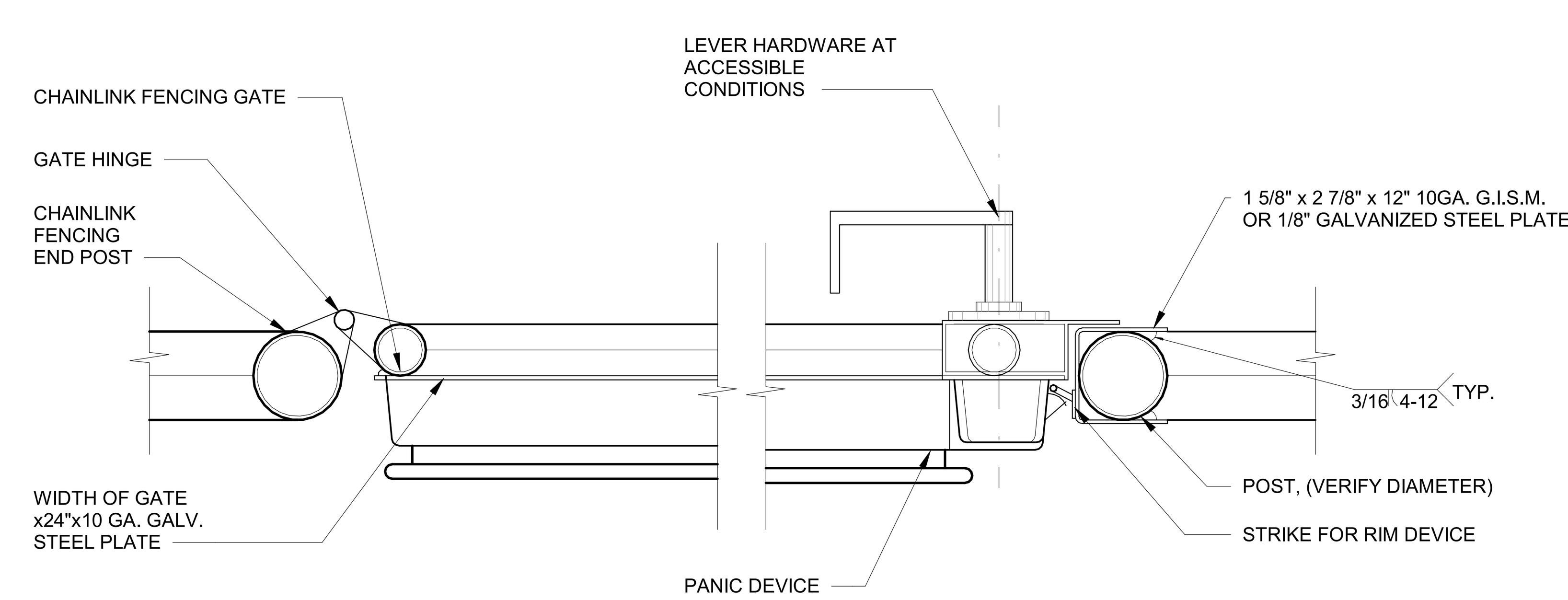


SRH_12_2019

ACCESSIBLE DOOR CLEARANCE 1/4" = 1'-0" 16



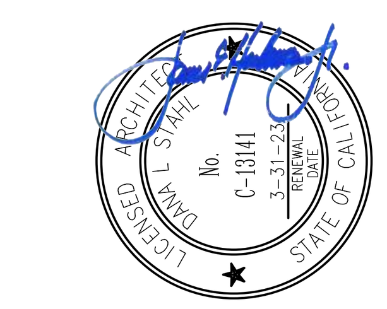
CANE BOLT 1 1/2" = 1'-0" 12



SRH_12_2019

GATE PANIC HARDWARE 1 1/2" = 1'-0" 4

MARK	DATE	DESCRIPTION
CD	11/28/2022	DSA BACKCHECK



TETER, LLP
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED
TETER

LOS BANOS CHILD DEVELOP. CENTER
MERCED COLLEGE | MCCD
22240 CA-152 LOS BANOS, CA.

DRAWING TITLE
SITE DETAILS

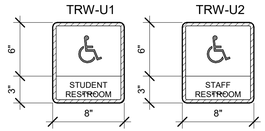
PROJECT NO.
22-12075

DRAWING
A111

INCREMENT

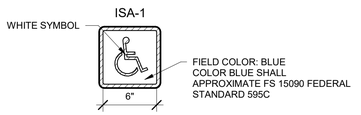
TYPICAL ROOM IDENTIFICATION

WALL MOUNTED TOILET SIGNAGE AT ACCESSIBLE TOILETS (TRW)



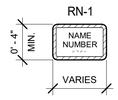
WALL MOUNTED ACCESSIBLE ACCESS SIGN (ISA)

SYMBOL SHALL COMPLY WITH CBC 11B-703.7.2.1

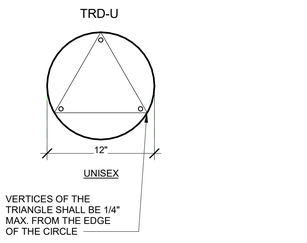


WALL MOUNTED IDENTIFICATION SIGNAGE @ FUNCTIONAL ROOMS (RN)

COORDINATE ROOM NAME AND NUMBER WITH OWNER PRIOR TO FABRICATION.
DO NOT USE IDENTIFICATION FOUND ON THE DRAWINGS, U.N.O.

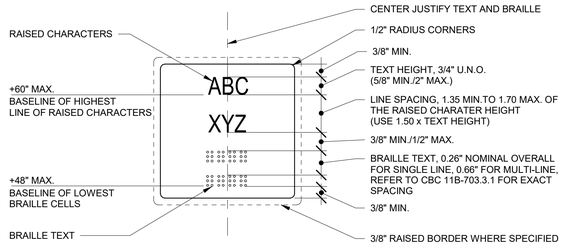


TOILET ROOM DOOR IDENTIFICATION SYMBOL (TRD)

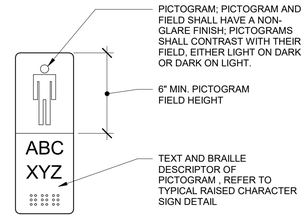


NOTES:

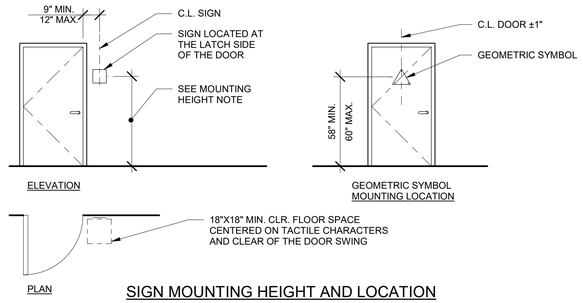
1. SYMBOLS SHALL BE 1/4" THICK; UNISEX SYMBOLS SHALL CONSIST OF A 1/4" THICK TRIANGLE ON A 1/4" THICK CIRCLE.
2. THE COLOR OF THE SYMBOL SHALL CONTRAST WITH THE COLOR OF THE DOOR; FOR UNISEX SIGNS, THE COLOR OF THE CIRCLE SHALL CONTRAST WITH THE DOOR AND THE COLOR OF THE TRIANGLE SHALL CONTRAST WITH THE CIRCLE; CONTRAST SHALL BE LIGHT ON DARK OR DARK ON LIGHT.
3. SYMBOLS SHALL NOT CONTAIN BRAILLE OR WRITTEN TEXT.
4. PICTOGRAMS ARE NOT A REQUIRED FEATURE BUT MAY BE INCLUDED. EXECPT AT UNISEX RESTROOMS WHERE PICTOGRAMS SYMBOLS ARE NOT PERMITED.
5. EDGES OF SYMBOLS SHALL BE EASED OR ROUNDED AT 1/16" MINIMUM OR CHAMFERED AT 1/8" MAXIMUM. VERTICES OF TRIANGLES SHALL BE RADIUSED BETWEEN 1/8" MIN./ 1/4" MAX.
6. SYMBOLS SHALL BE LOCATED ON DOORS TO TOILET ROOMS, WHERE NO DOORS ARE PROVIDED, SYMBOLS SHALL BE LOCATED ON THE WALL ADJACENT TO THE ENTRANCE OPENING.



TYPICAL ROOM IDENTIFICATION OR TACTILE EXIT SIGN



SIGN WITH PICTOGRAM



SIGN MOUNTING HEIGHT AND LOCATION

NOTES:

GENERAL: SIGNAGE SHALL COMPLY WITH CBC SECTION 11B-703, RAISED CHARACTER SIGNS SHALL COMPLY WITH CBC 11B-703.2, 11B-703.3 AND 11B-703.4

RAISED CHARACTERS (CBC 11B-703.2): RAISED CHARACTERS (TEXT) SHALL COMPLY WITH CBC SECTION 11B-703.2 AND SHALL BE DUPLICATED IN BRAILLE. RAISED CHARACTERS SHALL BE UPPER CASE AND BE RAISED 1/32-INCH MINIMUM ABOVE THEIR BACKGROUND. CHARACTERS SHALL BE SANS SERIF AND NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OTHER UNUSUAL FORMS. CHARACTERS 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". CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8-INCH MINIMUM AND 2 INCHES MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER. TEXT SHALL BE IN A HORIZONTAL FORMAT. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.

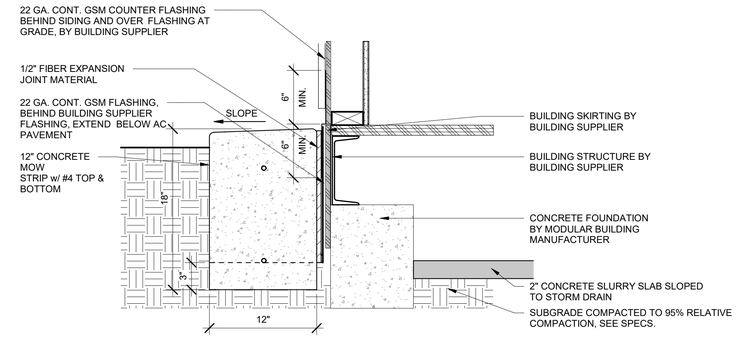
BRAILLE (CBC 11B-703.3): BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH CBC SECTIONS 11B-703.3. BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH CBC TABLE 703.3.1. BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, CENTER JUSTIFIED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8 INCH MINIMUM AND 1/2 INCH MAXIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8 INCH MINIMUM AND FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

MOUNTING HEIGHT (CBC 11B-703.4.1): TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48 INCHES MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE LOWEST BRAILLE CELLS AND 60 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FORM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS.

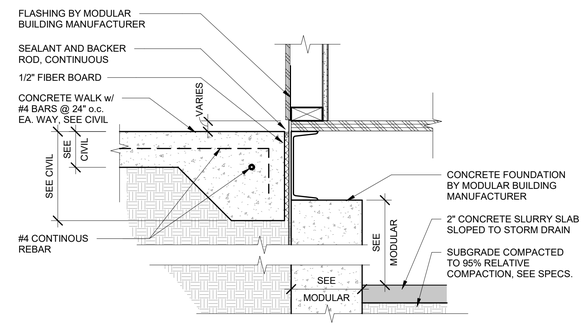
LOCATION (CBC 11B-703.4.2): SIGNS SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES MINIMUM BY 18 INCHES MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION. WHERE PROVIDED, SIGNS IDENTIFYING PERMANENT ROOMS AND SPACES SHALL BE LOCATED AT THE ENTRANCE TO, AND OUTSIDE OF THE ROOM OR SPACE. WHERE PROVIDED, SIGNS IDENTIFYING EXITS SHALL BE LOCATED AT THE EXIT DOOR WHEN APPROACHED IN THE DIRECTION OF EGRESS TRAVEL.

PICTOGRAMS (CBC 11B-703.6): PICTOGRAMS SHALL HAVE A FIELD HEIGHT OF 6 INCHES MINIMUM, CHARACTERS AND BRAILLE SHALL NOT BE LOCATED IN THE PICTOGRAM FIELD. PICTOGRAMS AND THEIR FIELD SHALL HAVE A NON-GLARE FINISH, PICTOGRAMS SHALL CONTRAST WITH THEIR FIELD WITH EITHER A LIGHT PICTOGRAM ON A DARK FIELD OR A DARK PICTOGRAM ON A LIGHT FIELD. PICTOGRAMS SHALL HAVE TEXT DESCRIPTORS LOCATED DIRECTLY BELOW THE PICTOGRAM FIELD AND BRAILLE TRANSLATION BELOW TEXT DESCRIPTION, TEXT DESCRIPTORS SHALL COMPLY WITH CBC SECTIONS 11B-703.2, 11B-703.3, AND 11B-703.4.1.

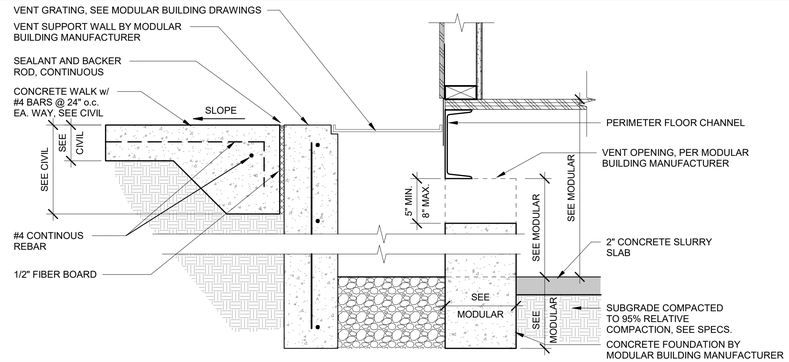
ACCESSIBLE BUILDING SIGNAGE — 1 1/2" = 1'-0" — 11



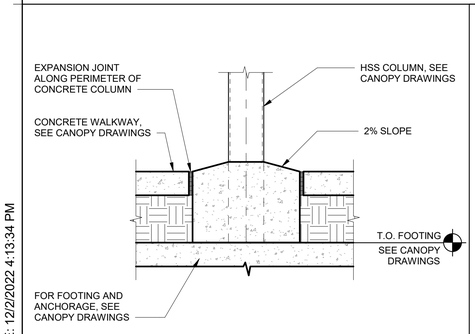
CONCRETE MOW STRIP AT MODULAR BUILDINGS — 1 1/2" = 1'-0" — 1



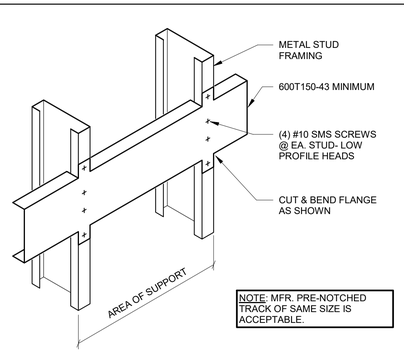
CONCRETE WALK AT MODULAR BUILDINGS — 1 1/2" = 1'-0" — 2



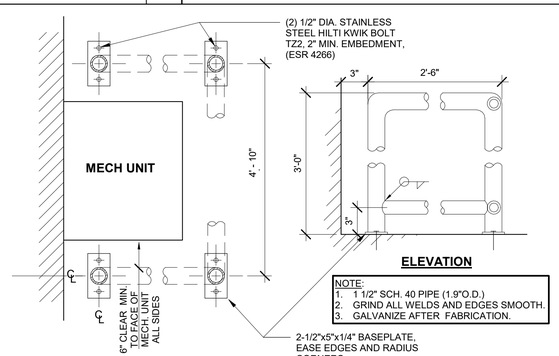
CONCRETE WALK AT MODULAR BUILDING VENT — 1 1/2" = 1'-0" — 3



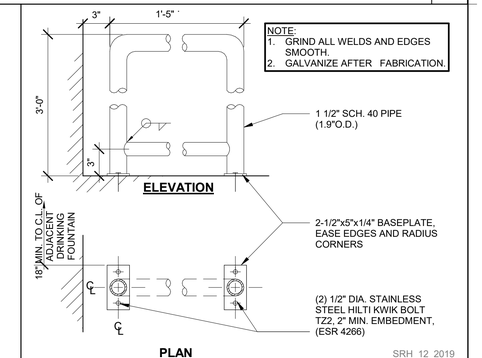
CONCRETE COLUMN SECTION — 1" = 1'-0" — 20



METAL STUD BACKING — 12" = 1'-0" — 12



MECH. UNIT GUARD RAIL — 1 1/2" = 1'-0" — 8



SRH_12_2019

DRINKING FOUNT. GUARD RAIL — 1 1/2" = 1'-0" — 4

PLOT DATE: 12/2/2022 4:13:34 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

MARK	DATE	DESCRIPTION
CD	11/28/2022	DSA BACKCHECK

LICENSED ARCHITECT — No. C-13141 — STATE OF CALIFORNIA

TETER, LLP
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

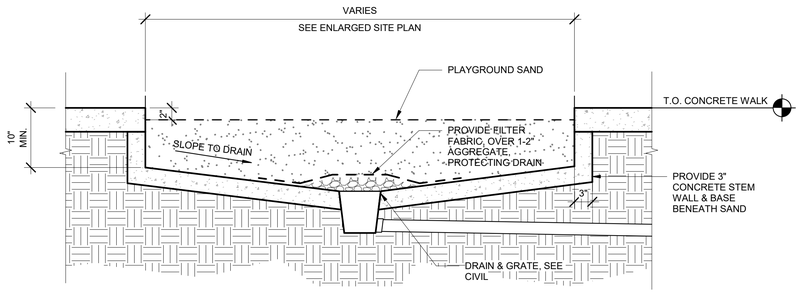
LOS BANOS
CHILD DEVELOP. CENTER
MERCED COLLEGE | MCCD
22240 CA-152 LOS BANOS, CA.

DRAWING TITLE
BUILDING / SITE DETAILS

PROJECT NO.
22-12075

DRAWING
A112

INCREMENT



SANBOX DRAINAGE DETAIL 1" = 1'-0" 1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

MARK	DATE	DESCRIPTION
CD	11/28/2022	DSA BACKCHECK

LICENSED ARCHITECT
Lic No. C23801
REN. 7-31-23
STATE OF CALIFORNIA

TETER, LLP
ARCHITECTS ENGINEERS CONNECTED
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO

TETER

LOS BANOS
CHILD DEVELOP. CENTER
MERCED COLLEGE | MCCD
22240 CA-152 LOS BANOS, CA.

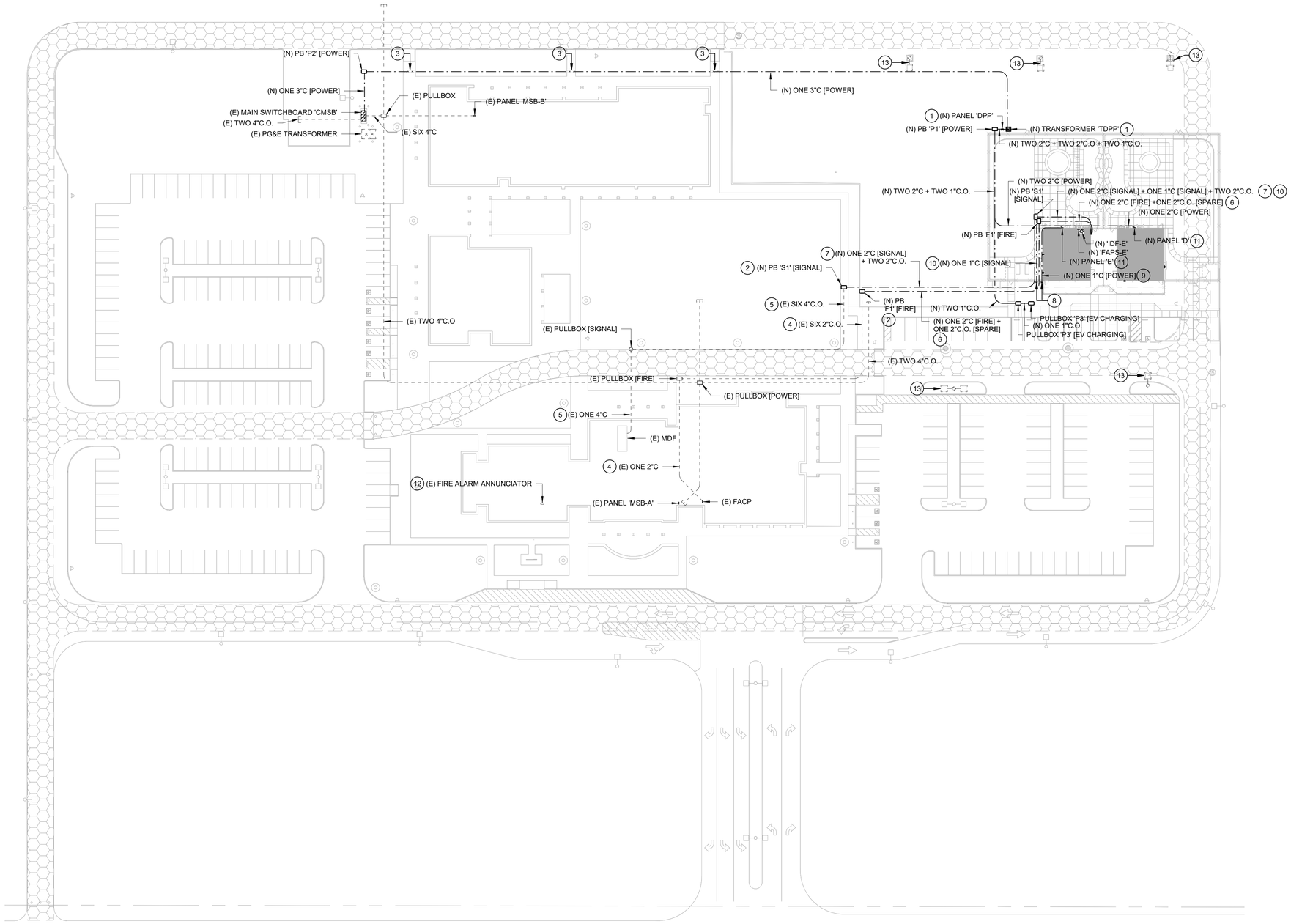
DRAWING TITLE
SITE DETAILS

PROJECT NO.
22-12075

DRAWING
A113

INCREMENT

PLOT DATE: 12/2/2022 4:13:35 PM



KEYNOTES

1. INSTALL PER DETAIL 12/E600.
2. PROVIDE (N) PULLBOX AT (E) CONDUIT LOCATION. PROVIDE SWEEPS ON EXISTIN GUNDERGROUND CONDUIT TO TURN UP INTO (N) PULL BOX TO FACILITATE USE OF EXISTING UNDERGROUND CONDUITS.
3. SAW CUT AND PATCH (E) CONCRETE TO FACILITATE CONDUIT INSTALLATION.
4. PROVIDE ONE TYPE 'FAS' CABLE IN ONE (E) 2" UNDERGROUND CONDUIT.
5. PROVIDE ONE TYPE 'FO' CABLE IN ONE (E) 4" UNDERGROUND CONDUIT.
6. PROVIDE ONE 2"C WITH ONE TYPE 'FAS' CABLE + ONE 2"C.O. (SPARE).
7. PROVIDE ONE 2"C WITH ONE TYPE 'FO' CABLE + ONE 2"C.O. (SPARE).
8. PROVIDE 120V POWER CONNECTION AND DATA CONNECTION TO IRRIGATION CONTROLLER.
9. PROVIDE ONE 1"C, 2#12 CU THWN AND 1#12 CU GND.
10. PROVIDE ONE 1"C WITH ONE TYPE 'D' CABLE.
11. PANEL PROVIDED BY MODULAR BUILDING MANUFACTURER.
12. (E) FIRE ALARM ANNUNCIATOR TO REMAIN.
13. (E) POLE MOUNTED SITE LIGHTING TO REMAIN.

GENERAL NOTES

A. PROVIDE ELECTRICAL FEEDERS PER SINGLE LINE DIAGRAM ON E700.

B. PROVIDE PULLBOXES PER DETAIL 3/E600.

C. SITE CONDUITS SHALL BE INSTALLED A MINIMUM OF 36" BELOW FINAL GRADE TO TOP OF CONDUIT.

D. SPECIAL PRECAUTION SHALL BE TAKEN WHEN TRENCHING TO LOCATE, PROTECT AND PRESERVE EXISTING UNDERGROUND UTILITIES. ANY DAMAGE CAUSED DURING THE COURSE OF CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED.

NORTH

ELECTRICAL SITE PLAN

1" = 40'-0" | 1

BID DOCUMENTS ONLY
DSA APPROVED DOCUMENTS
REQUIRED PRIOR TO CONSTRUCTION

MARK	DATE	DESCRIPTION
	12/02/2022	DSA BACKCHECK

TETER, LLP
ARCHITECTS ENGINEERS CONNECTED
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO

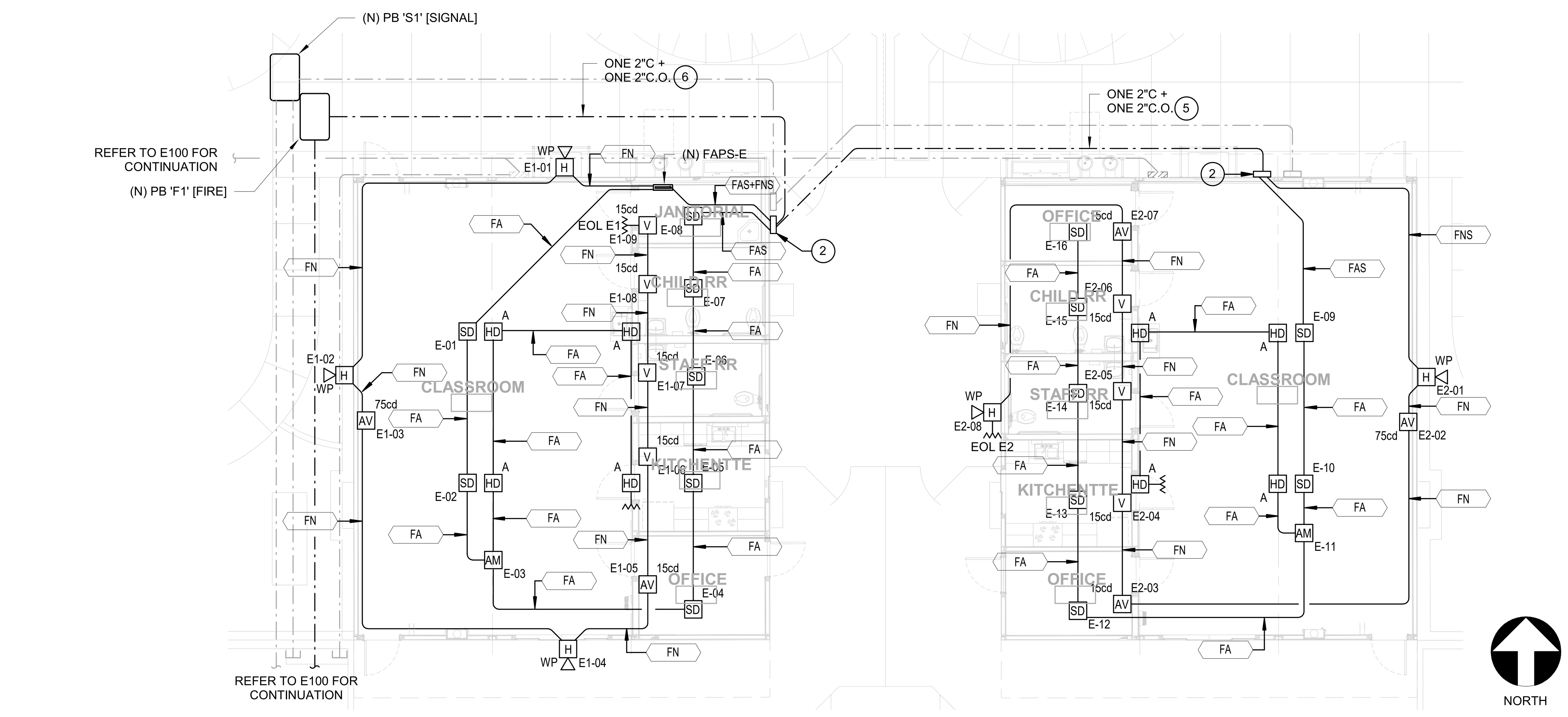
LOS BANOS
CHILD DEVELOP. CENTER
MERCED COLLEGE | MCCD
22240 CA-152 LOS BANOS, CA.

DRAWING TITLE
ELECTRICAL SITE PLAN

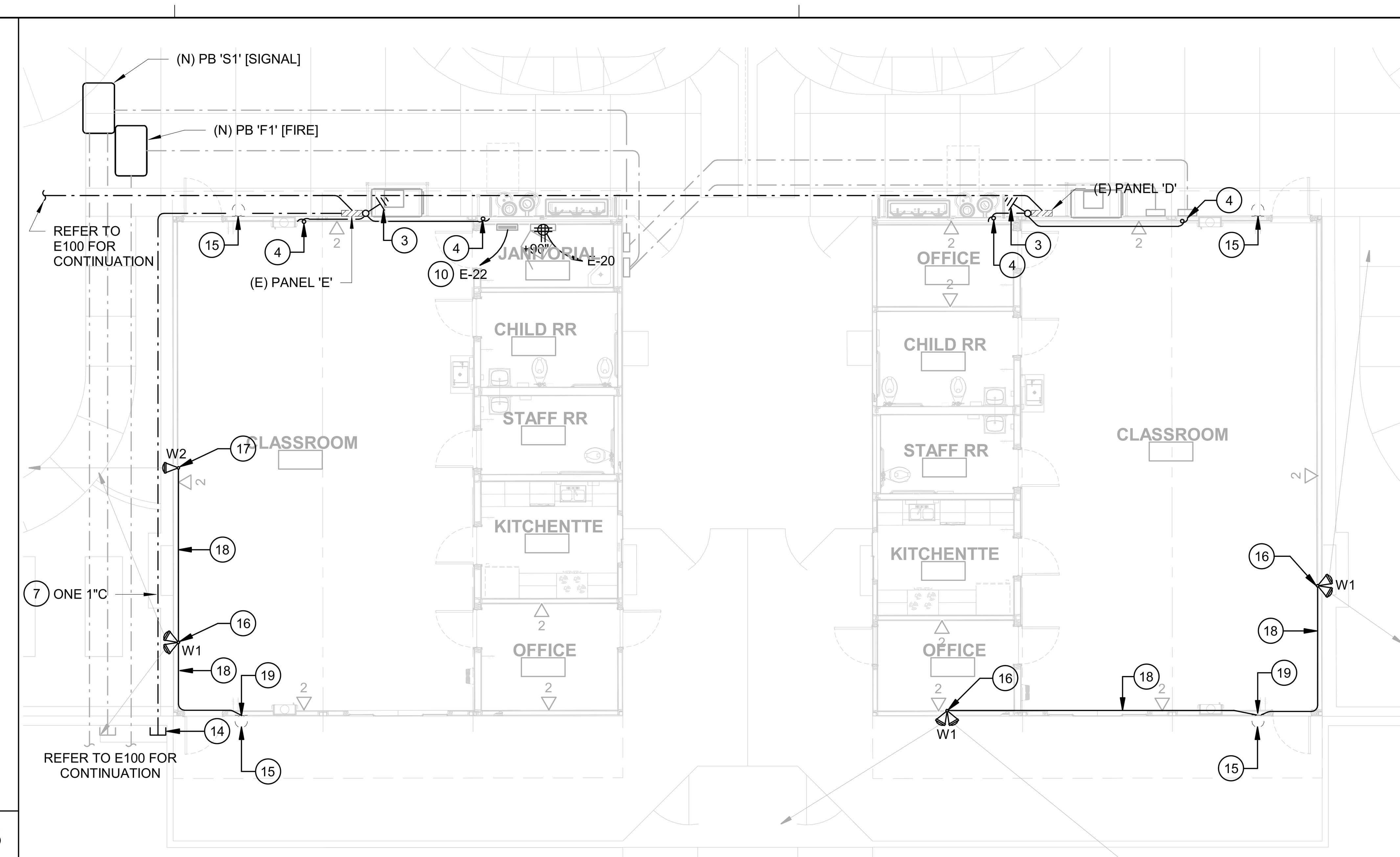
PROJECT NO.
22-12075

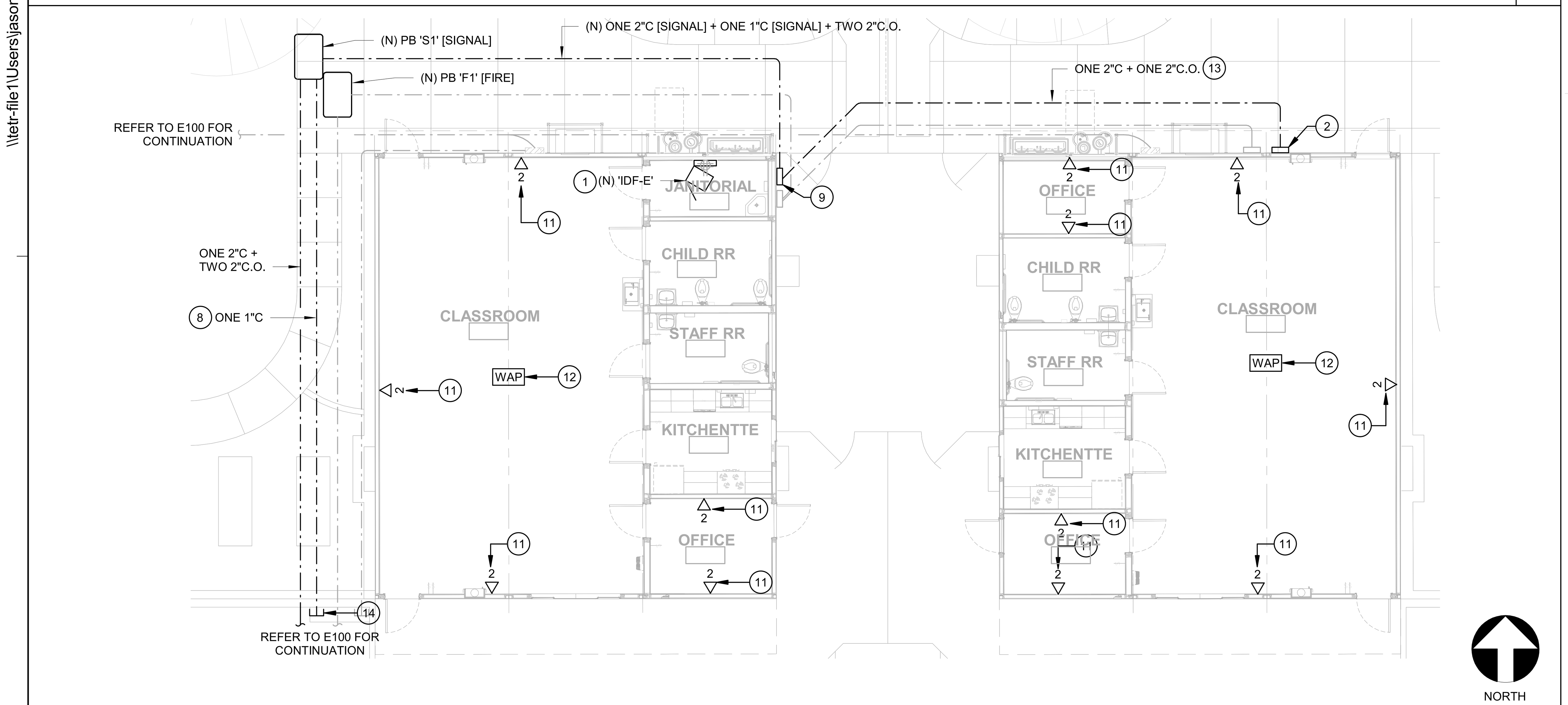
DRAWING
E100

PLOT DATE: 1/9/2023 4:36:37 PM



FIRE ALARM PLAN 1/8" = 1'-0" 3





SIGNAL PLAN 1/8" = 1'-0" 2

NORTH

POWER PLAN 1/8" = 1'-0" 1

KEYNOTES

1. REFER TO DETAIL 9/E600 FOR IDF MOUNTING.
2. PROVIDE AND INSTALL 18" x 18" x 6" WEATHERPROOF PULLCAN MOUNTED TO BUILDING EXTERIOR. PAINT PULLCAN AND EXPOSED CONDUIT TO MATCH (E) SURROUNDING AREA.
3. PROVIDE SYSTEM GROUNDING FACILITIES PER DETAILS 6/E600 AND 7/E600.
4. PROVIDE GROUNDING LUGS ON BOTH SIDES OF RIGID METAL BEAMS AND BOND SECTIONS OF RELOCATABLE BUILDING TOGETHER WITH 1#6 CU BONDING JUMPER.
5. ONE 2"C WITH ONE TYPE 'FAS' CABLE AND ONE TYPE 'FNS' CABLE.
6. ONE 2"C WITH ONE TYPE 'FAS' CABLE.
7. PROVIDE ONE 1"C, 2#12 CU THWN AND 1#12 CU GND FOR POWER CONNECTION TO IRRIGATION CONTROLLER.
8. PROVIDE ONE 1"C WITH ONE TYPE 'D' CABLE FOR DATA CONNECTION TO IRRIGATION CONTROLLER.
9. PROVIDE AND INSTALL 24" x 24" x 6" WEATHERPROOF PULLCAN MOUNTED TO BUILDING EXTERIOR. PAINT PULLCAN AND EXPOSED CONDUIT TO MATCH (E) SURROUNDING AREA.
10. PROVIDE 120VAC POWER CONNECTION TO (N) FIRE ALARM POWER SUPPLY PANEL 'FAPS-E'. CIRCUIT BREAKER SHALL BE COLORED RED AND LABELED "FIRE ALARM CIRCUIT".
11. PROVIDE 2-PORT DATA OUTLET FLUSH IN WALL. COORDINATE EXACT LOCATION OF NEW DATA OUTLET WITH OWNER PRIOR TO INSTALLATION.
12. PROVIDE TWO TYPE 'D' CABLES TERMINATED IN SURFACE MOUNTED TWO PORT KEYSTONE JACK BOX ABOVE CEILING TO ACCOMMODATE INSTALLTION OF WIRELESS ACCESS POINT.
13. ONE 2"C WITH FOURTEEN TYPE 'DX' CABLES AND TWO TYPE 'DAX' CABLES.
14. PROVIDE POWER AND DATA CONNECTION TO IRRIGATION CONTROLLER.
15. (E) WALL MOUNTED LIGHT FIXTURE TO REMAIN.
16. PROVIDE (N) FLOOD LIGHTING FIXTURE TO ILLUMINATE PATH TO SAFE DISPERSAL AREA. FLOOD LIGHTING FIXTURE SHALL BE WALL MOUNTED AT +10' AFG. LIGHTING FIXTURE TYPE 'W1' SHALL BE 2-HEAD LED FLOOD LIGHT WITH WALL MOUNT ACCESSORIES AND INTEGRAL PHOTOCELL, TWO (2) LITHONIA #DSXF1LED-P2-40K-WFR-MVOLT-THK-PE-DDBXD OR EQUIVALENT.
17. PROVIDE (N) FLOOD LIGHTING FIXTURE TO ILLUMINATE PATH TO SAFE DISPERSAL AREA. FLOOD LIGHTING FIXTURE SHALL BE WALL MOUNTED AT +10' AFG. LIGHTING FIXTURE TYPE 'W2' SHALL BE 1-HEAD LED FLOOD LIGHT WITH WALL MOUNT ACCESSORIES AND INTEGRAL PHOTOCELL, ONE (1) LITHONIA #DSXF1LED-P2-40K-MFL-MVOLT-THK-PE-DDBXD OR EQUIVALENT.
18. PROVIDE (N) PORTION OF LIGHTING BRANCH CIRCUIT TO (N) LIGHTING FIXTURE CONSISTING OF ONE 3/4"C, 2#12 CU THWN AND 1 #12 CU GND.
19. CONNECT (N) PORTION OF LIGHTING BRANCH CIRCUIT TO EXISTING UNSWITCHED EXTERIOR LIGHTING BRANCH CIRCUIT.

FIRE ALARM CONDUIT RUN LEGEND

FAS	ONE 3/4"C, WITH ONE TYPE 'FAS' CABLE
FA	ONE 3/4"C, WITH ONE TYPE 'FA' CABLE
FNS	ONE 3/4"C, WITH ONE TYPE 'FNS' CABLE
FN	ONE 3/4"C, WITH ONE TYPE 'FN' CABLE
FAS + FNS	ONE 3/4"C, WITH ONE TPYE 'FAS' CABLE + 'FNS' CABLE

GENERAL NOTES

A. PROVIDE ELECTRICAL FEEDERS PER SINGLE LINE DIAGRAM ON E700.

B. EXISTING CIRCUITING IS BASED ON AS BUILT RECORD DRAWINGS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.

C. CONDUIT AND CONDUCTORS FOR NEW OUTLETS SHALL BE CONCEALED, U.O.N.

D. PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, AND/OR ROOFS SHALL BE SEALED.

E. ALL 120V, 15A AND 20A RECEPTACLES WITHIN KITCHENS AND RESTROOMS SHALL BE GFCI TYPE RECEPTACLES. IN ALL OTHER SPACES, 120V, 15A AND 20A RECEPTACLES WITHIN 6' OF SINKS OR FAUCETS SHALL BE GFCI TYPE RECEPTACLES.

F. EACH DATA CABLE SHALL BE HOME RUN FROM OUTLET TO (N) 'IDF-E' IN RELOCATABLE BUILDING 'E'.

G. ALL PATCHING REQUIRED DUE TO WORK ON RELOCATABLE BUILDING WALLS, CEILINGS, FLOORS, AND/OR ROOFS SHALL BE COMPLETED AND FINISHED.

BID DOCUMENTS ONLY DSA APPROVED DOCUMENTS REQUIRED PRIOR TO CONSTRUCTION

MARK	DATE	DESCRIPTION
1	12/02/2022	DSA BACKCHECK

TETER, LLP
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

LOS BANOS CHILD DEVELOP. CENTER
MERCED COLLEGE | MCCD
22240 CA-152 LOS BANOS, CA.

DRAWING TITLE
POWER, SIGNAL, AND FIRE ALARM PLAN

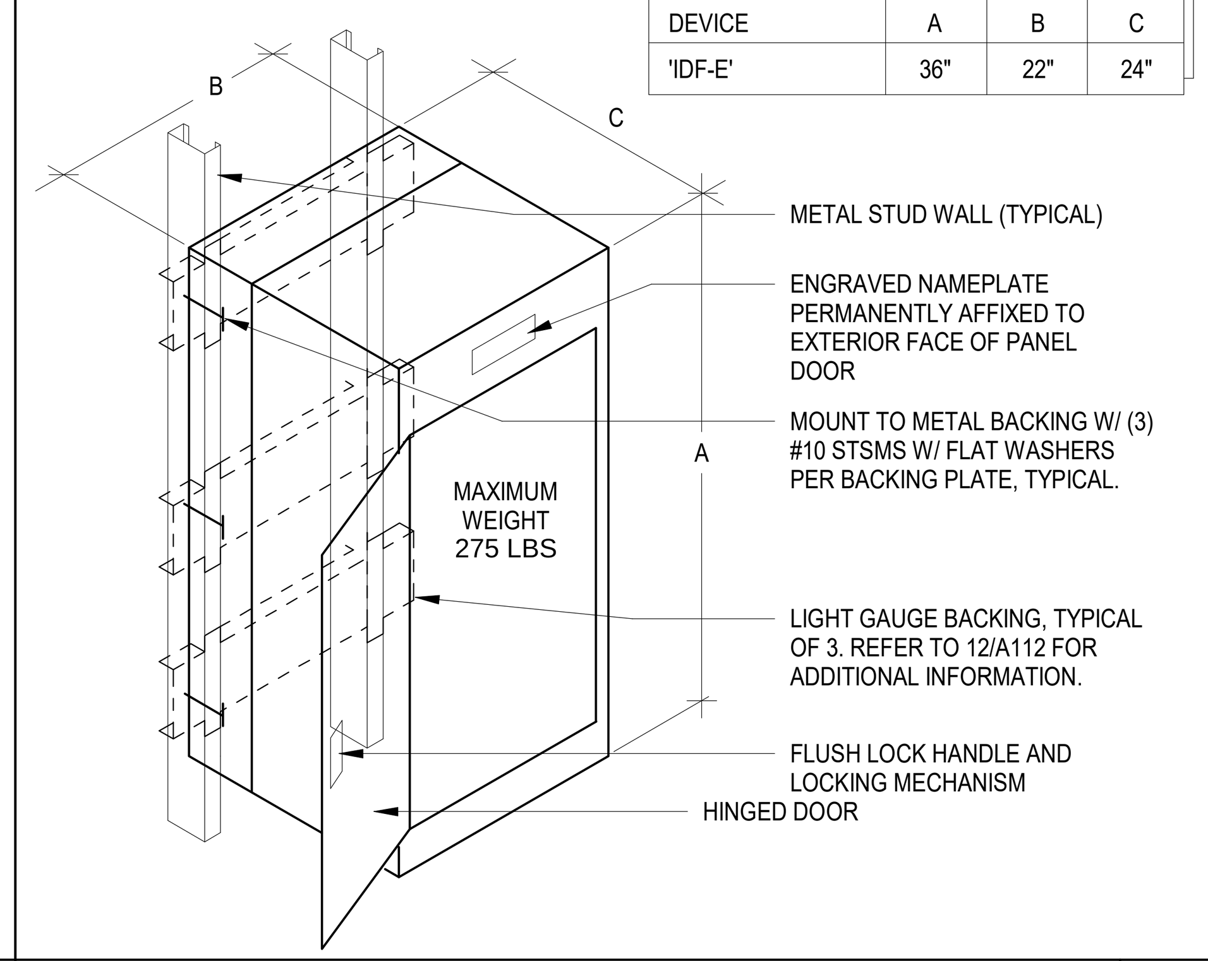
PROJECT NO.
22-12075

DRAWING
E200

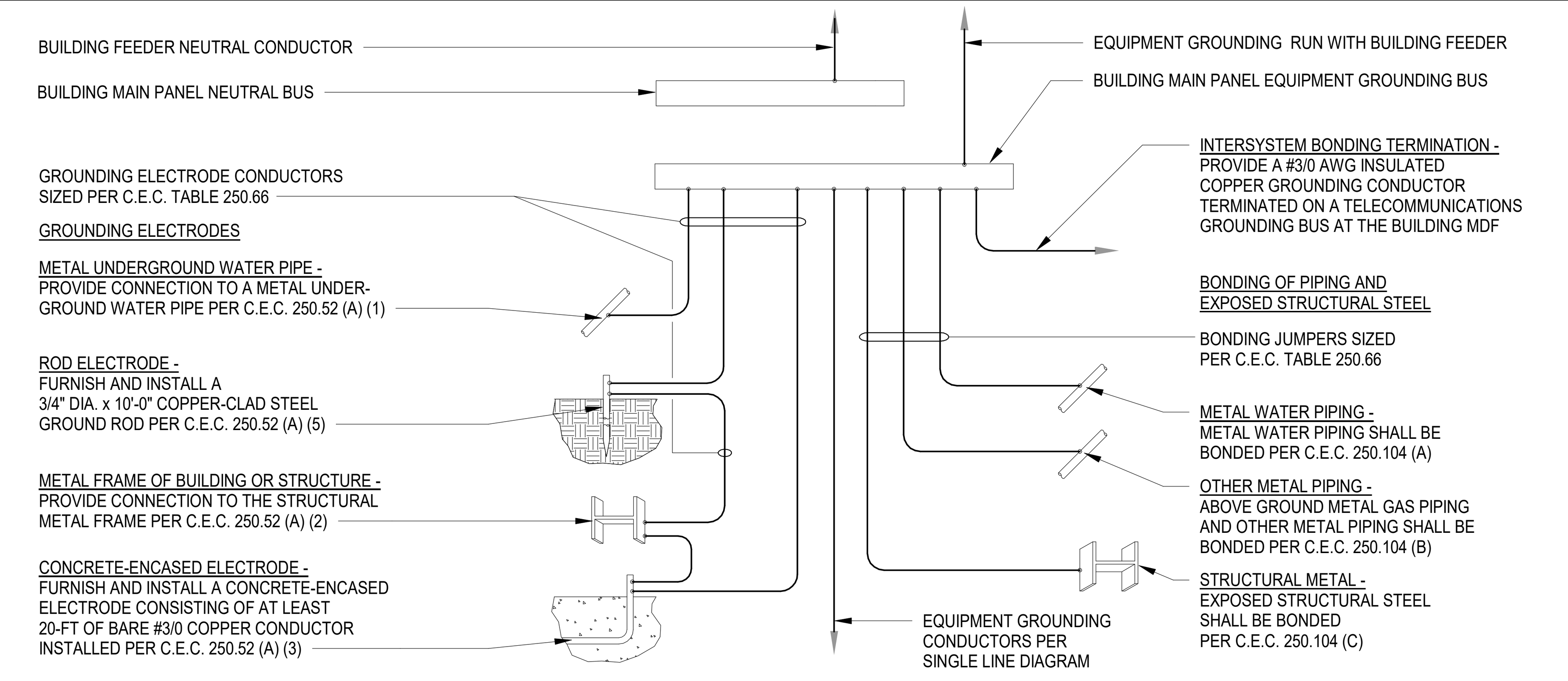
\\tetr-file1\Users\jason.march\Documents\12075-E-MCCD_LOS BANOS CHILD DEVELOPMENT CENTER-2023_march.jason.rvt

PLOT DATE: 1/9/2023 4:36:50 PM

DEVICE	A	B	C
'IDF-E'	36"	22"	24"

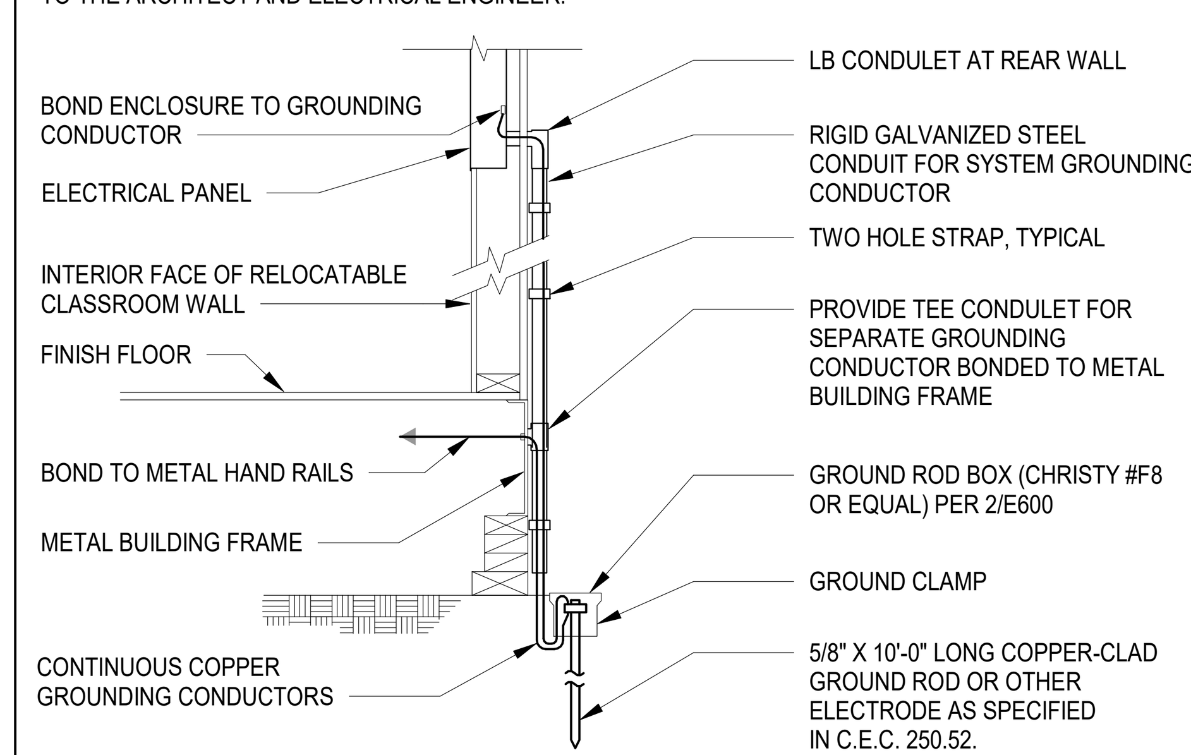


CABINET MOUNT - METAL STUD N.T.S. 9



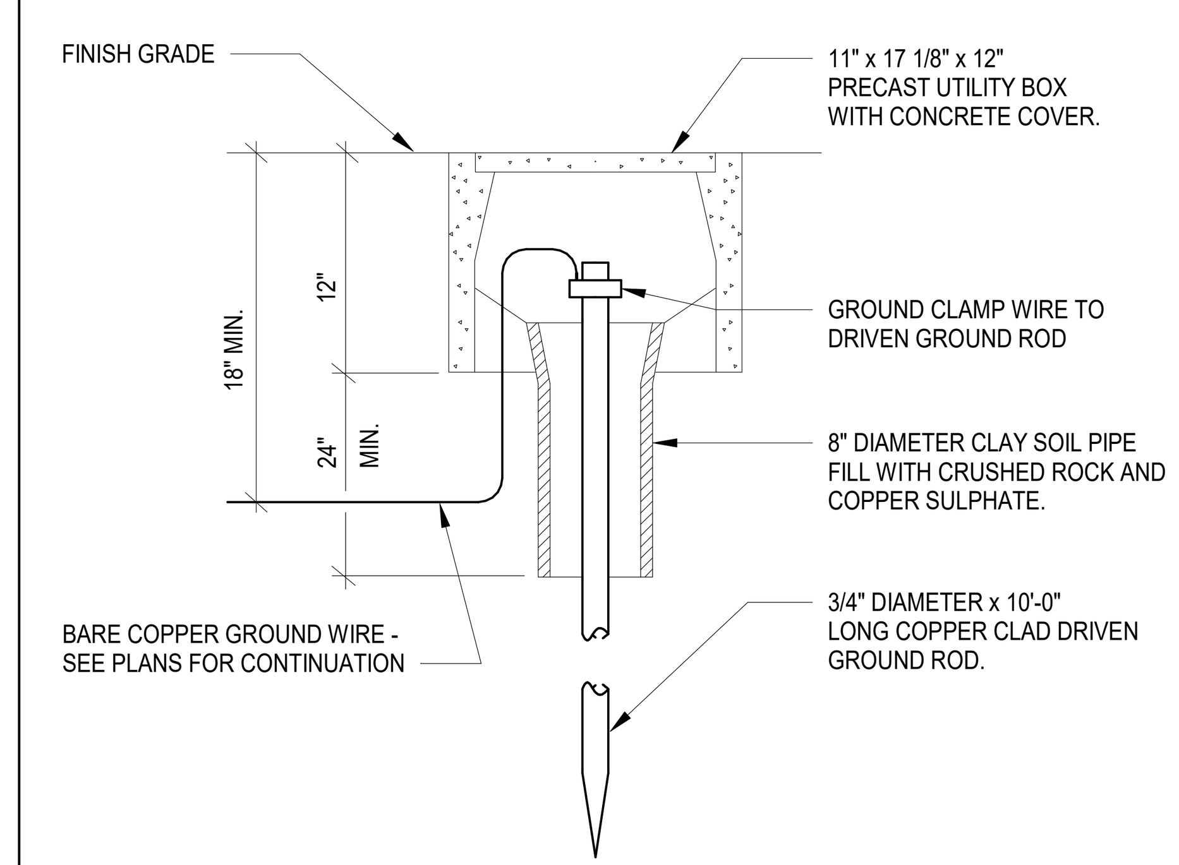
REMOTE BUILDING GROUNDING ELECTRODE SYSTEM N.T.S. 1

THE GROUNDING ELECTRODE SYSTEM SHALL BE TESTED BY THE FALL OF POTENTIAL METHOD AS SPECIFIED IN IEEE STANDARD 81-1983 AND SHOWN TO BE 5 OHMS OR LESS. A COPY OF THE TEST REPORT, SIGNED BY THE PROJECT INSPECTOR WHO WITNESSED THE TEST, SHALL BE SUBMITTED TO THE ARCHITECT AND ELECTRICAL ENGINEER.



BOND CLASSROOM BUILDINGS TOGETHER WITH 1 #6 CU CONDUCTOR WHERE RELOCATABLES OCCUR SIDE BY SIDE.

RELO. BUILDING GROUND N.T.S. 6



GROUND WELL N.T.S. 2

NOTES:

1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66.

2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL BUILDING FRAME (CEC 250.52). IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52).

3. ALL MODULES OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING).

4. PROVIDE TWO GROUND RODS NOT LESS THAN 6' APART.

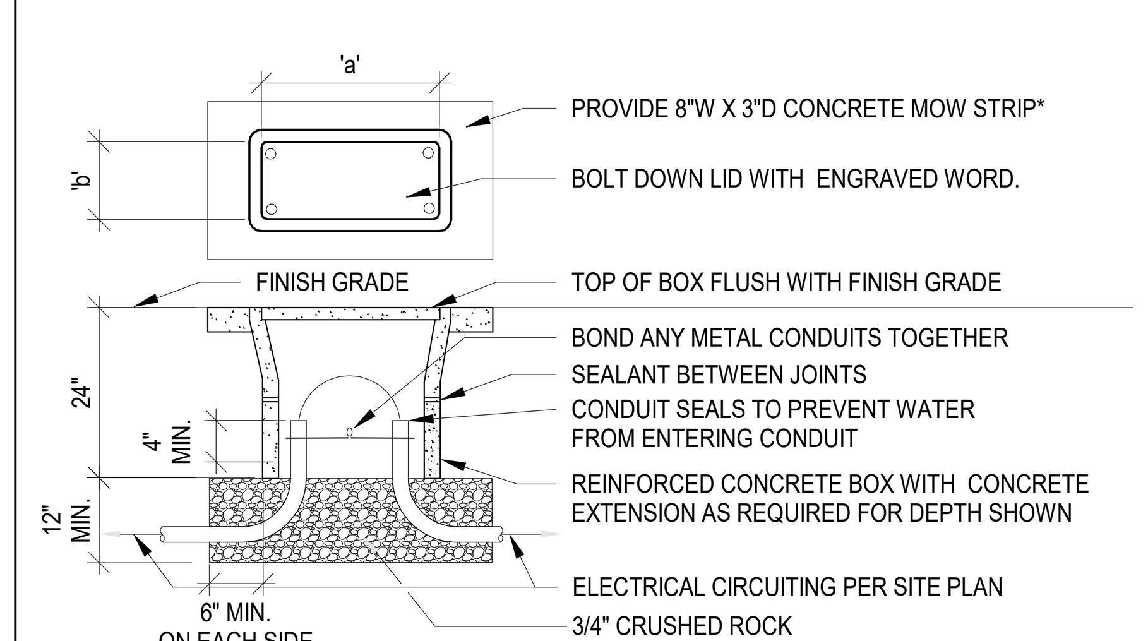
5. WHERE MODULAR BUILDINGS ARE INSTALLED ON CONCRETE FOUNDATIONS, A UFER GROUND SHALL BE INSTALLED IN THE FOOTING PER CEC 250.52(A)(3).

6. OTHER GROUNDING METHODS IDENTIFIED IN CEC 250 SHALL BE ACCEPTABLE MEANS TO ACHIEVE ADEQUATE GROUNDING OF METAL BUILDINGS IN COMPLIANCE WITH THE ABOVE.

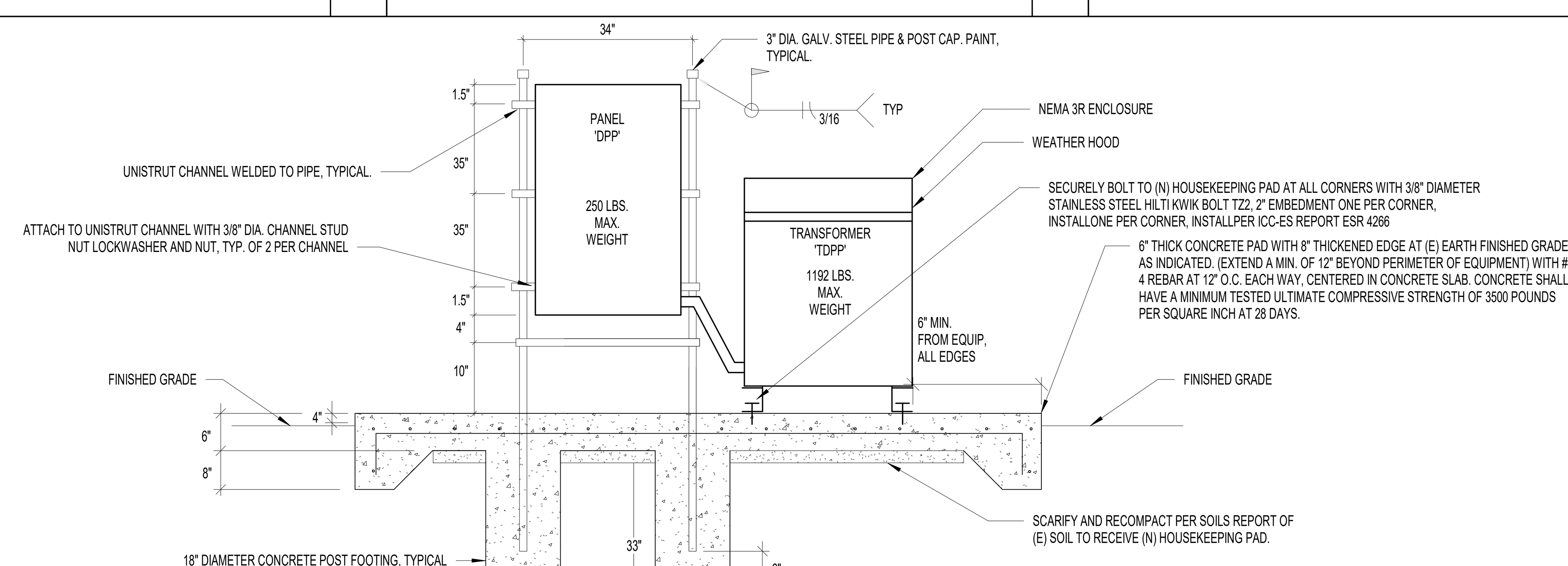
GROUNDING SYSTEM NOTES N.T.S. 7

*NOTE: WHERE PULLBOX IS ADJACENT TO CONCRETE WALK, EXTEND MOWSTRIP TO CONNECT WITH WALK. CONCRETE MOW STRIP IS NOT REQUIRED ON PULLBOXES INSTALLED IN ASPHALT PAVING.

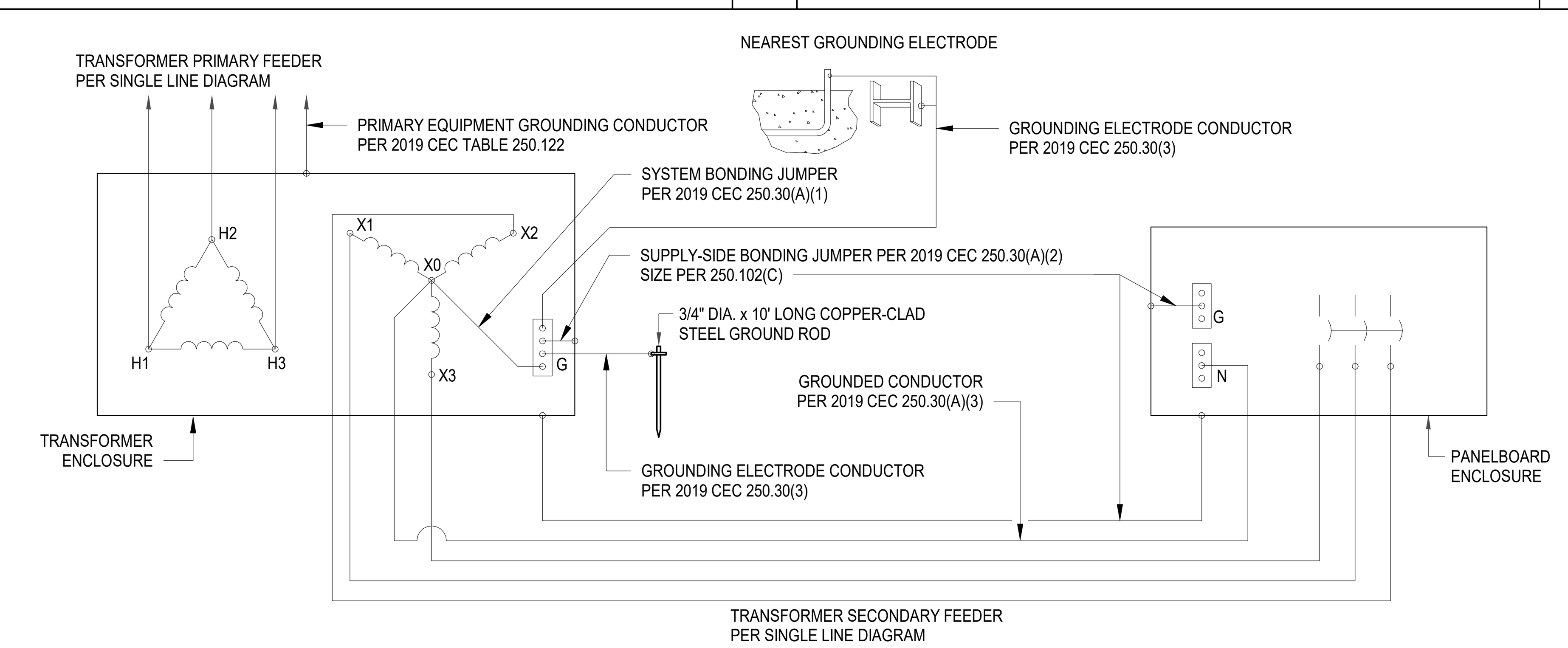
	DIMENSION 'a'	DIMENSION 'b'	ENGRAVING	LID TYPE
F1	30"	17"	FIRE	CONCRETE
P1	30"	17"	POWER	CONCRETE
P2	36"	24"	POWER	CONCRETE
P3	22"	11"	POWER	CONCRETE
S1	36"	24"	SIGNAL	CONCRETE



U.G. PULLBOX N.T.S. 3



POST/STRUT AND TRANSFORMER ELEVATION N.T.S. 12



TRANSFORMER GROUNDING ELECTRODE SYSTEM N.T.S. 4

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

MARK	DATE	DESCRIPTION
	12/02/2022	DSA BACKCHECK

TETER, LLP
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

TETER

LOS BANOS
CHILD DEVELOP. CENTER
MERCED COLLEGE | MCCD
22240 CA-152 LOS BANOS, CA.

DRAWING TITLE
ELECTRICAL DETAILS

PROJECT NO.
22-12075

DRAWING
E600

KEYNOTES

1. PROVIDE GROUNDING ELECTRODE SYSTEM AT RELOCATABLE BUILDING POWER PANEL PER DETAIL 6/E600.
2. PROVIDE GROUNDING ELECTRODE SYSTEM AT DISTRIBUTION PANEL 'DPP' PER DETAIL 1/E600.
3. PROVIDE ONE (N) 225A, 3-POLE CIRCUIT BREAKER IN (E) MAIN SWITCHBOARD 'CMSB' FOR PROTECTION OF (N) TRANSFORMER 'TDPP' AND (N) PANEL 'DPP'. CIRCUIT BREAKER SHALL BE LOCKABLE IN THE OFF POSITION.
4. PROVIDE GROUPING ELECTRODE SYSTEM AT TRANSFORMER 'TDPP' PER DETAIL 4/E600.

GENERAL NOTES

A. CIRCUIT BREAKERS SUPPLYING CLASS 1 TRANSFORMERS SHALL BE LOCKABLE IN THE OFF POSITION.

B. CIRCUIT BREAKERS THAT ARE 1200A OR LARGER SHALL HAVE AN ARC ENERGY REDUCTION FEATURE TO REDUCE CLEARING TIME. THE ARC ENERGY REDUCTION FEATURE SHALL BE AN ENERGY-REDUCING MAINTENANCE SWITCH WITH A LOCAL STATUS INDICATOR. WHEN THE SWITCH IS TURNED ON IT SHALL REDUCE THE CLEARING TIME AND SETS THE INSTANTANEOUS PICKUP CLEARING TIME TO BE 2 TIMES FASTER THAN THE NORMAL INSTANTANEOUS PICKUP SENSOR AMPERAGE.

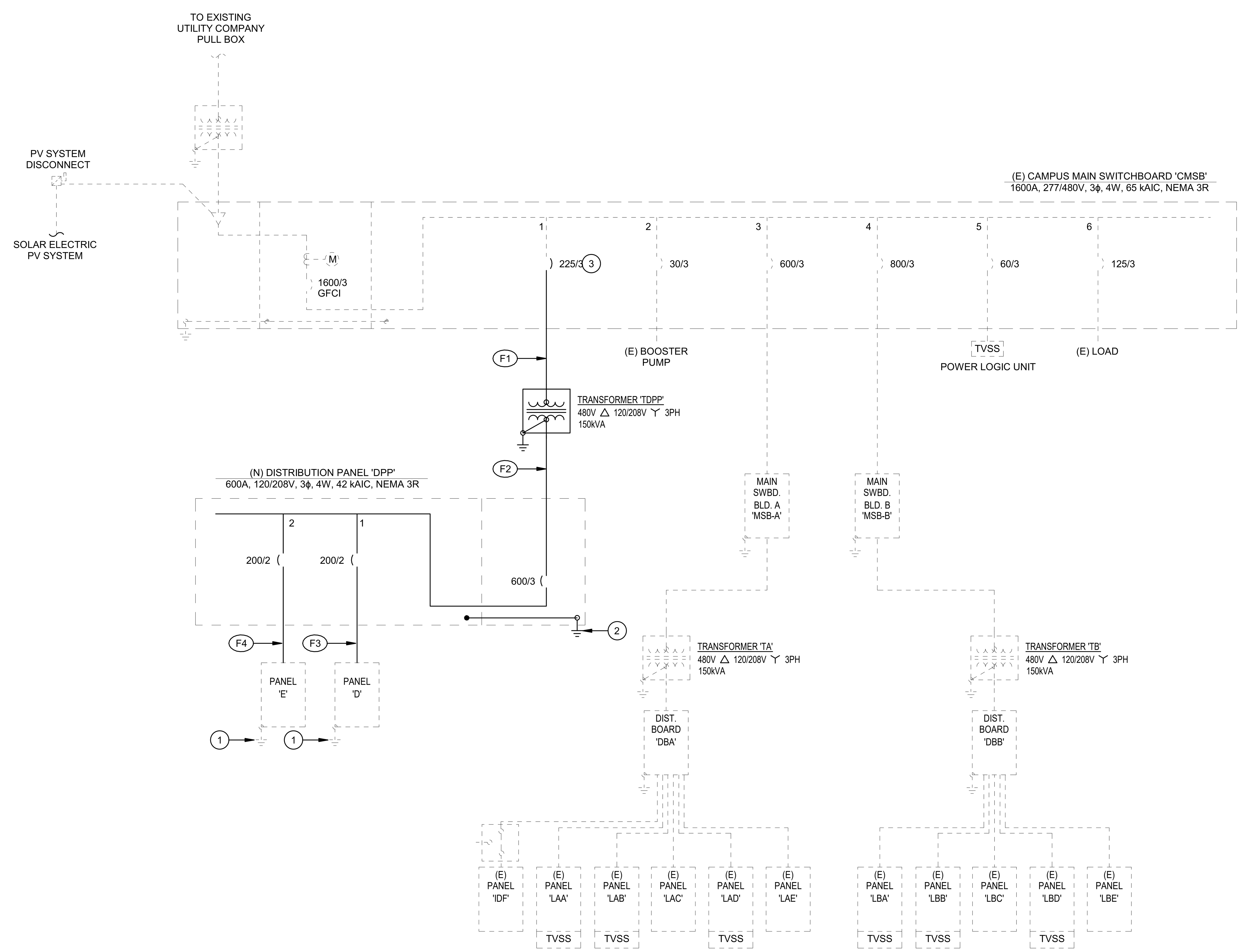
C. ARC-FLASH HAZARD WARNING LABELS SHALL BE PROVIDED AT ELECTRICAL EQUIPMENT SUCH AS SWITCHBOARDS AND PANELBOARDS IN ACCORDANCE WITH CEC 110.16.

D. CIRCUIT IDENTIFICATION - A TYPEWRITTEN CIRCUIT DIRECTORY SHALL BE PROVIDED AT EACH PANELBOARD AND SWITCHBOARD IN ACCORDANCE WITH CEC ARTICLE 408.4(A). THE CONTRACTOR SHALL DEVELOP AND PREPARE THE CIRCUIT IDENTIFICATION DESCRIPTION BASED ON THE AS-BUILT CONDITION.

E. SOURCE OF SUPPLY IDENTIFICATION - ALL SWITCHBOARDS, PANELBOARDS AND TRANSFORMERS SHALL HAVE A TYPEWRITTEN LABEL APPLIED INDICATING THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLY ORIGINATES PER CEC ARTICLE 408.4(B).

FEEDER SCHEDULE

FEEDER	ORIGIN	DESTINATION	CONDUIT	CONDUCTORS	CALCULATED VOLTAGE DROP	REMARKS
F1	MAIN SWITCHBOARD 'CMSB'	TRANSFORMER 'TDPP'	ONE 3"C	3#4/0 CU THWN, 1#4 CU GND	2.95%	FEEDER
F2	TRANSFORMER 'TDPP'	DISTRIBUTION PANEL 'DPP'	TWO 3"C	4#350 KCMIL CU THWN, 1#3/0 CU GND IN EACH CONDUIT	0.16%	TWO PARALLEL FEEDERS WITH SUPPLY-SIDE BONDING JUMPER
F3	DISTRIBUTION PANEL 'DPP'	PANEL 'D'	ONE 2"C	3#3/0 CU THWN, 1#6 CU GND	2.98%	FEEDER
F4	DISTRIBUTION PANEL 'DPP'	PANEL 'E'	ONE 2"C	3#3/0 CU THWN, 1#6 CU GND	2.20%	FEEDER



\\tetr-file1\Users\jason.march\Documents\12075-E-MCCD_LOS BANOS CHILD DEVELOPMENT CENTER-2023_march.jason.rvt

PLOT DATE: 1/9/2023 4:36:52 PM

BID DOCUMENTS ONLY
DSA APPROVED DOCUMENTS REQUIRED PRIOR TO CONSTRUCTION

MARK	DATE	DESCRIPTION
	12/02/2022	DSA BACKCHECK

REGISTERED PROFESSIONAL ENGINEER BRYAN A. GLASS No. E 17773 06-30-24 ELECTRICAL STATE OF CALIFORNIA

TETER, LLP
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

TETER

LOS BANOS CHILD DEVELOP. CENTER
MERCED COLLEGE | MCCD
22240 CA-152 LOS BANOS, CA.

DRAWING TITLE
SINGLE LINE DIAGRAM

PROJECT NO.
22-12075

DRAWING
E700

FIRE ALARM SYSTEM DESCRIPTION

THE FIRE ALARM SYSTEM DESCRIBED BY THESE DRAWINGS AND ASSOCIATED SPECIFICATIONS IS A MANUAL AND AUTOMATIC SYSTEM. THIS SYSTEM UTILIZES SMOKE DETECTORS ON CEILINGS AND IN THE ROOMS HOUSING THE FIRE ALARM SYSTEM EQUIPMENT WITH HEAT DETECTORS IN ATTIC SPACES. THE SYSTEM IS ADDRESSABLE AND IS WIRED CLASS 'B' WITHIN THE BUILDINGS AND CLASS 'B' BETWEEN BUILDINGS.

FIRE ALARM APPROVAL

THE FIRE ALARM SYSTEM DESIGN IS A "COMPLETE PLAN SUBMITTAL" PER DSA FIRE ALARM SUBMITTAL GUIDELINES. THE CONTRACTOR SHALL INSTALL THE SYSTEM AS SHOWN AND AS HEREIN SPECIFIED. IF ANY SUBSTITUTION OF FIRE ALARM EQUIPMENT IS TO BE REQUESTED, SUCH REQUEST SHALL BE MADE A MINIMUM OF TWO WEEKS PRIOR TO PROJECT BID DATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING THE SUBSTITUTION PER THE DSA GUIDELINES AND SHALL PAY ALL ADDITIONAL COSTS REQUIRED TO ACCOMMODATE REVIEW OF THE SUBSTITUTED FIRE ALARM SYSTEM BY DSA, WHETHER OR NOT SUCH APPROVAL IS GIVEN. THE CONTRACTOR'S SUBMITTAL SHALL INCLUDE MANUFACTURER'S CATALOG CUT SHEETS AND CSFM LISTING SHEETS FOR THE INDIVIDUAL COMPONENTS COMPRISING THE SUBSTITUTED FIRE ALARM SYSTEM, BATTERY LOAD CALCULATIONS AND VOLTAGE DROP CALCULATIONS FOR EACH SIGNALING CIRCUIT.

APPLICABLE CODES AND STANDARDS

2019 CA BUILDING CODE - CCR, TITLE 24, PART 2, VOLUMES 1 & 2
(2018 IBC AND CALIFORNIA AMENDMENTS)
2019 CA ELECTRICAL CODE - CCR, TITLE 24, PART 3
(2017 NEC AND CALIFORNIA AMENDMENTS)
2019 CA MECHANICAL CODE - CCR, TITLE 24, PART 4
(2018 UMC AND CALIFORNIA AMENDMENTS)
2019 CA PLUMBING CODE - CCR, TITLE 24, PART 5
(2018 UPC AND CALIFORNIA AMENDMENTS)
2019 CA FIRE CODE - CCR, TITLE 24, PART 9
(2018 IFC AND CALIFORNIA AMENDMENTS)
2019 CA REFERENCE STANDARDS CODE - CCR, TITLE 24, PART 12
2016 NFPA 13, INSTALLATION OF SPRINKLER SYSTEMS AND 2019 CALIFORNIA AMENDMENTS
2016 NFPA 72, NATIONAL FIRE ALARM CODE, AND 2019 CALIFORNIA AMENDMENTS
PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS - CCR, TITLE 19
DSA GUIDELINES FOR FIRE AND LIFE SAFETY SYSTEMS, DIVISION OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES.

FIRE ALARM GENERAL NOTES

1. UNDERGROUND AND EXTERIOR CONDUITS WILL HAVE WATERTIGHT FITTINGS. (CEC 110.11 AND CEC 300.6)
2. OUTLETS ON OPPOSITE SIDES OF A FIRE RATED WALL SHALL BE INSTALLED WITH A MINIMUM HORIZONTAL SPACING OF TWO FEET.
3. FIRE ALARM DEVICE MOUNTING HEIGHTS SHALL BE AS FOLLOWS:
   a. PULL STATION - OPERABLE PART OF A MANUALLY ACTUATED ALARM INITIATING DEVICE SHALL BE NOT LESS THAN 42" FROM FINISHED FLOOR; AND TOP OF BOX SHALL NOT BE MORE THAN 48" FROM FINISHED FLOOR. (CBC 11B 308.1.1, NFPA 72 17.14.5)
   b. INTERIOR AUDIBLE NOTIFICATION APPLIANCE - AT LEAST 90" TO THE TOP OF DEVICE ABOVE FINISHED FLOOR AND NOT LESS THAN 6" BELOW FINISHED CEILING. (NFPA 72 18.4.8.1)
   c. WALL-MOUNTED STROBE OR SPEAKER/STROBE - AT LEAST 80" TO BOTTOM OF LENS AND NOT GREATER THAN 96" TO TOP OF LENS ABOVE FINISHED FLOOR. (NFPA 72 18.5.5.1)
4. AUDIBLE SIGNAL DEVICES OF A FIRE ALARM SYSTEM INTENDED TO ALERT ALL OCCUPANTS SHALL BE SO LOCATED AND UNOBSTRUCTED AS TO CAUSE A LEVEL OF AUDIBILITY OF AT LEAST 15 dBA ABOVE AVERAGE AMBIENT SOUND LEVEL BUT NOT LESS THAN 75 dBA AT TEN FEET, OR MORE THAN 110 dBA IN TOTAL. (NFPA 72 18.4.3.1, 18.4.1.2 AND CFC 907.5.2.1.2)
5. AMBIENT NOISE LEVELS SHALL BE CONSTRUED TO MEAN THAT WHICH CAN NORMALLY BE EXPECTED TO EXIST WHEN THE FACILITY, BUILDING, ROOM OR AREA IS FUNCTIONING UNDER NORMAL OPERATIVE OR WORKING CONDITIONS. (CFC 907.5.2.1.1)
6. AUDIBLE DEVICES SHALL SOUND THE CA UNIFORM FIRE ALARM SIGNAL IN TEMPORAL MODE. PROVIDE AT LEAST ONE EXTERIOR AUDIBLE DEVICE ON BUILDING FOR E OCCUPANCIES. (CFC 907.5.2.1.3)
7. EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM SHALL COMPLY WITH CBC 907.2.3 AND NFPA 72 24.4.2
8. VISUAL DEVICES SHALL NOT EXCEED TWO FLASHES PER SECOND AND SHALL NOT BE SLOWER THAN ONE FLASH EVERY SECOND. (NFPA 72 18.5.3.1)
9. AUTOMATIC SMOKE DETECTION SHALL BE PROVIDED AT THE LOCATION OF EACH FIRE ALARM CONTROL UNIT, NOTIFICATION APPLIANCE CIRCUIT POWER EXTENDER AND SUPERVISING STATION TRANSMITTING EQUIPMENT TO PROVIDE NOTIFICATION OF FIRE AT THAT LOCATION. (NFPA 72 10.4.4)
10. BRANCH CIRCUITS PROTECTING FIRE ALARM EQUIPMENT SHALL BE LABELED PER NFPA 72 10.6.5.2.2 AND SHALL INCLUDE A LISTED CIRCUIT BREAKER LOCKING DEVICE PER NFPA 72 10.6.5.4
11. COMPLETE THE NFPA 72 RECORD OF COMPLETION, TESTING ALL DEVICES AND APPLIANCES. PROVIDE A COPY OF THE COMPLETED RECORD OF COMPLETION TO THE OWNER (SCHOOL DISTRICT), ARCHITECT, LOCAL FIRE AUTHORITY, AND DSA VIA THE PROJECT INSPECTOR. TESTING OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE LOCAL FIRE AUTHORITY AND THE DSA INSPECTOR OF RECORD (IOR). FINAL TEST SHALL INCLUDE READ OUT VERIFICATION FORM FROM CENTER STATION.
12. THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALLED, TESTED, AND MAINTAINED IN ACCORDANCE WITH THE STATE FIRE MARSHAL'S REGULATIONS (CFC 907.8.5, NFPA 72 14.4.1.1, NFPA 72 14.5)

FIRE ALARM CODES AND NOTES 6

FIRE ALARM SYSTEM EQUIPMENT LEGEND

SYMBOL	DESCRIPTION
	(E) FIRE ALARM CONTROL PANEL 'FACP': SIEMENS #MXL-IQ C.S.F.M. #7165-0067:0144
ANN	(E) FIRE ALARM ANNUNCIATOR: SIEMENS #RCC-2 C.S.F.M. #7165-0067:0152
	(N) FIRE ALARM PANEL POWER SUPPLY 'FAPS': SIEMENS #PAD-3 C.S.F.M. #7165-0067:0218
SD	ADDRESSABLE SMOKE DETECTOR (ON CEILING): SIEMENS #FP-11 C.S.F.M. #7272-0067:0203 BASE: #DB-11 C.S.F.M. #7300-0067:0134
AM	ADDRESSABLE INTERFACE MODULE: SIEMENS #TRI-B6M C.S.F.M. #7300-0067:0146
HD A	CONVENTIONAL HEAT DETECTOR WITH FIXED TEMPERATURE 194°F SYSTEM SENSOR #5604 C.S.F.M. #7270-1653:0167
V XX	STROBE ANNUNCIATOR - WALL MOUNTED (XX REPRESENTS CANDELA): - COOPER WHEELOCK #RSS-24MCW C.S.F.M. #7125-0785:0141
AV XX	HORN/STROBE ANNUNCIATOR - WALL MOUNTED (XX REPRESENTS CANDELA) - COOPER WHEELOCK #NS-24MCW C.S.F.M. #7125-0785:0142
H WP	HORN, OUTDOOR COOPER WHEELOCK #AH24-WP-R C.S.F.M. #7320-0785:0131

FIRE ALARM MONITORING NOTE

AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY CFC CHAPTER 80. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX OR UUJS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER.

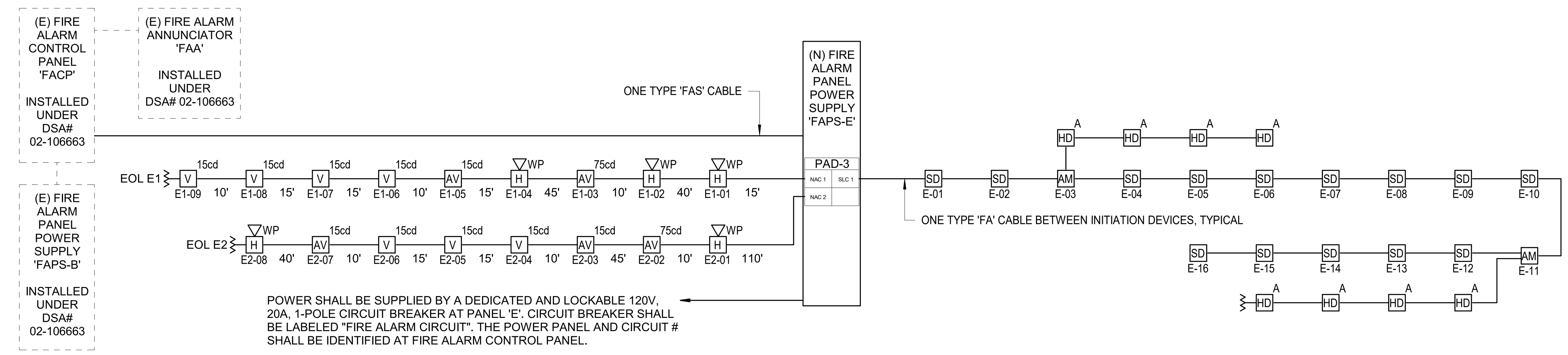
FIRE ALARM LEGEND 5

SB575 - GREEN OAKS FAMILY ACADEMY ELEMENTARY SCHOOL FIRE PROTECTION ACT REQUIREMENTS FOR AUTOMATIC FIRE ALARM SYSTEMS

THE FIRE DETECTION AND ALARM SYSTEM FOR THE AREAS AND/OR BUILDINGS WITHIN THE SCOPE OF WORK OF THIS PROJECT:

- [x] COMPLIES WITH SB575
  - [x] A FULLY-AUTOMATIC SYSTEM HAS BEEN DESIGNED FOR ALL AREAS, OR
  - [ ] THE AREAS AND/OR BUILDINGS ARE SPRINKLERED ABOVE THE CEILING, SO HEAT DETECTORS ARE EXEMPTED FROM ABOVE-CEILING AREAS. THE SYSTEM IS OTHERWISE FULLY AUTOMATIC.
  - [x] AN AUTOMATIC DIALER TO A UL-APPROVED CENTRAL STATION:
    - [x] IS EXISTING, OR
    - [ ] IS INCLUDED AS PART OF THIS PROJECT.
- [ ] IS EXEMPT FROM SB575
  - [ ] THE TOTAL PROJECT CONSTRUCTION VALUE IS LESS THAN $200,000, OR
  - [ ] THE PROJECT CONSISTS OF ONLY MODULAR BUILDINGS WHICH ARE TEMPORARY; THESE BUILDINGS SHALL BE REMOVED NO MORE THAN THREE YEARS FROM THE INSTALLATION DATE UNLESS A THREE-YEAR EXTENSION IS APPROVED BY DSA, OR
  - [ ] THE PROJECT IS NOT FUNDED UNDER CHAPTER 12.5 OF THE LEROY F. GREENE SCHOOL FACILITIES ACT. IT WILL BE 100% FUNDED BY LOCAL FUNDS.

SB575 3



FIRE ALARM RISER DIAGRAM 1

NAC 'E1' VOLTAGE DROP CALCULATION

QTY.	DEVICE	DESCRIPTION	ALARM CURRENT/ DEVICE	TOTAL ALARM CURRENT
1	HS15	Wheelock Horn/Strobe 15cd #NS-24MCW-FR	0.0740	0.0740
1	HS75	Wheelock Horn/Strobe 75cd #NS-24MCW-FR	0.1840	0.1840
4	RSS-24MCW-15	Wheelock VISUAL STROBE WALL MOUNTED 15cd #AS-24MCW-FR	0.0600	0.2400
3	AH	Wheelock Horn #AH-24WP-R (Exterior)	0.0620	0.1860
		TOTAL CURRENT ADDED TO CIRCUIT	0.380	0.684

LENGTH OF WIRE FROM FACP TO LAST DEVICE (IN FEET) = **175**
ACTUAL SIZE OF WIRE INSTALLED = **12** AWG **6530** CIRCULAR MILS
CALCULATED VOLTAGE DROP (IN VDC) = **0.396**

CIRCUIT VOLTAGE CALCULATED AT LAST DEVICE (IN VDC) = **23.6 VDC**

PERCENT VOLTAGE DROP (%) = **1.65 %**

VOLTAGE DROP FORMULA:
VOLTAGE DROP = 2 X 10.8 x LENGTH OF CIRCUIT TO FARTHEST DEVICE x CURRENT / WIRE SIZE IN C.M.
COMPUTED WITH TOTAL CURRENT ON CIRCUIT AT MAXIMUM LENGTH (CLASS A CIRCUIT).

NAC 'E2' VOLTAGE DROP CALCULATION

QTY.	DEVICE	DESCRIPTION	ALARM CURRENT/ DEVICE	TOTAL ALARM CURRENT
2	HS15	Wheelock Horn/Strobe 15cd #NS-24MCW-FR	0.0740	0.1480
1	HS75	Wheelock Horn/Strobe 75cd #NS-24MCW-FR	0.1840	0.1840
3	RSS-24MCW-15	Wheelock VISUAL STROBE WALL MOUNTED 15cd #AS-24MCW-FR	0.0600	0.1800
2	AH	Wheelock Horn #AH-24WP-R (Exterior)	0.0620	0.1240
		TOTAL CURRENT ADDED TO CIRCUIT	0.380	0.636

LENGTH OF WIRE FROM FACP TO LAST DEVICE (IN FEET) = **255**
ACTUAL SIZE OF WIRE INSTALLED = **12** AWG **6530** CIRCULAR MILS
CALCULATED VOLTAGE DROP (IN VDC) = **0.536**

CIRCUIT VOLTAGE CALCULATED AT LAST DEVICE (IN VDC) = **23.5 VDC**

PERCENT VOLTAGE DROP (%) = **2.24 %**

VOLTAGE DROP FORMULA:
VOLTAGE DROP = 2 X 10.8 x LENGTH OF CIRCUIT TO FARTHEST DEVICE x CURRENT / WIRE SIZE IN C.M.
COMPUTED WITH TOTAL CURRENT ON CIRCUIT AT MAXIMUM LENGTH (CLASS A CIRCUIT).

FIRE ALARM POWER SUPPLY 'FASP-E' BATTERY CALCULATIONS

QTY.	DEVICE	DESCRIPTION	STANDBY CURRENT	ALARM CURRENT/ DEVICE	ALARM CURRENT
1	PAD-3	Siemens Fire Alarm Power Supply #PAD-3	0.0750	0.0750	0.0750
2	TRI-B6M	Siemens Addressable Monitor Module #TRI-B6M	0.0006	0.0050	0.0100
14	FP-11	Siemens Addreassable Smoke Detector (Ceiling) #FP-11	0.0042	0.0650	0.9100
8	5604	System Sensor Heat Detector #5604	0.0000	0.0000	0.0000
7	RSS-24MCW-15	Wheelock VISUAL STROBE WALL MOUNTED 15cd #AS-24MCW-FR	0.0000	0.0600	0.4200
3	HS15	Wheelock Horn/Strobe 15cd #NS-24MCW-FR	0.0000	0.0740	0.2220
2	HS75	Wheelock Horn/Strobe 75cd #NS-24MCW-FR	0.0000	0.1840	0.3680
5	AH	Wheelock Horn #AH-24WP-R (Exterior)	0.0000	0.0620	0.3100
		TOTALS	0.0798	0.5250	2.3150

TOTAL ALARM AMP-HOURS (15 MIN.) = 0.25 HR x 2.315 A = 0.5788 A-H
TOTAL STANDBY AMP-HOURS (24 HRS) = 24 HR x 0.080 A = 1.9152 A-H
TOTAL REQUIRED AMP-HOURS = **2.4940 A-H**
TOTAL DESIGN AMP-HOURS WITH 20% SAFETY FACTOR = **2.9927 A-H**
BATTERY CAPACITY REQUIREMENTS **18.000 A-H**

(E) FIRE ALARM CONTROL PANEL 'FACP' BATTERY CALCULATIONS

QTY.	DEVICE	DESCRIPTION	STANDBY CURRENT	ALARM CURRENT/ DEVICE	ALARM CURRENT
1	MXL-IQ	Siemenes Fire Alarm Control Panel #MXL-IQ	0.4000	0.9220	0.9220
1	RCC-2	Siemens Fire Alarm Annunciator #RCC-2	0.0500	0.0750	0.0750
1	PAD-3	Siemens Fire Alarm Power Supply #PAD-3	0.0750	0.0750	0.0750
37	MSI-10B	Siemens Addreassable Manual Pullstation #TRI-B6M	0.0111	0.0050	0.1850
17	FP-11	Siemens Addreassable Smoke Detector (Ceiling) #FP-11	0.0051	0.0650	1.1050
8	5604	System Sensor Heat Detector #5604	0.0000	0.0000	0.0000
11	AD-11XPR	Siemens Duct Smoke Detector #AD-11XPR	0.0033	0.0650	0.7150
16	TRI-B6M	Siemens Addressable Monitor Module #TRI-B6M	0.0048	0.0050	0.0800
15	RSS-24MCW-15	Wheelock VISUAL STROBE WALL MOUNTED 15cd #AS-24MCW-FR	0.0000	0.0600	0.9000
4	RSS-24MCW-75	Wheelock VISUAL STROBE WALL MOUNTED 75cd #AS-24MCW-FR	0.0000	0.1650	0.6600
8	HS15	Wheelock Horn/Strobe 15cd #NS-24MCW-FR	0.0000	0.0740	0.5920
10	HS75	Wheelock Horn/Strobe 75cd #NS-24MCW-FR	0.0000	0.1840	1.8400
1	HS110	Wheelock Horn/Strobe 110cd #NS-24MCW-FR	0.0000	0.2440	0.2440
9	AH	Wheelock Horn #AH-24WP-R (Exterior)	0.0000	0.0620	0.5580
		TOTALS	0.5493	2.0010	7.9510

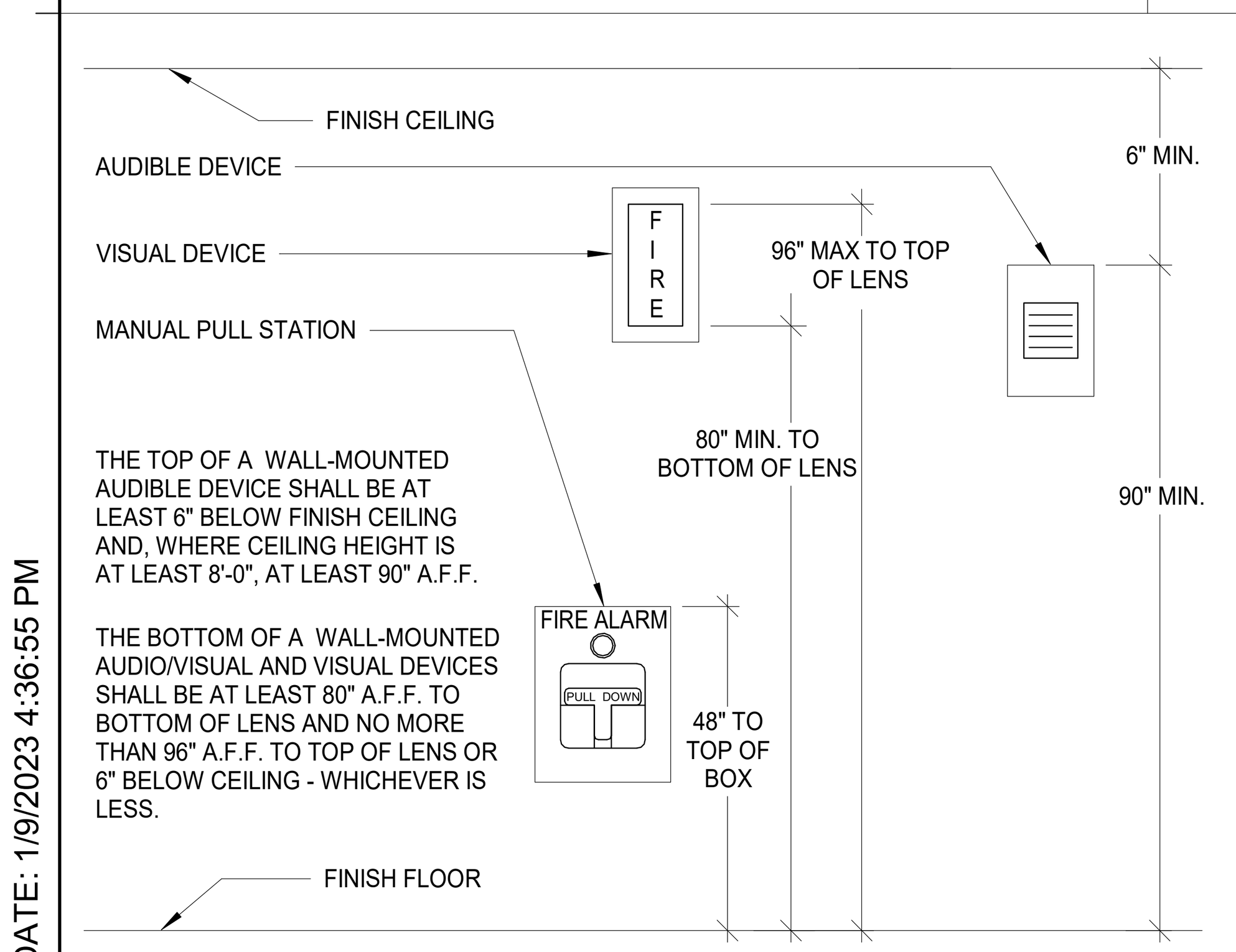
TOTAL ALARM AMP-HOURS (15 MIN.) = 0.25 HR x 7.951 A = 1.9878 A-H
TOTAL STANDBY AMP-HOURS (24 HRS) = 24 HR x 0.549 A = 13.1832 A-H
TOTAL REQUIRED AMP-HOURS = **15.1710 A-H**
TOTAL DESIGN AMP-HOURS WITH 20% SAFETY FACTOR = **18.2051 A-H**
(E) BATTERY CAPACITY **35.000 A-H**

BATTERY AND VOLTAGE DROP CALCULATIONS 2

FIRE ALARM SYSTEM OPERATIONAL MATRIX

DEVICE	ACTIVATE EVACUATION SIGNALS/STROBES	SHUTDOWN FIRE/SMOKE DAMPER, OR ACTIVATE SMOKE VENT RELEASE	SHUTDOWN HVAC EQUIPMENT	ANNUNCIATE AT BUILDING FACP AND ALL REMOTE ANNUNCIATORS	SEND SIGNAL TO CENTRAL STATION
FIRE ALARM PANEL SYSTEM TROUBLE				X	X
SMOKE DETECTOR	X	X		X	X
HEAT DETECTOR	X			X	X

FIRE ALARM OPERATIONAL MATRIX 4



FIRE ALARM DEVICE ELEVATIONS N.T.S. 7

BID DOCUMENTS ONLY
DSA APPROVED DOCUMENTS REQUIRED PRIOR TO CONSTRUCTION

MARK	DATE	DESCRIPTION
	12/02/2022	DSA BACKCHECK

TETER, LLP
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED
TETER

LOS BANOS CHILD DEVELOP. CENTER
MERCED COLLEGE | MCCD
22240 CA-152 LOS BANOS, CA.

DRAWING TITLE
FIRE ALARM RISER DIAGRAM & CALCULATIONS

PROJECT NO.
22-12075

DRAWING
E710

CODES, RULES & REGULATIONS

ALL WORK SHOWN HEREIN SHALL COMPLY WITH THE CURRENT REGULATIONS OF THE CALIFORNIA STATE FIRE MARSHAL, CALIFORNIA BUILDING CODE, TITLES 8 AND 19 THROUGH 24, SERVING UTILITY RULES AND ALL OTHER APPLICABLE STATE ORDINANCES. NOTHING IN THESE PLANS OR SPECIFICATIONS SHALL BE INTERPRETED AS TO PERMIT ANY WORK NOT IN CONFORMANCE WITH THESE CODES, RULES AND REGULATIONS. WHERE WORK OF A GREATER DEGREE IS INDICATED IN THESE PLANS OR SPECIFICATIONS, THAT REQUIREMENT SHALL GOVERN SUCH WORK.

C.E.C. TITLE 24 COMPLIANCE

THE LIGHTING AND LIGHTING CONTROL SYSTEMS DESIGN DEPICTED HEREIN IS IN COMPLIANCE WITH REQUIREMENTS OF THE CURRENT CALIFORNIA ENERGY COMMISSION EFFICIENCY STANDARDS FOR NONRESIDENTIAL BUILDINGS.

GENERAL NOTES (TYPICAL)

1. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR THE EXACT LOCATION OF ALL CEILING MOUNTED ELECTRICAL EQUIPMENT.
2. REFER TO THE MECHANICAL AND PLUMBING PLANS FOR THE EXACT LOCATION OF ALL MECHANICAL, HVAC AND PLUMBING EQUIPMENT.
3. VERIFY THE EXACT LOCATION OF ALL FLOOR BOXES AND ASSOCIATED TRENCH, BACKFILL AND SAWCUTTING REQUIREMENTS WITH THE ARCHITECT PRIOR TO COMMENCEMENT OF ANY ROUGH -IN WORK FOR THIS EQUIPMENT.
4. COORDINATE ELECTRICAL PANEL AND TERMINAL CABINET LOCATIONS AND ROUTING OF UNDERGROUND CONDUITS WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO COMMENCEMENT OF ANY ROUGH-IN WORK FOR THIS EQUIPMENT.
5. COORDINATE ALL ELECTRICAL WORK WITH OTHER TRADES WHOSE WORK WILL IMPACT PLACEMENT OR CONNECTION OF ELECTRICALLY POWERED EQUIPMENT REGARDLESS OF RESPONSIBILITY FOR SUPPLYING EQUIPMENT.

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVEABLE 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 FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

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

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

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

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH 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 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

ELECTRICAL DISTRIBUTION SYSTEMS:

SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM#) #OPM-0052-13, "SEISMIC BRACING AND SUPPORT SYSTEMS"

GENERAL NOTES 4

FIRE ALARM CABLE SCHEDULE

CABLE DESIGNATION	DESCRIPTION	MANUFACTURER & CATALOG #	OUTER JACKET COLOR	SYSTEM	USE
'FA'	1 PR, #16 AWG SOLID UNSHIELDED FPL	WEST PENN #D990	RED	FIRE ALARM	ADDRESSABLE SLC LOOP CABLE - INTERIOR
'FAS'	1 PR, #16 AWG STRANDED UNSHIELDED AQUASEAL FPL	WEST PENN #AQC225	BLACK	FIRE ALARM	SITE ADDRESSABLE SLC LOOP CABLE - EXTERIOR/OUTDOOR
'FN'	1 PR, #12 SOLID UNSHIELDED FPLP	WEST PENN #60995B	RED	FIRE ALARM	VISUAL (STROBE) NOTIFICATION APPLIANCE CIRCUIT - INTERIOR
'FNS'	1 PR, #12 STRANDED UNSHIELDED FPL	WEST PENN #AQ227	BLACK	FIRE ALARM	VISUAL (STROBE) NOTIFICATION APPLIANCE CIRCUIT - EXTERIOR/OUTDOOR

TELECOMMUNICATION CABLE SCHEDULE

CABLE DESIGNATION	DESCRIPTION	MANUFACTURER & CATALOG #	OUTER JACKET COLOR	SYSTEM	USE
'D'	4 UTP #23 AWG CATEGORY 6 CMP PLENUM RATED	BERK-TEK LANMARK-6	BLUE	DATA	HORIZONTAL CAT 6 DATA CABLE - INTERIOR
'DX'	4 UTP #23 AWG CATEGORY 6 FILLED OUTDOOR	BERK-TEK LANMARK-6 OSP	BLACK	DATA	HORIZONTAL CAT 6 DATA CABLE - OUTDOOR
'DA'	4 UTP #23 AWG CATEGORY 6A CMP PLENUM RATED	BERK-TEK LANMARK-10G2 RISER UTP	BLUE	DATA	HORIZONTAL CAT 6 DATA CABLE - INTERIOR
'DAX'	4 UTP #23 AWG CATEGORY 6A FILLED OUTDOOR	BERK-TEK LANMARK-10G CAT 6A OSP	BLACK	DATA	HORIZONTAL CAT 6 DATA CABLE - OUTDOOR
'FO'	6-STRAND SINGLE-MODE FIBER OPTIC CABLE	BERK-TEK LTAD12B006-1 A1J-M2	BLACK	DATA	SITE OPTICAL FIBER DATA NETWORK

CABLE SCHEDULES 5

TRANSFORMER SCHEDULE

TRANSFORMER DESIGNATION	PRIMARY VOLTAGE	SECONDARY VOLTAGE	KVA RATING	SUPPLY-SIDE & SYSTEM BONDING JUMPER SIZES	ENCLOSURE	DIMENSIONS HEIGHT	DIMENSIONS WIDTH	DIMENSIONS DEPTH	XFMR WEIGHT	REMARKS
TDPP	480V DELTA	120/208V Y 3ϕ	150	#3/0 CU	NEMA 3R	49.08"	33.65"	28.45"	1,192 LBS.	(1) (2) (3)

TRANSFORMER SCHEDULE NOTES:

(1) TRANSFORMER SHALL BE COMPLIANT WITH DOE 2016 ENERGY EFFICIENCY STANDARD.

(2) TRANSFORMER GROUND PER DETAIL 4/E600.

(3) MOUNT TRANSFORMER PER 12/E600.

