INTERIM HOUSING
AND NEW ACCESSIBLE MODULAR RESTROOMS

REDWOOD HIGH SCHOOL
395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT

TAMALPAIS UNION HIGH SCHOOL DISTRICT

P.O. Box 605 - Larkspur, CA 94977 - (415) 945-3600 - Fax (415) 945-3766 - www.tamdistrict.org

California Distinguished Schools: Tamalpais, Drake and Redwood High Schools

February 12th, 2018

Division of the State Architect
1515 Clay Street, Suite 1201
Oakland, CA 94612

Subject: **PTN# 65482-65 Interim Housings at Redwood High School**

Relocatable Building P4 - 24'x40' DSA # 02-102021
Relocatable Building P5 - 24'x40' DSA # 02-102021
Relocatable Building P6 - 24'x40' DSA # 69217
Relocatable Building P7 - 24'x40' DSA # 02-102021

To Whom It May Concern:

In reference to temporary classroom buildings required under PTN# **65482-65**, Tamalpais Union High School District anticipates all classrooms shall be permanently removed from the school site no later than December, 2021.

These temporary classrooms are used as regular Group E classrooms and, as such, no Laboratory-Fire hazardous materials will be performed nor stored in these classrooms.

If you have any questions, please feel free to contact me at (415) 945-1060

Sincerely,

David O'Connor
Director of Maintenance and Operations
Tamalpais Union High School District

cc: PHd Architects, Inc.

DRAWINGS INDEX

A-000	TITLE SHEET
A-001F	OVERALL SITE PLAN / FIRE MARSHALL
A-001	OVERALL SITE PLAN / ACCESS
A-200	ENLARGE SITE PLAN RESTROOM #2 AND RELOCATABLE BLDGS
A-210	ENLARGED SITE PLAN RESTROOM #1

THE DRAWINGS AND/OR SPECIFICATIONS LISTED BELOW HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN CALIFORNIA. THESE DOCUMENTS HAVE BEEN EXAMINED BY ME FOR DESIGN INTENT AND THEY APPEAR TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24 AND THE CALIFORNIA CODE OF REGULATIONS. THE ITEMS LISTED BELOW HAVE BEEN COORDINATED WITH MY PLANS AND SPECIFICATIONS AND ARE ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT FOR WHICH I AM THE INDIVIDUAL DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE.

C0.01	TITLE SHEET
C0.02	GRADING SPECIFICATIONS
C2.01	GRADING & DRAINAGE PLAN
C2.02	GRADING & DRAINAGE PLAN
C3.01	DETAILS
C4.01	EROSION & SEDIMENTATION CONTROL PLAN
C4.02	EROSION & SEDIMENTATION CONTROL PLAN
C4.03	EROSION & SEDIMENTATION CONTROL DETAILS
C4.04	CONSTRUCTION BEST MANAGEMENT PRACTICES (SWPPP)
E0.1	GENERAL NOTES, LEGEND, ABBREVIATIONS AND DRAWING INDEX
E0.2	ELECTRICAL SPECIFICATION
E1.1	ELECTRICAL SITE PLAN
E1.2	ELECTRICAL SITE PLAN
E2.1	SIGNAL PLAN
E3.1	SINGLE LINE DIAGRAM AND DETAILS
E3.2	SIGNAL RISER DIAGRAM
FA0.1	FIRE ALARM COVER SHEET
FA1.1	FIRE ALARM SITE PLAN
FA2.1	FIRE ALARM PLAN
FA3.1	FIRE ALARM PLAN RISER DIAGRAM, LEGEND AND EQUIPMENT LIST
FA4.1	FIRE ALARM VOLTAGE DROP, AND BATTERY CALCULATION
FA4.2	FIRE ALARM VOLTAGE DROP, AND BATTERY CALCULATION
FA5.1	FIRE ALARM DETAILS

ENVIROPLEX MODULAR ACCESSIBLE RESTROOM 12'X40' SITE ADAPT PC REFERENCE 02-113910

A0	- COVER SHEET, BUILDING CODES & CBC DATA, SHEET INDEX
A1A	- (RESTROOM #1) GIRLS, STAFF RESTROOM FLOOR PLAN, INTERIOR & EXTERIOR ELEVATIONS, MATERIAL SPECIFICATIONS, & NOTES
A1B	- (RESTROOM #2) BOYS, STAFF, GIRLS RESTROOM & JANITOR FLOOR PLAN, INT. & EXT. ELEVATIONS,
A2	- REFLECTED CEILING PLANS & CEILING ATTACHMENT DETAILS
A2A	- REFLECTED CEILING PLANS
AGB	- GREEN BUILDING STANDARDS
EN1	- ENERGY COMPLIANCE UNCONDITIONED RESTROOM
EN1.1	- ENERGY COMPLIANCE UNCONDITIONED RESTROOM
EN1.2	- ENERGY COMPLIANCE UNCONDITIONED RESTROOM
A3	- ELECTRICAL POWER PLAN, SIGNAL PLAN, LIGHTING PLAN, DETAILS, ELECTRICAL NOTES
A3A	- ELECTRICAL POWER PLAN, SIGNAL PLAN, LIGHTING PLAN
A4	- SECTIONS AND DETAILS 2x4 EXTERIOR WALLS (NON-RATED)
A4H	- INTERIOR WALL CONNECTION DETAILS
A5	- MISCELLANEOUS DETAILS
S1CA	- (RESTROOM #1) CONCRETE FOUNDATION PLAN, FOOTING DETAILS & NOTES (WOOD FLOOR)
S1CB	- (RESTROOM #2) CONCRETE FOUNDATION PLAN, FOOTING DETAILS & NOTES (WOOD FLOOR)
S1C.1	- ALTERNATE FOOTING DETAILS
S1C.2	- MISCELLANEOUS FOOTING DETAILS
S2	- BI-PITCH ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES
S3FA	- FASTENING SCHEDULE & NOTES
S3	- BI-PITCHED ROOF LONGITUDINAL BUILDING SECTION, WALL FRAMING ELEV., END FRAME ELEV., NAILING SCHEDULE
S4	- STRUCTURAL CONNECTION DETAILS
S4.1	- ALTERNATE STRUCTURAL DETAILS
S4.2	- ALTERNATE STRUCTURAL DETAILS
S5R	- ACCESSIBLE RAMP & PLATFORM DETAILS
S5S	- STAIR DETAILS
S5R.1	- PLATFORM DETAILS (PLATFORM OVER 18" HEIGHT)

ENVIROPLEX MODULAR ACCESSIBLE RESTROOM 12'X40' PC REFERENCE 02-113910 COMPARISON SET FOR DSA INFO

☑ MARKED BOX REPRESENTS DRAWING/OPTION TO BE USED FOR APPLICATION

☒	A0	- COVER SHEET, BUILDING CODES & CBC DATA, SHEET INDEX
☐	A1	- BOYS, GIRLS RESTROOM FLOOR PLAN, INTERIOR & EXTERIOR ELEVATIONS, MATERIAL SPECIFICATIONS, & NOTES
☒	A1A	- STAFF, BOYS, GIRLS RESTROOM FLOOR PLAN, INT. & EXT. ELEVATIONS, MATERIAL SPECIFICATIONS, & NOTES
☒	A2	- REFLECTED CEILING PLANS & CEILING ATTACHMENT DETAILS
☒	AGB	- GREEN BUILDING STANDARDS
☒	EN1	- ENERGY COMPLIANCE UNCONDITIONED RESTROOM
☒	EN1.1	- ENERGY COMPLIANCE UNCONDITIONED RESTROOM
☒	EN1.2	- ENERGY COMPLIANCE UNCONDITIONED RESTROOM
☒	A3	- ELECTRICAL POWER PLAN, SIGNAL PLAN, LIGHTING PLAN, DETAILS, ELECTRICAL NOTES
☐	A4	- SECTIONS AND DETAILS 2x4 EXTERIOR WALLS (NON-RATED)
☐	A4.1	- SECTIONS AND DETAILS 2x6 EXTERIOR WALLS (NON-RATED)
☒	A4.3	- SECTIONS AND DETAILS (1-HOUR FIRE RATED 2x6 EXTERIOR FIRE BARRIERS)
☒	A4A	- BI-PITCHED ROOF SECTIONS AND DETAILS (2x4 EXTERIOR WALLS)
☐	A4A.1	- BI-PITCHED ROOF SECTIONS AND DETAILS (2x6 EXTERIOR WALLS)
☐	A4A.3	- BI-PITCHED ROOF SECTIONS AND DETAILS (1-HOUR FIRE RATED 2x6 EXTERIOR FIRE BARRIERS)
☐	A4B	- SHED ROOF SECTIONS AND DETAILS (2x4 EXTERIOR WALLS)
☐	A4B.1	- SHED ROOF SECTIONS AND DETAILS (2x6 EXTERIOR WALLS)
☐	A4B.3	- SHED ROOF SECTIONS AND DETAILS (1-HOUR FIRE RATED 2x6 EXTERIOR FIRE BARRIERS)
☒	A4H	- INTERIOR WALL CONNECTION DETAILS
☐	A4H.1	- INTERIOR WALL CONNECTION DETAILS (1-HOUR FIRE BARRIERS OR FIRE PARTITIONS)
☐	A4H.2	- GYPSUM BOARD CEILING DETAILS
☐	A4C.1	- NON RATED WALL ATTACHMENT DETAILS - (CONCRETE FLOORS)
☐	A4C.2	- 1-HOUR FIRE BARRIER WALL ATTACHMENT DETAILS - (CONCRETE FLOORS)
☐	A4L	- "LEVEL ROCK" FLOOR UNDERLAYMENT OPTION - (PLYWOOD FLOORS)
☒	A5	- MISCELLANEOUS DETAILS
☐	A5.1	- SOL-A-TUBE SKYLIGHT OPTION
☒	S1C	- CONCRETE FOUNDATION PLAN, FOOTING DETAILS, NOTES - (WOOD FLOOR)
☐	S1C(H)	(HIGH SEISMIC) - CONCRETE FOUNDATION PLAN, FOOTING DETAILS, & NOTES - (WOOD FLOOR)
☒	S1C.1	- ALTERNATE FOOTING DETAILS
☐	S1C.2	- MISCELLANEOUS FOOTING DETAILS
☐	S1C.3	- CONCRETE FOUNDATION, FOOTING DETAILS & NOTES - (CONCRETE FLOORS)
☐	S1C.3(H)	(HIGH SEISMIC) - CONCRETE FOUNDATION, FOOTING DETAILS & NOTES - (CONCRETE FLOORS)
☐	S1C.4	- MISCELLANEOUS FOOTING DETAILS - (CONCRETE FLOORS)
☐	S1W50	- 50 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☐	S1W50(H)	- (HIGH SEISMIC) - 50 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☐	S1W65	- 65 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☐	S1W65(H)	- (HIGH SEISMIC) - 65 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☐	S1W125	- 125 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☐	S1W125(H)	(HIGH SEISMIC) - 125 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☒	S2	- BI-PITCH ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES
☐	S2(H)	- (HIGH SEISMIC) - BI-PITCH ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES
☐	S2A	- SHED ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES
☐	S2A(H)	- (HIGH SEISMIC) - SHED ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES
☐	S2C.1	- (HIGH & LOW SEISMIC) - FRAMING PLAN, STRUCTURAL STEEL PROPERTIES, NOTES - (CONCRETE FLOORS)
☐	S2RC	- (HIGH & LOW SEISMIC) - FRAMING PLAN, STRUCTURAL STEEL PROPERTIES, NOTES - (WOOD FLOORS W/ HRC)
☒	S3FA	- FASTENING SCHEDULE & NOTES
☒	S3	- BI-PITCHED ROOF LONGITUDINAL BUILDING SECTION, WALL FRAMING ELEV., END FRAME ELEV., NAILING SCHEDULE
☐	S3A	- SHED ROOF LONGITUDINAL BUILDING SECTION, WALL FRAMING ELEV., END FRAME ELEVATION, NAILING SCHEDULE
☒	S4	- STRUCTURAL CONNECTION DETAILS
☒	S4.1	- ALTERNATE STRUCTURAL DETAILS
☒	S4.2	- ALTERNATE STRUCTURAL DETAILS
☐	S4.3 -	ALTERNATE DETAILS - METAL SOFFIT PANELS
☐	S4.4 -	ALTERNATE DETAILS - METAL SOFFIT PANELS W/ WALL MOUNT HVAC UNIT
☐	S4C	- STRUCTURAL CONNECTION DETAILS - (CONCRETE FLOORS)
☐	S4H	- STRUCTURAL CONNECTION DETAILS - (WOOD FLOOR WITH HRC FRAME OPTION)
☐	WC1	- CANOPY FRAMING & CONNECTION DETAILS
☒	S5R	- ACCESSIBLE RAMP & PLATFORM DETAILS
☒	S5S	- STAIR DETAILS
☒	S5R.1	- PLATFORM DETAILS (PLATFORM OVER 18" HEIGHT)

H. MAX PEYVAN — DATE

LICENSE NUMBER: C-27121 EXPIRATION DATE: 09/30/2019

D.S.A. FILE INFORMATION

D.S.A. APPLICATION No. 01-117371
P.T.N. 65482-65

APPLICABLE CODES

2016 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, (PART 1, TITLE 24, C.C.R.)

2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R. (2016 INTERNATIONAL BUILDING CODE, VOLUMES 1 AND 2 WITH 2016 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA ELECTRICAL CODE (CEC) PART 3, TITLE 24, C.C.R. (2016 NATIONAL ELECTRICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24, C.C.R. (2016 UNIFORM MECHANICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)

2016 CALIFORNIA PLUMBING CODE (CPC) PART 5, TITLE 24, C.C.R. (2016 UNIFORM PLUMBING CODE WITH 2016 CALIFORNIA AMENDMENTS)

2016 ENERGY STANDARDS (CEC)

2016 CALIFORNIA FIRE CODE (CFC) PART 9, TITLE 24, C.C.R. (2016 INTERNATIONAL FIRE CODE) C.C.R. TITLE-19 PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

AMERICAN WITH DISABILITIES ACT AND 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

NATIONAL STANDARDS:

NFPA 13 AUTOMATIC SPRINKLER SYSTEMS; 2016 EDITION (CA AMENDED)

NFPA 14 STANDPIPE SYSTEMS; 2016 EDITION (CA AMENDED)

NFPA 17 DRY CHEMICAL EXTINGUISHING SYSTEM; 2016 EDITION

NFPA 17A WET CHEMICAL EXTINGUISHING SYSTEM; 2016 EDITION

NFPA 20 STATIONARY FIRE PUMPS; 2016 EDITION

NFPA 22 WATER TANKS FOR PRIVATE FIRE PROTECTION; 2016 EDITION

NFPA 24 PRIVATE FIRE MAINS; 2016 EDITION (CA AMENDED)

NFPA 25 PROTECTION SYSTEMS; 2016 CALIFORNIA EDITION

NFPA 72 NATIONAL FIRE ALARM CODE; 2016 EDITION (CA AMENDED)

NFPA 80 FIRE DOORS AND OTHER OPENINGS PROTECTIVE; 2016 EDITION

NFPA 101 LIFE SAFETY CODE; 2016 EDITION

NFPA 110 EMERGENCY AND STANDBY POWER SYSTEMS; 2016 EDITION

ADMINISTRATIVE REQUIREMENTS

PART 1, TITLE 24, C.C.R.

A. ADDENDA AND CHANGES AS PER SECTION 4-338

B. INSPECTOR APPROVED BY DSA

C. INSPECTOR AND CONTINUOUS INSPECTION OF WORK PER SECTION 4-333(b) AND 4-342

D. TEST AND TESTING LABORATORY PER SECTION 4-335 (OWNER SHALL PAY THE TESTING LABORATORY)

E. SPECIAL INSPECTION PER SECTION 4-333(c)

F. CONTRACTOR SHALL SUBMIT VERIFIED REPORT PER SECTION 4-336 & 4-343(C)

G. ADMINISTRATION OF CONSTRUCTION PER PART 1, TITLE 24, C.C.R.,
1. DUTIES OF ARCHITECT, STRUCTURAL ENGINEER OR PROFESSIONAL ENGINEER PER SECTION 4-333(a) AND4-341
2. DUTIES OF CONTRACTOR PER SECTION 4-343
3. VERIFIED REPORTS PER SECTION 4-336

H. A COPY OF PART 1, 2, 3, 4 & 5 OF TITLE 24 SHALL BE KEPT & AVAILABLE IN THE FIELD DURING CONSTRUCTION

K. DSA SHALL BE NOTIFIED ON START OF CONSTRUCTION & PRIOR TO PLACEMENT OF CONCRETE, PER SEC. 4-331

I. SUPERVISION BY DSA PER SECTION 4-334

L. DSA IS NOT SUBJECT TO ARBITRATION

M. PER SECTION 4-317(C), PART 1, TITLE 24, C.C.R.: THE INTENT OF THESE DRAWNGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, C.C.R.. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONSTRUCTION DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, C.C.R. A CHANGE ORDER OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DSA BEFORE PROCEEDING WITH THE WORK.

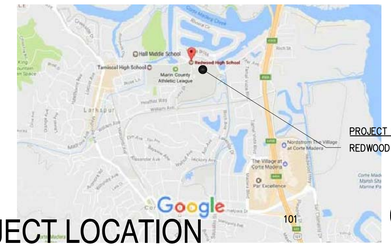
N. THE INTENT OF THESE DRAWINGS IS TO MODIFY THE FACILITY FOR ACCESSIBILITY IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS SUCH THAT THE FINISHED WORK WILL NOT COMPLY WITH SAID TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CCD SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DSA-AC BEFORE PROCEEDING WITH THE WORK.

SCOPE OF WORK

THE WORKS INCLUDES, BUT IS NOT LIMITED TO:

1) THE SITE PLACEMENT OF 4 RELOCATABLE CLASSROOM BUILDINGS FROM STOCKPILE (24'X40', 960 SF EACH, BY MANUFACTURER) AND ALL RELATED ELECTRICAL, DATA & FIRE ALARM CONNECTIONS BY CONTRACTOR. THESE BUILDINGS ARE FROM STOCKPILE, PC APPROVED BY DSA AND NOT NEW CONSTRUCTION.

2) THE SITE PLACEMENT OF 2 ACCESSIBLE MODULAR RESTROOMS PC REF. 02-113910 12' X 40' AT 2 SEPARATE LOCATIONS. THESE RESTROOMS ARE PERMANENT -SITE ADAPT FROM ENVIROPLEX PC APPROVED DRAWINGS 02-113910



PROJECT SITE:
REDWOOD HIGH SCHOOL

N

PROJECT LOCATION

DRAWING INDEX cont.

AMERICAN MODULAR RELOCATABLE CLASSROOMS 24'X40' FROM STOCKPILE

PC REFERENCE DSA #69217

TS-1	TITLE & BUILDING DATA NOTES
N-1	GENERAL NOTES & SPECIFICATIONS
1	FLOOR PLAN AND NOTES
2	EXTERIOR ELEVATIONS
3	CEILING GRIDS, DETAILS AND NOTES
4	INTERIOR ELEVATIONS AND OPTIONAL PLANS
~~S1~~	~~FOUNDATION PLAN, WOOD, DETAILS & NOTES 50#~~
S2	FLOOR FRAMING PLAN
S2A	BUILDING SECTIONS AND WALL DETAILS
S3	ROOF FRAMING PLAN AND DETAILS
S3A	ROOF FRAMING DETAILS
S4	FRAMING ELEVATIONS & DETAILS
S5R	RAMP PLAN, ELEVATIONS AND DETAILS
M1	MECHANICAL PLAN DETAILS AND NOTES
E1	ELECTRICAL PLAN DETAILS AND NOTES

AMERICAN MODULAR RELOCATABLE CLASSROOMS 24'X40' FROM STOCKPILE

PC REFERENCE DSA # 02-102021

TS-1	TITLE & BUILDING DATA NOTES
N-1	GENERAL NOTES & SPECIFICATIONS
1	FLOOR PLAN AND NOTES
2	EXTERIOR ELEVATIONS
3	CEILING GRIDS, DETAILS AND NOTES
4	INTERIOR ELEVATIONS AND OPTIONS
~~S1~~	~~WOOD FOUNDATION PLAN & DETAILS 50 PSF FLOOR LIVE LOAD~~
S2	FLOOR FRAMING PLAN & DETAILS
S2A	BUILDING SECTIONS AND WALL DETAILS
S3	ROOF FRAMING PLAN AND DETAILS
S3A	ROOF FRAMING DETAILS
S4	FRAMING ELEVATIONS & DETAILS
S5R	RAMP PLAN, ELEVATIONS AND DETAILS
M1	MECHANICAL PLAN DETAILS AND NOTES
E1	ELECTRICAL PLAN & NOTES

MOBILE MODULAR DSA FOUNDATION PLANS FOR EXISTING STOCKPILE

PC REFERENCE DSA # 04-113193

F1	COVER SHEET
F2	DSA NUMBER LISTING MATRIX
F3	FOUNDATION PLANS
F3A	FOUNDATION PLANS
F4	FOUNDATION PLANS
F4A	FOUNDATION PLANS
F5	FOUNDATION PLANS
F5A	FOUNDATION PLANS
F6	DETAILS
F7	GENERAL SPECIFICATIONS
F8	ADJACENT BLDGS
F9	ADJACENT BLDGS

PHd ARCHITECTS, INC.
Architecture • Planning • Interiors

LICENSED ARCHITECT H. MAX PEYVAN C-27121 9/30/19 RENEWAL DATE STATE OF CALIFORNIA

3211 Ronino Way
Lafayette, California 94549
925.949.8333 tel.
925.949.8666 fax

PROJECT TEAM:

CIVIL ENGINEER
CLARK CIVIL ENGINEERING
12700 HIGHWAY ONE,
POINT REYES STATION, CA 94956
TEL. (415) 295-4450
FAX (510) 372-0259

ELECTRICAL ENGINEER
ALLIANCE ENGINEERING CONSULTING, INC.
PATRICK HENRY DRIVE, BUILDING 10
SANTA CLARA, CA 95054
TEL (408) 970-9888
FAX (408) 970-9316

D.S.A. APPROVAL:
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT

APP. # 01 - 117371

AC_____FLS_____SS_____

DATE_____

PROJECT TITLE:

INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL

395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
3/20/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB # 18-201

SCALE: AS NOTED

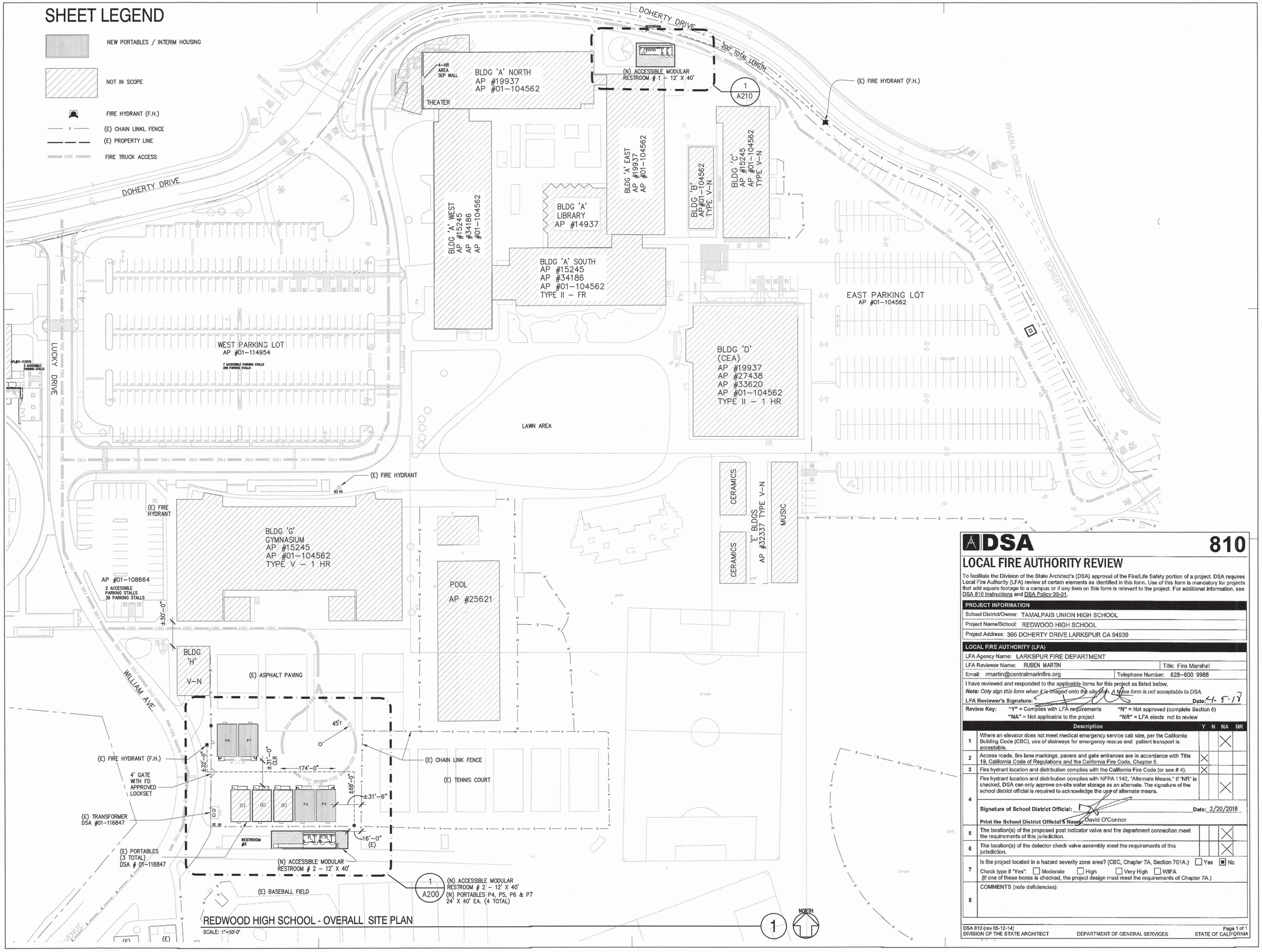
DATE: 3/20/18

SHEET NAME & NUMBER:

TITLE SHEET
A-000

SHEET LEGEND

- NEW PORTABLES / INTERIM HOUSING
- NOT IN SCOPE
- FIRE HYDRANT (F.H.)
- (E) CHAIN LINKL FENCE
- (E) PROPERTY LINE
- FIRE TRUCK ACCESS



REDWOOD HIGH SCHOOL - OVERALL SITE PLAN

SCALE: 1"=50'-0"

1

DSA 810

LOCAL FIRE AUTHORITY REVIEW

To facilitate the Division of the State Architect's (DSA) approval of the Fire/Life Safety portion of a project, DSA requires Local Fire Authority (LFA) review of certain elements as identified in this form. Use of this form is mandatory for projects that add square footage to a campus or if any item on this form is relevant to the project. For additional information, see DSA 810 Instructions and DSA Policy 09-01.

PROJECT INFORMATION

School District/Owner: TAMALPAIS UNION HIGH SCHOOL

Project Name/School: REDWOOD HIGH SCHOOL

Project Address: 395 DOHERTY DRIVE LARKSPUR CA 94939

LOCAL FIRE AUTHORITY (LFA)

LFA Agency Name: LARKSPUR FIRE DEPARTMENT

LFA Reviewer Name: RUBEN MARTIN | Title: Fire Marshal

Email: rmartin@centralmarinfire.org | Telephone Number: 628–600 9988

I have reviewed and responded to the applicable items for this project as listed below.

***Note:** Only sign this form when it is imaged onto the site plan. A loose form is not acceptable to DSA.*

LFA Reviewer's Signature: Date: 4-5-18

Review Key: "Y" = Complies with LFA requirements "N" = Not approved (complete Section 8) "NA" = Not applicable to the project "NR" = LFA elects not to review

	Description	Y	N	NA	NR
1	Where an elevator does not meet medical emergency service cab size, per the California Building Code (CBC), use of stairways for emergency rescue and patient transport is acceptable.			X	
2	Access roads, fire lane markings, pavers and gate entrances are in accordance with Title 19, California Code of Regulations and the California Fire Code, Chapter 5.	X			
3	Fire hydrant location and distribution complies with the California Fire Code (or see # 4).	X			
4	Fire hydrant location and distribution complies with NFPA 1142, "Alternate Means." If "NR" is checked, DSA can only approve on-site water storage as an alternate. The signature of the school district official is required to acknowledge the use of alternate means.				X
	Signature of School District Official: Date: 2/20/2018 **Print the School District Official's Name:** David O'Connor				
5	The location(s) of the proposed post indicator valve and fire department connection meet the requirements of this jurisdiction.				X
6	The location(s) of the detector check valve assembly meet the requirements of this jurisdiction.				X
7	Is the project located in a hazard severity zone area? (CBC, Chapter 7A, Section 701A.) ☐ Yes ☒ No Check type if "Yes": ☐ Moderate ☐ High ☐ Very High ☐ WIFA (If one of these boxes is checked, the project design must meet the requirements of Chapter 7A.)				
8	COMMENTS (note deficiencies):				

DSA 810 (rev 05-12-14) DIVISION OF THE STATE ARCHITECT | DEPARTMENT OF GENERAL SERVICES | Page 1 of 1 STATE OF CALIFORNIA

PHd ARCHITECTS, INC.
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3211 Ronino Way
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LICENSED ARCHITECT H. MAX FEYDA C-27121 9/30/19 RENEWAL DATE STATE OF CALIFORNIA

PROJECT TEAM:

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D.S.A. APPROVAL:
IDENTIFICATION STAMP
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APP. # 01 - 117371
AC_____FLS_____SS_____
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PROJECT TITLE:
INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL
395 DOHERTY DRIVE, LARKSPUR, CA 94939
TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
5/04/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB # 18-201

SCALE: AS NOTED | DATE: 5/04/18

SHEET NAME & NUMBER:
OVERALL SITE PLAN
FIRE MARSHALL
A-001F

SHEET LEGEND

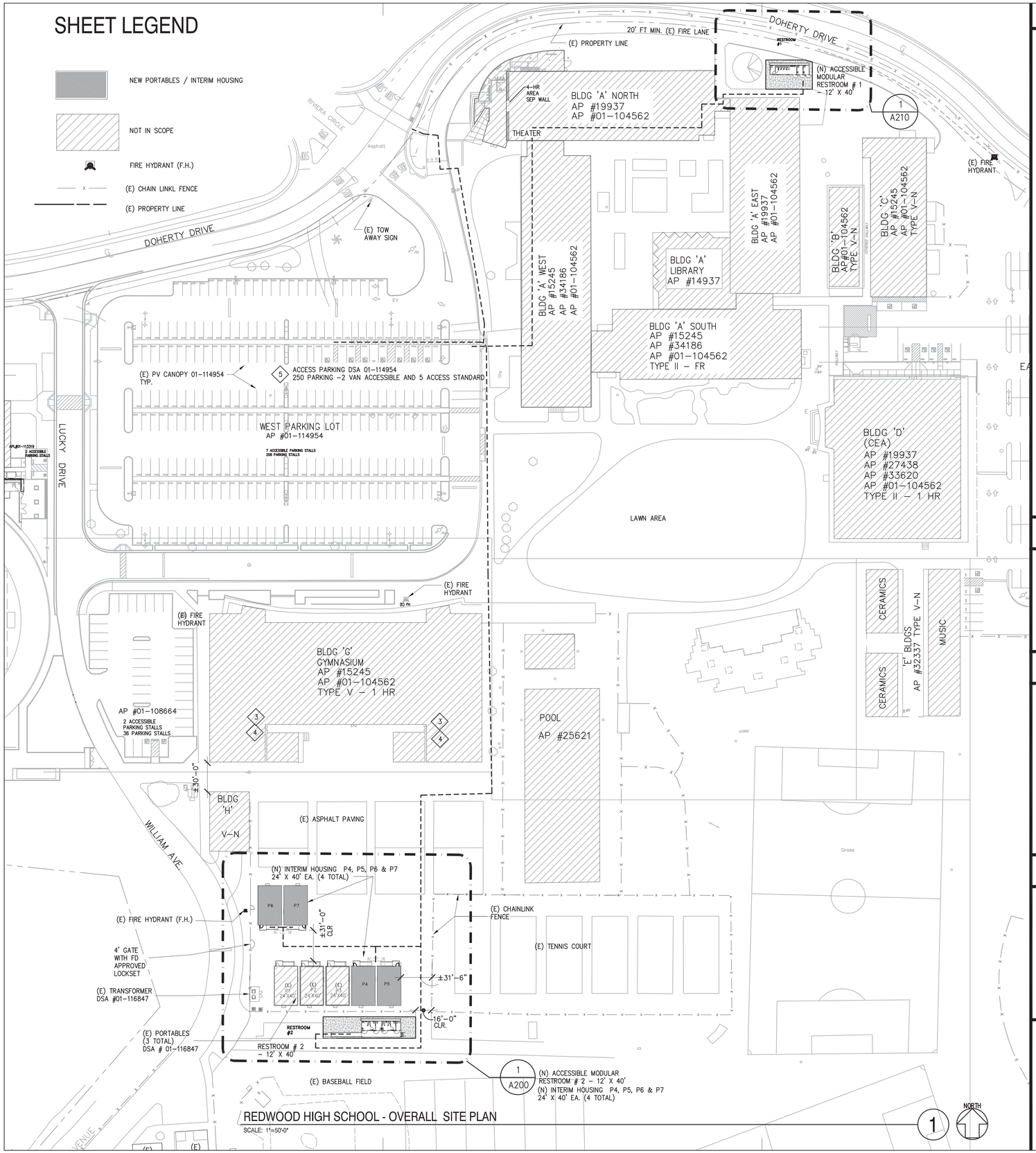
NEW PORTABLES / INTERIM HOUSING

NOT IN SCOPE

FIRE HYDRANT (F.H.)

(E) CHAIN LINKL FENCE

(E) PROPERTY LINE



REDWOOD HIGH SCHOOL - OVERALL SITE PLAN

SCALE: 1"=50'-0"

1

BUILDING DATA - DSA ONLY

BUILDING NAME	DSA #	USE	OCC.	NUMBER OF STORIES	TYPE OF CONST.	ACTUAL BLDG SQ.FT.	NOTES
(E) BUILDING A	19937, 01-104562	ED	A-3 E-1	2	II-FR	3,483 125,518	CBC SECTION 505.1.1, SEPARATION ON TWO SIDES (60 FEET - 20 FEET)=2003 MIXED OCCUPANCY CALCULATION: 3,483 sf / 89,700 sf + 125,518 sf / 133,600 sf = 0.04 + 0.93 = 0.97 ≤ 1 NO SPRINKLERS REQUIRED PERCBC SECTION 904.2.4.1, EXCEPTION 1 Basic Allowable Area: 70,000 sf
(E) THEATRE LOBBY (@ BLDG A)	01-104562	ED	A-3	1	V-1HR	1,584	
(E) BUILDING B	01-104562	ED	E-1	1	V-B	2,504	CBC SECTION 505.1.1, SEPARATION ON TWO SIDES (60 FEET - 20 FEET)=2003 Allowable Area Increases = 9,100 sf x 1.5 = 13,650 sf
(E) BUILDING C	15245, 01-104562	ED	E-1	1	V-B	8,686	CLUSTER (TOTAL:11,210 sf) - Actual Bldg sq.ft.
(E) BUILDING D	19937, 27438, 01-104562	ED	A-2.1 A-3 E-1	1	II-1HR (SPRINKLED)	6,071 2,048 4,815 7,975	CBC SECTION 505.1.1, SEPARATION ON TWO SIDES (60 FEET - 20 FEET)=2003 MIXED OCCUPANCY CALCULATION: 6,071 sf / 20,250 sf + 2,048 sf / 20,250 sf + 4,815 sf / 30,300 sf + 7,975 sf / 27,000 sf = 0.30+0.10+0.16+0.30 = 0.86 ≤ 1
(E) BUILDING E	32337, 01-104562	ED	E-1	1	V-B	8,632	CLUSTER
(E) BUILDING F	25621	ED	E-1	1	V-B	1,402	
(E) BUILDING G	15245, 01-104562	ED	A-2.1 A-3 E-1	1	V-1HR (SPRINKLED)	16,988 3,434 15,250	CBC SECTION 505.1.1, SEPARATION ON TWO SIDES (60 FEET - 20 FEET)=2003 MIXED OCCUPANCY CALCULATION: 16,988 sf / 36,750 sf + 3,434 sf / 36,750 sf + 15,250 sf / 54,950 sf = 0.46 + 0.09 + 0.28 = 0.83 ≤ 1
(E) BUILDING H	01-104562	ED	S-1	1	V-B	2,400	
(N) PORTABLE P4	THIS APPLICATION	ED	E	1	V-B	960	SEE CODE ANALYSIS BELOW
(N) PORTABLE P5	THIS APPLICATION	ED	E	1	V-B	960	
(N) PORTABLE P6	THIS APPLICATION	ED	E	1	V-B	960	
(N) PORTABLE P7	THIS APPLICATION	ED	E	1	V-B	960	
						3840	
(N) RESTROOM 2	THIS APPLICATION	ED	E	1	V-B	480	
(N) RESTROOM 1	THIS APPLICATION	ED	E	1	V-B	480	

CODE ANALYSIS

P4, P5, P6 & P7 @ 24X40 = 960 SQ. FT. FOR EACH PORTABLE

GROUP E TYPE V-B
BASIC ALLOWABLE AREA = 9,500 SQ. FT.
BLDG. HT 13FT < 40 FT.
PER CHAPTER 10 TABLE 1004.1.1 MAXIMUM OCCUPANT LOAD FOR GROUP E IS 20 SQ. FT PER OCCUPANT
AT 960 SQ. FT., 960/20 = 48 < THAN 49 - 1 EXIT REQUIRED PER 1015.1.1
FOR P4, P5, P6 AND P7

RESTROOM 2 TYPE V-B = 12' X 40' = 480 SQ. FT.
BASIC ALLOWABLE AREA FOR CLUSTERING FOR TYPE V-B = 9,500 SQ. FT.
BLDG. HT 13FT < 40 FT.
P1+P2+P3+P4+P5+P6+P7+ RESTROOM#2=
(960 SQ.FT X 7) + 480 SQ. FT. = 7200 SQ. FT.

SHEET LEGEND

NEW PORTABLES / INTERIM HOUSING

NOT IN SCOPE

FIRE HYDRANT (F.H.)

(E) CHAIN LINKL FENCE

(E) PROPERTY LINE

PATH OF TRAVEL

ACCESS DATA - DSA ONLY

1. (E) ACCESSIBLE BOY'S TOILET - DSA APPLICATION #01-104562
2. (E) ACCESSIBLE GIRL'S TOILET - DSA APPLICATION #01-104562
3. (E) STAFF ACCESSIBLE RESTROOM - DSA APPLICATION #01-104562
4. (E) ACCESSIBLE H/L DRINKING FOUNTAIN - DSA APPLICATION #01-10562
5. (E) ACCESSIBLE (7) PARKING STALLS, (2) VAN ACCESSIBLE STALL & 5 STANDARD -DSA APPLICATION # 01-114954

ACCESS NOTES

FOR DSA REVIEW PURPOSES, ARCHITECT HEREBY STATES THE FOLLOWING:

1. THE EXISTING ACCESSIBLE PATH OF TRAVEL AS INDICATED BY THIS LINE - - - - - - - - - - - - - - -

ACCORDING TO TUHSD AS-BUILT RECORD SETS, DSA PROJECT DATA AND OUR VISUAL INSPECTION IS A BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAX. SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX. AND AT LEAST 48" WIDE. SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED.

WITHIN THE REMODELED AREA PER THIS APPLICATION (PER THE PROJECT SCOPE OF WORK INDICATED ON TITLE-SHEET), THE ACCESSIBLE PATH OF TRAVEL IS A BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAX. SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX. AND AT LEAST 48" WIDE. SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED.

WITHIN THE REMODELED AREA PER THIS APPLICATION (PER THE PROJECT SCOPE OF WORK INDICATED ON TITLE-SHEET), NEW ACCESSIBLE ROUTE OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80". ARCHITECT HAS VERIFY THAT THERE ARE NO BARRIERS IN THE ROUTE OF TRAVEL (WITHIN THE REMODELED AREA PER THIS APPLICATION).

PROJECT SAFETY

ALL DEMOLITION & CONSTRUCTION WORK SHALL COMPLY WITH 2016 CFC CHAPTER 14 "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION" AND WITH 2013 CBC CHAPTER 33 "SAFETY DURING CONSTRUCTION".

EMERGENCY VEHICLE ACCESS ROADS AND ON-SITE FIRE HYDRANTS SHALL BE IN SERVICE AND OPERABLE PRIOR TO LOADING THE SITE WITH COMBUSTIBLE MATERIAL.

BID & CONSTRUCTION REQUIREMENTS

THE CONTRACTOR IS REQUIRED TO VERIFY IN FIELD ACTUAL EXISTING EXPOSED CONDITION AND EXTENT OF DEMOLITION AND CONSTRUCTION REQUIRED TO PERFORM THE JOB PRIOR TO BID - NOT ALL EXISTING CONDITIONS MAY BE SHOWN ON THE DRAWINGS.

WITH THE ABOVE THE CONTRACTOR IS ADVISED AND AGREES THAT THE DISTRICT WILL NOT NEGOTIATE ADDITIONAL COMPENSATIONS ON ITEMS NOT SHOWN ON THE DRAWINGS BUT, VISIBLE AND/OR EXPOSED AND REASONABLY ASSUMED FROM THE PROJECT SCOPE AND OBVIOUSLY REQUIRED TO BE PERFORMED IN ORDER TO ATTAIN A COMPLETE AND FINISHED PRODUCT

PHd ARCHITECTS, INC.
Architecture • Planning • Interiors

LICENSED ARCHITECT H MAX PEYRA C-27121 9/30/19 RENEWAL DATE STATE OF CALIFORNIA

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D.S.A. APPROVAL:

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DIVISION OF THE STATE ARCHITECT

APP. # 01 - 117371

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PROJECT TITLE:

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PHD ARCHITECTS JOB #
18-201

SCALE: AS NOTED

DATE: 5/04/18

SHEET NAME & NUMBER:

OVERALL SITE PLAN
ACCESS
A-001

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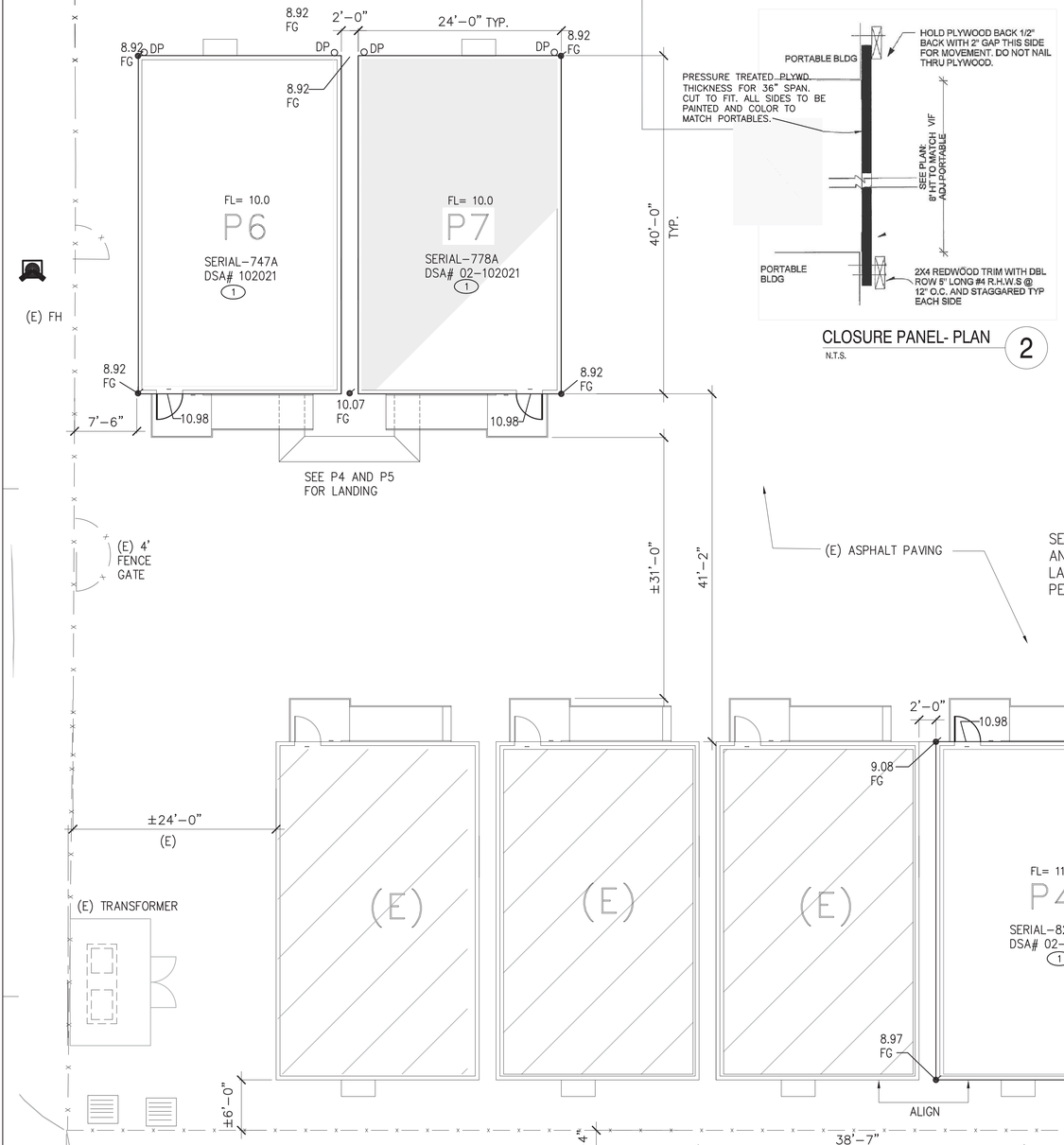
GENERAL NOTES

1. THE INTENT OF THE CONTRACT DOCUMENTS IS TO DEFINE THE SCOPE OF WORK IN ACCORDANCE WITH THE CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24. SHOULD ANY CONDITION DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, WHEREIN THE FINISHED WORK SHALL NOT COMPLY WITH THE CODE REQUIREMENTS, A CHANGE ORDER DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
2. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF THE WORK. NO ALLOWANCE SHALL BE MADE FOR ANY EXPENSE INCURRED BY THE FAILURE OR NEGLECT TO PERFORM SUCH AN INVESTIGATION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR OMISSIONS AND OBTAIN CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK.
3. ASSUMPTIONS HAVE BEEN MADE CONCERNING EXPOSED AND CONCEALED CONDITIONS. WORK WHICH IS NOT SHOWN ON THE DRAWINGS, BUT COULD BE REASONABLY ASSUMED FROM THE PROJECT SCOPE OR AN EXAMINATION OF THE EXISTING SITE CONDITIONS, AND IS OBVIOUSLY REQUIRED TO BE PERFORMED IN ORDER TO ATTAIN A COMPLETE AND FINISHED PRODUCT, SHALL BE PERFORMED BY THE GENERAL CONTRACTOR WITHOUT ADDED COST TO THE OWNER.
4. THE CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING EXTERIOR PAVING. ANY DAMAGE TO THE (E) PAVING DUE TO EQUIPMENT, TRUCKS OR STORED MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS ADVISED THAT PLAYGROUND PAVING GENERALLY IS NOT OF SUFFICIENT THICKNESS TO WITHSTAND REPEATED OR CONCENTRATED LOADING FROM HEAVY TRUCKS OR EQUIPMENT.
5. PROTECT EXISTING BUILDING AND AREA ADJACENT TO THE AREA OF WORK FROM ANY DAMAGE – ALL AREAS ADJACENT TO THE AREA OF WORK THAT ARE DAMAGED NEEDS TO BE PATCHED AND REPAIRED – ALWAYS MAINTAIN EXISTING WALL RATING AND MATCH ORIGINAL COLORS AND FINISHES.
6. COORDINATE ALL WORK WITH THE ELECTRICAL DRAWINGS. NOT ALL WORK IN THE SCOPE OF WORK IS SHOWN ON THIS SHEET.
7. PATCH AND REPAIR, ALL DAMAGED AREAS AS A RESULT OF THE WORK TO ORIGINAL CONDITION.
8. THE PATCHING OF THE ASPHALT CONCRETE PAVING HAS TO BE SMOOTH AND CLEAN WITH NO VERTICAL DROPS. MATCH EXISTING ASPHALT CONCRETE RATIO OF AGGREGATE & AC PAVING.

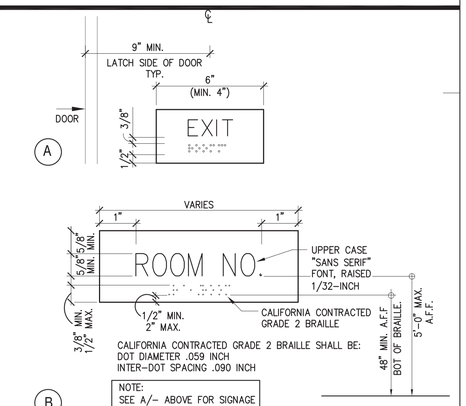
CONSTRUCTION NOTES

1. NEW PORTABLE BUILDING (BY MANUFACTURER) – SEE ATTACHED MANUFACTURER DSA–PC DRAWINGS SEE CIVIL DWG. FOR SITEWORK.
2. 24" CLOSURE PANEL (BY MANUFACTURER) PER (1/–)
3. NEW AC PAVING LANDING. PATCH AS REQUIRED THE EXISTING AC PAVING AND PROVIDE SMOOTH & FLUSH TRANSITION WITH ADJACENT (EXISTING) AC PAVING, FOLLOW "REQUIRED PAVING NOTES" BELOW. SEE CIVIL DWG
4. BUILDING RAMP (BY MANUFACTURER) – SEE ATTACHED MANUFACTURER DSA–PC DRAWINGS
5. EXTERIOR SIGNAGE PER (3B/–) / EMERGENCY INTERIOR EXIT SIGNAGE PER (3A/–)
6. BUILDING UPPER RAMP LANDING (BY MANUFACTURER) – SEE ATTACHED MANUFACTURER DSA–PC DRAWINGS
7. DOOR PANIC HARDWARE PER PC – MANUF. PRE–ENGINEERED
8. (N) ACCESSIBLE MODULAR RESTROOM PER MAUFACTURER. SEE ENVIROPLEX PC DWG. FOR MODULAR RESTROOM. SEE CIVIL DRAWINGS FOR EXTENT OF SITEWORK AND GRADING ELEVATIONS.
9. (N) CONC. PAVING. SEE CIVIL DWG.
10. (N) ACCESSIBLE RESTROOM PRE–ENGINEERED PC RAMP. SEE ENVIROPLEX PC DRAWINGS



CLOSURE PANEL- PLAN 2

N.T.S.



ROOM ID & EXIT SIGN W/ BRAILLE 3

SCALE 1/2"=1'–0"

NOTE:
CONTRACTOR TO EXCAVATE & REMOVE EXISTING SOIL / DIRT / PAVING / SUB BASE FOR NEW BUILDING PAD & UTILITY LINES AS REQUIRED (COORDINATE WITH THE CIVIL DRAWINGS FOR REQUIREMENTS & SPECIFICS ON DEPTH OF EXCAVATION, FOR BUILDING PERIMETER FOUNDATION & BUILDING PAD) – EXISTING STORM DRAIN / WATER / SEWER / GAS / ELECTRICAL LINES , CONDUITS & PIPING MAY BE PRESENT UNDER GROUND IN/OR AROUND AREA OF WORK – (AVERAGE DEPTH OF UTILITY LINES ±18"/24"). THE CONTRACTOR MUST INCLUDE CONTINGENCY ON THE BID TO RELOCATE THOSE UTILITIES SEE CIVIL DRAWINGS FOR EXTENT OF SITEWORK.

SEE CIVIL DRAWINGS FOR DEMOLITION AND NEW SITE WORK FOR RESTROOM # 2 AND (N) PORTABLES P4, P5, P6 AND P7

SHEET LEGEND

- NEW PORTABLES / INTERIM HOUSING 24'X40' – 4 TOTAL
- NOT IN SCOPE
- FIRE HYDRANT (F.H.)
- x — x (E) CHAIN LINKL FENCE

REQUIRED PAVING NOTE

ACCESS COMPLIANCE REQUIREMENTS

ALL NEW AC PAVING MUST BE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAX. SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX. AND AT LEAST 48" WIDE. SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED.

REQUIRED SAFETY NOTE

ALL DEMOLITION & CONSTRUCTION WORK SHALL COMPLY WITH 2016 CFC CHAPTER 14 "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION" AND WITH 2016 CBC CHAPTER 33 "SAFETY DURING CONSTRUCTION".

REDWOOD HIGH SCHOOL - PROPOSED RESTROOM #2 AND RELOCATABLE BUILDINGS - ENLARGE SITE PLAN 1

SCALE: 1/8" = 1'–0"

NORTH

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PHD ARCHITECTS JOB # 18-201

SCALE: AS NOTED

DATE: 5/04/18

SHEET NAME & NUMBER:
ENLARGE SITE PLAN
RESTROOM #2 AND
RELOCATABLE BLDGS.

A-200

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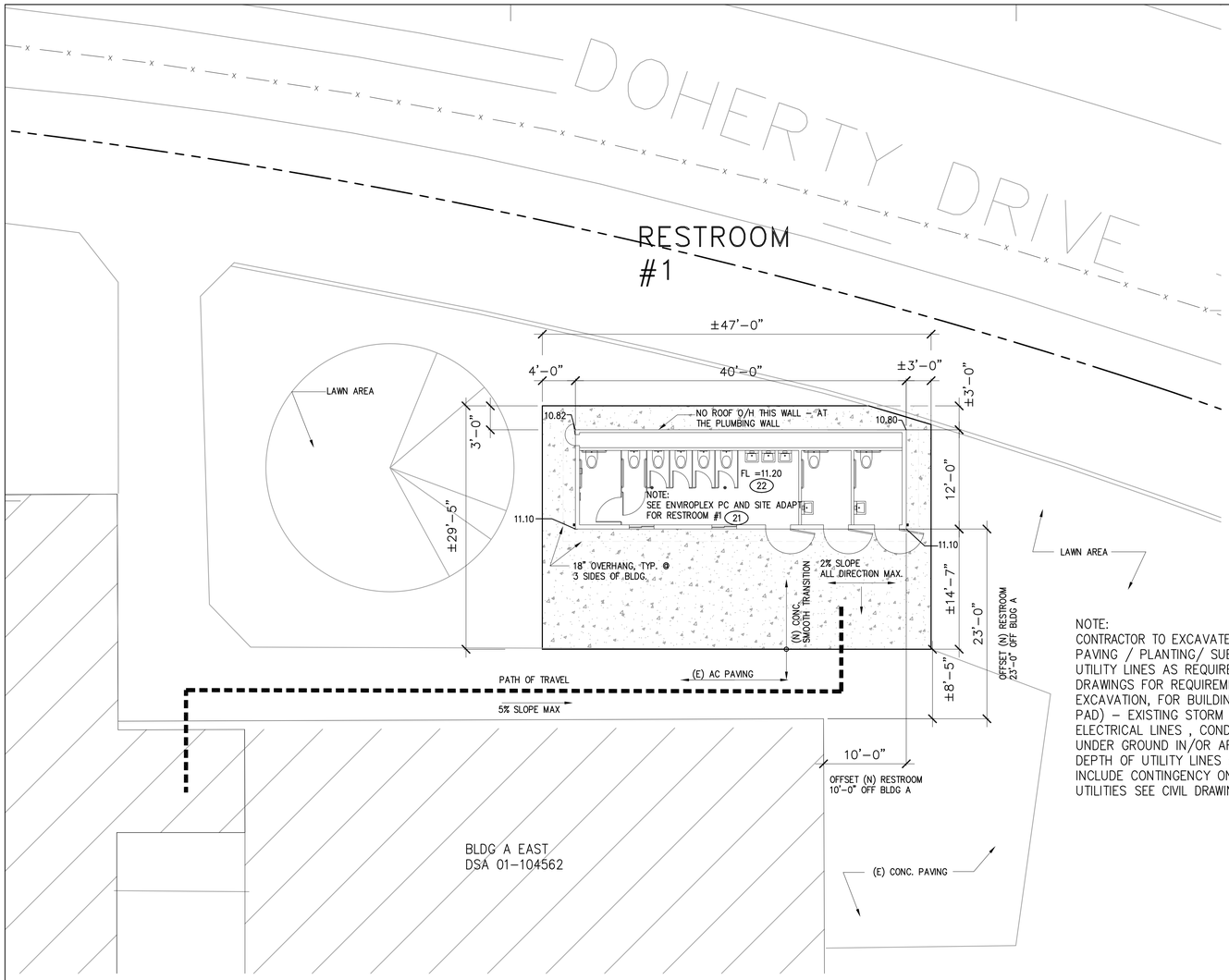

NOTE:
CONTRACTOR TO EXCAVATE & REMOVE EXISTING SOIL / DIRT / PAVING / PLANTING/ SUB BASE FOR NEW BUILDING PAD & UTILITY LINES AS REQUIRED (COORDINATE WITH THE CIVIL DRAWINGS FOR REQUIREMENTS & SPECIFICS ON DEPTH OF EXCAVATION, FOR BUILDING PERIMETER FOUNDATION & BUILDING PAD) – EXISTING STORM DRAIN / WATER / SEWER / GAS / ELECTRICAL LINES , CONDUITS & PIPING MAY BE PRESENT UNDER GROUND IN/OR AROUND AREA OF WORK – (AVERAGE DEPTH OF UTILITY LINES ±18"/24"). THE CONTRACTOR MUST INCLUDE CONTINGENCY ON THE BID TO RELOCATE THOSE UTILITIES SEE CIVIL DRAWINGS FOR EXTENT OF SITEWORK.

REDWOOD HIGH SCHOOL ENLARGE SITE PLAN - PROPOSED RESTROOM # 1

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

THIIS RESTROOM #1 SHALL BE ALL GENDER RESTROOM

1

NORTH

CONSTRUCTION NOTES

21 NEW PORTABLE RESTROOM BUILDING. OWNER FURNISHED & INSTALLED. CONTRACTOR TO PROVIDE: ALL SITE WORK (PAD & ASSEMBLY), UTILITIES CONNECTION, ETC. SEE CIVIL DWGS FOR SITEWORK AND EXTENT OF WORK

22 SEE CIVIL DRAWINGS FOR SITE ELEVATIONS FOR NEW GRADING

GENERAL NOTES

APPLICABLE FOR SHEET A200 AND A210

1. THE DISTRICT ASSUMES THAT ALL THE NOTES LISTED ON THIS SHEET HAVE BEEN INCORPORATED INTO THE BID PROPOSAL AND ALL WORK LISTED HAS BEEN INCLUDED.
2. ADDITIONAL EXISTING CHAIN LINK FENCE & POSTS MAY BE REQUIRED TO BE TEMPORARY REMOVED TO ACCESS AREA OF WORK – VERIFY IN FIELD & INCLUDE ALLOWANCE IF NECESSARY.
3. THE CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING EXTERIOR PAVING. ANY DAMAGE TO THE (E) PAVING DUE TO EQUIPMENT, TRUCKS OR STORED MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS ADVISED THAT THE EXISTING PAVING GENERALLY IS NOT OF SUFFICIENT THICKNESS TO WITHSTAND REPEATED OR CONCENTRATED LOADING FROM HEAVY TRUCKS OR EQUIPMENT.
4. ALL DIMENSIONS NOTED ON THE FLOOR PLANS MUST BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION TOLERANCES ARE ALLOWED – NOTIFY ARCHITECT OF ANY DISCREPANCY, PRIOR TO START ANY WORK.
5. PROTECT ALL AREAS ADJACENT TO THE AREA OF WORK. PATCH AND REPAIR, TO ORIGINAL CONDITION, ALL DAMAGED AREAS AS A RESULT OF THE WORK, INCLUDING LANDSCAPED AREAS.
6. THE DISTRICT EXPECTS ALL PLANTING/LANDSCAPE AREAS THAT WILL BE ALTERED DURING CONSTRUCTION, TO BE RECONSTITUTED TO MATCH THE EXISTING, AFTER JOB COMPLETION. INCLUDE ALLOWANCE IN THE BASE BID.
7. INCLUDE IN THE BASE BID 20% ADDITIONAL (MEASURED FROM THE PLANS) OF THE FOLLOWING SITE WORK: EXCAVATION & TRENCHING OF CONCRETE PAVING / ASPHALT–CONCRETE PAVING / DIRT., FOR SITE UTILITIES WORK. INCLUDE ALL MATERIAL, LABOR AND THE RECONSTITUTION & RECOMPACTION OF THE EXCAVATED AREAS.
8. THE CONTRACTOR IS RESPONSIBLE TO REINSTALL, AS REQUIRED, ALL THE PREVIOUSLY DISCONNECTED AND/OR REMOVED ITEMS, AS PER THE ORIGINAL CONDITION (SUCH AS BUT NOT LIMITED TO: FIRE ALARM CONDUITS & EQUIPMENT, ELECTRICAL CONDUITS & EQUIPMENT & FIXTURES, OTHER CONDUITS, SECURITY/LIGHTING, IRRIGATION LINES & VALVE BOXES, PLANTING, FENCES, ETC. – ALL MUST BE REINSTALLED AND/OR REROUTED ACCORDING TO THE APPLICABLE CODES LISTED ON SHEET A–000 – TEST FOR PROPER OPERATION MUST BE PERFORMED. ALLOWANCES SHOULD BE INCLUDED IN THE BASE BID.
9. ASSUMPTIONS HAVE BEEN MADE CONCERNING EXPOSED AND CONCEALED CONDITIONS. WORK WHICH IS NOT SHOWN ON THE DRAWINGS, BUT COULD BE REASONABLY ASSUMED FROM THE PROJECT SCOPE OR AN EXAMINATION OF THE EXISTING SITE CONDITIONS, AND IS OBVIOUSLY REQUIRED TO BE PERFORMED IN ORDER TO ATTAIN A COMPLETE AND FINISHED PRODUCT, SHALL BE PERFORMED BY THE CONTRACTOR WITHOUT ADDED COST TO THE OWNER.
10. INCLUDE IN THE BASE BID THE COMPLETE UPDATE OF THE GRAPHIC ENUNCIATOR FOR THE NEW BUILDING – FOR INFORMATION ON THE EXISTING SYSTEM CONTACT THE TUHSD PRIOR TO THE BID.
11. INCLUDE IN THE BASE BID TEMPORARY 6' FENCE BARRIER TO PROTECT ENTIRE AREA OF WORK.
12. THE CONTRACTOR IS RESPONSIBLE TO CLEAN AND KEEP CLEAN ALL AREAS OF THE WORK AT ALL TIMES.
13. NOT USED
14. COORDINATE ALL WORK WITH ALL OTHER TRADES (CIVIL, PLUMBING & ELECTRICAL DRAWINGS) & FIELD CONDITIONS. DRAWINGS ARE SCHEMATIC IN NATURE AND MAY NOT SHOW THE ACTUAL ROUTING.
15. THE SCOPE OF WORK (& INTENT OF THE DRAWINGS) IS TO INCLUDE ALL MATERIAL & PARTS (INCLUDING EQUIPMENT, PARTS, EARTH WORK, CONNECTIONS & LABOR) SHOWN AS PART OF THE SCOPE IN ALL THE DRAWINGS OF THIS PACKAGE (AKA DSA APPLICATION).
16. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRENCHING, BACKFILLING, RE–PAVING, AND RESTORATION OF THE EXISTING SURFACES AS A RESULT OF THE NEW WORK.
17. THE GENERAL CONTRACTOR IS ADVISED THAT THE ARCHITECTURAL DRAWINGS MAY INCLUDE, CIVIL PLUMBING AND ELECTRICAL NOTES.
18. ALL SALVAGED ITEMS ARE TO BE DELIVERED TO THE DISTRICT MAINTENANCE & OPERATIONS'S YARD OFFICE UNLESS OTHERWISE NOTED (IF IN GOOD USABLE CONDITIONS).
19. ALL EXCAVATED EXCESSIVE MATERIAL MUST BE DISPOSED OF, UNLESS OTHERWISE NOTED.
20. ACTUAL QUANTITIES OF REQUIRED EXCAVATION/THRENCHING OR/AND NEW & PATCHED DIRT AND/OR PAVING AREAS MUST BE CALCULATED IN FIELD. THE CONTRACTOR IS ADVISED THAT THE PLANS SHOWS THE GENERAL INTENT.
21. UTILITIES NOTE: EXISTING STORM DRAIN, GAS, ELECTRICAL, IRRIGATION & WATER LINES ARE PRESENT AROUND NEW BUILDING FOOTPRINT (SEE CIVIL DRAWINGS). THE CONTRACTOR SHOULD INVESTIGATE THE SITE PRIOR TO EXCAVATION. HAND WORK IS ADVISED AND ALLOWANCE SHOULD BE INCLUDED IN THE BID. ADDITIONAL INFORMATION & SPECIFICS CAN BE OBTAINED BY CIVIL ENGINEER IF NECESSARY.

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REVISIONS:

date	description
3/20/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB #
18-201

SCALE: AS NOTED

DATE: 3/20/18

SHEET NAME & NUMBER:

ENLARGE SITE PLAN
RESTROOM #1

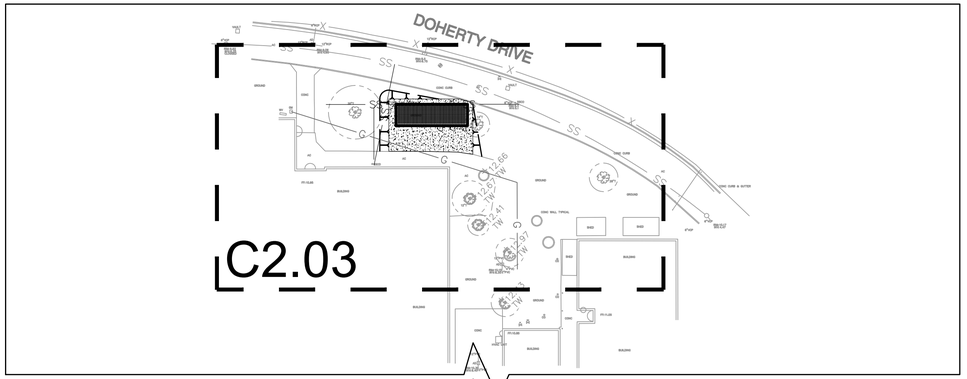
A-210

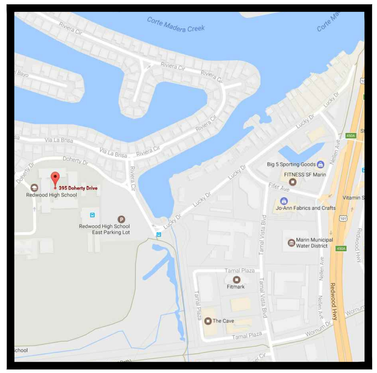
LEGEND

EXISTING	PROPOSED	DESCRIPTION
		BOUNDARY
		PROPERTY LINE
		RETAINING WALL
		LANDSCAPE RETAINING WALL
		SUBDRAIN LINE
		TIGHTLINE
SD	SD	STORM DRAIN LINE
SS	SS	SANITARY SEWER LINE
W	W	WATER LINE
G	G	GAS LINE
P	P	PRESSURE LINE
JT	JT	JOINT TRENCH
		SET BACK LINE
		CONCRETE VALLEY GUTTER
		SWALE FLOW DIRECTION
CB	CB	CATCH BASIN
JB	JB	JUNCTION BOX
AD	AD	AREA DRAIN
AD	AD	SQUARE AREA DRAIN
		CURB INLET
SDMH	SDMH	STORM DRAIN MANHOLE
		FIRE HYDRANT
SSMH	SSMH	SANITARY SEWER MANHOLE
222.57 INV	222.57 INV	STREET SIGN
		SPOT ELEVATION
		FLOW DIRECTION
	D	DEMOLISH/REMOVE
		BENCHMARK
200	200	CONTOURS
XX" TREE		TREE TO BE REMOVED

INTERIM HOUSING REDWOOD HIGH SCHOOL

3□□ DOHERT□ DRI□E
LAR□SPUR□CA □4□3□





ABBREVIATIONS

AB	AGGREGATE BASE	LF	LINEAL FEET
AC	ASPHALT CONCRETE	MAX	MAXIMUM
ACC	ACCESSIBLE	MH	MANHOLE
AD	AREA DRAIN	MIN	MINIMUM
BC	BEGINNING OF CURVE	MON.	MONUMENT
B & D	BEARING & DISTANCE	(N)	NEW
BM	BENCHMARK	NO.	NUMBER
BW/FG	BOTTOM OF WALL/FINISH GRADE	NTS	NOT TO SCALE
CB	CATCH BASIN	O.C.	ON CENTER
C & G	CURB AND GUTTER	O/	OVER
℄	CENTER LINE	OMC	OPTIMUM MOISTURE CONTENT
CPP	CORRUGATED PLASTIC PIPE (SMOOTH INTERIOR)	(PA)	PLANTING AREA
		PED	PEDESTRIAN
CO	CLEANOUT	PIV	POST INDICATOR VALVE
CONC	CONCRETE	PSS	PUBLIC SERVICES EASEMENT
CONST	CONSTRUCT or –TION	P	PROPERTY LINE
CONC COR	CONCRETE CORNER	PP	POWER POLE
CY	CUBIC YARD	PUC	PUBLIC UTILITY EASEMENT
D	DIAMETER	PVC	POLYVINYL CHLORIDE
DI	DROP INLET	R	RADIUS
DIP	DUCTILE IRON PIPE	RCP	REINFORCED CONCRETE PIPE
EA	EACH	RIM	RIM ELEVATION
EC	END OF CURVE	RW	RAINWATER
EG	EXISTING GRADE	R/W	RIGHT OF WAY
EL	ELEVATIONS	S	SLOPE
EP	EDGE OF PAVEMENT	S.A.D.	SEE ARCHITECTURAL DRAWINGS
EQ	EQUIPMENT	SAN	SANITARY
EW	EACH WAY	SD	STORM DRAIN
(E)	EXISTING	SDMH	STORM DRAIN MANHOLE
FC	FACE OF CURB	SHT	SHEET
FF	FINISHED FLOOR	S.L.D.	SEE LANDSCAPE DRAWINGS
FG	FINISHED GRADE	SPEC	SPECIFICATION
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	SSMH	SANITARY SEWER MANHOLE
FS	FINISHED SURFACE	ST.	STREET
G	GAS	STA	STATION
GA	GAGE OR GAUGE	STD	STANDARD
GB	GRADE BREAK	STRUCT	STRUCTURAL
HDPE	HIGH DENSITY CORRUGATED POLYETHYLENE PIPE	T	TELEPHONE
		TC	TOP OF CURB
HORIZ	HORIZONTAL	TEMP	TEMPORARY
HI PT	HIGH POINT	TP	TOP OF PAVEMENT
H&T	HUB & TACK	TW/FG	TOP OF WALL/FINISH GRADE
ID	INSIDE DIAMETER	TYP	TYPICAL
INV	INVERT ELEVATION	VC	VERTICAL CURVE
JB	JUNCTION BOX	VCP	VITRIFIED CLAY PIPE
JT	JOINT TRENCH	VERT	VERTICAL
JP	JOINT UTILITY POLE	W/	WITH
L	LENGTH	W, WL	WATER LINE
LNDG	LANDING	WM	WATER METER
		WWF	WELDED WIRE FABRIC

NOTES:

1. ALL GENERAL NOTES, SHEET NOTES, AND LEGEND NOTES FOUND IN THESE DOCUMENTS SHALL APPLY. TYPICALLY THROUGHOUT IF INCONSISTENCIES ARE FOUND IN THE VARIOUS NOTATIONS, NOTIFY THE ENGINEER IMMEDIATELY IN WRITING REQUESTING CLARIFICATION.
2. THESE DRAWINGS AND THEIR CONTENT ARE AND SHALL REMAIN THE PROPERTY OF WILLIAM CLARK, P.E. INC. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY ANY PERSONS ON OTHER PROJECTS OR EXTENSIONS OF THE PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH PPROPRIATE COMPENSATION TO THE ENGINEER.
3. ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND TRADE STANDARDS WHICH GOVERN EACH PHASE OF WORK INCLUDING, BUT NOT LIMITED TO, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA FIRE CODE, CALTRANS STANDARDS AND SPECIFICATIONS, AND ALL APPLICABLE STATE AND/OR LOCAL CODES AND/OR LEGISLATION.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND ALL SUBCONTRACTORS TO CHECK AND VERIFY ALL CONDITIONS, DIMENSIONS, LINES AND LEVELS INDICATED. PROPER FIT AND ATTACHMENT OF ALL PARTS IS REQUIRED. SHOULD THERE BE ANY DISCREPANCIES, IMMEDIATELY NOTIFY THE ENGINEER FOR CORRECTION OR ADJUSTMENT THE EVENTOF FAILURE TO DO SO, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERROR.
5. ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED ON THE JOB BY EACH SUBCONTRACTOR BEFORE HE/SHE BEGINS HIS/HER WORK. ANY ERRORS, OMISSION, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/CONTRACTOR BEFORE CONSTRUCTION BEGINS.
6. COMMENCEMENT OF WORK BY THE CONTRACTOR AND/OR ANY SUBCONTRACTOR SHALL INDICATE KNOWLEDGE AND ACCEPTANCE OF ALL CONDITIONS DESCRIBED IN THESE CONSTRUCTION DOCUMENTS, OR EXISTING ON SITE, WHICH COULD AFFECT THEIR WORK.
7. IF THE CONTRACTOR OBSERVES OR OTHERWISE BECOMES AWARE OF ANY FAULT OR DEFECT IN THE PROJECT OR NONCONFORMANCE WITH THE CONTRACT DOCUMENTS, PROMPT WRITTEN NOTICE THEREOF SHALL BE GIVEN BY THE CONTRACTOR TO THE ARCHITECT AND/OR ENGINEER.
8. THE ENGINEER SHALL NOT HAVE CONTROL OF OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
9. CONTRACTOR IS RESPONSIBLE FOR ALL IMPORT AND EXPORT QUANTITIES AND/OR DISPOSAL/IMPORT COSTS

SHEET INDEX

C0.01	TITLE SHEET
C0.02	GRADING SPECIFICATIONS
C2.01	GRADING & DRAINAGE PLAN
C2.02	GRADING & DRAINAGE PLAN
C3.01	DETAILS
C4.01	EROSION & SEDIMENTATION CONTROL PLAN
C4.02	EROSION & SEDIMENTATION CONTROL PLAN
C4.03	EROSION & SEDIMENTATION CONTROL DETAILS
C4.04	CONSTRUCTION BEST MANAGEMENT PRACTICES (SWPPP)

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ALLIANCE ENGINEERING CONSULTING, INC.
PATRICK HENRY DRIVE, BUILDING 10
SANTA CLARA, CA 95054
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D.S.A. APPROVAL:
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT

APP. # 01 - 117371

AC_____FLS_____SS_____

DATE_____

PROJECT TITLE:

INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL

395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

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18-201

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TITLE SHEET

C0.01

GENERAL SITE NOTES:

1. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING ON THIS WORK AND CONSIDER THE EXISTING CONDITIONS AND SITE CONSTRAINTS IN THE BID. CONTRACTOR SHALL BE IN THE POSSESSION OF AND FAMILIAR WITH ALL APPLICABLE GOVERNING AGENCIES STANDARD DETAILS AND SPECIFICATIONS PRIOR TO SUBMITTING OF A BID.
2. ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL APPLICABLE GOVERNING AGENCIES STANDARD DETAILS & SPECIFICATIONS.
3. PRIOR TO BEGINNING WORK, AND AFTER INITIAL HORIZONTAL CONTROL STAKING, CONTRACTOR SHALL FIELD CHECK ALL ELEVATIONS MARKED WITH (E) AND REPORT ANY DISCREPANCIES GREATER THAN 0.05' TO OWNER'S PROJECT MANAGER AND CIVIL ENGINEER.
4. DAMAGE TO ANY EXISTING SITE IMPROVEMENTS, UTILITIES AND/OR SERVICES TO REMAIN SHALL BE RESPONSIBLE OF THE CONTRACTOR. CONTRACTOR SHALL REPAIR AND/OR REPLACE IN KIND.
5. CONTRACTOR SHALL REPLACE ALL STRUCTURES AND GRATE LIDS FOR VAULTS, CATCH BASINS, ETC.., WITH VEHICULAR-RATED STRUCTURES IN ALL TRAFFIC ACCESSIBLE AREAS.
6. THE CONTRACTOR SHALL ADJUST TO FINAL GRADE ALL EXISTING AND/OR NEW MANHOLES, CURB INLETS, CATCH BASIN, VALVES, MONUMENT COVERS, AND OTHER CASTINGS WITHIN THE WORK AREA TO FINAL GRADE IN PAVEMENT AND LANDSCAPE AREAS UNLESS NOTED OTHERWISE.
7. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND INDEMNIFY AND HOLD THE OWNER, THE CONSULTING ENGINEER AND THE CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE CONSULTING ENGINEER.
8. EXISTING PEDESTRIAN WALKWAYS. BIKE PATHS AND ACCESSIBLE PATHWAYS SHALL BE MAINTAINED, WHERE FEASIBLE, DURING CONSTRUCTION.
9. IF A CONFLICT ARISES BETWEEN THE SPECIFICATIONS AND THE PLANS NOTES, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
10. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT BY BAGG ENGINEERS. PROJECT NO. FUHSD-0904B, DATED JANUARY 23, 2012.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY REQUIRED PERMITS AND COSTS ASSOCIATED WITH SAID PERMITS

TREE/PLANT PROTECTION NOTES:

1. PRIOR TO BEGINNING CONSTRUCTION ON SITE, CONTRACTOR SHALL IDENTIFY, CONFIRM WITH OWNER AND PROTECT EXISTING TREES AND PLANTS DESIGNED AS TO REMAIN.
2. PROVIDE 6 FOOT TALL TREE PROTECTION FENCE WITH DISTINCTIVE MARKING VISIBLE TO CONSTRUCTION EQUIPMENT, ENCLOSING DRIP LINES OF TREES DESIGNED TO REMAIN.
3. WORK REQUIRED WITHIN FENCE LINE SHALL BE HELD TO A MINIMUM, AVOID UNNECESSARY MOVEMENT OF HEAVY EQUIPMENT WITHIN FENCED AREA AND DO NOT PARK ANY VEHICLES UNDER DRIP LINE OR TREES. DO NOT STORE EQUIPMENT OR MATERIALS WITHIN FENCE LINE.
4. PRIOR TO REMOVING ROOTS AND BRANCHES LARGER THAN 2" IN DIAMETER OF TREES OR PLANTS THAT ARE TO REMAIN, CONSULT WITH THE OWNER'S PROJECT MANAGER.
5. ANY GRADE CHANGES GREATER THAN 6" WITHIN THE DRIPLINE OF EXISTING TREES SHALL NOT BE MADE WITHOUT FIRST CONSULTING THE ARCHITECT / CIVIL ENGINEER.
6. PROTECT EXISTING TREES TO REMAIN FROM SPILLED CHEMICALS, FUEL OIL, MOTOR OIL, GASOLINE AND ALL OTHER CHEMICALLY INJURIOUS MATERIALS; AS WELL AS FROM PADDLING OR CONTINUOUSLY RUNNING WATER. SHOULD A SPILL OCCUR, STOP WORK IN THAT AREA AND CONTACT THE INSPECTOR IMMEDIATELY. CONTRACTOR SHALL BE RESPONSIBLE TO MITIGATE DAMAGE FROM SPILLED MATERIAL AS WELL AS MATERIAL CLEAN UP.
7. PROVIDE TEMPORARY IRRIGATION TO ALL TREES AND PLANTS THAT ARE IN OR ADJACENT TO CONSTRUCTION AREAS WHERE EXISTING IRRIGATION SYSTEMS MAY BE AFFECTED BY THE CONSTRUCTION. ALSO PROVIDE TEMPORARY IRRIGATION TO RELOCATE TREES.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ONGOING MAINTENANCE OF ALL TREES AND PLANTS DESIGNED TO REMAIN AND FOR MAINTENANCE OF RELOCATED TREES STOCKPILED DURING CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REPLACE TREES OR PLANTS THAT DIE DUE TO LACK OF MAINTENANCE.
9. TREE PROTECTION ZONES NEED TO BE SET UP WITH FENCING AROUND TREES TO A MINIMUM DISTANCE OF 10 FEET FROM THE BUTTRESS FLAIR. NO EQUIPMENT, MATERIALS STORAGE, OR DIGGING IS ALLOWED WITHIN THE TREE PROTECTION ZONE WITHOUT WRITTEN AUTHORIZATION FROM THE PROJECT ARBOHIST, ARBOHIST SUPERVISOR OR AUTHORIZED DESIGNATE. ANY AUTHORIZED DIGGING WITHIN THE TREE PROTECTION ZONE MUST BE DONE BY HAND; I.E. PICK AND SHOVEL: CARE MUST BE TAKEN TO AVOID SEVERING ANY STRUCTURAL ROOTS. ANY ROOTS GREATER THAN 2" IN DIAMETER INCIDENTALLY SEVERED, WHETHER INSIDE OR OUTSIDE OF THE TREE PROTECTION ZONE, WILL NEED TO BE BROUGHT TO THE ATTENTION OF AND INSPECTED BY THE PROJECT ARBOHIST, ARBOHIST SUPERVISOR OR AUTHORIZED DESIGNATE; WHO WILL EVALUATE THE TREE IN QUESTION FOR IMPACTS TO BOTH LONG TERM HEALTH AND STABILITY. ANY ROOT SEVERANCE CONCLUDED TO COMPROMISE TREE STABILITY/SAFETY MAY RESULT IN TREE REMOVAL. ANY COSTS RESULTING FROM TREE REMOVALS WILL BE CHARGED TO THE PROJECT IN QUESTION. ANY COSTS FROM TREE REMOVALS RESULTING FROM VIOLATIONS OF THE COUNTY CODES WILL BE ABSORBED BY THE CONTRACTOR UP TO AND INCLUDING ANY FINES LEVIED BY THE COUNTY.

SITE MAINTENANCE:

1. REMOVE ALL DIRT, GRAVEL, RUBBISH, REFUSE, AND GREEN WASTE FROM STREET PAVEMENT AND STORM DRAINS ADJOINING THE SITE. LIMIT CONSTRUCTION ACCESS ROUTES ONTO THE SITE AND PLACE GRAVEL PADS AT THESE LOCATIONS. DO NOT DRIVE VEHICLES AND EQUIPMENT OFF THE PAVED OR GRAVELED AREAS DURING WET WEATHER.
2. SWEEP OR VACUUM THE STREET PAVEMENT AND SIDEWALKS ADJOINING THE PROJECT SITE AND THE ON-SITE PAVED AREAS ON A DAILY BASIS. SCRAPE CAKED-ON MUD AND DIRT FROM THESE AREAS BEFORE SWEEPING. CORNERS AND HARD TO REACH AREAS SHALL BE SWEPT MANUALLY.
3. CONTRACTOR SHALL: GATHER ALL CONSTRUCTION DEBRIS ON A REGULAR BASIS AND PLACE IT IN A DUMPSTER OR OTHER CONTAINER WHICH IS EMPTIED OR REMOVED ON A REGULAR BASIS. WHEN APPROPRIATE, USE TARPS ON THE GROUND TO COLLECT FALLEN DEBRIS OR SPLATTERS THAT COULD CONTRIBUTE TO STORM WATER RUNOFF POLLUTION.
4. IF THE STREET, SIDEWALKS AND/OR PARKING LOT ARE PRESSURE WASHED, DEBRIS MUST BE TRAPPED AND COLLECTED TO PREVENT ENTRY INTO THE STORM DRAIN SYSTEM. NO CLEANING AGENT MAY BE DISCHARGED INTO THE STORM DRAIN. IF ANY CLEANING AGENT OR DEGREASER IS USED, WASHED WATER MUST BE COLLECTED AND DISCHARGED TO THE SANITARY SEWER, SUBJECT TO THE APPROVAL OF THE OWNER'S PROJECT MANAGER, OR OTHERWISE DISPOSED OF THROUGH APPROVED DISPOSAL METHODS.
5. CREATE A CONTAINED AND COVERED AREA ON THE SITE FOR THE STORAGE OF BAGS, CEMENT, PAINTS, OILS, FERTILIZERS, PESTICIDES, OR OTHER MATERIAL USED ON THE SITE THAT HAVE THE POTENTIAL OF BEING WIND-BLOWN OR IN THE EVENT OF A MATERIAL SPILL.
6. NEVER CLEAN MACHINERY, EQUIPMENT OR TOOLS INTO A STREET, GUTTER OR STORM DRAIN.
7. ENSURE THAT CEMENT TRUCKS, PAINTERS, OR STUCCO/PLASTER FINISHING CONTRACTORS DO NOT DISCHARGE WASH WATER FROM EQUIPMENT, TOOLS OR RINSE CONTAINERS INTO GUTTERS OR DRAINS.
8. THE ON-SITE STORM DRAIN FACILITIES SHALL BE CLEANED A MINIMUM OF TWICE A YEAR AS FOLLOWS: IMMEDIATELY PRIOR TO OCTOBER 15TH AND ONCE IN JANUARY. ADDITIONAL CLEANING MAY BE REQUIRED IF FOUND NECESSARY BY THE INSPECTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR COST ASSOCIATED WITH CLEANING.
9. PREVENT DUST FROM LEAVING THE SITE AND ACCUMULATING ON ADJACENT AREAS AS REQUIRED IN THE DUST CONTROL NOTES ON THIS SHEET.
10. PREVENT SEDIMENT LADEN STORM RUN-OFF FROM LEAVING THE SITE OR ENTERING STORM DRAIN OR SANITARY SEWER SYSTEMS AS REQUIRED IN THE EROSION AND SEDIMENTATION CONTROL NOTES ON THIS SHEET.
11. MAINTAIN EXISTING TREES AND PLANTS THAT ARE TO REMAIN AS REQUIRED BY THE TREE AND PLANT PROTECTION NOTES ON THE SHEET.

STORM DRAIN NOTES:

1. ALL STORM DRAIN PIPE SHALL BE PVC PER SECTION 02720, SLOPED AT 2% UNLESS OTHERWISE SPECIFIED ON THE PLANS. PIPE SHALL BE SIZED AS SPECIFIED ON THE PLANS. ALL DIRECTION CHANGES SHALL BE MADE WITH A Y CONNECTION OR LONG SWEEP ELBOWS, REGULAR ELBOWS, AND TEE'S SHOULD BE AVOIDED.
2. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATE 6" BELOW THE SURFACE. TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION- STORM DRAIN LINE BELOW", CALPICO TYPE 2 OR EQUAL.
3. PAINT THE TOP OF THE CURBS ADJACENT TO EACH CATCH BASIN INSTALLED UNDER THE WORK OR ADJACENT TO THIS SITE WITH THE WORDS "NO DUMPING". WORDING TO BE BLUE 4" HIGH LETTERS ON A PAINTED WHITE BACKGROUND. A " NO DUMPING"
4. ALL AREA DRAINS AND CATCH BASINS GRATES WITHIN PEDESTRIAN ACCESSIBLE AREAS SHALL MEET ADA REQUIREMENTS AND HAVE BOLT DOWN GRATES.
5. ALL TRENCHES SHALL BE BACKFILLED PER THE SPECIFICATIONS WITH APPROPRIATE TEST BY THE GEOTECHNICAL ENGINEER TO VERIFY COMPACTION VALUES.
6. FOR GRAVITY FLOW SYSTEMS CONTRACTOR SHALL VERIFY (POTHOLE IF NECESSARY) SIZE, MATERIAL, LOCATION AND DEPTH OF ALL SYSTEMS THAT ARE TO BE CONNECTED TO OR CROSSED PRIOR TO TRENCH OR INSTALLATION OF ANY GRAVITY FLOW SYSTEM.
7. COMPLETE SYSTEMS; ALL UTILITY SYSTEMS ARE DELINEATED IN SCHEMATIC MANNER ON THESE PLANS. CONTRACTOR IS TO PROVIDE ALL FITTINGS, ACCESSORIES, AND WORK NECESSARY TO COMPLETE THE UTILITY SYSTEM SO THAT IT IS FULLY FUNCTIONING FOR THE PURPOSE INTENDED.

DEMOLITION NOTES:

1. CONTRACTOR IS TO COMPLY WITH ALL GENERAL AND STATE REQUIREMENTS INVOLVING THE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL(S).
2. THE CONTRACTOR SHALL LOCATE AND CLEARLY MARK (AND THEN PRESERVE THESE MARKERS) FOR THE DURATION OF CONSTRUCTION OF ALL TELEPHONE, DATA, STREET LIGHT, SIGNAL LIGHT AND POWER FACILITIES THAT ARE IN OR NEAR THE AREA OF CONSTRUCTION.
3. CONTRACTOR'S BID IS TO INCLUDE ALL VISIBLE SURFACE AND ALL SUBSURFACE FEATURES IDENTIFIED TO BE REMOVED OR ABANDONED IN THESE DOCUMENTS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SITE INSPECTION TO FULLY ACKNOWLEDGE THE EXTENT OF THE DEMOLITION WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS NECESSARY FOR ENCROACHMENT, GRADING, DEMOLITION, AND STATE JURISDICTIONS. THE CONTRACTOR SHALL PAY ALL FEES ASSOCIATED CONTRACTOR SHALL PAY DISPOSAL FEES.
6. CONTRACTOR SHALL PAY DISPOSAL FEES.
7. BACKFILL ALL DEPRESSIONS AND TRENCHES FROM DEMOLITION OF FOUNDATIONS & UTILITIES TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
8. WITHIN LIMITS OF WORK, REMOVE CURBS, GUTTERS, LANDSCAPING, SIGNAGE, TREES, SCRUBS, ASPHALT, UNDERGROUND PIPES, ETC. AS INDICATED ON THE PLANS AND SPECS.
9. REMOVAL OF LANDSCAPING SHALL INCLUDE ROOTS AND ORGANIC MATERIALS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
10. PRIOR TO BEGINNING DEMOLITION WORK ACTIVITIES, CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES OUTLINED IN THE EROSION PLAN & DETAILS.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING ALL DEMOLITION MATERIALS, OR STORING SELECTED ITEMS BY OWNER'S REPRESENTATIVE AT DESIGNATED LOCATIONS.
12. THE CONTRACTOR SHALL MAINTAIN ALL SAFETY DEVICES, AND SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS.
13. THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING IMPROVEMENTS FACILITIES AND STRUCTURES WHICH ARE TO REMAIN. ANY ITEMS DAMAGED BY THE CONTRACTOR OR HIS AGENTS OF ANY ITEMS REMOVED FOR HIS USE SHALL BE REPLACED IN EQUAL OR BETTER CONDITION AS APPROVED BY THE ARCHITECT OR OWNER'S REPRESENTATIVE.
14. COORDINATE WITH ELECTRICAL, MECHANICAL, FIRE PROTECTION AND ARCHITECTURAL DRAWINGS FOR UTILITY SHUT-DOWN / DISCONNECT LOCATIONS. CONTRACTOR IS TO SHUT OFF ALL UTILITIES AS NECESSARY PRIOR TO DEMOLITION. CONTRACTOR IS TO COORDINATE SERVICE INTERRUPTIONS WITH THE OWNER. DO NOT INTERRUPT SERVICES ADJACENT OFF-SITE OWNERS. ALSO SEE ARCHITECTURAL PLANS FOR ADDITIONAL DEMOLITION SCOPE OF WORK.
15. DEMOLITION INCLUDES REMOVAL OF ALL ITEMS ASSOCIATED WITH THE UTILITIES AND SHALL INCLUDE PREPARING THE SITE FOR NEW UTILITIES, BUILDINGS, RETAINING WALLS, ETC.
16. ALL MATERIALS TO BE DEMOLISHED AND REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OF OFF-SITE.
17. THE PLAN IS NOT INTENDED TO BE A COMPLETE CATALOGUE OF ALL EXISTING STRUCTURES AND UTILITIES. THIS PLAN INTENDS TO DISCLOSE GENERAL INFORMATION KNOWN BY THE ENGINEER AND TO SHOW THE LIMITS OF THE AREA WHERE WORK WILL BE PERFORMED. THIS PLAN SHOWS THE EXISTING FEATURES TAKEN FROM A FIELD SURVEY, FIELD INVESTIGATIONS AND AVAILABLE INFORMATION. THIS PLAN MAY OR MAY NOT ACCURATELY REFLECT THE TYPE OR EXTENT OF THE ITEMS TO BE ENCOUNTERED AS THEY ACTUALLY EXIST. WHERE EXISTING FEATURES ARE NOT SHOWN, IT IS IMPLIED THAT THEY ARE NOT TO BE DEMOLISHED OR REMOVED. THE CONTRACTOR SHALL PERFORM A THOROUGH FIELD INVESTIGATION AND REVIEW OF THE SITE WITHIN THE LIMIT OF WORK SHOWN IN THIS PLAN SET TO DETERMINE THE TYPE, QUANTITY AND EXTENT OF ANY AND ALL ITEMS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE EXTENT OF EXISTING STRUCTURES AND UTILITIES AND QUANTITY OR WORK INVOLVED IN REMOVING THESE ITEMS FROM THE SITE.

WATER SYSTEM NOTES:

1. WHERE WATER LINES HAVE TO CROSS SANITARY SEWER LINES, DO SO AT A 90 DEGREE ANGLE AND WATER LINES SHALL BE MINIMUM OF 12" ABOVE THE TOP OF THE SANITARY SEWER LINES.
2. WATER LINES ARE SHOWN SCHEMATICALLY; CONTRACTOR SHALL IDENTIFY EACH ANGLE AND/ OR BEND THAT MAY BE REQUIRED TO ACCOMPLISH THE INTENDED DESIGN.
3. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6" BELOW THE SURFACE, TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION-WATER LINE BELOW", CALPICO TYPE 2 OR EQUAL.
4. ALL WATER SERVICE CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY/TOWN OR APPLICABLE WATER DISTRICT STANDARDS.
5. PUBLIC AND PRIVATE WATER MAIN AND WATER SERVICE LINE 4-INCH THROUGH 12-INCH SHALL BE POLYVINYL CHLORIDE (PVC) AND SHALL MEET AWWA C900, RATED FOR 200 PSI CLASS PIPE WITH EPOXY COATED DUCTILE IRON FITTINGS AND FUSION EPOXY COATED GATE VALVES. ALL JOINTS SHALL FACTORY MANUFACTURED WITH BELL AND SPIGOT ENDS AND RUBBER GASKETS. NONMETALLIC WATER LINES HAVE TRACER WIRE INSTALLED.
6. CONNECTION TO THE EXISTING WATER MAIN SHALL BE APPROVED BY WATER COMPANY. THE DISTRICT SHALL PAY THE ACTUAL COSTS OF CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION PREPARE THE SITE, FURNISH ALL MATERIALS, INSTALL TAPPING TEE VALVE AND ALL THRUST BLOCKS. BACKFILL, RESTORE THE SURFACE, AND CLEANUP. ALL WET TAPS HALL BE APPROVED BY CALIFORNIA WATER COMPANY (CALWATER). NONMETALLIC WATER LINES SHALL HAVE TRACER WIRES INSTALLED.
7. ALL WATER LINES 3" OR SMALLER SHALL BE TYPE K COPPER WITH SILVER BRAZED JOINTS. CONTRACTOR TO VERIFY PRESSURES FROM EXISTING LINES ARE ADEQUATE TO SERVICE BUILDINGS AS SPECIFIED BY THE PLUMBING PLANS.
8. ALL WATER LINES SHALL BE INSTALLED WITH 3' MINIMUM COVER.
9. ALL WATER VALVES SHALL BE PER CITY STANDARD.
10. ALL TEMPORARY AND/OR PERMANENT AIR-RELEASE AND BLOW-OFF VALVES SHALL BE PER CITY STANDARD AND AS DIRECTED BY THE CITY ENGINEER.
11. CONCRETE THRUST BLOCKS SHALL BE INSTALLED AT ALL TEES, CROSSINGS, BENDS (HORIZONTAL AND VERTICAL), AT SIZE CHANGES AND AT FIRE HYDRANTS PER CITY STANDARD. AWWA C600, SECTION 3.8 UNLESS NOTED OTHERWISE.
12. MECHANICALLY RESTRAINED JOINTS SHALL BE INSTALLED AT VERTICAL BENDS IN ACCORDANCE WITH CITY STANDARDS AND AS APPROVED BY THE CITY ENGINEER.
13. ALL WATER VALVES SHALL BE CLUSTERED, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.

SANITARY SEWER NOTES:

1. INSTALL DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6"-12" BELOW THE SERVICE IN NON-PAVED AREAS, AND AT THE BOTTOM OF BASEROCK FOR PAVED AREAS. GREEN IMPRINTED WITH "CAUTION- SANITARY SEWER LINE BELOW", CALPICO TYPE 2 OR EQUAL.
2. ALL SEWER WORK SHALL BE IN CONFORMANCE WITH THE CITY/TOWN OR APPROPRIATE SANITARY SEWER DISTRICT.
3. PUBLIC AND PRIVATE SANITARY SEWER MAIN AND SERVICE LINE 4-INCH THROUGH 8-INCH SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26 GREEN SEWER PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 3034-73 WITH GLUED JOINTS.

SITE FENCING NOTES:

1. CONTRACTOR SHALL PROVIDE A CONSTRUCTION FENCE AROUND THE ENTIRE AREA OF DEMOLITION AND CONSTRUCTION, INCLUDING ALL STAGING, STORAGE, CONSTRUCTION OFFICE AND LAYDOWN AREAS.
2. FENCE LOCATION MAY BE ADJUSTED FROM TIME TO TIME AS CONSTRUCTION PROCEEDS TO EXCLUDE SOME AREAS WHERE CONSTRUCTION WORK IS NOT BEING DONE AND THE AREA IS NOT OBJECTIONABLE IN VISUAL APPEARANCE, AT THE DISCRETION AND APPROVAL OF THE DISTRICT STAFF.
3. CONSTRUCTION FENCE SHALL BE A MINIMUM OF A 6' HIGH GALVANIZED CHAIN LINK FENCE WITH GREEN WINDSCREEN FABRIC ON THE OUTSIDE OF THE FENCE.
4. CONTRACTOR SHALL REPLACE THE GREEN FABRIC AT LEAST ONCE A YEAR OR AT SUCH A TIME AS IT BECOMES TATTERED AND UNSIGHTLY DUE TO WIND OR CONSTRUCTION ACTIVITIES.

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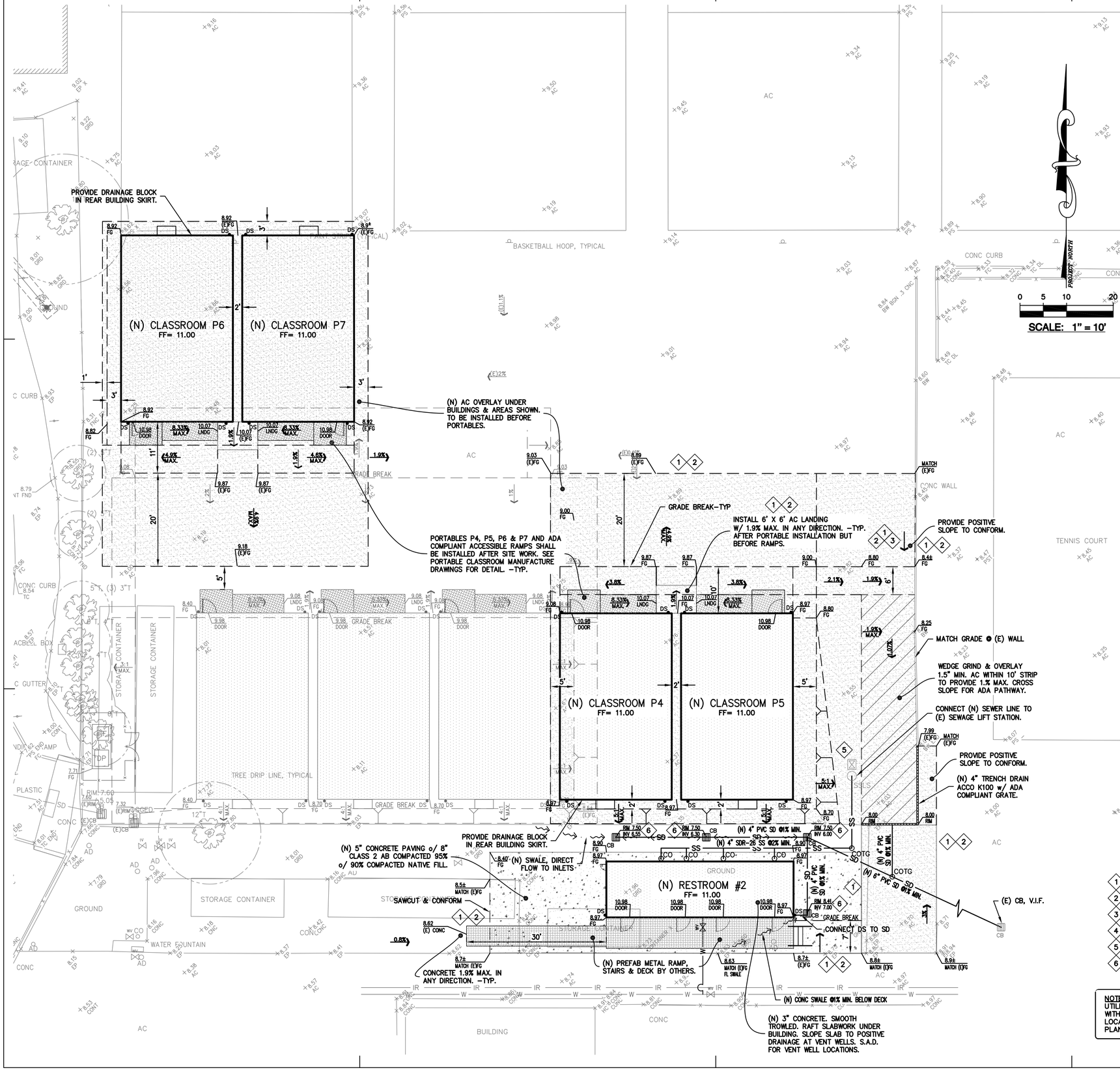
GRADING SPECIFICATIONS
C0.02



GRADING NOTES:

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY, LOCATE AND PROTECT ALL UNDERGROUND FACILITIES. UNDERGROUND FACILITIES DAMAGED DURING GRADING SHALL BE REPAIRED AND/OR REPLACED TO LIKE NEW CONDITION AT NO ADDITIONAL COST TO CONTRACT. REFER TO TOPOGRAPHIC SURVEY AND UTILITY SURVEY FOR ADDITIONAL INFORMATION.

THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.

ALL GRADING SHALL BE PERFORMED IN SUCH A MANNER AS TO COMPLY WITH THE STANDARDS ESTABLISHED BY THE AIR QUALITY MANAGEMENT DISTRICT FOR AIRBORNE PARTICULATES.

IN THE EVENT THAT HUMAN REMAINS AND/OR CULTURAL MATERIALS ARE FOUND, ALL PROJECT-RELATED CONSTRUCTION SHOULD CEASE WITHIN A 100-FOOT RADIUS. THE CONTRACTOR SHALL, PURSUANT TO SECTION 7050.5 OF THE HEALTH AND SAFETY CODE, AND SECTION 5097.94 OF THE PUBLIC RESOURCES CODE OF THE STATE OF CALIFORNIA, NOTIFY THE CORONER IMMEDIATELY.

CONTRACTOR VERIFY EXISTING UTILITY STUB LOCATIONS AND DEPTHS PRIOR TO COMMENCING CONSTRUCTION.

FINISHED GRADES SHALL BE SLOPED TOWARD INLETS OR POSITIVE RELEASE AT 0.5% MIN. FOR CONCRETE AND 1% MIN FOR ASPHALT AREAS.

REFER TO ARCHITECTURAL AND/OR LANDSCAPE PLANS FOR ADDITIONAL INFORMATION ON FLAT WORK, PAVING TYPE AND SCORING.

REFER TO ARCHITECTURAL PLANS FOR ACCESSIBLE PATH OF TRAVEL. GRADES SHALL BE DONE PER FEDERAL AND STATE ACCESSIBILITY REQUIREMENTS. IF CONTRACTOR BECOMES AWARE OF GRADES THAT ARE NOT CONFORMING TO ACCESSIBILITY REQUIREMENTS, HE SHALL BRING THIS TO THE ATTENTION OF THE ARCHITECT AND THE ENGINEER.

CUT AND FILL SLOPES AND GRADING TRANSITIONS AT THE OUTER EDGES OF THE PROPOSED IMPROVEMENTS ARE TO BE CONSTRUCTED AT THREE HORIZONTAL TO ONE VERTICAL (3:1) UNLESS OTHERWISE NOTED.

UTILITY NOTES:

STORM DRAIN PIPING SHALL BE PVC SDR-35 OR BETTER OR DOUBLE WALLED HDPE PIPING ADS N-12 OR APPROVED EQUAL. 6" MIN U.O.N.

CONTRACTOR SHALL VERIFY BUILDING CONNECTIONS AND ELEVATION. THIS INCLUDES RAIN WATER LEADER, SEWER CONNECTION AND WATER CONNECTION. NOTIFY ENGINEER OF ANY CONFLICTS.

DIMENSIONED & PIPE LENGTHS SHOWN ARE NOT MEANT TO PROVIDE BID QUANTITIES FOR CONTRACTOR, SHOWN FOR INFORMATIONAL PURPOSES ONLY.

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AREAS OF TRENCHING SHALL BE PATCHED TO MATCH EXISTING CONDITIONS TO LIKE NEW CONDITIONS, INCLUDING BUT NOT LIMITED TO SOD, CONCRETE AND ASPHALT

ANNOTATION NOTES

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4. REMOVE EXISTING TREE.
5. PROTECT EXISTING UTILITY FROM DAMAGE. RESET GRADE AS REQUIRED.
6. (N) 12" CENTRAL PRECAST CP1212 CATCH BASIN OR APPROVED EQUAL.

NOTE:
UTILITY STUB SHALL BE EXTENDED WITHIN FOUNDATION. COORDINATE LOCATION WITH BUILDING PLUMBING PLANS.

NOTE:
PRIOR TO BEGINNING WORK AND AFTER INITIAL HORIZONTAL CONTROL STAKING, CONTRACTOR SHALL FIELD CHECK ALL ELEVATIONS MARKED WITH (E) AND REPORT ANY DISCREPANCIES TO THE CIVIL ENGINEER AND ARCHITECT.

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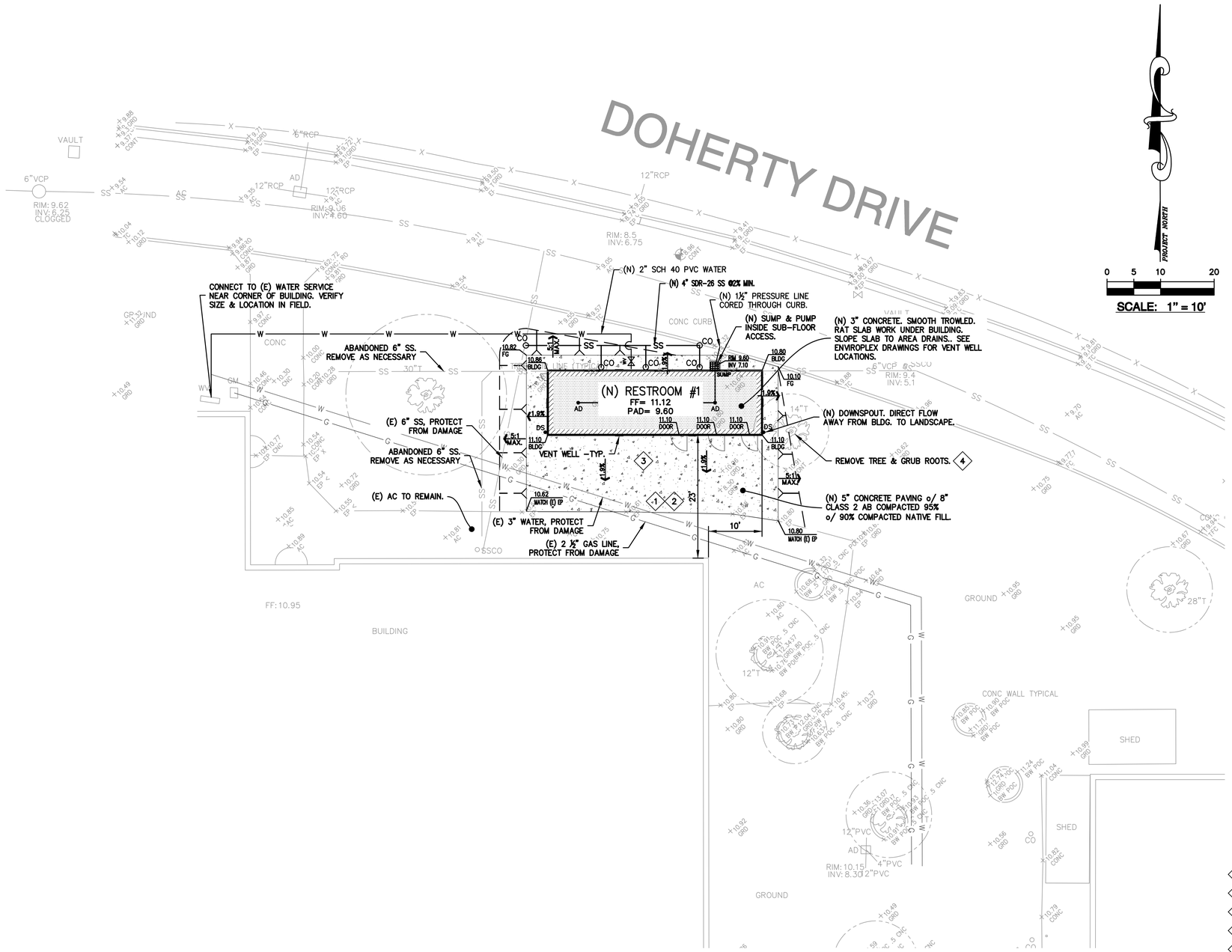
C2.01



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NOTE:
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NOTE:
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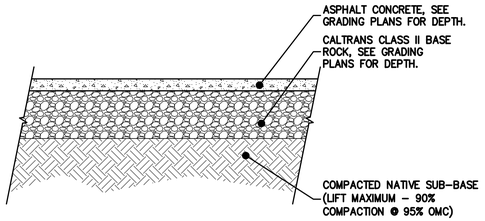
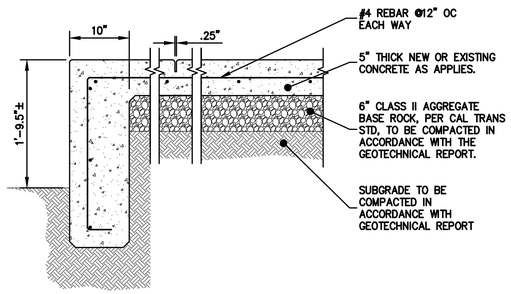
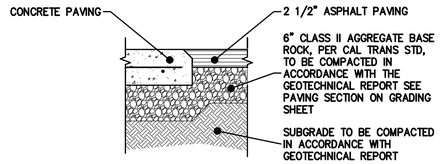


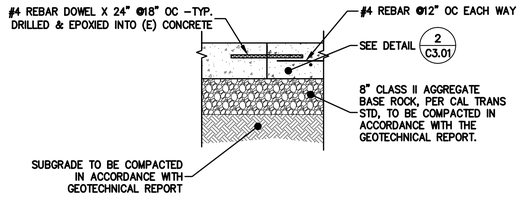
1 C3.01 **ASPHALT SECTION**
NTS



2 C3.01 **CONCRETE TRANSFORMER PAD**
NTS

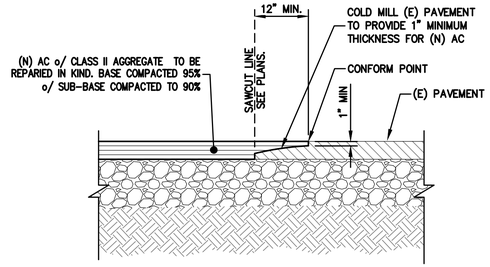


CONFORM FOR NEW ASPHALT AND NEW CONCRETE PAVING
NTS



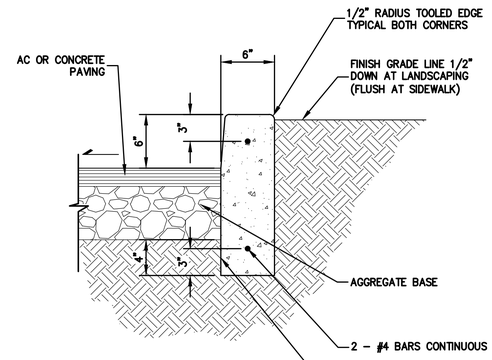
3 C3.01 **CONNECTION (N) TO (E) CONCRETE PAVING**
NTS

NOTE:
REFER TO ARCHITECTURAL PLAN FOR ADDITIONAL INFORMATION ON CONCRETE PAVING.



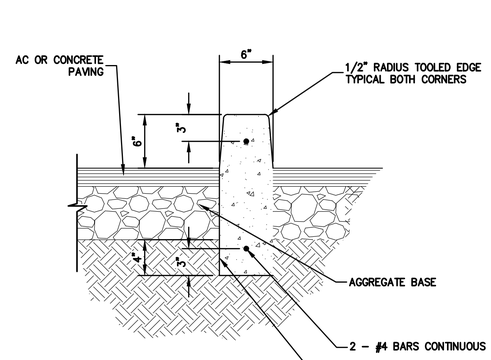
NOTES:
1. TIE-IN PAVEMENT SECTION AS SHOWN ON PLANS.
2. TIE-IN OF ASPHALT CONCRETE SHALL EXTEND TO AT LEAST THE BOTTOM OF EXISTING ASPHALT CONCRETE.

4 C3.01 **PAVEMENT TIE-IN**
NTS



NOTE:
1. CURB MAY EITHER BE EXTRUDED TO THE SHAPE SHOWN OR FORMED & POURED IN PLACE.
2. PROVIDE EXPANSION JOINTS AT 15" O.C.

5 C3.01 **TYPICAL CURB**
NTS



NOTE:
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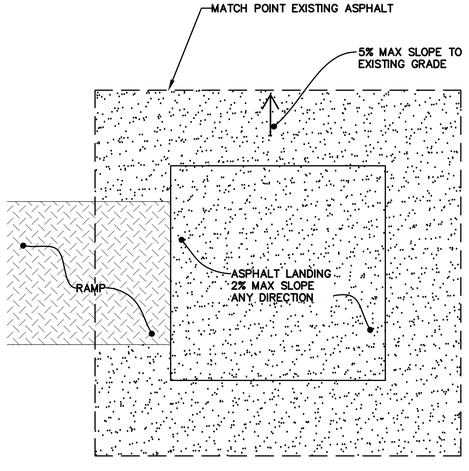
2. PROVIDE EXPANSION JOINTS @ 15'-0" O.C.

6 C3.01 **VERTICAL CURB**
NTS



7 C3.01 **ASPHALT RAMP LANDING AND CONFORM**
NTS

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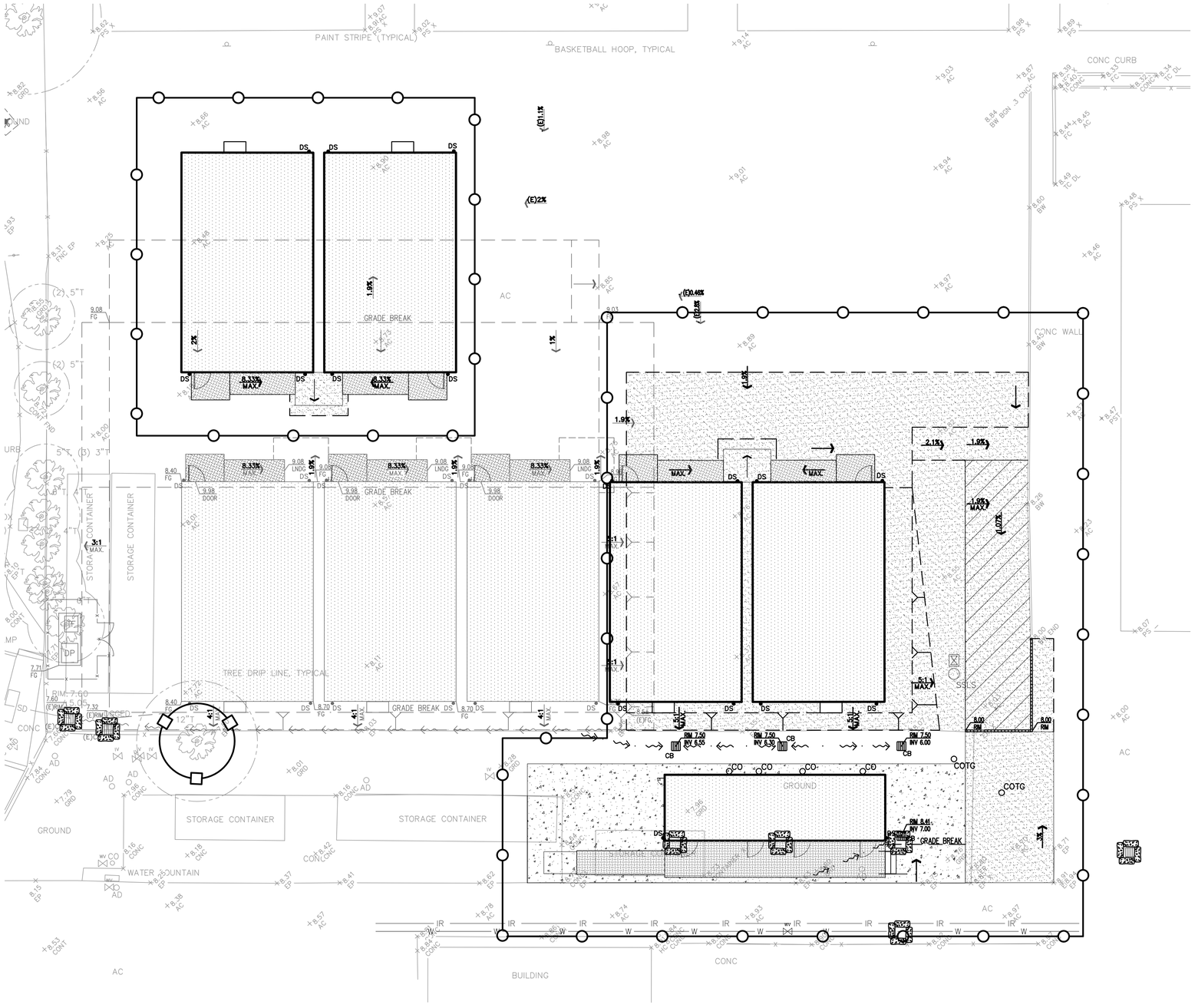

EROSION CONTROL LEGEND

- INLET PROTECTION
- CONSTRUCTION FENCE
- STRAW ROLL
- TREE PROTECTION

PURPOSE:

THE PURPOSE OF THIS PLAN IS TO STABILIZE THE SITE TO PREVENT EROSION OF GRADED AREAS AND TO PREVENT SEDIMENTATION FROM LEAVING THE CONSTRUCTION AREA AND AFFECTING NEIGHBORING SITES, NATURAL AREAS, PUBLIC FACILITIES OR ANY OTHER AREA THAT MIGHT BE AFFECTED BY SEDIMENTATION. ALL MEASURES SHOWN ON THIS PLAN SHOULD BE CONSIDERED THE MINIMUM REQUIREMENTS NECESSARY. SHOULD FIELD CONDITIONS DICTATE ADDITIONAL MEASURES, SUCH MEASURES SHALL BE PER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL AND THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION. CLARK CIVIL ENGINEERING SHOULD BE NOTIFIED IMMEDIATELY SHOULD CONDITIONS CHANGE.

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D.S.A. APPROVAL:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT

APP. # 01 - 117371

AC_____FLS_____SS_____

DATE_____

PROJECT TITLE:

INTERIM HOUSING &
NEW ACCESSIBLE
MODULAR RESTROOMS
AT
REDWOOD HIGH
SCHOOL

395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
3/20/2018	DSA SUBMITTAL

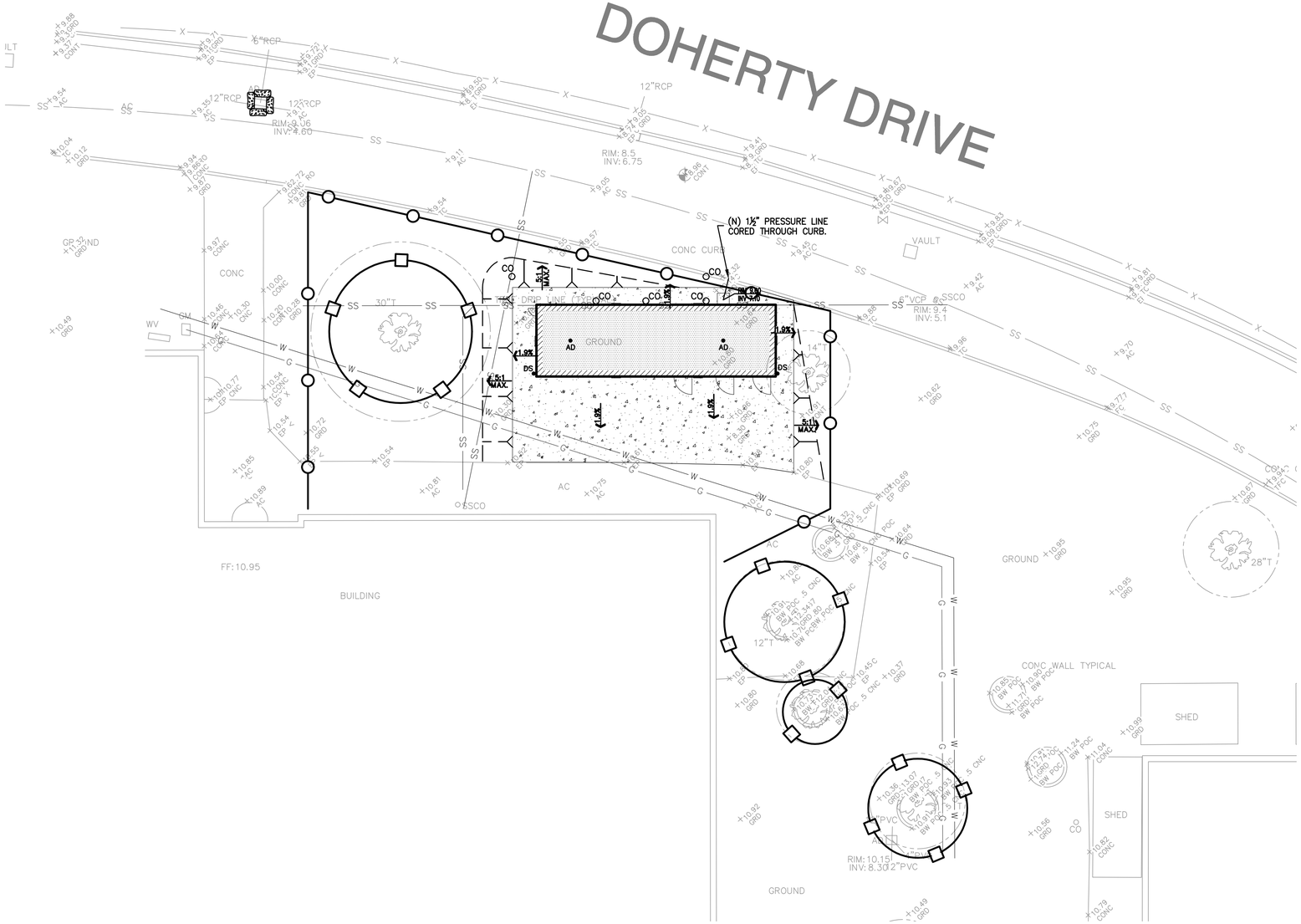
PHD ARCHITECTS JOB #
18-201

SCALE: AS NOTED

DATE: 3/20/18

SHEET NAME & NUMBER:

EROSION & SEDIMENTATION CONTROL PLAN
C4.01



0 10 20 40

SCALE: 1" = 20'

PROJECT NORTH

EROSION CONTROL LEGEND

- INLET PROTECTION
- CONSTRUCTION FENCE
- STRAW ROLL
- TREE PROTECTION

PURPOSE:

THE PURPOSE OF THIS PLAN IS TO STABILIZE THE SITE TO PREVENT EROSION OF GRADED AREAS AND TO PREVENT SEDIMENTATION FROM LEAVING THE CONSTRUCTION AREA AND AFFECTING NEIGHBORING SITES, NATURAL AREAS, PUBLIC FACILITIES OR ANY OTHER AREA THAT MIGHT BE AFFECTED BY SEDIMENTATION. ALL MEASURES SHOWN ON THIS PLAN SHOULD BE CONSIDERED THE MINIMUM REQUIREMENTS NECESSARY. SHOULD FIELD CONDITIONS DICTATE ADDITIONAL MEASURES, SUCH MEASURES SHALL BE PER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL AND THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION. CLARK CIVIL ENGINEERING SHOULD BE NOTIFIED IMMEDIATELY SHOULD CONDITIONS CHANGE.

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PROJECT TITLE:

INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL

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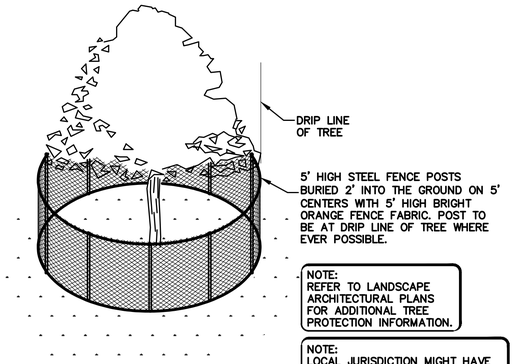
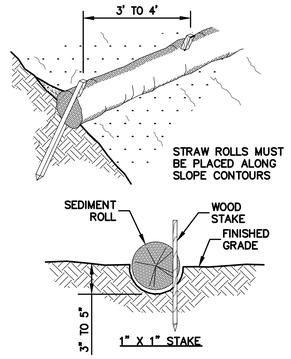
EROSION & SEDIMENTATION CONTROL PLAN
C4.02

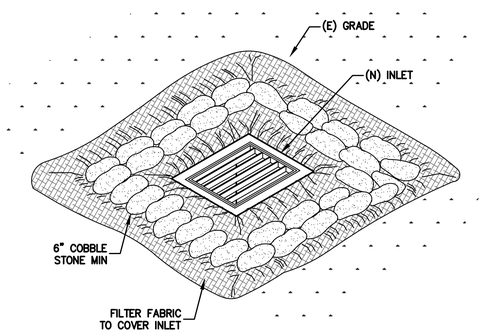


1 C4.03 **EXISTING TREE PROTECTION DETAIL**
NTS

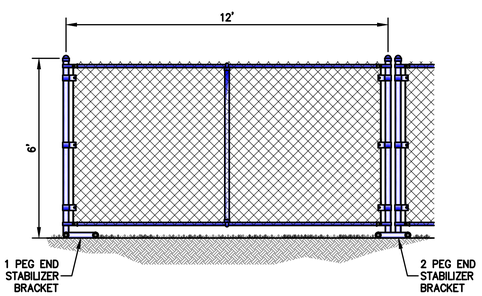


NOTE:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
2. CONTRACTOR IS RESPONSIBLE FOR REGULAR MAINTENANCE AND INSPECTION. THE SILT SHALL BE CLEANED OUT WHEN IT REACHES HALF THE HEIGHT OF THE ROLL.

2 C4.03 **STRAW ROLLS**
NTS



3 C4.03 **INLET PROTECTION**
NTS



4 C4.03 **CONSTRUCTION FENCE**
NTS

EROSION CONTROL NOTES:

1. IT SHALL BE THE OWNER'S/CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THIS EROSION CONTROL PLAN.
2. THE INTENTION OF THIS PLAN IS FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY. ALL EROSION CONTROL MEASURES SHALL CONFORM TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL, THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION, AND THE LOCAL GOVERNING AGENCY FOR THIS PROJECT.
3. OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO, DURING, AND AFTER STORM EVENTS. PERSON IN CHARGE OF MAINTAINING EROSION CONTROL MEASURES SHOULD WATCH LOCAL WEATHER REPORTS AND ACT APPROPRIATELY TO MAKE SURE ALL NECESSARY MEASURES ARE IN PLACE.
4. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM, INCLUDING EXISTING DRAINAGE SWALES AND WATERCOURSES.
6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS CONCERNING POLLUTION SHALL BE MAINTAINED AT ALL TIMES.
7. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS.
8. ALL MATERIALS NECESSARY FOR THE APPROVED EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15TH.
9. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON, OR FROM OCTOBER 15TH THROUGH APRIL 15TH, WHICHEVER IS LONGER.
10. IN THE EVENT OF RAIN, ALL GRADING WORK IS TO CEASE IMMEDIATELY AND THE SITE IS TO BE SEALED IN ACCORDANCE WITH THE APPROVAL EROSION CONTROL MEASURES AND APPROVED EROSION CONTROL PLAN.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND REPAIRING EROSION CONTROL SYSTEMS AFTER EACH STORM.
12. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY COUNTY'S ENGINEERING DEPARTMENT OR BUILDING OFFICIALS.
13. MEASURES SHALL BE TAKEN TO COLLECT OR CLEAN ANY ACCUMULATION OR DEPOSIT OF DIRT, MUD, SAND, ROCKS, GRAVEL OR DEBRIS ON THE SURFACE OF ANY STREET, ALLEY OR PUBLIC PLACE OR IN ANY PUBLIC STORM DRAIN SYSTEMS. THE REMOVAL OF AFORESAID SHALL BE DONE BY STREET SWEEPING OR HAND SWEEPING. WATER SHALL NOT BE USED TO WASH SEDIMENTS INTO PUBLIC OR PRIVATE DRAINAGE FACILITIES.
14. EROSION CONTROL MEASURES SHALL BE ON-SITE FROM SEPTEMBER 15TH THRU APRIL 15TH.
15. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON OR FROM OCTOBER 15 THRU APRIL 15, WHICHEVER IS GREATER.

REFERENCES:

1. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL
2. CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION

PERIODIC MAINTENANCE:

1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
   A. DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION SHALL BE REPAIRED AT THE END OF EACH WORKING DAY.
   B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
   C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
   D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1' FOOT.
   E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   F. RILLS AND GULLIES MUST BE REPAIRED.
2. GRAVEL BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE GRAVEL BAG.
3. STRAW ROLLS SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHED HALF THE HEIGHT OF THE ROLL.
4. SILT FENCE SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHES ONE FOOT IN HEIGHT.
5. CONSTRUCTION ENTRANCE SHALL BE REGRAVELED AS NECESSARY FOLLOWING SILT/SOIL BUILDUP.
6. ANY OTHER EROSION CONTROL MEASURES SHOULD BE CHECKED AT REGULAR INTERVALS TO ASSURE PROPER FUNCTION

EROSION CONTROL MEASURES:

1. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 15TH TO APRIL 15. EROSION CONTROL FACILITIES SHALL BE IN PLACE PRIOR TO OCTOBER 15TH OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DENUDED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES.
2. SITE CONDITIONS AT TIME OF PLACEMENT OF EROSION CONTROL MEASURES WILL VARY. APPROPRIATE ACTION INCLUDING TEMPORARY SWALES, INLETS, HYDROSEEDING, STRAW BALES, ROCK SACKS, ETC. SHALL BE TAKEN TO PREVENT EROSION AND SEDIMENTATION FROM LEAVING SITE. EROSION CONTROL MEASURES SHALL BE ADJUSTED AS THE CONDITIONS CHANGE AND THE NEED OF CONSTRUCTION SHIFT.
3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCES. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE GOVERNING AGENCY.
4. ALL EXPOSED SLOPES THAT ARE NOT VEGETATED SHALL BE HYDROSEEDED. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY OCTOBER 15, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE-STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH. HYDROSEEDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 20" EROSION CONTROL AND HIGHWAY PLANTING" OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED. REFER TO THE EROSION CONTROL SECTION OF THE GRADING SPECIFICATIONS THAT ARE A PART OF THIS PLAN SET FOR FURTHER INFORMATION.
5. INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT. MINIMUM INLET PROTECTION SHALL CONSIST OF A ROCK SACKS OR AS SHOWN ON THIS PLAN
6. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. A REPRESENTATIVE OF CLARK CIVIL ENGINEERING SHALL PERFORM A FIELD REVIEW AND MAKE RECOMMENDATIONS AS NEEDED. CONTRACTOR IS RESPONSIBLE TO NOTIFY CLARK CIVIL ENGINEERING AND THE GOVERNING AGENCY OF ANY CHANGES.
7. THE EROSION CONTROL MEASURES SHALL CONFORM TO THE COUNTY STANDARDS AND THE APPROVAL OF THE COUNTY'S ENGINEERING DEPARTMENT.
8. STRAW ROLLS SHALL BE PLACED AT THE TOE OF SLOPES AND ALONG THE DOWNSLOPE PERIMETER OF THE PROJECT. THEY SHALL BE PLACED AT 25 FOOT INTERVALS ON GRADED SLOPES. PLACEMENT SHALL RUN WITH THE CONTOURS AND ROLLS SHALL BE TIGHTLY ENDBUTTED. CONTRACTOR SHALL REFER TO MANUFACTURES SPECIFICATIONS FOR PLACEMENT AND INSTALLATION INSTRUCTIONS.

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395 DOHERTY DRIVE, LARKSPUR, CA 94939
TAMALPAIS UNION HIGH SCHOOL DISTRICT
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PHD ARCHITECTS JOB # 18-201

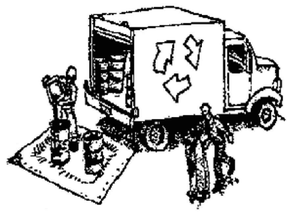
SCALE: AS NOTED
DATE: 3/20/18

SHEET NAME & NUMBER:
EROSION & SEDIMENTATION DETAILS
C4.03

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



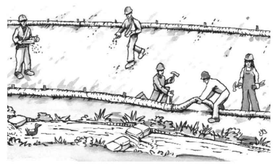
Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, steam cleaning equipment, etc.

Spill Prevention and Control

- ❑ Keep spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthwork & Contaminated Soils



Erosion Control

- ❑ Schedule grading and excavation work for dry weather only.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.

Sediment Control

- ❑ Protect storm drain inlets, gutters, ditches, and drainage courses with appropriate BMPs, such as gravel bags, fiber rolls, berms, etc.
- ❑ Prevent sediment from migrating offsite by installing and maintaining sediment controls, such as fiber rolls, silt fences, or sediment basins.
- ❑ Keep excavated soil on the site where it will not collect into the street.
- ❑ Transfer excavated materials to dump trucks on the site, not in the street.
- ❑ Contaminated Soils
- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells
  - Buried barrels, debris, or trash.

Paving/Asphalt Work



- ❑ Avoid paving and seal coating in wet weather, or when rain is forecast before fresh pavement will have time to cure.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

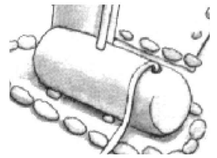
- ❑ Completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, abosorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application



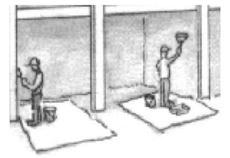
- ❑ Store concrete, grout and mortar under cover, on pallets and away from drainage areas. These materials must never reach a storm drain.
- ❑ Wash out concrete equipment/trucks offsite or in a contained area, so there is no discharge into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ Collect the wash water from washing exposed aggregate concrete and remove it for appropriate disposal offsite.

Dewatering



- ❑ Effectively manage all run-on, all runoff within the site, and all runoff that discharges from the site. Divert run-on water from offsite away from all disturbed areas or otherwise ensure compliance.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the Engineer to determine whether testing is required and how to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

Painting & Paint Removal



Painting cleanup

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or surface waters.
- ❑ For water-based paints, paint out brushes to the extent possible. Rinse to the sanitary sewer once you have gained permission from the local wastewater treatment authority. Never pour paint down a drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of residue and unusable thinner/solvents as hazardous waste.

Paint removal

- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead or tributyltin must be disposed of as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.

Landscape Materials



- ❑ Contain stockpiled landscaping materials by storing them under tarps when they are not actively being used.
- ❑ Stack erodible landscape material on pallets. Cover or store these materials when they are not actively being used or applied.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

Storm drain polluters may be liable for fines of up to $10,000 per day!

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CCE PROJECT NO. 217006

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DIVISION OF THE STATE ARCHITECT

APP. # 01 - 117371

AC_____FLS_____SS_____

DATE_____

PROJECT TITLE:

INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL

395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
3/20/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB # 18-201

SCALE: AS NOTED

DATE: 3/20/18

SHEET NAME & NUMBER:
CONSTRUCTION BEST MANAGEMENT PRACTICES (SWPP)
C4.04

GENERAL NOTES

1. THE COMPLETE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE 2011 EDITION OF THE NATIONAL ELECTRICAL CODE ADOPTED AS THE 2013 CALIFORNIA ELECTRICAL CODE, SPECIFICATIONS AND STANDARD, THE LATEST RULES AND REGULATIONS OF THE SAFETY ORDERS ISSUED BY THE DIVISION OF INDUSTRIAL SAFETY, THE NATIONAL BOARD OF FIRE UNDERWRITERS AND ALL APPLICABLE STATE AND LOCAL CODES ISSUED BY AUTHORITIES HAVING JURISDICTION.

2. PRIOR TO SUBMITTING PROPOSAL, BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS. VISIT CONSTRUCTION SITE AND ATTEND THE PRE-BID MEETING TO BE FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH WILL IN ANYWAY AFFECT THE WORK UNDER THIS CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.

3. THIS CONTRACTOR SHALL INCLUDE ALL CONTINGENCIES WHICH MAY RAISE AND WHICH MAY BE REQUIRED BY ALTERATION AND DEMOLITION WORK. THIS IS TO INCLUDE ALL REMOVAL, RELOCATION AND REWORKING OF ELECTRICAL OUTLETS, CONDUITS, WIRING AND ITEMS FOR ELECTRICAL EQUIPMENT REQUIRED AND ANY NECESSARY SPLICING OR EXTENSION OF EXISTING CONDUIT AND WIRING SYSTEMS. THE ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND DETERMINE EXTENT OF THE WORK.

4. FIELD VERIFY TO CONFIRM ALL FIRE RESISTIVE CEILINGS AND WALLS. PROVIDE FIRE STOP SEALS PER UNIFORM BUILDING CODE FOR CONDUIT PENETRATION THROUGH FIRE RESISTIVE FLOORS, WALLS AND CEILINGS.

5. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED BY UNDERWRITER'S LABORATORIES AND BEAR THEIR LABEL.

6. CONDUIT ROUTING SHOWN IS ESSENTIALLY DIAGRAMMATIC. CONTRACTOR SHALL LAYOUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF OTHER TRADES. ALL EXPOSED CONDUIT, BOXES, FITTINGS, SUPPORT, ETC. SHALL BE PAINTED TO MATCH ADJACENT SURFACES.

7. THE CONTRACTOR SHALL CONSULT THE ARCHITECTURAL AND OTHER DRAWINGS RELATED TO THIS PROJECT FOR ADDITIONAL WORK TO BE PROVIDED.

8. ALL FEEDER AND BRANCH CIRCUIT CONDUITS SHALL BE INSTALLED CONCEALED IN FINISHED AREA, UNLESS OTHERWISE NOTED. CUT AND PATCH (E) WALL OR CEILING AS REQUIRED.

9. ANY POWER SHUTDOWN SHALL BE COORDINATED WITH SCHOOL DISTRICT CONSTRUCTION COORDINATOR. A SHUTDOWN SCHEDULE SHALL BE PRESENTED TO SCHOOL DISTRICT FOR APPROVAL TWO WEEKS PRIOR TO COMMENCEMENT OF WORK. SHUTDOWN SHALL BE PERFORMED IN OVERTIME HOURS IF SO DIRECTED BY SCHOOL DISTRICT.

10. ALL PENETRATIONS THROUGH FIRE RESISTIVE WALLS SHALL BE TOTALLY SEALED TO PREVENT THE SPREAD OF SMOKE, FIRE, TOXIC GASES, AND WATER THROUGH THE PENETRATION BEFORE, DURING AND AFTER A FIRE CONDITION. THE FIRE RATING OF THE SEALED PENETRATION SHALL BE AT LEAST THAT OF THE WALL INTO WHICH IT IS INSTALLED. THE SEAL SHALL PERMIT THE VIBRATION, EXPANSION AND/OR CONTRACTION OF THE CONDUIT PASSING THROUGH THE PENETRATION WITHOUT THE SEAL CRACKING OR CRUMBLING.

11. THE CONTRACTOR SHALL PROVIDE TYPEWRITTEN DIRECTORIES FOR ALL ELECTRICAL PANELS INVOLVED IN THIS PROJECT. THE PANEL DIRECTORIES SHALL REFLECT THE AS-BUILT CIRCUITS. ONE COPY OF THE SCHEDULE SHALL BE TAPED TO THE INSIDE OF THE PANEL DOOR, AND ONE COPY SHALL BE SUBMITTED TO THE ENGINEER AS AN "AS-BUILT" DRAWING.

12. PROVIDE LIQUID TIGHT FLEXIBLE CONDUIT FOR BUILDING SEISMIC JOINT.

13. ALL MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING THE FOLLOWING CRITERIA:
    FIXED EQUIPMENT ON GRADE 20% OF OPERATING WEIGHT
    FIXED EQUIPMENT ON STRUCTURE 30% OF OPERATING WEIGHT
    EMERGENCY POWER EQUIPMENT ON STRUCTURE 40% OF OPERATING WEIGHT
    FOR FLEXIBLY MOUNTED EQUIPMENT USE 2X THE ABOVE VALUES.
    SIMULTANEOUS VERTICAL FORCE – USE 1/3 X HORIZONTAL FORCE.
    WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND THE FIELD ENGINEER OF THE OFFICE OF REGULATION SERVICES.

14. ALL EXPOSED CONDUIT BELOW 7'-0" SHALL BE RSC AND ALL EXPOSED HARDWARE SHALL BE "HOT DIPPED" GALVANIZED.

15. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUCTORS SHALL BE 12 AWG THWN STRANDED COPPER ONLY.

16. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUIT SHALL BE 3/4".

17. GREEN INSULATED GROUND CONDUCTORS SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUIT WIRING.

18. PROVIDE LABELS ON ALL EQUIPMENT AND DEVICES. LABELS SHALL BE SELF-ADHESIVE PHENOLIC TYPE AND WHITE LETTER ON BLACK BACKGROUND, PROVIDE BRADY OR DYMO TYPE LABELS (CIRCUIT IDENTIFICATION) FOR ALL SWITCHES AND RECEPTACLES.

19. ALL ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION PER CBC REQUIREMENTS.

20. THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRING PATCHING, PLASTERING PAINTING AND/OR OTHER REPAIRS DUE TO THE INSTALLATION OF ELECTRICAL WORK UNDER THE TERMS OF THIS SPECIFICATION. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED. THIS SHALL INCLUDE ALL WALLS, CEILINGS, ROOFS, PAVEMENT, PLANTERS, ETC.

21. WHERE CONDUIT IS ROUTED ON ROOF STRUCTURES, PROVIDE ROOF SUPPORT AND STRAP 8'-0" O.C. MAXIMUM. ALL EXPOSED CONDUIT ON ROOFS SHALL BE RSC OR IMC. ALL EXPOSED CONDUIT BELOW 7'-0" SHALL BE RGS OR IMC.

22. THE CONTRACTOR SHALL EMPLOY QUALIFIED AND EXPERIENCED WORKMEN FOR THIS WORK. ALL RESTORATION WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND/OR OWNER AND INSPECTOR OF RECORD.

23. UPON COMPLETION OF CONSTRUCTION, PAINT ALL EXPOSED ELECTRICAL CONDUITS, DEVICES AND BOXES. PAINT COLOR SHALL MATCH THE EXISTING SURFACES.

24. THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE, AN UP TO DATE "AS BUILT" DRAWING SET. THE "AS BUILT" DRAWING SET SHALL REFLECT ALL APPROVED CHANGES TO THE DESIGN DRAWINGS. THE "AS BUILT" DRAWING SET SHALL BE KEPT CLEAN AND IN GOOD CONDITION AND SHALL BE TURNED OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL BE UPDATED DAILY AND BE CHECKED WEEKLY BY IOR. THE PROGRESS PAYMENT IS TIED TO THEIR COMPLETION.

25. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SCHEDULE AND PERFORM A COMPLETE FUNCTIONAL TEST IN THE PRESENCE OF DSA IOR TO DEMONSTRATE TO THE OWNER THAT THE NEW INSTALLATION IS OPERATING AS INTENDED TEST RESULTS SHALL BE SENT TO DISTRICT FOR IOR AND AOR. ANY DEFECTS OR DEFICIENCIES IN THE MATERIALS OR WORK SHALL BE CORRECTED IMMEDIATELY BY AND AT THE CONTRACTOR'S EXPENSE.

GENERAL NOTES (CONTINUATION)

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

27. LIGHT FIXTURES WEIGHING LESS THAN OR EQUAL TO 10 LB. SHALL HAVE A MINIMUM OF ONE (1) #12 GAUGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.

28. LIGHT FIXTURES WEIGHING GREATER THAN 10 LB, BUT LESS THAN OR EQUAL TO 56 LBS, MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, BUT THEY SHALL HAVE A MINIMUM OF TWO (2) #12 GAUGE SLACK SAFETY WIRES CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE.

29. LIGHT FIXTURES WEIGHING GREATER THAN 56 LB SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR (4) TAUT #12 GAUGE WIRES ATTACHED TO THE HOUSING AND TO THE STRUCTURE ABOVE. THE FOUR (4) TAUT #12 GAUGE WIRES, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, MUST BE CAPABLE OF SUPPORTING FOUR (4) TIMES THE WEIGHT OF THE UNIT.

30. ALL FOUR FOOT x FOUR FOOT LIGHT FIXTURES MUST HAVE SLACK SAFETY WIRES AT EACH CORNER UNLESS SUPPORTED PER SECTION 7.2.4. OF DSA IR 25-2-13.

31. SURFACE-MOUNTED FIXTURES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST TWO POSITIVE CLAMPING DEVICES MADE OF MATERIAL WITH A MINIMUM #14 GAGE. ROTATIONAL SPRING CATCHES DO NOT COMPLY. A #12 GAUGE SUSPENSION WIRE SHALL BE ATTACHED TO EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE EIGHT (8) FEET OR LONGER. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED EIGHT (8) FEET.

32. SUPPORT PENDANT-MOUNTED LIGHT FIXTURES DIRECTLY FROM THE STRUCTURE ABOVE WITH HANGER WIRES OR CABLES PASSING THROUGH EACH PENDANT HANGER AND CAPABLE OF SUPPORTING TWO (2) TIMES THE WEIGHT OF THE FIXTURE. SEE IR 16-9 FOR ADDITIONAL REQUIREMENTS FOR PENDANT MOUNTED FIXTURE.
    IF THE PENDANT MOUNTED LIGHT FIXTURE IS DIRECTLY AND INDEPENDENTLY BRACED BELOW THE CEILING, I.E., AIRCRAFT CABLES TO WALL, THEN A BRACE ASSEMBLY IS NOT REQUIRED ABOVE THE CEILLING.
    IF THE PENDANT MOUNTED LIGHT FIXTURE IS NOT DIRECTLY AND INDEPENDENTLY BRACED BELOW THE CEILING, THEN A BRACING ASSEMBLY, PER FIGURE 1 OF DSA IR 25-2-13, IS REQUIRED WHERE THE PENDANT HANGER PENETRATES THE CEILING. SPECIAL DETAILS ARE REQUIRED TO ATTACH THE PENDANT HANGER TO THE BRACING ASSEMBLY TO TRANSMIT THE HORIZONTAL FORCE. EXCEPTION: WHERE THE WEIGHT OF THE FIXTURE IS LESS THAN 20 POUNDS, THE COMPRESSION POST SHOWN IN FIGURE 1 OF DSA IR 25-2-13, IS NOT REQUIRED.