TRANSFORMER SCHEDULE 2

PANEL: CMSB

EXISTING
CAMPUS MAIN SWITCHBOARD

BUS: 1600 AMP BUS
VOLTAGE: 277/480V, 3 PH, 4 W
NEUTRAL: 100% RATED NEUTRAL

MAIN: 1600A CB
TRIP: -
A.I.C.: 65000

LOCATION: OUTSIDE
MOUNTING: FLOOR
ENCLOSURE: NEMA 3R

CIRCUIT CKT NO.	CIRCUIT PNL SPACE	BREAKER AMP	BREAKER POLE	SERVES	VOLT-AMPERES LOAD	A	B	C
					46553	46553		
1	1	225	3	(N) TRANSFORMER 'TDPP' PANEL 'DPP'	23308		23308	
					23470			23470
2	2	30	3	BOOSTER PUMP	3878	3878		
					3878		3878	
					3878			3878
3	3	600	3	MAIN SWITCHBOARD BUILDING 'A' 'MSB-A'	135529	135529		
					135529		135529	
					135529			135529
4	4	800	3	MAIN SWITCHBOARD BUILDING 'B' 'MSB-B'	165778	165778		
					165778		165778	
					165778			165778
5	5	60	3	POWER LOGIC UNIT	0	0		
					0		0	
					0			0
6	6	125	3	(E) LOAD	27700	27700		
					27700		27700	
					27700			27700
7	7		3		0	0		
					0		0	
					0			0
8	8		3		0	0		
					0		0	
					0			0
				TOTAL CONNECTED LOAD (VA) :		379437	356192	356355
				25% LCL/LML (VA) :		0	0	0
				TOTAL CALCULATED LOAD (VA) :		379437	356192	356355
				TOTAL CALCULATED LOAD (AMPS) :		1369.8	1285.9	1286.5

PANEL: 'DPP'

600 AMP BUS
NEW PANELBOARD
120/208V, 3 PH, 4 W
100% RATED NEUTRAL

MAIN: 600A CB
TRIP: THERMAL-MAGNETIC
A.I.C.: 42000 A

LOCATION: OUTSIDE
MOUNTING: POST STRUT PER 12/E600
ENCLOSURE: NEMA 3R

CIRCUIT CKT NO.	CIRCUIT PNL SPACE	BREAKER AMP	BREAKER POLE	SERVES	VOLT-AMPERES LOAD	A	B	C	LOAD	SERVES	BREAKER AMP	BREAKER POLE	CIRCUIT PNL SPACE	CIRCUIT CKT NO.
1	1	200	2	PANEL 'D'	23245	23245			0	FUTURE EV CHARGERS	40	2	2	2
3	3				23308		23308		0				4	4
5	5	200	2	PANEL 'E'	23470			23470	0	FUTURE EV CHARGERS	40	2	6	6
7	7				23308	23308			0				8	8
9	9	20	1	SPACE	0		0		0	SPARE	20	1	10	10
11	11	20	1	SPACE	0			0	0	SPARE	20	1	12	12
13	13	20	1	SPACE	0	0			0	SPARE	20	1	14	14
15	15	20	1	SPACE	0		0		0	SPARE	20	1	16	16
17	17	20	1	SPACE	0			0	0	SPARE	20	1	18	18
19	19	20	1	SPACE	0	0			0	SPARE	20	1	20	20
21	21	20	1	SPACE	0		0		0	SPARE	20	1	22	22
23	23	20	1	SPACE	0			0	0	SPARE	20	1	24	24
				TOTAL CONNECTED LOAD (VA) :		46553	23308	23470						
				25% LCL/LML (VA) :		0	0	0						
				TOTAL CALCULATED LOAD (VA) :		46553	23308	23470	TOTAL CALCULATED LOAD FOR PANEL:					
				TOTAL CALCULATED LOAD (AMPS) :		387.9	194.2	195.6	93330 VA					

PANEL SCHEDULE 3

ELECTRICAL SYMBOL LEGEND

DIMENSIONS INDICATED ARE MEASURED TO CENTERLINE OF ENCLOSURE, UNLESS OTHERWISE NOTED
NOTE: SOME SYMBOLS SHOWN MAY NOT APPLY TO THIS PROJECT

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
E.P.	DENOTES EXPLOSION PROOF CONSTRUCTION	$_a	SINGLE POLE AC SNAP SWITCH @ +48" TO TOP OF BOX, U.O.N. | LOWER CASE SUBSCRIPT INDICATES CONTROLLED SWITCHLEG OF CIRCUIT
D.T.	DENOTES DUST TIGHT CONSTRUCTION	$_2	TWO POLE AC SNAP SWITCH @ +48" TO TOP OF BOX, U.O.N.
O.C.	DENOTES SPACING DIMENSION ON CENTER LINE OF DEVICE	$_3	THREE WAY AC SNAP SWITCH @ +48" TO TOP OF BOX, U.O.N.
R.T.	DENOTES RAIN TIGHT CONSTRUCTION	$_4	FOUR WAY AC SNAP SWITCH @ +48" TO TOP OF BOX, U.O.N.
U.G.	DENOTES UNDERGROUND INSTALLATION	$_M	HORSEPOWER RATED AC SNAP SWITCH @ +48" TO TOP OF BOX U.O.N.
V.P.	DENOTES VAPOR TIGHT CONSTRUCTION	$_P	SINGLE POLE AC SNAP SWITCH WITH PILOT LAMP @ +48" TO TOP OF BOX U.O.N.
W.P.	DENOTES WEATHERPROOF CONSTRUCTION	$_T	DIGITAL TIMER SWITCH, FLUSH MOUNTED @ +48" TO TOP OF BOX U.O.N.
W.T.	DENOTES WATER TIGHT CONSTRUCTION	$_A	SINGLE POLE AC SNAP SWITCH @ +48" TO TOP OF BOX, U.O.N.
A.F.F.	DENOTES ABOVE FINISHED FLOOR	$_K	KEY OPERATED AC SNAP SWITCH @ +48" TO TOP OF BOX U.O.N.
A.F.G.	DENOTES ABOVE FINISHED GRADE	$_CS	SYSTEM CONTROL SWITCH PER PLANS, @ 48" TO TOP OF BOX U.O.N.
F.B.O.	DENOTES FURNISHED BY OTHERS	$	WALL SWITCH WITH INTEGRAL OCCUPANCY SENSOR @ +48" TO TOP OF BOX, U.O.N.
U.O.N.	DENOTES UNLESS OTHERWISE NOTED	M	OCCUPANCY SENSOR - CEILING MOUNTED
(E)	DENOTES EXISTING TO REMAIN, NO WORK U.O.N.	M_W	OCCUPANCY SENSOR - WALL MOUNTED @ +90" TO TOP OF BOX, U.O.N.
(N)	DENOTES NEW	P	LIGHTING CONTROL SYSTEM DIMMING/POWER PACK MOUNTED IN ATTIC
1	ELECTRICAL KEYNOTES: DENOTES KEYNOTE #1 OF NOTES ON SAME SHEET	RP	LIGHTING CONTROL SYSTEM PLUG LOAD RELAY PACK MOUNTED IN ATTIC
A-3	CIRCUIT HOME RUN: DENOTES PANEL A, CKT. #3, - 3/4"C. MINIMUM, U.O.N.	C2	LIGHTING CONTROL SYSTEM 2-BUTTON DIMMING WALL SWITCH @ +48" TO TOP OF BOX, U.O.N.
F1	CIRCUIT FEEDER: DENOTES FEEDER 'F1' PER SYSTEM FEEDER SCHEDULE	C4	LIGHTING CONTROL SYSTEM 4-BUTTON DIMMING WALL SWITCH @ +48" TO TOP OF BOX, U.O.N.
	CONDUIT IN ATTIC/WALL: DENOTES 3/4"C-2#12 AWG CU THWN, 1#12 CU GND, U.O.N.	C1_L	LIGHTING CONTROL SYSTEM DIMMING WALL SWITCH WITH LOCKING COVER @ +48" TO TOP OF BOX, U.O.N.
— · —	CONDUIT IN FLOOR/U.G.: DENOTES 3/4"C-2#12 AWG CU THWN, 1#12 CU GND, U.O.N.	DS	LIGHTING CONTROL SYSTEM DAYLIGHT SENSOR - CEILING MOUNTED
– – – –	DENOTES EXISTING CONDUIT RUN TO REMAIN	NB	LIGHTING CONTROL SYSTEM NETWORK BRIDGE
	CONDUIT RUN - STUBBED, CAPPED AND LABELED.	NG	LIGHTING CONTROL SYSTEM NETWORK GATEWAY
	CONDUIT RUN: DENOTES 3/4"C - 3 #12 AWG CU THWN + 1 #12 CU GND, U.O.N.	AD	LIGHTING CONTROL SYSTEM AUTOMATED DEMAND RESPONSE MODULE
	CONDUIT RUN: DENOTES 3/4"C - 4 #12 AWG CU THWN + 1 #12 CU GND, U.O.N.	TC	LIGHTING CONTROL SYSTEM TIME CLOCK
	CONDUIT RUN: DENOTES 3/4"C - 5 #12 AWG CU THWN + 1 #12 CU GND, U.O.N.	PC	PHOTOCELL CONTROL MOUNTED ON ROOF
	CONDUIT RUN: DENOTES 1"C - 6 #12 AWG CU THWN + 1 #12 CU GND, U.O.N.		
	SEPARATE POWER AND DATA FLOOR BOXES (2)	T	LOW VOLTAGE CONTROL TRANSFORMER
	FLUSH FLOOR BOX WITH DEVICE(S) INSTALLED PER PLANS, U.O.N. (2)		
	TAMPER-RESISTANT SINGLE RECEPTACLE IN WALL @ +18", U.O.N.		ELECTRICAL PANELBOARD PER PLANS, FLUSH MOUNTED IN WALL (4)
	TAMPER-RESISTANT DUPLEX RECEPTACLE IN WALL @ +18", U.O.N.		ELECTRICAL PANELBOARD PER PLANS, SURFACE MOUNTED ON WALL
WP	TAMPER-RESISTANT DUPLEX GFI RECEPTACLE, IN WALL @ 18", U.O.N.		TERMINAL CABINET PER PLANS, FLUSH MOUNTED IN WALL (5)
	TAMPER-RESISTANT SWITCHED GFCI RECEPTACLE IN WALL @ +18" A.F.F. U.O.N. (OCC. SENSOR OR WALL SWITCH CONTOLLED)		TERMINAL CABINET PER PLANS, SURFACE MOUNTED ON WALL
WP	TAMPER-RESISTANT WEATHER RESISTANT (W/R) DUPLEX GFCI RECEPTACLE W/ W.P. COVER @+18", U.O.N.		CONTROL PANEL PER PLANS, FLUSH MOUNTED IN WALL (5)
	TAMPER-RESISTANT DUPLEX ISOLATED GROUND RECEPTACLE IN WALL @ +18", U.O.N. (7)		CONTROL PANEL PER PLANS, SURFACE MOUNTED ON WALL
	TAMPER-RESISTANT QUADRUPLEX RECEPTACLE IN WALL @ +18", U.O.N.		LIGHTING CONTROL PANEL PER PLANS, FLUSH MOUNTED IN WALL (5)
	SPECIAL PURPOSE ELECTRICAL OUTLET PER PLAN IN WALL @ 18" U.O.N.		LIGHTING CONTROL PANEL PER PLANS, SURFACE MOUNTED ON WALL
	DUPLEX RECEPTACLE FLUSH IN CEILING		FIRE ALARM PANEL PER PLANS, FLUSH MOUNTED IN WALL (5)
	TAMPER-RESISTANT QUADRUPLEX RECEPTACLE IN WALL @ +18" A.F.F., U.O.N. ONE UNSWITCHED RECEPTACLE AND ONE SWITCHED (OCC. SENSOR CONTROLLED)		FIRE ALARM PANEL PER PLANS, SURFACE MOUNTED ON WALL
	SPECIAL JUNCTION BOX		
	JUNCTION BOX WITH FLEXIBLE CONDUIT CONNECTION TO EQUIPMENT	S	EXTERIOR SPEAKER, ELEVATION AS NOTED
	NON-FUSIBLE DISCONNECT SWITCH	S	SPEAKER IN CEILING, U.O.N.
	FUSIBLE DISCONNECT SWITCH	S	SPEAKER/CLOCK IN COMMON BACKBOX PER PLAN @ 12" BELOW CEILING, U.O.N.
	FUSIBLE DISCONNECT SWITCH WITH INTEGRAL MAGNETIC STARTER		WALL CLOCK PER PLAN @ 12" BELOW CEILING, U.O.N.
	ELECTRIC MOTOR	S	SPEAKER ON WALL @ 12" BELOW CEILING, U.O.N.
	EXHAUST FAN OR FRACTIONAL HORSEPOWER MOTOR		
	SURFACE MOUNTED RACEWAY, MOUNT @ +18" A.F.F. U.ON.	MD	INTRUSION ALARM SYSTEM MOTION DETECTOR (3)
	RECESSED LED LIGHTING FIXTURE	DC	INTRUSION ALARM SYSTEM MAGNETIC DOOR CONTACT (3)
	RECESSED LED LIGHTING FIXTURE WITH EMERGENCY BATTERY BACKUP	WC	INTRUSION ALARM SYSTEM MAGNETIC WINDOW CONTACT (3)
	SURFACE MOUNTED LED LIGHTING FIXTURE	GB	INTRUSION ALARM SYSTEM GLASS BREAK DETECTOR (3)
	SURFACE MOUNTED LED LIGHTING FIXTURE WITH EMERGENCY BATTERY BACKUP	KP	INTRUSION ALARM SYSTEM KEYPAD (3)
	SURFACE MOUNTED LED STRIP LIGHT	CR	INTRUSION ALARM SYSTEM CARD READER (3)
	SURFACE MOUNTED LED STRIP LIGHT WITH EMERGENCY BATTERY BACKUP	FR	INTRUSION ALARM SYSTEM FOB READER (3)
	POST TOP MOUNTED LIGHTING FIXTURE	C	SECURITY CAMERA ROUGH-IN LOCATION PER PLAN (3)
	WALL MOUNTED LIGHTING FIXTURE		
	WALL MOUNTED LIGHTING FIXTURE WITH EMERGENCY BATTERY BACKUP	SD	FIRE ALARM SMOKE DETECTOR ON CEILING, U.O.N.
	CEILING MOUNTED LIGHTING FIXTURE	SM	FIRE ALARM SYNC MODULE
	CEILING MOUNTED LIGHTING FIXTURE WITH EMERGENCY BATTERY BACKUP	HD	FIRE ALARM HEAT DETECTOR ON CEILING, U.O.N.
	RECESSED LIGHTING FIXTURE	DD	FIRE ALARM DUCT DETECTOR IN HVAC DUCT
	RECESSED FIXTURE WITH EMERGENCY BATTERY BACKUP	WF	FIRE ALARM WATERFLOW DETECTION SWITCH
	SURFACE MOUNTED ROUND LIGHTING FIXTURE	WT	FIRE ALARM ADDRESSABLE WATERFLOW / TAMPER SWITCH MODULE
	SURFACE MOUNTED ROUND LIGHTING FIXTURE WITH EMERGENCY BATTERY BACKUP	TS	FIRE ALARM TAMPER SWITCH
	ILLUMINATED EXIT SIGN MOUNTED ON CEILING	CC	FIRE ALARM ADDRESSABLE INPUT/OUTPUT MODULE
	ILLUMINATED EXIT SIGN MOUNTED ON WALL	CR	FIRE ALARM ADDRESSABLE CONTROL RELAY MODULE
	LOW LEVEL PHOTOLUMINESCENT EXIT SIGN MOUNTED ON WALL	DR	FIRE ALARM DOOR RELEASE
	POLE MOUNTED EXTERIOR LIGHTING FIXTURE	AM	FIRE ALARM INDIVIDUAL ADDRESSABLE MODULE
		F	FIRE ALARM MANUAL PULL STATION @ +48" TO TOP OF BOX, U.O.N.
2/2	COMBINATION VOICE AND DATA OUTLET IN WALL, WITH TWO 'D' CABLES TO IDF + TWO 'T' CABLES TO TELEPHONE BACKBOARD (1) (6)	V	FIRE ALARM VISUAL ALARM UNIT @ +80" MINIMUM, U.O.N.
X	DATA OUTLET IN WALL @ +18", U.O.N. WITH 'D' CABLES TO IDF OR MDF (SUBSCRIPT INDICATES QUANTITY OF CABLES AND STATION SIDE JACKS) (1) (6)	H	INTERIOR FIRE ALARM HORN @ +10'-0", U.O.N.
TV	TELEVISION OUTLET IN WALL @ +18", U.O.N. (1)	H	EXTERIOR FIRE ALARM HORN
M	MICROPHONE OUTLET IN WALL @ +18", U.O.N. (1)	AV	FIRE ALARM HORN/STROBE ALARM UNIT @ +80" MINIMUM, U.O.N.
S	SPEAKER OUTLET IN WALL @ +18", U.O.N. (1)	SV	VOICE EVACUATION SPEAKER/STROBE ALARM UNIT @ +80" MINIMUM, U.O.N.
IC	INTERCOMMUNICATIONS HANDSET ON WALL @ +48" TO TOP OF BOX U.O.N.	S	EXTERIOR VOICE EVACUATION SPEAKER
WAP	WIRELESS ACCESS POINT LOCATION, PROVIDE TWO TYPE 'DA' CABLES TO IDF OR MDF		FIRE ALARM CIRCUIT END OF LINE RESISTOR

ELECTRICAL SYMBOLS NOTES:

(1) RUN 1"C CONCEALED IN WALL AND STUB INTO ACCESSIBLE ATTIC SPACE ABOVE NEAREST T-BAR CEILING, U.O.N.

(2) RUN 1"C TO NEAREST WALL, THEN RISE CONCEALED IN WALL AND STUB INTO ACCESSIBLE ATTIC SPACE ABOVE NEAREST T-BAR CEILING, U.O.N. FOR SINGLE SYSTEMS INDIVIDUAL FLOORBOXES. WHERE MULTIPLE SYSTEMS OCCUR WITHIN A COMMON FLOOR BOX, RUN TWO 1"C PER ABOVE.

(3) SYSTEM IS ROUGH IN ONLY, PROVIDE BACKBOX, BLANK COVERPLATE AND CONDUIT STUB PER DETAIL PLANS.

(4) IN ADDITION TO CONDUITS SHOWN ON PLANS, STUB ONE 1 1/4"C, ONE 1"C, AND TWO 3/4"C (SPARE) INTO ACCESSIBLE ATTIC SPACE ABOVE NEAREST T-BAR CEILING, U.O.N. THIS REQUIREMENT APPLIES TO EACH POWER AND LIGHTING PANEL INDICATED FLUSH MOUNTED ON POWER PLAN.

(5) IN ADDITION TO CONDUITS SHOWN ON PLANS, STUB ONE 1"C AND TWO 3/4"C (SPARE) INTO ACCESSIBLE ATTIC SPACE ABOVE NEAREST T-BAR CEILING U.O.N.. REQUIREMENT APPLIES TO EACH SIGNAL SYSTEM T.C. INDICATED FLUSH MOUNTED ON SIGNAL PLAN.

(6) 4S BACKBOX WITH SINGLE GANG TRIM AND COVERPLATE.

(7) ORANGE DEVICE (ISOLATED GROUND DUPLEX RECEPT. ONLY) WITH ENGRAVED WORDING ON COVER PLATE ABOVE ISOLATED GROUND RECEPT.: "COMPUTER ONLY".

SYMBOL LEGEND AND NOTES 1

BID DOCUMENTS ONLY
DSA APPROVED
DOCUMENTS
REQUIRED PRIOR TO
CONSTRUCTION

MARK	DATE	DESCRIPTION
	12/02/2022	DSA BACKCHECK

TETER, LLP
ARCHITECTS ENGINEERS
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ENGINEERS CONNECTED

LOS BANOS
CHILD DEVELOP. CENTER
MERCED COLLEGE | MCCD
22240 CA-152 LOS BANOS, CA.

DRAWING TITLE
ELECTRICAL SCHEDULES, LEGENDS, AND NOTES

PROJECT NO.
22-12075

DRAWING
E800

PLOT DATE: 1/9/2023 4:36:57 PM

GLOBAL MODULAR Incorporated

AURORA DESIGNS | MODTECH Designs | MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS

CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISION
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISION
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

MERCED COLLEGE LOS BANOS

CHILD DEVELOPMENT CENTER

22240 CA-152

LOS BANOS CA 93635

BUILDING DATA

ROOF LIVE LOAD: 20 PSF
WIND LOAD: 93 MPH Exp, "C"
ELECTRICAL: (1) 200A
SERIAL NUMBER:

FLOOR LIVE LOAD: 50 PSF
OCCUPANCY: E
MECHANICAL: YES
PLUMBING: YES

2AH10101-2AH10103 (BUILDING D)
2AH10104-2AH10106 (BUILDING E)

APPLICABLE CODES

2022 California Administrative Code (CAC), Part 1, Title 24 CCR
2019 California Building Code (CBC), Part 2, Title 24 CCR
2019 California Plumbing Code (CPC), Part 5, Title 24 CCR
2019 California Existing Building Code (CEBC), Part 10, Title 24 CCR

EXISTING APPLICABLE CODES

2001 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR)

2001 CALIFORNIA BUILDING CODE VOLUMES 1, 2 AND 3 (PART 2 TITLE 24, CCR) (1997 EDITION UNIFORM BUILDING CODE WITH 2001 CALIFORNIA AMENDMENTS)

2001 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24, CCR) (1999 EDITION NATIONAL ELECTRICAL CODE WITH 2001 AMENDMENTS)

2001 CALIFORNIA MECHANICAL CODE (PART 4, TITLE 24, CCR) (2000 EDITION IAPMO UNIFORM MECHANICAL CODE WITH 2001 CALIFORNIA AMENDMENTS)

2001 CALIFORNIA PLUMBING CODE (PART 5, TITLE 24, CCR) (2000 EDITION IAMPO UNIFORM PLUMBING CODE WITH 2001 CALIFORNIA AMENDMENTS)

2001 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR)

2001 CALIFORNIA ELEVATOR SAFETY CONSTRUCTION CODE (PART 7, TITLE 24, CCR)

2001 CALIFORNIA FIRE CODE (PART 9, TITLE 24, CCR)

2001 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR)

NFPA 13, 1999 EDITION, THE INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS, AS AMENDED

NFPA 14, 2000 EDITION, INSTALLATION OF STANDPIPE, PRIVATE HYDRANT AND HOSE SYSTEMS

NFPA 24, 1995 EDITION, INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES

NFPA 72, 1999 EDITION, NATIONAL FIRE ALARM CODE, AS AMENDED

SITE SPECIFIC DESIGN CRITERIA

WIND DESIGN DATA:

WIND SPEED: 93 MPH
RISK CATEGORY=II
WIND EXPOSURE=C
INTERNAL PRESSURE COEFFICIENT=+/- 0.18

EARTH QUAKEDESIGN DATA:

RISK CATEGORY:II
Ie=1.0
Ss=1.457
S_1=0.481
SITE CLASS=D
SEISMIC DESIGN CATEGORY=D
BASIC SEISMIC FORCE RESISTING SYSTEM= LIGHT MODULAR STEEL MOMENT FRAME
BASE SHEAR: 10060 POUNDS
C_s=0.278
R=3.5
ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE
NO VERTICAL OR HORIZONTAL IRREGULARITIES
LOCATION OF BASE=FINISH FLOOR ELEVATION

SCOPE OF WORK:
GLOBAL MODULAR INC, ADDING AN INTERIOR PARTITION WALL TO AN EXISTING 2-36X40 DSA-CERTIFIED MODULAR CLASSROOM.

2-36x40 CHILD DEVELOPMENT CENTER

PROJECT SPECIFIC SHEETS

MSI APP NO. 01-105425

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated

AURORA DESIGNS | MODTECH Designs | MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS

CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:

TITLE SHEET

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22

SHEET NUMBER

A0.0-PS

HARDWARE GROUP (MAIN ENTRY) 1		
QTY.	ITEM	DESCRIPTION
1	LOCK SET	'VON DUPRIN': PANIC HARDWARE MODEL: 22 SERIES, AX & HDSI
1	KEYING	CONSTRUCTION KEY
3	HINGES	'MCKINNEY': T2714 4.5"x4.5" NRP A5133
1	CLOSER	'NORTON': 8301 SLIM COVER (5 LB OPERATING PUSH/PULL PRESSURE)
1	THRESHOLD	'MCKINNEY': MCK271A 36"
1	DOOR BOTTOM	'MCKINNEY': MCK216AV 36"
1	WEATHER-STRIP	'MCKINNEY': MCK2891AS 36"x84"
1	KICK PLATE	'MCKINNEY': KP50 10"x34"
1	DOOR STOP	'MCKINNEY': FS02 FLOOR STOP (LOCATED 4" FROM WALL)

HARDWARE GROUP (SIDE ENTRY) 2		
QTY.	ITEM	DESCRIPTION
1	LOCK SET	'FALCON': 511 DANE LEVER 626
1	KEYING	CONSTRUCTION KEY
3	HINGES	'MCKINNEY': T2714 4.5"x4.5" NRP A5133
1	CLOSER	'NORTON': 8301 SLIM COVER (5 LB OPERATING PUSH/PULL PRESSURE)
1	THRESHOLD	'PEMKO': 271A 36"
1	DOOR BOTTOM	'PEMKO': 216AV 36"
1	WEATHER-STRIP	'PEMKO': 2891AS 36"x84"
1	KICK PLATE	'ROCKWOOD': K1050 10"x34"
1	DOOR STOP	'ROCKWOOD': 443 FLOOR STOP (LOCATED 4" FROM WALL)

HARDWARE GROUP DUTCH DOOR (PASSAGE) 3		
QTY.	ITEM	DESCRIPTION
1	PASSAGE LOCKSET	'FALCON': 101 F75 "DANE" LEVER 626
4	HINGES	'MCKINNEY': T2714 4"x4"
1	SLIDE BOLTS	'IVES' SURFACE BOLT #253 8" B626D (RESTROOM DOOR ONLY)

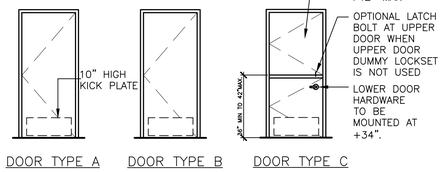
HARDWARE GROUP (PRIVACY) 4		
QTY.	ITEM	DESCRIPTION
1	LOCK SET	'FALCON': 301 DANE LEVER 626
3	HINGES	'MCKINNEY': T2714 4"x4" A5133

HARDWARE GROUP (OFFICE) 5		
QTY.	ITEM	DESCRIPTION
1	OFFICE LOCKSET	'FALCON': 521 DANE LEVER 626
3	HINGES	'MCKINNEY': T2714 4"x 4"

DOOR SCHEDULE											
#	DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	HARDWARE GROUP	DOOR MATERIAL	DOOR GAUGE	DOOR FRAME	FRAME GAUGE	GLAZING	FIRE RATING	REMARKS
100	A	3'-0"	6'-8"	1	STL	18	KD	16	–	–	–
200	A	3'-0"	6'-8"	2	STL	–	KD	16	–	–	–
300	B	3'-0"	6'-8"	4	SCL	–	TM	16	–	–	–
400	B	3'-0"	6'-8"	5	SCL	–	TM	16	–	–	–
500	C	3'-0"	6'-8"	3	SCL	–	TM	16	–	–	–

DOOR MATERIAL LEGEND
STL: STEEL DOOR-HOLLOW CORE
SCW: SOLID CORE WOOD
SCL: SOLID CORE 1HO OR LEGACY
HCW: HOLLOW CORE WOOD
SF: STORE FRONT

DOOR FRAME LEGEND
WF: WELDED FRAMING-HOLLOW METAL
TM: TIMELY METAL
KD: KNOCK DOWN-HOLLOW METAL
SF: STORE FRONT



DOOR TYPE A DOOR TYPE B DOOR TYPE C

NOTE:
NEW BUILDINGS OR EXISTING BUILDINGS RECEIVING INTERIOR MODERNIZATION, SERVING K-12, CONSTRUCTED WITH STATE FUNDS, ON NEW OR EXISTING CAMPUSES WITH INDIVIDUAL ROOMS WITH AN OCCUPANT LOAD OF 5 OR MORE AND BUILDING ENTRANCES SHALL BE EQUIPPED WITH INTERIOR LOCKING DOOR HARDWARE

ROOM SCHEDULE										
ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE	WALLS				CEILING FINISH	HEIGHT CEILING	REMARKS
				ELEV. 1	ELEV. 2	ELEV. 3	ELEV. 4			
	OPEN AREA	CPT	4TB	VT	VT	VT	VT	AT	8'-6"	–
	OFFICE 1	VCT	4TB	VT	VT	VT	VT	AT	8'-6"	–
	OFFICE 2	VCT	4TB	VT	VT	VT	VT	AT	8'-6"	–
	KITCHENETTE	VCT	4TB	VT	VT	VT	VT	AT	8'-6"	–
	CHILD'S RR	SV	6SC	FRP	FRP	FRP	FRP	AT	8'-6"	–
	STAFF'S RR	SV	6SC	FRP	FRP	FRP	FRP	AT	8'-6"	–

WALL FINISH LEGEND: (CHECK BOX WHERE APPLICABLE)
VT: 1/2" VINYL TACK BOARD OVER:
1/2" GYP BOARD ■
OPTIONAL 5/8" GYP BOARD □
NOTE: USE TYPE 'X' GYP BOARD WHERE CALL FOR. USE MOISTURE RESISTANT GYP BOARD BEHIND CLASSROOM SINKS

FRP: 1/8" FIBERBOARD REINFORCED PANELS OVER:
1/2" MOISTURE RESISTANT GYP BOARD ■
OPTIONAL 5/8" MOISTURE RESISTANT GYP BOARD □

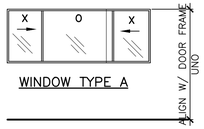
PGYP: 1/2" GYP BOARD TAPE/TEXTURED/PAINTED □
OPTIONAL 5/8" GYP BOARD TAPE/TEXTURED/PAINTED □
NOTE: USE TYPE 'X' GYP BOARD WHERE CALL FOR. USE MOISTURE RESISTANT GYP BOARD BEHIND CLASSROOM SINKS AND/OR WET AREAS

FLOOR FINISH LEGEND
CPT: CARPET FLOORING
SV: SHEET VINYL FLOORING
VCT: VINYL COMPOSITION TILE
4TB: 4" TOP SET BASE
6TB: 6" TOP SET BASE
6SC: 6" SELF COVE BASE
BO: BY OWNER

CEILING FINISH LEGEND: (CHECK BOX WHERE APPLICABLE)
AT: ACOUSTICAL TILE IN HEAVY DUTY T-BAR GRID

HL: 1/2" GYP BOARD TAPE/TEXTURED/PAINTED
5/8" GYP BOARD TAPE/TEXTURED/PAINTED

WINDOW SCHEDULE							
*	WINDOW WIDTH	WINDOW HEIGHT	WINDOW FRAME	WINDOW FINISH	WINDOW GLAZING	FIRE RATING	REMARKS
A	8'-0"	3'-0"	AL	CA	1&4	–	
B	4'-0"	4'-0"	AL	CA	1&4	–	



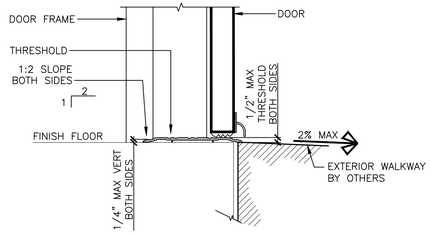
WINDOW TYPE A

X=SLIDER
O=FIXED

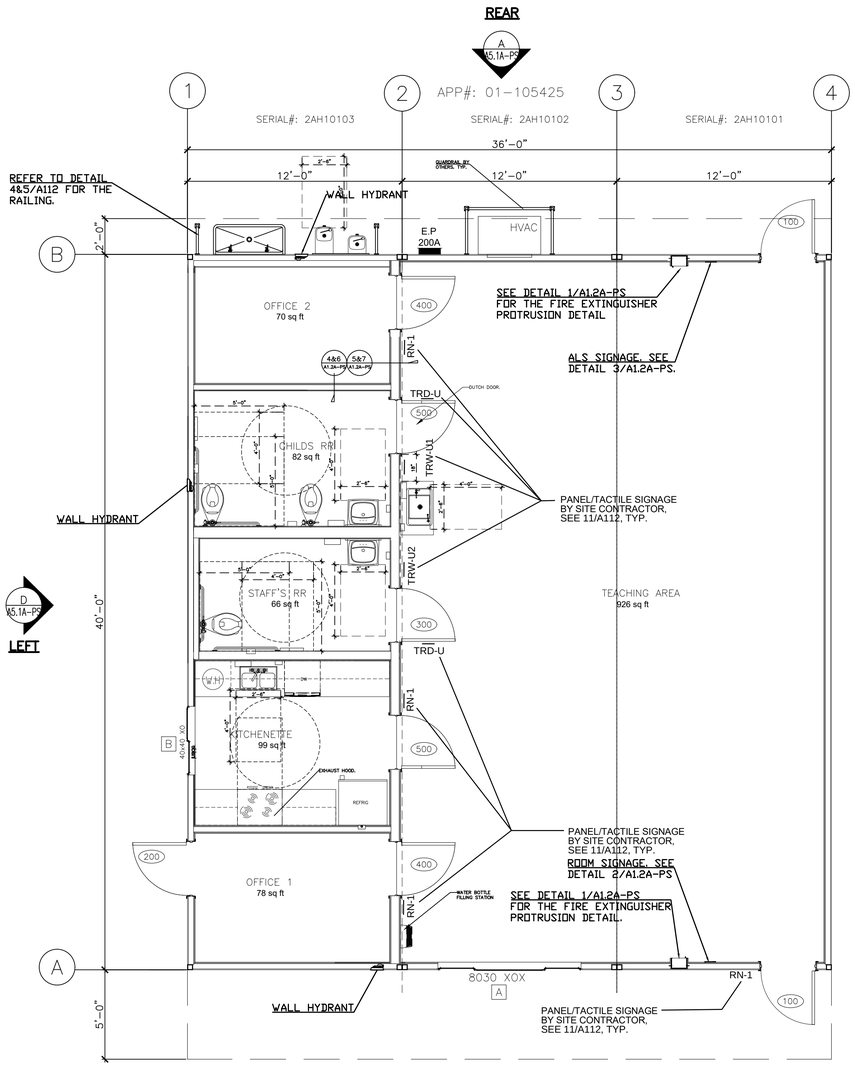
WINDOW TYPE B

WINDOW FINISHES
CA: CLEAR ANODIZED
BA: BRONZE ANODIZED
PNT: PAINTED

WINDOW FRAME LEGEND
AL: ALUMINUM
HM: HOLLOW METAL



ACCESSIBLE THRESHOLD
SCALE: NTS



FUNCTION OF SPACE	OCCUPANT LOAD FACTOR
DAYCARE	35
36'x40'= 1440 SQ.FT 1440/35= 41 TOTAL OCCUPANTS.	

NORTH

FLOOR PLAN BUILDING D SCALE: 1/4"=1'-0"

1

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR incorporated
AURORA DESIGNS MODTECH MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME:
36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:

FLOOR PLAN & HARDWARE SCHEDULE

BUILDING D

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22

SHEET NUMBER

A1.1A-PS

HARDWARE GROUP (MAIN ENTRY) 1		
QTY.	ITEM	DESCRIPTION
1	LOCK SET	'VON DUPRIN': PANIC HARDWARE MODEL: 22 SERIES, AX & HDSI
1	KEYING	CONSTRUCTION KEY
3	HINGES	'MCKINNEY': T2714 4.5"x4.5" NRP A5133
1	CLOSER	'NORTON': 8301 SLIM COVER (5 LB OPERATING PUSH/PULL PRESSURE)
1	THRESHOLD	'MCKINNEY': MCK271A 36"
1	DOOR BOTTOM	'MCKINNEY': MCK216AV 36"
1	WEATHER-STRIP	'MCKINNEY': MCK2891AS 36"x84"
1	KICK PLATE	'MCKINNEY': KP50 10"x34"
1	DOOR STOP	'MCKINNEY': FS02 FLOOR STOP (LOCATED 4" FROM WALL)

HARDWARE GROUP (SIDE ENTRY) 2		
QTY.	ITEM	DESCRIPTION
1	LOCK SET	'FALCON': 511 DANE LEVER 626
1	KEYING	CONSTRUCTION KEY
3	HINGES	'MCKINNEY': T2714 4.5"x4.5" NRP A5133
1	CLOSER	'NORTON': 8301 SLIM COVER (5 LB OPERATING PUSH/PULL PRESSURE)
1	THRESHOLD	'PEMKO': 271A 36"
1	DOOR BOTTOM	'PEMKO': 216AV 36"
1	WEATHER-STRIP	'PEMKO': 2891AS 36"x84"
1	KICK PLATE	'ROCKWOOD': K1050 10"x34"
1	DOOR STOP	'ROCKWOOD': 443 FLOOR STOP (LOCATED 4" FROM WALL)

HARDWARE GROUP DUTCH DOOR (PASSAGE) 3		
QTY.	ITEM	DESCRIPTION
1	PASSAGE LOCKSET	'FALCON': 101 F75 "DANE" LEVER 626
4	HINGES	'MCKINNEY': T2714 4"x4"
1	SLIDE BOLTS	'IVES' SURFACE BOLT #253 8" B626D (RESTROOM DOOR ONLY)

HARDWARE GROUP (PRIVACY) 4		
QTY.	ITEM	DESCRIPTION
1	LOCK SET	'FALCON': 301 DANE LEVER 626
3	HINGES	'MCKINNEY': T2714 4"x4" A5133

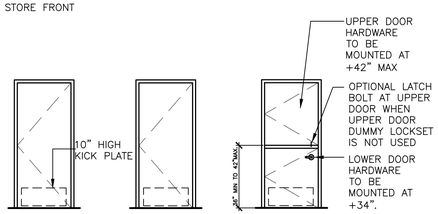
HARDWARE GROUP (OFFICE) 5		
QTY.	ITEM	DESCRIPTION
1	OFFICE LOCKSET	'FALCON': 521 DANE LEVER 626
3	HINGES	'MCKINNEY': T2714 4"x 4"

HARDWARE GROUP (JANITOR CLOSET) 6		
QTY.	ITEM	DESCRIPTION
1	STORAGE LOCKSET	'FALCON': 581 DANE LEVER 626
3	HINGES	'MCKINNEY': T2714 4"x 4"
1	CLOSER	'NORTON': 8301 SLIM COVER (5 LB OPERATING PUSH/PULL PRESSURE)

DOOR SCHEDULE											
#	DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	HARDWARE GROUP	DOOR MATERIAL	DOOR GAUGE	DOOR FRAME	FRAME GAUGE	GLAZING	FIRE RATING	REMARKS
100	A	3'-0"	6'-8"	1	STL	18	KD	16	–	–	–
200	A	3'-0"	6'-8"	2	STL	–	KD	16	–	–	–
300	B	3'-0"	6'-8"	4	SCL	–	TM	16	–	–	–
400	B	3'-0"	6'-8"	5	SCL	–	TM	16	–	–	–
500	C	3'-0"	6'-8"	3	SCL	–	TM	16	–	–	–
600	B	3'-0"	6'-8"	6	SCL	–	TM	16	–	–	–

DOOR MATERIAL LEGEND
STL: STEEL DOOR-HOLLOW CORE
SCW: SOLID CORE WOOD
SCL: SOLID CORE WOOD LEGACY
HCW: HOLLOW CORE WOOD
SF: STORE FRONT

DOOR FRAME LEGEND
WF: WELDED FRAMING-HOLLOW METAL
TM: TIMELY METAL
KD: KNOCK DOWN-HOLLOW METAL
SF: STORE FRONT



DOOR TYPE A DOOR TYPE B DOOR TYPE C

NOTE:
NEW BUILDINGS OR EXISTING BUILDINGS RECEIVING INTERIOR MODERNIZATION, SERVING K-12, CONSTRUCTED WITH STATE FUNDS, ON NEW OR EXISTING CAMPUSES WITH INDIVIDUAL ROOMS WITH AN OCCUPANT LOAD OF 5 OR MORE AND BUILDING ENTRANCES SHALL BE EQUIPPED WITH INTERIOR LOCKING DOOR HARDWARE

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE	WALLS ELEV. 1	WALLS ELEV. 2	WALLS ELEV. 3	WALLS ELEV. 4	CEILING FINISH	HEIGHT CEILING	REMARKS
	OPEN AREA	CPT	4TB	VT	VT	VT	VT	AT	8'-6"	–
	OFFICE 1	VCT	4TB	VT	VT	VT	VT	AT	8'-6"	–
	JANITOR CLOSET	SV	4TB	FRP	FRP	FRP	FRP	AT	8'-6"	–
	KITCHENETTE	VCT	4TB	VT	VT	VT	VT	AT	8'-6"	–
	CHILD'S RR	SV	6SC	FRP	FRP	FRP	FRP	AT	8'-6"	–
	STAFF'S RR	SV	6SC	FRP	FRP	FRP	FRP	AT	8'-6"	–

WALL FINISH LEGEND: (CHECK BOX WHERE APPLICABLE)
VT: 1/2" VINYL TACK BOARD OVER: 1/2" GYP BOARD ■ OPTIONAL 5/8" GYP BOARD ☐
NOTE: USE TYPE 'X' GYP BOARD WHERE CALL FOR. USE MOISTURE RESISTANT GYP BOARD BEHIND CLASSROOM SINKS

FRP: 1/8" FIBERBOARD REINFORCED PANELS OVER: 1/2" MOISTURE RESISTANT GYP BOARD ■ OPTIONAL 5/8" MOISTURE RESISTANT GYP BOARD ☐

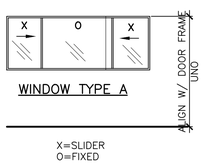
PGYP: 1/2" GYP BOARD TAPE/TEXTURED/PAINTED ☐ OPTIONAL 5/8" GYP BOARD TAPE/TEXTURED/PAINTED ☐
NOTE: USE TYPE 'X' GYP BOARD WHERE CALL FOR. USE MOISTURE RESISTANT GYP BOARD BEHIND CLASSROOM SINKS AND/OR WET AREAS

FLOOR FINISH LEGEND
CPT: CARPET FLOORING
SV: SHEET VINYL FLOORING
VCT: VINYL COMPOSITION TILE
4TB: 4" TOP SET BASE
6TB: 6" TOP SET BASE
6SC: 6" SELF COVE BASE
BO: BY OWNER

CEILING FINISH LEGEND: (CHECK BOX WHERE APPLICABLE)
AT: ACOUSTICAL TILE IN HEAVY DUTY T-BAR GRID

HL: 1/2" GYP BOARD TAPE/TEXTURED/PAINTED 5/8" GYP BOARD TAPE/TEXTURED/PAINTED

WINDOW SCHEDULE							
*	WINDOW WIDTH	WINDOW HEIGHT	WINDOW FRAME	WINDOW FINISH	WINDOW GLAZING	FIRE RATING	REMARKS
A	8'-0"	3'-0"	AL	CA	1&4	–	
B	4'-0"	4'-0"	AL	CA	1&4	–	



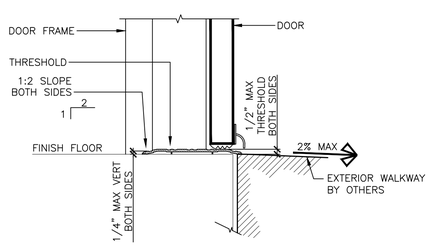
WINDOW TYPE A

X=SLIDER
O=FIXED

WINDOW TYPE B

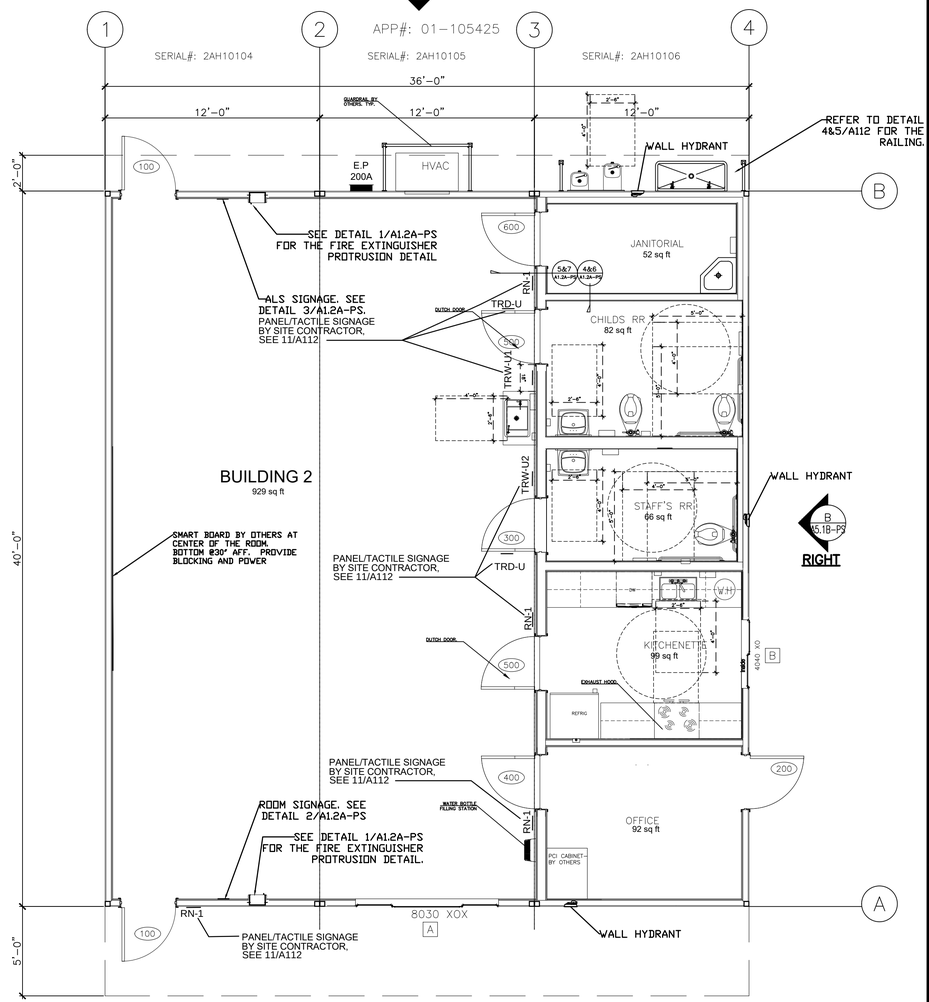
WINDOW FINISHES
CA: CLEAR ANODIZED
BA: BRONZE ANODIZED
PNT: PAINTED

WINDOW FRAME LEGEND
AL: ALUMINUM
HM: HOLLOW METAL



ACCESSIBLE THRESHOLD
SCALE: NTS

REAR



FUNCTION OF SPACE	OCCUPANT LOAD FACTOR
DAYCARE	35
36'x40'= 1440 SQ.FT 1440/35= 41 TOTAL OCCUPANTS.	

NORTH

FLOOR PLAN BUILDING E SCALE: 1/4"=1'-0"

1

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS

CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:
FLOOR PLAN & HARDWARE SCHEDULE
BUILDING E

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

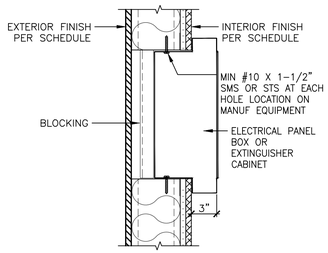
LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22

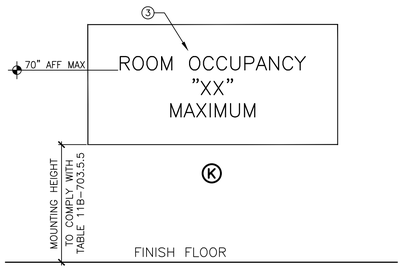
SHEET NUMBER
A1.1B-PS



WOOD SIDING WITH METAL STUDS

ELECT PANEL/FIRE EXTINGUISHER CABINET STEEL STUD FRAMING AT EXTERIOR WALL

1

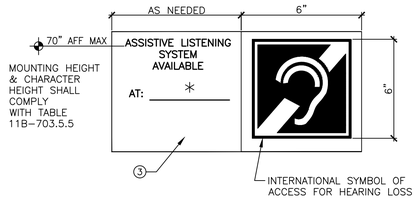


NOTES:
1. SIGN MATERIAL TO BE 1/8" THICK ES PLASTIC. MOUNT WITH VANDAL RESISTANT FASTENERS
2. SIGN PROVIDED BY DISTRICT UNO
3. OCCUPANT LOAD SIGN SHALL BE PROVIDED FOR ROOM OR SPACE WITH OCCUPANT LOAD OF 50 OR MORE. CBC 1004.9

③ FINISH AND CONTRAST: CBC SECTION 11B-703.5.1, CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUD OR DARK CHARACTERS ON A LIGHT BACKGROUND

OCCUPANCY SIGNAGE

2

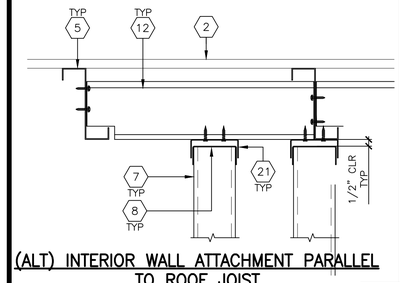


NOTES:
1. SIGN MATERIAL TO BE 1/8" THICK ES PLASTIC. MOUNT WITH VANDAL RESISTANT FASTENERS
2. CBC SECTION 11B-216.10 ASSISITIVE LISTENING SYSTEMS SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS COMPLYING WITH FIGURE 11B-703.7.2.4
3. PROVIDE ONE SIGN WHERE INDICATED ON PLANS
4. SIGN SHALL HAVE A NON-GLARE FINISH AND BE DISPLAYED EITHER AS A NEGATIVE OR POSITIVE IMAGE WITHIN A SQUARE THAT IS A MINIMUM OF 6 INCHES ON EACH SIDE. THE SYMBOL MAY BE SHOWN IN BLACK AND WHITE OR IN COLOR. THERE SHALL BE AT LEAST A 70 PERCENT COLOR CONTRAST BETWEEN THE BACKGROUND OF THE SIGN FROM THE SURFACE THAT IT IS MOUNTED ON
5. SIGN PROVIDED BY DISTRICT UNO
6. CHARACTERS SHALL COMPLY WITH 11B-703.5

* SITE SPECIFIC INFORMATION PROVIDED BY ARCHITECT (TO BE INCLUDED AS PERMANENT PART OF SIGN)

ASSISTIVE LISTENING SYSTEM

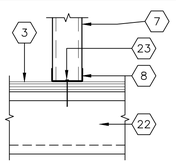
3



(ALT) INTERIOR WALL ATTACHMENT PARALLEL TO ROOF JOIST

SCALE: NTS

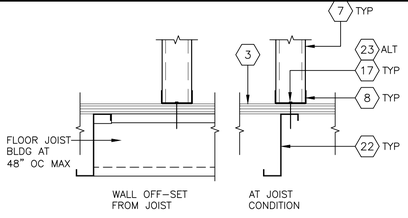
4



INTERIOR WALL AT FLOOR PERPENDICULAR TO FLOOR JOIST

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

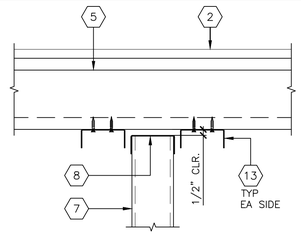
5



INTERIOR WALL AT FLOOR PARALLEL TO FLOOR JOIST

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

6



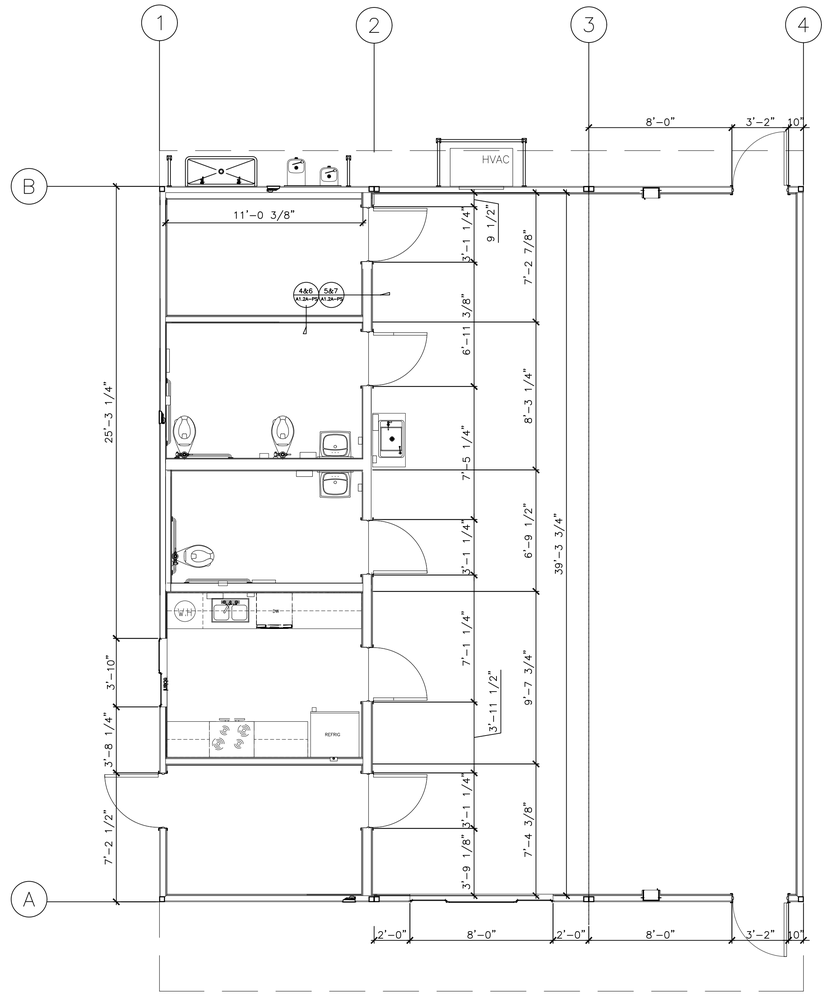
INTERIOR WALL ATTACHMENT (PERPEND)

SCALE: 1" = 1'-0"

7

KEY NOTES

1. EXTERIOR PLYWOOD SIDING/SHEATHING
2. ROOF DIAPHRAGM
3. FLOOR SYSTEM
4. STEEL COLUMN
5. STEEL ROOF JOIST
6. PERIMETER FLOOR FRAME
7. METAL STUD (SEE MANUFATURES WALL FRAMING PLAN ON SHEET S-21)
8. METAL TRACK
9. CONTINUOUS SPACER AS REQUIRED
10. ROOF/CEILING BEAM
11. # 10 SMS @ 24" O.C. AT DOUBLE STUDS
12. C-S 1/2" X 1 5/8" X 20 GA STUD BLK ATTACHED TO ROOF JOIST WITH (2) #10 STS EACH END (BEND ENDS AS REQUIRED) AT 48" OC MAX
13. C-3 1/2" X 1 5/8" X 20 GA TRACK ATTACHED TO BLOCKING OR JOIST WITH (2) #10 STS
14. ~~METAL FLOOR DECKING~~
15. ~~TRUSS BOTTOM CHORD~~
16. ~~R-19 INSULATION IN EXTERIOR WALL~~
17. 'HILTI' X-U 15 0.145"ø X 1-7/8" SHOT PIN AT 24" OC MAX EDGE DISTANCE TO BE 4" MIN AND 8" MAX AT END OF SILL PLATE, 2 MIN FASTENERS PER PLATE
18. ~~WALL MOUNTED AC UNIT (SEE MECHANICAL PLANS)~~
19. ~~16 GA x 24" LONG STEEL BOTTOM BRACKET AT AC~~
20. ~~3/8"ø X MIN 3 1/2" LAG BOLTS, QUANTITY INDICATED PER DETAIL~~
21. CONTINUOUS 3 1/2" X 1 5/8" X 20 GA TRACK, SECURED TO MEMBERS WITH (2) #10 STS OR (2) 16d NAILS INTO 2x BLOCKING TYPICAL
22. FLOOR JOIST MEMBER OR BLOCKING
23. MIN #10 X 1-1/2" STS SPACING PER "JAMB STUD TO COLUMN" ON S3.2



FLOOR PLAN BUILDING D SCALE: 1/4"=1'-0"

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:

FRAMING PLAN

BUILDING D

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

ROBERT ESPINOZA LICENSED ARCHITECT C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

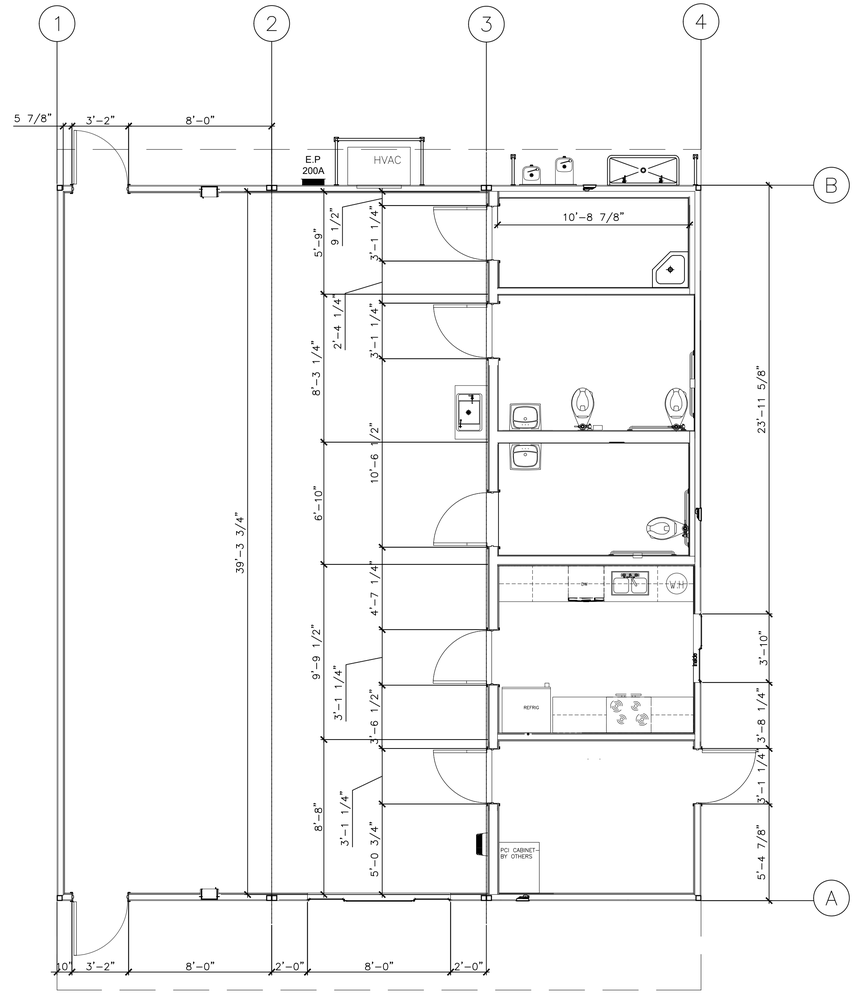
ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22

SHEET NUMBER

A1.2A-PS



FLOOR PLAN BUILDING E SCALE: 1/4"=1'-0"

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS

CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:

FRAMING PLAN

BUILDING E

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT
ROBERT ESPINOZA
C-14456
2/2023
RENEWAL DATE
STATE OF CALIFORNIA

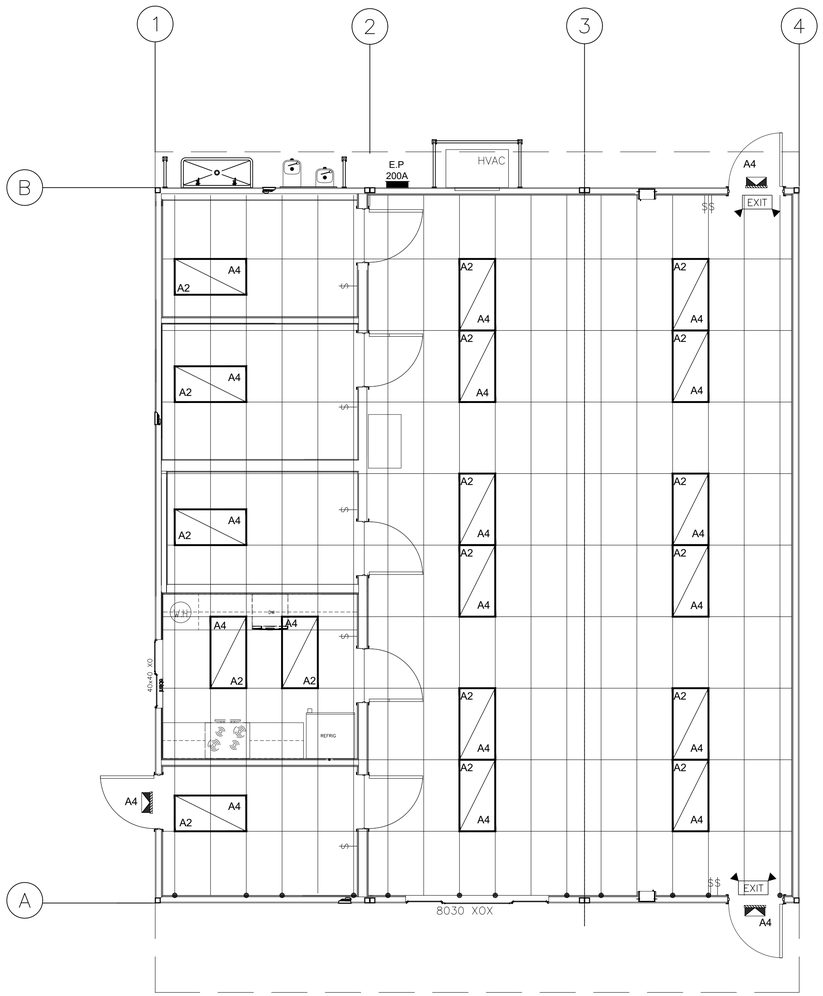
ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22

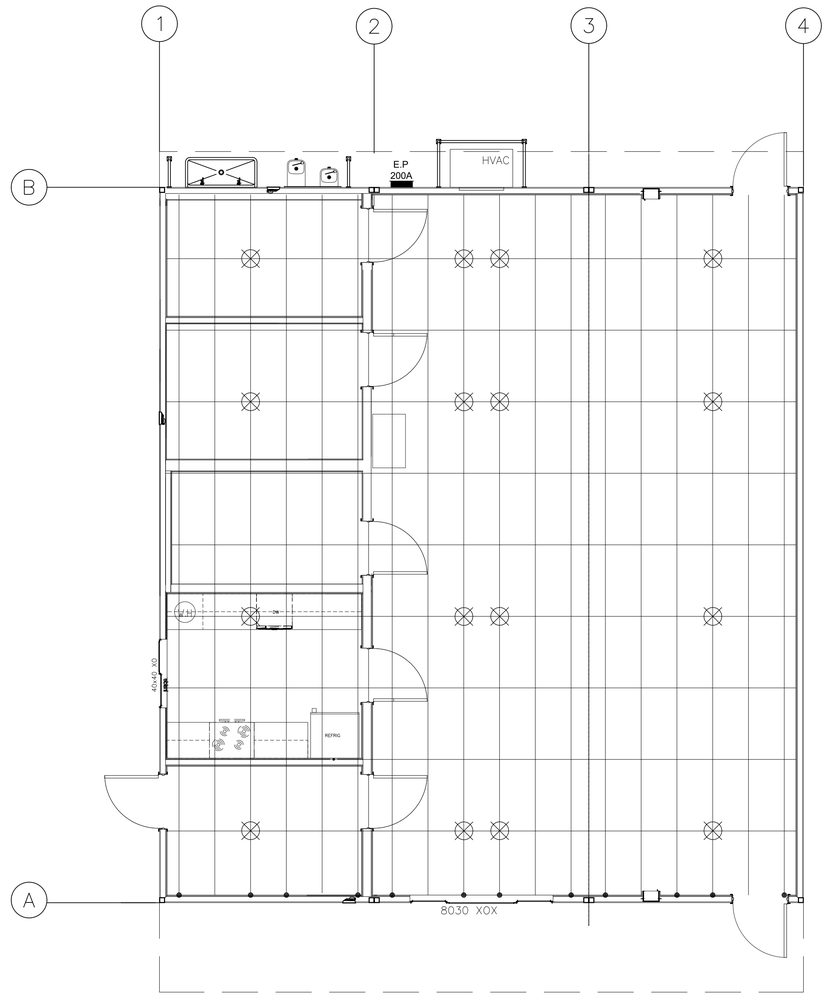
SHEET NUMBER

A1.2B-PS



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

NOTE: SEE SHEET A-3.1-36 FOR THE T-GRID LAYOUT AND ANCHORAGE DETAILS.



CEILING HEIGHT: 8'-6"

REFLECTED CEILING PLAN SCALE: 1/4"=1'-0"

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:
REFLECTED CEILING & LIGHTING PLAN BUILDING D

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

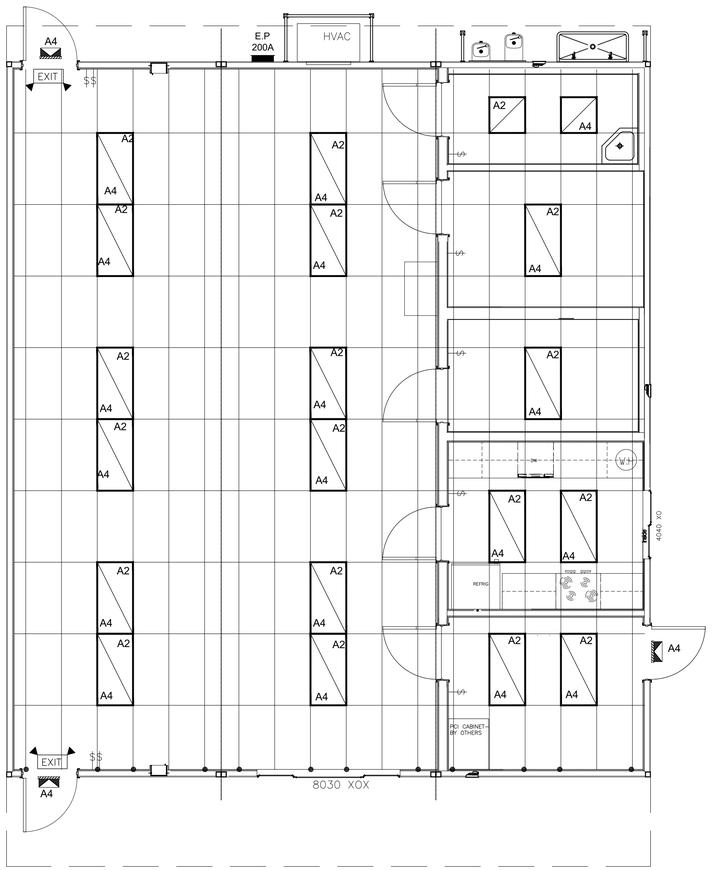
LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

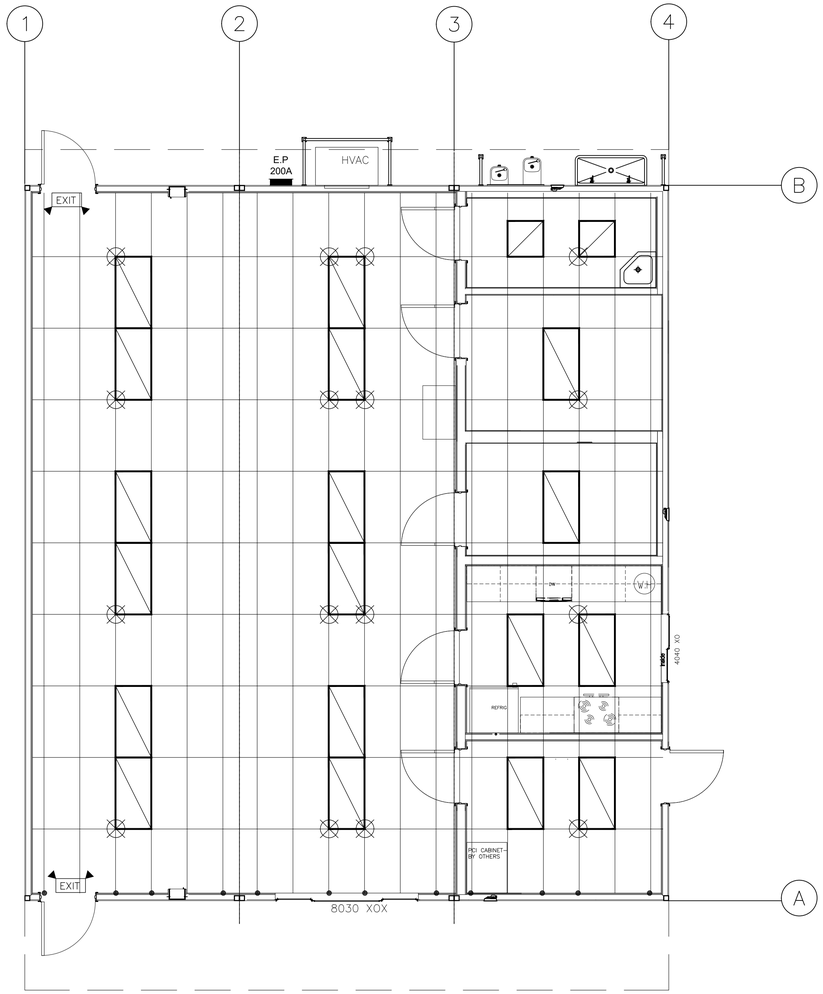
PROJECT NO.:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09.20.22

SHEET NUMBER
A2.1A-PS



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

NOTE: SEE SHEET A-3.1-36 FOR THE T-GRID LAYOUT AND ANCHORAGE DETAILS.



CEILING HEIGHT: 8'-6"

REFLECTED CEILING PLAN SCALE: 1/4"=1'-0"

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated
AURORA DESIGNS · MODTECH Designs · MODULAR STRUCTURES INTERNATIONAL, INC DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:
REFLECTED CEILING & LIGHTING PLAN BUILDING E

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

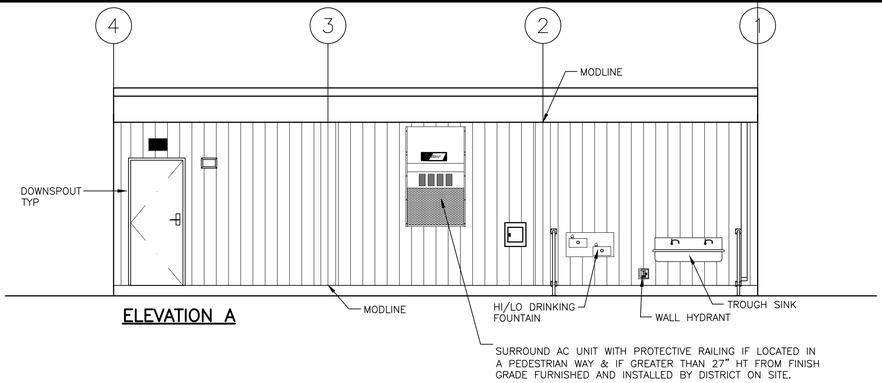
LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

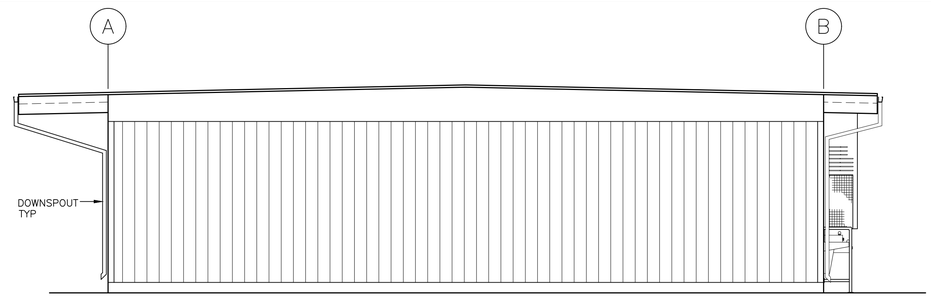
REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09.20.22

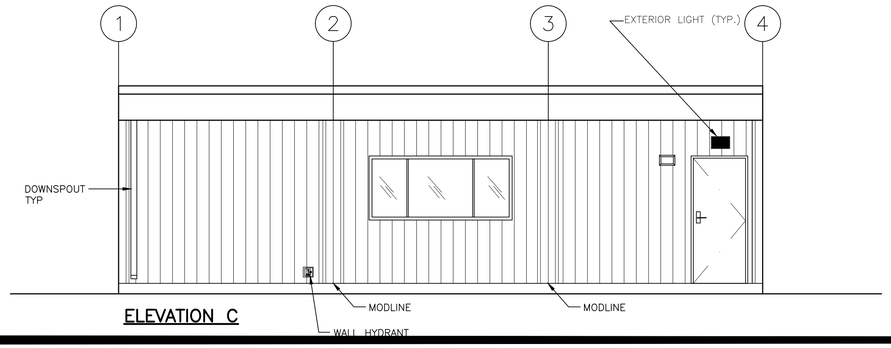
SHEET NUMBER
A2.1B-PS



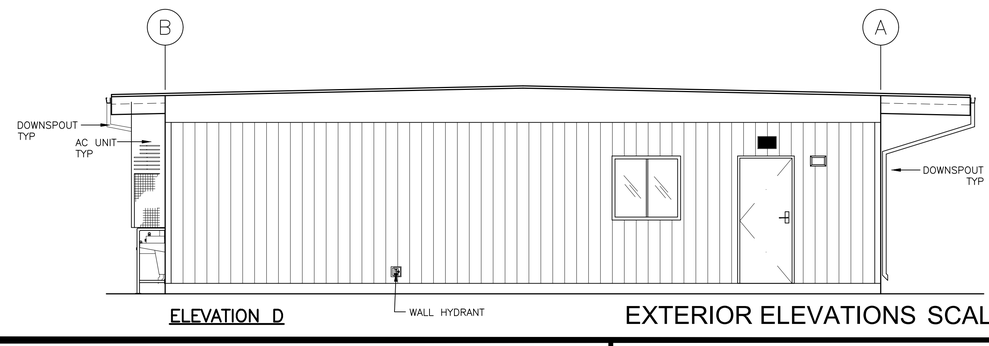
ELEVATION A



ELEVATION B



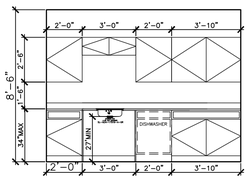
ELEVATION C



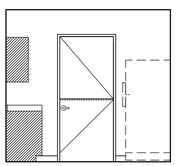
ELEVATION D

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

KITCHENETTE

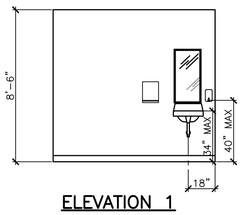


ELEVATION 1

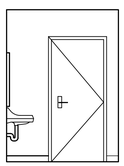


ELEVATION 2

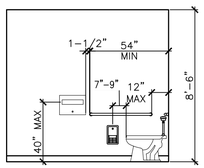
STAFF RESTROOM



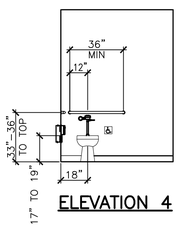
ELEVATION 1



ELEVATION 2

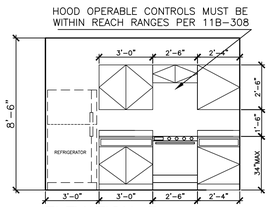


ELEVATION 3

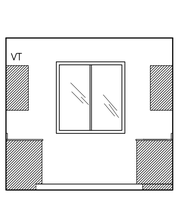


ELEVATION 4

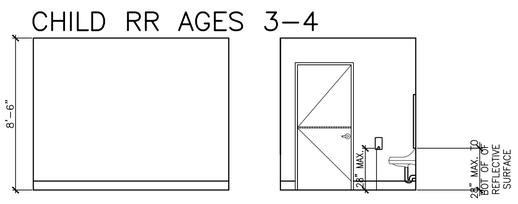
CHILD RR AGES 3-4



ELEVATION 3

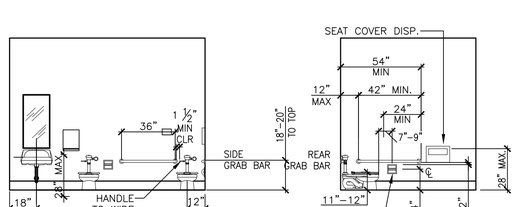


ELEVATION 4

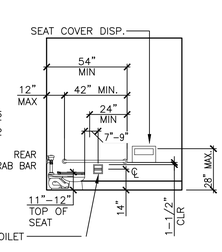


ELEVATION 1

ELEVATION 2

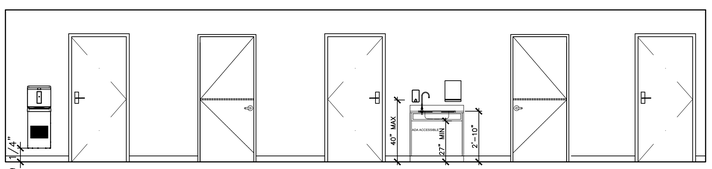


ELEVATION 3



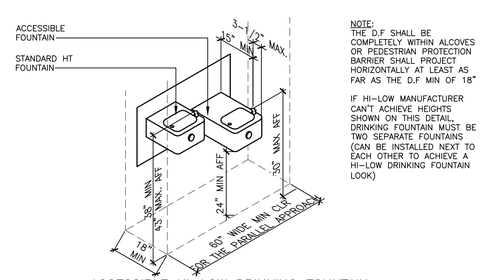
ELEVATION 4

OPEN AREA



SOUTH WALL

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



NOTE:
THE D.F SHALL BE COMPLETELY WITHIN ALCOVES OR PEDESTRIAN PROTECTION BARRIER SHALL PROJECT HORIZONTALLY AT LEAST AS FAR AS THE D.F MIN OF 18"

IF HI-LOW MANUFACTURER CAN'T ACHIEVE HEIGHTS SHOWN ON THIS DETAIL, DRINKING FOUNTAIN MUST BE TWO SEPARATE FOUNTAINS (CAN BE INSTALLED NEXT TO EACH OTHER TO ACHIEVE A HI-LOW DRINKING FOUNTAIN LOOK)

ACCESSIBLE HI-LOW DRINKING FOUNTAIN
AGES 3 THROUGH 5 AND 6 THROUGH 12

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS

CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:

EXTERIOR AND INTERIOR ELEVATIONS.

BUILDING D

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

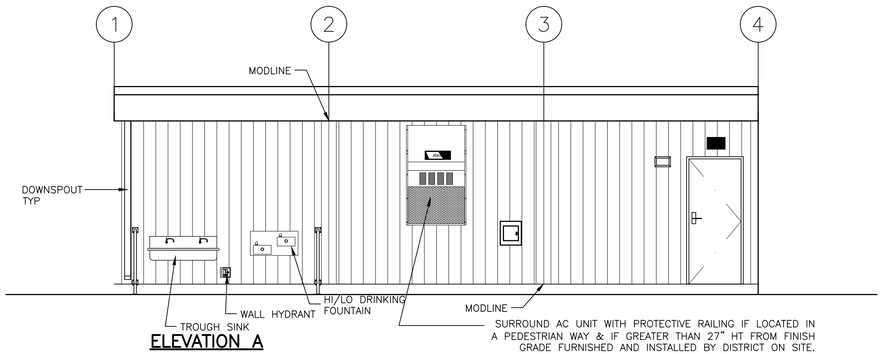
ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

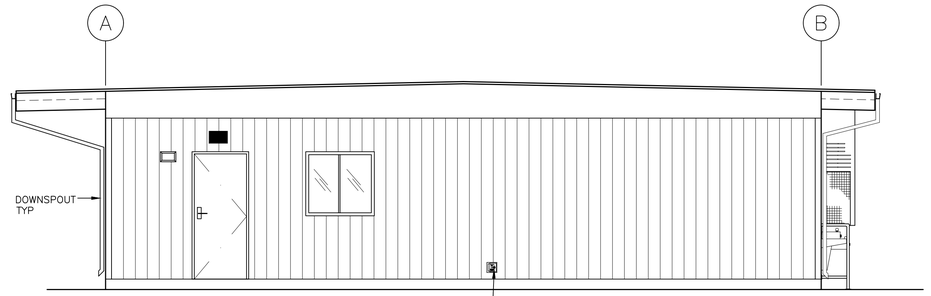
PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22

SHEET NUMBER

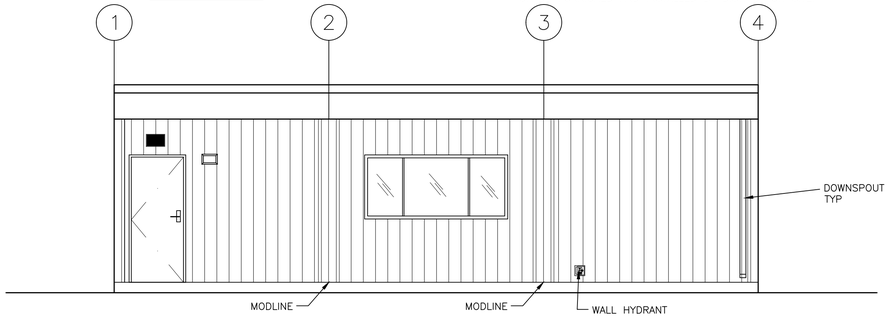
A5.1A-PS



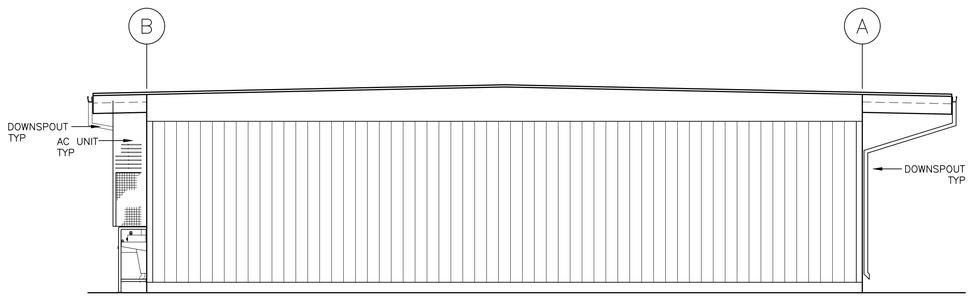
ELEVATION A



ELEVATION B



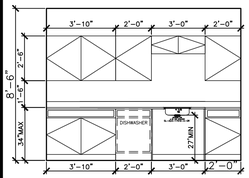
ELEVATION C



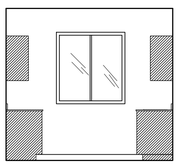
ELEVATION D

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

KITCHENETTE

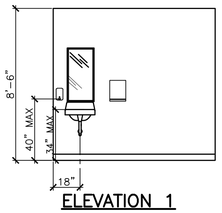


ELEVATION 1

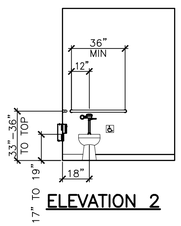


ELEVATION 2

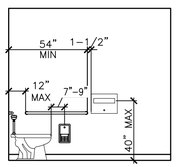
STAFF RESTROOM



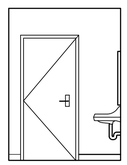
ELEVATION 1



ELEVATION 2

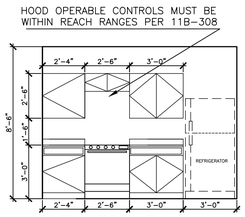


ELEVATION 3

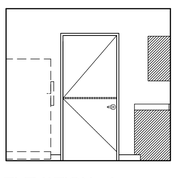


ELEVATION 4

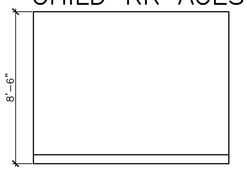
CHILD RR AGES 5-8



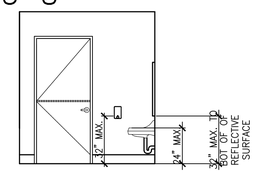
ELEVATION 3



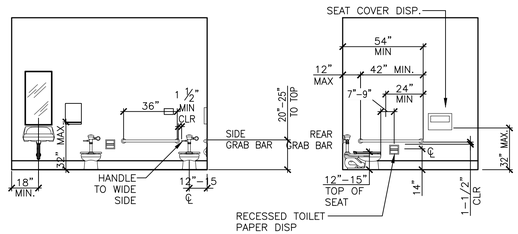
ELEVATION 4



ELEVATION 1



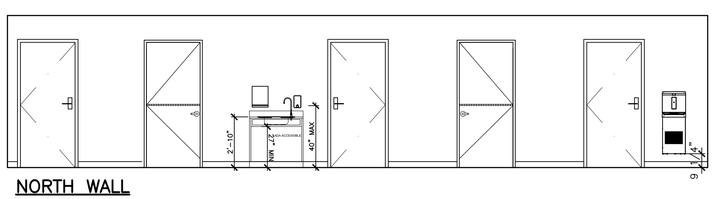
ELEVATION 2



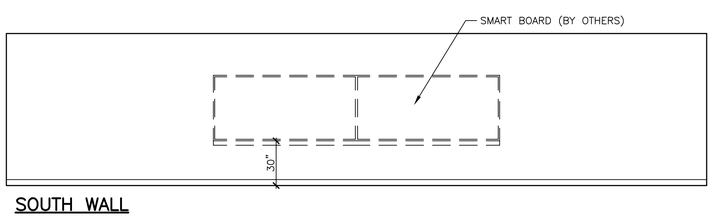
ELEVATION 3

ELEVATION 4

OPEN AREA

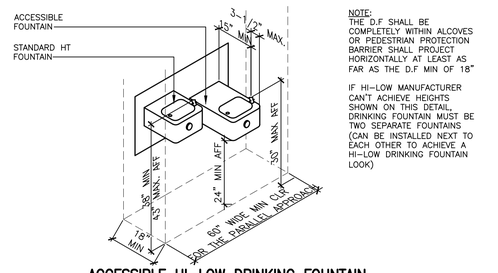


NORTH WALL



SOUTH WALL

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



NOTE:
THE D.F SHALL BE COMPLETELY WITHIN ALCOVES OR PEDESTRIAN PROTECTION BARRIER SHALL PROJECT HORIZONTALLY AT LEAST AS FAR AS THE D.F MIN OF 18"

IF HI-LOW MANUFACTURER CAN'T ACHIEVE HEIGHTS SHOWN ON THIS DETAIL, DRINKING FOUNTAIN MUST BE TWO SEPARATE FOUNTAINS (CAN BE INSTALLED NEXT TO EACH OTHER TO ACHIEVE A HI-LOW DRINKING FOUNTAIN LOOK)

ACCESSIBLE HI-LOW DRINKING FOUNTAIN
AGES 3 THROUGH 5 AND 6 THROUGH 12

1

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:

EXTERIOR AND INTERIOR ELEVATIONS.

BUILDING E

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22

SHEET NUMBER

A5.1B-PS

PANEL BUILDING D

Rated Amps: 200 — Volts: 120/240
Interior: — Phase / Wire: 1 PHASE/3 WIRE
Exterior: X — Flush: X
NEMA Rated: 3R — Surface:

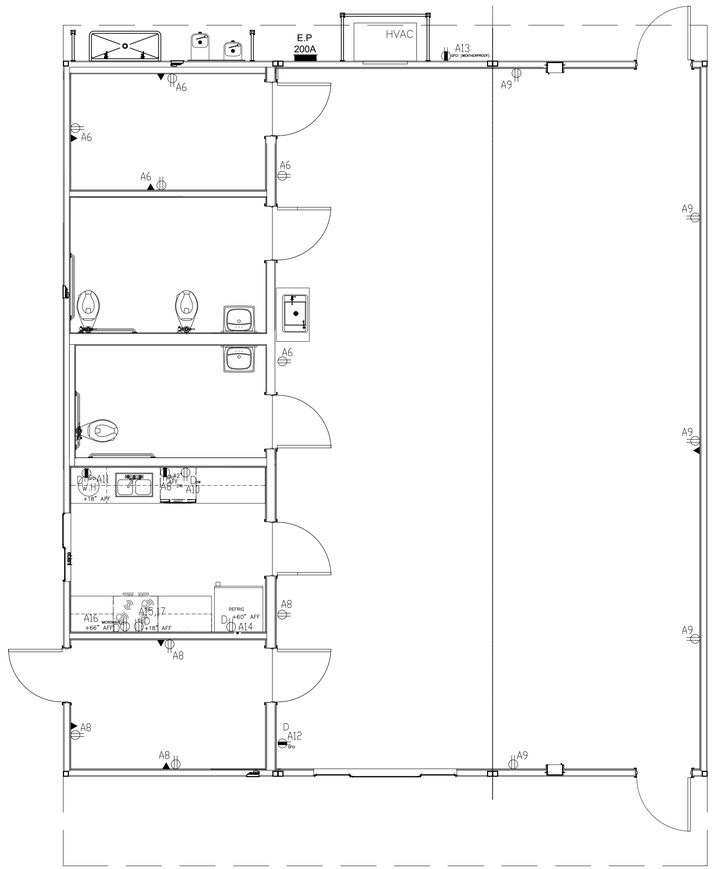
Description	Load	Ckt	Bkr			Ckt	Bkr	Load	Description
MAIN BREAKER		2	150						
HVAC 5 TON	5175	2		1	2	1	20	939	LIGHTS
HVAC 5 TON	5175		60	3	4	1	20	939	LIGHTS
HEAT STRIP	2990	2		5	6	1	20	900	RECEPTACLES
HEAT STRIP	2990		30	7	8	1	20	900	RECEPTACLES
RECEPTACLES	900	1	20	9	10	1	20	1100	DED DISH WASHER
DED WATER HEATER	1500	1	20	11	12	1	20	1350	DED WATER BOTTLE FILLER
HVAC GFCI	180	1	20	13	14	1	20	1440	REFRIGERATOR
RANGE / OVEN	4792	2		15	16	1	20	1000	MICROWAVE
RANGE / OVEN	4792		40	17	18	1	20		SPACE
SPACE		1	20	19	20	1	20		
SPACE		1	20	21	22	1	20		SPACE

18596 Watts + 18646 Watts + 9310 Watts (25%) = 46552 Watts ÷ 240 Voltage = 194 Amps Per Phase

* CIRCUIT BREAKER TO BE ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

SYMBOL LEGEND

- A — 2'X4' FLUORESCENT DROP IN LIGHT FIXTURE T-8
- AC ELECTRONICS AC106 37W 120/277V EXTERIOR WALL MOUNT LED WALLPACK FIXTURE WITH 90 MIN EMERGENCY BACK UP PS1055LCP
- OS — OCCUPANCY SENSOR CEILING MOUNTED (LIGHTING) ☐ LEVITON OSC10-MOW ☐ LEVITON OSC20-MOW
- CEILING MOUNTED PROJECTOR
- AV — AUDIOVISUAL
- DUPLEX RECEPTACLE +15" AFF BOT OF BOX (U.N.O.)
- DUPLEX RECEPTACLE/ GFCI +15" AFF BOT OF BOX (U.N.O.)
- J — J-BOX STUB TO ATTIC +48" AFF TOP OF BOX (U.N.O.)
- T — THERMOSTAT
- TELEPHONE (J-BOX) STUB TO ATTIC
- DATA (J-BOX) STUB TO ATTIC
- FIRE EXTINGUISHER +48" MAX A.F.F TO F.E HANDLE.
- SUPPLY AIR REGISTER PERFORATED FACE
- DIM — DIMMER SWITCH +44" AFF BOT OF BOX (U.N.O.) LEVITON DS710-10Z 120/277V
- EXIT — EXIT (RED)/ EMERGENCY LIGHT WITH 90 MIN BATTERY BACK UP LITHONIA LHQM-LED-R-HO 4.3W
- UCD — UNDERCUT DOOR
- RETURN AIR REGISTER EXCELSIOR 710S ANGLE STACK BOOT
- VOLUME AIR DAMPER
- CEILING MOUNTED SPEAKER
- WALL MOUNTED MOUNTED SPEAKER
- DIM2 — OCCUPANCY SENSOR DIMMER SWITCH LEVITON OSD10-I0W
- PC — PHOTO CONTROL SWITCH LEVITON ODCOP-D0W
- WALL HYDRANT



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated
AURORA DESIGNS · MODTECH Designs · MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:
ELECTRICAL PLAN
BUILDING D

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT · ROBERT ESPINOZA · C-14456 · 2/2023 RENEWAL DATE · STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22

SHEET NUMBER
E1.0A-PS

PANEL BUILDING E

Rated Amps: 200 — Volts: 120/240
Interior: — Phase / Wire: 1 PHASE/3 WIRE
Exterior: X — Flush: X
NEMA Rated: 3R — Surface:

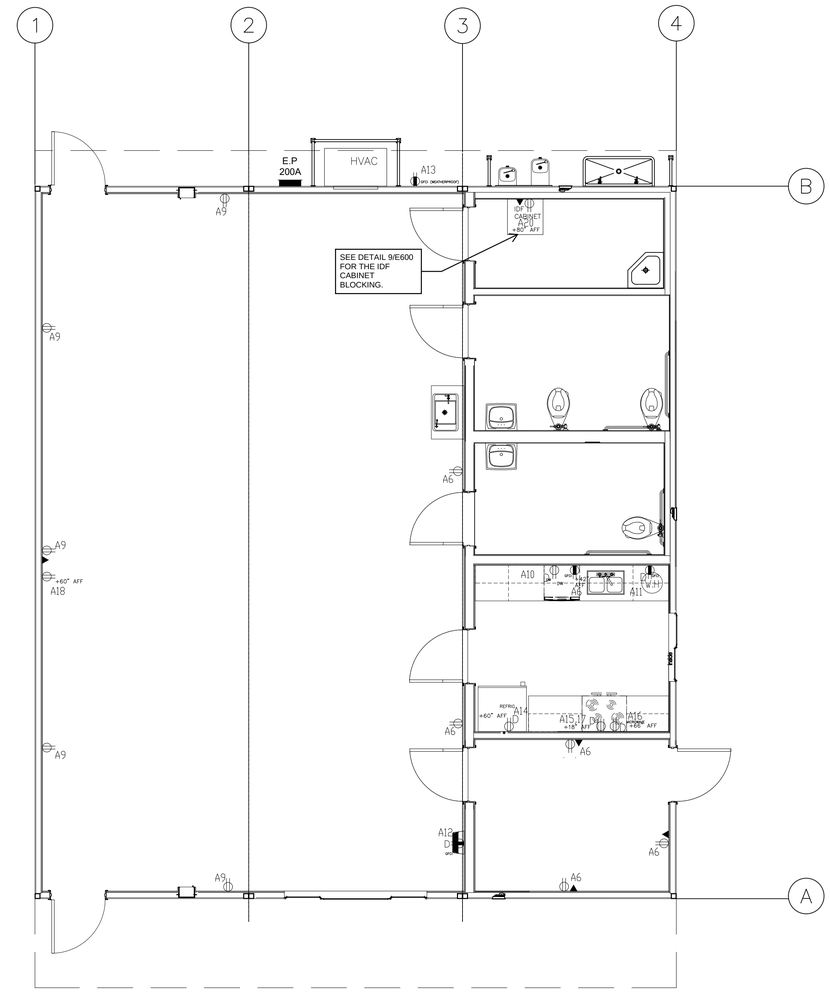
Description	Load	Ckt	Bkr			Ckt	Bkr	Load	
MAIN BREAKER		2	150						
HVAC 5 TON	5175	2		1	2	1	20	939	LIGHTS
HVAC 5 TON	5175		60	3	4	1	20	939	LIGHTS
HEAT STRIP	2990	2		5	6	1	20	1080	RECEPTACLES
HEAT STRIP	2990		30	7	8	1	20	900	RECEPTACLES
RECEPTACLES	900	1	20	9	10	1	20	1100	DED DISH WASHER
DED WATER HEATER	1500	1	20	11	12	1	20	1350	DED WATER BOTTLE FILLER
HVAC GFCI	180	1	20	13	14	1	20	1440	REFRIGERATOR
RANGE / OVEN	4792	2		15	16	1	20	1000	MICROWAVE
RANGE / OVEN	4792		40	17	18	1	20	180	DED SMART BOARD
SPACE		1	20	19	20	1	20	180	IDF CABINET
SPACE		1	20	21	22	1	20	180	FIRE ALARM

18776 Watts + 18646 Watts + 9355 Watts (25%) = 46777 Watts ÷ 240 Voltage = 195 Amps Per Phase

* CIRCUIT BREAKER TO BE ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
* FIRE ALARM BREAKER IS RED AND EQUIPPED W/LOCKOUT DEVICE.

SYMBOL LEGEND

- A — 2'X4' FLUORESCENT DROP IN LIGHT FIXTURE T-8
- AC ELECTRONICS AC106 37W 120/277V EXTERIOR WALL MOUNT LED WALLPACK FIXTURE WITH 90 MIN EMERGENCY BACK UP PS1055LCP
- OS — OCCUPANCY SENSOR CEILING MOUNTED (LIGHTING) ☐ LEVITON OSC10-M0W ☐ LEVITON OSC20-M0W
- CEILING MOUNTED PROJECTOR
- AV — AUDIOVISUAL
- DUPLEX RECEPTACLE +15" AFF BOT OF BOX (U.N.O.)
- DUPLEX RECEPTACLE/ GFCI +15" AFF BOT OF BOX (U.N.O.)
- J — J-BOX STUB TO ATTIC +48" AFF TOP OF BOX (U.N.O.)
- T — THERMOSTAT
- TELEPHONE (J-BOX) STUB TO ATTIC
- DATA (J-BOX) STUB TO ATTIC
- FIRE EXTINGUISHER +48" MAX A.F.F TO F.E HANDLE.
- SUPPLY AIR REGISTER PERFORATED FACE
- DIM — DIMMER SWITCH +44" AFF BOT OF BOX (U.N.O.) LEVITON DS710-10Z 120/277V
- EXIT — EXIT (RED)/ EMERGENCY LIGHT WITH 90 MIN BATTERY BACK UP LITHONIA LHQM-LED-R-HO 4.3W
- UCD — UNDERCUT DOOR
- RETURN AIR REGISTER EXCELSIOR 710S ANGLE STACK BOOT
- VOLUME AIR DAMPER
- CEILING MOUNTED SPEAKER
- WALL MOUNTED MOUNTED SPEAKER
- DIM2 — OCCUPANCY SENSOR DIMMER SWITCH LEVITON OSD10-I0W
- PC — PHOTO CONTROL SWITCH LEVITON ODCOP-D0W
- WALL HYDRANT



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated
AURORA DESIGNS · MODTECH Designs · MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS

CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:
ELECTRICAL PLAN
BUILDING E

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

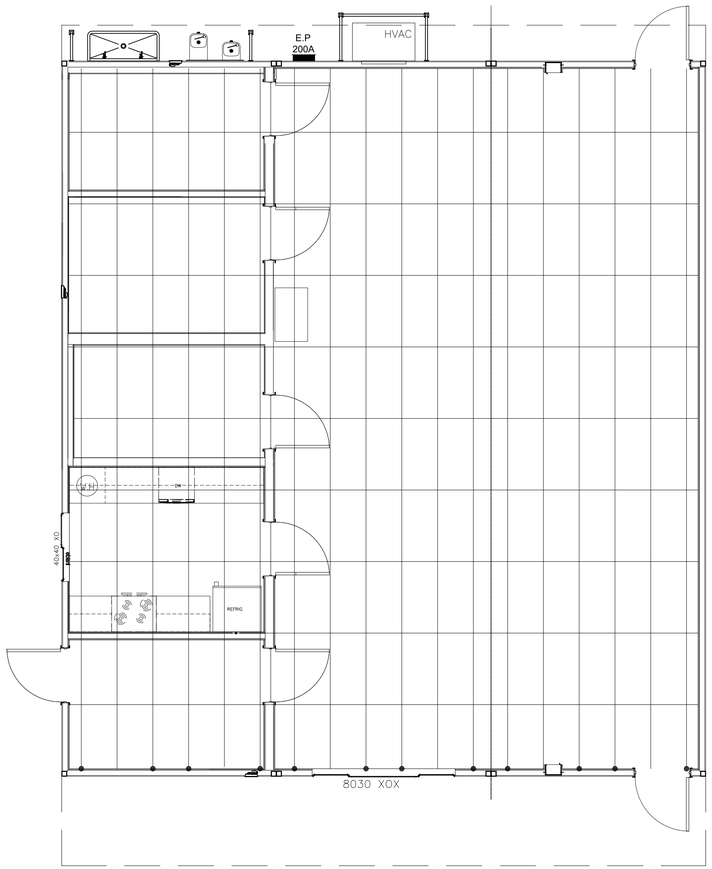
PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22
SHEET NUMBER

E1.0B-PS

SYMBOL LEGEND

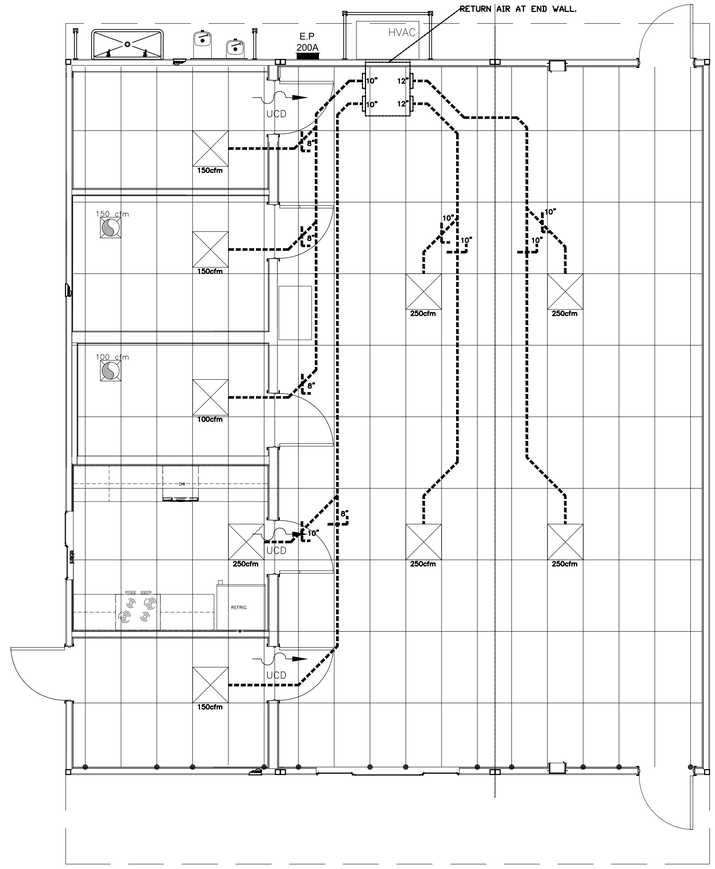
SYMBOL	DESCRIPTION
HF	MANUAL PULL STATION (J-BOX ONLY) MOUNT +48" A.F.F. TO CENTERLINE OF DEVICE
H	WALL MOUNT FLASHING LIGHT STROBE (J-BOX ONLY) MOUNT +80"-96" A.F.F., OR 6" BELOW CEILING TO BOTTOM OF DEVICE WHICHEVER IS LOWER
HF (W.P.)	WALL MOUNT WEATHERPROOF EXTERIOR HORN (J-BOX ONLY) MOUNT +90" A.F.F. TO BOTTOM OF DEVICE (W.P. – INDICATES WEATHERPROOF)
S	CEILING MOUNT SMOKE DETECTOR (J-BOX ONLY)
HA	HEAT DETECTOR MOUNTED ABOVE CEILING (J-BOX ONLY)
FACP	MAIN FIRE ALARM CONTROL PANEL N.I.C.

NOTE: SEE ARCHITECTURAL SHEET E200 FOR THE FIRE ALARM PLAN.



FIRE ALARM PLAN SCALE: 1/4"=1'-0"

NOTE: SEE SHEET M-1.1-36 FOR THE HVAC AND DUCTING INFORMATION.



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:

MECHANICAL & FIRE ALARM PLAN BUILDING D

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS	
1	-
2	-
3	-
4	-
PROJECT NO.:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09.20.22

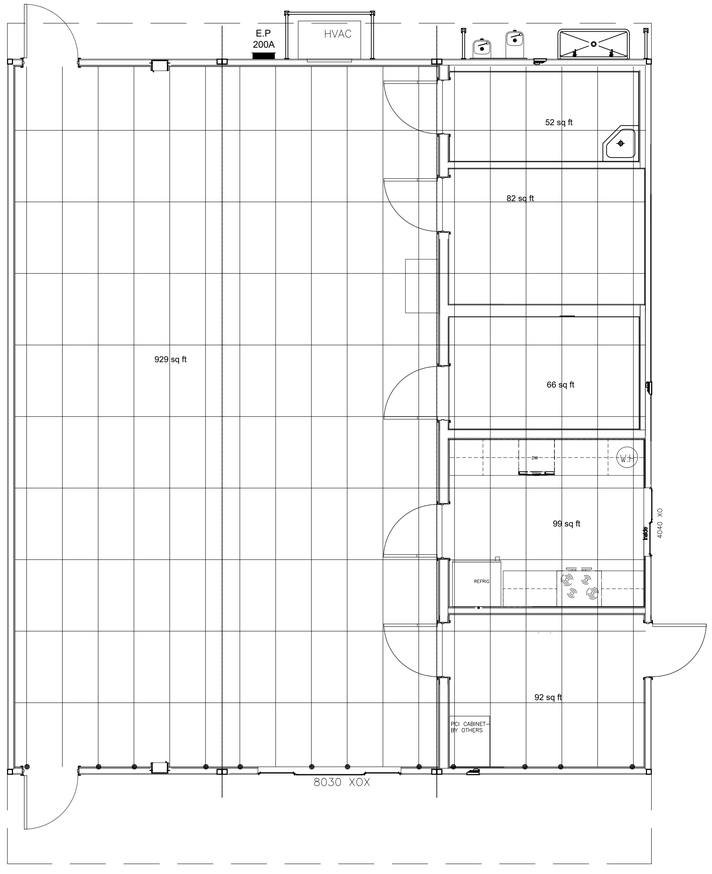
SHEET NUMBER

M1.0A-PS

NOTE: SEE ARCHITECTURAL SHEET E200 FOR THE FIRE ALARM PLAN.

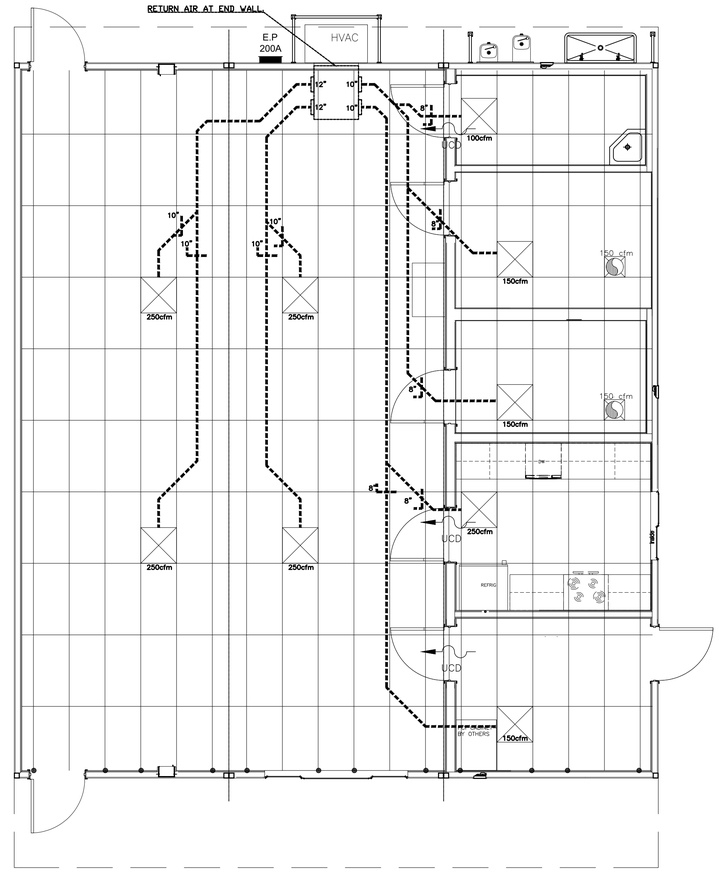
SYMBOL LEGEND

SYMBOL	DESCRIPTION
HF	MANUAL PULL STATION (J-BOX ONLY) MOUNT +48" A.F.F. TO CENTERLINE OF DEVICE
H	WALL MOUNT FLASHING LIGHT STROBE (J-BOX ONLY) MOUNT +80"-96" A.F.F., OR 6" BELOW CEILING TO BOTTOM OF DEVICE WHICHEVER IS LOWER
HF (W.P.)	WALL MOUNT WEATHERPROOF EXTERIOR HORN (J-BOX ONLY) MOUNT +90" A.F.F. TO BOTTOM OF DEVICE (W.P. – INDICATES WEATHERPROOF)
S	CEILING MOUNT SMOKE DETECTOR (J-BOX ONLY)
H A	HEAT DETECTOR MOUNTED ABOVE CEILING (J-BOX ONLY)
FACP	MAIN FIRE ALARM CONTROL PANEL N.I.C.



FIRE ALARM PLAN SCALE: 1/4"=1'-0"

NOTE: SEE SHEET M-1.1-36 FOR THE HVAC AND DUCTING INFORMATION.



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:
MECHANICAL & FIRE ALARM PLAN BUILDING E

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT
ROBERT ESPINOZA
C-14456
2/2023
RENEWAL DATE
STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09.20.22

SHEET NUMBER

M1.0B-PS

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION ***ALTERNATE/OPTIONAL	ACCESSIBLE FOR	WASTE	VENT	CW	HW
WC 1 ***	BOWL: 'KOHLER' – MODEL# K–4325, KINGSTON, WALL HUNG FLUSHOMETER. SEE PLUMB NOTE #13 FOR CARRIER INFO VALVE: 'SLOAN' – MODEL# , 111–1.28GPF FLUSHOMETER SEAT: 'BEMIS' – MODEL# 1955 SSCT, TOILET SEAT	ADULT AGES 12+	3"	2"	1"	–
WC 3	BOWL: 'KOHLER' – MODEL# K–96059 (JUVENILE ULTRA) TOP SPUD FLUSHOMETER BOWL OR EQUAL, FLOOR MOUNT VALVE: 'SLOAN' MODEL: 111–1.28 GPF OPTIONAL ELECTRONIC FLUSH VALVE: 'SLOAN' MODEL: REGAL 111 SFSM–1.28GPF SEAT: 'BEMIS' MODEL 1955SSCT, TOILET SEAT	ELEM AGES 5–8 SEE	3"	2"	1"	–
LV 1	LAV: KOHLER' – MODEL# K–2005, KINGSTON, WALL HUNG, 21–1/4" x 18–1/8" LAVATORY. 6 1/2" MAX SINK DEPTH FAUCET: 'KROWNE' – MODEL# 12–510L, SINGLE HANDLE, 1.5 GPM COLD & HOT WATER (OPTION): WHEN REQUIRED THAT WATER NOT EXCEED 110F A TEMPERING VALVE WILL BE ADDED BEFORE FAUCET.	ALL AGES	2"	3"	1/2"	1/2"
SK 1	SINK: 'ELKAY' – MODEL# DRKAD251750C, 25"X17", 18 GA TOP MOUNT, SS CLASSROOM SINK. SINK DEPTH: 5" MAX. ACTUAL SINK DEPTH SHALL BE VERIFIED ON PROJECT SPECIFIC FAUCET: 'KROWNE' – MODEL# 15–512L, THREE HOLE FAUCET 2 GPM BUBBLER: 'JUST MANUFACTURING COMPANY' – MODEL# JSB–10 LEAD FREE BUBBLER NOTE: SPOUT HEIGHT SHALL BE NO MORE THAN 2" HIGH TO CONFORM WITH APPLICABLE CODE WHEN INSTALLED ON A CLASSROOM SINK COUNTER	ALL AGES	2"	2"	1/2"	1/2"
SK 2	SINK: 'JUST' – MODEL# DL–ADA–1625–A–GR, 25x16, 18 GA TOP MOUNT, SS CLASSROOM SINK. STRAINER J35 SINK DEPTH: 6 1/2" MAX. ACTUAL SINK DEPTH SHALL BE VERIFIED ON PROJECT SPECIFIC FAUCET: 'KROWNE' – MODEL# 15–512L, THREE HOLE FAUCET 2 GPM	ALL AGES	2"	2"	1/2"	1/2"
SK 3	WASH–UP SINK: 'JUST MANUFACTURING' – MODEL# J–4820, WALL MOUNTED HAND WASH TROUGH FAUCET: 'CENTRAL BRASS' – MODEL# 0398–ULEO, CHROME, SINGLE HOLE, WALL MOUNT	ALL AGES	1 1/4"	1 1/4"	1/2"	–
DF 1	DRINKING FOUNTAIN WALL MOUNTED: 'HAWS' – MODEL# 1119, ADA, SINGLE USE FOUNTAIN	ALL AGES	1 1/4"	1 1/4"	1/2"	–
DF 2 ***	WALL–MOUNT FILTERED ADA BOTTLE FILLER: 'HAWS' – MODEL# 1210SF, ADA ELECTRICAL REQUIREMENTS: 115V, 60Hz, 350W, 5A	ALL AGES	2"	1 1/2"	1/2"	–
RF 1	ICE MAKER OUTLET BOXES: 'OATEY' – MODEL# 38574, 6"X6"X3 3/8", 1/4 TURN BRASS BALL VALVE COPPER SWEAT	–	–	–	–	–
HB 1 ***	HOSE BIB: 'ZURN' – MODEL# Z1350–EZ, 3/4" FPT X 3/4" HOSE CONNECTION	–	–	–	3/4"	–
HA 1	HAMMER ARRESTOR: SIOUX CHIEF #652					
NOTE: NON–ACCESSIBLE (STANDARD) MOUNTING HEIGHTS FOR ADULT FIXTURES SHALL BE THE FOLLOWING: TOILET SEAT HEIGHT– 15" AFF						

PLUMBING ACCESSORIES SCHEDULE

REF. NUMBER	MODEL AND DESCRIPTION (***ALTERNATE/OPTIONAL)
1	MULTI–ROLL RECESSED TOILET PAPER DISP AT ACCESSIBLE STALL, 'BOBRICK' B–3888 OR APPROVED EQUAL 3" MAX PROJ. BY MANUF ■ BY DISTRICT ☐
2	MIRROR (18" x 36") 'BOBRICK' B–165, 1836 SERIES OR APPROVED EQUAL BY MANUF ■ BY DISTRICT ☐
3	GRAB BAR (REAR) 'BOBTICK' B–6806, 36" SS FOR USE AT REAR GRAB BAR EXCEPTION 'BOBRICK' B–6806, 24" SS BY MANUF ■ BY DISTRICT ☐
4	GRAB BAR (SIDE) 'BOBRICK' B–6806, 42" SS BY MANUF ■ BY DISTRICT ☐
5	TOILET SEAT COVER DISP. SURFACE MOUNT. 'BOBRICK' B–221 OR APPROVED EQUAL BY MANUF ☐ BY DISTRICT ■
6	SOAP DISPENSER SURFACE MOUNT. BOBRICK' B–2111 OR APPROVED EQUAL, BY MANUF ☐ BY DISTRICT ■
7	PAPER TOWEL DISPENSER 'BOBRICK' B–262 OR APPROVED EQUAL, SURFACE MOUNT, 4" MAX PROJ BY MANUF ☐ BY DISTRICT ■

CHILDREN'S WATER CLOSET HEIGHTS CHART

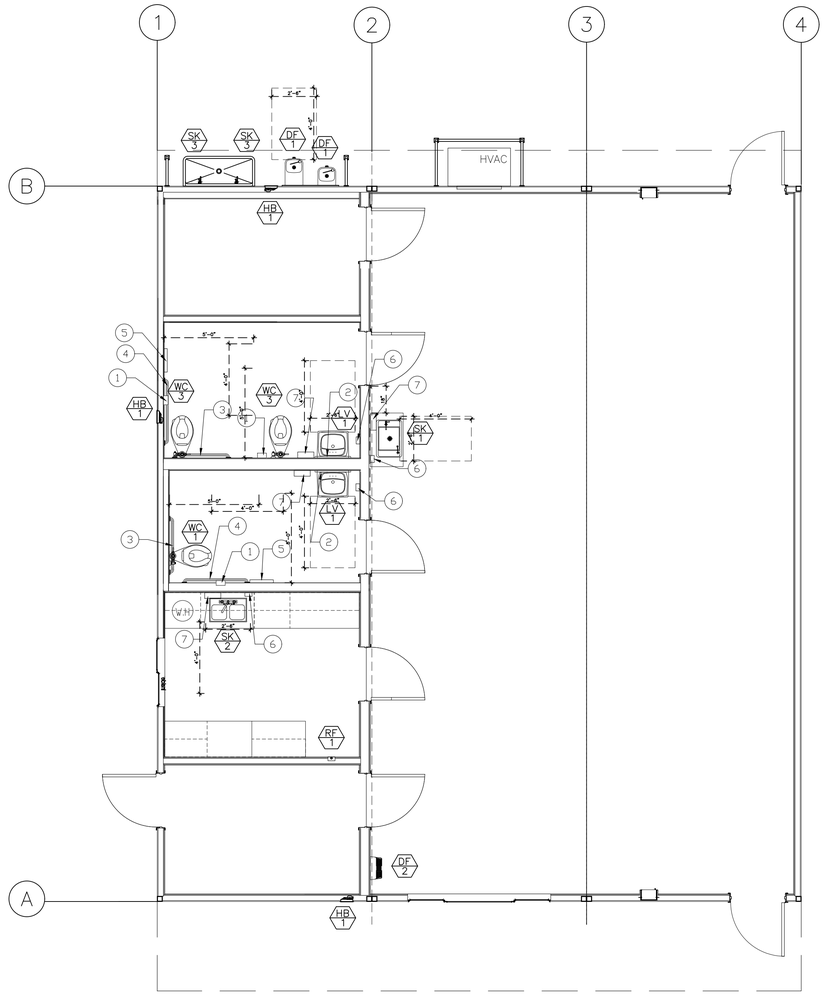
TABLE 109–604.9
SUGGESTED DIMENSIONS FOR CHILDREN'S USE

SUGGESTED DIMENSIONS FOR WATER CLOSETS SERVING CHILDREN AGES 3 THROUGH 12			
	AGES 3 AND 4	AGES 5 THROUGH 8	AGES 9 THROUGH 12
WATER CLOSET CENTERLINE	12 INCHES	12 – 15 INCHES	15 – 18 INCHES
TOILET SEAT HEIGHT	11 – 12 INCHES	12 – 15 INCHES	15 – 17 INCHES
GRAB BAR HEIGHT	18 – 20 INCHES	20 – 25 INCHES	25 – 27 INCHES
TOILET PAPER DISPENSER HEIGHT	14 INCHES	14 – 17 INCHES	17 – 19 INCHES
LAVATORY RIM HEIGHT	22 INCHES	24 INCHES	29 INCHES
SOAP PAPER TOWEL SEAT COVER DISP HT	28 INCHES	32 INCHES	36 INCHES

PROJECT SPECIFIC HEIGHT USE:
TO BE CHECKED OFF WHEN PREPARING PROJECT SPECIFIC DRAWINGS SET.