33. RIGID CONDUIT SHALL NOT BE USED FOR ATTACHMENT OF THE FIXTURES.

SIGNAL SYSTEM NOTES

1. ALL WIRING SHALL BE IN CONDUIT, U.O.N. MINIMUM CONDUIT SIZE SHALL BE 3/4"C. SIGNAL WIRING ABOVE ACCESSIBLE CEILINGS MAY BE SUPPORTED BY "J" HOOKS AT 4 FEET ON CENTERS.
2. PROVIDE AND INSTALL ALL CONDUIT, BOXES, CONDUCTORS, POWER SUPPLY, RELAYS, ZONE MODULES, CARDS AND ALL NECESSARY/MATERIALS AS REQUIRED FOR A COMPLETE AND OPERABLE TELECOMMUNICATION SYSTEMS.
3. ALL CABLES COMING INTO THE STC OR FTC CANS SHALL TERMINATE TO TERMINAL BLOCKS ON RAILS MOUNTED TO THE CAN.
4. ALL REQUIREMENTS OF CONTRACT SPECIFICATIONS AND DRAWING APPLY.
5. INSTALLATION SHALL CONFORM TO REQUIREMENTS OF APPLICABLE ELECTRICAL CODES.
6. ALL WIRING INCLUDING SHIELDS MUST BE DRY AND FREE OF SHORTS AND GROUNDS.
7. 120VAC IS NOT PERMITTED IN SAME CONDUIT WITH LOW VOLTAGE WIRING.
8. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER-TIGHT FITTINGS AND WIRES TO BE APPROVED FOR WET LOCATIONS.
9. POWER SERVICE SHALL BE ON A DEDICATED BRANCH CIRCUIT WITH RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL" NFPA SEC 10.5.5.2.2
10. WIRING AND MATERIALS SHALL BE PER CEC/NEC ART. 760.
11. 120VAC 60Hz INPUT POWER FOR FIRE ALARM CONTROLS SHALL BE A DEDICATED, LOCKING BREAKER PROPERLY LABELED "SOURCE FROM LINE OF MAIN DISCONNECT" OR "EMERGENCY POWER"
12. ALL WIRE, PANEL AND DEVICE TERMINATION, CONDUIT, PHYSICAL MOUNTING, ETC., SHALL BE PROVIDED BY OTHER FIRE ALARM SYSTEM MANUFACTURER.
13. AUDIBLE DEVICE(S) TO BE AT LEAST 15dBA ABOVE THE EQUIVALENT SOUND LEVEL BUT NOT LESS THAN 75dBA AT 10' OR MORE THAN 110dBA AT THE MINIMUM HEARING DISTANCE.
14. AUDIBLE DEVICE SHALL SOUND THE CALIFORNIA UNIFORM FIRE ALARM SIGNAL.
15. FINAL FIRE ALARM TEST SHALL BE MADE WITH THE DSA INSPECTOR OF RECORD (IOR). LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATA AND TIME OF FINAL FIRE ALARM TESTING AND SHALL ASSIST/WITNESS SUCH TESTING WHEN ABLE.
16. FIRE ALARM CONTRACTOR SHALL PROVIDE A COMPLETED AND SIGNED" CERTIFICATE OF COMPLETION" AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TESTS. (NFPA 72 SEC. 10.18.2 & FIG. 10.18.2.1).
17. PROVIDE TEMPORAL THREE DISTINCTIVE FIRE ALARM SOUND (CFC SEC. 907.6.2.1.3, NFPA 72 SEC. 18.4.2.1)
18. A DOCUMENTATION CABINET SHALL BE INSTALLED PROXIMAL TO THE FACU. (NFPA 72, 7.7.2.1)
19. ALL RECORD DOCUMENTATION SHALL BE STORED IN THE DOCUMENT CABINET. (NFPA 72, 7.7.2.2)
20. THE DOCUMENT CABINET SHALL BE PROMINENTLY LABELED SYSTEM RECORD DOCUMENT. (NFPA 72, 7.7.2.4)

LEGEND

- HOMERUN TO PANEL, HASHMARKS INDICATE NUMBER OF #12 AWG WIRES IF MORE THAN (3); (1) INDICATES GROUND.
- FLEXIBLE WIRING AND EQUIPMENT CONNECTION.
- CONDUIT AND CONDUCTORS CONCEALS IN WALL OR CEILING
- CONDUIT AND WIRES CONCEALED IN FLOOR OR UNDERGROUND
- CONDUIT STUBBED OUT IN ACCESSIBLE LOCATION, CAP AND MARK LOCATION
- CONDUIT RISER
- SURFACE ELECTRICAL PANEL BOARD, 120/208V, 3ø, 4W
- DISCONNECT SWITCH
- DATA OUTLET
- AP 2-PORT DATA WIRELESS ACCESS POINT
- TELEPHONE OUTLET
- COMBINATION TELEPHONE AND DATA OUTLET
- PULLBOX, SIZE AS SHOWN ON THE DRAWING
- J JUNCTION BOX OR PULL BOX, SIZE PER CODE.
- MS MOTION SENSOR
- WP WALL MOUNTED SPEAKER, ±96" A.F.F. U.O.N.
  WP DENOTES OUTSIDE SPEAKER IN NEMA 3R ENCLOSURE
- COMBINATION OF CLOCK AND SPEAKER
- 1 SHEET NOTE REFERENCE, SEE NOTE 1
- 1 / E3.0 DETAIL TAG. REFER TO DETAIL 1 ON SHEET NUMBER E3.0
- EF / 1 EQUIPMENT IDENTIFICATION TAG
- A LIGHTING FIXTURE TAG (SEE FIXTURE SCHEDULE)

ABBREVIATIONS

A AMP	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BRKR	BREAKER
C	CONDUIT, CLOCK
CBC	CALIFORNIA BUILDING CODE
CCTV	CLOSED CIRCUIT TELEVISION
CEC	CALIFORNIA ELECTRIC CODE
CKT	CIRCUIT
CNTL	CONTROL
CO	CONDUIT ONLY WITH PULL ROPE
CSTC	CLOCK/SPEAKER/TELEPHONE CABINET
(E)	EXISTING
FU	FUSE
G	GROUND, GUARD
LTG	LIGHTING
LV	LOW VOLTAGE
MAX	MAXIMUM
MIN	MINIMUM
MPOE	MAIN POINT OF ENTRY
MSTC	MAIN SIGNAL TELEPHONE CABINET
MTB	MAIN TELEPHONE BOARD
NEC	NATIONAL ELECTRICAL CODE
NL	NIGHT LIGHT
NTS	NOT TO SCALE
O.C.	ON CENTER
OFOI	OWNER FURNISHED OWNER INSTALLED
PH, ø	PHASE
PNL	PANEL
(R)	RELOCATED
RECEPT.	RECEPTACLE
SAD	SEE ARCHITECTURAL DRAWINGS
SBC	SOUTHERN BELL COMMUNICATIONS
TRANSF.	TRANSFORMER
TB	TELEPHONE BOARD
TC	TERMINAL CAN
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
V	VOLT
W	WATT
WG	WIRE GUARD
WP	WEATHERPROOF
XFMR	TRANSFORMER

DRAWING INDEX

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E1.2	ELECTRICAL SITE PLAN
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LIST OF APPLICABLE CODES

2016 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.

2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R. (2015 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL WITH CALIFORNIA AMENDMENTS)

2016 CALIFORNIA ELECTRICAL CODE (CEC) PART 3, TITLE 24, C.C.R. (2014 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA)

2016 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24, C.C.R. (2015 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)

2016 CALIFORNIA PLUMBING CODE (CPC) PART 5, TITLE 24, C.C.R. (2015 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)

2016 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24, C.C.R.

2016 CALIFORNIA HISTORICAL BUILDING CODE, PART 8, TITLE 24, C.C.R.

2016 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R. (2015 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL)

2016 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24, C.C.R. (2015 INTERNATIONAL EXISTING BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL WITH AMENDMENTS.)

2016 CALIFORNIA GREEN BUILDING STANDARDS, PART 11, TITLE 24, C.C.R. (CALGREEN CODE)

2016 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24, C.C.R.

MEP COMPONENT ANCHORAGE NOTES

MEP COMPONENT ANCHORAGE NOTES:

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENT PRESCRIBED IN THE 2013 CBC, SECTION 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10 CHAPTER 13, 26 AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER
3. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT THE ATTACHMENT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

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.

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENT PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.5.6, 13.6.7, 13.6.8 AND 2013 CBC, SECTIONS 1616A.1.23, 1616A.1.24, 1616A.1.25 AND 1616A.1.26.
THE METHOD OF SHOWING BRACING AND ATTACHMENT 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., SMACNA OR OSHPD OPM), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS.
MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☐MD☐PP☐E☒
OPTION 1: DETAILED ON THE APPROVED DWGS WITH PROJECT SPECIFIC NOTES AND DETAILS
MP☐MD☐PP☐E☒
OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) # _____
MP☐MD☐PP☐
OPTION 3: SHALL COMPLY WITH THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION (2009), INCLUDING ANY ADDENDA. FASTENERS AND OTHER ATTACHMENTS NOT SPECIFICALLY IDENTIFIED IN THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION, ARE DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS. THE DETAILS SHALL ACCOUNT FOR THE APPLICABLE SEISMIC HAZARD LEVEL _____ AND CONNECTION CONNECTION LEVEL _____ FOR THE PROJECT AND CONDITIONS.

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STATE OF CALIFORNIA

D.S.A. APPROVAL:
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
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INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL
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SCALE: NONE
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GENERAL NOTES, LEGEND, ABBREVIATIONS AND DRAWING INDEX
E0.1

FILE: M:\162-17-05 Redwood HS Portables\$PHASE 2\P2_E01.dwg Jun 15, 2017 1:34 pm Scale: 1=1 by: CHRIS
XREFS: 17-209 RHS X TTL24X36.dwg

ELECTRICAL SPECIFICATION
SECTION 26 00 00

PART 1 GENERAL

1.01 SCOPE

A. The scope of work shall include all labor, materials, equipment and services necessary for the complete installation of all electrical work as herein specified and as shown on the Drawings, including, but not limited to the following:

1. Power circuits to all equipment and devices.
2. Wiring devices, necessary conduit, wiring and interconnections
3. All necessary cutting, patching, trenching and backfilling.
4. Painting, labeling and equipment identification as specified.
5. Test the complete work. Correct any deficiencies to the satisfaction of the Owner or his designated representative.

1.02 PRODUCT HANDLING

A. Contractor shall be responsible for delivery, storage, protection and placing of all equipment and materials.

B. Protection: Contractor shall protect from damage during construction, work and materials of other trades as well as electrical work and material. Electrical equipment stored and installed on job site shall be protected from dust, water, or any other damage.

1.03 RULES AND REGULATIONS

A. All work and materials shall be in full accordance with regulations of the California Administrative Code, Title 24, State Building Standards, National Electrical Code, Local City and County Code, applicable regulations of local utility companies, and any other applicable laws or regulations.
B. Nothing in these specifications is to be construed to permit work not conforming to the above codes.
C. Drawings and/or specifications shall take precedence when work and material called for exceed code requirements.

1.04 DRAWINGS AND SPECIFICATIONS

A. Any error or omissions of detail in either Drawings or Electrical Specifications shall not relieve Contractor from correctly installing all materials necessary for complete and operating electrical systems.
B. Locate and install all equipment so that it will be readily accessible for operation and maintenance.

1.05 MATERIAL AND EQUIPMENT

A. Unless otherwise noted, all material and equipment shall be new, of the type, capacity and quality specified and free from defects. Material shall bear the label of, or be listed by the Underwriter's Laboratories unless of a type for which label or listing service is not provided.
B. Materials shall be of the same brand or manufacturer throughout for each class of material or equipment wherever possible.

1.06 SUBMITTALS

A. Forward all submittals in related groups. Individual or incomplete submittals are not acceptable. Submit six copies of shop drawings for the following items:
1. Conduits and wires
2. Wiring devices.

1.07 SITE EXAMINATION

A. Examine the site and premises prior to bidding to determine the conditions under which the work is to be performed. No allowances will be made for extra expenses incurred due to failure to examine the premises or to discover site conditions which affect the work.

1.08 WORKMANSHIP

A. Good workmanship shall be evidenced in the installation of all electrical materials and equipment. Equipment shall be level, plumb and true with the structure and other equipment. All materials shall be firmly secured in place and adequately supported and permanent. The requirements of the codes are minimum standards.
B. Work covered or concealed before being inspected and approved shall be opened and uncovered upon request without any cost to the Owner and/or the Architect.

1.09 MANUFACTURER'S DIRECTIONS

A. Follow manufacturer's directions where these directions cover points not included on the Drawings or in the Specifications.

1.10 DEMOLITION

A. Provide as required to accommodate new work called for and as noted. Work shall be done carefully to avoid damage to surfaces not being replaced.

1.11 SERVICE INTERRUPTIONS

A. The facility shall remain in operation during the period of construction. Interruption of power service, if required, shall be done on weekends or nightshift hours with no added expense to the Owner. Any interruptions must be scheduled in writing with the Owner, forty–eight (48) hours in advance and must meet with their approval.

1.12 AS– BUILT DRAWINGS

A. The Contractor shall furnish one set of clean "AS–BUILT" marked blue line prints to the Owner at completion of the project showing all work including the circuiting.

1.13 GUARANTEE

A. The Contractor shall guarantee that all work executed under this Section will be free from defects of materials and workmanship for a period of one year from the date of final acceptance of this work and further guarantee that he will, at his own expense, repair and replace all such defective work, and all other work damaged thereby, which becomes defective during the term of the guarantee.

PART 2 PRODUCTS

2.01 MATERIALS

A. Unless otherwise noted, all material and equipment shall be new, of the type, capacity and quality specified and free from defects. Material shall bear the label of, or be listed by, the Underwriter's Laboratories unless of a type for which label of listing service is not provided.
B. Materials shall be of the same brand or manufacturer throughout for each class of material or equipment wherever possible.
C. Equipment shall be the product of a manufacturer who has, for a period of not less than five (5) years, been in successful manufacture of the equipment and who has a nationally distributed catalog covering ratings and specifications of said equipment.

2.02 RACEWAY

A. All conduits installed indoors shall be electrical metallic tubing (EMT) with compression type fittings. Conduits exposed outdoors shall be rigid steel. Raceway exposed or other finished areas shall be Wiremold or equal. Underground conduit shall be schedule 40 PVC.

B. Conduits shall be 3/4 inch minimum in size.

2.03 CONDUCTORS

A. All conductors shall be in conduit. Minimum size shall be #12 AWG.
B. Color code all branch circuits and feeders as follows:

120/208 Volts		277/480 Volts	
Phase A	Black	Phase A	Brown
Phase B	Red	Phase B	Orange
Phase C	Blue	Phase C	Yellow
Neutral	White	Neutral	Gray
Ground	Green	Ground	Green

C. Conductors in sizes up through #10 AWG shall have solid color finish as listed above.
D. Color coding shall be continuous and consistent throughout the work.
E. All insulation shall be 600V minimum type THHN/THWN.
F. Conductors shall be copper, 98% conductivity.
G. All conductors shall be identified and tagged at all electrical panels, pullboxes, devices and termination points with Partex PA sleeve type markers.
H. Splices: For conductors #10 and smaller, pre–insulated type connectors, 3M Scotchloks, T & B Piggys or equal, nylon self–insulated type. Splices #8 and larger use compression type connector, insulated with Scotchtape No. 88. Wire splicing devices shall be sized according to manufacturer's recommendations.
I. Cable Ties: For wire training and clamping in cabinets and enclosures use nylon cable ties.
J. Swab conduits before installing cables, and exercise care in pulling to avoid damage or disarrangement of conductors, use approved grips.

2.04 BOXES

A. Shall be of size and shape best suited for particular application, properly code sized for number of wires and conduits passing through or terminating therein. Support boxes directly to structural members, framing or blocking by means of screws, anchors or bolts.

2.05 MOTOR DISCONNECT SWITCH

A. Motor disconnect switch shall be heavy duty type HD, fused, fully enclosed, Nema 1 for indoor installation and Nema 3R for outdoor installation . The fused disconnect switch shall be provided with resection clips and fuses rated as required by the manufacturer of the equipment that is to disconnect.
B. Switch shall be provided with a cover interlock to prevent opening of the switch door when switch is in the "on" position, means of defeating the interlock mechanism shall be provided to allow authorized personnel to access the switch interior with the switch in the on position.

2.06 SUPPORT SYSTEMS

A. As manufactured by Unistrut, Kindorf or Power strut.
B. Clamp, one hole malleable iron.

2.07 GROUNDING SYSTEMS

A. Acceptable device manufacturer's: Burndy, O.Z., Appleton and "Erico" Caldwell.
B. Install ground wire in all feeder and branch circuit conduits.

PART 3 EXECUTION

3.01 COORDINATION

A. Coordinate work with that of all contractors on the job for an efficient and effective completion of the project. Refer to the contract documents of other trades for construction details.

3.02 WORKING SPACE

A. Adequate working space shall be provided around electrical equipment in strict compliance with the N.E.C. and Electrical Safety Orders.

3.03 GROUNDING

A. Permanently and effectively ground all services, raceway systems, supports, and utilization apparatus. Obtain good contact between conduit, tubing and fittings, cabinets, outlet boxes, and equipment.
B. Provide grounding conductor inside all conduits.

3.04 RACEWAY INSTALLATION

A. Exposed raceways shall run parallel or at right angles to wall or ceiling.
B. Paint all exposed conduits, Wiremold and boxes to match existing architectural finishes.

3.05 MOTOR DISCONNECT SWITCH INSTALLATION

A. Motor disconnect switch shall be installed near the motor that is disconnect.
B. Disconnect switch shall be mounted on building wall or on steel channel structures as required for each particular equipment.
C. Provide nameplate indicating panel and circuit designation. Nameplate shall be phenolic, black face with white core.
D. Fuses for motors shall be dual element time delay type.

3.06 WIRING, EMERGENCY SYSTEM

A. Wiring from an emergency source or emergency source distribution overcurrent protection to emergency loads shall be kept entirely independent of all other wiring and equipment.
B. Identification of all boxes and enclosures for emergency circuits shall be permanently marked so they will be readily identified as a component of emergency circuit or system.

3.07 TESTS

A. Test all wiring and connections for continuity and grounds before the equipment are connected and where such tests indicate faulty insulation or other defects, they shall be located, repaired and tested again. Electrical loads shall be balanced at the panelboard.

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D.S.A. APPROVAL:
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT

APP. # 01 - 117371

AC_____FLS_____SS_____

DATE_____

PROJECT TITLE:

INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL

395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
5/4/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB #
18-201

SCALE: NONE

DATE: 5/4/18

SHEET NAME & NUMBER:
ELECTRICAL SPECIFICATION

E0.2

FILE: M:\162–17–05 Redwood HS Portables\$PHASE 2\P2_E02.dwg May 24, 2017 8:10 pm Scale: 1=1 by: TRANG
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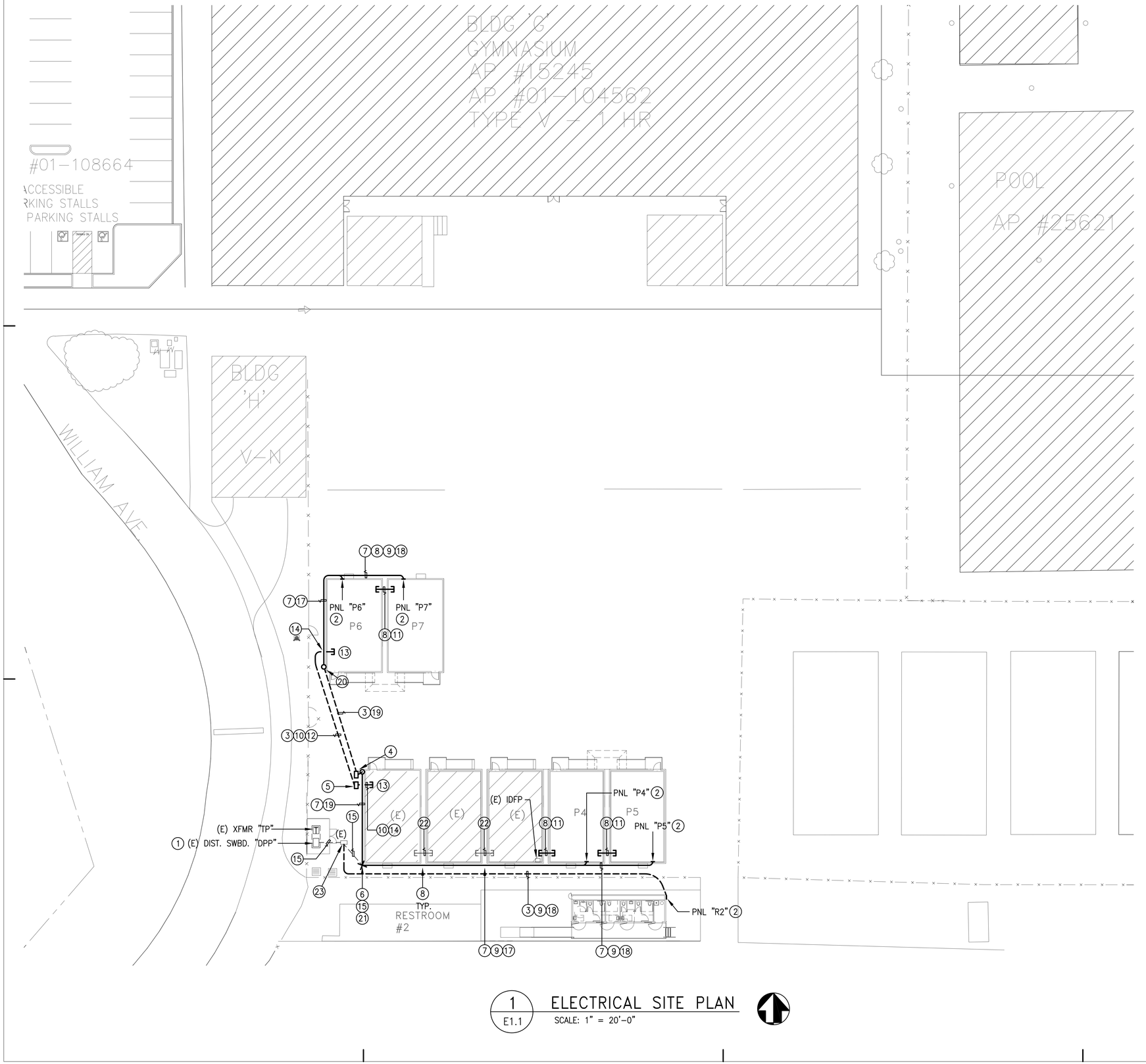

1 E1.1 ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

SHEET NOTES:

1. SEE SINGLE LINE DIAGRAM FOR (N) WORK REQUIREMENT ON (E) DIST. SWITCHBOARD "DPP".
2. PANELBOARD INSTALLED BY PORTABLE MANUFACTURER.
3. TRENCH, BACKFILL, COMPACT AND PATCH TO MATCH (E).
4. CONCRETE PULLBOX CHRISTY CAT #B1324 WITH 12" EXTENSION, COVER SHALL BE ENGRAVED TO READ "ELECTRIC".
5. SAME AS NOTE (4) EXCEPT COVER SHALL BE ENGRAVED "LOW VOLTAGE".
6. CONNECT (E) AND (N) CONDUITS.
7. ROUTE CONDUIT ON THE WALL AND PROVIDE CONDUIT SUPPORT AT 10FT. INTERVAL MAXIMUM.
8. PROVIDE FLEXIBLE LIQUID TIGHT CONDUIT IN BETWEEN PORTABLES.
9. SEE SINGLE LINE DIAGRAM FOR WIRE INFORMATION.
10. (3) 2"C (LOW VOLTAGE)
11. (2) 2"C (LOW VOLTAGE)
12. SEE RISER DIAGRAM FOR CABLE INFORMATION.
13. STUB-OUT CONDUIT NEAR J-HOOKS.
14. PROVIDE CONDUIT ELBOW WITH COVER AND GASKET.
15. (E) (13) 1 1/4"C (SPARES)
    UTILIZE (5) 1 1/4"C OF SPARE CONDUITS TO INSTALL (N) WIRES.
16. (3) 1 1/4"C (POWER)
17. (2) 1 1/4"C (POWER)
18. (1) 1 1/4"C (POWER)
19. (2) 1 1/4"C (POWER)
    (4) 1 1/4"C (SPARES)
20. STUB-UP (4) 1 1/4"C (SPARES)
21. EXTEND ADDITIONAL (4) SPARE CONDUIT TO PORTABLE "P6".
22. (E) 1 1/2"C, (E)(2) 2"C
23. INSTALL (N) CONDUIT INTO (E) PULLBOX

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395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
5/4/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB # 18-201

SCALE: AS NOTED

DATE: 5/4/18

SHEET NAME & NUMBER:

ELECTRICAL SITE PLAN

E1.1

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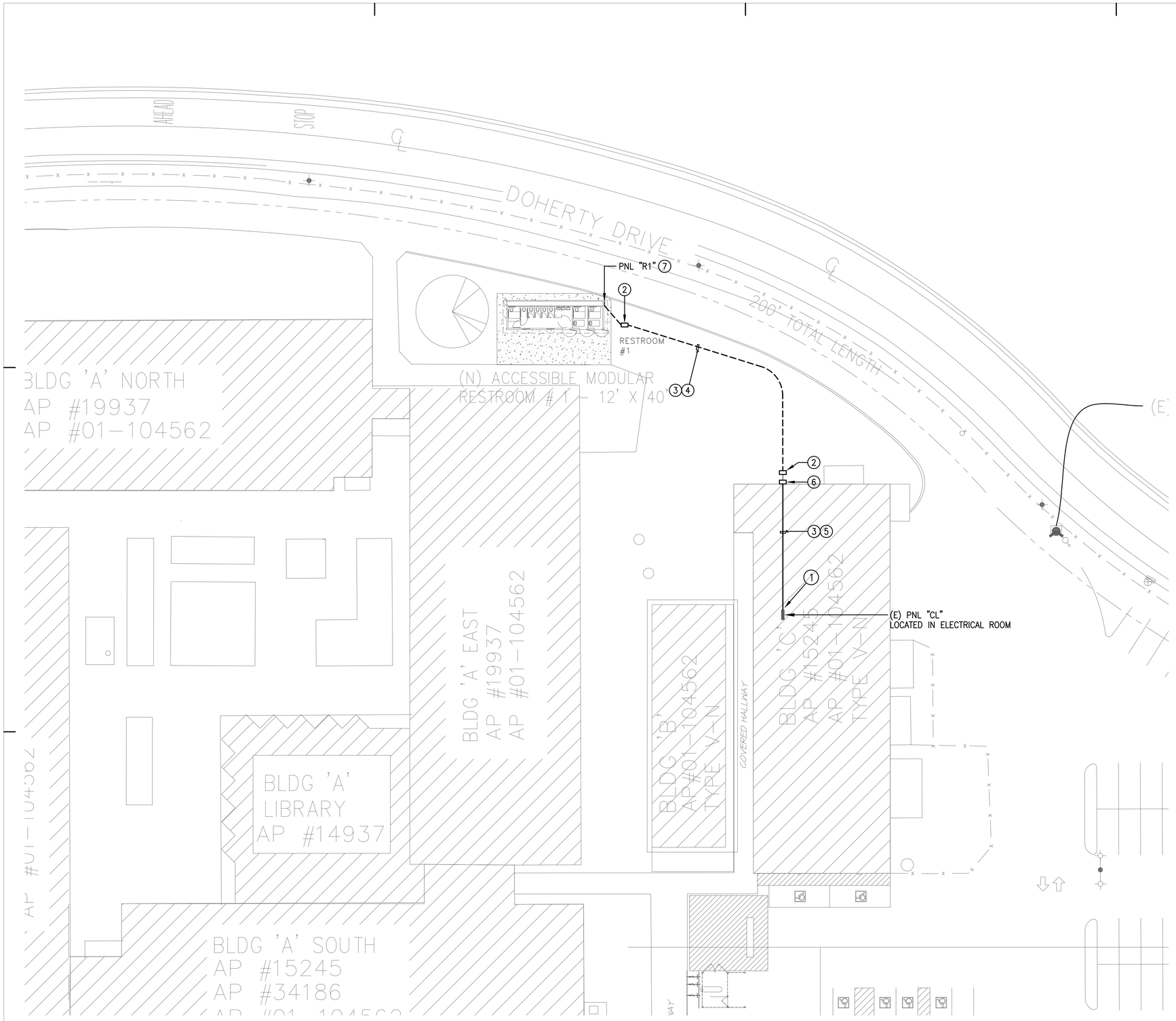

1 / E1.2 ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

SHEET NOTES:

1. CONDUIT ROOF PENETRATION, SEE DWG. 4/E3.1 FOR INSTALLATION DETAIL.
2. CONCRETE PULLBOX CHRISTY CAT #B1017 WITH 12" EXTENSION, COVER SHALL BE ENGRAVED TO READ "ELECTRIC".
3. 1 1/4"C (POWER)
4. TRENCH, BACKFILL, COMPACT AND PATCH TO MATCH (E).
5. ROUTE CONDUIT ON THE ROOF AND PROVIDE CONDUIT SUPPORT AT 10FT. INTERVAL MAXIMUM.
6. PROVIDE A 10"x8"x6" NEMA 3R PULLBOX AND SECURE ON THE EXTERIOR WALL OF THE BUILDING, FIELD VERIFY EXACT MOUNTING HEIGHT.
7. PANELBOARD INSTALLED BY PORTABLE MANUFACTURER.

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TAMALPAIS UNION HIGH SCHOOL DISTRICT
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333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
3/20/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB #
18-201

SCALE: AS NOTED

DATE: 3/20/18

SHEET NAME & NUMBER:

ELECTRICAL SITE PLAN

E1.2

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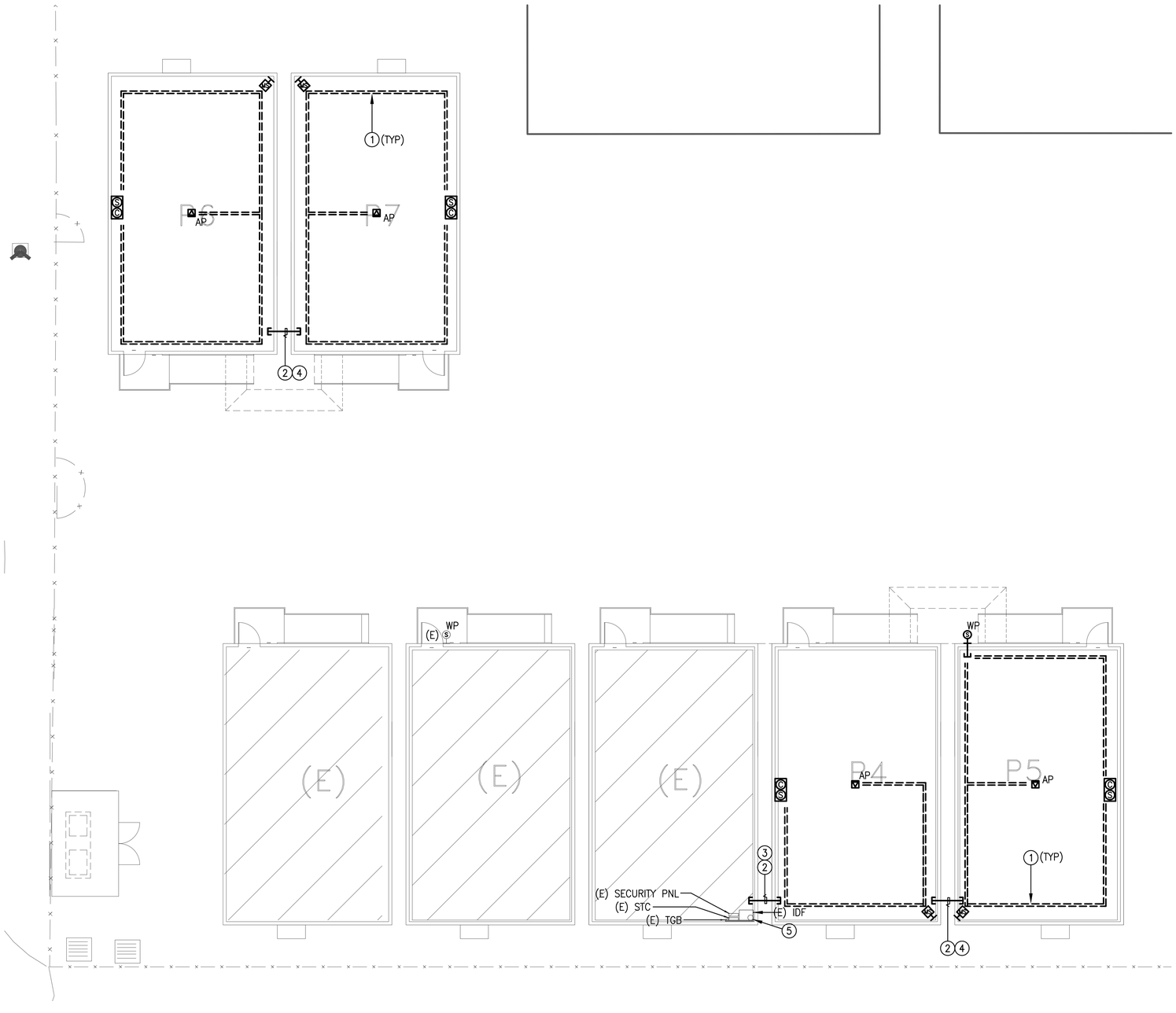

1 E2.1 SIGNAL PLAN

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

SHEET NOTES:

1. PROVIDE 3" J-HOOKS FOR LOW VOLTAGE CABLES SUPPORT ALONG BROKEN LINES AT 4FT. ON CENTER.
2. PROVIDE FLEXIBLE LIQUID TIGHT CONDUIT IN BETWEEN PORTABLES. FLEX LOOP SHALL ALLOW FOR 4" OF MOVEMENT IN EITHER DIRECTIONS.
3. (2) 2"C (LOW VOLTAGE)
4. (1) 2"C (LOW VOLTAGE)
5. (E) STUB-UP (5) 2 1/2"C (LOW VOLTAGE)

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5/4/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB #
18-201

SCALE: AS NOTED

DATE: 5/4/18

SHEET NAME & NUMBER:
SIGNAL PLAN

E2.1

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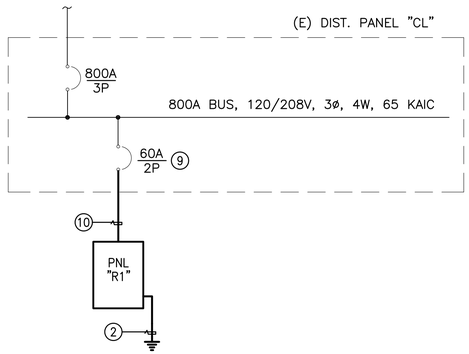
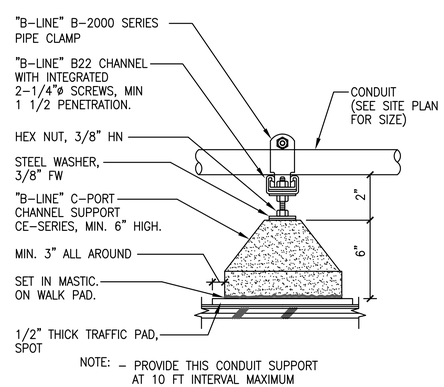


2 E3.1 SINGLE LINE DIAGRAM

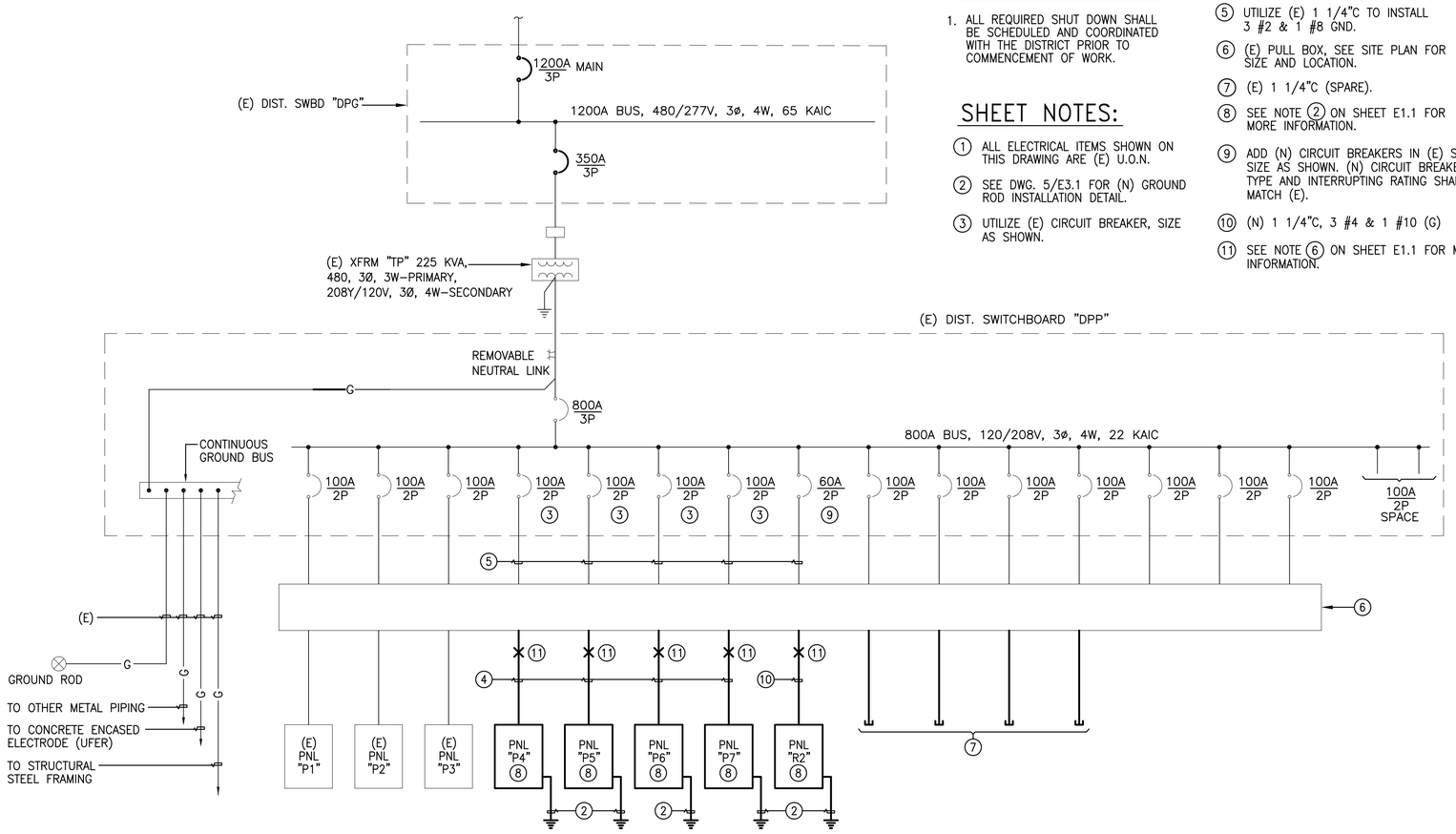
NOT TO SCALE
(@ RESTROOM #1)



NOTE: – PROVIDE THIS CONDUIT SUPPORT AT 10 FT INTERVAL MAXIMUM

3 E3.1 ROOF CONDUIT SUPPORT

NOT TO SCALE



1 E3.1 SINGLE LINE DIAGRAM ①

NOT TO SCALE
(@ INTERIM HOUSING AND RESTROOM #2)

GENERAL NOTE:

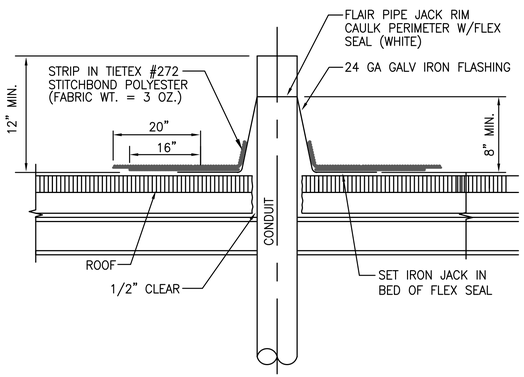
1. ALL REQUIRED SHUT DOWN SHALL BE SCHEDULED AND COORDINATED WITH THE DISTRICT PRIOR TO COMMENCEMENT OF WORK.

SHEET NOTES:

1. ALL ELECTRICAL ITEMS SHOWN ON THIS DRAWING ARE (E) U.O.N.
2. SEE DWG. 5/E3.1 FOR (N) GROUND ROD INSTALLATION DETAIL.
3. UTILIZE (E) CIRCUIT BREAKER, SIZE AS SHOWN.
4. (N) 1 1/4"C, 3 #2 & 1 #8 GND.
5. UTILIZE (E) 1 1/4"C TO INSTALL 3 #2 & 1 #8 GND.
6. (E) PULL BOX, SEE SITE PLAN FOR SIZE AND LOCATION.
7. (E) 1 1/4"C (SPARE).
8. SEE NOTE (2) ON SHEET E1.1 FOR MORE INFORMATION.
9. ADD (N) CIRCUIT BREAKERS IN (E) SPACES, SIZE AS SHOWN. (N) CIRCUIT BREAKER TYPE AND INTERRUPTING RATING SHALL MATCH (E).
10. (N) 1 1/4"C, 3 #4 & 1 #10 (G)
11. SEE NOTE (6) ON SHEET E1.1 FOR MORE INFORMATION.

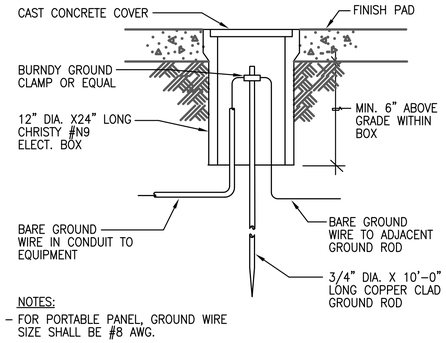
NOTES:

1. ALL SURFACES TO BE CLEANED e.g. FREE OF DIRT, GREASE, SCALE PAINT, ETC.
2. WIRE BRUSH ALL LOOSE MATERIAL AS REQUIRED.
3. PRIME EXISTING ROOF AND FLASHING WITH ELASTOMERIC PRIMER.



4 E3.1 CONDUIT ROOF PENETRATION

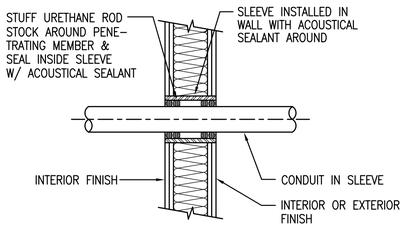
NOT TO SCALE



NOTES:
– FOR PORTABLE PANEL, GROUND WIRE SIZE SHALL BE #8 AWG.

5 E3.1 GROUND ROD INSTALLATION DETAIL

NOT TO SCALE

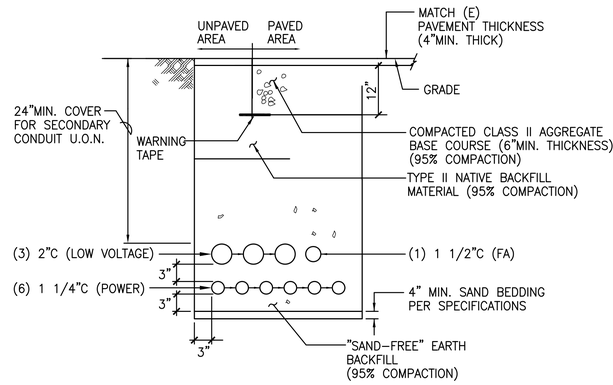


NOTE: PATCH AND FINISH TO MATCH (E)

THESE RECOMMENDATIONS ARE BASED ON PRODUCT PERFORMANCE PER ASTME-814(UL1479) FIRE TEST AND UL THROUGH PENETRATION FIRESTOP SYSTEM #WL1001.

6 E3.1 TYPICAL WALL PENETRATION

NOT TO SCALE



7 E3.1 TYP. TRENCH DETAIL

NOT TO SCALE

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REVISIONS:

date	description
5/4/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB #
18-201

SCALE: NONE

DATE: 5/4/18

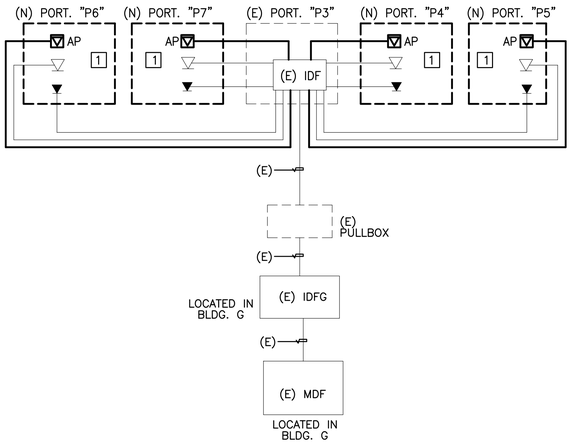
SHEET NAME & NUMBER:
SINGLE LINE DIAGRAM AND DETAILS

E3.1

FILE: M:\162-17-05 Redwood HS Portables\05E21.dwg May 03, 2017 3:28 pm Scale: 1=1 by: DIEU
XREFS: 17-209 RHS X TTL24X36.dwg

DIAGRAM NOTES:

[1] SEE FLOOR PLAN FOR EXACT LOCATION AND QUANTITY OF DEVICES

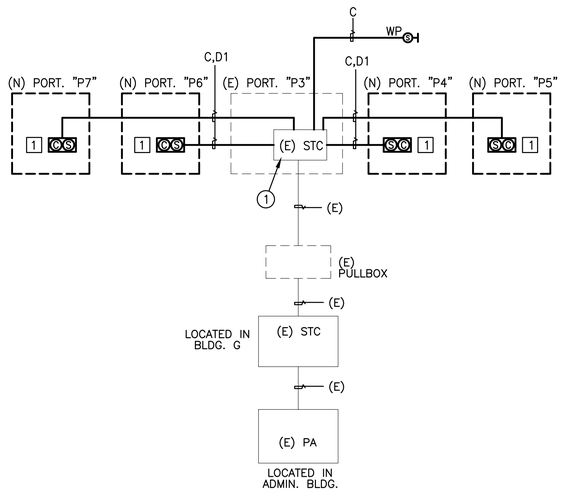


1 E3.2 DATA/VOICE SYSTEM RISER DIAGRAM

NOT TO SCALE
(@ INTERIM HOUSING, TYP.)

FOR INFORMATION ONLY (OFOI)

TYPE	INTERCOM CABLE SCHEDULE
	DESCRIPTION
C	(1) PAIR #22 (SHIELDED – OSP)
D1	3 #14 THWN

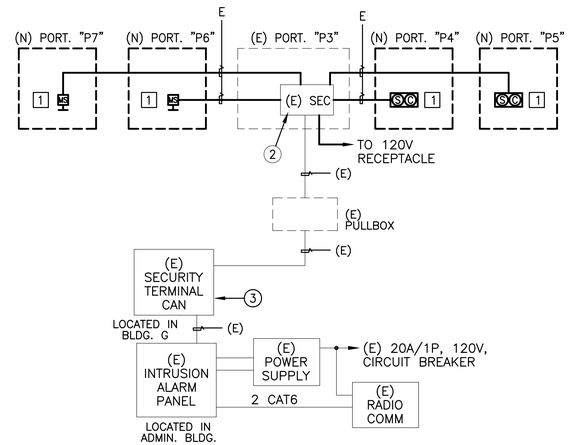


2 E3.2 CLOCK & INTERCOM SYSTEM RISER DIAGRAM ④

NOT TO SCALE
(@ INTERIM HOUSING, TYP.)

TYPE	SECURITY MATERIAL LIST
MOTION DETECTOR	HONEYWELL VP/EX DT7500SN

TYPE	INTRUSION ALARM SECURITY CABLE SCHEDULE
	DESCRIPTION
E	4 #18 (UNSHIELDED) (OSP)



3 E3.2 INTRUSION ALARM SECURITY SYSTEM RISER DIAGRAM ⑤

NOT TO SCALE
(@ INTERIM HOUSING, TYP.)

SHEET NOTES:

1. PROVIDE TERMINAL BLOCKS FOR PA/ CLOCK AS REQUIRED.
2. PROVIDE ADDITIONAL MODULE, BATTERY IN (N) ENCLOSURE (16"x16"x3.5") AS REQUIRED.
3. FIELD VERIFY FOR NEAREST SECURITY TERMINAL CAN.
4. (N) CLOCK/SPEAKER TO MATCH (E).
5. (N) SECURITY SYSTEM TO MATCH (E).
6. ALL DATA/VOICE CABLING AND CONNECTIVITIES ARE TO BE PROVIDED, INSTALLED AND TESTED BY THE DISTRICT.

PHD ARCHITECTS, INC.
Architecture • Planning • Interiors

3211 Ronino Way
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PROJECT NO. 162-18-01

REGISTERED PROFESSIONAL ENGINEER
KENNETH S. NEAL
No. 11537
Exp. 6/30/19
ELECT.
STATE OF CALIFORNIA

D.S.A. APPROVAL:
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT

APP. # 01 - 117371

AC_____FLS_____SS_____

DATE_____

PROJECT TITLE:

INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL

395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
5/4/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB #
18-201

SCALE: NONE

DATE: 5/4/18

SHEET NAME & NUMBER:
SIGNAL RISER DIAGRAM

E3.2

FILE: M:\162-17-05 Redwood HS Portables\05E21.dwg May 03, 2017 3:28 pm Scale: 1=1 by: DIEU
XREFS: 17-209 RHS X TTL24X36.dwg

GENERAL NOTES

1. THE COMPLETE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA ELECTRICAL CODE, SPECIFICATIONS AND STANDARD, THE LATEST RULES AND REGULATIONS OF THE SAFETY ORDERS ISSUED BY THE DIVISION OF INDUSTRIAL SAFETY, THE NATIONAL BOARD OF FIRE UNDERWRITERS AND ALL APPLICABLE STATE AND LOCAL CODES ISSUED BY AUTHORITIES HAVING JURISDICTION.
2. PRIOR TO SUBMITTING PROPOSAL, BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS, VISIT CONSTRUCTION SITE AND ATTEND THE PRE-BID MEETING TO BE FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH WILL IN ANYWAY AFFECT THE WORK UNDER THIS CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN THIS CONNECTION IN BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.
3. FIELD VERIFY TO CONFIRM ALL FIRE RATED CEILINGS AND WALLS. PROVIDE FIRE STOP SEALS PER UNIFORM BUILDING CODE FOR CONDUIT PENETRATION THROUGH FIRE RATED FLOORS, WALLS AND CEILINGS.
4. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED BY UNDERWRITER'S LABORATORIES AND BEAR THEIR LABEL.
5. CONDUIT ROUTING SHOWN IS ESSENTIALLY DIAGRAMMATIC. CONTRACTOR SHALL LAYOUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF OTHER TRADES. ALL EXPOSED CONDUIT, BOXES, FITTINGS, SUPPORT, ETC. SHALL BE PAINTED TO MATCH ADJACENT SURFACES.
6. THE CONTRACTOR SHALL CONSULT THE ARCHITECTURAL, MECHANICAL AND OTHER DRAWINGS RELATED TO THIS PROJECT FOR ADDITIONAL WORK TO BE PROVIDED.
7. THE OWNER RETAINS FIRST SALVAGE RIGHTS TO ALL EXISTING EQUIPMENT REMOVED UNDER THIS CONTRACT. THE ELECTRICAL CONTRACTOR SHALL CONSULT WITH THE OWNER FOR DISPOSITION OF THE EXISTING EQUIPMENT TO BE REMOVED BY HIM. THE CONTRACTOR SHALL INCLUDE IN HIS BID PROPOSAL ALL COSTS RELATED TO THE DISPOSAL OF EXISTING EQUIPMENT REMOVED UNDER THIS CONTRACT.
8. ANY POWER SHUTDOWN SHALL BE COORDINATED WITH SCHOOL DISTRICT PROJECT MANAGER. A SHUTDOWN SCHEDULE SHALL BE PRESENTED TO SCHOOL DISTRICT FOR APPROVAL TWO WEEKS PRIOR TO COMMENCEMENT OF WORK. SHUTDOWN SHALL BE PERFORMED IN OVERTIME HOURS IF SO DIRECTED BY SCHOOL DISTRICT.
9. DEMOLITION WORK SHALL BE PROVIDED AS REQUIRED TO ACCOMPLISHED NEW WORK CALLED FOR AND AS NOTED. WORK SHALL BE PERFORMED CAREFULLY TO AVOID DAMAGE TO SURFACES, STRUCTURES, AND EQUIPMENT NOT BEING REMOVED. EXISTING EQUIPMENT AND/OR ELECTRICAL WIRING WHICH IS TO REMAIN, BUT HAS BEEN REMOVED TO FACILITATE THE INSTALLATION OF THE NEW EQUIPMENT, SHALL BE RESTORED TO ITS ORIGINAL OPERATING CONDITION.
10. BLANK COVERS SHALL BE INSTALLED WHEREVER DEVICE IS REMOVED AND OUTLET BOX REMAINS IN PLACE.
11. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUCTORS SHALL BE 12 AWG THWN STRANDED COPPER ONL.Y.
12. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUIT SHALL BE 3/4".
13. GREEN INSULATED GROUND CONDUCTORS SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUIT WIRING.
14. PROVIDE LABELS ON ALL EQUIPMENT AND DEVICES. LABELS SHALL BE SELF-ADHESIVE PHENOLIC TYPE AND WHITE LETTER ON BLACK BACKGROUND, PROVIDE BRADY OR DYMO TYPE LABELS (CIRCUIT IDENTIFICATION) FOR ALL SWITCHES AND RECEPTACLES.
15. THE CONTRACTOR SHALL PROVIDE TYPEWRITTEN DIRECTORIES FOR ALL ELECTRICAL PANELS INVOLVED IN THIS PROJECT. THE PANEL DIRECTORIES SHALL REFLECT THE AS-BUILT CIRCUITS. ONE COPY OF THE SCHEDULE SHALL BE TAPED TO THE INSIDE OF THE PANEL DOOR, AND ONE COPY SHALL BE SUBMITTED TO THE ENGINEER AS AN "AS-BUILT" DRAWING.
16. ALL ELECTRICAL EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST A SEISMIC FORCE ACTING IN ANY DIRECTION USING THE FOLLOWING CRITERIA:
    a. THE TOTAL DESIGN LATERAL SEISMIC FORCE SHALL BE DETERMINED PER CALIFORNIA BUILDING CODE (CBC) 2013. FORCES SHALL BE APPLIED IN THE HORIZONTAL DIRECTIONS, WHICH RESULT IN THE MOST CRITICAL LOADING FOR DESIGN.
    b. THE VALUE OF A_P(COMPONENT AMPLIFICATION FACTOR), R_P (COMPONENT RESPONSE MODIFICATION FACTOR), C_{S1}(SEISMIC COEFFICIENT) AND I_P(SEISMIC IMPORTANCE FACTOR) BE DETERMINED PER CALIFORNIA BUILDING CODE (CBC) 2013.

    WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON THE DRAWINGS, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE FIELD REPRESENTATIVE OF THE DIVISION OF THE STATE ARCHITECT.
17. CERTAIN REMODELING OF ELECTRICAL FACILITIES WILL BE REQUIRED IN THE EXISTING BUILDING. THE DRAWINGS SHOWING LOCATION OF EQUIPMENT IN EXISTING AREAS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL CONCEAL ALL WORK; IF THIS NOT POSSIBLE, SURFACE RACEWAY SUCH AS WIREMOLD SHALL BE USED ONLY WITH THE APPROVAL OF THE ARCHITECT AND OWNER.
18. THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRING PATCHING, PLASTERING PAINTING AND/OR OTHER REPAIRS DUE TO THE INSTALLATION OF ELECTRICAL WORK UNDER THE TERMS OF THIS SPECIFICATION. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED. THIS SHALL INCLUDE ALL WALLS, CEILINGS, ROOFS, PAVEMENT, PLANTERS, ETC.
19. OUTLETS MOUNTED ON WALL BACK TO BACK SHALL MAINTAIN A MINIMUM HORIZONTAL DISTANCE OF 24" OR BE SEPARATED BY A STUD.
20. ALL EXPOSED CONDUITS, BOXES AND CABINETS INSTALLED IN FINISHED AREAS SHALL BE PAINTED TO MATCH COLOR OF ADJACENT WALL OR CEILING.
21. THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE, AN UP TO DATE "AS BUILT" DRAWING SET. THE "AS BUILT" DRAWING SET SHALL REFLECT ALL APPROVED CHANGES TO THE DESIGN DRAWINGS. THE "AS BUILT" DRAWING SET SHALL BE KEPT CLEAN AND IN GOOD CONDITION AND SHALL BE TURNED OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL BE UPDATED DAILY AND BE CHECKED WEEKLY BY IOR. THE PROGRESS PAYMENT IS TIED TO THEIR COMPLETION.
22. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SCHEDULE AND PERFORM A COMPLETE FUNCTIONAL TEST TO DEMONSTRATE TO THE OWNER THAT THE NEW INSTALLATION IS OPERATING AS INTENDED. ANY DEFECTS OR DEFICIENCIES IN THE MATERIALS OR WORK SHALL CORRECTED IMMEDIATELY BY AND AT THE CONTRACTOR'S EXPENSE.
23. PROVIDE ACCESSIBLE PANEL FOR HEAT DETECTOR ABOVE CEILING WHERE REQUIRED.

FIRE ALARM L E G E N D

WIRING

SYMBOL	DESCRIPTION
	WIRING CONCEALED IN CEILING OR WALL. LINE WEIGHT TOP TO BOTTOM= NEW, EXISTING TO REMAIN, FUTURE
	WIRING CONCEALED IN FLOOR OR UNDER GRADE OR ROUTED IN CEILING SPACE OF FLOOR BELOW. LINE WEIGHT TOP TO BOTTOM= NEW, EXISTING TO REMAIN, FUTURE
	WIRING EXPOSED. LINE WEIGHT TOP TO BOTTOM= NEW, EXISTING TO REMAIN, FUTURE
	EXISTING ITEM TO BE REMOVED
LV	LOW VOLTAGE CABLE IN CONDUIT
	STROKES INDICATE QUANTITY OF #12 AWG. CONDUCTORS IF MORE THAN 3, UON. NOTE: WIRING STROKES FOR 20A BRANCH CIRCUITS ARE NOT SHOWN ON DRAWINGS. CONTRACTOR SHALL USE INFORMATION IN PANEL AND BRANCH CIRCUIT SCHEDULES TO PROVIDE REQUIRED CIRCUITING. ALL SHARED NEUTRAL SHALL BE #10 U.O.N.
GROUND	GROUND, ISOLATED
HOT	NEUTRAL
L1A-1,3 HD1A	HOME RUN WIRING TO INDICATED DESTINATION, 3/4"C. MIN. OR AS OTHERWISE NOTED. CONTRACTOR SHALL USE CIRCUIT SIZES NOTED IN RESPECTIVE SCHEDULES AND INFORMATION IN THE FEEDER AND BRANCH CIRCUIT SCHEDULES.
	CONDUIT RUN TURNED UP THROUGH FLOOR OR CEILING. CORE & FIREPROOF AS REQUIRED.
	CONDUIT RUN TURNED DOWN THROUGH FLOOR OR CEILING. CORE & FIREPROOF AS REQUIRED.
	CONDUIT STUBBED OUT AT LOCATION SHOWN. PROVIDE INSULATED BUSHING & PULLROPE.
	RACEWAY STUBBED OUT FOR FUTURE CONTINUATION; CAP, MARK AND RECORD LOCATION.
J J J	JUNCTION BOXES, WALL, CEILING AND FLUSH FLOOR MOUNTED. 4" SQ. BOX MIN., LARGER IF REQUIRED
	WIRING EXTENSION POINT – CONDUIT TO MC CABLE OR MANUFACTURED WIRING SYSTEM J-BOX ABOVE ACCESSIBLE CEILINGS AREAS, OR EXTEND CONDUIT & WIRE IN EXPOSED OR "HARD" CEILING AREAS. SHADED= ON ALT. POWER SOURCE (EMERG,UPS,ETC.)
PB	PULL BOX, MIN. SIZE PER NEC., UON.
	FLEXIBLE CONDUIT CONNECTION
	POWER CONNECTION TO DIV 15 FIRE/SMOKE DAMPER. REFER TO FSD CONNECTION DETAIL IF NOT SHOWN
	LOW VOLTAGE SYSTEM GROUND CONNECTION
	GROUND ROD CONNECTION
	GROUND ROD CONNECTION WITH TEST WELL BOX
	LIGHTNING SYSTEM AIR TERMINAL

FIRE ALARM SYSTEM

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL AND ASSOCIATED COMPONENTS. PROVIDE 120V POWER AS REQUIRED OR AS INDICATED.
FCPS	FIRE ALARM POWER SUPPLY
F WP	HORN, WALL MOUNTED WEATHER PROOF
15,30,75,110 F	STROBE, WALL MOUNTED (# = CANDELA RATING IF OTHER THAN 15)
15,30,75,110 F	COMBINATION OF HORN/STROBE, WALL MOUNTED (# = CANDELA RATING IF OTHER THAN 15)
	SMOKE DETECTOR, CEILING OR PLENUM, WALL MOUNTED. MULTI-SENSOR TYPE UON.
A	HEAT DETECTOR, ABOVE CELING MOUNTED. FIXED AND RATE OF RISE AND RATED AT 194°F, U.O.N.
CM	ADDRESSABLE CONTROL MODULE
MM	ADDRESSABLE MONITOR MODULE
RM	ADDRESSABLE RELAY MODULE
EOL	END OF LINE RESISTOR (NOT SHOWN ON PLANS)
*	KEY NOTE REFERENCE

FIRE ALARM SCOPE OF WORK

THE INTENT OF THIS PROJECT IS TO PROVIDE A COMPLETE CODE COMPLYING FIRE ALARM SYSTEMS IN THE NEWLY ADDED MODULAR BUILDINGS.

FIRE ALARM SYSTEM GENERAL NOTE

THE FIRE DETECTION AND ALARM SYSTEM, UPON ACTIVATION OF AN INITIATING DEVICE, SHALL ALERT ALL OCCUPANTS AND SHALL TRANSMIT THE ALARM SIGNAL TO AN APPROVED SUPERVISING CENTRAL MONITORING STATION IN ACCORDANCE WITH THE REQUIREMENTS OF SENATE BILL No. 575.

NFPA 72 REQUIREMENTS

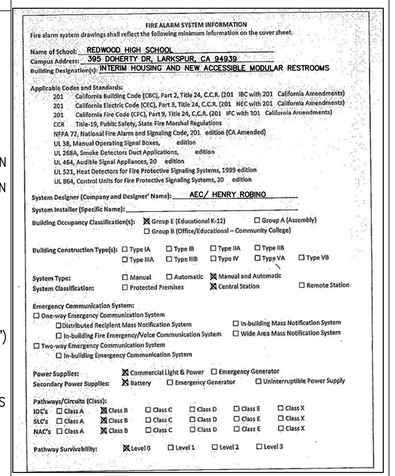
1. POWER SERVICE SHALL BE ON A DEDICATED BRANCH CIRCUIT WITH A RED MARKING AND IDENTFIED PER (NFPA 72 SEC. 10.6.5.2.2)
2. PROVIDE TEMPORAL- THREE DISTINCTIVE FIRE ALARM SOUND, (CFC SEC. 907.5.2.1.3, NFPA 72 SEC. 18.4.2.1).
3. AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15 DBA ABOVE THE AVERAGE AMBIENT SOUND LEVEL IN ALL OCCUPINABLE AREAS, (NFPA 72 SEC. 18.4.3.1). (IE. CLASSROOM AVERAGE AMBIENT ROOM NOISE IS 45 DBA PLUS 15 DBA EQUALS = 60 DBA MINIMUM ALARM TONE REQUIRED)
4. STROBES SHALL FLASH AT A RATE OF NOT EXCEEDING TWO FLASHES PER SECOND NOR BELESS THAN ONE FLASH EVERY SECOND, (2016 NFPA 72 SEC. 18.5.3.1).
5. FINAL FIRE ALARM TEST SHALL BE MADE WITH THE DSA INSPECTOR OF RECORD (IOR). LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF THE DATE AND TIME OF FINAL FIRE ALARM TESTING AND SHALL ASSIST/WITNESS SUCH TESTING WHEN ABLE.
6. FIRE ALARM CONTRACTOR SHALL PROVIDE A "RECORD OF COMPLETION" TO THE INSPECTOR OF RECORD (IOR)/DSA AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TESTS, (2016 NFPA 72 SEC. 7.8.2 AND FIGURE 7.8.2).

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE STANDARDS:

2016 CALIFORNIA BUILDING CODE (FOR SFM)
REFERENCE STANDARD CHAPTER 35

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS; 2016 EDITION (CA AMENDED)
NFPA 14	STANDPIPE SYSTEMS; 2016 EDITION (CA AMENDED)
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEM; 2017 EDITION
NFPA 17A	WET CHEMICAL EXTINGUISHING SYSTEM; 2017 EDITION
NFPA 20	STATIONARY PUMPS; 2016 EDITION
NFPA 24	PRIVATE FIRE SERVICE MAINS; 2016 EDITION (CA AMENDED)
NFPA 25	PROTECTION SYSTEMS; 2017 CALIFORNIA EDITION
NFPA 72	NATIONAL FIRE ALARM AND SIGNALING CODE; 2016 EDITION (CA AMENDED) (NOTE: SEE UL STANDARD 1971 FOR "VISUAL DEVICES")
NFPA 80	FIRE DOORS AND OTHER OPENINGS PROTECTIVE; 2016 EDITION
NFPA 253	CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS 2015 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS; 2015 EDITION



FIRE ALARM SYSTEM INFORMATION

Fire alarm system drawings shall reflect the following minimum information on the cover sheet.

Name of School: REDWOOD HIGH SCHOOL
Campus Address: 395 DOHERTY DR, LARKSPUR, CA 94939
Building Designation(s): INTERIM HOUSING AND NEW ACCESSIBLE MODULAR RESTROOMS

Applicable Codes and Standards:
201 California Building Code (CBC), Part 2, Title 24, C.C.R. (201 IBC-with 201 California Amendments)
201 California Electric Code (CEC), Part 3, Title 24, C.C.R. (201 NEC with 201 California Amendments)
201 California Fire Code (CFC), Part 9, Title 24, C.C.R. (201 IFC with 101 California Amendments)
CCR Title-19, Public Safety, State Fire Marshal Regulations
NFPA 72, National Fire Alarm and Signaling Code, 201 edition (CA Amended)
UL 38, Manual Operating Signal Boxes, edition
UL 268A, Smoke Detectors Duct Applications, edition
UL 464, Audible Signal Appliances, 20 edition
UL 521, Heat Detectors for Fire Protective Signaling Systems, 1999 edition
UL 864, Control Units for Fire Protective Signaling Systems, 20 edition

System Designer (Company and Designer' Name): AEC/ HENRY ROBINO
System Installer (Specific Name):
Building Occupancy Classification(s): [X] Group E ((Educational K-12) [ ] Group A (Assembly) [ ] Group B (Office/Educational – Community College)
Building Construction Type(s): [ ] Type IA [ ] Type IB [ ] Type IIA [ ] Type IIB [ ] Type IIIA [ ] Type IIIB [ ] Type IV [ ] Type VA [ ] Type VB
System Type: [ ] Manual [ ] Automatic [X] Manual and Automatic
System Classification: [ ] Protected Premises [X] Central Station [ ] Remote Station
Emergency Communication Systems:
[ ] One-way Emergency Communication System
[ ] Distributed Recipient Mass Notification System [ ] In-building Mass Notification System
[ ] In-building Fire Emergency/Voice Communication System [ ] Wide Area Mass Notification System
[ ] Two-way Emergency Communication System
[ ] In-building Emergency Communication System
Power Supplies: [X] Commercial Light & Power [ ] Emergency Generator
Secondary Power Supplies: [X] Battery [ ] Emergency Generator [ ] Uninterruptible Power Supply
Pathways/Circuits (Class):
IDC's [ ] Class A [X] Class B [ ] Class C [ ] Class D [ ] Class E [ ] Class X
SLC's [ ] Class A [X] Class B [ ] Class C [ ] Class D [ ] Class E [ ] Class X
NAC's [ ] Class A [X] Class B [ ] Class C [ ] Class D [ ] Class E [ ] Class X
Pathway Survivability: [X] Level 0 [ ] Level 1 [ ] Level 2 [ ] Level 3

ABBREVIATIONS

(E)	EXISTING TO REMAIN
(F)	FUTURE
(R)	EXISTING TO BE REMOVED
(RL)	EXISTING TO BE RELOCATED
AB	ABOVE COUNTER BACKSPLASH
ACU	AIR CONDITIONING UNIT
AC	ALTERNATING CURRENT
A, AMP	AMPERES
AF	AMPERE (RATED) FUSE OR CB FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM (ALLOY)
ALC	AUTOMATIC LIGHTING CONTROL
AS	AMPERE (RATED) SWITCH
AT	CIRCUIT BRKR TRIP SETTING (AMPS)
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
B	BELL (FIRE ALARM)
BAT	BATTERY
BG	BELOW GRADE
C	CONDUIT (CIRCULAR RACEWAY)
CAB	CABINET
CKT	CIRCUIT
CLG	CEILING
CO	CONDUIT ONLY
CU	COPPER
DC	DIRECT CURRENT
DIV	DIVISION
DPST	DOUBLE POLE SINGLE THROW
DWG	DRAWING
ENCL	ENCLOSURE
EO	ELECTRICALLY OPERATED
EOL	END OF LINE
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR
FSD	FIRE/SMOKE DAMPER
GND	GROUND
K	KEY OPERATED
MAX	MAXIMUM
MIN	MINIMUM
MTD	MOUNTED
MTR	MOTOR
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NO	NORMALLY OPEN
NTS	NOT TO SCALE
NP	NAMEPLATE
OC	ON CENTER
PNL	PANEL
+,POS	POSITIVE
REQD	REQUIRED
RNC	RIGID NON-METALLIC CONDUIT (PVC)
RSE	REMOTE SIGNAL EXPANDER
RST	REMOTE STATION TRANSMITTER
S.A.D.	SEE ARCHITECTURAL DRAWINGS
TYP	TYPICAL
UL	UNDERWRITERS LAB
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY

FIRE ALARM DRAWING LIST

FA0.1	FIRE ALARM COVER SHEET
FA1.1	FIRE ALARM SITE PLAN
FA2.1	FIRE ALARM PLAN
FA3.1	FIRE ALARM RISER DIAGRAM, LEGEND AND EQUIPMENT LIST
FA4.1	FIRE ALARM VOLTAGE DROP AND BATTERY CALCULATION
FA4.2	FIRE ALARM VOLTAGE DROP AND BATTERY CALCULATION
FA5.1	FIRE ALARM DETAILS

FIRE ALARM SYSTEM NOTES

1. ALL WIRING SHALL BE IN CONDUIT, U.O.N. MINIMUM CONDUIT SIZE SHALL BE 3/4"C.
2. PROVIDE AND INSTALL ALL CONDUIT, BOXES, CONDUCTORS, POWER SUPPLY, RELAYS, ZONE MODULES, CARDS, SWITCHES ETC. FOR A COMPLETE AND OPERABLE FIRE ALARM SYSTEM.
3. ALL REQUIREMENT OF CONTRACT SPECIFICATIONS AND DRAWING APPLY.
4. INSTALLATION SHALL CONFORM TO REQUIREMENTS OF APPLICABLE ELECTRICAL CODES.
5. TEE-TAP INSIDE BUILDING IN JUNCTION BOX. USE TERMINAL BLOCKS.
6. FIRE ALARM FIELD WIRING SPECIFICATIONS FOR ADDITIONAL INSTALLATION REQUIREMENTS.
7. 120VAC 60Hz INPUT POWER FOR FIRE ALARM CONTROLS SHALL BE A DEDICATED, LOCKING BREAKER PROPERLY LABELED "SOURCE FROM LINE OF MAIN DISCONNECT" OR "EMERGENCY POWER".
8. ALL WIRING INCLUDING SHIELDS MUST BE DRY AND FREE OF SHORTS AND GROUNDS.
9. 120VAC IS NOT PERMITTED IN SAME CONDUIT WITH LOW VOLTAGE WIRING.
10. DO NOT APPLY POWER EXCEPT IN THE PRESENCE OF A FACTORY-TRAINED FIRE ALARM TECHNICAL REPRESENTATIVE.
11. THERE WILL BE NO CONDUIT ENTRY ALLOWED 18" OR LOWER ON THE SIDE PANELS OR THROUGH THE BOTTOM OF ALL CONTROL EQUIPMENT BACKBOXES.
12. ALL VISUAL ALARM IN EVERY ROOMS OR EXTERIOR WHERE OCCUR SHALL BE SYNCHRONIZED.
13. VISUAL DEVICE SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE THAT MEETS NFPA STROBE INTENSITY REQUIREMENTS WHICH VARIES WITH VIEWING CONDITIONS AND ROOM SIZES.
14. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER-TIGHT FITTINGS AND WIRES TO BE APPROVED FOR WET LOCATIONS.
15. AUDIBLE DEVICE(S) TO BE AT LEAST 15dBA ABOVE THE EQUIVALENT SOUND LEVEL BUT NOT LESS THAN 75dBA AT 10' OR MORE THAN 110dBA AT THE MINIMUM HEARING DISTANCE.
16. AUDIBLE DEVICE SHALL SOUND THE CALIFORNIA UNIFORM FIRE ALARM SIGNAL.
17. FINAL FIRE ALARM TEST SHALL BE MADE WITH THE DSA INSPECTOR OF RECORD (IOR). LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATA AND TIME OF FINAL FIRE ALARM TESTING AND SHALL ASSIST/WITNESS SUCH TESTING WHEN ABLE.
18. FIRE ALARM CONTRACTOR SHALL PROVIDE A COMPLETED AND SIGNED" CERTIFICATE OF COMPLETION" AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TESTS. (NFPA 72 SEC. 7.8.2 & 14.6.1).
19. PROVIDE TEMPORAL THREE DISTINCTIVE FIRE ALARM SOUND (CFC SEC. 907.5.2.1.3 NFPA 72 SEC. 18.4.2.1)
20. POWER SERVICE SHALL BE ON A DEDICATED BRANCH CIRCUIT WITH RED MARKING AND IDENTIFIED PER NFPA SEC 10.6.5.2.2 .
21. WIRING AND MATERIALS SHALL BE PER CEC/NEC ART. 760.
22. A DOCUMENTATION CABINET SHALL BE INSTALLED PROXIMAL TO THE FACU. (NFPA 72, 7.7.2.1)
23. ALL RECORD DOCUMENTATION SHALL BE STORED IN THE DOCUMENT CABINET. (NFPA 72, 7.7.2.2)
24. THE DOCUMENT CABINET SHALL BE PROMINENTLY LABELED SYSTEM RECORD DOCUMENT (NFPA 72, 7.7.2.4.)

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D.S.A. APPROVAL:
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APP. # 01 - 117371

AC_____FLS_____SS_____

DATE_____

PROJECT TITLE:

INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL

395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
5/4/2018	DSA SUBMITTAL

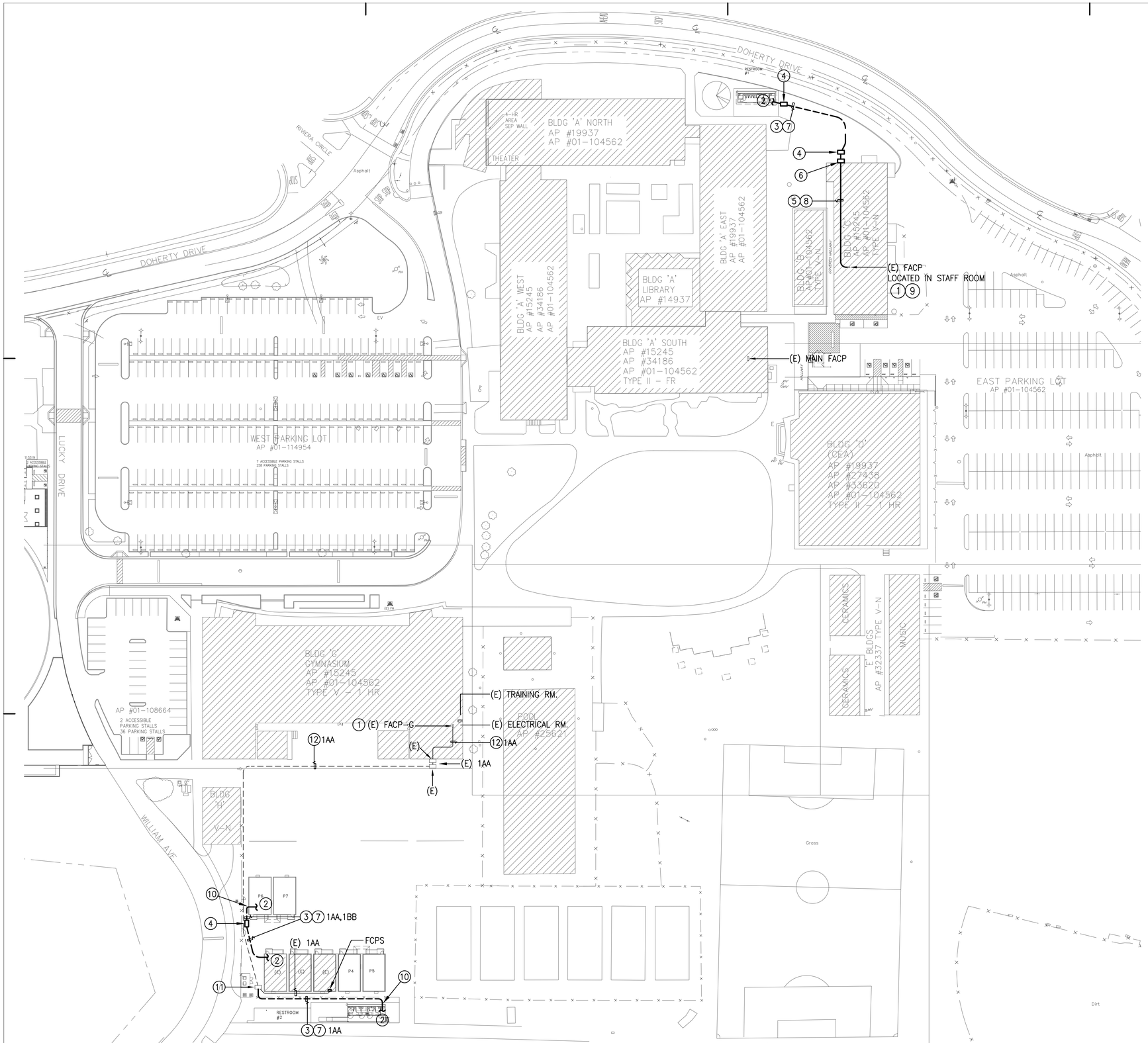
PHD ARCHITECTS JOB #
18-201

SCALE: NONE

DATE: 5/4/18

SHEET NAME & NUMBER:
FIRE ALARM COVER SHEET
FA0.1

FILE: M:\162-17-05 Redwood HS Portables\$PHASE 2\P2_FA01.dwg May 24, 2017 12:12 pm Scale: 1=1 by: TRANG
XREFS: 17-209 RHS X TTL24X36.dwg



1 FA1.1 FIRE ALARM SITE PLAN

SCALE: 1" = 50'-0"

SHEET NOTES:

1. REPROGRAM (E) FACP AFTER COMPLETION OF WORK IN PORTABLES AS REQUIRED.
2. SEE FA2.1 FOR CONTINUATION.
3. 1 1/4"C (FIRE ALARM). INSTALL CABLES AS INDICATED.
4. CONCRETE PULLBOX CHRISTY CAT #B1017 WITH 12" EXTENSION. COVER SHALL BE ENGRAVED TO READ "FIRE ALARM".
5. ROUTE CONDUIT ON THE ROOF. PROVIDE CONDUIT SUPPORT AT 8FT. INTERVAL MAXIMUM.
6. PROVIDE 10"x8"x6" NEMA 3R PULLBOX AND SECURE ON THE EXTERIOR WALL OF THE BUILDING. FIELD VERIFY EXACT MOUNTING HEIGHT.
7. TRENCH, BACKFILL, COMPACT AND PATCH TO MATCH (E).
8. 3/4"C (FIRE ALARM).
9. CONDUIT ROOF PENETRATION. SEE DWG. 3 & 4/ E3.1 FOR INSTALLATION DETAIL.
10. PROVIDE CONDUIT ELBOW WITH COVER AND GASKET.
11. INSTALL (N) CONDUIT INTO (E) PULLBOX.
12. (E) 1 1/2"C WITH FA WIRES. ADD FA WIRES AS INDICATED.

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Exp. 6/30/19
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STATE OF CALIFORNIA

D.S.A. APPROVAL:
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT

APP. # 01 - 117371

AC_____FLS_____SS_____

DATE_____

PROJECT TITLE:

INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL

395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
5/4/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB #
18-201

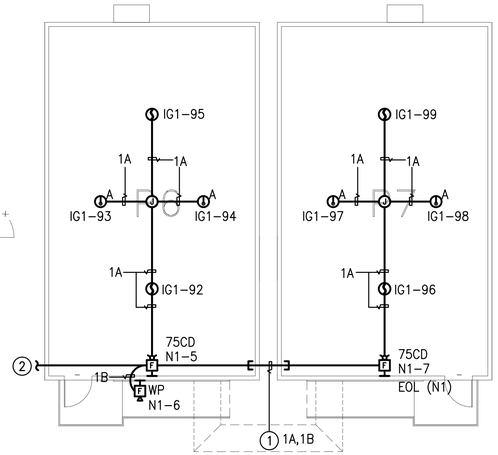
SCALE: AS NOTED

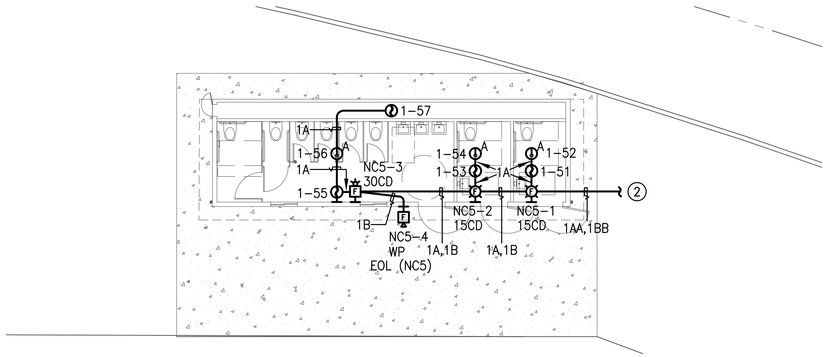
DATE: 5/4/18

SHEET NAME & NUMBER:
FIRE ALARM SITE PLAN

FA1.1

FILE: M:\162-17-05 Redwood HS Portables\05E11.dwg May 03, 2017 3:27 pm Scale: 1=1 by: DIEU
XREFS: A-SP_REDWOOD.dwg 17-209 RHS X TTL24X36.dwg



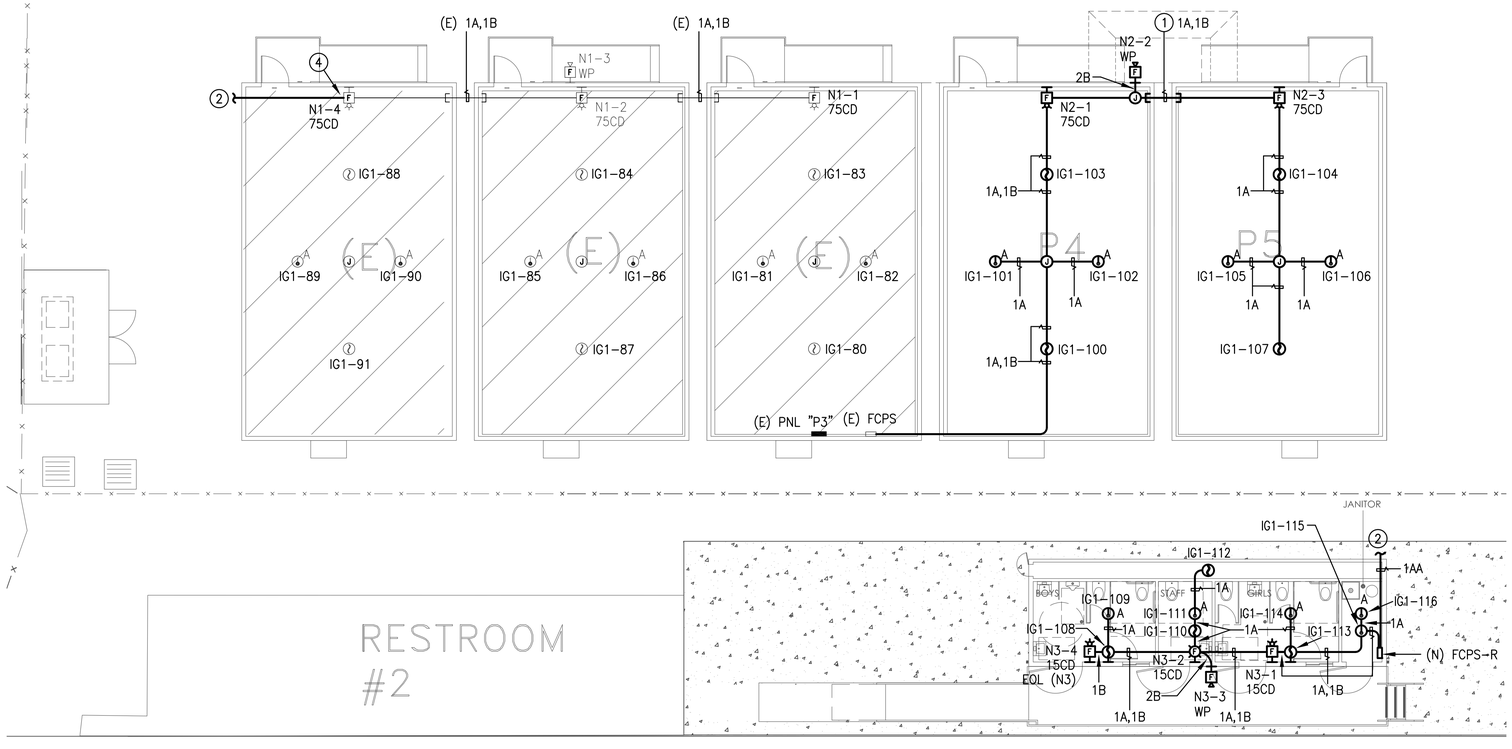


2 / FA2.1 FIRE ALARM PLAN ③

SCALE: 1/8"=1'-0" **RESTROOM #1**

SHEET NOTES:

1. PROVIDE FLEXIBLE LIQUID TIGHT CONDUIT IN BETWEEN PORTABLES. FLEX LOOP SHALL ALLOW FOR 4" OF MOVEMENT IN EITHER DIRECTIONS.
2. SEE SHEET FA1.1 FOR CONTINUATION.
3. THESE ADDED (N) RELOCATABLE CLASSROOM BUILDINGS ARE SHORT TERM USE AND INTENDED TO BE SITED FOR LESS THAN 3 YEARS. ALSO, THE RESTROOMS ARE DETACHED BUILDINGS USED FOR NON-INSTRUCTIONAL PURPOSES. THEREFORE, EMERGENCY VOICE/ ALARM COMMUNICATION SYSTEM IS NOT REQUIRED PER DSA IR F-1.
4. INSTALL (N) CONDUIT AND WIRES IN (E) DEVICE. TERMINATE (N) WIRES INTO (E) WIRES. REMOVE (E) EOL RESISTOR.



1 / FA2.1 FIRE ALARM PLAN ③

SCALE: 1/8"=1'-0" **CLASSRM & RESTROOM #2**

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395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

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5/4/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB # 18-201

SCALE: AS NOTED

DATE: 5/4/18

SHEET NAME & NUMBER:

FIRE ALARM PLAN

FA2.1

FILE: M:\162-17-05 Redwood HS Portables\$PHASE 2\P2_E21.dwg Jun 15, 2017 1:35 pm Scale: 1=1 by: CHRIS
XREFS: CLASSROOM PC 24X40.dwg 17-209 RHS X TTL24X36.dwg 17-209 RHS X SITE FLS.dwg

SLC DEVICE LABEL (DETECTOR)

IG1 – 1

- IG1: SIGNALING LINE CIRCUIT (LOOP) NUMBER
- 1: DEVICE NUMBER

NAC DEVICE LABEL

N1 – 1

- N1: NOTIFICATION APPLIANCE CIRCUIT NUMBER
- 1: DEVICE NUMBER

SLC DEVICE LABEL (MODULE)

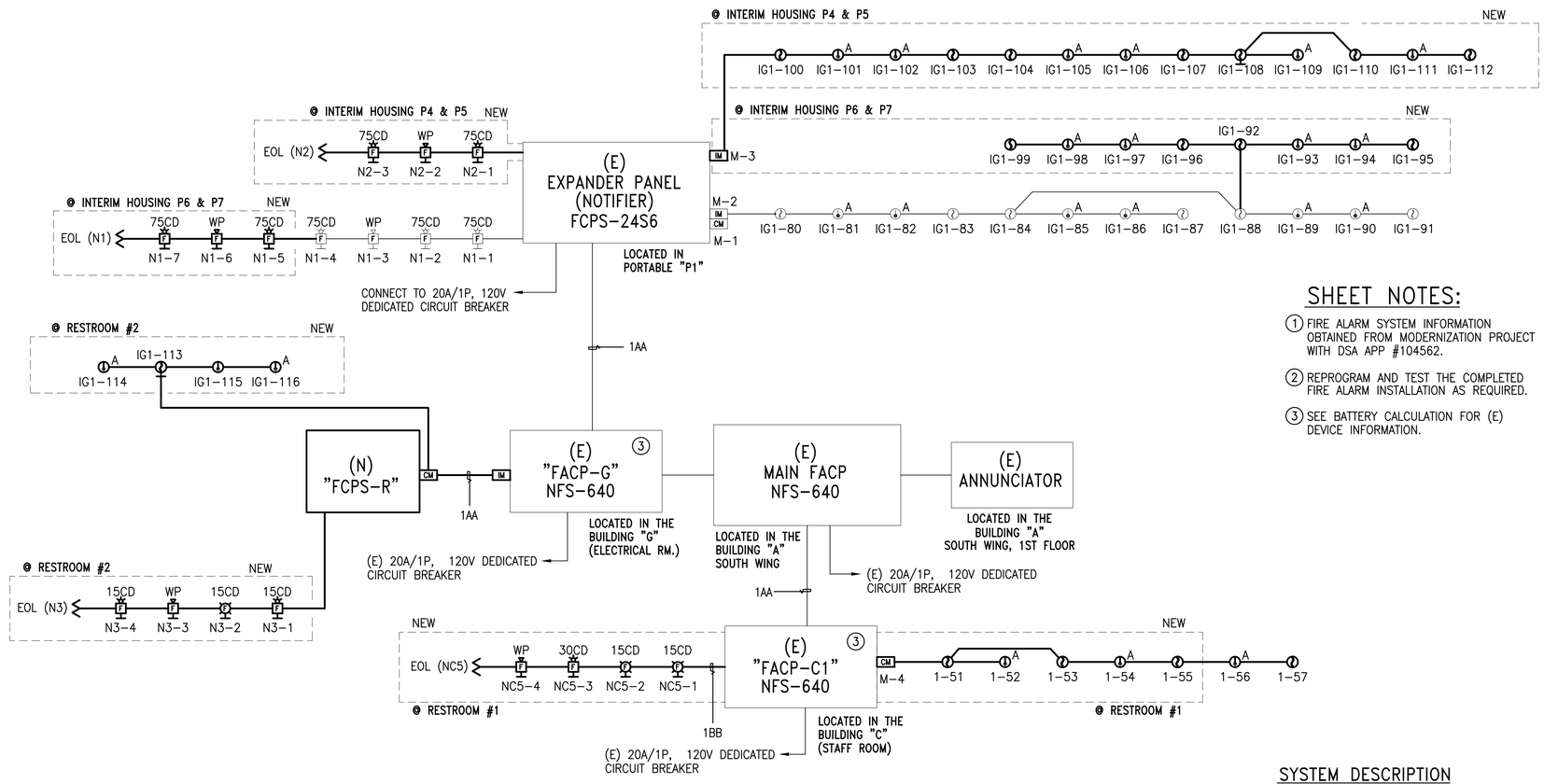
M – 1

- M: DEVICE TYPE
- 1: DEVICE NUMBER

CABLE DESIGNATIONS

1 A

- 1: CABLE QTY
- A: CABLE TYPE



1 FA3.1 FIRE ALARM RISER DIAGRAM ①②

SHEET NOTES:

1. FIRE ALARM SYSTEM INFORMATION OBTAINED FROM MODERNIZATION PROJECT WITH DSA APP #104562.
2. REPROGRAM AND TEST THE COMPLETED FIRE ALARM INSTALLATION AS REQUIRED.
3. SEE BATTERY CALCULATION FOR (E) DEVICE INFORMATION.

SYSTEM DESCRIPTION

THE FIRE ALARM SHALL BE ELECTRICALLY SUPERVISED AND MONITORED.
CLASS: B STYLE: Y
THE FIRE ALARM SYSTEM IS A COMPLETE AUTOMATIC AND ADDRESSABLE SYSTEM.

EQUIPMENT LIST

MANUFACTURER	MODEL	DESCRIPTION	CSFM NUMBER
–	(E) NFS–640	Fire Alarm Control Panel	DISCONTINUED
Notifier	FCPS–24S6	Fire Alarm Power Supply	7315–0028:225
Notifier	FCM–1	Control Module, Addressable	7300–0028:219
Notifier	FMM–101	Monitor Module, Addressable, Mini	7300–0028:219
Notifier	FST–851H	High Temperature Heat Detector	7270–0028:0196
Notifier	B710LP	Base, Detector, Addressable	7300–0028:0173
Notifier	FSP–851	Smoke Detector Head, Photoelectric, Analog	7272–0028:0206
Notifier	ISO–X	ISOLATOR MODULE	7300–0028:0261
Power Sonic	PS–1270	Battery, 12 Volt, 7.0 AH	
Wheelock	HS	Horn/Strobe, Non–Sync/Sync, "CD" denotes Candela	7125–0785:0168
Wheelock	AH–24WP–R	Horn, Weatherproof	7125–0785:0131
Wheelock	WBB–R	Back Box, Exterior	
West Penn	D990	Cable, 1 PR 16 AWG Twisted pair Type FPLP, Red/Black	7161–0859:101
West Penn	AQ225	Cable, 1 PR 16 AWG Twiste pair, Type FPL/PLTC	7161–0859:101
West Penn	994S	Cable, 1 PR 14 AWG Twisted pair Type FPLP, Red/Black	7161–0859:101
West Penn	AQ226	Cable, 1 PR 14 AWG Twiste pair, Type FPL/PLTC	7161–0859:101

FIRE ALARM WIRING LEGEND

SYMBOL	WIRE TYPE	USED ON
A	2–CONDUCTOR, #16 TWISTED PAIR UNSHIELDED (D990)	ADDRESSABLE ALARM INITIATING DEVICES: – SMOKE DETECTORS – INTERFACE MODULES – PULL STATION
B	2–CONDUCTOR, #14 AWG THWN SOLID (BLACK/RED) (994S)	AUDIO/VISUAL FROM NAC INDICATING DEVICES: – (SYNC HORN/STROBE CIRCUITS)
AA	2–CONDUCTOR, #16 TWISTED PAIR UNSHIELDED (AQ225)	ADDRESSABLE ALARM INITIATING DEVICES: (UNDERGROUND) – SMOKE DETECTORS – INTERFACE MODULES – PULL STATION
BB	2–CONDUCTOR, #14 AWG (AQ226)	AUDIO/VISUAL FROM NAC INDICATING DEVICES: – (SYNC HORN/STROBE CIRCUITS) (UNDERGROUND)
	2–CONDUCTOR, #14 AWG SOLID, THWN (GROUNDED WIRE)	120 VAC POWER WIRING TO: – F.A. CONTROL PANEL – POWER SUPPLY PANEL

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PROJECT TITLE:

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395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
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333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
5/4/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB #
18-201

SCALE: AS NOTED

DATE: 5/4/18

SHEET NAME & NUMBER:

FIRE ALARM RISER DIAGRAM, LEGEND AND EQUIPMENT LIST

FA3.1

FILE: M:\162–17–05 Redwood HS Portables\$PHASE 2\P2_FA21.dwg May 24, 2017 2:24 pm Scale: 1=1 by: TRANG
XREFS: CLASSROOM PC 24X40.dwg 17–209 RHS X TTL24X36.dwg

(E) FACP-G Battery Calculation Work Sheet

						Standby Current (A)		Alarm Current (A)	
NFS-640 (2 Loops)						0.032	A	0.032	A
		x	Standby	0.040	A	0.040	A		
UDACT, Alarm Communicator	1	x	Alarm	0.100	A			0.100	A
		x	Standby	0.100	A	0.100	A		
ACS Annunciator LCD-80	1	x	Alarm	0.100	A			0.100	A
		x	Standby	0.100	A	0.000	A		
LEM-320 Expander Module	0	x	Alarm	0.100	A			0.000	A
Auxiliary Devices Catalog #	**Qty**								
		x	Standby	0.00003	A	0.001	A		
FSP-851 Addressable smoke detector	44	x	Alarm	0.00003	A			0.001	A
		x	Standby	0.0003	A	0.002	A		
(N) FSP-851 Addressable Smoke Detector	**6**	x	Alarm	0.0065	A			0.039	A
		x	Standby	0.00085	A	0.010	A		
FST-851 Addressable Heat detector	12	x	Alarm	0.00085	A			0.010	A
		x	Standby	0.0003	A	0.002	A		
(N) FST-851 Addressable Heat Detector	**6**	x	Alarm	0.0065	A			0.039	A
		x	Standby	0.0003	A	0.000	A		
FCM-1 Control module	1	x	Alarm	0.005	A			0.005	A
		x	Standby	0.00018	A	0.001	A		
NBGL-12LX Pull Station	7	x	Alarm	0.00023	A			0.002	A
		x	Standby	0.00023	A	0.000	A		
ISO-X Isolator module	2	x	Alarm	0.005	A			0.010	A
		x	Standby	0.00023	A	0.000	A		
(N) ISO-X Isolator module	**1**	x	Alarm	0.005	A			0.005	A
Notification Devices Catalog #	**Qty**								
15CD Strobe	11	x	Alarm	0.050	A			0.550	A
30CD Strobe	0	x	Alarm	0.081	A			0.000	A
75CD Strobe	0	x	Alarm	0.133	A			0.000	A
110CD Strobe	0	x	Alarm	0.161	A			0.000	A
15CD Horn/Strobe	5	x	Alarm	0.072	A			0.360	A
30CD Horn/Strobe	2	x	Alarm	0.097	A			0.194	A
75CD Horn/Strobe	3	x	Alarm	0.155	A			0.465	A
110CD Horn/Strobe	12	x	Alarm	0.185	A			2.220	A
Weatherproof Horn	12	x	Alarm	0.027	A			0.324	A
DSM-12/24	0	x	Alarm	0.038	A			0.000	A
		x	Alarm		A			0.000	A
		x	Alarm		A				A
Total Standby Current						**0.189**	**A**		
Total Alarm Current								**4.456**	**A**
Hours of Standby required by NFPA 72 Standards, (4,24 or 60)		**X**	**24**	HOURS					
Total A.H required for standby:								**4.54**	**AH**
5 Minute of Alarm operation per NFPA 72 Standards		**X**	5min.	(0.0833 Hours)					
Total A.H required for Alarm:								**0.371**	**AH**
Add total standby current and alarm current:								**4.92**	**AH**
De-rating factor (20% extra insurance to meet desired performance					**X**			1.25%	
Total A.H required for battery back-up								**6.14**	**AH**

Notes:

1 An additional multiplier is included to compensate for the higher discharge rate in alarm. Battery capacity decreases w ith age

2 A 4-year old battery can lose up to 50% of its capacity. Compensations should be made to allow for this loss.

3 The Standby current + Alarm current must never exceed 4.66 Amps.

4 **(E) Supplied battery set is (2) 7.0AH**

(E) FCPS-24S6 Battery Calculation Work Sheet (in BLDG "G")

						Standby Current (A)		Alarm Current (A)	
FCPS-24S6						0.065	A	0.145	A
Auxiliary Devices									
Catalog Number	**Qty**								
		x	Standby		A	0.000	A		
Door Holders									
Catalog Number	**Qty**								
		x	Standby		A	0.000	A		
Notification Appliances									
Catalog Number	**Qty**								
(N) ST-15cd Strobe	**1**	x	Alarm	0.041	A			0.041	A
ST-30cd Strobe	0	x	Alarm	0.065	A			0.000	A
ST-75cd Strobe	0	x	Alarm	0.116	A			0.000	A
ST-110cd Strobe	0	x	Alarm	0.155	A			0.000	A
(N) HS-15cd Horn/Strobe	**2**	x	Alarm	0.082	A			0.164	A
HS-30cd Horn/Strobe	0	x	Alarm	0.102	A			0.000	A
HS-75cd Horn/Strobe	3	x	Alarm	0.148	A			0.444	A
(N) HS-75cd Horn/Strobe	**4**	x	Alarm	0.148	A			0.592	A
HS-110cd Horn/Strobe	0	x	Alarm	0.197	A			0.000	A
AH-24WP Weatherproof Horn	1	x	Alarm	0.08	A			0.080	A
(N) AH-24WP Weatherproof Horn	**3**	x	Alarm	0.08	A			0.240	A
Total Standby Current						**0.07**	**A**		
Total Alarm Current								**1.114**	**A**
Hours of Standby required by NFPA 72 Standards, (4,24 or 60)		**X**	**24**	HOURS					
Total A.H required for standby:								**1.56**	**AH**
5 Minute of Alarm operation per NFPA 72 Standards		**X**	5min.	(0.0833 Hours)					
Total A.H required for Alarm:								**0.09**	**AH**
Add total standby current and alarm current:								1.65	**AH**
De-rating factor (20% extra insurance to meet desired performance					**X**			1.20%	
Total A.H required for battery back-up								**2.07**	**AH**

Notes:

1 The alarm current must never exceed 6.14 Amps.

VOLTAGE DROP (VD) CALCULATION

PROJ. NAME------- REDWOOD HS
SIG CKT #-------- N1

DEVICE #	1st	2nd	3rd	4th	5th	6th	7th
GAUGE WIRE	14	14	14	14	14	14	14
DISTANCE (FT)	60	35	5	40	75	5	35
AMPS @ DEVICE	0.148	0.148	0.080	0.148	0.148	0.080	0.148
AMPS DEVELOPED	0.900	0.752	0.604	0.524	0.376	0.228	0.148
VOLT. DROP	0.33156	0.16160	0.01854	0.12869	0.17315	0.00700	0.03181

TOTAL CKT V.D.= 0.51171
CKT VOLTAGE= 20.4
VOLT. @ LAST DEVICE 19.88829
%VOLTAGE DROP= 2.50837

VOLTAGE DROP (VD) CALCULATION

PROJ. NAME------- REDWOOD HS
SIG CKT #-------- N2

DEVICE #	1st	2nd	3rd
GAUGE WIRE	14	14	14
DISTANCE (FT)	70	5	35
AMPS @ DEVICE	0.148	0.080	0.148
AMPS DEVELOPED	0.376	0.228	0.148
VOLT. DROP	0.16160	0.00700	0.03181

TOTAL CKT V.D.= 0.20041
CKT VOLTAGE= 20.4
VOLT. @ LAST DEVICE 20.19959
% VOLTAGE DROP= 0.98240

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PHD ARCHITECTS JOB #
18-201

SCALE: NONE

DATE: 5/4/18

SHEET NAME & NUMBER:

FIRE ALARM VOLTAGE DROP AND BATTERY CALCULATION

FA4.1

FILE: M:\162-17-05 Redwood HS Portables\$PHASE 2\P2 FA31.dwg May 24, 2017 6:49 pm Scale: 1=1 by: TRANG
XREFS: 17-209 RHS X TTL24X36.dwg

(E) FACP-C1 Battery Calculation Work Sheet

						Standby Current (A)		Alarm Current (A)	
NFS-640 (2 Loops)						0.032	A	0.032	A
UDACT, Alarm Communicator	1	x	Standby	0.040	A	0.040	A		
		x	Alarm	0.100	A			0.100	A
ACS Annunciator LCD-80	1	x	Standby	0.100	A	0.100	A		
		x	Alarm	0.100	A			0.100	A
LEM-320 Expander Module	0	x	Standby	0.100	A	0.000	A		
		x	Alarm	0.100	A			0.000	A
Auxiliary Devices Catalog #	**Qty**								
FSP-851 Addressable smoke detector	34	x	Standby	0.00003	A	0.001	A		
		x	Alarm	0.00003	A			0.001	A
(N) FSP-851 Addressable Smoke Detector	**3**	x	Standby	0.0003	A	0.001	A		
		x	Alarm	0.0065	A			0.020	A
FST-851 Addressable Heat detector	8	x	Standby	0.00085	A	0.007	A		
		x	Alarm	0.00085	A			0.007	A
(N) FST-851 Addressable Heat Detector	**3**	x	Standby	0.0003	A	0.001	A		
		x	Alarm	0.0065	A			0.020	A
NBGL-12LX Pull Station	0	x	Standby	0.00018	A	0.000	A		
		x	Alarm	0.00023	A			0.000	A
ISO-X Isolator module	0	x	Standby	0.00023	A	0.000	A		
		x	Alarm	0.005	A			0.000	A
		x	Standby	0	A				
		x	Alarm	0	A				
Notification Devices Catalog #	**Qty**								
15CD Strobe	5	x	Alarm	0.050	A			0.250	A
(N) 15CD Strobe	**2**	x	Alarm	**0.041**	**A**			**0.082**	**A**
30CD Strobe	1	x	Alarm	0.081	A			0.081	A
75CD Strobe	0	x	Alarm	0.133	A			0.000	A
110CD Strobe	0	x	Alarm	0.161	A			0.000	A
15CD Horn/Strobe	2	x	Alarm	0.072	A			0.144	A
30CD Horn/Strobe	0	x	Alarm	0.097	A			0.000	A
(N) 30CD Horn/Strobe	**1**	x	Alarm	**0.102**	A			0.102	A
75CD Horn/Strobe	1	x	Alarm	0.155	A			0.155	A
110CD Horn/Strobe	0	x	Alarm	0.185	A			0.000	A
Weatherproof Horn	8	x	Alarm	0.027	A			0.216	A
(N) Weatherproof Horn	**1**	x	Alarm	**0.080**	A			0.080	A
DSM-12/24	0	x	Alarm	0.038	A			0.000	A
		x	Alarm		A			0.000	A
		x	Alarm		A				A
Total Standby Current						**0.182**	**A**		
Total Alarm Current								**1.389**	**A**
Hours of Standby required by NFPA 72 Standards, (4,24 or 60)				**X**	**24**	HOURS			
Total A.H required for standby:								**4.36**	**AH**
5 Minute of Alarm operation per NFPA 72 Standards				**X**	5min.	(0.0833 Hours)			
Total A.H required for Alarm:								**0.116**	**AH**
Add total standby current and alarm current:								**4.47**	**AH**
De-rating factor (20% extra insurance to meet desired performance					**X**			1.25%	
Total A.H required for battery back-up								**5.59**	**AH**

Notes:

1 An additional multiplier is included to compensate for the higher discharge rate in alarm. Battery capacity decreases w ith age

VOLTAGE DROP (VD) CALCULATION

PROJ. NAME------- REDWOOD HS
SIG CKT #-------- NC5

DEVICE #	1st	2nd	3rd	4th
GAUGE WIRE	14	14	14	14
DISTANCE (FT)	150	15	20	15
AMPS @ DEVICE	0.041	0.041	0.102	0.080
AMPS DEVELOPED	0.264	0.223	0.182	0.080
VOLT. DROP	0.24314	0.02054	0.02235	0.00737

TOTAL CKT V.D.= 0.28603
CKT VOLTAGE= 20.4
VOLT. @ LAST DEVICE 20.11397
%VOLTAGE DROP= 1.40212

VOLTAGE DROP (VD) CALCULATION

PROJ. NAME------- REDWOOD HS
SIG CKT #-------- N3

DEVICE #	1st	2nd	3rd	4th
GAUGE WIRE	14	14	14	14
DISTANCE (FT)	25	15	15	25
AMPS @ DEVICE	0.041	0.041	0.080	0.041
AMPS DEVELOPED	0.203	0.162	0.121	0.041
VOLT. DROP	0.03116	0.01492	0.01114	0.00629

TOTAL CKT V.D.= 0.05722
CKT VOLTAGE= 20.4
VOLT. @ LAST DEVICE 20.34278
% VOLTAGE DROP= 0.28051

(N) FCPS-R Battery Calculation Work Sheet

						Standby Current (A)		Alarm Current (A)	
FCPS-R						0.065	A	0.145	A
Auxiliary Devices									
Catalog Number	**Qty**								
		x	Standby		A	0.000	A		
Door Holders									
Catalog Number	**Qty**								
		x	Standby		A	0.000	A		
Notification Appliances									
Catalog Number	**Qty**								
ST-15cd Strobe	**1**	x	Alarm	0.041	A			0.041	A
ST-30cd Strobe	0	x	Alarm	0.065	A			0.000	A
ST-75cd Strobe	0	x	Alarm	0.116	A			0.000	A
ST-110cd Strobe	0	x	Alarm	0.155	A			0.000	A
HS-15cd Horn/Strobe	2	x	Alarm	0.082	A			0.164	A
HS-30cd Horn/Strobe	**0**	x	Alarm	0.102	A			0.000	A
HS-75cd Horn/Strobe	0	x	Alarm	0.148	A			0.000	A
HS-110cd Horn/Strobe	0	x	Alarm	0.197	A			0.000	A
AH-24WP Weatherproof Horn	0	x	Alarm	0.08	A			0.000	A
AH-24WP Weatherproof Horn	**1**	x	Alarm	0.08	A			0.080	A
Total Standby Current						**0.07**	**A**		
Total Alarm Current								**0.430**	**A**
Hours of Standby required by NFPA 72 Standards, (4,24 or 60)				**X**	**24**	HOURS			
Total A.H required for standby:								**1.56**	**AH**
5 Minute of Alarm operation per NFPA 72 Standards				**X**	5min.	(0.0833 Hours)			
Total A.H required for Alarm:								**0.04**	**AH**
Add total standby current and alarm current:								1.60	**AH**
De-rating factor (20% extra insurance to meet desired performance					**X**			1.20%	
Total A.H required for battery back-up								**1.99**	**AH**

Notes:

1 The alarm current must never exceed 6.14 Amps.
2 Supplied Battery Set 7.0AH

PHd ARCHITECTS, INC.
Architecture • Planning • Interiors
3211 Ronino Way
Lafayette, California 94549
925.949.8333 tel.
925.949.8666 fax

PROJECT TEAM:

CIVIL ENGINEER
CLARK CIVIL ENGINEERING
12700 HIGHWAY ONE,
POINT REYES STATION, CA 94956
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FAX (510) 372-0259

ELECTRICAL ENGINEER
ALLIANCE ENGINEERING CONSULTING, INC.
PATRICK HENRY DRIVE, BUILDING 10
SANTA CLARA, CA 95054
TEL (408) 970-9888
FAX (408) 970-9316
PROJECT NO. 162-18-01

REGISTERED PROFESSIONAL ENGINEER
KENNETH S. NEAL
No. 11537
Exp. 6/30/19
ELECT.
STATE OF CALIFORNIA

D.S.A. APPROVAL:
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT

APP. # 01 - 117371

AC_____FLS_____SS_____

DATE_____

PROJECT TITLE:

INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL

395 DOHERTY DRIVE, LARKSPUR, CA 94939

TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
5/4/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB #
18-201

SCALE: NONE

DATE: 5/4/18

SHEET NAME & NUMBER:

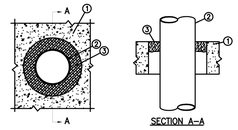
FIRE ALARM VOLTAGE DROP AND BATTERY CALCULATION

FA4.2

FILE: M:\162-17-05 Redwood HS Portables\$PHASE 2\P2 FA31.dwg May 24, 2017 6:49 pm Scale: 1=1 by: TRANG
XREFS: 17-209 RHS X TTL24X36.dwg

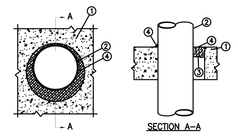
THROUGH–PENETRATION FIRESTOP SYSTEM DETAILS

(Formerly System No. 202)
F RATING – 3 HOUR
T RATING – 0 HOUR



1. FLOOR OR WALL ASSEMBLY – MIN 4–1/2 IN. THICK LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS. MAX THROUGH OPENING SIZE IS 12.4 SQ. IN.
   SEE CONCRETE BLOCKS (CAZT) CATEGORY IN FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
2. PIPE OR CONDUIT – NOM. 10 IN. DIA. (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE, NOM 6 IN. DIA. (OR SMALLER) RIGID STEEL CONDUIT, NOM 4 IN. DIA. (OR SMALLER) STEEL EMT OR NOM 3 IN. DIA. (OR SMALLER). TYPE L (OR HEAVIER) COPPER PIPE. MAX ONE PIPE OR CONDUIT PER THROUGH OPENING. MAX ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF OPENING IS 3/4 IN. MIN ANULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF OPENING IS 0 IN. (POINT CONTACT). PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
3. FILL VOID OR CAVITY MATERIALS – PUTTY–MOLDABLE PUTTY MATERIAL KNEEDED BY HAND AND APPLIED TO FILL ANNULAR SPACE TO A MIN DEPTH OF 1 IN FLUSH WITH TOP SURFACE OF FLOOR. IN WALL ASSEMBLIES, REQUIRED PUTTTY THICKNESS TO BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL.
   MINNESOTA MINING & MFG. CO.– MPS–2+.
   BEARING THE UL CLASSIFICATION MARKING.

SYSTEM NO. CAJ1044
(Formerly System No. 319)
T RATING – 0 HR
L RATING AT AMBIENT – 2 CFM/SQ FT (SEE ITEM 4)
L RATING AT 400 F – LESS THAN 1 CFM/SQ FT (SEE ITEM 4)



1. FLOOR WALL ASSEMBLY–LIGHTWEIGHT OR NORMAL WEIGHT (100–150 PCF) CONCRETE. EXCEPT AS NOTED IN TABLE UNDER ITEM 4, MIN THICKNESS OF SOLID CONCRETE FLOOR OR WALL ASSEMBLY IS 4–1/2 IN. FLOOR MAY ALSO BE CONSTRUCTED OF ANY MIN 6 IN. THICK UL CLASSIFIED HOLLOW–CORE. PRECOAT CONCRETE UNITS. WHEN FLOOR IS CONSTRUCTED OF HOLLOW–CORE PRECOAT CONCETE UNITS, PACKING MATERIALS (ITEM 3) AND CAULK FILL MATERIAL (ITEM 4) TO BE INSTALLED SYMETRYCALLY ON BOTH SIDES OF THE FLOOR, FLUSH WITH FLOOR SURFACE. WALL ASSEMBLY MAY ALSO BE CONSTRUCTED OF CLASSIFIED CONCRETE BLOCKS. MAX DIA. OF OPENING IS 32 IN.
   SEE CONCTRETE BLOCKS (CAZT) AND PRECAST CONCRETE UNITS (CFTV) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURER

1A. STEEL SLEVE – (OPTIONAL NOT SHOWN) NOM 16 IN. (OR SMALLER) SCHEDULE 10 (ORHEAVIER) STEEL SLEEVE CAST OR GROUTED INTO FLOOR OR WALL ASSEMBLY. SLEEVE MAY EXTEND A MAX OF 2 IN. ABOVE TOP FLOOR OR BEYOND EITHER SURFACE OF WALL.

2. PIPE OR CONDUIT – NOM 30 IN.DIA. (OR SMALLER) CAST IRON OR SCHEDULE 10 (OR HEAVIER) STEEL PIPE, NOM 6 IN. DIA. (OR SMALLER) STEEL CONDUIT, NOM 3 IN. DIA. (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBE OR NOM 4 IN. DIA. (OR SMALLER) STEEL ELECTRICAL METALIC TUBING. MAX ANNU;AR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING NOT TO EXCEED 2 IM. MIN ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING IS 0 IN. (POINT CONTACT). PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDE OF FLOOR OR WALL ASSEMBLY.

3. PACKING MATERIAL – POLYETHYLENE BACKER ROD OR NOM 1 IN. THICKNESS OF THIGHTLY–PACKRD MINERAL WOOL BATT OR GLASS FIBER INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OF FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4).

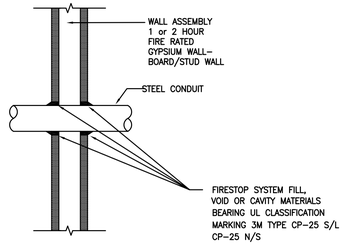
4. FILL, VOID OR CAVITY MATERIAL – CAULK – APPLIED TO FILL THE ANNULAR SPACE FLUSH WITH TOP SURFACE OF FLOOR. IN WALL ASSEMBLIES, REQUIRED CAULK THICKNESS TO BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL, FLUSH WITH WALL SURFACE. THE HOURLY F RATING AND THE MIN REQUIRED CAULK THICKNESS ARE DEPENDENT UPON A NUMBER OF PARAMETERS, AS SHOWN ON THE FOLLOWING TABLE.

MIN FLOOR OR WALL THKNS, IN	NOM PIPE TUBE OR CONDUIT DIA. IN.	MAX ANNULAR SPACE, IN	MAX CAULK THKNS, IN	F RATING, HR
2–1/2	1/2–12	1–3/8	1/2	2
2–1/2	1/2–12	2–7/8	1	2
4–1/2	1/2–6	1–3/8	1/4(a)	2
4–1/2	1/2–12	1–1/4	1/2	3
4–1/2	1/2–20	2	1	3
4–1/2	22–30	2	2	3
5–1/2	1/2–6	1–3/8	1(b)	4

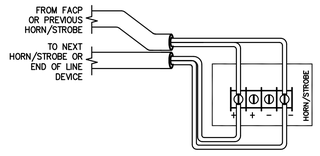
(a) MIN 2 IN THICKNESS OF MINERAL–WOOL BATT INSULATION REQUIRED IN ANNULAR SPACE.
(b) MIN 1 IN. THICKNESS OF MINERAL–WOOL BATT INSULATION REQUIRED IN ANNULAR SPACE ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. MIN 1IN. THICKNESS OF CAULK TO BE INSTALLED FLUSH WITH EACH SURFACE FLOOR OR WALL ASSEMBLY.

MINNESOTA MINING & MANUKACTURING CO – TYPES CP–25 WB, CP–25 WB+.
(NOTE: L RATING AND OR USE OF OPTIONAL SLEEVE APPLY ONLY WHEN TYPE CP–25WB+ CAULK IS USED).

SYSTEM NO. WL1001
(Formerly System No. 147)
F RATING – 1 & 2 HOUR
T RATING – 0, 1, 1–1/2 & 2 HOUR



1. SEAL ALL PENETRATIONS IN ACCORDANCE WITH APPLICABLE CODES TO PRESERVE ORIGINAL FIRE HOUR RESISTANCE OF WALLS, FLOORS OR CEILINGS. USE UL DIRECTOY ASSEMBLY NOS. 49 & 328, AS APPLICABLE FOR ALL FIRE WALL PENETRATIONS.
2. AT FIRE SEPARATION WALLS, WRAP CONDUIT WITH 3M CONDUIT WRAP F3–195 TO WITHIN 1/4" OF OPENING; FILL THE GAP AND COVER EDGE OF WRAP WITH 3M–CP25 CAULK AND/OR #303 PUTTY.

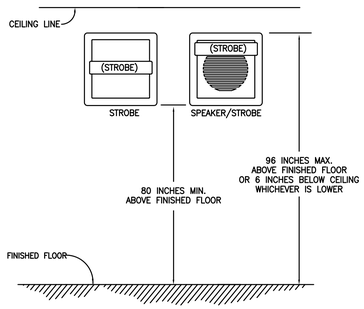


HORN/STROBE CIRCUIT, 24VDC

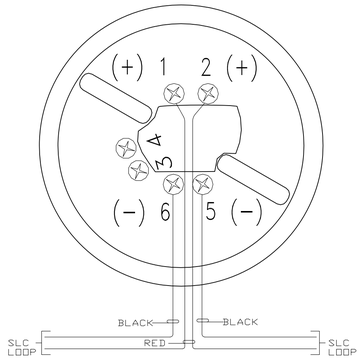
NOTE:

1. STROBE CIRCUIT COMING FROM THE NAC USE: 24K, END OF LINE DEVICE.

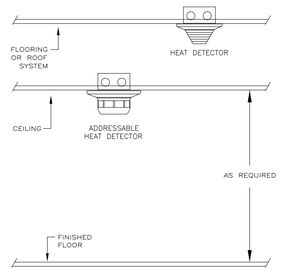
HORN/STROBE, STROBE & HORN DETAILS



TYPICAL MOUNTING ELEVATION DETAIL OF STROBE & HORN/STROBE



DETECTOR BASE



ADDRESABLE & CONVENTIONAL DETECTORS MOUNTING DETAIL

MEP COMPONENT ANCHORAGE NOTES

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENT PRESCRIBED IN THE 2016 CBC, SECTION 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7–10 CHAPTER 13, 26 AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER
3. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT THE ATTACHMENT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

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.

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:

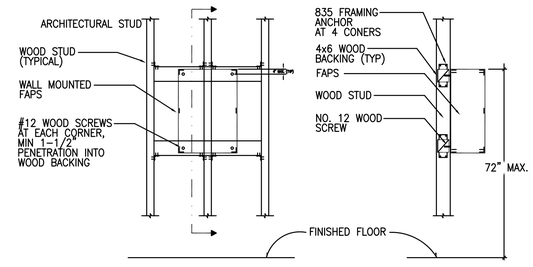
PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENT PRESCRIBED IN ASCE 7–10 SECTION 13.3 AS DEFINED IN ASCE 7–10 SECTION 13.6.5.6, 13.6.7, 13.6.8 AND 2016 CBC, SECTIONS 1616A.1.23, 1616A.1.24, 1616A.1.25 AND 1616A.1.26.
THE METHOD OF SHOWING BRACING AND ATTACHMENT 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., SMACNA OR OSHPD OPM), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS.
MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

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

MP☐MD☐PP☐E☒
OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE–APPROVED (OPM#); (I.E. OPM # 0043–13 MASON INDUSTRIES INC., AND OPM # 0203–13 M.W. SAUSSE & CO. INC.)

MP☐MD☐PP☐
OPTION 3: SHALL COMPLY WITH THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION (2009), INCLUDING ANY ADDENDA. FASTENERS AND OTHER ATTACHMENTS NOT SPECIFICALLY IDENTIFIED IN THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION, ARE DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS. THE DETAILS SHALL ACCOUNT FOR THE APPLICABLE SEISMIC HAZARD LEVEL AND CONNECTION CONNECTION LEVEL FOR THE PROJECT AND CONDITIONS.

WOOD BACKING GYPSUM BOARD WALL
FOR FAPS MOUNTING



TYPICAL MOUNTING OF EQUIPMENT
WEIGHING OVER 20 LBS.
(120 LBS MAXIMUM)

FAPS MOUNTING DETAIL

PHD ARCHITECTS, INC.
Architecture • Planning • Interiors
3211 Ronino Way
Lafayette, California 94549
925.949.8333 tel.
925.949.8666 fax

PROJECT TEAM:

CIVIL ENGINEER
CLARK CIVIL ENGINEERING
12700 HIGHWAY ONE,
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PATRICK HENRY DRIVE, BUILDING 10
SANTA CLARA, CA 95054
TEL (408) 970–9888
FAX (408) 970–9316
PROJECT NO. 162–18–01

REGISTERED PROFESSIONAL ENGINEER
KENNETH S. NEAL
No. 11537
Exp. 6/30/19
ELECT.
STATE OF CALIFORNIA

D.S.A. APPROVAL:
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. # 01 - 117371
AC_____FLS_____SS_____
DATE_____

PROJECT TITLE:
INTERIM HOUSING & NEW ACCESSIBLE MODULAR RESTROOMS AT REDWOOD HIGH SCHOOL
395 DOHERTY DRIVE, LARKSPUR, CA 94939
TAMALPAIS UNION HIGH SCHOOL DISTRICT
MAINTENANCE & OPERATIONS
333 DOHERTY DR. LARKSPUR, CA 94939

REVISIONS:

date	description
5/4/2018	DSA SUBMITTAL

PHD ARCHITECTS JOB #
18-201

SCALE: NONE
DATE: 5/4/18

SHEET NAME & NUMBER:
FIRE ALARM DETAILS
FA5.1

FILE: M:\162–17–05 Redwood HS Portables\$PHASE 2\P2_FA41.dwg Jun 15, 2017 5:24 pm Scale: 1=1 by: CHRIS
XREFS: 17–209 RHS X TTL24X36.dwg

ENVIROPLEX, INC.

STEEL ORDINARY MOMENT RESISTING FRAME MODULAR BUILDING (2) 12'x40'(480 S.F. E.A.)

REDWOOD HIGH SCHOOL – 395 DOHERTY DRIVE, LARKSPUR, CA 94939
SN.# 23272 & 23273
PC REF: 02–113910

SHEET INDEX

PC REFERENCE FOR THIS SITE SPECIFIC PROJECT IS 02-113910

A0 – COVER SHEET, BUILDING CODES & CBC DATA, SHEET INDEX

A1A – (RESTROOM #1) GIRLS, STAFF RESTROOM FLOOR PLAN, INTERIOR & EXTERIOR ELEVATIONS, MATERIAL SPECIFICATIONS, & NOTES
A1B – (RESTROOM #2) BOYS, STAFF, GIRLS RESTROOM & JANITOR FLOOR PLAN, INT. & EXT. ELEVATIONS,

A2 – REFLECTED CEILING PLANS & CEILING ATTACHMENT DETAILS
A2A – REFLECTED CEILING PLANS

AGB – GREEN BUILDING STANDARDS

EN1 – ENERGY COMPLIANCE UNCONDITIONED RESTROOM
EN1.1 – ENERGY COMPLIANCE UNCONDITIONED RESTROOM
EN1.2 – ENERGY COMPLIANCE UNCONDITIONED RESTROOM

A3 – ELECTRICAL POWER PLAN, SIGNAL PLAN, LIGHTING PLAN, DETAILS, ELECTRICAL NOTES
A3A – ELECTRICAL POWER PLAN, SIGNAL PLAN, LIGHTING PLAN

A4A – BI–PITCHED ROOF SECTIONS AND DETAILS 2x4 EXTERIOR WALLS (NON–RATED)
A4H – INTERIOR WALL CONNECTION DETAILS

A5 – MISCELLANEOUS DETAILS

S1CA – (RESTROOM #1) CONCRETE FOUNDATION PLAN, FOOTING DETAILS & NOTES (WOOD FLOOR)
S1CB – (RESTROOM #2) CONCRETE FOUNDATION PLAN, FOOTING DETAILS & NOTES (WOOD FLOOR)
S1C.1 – ALTERNATE FOOTING DETAILS
S1C.2 – MISCELLANEOUS FOOTING DETAILS

S2 – BI–PITCH ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES

S3FA – FASTENING SCHEDULE & NOTES
S3 – BI–PITCHED ROOF LONGITUDINAL BUILDING SECTION, WALL FRAMING ELEV., END FRAME ELEV., NAILING SCHEDULE

S4 – STRUCTURAL CONNECTION DETAILS
S4.1 – ALTERNATE STRUCTURAL DETAILS
S4.2 – ALTERNATE STRUCTURAL DETAILS

S5R – ACCESSIBLE RAMP & PLATFORM DETAILS
S5S – STAIR DETAILS
S5R.1 – PLATFORM DETAILS (PLATFORM OVER 18" HEIGHT)

INCLUDE IN THIS PACKAGE DSA PRE-CHECK DRAWINGS 12'X40' MODULAR BLDG DSA # 02-113910 AS COMPARISON SET FOR DSA REFERENCE

TEST & INSPECTION GUIDELINE

TYPE OF MODULAR STEEL MOMENT FRAME BUILDING PROJECT (X–INDICATES TEST OR INSPECTION TO BE DONE)

TEST and INSPECTIONS (as listed on Form DSA–103)

MATERIAL TYPE		DSA 103 ITEM #	DESCRIPTION	STOCKPILE: WOOD FLOOR ONLY	STOCKPILE: CONCRETE FLOORS	CONSTRUCTION OF (diaphragm material–foundation material): PLYWOOD FLOOR ONLY -WOOD FOUNDATION	CONSTRUCTION OF: PLYWOOD FLOOR CONCRETE FOUNDATION	CONSTRUCTION OF: CONCRETE FLOOR - CONCRETE FOUNDATION	RELOCATION OF CERTIFIED BUILDING: WOOD FOUNDATION	RELOCATION OF CERTIFIED BUILDING: CONCRETE FOUNDATION
SOILS Verify the necessity of the Tests and/or Inspections with the requirements of the application that this PC is part of.	GENERAL	1	-Site has been prepared properly prior to fill placement/excavations -Fdn excavations extended to proper depth and material -Materials below footing are adequate				X	X		X
	COMPACTED FILL	2a	Perform qualification testing of materials				X	X		X
		2b	Proper fill materials, lift thickness placement and compaction during placement.				X	X		X
		2c	Compaction test				X	X		X
CONCRETE	LT WT FILL OVER METAL DECK	7a	Verify required design mix		X			X		
		7c	Perform slump and (where required) air content test; determine temperature of concrete		X			X		
		7d	Test concrete - compression tests		X			X		
		7e	inspect batching of concrete -		X			X		
		12	Waiver of Batch Plant Inspection See Note 1 for conditions and requirements.		X			X		
		7f	Inspect placement of concrete, reinforcing and embedded items over steel deck - by RBIP		X			X		
	FOUNDATION	7a	Verify required Design Mix				X	X		X
		7b	Test reinforcing Steel - See Note 1 for Waiver for one Story Bldgs.				X	X		X
		7c	Perform slump and (where required) air content test; determine temperature of concrete				X	X		X
		7d	Test concrete - compression tests				X	X		X
		7e	inspect batching of concrete -				X	X		X
		7e	Inspect placement of formwork, concrete, reinforcing steel and embedded items - by Project inspector				X	X		X
	POST INSTALLED ANCHORS NOTE 2		Inspect installation of post installed anchors				X	X		X
			Test post-installed anchors				X	X		X
STRUCTURAL STEEL	MATERIAL VERIFICATION	17a	-Materials are appropriately marked -Mfr. certified mill test reports -Material sizes, types and grades comply with requirements	X	X	X	X	X		
		17b	Sample and test all unidentified structural steel and steel deck	X	X	X	X	X		
		17c	Examine seam welds of structural tubes and pipes	X	X	X	X	X		
		17d	Verify member locations, bracing and all details constructed in the field	X	X	X	X	X		
		17e	Verify stiffener locations, connection tab locations and all construction details fabricated in the shop.	X	X	X	X	X		
	VERIFICATION OF MATERIALS EQUIPMENT, WELDERS, ETC	19a	Verify weld filler material identification marking per AWS designation listed on the DSA approved documents and the WPS	X	X	X	X	X		
		19b	Verify weld filler material manufactures's certificate of compliance	X	X	X	X	X		
		19c	Verify WPS, welder qualifications and equipment	X	X	X	X	X		
	SHOP WELDING	19.1a	Inspect groove, multi-pass, and fillet welds > 5/16"	X	X	X	X	X		
		19.1b	Inspect single-pass fillet welds ≤ 5/16"	X	X	X	X	X		
		19.1c	Inspect welding of stairs and railing systems. Note 3.	X	X	X	X	X		
	FIELD WELDING See Note 3	19.2a	Inspect groove, multi-pass, and fillet welds > 5/16"			X	X	X		X
		19.2b	Inspect single-pass fillet welds ≤ 5/16"			X	X	X		X
		19.2f	Inspect welding of stairs and railing systems.			X	X	X		X
	OTHER	24a	Shop Welding - Inspection welding of cold-formed steel Periodic/Special Inspector	X	X	X	X	X		
		24b	Shop Welding - Inspect welding of steel floor deck welds Periodic/Special Inspector		X			X		
OTHER - SHOT PINS (Two Story Modular)		27c	Ceiling wire hangers (pins in metal deck with concrete fill) Test/Lab		X			X		
INSPECTOR CLASS (minimum requirements)				RBIP or Class 1		In Plant RBIP or Class 1 Site: Class 4 for Single Story Site: Class 2 for Two-story			Class 4 for Single Story Class 2 for Two-story	
SELECTION OF THE PROJECT INSPECTOR AND TESTING AGENCY				By the Owner and approved by DSA, A/E of Record and Structural Engineer		By the School District and approved by DSA, A/E of Record and Structural Engineer				
COST OF THE PROJECT INSPECTOR (Title 24, Part1,Section 4–333(b)) AND TESTING AGENCY (Title 24, Part 1, Section 4–335))				By the Owner		By the School District				

NOTE 1: Reinforcing steel tests may be waived for one-story buildings.
NOTE 2: Required only where the details of the PC specify the use of this type of anchor
NOTE 3: Required only where the details of the PC specify this Welding

The Example form DSA-103's shown on this sheet are for illustration purposes only to assist in the completion of future project-specific form DSA-103's. A form DSA-103 is to be completed for each Application that this PC is being incorporated into and all Example form DSA-103's are to be crossed out on this drawing.

PC GENERAL NOTES

1. THIS PC IS NOT APPROVED FOR "A" OCCUPANCY USES AND CANNOT BE REVIEWED OVER THE COUNTER (OTC).
2. PC BUILDING APPROVED ONLY FOR OCCUPANCY B, or E WITH OCCUPANT LOAD LESS THAN 250. (2013 CBC TABLE 1604A.5 RISK CATEGORY I & II).
3. PC BUILDING EXITING IS BASED ON THE USE OR OCCUPANCY AND WILL BE REVIEWED AS SITE SPECIFIC.
4. PC BUILDING LOCATED IN FIRE HAZARD SEVERITY ZONES PER WILDLAND URBAN INTERFACE FIRE AREAS (WUI) SHALL CONFORM TO CBC CHAPTER 7A.
5. THIS PC IS NOT APPROVED FOR FIRE HAZARD SEVERITY ZONES PER C.B.C. CHAPTER 7A.
6. SITE AND USE SPECIFIC REQUIREMENT FOR FIRE ALARM SYSTEM MIGHT BE REQUIRED BUT NOT INCLUDED IN THIS PC APPROVAL.
7. THIS BUILDING IS STRUCTURALLY DESIGNED TO SUPPORT THE WEIGHT OF A FUTURE FIRE SPRINKLER SYSTEM (EQUIVALENT TO 1.5 psf MAXIMUM), IF REQUIRED.
8. THIS PC IS APPROVED FOR CLIMATE ZONES 1 THROUGH 16.
9. THIS PC IS NOT APPROVED FOR OCCUPANCY E USED AS SPECIAL HAZARD USE OR STORE SUCH AS LIBRARIES, VOCATIONAL SHOPS & DAYCARE CANNOT BE REVIEWED OVER THE COUNTER (OTC).
10. NOT USED.
11. SOLAR READY SITE ADOPTED PC BUILDINGS:
    PROVISIONS FOR SOLAR READY REQUIREMENTS OF THIS PC WILL BE PART OF ANOTHER BUILDING WITHIN 250 FT.
    SOLAR READY ZONE SHALL BE A MIN. OF 5 FT WIDE AND 80 SQ. FT. (TITLE 24, PART 6, 110.10(b).
    SOLAR READY ZONE MUST BE IN THE BUILDING OR WITHIN 250 FT. OF THE BUILDING AND HAVE A SOLAR ZONE AREA NO LESS THAN 15% OF THE TOTAL ROOF AREA OF THE BUILDING EXCLUDING ANY SKYLIGHT AREA. (TITLE 24, PART 6, 110.10(b) 1B.
12. NOT USED.
13. ENERGY CODE COMPLIANCE FORMS FOR SITE ADOPTED PC BUILDINGS:
    WHEN A PC BUILDING IS SITE ADAPTED, THE FOLLOWING FORMS SHALL BE SUBMITTED BY THE ARCHITECT OF RECORD WITH THE SITE SPECIFIC APPLICATION:
    DESIGN REVIEW KICKOFF - NRCC-CXR-01-E
    CONSTRUCTION DOCUMENTS, GENERAL - NRCC-CXR-02-E
    CONSTRUCTION DOCUMENTS, SIMPLE HVAC - NRCC-CXR-03-E
    DESIGN REVIEW SIGNATURE PAGE - NRCC-CXR-05-E
    SOLAR READY AREAS - NRCC-SRA-01-E
    WATER HEATING SYSTEMS (IF APPLICABLE) - CRCC-PLB-01-E

DSA GENERAL NOTES

1. ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO THE 2013 CALIFORNIA BUILDING CODE (C.B.C.). A COPY OF THE CALIFORNIA BUILDING CODE SHALL BE KEPT ON THE SITE AT ALL TIMES.
2. CHANGES TO THE APPROVED DRAWINGS & SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONST. CHANGE DOCUMENT APPROVED BY THE ARCHITECT OF RECORD, OWNER, & THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED (REFERENCE DSA IR-A6).
3. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) & APPROVED BY THE ARCHITECT OF RECORD & THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-333(b) OF 2013 TITLE 24, PART 1.
4. MATERIAL TESTING AS NOTED IN THE STRUCTURAL TESTS & INSPECTIONS AT THE LEFT SHALL BE PERFORMED AS REQ. PER SECTION 1704A & 2212A, & 1913A FOR CONCRETE OF 2013 C.B.C. MATERIAL TESTING REQUIRED BY FIRE REGULATIONS SHALL BE PERFORMED BY A NATIONALLY RECOGNIZED TESTING LABORATORY.
5. VERIFIED REPORTS (DSA/SSS FORM 6) SHALL BE SUBMITTED PER SECTION 4-336, 4-341(f), 342(b)(9), AND 4-343 (c) BY THE MANUFACTURER, INSPECTOR, STRUCTURAL ENGINEER.
6. A SEPARATE DSA APPLICATION NUMBER MUST BE OBTAINED BEFORE MANUFAC-TURING ANY ENVIROPLEX UNIT IN ACCORDANCE WITH THESE DRAWINGS.
7. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD & ACCESS REQUIREMENTS & ENVIROMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
8. SPECIAL INSPECTIONS PER CHAPTER 17A, 2013 C.B.C.

OPT. COMBINATIONS ALLOWED

Option combination table 12'x40' PC
(shaded) not applicable / not allowed

		Roof: Bi-Pitch	Roof: Shed	Foundation: Concrete	Foundation: 50# wood	Foundation: 65# wood	Foundation: 125# wood
Exterior finish	Standard MDO, lap siding, wood clad siding	X	X	X	X	X	X
	Stucco-flex	X	X	X			
	3-coat stucco	X	X	X			
Roof slope	Bi-pitch			X	X	X	X
	Shed			X	X	X	X
Roof load/column	20 psf. TS 5 x 5 x 3/16"	X	X	X	X	X	X
Floor load	50 psf (joist spacing at 16" or 24"o.c.)	X	X	X	X	X	X
	65 psf (joist spacing at 16" or 24"o.c.)	X	X	X		X	X
	125 psf (joist spacing at 16"o.c.)	X	X	X			X
Floor construction	Plywood	X	X	X	X	X	X
	Concrete	X	X	X			
Fire rated const.	NR / Sprinklered	X	X	X	X	X	X
	Fire barriers (int & ext., multiple walls)	X	X	X	X	X	X

GOVERNING CODES

2013 CALIFORNIA ADMINISTRATIVE CODE (CAC) (PART 1, TITLE 24, CCR)

2013 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2 (PART 2, TITLE 24, CCR) (2012 INTERNATIONAL BUILDING CODE WITH 2013 CALIFORNIA AMENDMENTS)

2013 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24, CCR) (2011 NATIONAL ELECTRICAL CODE WITH 2013 CALIFORNIA AMENDMENTS)

2013 CALIFORNIA MECHANICAL CODE (CMC) (PART 4, TITLE 24, CCR) (2012 UNIFORM MECHANICAL CODE WITH 2013 CALIFORNIA AMENDMENTS)

2013 CALIFORNIA PLUMBING CODE (CPC) (PART 5, TITLE 24, CCR) (2012 UNIFORM PLUMBING CODE WITH 2013 CALIFORNIA AMENDMENTS)

2013 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR).

2013 CALIFORNIA FIRE CODE (CFC) (PART 9, TITLE 24, CCR). (2012 INTERNATIONAL FIRE CODE WITH 2013 CALIFORNIA AMENDMENTS)

2013 CALIFORNIA GREEN BUILDING STANDARDS CODE (PART 11, TITLE 24, CCR)

2013 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR)

NFPA 13 - 2013

NFPA 72 - 2013

DESIGN CRITERIA

DEAD AND LIVE LOADS

FLOOR: LIVE LOAD - ☐ 50.0 PSF / ☒ 65.0 PSF / ☐ 125.0 PSF

FLOOR: DEAD LOAD - 8.0 PSF (wood floor), 42.0 PSF (concrete floor)

ROOF: LIVE (SNOW) LOAD - 20.0 PSF

ROOF: DEAD LOAD - 9.5 PSF

ALLOWABLE SOIL PRESSURE

CONCRETE FOOTING: (DL +LL) 1500 PSF; (DL + LL + LATERAL) 2000 PSF

FLOOD DESIGN

WIND DESIGN

BASIC WIND SPEED (3 SECOND GUST), V — 110 MPH
WIND EXPOSURE CATEGORY — C
CHAPTER 28, PART 2, ASCE 7-10, SEC 28.6 - SIMPLIFIED DESIGN WIND PRESSURES
$\lambda = 1.21$
RISK CATEGORY = II
$K_{zt} = 1.0$

LOW SEISMIC DESIGN CRITERIA (Site specific $S_s \leq 1.875$)

LATERAL FORCE RESISTING SYSTEM — ORDINARY STEEL MOMENT FRAMES
ANALYSIS PROCEDURE — EQUIVALENT LATERAL FORCE PROCEDURE
SEISMIC DESIGN CATEGORY (SDC) — D (S_1 <= 0.75), E (0.75 < S_1 < 1.5)

SEISMIC IMPORTANCE FACTOR, I_e — 1.0

V=EQUIV. LATERAL FORCE PROCEDURE BASE SHEAR (STRENGTH DESIGN)
$V = C_s W = 0.286W$
$C_s = \frac{S_{DS}}{(R/I_e)} = 0.286$

BASIC SEISMIC FORCE RESISTING SYSTEM: ORDINARY STEEL MOMENT FRAMES
R = 3.5, P = 1.0, SITE CLASS: D
$I_e = 1.0$, $C_d = 3.0$, *$S_s = 1.5$, $F_A = 1.0$, $S_{DS} = 1.0$
$\Omega_o = 3.0$, $S_1 <= 1.5$, $F_V = 1.5$, $S_{D1} <= 1.5$

* PER CBC 1616A.1.12 (MODIFICATION TO ASCE 7-10, 12.8.1.3): "FOR REGULAR STRUCTURES FIVE STORIES OR LESS ABOVE THE BASE AS DEFINED IN SECTION 11.2 AND WITH A PERIOD, T, OF 0.5 SECONDS OR LESS, C_s IS PERMITTED TO BE CALCULATED USING THE LARGER OF EITHER S_s = 1.5 OR 80 PERCENT OF THE VALUE OF S_s DETERMINED PER SECTIONS 11.4.1 OR 11.4.7." THEREFORE, THIS PC IS PERMITTED FOR USE IN LOCATIONS WHERE S_s IS EQUAL TO 1.875 MAX (1.5/0.8 = 1.875).

SITE SPECIFIC DESIGN CRITERIA

LATITUDE: 37.938° N
LONGITUDE: 122.524° W

SITE SPECIFIC WIND DESIGN CRITERIA:

*BASIC WIND SPEED (3 SECOND GUST), V — 110 MPH
*WIND EXPOSURE CATEGORY — C

SITE SPECIFIC SEISMIC DESIGN CRITERIA:

*Ss — 1.500 < 1.875
*S1 — 0.600 < 1.5

*THE WIND DESIGN CRITERIA FOR THIS SITE IS THE SAME AS THE WIND DESIGN CRITERIA FOR THE REFERENCE PC DESIGN. THE SEISMIC DESIGN CRITERIA FOR THIS SITE IS WITHIN THE "LOW SEISMIC" DESIGN CRITERIA OF THE REFERENCE PC PROVIDED ABOVE. AS A RESULT THE REFERENCE PC DRAWINGS PROVIDED ARE ADEQUATE FOR THIS GIVEN PROJECT LOCATION

BUILDING DATA

CONSTRUCTION TYPE:	V-B
OCCUPANCY:	E
BUILDING AREA:	480 S.F. NOMINAL
NUMBER OF STORIES:	1

CYS STRUCTURAL ENGINEERS INC.
2495 Natomas Park Drive, Suite 650
Sacramento, CA 95833
(916) 920-2020 (916) 920-1556 Fax
www.cyseng.com

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST ROSS No. S2030 STRUCTURAL STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466–8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

COVER SHEET, BUILDING CODES & C.B.C. DATA, SHEET INDEX

REV / DATE:	BY:

JOB No.:	17–025
DRAWN BY:	RS
DATE:	3/15/18

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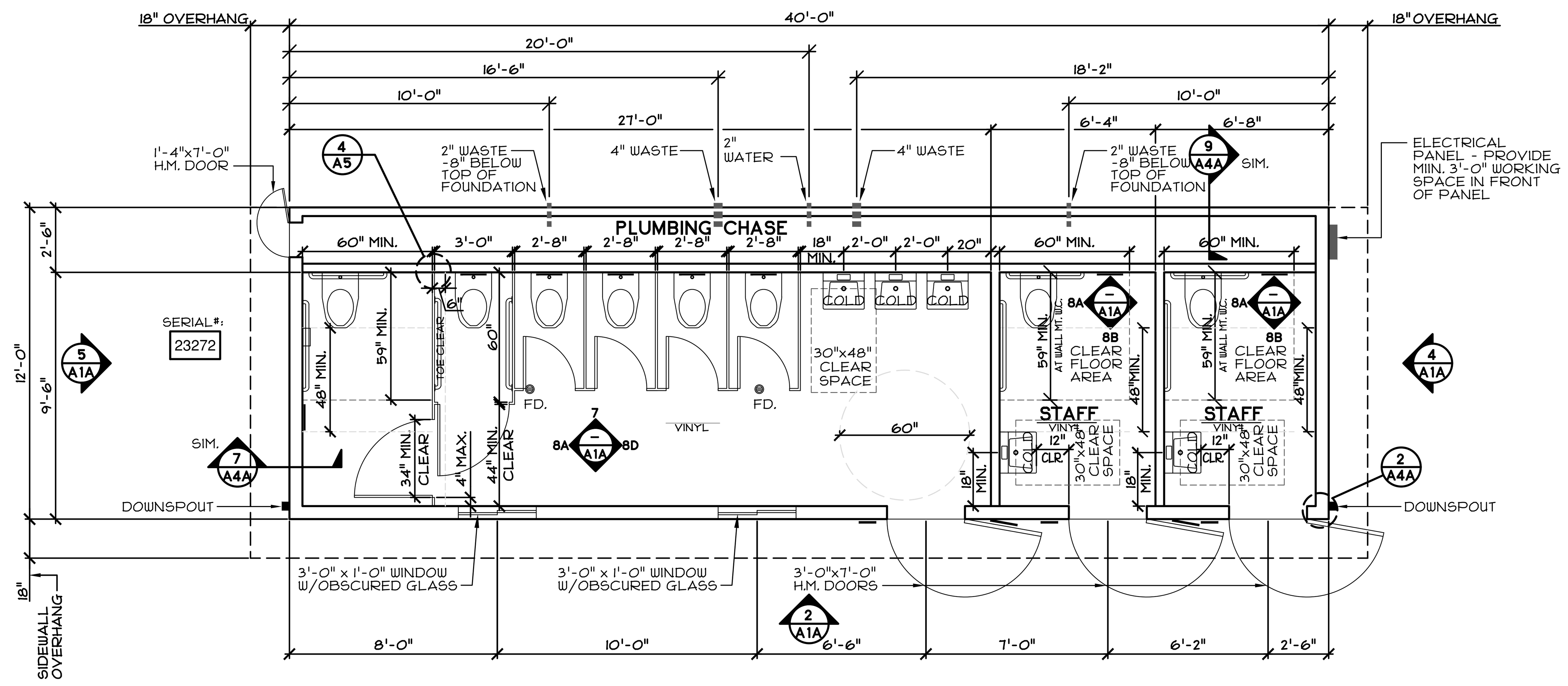
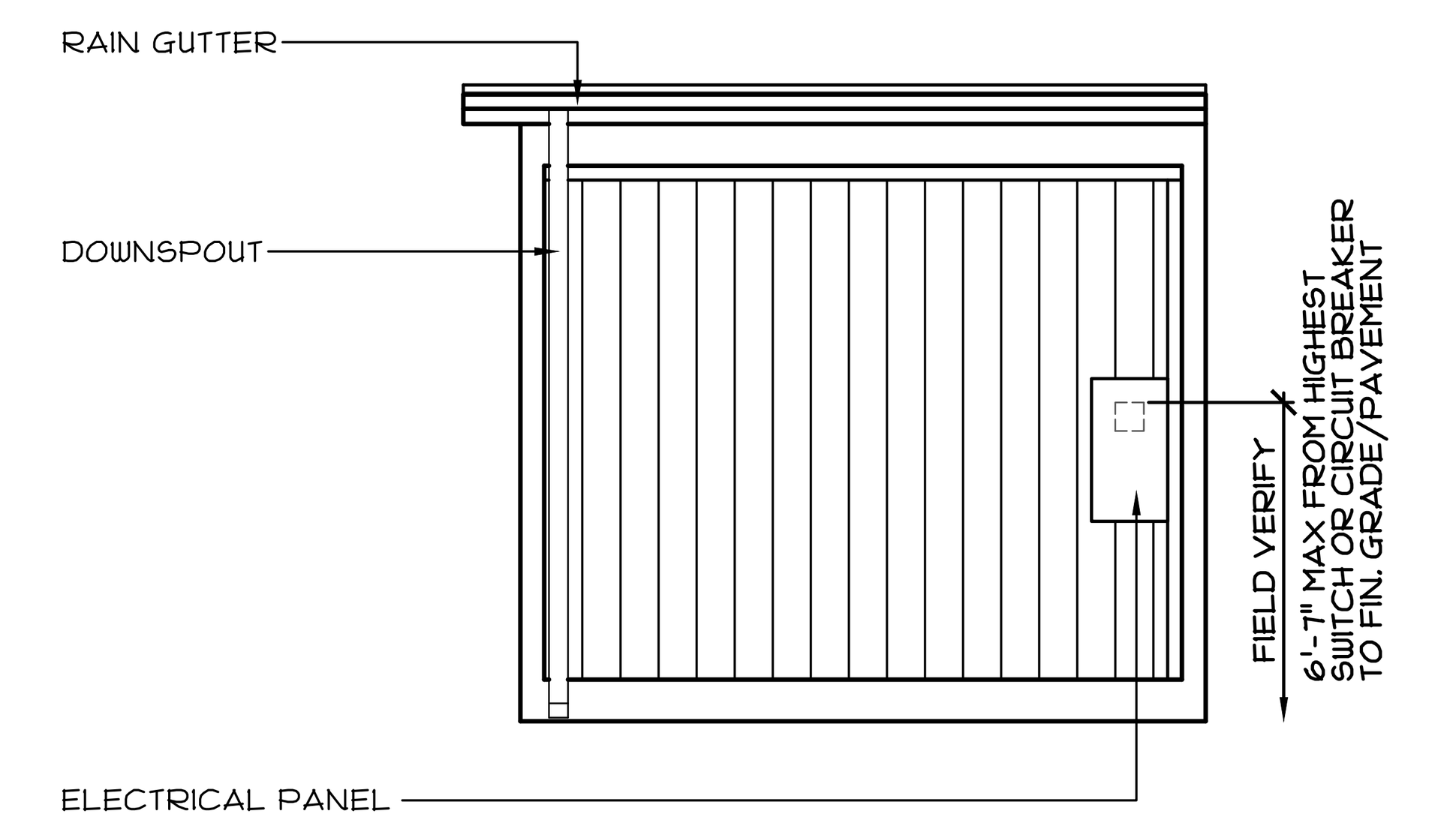


1 RESTROOM FLOOR PLAN RESTROOM #1 @ DOHERTY DRIVE

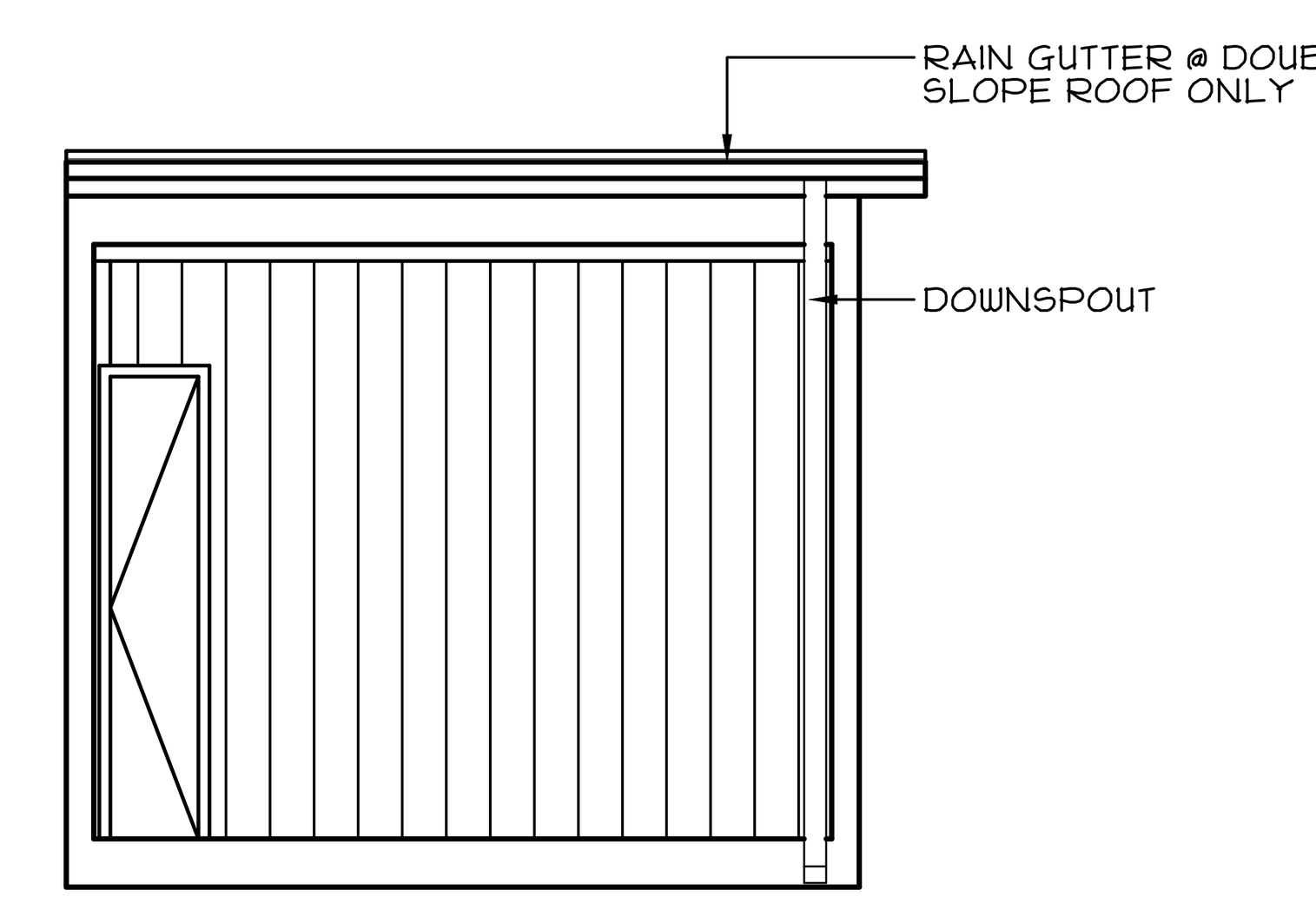
SCALE: 1/4"=1'-0"

2



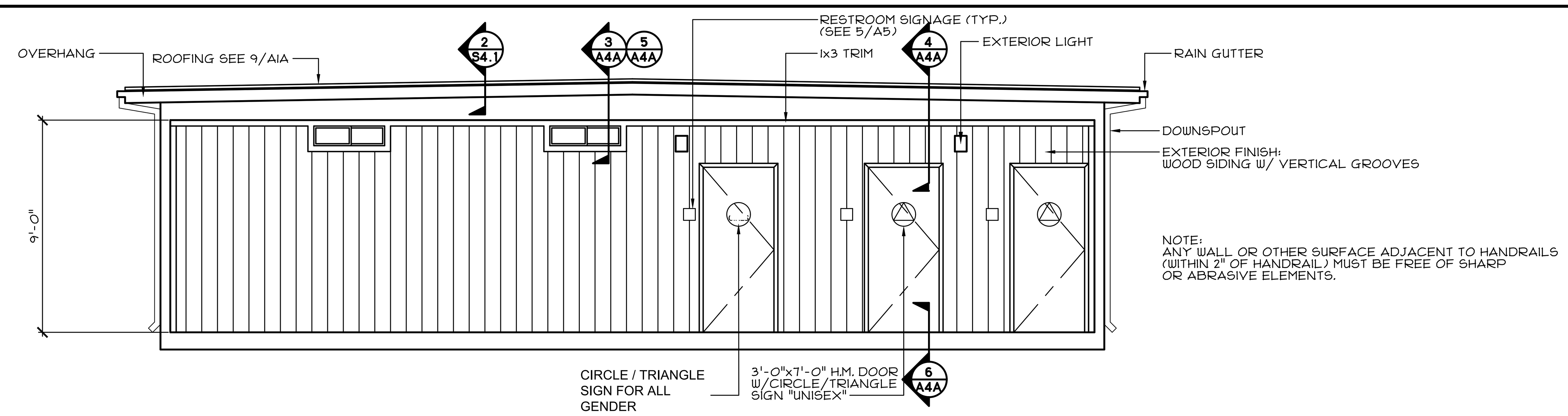
4 EXTERIOR ENDWALL ELEVATION

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



5 EXTERIOR ENDWALL ELEVATION

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



NOTE:
ANY WALL OR OTHER SURFACE ADJACENT TO HANDRAILS (WITHIN 2" OF HANDRAIL) MUST BE FREE OF SHARP OR ABRASIVE ELEMENTS.