■ ADULT

■ CHILDREN AGES 5 THROUGH 8



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR incorporated
AURORA DESIGNS MODTECH MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS

CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE.
ATWATER, CA 95301
PHONE: (209) 676–8029
FAX: (209) 676–8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I–7
RIVERSIDE, CA 92507
PHONE: (951) 686–3633
FAX: (951) 686–3686
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA–152
LOS BANOS CA 93635

SHEET TITLE:

SCHEDULE & PLUMBING PLAN BUILDING D

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22

SHEET NUMBER

P1.0A-PS

SYMBOL	PLUMBING FIXTURE SCHEDULE DESCRIPTION ***ALTERNATE/OPTIONAL	ACCESSIBLE FOR	WASTE	VENT	CW	HW
WC 1 ***	BOWL: 'KOHLER' – MODEL# K-4325, KINGSTON, WALL HUNG FLUSHOMETER. SEE PLUMB NOTE #13 FOR CARRIER INFO VALVE: 'SLOAN' – MODEL# , 111-1.28GPF FLUSHOMETER SEAT: 'BEMIS' – MODEL# 1955 SSCT, TOILET SEAT	ADULT AGES 12+	3"	2"	1"	–
WC 2 ***	BOWL: 'KOHLER' – MODEL# K-96064, PRIMARY, FLOOR MOUNT FLUSHOMETER VALVE: 'SLOAN' – MODEL# 111-1.28 GPF, FLUSHOMETER SEAT: 'KOHLER' – MODEL# K-4686 , TOILET SEAT INCLUDED	KINDER AGES 3-4	3"	2"	1"	–
LV 1	LAV: KOHLER' – MODEL# K-2005, KINGSTON, WALL HUNG, 21-1/4" x 18-1/8" LAVATORY. 6 1/2" MAX SINK DEPTH FAUCET: 'KROWNE' – MODEL# 12-510L, SINGLE HANDLE, 1.5 GPM COLD & HOT WATER (OPTION): WHEN REQUIRED THAT WATER NOT EXCEED 110F A TEMPERING VALVE WILL BE ADDED BEFORE FAUCET.	ALL AGES	2"	3"	1/2"	1/2"
SK 1	SINK: 'ELKAY' – MODEL# DRKAD251750C, 25"X17", 18 GA TOP MOUNT, SS CLASSROOM SINK. SINK DEPTH: 5" MAX. ACTUAL SINK DEPTH SHALL BE VERIFIED ON PROJECT SPECIFIC FAUCET: 'KROWNE' – MODEL# 15-512L, THREE HOLE FAUCET 2 GPM BUBBLER: 'JUST MANUFACTURING COMPANY' – MODEL# JSB-10 LEAD FREE BUBBLER NOTE: SPOUT HEIGHT SHALL BE NO MORE THAN 2" HIGH TO CONFORM WITH APPLICABLE CODE WHEN INSTALLED ON A CLASSROOM SINK COUNTER	ALL AGES	2"	2"	1/2"	1/2"
SK 2	SINK: 'JUST' – MODEL# DL-ADA-1625-A-GR, 25x16, 18 GA TOP MOUNT, SS CLASSROOM SINK. STRAINER J35 SINK DEPTH: 6 1/2" MAX. ACTUAL SINK DEPTH SHALL BE VERIFIED ON PROJECT SPECIFIC FAUCET: 'KROWNE' – MODEL# 15-512L, THREE HOLE FAUCET 2 GPM	ALL AGES	2"	2"	1/2"	1/2"
SK 3	WASH-UP SINK: 'JUST MANUFACTURING' – MODEL# J-4820, WALL MOUNTED HAND WASH TROUGH FAUCET: 'CENTRAL BRASS' – MODEL# 0398-ULE0, CHROME, SINGLE HOLE, WALL MOUNT	ALL AGES	1 1/4"	1 1/4"	1/2"	–
DF 1	DRINKING FOUNTAIN WALL MOUNTED: 'HAWS' – MODEL# 1119, ADA, SINGLE USE FOUNTAIN	ALL AGES	1 1/4"	1 1/4"	1/2"	–
DF 2 ***	WALL-MOUNT FILTERED ADA BOTTLE FILLER: 'HAWS' – MODEL# 1210SF, ADA ELECTRICAL REQUIREMENTS: 115V, 60Hz, 350W, 5A	ALL AGES	2"	1 1/2"	1/2"	–
SS 1 ***	SERVICE SINK: 'FLORESTONE' – MODEL# MSR-2424, 24" X 24" X 10" MOLDED MOP RECEPTOR FAUCET: 'MOEN' – MODEL# 8230 MOP SINK FAUCET	–	2"	1 1/2"	1/2"	1/2"
RF 1	ICE MAKER OUTLET BOXES: 'OATEY' – MODEL# 38574, 6"X6"X3 3/8", 1/4 TURN BRASS BALL VALVE COPPER SWEAT	–	–	–	–	–
HB 1 ***	HOSE BIB: 'ZURN' – MODEL# Z1350-EZ, 3/4" FPT X 3/4" HOSE CONNECTION	–	–	–	3/4"	–
HA 1	HAMMER ARRESTOR: SIOUX CHIEF #652					
NOTE: NON-ACCESSIBLE (STANDARD) MOUNTING HEIGHTS FOR ADULT FIXTURES SHALL BE THE FOLLOWING: TOILET SEAT HEIGHT– 15" AFF						

REF. NUMBER	PLUMBING ACCESSORIES SCHEDULE MODEL AND DESCRIPTION (***ALTERNATE/OPTIONAL)
1	MULTI-ROLL RECESSED TOILET PAPER DISP AT ACCESSIBLE STALL, 'BOBRICK' B-3888 OR APPROVED EQUAL 3" MAX PROJ. BY MANUF ■ BY DISTRICT ☐
2	MIRROR (18" x 36") 'BOBRICK' B-165, 1836 SERIES OR APPROVED EQUAL BY MANUF ■ BY DISTRICT ☐
3	GRAB BAR (REAR) 'BOBTICK' B-6806, 36" SS FOR USE AT REAR GRAB BAR EXCEPTION 'BOBRICK' B-6806, 24" SS BY MANUF ■ BY DISTRICT ☐
4	GRAB BAR (SIDE) 'BOBRICK' B-6806, 42" SS BY MANUF ■ BY DISTRICT ☐
5	TOILET SEAT COVER DISP. SURFACE MOUNT. 'BOBRICK' B-221 OR APPROVED EQUAL BY MANUF ☐ BY DISTRICT ■
6	SOAP DISPENSER SURFACE MOUNT. BOBRICK' B-2111 OR APPROVED EQUAL, BY MANUF ☐ BY DISTRICT ■
7	PAPER TOWEL DISPENSER 'BOBRICK' B-262 OR APPROVED EQUAL, SURFACE MOUNT, 4" MAX PROJ BY MANUF ☐ BY DISTRICT ■

CHILDREN'S WATER CLOSET HEIGHTS CHART

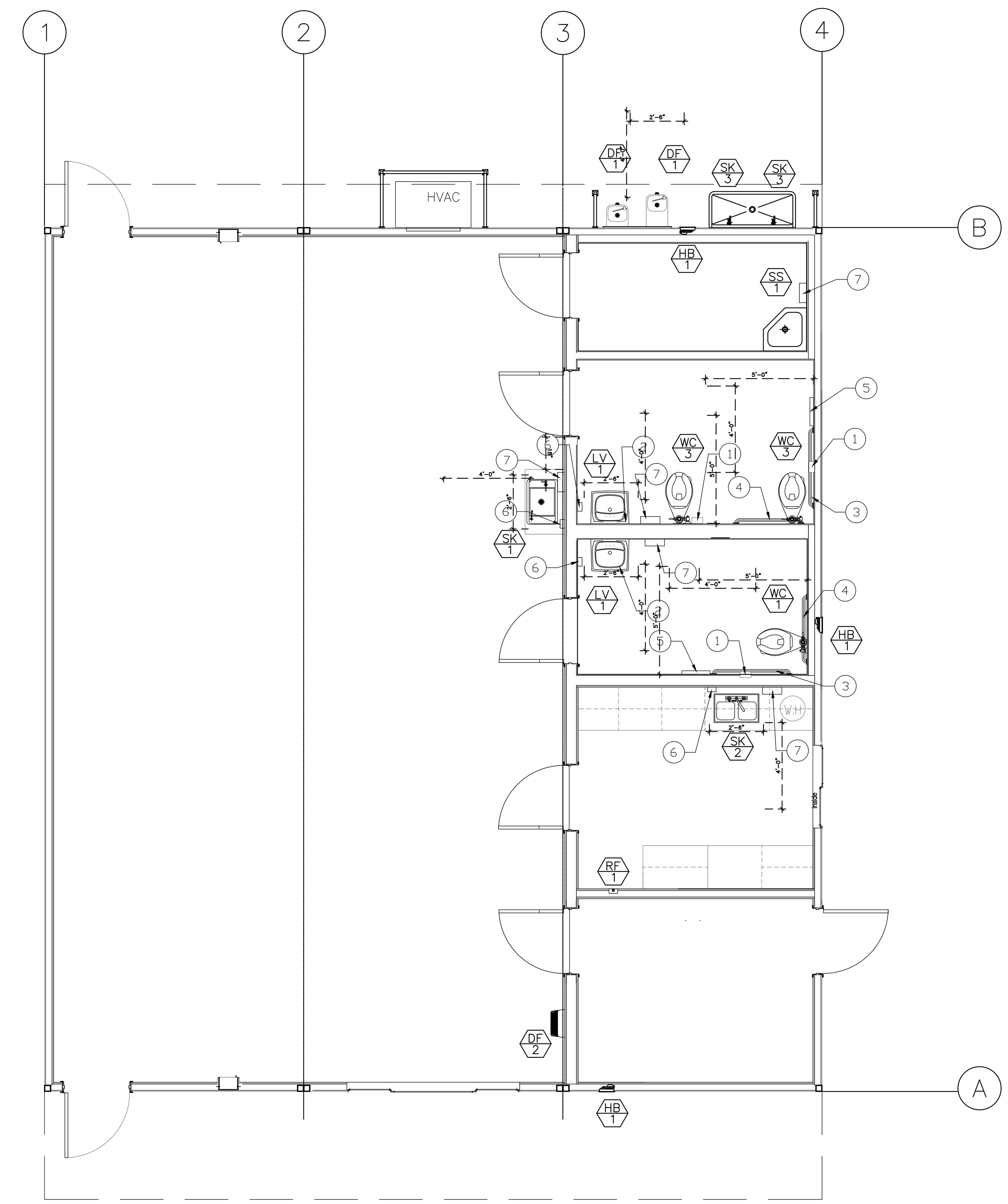
TABLE 11B-604.9
SUGGESTED DIMENSIONS FOR CHILDREN'S USE

SUGGESTED DIMENSIONS FOR WATER CLOSETS SERVING CHILDREN AGES 3 THROUGH 12			
	AGES 3 AND 4	AGES 5 THROUGH 8	AGES 9 THROUGH 12
WATER CLOSET CENTERLINE	12 INCHES	12 – 15 INCHES	15 – 18 INCHES
TOILET SEAT HEIGHT	11 – 12 INCHES	12 – 15 INCHES	15 – 17 INCHES
GRAB BAR HEIGHT	18 – 20 INCHES	20 – 25 INCHES	25 – 27 INCHES
TOILET PAPER DISPENSER HEIGHT	14 INCHES	14 – 17 INCHES	17 – 19 INCHES
LAVATORY RIM HEIGHT	22 INCHES	24 INCHES	29 INCHES
SOAP,PAPER TOWEL, SEAT COVER DISP HT	28 INCHES	32 INCHES	36 INCHES

PROJECT SPECIFIC HEIGHT USE:
TO BE CHECKED OFF WHEN PREPARING PROJECT SPECIFIC DRAWINGS SET.

■ ADULT

■ CHILDREN AGES 3 THROUGH 4



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated
AURORA DESIGNS
MODTECH Designs
MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:

SCHEDULE & PLUMBING PLAN BUILDING E

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT
ROBERT ESPINOZA
C-14456
2/2023
RENEWAL DATE
STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:
DRAWN BY:
SCALE: AS NOTED
DATE: 09.20.22
SHEET NUMBER

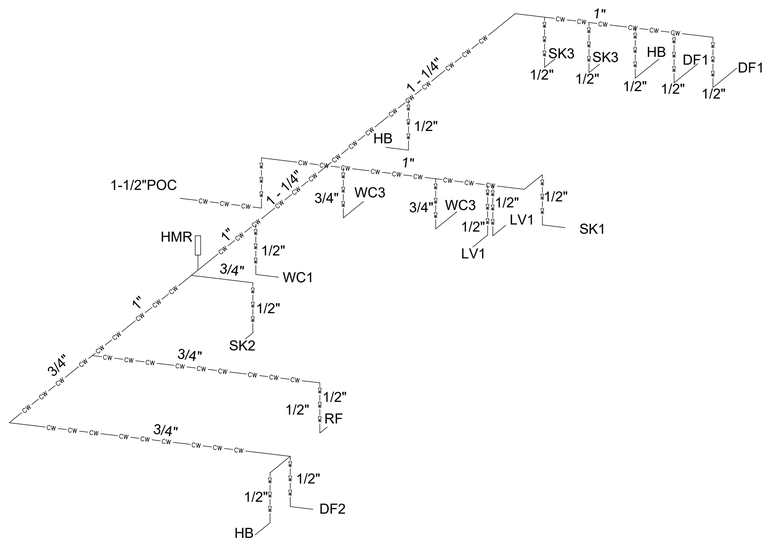
P1.0B-PS

PLUMBING LEGEND

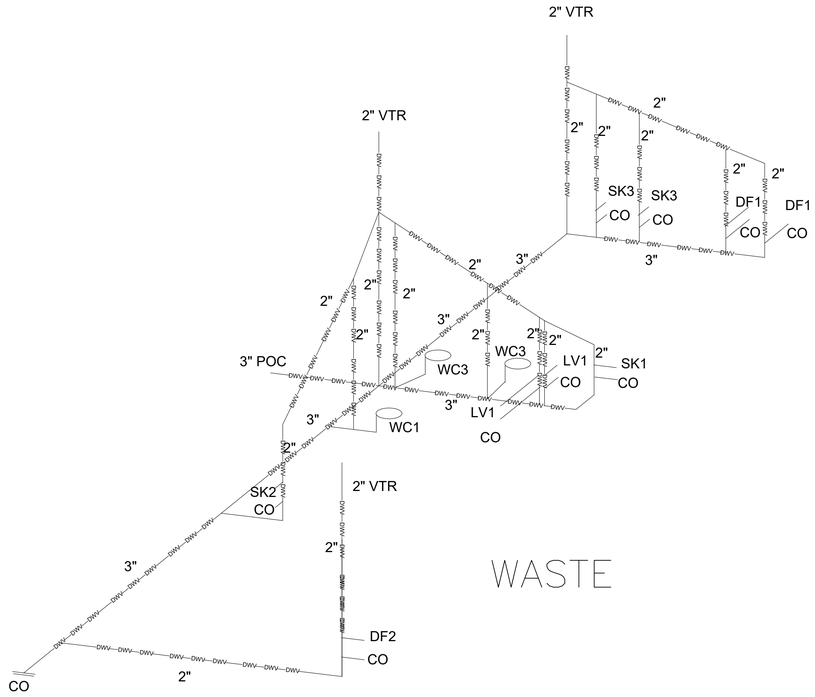
CW — CW — CW	COLD WATER
DWV — DWV — DWV	WASTE
	CLEAN OUT
	VENT TRHOUGH ROOF (VTR)
	WATER POC
	WASTE POC
	PLUMBING FIXTURE CALL OUT (REFERENCE SHEET P0.0 FOR FIXTURE SCHEDULE)

CO	CLEANOUT
LV	WALL HUNG LAVATORY SINK
POC	POINT OF CONNECTION
VTR	VENT THRU ROOF
WC	WATER CLOSET
HA	WATER HAMMER ARRESTOR
SK	SINK
DF	DRINKING FOUNTAIN
HB	HOSE BIBB

*ABS SCHEDULE 40 WASTE PIPE
*L COPPER WATER PIPE



WATER



WASTE

NOT TO SCALE

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:
PLUMBING SCHEMATICS
BUILDING D

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 CIVIL STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09.20.22

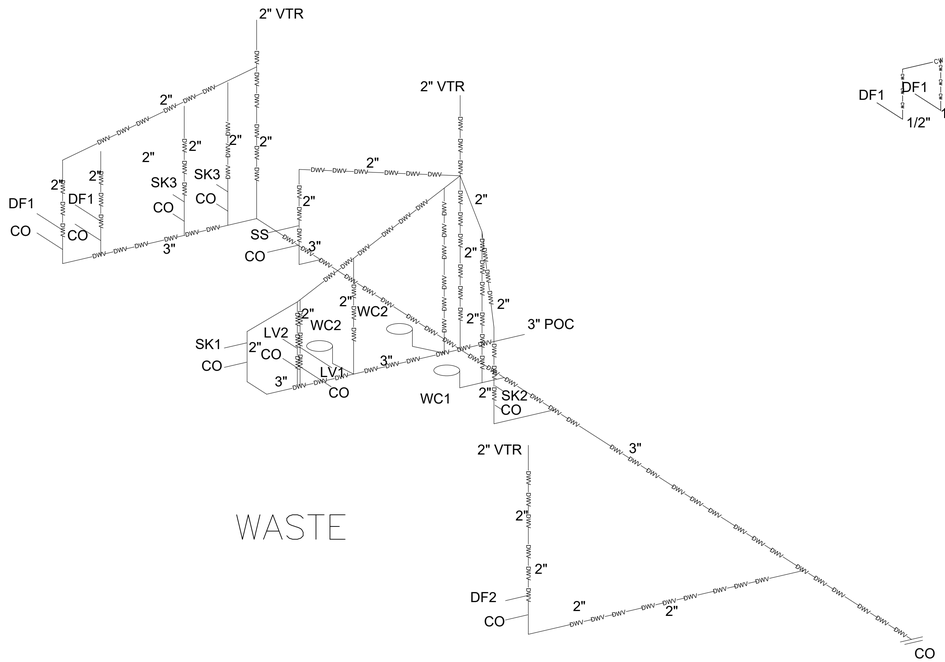
SHEET NUMBER
P2.0A-PS

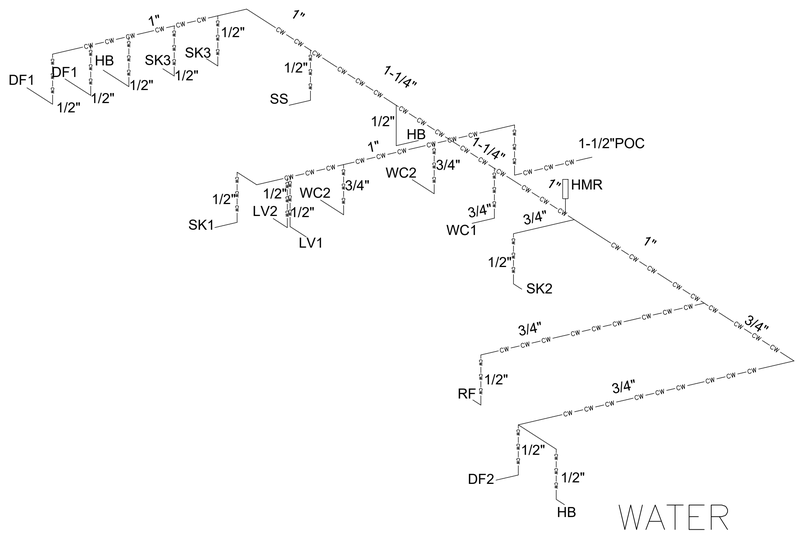
PLUMBING LEGEND

CW — CW — CW	COLD WATER
DWV—DWV—DWV	WASTE
	CLEAN OUT
	VENT THROUGH ROOF (VTR)
	WATER POC
	WASTE POC
	PLUMBING FIXTURE CALL OUT (REFERENCE SHEET P0.0 FOR FIXTURE SCHEDULE)

CO	CLEANOUT
LV	WALL HUNG LAVATORY SINK
POC	POINT OF CONNECTION
VTR	VENT THRU ROOF
WC	WATER CLOSET
HA	WATER HAMMER ARRESTOR
SK	SINK
FS	FLOOR SINK
DF	DRINKING FOUNTAIN
HB	HOSE BIBB

*ABS SCHEDULE 40 WASTE PIPE
*L COPPER WATER PIPE





NOT TO SCALE

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS
CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:
PLUMBING SCHEMATICS
BUILDING E

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

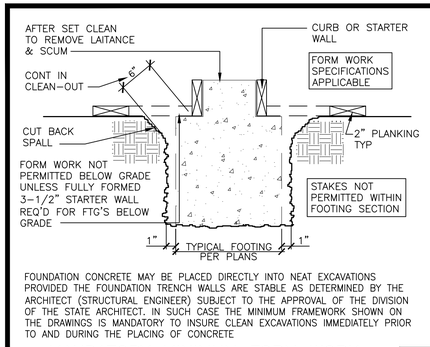
LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	09.20.22

SHEET NUMBER
P2.0B-PS

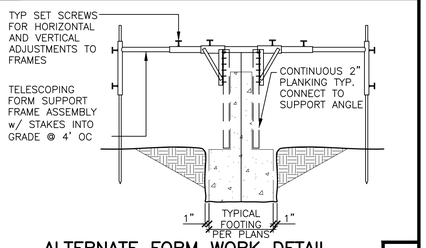


FOUNDATION CONCRETE MAY BE PLACED DIRECTLY INTO NEAT EXCAVATIONS PROVIDED THE FOUNDATION TRENCH WALLS ARE STABLE AS DETERMINED BY THE ARCHITECT (STRUCTURAL ENGINEER) SUBJECT TO THE APPROVAL OF THE DIVISION OF THE STATE ARCHITECT. IN SUCH CASE THE MINIMUM FRAMEWORK SHOWN ON THE DRAWINGS IS MANDATORY TO INSURE CLEAN EXCAVATIONS IMMEDIATELY PRIOR TO AND DURING THE PLACING OF CONCRETE

MANDATORY MINIMUM FORM WORK

(UNLESS FULLY FORMED)

15

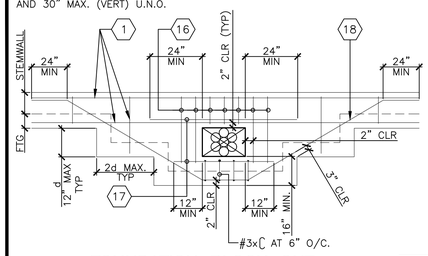


ALTERNATE FORM WORK DETAIL

SCALE: NTS

16

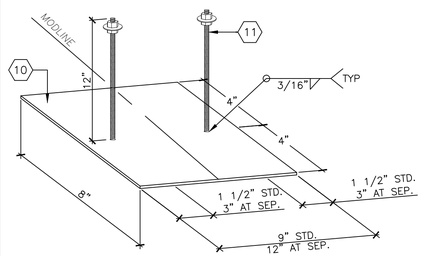
NOTE:
BLOCK-OUT IS A MAX. 30" MAX. (HORZ) AND 30" MAX. (VERT) U.N.O.



FOUNDATION BLOCK OUT

SCALE: NTS

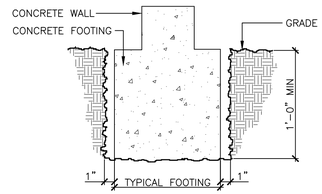
10



PAD FOOTING ANCHOR PLATE

SCALE: 1"=1'-0"

6



NON-FORMED FOOTINGS UNDER FOLLOWING CONDITIONS: (1) SOIL WILL STAND WITHOUT SLOUGHING (2) TRENCH ONE (1) INCH WIDER ON ALL SIDES. (3) PROVIDE POSITIVE PROTECTION OF TOP EDGES.

NON-FORMED FOOTING (OPTIONAL)

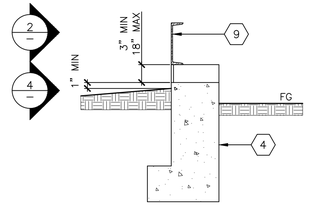
SCALE: NTS

1

KEY NOTES

1. REBARS PER SHEET F3.0.
2. ONE ADDITIONAL REBAR AT OPENING. REBAR SIZE TO MATCH TOP AND BOTTOM REBARS ACCORDINGLY.
3. GRATE IN PATH OF TRAVEL (ADA)- STD WELDED STEEL 3/4" X 3/16" BEARING BARS. BAR SPACING @ 1/2" OC PERPENDICULAR TO ROUTE OF TRAVEL, ALL WALKWAYS. (BY CONCRETE CONTRACTOR); FOR STANDARD GRATE SEE GENERAL NOTE #8 BELOW
4. FOUNDATION WALL AND FTG PER SHEET F2.0 OR F3.0.
5. REBAR - #5 CONTINUOUS @ MID HEIGHT
6. ANGLE FRAME: L-1 1/2" X 1 1/2" X 1/4"
7. #10 X 1 1/2" GALV. TEK SCREW AT 16" O.C. MAX.
8. 1/4"ø x3" IN ANCHOR BOLT. MIN OF 2
9. STEEL PERIMETER CHANNEL
10. 1/4" STEEL EMBEDMENT PLATE.
11. 3/4" MIN ALL THREAD WELDED TO STEEL PLATE AT ONE END AND DOUBLE NUT WITH 1/4" THICK WASHER AT THE OTHER END.
12. 3/16" MIN SHIM PLATE, MAY BE A SINGLE PLATE OR COMBO OF MULTIPLE PLATES WITH MAX SHIM HEIGHT OF 1". GAPS UP TO 1/4" DO NOT REQUIRE A SHIM. USE AS REQUIRED
13. REBAR - (1) #3 AT 24" O.C. AT CENTER LINE OF WALL.
14. REBAR - #3 "L" AT 24" O.C. MAX. AT STEP DOWN LOCATION.
15. REBAR - #5 " " AT STEP DOWN LOCATION.
16. REBAR - #3 AT 6" O.C. AROUND BLOCK-OUT.
17. REBAR - (1) #5 TOP AND BOTTOM OF BLOCK-OUT.
18. REBAR - #5 " " AT STEP DOWN LOCATION
19. REBAR - (1) #3 TOP OR BOTTOM
20. REBAR - (1) #3 AT CENTER OF WALL

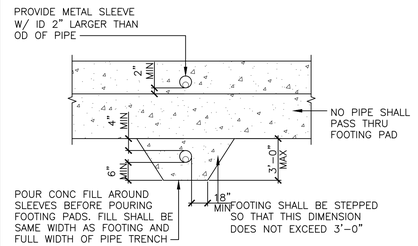
NOTE:
3" MIN FOR VENT OPENING (ABOVE GRADE)
12" MIN FOR VENT OPENING (FLUSH TO GRADE)
18" MIN FOR ACCESS OPENING (FLUSH TO GRADE)

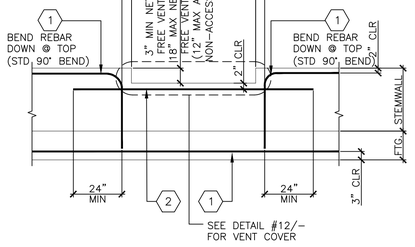


VENT OPENING AT FOUNDATION

SCALE: 1"=1'-0"

11

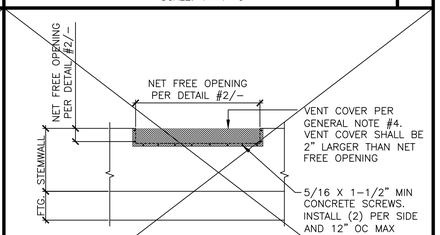




OPENING IN STEM WALL (ABOVE GRADE)

SCALE: NTS

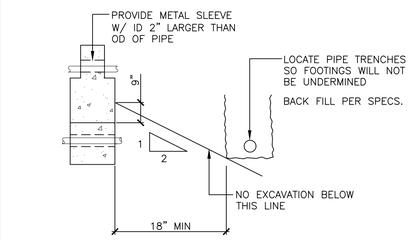
2



STEM WALL VENT COVER (ABOVE GRADE)

SCALE: NTS

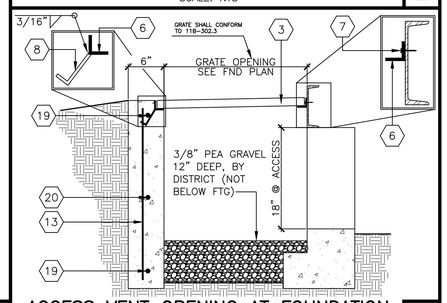
12



FOOTING EXECUTIONS

SCALE: NTS

7



ACCESS VENT OPENING AT FOUNDATION

SCALE: 1"=1'-0"

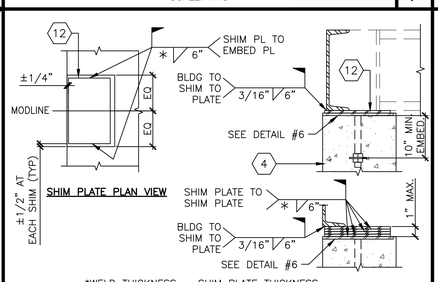
3

NOT USED

17

NOT USED

14

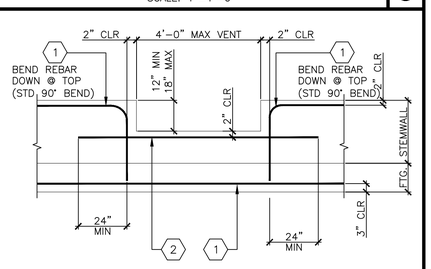


*WELD THICKNESS = SHIM PLATE THICKNESS

SHIM PLATE

SCALE: 1"=1'-0"

8



OPENING IN STEM WALL (FLUSH TO GRADE)

SCALE: NTS

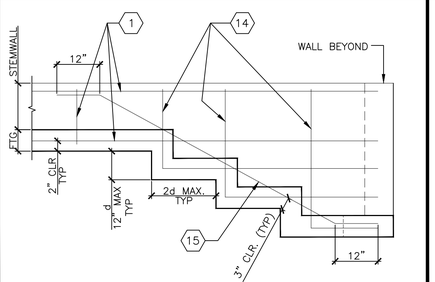
4

NOT USED

19

NOT USED

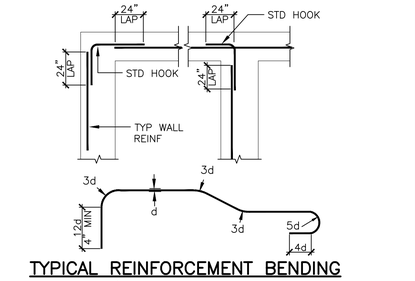
14



ALTERNATE STEP FOOTING DETAIL

SCALE: NTS

9



TYPICAL REINFORCEMENT BENDING DETAIL (#5 BAR OR SMALLER)

SCALE: NTS

5

GENERAL NOTES:

1. DESIGN SOIL BEARING PRESSURE VALUE FOR NON EXPANSIVE SOIL IS 1500 PSF FOR DEAD LOAD PLUS LIVE LOAD. FOUNDATION DETAILS SHOWN ARE BASED ON MINIMUM CODE REQUIREMENTS. FOUNDATION IS SUBJECT TO APPROVAL BY LOCAL ENFORCEMENT AGENCY DUE TO SPECIAL SOIL AND/OR SITE CONDITIONS PRESENT.
2. ALL FOOTINGS SHALL REST 12" IN BELOW NATURAL GRADE AND FINISHED GRADE OF THE FROST LINE. ALL FOOTINGS SHALL REST ON FIRM, UNDISTURBED SOIL. WHERE FROST LINE DEPTH MAY PRESENT A PROBLEM, CONTRACTOR SHALL CONSULT DSA FOR RECOMMENDATIONS AS TO REQUIRED DEPTH OF FOOTING. THE RESULTS OF SUCH INVESTIGATION SHALL BE INCLUDED IN THE APPROVED SET OF DRAWINGS.
3. WHERE TERMITE HAZARD EXISTS TREAT SOIL AT GROUND CONTACT POINTS, INSIDE AND OUTSIDE FOUNDATION.
4. UNDER FLOOR AREAS SHALL BE VENTILATED 1 SF FOR EACH 150 SF OF UNDER FLOOR AREA. OPENINGS SHALL BE COVERED WITH CORROSION RESISTANT WIRE MESH NOT LESS THAN 0.070 THICK WITH MESH OPENINGS OF 1/4" (REST OF REQUIREMENTS TO COMPLY WITH CBC, SECTION 1203.3)
5. CONTRACTOR SHALL VERIFY ALL REQUIREMENTS, MATERIAL SPECIFICATIONS, CONDITIONS AND DIMENSIONS SHOWN ON PLANS AGAINST ACTUAL JOB SITE, FLOOR PLAN AND MANUFACTURER'S REQUIREMENTS TO CHECK FOR ANY REQUIRED TOLERANCES FOR FOUNDATION LAYOUTS, SUCH AS, GAP AT MODLINES. NOTIFY ENGINEER OF THE FOLLOWING: ABNORMAL CONDITIONS, DEFICIENCIES, DISCREPANCIES, CLARIFICATION, MISUNDERSTANDINGS, TYPOS, MISTAKES, ITEMS MISSING FROM DRAWINGS, MISSING REFERENCE, DETAILS OR NOTES BEFORE PROCEEDING.
6. PROVIDE CRAWL SPACE DRAINAGE, FOR AND AROUND BUILDING AS NEEDED. (BY OWNER)
7. REQUIRED DIMENSIONS FOR FOUNDATION LAYOUT TO BE BASED ON SPECIFIC FLOOR PLAN.
8. GRATE: 1 3/16" BAR SPACING NET OPENING AT VENT TO BE 12"x48". NET OPENING AT ACCESS TO BE 24"x36"
9. DETAIL #11 VERTICAL REINFORCEMENTS NOT SHOWN FOR CLARITY
10. DO NOT LOCATE BLOCK OUT WITHIN 4'-0" OF SIDE WALL HOLD DOWN, FRAME COLUMN & COLUMN PAD FOOTING

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL INC DESIGNS

CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1850 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:

GENERAL DETAILS

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

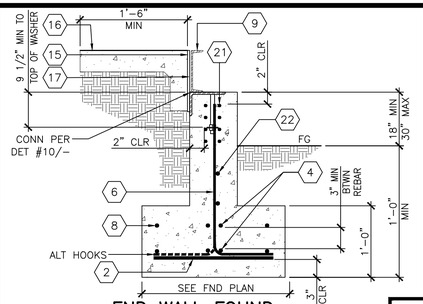
REVISIONS	
1	-
2	-
3	-
4	-
PROJECT NO.:	00-0000
DRAWN BY:	00
SCALE:	AS NOTED
DATE:	00-00-00

SHEET NUMBER

F0.0

NOT USED

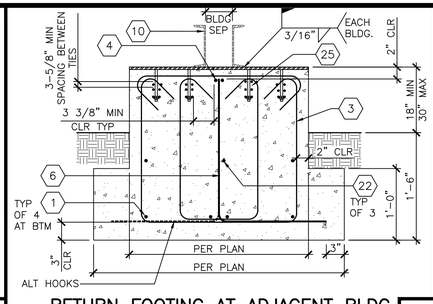
14



END WALL FOUND

SCALE: 1" = 1'-0"

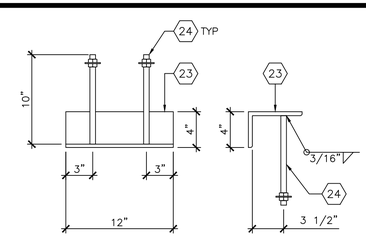
9



RETURN FOOTING AT ADJACENT BLDG

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

6



ANCHOR PLATE AT CORNERS

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

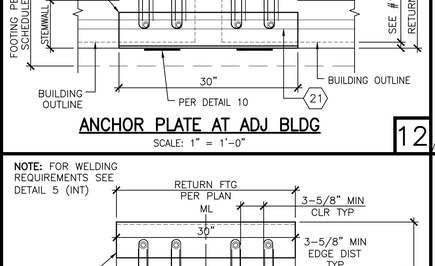
1

KEY NOTES

1. #5 REBAR
2. #4 REBAR @ 24" OC
3. REBAR CAGE – #5 ☐ VERTICALS WITH #5 HORIZONTAL REBAR (90° BENDS AT EACH END) SPACED 12" OC MAX
4. REBAR – (2) #5 CONTINUOUS TOP AND BOTTOM, MIN. 1 1/2" APART
5. REBAR – (1) #5 CONTINUOUS TOP AND BOTTOM
6. REBAR – (1) #3 VERT @ 24" OC (CENTERED IN STEM WALL)
7. REBAR – (1) #5 CONTINUOUS AT BOTTOM
8. (3) #5 AT TOP AND BOTTOM
9. STEEL PERIMETER FRAME – END CHANNEL
10. STEEL PERIMETER FRAME – SIDE CHANNEL
11. REBAR – #4 TIES @ 8" OC
12. REBAR – (2) #4 ☐ TIES AT TOP 5", MIN. 1 1/2" APART.
13. REBAR – #5 EA WAY (SEE SCHEDULE ON FOUNDATION PLAN FOR AMOUNT)
14. REBAR – (4) #5 VERT
15. FELT EXPANSION JOINT (NOT BY BUILDING MANUFACTURER)
16. MOW STRIP/CONCRETE SIDEWALK (NOT BY BUILDING MANUFACTURER)
17. 22 GA GALVANIZED SHEET METAL FLASHING EXTEND 6" BELOW PERIMETER FRAME
18. ANCHOR PLATE PER DETAIL #6, F0.0.
19. NOT USED
20. NOT USED
21. REBAR – (4) #4 AT TOP STEMWALL AT EACH SIDE OF BOLT SPACED 1-1/2" CLR OF EACH REBARS
22. WHEN STEM WALL HEIGHT ABOVE FOOTING EXCEEDS 24", PROVIDE (1) ADDITIONAL #5 REBAR AT MID-HEIGHT OF STEM WALL
23. L-4" X 6" X 3/8" THICK STEEL EMBEDMENT PLATE
24. 3/4" MIN ALL THREAD (SEE SHEET S0.0 FOR ANCHORAGE BOLT MIN GRADE) WELDED TO STEEL PLATE AT ONE END AND DOUBLE NUT WITH 1/4" THICK WASHER AT THE OTHER END
25. (4) #3 HAIR PIN TIES GRADE 60 ANCHOR REINFORCING, MIN 24" LAP AT EACH HAIR PIN

NOT USED

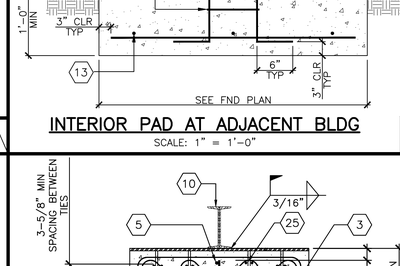
15



ANCHOR PLATE CONNECTIONS

SCALE: NTS

10



SIDE WALL FOUNDATION

SCALE: 1" = 1'-0"

2

NOT USED

7

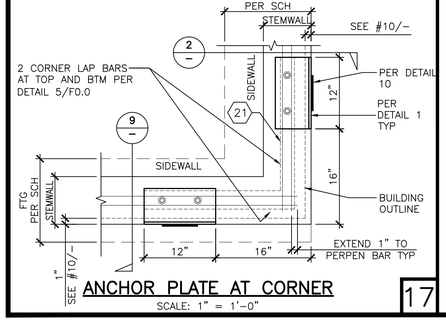
INTERIOR PAD AT MODLINE

SCALE: 1" = 1'-0"

3

NOT USED

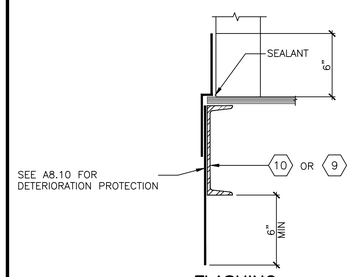
16



ANCHOR PLATE AT CORNER

SCALE: 1" = 1'-0"

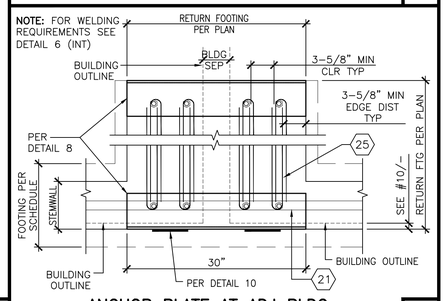
17



FLASHING

SCALE: NTS

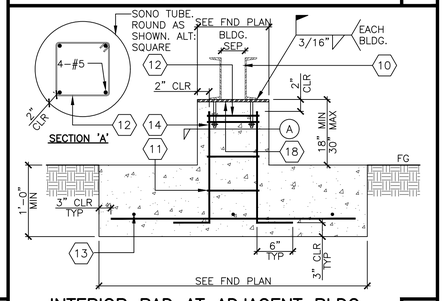
11



ANCHOR PLATE AT ADJ BLDG

SCALE: 1" = 1'-0"

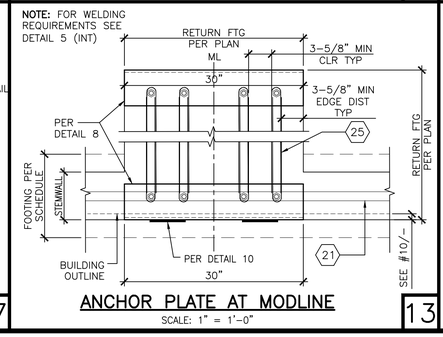
12



INTERIOR PAD AT ADJACENT BLDG

SCALE: 1" = 1'-0"

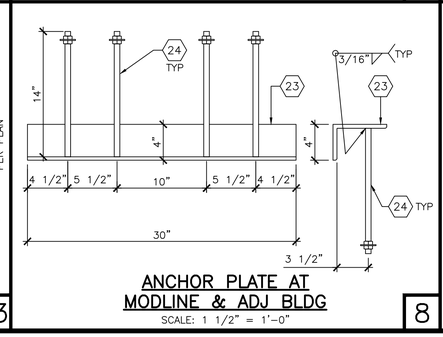
4



ANCHOR PLATE AT MODLINE

SCALE: 1" = 1'-0"

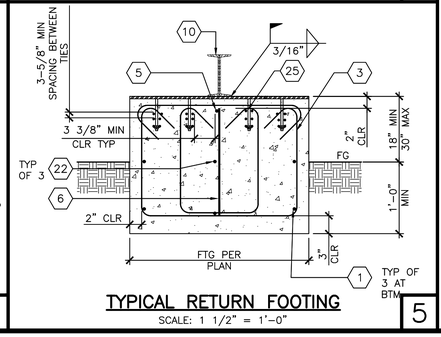
13



ANCHOR PLATE AT MODLINE & ADJ BLDG

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

8



TYPICAL RETURN FOOTING

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

5

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR Incorporated

AURORA DESIGNS · MODTECH Designs · MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS

CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1860 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS, CA 93635

SHEET TITLE:
FLUSH TO GRADE CONCRETE FOUNDATION DETAILS

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOZA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

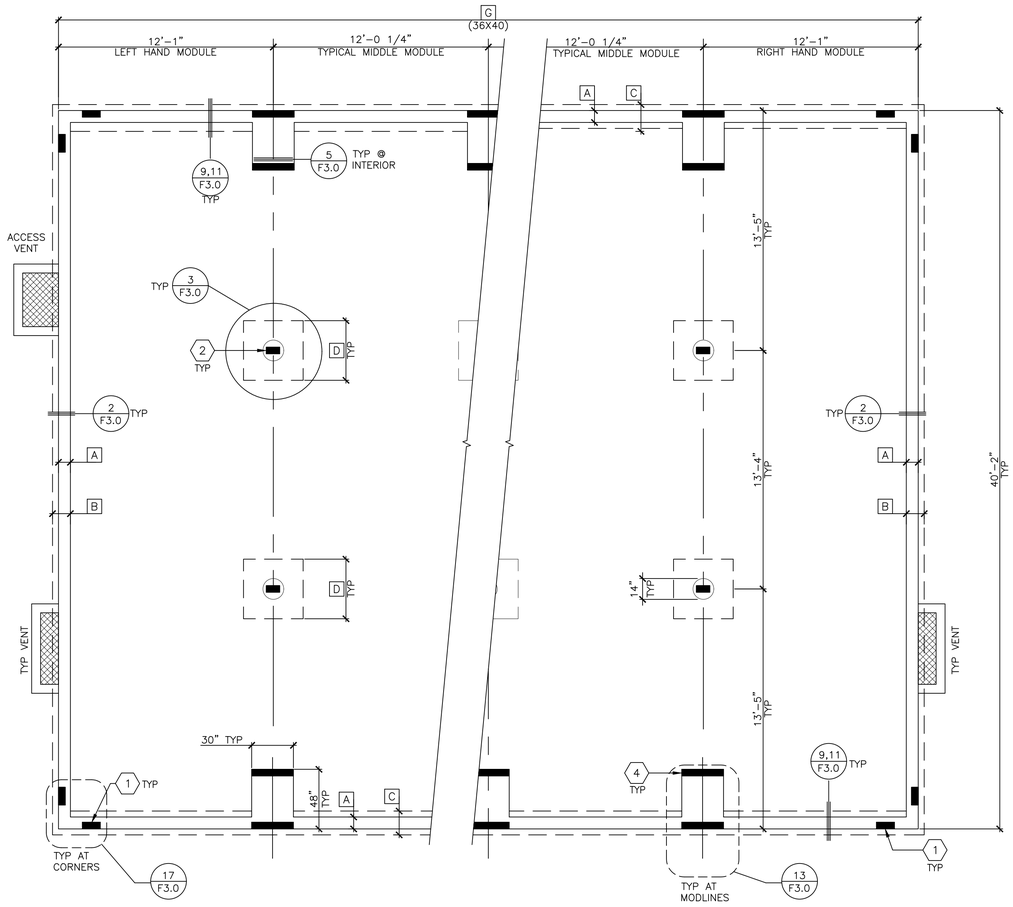
ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:	00-0000
DRAWN BY:	00
SCALE:	AS NOTED
DATE:	00-00-00

SHEET NUMBER
F3.0

NOTE: FOUNDATION PLAN
MIRRORED FOR THE BUILDING E

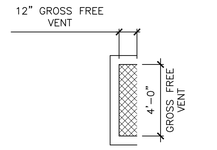


50 PSF FOUNDATION PLAN (BUILDING D)

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

KEY NOTES

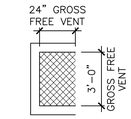
1. ANCHOR PLATE AT CORNERS AND MODLINES
2. ANCHOR PLATE AT PIERS – SEE #6/F0.0
3. NOT USED
4. ANCHOR PLATES REQUIRED AT RETURN STEMWALL FOOTING AND/OR BLDG SEP STEMWALL FOOTING TYP



TYPICAL VENT

VENT: 48"x12" PROVIDES
4.0 SF GROSS VENTILATION
3.2 SF NET VENTILATION

3 F0.0 4 F0.0



TYPICAL ACCESS VENT

ACCESS VENT: 36"x24" PROVIDES
6.0 SF GROSS FREE VENTILATION
4.8 SF NET FREE VENTILATION

3 F0.0 4 F0.0

TYPICAL VENT & ACCESS VENT DETAILS

GENERAL NOTES

1. THE LOCATION OF VENTS SHOWN HERE IS FOR REFERENCE ONLY AS THE LOCATIONS OF VENTS WILL VARY FROM JOB TO JOB.
   THE OPENINGS SHALL BE LOCATED AS CLOSE TO THE CORNER AS PRACTICAL AND SHALL PROVIDE CROSS VENTILATION. THE OPENINGS SHALL BE EQUALLY DISTRIBUTED ALONG THE LENGTH OF AT LEAST (2) OPPOSITE ENDS
2. UNDER FLOOR VENTILATION SHALL BE PROVIDED AT A NET AREA OF NOT LESS THAN 1 SQUARE FOOT FOR EACH 150 SQUARE FEET OF UNDER FLOOR AREA
3. PER SECTION 1203.3.2 EXCEPTION 2, THE TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 OF THE UNDER-FLOOR AREA WHERE THE GROUND SURFACE IS COVERED WITH A CLASS I VAPORRETARDER MATERIAL AND THE REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS VENTILATION OF THE SPACE. THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED
4. DRAINAGE SHALL BE PROVIDED TO PREVENT WATER PONDING BENEATH BUILDINGS. IF THE BUILDING IS PLACED ON RAISED WOOD FOUNDATIONS, SUCH AS WOOD SLEEPERS PLACED ON GROUND OR ASPHALT THAT IS PLANAR (I.E., NOT LOWERED BELOW ADJACENT GRADE), SLOPED DRAINAGE IS NOT REQUIRED WAY FROM THE BUILDING IF THERE IS ADEQUATE SLOPE AT THE SITE TO PREVENT WATER FROM PONDING BENEATH AND IMMEDIATELY ADJACENT TO BUILDINGS. FOR OTHER CONDITIONS, SUCH AS LOWERED BASIN UNDER BUILDING OR CONCRETE FOUNDATIONS, SLOPED DRAINAGE SHALL BE PROVIDED AWAY FROM THE BUILDING IN ACCORDANCE WITH CBC SECTION 1804A.4. REFER TO APPENDIX A FOR ADDITIONAL INFORMATION.

SCHEDULES (☐=REF LETTERS TO SCHEDULES BELOW TYP)

NOTE:

THE SCHEDULE BELOW TAKES AN ACCOUNT OF (1) ACCESS VENT AND (2) TYPICAL VENT. THE DESIGN PROFESSIONAL CAN ADD ADDITIONAL VENTS IF NECESSARY.

MIN 2 VENTS REQUIRED FOR CROSS VENTILATION

REQUIRED VENTILATION		
BUILDING SIZE	VENTILATION REQUIRED	MIN # VENTS
24'x40'	6.4 SF	2
36'x40'	9.6 SF	3
48'x40'	12.8 SF	4
60'x40'	16.0 SF	5
72'x40'	19.2 SF	6
84'x40'	22.4 SF	7
96'x40'	25.6 SF	8
108'x40'	28.8 SF	9
120'x40'	32.0 SF	10
ACCESS VENT CAN BE USED IN PLACE OF A TYPICAL VENT AS NECESSARY		

VENTILATION FORMULA (36X40)

BUILDING SQUARE FOOTAGE: 36' X 40'=1440 SF

REQUIRED VENTILATION: 1 SF / 150 SF (ALLOWED BY CODE)
1440 SF / 150 SF = 9.6 SF "NET" VENTILATION REQUIRED

NUMBER OF ACCESS VENTS TO BE USED: 1
TOTAL VENTILATION: (1) TYP VENT X 4.8 = 4.8 SF

NUMBER OF TYP VENTS TO BE USED:
TOTAL VENTILATION: (2) TYP VENT X 3.2 = 6.4 SF

OVERALL VENTILATION:
4.8 + 6.4 = 11.2 SF

11.2 SF ≥ 9.6 SF VENTILATION REQUIREMENT = OK

REBAR SCHEDULE		
FLOOR LOAD	PLYWOOD FLOOR	CONCRETE FLOOR
50	3	4
50+15	3	4
100	3	4
125	4	6
FOR INTERIOR PADS @ MODLINE AND ADJACENT BUILDINGS (#5 REBAR EACH WAY)		

FLUSH TO GRADE FOUNDATION									
	FLOOR LIVE LOAD PSF	PLYWOOD FLOOR				CONCRETE FLOOR			
		50	50+15	100	125	50	50+15	100	125
A	STEM WALL	8"(W)	8"(W)	8"(W)	8"(W)	8"(W)	8"(W)	8"(W)	8"(W)
B	SIDE WALL FOOTING	12"(W)	12"(W)	14"(W)	18"(W)	12"(W)	12"(W)	14"(W)	18"(W)
C	END WALL FOOTING	22"(W)	22"(W)	22"(W)	24"(W)	25"(W)	27"(W)	27"(W)	29"(W)
D	INTERIOR PAD FOOTING x12" DEEP	3'-4" SQ	4'-0" SQ	4'-0" SQ	4'-6" SQ	3'-11" SQ	4'-5" SQ	5'-0" SQ	5'-5" SQ
E	ADJACENT PAD FOOTING x12" DEEP	4'-0" SQ	4'-3" SQ	4'-3" SQ	4'-8" SQ	4'-6" SQ	4'-9" SQ	5'-3" SQ	5'-9" SQ
F	ADJACENT PAD FOOTING SPACING	13'-4"	13'-4"	10'-0"	10'-0"	13'-4"	13'-4"	10'-0"	10'-0"

TOTAL FOUNDATION FOS TO FOS	
24'x40'	24'-2"
36'x40'	36'-2 1/4"
48'x40'	48'-2 1/2"
60'x40'	60'-2 3/4"
72'x40'	72'-3"
84'x40'	84'-3 1/4"
96'x40'	96'-3 1/2"
108'x40'	108'-3 3/4"
120'x40'	120'-4"

G

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GLOBAL MODULAR incorporated
AURORA DESIGNS MODTECH Designs MODULAR STRUCTURES INTERNATIONAL, INC. DESIGNS

CONTRACTORS LICENSE #837357

NORTHERN CALIFORNIA DIVISON
450 COMMERCE AVE
ATWATER, CA 95301
PHONE: (209) 676-8029
FAX: (209) 676-8067
WEBSITE: WWW.GDVI.NET

SOUTHERN CALIFORNIA DIVISON
1850 CHICAGO AVE., SUITE I-7
RIVERSIDE, CA 92507
PHONE: (951) 686-3633
FAX: (951) 686-3666
WEBSITE: WWW.GDVI.NET

PROJECT NAME: 36'X40'
MERCED COLLEGE
LOS BANOS DAY CARE
22240 CA-152
LOS BANOS CA 93635

SHEET TITLE:
FLUSH TO GRADE CONCRETE FOUNDATION PLAN

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MFR. STRUCTURAL ENGINEER OF RECORD ON PC

MFR. PROJECT SPECIFIC PROFESSIONAL OF RECORD

LICENSED ARCHITECT ROBERT ESPINOSA C-14456 2/2023 RENEWAL DATE STATE OF CALIFORNIA

ARCHITECT OF RECORD

REVISIONS
1 -
2 -
3 -
4 -

PROJECT NO.:	00-0000
DRAWN BY:	00
SCALE:	AS NOTED
DATE:	00-00-00

SHEET NUMBER
F3.1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

MANUFACTURED RELOCATABLE MODULAR BUILDINGS
72'x40', (2) 36'x40', 24'x40'
TERRA NOVA CLASSROOMS
BASED ON PC 4-104778

MSI
MODULAR STRUCTURES INTERNATIONAL Inc.
920 CITRUS AVE, RIVERSIDE, CA. 92507
(909) 788-3035

BUILDING CODES AND STANDARDS

2001 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR)
2001 CALIFORNIA BUILDING CODE VOLUMES 1, 2 AND 3 (PART 2 TITLE 24, CCR) (1997 EDITION UNIFORM BUILDING CODE WITH 2001 CALIFORNIA AMENDMENTS)
2001 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24, CCR) (1999 EDITION NATIONAL ELECTRICAL CODE WITH 2001 AMENDMENTS)
2001 CALIFORNIA MECHANICAL CODE (PART 4, TITLE 24, CCR) (2000 EDITION IAPMO UNIFORM MECHANICAL CODE WITH 2001 CALIFORNIA AMENDMENTS)
2001 CALIFORNIA PLUMBING CODE (PART 5, TITLE 24, CCR) (2000 EDITION IAMPO UNIFORM PLUMBING CODE WITH 2001 CALIFORNIA AMENDMENTS)
2001 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR)
2001 CALIFORNIA ELEVATOR SAFETY CONSTRUCTION CODE (PART 7, TITLE 24, CCR)
2001 CALIFORNIA FIRE CODE (PART 9, TITLE 24, CCR)
2001 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR)

NFPA 13, 1999 EDITION, THE INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS, AS AMENDED
NFPA 14, 2000 EDITION, INSTALLATION OF STANDPIPE, PRIVATE HYDRANT AND HOSE SYSTEMS
NFPA 24, 1995 EDITION, INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
NFPA 72, 1999 EDITION, NATIONAL FIRE ALARM CODE, AS AMENDED

BUILDING DATA

OCCUPANCY:	E-2
TYPE OF CONSTRUCTION:	V-NON RATED
WIND LOAD:	80 M.P.H. EXPOSURE 'C'
OPTIONAL WIND LOAD:	
FLOOR LIVE LOAD:	50 PSF LL, 72'x40' 125 PSF LL
ROOF LIVE LOAD:	20 PSF
OPTIONAL ROOF LIVE LOAD:	
BUILDING AREA:	72'x40'=2,880 SQ. FT., 36'x40'=1,440 SQ. FT., 24'x40'=960 SQ. FT.
STRUCTURAL DESIGN:	RIGID FRAME WITH CLEAR SPAN TRUSS
MODULES:	12'x40'
ENERGY COMPLIANCE:	CLIMATE ZONE 1 THRU 16
SEISMIC ZONE:	4
SEISMIC NEAR SOURCE FACTORS:	Z=0.4, P=1.0, Ca=0.44xNa, Na=1.5 REDUCED TO 1.1 PER TITLE 24 SEC. 1629A.4.2 I=1.0, R=4.5, Cv=0.64xNv, Nv=2.0

NOTES:
THIS P.C. IS DESIGNED STRUCTURALLY TO SUPPORT THE WEIGHT OF A FIRE SPRINKLER SYSTEM.
THIS P.C. IS NOT APPROVED FOR 'A' OCCUPANCY USES.

REVISION SUMMARY LOG

REVISION	DATE	DESCRIPTION OF REVISION	SHEET #
1.	–	–	–

DRAWING INDEX

SHEET NO.	ARCHITECTURAL
CS	COVER SHEET, BLDG DATA, SHEET INDEX
G-1	GENERAL NOTES & SPECIFICATIONS
G-2	CONSTRUCTION NOTES, BLDG. MATERIALS, DOOR, WINDOW & FINISH SCHEDULES
G-3	STANDARD ARCHITECTURAL PLUMBING DETAILS
G-4	STANDARD ARCHITECTURAL DETAILS
	72'x40'– BIOLOGY/PHYSICS CLASSROOM
A-1-72	72'x40' FLOOR PLAN
A-1.1-72	72'x40' EXTERIOR ELEVATIONS & DOUBLE SLOPE ROOF PLAN
A-2-72	72'x40' ROOF PLAN & INTERIOR ELEVATIONS
A-3-72	72'x40' REFLECTED CEILING PLAN & DETAILS
M-1-72	72'x40' MECHANICAL PLAN
E-1-72	72'x40' ELECTRICAL LIGHTING PLAN
E-2-72	72'x40' ELECTRICAL POWER PLAN & FIRE ALARM
P-1-72	72'x40' COLD & HOT WATER PLUMBING SYSTEM
P-1.1-72	72'x40' WASTE & VENT PLUMBING SYSTEM
	36'x40'– COMPUTER/DRAFTING CLASSROOM
A-1.1-36	36'x40' FLOOR PLAN & EXTERIOR ELEVATIONS
A-2.1-36	36'x40' ROOF PLAN & INTERIOR ELEVATIONS
A-3.1-36	36'x40' REFLECTED CEILING PLAN & DETAILS
M-1.1-36	36'x40' MECHANICAL PLAN
E-1.1-36	36'x40' ELECTRICAL LIGHTING/POWER PLAN & FIRE ALARM
	36'x40'– BUSINESS CLASSROOM
A-1.2-36	36'x40' FLOOR PLAN & EXTERIOR ELEVATIONS
A-2.2-36	36'x40' ROOF PLAN & INTERIOR ELEVATIONS
A-3.2-36	36'x40' REFLECTED CEILING PLAN & DETAILS
M-1.2-36	36'x40' MECHANICAL PLAN
E-1.2-36	36'x40' ELECTRICAL LIGHTING/POWER PLAN & FIRE ALARM
	24'x40'– ART ROOM
A-1.3-24	24'x40' FLOOR PLAN & EXTERIOR ELEVATIONS
A-2.3-24	24'x40' ROOF PLAN & INTERIOR ELEVATIONS
A-3.3-24	24'x40' REFLECTED CEILING PLAN & DETAILS
M-1.3-24	24'x40' MECHANICAL PLAN
E-1.3-24	24'x40' ELECTRICAL LIGHTING/POWER PLAN & FIRE ALARM

SHEET NO.	STRUCTURAL
S-1	GENERAL NOTES & SPECIFICATIONS
S-5	RIGID FRAME SECTIONS & DETAILS, DUAL SLOPE W/ LIGHT GA. SIDEWALL BEAM W/ TRUSS @ MODLINE W/ PLYWOOD FLOOR (80 MPH WIND)
S-10	FLOOR FRAMING PLAN & DETAILS W/PLYWOOD FLOOR (80 & 90 MPH WIND)
S-21	EXTERIOR WALL FRAMING ELEVATIONS (STEEL STUDS, 80 & 90 MPH WIND)
S-25	STEEL STUD WALL FRAMING DETAILS (80 & 90 MPH WIND)
S-41	ROOF FRAMING PLAN W/22 GA. ROOF (80 & 90 MPH WIND)
S-51	ROOF FRAMING DETAILS W/ 22 GAUGE ROOF (80 & 90 MPH WIND)
S-60	DUAL SLOPE TRUSS & DETAILS 20 PSF ROOF (80 MPH WIND)
	FOUNDATION
F-4	CONCRETE FOUNDATION PLAN FLUSH W/ GRADE W/ PLYWOOD FLOOR (80 & 90 MPH WIND)
F-4.1	CONCRETE FOUNDATION DETAILS FLUSH W/GRADE W/ PLYWOOD FLOOR (80 & 90 MPH WIND)

LICENSED ARCHITECT – STATE OF CALIFORNIA
ARCHITECT STAMP
DATE SIGNED JUN 04 2003
LICENSE EXPIRES 6-30-2004
STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
APPL 01 105425
AC FLS SS
DATE
STATE AGENCY STAMP

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
4-104778
AC FLS SS
DATE:
STATE AGENCY STAMP

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE, RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

PROJECT: TERRE NOVA MODULAR CLASSROOM BUILDINGS
TITLE: COVER SHEET

JOB #	03-1003
DATE	5-6-03
DRAWN BY	db
SCALE	AS NOTED
APPROVED	
REVISIONS	

SHEET NO. CS

GENERAL SPECIFICATIONS

SECTION 1A

1. GENERAL

A. THE REQUIREMENTS OF THE GENERAL CONDITIONS OF THE AGREEMENT AND THIS GENERA REQUIREMENTS APPLY TO THE SEVERAL TRADE SECTIONS WITH THE SAME FORCE AS THOUGH FULLY REPEATED IN EACH SECTION.

B. NAME BRANDS ARE INDICATED TO ESTABLISH A STANDARD OF QUALITY. ITEMS OF EQUAL OR BETTER QUALITY MAY BE SUBSTITUTED FOR THE LISTED BRAND NAMED PRODUCTS.

C. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF TITLE 19, AND 24 CALIFORNIA CODE OF REGULATIONS. NO CHANGES SHALL BE MADE FROM D.S.A. APPROVED DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR WRITTEN APPROVAL OF D.S.A. AND THE DISTRICT ARCHITECT.

2. SCOPE OF WORK

A. THE WORK CONSISTS OF MANUFACTURING OFF-SITE IN A PLANT, AND INSTALLING ON-SITE, MODULAR RELOCATABLE BUILDING AS DEFINED HEREIN AND SHOWN AND DETAILED ON DRAWINGS.

B. ALL REQUIREMENTS OF TITLE 19 AND 24 OF THE STATE OF CALIFORNIA CODE OF REGULATIONS (C.C.R.) RELATING TO INSPECTIONS AND VERIFIED REPORTS SHALL BE COMPLIED WITH AND SHALL INCLUDE:

1. GENERAL RESPONSIBLE CHARGE OF FIELD ADMINISTRATION BY THE ARCHITECT OF RECORD.

2. INSPECTION IN-PLANT DURING THE COURSE OF CONSTRUCTION BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND THE DISTRICT ARCHITECT. THE INSPECTOR SHALL BE RESPONSIBLE FOR AND APPROVED TO INSPECT THE GENERAL CONSTRUCTION, WELDING, MECHANICAL AND ELECTRICAL WORK. COST OF THESE INSPECTIONS SHALL BE BORNE BY THE SCHOOL DISTRICT.

3. ON SITE INSPECTION OF THE BUILDING INSTALLATION ELECTRICAL AND UTILITY OF THE BUILDING INSTALLATION BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND RETAINED BY THE SCHOOL DISTRICT.

4. OTHER SPECIAL TESTS OR INSPECTIONS AS MAY BE REQUIRED BY THE DIVISION OF THE STATE ARCHITECT.

3. WORK NOT INCLUDED

A. ALL ON-SITE OR OFF-SITE UTILITIES AND THE CONNECTION OF THEM TO THE BUILDING UNLESS INDICATED ON THE DRAWINGS.

B. ALL LEVELING, GRADING OR OTHER SITE PREPARATION EXCEPT CONCRETE OR WOOD LEVELING STRIPS, WHERE REQUIRED, UNLESS OTHERWISE INDICATED ON THE DRAWINGS. C. FIRE ALARM SYSTEM, FIRE EXTINGUISHER, PROGRAM BELL, CLOCK, PUBLIC ADDRESS SYSTEM, INTERCOM SYSTEM, TV SYSTEM UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

4. WHEELS AND HITCH

SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

5. ACCESSIBILITY OF SITE

THE SCHOOL DISTRICT SHALL PROVIDE ACCESS TO THE SITE FOR THE INSTALLATION OF THE BUILDING. REMOVAL OF TREES, SHRUBS, FENCING, SPRINKLERS, ETC. NECESSARY FOR THE MOVE-IN OF BUILDINGS SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

6. GENERAL CONSTRUCTION

A. STRUCTURAL FRAME – EACH MODULE SHALL BE DESIGNED AS A MOMENT FRAME STRUCTURE TO WITHSTAND VERTICAL AND HORIZONTAL LOADS AND COMPLY WITH REQUIREMENTS OF THE DIVISION OF THE STATE ARCHITECT. THE NECESSARY PROVISIONS ARE INCORPORATED IN THE STRUCTURE TO PERMIT THE RELOCATION OF THE STRUCTURAL FRAME IN SECTIONS NOT EXCEEDING 12 FEET IN WIDTH.

B. FLOOR – THE FLOOR SHALL BE STEEL FRAMED WITH A DESIGN LIVE LOAD OF 50 lbs. PER SQUARE FOOT UNLESS OTHERWISE NOTED ON THE DRAWINGS.

SECTION 5A STRUCT. AND MISC. STEEL

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND AS SPECIFIED AND INDICATED ON THE DRAWINGS, SERVICES REQUIRED FOR STRUCTURAL AND MISCELLANEOUS STEEL.

2. MATERIALS

A. STRUCTURAL STEEL SHAPES– ASTM A-36, OPEN HEARTH OR ELECTRIC FURNACE ONLY. ALL REGULAR SHAPES AS DESCRIBED IN AISC CONSTRUCTION MANUAL, UNLESS OTHERWISE NOTED.

B. COLD FORMED LIGHT GAUGE STEEL– ASTM A-570 GRADE 33, MINIMUM YIELD 33,000 PSI.

C. STRUCTURAL PIPE – ASTM A-53 MIN. YIELD OF 35,000 PSI. STRUCTURAL TUBING – ASTM A-500 MIN. YIELD OF 46,000 PSI.

D. BOLT MATERIAL– BOLTS AND NUTS, AMERICAN STANDARD REGULAR, AS DETAILED IN AISC CONSTRUCTION MANUAL, FABRICATED FROM STRUCTURAL QUALITY STEEL, ASTM A-307.

E. ARC-WELDING ELECTRODES– CLASS E-70 SERIES FOR WELDING A-36 STEEL TO A-36 AND E-60 SERIES FOR WELDING A-570 STEEL TO A-36, CONFORMING TO REQUIREMENTS OF THE "STRUCTURAL WELDING CODE" OF AMERICAN WELDING SOCIETY, LATEST EDITION.

F. ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEMS SHALL BE MADE WITH A FILLER METAL THAT HAS A MINUMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT LBS. AT MINUS 20 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

3. WORKMANSHIP

A. GENERAL – ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC STANDARD SPECIFICATIONS, TITLES 21 AND 24 OF THE CALIFORNIA CODE OF REGULATIONS AND THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS FOR DESIGN OF LIGHT GAUGE STEEL STRUCTURAL MEMBERS.

B. WELDING– ALL WELDING DONE BY SHIELDING ELECTRIC-ARC OR FLUX CORED-ARC PROCESS COMPLYING WITH THE AMERICAN WELDING SOCIETY. WELDING DONE BY OPERATORS QUALIFIED BY TESTS ACCEPTABLE TO THE DIVISION OF THE STATE ARCHITECT.

C. ERECTION– STRUCTURAL STEEL ERECTED TRUE, STRAIGHT, PLUMB AND TO ITS DESIGNED LOCATIONS. FIELD CONNECTIONS BOLTED OR WELDING AS INDICATED ON THE DRAWINGS.

D. NAILS, BOLTS, SCREWS, NUTS, ETC.– FOR EXTERIOR WORK SHALL BE CADIUM PLATED OR GALVANIZED.

E. HANDRAILS– FABRICATED AS DETAILED, WELDS GROUND SMOOTH.

F. SHOP PAINT–
1. EXPOSED STEEL COATED WITH ONE COAT SHOP COAT.
2. NON-EXPOSED STEEL COATED WITH ONE COAT SHOP COAT.
3. ALL SURFACES THOROUGHLY CLEANED BY EFFECTIVE MEANS PRIOR TO APPLICATION OF SHOPS COAT.

G. TESTS– PROVIDE MILL CERTIFICATES OR TEST ALL MEMBERS. WELDS SHALL BE INSPECTED AND/OR TESTED PER T-24 SECTION 2231A.5

SECTION 6A CARPENTRY

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL CARPENTRY.

2. MATERIALS

LUMBER GRADE MARKED IN ACCORDANCE WITH "STANDARD GRADING AND DRESSING RULE NO. 16" OF WEST COAST LUMBER INSPECTION BUREAU OR " GRADING RULES FOR WESTERN LUMBER, 3rd EDITION" OF WESTERN WOOD PRODUCTS ASSOCIATION. PLYWOOD GRADE MARKED IN ACCORDANCE WITH "PRODUCT STANDARD PS 1-95 FOR SOFTWOOD" OF AMERICAN PLYWOOD ASSOCIATION. COMPLYING WITH UBC STANDARD 25-9.

A. HEADERS– HEM FIR STUD GRADE OR BETTER.
B. PLATES– HEM FIR STUD GRADE OR BETTER.
C. BLOCKING– HEM FIR STUD GRADE OR BETTER.
D. SILLS AND LUMBER IN CONTACT WITH CONCRETE, MASONRY OR EARTH– HEMLOCK FIR PRESSURE TREATED WITH WOLMAN SALTS, TANALITH U OR CHROMATE COPPER ARSENIC, GRADE– 2x4: NO. 2 GRADE – 2x6, CUT ENDS DIPPED IN PRESERVATIVE (CUPONAL).
E. PLYWOOD ROOF DECKING– APA C-D GRADE GROUP 1, EXPOSURE 1 ... PLUGGED AND TOUCH ...

F. PLYWOOD FLOOR DECKING– APA STURD-I-FLOOR 48" O.C. 1-1/8" TONGUE AND GROOVE FLOOR SHEATHING.
G. EXTERIOR SIDING/SHEATHING– APA TYPE 303, EXTERIOR, M.D.O. 8" O.C., SIDING. SHEATHING 1/2" CDX.
H. STUDS AND POSTS– HEM FIR STUD GRADE.
I. FASTENERS– ALL NAILS SHALL BE CORROSION RESISTANT PER UBC STANDARD 2304A.4.
J. BUILDING TRIM– 1x RESAWN SELECT H.F. OR MASONITE.
K. DOOR/WINDOW TRIM– 1x4 RESAWN H.F.

3. WORKMANSHIP

A. FRAMING– SECURELY NAILED, BRIDGED AND BLOCKED TO FORM RIGID STRUCTURE. WORK CUT, FITTED AND ASSEMBLED LEVEL, PLUMB AND TRUE TO LINE. TRIM IN AS LONG LENGTHS AS POSSIBLE WITH ALL STANDING TRIM IN ONE PIECE. TRIM SEALED AT ALL EDGES.
B. NAILING– IN ACCORDANCE WITH TITLE 24 C.C.R.– TABLE 23-II-B-1. NAILS SHALL BE CORROSION RESISTANT BOX NAILS.
C. EXTERIOR WALLS– FACTORY FABRICATED. CAULKING PROVIDED BETWEEN PERIMETER OF WALLS AND STRUCTURAL MEMBERS PROVIDING WEATHERPROOF AND WATERTIGHT SEAL. NECESSARY CLOSURES, SEALS, FLASHING PLACED AT TOP AND BASE SUPPORT OF PANELS AND AROUND OPENINGS.
D. MACHINE APPLIED NAILING– SHALL HAVE PRIOR DEMONSTRATION AND APPROVAL BY DSA FIELD INSPECTOR AND THE ARCHITECT. THE APPROVAL IS SUBJECT TO CONTINUES SATISFACTORY PERFORMANCE. PLYWOOD SHALL HAVE A MINIMUM THICKNESS OF 3/8". 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.
E. TRIM SEALED AT ALL EDGES. SEALANT PAINTED TO MATCH TRIM OR SIDING.
F. RETIGHTEN ALL BOLTS BEFORE CLOSING IN.
G. THE DESIGN MOISTURE CONTENT OF LUMBER IS 19% OR LESS BEFORE FABRICATION, OTHER REVISION THRU CHANGE ORDER WILL BE REQUIRED.

SECTION 7B SHEET METAL

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL INDICATED SHEET METAL.

2. MATERIALS

A. SHEET METAL– STEEL SHEETS HOT DIP GALVANIZED WITH 1.25 OZ. PER SQUARE FOOT ZINC COATING CONFORMING TO ASTM A123. MINIMUM 26 GA.
B. SOLDER– OF STANDARD BRAND, GRADE A OF EQUAL PARTS LEAD AND TIN ASTM B32.
C. FLUX– ZINC SATURATED MURATIC ACID.

3. WORKMANSHIP

SHEET METAL ACCURATELY FORMED TO DIMENSIONS AND SHAPES DETAILED WITH TRUE STRAIGHT LINES, CORNERS AND ANGLES. FLASHING INSTALLED IN LONGEST LENGTHS POSSIBLE. EXTERIOR WORK FORMED, FABRICATED AND INSTALLED SO THAT IT ADEQUATELY PROVIDES FOR EXPANSION AND CONTRACTION IN THE COMPLETED WORK AND FINISHES WATER AND WEATHER TIGHT.

SECTION 7J SEALANT

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO SEAL THE BUILDINGS.

2. MATERIALS

"VULKEM" SEALANT, POLYURETHANE, MANUFACTURED BY MAMECO INTERNATIONAL OR APPROVED EQUAL, TO BE USED @ ALL STANDING SEAM ROOFING DETAILS.

SEALANT APPLIED TO DRY CLEAN SURFACES, WHEREVER INDICATED ON DETAILS AND AS NEEDED TO MAKE BUILDING WATERTIGHT, IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

SECTION 8B HOLLOW METAL DOORS & FRAMES

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL HOLLOW METAL DOORS & FRAMES.

2. MATERIALS

A. DOORS– TYPE L FULL FLUSH INSULATED, MANUFACTURED BY 'STEELCRAFT' MANUFACTURING COMPANY OR APPROVED EQUAL, 18 GA. 1-3/4" THICK.
B. FRAMES– 16 GA. COLD ROLLED 2" FACES.

SECTION 8D FINISH HARDWARE

1. SCOPE OF WORK

CONTRACTOR SHALL SUPPLY AND INSTALL HARDWARE AS SPECIFIED AND AS REQUIRED.

2. DOOR SCHEDULE– SEE SHEET G-2

3. SPECIAL REQUIREMENTS

A. CLOSURE FOR EXTERIOR DOORS SHALL BE SET FOR A MAXIMUM OPENING PRESSURE OF 5 LBS.
B. DEADBOLTS ARE NOT PERMITTED UNLESS OPERABLE WITH A SINGLE EFFORT USING LEVER HANDLE.
C. HARDWARE SHALL BE CENTERED BETWEEN 30" AND 44" ABOVE FINISHED FLOOR.
D. ALL EXIT DOORS SHALL BE OPEN ABLE FROM INSIDE WITHOUT ANY EFFORT, SPECIAL TOOL, OR KNOWLEDGE.

SECTION 9E PAINTING

1. SCOPE OF WORK.

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO PAINT BUILDINGS. ALL EXPOSED SURFACES OF BUILDING AND RAMP SHALL BE PAINTED EXCEPT ALUMINUM WINDOW FRAMES AND THRESHOLDS.

2. MATERIALS

A. EXTERIOR WOOD– VISTA BRAND 4100 PRIMER, 6000 FINISH. (OR EQUAL)
B. INTERIOR TRIM– VISTA BRAND 7000 FINISH. (OR EQUAL)
C. METAL– VISTA BRAND 7000 FINISH. (OR EQUAL)

3. WORKMANSHIP

A. EXTERIOR– WOOD SIDING, TRIM AND SKIRTING– APPLY TWO COATS OF EXTERIOR FLAT ACRYLIC PAINT SPRAYED ON.
B. INTERIOR TRIM– TRIM NOT PRECOATED SHALL BE PAINTED WITH TWO COATS OF SEMIGLOSS LATEX OVER PRIMER.
C. METAL– ALL METAL SURFACES SHALL BE PAINTED WITH TWO COATS OF ALKYD FINISH COAT OVER SHOP COAT.
D. RAMP– ONE COAT OF NON-SKID SURFACING.

SECTION 13F SITE ASSEMBLY

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO PREPARE THE BUILDING ELEMENTS, TRANSPORT THEM FROM THE PLANT TO THE SITE AND TO COMPLETE THE ASSEMBLY AT THE SITE.

THE CONDITION OF THE SITE, SUCH AS DRAINAGE AND SOIL BEARING CAPACITY, SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

2. ASSEMBLY OF ELEMENTS

A. IN A LOCATION AS DETERMINED BY THE SCHOOL DISTRICT, THE CONTRACTOR SHALL PLACE CONCRETE LEVELING STRIPS OR OTHER SUITABLE SUPPORTS AS DETAILED ON THE DRAWINGS.
B. THE ELEMENTS SHALL BE BROUGHT TO THE SITE ON WHEEL ASSEMBLY AND TRANSFERRED TO THE PREPARED SITE. GREAT CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ELEMENTS BY RACKING OR BUMPING.
C. CONNECTION OF THE ELEMENTS TOGETHER SHALL BE DONE ACCORDING TO INSTRUCTIONS ON THE DRAWINGS. FLASHING, TRIM AND OTHER LOOSE ITEMS SHALL BE INSTALLED PER DETAILS ON THE DRAWINGS.

SECTION 15A MECHANICAL

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL THE AIR CONDITION SYSTEM AS SHOWN ON THE DRAWINGS INCLUDING A/C UNITS AND ACCESSORIES, REMOTE THERMOSTAT, GRILLS AND POWER WIRING COMPLETE TO LOAD CENTER. CONTRACTOR SHALL INSTRUCT OWNER'S OPERATORS ON OPERATION AND MAINTENANCE OF A/C SYSTEM.

2. EQUIPMENT– SEE A/C INFORMATION SCHEDULE FOR SIZE AND TYPE

3. WORKMANSHIP

UNITS SHALL BE INSTALLED COMPLETE AND OPERATING WITH ALL ACCESSORIES IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.

SECTION 16A ELECTRICAL

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES FOR ELECTRICAL INSTALLATION COMPLETE WITH ASSOCIATED EQUIPMENT AND FIXTURES IN OPERATING CONDITION READY FOR USE. THE WORK INCLUDES LIGHT AND POWER SYSTEMS, LIGHTING FIXTURES COMPLETE ... TO A/C EQUIPMENT ...

2. MATERIALS– ALL NEW COMPLYING WITH REQUIREMENTS OF CBC AND NFPA

A. ELECTRIC METALLIC TUBING– COUPLINGS AND FLEX CONDUIT GALVANIZED OR SHERARDIZED.
B. PANELBOARDS– FLUSH MOUNTED WITH HINGED DOORS AND INDEXED CARD HOLDERS.
C. CONDUCTORS– COPPER, INSULATED FOR 600 VOLTS, TYPE THHN FOR SIZES #12 TO #6, TYPE THW FOR LARGER SIZES. MINIMUM SIZE– #12.
D. RECEPTACLE– GENERAL ELECTRIC 5242-2 OR EQUAL, +18".
E. CLOCK RECEPTACLE– EAGLE OR EQUAL.
F. SWITCHES– GENERAL ELECTRIC 5901-2 OR EQUAL, +48".
G. 2'x4' FLOURESCENT DROP IN LIGHT FIXTURE ACRYLIC PRISMATIC LENS, DBL. BALLAST, MAGNETIC ENERGY EFFICIENT (3) 34 WATT T-12 TUBES WEIGHT 27 LBS.

3. WORKMANSHIP

MATERIAL AND EQUIPMENT INSTALLED IN A SECURE, NEAT, WORKMANLIKE MANNER IN ACCORDANCE WITH CODE REQUIREMENTS, PANEL BOARD CARDS FILLED OUT. CONDUIT AND CABLE INSTALLED IN WALL AND CEILING SPACES. WORK PIERCING WATERPROOFED AREAS FLASHED AND SEALED TO A WATERTIGHT CONDITION.

NAILING SCHEDULE [1]

JOIST OR RAFTERS TO SIDES OF STUDS 8" JOIST OR LESS (3) 16d: FOR EACH ADDITION 4" IN DEPTH OF JOIST (1) 16d

BRIDGING TO JOIST, TOENAILS EACH END (2) 8d
A. BLOCKING BETWEEN JOIST OR RAFTERS TOENAILS EACH SIDE, EACH END (2) 10d [12]
B. BLOCKING BETWEEN STUDS, EA. END (2) 16d OR (2) 10d TOENAILS

SOLE PLATE TO JOIST OR BLOCKING FACE NAIL 16d AT 16" O/C

TOP PLATE TO STUD, END NAIL (2) 16d

STUD TO SOLE PLATE (4) 8d TOENAILS OR (2) 16d ENDNAIL

DOUBLE STUDS, FACE NAIL 16d AT 24" O/C

DOUBLE TOP PLATES, FACE NAIL 16d AT 16" O/C

DOUBLE TOP PLATES, LAP SPLICE (8) 16d

CONTINUOUS HEADER, TWO PIECES 16d AT 16" O/C ALONG EACH EDGE

CEILING JOIST TO PLATE, TOENAIL (3) 8d

CONTINUOUS HEADER TO STUD, TOENAIL (4) 8d

CEILING JOIST, LAPS OVER PARTITIONS, FACE NAIL (3) 16d

CEILING JOIST TO PARALLEL RAFTERS FACE NAIL (3) 16d

JOIST OR RAFTERS AT ALL BEARINGS, TOENAILS EACH SIDE (2) 10d

1" BRACE TO EA. STUD AND PLATE, FACE NAIL (2) 8d

BUILT UP CORNER STUDS 16d AT 24" O/C

PLYWOOD

SUBFLOOR, ROOF AND WALL SHEATHING TO FRAMING: [2]
1/2" OR LESS 6d [3]
19/32" – 3/4" 8d [4] OR 6d [5]
7/8" – 1" 8d [3]
1 1/8" – 1 1/4" 10d [4] OR 8d [5]

COMBINATION SUBFLOOR/UNDERLAYMENT TO FRAMING:
3/4" OR LESS 6d [5]
7/8" – 1" 8d [5]
1 1/8" – 1 1/4" 10d [4] OR 8d [5]

PANEL SIDING TO FRAMING: [2]
1/2" OR LESS 6d [6]
5/8" 8d [6]

FOOTNOTES

[1] COMMON OR BOX NAILS MAY BE USED, EXCEPT WHERE OTHERWISE STATED.

[2] NAILS SPACED AT 6" O/C AT EDGES, 12" O/C AT INTERMEDIATE SUPPORTS EXCEPT 6" O/C AT ALL SUPPORTS WHERE SPANS ARE 48" OR MORE. FOR NAILING PLYWOOD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2315A.3.3 & 2315A.4. NAILS FOR WALL SHEATHING MAY BE COMMON, BOX OR CASING.

[3] COMMON OR DEFORMED SHANK.

[4] COMMON

[5] DEFORMED SHANK.

[6] CORROSION RESISTANT SIDING OR CASING NAILS CONFORMING TO THE REQ. OF SECTION 2304A.3.

[7] FASTENERS SPACED 3" O/C AT EXT. EDGES AND 6" O/C AT INTERMEDIATE SUPPORTS.

[8] CORROSION RESISTANT ROOFING NAILS WITH 7/16"ø HEAD AND 1 1/2" LENGTH FOR 1/2" SHEATHING AND 1 3/4" LENGTH FOR 25/32" SHEATHING CONFORMING TO THE REQUIREMENTS OF SECTION 2304A.3.

[9] CORROSION RESISTANT STAPLES WITH NOMINAL 7/16" CROWN AND 1 1/8" LENGTH FOR 1/2" SHEATHING AND 1 1/2" LENGTH FOR 25/32" SHEATHING CONFORMING TO THE REQUIREMENTS OF SECTION 2304A.3.

[10] PANEL SUPPORTS AT 16", CASING OR FINISH NAILS SPACED 6" ON PANEL EDGES, 12" AT INTERMEDIATE SUPPORTS.

[11] PANEL SUPPORTS AT 24", CASING OR FINISH NAILS SPACED 6" ON PANEL EDGES, 12" AT INTERMEDIATE SUPPORTS.

[12] WHEN POSSIBLE, NAILS DRIVEN PERPENDICULAR TO THE GRAIN SHALL BE USED INSTEAD OF TOENAILS.

A. MATERIALS AND WORKMANSHIP:

ALL WORKMEN SHALL BE SKILLED AND QUALIFIED FOR THE WORK WHICH THEY PERFORM. ALL MATERIALS USED, UNLESS OTHERWISE SPECIFIED, SHALL BE NEW AND OF THE TYPES AND GRADES SPECIFIED.

WORKMANSHIP SHALL BE EQUAL OR BETTER IN QUALITY TO THAT REQUIRED BY THE CONSTRUCTION TRADES FOR A FINISHED PRODUCT.

THE CONTRACTOR SHALL CERTIFY THAT NO ASBESTOS-CONTAINING BUILDING MATERIALS WHICH EXCEED STATE AND FEDERAL MANDATED SAFE ASBESTOS LEVELS HAVE BEEN USED IN THE CONSTRUCTION OF RELOCATABLE FACILITIES.

B. GENERAL DESIGN REQUIREMENTS:

EACH MODULE SHALL BE PERMANENTLY IDENTIFIED WITH A METAL IDENTIFICATION TAG 3" x 1 1/2" MINIMUM SIZE WITH THE FOLLOWING INFORMATION:

A. D.S.A. APPROVAL NUMBER
B. DESIGN WIND LOAD
C. DESIGN ROOF LIVE LOAD
D. DESIGN FLOOR LIVE LOAD
E. BUILDER'S NAME
F. PLANT INSPECTOR/ID MARK

EACH MODULE SHALL BE CAPABLE OF RESISTING ALL VERTICAL AND LATERAL LOADS DURING TRANSPORTATION AND RELOCATION. (NORMAL INDUSTRY PRACTICE FOR BRACING MODULES DURING TRANSPORTATION IS ACCEPTABLE). WHEN MODULES ARE ASSEMBLED, JOINTS SHALL BE SEALED WITH REMOVABLE CLOSING STRIPS OR OTHER METHOD TO PRESENT A FINISHED APPEARANCE AND BE PERMANENTLY WATERPROOF.

EACH 12'-0" WIDE MODULE SHALL BE SUFFICIENTLY RIGID TO BE JACKED UP AT THE FRONT AND BACK CORNERS FOR RELOCATION WITHOUT DAMAGE OR THE MODULE SHALL HAVE LIFT LUGS AT FRONT AND BACK LOCATED AS REQUIRED SO THAT THE MODULE MAY BE JACKED UP FOR RELOCATION IN ONE PIECE WITHOUT ADDITIONAL SUPPORTS OF ANY TYPE. EVIDENCE OF EXCESSIVE BOWING DURING THE INSTALLATION OF THE MODULES WHICH, IN THE OPINION OF THE AGENCY ARCHITECT OR STRUCTURAL ENGINEER, CAUSES EXCESSIVE WORKING AT ANY JOINT OR COMPROMISES THE STRUCTURAL INTEGRITY OF THE MODULE, SHALL BE SUFFICIENT REASON FOR REJECTION OF THE MODULE.

C. FRAMING: ROOF, WALLS AND FLOOR:

FRAMING MEMBERS SHALL BE OF THE GRADE AND SIZE CALLED FOR ON THE STRUCTURAL PLANS.

D. MOISTURE BARRIER:

ALL WEATHER-EXPOSED SURFACES SHALL HAVE A WEATHER-RESISTIVE BARRIER TO PROTECT THE INTERIOR WALL COVERING. SUCH BARRIER SHALL BE EQUAL TO THAT PROVIDED FOR IN THE U.B.C. STANDARD NO. 14.1 FOR KRAFT WATERPROOF FELT. BARRIER SHALL BE FREE FROM HOLES AND BREAKS OTHER THAN THOSE CREATED BY FASTENERS AND CONSTRUCTION SYSTEM DUE TO ATTACHING OF THE BUILDING PAPER.

E. ZBAR:

ALL HORIZONTAL JOINTS IN SIDING SHALL BE PROTECTED BY GALVANIZED "Z BAR– 3/4 x 5/8 x 3/4" FLASHING.

FLASHING NEED NOT BE USED WHERE SKIRTING MEETS THE UNDERSIDE OF AN EXPOSED METAL FRAME AND THE SKIRTING IS RECESSED SUFFICIENTLY TO PROTECT THE TOP EDGE OF PLYWOOD.

F. ROOF OVERHANG:

ALL OVERHANGS SHALL PRESENT A PLEASING AND FINISHED APPEARANCE. SOFFIT MATERIAL, WHEN USED, SHALL BE 3/8" MIN. EXTERIOR SIDING. PLYWOOD SOFFIT MATERIAL SHALL BE APPLIED WITH EXPOSED GRAIN RUNNING PARALLEL TO THE LENGTH OF THE BUILDING. SOFFIT SHALL BE NEATLY AND CLOSELY FITTED AND TRIMMED TO COVER GAPS. ALL ENCLOSED SOFFIT AREAS SHALL BE VENTILATED PER THE C.B.C.

G. ENTRY LANDING AND RAMP:

EACH MODULE SHALL HAVE A LANDING(s) AND RAMP(s) TO CONFORM TO TITLE 24, C.C.R. SECTION 1007. THE LANDING(s) AND RAMP(s) STRUCTURE INCLUDING HANDRAIL AND WHEEL GUIDES. PREFABRICATED METAL LANDINGS AND RAMPS SHALL BE BUILT IN SECTIONS THAT ARE DEMOUNTABLE FOR MOVING AND REINSTALLATION AT A NEW SITE. THERE SHALL BE SUFFICIENT CROSS BRACING UNDER THE RAMP SURFACE TO PREVENT BOUNCE OR OIL CANNING OR THE RAMP SURFACE. DESIGN SHALL BE SUCH THAT HEIGHT ADJUSTMENT CAN BE MADE AT THE INSTALLATION SITE.

RAMP SHALL HAVE SKID RESISTANT METAL OR WOOD SURFACE.

H. ELECTRICAL MATERIALS:

ALL ELECTRICAL WIRING 110V AND GREATER SHALL BE IN CONDUIT SYSTEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF C.E.C. MINIMUM SIZE CONDUIT IS 1/2" MIN.

ACCEPTABLE CONDUIT:
RIGID ELECTRICAL METALLIC TUBING (EMT); GALVANIZED THIN WALL
FLEXIBLE (INTERIOR); GALVANIZED STEEL
FLEXIBLE (EXTERIOR); GALVANIZED STEEL WITH FACTORY APPLIED PVC

ALL CONDUITS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND SHALL BE SECURED IN CONFORMANCE WITH C.E.C. FIELD BENDS SHALL BE AVOIDED WHEREVER POSSIBLE. WHERE BENDS MUST BE MADE, USE AN APPROPRIATE "HICKEY" OR BENDING MACHINE. REAM AND DEBUR ALL CONDUIT PRIOR TO INSTALLATION AND TERMINATE IN APPROPRIATE BUSHINGS OR CONNECTORS, JACKET. WIRING SHALL BE #14 MIN. COPPER TYPE TW, THW, THWN AS APPLICABLE. CONDUIT FILL SHALL NOT EXCEED REQUIREMENTS OF C.E.C. A SEPARATE GROUNDING CONDUCTOR SHALL BE PULLED THROUGHOUT THE ENTIRE SYSTEM. CARE SHALL BE TAKEN TO AVOID DAMAGE TO WIRE OR INSULATION DURING PULLING. POWDERED SOAPSTONE OR A PULLING COMPOUND SUCH AS "YELLOW 77" LUBRICANT MAY BE USED IF NECESSARY.

GENERAL NOTES:

A. ALL WORK TO BE IN ACCORDANCE WITH REQUIREMENTS OF CALIFORNIA BUILDING CODE; TITLE 24, PART 2,3,4,5,9 AND TITLE 24, PART 1, GROUP 1. A COPY OF THESE REGULATIONS SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.

B. PLANS AND SPECIFICATIONS: CHANGES IN PLANS AND SPECIFICATIONS SHALL BE MADE BY THE ADDENDUM OR CHANGE ORDER, SIGNED BY THE ARCHITECT AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT BEFORE ANY RELATED WORK CAN BEGIN. CHANGE ORDERS SHALL ALSO BE SIGNED BY THE OWNER PRIOR TO APPROVAL BY DSA.

C. TESTING: TESTS OF MATERIALS SHALL BE BY A PERSON OR TESTING LABORATORY SELECTED BY THE OWNER WITH THE APPROVAL OF DSA AND ARCHITECT. THE OWNER SHALL BE RESPONSIBLE FOR THE COST OF TESTING, EXCEPT FOR THE RETESTING REQUIRED BY THE FAILURE OF ANY MATERIAL TO PASS.

D. ERECTION AT THE SITE: THE BUILDING SHALL BE TRANSPORTED, ERECTED AND SET ON FOUNDATION AS REQUIRED BY A LICENSED TRANSPORTER. ALL REQUIRED FINISH WORK SHALL BE COMPLETED BY SKILLED LABOR OF THE MANUFACTURER/CONTRACTOR, BUT WILL NOT INCLUDE UTILITIES SERVICE CONNECTION.

E. SITE WORK: THE OWNER, UNLESS OTHERWISE SHOWN ON THE APPROVED PLANS, WILL PROVIDE SITE(s) SATISFACTORY TO THE ARCHITECT OR ENGINEER FOR THE INSTALLATION OF THE RELOCATABLE BUILDING(s) THAT ARE LEVEL AND HAVE STABLE SOIL CONDITIONS WITH ADEQUATE SITE DRAINAGE, EXCEPT IF DESIGNATED IN THE CONTRACT DOCUMENTS AS THE RESPONSIBILITY OF THE MANUFACTURER/CONTRACTOR. IF ADDITIONAL GRADING AND/OR LEVELING IS NECESSARY FOR PROPER INSTALLATION OF MODULAR UNITS, THE ADDITIONAL CHARGE WILL BE THE RESPONSIBILITY OF THE OWNER.

F. UTILITIES: THE OWNER WILL BE RESPONSIBLE FOR ANY AND ALL UTILITY, FIRE ALARM OR SPECIAL ELECTRICAL SIGNAL SYSTEM CONNECTIONS EXCEPT IF DESIGNATED IN THE CONTRACT DOCUMENTS AS THE RESPONSIBILITY OF THE MANUFACTURER/CONTRACTOR.

G. FIRE EXTINGUISHER: UL2A-10BC, PRESSURE TYPE, MAX. 48" TO EXTINGUISHER HANDLE – SEE SPECIFICATION SHEET.

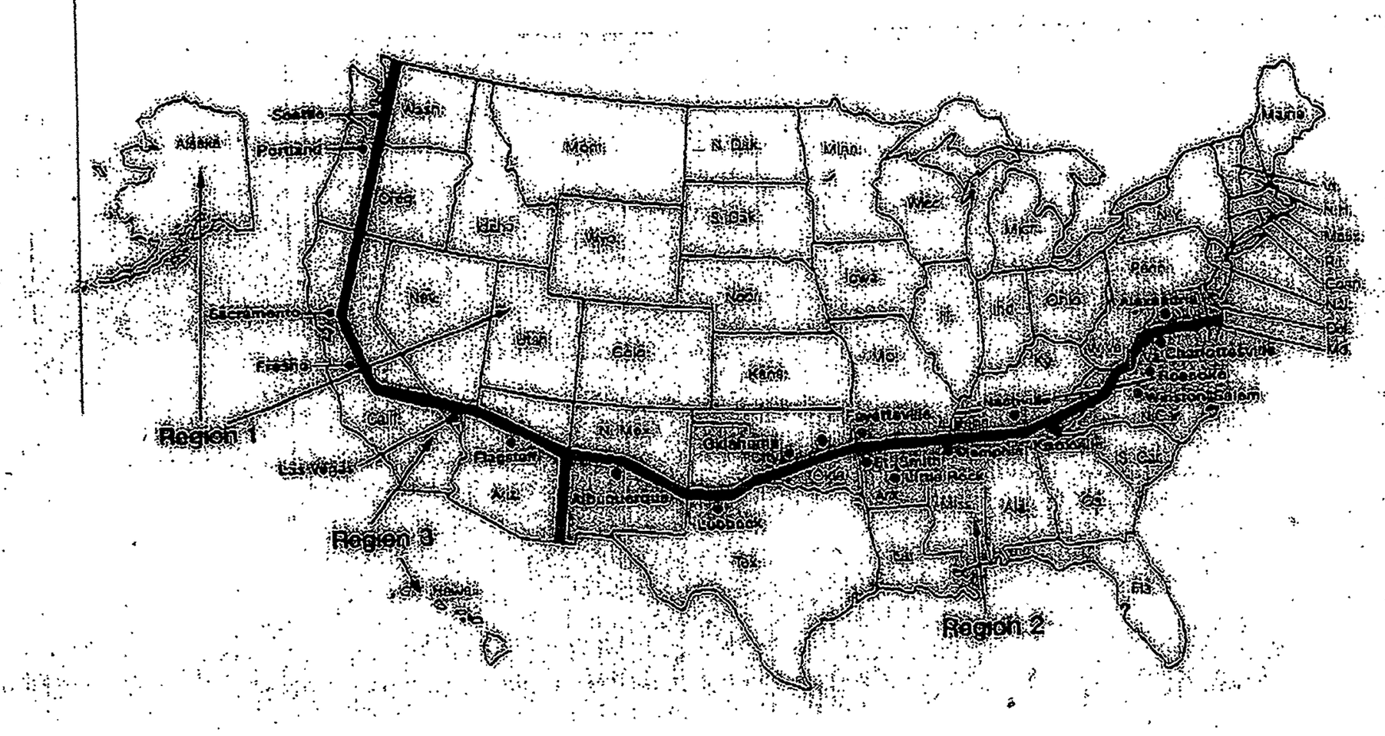
H. BUILDING INSULATION: SHALL COMPLY WITH CALIFORNIA QUALITY STANDARDS FOR INSULATING MATERIAL. FLAME SPREAD –MAX. 25, SMOKE DEVELOP –MAX. 450 CBC SEC. 1510. SEE SPECIFICATION SHEET.

I. T-GRID CEILING: SUSPENDED T-BAR SYSTEM WITH LAY-IN PANELS FLAME SPREAD – MAX. 0-25, SMOKE DEVELOP – MAX. 450 SEE SPECIFICATION SHEET.

J. FIRE ALARM SYSTEM: – SEE SPECIFICATION SHEET
1. "THE FIRE ALARM SYSTEM SHALL CONFORM TO CALIFORNIA BUILDING CODE SECTION 305.9, AND CALIFORNIA ELECTRIC CODE ARTICLE 760, CALIFORNIA FIRE CODE, ARTICLE 10."
2. INSTALLATION OF THE FIRE PROTECTIVE SIGNALING SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING STATE FIRE MARSHAL LISTING NUMBER FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY DSA.
3. UPON COMPLETION OF THE INSTALLATION OF THE PROTECTIVE SIGNALING EQUIPMENT, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING FIRE AGENCY.
4. ALARMS– SECTION 1006.2.4, CALIFORNIA FIRE CODE. IF EMERGENCY WARNING SYSTEMS ARE REQUIRED, THEY SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL WARNING SHALL HAVE A FREQUENCY OF NOT MORE THAN 60 FLASHES PER MINUTE.
(A) LOCATE PER CFC 1006.2.4

K. GROUNDING OF BUILDING COMPONENTS
1. THE OWNER, UNLESS OTHERWISE NOTED IN THE CONTRACT DOCUMANTS, SHALL RESPONSIBLE FOR PROVIDING THE NECESSARY GROUNDING OF THE BUILDING ELECTRICAL SYSTEM PER CEC 250-50, 250-52 AND 250-56.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY GROUNDING OF THE METAL PORTION BUILDING COMPONENTS (METAL FRAMED STEEL RAMP, ETC.) TO MEET THE REQUIREMENTS OF IR NO 16-1, ISSUED BY D.S.A.
3. THE PROJECT INSPECTOR SHALL WITNESS AND VERIFY THE GROUNDING TESTS.

L. MECHANICAL
1. FACTORY-MADE AIR DUCTS. FACTORY-MADE AIR DUCTS SHALL BE APPROVED FOR THE USE INTENDED OR SHALL CONFORM TO THE REQUIREMENTS OF C.M.C. STANDARD NO. 10-1. EACH PORTION OF A FACTORY-MADE AIR DUCT SYSTEM SHALL BE IDENTIFIED BY THE MANUFACTURER WITH A LABEL OR OTHER SUITABLE IDNETIFICATION INDICATING COMPLIANCE WITH C.M.C STANDARD NO. 10-1 AND SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF THEIR LISTING.
2. INSULATION APPLIED TO THE EXTERIOR SURFACE OF DUCTS LOCATED IN BUILDINGS SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND A SMOKE DENSITY OF NOT MORE THAN 50 WHEN TESTED AS A COMPOSITE INSTALLATION INCLUDING INSULATION, FACING MATERIALS, TAPES AND ADHESIVES AS NORMALLY APPLIED.
3. MATERIAL EXPOSED WITHIN DUCTS OR PLENUMS SHALL HAVE A FLAME-SPREAD RATING OF NOT MORE THAN 25 AND A SMOKE-DEVELOPMENT RATING OF NOT MORE THAN 50.
4. AIR FILTERS. AIR FILTERS SHALL BE LISTED UNITS PER U.F.C. STANDARD NO. 9-6. AIR FILTERS SHALL COMPLY WITH ALL REQUIREMENTS OF STATE STANDARD NO. 12-71-1.
5. PIPE AND TUBING. INSULATION AND COVERING ON PIPE AND TUBING SHALL HAVE A FLAME SPREAD-RATING NOT TO EXCEED 25 AND A SMOKE DENSITY NOT TO EXCEED 450 WHEN TESTED IN ACCORDANCE WITH CBC SECTION 707.2



JOHNS MANVILLE BUILT-UP ROOFING
REGION 1, REGION 2 + REGION 3

CONCRETE ULTIMATE STRENGTH =
F'c = 3000 psi @ 28 DAYS

REINFORCING STEEL YIELD STRENGTH:
Fy = 40,000 psi (#3)
Fy = 60,000 psi (#4 AND LARGER)

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

DATE SIGNED JUN 04 2003

LICENSE EXPIRES 6-30-2004

ARCHITECT STAMP

DATE SIGNED MAY 21 2003

LICENSE EXPIRES 6-30-2004

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
APPL.01 105425

STATE AGENCY STAMP

PC
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
4-104778
DATE 5-30-03

STATE AGENCY STAMP

PROJECT: MODULAR CLASSROOM BUILDING

TITLE: GENERAL NOTES & SPECIFICATIONS

JOB #	
DATE	12-1-02
DRAWN BY	RDL
SCALE	AS NOTED
APPROVED	
REVISIONS	

SHEET NO. G-1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS [X] FLS [X] ACS [X]
DATE: 12/28/2022

CONSTRUCTION NOTES & MATERIALS:

CHASSIS CONSTRUCTION: CHECK ONE

BOX SIZE: 12'x40'
FRAME: PERIMETER
MAIN RAIL/SIZE: 7"x9.8# C-CHANNEL @ PLYWOOD FLOOR [X]
No. OF AXLES: –
REFERENCE DETAIL SHEET: –
MISC: –

FLOOR FRAMING: CHECK ONE

FLOOR LOAD: 50 PSF, 125 PSF FOR 72'x40' ONLY
JOIST SIZE & GRADE: 7"x11 GA. Z-MEMBER @ PLYWOOD FLOOR [X]
JOIST SPACING: SEE CHART ON FLOOR FRAMING PLAN
INSULATION: R-11 UNFACED [X]
BOTTOM ENCLOSURE: CANVEX CW-600
FLOOR DECK: PLYWOOD DECKING [X]
REFERENCE DETAIL SHEET: –
MISC.: –

EXTERIOR WALLS WOOD STUD OPTION: CHECK ONE [ ] USED [X] NOT USED

WIND LOAD: 80 MPH EXP. C [ ]
STUD SIZE & GRADE: 2"x4" H.F. #2 [ ]
SPACING: 16" O.C.
SIDE WALL HEIGHT: 9'-0"
INSULATION: R-13 UNFACED [ ]
FIRE RESISTIVE CONSTRUCTION: –
REFERENCE DETAIL SHEET: –
MISC.: –

EXTERIOR WALLS STEEL STUD OPTION: [X] USED [ ] NOT USED

WIND LOAD: 80 MPH EXP. C [X] OR 90 MPH EXP. C [ ]
STUD SIZE & GRADE: 3 1/2" x 20 GAUGE [X] OR 5 1/2" x 20 GAUGE [ ]
SPACING: 16" O.C.
SIDE WALL HEIGHT: 9'-0"
INSULATION: R-13 UNFACED [X] OR R-19 UNFACED [ ]
FIRE RESISTIVE CONSTRUCTION:
REFERENCE DETAIL SHEET: –
MISC.: –

EXTERIOR WALL SIDING: CHECK ONE

5/8" THK. DURATEMP APA RATED GROOVED @ 8" O.C. [X]
1/2" CDX PLYWOOD W/ STUCCO ON-SITE [ ]
REFERENCE DETAIL SHEET: FOR STUCCO SIDING SEE DETAILS #16 & #17 SHEET G-4
MISC.: I.C.B.O.# FOR DURATEMP SIDING (ER-4856)

INTERIOR WALLS: CHECK ONE

STUD SIZE & GRADE: 2"x4" H.F. #2 [ ] OR 3 1/2"x20 GAUGE STEEL STUDS [X]
STUD SPACING: 16" O.C.
PARTITION HEIGHT: TO RAFTERS [X] OR BELOW RAFTERS [ ]
INSULATION: YES [ ] OR NO [ ]
FIRE RESISTIVE CONSTRUCTION: 1 HR. WALL @ STORAGE/WORKROOM, 72'x40'
REFERENCE DETAIL SHEET: –
MISC.: –

ROOF DETAILS:

TYPE OF DRAIN SYSTEM: 26 GA. GUTTERS AND DOWN SPOUTS
REFERENCE DETAIL SHEET: –
MISC.:

ROOF FRAMING: CHECK ONE

ROOF LOAD: 20 PSF [X] OR 30 PSF [ ]
RAFTER SIZE/GRADE: 6"x2"x14 GA. Z-MEMBER [X] OR 7"x1 1/2"x11 GA. Z-MEMBER [ ]
RAFTER SPACING: 48" O.C.
INSULATION: R-19 UNFACED [X] OR R-30 UNFACED
FINISH ROOFING: 22 GAUGE GALV. STANDING SEAM ROOF [X]
26 GAUGE GALV. STANDING SEAM ROOF [ ]
BUILT-UP 3-PLY ROOFING [ ] EPDM W/ 1/4" DENSDECK UNDERLAYMENT [ ]
ROOF SHEATHING: 3/4" C-D PLYWOOD @ NON 22 GAUGE ROOFING
ROOF SLOPE: 1/4" PER 12" DOUBLE SLOPE
REFERENCE DETAIL SHEETS: –
DRAFT STOP CONSTRUCTION: –
ROOF MOUNT HVAC: [ ] YES [X] NO
MISC:

STEEL COLUMNS: CHECK ONE

CORNER COLUMNS: 3 1/2"x3 1/2"x1/4" [X] OR 4"x4"x1/4" [ ]
MIDSPAN COLUMN @ SIDEWALL: N.A.
STEEL POST HEIGHT: 9'-0"
REFERENCE DETAIL SHEET:
MISC: (NOTE: THE STEEL POST HEIGHT IS FROM TOP OF FLOOR TO BTM. OF SIDEWALL BEAM/HEADER.)