3 SIDE WALL EXTERIOR ELEVATION (BI-PITCHED ROOF)

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

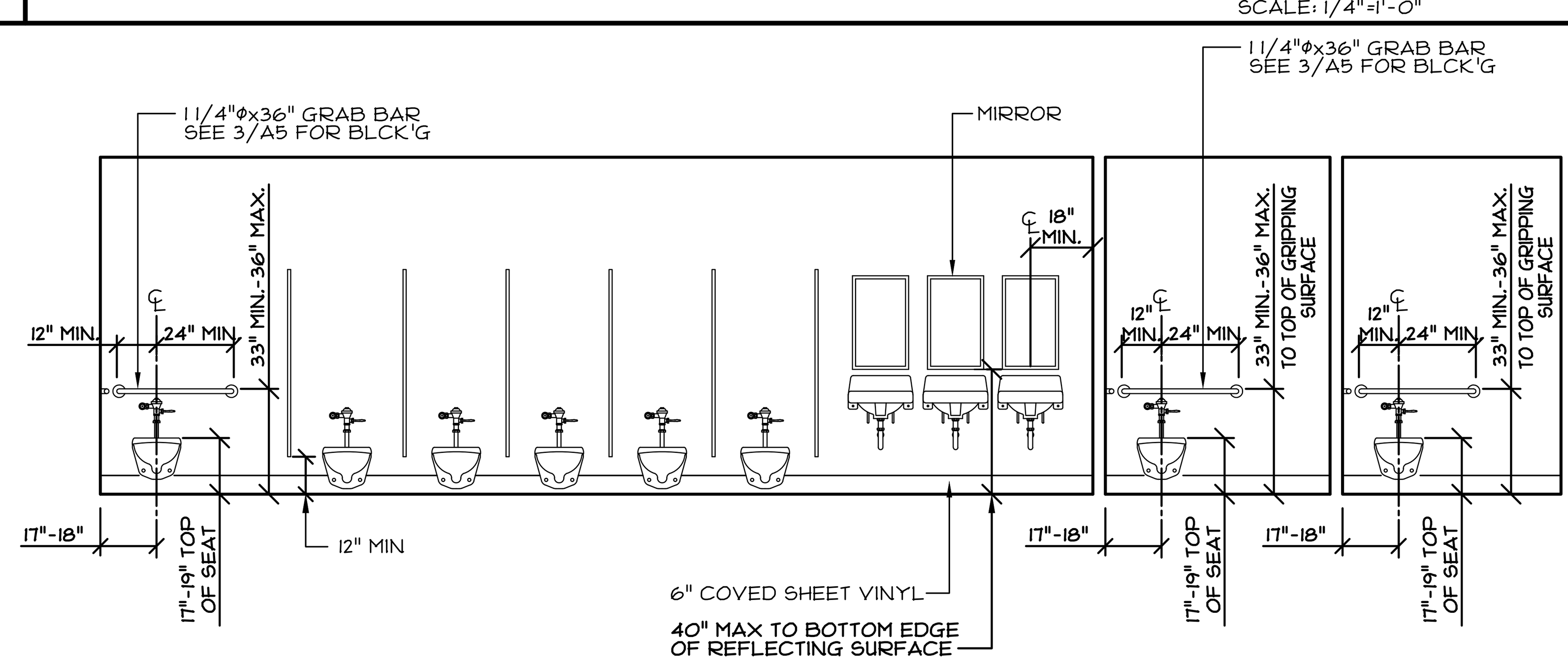
CBC TABLE 11B-604.9
SUGGESTED DIMENSIONS FOR CHILDREN'S USE

	AGES 3 AND 4	AGES 5 THRU 8	AGES 9 THRU 12
WATER CLOSET CENTERLINE	12"	12" TO 15"	15" TO 18"
TOILET SEAT HEIGHT	11" TO 12"	12" TO 15"	15" TO 17"
GRAB BAR HEIGHT	18" TO 20"	20" TO 25"	25" TO 27"
DISPENSER HEIGHT TO OUTLET	14"	14" TO 17"	17" TO 19"

DIMENSIONS FOR ADULT USE

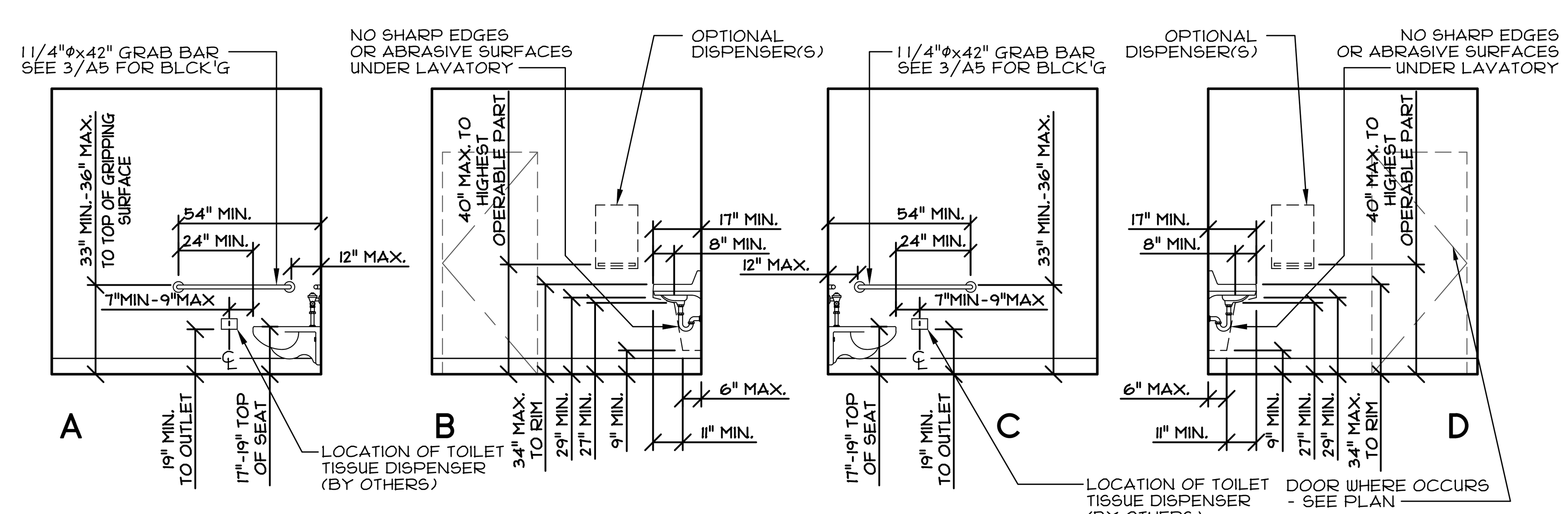
WATER CLOSET CENTERLINE	17" TO 18"
TOILET SEAT HEIGHT	17" TO 19"
GRAB BAR HEIGHT	33" TO 36" (TO TOP OF GRIP SURFACE)
DISPENSER HEIGHT TO OUTLET	19" TO OUTLET (7" TO 9" FROM FRONT OF TOILET TO CENTERLINE)

6 TYPICAL FIXTURE MOUNTING HEIGHTS



7 TYPICAL INTERIOR ELEVATION

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



8 TYPICAL INTERIOR ELEVATION

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

1. FLOORING- COMMERCIAL SHEET VINYL, ARMSTRONG CORLON OR EQUAL
   NOTE: APPLICATION AND MAINTENANCE OF POLISHED-COATED FLOOR SURFACES (BY OWNER) SHALL BE SLIP RESISTANT. (0.5 MIN. COEFFICIENT OF FRICTION PER ASTM D-2047)
2. BASE TRIM- 6" COVED SHEET VINYL (SAME AS FLOORING)
3. WALL PANELS- FIBERGLASS REINFORCED POLYETHELYENE PANELS OVER 1/2" WATER RESISTENT GYPSUM WALL BOARD @ PLUMBING WALLS ONLY
4. ADHESIVES- ALL ADHESIVES SHALL BE WATER BASE, SOLVENT BASE NOT ACCEPTABLE. FURNISH AND APPLY PER MANUFACTURER'S WRITTEN INSTRUCTIONS. ALL ADHESIVES, SEALANTS, CAULKS, PAINTS, COATINGS, CARPET SYSTEMS, CARPET CUSHIONS, COMPOSITE WOOD PRODUCTS, AND RESILIENT FLOORING SYSTEMS SHALL COMPLY WITH GREEN BUILDING REQUIREMENTS, REFERENCE SHEET "AGB".
5. SEALANT- "VULKEM" SEALANT, POLYURETHANE, MANUFACTURED BY MAMECO INTERNATIONAL OR APPROVED EQUAL.
6. PAINT: (EXTERIOR WOODS) PRIMER: ACRYLIC UNDERCOAT FINISH: ACRYLIC ENAMEL; (METALS) PRIMER: RED OXIDE ALKYD FINISH: ACRYLIC ENAMEL
7. M.D.O. BUILDING, DOOR, & WINDOW TRIM. JOINTS, PENETRATIONS, AND OTHER OPENINGS IN THE BUILDING ENVELOPE SHALL BE SEALED TO LIMIT INFILTRATION AND EXFILTRATION. SEALANT PAINTED TO MATCH FINISHES.

   EXTERIOR SIDING - 8" O.C. GROOVED M.D.O. PLYWOOD OR STUCCO PATTERN FACED EXTERIOR SIDING. (MINUMUM NET THICKNESS 3/8")
8. HOLLOW METAL DOORS AND FRAMES- SIZES NOTED ON PLAN, 1 3/4" THICK 18 GA. FULL FLUSH DOOR IN 16 GA. METAL FRAME

   EXIT DOOR SHALL BE OPENABLE FROM THE INTERIOR WITHOUT A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

   CLOSERS FOR INTERIOR AND EXTERIOR DOORS SHALL BE SET FOR A MAXIMUM OPENING PRESSURE OF 5 LBS. MAX. CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM.

   DEADBOLTS NOT PERMITTED UNLESS OPERABLE WITH A SINGLE EFFORT USING LEVER HANDLE.

   DOOR HANDLES & PULLS SHALL BE PLACED ON BOTH SIDES; LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE AND SHALL BE 34" MINIMUM AND 44 INCHES MAXIMUM ABOVE FINISHED FLOOR.

   DOOR SWINGS CAN BE RIGHT OR LEFT HAND HINGE.
   HARDWARE SHALL BE CENTERED BETWEEN 34" AND 44" ABOVE FINISHED FLOOR.

   LOCKSET: SCHLAGE D70PDRHO OR EQUAL
   HINGES: HAGER BB1279 N.R.P 4-1/2"x4-1/2" OR EQUAL
   CLOSER: NORTON 8501BF OR EQUAL
   THRESHOLD: PEMKO 271A OR EQUAL
   DOOR BOTTOM: PEMKO 216AV OR EQUAL
   WEATHERSTRIP: PEMKO 306A OR EQUAL
9. METAL ROOF:
   PREFINISHED, UNPENETRATED INTERLOCKING, 26 GAGE MIN. GALV. STEEL ROOF PANELS, MECH. CRIMPED STANDING SEAMS OVER SEAL-TITE #15 UNDERLAYMENT OVER 15/32" APA RATED, EXTERIOR GRADE PLYWOOD. (CLASS "B" FIRE RATING)
10. PLUMBING FIXTURE SCHEDULE:
   WATER CLOSET (WALL MOUNT) : KOHLER "KINGSTON" (1.28 G.P.F.) K-4325 OR EQUAL W/ SLOAN ROYAL 111-1.28 FLUSH VALVE (1.28 G.P.F.) OR EQ.
   WATER CLOSET (FLOOR MOUNT) :KOHLER "HIGHCLIFF" (1.6 G.P.F.) K-4368 OR EQUAL W/ SLOAN ROYAL 111-1.6/1.1 FLUSH VALVE (1.6/1.1 G.P.F.) OR EQ.
   SEAT: BEMIS 1955-SSC (O.F.L.C.) OR EQUAL
   URINALS: KOHLER "DARFIELD" K-5024-T (0.5 G.P.F.) OR EQUAL W/ SLOAN MODEL 186-0.5 FLUSH VALVE (0.5 G.P.F.) OR EQ.
   LAVATORIES: KOHLER "KINGSTON" K-2005 20" x 18" OR EQUAL
   FAUCET: T & S BRASS, B-2711-F05 (0.5 GPM) OR EQUAL
   ~~OPTIONAL WATER HEATER: "AO SMITH", PEC-30, 30 GAL. ELECTRIC, 15,350 INPUT RATE, (OR EQUAL) EXPOSED HOT WATER PIPES SHALL BE INSULATED. 1" THICK INSULATION FOR PIPE 1" DIA. OR LESS. 1 1/2" THICK INSULATION FOR PIPE GREATER THAN 1" DIA.~~
   COLD WATER PIPING: TYPE L COPPER
   DRAIN, WASTE & VENT: ABS AND PVC PIPES, STRAPPED TO RESIST HORIZONTAL DISPLACEMENT DUE TO EARTHQUAKE MOTION PER TITLE 24, PART 5, CALIFORNIA CODE OF REGULATIONS, CHAPER 4, SEC. 401 (A)
11. ALL PLUMBING FIXTURES AND ACCESSORIES TO BE INSTALLED IN ACCORDANCE WITH ACCESSIBILITY REQUIREMENTS. (PER SECTION C.B.C. 11B DIVISION 6) FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE BY ONE HAND AND NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS. LEVER OPERATED, PUSH TYPE, AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.
12. ALL TOILETS; FLOOR MOUNTED, OR WALL MOUNTED W/ HAND OPERATED FLUSH VALVE LOCATED 44 INCHES MAX. ABOVE FLOOR. WHEELCHAIR ACCESSIBLE TOILETS SHALL HAVE THE FLUSH VALVE ACTIVATOR ON THE OPEN SIDE.
13. DOORS HANDLES FOR ENAMELED STEEL PARTITIONS SHALL BE PLACED ON BOTH SIDES NEAR THE LATCH; SHALL PROVIDE A CLEAR WIDTH OF 34" FOR WHEELCHAIR ACCESSIBLE STALLS AND 24" WIDE FOR STANDARD STALLS. DOORS FOR ACCESSIBLE TOILETS SHALL BE SELF CLOSING, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE AND SHALL BE 34" MINIMUM AND 44 INCHES MAXIMUM ABOVE FINISHED FLOOR.
14. THE DOOR LEADING INTO BOY'S FACILITY SHALL BE IDENTIFIED BY AN EQUILATERAL TRIANGLE 1/4" THICK WITH EDGES 12" LONG AND A VERTEX POINTING UPWARD. THE DOOR LEADING INTO GIRL'S FACILITY SHALL BE IDENTIFIED BY A CIRCLE 1/4" THICK AND 12" IN DIAMETER. UNISEX FACILITY SHALL BE IDENTIFIED BY A CIRCLE 1/4 THICK AND 12" IN DIAMETER WITH A 1/4" THICK TRIANGLE WITH THE VERTEX POINTING UPWARD SUPERIMPOSED ON THE CIRCLE & WITHIN THE 12" DIAMETER. THE GEOMETRIC SYMBOLS SHALL BE MOUNTED ON THE DOOR AT A HEIGHT PER DETAIL 5 SHEET A5 AND THEIR COLOR AND CONTRAST SHALL MEET THE IDENTIFICATION SIGNAGE FINISH REQUIREMENTS OF DETAIL 10 SHEET A5
15. ALL INSULATION SHALL COMPLY W/CALIFORNIA QUALITY STANDARDS & CALIFORNIA BUILDING CODE SECTION 719 CHAPTER 26 FOR FOAM INSULATION INCLUDING PIPE INSULATION. FLAME SPREAD MAX=25, SMOKE DENSITY MAX=450.
   1. CEILING INSULATION TO BE R-19 FIBERGLASS
   2. WALL INSULATION TO BE R-13 FIBERGLASS
   3. FLOOR INSULATION TO BE R-11 RIGID CELLULAR BOARD
16. THE MANUFACTURER SHALL PLACE TWO PERMANENT METAL IDENTIFICATION TAG ON EACH MODULAR BUILDING MECHANICALLY FASTENED TO THE END WALL. THE TAG SHALL SHOW D.S.A. APPLICATION NUMBER, MANUFACTURER'S SERIAL NUMBER, PLANT INSPECTOR'S IDENTIFICATION MARK AND DESIGN FLOOR AND ROOF LIVE LOAD. PLACE ONE TAG ON EXTERIOR AND, ONE ON THE INTERIOR ABOVE CEILING LINE.

9 MATERIAL SPECIFICATIONS & NOTES

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

(RESTROOM #1) GIRLS, STAFF RESTROOM FLOOR PLAN, INTERIOR & EXTERIOR ELEVATIONS, MATERIAL SPECIFICATIONS, & NOTES

REV / DATE:	BY:

JOB No.:	17-025
DRAWN BY:	RS
DATE:	3/12/18

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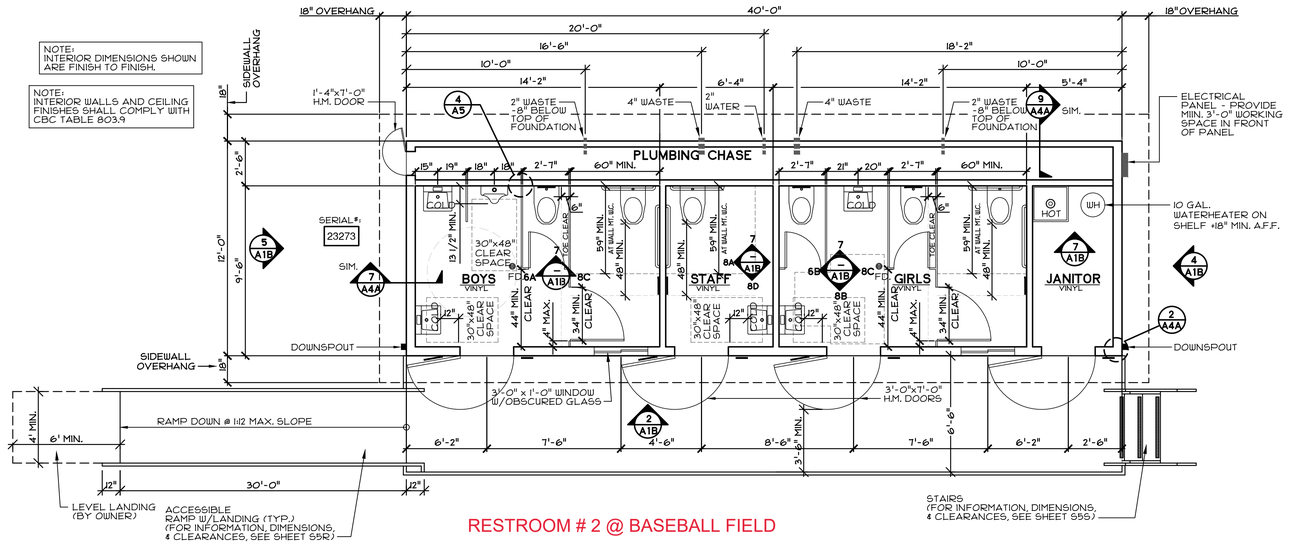
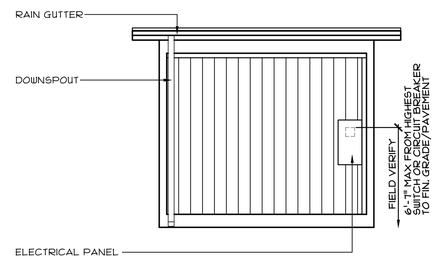
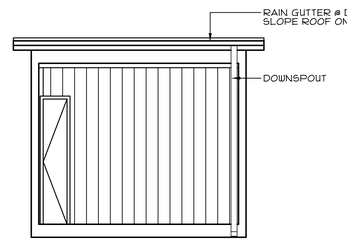


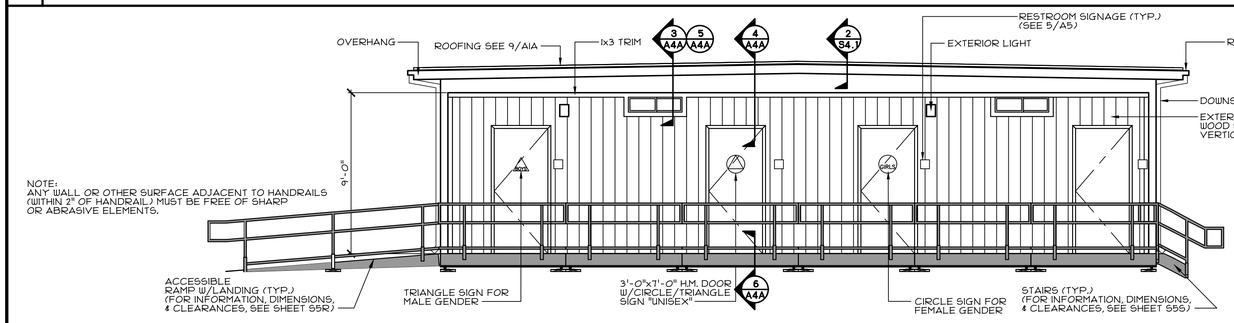
1 RESTROOM FLOOR PLAN
SCALE: 1/4"=1'-0"



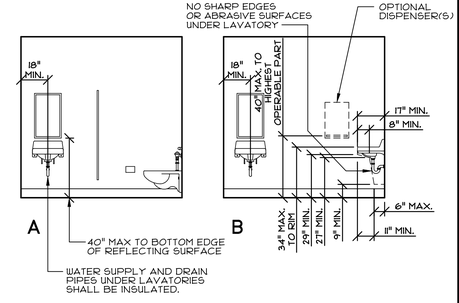
4 EXTERIOR ENDWALL ELEVATION
SCALE: 1/4"=1'-0"



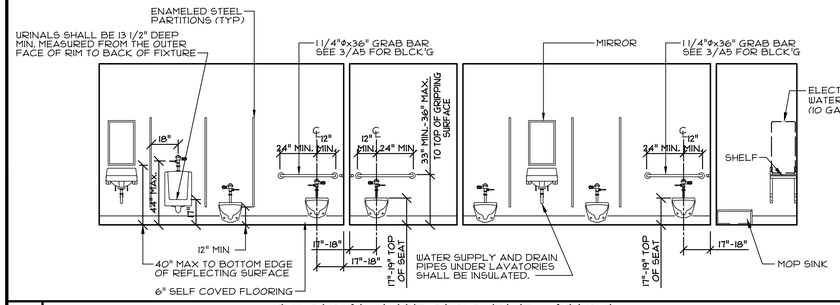
5 EXTERIOR ENDWALL ELEVATION
SCALE: 1/4"=1'-0"



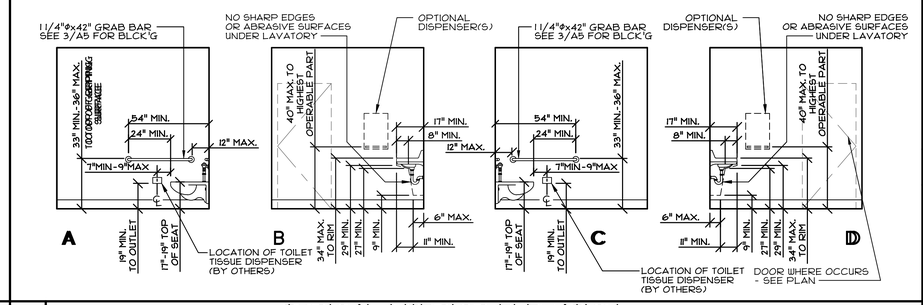
3 SIDE WALL EXTERIOR ELEVATION (BI-PITCHED ROOF)
SCALE: 1/4"=1'-0"



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



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



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

10. PLUMBING FIXTURE SCHEDULE (CONT.) :

WATER HEATER:	"AO SMITH", EJC-10, 10 GAL, ELECTRIC, 1,650 INPUT RATE, (OR EQUAL) EXPOSED HOT WATER PIPES SHALL BE INSULATED. 1" THICK INSULATION FOR PIPE 1" DIA. OR LESS. 1 1/2" THICK INSULATION FOR PIPE GREATER THAN 1" DIA.
P-TRAP COVER:	PLUMBEREX MODEL #3011 WHITE P-TRAP COVER
VALVE & SUPPLY COVER:	PLUMBEREX MODEL #3021 WHITE VALVE AND SUPPLY COVER
EXTERIOR HOSE BIBB:	WOODFORD MODEL B75 SQUARE BOX & DOOR ANTI-SIPHON SPICKET W/ TEE KEY
FLOOR DRAIN:	WATTS FD-390-E-63 EPOXY COATED CAST IRON 5" DIAMETER NICKEL BRONZE GRATE OR EQUAL W/ PPP INC. TRAP PRIMER VALVE MODEL # PR-500 W/ DU-U DISTRIBUTION UNIT AT MULTIPLE DRAINS

ACCESSORIES:

TOILET TISSUE DISP:	BOBRICK B-2888 STAINLESS STEEL SATIN FINISH
SOAP DISPENSER:	BOBRICK B-2112 STAINLESS STEEL SATIN FINISH
NAPKIN DISPOSAL:	BOBRICK B-254 STAINLESS STEEL SATIN FINISH
MIRROR:	BOBRICK B-165 STAINLESS STEEL POLISHED FINISH
PAPER TOWEL DISP:	BOBRICK B-262 STAINLESS STEEL SATIN FINISH
SEAT COVER DISP:	BOBRICK B-221 STAINLESS STEEL SATIN FINISH
UTILITY SHELF/MOP:	BOBRICK B-239 STAINLESS STEEL SATIN FINISH

9 MATERIAL SPEC & NOTES (CONT.)

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

(RESTROOM #2) BOYS, STAFF, GIRLS AND JANITOR RESTROOM FLOOR PLAN, INTERIOR & EXTERIOR ELEVATIONS,

REV / DATE:	BY:

JOB No.:	17-025
DRAWN BY:	RS
DATE:	3/28/18

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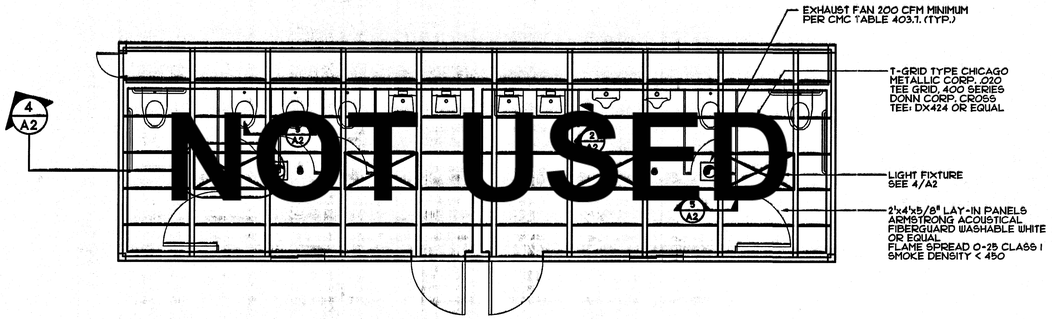
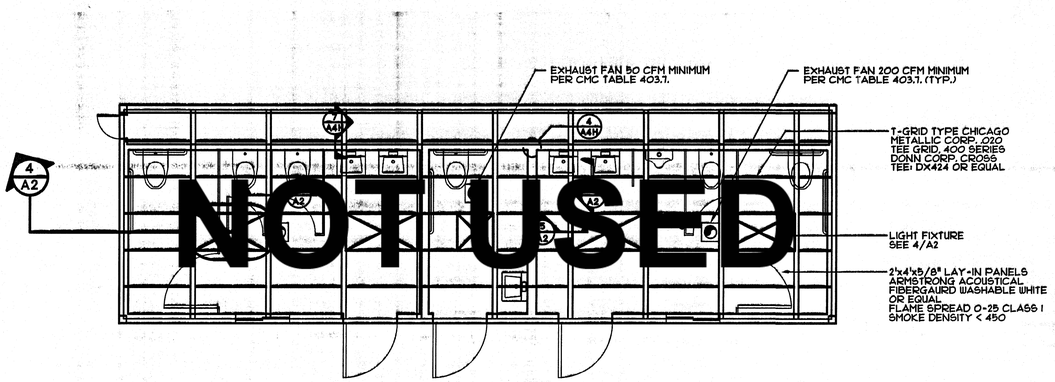


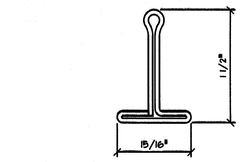
NOTE: CEILING TILE & LIGHTING SYSTEM IN THIS MODULE ARE NOT SUSPENDED. THE BUILDING HAS A FIXED CEILING AND LIGHTING FIXTURE SUPPORT SYSTEM WHICH IS MECHANICALLY FASTENED TO STEEL CEILING BEAMS.

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



NOTE: CEILING TILE & LIGHTING SYSTEM IN THIS MODULE ARE NOT SUSPENDED. THE BUILDING HAS A FIXED CEILING AND LIGHTING FIXTURE SUPPORT SYSTEM WHICH IS MECHANICALLY FASTENED TO STEEL CEILING BEAMS.

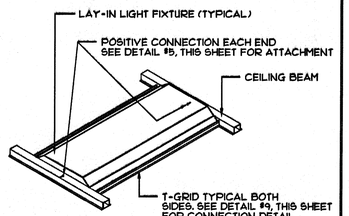
6 "BOYS / GIRLS / STAFF" REFLECTED CEILING PLAN
SCALE: 1/4"=1'-0"



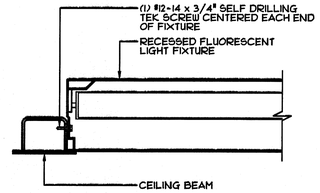
NOTE: T-GRID TO BE DONN CORP. CROSS TEE : DX424 OR CHICAGO METALLIC CORP. .020 TEE GRID, 400 SERIES OR EQUAL.

2 TYP. T-GRID SECTION
SCALE: FULL

3

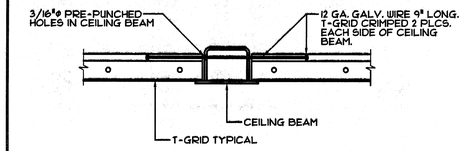


4 LAY-IN LIGHT FIXTURE
SCALE: 1/2"=1'-0"

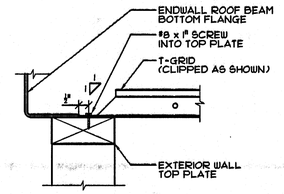


5 LIGHT FIXTURE SUPPORT
SCALE: 3"=1'-0"

8



9 T-GRID CONNECTION DETAIL
SCALE: 3"=1'-0"



10 T-GRID CONNECTION DETAIL
SCALE: 3"=1'-0"

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PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

7

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

REFLECTED CEILING PLANS & CEILING ATTACHMENT DETAILS

REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. JM FLS. KL SS KO
DATE 6-9-15

2013 - 12x40

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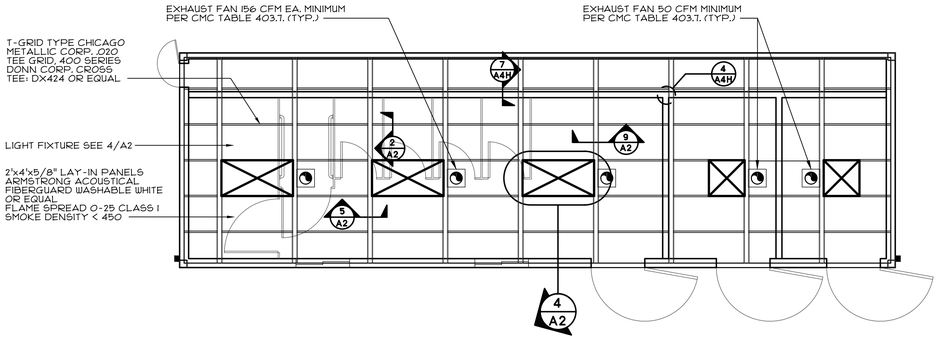
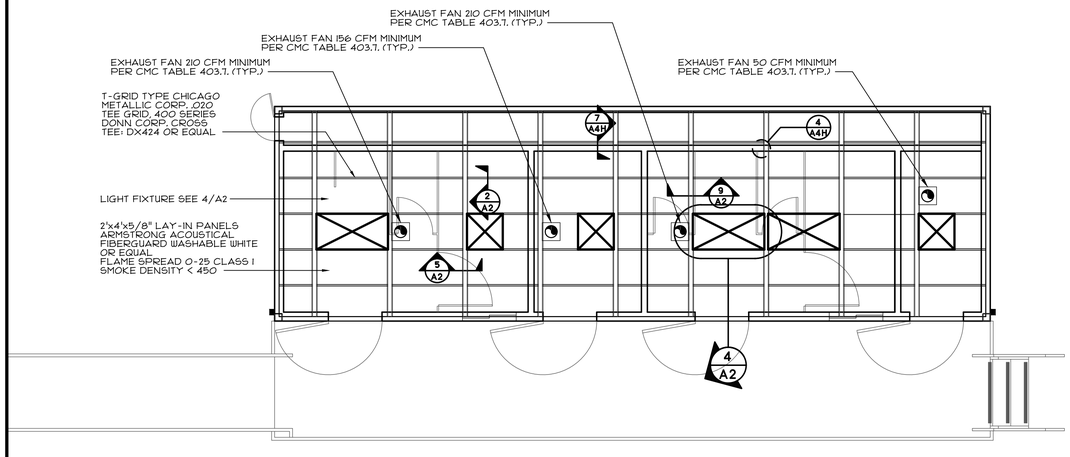
12x40 P.C.



NOTE: CEILING TILE & LIGHTING SYSTEM IN THIS MODULE ARE NOT SUSPENDED. THE BUILDING HAS A FIXED CEILING AND LIGHTING FIXTURE SUPPORT SYSTEM WHICH IS MECHANICALLY FASTENED TO STEEL CEILING BEAMS.

1 (RESTROOM #1) GIRLS, STAFF RESTROOM REFLECTED CEILING PLAN

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



NOTE: CEILING TILE & LIGHTING SYSTEM IN THIS MODULE ARE NOT SUSPENDED. THE BUILDING HAS A FIXED CEILING AND LIGHTING FIXTURE SUPPORT SYSTEM WHICH IS MECHANICALLY FASTENED TO STEEL CEILING BEAMS.

6 (RESTROOM #2) BOYS, STAFF, GIRLS RESTROOM & JANITOR REFLECTED CEILING PLAN

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

2 3 4 5 8 9 10

DIVISION OF THE STATE ARCHITECT

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

REFLECTED CEILING PLANS

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CAL-GREEN MANDATORY MEASURES

NOTE:
ONLY APPLICABLE CAL-GREEN MANDATORY MEASURES TO THE ENVIROPLEX MODULAR BUILDING ARE LISTED BELOW. FOR A COMPLETE LIST OF MEASURES REQUIRED FOR THE ENTIRE CONSTRUCTION PROJECT, REFER TO DSA DOCUMENT GL-4.

1. WATER CLOSETS.
   THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR TANK-TYPE TOILETS.
2. URINALS.
   THE EFFECTIVE FLUSH VOLUME OF URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.
3. INDOOR WATER USE:
   LAVATORY FAUCETS - 0.5 GPM
   KITCHEN FAUCETS - 2.2 GPM
   GRAVITY TANK WATER CLOSET - 1.28 GAL/FLUSH
   FLUSHOMETER TANK WATER CLOSET - 1.28 GAL/FLUSH
   FLUSHOMETER VALVE WATER CLOSET - 1.28 GAL/FLUSH
   URINALS - 0.5 GAL/FLUSH
4. EXTERIOR DOOR PROTECTION.
   PRIMARY EXTERIOR ENTRIES SHALL BE COVERED TO PREVENT WATER INTRUSION BY USING NONABSORBENT FLOOR AND WALL FINISHES WITHIN AT LEAST 2 FEET AROUND AND PERPENDICULAR TO SUCH OPENINGS PLUS AT LEAST ONE OF THE FOLLOWING:
   1. AN INSTALLED AWNING AT LEAST 4 FEET IN DEPTH.
   2. THE DOOR IS PROTECTED BY A ROOF OVERHANG AT LEAST 4 FEET IN DEPTH.
   3. THE DOOR IS RECESSED AT LEAST 4 FEET.
   4. OTHER METHODS WHICH PROVIDE EQUIVALENT PROTECTION.
5. WASTE MANAGEMENT COMPANY.
   UTILIZE A WASTE MANAGEMENT COMPANY THAT CAN PROVIDE VERIFIABLE DOCUMENTATION THAT THE PERCENTAGE OF CONSTRUCTION AND DEMOLITION WASTE MATERIAL DIVERTED FROM THE LANDFILL.
6. COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION.
   AT THE TIME OF ROUGH INSTALLATION, OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY COLLECT IN THE SYSTEM.
7. CARPET SYSTEMS.
   ALL CARPET INSTALLED IN THE BUILDING INTERIOR SHALL MEET AT LEAST ONE OF THE TESTING AND PRODUCT REQUIREMENTS:
   1. CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM.
   2. COMPLIANT WITH THE VOC-EMISSION LIMITS AND TESTING REQUIREMENTS SPECIFIED IN THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS, VERSION 1.1, FEBRUARY 2010 (ALSO KNOWN AS CDPH STANDARD METHOD V1.1 OR SPECIFICATION 01350) .
   3. NSF/ANSI 140 AT THE GOLD LEVEL OR HIGHER;
   4. SCIENTIFIC CERTIFICATIONS SYSTEMS SUSTAINABLE CHOICE; OR
   5. COMPLIANT WITH THE CALIFORNIA COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CA-CHPS) CRITERIA INTERPRETATION FOR EQ 2.2 DATED JULY 2012 AND LISTED IN THE CHPS HIGH PERFORMANCE PRODUCT DATABASE.
8. CARPET CUSHION.
   ALL CARPET CUSHION INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE REQUIREMENTS OF THE CARPET AND RUG INSTITUTE GREEN LABEL PROGRAM.
9. CARPET ADHESIVE.
   ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 5.504.4.1.
10. COMPOSITE WOOD PRODUCTS.
    HARDWOOD PLYWOOD, PARTICLEBOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDINGS SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED IN ARB'S AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD (17 CCR 93120 ET SEQ) .
    THOSE MATERIALS NOT EXEMPTED UNDER THE ATCM MUST MEET THE SPECIFIED EMISSION LIMITS, AS SHOWN IN TABLE 5.504.4.5.
11. RESILIENT FLOORING SYSTEMS.
    80% OF FLOOR AREA RECEIVING RESILIENT FLOORING, INSTALLED RESILIENT FLOORING SHALL MEET AT LEAST ONE OF THE FOLLOWING:

    1. CERTIFIED UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOOR SCORE PROGRAM;

    2. COMPLIANT WITH THE VOC-EMISSION LIMITS AND TESTING REQUIREMENTS SPECIFIED IN THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S 2010 STANDARD METHOD FOR THE TESTING AND EVALUATION CHAMBERS, VER 1.1, FEB 2010.;

    3. COMPLIANT WITH THE CALIFORNIA COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CA-CHPS) CRITERIA INTERPRETATION FOR EQ 2.2 DATED JULY 2012 AND LISTED IN THE CHPS HIGH PERFORMANCE PRODUCT DATABASE;

    4. COMPLIANT WITH CDPH CRITERIA AS CERTIFIED UNDER THE GREENGUARD CHILDREN'S & SCHOOLS PROGRAM.

    VERIFICATION OF COMPLIANCE.
    DOCUMENTATION SHALL BE PROVIDED VERIFYING THAT RESILIENT FLOORING MATERIALS MEET THE POLLUTANT EMISSION LIMIT.

TABLE 5.504.4.1 - ADHESIVE VOC LIMIT [1,2]
Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVES	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT SPECIFICALLY LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF

TABLE 5.504.4.2 - SEALANT VOC LIMIT
Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NONPOROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

NOTE: FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THESE TABLES, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 5.504.4.5 - FORMALDEHYDE LIMITS [1]
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD [2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM).

JUN 03 2015

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST ROSS
No. S2030
EXP. 9/30/15
STRUCTURAL
STATE OF CALIFORNIA

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

GREEN BUILDING STANDARDS

REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC FLS SS
DATE 6-9-15

2013 - 12x40

AGB

12'x40' P.C.

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 1 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

Climate Zone:	Conditioned Floor Area : 0
3	Unconditioned Floor Area : 480

General Information

Building Type:	☐ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel		
☐ Schools	☐ Relocatable Public Schools	☐ Conditioned Spaces	☒ Unconditioned Spaces		
Phase of Construction:	☒ New Construction	☐ Addition	☐ Alteration		
Method of Compliance:	☐ Complete Building	☐ Area Category	☐ Tailored		

LIGHTING COMPLIANCE DOCUMENTS (select yes for each document included)
For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	FORM	TITLE
YES		NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
YES		NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
YES		NRCC-LTI-03-E	Indoor Lighting Power Allowance
	NO	NRCC-LTI-04-E	Tailored Method Worksheets
	NO	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets

Summary of Allowed Lighting Power
Conditioned and Unconditioned space Lighting must not be combined for compliance

Indoor Lighting Power For Conditioned Spaces			Watts	Indoor Lighting Power for Unconditioned Spaces		Watts
1.	Installed Lighting (NRCC-LTI-01-E, page 4)	+	0	Installed Lighting (NRCC-LTI-01-E, page 4)	+	238
2.	PORTABLE ONLY FOR OFFICES (NRCC-LTI-01-E, page 3)	+				
3.	Minus Lighting Control Credits (NRCC-LTI-02-E, page 2)	-	0	Minus Lighting Control Credits (NRCC-LTI-02-E, page 2)	-	0
4.	Adjusted Installed Lighting Power (row 1 plus row 2 minus row 3)	=	0	Adjusted Installed Lighting Power (row 1 minus row 3)	=	238

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 2 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

5.	Complies ONLY if Installed ≤ Allowed		Complies ONLY if Installed ≤ Allowed	
6.	Allowed Lighting Power Conditioned NRCC-LTI-03-E, page 1	0	Allowed Lighting Power Unconditioned NRCC-LTI-03-E, page 1	828

Declaration of Required Installation Certificates – Declare by selecting yes for all installation Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
X		NRCI-LTI-01-E - Must be submitted for all buildings	☐ Field Inspector
X		NRCI-LTI-03-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐ Field Inspector
	X	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
	X	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	☐ Field Inspector
	X	NRCI-LTI-03-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
	X	NRCI-LTI-05-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

Declaration of Required Certificates of Acceptance – Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
X		NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
	X	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
	X	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 3 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☐ CONDITIONED SPACE ☒ UNCONDITIONED SPACE

A. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST
☐ The actual indoor lighting power listed on this page and on the next page includes all installed permanent and planned portable lighting systems.
☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines
☐ Also include track lighting in schedule, and submit the track lighting compliance form (NRCC-LTI-05-E) when line-voltage track lighting is installed.

B. Installed Portable Luminaires in Offices – Exception to Section 140.8(a)
☐ This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance form.
☐ This section is used to determine if greater than 0.8 watts of portable lighting is planned for any office
☐ Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire Watts Per Square Foot							Office Location	Field Inspector
A	B	C	D	E	F	G	H	I	J
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Number of Luminaires	Installed portable luminaire watts in this office (B x C)	Square feet of this office	Watts per square foot (D / E)	If F > 0.8, enter term; If F ≤ 0.8, (F-0.8)	E x G	Identify Office area in which these portable luminaires are installed	Pass / Fail
									☐ ☐
									☐ ☐
									☐ ☐
									☐ ☐
									☐ ☐
Total installed portable luminaire watts that are greater than 0.8 watts per square foot per office:								Enter sum total of all pages into NRCC-LTI-01-E; Page 1	

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 4 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☐ CONDITIONED SPACE ☒ UNCONDITIONED SPACE

C. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Luminaire Schedule		Installed Watts				Location	Field Inspector
A	B	C	D	E	F	G	H
Luminaire Tag Name	Complete Luminaire Description (i.e., # lamp fluorescent troffer, PS278, one dimmable electronic ballast)	Luminaire wattage	How wattage was determined: Calculated (use this)	How wattage was determined: Measured (use this)	Number of luminaires	Total wattage (C x D x E)	Primary function area in which these luminaires are installed	Pass	Fail
A	4 ft LED 3GTL 4 80L	59.0	☐	☒	4	236	Relocatable Public School	☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
INSTALLED WATTS PAGE TOTAL:						236	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 5 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
I. I certify that the Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Hayley Dodd	Documentation Author Signature:	
Company:	EnergySoft, LLC	Signature Date:	10/17/2014
Address:	1035 5th Street, Suite A	CEA/ HERS Certification Identification (If applicable):	ENERGY-SOFT
City/State/Zip:	Novato, CA 94949	Phone:	(418) 897-8400

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Luis Esquivel	Responsible Designer Signature:	
Company:	Enviroplex Inc.	Date Signed:	6.9.15
Address:	4777 E. Carpenter Rd	License:	640557
City/State/Zip:	Stockton, CA 95215	Phone:	209-466-8000

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE — NRCC-LTI-02-E
Indoor Lighting - Lighting Controls — (Page 1 of 3)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

The NRCC-LTI-02-E shall be used to document all mandatory and prescriptive lighting controls that are applicable to the project.

Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
X		Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section §110.9.
X		Lighting shall be controlled by a lighting control s system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
	X	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
	X	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section §110.9 and Section §130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
X		All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
X		All luminaires shall be functionally controlled with manually switched ON and OFF lighting controls in accordance with Section 130.1(a).
X		General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
X		The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
X		All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
	X	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
	X	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
X		Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4 (a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE — NRCC-LTI-02-E
Indoor Lighting - Lighting Controls — (Page 2 of 3)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☑ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

MANDATORY AND PRESCRIPTIVE INDOOR LIGHTING CONTROL SCHEDULE, PAF CALCULATION, and FIELD INSPECTION CHECKLIST

Lighting Control Schedule			Standards Complying With [1] (✓ all that apply, or enter "E" if Exempted)							PAF Credit Calculation [2]				Field Inspector
										Watts of Controlled Lighting	PAF	Control Credit (K x L)	✓ If Acceptance Test Required	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Location in Building	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.1(b)	§130.1(c)	§130.1(d)	§130.1(e)	§140.6(a)2	§140.6(a)3					Pass / Fail
														☐ ☐
														☐ ☐
														☐ ☐
														☐ ☐
														☐ ☐
														☐ ☐
														☐ ☐
Control Credit PAGE TOTAL (Sum of Column M):												0		
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column M):												0		
														Enter Control Credit total into NRCC-LTI-01-E: Page 1.

1. §130.1(a) = Manual area controls; §130.1(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(a) = Additional lighting controls installed to earn a PAF; §140.6(a) = Prescriptive Secondary Sitelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE — NRCC-LTI-02-E
Indoor Lighting - Lighting Controls — (Page 3 of 3)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☐ CONDITIONED SPACES ☑ UNCONDITIONED SPACES

MANDATORY AND PRESCRIPTIVE INDOOR LIGHTING CONTROL SCHEDULE, PAF CALCULATION, and FIELD INSPECTION CHECKLIST

Lighting Control Schedule			Standards Complying With [1] (✓ all that apply, or enter "E" if Exempted)							PAF Credit Calculation [2]				Field Inspector
										Watts of Controlled Lighting	PAF	Control Credit (K x L)	✓ If Acceptance Test Required	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Location in Building	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.1(b)	§130.1(c)	§130.1(d)	§130.1(e)	§140.6(a)2	§140.6(a)3					Pass / Fail
														☐ ☐
														☐ ☐
														☐ ☐
														☐ ☐
														☐ ☐
														☐ ☐
														☐ ☐
Control Credit PAGE TOTAL (Sum of Column M):												0		
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column M):												0		
														Enter Control Credit total into NRCC-LTI-01-E: Page 1.

1. §130.1(a) = Manual area controls; §130.1(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(a) = Additional lighting controls installed to earn a PAF; §140.6(a) = Prescriptive Secondary Sitelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

JUN 03 2015

APPROVED
DIVISION OF STATE ARCHITECT
HIGH PERFORMANCE SECTION
APP.# 02-113910 DATE: 6/5/15
Sylvia Barrios, C.E.P.S.

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST ROSS No. S2030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

ENERGY COMPLIANCE
UNCONDITIONED RESTROOM

REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02–113910
AC. — FLS — SS
DATE 6-9-15
2013 – 12x40

EN1

12x40 P.C.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-03-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Indoor Lighting - Lighting Controls	(Page 3 of 3)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Hayley Dodd	Documentation Author Signature:	
Company:	EnergySoft, LLC	Signature Date:	10/17/2014
Address:	1025 5th Street, Suite A	CEA/HERS Certification Identification (If Applicable):	ENERGY·SOFT
City/State/Zip:	Novato, CA 94949	Phone:	(415) 897-8400

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Luis Esquivel	Responsible Designer Signature:	
Company:	Enviroplex Inc.	Date Signed:	6-9-15
Address:	4777 E. Carpenter Rd	License:	640957
City/State/Zip:	Stockton, CA 95215	Phone:	209-466-8000

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 1 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

ALLOWED LIGHTING POWER

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☐ CONDITIONED spaces ☑ UNCONDITIONED spaces

A. SUMMARY TOTALS OF LIGHTING POWER ALLOWANCES

☐ If using Complete Building Method for compliance, use only the total in column (a) as total allowed building watts.
☐ If using Area Category Method, Tailored Method, or a combination of Area Category and Tailored Method for compliance, use only the total in column (b) as the total allowed building watts

	(a)	(b)
1. Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on this page)		
2. Area Category Method Allowed Watts. Documented in section C-1 of NRCC-LTI-03-E (below on this page)		628
3. Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E		0
TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01, Page 2, Row 1		628

☐ Check here if building contains both conditioned and unconditioned areas.

B. COMPLETE BUILDING METHOD LIGHTING POWER ALLOWANCE

A: TYPE OF BUILDING (From §140.6 Table 140.6-B)	B: WATTS PER (ft²)		C: COMPLETE BLDG. AREA		D: ALLOWED WATTS
		X		=	
			Total Area:		
Total Watts. Enter Total Watts into section A, row 1 (Above on this page)					

C-1. AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES (C-2 plus C-3)

	Watts
Total from section C-2	628
Total from section C-3	0
Total Watts. Enter Total Watts into section A, row 2 (Above on this page)	628

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 2 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☐ CONDITIONED spaces ☑ UNCONDITIONED spaces

C-2 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE

☐ Do not include portable lighting for offices. Portable lighting for offices shall be documented only in section B of NRCC-LTI-03-E.
☐ Separately list lighting for each primary function area as defined in §100.1 of the Standards.

A: AREA CATEGORY (From §140.6 Table 140.6-C) Location in Building	Primary Function Area per Table 140.6-C	B: WATTS PER (ft²)		C: AREA (ft²)		D: ALLOWED WATTS
Restroom	Relocatable Public School	1.10	X	480	=	528

STATE OF CALIFORNIA
OUTDOOR LIGHTING CONTROLS
CEC-NRCC-LTD-02-E (Revised 06/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTD-02-E
Outdoor Lighting Controls	(Page 3 of 3)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Hayley Dodd	Documentation Author Signature:	
Company:	Energy Soft, LLC	Signature Date:	10/17/2014
Address:	1028 5th Street, Suite A	CEA/HERS Certification Identification (If applicable):	ENERGY·SOFT
City/State/Zip:	Novato, CA 94949	Phone:	(415) 897-8400

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Luis Esquivel	Responsible Designer Signature:	
Company:	Enviroplex Inc.	Date Signed:	6-5-15
Address:	4777 E. Carpenter Rd	License:	640551
City/State/Zip:	Stockton, CA 95215	Phone:	209-466-8000

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTD-02-E (Revised 06/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTD-02-E
Outdoor Lighting Power Allowances	(Page 2 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

C. ADDITIONAL "USE IT OR LOSE IT" OUTDOOR LIGHTING POWER ALLOWANCES FOR SPECIFIC APPLICATIONS
☐ The additional specific outdoor lighting power allowance shall be the smaller of the allowed lighting power or the actual lighting power used.
☐ Use Outdoor Lighting Zone (OLZ) that is documented on page 1 of NRCC-LTD-01-E to calculate the specific wattage allowances.

C-1. WATTAGE ALLOWANCE PER APPLICATION – Table 140.7-B
☐ Available only for qualifying locations, which include Building Entrances or Exits; Primary Entrances to Senior Care Facilities, Police Stations, Hospitals, Fire Stations, and Emergency Vehicle Facilities; Drive Up Windows; Vehicle Service Station Uncovered Fuel Dispenser
☐ If more than one luminaire type is used per location, use multiple rows for that location

A	B	C	D	E	F	G	H	I	J
	ALLOTTED WATTS			DESIGN WATTS					
Name of Location for which allowance is claimed	Number of qualifying locations	Wattage Allowance per qualifying location	Allotted Watts (B x C)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (G x H)	Allowed Watts (smaller of D or I)
Outdoor Lighting	1	80	80	B	80w INGRESS/EGRESS	1	80.0	80	80
							Sum total allowances per application on this site:		

C-2. WATTAGE ALLOWANCE PER UNIT LENGTH (Sales Frontage) from Table 140.7-B
☐ If more than one luminaire type is used per location, use multiple rows for that location

A	B	C	D	E	F	G	H	I	J
	ALLOTTED WATTS			DESIGN WATTS					
Name of Location for which allowance is claimed	Linear feet of Sales Frontage	Wattage Allowance per linear foot	Allotted Watts (B x C)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (G x H)	Allowed Watts (smaller of D or I)
							Sum total allowances for sales frontage on the site:		0

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTD-02-E (Revised 06/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTD-02-E
Outdoor Lighting Power Allowances	(Page 4 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Hayley Dodd	Documentation Author Signature:	
Company:	Energy Soft, LLC	Signature Date:	10/17/2014
Address:	1028 5th Street, Suite A	CEA/HERS Certification Identification (If applicable):	ENERGY·SOFT
City/State/Zip:	Novato, CA 94949	Phone:	(415) 897-8400

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
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4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
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Responsible Designer Name:	Luis Esquivel	Responsible Designer Signature:	
Company:	Enviroplex Inc.	Date Signed:	6-5-15
Address:	4777 E. Carpenter Rd	License:	640551
City/State/Zip:	Stockton, CA 95215	Phone:	209-466-8000

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

APPROVED
DIVISION OF STATE ARCHITECT
HIGH PERFORMANCE SECTION
APP.# 02-113910 DATE: 6/15/15
Lydia Bastian, C.E.P.E.

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Sacramento, CA 95815
(916) 920-2020 (916) 920-1201 Fax
www.cysse.com

JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST CYS No. S2030 EXP.9/30/15 STRUCTURAL STATE OF CALIFORNIA

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466–8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

ENERGY COMPLIANCE
UNCONDITIONED RESTROOM

REV / DATE:	BY:

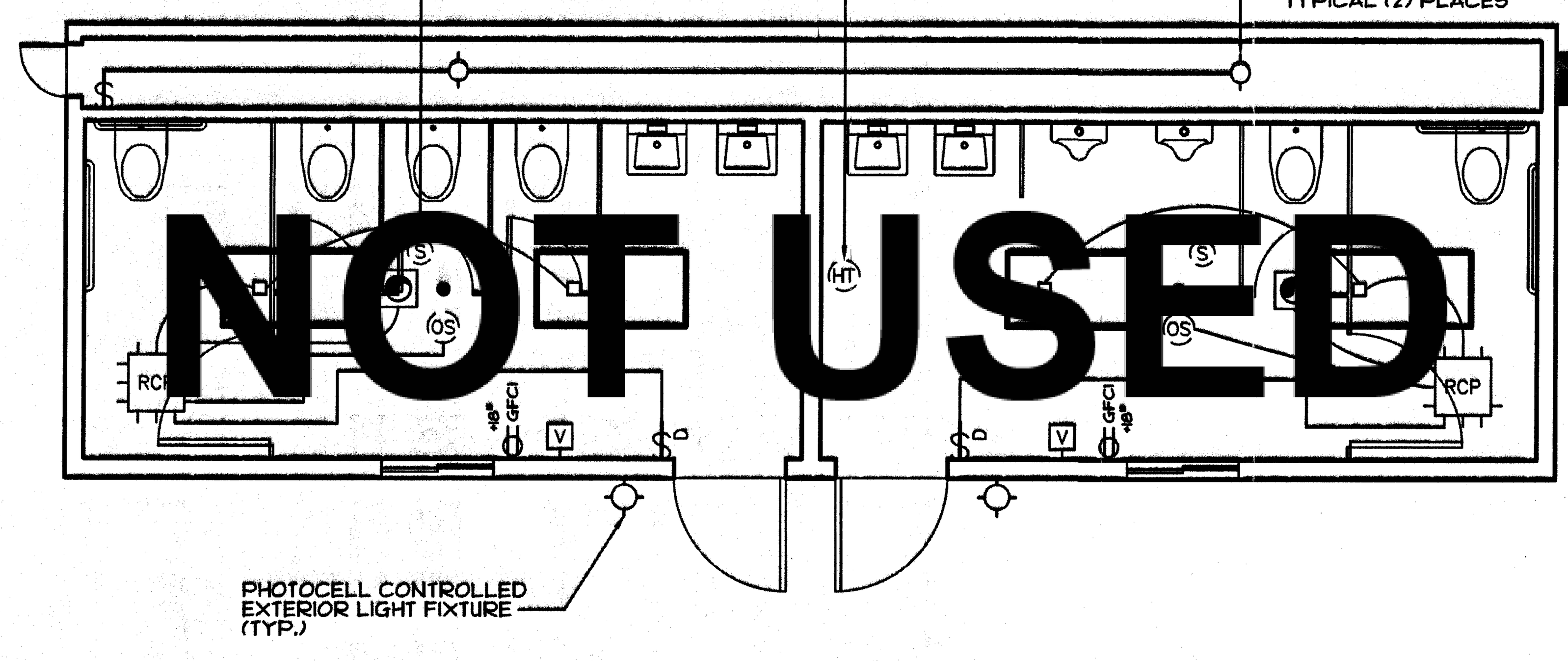
JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. — FLS. — SS 28
DATE 6-9-15

2016 - 12x40

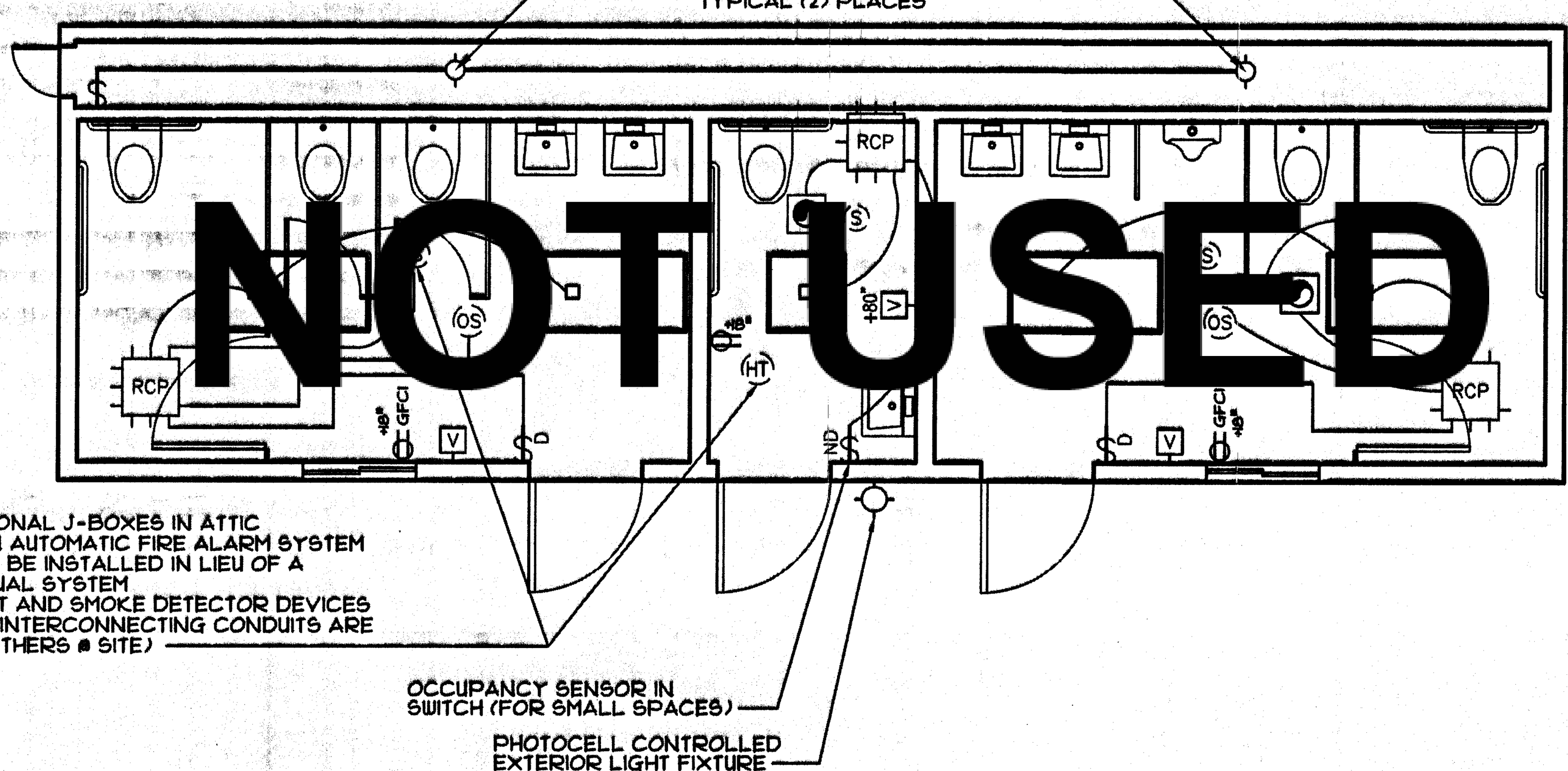
EN1.2

12'x40' P.C.



NOTE:
DAYLIGHTING CONTROLS ARE NOT REQUIRED IN ROOMS THAT HAVE A TOTAL GLAZING AREA OF LESS THAN 24 SQ. FT.

1a ELECTRICAL POWER, LIGHTING & SIGNAL PLAN
SCALE: 1/4"=1'-0"



NOTE:
DAYLIGHTING CONTROLS ARE NOT REQUIRED IN ROOMS THAT HAVE A TOTAL GLAZING AREA OF LESS THAN 24 SQ. FT.

11 ELECTRICAL POWER, LIGHTING & SIGNAL PLAN
SCALE: 1/4"=1'-0"

PANEL SCHEDULE: "A"
MOUNTING: SURFACE NEMA-1 VOLTS: 120/240
PANEL: 125A PHASE: 1φ
MAIN BREAKER: 125A WIRE: 3W

DESCRIPTION	LOAD	BRKR		MAIN 125 A B		BRKR	LOAD	DESCRIPTION
			1		2	20/1	600	LIGHTING-A
			3		4	20/1	600	LIGHTING-B
			5		6	20/1	1800	OUTLETS
			7		8	20/1	1800	OUTLETS
			9		10			
			11		12			

LEG A: 2400 W LEG B: 2400 W TOTAL: 4800 W

7 TYP. INTERIOR PANEL SCHEDULE

RCP — RELAY CONTROLLER PANEL: NEMA 1 PLENUM RATED, SURFACE MOUNTED DIMMING PANEL (RELAYS, DIMMING OUTPUTS, PHOTOCELL INPUTS, & DRY CONTACT INPUTS).

LIGHT FIXTURE: 2'x4' LED RECESSED TROFFER TYPE

LIGHT FIXTURE: 2'x2' LED RECESSED TROFFER TYPE

OS — OCCUPANCY SENSOR: LOW VOLTAGE, CEILING MOUNTED, OPTIONAL - WALL MOUNTED.

$D — DIMMING SWITCH: LOW VOLTAGE, TWO BUTTON, DIGITAL SWITCH W/ MANUAL ON/OFF & DIMMING CONTROL. (@+48" MAX A.F.F. TO TOP OF BOX).

$ND — NON-DIMMING SWITCH: LOW VOLTAGE, TWO BUTTON, DIGITAL SWITCH W/ MANUAL ON/OFF. (@+48" MAX A.F.F. TO TOP OF BOX).

EXTERIOR LIGHT: COMPACT FLUORESCENT, 13 WATT, WALL PACK. "LITHONIA" TWS (OR EQUAL) MOUNTED @ +96" A.F.F. (U.O.N.)

LIGHTING LEGEND

1. OPTIONAL WALL CLOCK (BY OWNERS) : PROVIDE SINGLE CLOCK RECEPTACLE 115 VAC (OR EQUAL) .
2. ELECTRICAL PANEL: FLUSH INTERIOR MOUNTED OR SURFACE MOUNT EXTERIOR W/ HINGED DOORS AND INDEXED CARD HOLDERS. CIRCUIT BREAKER (S) WILL HAVE AN APPROPRIATE UL. LABEL LISTING.
3. RECEPTACLES: "LEVITON", "HUBBEL" (OR EQUAL)
4. ELECTRIC METALLIC TUBING: COUPLINGS AND FLEX CONDUIT GALVANIZED OR SHERARDIZED.

3 ELECTRICAL SPECIFICATIONS

1. FIRE ALARM: FURNISHED BY OWNER AND SHALL CONFORM TO THE CALIFORNIA BUILDING CODE SECTION 907.2.3 AND CALIFORNIA ELECTRICAL CODE ARTICLE 760.
2. INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY D.S.A.
3. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE PROJECT INSPECTOR.
4. ALARMS/EMERGENCY WARNING SYSTEMS/ACCESSIBILITY. IF EMERGENCY WARNING SYSTEMS ARE PROVIDED, THEY SHALL INCLUDE BOTH AUDIBLE ALARMS AND VISUAL ALARMS COMPLYING WITH NFPA 72 AND CHAPTER 9, SECTIONS 907.5.2 AND 907.5.2.1

2 FIRE PROTECTION

DUPLEX RECEPTACLE @+15" MIN. A.F.F. (TO BOTTOM OF BOX) OR 18" A.F.F. TO CENTERLINE OF BOX. (UNLESS OTHERWISE NOTED)

J — JUNCTION BOX (SIZE AND INSTALLATION HEIGHT AS NOTED)

H — WATER PROOF BELL BOX UNDER EAVE @+9'-4" (U.O.N.) FOR FUTURE FIRE ALARM AUDIBLE WARNING DEVICE SEE NOTE NO. 1 OF FIRE PROTECTION

P — JUNCTION BOX @+48" A.F.F. (TO TOP OF BOX) FOR FUTURE FIRE ALARM PULL STATION - SEE NOTE NO. 1 OF FIRE PROTECTION ABOVE

V — JUNCTION BOX @+90" (U.O.N.) FOR FUTURE FIRE ALARM HORN/STROBE DEVICE - SEE NOTE NO. 1 OF FIRE PROTECTION ABOVE

I — JUNCTION BOX @+48" A.F.F. (TO TOP OF BOX) (U.O.N.) FOR FUTURE INTERCOM

CEILING MOUNT EXHAUST FAN (CFM PER SHEET A2)

HT — OPTIONAL JUNCTION BOX IN ATTIC FOR FUTURE HEAT DETECTOR (DEVICES AND INTERCONNECTING CONDUITS BY OTHERS @ SITE)

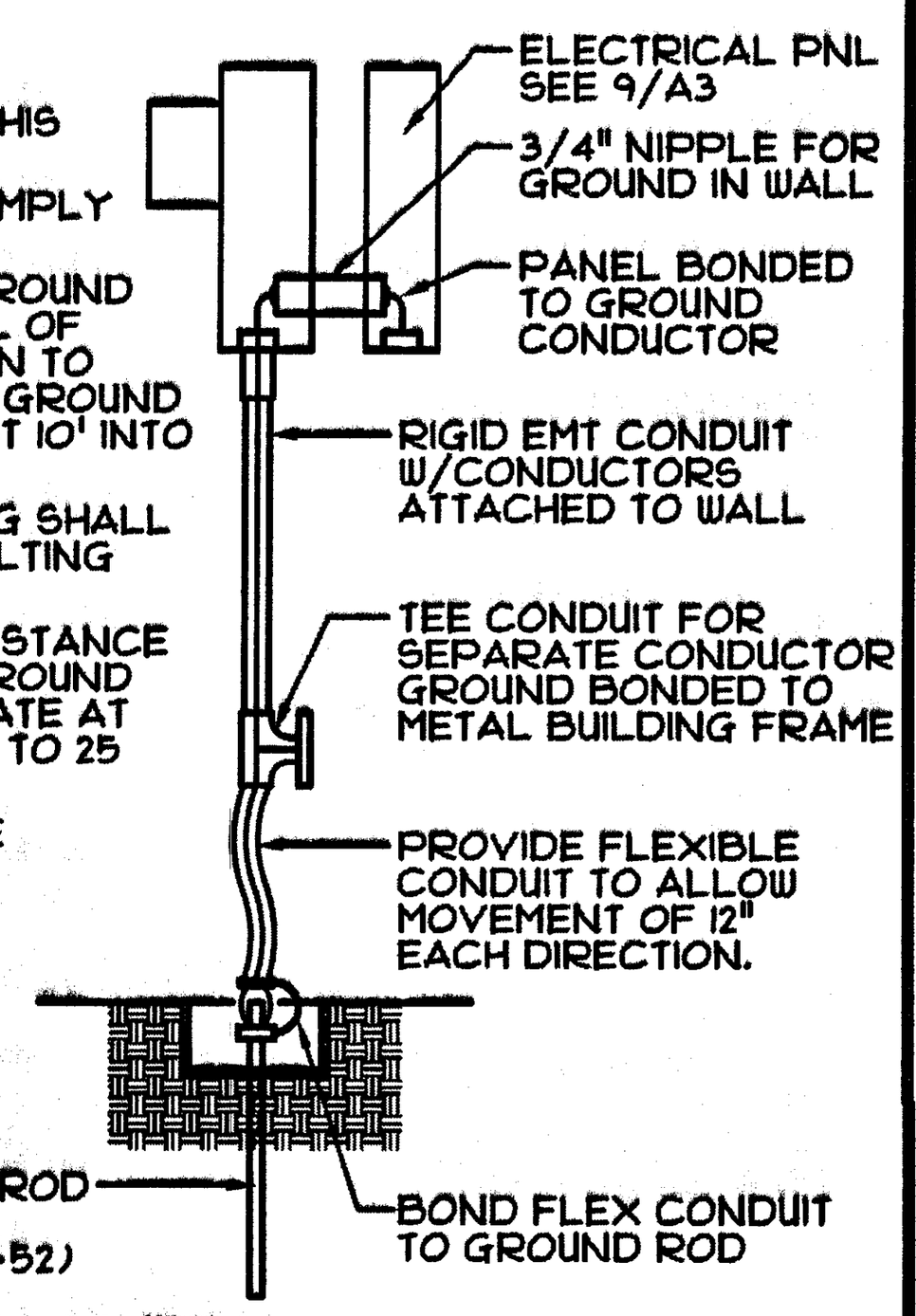
S — OPTIONAL JUNCTION BOX IN ATTIC FOR FUTURE SMOKE DETECTOR (DEVICES AND INTERCONNECTING CONDUITS BY OTHERS @ SITE)

4 ELECTRICAL LEGEND

1. CERTIFIED LUMINARIES/BALLASTS.
2. INDEPENDENT CONTROL WITHIN ENCLOSED AREAS.
3. MANUAL SWITCHING READILY ACCESSIBLE.
4. REDUCTION OF LIGHTING LOAD TO AT LEAST 50% VIA (2) SWITCHES OR (1) MULTI-LEVEL SWITCH.
5. NOT USED.
6. TANDEM WIRING OF (4) LAMP LUMINARIES.

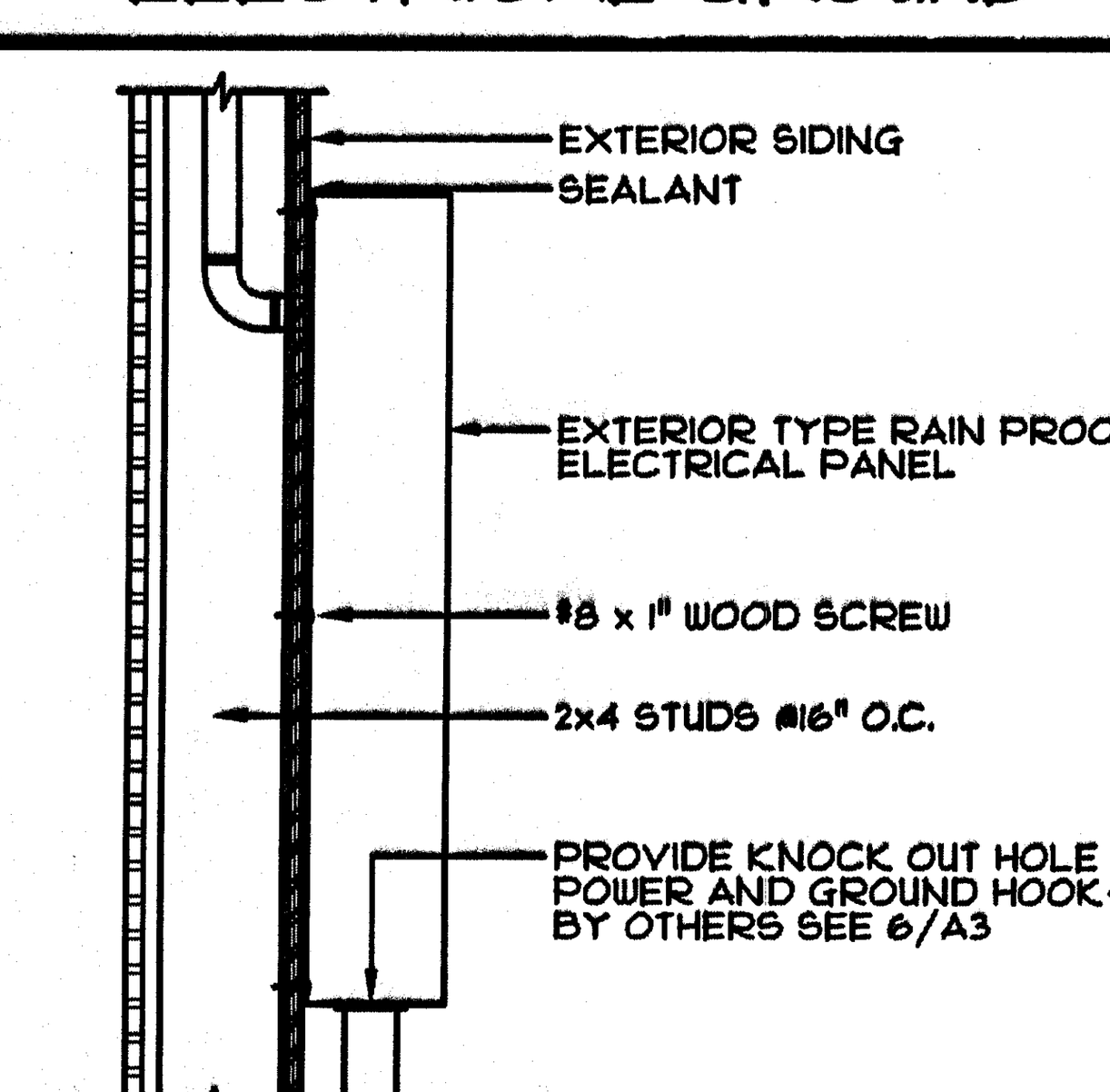
5 ELECTRICAL ENERGY COMPLIANCE

NOTES:
1. METER AND GROUND ARE NOT PART OF THIS CONTRACT TO BE PROVIDED BY OTHERS
2. SIZE OF GROUND CONDUCTOR SHALL COMPLY W/CEC TABLE 250-122
3. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL OF BUILDING FRAME (CEC. 250-52) IN ADDITION TO THE DETAIL SHOWN BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10' INTO THE SOIL IF AVAILABLE (C.E.C. 250-52)
4. ALL MODULES OF METAL FRAME BUILDING SHALL BE ELECTRICALLY BONDED TOGETHER, BOLTING ONLY IS NOT ACCEPTABLE BONDING.
5. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS W/ CONDUCTORS AS SHOWN, SEPARATE AT LEAST 6'0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS. (C.E.C. 250-52)
6. ELECTRICAL GROUNDING TEST SHALL BE WITNESSED BY THE PROJECT INSPECTOR & RESULTS SENT TO D.S.A.
7. GROUND ROD GROUNDING CLAMP TO BE BUSHING RATED FOR 3 CONNECTIONS



NOTE: GROUND TO BE PROVIDED BY OTHERS

8 ELECTRICAL GROUND

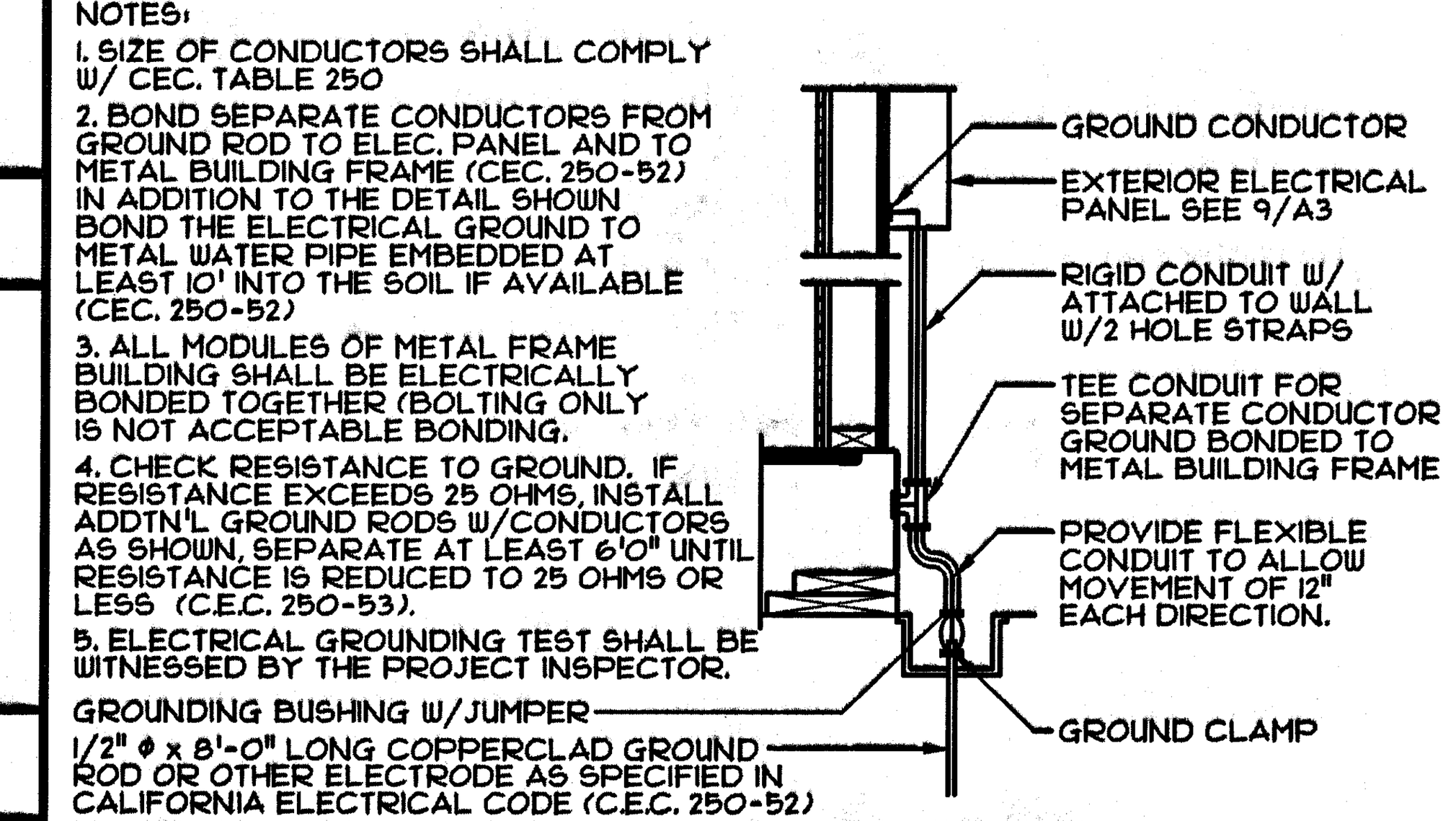


10 ELECTRICAL PANEL INSTALLATION
SCALE: 1"=1'-0"

1. LIGHTING FIXTURE: 2' x 4' LED RECESSED TROFFER TYPE FIXTURES, W/ LOW VOLTAGE DIMMING CONTROL SIGNAL, MAXIMUM 6000 LUMENS, MAX 59W. "LITHONIA" 2GTL (OR EQUAL) .
2. DAYLIGHT CONTROL PHOTOCELL: ON/OFF AND AUTOMATIC DIMMING CONTROL, CEILING MOUNT, LOW VOLTAGE. "nLIGHT" nCM ADC OR nCM ADCX (OR EQUAL) .
3. LIGHT SWITCHES: ON/OFF & ON/OFF PLUS DIMMING, PUSH BUTTON, LOW VOLTAGE. "nLIGHT" nCM ADC OR nCM ADCX (OR EQUAL) .
4. OCCUPANCY SENSOR: LOW VOLTAGE, WALL MOUNT OR CEILING MOUNT.
5. RELAY CONTROL PANEL: RELAY DIMMING PANEL, NEMA 1 PLENUM RATED, SURFACE MOUNTED. W/ 30A RELAYS, LOW VOLTAGE DIMMING OUTPUTS, PHOTOCELL OUTPUTS, DRY CONTACT INPUTS, AND OPTIONAL VOLTAGE BARRIER FOR EM CIRCUITS. "ACUITY BRANDS" (OR EQUAL)
6. ILLUMINATED EXIT SIGNS: IF REQUIRED BY CODE, SHALL BE PROVIDED IN COMPLIANCE W/ C.B.C. 1011 & 1006.
7. NOT USED.
8. SKYLIGHTS (IF OPTION IS INCLUDED IN SITE SPECIFIC PROJECT) : GENERAL LIGHTING FIXTURES PLACED IN THE PRIMARY DAYLIT ZONE OF SKYLIGHTS SHALL BE CONTROLLED IN RESPONSE TO AVAILABLE DAYLIGHTING.
9. ACCESSIBLE, INDEPENDENT SWITCHING OR A CONTROL DEVICE SHALL BE INCLUDED FOR ALL AREAS ENCLOSED BY CEILING HEIGHT PARTITIONS.
10. ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY A PHOTOCELL OR OUTDOOR ASTRONOMICAL TIME SWITCH CONTROL.
11. FOR NON-POLE MOUNTED LUMINAIRES OVER 30 WATTS EACH: OUTDOOR LIGHTING WHERE BOTTOM OF LUMINAIRE IS MOUNTED 24 FEET OR LESS ABOVE THE GROUND SHALL BE CONTROLLED BY MOTION SENSORS OR OTHER CONTROLS CAPABLE OF REDUCING THE LIGHTING POWER OF EACH LUMINAIRE BY 40 TO 80% IN RESPONSE TO THE AREA BEING VACATED.

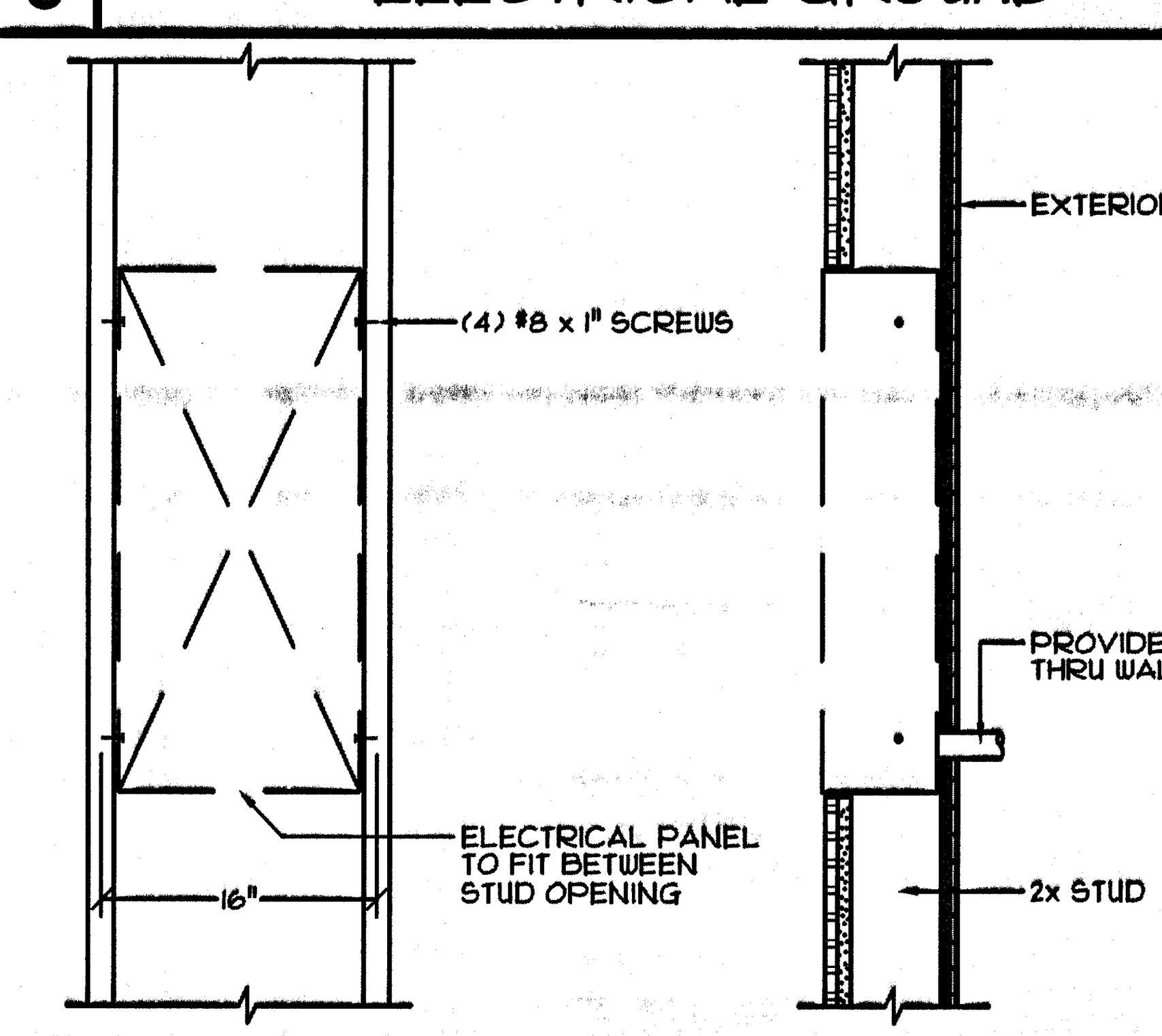
LIGHTING SPECIFICATIONS

NOTES:
1. SIZE OF CONDUCTORS SHALL COMPLY W/ CEC. TABLE 250
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC. PANEL AND TO METAL BUILDING FRAME (CEC. 250-52) IN ADDITION TO THE DETAIL SHOWN BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10' INTO THE SOIL IF AVAILABLE (CEC. 250-52)
3. ALL MODULES OF METAL FRAME BUILDING SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING.
4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDTN'L GROUND RODS W/CONDUCTORS AS SHOWN, SEPARATE AT LEAST 6'0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (C.E.C. 250-53).
5. ELECTRICAL GROUNDING TEST SHALL BE WITNESSED BY THE PROJECT INSPECTOR.



NOTE:GROUND TO BE PROVIDED BY OTHERS

6 ELECTRICAL GROUND



9 ELECTRICAL PANEL INSTALLATION
SCALE: 1"=1'-0"

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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JUN 0 3 2015

REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST ROSS
No. S2030
EXP. 9/30/15
STRUCTURAL
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

ELECTRICAL POWER PLAN, SIGNAL PLAN, LIGHTING PLAN, DETAILS, ELECTRICAL NOTES

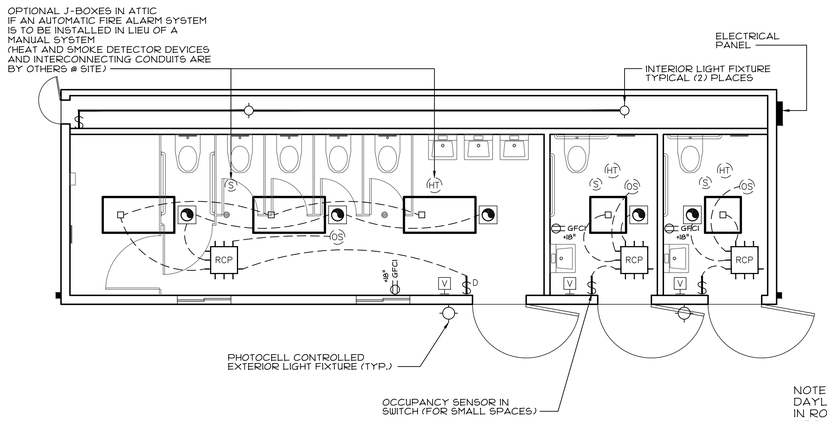
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC TM FLS [signature] SS [signature]
DATE 6-1-15
2013 - 12x40

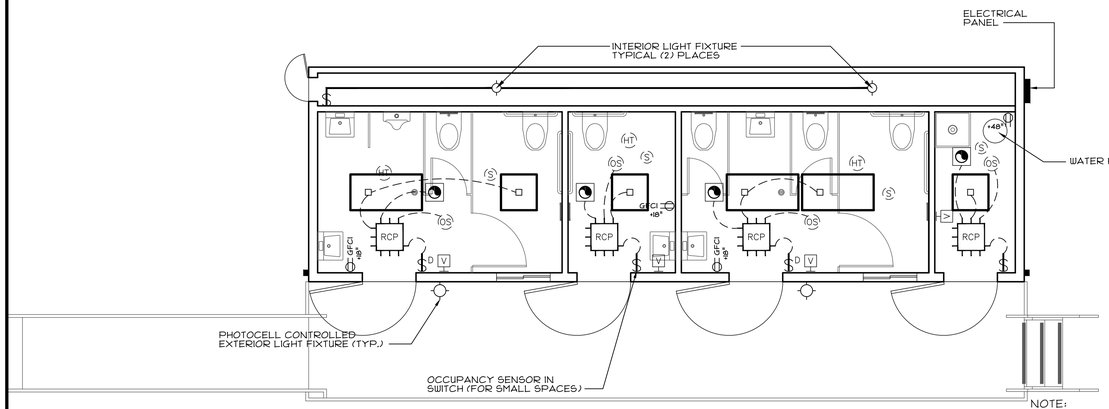
A3

12'x40' P.C.



NOTE:
DAYLIGHTING CONTROLS ARE NOT REQUIRED
IN ROOMS THAT HAVE A TOTAL GLAZING
AREA OF LESS THAN 24 SQ. FT.

1a (RESTROOM #1) ELECTRICAL POWER, LIGHTING & SIGNAL PLAN
SCALE: 1/4"=1'-0"



NOTE:
DAYLIGHTING CONTROLS ARE NOT REQUIRED
IN ROOMS THAT HAVE A TOTAL GLAZING
AREA OF LESS THAN 24 SQ. FT.

11 (RESTROOM #2) ELECTRICAL POWER, LIGHTING & SIGNAL PLAN
SCALE: 1/4"=1'-0"

PANEL SCHEDULE: RESTROOM #1
MOUNTING: SURFACE NEMA-3 VOLTS: 120/240
PANEL: 125A PHASE: 1Φ
MAIN BREAKER: 125A WIRE: 3W

DESCRIPTION	LOAD	BRKR		MAIN 125 A	MAIN 125 B		BRKR	LOAD	DESCRIPTION
LIGHTING-EXTERIOR	38	20/1	1			2	20/1	195	LIGHTING-INTERIOR
			3			4	20/1	540	OUTLETS
			5			6	20/1	38	LIGHTING-PLUMB CHASE
			7			8			
			9			10			
			11			12			

LEG A: 271 W LEG B: 540 W TOTAL: 811 W

7 (RESTROOM #1) ELEC. PANEL SCHEDULE

PANEL SCHEDULE: RESTROOM #2
MOUNTING: SURFACE NEMA-3 VOLTS: 120/240
PANEL: 125A PHASE: 1Φ
MAIN BREAKER: 125A WIRE: 3W

DESCRIPTION	LOAD	BRKR		MAIN 125 A	MAIN 125 B		BRKR	LOAD	DESCRIPTION
LIGHTING-EXTERIOR	38	20/1	1			2	20/1	234	LIGHTING-INTERIOR
			3			4	20/1	1650	WATER HEATER
OUTLETS	540	20/1	5			6	20/1	38	LIGHTING-PLUMB CHASE
			7			8			
			9			10			
			11			12			

LEG A: 850 W LEG B: 1650 W TOTAL: 2500 W

7 (RESTROOM #2) ELEC. PANEL SCHEDULE

3

2

4

5

6

8

9

10

DIVISION OF THE STATE ARCHITECT

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REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST ROSS
No. S2030
STRUCTURAL
STATE OF CALIFORNIA

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

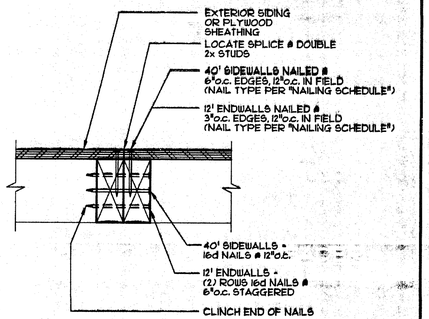
ELECTRICAL POWER PLAN,
SIGNAL PLAN, LIGHTING PLAN,

REV / DATE:	BY:

JOB No.:	17-025
DRAWN BY:	RS
DATE:	2/5/18

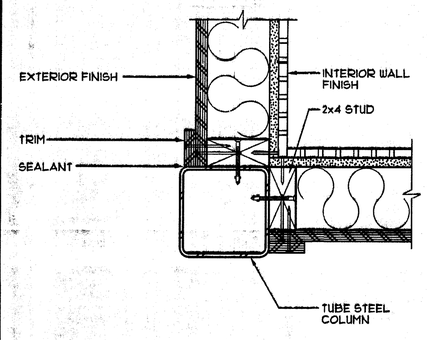
A3A

NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

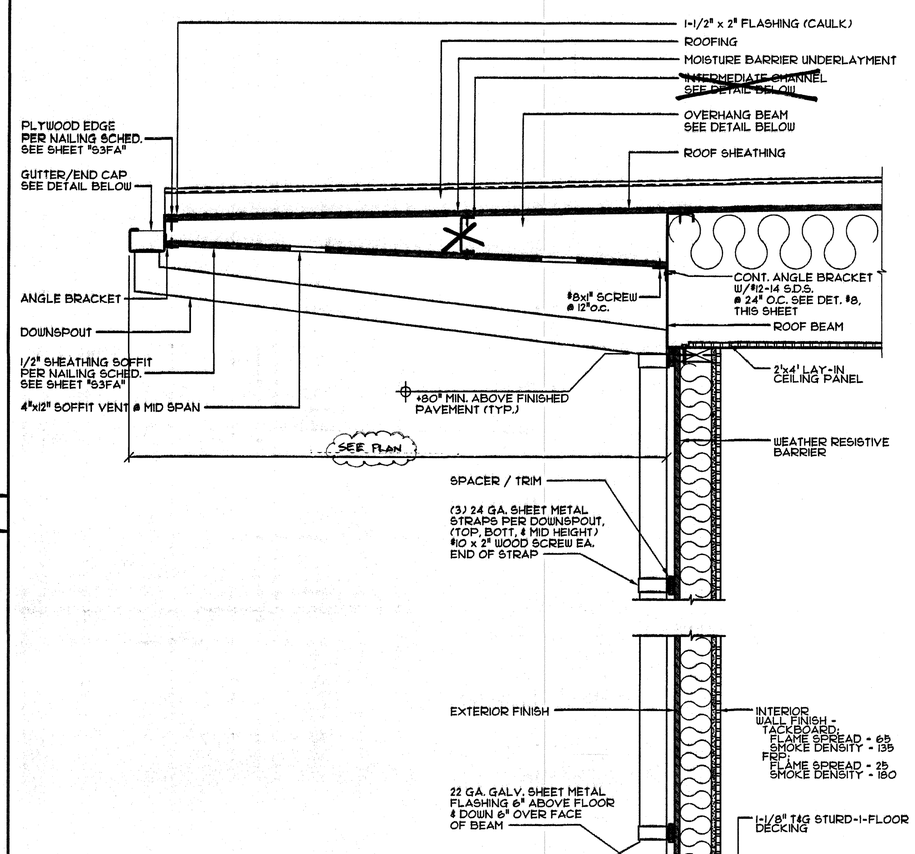


FOR FASTENER SCHEDULE, SEE "S3" SHEETS

1 SIDING SPLICE DETAIL
SCALE: 3"=1'-0"

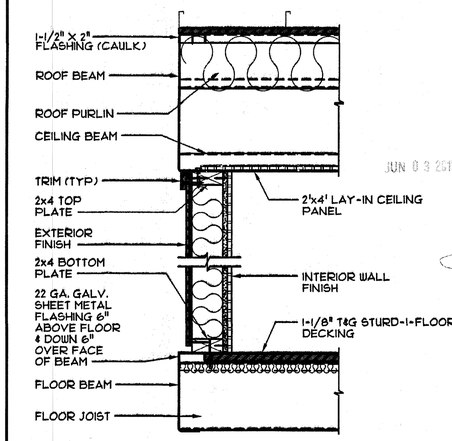


2 SECTION - COLUMN @ CORNER
SCALE: 3"=1'-0"



FOR FASTENER SCHEDULE, SEE "S3" SHEETS

7 SECTION - FRONT OVERHANG (REAR SIMILAR)
SCALE: 1 1/2"=1'-0"

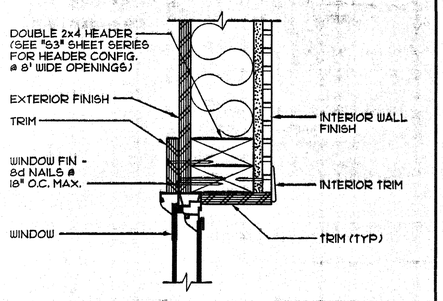


FOR FASTENER SCHEDULE, SEE "S3" SHEETS

9 SECTION - @ SIDEWALL
SCALE: 1 1/2"=1'-0"

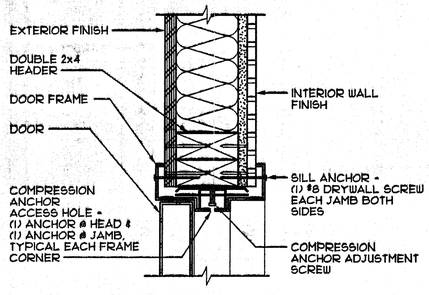
10

DIVISION OF THE STATE ARCHITECT



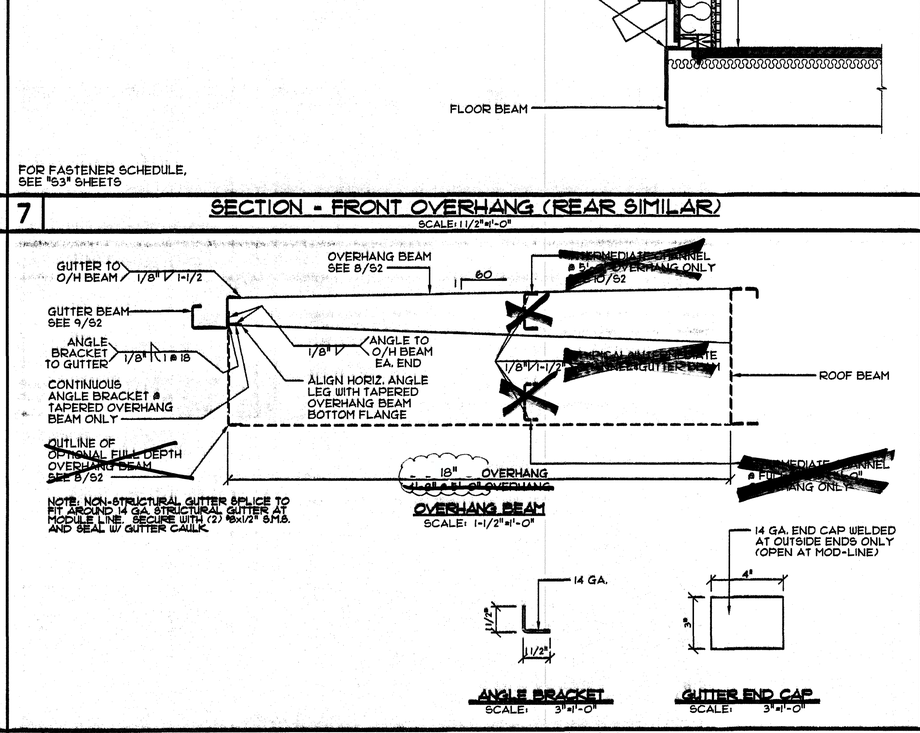
SECTION @ WINDOW JAMB IS SIMILAR

3 SECTION - WINDOW HEADER
SCALE: 3"=1'-0"

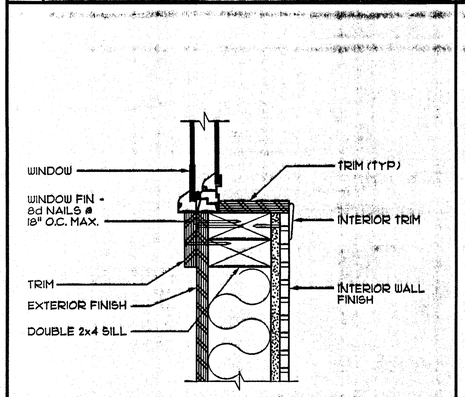


SECTION @ DOOR JAMB IS SIMILAR

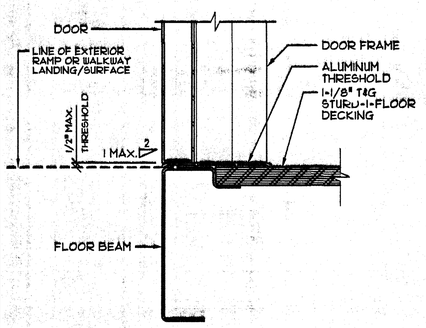
4 SECTION - DOOR HEADER
SCALE: 3"=1'-0"



8 OVERHANG & GUTTER DETAILS
SCALE: AS NOTED



5 SECTION - WINDOW SILL
SCALE: 3"=1'-0"



6 SECTION - DOOR THRESHOLD
SCALE: 3"=1'-0"

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST CYS No. 52030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

BI-PITCHED ROOF
SECTIONS AND DETAILS
(2x4 EXTERIOR WALLS)

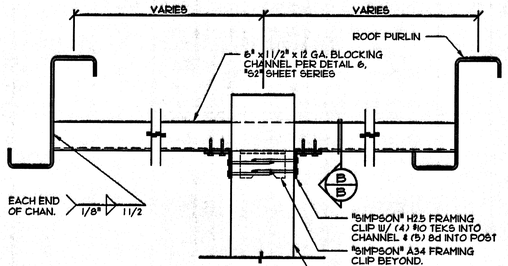
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

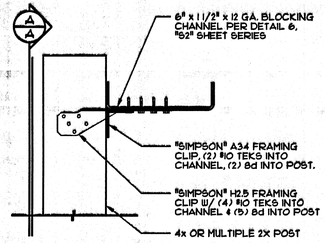
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC TM FLS KL SS
DATE 6-9-15

12x40 P.C.

A4A



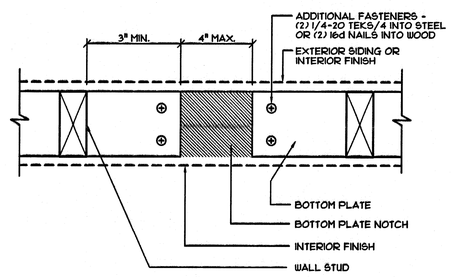
SECTION A-A



SECTION B-B

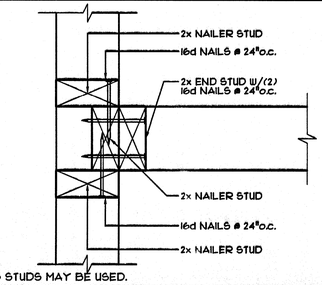
11 TOP CONNECTION - FULL HT. POST FOR HALF WALLS
SCALE: 3"=1'-0"

NOTE: 2x4 OR 2x6 STUDS MAY BE USED.



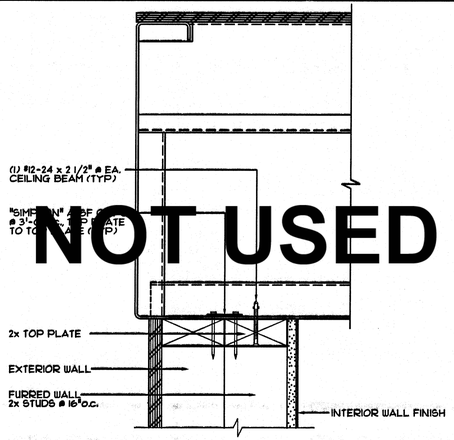
FOR FASTENER SCHEDULE, SEE "S3" SHEETS

1 ALLOWABLE BOTTOM PLATE NOTCH
SCALE: 3"=1'-0"



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

4 PERPENDICULAR WALL CONNECTION
SCALE: 3"=1'-0"

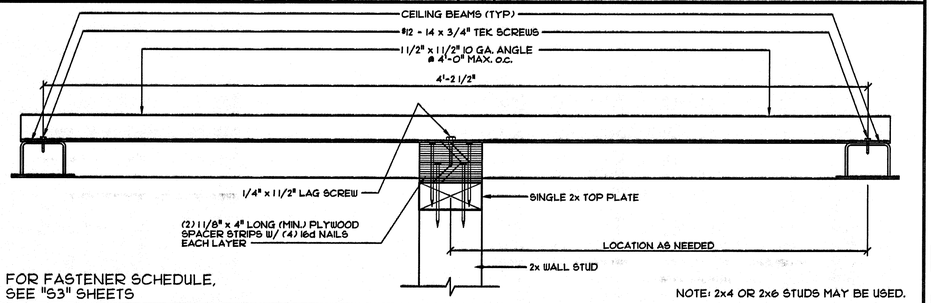


NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

NOT USED

2

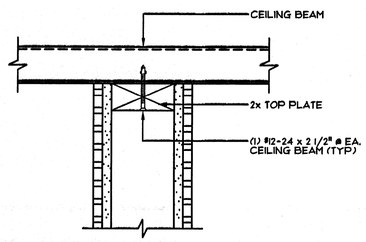
3



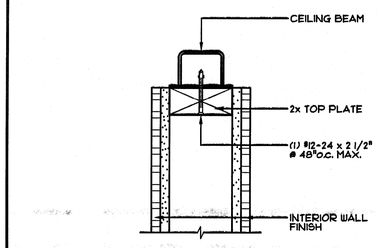
FOR FASTENER SCHEDULE, SEE "S3" SHEETS

NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

5 TOP PLATE ATTACHMENT BETWEEN CEILING BEAMS
SCALE: 3"=1'-0"



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

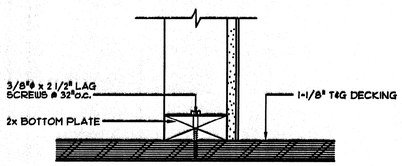


NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

6 FURRED WALL - TOP PLATE CONN.
SCALE: 3"=1'-0"

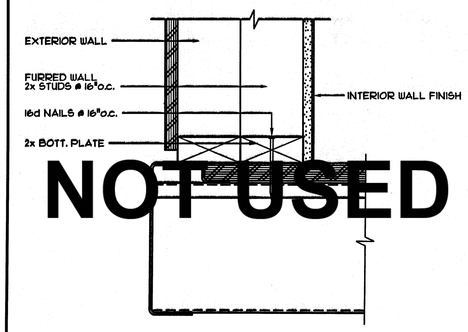
7 TOP PLATE TO CEILING BEAM
SCALE: 3"=1'-0"

8 TOP PLATE TO CEILING BEAM
SCALE: 3"=1'-0"



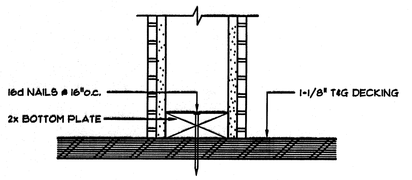
THIS DETAIL SHALL BE USED ONLY FOR PLUMBING CHASE WALLS SUPPORTING WALL HUNG TOILET FIXTURES.

NOTE: 2x4 OR 2x6 STUDS MAY BE USED.



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

NOT USED



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

11 PLUMBING CHASE WALL TO FLOOR
SCALE: 3"=1'-0"

9 FURRED WALL - BOTT. PLATE CONN.
SCALE: 3"=1'-0"

10 BOTTOM PLATE TO FLOOR
SCALE: 3"=1'-0"

DIVISION OF THE STATE ARCHITECT

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
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JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST ROSS No. S2030 EXP. 6/30/15 STRUCTURAL STATE OF CALIFORNIA

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

INTERIOR WALL CONNECTION DETAILS

REV / DATE:	BY:

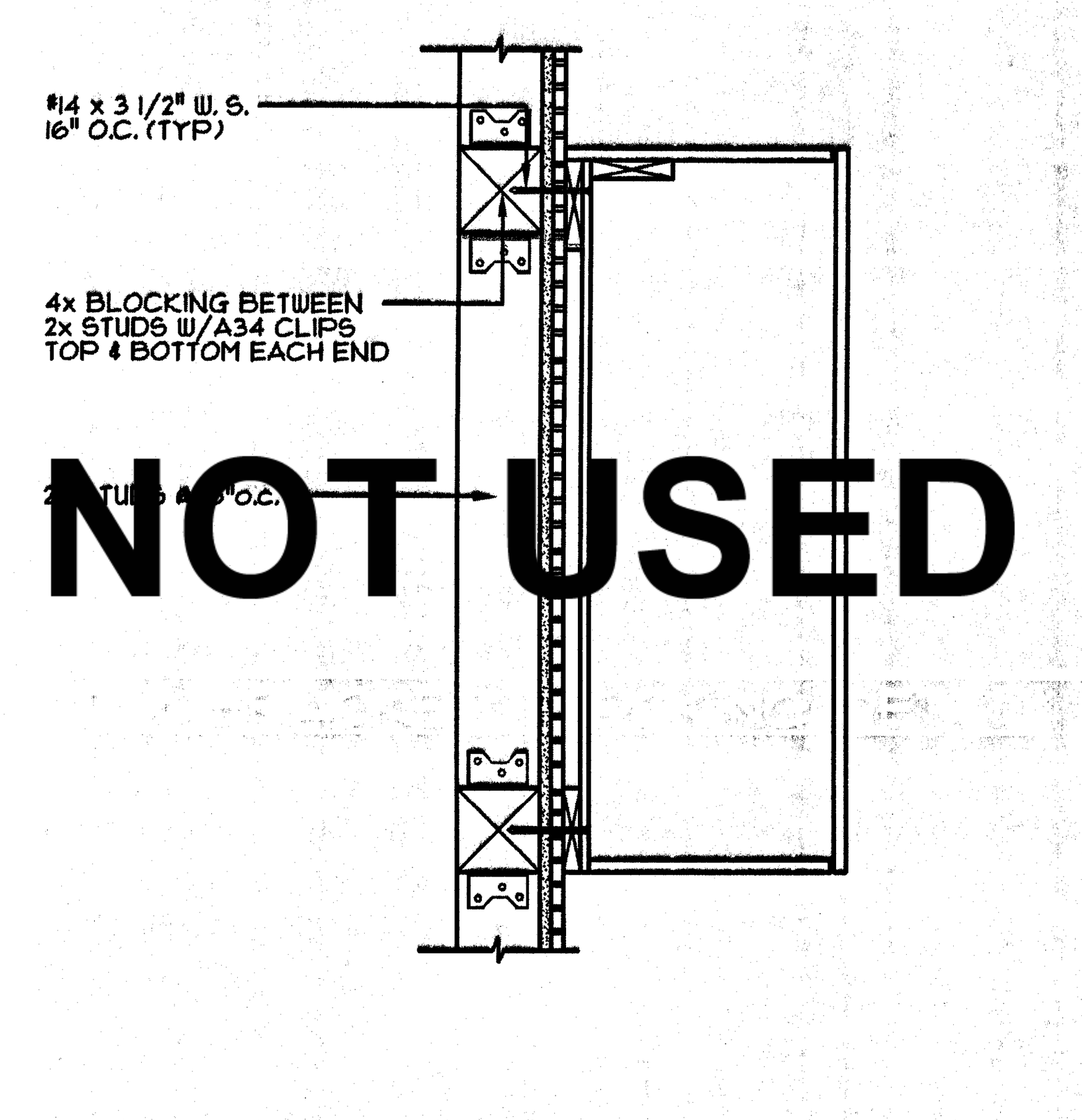
JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. TM FLS. 12 SS. K
DATE 6-9-15

2015 - 12x40

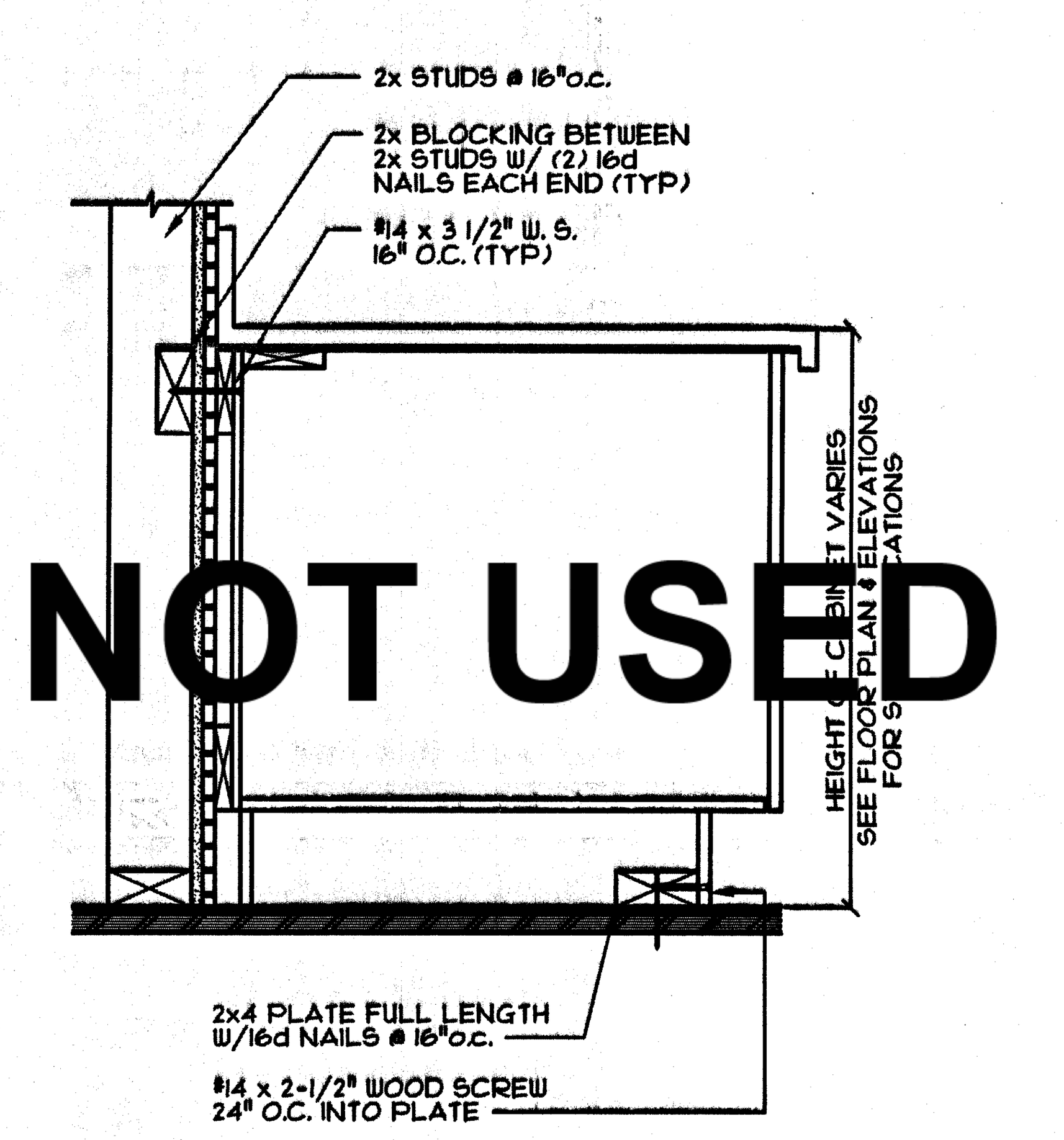
A4H

12'x40' P.C.



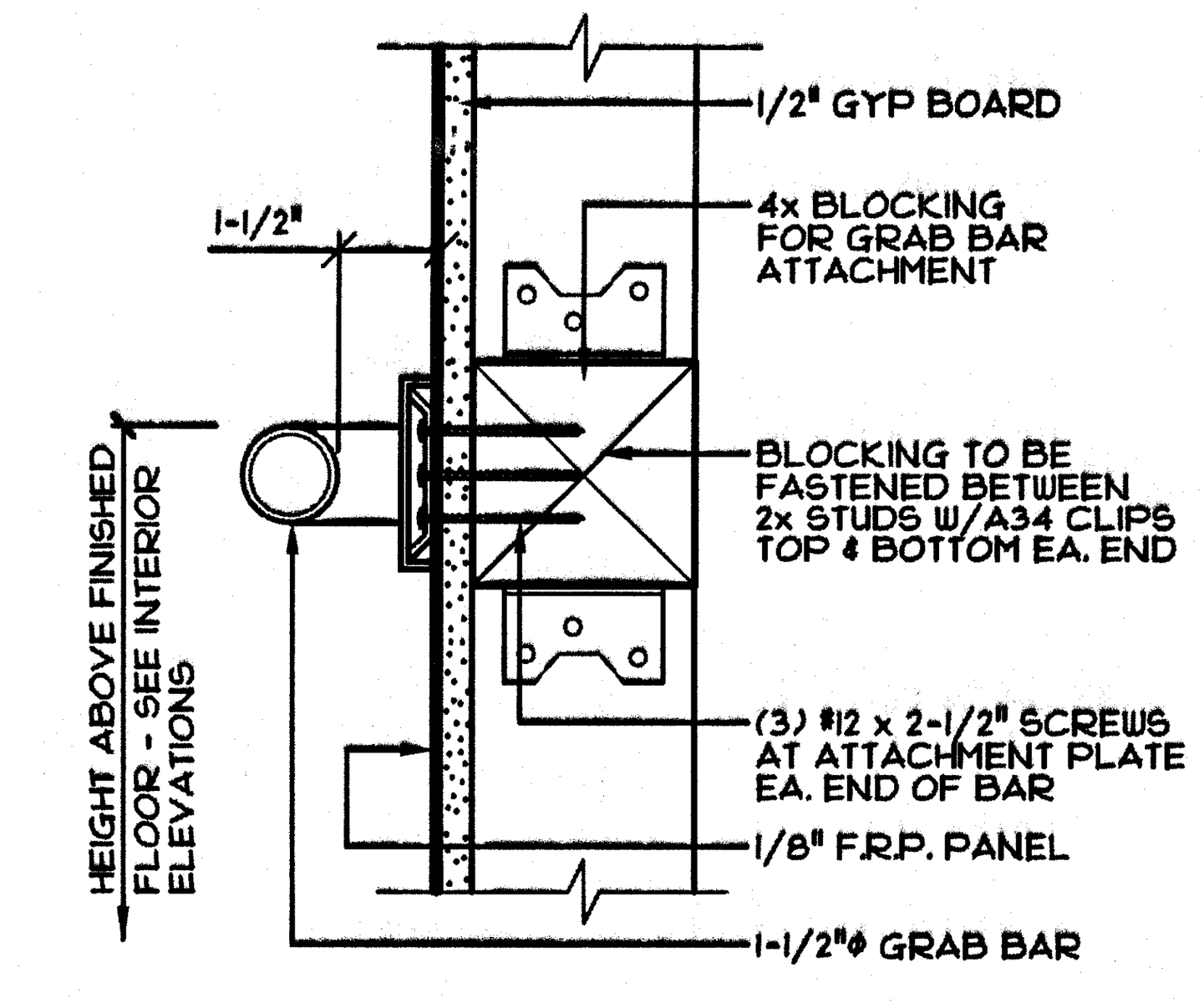
NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

1 UPPER CABINET BLOCKING DETAIL
SCALE: 1 1/2"=1'-0"



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

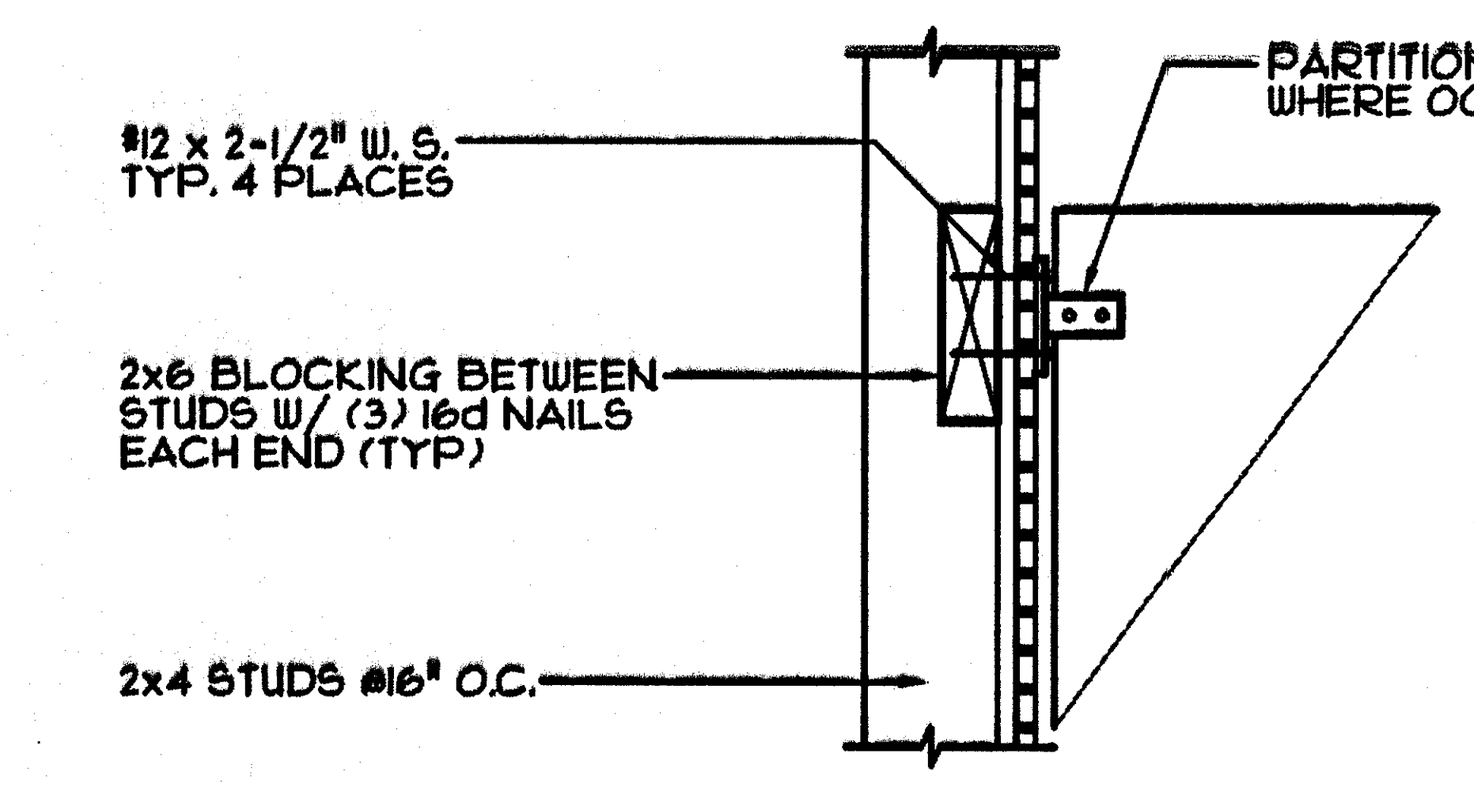
2 BASE CABINET BLOCKING DETAIL
SCALE: 1 1/2"=1'-0"



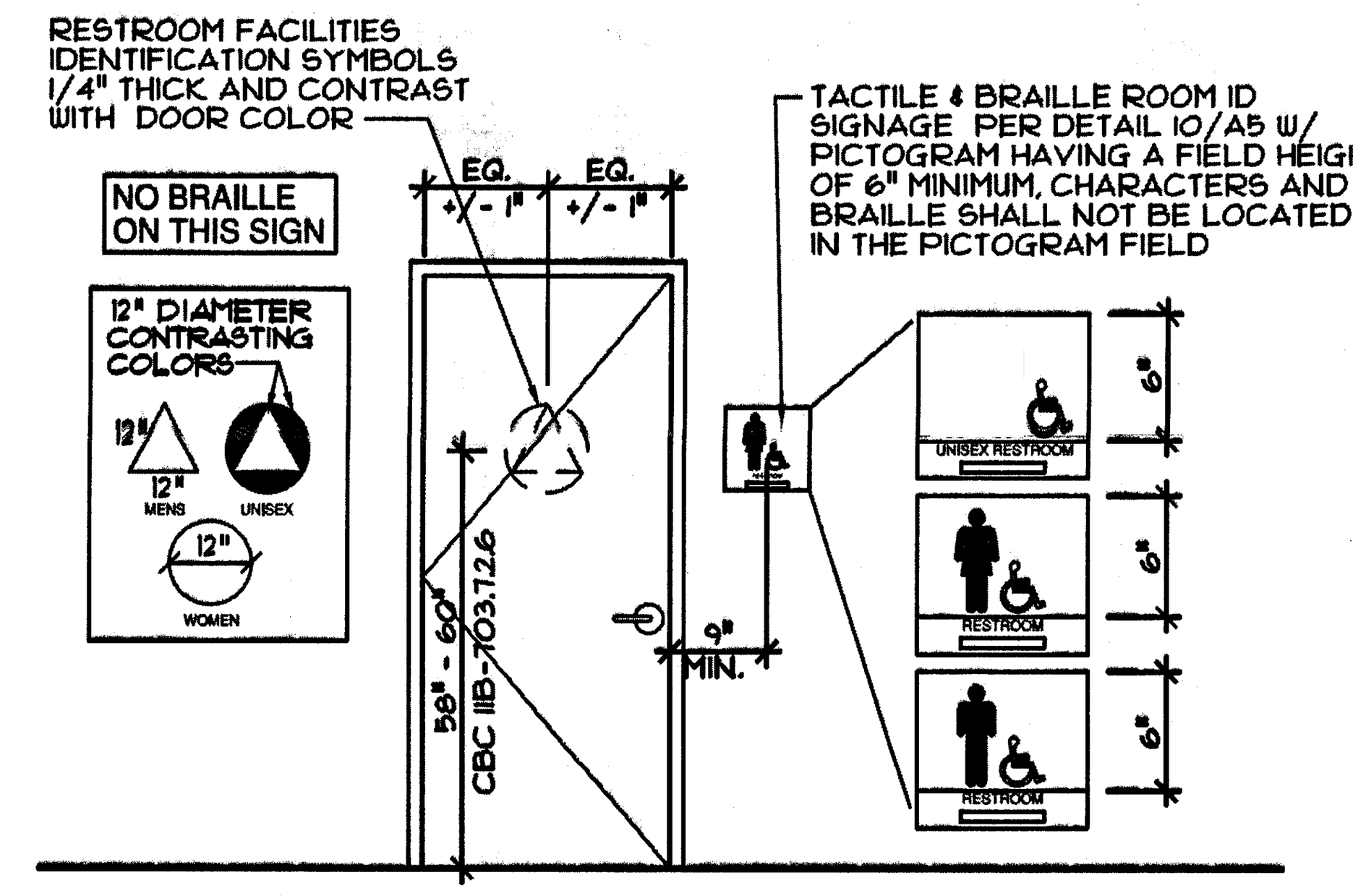
NOTE:
GRAB BAR SHALL BE CAPABLE OF SUPPORTING A VERTICAL OR HORIZONTAL 250 POUND LOAD

NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

3 GRAB BAR BLOCKING DETAIL
SCALE: 3"=1'-0"



4 TOILET PARTITION BLOCKING
SCALE: 1 1/2"=1'-0"



NOTE: EDGES AND CORNERS OF SIGNS SHALL BE ROUNDED, CHAMFERED OR EASED AND SHALL HAVE A MINIMUM RADIUS OF 1/8"

SEE 10/A5 FOR CHARACTER DEPTH, CASE, STYLE, PROPORTIONS, HEIGHT, STROKE THICKNESS, FINISH, CHARACTER SPACING, LINE SPACING, FORMAT, BRAILLE, POSITION, INSTALLATION HEIGHT ABOVE FINISHED FLOOR OR GROUND, AND LOCATION

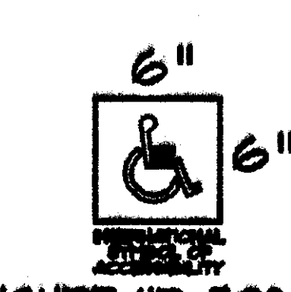
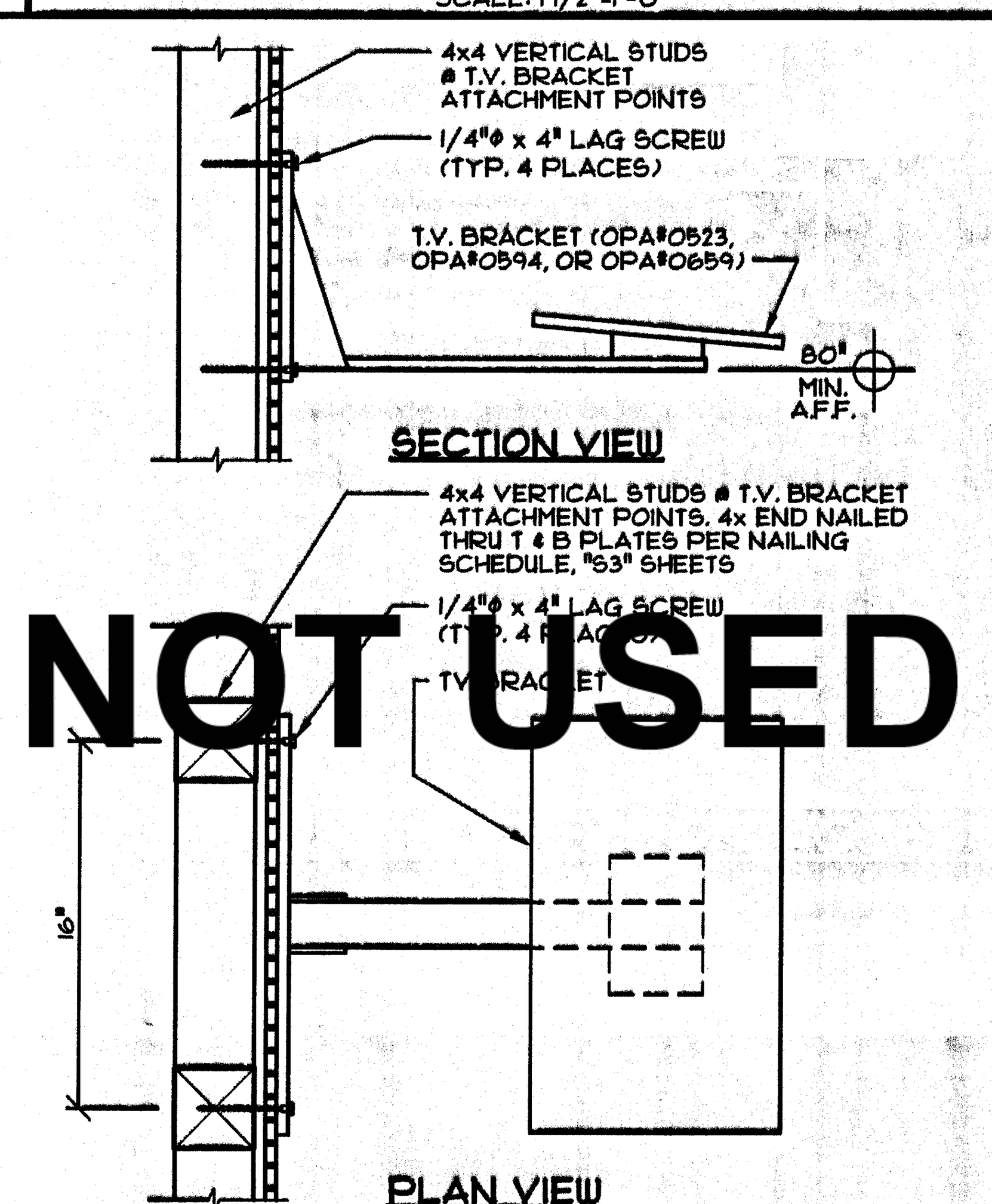


FIGURE 11B-703.7.2.1

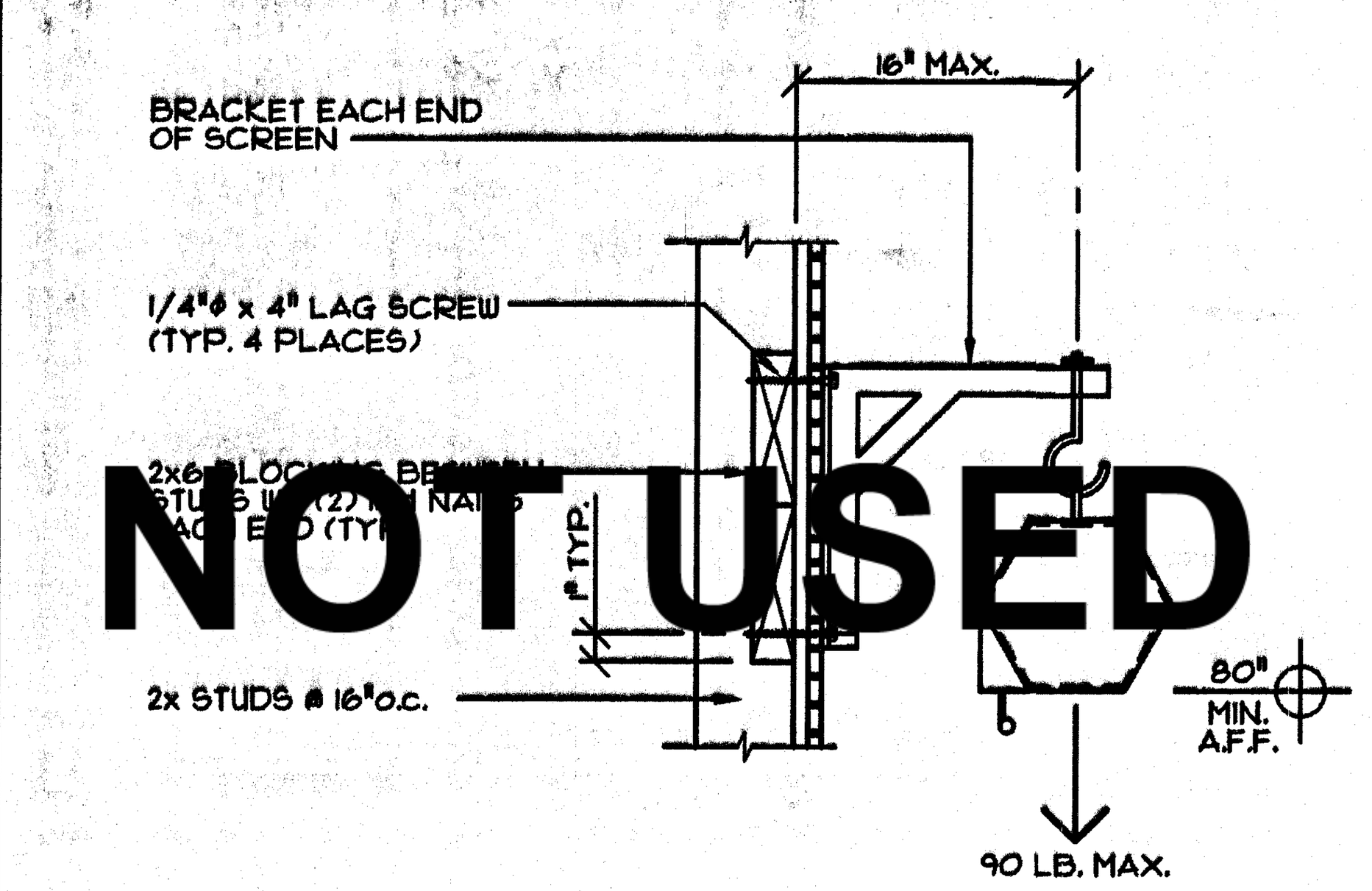
INTERNATIONAL SYMBOL OF ACCESSIBILITY:
SHALL COMPLY WITH FIGURE LLB-703.7.2.1 THE SYMBOL SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE COLOR NO. 15090 IN FEDERAL STANDARDS 595B FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE COLOR NO. 15090 IN FEDERAL STANDARDS 595B

5 RESTROOM DOOR & ROOM IDENTIFICATION SIGNAGE
SCALE: 3/8"=1'-0"



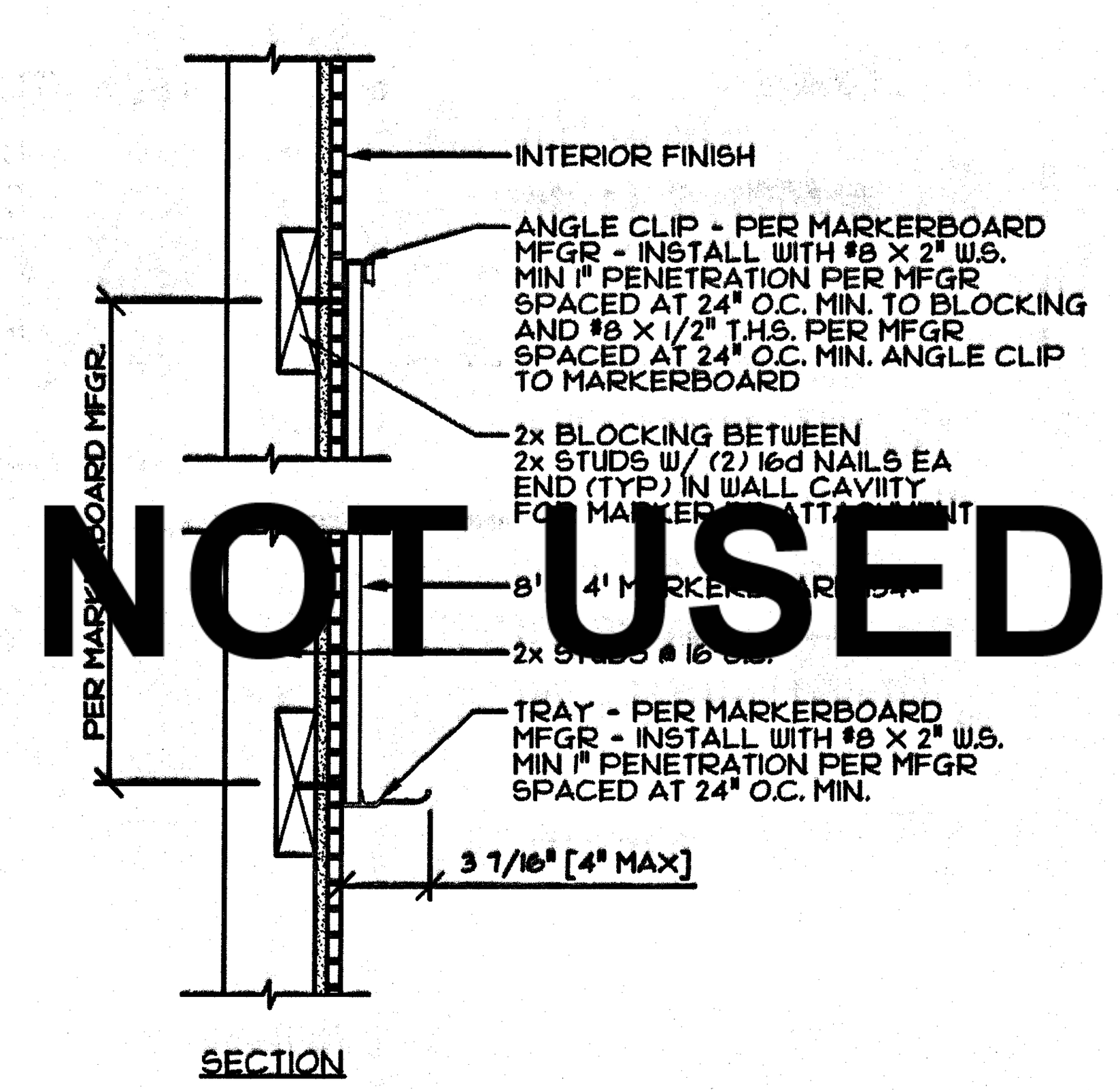
NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

6 T.V. BRACKET BLOCKING DETAIL
SCALE: 1 1/2"=1'-0"

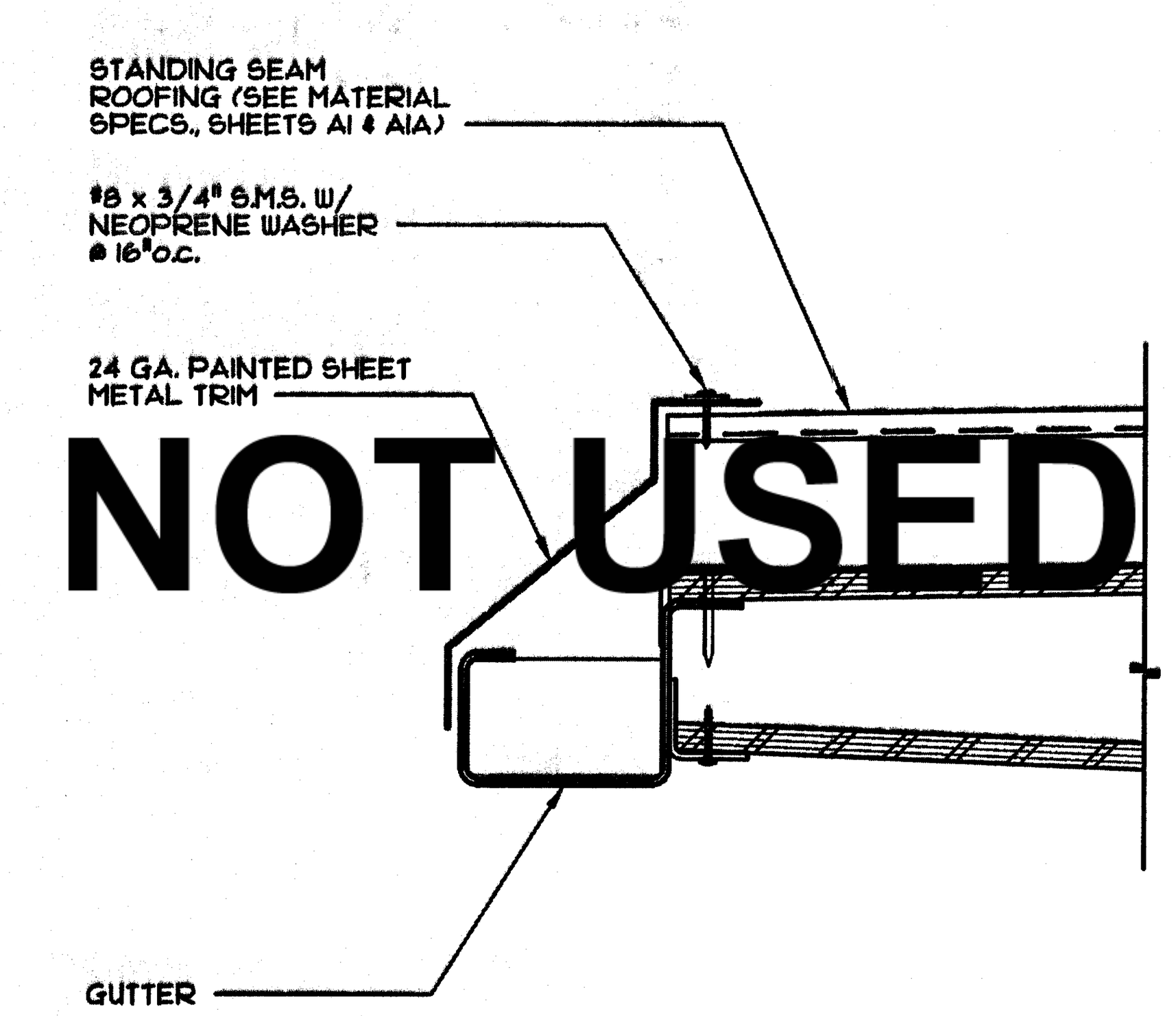


NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

7 PROJECTOR SCREEN BLOCKING
SCALE: 1 1/2"=1'-0"

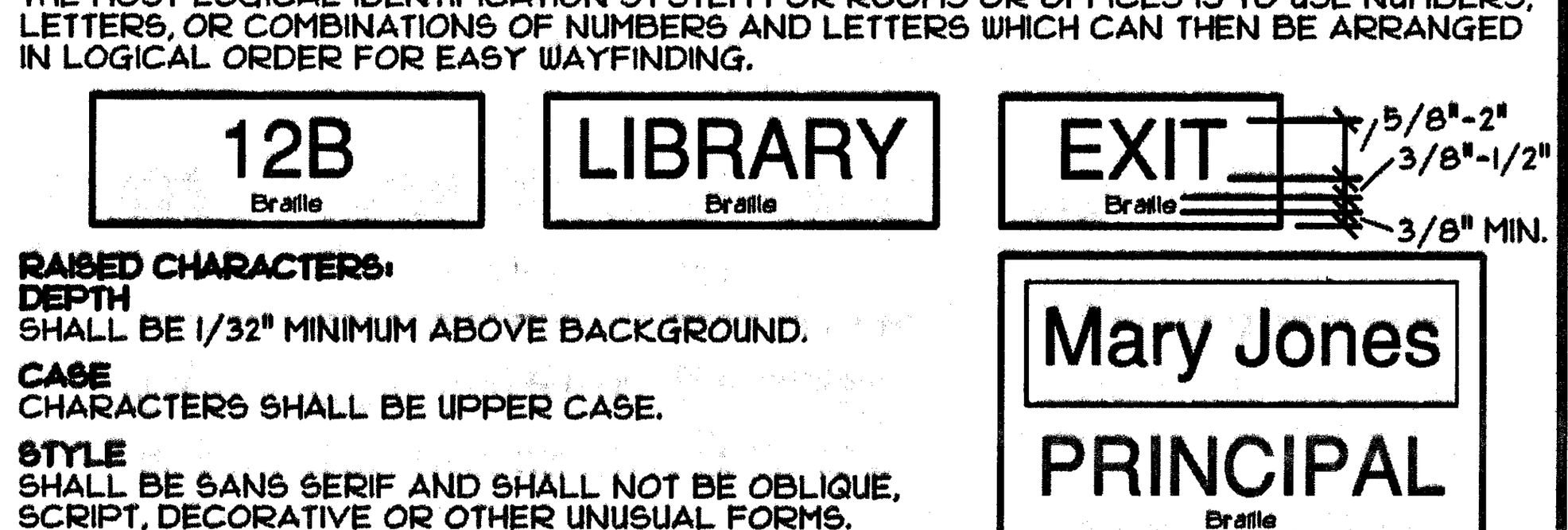


8 MARKERBOARD BLOCKING
SCALE: 1 1/2"=1'-0"



9 ROOFING CONCEALMENT TRIM
SCALE: 3"=1'-0"

NAMES, NUMBERS, OR LETTERS ONLY
THE MOST LOGICAL IDENTIFICATION SYSTEM FOR ROOMS OR OFFICES IS TO USE NUMBERS, LETTERS, OR COMBINATIONS OF NUMBERS AND LETTERS WHICH CAN THEN BE ARRANGED IN LOGICAL ORDER FOR EASY WAYFINDING.