TRUSS TYPE 20 PSF ROOF LOAD: [X] YES OR [ ] NO

SIDEWALL BEAM TYPE: 18/23/18x3 1/2"x10 GA. CHANNEL @ DOUBLE SLOPE OR 18/28x3 1/2"x10 GA. CHANNEL @ SINGLE SLOPE
ENDWALL HEADER: 18 x 3 1/2" x 12 GA. CHANNEL @ DOUBLE SLOPE AND 18 x 28" x 3 1/2" x 12 GA. CHANNEL @ HIGH SIDE OF SINGLE SLOPE
TRUSS CONFIGURATION @ MODLINE: DOUBLE SLOPE [X] OR SINGLE SLOPE [ ]
TOP CHORD: L 3"x3"x3/8"
BOTTOM CHORD: L 3"x3"x3/8"
WEBS: L 2"x2"x3/16" @ 1ST TWO BAYS, L 1 1/2"x1 1/2"x3/16" @ ALL OTHERS
OVERHANGS: 5'-0" @ FRONT & 2'-0" @ REAR
OVERHANG MATERIAL: L 4"x3"x3/8" [X] OR 10"x3"x12 GAUGE C-CHANNEL [ ]
SOFFITS: OPEN SOFFITS [X] OR CLOSED SOFFITS [ ]
REFERENCE DETAIL SHEET:
MISC:

TRUSS TYPE 30 PSF ROOF LOAD: [ ] YES OR [X] NO

TRUSS CONFIGURATION: DOUBLE SLOPE [ ] OR SINGLE SLOPE [ ]
SIDEWALL BEAM TYPE: 18/23/18x3 1/2"x10 GA. CHANNEL @ DOUBLE SLOPE OR 18/28x3 1/2"x10 GA. CHANNEL @ SINGLE SLOPE
ENDWALL HEADER: 18"x3 1/2"x12 GA. CHANNEL @ DOUBLE SLOPE AND 18"x28"x3 1/2"x12 GA. CHANNEL @ HIGH SIDE OF SINGLE SLOPE
TRUSS TOP CHORD: L 4"x3"x3/8"
TRUSS BOTTOM CHORD: L 4"x3"x3/8"
TRUSS WEBS: L 2"x2"x3/16" @ 1ST TWO BAYS, L 1 1/2"x1 1/2"x3/16" @ ALL OTHERS
OVERHANGS: 5'-0" @ FRONT & 2'-0" @ REAR
OVERHANG MATERIAL: L 5"x3"x3/8" [ ] OR 10"x3"x12 GAUGE C-CHANNEL [ ]
SOFFITS: OPEN SOFFITS [ ] OR CLOSED SOFFITS [ ]
REFERENCE DETAIL SHEET:
MISC:

SITE CONDITIONS: CHECK ONE

FOUNDATION TYPE: WOOD PAD [ ] OR CONCRETE [X]
FLASHING REQUIRED: CONCRETE FLUSH W/ GRADE [X] OR CONCRETE ABOVE W/ GRADE [ ]
RAMP & LANDING: SEE FLOOR PLAN FOR RAMP AND LANDING
SKIRTING REQUIRED: YES [ ] OR NO [X] DURATEMP
FIXTURE MOUNTING HEIGHTS: ADULT HEIGHT [X] ELEMENTARY [ ] KIDDIE [ ]
MISC.:

ON-SITE SCOPE OF WORK:

1. ALL UNDER FLOOR PLUMBING FURINISHED AND INSTALLED ON-SITE.
2.
3.
4.
5.

VARIABLE MATERIAL SPECIFICATIONS:

ROOFING:
FIRE RATED PER UBC STANDARD 15-2 CLASS 'A'
BASE SHEET FINISHED GRADE 25-30# ASPHALT COATED

MULE-HIDE EPDM MEMBRANE ROOFING SYSTEM:
(ETHYLENE-PROPYLENE-DIENE TERPOLYMER MEMBRANE)
ADHESIVELY OR MECHANICALLY ATTACHED OVER INSULATED, COMBUSTIBLE OR NON-COMBUSTIBLE DECKS. CLASS 'A'.
THE EPDM MEMBRANES ARE SYNTHETIC RUBBER SINGLE-PLY SHEETS HAVING A MIN. NOMINAL THICKNESS OF 45 MILS (1.1 MM).
INSTALL PER MANUFACTURER INSTALLATION INSTRUCTIONS.
(I.C.B.O.# ER-5867)
1/4" DENS-DECK ROOF BOARD:
USED AS A UNDERLAYMENT FOR THE EPDM MEMBRANE ROOFING SYSTEM. FLAME SPREAD: 0, SMOKE DEVELOPED: 0 PER, ASTM E 84.
INSTALL PER ROOFING MANUFACTURER INSTALLATION INSTRUCTIONS.

WINDOWS:
HORIZONTAL SLIDING , 50% VENTING, ANODIZED ALUMINUM FRAME. PERFORMANCE RATED PER AAMA GS101-88 FOR COMMERCIAL USE AND MEDIUM EXPOSURE, NAIL-ON FIN FASTENED DIRECTLY TO FRAMING AND BEHIND SIDING MATERIAL, REMOVABLE SCREEN AT VENT SASHES. LAMINATED OR TEMPERED GLAZING TO BE NOTED ON FLOOR PLAN. DUAL GLAZED WINDOWS TO HAVE MINIMUM 1/4" AIR SPACE AND 1/8" GLASS (SEE WINDOW SCHEDULE FOR SIZES)

INTERIOR WALL COVERINGS:
APPLIED OVER MINIMUM 1/2" GYPSUM BOARD, OR MINIMUM 3/8" (*)ORIENTED STRAND BOARD. EXPOSED SURFACES FIRE RATED PER ASTM E-84, FLAME SPREAD MAXIMUM 200, SMOKE DEVELOPED MAXIMUM 450. (*PROVIDE FIRE BLOCKING WHEN 3/8" OSB IS USED AS BACKING MATERIAL)
TACKBOARD: VINYL WALL COVERING TO BE CLASS I DOMTAR GYPSUM OR EQUAL, LAMINATED ONTO 1/2" INDUSTRIAL INSULATION BOARD, 4'-0"x9'-0", LONG EDGES BEVELED.
FLAME SPREAD = 65
SMOKE DENSITY = 175

FRP: FIBERGLASS REINFORCED PLASTIC PANELS, 4'-0"x8'-0", WITH COLOR MATCHED PVC MOLDINGS OVER 1/2 GYPSUM FLAME SPREAD AND SMOKE DEVELOPMENT, CLASS C PER ASTM-E84

CEILING TYPE:
SUSPENDED SYSTEM, PERFORMANCE RATED ASTM C635 HEAVY DUTY ACOUSTIC LAY-IN CEILING PANELS:
LIGHT REFLECTIVE LR-1, FIRE RATED CLASS-A PER ASTM E84.
VINYL FACED FIBERGLASS, 5/8" THICK, ARMSTRONG OR EQUIV.
CLASS A: FLAME SPREAD 25 (UL LABELED) PER ASTM E 1264

CARPET:
DIRECT GLUE-DOWN, PERFORMANCE RATED PER STATE OF CALIFORNIA SPECIFICATION 7220-21L-01. (GROUP I, TYPE A, CLASS 24) 4600 MIN. DENSITY. THE CARPET IS TO HAVE A MINIMUM CRITICAL FLUX OF .25 WATT/CM .

VINYL SHEET FLOORING:
MINIMUM WEAR LAYER .050" THICK, PERFORMANCE RATED PER ASTM F1303-90 TYPE-II, GRADE-1, CLASS-A, AND ASTM F970 125PSI, FIRE RATED PER ASTM E648 FLAMMABILITY CLASS-I, AND ASTM E662 SMOKE DENSITY MAX. 450. MIN. COEFFICIENT OF FRICTION TO BE 0.6 PER ASTM 02047

VINYL COMPOSITION TILE:
12" SQUARE, MINIMUM 1/8" THICK, PERFORMANCE RATED PER ASTM F1066, COMP-1, CLASS-2, AND ASTM F970 75PSI, FIRE RATED PER ASTM E648 FLAMMABILITY CLASS-1, AND ASTM E662 SMOKE DENSITY MAX. 450. MIN. COEFFICIENT OF FRICTION TO BE 0.6 PER ASTM D2047

TOP SET BASE:
BURKE MOLDED RUBBER 1/8" THICK, 4" HEIGHT, COVE STYLE #502-P, OR EQUIV.

MARKER BOARDS:
1/2" PARTICLE BOARD SUBSTRATE, FULL WIDTH MAP RAIL W/ CORK INSERT AND SIX MAP HOOKS, EXTRUDED ALUMINUM MOLDING WITH FLAG HOLDER.

NOTE:
ALL FINISHES SHALL COMPLY WITH CBC CHAPTERS 7 & 8.
CFC AND TITLE 19 CCR

INTERIOR FINISH SCHEDULE

ROOM	FLOOR				BASE				WALLS			CEILING		
		(BY OTHERS)	SHEET VINYL			(BY OTHERS)	6" SELF COVE			1/2" VINYL WRAP TACK. BD. OVER 1/2" GYP BD.			ACOUSTICAL TILE IN HEAVY DUTY GRID @ 8'-6"	
CLASSROOMS		●				●				●			●	

NOTE:
FINISH WALL COVERING & FINISH CEILING SHALL BE FLAME SPREAD CLASS 1

WINDOW SCHEDULE

SYM.	ROUGH OPENING WIDTH	x HEIGHT	WINDOW SIZE	TYPE	FRAME	SCREEN	GLAZING	MANUFACTURE/SERIES/DESCRIPTION
A	VERIFY	VERIFY	8'-0"x3'-0"	XOX	CLEAR ANODIZED ALUM. FRAME	YES	46% GREY TINT	DUAL GLAZE, HORIZONTAL SLIDER, ALUMINUM FRAMED SCREENS
B								
C								

DOOR SCHEDULE

SYM.	WIDTH	HEIGHT	THK.	TYPE	FIRE RATING	FRAME	GLAZING	REMARKS
1	3'-0"	6'-8"	1 3/4"	HOLLOW METAL		16 GA. METAL		18 GA. HOLLOW METAL DOOR
2	3'-0"	6'-8"	1 3/4"	SOLID CORE	1-HR.	TIMELY		PREFINISHED INTERIOR LEGACY DOOR & FRAME

HARDWARE GROUP 1

QTY.	DESCRIPTION	PART NO.
3	HINGES	BB12793 4.5"x4.5" NRP
1	PANIC HARDWARE	VON DUPRIN 22NL
1	CLOSER, 5 LBS CLOSING PRESSURE	NORTON 1601
1	THRESHOLD	413S-A36
1	DOOR BOTTOM	PEMCO 216AV
1	WEATHERSTRIP	83S-AV HAGER

NOTE:
PANIC HARDWARE IS REQUIRED TO BE INSTALLED WHEN THE CONFIGURATION OF ANY ROOM PROVIDES AN OCCUPANT LOAD OF 50 OR GREATER, CBC 1007.3.10

HARDWARE GROUP 2

QTY.	DESCRIPTION	PART NO.
3	HINGES	BB12793 4.5"x4.5" NRP
1	LOCKSET	SCHLAGE D70PD RHO 26D
1	CLOSER, 5 LBS CLOSING PRESSURE	NORTON 1601
1	THRESHOLD	413S-A36
1	DOOR BOTTOM	PEMCO 216AV
1	WEATHERSTRIP	83S-AV HAGER

HARDWARE GROUP 3

QTY.	DESCRIPTION	PART NO.
3	HINGES	HAGAR RC1749 4.0"x4.0" L2
1	PASSAGE LEVER	SCHLAGE D10S RHODES, 26D FINISH
1	SMOKE SEAL	
1	CLOSER, 5 LBS CLOSING PRESSURE	NORTON 1601

ARCHITECT STAMP
DATE SIGNED JUN 04 2003
STRUCTURAL ENGINEER STAMP
IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
STATE AGENCY STAMP
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
4-104778
STATE AGENCY STAMP

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

PROJECT
TERRE NOVA
CLASSROOM MODULAR BUILDINGS

TITLE
BUILDING SPECIFICATIONS, CONSTRUCTION NOTES & SCHEDULES

JOB #
DATE 5-6-03
DRAWN BY db
SCALE AS NOTED
APPROVED
REVISIONS

SHEET NO.
G-2

GENERAL PLUMBING SPECIFICATIONS

A. PLUMBING EQUIPMENT, FIXTURE AND ACCESSORIES:
FURNISH AND INSTALL ALL PIPING, VALVES, VENTS, STOPS, AND TRAPS REQUIRED TO CONNECT ALL FIXTURES AND EQUIPMENT. PROVIDE ALL ELECTRICAL CONNECTIONS AS REQUIRED.

B. MATERIALS AND WORKMANSHIP:
ALL WORKMEN SHALL BE SKILLED AND QUALIFIED FOR THE WORK WHICH THEY PERFORM. ALL MATERIALS USED, UNLESS OTHERWISE SPECIFIED, SHALL BE NEW AND OF THE TYPES AND GRADE SPECIFIED.

WORKMANSHIP SHALL BE EQUAL OF BETTER IN QUALITY TO THAT REQUIRED BY THE CONSTRUCTION TRADES FOR A FINISHED PRODUCT.

THE DETAILS ON THIS SHEET ONLY ILLUSTRATE THE SPECIFIC REQUIREMENTS FOR INSTALLING THE FIXTURES AND THE ACCESSORIES SHOWN.
SEE PROJECT SPECIFICATIONS FOR THE ACCESSORIES AND FIXTURES THAT APPLY TO THIS PROJECT.

PLUMBING NOTES

1. ALL VENTS TO ROOF AND VENT RISER CONNECTIONS TO BE OFFSET ABOVE CEILING FROM WALLS IN ORDER TO PREVENT PENETRATION THROUGH TOP PLATES.
2. ALL WASTE DROPS IN WALLS TO BE OFFSET PRIOR TO WALL BOTTOM PLATES.
3. FOR ALLOWABLE CUTTING/NOTCHING/BORED HOLES IN 2x WALL STUDS AND JOISTS, SEE TYPICAL DETAILS ON STRUCTURAL SHEETS.
4. TOILET CURB ON FLOORS: FOR TOILET ROOMS WITH MORE THAN TWO (2) FIXTURES IN RELOCATABLE BUILDINGS, PROVIDE A CONTINUOUS VINYL FLOORING, ARMSTRONG "RHINO 90402" OR EQUAL WITH FULLY SEALED JOINTS. VINYL FLOORING TO EXTEND A MIN. OF SIX (6) INCHES UP THE STUD WALL FROM THE FINISH FLOOR LEVEL.
5. ALL INTERIOR COLD AND HOT WATER IS OVERHEAD PIPING EXCEPT AT INSIDE WALLS UNLESS OTHERWISE NOTED.
6. ALL DRAIN AND SEWER FITTINGS BELOW FLOOR LINE SITE INSTALLED.
7. SEWER/WATER STUB OUTS: SHALL BE LOCATED WITHIN THE ALLOWABLE AREA AS SHOWN ON PLANS AND CONNECTIONS SHOULD BE EASILY ACCESSIBLE FOR FUTURE RELOCATION. STUB OUT HEIGHT SHOULD BE COORDINATED WITH BUILDING MANUFACTURER AND SITE CONTRACTOR/OWNER.

ACCESSIBLE DIMENSIONS

	A	E	K
TOILET CENTERLINE FROM WALL	18"	15"*	12"*
TOILET SEAT HEIGHT	17"–19"	15"	10"–12"
GRAB BAR HEIGHT (SIDE)	33"	27"*	20"–22"
TOILET PAPER IN FRONT OF TOILET	12" MAX.	6" MAX*	6" MAX*
NAPKIN DISPOSAL IN FRONT OF TOILET	12" MAX.	12" MAX.	N/A
DISPENSER OR MIRROR HEIGHT	40" MAX.	36" MAX.	32" MAX.
LAVATORY/SINK TOP HEIGHT	34" MAX.	29" MAX.	24" MAX.
LAVATORY/SINK KNEE CLEARANCE	27" CLR.	24" CLR.	19" CLR.
URINAL LIP HEIGHT	17" MAX.	15" MAX.	13" MAX.
URINAL FLUSH HANDLE HEIGHT	44" MAX.	37" MAX.	32" MAX.
DRINKING FOUNTAIN BUBBLER HEIGHT	36" MAX.	32" MAX.	30" MAX.
DRINKING FOUNTAIN KNEE CLEARANCE	27" MIN.	24" MIN.	22" MIN.
RAMP/STAIR HANDRAIL HEIGHT	34"–38"	27"	22"

* = DEVIATES FROM CODE REQUIREMENTS AND REQUIRES A WRITTEN FINDING OF UNREASONABLE HARDSHIP
A = ADULT DIMENSIONS (AGE 12 AND OVER)
E = ELEMENTARY DIMENSIONS
K = KINDERGARTEN & PRE-SCHOOL DIMENSIONS

ACCESSIBLE SINK COUNTERS

	COUNTER HEIGHT	KNEE SPACE	SINK DEPTH MAX.	DRINKING FOUNTAIN/ BUBBLER HEIGHT
ADULT	34"	27"	6 1/2"	36"
ELEMENTARY	29"	24"	5"	32"
KINDER	24"	19"	5"	30"

PLUMBING LEGEND

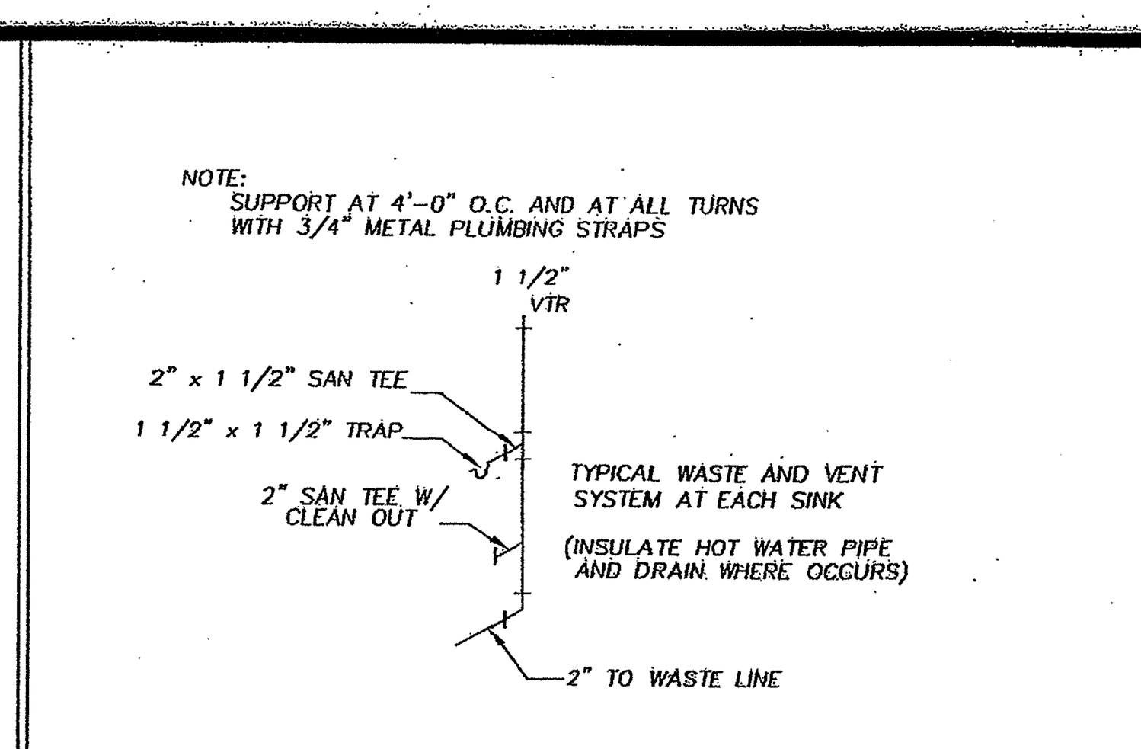
COLD WATER	— - - —
HOT WATER	— - - - —
WASTE	———
VENT	— — — —
CLEAN OUT	‖———
VENT THRU ROOF	⊙- - - -
SHUT OFF VALVE	——⋈——
PIPE UP	o———
PIPE DOWN	o———

PLUMBING FIXTURE SCHEDULE

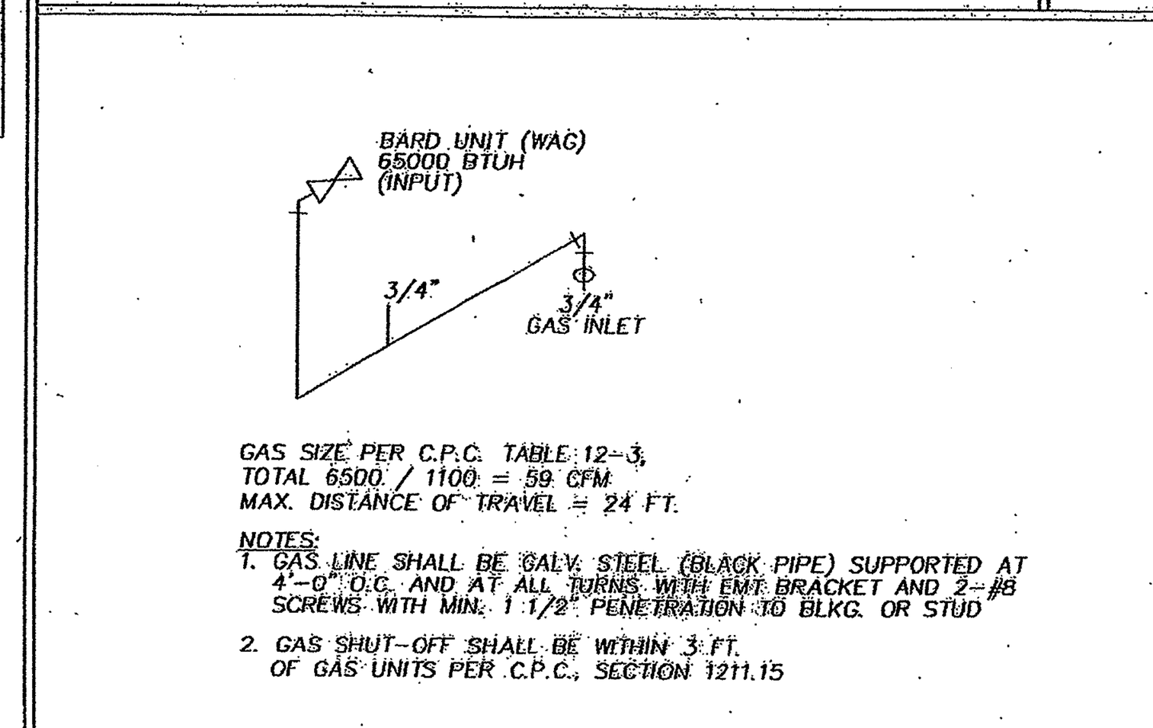
SYMBOL	DESCRIPTION	HEIGHT	WASTE	VENT	C.W.	H.W.	MANUFACTURE	MODEL
* WC 1	VITRIOUS CHINA FLOOR MOUNTED SIPHON JET TANK TYPE WATER CLOSET WITH ELONG. OPEN FRONT SEAT. FIXTURE SHALL BE LOW VOLUME FLUSH TYPE. INSTALL FIXTURE IN COMPLIANCE WITH STATE REQUIREMENTS FOR PERSONS WITH DISABILITIES	ADULT ELEMENTARY KIDDIE	3"	2"	1/2"	–	CRANE PLUMB. CRANE PLUMB. CRANE PLUMB.	3-392 3-792 3-811
* LV 1	20"x 17" VITRIOUS CHINA WALL MOUNTED LAVATORY. 1/2" ANGLE STOPS WITH SUPPLY AND WALL ESCUTCHEON, CHROME PLATE P-TRAP. INSTALL IN ACCORDANCE WITH STATE REQUIREMENTS FOR PERSONS WITH DISABILITIES	ADULT ELEMENTARY KIDDIE	2"	1-1/2"	1/2"	1/2"	CRANE PLUMB.	HARWICH 1-412
* SK 1	25"x22" STAINLESS STEEL SINGLE BOWL CLASSROOM SINK W/ SINGLE GOOSENECK FAUCET W/ POLISHED CHROME PLATE FINISH. INSTALL IN ACCORDANCE WITH STATE REQUIREMENTS FOR PERSONS WITH DISABILITIES	ADULT ELEMENTARY KIDDIE	2"	1-1/2"	1/2"	1/2"	JUST	CRA-ADA-2225-A-GR
* DF 1	LEAD FREE BUBBLER, SELF CLOSING PUSH BUTTON CONTROLLED JUST JSB-10 OR EQUAL				1/2"		JUST	JSB-10
* WH 1	6 GALLON ELECTRIC WATER HEATER WITH P & T THRU FLOOR TO OUTSIDE OF STRUCTURE. WATER HEATER SHALL BE ENERGY COMMISION APPROVED.		–	–	3/4"	3/4"	AMERICAN	E61-06U-015SV
*	PROVIDE AS LISTED OR EQUAL							

TOILET ACCESSORIES

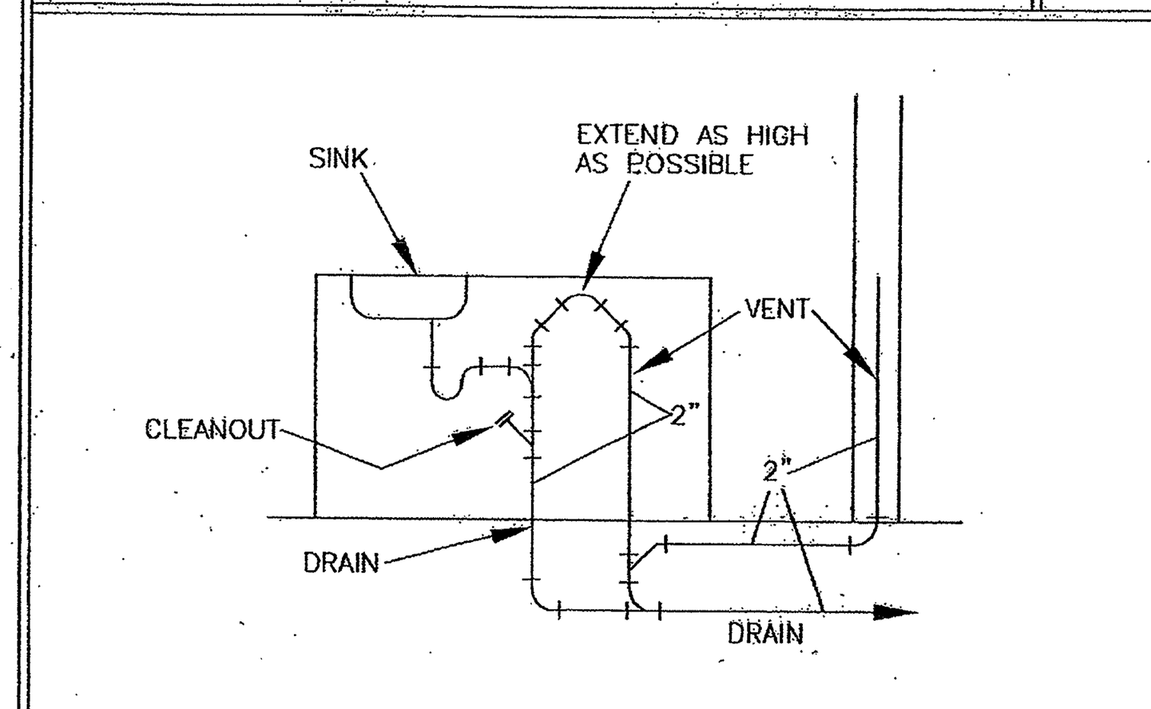
	ITEM #	DESCRIPTION	LOCATION/HEIGHT
1	B264	SINGLE ROLL TOILET PAPER HOLDER	ADULT: 19"–24" A.F.F., 12" MAX. TO CENTER IN FRONT OF TOILET @ ACCESSIBLE LOCATIONS.
	B-3888	RECESSED MULTI-ROLL TOILET PAPER HOLDER	ELEMENTARY: 19"–24" A.F.F., 6" MAX. TO CENTER IN FRONT OF TOILET @ ACCESSIBLE LOCATIONS. KINDERGARTEN: 19"–24" A.F.F., 6" MAX. TO CENTER IN FRONT OF TOILET @ ACCESSIBLE LOCATIONS.
2	B265	DOUBLE ROLL TOILET PAPER HOLDER	SAME AS ABOVE
3	B288	CABINET DOUBLE ROLL TOILET PAPER HOLDER	SAME AS ABOVE
	LOCATION FOR ALL TOILET PAPER HOLDERS IN A NON-ACCESSIBLE APPLICATION SHALL BE ON THE DOOR SWING SIDE OF STALL @ 24"–30" A.F.F.		
4	B270	FEMININE NAPKIN DISPOSAL	ACCESSIBLE: 24" TO TOP MOUNTED AT SIDE OF TOILET. STANDARD: 24"–30" MOUNTED @ DOOR SIDE.
5	B2800	FEMININE NAPKIN DISPENSER	40" A.F.F. TO OPERABLE PART OF UNIT
6	B279	WASTE RECEPTACLE	40" A.F.F. TO OPERABLE PART OF UNIT
7	B262	STAINLESS STEEL PAPER TOWER HOLDER	40" A.F.F. TO OPERABLE PART OF UNIT
8	B165 1830	MIRROR–18"x30"	ADULT: +40" A.F.F. TO BOTTOM OF GLASS ELEMENTARY: +36" A.F.F. TO BOTTOM OF GLASS KINDERGARTEN: +32" A.F.F. TO BOTTOM OF GLASS
9	B6806 36	36" GRAB BAR	ADULT: 33" A.F.F. BACK OF TOILET ELEMENTARY: 27" A.F.F. BACK OF TOILET KINDERGARTEN: 20"–22" A.F.F. BACK OF TOILET
10	B6806 42	42" GRAB BAR	USED FOR SEMI HANDICAP WALK UP STALLS (2 PER STALL) +24" @ SIDE WALL OF TOILET
11	B6806 48	48" GRAB BAR	ADULT: 33" A.F.F. SIDE OF TOILET ELEMENTARY: 27" A.F.F. SIDE OF TOILET KINDERGARTEN: 20"–22" A.F.F. SIDE OF TOILET
12	B221	SEAT COVER DISPENSER	ACCESSIBLE MOUNT @ +40" A.F.F. CANNOT BE MOUNTED ABOVE GRAB BAR. STANDARD APPLICATION MOUNT @ +40" A.F.F. TO OPERATOR OF UNIT BEHIND TOILET ON WALL CENTERED IN STALL.
13	B170	POWER SOAP DISPENSER	ADULT: MOUNT @ +40" A.F.F. FROM BOTTOM OF OPERATIONAL PARTS. ELEMENTARY: MOUNT @ +36" A.F.F. FROM BOTTOM OF OPERATIONAL PARTS. KINDERGARTEN: MOUNT @ +32" A.F.F. FROM BOTTOM OF OPERATIONAL PARTS.
14	B155	STAINLESS STEEL LIQUID SOAP DISPENSER	SAME AS ABOVE
15	B2111	SOAP DISPENSER	SAME AS ABOVE
16		URINAL SCREEN	



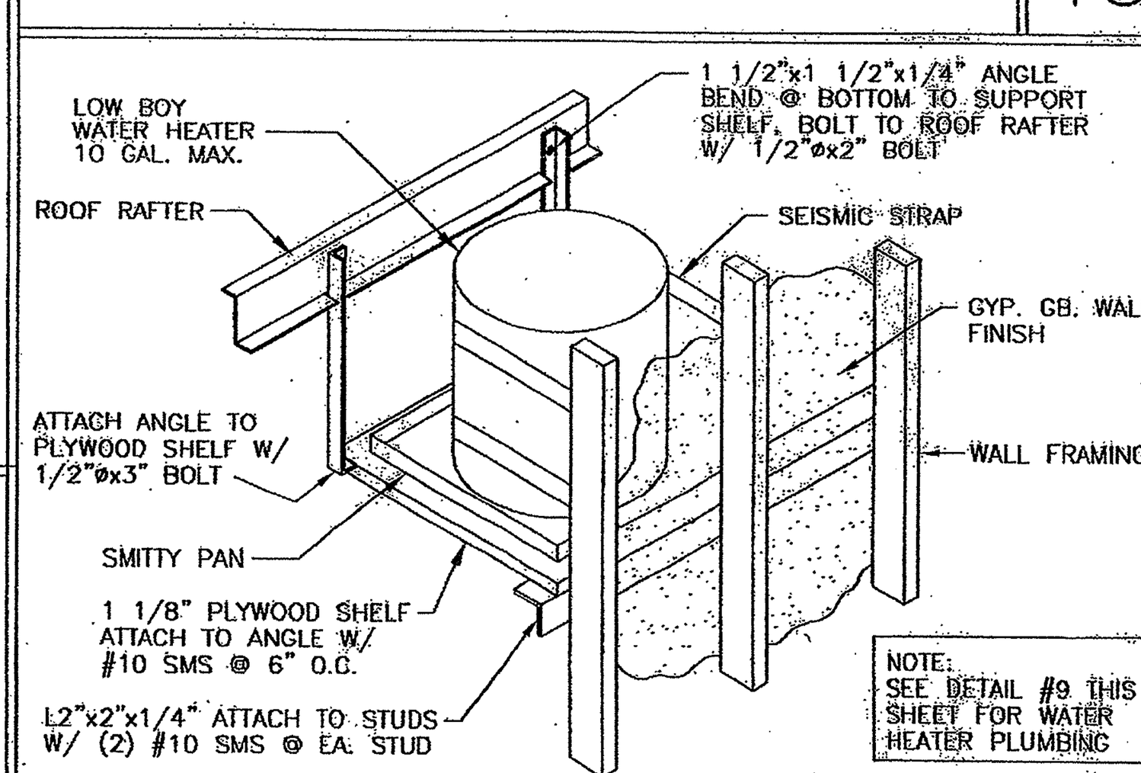
OPTIONAL SINK PLUMBING
[ ] NOT USED IN THIS PROJECT
11



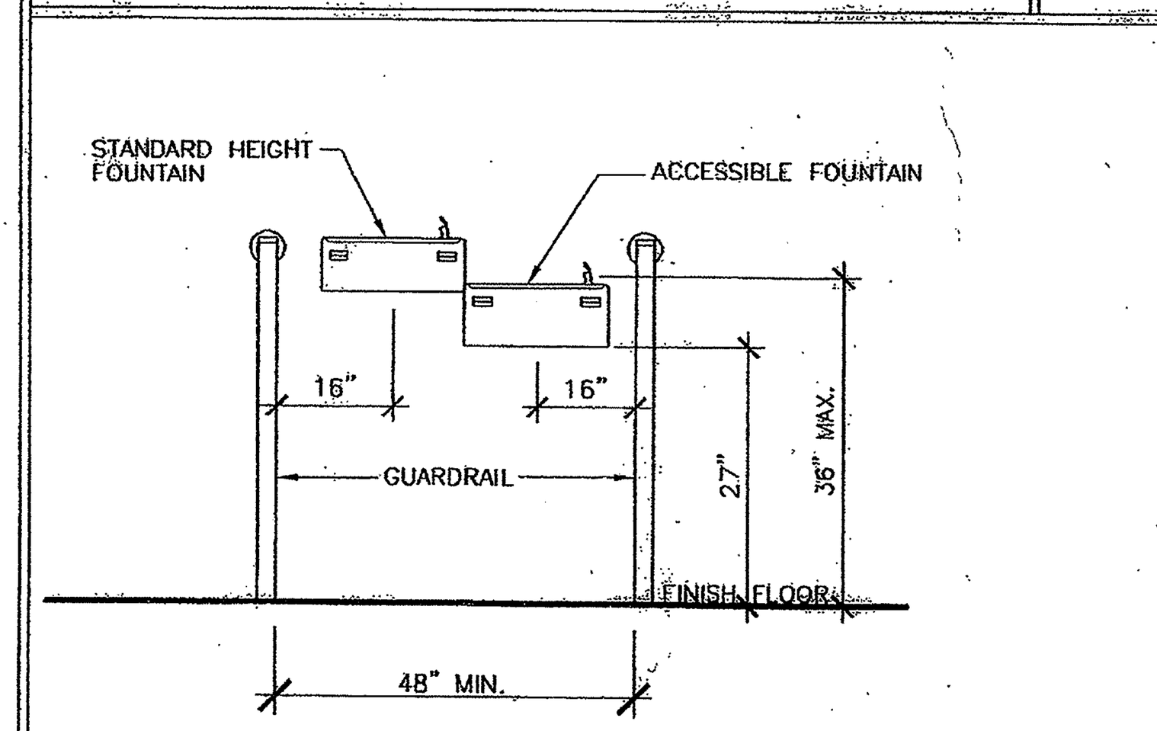
GAS HEAT PUMP SYSTEM
[ ] NOT USED IN THIS PROJECT
12



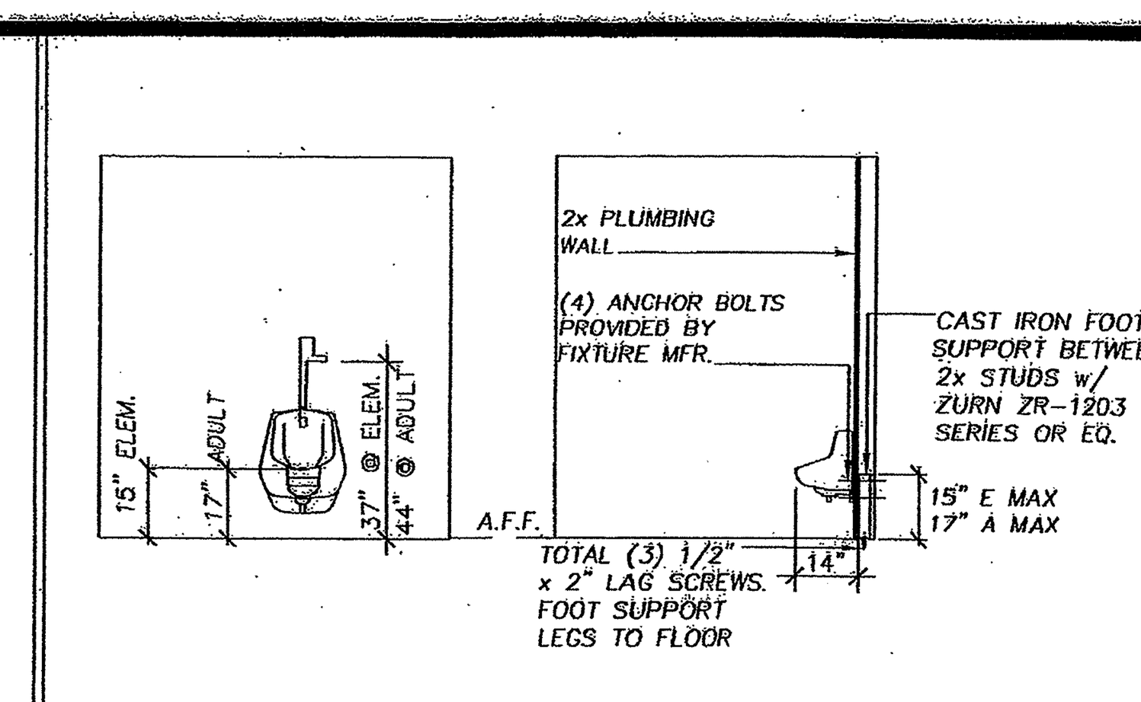
ISLAND SINK PLUMBING
[ ] NOT USED IN THIS PROJECT
13



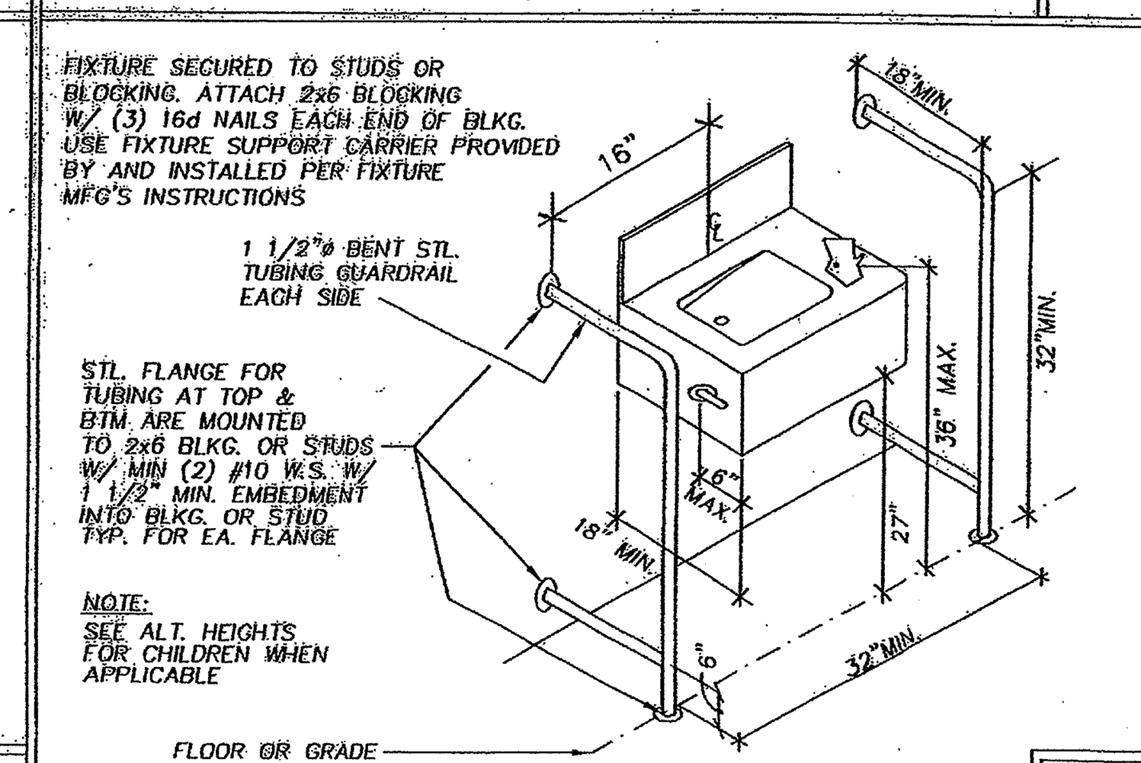
WATER HEATER IN ATTIC
[ ] NOT USED IN THIS PROJECT
14



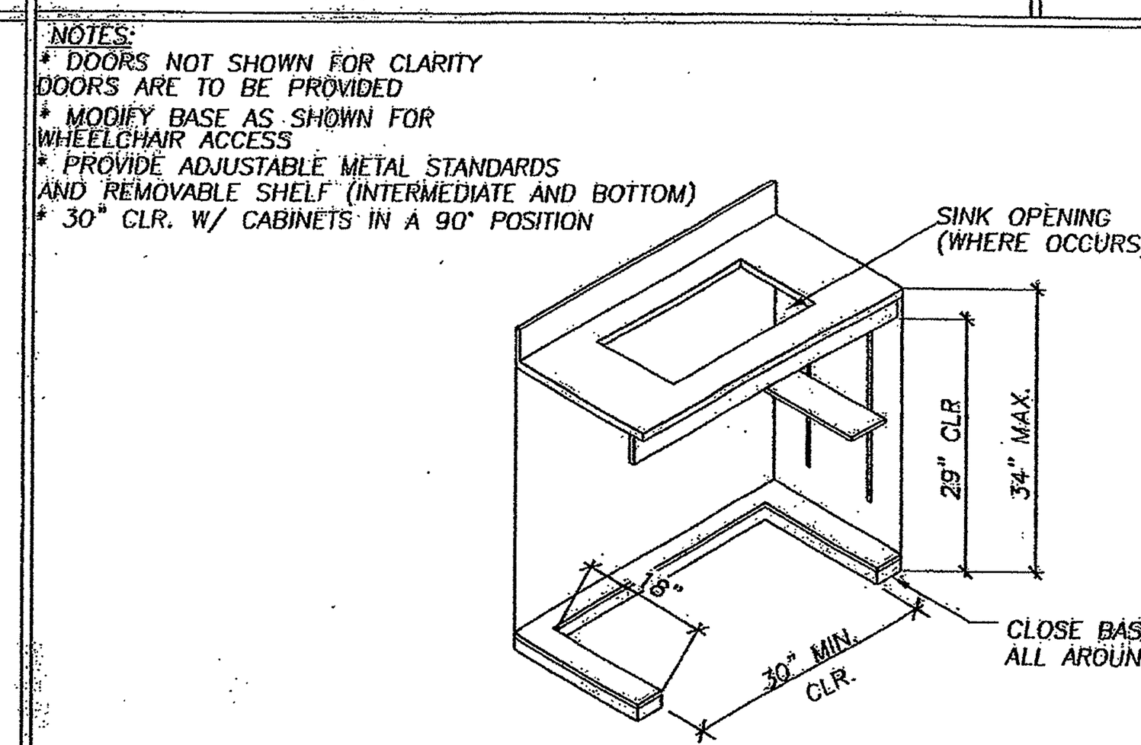
HI/LOW DRINKING FOUNTAIN
[ ] NOT USED IN THIS PROJECT
15



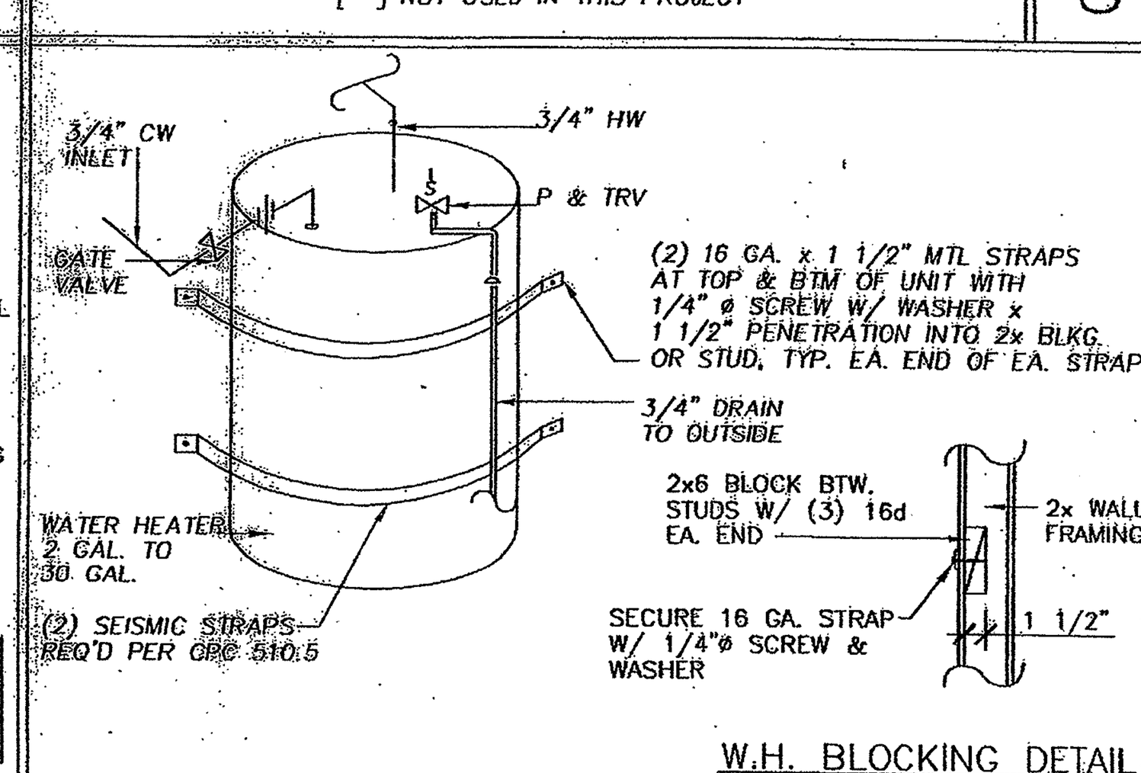
WALL HUNG URINAL
ACCESS/ATTACH DETAIL
[ ] NOT USED IN THIS PROJECT
6



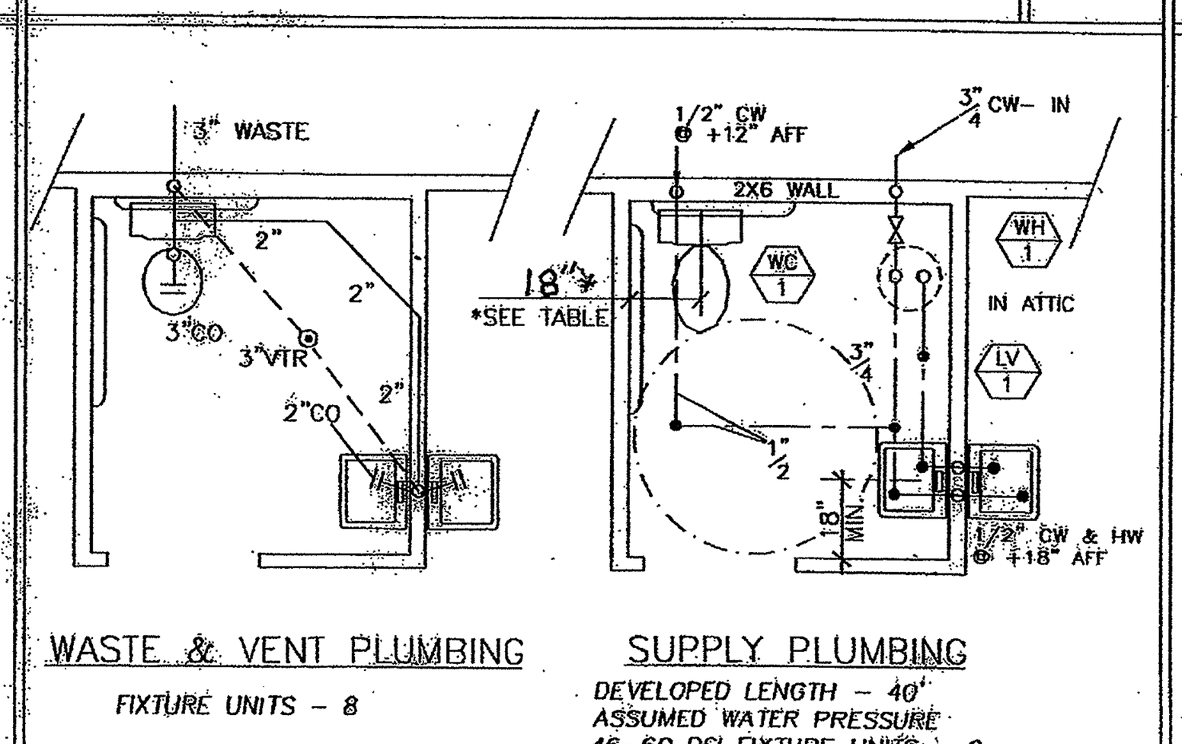
ACCESS WATER FOUNTAIN
[ ] NOT USED IN THIS PROJECT
7



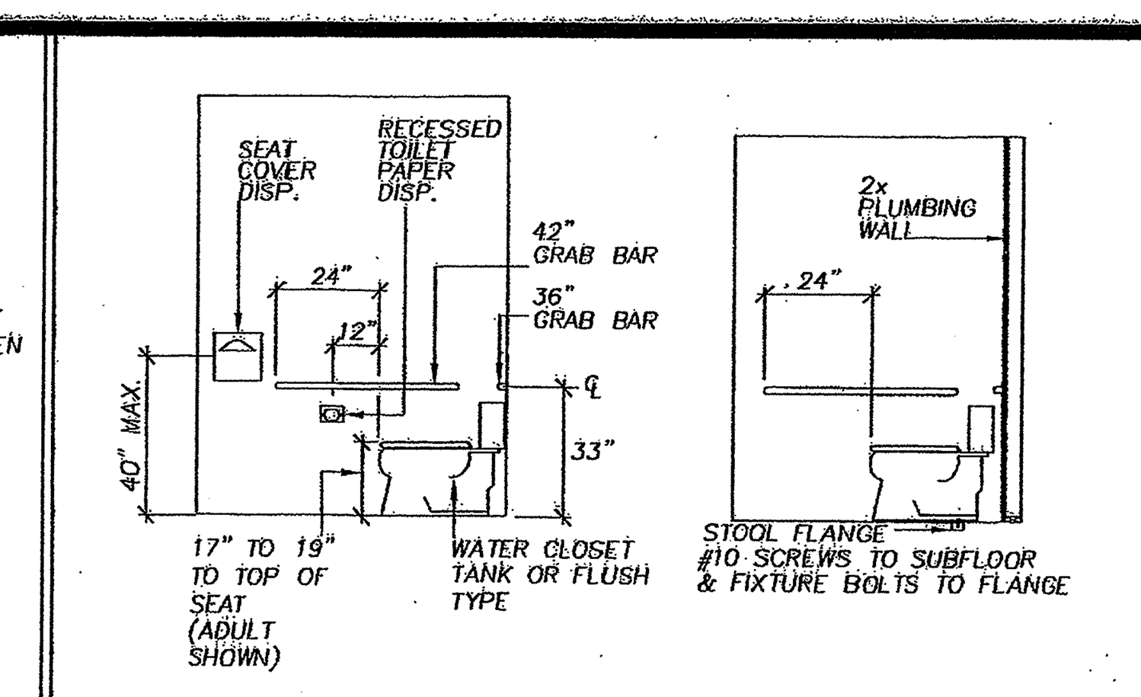
ACCESSIBLE CABINET
[ ] NOT USED IN THIS PROJECT
8



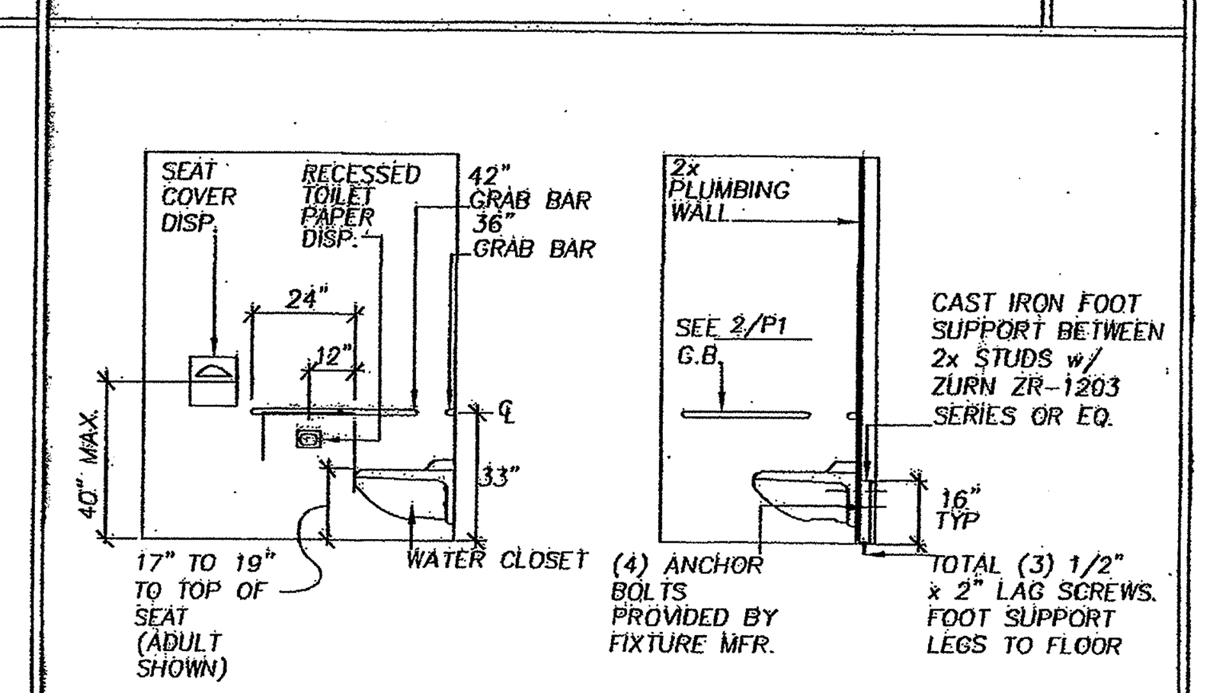
WATER HEATER
[ ] NOT USED IN THIS PROJECT
9



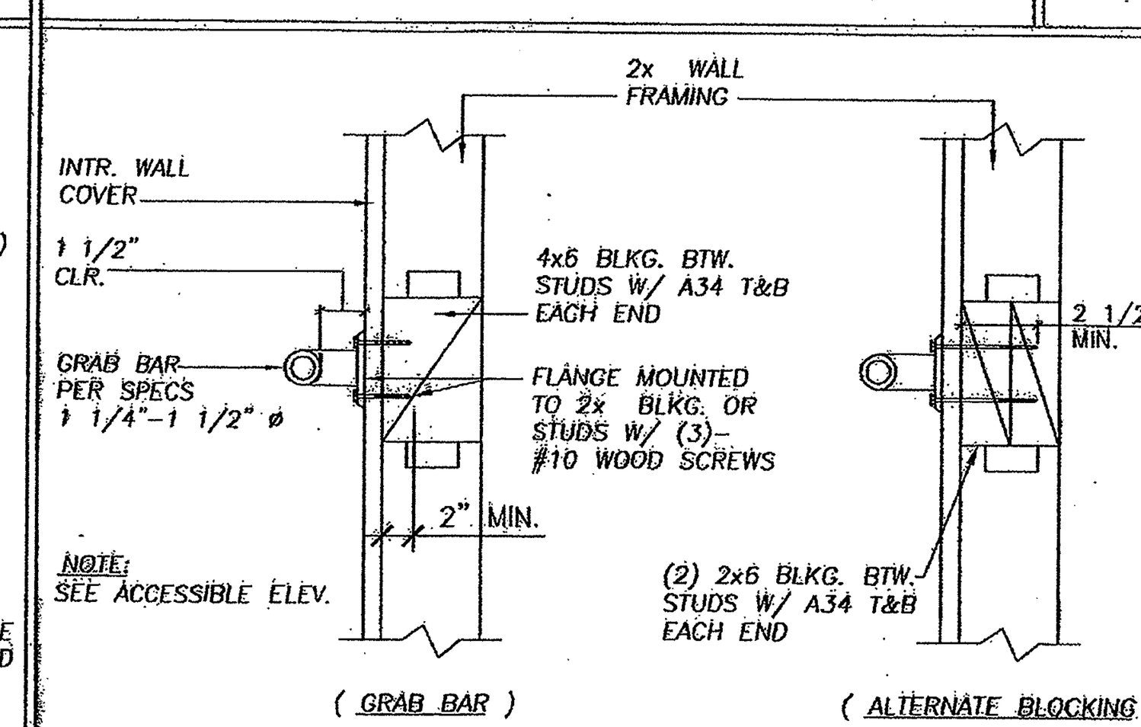
OPTIONAL RESTROOM PLUMBING
[ ] NOT USED IN THIS PROJECT
10



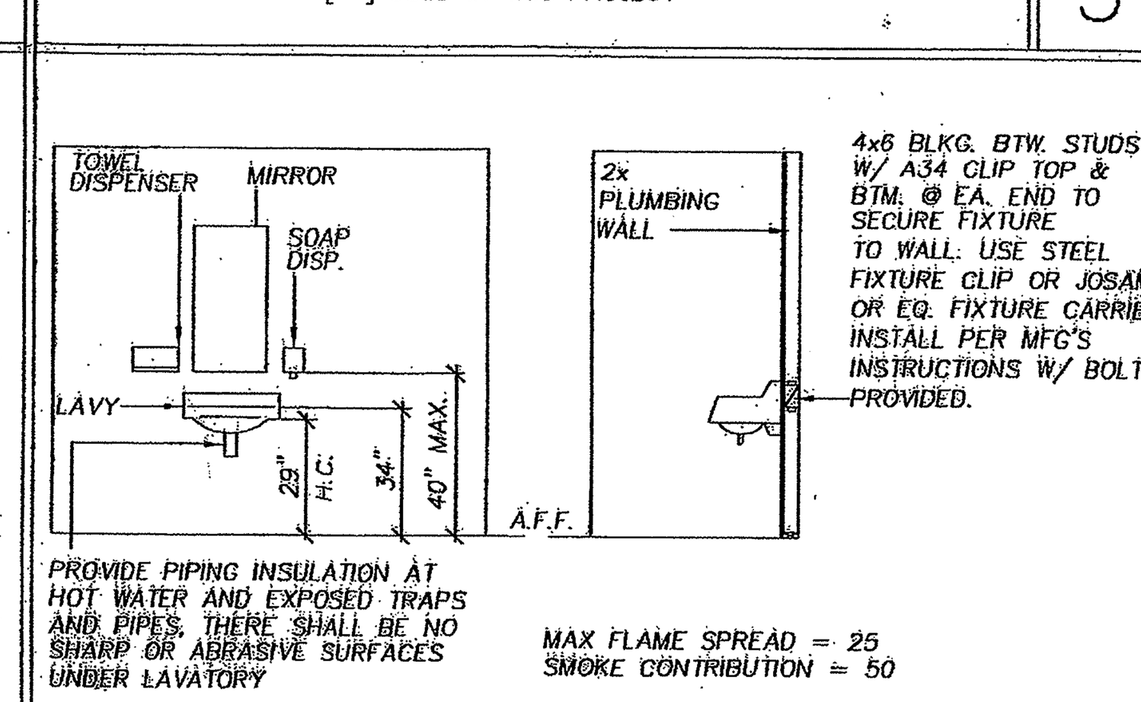
WATER CLOSET (FLOOR MTD)
ACCESS/ATTACH DETAIL
[ ] NOT USED IN THIS PROJECT
1



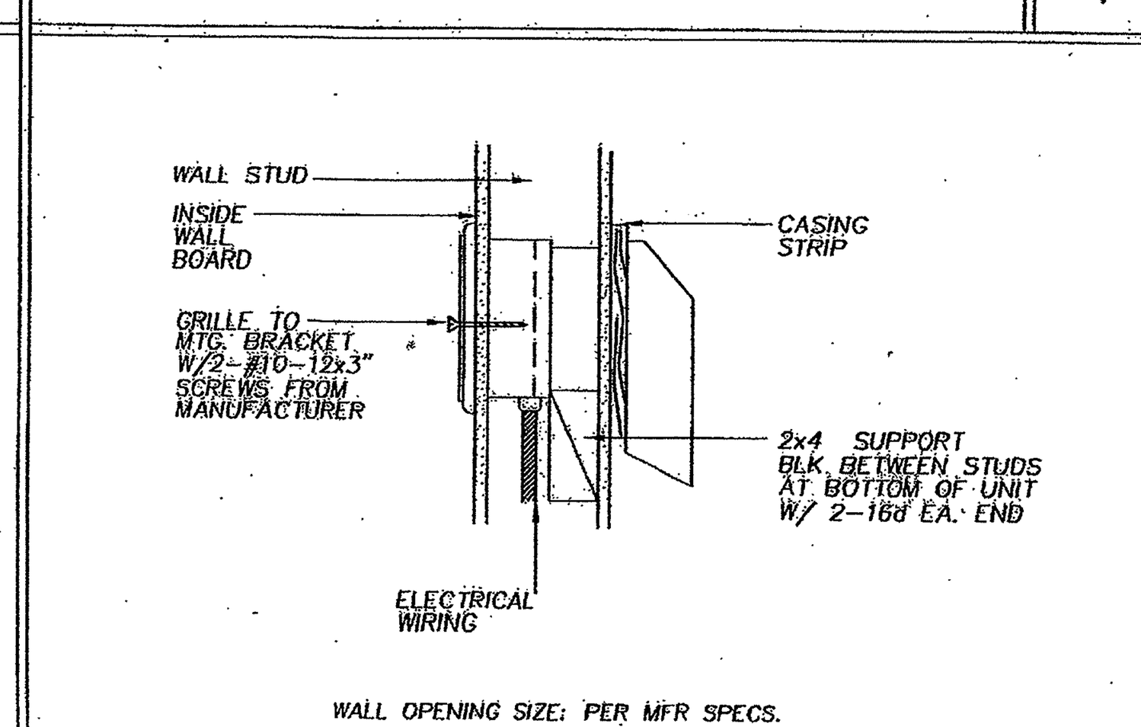
WATER CLOSET (WALL MTD)
ACCESS/ATTACH DETAIL
[ ] NOT USED IN THIS PROJECT
2



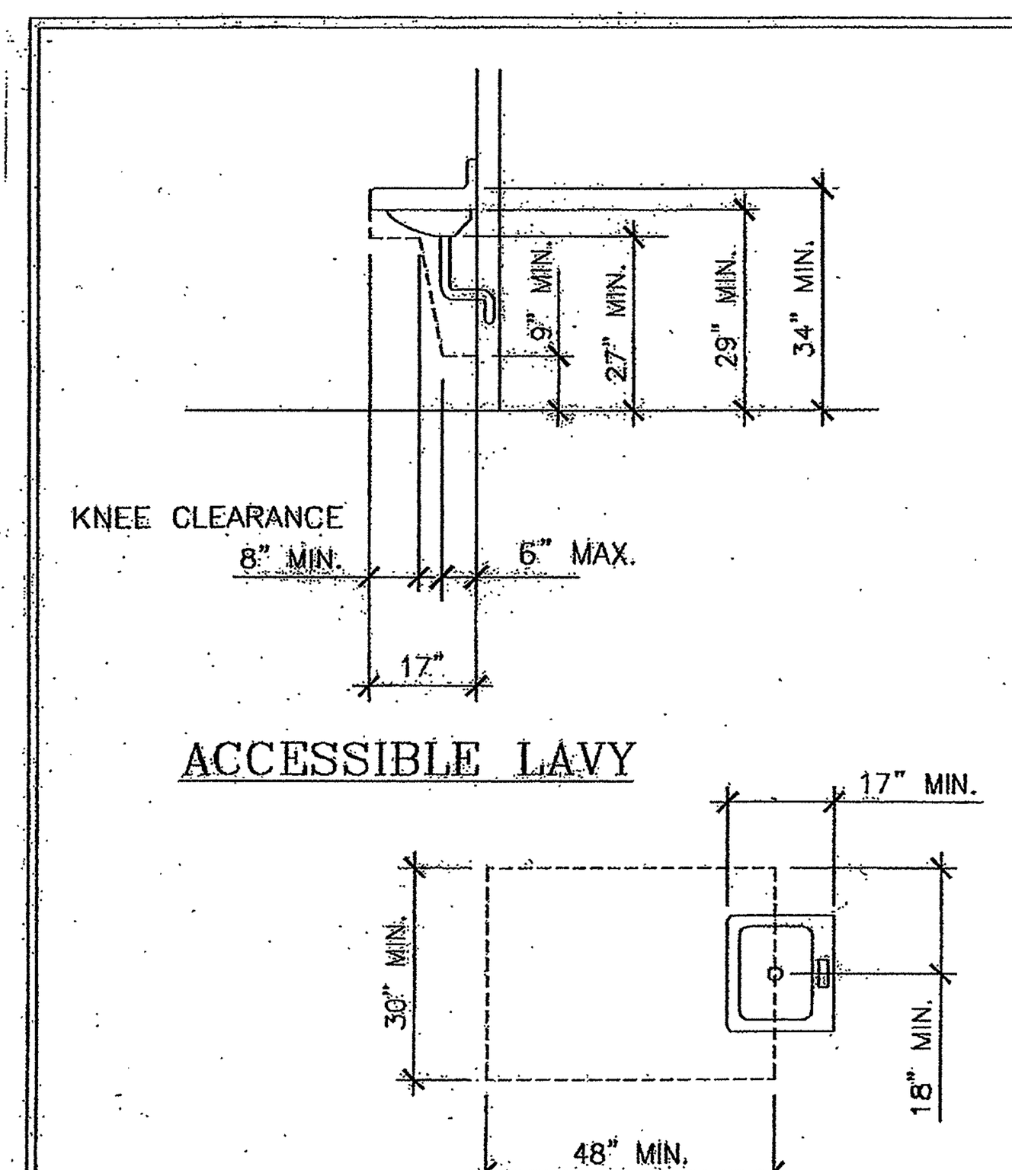
ATTACHMENT DETAIL
[ ] USED IN THIS PROJECT
3



LAVATORY–WALL HUNG
ACCESS/ATTACH DETAIL
[ ] NOT USED IN THIS PROJECT
4



WALL EXAUST FAN ATTACHMENT
[ ] NOT USED IN THIS PROJECT
5



ACCESSIBLE LAVY
PLAN VIEW
16

DATE SIGNED JUN 04 2003
LICENSE EXPIRES 6-30-2004

LICENSED ARCHITECT PAUL DENNIS WEISBERG C-16024 EXP. 9-2003 STATE OF CALIFORNIA
ARCHITECT STAMP

DATE SIGNED MAY 21 2003
REGISTERED PROFESSIONAL ENGINEER JAMES T. SIMPSON No. 2602 STRUCTURAL STATE OF CALIFORNIA
LICENSE EXPIRES 6-30-2004
STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL 01 105425
AC ___ FLS ___ SS ___
DATE 6/19/03
STATE AGENCY STAMP

PC
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-104778
AC ___ FLS ___ SS ___
DATE: 5-30-03
STATE AGENCY STAMP

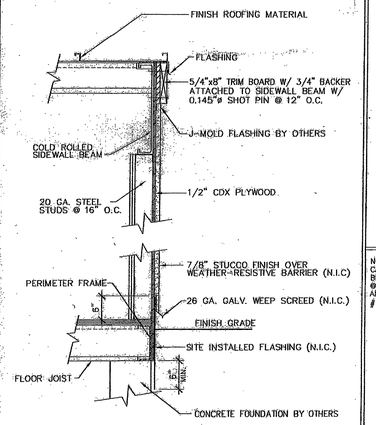
MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA. 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

PROJECT
MODULAR CLASSROOM BUILDING

TITLE
STANDARD ARCHITECTURAL PLUMBING DETAILS

JOB #	
DATE	12-1-02
DRAWN BY	RDL
SCALE	AS NOTED
APPROVED	
REVISIONS	

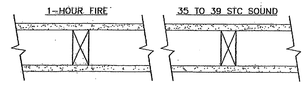
SHEET NO.
G-3



SIDEWALL DETAIL

OPTIONAL STUCCO SIDING DETAIL
[ ] NOT USED IN THIS PROJECT — 16

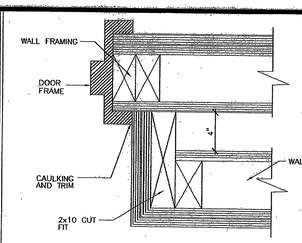
GA FILE NO. WP 3514 GYPSUM WALLBOARD, WOOD STUDS



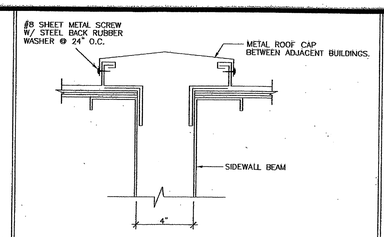
ONE LAYER 5/8" TYPE 'X' GYPSUM WALLBOARD OR VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF 2x4 WOOD STUDS 16" O.C. WITH 1 1/4" TYPE W DRYWALL SCREWS 12" O.C.

JOINTS STAGGERED 16" ON OPPOSITE SIDES.

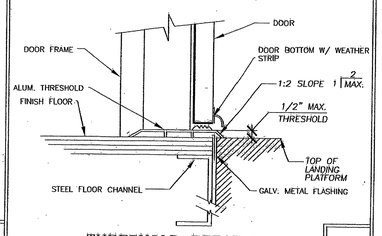
1-HOUR RATED WALL WOOD STUDS
[ ] NOT USED IN THIS PROJECT — 12



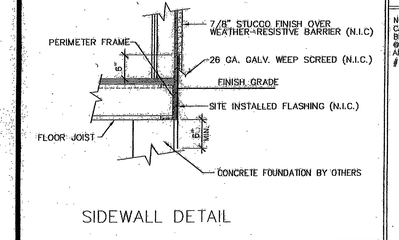
COMMON WALL CONNECTION AT DOOR BETWEEN ADJACENT BUILDINGS
[ ] NOT USED IN THIS PROJECT — 7



CLOSURE AT ROOF
[ ] NOT USED IN THIS PROJECT — 4



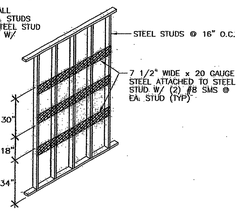
THRESHOLD DETAIL
[ ] NOT USED IN THIS PROJECT — 1



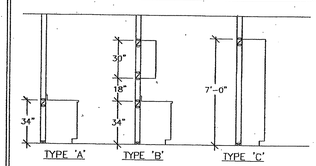
ENDWALL DETAIL

OPTIONAL STUCCO SIDING DETAIL
[ ] NOT USED IN THIS PROJECT — 17

NOTE:
CABINET ATTACHMENT SHALL BE TO DIRECTLY TO WALL STUDS @ 16" O.C. (THROUGH STEEL STUD AND FLAT 20 GA. STEEL) W/ #14 SMS



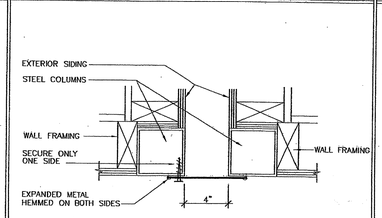
ALTERNATE CABINET BLOCKING
[ ] NOT USED IN THIS PROJECT — 13



BLOCKING SHALL BE 3x H.F. #2 BETWEEN STUDS WITH (2) 'SIMPSON' A-34 ANCHORS TOP & BTM. @ EACH END OF BLOCK TO STUD. ATTACH CABINET W/ #14 SCREWS W/ 2" MIN. PENETRATION INTO STUD OR BLOCKING @ 16" O.C.

ALTERNATE CABINET ATTACHMENT SHALL BE DIRECTLY TO WOOD STUDS @ 16" O.C.

CABINET BLOCKING
[ ] NOT USED IN THIS PROJECT — 8



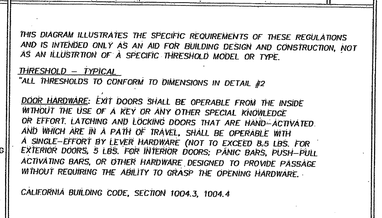
CLOSURE AT ENDWALLS
[ ] NOT USED IN THIS PROJECT — 5

THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION, NOT AS AN ILLUSTRITION OF A SPECIFIC THRESHOLD MODEL OR TYPE.

THRESHOLD – TYPICAL
"ALL THRESHOLDS TO CONFORM TO DIMENSIONS IN DETAIL #2

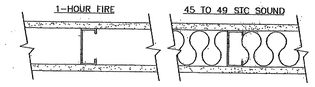
DOOR HARDWARE: EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY OTHER SPECIAL KNOWLEDGE OR EFFORT. LATCHING AND LOCKING DOORS THAT ARE HAND-ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL, SHALL BE OPERABLE WITH A SINGLE-EFFORT BY LEVER HARDWARE (NOT TO EXCEED 8.5 LBS. FOR EXTERIOR DOORS, 5 LBS. FOR INTERIOR DOORS; PANIC BARS, PUSH-PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.

CALIFORNIA BUILDING CODE, SECTION 1004.3, 1004.4



THRESHOLD DETAIL
[ ] NOT USED IN THIS PROJECT — 2

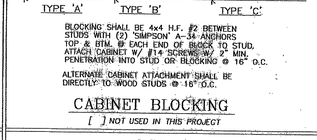
GA FILE NO. WP 1072 GYPSUM WALLBOARD, STEEL STUDS



ONE LAYER 5/8" TYPE 'X' GYPSUM WALLBOARD OR VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF 3 5/8"x20 GA. STEEL STUDS 16" O.C. WITH 1" TYPE S DRYWALL SCREWS 8" O.C. AT VERTICAL JOINTS AND 12" O.C. AT FLOOR AND CEILING RUNNERS AND INTERMEDIATE STUDS.

JOINTS STAGGERED 24" ON EACH SIDE AND ON OPPOSITE SIDES. SOUND TESTED WITH 3 1/2" GLASS FIBER FRICTION FIT IN STUD SPACE.

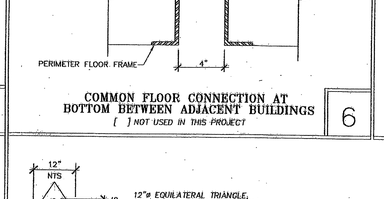
1-HOUR RATED WALL STEEL STUDS
[ ] NOT USED IN THIS PROJECT — 11



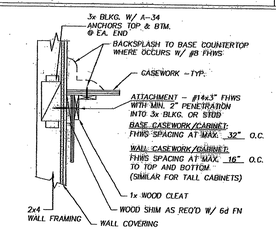
BLOCKING SHALL BE 4x4 H.F. #2 BETWEEN STUDS WITH (2) 'SIMPSON' A-34 ANCHORS TOP & BTM. @ EACH END OF BLOCK TO STUD. ATTACH CABINET W/ #14 SCREWS W/ 2" MIN. PENETRATION INTO STUD OR BLOCKING @ 16" O.C.

ALTERNATE CABINET ATTACHMENT SHALL BE DIRECTLY TO WOOD STUDS @ 16" O.C.

CABINET BLOCKING
[ ] NOT USED IN THIS PROJECT — 9

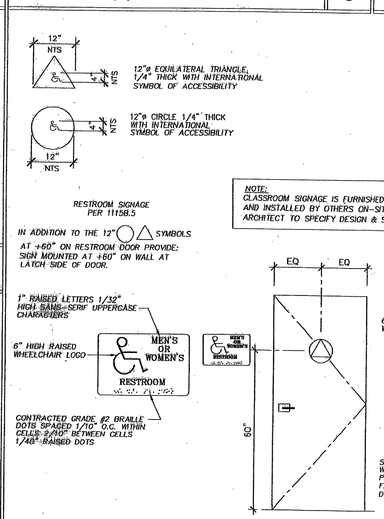


COMMON FLOOR CONNECTION AT BOTTOM BETWEEN ADJACENT BUILDINGS
[ ] NOT USED IN THIS PROJECT — 6



(BASE CASEWORK SHOWN, WALL AND TALL CASEWORK SIMILAR)

CASEWORK TO WALL
[ ] NOT USED IN THIS PROJECT — 10



NOTE:
CLASSROOM SIGNAGE IS FURNISHED AND INSTALLED BY OTHERS ON-SITE. ARCHITECT TO SPECIFY DESIGN & SIZE

RESTROOM/ENTRANCE SIGNAGE
[ ] NOT USED IN THIS PROJECT — 3

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3035 FAX: (909) 788-1923

DATE SIGNED
JUN 04 2003
STATE OF CALIFORNIA
No. 15506
REGISTERED PROFESSIONAL ENGINEER
LS22-93 EXPIRES 6-30-2004

LICENSED ARCHITECT
REGISTERED PROFESSIONAL
No. C-19003
EXP. 9-2003
STATE OF CALIFORNIA
ARCHITECT STAMP

DATE SIGNED
MAY 21 2003
REGISTERED PROFESSIONAL ENGINEER
JAMES T. SWINDERMAN
No. 15506
CIVIL
STATE OF CALIFORNIA
LICENSE EXPIRES 6-30-2004
STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL.ID 10552 25
AC. FLS. SS
DATE 5/19/03
STATE AGENCY STAMP

pc
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-104778
AC. FLS. SS
DATE: 5-30-03
STATE AGENCY STAMP

PROJECT
MODULAR CLASSROOM BUILDING

TITLE
STANDARD ARCHITECTURAL DETAILS

JOB #

DATE 12-1-02

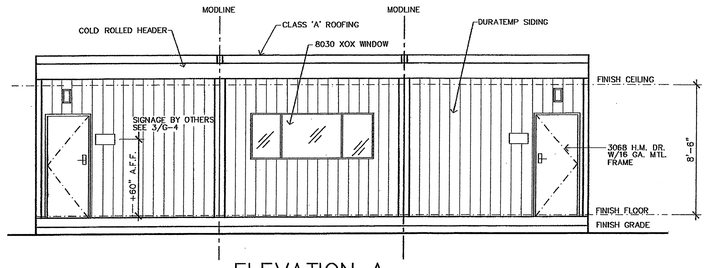
DRAWN BY RDL

SCALE AS NOTED

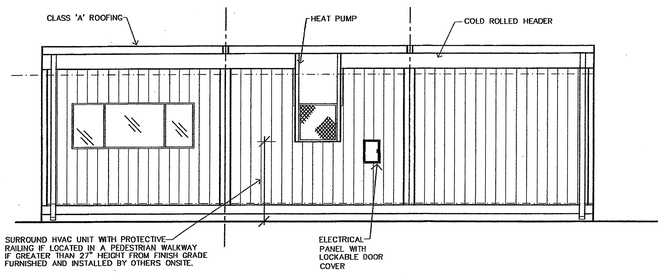
APPROVED

REVISIONS

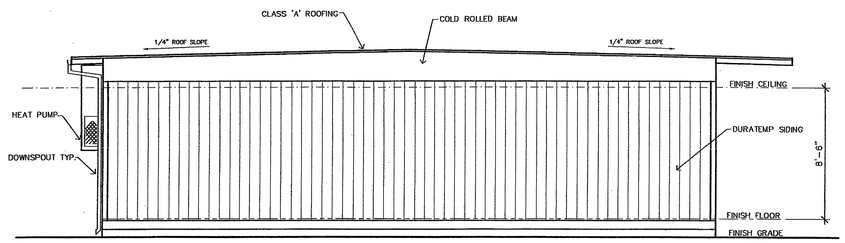
SHEET NO.
G-4



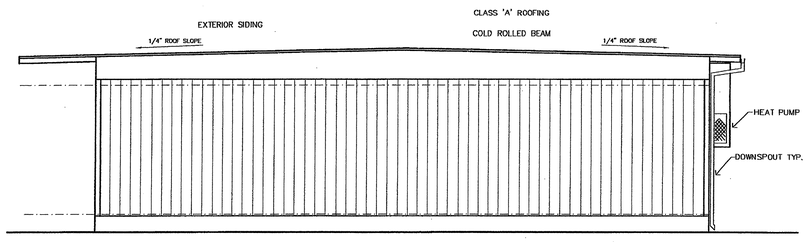
ELEVATION A



ELEVATION B



ELEVATION C



ELEVATION D

LEGEND

- INDICATES DOOR TYPE, SEE G-2
- INDICATES HARDWARE TYPE, SEE G-2
- (A) INDICATES WINDOW TYPE- SEE SHEET G-2
- DETAIL # / SHEET #

SIGNAGE LEGEND:

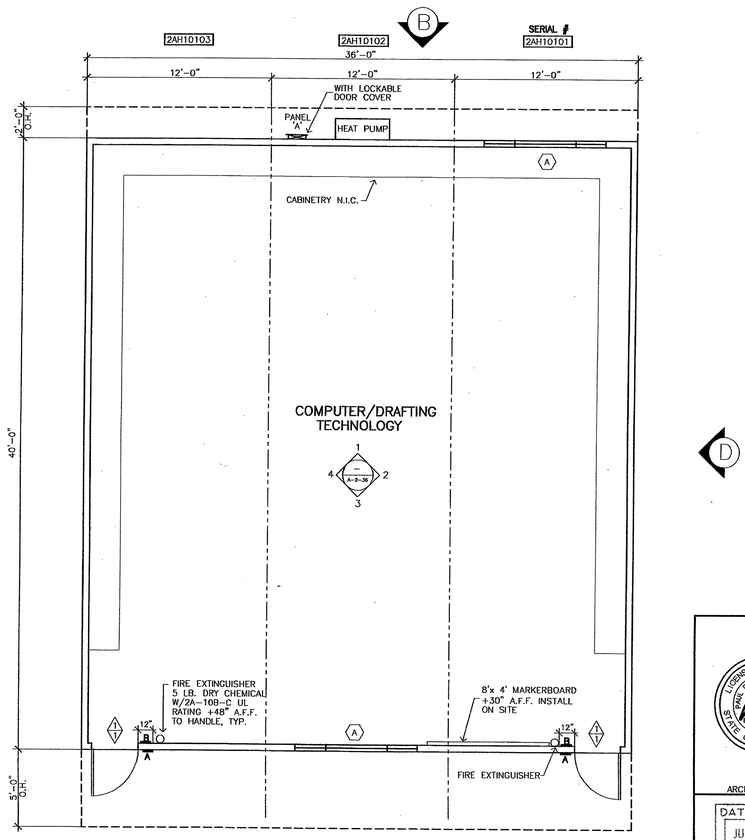
A: ROOM SIGNAGE PER DETAIL #3, SHEET G-4
B: EXIT SIGNAGE PER DETAIL #3, SHEET G-4

SEE NOTE 4 BELOW FOR SIGNAGE REQUIREMENTS

NOTE:
FLOOR PLAN SHOWN IS 'B' BUILDING
'A' BUILDING IS OPPOSITE HANDED

NOTE:
PROVIDE FIRE BLOCKING PER C.B.C. 708

NOTE:
BUILDING HOUSING GROUP 'E' OCCUPANCIES SHALL HAVE ROOF COVERINGS AS SPECIFIED IN TABLE 15A C.B.C. – CLASS 'A'



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

NOTES:

1. MANUFACTURER SHALL MECHANICALLY ATTACH METAL TAG TO EXTERIOR OF BUILDING SHOWING DSA APPLICATION NUMBER, MANUFACTURERS NAME, UNIT SERIAL NUMBER, DESIGN LIVE LOADS FOR FLOOR AND ROOF, AND THE DESIGN WIND LOAD.
2. WALL AND CEILING FINISHES SHALL BE MIN. CLASS I MATERIAL
3. FIBERGLAS INSULATION SHALL HAVE THE FOLLOWING:
   FLAME SPREAD 0-25
   SMOKE DEVELOPED, FUEL CONTRIBUTED 0-450
4. SIGNAGE REQUIRED PER APPLICABLE CODES LISTED ON SHEET CS PROVIDED AND INSTALLED BY OTHERS ONSITE. SEE #3/G-4
5. ANY ROOM HAVING AN OCCUPANT LOAD OF 50 OR MORE WHERE FIXED SEATS ARE NOT INSTALLED, AND WHICH IS USED FOR CLASSROOM, ASSEMBLY, DINING OR SIMILAR PURPOSE SHALL HAVE THE CAPACITY OF THE ROOM POSTED IN A CONSPICUOUS PLACE NEAR THE MAIN EXIT OF THE ROOM. POSTING SHALL BE BY MEANS OF A DURABLE SIGN HAVING CONTRASTING COLOR FROM THE BACKGROUND TO WHICH IT IS ATTACHED.
6. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS, SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR ATUOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED NOT TO EXCEED 15 POUNDS.
7. PANIC HARDWARE IS REQUIRED TO BE INSTALLED WHEN THE CONFIGURATION OF ANY ROOM PROVIDES AN OCCUPANT LOAD 50 OR GREATER, CBC 1007.3.10

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3535 FAX: (909) 788-1523

ARCHITECT STAMP

DATE SIGNED
JUN 04 2003

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL ID 1054225
AC FLS SS
DATE 6/19/03
STATE AGENCY STAMP

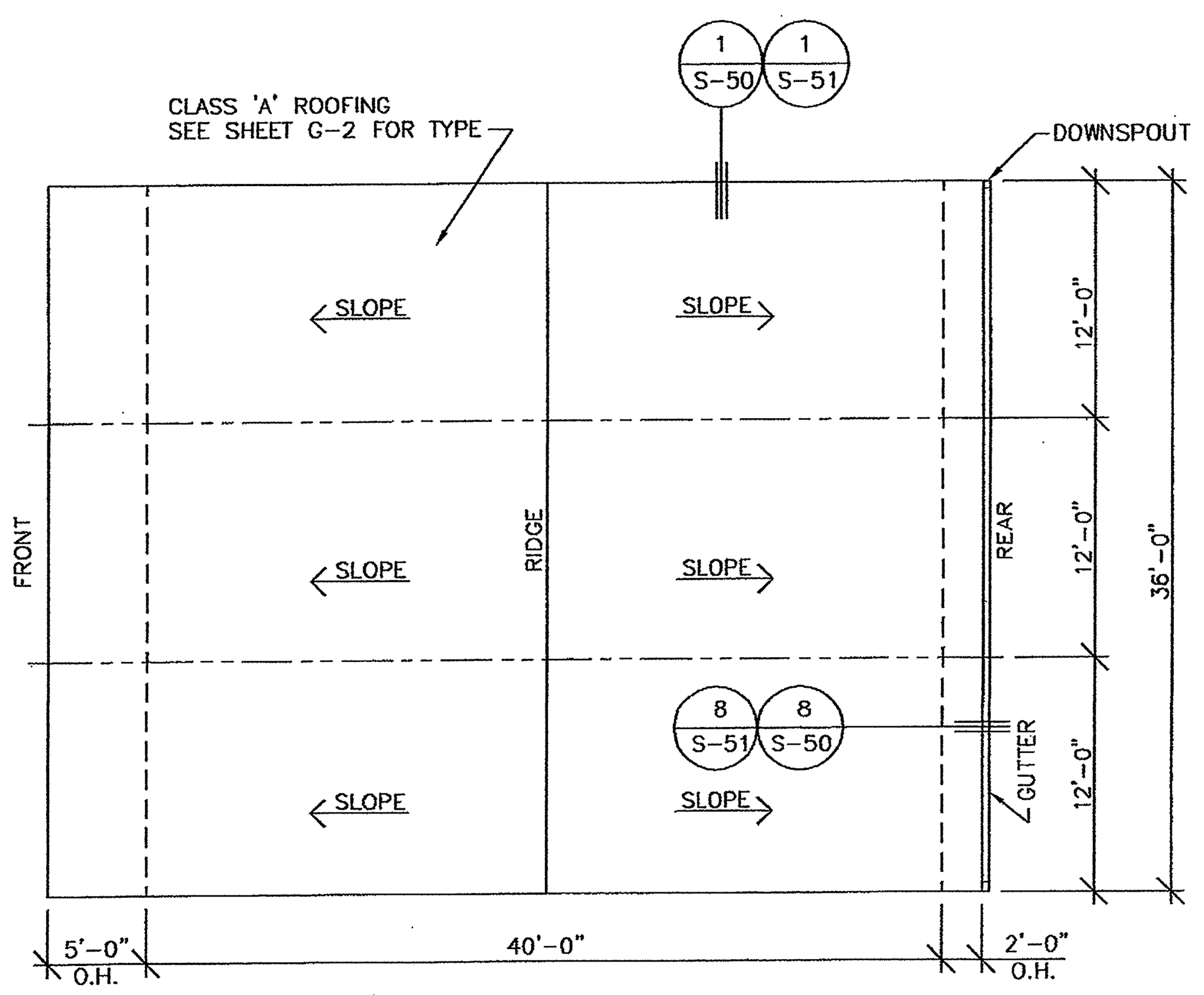
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-104778
AC FLS SS
DATE:
STATE AGENCY STAMP

PROJECT
36'x40' COMPUTER/DRAFTING TECHNOLOGY

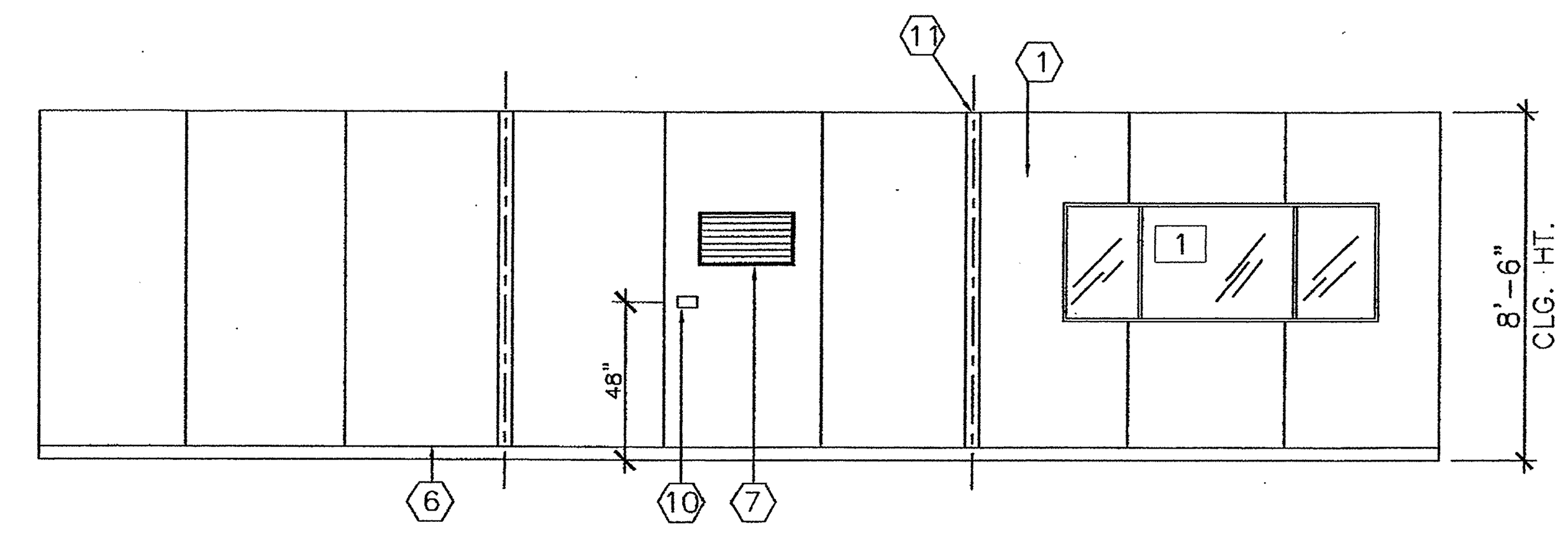
TITLE
36'x40' FLOOR PLAN, EXTERIOR ELEVATIONS DUAL SLOPE ROOF

JOB #	03-1003
DATE	5-6-03
DRAWN BY	db
SCALE	1/4"=1'-0"
APPROVED	
REVISIONS	

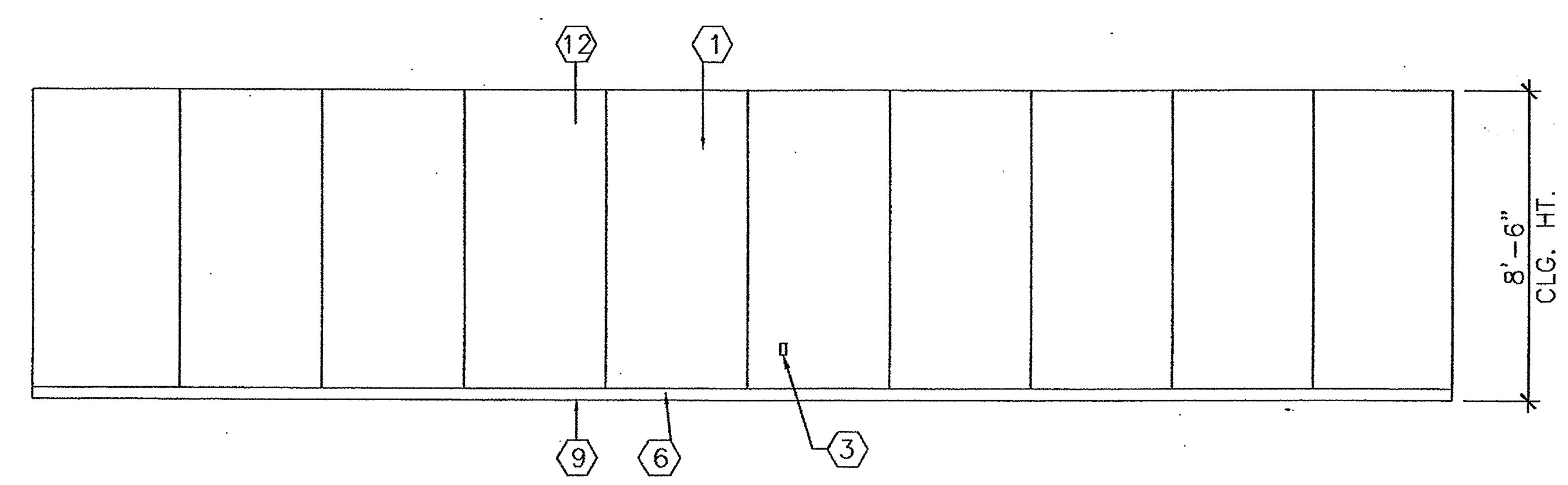
SHEET NO.
A-1.1-36



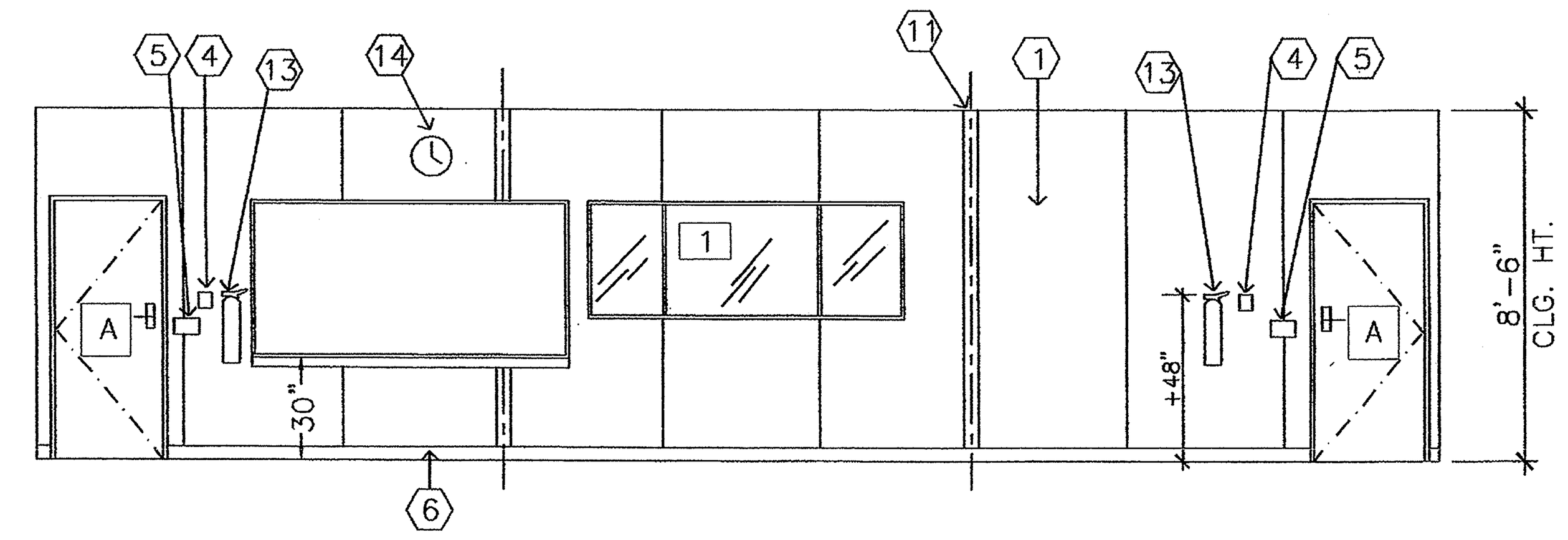
DUAL PITCH ROOF PLAN
SCALE: 1/8"=1'-0"



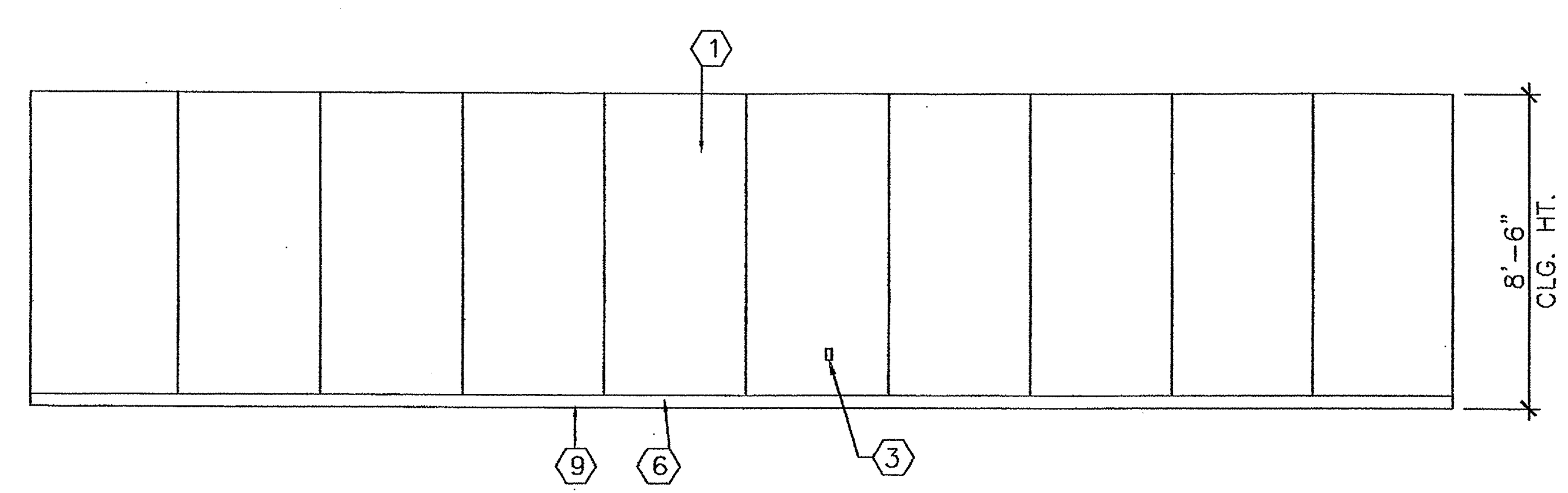
INTERIOR ELEVATION #1
SCALE: 1/4"=1'-0"



INTERIOR ELEVATION #2
SCALE: 1/4"=1'-0"



INTERIOR ELEVATION #3
SCALE: 1/4"=1'-0"



INTERIOR ELEVATION #4
SCALE: 1/4"=1'-0"

KEYNOTES:

- A EXTERIOR DOOR
- 1 EXTERIOR WINDOW
- 1 TYPICAL INTERIOR FINISH
- 2 CLOSURE AT MODULAR JOINT
- 3 DUPLEX WALL RECEPTACLE +18" A.F.F. (SEE POWER PLAN)
- 4 FIRE ALARM PULL STATION (SEE POWER PLAN)
- 5 LIGHT SWITCH (SEE LIGHTING PLAN)
- 6 TOP SET BASE (TYPICAL) SEE FINISH SCHEDULE
- 7 RETURN AIR GRILL
- 8 NOT USED
- 9 FINISH FLOOR
- 10 THERMOSTAT SEE MECHANICAL PLAN
- 11 MODULAR JOINT
- 12 (1) 8'-0" x 4'-0" MARKERBOARD
- 13 FIRE EXTINGUISHER
- 14 12" DIA. ELECTRIC CLOCK (SEE ELECTRICAL POWER PLAN)

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3535 FAX: (909) 788-1523

ARCHITECT STAMP

DATE SIGNED
JUN 04 2003

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL 01 105425
STATE AGENCY STAMP

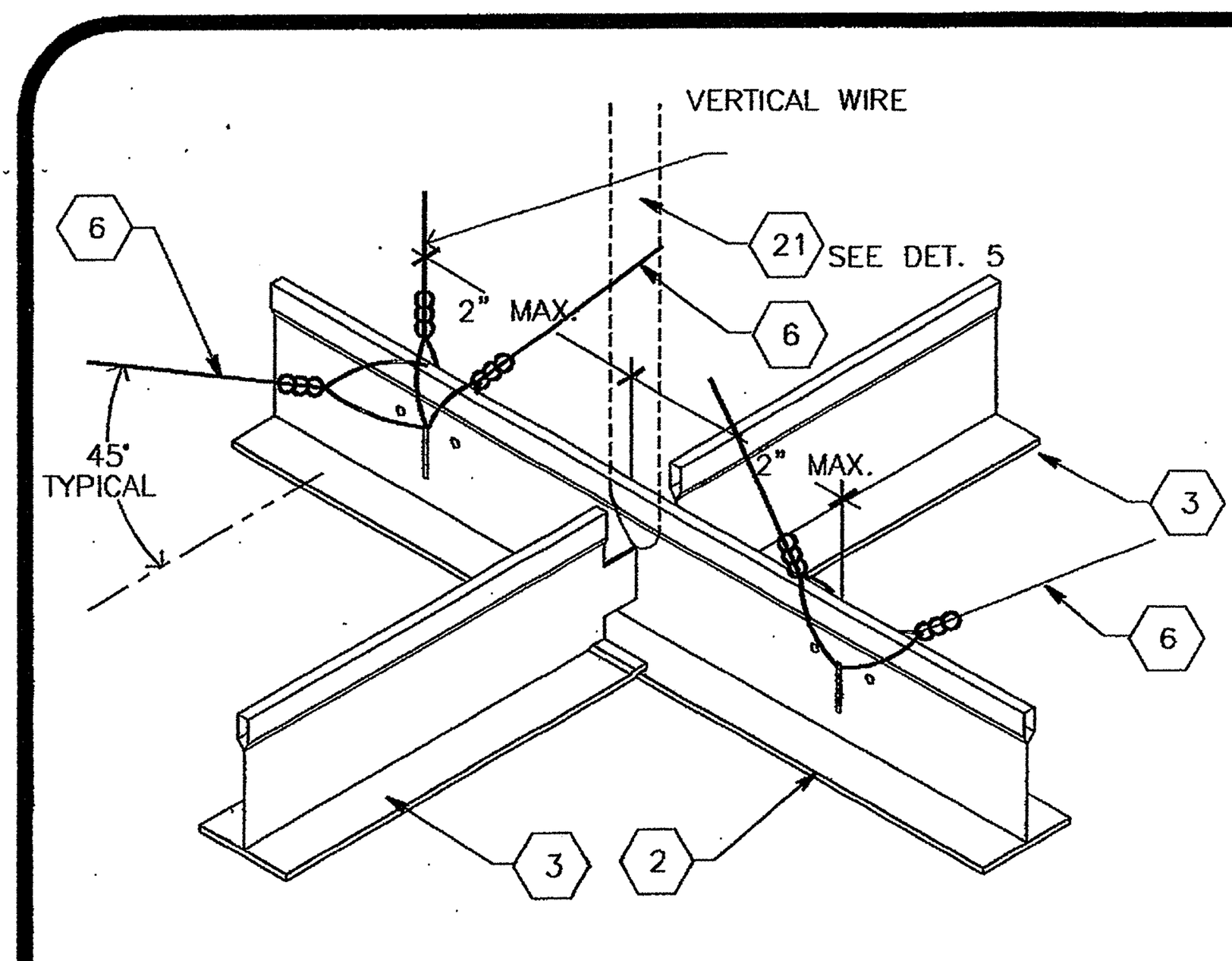
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-104778
AC__ FLS__ SS__
DATE:
STATE AGENCY STAMP

PROJECT
36'x40'
COMPUTER/DRAFTING
TECHNOLOGY

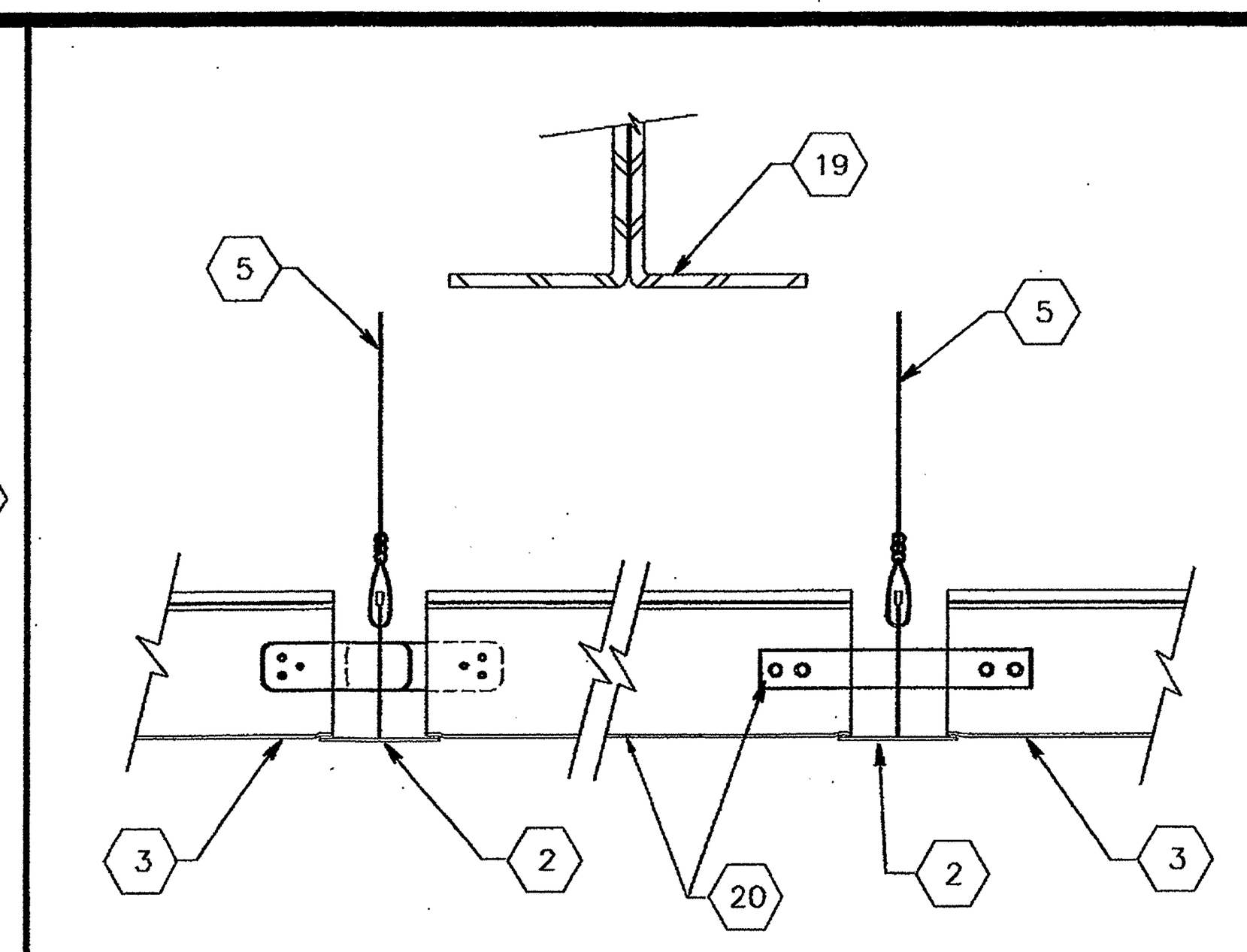
TITLE
36'x40' INTERIOR ELEVATIONS
& SINGLE SLOPE ROOF PLAN
DOUBLE SLOPE ROOF PLAN

JOB #	03-1003
DATE	5-6-03
DRAWN BY	db
SCALE	1/4"=1'-0"
APPROVED	
REVISIONS	

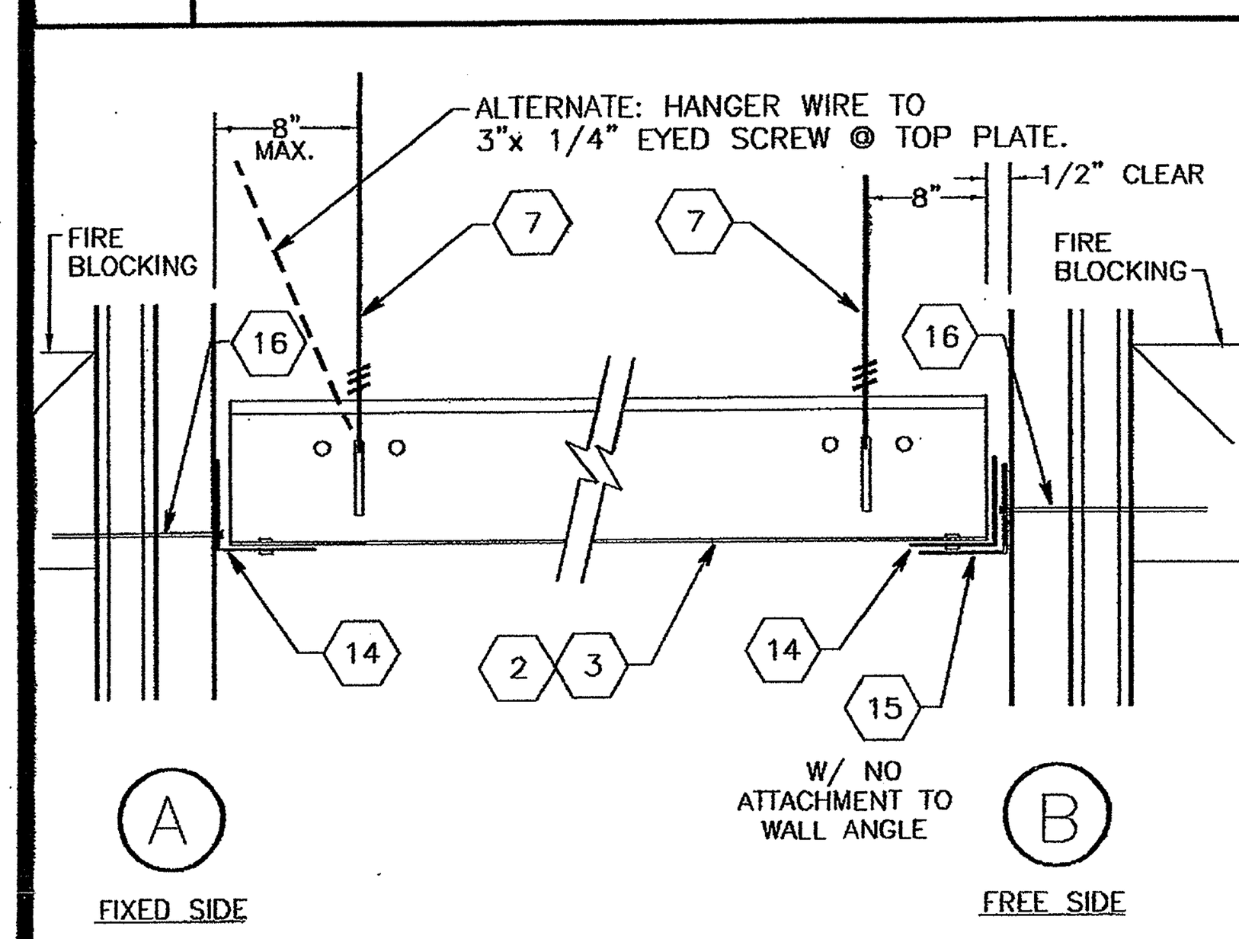
SHEET NO.
A-2.1-36



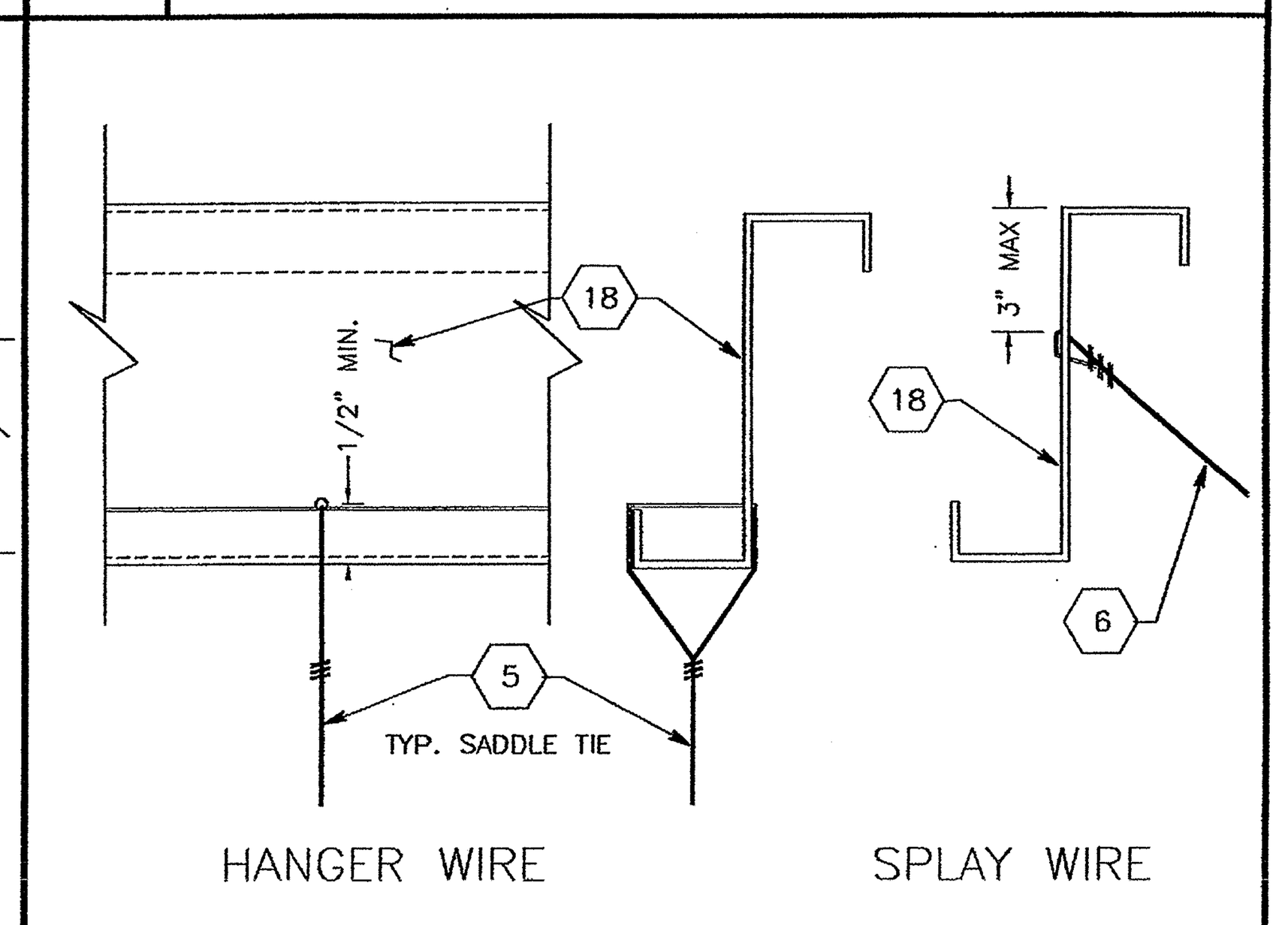
1 SPLAY WIRE



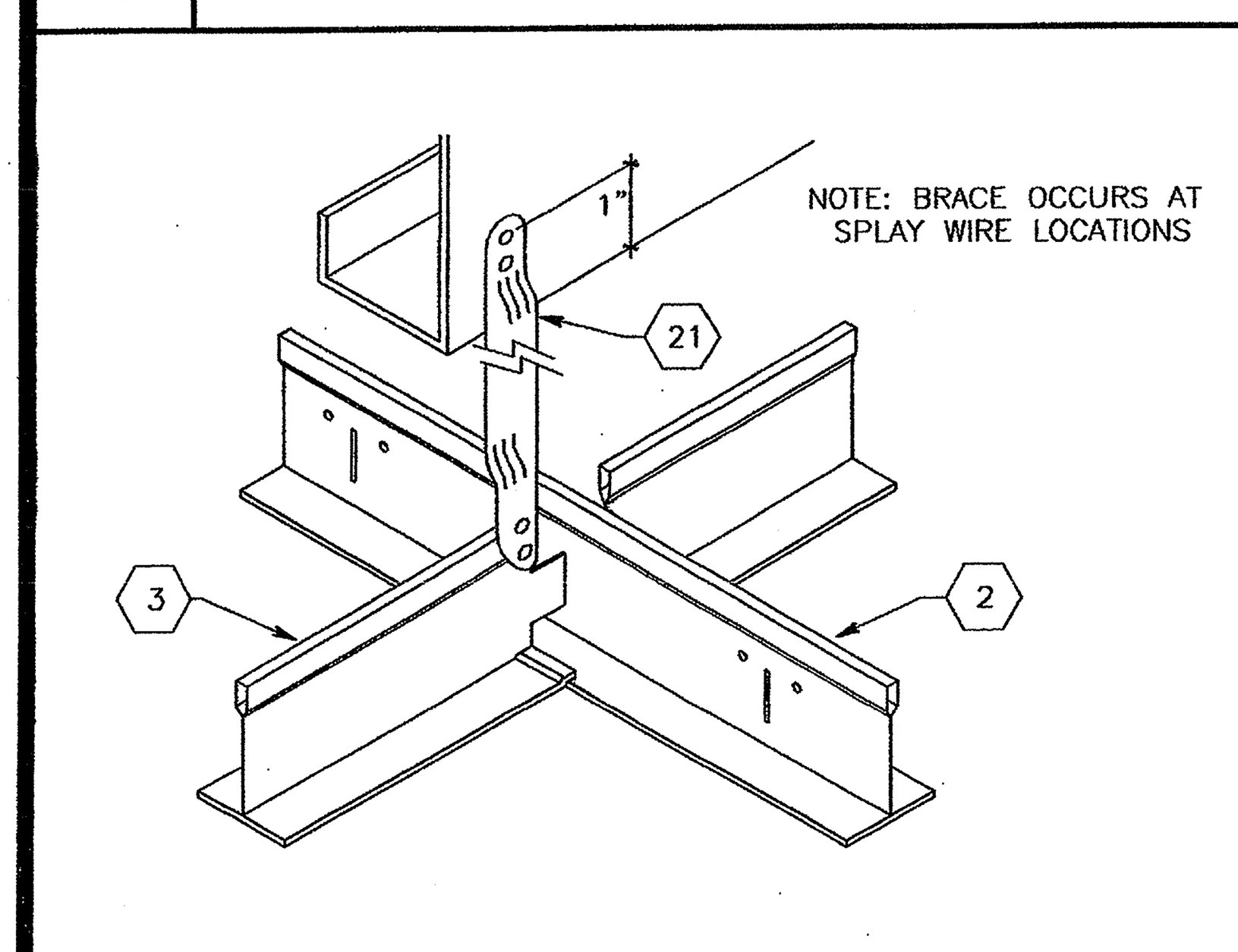
2 GRID AT MODLINE



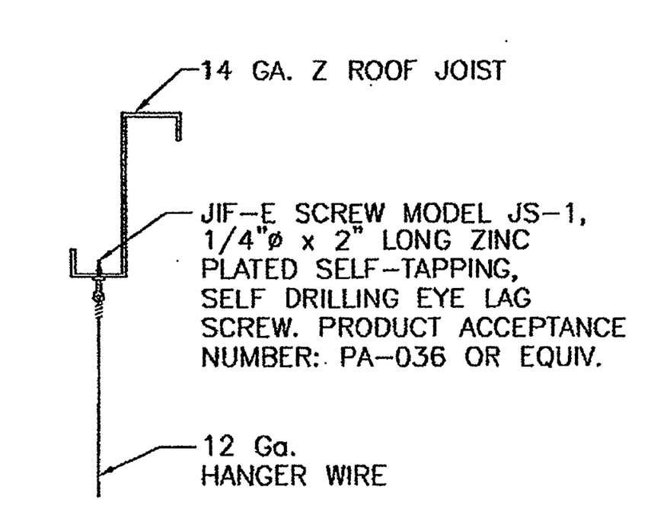
3 GRID AT WALL



4 WIRE ATTACHMENT

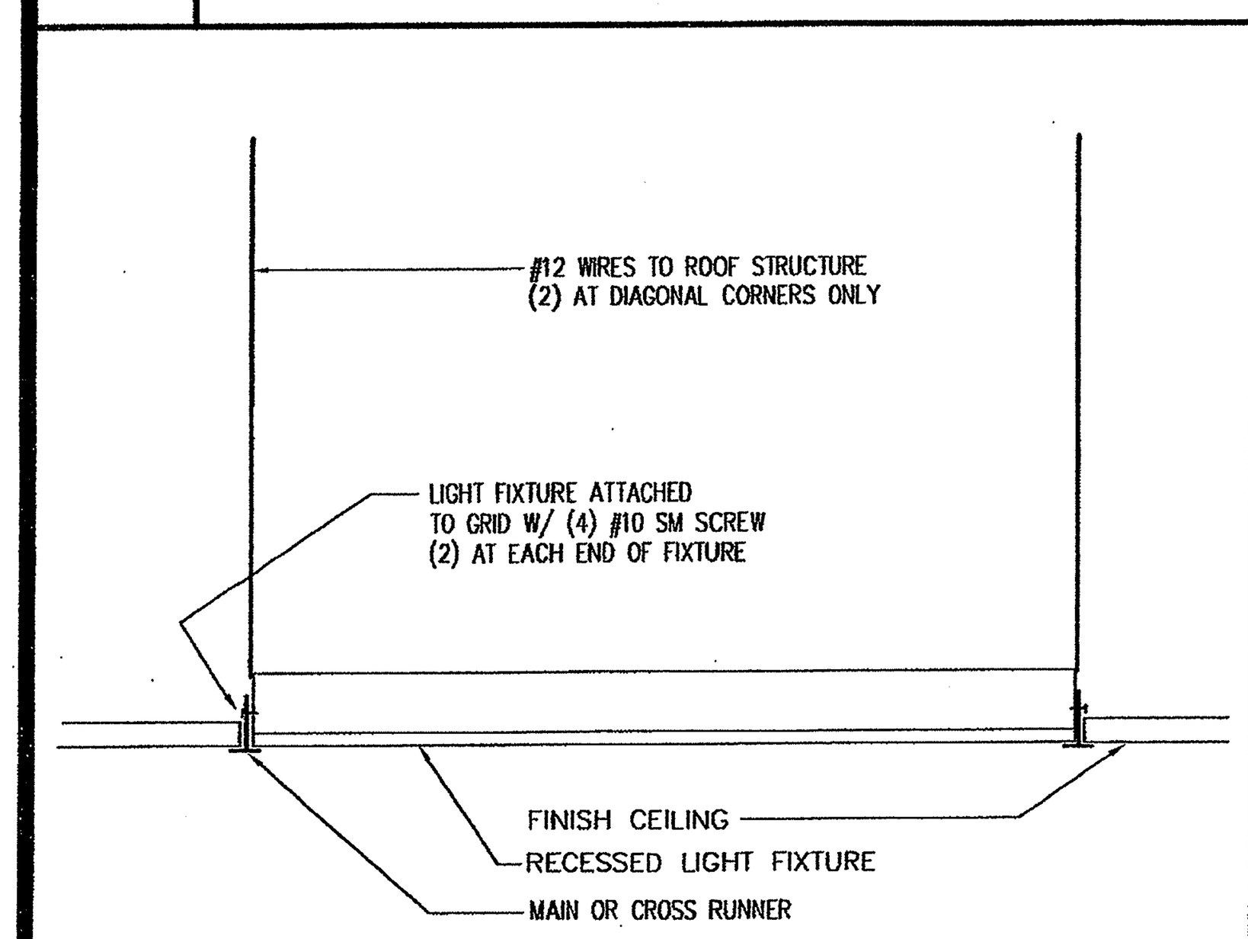


5 VERTICAL BRACE

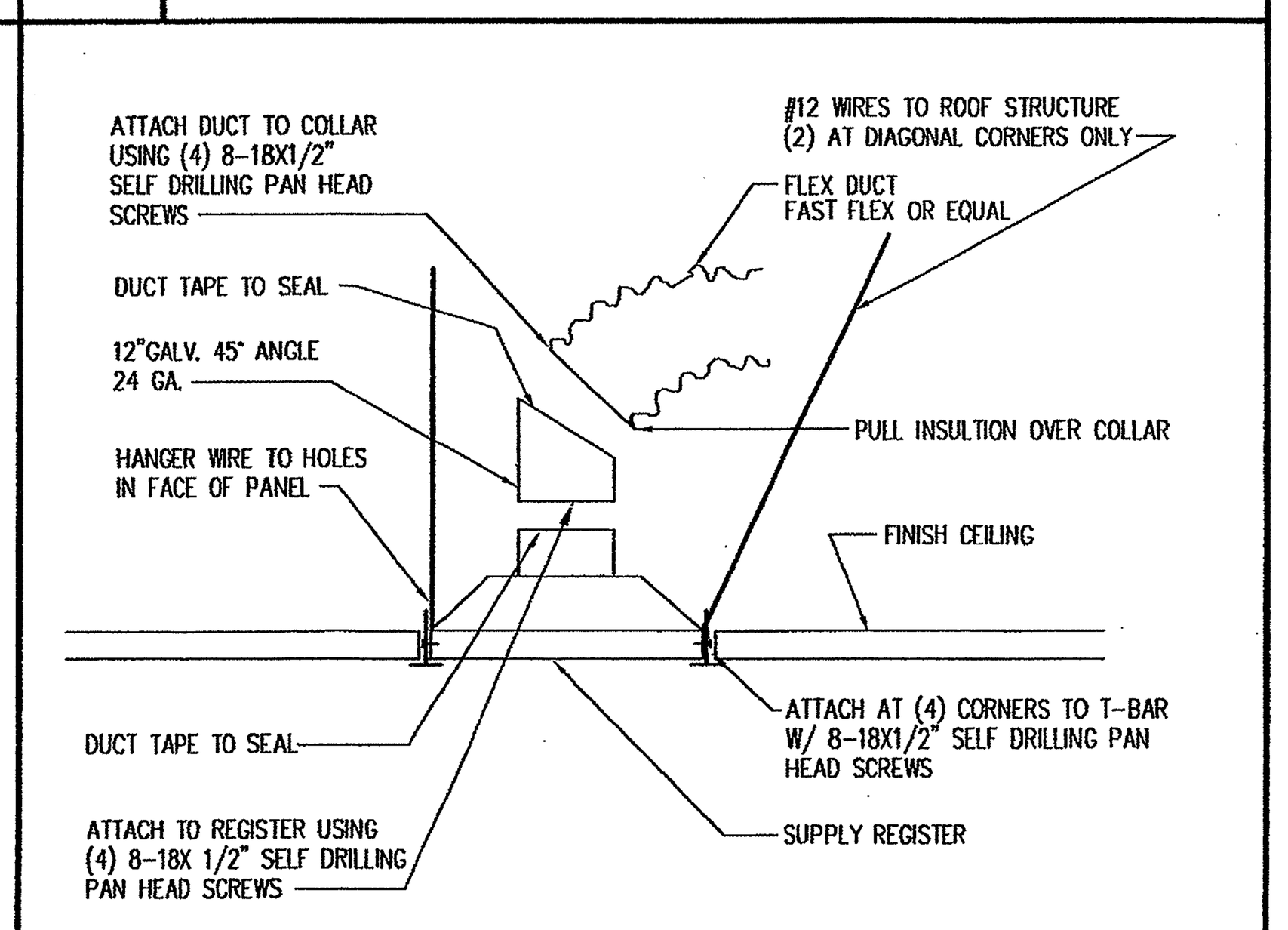


HANGER WIRE TO ROOF

6 ALTERNATE WIRE ATTACHMENT



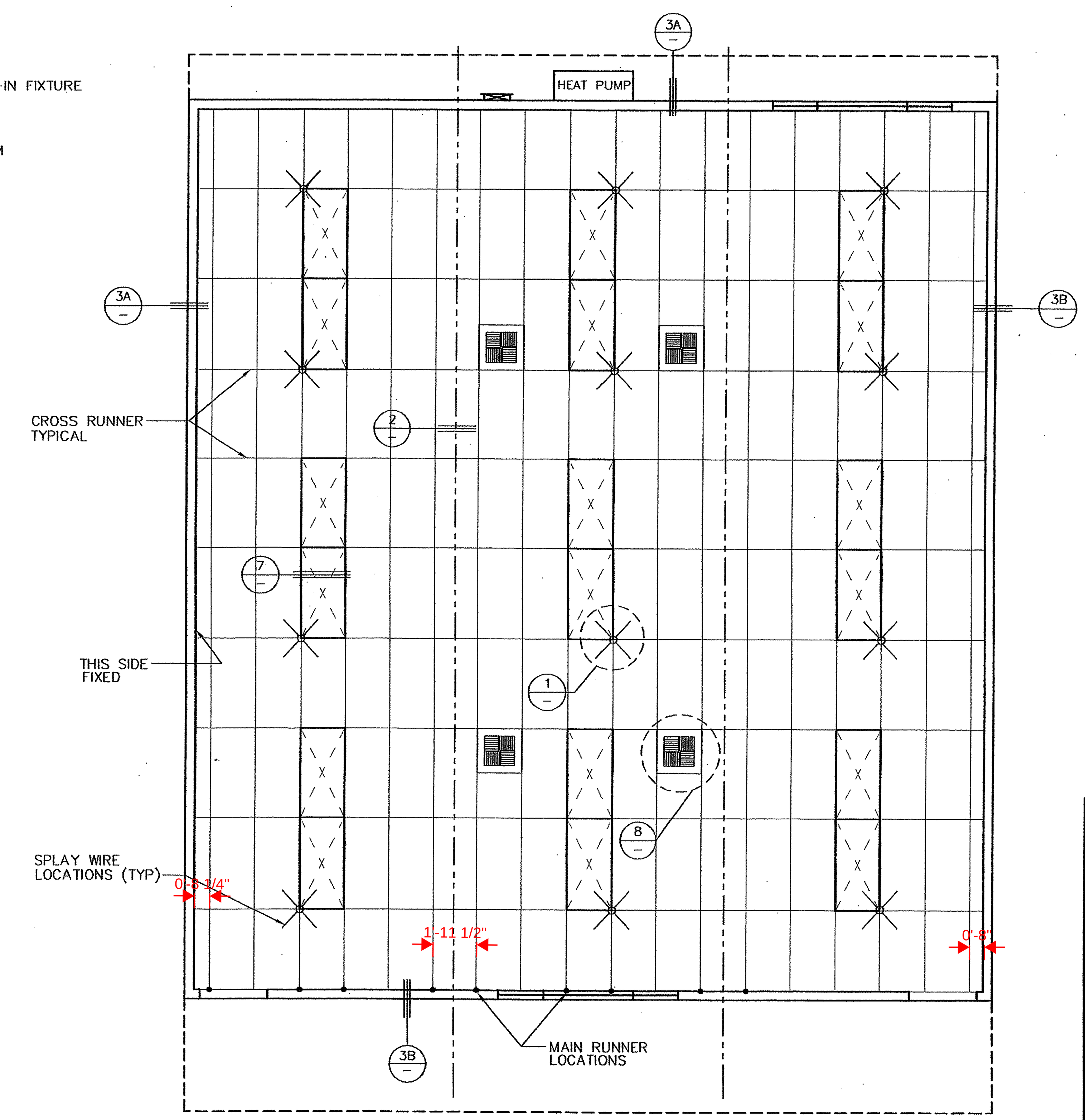
7 LIGHTING FIXTURE DETAIL



8 REGISTER BOX DETAIL

LEGEND

- SUPPLY AIR DIFFUSERS
- 2'x 4' FLUORESCENT DROP-IN FIXTURE
- 4-WAY SPLAY WIRE SYSTEM



REFLECTED CEILING PLAN

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

KEY NOTES

1 MAIN RUNNERS @ 4'-0" O.C. WITH HANGER WIRES SPACED @ 4'-0" O.C. MAX.

2 MAIN RUNNER: DONN CORP. DX-26 HEAVY DUTY

3 CROSS RUNNER: DONN CORP. DXO-424 HEAVY DUTY

4 WALL RUNNER: DONN CORP. M7-EV

5 TYPICAL HANGER WIRE TO BE 12 Ga. STEEL WIRE ATTACHED TO STRUCTURE ABOVE AND TO GRID WITH (3) TIGHT TURNS WITHIN 1 1/2" - SEE DETAIL 4

6 TYPICAL SPLAY WIRE TO BE 12 Ga. STEEL WIRE ATTACHED TO STRUCTURE ABOVE AND TO GRID WITH (4) TIGHT TURNS WITHIN 1 1/2" - SEE DETAIL 4

7 AT END OF ROWS OF RUNNERS, A HANGER WIRE SHALL BE ATTACHED WITHIN 8" (OF ANY WALL OR SOFFIT.) OR 1/4 LENGTH OF END TEE WHICHEVER IS LEAST

8 VERTICAL WIRES MORE THAN 1:6 OUT OF PLUMB SHALL HAVE COUNTERBALANCE WIRES INSTALLED. ADJOINING WALLS; AT OTHER WALLS NO ATTACHMENT. A 1/2" CLEARANCE BETWEEN END OF RUNNER AND FACE OF WALL. WIRES INSTALLED AS INDICATED ON PLAN. SPLAY WIRES SHALL BE TAUT BUT NOT DISTORTED.

9 RUNNERS MAY BE ATTACHED TO WALL MOLDING AT (2) ADJOINING WALLS; AT OTHER WALLS NO ATTACHMENT. WHERE THERE IS NO ATTACHMENT THERE SHALL BE A 1/2" CLEARANCE BETWEEN END RUNNER AND FACE OF WALL.

10 CEILING AREAS EVERY 144 SQ. FT. OR LESS SHALL HAVE SPLAY WIRES INSTALLED AS INDICATED ON CEILING PLAN. SPLAY WIRES SHALL BE TAUT BUT SHALL NOT DISTORT GRID.

11 ELECTRICIAN SHALL PROVIDE (2) SLACK HANGER WIRES AT OPPOSITE CORNERS OF ALL LIGHT FIXTURES. WIRES SHALL BE ATTACHED TO STRUCTURE ABOVE PER NOTE 5. LIGHT FIXTURES SHALL BE ATTACHED TO CEILING GRID WITH (1) #8 SHEET METAL SCREW @ EACH CORNER.

12 DUCTWORK, IF REQUIRED, SHALL BE RIGIDLY ATTACHED TO STRUCTURE ABOVE AT INTERVALS NOT TO EXCEED 4'-0" AND SHALL NOT BE CLOSER THAN 6" TO ANY WIRE.

13 CEILING REGISTERS, WHEN INDICATED ON PLANS, SHALL BE ATTACHED TO STRUCTURE ABOVE PER NOTE 5.

14 CONT. WALL ANGLE WITH POP RIVET TO EACH MEMBER.

15 CONTINUOUS WALL ANGLE.

16 6d NAIL @ 16" O.C. INTO BLOCK OR STUD.

17

18 ROOF JOIST

19 ROOF BEAM

20 CLOSE OFF CROSS TEE- INSERT ONE END OF CROSS TEE INTO MAIN RUNNER WITH BAYONET. CUT OPPOSITE END TO FIT (IF LESS THAN 24"). INSERT MIN. 20 ga. MTL. STRAP THRU MAIN RUNNER, SECURE TO CROSS TEE W/ (2) #8 TEK SCREWS AT EACH END.

21 VERTICAL BRACE- 1/2" STEEL EMT AT SPLAY WIRE LOCATIONS. (MAX. HT. OF 4'-0") DRILL 1/8" HOLE THRU CONDUIT AT TOP & BOTTOM. ATTACH CONDUIT TO JOIST ABOVE OR TO BLOCKING W/ (2) #12 SCREWS @ TOP & BOTTOM.

ARCHITECT STAMP

DATE SIGNED JUN 04 2003

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
APPL 01 103125
STATE AGENCY STAMP

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
4-104778
AC FLS SS
DATE:
STATE AGENCY STAMP

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA. 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

PROJECT 36'x40' COMPUTER/DRAFTING TECHNOLOGY

TITLE 36'x40' REFLECTED CEILING PLAN

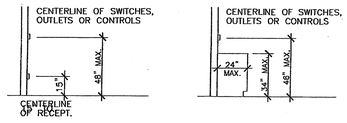
JOB #	03-1003
DATE	5-6-03
DRAWN BY	db
SCALE	1/4"=1'-0"
APPROVED	
REVISIONS	

SHEET NO. A-3.1-36

SYMBOL LEGEND

- DISCONNECT–GENERAL SWITCH R610–B,60 AMP. NOT REQUIRED ON A/C UNITS WITH INTERNAL DISCONNECT BREAKER
- PULL STATION J–BOX W/ 3/4"ø CONDUIT @ 48" A.F.F.
- EXT. HORN J–BOX W/ 3/4"ø CONDUIT @ + 7'–0" A.F.F.
- 110V RECEPTACLE 20 AMP SPECIFICATION GRADE @ +18" A.F.F.
- SWITCH @ +42" A.F.F.
- DATA J–BOX W/3/4" CONDUIT STUBBED TO ATTIC
- EXTERIOR LIGHT +7'–6"– SEE FIXTURE SCHEDULE
- HORN/STROBE LIGHT J–BOX W/ 3/4"ø CONDUIT @ + 80" A.F.F.
- (S) SMOKE DETECTOR J–BOX W/ 3/4"ø CONDUIT @ CEILING
- (H) HEAT DETECTOR J–BOX W/ 3/4"ø CONDUIT IN ATTIC SPACE (ONE PER MODULE, IN ATTIC TYP.)
- (P) DIRECTIONAL PHOTO CELL CONTROL ON ROOF
- CLOCK W/CLOCK OUTLET @ +8'–0"
- EMERGENCY LIGHT W/ BATTERY BACK–UP
- LIGHTED EXIT SIGN W/ BATTERY BACKUP

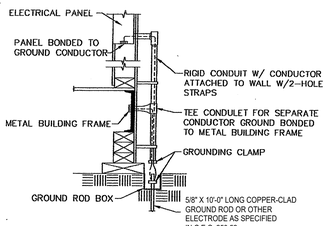
NOTE:
ALL FIXTURE MOUNTING HEIGHTS ARE TO THE CENTER OF THE FIXTURE (U.N.O.)



MOUNTING HEIGHT OVER OBSTRUCTION

FIRE ALARM NOTES

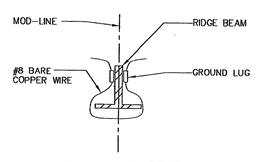
1. FIRE ALARM SYSTEM SHALL COMPLY W/ TITLE 24 SEC. 305.9, TITLE 24, PART 3, ARTICLE 760 OF THE CALIFORNIA CODE OF REGULATIONS AND CALIFORNIA FIRE REGULATIONS, ARTICLE 10.
2. INSTALLATION OF FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAIL PLANS, SPECIFICATIONS AND ENGINEERING CALCULATIONS HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STUCTURAL ENGINEER IN GENERAL CHARGE OF DESIGN AND THE SIGNATURE OF THE ARCHITECT OR PROFESSIONAL ENGINEER WHO HAS BEEN DELEGATED RESPONSIBILITY COVERING THE WORK SHOWN ON A PARTICULAR PLAN OR SPECIFICATION, AND APPROVED BY THE OFFICE OF THE STATE ARCHITECT AND STATE FIRE MARSHAL.



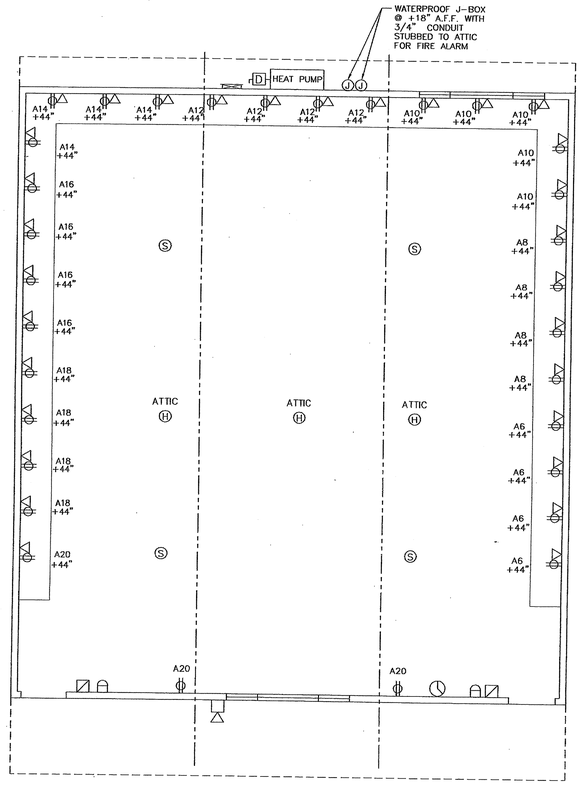
NOTES:
1. SIZE OF CONDUCTORS SHALL COMPLY W/NEC TABLE 250–95.
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL & TO METAL BUILDING FRAME (NEC 250–81) IN ADDITION TO THE DETAIL SHOWN ABOVE. BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. INTO THE SOIL IF AVAILABLE (NEC 250–81 & 250–83).
3. ALL MODULES OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). INCLUDING RAMP TO STEEL FRAME.
4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS W/CONDUCTORS AS SHOWN, SEPARATED AT LEAST 6'–0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (NEC 250–84).
5. PROJECT INSPECTOR SHALL WITNESS GROUNDING TEST.

ACCEPTABLE GROUNDING DETAIL

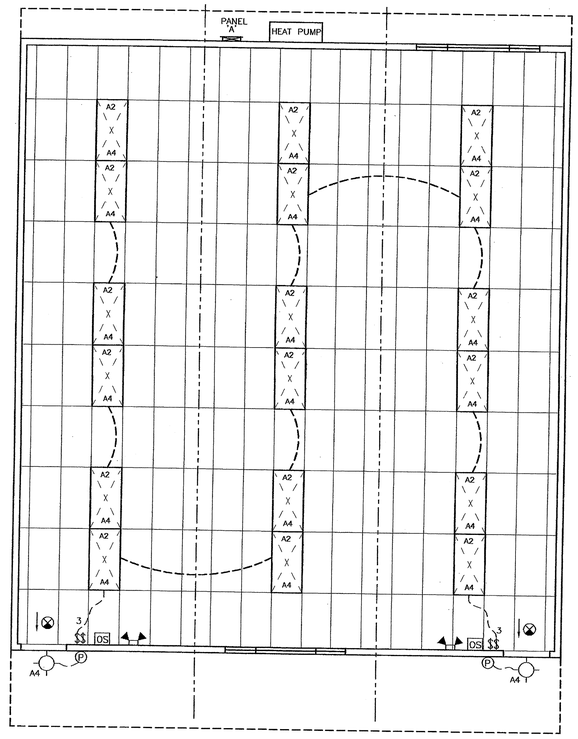
BY OWNER



MODULE BONDING



ELECTRICAL POWER PLAN



ELECTRICAL LIGHTING PLAN

PANELBOARD SCHEDULE — PANEL A

VOLTS 120/240 | PHASE 1 | BUSS 125 A | FEED BOTTOM
MAIN BRKR 125 A | WIRE 3 | MOUNT SURFACE | LOCATION EXTERIOR

DESCRIPTION	WATTS Aø	WATTS Bø	WIRE SIZE	BREAKER	POLE	CKT. NO.	A	O	B	CKT. NO.	POLE	BREAKER	WIRE SIZE	WATTS Aø	WATTS Bø	DESCRIPTION
5–TON HEAT PUMP	5175	——	8	60	2	1				2	1	20	12	939	——	LIGHTS
5–TON HEAT PUMP	——	5175	–	–	–	3				4	1	20	12	——	939	LIGHTS
HEAT STRIP	2990	——	10	30	2	5				6	1	20	12	720	——	RECEPT.
HEAT STRIP	——	2990	–	–	–	7				8	1	20	12	——	720	RECEPT.
–	——	——	–	–	–	9				10	1	20	12	720	——	RECEPT.
–	——	——	–	–	–	11				12	1	20	12	——	720	RECEPT.
–	——	——	–	–	–	13				14	1	20	12	720	——	RECEPT.
–	——	——	–	–	–	15				16	1	20	12	——	720	RECEPT.
–	——	——	–	–	–	17				18	1	20	12	720	——	RECEPT.
–	——	——	–	–	–	19				20	1	20	12	——	540	RECEPT.
SUB TOTAL	8,165	8,165												3,819	3,639	SUB TOTAL

LOAD KW
A 11,885
B 11,804
TOT 23,789

L.C.L. = 1,878 x 1.25 = 2,348
OTHER = 21,911
MAX DEMAND = 24,259

TOTAL LOAD
MAX DEMAND 101 AMPS

FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	WATTS
	2'x 4' FLUORESCENT DROP IN LIGHT FIXTURE ACRYLIC PRASMATIC LENS, DOUBLE ELECTRONIC BALLAST, (3) 32 WATT T–8 TUBES, WEIGHT 27 LBS.	96 WATTS
	INCANDESCENT SURFACE MOUNTED EXTERIOR LIGHT FIXTURE WITH IMPACT RESISTANT ENCLOSURE WITH DIRECTIONAL PHOTO CELL CONTROL ON ROOF.	75 WATTS

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
420 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788–3035 FAX: (909) 788–1523

ARCHITECT STAMP

DATE SIGNED JUN 04 2003

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL ID 10542S
AC FLS SS
DATE 6/4/03
STATE AGENCY STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-104778
AC FLS SS
DATE:
STATE AGENCY STAMP

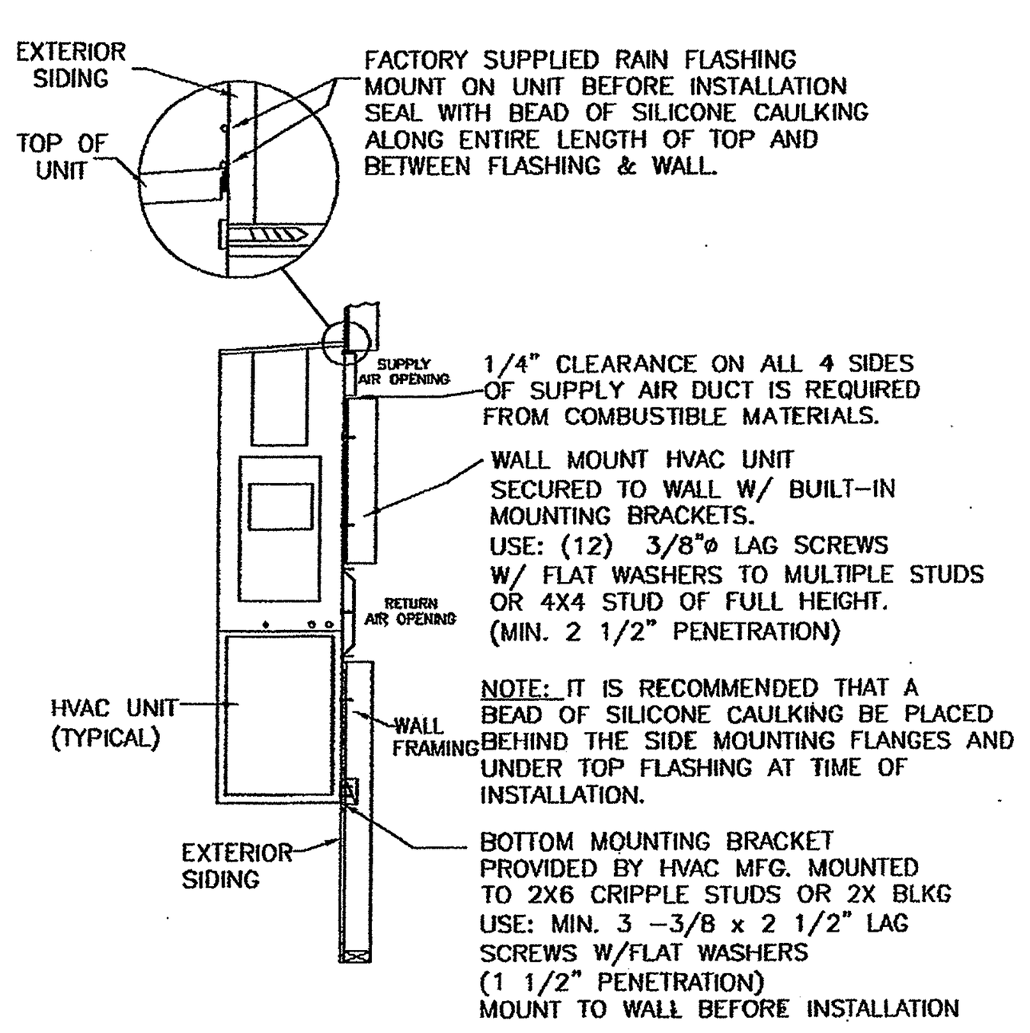
PROJECT: 36'x40' COMPUTER/DRAFTING TECHNOLOGY

TITLE: 36'x40' ELECTRICAL LIGHTING PLAN ELECTRICAL POWER PLAN

JOB # 03–1003
DATE 5–6–03
DRAWN BY db
SCALE 1/4"=1'–0"
APPROVED
REVISIONS

SHEET NO.
E–1.1–36

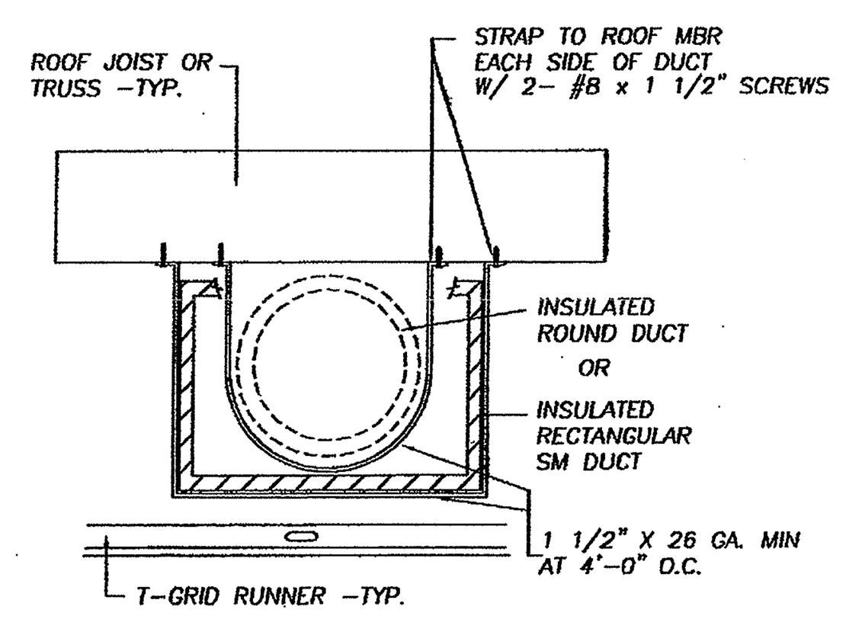
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC.
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022



AIR FILTER: SEE GEN. NOTES ON ARCH'L SHEET OF PLANS

HVAC MOUNTING

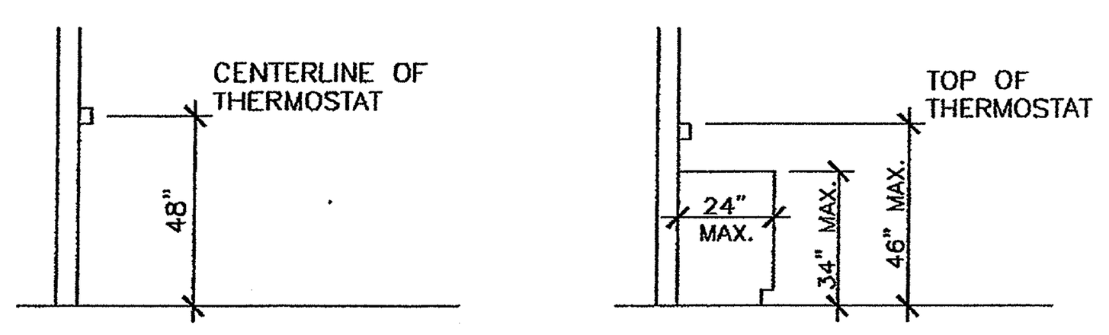
SCALE: 3/8" - 1'-0"



FACTORY-MADE AIR DUCTS: SEE GENERAL NOTES ARCH'L SHEET OF PLANS

DUCT MOUNTING

SCALE: 1" = 1'-0"



MOUNTING HEIGHT OVER OBSTRUCTION

BARD HVAC OPENING @ SUPPLY		
10 SEER	SIZE	OPENING
WH	5.0 TON	31 X 11

EQUIPMENT & MATERIAL SCHEDULE

HP 1 — 5 TON
HEAT PUMP 'BARD' WALLMOUNT, WH60-A05VP4 5KW
56,000 NOM. BTUH COOLING CAPACITY-10.20 SEER
58,000 NOM. BTUH HEATING CAPACITY FROM COMPRESSOR-7.00 HSPF
ADDITIONAL 17,065 NOM. BTUH HEATING CAPACITY FROM HEAT STRIP
DUAL CIRCUIT:
CIRCUIT#1: MCA 45, MOCP 60, MIN. WIRE SIZE #8
CIRCUIT#2: MCA 26, MOCP 30, MIN. WIRE SIZE #10
1875 CFM @ .3 ESP, UNIT WEIGHT 510 LBS., 230 v., 60 CYCLE, SINGLE PHASE

NOTE:
ADJUST OUTSIDE AIR DAMPER TO A MIN. OF 534 CFM

(T) THERMOSTAT - WHITE ROGERS 1F92-371
AUTO CHANGEOVER, ELECTRONIC, 5+2 DAY
3 HEAT, 2 COOL, MOUNT AT +48" A.F.F.
USE STAT GUARD #F29-0277

SUPPLY REGISTER, CEILING, SHOEMAKER
104-OBD, 16x16-12, T-BAR, OBD
4 WAY FIXED CURVE BLADE, U.N.O.

SUPPLY BALANCE DAMPER (SIZE AS NOTED)

MECHANICAL NOTES

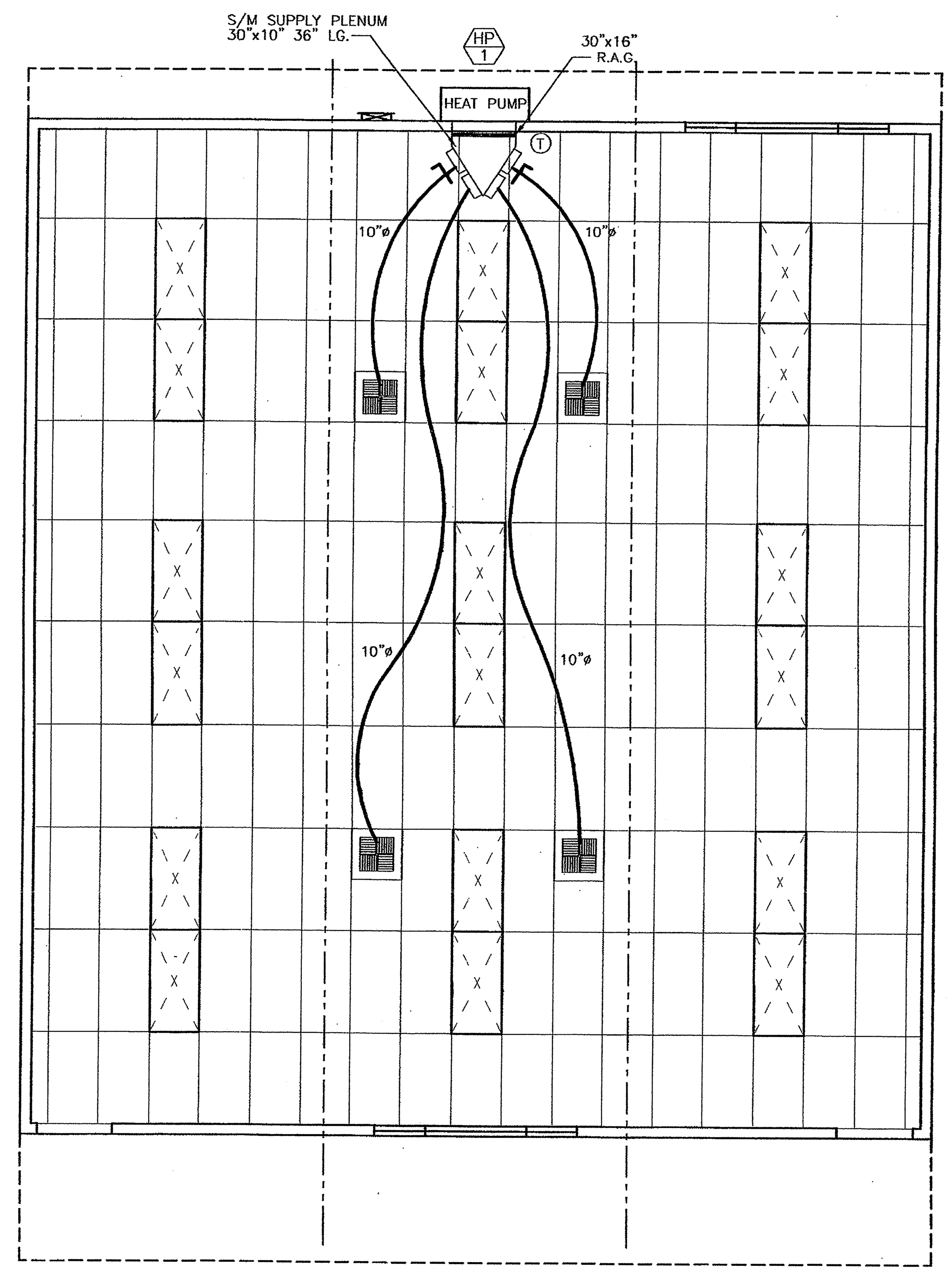
FLEXIBLE DUCT SHALL BE MODULAR METAL FABRICATORS SERIES FDMA R4.2 WITH INSULATION, A POLY JACKET, AND A WIRE ENCAPSULATED NON-PERFORATED CORE THAT COMPLIES WITH ASTM C-518, 1991. FLEXIBLE DUCTING SHALL BE UL LISTED CLASS 1 AIR DUCT WITH A FLAME SPREAD RATING NOT TO EXCEED 25, AND A SMOKE-DEVELOPED RATING NOT TO EXCEED 50 IN ACCORDANCE WITH NFPA 90A & 90B.

THERMOSTAT PROGRAMMING TO BE PERFORMED AND BATTERY PROVIDED BY OTHERS ON SITE.

TEST AND BALANCE OF HVAC SYSTEM TO BE PROVIDED AND PERFORMED BY OTHERS ON SITE.

ALL HVAC EQUIPMENT LEAVES FACTORY WIRED FOR 240V. OPERATION. THE ACCEPTABLE OPERATING RANGE FOR THE 240 & 208 TAPS ARE:

TAP	RANGE
240	253-216
208	220-187



MECHANICAL PLAN

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

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA, 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

LICENSED ARCHITECT — STATE OF CALIFORNIA
ARCHITECT STAMP

DATE SIGNED JUN 04 2003

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
APPL 03 103425
STATE AGENCY STAMP

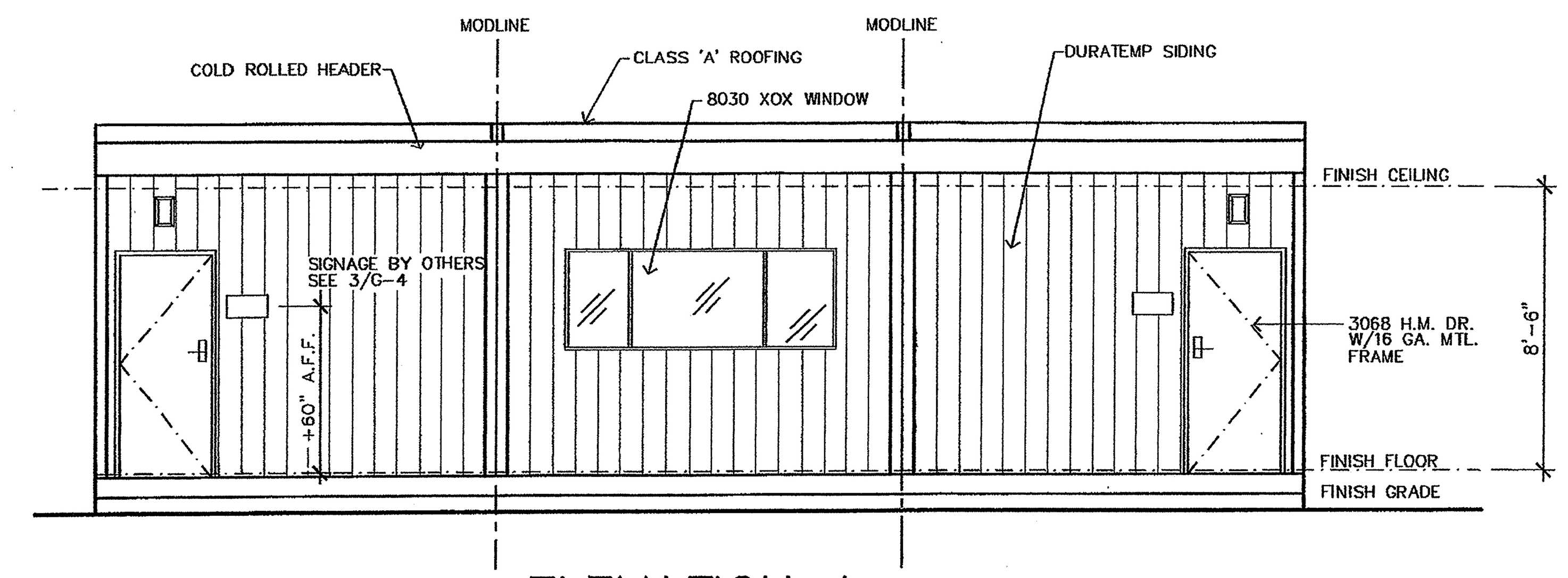
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
4-104778
AC FLS SS DATE
STATE AGENCY STAMP

PROJECT: 36'x40' COMPUTER/DRAFTING TECHNOLOGY

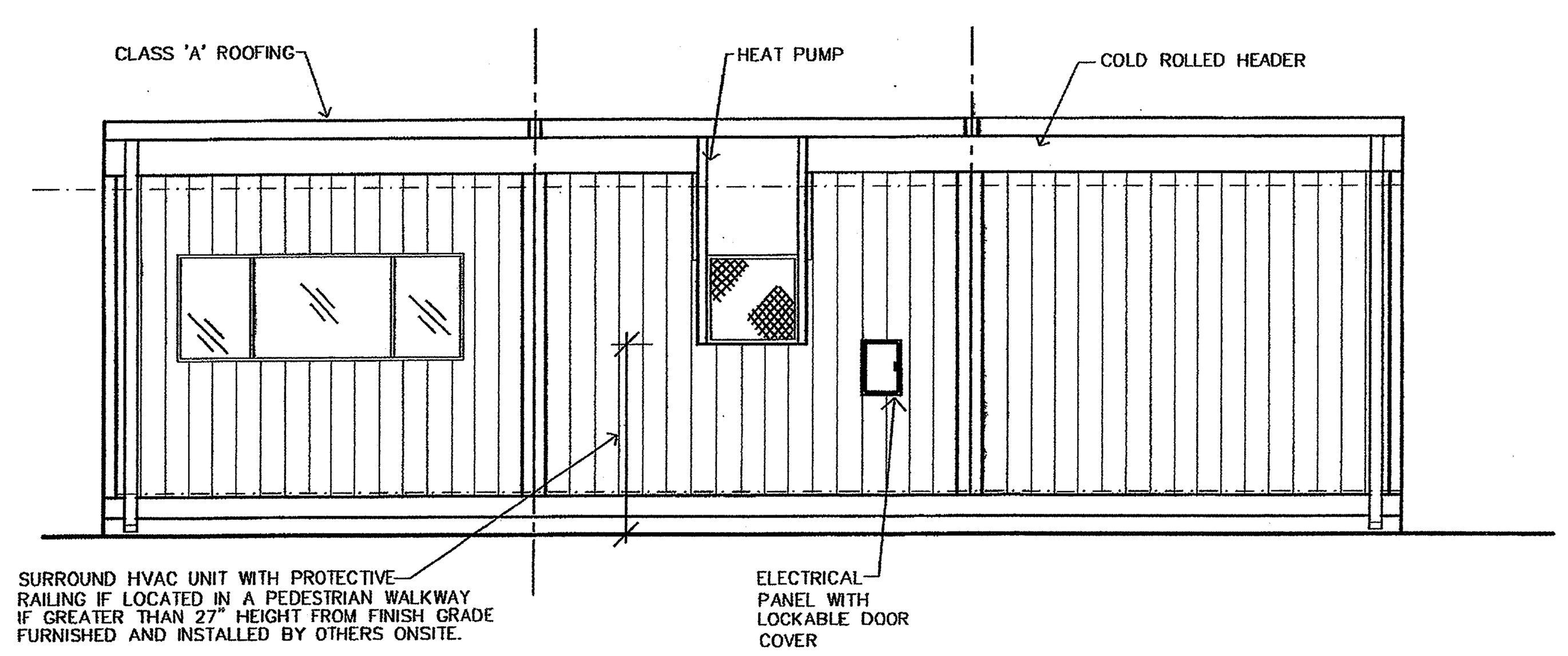
TITLE: 36'x40' MECHANICAL PLAN

JOB #	03-1003
DATE	5-6-03
DRAWN BY	db
SCALE	1/4"=1'-0"
APPROVED	
REVISIONS	

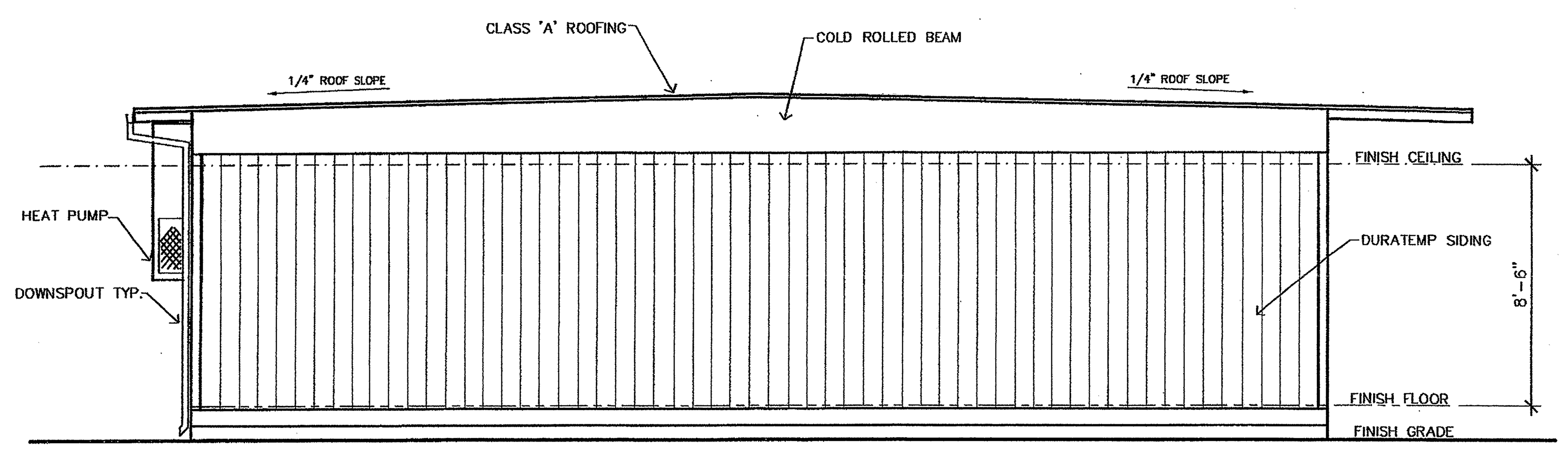
SHEET NO.
M-1.1-36



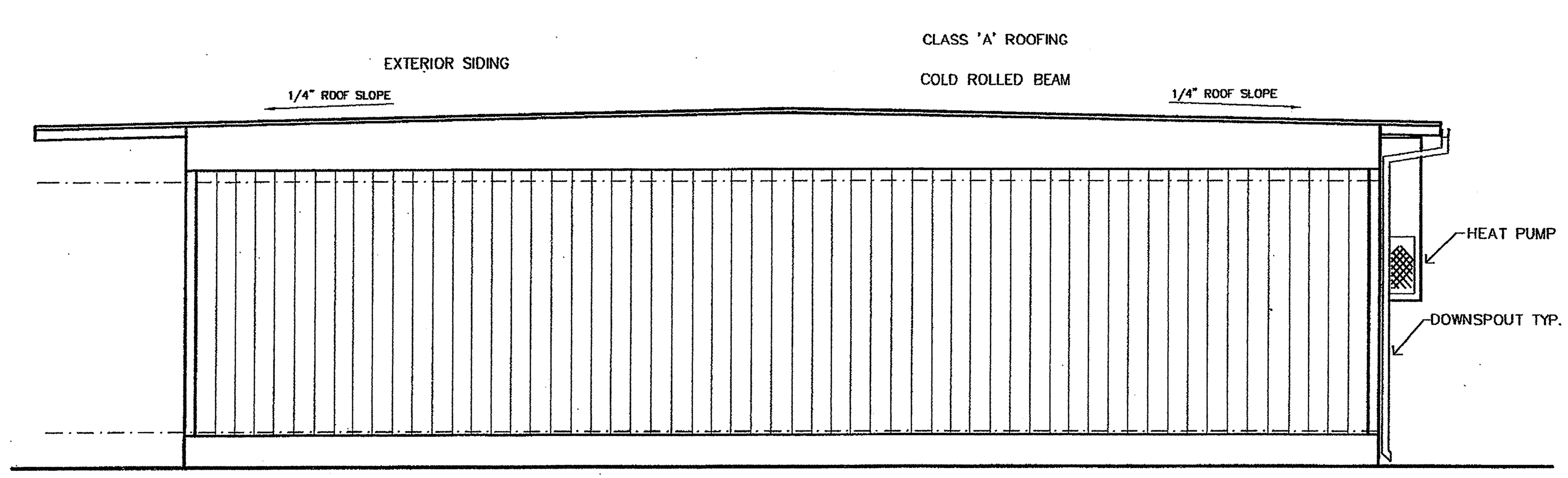
ELEVATION A



ELEVATION B



ELEVATION C



ELEVATION D

LEGEND

INDICATES DOOR TYPE, SEE G-2
INDICATES HARDWARE TYPE, SEE G-2

(A) INDICATES WINDOW TYPE- SEE SHEET G-2

DETAIL #
SHEET #

SIGNAGE LEGEND:

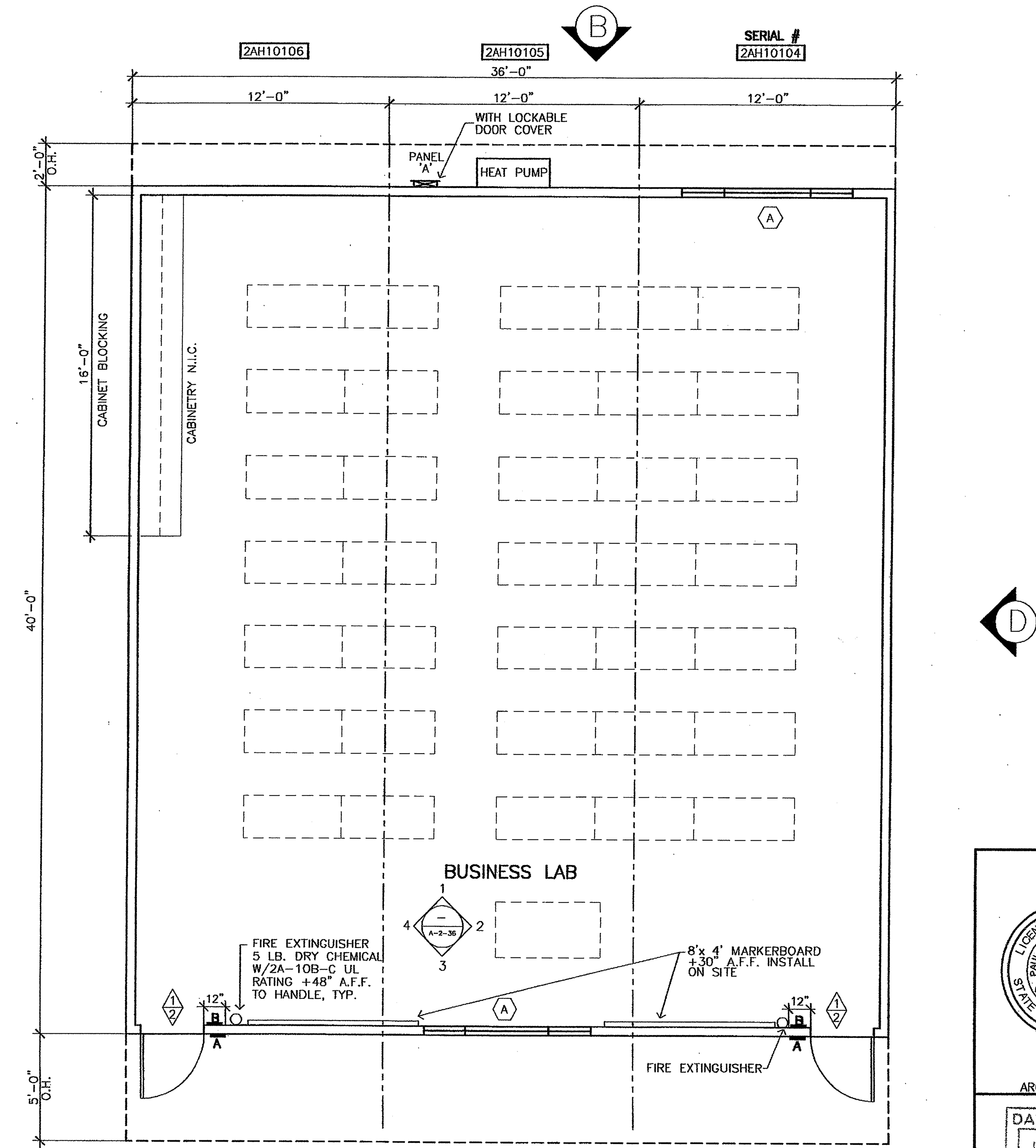
A: ROOM SIGNAGE PER DETAIL #3, SHEET G-4
B: EXIT SIGNAGE PER DETAIL #3, SHEET G-4

SEE NOTE 4 BELOW FOR SIGNAGE REQUIREMENTS

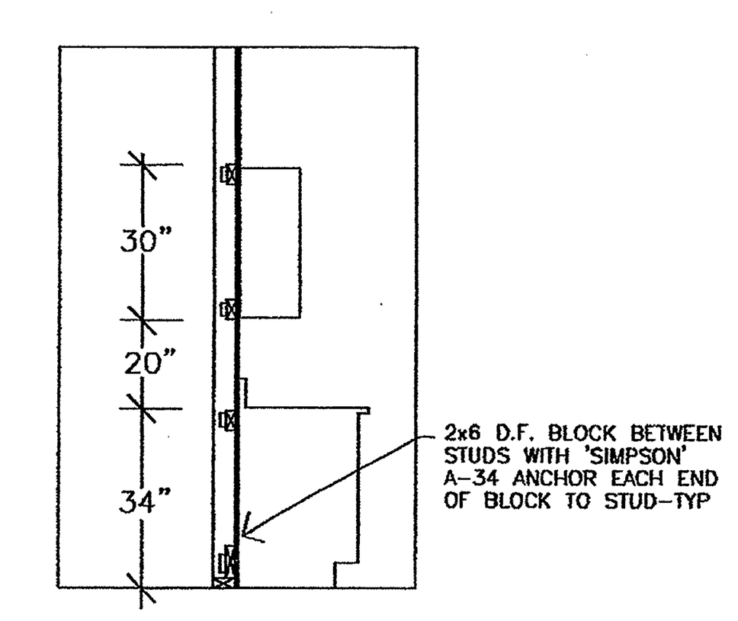
NOTE:
FLOOR PLAN SHOWN IS 'B' BUILDING
'A' BUILDING IS OPPOSITE HANDED

NOTE:
PROVIDE FIRE BLOCKING PER C.B.C. 708

NOTE:
BUILDING HOUSING GROUP 'E' OCCUPANCIES SHALL HAVE ROOF COVERINGS AS SPECIFIED IN TABLE 15A C.B.C. - CLASS 'A'



FLOOR PLAN
SCALE: 1/4"-1'-0"



CABINET BLOCKING

BLOCKING SHALL BE 2x4 D.F. #2 BETWEEN STUDS WITH 'SIMPSON' A-34 ANCHOR EACH END OF BLOCK TO STUD. ATTACH CABINET TO BLOCKING WITH #10 x 3" SCREWS @ 12" O.C. ALTERNATE BLOCKING SHALL BE 20 GA. x 7 1/2" WIDE STEEL ATTACHED TO STUDS W/ (2) #6 SMS @ EACH STUD

NOTES:

1. MANUFACTURER SHALL MECHANICALLY ATTACH METAL TAG TO EXTERIOR OF BUILDING SHOWING DSA APPLICATION NUMBER, MANUFACTURERS NAME, UNIT SERIAL NUMBER, DESIGN LIVE LOADS FOR FLOOR AND ROOF, AND THE DESIGN WIND LOAD.
2. WALL AND CEILING FINISHES SHALL BE MIN. CLASS I MATERIAL
3. FIBERGLAS INSULATION SHALL HAVE THE FOLLOWING:
   FLAME SPREAD 0-25
   SMOKE DEVELOPED, FUEL CONTRIBUTED 0-450
4. SIGNAGE REQUIRED PER APPLICABLE CODES LISTED ON SHEET CS PROVIDED AND INSTALLED BY OTHERS ONSITE. SEE #3/G-4
5. ANY ROOM HAVING AN OCCUPANT LOAD OF 50 OR MORE WHERE FIXED SEATS ARE NOT INSTALLED, AND WHICH IS USED FOR CLASSROOM, ASSEMBLY, DINING OR SIMILAR PURPOSE SHALL HAVE THE CAPACITY OF THE ROOM POSTED IN A CONSPICUOUS PLACE NEAR THE MAIN EXIT OF THE ROOM. POSTING SHALL BE BY MEANS OF A DURABLE SIGN HAVING CONTRASTING COLOR FROM THE BACKGROUND TO WHICH IT IS ATTACHED.
6. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS, SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR ATUOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED NOT TO EXCEED 15 POUNDS.
7. PANIC HARDWARE IS REQUIRED TO BE INSTALLED WHEN THE CONFIGURATION OF ANY ROOM PROVIDES AN OCCUPANT LOAD 50 OR GREATER, CBC 1007.3.10

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA. 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

ARCHITECT STAMP

DATE SIGNED
JUN 04 2003

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL 01 105425
STATE AGENCY STAMP

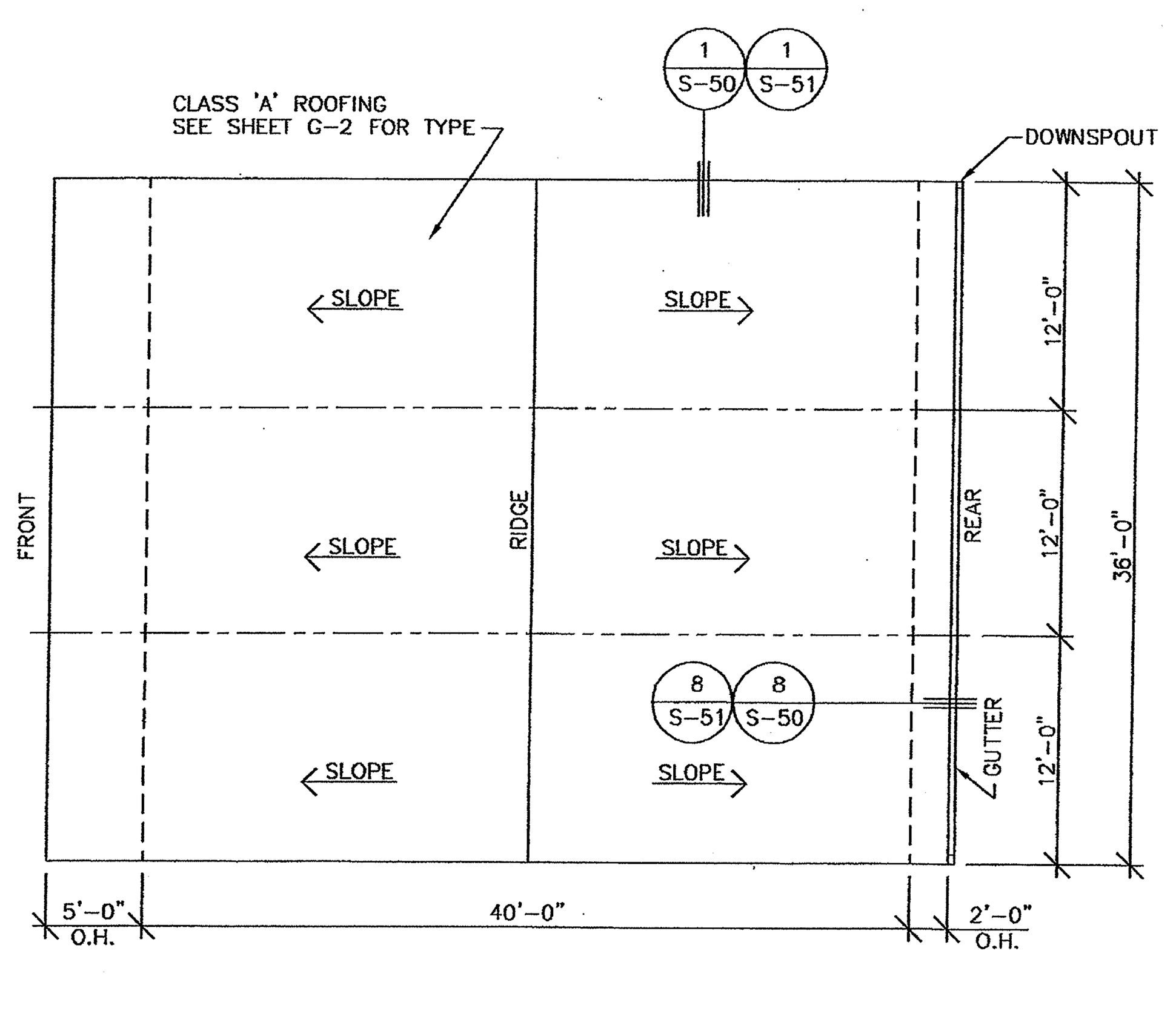
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-104778
AC ___ FLS ___ SS ___
DATE: ___
STATE AGENCY STAMP

PROJECT
36'x40'
BUSINESS LAB

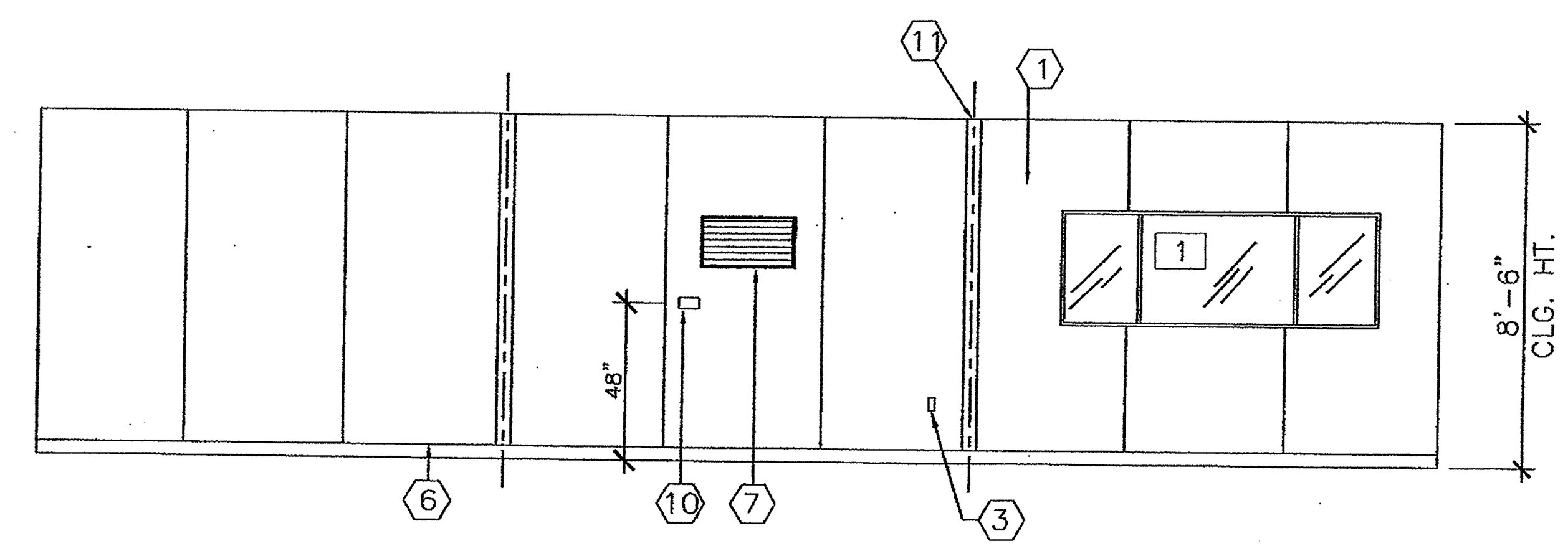
TITLE
FLOOR PLAN, EXTERIOR ELEVATIONS
36'x40'
DUAL SLOPE ROOF

JOB #	03-1003
DATE	5-6-03
DRAWN BY	db
SCALE	1/4"=1'-0"
APPROVED	
REVISIONS	

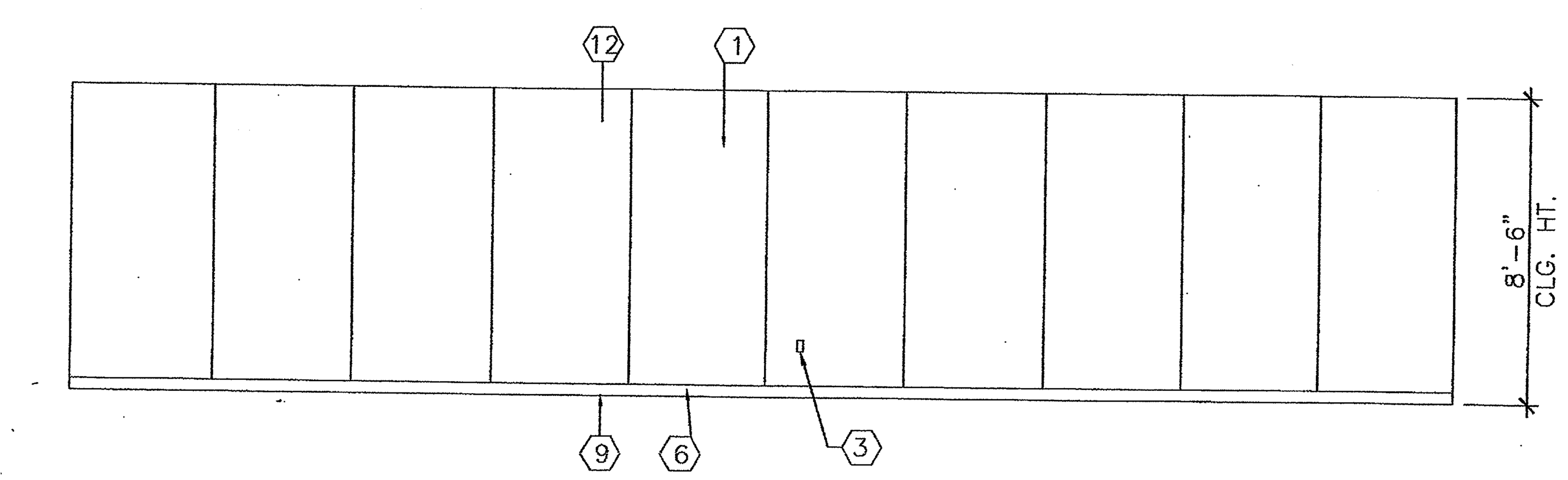
SHEET NO.
A-1.2-36



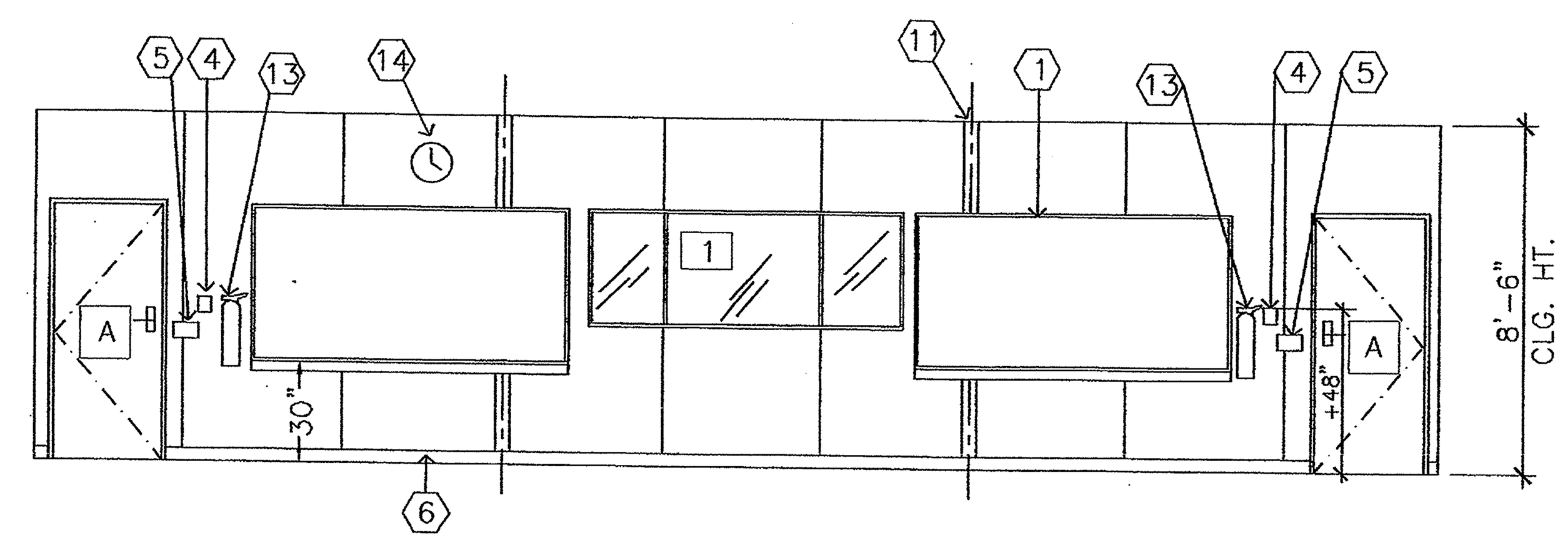
DUAL PITCH ROOF PLAN
SCALE: 1/8"=1'-0"



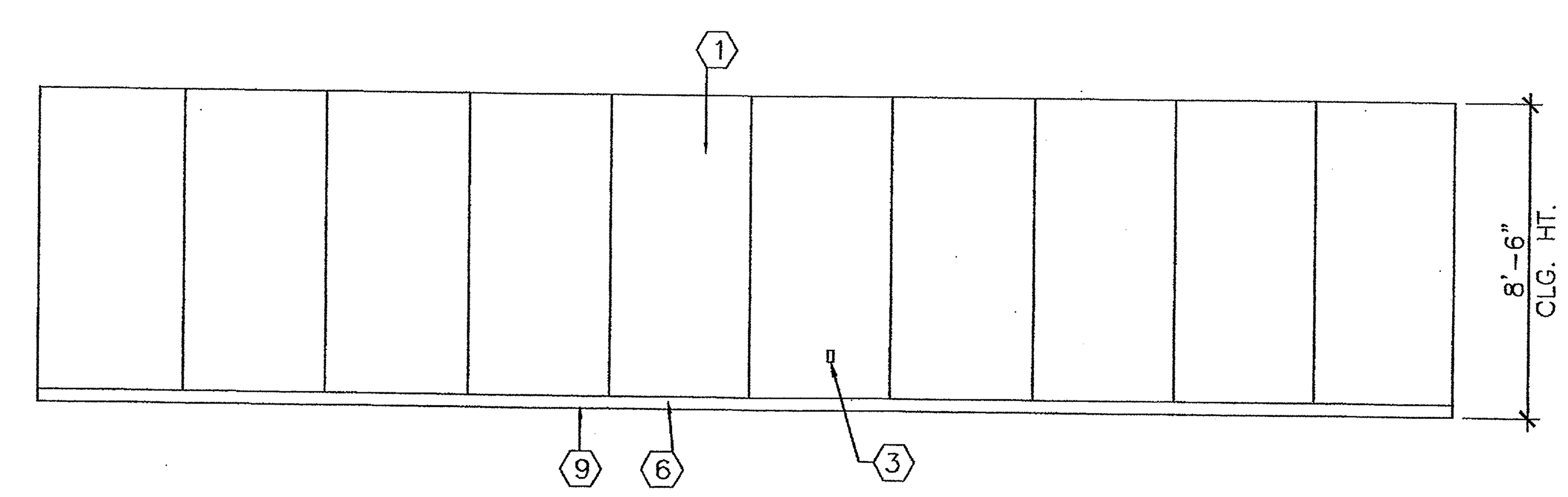
INTERIOR ELEVATION #1
SCALE: 1/4"=1'-0"



INTERIOR ELEVATION #2
SCALE: 1/4"=1'-0"



INTERIOR ELEVATION #3
SCALE: 1/4"=1'-0"



INTERIOR ELEVATION #4
SCALE: 1/4"=1'-0"

KEYNOTES:

- [A] EXTERIOR DOOR
- [1] EXTERIOR WINDOW
- (1) TYPICAL INTERIOR FINISH
- (2) CLOSURE AT MODULAR JOINT
- (3) DUPLEX WALL RECEPTACLE +18" A.F.F. (SEE POWER PLAN)
- (4) FIRE ALARM PULL STATION (SEE POWER PLAN)
- (5) LIGHT SWITCH (SEE LIGHTING PLAN)
- (6) TOP SET BASE (TYPICAL) SEE FINISH SCHEDULE
- (7) RETURN AIR GRILL
- (8) ELECTRICAL PANEL
- (9) FINISH FLOOR
- (10) THERMOSTAT SEE MECHANICAL PLAN
- (11) MODULAR JOINT
- (12) (1) 8'-0" x 4'-0" MARKERBOARD
- (13) FIRE EXTINGUISHER
- (14) 12" DIA. ELECTRIC CLOCK (SEE ELECTRICAL POWER PLAN)

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

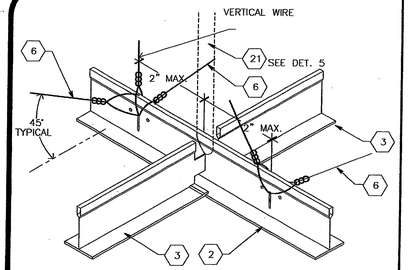
ARCHITECT STAMP
DATE SIGNED JUN 04 2003
STRUCTURAL ENGINEER STAMP

PROJECT: 36'x40' BUSINESS LAB

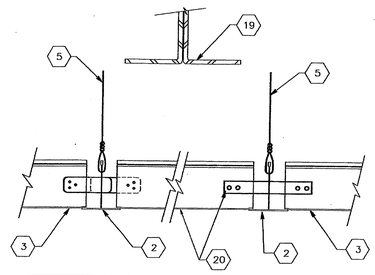
TITLE: 36'x40' INTERIOR ELEVATIONS & SINGLE SLOPE ROOF PLAN DOUBLE SLOPE ROOF PLAN

JOB #	03-1003
DATE	5-6-03
DRAWN BY	db
SCALE	1/4"=1'-0"
APPROVED	
REVISIONS	

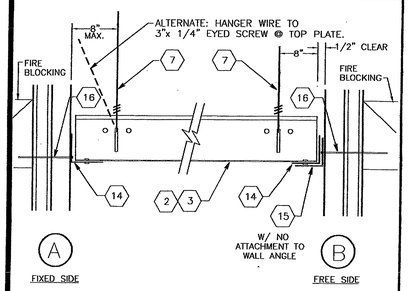
SHEET NO.
A-2.2-36



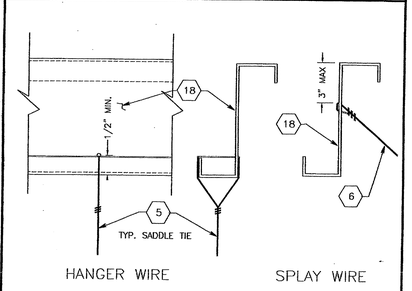
1 SPLAY WIRE



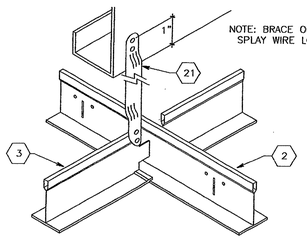
2 GRID AT MODLINE



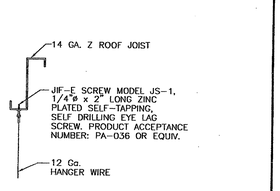
3 GRID AT WALL



4 WIRE ATTACHMENT

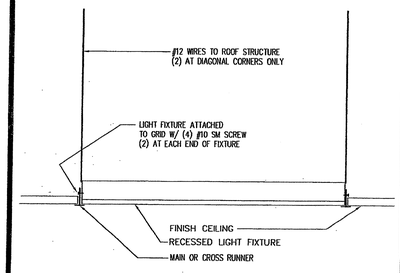


5 VERTICAL BRACE

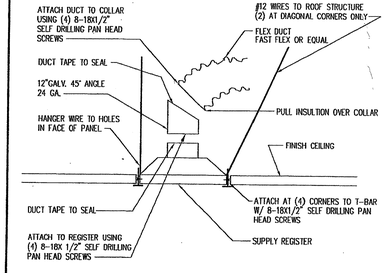


HANGER WIRE TO ROOF

6 ALTERNATE WIRE ATTACHMENT



7 LIGHTING FIXTURE DETAIL



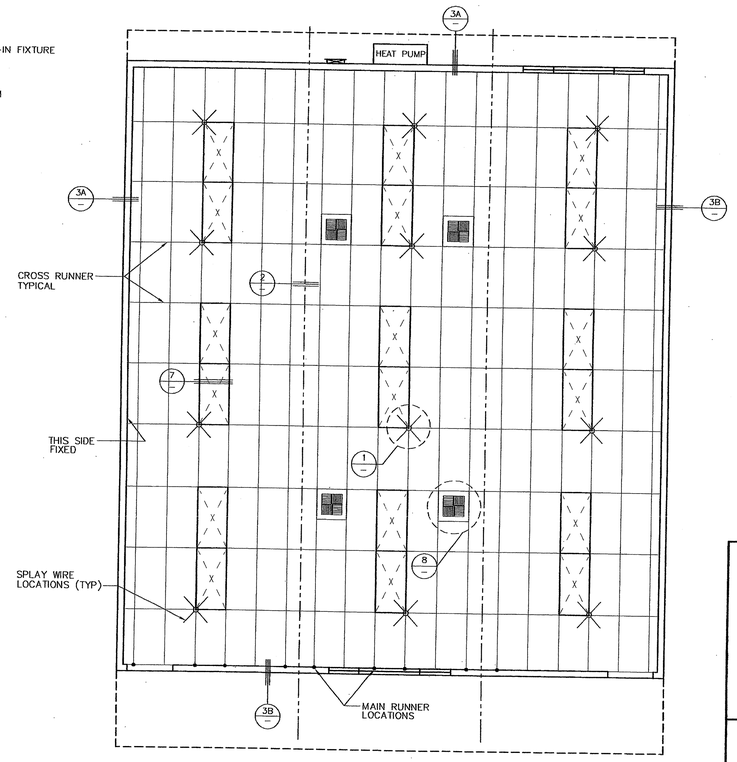
8 REGISTER BOX DETAIL

LEGEND

SUPPLY AIR DIFFUSERS

2'x 4' FLUORESCENT DROP-IN FIXTURE

4-WAY SPLAY WIRE SYSTEM



REFLECTED CEILING PLAN

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

KEY NOTES

1 MAIN RUNNERS @ 4'-0" O.C. WITH HANGER WIRES SPACED @ 4'-0" O.C. MAX.

2 MAIN RUNNER: DONN CORP. DX-26 HEAVY DUTY

3 CROSS RUNNER: DONN CORP. DXO-424 HEAVY DUTY

4 WALL RUNNER: DONN CORP. M7-EV

5 TYPICAL HANGER WIRE TO BE 12 Ga. STEEL WIRE ATTACHED TO STRUCTURE ABOVE AND TO GRID WITH (3) TIGHT TURNS WITHIN 1 1/2" - SEE DETAIL 4

6 TYPICAL SPLAY WIRE TO BE 12 Ga. STEEL WIRE ATTACHED TO STRUCTURE ABOVE AND TO GRID WITH (4) TIGHT TURNS WITHIN 1 1/2" - SEE DETAIL 4

7 AT END OF ROWS OF RUNNERS, A HANGER WIRE SHALL BE ATTACHED WITHIN 8" (OF ANY WALL OR SOFFIT.) OR 1/4 LENGTH OF END TEE WHICHEVER IS LEAST

8 VERTICAL WIRES MORE THAN 1:6 OUT OF PLUMB SHALL HAVE COUNTERBALANCE WIRES INSTALLED. ADJOINING WALLS; AT OTHER WALLS NO ATTACHMENT. A 1/2" CLEARANCE BETWEEN END OF RUNNER AND FACE OF WALL. WIRES INSTALLED AS INDICATED ON PLAN. SPLAY WIRES SHALL BE TAUT BUT NOT DISTORTED.

9 RUNNERS MAY BE ATTACHED TO WALL MOLDING AT (2) ADJOINING WALLS; AT OTHER WALLS NO ATTACHMENT. WHERE THERE IS NO ATTACHMENT THERE SHALL BE A 1/2" CLEARANCE BETWEEN END RUNNER AND FACE OF WALL.

10 CEILING AREAS EVERY 144 SQ. FT. OR LESS SHALL HAVE SPLAY WIRES INSTALLED AS INDICATED ON CEILING PLAN. SPLAY WIRES SHALL BE TAUT BUT SHALL NOT DISTORT GRID.

11 ELECTRICIAN SHALL PROVIDE (2) SLACK HANGER WIRES AT OPPOSITE CORNERS OF ALL LIGHT FIXTURES. WIRES SHALL BE ATTACHED TO STRUCTURE ABOVE PER NOTE 5. LIGHT FIXTURES SHALL BE ATTACHED TO CEILING GRID WITH (1) #8 SHEET METAL SCREW @ EACH CORNER.

12 DUCTWORK, IF REQUIRED, SHALL BE RIGIDLY ATTACHED TO STRUCTURE ABOVE AT INTERVALS NOT TO EXCEED 4'-0" AND SHALL NOT BE CLOSER THAN 6" TO ANY WIRE.

13 CEILING REGISTERS, WHEN INDICATED ON PLANS, SHALL BE ATTACHED TO STRUCTURE ABOVE PER NOTE 5.

14 CONT. WALL ANGLE WITH POP RIVET TO EACH MEMBER.

15 CONTINUOUS WALL ANGLE.

16 6d NAIL @ 16" O.C. INTO BLOCK OR STUD.

17

18 ROOF JOIST

19 ROOF BEAM

20 CLOSE OFF CROSS TEE- INSERT ONE END OF CROSS TEE INTO MAIN RUNNER WITH BAYDNET. CUT OPPOSITE END TO FIT (IF LESS THAN 24"). INSERT MIN. 20 ga. MTL. STRAP THRU MAIN RUNNER. SECURE TO CROSS TEE W/ (2) #8 TEK SCREWS AT EACH END.

21 VERTICAL BRACE- 1/2" STEEL EMT AT SPLAY WIRE LOCATIONS. (MAX. HT. OF 4'-0") DRILL 1/8" HOLE THRU CONDUIT AT TOP & BOTTOM. ATTACH CONDUIT TO JOIST ABOVE OR TO BLOCKING W/ (2) #12 SCREWS @ TOP & BOTTOM.

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

ARCHITECT STAMP

DATE SIGNED JUN 04 2003

STRUCTURAL ENGINEER STAMP

PROJECT: 36'x40' BUSINESS LAB

TITLE: 36'x40' REFLECTED CEILING PLAN

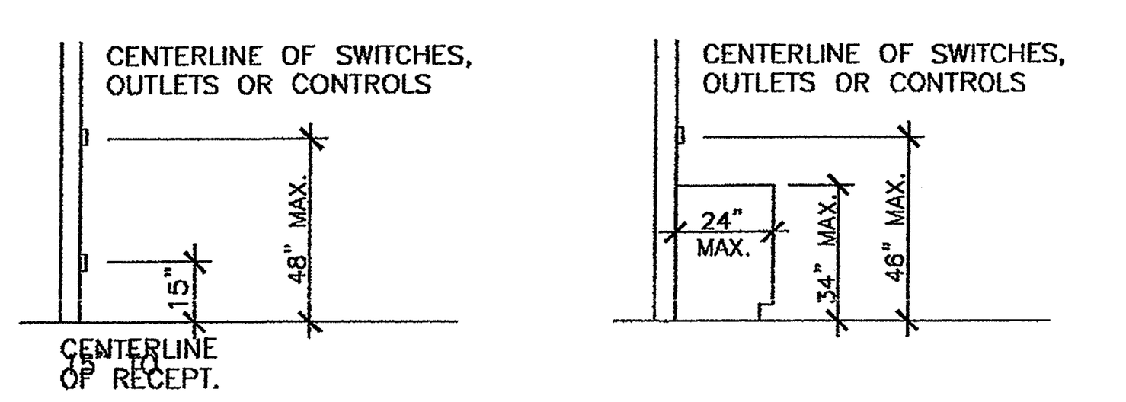
JOB #	03-1003
DATE	5-6-03
DRAWN BY	db
SCALE	1/4"=1'-0"
APPROVED	
REVISIONS	

SHEET NO.
A-3.2-36

SYMBOL LEGEND

- DISCONNECT–GENERAL SWITCH R610–B,60 AMP. NOT REQUIRED ON A/C UNITS WITH INTERNAL DICONNECT BREAKER
- PULL STATION J–BOX W/ 3/4"ø CONDUIT @ 48" A.F.F.
- EXT. HORN J–BOX W/ 3/4"ø CONDUIT @ + 7'–0" A.F.F.
- 110V RECEPTACLE 20 AMP SPECIFICATION GRADE @ +18" A.F.F.
- SWITCH @ +42" A.F.F.
- FLOOR MOUNTED J–BOX W/3/4" CONDUIT
- EXTERIOR LIGHT +7'–6"– SEE FIXTURE SCHEDULE
- HORN/STROBE LIGHT J–BOX W/ 3/4"ø CONDUIT @ + 80" A.F.F.
- SMOKE DETECTOR J–BOX W/ 3/4"ø CONDUIT @ CEILING
- HEAT DETECTOR J–BOX W/ 3/4"ø CONDUIT IN ATTIC SPACE (ONE PER MODULE, IN ATTIC TYP.)
- OVERRIDE SWITCH @ +42"
- DIRECTIONAL PHOTO CELL CONTROL ON ROOF
- CLOCK W/CLOCK OUTLET @ +8'–0"
- EMERGENCY LIGHT W/ BATTERY BACK–UP
- LIGHTED EXIT SIGN W/ BATTERY BACKUP

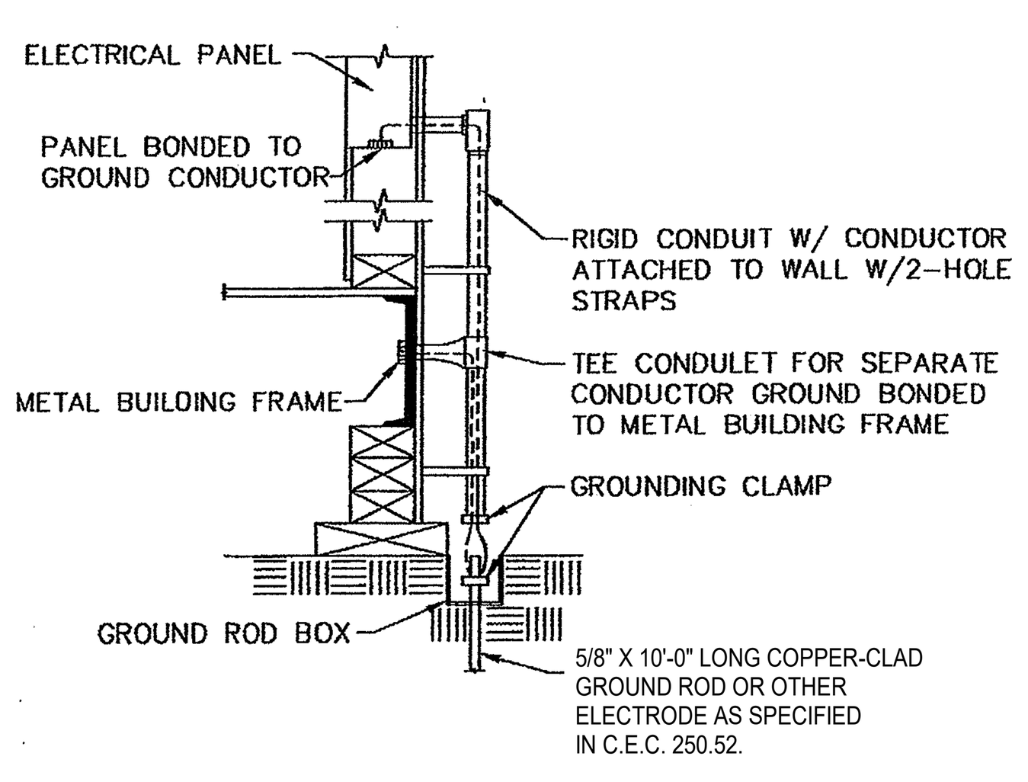
NOTE:
ALL FIXTURE MOUNTING HEIGHTS ARE TO THE CENTER OF THE FIXTURE (U.N.O.)



MOUNTING HEIGHT OVER OBSTRUCTION

FIRE ALARM NOTES

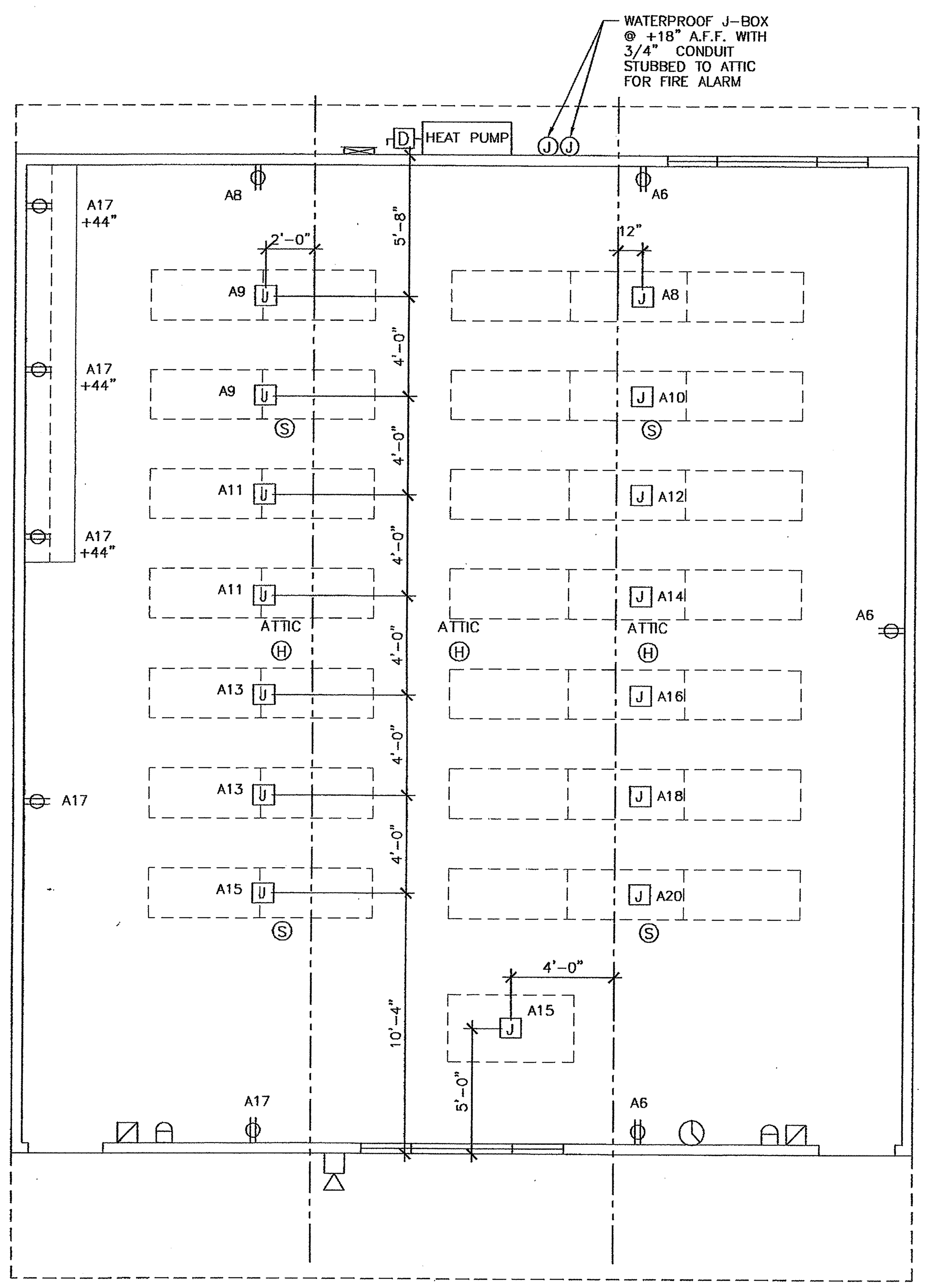
1. FIRE ALARM SYSTEM SHALL COMPLY W/ TITLE 24 SEC. 305.9, TITLE 24, PART 3, ARTICLE 760 OF THE CALIFORNIA CODE OF REGULATIONS AND CALIFORNIA FIRE REGULATIONS, ARTICLE 10.
2. INSTALLATION OF FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAIL PLANS, SPECIFICATIONS AND ENGINEERING CALCULATIONS HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STUCTURAL ENGINEER IN GENERAL CHARGE OF DESIGN AND THE SIGNATURE OF THE ARCHITECT OR PROFESSIONAL ENGINEER WHO HAS BEEN DELEGATED RESPONSIBILITY COVERING THE WORK SHOWN ON A PARTICULAR PLAN OR SPECIFICATION, AND APPROVED BY THE OFFICE OF THE STATE ARCHITECT AND STATE FIRE MARSHAL.



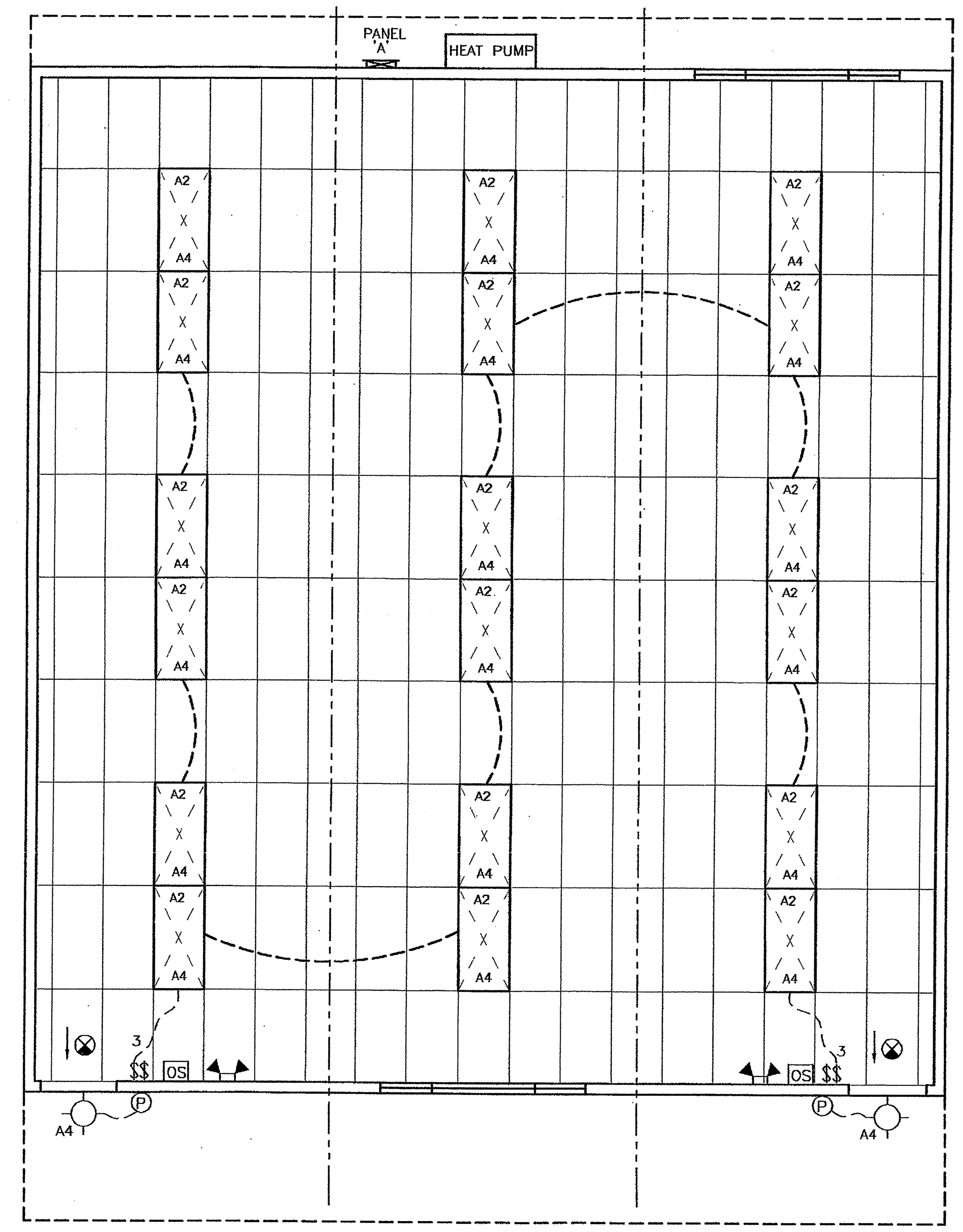
NOTES:
1. SIZE OF CONDUCTORS SHALL COMPLY W/NEC TABLE 250–95.
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL & TO METAL BUILDING FRAME (NEC 250–81) IN ADDITION TO THE DETAIL SHOWN ABOVE. BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. INTO THE SOIL IF AVAILABLE (NEC 250–81 & 250–83).
3. ALL MODULES OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). INCLUDING RAMP TO STEEL FRAME.
4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS W/CONDUCTORS AS SHOWN, SEPARATED AT LEAST 6'–0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (NEC 250–84).
5. PROJECT INSPECTOR SHALL WITNESS GROUNDING TEST.