CHANGEABLE INFORMATION MAY BE INCLUDED ON A REMOVABLE INSERT

RAISED CHARACTERS:

DEPTH
SHALL BE 1/32" MINIMUM ABOVE BACKGROUND.

CASE
CHARACTERS SHALL BE UPPER CASE.

STYLE
SHALL BE SANS SERIF AND SHALL NOT BE OBLIQUE, SCRIPT, DECORATIVE OR OTHER UNUSUAL FORMS.

PROPORTIONS
WIDTH OF UPPERCASE LETTER "O" IS 60% MINIMUM AND 110% MAXIMUM OF THE HEIGHT OF UPPERCASE "I".

HEIGHT
MEASURED VERTICALLY FROM BASELINE OF THE CHARACTER SHALL BE 5/8" MINIMUM AND 2" MAXIMUM BASED ON THE UPPERCASE LETTER "I".

STROKE THICKNESS
THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15% MAXIMUM OF THE HEIGHT OF THE CHARACTER

FINISH
CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON DARK BACKGROUND OR DARK CHARACTERS ON LIGHT BACKGROUND.

CHARACTER SPACING
SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSET POINTS OF ADJACENT RAISED CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. WHERE CHARACTERS HAVE RECTANGULAR CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/8" MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM. WHERE CHARACTERS HAVE OTHER CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/16" MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE BASE OF THE CROSS SECTIONS AND 1/8" MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8" MINIMUM.

LINE SPACING
SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135% MINIMUM AND 170% MAX. OF THE RAISED CHARACTER HEIGHT.

FORMAT
TEXT SHALL BE HORIZONTAL

BRAILLE:
SHALL BE CONTRACTED (GRADE 2) AND DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH CBC TABLE 11B-703.3.1. THE INDICATION OF AN UPPER-CASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF A SENTENCE, PROPER NOUNS, AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS.

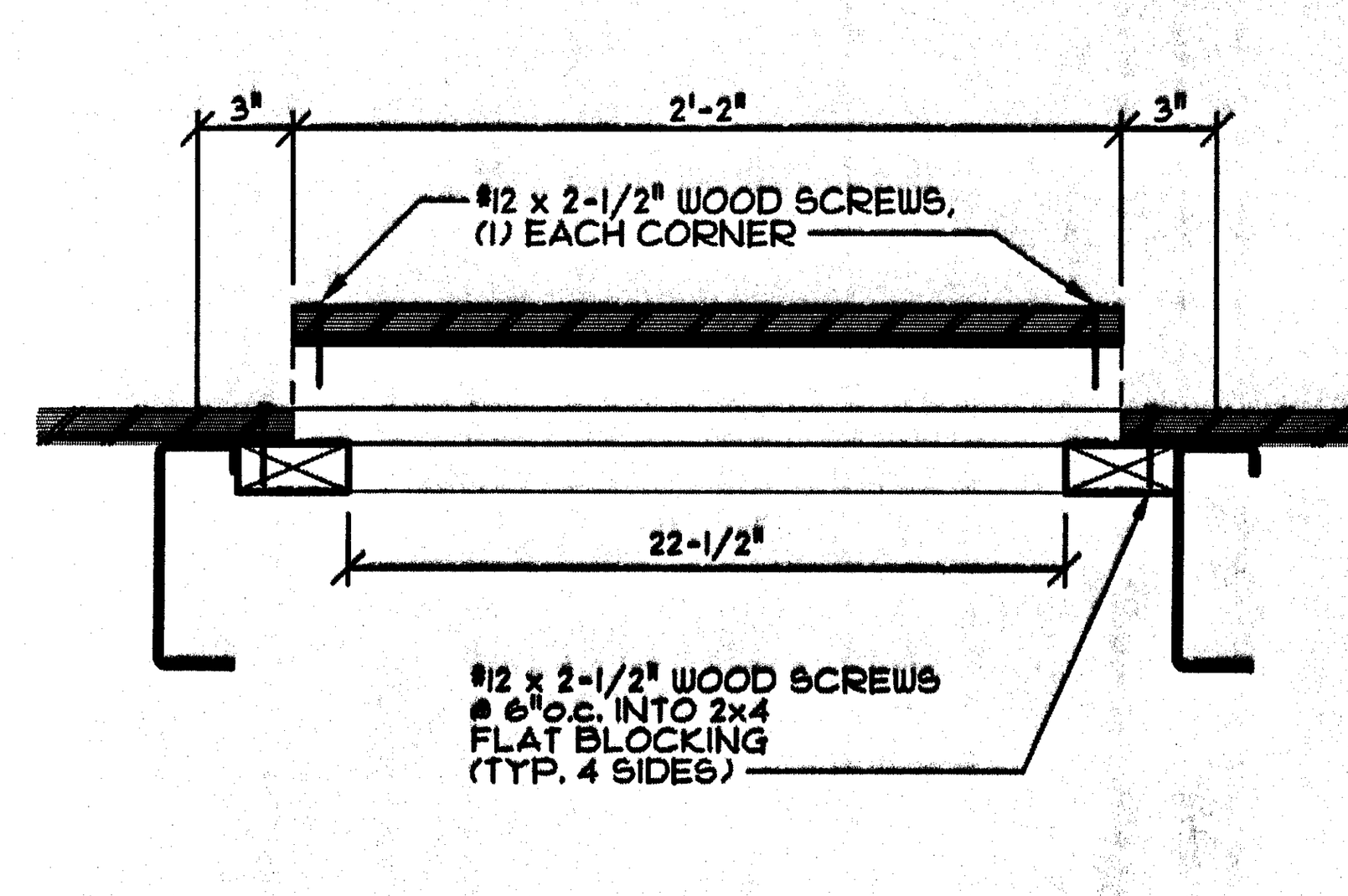
POSITION
SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8" MIN AND 1/2" MAX FROM ANY OTHER TACTILE CHARACTERS AND 3/8" MIN FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

INSTALLATION:
HEIGHT ABOVE FINISHED FLOOR OR GROUND
CHARACTERS ON SIGNS SHALL BE LOCATED 48" MIN ABOVE THE FINISHED FLOOR OR GROUND SURFACE MEASURED FROM BASELINE OF THE LOWEST BRAILLE CELLS AND 60" MAX ABOVE THE FINISHED FLOOR OR GROUND SURFACE MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS.

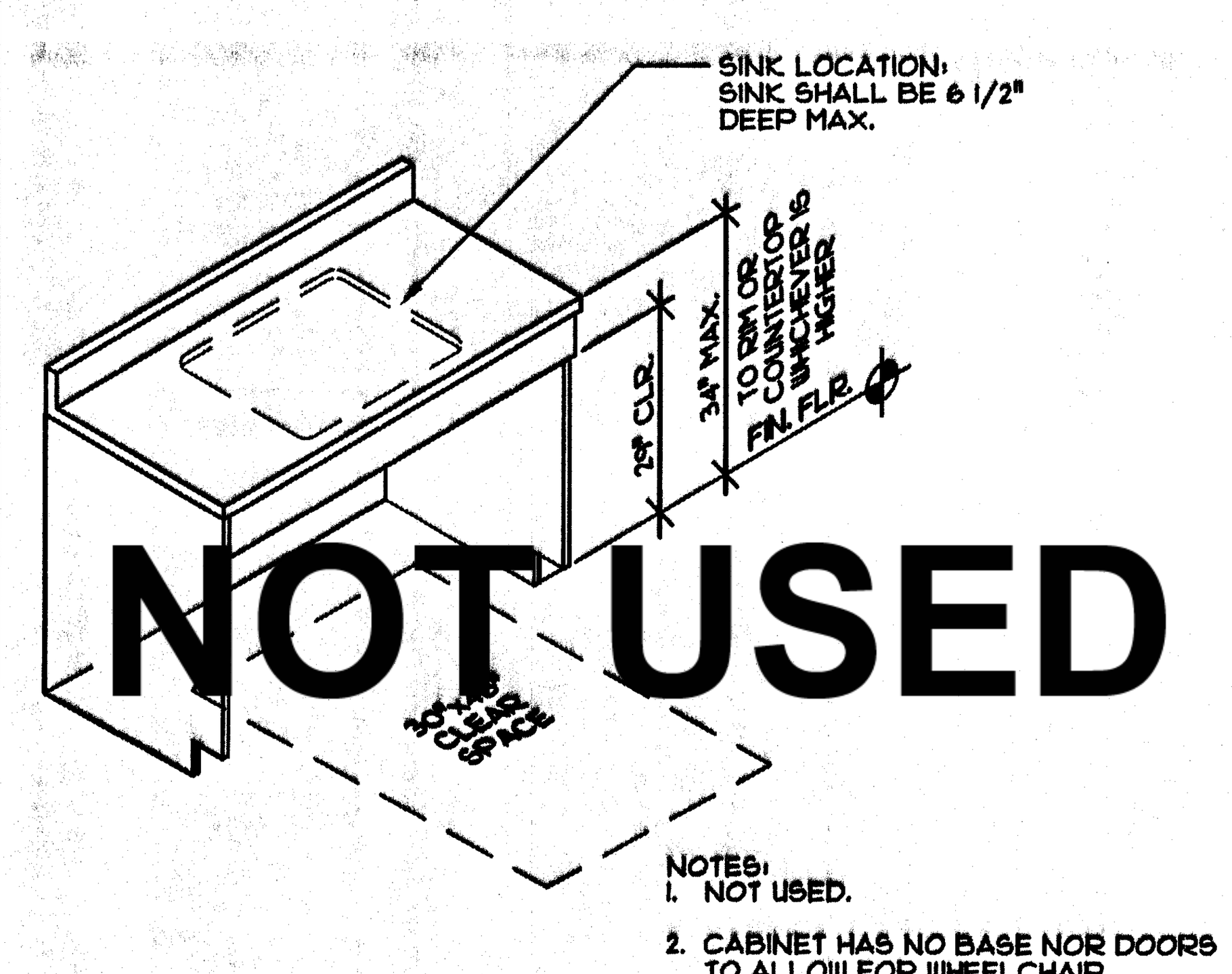
LOCATION
SIGNS SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE, WHERE AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE THE PROVIDED WITH TWO ACTIVE LEAFS THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF A DOUBLE DOOR, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MIN BY 18" MIN CENTERED ON THE TACTILE CHARACTERS IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.

NOTE
ROOM IDENTIFICATION SIGNAGE AND INTERNATIONAL SYMBOLS OF ACCESSIBILITY SIGNAGE SHALL BE PROVIDED BY SCHOOL DISTRICT / OWNER AT SITE. SIGNAGE SHALL BE INSTALLED AT LOCATIONS REQUIRED BY CODE USING THE ABOVE GUIDELINES.

10 TYP. ROOM IDENTIFICATION SIGNAGE

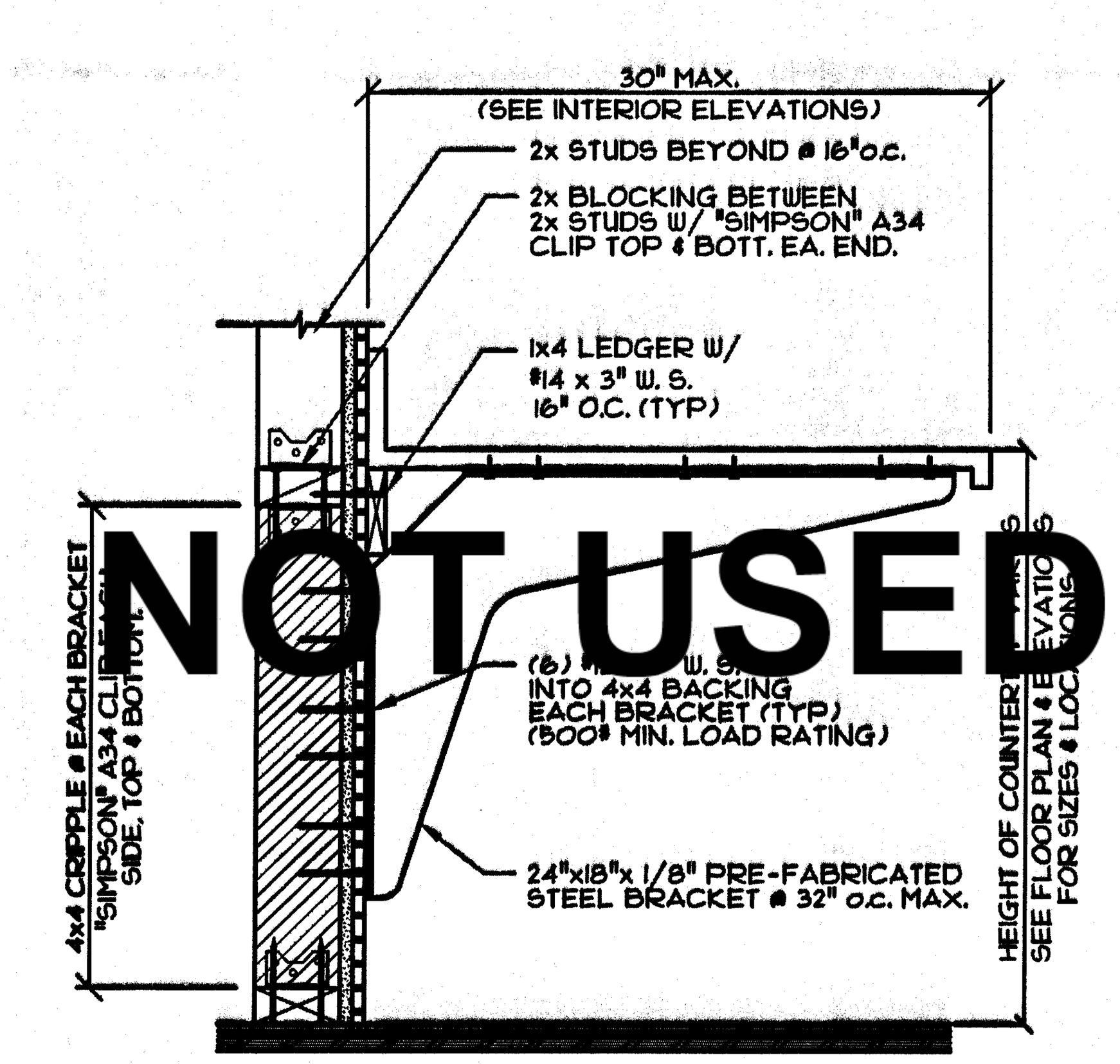


11 INTERIOR UNDERFLOOR ACCESS
SCALE: 1 1/2"=1'-0"



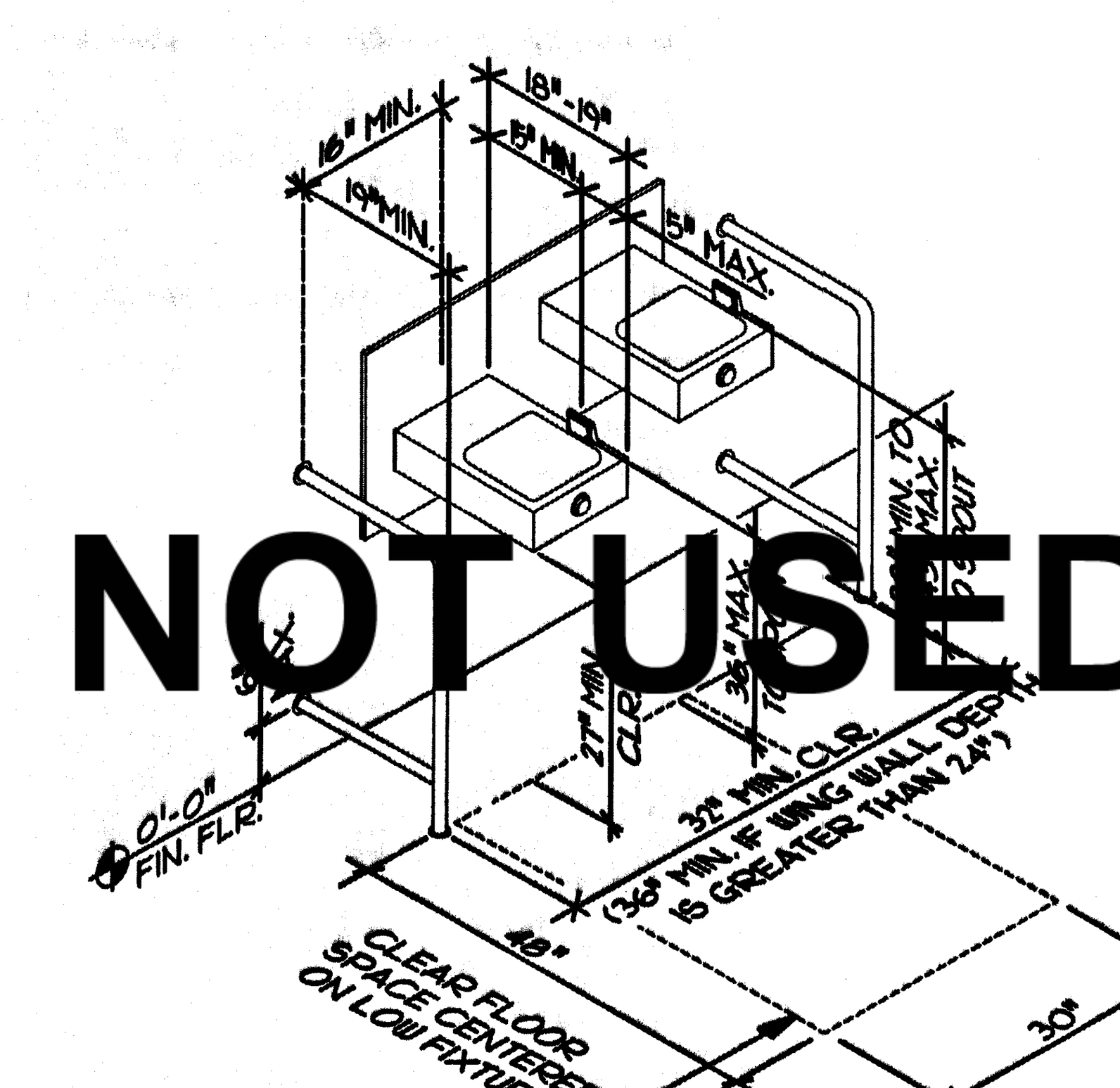
NOTES:
1. NOT USED.
2. CABINET HAS NO BASE NOR DOORS TO ALLOW FOR WHEELCHAIR ACCESS.
3. EXTEND FLOORING UNDER CABINET TO WALL.
4. NO SHARP OR ABRASIVE SURFACES UNDER LAVATORY OR COUNTER.

12 ACCESSIBLE CASEWORK @ SINK
SCALE: 1/2"=1'-0"



NOTE:
NO SHARP OR ABRASIVE SURFACES UNDER SINKS/LAVATORIES OR COUNTERS.

13 COUNTERTOP SUPPORT BRACKET
SCALE: 1 1/2"=1'-0"



14 DRINKING FOUNTAIN WING WALLS
SCALE: NONE

DIVISION OF THE STATE ARCHITECT

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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(916) 920-2020 (916) 920-1556 Fax
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JUN 0 3 2015

REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST ROSS
No. S2030
EXP. 9/30/15
STRUCTURAL
STATE OF CALIFORNIA

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

MISCELLANEOUS DETAILS

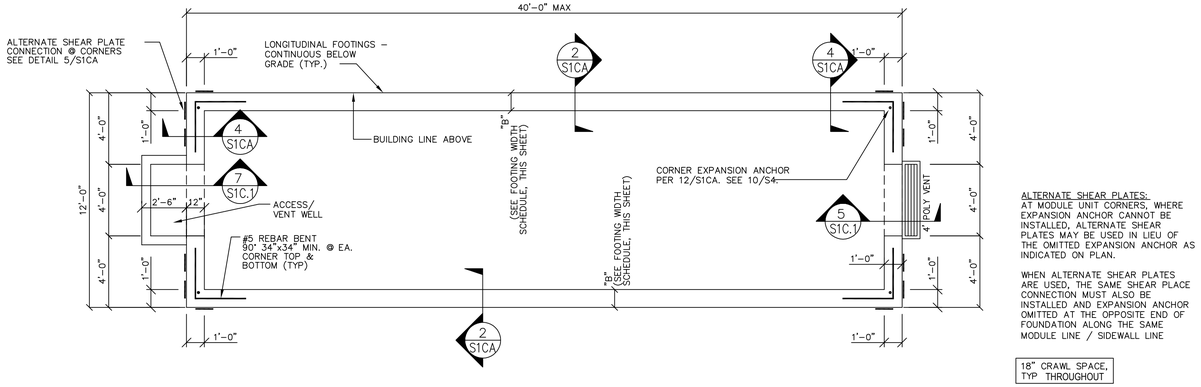
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC TM FLS [signature] SS [signature]
DATE 6-9-15
2013 - 12x40

A5

12'x40' P.C.



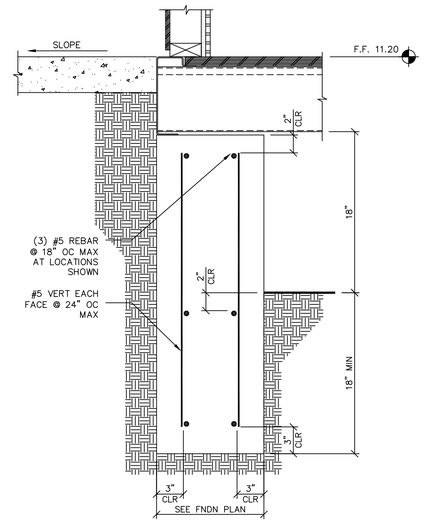
ALTERNATE SHEAR PLATES:
AT MODULE UNIT CORNERS, WHERE EXPANSION ANCHOR CANNOT BE INSTALLED, ALTERNATE SHEAR PLATES MAY BE USED IN LIEU OF THE OMITTED EXPANSION ANCHOR AS INDICATED ON PLAN.

WHEN ALTERNATE SHEAR PLATES ARE USED, THE SAME SHEAR PLACE CONNECTION MUST ALSO BE INSTALLED AND EXPANSION ANCHOR OMITTED AT THE OPPOSITE END OF FOUNDATION ALONG THE SAME MODULE LINE / SIDEWALL LINE

18" CRAWL SPACE, TYP THROUGHOUT

1 CONCRETE FOUNDATION PLAN – RESTROOM #1 (NOT IN FLOOD ZONE)

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



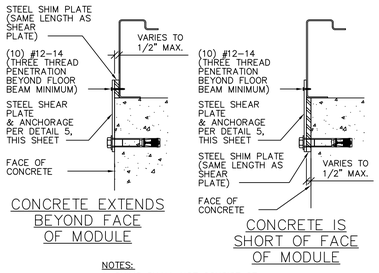
2 PERIMETER FOOTING

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

LOW SEISMIC					
EXPANSION ANCHOR EMBEDMENT AND PROOF LOAD SCHEDULE					
ANCHOR INFORMATION			PROOF TEST		MAXIMUM
ANCHOR TYPE	SIZE	MIN. EMBED.	INSTALLATION TORQUE (FT#)	DIRECT TENSION see note #1	FLOOR LIVE LOAD
HILTI KWIK BOLT-TZ	1/2"	4"	40	5610	50 + 15 PSF
SIMPSON STRONG BOLT 2	1/2"	4 1/8"	60	5345	50 + 15 PSF

NOTES:
1. TENSION TEST = 2x ALLOWABLE TENSION LOAD PER DSA IR 19-1.
2. NORMAL WEIGHT CONCRETE WITH f'c = 4000 psi TO COMPLY WITH 1705A.3.3 FOR MATERIAL TEST WAIVER.
3. THE VALUES PRESENTED IN THIS TABLE ARE FOR CARBON STEEL ANCHORS.

12 EXPANSION ANCHOR SCHEDULE



NOTES:
1. SHIMS SHALL NOT CONSIST OF MORE THAN TWO PIECES
2. IF CONCRETE IS OUT OF DIMENSION BY MORE THAN 1/2", CONTACT THE STRUCTURAL ENGINEER.

5A ALTERNATE SHEAR PLATE SHIMS

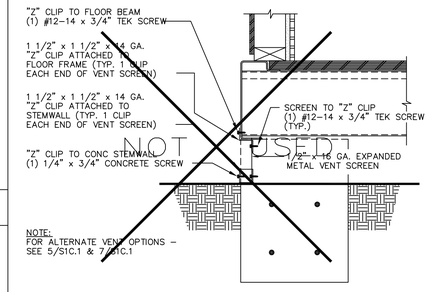
SCALE: 1-1/2"=1'-0"

ALLOWABLE BEARING (psf)	MODULE CONFIGURATION	FOOTING WIDTH "B" (inches)	
		RESTROOM (50 + 15 psf) ☐	
1500	STANDARD – NO STUCCO	12	
	STANDARD – 1 HOUR, NO STUCCO	12	
	STD – STUCCO W/ AND W/O 1 HOUR	12	

9 "B" FOOTING WIDTH SCHEDULE

NOTES:
1. ALLOWABLE SOIL BEARING PRESSURE IS 1,500 P.S.F.
2. CONCRETE FOR FOOTINGS SHALL HAVE A MINIMUM STRENGTH f'c= 4,000 P.S.I., PER 1905A.1.1 MADE WITH 1" MAX ASTM C-33 AGGREGATES PER ACI 318-11 SECTION 3.3 AND IN ACCORDANCE WITH CBC SECTION 1903A.6
3. MIX DESIGN SHALL BE PER ACI 318-11 SECTION 5.2.
4. REINFORCING BARS SHALL BE A615, GRADE 60 MIN.
5. VENTILATION TO MEET REQUIREMENTS PER IR 16-1.13. PROVIDE MINIMUM 1 SQ. FT. OF VENT SPACE PER 150 SQ. FT. (PROVIDE 2" MINIMUM CLEARANCE)
6. ANCHORS TO BE EITHER:
A. HILTI KWIK BOLT TZ IN ACCORDANCE WITH ICC ESR-1917.
B. "SIMPSON" STRONG BOLT 2 ANCHOR IN ACCORDANCE WITH ICC ESR-3037
C. ANCHORS WITH EXTERIOR EXPOSURE TO BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.
7. TESTING OF REINFORCING BARS USED IN SINGLE STORY BUILDINGS MAY BE WAIVED PROVIDED CERTIFIED MILL TEST REPORTS ARE PROVIDED FOR EACH SHIPMENT OF SUCH REINFORCMENT (CBC 1913A.2).
8. CONCRETE MIX SHALL HAVE A MAXIMUM 0.45 WATER CEMENT RATIO.
9. ADD WATER REDUCING ADMIXTURE IN COMPLIANCE WITH ASTM C494 TYPE A.
10. CONCRETE SHOULD UTILIZE TYPE V PORTLAND CEMENT.
11. UNDERGROUND UTILITIES SHOULD BE CONSTRUCTED OF PLASTIC OR PVC PIPE; METALLIC PIPING SHOULD BE AVOIDED.
12. CONCRETE SHALL CONSIST OF A MAXIMUM OF 25% FLY ASH OR SLAG REPLACEMENT BY WEIGHT.

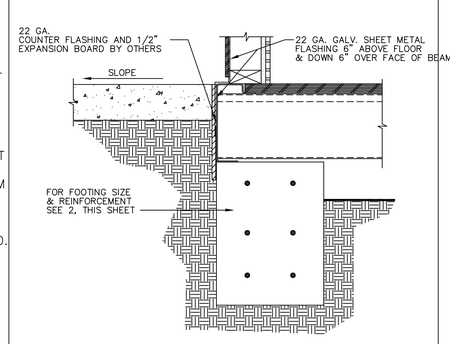
11 GENERAL NOTES



NOTE:
FOR ALTERNATE VENT OPTIONS – SEE 5/S1C.1 & 7/S1C.1

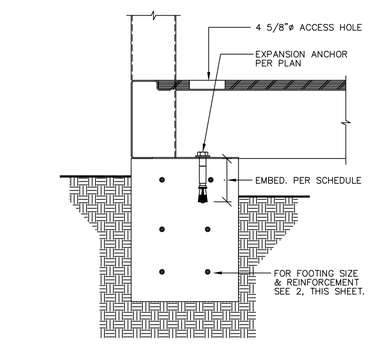
6 VENT SCREEN DETAIL

SCALE: NTS



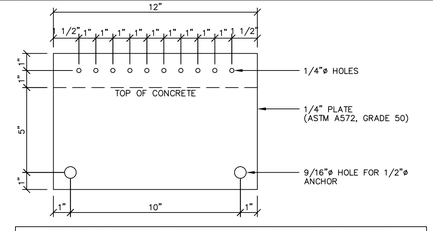
7 PERIMETER FLASHING DETAIL

SCALE: NTS



4 CORNER ANCHORING DETAIL

SCALE: NTS

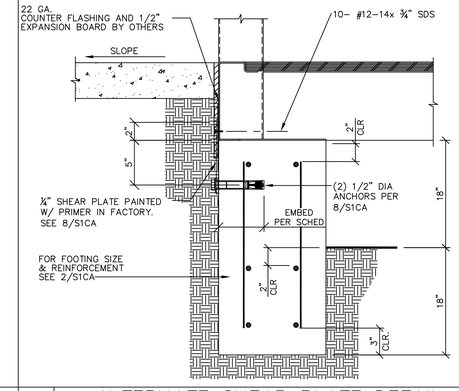


SHEARPLATE EXPANSION ANCHOR EMBEDMENT AND PROOF LOAD SCHEDULE				
ANCHOR INFORMATION			PROOF TEST	
ANCHOR TYPE	SIZE	MIN. EMBED.	INSTALLATION TORQUE (FT#)	DIRECT TENSION see note #1
HILTI KWIK BOLT-TZ	1/2"	4"	40	5859
SIMPSON STRONG BOLT 2	1/2"	4 1/8"	60	4572

NOTES:
1. TENSION TEST = 2x ALLOWABLE TENSION LOAD PER DSA IR 19-1.
2. NORMAL WEIGHT CONCRETE WITH f'c = 4000 psi TO COMPLY WITH 1705A.3.3 FOR MATERIAL TEST WAIVER.
3. THE VALUES PRESENTED IN THIS TABLE ARE FOR STAINLESS STEEL ANCHORS.

8 ALTERNATE SHEAR PLATE

SCALE: 3"=1'-0"



5 ALTERNATE SHEAR PLATE DETAIL

SCALE: NTS

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

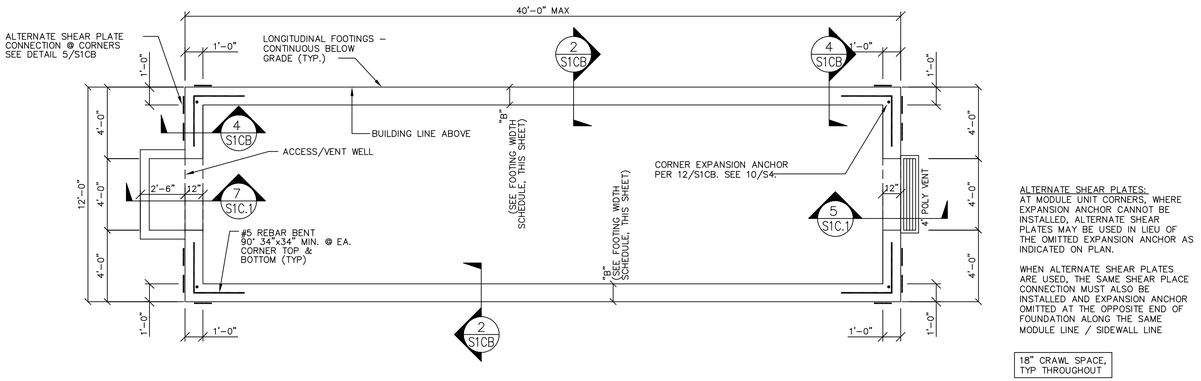
(RESTROOM #1)
CONCRETE FOUNDATION PLAN, FOOTING DETAILS & NOTES
(WOOD FLOOR)

REV / DATE:	BY:

JOB No.:	
DRAWN BY:	
DATE:	

LOW SEISMIC

S1CA



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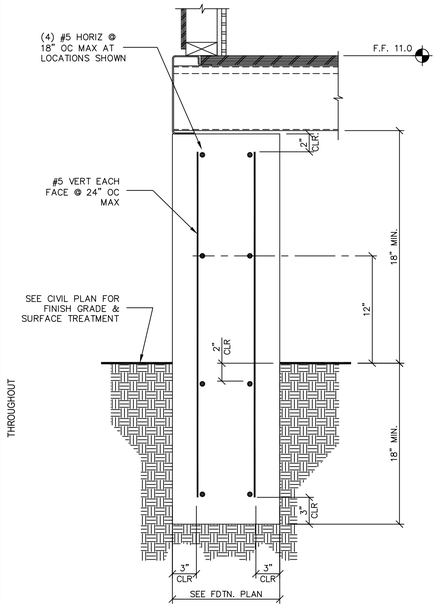
18" CRAWL SPACE, TYP THROUGHOUT

1 CONCRETE FOUNDATION PLAN – RESTROOM #2 (FLOOD ZONE)
SCALE: 1/4"=1'-0"



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

LOW SEISMIC					
EXPANSION ANCHOR EMBEDMENT AND PROOF LOAD SCHEDULE					
ANCHOR INFORMATION			PROOF TEST		MAXIMUM
ANCHOR TYPE	SIZE	MIN. EMBED.	INSTALLATION TORQUE (FT#)	DIRECT TENSION see note #1	FLOOR LIVE LOAD
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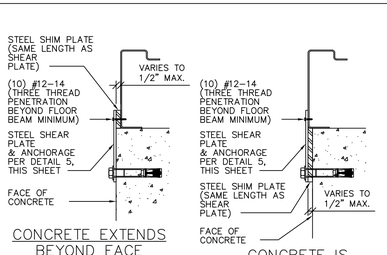
12 EXPANSION ANCHOR SCHEDULE



NOTES:
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5A ALTERNATE SHEAR PLATE SHIMS
SCALE: 1–1/2"=1'–0"

ALLOWABLE BEARING (psf)	MODULE CONFIGURATION	FOOTING WIDTH "B" (inches)	
		RESTROOM (50 + 15 psf)	
1500	STANDARD – NO STUCCO	12	
	STANDARD – 1 HOUR, NO STUCCO	12	
	STD – STUCCO W/ AND W/O 1 HOUR	12	

9 "B" FOOTING WIDTH SCHEDULE

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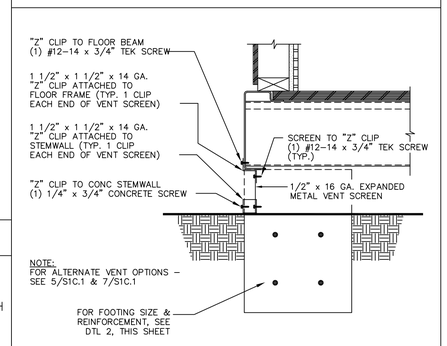
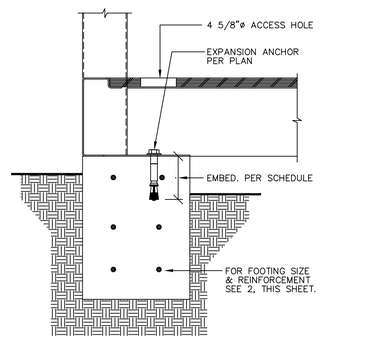
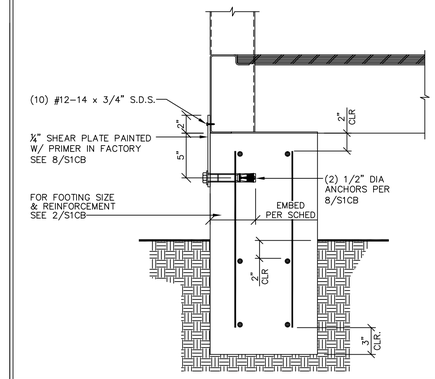
11 GENERAL NOTES



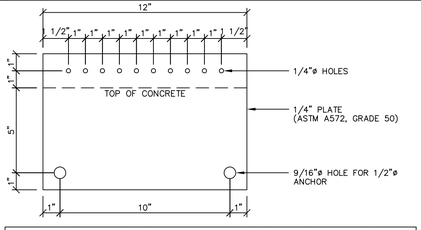
6 VENT SCREEN DETAIL
SCALE: NTS



4 CORNER ANCHORING DETAIL
SCALE: 1–1/2"=1'–0"



5 ALTERNATE SHEAR PLATE DETAIL
SCALE: NTS



SHEARPLATE EXPANSION ANCHOR EMBEDMENT AND PROOF LOAD SCHEDULE				
ANCHOR INFORMATION			PROOF TEST	
ANCHOR TYPE	SIZE	MIN. EMBED.	INSTALLATION TORQUE (FT#)	DIRECT TENSION see note #1
HILTI KWIK BOLT–TZ	1/2"	4"	40	5859
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3. THE VALUES PRESENTED IN THIS TABLE ARE FOR STAINLESS STEEL ANCHORS.

8 ALTERNATE SHEAR PLATE
SCALE: 3"=1'–0"

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

(RESTROOM #2)
CONCRETE FOUNDATION PLAN, FOOTING DETAILS & NOTES
(WOOD FLOOR)

REV / DATE:	BY:

JOB No.:	
DRAWN BY:	
DATE:	

LOW SEISMIC

S1CB

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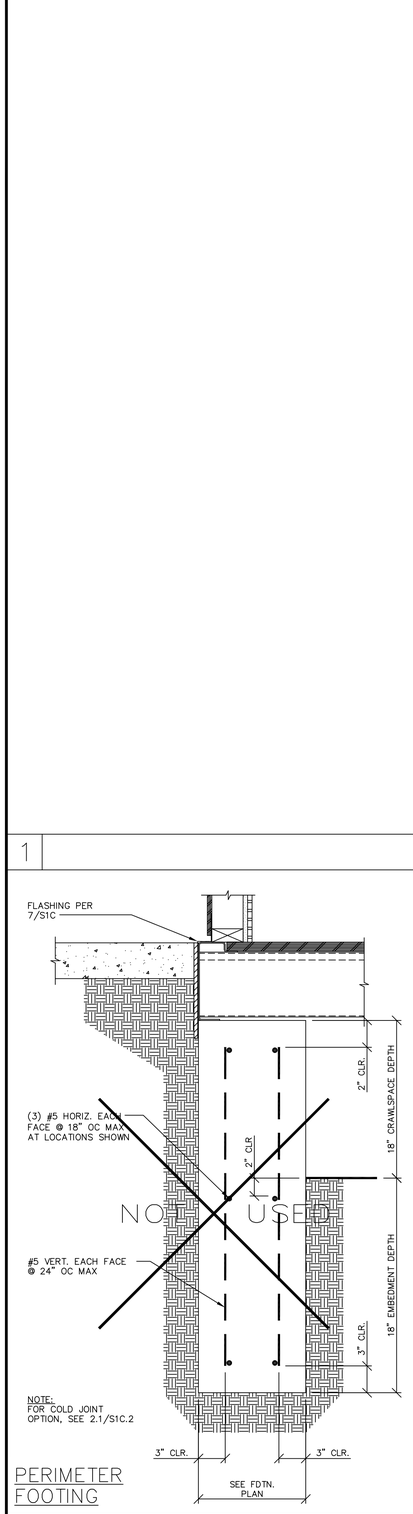
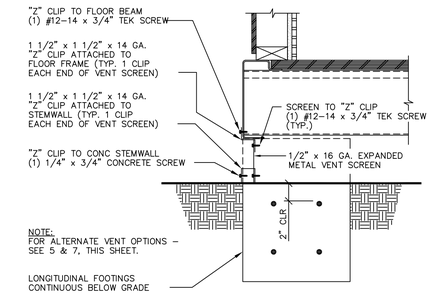
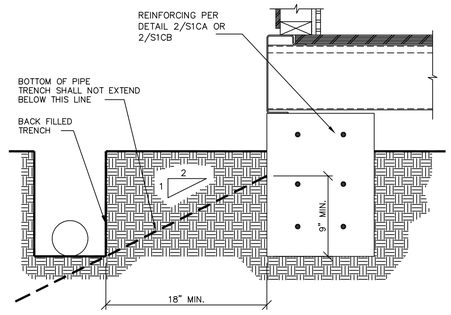


PERIMETER FOOTING

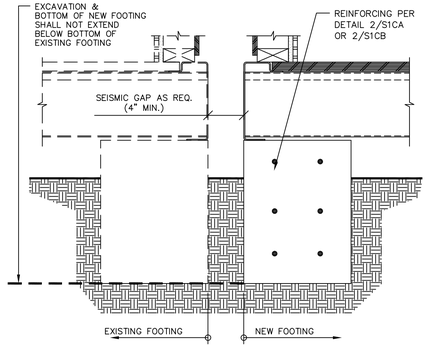
2.1 FOOTING
SCALE: 1 1/2"=1'-0"



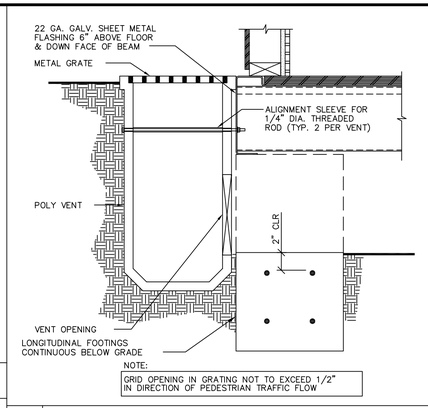
4 VENT SCREEN DETAIL
SCALE: NTS



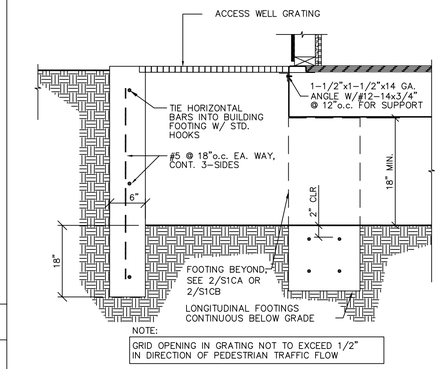
6 TRENCH PROXIMITY TO FOOTINGS
SCALE: NTS



8 PROXIMITY OF NEW TO EXIST. FOOTING
SCALE: NTS



5 POLYVENT DETAIL
SCALE: NTS



7 ACCESS / VENT WELL
SCALE: NTS

9

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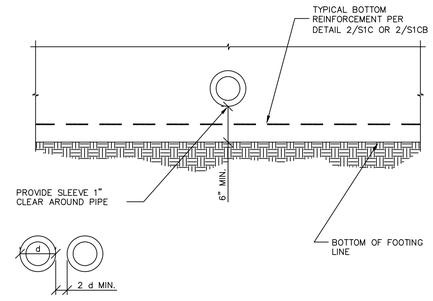
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

ALTERNATE FOOTING DETAILS

REV / DATE:	BY:

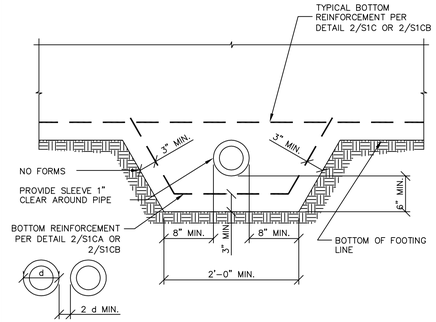
JOB No.:	
DRAWN BY:	
DATE:	

S1C.1



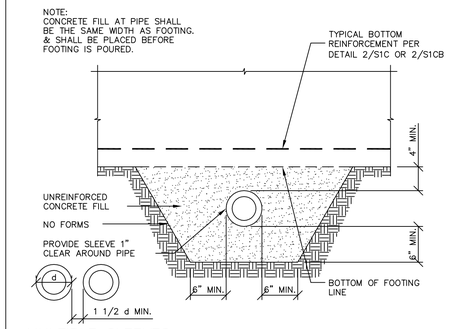
MULTIPLE SLEEVES

4 PIPE THROUGH FOOTING
SCALE: 1"=1'-0"



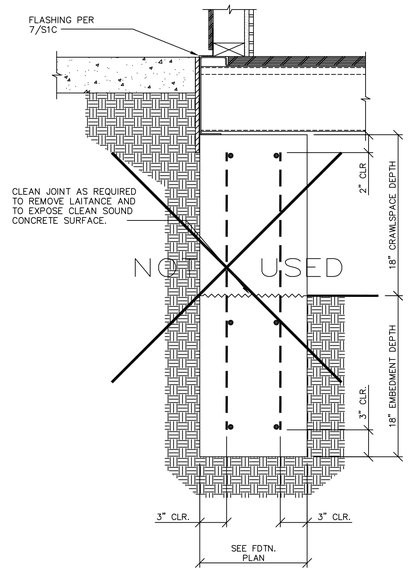
MULTIPLE SLEEVES

5 PIPE NEAR BOTTOM OF FOOTING
SCALE: 1"=1'-0"

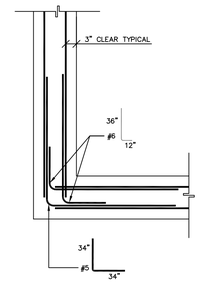


MULTIPLE SLEEVES

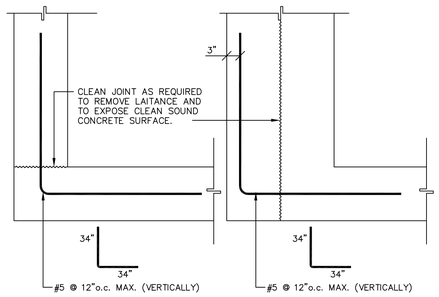
6 PIPE BELOW BOTTOM OF FOOTING
SCALE: 1"=1'-0"



2.1 HORIZONTAL COLD JOINT
SCALE: 1 1/2"=1'-0"



CORNER (PLAN VIEW)

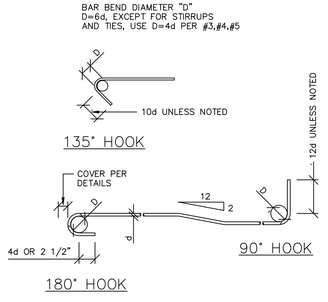


PERPENDICULAR JOINT PARALLEL JOINT

9 TYP. REBAR LAPS (DOUBLE BAR)
SCALE: 3/4"=1'-0"

10 PLAN VIEW – VERTICAL COLD JOINT
SCALE: 3/4"=1'-0"

3.1



11 TYP. REINFORCING BAR BENDS
SCALE: NONE

12

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REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST ROSS
No. S2030
STRUCTURAL
STATE OF CALIFORNIA

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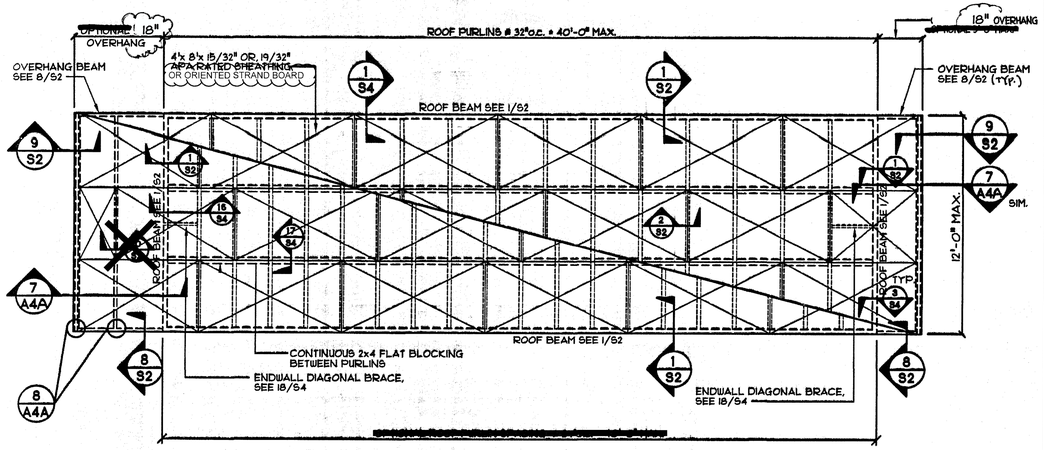
(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

MISCELLANEOUS FOOTING DETAILS

REV / DATE:	BY:

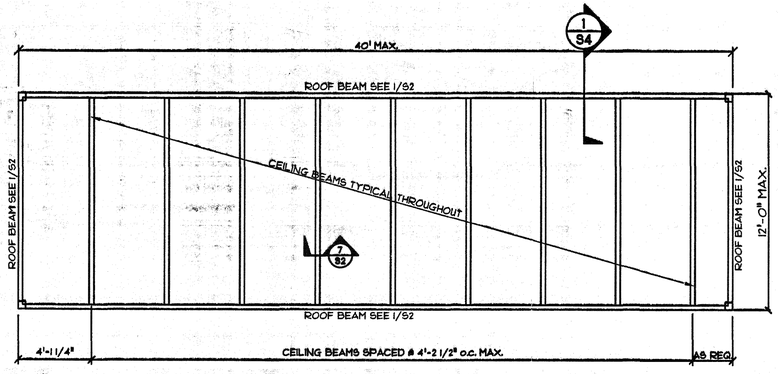
JOB No.:	
DRAWN BY:	
DATE:	

S1C.2



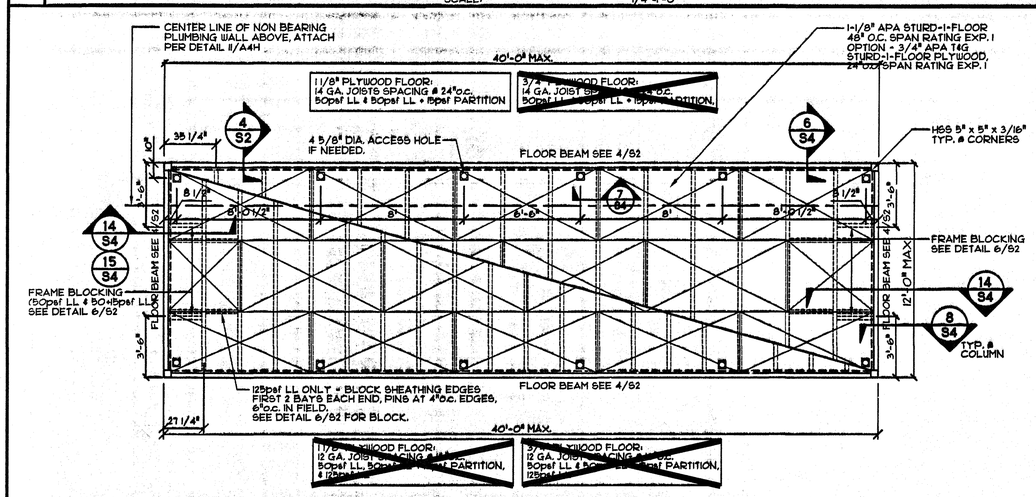
13 ROOF FRAMING PLAN

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



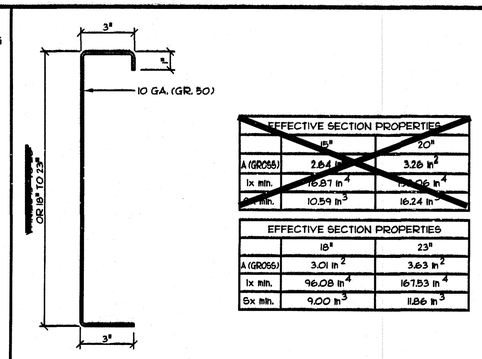
14 CEILING FRAMING PLAN

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



15 FLOOR FRAMING PLAN

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

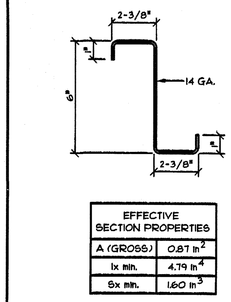


EFFECTIVE SECTION PROPERTIES		
	18"	20"
A (GROSS)	2.64 in²	3.26 in²
Ix min.	16.87 in⁴	25.96 in⁴
Sx min.	10.59 in³	16.24 in³

EFFECTIVE SECTION PROPERTIES		
	18"	23"
A (GROSS)	3.01 in²	3.63 in²
Ix min.	96.08 in⁴	167.53 in⁴
Sx min.	9.00 in³	11.86 in³

1 ROOF BEAM SECTION

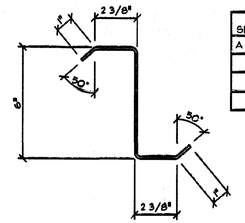
SCALE: 3"=1'-0"



EFFECTIVE SECTION PROPERTIES	
A (GROSS)	0.87 in²
Ix min.	4.79 in⁴
Sx min.	1.60 in³

2 ROOF PURLIN SECT.

SCALE: 3"=1'-0"

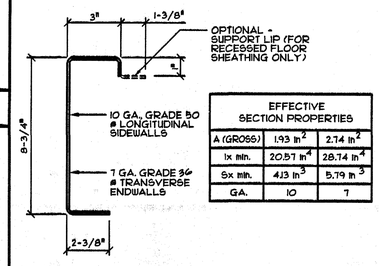


EFFECTIVE SECTION PROPERTIES	
A (GROSS)	0.878 in²
Ix min.	5.06 in⁴
Sx min.	1.687 in³
GA.	14

FOR USE WITH:
ROOFS - ALL CONDITIONS
FLOORS - 24"o.c. FOR CLASSROOM OCCUPANCIES ONLY, 19.2"o.c. FOR ALL OTHER OCCUPANCIES

3 ALT. ROOF PURLIN / FLOOR JOIST

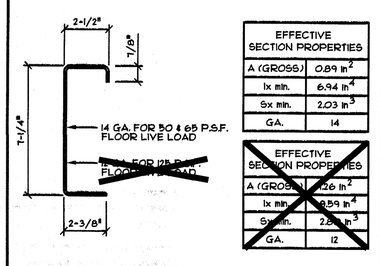
SCALE: 3"=1'-0"



EFFECTIVE SECTION PROPERTIES		
A (GROSS)	1.93 in²	2.74 in²
Ix min.	20.57 in⁴	28.74 in⁴
Sx min.	4.13 in³	5.79 in³
GA.	10	7

4 FLOOR BEAM SECTION

SCALE: 3"=1'-0"

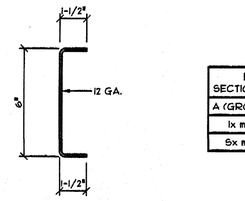


EFFECTIVE SECTION PROPERTIES	
A (GROSS)	0.89 in²
Ix min.	6.94 in⁴
Sx min.	2.03 in³
GA.	14

EFFECTIVE SECTION PROPERTIES	
A (GROSS)	1.26 in²
Ix min.	8.59 in⁴
Sx min.	2.85 in³
GA.	12

5 FLOOR JOIST SECTION

SCALE: 3"=1'-0"



EFFECTIVE SECTION PROPERTIES	
A (GROSS)	.89in²
Ix min.	4.12in⁴
Sx min.	1.34in³

6 FRAME BLOCKING SECTION

SCALE: 3"=1'-0"

1. ALL LIGHT GAGE STEEL SHALL BE ASTM A101 GRADE 36. UNLESS OTHERWISE NOTED
2. STRUCTURAL STEEL TUBING SHALL BE ASTM A500 GRADE B Fy=46
3. ALL STRUCTURAL STEEL PLATES, ANGLES, CHANNELS, BARS & MISC. SHAPES SHALL CONFORM TO ASTM A36, UNLESS OTHERWISE NOTED.
4. ALL MACHINE BOLTS SHALL BE ASTM A307.
5. WELDING SHALL BE DONE PER AWS D 1.1 - D6.3.
6. WELDING INSPECTION TO BE PER C.B.C. SECTION 1705A.2.2.3
7. SEE TESTS AND INSPECTIONS REPORT SHEET A0 FOR REQUIREMENTS.
8. LIGHT GAGE METAL & FRAMING THICKNESSES

GAGE	DESIGN THICKNESS	MIN. DELIVERED THICKNESS
7 GA. STEEL	0.1793"	0.170"
10 GA. STEEL	0.1240"	0.118"
12 GA. STEEL	0.1017"	0.0966"
14 GA. STEEL	0.0713"	0.0677"

R = 3/16" MAX.
TYPICAL CORNER RADIUS

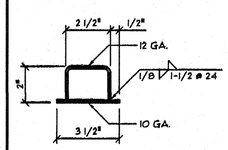
9. MINIMUM STEEL THICKNESS SHALL NOT BE LESS THAN 95% OF THE DESIGN THICKNESS PER AISI - GENERAL AND AISI - NAS.

STEEL SPECIFICATION

1. ALL STRUCTURAL PLYWOOD SHALL BE MANUFACTURED TO PRODUCT STANDARD DOC PS-1 AND INSPECTED AND GRADE MARKED AT THE MILL BY AN APPROVED QUALITY CONTROL AGENCY SUCH AS APA OR TECO.
2. ROOF SHEATHING SHALL BE 4'x 8'x 15/32" GRADE MARKED 32/16 SPAN INDEX, EXP.1, OR 19/32" GRADE MARKED 40/20 SPAN INDEX, EXP.1 (PLYWOOD OR ORIENTED STRAND BD.)
3. FLOOR SHEATHING SHALL BE 4'x 8'x 1-1/8" T & G APA OR TECO RATED UNDERLAYMENT GRADE STURD-I-FLOOR OR EQUAL, SPAN RATING = 48" OR 4'x 8'x 3/4" T & G APA OR TECO RATED UNDERLAYMENT GRADE STURD-I-FLOOR OR EQUAL, SPAN RATING = 24"
4. WALL SHEATHING SHALL BE 3/8" HARD BOARD SIDING APA EXTERIOR TYPE 303 GROUP II M.D.O., EXTERIOR GROUP II, OR 1/2" APA RATED CDX PLYWOOD OR OSB SHEATHING
5. SEE FASTENER SCHEDULE, SHEET *S3FA*.

SHEATHING / PLYWOOD SPECIFICATION

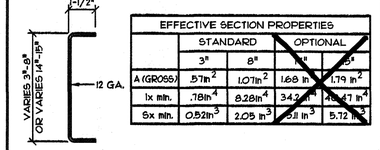
DIVISION OF THE STATE ARCHITECT



EFFECTIVE SECTION PROPERTIES	
A (GROSS)	1.05 in²
Ix min.	0.86 in⁴
Iy min.	1.08 in⁴
Sx min.	0.829 in³
Sy min.	0.824 in³

7 CEILING BEAM SECTION

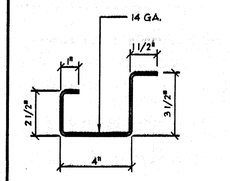
SCALE: 3"=1'-0"



EFFECTIVE SECTION PROPERTIES	STANDARD		OPTIONAL	
	3"	8"	14"	18"
A (GROSS)	.571in²	1.07in²	1.68 in²	1.79 in²
Ix min.	.781in⁴	8.28in⁴	34.2 in⁴	46.47 in⁴
Sx min.	0.521in³	2.05 in³	5.11 in³	5.72 in³

8 OVERHANG BEAM

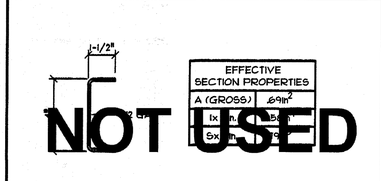
SCALE: 3"=1'-0"



EFFECTIVE SECTION PROPERTIES	
A (GROSS)	0.85 in²
Ix min.	1.26 in⁴
Sx min.	0.97 in³

9 GUTTER BEAM SECTION

SCALE: 3"=1'-0"

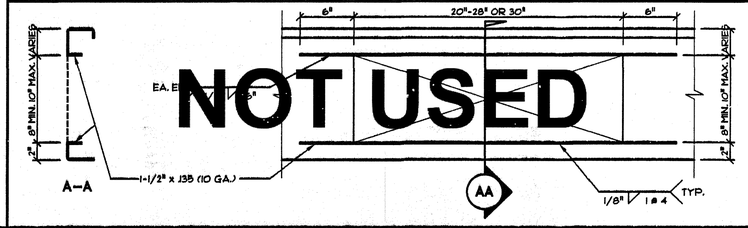


EFFECTIVE SECTION PROPERTIES	
A (GROSS)	.69in²
Ix	
Sx	

NOT USED

10 INTERMEDIATE CHANNELS

SCALE: 3"=1'-0"



NOT USED

11 HVAC PENETRATION @ ENDWALL ROOF BEAM

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

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JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER
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No. S2030
EXP. 9/30/15
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STATE OF CALIFORNIA

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

BUILT-UP ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES

REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. FLS SS
DATE 6-9-15
2013 - 12x40

LOW SEISMIC

S2

12x40 P.C.

FOR BUILDINGS ON WOOD FOUNDATIONS

JAACO - .145 x 1 3/4" PIN (ICC ESR-2961)

		50 PSF	65 PSF	125 PSF
1-1/8" APA RATED T&G STURD-I-FLOOR TO STEEL BEAMS & JOISTS	LOW SEISMIC	PER DIAGRAM FWJ-1		PER DIAGRAM FWJ-2
	HIGH SEISMIC	PER DIAGRAM FWJ-3		PER DIAGRAM FWJ-4

SUBFLOORING

DIAGRAM - FWJ-1

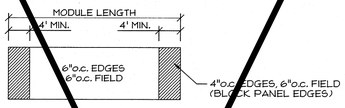


DIAGRAM - FWJ-2

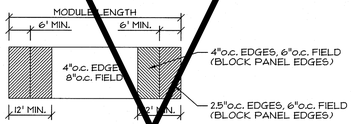


DIAGRAM - FWJ-3

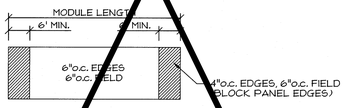
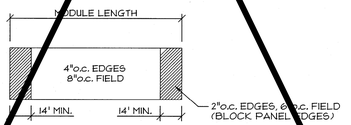
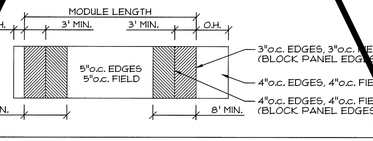


DIAGRAM - FWJ-4



ROOF

15/32" APA RATED PLYWOOD TO PURLINS & BEAMS
(OPTIONAL - 19/32" PLYWOOD ROOF)



FOR BUILDINGS ON CONCRETE FOUNDATIONS

JAACO - .145 x 1 3/4" PIN (ICC ESR-2961)

		50 PSF	65 PSF	125 PSF
1-1/8" APA RATED T&G STURD-I-FLOOR TO STEEL BEAMS & JOISTS	LOW SEISMIC	PER DIAGRAM FCJ-1		PER DIAGRAM FCJ-2
	HIGH SEISMIC	PER DIAGRAM FCJ-3		PER DIAGRAM FCJ-4

SUBFLOORING

DIAGRAM - FCJ-1

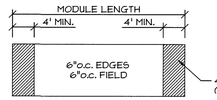


DIAGRAM - FCJ-2

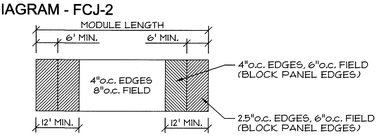


DIAGRAM - FCJ-3

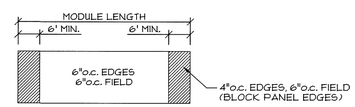
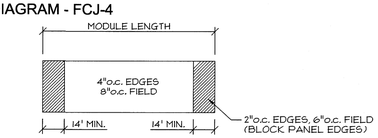


DIAGRAM - FCJ-4



SUBFLOORING WITH LEVELROCK

		50 PSF	65 PSF	125 PSF
3/4" USG "LEVELROCK" FLOOR TOPPING OVER 3/8" SOUND REDUCTION BOARD OVER 3/4" T&G STURD-I-FLOOR PLY SHEATHING	LOW SEISMIC	PER DIAGRAM FCJ-5		
	HIGH SEISMIC	PER DIAGRAM FCJ-6		

DIAGRAM - FCJ-5

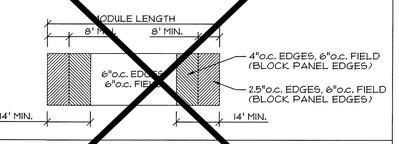
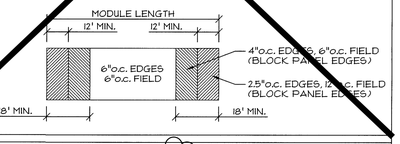


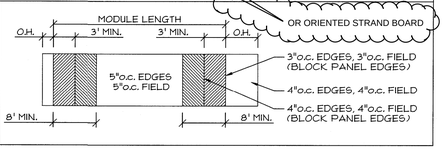
DIAGRAM - FCJ-6



ROOF

15/32" APA RATED PLYWOOD TO PURLINS & BEAMS
(OPTIONAL - 19/32" PLYWOOD ROOF)

OR ORIENTED STRAND BOARD



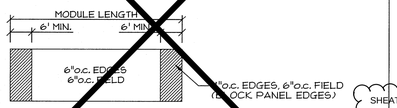
FOR BUILDINGS ON WOOD FOUNDATIONS

SCREWS - #10 S.M.S. (AISI S213-07, SECTION D)

		50 PSF	65 PSF	125 PSF
1-1/8" APA RATED T&G STURD-I-FLOOR TO STEEL BEAMS & JOISTS	LOW SEISMIC	6"o.c. EDGES 12"o.c. FIELD		
	HIGH SEISMIC	6"o.c. EDGES 12"o.c. FIELD		PER DIAGRAM FWS-1

SUBFLOORING

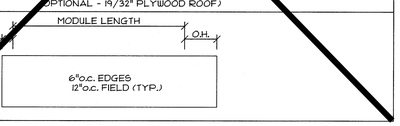
DIAGRAM - FWS-1



SHEATHING

ROOF

15/32" APA RATED PLYWOOD TO PURLINS & BEAMS
(OPTIONAL - 19/32" PLYWOOD ROOF)



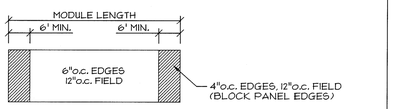
FOR BUILDINGS ON CONCRETE FOUNDATIONS

SCREWS - #10 S.M.S. (AISI S213-07, SECTION D)

		50 PSF	65 PSF	125 PSF
1-1/8" APA RATED T&G STURD-I-FLOOR TO STEEL BEAMS & JOISTS	LOW SEISMIC	6"o.c. EDGES 12"o.c. FIELD		
	HIGH SEISMIC	6"o.c. EDGES 12"o.c. FIELD		PER DIAGRAM FCS-1

SUBFLOORING

DIAGRAM - FCS-1



		50 PSF	65 PSF	125 PSF
3/4" USG "LEVELROCK" FLOOR TOPPING OVER 3/8" SOUND REDUCTION BOARD OVER 3/4" T&G STURD-I-FLOOR PLY SHEATHING	LOW SEISMIC	PER DIAGRAM FCS-2		
	HIGH SEISMIC	PER DIAGRAM FCS-3		

SUBFLOORING WITH LEVELROCK

DIAGRAM - FCS-2

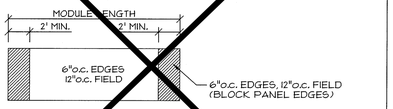
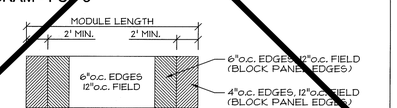


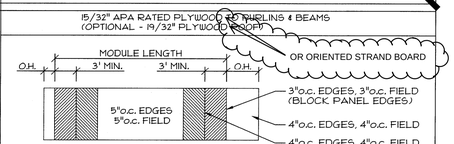
DIAGRAM - FCS-3



ROOF

15/32" APA RATED PLYWOOD TO PURLINS & BEAMS
(OPTIONAL - 19/32" PLYWOOD ROOF)

OR ORIENTED STRAND BOARD



WALL TO FRAME FASTENING:

- WALL PANEL TOP PLATE TO PERIMETER ROOF BEAM. ..... (1) 1/4"ø x 2" LAG SCREWS FROM ROOF BEAM BOTT. FLANGE INTO TOP PLATE @ 15"o.c. MAX.
- WALL PANEL BOTTOM PLATE TO PERIMETER FLOOR BEAM. ..... 1/4"-20 TEKS/4 SCREWS @ 16"o.c. FROM BOTT. PLATE INTO FLOOR BEAM TOP FLANGE
- WALL PANEL SIDE STUDS TO TS CORNER COLUMNS ..... #12-24 x 2 1/2" S.D.S. @ 16"o.c. FROM SIDE STUD INTO STEEL CORNER COLUMN.
- TOP AND BOTTOM PLATE TO STUDS AND KING STUDS ..... (3) .135 x 3 1/4" LONG MACHINE NAIL
- DOUBLE STUDS, TRIMMERS, SILLS AND CRIPPLES STICH NAILED ..... .135 x 3 1/4" LONG MACHINE NAILS @ 8"o.c.
- CRIPPLES, TRIMMERS END NAILED TO PLATES AND SILLS. ..... (3) .135 x 3 1/4" LONG MACHINE NAIL EA. END
- CRIPPLES, TRIMMERS NAILED TO HEADERS. ..... (3) .135 x 3 1/4" LONG MACHINE NAIL
- ALL HANGERS, STRAPS, CLIPS, ETC. ..... NAILED AS PER MANUFACTURERS SPECS.
- FASTENING CONDITIONS NOT ADDRESSED ABOVE ..... TABLE 2304.9.1 2013 C.B.C.

PLYWOOD NAILING NOTES:

1. DO NOT CRUSH PLYWOOD FACE PLY (OUTER VENEER LAYER) BY OVER DRIVING SCREWS, MACHINE OR HAND NAILS.
2. UNDER DRIVEN NAILS SHALL BE CORRECTED BY HAND SET.
3. REMOVE AND REPLACE NAILS DRIVEN THAT MISS FRAMING OR SUPPORT.
4. ALL CORRECTIVE NAILING SHALL BE DONE BY HAND NAILING.
5. H.D.G.= HOT DIPPED GALVANIZED WITH MINIMUM COATING OF 1 OZ PER SQ. F.T OF ZINC. OR MECHANICALLY GALVANIZED PER ASTM. F-1667.

SIDING	
EXTERIOR SIDING	INTO 2x4 OR 2x6 WOOD STUDS; .131" x 2 1/2" @ 6"o.c. PANEL EDGES, 12"o.c. IN FIELD. (H.D.G. OR MECH. GALV. NAILS, PER ASTM F-1667). INTO STEEL COLUMNS; #12-24 x 2" S.D.S. @ 24"o.c.

GYPSUM WALLBOARD	
1/2" GYP. BOARD TO 2x4 OR 2x6 STUDS	J21 x 1 1/2" COATED NAILS @ 8"o.c. EDGES, 8"o.c. IN FIELD.

OVERHANG SOFFIT	
1/2" APA RATED SHEATHING	#8 x 1" S.M.S. @ 6"o.c. EDGES, 12"o.c. IN FIELD (PRE-PUNCHED HOLES IN STEEL)

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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6-9-15

REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST FOSS
No. S2030
EXP. 9/30/15
STRUCTURAL
STATE OF CALIFORNIA

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

FASTENING SCHEDULE & NOTES

REV / DATE:	BY:

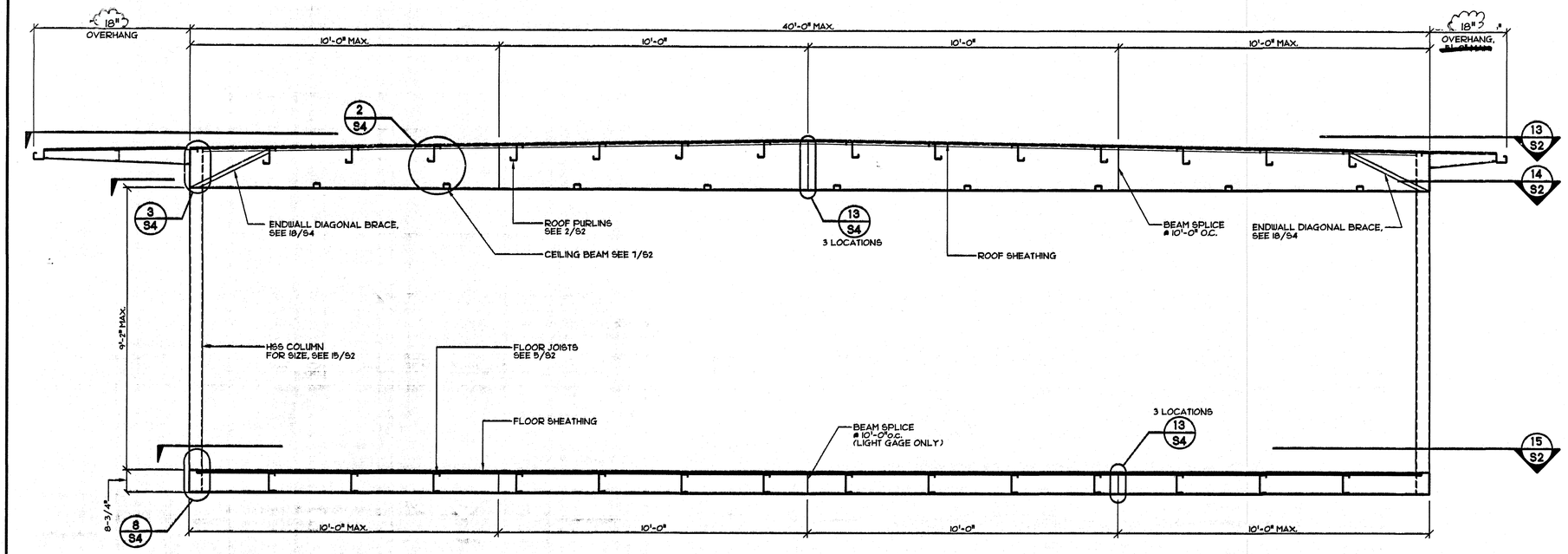
JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. FLS. SS.
DATE 6-9-15

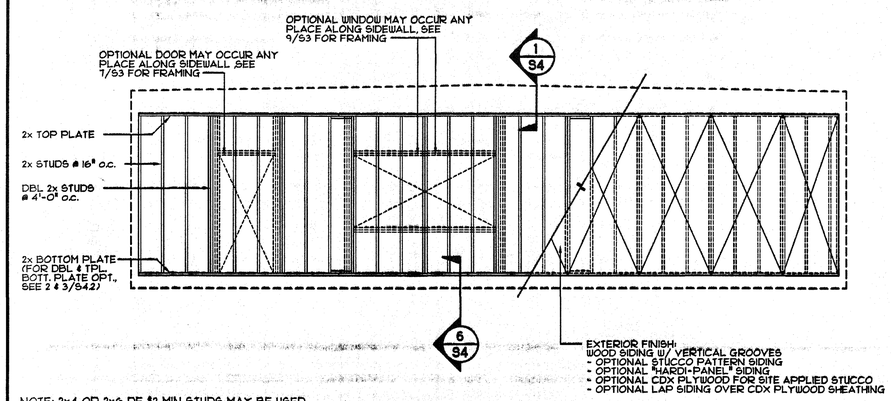
2013 - 12x40

S3FA

12x40 P.C.

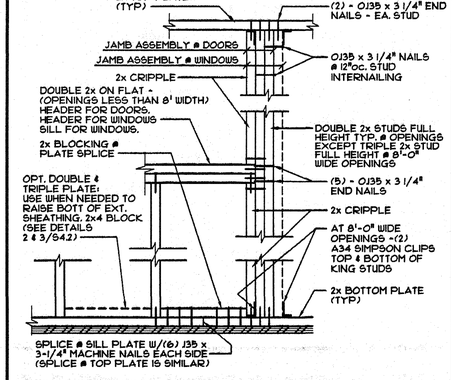


1 **TYPICAL LONGITUDINAL FRAME SECTION - BI-PITCH ROOF**
SCALE: 1/2"=1'-0"



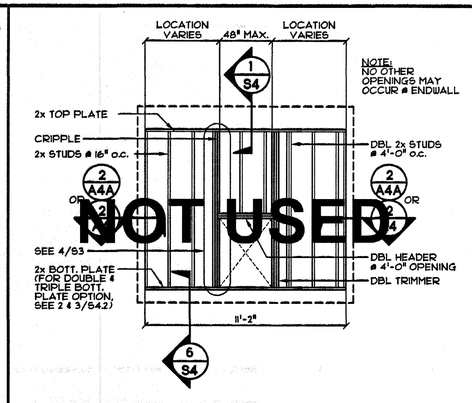
NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.

3 **TYPICAL SIDEWALL FRAMING ELEVATION**
SCALE: 1/4"=1'-0"



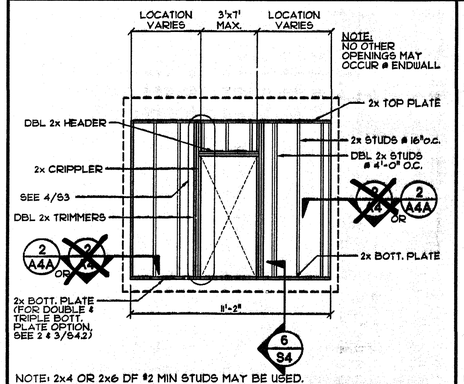
NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.
FOR "NAILING SCHEDULE", SEE 2/S3FA

4 **STUD NAILING DETAIL**
SCALE: 1"=1'-0"



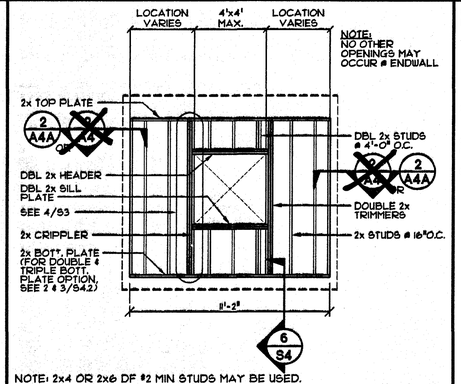
NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.

5 **ENDWALL FRAMING - INTERIOR HVAC**
SCALE: 1/4"=1'-0"



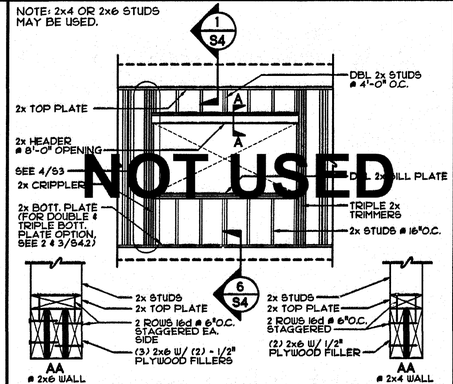
NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.

7 **ENDWALL FRAMING - EXT. DOOR**
SCALE: 1/4"=1'-0"

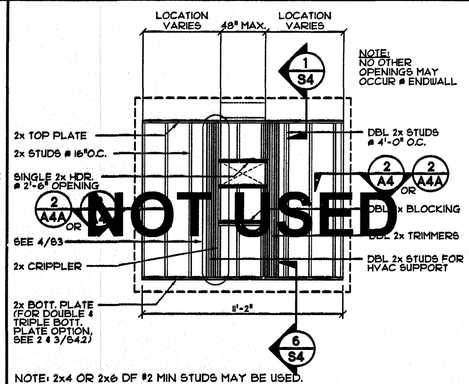


NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.

8 **ENDWALL FRAMING - EXT. WINDOW**
SCALE: 1/4"=1'-0"



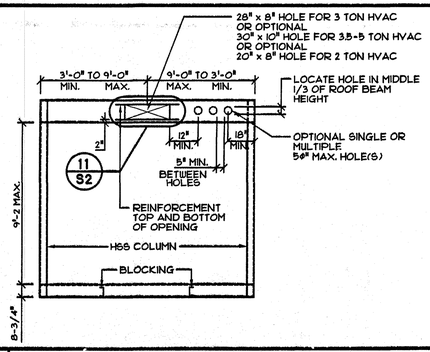
9 **FRAMING @ 8'-0" OPENING**
SCALE: 1/4"=1'-0"



NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.

10 **ENDWALL FRAMING - EXT. HVAC**
SCALE: 1/4"=1'-0"

NOT USED
NOT USED
NOT USED



6 **END FRAME ELEVATION**
SCALE: 1/4"=1'-0"

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
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JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST MOSS No. S2030 EXP. 8/30/15 STRUCTURAL STATE OF CALIFORNIA

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

BI-PITCHED ROOF
LONGITUDINAL BUILDING SECTION, WALL FRAMING ELEVATIONS, END FRAME ELEVATION, NAIL SCHEDULE

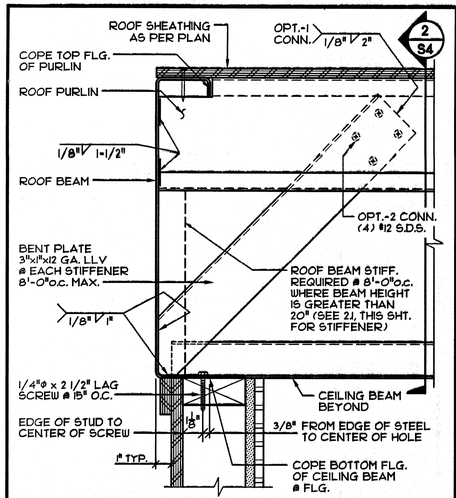
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. FLS. SS.
DATE 6-1-15
2013 - 12x40

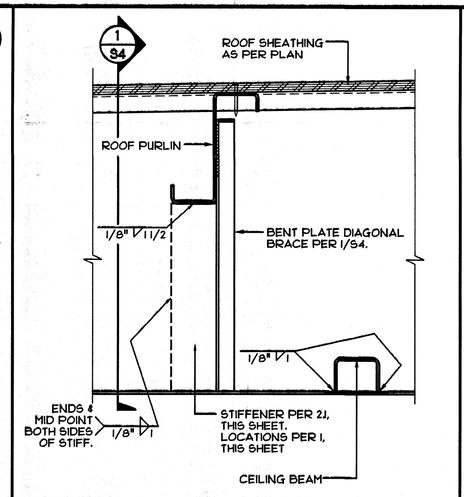
S3

12'x40' P.C.



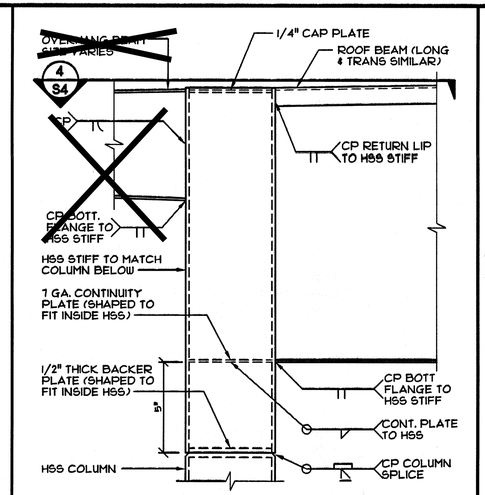
FOR FASTENER SCHEDULE, SEE "S3" SHEETS

1 ROOF BEAM SECTION @ PURLIN
SCALE: 3"=1'-0"

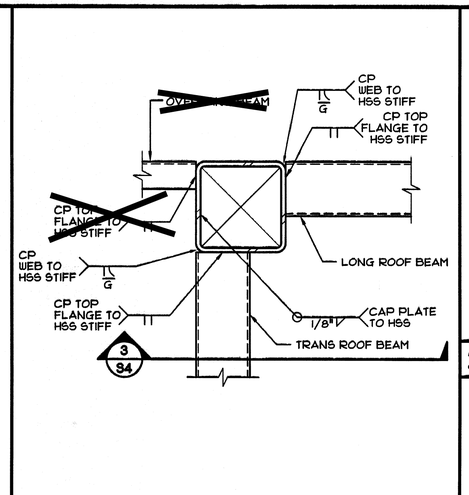


FOR FASTENER SCHEDULE, SEE "S3" SHEETS

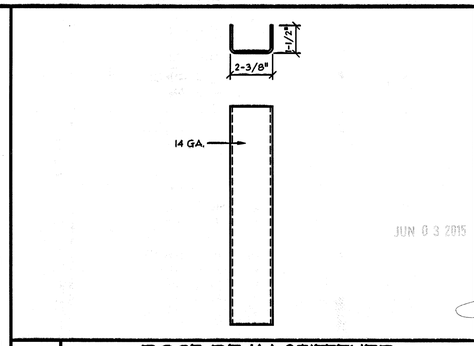
2 PURLIN TO STIFFENER AT BEAM
SCALE: 3"=1'-0"



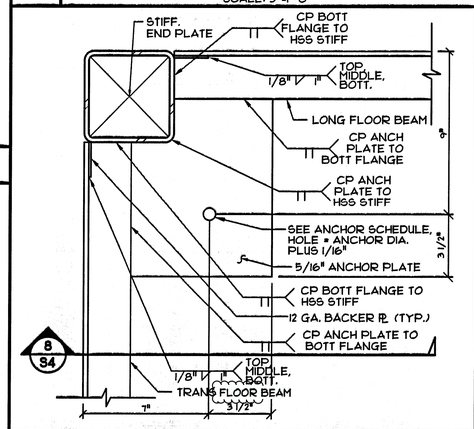
3 ROOF BEAM SECTION @ CORNER
SCALE: 3"=1'-0"



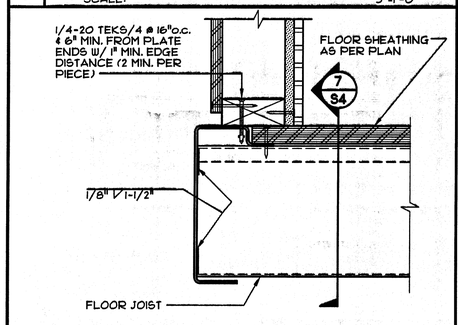
4 ROOF BEAM TOP FLANGE
SCALE: 3"=1'-0"



2.1 ROOF BEAM STIFFENER
SCALE: 3"=1'-0"

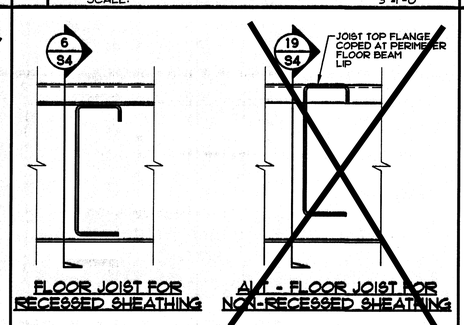


10 FLOOR BEAM BOTTOM FLANGE
SCALE: 3"=1'-0"



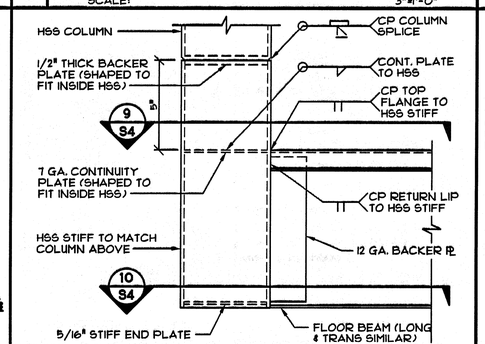
FOR FASTENER SCHEDULE, SEE "S3" SHEETS

6 FLOOR BEAM @ JOIST CONNECTION
SCALE: 3"=1'-0"

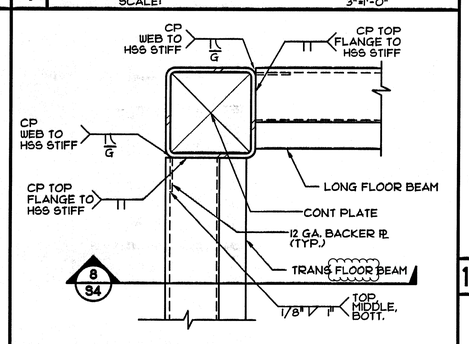


FOR CLARITY, FLOOR SHEATHING IS NOT SHOWN.

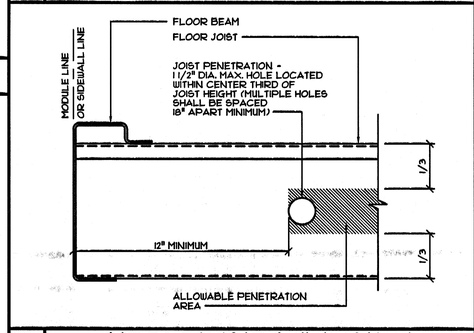
7 JOIST TO BEAM CONNECTION
SCALE: 3"=1'-0"



8 FLOOR BEAM SECTION @ CORNER
SCALE: 3"=1'-0"



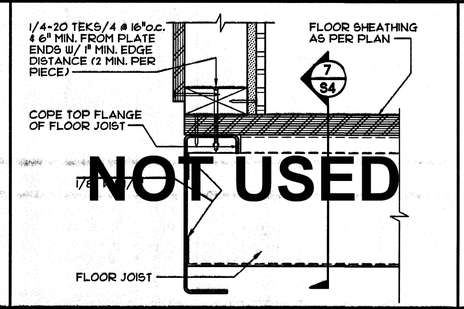
9 FLOOR BEAM TOP FLANGE
SCALE: 3"=1'-0"



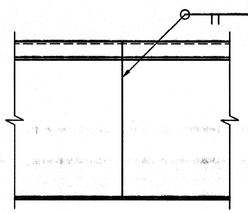
19 FLOOR JOIST PENETRATION
SCALE: 3"=1'-0"

NOT USED

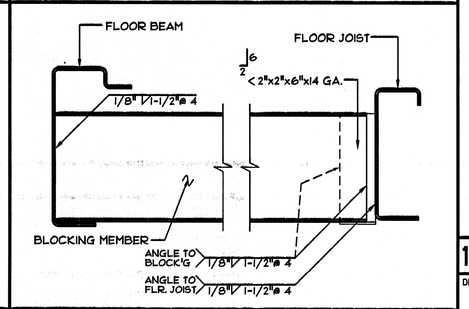
11



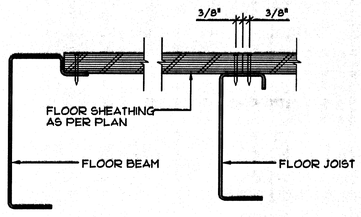
12 ALT. FLOOR BEAM @ JOIST CONN.
SCALE: 3"=1'-0"



13 BEAM SPLICE DETAIL
SCALE: 3"=1'-0"

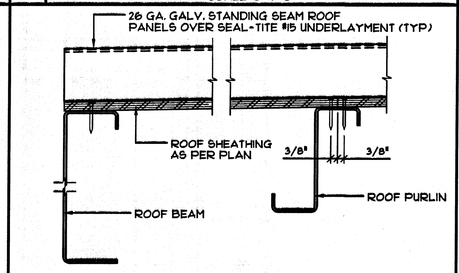


14 BLOCKING MEMBER CONNECTION
SCALE: 3"=1'-0"



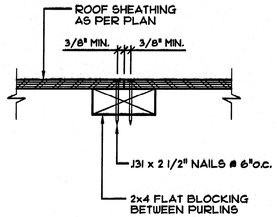
FOR FASTENER SCHEDULE, SEE "S3" SHEETS

15 FLOOR SHEATHING ATTACHMENT
SCALE: 3"=1'-0"

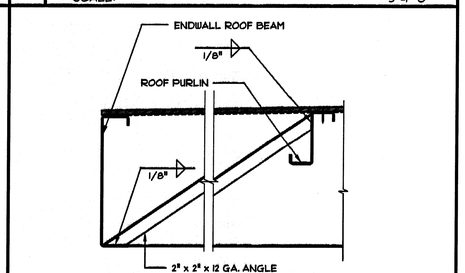


NOTE: THIS ROOF MEETS CLASS 'B' FIRE RATING
FOR FASTENER SCHEDULE, SEE "S3" SHEETS

16 ROOF SHEATHING ATTACHMENT
SCALE: 3"=1'-0"



17 FLAT BLOCKING @ ROOF
SCALE: 3"=1'-0"



18 ENDWALL DIAGONAL BRACE
SCALE: 1 1/2"=1'-0"

DIVISION OF THE STATE ARCHITECT

PRE-CHECK (PC) DOCUMENT
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(916) 646-1900 Fax (916) 646-1300
www.cysse.com

JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST ROSES
No. S2030
EXP. 9/30/15
STRUCTURAL
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215. (209) 466-8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

STRUCTURAL CONNECTION DETAILS

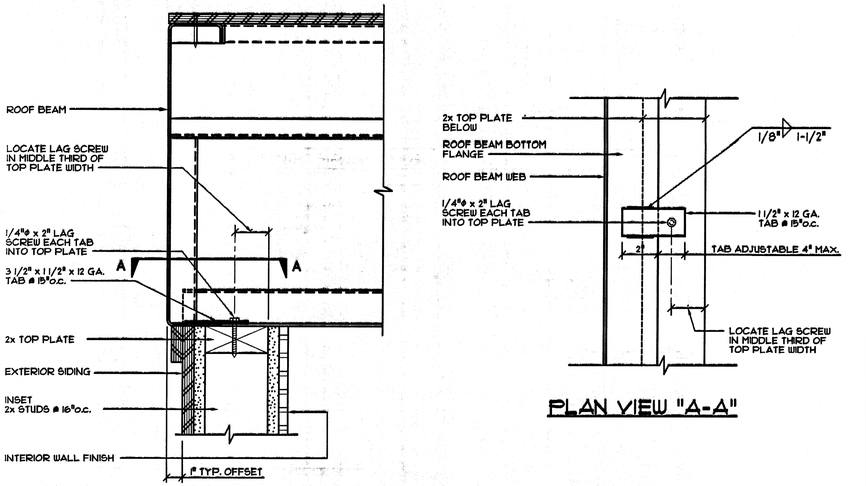
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. FLS. SS.
DATE 6-1-15
2013 - 12x40

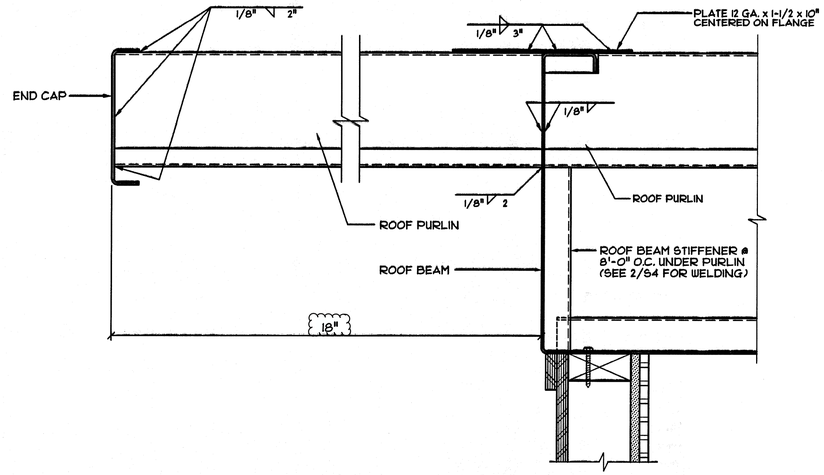
12'x40' P.C.

S4

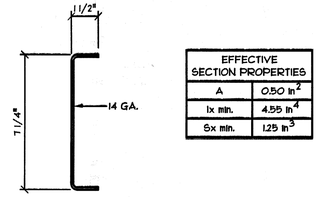


PLAN VIEW "A-A"

1 INSET STUDS - TOP PLATE CONNECTION
SCALE: 3"=1'-0"

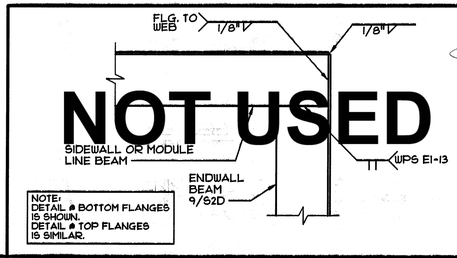


2 SIDEWALL OVERHANG DETAIL
SCALE: 3"=1'-0"

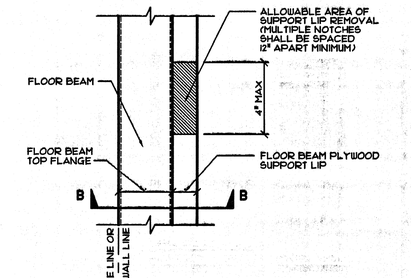


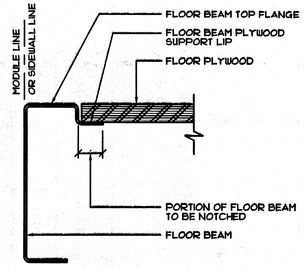
EFFECTIVE SECTION PROPERTIES	
A	0.50 in^2
Ix min.	4.55 in^4
Sx min.	1.25 in^3

END CAP SECTION PROPERTIES

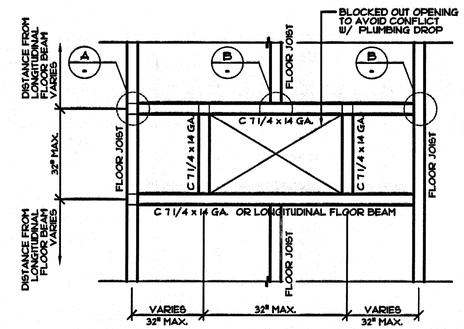


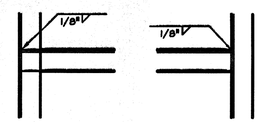
15 TYP. CHANNEL BEAM @ CORNERS
SCALE: 3"=1'-0"

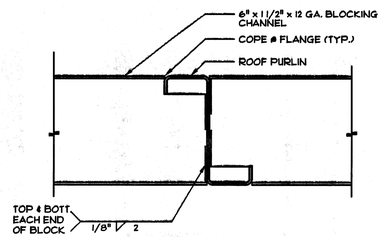




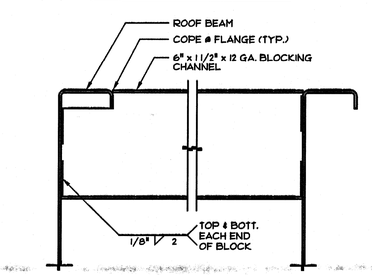
SECTION VIEW "B-B"





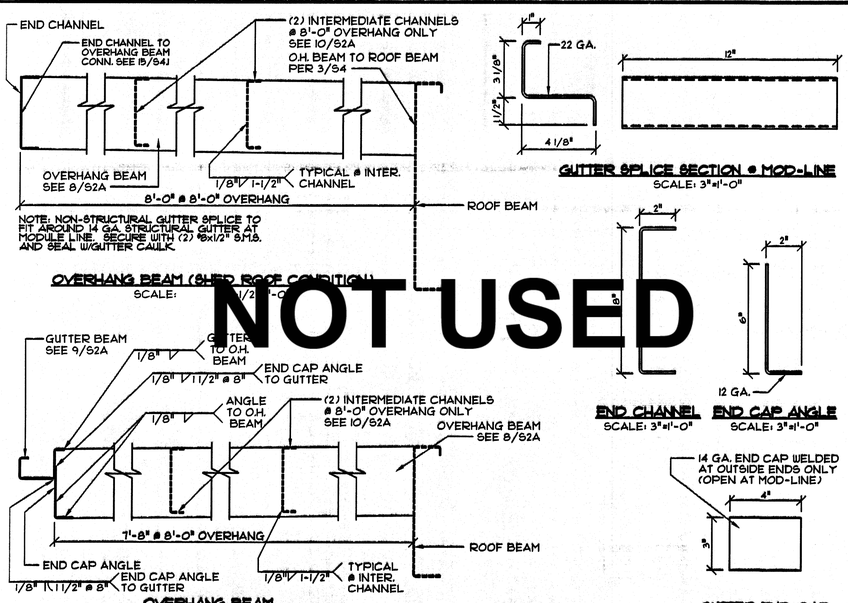


BETWEEN PURLINS

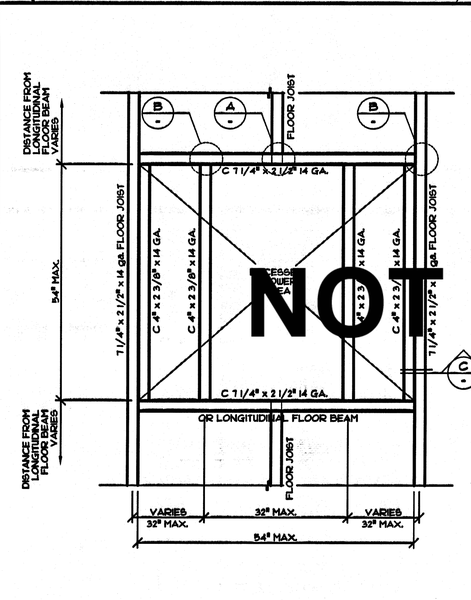


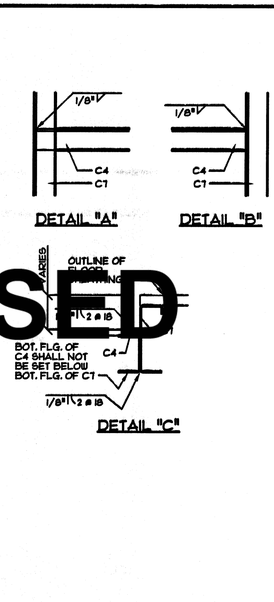
BETWEEN BEAMS

11 TYP. CHANNEL BLOCK INSTALLATION
SCALE: 3"=1'-0"



12 8'-0" OVERHANG DETAILS
SCALE: AS NOTED





14 RECESSED SHOWER FLOOR FRAMING PLAN
SCALE: 3/4"=1'-0"

NOT USED

NOT USED

DIVISION OF THE STATE ARCHITECT

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER MATTHEW ERNEST ROSS No. S2030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

ALTERNATE STRUCTURAL DETAILS

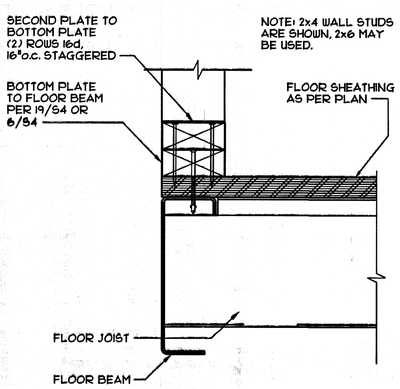
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

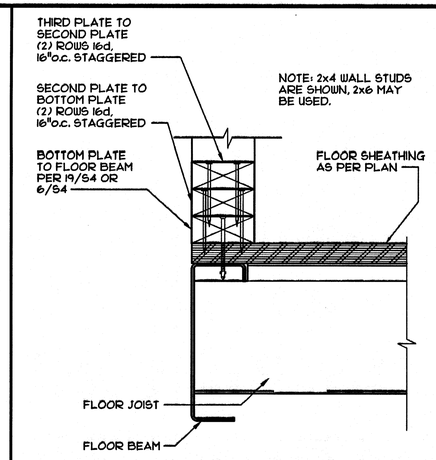
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. FLS. SS.
DATE 6-9-15
3013 - 12x40

S4.1

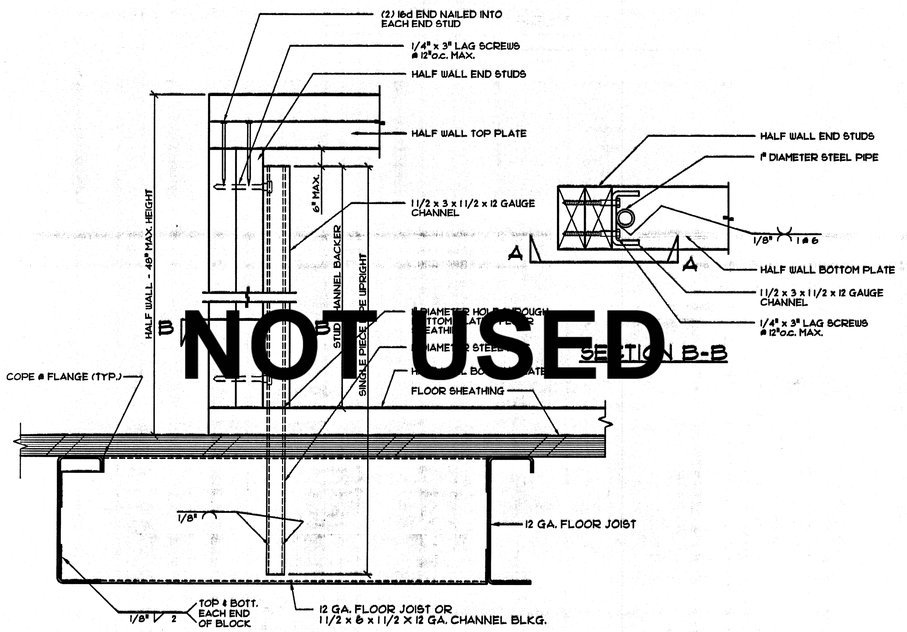
12'x40' P.C.



2 DOUBLE BOTTOM PLATE OPTION
SCALE: 3"=1'-0"



3 TRIPLE BOTTOM PLATE OPTION
SCALE: 3"=1'-0"



SECTION A-A

11 HALF WALL STABILIZER BRACKET
SCALE: 3"=1'-0"

JUN 0 3 2015

10.1

12

15

DIVISION OF THE STATE ARCHITECT

PRE-CHECK (PC) DOCUMENT
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www.cysse.com

REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST PERSSON
No. S2030
EXP. 9/30/15
STRUCTURAL
STATE OF CALIFORNIA

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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

ALTERNATE STRUCTURAL DETAILS

REVISION DATE:	BY:

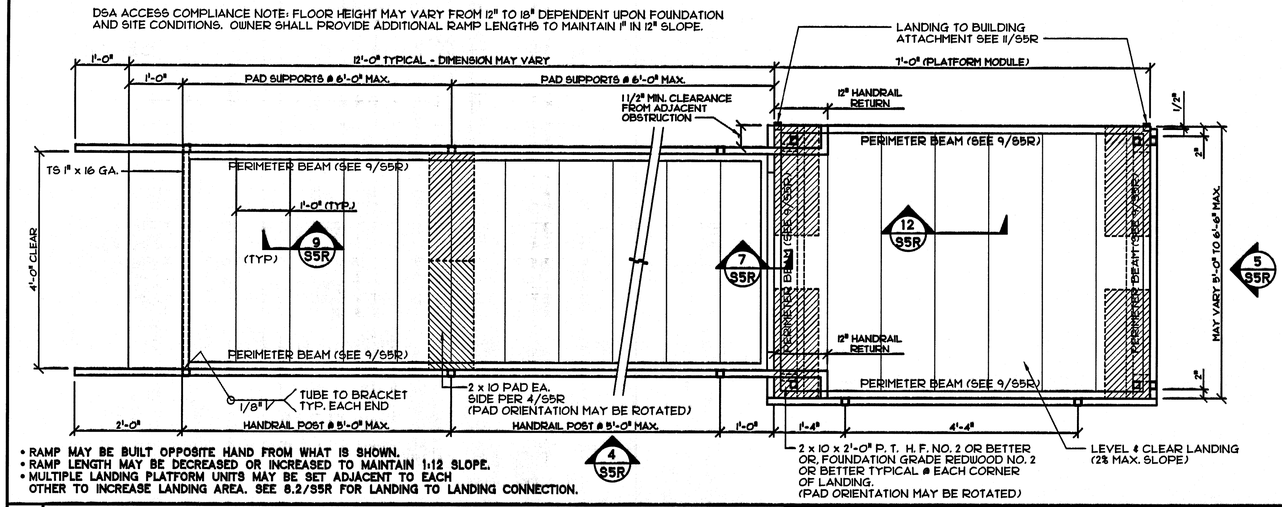
JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. FLS SS
DATE 6-9-15

S4.2

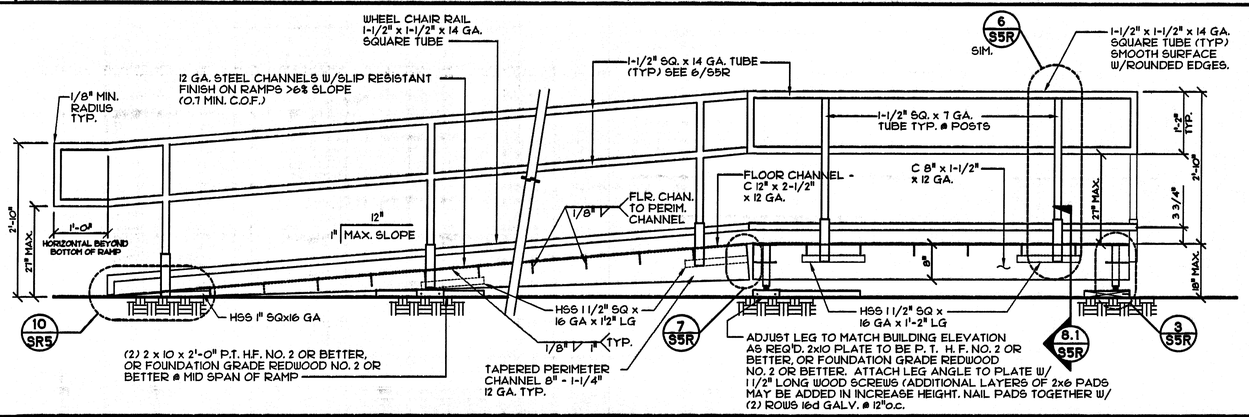
12'x40' P.C.

DSA ACCESS COMPLIANCE NOTE: FLOOR HEIGHT MAY VARY FROM 12" TO 18" DEPENDENT UPON FOUNDATION AND SITE CONDITIONS. OWNER SHALL PROVIDE ADDITIONAL RAMP LENGTHS TO MAINTAIN 1" IN 12" SLOPE.

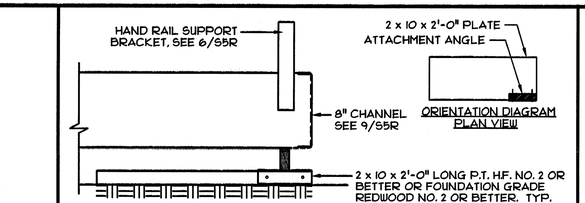


- RAMP MAY BE BUILT OPPOSITE HAND FROM WHAT IS SHOWN.
- RAMP LENGTH MAY BE DECREASED OR INCREASED TO MAINTAIN 1:12 SLOPE.
- MULTIPLE LANDING PLATFORM UNITS MAY BE SET ADJACENT TO EACH OTHER TO INCREASE LANDING AREA. SEE 8.2/S5R FOR LANDING TO LANDING CONNECTION.

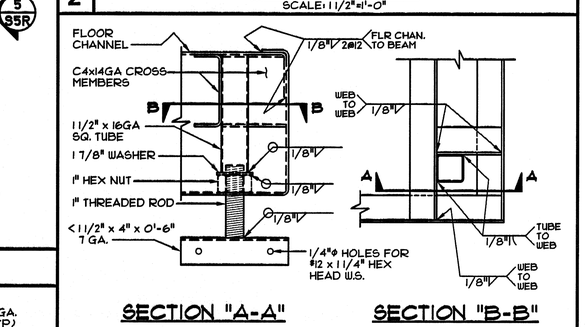
1 RAMP & LANDING PLAN
SCALE: 3/4"=1'-0"



4 RAMP & PLATFORM SIDE ELEVATION
SCALE: 3/4"=1'-0"

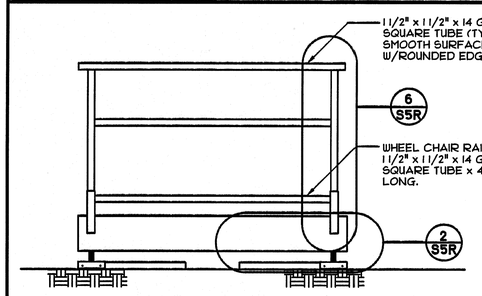


2 LANDING BASE
SCALE: 1 1/2"=1'-0"

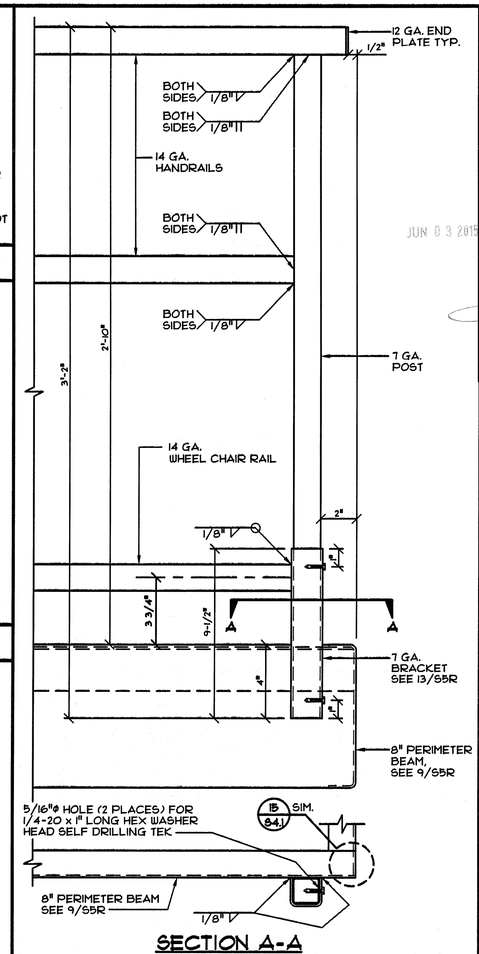


SECTION "A-A" SECTION "B-B"

3 PLATFORM BASE & ADJUST LEG DETAIL
SCALE: 3"=1'-0"

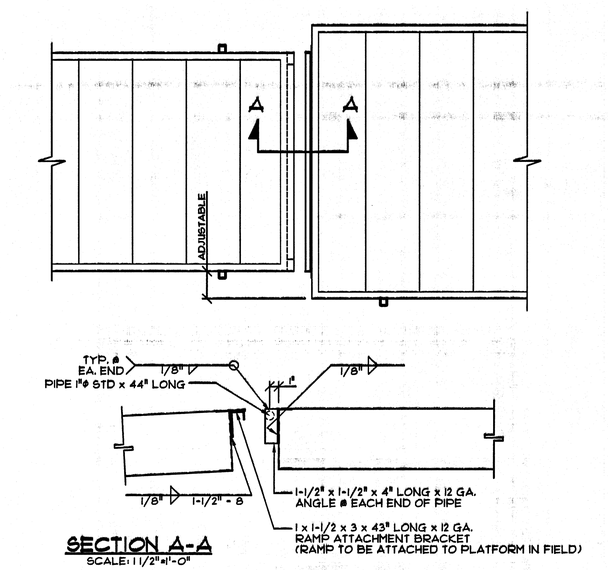


5 PLATFORM END ELEVATION
SCALE: 3/4"=1'-0"



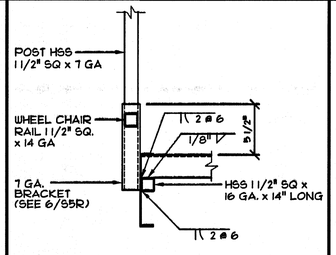
SECTION A-A

6 HANDRAIL SUPPORT BRACKET
SCALE: 3"=1'-0"

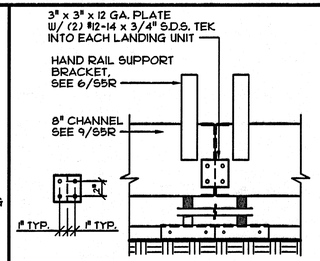


SECTION A-A
SCALE: 1 1/2"=1'-0"

7 RAMP TO LANDING ATTACHMENT
SCALE: 3/4"=1'-0"

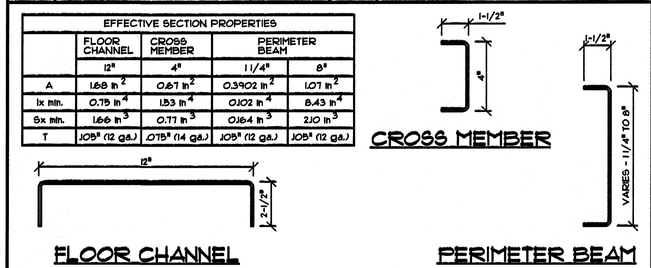


8.1 SECTION
SCALE: 1 1/2"=1'-0"

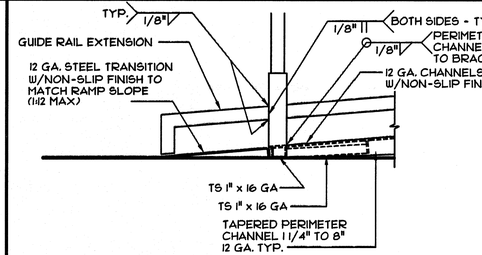


8.2 LANDING TO LANDING
SCALE: 1 1/2"=1'-0"

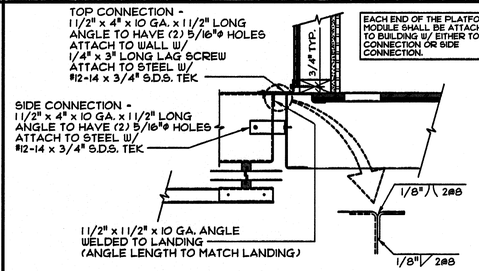
EFFECTIVE SECTION PROPERTIES				
	FLOOR CHANNEL	CROSS MEMBER	PERIMETER BEAM	
	12"	4"	11/4"	8"
A	1.68 in^2	0.67 in^2	0.3902 in^2	1.07 in^2
Ix min.	0.75 in^4	1.53 in^4	0.102 in^4	8.43 in^4
Sx min.	1.66 in^3	0.77 in^3	0.164 in^3	2.10 in^3
T	.105" (12 ga.)	.075" (14 ga.)	.105" (12 ga.)	.105" (12 ga.)



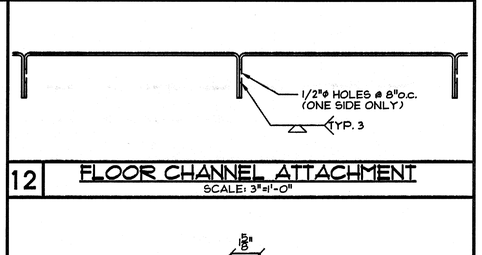
9 SECTION PROPERTIES
SCALE: 3"=1'-0"



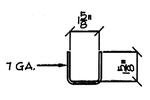
10 ZERO CLEARANCE TRANSITION
SCALE: 1 1/2"=1'-0"



11 LANDING ATTACHMENT TO BUILDING
SCALE: 1 1/2"=1'-0"



12 FLOOR CHANNEL ATTACHMENT
SCALE: 3"=1'-0"



13 HANDRAIL BRACKET / SLEEVE
SCALE: 3"=1'-0"

RAMP DESIGN CRITERIA:
RAMP: DEAD LOAD = 5.0 PSF
RAMP: LIVE LOAD = 100.0 PSF

PRE-CHECK (PC) DOCUMENT
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(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

ACCESSIBLE RAMP & PLATFORM DETAILS

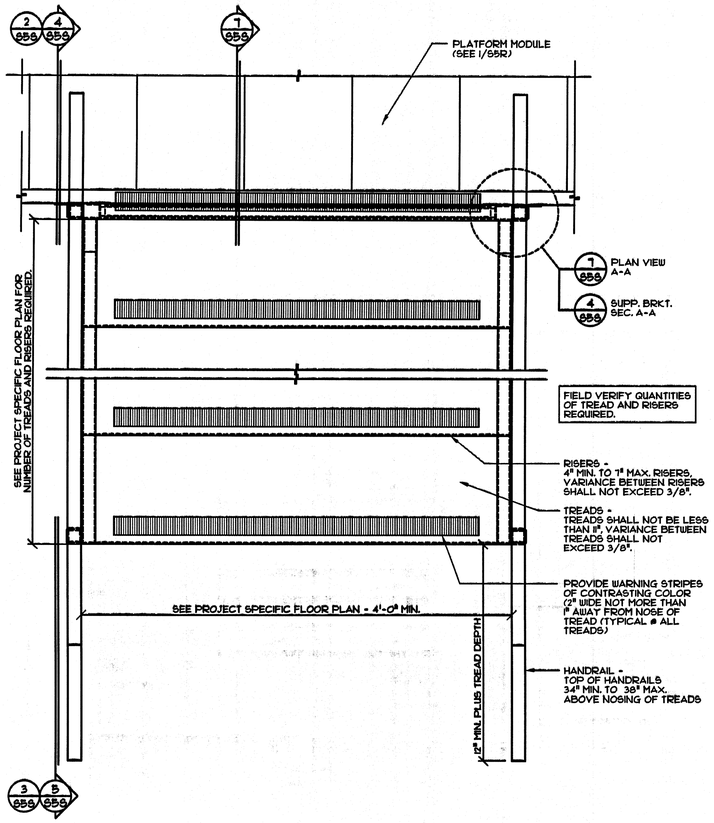
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. TM FLS BE SS
DATE 6-9-15
2013 - 12x40

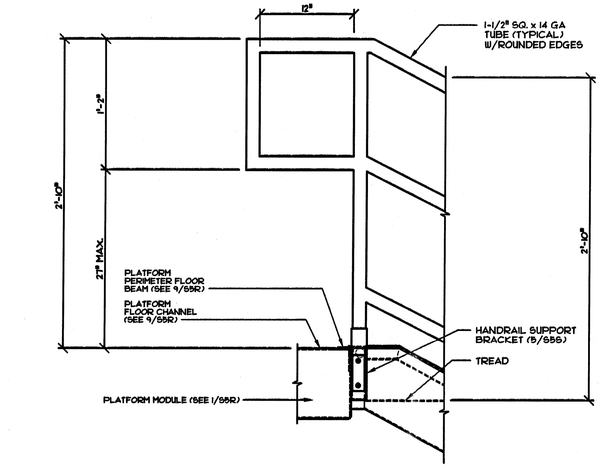
12'x40' P.C.

S5R

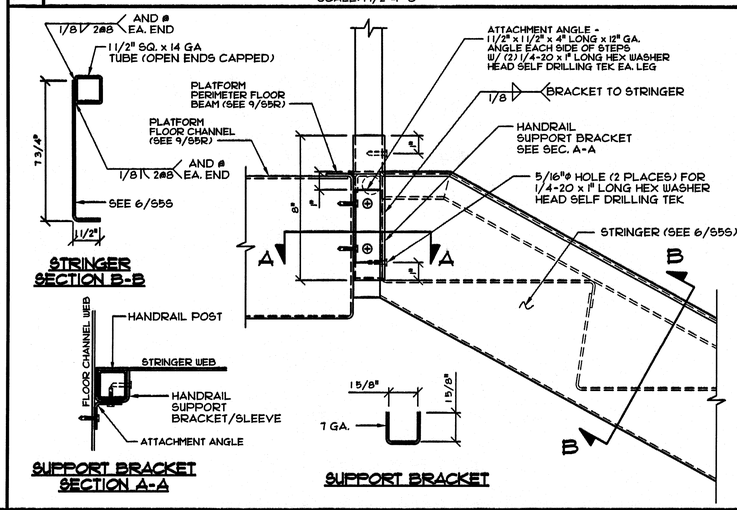


- TYPICAL STAIR PLAN IS SHOWN – SEE PROJECT SPECIFIC FLOOR PLAN FOR ACTUAL CONFIGURATION TO BE BUILT.
- STAIRWAY MAY BE BUILT OPPOSITE HAND FROM WHAT IS SHOWN.
- STAIRWAY LENGTH MAY BE DECREASED OR INCREASED AS REQUIRED FOR SITE CONDITIONS.
- MULTIPLE LANDING PLATFORM MODULES MAY BE SET ADJACENT TO EACH OTHER TO INCREASE LANDING AREA (SEE 1/S5R)

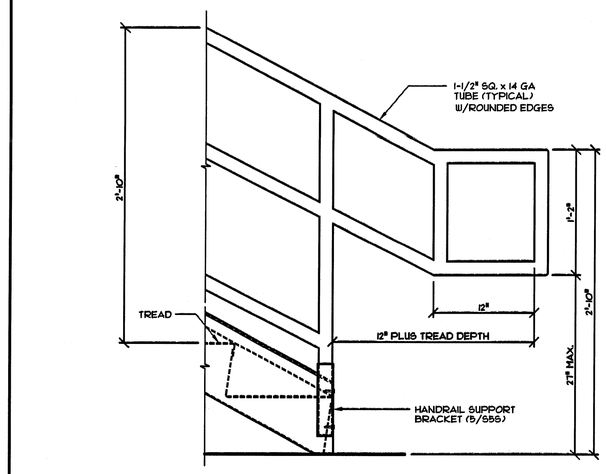
1 **TYPICAL STAIR PLAN**
SCALE: 1 1/2"=1'-0"



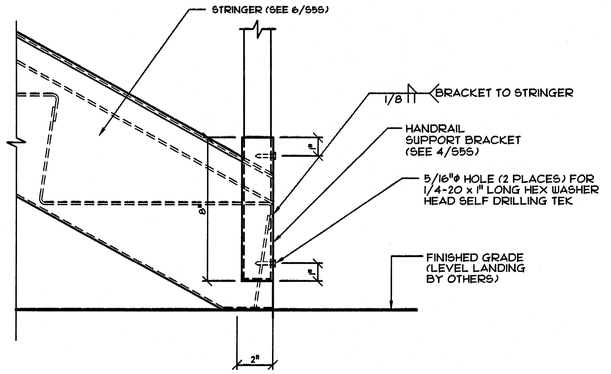
2 **HANDRAIL @ TOP**
SCALE: 1 1/2"=1'-0"



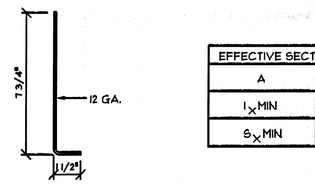
4 **HANDRAIL BRACKET @ TOP**
SCALE: 3"=1'-0"



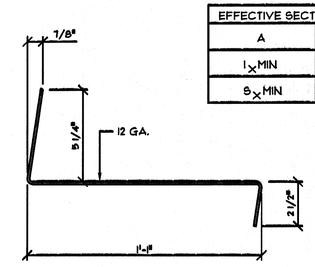
3 **HANDRAIL @ BOTTOM**
SCALE: 1 1/2"=1'-0"



5 **HANDRAIL BRACKET @ BOTTOM**
SCALE: 3"=1'-0"

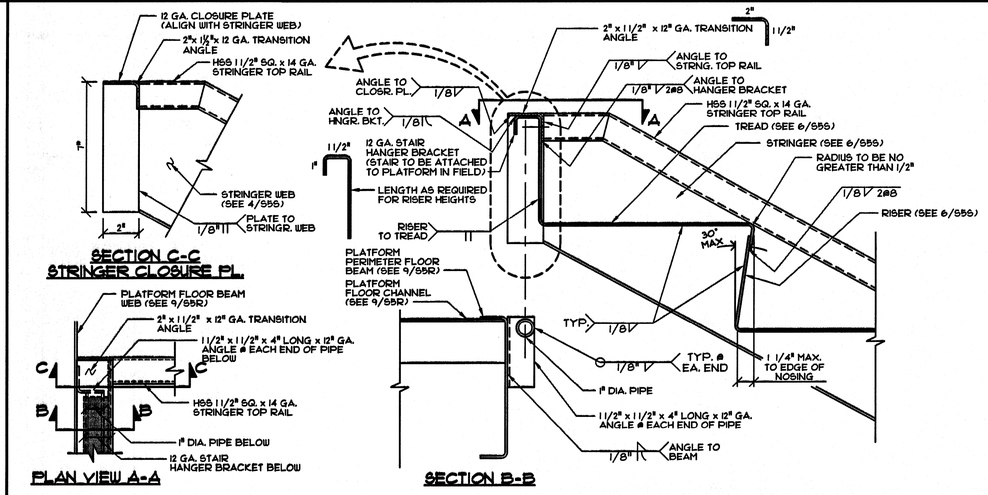


EFFECTIVE SECTION PROPERTIES	
A	0.9196 (IN ^{2})
I_x MIN	0.2621 (IN ^{4})
S_x MIN	0.308 (IN ^{3})



EFFECTIVE SECTION PROPERTIES	
A	2.07 (IN ^{2})
I_x MIN	0.85 (IN ^{4})
S_x MIN	0.35 (IN ^{3})

6 **SECTION PROPERTIES**
SCALE: 3"=1'-0"



7 **STAIR CONNECTION @ TOP**
SCALE: 3"=1'-0"

DESIGN CRITERIA:
DEAD LOAD – 5.0 PSF
LIVE LOAD – 100.0 PSF

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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(916) 920-2020 (916) 920-1330 Fax
www.cysmg.com

JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST HOGE No. 52030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

STAIR DETAILS

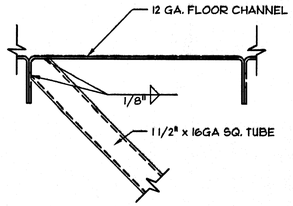
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

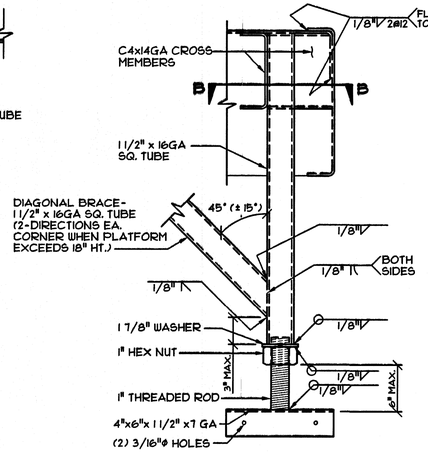
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC TM FLS SS
DATE 6-1-15

S5S

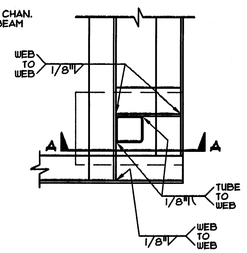
12'x40' P.C.



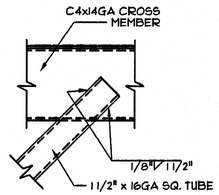
DIAGONAL BRACE @ TOP



SECTION A-A



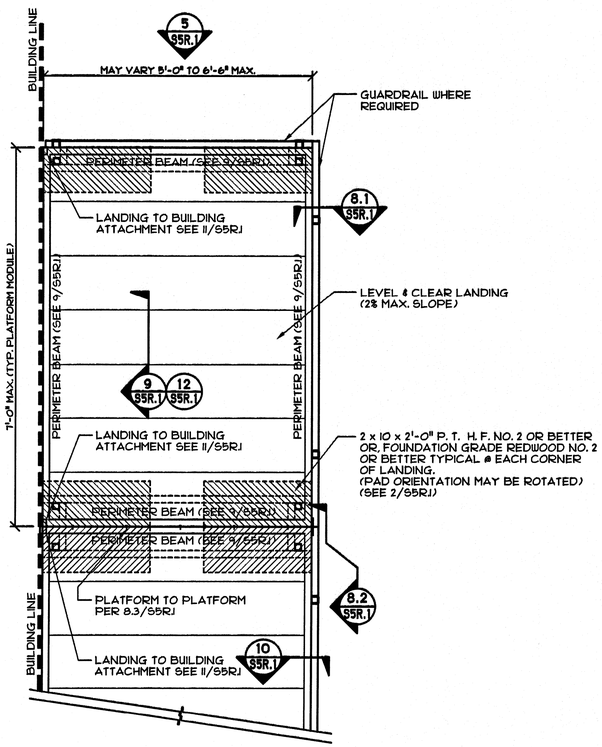
SECTION B-B



DIAGONAL BRACE @ TOP

3 ADJUST LEG DETAIL (PLATFORMS OVER 18")

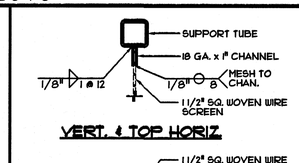
SCALE: 3"=1'-0"



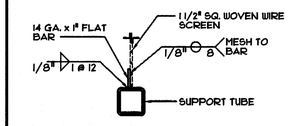
- RAMP MAY BE BUILT OPPOSITE HAND FROM WHAT IS SHOWN.
- MULTIPLE LANDING PLATFORM UNITS MAY BE SET ADJACENT TO EACH OTHER TO INCREASE LANDING AREA.

15 TYP. MULTIPLE PLATFORM PLAN

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



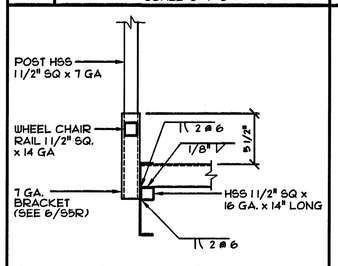
VERT. & TOP HORIZ



BOTTOM HORIZ

5.1 MESH TO SUPPORT

SCALE: 3"=1'-0"

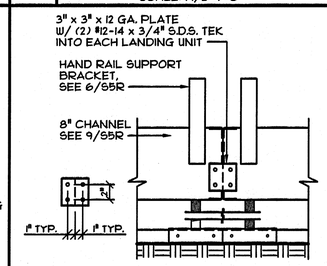


8.1 SECTION

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

8.3 PLATFORM STITCH

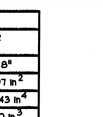
SCALE: 1 1/2"=1'-0"



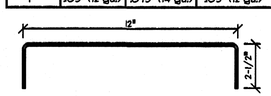
8.2 LANDING TO LANDING

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

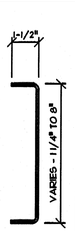
EFFECTIVE SECTION PROPERTIES				
	FLOOR CHANNEL	CROSS MEMBER	PERIMETER BEAM	
	12"	4"	11/4"	8"
A	1.88 in^2	0.87 in^2	0.3902 in^2	1.07 in^2
Ix min.	0.75 in^4	1.93 in^4	0.102 in^4	8.43 in^4
Sx min.	1.66 in^3	0.77 in^3	0.164 in^3	2.10 in^3
T	.105" (12 ga.)	.075" (14 ga.)	.105" (12 ga.)	.105" (12 ga.)



CROSS MEMBER



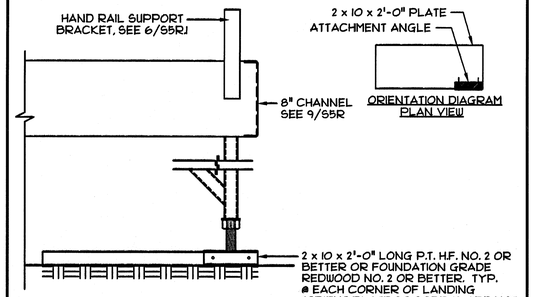
FLOOR CHANNEL



PERIMETER BEAM

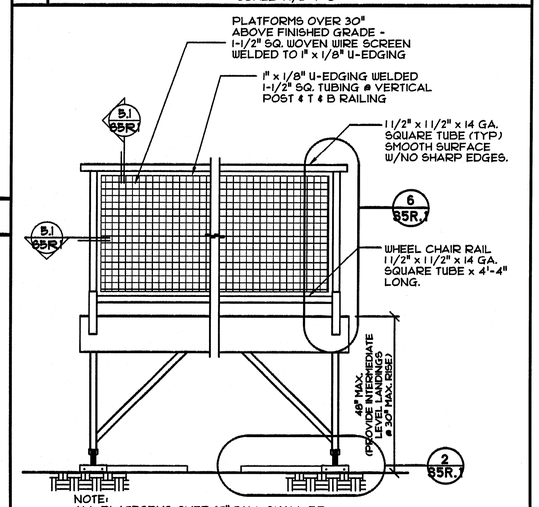
9 SECTION PROPERTIES

SCALE: 3"=1'-0"



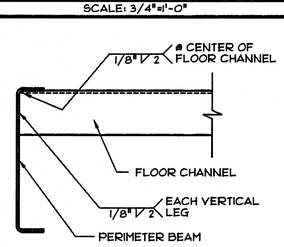
2 TYPICAL LANDING BASE

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



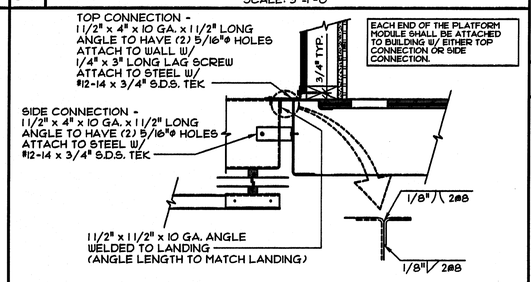
5 TYPICAL PLATFORM END ELEVATION

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



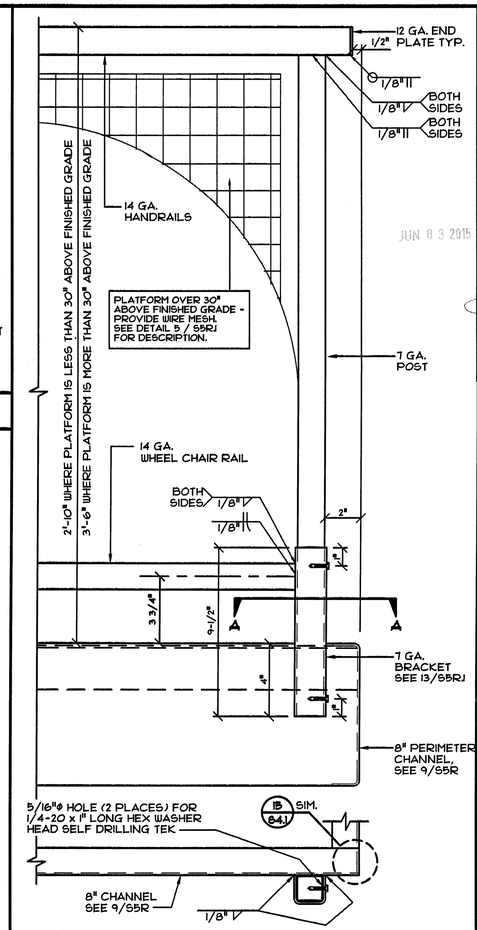
10 FLR. CHAN. TO PERIMETER BM.

SCALE: 3"=1'-0"



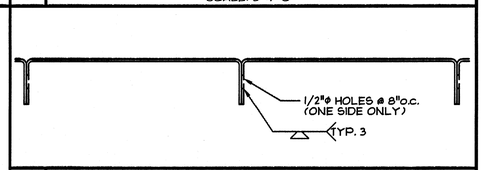
11 LANDING ATTACHMENT TO BUILDING

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



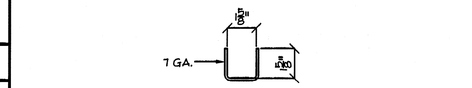
6 GUARD/HANDRAIL BRACKET

SCALE: 3"=1'-0"



12 FLOOR CHANNEL ATTACHMENT

SCALE: 3"=1'-0"



13 HANDRAIL BRACKET / SLEEVE

SCALE: 3"=1'-0"

DESIGN CRITERIA:
DEAD LOAD = 5.0 PSF
LIVE LOAD = 100.0 PSF

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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www.cysinc.com

REGISTERED PROFESSIONAL ENGINEER ARTHUR "ERNEST" RIGGS No. S2030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

JUN 03 2015

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

(2) 12x40 MODULAR BUILDING
REDWOOD HIGH SCHOOL
TAMALPAIS UNION HIGH SCHOOL DISTRICT

PLATFORM DETAILS
(PLATFORM OVER 18" HEIGHT)

REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC JM FLS SS
DATE 6-9-15
2013 - 12x40

12x40 P.C.

S5R.1

ENVIROPLEX, INC.

STEEL ORDINARY MOMENT RESISTING FRAME MODULAR BUILDING 12'x40' RESTROOM (480 S.F.)

TEST & INSPECTION GUIDELINE

TYPE OF MODULAR STEEL MOMENT FRAME BUILDING PROJECT (X–INDICATES TEST OR INSPECTION TO BE DONE)

TEST and INSPECTIONS (as listed on Form DSA–103)				STOCKPILE		CONSTRUCTION OF (diaphragm material–foundation material)			RELOCATION OF CERTIFIED BUILDING	
MATERIAL TYPE		DSA 103 ITEM #	DESCRIPTION	WOOD FLOOR ONLY	CONCRETE FLOORS	PLYWOOD FLOOR ONLY -WOOD FOUNDATION	PLYWOOD FLOOR CONCRETE FOUNDATION	CONCRETE FLOOR - CONCRETE FOUNDATION	WOOD FOUNDATION	CONCRETE FOUNDATION
SOILS Verify the necessity of the Tests and/ or Inspections with the requirements of the application that this PC is part of.	GENERAL	1	-Site has been prepared properly prior to fill placement/excavations -Fdn excavations extended to proper depth and material -Materials below footing are adequate				X	X		X
	COMPACTED FILL	2a	Perform qualification testing of materials				X	X		X
		2b	Proper fill materials, lift thickness placement and compaction during placement.				X	X		X
		2c	Compaction test				X	X		X
CONCRETE	LT WT FILL OVER METAL DECK	7a	Verify required design mix		X			X		
		7c	Perform slump and (where required) air content test; determine temperature of concrete		X			X		
		7d	Test concrete - compression tests		X			X		
		7e	Inspect batching of concrete -		X			X		
		12	Waiver of Batch Plant Inspection See Note 1 for conditions and requirements.		X			X		
		7f	Inspect placement of concrete, reinforcing and embedded items over steel deck - by RBIP		X			X		
	FOUNDATION	7a	Verify required Design Mix				X	X		X
		7b	Test reinforcing Steel - See Note 1 for Waiver for one Story Bldgs.				X	X		X
		7c	Perform slump and (where required) air content test; determine temperature of concrete				X	X		X
		7d	Test concrete - compression tests				X	X		X
		7e	Inspect batching of concrete -				X	X		X
		7e	Inspect placement of formwork, concrete, reinforcing steel and embedded items - by Project Inspector				X	X		X
	POST INSTALLED ANCHORS NOTE 2		Inspect installation of post installed anchors				X	X		X
			Test post-installed anchors				X	X		X
STRUCTURAL STEEL	MATERIAL VERIFICATION	17a	-Materials are appropriately marked -Mfr. certified mill test reports -Material sizes, types and grades comply with requirements	X	X	X	X	X		
		17b	Sample and test all unidentified structural steel and steel deck	X	X	X	X	X		
		17c	Examine seam welds of structural tubes and pipes	X	X	X	X	X		
		17d	Verify member locations, bracing and all details constructed in the field	X	X	X	X	X		
		17e	Verify stiffener locations, connection tab locations and all construction details fabricated in the shop.	X	X	X	X	X		
	VERIFICATION OF MATERIALS EQUIPMENT, WELDERS, ETC	19a	Verify weld filler material identification marking per AWS designation listed on the DSA approved documents and the WPS	X	X	X	X	X		
		19b	Verify weld filler material manufactures's certificate of compliance	X	X	X	X	X		
		19c	Verify WPS, welder qualifications and equipment	X	X	X	X	X		
	SHOP WELDING	19.1a	Inspect groove, multi-pass, and fillet welds > 5/16"	X	X	X	X	X		
		19.1b	Inspect single-pass fillet welds ≤ 5/16"	X	X	X	X	X		
		19.1c	Inspect welding of stairs and railing systems. Note 3.	X	X	X	X	X		
	FIELD WELDING See Note 3	19.2a	Inspect groove, multi-pass, and fillet welds > 5/16"			X	X	X		X
		19.2b	Inspect single-pass fillet welds ≤ 5/16"			X	X	X		X
		19.2f	Inspect welding of stairs and railing systems.			X	X	X		X
	OTHER	24a	Shop Welding - Inspection welding of cold-formed steel Periodic/Special Inspector	X	X	X	X	X		
		24b	Shop Welding - Inspect welding of steel floor deck welds Periodic/Special Inspector		X			X		
OTHER - SHOT PINS (Two Story Modular)		27c	Ceiling wire hangers (pins in metal deck with concrete fill) Test/Lab		X			X		
INSPECTOR CLASS (minimum requirements)				RBIP or Class 1		In Plant RBIP or Class 1 Site: Class 4 for Single Story Site: Class 2 for Two-story			Class 4 for Single Story Class 2 for Two-story	
SELECTION OF THE PROJECT INSPECTOR AND TESTING AGENCY				By the Owner and approved by DSA, A/E of Record and Structural Engineer		By the School District and approved by DSA, A/E of Record and Structural Engineer				
COST OF THE PROJECT INSPECTOR (Title 24, Part1,Section 4–333(b) AND TESTING AGENCY (Title 24, Part 1, Section 4–335))				By the Owner		By the School District				

NOTE 1: Reinforcing steel tests may be waived for one-story buildings.

NOTE 2: Required only where the details of the PC specify the use of this type of anchor

NOTE 3: Required only where the details of the PC specify this Welding

The Example form DSA-103's shown on this sheet are for illustration purposes only to assist in the completion of future project-specific form DSA-103's. A form DSA-103 is to be completed for each Application that this PC is being incorporated into and all Example form DSA-103's are to be crossed out on this drawing.

PC GENERAL NOTES

1. THIS PC IS NOT APPROVED FOR "A" OCCUPANCY USES AND CANNOT BE REVIEWED OVER THE COUNTER (OTC).
2. PC BUILDING APPROVED ONLY FOR OCCUPANCY B, or E WITH OCCUPANT LOAD LESS THAN 250. (2013 CBC TABLE 1604A.5 RISK CATEGORY I & II).
3. PC BUILDING EXITING IS BASED ON THE USE OR OCCUPANCY AND WILL BE REVIEWED AS SITE SPECIFIC.
4. PC BUILDING LOCATED IN FIRE HAZARD SEVERITY ZONES PER WILDLAND URBAN INTERFACE FIRE AREAS (WUI) SHALL CONFORM TO CBC CHAPTER 7A.
5. THIS PC IS NOT APPROVED FOR FIRE HAZARD SEVERITY ZONES PER C.B.C. CHAPTER 7A.
6. SITE AND USE SPECIFIC REQUIREMENT FOR FIRE ALARM SYSTEM MIGHT BE REQUIRED BUT NOT INCLUDED IN THIS PC APPROVAL.
7. THIS BUILDING IS STRUCTURALLY DESIGNED TO SUPPORT THE WEIGHT OF A FUTURE FIRE SPRINKLER SYSTEM (EQUIVALENT TO 1.5 psf MAXIMUM), IF REQUIRED.
8. THIS PC IS APPROVED FOR CLIMATE ZONES 1 THROUGH 16.
9. THIS PC IS NOT APPROVED FOR OCCUPANCY E USED AS SPECIAL HAZARD USE OR STORE SUCH AS LIBRARIES, VOCATIONAL SHOPS & DAYCARE CANNOT BE REVIEWED OVER THE COUNTER (OTC).
10. NOT USED.
11. SOLAR READY SITE ADOPTED PC BUILDINGS:
    PROVISIONS FOR SOLAR READY REQUIREMENTS OF THIS PC WILL BE PART OF ANOTHER BUILDING WITHIN 250 FT.
    SOLAR READY ZONE SHALL BE A MIN. OF 5 FT WIDE AND 80 SQ. FT. (TITLE 24, PART 6, 110.10(b).
    SOLAR READY ZONE MUST BE IN THE BUILDING OR WITHIN 250 FT. OF THE BUILDING AND HAVE A SOLAR ZONE AREA NO LESS THAN 15% OF THE TOTAL ROOF AREA OF THE BUILDING EXCLUDING ANY SKYLIGHT AREA.
    (TITLE 24, PART 6, 110.10(b) 1B.
12. NOT USED.
13. ENERGY CODE COMPLIANCE FORMS FOR SITE ADOPTED PC BUILDINGS:
    WHEN A PC BUILDING IS SITE ADAPTED, THE FOLLOWING FORMS SHALL BE SUBMITTED BY THE ARCHITECT OF RECORD WITH THE SITE SPECIFIC APPLICATION:
    DESIGN REVIEW KICKOFF - NRCC-CXR-01-E
    CONSTRUCTION DOCUMENTS, GENERAL - NRCC-CXR-02-E
    CONSTRUCTION DOCUMENTS, SIMPLE HVAC - NRCC-CXR-03-E
    DESIGN REVIEW SIGNATURE PAGE - NRCC-CXR-05-E
    SOLAR READY AREAS - NRCC-SRA-01-E
    WATER HEATING SYSTEMS (IF APPLICABLE) - CRCC-PLB-01-E

DSA GENERAL NOTES

1. ALL MATERIALS & WORKMANSHIP SHALL CONFORM TO THE 2013 CALIFORNIA BUILDING CODE (C.B.C.). A COPY OF THE CALIFORNIA BUILDING CODE SHALL BE KEPT ON THE SITE AT ALL TIMES.
2. CHANGES TO THE APPROVED DRAWINGS & SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CONST. CHANGE DOCUMENT APPROVED BY THE ARCHITECT OF RECORD, OWNER, & THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED (REFERENCE DSA IR-A6).
3. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) & APPROVED BY THE ARCHITECT OF RECORD & THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-333(b) OF 2013 TITLE 24, PART 1.
4. MATERIAL TESTING AS NOTED IN THE STRUCTURAL TESTS & INSPECTIONS AT THE LEFT SHALL BE PERFORMED AS REQ. PER SECTION 1704A & 2212A, & 1913A FOR CONCRETE OF 2013 C.B.C. MATERIAL TESTING REQUIRED BY FIRE REGULATIONS SHALL BE PERFORMED BY A NATIONALLY RECOGNIZED TESTING LABORATORY.
5. VERIFIED REPORTS (DSA/SSS FORM 6) SHALL BE SUBMITTED PER SECTION 4-336, 4-341(f), 342(b)(8), AND 4-343 (c) BY THE MANUFACTURER, INSPECTOR, STRUCTURAL ENGINEER.
6. A SEPARATE DSA APPLICATION NUMBER MUST BE OBTAINED BEFORE MANUFACTURING ANY ENVIROPLEX UNIT IN ACCORDANCE WITH THESE DRAWINGS.
7. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD & ACCESS REQUIREMENTS & ENVIROMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
8. SPECIAL INSPECTIONS PER CHAPTER 17A, 2013 C.B.C.