ACCEPTABLE GROUNDING DETAIL

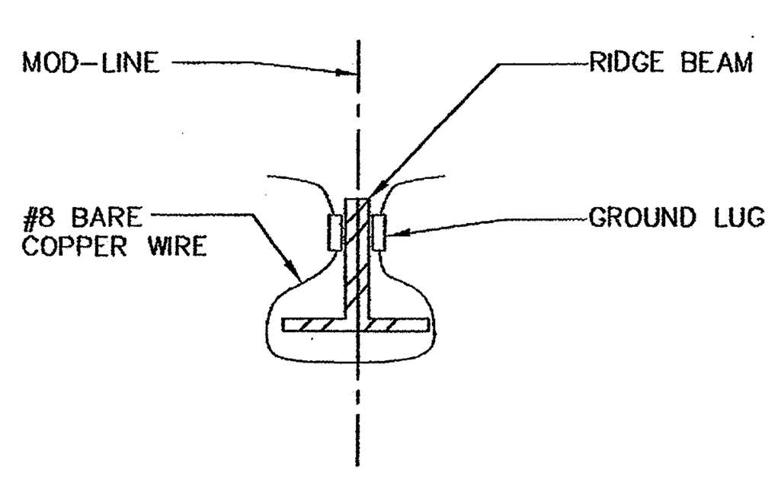
BY OWNER



ELECTRICAL POWER PLAN



ELECTRICAL LIGHTING PLAN



MODULE BONDING

PANELBOARD SCHEDULE													PANEL A
VOLTS 120/240			PHASE 1			BUSS 150 A				FEED BOTTOM			
MAIN BRKR 150 A			WIRE 3			MOUNT SURFACE				LOCATION EXTERIOR			
DESCRIPTION	WATTS Aø	WATTS Bø	WIRE SIZE	BREAKER	POLE	CKT. NO.	CKT. NO.	POLE	BREAKER	WIRE SIZE	WATTS Aø	WATTS Bø	DESCRIPTION
5–TON HEAT PUMP	5175	——	8	60	2	1	2	1	20	12	939	——	LIGHTS
5–TON HEAT PUMP	——	5175	–	–	–	3	4	1	20	12	——	939	LIGHTS
HEAT STRIP	2990	——	10	30	2	5	6	1	20	12	540	——	RECEPT.
HEAT STRIP	——	2990	–	–	–	7	8	1	20	12	——	800	FLOOR MOUNTED J–BOX
FLOOR MOUNTED J–BOX	1200	——	–	–	–	9	10	1	20	12	800	——	FLOOR MOUNTED J–BOX
FLOOR MOUNTED J–BOX	——	1200	–	–	–	11	12	1	20	12	——	800	FLOOR MOUNTED J–BOX
FLOOR MOUNTED J–BOX	1200	——	–	–	–	13	14	1	20	12	800	——	FLOOR MOUNTED J–BOX
FLOOR MOUNTED J–BOX	——	1200	–	–	–	15	16	1	20	12	——	800	FLOOR MOUNTED J–BOX
RECEPT.	1260	——	–	–	–	17	18	1	20	12	800	——	FLOOR MOUNTED J–BOX
–	——	——	–	–	–	19	20	1	20	12	——	800	FLOOR MOUNTED J–BOX
SUB TOTAL	11,825	10,565									4,599	4,139	SUB TOTAL

LOAD KW		TOTAL LOAD
A 15,164 B 14,704 TOT 29,868	*L.C.L. = 1,878 x 1.25 = 2,348 OTHER = 27,990 MAX DEMAND = 30,338	MAX DEMAND 126.4 AMPS

FIXTURE SCHEDULE		
SYMBOL	DESCRIPTION	WATTS
	2'x 4' FLUORESCENT DROP IN LIGHT FIXTURE ACRYLIC PRASMATIC LENS, DOUBLE ELECTRONIC BALLAST, (3) 32 WATT T–8 TUBES, WEIGHT 27 LBS.	96 WATTS
	INCANDESCENT SURFACE MOUNTED EXTERIOR LIGHT FIXTURE WITH IMPACT RESISTANT ENCLOSURE WITH DIRECTIONAL PHOTO CELL CONTROL ON ROOF.	75 WATTS

ARCHITECT STAMP

DATE SIGNED
JUN 04 2003

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL 01 105425
AC___ FLS___ SS
DATE
STATE AGENCY STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-104778
AC___ FLS___ SS___
DATE:
STATE AGENCY STAMP

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA, 92507
PHONE: (909) 788–3035 FAX: (909) 788–1523

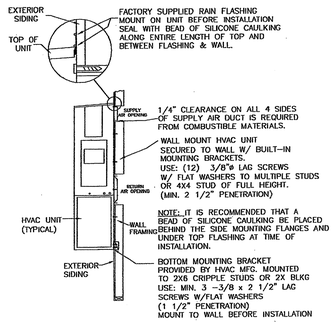
PROJECT 36'x40' BUSINESS LAB

TITLE 36'x40' ELECTRICAL LIGHTING PLAN ELECTRICAL POWER PLAN

JOB #	03–1003
DATE	5–6–03
DRAWN BY	db
SCALE	1/4"=1'–0"
APPROVED	
REVISIONS	

SHEET NO.
E–1.2–36

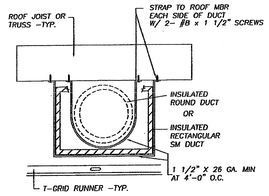
SIZE OF SUPPLY AND RETURN AIR OPENINGS AS PER MFG.'S SPECS ACCORDING TO SIZE OF HVAC UNIT



AIR FILTER: SEE GEN. NOTES ON ARCH'L SHEET OF PLANS

HVAC MOUNTING

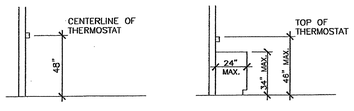
SCALE: 3/8" = 1'-0"



FACTORY-MADE AIR DUCTS: SEE GENERAL NOTES ARCH'L SHEET OF PLANS

DUCT MOUNTING

SCALE: 1" = 1'-0"



MOUNTING HEIGHT OVER OBSTRUCTION

BARD HVAC OPENING @ SUPPLY		
10 SEER	SIZE	OPENING
WH	5.0 TON	31 X 11

EQUIPMENT & MATERIAL SCHEDULE

HP 1 — **5 TON**

HEAT PUMP 'BARD' WALLMOUNT, WH60-A05VP4 5KW
56,000 NOM. BTUH COOLING CAPACITY-10.20 SEER
58,000 NOM. BTUH HEATING CAPACITY FROM COMPRESSOR-7.00 HSPF
ADDITIONAL 17,065 NOM. BTUH HEATING CAPACITY FROM HEAT STRIP
DUAL CIRCUIT:
CIRCUIT#1: MCA 45, MOCP 60, MIN. WIRE SIZE #8
CIRCUIT#2: MCA 26, MOCP 30, MIN. WIRE SIZE #10
1875 CFM @ .3 ESP, UNIT WEIGHT 510 LBS., 230 v., 60 CYCLE, SINGLE PHASE

NOTE:
ADJUST OUTSIDE AIR DAMPER TO A MIN. OF 534 CFM

T — THERMOSTAT - WHITE ROGERS 1F92-371
AUTO CHANGEOVER, ELECTRONIC, 5+2 DAY
3 HEAT, 2 COOL, MOUNT AT +48" A.F.F.
USE STAT GUARD #29-0277

SUPPLY REGISTER, CEILING, SHOEMAKER
104-OBD, 16x16-12, T-BAR, OBD
4 WAY FIXED CURVE BLADE, U.N.O.

SUPPLY BALANCE DAMPER (SIZE AS NOTED)

MECHANICAL NOTES

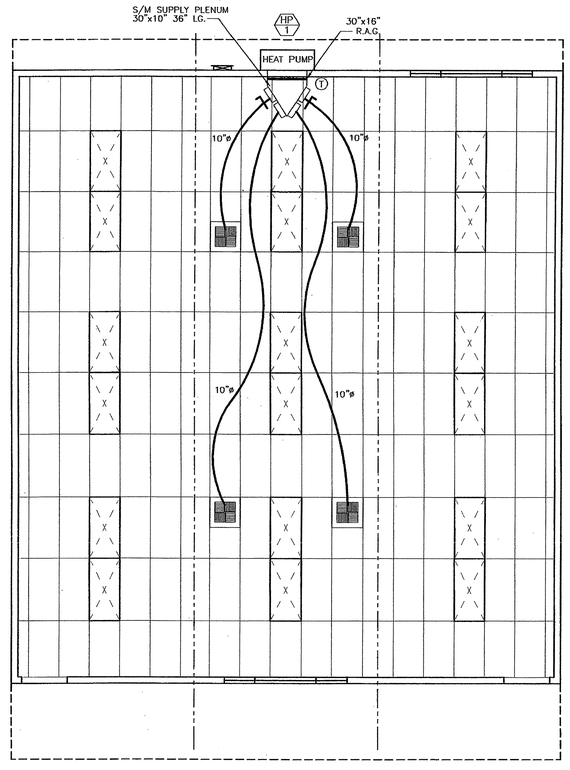
FLEXIBLE DUCT SHALL BE MODULAR METAL FABRICATORS SERIES FDMA R4.2 WITH INSULATION, A POLY JACKET, AND A WIRE ENCAPSULATED NON-PERFORATED CORE THAT COMPLIES WITH ASTM C-518, 1991. FLEXIBLE DUCTING SHALL BE UL LISTED CLASS 1 AIR DUCT WITH A FLAME SPREAD RATING NOT TO EXCEED 25, AND A SMOKE-DEVELOPED RATING NOT TO EXCEED 50 IN ACCORDANCE WITH NFPA 90A & 90B.

THERMOSTAT PROGRAMMING TO BE PERFORMED AND BATTERY PROVIDED BY OTHERS ON SITE.

TEST AND BALANCE OF HVAC SYSTEM TO BE PROVIDED AND PERFORMED BY OTHERS ON SITE.

ALL HVAC EQUIPMENT LEAVES FACTORY WIRED FOR 240V. OPERATION. THE ACCEPTABLE OPERATING RANGE FOR THE 240 & 208 TAPS ARE:

TAP	RANGE
240	253-216
208	220-187



MECHANICAL PLAN

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

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

ARCHITECT STAMP

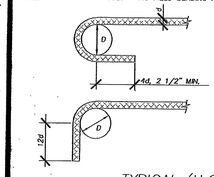
STRUCTURAL ENGINEER STAMP

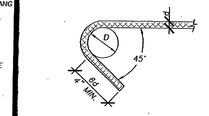
PROJECT: 36'x40' BUSINESS LAB

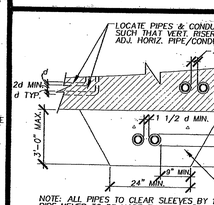
TITLE: 36'x40' MECHANICAL PLAN

JOB #	03-1003
DATE	5-6-03
DRAWN BY	db
SCALE	1/4"=1'-0"
APPROVED	
REVISIONS	

SHEET NO.
M-1.2-36







IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

GENERAL NOTES

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE 2001 EDITION OF THE CALIFORNIA BUILDING CODE, CCR TITLE 24, PART 2 (CBC) AND CCR TITLE 24, PART 1, CHAPTER 4, GROUP 1, LATEST REVISIONS (MODIFICATIONS TO THE 1997 UNIFORM BUILDING CODE (UBC), UBC STANDARDS AND UBC RECOGNIZED STANDARDS. – NOTE, ALL UBC RECOGNIZED STANDARDS AS APPLICABLE ARE REQUIRED FOR THIS PROJECT.) ALSO REFER TO THE DIVISION OF THE STATE ARCHITECT – STRUCTURAL SAFETY SECTION "INTERPRETATIONS OF REGULATIONS". SEE ESPECIALLY IR 16-1. THESE STRUCTURES ARE DESIGNED PER THE MODIFIED REQUIREMENTS TEMPORARY FOUNDATIONS (U.O.N.).
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION AND SHALL PROVIDE ADEQUATE SHORING AND BRACING DURING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH APPLICABLE SAFETY REGULATIONS.
3. DETAILS NOT SPECIFICALLY SHOWN SHALL BE SIMILAR TO DETAILS FOR SIMILAR CONSTRUCTION SHOWN ON THESE DRAWINGS.
4. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ANY DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE OWNER AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
5. NO STRUCTURAL MEMBERS SHALL BE CUT, NOTCHED OR OTHERWISE PENETRATED UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER IN ADVANCE OR SHOWN ON THESE DRAWINGS.
6. TYPICAL DETAILS SHALL APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
7. WHERE THESE GENERAL NOTES AND TYPICAL DETAILS ARE IN CONFLICT WITH THE SPECIFICATIONS, THESE GENERAL NOTES AND TYPICAL DETAILS SHALL GOVERN.
8. PROVIDE OPENINGS, CURBS, FRAMING AND/OR SUPPORTS FOR ITEMS INDICATED ON ARCHITECTURAL, MECHANICAL, ELECTRICAL OR OTHER DRAWINGS INCLUDED IN CONSTRUCTION DOCUMENTS.
9. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND OTHER INFORMATION NOT SPECIFICALLY SHOWN ON STRUCTURAL DRAWINGS.
10. ALL ELEVATIONS ARE REFERENCED FROM TOP OF FINISHED FIRST FLOOR ELEVATION = 0'-0".
11. PROVIDE INSPECTIONS, TESTS AND REPORTS IN ACCORDANCE WITH CCR TITLE 24, PART 2 AND CCR TITLE 24, PART 1, CHAPTER 4, GROUP 1.
12. IN ADDITION TO CONTINUOUS PROJECT INSPECTION, THE FOLLOWING SPECIAL INSPECTIONS SHALL BE REQUIRED, AS A MINIMUM:
    A. INSPECTION OF ALL WELDING FOR STRUCTURAL STEEL, PER TITLE 24, PART 2, SECTION 2231A.5.
    B. INSPECTION FOR CONCRETE AND CONCRETE REINFORCEMENT PLACEMENT, PER TITLE 24, PART 2, SECTION 1701A.5.1.
13. ALL REQUIRED INSPECTIONS AND TESTS ARE THE RESPONSIBILITY OF THE OWNER. ALL INSPECTORS SHALL PROVIDE REPORTS AS REQUIRED BY TITLE 24, PART 1, CHAPTER 4, GROUP 1.
14. DIMENSIONS AND ELEVATIONS SHOWN ARE APPROXIMATE AND ARE PROVIDED AS AN AID IN INTERPRETING THE DRAWINGS ONLY. DIMENSIONS AND ELEVATIONS MUST BE VERIFIED WITH ARCHITECTURAL DRAWINGS. IN THE EVENT OF CONFLICT, DIMENSIONS AND ELEVATIONS SHOWN ON ARCHITECTURAL DRAWINGS SHALL GOVERN. DRAWING SCALES GIVEN ARE APPROXIMATE –DO NOT SCALE PLANS OR DETAILS.
15. WHEN MODULE IS RELOCATED – DO NOT REINSTALL NAILS OR SCREWS IN EXISTING HOLES.

WOOD:

1. STRUCTURAL FRAMING SHALL BE HEM FIR – LARCH GRADED IN ACCORDANCE WITH THE STANDARD GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION OR STANDARD GRADING RULES NO. 16 OF THE WEST COAST LUMBER INSPECTION BUREAU, LATEST EDITIONS. GRADES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE DRAWINGS. (HEM FIR SOUTH IS NOT ALLOWED.) EACH PIECE SHALL BE GRADE MARKED AND NO PIECE MAY FALL BELOW GRADES INDICATED.
   ALL FRAMING EXCEPT AS NOTED HEM FIR NO. 2.
2. PLYWOOD SHALL BE AS SHOWN ON THESE DRAWINGS WITH EXTERIOR GLUE IN ACCORDANCE WITH U.S. PRODUCT STANDARD PS 1-95. ALL PANELS SHALL BE MARKED WITH AN APA GRADE MARK WITH AN IDENTIFICATION INDEX AS SHOWN ON DRAWINGS. USE 4'x8' PANELS, MINIMUM, EXCEPT AT BOUNDARIES AND FRAMING CHANGES WHERE MINIMUM PANEL DIMENSION SHALL BE 24" AT ROOFS AND FLOORS AND 12" AT WALLS.
3. BOLTS FOR TIMBER CONNECTIONS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1-1981 AND 1991 EDITION OF THE NDS. BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF OF THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION BY THE NATIONAL FOREST PRODUCTS ASSOCIATION (NDS). BOLT HOLES SHALL BE 1/32 TO 1/16 INCH LARGER THAN BOLT DIAMETER. RE-TIGHTEN BOLTS BEFORE CLOSING IN WORK. BOLTS SHALL BE FULL BODY STEEL BOLTS WITH MINIMUM YIELD STRENGTH OF 45,000 PSI.
4. LAG SCREWS SHALL BE STEEL AND CONFORM TO ANSI/ASME STANDARD B18.2.1 AND THE REQUIREMENTS OF THE 1991 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS). HOLES FOR LAG SCREW SHANKS SHALL BE BORED THE SAME DEPTH AND DIAMETER AS THE SHANK. THE REMAINING DEPTH OF PENETRATION OF THE SCREW SHALL BE BORED TO 70% OF THE SHANK DIAMETER. ONE QUARTER INCH (1/4") DIAMETER LAG SCREWS NEED NOT HAVE PRE-DRILLED HOLES IF IT CAN BE SHOWN THAT THE WOOD MEMBERS ARE NOT DAMAGED DURING INSTALLATION. PROVIDE FULL DIAMETER BODY LAG SCREWS WITH BENDING YIELD STRENGTHS PER TABLES 9.3 IN NDS.
5. PROVIDE MALLEABLE IRON WASHERS OR EQUIVALENT CUT PLATE WASHERS (NOT LESS THAN A STANDARD CUT WASHER) UNDER NUTS AND BOLT OR LAG SCREW HEADS WHICH BEAR ON WOOD.
6. WOOD SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.6.1 AND THE REQUIREMENTS OF THE 1991 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION BY THE NATIONAL FOREST PRODUCTS ASSOCIATION (NDS). GALVANIZED OR OTHER CORROSION RESISTANT COATING WHERE EXPOSED TO WEATHER OR USED IN FOUNDATIONS. SCREWS SHALL BE STEEL WITH CUT THREADS AND BENDING YIELD STRENGTHS PER TABLES 11.3 IN NDS.
7. WOOD MEMBERS SHALL BE CUT OR NOTCHED ONLY AS SHOWN ON STRUCTURAL DRAWINGS.
8. WHEN REQUIRED NAILING TENDS TO SPLIT WOOD MEMBERS, NAIL HOLES SHALL BE PRE-BORED TO 3/4 OF THE NAIL DIAMETER.
9. STRUCTURAL NAILING SHALL BE WITH FULL HEAD COMMON NAILS PER ALL REQUIREMENTS OF 1991 NDS. NAILING NOT SPECIFICALLY INDICATED SHALL COMPLY WITH CCR TITLE 24, PART 2, TABLE 23A-I-Q. ALL NAILS SHALL BE GALVANIZED OR OTHER CORROSION RESISTANT COATING WHERE EXPOSED TO WEATHER, IN FOUNDATIONS AND AS NOTED ON PLANS, PER THE REQUIREMENTS OF CCR TITLE 24, PART 2, WITH MINIMUM BENDING YIELDS PER TABLE 12.3B IN NDS. (SEE NAIL EQUIVALENCE BELOW.)
10. NAIL EQUIVALENCE: (PROVIDE MINIMUM NAIL LENGTHS AS REQUIRED FOR SPECIFIED PENETRATION, TYP. U.O.N.)
    6d EQUALS .113" DIA. – PROVIDE 1.36" MIN. POINT PENETRATION
    8d EQUALS .131" DIA. – PROVIDE *1.57" MIN. POINT PENETRATION
    10d EQUALS .148" DIA. – PROVIDE *1.78" MIN. POINT PENETRATION
    16d EQUALS .162" DIA. – PROVIDE *1.94" MIN. POINT PENETRATION
    * 1 1/2" AT 2x MEMBERS
11. EXCEPT WHERE MORE STRINGENT CONSTRUCTION IS SHOWN ON THE DRAWINGS. WOOD CONSTRUCTION SHALL COMPLY WITH TITLE 24. PART 2, SECTION 2320A, CONVENTIONAL LIGHT-FRAME CONSTRUCTION PROVISIONS, AS A MINIMUM.
12. PRESSURE PRESERVATIVE TREATMENT SHALL BE PER SECTION 2303A.5.1, CCR TITLE 24, PART 2. PROVIDE QUALITY MARK ON ALL TREATED FOUNDATION MEMBERS FROM AGENCY APPROVED BY DSA. ALL FOUNDATION MEMBERS SHALL BE MARKED AS "FOR GROUND CONTACT (LP22)" OR "FOR ABOVE GROUND USE (LP2)" AS APPROPRIATE. TREAT ALL CUT ENDS OF PRESSURE TREATED MEMBERS WITH AN APPROVED PRESERVATIVE. (WILLARD W/B COPPER GREEN 2% OR AN APPROVED EQUIVALENT). WHERE NOTED, MEMBERS BELOW THE SUB FLOOR THAT ARE NOT A PART OF THE FOUNDATION SHALL BE PRESSURE TREATED PER LP2. A QUALITY CONTROL STAMP IS NOT REQUIRED FOR STRUCTURAL MEMBERS BELOW THE SUB FLOOR THAT ARE NOT PART OF THE FOUNDATION.
13. IF MACHINE NAILING IS UTILIZED FOR THIS PROJECT, CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF CCR TITLE 24, PART 2, SECTIONS 2315A.3.3. MACHINE NAILING IS SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER OR ARCHITECT AND THE DIVISION OF THE STATE ARCHITECT.
14. POWDER DRIVEN FASTENERS SHALL BE BY HILTI, INC., HILTI FASTENING SYSTEMS – OR EQUAL. INSTALL IN ACCORDANCE WITH DRAWINGS AND THE MANUFACTURER'S RECOMMENDATIONS AND ICBO APPROVALS.
15. FASTENERS FOR PRESSURE-PRESERVATIVE TREATED AND FIRE-RETARDANT TREATED WOOD SHALL COMPLY WITH SEC. 2304A.3 OF CBC.
16. NAILS AND SPIKES USED IN WET OR EXTERIOR LOCATIONS SHALL COMPLY WITH SEC. 2318A.3.4 OF CBC.

CONCRETE:

1. CONCRETE SHALL DEVELOP A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS IN ACCORDANCE WITH ASTM C31 AND C39. TESTING SHALL BE IN ACCORDANCE WITH CBC (CCR TITLE 24, PART 2) SECTION 1905A.6. THREE CYLINDERS FOR STRENGTH TESTS OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN BY THE OWNER'S TESTING LABORATORY NOT LESS THAN ONCE A DAY, NOR LESS THAN ONCE FOR EACH 50 CUBIC YARDS OF CONCRETE PLACED. PROVIDE 6% ENTRAINED AIR BY VOLUME WITH ADMIXTURE PER ASTM C260 FOR SITES ABOVE 1500 FEET IN ELEVATION, SEE ALSO CBC SECTION 1904A.2.
2. ALL CONCRETE SHALL BE CONSOLIDATED BY MECHANICAL VIBRATORS.
3. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CBC (CCR TITLE 24, PART 2) AND ACI STANDARD 318, LATEST EDITION, OF THE AMERICAN CONCRETE INSTITUTE, UNLESS SHOWN OR NOTED OTHERWISE ON THESE DRAWINGS.
4. AGGREGATE SHALL CONFORM TO ASTM C33 AND CBC SECTION 1903A.3.
5. CEMENT SHALL BE ASTM C150, TYPE I OR TYPE II. SEE ALSO REQUIREMENTS OF CBC SECTION 1903A.2.
6. REINFORCING STEEL SHALL BE DEFORMED CONFORMING TO ASTM A615 GRADE 40 UNLESS OTHERWISE NOTED.
7. WELDED WIRE FABRIC REINFORCEMENT SHALL CONFORM TO ASTM A185.
8. WELDING OF REINFORCING STEEL SHALL BE PERFORMED ONLY WHERE INDICATED ON THE DRAWINGS AND SHALL BE IN COMPLIANCE WITH ALL REQUIREMENTS OF THE CBC, UBC STANDARD 19-2 AND THE REINFORCING STEEL WELDING CODE, AWS D1.4, LATEST REVISION, OF THE AMERICAN WELDING SOCIETY. PROVIDE WELDING PROCEDURE AND MILL TEST REPORTS FOR ALL REINFORCEMENT TO BE WELDED. REINFORCING WITH C.E. ABOVE .75 SHALL NOT BE WELDED. ARCHITECT SHALL APPROVE WELDING PROCEDURE, WELDER QUALIFICATIONS AND MILL TEST REPORTS PRIOR TO EXECUTION OF WELDING. PROVIDE INSPECTION PER SECTION 1929A.12, TITLE 24, PART 2.
9. COVERAGE FOR REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CBC AND ACI STANDARD 318 UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
10. LAP SPLICES FOR REINFORCING BARS SHALL BE 50 BAR DIAMETERS OR 18" MINIMUM UNLESS SHOWN OTHERWISE ON THE DRAWINGS. WIRE BARS TOGETHER AT LAPS OR SPLICES. STAGGER LAPS IN ADJACENT HORIZONTAL OR SLOPING REINFORCING BARS A MINIMUM OF THE REQUIRED SPLICE LENGTH. HOOKS AND BENDS SHALL BE CBC STANDARD PER CCR TITLE 24, PART 2, SECTION 1907A.1 THROUGH 1907A.3 UNLESS SHOWN OTHERWISE. WELDED WIRE FABRIC SHALL BE SPLICED BY LAPPING A MINIMUM OF 12 INCHES OR TWO CROSS WIRES, WHICHEVER IS GREATER.
11. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ASTM C94 (UBC STANDARD 19-3) AND ACI STANDARD 304. ALSO COMPLY WITH REQUIREMENTS OF CCR TITLE 24, PART 2, SECTION 1905A.
12. ALL EMBEDDED ITEMS SHALL BE PLACED ACCURATELY AND SECURED PRIOR TO BEGINNING CONCRETE PLACEMENT.
13. CONSTRUCTION JOINTS SHALL BE LOCATED SO AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE. CONSTRUCTION JOINTS SHALL COMPLY WITH CBC SECTION 1906A.4. LOCATE CONSTRUCTION JOINTS AS SHOWN ON THE DRAWINGS OR APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER AND DSA.
14. PROVIDE SHOP DRAWINGS FOR ALL REINFORCING STEEL TO ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO BEGINNING ANY FABRICATION.
15. CONTRACTOR SHALL PREPARE AND SUBMIT CONCRETE MIX DESIGNS TO THE ARCHITECT FOR APPROVAL PRIOR TO PLACEMENT OF ANY CONCRETE. CONCRETE MIX DESIGNS SHALL BE PER CBC SECTION 1905A.2, METHOD A (TABLE 19A-A-7). [ALTERNATE MIX DESIGN: METHOD B OR C MAY BE USED PER CBC SECTION 1905A.2 THROUGH 1905A.3. METHOD B OR C MIX DESIGNS SHALL BE SIGNED BY A CIVIL ENGINEER LICENSED IN CALIFORNIA.]
16. ALL GROUT SHALL BE NONMETALLIC NON-SHRINK HIGH STRENGTH GROUT BY MASTER BUILDERS OR EQUIVALENT AS APPROVED BY THE ARCHITECT. UTILIZE PRODUCTS RECOMMENDED BY THE MANUFACTURER FOR EACH APPLICATION AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
17. REINFORCING AND EMBEDMENT ITEMS SHALL BE FREE OF EXCESSIVE SCALE OR RUST, DIRT, GREASE, OIL OR ANY OTHER SUBSTANCE THAT WILL IMPAIR BOND WITH CONCRETE.
18. OWNER SHALL PROVIDE INSPECTIONS IN ACCORDANCE WITH CCR TITLE 24 FOR THE PLACEMENT OF CONCRETE AND CONCRETE REINFORCEMENT, FOR BOLTS INSTALLED IN CONCRETE AND FOR SAMPLING CONCRETE. OWNER'S INSPECTOR SHALL PROVIDE INSPECTION REPORTS TO THE ARCHITECT AND THE DIVISION OF THE STATE ARCHITECT.
19. ADDITIONALLY, PROVIDE TESTS AND INSPECTIONS IN ACCORDANCE WITH TITLE 24, PART 2, SECTION 1929A. A PLACING RECORD SHALL BE MAINTAINED FOR ALL CONCRETE PLACED IN THE STRUCTURE.
20. BATCH PLANT INSPECTION, CEMENT AND REINFORCING TESTS ARE NOT REQUIRED. THE QUANTITIES OF CONCRETE MATERIALS SHALL BE CERTIFIED BY A LICENSED WEIGHMASTER AND THE QUALITY OF MATERIALS SHALL BE VERIFIED BY THE OWNER'S TESTING AGENCY. COMPLY WITH ALL REQUIREMENTS OF TITLE 24, PART 2, SECTIONS 1929A.5.2 AND 1929A.6.
21. ALL CONCRETE WORK SHALL BE FORMED. CASTING OF FOUNDATION CONCRETE AGAINST SIDES OF FOOTING EXCAVATIONS SHALL NOT BE ALLOWED EXCEPT AS SPECIFICALLY APPROVED BY ARCHITECT, STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.
22. MAX. CONC. SLUMP TO BE 4"±1"

CONCRETE FOUNDATION:

1. FOUNDATION BEARING SHALL BE AS APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND THE OWNER'S ARCHITECT. IT IS THE SCHOOL DISTRICT'S RESPONSIBILITY TO PROVIDE ADEQUATE BEARING TO DEVELOP THE ALLOWABLE BEARING PRESSURE NOTED BELOW.
2. FOUNDATIONS ARE DESIGNED FOR A MAXIMUM DEAD PLUS LIVE LOAD ALLOWABLE SOIL BEARING PRESSURE OF 1000 PSF, AS PER TITLE 24, TABLE 18A-I-A.
3. THE BOTTOM OF ALL FOOTINGS SHALL BE LEVEL. CHANGES IN FOOTING ELEVATIONS SHALL BE MADE UTILIZING THE TYPICAL FOOTING STEP DETAILS ON THESE DRAWINGS.
4. CENTER FOOTINGS UNDER WALLS OR COLUMNS UNLESS OTHERWISE INDICATED ON THESE DRAWINGS.
5. PROVIDE PROPER GRADING OF SITE SUCH THAT WATER DOES NOT POND OR OTHERWISE COLLECT UNDER THE BUILDING.
6. FOUNDATIONS ARE DESIGNED AS FIXED FOUNDATIONS IN ACCORDANCE WITH TITLE 24, CHAPTER 18A. (REFERENCE IR 16-1)
    A. ALL BUILDINGS, PERMANENT OR OTHER RELOCATABLE, ADJACENT TO THESE RELOCATABLE BUILDINGS MUST BE SEPARATED FROM THESE RELOCATABLE BUILDINGS BY 4" MINIMUM.

STRUCTURAL STEEL:

1. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE ASTM A36 UNLESS NOTED OTHERWISE.
2. TUBE MEMBERS SHALL BE ASTM A500 WITH MIN. YIELD STRESS OF 46,000 PSI., PIPE MEMBERS SHALL BE ASTM A53 WITH A MIN. YIELD STRESS OF 35,000 P.S.I.
3. UNLESS OTHERWISE NOTED, LIGHT GAUGE STEEL PLATE (10 GAUGE AND LESS) SHALL BE GALVANIZED AND PER THE REQUIREMENTS OF ASTM A36, ASTM A446 OR EQUAL WITH MINIMUM YIELD STRESS OF 33,000 PSI.
4. ALL BOLTS SHALL BE ASTM A307 MACHINE BOLTS UNLESS NOTED OTHERWISE.
5. ALL WELDING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA BUILDING CODE (CBC) AND THE STRUCTURAL WELDING CODE – STEEL, AWS D1.1, LATEST EDITION, OF THE AMERICAN WELDING SOCIETY. INSPECTION OF ALL WELDING SHALL BE PROVIDED, SEE NUMBER 8, BELOW.
6. FABRICATION AND ERECTION OF STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN, OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) (CBC CHAPTER 22A, DIVISION V). ALSO COMPLY WITH REQUIREMENTS OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES. (THERE ARE NO SELF-SUPPORTING FRAMES ON THIS PROJECT – TEMPORARY BRACING IS REQUIRED UNTIL ALL ELEMENTS SHOWN ON STRUCTURAL DRAWINGS ARE IN PLACE.)
7. PRIME ALL STEEL SURFACES WITH AN APPROVED PRIMER, EXCEPT SURFACES TO BE EMBEDDED IN CONCRETE AND SURFACES TO RECEIVE FIELD WELDS. TOUCH-UP FIELD WELDS AND OTHER EXPOSED STEEL SURFACES AFTER ERECTION. ALTERNATE: PROVIDE GALVANIZED PER ASTM STANDARDS.
8. PROVIDE TESTS AND INSPECTIONS IN ACCORDANCE WITH CCR TITLE 24, PART 2, SECTION 2231A (CBC). ALL STEEL SHALL BE PROPERLY IDENTIFIED PER SECTION 2231A.1.
9. WELDING SHOULD BE IN ACCORDANCE WITH CCR TITLE 24. PART 2, SECTION 2231A.5.
10. ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEM SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 ft-lbs AT MINUS 20 DEGREES F, AS REQ. BY SEC. 2213A.4.1 OF CBC.

ABBREVIATIONS

A.B.	ANCHOR BOLT
ABV.	ABOVE
ADDL.	ADDITIONAL
ADJ.	ADJACENT
ALT.	ALTERNATE
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
BLDG.	BUILDING
BLKG.	BLOCKING
BLW.	BELOW
BM.	BEAM
B.O.	BOTTOM OF
BOT.	BOTTOM
B.S.	BOTH SIDES
BTWN.	BETWEEN
C.J.	CONSTRUCTION JOINT
℄	CENTERLINE
CLG.	CEILING
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONSTR.	CONSTRUCTION
CONN.	CONNECTION
CONT.	CONTINUOUS
CP	COMPLETE PENETRATION
CSK.	COUNTERSINK
DBL.	DOUBLE
DET.	DETAIL
D.F.	DOUGLAS FIR
DIAG.	DIAGONAL
DIM.	DIMENSION
D.O.	DITTO
DWG.	DRAWING
DIA., ø	DIAMETER
(E)	EXISTING
EA.	EACH
E.F.	EACH FACE
E.J.	EXPANSION JOINT
ELEV.	ELEVATION
E.N.	END NAIL
E.P.D.M.	ETHYLENE PROPYLENE DIENE MONOMER
EQ.	EQUAL
EQUIP.	EQUIPMENT
E.S.	EACH SIDE
EVT	EQUIVISCOUS TEMPERATURE
EXT.	EXTERIOR
E.W.	EACH WAY
F.F.	FINISH FLOOR
F.G.	FINISH GRADE
FIN.	FINISH
FLR.	FLOOR
F.N.	FACE NAIL
FND.	FOUNDATION
F.O.C.	FACE OF CONCRETE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
F.S.	FAR SIDE
FTG.	FOOTING
GA.	GAGE
GALV.	GALVANIZED
G.L.	GRID LINE
GLB	GLU-LAM BEAM
GYP. BD.	GYPSUM BOARD
HCB	HOLLOW CONCRETE BLOCK
HD	HOLDOWN
HDR.	HEADER
HK.	HOOK
HORIZ.	HORIZONTAL
H.S.	HIGH STRENGTH
IN.	INCH
INFO.	INFORMATION
INT.	INTERIOR
INTRM.	INTERMEDIATE
JT.	JOINT
LCTN.	LOCATION
MAX.	MAXIMUM
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MOD.	MODULE
M℄	MODULE LINE
(N)	NEW
N.S.	NEAR SIDE
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.H.	OPPOSITE HAND/OVERHANG
OPNG.	OPENING
OPP.	OPPOSITE
PC.	PIECE
PL. (℗)	PLATE
P.O.C.	POINT OF CONNECTION
PPT/PT	PRESSURE PRESERVATIVE TREATED
P.W.	PLYWOOD
REINF.	REINFORCEMENT
REQD.	REQUIRED
RWD.	REDWOOD
SHTHG.	SHEATHING
SIM.	SIMILAR
SQ.	SQUARE
STD.	STANDARD
STG'D.	STAGGERED
STIFF.	STIFFENER
S.W.	SHEARWALL
SYM.	SYMMETRICAL
T&B	TOP & BOTTOM
T&G	TONGUE & GROOVE
THRU	THROUGH
T.N.	TOE NAIL
T.O.	TOP OF
T.O.C.	TOP OF CONCRETE
T.O.S.	TOP OF STEEL
TS	TUBE STEEL
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
VERT.	VERTICAL
W/	WITH
W.P.	WORK POINT
WND.	WINDOW
WWF	WELDED WIRE FABRIC

PAD FOUNDATIONS: (RESTRAINED)

1. FOUNDATION BEARING SHALL BE AS APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AND THE OWNER'S ARCHITECT. IT IS THE RESPONSIBILITY OF THE PERSON IN CHARGE OF THE PROJECT SITE TO PROVIDE A MIN. OF 1000 PSF SOIL BEARING CAPACITY.
2. FOUNDATIONS ARE DESIGNED FOR A MAXIMUM DEAD PLUS LIVE LOAD ALLOWABLE SOIL BEARING PRESSURE OF 1000 PSF, AS PER IR 16-1.
3. THE BOTTOM OF ALL FOOTINGS SHALL BE LEVEL. CHANGES IN FOOTING ELEVATIONS SHALL BE MADE UTILIZING THE FOOTING SHIM DETAILS ON THESE DRAWINGS.
4. CENTER FOOTINGS UNDER WALLS OR COLUMNS UNLESS OTHERWISE INDICATED ON THESE DRAWINGS.
5. PROVIDE PROPER GRADING OF SITE SUCH THAT WATER DOES NOT POND OR OTHERWISE COLLECT UNDER THE BUILDING.
6. VERIFY THAT NO PIPES, UTILITIES, OR OTHER SUCH ITEMS OCCUR BELOW FOOTINGS.
7. FOUNDATIONS ARE DESIGNED AS "RESTRAINED FOUNDATION", IN ACCORDANCE WITH IR 16-1, TEMPORARY FOUNDATIONS.
    a. ANCHOR FOOTINGS AT BUILDING PERIMETER WITH 1" ø GALVANIZED STANDARD STEEL PIPES DRIVEN FLUSH WITH TOP OF WOOD FOUNDATION PADS AND PENETRATING SOIL 12" MINIMUM AT A MAXIMUM SPACING OF 10'-0" O.C. AT SIDEWALLS AND AT EACH CORNER EACH MODULE AT ENDWALLS.
    b. STAIRS AND RAMPS SHALL BE PROPERLY ANCHORED TO BUILDING TO PREVENT SEPARATION.
    c. ALL BUILDINGS, PERMANENT OR OTHER RELOCATABLE, ADJACENT TO THESE RELOCATABLE BUILDINGS MUST BE SEPARATED FROM THESE RELOCATABLE BUILDINGS BY 4" MINIMUM.
8. FINISH GRADES SHALL BE WITHIN MAX. 18" BELOW BOTTOM OF FLOOR JOISTS, WITHOUT EXCEPTION.
9. THE TIE PLATE WHICH ATTACHES THE FLOOR BEAM TO THE WOOD FOUNDATION AND THAT IS EXPOSED TO THE WEATHER IS TO BE GALVANIZED. TEK SCREWS THAT ATTACH THE TIE PLATE TO THE FLOOR BEAM ARE TO BE HOT-DIPPED GALVANIZED. ANCHOR BOLTS AND MECHANICAL EXPANSION ANCHORS WHICH ARE EXPOSED TO THE WEATHER ARE TO BE PAINTED WITH ZINC-BASED PAINT.

POWER DRIVEN SHOT PINS (LOW VELOCITY)

SHOT PINS MAY BE USED FOR SHEAR LOADS AND THEY MAY BE USED IN TENSION TO SUPPORT LOADS LESS THEN 100 POUNDS LIKE ACOUSTICAL CEILINGS, DUCT WORK, CONDUIT, ECT. ANY SHOT ANCHORS MUST HAVE ICBO APPROVAL FOR THE TYPE OF CONCRETE USED ON THE JOB. SHOT PINS MAY NOT BE USED IN CONCRETE CURBS.

THE ALLOWABLE LOADS SHALL BE 100 POUNDS OR 80% OF ICBO 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.

TESTING – THE OPERATOR, TOOL, AND FASTENER SHALL BE PRE-QUALIFIED BY THE PROJECT INSPECTOR. HE SHALL OBSERVE THE TESTING OF THE FIRST 10 FASTENER INSTALLATIONS. A TEST "PULL-OUT" LOAD OF NOT LESS THAN TWICE THE DESIGN LOAD 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 TEST UNDER THE PROJECT INSPECTOR'S SUPERVISION SHALL BE MADE OF APPROXIMATELY 1 IN 10 PINS. IF ANY PIN FAILS TESTING, TEST ALL PINS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE PASS, THEN RESUME THE INITIAL TESTING FREQUENCY.

MACHINE APPLIED NAILING

USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOBSITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE APPROVED IN 5/16" PLYWOOD. 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 MACHINE NAILING SHALL BE DISCONTINUED. (REFERENCE – TITLE 24, PART 2, SEC. 2315A.3.3)

TYPICAL DETAILS

NOTE: ALL BARS BENT COLD – NO FIELD BENDING ALLOWED.

INSIDE BEND DIAMETERS

BAR SIZE	D
#3 TO #8	6d
#9,#10,#11	8d
#14,#18	10d

INSIDE BEND DIAMETERS

BAR SIZE	D
#3	1 1/2"
#4	2"
#5	2 1/2"

A / S-1 STD HOOKS AND BENDS IN REINF. STEEL

B / S-1 STEP FOOTING DETAIL

C / S-1 CONC. REINF. DETAIL

NOTE: ALL PIPES TO CLR. SLEEVES BY 1" ALL AROUND –CAULK AS REQ'D

NOTE: ALL PIPES TO CLEAR SLEEVES BY 1" ALL AROUND – CAULK AS REQUIRED. PIPE NEVER TO BE MORE THAN 2'-6" BELOW BOTTOM OF FOOTING; STEP FOOTING IF REQUIRED PER TYPICAL STEP DETAILS.

D / S-1 PIPES AT FOOTINGS

DATE SIGNED
JUN 04 2003

JAMES T. SIMPSON
LICENSE EXPIRES 6-30-2004

PAUL DENNIS WESBERG
EXP. 9-2003

ARCHITECT APPROVAL

DATE SIGNED
MAY 21 2003

JAMES T. SIMPSON
LICENSE EXPIRES 6-30-2004
STRUCTURAL ENGINEERS STAMP

~~IDENTIFICATION STAMP~~
~~DIVISION OF THE STATE ARCHITECT~~
~~APPL 01 105425~~
~~AC ___ FLS ___ SS JW~~
~~DATE 6/19/03~~
STATE AGENCY APPROVAL

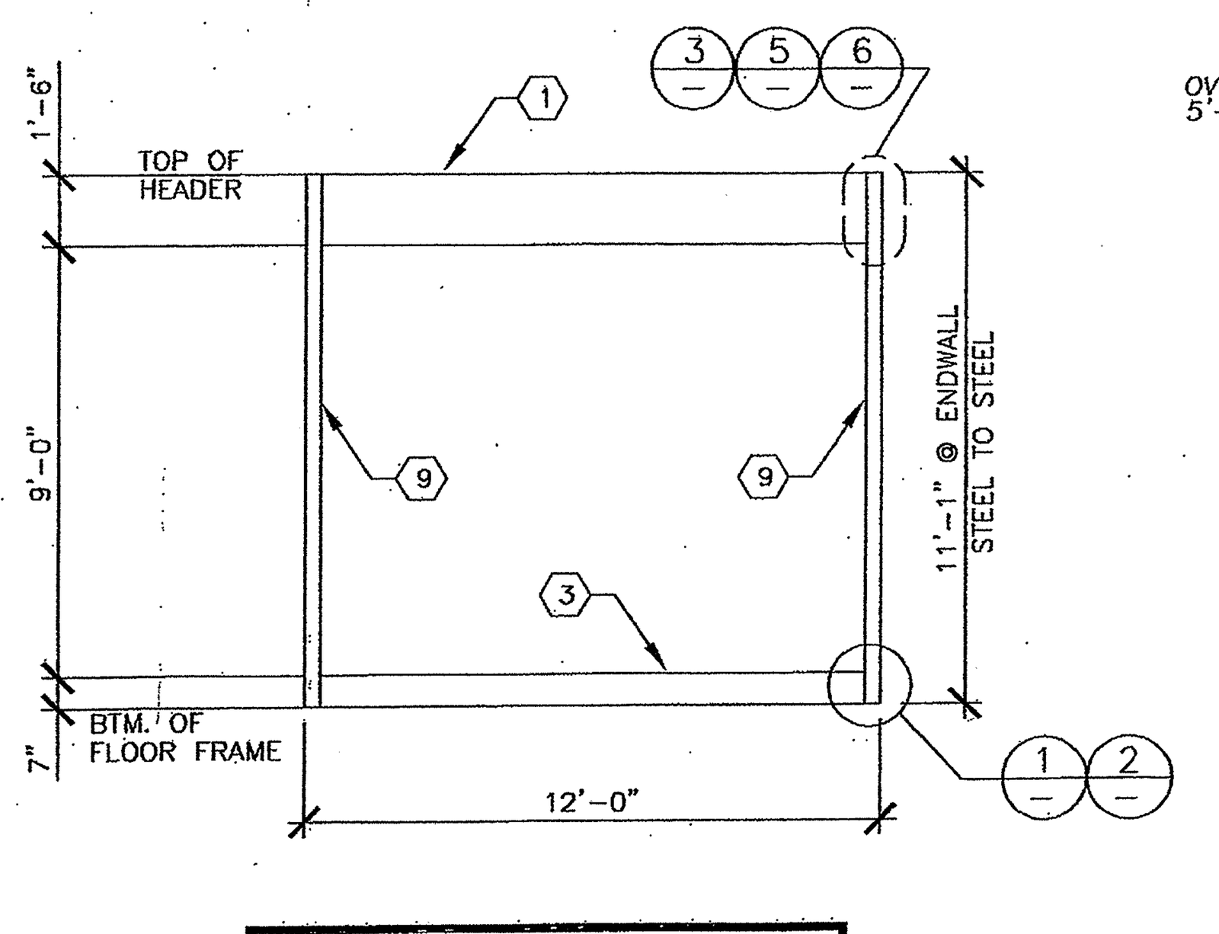
pc
~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~OFFICE OF REGULATION SERVICES~~
~~4-104778~~
~~AC ___ FLS ___ SS KB~~
~~DATE: 5-30-03~~
STATE AGENCY APPROVAL

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA. 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

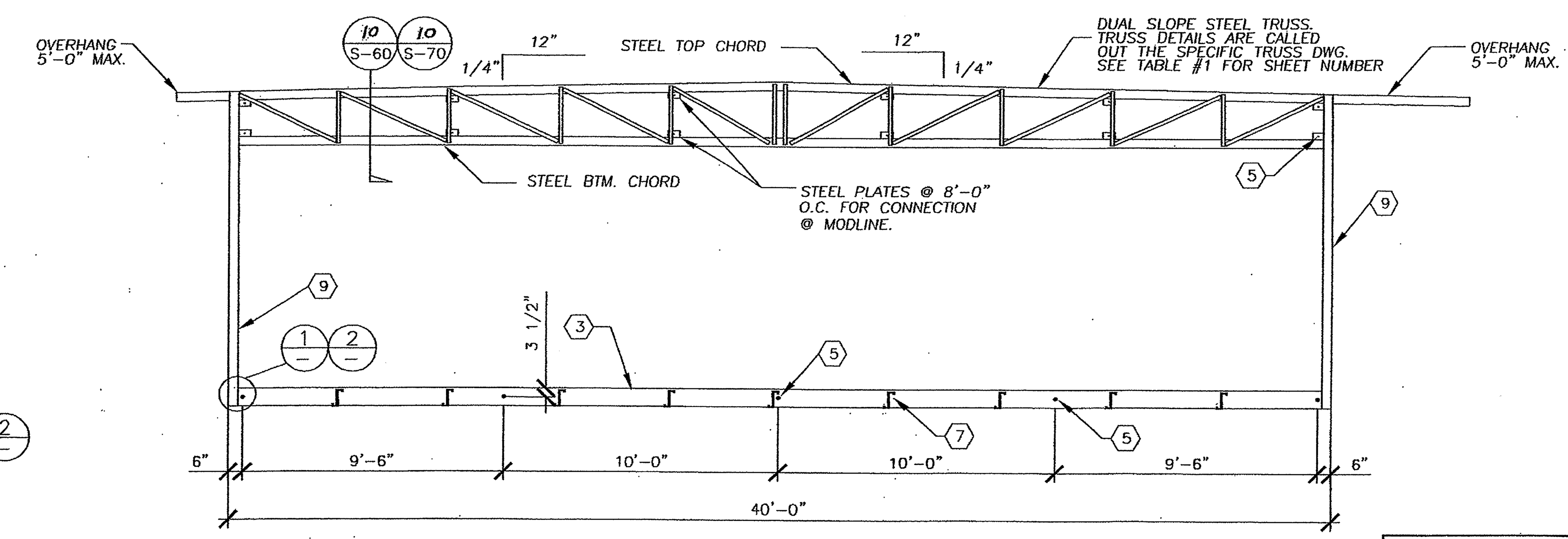
PROJECT:
MODULAR CLASSROOM BUILDING
TITLE & BLDG. DATA:
STRUCTURAL GENERAL NOTES
WIND LOAD: 80 & 90 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

JOB #
DATE 12-1-02
DRAWN BY JAG
SCALE AS NOTED
APPROVED
REVISIONS

SHEET NO.
S-1



STRUCTURAL SECTION AT ENDWALL
SCALE: 1/4" = 1'-0"



MODLINE SECTION
W/ DOUBLE SLOPE TRUSS, SEE SPECIFIC TRUSS DRAWING PER TABLE #1 FOR DETAILED INFORMATION
SCALE: 1/4" = 1'-0"

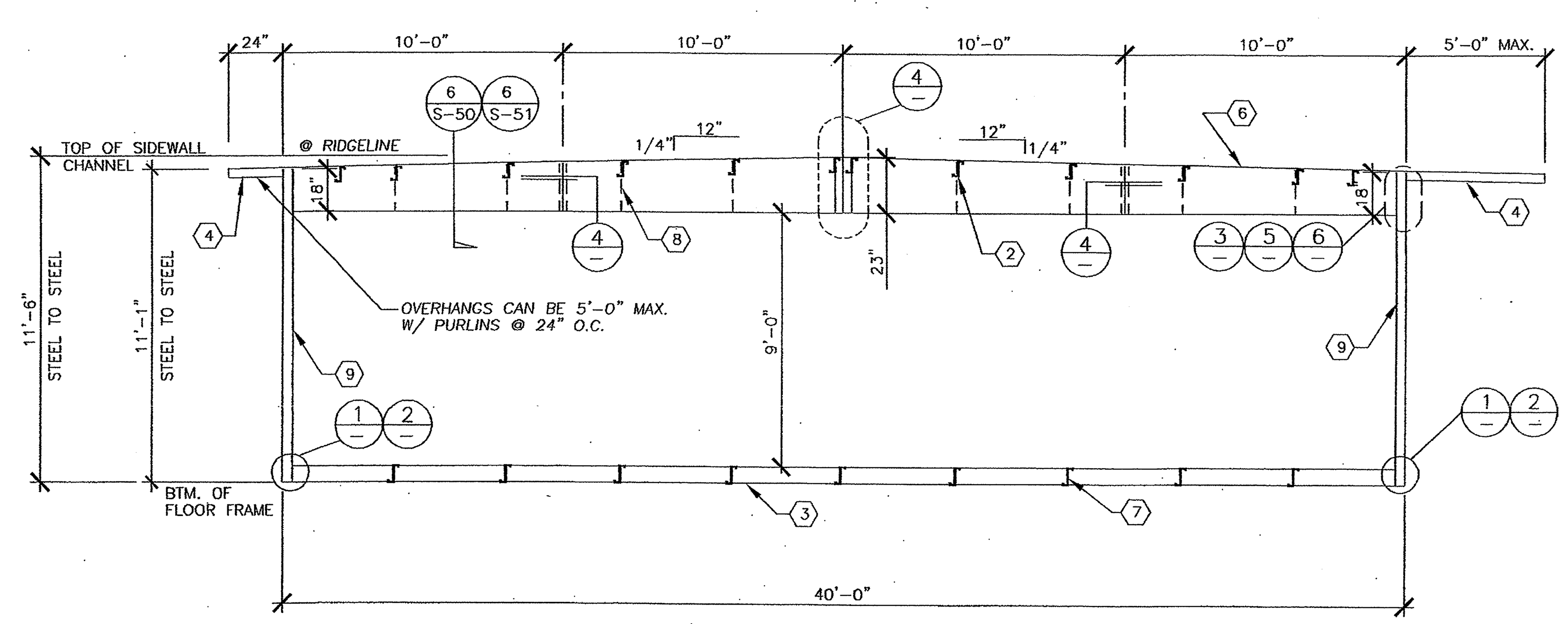
TRUSS TABLE #1	
SHEET #	TRUSS DESCRIPTION
S-60	DUAL SLOPE 20 PSF ROOF LOAD, 80 MPH WIND LOAD
S-70	DUAL SLOPE 30 PSF ROOF LOAD, 80 MPH WIND LOAD

KEY NOTES

1. [3 1/2" x 18" x 12 Ga. RFC STEEL ROOF HEADER.
2. ⅂ 6" x 2 X 14 Ga. STEEL ROOF JOIST FOR 20 PSF ROOF. OR 7 X 1 1/2 X 11 GA. FOR 30 PSF ROOF.
3. C7" X 9.8 LB. PERIMETER FRAME
4. 10"x3"x12 GA. CHANNEL AT OVERHANG OR OPTIONAL L 4"x3"x3/8" PURLIN & OUTRIGGER AT 20 PSF ROOF OR L 5"x3"x3/8" OUTRIGGER & L 4"x3"x3/8" PURLIN AT 30 PSF ROOF
5. 5/8" MACHINE BOLT @ MODULE CONNECTION LOCATIONS
6. TAPERED 10 GA. CHANNEL SECTION, BEAM. 18" x 23" x 18" x 3 1/2" x 10 GA..
7. ⅂ MEMBER – FLOOR JOIST.
8. 1/4" PLATE FULL HT. STIFFENER AT 4' O.C.
9. STEEL COLUMN – USE 3 1/2" x 3 1/2" x 1/4" TUBE AT CORNERS.
10. NOT USED.
11. 1/4" CAP PLATE.
12. 1/4" PLATE FITTED INSIDE TUBE COLUMN AND WELD IN PLACE.

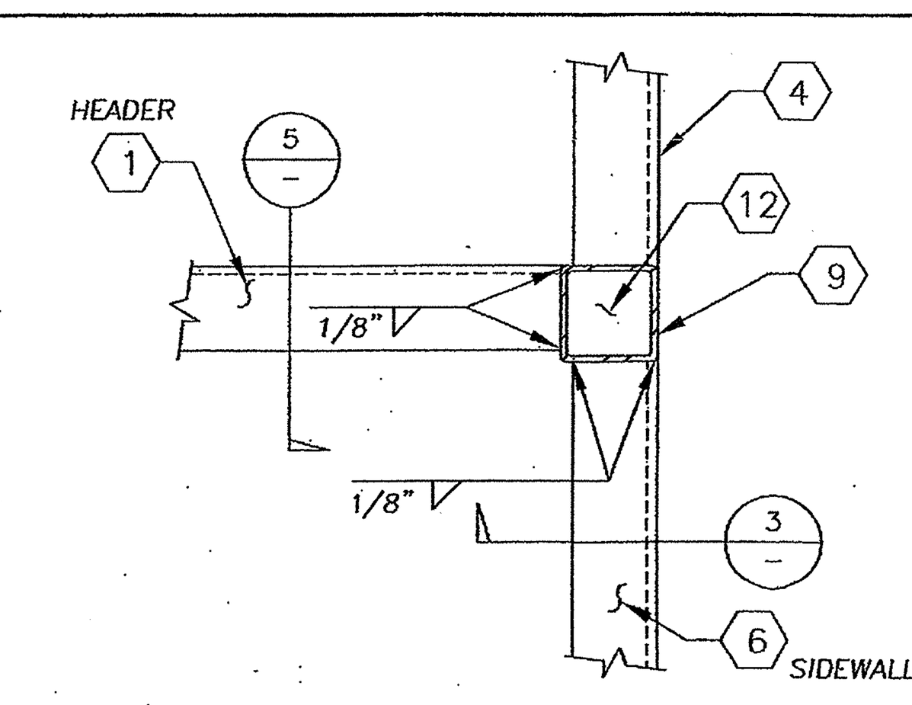
BUILDING HEIGHT NOTE:
THE BUILDING HEIGHTS SHOWN ON THESE DETAILS DO NOT INCLUDE THE PLYWOOD ROOF DECK OR THE FINISH ROOFING MATERIALS.

DATE SIGNED JUN 04 2003

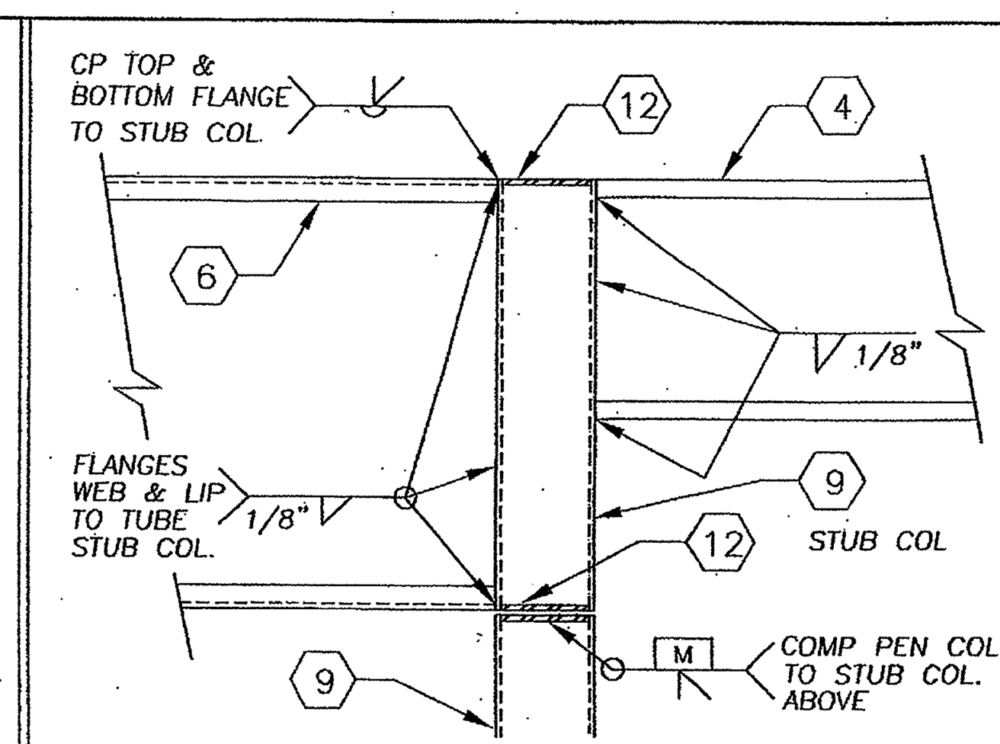


STRUCTURAL SECTION AT SIDEWALL
SCALE: 1/4" = 1'-0"

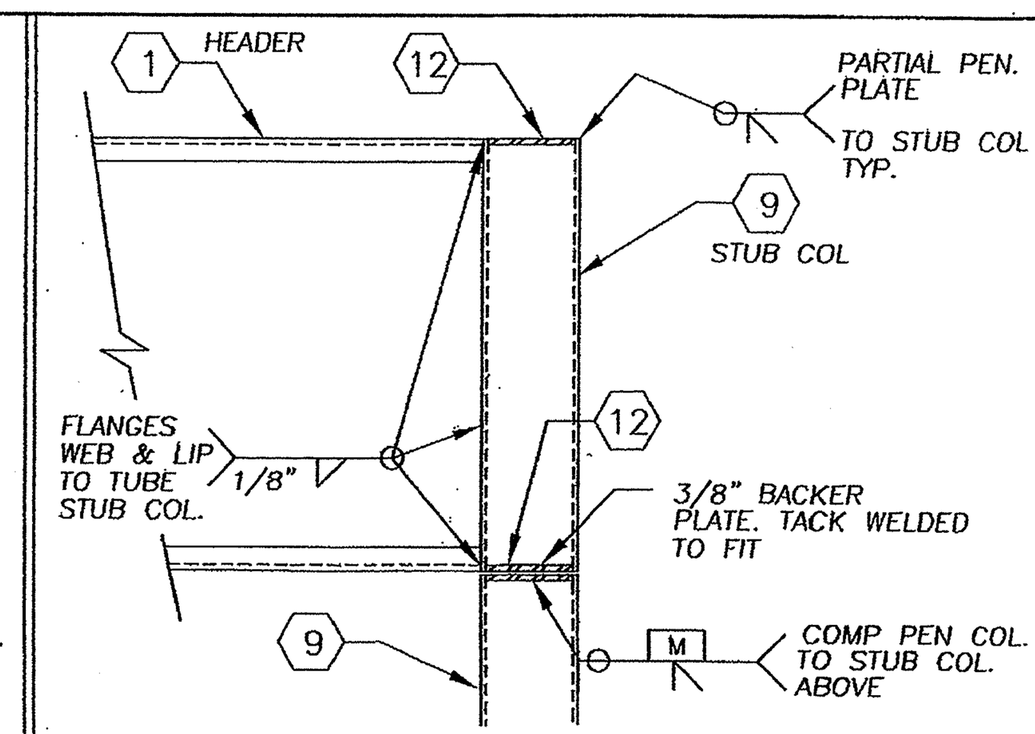
8



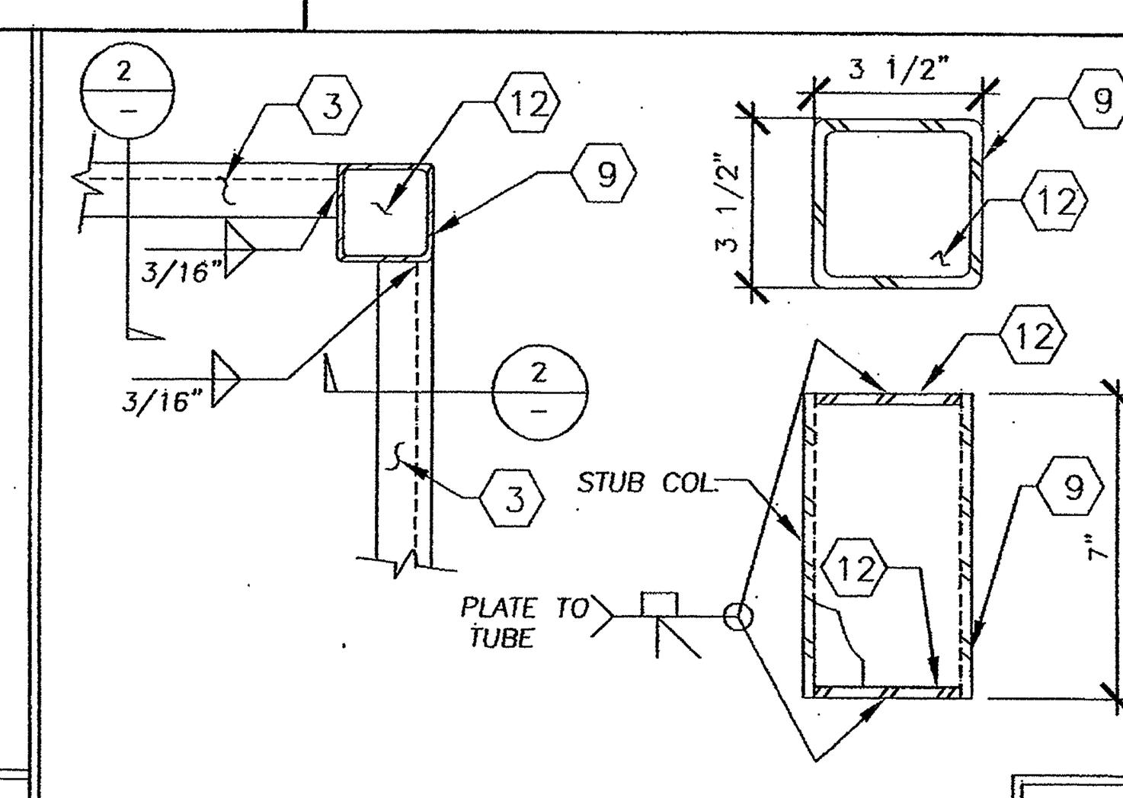
POST CONN. @ ROOF
SCALE: 1 1/2" = 1'-0"
6



POST CONN. @ ROOF
SCALE: 1 1/2" = 1'-0"
5



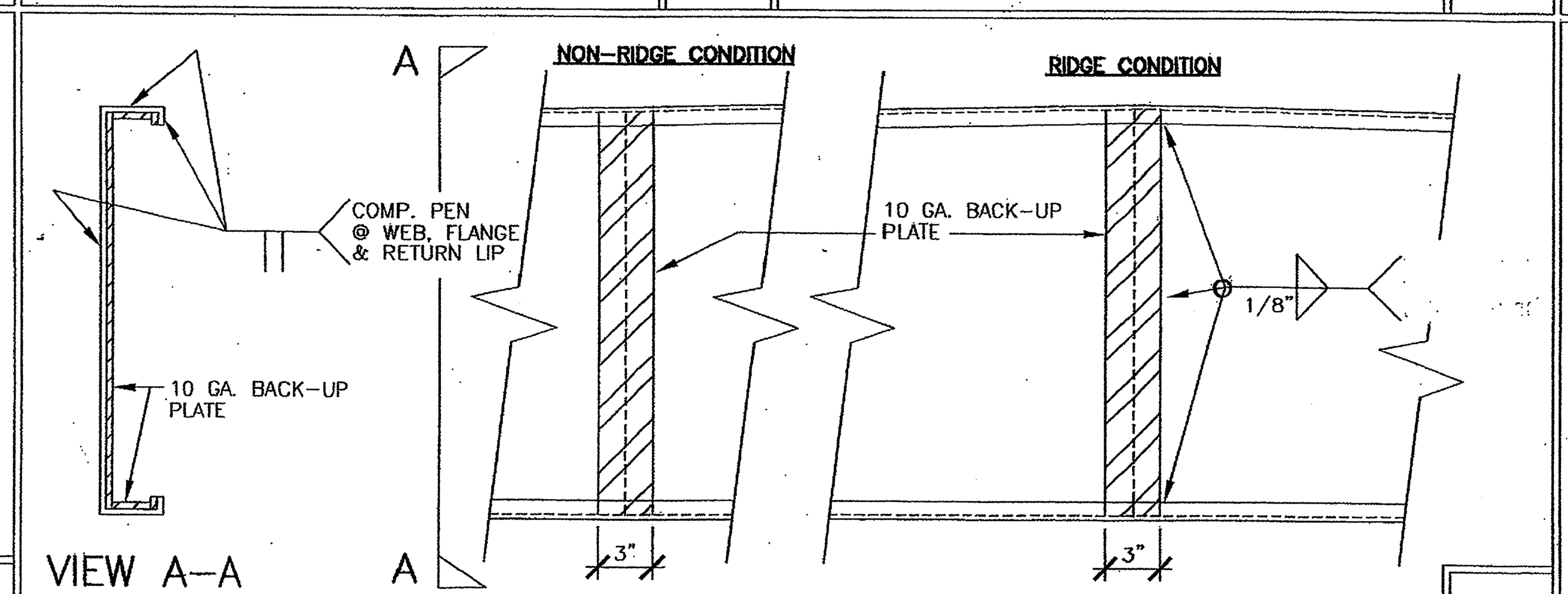
POST CONN. @ ROOF
SCALE: 1 1/2" = 1'-0"
3



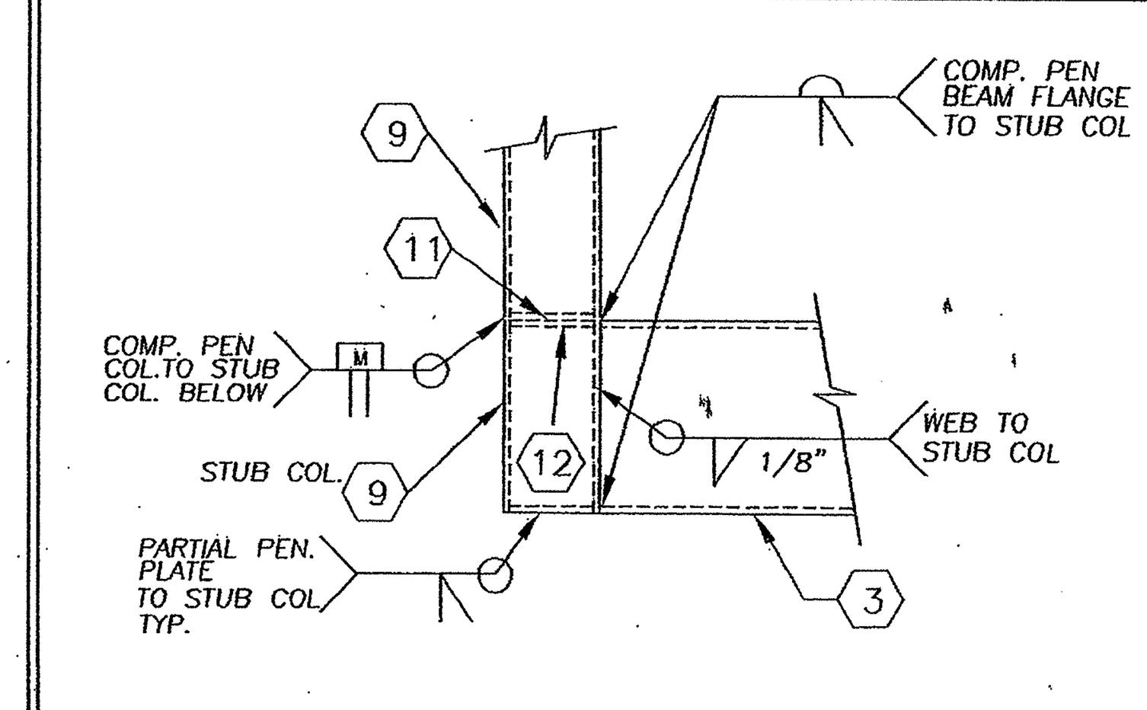
CORNER CONN. @ FLOOR
SCALE: 1 1/2" = 1'-0"
1

9

7



LIGHT GA. BEAM SPLICE (N.T.S.)
4



POST CONN. @ FLOOR
SCALE: 1 1/2" = 1'-0"
2

ARCHITECT STAMP

DATE SIGNED MAY 2 1 2003

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
APPL 01 105425
STATE AGENCY STAMP

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
4-104778
DATE: 5-30-03
STATE AGENCY STAMP

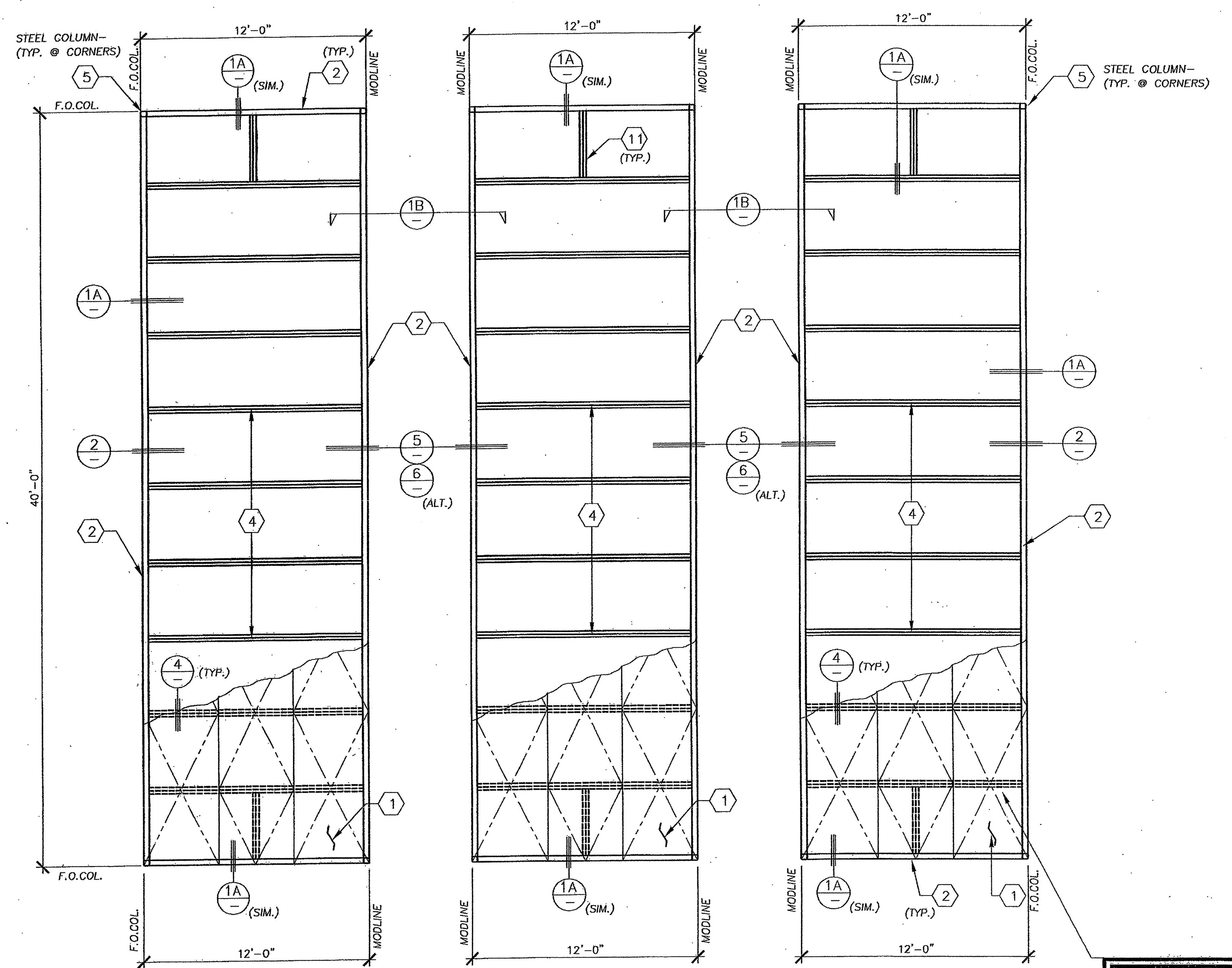
MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA. 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

PROJECT:
MODULAR CLASSROOM BUILDING

TITLE & BLDG. DATA:
RIGID FRAME SECTION & DETAILS
DUAL SLOPE W/ MODLINE TRUSS
WIND LOAD: 80 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

JOB #	
DATE	12/1/02
DRAWN BY	JAG
SCALE	1/4"= 1-0"
APPROVED	
REVISIONS	

SHEET NO.
S-5



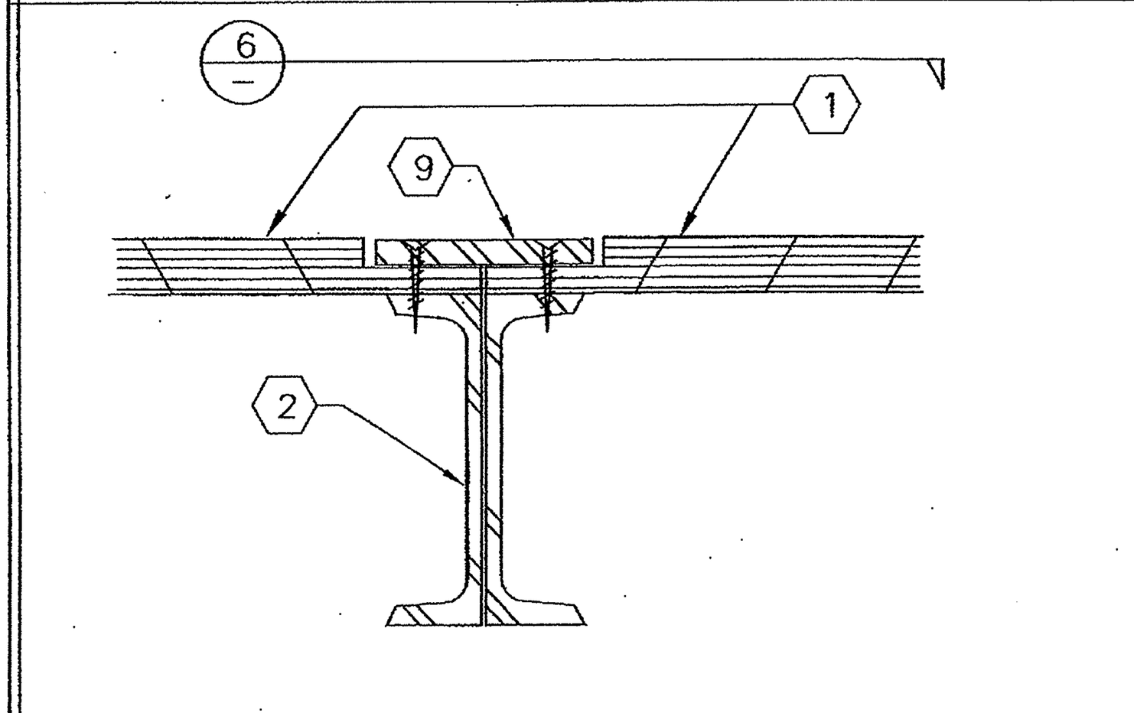
LEFT HAND MODULE

CENTER MODULE

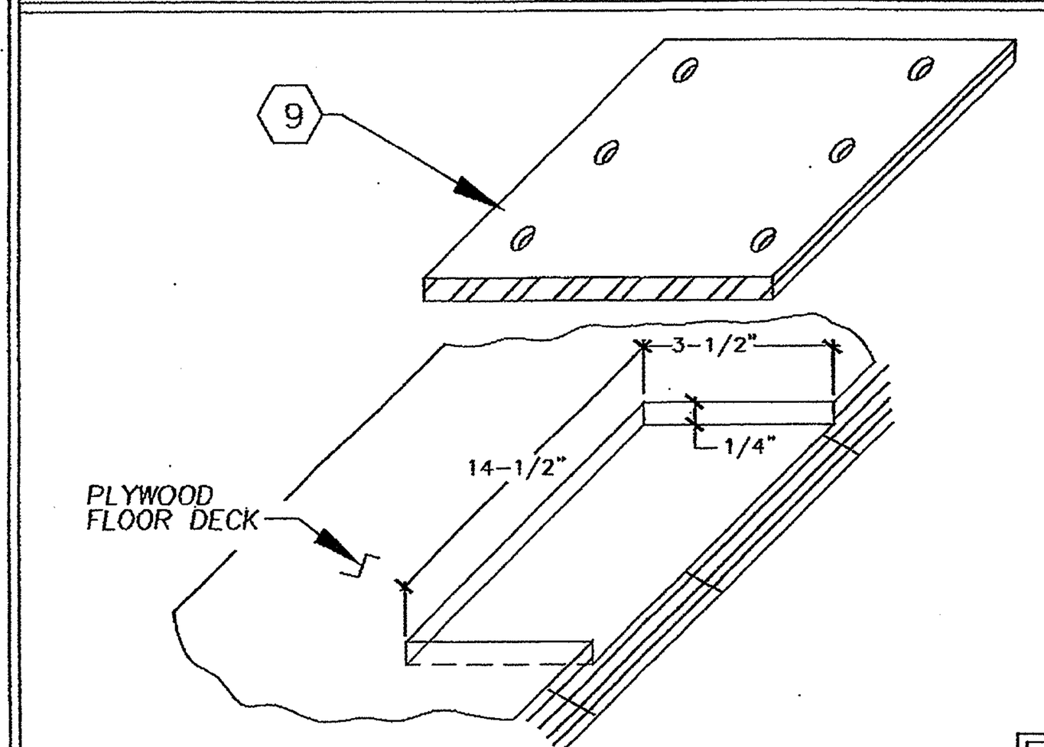
RIGHT HAND MODULE

FLOOR FRAMING PLAN
SCALE 1/4" – 1'-0"

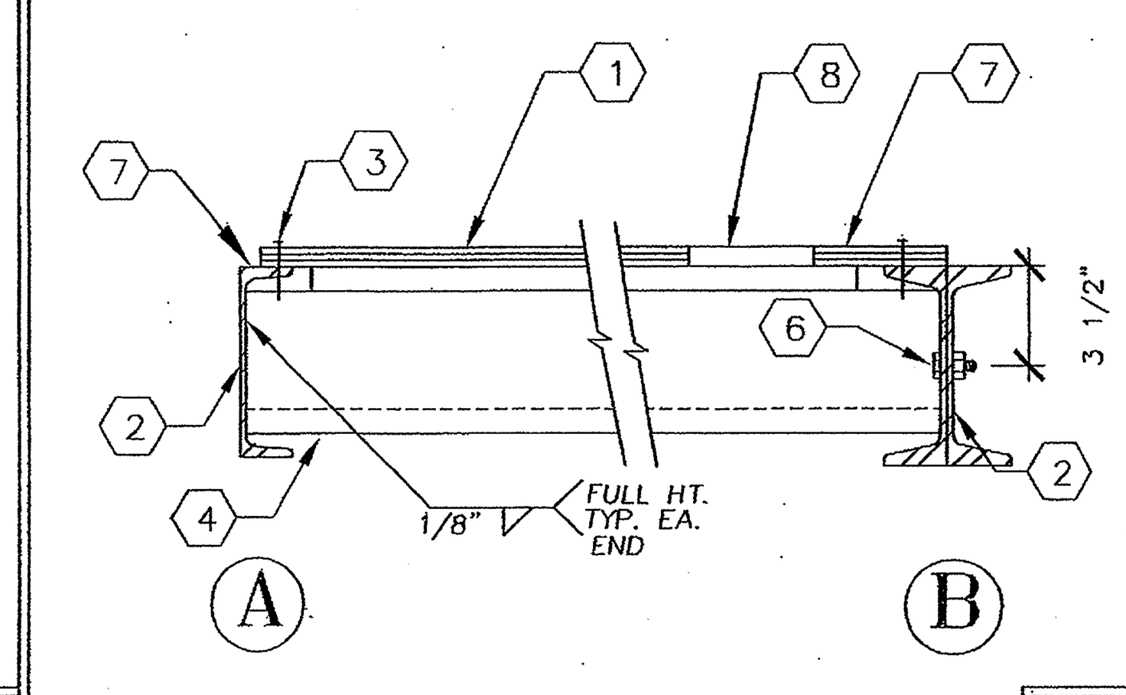
NOTE:
FLOOR JOIST ARE SHOWN AT 48" O/C AS AN EXAMPLE ONLY. CALCS. WILL DETERMINE SPACING FOR REQUIRED LOADS. (SEE SCHEDULE BELOW)



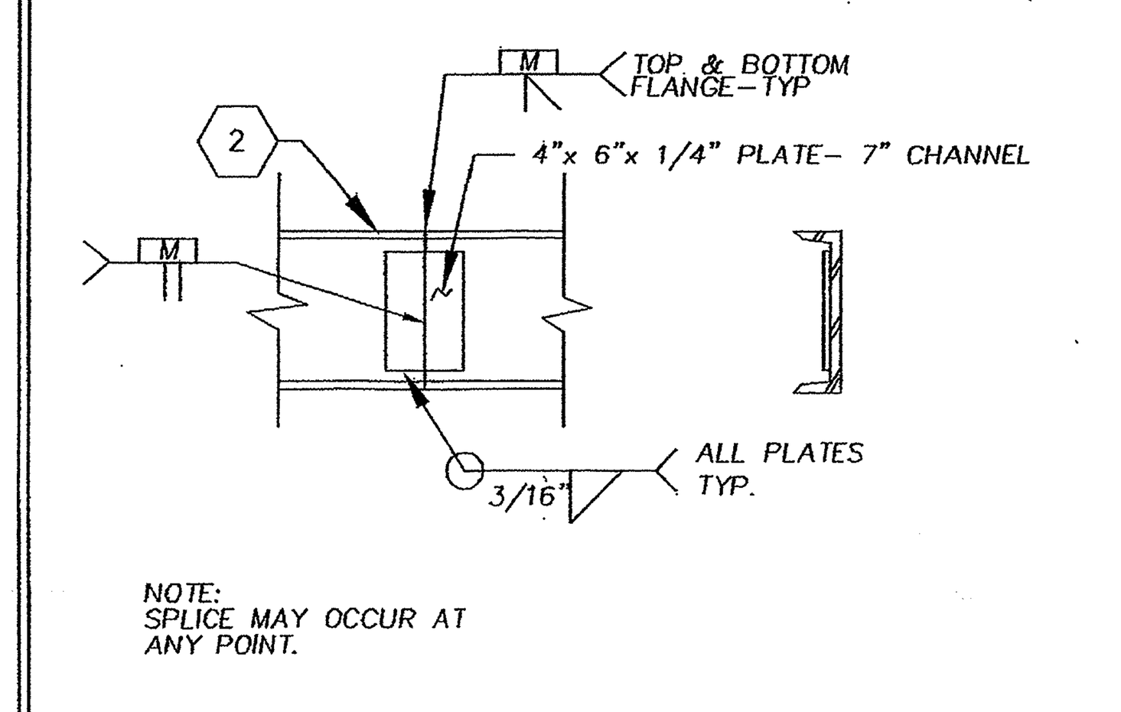
MOD CONN. @ FLOOR
SCALE: 3" = 1'-0"
5



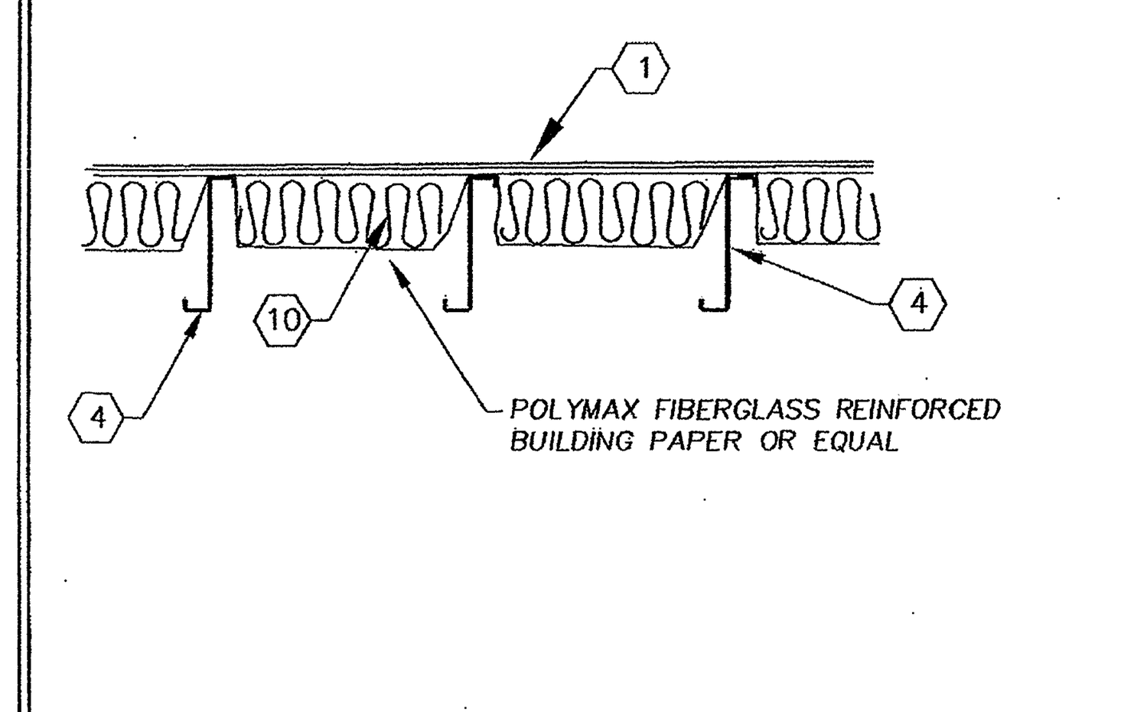
MOD LINE CONN.PLATE ALT.
SCALE: N.T.S.
6



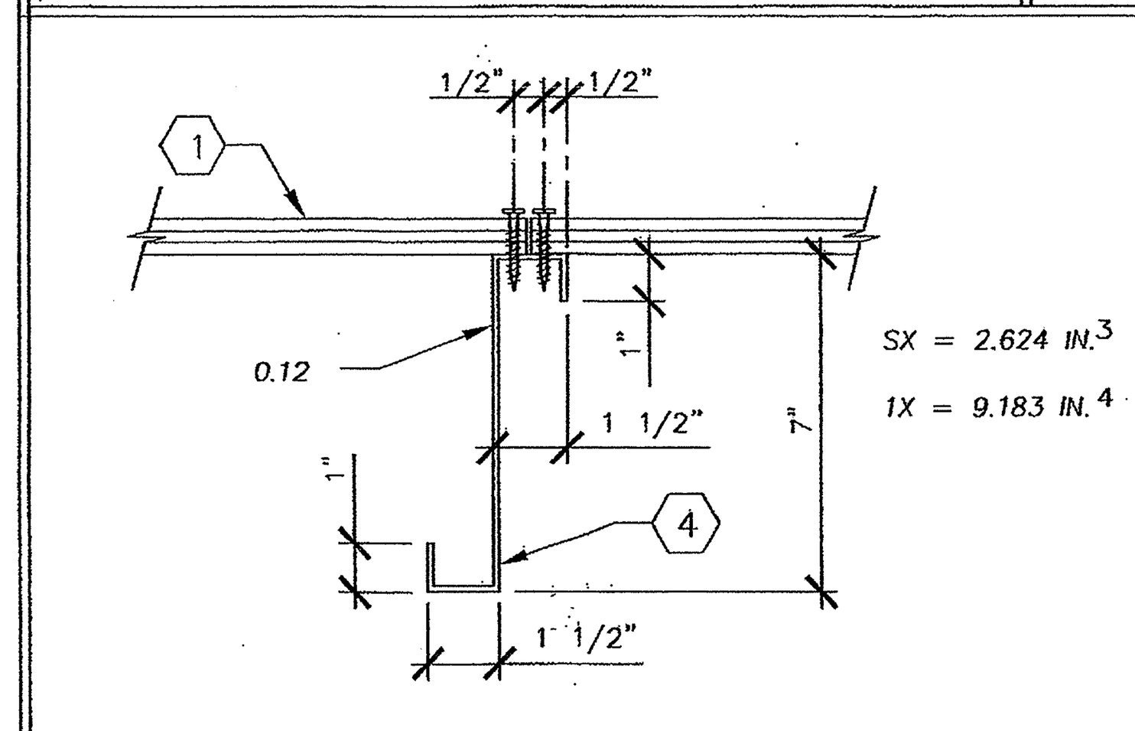
PERIMETER FLOOR
SCALE: 1 1/2" = 1'-0"
1



CHANNEL SPLICE
SCALE: 1 1/2" = 1'-0"
2



INSULATION @ FLOOR
SCALE: N.T.S.
3



FLOOR JOIST
SCALE: 3" = 1'-0"
4

KEY NOTES

1. PLYWOOD FLOOR SHEATHING – 1 1/8" A.P.A. RATED OR EQUAL. P.S. 1-95 T & G EDGES, 48" SPAN RATING; ATTACH TO STEEL FRAMING WITH .170/.192 PIN OR #10-24x1 3/4" SELF TAP SCREW @ 6" O.C. BOUNDARY & EDGES AND 10" O.C. FIELD.
   NOTE:
   PROVIDE FIELD NAILING @ 6" O.C. WHERE FLOOR JOISTS ARE AT 48" O.C.
2. C7" x 9.8 LB. PERIMETER FRAME
3. 0.145"ø SHOT PIN @ 6" O.C. PLYWOOD DECK TO PERIMETER CHANNEL
4. FLOOR JOIST 'Z' MEMBER. SEE SCHEDULE BELOW.
5. STEEL CORNER COLUMN.
6. 5/8" MACHINE BOLT AT 10'-0" O.C. @ MODULE CONNECTION.
7. AT MODULE JOINT TAKE PLYWOOD TO EDGE OF CHANNEL. AT PERIMETER, HOLD PLYWOOD BACK AS INDICATED.
8. 5" DIA. HOLE AT BOLT LOCATION. (OPTIONAL)
9. 6" x 14" x 12 Ga. PLATE WITH (6) #10-34 x 1 3/4" FLAT HEAD SELF TAP SCREWS INTO STEEL CHANNEL FLOOR FRAME @ 10' O.C.
10. R-11 INSULATION ON 'SEAL TITE' TYPE HW POLYMAX UNDERBELLY OR EQUAL WITH BIDIRECTIONAL POLYESTER FIBERS.
11. 7"x1 1/2"x11 GA. 'Z' MEMBER @ MIDSPAN.

FLOOR JOIST SCHEDULE

LOAD	JOIST	SPACING
50 PSF	Z 7x1 1/2x11 GA.	48" O.C.
50+20 PSF	Z 7x1 1/2x11 GA.	32" O.C.
100 PSF	Z 7x1 1/2x11 GA.	24" O.C.
125 PSF	Z 7x1 1/2x11 GA.	16" O.C.

DATE SIGNED JUN 04 2003
LICENSE EXPIRES 6-30-2004

ARCHITECT STAMP

DATE SIGNED MAY 21 2003
LICENSE EXPIRES 6-30-2004

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
APPL 01 105425
STATE AGENCY STAMP

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
4-104778
5-30-03
STATE AGENCY STAMP

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA. 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

PROJECT:
MODULAR CLASSROOM BUILDING

TITLE & BLDG. DATA:
FLOOR FRAMING PLAN AND DETAILS FOR PLYWOOD FLOOR
WIND LOAD: 80 & 90 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

JOB #

DATE 12/1/02

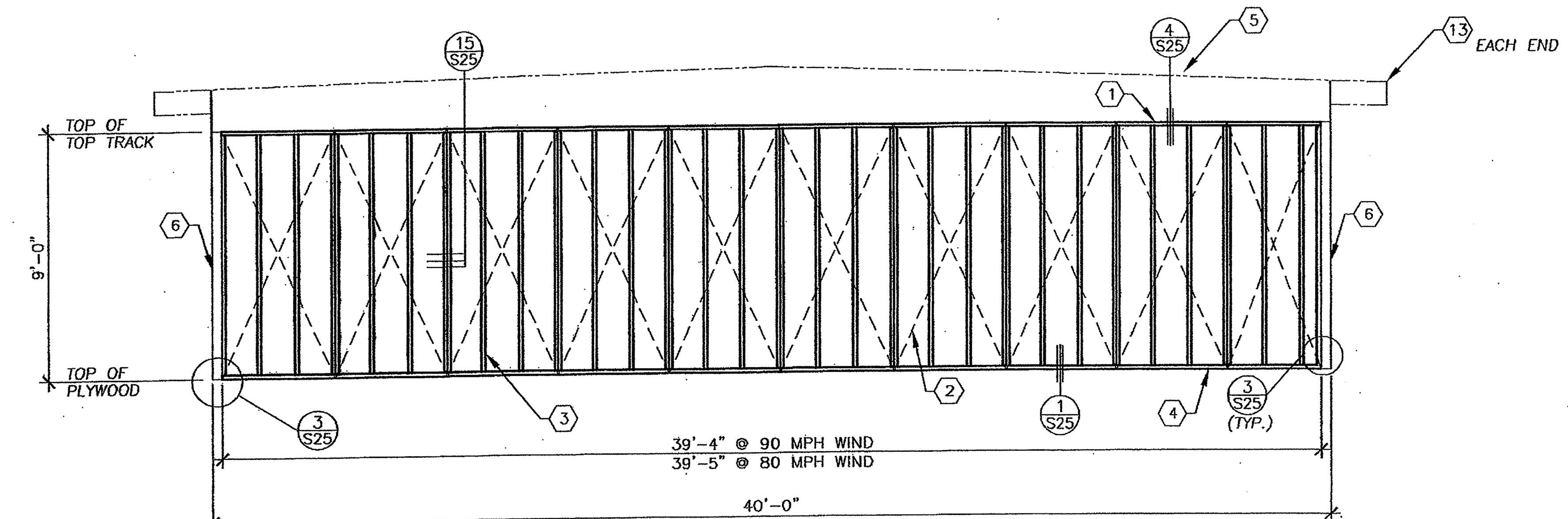
DRAWN BY JAG

SCALE AS NOTED

APPROVED

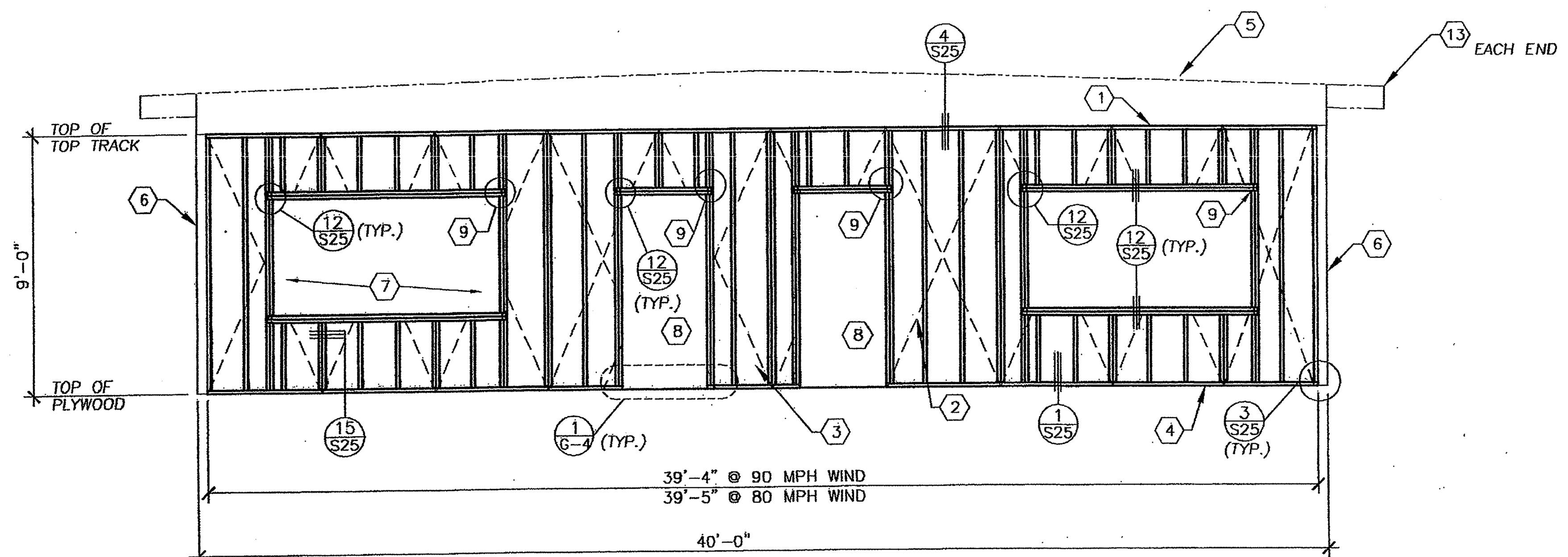
REVISIONS

SHEET NO.
S-10



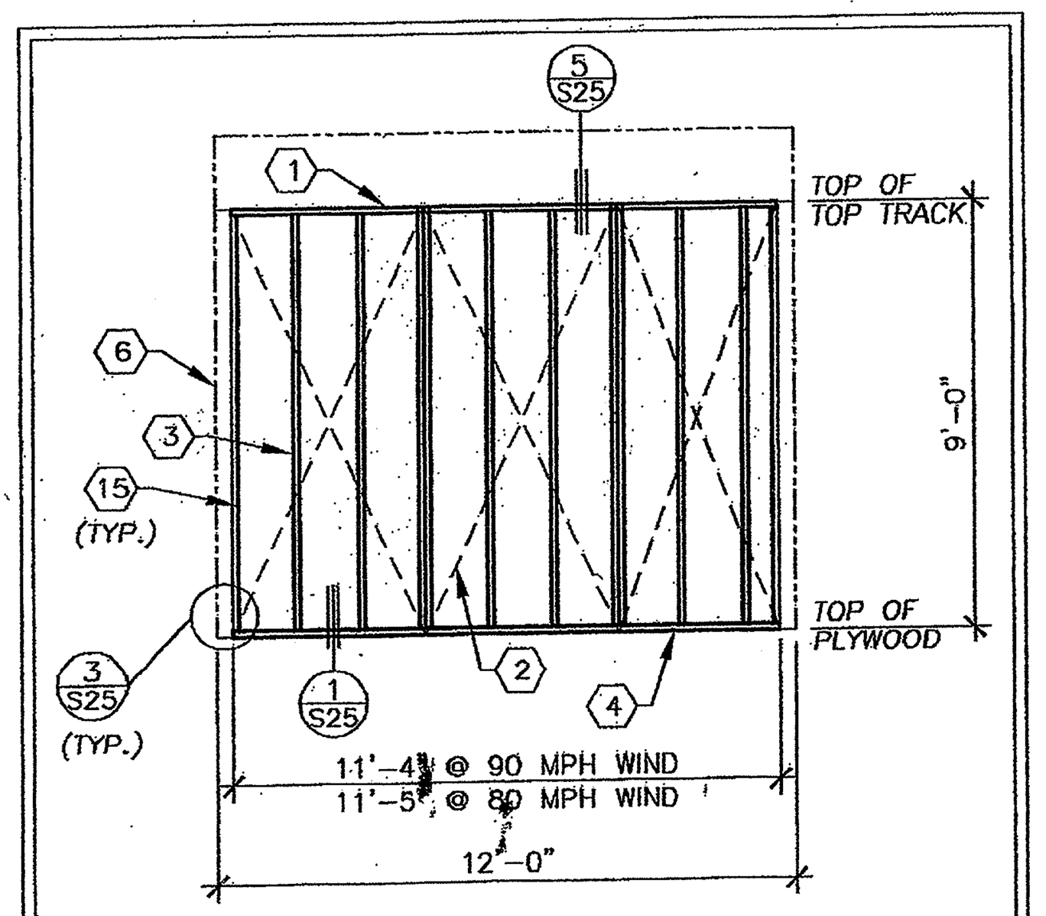
NOTE:
DOOR AND WINDOW LOCATIONS CAN BE LOCATED ANY WHERE IN SIDE WALL. FOR EXACT LOCATION OF DOORS, WINDOWS AND HVAC OPENINGS SEE FLOOR PLAN.

TYPICAL SIDEWALL W/NO OPNG'S
SCALE: 1/4" = 1'-0"

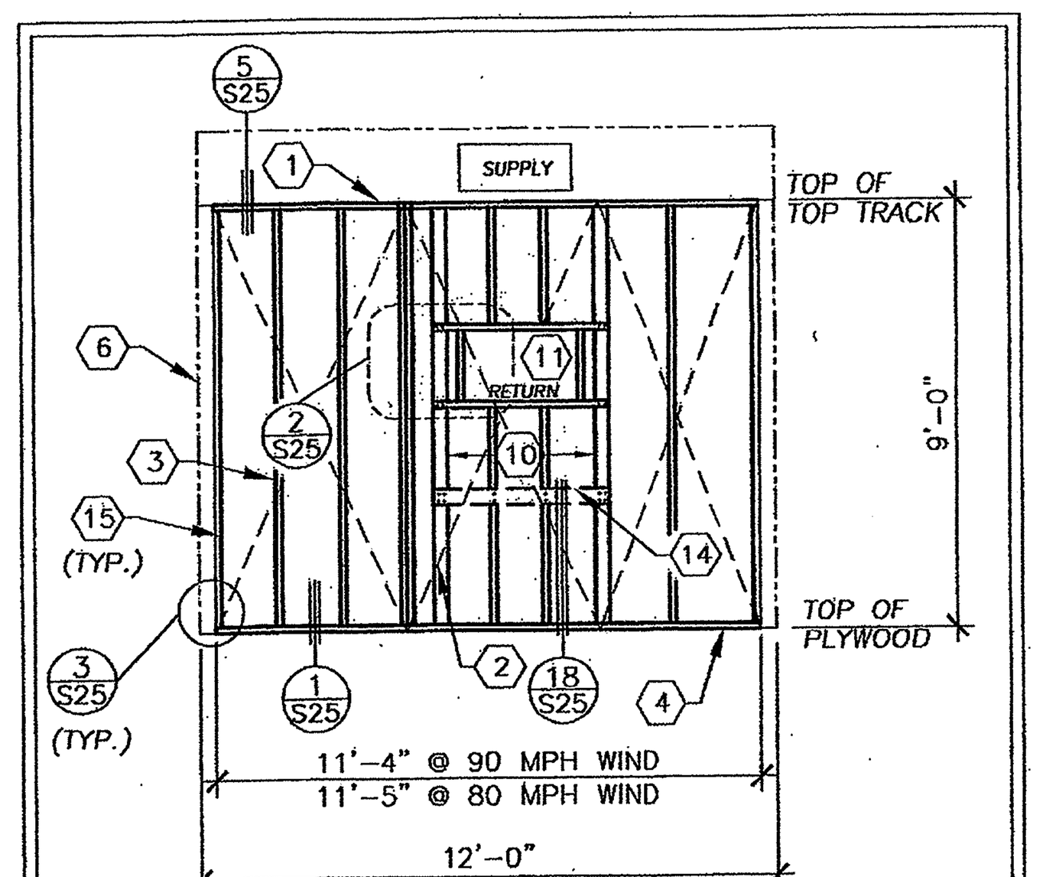


NOTE:
DOOR AND WINDOW LOCATIONS CAN BE LOCATED ANY WHERE IN SIDE WALL. FOR EXACT LOCATION OF DOORS, WINDOWS AND HVAC OPENINGS SEE FLOOR.

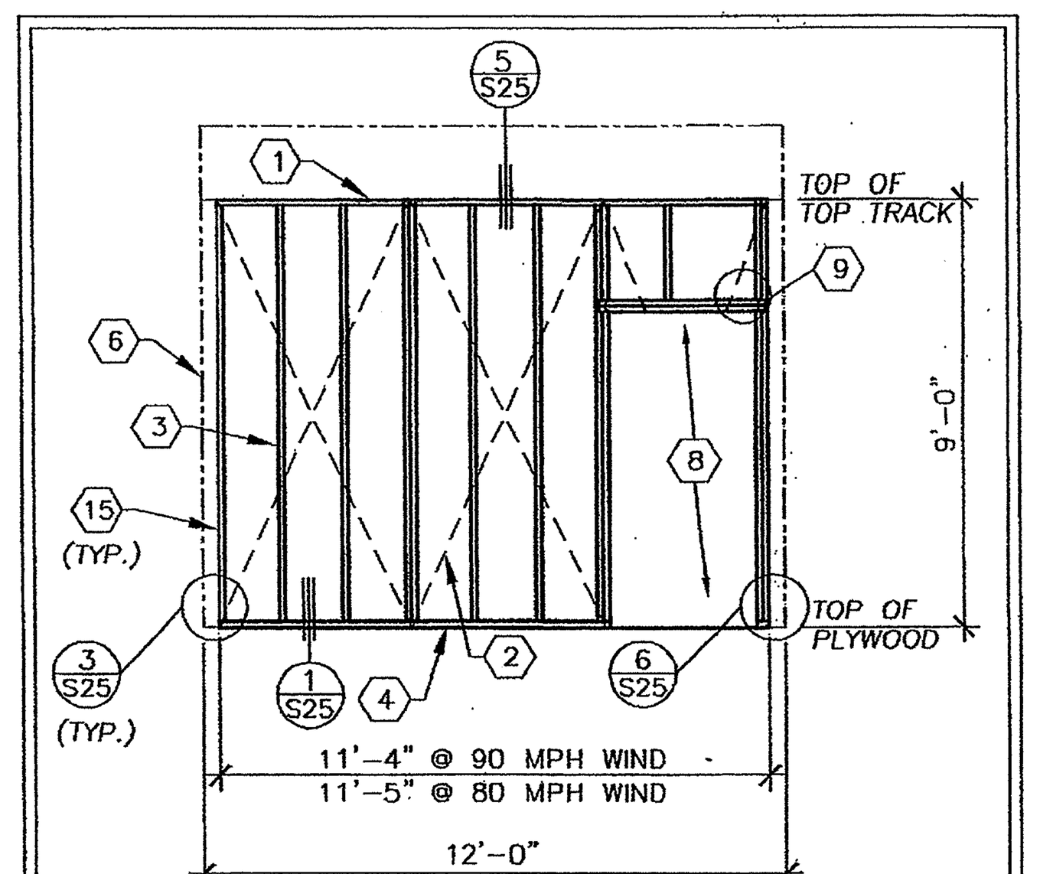
TYPICAL SIDEWALL W/DOORS & WINDOWS
SCALE: 1/4" = 1'-0"



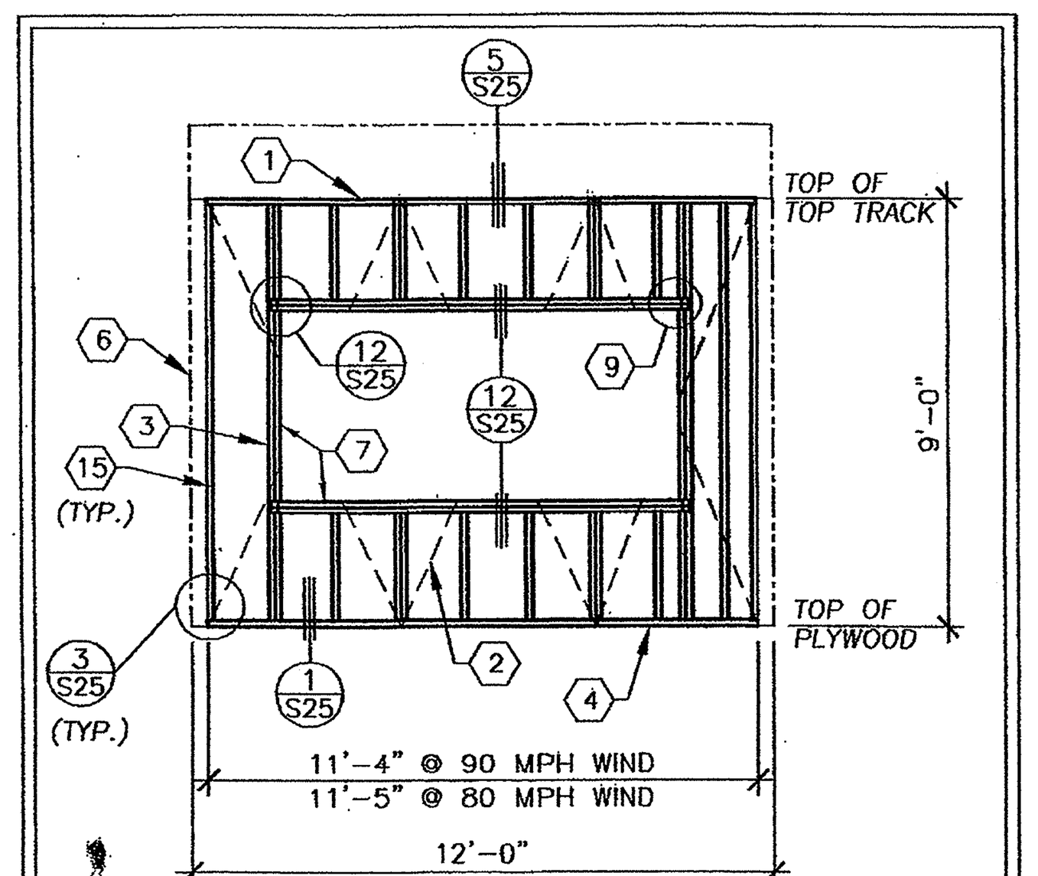
TYPICAL ENDWALLS
SCALE: 1/4" = 1'-0"



ENDWALLS W/AC UNIT
SCALE: 1/4" = 1'-0"



ENDWALLS W/DOOR
SCALE: 1/4" = 1'-0"



ENDWALLS W/WINDOW
SCALE: 1/4" = 1'-0"

⬡ KEYNOTES

1. CONTINUOUS 3 1/2" x 20 GA. TOP TRACK.
2. PLYWOOD SIDING/SHEATHING
   NAIL SIDING WITH CORROSION RESISTANT
   8d BOX NAILS @ 6" BOUNDARY & EDGES, 12" FIELD.
3. 3 1/2" x 20 GA. STUDS @ 16" O.C.
4. CONTINUOUS 3 1/2" x 20 GA. BTM. TRACK.
5. STEEL FRAME– SEE SHEET S–50 – S–51 "STRUCTURAL SECTIONS" FOR MEMBER TYPES AND SIZES.
6. STEEL CORNER COLUMN.
7. FRAME FOR 8040 WINDOW USE (2) FULL HEIGHT 3 1/2" x 20 GA. JAMB STUDS. (2) 3 1/2" x 20 GA. TRACKS FOR HEADER. (2) 3 1/2" x20 GA. TRACKS FOR WINDOW SILL.
8. FRAME FOR 3'–0"x 6'–8" DOOR. USE (2) FULL HEIGHT 3 1/2" x 20 GA. JAMB STUDS & (2) 3 1/2" x 20 GA. TRACKS FOR HEADER.
9. ATTACH HEADER OR SILL TO 3 1/2" x 20 GA. STUD WITH #8 x 1/2" SELF TAP SCREWS. AT CORNERS OF ALL OPENINGS.
10. 4x4 D.F. POST
11. FRAME FOR A/C UNIT.
12. NOT USED
13. OVERHANG, (5'–0" MAX.)
14. NOTCH (1) PC. OF 3 1/2" x 20 GA. TRACK AROUND STUDS TO PROVIDE BLKG..
15. 2 x 4 SHIM LOCATED BETWEEN 4 x 4 STL. POST AND FIRST 3 1/2" x 20 GA. STUD @ OUTSIDE OF BLDG.