OPT. COMBINATIONS ALLOWED

Option combination table 12'x40' PC

■ not applicable / not allowed

		Roof: Bi-Pitch	Roof: Shed	Foundation: Concrete	Foundation: 50# wood	Foundation: 65# wood	Foundation: 125# wood
Exterior finish	Standard MDO, lap siding, wood clad siding	X	X	X	X	X	X
	Stucco-flex	X	X	X	■	■	■
	3-coat stucco	X	X	X	■	■	■
Roof slope	Bi-pitch	■	■	X	X	X	X
	Shed	■	■	X	X	X	X
Roof load/column	20 psf. TS 5 x 5 x 3/16"	X	X	X	X	X	X
Floor load	50 psf (joist spacing at 16" or 24"o.c.)	X	X	X	X	X	X
	65 psf (joist spacing at 16" or 24"o.c.)	X	X	X	■	X	X
	125 psf (joist spacing at 16"o.c.)	X	X	X	■	■	X
Floor construction	Plywood	X	X	X	X	X	X
	Concrete	X	X	X	■	■	■
Fire rated const.	NR / Sprinklered	X	X	X	X	X	X
	Fire barriers (int & ext., multiple walls)	X	X	X	X	X	X

GOVERNING CODES

2013 CALIFORNIA ADMINISTRATIVE CODE (CAC) (PART 1, TITLE 24, CCR)

2013 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2 (PART 2, TITLE 24, CCR) (2012 INTERNATIONAL BUILDING CODE WITH 2013 CALIFORNIA AMENDMENTS)

2013 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24, CCR) (2011 NATIONAL ELECTRICAL CODE WITH 2013 CALIFORNIA AMENDMENTS)

2013 CALIFORNIA MECHANICAL CODE (CMC) (PART 4, TITLE 24, CCR) (2012 UNIFORM MECHANICAL CODE WITH 2013 CALIFORNIA AMENDMENTS)

2013 CALIFORNIA PLUMBING CODE (CPC) (PART 5, TITLE 24, CCR) (2012 UNIFORM PLUMBING CODE WITH 2013 CALIFORNIA AMENDMENTS)

2013 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR).

2013 CALIFORNIA FIRE CODE (CFC) (PART 9, TITLE 24, CCR). (2012 INTERNATIONAL FIRE CODE WITH 2013 CALIFORNIA AMENDMENTS)

2013 CALIFORNIA GREEN BUILDING STANDARDS CODE (PART 11, TITLE 24, CCR)

2013 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR)

NFPA 13 - 2013

NFPA 72 - 2013

DESIGN CRITERIA

DEAD AND LIVE LOADS

FLOOR: LIVE LOAD - ☐ 50.0 PSF ☐ 65.0 PSF ☐ 125.0 PSF

FLOOR: DEAD LOAD - 8.0 PSF (wood floor) 42.0 PSF (concrete floor)

ROOF: LIVE (SNOW) LOAD - 20.0 PSF

ROOF: DEAD LOAD - 9.5 PSF

ALLOWABLE SOIL PRESSURE

WOOD FOOTING (DL + LL + LATERAL) 1000 PSF

CONCRETE FOOTING (DL +LL) 1500 PSF (DL + LL + LATERAL) 2000 PSF

FLOOD DESIGN

WIND DESIGN

BASIC WIND SPEED (3 SECOND GUST), V 110 MPH
WIND EXPOSURE CATEGORY C
CHAPTER 28, PART 2, ASCE 7-10, SEC 28.6 - SIMPLIFIED DESIGN WIND PRESSURES
$\lambda = 1.21$
RISK CATEGORY = II
$K_{zt} = 1.0$

LOW SEISMIC DESIGN CRITERIA (Site specific $S_s \leq 1.875$)

LATERAL FORCE RESISTING SYSTEM: ORDINARY STEEL MOMENT FRAMES
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
SEISMIC DESIGN CATEGORY (SDC): D (S_1 <= 0.75) E (0.75 < S_1 < 1.5)
SEISMIC IMPORTANCE FACTOR, I_e: 1.0
V=EQUIV. LATERAL FORCE PROCEDURE BASE SHEAR (STRENGTH DESIGN)
$V = C_s W = 0.286W$
$C_s = \frac{S_{DS}}{(R/I_e)} = 0.286$
BASIC SEISMIC FORCE RESISTING SYSTEM: ORDINARY STEEL MOMENT FRAMES
R = 3.5, P = 1.0, SITE CLASS: D
$I_e = 1.0$, $C_d = 3.0$, $*S_s = 1.5$, $F_A = 1.0$, $S_{DS} = 1.0$
$\Omega_o = 3.0$, $S_1 <= 1.5$, $F_V = 1.5$, $S_{D1} <= 1.5$

* PER CBC 1616A.1.12 (MODIFICATION TO ASCE 7-10, 12.8.1.3): "FOR REGULAR STRUCTURES FIVE STORIES OR LESS ABOVE THE BASE AS DEFINED IN SECTION 11.2 AND WITH A PERIOD, T, OF 0.5 SECONDS OR LESS, C_s IS PERMITTED TO BE CALCULATED USING THE LARGER OF EITHER S_s = 1.5 OR 80 PERCENT OF THE VALUE OF S_s DETERMINED PER SECTIONS 11.4.1 OR 11.4.7." THEREFORE, THIS PC IS PERMITTED FOR USE IN LOCATIONS WHERE S_s IS EQUAL TO 1.875 MAX (1.5/0.8 = 1.875).

HIGH SEISMIC DESIGN CRITERIA (Site specific $S_s \leq 2.625$)

LATERAL FORCE RESISTING SYSTEM: ORDINARY STEEL MOMENT FRAMES
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
SEISMIC DESIGN CATEGORY (SDC): D (S_1 <= 0.75) E (0.75 < S_1 < 1.5)
SEISMIC IMPORTANCE FACTOR, I_e: 1.0
V=EQUIV. LATERAL FORCE PROCEDURE BASE SHEAR (STRENGTH DESIGN)
$V = C_s W = 0.400W$
$C_s = \frac{S_{DS}}{(R/I_e)} = 0.400$
BASIC SEISMIC FORCE RESISTING SYSTEM: ORDINARY STEEL MOMENT FRAMES
R = 3.5, P = 1.0, SITE CLASS: D
$I_e = 1.0$, $C_d = 3.0$, $*S_s = 2.1$, $F_A = 1.0$, $S_{DS} = 1.4$
$\Omega_o = 3.0$, $S_1 <= 1.5$, $F_V = 1.5$, $S_{D1} <= 1.5$

* PER CBC 1616A.1.12 (MODIFICATION TO ASCE 7-10, 12.8.1.3): "FOR REGULAR STRUCTURES FIVE STORIES OR LESS ABOVE THE BASE AS DEFINED IN SECTION 11.2 AND WITH A PERIOD, T, OF 0.5 SECONDS OR LESS, C_s IS PERMITTED TO BE CALCULATED USING THE LARGER OF EITHER S_s = 1.5 OR 80 PERCENT OF THE VALUE OF S_s DETERMINED PER SECTIONS 11.4.1 OR 11.4.7." THEREFORE, THIS PC IS PERMITTED FOR USE IN LOCATIONS WHERE S_s IS EQUAL TO 2.625 MAX (2.1/0.8 = 2.625).

BUILDING DATA

CONSTRUCTION TYPE:	V-B
OCCUPANCY:	B or E
BUILDING AREA:	480 S.F. NOMINAL
NUMBER OF STORIES:	1

SHEET INDEX

■ MARKED BOX REPRESENTS DRAWING/OPTION TO BE USED FOR APPLICATION

☐ A0 – COVER SHEET, BUILDING CODES & CBC DATA, SHEET INDEX

☐ A1 – BOYS, GIRLS RESTROOM FLOOR PLAN, INTERIOR & EXTERIOR ELEVATIONS, MATERIAL SPECIFICATIONS, & NOTES
☐ A1A – STAFF, BOYS, GIRLS RESTROOM FLOOR PLAN, INT. & EXT. ELEVATIONS, MATERIAL SPECIFICATIONS, & NOTES

☐ A2 – REFLECTED CEILING PLANS & CEILING ATTACHMENT DETAILS

☐ AGB – GREEN BUILDING STANDARDS

☐ EN1 – ENERGY COMPLIANCE UNCONDITIONED RESTROOM
☐ EN1.1 – ENERGY COMPLIANCE UNCONDITIONED RESTROOM
☐ EN1.2 – ENERGY COMPLIANCE UNCONDITIONED RESTROOM

☐ A3 – ELECTRICAL POWER PLAN, SIGNAL PLAN, LIGHTING PLAN, DETAILS, ELECTRICAL NOTES
☐ A4 – SECTIONS AND DETAILS 2x4 EXTERIOR WALLS (NON–RATED)
☐ A4.1 – SECTIONS AND DETAILS 2x6 EXTERIOR WALLS (NON–RATED)
☐ A4.3 – SECTIONS AND DETAILS (1–HOUR FIRE RATED 2x6 EXTERIOR FIRE BARRIERS)
☐ A4A – BI–PITCHED ROOF SECTIONS AND DETAILS (2x4 EXTERIOR WALLS)
☐ A4A.1 – BI–PITCHED ROOF SECTIONS AND DETAILS (2x6 EXTERIOR WALLS)
☐ A4A.3 – BI–PITCHED ROOF SECTIONS AND DETAILS (1–HOUR FIRE RATED 2x6 EXTERIOR FIRE BARRIERS)
☐ A4B – SHED ROOF SECTIONS AND DETAILS (2x4 EXTERIOR WALLS)
☐ A4B.1 – SHED ROOF SECTIONS AND DETAILS (2x6 EXTERIOR WALLS)
☐ A4B.3 – SHED ROOF SECTIONS AND DETAILS (1–HOUR FIRE RATED 2x6 EXTERIOR FIRE BARRIERS)
☐ A4H – INTERIOR WALL CONNECTION DETAILS
☐ A4H.1 – INTERIOR WALL CONNECTION DETAILS (1–HOUR FIRE BARRIERS OR FIRE PARTITIONS)
☐ A4H.2 – GYPSUM BOARD CEILING DETAILS
☐ A4C.1 – NON RATED WALL ATTACHMENT DETAILS – (CONCRETE FLOORS)
☐ A4C.2 – 1–HOUR FIRE BARRIER WALL ATTACHMENT DETAILS – (CONCRETE FLOORS)
☐ A4L – "LEVEL ROCK" FLOOR UNDERLAYMENT OPTION – (PLYWOOD FLOORS)

☐ A5 – MISCELLANEOUS DETAILS
☐ A5.1 – SOL–A–TUBE SKYLIGHT OPTION

☐ S1C – CONCRETE FOUNDATION PLAN, FOOTING DETAILS, NOTES – (WOOD FLOOR)
☐ S1C(H) (HIGH SEISMIC) – CONCRETE FOUNDATION PLAN, FOOTING DETAILS, & NOTES – (WOOD FLOOR)
☐ S1C.1 – ALTERNATE FOOTING DETAILS
☐ S1C.2 – MISCELLANEOUS FOOTING DETAILS
☐ S1C.3 – CONCRETE FOUNDATION, FOOTING DETAILS & NOTES – (CONCRETE FLOORS)
☐ S1C.3(H) (HIGH SEISMIC) – CONCRETE FOUNDATION, FOOTING DETAILS & NOTES – (CONCRETE FLOORS)
☐ S1C.4 – MISCELLANEOUS FOOTING DETAILS – (CONCRETE FLOORS)

☐ S1W50 – 50 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☐ S1W50(H)– (HIGH SEISMIC) – 50 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☐ S1W65 – 65 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☐ S1W65(H)– (HIGH SEISMIC) – 65 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☐ S1W125 – 125 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES
☐ S1W125(H)–(HIGH SEISMIC) – 125 PSF WOOD FOUNDATION PLAN, PIER DETAILS, NOTES

☐ S2 – BI–PITCH ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES
☐ S2(H) – (HIGH SEISMIC) – BI–PITCH ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES

☐ S2A – SHED ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES
☐ S2A(H) – (HIGH SEISMIC) – SHED ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES

☐ S2C.1 – (HIGH & LOW SEISMIC) – FRAMING PLAN, STRUCTURAL STEEL PROPERTIES, NOTES – (CONCRETE FLOORS)

☐ S2RC – (HIGH & LOW SEISMIC) – FRAMING PLAN, STRUCTURAL STEEL PROPERTIES, NOTES – (WOOD FLOORS W/ HRC)

☐ S3FA – FASTENING SCHEDULE & NOTES
☐ S3 – BI–PITCHED ROOF LONGITUDINAL BUILDING SECTION, WALL FRAMING ELEV., END FRAME ELEV., NAILING SCHEDULE
☐ S3A – SHED ROOF LONGITUDINAL BUILDING SECTION, WALL FRAMING ELEV., END FRAME ELEVATION, NAILING SCHEDULE

☐ S4 – STRUCTURAL CONNECTION DETAILS
☐ S4.1 – ALTERNATE STRUCTURAL DETAILS
☐ S4.2 – ALTERNATE STRUCTURAL DETAILS
☐ S4.3 – ALTERNATE DETAILS – METAL SOFFIT PANELS
☐ S4.4 – ALTERNATE DETAILS – METAL SOFFIT PANELS W/ WALL MOUNT HVAC UNIT

☐ S4C – STRUCTURAL CONNECTION DETAILS – (CONCRETE FLOORS)
☐ S4H – STRUCTURAL CONNECTION DETAILS – (WOOD FLOOR WITH HRC FRAME OPTION)

☐ WC1 – CANOPY FRAMING & CONNECTION DETAILS

☐ S5R – ACCESSIBLE RAMP & PLATFORM DETAILS
☐ S5S – STAIR DETAILS
☐ S5R.1 – PLATFORM DETAILS (PLATFORM OVER 18" HEIGHT)

JUN 0 3 2015

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
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SS – Jaspal Sandha
FLS – Greg Cabobe
ACS – Tom Markes

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COMPARISON PC SET

COVER SHEET, BUILDING CODES & C.B.C. DATA, SHEET INDEX

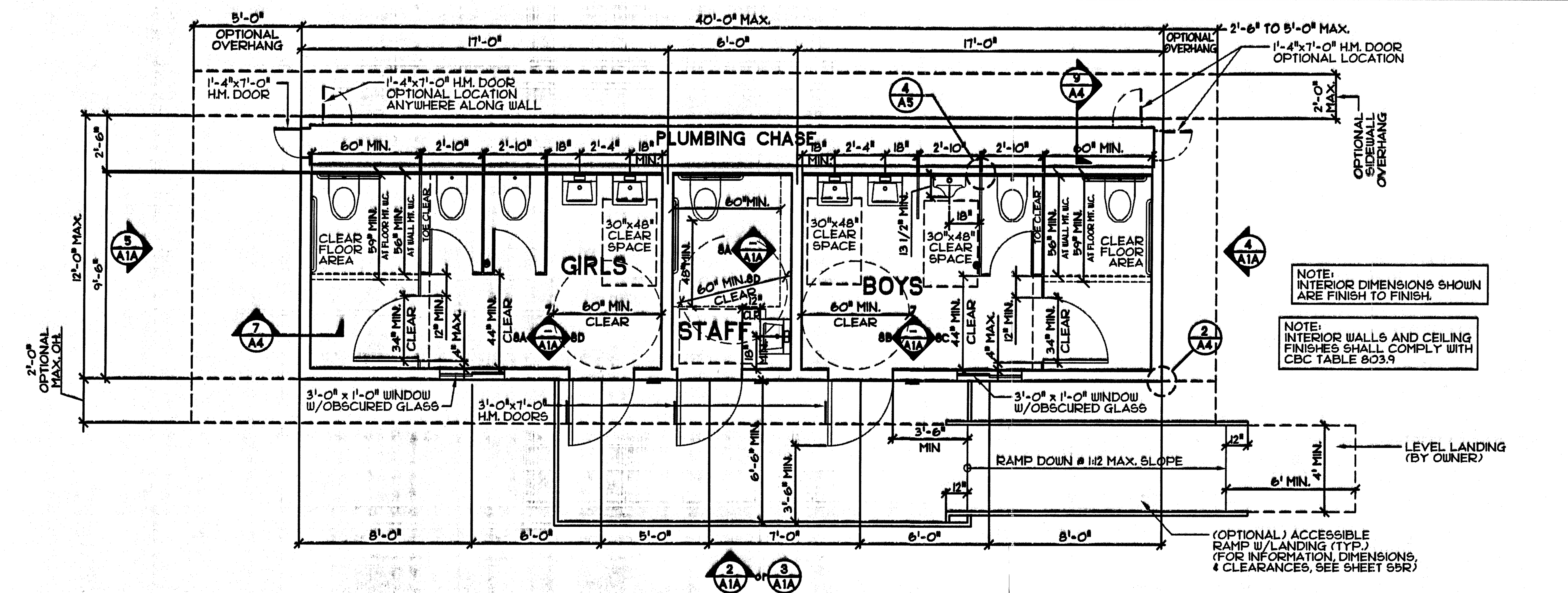
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

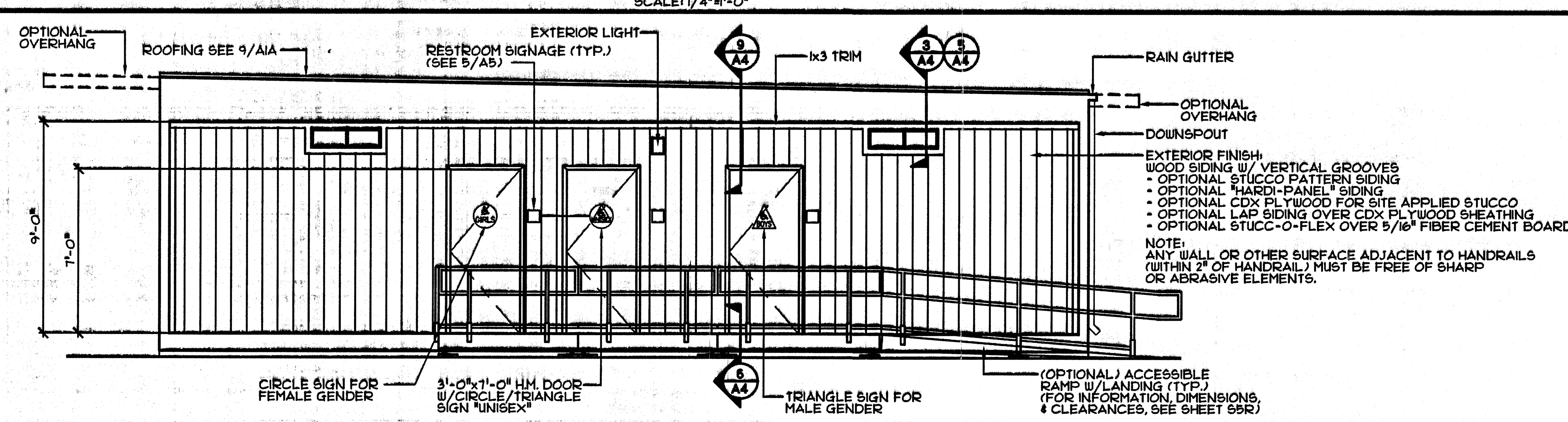
IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT
02–113910
AC TM FLS [signature] SS [signature]
DATE 6-9-15
2013 – 12x40

AO

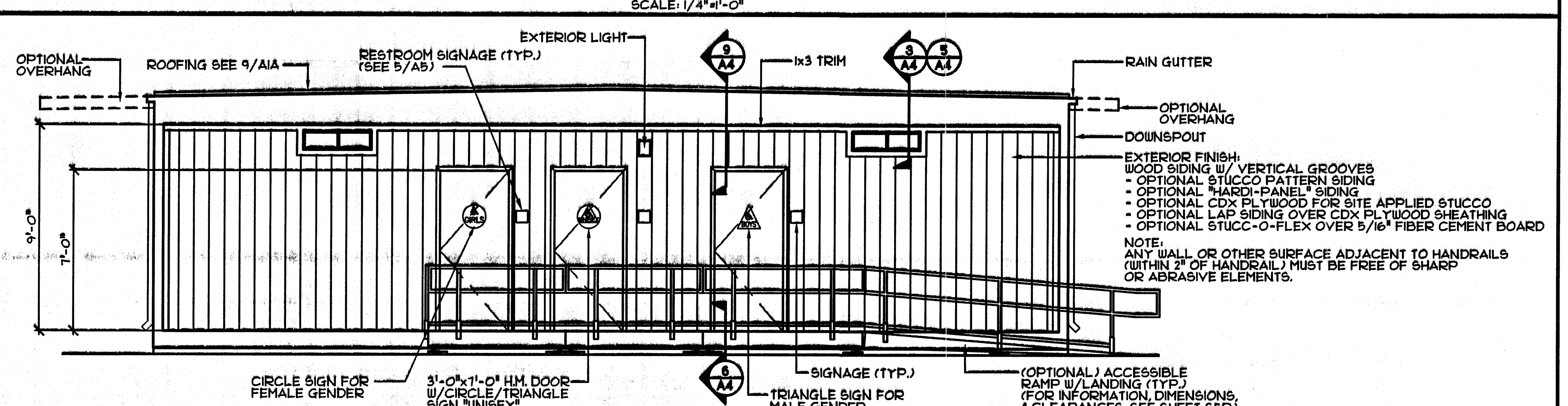
12'x40' P.C.



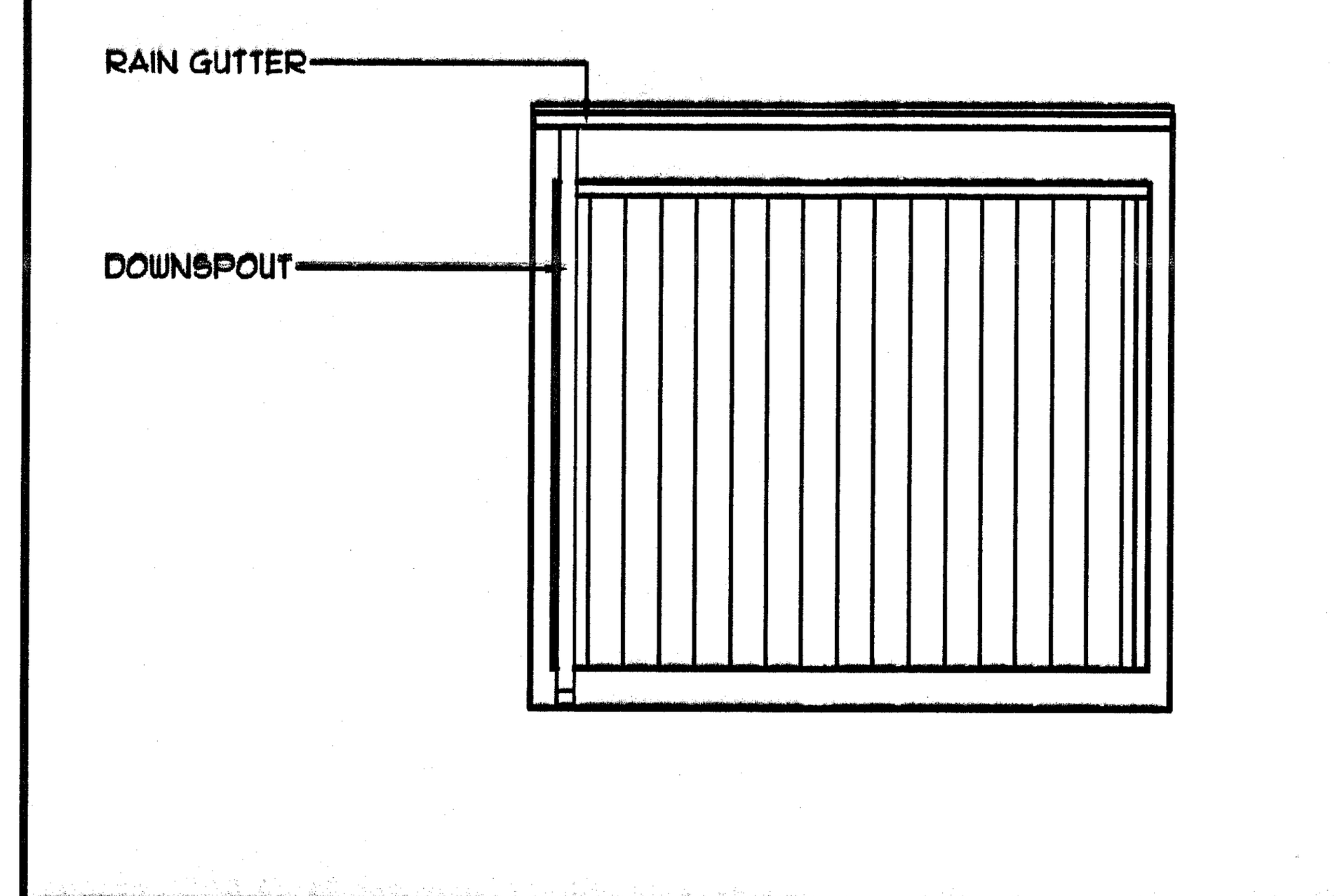
1 RESTROOM FLOOR PLAN
SCALE: 1/4"=1'-0"



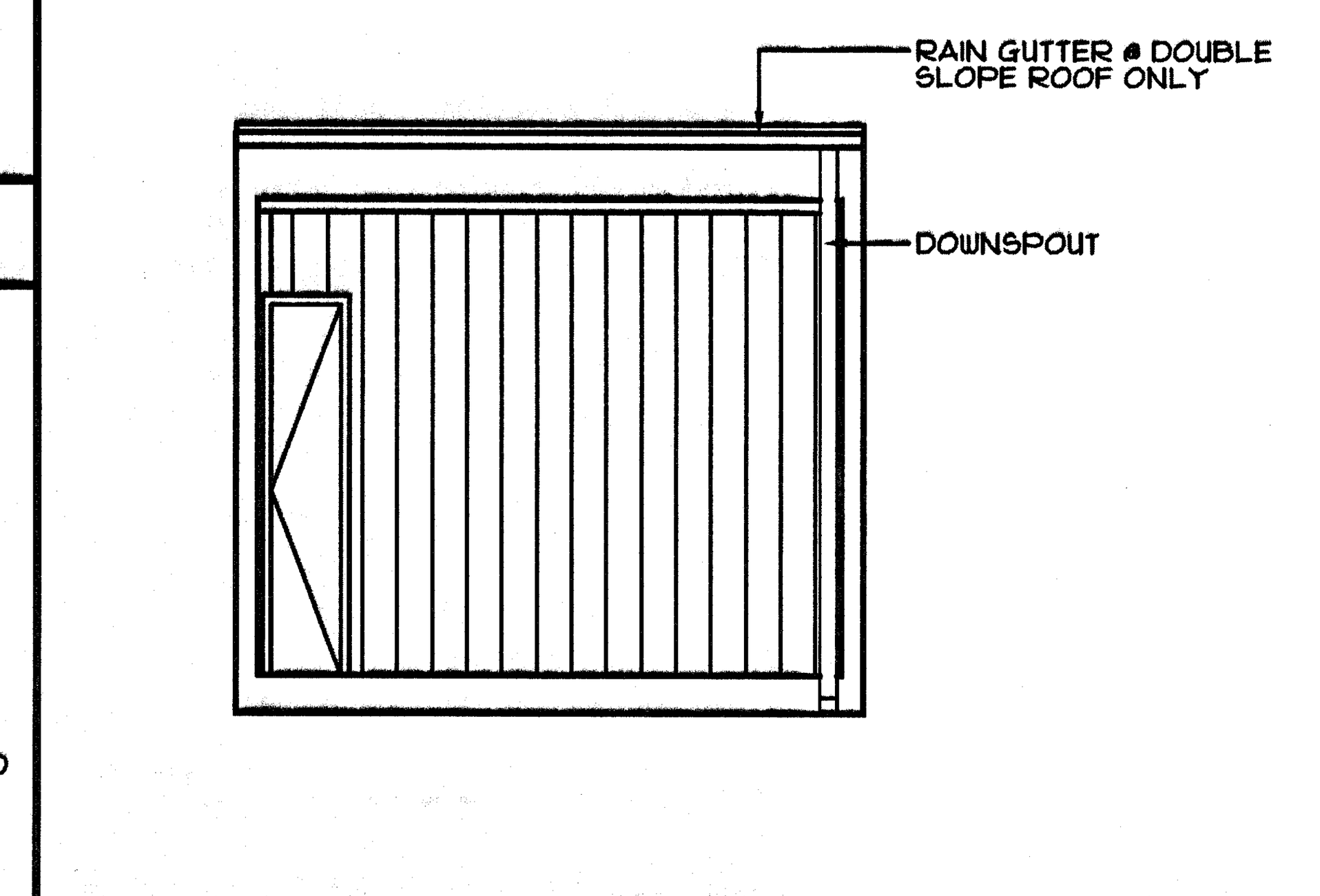
2 SIDE WALL EXTERIOR ELEVATION (SHED ROOF)
SCALE: 1/4"=1'-0"



3 SIDE WALL EXTERIOR ELEVATION (BI-PITCHED ROOF)
SCALE: 1/4"=1'-0"



4 EXTERIOR ENDWALL ELEVATION
SCALE: 1/4"=1'-0"



5 EXTERIOR ENDWALL ELEVATION
SCALE: 1/4"=1'-0"

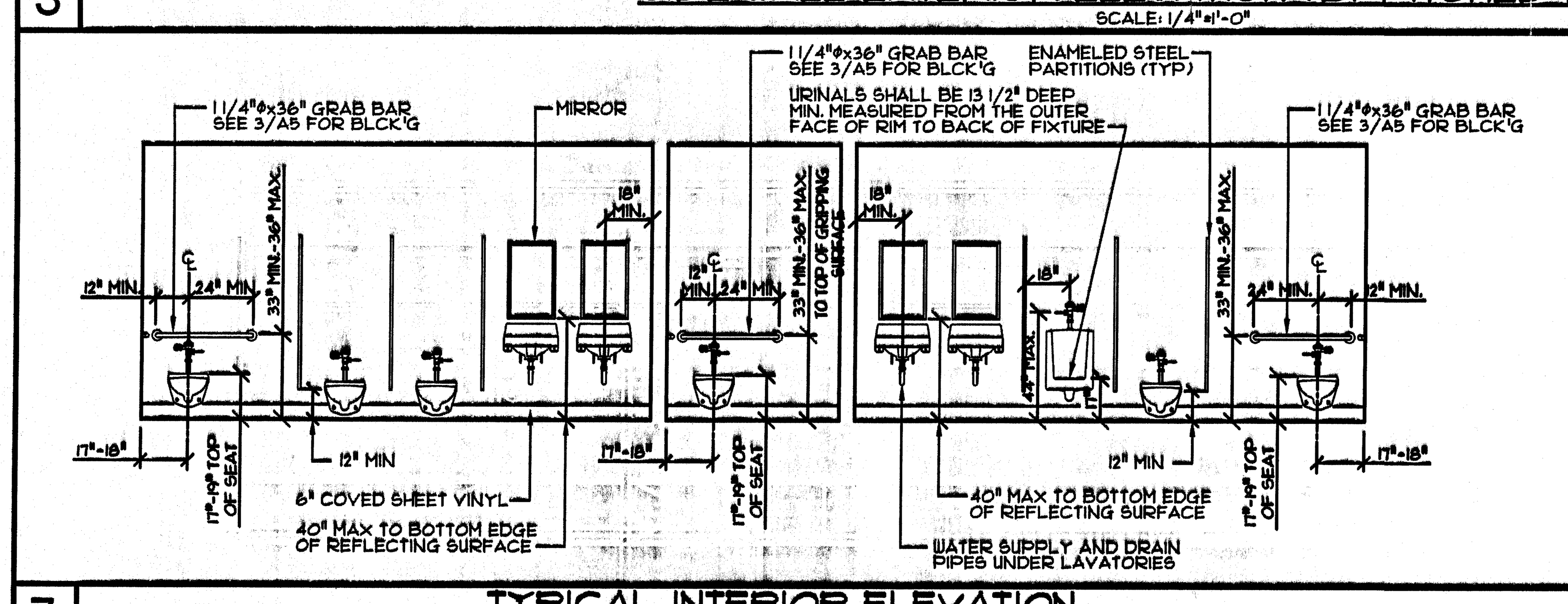
CBC TABLE 11B-604.9
SUGGESTED DIMENSIONS FOR CHILDREN'S USE

	AGES 3 AND 4	AGES 5 THRU 8	AGES 9 THRU 12
WATER CLOSET CENTERLINE	12"	12" TO 15"	15" TO 18"
TOILET SEAT HEIGHT	11" TO 12"	12" TO 15"	15" TO 17"
GRAB BAR HEIGHT	18" TO 20"	20" TO 25"	25" TO 27"
DISPENSER HEIGHT	14"	14" TO 17"	17" TO 19"

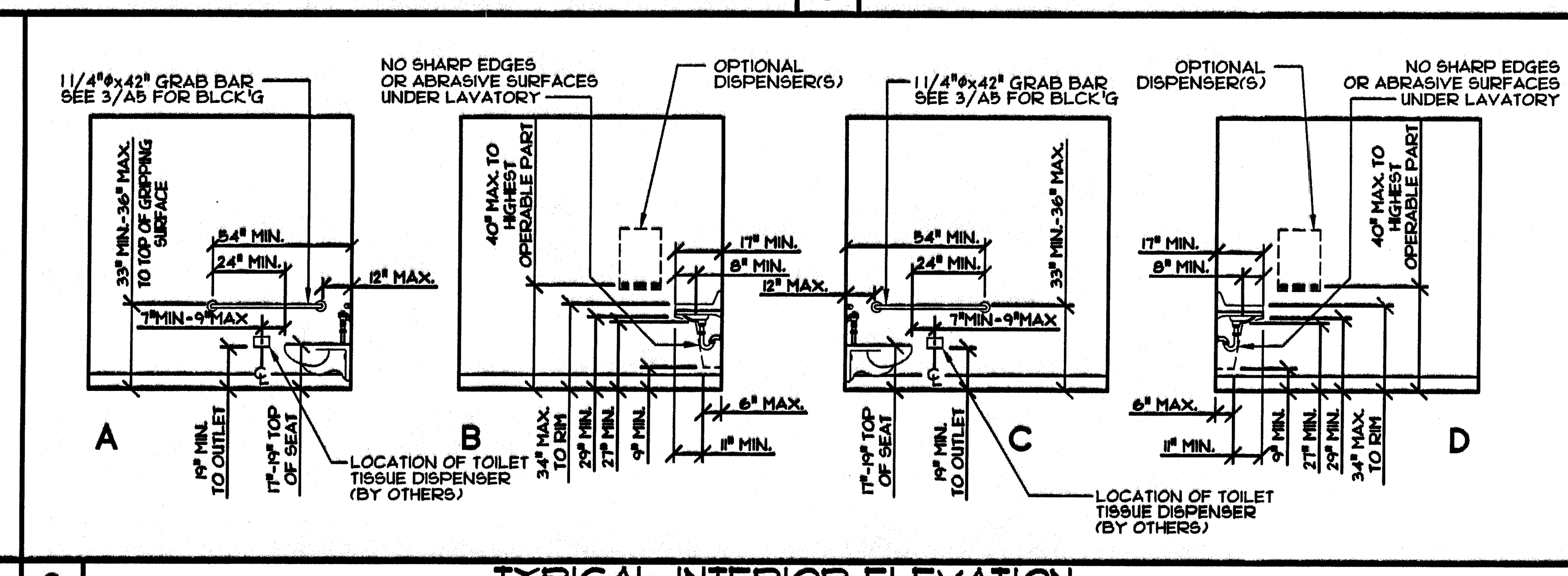
DIMENSIONS FOR ADULT USE

WATER CLOSET CENTERLINE	17" TO 18"
TOILET SEAT HEIGHT	17" TO 19"
GRAB BAR HEIGHT	33" TO 36" (TO TOP OF GRIP SURFACE)
DISPENSER HEIGHT CENTERLINE	19" TO OUTLET (7" TO 9" FROM FRONT OF TOILET TO CENTERLINE)

6 TYPICAL FIXTURE MOUNTING HEIGHTS



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



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

1. FLOORING- COMMERCIAL SHEET VINYL, ARMSTRONG CORLON OR EQUAL
NOTE: APPLICATION AND MAINTENANCE OF POLISHED-COATED FLOOR SURFACES (BY OWNER) SHALL BE SLIP RESISTANT. (0.5 MIN. COEFFICIENT OF FRICTION PER ASTM D-2047)
2. BASE TRIM- 6" COVED SHEET VINYL (SAME AS FLOORING)
3. WALL PANELS- FIBERGLASS REINFORCED POLYETHELYENE PANELS OVER 1/2" WATER RESISTENT GYPSUM WALL BOARD @ PLUMBING WALLS ONLY
4. ADHESIVES- ALL ADHESIVES SHALL BE WATER BASE, SOLVENT BASE NOT ACCEPTABLE. FURNISH AND APPLY PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
ALL ADHESIVES, SEALANTS, CAULKS, PAINTS, COATINGS, CARPET SYSTEMS, CARPET CUSHIONS, COMPOSITE WOOD PRODUCTS, AND RESILIENT FLOORING SYSTEMS SHALL COMPLY WITH GREEN BUILDING REQUIREMENTS, REFERENCE SHEET "AGB".
5. SEALANT- "VULKEM" SEALANT, POLYURETHANE, MANUFACTURED BY MAMECO INTERNATIONAL OR APPROVED EQUAL.
6. PAINT: (EXTERIOR WOODS) PRIMER: ACRYLIC UNDERCOAT FINISH: ACRYLIC ENAMEL; (METALS) PRIMER: RED OXIDE ALKYD FINISH: ACRYLIC ENAMEL
7. M.D.O. BUILDING, DOOR, & WINDOW TRIM. JOINTS, PENETRATIONS, AND OTHER OPENINGS IN THE BUILDING ENVELOPE SHALL BE SEALED TO LIMIT INFILTRATION AND EXFILTRATION. SEALANT PAINTED TO MATCH FINISHES.

EXTERIOR SIDING - 8" O.C. GROOVED M.D.O. PLYWOOD OR STUCCO PATTERN FACED EXTERIOR SIDING. (MINUMUM NET THICKNESS 3/8")
8. HOLLOW METAL DOORS AND FRAMES- SIZES NOTED ON PLAN, 1 3/4" THICK 18 GA. FULL FLUSH DOOR IN 16 GA. METAL FRAME

EXIT DOOR SHALL BE OPENABLE FROM THE INTERIOR WITHOUT A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

PUSH/PULL FORCE FOR DOORS SHALL BE SET FOR A MAXIMUM OPENING PRESSURE OF 5 LBS. MAX. CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM.

DEADBOLTS NOT PERMITTED UNLESS OPERABLE WITH A SINGLE EFFORT USING LEVER HANDLE.

DOOR HANDLES & PULLS SHALL BE PLACED ON BOTH SIDES; LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE AND SHALL BE 34" MINIMUM AND 44 INCHES MAXIMUM ABOVE FINISHED FLOOR.

DOOR SWINGS CAN BE RIGHT OR LEFT HAND HINGE.
HARDWARE SHALL BE CENTERED BETWEEN 34" AND 44" ABOVE FINISHED FLOOR.

LOCKSET:	SCHLAGE D70PDRHO OR EQUAL
HINGES:	HAGER BB1279 N.R.P 4-1/2"x4-1/2" OR EQUAL
CLOSER:	NORTON 8501BF OR EQUAL
THRESHOLD:	PEMKO 271A OR EQUAL
DOOR BOTTOM:	PEMKO 216AV OR EQUAL
WEATHERSTRIP:	PEMKO 306A OR EQUAL

9. METAL ROOF:
PREFINISHED, UNPENETRATED INTERLOCKING, 26 GAGE MIN. GALV. STEEL ROOF PANELS, MECH. CRIMPED STANDING SEAMS OVER SEAL-TITE #15 UNDERLAYMENT OVER 15/32" APA RATED, EXTERIOR GRADE PLYWOOD. (CLASS "B" FIRE RATING)

10. PLUMBING FIXTURE SCHEDULE:
WATER CLOSET (WALL MOUNT) : KOHLER "KINGSTON" (1.28 G.P.F.) K-4325 OR EQUAL W/ SLOAN ROYAL 111-1.28 FLUSH VALVE (1.28 G.P.F.) OR EQ.
WATER CLOSET (FLOOR MOUNT) : KOHLER "HIGHCLIFF" (1.6 G.P.F.) K-4368 OR EQUAL W/ SLOAN ROYAL 111-1.6/1.1 FLUSH VALVE (1.6/1.1 G.P.F.) OR EQ.
SEAT: BEMIS 1955-SSC (O.F.L.C.) OR EQUAL
URINALS: KOHLER "DARFIELD" K-5024-T (0.5 G.P.F.) OR EQUAL W/ SLOAN MODEL 186-0.5 FLUSH VALVE (0.5 G.P.F.) OR EQ.
LAVATORIES: KOHLER "KINGSTON" K-2005 20" x 18" OR EQUAL
FAUCET: T & S BRASS, B-2711-F05 (0.5 GPM) OR EQUAL
OPTIONAL WATER HEATER: "AO SMITH", PEC-30, 30 GAL, ELECTRIC, 15,359 INPUT RATE, (OR EQUAL) EXPOSED HOT WATER PIPES SHALL BE INSULATED. 1" THICK INSULATION FOR PIPE 1" DIA. OR LESS. 1 1/2" THICK INSULATION FOR PIPE GREATER THAN 1" DIA.
COLD WATER PIPING: TYPE L COPPER
DRAIN, WASTE & VENT: ABS AND PVC PIPES, STRAPPED TO RESIST HORIZONTAL DISPLACEMENT DUE TO EARTHQUAKE MOTION PER TITLE 24, PART 5, CALIFORNIA CODE OF REGULATIONS, CHAPER 4, SEC. 401 (A)

11. ALL PLUMBING FIXTURES AND ACCESSORIES TO BE INSTALLED IN ACCORDANCE WITH ACCESSIBILITY REQUIREMENTS. (PER SECTION C.B.C. 11B DIVISION 6) FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE BY ONE HAND AND NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS. LEVER OPERATED, PUSH TYPE, AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.

12. ALL TOILETS SHOWN ARE TO BE WALL MOUNTED W/ HAND OPERATED FLUSH VALVE LOCATED 44 INCHES MAX. ABOVE FLOOR. WHEELCHAIR ACCESSIBLE TOILETS SHALL HAVE THE FLUSH VALVE ACTIVATOR ON THE OPEN SIDE.

13. DOORS HANDLES FOR ENAMELED STEEL PARTITIONS SHALL BE PLACED ON BOTH SIDES NEAR THE LATCH; SHALL PROVIDE A CLEAR WIDTH OF 34" FOR WHEELCHAIR ACCESSIBLE STALLS AND 24" WIDE FOR STANDARD STALLS. DOORS FOR ACCESSIBLE TOILETS SHALL BE SELF CLOSING, LATCHES, LOCKS AND OTHER OPERATING DEVICES ON DOORS REQUIRED TO BE ACCESSIBLE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE AND SHALL BE 34" MINIMUM AND 44 INCHES MAXIMUM ABOVE FINISHED FLOOR.

14. THE DOOR LEADING INTO BOY'S FACILITY SHALL BE IDENTIFIED BY AN EQUILATERAL TRIANGLE 1/4" THICK WITH EDGES 12" LONG AND A VERTEX POINTING UPWARD. THE DOOR LEADING INTO GIRL'S FACILITY SHALL BE IDENTIFIED BY A CIRCLE 1/4" THICK AND 12" IN DIAMETER. UNISEX FACILITY SHALL BE IDENTIFIED BY A CIRCLE 1/4 THICK AND 12" IN DIAMETER WITH A 1/4" THICK TRIANGLE WITH THE VERTEX POINTING UPWARD SUPERIMPOSED ON THE CIRCLE & WITHIN THE 12" DIAMETER. THE GEOMETRIC SYMBOLS SHALL BE MOUNTED ON THE DOOR AT A HEIGHT PER DETAIL 5 SHEET A5 AND THEIR COLOR AND CONTRAST SHALL MEET THE IDENTIFICATION SIGNAGE FINISH REQUIREMENTS OF DETAIL 10 SHEET A5

15. ALL INSULATION SHALL COMPLY W/CALIFORNIA QUALITY STANDARDS & CALIFORNIA BUILDING CODE SECTION 719 CHAPTER 26 FOR FOAM INSULATION INCLUDING PIPE INSULATION. FLAME SPREAD MAX=25, SMOKE DENSITY MAX=450.
1. CEILING INSULATION TO BE R-19 FIBERGLASS
2. WALL INSULATION TO BE R-13 FIBERGLASS
3. FLOOR INSULATION TO BE R-11 RIGID CELLULAR BOARD

16. THE MANUFACTURER SHALL PLACE TWO PERMANENT METAL IDENTIFICATION TAG ON EACH MODULAR BUILDING MECHANICALLY FASTENED TO THE END WALL. THE TAG SHALL SHOW D.S.A. APPLICATION NUMBER, MANUFACTURER'S SERIAL NUMBER, PLANT INSPECTOR'S IDENTIFICATION MARK AND DESIGN FLOOR AND ROOF LIVE LOAD. PLACE ONE TAG ON EXTERIOR AND, ONE ON THE INTERIOR ABOVE CEILING LINE.

9 MATERIAL SPECIFICATIONS & NOTES

DIVISION OF THE STATE ARCHITECT

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JUN 0 3 2015

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COMPARISON PC SET

STAFF, BOYS, GIRLS RESTROOM FLOOR PLAN, INTERIOR & EXTERIOR ELEVATIONS, MATERIAL SPECIFICATIONS, & NOTES

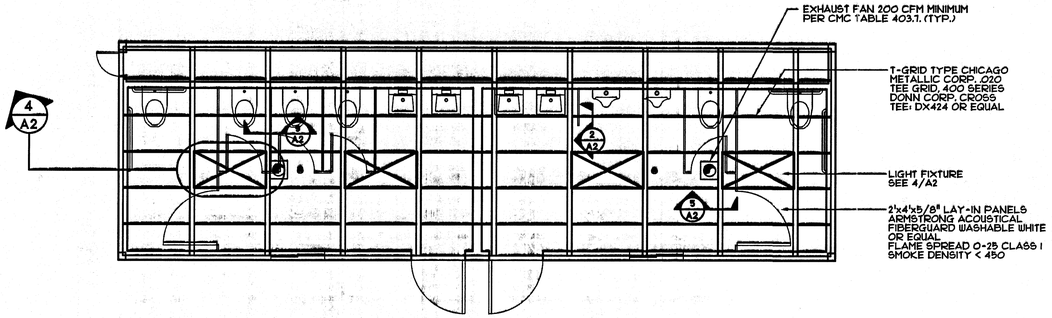
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC MM FLS [illegible] SS [illegible]
DATE 6-9-15
2013 - 12x40

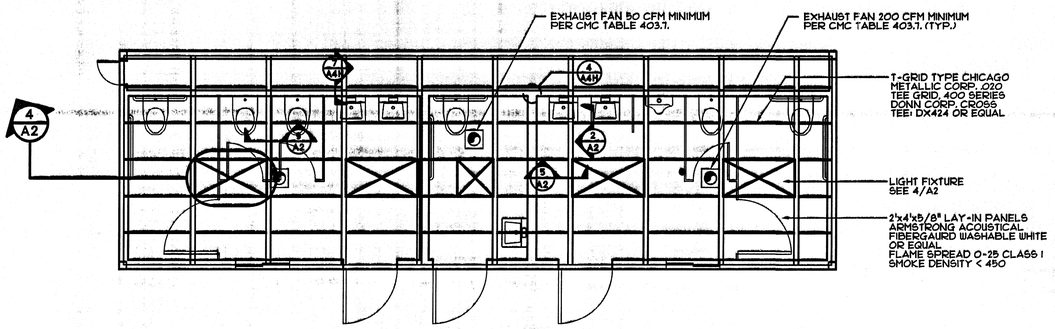
A1A

12'x40' P.C.



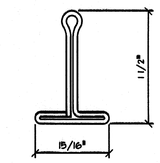
NOTE: CEILING TILE & LIGHTING SYSTEM IN THIS MODULE ARE NOT SUSPENDED. THE BUILDING HAS A FIXED CEILING AND LIGHTING FIXTURE SUPPORT SYSTEM WHICH IS MECHANICALLY FASTENED TO STEEL CEILING BEAMS.

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



NOTE: CEILING TILE & LIGHTING SYSTEM IN THIS MODULE ARE NOT SUSPENDED. THE BUILDING HAS A FIXED CEILING AND LIGHTING FIXTURE SUPPORT SYSTEM WHICH IS MECHANICALLY FASTENED TO STEEL CEILING BEAMS.

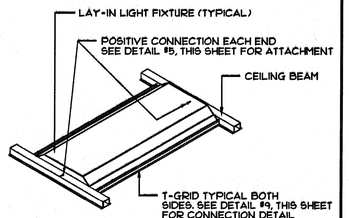
6 "BOYS / GIRLS / STAFF" REFLECTED CEILING PLAN
SCALE: 1/4"=1'-0"



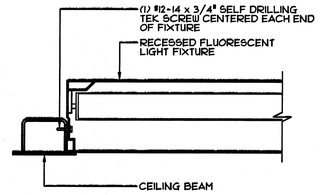
NOTE: T-GRID TO BE DONN CORP. CROSS TEE : DX424 OR CHICAGO METALLIC CORP. .020 TEE GRID, 400 SERIES OR EQUAL.

2 TYP. T-GRID SECTION
SCALE: FULL

3



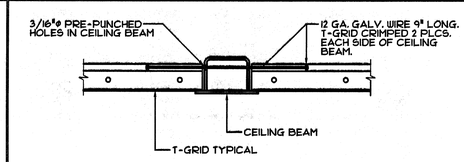
4 LAY-IN LIGHT FIXTURE
SCALE: 1/2"=1'-0"



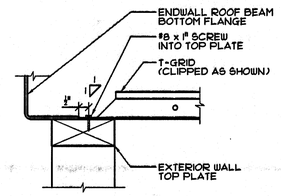
5 LIGHT FIXTURE SUPPORT
SCALE: 3"=1'-0"

7

8



9 T-GRID CONNECTION DETAIL
SCALE: 3"=1'-0"



10 T-GRID CONNECTION DETAIL
SCALE: 3"=1'-0"

DIVISION OF THE STATE ARCHITECT

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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(916) 960-9220 (916) 960-1160 Fax
www.cysinc.com

JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST ROSS No. S2030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

COMPARISON PC SET

REFLECTED CEILING PLANS & CEILING ATTACHMENT DETAILS

REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. FLS. SS
DATE

2013 - 15x40

12"x40" P.C.

A2

CAL-GREEN MANDATORY MEASURES

NOTE:
ONLY APPLICABLE CAL-GREEN MANDATORY MEASURES TO THE ENVIROPLEX MODULAR BUILDING ARE LISTED BELOW. FOR A COMPLETE LIST OF MEASURES REQUIRED FOR THE ENTIRE CONSTRUCTION PROJECT, REFER TO DSA DOCUMENT GL-4.

1. WATER CLOSETS.
   THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR TANK-TYPE TOILETS.
2. URINALS.
   THE EFFECTIVE FLUSH VOLUME OF URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.
3. INDOOR WATER USE:
   LAVATORY FAUCETS - 0.5 GPM
   KITCHEN FAUCETS - 2.2 GPM
   GRAVITY TANK WATER CLOSET - 1.28 GAL/FLUSH
   FLUSHOMETER TANK WATER CLOSET - 1.28 GAL/FLUSH
   FLUSHOMETER VALVE WATER CLOSET - 1.28 GAL/FLUSH
   URINALS - 0.5 GAL/FLUSH
4. EXTERIOR DOOR PROTECTION.
   PRIMARY EXTERIOR ENTRIES SHALL BE COVERED TO PREVENT WATER INTRUSION BY USING NONABSORBENT FLOOR AND WALL FINISHES WITHIN AT LEAST 2 FEET AROUND AND PERPENDICULAR TO SUCH OPENINGS PLUS AT LEAST ONE OF THE FOLLOWING:
   1. AN INSTALLED AWNING AT LEAST 4 FEET IN DEPTH.
   2. THE DOOR IS PROTECTED BY A ROOF OVERHANG AT LEAST 4 FEET IN DEPTH.
   3. THE DOOR IS RECESSED AT LEAST 4 FEET.
   4. OTHER METHODS WHICH PROVIDE EQUIVALENT PROTECTION.
5. WASTE MANAGEMENT COMPANY.
   UTILIZE A WASTE MANAGEMENT COMPANY THAT CAN PROVIDE VERIFIABLE DOCUMENTATION THAT THE PERCENTAGE OF CONSTRUCTION AND DEMOLITION WASTE MATERIAL DIVERTED FROM THE LANDFILL.
6. COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION.
   AT THE TIME OF ROUGH INSTALLATION, OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY COLLECT IN THE SYSTEM.
7. CARPET SYSTEMS.
   ALL CARPET INSTALLED IN THE BUILDING INTERIOR SHALL MEET AT LEAST ONE OF THE TESTING AND PRODUCT REQUIREMENTS:
   1. CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM.
   2. COMPLIANT WITH THE VOC-EMISSION LIMITS AND TESTING REQUIREMENTS SPECIFIED IN THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS, VERSION 1.1, FEBRUARY 2010 (ALSO KNOWN AS CDPH STANDARD METHOD V1.1 OR SPECIFICATION 01350) .
   3. NSF/ANSI 140 AT THE GOLD LEVEL OR HIGHER;
   4. SCIENTIFIC CERTIFICATIONS SYSTEMS SUSTAINABLE CHOICE; OR
   5. COMPLIANT WITH THE CALIFORNIA COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CA-CHPS) CRITERIA INTERPRETATION FOR EQ 2.2 DATED JULY 2012 AND LISTED IN THE CHPS HIGH PERFORMANCE PRODUCT DATABASE.
8. CARPET CUSHION.
   ALL CARPET CUSHION INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE REQUIREMENTS OF THE CARPET AND RUG INSTITUTE GREEN LABEL PROGRAM.
9. CARPET ADHESIVE.
   ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 5.504.4.1.
10. COMPOSITE WOOD PRODUCTS.
    HARDWOOD PLYWOOD, PARTICLEBOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDINGS SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED IN ARB'S AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD (17 CCR 93120 ET SEQ.) , THOSE MATERIALS NOT EXEMPTED UNDER THE ATCM MUST MEET THE SPECIFIED EMISSION LIMITS, AS SHOWN IN TABLE 5.504.4.5.
11. RESILIENT FLOORING SYSTEMS.
    80% OF FLOOR AREA RECEIVING RESILIENT FLOORING, INSTALLED RESILIENT FLOORING SHALL MEET AT LEAST ONE OF THE FOLLOWING:

    1. CERTIFIED UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOOR SCORE PROGRAM;

    2. COMPLIANT WITH THE VOC-EMISSION LIMITS AND TESTING REQUIREMENTS SPECIFIED IN THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S 2010 STANDARD METHOD FOR THE TESTING AND EVALUATION CHAMBERS, VER 1.1, FEB 2010.;

    3. COMPLIANT WITH THE CALIFORNIA COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CA-CHPS) CRITERIA INTERPRETATION FOR EQ 2.2 DATED JULY 2012 AND LISTED IN THE CHPS HIGH PERFORMANCE PRODUCT DATABASE;

    4. COMPLIANT WITH CDPH CRITERIA AS CERTIFIED UNDER THE GREENGUARD CHILDREN'S & SCHOOLS PROGRAM.

    VERIFICATION OF COMPLIANCE.
    DOCUMENTATION SHALL BE PROVIDED VERIFYING THAT RESILIENT FLOORING MATERIALS MEET THE POLLUTANT EMISSION LIMIT.

TABLE 5.504.4.1 - ADHESIVE VOC LIMIT [1,2]
Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVES	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT SPECIFICALLY LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF

TABLE 5.504.4.2 - SEALANT VOC LIMIT
Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NONPOROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

NOTE: FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THESE TABLES, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 5.504.4.5 - FORMALDEHYDE LIMITS [1]
MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD [2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.
2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM).

JUN 03 2015

PRE-CHECK (PC) DOCUMENT
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REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST ROSS
No. S2030
EXP. 9/30/15
STRUCTURAL
STATE OF CALIFORNIA

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215. (209) 466-8000

COMPARISON PC SET

GREEN BUILDING STANDARDS

REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC FLS SS
DATE 6-4-15

2013 - 12x40

AGB

12'x40' P.C.

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 1 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

Climate Zone:	Conditioned Floor Area : 0
3	Unconditioned Floor Area : 480

General Information

Building Type:	☐ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel		
☐ Schools	☐ Relocatable Public Schools	☐ Conditioned Spaces	☒ Unconditioned Spaces		
Phase of Construction:	☒ New Construction	☐ Addition	☐ Alteration		
Method of Compliance:	☐ Complete Building	☐ Area Category	☐ Tailored		

LIGHTING COMPLIANCE DOCUMENTS (select yes for each document included)
For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	FORM	TITLE
YES		NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
YES		NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
YES		NRCC-LTI-03-E	Indoor Lighting Power Allowance
	NO	NRCC-LTI-04-E	Tailored Method Worksheets
	NO	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets

Summary of Allowed Lighting Power
Conditioned and Unconditioned space Lighting must not be combined for compliance

Indoor Lighting Power For Conditioned Spaces			Watts	Indoor Lighting Power for Unconditioned Spaces		Watts
1.	Installed Lighting (NRCC-LTI-01-E, page 4	+	0	Installed Lighting (NRCC-LTI-01-E, page 4	+	238
2.	PORTABLE ONLY FOR OFFICES (NRCC-LTI-01-E, page 3	+				
3.	Minus Lighting Control Credits (NRCC-LTI-02-E, page 2	-	0	Minus Lighting Control Credits (NRCC-LTI-02-E, page 2	-	0
4.	Adjusted Installed Lighting Power (row 1 plus row 2 minus row 3)	=	0	Adjusted Installed Lighting Power (row 1 minus row 5)	=	238

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 2 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

5.	Complies ONLY if Installed ≤ Allowed		Complies ONLY if Installed ≤ Allowed	
6.	Allowed Lighting Power Conditioned NRCC-LTI-03-E, page 1	0	Allowed Lighting Power Unconditioned NRCC-LTI-03-E, page 1	828

Declaration of Required Installation Certificates – Declare by selecting yes for all installation Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
X		NRCI-LTI-01-E - Must be submitted for all buildings	☐ Field Inspector
X		NRCI-LTI-03-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐ Field Inspector
	X	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
	X	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	☐ Field Inspector
	X	NRCI-LTI-03-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
	X	NRCI-LTI-05-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

Declaration of Required Certificates of Acceptance – Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
X		NRCA-LTI-03-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
	X	NRCA-LTI-05-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
	X	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 3 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☐ CONDITIONED SPACE ☒ UNCONDITIONED SPACE

A. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST
☐ The actual indoor lighting power listed on this page and on the next page includes all installed permanent and planned portable lighting systems.
☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
☐ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines
☐ Also include track lighting in schedule, and submit the track lighting compliance form (NRCC-LTI-05-E) when line-voltage track lighting is installed.

B. Installed Portable Luminaires in Offices – Exception to Section 140.8(a)
☐ This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance form.
☐ This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
☐ Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire Watts Per Square Foot							Office Location	Field Inspector
A	B	C	D	E	F	G	H	I	J
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Luminaires	Installed portable luminaire watts in this office (B x C)		Watts per square foot (D / E)	If F ≥ 0.3, enter sum; If F > 0.3, (F-0.3)	Enter Here	Identify Office area in which these portable luminaires are installed	Pass / Fail
									☐ ☐
									☐ ☐
									☐ ☐
									☐ ☐
									☐ ☐
Total installed portable luminaire watts that are greater than 0.3 watts per square foot per office:								Enter sum total of all pages into NRCC-LTI-01-E Page 1	

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 3 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☐ CONDITIONED SPACE ☒ UNCONDITIONED SPACE

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Office Portable Luminaire Schedule	Office Installed Portable Luminaire Watts Per Square Foot							Office Location	Field Inspector
A	B	C	D	E	F	G	H	I	J
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Luminaires	Installed portable luminaire watts in this office (B x C)		Watts per square foot (D / E)	If F ≥ 0.3, enter sum; If F > 0.3, (F-0.3)	Enter Here	Identify Office area in which these portable luminaires are Installed	Pass / Fail
									☐ ☐
									☐ ☐
									☐ ☐
									☐ ☐
									☐ ☐
Total installed portable luminaire watts that are greater than 0.3 watts per square foot per office:								Enter sum total of all pages into NRCC-LTI-01-E Page 1	

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 4 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for:
☐ CONDITIONED SPACE ☐ UNCONDITIONED SPACE

C. INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Luminaire Schedule		Installed Watts					Location	Field Inspector
A	B	C	D	E	F	G	H	
Luminaire Schedule Number	Complete Luminaire Description (i.e., # lamp fluorescent troffer, PS278, one dimmable electronic ballast)	Luminaires	How wattage was determined: Calculated (watts from table)	How wattage was determined: Nameplate (watts)	Number of Lamps	Total Installed Watts (C x D x E)	Primary function area in which these luminaires are Installed	Pass / Fail
A	4 ft LED 3GTL 4 80L	60.0	☐	☒	4	238	Relocatable Public School	☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
			☐	☐				☐ ☐
INSTALLED WATTS PAGE TOTAL:						238	Enter sum total of all pages into NRCC-LTI-01-E; Page 2	

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS — NRCC-LTI-01-E
Indoor Lighting — (Page 5 of 5)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that the Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Hayley Dodd	Documentation Author Signature:	
Company:	EnergySoft, LLC	Signature Date:	10/17/2014
Address:	1035 5th Street, Suite A	CEA/HERS Certification Identification (If applicable):	ENERGY-SOFT
City/State/Zip:	Novato, CA 94949	Phone:	(418) 897-8400

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Luis Esquivel	Responsible Designer Signature:	
Company:	Enviroplex Inc.	Date Signed:	6.9.15
Address:	4777 E. Carpenter Rd	License:	640557
City/State/Zip:	Stockton, CA 95215	Phone:	209-466-8000

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE — NRCC-LTI-02-E
Indoor Lighting - Lighting Controls — (Page 1 of 3)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

The NRCC-LTI-02-E shall be used to document all mandatory and prescriptive lighting controls that are applicable to the project.

Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
X		Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section §110.9.
X		Lighting shall be controlled by a lighting control s system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
	X	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
	X	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section §110.9 and Section §130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
X		All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
X		All luminaires shall be functionally controlled with manually switched ON and OFF lighting controls in accordance with Section 130.1(a).
X		General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
X		The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
X		All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
	X	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
	X	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
X		Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4 (a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE — NRCC-LTI-02-E
Indoor Lighting - Lighting Controls — (Page 2 of 3)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☒ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

MANDATORY AND PRESCRIPTIVE INDOOR LIGHTING CONTROL SCHEDULE, PAF CALCULATION, and FIELD INSPECTION CHECKLIST

Lighting Control Schedule		Standards Complying With [1] (✓ all that apply, or enter "E" if Exempted)							PAF Credit Calculation [2]			✓ If Acceptance Test Required	Field Inspector	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
Location in Building	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.1(b)	§130.1(c)	§130.1(d)	§130.1(e)	§140.6(a)	§140.6(b)	Watts of Controlled Lighting	PAF	Control Credit (K x L)		Pass	Fail
														☐	☐
														☐	☐
														☐	☐
														☐	☐
														☐	☐
														☐	☐
														☐	☐
Control Credit PAGE TOTAL (Sum of Column M):												0			
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column M):												0			
													Enter Control Credit total into NRCC-LTI-01-E Page 1.		

1. §130.1(a) = Manual area controls; §130.1(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(a) = Additional lighting controls installed to earn a PAF; §140.6(b) = Prescriptive Secondary Sidelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 09/14) — CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE — NRCC-LTI-02-E
Indoor Lighting - Lighting Controls — (Page 2 of 3)
Project Name: 12x40 Modular PC — Date Prepared: 10/17/2014

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
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MANDATORY AND PRESCRIPTIVE INDOOR LIGHTING CONTROL SCHEDULE, PAF CALCULATION, and FIELD INSPECTION CHECKLIST

Lighting Control Schedule		Standards Complying With [1] (✓ all that apply, or enter "E" if Exempted)							PAF Credit Calculation [2]			✓ If Acceptance Test Required	Field Inspector	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
Location in Building	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.1(b)	§130.1(c)	§130.1(d)	§130.1(e)	§140.6(a)	§140.6(b)	Watts of Controlled Lighting	PAF	Control Credit (K x L)		Pass	Fail
														☐	☐
														☐	☐
														☐	☐
														☐	☐
														☐	☐
														☐	☐
														☐	☐
Control Credit PAGE TOTAL (Sum of Column M):												0			
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column M):												0			
													Enter Control Credit total into NRCC-LTI-01-E Page 1.		

1. §130.1(a) = Manual area controls; §130.1(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(a) = Additional lighting controls installed to earn a PAF; §140.6(b) = Prescriptive Secondary Sidelit Daylight Controls.
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CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — June 2014

APPROVED
DIVISION OF STATE ARCHITECT
HIGH PERFORMANCE SECTION
APP.# 02-113910 DATE: 6/5/15
Sylvia Barrios, C.E.P.S.

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

CONFIDENTIAL MATERIAL–THESE DOCUMENTS ARE THE PROPERTY OF AND ARE NOT TO BE REPRODUCED OR DISTRIBUTED WITHOUT FULL KNOWLEDGE AND WRITTEN CONSENT FROM ENVIROPLEX, INC.
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CYS
STRUCTURAL ENGINEERS INC.
2441 Fair Oaks Blvd. Suite #200
Sacramento, CA 95825
(916) 920-2920 (916) 920-1450 Fax
www.cysinc.com

JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST ROSES No. S20300 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466–8000

COMPARISON PC SET

ENERGY COMPLIANCE
UNCONDITIONED RESTROOM

REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02–113910
AC. — FLS — SS
DATE 6-9-15
2013 – 12x40

EN1

12x40 P.C.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-03-E (Revised 09/13) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Indoor Lighting - Lighting Controls	(Page 3 of 3)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Hayley Dodd	Documentation Author Signature:	
Company:	EnergySoft, LLC	Signature Date:	10/17/2014
Address:	1025 5th Street, Suite A	CEA/HERS Certification Identification (If Applicable):	ENERGY·SOFT
City/State/Zip:	Novato, CA 94949	Phone:	(415) 897-8400

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
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5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Luis Esquivel	Responsible Designer Signature:	
Company:	Enviroplex Inc.	Date Signed:	6-9-15
Address:	4777 E. Carpenter Rd	License:	640957
City/State/Zip:	Stockton, CA 95215	Phone:	209-466-8000

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 09/13) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 1 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

ALLOWED LIGHTING POWER

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☐ CONDITIONED spaces ☑ UNCONDITIONED spaces

A. SUMMARY TOTALS OF LIGHTING POWER ALLOWANCES

☐ If using Complete Building Method for compliance, use only the total in column (b) as total allowed building watts.
☐ If using Area Category Method, Tailored Method, or a combination of Area Category and Tailored Method for compliance, use only the total in column (b) as the total allowed building watts.

	(a)	(b)
1. Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on this page)		
2. Area Category Method Allowed Watts. Documented in section C-1 of NRCC-LTI-03-E (below on this page)		628
3. Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E		0
TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01, Page 2, Row 1		628

☐ Check here if building contains both conditioned and unconditioned areas.

B. COMPLETE BUILDING METHOD LIGHTING POWER ALLOWANCE

A: TYPE OF BUILDING (From §140.6 Table 140.6-B)	B: WATTS PER (ft²)		C: COMPLETE BLDG. AREA		D: ALLOWED WATTS
		X		=	
			Total Area:		
Total Watts. Enter Total Watts into section A, row 1 (Above on this page)					

C-1. AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES (C-2 plus C-3)

	Watts
Total from section C-2	628
Total from section C-3	0
Total Watts. Enter Total Watts into section A, row 2 (Above on this page)	628

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 09/13) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 2 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

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C -3 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE

☐ Do not include portable lighting for offices. Portable lighting for offices shall be documented only in section B of NRCC-LTI-03-E.
☐ Separately list lighting for each primary function area as defined in §100.1 of the Standards.

A: AREA CATEGORY (From §140.6 Table 140.6-C) Location in Building	Primary Function Area per Table 140.6-C	B: WATTS PER (ft²)		C: AREA (ft²)		D: ALLOWED WATTS
Restroom	Relocatable Public School	1.10	X	480	=	528
				TOTALS	480	
Enter sum total Area Category allowed watts into section C-1 of NRCC-LTI-03-E (this compliance form)						528 WATTS

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 09/13) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 4 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Hayley Dodd	Documentation Author Signature:	
Company:	EnergySoft, LLC	Signature Date:	10/17/2014
Address:	1025 5th Street, Suite A	CEA/HERS Certification Identification (If Applicable):	ENERGY·SOFT
City/State/Zip:	Novato, CA 94949	Phone:	(415) 897-8400

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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Responsible Designer Name:	Luis Esquivel	Responsible Designer Signature:	
Company:	Enviroplex Inc.	Date Signed:	6-9-15
Address:	4777 E. Carpenter Rd	License:	640957
City/State/Zip:	Stockton, CA 95215	Phone:	209-466-8000

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 09/13) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 1 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

Project Address: ,	Total Illuminated Hardscape Area: 0

General Information

Phase of Construction: ☑ New Construction ☐ Addition ☐ Alteration

Outdoor Lighting Zone (OLZ): ☐ OLZ-1 ☐ OLZ-2 ☑ OLZ-3 ☐ OLZ-4

I have confirmed with the AHJ which OLZ applies to this site. For default lighting zone designations, see Title 24 Part 6, §10-114

LIGHTING COMPLIANCE DOCUMENTS (check box for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

☑	NRCC-LTO-01-E	Certificate of Compliance
☐	NRCC-LTO-02-E	Outdoor Lighting Controls Certificate of Compliance
☐	NRCC-LTO-03-E	Outdoor Lighting Power Allowance Certificate of Compliance

Summary of Allowed Outdoor Lighting Power		Watts
1.	Sum Total ALLOWED Outdoor Lighting Wattage from NRCC-LTO-03-E, page 1	60
	Complies ONLY if Installed ≤ Allowed	≤
2.	Sum Total INSTALLED Outdoor Lighting Wattage from NRCC-LTO-01-E, page 3	60

Declaration of Required Installation Certificates – Declare by checking all installation Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

☑ NRCI-LTO-01-E - Must be submitted for all buildings	☐ Field Inspector
☑ NRCI-LTO-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐ Field Inspector

Declaration of Required Certificates of Acceptance – Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

☑ NRCA-LTO-02-A - Must be submitted for outdoor lighting controls.	☐ Field Inspector

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 09/13) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 2 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

Schedule of luminaires exempt from the outdoor lighting power requirements in §140.7

Name or Symbol	Description of exempt luminaire in accordance with the exemptions

Schedule of luminaires exempt from the cutoff requirements in §130.2(b)

Name or Symbol	Description of exempt luminaire in accordance with the exemptions

Schedule of luminaires exempt from the outdoor lighting control requirements in §130.2(c)

Name or Symbol	Description of exempt luminaire in accordance with the exemptions

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 09/13) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 3 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

A. OUTDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Luminaire Schedule A: Name or Item Tag	B: Complete Luminaire Description	C: Watts per Luminaire	D: How wattage was determined — CEC Default Table Value	D: How wattage was determined — Documented Value per §130.0	E: Number of Luminaires	F: Total Luminaire Watts (C x E)	G: Location — Primary Function area in which these luminaires are installed	H: Cutoff — Shielding	I: Field Inspector — Pass	I: Fail
B	60w Incandescent	60.0	☑	☐	1	60	Main Entrance		☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐		

STATE OF CALIFORNIA
OUTDOOR LIGHTING CONTROLS
CEC-NRCC-LTD-02-E (Revised 06/13) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTD-02-E
Outdoor Lighting Controls	(Page 3 of 3)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Hayley Dodd	Documentation Author Signature:	
Company:	Energy8oft, LLC	Signature Date:	10/17/2014
Address:	1025 5th Street, Suite A	CEA/HERS Certification Identification (If applicable):	ENERGY·SOFT
City/State/Zip:	Novato, CA 94949	Phone:	(415) 907-6400

RESPONSIBLE PERSON'S DECLARATION STATEMENT
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Responsible Designer Name:	Luis Esquivel	Responsible Designer Signature:	
Company:	Enviroplex Inc.	Date Signed:	6-5-15
Address:	4777 E. Carpenter Rd	License:	640551
City/State/Zip:	Stockton, CA 95215	Phone:	209-466-8000

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTD-04-E (Revised 06/13) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTD-09-E
Outdoor Lighting Power Allowances	(Page 2 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

C. ADDITIONAL "USE IT OR LOSE IT" OUTDOOR LIGHTING POWER ALLOWANCES FOR SPECIFIC APPLICATIONS
☐ The additional specific outdoor lighting power allowance shall be the smaller of the allowed lighting power or the actual lighting power used.
☐ Use Outdoor Lighting Zone (OLZ) that is documented on page 1 of NRCC-LTD-01-E to calculate the specific wattage allowances.

C-1. WATTAGE ALLOWANCE PER APPLICATION – Table 140.7-B
☐ Available only for qualifying locations, which include Building Entrances or Exits; Primary Entrances to Senior Care Facilities, Police Stations, Hospitals, Fire Stations, and Emergency Vehicle Facilities; Drive Up Windows; Vehicle Service Station Uncovered Fuel Dispenser
☐ If more than one luminaire type is used per location, use multiple rows for that location

A	B	C	D	E	F	G	H	I	J
	ALLOTTED WATTS			DESIGN WATTS					
Name of Location for which allowance is claimed	Number of qualifying locations	Wattage Allowance per qualifying location	Allotted Watts (B x C)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (G x H)	Allowed Watts (smaller of D or I)
Outdoor Lighting	1	80	80	B	80w INGRESS/EGRESS	1	80.0	80	80
								Sum total allowances per application on this site:	

C-2. WATTAGE ALLOWANCE PER UNIT LENGTH (Sales Frontage) from Table 140.7-B
☐ If more than one luminaire type is used per location, use multiple rows for that location

A	B	C	D	E	F	G	H	I	J
	ALLOTTED WATTS			DESIGN WATTS					
Name of Location for which allowance is claimed	Linear feet of Sales Frontage	Wattage Allowance per linear foot	Allotted Watts (B x C)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (G x H)	Allowed Watts (smaller of D or I)
								Sum total allowances for sales frontage on this site:	0

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTD-04-E (Revised 06/13) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTD-09-E
Outdoor Lighting Power Allowances	(Page 4 of 4)
Project Name: 12x40 Modular PC	Date Prepared: 10/17/2014

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Hayley Dodd	Documentation Author Signature:	
Company:	Energy8oft, LLC	Signature Date:	10/17/2014
Address:	1025 5th Street, Suite A	CEA/HERS Certification Identification (If applicable):	ENERGY·SOFT
City/State/Zip:	Novato, CA 94949	Phone:	(415) 907-6400

RESPONSIBLE PERSON'S DECLARATION STATEMENT
I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Luis Esquivel	Responsible Designer Signature:	
Company:	Enviroplex Inc.	Date Signed:	6-5-15
Address:	4777 E. Carpenter Rd	License:	640551
City/State/Zip:	Stockton, CA 95215	Phone:	209-466-8000

JUN 03 2015

APPROVED
DIVISION OF STATE ARCHITECT
HIGH PERFORMANCE SECTION
APP.# 02-113910 DATE: 6/5/15
Kyle Barrow, C.E.P.S.

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Sacramento, CA 95814
(916) 930-9880 (916) 930-1200 Fax
www.cysse.com

REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST CROSS
No. S2036
EXP. 9/30/15
STRUCTURAL
STATE OF CALIFORNIA

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COMPARISON PC SET

ENERGY COMPLIANCE
UNCONDITIONED RESTROOM

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JOB No.:
DRAWN BY:
DATE:

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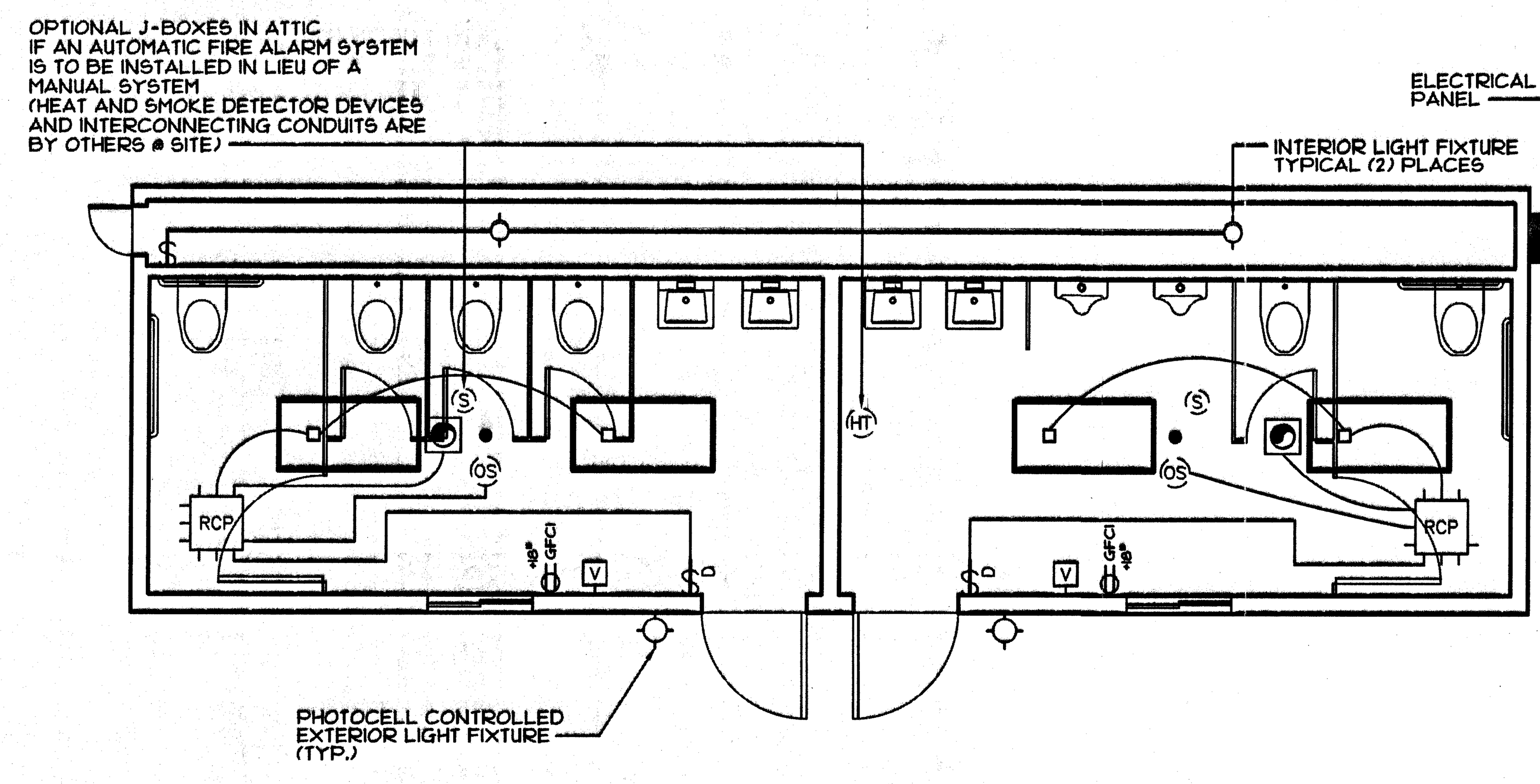
DIVISION OF THE STATE ARCHITECT
02-113910
AC. — FLS. — SS. 28
DATE 6-9-15

3018 - 12x40

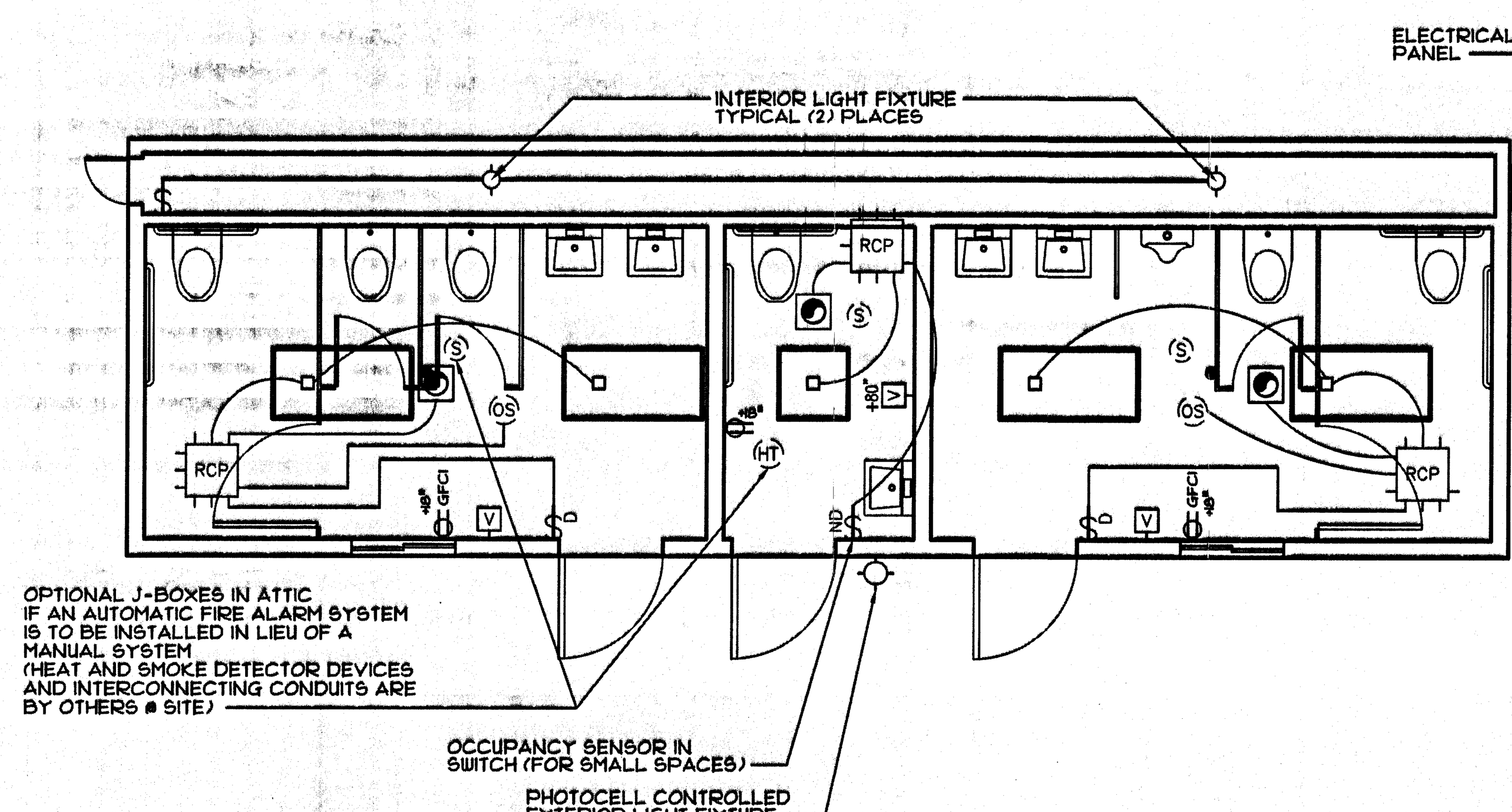
EN1.2

12x40 P.C.



NOTE:
DAYLIGHTING CONTROLS ARE NOT REQUIRED IN ROOMS THAT HAVE A TOTAL GLAZING AREA OF LESS THAN 24 SQ. FT.

1a ELECTRICAL POWER, LIGHTING & SIGNAL PLAN
SCALE: 1/4"=1'-0"



NOTE:
DAYLIGHTING CONTROLS ARE NOT REQUIRED IN ROOMS THAT HAVE A TOTAL GLAZING AREA OF LESS THAN 24 SQ. FT.

11 ELECTRICAL POWER, LIGHTING & SIGNAL PLAN
SCALE: 1/4"=1'-0"

PANEL SCHEDULE: "A"
MOUNTING: SURFACE NEMA-1 VOLTS: 120/240
PANEL: 125A PHASE: 1ϕ
MAIN BREAKER: 125A WIRE: 3W

DESCRIPTION	LOAD	BRKR		MAIN 125 A B		BRKR	LOAD	DESCRIPTION
			1		2	20/1	600	LIGHTING-A
			3		4	20/1	600	LIGHTING-B
			5		6	20/1	1800	OUTLETS
			7		8	20/1	1800	OUTLETS
			9		10			
			11		12			

LEG A: 2400 W LEG B: 2400 W TOTAL: 4800 W

7 TYP. INTERIOR PANEL SCHEDULE

RCP — RELAY CONTROLLER PANEL: NEMA 1 PLENUM RATED, SURFACE MOUNTED DIMMING PANEL (RELAYS, DIMMING OUTPUTS, PHOTOCELL INPUTS, & DRY CONTACT INPUTS).

LIGHT FIXTURE: 2'x4' LED RECESSED TROFFER TYPE

LIGHT FIXTURE: 2'x2' LED RECESSED TROFFER TYPE

OS — OCCUPANCY SENSOR: LOW VOLTAGE, CEILING MOUNTED, OPTIONAL - WALL MOUNTED.

$D — DIMMING SWITCH: LOW VOLTAGE, TWO BUTTON, DIGITAL SWITCH W/ MANUAL ON/OFF & DIMMING CONTROL. (@+48" MAX A.F.F. TO TOP OF BOX).

$ND — NON-DIMMING SWITCH: LOW VOLTAGE, TWO BUTTON, DIGITAL SWITCH W/ MANUAL ON/OFF. (@+48" MAX A.F.F. TO TOP OF BOX).

EXTERIOR LIGHT: COMPACT FLUORESCENT, 13 WATT, WALL PACK. "LITHONIA" TWS (OR EQUAL) MOUNTED @ +96" A.F.F. (U.O.N.)

LIGHTING LEGEND

1. OPTIONAL WALL CLOCK (BY OWNERS) : PROVIDE SINGLE CLOCK RECEPTACLE 115 VAC (OR EQUAL) .
2. ELECTRICAL PANEL: FLUSH INTERIOR MOUNTED OR SURFACE MOUNT EXTERIOR W/ HINGED DOORS AND INDEXED CARD HOLDERS. CIRCUIT BREAKER (S) WILL HAVE AN APPROPRIATE UL. LABEL LISTING.
3. RECEPTACLES: "LEVITON", "HUBBEL" (OR EQUAL)
4. ELECTRIC METALLIC TUBING: COUPLINGS AND FLEX CONDUIT GALVANIZED OR SHERARDIZED.

3 ELECTRICAL SPECIFICATIONS

1. FIRE ALARM: FURNISHED BY OWNER AND SHALL CONFORM TO THE CALIFORNIA BUILDING CODE SECTION 907.2.3 AND CALIFORNIA ELECTRICAL CODE ARTICLE 760.
2. INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY D.S.A.
3. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE PROJECT INSPECTOR.
4. ALARMS/EMERGENCY WARNING SYSTEMS/ACCESSIBILITY. IF EMERGENCY WARNING SYSTEMS ARE PROVIDED, THEY SHALL INCLUDE BOTH AUDIBLE ALARMS AND VISUAL ALARMS COMPLYING WITH NFPA 72 AND CHAPTER 9, SECTIONS 907.5.2 AND 907.5.2.1

2 FIRE PROTECTION

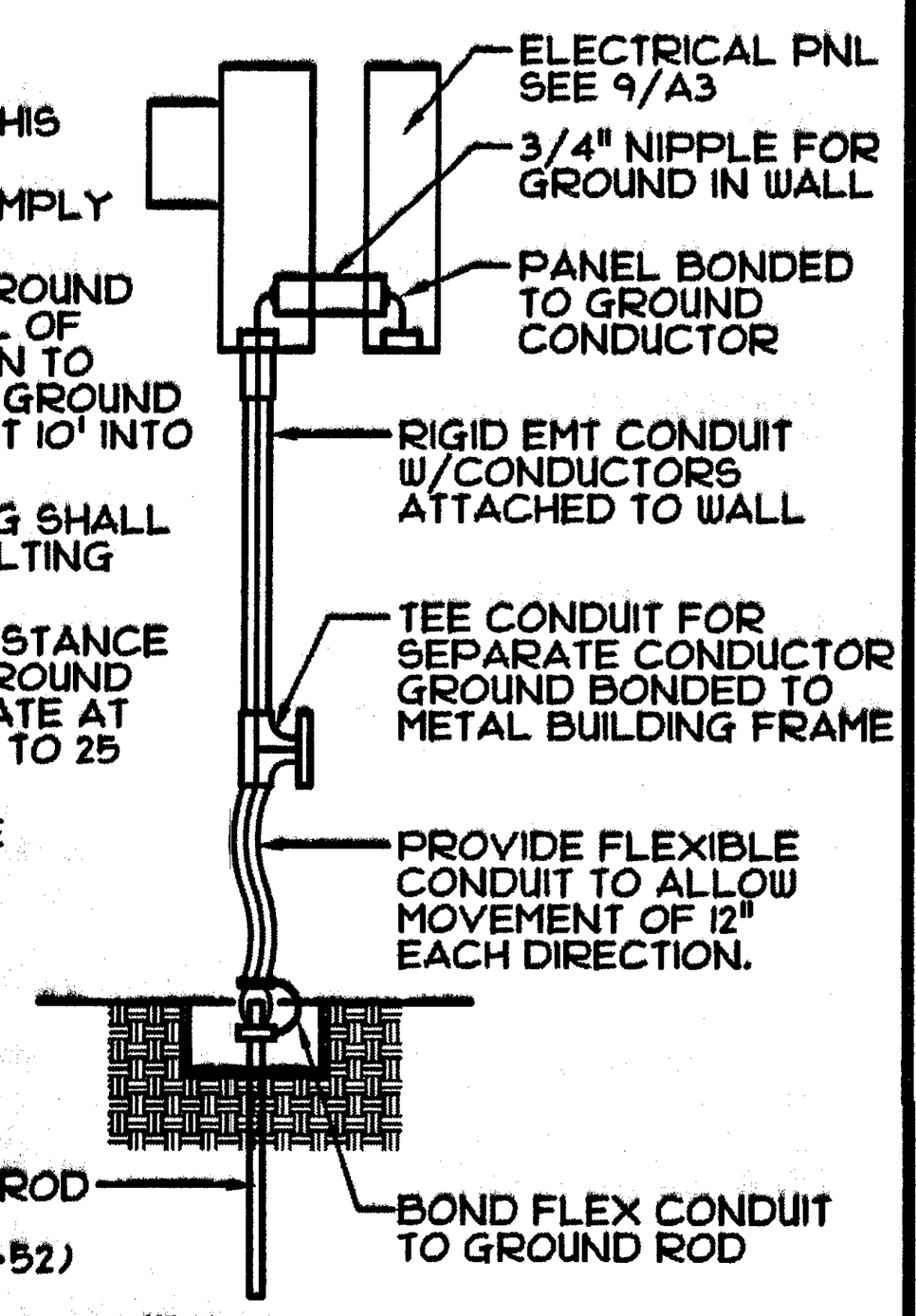
- DUPLEX RECEPTACLE @+15" MIN. A.F.F. (TO BOTTOM OF BOX) OR 18" A.F.F. TO CENTERLINE OF BOX. (UNLESS OTHERWISE NOTED)
- J — JUNCTION BOX (SIZE AND INSTALLATION HEIGHT AS NOTED)
- H — WATER PROOF BELL BOX UNDER EAVE @+9'-4" (U.O.N.) FOR FUTURE FIRE ALARM AUDIBLE WARNING DEVICE SEE NOTE NO. 1 OF FIRE PROTECTION
- P — JUNCTION BOX @+48" A.F.F. (TO TOP OF BOX) FOR FUTURE FIRE ALARM PULL STATION - SEE NOTE NO. 1 OF FIRE PROTECTION ABOVE
- V — JUNCTION BOX @+90" (U.O.N.) FOR FUTURE FIRE ALARM HORN/STROBE DEVICE - SEE NOTE NO. 1 OF FIRE PROTECTION ABOVE
- I — JUNCTION BOX @+48" A.F.F. (TO TOP OF BOX) (U.O.N.) FOR FUTURE INTERCOM
- CEILING MOUNT EXHAUST FAN (CFM PER SHEET A2)
- HT — OPTIONAL JUNCTION BOX IN ATTIC FOR FUTURE HEAT DETECTOR (DEVICES AND INTERCONNECTING CONDUITS BY OTHERS @ SITE)
- S — OPTIONAL JUNCTION BOX IN ATTIC FOR FUTURE SMOKE DETECTOR (DEVICES AND INTERCONNECTING CONDUITS BY OTHERS @ SITE)

4 ELECTRICAL LEGEND

1. CERTIFIED LUMINARIES/BALLASTS.
2. INDEPENDENT CONTROL WITHIN ENCLOSED AREAS.
3. MANUAL SWITCHING READILY ACCESSIBLE.
4. REDUCTION OF LIGHTING LOAD TO AT LEAST 50% VIA (2) SWITCHES OR (1) MULTI-LEVEL SWITCH.
5. NOT USED.
6. TANDEM WIRING OF (4) LAMP LUMINARIES.

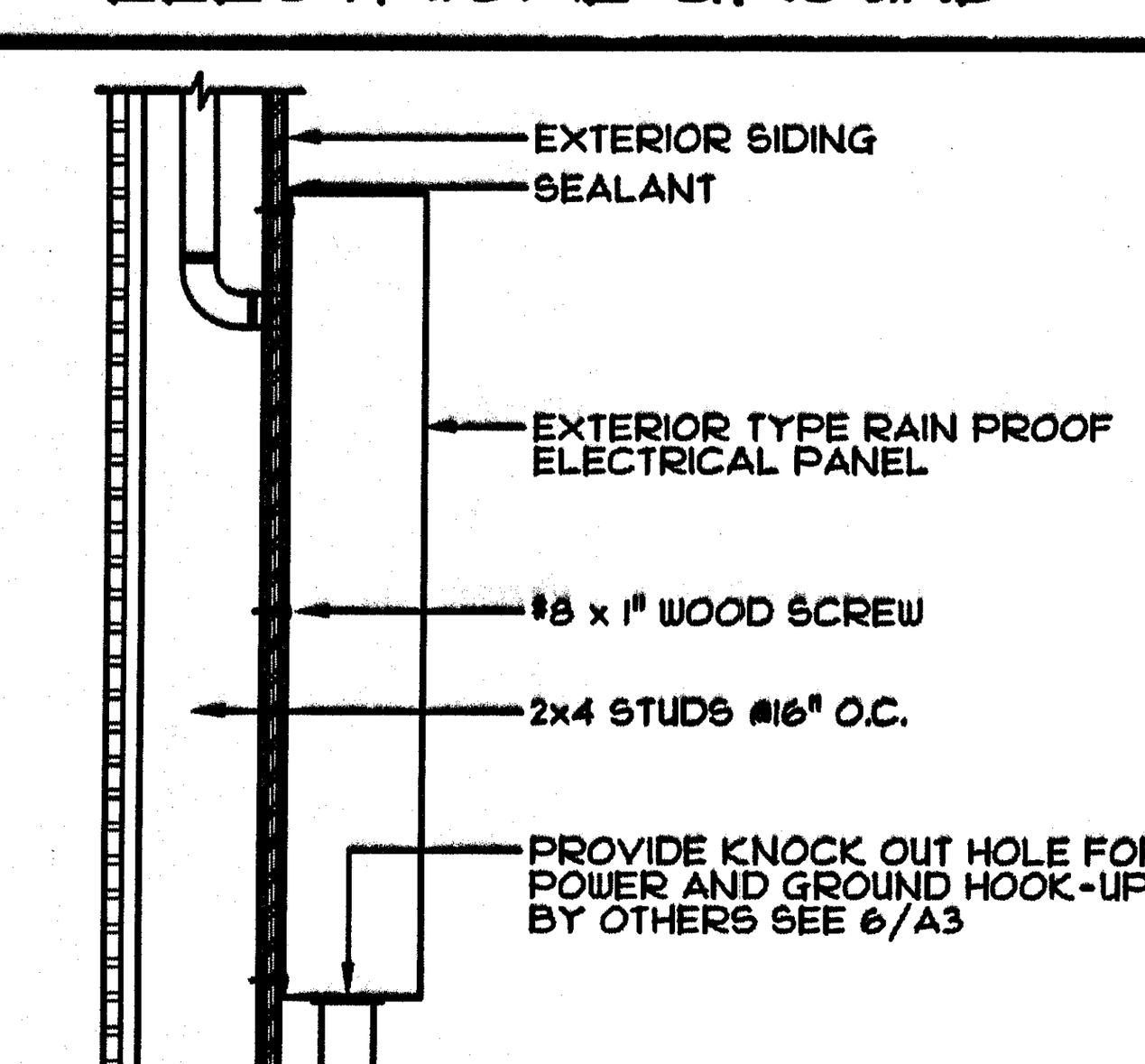
5 ELECTRICAL ENERGY COMPLIANCE

NOTES:
1. METER AND GROUND ARE NOT PART OF THIS CONTRACT TO BE PROVIDED BY OTHERS
2. SIZE OF GROUND CONDUCTOR SHALL COMPLY W/CEC TABLE 250-122
3. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL OF BUILDING FRAME (CEC. 250-52) IN ADDITION TO THE DETAIL SHOWN BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10' INTO THE SOIL IF AVAILABLE (C.E.C. 250-52)
4. ALL MODULES OF METAL FRAME BUILDING SHALL BE ELECTRICALLY BONDED TOGETHER, BOLTING ONLY IS NOT ACCEPTABLE BONDING.
5. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS W/ CONDUCTORS AS SHOWN, SEPARATE AT LEAST 6'0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS. (C.E.C. 250-52)
6. ELECTRICAL GROUNDING TEST SHALL BE WITNESSED BY THE PROJECT INSPECTOR & RESULTS SENT TO D.S.A.
7. GROUND ROD GROUNDING CLAMP TO BE BUSHING RATED FOR 3 CONNECTIONS



NOTE: GROUND TO BE PROVIDED BY OTHERS

8 ELECTRICAL GROUND



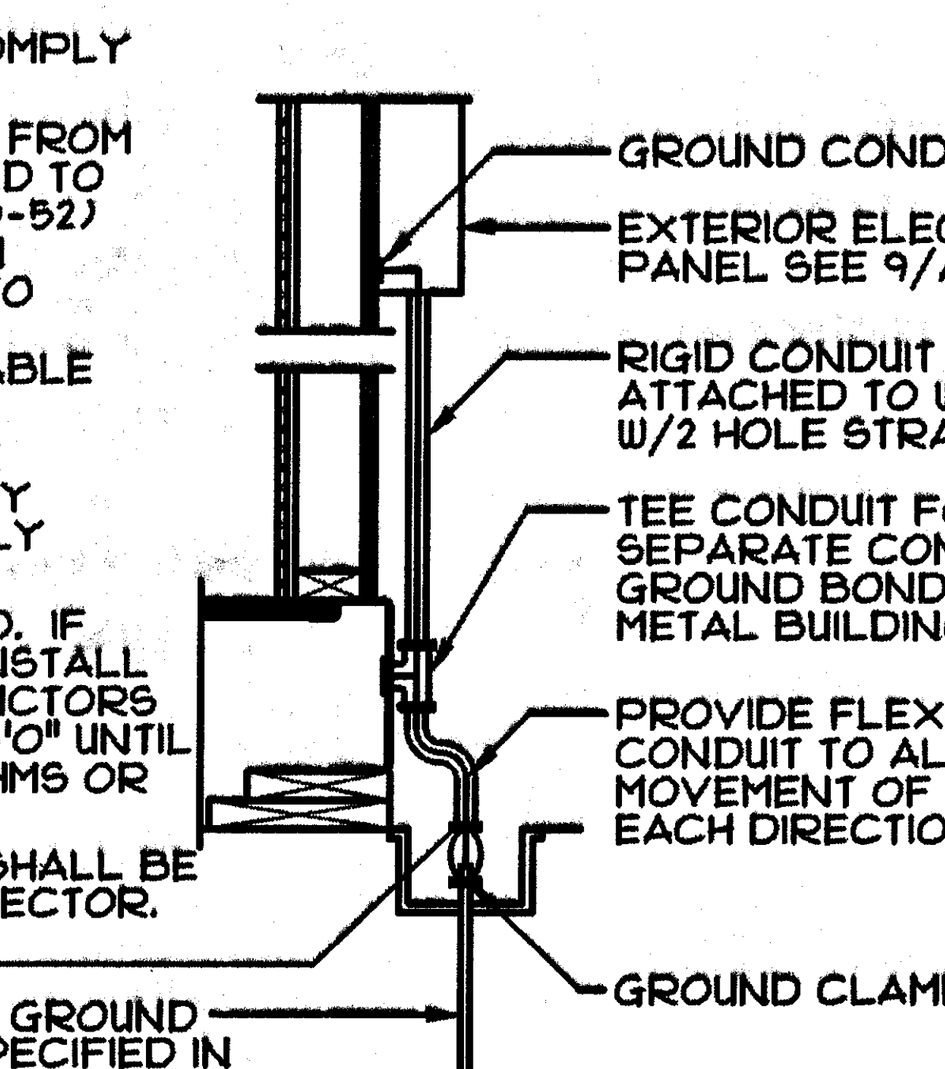
10 ELECTRICAL PANEL INSTALLATION
SCALE: 1"=1'-0"

1. LIGHTING FIXTURE: 2' x 4' LED RECESSED TROFFER TYPE FIXTURES, W/ LOW VOLTAGE DIMMING CONTROL SIGNAL, MAXIMUM 6000 LUMENS, MAX 59W. "LITHONIA" 2GTL (OR EQUAL) .
2. DAYLIGHT CONTROL PHOTOCELL: ON/OFF AND AUTOMATIC DIMMING CONTROL, CEILING MOUNT, LOW VOLTAGE. "nLIGHT" nCM ADC OR nCM ADCX (OR EQUAL) .
3. LIGHT SWITCHES: ON/OFF & ON/OFF PLUS DIMMING, PUSH BUTTON, LOW VOLTAGE. "nLIGHT" nCM ADC OR nCM ADCX (OR EQUAL) .
4. OCCUPANCY SENSOR: LOW VOLTAGE, WALL MOUNT OR CEILING MOUNT.
5. RELAY CONTROL PANEL: RELAY DIMMING PANEL, NEMA 1 PLENUM RATED, SURFACE MOUNTED. W/ 30A RELAYS, LOW VOLTAGE DIMMING OUTPUTS, PHOTOCELL OUTPUTS, DRY CONTACT INPUTS, AND OPTIONAL VOLTAGE BARRIER FOR EM CIRCUITS. "ACUITY BRANDS" (OR EQUAL)
6. ILLUMINATED EXIT SIGNS: IF REQUIRED BY CODE, SHALL BE PROVIDED IN COMPLIANCE W/ C.B.C. 1011 & 1006.
7. NOT USED.
8. SKYLIGHTS (IF OPTION IS INCLUDED IN SITE SPECIFIC PROJECT) : GENERAL LIGHTING FIXTURES PLACED IN THE PRIMARY DAYLIT ZONE OF SKYLIGHTS SHALL BE CONTROLLED IN RESPONSE TO AVAILABLE DAYLIGHTING.
9. ACCESSIBLE, INDEPENDENT SWITCHING OR A CONTROL DEVICE SHALL BE INCLUDED FOR ALL AREAS ENCLOSED BY CEILING HEIGHT PARTITIONS.
10. ALL OUTDOOR LIGHTING SHALL BE CONTROLLED BY A PHOTOCELL OR OUTDOOR ASTRONOMICAL TIME SWITCH CONTROL.
11. FOR NON-POLE MOUNTED LUMINAIRES OVER 30 WATTS EACH: OUTDOOR LIGHTING WHERE BOTTOM OF LUMINAIRE IS MOUNTED 24 FEET OR LESS ABOVE THE GROUND SHALL BE CONTROLLED BY MOTION SENSORS OR OTHER CONTROLS CAPABLE OF REDUCING THE LIGHTING POWER OF EACH LUMINAIRE BY 40 TO 80% IN RESPONSE TO THE AREA BEING VACATED.

JUN 03 2015

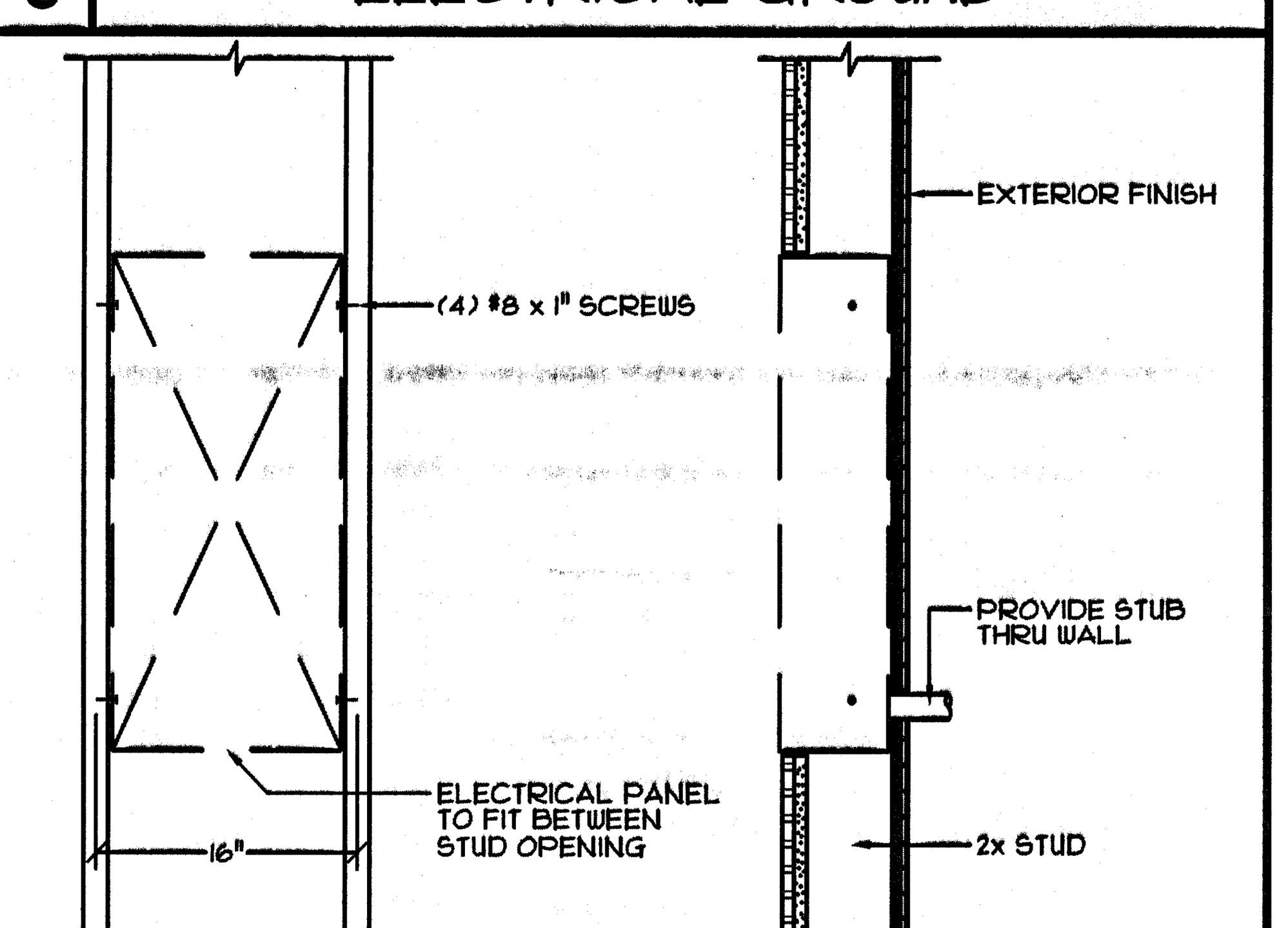
LIGHTING SPECIFICATIONS

NOTES:
1. SIZE OF CONDUCTORS SHALL COMPLY W/ CEC. TABLE 250
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC. PANEL AND TO METAL BUILDING FRAME (CEC. 250-52) IN ADDITION TO THE DETAIL SHOWN BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10' INTO THE SOIL IF AVAILABLE (CEC. 250-52)
3. ALL MODULES OF METAL FRAME BUILDING SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING.
4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDTN'L GROUND RODS W/CONDUCTORS AS SHOWN, SEPARATE AT LEAST 6'0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (C.E.C. 250-53).
5. ELECTRICAL GROUNDING TEST SHALL BE WITNESSED BY THE PROJECT INSPECTOR.



NOTE: GROUND TO BE PROVIDED BY OTHERS

6 ELECTRICAL GROUND



9 ELECTRICAL PANEL INSTALLATION
SCALE: 1"=1'-0"

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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www.cyseng.com

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST ROSS No. S2030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

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COMPARISON PC SET

ELECTRICAL POWER PLAN, SIGNAL PLAN, LIGHTING PLAN, DETAILS, ELECTRICAL NOTES

REV / DATE:	BY:

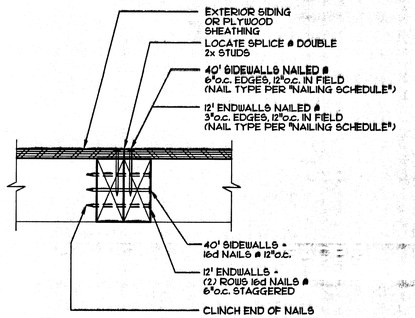
JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC TM FLS [illegible] SS [illegible]
DATE 6-1-15
2013 – 12x40

A3

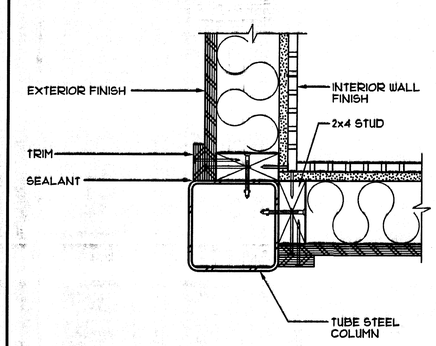
12'x40' P.C.

NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

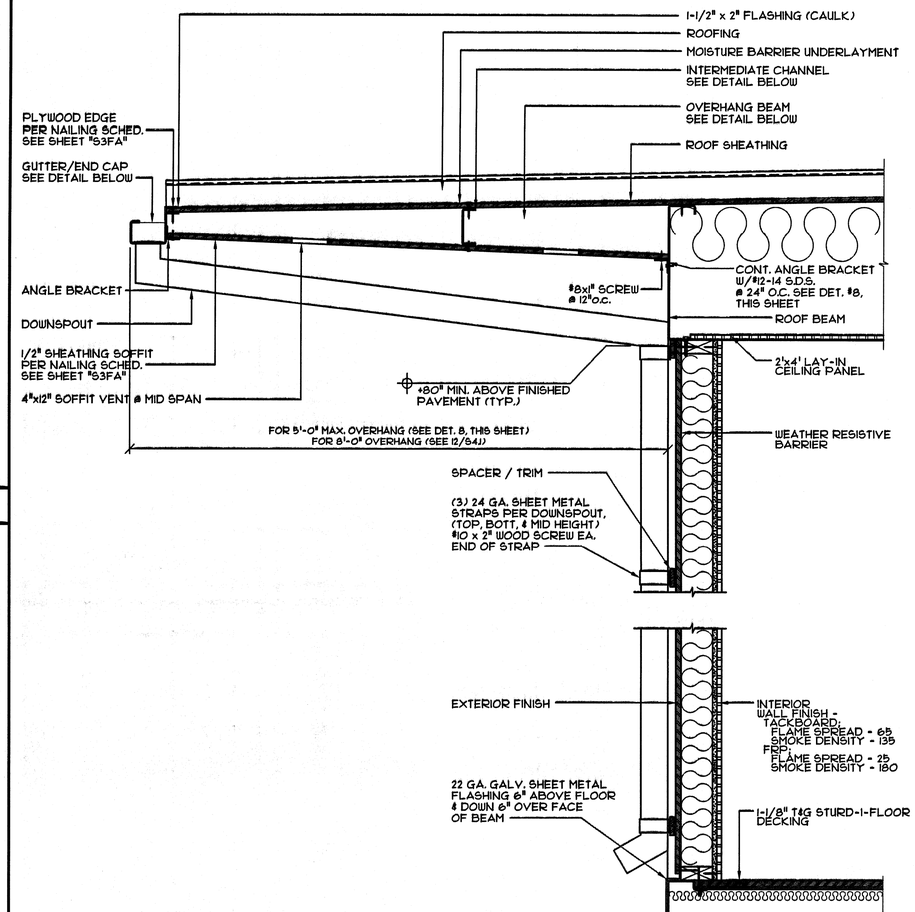


FOR FASTENER SCHEDULE, SEE "S3" SHEETS

1 **SIDING SPLICE DETAIL**
SCALE: 3"=1'-0"

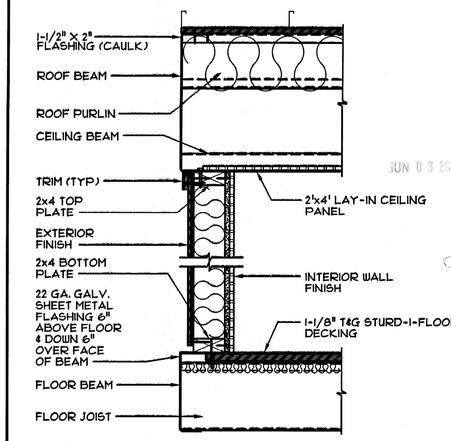


2 **SECTION - COLUMN @ CORNER**
SCALE: 3"=1'-0"



FOR FASTENER SCHEDULE, SEE "S3" SHEETS

7 **SECTION - FRONT OVERHANG (REAR SIMILAR)**
SCALE: 1 1/2"=1'-0"

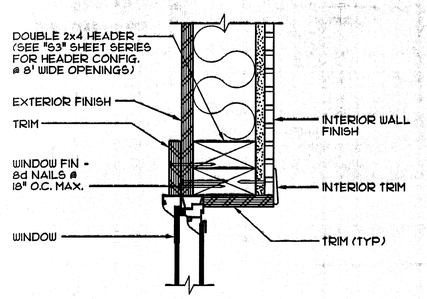


FOR FASTENER SCHEDULE, SEE "S3" SHEETS

9 **SECTION - @ SIDEWALL**
SCALE: 1 1/2"=1'-0"

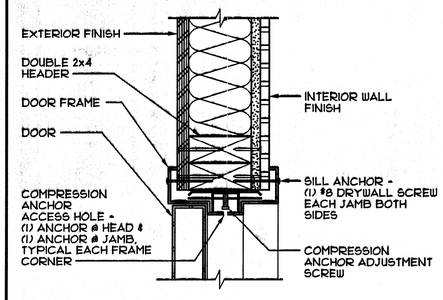
10

DIVISION OF THE STATE ARCHITECT



SECTION @ WINDOW JAMB IS SIMILAR

3 **SECTION - WINDOW HEADER**
SCALE: 3"=1'-0"

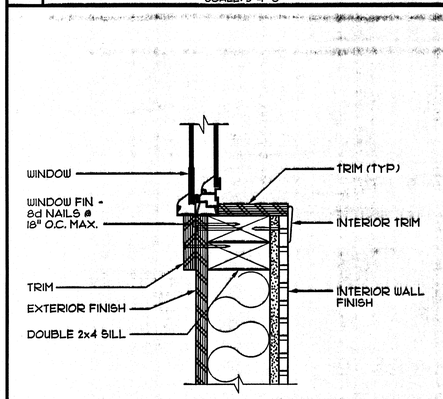


SECTION @ DOOR JAMB IS SIMILAR

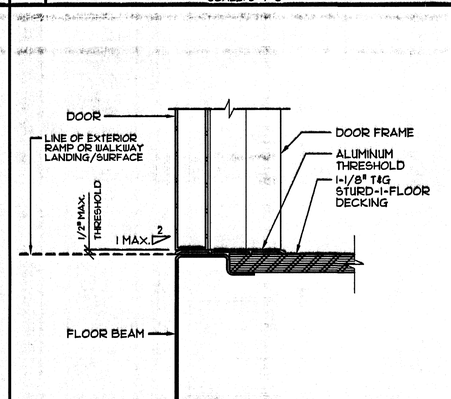
4 **SECTION - DOOR HEADER**
SCALE: 3"=1'-0"

FOR FASTENER SCHEDULE, SEE "S3" SHEETS

8 **OVERHANG & GUTTER DETAILS**
SCALE: AS NOTED



5 **SECTION - WINDOW SILL**
SCALE: 3"=1'-0"



6 **SECTION - DOOR THRESHOLD**
SCALE: 3"=1'-0"

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JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER
"ERNEST" "ROSS"
No. S2030
EXP. 8/30/15
STRUCTURAL
STATE OF CALIFORNIA

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

BI-PITCHED ROOF SECTIONS AND DETAILS (2x4 EXTERIOR WALLS)

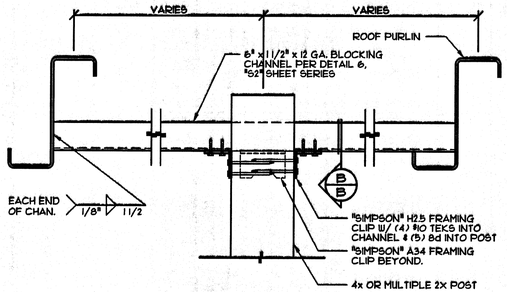
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

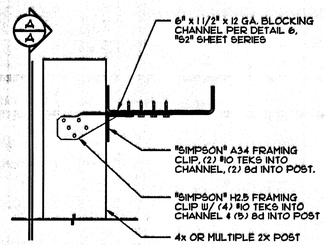
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. TM FLS. VL SS. JJ
DATE 6-9-15

A4A

12"x40" P.C.

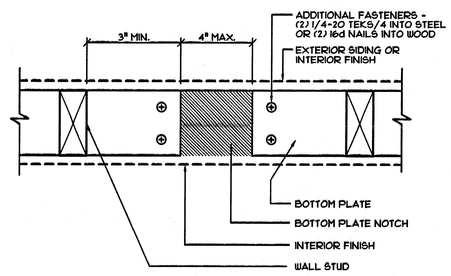


SECTION A-A



SECTION B-B

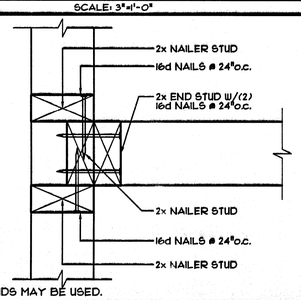
NOTE: 2x4 OR 2x6 STUDS MAY BE USED.



FOR FASTENER SCHEDULE, SEE "S3" SHEETS

1 ALLOWABLE BOTTOM PLATE NOTCH

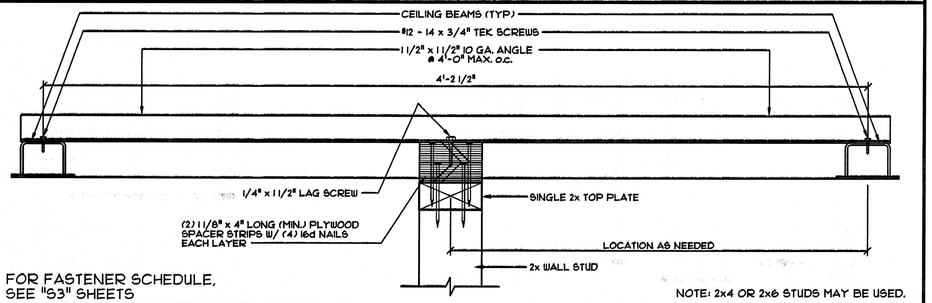
SCALE: 3"=1'-0"



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

2

3

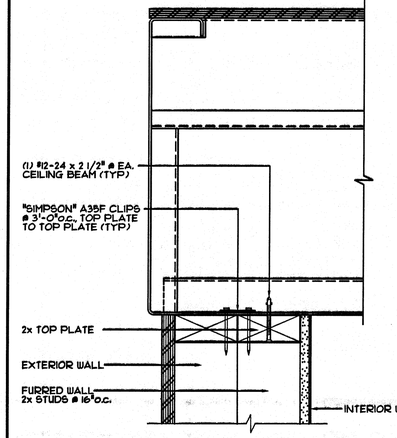


FOR FASTENER SCHEDULE, SEE "S3" SHEETS

NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

4 PERPENDICULAR WALL CONNECTION

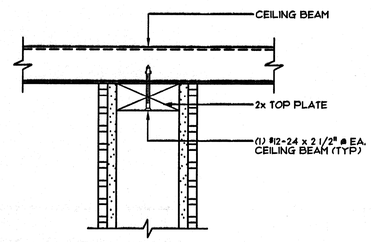
SCALE: 3"=1'-0"



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

5 TOP PLATE ATTACHMENT BETWEEN CEILING BEAMS

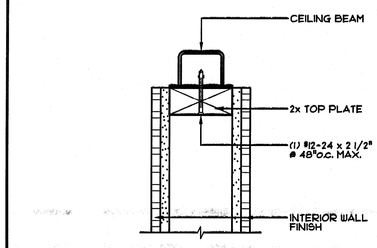
SCALE: 3"=1'-0"



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

6 FURRED WALL - TOP PLATE CONN.

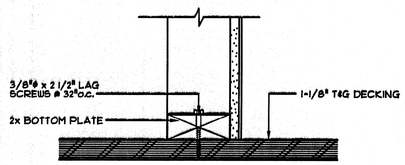
SCALE: 3"=1'-0"



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

7 TOP PLATE TO CEILING BEAM

SCALE: 3"=1'-0"

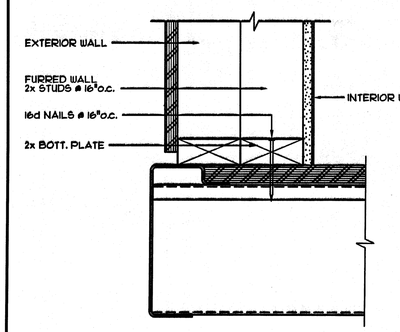


THIS DETAIL SHALL BE USED ONLY FOR PLUMBING CHASE WALLS SUPPORTING WALL HUNG TOILET FIXTURES.

NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

8 TOP PLATE TO CEILING BEAM

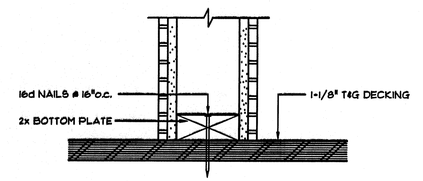
SCALE: 3"=1'-0"



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

9 FURRED WALL - BOTT. PLATE CONN.

SCALE: 3"=1'-0"



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

10 BOTTOM PLATE TO FLOOR

SCALE: 3"=1'-0"

11 TOP CONNECTION - FULL HT. POST FOR HALF WALLS

SCALE: 3"=1'-0"

11 PLUMBING CHASE WALL TO FLOOR

SCALE: 3"=1'-0"

DIVISION OF THE STATE ARCHITECT

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JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST ROSS No. S2030 EXP. 6/30/15 STRUCTURAL STATE OF CALIFORNIA

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COMPARISON PC SET

INTERIOR WALL CONNECTION DETAILS

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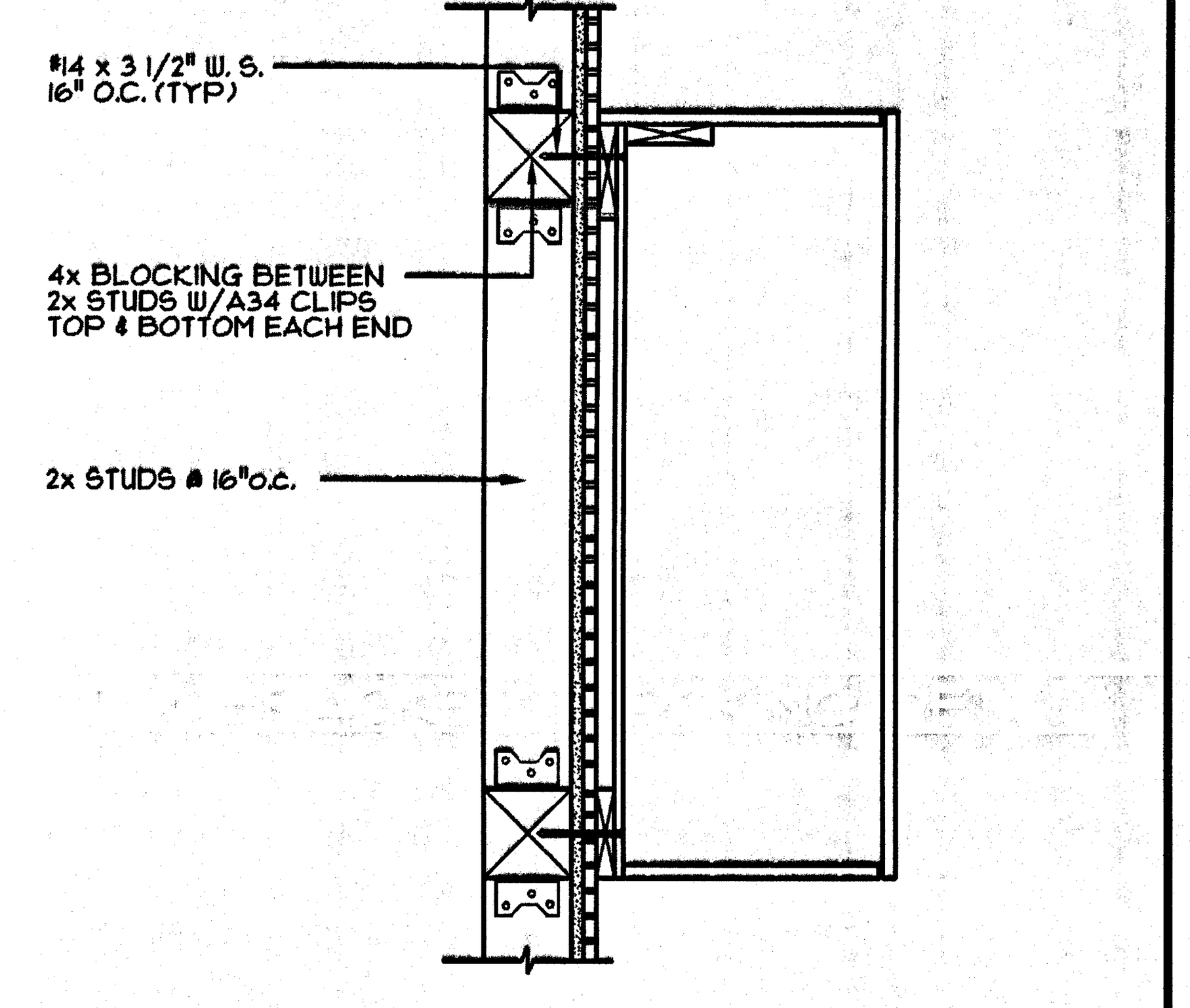
JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. TM FLS. 12 SS.
DATE 6-9-15

2013 - 12x40

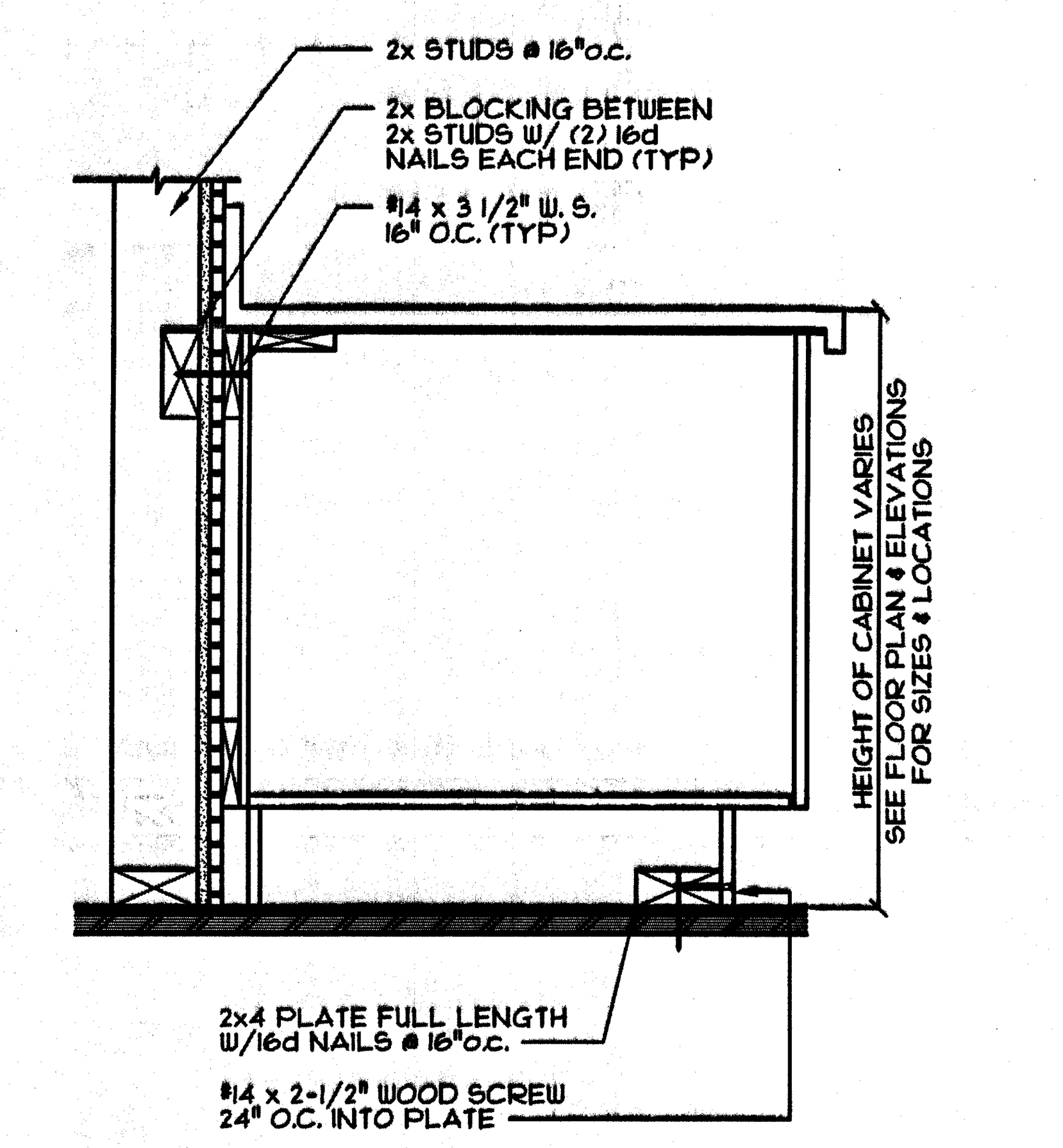
A4H

12"x40" P.C.



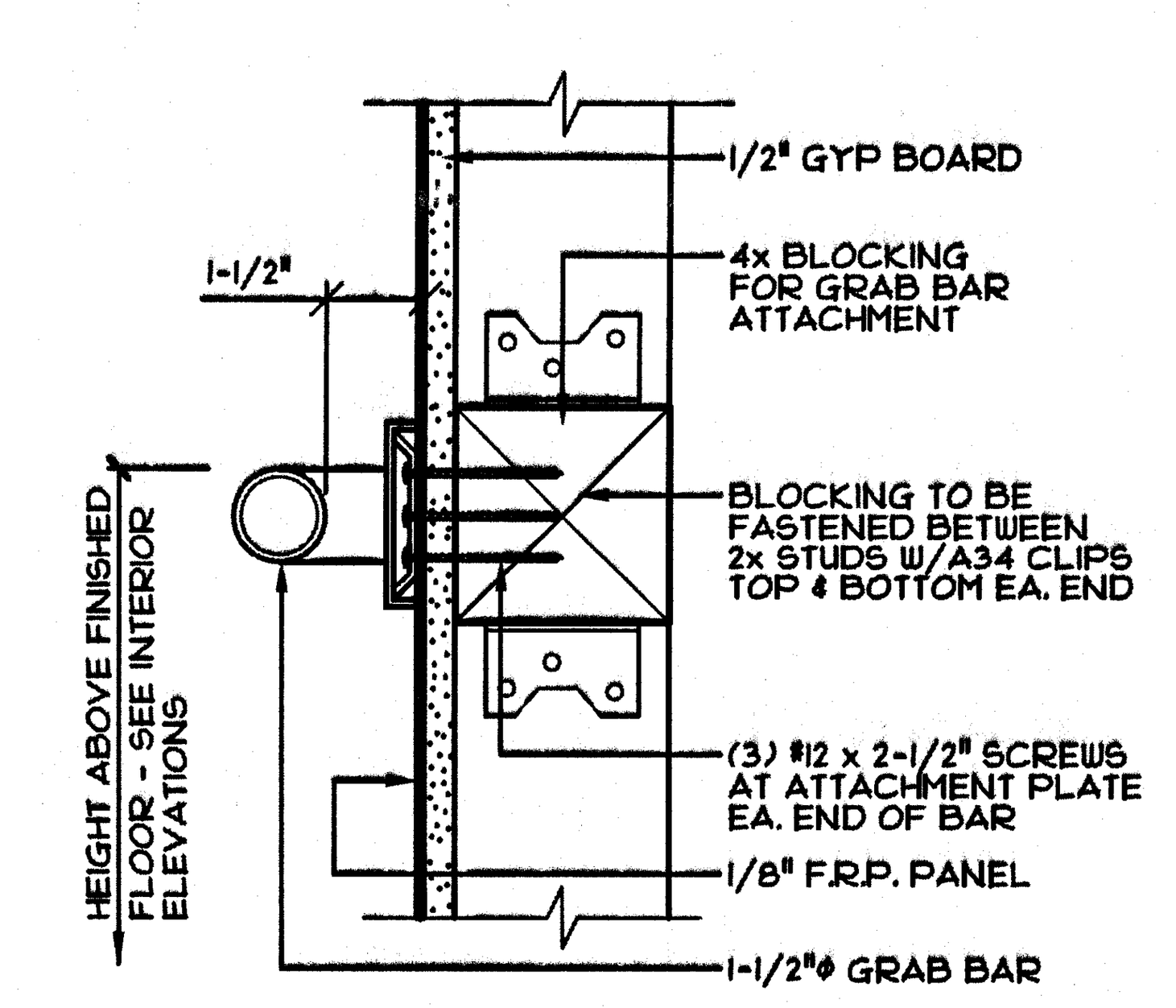
NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

1 **UPPER CABINET BLOCKING DETAIL**
SCALE: 1 1/2"=1'-0"



NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

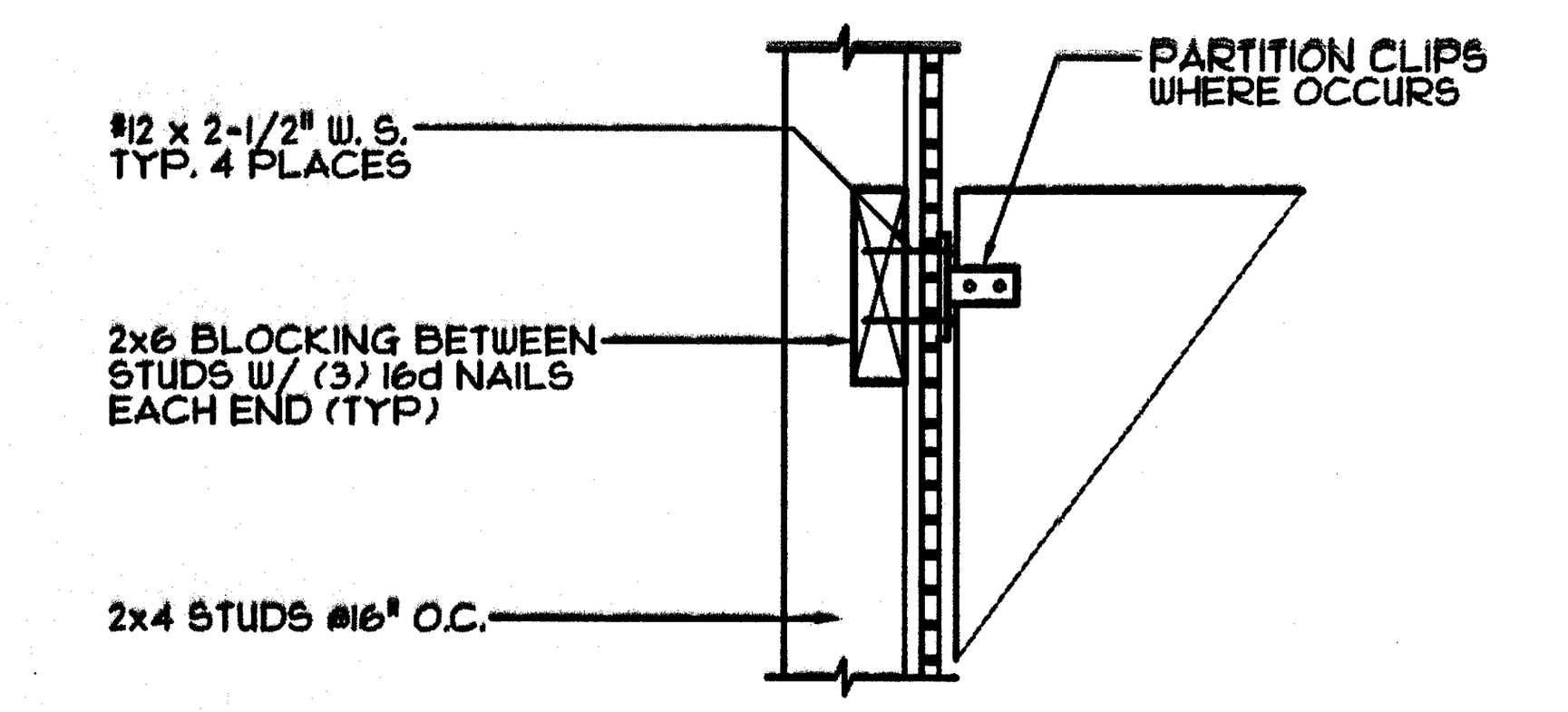
2 **BASE CABINET BLOCKING DETAIL**
SCALE: 1 1/2"=1'-0"



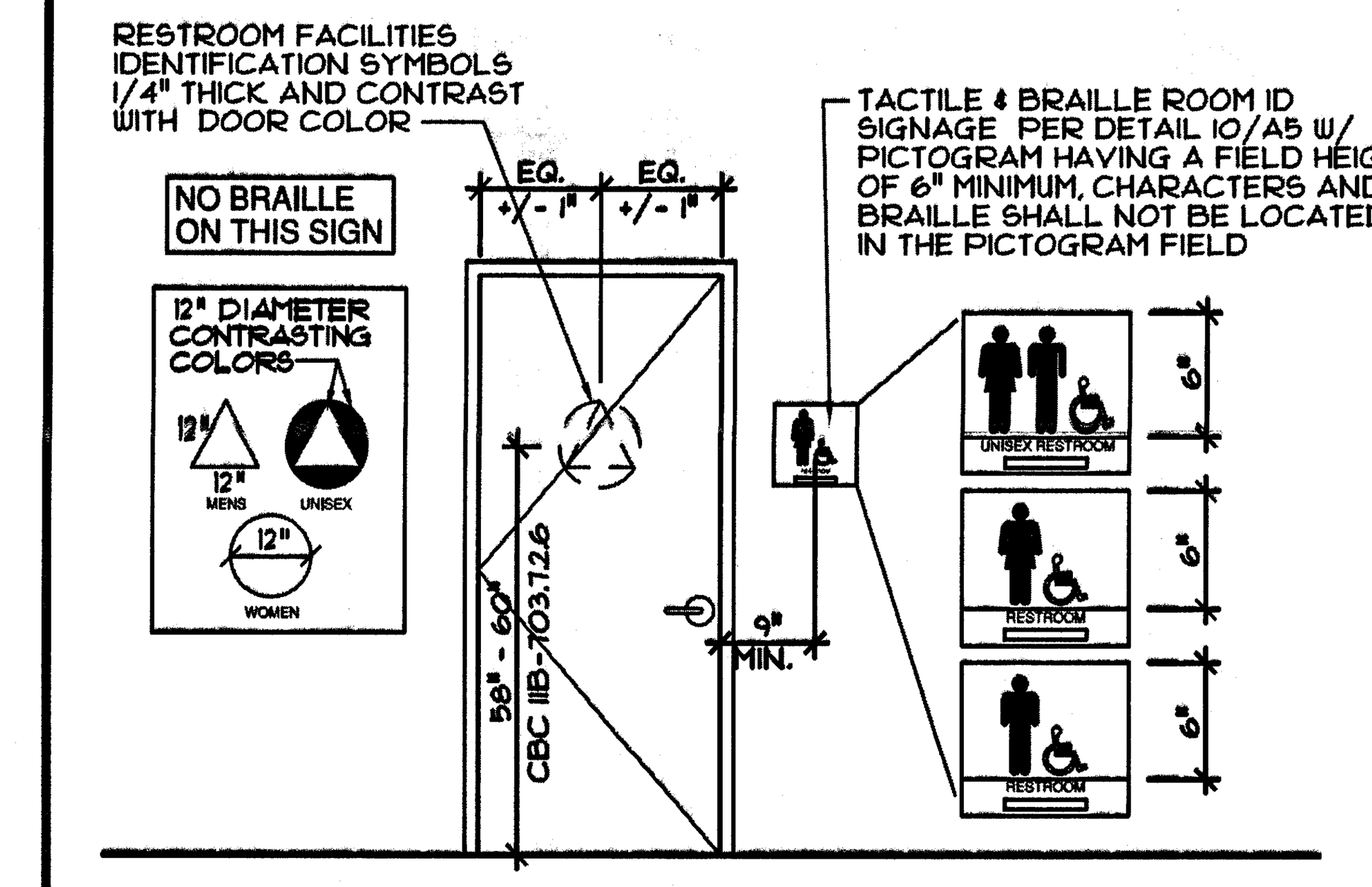
NOTE:
GRAB BAR SHALL BE CAPABLE OF SUPPORTING A VERTICAL OR HORIZONTAL 250 POUND LOAD

NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

3 **GRAB BAR BLOCKING DETAIL**
SCALE: 3"=1'-0"



4 **TOILET PARTITION BLOCKING**
SCALE: 1 1/2"=1'-0"



NOTE: EDGES AND CORNERS OF SIGNS SHALL BE ROUNDED, CHAMFERED OR EASED AND SHALL HAVE A MINIMUM RADIUS OF 1/8"

SEE 10/A5 FOR CHARACTER DEPTH, CASE, STYLE, PROPORTIONS, HEIGHT, STROKE THICKNESS, FINISH, CHARACTER SPACING, LINE SPACING, FORMAT, BRAILLE, POSITION, INSTALLATION HEIGHT ABOVE FINISHED FLOOR OR GROUND, AND LOCATION

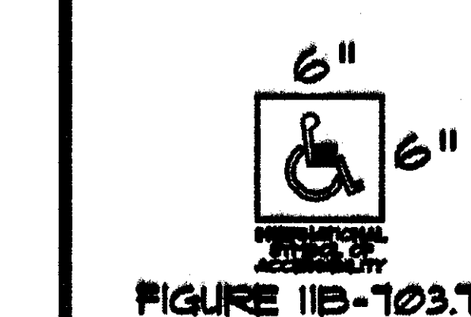
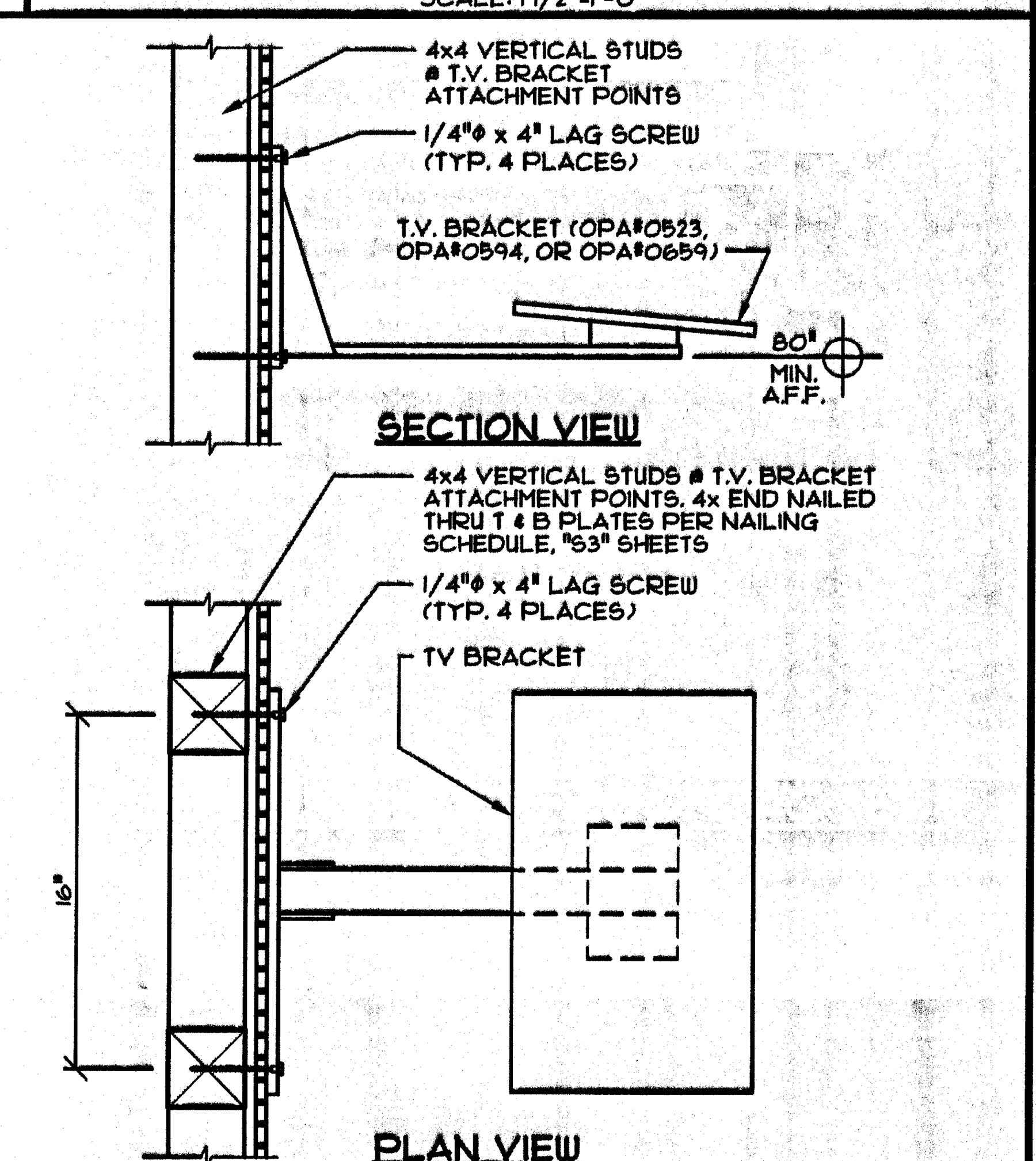


FIGURE 11B-703.7.2.1

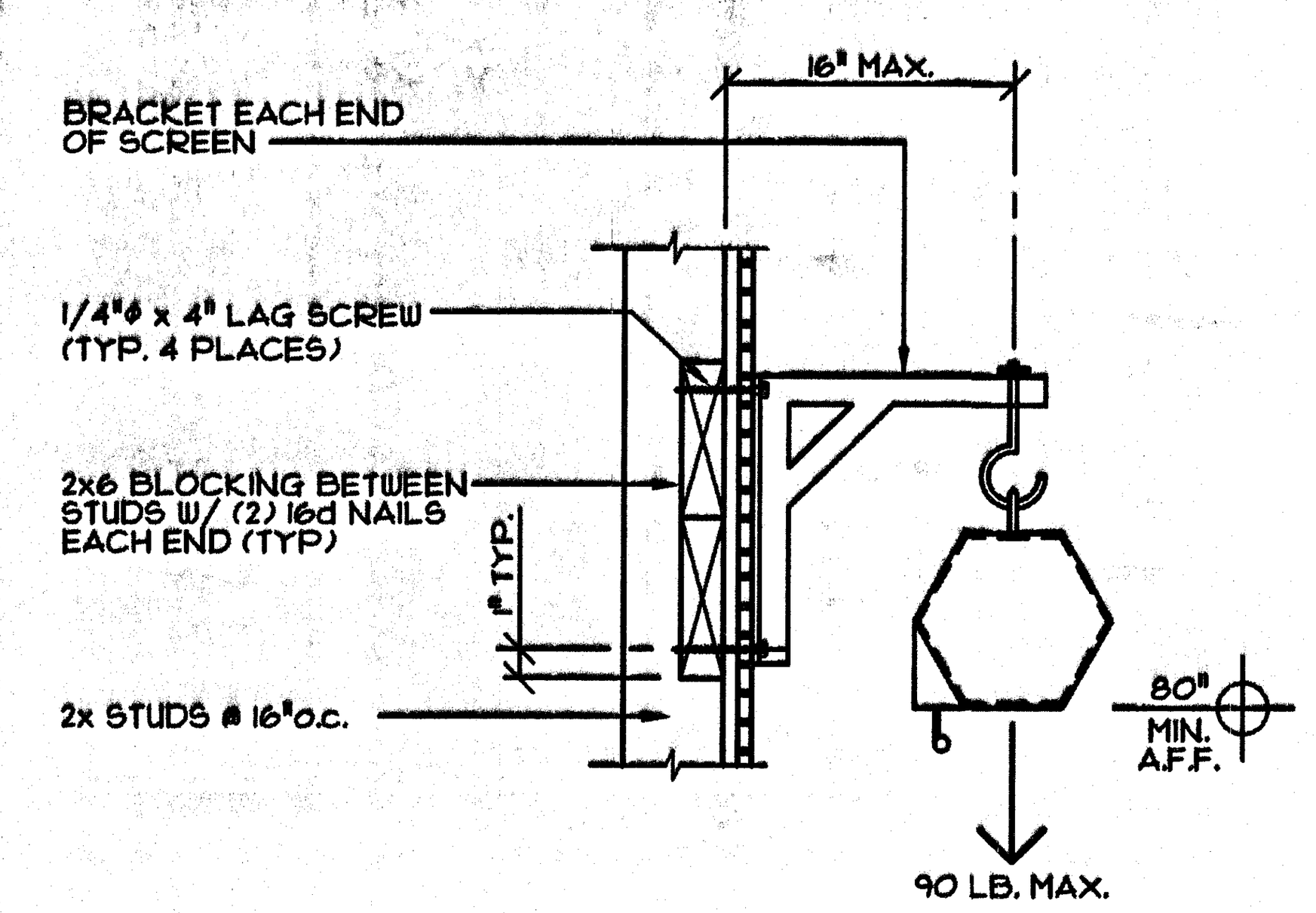
INTERNATIONAL SYMBOL OF ACCESSIBILITY:
SHALL COMPLY WITH FIGURE LLB-703.7.2.1 THE SYMBOL SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE COLOR NO. 15090 IN FEDERAL STANDARDS 595B FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE COLOR NO. 15090 IN FEDERAL STANDARDS 595B

5 **RESTROOM DOOR & ROOM IDENTIFICATION SIGNAGE**
SCALE: 3/8"=1'-0"



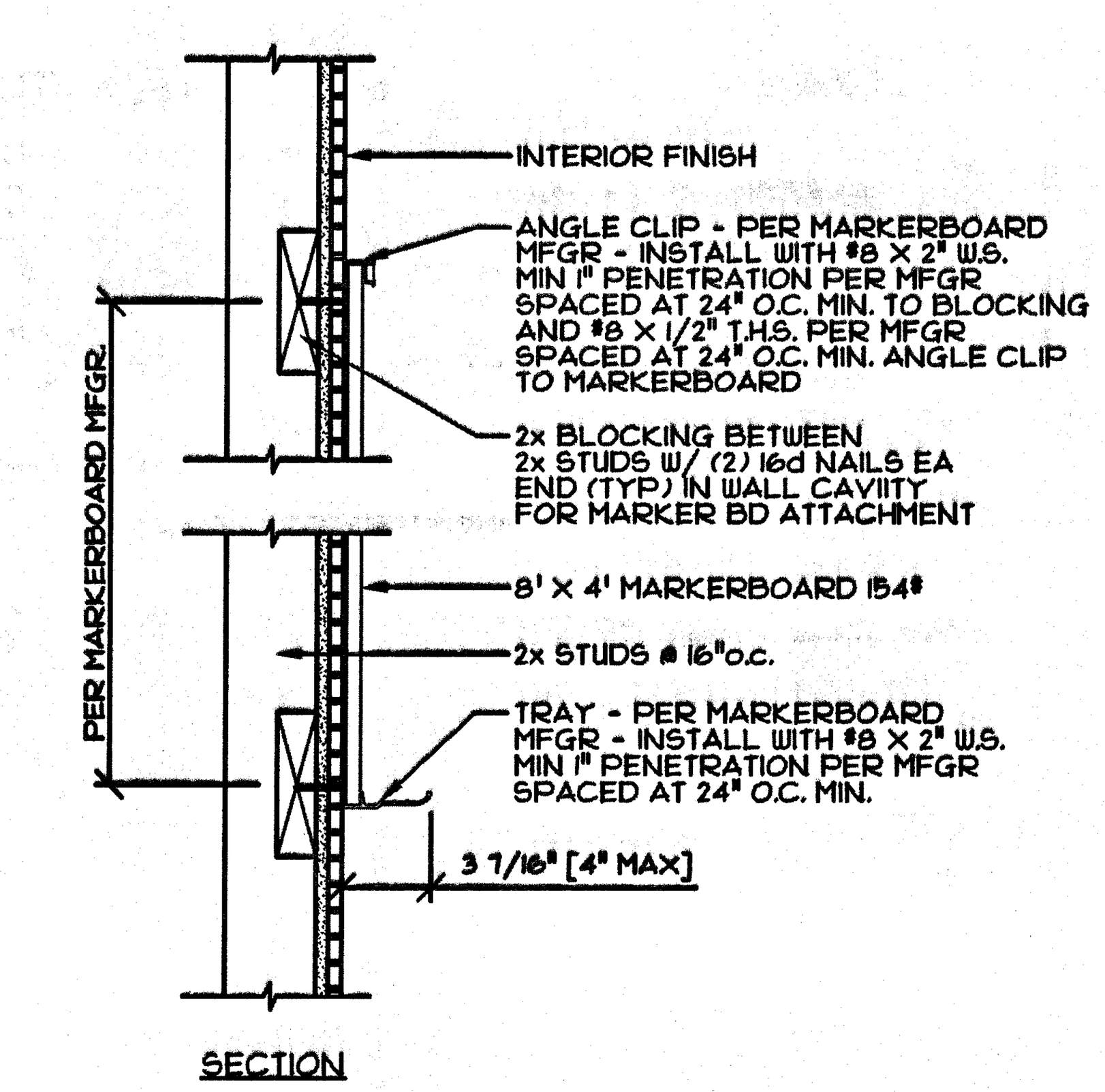
NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

6 **T.V. BRACKET BLOCKING DETAIL**
SCALE: 1 1/2"=1'-0"

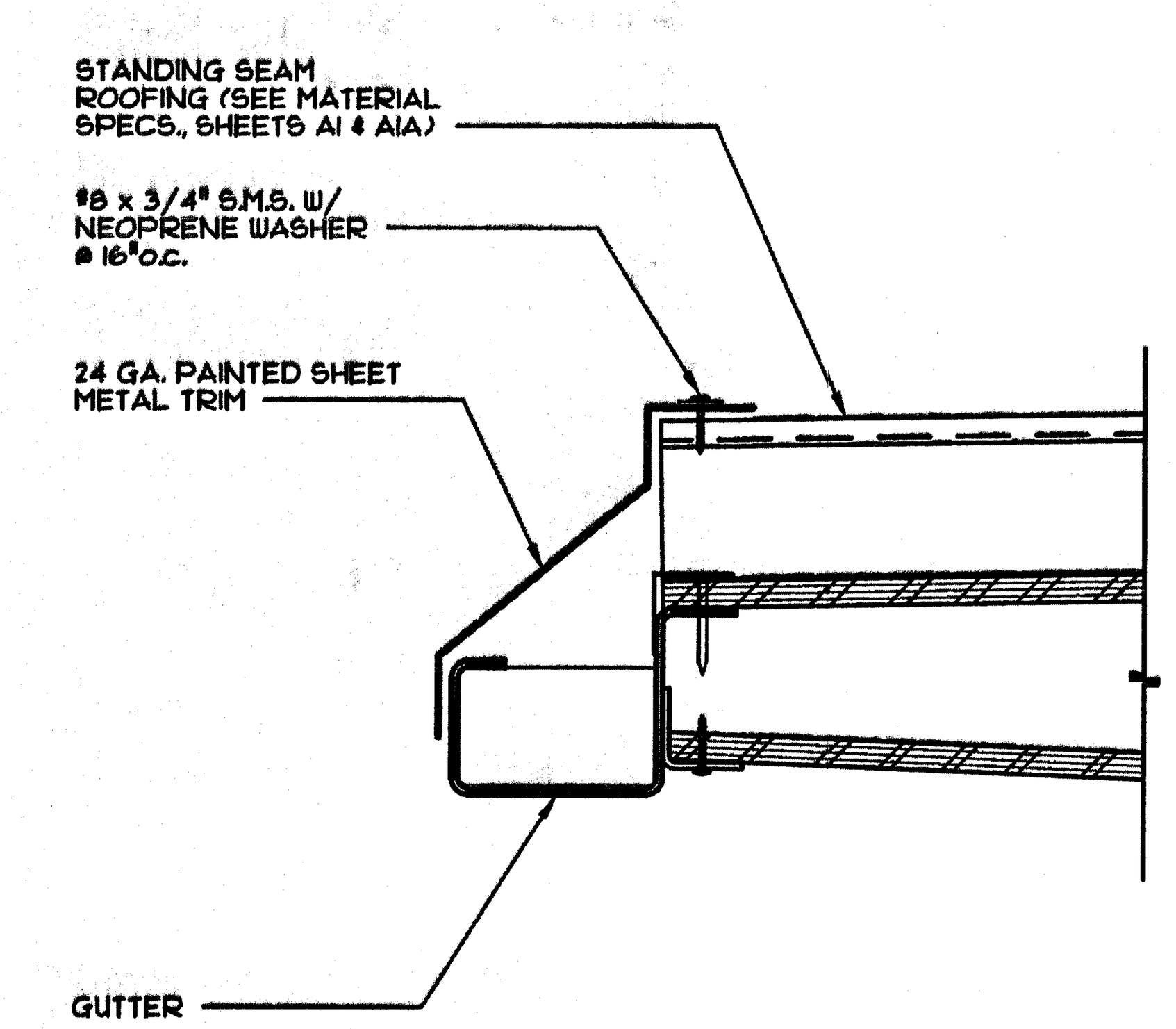


NOTE: 2x4 OR 2x6 STUDS MAY BE USED.

7 **PROJECTOR SCREEN BLOCKING**
SCALE: 1 1/2"=1'-0"

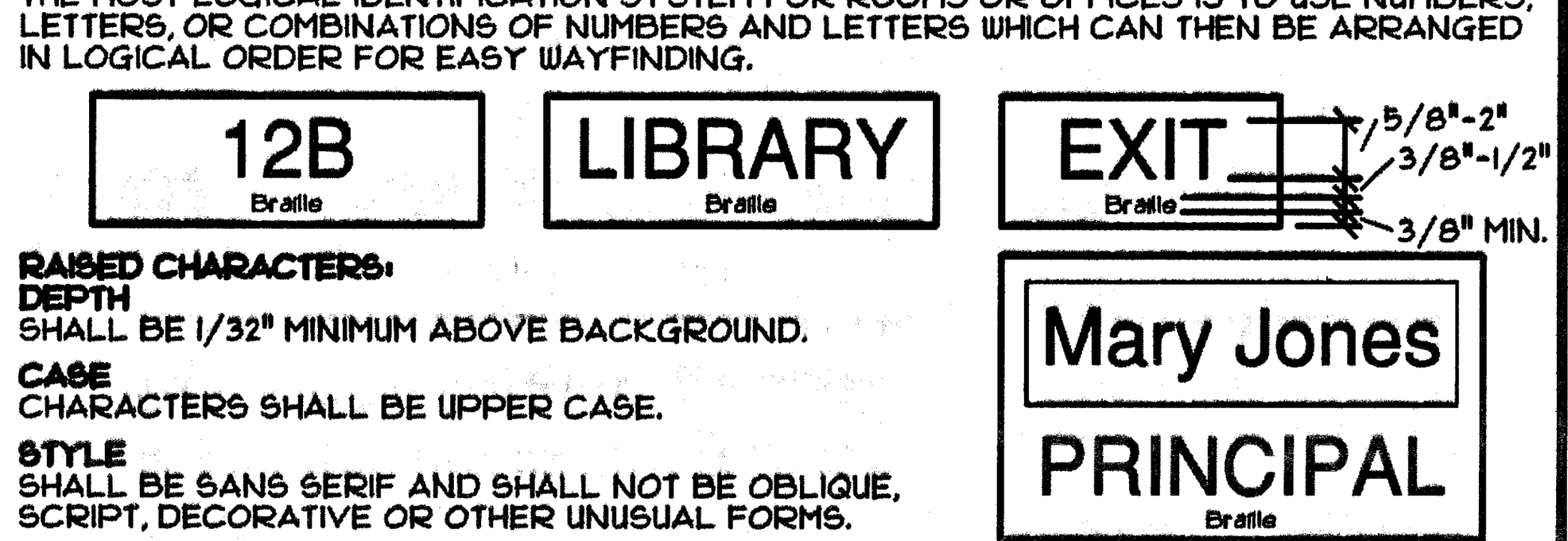


8 **MARKERBOARD BLOCKING**
SCALE: 1 1/2"=1'-0"



9 **ROOFING CONCEALMENT TRIM**
SCALE: 3"=1'-0"

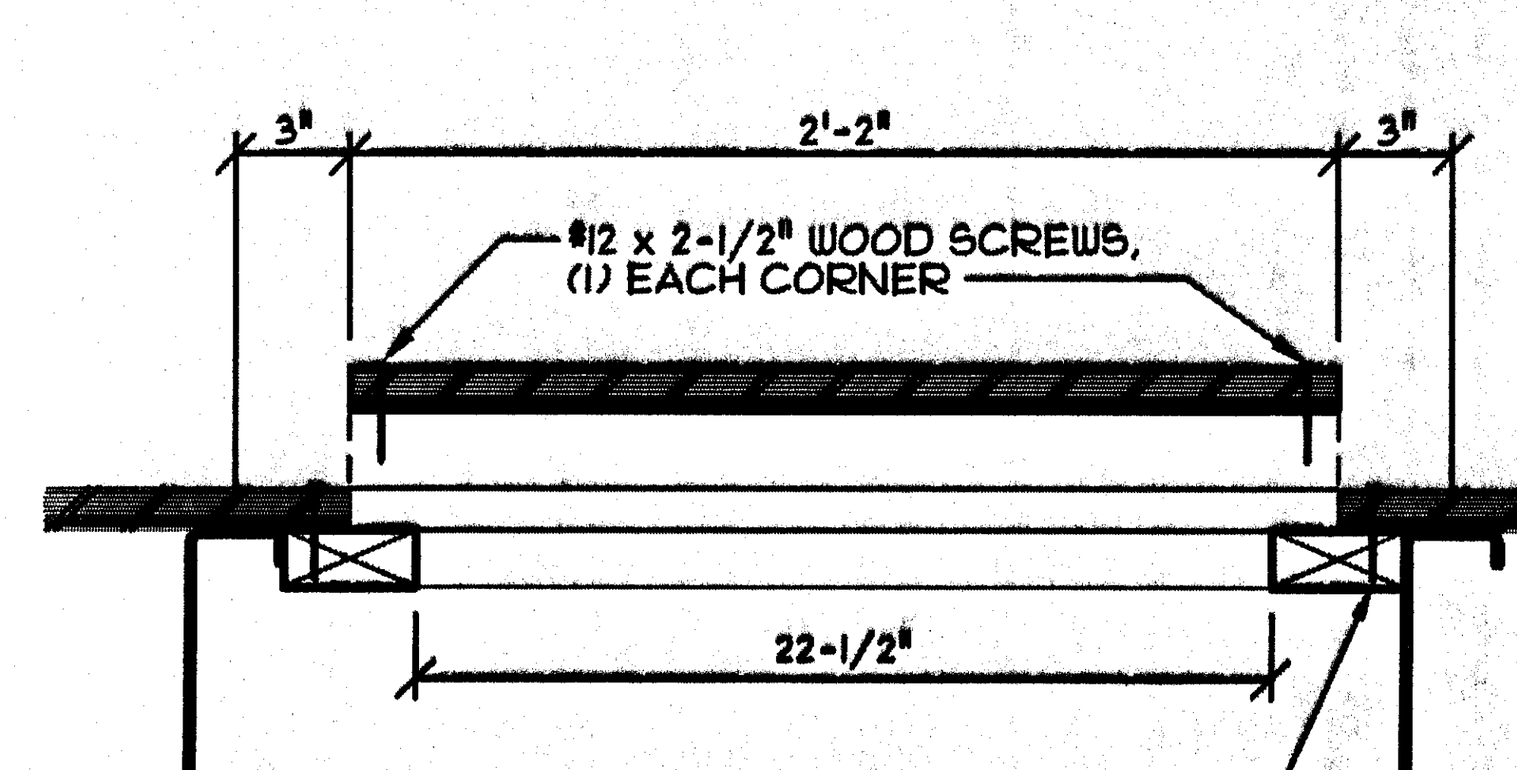
NAMES, NUMBERS, OR LETTERS ONLY
THE MOST LOGICAL IDENTIFICATION SYSTEM FOR ROOMS OR OFFICES IS TO USE NUMBERS, LETTERS, OR COMBINATIONS OF NUMBERS AND LETTERS WHICH CAN THEN BE ARRANGED IN LOGICAL ORDER FOR EASY WAYFINDING.



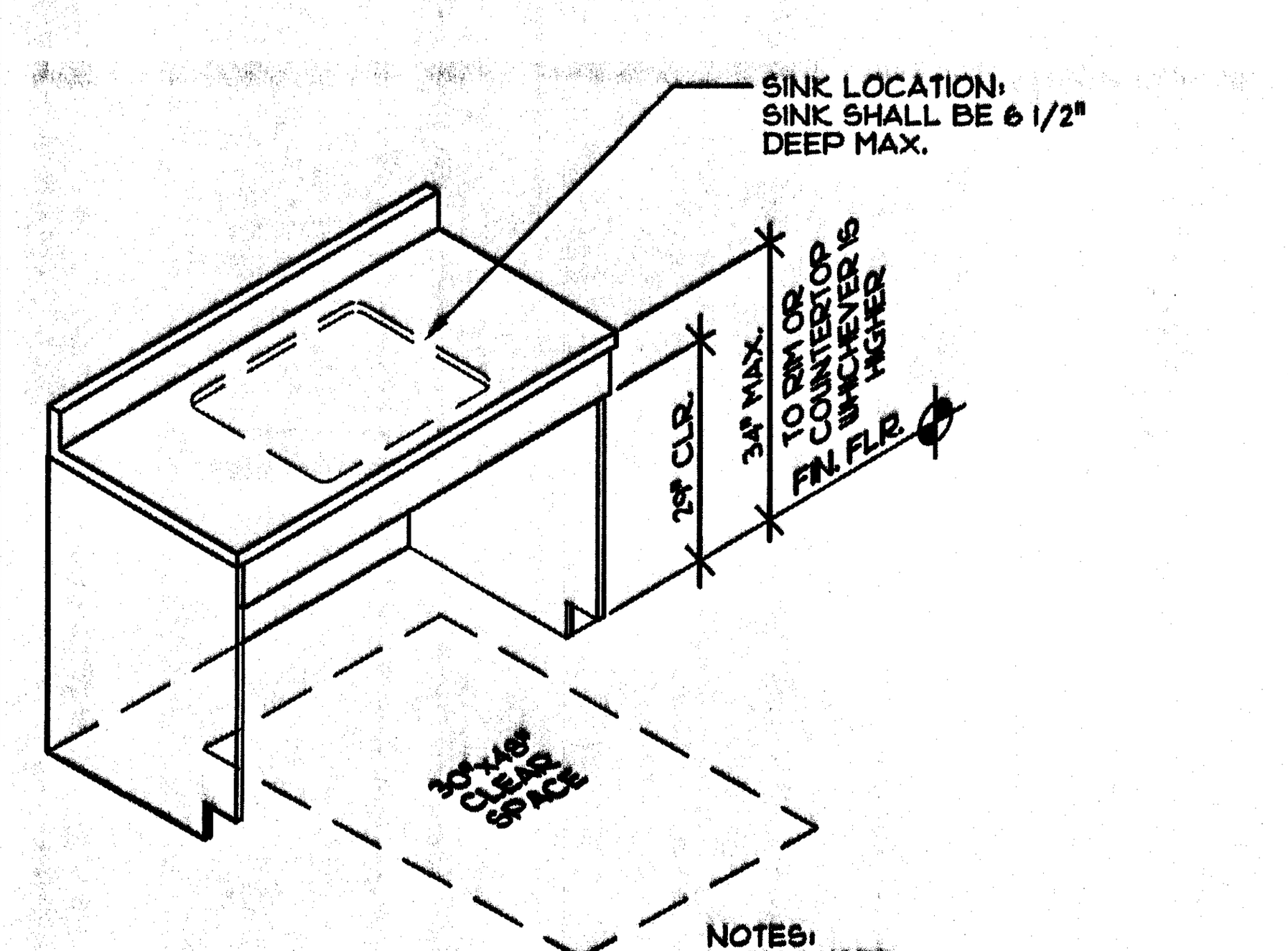
CHANGEABLE INFORMATION MAY BE INCLUDED ON A REMOVABLE INSERT

RAISED CHARACTERS:
DEPTH
SHALL BE 1/32" MINIMUM ABOVE BACKGROUND.
CASE
CHARACTERS SHALL BE UPPER CASE.
STYLE
SHALL BE SANS SERIF AND SHALL NOT BE OBLIQUE, SCRIPT, DECORATIVE OR OTHER UNUSUAL FORMS.
PROPORTIONS
WIDTH OF UPPERCASE LETTER "O" IS 60% MINIMUM AND 110% MAXIMUM OF THE HEIGHT OF UPPERCASE "I".
HEIGHT
MEASURED VERTICALLY FROM BASELINE OF THE CHARACTER SHALL BE 5/8" MINIMUM AND 2" MAXIMUM BASED ON THE UPPERCASE LETTER "I".
STROKE THICKNESS
THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15% MAXIMUM OF THE HEIGHT OF THE CHARACTER
FINISH
CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON DARK BACKGROUND OR DARK CHARACTERS ON LIGHT BACKGROUND.
CHARACTER SPACING
SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSET POINTS OF ADJACENT RAISED CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. WHERE CHARACTERS HAVE RECTANGULAR CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/8" MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM. WHERE CHARACTERS HAVE OTHER CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/16" MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE BASE OF THE CROSS SECTIONS AND 1/8" MINIMUM AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8" MINIMUM.
LINE SPACING
SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135% MINIMUM AND 170% MAX. OF THE RAISED CHARACTER HEIGHT.
FORMAT
TEXT SHALL BE HORIZONTAL
BRAILLE:
SHALL BE CONTRACTED (GRADE 2) AND DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH CBC TABLE 11B-703.3.1. THE INDICATION OF AN UPPER-CASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF A SENTENCE, PROPER NOUNS, AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS.
POSITION
SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8" MIN AND 1/2" MAX FROM ANY OTHER TACTILE CHARACTERS AND 3/8" MIN FROM RAISED BORDERS AND DECORATIVE ELEMENTS.
INSTALLATION:
HEIGHT ABOVE FINISHED FLOOR OR GROUND
CHARACTERS ON SIGNS SHALL BE LOCATED 48" MIN ABOVE THE FINISHED FLOOR OR GROUND SURFACE MEASURED FROM BASELINE OF THE LOWEST BRAILLE CELLS AND 60" MAX ABOVE THE FINISHED FLOOR OR GROUND SURFACE MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS.
LOCATION
SIGNS SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE, WHERE AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE THE PROVIDED 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 A DOUBLE DOOR, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MIN BY 18" MIN CENTERED ON THE TACTILE CHARACTERS IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.
NOTE
ROOM IDENTIFICATION SIGNAGE AND INTERNATIONAL SYMBOLS OF ACCESSIBILITY SIGNAGE SHALL BE PROVIDED BY SCHOOL DISTRICT / OWNER AT SITE. SIGNAGE SHALL BE INSTALLED AT LOCATIONS REQUIRED BY CODE USING THE ABOVE GUIDELINES.

10 **TYP. ROOM IDENTIFICATION SIGNAGE**

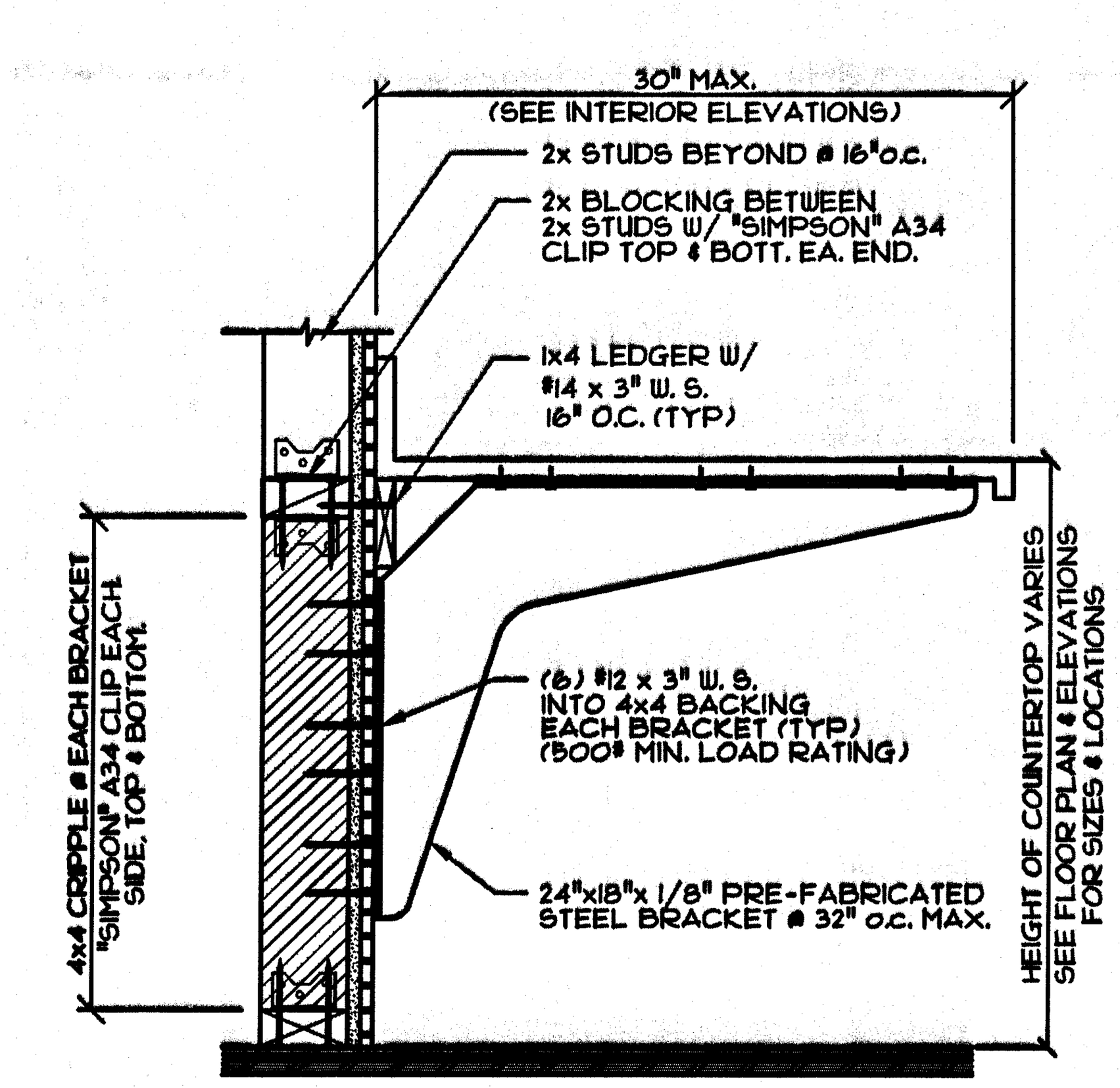


11 **INTERIOR UNDERFLOOR ACCESS**
SCALE: 1 1/2"=1'-0"



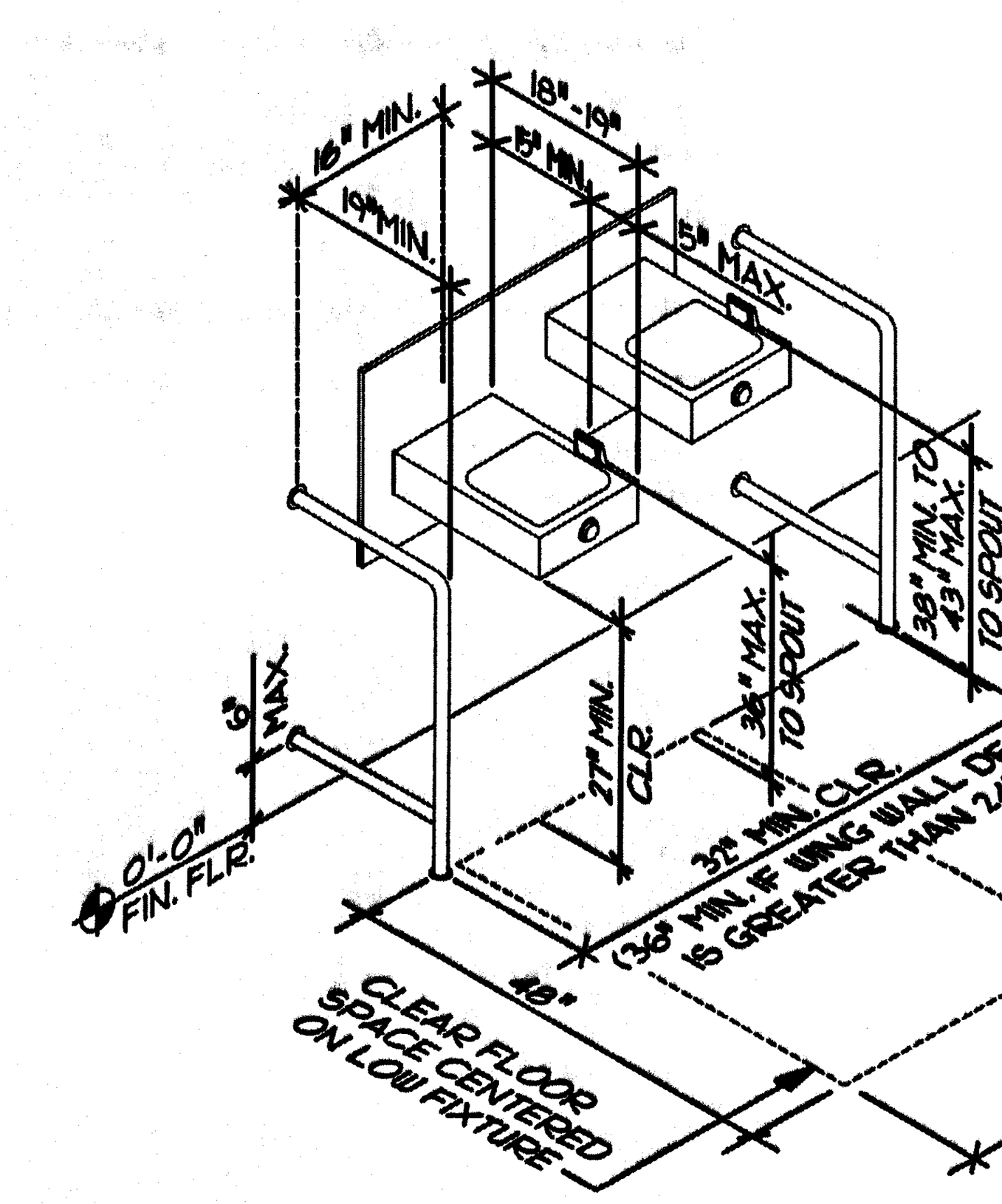
NOTES:
1. NOT USED.
2. CABINET HAS NO BASE NOR DOORS TO ALLOW FOR WHEELCHAIR ACCESS.
3. EXTEND FLOORING UNDER CABINET TO WALL
4. NO SHARP OR ABRASIVE SURFACES UNDER LAVATORY OR COUNTER.

12 **ACCESSIBLE CASEWORK @ SINK**
SCALE: 1/2"=1'-0"



NOTE:
NO SHARP OR ABRASIVE SURFACES UNDER SINKS/LAVATORIES OR COUNTERS.

13 **COUNTERTOP SUPPORT BRACKET**
SCALE: 1 1/2"=1'-0"



14 **DRINKING FOUNTAIN WING WALLS**
SCALE: NONE

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JUN 0 3 2015

REGISTERED PROFESSIONAL ENGINEER
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No. S2030
EXP. 9/30/15
STRUCTURAL
STATE OF CALIFORNIA

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COMPARISON PC SET

MISCELLANEOUS DETAILS

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DRAWN BY:
DATE:

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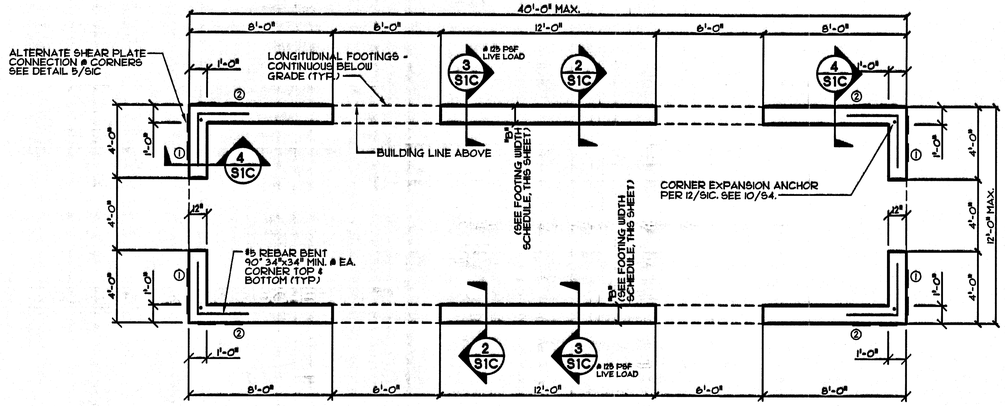
02-113910
AC TM FLS [signature] SS [signature]
DATE 6-9-15
2013 – 12x40

A5

12'x40' P.C.

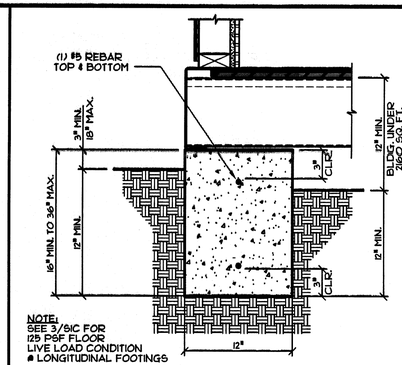


ALTERNATE SHEAR PLATES:
AT MODULE UNIT CORNERS, WHERE EXPANSION ANCHOR CANNOT BE INSTALLED, ALTERNATE SHEAR PLATES MAY BE USED IN LIEU OF THE OMITTED EXPANSION ANCHOR AS INDICATED ON PLAN.

WHEN ALTERNATE SHEAR PLATES ARE USED, THE SAME SHEAR PLATE CONNECTION MUST ALSO BE INSTALLED, AND EXPANSION ANCHOR OMITTED, AT THE OPPOSITE END OF FOUNDATION ALONG THE SAME MODULE LINE / SIDEWALL LINE.

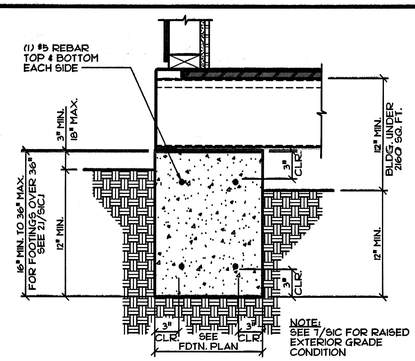
NOTE:
① ADDITIONAL SHEAR PLATE REQUIRED FOR 65# & 125# FLOOR LIVE LOAD CONDITIONS
② ADDITIONAL SHEAR PLATE REQUIRED FOR 125# FLOOR LIVE LOAD CONDITIONS.

1 CONCRETE FOUNDATION PLAN
SCALE: 1/4"=1'-0"



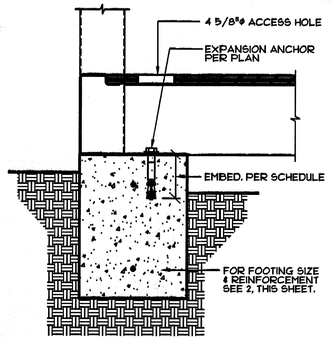
NOTE:
SEE 3/S1C FOR 125 PSF FLOOR LIVE LOAD CONDITION & LONGITUDINAL FOOTINGS

2 PERIMETER FOOTING - 50 & 65 PSF
SCALE: 1-1/2"=1'-0"

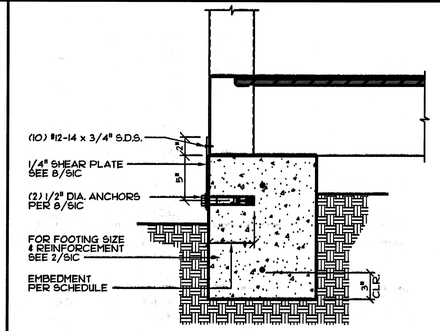


NOTE:
SEE T/S1C FOR RAISED EXTERIOR GRADE CONDITION

3 PERIMETER FOOTING - 125 PSF



4 CORNER ANCHORING DETAIL
SCALE: 1-1/2"=1'-0"

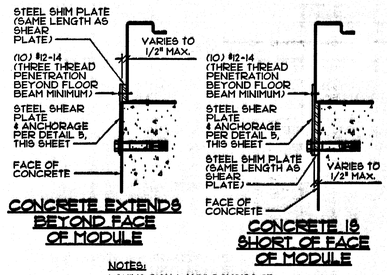


5 ALTERNATE SHEAR PLATE DETAIL
SCALE: 1-1/2"=1'-0"

LOW SEISMIC					
EXPANSION ANCHOR EMBEDMENT AND PROOF LOAD SCHEDULE					
ANCHOR INFORMATION			PROOF TEST		MAXIMUM
ANCHOR TYPE	SIZE	MIN. EMBED.	INSTALLATION TORQUE (FT#)	DIRECT TENSION see note #1	FLOOR LIVE LOAD
HILTI KWIK BOLT-TZ	1/2"	4"	40	5610	50 & 65 PSF
	5/8"	4 3/4"	60	9302	125 PSF
SIMPSON STRONG BOLT 2	1/2"	4 1/8"	60	5345	50 & 65 PSF
	5/8"	5 3/8"	90	9180	125 PSF

NOTES:
1. TENSION TEST = 2x ALLOWABLE TENSION LOAD PER DSA IR 19-1.
2. NORMAL WEIGHT CONCRETE WITH f'_c= 3000 psi TO COMPLY WITH 1705A.3.3 FOR MATERIAL TEST WAIVER.
3. THE VALUES PRESENTED IN THIS TABLE ARE FOR CARBON STEEL ANCHORS.

12 EXPANSION ANCHOR SCHEDULE



NOTES:
1. SHIMS SHALL NOT CONSIST OF MORE THAN TWO PIECES
2. IF CONCRETE IS OUT OF DIMENSION BY MORE THAN 1/2" CONTACT THE STRUCTURAL ENGINEER.

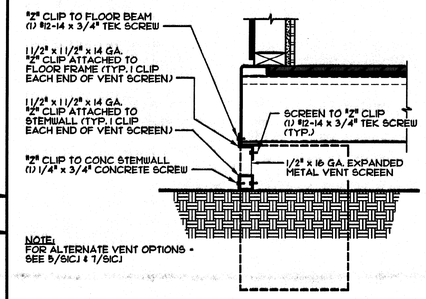
5A ALTERNATE SHEAR PLATE SHIMS
SCALE: 1-1/2"=1'-0"

ALLOWABLE BEARING (psf)	MODULE CONFIGURATION	FOOTING WIDTH "B" (inches)	
		CLASSROOM (50 psf & 50 + 15 psf) ☐	125psf ☐
1500	STANDARD - NO STUCCO	12	16
	STANDARD - 1 HOUR, NO STUCCO	12	16
	STD - STUCCO W/ AND W/O 1 HOUR	12	16

9 "B" FOOTING WIDTH SCHEDULE

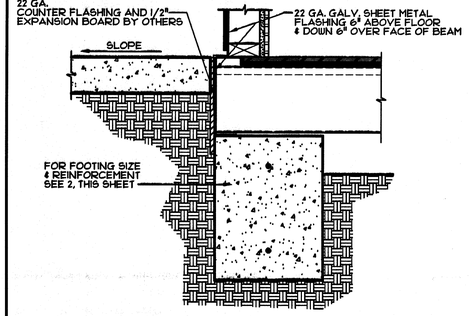
NOTES:
1. ALLOWABLE SOIL BEARING PRESSURE IS 1,500 P.S.F.
2. CONCRETE FOR FOOTINGS SHALL HAVE A MINIMUM STRENGTH F'c= 3,000 P.S.I., PER 1905A.1.1 MADE WITH 1" MAX ASTM C-33 AGGREGATES PER ACI 318-11 SECTION 3.3 AND IN ACCORDANCE WITH CBC SECTION 1903A.6
3. MIX DESIGN SHALL BE PER ACI 318-11 SECTION 5.2
4. REINFORCING BARS SHALL BE A615, GRADE 60 MIN.
5. VENTILATION TO MEET REQUIREMENTS PER IR 16-1. PROVIDE MINIMUM 1 SQ. FT. OF VENT SPACE PER 150 SQ. FT. (PROVIDE 2" MINIMUM CLEARANCE)
6. ANCHORS TO BE EITHER:
   A. HILTI KWIK BOLT TZ IN ACCORDANCE WITH ICC ESR-1917.
   B. "SIMPSON" STRONG BOLT 2 ANCHOR IN ACCORDANCE WITH ICC ESR-3037
   C. ANCHORS WITH EXTERIOR EXPOSURE TO BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.
7. TESTING OF REINFORCING BARS USED IN SINGLE STORY BUILDINGS MAY BE WAIVED PROVIDED CERTIFIED MILL TEST REPORTS ARE PROVIDED FOR EACH SHIPMENT OF SUCH REINFORCMENT (CBC 1913A.2).
8. CONCRETE MIX SHALL HAVE A MAXIMUM 0.50 WATER CEMENT RATIO.
9. ADD WATER REDUCING ADMIXTURE IN COMPLIANCE WITH ASTM C494 TYPE A.

11 GENERAL NOTES

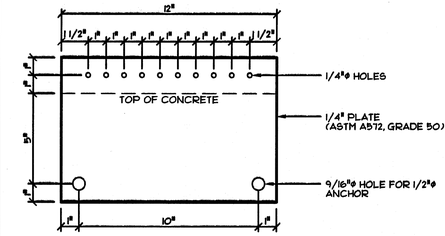


NOTE:
FOR ALTERNATE VENT OPTIONS - SEE 5/S1C.1 & 7/S1C.1

6 VENT SCREEN DETAIL
SCALE: 1-1/2"=1'-0"



7 PERIMETER FLASHING DETAIL
SCALE: 1-1/2"=1'-0"



SHEARPLATE EXPANSION ANCHOR EMBEDMENT AND PROOF LOAD SCHEDULE				
ANCHOR INFORMATION			PROOF TEST	
ANCHOR TYPE	SIZE	MIN. EMBED.	INSTALLATION TORQUE (FT#)	DIRECT TENSION see note #1
HILTI KWIK BOLT-TZ	1/2"	4"	40	5859
SIMPSON STRONG BOLT 2	1/2"	4 1/8"	60	4572

NOTES:
1. TENSION TEST = 2x ALLOWABLE TENSION LOAD PER DSA IR 19-1.
2. NORMAL WEIGHT CONCRETE WITH f'_c= 3000 psi TO COMPLY WITH 1705A.3.3 FOR MATERIAL TEST WAIVER.
3. THE VALUES PRESENTED IN THIS TABLE ARE FOR STAINLESS STEEL ANCHORS.

8 ALTERNATE SHEAR PLATE
SCALE: 3"=1'-0"

FOR USE:
1) 20 PSF ROOF LIVE LOAD W/ 50, 65, & 125psf FLOOR LL.
2) FOR ALLOWABLE EXTERIOR FINISHES, SEE "OPTION COMBINATION TABLE" SHEET A0.

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER — No. S2030 EXP. 9/30/15 — STRUCTURAL — STATE OF CALIFORNIA

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COMPARISON PC SET

CONCRETE FOUNDATION PLAN, FOOTING DETAILS & NOTES (WOOD FLOOR)

REV / DATE:	BY:

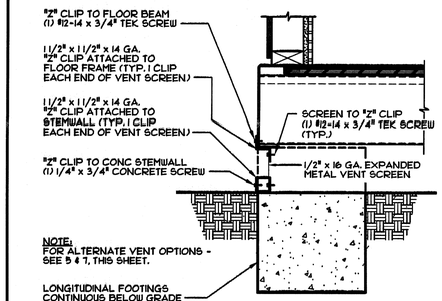
JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. — FLS. — SS
DATE 6-9-15
2013 - 15:40

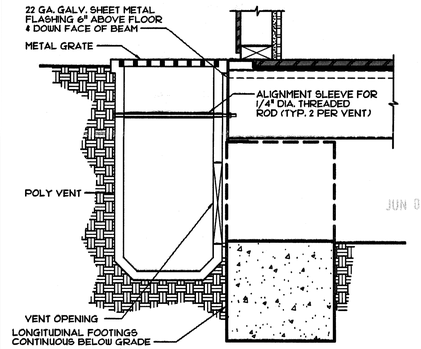
LOW SEISMIC

S1C

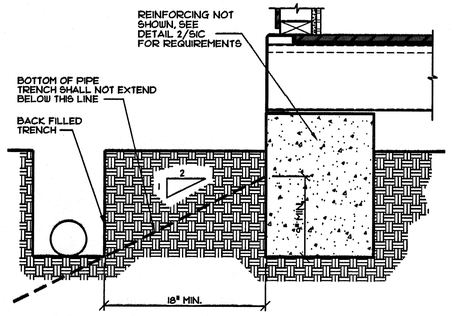
12'x40' P.C.



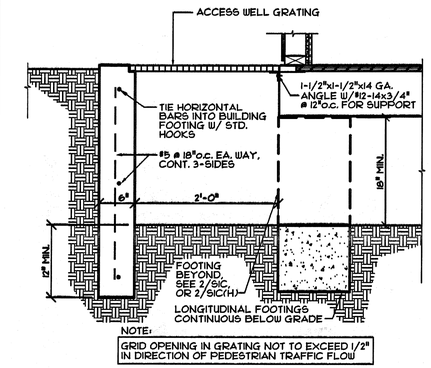
4 VENT SCREEN DETAIL
SCALE: 1-1/2"=1'-0"



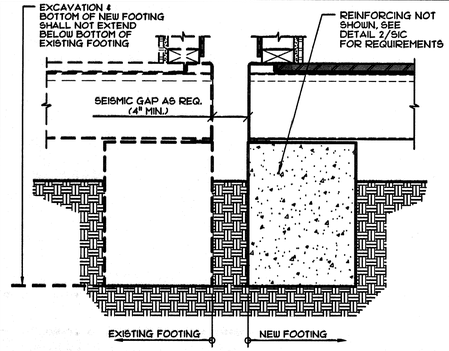
5 POLYVENT DETAIL
SCALE: 1 1/2"=1'-0"



6 TRENCH PROXIMITY TO FOOTINGS
SCALE: 1 1/2"=1'-0"



7 ACCESS / VENT WELL
SCALE: 1"=1'-0"

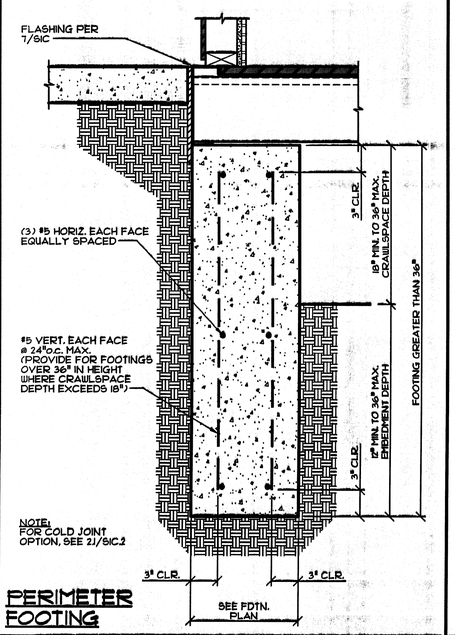


8 PROXIMITY OF NEW TO EXIST. FOOTING
SCALE: 1 1/2"=1'-0"

9

FOR USE:
1) 20 PSF ROOF LIVE LOAD W/ 50, 65, & 125psf FLOOR LIVE LOAD.
2) ALL ROOF OPTIONS.

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.



PERIMETER FOOTING

2.1 FOOTING GREATER THAN 36" HT.
SCALE: 1 1/2"=1'-0"

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COMPARISON PC SET

ALTERNATE FOOTING DETAILS

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JOB No.:
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DATE:

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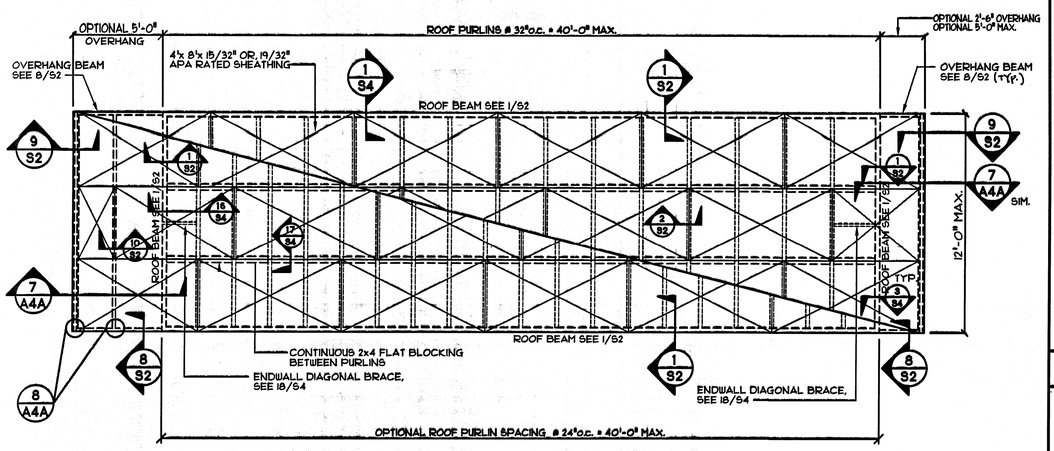
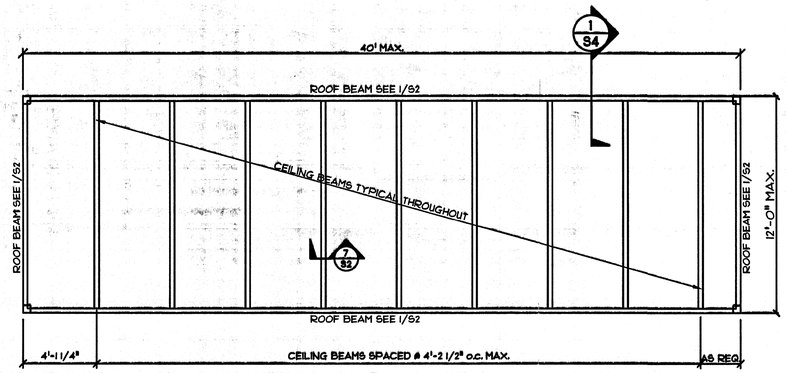
02-113910
AC. TM FLS SS
DATE 6-9-15

S1C.1

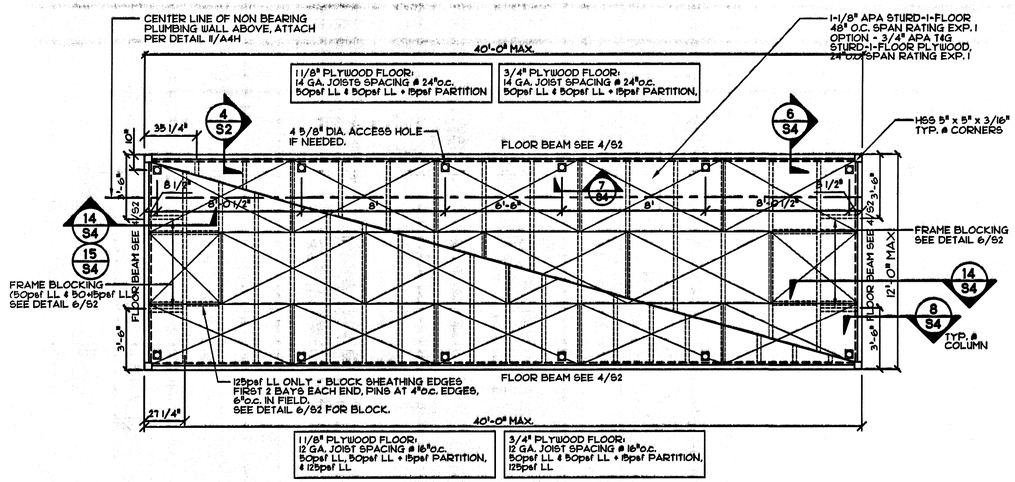
12"x40" P.C.



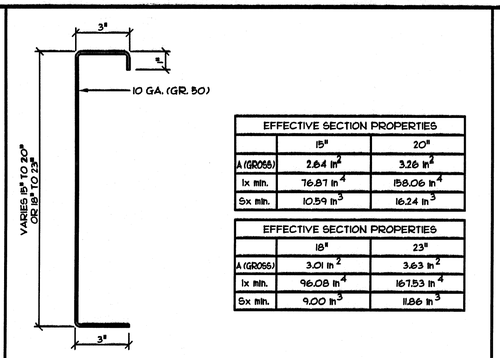
13 ROOF FRAMING PLAN
SCALE: 1/4"=1'-0"



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



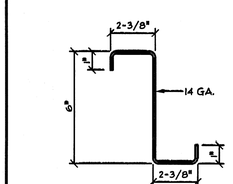
15 FLOOR FRAMING PLAN
SCALE: 1/4"=1'-0"



EFFECTIVE SECTION PROPERTIES		
	15"	20"
A (GROSS)	2.84 in²	3.26 in²
Ix min.	76.87 in⁴	158.06 in⁴
Sx min.	10.59 in³	16.24 in³

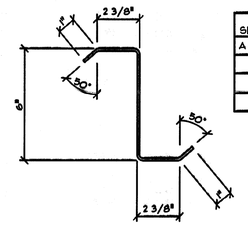
EFFECTIVE SECTION PROPERTIES		
	18"	23"
A (GROSS)	3.01 in²	3.63 in²
Ix min.	96.08 in⁴	167.53 in⁴
Sx min.	9.00 in³	11.86 in³

1 ROOF BEAM SECTION
SCALE: 3"=1'-0"



EFFECTIVE SECTION PROPERTIES	
A (GROSS)	0.87 in²
Ix min.	4.79 in⁴
Sx min.	1.60 in³

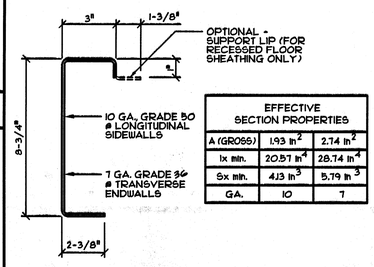
2 ROOF PURLIN SECT.
SCALE: 3"=1'-0"



EFFECTIVE SECTION PROPERTIES	
A (GROSS)	0.878 in²
Ix min.	5.06 in⁴
Sx min.	1.687 in³
GA.	14

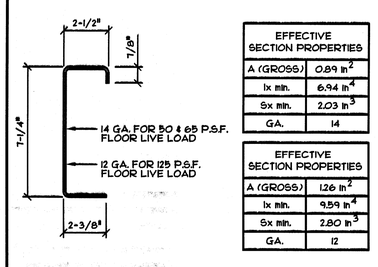
FOR USE WITH:
ROOFS - ALL CONDITIONS
FLOORS - 24"o.c. FOR CLASSROOM OCCUPANCIES ONLY, 19.2"o.c. FOR ALL OTHER OCCUPANCIES

3 ALT. ROOF PURLIN / FLOOR JOIST
SCALE: 3"=1'-0"



EFFECTIVE SECTION PROPERTIES		
A (GROSS)	1.93 in²	2.74 in²
Ix min.	20.51 in⁴	28.74 in⁴
Sx min.	4.13 in³	5.79 in³
GA.	10	7

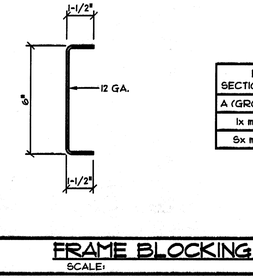
4 FLOOR BEAM SECTION
SCALE: 3"=1'-0"



EFFECTIVE SECTION PROPERTIES	
A (GROSS)	0.89 in²
Ix min.	6.94 in⁴
Sx min.	2.03 in³
GA.	14

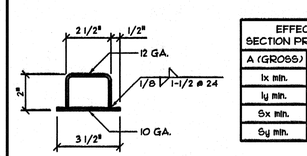
EFFECTIVE SECTION PROPERTIES	
A (GROSS)	1.26 in²
Ix min.	9.59 in⁴
Sx min.	2.80 in³
GA.	12

5 FLOOR JOIST SECTION
SCALE: 3"=1'-0"

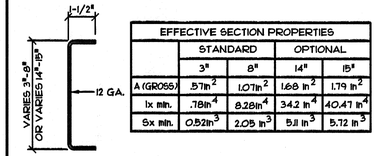


EFFECTIVE SECTION PROPERTIES	
A (GROSS)	.89in²
Ix min.	1.58in⁴
Sx min.	.79in³

6 FRAME BLOCKING SECTION
SCALE: 3"=1'-0"



EFFECTIVE SECTION PROPERTIES	
A (GROSS)	1.05 in²
Ix min.	0.86 in⁴
Iy min.	1.08 in⁴
Sx min.	0.829 in³
Sy min.	0.824 in³



EFFECTIVE SECTION PROPERTIES	STANDARD		OPTIONAL	
	3"	8"	14"	18"
A (GROSS)	.571in²	1.07in²	1.68 in²	1.79 in²
Ix min.	.718in⁴	8.28in⁴	34.2 in⁴	40.47 in⁴
Sx min.	0.521in³	2.05 in³	5.11 in³	5.72 in³

1. ALL LIGHT GAGE STEEL SHALL BE ASTM A101 GRADE 36. UNLESS OTHERWISE NOTED
2. STRUCTURAL STEEL TUBING SHALL BE ASTM A500 GRADE B Fy=46
3. ALL STRUCTURAL STEEL PLATES, ANGLES, CHANNELS, BARS & MISC. SHAPES SHALL CONFORM TO ASTM A36, UNLESS OTHERWISE NOTED.
4. ALL MACHINE BOLTS SHALL BE ASTM A307.
5. WELDING SHALL BE DONE PER AWS D 1.1 - D6.3.
6. WELDING INSPECTION TO BE PER C.B.C. SECTION 1705A.2.2.5
7. SEE TESTS AND INSPECTIONS REPORT SHEET A0 FOR REQUIREMENTS.
8. LIGHT GAGE METAL & FRAMING THICKNESSES

GAGE	DESIGN THICKNESS	MIN. DELIVERED THICKNESS
7 GA. STEEL	0.1793"	0.170"
10 GA. STEEL	0.1240"	0.1178"
12 GA. STEEL	0.1017"	0.0966"
14 GA. STEEL	0.0713"	0.0677"

R = 3/16" MAX.
TYPICAL CORNER RADIUS

9. MINIMUM STEEL THICKNESS SHALL NOT BE LESS THAN 95% OF THE DESIGN THICKNESS PER AISI - GENERAL AND AISI - NAS.

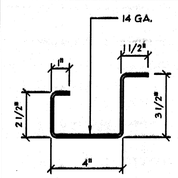
STEEL SPECIFICATION

1. ALL STRUCTURAL PLYWOOD SHALL BE MANUFACTURED TO PRODUCT STANDARD DOC PS-1 AND INSPECTED AND GRADE MARKED AT THE MILL BY AN APPROVED QUALITY CONTROL AGENCY SUCH AS APA OR TECO.
2. ROOF SHEATHING SHALL BE 4'x 8'x 15/32" GRADE MARKED 32/16 SPAN INDEX, EXP. 1 OR 19/32" GRADE MARKED 40/20 SPAN INDEX, EXP.1
3. FLOOR SHEATHING SHALL BE 4'x 8'x 1-1/8" T & G APA OR TECO RATED UNDERLAYMENT GRADE STURD-I-FLOOR OR EQUAL, SPAN RATING = 48"
   OR
   4'x 8'x 3/4" T & G APA OR TECO RATED UNDERLAYMENT GRADE STURD-I-FLOOR OR EQUAL, SPAN RATING = 24"
4. WALL SHEATHING SHALL BE 3/8" HARD BOARD SIDING APA EXTERIOR TYPE 303 GROUP II M.D.O., EXTERIOR GROUP II, OR 1/2" APA RATED CDX PLYWOOD.
5. SEE FASTENER SCHEDULE, SHEET "S3.FA".

SHEATHING / PLYWOOD SPECIFICATION

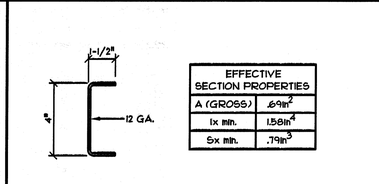
DIVISION OF THE STATE ARCHITECT

7 CEILING BEAM SECTION
SCALE: 3"=1'-0"



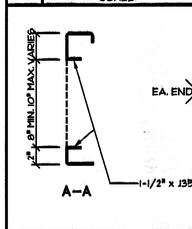
EFFECTIVE SECTION PROPERTIES	
A (GROSS)	0.85 in²
Ix min.	1.26 in⁴
Sx min.	0.97 in³

8 OVERHANG BEAM
SCALE: 3"=1'-0"

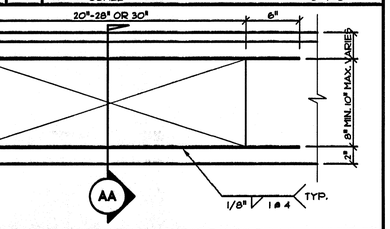


EFFECTIVE SECTION PROPERTIES	
A (GROSS)	.69in²
Ix min.	1.58in⁴
Sx min.	.79in³

9 GUTTER BEAM SECTION
SCALE: 3"=1'-0"



10 INTERMEDIATE CHANNELS
SCALE: 3"=1'-0"



11 HVAC PENETRATION @ ENDWALL ROOF BEAM
SCALE: 1-1/2"=1'-0"

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR "ERNEST" HOSKINS No. S2030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

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COMPARISON PC SET

BI-PITCH ROOF, CEILING, & FLOOR FRAMING PLANS, STRUCTURAL STEEL PROPERTIES, NOTES

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AC. FLS SS
DATE 6-9-15
2013 - 12x40

LOW SEISMIC

12'x40' P.C.

S2

FOR BUILDINGS ON WOOD FOUNDATIONS

JAACO - .145 x 1 3/4" PIN (ICC ESR-2961)

SUBFLOORING

I-1/8" APA RATED T&G STURD-I-FLOOR TO STEEL BEAMS & JOISTS		50 PSF	65 PSF	125 PSF
	LOW SEISMIC	PER DIAGRAM FWJ-1		PER DIAGRAM FWJ-2
	HIGH SEISMIC	PER DIAGRAM FWJ-3		PER DIAGRAM FWJ-4

DIAGRAM - FWJ-1

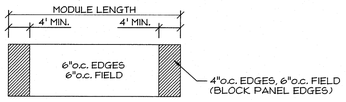


DIAGRAM - FWJ-2

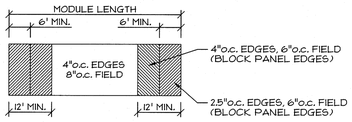


DIAGRAM - FWJ-3

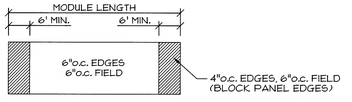
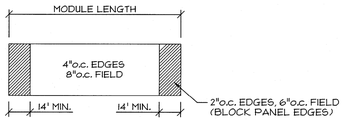
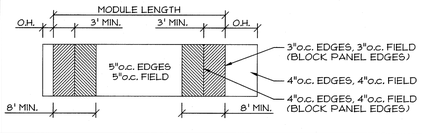


DIAGRAM - FWJ-4



ROOF

15/32" APA RATED PLYWOOD TO PURLINS & BEAMS
(OPTIONAL - 19/32" PLYWOOD ROOF)



FOR BUILDINGS ON CONCRETE FOUNDATIONS

JAACO - .145 x 1 3/4" PIN (ICC ESR-2961)

SUBFLOORING

I-1/8" APA RATED T&G STURD-I-FLOOR TO STEEL BEAMS & JOISTS		50 PSF	65 PSF	125 PSF
	LOW SEISMIC	PER DIAGRAM FCJ-1		PER DIAGRAM FCJ-2
	HIGH SEISMIC	PER DIAGRAM FCJ-3		PER DIAGRAM FCJ-4

DIAGRAM - FCJ-1

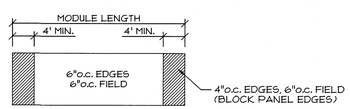


DIAGRAM - FCJ-2

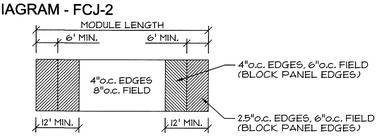


DIAGRAM - FCJ-3

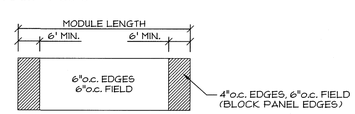
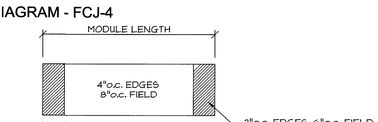


DIAGRAM - FCJ-4



SUBFLOORING WITH LEVELROCK

3/4" USG "LEVELROCK" FLOOR TOPPING OVER 3/8" SOUND REDUCTION BOARD OVER 3/4" T&G STURD-I-FLOOR PLY SHEATHING		50 PSF	65 PSF	125 PSF
	LOW SEISMIC	PER DIAGRAM FCJ-5		
	HIGH SEISMIC	PER DIAGRAM FCJ-6		

DIAGRAM - FCJ-5

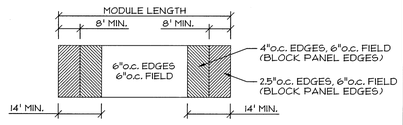
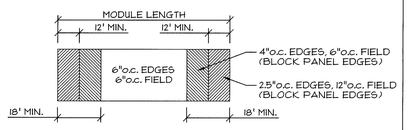
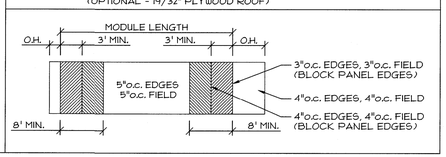


DIAGRAM - FCJ-6



ROOF

15/32" APA RATED PLYWOOD TO PURLINS & BEAMS
(OPTIONAL - 19/32" PLYWOOD ROOF)



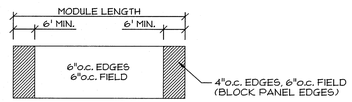
FOR BUILDINGS ON WOOD FOUNDATIONS

SCREWS - #10 S.M.S. (AISI S213-07, SECTION D)

SUBFLOORING

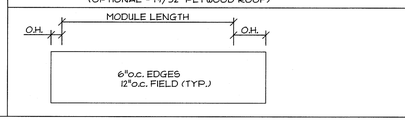
I-1/8" APA RATED T&G STURD-I-FLOOR TO STEEL BEAMS & JOISTS		50 PSF	65 PSF	125 PSF
	LOW SEISMIC	6"o.c. EDGES 12"o.c. FIELD		
	HIGH SEISMIC	6"o.c. EDGES 12"o.c. FIELD		PER DIAGRAM FWS-1

DIAGRAM - FWS-1



ROOF

15/32" APA RATED PLYWOOD TO PURLINS & BEAMS
(OPTIONAL - 19/32" PLYWOOD ROOF)



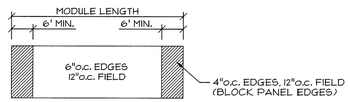
FOR BUILDINGS ON CONCRETE FOUNDATIONS

SCREWS - #10 S.M.S. (AISI S213-07, SECTION D)

SUBFLOORING

I-1/8" APA RATED T&G STURD-I-FLOOR TO STEEL BEAMS & JOISTS		50 PSF	65 PSF	125 PSF
	LOW SEISMIC	6"o.c. EDGES 12"o.c. FIELD		
	HIGH SEISMIC	6"o.c. EDGES 12"o.c. FIELD		PER DIAGRAM FCS-1

DIAGRAM - FCS-1



SUBFLOORING WITH LEVELROCK

3/4" USG "LEVELROCK" FLOOR TOPPING OVER 3/8" SOUND REDUCTION BOARD OVER 3/4" T&G STURD-I-FLOOR PLY SHEATHING		50 PSF	65 PSF	125 PSF
	LOW SEISMIC	PER DIAGRAM FCS-2		
	HIGH SEISMIC	PER DIAGRAM FCS-3		

DIAGRAM - FCS-2

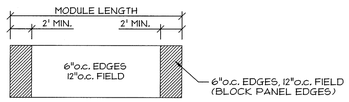
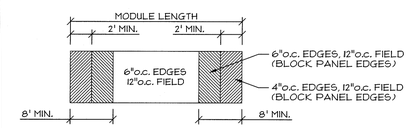
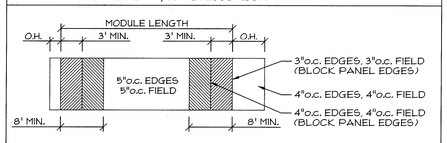


DIAGRAM - FCS-3



ROOF

15/32" APA RATED PLYWOOD TO PURLINS & BEAMS
(OPTIONAL - 19/32" PLYWOOD ROOF)



WALL TO FRAME FASTENING:

- WALL PANEL TOP PLATE TO PERIMETER ROOF BEAM. ..... (1) 1/4"ø x 2" LAG SCREWS FROM ROOF BEAM BOTT. FLANGE INTO TOP PLATE @ 15"o.c. MAX.
- WALL PANEL BOTTOM PLATE TO PERIMETER FLOOR BEAM. ..... 1/4"-20 TEKS/4 SCREWS @ 16"o.c. FROM BOTT. PLATE INTO FLOOR BEAM TOP FLANGE
- WALL PANEL SIDE STUDS TO TS CORNER COLUMNS ..... #12-24 x 2 1/2" S.D.S. @ 16"o.c. FROM SIDE STUD INTO STEEL CORNER COLUMN.
- TOP AND BOTTOM PLATE TO STUDS AND KING STUDS ..... (3) .135 x 3 1/4" LONG MACHINE NAIL
- DOUBLE STUDS, TRIMMERS, SILLS AND CRIPPLES STICH NAILED ..... .135 x 3 1/4" LONG MACHINE NAILS @ 8"o.c.
- CRIPPLES, TRIMMERS END NAILED TO PLATES AND SILLS. ..... (3) .135 x 3 1/4" LONG MACHINE NAIL EA. END
- CRIPPLES, TRIMMERS NAILED TO HEADERS. ..... (3) .135 x 3 1/4" LONG MACHINE NAIL
- ALL HANGERS, STRAPS, CLIPS, ETC. ..... NAILED AS PER MANUFACTURERS SPECS.
- FASTENING CONDITIONS NOT ADDRESSED ABOVE ..... TABLE 2304.9.1 2013 C.B.C.

PLYWOOD NAILING & NOTES:

1. DO NOT CRUSH PLYWOOD FACE PLY (OUTER VENEER LAYER) BY OVER DRIVING SCREWS, MACHINE, OR HAND NAILS.
2. UNDER DRIVEN NAILS SHALL BE CORRECTED BY HAND SET.
3. REMOVE AND REPLACE NAILS DRIVEN THAT MISS FRAMING OR SUPPORT.
4. ALL CORRECTIVE NAILING SHALL BE DONE BY HAND NAILING.
5. H.D.G.= HOT DIPPED GALVANIZED WITH MINIMUM COATING OF 1 OZ PER SQ. F.T OF ZINC. OR MECHANICALLY GALVANIZED PER ASTM. F-1667.

SIDING	
EXTERIOR SIDING	INTO 2x4 OR 2x6 WOOD STUDS; .131" x 2 1/2" @ 6"o.c. PANEL EDGES, 12"o.c. IN FIELD. (H.D.G. OR MECH. GALV. NAILS, PER ASTM F-1667). INTO STEEL COLUMNS; #12-24 x 2" S.D.S. @ 24"o.c.

GYPSUM WALLBOARD	
1/2" GYP. BOARD TO 2x4 OR 2x6 STUDS	.121 x 11/2" COATED NAILS @ 8"o.c. EDGES, 8"o.c. IN FIELD.

OVERHANG SOFFIT	
1/2" APA RATED SHEATHING	#8 x 1" S.M.S. @ 6"o.c. EDGES, 12"o.c. IN FIELD (PRE-PUNCHED HOLES IN STEEL)

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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(916) 797-3030 (916) 797-3034 Fax
www.cysinc.com

6-9-15

REGISTERED PROFESSIONAL ENGINEER
ARTHUR ERNEST JOSEPH
No. S2030
EXP. 9/30/15
STRUCTURAL
STATE OF CALIFORNIA

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ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215. (209) 466-8000

COMPARISON PC SET

FASTENING SCHEDULE & NOTES

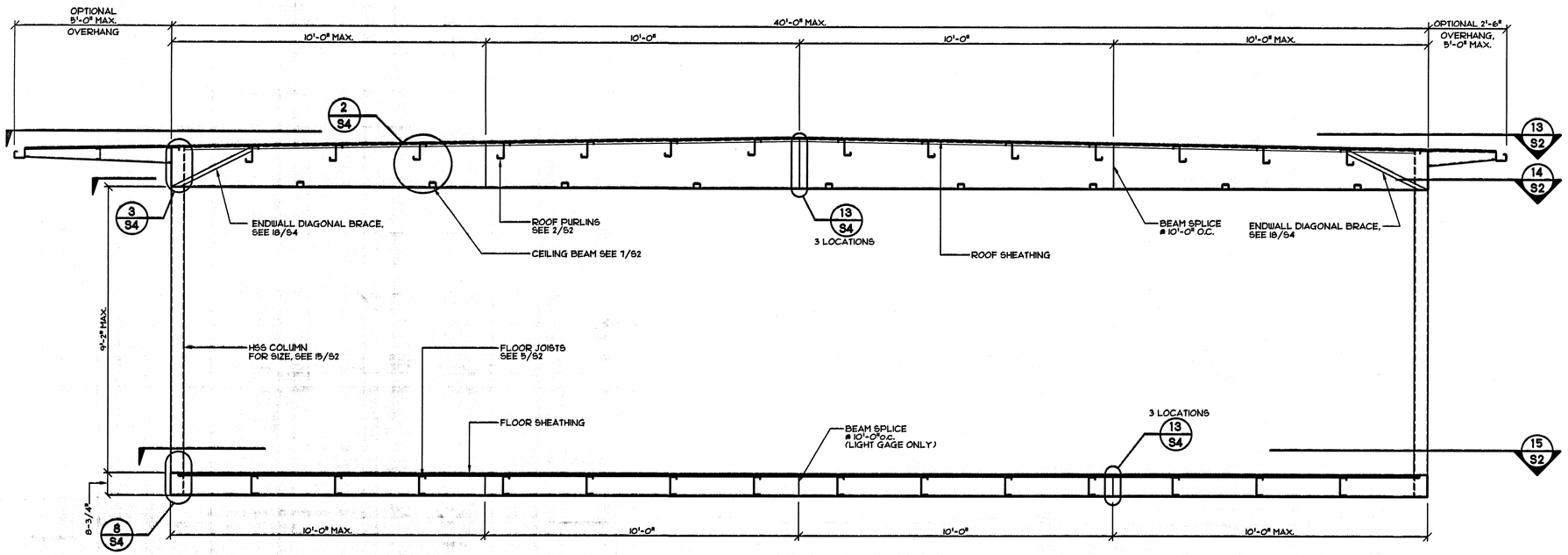
REV / DATE:	BY:

JOB No.:	
DRAWN BY:	
DATE:	

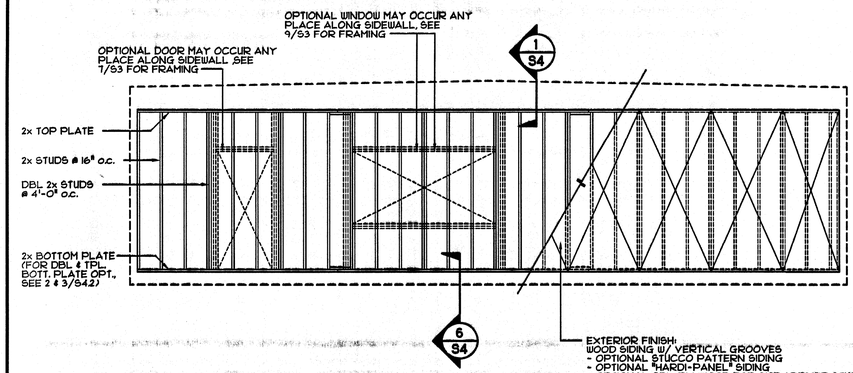
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. ___ FLS. ___ SS. ___
DATE 6-9-15
2013 - 12x40

S3FA

12'x40' P.C.

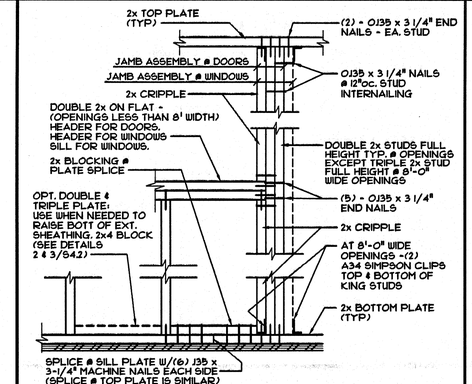


1 **TYPICAL LONGITUDINAL FRAME SECTION - BI-PITCH ROOF**
SCALE: 1/2"=1'-0"



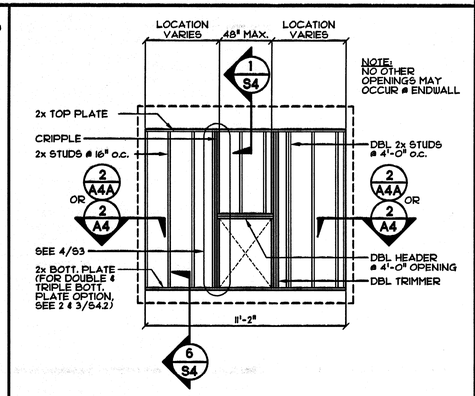
NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.

3 **TYPICAL SIDEWALL FRAMING ELEVATION**
SCALE: 1/4"=1'-0"



NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED. FOR "NAILING SCHEDULE", SEE 2/S3FA

4 **STUD NAILING DETAIL**
SCALE: 1"=1'-0"



NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.

5 **ENDWALL FRAMING - INTERIOR HVAC**
SCALE: 1/4"=1'-0"

NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.

7 **ENDWALL FRAMING - EXT. DOOR**
SCALE: 1/4"=1'-0"

NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.

8 **ENDWALL FRAMING - EXT. WINDOW**
SCALE: 1/4"=1'-0"

9 **FRAMING @ 8'-0" OPENING**
SCALE: 1/4"=1'-0"

NOTE: 2x4 OR 2x6 DF #2 MIN STUDS MAY BE USED.

10 **ENDWALL FRAMING - EXT. HVAC**
SCALE: 1/4"=1'-0"

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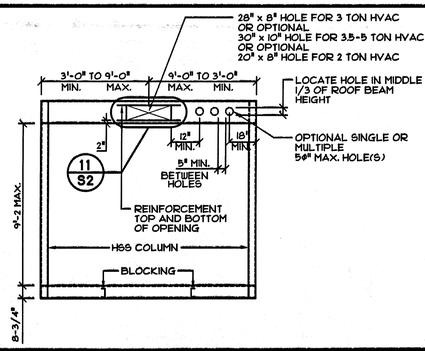

6 **END FRAME ELEVATION**
SCALE: 1/4"=1'-0"

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

JUN 03 2015

CYS
STRUCTURAL ENGINEERS INC.
2480 Natomas Park Drive, Suite 600
Sacramento, CA 95833
(916) 920-0200 (916) 920-1260 Fax.
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REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST HERSEY No. S2030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

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COMPARISON PC SET

BI-PITCHED ROOF
LONGITUDINAL BUILDING SECTION, WALL FRAMING ELEVATIONS, END FRAME ELEVATION, NAIL SCHEDULE

REV / DATE:	BY:

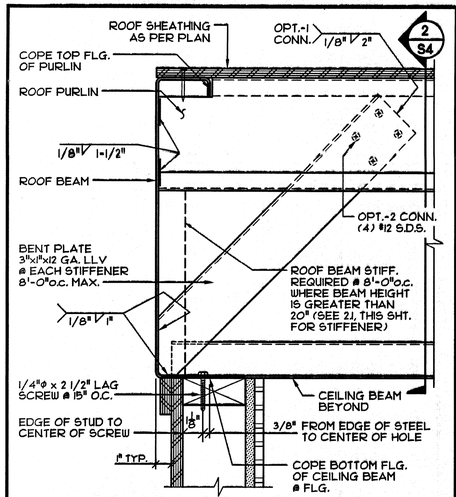
JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. FLS SS
DATE 6-1-15

2013 - 12x40

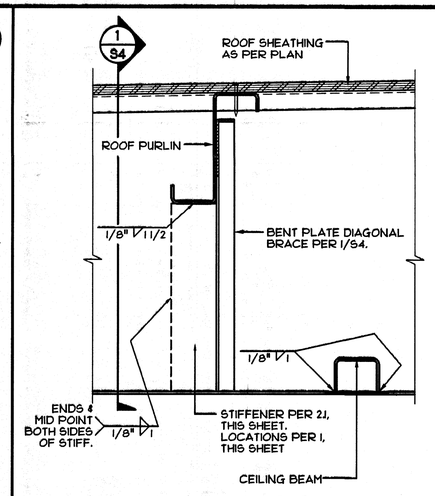
12'x40' P.C.

S3



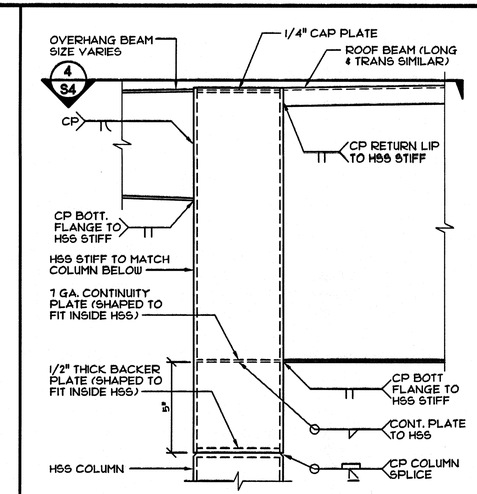
FOR FASTENER SCHEDULE, SEE "S3" SHEETS

1 ROOF BEAM SECTION @ PURLIN
SCALE: 3"=1'-0"

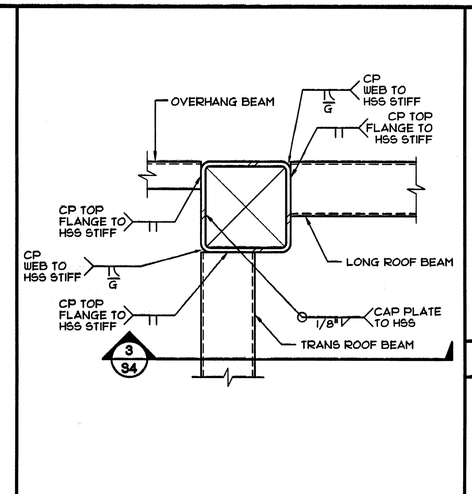


FOR FASTENER SCHEDULE, SEE "S3" SHEETS

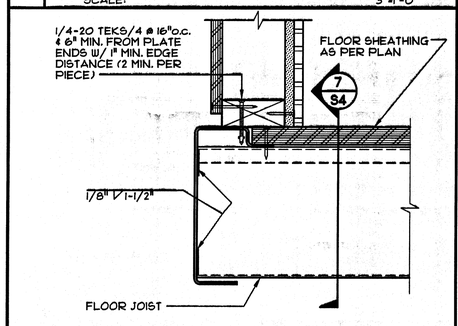
2 PURLIN TO STIFFENER AT BEAM
SCALE: 3"=1'-0"



3 ROOF BEAM SECTION @ CORNER
SCALE: 3"=1'-0"

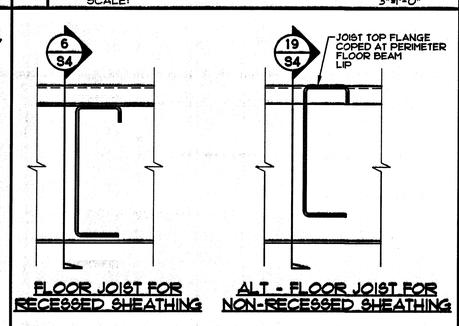


4 ROOF BEAM TOP FLANGE
SCALE: 3"=1'-0"



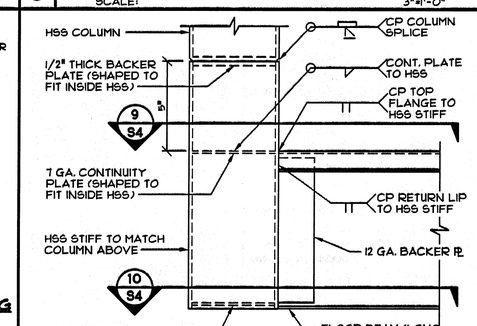
FOR FASTENER SCHEDULE, SEE "S3" SHEETS

6 FLOOR BEAM @ JOIST CONNECTION
SCALE: 3"=1'-0"

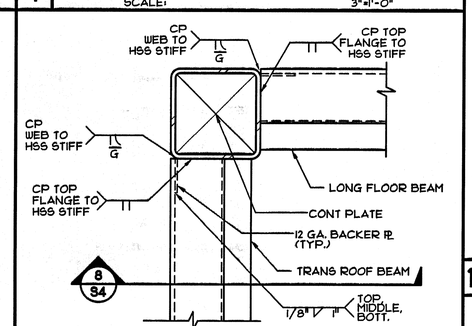


FOR CLARITY, FLOOR SHEATHING IS NOT SHOWN.

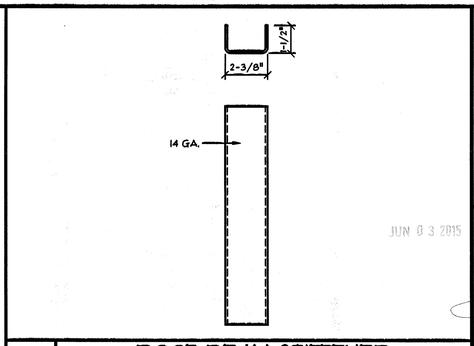
7 JOIST TO BEAM CONNECTION
SCALE: 3"=1'-0"



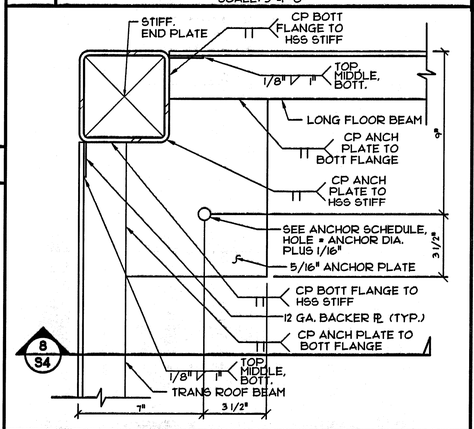
8 FLOOR BEAM SECTION @ CORNER
SCALE: 3"=1'-0"



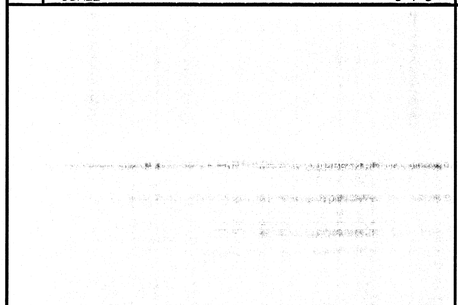
9 FLOOR BEAM TOP FLANGE
SCALE: 3"=1'-0"



2.1 ROOF BEAM STIFFENER
SCALE: 3"=1'-0"

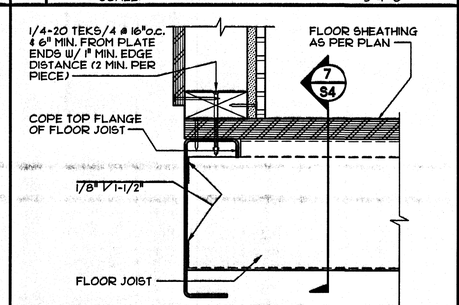


10 FLOOR BEAM BOTTOM FLANGE
SCALE: 3"=1'-0"

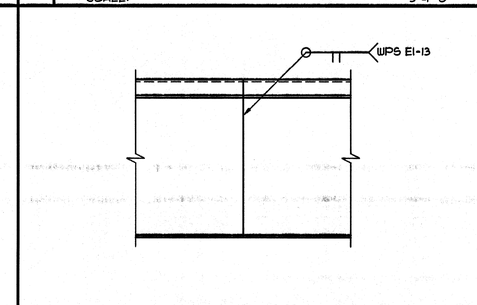


FOR FASTENER SCHEDULE, SEE "S3" SHEETS

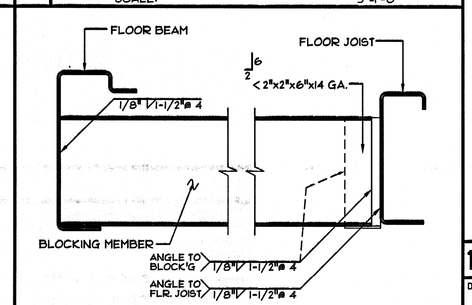
15 FLOOR SHEATHING ATTACHMENT
SCALE: 3"=1'-0"



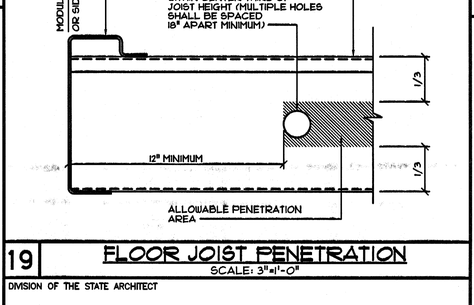
12 ALT. FLOOR BEAM @ JOIST CONN.
SCALE: 3"=1'-0"



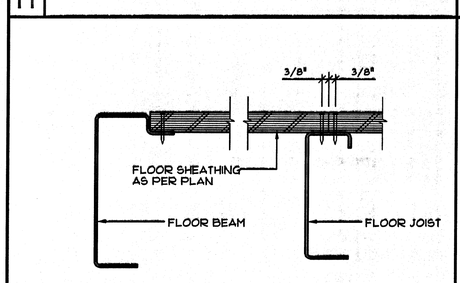
13 BEAM SPLICE DETAIL
SCALE: 3"=1'-0"



14 BLOCKING MEMBER CONNECTION
SCALE: 3"=1'-0"

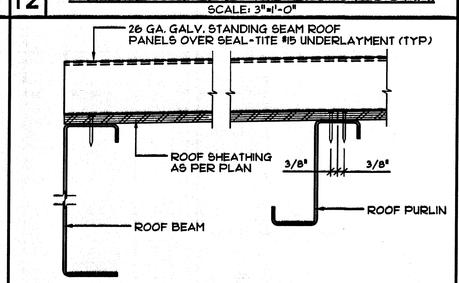


19 FLOOR JOIST PENETRATION
SCALE: 3"=1'-0"



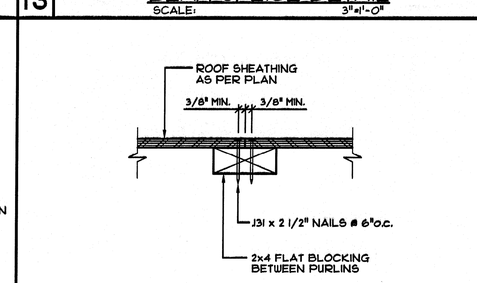
FOR FASTENER SCHEDULE, SEE "S3" SHEETS

15 FLOOR SHEATHING ATTACHMENT
SCALE: 3"=1'-0"

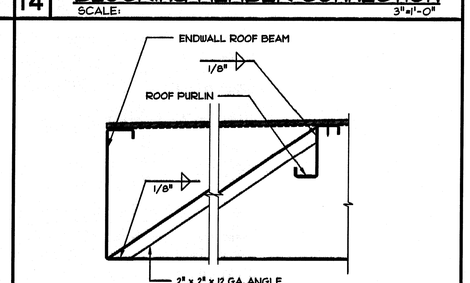


NOTE: THIS ROOF MEETS CLASS 'B' FIRE RATING
FOR FASTENER SCHEDULE, SEE "S3" SHEETS

16 ROOF SHEATHING ATTACHMENT
SCALE: 3"=1'-0"



17 FLAT BLOCKING @ ROOF
SCALE: 3"=1'-0"



18 ENDWALL DIAGONAL BRACE
SCALE: 1 1/2"=1'-0"

DIVISION OF THE STATE ARCHITECT

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
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JUN 03 2015

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COMPARISON PC SET

STRUCTURAL CONNECTION DETAILS

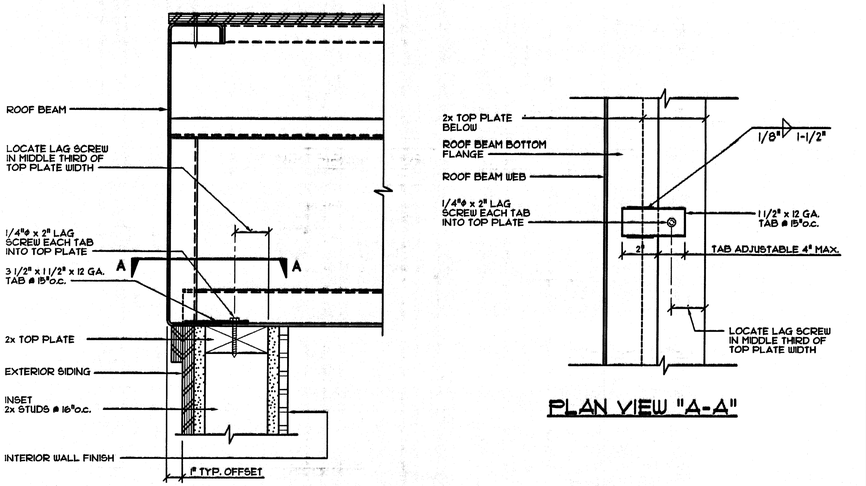
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC. FLS. SS.
DATE 6-1-15

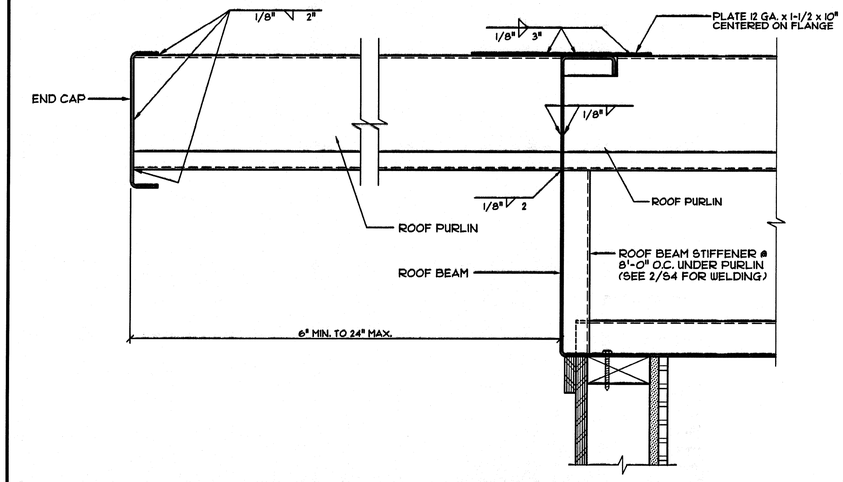
S4

12"x40" P.C.

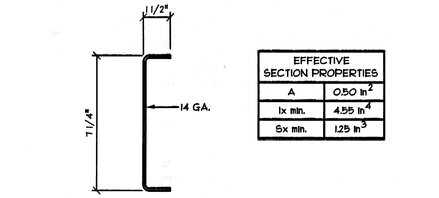


PLAN VIEW "A-A"

1 INSET STUDS - TOP PLATE CONNECTION
SCALE: 3"=1'-0"

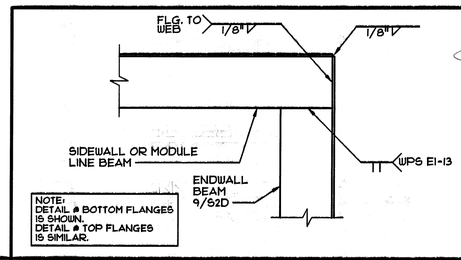


2 SIDEWALL OVERHANG DETAIL
SCALE: 3"=1'-0"

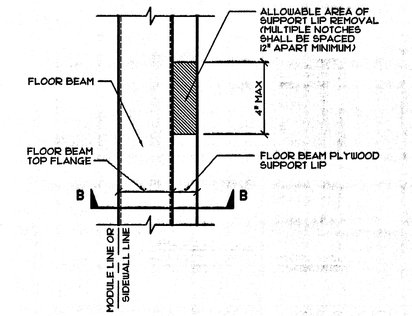


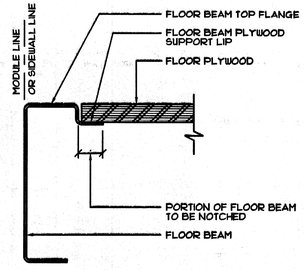
EFFECTIVE SECTION PROPERTIES	
A	0.50 in^2
Ix min.	4.55 in^4
Sx min.	1.25 in^3

END CAP SECTION PROPERTIES



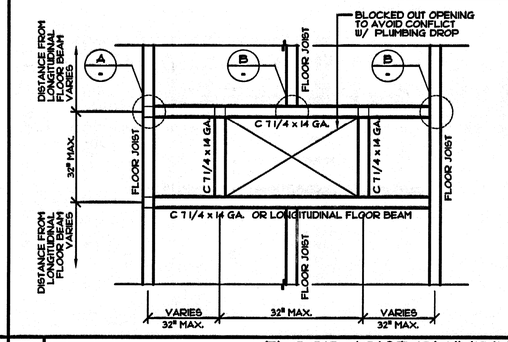
15 TYP. CHANNEL BEAM @ CORNERS
SCALE: 3"=1'-0"



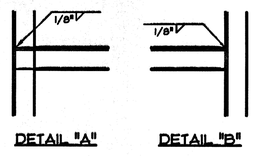


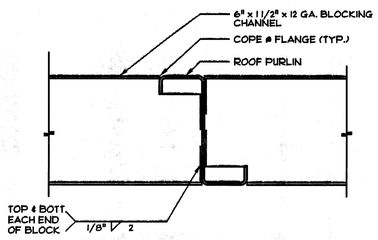
SECTION VIEW "B-B"

3 FLOOR BEAM TOP FLANGE NOTCH
SCALE: 3"=1'-0"

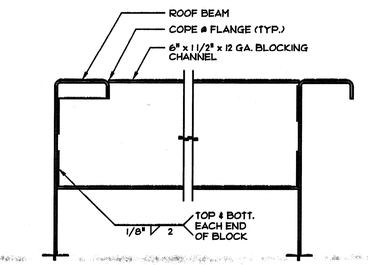


4 FLOOR JOIST PLUMBING BLOCK-OUT
SCALE: 3/4"=1'-0"



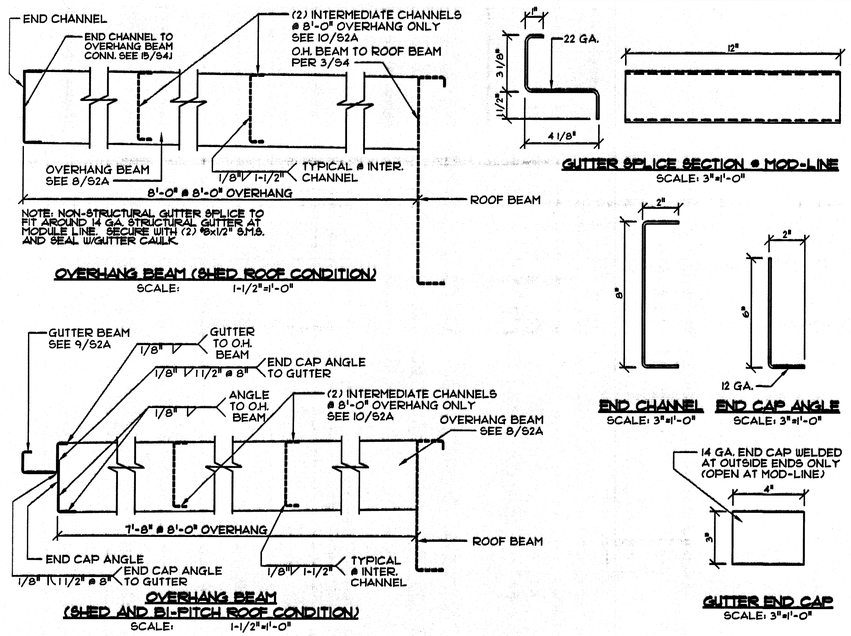


BETWEEN PURLINS

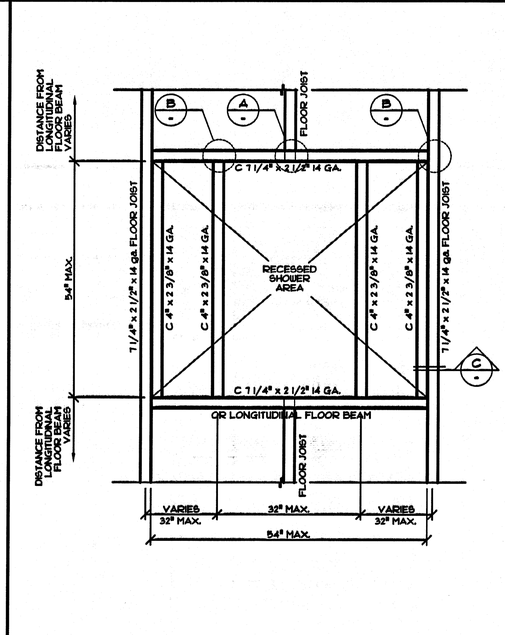


BETWEEN BEAMS

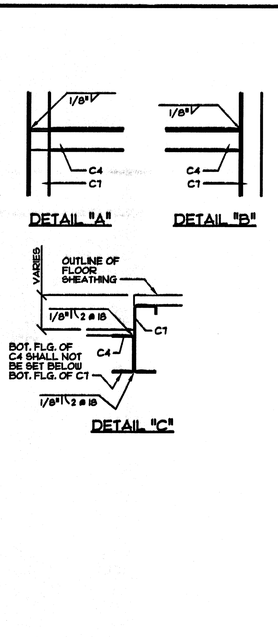
11 TYP. CHANNEL BLOCK INSTALLATION
SCALE: 3"=1'-0"



12 8'-0" OVERHANG DETAILS
SCALE: AS NOTED



14 RECESSED SHOWER FLOOR FRAMING PLAN
SCALE: 3/4"=1'-0"



PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
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ALTERNATE STRUCTURAL DETAILS

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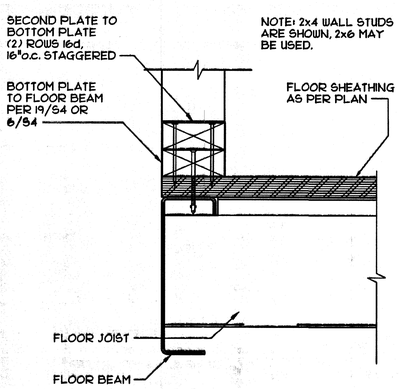
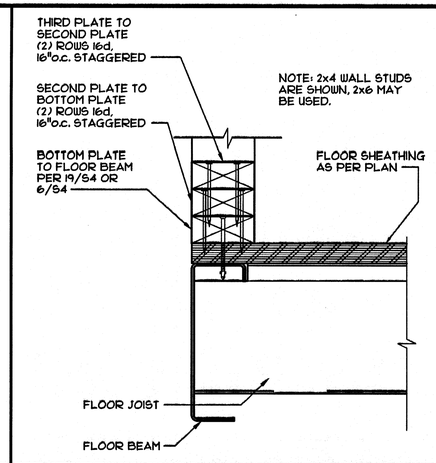
DIVISION OF THE STATE ARCHITECT

S4.1

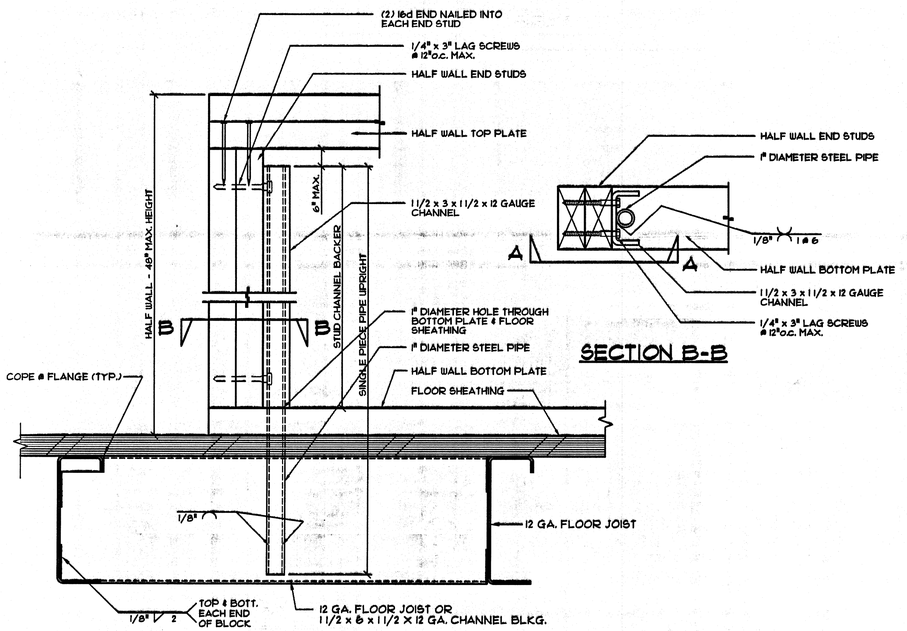
12"x40" P.C.



2 DOUBLE BOTTOM PLATE OPTION
SCALE: 3"=1'-0"



3 TRIPLE BOTTOM PLATE OPTION
SCALE: 3"=1'-0"



SECTION B-B

SECTION A-A

11 HALF WALL STABILIZER BRACKET
SCALE: 3"=1'-0"

10.1

JUN 0 3 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST PERRY No. S2030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

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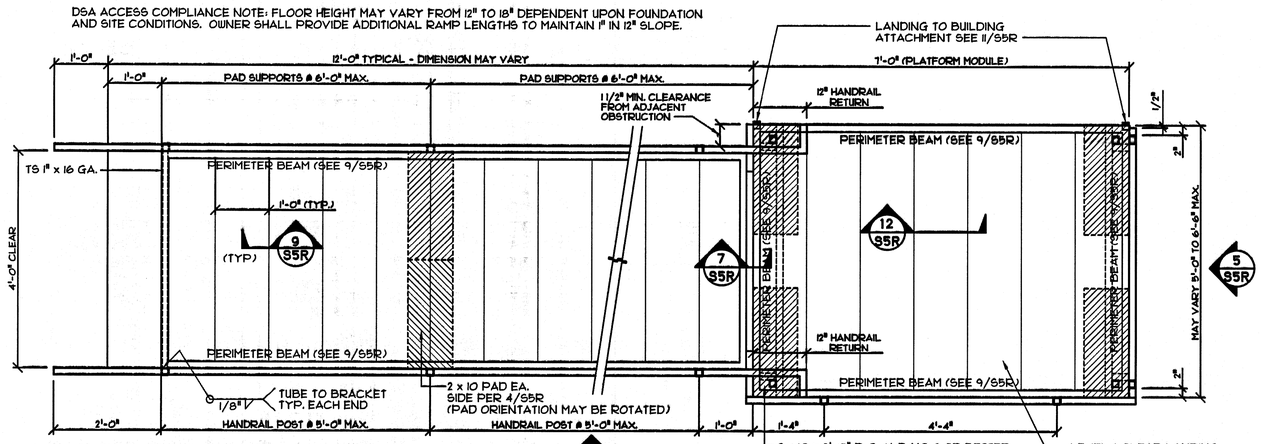
S4.2

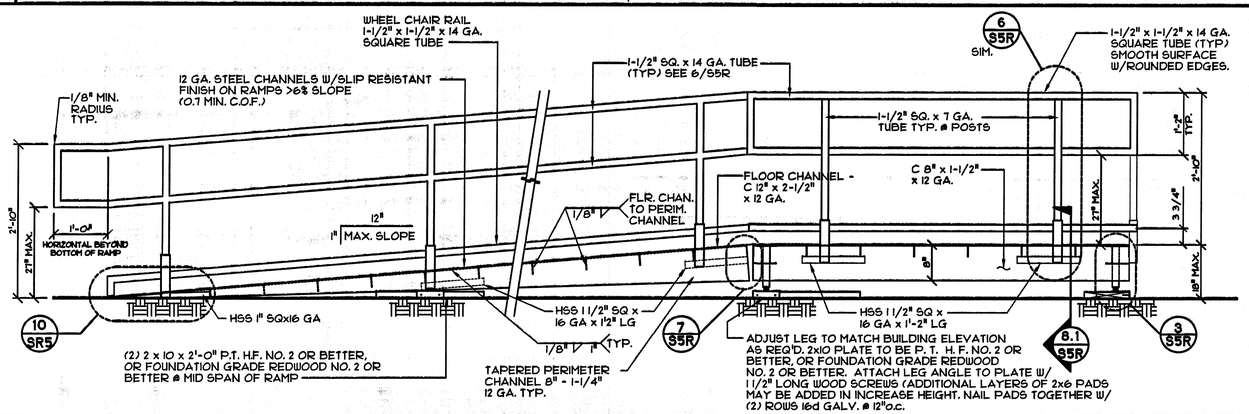
12"x40" P.C.

DSA ACCESS COMPLIANCE NOTE: FLOOR HEIGHT MAY VARY FROM 12" TO 18" DEPENDENT UPON FOUNDATION AND SITE CONDITIONS. OWNER SHALL PROVIDE ADDITIONAL RAMP LENGTHS TO MAINTAIN 1" IN 12" SLOPE.

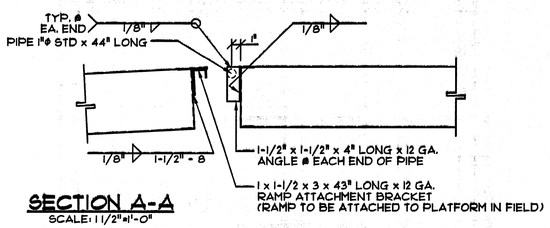


- RAMP MAY BE BUILT OPPOSITE HAND FROM WHAT IS SHOWN.
- RAMP LENGTH MAY BE DECREASED OR INCREASED TO MAINTAIN 1:12 SLOPE.
- MULTIPLE LANDING PLATFORM UNITS MAY BE SET ADJACENT TO EACH OTHER TO INCREASE LANDING AREA. SEE 8.2/S5R FOR LANDING TO LANDING CONNECTION.

1 RAMP & LANDING PLAN
SCALE: 3/4"=1'-0"

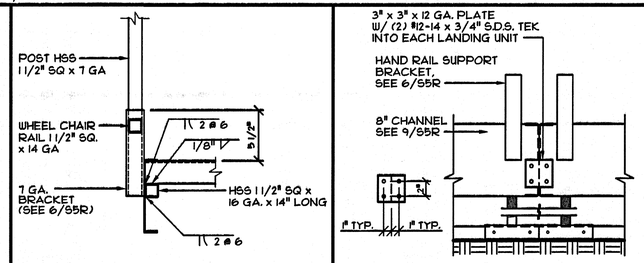


4 RAMP & PLATFORM SIDE ELEVATION
SCALE: 3/4"=1'-0"



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

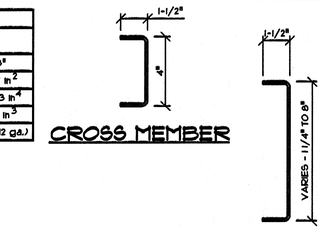
7 RAMP TO LANDING ATTACHMENT
SCALE: 3/4"=1'-0"



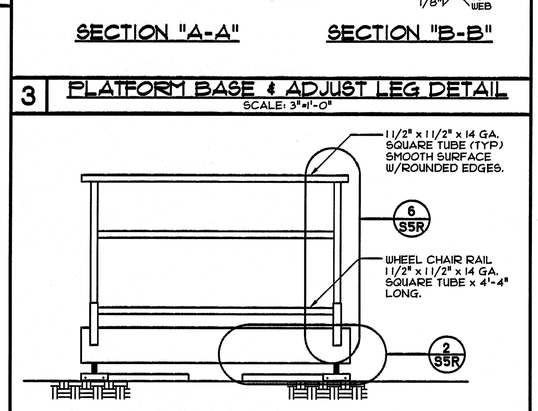
8.1 SECTION
SCALE: 1 1/2"=1'-0"

8.2 LANDING TO LANDING
SCALE: 1 1/2"=1'-0"

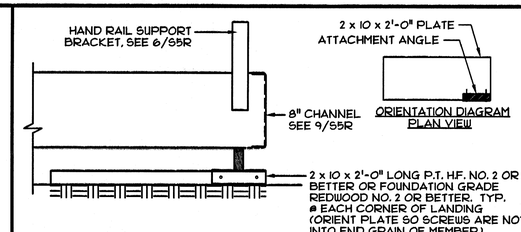
EFFECTIVE SECTION PROPERTIES				
	FLOOR CHANNEL	CROSS MEMBER	PERIMETER BEAM	
	12"	4"	11/4"	8"
A	1.68 in^2	0.67 in^2	0.3902 in^2	1.07 in^2
Ix min.	0.78 in^4	1.83 in^4	0.102 in^4	8.43 in^4
Sx min.	1.66 in^3	0.71 in^3	0.164 in^3	2.10 in^3
T	.105" (12 ga.)	.075" (14 ga.)	.105" (12 ga.)	.105" (12 ga.)



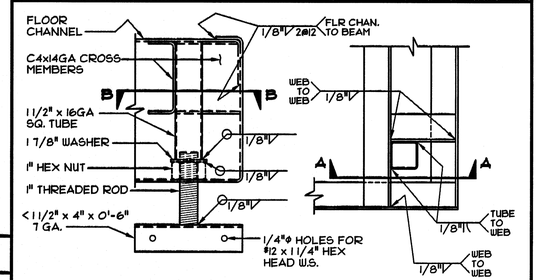
9 SECTION PROPERTIES
SCALE: 3"=1'-0"



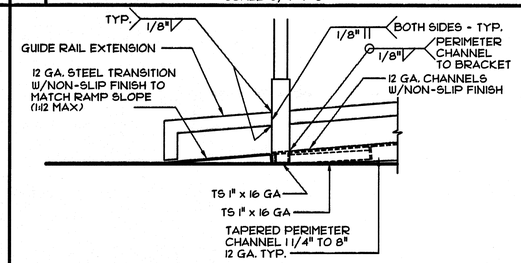
5 PLATFORM END ELEVATION
SCALE: 3/4"=1'-0"



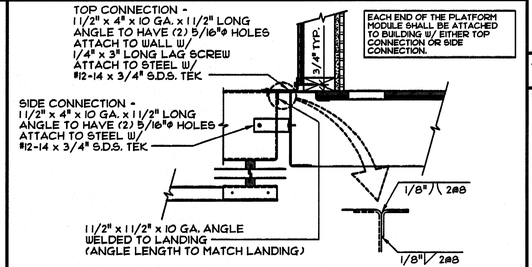
2 LANDING BASE
SCALE: 1 1/2"=1'-0"



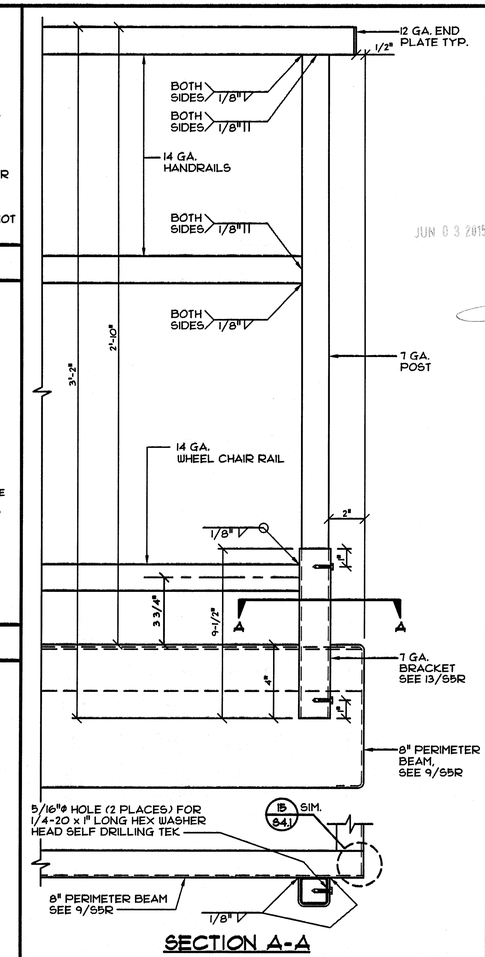
3 PLATFORM BASE & ADJUST LEG DETAIL
SCALE: 3"=1'-0"



10 ZERO CLEARANCE TRANSITION
SCALE: 1 1/2"=1'-0"

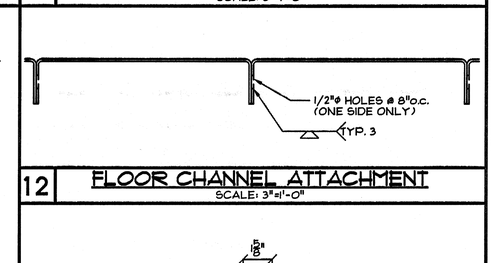


11 LANDING ATTACHMENT TO BUILDING
SCALE: 1 1/2"=1'-0"

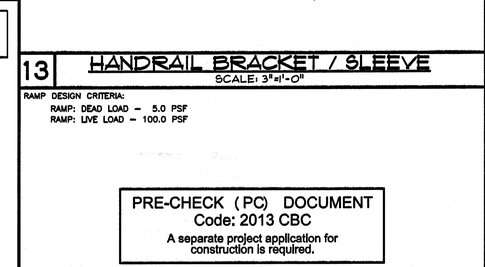


SECTION A-A

6 HANDRAIL SUPPORT BRACKET
SCALE: 3"=1'-0"



12 FLOOR CHANNEL ATTACHMENT
SCALE: 3"=1'-0"



13 HANDRAIL BRACKET / SLEEVE
SCALE: 3"=1'-0"

RAMP DESIGN CRITERIA:
RAMP: DEAD LOAD = 5.0 PSF
RAMP: LIVE LOAD = 100.0 PSF

PRE-CHECK (PC) DOCUMENT
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JOB No.:
DRAWN BY:
DATE:

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AC. TM FLS SS
DATE 6-9-15

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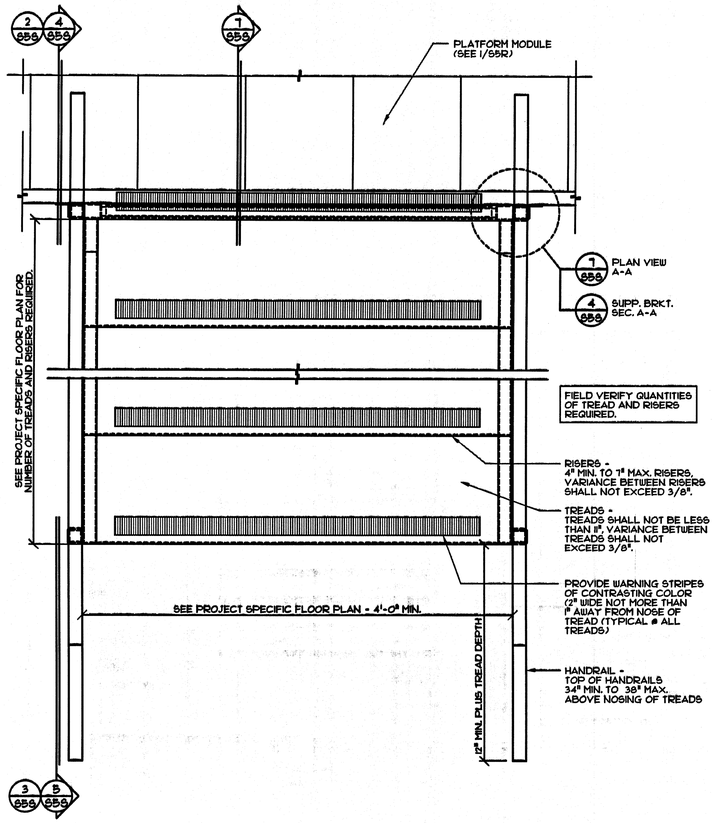
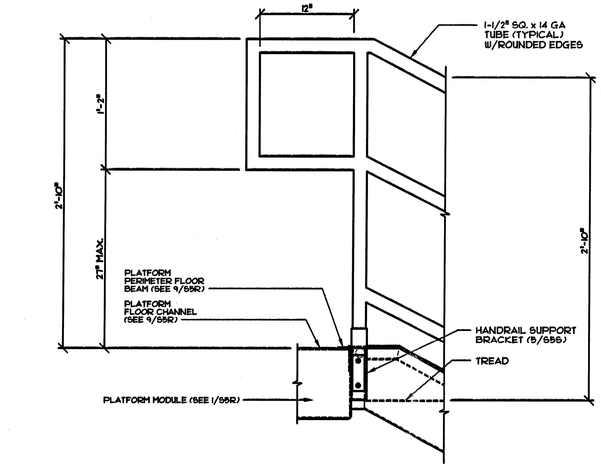
S5R

12"x40" P.C.

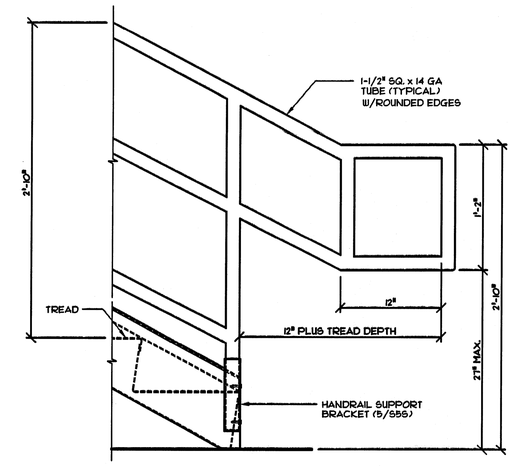


- TYPICAL STAIR PLAN IS SHOWN - SEE PROJECT SPECIFIC FLOOR PLAN FOR ACTUAL CONFIGURATION TO BE BUILT.
- STAIRWAY MAY BE BUILT OPPOSITE HAND FROM WHAT IS SHOWN.
- STAIRWAY LENGTH MAY BE DECREASED OR INCREASED AS REQUIRED FOR SITE CONDITIONS.
- MULTIPLE LANDING PLATFORM MODULES MAY BE SET ADJACENT TO EACH OTHER TO INCREASE LANDING AREA (SEE 1/S5R)

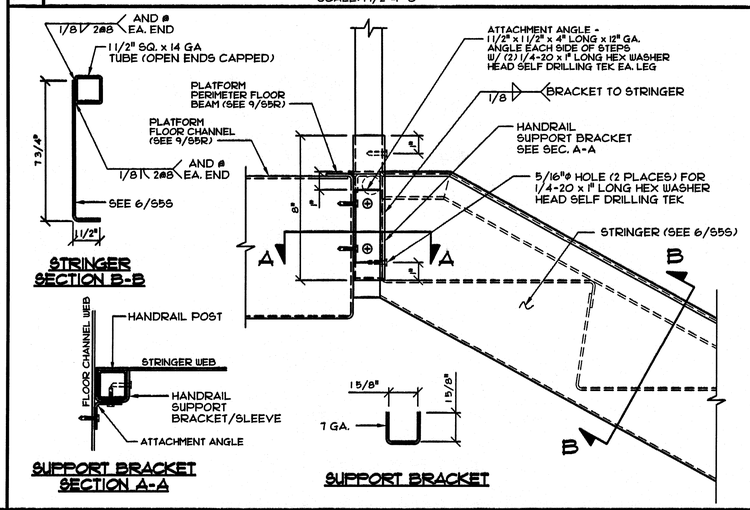
1 **TYPICAL STAIR PLAN**
SCALE: 1 1/2"=1'-0"



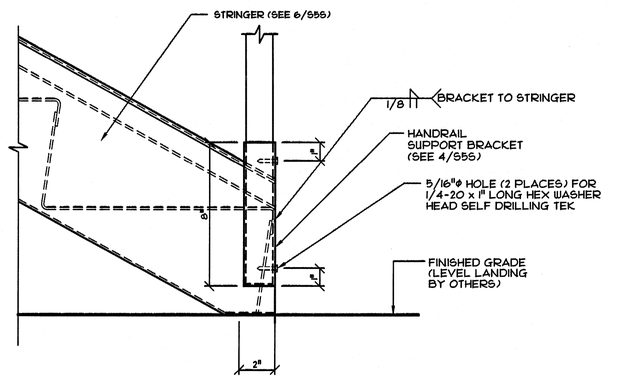
2 **HANDRAIL @ TOP**
SCALE: 1 1/2"=1'-0"



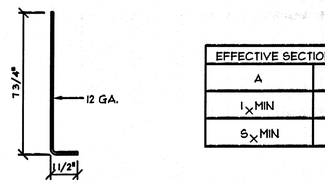
3 **HANDRAIL @ BOTTOM**
SCALE: 1 1/2"=1'-0"



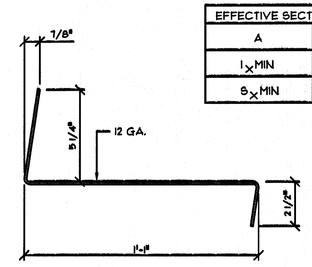
4 **HANDRAIL BRACKET @ TOP**
SCALE: 3"=1'-0"



5 **HANDRAIL BRACKET @ BOTTOM**
SCALE: 3"=1'-0"

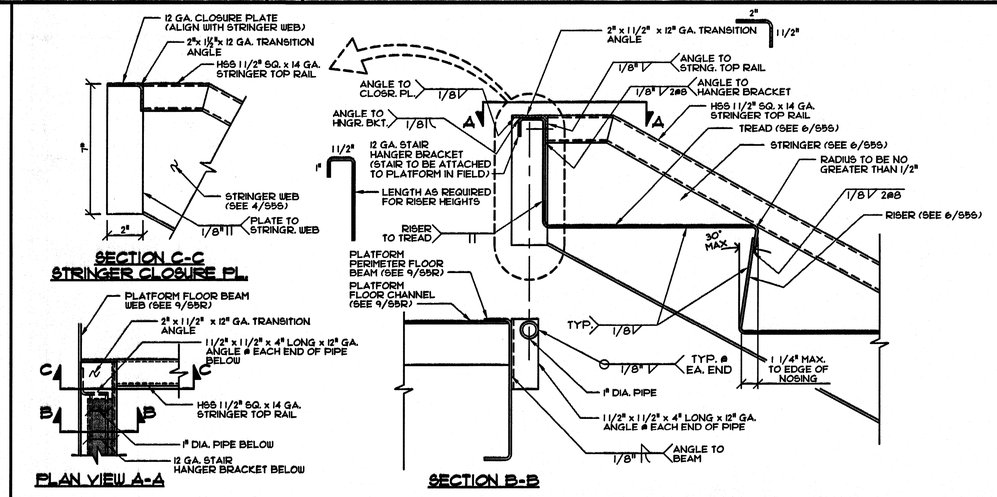


EFFECTIVE SECTION PROPERTIES	
A	0.9196 (IN ^{2})
I_x MIN	0.2621 (IN ^{4})
S_x MIN	0.308 (IN ^{3})



EFFECTIVE SECTION PROPERTIES	
A	2.07 (IN ^{2})
I_x MIN	0.85 (IN ^{4})
S_x MIN	0.35 (IN ^{3})

6 **SECTION PROPERTIES**
SCALE: 3"=1'-0"



7 **STAIR CONNECTION @ TOP**
SCALE: 3"=1'-0"

DESIGN CRITERIA:
DEAD LOAD = 5.0 PSF
LIVE LOAD = 100.0 PSF

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

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CYS
STRUCTURAL ENGINEERS INC.
2495 Natomas Park Drive, Suite 600
Sacramento, California 95833
(916) 920-2020 (916) 920-1330 Fax
www.cysmg.com

JUN 03 2015

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST ROSE No. 52030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

STAIR DETAILS

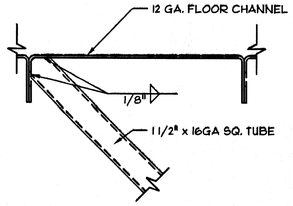
REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

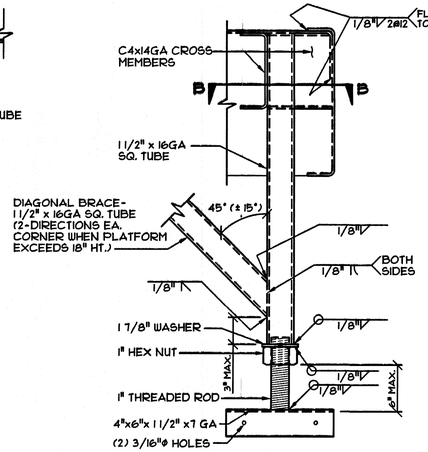
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC TM FLS SS
DATE 6-1-15

S5S

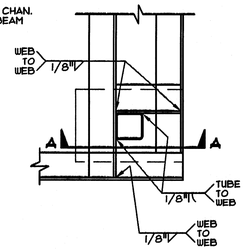
12"x40" P.C.



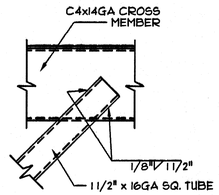
DIAGONAL BRACE @ TOP



SECTION A-A



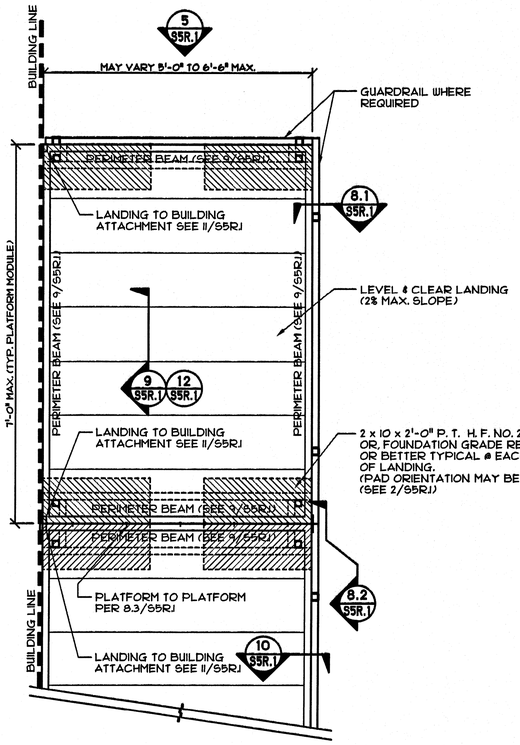
SECTION B-B



DIAGONAL BRACE @ TOP

3 ADJUST LEG DETAIL (PLATFORMS OVER 18")

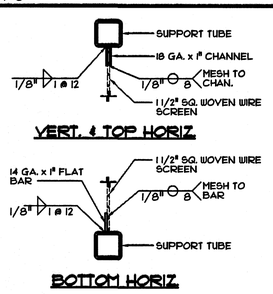
SCALE: 3"=1'-0"



- RAMP MAY BE BUILT OPPOSITE HAND FROM WHAT IS SHOWN.
- MULTIPLE LANDING PLATFORM UNITS MAY BE SET ADJACENT TO EACH OTHER TO INCREASE LANDING AREA.

15 TYP. MULTIPLE PLATFORM PLAN

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

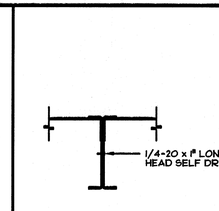


VERT. & TOP HORIZ.

BOTTOM HORIZ.

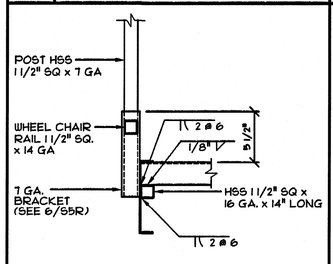
5.1 MESH TO SUPPORT

SCALE: 3"=1'-0"



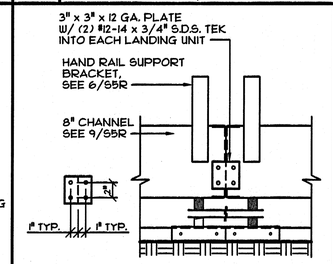
8.3 PLATFORM STITCH

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



8.1 SECTION

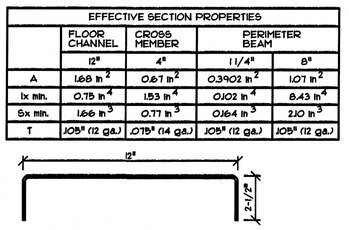
SCALE: 1 1/2"=1'-0"



8.2 LANDING TO LANDING

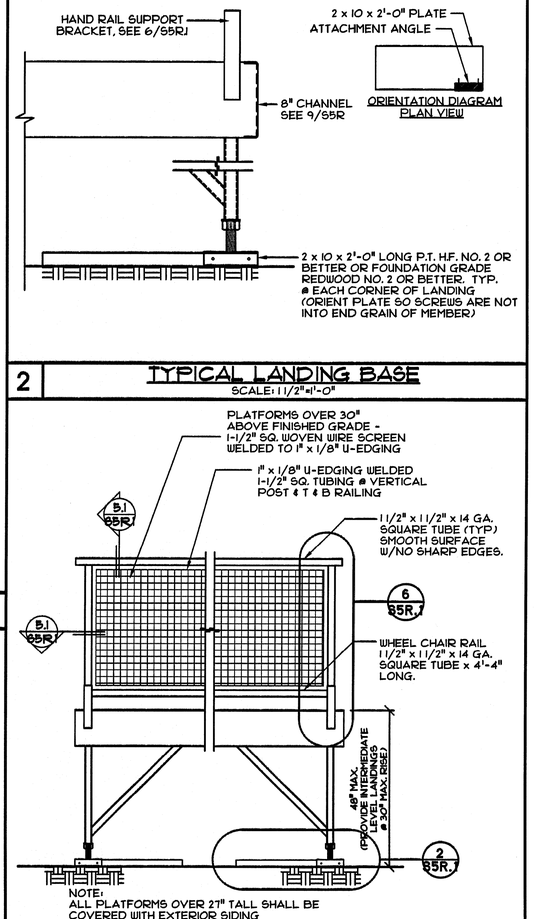
SCALE: 1 1/2"=1'-0"

EFFECTIVE SECTION PROPERTIES				
	FLOOR CHANNEL	CROSS MEMBER	PERIMETER BEAM	
	12"	4"	11/4"	8"
A	1.68 in^2	0.67 in^2	0.3902 in^2	1.07 in^2
Ix min.	0.75 in^4	1.53 in^4	0.102 in^4	8.43 in^4
Sx min.	1.66 in^3	0.77 in^3	0.164 in^3	2.10 in^3
T	.105" (12 ga.)	.075" (14 ga.)	.105" (12 ga.)	.105" (12 ga.)



9 SECTION PROPERTIES

SCALE: 3"=1'-0"

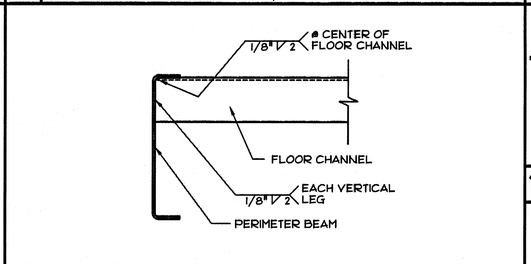


2 TYPICAL LANDING BASE

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

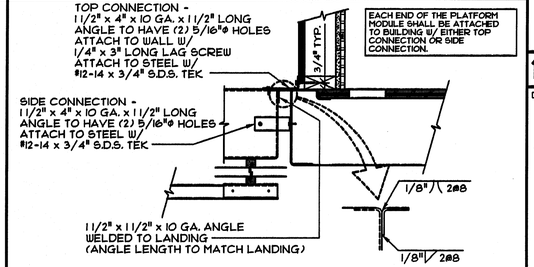
5 TYPICAL PLATFORM END ELEVATION

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



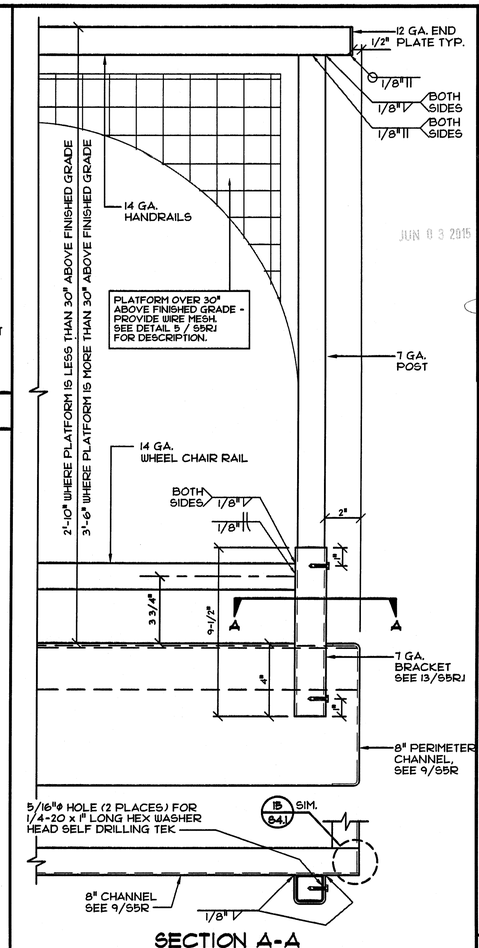
10 FLR. CHAN. TO PERIMETER BM.

SCALE: 3"=1'-0"



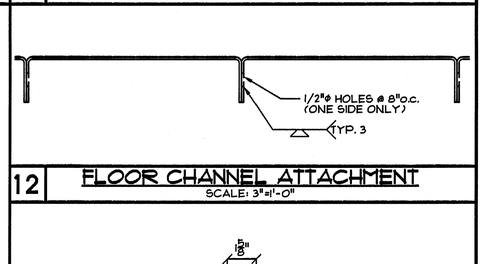
11 LANDING ATTACHMENT TO BUILDING

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



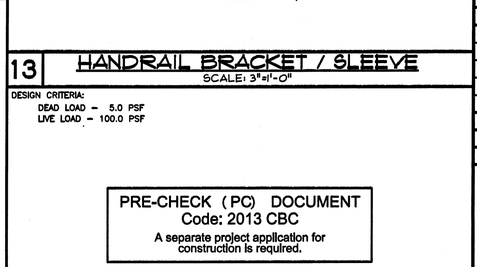
6 GUARD/HANDRAIL BRACKET

SCALE: 3"=1'-0"



12 FLOOR CHANNEL ATTACHMENT

SCALE: 3"=1'-0"



13 HANDRAIL BRACKET / SLEEVE

SCALE: 3"=1'-0"

DESIGN CRITERIA:
DEAD LOAD = 5.0 PSF
LIVE LOAD = 100.0 PSF

PRE-CHECK (PC) DOCUMENT
Code: 2013 CBC
A separate project application for construction is required.

CYS
STRUCTURAL ENGINEERS INC.
3185 Nimitus Park Drive, Suite 808
Cameron Park, CA 95682
(916) 920-2020 (916) 920-1336 Fax
www.cysinc.com

REGISTERED PROFESSIONAL ENGINEER ARTHUR ERNEST REGES No. S2030 EXP. 9/30/15 STRUCTURAL STATE OF CALIFORNIA

ENVIROPLEX, INC.
4777 E. CARPENTER ROAD STOCKTON, CA. 95215, (209) 466-8000

JUN 03 2015

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

PLATFORM DETAILS
(PLATFORM OVER 18" HEIGHT)

REV / DATE:	BY:

JOB No.:
DRAWN BY:
DATE:

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
02-113910
AC TM FLS SS
DATE 6-1-15

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S5R.1

12x40 P.C.

American Modular Systems

24 X 40 RELOCATABLE CLASSROOMS
MOBILE MODULAR MANAGEMENT CORPORATION

TEST AND INSPECTION LIST

TESTING LABORATORY: _____ DATE: _____

NAME: _____

DISTRICT/OWNER: _____

DIVISION-FILE NO. _____ APPLICATION NO. _____

ARCHITECT: _____

STRUCTURAL ENGINEER: _____

STATE OF CALIFORNIA
DEPT. OF GENERAL SERVICES
DIVISION OF THE
STATE ARCHITECT

STRUCTURAL
TESTS
AND
INSPECTIONS

ORS 103-1 (R 11/85)

The following tests and inspections, as checked, will be required as detailed in applicable specifications.

	CON-CRETE	GUNITE	GROUT	MORTAR	
COMPACTED FILL					
☐ Fill material, acceptance tests					Test of aggregates for mix design only
☐ Compaction control, continuous					Suitability tests of aggregates as detailed below
☐ Compaction tests only as ordered					Mix designs
☐ Bearing capacity of compacted fill					Continuous batch plant inspection
REINFORCING STEEL					Inspect. placing
☒ Sample and test bar steel	☒				Sample
☐ Sample and test mesh					Compressive tests
☐ Inspect. placing at job					Pick up samples at job
STRUCTURAL STEEL					Samples delivered to laboratory
☒ Sample and test as detailed below					Deliver sample forms to laboite
☐ Shop fabrication inspection					Sample and test cement
☐ Field erection inspection					
☒ Inspection of welds — Shop					
☐ Inspection of welds — Field					
☐ Inspection of riveting or bolting — Shop					
☐ Inspection of riveting or bolting — Field					
☐ Sample and test high strength bolts and washers					
BRICK AND BLOCK					
☐ Sample and test					
☐ Test only					
☐ Inspection of placing					
☐ Core drill samples					
GLUED LAMINATED STRUCTURAL LUMBER					
☐ Fabrication inspection					
☐ Sample and test steel accessories					
☐ Inspect. fabrication of steel accessories					

SUITABILITY TESTS	CONCRETE MATERIALS	GUNITE	MORTAR	GROUT
Sodium sulphate				
Structural strength				
Los Angeles rattler				
Clay (Hydrometer method)				
Reactivity tests				
Volume change				

MIX DESIGNS: CONCRETE, GROUT, MORTAR OR GUNITE

MATERIAL	MAXIMUM SIZE	COMPRESSIVE STRENGTH, PSI, MINIMUM 28 DAYS
CONCRETE	1 1/2"	3000

List of structural steel members to be tested:

C7X9.8
C12X20.7
6 3/4"X14 GA. JOISTS
2"x18 ga. STRAPS

TESTING MAY BE WAIVED IF STEEL HAS BEEN PROPERLY IDENTIFIED BY MFR'S MILL ANALYSIS AND TEST REPORTS PER TITLE 24, C.C.R., SECTION 2212.A.1

Other Tests and Inspections, together with special instructions:

GROUNDING TEST
EXPANSION ANCHORS

Copies of Reports to:

DSA/ORS
AMERICAN MODULAR SYSTEMS, INC.
SCHOOL DISTRICT
ARCHITECT

By: _____
AUTHORIZED REPRESENTATIVE

INDEX

SHEET No.	DESCRIPTION
TS-1	TITLE & BUILDING DATA NOTES
N-1	GENERAL NOTES
1	FLOOR PLAN & NOTES
2	EXTERIOR ELEVATIONS
3	CEILING GRID, DETAILS & NOTES
S1	FOUNDATION PLAN WOOD, DETAILS & NOTES 50#
S1B	FOUNDATION PLAN CONCRETE, DETAILS & NOTE 50#
S2	FLOOR FRAMING PLAN & BUILDING SECTIONS
S2B	BUILDING SECTIONS AND WALL DETAILS
S3	ROOF FRAMING PLAN & DETAILS
S4	FRAMING ELEVATIONS & DETAILS
S5R	RAMP PLAN, ELEVATION & DETAILS
M1	MECHANICAL PLAN, DETAILS & NOTES
E1	ELECTRICAL PLAN, DETAILS & NOTES

BUILDING DATA
STOCKPILE CLASSROOMS

OCCUPANCY	E-2
TYPE OF CONSTRUCTION	V - NON-RATED
WIND LOAD (80 MPH EXPOSURE C)	21 LBS/SQ FT
FLOOR LIVE LOAD	50 LBS/SQ FT
ROOF LIVE LOAD	20 LBS/SQ FT (REDUCIBLE)
RAMP LIVE LOAD	100 LBS/SQ FT
BUILDING AREA	960 SQ FT

FIRE MARSHAL- CALIFORNIA BUILDING CODE (CBC)
TITLE 24, PART 2, CCR (1994 UBC W/ CAL. AMENDS)
TITLE 24, PART 3, CCR (1993 NEC W/ CAL. AMENDS)
TITLE 24, PART 4, CCR (1994 UMC W/ CAL. AMENDS)
TITLE 24, PART 5, CCR (1994 UPC W/ CAL. AMENDS)
TITLE 24, PART 9, CCR (1994 UFC W/ CAL. AMENDS)
TITLE 24, PART 12, CCR (1994 STD. W/ CAL. AMENDS)
TITLE 19

STRUCTURAL - 1995 CALIFORNIA BUILDING CODE (CBC)
TITLES 24 PARTS 1 AND 2

MODULES	MOMENT-RESISTANT
SYSTEM	(2) 12' X 40' MODULES
FOUNDATION	PRESSURE TREATED WOOD OR CONCRETE
SEISMIC	ZONE 4

55-0
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL 69217
AC. FLS. SS.
DATE 8-20-97
Fire - Sharon Wilt

FILE NO.
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL PC 328
AC. FLS. SS.
DATE

REGISTERED PROFESSIONAL ENGINEER
JOHN H. LAWLESS
No. 2310
Exp 3-31-01
STRUCTURAL
STATE OF CALIFORNIA

JOB NO.
DATE: AUGUST 6,1997
SHEET NUMBER
TS-1
BINDING ORDER 1

GENERAL NOTES AND SPECIFICATIONS

SECTION 1A GENERAL REQUIREMENTS

1. GENERAL

A. THE REQUIREMENTS OF THE GENERAL CONDITIONS OF THE AGREEMENT AND THIS GENERAL REQUIREMENT APPLY TO THE SEVERAL TRADE SECTIONS WITH THE SAME FORCE AS THOUGH FULLY REPEATED IN EACH TRADE 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 WITH THE WRITTEN APPROVAL OF D.S.A. AND THE ARCHITECT.

C. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF TITLES 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 ARCHITECT.

2. SCOPE OF WORK

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

B. ALL REQUIREMENTS OF TITLES 24 OF THE STATE OF CALIFORNIA CODE OF REGULATIONS 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 DISTRICTS.
3. ON-SITE INSPECTION OF THE BUILDING INSTALLATION ELECTRICAL AND UTILITY INSTALLATION OR CONNECTIONS BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND THE DISTRICT ARCHITECT AND RETAINED BY THE SCHOOL DISTRICT WORK. COST OF
4. OTHER SPECIAL TESTS OR INSPECTIONS AS MAY BE REQUIRED BY THE DIMSION OF THE STATE ARCHITECT.
5. ADDENDUMS SHALL BE SIGNED BY THE ARCHITECT & APPROVED BY D.S.A.
6. CHANGE ORDERS SHALL BE SIGNED BY THE OWNER & ARCHITECT & APPROVED BY D.S.A.
7. THE TESTING LAB SHALL BE IN THE EMPLOY OF THE OWNER.
8. ALL CONTRACTORS SHALL VERIFY ALL WORK CONDITIONS, DIMENSIONS AND DETAILS AND REPORT ANY OR ALL OMISSIONS AND DISCREPANCIES TO THE DESIGNER/OWNER IMMEDIATELY BEFORE COMMENCING WORK.
9. EACH CONTRACTOR TO BE RESPONSIBLE TO SEE THAT THEIR WORK CONFORMS TO ALL GOVERNMENTAL CODES WHETHER OR NOT SO STATED ON THE DRAWINGS.
10. ALL MATERIALS AND WORKMANSHIP TO CONFORM TO THE LATEST REQUIREMENTS OF THE GOVERNING BUILDING CODES IN EFFECT AT TIME OF DSA APPLICATION.
11. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED AND ERECTED PER MANUFACTURER'S DIRECTIONS AND INSTRUCTIONS.
12. SHOP DRAWINGS MAY BE REQUIRED. IF SO, THEY WILL BE ACCURATELY DRAWN TO A LARGE ENOUGH SCALE TO SHOW ALL PERTINENT FEATURES OF THE ITEM AND ITS CONNECTION TO RELATED WORK.
13. THE MANUFACTURER OF BUILDING IS TO PLACE A PERMANENT METAL IDENTIFICATION LABEL ON EACH MODULE, MECHANICALLY FASTENED TO THE FRAME AND VISIBLE FROM THE EXTERIOR OF THE END OF THE MODULE. SEE "GENERAL DESIGN REQUIREMENTS", THIS PAGE.
    FOR PROJECTS MANUFACTURED OFF-SITE, THE PLANT INSPECTOR IS TO INDICATE THE MANUFACTURER'S NAME AND SERIAL NUMBER OF EACH MODULE ON THE VERIFIED REPORT AND D.S.A. APP. NUMBER.
14. ALL TESTS AND INSPECTIONS REQUIRED BY DSA SHALL BE COMPLIED WITH. ALL TESTS REQ. BY FIRE AND LIFE SAFETY REGULATIONS SHALL BE BY A NATIONALLY RECOGNIZED TESTING LABORATORY.

FOUNDATION

1. ASSUMED ALLOWABLE SOIL BEARING: 1000 PSF.
2. FOOTINGS SHALL BE LOCATED ON UNDISTURBED FIRM NATURAL SOIL, APPROVED COMPACTED FILL OR ON AN APPROVED PAVED SURFACE.

NOTE:THE FOUNDATION SYSTEM PRESENTED HEREIN COMPLIES WITH INTERPRETATION OF REGULATIONS, IR 23-8, ISSUED BY DIVISION OF THE STATE ARCHITECT FOR TEMPORARY BUILDINGS. THIS FOUNDATION SYSTEM IS NON-CONVENTIONAL AND THE STRUCTURAL ENGINEER TAKES NO RESPONSIBILITY FOR ITS CONSTRUCTION OR LONGEVITY.

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, PROGRAM BELL, PUBLIC ADDRESS SYSTEM,INTERCOM SYSTEM,TV,TELEPHONE SYSTEM UNLESS OTHERWISE INDICATED ON THE DRAWINGS, OR MODIFIED BY CHANGE ORDER.

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 BUILDINGS. REMOVAL OF TREES SHRUBS,FENCING, SPRINKLERS ETC. NECESSARY FOR THE MOVE-IN OF BUILDINGS SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

TRIM/ FINISH NAILING

DESCRIPTION	SET	SIZE	LENGTH	FINISH
SIDING		.131	2 1/4"	GALV
CASING, SILL & INT. CORNER TRIM	X	16g	1 1/4"	N
2X FASCIA		.131	3"	GALV
SOFFIT		.131	2 1/4"	GALV
1X EXT. TRIM, WINDOWS, EXT. DOORS, EXT. TRIM		.113	2"	GALV

SECTION 6 WORKMANSHIP

A. GENERAL - ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC STANDARD SPECIFICATIONS,TITLE 24 OF CALIFORNIA CODE OF REGULATIONS AND THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS FOR DESIGN OF STEEL STRUCTURAL MEMBERS. A COPY OF TITLE 24 SHALL BE KEPT AT THE JOBSITE AT ALL TIMES.