WALL FRAMING NOTES FOR STUCCO SIDING OPTION:

STUDS TO BE 3 1/2" x 20 GA. @ 16" O.C.

4'–0" WALL OPENINGS – (1) 3 1/2" x 20 GA. TRACK AS HEADER AND (2) 3 1/2" x 20 GA. FULL HEIGHT JAMB STUDS.

8'–0" WALL OPENINGS – (2) 3 1/2" x 20 GA. TRACK AS HEADER AND (3) 3 1/2" x 20 GA. FULL HEIGHT JAMB STUDS.

NOTE:
FOR EXACT LOCATION OF DOORS, WINDOWS AND HVAC OPENINGS, SEE FLOOR PLAN.

DATE SIGNED
JUN 04 2003
LICENSE EXPIRES 6-30-2004

ARCHITECT STAMP

DATE SIGNED
MAY 21 2003
LICENSE EXPIRES 6-30-2004
STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL. 01-105425
STATE AGENCY STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-104778
DATE 5-30-03
STATE AGENCY STAMP

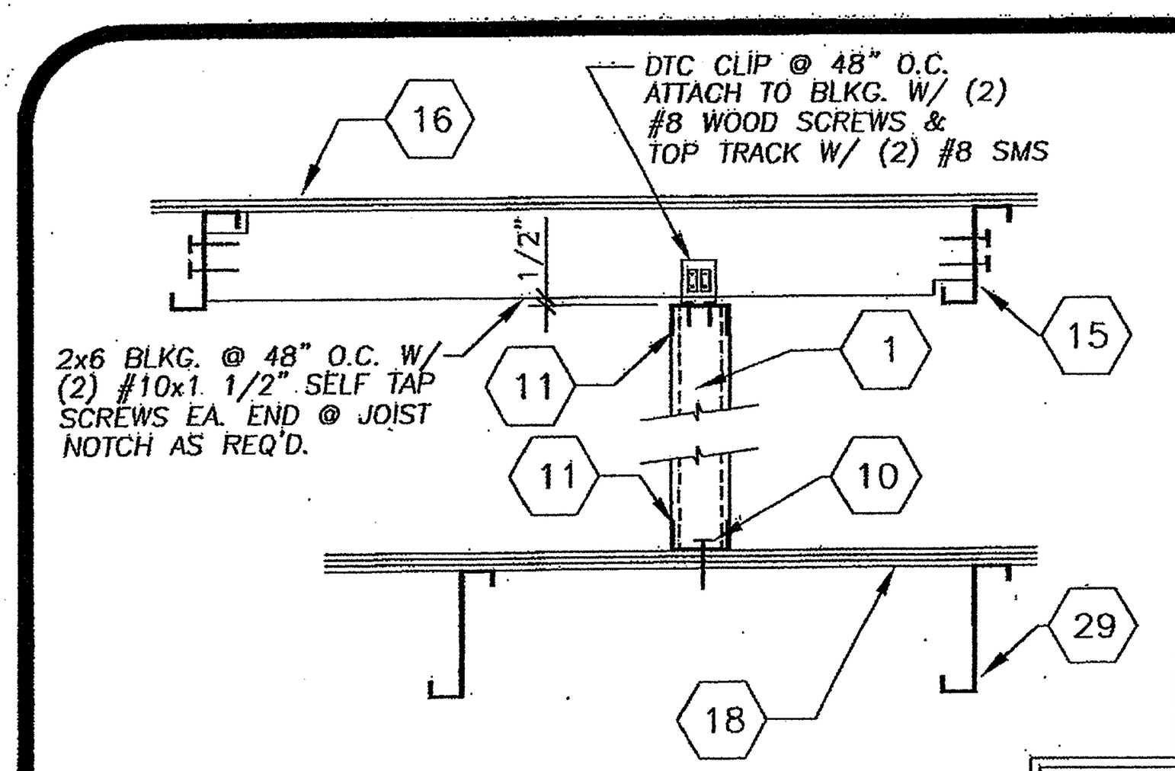
MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA. 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

PROJECT:
MODULAR CLASSROOM BUILDING

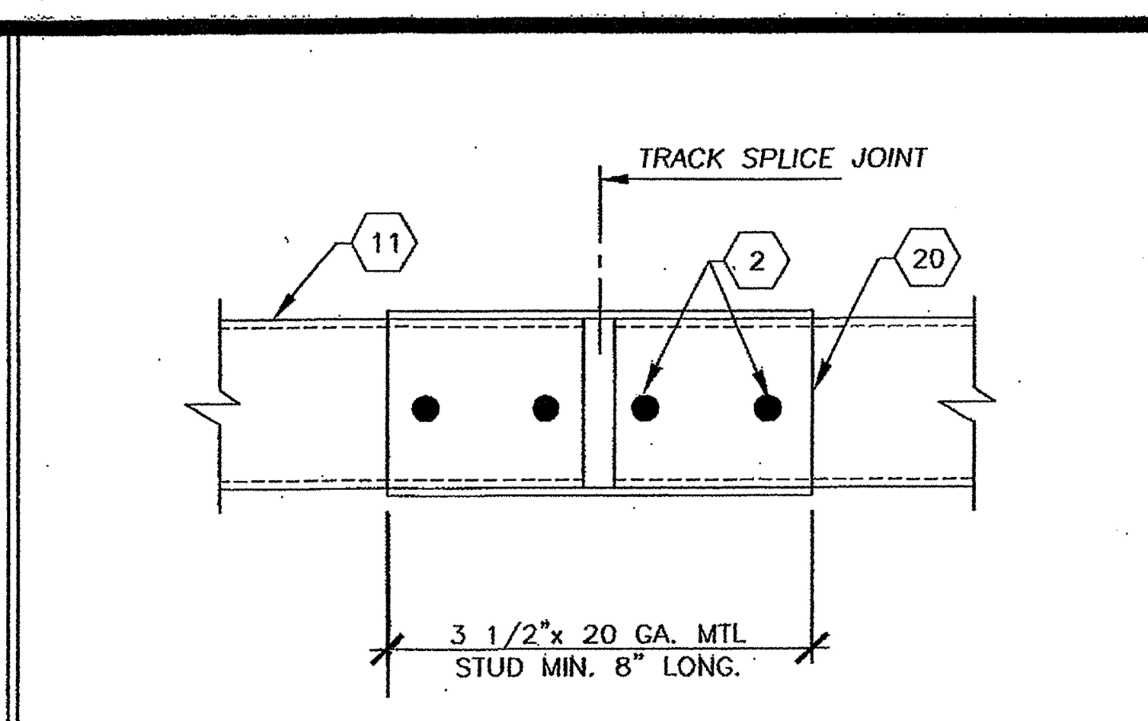
TITLE & BLDG. DATA:
EXTERIOR WALL FRAMING ELEVATIONS FOR STEEL STUDS
WIND LOAD: 80 & 90 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

JOB #	
DATE	12/1/02
DRAWN BY	JAG
SCALE	1/4" = 1–0"
APPROVED	
REVISIONS	

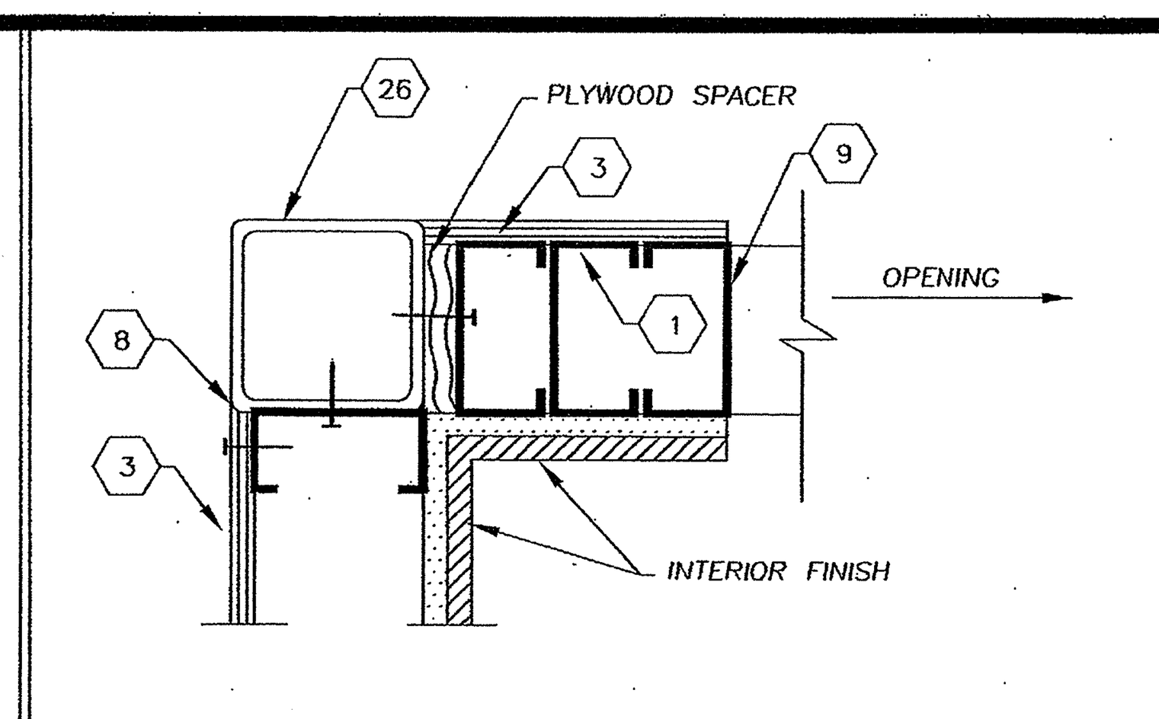
SHEET NO.
S–21



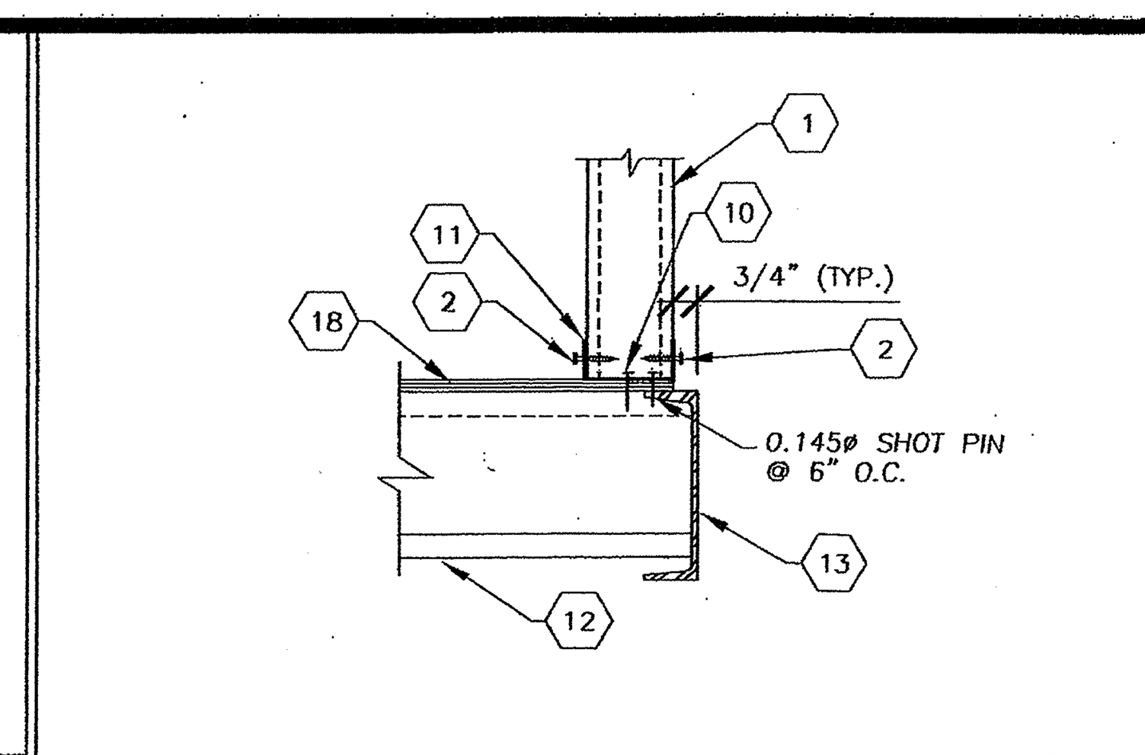
INT. WALL ATTACHMENT PARELLEL TO ROOF PURLINS SCALE: 1" = 1'-0" 16



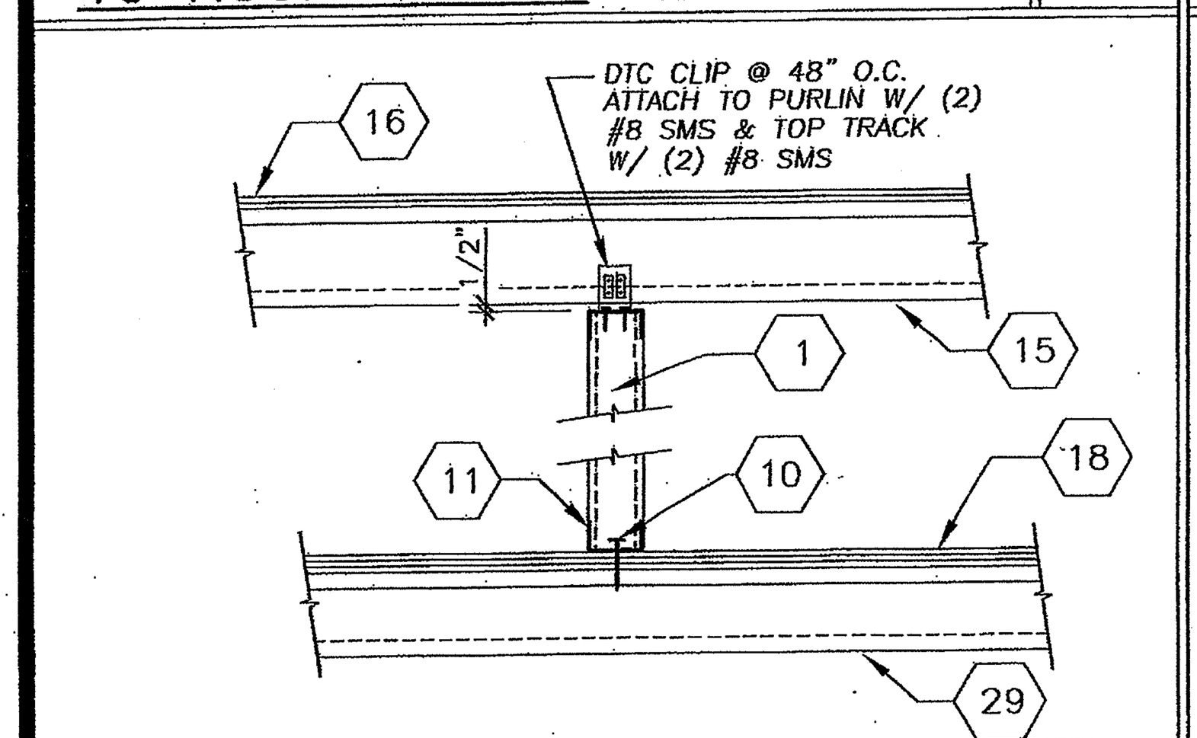
TRACK SPLICE DETAIL SCALE: 3" = 1'-0" 11



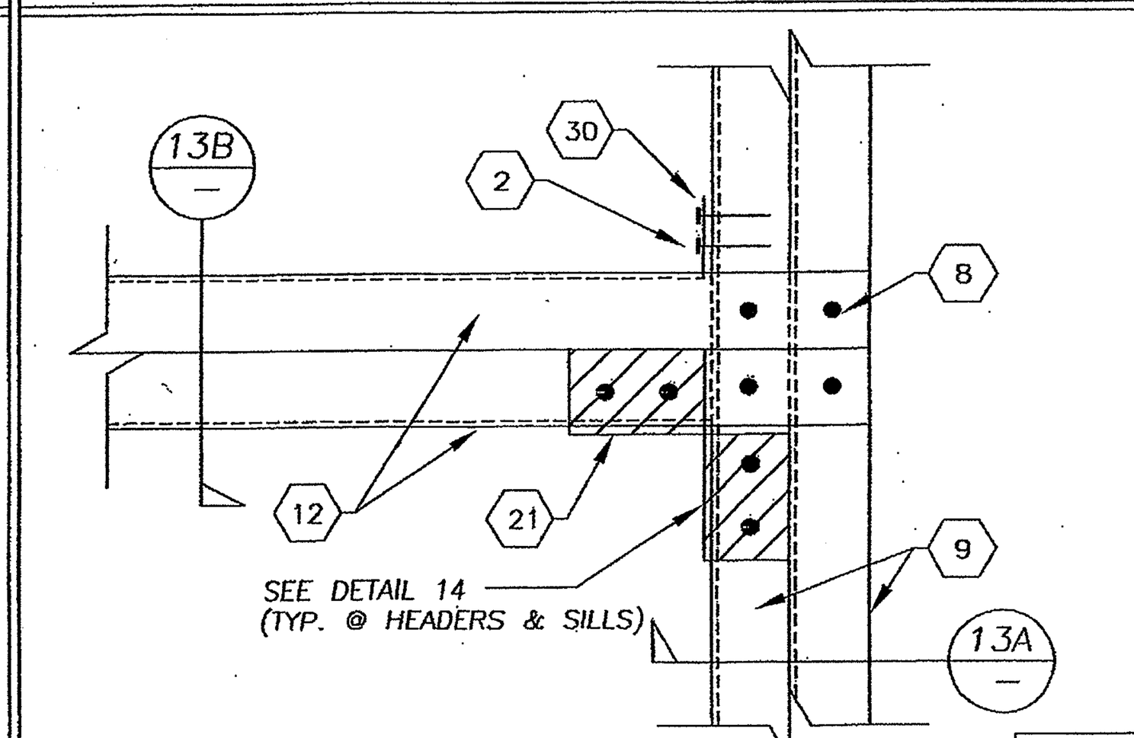
JAMB STUDS @ CORNER SCALE: 3" = 1'-0" 6



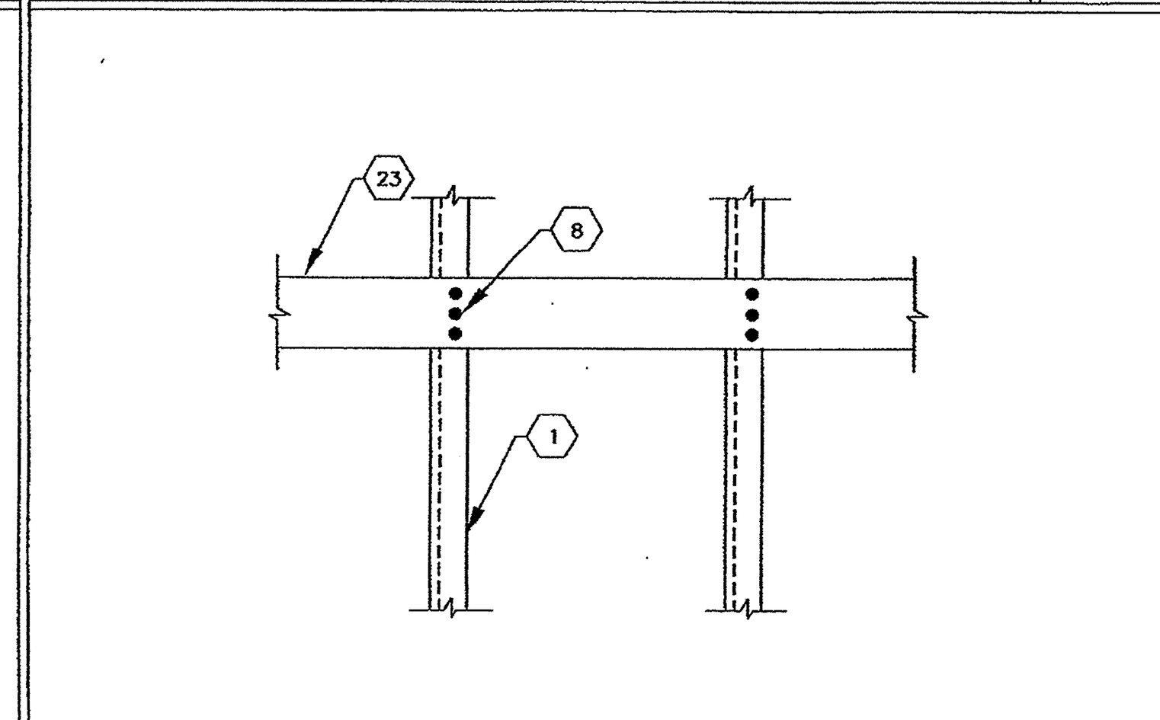
WALL @ FLOOR SCALE: 1 1/2" = 1'-0" 1



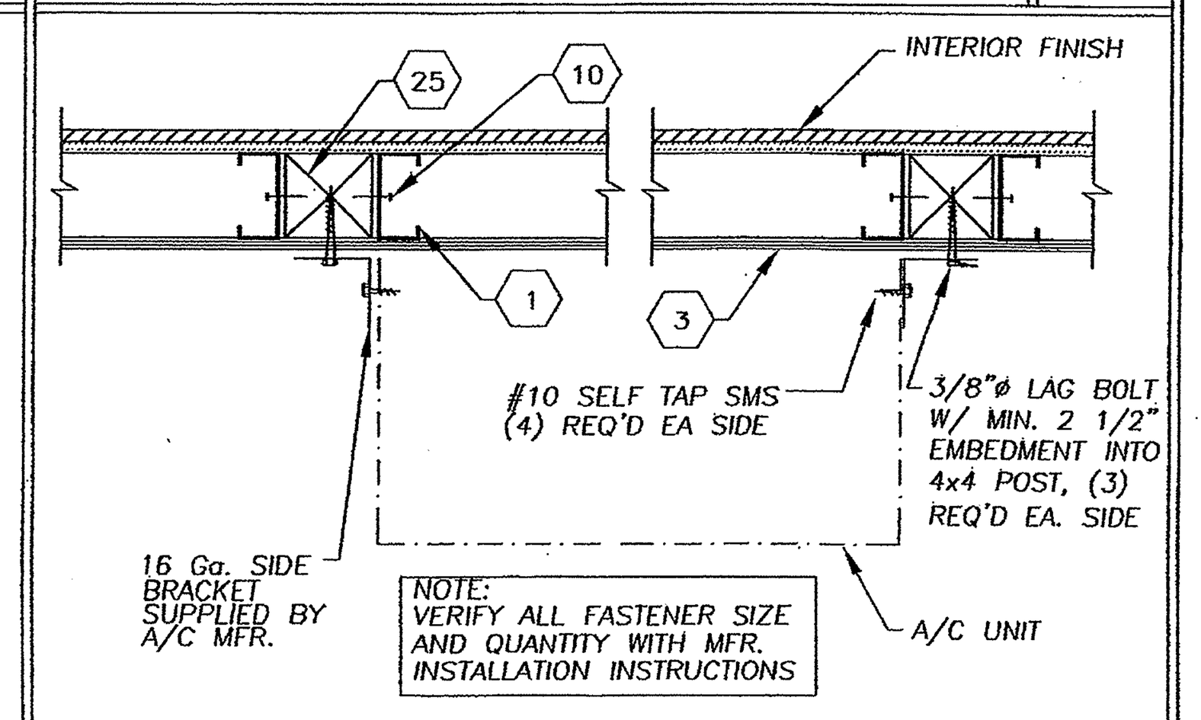
INT. WALL ATTACHMENT PERPENDICULAR TO ROOF PURLINS SCALE: 1" = 1'-0" 17



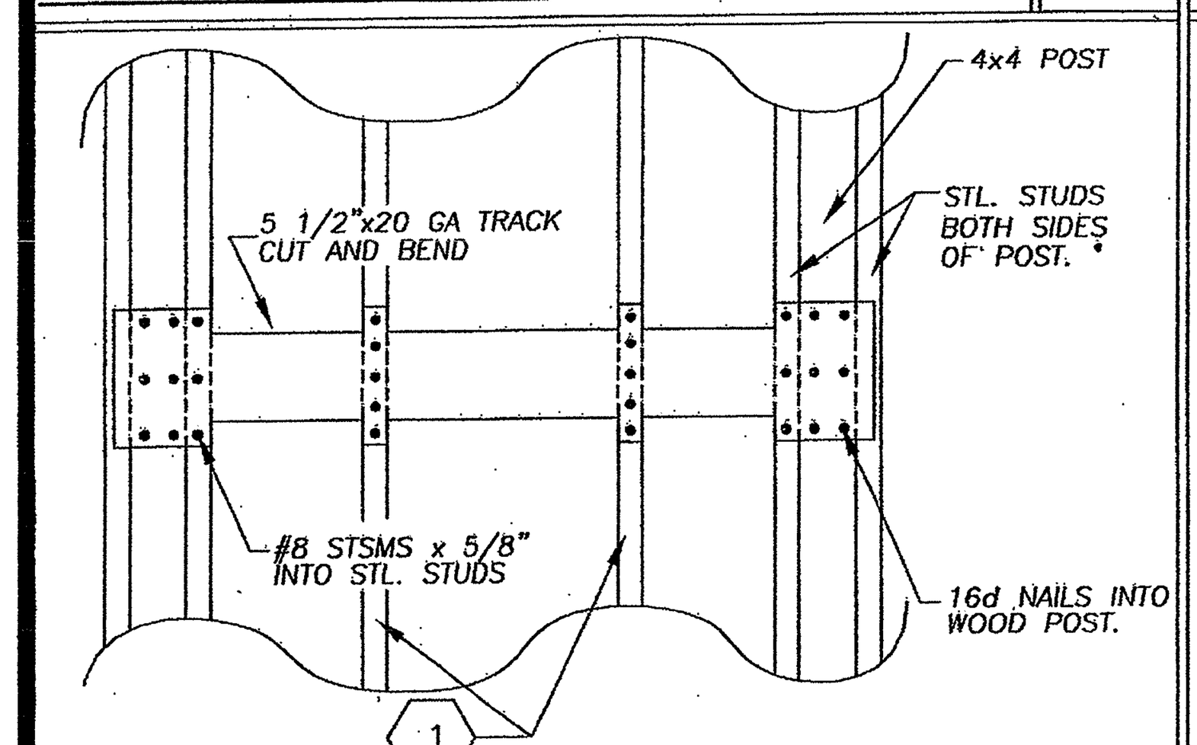
JAMB STUDS @ HEADER & SILL SCALE: 3" = 1'-0" 12



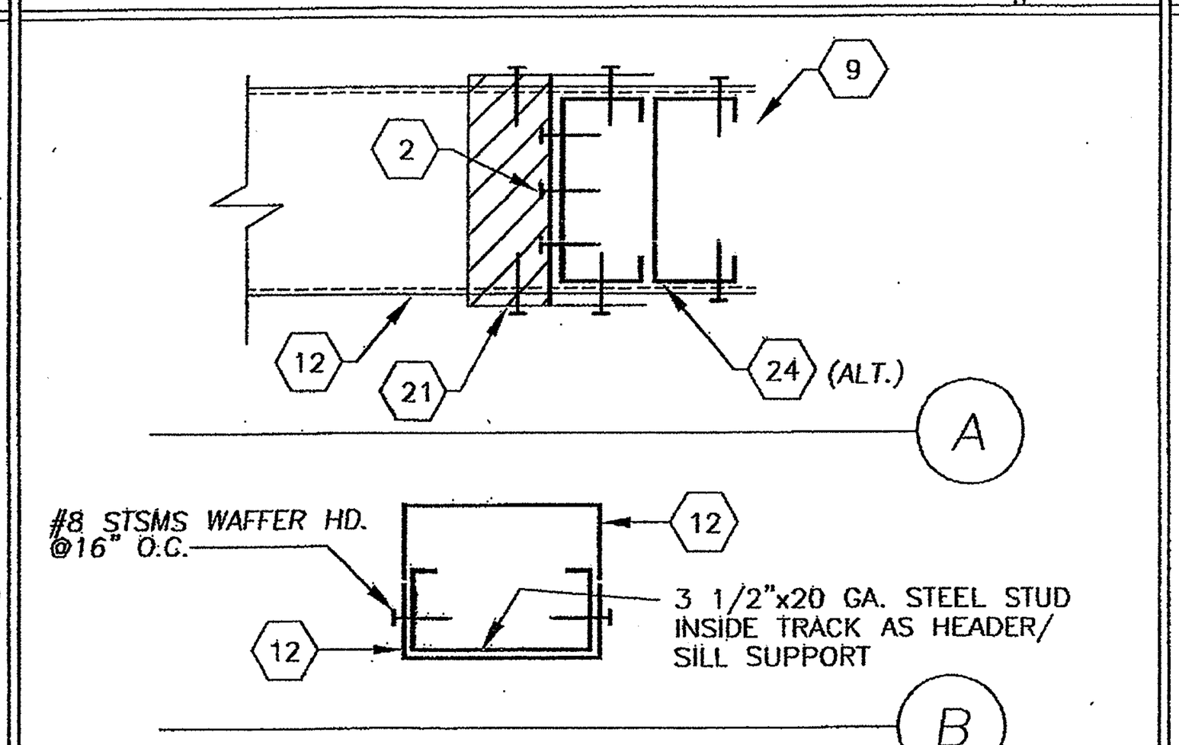
TYP. STRAP TO STUD SCALE: 1 1/2" = 1'-0" 7



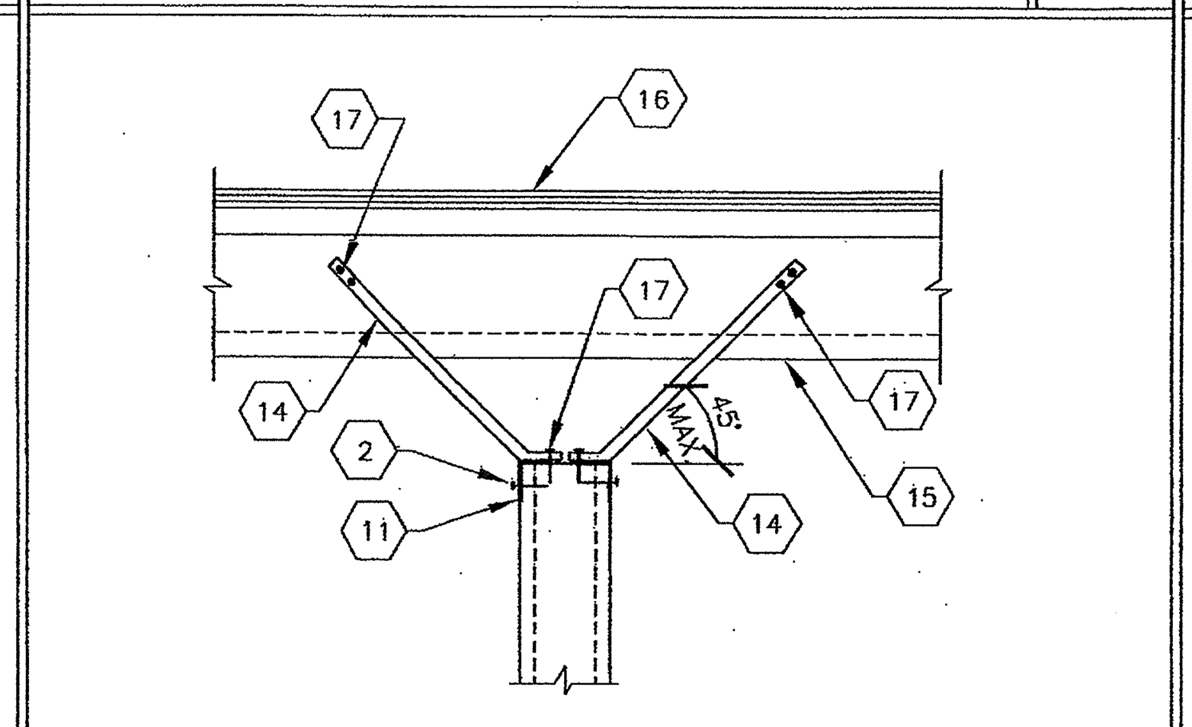
A/C @ ENDWALL SCALE: 1 1/2" = 1'-0" 2



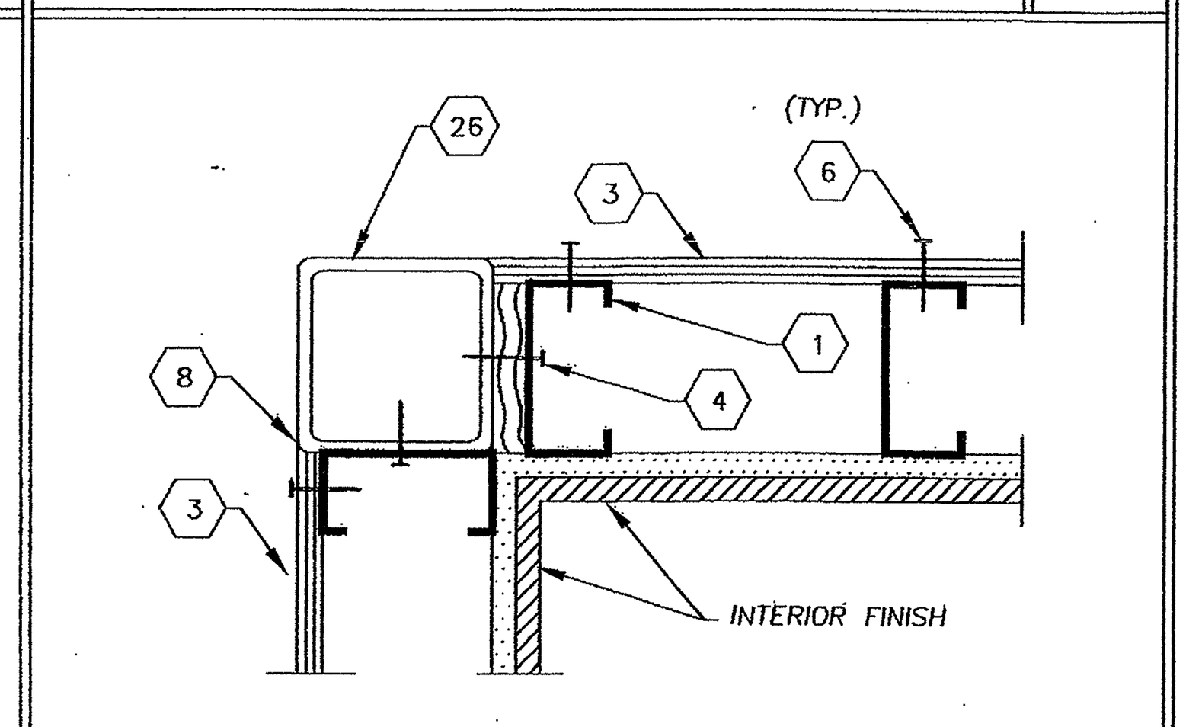
A/C BTM. BRACKET STL. STUDS SCALE: N.T.S. 18



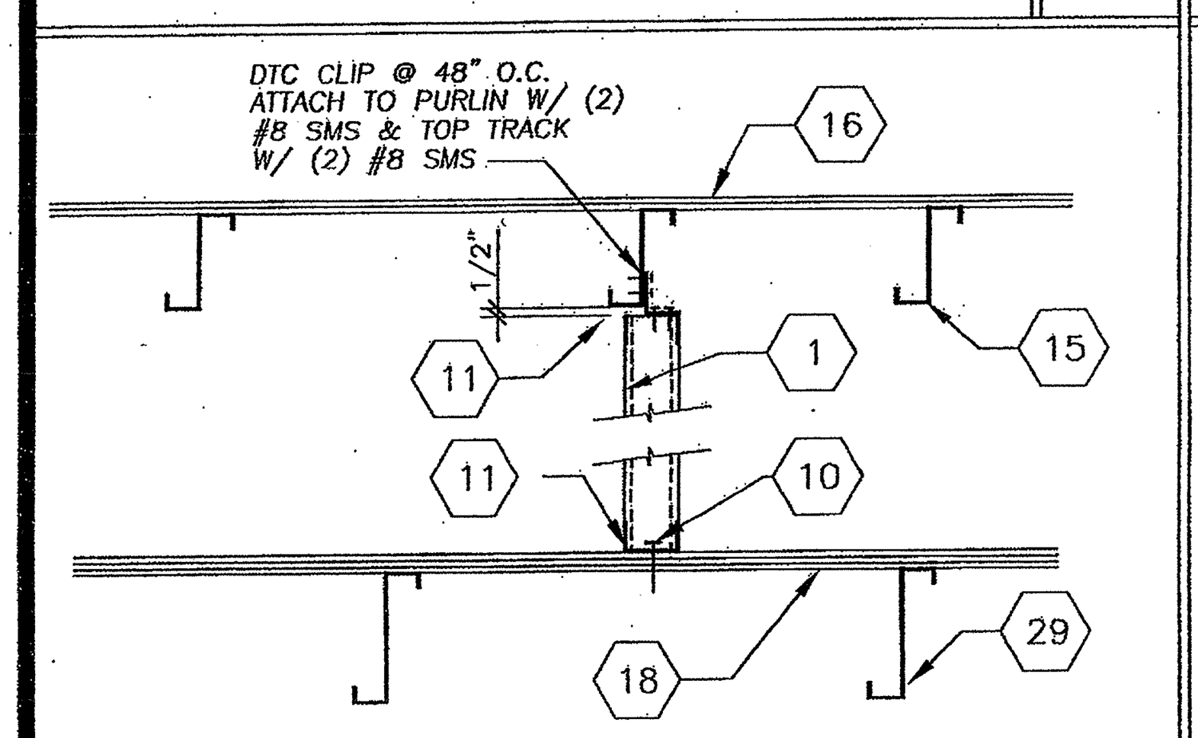
HEADER & SILL CONN. SCALE: 3" = 1'-0" 13



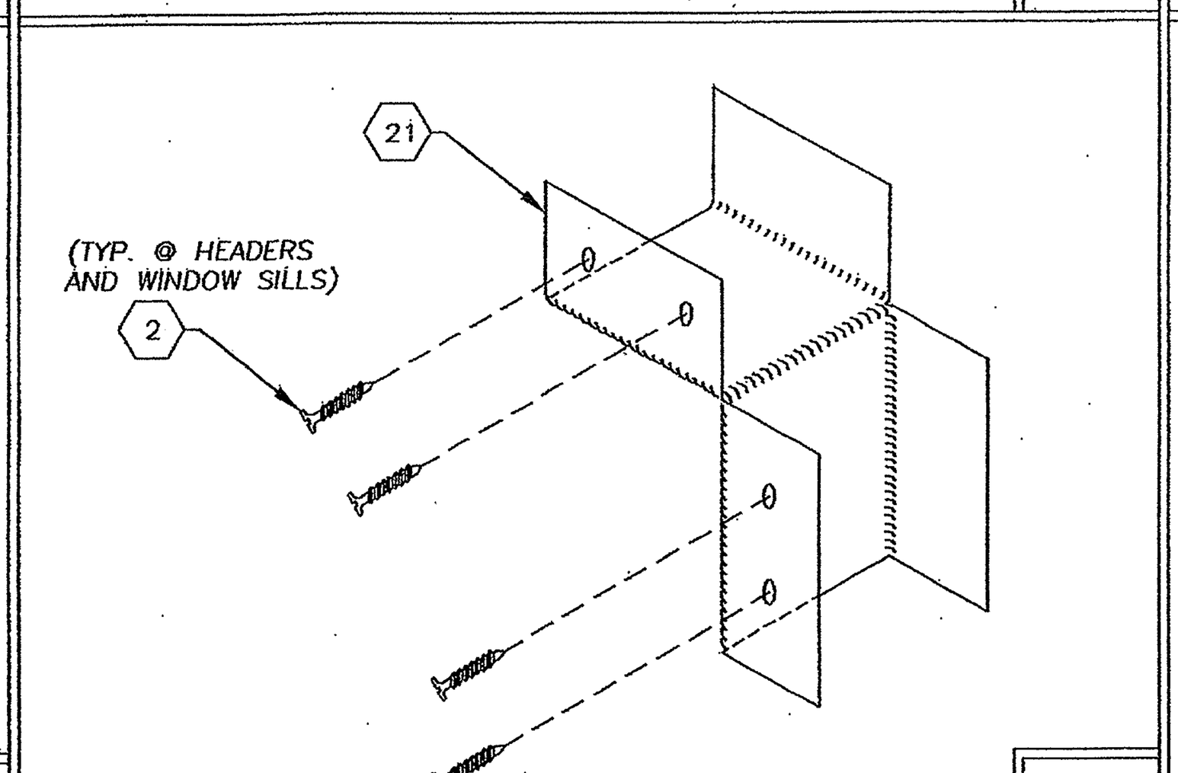
ALT. PARTITION CONN. PERP. SCALE: 1 1/2" = 1'-0" 8



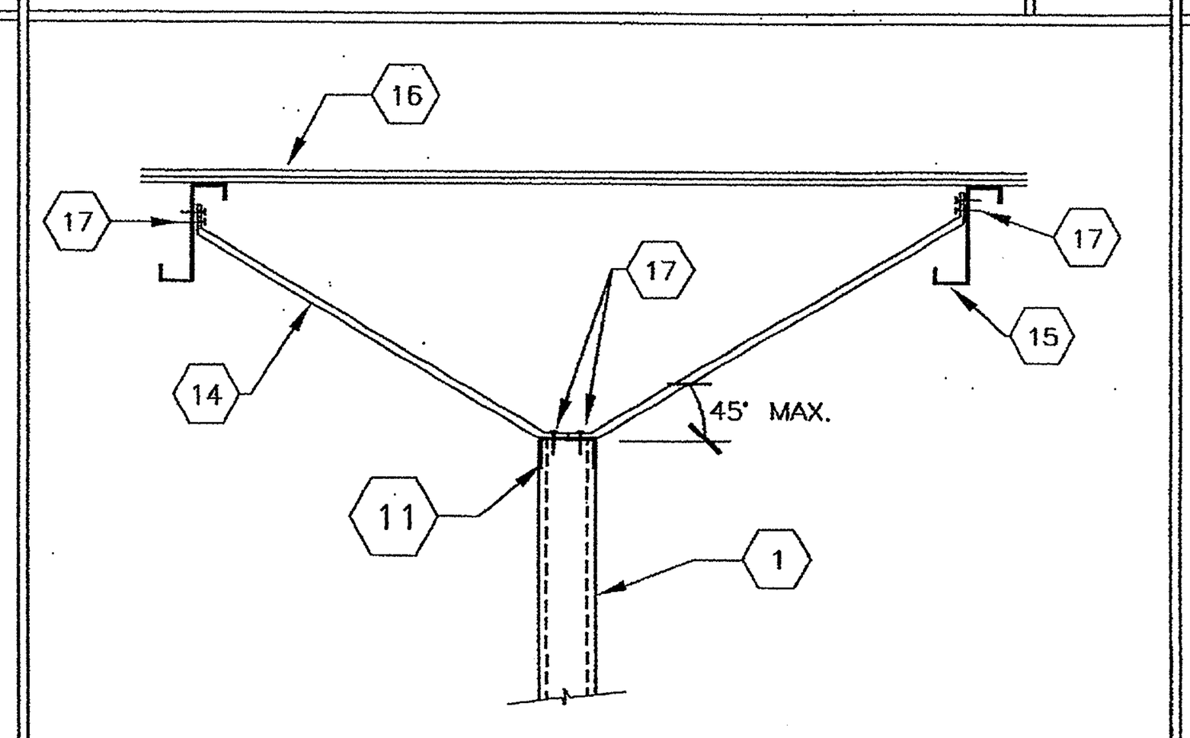
COLUMN AT CORNER SCALE: 3" = 1'-0" 3



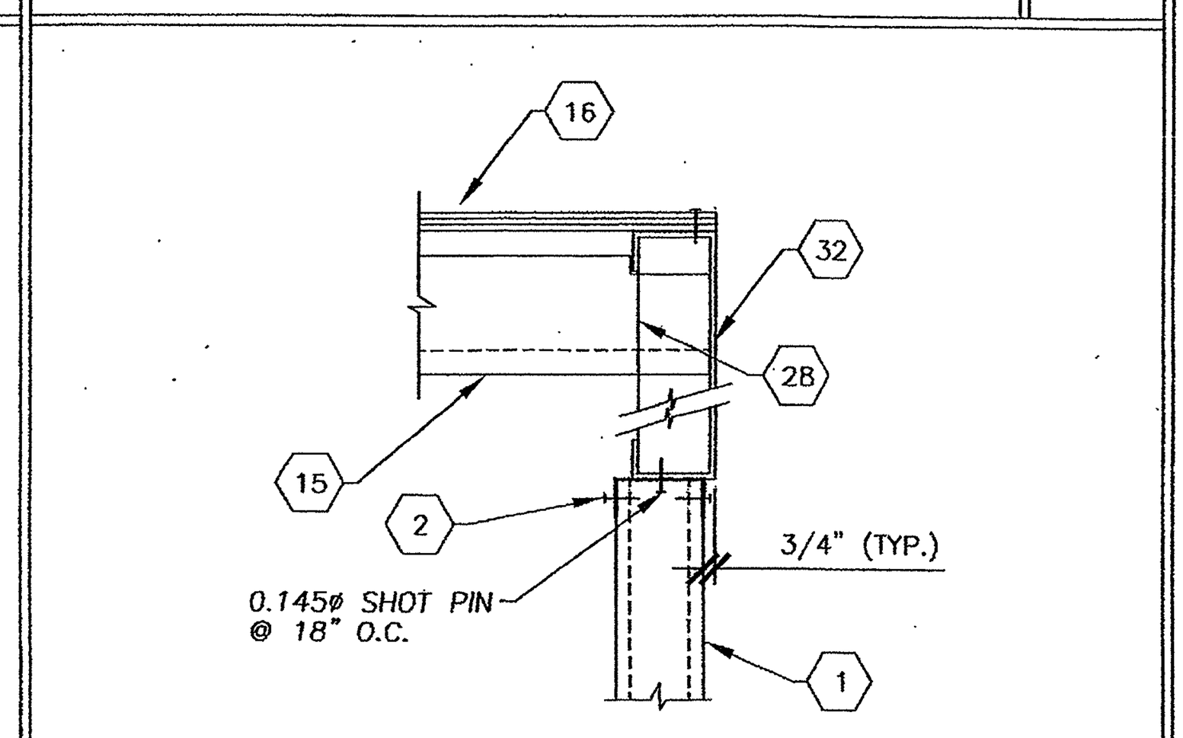
INT. WALL ATTACHMENT TO ROOF PURLINS SCALE: 1" = 1'-0" 19



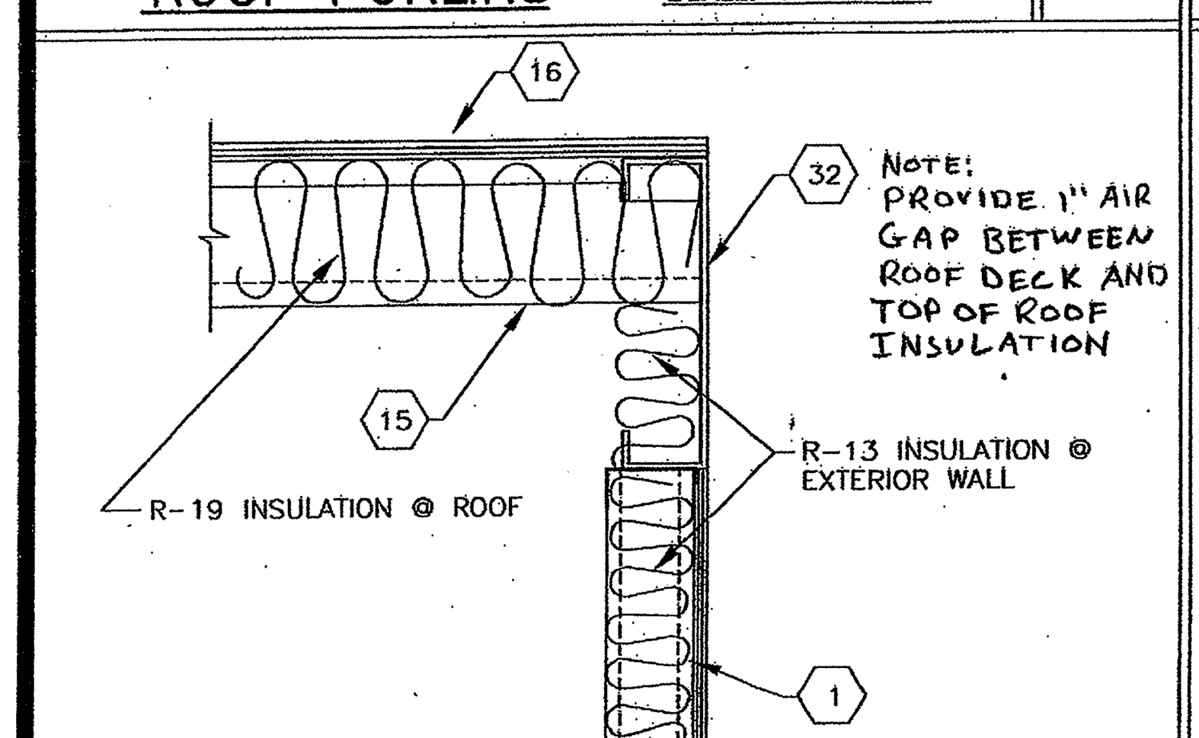
CONNECTOR FROM JAMB TO HDR. 14



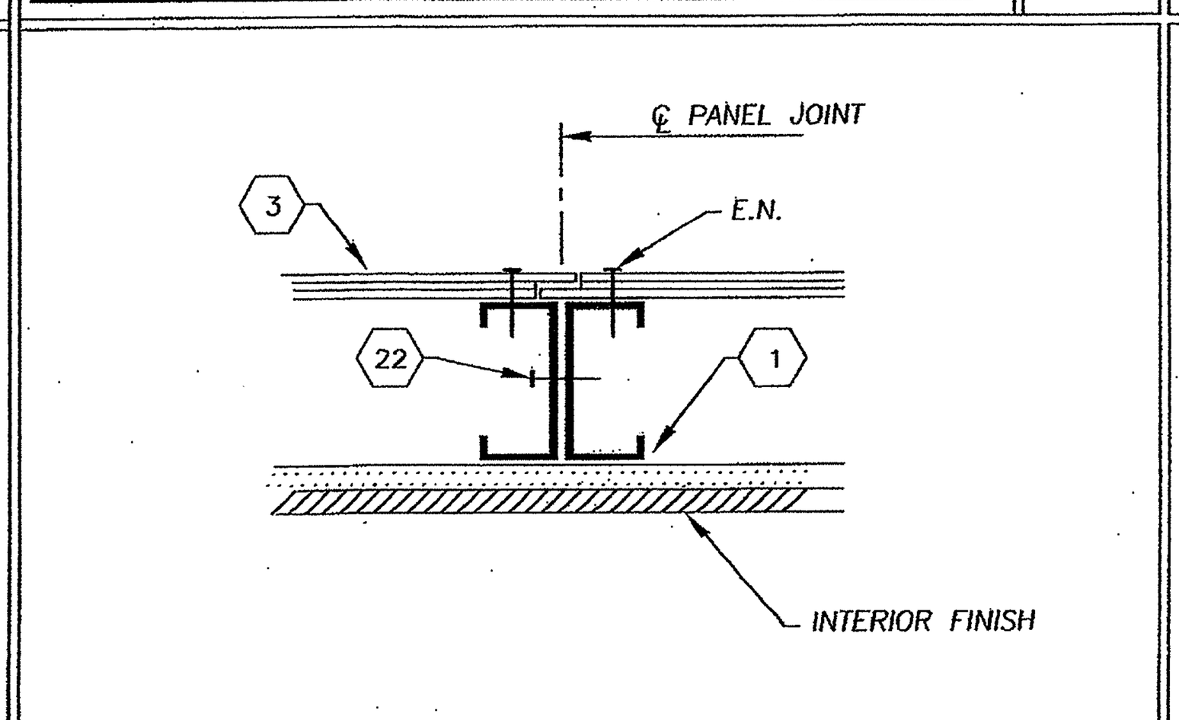
ALT. PARTITION CONN. PARELLEL SCALE: 1" = 1'-0" 9



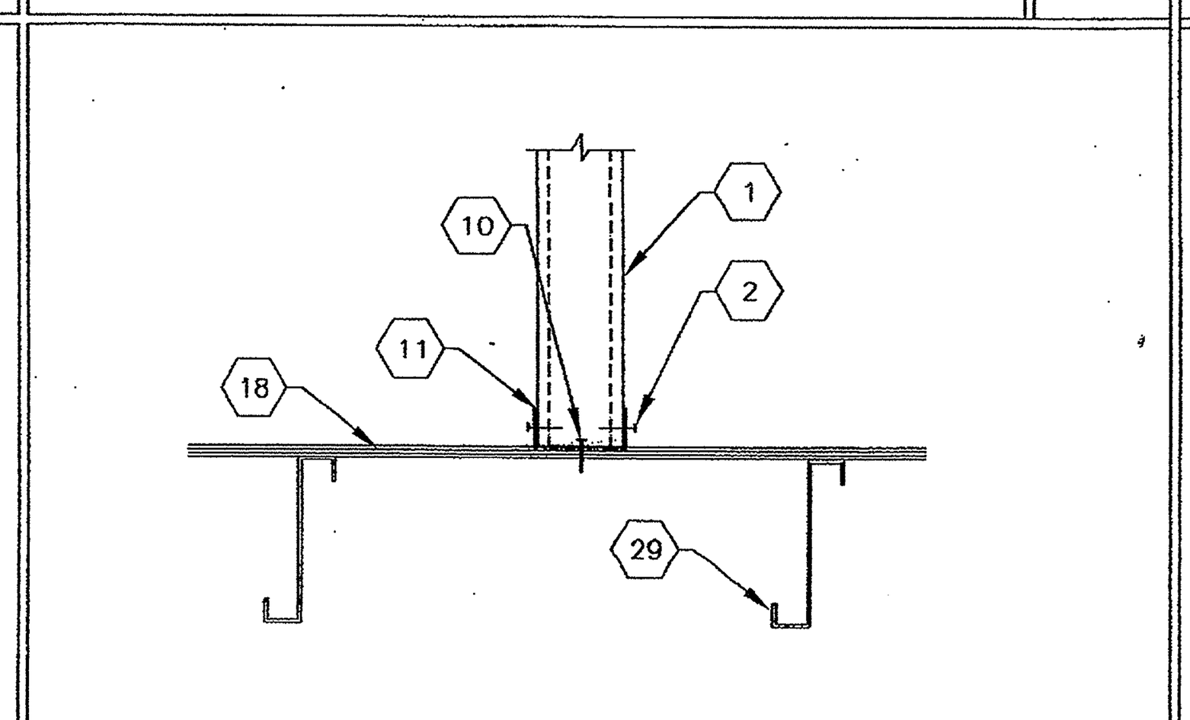
WALL @ ROOF BM. SCALE: 1 1/2" = 1'-0" 4



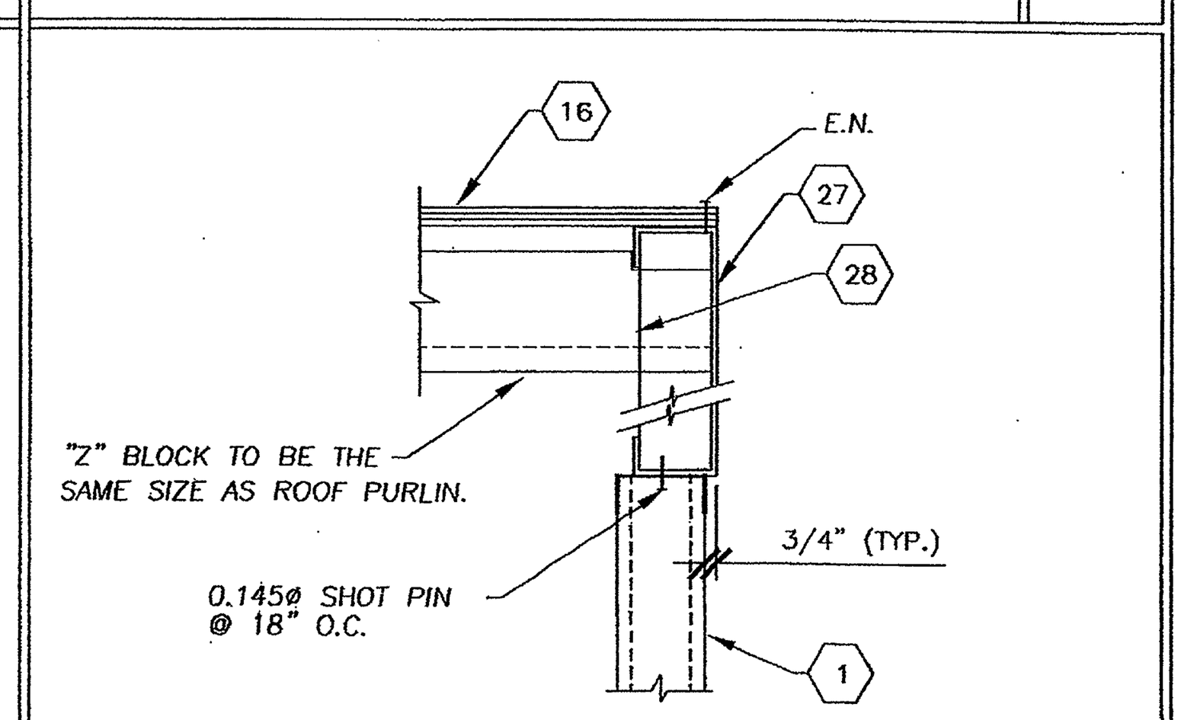
INSULATION @ WALL/ROOF SCALE: 1 1/2" = 1'-0" 20



WALL PANEL JOINT SCALE: 1 1/2" = 1'-0" 15



PARTITION CONN. TO SILL SCALE: 1 1/2" = 1'-0" 10



WALL @ ROOF HDR. SCALE: 1 1/2" = 1'-0" 5

NOTES:

A. EXTERIOR PLYWOOD ATTACHED TO STUDS W/ CORROSION RESISTANT SCREWS.

B. PROVIDE MOISTURE BARRIER BEHIND SIDING. USE ASPHALT SATURATED KRAFT, TYPE-1, GRADE 'D', STYLE-2 OR EQUAL ICBO NO. 4369

KEYNOTES

1. 3 1/2" x 20 GA. METAL STUD AT 16" O.C. MAX.
2. #8 STSMS WAFFER HD. @ EA. STUD
3. EXTERIOR FINISH (SEE FINISH SCHEDULE).
4. AEROSMITH AKN 0.145ø SHOT PIN, OR #10 SMS @ 24" MAX.
5. GALV METAL FLASHING
6. #8 STSMS FN AT 12" O.C. MAX.
7. HEADER (SEE OPENING SCHEDULE) COPE & BEND WEB FOR ATTACHMENT TO JAMB STUDS.
8. PAINTABLE ACRYLIC LATEX SEALANT (U.N.O.)
9. JAMB STUD (SEE OPENING SCHEDULE FOR TYPE AND QUANITY)
10. 16d BOX NAIL @ 8" O.C. OR #10-24x 1 3/4" W.S. SILL TRACK TO PLYWOOD FLOOR
11. 3 1/2" x 20 GA. TRACK.
12. 3 1/2" x 20 GA. TRACK AS HEADER OR SILL (SEE OPENING SCHEDULE) COPE AND BEND WEB FOR ATTACHMENT TO JAMB STUDS.
13. STEEL FLOOR CHANNEL.
14. 1/2"ø STEEL CONDUIT BRACE AT 8' O.C. MAX. STAGGERED.
15. ROOF PURLIN (SEE STRUCTURAL ROOF FRAME).
16. PLYWOOD ROOF DECK SHOWN, NOT REQ'D @ 22 GAUGE METAL ROOF DECK
17. #10 STSMS WAFER HD.
18. PLYWOOD SUB FLOOR.
19. 16d AT 8" O.C. MAX.
20. 3 1/2" x 20 GA. METAL TRACK USED FOR SPLICE.
21. 20 GA. JAMB CLIP. (SEE DETAIL #14)
22. #6 STSMS AT 24" O.C. MAX.
23. 20 GA. STRAP WIDTH MAY VARY, USED AS BACKING FOR CABINETS.
24. ALTERNATE WELDING 1" AT 18" O.C. IS AN ACCEPTABLE ALTERNATE TO BOXING AND SCREWING.
25. 4X4 DF #2 POST TO SUPPORT A/C UNIT.
26. STEEL TUBE COLUMN.
27. ROOF HEADER.
28. 1/4" FULL HGT. STIFFENER.
29. FLOOR JOIST @ 32" O.C. MIN. FOR PARTITION LOAD
30. BEND UP FLANGE OF 20 GA. TRACK AND SECURE TO JAMB STUD W/ #8 STSMS WAFER HEAD SCREWS.
31. NOT USED.
32. ROOF BEAM.

OPENING SCHEDULE			
OPENING	HEADER	SILL	JAMB
3068/4068	(1) 3 1/2"x20 GA. T.	(1) 3 1/2"x20 GA. T.	(2) 3 1/2"x20 GA. S.
8040	(1) 3 1/2"x16 GA. T.	(1) 3 1/2"x16 GA. T.	(2) 3 1/2"x20 GA. S.

NOTE:
T. = TRACK
S. = STUD

DATE SIGNED JUN 04 2003

LICENSE EXPIRES 6-30-2004

ARCHITECT STAMP

DATE SIGNED MAY 21 2003

LICENSE EXPIRES 6-30-2004

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
APPL 01 105425
AC ___ FLS ___ SS ___ DATE 6/19/03

STATE AGENCY STAMP

PC
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
4-104778
AC ___ FLS ___ SS ___ DATE: 5-30-03

STATE AGENCY STAMP

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE, RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

PROJECT: MODULAR CLASSROOM BUILDING

TITLE & BLDG. DATA: STEEL STUD WALL FRAMING DETAILS

WIND LOAD: 80 & 90 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

JOB #

DATE 12-1-02

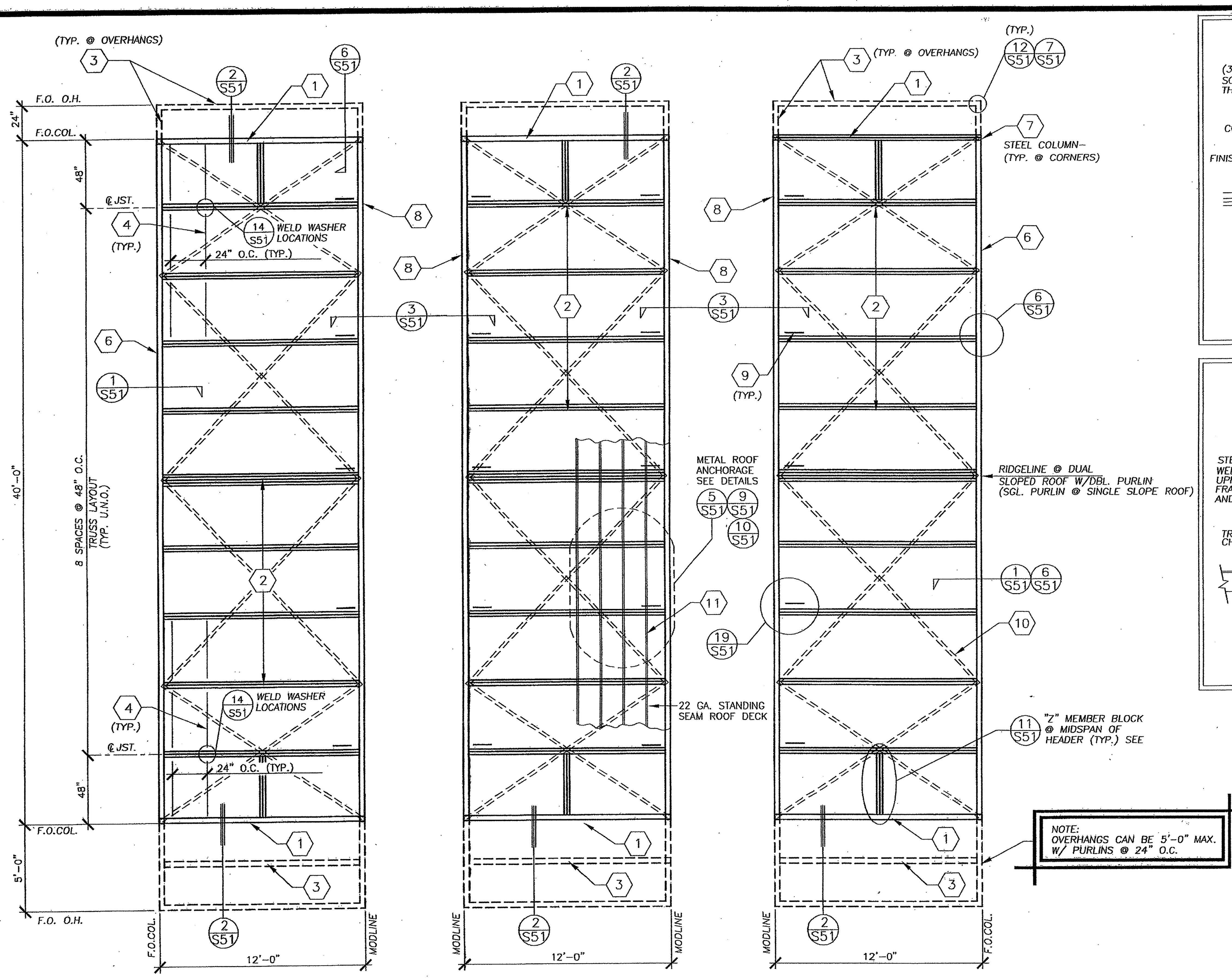
DRAWN BY JAG

SCALE AS NOTED

APPROVED

REVISIONS

SHEET NO. S-25



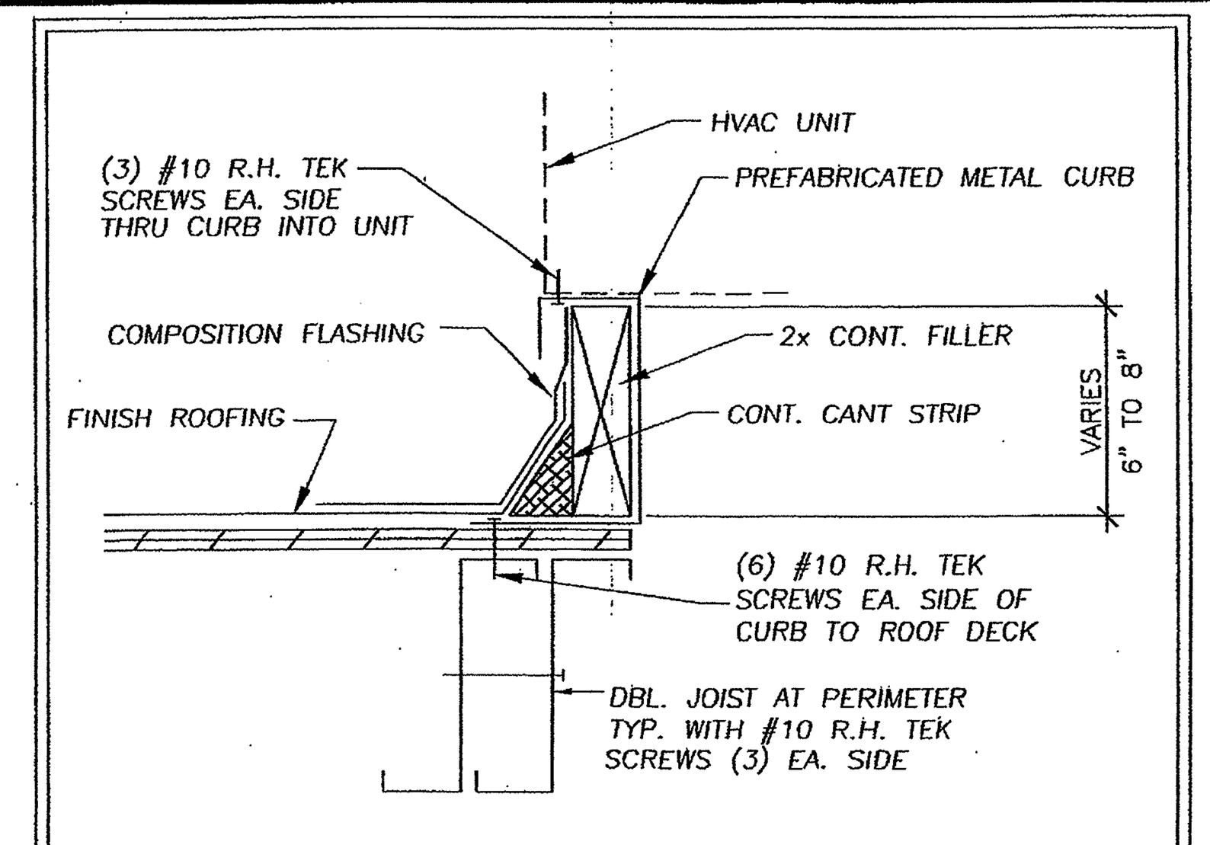
LEFT HAND MODULE
SCALE 1/4" – 1'-0"

CENTER MODULE
SCALE 1/4" – 1'-0"

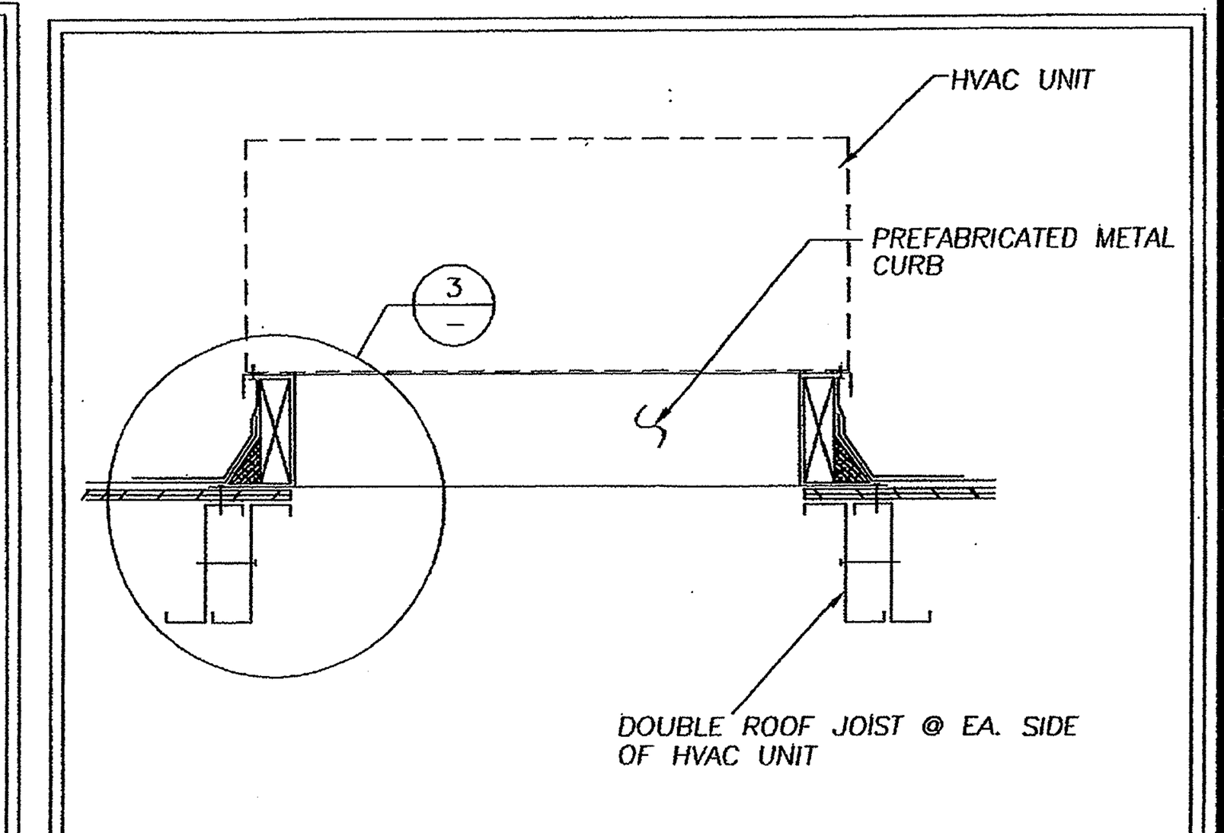
RIGHT HAND MODULE
SCALE 1/4" – 1'-0"

NOTE:
OVERHANGS CAN BE 5'-0" MAX. W/ PURLINS @ 24" O.C.

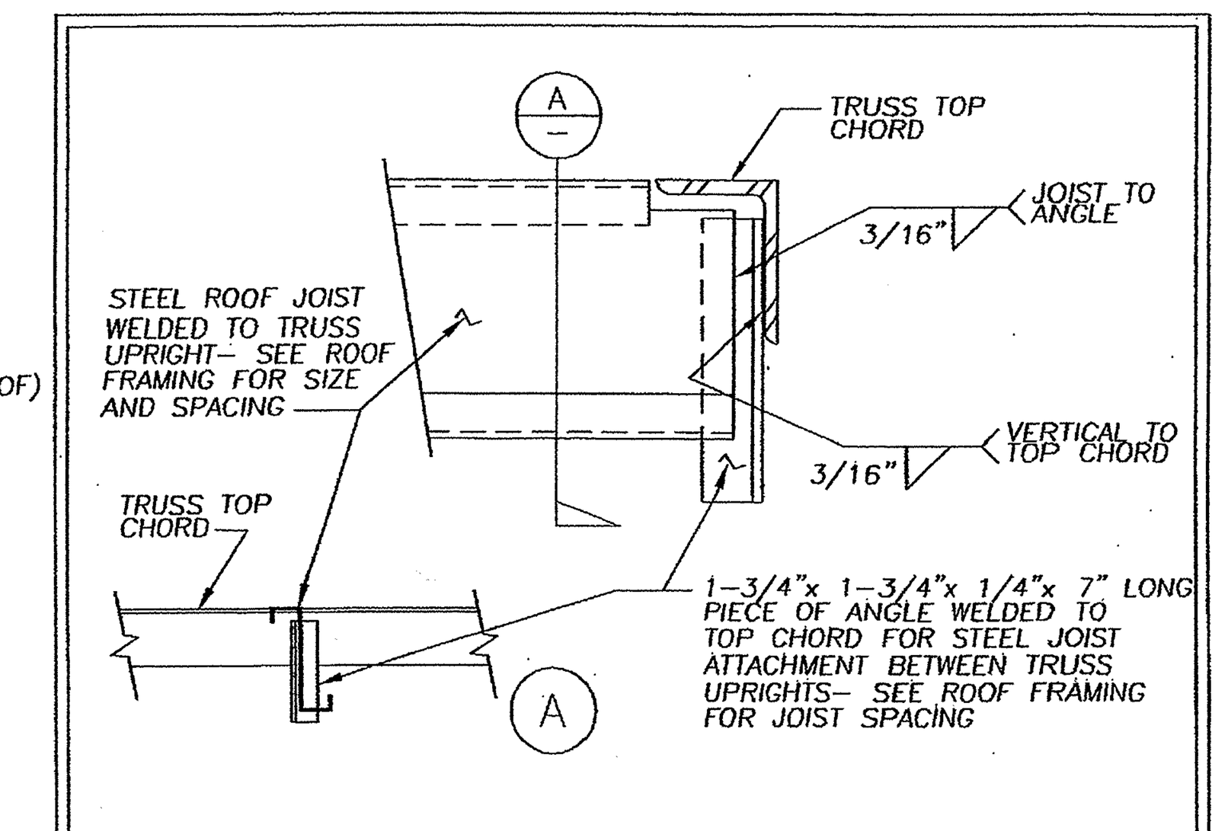
ROOF FRAMING PLAN METAL ROOF OPTION
SCALE 1/4" – 1'-0"



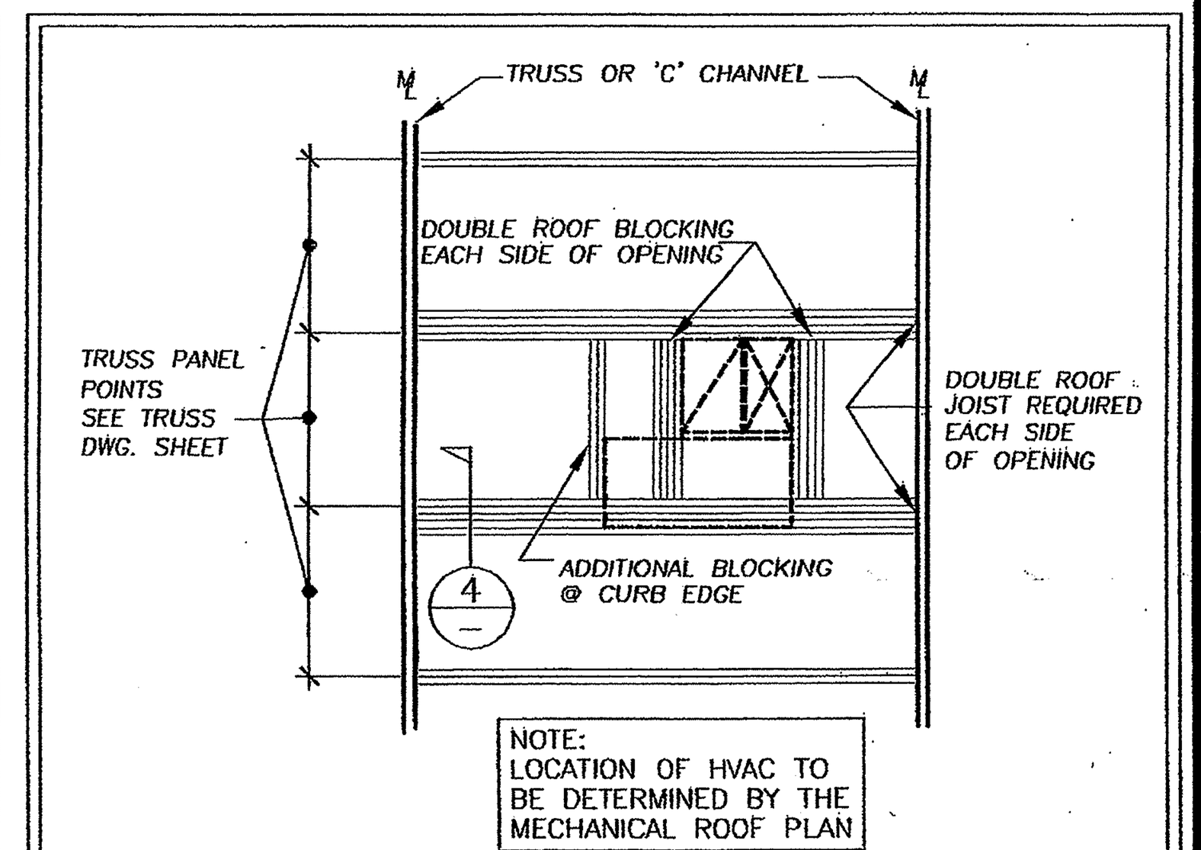
HVAC CURB DETAIL #3



HVAC MOUNTING DETAIL #1



STEEL JOIST TO TRUSS DETAIL #4



NOTE:
LOCATION OF HVAC TO BE DETERMINED BY THE MECHANICAL ROOF PLAN

ROOF MOUNT HVAC OPENING #2

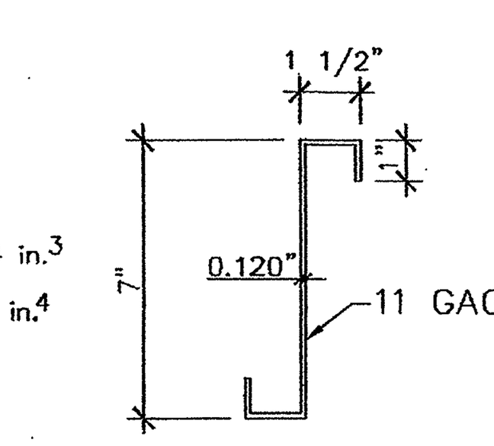
KEY NOTES

1. [18"x3 1/2"x 12 GA. RFC STEEL ROOF HEADER.
2. ⅂ 6" x 2 x 14 Ga. STEEL ROOF JOIST @ 48" O.C. FOR 20 PSF ROOF OR 7 x 1 1/2 x 11 GA. @ 48" O.C. FOR 30 PSF ROOF.
3. 10"x12 GA. CHANNEL @ ROOF OVERHANGS.
   L 4"x3"x3/8" PURLIN & OUTRIGGER AT 20 PSF ROOF OR
   L 5"x3"x3/8" OUTRIGGER & L 4"x3"x3/8" PURLIN AT 30 PSF ROOF
4. WIRE OR STRAP ATTACHED TO ROOF JOISTS FOR INSULATION SUPPORT AT 24" O.C.
5. NOT USED.
6. 18"x23"x18"x3 1/2"x10 GA. TAPERED CHANNEL SECTION BEAM AT DOUBLE SLOPE ROOF AND 18"x28"x3 1/2"x 10 GA. AT SINGLE SLOPE ROOF.
7. STEEL CORNER COLUMN SEE RIGID FRAME SECTION FOR SIZE.
8. STEEL TRUSS. (SEE SHTS. S-60, S-60.1, S-70, & S-70.1)
9. STEEL TRUSS BRACES AT 8' O.C. TO BOTTOM CHORD OF TRUSSES L 1 1/2"x1 1/2"x 3/16"
10. 2" x 20 GAUGE METAL STRAPS ONLY FOR 22 GA. METAL ROOF OPTION. W/ 3" MIN. OF 1/8" FILLET WELD EACH END TO ROOF BEAM OR HEADER.
11. 22 GA. STANDING SEAM ROOF DECK. SEE DETAIL #9 ON SHEET S-51 FOR ROOF PANEL SECTION.

ROOF JOIST SCHEDULE

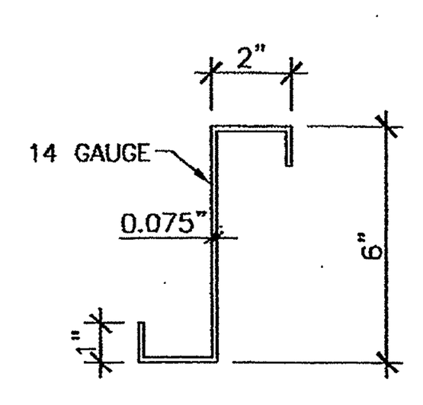
LOAD	PURLIN	SPACING
20 PSF	⅂ 6x14 GA.	48" O.C.
30 PSF	⅂ 7x11 GA.	48" O.C.

$S_x = 2.624$ in.^{3}
$I_x = 9.183$ in.^{4}

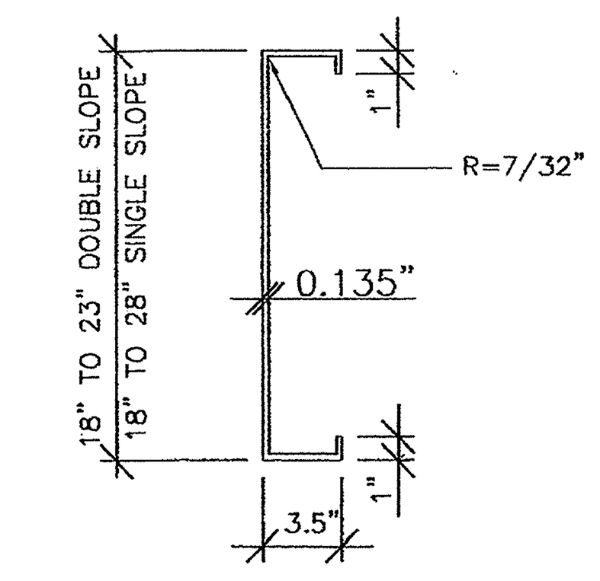


(2) ROOF JOIST
⅂ 7"x1 1/2"x11 GA. (ALTERNATE)

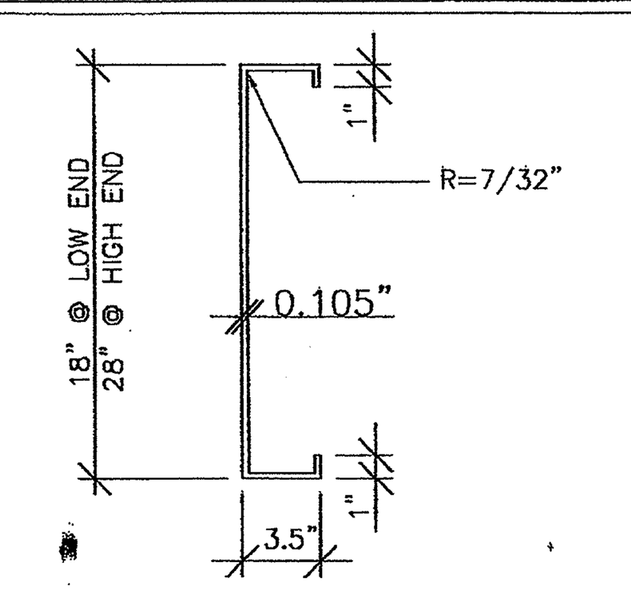
$I_x = 4.734$ in^4
$S_x = 1.578$ in^3



(2) ROOF JOIST
⅂ 6"x2"x14 GA.



(6) ROOF BEAM
18"/23"/18" x 3 1/2" x 10 GA. CHANNEL (BEAM) @ DOUBLE SLOPE
OR 18"/28" x 3 1/2" x 10 GA. CHANNEL (BEAM) @ SINGLE SLOPE



ROOF HEADER
(1) 18" x 3 1/2" x 12 GA. CHANNEL (HDR) @ DOUBLE SLOPE
28" x 3 1/2" x 12 GA. CHANNEL (HDR) @ SINGLE SLOPE

DATE SIGNED
JUN 04 2003

ARCHITECT STAMP

DATE SIGNED
MAY 21 2003

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL 01 105425
STATE AGENCY STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-104778
DATE 5-30-03
STATE AGENCY STAMP

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA. 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

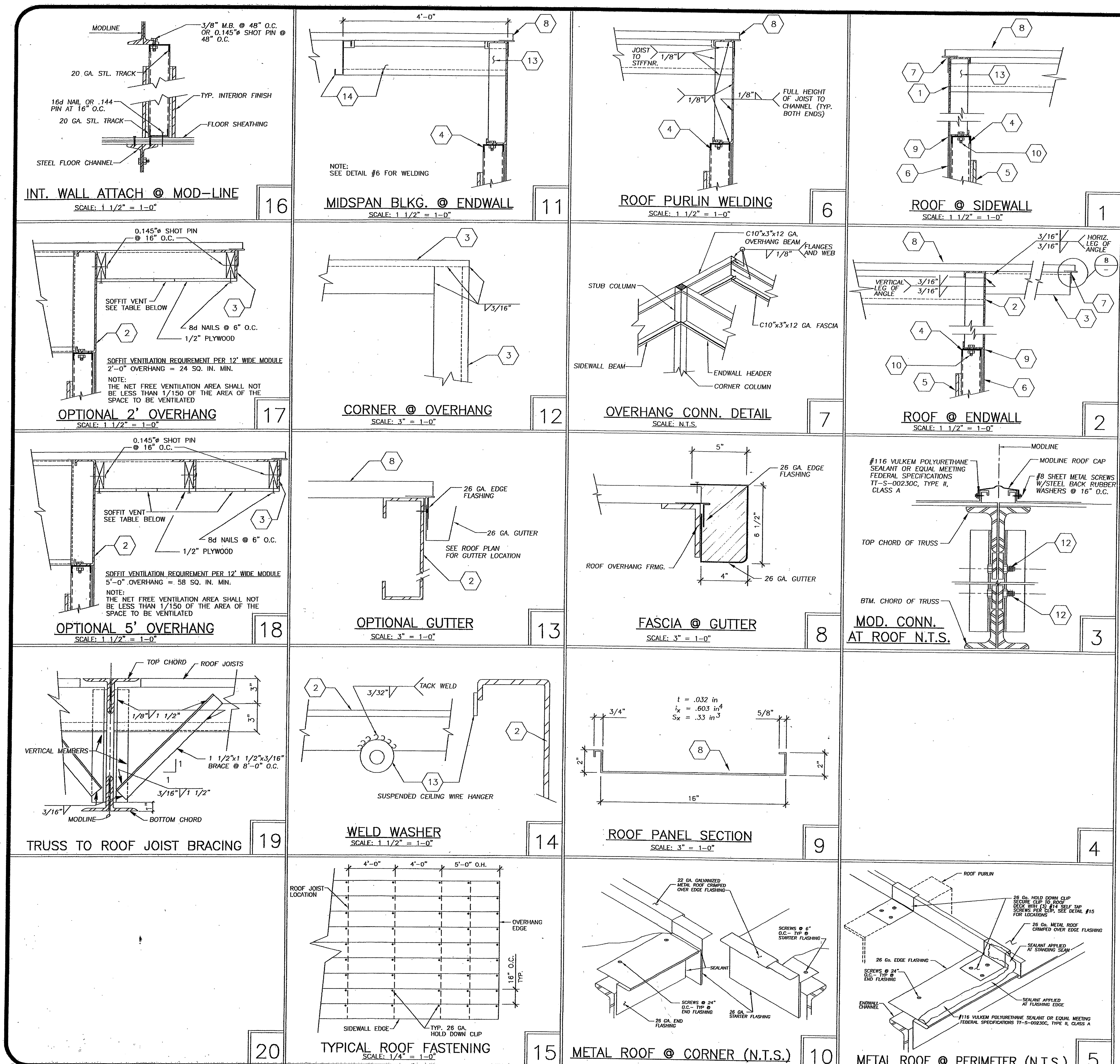
PROJECT:
MODULAR CLASSROOM BUILDING

TITLE & BLDG. DATA:
ROOF FRAMING PLAN W/ 22 GA. METAL DECK

WIND LOAD: 80 & 90 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

JOB #
DATE 12/1/02
DRAWN BY JAG
SCALE AS NOTED
APPROVED
REVISIONS

SHEET NO.
S-41


INT. WALL ATTACH @ MOD-LINE
SCALE: 1 1/2" = 1'-0"
16
MIDSPAN BLKG. @ ENDWALL
SCALE: 1 1/2" = 1'-0"
11
NOTE:
SEE DETAIL #6 FOR WELDING
ROOF PURLIN WELDING
SCALE: 1 1/2" = 1'-0"
6
ROOF @ SIDEWALL
SCALE: 1 1/2" = 1'-0"
1
OPTIONAL 2' OVERHANG
SCALE: 1 1/2" = 1'-0"
17
SOFFIT VENTILATION REQUIREMENT PER 12' WIDE MODULE
2'-0" OVERHANG = 24 SQ. IN. MIN.
NOTE:
THE NET FREE VENTILATION AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE TO BE VENTILATED
CORNER @ OVERHANG
SCALE: 3" = 1'-0"
12
OVERHANG CONN. DETAIL
SCALE: N.T.S.
7
ROOF @ ENDWALL
SCALE: 1 1/2" = 1'-0"
2
OPTIONAL 5' OVERHANG
SCALE: 1 1/2" = 1'-0"
18
SOFFIT VENTILATION REQUIREMENT PER 12' WIDE MODULE
5'-0" OVERHANG = 58 SQ. IN. MIN.
NOTE:
THE NET FREE VENTILATION AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE TO BE VENTILATED
OPTIONAL GUTTER
SCALE: 3" = 1'-0"
13
FASCIA @ GUTTER
SCALE: 3" = 1'-0"
8
MOD. CONN. AT ROOF N.T.S.
3
TRUSS TO ROOF JOIST BRACING
19
WELD WASHER
SCALE: 1 1/2" = 1'-0"
14
ROOF PANEL SECTION
SCALE: 3" = 1'-0"
9
4
20
TYPICAL ROOF FASTENING
SCALE: 1/4" = 1'-0"
15
METAL ROOF @ CORNER (N.T.S.)
10
METAL ROOF @ PERIMETER (N.T.S.)
5

KEYNOTES

1. 10 GA. CHANNEL @ ROOF SIDEWALL
   DUAL SLOPE OPTION: 18/23/18x3 1/2x10 GA.
   SINGLE SLOPE OPTION: 18/28/18x3 1/2x10 GA.
2. 12 GA. CHANNEL @ ROOF HEADER
   DUAL SLOPE OPTION: 18"x3 1/2"x12 GA.
   SINGLE SLOPE OPTION: 18/28x3 1/2x 12 GA.
3. OVERHANG @ ENDWALL, SEE ROOF PLAN FOR SIZE AND SHT. G-2 FOR OVERHANG MATERIAL
4. 20 GA. STL. TRACK CONT. TOP PLATE- ATTACH TO CHANNEL W/ 0.145ø SHOT PIN AT 18" O.C. OR 3/8" BOLT AT 24" O.C. MIN.
5. INTERIOR FINISH - SEE SHEET G-2
6. TYP. EXTERIOR FINISH - SEE SHEET G-2
7. 26 GA. FLASHING
8. STEEL ROOF DECK - 22 GA. ROLL FORMED STANDING SEAM ROOF DECK. SEE DETAIL #9 ROOF PANEL SECTION. SEE DETAILS #5 AND #10 FOR ATTACHMENT SPECIFICATIONS.
9. PAINTABLE ACRYLIC LATEX SEALANT (U.N.O.)
10. 1/2ø" MACHINE BOLT W/ WASHER @ 24" OC MIN. OR 0.145ø SHOT PIN AT 18" O.C.
11. WELD WASHER - 1-3/8"x 3/32" WITH 9/16" HOLE. WELD TO UPPER CHANNEL FLANGE.
12. 5/8" MACHINE BOLT AT 8'-0" O.C. @ MODULE CONNECTION.
13. 1/4" FULL HEIGHT STIFFENER @ 4'-0" O.C.
14. 6"x 14 GA. ROOF JOIST OR BLKG.

DATE SIGNED JUN 0 4 2003

ARCHITECT STAMP

DATE SIGNED MAY 2 1 2003

STRUCTURAL ENGINEER STAMP

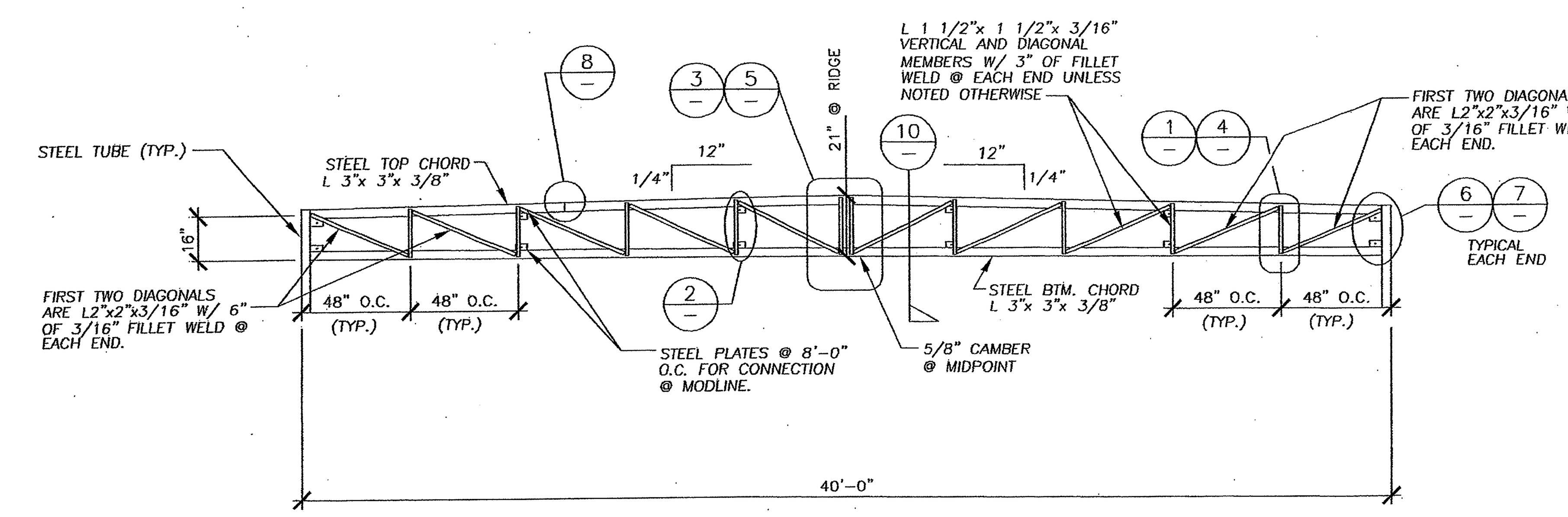
MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

PROJECT:
MODULAR CLASSROOM BUILDING

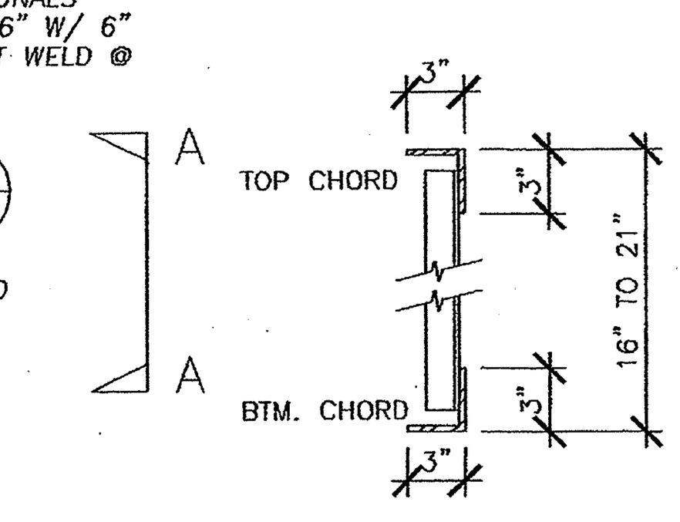
TITLE & BLDG. DATA:
ROOF FRAMING DETAILS W/ METAL DECK
WIND LOAD: 80 & 90 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

JOB #	
DATE	12/1/02
DRAWN BY	JAG
SCALE	AS NOTED
APPROVED	
REVISIONS	

SHEET NO.
S-51



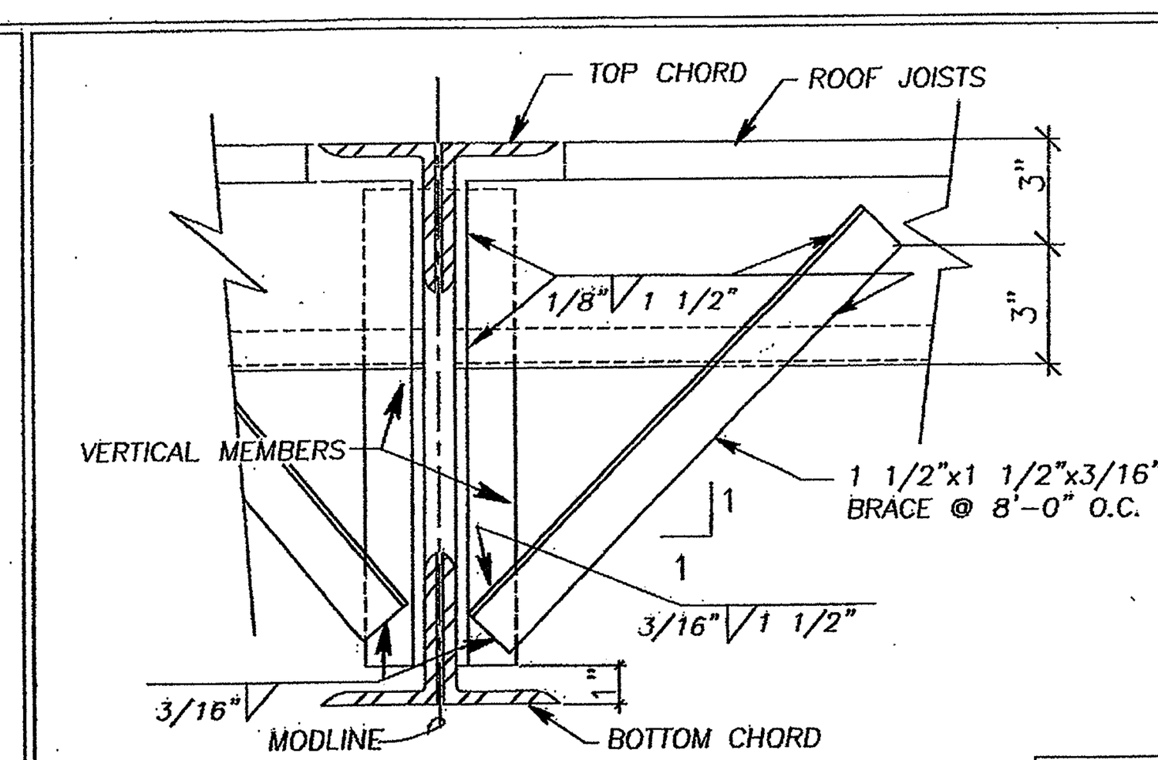
DUAL SLOPE STEEL TRUSS ELEVATION
W/ 20 PSF ROOF LOAD & 80 MPH WIND
SCALE: 1/4" = 1'-0"



VIEW A-A
SCALE: 1" = 1'-0"

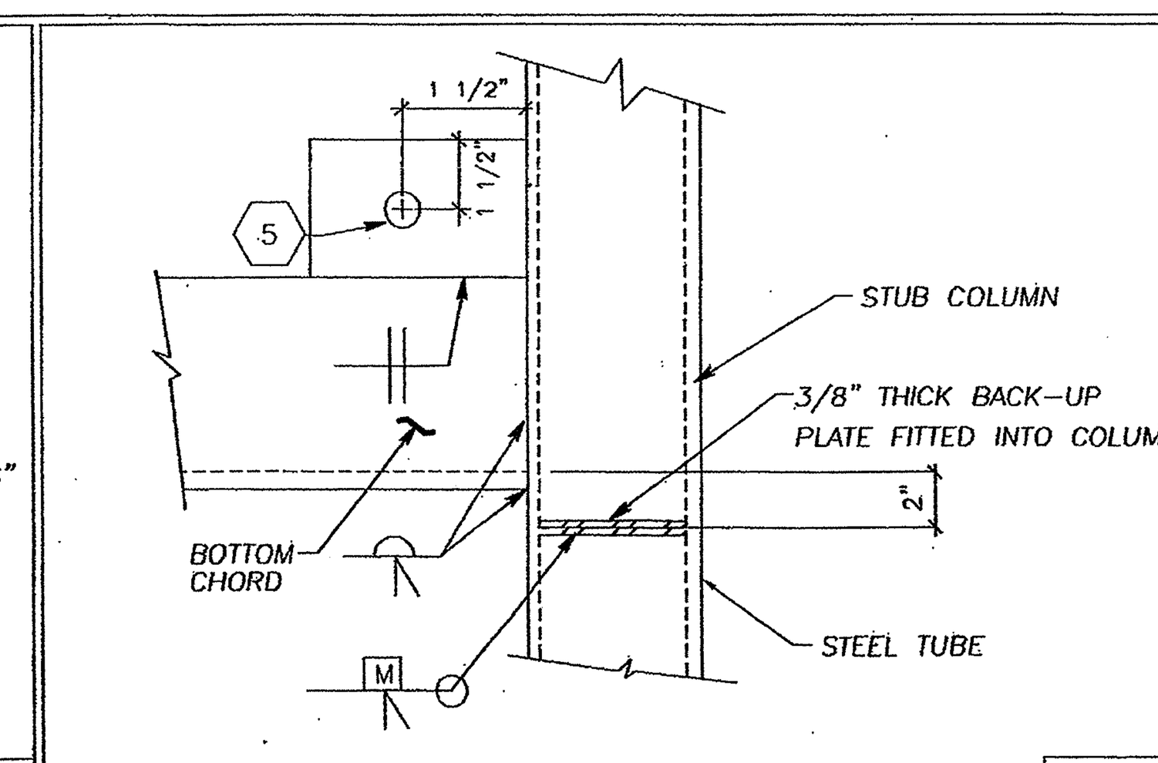
NOTES:

1. ALL STEEL GRADES TO BE A-36 OR EQ. WITH 36 K.S.I. MIN. YEILD
2. REQUIRED ELECTRODES FOR ALL WELDS TO BE E-70-XX OR EQ.
3. VOLTAGE & AMPERAGE SHALL BE PER ELECTRODE MANUFACTURERS SPECIFICATIONS.
4. BOLTS & NUTS TO BE A307.
5. 3/8"x3"x5 1/2" PLATE WITH 11/16" HOLE FOR 5/8" MACHINE BOLT. PLATES @ 8'-0" O.C. FOR MODULE CONNECTION. SEE DETAIL #2A.