B. WELDING - ALL WELDING DONE BY SHIELDED ELECTRIC-ARC OR FLUX CORED-ARC PROCESS COMPLYING WITH REQUIREMENTS OF THE "STRUCTURAL WELDING CODE" OF THE AMERICAN WELDING SOCIETY. WELDING DONE BY OPERATORS QUALIFIED BY TESTS ACCEPTABLE TO THE DIVISION OF THE STATE ARCHITECT. WELDING INSPECTION PER TITLE 24,PART 2,CCR, SECTION 2212.A.5
WELDING ELECTRODE SHALL BE E70XX.
1. STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. A-36 & A-570 GR.36.
2. PIPE COLUMNS SHALL COMFORM TO A.S.T.M. A-53 WITH SULFUR CONTENT NOT EXCEEDING 0.05%.
3. STEEL TUBING SHALL CONFORM TO A.S.T.M. A-500 GRADE B OR A.S.T.M. A579 GRADE 50 FOR GAUGE TUBING-TYP. U.N.O.
4. STRUCTURAL WELDS ARE DESIGNED FOR FULL ALLOWABLE STRESS UNLESS OTHERWISE NOTED.

C. ERECTION - STRUCTURAL STEEL ERECTED TRUE,STRAIGHT, PLUMB AND TO ITS DESIGNATED LOCATIONS. FIELD CONNECTIONS BOLTED OR WELDED AS INDICATED ON THE DRAWINGS.

D. NAILS,BOLTS, SCREWS AND NUTS ETC.- FOR EXTERIOR WORK SHALL BE CADMIUM PLATED OR GALVANIZED.
1. BOLTS FOR STRUCTURAL STEEL JOINTS SHALL CONFORM TO A.S.T.M. A-307 UNLESS OTHERWISE NOTED. ALL HOLES FOR MACHINE AND CARRIAGE BOLTS THROUGH STEEL TO BE DRILLED, OR TORCH PILOT HOLE AND REAM MIN. 1/16" TO CORRECT SIZE. NELSON STUDS (WELDED TO STEEL) MAY BE SUBSTITUTED FOR BOLTS SAME LENGTH AND DIAMETER EXCEPT AT SIMPSON MTT28B.

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

F. SHOP PAINT
1. EXPOSED STEEL COATED WITH ONE SHOP COAT OF RED OXIDE PRIMER.
2. NON-EXPOSED STEEL COATED WITH ONE SHOP COAT OF RED OXIDE PRIMER.
3. ALL SURFACES THOROUGHLY CLEANED BY EFFECTIVE MEANS PRIOR TO APPLICATION OF SHOP COATS.PRIME ALL EXPOSED STEEL SURFACES AFTER FIELD WELDING.

G. TESTS
1. PROVIDE MILL CERTIFICATES ON TEST ALL STEEL MEMBERS PER T-24 PART 2,CCR SECTION 2212.A.1.

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. 17 OF WEST COAST LUMBER INSPECTION BUREAU, OR "GRADING RULES FOR LUMBER,3RD EDITION OF WESTERN WOOD PRODUCTS ASSOCIATION OR W.C.L.I.B.. PLYWOOD GRADE MARKED IN ACCORDANCE WITH PRODUCT STANDARD PS 1-95 FOR SOFTWOOD PLYWOOD,OF AMERICAN PLYWOOD ASSOCIATION, COMPLYING WITH CBC EACH SHEET SHALL BEAR THE STAMP OF APA, PITTSBURGH TESTING, OR TECO.

A. JOISTS, RAFTERS, PLATES, STUDS-DOUGLAS FIR OR HEM FIR S4S #2 U.N.O. NOTE: USE 1 1650 E1.5 MAY BE SUBSTITUTED FOR #2 GRADE IF IT MEETS THE STRUCTURAL REQUIREMENTS FOR FLOOR AND ROOF MEMBERS.
B. HEADERS,POSTS AND TIMBERS-DOUGLAS FIR S4S #1
C. BLOCKING - DOUG FIR #3,OR HEM FIR #3,OR STD. & BET.
D. SILLS AND LUMBER & SHIM PLATES IN CONTACT WITH CONCRETE,MASONRY OR EARTH, DOUG FIR #2 PRESSURE TREATED IN ACCORDANCE WITH CBC 1811.7. EACH PIECE SHALL BEAR AWPB STAMP, LP-22 GROUND CONTACT,D.F.#2 ABOVE GROUND.
E. PLYWOOD ROOF DECKING - NOT USED.
F. PLYWOOD FLOOR DECKING - APA STURD-I-FLOOR 2-4-1 OR UNI-FLOOR BY PITTSBURGH TESTING LAB, 1-1/8"NOM. TONGUE AND GROOVE FLOOR SHEATHING, WITH EXTERIOR GLUE.
G. EXTERIOR SIDING/SHEATHING - APA TYPE 303,EXTERIOR.
H. MOISTURE BARRIER - KRAFT WATERPROOF BUILDING PAPER, OR 15 LB. FELT, UBC STANDARD 14-1 FOR KRAFT, 15-1 FOR FELT.
J. STUDS - DOUG FIR #2, OR HEM FIR #2.
K. FASTENERS - ALL NAILS SHALL BE CORROSION RESISTANT PER UBC STANDARD 25-17. ELECTROGALVANIZED COMMON NAILS U.N.O.
L. BUILDING TRIM - 2X RESAWN SELECT D.F.,H.F.,OR CEDAR
M. DOOR/WINDOW TRIM - 1X4 REWAWN D.F.,H.F.,OR CEDAR.
N. FRAMING CONNECTORS SHALL BE FROM SIMPSON CATALOG LATEST ED.
O. FIRE BLOCKS SHALL CONFORM TO CBC SECTION 708.
P. ALL NAILS SHALL BE COMMON NAILS UNLESS OTHERWISE NOTED.
Q. FOUNDATION LUMBER: ALL CUT ENDS AND HOLES IN PRESSURE TREATED LUMBER SHALL BE TREATED WITH "CUPRINOL".

3. WORKMANSHIP

A. FRAMING - SECURELY NAILED,BRIDGED AND BLOCKED TO FORM RIGID STRUCTURE. WORK CUT, FITTED AND ASSEMBELED 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,PART 2, CALIFORNIA CODE OF REGULATIONS,TABLE 23-I-Q
C. EXTERIOR WALLS - FACTORY FABRICATED. CAULKING PROVIDED BETWEEN PERIMETER OF WALL AND STRUCTURAL MEMBERS PROVIDING WEATHER-PROOF AND WATER-TIGHT SEAL. NECESSARY CLOSERS,SEALS, AND FLASHINGS PLACED AT TOP AND BASE SUPPORT OF PANELS AND AROUND OPENINGS.
D. 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.
E. MOISTURE BARRIER - APPLIED TO STUDS WEATHER-BOARD FASHION, HORIZONTAL JOINTS LAPPED MIN 6" INCLUDING BUILDING CORNERS. SHEATHING APPLIED OVER MOISTURE BARRIER.
F. TRIM SEALED AT ALL EDGES. SEALANT PAINTED TO MATCH TRIM OR SIDING UNLESS TRANSPARENT TYPE.

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 A526. MINIMUM 26 GA. UNLESS OTHERWISE NOTED ON THE DRAWINGS.
B. SOLDER - OF STAND,GRADE "A" OF EQUAL PARTSARD BRAND LEAD AND TIN ASTM B32.
C. FLUX - ZINC SATURATED MURIATIC ACID.
D. GUTTERS: 26 GA. G-90 GALV. STEEL.
DOWNSPOUTS: 2"X3" CONVOLUTED 30 GA. G-90 GALV. STEEL.
GUTTER ENDCAPS: 26 GA. G-90 GALV. STEEL.
GUTTER CLIPS: 18 GA. G-90 GALV. STEEL

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 COUPLETED WORK AND FINISHES WATER AND WEATHER TIGHT. ALUMINUM SHALL BE SEPARATED FROM FERROUS METAL BY POLYETHYLENE TAPE OR FLOOD COAT OF ASPHALTIC PAINT.

SECTION 7C METAL ROOFING

1. SCOPE OF WORK
CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL METAL ROOFING. TEST RESULTS SHOWING THE ROOFING SYSTEM WILL WITHSTAND THE UPLIFT OF A 80 MPH WIND SHALL BE SUBMITTED WITH THE PLANS AND SPECIFICATIONS.

2. MATERIALS
A. ROOFING - 3" INCH STANDING SEAM 22-GAUGE G-90 GALV. INTERLOCKING SHEET STL PANELS (G90).

SECTION 7J SEALANT

1. SCOPE OF WORK
CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIAL AND SERVICES TO SEAL BUILDINGS.

2. MATERIALS
VULKEM SEALANT, POLYURETHANE, MANUFACTURED BY MAMECO INTERNATIONAL FOR ROOFS. "GEOCEL" SILICONIZED CAULK, GE, DUPONT, EAGLESEAL OR DAP FOR ALL OTHER APPLICATIONS, OR EQUAL.

3. WORKMANSHIP
SEALANT APPLIED TO DRY CLEAN SURFACES, WHEREVER INDICATED ON DETAILS AND AS NEEDED TO MAKE BUILDING WATERTIGHT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

SECTION CONCRETE CONCRETE (IF USED)

1. CONCRETE MORTAR AND RELATED MATERIALS TO CONFORM TO APPLICABLE PROVISIONS OF TITLE 24 EXCEPT AS MODIFED HEREIN.
2. REINFORCEING BARS:ASTM A615 OR ASTM A706 DEFORMED GRADE 40 BILLET STEEL.
3. EXPANSION JOINT FILLER: ASTM D994
4. FORM MATERIALS: SIDE FORMS DOUGLAS FIR, CONSTRUCTION GRADE OR BETTER: OR METAL FORMS.
5. PLACING REINFORCEMENT, PLACING CONCRETE SUFACE FINISHES, CURING AND REMOVAL OF FORMS SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF TITLE 24, PART 2.

SECTION 8B HOLLOW METAL DOORS AND FRAMES

1. SCOPE OF WORK
CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL HOLLOW METAL DOORS AND FRAMES.

2. MATERIALS
A. DOORS - TYPE L FULL FLUSH, MANUFACTURED BY AMWELD MANUFACTURING COMPANY,18 GA. 1 3/4" THICK PER CS242 MIN,REINFORCE FOR HARDWARE-BOTH FACES FOR CLOSER, SOUND DEADEN INTERIOR.
B. FRAMES - 16 GA COLD ROLLED,2" FACES, CS242 MIN.3 ANCHORS PER JAMB + ADJUSTABLE FLOOR ANCHOR EACH JAMB REINFORCE FOR HARDWARE. PROVIDE STRIKE BOX,PROVIDE SOUND DEADENING: 1/8" UNDERCOATING OR INSULATING FILL.

3. WORKMANSHIP
ALL WORK FABRICATED IN SHOP TO REQUIRED PROFILES BY FORMING AND WELDING, WITH ARISES AND EDGES STRAIGHT, SHARDP FIT FABRICATED ACCURATELY WITH SQUARE CORNERS, HAIRLINE JOINTS AND SURFACES FREE FROM WARP,WAVE,BUCKLE OR OTHER DEFECTS AFTER FABRICATION,DOORS AND FRAMES CLEANED THOUROUGHLY,ALL WELDS GROUND SMOOTH AND GIVEN PRIME COAT.

SECTION 8D FINISH HARDWARE

1. SCOPE OF WORK
CONTRACTOR SHALL SUPPLY AND INSTALL FINISH HARDWARE AS SPECIFIED AND AS REQUIRED.

2. SCHEDULE FOR EXTERIOR DOORS
SEE NOTE ON FLOOR PLAN.

3. SPECIAL REQUIREMENTS
A. EXIT DOORS SHALL BE OPENABLE FROM THE INTERIOR WITHOUT KEY OR SPECIAL KNOWLEDGE OR EFFORT.
B. CLOSER SHALL BE SET FOR A MAXIMUM OPENING PRESSURE OF 8.5 LBS. PRESSURE.

SECTION 9E PAINTING

1. SCOPE OF WORK
CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO PAINT BUILDING. ALL EXPOSED SURFACES OF BUILDING AND RAMPS SHALL BE PAINTED EXCEPT ALUMINUM WINDOW FRAMES, THRESHOLDS, AND ROOFING.

2. MATERIALS
A. FOR EXTERIOR WOOD:

REF.BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
PRIMER	42-9W	1240	Y24W20	289-N
FINISH	OD-60-XX	1240-XXX	B54WZ102	GE2-NXX

B. FOR INTERIOR TRIM

REF. BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
FINISH	W450-XX	1650-XXX	A26W11	40XX

C. FOR METAL

REF. BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
PRIMER	43-4	1710	B50NZ6	15N
FINISH	10-XX	1700-XXX	B54WZ102	GE2-NXX

3. WORKMANSHIP
ALL EXPOSED SURFACES SHALL BE PAINTED EXCEPT ALUMINUM WINDOW FRAMES AND THRESHOLDS. MATERIAL SHALL BE OF THE GRADE SPECIFIED OR EQUAL.
A. EXTERIOR - WOOD SIDING, TRIM AND SKIRTING FLAT OR SEMI-GLOSS LATEX - APPLY ONE COAT OF PRIME AND AT LEAST ONE FINISH COAT. PRIME COAT SHALL BE BRUSHED ON OR SPRAYED AND BACK BRUSHED INTO ALL GROOVES IN THE SIDING. IF NECESSARY, IN THE OPINION OF THE INSPECTOR, AN EXTRA COAT SHALL BE APPLIED TO ALL GROOVES SO THAT THE FINISH COAT WILL HAVE A UNIFORM APPEARANCE. ALLOW PRIME COAT TO DRY ACCORDING TO MANUFACTURER'S RECOMMENDATION. PRIME AND FINISH COATS SHALL BE COMPATIBLE AND MANUFACTURED BY THE SAME COMPANY.
B. INTERIOR TRIM - TRIM NOT PREFINISHED SHALL BE PAINTED WITH TWO COATS OF SEMI-GLOSS LATEX OVER PRIMER.
C. INTERIOR HARDWOOD CABINETS - TWO COATS LOW LUSTER POLYURETHANE FINISH. APPLY FIRST COAT THINNED WITH ONE QUART MINERAL SPIRITS PER GALLON. APPLY SECOND COAT AS RECOMMENDED BY MANUFACTURER.
D. METAL - ALL METAL SURFACES SHALL BE PAINTED WITH TWO COATS OF ALKYD FINISH COAT OVER ZINC CHROMATE OR EQUAL RUST INHIBITING PRIMER.
E. RAMP - ONE COAT OF FERROX NON-SKID SURFACING AS MANUFACTURED BY AMERICAN ABRASIVE METALS OR COMPARABLE.
ALL PAINTS OF THE TYPE INDICATED SHALL BE LISTED ON THE STATE OF CALIFORNIA QUALIFIED PRODUCTS LIST FOR MAINTENANCE PAINTS 8010-910-98A DATED JULY 1989. OR EQIAL.
F. SUBMIT ONE SET COLOR SAMPLES TO ARCHITECT FOR EACH PRODUCT TO ASSIST IN SELECTION.

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 . UNLESS SPECIFICALLY CALLED FOR IN THE CONTRACT, STEPS, RAMPS, OR HANDRAILS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

2. ASSEMBLY OF ELEMENTS
A. IN A LOCATION ON THE SITE AS DETERMINED BY THE SCHOOL DISTRICT,(APPROVED BY DSA) THE CONTRACTOR SHALL PLACE WOOD 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 EACH OTHER.
C. CONNECTION OF THE ELEMENTS TOGETHER SHALL BE DONE ACCORDING TO INSTRUCTION ON THE DRAWINGS. FLASHINGS, TRIM AND OTHER LOOSE ITEMS SHALL BE INSTALLED PER DETAILS ON THE DRAWINGS.

NOTE:

WALL FINISH MATERIAL
FLAME SPREAD MAX = 200
SMOKE DENSITY MAX = 450
BUILDING INSULATION
FLAME SPREAD MAX = 25
SMOKE DENSITY MAX = 450
PIPE INSULATION
FLAME SPREAD MAX = 25
SMOKE DENSITY MAX = 450
DUCT INSULATION
FLAME SPREAD MAX = 25
SMOKE DENSITY MAX = 50

SECTION 15A AIR CONDITIONING

1. SCOPE OF WORK (SEE SHEET M-1 FOR HVAC SPEC. AND NOTES)
CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL THE AIR CONDITIONING SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFICATIONS, 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 NOTE ON FLOOR PLAN FOR SIZE AND TYPE.

3. WORKMANSHIP
UNITS SHALL BE INSTALLED COMPLETE AND OPERATING WITH ALL ACCESSORIES IN ACCORDANCE WITH THE MANUFACTURER'S 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 WITH LAMPS, CONNECTIONS AND DISCONNECTS TO A/C EQUIPMENT.

2. MATERIALS
ALL NEW COMPLYING WITH REQUIREMENTS OF CALIFORNIA ELECTRICAL CODE AND NATIONAL FIRE PROTECTION ASSOCIATION
A. ELECTRIC METALLIC TUBING - COUPLING AND FLEX CONDUIT GALVANIZED OR SHERARDIZED. EXTERIOR FLEX- GALV. STEEL W/ FACTORY APPLIED P.V.C. JACKET.
B. PANELBOARDS - FLUSH MOUNTED.
C. CONDUCTORS - COPPER,INSULATED FOR 600 VOLTS, TYPE THHN FOR SIZES #12 TO #6, TYPE THW FOR LARGER SIZES.MINIMUM SIZE-#14,
D. RECEPTACLES - AS NOTED. +15" A.F.F. MIN.
E. CLOCK RECEPTACLE - AS NOTED.
F. SWITCHES - AS NOTED. +48" A.F.F. MAX.
G. LIGHTING FIXTURES - AS NOTED ON THE DRAWINGS.

3. WORKMANSHIP
MATERIALS AND EQUIPMENT INSTALLED IN A SECURE,NEAT WORKMANLIKE MANNER IN ACCORDANCE WITH CODE REQUIREMENTS. PANELBOARD CARDS FILLED OUT. CONDUIT AND CABLE INSTALLED IN WALL AND CEILING SPACES. WORK PIERCING WATERPROOFED AREAS FLASHED AND SEALED TO A WATERTIGHT CONDITION. BUILDING CONDUIT/WIRING FROM FACE OF BLDG TO SITE TERMINATION BY SITE CONTRACTOR(N.I.C.).(FLEXIBLE CONDUIT S-BEND SEALTITE)

INSPECTION

INSPECTION OF PREFABRICATED BUILDINGS IS DIVIDED INTO TWO SEPARATE FUNCTIONS.

1. IN-PLANT INSPECTION.
2. ON-SITE INSPECTION.

THE CONTRACTOR SHALL ALLOW UP TO SEVEN (7) DAYS FROM THE DATE OF PLAN APPROVAL TO OBTAIN AN IN PLANT INSPECTOR APPROVED BY D.S.A.

IN-PLANT INSPECTION AND MATERIAL TESTING SHALL BE ACCOMPLISHED UNDER THE SUPERVISION OF THE DISTRICT ARCHITECT. THE CONTRACTOR SHALL NOTIFY THE DISTRICT ARCHITECT, DSA, AND THE DESIGNATED INSPECTOR/INSPECTION AGENCY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK. THE MANUFACTURER SHALL PROVIDE THE INSPECTOR WITH FULL ACCESS TO ALL PLANT OPERATIONS INVOLVING WORK UNDER THIS CONTRACT AND SHALL ADVISE THE INSPECTOR IN ADVANCE OF THE TIME AND PLACE WHEN OPERATIONS THAT THE INSPECTOR WANTS TO OBSERVE TAKE PLACE. BEFORE THE BUILDING(S) ARE REMOVED FROM THE PLANT FOR DELIVERY TO THE STORAGE FACILITY OR FROM THE STORAGE FACILITY TO THE SITE THE INSPECTOR SHALL DETERMINE THAT THEY ARE ACCEPTABLE AND ISSUE A WRITTEN RELEASE WHICH SHALL BE IN THE FORM OF A VERIFIED REPORT (FORM SSS-6). A COPY OF THE INSPECTOR'S VERIFIED REPORT SHALL ACCOMPANY EACH BUILDING TO STORAGE OR TO THE SITE. THE INSPECTOR SHALL PUT ONE COPY IN EACH BUILDING.

COORDINATION OF WORK

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ALL NECESSARY ARRANGEMENTS WITH THE SCHOOL DISTRICT AUTHORIZED REPRESENTATIVE FOR ACCESS TO GROUNDS AND REMOVAL OF EQUIPMENT,IF NECESSARY.
THIS CONTACT SHALL BE MADE AT LEAST 48 HOURS PRIOR TO DELIVERY OF AY MODULE.
ON-SITE INSPECTION SHALL BE DONE BY THE SITE INSPECTOR. ALL WORK WHICH THE MANUFACTURER OR HIS SUBCONTRACTORS PERFORM AT THE SITE SHALL BE SUBJECT TO THE INSPECTION OF THE SITE INSPECTOR. THE MANUFACTURER WILL FURNISH THE SITE INSPECTOR WITH SUCH INFORMATION AS MAY BE NECESSARY TO KEEP HIM FULLY INFORMED AS TO PROGRESS OF WORK AND DATES WHEN SITE WORK WILL OCCUR. THE CONTRACTOR SHALL NOTIFY THE INSPECTION AGENCY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.

THE CONTRACTOR SHALL VERIFY THAT THE DISTRICT'S SITE IS READY TO RECEIVE THE CLASSROOM(S) PRIOR TO THE DELIVERY OF ANY CLASSROOM(S) BY VISITING EACH SITE (THIS MAY BE DONE BY THE INSPECTOR).

MATERIALS AND WORKMANSHIP

ALL CONTRACTORS 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.

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. THE CONTRACTOR SHALL IF REQUESTED, FURNISH EVIDENCE SATISFACTORY TO THE ARCHITECT THAT SUCH IS THE CASE.

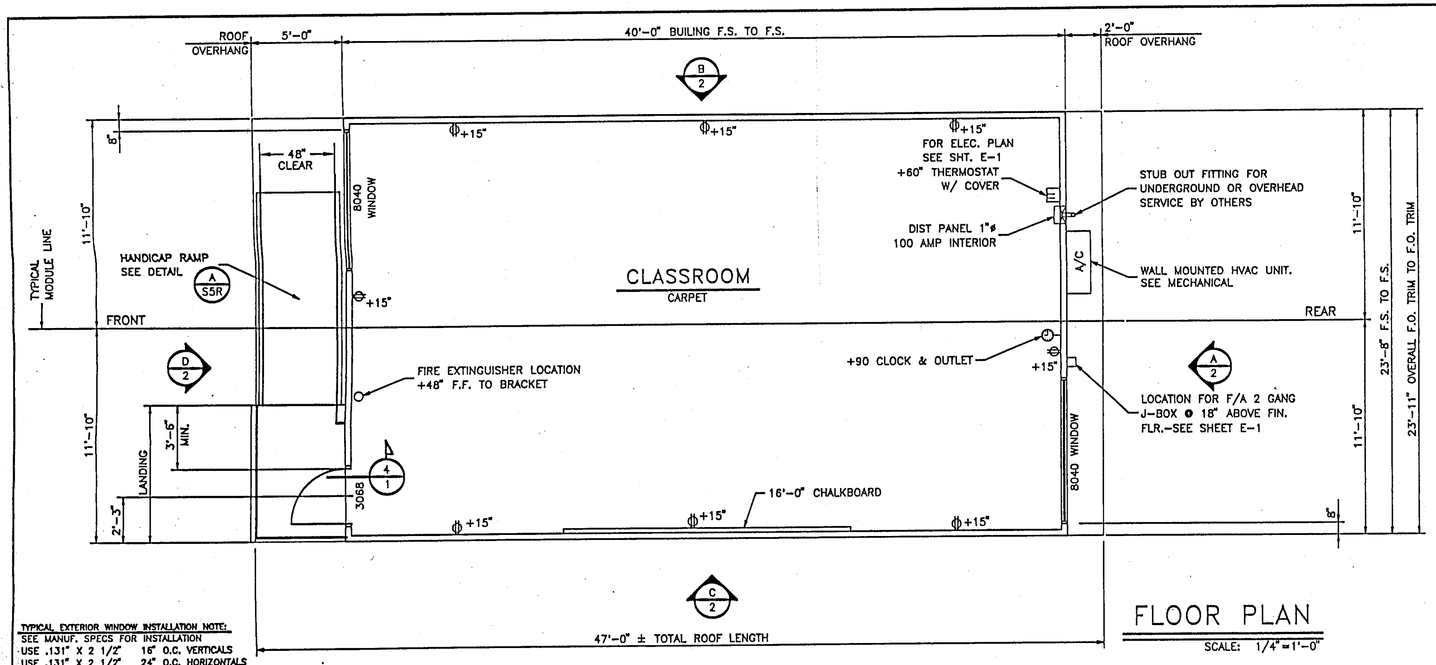
CONTRACTOR'S CREWS ASSIGNED TO ANY WORK PERFORMED UNDER THIS CONTRACT SHALL INCLUDE ONE COMPETENT AND FULLY EXPERIENCED PERSON DESIGNATED AS THE RESPONSIBLE PERSON IN CHARGE. SUCH PERSON MUST BE IDENTIFIED BY NAME TO THE DISTRICT IN ADVANCE OF ANY WORK. UPON REQUEST, THE CONTRACTOR SHALL PROMPTLY FURNISH TO THE DISTRICT INFORMATION RELATING TO THIS EMPLOYEE'S EXPERIENCE.

WORKMANSHIP SHALL BE EQUAL OR BETTER IN QUALITY TO THAT REQUIRED BY THE CONSTRUCTION TRADES FOR A FINISHED PRODUCT. A QUALITY CONTROL SUPERVISOR, DESIGNATED BY THE MANUFACTURER, SHALL REVIEW ALL WORK IN PROGRESS AND SHALL REVIEW THE FINISHED BUILDING PRIOR TO FINAL INSPECTION TO ASSURE IT IS COMPLETE AND CORRECT. THE QUALITY CONTROL SUPERVISOR SHALL HAVE THE AUTHORITY TO HAVE MATERIALS REPLACED AND WORK REDONE IN ORDER TO CORRECT FAULTY MATERIALS OR WORKMANSHIP.

GENERAL DESIGN REQUIREMENTS:

TWO (2) APPROXIMATELY 12' X 40' MODULES DESIGNED SO THAT TWO MODULES MAY BE JOINED TOGETHER TO FORM A COMPLETE STRUCTURE TO MAINTAIN A POSITIVE ALIGNMENT OF FLOORS, WALLS, AND ROOF AND TO PERMIT SIMPLE NON-DESTRUCTIVE DETACHMENT FOR FUTURE RELOCATION.

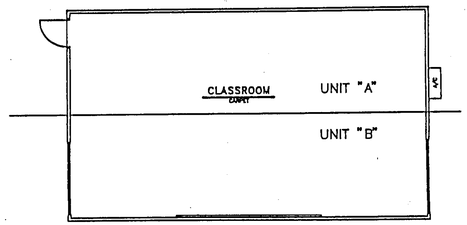
EACH MODULE SHALL BE PERMANENTLY IDENTIFIED WITH AN IMPRINTED (STAMPED NOT ENGRAVED) METAL IDENTIFICATION TAG 3"X1 -1/2" MINIMUM SIZE WITH THE FOLLOWING INF



FLOOR PLAN

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

TYPICAL EXTERIOR WINDOW INSTALLATION NOTE:
SEE MANUF. SPECS FOR INSTALLATION
USE .131" X 2 1/2" 16" O.C. VERTICALS
USE .131" X 2 1/2" 24" O.C. HORIZONTALS



OPTIONAL FLOOR PLAN

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

NOTES
INTERIOR

1. Floor: Carpets – Units shall be carpeted as indicated on floor plan with direct glue down type per State of California Specification 7220-XXX-01, Group 1, Type A, Class 28. Color will be selected by District after award of bid. The carpet density shall be 4600 minimum. Pile yarn shall be branded nylon. No cross seams shall be allowed.

2. Base: Resilient Cove Base – Best quality, moulded rubber, 1/8" thick, 4" high, moulded top set Cove: Provide preformed base for square external corners and preformed end stops where base does not abut. Solid color as manufactured by "Johnsonite Co." Flexco, or equal, Apply cove to complete perimeter of classroom.

3. Interior walls shall be vinyl covered lackboard U.N.O. applied in one continuous length from floor to ceiling. The lackboard shall be industrial insulation board manufactured specifically as a subst for vinyl covered wall panels. The board shall be asphalt free, shall have an inned-on coating and shall have a minimum density of 18 lbs. per ft. The vinyl coating shall be made of virgin vinyl colendered base color, weighing a minimum of 8 oz. per square yard. The coating backing shall be sheeting or non-woven fabric. The vinyl coating shall be mechanicaly laminated, with the long edges wrapped, to the lackboard. Tackboard shall be applied over 1/2" sheetrock or 3/8" plywood sheathing. The vinyl wall covered panel shall have a Class II flame spread rating. The panel shall be approved for classroom use by The California State Fire Marshal. Reference brand: Vinyl covered lackboard as manufactured by Chalfield-Clarks or comparable. Care shall be taken in mounting the lackboard so that the texture of all panels will have the same orientation and color match.

4. Ceiling: Suspend T-Bar System, see sheet 3 for details etc. Materials and installation per CCR 2501.A.5 and IR #47-4 inclusive as applicable to classrooms.

DOORS & WINDOWS

Exterior Doors: Metal Doors – 3'0"X6'8" hollow metal door construction of 1 sheet of 18 ga. steel assembled per C5242 min and reinforced with 20 ga. min. continuous vertical steel stiffeners spaced @ 6" O.C. Fill spaces between stiffeners with mineral wool or other insulation. (Reinforc both faces for closure) provide flush top on doors. Hardware reinforcement shall be 10 ga. min for hinges, door frame shall be 16 ga. pressed steel frame ASTM A366 & C5242. Hardware reinforcement shall be 10 ga. plate. Frames shall be designed with integral stop and trim. Provide (3) anchors per jamb.

Exterior Windows: Provide BRONZE aluminum frame minimum pane window units, as shown on floor plans.

Exterior Lite – 3/16" minimum tempered glass or laminated as – 1 glass of BRONZE

Certification – All glazing to be certified in accordance with ASTM E-773, E-774.

Header height shall be the same as the door. All operable sash shall have aluminum screens. Windows shall not be mounted to the exterior plywood surface. All windows shall meet the AAMA GS101-88 voluntary spec. For aluminum prime windows and sliding glass (ANSI), commercial grade.

HARDWARE

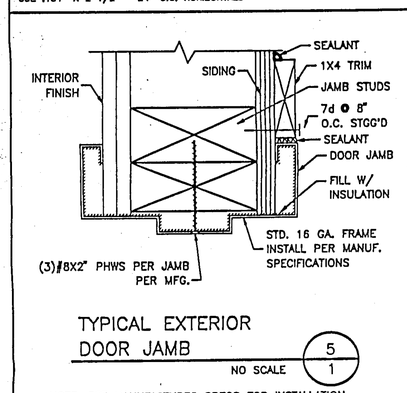
1. Exterior Door
   A) Hinges: HAGER 4-1/2X4-1/2 butts, BB1279 US26D,1-1/2 pair each door with set screw in barrel and ball bearing design, or approved equal.
   B) Lockset: Classroom lever handle lockset, mortise or cylindrical type, Schlage D70PD (Rodes) or equal. US26D finish.
   C) Closer: Norton 8500DA or 8500BF series, LCN 1460 Del series or equal.
   D) Weatherstripping: All exterior doors shall be weatherstripped with Pemko 2990, Ultra WS007, at door jambs and head or equal.
   E) Threshold: Threshold shall be Pemko 271 AV 5" aluminum with Pemko 216 AV Ultra TH042 door bottom.
   F) Doorstop: Quality #44, or equal.

FIRE EXTINGUISHER

1. Each portable classroom shall be equipped with pressure type fire extinguishers with 2A40BC UL rating. To be mounted on the interior wall of the building near the doorway(s) at a height of 4 feet to mounting bracket. Fire extinguishers shall be totally charged and have a dial indicating the state of charge.

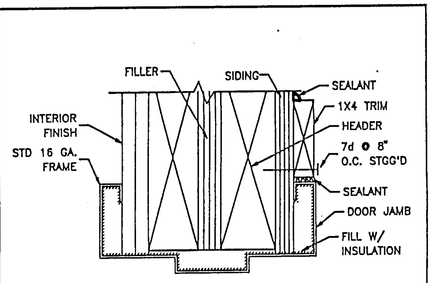
CHALKBOARD SPECIFICATIONS

Chalkboards(standard) shall have green facing sheet. Markerboards(extra cost option)
Markerboards shall be 5 mil thick melamine facing sheet suitable to accept dry erase felt markers. The facing sheet shall be laminated, using hot melt adhesive, to a medium density particleboard substrate with a minimum density of 45#/c. ft. The panel shall have a foil backing. The panels shall have extruded aluminum molding and chalktroll with a minimum of 2-15/16" projection from the face of the panel. A full length map rail shall be provided with cork insert and end stops. The map rail and chalktroll are to incorporate a channel to wrap around the panel. Three (3) map hooks, with clips, personel shall be provided. One flag holder, 1/2" size, shall be provided for each classroom. Each classroom shall be 2 ea. 4x8 panels installed side by side to make a 4x16 panel, centered on one of the long walls. Referenced brand: Chalfield-Clarke Co. series 500. Attach directly to studs and blocking W/#8x3" oval head wood screw @ 32" o.c. horizontally and @ 24" o.c. vertically.



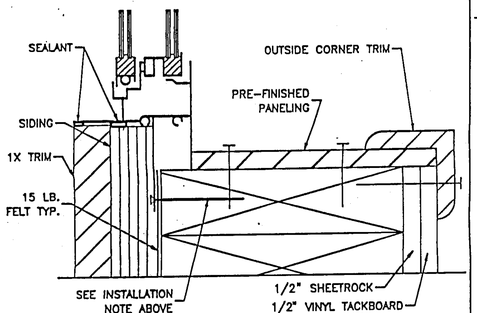
TYPICAL EXTERIOR DOOR JAMB 5/1 — NO SCALE

NOTE: SEE MANUFACTURES SPECS FOR INSTALLATION.

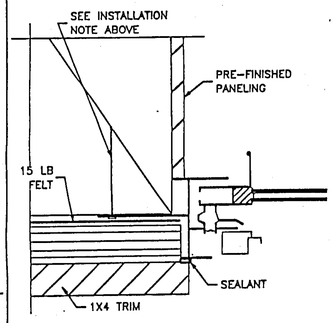


TYPICAL EXTERIOR DOOR HEAD 6/1 — NO SCALE

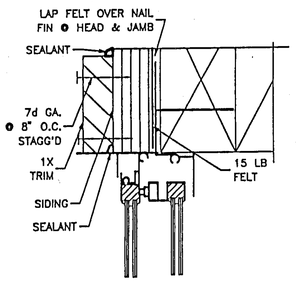
NOTE: SEE MANUFACTURES SPECS FOR INSTALLATION.



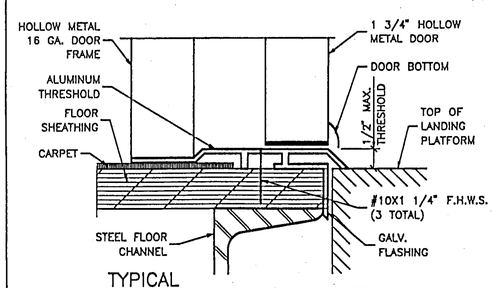
TYPICAL WINDOW SILL DETAIL 1/1 — NO SCALE



TYPICAL WINDOW JAMB 2/1 — NO SCALE



TYPICAL WINDOW HEAD 3/1 — NO SCALE



TYPICAL EXTERIOR DOOR SILL 4/1 — NO SCALE

3" STANDING SEAM ROOF

DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL NO. 92 1.5
FLS SS
DATE 8-20-97

REGISTERED PROFESSIONAL ENGINEER
JOHN H. LAWLESS
No. 2310
Exp 3-31-01
STRUCTURAL
STATE OF CALIFORNIA

FILE NO.
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL PC 328
AC FLS SS
DATE 4/9/97

24 X 40
RELOCATABLE
CLASSROOMS

American Modular Systems

CUSTOMER:

FLOOR PLAN & NOTES

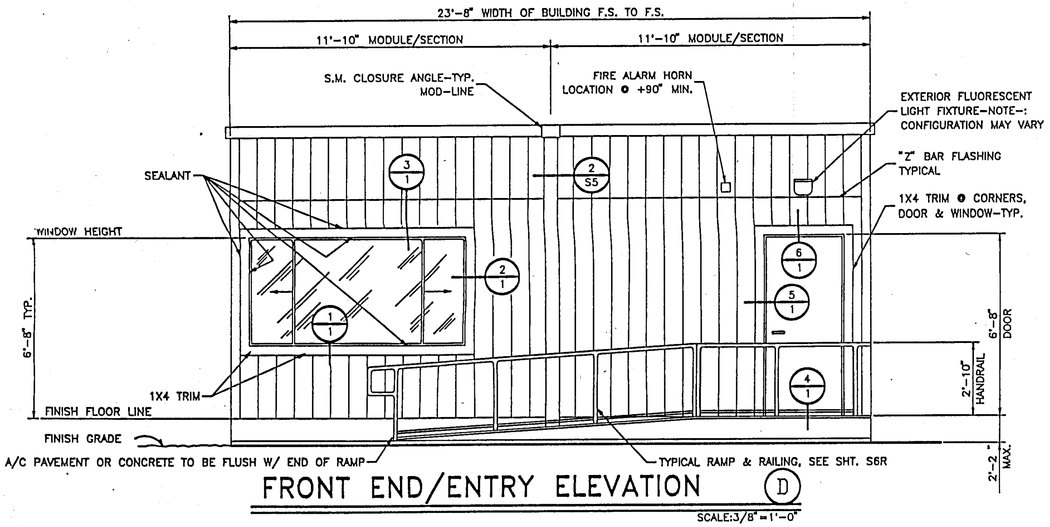
DATE:	4-8-97
SCALE:	NONE
DRAWN BY:	R.S.
CHECKED BY:	
CHECKED BY:	
SERIAL NO.	

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION

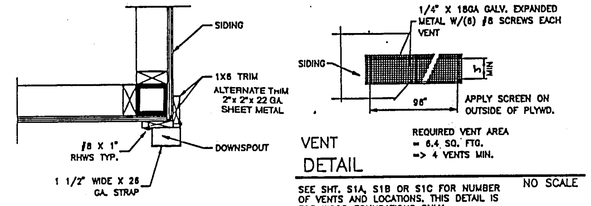
PROJECT No.

SHEET No. 1



FRONT END/ENTRY ELEVATION (D)

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



VENT DETAIL

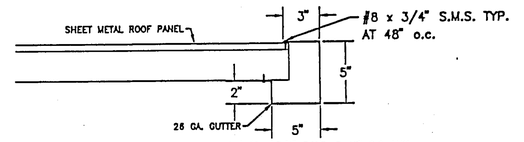
REQUIRED VENT AREA = 6.4 SQ. FTG. => 4 VENTS MIN.

SEE SHT. S1A, S1B OR S1C FOR NUMBER OF VENTS AND LOCATIONS. THIS DETAIL IS FOR WOOD FOUNDATIONS ONLY.

NO SCALE

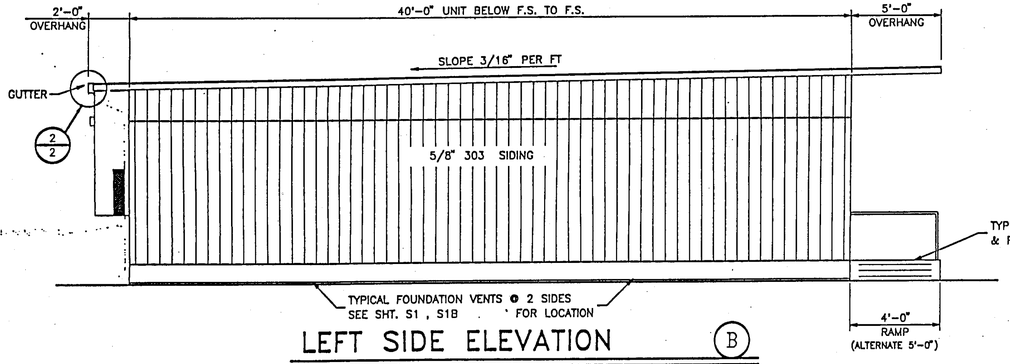
DOWNSPOUT DETAIL (3/2)

1 1/2"=1'-0"



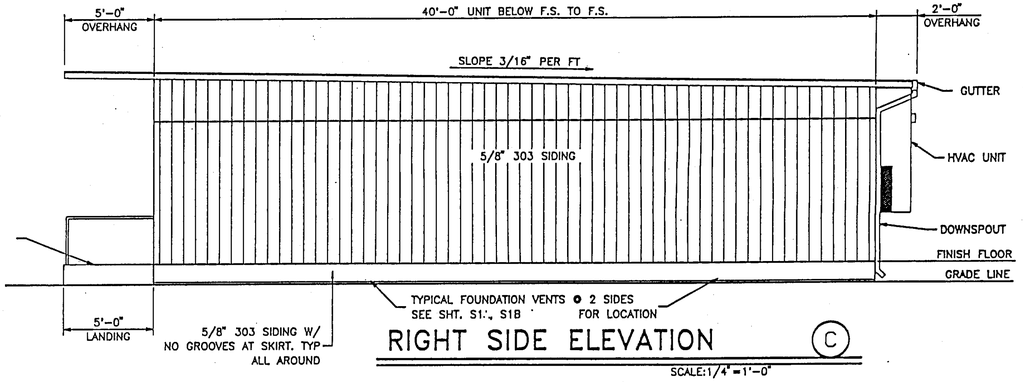
GUTTER: 26 GA., G-90 GALV. STEEL, FASTENED W/ #8 x 3/4" S.M.S. @ 48" O.C. MAX.
DOWNSPOUT: 2"X3" G-90 30 GA. CONVOLUTED GALV. STEEL.
DOWNSPOUT STRAPS: 26 GA. STEEL X 1 1/2" WIDE ATTACHED TO BLDG. MAX. 6'-0" O.C.

GUTTER AT OVERHANG DETAIL (2/2)



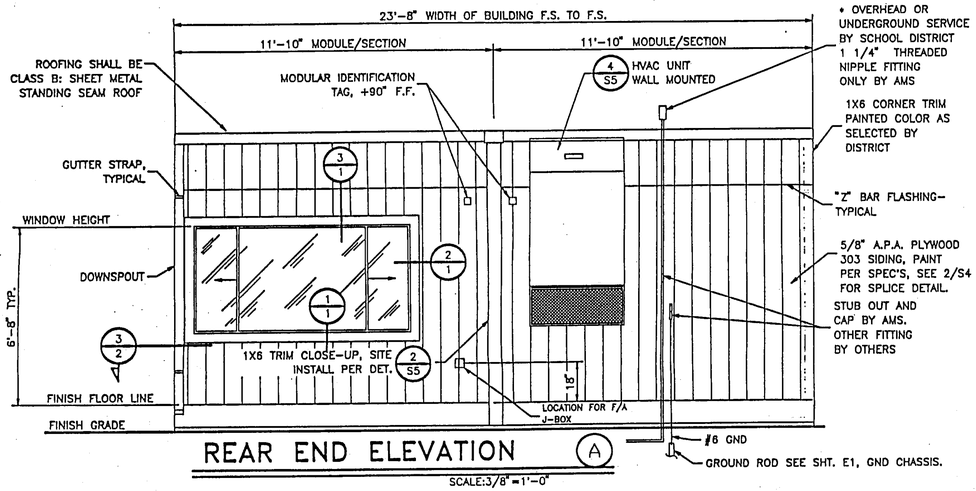
LEFT SIDE ELEVATION (B)

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



RIGHT SIDE ELEVATION (C)

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



REAR END ELEVATION (A)

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL. PC 328
AC. FLS SS QR
DATE 8-20-97

REGISTERED PROFESSIONAL ENGINEER
JOHN H. LAWLOR
No. 2310
Exp. 3-31-01
STRUCTURAL
STATE OF CALIFORNIA

FILE NO.
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL. PC 328
AC. FLS SS QR
DATE 4/9/97

24 X 40
RELOCATABLE
CLASSROOMS

American Modular Systems

CUSTOMER:

EXTERIOR ELEVATIONS

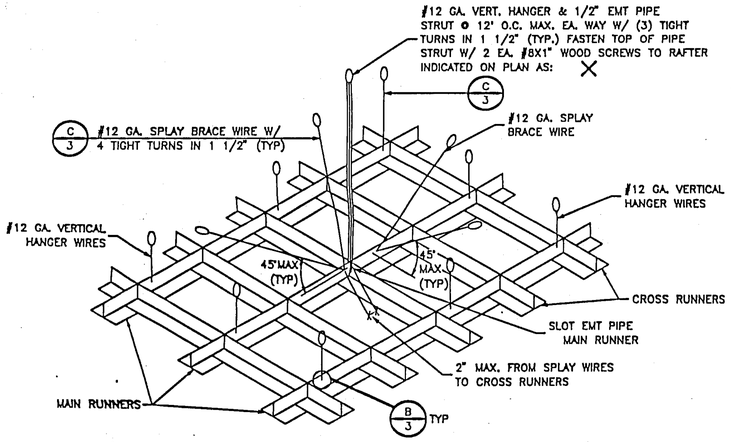
DATE: 4-8-97
SCALE: NONE
DRAWN BY: R.S.
CHECKED BY:
CHECKED BY:
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			4		
2			5		
3			6		

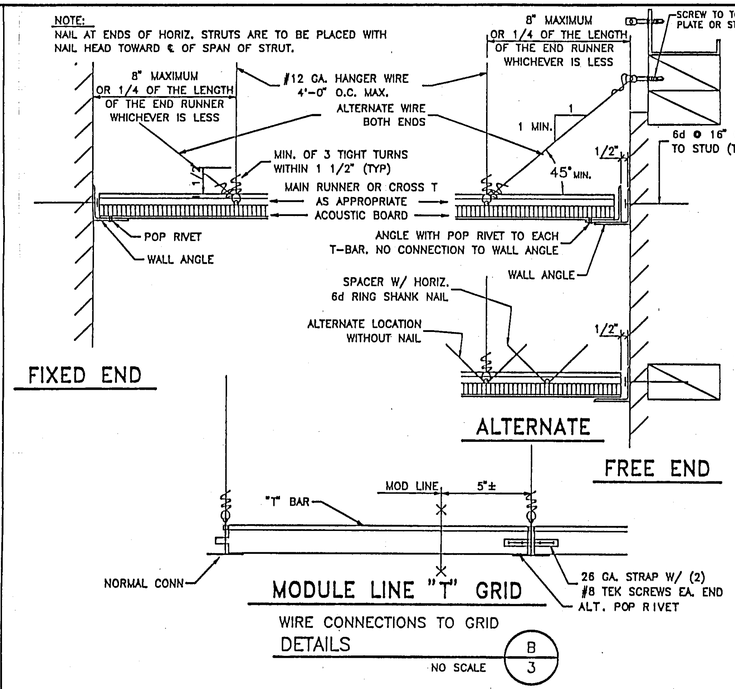
PROJECT No.

SHEET No. 2



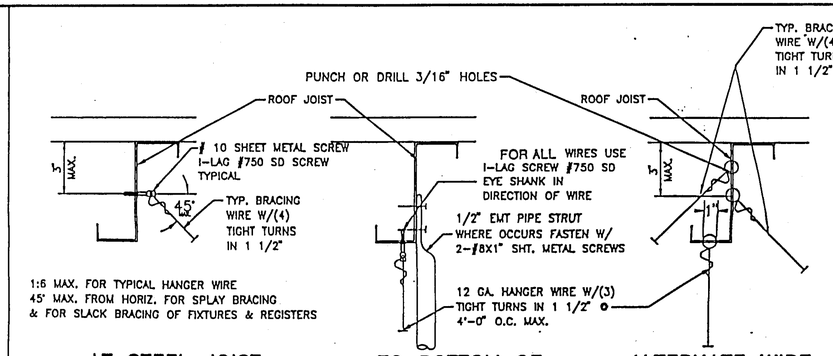
NOTE: SPLAYED BRACING WIRES SHALL BE SPACED NOT MORE THAN 12 FT. ON CENTER.

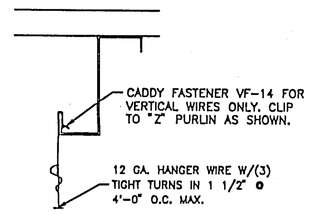
ATTACHMENT FOR CEILING GRID DETAIL — A/3 — NO SCALE



MODULE LINE "T" GRID

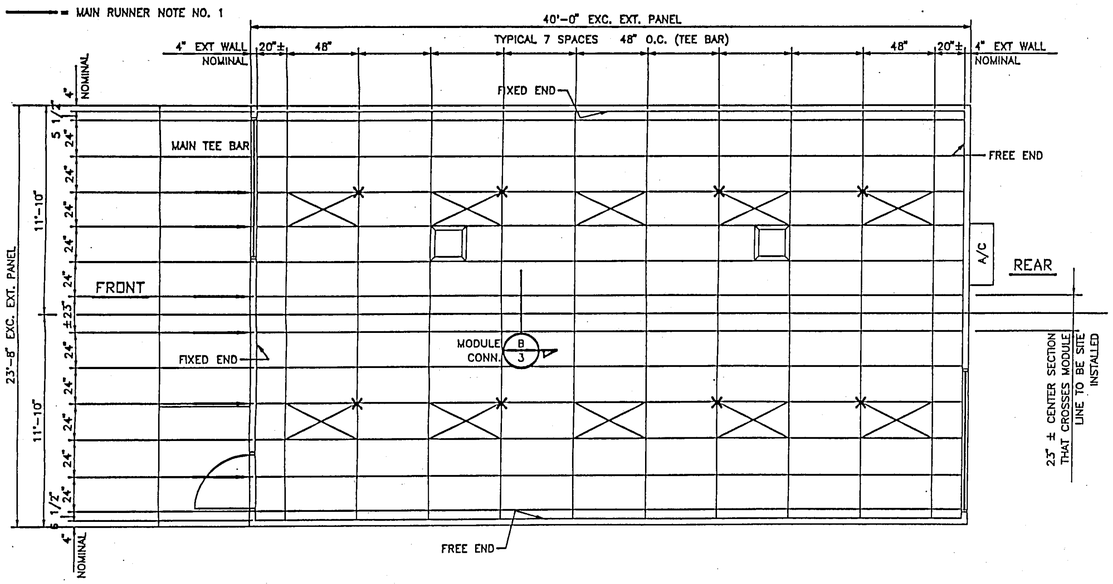
WIRE CONNECTIONS TO GRID DETAILS — B/3 — NO SCALE





ALTERNATE WIRE CONNECTION

CONNECTIONS TO STEEL JOISTS OR PURLINS DETAIL — C/3 — NO SCALE



CEILING TEE BAR GRID LAYOUT WITH LIGHT FIXTURES

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

METAL SUSPENSION SYSTEMS FOR LAY IN PANEL CEILING

1. 12 GA. (MIN) HANGER WIRES MAY BE USED FOR UP TO AND INCLUDING 4'-0" x 4'-0 GRID SPACING, ALONG MAIN RUNNER. SPLICES WILL NOT BE PERMITTED IN ANY HANGER WIRES UNLESS SPECIFICALLY APPROVED BY DSA/ORS.
2. PROVIDE 12 GA HANGER WIRES WITHIN 8" OF THE ENDS OF ALL MAIN AND CROSS RUNNERS OR AT 1/4 OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS AT THE PERIMETER OF THE CEILING AREA.
3. PROVIDE TRAPEZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO MAINTAIN HANGER SPACING. PROVIDE ADDITIONAL HANGERS, STRUTS OR BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS OR DISCONTINUOUS AREA. HANGER WIRES THAT ARE MORE THAN 1 IN 6 OUT OF PLUMB ARE TO HAVE COUNTERBRACED WIRES.
4. CEILING GRID MEMBERS MAY BE ATTACHED TO NOT MORE THAN 2 ADJACENT WALLS. CEILING GRID MEMBERS SHOULD BE AT LEAST 1/2 INCH FREE OF OTHER WALLS. RUNNERS, ONE END OF MAIN AND CROSS RUNNERS SHOULD IF WALLS RUN DIAGONALLY TO CEILING GRID SYSTEM BE FREE AND A MINIMUM OF 1/2 INCH CLEAR OF WALL.
5. AT THE PERIMETER OF THE CEILING AREA WHERE MAIN OR CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS AT THE FREE END TO PREVENT LATERAL SPREADING. A METAL STRUT OR A 16 GA WIRE WITH A POSITIVE MECHANICAL CONNECTION TO THE RUNNERS MAY BE USED. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNERS IS 12" OR LESS, THIS INTERLOCK IS NOT REQUIRED.
6. PROVIDE SETS OF 4-#12 GA. SPLAYED BRACING WIRES ORIENTED 90 DEGREES FROM EACH OTHER AT THE FOLLOWING SPACING:
   (A) FOR SCHOOL BUILDINGS, PLACE SETS OF SPLAY WIRES AT A SPACING NOT MORE THAN 12 FEET BY 12 FEET ON CENTER.
   (B) PROVIDE SPLAY WIRES AT LOCATIONS NOT MORE THAN 1/2 THE ABOVE SPACING FROM EACH PERIMETER WALL OR AT THE EDGE OF VERTICAL CEILING OFFSETS

THE SLOPE OF THESE WIRES SHOULD NOT EXCEED 45 DEGREES FROM THE PLANE OF THE CEILING AND SHOULD BE TAUT WITHOUT CAUSING THE CEILING TO LIFT. SPLICES IN BRACING WIRES ARE NOT PERMITTED WITHOUT SPECIAL DSA/ORS APPROVAL.

7. FASTEN HANGER WIRES WITH NOT LESS THAN 3 TIGHT TURNS. FASTEN SPLAY WIRES WITH 4 TIGHT TURNS. MAKE ALL TIGHT TURNS WITHIN A DISTANCE OF 1 1/2 INCHES. HANGER OR BRACING WIRE ANCHORS TO THE STRUCTURE SHOULD BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE WIRE ALIGNS AS CLOSELY AS POSSIBLE WITH THE DIRECTION OF THE FORCES ACTING ON THE WIRE.
8. SEPARATE ALL CEILING HANGING AND BRACING WIRES AT LEAST 6 INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT ETC., IT IS ACCEPTABLE TO ATTACH LIGHT-WEIGHT ITEMS, SUCH AS SINGLE ELECTRICAL CONDUIT NOT EXCEEDING 3/4" NOMINAL DIAMETER, TO HANGER WIRES USING CONNECTORS ACCEPTABLE TO DSA/ORS.
9. ATTACH ALL LIGHT FIXTURES AND AIR TERMINALS TO THE CEILING GRID RUNNERS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURES.
10. FLUSH OR RECESSED LIGHT FIXTURES AND AIR TERMINALS OR SERVICES WEIGHING LESS THAN 56 POUNDS MAY BE SUPPORTED DIRECTLY ON THE RUNNERS OF A HEAVY DUTY GRID SYSTEM BUT, IN ADDITION, THEY MUST HAVE A MINIMUM OF 2-#12 GA. SLACK SAFETY WIRES ATTACHED AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE.
11. CLASSIFICATION OF CEILING GRID:
    CLASSIFICATION OF CEILING GRID IS "HEAVY DUTY" PER ASTM C635
    MANUFACTURER'S CATALOG NUMBER - MAIN RUNNER HEAVY DUTY MAIN TEE OR EQUAL PER TABLE A.
    MANUFACTURER'S CATALOG NUMBER - CROSS RUNNER PER TABLE A.

    MANUFACTURER'S CATALOG NUMBER OF DETAIL FOR RUNNER SPLICE N/A.
    ACOUSTICAL PANELS SHALL BE 5/8" MINIMUM THICK, MINERAL FIBERBOARD OR VINYL-FACED FIBERGLASS LAY-IN PANELS SQUARE EDGE ASTM FLAME SPREAD CLASS 1, 24" X 48" MODULAR SIZE, LIGHT REFLECTION 75% MINIMUM, NOISE REDUCTION COEFFICIENT OF 0.65 MINIMUM. MAXIMUM SMOKE DENSITY NOT TO EXCEED 450.

TABLE A HEAVY DUTY GRID COMPONENTS			
MANUFACTURER	MAIN TEE	H.D. 4' CROSS TEE	H.D. 2' CROSS TEE
DONN/USG	DX-26	DX-424	DX-216
ARMSTRONG	7301	7341	7323
CHICAGO MET.	200-01	1204-01	1226-01
NOTE: ALL GRID COMPONENTS SHALL BE BY SAME MANUFACTURER			

DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES — FILE NO. 9217 — APPROVED — DATE 8-20-97

REGISTERED PROFESSIONAL ENGINEER — JOHN H. LANDRUM — No. 2310 — Exp 3-31-01 — STRUCTURAL — STATE OF CALIFORNIA — 9/11/96

FILE NO. — IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES — APPL. PC 328 — AC FLS SS — DATE 4/9/97

24 X 40 RELOCATABLE CLASSROOMS

American Modular Systems

CUSTOMER:

CEILING GRID, DETAILS AND NOTES

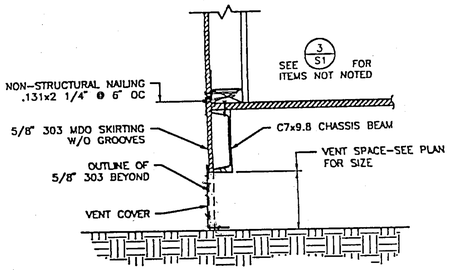
DATE: 4-8-97
SCALE: NONE
DRAWN BY: R.S.
CHECKED BY:
CHECKED BY:
SERIAL NO.

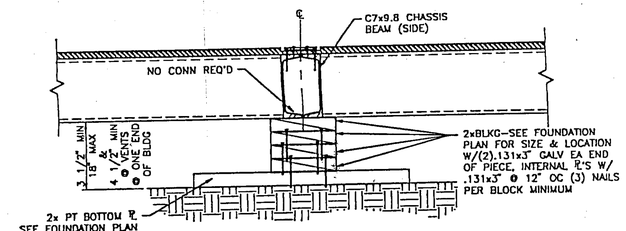
REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			5		
2			6		
3			7		
4			8		

PROJECT No.

SHEET No. 3



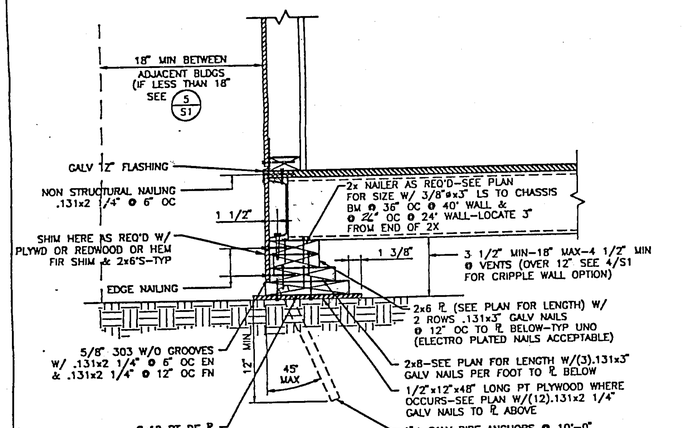


1/S1 FOUNDATION DETAIL

1 1/2" = 1'-0"

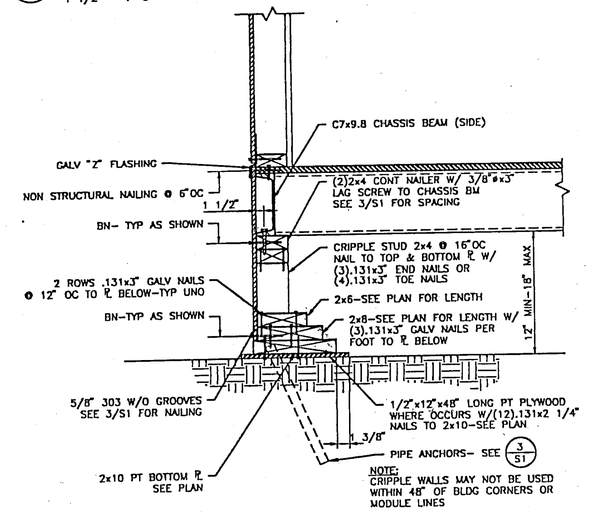
2/S1 DETAIL

1 1/2" = 1'-0"



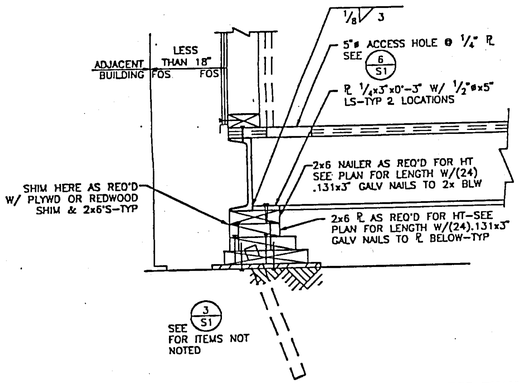
3/S1 FOUNDATION DETAIL

1 1/2" = 1'-0"



4/S1 FOUNDATION DETAIL

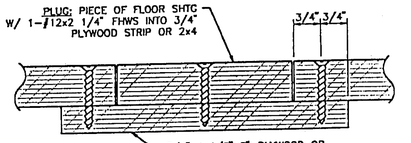
1 1/2" = 1'-0"



OPTIONAL FOR BUILDING PLACES LESS THAN 18" APART

5/S1 FOUNDATION DETAIL

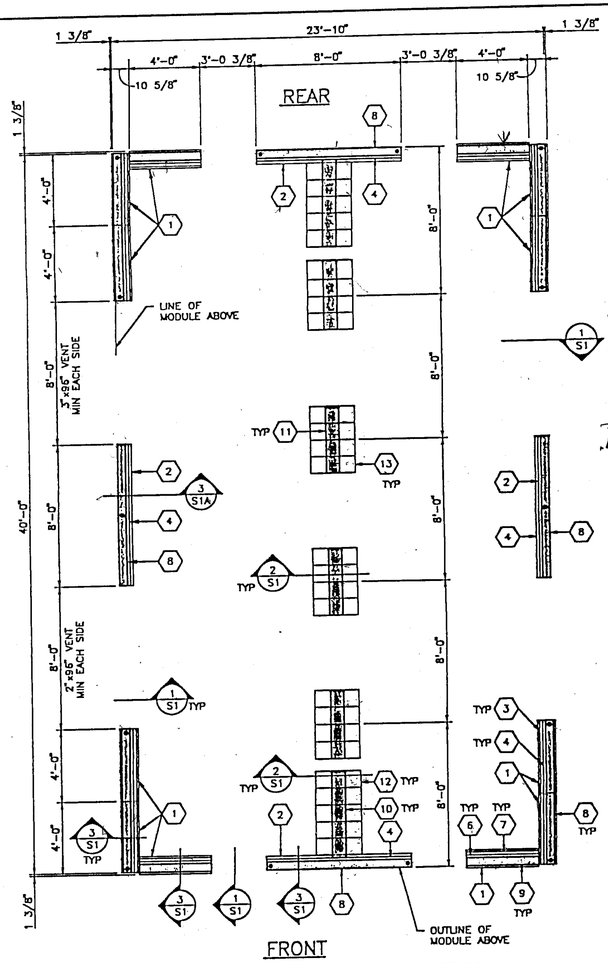
1 1/2"=1'-0"



FILLER ACCESS HOLE

6/S1 DETAIL

NO SCALE



FRONT

LEGEND

1. 1/2"x12" WIDE x 48" LONG PT STRUCTURAL PLYWOOD (CDX PLYWOOD)
2. 2x10x8'-0" LONG PT ℞
3. 2x10x8'-0" LONG ℞
4. 2x8x8'-0" LONG ℞
5. NOT USED
6. 2x8x4'-0" LONG ℞
7. 2x10x4'-0" LONG ℞
8. MULTIPLE 2x6x8'-0" LONG AS REQ'D FOR HEIGHT
9. MULTIPLE 2x6x4'-0" LONG AS REQ'D FOR HEIGHT
10. 2x10 ℞ W/ SHIM, SEE 2/S1
11. 2x10 BLKG, SEE 2/S1
12. (5)2x12x2'-6" OR (6)2x10x2'-6" OR (7)2x8x2'-6", SEE 2/S1
13. (4)2x12x2'-0" OR (5)2x10x2'-0" OR (6)2x8x2'-0", SEE 2/S1

• 1" ø GALV. PIPE LOCATIONS-TYPICAL

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
PC 320
FLS SS
DATE 8-20-97

NOTES:
1. TOP OF WOOD PADS TO BE LEVEL.
2. DO NOT INSTALL BUILDINGS IN AREAS OF WATER LINES.
3. SITE TO BE GRADED TO PREVENT WATER PONDING BENEATH THE STRUCTURE.
4. FOUNDATION PLYWOOD TO BE CUT PERPENDICULAR TO THE FACE GRAIN.
5. VENT AREA REQUIRED = (1sq ft / 150sq ft)=6.4 SF
   VENT AREA PROVIDED = 6.67 SF
6. PER THE CONTRACT OF THIS PROJECT-THE BUILDING PAD MUST BE A MINIMUM OF 30'x50' AND SHALL NOT EXCEED 6" OUT OF LEVEL IN ANY DIRECTION.

SILL RESTRAINT:
- ON SOIL: 1"ø GALV PIPE W/ 12" MIN PENETRATION BELOW SOIL SURFACE @ 10'-0" OC. DRILL SILL 1 1/4" MAX. PIPE MAY BE DRIVEN MAX 45° ANGLE TO VERTICAL.
- ON A/C PAVING: 1"ø GALV PIPE W/ 12" MIN PENETRATION BELOW PAVING SURFACE @ 10'-0" OC. DRILL SILL 1 1/4" MAX OR 20d NAILS THRU SILL ℞ @ 32" OC
- ON CONC PAVING: HILTI DS 82-P10 THRU SILL ℞ @ 4'-0" OC.

NOTE: PER THE CONTACT FOR THIS PROJECT THE BUILDING PAD MUST BE 30' x 50'. THE PAD SHALL NOT BE MORE THAN 6" OUT OF LEVEL IN ANY DIRECTION.

A/S1 FOUNDATION PLAN

1/4" = 1'-0"

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
PC 320
FLS SS
DATE 4/9/97

REGISTERED PROFESSIONAL ENGINEER STEVEN M. LAWSON No. 2310 Exp 3-31-01 STRUCTURAL STATE OF CALIFORNIA

FOUNDATIONS:
ALL FOUNDATION MATERIALS IN CONTACT WITH THE GROUND SHALL BE PRESSURE TREATED EXCEPT SHIMS MAY BE REDWOOD, HEM FIR OR CEDAR. PRESSURE TREATED DOUGLAS FIR, HEM FIR, PLYWOOD ETC. SHALL BE VERIFIED BY A CERTIFICATE OF TREATMENT STATING: "THE MATERIAL IN THIS UNIT WAS TREATED PER 1995 CALIFORNIA BUILDING CODE. ALL MATERIAL FOR USE IN GROUND CONTACT SHALL BE STAMPED "FOR GROUND CONTACT" (LP22). ALL MATERIAL NOT USED IN GROUND CONTACT SHALL BE H.F.#2 OR D.F.#2 FOR ABOVE GROUND USE. THE IN-PLANT INSPECTOR SHALL VERIFY THAT ALL PRESSURE TREATED FOUNDATION MATERIAL IS CUT FROM AWPB STAMPED STOCK AND THAT ALL CUTS AND HOLES ARE RETREATED PER SPECIFICATIONS. LP-2 AND LP-22 MATERIAL SHALL BE BANDED SEPARATELY FOR SHIPMENT TO THE JOB SITE. THE IN-PLANT INSPECTOR'S VERIFICATION OF EACH BANDED UNIT SHALL BE ATTACHED TO THE MATERIAL.
CONCRETE OR CONCRETE BLOCK FOUNDATIONS ARE NOT ALLOWED. THE FOOTING DESIGN SHALL PROVIDE FOR SHIMS AND BLOCKS NECESSARY TO PERMIT INSTALLATION ON SITES NOT LEVEL, BUT WITHIN TOLERANCE ALLOWED.
INSTALLATION SHALL BE PERMITTED ON EITHER SOIL, CONCRETE OR A/C PAVING, HAVING SUITABLE DESIGN BEARING CAPACITY, THE BUILDINGS SHALL BE SECURELY FASTENED TO THE FOUNDATIONS. THE FOUNDATIONS AND THE METHOD OF FASTENING SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT AND DSA. PADS SHALL BE DESIGNED FOR A MAXIMUM OF 1000 PSF LOAD ON THE SOIL. PADS SHALL NOT BE PLACED ON TURF.

WOOD: 50 PSF FLOOR LIVE LOAD

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER STEVEN J. FOLDING No. 23837 Exp 8/99 STRUCTURAL STATE OF CALIFORNIA

CUSTOMER:

FOUNDATION PLAN, NOTES, SECTIONS AND DETAILS
WOOD FOUNDATION; 50 PSF

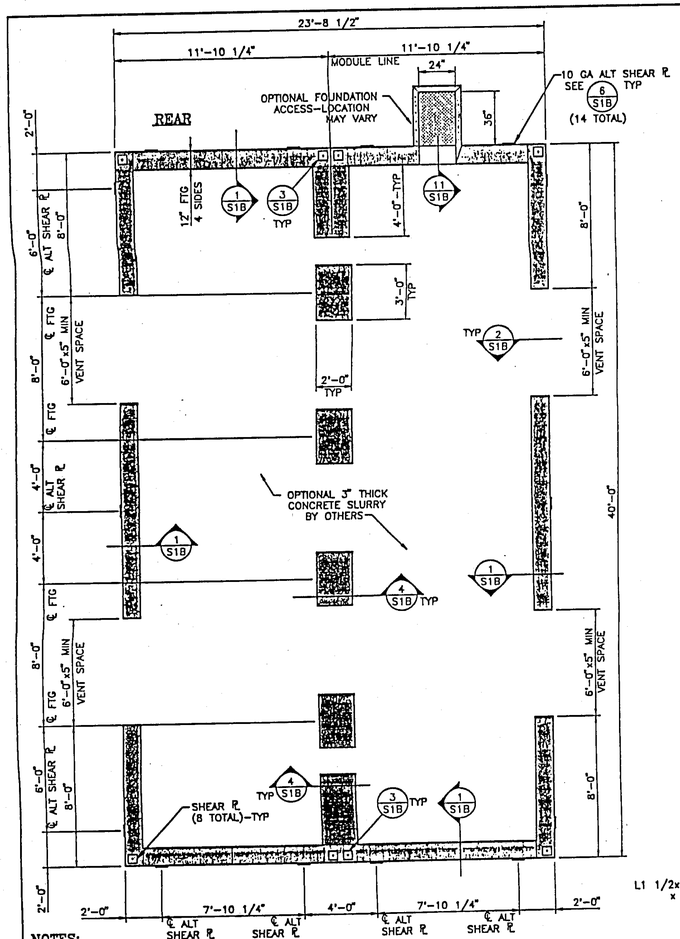
DATE: MARCH 3, 1997
SCALE: AS NOTED
DRAWN BY: KDT
DESIGNED BY: WDB
CHECKED BY: BJR
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			4		
2			5		
3			6		

PROJECT No. 97023
SHEET No. S1

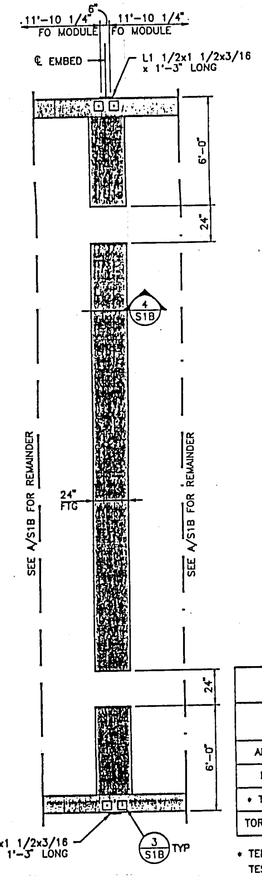
K:\97023\ACAD\STR\S1 2-10-97 2:33:20 pm EST



NOTES:

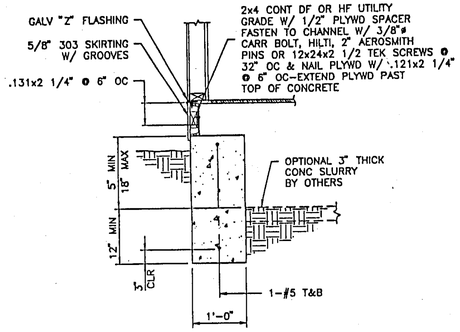
1. DO NOT INSTALL BUILDING IN AREAS WATER FLOW LINES.
2. CONCRETE STRENGTH 3000 PSI @ 28 DAYS.
3. REINFORCING STEEL 40,000 PSI MINIMUM, PER ASTM A615.
4. MINIMUM SOIL BEARING CAPACITY 1000 PSF.
4. DESIGN SOIL BEARING CAPACITY 1000 PSI.
5. VENT AREA REQ'D = 960 SF ($\frac{1 \text{ SF VENT}}{150 \text{ SF}}$) = 6.4 SF
   VENT AREA PROVIDED = 10.0 SF

A/S1B FOUNDATION PLAN
1/4" = 1'-0"

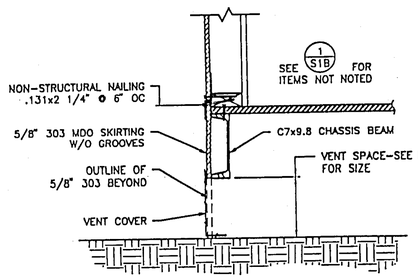


ANCHOR TYPE	WEJ-IT ICBO #1821
MATERIAL	N.W. CONCRETE f'c= 3000 PSI
ANCHOR SIZE (IN)	1/2"@
MIN EMBED (IN)	3 1/2"
* TENSION TEST (LB)	1275#
TORQUE TEST (FT-LB)	50

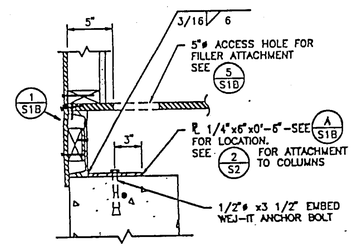
* TENSION TEST- 1.6 x ALLOWABLE TENSION TEST PER IR 26-6



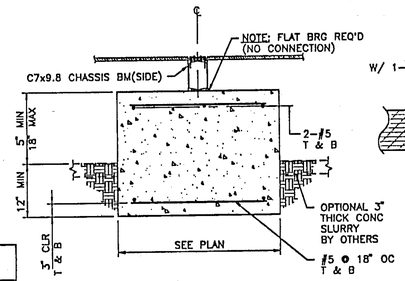
1/S1B SECTION
3/4" = 1'-0"



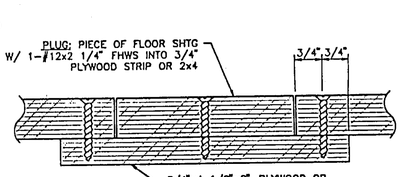
2/S1B FOUNDATION DETAIL
1 1/2" = 1'-0"



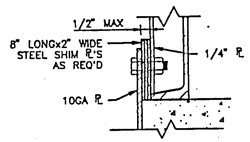
3/S1B SECTION
1 1/2" = 1'-0"



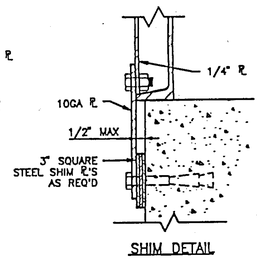
4/S1B SECTION
3/4" = 1'-0"



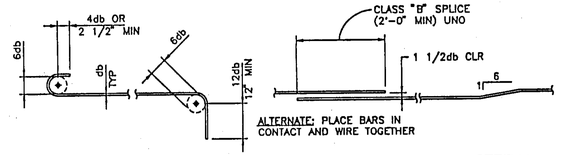
5/S1B FILLER ACCESS HOLE DETAIL
NO SCALE



SHIM DETAIL

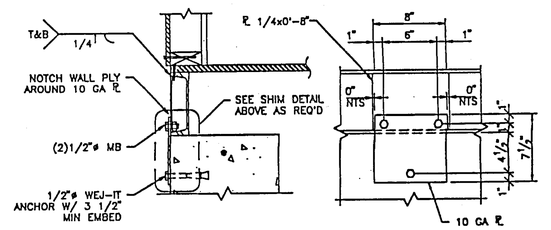


SHIM DETAIL



180° & 90° HOOK BAR LAP OFFSET

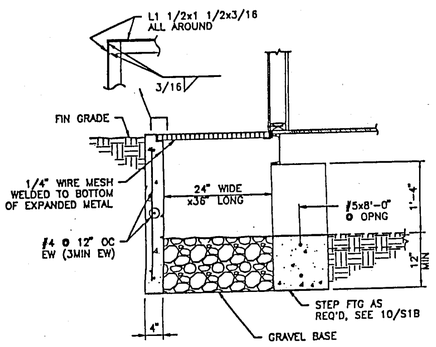
8/S1B TYPICAL REINFORCING BENDS DETAIL
1" = 1'-0"



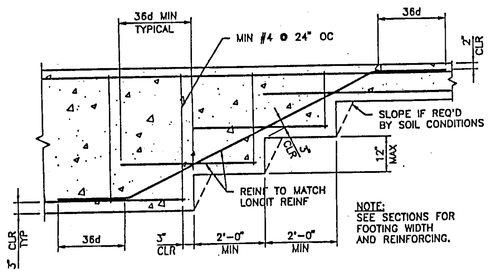
SECTION ELEVATION

REGISTERED PROFESSIONAL ENGINEER DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
PC 320
DATE 4/9/97

6/S1B ALTERNATE SHEAR PLATE DETAIL
1 1/2" = 1'-0"

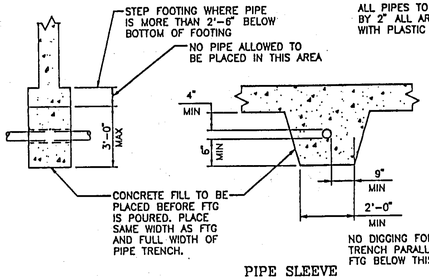


11/S1B SECTION
3/4" = 1'-0"

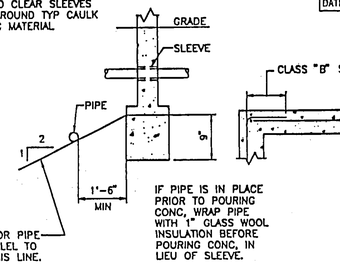


NOTE: SEE SECTIONS FOR FOOTING WIDTH AND REINFORCING.

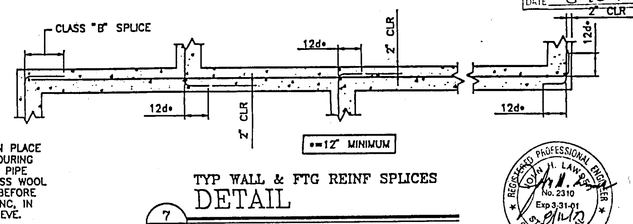
10/S1B STEPPED FOOTING DETAIL
1/2" = 1'-0"



ALL PIPES TO CLEAR SLEEVES BY 2" ALL AROUND TYP CAULK WITH PLASTIC MATERIAL



9/S1B PIPE SLEEVE DETAIL
3/4"=1'-0"



7/S1B TYP WALL & FTG REINF SPLICES DETAIL
NO SCALE

REGISTERED PROFESSIONAL ENGINEER JOHN H. LAWLESS No. 2310 Exp 3.31.01 STRUCTURAL STATE OF CALIFORNIA

ABOVE GRADE CONCRETE: 50 PSF FLOOR LIVE LOAD

CONCRETE PROPORTIONS ARE PER METHOD A OF TITLE 24, PART 2, SECTION 1905A.2.3 AND TABLE 19A-A-7			
MAXIMUM SIZE	MINIMUM SACKS OF CEMENT PER YARD OF CONCRETE	MAXIMUM WATER CEMENT RATIO IN GALLONS PER 94 LBS SACK OF CEMENT	PERMISSABLE ASSUMPTION TO MINIMUM ULTIMATE 28 DAY COMPRESSIVE STRENGTH IN LBS PER SQUARE INCH
1 1/2 INCHES	6.6	6.00	3000

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER JOHN T. RATTO No. 2837 Exp 9/99 STRUCTURAL STATE OF CALIFORNIA

CUSTOMER:

FOUNDATION PLAN, NOTES, AND DETAILS
ABOVE GRADE CONCRETE FOUNDATION: 50 PSF

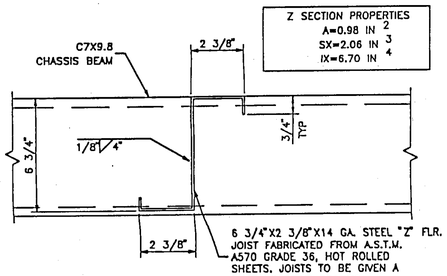
DATE: MARCH 3, 1997
SCALE: AS NOTED
DRAWN BY: KDT
DESIGNED BY: MDB
CHECKED BY: BJR
SERIAL NO.

REVISIONS

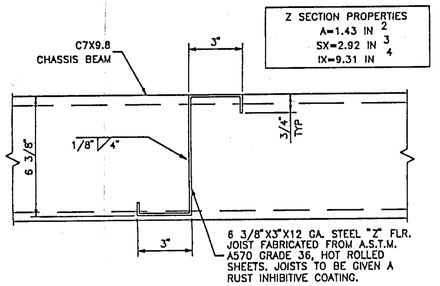
NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			5		
2			6		
3			7		
4			8		

PROJECT No. 97023
SHEET No. S1B

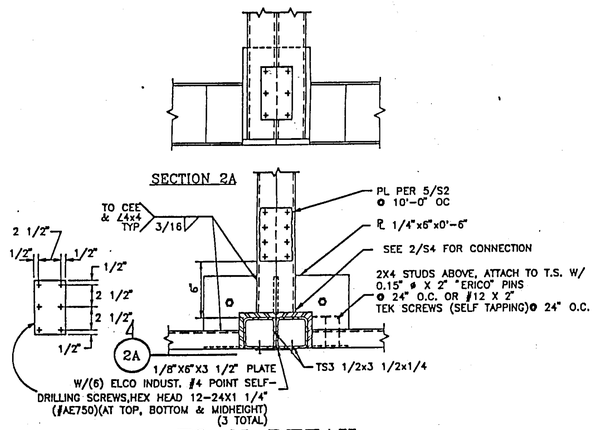
G:\9618\ACAD\STRU\S1B 10-8-96 10:10:31 pm EST



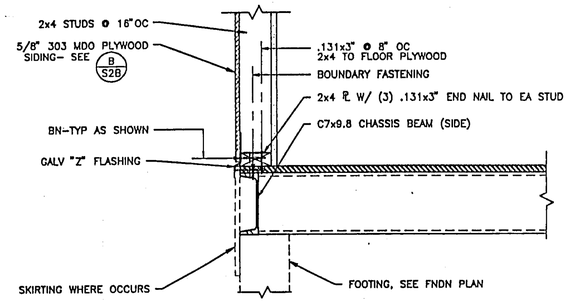
1 / S2 DETAIL
NO SCALE



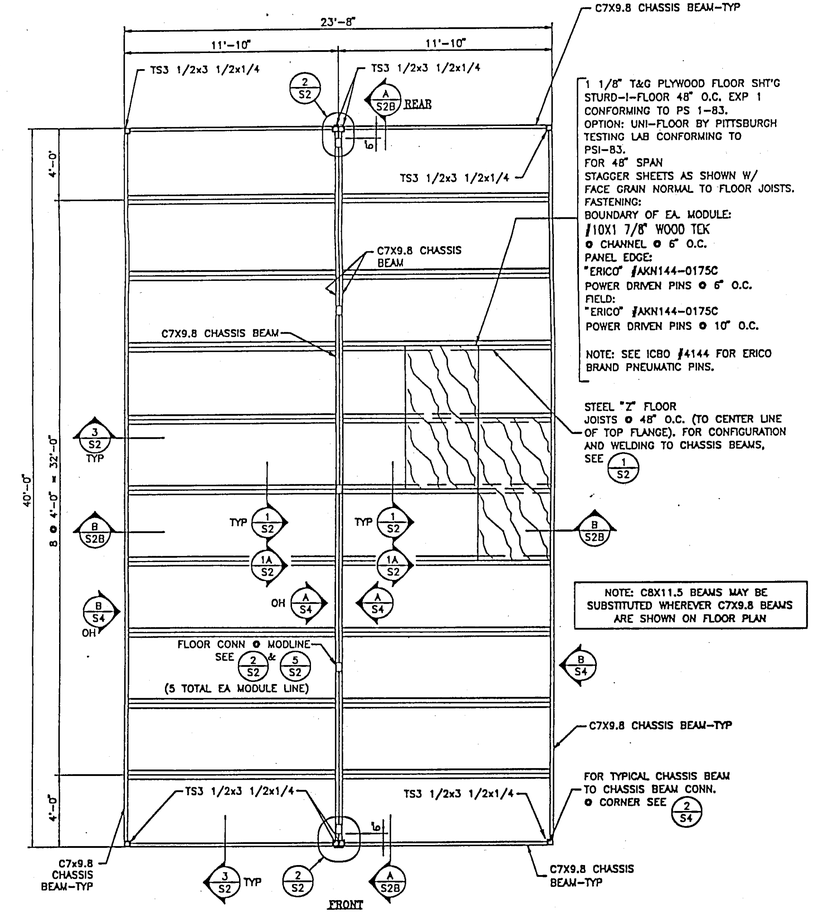
1A / S2 DETAIL
NO SCALE



2 / S2 PLAN DETAIL
NO SCALE

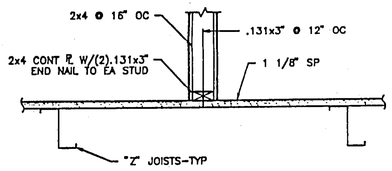


3 / S2 DETAIL
1 1/2" = 1'-0"

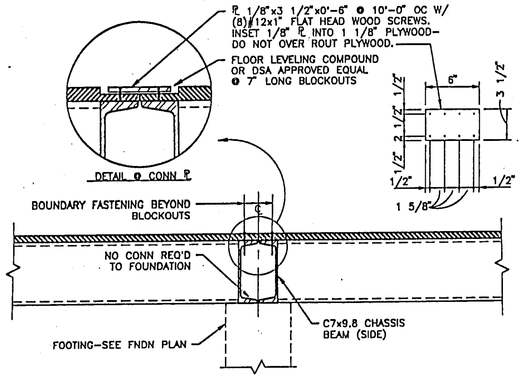


NOTES:
1. SEE SHEET S4 FOR TYPICAL WALL FRAMING.

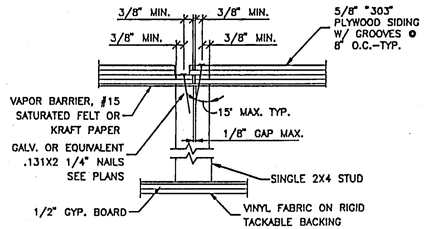
A / S2 FLOOR FRAMING PLAN
1/4" = 1'-0"



TYP INTERIOR NON-BEARING WALL BASE
6 / S2 DETAIL
1" = 1'-0"



5 / S2 DETAIL
1 1/2" = 1'-0"



TYPICAL SIDING JOINT
4 / S2 DETAIL
NO SCALE

RECOMMENDED BY DIV. OF THE STATE ARCHITECT OFFICE OF REGULATORY SERVICES
PC 328
DATE 4/9/97

OFFICE OF THE STATE ARCHITECT
SEP 6 9 27
AC ES SS
DATE 8-20-97

REGISTERED PROFESSIONAL ENGINEER
JOHN H. LAWLESS
No. 2310
Exp 7-31-01
9/11/97
STRUCTURAL
STATE OF CALIFORNIA

50 PSF FLOOR LIVE LOAD

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER
BRAD TROUTMAN
No. 21837
Exp 9/99
STRUCTURAL
STATE OF CALIFORNIA

CUSTOMER:

FLOOR FRAMING PLAN AND DETAILS
50 PSF FLOOR LOAD

DATE: MARCH 3, 1997
SCALE: AS NOTED
DRAWN BY: KDT
DESIGNED BY: MDB
CHECKED BY: BJR
SERIAL NO.

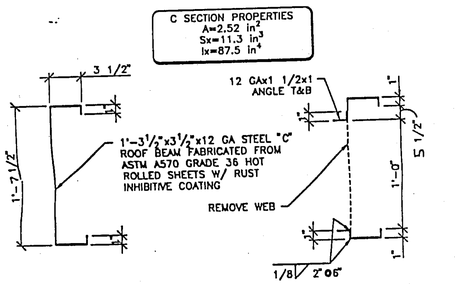
REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			4		
2			5		
3			6		

PROJECT No. 97023

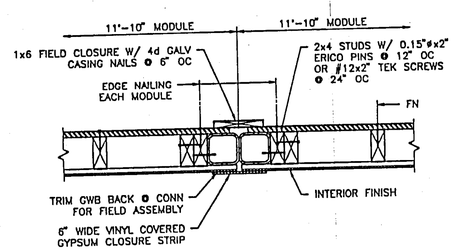
SHEET No. S2

K:\97023\ACAD\STRU\S2 2-10-97 3:21:18 pm EST

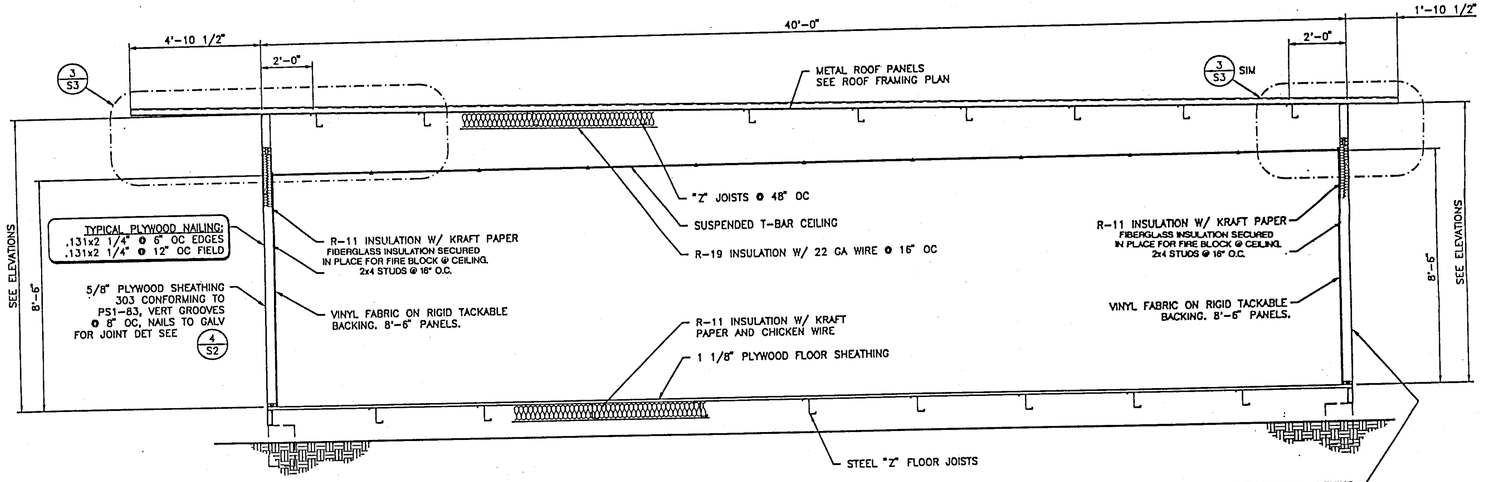


TYPICAL SECTION

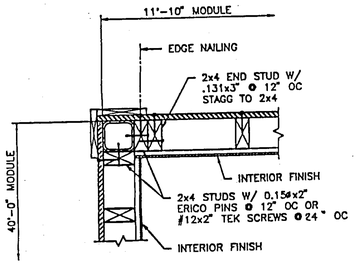
SECTION @ DUCT OPENING



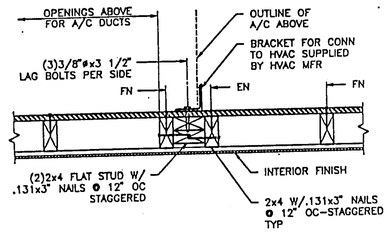
WALL FRAMING
PLAN DETAIL
2 / S2B
1 1/2" = 1'-0"



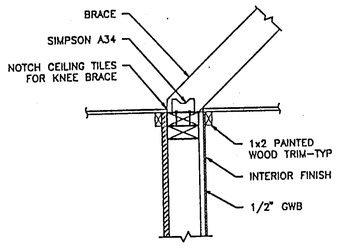
TYPICAL LONGITUDINAL SECTION
A / S2B
3/8" = 1'-0"



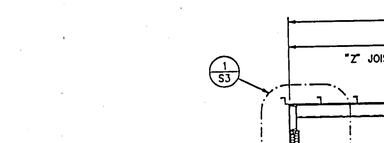
WALL FRAMING
PLAN DETAIL
3 / S2B
1 1/2" = 1'-0"



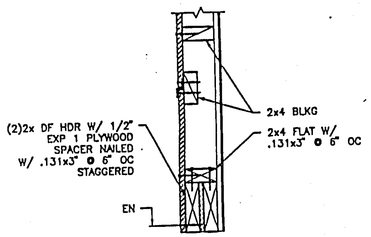
WALL FRAMING
PLAN DETAIL
4 / S2B
1 1/2" = 1'-0"



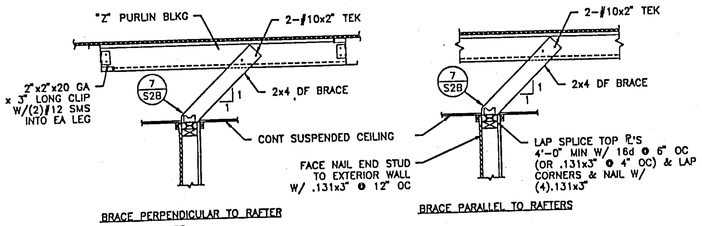
WALL FRAMING
DETAIL
7 / S2B
1 1/2" = 1'-0"



TYPICAL TRANSVERSE SECTION
B / S2B
3/8" = 1'-0"



WALL FRAMING
DETAIL
5 / S2B
1 1/2" = 1'-0"



NOTE:
TOP PL MUST BE BRACED @ 7'-9" MIN BY EITHER AN INTERSECTING WALL OR WITH A 2x4 BRACE TO THE RAFTERS.

WALL FRAMING
DETAIL
6 / S2B
NO SCALE

APPROVED BY DIV. OF THE STATE ARCHITECT OFFICE OF REGIONAL TECH SERVICES
APPL 6 92 17
AC FLS SS
DATE 8-20-97

PC328
DATE 4/9/97

REGISTERED PROFESSIONAL ENGINEER
No. 2310
Exp 3/31-01
STRUCTURAL
STATE OF CALIFORNIA

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER
No 2897
Exp 9/99
STRUCTURAL
STATE OF CALIFORNIA

CUSTOMER:

BUILDING SECTIONS AND WALL DETAILS

DATE: MARCH 3, 1997
SCALE: AS NOTED
DRAWN BY: KDT
DESIGNED BY: MDB
CHECKED BY: BJR
SERIAL NO.

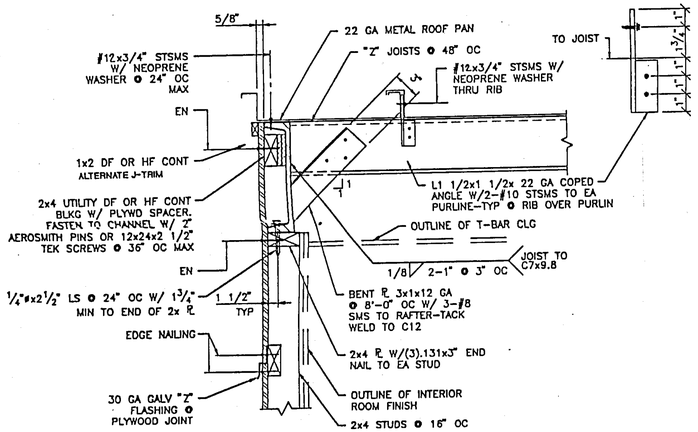
REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			4		
2			5		
3			6		

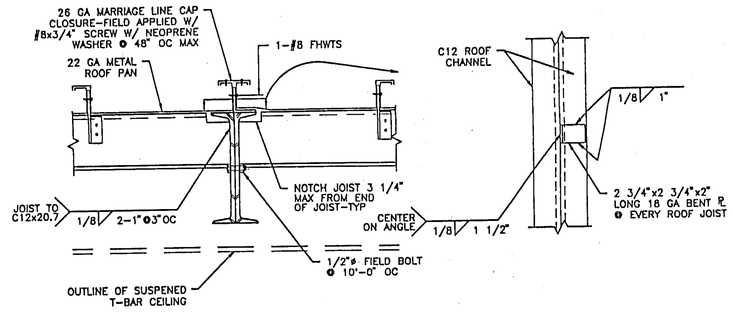
PROJECT No. 97023

SHEET No. S2B

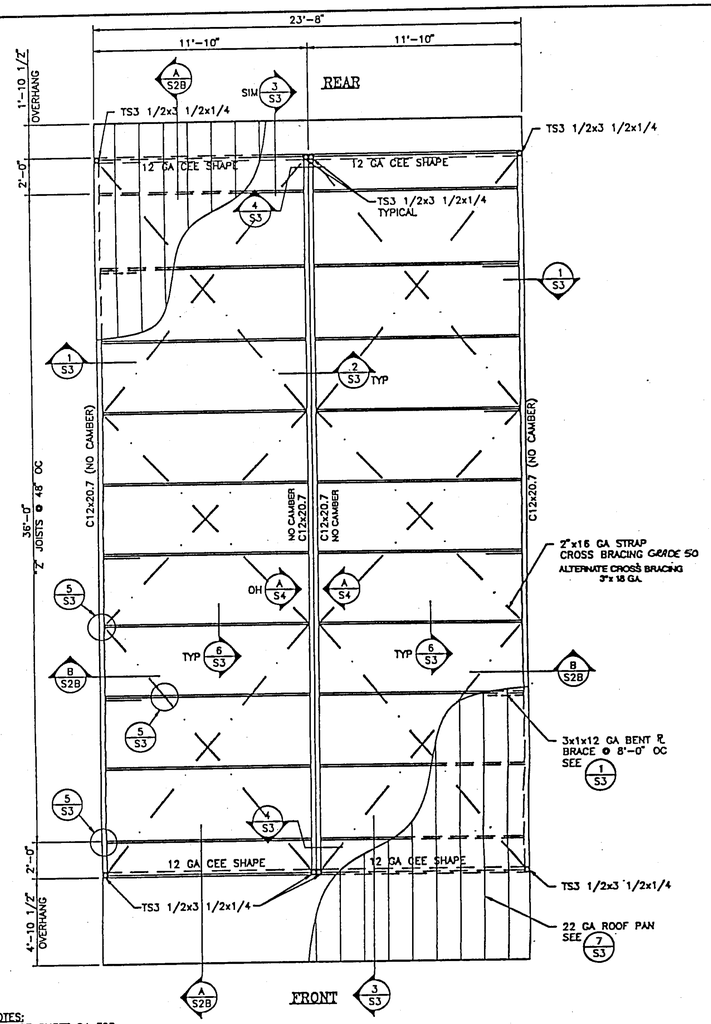
S2B 2-10-97 4:16:49 pm EST



1 S3 DETAIL
NO SCALE

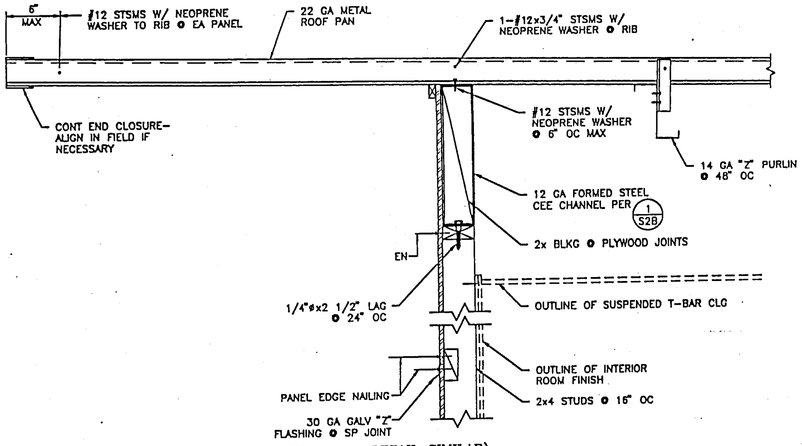


2 S3 DETAIL
NO SCALE



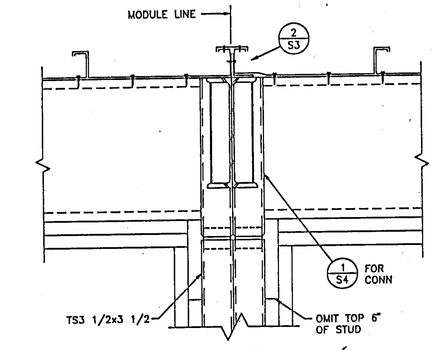
NOTES:
1. SEE SHEET S4 FOR TYPICAL WALL FRAMING.

A S3 ROOF FRAMING PLAN
1/4" = 1'-0"

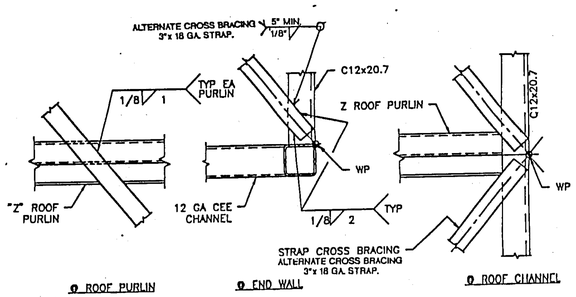


(2'-0" OVERHANG DETAIL SIMILAR)

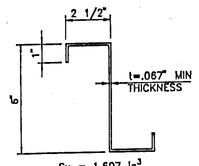
3 S3 5'-0" OVERHANG DETAIL
NO SCALE



4 S3 DETAIL
NO SCALE

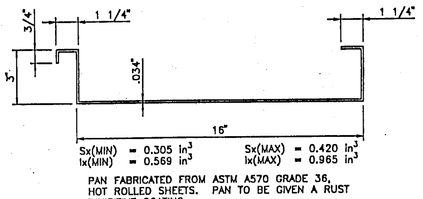


5 S3 CROSS BRACING DETAIL
1 1/2" = 1'-0"



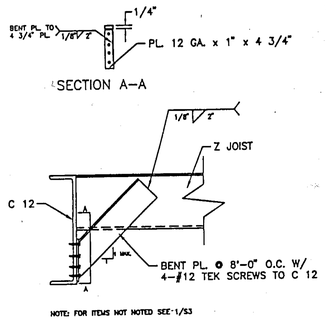
JOIST FABRICATED FROM ASTM A570 GRADE 36, HOT ROLLED SHEETS. JOISTS TO BE GIVEN A RUST INHIBITIVE COATING.

6 S3 14 GA ROOF PURLIN DETAIL
3" = 1'-0"

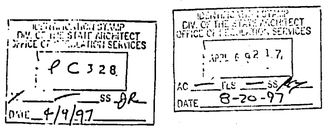


PAN FABRICATED FROM ASTM A570 GRADE 36, HOT ROLLED SHEETS. PAN TO BE GIVEN A RUST INHIBITIVE COATING.

7 S3 22 GA ROOF PAN DETAIL
3" = 1'-0"



8 S3 ALT. BRACE CONNECTION DETAIL
N.T.S.





24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems



CUSTOMER:

ROOF FRAMING PLAN AND DETAILS

DATE: MARCH 3, 1997
SCALE: AS NOTED
DRAWN BY: KDT
DESIGNED BY: WDB
CHECKED BY: BJR
SERIAL NO.

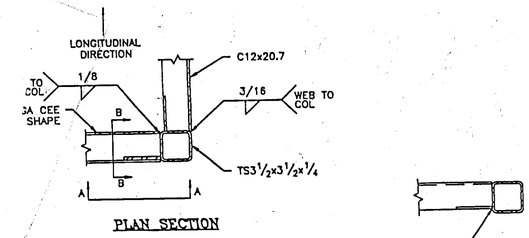
REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			5		
2			6		
3			7		
4			8		

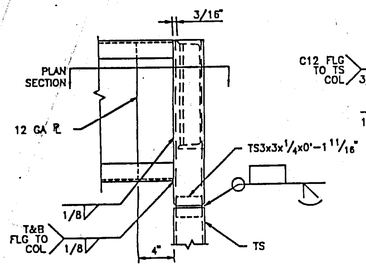
PROJECT No. 97023

SHEET No. S3

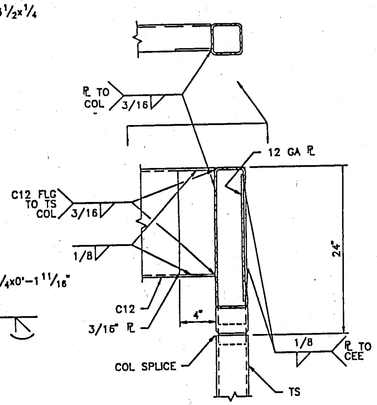
S3 2-27-97 9:41:11 am EST



PLAN SECTION

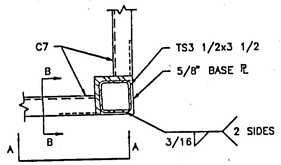


SECTION A–A

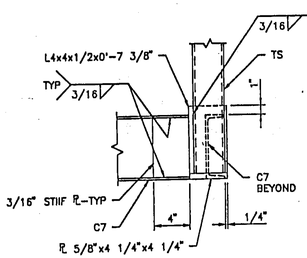


SECTION B–B

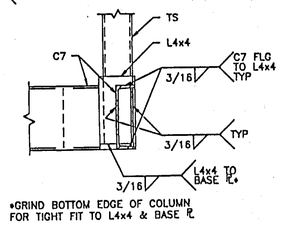
TOP CONNECTION
1 / S4 DETAIL
1 1/2" = 1'-0"



PLAN

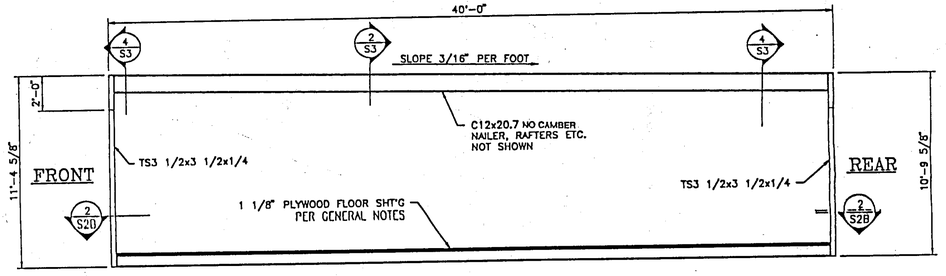


SECTION A–A

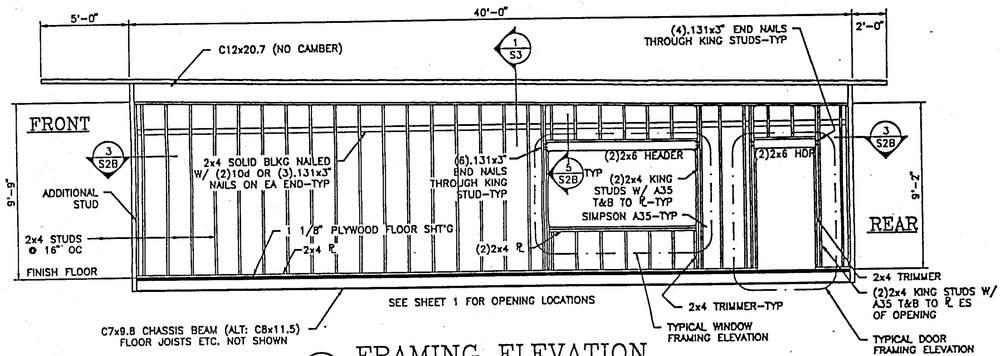


SECTION B–B

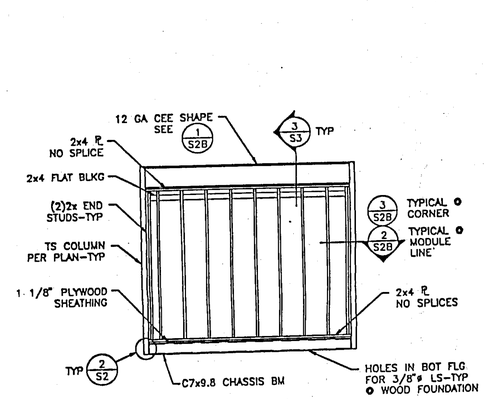
BOTTOM CONNECTION
2 / S4 DETAIL
1 1/2" = 1'-0"



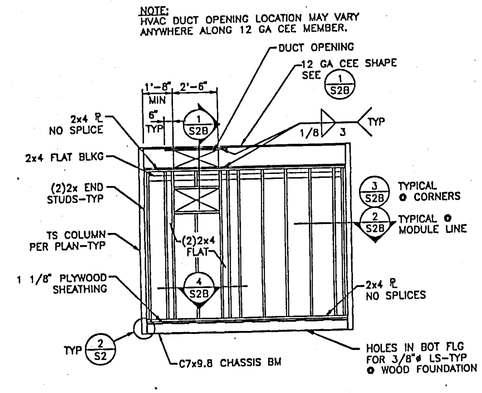
A / S4 FRAMING ELEVATION
1/4"=1'-0"



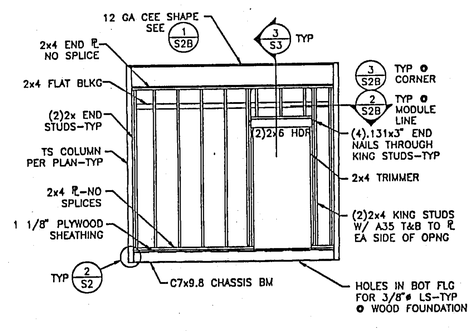
B / S4 FRAMING ELEVATION
1/4"=1'-0"



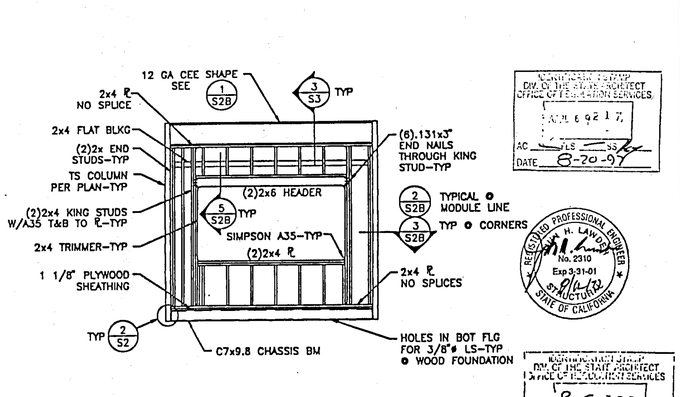
C / S4 SOLID END WALL ELEVATION
1/2" = 1'-0"



SEE SHEET 1 FOR OPENING LOCATION
D / S4 HVAC END WALL ELEVATION
1/2" = 1'-0"



SEE SHEET 1 FOR OPENING LOCATION
E / S4 DOOR END WALL ELEVATION
1/4"=1'-0"



SEE SHEET 1 FOR OPENING LOCATION
F / S4 WINDOW END WALL ELEVATION
1/2" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER — RICHARD V. ROTONDO — No. 19837 Exp 9/99 — STRUCTURAL — STATE OF CALIFORNIA

DIV. OF THE STATE ARCHITECT — OFFICE OF REGULATION SERVICES — ACCESS GRANTED — AC ___ LS ___ SS ___ — DATE 8-20-97

REGISTERED PROFESSIONAL ENGINEER — JAMES H. LANDON — No. 2310 — Exp 3-31-01 — STRUCTURAL — STATE OF CALIFORNIA

DIV. OF THE STATE ARCHITECT — OFFICE OF REGULATION SERVICES — PC 320 — DATE 4/9/97

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

CUSTOMER:

FRAMING ELEVATIONS AND DETAILS

DATE:	MARCH 3, 1997
SCALE:	AS NOTED
DRAWN BY:	KDT
DESIGNED BY:	MDB
CHECKED BY:	BJR
SERIAL NO.	

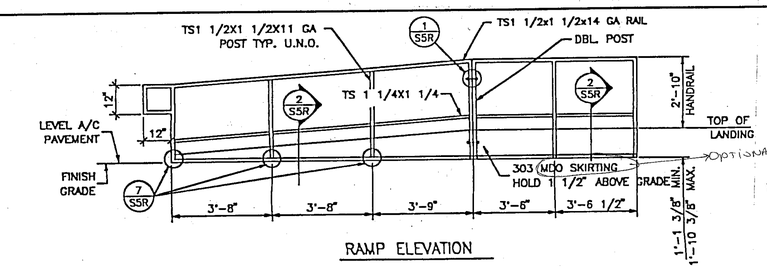
REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			4		
2			5		
3			6		

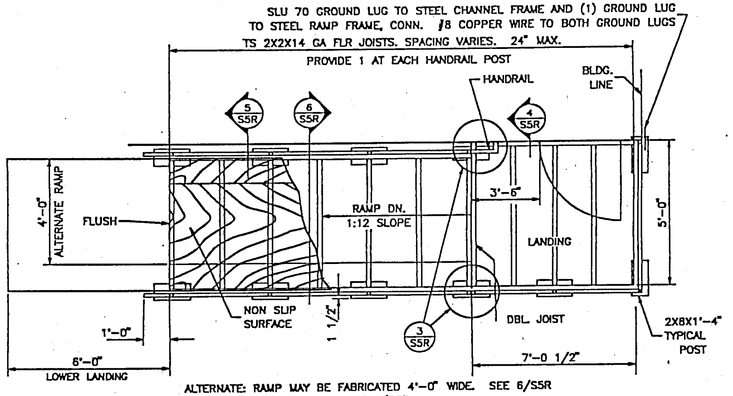
PROJECT No. 97023

SHEET No. S4

G:\96187\ACAD\STRUS.S4 1-3-97 4:37:19 pm EST



RAMP ELEVATION

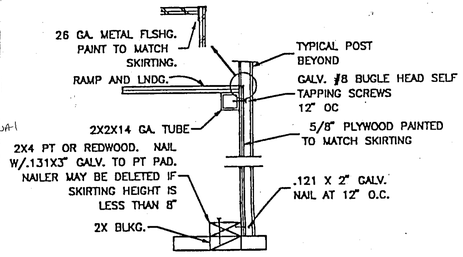


ALTERNATE: RAMP MAY BE FABRICATED 4'-0" WIDE. SEE 6/S5R
OPTIONAL RAMP SEE 8/S5R

RAMP PLAN

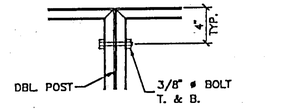
NOTE: RAMP & LANDING TO BE FABRICATED IN SECTIONS (2 MIN) FOR MOVING

A S5R RAMP
3/8"=1'-0"

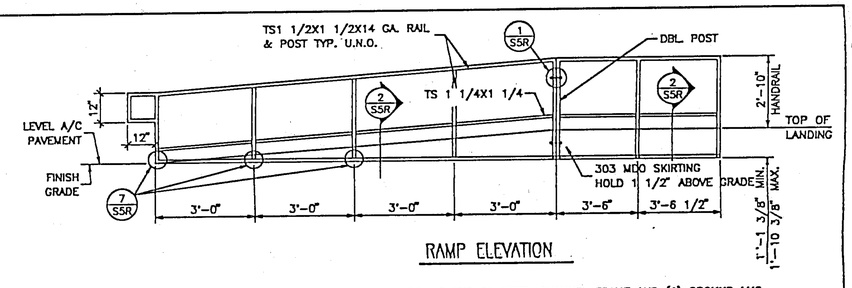


NOTE: FIT PLYWOOD WITHIN 1" MAX OF SOIL,PT PADS AND FRAMING

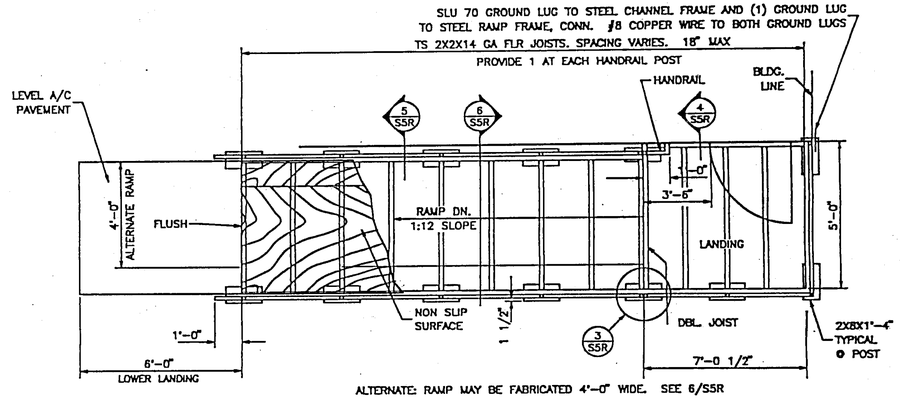
2 S5R RAMP SKIRT DETAIL (OPTIONAL)
NO SCALE



1 S5R DETAIL
NO SCALE



RAMP ELEVATION

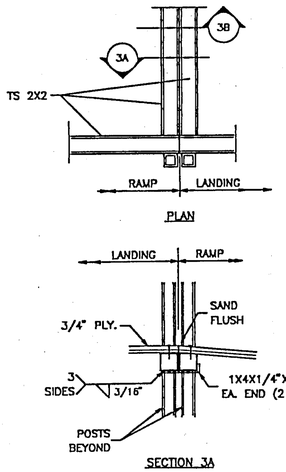


ALTERNATE: RAMP MAY BE FABRICATED 4'-0" WIDE. SEE 6/S5R

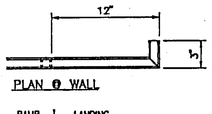
RAMP PLAN

NOTE: RAMP & LANDING TO BE FABRICATED IN SECTIONS (2 MIN) FOR MOVING

8 S5R RAMP- OPTIONAL (14 GA POSTS)
3/8"=1'-0"

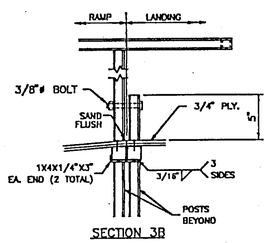


PLAN



PLAN @ WALL

SECTION 3A



SECTION 3B

ENTRY RAMP AND LANDING SPECIFICATIONS

EACH BUILDING SHALL HAVE A RAMP AND LANDING TO CONFORM TO TITLE 24 CCR SECTIONS 1006 AND 1007. THE RAMP AND LANDING STRUCTURES INCLUDING HANDRAIL AND WHEEL GUIDES ARE TO BE PREFABRICATED METAL IN SECTIONS THAT ARE DEMOUNTABLE FOR MOVING AND REINSTALLATION AT A NEW SITE.
DESIGN SHALL BE SUCH THAT HEIGHT ADJUSTMENT CAN BE MADE AT THE INSTALLATION SITE. TUBING SHALL BE STEEL CONFORMING TO ASTM A500 GRADE B.
THE RAMP SURFACE SHALL BE 3/4" MARINE GRADE PLYWOOD.
RAMP AND LANDING SHALL HAVE A NON-SKID SURFACE FINISH APPLIED. NON-SKID FINISH SHALL BE AMCOE GRIP II MANUFACTURED BY AMERICAN CHEMICAL CO. OR EQUIVALENT. ALL RAMP SURFACES SHALL BE PAINTED AS INDICATED IN SECTION 3.3.19. RAMPS SHALL HAVE HANDRAILS ON BOTH SIDES. WALL MOUNTED HANDRAILS SHALL BE OF SIMILAR CONSTRUCTIONN TO THE INTEGRAL RAMP HANDRAIL.
RAMP AND LANDING SHALL BE FULLY SKIRTED WITH THE SAME MATERIAL USED FOR BUILDING SKIRT. SIDES OF RAMP AND LANDING THAT DO NOT ADJOIN BUILDING WALL SHALL BE SKIRTED. ALL EDGES OF THE PLYWOOD SKIRT SHALL BE SUPPORTED AND PROTECTED FROM WEATHER. FOUNDATION MEMBERS SHALL BE AS FOR BUILDING FOUNDATION. ONLY THE FOUNDATION PAD RESTING ON GRADE MAY EXTEND BEYOND THE OUTSIDE FACE OF THE SKIRT 1" MAXIMUM

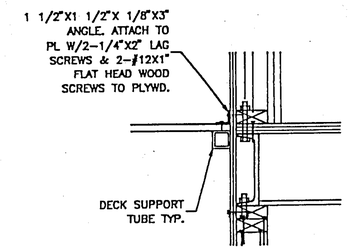
(OPTIONAL)

(OPTIONAL)

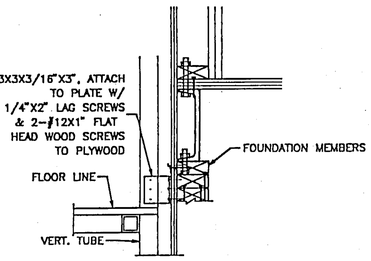
FLOOR DECKING:
3/4" MARINE EXT. APA 48/24 PLYWOOD W/ NON-SKID SURFACE. (SEE ALTERNATE) DECK SURFACES SHALL BE SEALED ON ALL SIDES. FASTENED TO STEEL FLOOR MEMBERS WITH #10-24 X 1 1/4" LONG PLY-METAL TYPE SCREWS @ 12" O.C.

ALT. FLOOR DECKING:
1. 11 GA SHEET METAL WITH NON-SKID SURFACE.

GROUNDING OF BUILDING COMPONENTS:
CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING NECCESSARY CONNECTORS TO GROUND THE METAL PORTIONS OF THE BUILDING (I.E. FRAME, RAMP, ETC.) GROUNDING ROD, WIRES AND TESTING SHALL BE PROVIDED BY OTHERS AND MEET THE REQUIREMENTS OF I.R. #8-1 ISSUED BY DSA.

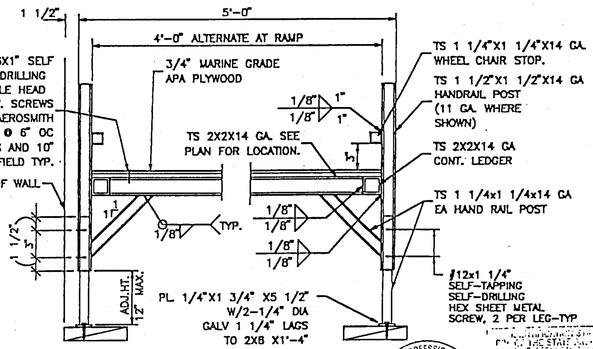


3 S5R HANDRAIL DETAIL
NO SCALE

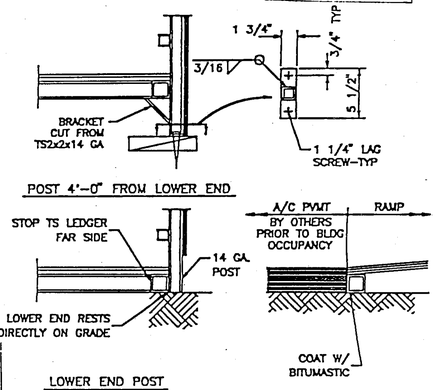


4 S5R LANDING ATTACHMENT DETAIL
NO SCALE

5 S5R RAMP CONNECTION DETAIL
NO SCALE



6 S5R HANDRAIL AND RAMP DETAIL
NO SCALE



LOWER END POST

7 S5R DETAIL
NO SCALE

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

CUSTOMER:

RAMP PLAN, ELEVATIONS AND DETAILS

DATE: MARCH 3, 1997
SCALE: AS NOTED
DRAWN BY: KDT
DESIGNED BY: MDB
CHECKED BY: BJR
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			5		
2			6		
3			7		
4			8		

PROJECT No. 97023
SHEET No. S5R

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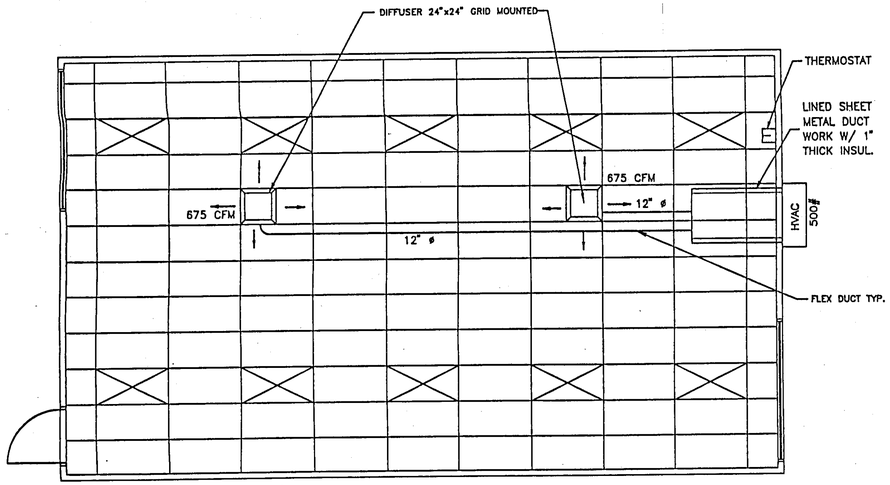
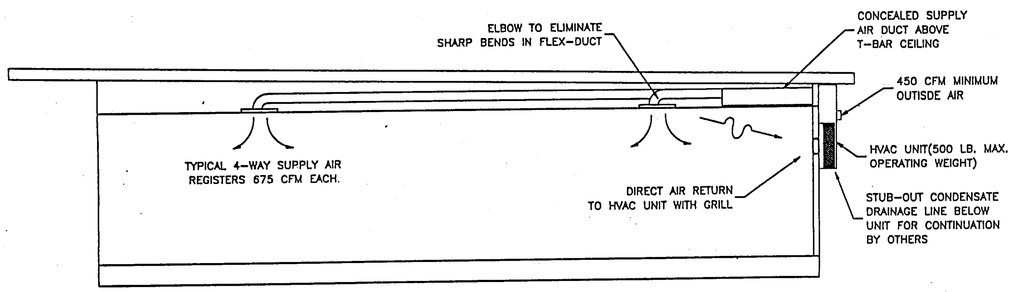


HEAT/SUPPLY AIR DUCT LAYOUT

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



HEAT/SUPPLY AIR DUCT CROSS SECTION

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

GENERAL NOTES
HEATING VENTILATING AND AIR CONDITIONING (HVAC)

1. Heat Pump: Single package wall mounted air to air electric heat pump unit shall be rated in accordance with ARI Standard 240-77.
   Reference
   Brands: BARD WH42A-XXXXXX
   MARVAIR AVP 42 HPA-08S

   All units shall be 230/208 volt, 1 phase system, UL tested & approved or comparable and meet current energy standards.

   A.) The system shall maintain an automatically controlled indoor classroom temperature of 78 degrees F. When the outdoor dry bulb temperature varies between 100 degrees F. in the summer
   B.) The system must maintain the above temperature when the damper is adjusted to use approximately one third fresh air.
2. Duckwork.
   A.) Construct all ductwork of galvanized sheet metal in accordance with U.M.C., Ashrae Guide Equipment volume and Smacna Low Velocity Duct Construction manual latest editions. All ductwork shall be insulated with 1" thick fiberglass duct wrap with vapor barrier. Provide 1" duct attenuation at all ductwork within 5'0" of HVAC unit.

   B.) Non-metallic ductwork option: In accessible concealed portions of duct system rigid 1" fiberglass or insulated flex-duct with vapor barrier may be substituted for sheet metal ductwork. All ductwork within 5' of the HVAC unit and all interface connections shall be metal. Ductwork and reinforcement shall be designed for 2" static pressure.
   Reference Brands: Owens-Corning fiberglass ducttboard, 1" thick, and Micro-aire, TYPE 475.
   Non-metallic ductwork shall conform to NFPA 90-A and SMACNA Class 1 rating.
3. Air duct insulation and linings shall comply with flame spread less than or equal to 25, smoke generation less than or equal to 50.
4. Supply air diffusers shall be 675 CFM max. 15"x15" neck, steel, rigid 1" fiberglass or flexduct ductwork specifically designed to provide air thermal cooling systems. 24"x8"x1" Micro-Aire type #475 Owens-Corning, Knauf, Certainteed, or equal and 90- B: UL #131 test, class 1 rating with "SMACNA".
5. Registers and diffusers: Provide three (Min) 4-way throw air diffusers as manufactured Carnes, Titus, Hart and Cooley, Metalaire, Shoemaker, Barber-Coleman or Krueger commercial grade grills and registers
6. Air conditioning controls.
   Thermostat: Provide electronic programmable thermostat. Thermostat shall have the following functions.
   A.) 5 and 2 weekday/weekend programming with 4 separate time/temperature setting for 24-hour period.
   B.) Key board lockout switch.
   C.) Programmable display.
   D.) 2-hour override minimum.
   E.) Status Indicated Led's.
   F.) Battery back-up.
   Provide locking clear thermostat cover with thermostat cover with access hole for program override. White Rodgers 1F92.
7. Thermal insulation
   A.) Roof Insulation: R-19 Unfaced.
   B.) Walls Insulation: R-11 Kraft Faced.
   C.) Floors Insulation: R-11 Kraft Faced.
   Flame spread and smoke development shall conform to California Building Code sec. 707.
8. Factory-made air ducts. Factory-made air ducts shall be approved for the use intended or shall conform to the requirements of U.M.C. Standard No. 6-1. Each portion of a factory-made air duct system shall be identified by the manufacturer with a label or other suitable identification indicating compliancewith U.M.C. Standard No. 6-1 and its class designation. These ducts shall be listed and shall be installed in accordance with the terms of their listing and the requirements of UMC STD. 6-1.

DUCT SUPPORT
Flex duct to be supported with 1-1/2" wide x 26 ga. galv. strap @ max 6'-0" o.c. Attach to rafter W/2 #8 SMS @ each end.
Supply air plenum to be supported with 1-1/2" wide x 26 ga. galv. straps min. 2 per plenum.
Supply air box and diffusers to be supported with (2) 12 ga. hanger wires to box @ opposite corners.
Supply air box and diffusers to be braced with (2) 12 ga. slack wires to box @ opposite corners. Attach supply air diffusers to ceiling grid to resist a lateral load equal to the weight of the diffuser and supply air box W/2 #8 SMS.

THESE DRAWINGS COMPLY
WITH THE ENERGY CONSERVATION REQUIREMENTS
OF TITLE 24 OF THE STATE OF CALIFORNIA

DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL 69217
AC FLS SS
DATE 8-20-97

REGISTERED PROFESSIONAL ENGINEER
JOHN H. LAING
No. 2310
Exp. 3-31-97
STRUCTURAL
STATE OF CALIFORNIA

FILE NO.
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL.PC 328
AC. FLS SS
DATE 4/9/97

3" STANDING SEAM ROOF

24 X 40
RELOCATABLE
CLASSROOMS

American Modular Systems

CUSTOMER:

MECHANICAL PLAN & NOTES

DATE: 4-8-97
SCALE: NONE
DRAWN BY: R.S.
CHECKED BY:
CHECKED BY:
SERIAL NO.

REVISIONS

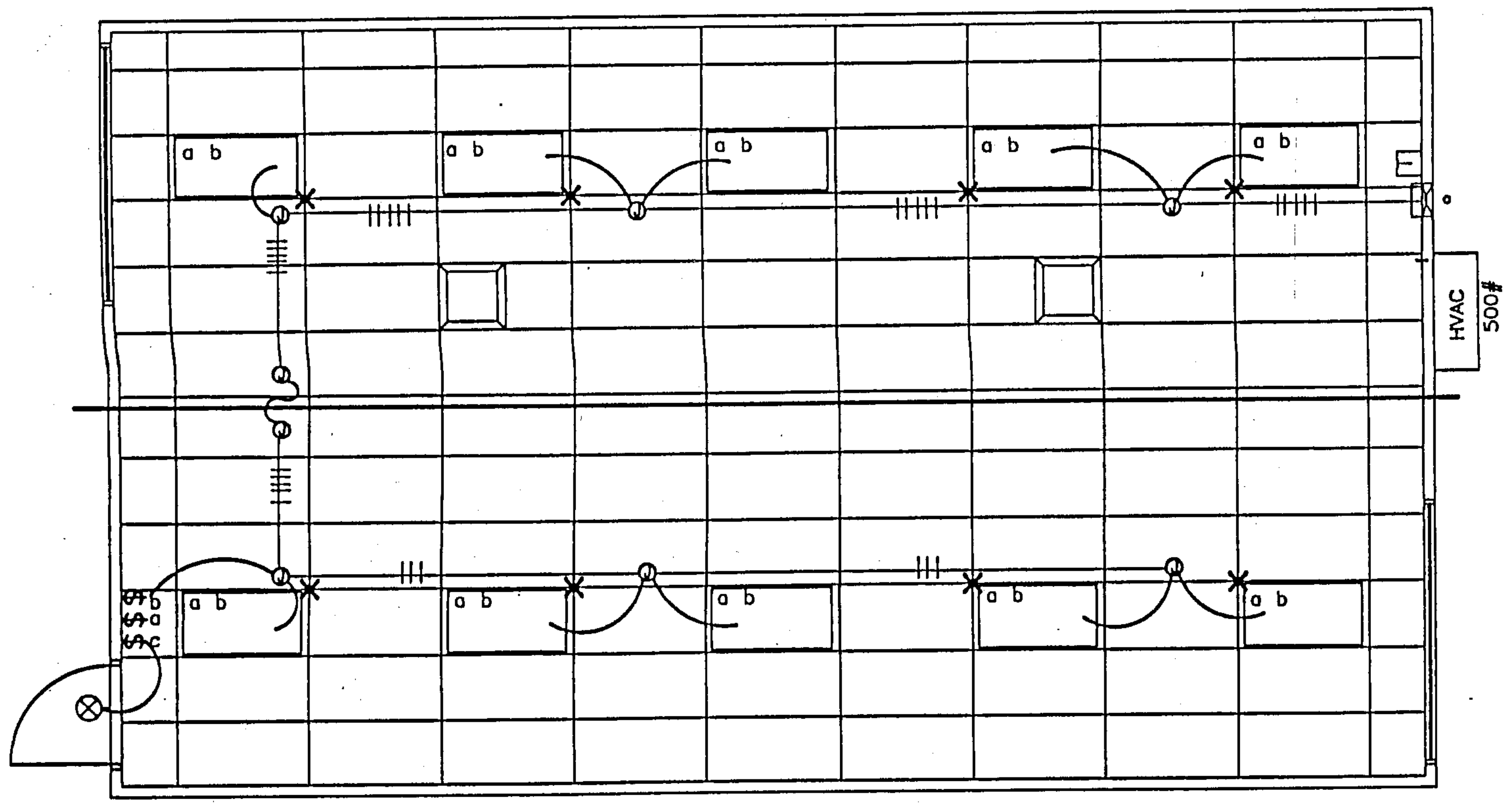
NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			4		
2			5		
3			6		

PROJECT No.

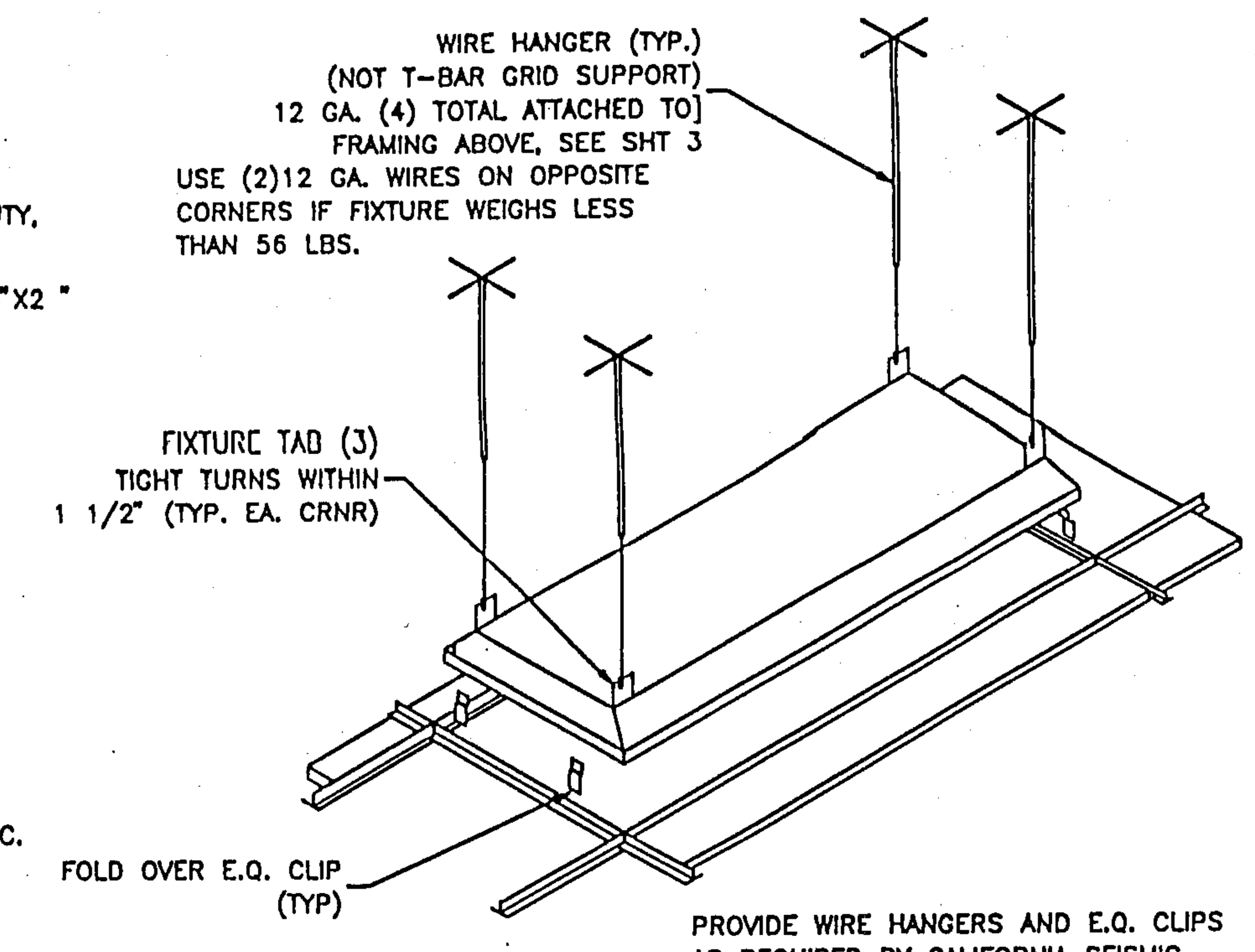
SHEET No.
M 1

STANDARD ELECTRICAL SYMBOLS

- FLUORESCENT LIGHTING FIXTURE – SURFACE MOUNTED.
- FLUORESCENT LIGHTING FIXTURE – RESCESSED.
- FLUORESCENT LIGHTING FIXTURE – WALL MOUNTED (EXTERIOR)
- INCANDESCENT LIGHTING FIXTURE – WALL MOUNTED (INTERIOR).
- DUPLEX WALL CONVENIENCE OUTLETS +18".
- SINGLE POLE LIGHT SWITHCES +48", HUBBELL PREMIUM, BRYANT HEAVY DUTY, OR LEVITON SPECIFICATIONS GRADE.
- LECTRICAL CROSSOVER J-BOXES ABOVE T-BAR CEILING #1-4"X1 ",#22 4"X2 "
- WALL CLOCK OUTLET WITH POWER OUTLET +84".
- a — SWITCH SUBSCRIPTS – a=DEVICE CONTROLLED.
- 15 AMP DUPLEX RECEPTACLE +18". HOSPITAL GRADE.
- JUNCTION BOX – SIZE AND TYPE AS REQUIRED.
- PANELBOARD – SEE SCHEDULE.
- TERMINAL CABINET – SIZE AND TYPE AS NOTED.
- CONDUIT CONCEALED IN CEILING OR WALL.
- CONDUIT CONCEALED BELOW FLOOR OR GRADE.
- HOMERUN TO RESPECTIVE PANEL TO TERMINAL.
- INDICATES 1#14 (GREEN) GROUND WIRE, OTHER SIZES AS INDICATED.
- NOTE — BRANCH CIRCUIT WITHOUT FURTHER DESIGNATION IS A 2#14 WIRE CIRCUIT, FOR MORE THAN 2#14 WIRES AS FOLLOWS, –|||–3#14, –||||–4#14 ETC. FOR OTHER SIZES AS FOLLOWS, –|||10 3#10, –||||6 4#6 ETC.
- (A) — FIXTURE IDENTIFICATION – LETTER INDICATES TYPE.
- N.I.E.S. — ABBREV. FOR NOT IN ELECTRICAL SECTION OF THESE PLANS AND SPEC'S.
- MT — ABBREV. FOR EMPTY CONDUIT WITH POLY PULL CORD.
- FUSED DISCONNECT SWITCH SIZE AS REQUIRED. PROVIDE FUSES AS RECOMMENDED BY EQUIPMENT SUPPLIER.
- [W.E.F.] — WALL MOUNTED EXHAUST FAN N.I.E.S. CONNECT AS REQUIRED.
- 50 AMP 250 VOLT RANGE RECEPTACLE.
- [F] — FIRE ALARM STATION – OUTLET ONLY, 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +48" CENTERLINE
- FIRE ALARM HORN – OULET ONLY – 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +90" MIN. AND NOT LESS THAN 6" BELOW FINISHED CEILING.
- FIRE ALARM VISUAL ALARM– OUTLET ONLY – 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER BOTTOM +80". A.F.F. BUT NO GREATER THAN +96". IF CEILING MOUNTED PER NFPA72 TABLE 6-4.4.1(b).
- SPEAKER– OUTLET ONLY – 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +84"
- INTERCOM TELEPHONE– OUTLET ONLY– 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +48"
- FIRE ALARM MINI HORN – OULET ONLY – 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +90" MIN. AND NOT LESS THAN 6" BELOW FINISHED CEILING.



1/E1 LIGHT FIXTURE PLAN
1/4" = 1'-0"



PROVIDE WIRE HANGERS AND E.Q. CLIPS AS REQUIRED BY CALIFORNIA SEISMIC REGULATIONS CBC 2501.A.5 & IR. 47-4

SUPPORT DETAIL

SYMBOL	DESCRIPTION	WATTS	MANUFACTURER
	2'X4' FLOURESCENT DROP IN FIXTURE, ACRYLIC PRISMATIC LENS. ENERGY SAVING BALLAST. (4)35 WATT TUBES, WT. 27 LBS.	156 W	CRESCENT 24TF440DLA
	FLOURESCENT SURFACE MOUNTED EXTERIOR LIGHT WITH IMPACT RESISTANT ENCLOSURE. .125 THICK CLEAR PRISMATIC ONE PIECE LENS W/ NEOPRENE GASKET & "POSIGRIP" STAINLESS STEEL SCREWS.	(2) 7W TT 2700 K	KENALL 3714 OR LITHONIA 202 2/7PL LP
	INCANDESCENT WALL MOUNTED	150W	PROGRESS P3011x30"

SEE TYPICAL CLASSROOM LAYOUT FOR LOCATIONS OF ALL DEVICES.
FIXTURE MOUNTING SHALL COMPLY WITH CALIFORNIA SEISMIC REGULATIONS.

FIRE ALARM SYSTEM

1. THE FIRE ALARM SYSTEM SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE, ARTICLE 760 &CA. FIRE CODE ART. 10.
2. INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING CALIFORNIA STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY THE DIVISION OF THE STATE ARCHITRCT.
3. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING AGENCY.

GENERAL NOTES

1. GROUNDING ELECTRODE CONDUCTOR SIZED PER CEC 250-94 & 95.
2. ALLOW FOR 12" MOVEMENT IN ANY DIRECTION IF PAD FOUNDATION IS USED.
3. PROVIDE BONDS TO BLDG. STEEL & PANEL (#8 CU)
4. PANEL TO LISTED FOR USE AS SERVICE EQUIPMENT.

FIXTURE NOTES:

1. ALL FLUORESCENT LIGHT FIXTURES SHALL HAVE ENERGY SAVING LAMPS AND BALLASTS.
2. LUMINATES/BALLASTS SHALL BE CERTIFIED PER CALIFORNIA BUILDING CODE TITLE 24.
3. FLUORESCENT LIGHT FIXTURE TYPE "A" SHALL BE CONTROLLED TO PROVIDE TWO LEVELS OF LIGHTING. SWITCH (SA) SHALL CONTROL THE TWO OUTER LAMPS AND SWITCH (SB) SHALL CONTROL THE TWO INNER LAMPS.

ELECTRICAL

1. Electrical service drop and connections supplied by others.
2. Manufacturer to provide stub-out from back of electrical panel through the exterior wall for receiving either underground or overhead service & fitting for grounding cable.
3. Electrical panel board shall be recess mounted inside the building. Sized to accommodate all connected loads including spaces as shown. Overcurrent protective devices in the panel boards have adequate short circuit interrupting capacity. All buses including bus shall be copper or aluminum.
4. 2x4 Flourescent fixtures shall be steel frame, lens shall be hinged and locked in place by two locking devices. The lens diffusers shall be KHS, Inc. #KSH-12, Carolite, Inc. #C-12 or Plaskolite, Inc. #PL21A. Minimum lens thickness shall be .125 inch.
5. Flourescent ballast shall be energy saver while maintaining full light output, class "P" equipped with thermal protectors, guaranteed against failure for (2) years and be replaced from inside the fixture.
6. Clock – 12" dial clock on clock outlet.
   A) Clock shall be General Electric model 2912 129V 60 cycle
   B) Clock outlet shall be Bryant #2828 or equal with seperable hanging clip & app'd recept.

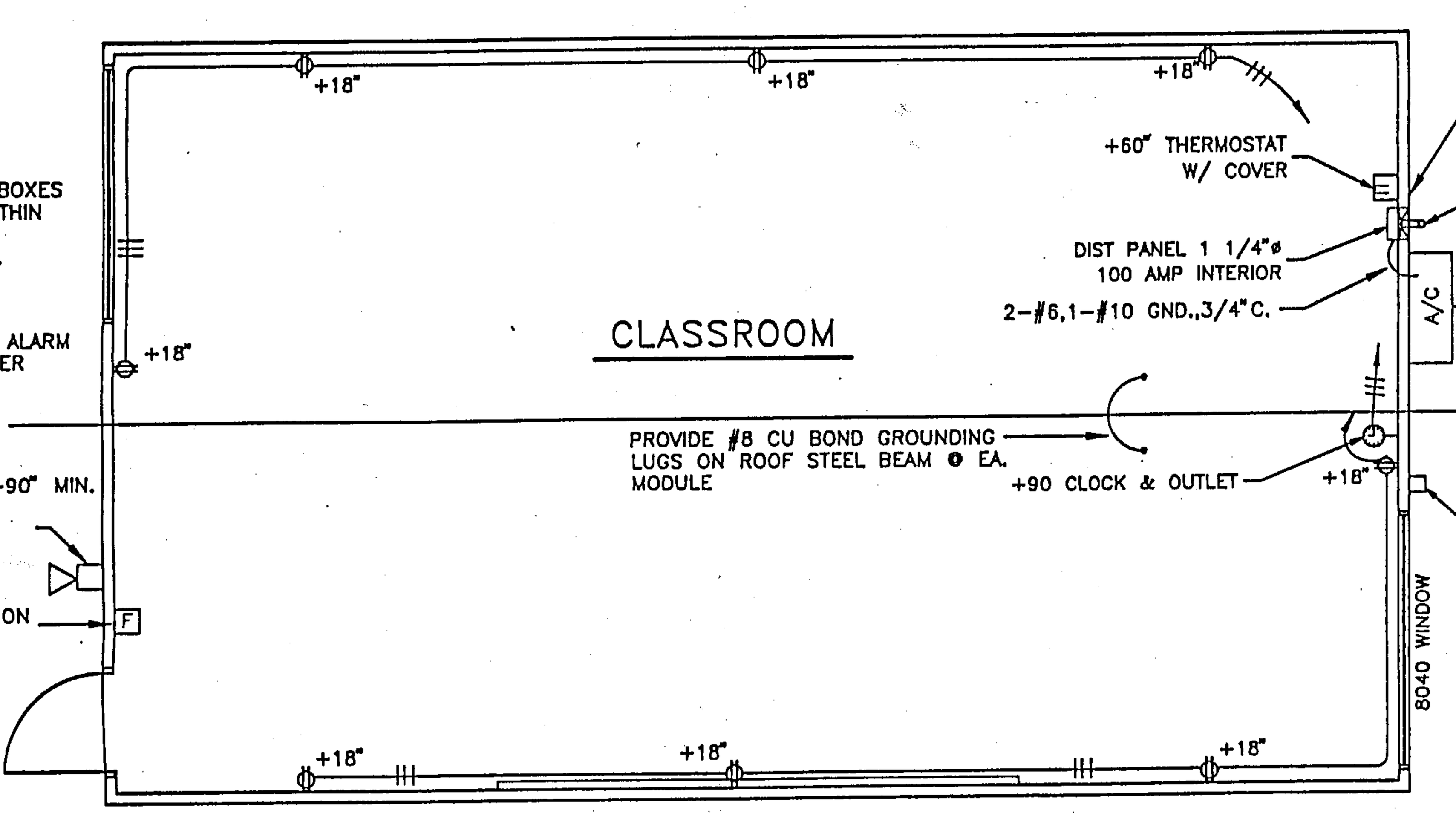
The H.V.A.C. unit feeder circuit – panel circuit breaker, feeder wire, unit disconnect and fuses (where used) – is to be coordinated with the name plate data at the time ofmanufacture. H.V.A.C. units having KVA ratings larger than that indicated on this panel schedule will not be allowed to be installed on this building. If 60 degrees C. wire is to be used in this installation, calculations demonstrating ampacity be provided on the drawing.

F.A. : CONNECT ALL FIRE ALARM JUNCTION BOXES WITH 1/2" MIN. GALV. THIN WALL TUBING (EMT): STUB TO CEILING ONLY.

DO NOT CONNECT FIRE ALARM CONDUIT WITH ANY OTHER ELECTRICAL CONDUIT

FIRE ALARM HORN @ +90" MIN. J-BOX WITH BLANK WEATHERPROOF COVER ONLY DEVICE N.I.C. STUB TO CEILING

FIRE ALARM PULL STATION +48" TO CENTER J-BOX AND COVER ONLY, DEVICE N.I.C. STUB TO CEILING



STUB OUT FITTING AT PANEL FOR GROUNDING BLDG. FRAME & PANEL W/ #8 WIRE SEE GROUNDING DETAIL PER I.R. 8-1

STUB OUT FITTING FOR UNDERGROUND OR OVERHEAD SERVICE BY OTHERS SEE ELECTRICAL NOTE #2.

WALL MOUNTED HEAT PUMP UNIT SEE MECHANICAL (240V,1PH.) W/ DISCONNECT BREAKER MOUNTED IN UNIT.