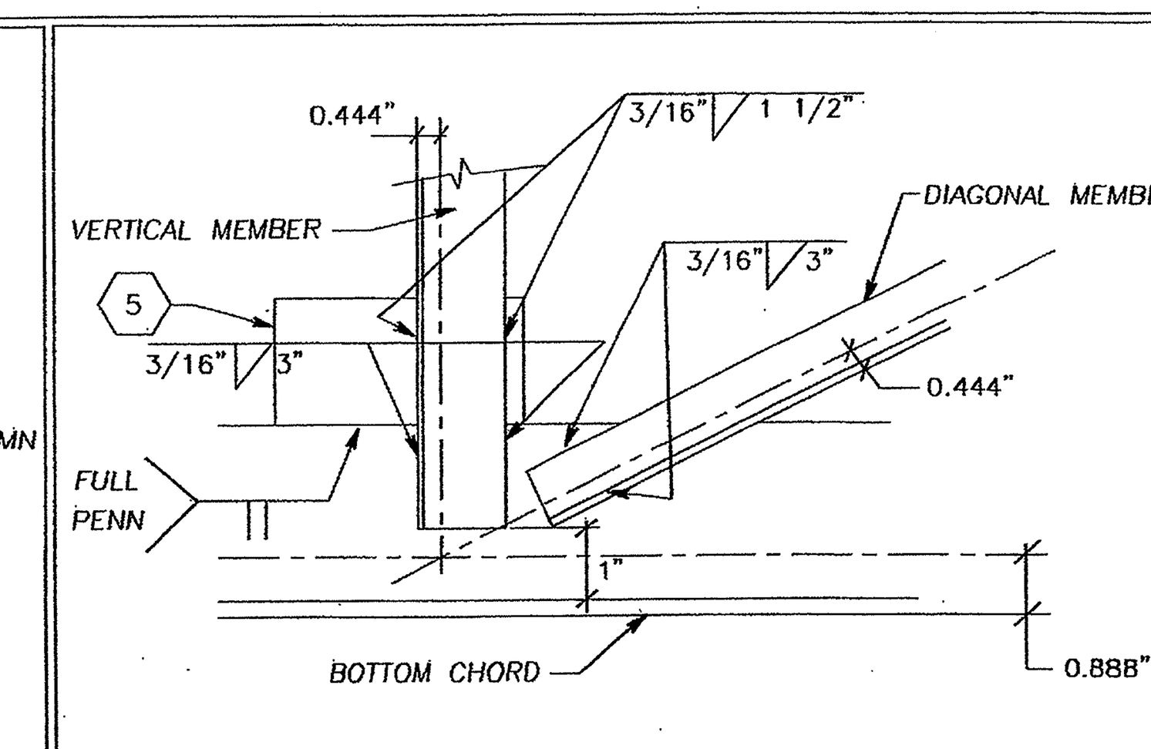


13

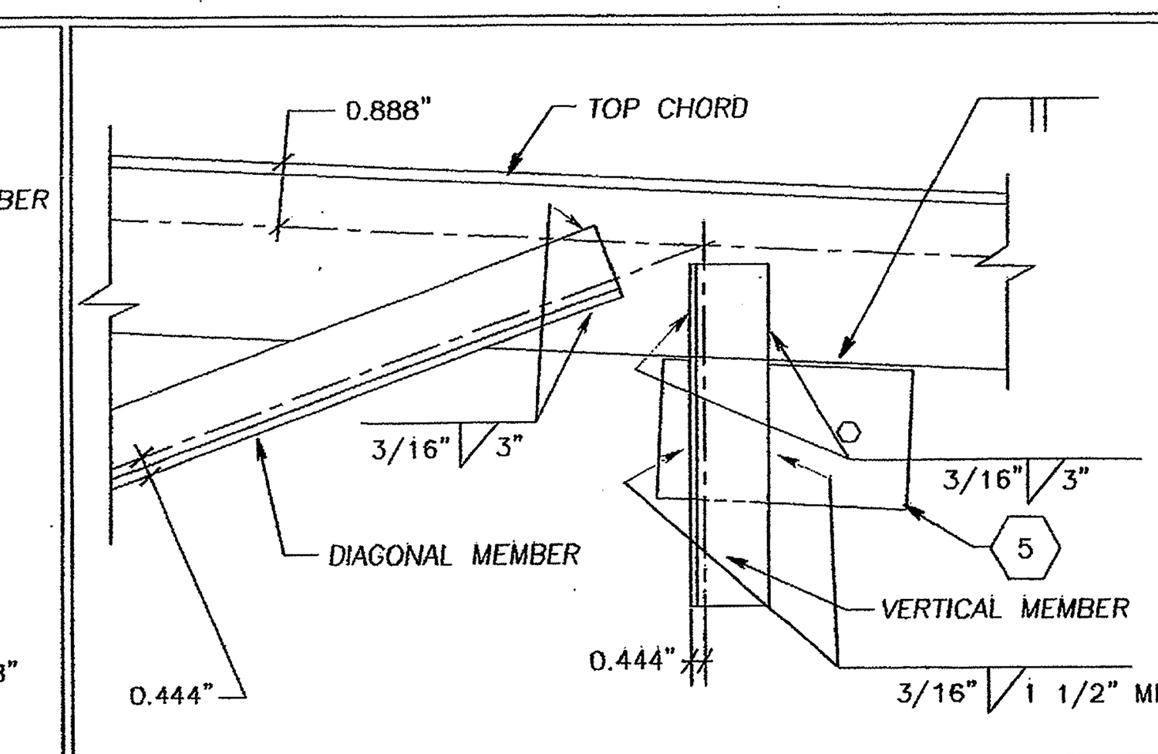
TRUSS TO ROOF JOIST BRACING 10



POST CONN. TO TRUSS (BOT.) 7



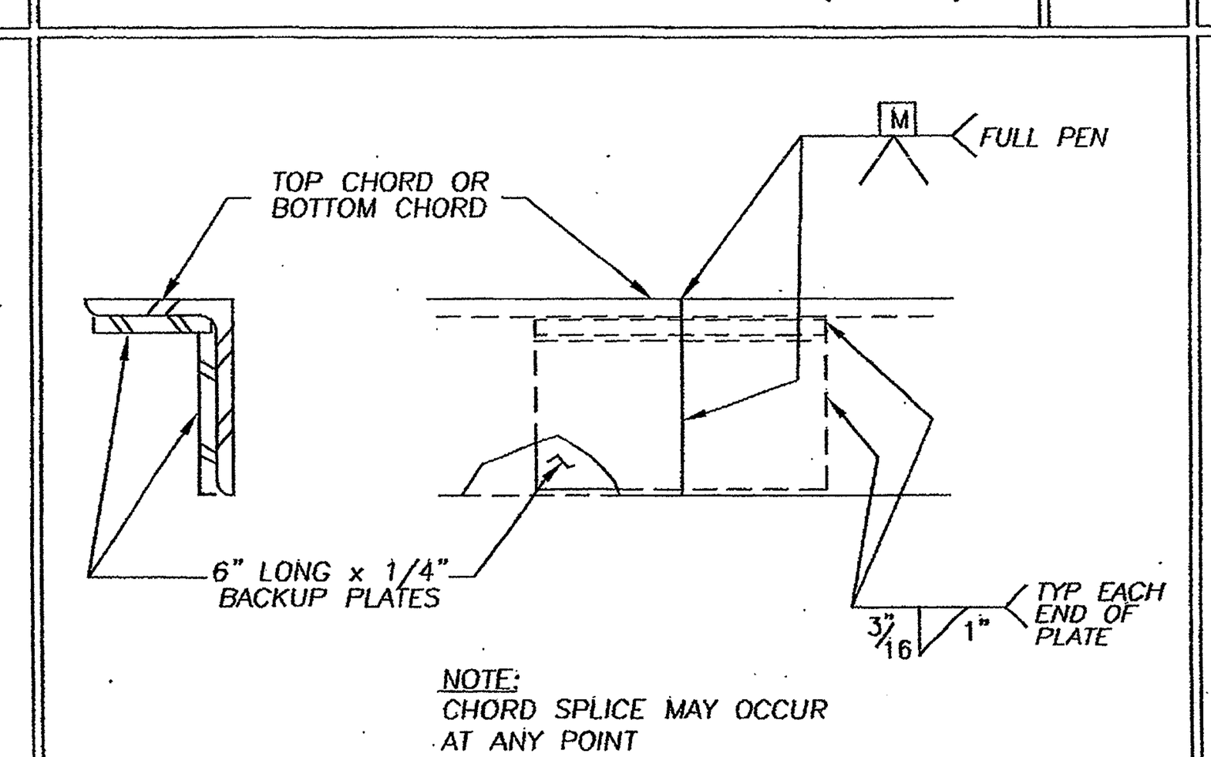
VERT. & DIAG. TO BTM CHORD 4



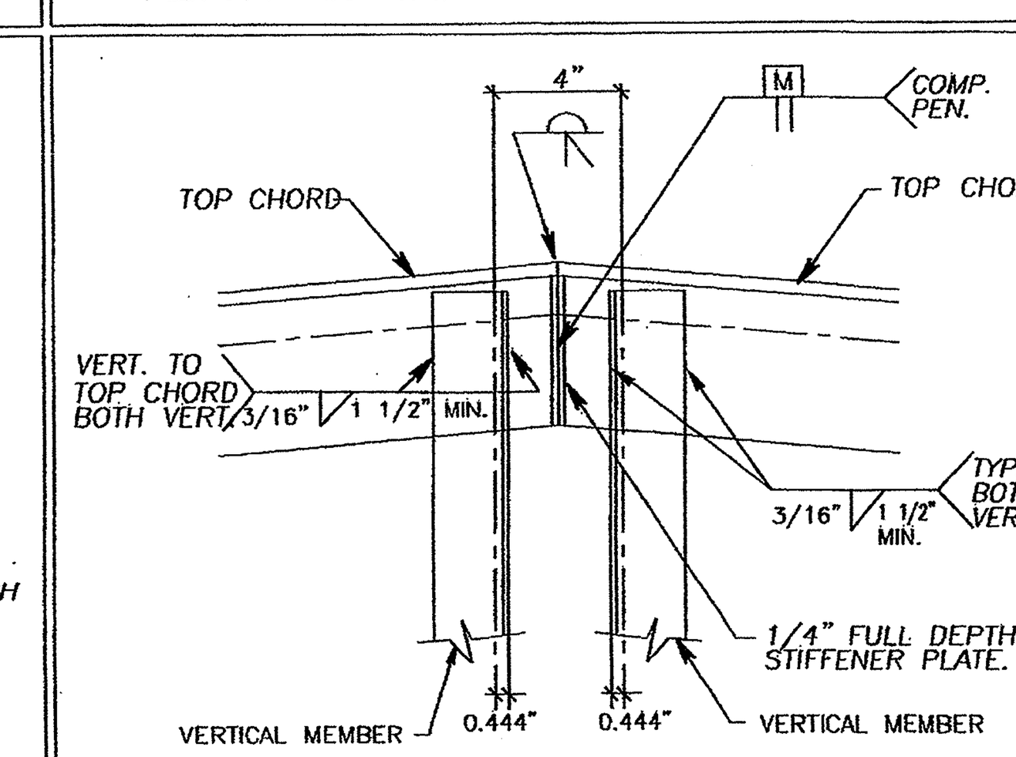
VERT. & DIAG. TOP CHORD 1

14

11

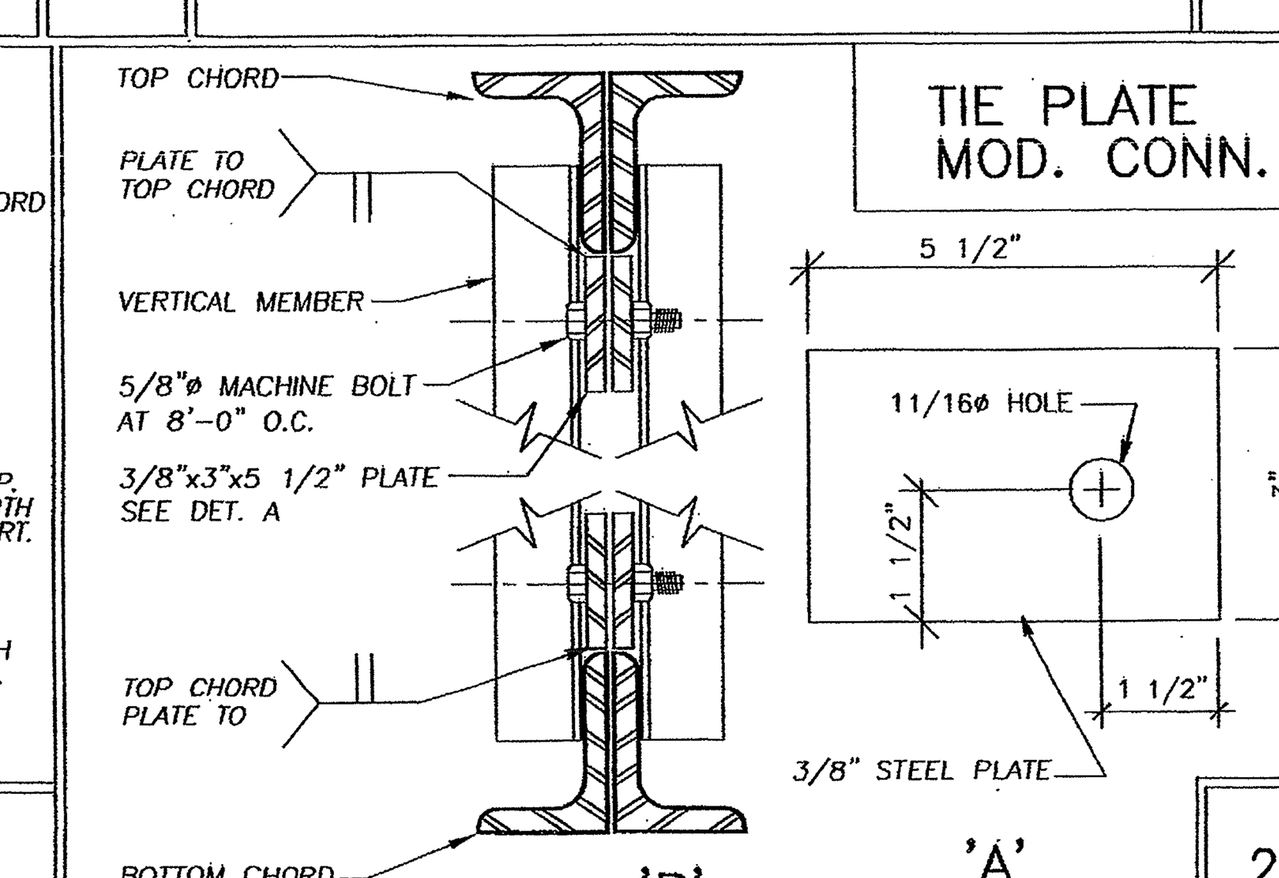


TRUSS CHORD SPLICE 8



TOP CHORD @ MIDPOINT 5

TIE PLATE MOD. CONN.

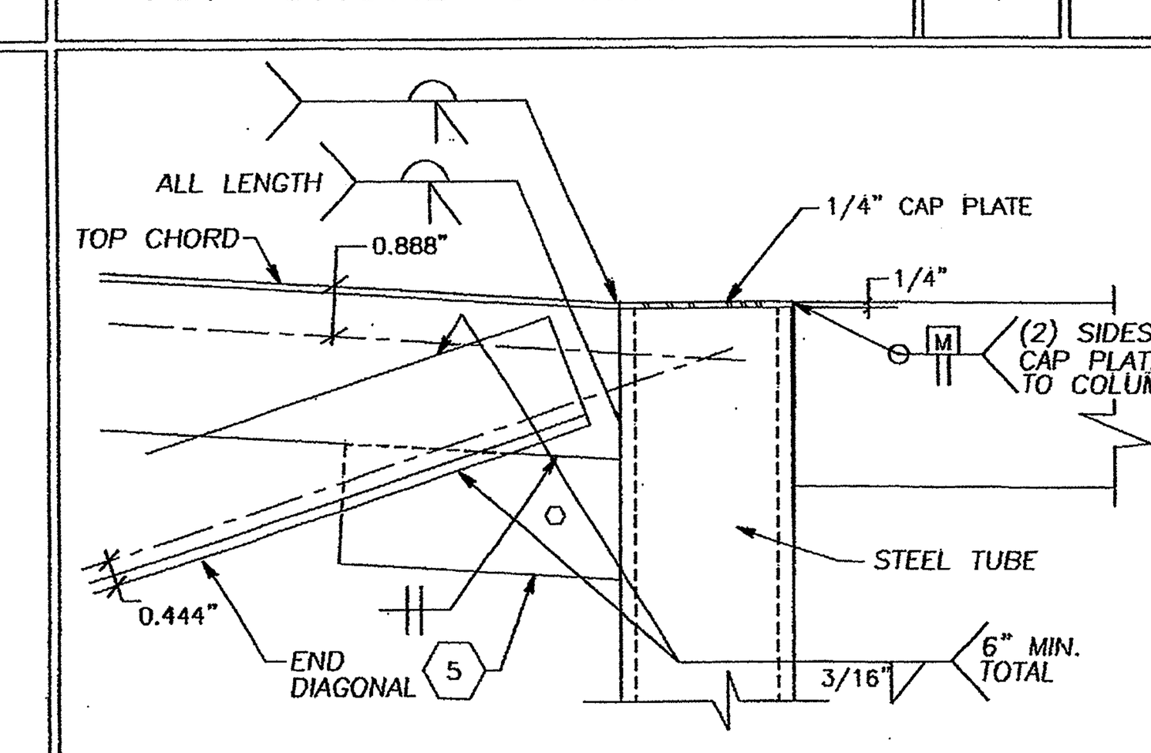


2

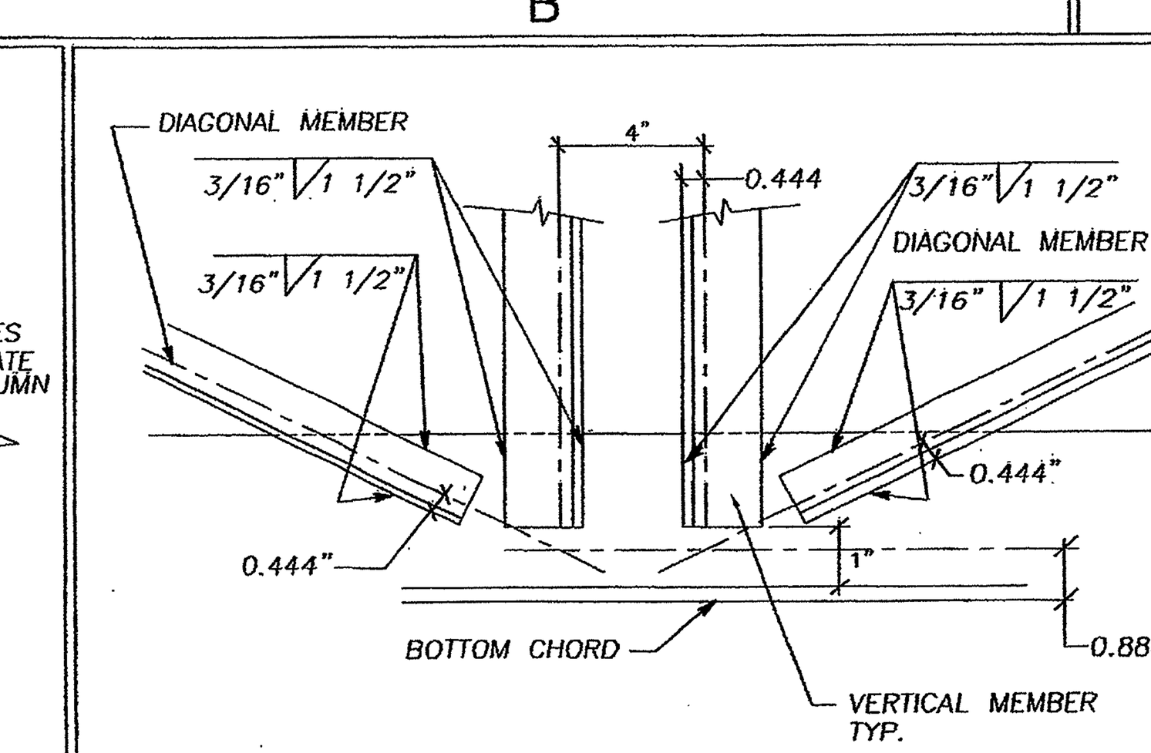
15

12

9



POST CONN. TO TRUSS (TOP) 6



BOTTOM CHORD @ MIDSPAN 3

DATE SIGNED JUN 04 2003

ARCHITECT STAMP

DATE SIGNED MAY 21 2003

STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
APPL 01 103435
STATE AGENCY STAMP

PC
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
4-104778
DATE 5-30-03

STATE AGENCY STAMP

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA. 92507
PHONE: (909) 788-3035 FAX: (909) 788-1523

PROJECT: MODULAR CLASSROOM BUILDING

TITLE & BLDG. DATA: DUAL SLOPE TRUSS & DETAILS

WIND LOAD: 80 MPH
ROOF LOAD: 20 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

JOB #

DATE 12/1/02

DRAWN BY JAG

SCALE AS NOTED

APPROVED

REVISIONS

SHEET NO. S-60

PROJECT DIRECTORY

OWNER
CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670
T: (562) 464-4766
F: (562) 464-4770
CONTACT: STEVE GRAAF

ARCHITECT
RON EDWARDS ARCHITECT
7400 PEDRICK CT
BAKERSFIELD, CA 93313
T: (661) 394-0053
CONTACT: RON EDWARDS

STRUCTURAL
ORION STRUCTURAL ENGINEERING
11305 RANCHO BERNARDO ROAD, STE 121
SAN DIEGO, CA 92127
T: (858) 679-1974
CONTACT: RYAN OMER

SITE SPECIFIC DESIGN CRITERIA

WIND DESIGN DATA:
WIND SPEED: V= 93 MPH
RISK CATEGORY=II
WIND EXPOSURE=C
INTERNAL PRESSURE COEFFICIENT=+/- 0.18

EARTH QUAKEDESIGN DATA:
RISK CATEGORY:II
Ie=1.0
Ss=1.457
S_1=0.481
SITE CLASS=D
SEISMIC DESIGN CATEGORY=D

PRECHECK FABRIC SHADE STRUCTURE

FOR
CUSTOM CANOPES INC.

SHEET INDEX

MATERIAL SPECIFICATIONS

1. MATERIAL SPECIFICATIONS
   - 1.A. CONCRETE: f'_c=4,500psi @ 28 DAYS (SPECIAL INSPECTION REQUIRED). CONCRETE SHALL BE MADE WITH TYPE V CEMENT WITH WATER RATIO NOT LESS THAN 0.50. SITE SPECIFIC GEOTECHNICAL REPORT MUST BE PROVIDED IF A LOWER f'_c IS DESIRED.
   - 1.B. REINFORCING STEEL: ASTM A36, F_y = 36ksi.
   - 1.C. PLATE STEEL: ASTM A36, F_y = 36ksi.
   - 1.D. PIPE COLUMNS: ASTM A53 GRADE B, TYPE E OR S, F_y = 35ksi.
   - 1.E. STRUCTURAL TUBES: ASTM A500 GRADE B, F_y = 42ksi OR ASTM A513 (NORMALIZED WITH A MIN. ELONGATION IN 2" OF 20%), F_y = 50ksi. MIN. CORROSION PROTECTION SHALL BE TRIPLE COATED IN LINE ZINC ELECTROPLATING.
   - 1.F. MACHINE BLOTS: ASTM A307 OR SAE GRADE 2 MIN. (LOCK WASHER REQUIRED). BOLTS OF GREATER STRENGTH MAY USED SUCH AS ASTM F593C/304 OR F593D/304.
   - 1.G. CABLE STEEL: ASTM A1023, 7X19 CLASS IWRC, (TYPICALLY REFERRED TO AIRCRAFT CABLE). CABLE SHALL BE GALVANIZED (CLASS A ZINC COATING) OR STAINLESS STEEL. BREAKING CABLE STRENGTH FOR 1/4" DIA. = 6.4K , 5/16" DIA. = 9K, 3/8" DIA. CABLE = 12K. DESIGN STRENGTH Sa FOR 1//4" DIA = 2.2K, 5/16" DIA. = 3.1K, 3/8" DIA. CABLE = 4.1K. MIN. PRETENSION FORCE ON $\frac{1}{4}$"Ø = 0.10k, ON $\frac{5}{16}$"Ø = 0.15k, ON $\frac{3}{8}$"Ø = 0.20k. MAX. PRETENSION FORCE ON $\frac{1}{4}$"Ø = 0.15k, ON $\frac{5}{16}$"Ø = 0.23k, ON $\frac{3}{8}$"Ø = 0.30k.
   - 1.H. WELDING ELECTRODES SHALL BE "GMAW / SEMI-AUTOMATIC, GRADE ER70S-6 PER AWS A-5.18"
   - 1.I. GROUT: COMMERCIAL GRADE QUICKCRETE, NON-SHRINK PRECISION GROUT, NO. 1585-00 F = 3000psi @ 1 DAY, 10,000psi @ 28 DAYS.
   - 1.J. EXPOSED STEEL FASTENERS: ALL EXPOSED STEEL FASTENERS, INCLUDING CAST-IN-PLACE ANCHOR BOLTS/RODS, SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT-DIP GLAVANIZED (ASTM A153, CLASS D MINIMUM OF ASTM F2329), OR PROTECTED WITH CORROSION-PREVENTATIVE COATING THAT DEMONSTRATES NO MORE THAN 2% OF RED RUST IN MINIMUM 1000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117, ZINC PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT. (EXAMPLE PROPRIETARY COATINGS THAT DO NOT COMPLY WITH THE 1000 HOUR REQUIREMENT INCLUDE BUT ARE NOT NECESSARILY LIMITED TO: QUICK GUARD BY SIMPSON, KWIK-COTE BY HILTI, STALGARD BY ELCO, VISTACORR BY SFS INTEC, ETC.)
2. WELDING
   - 2.A. WORKMANSHIP AND TECHNIQUE OF WELDING ARE TO COMFORM TO THE 2019 CBC SECTION 2204A.1. ALL WELDS SHALL BE INSPECTED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE 2019 CBC CHAPTER 17A, SECTION 1705.2.5.
3. CABLE CLIPS
   - 3.A. CABLE CLIPS SHALL BE FORGED STEEL PER FEDERAL INSPECTION FF-C-40 TYPE 1, CLASS 2 INSTALLED WITH THE U-BOLT ON THE CABLE DEAD END (SEE SPECIFICATION SHEET ON THIS SHEET.)
   - 3.B. BOLT TORQUE FOR $\frac{1}{4}$"Ø CABLE CLIPS = 15 lb-ft, FOR $\frac{5}{26}$"Ø CABLE CLIPS = 30 lb-ft.
4. BOLT HOLES
   - 4.A. BOLT HOLE DIAMETERS SHALL BE $\frac{1}{16}$" LARGER THAN THE BOLT DIAMETER.
   - 4.B. ALL BOLTS SHALL BE INSTALLED WITH LOCK WASHERS.
5. CORROSION PROTECTION
   - 5.A. STEEL TUBE ROOF MEMBER SHALL BE TRIPLE COATED USING IN-LINE ZINC ELECTROPLATING PER ASTM E-6 AND THEN POWDER COATED WITH A TGIC POLYESTER TOP COAT.
   - 5.B. STEEL PIPE COLUMNS SHALL BE POWDER COATED WITH A TGIC POLYESTER PRIMER AND TOP COAT.
   - 5.C. ZINC SPELTER CONFORMS TO ASTM B-6 HIGH GRADE ZINC.
6. FABRIC MATERIAL
   - 6.A. FABRIC MATERIAL SHALL BE COMTEX, EXTRA BLOCK, OR SYNTHETIC SA FR FABRIC.
   - 6.B. THE FABRIC SHALL BE MANUFACTURED FROM HIGH DENSITY POLYETHYLENE POLYMER.
   - 6.C. MIN. WEIGHT - 8.3 oz/sq.yd
   - 6.D. MIN. BREAKING STRENGTH PER ASTM D 5034: WARP = 165 lbs., WEFT = 260 lbs.
   - 6.E. MAX. ELONGATION: WARP = 115%, WEFT = 76%.
   - 6.F. MIN. TEAR STRENGTH PER ASTM D 2261: WARP = 26 lbs., WEFT = 26 lbs.
   - 6.G. FIRE RETARDANT RATING PER CSTM - TITLE 19, (REGISTRATION #: ALNET EXTRA BLOCK SHADECLOTH - F94501)
   - 6.H. THE FABRIC SHALL BE CAPABLE OF MAINTAINING 80% OF IT'S TENSILE AND TEARING STRENGTH AFTER EXPOSURE TO A 313NM LIGHT SOURCE APPLIED FOR 500 HOURS AND WHILE MOISTENED FOR 1 HOUR EVERY 12 HOURS PER ASTM G53. THE FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE SAMPLES OF THE SAME MATERIAL SHALL BE MAINTAINED AT THE PROJECT SITE AND TESTED TO SHOE COMPLIANCE WITH ASTM D 5034 AND D 2261.
   - 6.I. THE FABRIC SHALL MAINTAIN AT LEAST 50% OF IT'S ORIGINAL BREAKING STRENGTH AFTER 5 YEARS OF EXPOSURE TO SUNLIGHT.
7. STANDARD NOTES
   - 7.A. ALL WORK SHALL CONFORM TO 2019 EDITION TITLE 24, CALIFORNIA CODE OF REGULATION (CCR)
   - 7.B. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY DSA, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24 (CCR)
   - 7.C. A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRCT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24 (CCR).
   - 7.D. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
   - 7.E. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH THE TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD) OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA.
   - 7.F. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF January 1, 2021*
2019 California Administrative Code (CAC), Part 1, Title 24 CCR*
2019 California Building Code (CBC), Part 2, Title 24 CCR
(2018 International Building Code, Vol. 1 & 2, and 2019 California amendments)
2019 California Fire Code (CFC), Part 9, Title 24 CCR
(2018 International Fire Code and 2019 California Amendments)

GENERAL NOTES

1. FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH CFC CHAPTER 33 AND CBC CHAPTER 33.

kulkani — MALLEABLE WIRE ROPE CLIPS

ZINC PLATED, MALLEABLE

Size in Inches	Min. Clips Required	Wire Rope Turn Back in Inches	Torque in Foot Pounds**	Approx Wt. in Pounds	Dimensions in Inches A	B	C	D	E	F	G
1/16"*	3	4	2.0	0.030	0.15	0.65	0.45	0.38	0.38	0.45	0.69
1/8"*	3	4.3/4	3.0	0.040	0.18	0.81	0.50	0.50	0.50	0.56	0.94
3/16	3	5.1/2	4.5	0.083	0.26	0.94	0.56	0.56	0.56	0.63	1.06
1/4	3	7	15.0	0.150	0.31	1.19	0.75	0.75	0.69	0.75	1.31
5/16	3	7.3/4	15.0	0.150	0.31	1.31	0.84	0.75	0.75	0.75	1.44
3/8	3	8.1/2	30.0	0.210	0.38	1.63	1.00	0.88	0.94	0.88	1.63
7/16	4	10.1/4	40.0	0.370	0.38	2.00	1.19	1.06	1.00	1.06	1.88
1/2	4	15.1/4	45.0	0.370	0.44	2.00	1.19	1.06	1.00	1.06	1.88
9/16	4	16	50.0	0.590	0.50	2.31	1.38	1.25	1.25	1.25	2.09
5/8	4	16	75.0	0.590	0.50	2.31	1.38	1.25	1.25	1.25	2.09
3/4	5	22.1/4	75.0	0.840	0.66	2.56	1.56	1.31	1.44	1.56	2.38
7/8	5	23.1/2	130.0	1.250	0.63	3.05	1.81	1.63	1.75	1.81	2.88
1	6	31	130.0	1.660	0.63	3.44	2.00	1.88	2.06	2.00	3.00
1.1/8	7	39	200.0	2.430	0.75	4.00	2.75	2.00	2.19	2.00	3.38

Meets the performance requirements of Federal Specification FF-C-450, current revision, Type 1, Class 2.**

* Based on clean, unlubricated threads. The table above shows the minimum torque required to reach maximum holding power of wire rope clips.

** NOTE: 1/16" and 1/8" are not covered by Federal Specification FF-C-450, current revision.

CAL FIRE — FLAME RETARDANT

Fabric Registration

LICENSE NUMBER: F-094501

EXTRA BLOCK SHADECLOTH

Product Marketed by:

ALNET PTY (LTD)
MOORSOM AVENUE, EPPING, INDUSTRY II
CAPE TOWN, S. AFRICA, ,

Issue Date : 06/01/2022
Expiration Date : 06/30/2023

This product meets the minimum requirements of flame resistance established by the California State Fire Marshal for products identified in Section 13115, California Health and Safety Code. The scope of the approved use of this product is provided in the current edition of the CALIFORNIA APPROVED LIST OF FLAME RETARDANT CHEMICALS AND FABRICS, GENERAL AND LIMITED APPLICATIONS CONCERNS published by the California State Fire Marshal.

Issued By Vikkie Franklin
Fire Engineering License Manager
Fire Engineering & Investigations Division

Reviewed and Approved By Patricia Setter
Deputy State Fire Marshal III
Fire Engineering & Investigations Division

OFFICE OF THE STATE FIRE MARSHAL

Please visit calfire.govmotus.org for more information on Licensing and Permitting with CAL FIRE

DESIGN PARAMETER CHECKLIST FOR OTC REVIEW

THE FOLLOWING CHECKLIST IS INTENDED TO ASSIST THE PLAN REVIEWER TO DETERMINE IF THIS PRE-CHECKED SUBMITTAL IS APPLICABLE TO THE SITE SPECIFIC CONDITIONS IN WHICH IT IS INTENDED TO BE USED. IF THIS CHECKLIST CANNOT BE COMPLETED, ADDITIONAL ENGINEERING PROVING SITE-SPECIFIC COMPLIANCE IS REQUIRED.

THIS PRE-CHECKED SUBMITTAL IS APPLICABLE UNDER THE FOLLOWING CIRCUMSTANCES:
- [X] NONE OF THE STRUCTURAL DESIGN CRITERIA ARE EXCEEDED
- [X] THE RISK CATEGORY IS 'II' OR LESS
- [X] THE WIND EXPOSURE CATEGORY IS 'C' OR LESS
- [X] THE PROJECT SITE BASIC ULTIMATE WIND SPEED IS <105mph
- [X] THE PROJECT SITE CLASS CATEGORY IS 'D' OR LESS
- [ ] THE PROJECT SEISMIC DESIGN CATEGORY IS 'E' OR LESS
- [X] THE PROJECT SEISMIC SDS IS MAXIMUM 1.43
- [X] THE PROJECT SITE IS NOT IN A FLOOD ZONE OTHER THAN ZONE 'X'. IF SO, THEN A GEOTECHNICAL LETTER IS REQUIRED PER PC-7 1.7.2.
- [X] THE PROJECT SITE IS NOT IN AN AREA REQUIRING SNOW LOADING
- [X] THE PROJECT SITE IS NOT IN AN AREA CLASSIFIED AS A WILD LIFE URBAN INTERFACE ZONE
- [ ] THE ALLOWABLE SOIL COMPRESSIVE STRENGTH IS 1500psi OR GREATER
- [X] IF THE CANOPY SIZE IS <1600s.f. IN AREA, NO GEOTECHNICAL/GEOHAZARDS REPORT IS REQUIRED.
- [ ] IF THE CANOPY SIZE IS >1600s.f. AND <4000s.f. AND THERE IS A GEOTECHNICAL REPORT PROVING THAT NO POTENTIAL FOR LIQUIFICATION EXISTS
- [ ] IF THE CANOPY SIZE IS >4000s.f., A SITE SPECIFIC GEOTECHNICAL/GEOHAZARD REPORT IS REQUIRED GEOTECHNICAL/GEOHAZARD REPORT REQUIRED IN MAPPED GEOLOGIC HAZARD ZONES AND AS REQUIRED BY IR-4.
- [X] THE CANOPY SIZE PROVIDES THE MINIMUM REQUIRED AREA FOR SELECTED ASSEMBLY USE AND DESIRED OCCUPANCY LOAD (SEE ASSEMBLY USE CHECKLIST)
- [X] THIS PROJECT HAS NOT BEEN DESIGNED TO INCLUDE FIRE SPRINKLERS.
- [X] THE PROJECT IS NOT INTENDED TO PROVIDE SOLAR PANELS

ASSEMBLY USE SELECTION CHECKLIST

THE FOLLOWING CHECKLIST IS TO BE USED BY THE PARTY SUBMITTING THIS PRE-CHECK TO INDICATE THE INTENDED ASSEMBLY USE FOR THIS STRUCTURE.
- [ ] DINING CANOPY - ASSEMBLY USE (1200 s.f. MAX.) - 'A2'
- [ ] SHADE STRUCTURE - ASSEMBLY USE (1200 s.f. MAX.) - 'A'
- [ ] SHADE STRUCTURE - OUTDOOR INSTRUCTIONAL USE (1200 s.f. MAX.) - ASSEMBLY USE - 'E'
- [X] SHADE STRUCTURE OVER PLAY EQUIPMENT (1200 s.f. MAX.) - ASSEMBLY USE - 'E'
- [ ] SHADE STRUCTURE OVER PARKING - ASSEMBLY USE (1200 s.f. MAX.) - 'S2' OR 'U'

NOTE: THE LOCATION OF THESE CANOPIES ADJACENT TO OTHER BUILDINGS IS SUBJECT TO SITE SPECIFIC APPROVAL
- [X] THE INTENDED OCCUPANT LOAD IS _____ PERSONS

FOOTINGS SELECTION CHECKLIST

THE FOLLOWING CHECKLIST IS TO BE USED BY THE PARTY SUBMITTING THIS PRE-CHECK TO INDICATE THE INTENDED SIZES USED FOR THIS PRE-CHECK STRUCTURE.
- [ ] SPREAD FOOTINGS
- [X] PIER FOOTINGS

SITE-SPECIFIC CODE ANALYSIS

THE SECTION IS TO BE FILLED OUT BY THE ARCHITECT OF RECORD FOR THE SITE-SPECIFIC APPROVAL
- [X] OCCUPANCY GROUP: E (SEE ASSEMBLY USE CHECKLIST)
- [ ] OCCUPANCY LOAD: N/A (MAX OCC LOAD 86 PERSON PER 15'x10' MODULE)
- [X] TYPE OF CONSTRUCTION: VB
- [X] PROPOSED AREA: 900 sf (ea.)
- [X] ALLOWABLE AREA: 1200 sf (ea.)

IR 31-1 (Issued 07/27/21)
DIVISION OF THE STATE ARCHITECT
9.3 Shade structures installed over outdoor play area equipment do not require an occupant load calculation.

CANOPY SIZE SELECTION CHECKLIST

THE FOLLOWING CHECKLIST IS TO BE USED BY THE PARTY SUBMITTING THIS PRE-CHECK TO INDICATE THE INTENDED SIZES USED FOR THIS PRE-CHECK STRUCTURE.

[ ] 20'X10'	[ ] 30'X20'	[X] (2) 30'X30'
[ ] 20'X15'	[ ] 30'X25'	[ ] 40'X30'
[ ] 20'X20'	[ ] 36'X18'	[ ] __'X__' (FOR INTERMEDIATE SIZE)
[ ] 25'X25'	[ ] 40'X20'	[ ] __'X__' (FOR INTERMEDIATE SIZE)

NOTES:
1. PLAN DIMENSIONS ARE REPEATABLE IN ANY ONE DIRECTION TO A TOTAL AREA OF 6000 SQ.FT.
2. INTERMEDIATE SIZES MAY USE THE MEMBER SIZES OF THE NEXT LARGEST CANOPY WITH AN IDENTICAL WIDTH TO LENGTH RATIO.

COLUMN HEIGHTS:
- [ ] 9' COLUMN HEIGHT
- [X] 10' COLUMN HEIGHT
- [ ] 11' COLUMN HEIGHT
- [ ] 12' COLUMN HEIGHT

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

rea architect RONEDWARDS

Architecture
7400 Pedrick Court
Bakersfield, CA 93313
(661) 394-0053
ron@rearchitect.net

LICENSED ARCHITECT — RONALD W. EDWARDS — C-25192 — REN 12-31-21 — STATE OF CALIFORNIA

MANUFACTURER:
CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
PRE-CHECK PC DOCUMENT
CODE: 2019 CBC
A separate application for construction is required

PC APPROVAL STAMP:
APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120090 PC A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 06/30/2021

PRECHECK FABRIC SHADE STRUCTURE

Sheet Title
TITLE SHEET

Project #	Sheet
21-003	A001
Drawn By: RWE	
Date: 5-10-20	

CONCRETE:

1. ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE 2019 C.B.C. AND THE A.C.I. 318–14 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
2. SLAB AND FOUNDATION CONCRETE SHALL BE 150 P.C.F. HARDROCK, MIXED PER A.S.T.M. C–94, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 P.S.I. AT 28 DAY. MAX. SLUMP TO BE 4" ± 1" OF W/C RATIO ⩽ .50
3. CONCRETE LIMITED TO EXPOSURE CLASS FO, S1, W1 AND C1
4. THE MAXIMUM SIZE AGGREGATE IN FOUNDATION AND MASS CONCRETE WORK SHALL BE 1 INCH.
5. CEMENT SHALL CONFORM TO A.S.T.M.. C–150, TYPE II, LOW ALKALI. AGGREGATES FOR NORMAL WEIGHT SHALL CONFORM TO A.S.T.M. C–33.
6. ADMIXTURES AND COLORS (EXCEPT AS NOTED HEREIN) SHALL NOT BE USED UNLESS SUBSTANTIATING DATA IS SUBMITTED TO AND ACCEPTED BY THE ENGINEER AND ARCHITECT OF RECORD AND DSA.
7. CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY. THE MIX DESIGNS SHALL CONFORM TO ACI 318–14 SECTION 26.4.3. UNLESS NOTED OTHERWISE.
8. NON–STRUCTURAL STEEL EMBEDDED IN CONCRETE SHALL BE GALVANIZED OR PAINTED. ALL DAMAGED GALVANIZED AREAS SHALL BE REPAIRED PRIOR TO EMBEDMENT.
9. READY MIXED CONCRETE SHALL CONFORM TO (A.S.T.M. C–94).
10. PLACEMENT OF CONCRETE SHALL CONFORM THE 2019 C.B.C. AND THE TO A.C.I. 304. CLEAN AND ROUGHEN A FULL AMPLITUDE OF ¼" BY REMOVING THE ENTIRE SURFACE AND EXPOSING CLEAN AGGREGATE SOLIDLY EMBEDDED IN THE MORTAR MATRIX AGAINST ALL CONCRETE SURFACES AGAINST WHICH CONCRETE IS TO BE POURED.
11. ALL EXPOSED CONCRETE SHALL HAVE A SMOOTH FORM FINISH USING B–B PLYFORM, CLASS I, EXT–A.P.A. PLYWOOD.
12. ALL SLABS SHALL HAVE A TROWELED FINISH EXCEPT AS NOTED ON THE DRAWINGS.
13. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
14. IF THE CONTRACTOR DESIRES TO MAKE ANY CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON THESE DRAWINGS, HE SHALL SUBMIT DETAILS OF CHANGES TO THE ENGINEER OF RECORD FOR REVIEW BEFORE STARTING WORK AND THE ENGINEER OF RECORD TO OBTAIN DSA APPROVAL PRIOR TO STARTING WORK.
15. NO BRICK OR POROUS MATERIAL SHALL BE USED TO SUPPORT FOUNDATION STEEL OFF THE GROUND.
16. PROVIDE 1/2 INCH CHAMFER ON ALL EXPOSED CONCRETE CORNERS, U.N.O.
17. MINIMUM CONCRETE COVERAGES

FOOTINGS CAST AGAINST EARTH	3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER	2"

18. CONCRETE CURING:
SLAB AND FDN; TYPICALLY REQUIRED FOR 10 DAYS TO ACHIEVE A MINIMUM OF 3000 PSI STRENGTH PRIOR TO INSTALLATION OF OTHER MAJOR STRUCTURAL COMPONENTS.

FOUNDATION:

1. THIS P.C. IS DESIGN TO THE C.B.C. MINIMUM. WHERE SOIL REPORT IS AVAILABLE; ATTACH ONE COPY OF SOILS REPORT TO THE APPROVED SET OF CONSTRUCTION DOCUMENTS. SOILS REPORT SHALL BE PART OF THESE NOTES. PRIOR TO THE POURING OF CONCRETE AND PRIOR TO THE CONTRACTOR REQUESTING A DSA FOUNDATION INSPECTION, THE GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE THE FOOTING EXCAVATIONS. HE SHALL POST NOTICE ON THE JOB SITE AND ADVISE THE DSA INSPECTOR IN WRITING THAT THE WORK SO INSPECTED MEETS THE CONDITIONS OF THE REPORT. A WRITTEN CERTIFICATION TO VERIFY THAT:
   A. THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOIL REPORT.
   B. THE UTILITY TRENCHES HAVE BEEN PROPERLY BACKFILLED AND COMPACTED, AND
   C. THE FOUNDATION EXCAVATIONS COMPLY WITH THE INTENT OF THE SOILS REPORT.
2. SOIL REMOVAL AND RECOMPACTION SHALL BE DONE PER SOILS REPORT RECOMMENDATIONS UNDER GEOTECHNICAL ENGINEER'S SUPERVISION AND INSPECTION.
3. TYPE OF FOOTING:
   A. SHALLOW FOOTING SYSTEM MINIMUM EMBEDMENT 18" BELOW LOWEST ADJACENT GRADE.
   DESIGN SOIL PRESSURE:

FOOTING TYPE	STATIC BEARING PRESSURE
SPREAD FOOTING	1,500 psf
CONTINUOUS FOOTING	1,500 psf
LATERAL BEARING	100 pcf*

   * DOUBLED PER SECTION 1806A.3.4
4. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.
5. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF UTILITY SERVICES IN AREAS TO BE EXCAVATED BEFORE BEGINNING EXCAVATION. EXERCISE EXTREME CAUTION IN EXCAVATING AND TRENCHING. DAMAGE CAUSED AS A RESULT OF FAILING TO EXACTLY LOCATE AND PRESERVE ALL EXISTING UNDERGROUND UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
6. THE CONTRACTOR SHALL PROVIDE FOR THE DESIGN, APPROVALS, PERMITS, INSTALLATION AND MONITORING OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED TO SAFELY RETAIN TEMPORARY EXCAVATIONS.
7. ALL PLANTERS IN CLOSE PROXIMITY TO THE STRUCTURE SHALL HAVE ADEQUATE DRAINAGE OF SURFACE WATER TO PREVENT SATURATION OF SOIL UNDER FOUNDATION.
8. 2019 C.B.C. SEISMIC SITE CLASS A, B, C, AND D

REINFORCING STEEL:

1. ALL REINFORCING STEEL SHALL BE PLACED IN CONFORMANCE WITH THE C.B.C., AND THE "MANUAL OF STANDARD PRACTICE" BY THE C.R.S.I.
2. REINFORCING BARS SHALL CONFORM TO A.S.T.M. A–615, DEFORMED GRADE 60. REINFORCING BARS THAT ARE TO BE WELDED SHALL CONFORM TO A.S.T.M. A–706, DEFORMED GRADE 60.
3. WELDING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH A.S.T.M. A–706 WITH LOW HYDROGEN ELECTRODES AND SHALL CONFORM TO THE STRUCTURAL WELDING CODE REINFORCING STEEL BY A.N.S.I. / A.W.S. D1.4. MINIMUM TENSILE STRENGTH OF WELD METAL SHALL BE 90 K.S.I. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
4. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
5. REINFORCING SPLICES SHALL BE MADE AS INDICATED ON THE DRAWINGS.
6. SLAB ON GRADE REINFORCING SHALL BE POSITIONED AT MID–DEPTH, UNLESS NOTED OTHERWISE.
7. PROVIDE #3 SPACER TIES AT 2'–6" ON CENTER IN ALL BEAMS AND FOOTINGS TO SECURE REINFORCING BARS IN PLACE, U.N.O.
8. PIPING AND CONDUIT SHALL BE SO FABRICATED AND INSTALLED THAT CUTTING, BENDING, OR DISPLACEMENT OF REINFORCEMENT FROM ITS PROPER LOCATION WILL NOT BE REQUIRED. A.C.I. #318–14

GENERAL NOTES:

1. THE PROJECT SPECIFICATIONS SHALL BE PART OF THE CONTRACT DOCUMENTS.
2. THE STRUCTURAL DRAWINGS ARE TO BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS.
3. THE CONTRACTOR SHALL REVIEW EXISTING CONDITIONS ON THE SITE DURING THE BIDDING. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING WORK. THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES PRIOR TO PROCEEDING.
4. ALL PHASES OF WORK ARE TO CONFORM TO THE MINIMUM STANDARDS OF THE CALIFORNIA BUILDING CODE (2019 EDITION C.B.C.), RELATED CALIFORNIA BUILDING CODE STANDARDS, AND ANY A.S.T.M. SPECIFICATIONS ON WHICH THESE STANDARDS ARE BASED. WHERE CONFLICT BETWEEN BUILDING CODES AND SPECIFICATIONS OCCURS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
5. ALL A.S.T.M. DESIGNATIONS REFERRED TO ON THESE DRAWINGS SHALL BE THE LATEST ADOPTED OR REVISED SPECIFICATION, AS OF THE DATE OF THESE DRAWINGS.
6. ALL DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS, SECTIONS AND DETAILS. DRAWINGS SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.
7. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
8. THE STRUCTURAL DRAWINGS SHOW ONLY THE BASIC STRUCTURAL REQUIREMENTS. REFER TO CIVIL, ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR NON–STRUCTURAL ITEMS, SUCH AS:
   A. SIZE AND LOCATION OF ALL OPENINGS.
   B. SIZE AND LOCATION OF ALL NON–BEARING WALLS.
   C. SIZE AND LOCATION OF ALL CONCRETE CURBS, WALKS, ROOF AND FLOOR DRAINS, SLOPES, DEPRESSED SLAB AREAS, ETC.
   D. FLOOR, ROOF AND WALL FINISHES.
   E. DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
9. THE STRUCTURAL CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE INDICATED, THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION.
10. NEITHER THE OWNER NOR THE ARCHITECT/STRUCTURAL ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND BRACING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE SAFETY ITEMS.
11. SATISFACTORY EXECUTION OF CONSTRUCTION IS DEPENDENT UPON CONFORMANCE WITH THE INTENT OF THESE DRAWINGS. OWNER OR CONTRACTOR SHALL RETAIN A CALIFORNIA LICENSED STRUCTURAL ENGINEER DURING CONSTRUCTION TO OBSERVE THE CONSTRUCTION AND FILE A REPORT (DSA 6AE) STATING THE "THE CONSTRUCTION HAS, IN EVERY MATERIAL RESPECT, BEEN PERFORMED IN COMPLIANCE WITH THE DSA APPROVED DOCUMENTS".
12. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOF. LOAD SHALL NOT EXCEED DESIGN LIVE LOAD FOR EACH PARTICULAR LEVEL. WHEN WEIGHT OF MATERIALS OR EQUIPMENT MAY EXCEED DESIGN LOAD, STRUCTURAL SYSTEMS SHALL BE SHORED.
13. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK. THE DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK.

DESIGN BASIS:

CODE: 2019 C.B.C. (CALIFORNIA BUILDING CODE CCR, TITLE 24, PART 2)

GRAVITY LOADS:

1. ROOF LIVE LOAD 5 P.S.F. (REDUCIBLE)
   ROOF DEAD LOAD 1.5 P.S.F. (MAX.)
2. SNOW LOAD Pg 0.0 P.S.F.

LATERAL LOADS:

1. SEISMIC DESIGN

☒ SITE CLASS = A,B,D (GEOTECH REPORT IS REQUIRED TO SUPPORT OTHER SITE CLASSES)

OCCUPANCY CATEGORY = II
REDUNDANCY (ρ) = 1

S_S = 3.6
Fa = 1
S_{MS} = 3.6 Sms = Fa x Ss
S_{DS} = 2.400 Sds = Sms x 2/3

S_1 = 0.75
F_V = 1.7
S_{M1} = 1.275 Sms = Fv x Ss
S_{D1} = 0.850 Sds = Sms x 2/3

☐ SITE CLASS C AND D DEFAULT

OCCUPANCY CATEGORY = II
REDUNDANCY (ρ) = 1

S_S = 3
Fa = 1.2
S_{MS} = 3.6 Sms = Fa x Ss
S_{DS} = 2.400 Sds = Sms x 2/3

S_1 = 0.75
F_V = 1.4
S_{M1} = 1.05 Sms = Fv x Ss
S_{D1} = 0.700 Sds = Sms x 2/3

CANOPIES OCCUPANCY = II

SPECIAL STEEL CANTILEVER COLUMNS

SEISMIC DESIGN CATEGORY

TABLE 1613A.2.5 = D (ASCE 7–16 TABLE 11.6.1 AND TABLE 11.6.2)
I_e = 1.000
R = 2.500
C_s = Sds/(R/Ie) (LRFD) = 0.960

ANALYSIS METHOD = EQUIVALENT LATERAL FORCE ANALYSIS

2. WIND DESIGN
   ANALYSIS METHOD = DIRECTIONAL PROCEDURE (OPEN STRUCTURE)
   V = 100 M.P.H. BASIC WIND SPEED, ASCE 7–16 FIGURE 26.5.1–B
   EXPOSURE "C"
   Kzt = 1.0
   RISK CATEGORY = II
   STRUCTURE IS DESIGN FOR CLEAR AND OBSTRUCTED WIND FLOW

FLOOD HAZARD: DESIGN DOES NOT ACCOUNT FOR FLOOD HAZARD

SITE SPECIFIC GEOTECHNICAL STUDY IS NOT REQUIRED

BUILDING SEPARATION REQUIREMENT:

MINIMUM CLEAR DISTANCE REQUIRED BETWEEN EXISTING SITE STRUCTURE/ADJACENT SITE STRUCTURE AND METAL WALKWAY IS TO BE AT LEAST 12".
MINIMUM CLEAR DISTANCE REQUIRED BETWEEN FOUNDATIONS OF EXISTING SITE STRUCTURE/ADJACENT SITE STRUCTURE AND METAL WALKWAY IS TO BE AT LEAST 10'.

SEISMIC BASE SHEAR	
BUILDING CONFIGURATION	BASE SHEAR (KIP)
20'x10'	0.8K
20'x15'	0.85K
20'x20'	1.1K
25'x25'	1.1K
30'x20'	1.51K
30'x25'	1.9K
30'x30'	2.58K
36'x18'	2.1K
40'x20'	2.4K
40'x30'	4.36K

STRUCTURAL ENGINEER OF RECORD
ORION
Structural Engineering, Inc.
11305 RANCHO BERNARDO RD SUITE 121
SAN DIEGO CA. 92127
PHONE (858) 679-1974
REGISTERED PROFESSIONAL ENGINEER RYAN J. OMER No. S 44357 STRUCTURAL STATE OF CALIFORNIA

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

rea architect
RONEDWARDS
Architecture
7400 Pedrick Court
Bakersfield, CA 93313
(661) 394-0053
ron@rearchitect.net
LICENSED ARCHITECT RONALD W. EDWARDS C 25192 REN. 12-31-22 STATE OF CALIFORNIA

CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
PRE-CHECK PC DOCUMENT
CODE: 2019 CBC
A separate application for construction is required

PC APPROVAL STAMP:
APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120090 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 06/30/2021

PRECHECK FABRIC SHADE STRUCTURE

MANUFACTURER:

General Notes and Typical Details

Project #	Sheet
21-003	S1.1
Drawn By: RWE	
Date: 6-17-21	

STRUCTURAL OBSERVATION:

1. PER C.B.C. CHAPTER 17A, 1704A.6 THE OWNER SHALL EMPLOY A LICENSED ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, OR HIS DESIGNATED ENGINEER OR ARCHITECT TO MAKE SITE VISITS TO OBSERVE GENERAL COMPLIANCE WITH THE APPROVED STRUCTURAL PLANS, SPECIFICATIONS AND CHANGE ORDERS. THE ENGINEER OR ARCHITECT SHALL SUBMIT A STATEMENT IN WRITING TO THE BUILDING OFFICIAL STATING THAT THE SITE VISIT HAS BEEN MADE AND THAT ANY DEFICIENCIES NOTED HAVE BEEN CORRECTED.

2. IN ACCORDANCE WITH SECT. 4-333 (a) OF TITLE 24, PART 1, STRUCTURAL OBSERVATION SHALL INCLUDE AND OCCUR AT THE FOLLOWING STAGES:
   A. OBSERVATION AT THE SITE PRIOR TO PLACING CONCRETE.
   B. OBSERVATION OF THE BUILDING DURING FABRICATION AFTER THE MAJORITY OF STRUCTURAL ITEMS ARE IN PLACE.
   C. OBSERVATION OF THE COMPLETED STRUCTURE PRIOR TO BEING COVERED FINISHES.

3. AT COMPLETION OF IN-PLANT MANUFACTURING THE INDIVIDUAL ACCEPTING RESPONSIBILITY FOR OBSERVATION OF IN-PLANT MANUFACTURING SHALL SIGN THE VERIFIED REPORT, DSA 152-IPI (IN-PLANT INSPECTOR VERIFIED REPORT).

4. OBSERVATION OF THE ON SITE CONSTRUCTION INCLUDES THE SCOPE OF WORK INDICATED ON THE DSA APPROVED MODULAR BUILDING PLANS AND SPECS.

5. INTERIM AND FINAL VERIFIED REPORTS ARE REQUIRED DURING, AND AT THE COMPLETION OF, ON SITE CONSTRUCTION AND INSTALLATION USING FORM DSA 6-AE (ARCHITECT/ENGINEER VERIFIED REPORT).

6. STRUCTURAL TESTING & SPECIAL INSPECTIONS: SEE APPROVED DSA-103 FORM FOR STRUCTURAL TESTING & INSPECTIONS.

GOVERNING BASE REACTIONS

BLD'G CONFI.	LOAD CASE	F(X) KIPS	F(Y) KIPS	F(Z) KIPS	M(X) K-FT	M(Y) K-FT	M(Z) K-FT
20' x 10'	DL	0.01	0.19	0.00	0.01	0.00	-0.02
	RLL	0.01	0.26	0.00	-0.01	0.00	-0.05
	ELX	-0.19	-0.08	0.04	0.16	0.00	1.43
	ELZ	-0.04	0.18	-0.18	-1.34	-0.01	0.14
	WL	-0.08	-1.69	0.02	0.07	0.01	0.30
20' x 15'	DL	0.01	0.22	-0.01	-0.02	0.00	-0.03
	RLL	0.02	0.39	0.01	0.04	0.00	-0.07
	ELX	-0.22	-0.08	0.03	0.10	0.01	1.74
	ELZ	-0.03	-0.13	-0.22	-1.58	0.00	0.12
	WL	-0.12	-2.48	-0.06	-0.22	-0.01	0.45
20' x 20'	DL	0.01	0.27	0.01	0.02	0.00	-0.03
	RLL	0.02	0.52	0.01	0.03	0.00	-0.09
	ELX	-0.27	-0.11	0.04	0.16	0.01	2.12
	ELZ	0.04	0.14	-0.27	-1.85	0.00	-0.14
	WL	-0.14	-3.34	0.05	0.19	0.01	0.52
25' x 25'	DL	-0.02	0.43	-0.02	-0.06	0.00	0.10
	RLL	-0.06	0.82	-0.03	-0.13	0.00	0.25
	ELX	-0.41	-0.11	-0.03	0.03	0.05	3.09
	ELZ	-0.09	-0.13	-0.35	-2.47	0.05	0.41
	WL	0.35	-5.24	0.19	0.74	-0.01	-1.46
30'x20'	DL	-0.02	0.39	-0.01	-0.03	0.00	0.07
	RLL	0.04	0.78	-0.01	-0.05	0.00	-0.16
	ELX	-0.38	-0.11	0.05	0.18	0.00	2.92
	ELZ	-0.06	-0.16	-0.38	-2.91	0.01	0.22
	WL	0.25	-5.00	0.08	0.30	-0.01	-0.94
30'x25'	DL	-0.03	0.48	-0.02	-0.06	0.00	0.10
	RLL	-0.06	0.98	-0.03	-0.12	0.00	0.24
	ELX	-0.47	-0.12	-0.06	-0.22	0.00	3.76
	ELZ	0.06	0.15	-0.46	-3.66	0.00	-0.23
	WL	-0.39	-6.23	-0.19	-0.72	-0.01	1.47
30'x30'	DL	-0.04	0.65	-0.04	-0.14	0.00	0.14
	RLL	-0.09	1.17	0.06	0.21	0.00	0.34
	ELX	-0.65	-0.14	-0.07	-0.26	0.00	5.61
	ELZ	0.07	0.17	-0.64	-5.25	0.00	-0.25
	WL	-0.54	-7.50	-0.33	-1.25	-0.01	2.07
36'x18'	DL	-0.05	0.60	-0.02	-0.08	0.00	0.21
	RLL	-0.10	1.07	0.05	0.17	0.00	0.38
	ELX	-0.52	0.13	-0.07	-0.24	0.00	3.90
	ELZ	-0.08	0.20	-0.52	-4.03	0.00	0.30
	WL	0.57	-6.83	0.25	0.95	-0.01	-2.16
40'x20'	DL	0.05	0.61	-0.01	-0.03	0.00	-0.18
	RLL	0.08	1.04	-0.02	-0.08	0.00	-0.30
	ELX	-0.60	-0.13	-0.06	-0.23	0.00	4.46
	ELZ	-0.09	0.24	-0.59	-4.72	-0.01	0.35
	WL	-0.46	-6.68	0.12	0.45	0.01	1.74
40'x40'	DL	0.08	1.00	0.03	0.11	0.00	-0.31
	RLL	0.11	1.56	-0.06	-0.21	0.00	-0.43
	ELX	-1.10	-0.22	-0.12	-0.45	0.00	8.75
	ELZ	-0.13	0.29	-1.09	-8.80	0.00	0.50
	WL	0.67	-9.95	0.32	1.20	0.00	-2.57

COLD FORMED STRUCTURAL STEEL:

1. ALL LIGHT GAUGE METAL FRAMING SHALL BE THE TYPE, SIZE AND GAUGE AS SHOWN ON THE PLANS AND BE FABRICATED AND ERECTED IN ACCORDANCE WITH 2016 A.I.S.I. S100 SPECIFICATIONS. WITH SUPPLEMENT AND 2019 CBC SECTIONS 2210A, 2211A, & 2213A.

2. ALL GALVANIZED TRACK BRIDGING, END ENCLOSURES AND ACCESSORIES SHALL CONFORM TO A.S.T.M. A-1011 GRADE A (Fy = 33 K.S.I.).

3. STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123 OR A153 CLASS D OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT; OR EQUIVALENT PAINT SYSTEM. COLD FORMED STEEL MEMBERS SHALL BE 5 PORCENT ALUMINUM-ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AMERICAN IRON AND STEEL INSTITUTE (AISI) S240 TABLE A4-1, CP 90 COATING DESIGNATION.

4. CARBON SHEET STEEL MUST MEET THE MINIMUM REQUIREMENTS OF A.S.T.M. A1011 GRADE 50 K.S.I. FOR 12,14 AND 16 GAUGE AND GRADE 33 K.S.I. FOR 18 GAUGE AND LIGHTER MEMBERS, CARBON SHEET STEEL PRODUCTS MUST BE THOROUGHLY COATED WITH A RUST INHIBITIVE PAINT.

5. PROVIDE ALL ACCESSORIES INCLUDING, BUT NOT NECESSARILY LIMITED TO, TRACKS, CLIPS, WEB STIFFENERS, ANCHORS, FASTENING DEVICES, RESILIENT CLIPS AND OTHER ACCESSORIES REQUIRED FOR A COMPLETE AND PROPER INSTALLATION, AND AS RECOMMENDED BY THE MANUFACTURER FOR THE STEEL MEMBERS USED.

6. FASTENINGS OF COMPONENTS SHALL BE WITH ASTM C1513 SELF-DRILLING SCREWS OR WELDING U.N.O. SCREWS OR WELDS SHALL BE OF SUFFICIENT SIZE TO INSURE THE STRENGTH OF THE CONNECTION. ALL WELDS OF GALVANIZED STEEL SHALL BE TOUCHED UP WITH ZINC-RICH PAINT. ALL WELDS OF CARBON SHEET STEEL SHALL BE TOUCHED UP WITH PAINT.

7. ALL SHEET METAL SCREWS SHALL COMPLY W/ICC ESR-1976 OR APPROVED EQUAL.

8. ALL WELDING OR MATERIAL LESS THAN 0.18 INCHES IN THICKNESS SHALL BE MADE IN ACCORDANCE WITH THE A.W.S. D1.3 WELDERS AND WELDING PROCEDURES AND SHALL BE QUALIFIED AS SPECIFIED IN A.W.S. D1.3.

9. TOUCH UP COLD GALVANIZING USING ZRC CHEMICAL PRODUCTS CO., ZRC COLD GALVANIZING COMPOUND OR EQUAL.

10.

COATING CLASSIFICATION	COATING DESIGNATOR	MINIMUM COATING REQUIREMENTS			
		ZINK COATED[A] oz/ft² (g/m²)	ZINK Iron[B] oz/ft² (g/m²)	55% AL-Zinc[C] oz/ft² (g/m²)	Zinc-5%[D] oz/ft² (g/m²)
METALLIC COATED	CP 60	G60 [Z180]	G60 [Z180]	AZ50 [AZM150]	GF30 [ZGF90]
	CP 90	G90 [Z275]	Not Applicable	AZ50 [AZM150]	GF45 [ZGF135]
PAINTED METALLIC	PM	The metallic coated substrate shall meet the requirements of metallic coated. In addition, the paint film shall have a minimum thickness of 0.5 mil per side (primer plus topcoat) with a minimum primer thickness of 0.1 mil per side.			

[A] Zinc-coated steel sheet as described in ASTM A653/A653M.
[B] Zinc-iron alloy-coated steel sheet as described in ASTM A653/A653M.
[C] 55% Alumunum-zinc alloy-coated steel sheet as described in ASTM A792/A792M.
[D] Zinc-5% aluminum alloy-coated steel sheet as descrbed in ASTM A875/875.
[E] In accordance with the requirements of ASTM A1003/A1003M.

LOAD COMBINATIONS

ASCE7-16 LOAD COMB.	LC	FACTOR	LC	FACTOR	LC	FACTOR	LC	FACTOR	LC	FACTOR
ASCE ASD 1	DL	1								
ASCE ASD 2	DL	1	LL	1	LLS	1				
ASCE ASD 3 (a)	DL	1	RLL	1						
ASCE ASD 4 (a)	DL	1	LL	0.75	LLS	0.75	RLL	0.75		
ASCE ASD 5 (a)	DL	1	WL	0.6						
ASCE ASD 6 (a)	DL	1	WL	0.45	LL	0.75	LLS	0.75	RLL	0.75
ASCE ASD 6 (b)	DL	1	WL	0.45	LL	0.75	LLS	0.75		
ASCE ASD 7	DL	0.6	WL	0.6						
ASCE ASD 8 (a)	DL	1	ELX	0.7						
ASCE ASD 8 (b)	DL	1	ELZ	0.7						
ASCE ASD 9 (a)	DL	1	ELX	0.525	LL	0.75	LLS	0.75		
ASCE ASD 9 (b)	DL	1	ELZ	0.525	LL	0.75	LLS	0.75		
ASCE ASD 10 (a)	DL	0.6	ELX	0.7						
ASCE ASD 10 (b)	DL	0.6	ELZ	0.7						
ASCE ASD 8 (os-a)	DL	1	OMEGA*ELX	0.7						
ASCE ASD 8 (os-b)	DL	1	OMEGA*ELZ	0.7						
ASCE ASD 9 (os-a)	DL	1	OMEGA*ELX	0.525	LL	0.75	LLS	0.75		
ASCE ASD 9 (os-b)	DL	1	OMEGA*ELZ	0.525	LL	0.75	LLS	0.75		
ASCE ASD 10 (os-a)	DL	0.6	OMEGA*ELX	0.7						
ASCE ASD 10 (os-b)	DL	0.6	OMEGA*ELZ	0.7						

WELDING:

1. ALL WELDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE AMERICAN WELDING SOCIETY CODE D1.1.-15.

2. ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS.

3. ALL WELDING SHALL BE DONE BY THE SHIELDED ARC PROCESS USING APPROVED ELECTRODES PER A.W.S. SPECIFICATIONS E70XX (LOW HYDROGEN ELECTRODES).

4. ALL WELDS SHALL HAVE A WELD CONTROLLED SEQUENCE AND TECHNIQUE IN ORDER TO MINIMIZE SHRINKAGE, STRESSES AND DISTORTION.

5. ALL ELECTRODES FILLER MATERIAL SHALL BE A MINIMUM OF E70XX.

6. WELDING OF SHEET METAL SHALL BE IN ACCORDANCE WITH A.W.S. D1.3.

7. SPECIAL INSPECTION IS REQUIRED FOR ALL WELDING.

8. ALL SHOP AND FIELD WELDING OF MOMENT CONNECTIONS OR MOMENT RESISTING FRAMES, AND ALL COLUMN SPLICE WELDS, SHALL BE TESTED AS PER C.B.C.
   A. ALL WELDS WITHIN MEMBERS DESIGNATED AS PART OF THE LATERAL FORCE RESISTING SYSTEM (LFRS) SHALL CONFORM TO THE DETAILING, MATERIALS, WORKMANSHIP, TESTING AND INSPECTION REQUIREMENTS PER AWS D1.8 AND AISC 341-16, AND SHALL USE A FILLER METAL WITH A CHARPY V-NOTCH (CVN) TOUGHNESS OF 20 FT-LB AT 0° F.
   B. WHERE WELDS ARE DESIGNATED AS DEMAND CRITICAL, THEY SHALL BE MADE WITH A FILLER METAL CAPABLE OF PROVIDING A MINIMUM CVN TOUGHNESS OF 20 FT-LB AT 20° F AND 40 FT-LB AT 70° F. SEE AWS D1.8 SECTION 6.3.6,
   C. WELDERS PERFORMING WELDING WITHIN THE "LFRS" SHALL BE QULIFIED IN ACCORDANCE WITH AWS D1.8 CHAPTER 5.

STEEL:

1. FABRICATION AND ERECTION TO CONFORM TO A.I.S.C. 360-16 "SPECIFICATION FOR THE STRUCTURAL STEEL BUILDINGS" AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" EXCEPT AS OTHERWISE SHOWN OR SPECIFIED.

2. QUALIFIED AND CERTIFIED WELDERS SHALL BE USED FOR ALL WELDING. ALL WELDING TO CONFORM TO THE LATEST ADOPTED EDITION OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE A.W.S. D1.1.

3. MATERIALS:

ANGLES, CHANNELS, MISC. STEEL	A.S.T.M. A36
MISCELLANEOUS PLATES	A.S.T.M. A-992 GRADE 50
STRUCTURAL STEEL PIPES	A.S.T.M. A53 TYPE E OR S, GRADE B
WELDING ELECTRODES	A.W.S. STRUCTURAL STEEL E70XX,
ANCHOR BOLTS	A.S.T.M. F-1554 GRADE 105
TYPICAL STEEL CONNECTION BOLTS	A.S.T.M. F-3125 GRADE A325
MISCELLANEOUS BOLTS	A.S.T.M. A-307
GALVANIZING	A.S.T.M. A-123
RUST-INHIBITING PRIMER	CC-M10
STEEL TUBING	A.S.T.M. A-500, GRADE B (Fy = 46 K.S.I.)

4. STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123 AND ANCHOR BOLTS SHALL BE GALVANIZED WITH A153 CLASS D OR PAINTED WITH ZINC RICH PRIMER COAT, UNDERCOAT AND FINISH COAT OR EQUIVALENT PAINT SYSTEM.

5. CONNECTED MEMBERS SHALL BEAR ONLY UPON UNTHREADED PORTIONS OF BOLTS.

6. BURNING OF HOLES IS NOT ALLOWED.

7. INSPECTION OF WELDING SHALL CONFORM TO C.B.C. REQUIREMENTS (CHAPTER 17A).

8. THE STRUCTURAL STEEL FABRICATOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

9. BOLT HOLES SHALL BE 1/16" LARGER IN DIAMETER THAN NOMINAL SIZE OF BOLT USED, UNLESS NOTED OTHERWISE.

10. ALL STRUCTURAL STEEL SURFACES TO RECEIVE SPRAY-APPLIED FIREPROOFING, OR TO BE ENCASED IN CONCRETE OR MASONRY, SHALL BE LEFT UNPAINTED.

11. STRUCTURAL STEEL SHALL BE DELIVERED TO THE JOB SITE FREE OF EXCESSIVE RUST, MILL SCALE, GREASE, ETC.

12. OPENINGS SHALL NOT BE PLACED IN STEEL MEMBERS UNLESS SPECIFICALLY DETAILED.

STRUCTURAL ENGINEER OF RECORD
ORION
Structural Engineering, Inc.
11305 RANCHO BERNARDO RD
SUITE 121
SAN DIEGO CA. 92127
PHONE (858) 679-1974
REGISTERED PROFESSIONAL ENGINEER
RYAN J. OMER
No. S 4437
EXP. 12/31/22
STRUCTURAL
STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

rea architect
RON EDWARDS
Architecture
7400 Pedrick Court
Bakersfield, CA 93313
(661) 394-0053
ron@rearchitect.net
LICENSED ARCHITECT
RONALD W. EDWARDS
C 25192
REN 12-31-21
STATE OF CALIFORNIA

CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
PRE-CHECK PC DOCUMENT
CODE: 2019 CBC
A separate application for construction is required

PC APPROVAL STAMP:
APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120090 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 06/30/2021

PRECHECK FABRIC SHADE STRUCTURE

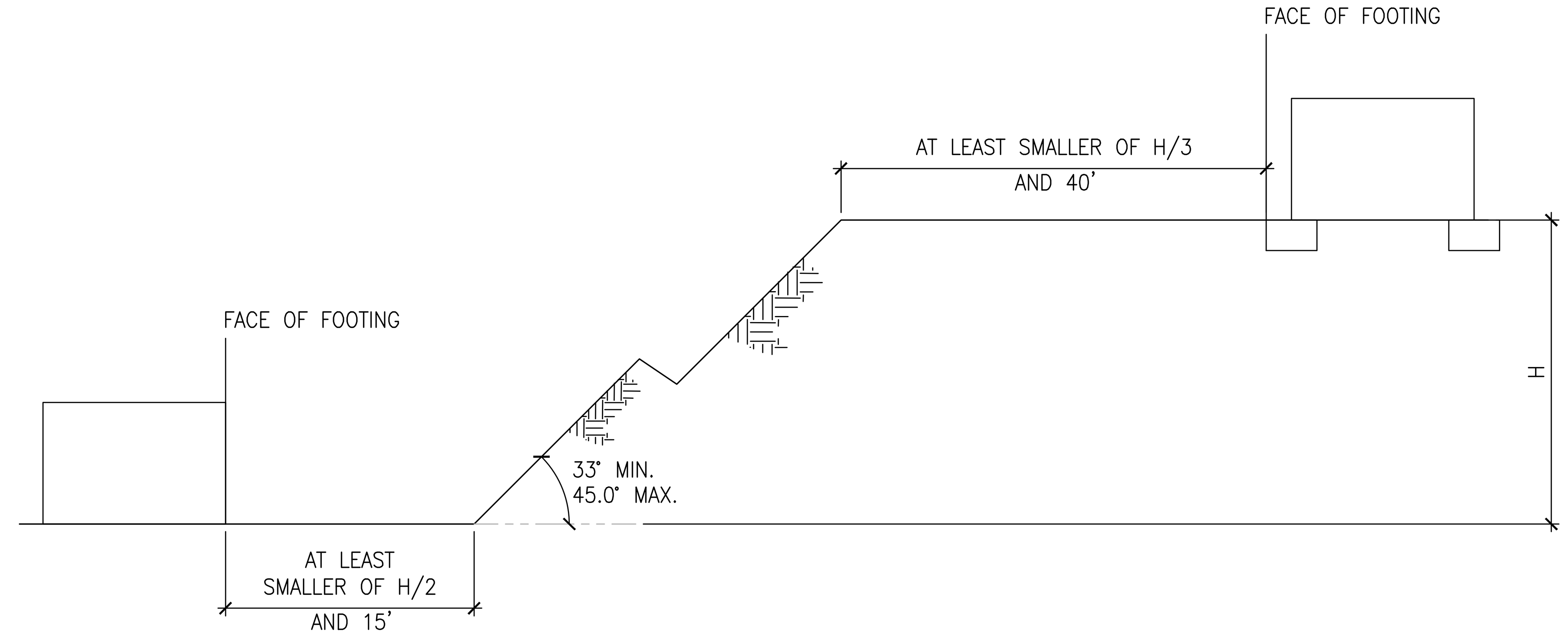
MANUFACTURER:

General Notes and Typical Details

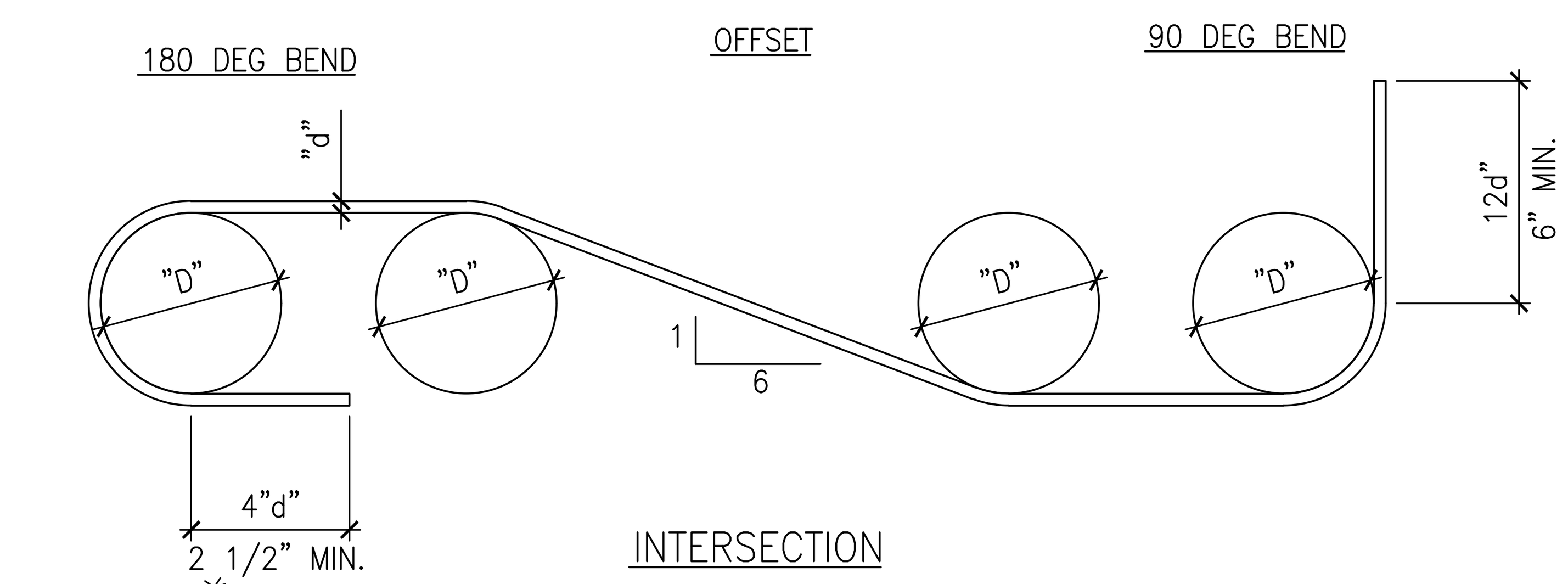
Project #	Sheet
21-003	S1.2
Drawn By: RWE	
Date: 6-17-21	

ABBREVIATIONS:

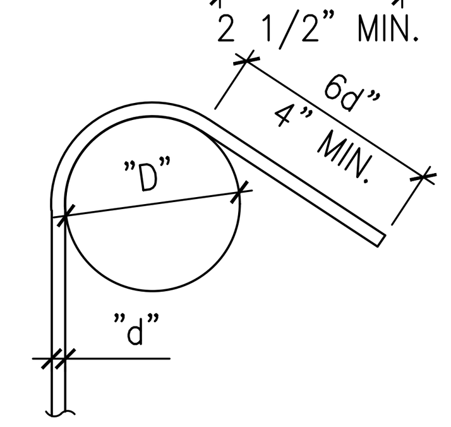
&	AND	KIPS	KILOPOUNDS (1,000 POUNDS)
@	AT	K.O.	KNOCK OUT
℄	CENTER LINE	LB	POUND
℞	PLATE, PROPERTY LINE	L.B.	LAG BOLT
A.B.	ANCHOR BOLT	L.F.	LINEAR FOOT
ADJ	ADJACENT	LG	LONG
A.F.F.	ABOVE FINISH FLOOR	L.L.	LIVE LOAD
ARCH'L	ARCHITECTURAL	L.L.H.	LONG LEG HORIZONTAL
BD	BOARD	L.L.V.	LONG LEG VERTICAL
BLD'G	BUILDING	L.S.	LAG SCREW
BLK	BLOCK	LT.	LIGHT
BLK'G	BLOCKING	MAS	MASONRY
BLW	BELOW	MAT.	MATERIAL
BM	BEAM	MAX.	MAXIMUM
B.N.	BOUNDARY NAIL/SCREW	M.B.	MACHINE BOLT
BOT.	BOTTOM	MECH'L	MECHANICAL
BRG	BEARING	MEZZ.	MEZZANINE
B.S.	BOTH SIDE	MIN.	MINIMUM
BTWN	BETWEEN	M.H.	MANHOLE
C.B.	CARRIAGE BOLT	MANUF.	MANUFACTURER
C.F.	CUBIC FOOT	MTL.	METAL
CHAM	CHAMFER	N.S.	NEAR SIDE
C.I.	CAST-IRON	N.I.C.	NOT IN CONTRACT
C.I.P.	CAST-IN-PLACE	NOM.	NOMINAL
C.J.	CONTROL JOINT	N.T.S.	NOT TO SCALE
CLG	CEILING	O.C.	ON CENTER
CLK	CAULK	O.D.	OUTSIDE DIAMETER
CLK'G	CAULKING	O.H.	OPPOSITE HAND
CLR.	CLEAR	OPN'G	OPENING
C.M.U.	CONCRETE MASONRY UNIT	OPP	OPPOSITE
CNTR	CENTER	O.W.J.	OPEN WEB JOIST
COL	COLUMN	P.C.	PRECAST
CONC	CONCRETE	PERP.	PERPENDICULAR
CONN	CONNECTION	PLYWD	PLYWOOD
CONT	CONTINUOUS	PNL	PANEL
CNTRSNK	COUNTERSINK	PREFAB	PREFABRICATED
d	PENNY	P.S.F.	POUNDS PER SQUARE FOOT
DBL	DOUBLE	P.S.I.	POUNDS PER SQUARE INCHES
DEP	DEPRESSED	PT	POINT
DET	DETAIL	P.T.	PRESSURE TREATED
D.F.	DOUGLAS FIR	P.V.C.	POLYVINYL CHLORIDE
D.F.L.	DOUGLAS FIR/LARCH	RAD	RADIUS
DIA	DIAMETER	R.D.	ROOF DRAIN
DIAG	DIAGONAL	REF.	REFERENCE
DIAM.	DIMENSION	REINF.	REINFORCED / REINFORCING
D.L.	DEAD LOAD	REQ'D	REQUIRED
DN	DOWN	REV	REVISION
DIV	DIVISION	RF	ROOF
DR	DOOR	RFTR	RAFTER
DWG	DRAWING	R.H.	ROOF HATCH
DWL	DOWEL	RM	ROOM
EA	EACH	R.O.	ROUGH OPENING
E.F.	EACH FACE	R.S.	ROUGH SAWN
EL.	ELEVATION	SCHED.	SCHEDULE
ELEV.	ELEVATION / ELEVATOR	SECT.	SECTION
EMBED	EMBEDMENT	S.F.	SQUARE FOOT
E.N.	EDGE NAIL/SCREW	SHT	SHEET
EQ.	EQUAL	SHT'G	SHEETING
EQUIP	EQUIPMENT	SIM.	SIMILAR
E.S.	EACH SIDE	S.M.S.	SHEET METAL SCREW
E.W.	EACH WAY	SPEC.	SPECIFICATION
EXIST'G	EXISTING	SQ.	SQUARE
EXP	EXPANSION	S.S.	STAINLESS STEEL
EXT	EXTERIOR	STAGG.	STAGGERED
F.D.	FLOOR DRAIN	STD	STANDARD
FDN	FOUNDATION	STIFF.	STIFFENER
F.F.	FINISH FLOOR	STL.	STEEL
FIN.	FINISH	STRUCT'L	STRUCTURAL
FLR.	FLOOR	STS	SELF TAPPING SCREW
F.N.	FIELD NAIL	SYM	SYMMETRICAL
F.O.	FACE OF	SYS	SYSTEM
FRM'G	FRAMING	T & B	TOP AND BOTTOM
F.S.	FAR SIDE	T & G	TONGUE AND GROOVE
FT	FEET / FOOT	TEMP	TEMPORARY
FTG	FOOTING	THK	THINK
GA	GAUGE	THKN'D	THICKENED
GALV	GALVANIZED	THRU	THROUGH
G.I.	GALVANIZED IRON	T.L.	TOTAL LOAD
GLB	GLU-LAMINATED BEAM	T.O.	TOP OF
GRD	GRADE	T.S.G.	TAPERED STEEL GIRDER
GYP	GYPSUM	TYP.	TYPICAL
H.D.	HOLDOWN	U.N.O.	UNLESS NOTED OTHERWISE
HDR	HEADER	U.T.	ULTRASONIC TESTING
HGR	HANGER	VERT.	VERTICAL
HORIZ	HORIZONTAL	W/	WITH
HRD	HARD	W/O	WITHOUT
H.S.B.	HIGH STRENGTH BOLT	WD	WOOD
HT.	HEIGHT	WIN	WINDOW
HVAC	HEATING, VENTILATION, & AIR CONDITIONING	W.P.	WATERPROOF / WORK POINT
IN.	INCH	W.P.J.	WEAKENED PLANE JOINT
INSP.	INSPECTION / INSPECTOR	WT.	WEIGHT
INT.	INTERIOR	W.W.F.	WELDED WIRE FABRIC
JST	JOIST	W.W.M.	WELDED WIRE MESH
JT	JOINT		



1



INTERSECTION



135 DEG BEND
#5 & SMALLER

REINFORCING BAR BEND	
REINFORCING SIZE	BAR BEND DIAMETER ("D")
#3 TO #8	6d

NOTE:
CAP STIRRUPS MAY BE USED WHENEVER 135° CLOSED STIRRUPS ARE SHOWN IN GRADE BEAM ONLY

NOTE: ALL BENDS SHALL BE MADE COLD

BAR CLEARANCE

2

3

STRUCTURAL ENGINEER OF RECORD
ORION
Structural Engineering, Inc.
11305 RANCHO BERNARDO RD
SUITE 121
SAN DIEGO CA. 92127
PHONE (858) 679-1974

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

rea architect
RON EDWARDS

Architecture
7400 Pedrick Court
Bakersfield, CA 93313
(661) 394-0053
ron@rearchitect.net

CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
PRE-CHECK PC DOCUMENT
CODE: 2019 CBC
A separate application for construction is required

PC APPROVAL STAMP:
APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120090 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 06/30/2021

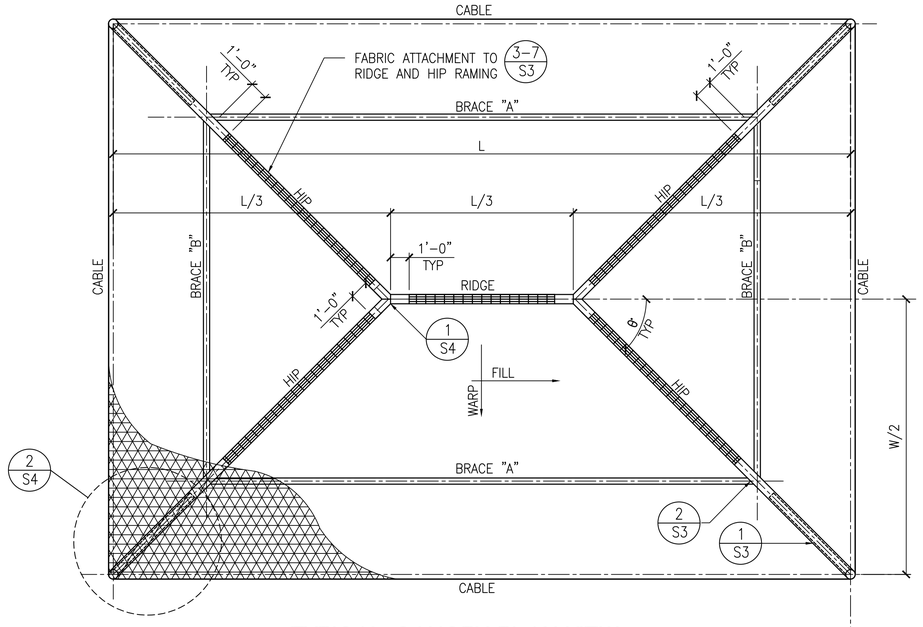
PRECHECK FABRIC SHADE STRUCTURE

MANUFACTURER:

General Notes and Typical Details

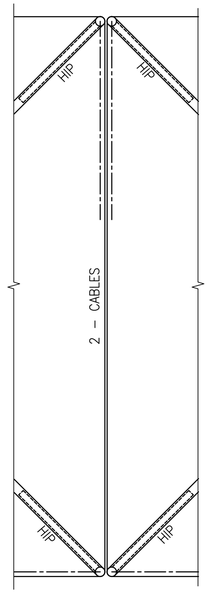
Project # 21-003	Sheet
Drawn By RWE	S1.3
Date 6-17-21	

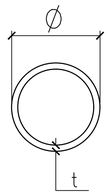
STRUCTURAL TUBE PROPERTIES						
SIZE	Ø	t des.	A	I	S	GAGE REFERENCE
1 3/4"Ø X .109	1.75"	0.101"	.523in2	.179in4	.204in3	12GA
2"Ø X .095	2"	0.088"	.529in2	.242in4	.242in3	13GA
2 7/8"Ø X .120	2.25"	0.112"	.752in2	.431in4	.383in3	11GA
2 7/8"Ø X .120	2.875"	0.101"	.880in2	.848in4	.590in3	12GA
3"Ø X .120	2.875"	0.112"	.972in2	.929in4	.646in3	11GA
5" XØ .180	3"	0.112"	1.016in2	1.061in4	.707in3	11GA
3 1/2"Ø X .120	3.5"	0.112"	1.192in2	1.712in4	.978in3	11GA
4"Ø X .180	4"	0.112"	1.368in2	2.587in4	1.294in3	11GA
4 1/2"Ø X .120	4.5"	0.112"	1.544in2	3.718in4	1.653in3	11GA
4 1/2"Ø X .180	4.5"	.167"	2.273in2	5.343in4	2.375in3	7GA
5"Ø X .120	5"	0.112"	1.720in2	5.139in4	2.056in3	11GA
5"Ø X .180	5"	.167"	2.536in2	7.412in4	2.965in3	7GA
5" PHI x 0.25"	5"	0.25"	3.736in2	10.55in3	4.22in3	3GA

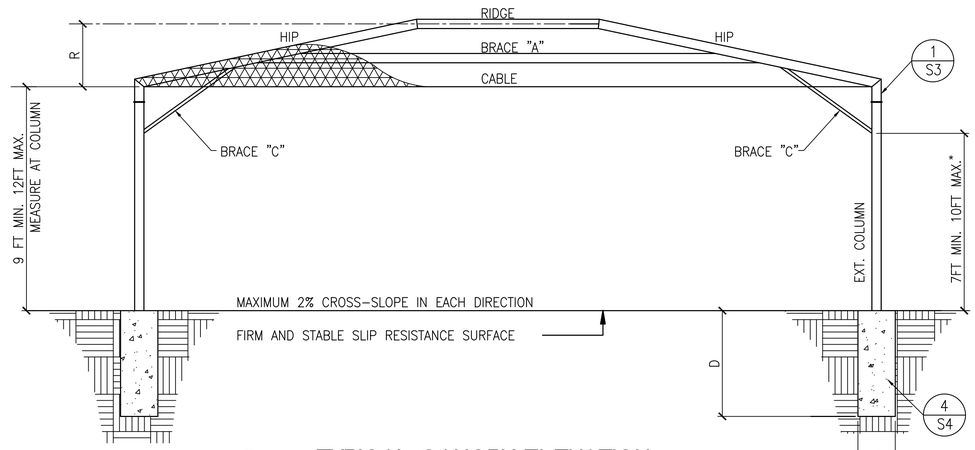


3 TYPICAL CANOPY PLAN VIEW

SCALE: NONE

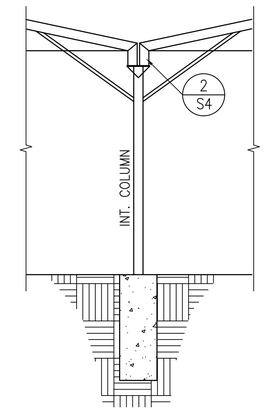






4 TYPICAL CANOPY ELEVATION

SCALE: NONE



*: SHADE STRUCTURES FOR CLEAR COLUMN HEIGHTS OF 8'-2" MIN. FOR ACCESSIBLE PARKING AND ACCESS AISLES

CANOPY OPTIONS																		
L	W	R	θ	Ext. Col.	D"N"	D"C"	B	Int. Col.	D"N"	D"C"	B	HIP	RIDGE	BRACE A	BRACE B	CABLE	BOLT A	BOLT B	BOLT C
20'	10'	1.77'	36.9°	3" STD.	3.50'	2.75'	1.5'	3" STD.	4.50'	3.50'	1.5'	2 7/8"Ø x .109	2 7/8"Ø x .109	2 7/8"Ø x .109	2"Ø x .095	1/4"Ø	1/2"Ø	3/8"Ø	1/2"Ø
20'	15'	2.13'	48.4°	3" STD.	3.75'	3.00'	1.5'	3" STD.	4.75'	3.75'	1.5'	2 7/8"Ø x .109	2 7/8"Ø x .109	2 7/8"Ø x .109	2"Ø x .095	1/4"Ø	1/2"Ø	3/8"Ø	1/2"Ø
20'	20'	2.55'	56.3°	3" STD.	4.00'	3.25'	1.5'	3" STD.	5.00'	4.00'	1.5'	3 1/2"Ø x .120	3 1/2"Ø x .120	2 7/8"Ø x .109	2 7/8"Ø x .109	1/4"Ø	1/2"Ø	3/8"Ø	1/2"Ø
25'	25'	3.79'	56.3°	4" STD.	4.50'	3.50'	1.5'	4" STD.	5.75'	4.50'	1.5'	4 "Ø x .120	4 1/2"Ø x .120	4 1/2"Ø x .120	3 1/2"Ø x .120	5/16"Ø	3/4"Ø	(2)3/8"Ø	5/8"Ø
30'	20'	3.01'	45.0°	3½" STD.	4.50'	3.50'	1.5'	3½" STD.	5.75'	4.50'	1.5'	4 "Ø x .120	4"Ø x .120	4"Ø x .120	2 7/8"Ø x .120	5/16"Ø	5/8"Ø	3/8"Ø	5/8"Ø
30'	25'	3.40'	51.3°	4" STD.	5.00'	4.00'	1.5'	4" STD.	6.25'	5.00'	1.5'	4 1/2"Ø x .120	4 1/2"Ø x .120	4 1/2"Ø x .120	3 1/2"Ø x .120	3/8"Ø	3/4"Ø	(2)3/8"Ø	5/8"Ø
36'	18'	3.19'	36.9°	4" STD.	5.00'	4.00'	1.5'	4" STD.	6.50'	5.00'	1.5'	3 1/2"Ø x .120	3 1/2"Ø x .120	3 1/2"Ø x .120	2 7/8"Ø x .120	5/16"Ø	5/8"Ø	3/8"Ø	5/8"Ø
40'	20'	3.54'	36.9°	4" STD.	5.50'	4.50'	1.5'	4" STD.	7.00'	5.50'	1.5'	4 1/2"Ø x .180	4 1/2"Ø x .120	4 1/2"Ø x .120	3 1/2"Ø x .120	3/8"Ø	3/4"Ø	(2)3/8"Ø	3/4"Ø
→ 30'	30'	3.83'	56.3°	5" STD.	5.75'	4.75'	1.5'	5" STD.	7.25'	5.75'	1.5'	5"Ø x .180	5"Ø x .120	4.5"Ø x .120	4.5"Ø x .120	3/8"Ø	3/4"Ø	(2)3/8"Ø	3/4"Ø
40'	30'	4.27'	48.4°	5" STD.	6.00'	4.50'	2.00'	5" STD.	8.00'	5.50'	2.0'	5"Ø x .250	5"Ø x .120	5"Ø x .250	5"Ø x .120	3/8"Ø	3/4"Ø	(2)3/8"Ø	3/4"Ø

TABLE NOTES:

n = NONCONSTRAINED CONDITION
(SEE DETAIL 4B ON SHEET S4)
c = CONSTRAINED CONDITION
(SEE DETAIL 4A ON SHEET S4)
DIMENSIONS "L" OR "W" MAY BE
REPEATED IN ONE DIRECTION ONLY.

STRUCTURAL ENGINEER OF RECORD
ORION
Structural Engineering, Inc.
11305 RANCHO BERNARDO RD SUITE 121
SAN DIEGO CA. 92127
PHONE (858) 679-1974
REGISTERED PROFESSIONAL ENGINEER
RYAN J. OLSEN
No. S 4439
STRUCTURAL
STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

rea architecture
RONEDWARDS
Architecture
7400 Pedrick Court
Bakersfield, CA 93313
(661) 394-0053
ron@rearchitect.net
LICENSED ARCHITECT RONALD W. EDWARDS C 25192 RENEWAL 12-31-22 STATE OF CALIFORNIA

CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
PRE-CHECK PC DOCUMENT
CODE: 2019 CBC
A separate application for construction is required

PC APPROVAL STAMP:
APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-120090 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 06/30/2021

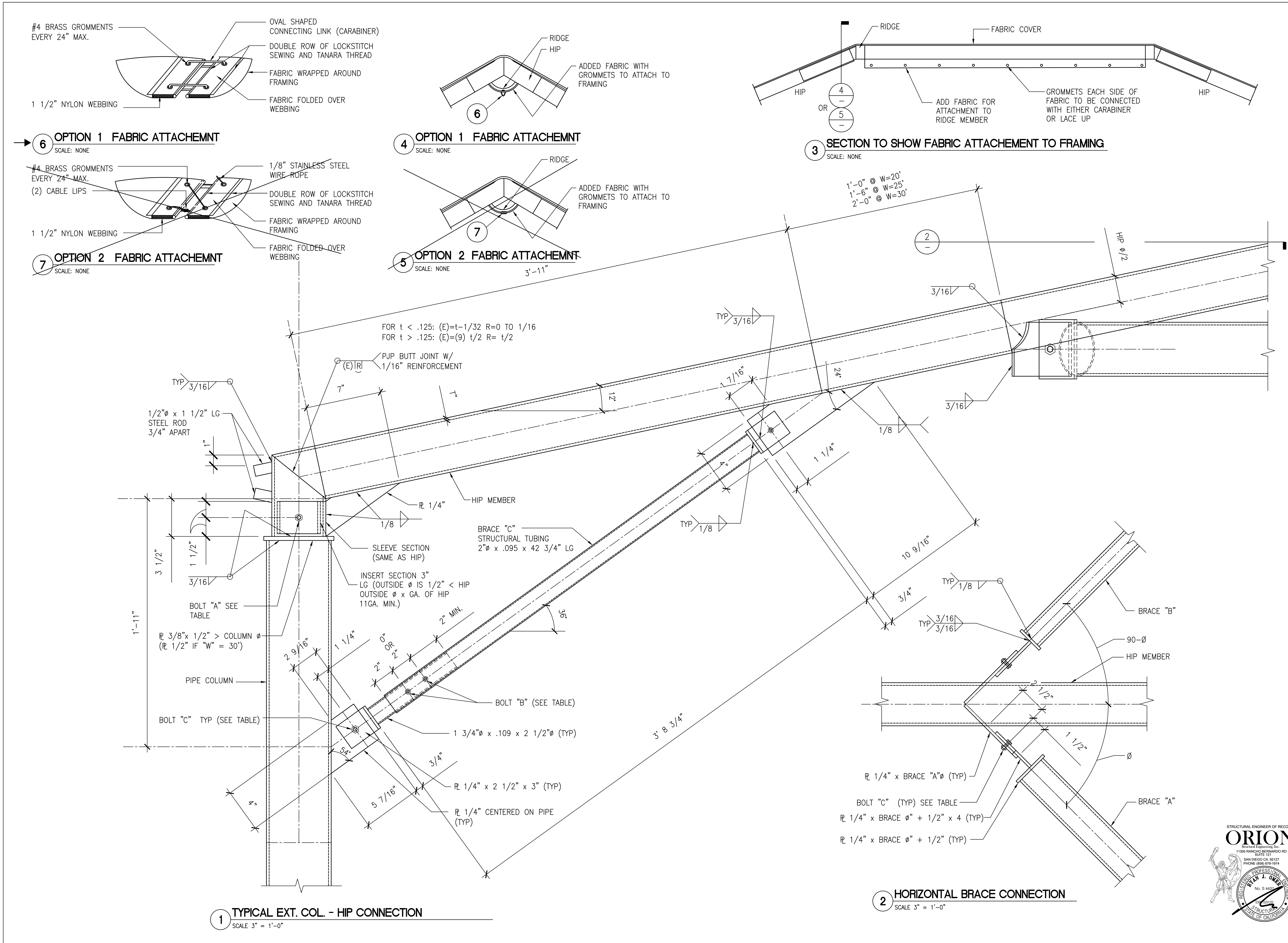
PRECHECK FABRIC SHADE STRUCTURE

MANUFACTURER:

CUSTOM CANOPIES 2019 CBC DWGS

Project #	Sheet
21-003	S2
Drawn By: RWE	
Date: 6-17-21	

6/22/2021 1:53:24 PM



IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT
APP: 02-120552 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/28/2022

rea architect RON EDWARDS

Architecture
7400 Pedrick Court
Bakersfield, CA 93313
(661) 394-0053
ron@rearchitect.net

LICENSED ARCHITECT RONALD W. EDWARDS C 25192 REN 12-31-22 STATE OF CALIFORNIA

CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670

IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
PRE-CHECK PC DOCUMENT CODE: 2019 CBC A separate application for construction is required

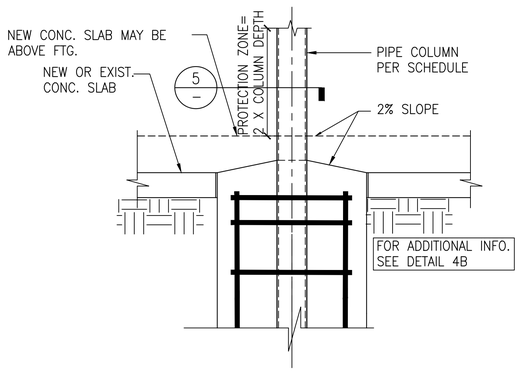
PC APPROVAL STAMP:
APPROVED DIV. OF THE STATE ARCHITECT
APP: 04-120090 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 06/30/2021

PRECHECK FABRIC SHADE STRUCTURE

MANUFACTURER:

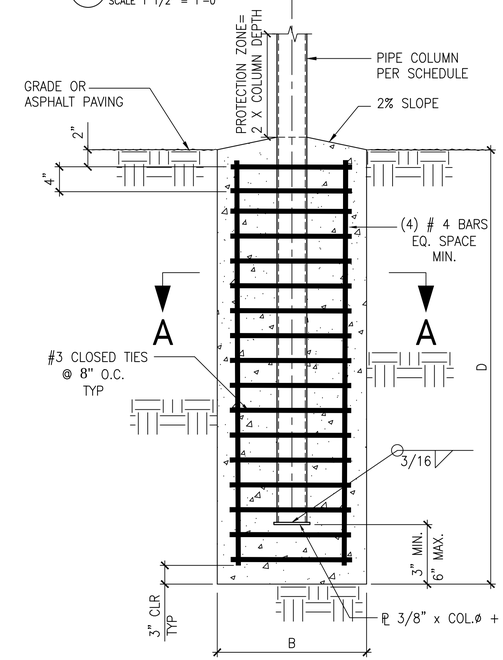
CUSTOM CANOPIES 2019 CBC DWGS

Project # 21-003
Sheet S3
Drawn By RWE
Date 6-17-21



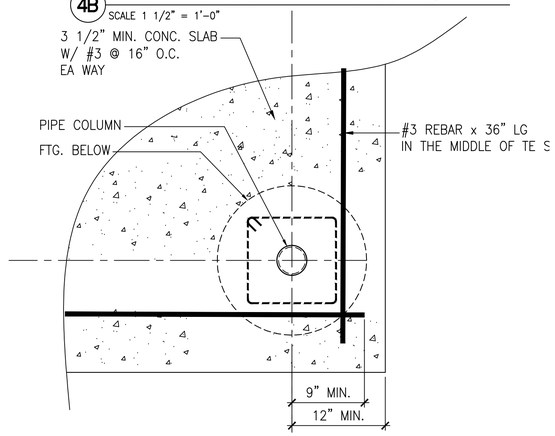
4A TYPICAL CONSTRAINED FOOTING DETAIL

SCALE 1 1/2" = 1'-0"



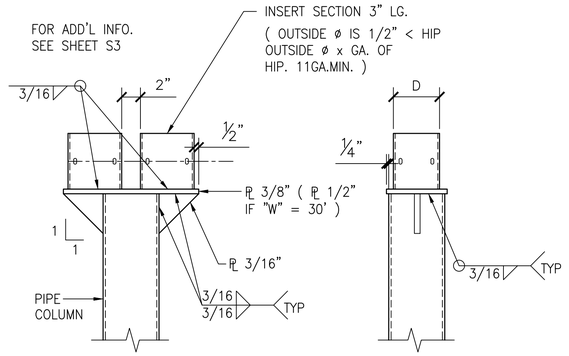
4B TYPICAL NON-CONSTRAINED FOOTING DETAIL

SCALE 1 1/2" = 1'-0"



5 TYPICAL CONSTRAINED FOOTING DETAIL

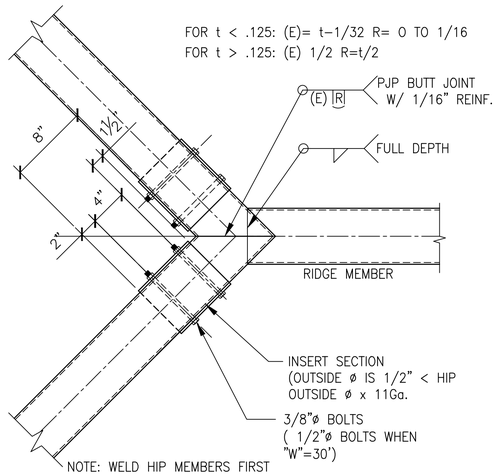
SCALE 1 1/2" = 1'-0"



ELEVATION SIDE VIEW

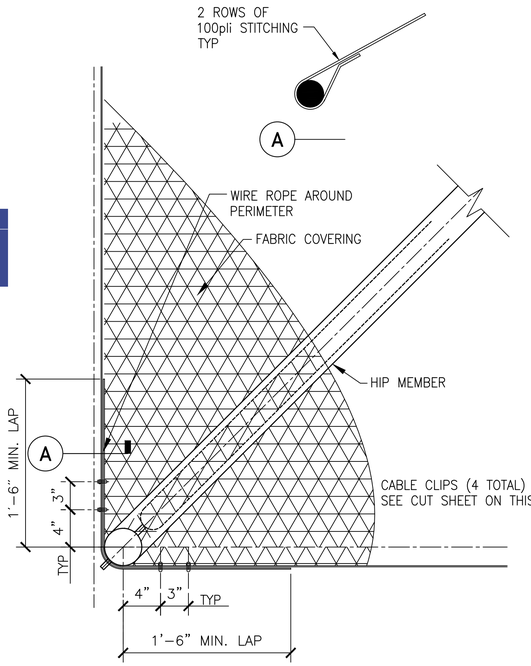
3 TYPICAL INT. COL. - HIP CONNECTION

SCALE 3" = 1'-0"



1 TYPICAL HIP - RIDGE CONNECTION

SCALE 1 1/2" = 1'-0"



2 TYPICAL CABLE CONNECTION

SCALE 1 1/2" = 1'-0"

HSI HANES SUPPLY INC

Wire Rope

1 Wire Rope

Cable

Stainless Steel Cables

Type 302/304 - Type 302/304 stainless steel is the standard alloy for cable. It has about the same strength as galvanized aircraft cable and much better corrosion resistance. It has excellent corrosion resistance in most industrial atmospheres, and good corrosion resistance in sea water and marine atmospheres. Type 302/304 also has very good corrosion resistance to many chemicals including nitric acid.

Type 305 - Type 305 has better corrosion resistance than Type 302 with 10-15% lower strength. This alloy is primarily used for nonmagnetic cable applications. When sufficiently cold worked, this alloy does not become magnetic.

Type 316 - Type 316 is the standard high corrosion resistant alloy for cable. It is resistant to many of the chemicals in the paper pulp, photographic, food processing and textiles industries. It has the best pitting resistance in marine use of the commonly used stainless steels. The breaking strength is 10-15% below Type 302. Excellent scale resistance allows its continuous use at temperatures up to 900°F.

Corrosion Resistance - Chromium in stainless steels is the primary reason for their corrosion resistance. The chrome protects the surface by quickly forming an impervious, tenacious oxide film. This acts as a protective barrier against attack. Nickel improves the oxide forming ability of chromium and also gives the stainless steel a broader range of corrosion resistance.

Diameter (In)	Breaking Strength (lbs)	Wt (lbs) M Feet
1 x 7 TYPE 302/304 - Stainless Steel Strand		
.012	25	0.33
.015	40	0.55
.018	55	0.73
.021	80	1.00
.024	100	1.30
.027	125	1.70
1/32	185	2.30
.038	250	3.50
3/64	375	5.50
1/16	500	8.50
5/64	800	14.00
3/32	1200	20.00
7/64	1600	27.00
1/8	2100	35.00
5/32	3300	55.00
3/16	4700	77.00
7/32	6300	103.00
1/4	8500	135.00
9/32	10700	170.00
5/16	13200	212.00
3/8	18000	282.00
7/16	26000	416.00
1/2	33700	535.00
1 x 19		
1/32	185	2.5
3/64	335	5.5
1/16	500	8.5
5/64	800	14.0
3/32	1200	20.0
7/64	1600	27.0
1/8	2100	35.0
5/32	3300	55.0
3/16	4700	77.0
7/32	6300	102.0
1/4	8200	135.0
9/32	10300	170.0
5/16	12500	210.0
3/8	17500	300.0
7/16	22500	410.0
1/2	30000	521.0
9/16	36200	670.0
5/8	47000	855.0

Diameter (In)	Breaking Strength (lbs)	Wt (lbs) M Feet
3 x 3 TYPE 302/304 - Stainless Steel Cable		
.021	40	0.5
3 x 7		
1/32	110	1.7
5/64	650	9.7
6 x 19 IWRC		
7/16	16300	356.0
1/2	22800	458.0
9/16	28500	590.0
5/8	35000	715.0
3/4	49600	922.0
7/8	66500	1430.0
1	85400	1870.0
1-1/8	106400	2400.0
1-1/4	129400	2900.0
6 x 37 IWRC		
3/16	3000	65.0
1/4	5400	100.0
5/16	8300	180.0
3/8	11700	240.0
7/16	15800	330.0
1/2	20800	430.0
9/16	25600	540.0
5/8	31400	670.0
3/4	44400	960.0

Diameter (In)	Breaking Strength (lbs)	Wt (lbs) M Feet
6 x 37 IWRC *(continued)*		
7/8	59700	1310.0
1	77300	1700.0
1-1/8	96600	2160.0
1/114	118400	2660.0
6 x 4 *Non-Preformed*		
1/8	700	18.0
3/16	1600	40.0
1/4	3200	70.0
5/16	4900	110.0
3/8	6900	160.0
7/16	9300	210.0
1/2	12000	280.0
9/16	15000	350.0
5/8	18400	430.0
7 x 3		
.018	40	0.5
.024	60	1.0
.031	110	1.7
7 x 7		
.031	115	2.0
3/64	270	4.2
1/16	480	7.5
5/64	650	11.0
3/32	920	16.0
7/64	1260	22.0
1/8	1700	28.5
5/32	2400	43.0
3/16	3700	62.0
7/32	5000	83.0
1/4	6400	106.0
9/32	7800	134.0
5/16	9000	1670
3/8	12000	236.0
7/16	15600	342.0
1/2	21300	440.0
9/16	26600	550.0
5/8	32500	680.0
3/4	45000	940.0
7 x 19		
3/64	270	4.2
1/16	480	7.5
3/32	920	16.0
7/64	1260	22.0
1/8	1760	29.0
5/32	2400	45.0
3/16	3700	65.0
7/32	5000	86.0
1/4	6400	110.0
9/32	7800	139.0
5/16	9000	173.0
3/8	12000	243.0
19 x 7 *Non-Preformed*		
1/8	1500	29.0
5/32	2160	45.0
3/16	3330	65.0
7/32	4500	86.0
1/4	5760	110.0
5/16	8100	173.0
3/8	10800	243.0
7/16	13800	356.0
1/2	20520	458.0
9/16	24200	590.0
5/8	31500	715.0

Diameter (In)	Breaking Strength (lbs)	Wt (lbs) M Feet
6 x 19 TYPE 305 - IWRC Stainless Steel *Non-Magnetic*		
7/16	14900	356.0
1/2	19300	458.0
9/16	24300	590.0
5/8	30100	715.0
3/4	42900	1052.0
7/8	58000	1430.0
1	75200	1870.0
7 x 7		
1/16	360	7.5
3/32	700	16.0
7 x 19		
1/8	1300	29.0
5/32	2000	45.0
3/16	2900	65.0
7/32	3800	86.0
1/4	4900	110.0
9/32	6100	139.0
5/16	7600	173.0
3/8	11000	243.0
1 x 7 TYPE 316 - Stainless Steel Strand		
7/32	5700	103.0
1/4	7650	135.0
9/32	9650	170.0
5/16	11900	212.0
3/8	16200	282.0
7/16	23400	416.0
1/2	30200	535.0
1 x 19		
1/8	1780	35.0
5/32	2800	55.0
3/16	4000	770
7/32	5350	102.0
1/4	6900	135.0
9/32	9400	170.0
5/16	10600	210.0
3/8	14800	300.0
7/16	20000	410.0
1/2	27000	521.0
9/16	32400	670.0
5/8	42000	855.0
6 x 19 Type 316 - IWRC Stainless Steel		
7/16	15000	356.0
1/2	19300	458.0
5/8	29800	715.0
7 x 7		
3/64	240	4.2
1/16	360	7.5
3/32	700	16.0
1/8	1360	28.5
7 x 19		
1/8	1300	29.0
5/32	2000	45.0
3/16	2900	65.0
1/4	4900	110.0
5/16	7600	173.0
3/8	11000	243.0
1 x 7 Annealed Stainless Steel Seizing Strand		
1/32	60	2.3
3/64	130	5.3
1/16	230	8.5
5/64	360	14.0
3/32	500	20.0
1/8	900	33.0
5/32	1350	50.0

rea architect
RONEDWARDS
Architecture
7400 Pedrick Court
Bakersfield, CA 93313
(661) 394-0053
ron@rearchitect.net

CUSTOM CANOPIES INC.
11815 BURKE STREET
SANTA FE SPRINGS, CA 90670

PRECHECK FABRIC SHADE STRUCTURE

MANUFACTURER:

CUSTOM CANOPIES
2019 CBC DWGS

STRUCTURAL ENGINEER OF RECORD
ORION
Structural Engineering, Inc.
11305 RANCHO BERNARDO RD
SUITE 121
SAN DIEGO CA. 92127
PHONE (858) 679-1974

Project #	Sheet
21-003	S4
Drawn By: RWE	
Date: 6-17-21	

6/22/2021 1:53:21 PM