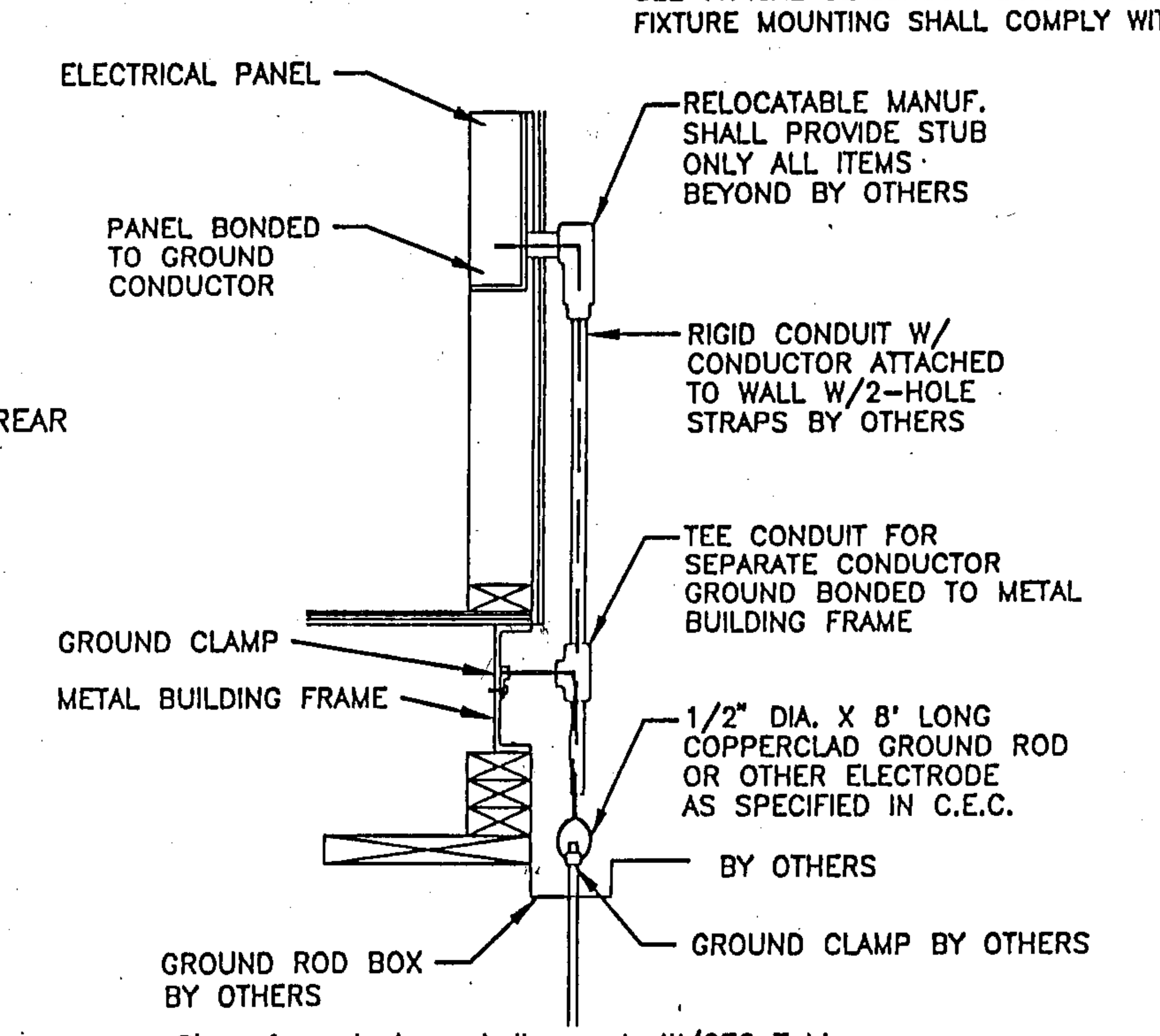
REAR

LOCATION FOR F/A 2 GANG J-BOX @ 18" ABOVE FIN. FLR.

2/E1 ELECTRICAL PLAN
1/4" = 1'-0"

FIRE ALARM
Junction boxes – Galvanized sheet metal, square or rectangular with blank covers. Locate one box at rear of building near main electrical panel at +18– above finish floor for future connection.
Covers – Install gasketed, metal, waterproof, finish covers at exterior locations. Install finish covers at interior locations.

If testing results determine fire alarm audibility does not meet 15db over ambient noise levels, additional fire alarm signaling devices may be required by the enforcing anency



Size of conductors shall comply W/CEC Table

Bond separate conductors from ground rod to electrical panel & metal building from.
In addition to the detail shown above, bond the electrical ground to metal water pipe embedded @ least 10' into the soil if available.
Electrical bond modules together W/#8 CU @ modline. By manufacturer. Check resistance to ground. If resistance exceeds 25 OHMS, install additional ground rods as required. Grounding detail per I-R 8-1.

A/E1 BUILDING GROUND DETAIL
N.T.S.

VOLTS: 120/240 SINGLE PHASE						PANEL: A			FEED: EXTERIOR LB		
MAIN: 100 AMP MAIN BKR.						LOCATION: INTERIOR			MOUNTING: FLUSH		
LOAD	WATTS A	WATTS B	BRK. AMP	BRK. P	CIR	CIR	BRK. P	BRK. AMP	WATTS A	WATTS B	LOAD
LIGHTS, FLUORESCENT	960		15	1	1	2	2	50	4476		A/C HVAC UNIT
LIGHTS, FLUORESCENT		960	15	1	3	4	2	50		4476	
EXTERIOR LIGHT & CLOCK	100		15	1	5	6					SPACE
DUPLEX RECEPT.		720	15	1	7	8					
DUPLEX RECEPT.	720		15	1	9	10					
SPACE					11	12					
					13	14					
					15	16					
PHASE WATTAGE	1880	1680			17	18			4476	4476	PHASE WATTAGE
TOTAL WATTS "A" LEG: 6556				TOTAL WATTS A+B=2743				TOTAL WATTS "B" LEG 6156			
TOTAL WATTS: 15455		65 AMPS			120/240V	SINGLE PHASE			100AMP BUS.		
FEEDERS: TO BE RUN BY THE DISTRICT EITHER UNDERGROUND OR OVERHEAD, SEE SITE ELEC. PLAN.											

3/E1 ELECTRICAL DISTRIBUTION PLAN
1/4" = 1'-0"

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
FLS SS
DATE 8-20-97

REGISTERED PROFESSIONAL ENGINEER JOHN H. LAWSON No. 2310 Exp 3-31-01 STRUCTURAL STATE OF CALIFORNIA 9/12/97

FILE NO.
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
APPL.PC 328
AC FLS SS
DATE 4/9/97

24 X 40
RELOCATABLE
CLASSROOMS

American Modular Systems

CUSTOMER:

ELECTRICAL PLAN & NOTES

DATE:	4-8-97
SCALE:	NONE
DRAWN BY:	R.S.
CHECKED BY:	
CHECKED BY:	
SERIAL NO.	

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
△			△		
△			△		
△			△		
△			△		

PROJECT No.

SHEET No.
E 1

American Modular Systems

24 X 40 RELOCATABLE CLASSROOMS
MOBILE MODULAR MANAGEMENT

TEST AND INSPECTION LIST

TESTING LABORATORY: _____ DATE: _____

NAME: _____

DISTRICT/OWNER: _____

DIVISION-FILE NO. _____ APPLICATION NO. _____

ARCHITECT: _____

STRUCTURAL ENGINEER: _____

STATE OF CALIFORNIA
DEPT. OF GENERAL SERVICES
DIVISION OF THE
STATE ARCHITECT

STRUCTURAL
TESTS
AND
INSPECTIONS

ORS 103-1 (R 11/85)

The following tests and inspections, as checked, will be required as detailed in applicable specifications.

		CONCRETE	GUNITE	GROUT	MORTAR	
COMPACTED FILL						
	Fill material, acceptance tests					Test of aggregates for mix design only
	Compaction control, continuous					Suitability tests of aggregates as detailed below
	Compaction tests only as ordered					Mix designs
	Bearing capacity of compacted fill					Continuous batch plant inspection
REINFORCING STEEL						Inspect placing
X	Sample and test bar steel					Sample
	Sample and test mesh	X				Compressive tests
	Inspect placing at job					Pick up samples at job
STRUCTURAL STEEL						Samples delivered to laboratory
X	Sample and test as detailed below					Deliver sample forms to labelle
	Shop fabrication inspection					Sample and test cement
	Field erection inspection					
X	Inspection of welds - Shop					
	Inspection of welds - Field					
	Inspection of riveting or bolting - Shop					
	Inspection of riveting or bolting - Field					
	Sample and test high strength bolts and washers					
BRICK AND BLOCK						
	Sample and test					
	Test only					
	Inspection of placing					
	Core drill samples					
GLUED LAMINATED STRUCTURAL LUMBER						
	Fabrication inspection					
	Sample and test steel accessories					
	Inspect fabrication of steel accessories					

SUITABILITY TESTS	CONCRETE MATERIALS	GUNITE	MORTAR	GROUT
Sodium sulphate				
Structural strength				
Los Angeles rattler				
Clay (hydrometer method)				
Reactivity tests				
Volume change				

MIX DESIGNS: CONCRETE, GROUT, MORTAR OR GUNITE

MATERIAL	MAXIMUM SIZE	COMPRESSIVE STRENGTH, PSI, MINIMUM
		28 DAYS
CONCRETE	1 1/2"	3000

List of structural steel members to be tested:

3 1/2" x 3 1/2" x 1/4" SQ. COL.
C7X9.8
10 ga. & 12 ga. ROOF CEE
6 3/4"X14 GA. JOISTS
6 3/8" x 12 ga. JOIST
6 " x 14 ga. ROOF JOIST
4" x 12ga. ROOF JOIST
3 1/2" x 10 ga. ALT. JOIST
2"x16 ga. STRAPS

TESTING MAY BE WAIVED IF STEEL HAS BEEN PROPERLY IDENTIFIED BY MFR'S MILL ANALYSIS AND TEST REPORTS PER TITLE 24, C.C.R., SECTION 2212.A.1

Other Tests and Inspections, together with special instructions:

GROUNDING TEST
EXPANSION ANCHORS

Copies of Reports to:

DSA/ORS
AMERICAN MODULAR SYSTEMS, INC.
SCHOOL DISTRICT
ARCHITECT

By: _____
AUTHORIZED REPRESENTATIVE

INDEX

SHEET No.	DESCRIPTION
TS-1	TITLE & BUILDING DATA NOTES
N-1	GENERAL NOTES
1	FLOOR PLAN & NOTES
2	EXTERIOR ELEVATIONS
3	CEILING GRID, DETAILS & NOTES
4	INTERIOR ELEVATIONS & OPTIONAL PLANS
S1	FOUNDATION PLAN WOOD, DETAILS & NOTES 50#
S1C	FOUNDATION PLAN CONCRETE
~~S1D~~	~~FOUNDATION PLAN CONCRETE~~
S1E	FOUNDATION DETAILS
S2	FLOOR FRAMING PLANS
S2A	BUILDING SECTIONS & WALL DETAILS
S3	ROOF FRAMING PLAN & DETAILS
S3A	ROOF FRAMING DETAILS
S4	FRAMING ELEVATIONS & DETAILS
S5R	RAMP PLAN, ELEVATION & DETAILS (OPTIONAL)
~~R1.0~~	~~RAMP DETAILS (OPTIONAL)~~
~~R2.0~~	~~RAMP DETAILS (OPTIONAL)~~
M1	MECHANICAL PLAN, DETAILS & NOTES
E1	ELECTRICAL PLAN, DETAILS & NOTES

BUILDING DATA

CLASSROOMS

OCCUPANCY	E-2
TYPE OF CONSTRUCTION	V - NON-RATED
WIND LOAD (80 MPH EXPOSURE C)	21 LBS/SQ FT
FLOOR LIVE LOAD	50 LBS/SQ FT
ROOF LIVE LOAD	20 LBS/SQ FT (REDUCIBLE)
RAMP LIVE LOAD	100 LBS/SQ FT
BUILDING AREA	960 SQ FT

FIRE MARSHAL- CALIFORNIA BUILDING CODE (CBC)

TITLE 24, PART 2, CCR (1997 UBC W/ CAL. AMENDS)
TITLE 24, PART 3, CCR (1997 NEC W/ CAL. AMENDS)
TITLE 24, PART 4, CCR (1997 UMC W/ CAL. AMENDS)
TITLE 24, PART 5, CCR (1997 UPC W/ CAL. AMENDS)
TITLE 24, PART 9, CCR (1997 UFC W/ CAL. AMENDS)
TITLE 24, PART 12, CCR (1997 STD. W/ CAL. AMENDS)
TITLE 19

STRUCTURAL - 1998 CALIFORNIA BUILDING CODE (CBC)
TITLES 24 PARTS 1 AND 2

MODULES	MOMENT-RESISTANT
SYSTEM	(2) 12' X 40' MODULES
FOUNDATION	PRESSURE TREATED WOOD OR CONCRETE
SEISMIC	ZONE 4

SEISMIC SOURCE A
DISTANCE FROM SEISMIC SOURCE ≤ 2 KM
SOIL TYPE S_A

17 pgs

FILE NO. 39-0
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL. 07-102021
AC. 21 FLS. 07 SS
DATE 3-9-00

American Modular Systems
333 EAST CARNEGIE CT. MANTECA, CALIFORNIA 95337
PHONE (209) 825-1921 FAX. (209) 825-7018

REGISTERED PROFESSIONAL ENGINEER
JOHN M. LAU
No. 2310
Exp 3-31-01
STRUCTURAL
STATE OF CALIFORNIA

JOB NO.
DATE: MARCH 1, 2000
SHEET NUMBER
TS-1
BINDING ORDER 1

GENERAL NOTES AND SPECIFICATIONS

SECTION 1A GENERAL REQUIREMENTS

1. GENERAL

A. THE REQUIREMENTS OF THE GENERAL CONDITIONS OF THE AGREEMENT AND THIS GENERAL REQUIREMENT APPLY TO THE SEVERAL TRADE SECTIONS WITH THE SAME FORCE AS THOUGH FULLY REPEATED IN EACH TRADE 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 WITH THE WRITTEN APPROVAL OF D.S.A. AND THE ARCHITECT.

C. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF TITLES 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 ARCHITECT.

2. SCOPE OF WORK

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

B. ALL REQUIREMENTS OF TITLES 24 OF THE STATE OF CALIFORNIA CODE OF REGULATIONS 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 DISTRICTS.
3. ON-SITE INSPECTION OF THE BUILDING INSTALLATION ELECTRICAL AND UTILITY INSTALLATION OR CONNECTIONS BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND THE DISTRICT ARCHITECT AND RETAINED BY THE SCHOOL DISTRICT.
4. OTHER SPECIAL TESTS OR INSPECTIONS AS MAY BE REQUIRED BY THE DIVISION OF THE STATE ARCHITECT.
5. ADDENDUMS SHALL BE SIGNED BY THE ARCHITECT & APPROVED BY D.S.A.
6. CHANGE ORDERS SHALL BE SIGNED BY THE OWNER & ARCHITECT & APPROVED BY D.S.A.
7. THE TESTING LAB SHALL BE IN THE EMPLOY OF THE OWNER.
8. ALL CONTRACTORS SHALL VERIFY ALL WORK CONDITIONS, DIMENSIONS AND DETAILS AND REPORT ANY OR ALL OMISSIONS AND DISCREPANCIES TO THE DESIGNER/OWNER IMMEDIATELY BEFORE COMMENCING WORK.
9. EACH CONTRACTOR TO BE RESPONSIBLE TO SEE THAT THEIR WORK CONFORMS TO ALL GOVERNMENTAL CODES WHETHER OR NOT SO STATED ON THE DRAWINGS.
10. ALL MATERIALS AND WORKMANSHIP TO CONFORM TO THE LATEST REQUIREMENTS OF THE GOVERNING BUILDING CODES IN EFFECT AT TIME OF DSA APPLICATION.
11. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED AND ERECTED PER MANUFACTURER'S DIRECTIONS AND INSTRUCTIONS.
12. SHOP DRAWINGS MAY BE REQUIRED. IF SO, THEY WILL BE ACCURATELY DRAWN TO A LARGE ENOUGH SCALE TO SHOW ALL PERTINENT FEATURES OF THE ITEM AND ITS CONNECTION TO RELATED WORK.
13. THE MANUFACTURER OF BUILDING IS TO PLACE TWO PERMANENT METAL IDENTIFICATION LABEL ON EACH MODULE, MECHANICALLY FASTENED TO THE FRAME SEE "GENERAL DESIGN REQUIREMENTS", THIS PAGE.

    FOR PROJECTS MANUFACTURED OFF-SITE, THE PLANT INSPECTOR IS TO INDICATE THE MANUFACTURER'S NAME AND SERIAL NUMBER OF EACH MODULE ON THE VERIFIED REPORT AND D.S.A. APP. NUMBER.
14. ALL TESTS AND INSPECTIONS REQUIRED BY DSA SHALL BE COMPLIED WITH. ALL TESTS REQ. BY FIRE AND LIFE SAFETY REGULATIONS SHALL BE BY A NATIONALY RECOGNIZED TESTING LABORATORY.

FOUNDATION

1. ASSUMED ALLOWABLE SOIL BEARING: 1000 PSF.
2. FOOTINGS SHALL BE LOCATED ON UNDISTURBED FIRM NATURAL SOIL, APPROVED COMPACTED FILL OR ON AN APPROVED PAVED SURFACE.

NOTE:THE FOUNDATION SYSTEM PRESENTED HEREIN COMPLIES WITH INTERPRETATION OF REGULATIONS, IR 16-1, ISSUED BY DIVISION OF THE STATE ARCHITECT FOR TEMPORARY BUILDINGS. THIS FOUNDATION SYSTEM IS NON-CONVENTIONAL AND THE STRUCTURAL ENGINEER TAKES NO RESPONSIBILITY FOR ITS CONSTRUCTION OR LONGEVITY.

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, PROGRAM BELL, PUBLIC ADDRESS SYSTEM,INTERCOM SYSTEM,TV,TELEPHONE SYSTEM UNLESS OTHERWISE INDICATED ON THE DRAWINGS, OR MODIFIED BY CHANGE ORDER.

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 BUILDINGS. REMOVAL OF TREES SHRUBS,FENCING, SPRINKLERS ETC. NECESSARY FOR THE MOVE-IN OF BUILDINGS SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

TRIM/ FINISH NAILING

DESCRIPTION	SET	SIZE	LENGTH	FINISH
SIDING		.131	2 1/4"	GALV
CASING, SILL & INT. CORNER TRIM	X	16g	1 1/4"	N
2X FASCIA		.131	3"	GALV
SOFFIT		.131	2 1/4"	GALV
1X EXT. TRIM, WINDOWS, EXT. DOORS, EXT. TRIM		.113	2"	GALV

SECTION 6 WORKMANSHIP

A. GENERAL - ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC STANDARD SPECIFICATIONS,TITLE 24 OF CALIFORNIA CODE OF REGULATIONS AND THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS FOR DESIGN OF STEEL STRUCTURAL MEMBERS. A COPY OF TITLE 24 SHALL BE KEPT AT THE JOBSITE AT ALL TIMES.

B. WELDING - ALL WELDING DONE BY SHIELDED ELECTRIC-ARC OR FLUX CORED-ARC PROCESS COMPLYING WITH REQUIREMENTS OF THE "STRUCTURAL WELDING CODE" OF THE AMERICAN WELDING SOCIETY. WELDING DONE BY OPERATORS QUALIFIED BY TESTS ACCEPTABLE TO THE DIVISION OF THE STATE ARCHITECT. WELDING INSPECTION PER TITLE 24,PART 2,CCR, SECTION 2212.A.5
   WELDING ELECTRODE SHALL BE E70XX.
   1. STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. A-36 & A-570 GR.36.
   2. PIPE COLUMNS SHALL CONFORM TO A.S.T.M. A-53 WITH SULFUR CONTENT NOT EXCEEDING 0.05%.
   3. STEEL TUBING SHALL CONFORM TO A.S.T.M. A-500 GRADE B OR A.S.T.M. A579 GRADE 50 FOR GAUGE TUBING-TYP. U.N.O.
   4. STRUCTURAL WELDS ARE DESIGNED FOR FULL ALLOWABLE STRESS UNLESS OTHERWISE NOTED.

C. ERECTION - STRUCTURAL STEEL ERECTED TRUE,STRAIGHT, PLUMB AND TO ITS DESIGNATED LOCATIONS. FIELD CONNECTIONS BOLTED OR WELDED AS INDICATED ON THE DRAWINGS.

D. NAILS,BOLTS, SCREWS AND NUTS ETC.- FOR EXTERIOR WORK SHALL BE CADMIUM PLATED OR GALVANIZED.
   1. BOLTS FOR STRUCTURAL STEEL JOINTS SHALL CONFORM TO A.S.T.M. A-307 UNLESS OTHERWISE NOTED. ALL HOLES FOR MACHINE AND CARRIAGE BOLTS THROUGH STEEL TO BE DRILLED, OR TORCH PILOT HOLE AND REAM MIN. 1/16" TO CORRECT SIZE. NELSON STUDS (WELDED TO STEEL) MAY BE SUBSTITUTED FOR BOLTS SAME LENGTH AND DIAMETER EXCEPT AT SIMPSON MTT28B.

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

F. SHOP PAINT
   1. EXPOSED STEEL COATED WITH ONE SHOP COAT OF RED OXIDE PRIMER.
   2. NON-EXPOSED STEEL COATED WITH ONE SHOP COAT OF RED OXIDE PRIMER.
   3. ALL SURFACES THOROUGHLY CLEANED BY EFFECTIVE MEANS PRIOR TO APPLICATION OF SHOP COATS.PRIME ALL EXPOSED STEEL SURFACES AFTER FIELD WELDING.

G. TESTS
   1. PROVIDE MILL CERTIFICATES OR TEST ALL STEEL MEMBERS PER T-24 PART 2,CCR SECTION 2212.A.1.

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. 17 OF WEST COAST LUMBER INSPECTION BUREAU, OR "GRADING RULES FOR LUMBER,3RD EDITION OF WESTERN WOOD PRODUCTS ASSOCIATION OR W.C.L.I.B.. PLYWOOD GRADE MARKED IN ACCORDANCE WITH PRODUCT STANDARD PS 1-95 FOR SOFTWOOD PLYWOOD,OF AMERICAN PLYWOOD ASSOCIATION, COMPLYING WITH CBC EACH SHEET SHALL BEAR THE STAMP OF APA, PITTSBURGH TESTING, OR TECO.

A. JOISTS, PLATES, STUDS-DOUGLAS FIR OR HEM FIR S4S #2 U.N.O. NOTE: MSR 1650 E1.5 MAY BE SUBSTITUTED FOR #2 GRADE IF IT MEETS THE STRUCTURAL REQUIREMENTS FOR FLOOR AND ROOF MEMBERS.

B. HEADERS,POSTS AND TIMBERS-DOUGLAS FIR OR SP S4S #1

C. BLOCKING - DOUG FIR #3,OR HEM FIR #3,OR STD. & BET.

D. SILLS AND LUMBER & SHIM PLATES IN CONTACT WITH CONCRETE,MASONRY OR EARTH, DOUG FIR #2 PRESSURE TREATED IN ACCORDANCE WITH CBC 1811.7. EACH PIECE SHALL BEAR AWPB STAMP. LP-22 GROUND CONTACT,D.F.#2 ABOVE GROUND.

E. PLYWOOD ROOF DECKING - SEE A/S3

F. PLYWOOD FLOOR DECKING - APA STURD-I-FLOOR 2-4-1 OR UNI-FLOOR BY PITTSBURGH TESTING LAB, 1-1/8"NOM. TONGUE AND GROOVE FLOOR SHEATHING, WITH EXTERIOR GLUE.

G. EXTERIOR SIDING/SHEATHING - APA TYPE 303,EXTERIOR.

H. MOISTURE BARRIER - KRAFT WATERPROOF BUILDING PAPER, OR 15 LB. FELT, UBC STANDARD 14-1 FOR KRAFT, 15-1 FOR FELT.

J. STUDS - DOUG FIR #2 OR HEM FIR #2 MOISTURE CONTENT NOT OVER 19%.

K. FASTENERS - NAILS SHALL BE CORROSION RESISTANT PER C.B.C. 2318A.3.4 COMMON NAILS- For Ext Siding and Fndn Only.

L. BUILDING TRIM - 2X RESAWN SELECT D.F.,H.F.,OR CEDAR

M. DOOR/WINDOW TRIM - 1X4 REWAWN D.F.,H.F.,OR CEDAR.
   FRAMING CONNECTORS SHALL BE FROM SIMPSON CATALOG LATEST ED.

O. FIRE BLOCKS SHALL CONFORM TO CBC SECTION 708.

P. ALL NAILS SHALL BE COMMON NAILS UNLESS OTHERWISE NOTED.

Q. FOUNDATION LUMBER: ALL CUT ENDS AND HOLES IN PRESSURE TREATED LUMBER SHALL BE TREATED WITH "CUPRINOL".

3. WORKMANSHIP

A. FRAMING - SECURELY NAILED,BRIDGED AND BLOCKED TO FORM RIGID STRUCTURE. WORK CUT, FITTED AND ASSEMBELED 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,PART 2, CALIFORNIA BUILDING CODE,TABLE 23A-11-B-1

C. EXTERIOR WALLS - FACTORY FABRICATED. CAULKING PROVIDED BETWEEN PERIMETER OF WALL AND STRUCTURAL MEMBERS PROVIDING WEATHER-PROOF AND WATER-TIGHT SEAL. NECESSARY CLOSERS,SEALS, AND FLASHINGS PLACED AT TOP AND BASE SUPPORT OF PANELS AND AROUND OPENINGS.

D. 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.

E. MOISTURE BARRIER - APPLIED TO STUDS WEATHER-BOARD FASHION, HORIZONTAL JOINTS LAPPED MIN 6" INCLUDING BUILDING CORNERS. SHEATHING APPLIED OVER MOISTURE BARRIER.

F. TRIM SEALED AT ALL EDGES. SEALANT PAINTED TO MATCH TRIM OR SIDING UNLESS TRANSPARENT TYPE.

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 A526. MINIMUM 26 GA. UNLESS OTHERWISE NOTED ON THE DRAWINGS.
   B. SOLDER - OF STAND,GRADE "A" OF EQUAL PARTSARD BRAND LEAD AND TIN ASTM B32.
   C. FLUX - ZINC SATURATED MURIATIC ACID.
   D. GUTTERS: 26 GA. G-90 GALV. STEEL.
      DOWNSPOUTS: 2"X3" CONVOLUTED 30 GA. G-90 GALV. STEEL.
      GUTTER ENDCAPS: 26 GA. G-90 GALV. STEEL.
      GUTTER CLIPS: 18 GA. G-90 GALV. STEEL
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. ALUMINUM SHALL BE SEPARATED FROM FERROUS METAL BY POLYETHYLENE TAPE OR FLOOD COAT OF ASPHALTIC PAINT.

SECTION 7C METAL ROOFING

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL METAL ROOFING. TEST RESULTS SHOWING THE ROOFING SYSTEM WILL WITHSTAND THE UPLIFT OF A 80 MPH WIND SHALL BE SUBMITTED WITH THE PLANS AND SPECIFICATIONS.
2. MATERIALS
   A. ROOFING - 3" INCH STANDING SEAM 22-GAUGE G-90 GALV. INTERLOCKING SHEET STL PANELS (G90).
   B. ROOFING: CLASS B FIRE RATING

SECTION 7J SEALANT

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIAL AND SERVICES TO SEAL BUILDINGS.
2. MATERIALS
   VULKEM SEALANT, POLYURETHANE, MANUFACTURED BY MAMECO INTERNATIONAL FOR ROOFS. "GEOCEL" SILICONIZED CAULK, GE, DUPONT, EAGLESEAL OR DAP FOR ALL OTHER APPLICATIONS, OR EQUAL.
3. WORKMANSHIP
   SEALANT APPLIED TO DRY CLEAN SURFACES, WHEREVER INDICATED ON DETAILS AND AS NEEDED TO MAKE BUILDING WATERTIGHT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

SECTION CONCRETE CONCRETE (IF USED)

1. CONCRETE MORTAR AND RELATED MATERIALS TO CONFORM TO APPLICABLE PROVISIONS OF TITLE 24 EXCEPT AS MODIFIED HEREIN.
2. REINFORCEING BARS:ASTM A615 OR ASTM A706 DEFORMED GRADE 40 BILLET STEEL.
3. EXPANSION JOINT FILLER: ASTM D994
4. FORM MATERIALS: SIDE FORMS DOUGLAS FIR, CONSTRUCTION GRADE OR BETTER: OR METAL FORMS.
5. PLACING REINFORCEMENT. PLACING CONCRETE SURFACE FINISHES, CURING AND REMOVAL OF FORMS SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF TITLE 24, PART 2.

SECTION 8B HOLLOW METAL DOORS AND FRAMES

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL HOLLOW METAL DOORS AND FRAMES.
2. MATERIALS
   A. DOORS - TYPE L FULL FLUSH, MANUFACTURED BY AMWELD MANUFACTURING COMPANY,18 GA. 1 3/4" THICK PER CS242 MIN.REINFORCE FOR HARDWARE-BOTH FACES FOR CLOSER, SOUND DEADEN INTERIOR.
   B. FRAMES - 16 GA COLD ROLLED,2" FACES, CS242 MIN.3 ANCHORS PER JAMB + ADJUSTABLE FLOOR ANCHOR EACH JAMB REINFORCE FOR HARDWARE, PROVIDE STRIKE BOX,PROVIDE SOUND DEADENING: 1/8" UNDERCOATING OR INSULATING FILL.
3. WORKMANSHIP
   ALL WORK FABRICATED IN SHOP TO REQUIRED PROFILES BY FORMING AND WELDING, WITH ARISES AND EDGES STRAIGHT, SHARDP FIT FABRICATED ACCURATELY WITH SQUARE CORNERS, HAIRLINE JOINTS AND SURFACES FREE FROM WARP,WAVE,BUCKLE OR OTHER DEFECTS AFTER FABRICATION,DOORS AND FRAMES CLEANED THOUROUGHLY,ALL WELDS GROUND SMOOTH AND GIVEN PRIME COAT.

SECTION 8D FINISH HARDWARE

1. SCOPE OF WORK
   CONTRACTOR SHALL SUPPLY AND INSTALL FINISH HARDWARE AS SPECIFIED AND AS REQUIRED.
2. SCHEDULE FOR EXTERIOR DOORS
   SEE NOTE ON FLOOR PLAN.
3. SPECIAL REQUIREMENTS
   A. EXIT DOORS SHALL BE OPENABLE FROM THE INTERIOR WITHOUT KEY OR SPECIAL KNOWLEDGE OR EFFORT.
   B. CLOSER SHALL BE SET FOR A MAXIMUM OPENING PRESSURE OF 8.5 LBS. PRESSURE.

SECTION 9E PAINTING

1. SCOPE OF WORK
   CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO PAINT BUILDING. ALL EXPOSED SURFACES OF BUILDING AND RAMPS SHALL BE PAINTED EXCEPT ALUMINUM WINDOW FRAMES, THRESHOLDS, AND ROOFING.
2. MATERIALS

A. FOR EXTERIOR WOOD:

REF.BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
PRIMER	42-9M	1240	Y24W20	289-N
FINISH	QD-60-XX	1240-XXX	B54WZ102	GE2-NXX

B. FOR INTERIOR TRIM

REF. BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
FINISH	W450-XX	1650-XXX	A26W11	40XX

C. FOR METAL

REF. BRAND	DUNN EDWARDS	KELLY MOORE	SHERWIN WILLIAMS	SINCLAIR
PRIMER	43-4	1710	B50NZ6	15N
FINISH	10-XX	1700-XXX	B54WZ102	GE2-NXX

3. WORKMANSHIP
   ALL EXPOSED SURFACES SHALL BE PAINTED EXCEPT ALUMINUM WINDOW FRAMES AND THRESHOLDS. MATERIAL SHALL BE OF THE GRADE SPECIFIED OR EQUAL.
   A. EXTERIOR - WOOD SIDING, TRIM AND SKIRTING FLAT OR SEMI-GLOSS LATEX - APPLY ONE COAT OF PRIME AND AT LEAST ONE FINISH COAT. PRIME COAT SHALL BE BRUSHED ON OR SPRAYED AND BACK BRUSHED INTO ALL GROOVES IN THE SIDING. IF NECESSARY, IN THE OPINION OF THE INSPECTOR, AN EXTRA COAT SHALL BE APPLIED TO ALL GROOVES SO THAT THE FINISH COAT WILL HAVE A UNIFORM APPEARANCE. ALLOW PRIME COAT TO DRY ACCORDING TO MANUFACTURER'S RECOMMENDATION. PRIME AND FINISH COATS SHALL BE COMPATIBLE AND MANUFACTURED BY THE SAME COMPANY.
   B. INTERIOR TRIM - TRIM NOT PRECOATED SHALL BE PAINTED WITH TWO COATS OF SEMI-GLOSS LATEX OVER PRIMER.
   C. INTERIOR HARDWOOD CABINETS - TWO COATS LOW LUSTER POLYURETHANE FINISH. APPLY FIRST COAT THINNED WITH ONE QUART MINERAL SPIRITS PER GALLON. APPLY SECOND COAT AS RECOMMENDED BY MANUFACTURER.
   D. METAL - ALL METAL SURFACES SHALL BE PAINTED WITH TWO COATS OF ALKYD FINISH COAT OVER ZINC CHROMATE OR EQUAL RUST INHIBITING PRIMER.
   E. RAMP - ONE COAT OF FERROX NON-SKID SURFACING AS MANUFACTURED BY AMERICAN ABRASIVE METALS OR COMPARABLE. ALL PAINTS OF THE TYPE INDICATED SHALL BE LISTED ON THE STATE OF CALIFORNIA QUALIFIED PRODUCTS LIST FOR MAINTENANCE PAINTS 8010-91G-98A DATED JULY 1989. OR EQIAL.

F. SUBMIT ONE SET COLOR SAMPLES TO ARCHITECT FOR EACH PRODUCT TO ASSIST IN SELECTION.

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 . UNLESS SPECIFICALLY CALLED FOR IN THE CONTRACT, STEPS, RAMPS, OR HANDRAILS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. ASSEMBLY OF ELEMENTS

A. IN A LOCATION ON THE SITE AS DETERMINED BY THE SCHOOL DISTRICT,(APPROVED BY DSA) THE CONTRACTOR SHALL PLACE WOOD 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 EACH OTHER.

C. CONNECTION OF THE ELEMENTS TOGETHER SHALL BE DONE ACCORDING TO INSTRUCTION ON THE DRAWINGS. FLASHINGS, TRIM AND OTHER LOOSE ITEMS SHALL BE INSTALLED PER DETAILS ON THE DRAWINGS.

NOTE:

WALL FINISH MATERIAL
  FLAME SPREAD MAX = 200
  SMOKE DENSITY MAX = 450
BUILDING INSULATION
  FLAME SPREAD MAX = 25
  SMOKE DENSITY MAX = 450
PIPE INSULATION
  FLAME SPREAD MAX = 25
  SMOKE DENSITY MAX = 450
DUCT INSULATION
  FLAME SPREAD MAX = 25
  SMOKE DENSITY MAX = 50

SECTION 15A AIR CONDITIONING

1. SCOPE OF WORK (SEE SHEET M-1 FOR HVAC SPEC. AND NOTES)
   CONTRACTOR SHALL PROVIDE ALL LABOR,MATERIALS AND SERVICES TO INSTALL THE AIR CONDITIONING SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFICATIONS, 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 NOTE ON FLOOR PLAN FOR SIZE AND TYPE.
3. WORKMANSHIP
   UNITS SHALL BE INSTALLED COMPLETE AND OPERATING WITH ALL ACCESSORIES IN ACCORDANCE WITH THE MANUFACTURER'S 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 WITH LAMPS, CONNECTIONS AND DISCONNECTS TO A/C EQUIPMENT.
2. MATERIALS
   ALL NEW COMPLYING WITH REQUIREMENTS OF CALIFORNIA ELECTRICAL CODE AND NATIONAL FIRE PROTECTION ASSOCIATION

A. ELECTRIC METALLIC TUBING - COUPLING AND FLEX CONDUIT GALVANIZED OR SHERARDIZED. EXTERIOR FLEX- GALV. STEEL W/ FACTORY APPLIED P.V.C. JACKET.

B. PANELBOARDS - FLUSH MOUNTED.

C. CONDUCTORS - COPPER,INSULATED FOR 600 VOLTS, TYPE THHN FOR SIZES #12 TO #6, TYPE THW FOR LARGER SIZES.MINIMUM SIZE- #14.

D. RECEPTACLES - AS NOTED. +18" A.F.F. MIN.

E. CLOCK RECEPTACLE - AS NOTED.

F. SWITCHES - AS NOTED. +48" A.F.F. MAX.

G. LIGHTING FIXTURES - AS NOTED ON THE DRAWINGS.

3. WORKMANSHIP
   MATERIALS AND EQUIPMENT INSTALLED IN A SECURE,NEAT WORKMANLIKE MANNER IN ACCORDANCE WITH CODE REQUIREMENTS. PANELBOARD CARDS FILLED OUT. CONDUIT AND CABLE INSTALLED IN WALL AND CEILING SPACES. WORK PIERCING WATERPROOFED AREAS FLASHED AND SEALED TO A WATERTIGHT CONDITION. BUILDING CONDUIT/WIRING FROM FACE OF BLDG TO SITE TERMINATION BY SITE CONTRACTOR(N.I.C.).(FLEXIBLE CONDUIT S-BEND SEALTITE)

INSPECTION

INSPECTION OF PREFABRICATED BUILDINGS IS DIVIDED INTO TWO SEPARATE FUNCTIONS.

1. IN-PLANT INSPECTION.
2. ON-SITE INSPECTION.

THE CONTRACTOR SHALL ALLOW UP TO SEVEN (7) DAYS FROM THE DATE OF PLAN APPROVAL TO OBTAIN AN IN PLANT INSPECTOR APPROVED BY D.S.A.

IN-PLANT INSPECTION AND MATERIAL TESTING SHALL BE ACCOMPLISHED UNDER THE SUPERVISION OF THE DISTRICT ARCHITECT. THE CONTRACTOR SHALL NOTIFY THE DISTRICT ARCHITECT, DSA, AND THE DESIGNATED INSPECTOR/INSPECTION AGENCY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK. THE MANUFACTURER SHALL PROVIDE THE INSPECTOR WITH FULL ACCESS TO ALL PLANT OPERATIONS INVOLVING WORK UNDER THIS CONTRACT AND SHALL ADVISE THE INSPECTOR IN ADVANCE OF THE TIME AND PLACE WHEN OPERATIONS THAT THE INSPECTOR WANTS TO OBSERVE TAKE PLACE. BEFORE THE BUILDING(S) ARE REMOVED FROM THE PLANT FOR DELIVERY TO THE STORAGE FACILITY OR FROM THE STORAGE FACILITY TO THE SITE THE INSPECTOR SHALL DETERMINE THAT THEY ARE ACCEPTABLE AND ISSUE A WRITTEN RELEASE WHICH SHALL BE IN THE FORM OF A VERIFIED REPORT (FORM SS5-6). A COPY OF THE INSPECTOR'S VERIFIED REPORT SHALL ACCOMPANY EACH BUILDING TO STORAGE OR TO THE SITE. THE INSPECTOR SHALL PUT ONE COPY IN EACH BUILDING.

COORDINATION OF WORK

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ALL NECESSARY ARRANGEMENTS WITH THE SCHOOL DISTRICT AUTHORIZED REPRESENTATIVE FOR ACCESS TO GROUNDS AND REMOVAL OF EQUIPMENT,IF NECESSARY.
THIS CONTACT SHALL BE MADE AT LEAST 48 HOURS PRIOR TO DELIVERY OF AY MODULE.
ON-SITE INSPECTION SHALL BE DONE BY THE SITE INSPECTOR. ALL WORK WHICH THE MANUFACTURER OR HIS SUBCONTRACTORS PERFORM AT THE SITE SHALL BE SUBJECT TO THE INSPECTION OF THE SITE INSPECTOR. THE MANUFACTURER WILL FURNISH THE SITE INSPECTOR WITH SUCH INFORMATION AS MAY BE NECESSARY TO KEEP HIM FULLY INFORMED AS TO PROGRESS OF WORK AND DATES WHEN SITE WORK WILL OCCUR. THE CONTRACTOR SHALL NOTIFY THE INSPECTION AGENCY AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.

THE CONTRACTOR SHALL VERIFY THAT THE DISTRICT'S SITE IS READY TO RECEIVE THE CLASSROOM(S) PRIOR TO THE DELIVERY OF ANY CLASSROOM(S) BY VISITING EACH SITE (THIS MAY BE DONE BY THE INSPECTOR).

MATERIALS AND WORKMANSHIP

ALL CONTRACTORS 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.

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. THE CONTRACTOR SHALL, IF REQUESTED, FURNISH EVIDENCE SATISFACTORY TO THE ARCHITECT THAT SUCH IS THE CASE.

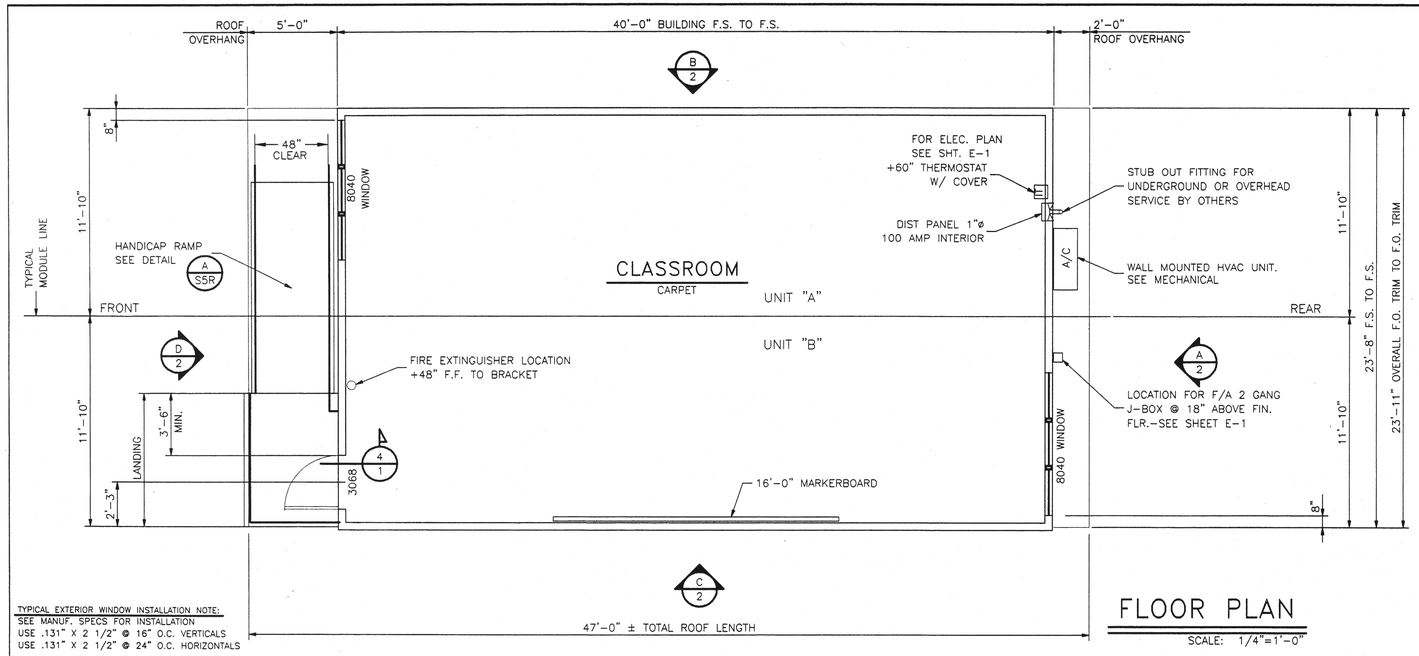
CONTRACTOR'S CREWS ASSIGNED TO ANY WORK PERFORMED UNDER THIS CONTRACT SHALL INCLUDE ONE COMPETENT AND FULLY EXPERIENCED PERSON DESIGNATED AS THE RESPONSIBLE PERSON IN CHARGE. SUCH PERSON MUST BE IDENTIFIED BY NAME TO THE DISTRICT IN ADVANCE OF ANY WORK. UPON REQUEST, THE CONTRACTOR SHALL PROMPTLY FURNISH TO THE DISTRICT INFORMATION RELATING TO THIS EMPLOYEE'S EXPERIENCE.

WORKMANSHIP SHALL BE EQUAL OR BETTER IN QUALITY TO THAT REQUIRED BY THE CONSTRUCTION TRADES FOR A FINISHED PRODUCT. A QUALITY CONTROL SUPERVISOR, DESIGNATED BY THE MANUFACTURER, SHALL REVIEW ALL WORK IN PROGRESS AND SHALL REVIEW THE FINISHED BUILDING PRIOR TO FINAL INSPECTION TO ASSURE IT IS COMPLETE AND CORRECT. THE QUALITY CONTROL SUPERVISOR SHALL HAVE THE AUTHORITY TO HAVE MATERIALS REPLACED AND WORK REDONE IN ORDER TO CORRECT FAULTY MATERIALS OR WORKMANSHIP.

GENERAL DESIGN REQUIREMENTS:

TWO (2) APPROXIMATELY 12' X 40' MODULES DESIGNED SO THAT TWO MODULES MAY BE JOINED TOGETHER TO FORM A COMPLETE STRUCTURE TO MAINTAIN A POSITIVE ALIGNMENT OF FLOORS, WALLS, AND ROOF AND TO PERMIT SIMPLE NON-DESTRUCTIVE DETACHMENT FOR FUTURE RELOCATION.

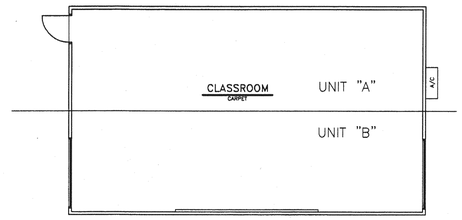
EACH MODULE SHALL BE PERMANENTLY IDENTIFIED WITH AN IMPRINTED (STAMPED NOT ENGRAVED)



TYPICAL EXTERIOR WINDOW INSTALLATION NOTE:
SEE MANUF. SPECS FOR INSTALLATION
USE .131" X 2 1/2" @ 16" O.C. VERTICALS
USE .131" X 2 1/2" @ 24" O.C. HORIZONTALS

FLOOR PLAN

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



OPTIONAL FLOOR PLAN

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

NOTES
INTERIOR

1. Floor: Carpets – Units shall be carpeted as indicated on floor plan with direct glue down type per State of California Specification 7220-XXX-01, Group 1, Type A, Class 26. Color will be selected by District after award of bid. The carpet density shall be 4600 minimum. Pile yarn shall be branded nylon. No cross seams shall be allowed.
2. Base: Resilient Cove Base – Best quality, moulded rubber, 1/8" thick, 4" high, moulded top set Cove: Provide preformed base for square external corners and preformed end stops where base does not abut. Solid color as manufactured by "Johnsonite Co." Flexco, or equal. Apply cove to complete perimeter of classroom.
3. Interior walls shall be vinyl covered tackboard U.N.O. applied in one continuous length from floor to ceiling. The tackboard shall be industrial insulation board manufactured specifically as a substitute for vinyl covered wall panels. The board shall be asphalt free, shall have an ironed-on coating and shall have a minimum density of 18 lbs. per ft. The vinyl coating shall be made of virgin vinyl calendered base color, weighing a minimum of 8 oz. per square yard. The coating backing shall be sheeting or non-woven fabric. The vinyl coating shall be mechanically laminated, with the long edges wrapped, to the tackboard. Tackboard shall be applied over 1/2" sheetrock or 3/8" plywood sheathing. The vinyl wall covered panel shall have a Class III flame spread rating. The panel shall be approved for classroom use by The California State Fire Marshal. Reference brand: Vinyl covered tackboard as manufactured by Chatfield-Clarke or comparable. Care shall be taken in mounting the tackboard so that the texture of all panels will have the same orientation and color match.
4. Ceiling: Suspend T-Bar System, see sheet 3 for details etc. Materials and installation per CCR 2501.A.5 and IR #47-4 inclusive as applicable to classrooms.

DOORS & WINDOWS

Exterior Doors: Metal Doors – 3'0"X6'8" hollow metal door construction of 1 sheet of 18 ga. steel assembled per CS242 min and reinforced with 20 ga. min. continuous vertical steel stiffeners spaced @ 6" O.C. Fill spaces between stiffeners with mineral wool or other insulation. (Reinforce both faces for closure) provide flush top on doors. Hardware reinforcement shall be 10 ga. min for hinges, door frame shall be 16 ga. pressed steel frame ASTM A366 & C5242. Hardware reinforcement shall be 10 ga. plate. Frames shall be designed with integral stop and trim. Provide (3) anchors per jamb.

Exterior Windows: Provide anodized aluminum frame 5/8" minimum dual pane window units, as shown on floor plans. The 5/8" dimension is the minimum thickness for the dual glazed window panel consisting of two lights of glass and the air space. Glazing material shall be:

Exterior Lite – 3/16" minimum tempered glass or laminated as – 1 glass of solar gray glare reducing type with a light transmission factor of 45% maximum.

Interior Lite – 1/8" minimum clear tempered.

Minimum air space shalle be 1/4".

Space – Bent or sealed corner aluminum with desiccant fill

Sealer – Butyl primary seal and polysulfide of silicone secondary seal.

Certification – All glazing to be certified in accordance with ASTM E-773, E-774.

Header height shall be the same as the door. All operable sash shall have aluminum screens. Windows shall not be mounted to the exterior plywood surface. All windows shall meet the AAMA GS101-88 voluntary spec. For aluminum prime windows and sliding glass (ANS1), commercial grade.

HARDWARE

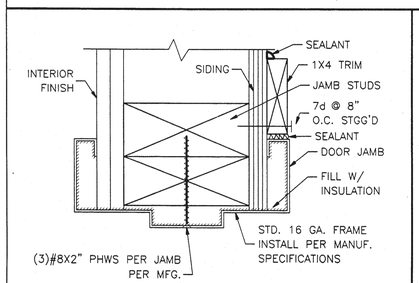
1. Exterior Door
   A) Hinges: HAGER 4-1/2X4-1/2 butts, BB1279 US26D,1-1/2 pair each door with set screw in barrel and ball bearing design, or approved equal.
   B) Lockset: Classroom lever handle lockset, mortise or cylindrical type, Schlage D70PD (Rhodes) or equal. US26D finish.
   C) Closer: Norton 8500DA or 8500BF series, LCN 1460 Del series or equal.
   D) Weatherstripping: All exterior doors shall be weatherstripped with Pemko 299D, Ultra WS007, at door jambs and head or equal.
   E) Threshold: Threshold shall be Pemko 271 AV 5" aluminum with Pemko 216 AV Ultra TH042 door bottom.
   F) Doorstop: Quality #44, or equal.

FIRE EXTINGUISHER

1. Each portable classroom shall be equipped with pressure type fire extinguishers with 2A10BC UL rating. To be mounted on the interior wall of the building near the doorway(s) at a height of 4 feet to mounting bracket. Fire extinguishers shall be totally charged and have a dial indicating the state of charge.

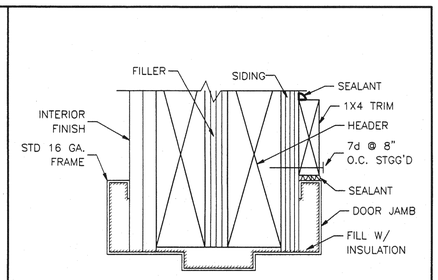
MARKERBOARD SPECIFICATIONS

Chalkboards(standard) shall have green facing sheet.
Markerboards(extra cost option)
Markerboards shall be 5 mil thick melamine facing sheet suitable to accept dry erase felt markers. The facing sheet shall be laminated, using hot melt adhesive, to a medium density particleboard substrate with a minimum density of 45#/c. ft. The panel shall have a foil backing. The panels shall have extruded aluminum molding and chalkrail with a minimum of 2-15/16" projection from the face of the panel. A full length map rail shall be provided with cork insert and end stops. The map rail and chalkrail are to incorporate a channel to wrap around the panel. Three (3) map hooks, with clips, perpanel shall be provided. One flag holder, 1/2" size, shall be provided for each classroom. Each classroom shall be 2 ea. 4x8 panels installed side by side to make a 4x16 panel, centered on one of the long walls. Referenced brand: Chatfield-Clarke Co. series 500. Attach directly to studs and blocking W/#8x3" oval head wood screw @ 32" o.c. horizontally and @ 24" o.c. vertically.



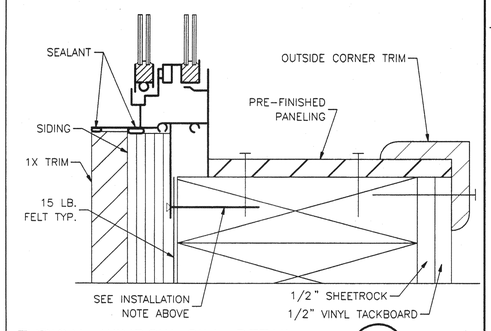
TYPICAL EXTERIOR DOOR JAMB 5/1 — NO SCALE

NOTE: SEE MANUFACTURES SPECS FOR INSTALLATION.

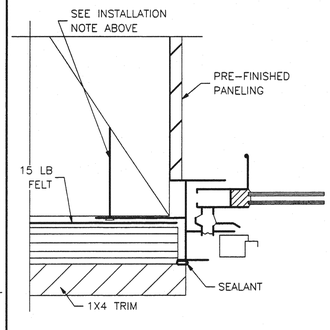


TYPICAL EXTERIOR DOOR HEAD 6/1 — NO SCALE

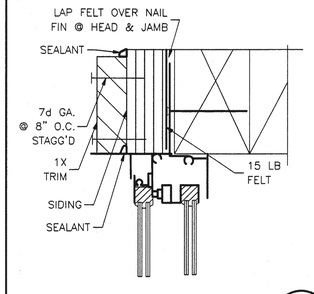
NOTE: SEE MANUFACTURES SPECS FOR INSTALLATION.



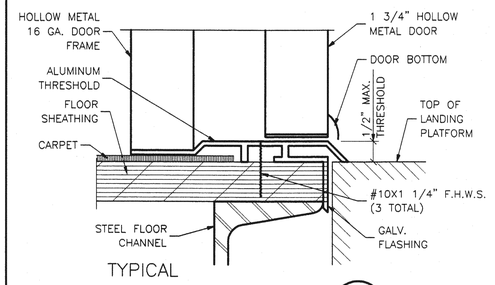
TYPICAL WINDOW SILL DETAIL 1/1 — NO SCALE



TYPICAL WINDOW JAMB 2/1 — NO SCALE



TYPICAL WINDOW HEAD 3/1 — NO SCALE



TYPICAL EXTERIOR DOOR SILL 4/1 — NO SCALE

IDENTIFICATION STAMP
DIV. OF FIRE SAFETY ARCHITECT
OFFICE OF REGULATION SERVICES
02 101887
AC. FLS. SS.
DATE JAN 1 2 2000

FILE NO.
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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APPL. 02-101488
AC. FLS. SS.
DATE OCT 1 9 1999

24 X 40
RELOCATABLE
CLASSROOMS

American Modular Systems
333 EAST CARNEGIE CT. MANTECA, CALIFORNIA 95337
PHONE (209) 825-1921 FAX. (209) 825-7018

CUSTOMER:

FLOOR PLAN & NOTES

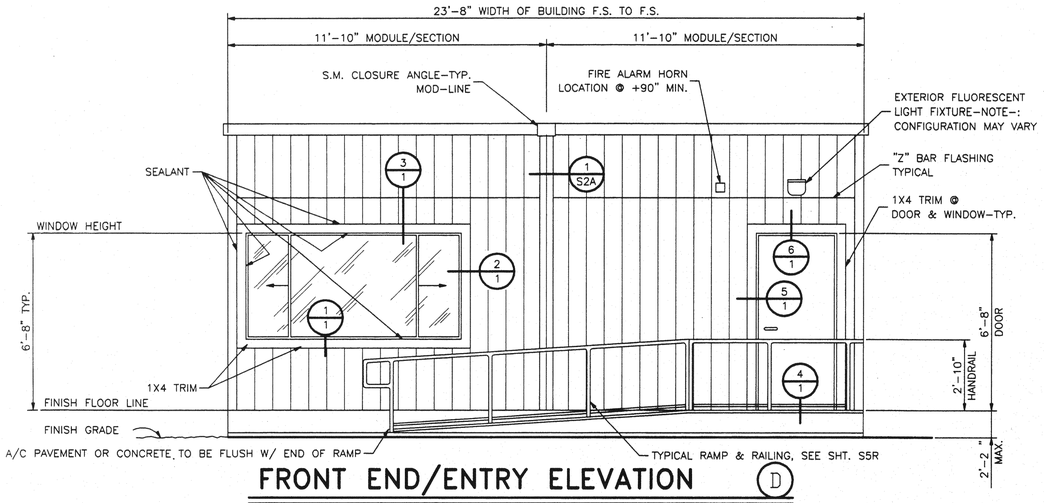
DATE: 10-19-99
SCALE: NONE
DRAWN BY: R.S.
CHECKED BY:
CHECKED BY:
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			5		
2			6		
3			7		
4			8		

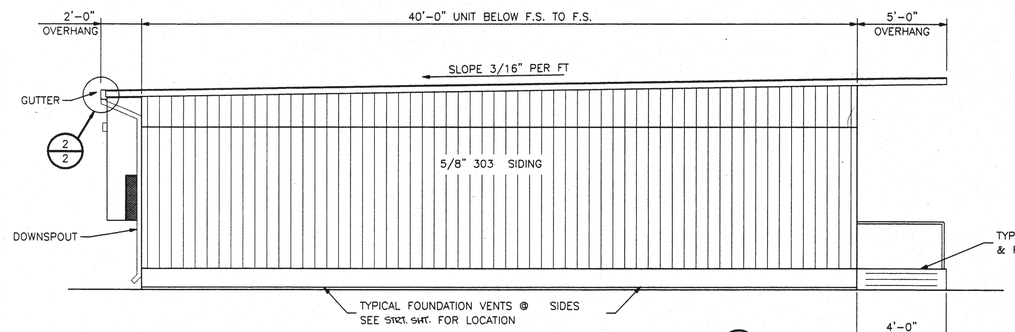
PROJECT No.

SHEET No. 1



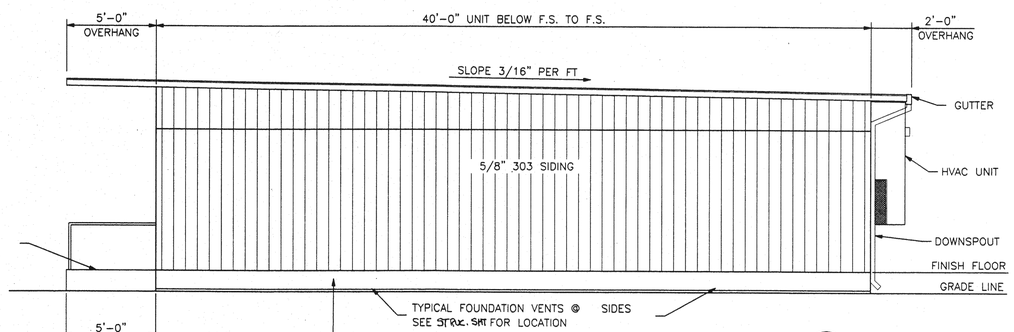
FRONT END/ENTRY ELEVATION (D)

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



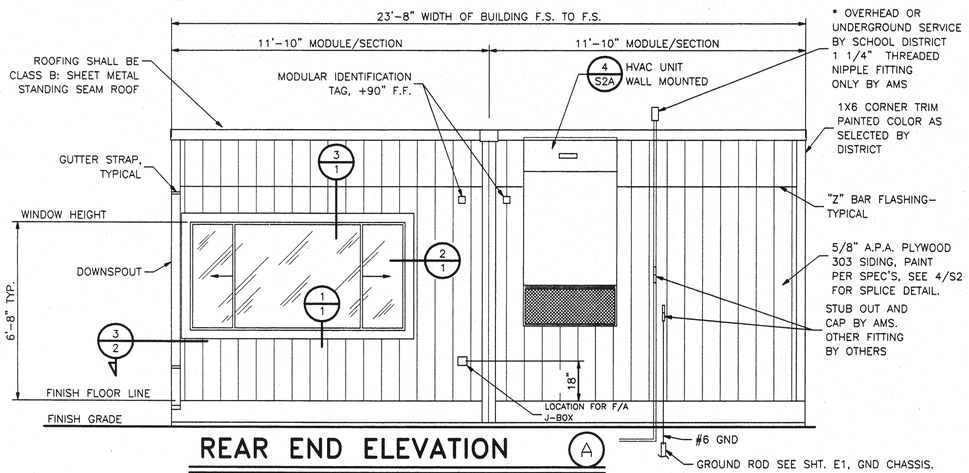
LEFT SIDE ELEVATION (B)

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



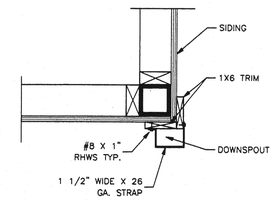
RIGHT SIDE ELEVATION (C)

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



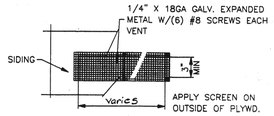
REAR END ELEVATION (A)

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



DOWNSPOUT DETAIL (3/2)

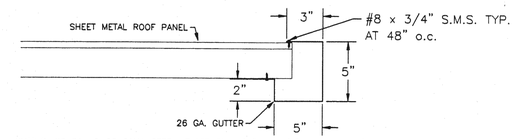
1 1/2"=1'-0"



VENT DETAIL

NO SCALE

SEE SHT. S1A, S1B OR S1C FOR NUMBER OF VENTS AND LOCATIONS. THIS DETAIL IS FOR WOOD FOUNDATIONS ONLY.



GUTTER: 26 GA., G-90 GALV. STEEL, FASTENED W/ #8 x 3/4" S.M.S. @ 48" O.C. MAX.
DOWNSPOUT: 2"X3" G-90 30 GA. CONVOLUTED GALV. STEEL.
DOWNSPOUT STRAPS: 26 GA. STEEL X 1 1/2" WIDE ATTACHED TO BLDG. MAX. 6'-0" O.C.

GUTTER AT OVERHANG DETAIL (2/2)

RE-IRRIGATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02 101887
AC. FLS SS
DATE JAN 1 2 2000

02 102021
FILE NO.
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL. 02-101488
AC. FLS SS
DATE OCT 1 9 1999

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American Modular Systems
333 EAST CARNEGIE CT. MANTECA, CALIFORNIA 95337
PHONE (209) 825-1921 FAX. (209) 825-7018

CUSTOMER:

EXTERIOR ELEVATIONS

DATE: 10-19-99
SCALE: NONE
DRAWN BY: R.S.
CHECKED BY:
CHECKED BY:
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
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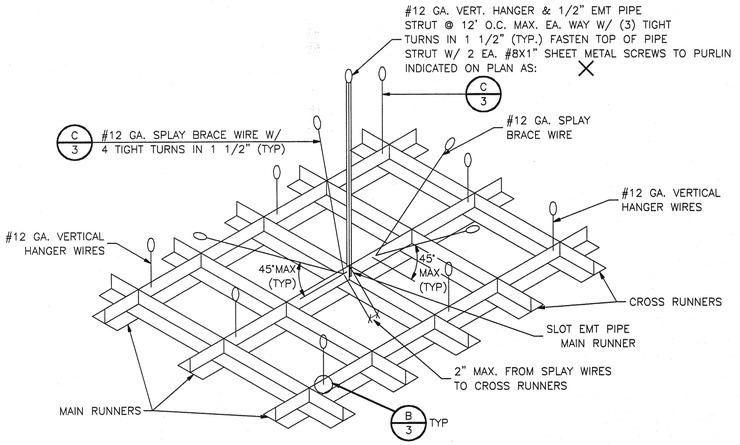
2			5		
3			6		

PROJECT No.

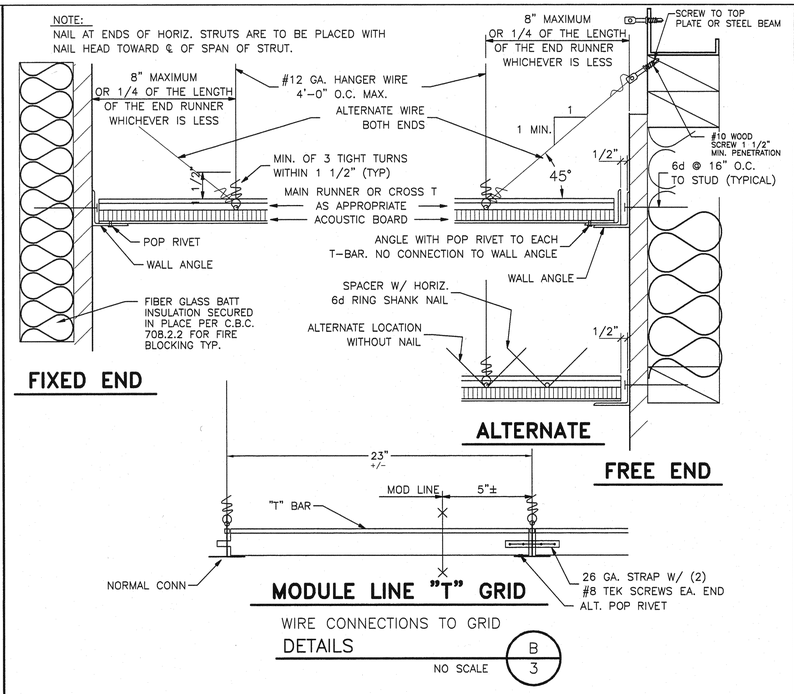
SHEET No. 2



NOTE: SPLAYED BRACING WIRES SHALL BE SPACED NOT MORE THAN 12 FT. ON CENTER. OR MORE THAN 6 FT. FROM WALLS.

ATTACHMENT FOR CEILING GRID DETAIL A/3

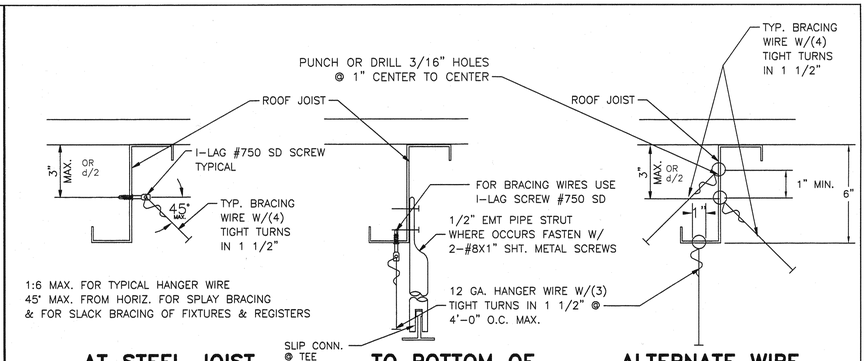
NO SCALE



MODULE LINE "T" GRID

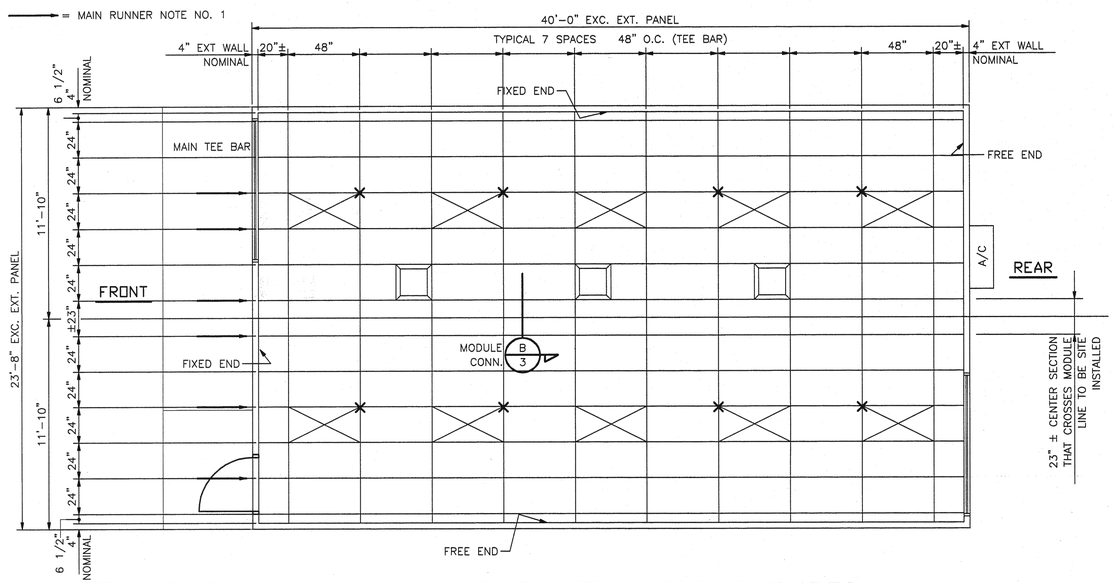
WIRE CONNECTIONS TO GRID DETAILS B/3

NO SCALE



CONNECTIONS TO STEEL JOISTS OR PURLINS DETAIL C/3

NO SCALE



CEILING TEE BAR GRID LAYOUT WITH LIGHT FIXTURES

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

METAL SUSPENSION SYSTEMS FOR LAY IN PANEL CEILING

1. 12 GA. (MIN) HANGER WIRES MAY BE USED FOR UP TO AND INCLUDING 4'-0" x 4'-0 GRID SPACING, ALONG MAIN RUNNER. SPLICES WILL NOT BE PERMITTED IN ANY HANGER WIRES UNLESS SPECIFICALLY APPROVED BY DSA.
2. PROVIDE 12 GA HANGER WIRES WITHIN 8" OF THE ENDS OF ALL MAIN AND CROSS RUNNERS OR AT 1/4 OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS AT THE PERIMETER OF THE CEILING AREA.
3. PROVIDE TRAPEZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO MAINTAIN HANGER SPACING. PROVIDE ADDITIONAL HANGERS, STRUTS OR BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS OR DISCONTINUOUS AREA. HANGER WIRES THAT ARE MORE THAN 1 IN 6 OUT OF PLUMB ARE TO HAVE COUNTERBRACED WIRES.
4. CEILING GRID MEMBERS MAY BE ATTACHED TO NOT MORE THAN 2 ADJACENT WALLS. CEILING GRID MEMBERS SHOULD BE AT LEAST 1/2 INCH FREE OF OTHER WALLS. IF WALLS RUN DIAGONALLY TO CEILING GRID SYSTEM RUNNERS, ONE END OF MAIN AND CROSS RUNNERS SHOULD BE FREE AND A MINIMUM OF 1/2 INCH CLEAR OF WALL.
5. AT THE PERIMETER OF THE CEILING AREA WHERE MAIN OR CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS AT THE FREE END TO PREVENT LATERAL SPREADING. A METAL STRUT OR A 16 GA WIRE WITH A POSITIVE MECHANICAL CONNECTION TO THE RUNNERS MAY BE USED. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNERS IS 12" OR LESS, THIS INTERLOCK IS NOT REQUIRED.
6. PROVIDE SETS OF 4-#12 GA. SPLAYED BRACING WIRES ORIENTED 90 DEGREES FROM EACH OTHER AT THE FOLLOWING SPACING:
   (A) FOR SCHOOL BUILDINGS, PLACE SETS OF SPLAY WIRES AT A SPACING NOT MORE THAN 12 FEET BY 12 FEET ON CENTER.
   (B) PROVIDE SPLAY WIRES AT LOCATIONS NOT MORE THAN 1/2 THE ABOVE SPACING FROM EACH PERIMETER WALL OR AT THE EDGE OF VERTICAL CEILING OFFSETS

THE SLOPE OF THESE WIRES SHOULD NOT EXCEED 45 DEGREES FROM THE PLANE OF THE CEILING AND SHOULD BE TAUT WITHOUT CAUSING THE CEILING TO LIFT. SPLICES IN BRACING WIRES ARE NOT PERMITTED WITHOUT SPECIAL DSA APPROVAL.

7. FASTEN HANGER WIRES WITH NOT LESS THAN 3 TIGHT TURNS. FASTEN SPLAY WIRES WITH 4 TIGHT TURNS. MAKE ALL TIGHT TURNS WITHIN A DISTANCE OF 1 1/2 INCHES. HANGER OR BRACING WIRE ANCHORS TO THE STRUCTURE SHOULD BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE WIRE ALIGNS AS CLOSELY AS POSSIBLE WITH THE DIRECTION OF THE FORCES ACTING ON THE WIRE.
8. SEPARATE ALL CEILING HANGING AND BRACING WIRES AT LEAST 6 INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT ETC., IT IS ACCEPTABLE TO ATTACH LIGHT-WEIGHT ITEMS, SUCH AS SINGLE ELECTRICAL CONDUIT NOT EXCEEDING 3/4" NOMINAL DIAMETER, TO HANGER WIRES USING CONNECTORS ACCEPTABLE TO DSA.
9. ATTACH ALL LIGHT FIXTURES AND AIR TERMINALS TO THE CEILING GRID RUNNERS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURES.
10. FLUSH OR RECESSED LIGHT FIXTURES AND AIR TERMINALS OR SERVICES WEIGHING LESS THAN 56 POUNDS MAY BE SUPPORTED DIRECTLY ON THE RUNNERS OF A HEAVY DUTY GRID SYSTEM BUT, IN ADDITION, THEY MUST HAVE A MINIMUM OF 2-#12 GA. SLACK SAFETY WIRES ATTACHED AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE.
11. CLASSIFICATION OF CEILING GRID:
    CLASSIFICATION OF CEILING GRID IS "HEAVY DUTY" PER ASTM C635
    MANUFACTURER'S CATALOG NUMBER - MAIN RUNNER HEAVY DUTY MAIN TEE OR EQUAL PER TABLE A.
    MANUFACTURER'S CATALOG NUMBER - CROSS RUNNER PER TABLE A.

    MANUFACTURER'S CATALOG NUMBER OF DETAIL FOR RUNNER SPLICE N/A.
    ACOUSTICAL PANELS SHALL BE 5/8" MINIMUM THICK, MINERAL FIBERBOARD OR VINYL-FACED FIBERGLASS LAY-IN PANELS SQUARE EDGE ASTM FLAME SPREAD CLASS 1, 24" X 48" MODULAR SIZE, LIGHT REFLECTION 75% MINIMUM, NOISE REDUCTION COEFFICIENT OF 0.65 MINIMUM. MAXIMUM SMOKE DENSITY NOT TO EXCEED 450.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02 102021
AC 04 FLS 03 SS C-1
DATE 3-9-00

REGISTERED PROFESSIONAL ENGINEER JOHN M. LAWDER No. 2310 Exp.3-31-01 STRUCTURAL STATE OF CALIFORNIA

TABLE A HEAVY DUTY GRID COMPONENTS

MANUFACTURER	MAIN TEE	H.D. 4' CROSS TEE	H.D. 2' CROSS TEE
DONN/USG	DX-26	DX-424	DX-216
ARMSTRONG	7301	7341	7323
CHICAGO MET.	200-01	1204-01	1226-01

NOTE: ALL GRID COMPONENTS SHALL BE BY SAME MANUFACTURER

FILE NO.
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
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DATE.____

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American Modular Systems
333 EAST CARNEGIE CT. MANTECA, CALIFORNIA 95337
PHONE (209) 825-1921 FAX. (209) 825-7018

CUSTOMER: MOBILE MODULAR MANAGEMENT

CEILING GRID, DETAILS AND NOTES

DATE: 3-01-00
SCALE: NONE
DRAWN BY: R.S.
CHECKED BY:
CHECKED BY:
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
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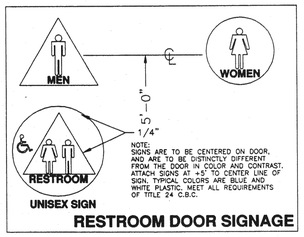
2			5		
3			6		

PROJECT No.

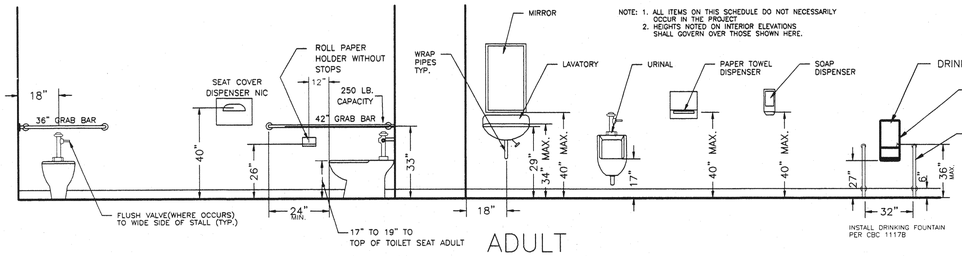
SHEET No. 3



UNISEX SIGN

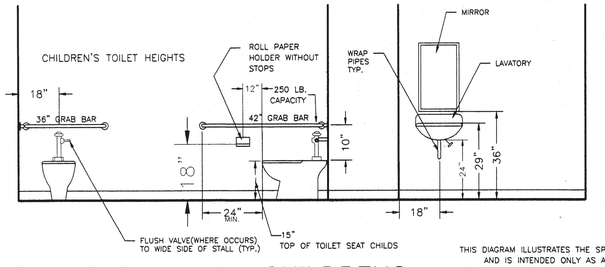
RESTROOM DOOR SIGNAGE



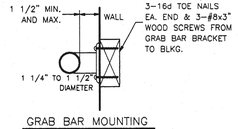


NOTE: 1. ALL ITEMS ON THIS SCHEDULE DO NOT NECESSARILY OCCUR IN THE PROJECT
2. HEIGHTS NOTED ON INTERIOR ELEVATIONS SHALL GOVERN OVER THOSE SHOWN HERE.

ADULT



CHILDRENS



GRAB BAR MOUNTING

THIS DIAGRAM ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING AND CONSTRUCTION

ACCESSIBLE SANITARY FACILITIES DETAIL — D / 4 — NO SCALE

PANEL INSTALLATION

START AT THE STARTER FLASHING END OF THE BUILDING. APPLY VULKEM SEALANT ALONG THE ENTIRE STANDING SEAM LIP. AT THE EAVE END, APPLY EALANT APPROXIMATELY 3" ALONG THE SIDE OF THE STANDING SEAM AND ALO NG HE END FLASHING LIP. THE SEALANT SHOULD BE APPLIED AS THE ROOF PAN ELS ARE POSITIONED TO AVOID CURING.

HOOK THE PANEL OVER THE STARTER FLASHING AND LAY IT INTO POSITION, LEAVING 2" OVERHANG AT THE EAVE FOR WRAPPING AROUND THE END FLASHING LIP. INSTALL 2-CLIPS 1'-8" O.C. KEEPING THEM TIGHT AGAINST THE STANDING SEAM. SECURE WITH THREE 1/2" CROWN X 1 1/4 " LENGTH 16B GA. STAPLES PER CLIP. THE CLIPS NEED ONLY BE HAND CRIMPED AROUND SEAM AT THIS POINT. FORM THE PANEL OVER THE STARTER FLASHING LIP AND AT THE END FLASHING. MECHANICALLY CRIMP THE PANEL OVER THE FLASHING LIP AND ALONG THE ENTIRE STANDING SEAM.

NOTE: KEEP ALL FASTENERS ON THE CLIPS AND FLASHINGS COMPLETELY. DO NOT USE EXCESSIVE PRESSURE OR OVERPOWER THE STAPLES AS TO TEAR OR CAUSE DAMAGE TO THE CLIP.

CONTINUE THE PANELING PROCEDURE, APPLYING SEALANT TO THE FLASHING LIP. APPLY SEALANT AT THE STANDING SEAMS APPROXIMATELY 3" ALONG THE SIDE TOP LIP OF EACH FOLLOWING PANEL. HOOK THE NEXT PANEL OVER THE INNER LOCK AND LAY THE PANEL INTO POSITION. KEEP THE STANDING SEAMS BUTTED TIGHTLY TOGETHER TO MAINTAIN SQUARE, JUSTIFIED PANELS AND INHIZE ANY POSSIBILITY OF GAPS OCCURRING AT THE EAVES OR STRETCHINGS OF THE ROOF COVER.

MECHANICALLY CRIMP EACH STANDING SEAM ENTIRELY. MECHANICALLY CRIMP PANELS OVER ALL FLASHING CLIPS. CUT THE FINAL PANEL TO THE DESIRED WIDTH, ALLOWING 2" FOR FLASHING OVERLAP AND WRAP-AROUND. USE SEALANT ALONG THE FLASHING LIP AND LAY THE PANEL INTO PLACE. FORM THE PANEL OVER THE FLASHING LIP AND MECHANICALLY CRIMP.

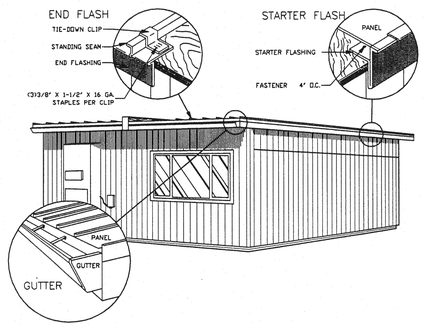
FLASHING (ROOF)

INSTALL THE STARTER FLASHING ON THE END OF THE BUILDING THAT IS OPPOSITE FROM THE DIRECTION OF PREVAILING WIND (OR LEADING EDGE). ECURE USING 1/2" CROWN X 1 1/2" LENGTH 18GA. STAPLES 8" O.AC. TO THE ROOF DECK. THE FLASHING SHOULD EXTEND APPROXIMATELY 3" PAST THE OUTSIDE WALL. WRAP THE 3" AROUND THE CORNER, FORMING IT TIGHTLY GAINST THE FASCIA. OVERLAP THE FLASHING SECTIONS 2", SOME MODIFICATION OF THE FLASHING LIP WILL BE REQUIRED TO ALLOW THE OVERLAP.

INSTALL THE END FLASHING ALONG THE OPPOSITE END OF THE BUILDING (OR LEADING EDGE) WRAPPING THE CORNERS AROUND THE EDGE APPROXIMATELY 1". SECURE THE "LEADING EDGE" FLASHING ONLY ADDITIONAL #8 X 1 1/2" SMS 2"O.C. THROUGH THE DESCENDER INTO SIDING. INSTALL THE END FLASHING ALONG THE SIDES OF THE BUILDING. KEEP THE ENDS OF THE FLASHING FLUSH WITH THE EDGES OF THE BUILDING.

80 MPH WIND RATING

REQUIRES A MINIMUM OF 28 GA. STEEL ROOF PANELS WITH 26 GAGE TIE-DOWN CLIPS AT 18" O.C. SECURED TO THE ROOF DECK WITH THREE 1/2" CROWN BY 1 1/2" LENGTH 18 GA. STAPLES PER CLIP.



OPTIONAL ROOFING

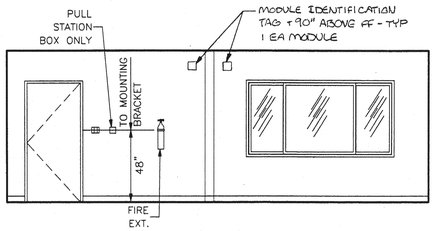
B / 4 — N.T.S.

SPECIFICATIONS

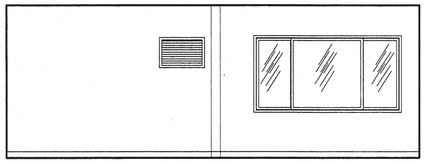
MATERIAL
26, GAGE

FINISH
G90 GALVANIZED, OR SPECIAL.

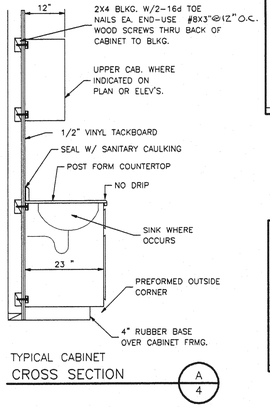
FASTENERS
#8X1", #8X1-1/2" AND #8X2" ZINC PLATED SHEET METAL SCREWS, 3/8" CROWN X 1-1/2" LENGTH 16 GAGE STAPLES OR 8d 1-1/2" RING SHANK NAILS.
WEATHERPROOFING
VENTS, CURBS, RIDGE CAP, COMPLEX CAP, PAN SPLICE, PAN OVERLAP AND FLASHING ARE SEALED WITH #116 VULKEM POLYURETHANE SEALANT MEETING FEDERAL SPECIFICATIONS TT-S-00230C, TYPE II, CLASS A. ALL EXPOSED SCREWS WILL USE A WEATHERPROOF WASHER AND BE SEALED WITH APPROVED SEALANT.
CLASS-A FIRE RATING
REQUIRES 1/2" PLYWOOD DECK WITH 30LB. FELT UNDERLAYMENT.



1 / 4 — INTERIOR ELEVATION — 1/4" = 1'-0"

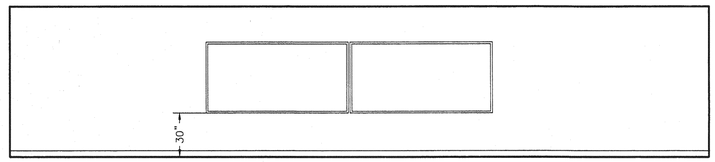


2 / 4 — INTERIOR ELEVATION — 1/4" = 1'-0"

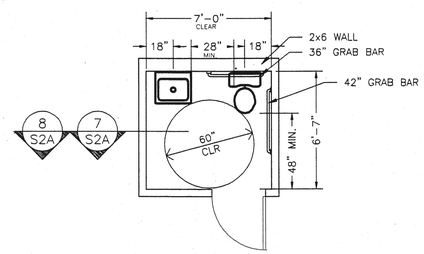


TYPICAL CABINET CROSS SECTION — A / 4

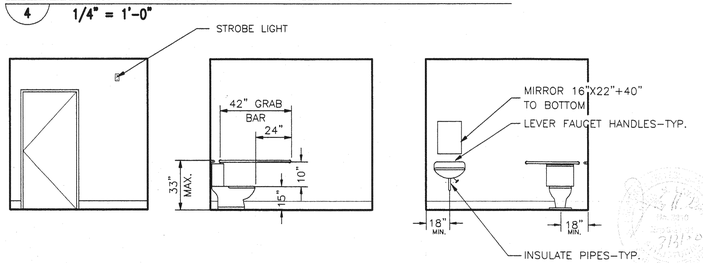
3 / 4 — INTERIOR ELEVATION — 1/4" = 1'-0"



4 / 4 — INTERIOR ELEVATION — 1/4" = 1'-0"



6 / 4 — RESTROOM FLOOR PLAN — 1/4" = 1'-0"



5 / 4 — RESTROOM — 1/4" = 1'-0"

RECOMMENDED DIMENSION FOR ACCESSIBILITY IN TOILET FACILITIES FOR CHILDREN

FIXTURE TYPE	ADULT (AGE 12 AND OVER) DIMENSION	ELEMENTARY DIMENSION	KINDERGARTEN & PRE-SCHOOL DIMENSION
TOILET CENTERLINE FROM WALL	18"	15"	12"
TOILET SEAT HEIGHT (TO TOP OF SEAT)	17"-19"	15"	10"-12"
GRAB BAR HEIGHT	33"	33"	10" ABOVE SEAT *
TOILET PAPER IN FRONT OF TOILET	12" MAX.	12" MAX.	8" MAX. **
NAPKIN DISPOSEL IN FRONT OF TOILET	12" MAX.	N/A	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	29" MIN.	24" MIN.	22" MIN.
URINAL LIP HEIGHT	17" MAX.	15" MAX.	10" MAX.
URINAL FLUSH HANDLE HEIGHT	44" MAX.	36" MAX.	28" MAX.
DRINKING FOUNTAIN BUBBLER HEIGHT	36" MAX.	31" MAX.	24" MAX.
DRINKING FOUNTAIN KNEE CLEARANCE	27" MIN.	24" MIN.	22" MIN.
RAMP/STAIR HANDRAIL HEIGHT	34"-38"	27"	22"

* = ABOVE SEAT
** = DEVIATES FROM CODE REQUIREMENTS AND REQUIRES A WRITTEN FINDING OF UNREASONABLE HARDSHIP

DOOR SCHEDULE

DOOR NO.	OPENING SIZE	DOOR TYPE	DOOR THK.	DOOR MAT'L	FRAME MAT'L	DETAILS SHT. 1 HEAD	DETAILS SHT. 1 JAMB	DETAILS SHT. 1 THRESHOLD	GLAZING	RATING		REMARKS
1	3'-0"X6'-8"	A	1 3/4"	H.M	H.M				N/A	N/A		
2	3'-0"X6'-8"	A	1 3/4"	H.M	H.M				N/A	N/A		

DOOR TYPES

A — EXTERIOR

B — INTERIOR NOT USED

FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS NORTH	WALLS EAST	WALLS SOUTH	WALLS WEST	CEILING	MISC.	CLG. HT.	REMARKS
01	CLASSROOM	F2	B1	W1	W1	W1	W1	C1	N/A	8-6	N/A
02	OPTIONAL RESTROOM	F3	B1	W2	W2	W2	W2	C1	N/A	8-6	N/A

FINISHES

FLOOR FINISHES
F1 VINYL COMPOSITION TILE
F2 CARPETING
F3 SHEET VINYL

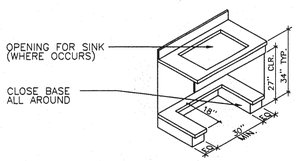
BASE FINISHES
B1 RUBBER COVE BASE

REMARKS
1 SEE PLAN FOR LOCATION OF FLOOR FINISHES

WALL FINISHES
W1 1/2" VINYL WRAPPED SOUND BOARD OVER 1/2" GYPSUM BD.
W2 1/8" MARLITE OVER 1/2" GYPSUM BOARD

CEILING FINISHES
C1 SUSPENDED LAY-IN ACOUSTIC TILE

MISCELLANEOUS FINISHES



NOTES:
- DOORS NOT SHOWN FOR CLARITY. DOORS ARE TO BE PROVIDED.
- MODIFY BASE AS SHOWN FOR WHEELCHAIR ACCESS.
- ALL EXTERIOR SURFACES TO BE PLASTIC LAMINATE.

DISABLED ACCESSIBLE CABINET

N.T.S.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES 02 101887 AC FLS SS DATE JAN 12 2000

FILE NO.
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
APPL. 02-101486
AC FLS SS
DATE OCT 19 1999

24 X 40 PC
RELOCATABLE
CLASSROOM

American Modular Systems

CUSTOMER:

INTERIOR ELEVATIONS AND OPTIONS

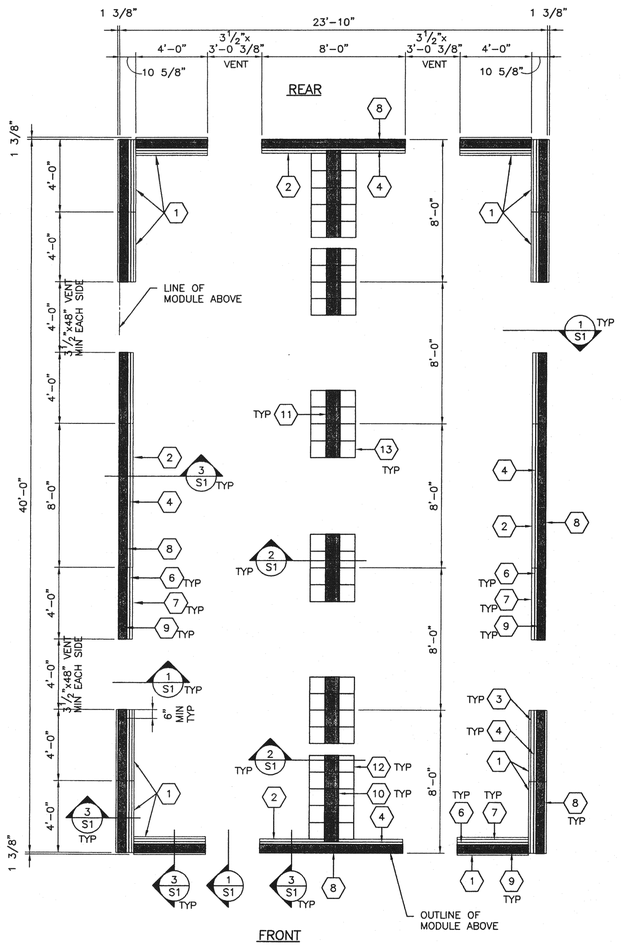
DATE: 10-19-99
SCALE: NONE
DRAWN BY: R.S.
CHECKED BY:
CHECKED BY:
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			4		
2			5		
3			6		

PROJECT No.

SHEET No. 4



FRONT

LEGEND

1. 1/2"x12" WIDE x 48" LONG PT STRUCTURAL PLYWOOD (CDX PLYWOOD)
2. 2x10x8'–0" LONG PT ℄
3. 2x10x8'–0" LONG ℄
4. 2x8x8'–0" LONG ℄
5. NOT USED
6. 2x8x4'–0" LONG ℄
7. 2x10x4'–0" LONG ℄
8. MULTIPLE 2x6x8'–0" LONG AS REQ'D FOR HEIGHT
9. MULTIPLE 2x6x4'–0" LONG AS REQ'D FOR HEIGHT
10. 2x10 ℄ W/ SHIM, SEE 2/S1
11. 2x10 BLKG, SEE 2/S1
12. (5)2x12x2'–6" OR (6)2x10x2'–6" OR (7)2x8x2'–6", SEE 2/S1
13. (4)2x12x2'–0" OR (5)2x10x2'–0" OR (6)2x8x2'–0", SEE 2/S1

• 1" ø GALV. PIPE LOCATIONS–TYPICAL

A/S1 FOUNDATION PLAN

1/4" = 1'–0"

NOTES:

1. TOP OF WOOD PADS TO BE LEVEL.
2. DO NOT INSTALL BUILDINGS IN AREAS OF WATER LINES.
3. SITE TO BE GRADED TO PREVENT WATER PONDING BENEATH THE STRUCTURE.
4. FOUNDATION PLYWOOD TO BE CUT PERPENDICULAR TO THE FACE GRAIN.
5. PER THE CONTRACT OF THIS PROJECT–THE BUILDING PAD MUST BE A MINIMUM OF 30'x50' AND SHALL NOT EXCEED 6" OUT OF LEVEL IN ANY DIRECTION.
6. VENT AREA REQUIRED=$\frac{(950 \text{ SF})}{(150)}$=6.4 SF
   VENT AREA PROVIDED=6.44 SF

SILL RESTRAINT:

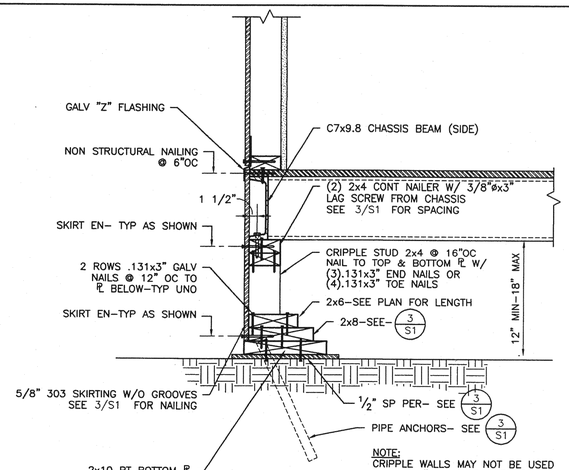
ON SOIL: 1"ø GALV PIPE W/ 12" MIN PENETRATION BELOW SOIL SURFACE @ 10'–0" OC MIN 2 EA 2x ℄. DRILL SILL 1 1/4" MAX PIPE MAY BE DRIVEN MAX 45° ANGLE TO VERTICAL.

ON A/C PAVING: 1"ø GALV PIPE W/ 12" MIN PENETRATION BELOW PAVING SURFACE @ 10'–0" OC (MIN 2 EA 2x ℄). DRILL SILL 1 1/4" MAX OR 20d NAILS THRU SILL ℄ @ 32" OC

ON CONC PAVING: HILTI DS 82–P10 THRU SILL ℄ @ 4'–0" OC, 2 EA PIECE

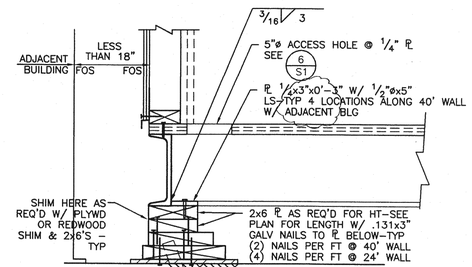
FOUNDATIONS:

ALL FOUNDATION MATERIALS IN CONTACT WITH THE GROUND SHALL BE PRESSURE TREATED EXCEPT SHIMS MAY BE REDWOOD, HEM FIR OR CEDAR. PRESSURE TREATED DOUGLAS FIR, HEM FIR, PLYWOOD ETC. SHALL BE VERIFIED BY A CERTIFICATE OF TREATMENT STATING: "THE MATERIAL IN THIS UNIT WAS TREATED PER 1998 CALIFORNIA BUILDING CODE. ALL MATERIAL FOR USE IN GROUND CONTACT SHALL BE STAMPED "FOR GROUND CONTACT" (LP22). ALL MATERIAL NOT USED IN GROUND CONTACT SHALL BE HF#2 OR DF#2 "FOR ABOVE GROUND USE." THE IN–PLANT INSPECTOR SHALL VERIFY THAT ALL PRESSURE TREATED FOUNDATION MATERIAL IS CUT FROM AWPB STAMPED STOCK AND THAT ALL CUTS AND HOLES ARE RE–TREATED PER SPECIFICATIONS. LP–2 AND LP–22 MATERIAL SHALL BE BANDED SEPARATELY FOR SHIPMENT TO THE JOB SITE. THE IN–PLANT INSPECTOR'S VERIFICATION OF EACH BANDED UNIT SHALL BE ATTACHED TO THE MATERIAL.
CONCRETE OR CONCRETE BLOCK FOUNDATIONS ARE NOT ALLOWED. THE FOOTING DESIGN SHALL PROVIDE FOR SHIMS AND BLOCKS NECESSARY TO PERMIT INSTALLATION ON SITES NOT LEVEL, BUT WITHIN TOLERANCE ALLOWED.
INSTALLATION SHALL BE PERMITTED ON EITHER SOIL, CONCRETE OR A/C PAVING, HAVING SUITABLE DESIGN BEARING CAPACITY. THE BUILDINGS SHALL BE SECURELY FASTENED TO THE FOUNDATIONS. THE FOUNDATIONS AND THE METHOD OF FASTENING SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT AND DSA. PADS SHALL BE DESIGNED FOR A MAXIMUM OF 1000 PSF LOAD ON THE SOIL. PADS SHALL NOT BE PLACED ON TURF.



4/S1 FOUNDATION DETAIL

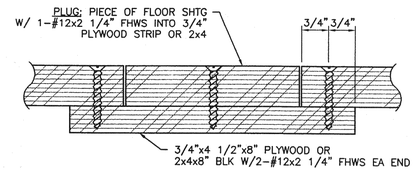
1 1/2" = 1'–0"



OPTIONAL FOR BUILDING PLACES LESS THAN 18" APART

5/S1 FOUNDATION DETAIL

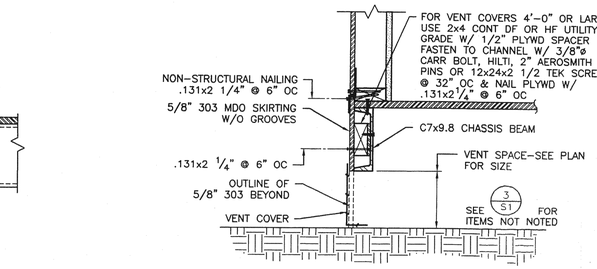
1 1/2"=1'–0"



FILLER ACCESS HOLE

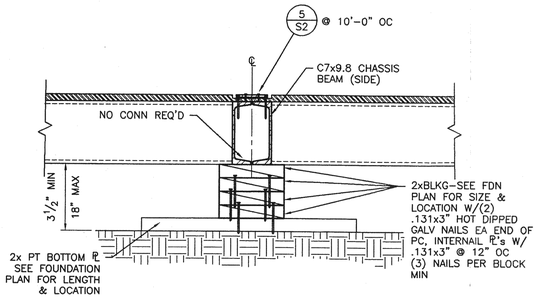
6/S1 DETAIL

NO SCALE



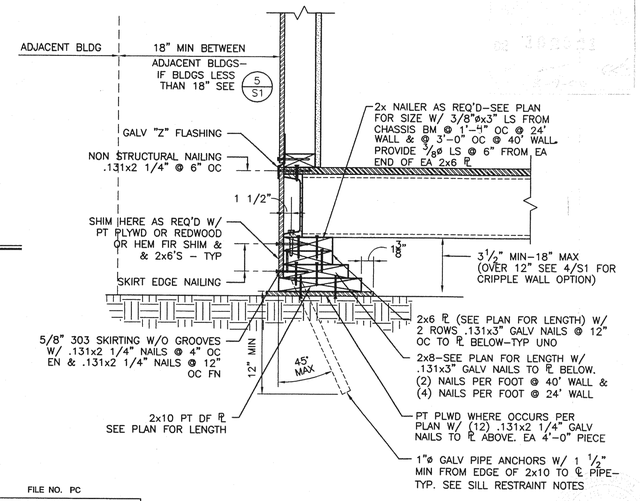
1/S1 FOUNDATION DETAIL

1 1/2" = 1'–0"



2/S1 DETAIL

1 1/2" = 1'–0"



3/S1 FOUNDATION DETAIL

1 1/2" = 1'–0"

WOOD: 50 PSF FLOOR LIVE LOAD
W/O PARTITION LOAD

FILE NO. PC

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPLICATION NO. 02-101837
AC FLS SS
DATE JAN 1 2 2000

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1418
EXP. 3-31-01
Structural Engineer
STATE OF CALIFORNIA

CUSTOMER:

FOUNDATION PLAN AND DETAILS

DATE:	12/27/99
SCALE:	AS NOTED
DRAWN BY:	PWD
DESIGNED BY:	MDB
CHECKED BY:	KAL
SERIAL NO.	

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			4		
2			5		
3			6		

PROJECT No. 99100

SHEET No. S1

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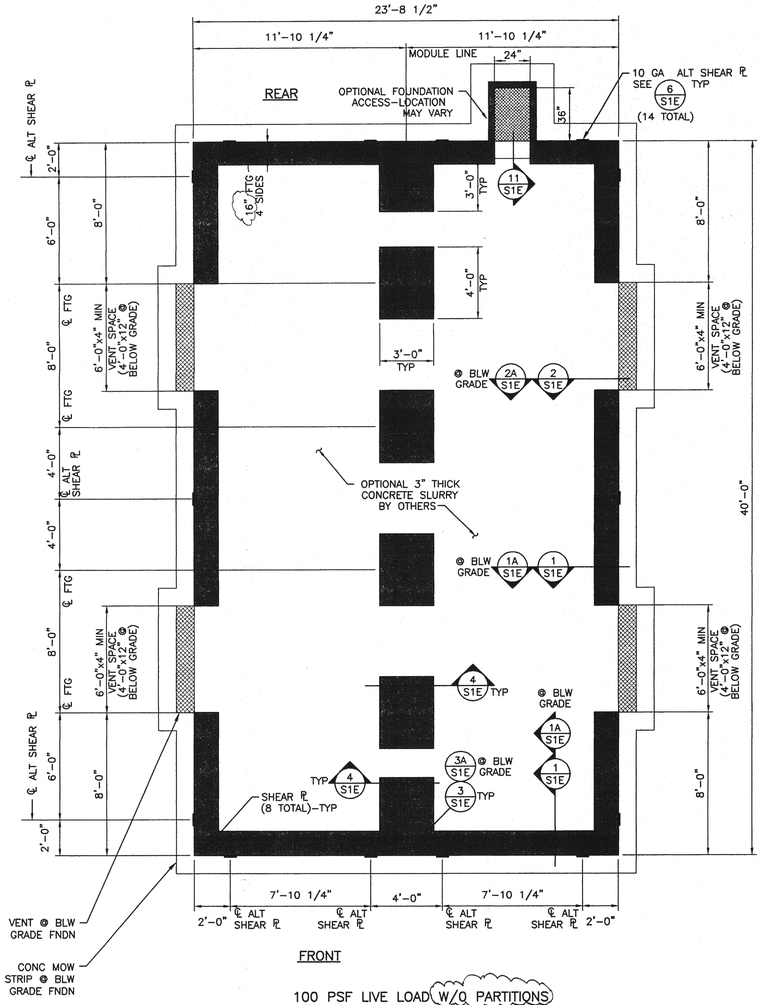


100 PSF LIVE LOAD W/O PARTITIONS

FOUNDATION PLAN

B S1C

1/4" = 1'-0"

COMBINED

FOUNDATION PLAN

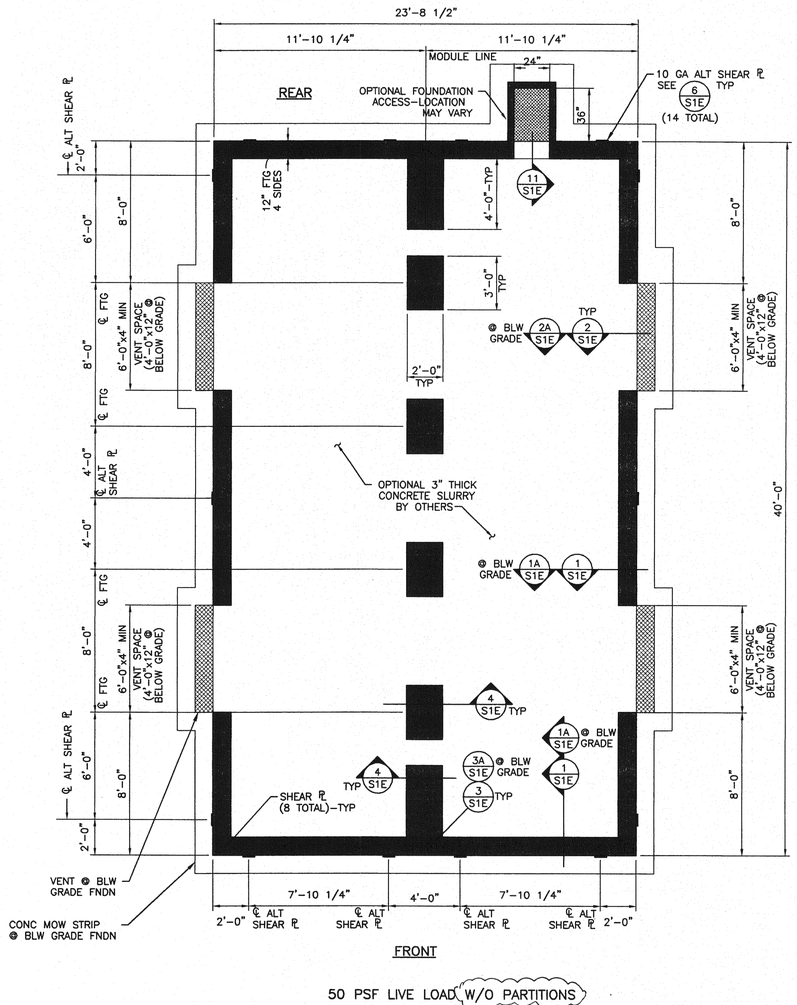
B1 S1C

1/4" = 1'-0"

CONCRETE PROPORTIONS ARE PER METHOD A OF TITLE 24, PART 2, SECTION 1905A.2.3 AND TABLE 19A-A-7			
MAXIMUM SIZE	MINIMUM SACKS OF CEMENT PER YARD OF CONCRETE	MAXIMUM WATER CEMENT RATIO IN GALLONS PER 94 LBS SACK OF CEMENT	PERMISSABLE ASSUMPTION TO MINIMUM ULTIMATE 28 DAY COMPRESSIVE STRENGTH IN LBS PER SQUARE INCH
1 1/2 INCHES	6.6	6.00	3000

NOTES:

1. DO NOT INSTALL BUILDING IN AREAS OF WATER FLOW LINES.
2. CONCRETE STRENGTH 3000 PSI @ 28 DAYS.
3. REINFORCING STEEL 40,000 PSI MINIMUM, PER ASTM A615.
4. MINIMUM SOIL BEARING CAPACITY 1000 PSF.
5. DESIGN SOIL BEARING CAPACITY 1000 PSI.
6. VENT AREA REQ'D = 960 SF($\frac{1 \text{ SF VENT}}{150 \text{ SF}}$)=6.4 SF
   VENT AREA PROVIDED = 8.0 SF



50 PSF LIVE LOAD W/O PARTITIONS

FOUNDATION PLAN

A S1C

1/4" = 1'-0"

COMBINED

FOUNDATION PLAN

A1 S1C

1/4" = 1'-0"

CONCRETE PROPORTIONS ARE PER METHOD A OF TITLE 24, PART 2, SECTION 1905A.2.3 AND TABLE 19A-A-7			
MAXIMUM SIZE	MINIMUM SACKS OF CEMENT PER YARD OF CONCRETE	MAXIMUM WATER CEMENT RATIO IN GALLONS PER 94 LBS SACK OF CEMENT	PERMISSABLE ASSUMPTION TO MINIMUM ULTIMATE 28 DAY COMPRESSIVE STRENGTH IN LBS PER SQUARE INCH
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NOTES:

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2. CONCRETE STRENGTH 3000 PSI @ 28 DAYS.
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4. MINIMUM SOIL BEARING CAPACITY 1000 PSF.
5. DESIGN SOIL BEARING CAPACITY 1000 PSI.
6. VENT AREA REQ'D = 960 SF($\frac{1 \text{ SF VENT}}{150 \text{ SF}}$)=6.4 SF
   VENT AREA PROVIDED = 8.0 SF

FILE NO. PC

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES

APPLICATION NO. 02-101837

AC. - FLS. - SS. AM

DATE. JAN 1 2 2000

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1418
EXP. 3-31-01
Structural Engineer
STATE OF CALIFORNIA

CUSTOMER:

FOUNDATION PLANS AND NOTES

DATE: 12/27/99
SCALE: AS NOTED
DRAWN BY: PWD
DESIGNED BY: MDB
CHECKED BY: KAL
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			5		
2			6		
3			7		
4			8		

PROJECT No. 99100

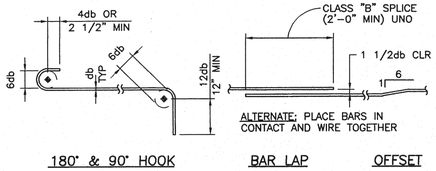
SHEET No. S1C

M:\99100\ACAD\STRU\ S1c.dwg 10-18-99 1:11:05 pm EST

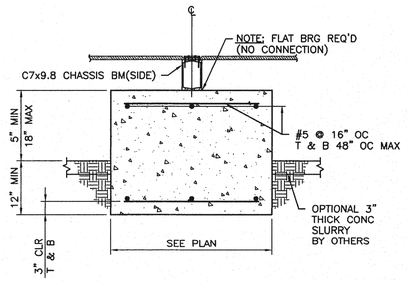
ANCHOR TYPE	HILTI KWIK BOLT II ICBO # 4627	
MATERIAL	NEW CONCRETE f'c- 2000 PSI	
ANCHOR SIZE (IN)	1/2"ø	5/8"ø
MIN EMBED (IN)	3 1/2"	4"
* TENSION TEST (LB)	2800#	3490#
TORQUE TEST (FT-LB)	50	50

* TENSION TEST- 1.6 x ALLOWABLE TENSILE LOAD PER IR 19-1

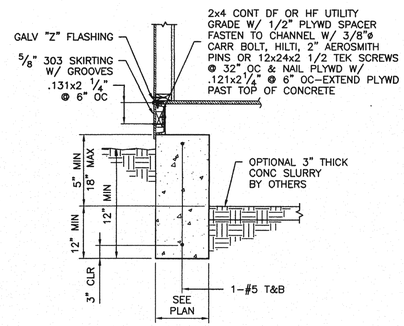
12 S1E ANCHOR BOLT SCHEDULE DETAIL
NO SCALE



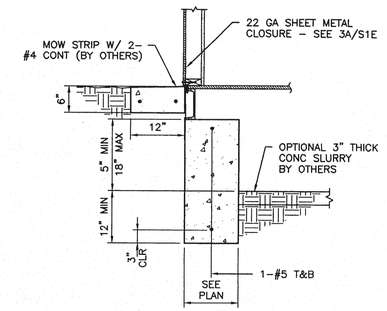
TYPICAL REINFORCING BENDS
8 S1E DETAIL
1" = 1'-0"



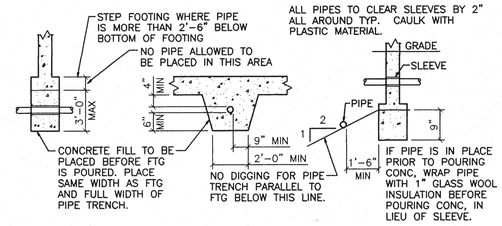
4 S1E SECTION
3/4" = 1'-0"



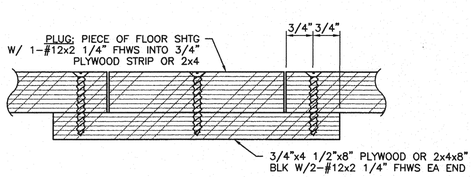
1 S1E ABOVE GRADE SECTION
3/4" = 1'-0"



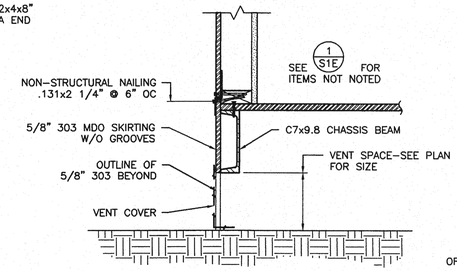
1A S1E BELOW GRADE SECTION
3/4" = 1'-0"

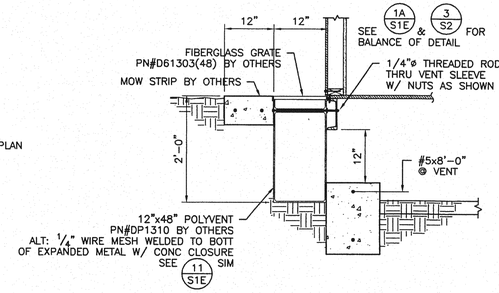


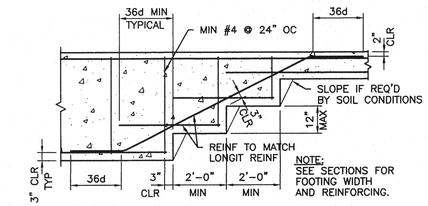
PIPE SLEEVE
9 S1E DETAIL
1/2"=1'-0"



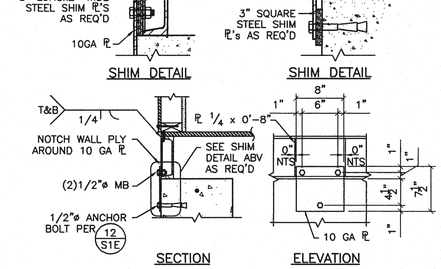
FILLER ACCESS HOLE
5 S1E DETAIL
NO SCALE



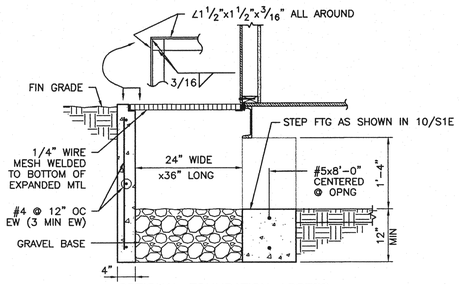




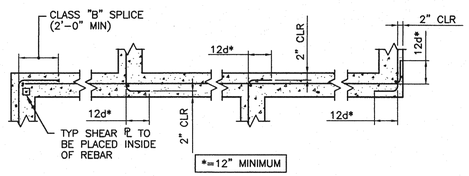
STEPPED FOOTING
10 S1E DETAIL
3/8" = 1'-0"



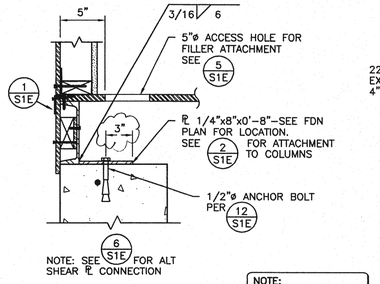
ALTERNATE SHEAR PLATE
6 S1E DETAIL
1" = 1'-0"



OPTIONAL FOUNDATION ACCESS
11 S1E SECTION
3/4" = 1'-0"



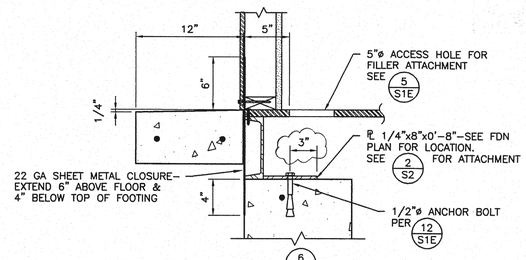
TYP WALL & FTG REINF SPLICES
7 S1E DETAIL
NO SCALE



NOTE:
SEE 6/S1E FOR ALT SHEAR PLATE CONN

ABOVE GRADE
3 S1E SECTION
1 1/2" = 1'-0"

ABOVE GRADE
2 S1E DETAIL
1 1/2" = 1'-0"



NOTE:
SEE 6/S1E FOR ALT SHEAR PLATE CONN

BELOW GRADE
2A S1E DETAIL
3/4" = 1'-0"

BELOW GRADE
3A S1E SECTION
1 1/2" = 1'-0"

FILE NO. PC

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPLICATION NO.
02-101837
AC. - FLS. - SS. AJ
DATE JAN 1 2 2000

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1418
EXP. 3-31-01
Structural Engineer
STATE OF CALIFORNIA

CUSTOMER:

FOUNDATION DETAILS

DATE: 12/27/99
SCALE: AS NOTED
DRAWN BY: PWD
DESIGNED BY: MDB
CHECKED BY: KAL
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			4		
2			5		
3			6		

PROJECT No. 99100

SHEET No. S1E

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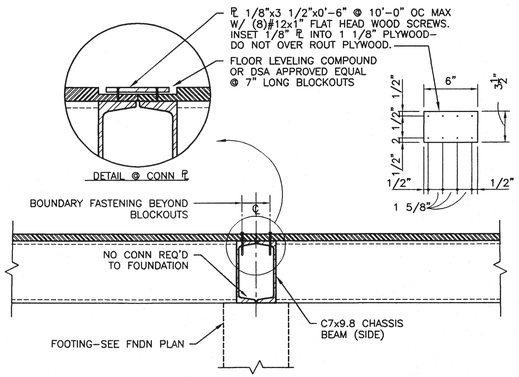
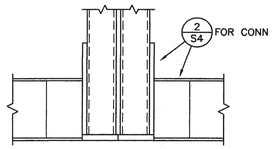
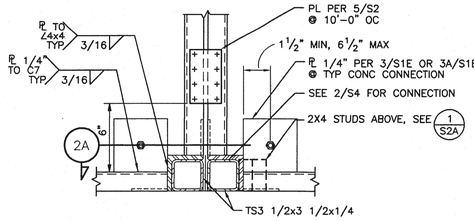


5 S2 DETAIL

1 1/2" = 1'-0"

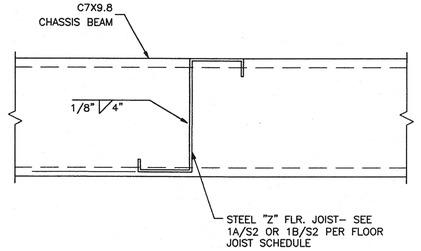


SECTION 2A



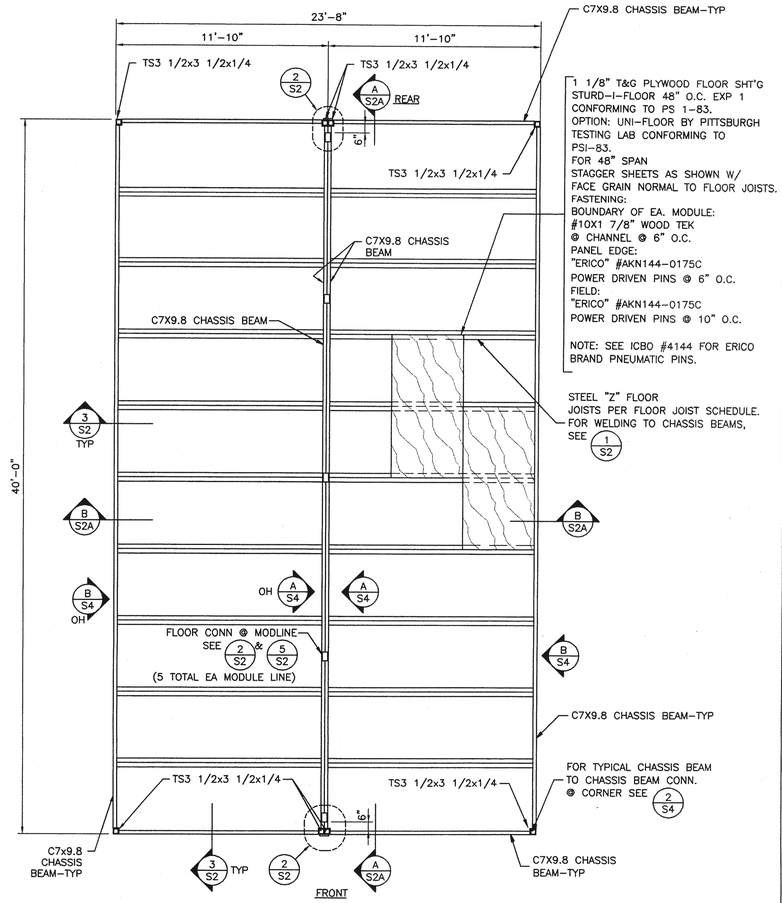
2 S2 PLAN DETAIL

NO SCALE



1 S2 DETAIL

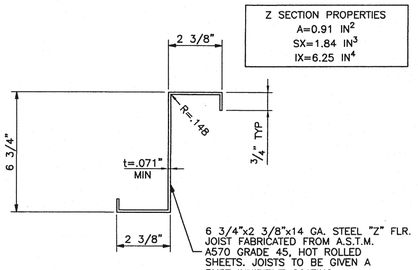
NO SCALE



NOTES:
1. SEE SHEET S4 FOR TYPICAL WALL FRAMING.

A S2 FLOOR FRAMING PLAN

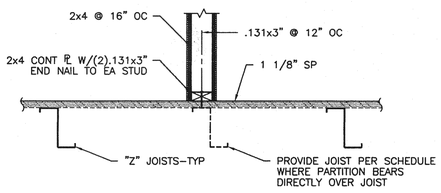
1/4" = 1'-0"



14 GA JOIST

1A S2 DETAIL

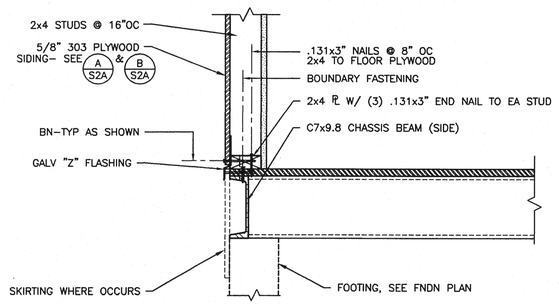
NO SCALE



TYP INTERIOR NON-BEARING WALL BASE

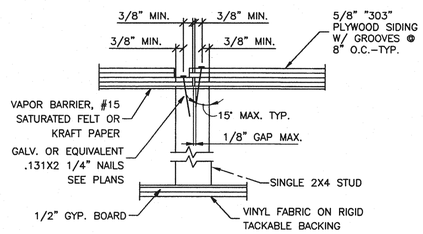
6 S2 DETAIL

1 " = 1'-0"



3 S2 DETAIL

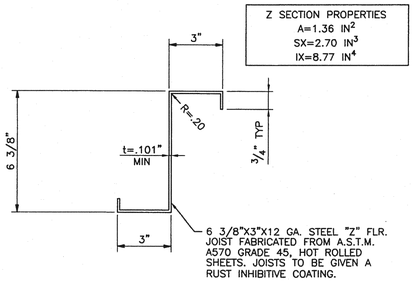
1 1/2" = 1'-0"



TYPICAL SIDING JOINT

4 S2 DETAIL

NO SCALE



12 GA JOIST

1B S2 DETAIL

NO SCALE

FLOOR JOIST SCHEDULE

LIVE LOAD	SPACING	
	14 GA JOIST	12 GA JOIST
50 PSF	48" OC	48" OC
100 PSF	24" OC	24" OC
125 PSF	-	24" OC

NOTES:
1. FOR JOISTS SEE 1A/S2 AND 1B/S2.
2. SPACING IS TO CENTER LINE OF TOP FLANGE.
3. PROVIDE 12 GA JOIST WHERE PARTITION BEARS DIRECTLY OVER JOIST.

FILE NO. PC

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPLICATION NO. 02-101837
AC. - FLS. - SS. -
DATE JAN 12 2000

M:\99100\ACAD\STRU\S2.dwg 12-27-99 10:58:13 am EST

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1418
EXP. 3-31-01
Structural Engineer
STATE OF CALIFORNIA

CUSTOMER:

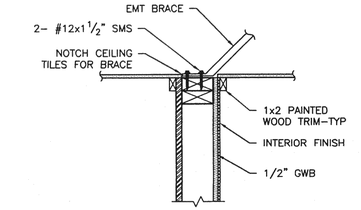
FLOOR FRAMING PLAN AND DETAILS

DATE: 12/27/99
SCALE: AS NOTED
DRAWN BY: PWD
DESIGNED BY: MDB
CHECKED BY: KAL
SERIAL NO.

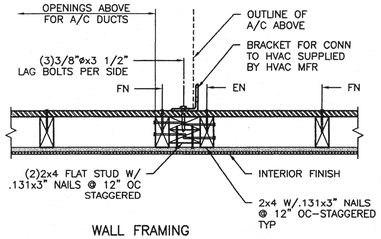
REVISIONS					
NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION

PROJECT No. 99100

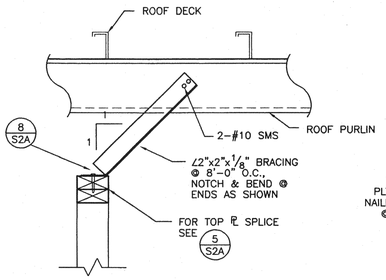
SHEET No. S2



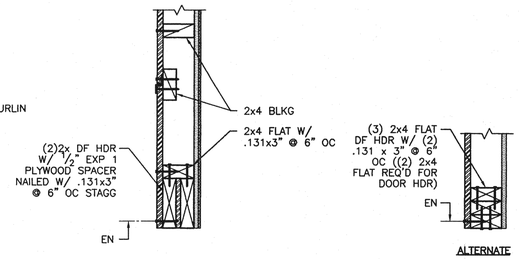
WALL FRAMING
DETAIL
6 / S2A
1 1/2" = 1'-0"



WALL FRAMING
PLAN DETAIL
3 / S2A
1 1/2" = 1'-0"

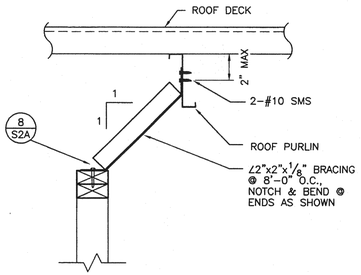


BRACE PARALLEL TO PURLINS

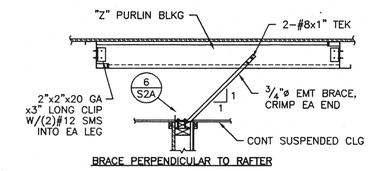


ALTERNATE

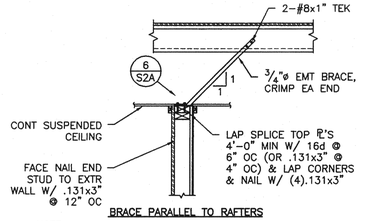
WALL FRAMING
DETAIL
4 / S2A
1 1/2" = 1'-0"



BRACE PERPENDICULAR TO PURLINS



BRACE PERPENDICULAR TO RAFTER

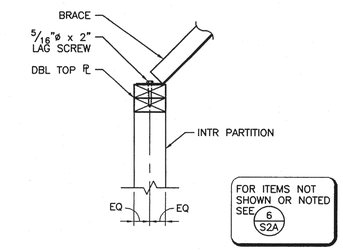


BRACE PARALLEL TO RAFTERS

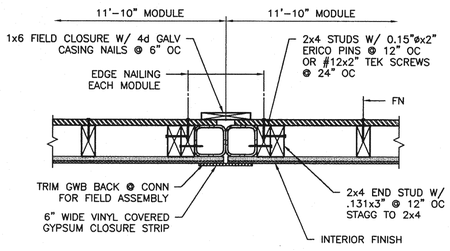
NOTE:
TOP ℄ MUST BE BRACED @ 8'-0" MAX BY EITHER AN INTERSECTING WALL OR WITH AN EMT BRACE TO THE RAFTERS.

WALL FRAMING
DETAIL
5 / S2A
NO SCALE

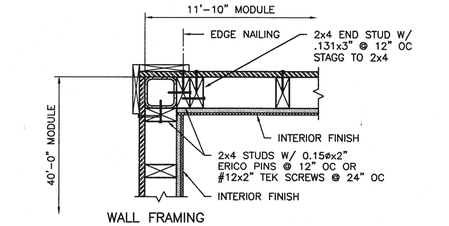
ALT. WALL FRAMING
DETAIL
7 / S2A
1 1/2" = 1'-0"



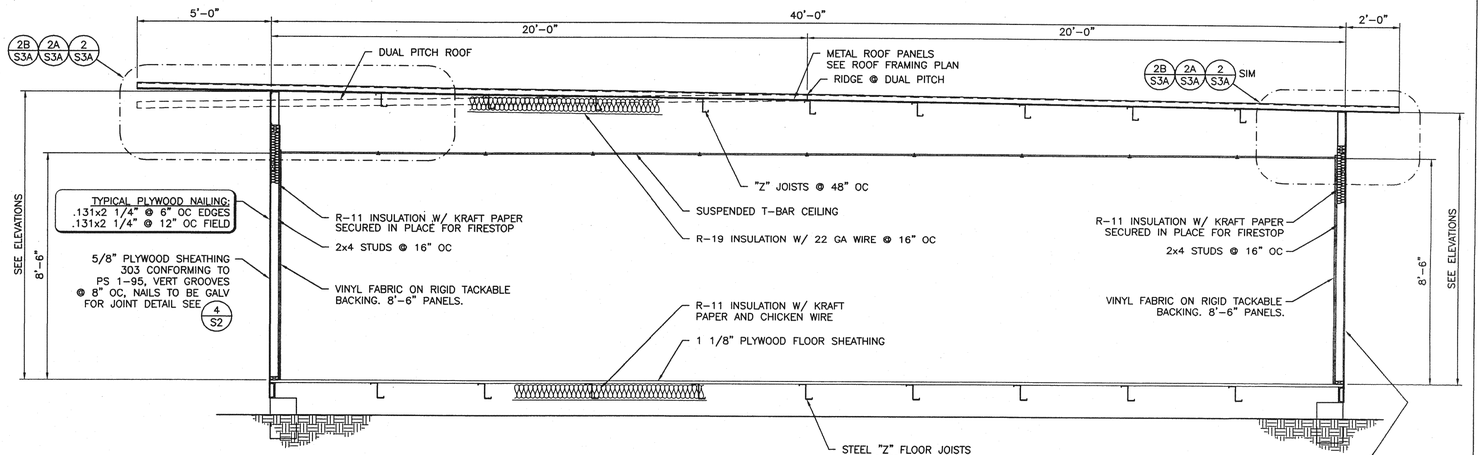
WALL FRAMING
DETAIL
8 / S2A
1 1/2" = 1'-0"



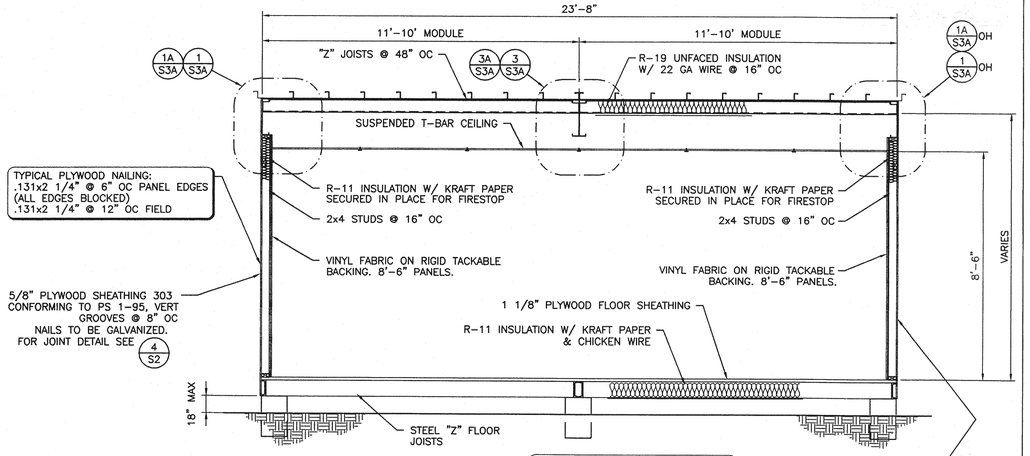
WALL FRAMING
PLAN DETAIL
1 / S2A
1 1/2" = 1'-0"



WALL FRAMING
PLAN DETAIL
2 / S2A
1 1/2" = 1'-0"



TYPICAL LONGITUDINAL SECTION
A / S2A
3/8" = 1'-0"



TYPICAL TRANSVERSE SECTION
B / S2A
3/8" = 1'-0"

FILE NO. PC

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPLICATION NO. 02-101837
AC ~~FT~~ FLS ~~FS~~ SS ~~SS~~
DATE JAN 12 2000

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1418
EXP. 3-31-01
Structural Engineer
STATE OF CALIFORNIA

CUSTOMER:

BUILDING SECTIONS AND WALL DETAILS

DATE:	12/27/99
SCALE:	AS NOTED
DRAWN BY:	PWD
DESIGNED BY:	MDB
CHECKED BY:	KAL
SERIAL NO.	

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION

PROJECT No. 99100

SHEET No. S2A

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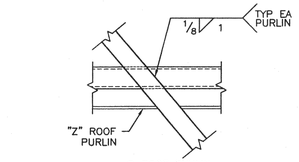
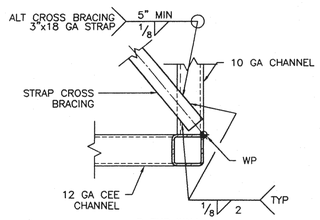
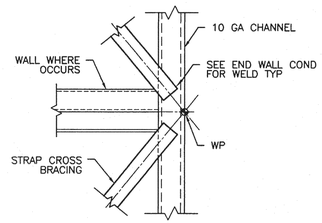


ROOF PURLIN



END WALL

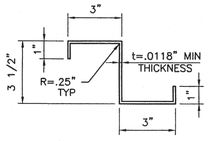


ROOF CHANNEL

CROSS BRACING DETAIL

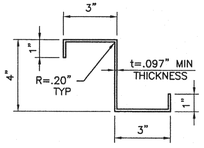
1 / S3

1 1/2" = 1'-0"



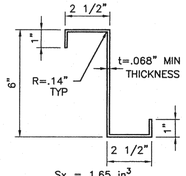
Sx = 1.484 in^3
Ix = 2.60 in^4

10 GA ROOF PURLIN



Sx = 1.501 in^3
Ix = 3.002 in^4

12 GA ROOF PURLIN



Sx = 1.65 in^3
Ix = 4.95 in^4

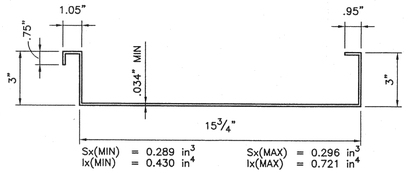
14 GA ROOF PURLIN

JOIST FABRICATED FROM ASTM A570 GRADE 36, HOT ROLLED SHEETS. JOISTS TO BE GIVEN A RUST INHIBITIVE COATING.

DETAIL

2 / S3

3" = 1'-0"



Sx(MIN) = 0.289 in^3 Sx(MAX) = 0.296 in^3
Ix(MIN) = 0.430 in^4 Ix(MAX) = 0.721 in^4

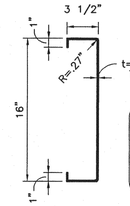
PAN FABRICATED FROM ASTM A570 GRADE 36, HOT ROLLED SHEETS. PAN TO BE GIVEN A RUST INHIBITIVE COATING.

22 GA ROOF PAN

DETAIL

3 / S3

3" = 1'-0"



NOTES:
1. ROOF CHANNEL FABRICATED FROM ASTM A570 GRADE 40 HOT ROLLED SHEETS W/ RUST INHIBITIVE PRIMER
2. SEE 3A/S4 FOR OPT BM SPLICE

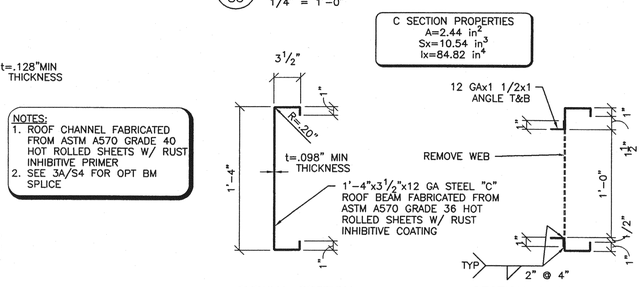
PROPERTIES:
A = 3.212 in^2
Sx = 13.85 in^3
Ix = 110.8 in^4

10 GA ROOF CHANNEL

DETAIL

4 / S3

1 1/2" = 1'-0"



TYPICAL SECTION

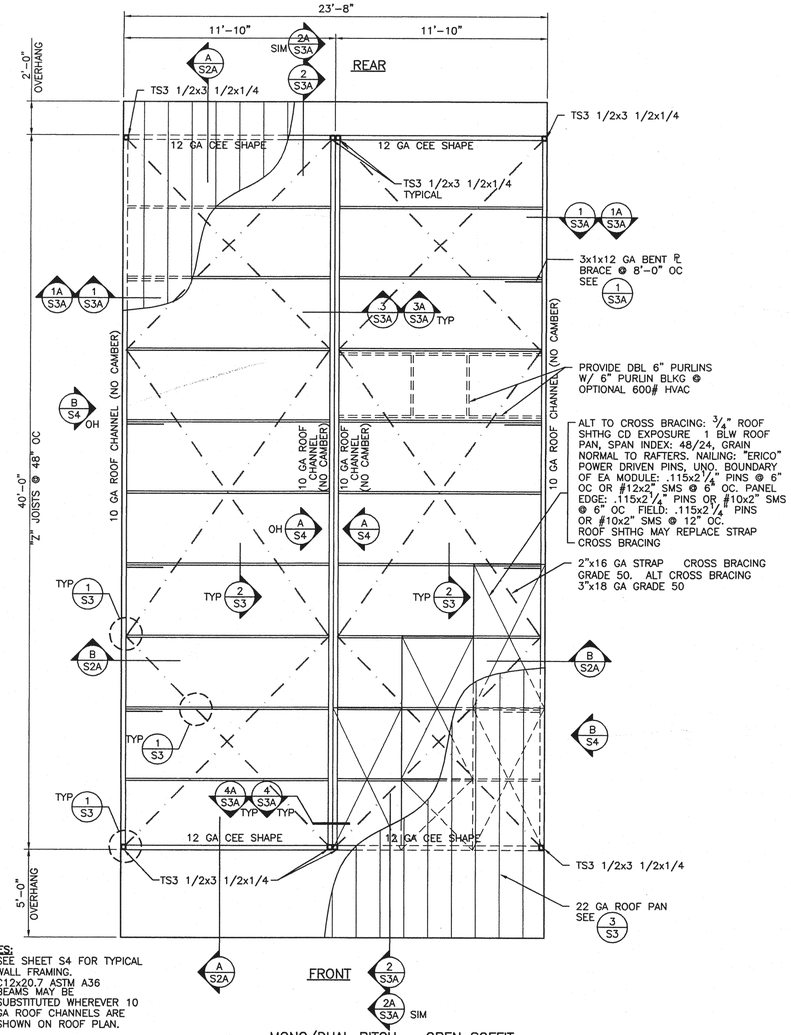
SECTION @ DUCT OPENING

12 GA ROOF CHANNEL

DETAIL

5 / S3

1 1/2" = 1'-0"



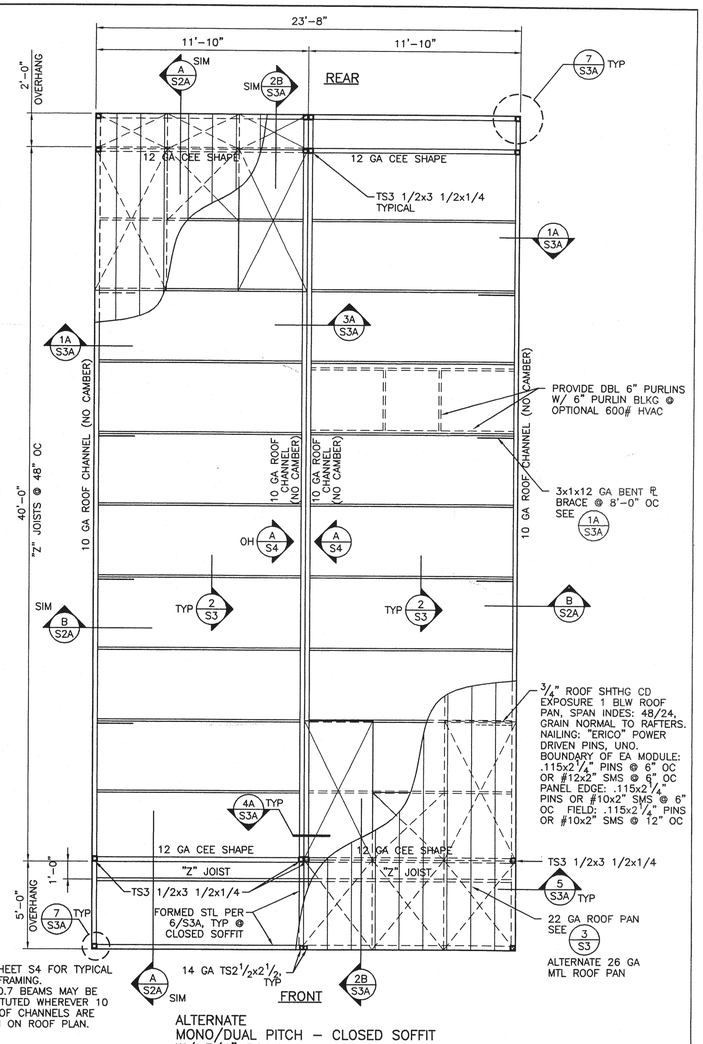
NOTES:
1. SEE SHEET S4 FOR TYPICAL WALL FRAMING.
2. C12x20.7 ASTM A36 BEAMS MAY BE SUBSTITUTED WHEREVER 10 GA ROOF CHANNELS ARE SHOWN ON ROOF PLAN.

MONO/DUAL PITCH – OPEN SOFFIT

ROOF FRAMING PLAN

A / S3

1/4" = 1'-0"



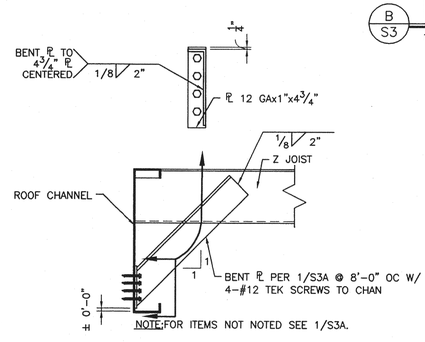
NOTES:
1. SEE SHEET S4 FOR TYPICAL WALL FRAMING.
2. C12x20.7 BEAMS MAY BE SUBSTITUTED WHEREVER 10 GA ROOF CHANNELS ARE SHOWN ON ROOF PLAN.

ALTERNATE
MONO/DUAL PITCH – CLOSED SOFFIT
W/ 3/4" ROOF PLYWOOD

ROOF FRAMING PLAN

B / S3

1/4" = 1'-0"



NOTE: FOR ITEMS NOT NOTED SEE 1/S3A.

DETAIL

6 / S3

1 1/2" = 1'-0"

FILE NO. PC

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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APPLICATION NO. 02-101837
AC. FLS. SS.
DATE JAN 12 2000

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1418
EXP. 3-31-01
Structural Engineer
STATE OF CALIFORNIA

CUSTOMER:

DATE: 12/27/99
SCALE: AS NOTED
DRAWN BY: PWD
DESIGNED BY: MDB
CHECKED BY: KAL
SERIAL NO.

ROOF FRAMING PLANS AND DETAILS

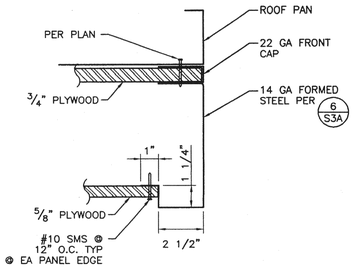
REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			5		
2			6		
3			7		
4			8		

PROJECT No. 99100

SHEET No. S3

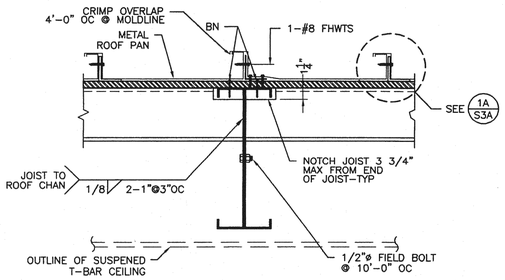
M:\99100\ACAD\STRU\S3.dwg 10-18-99 12:08:01 pm EST



ALT ENCLOSED SOFFIT W/ PLYWOOD DECKING

5/S3A DETAIL

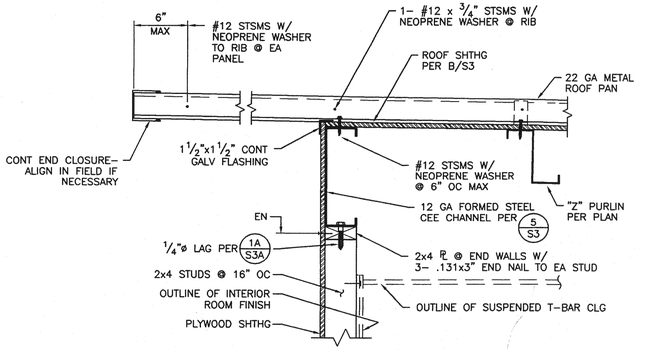
3" = 1'-0"



ALT W/ ROOF PLYWOOD SHTHG

3A/S3A DETAIL

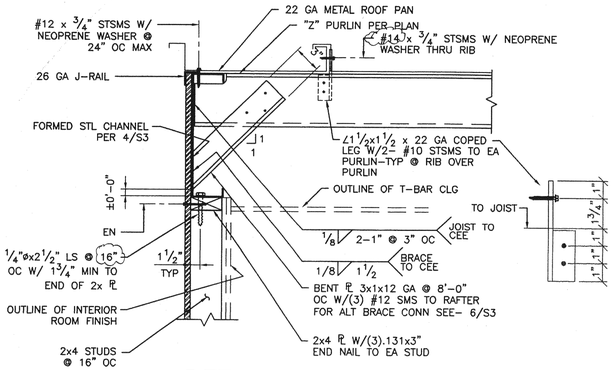
1 1/2" = 1'-0"



ALT W/ PLYWOOD SHTHG
(2'-0" OVERHANG DETAIL SIM)

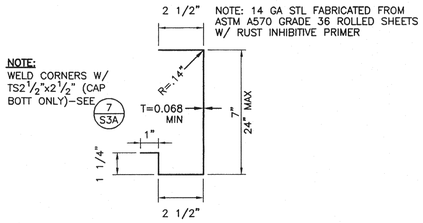
2A/S3A 5'-0" OVERHANG DETAIL

1 1/2" = 1'-0"



1/S3A DETAIL

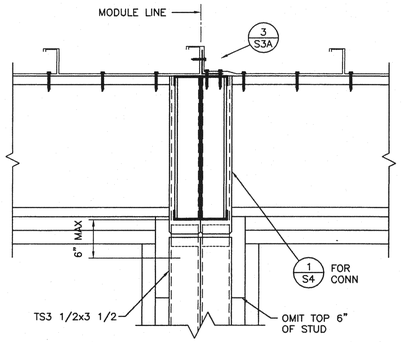
1 1/2" = 1'-0"



14 GA FORMED STEEL CEE ALT ENCLOSED SOFFIT

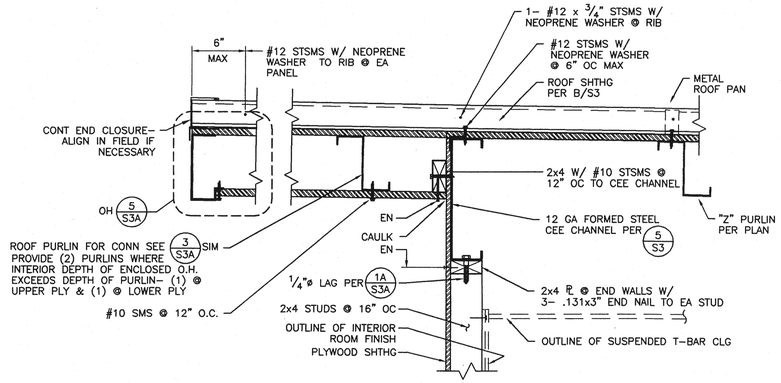
6/S3A DETAIL

3" = 1'-0"



4/S3A DETAIL

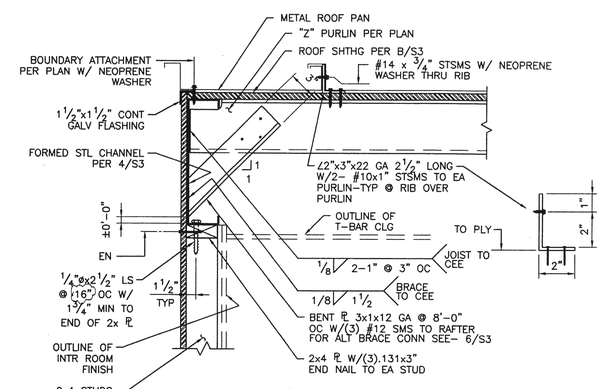
1 1/2" = 1'-0"



ALTERNATE ENCLOSED SOFFIT & ROOF PLYWOOD
(2'-0" OVERHANG DETAIL SIM)

2B/S3A 5'-0" OVERHANG DETAIL

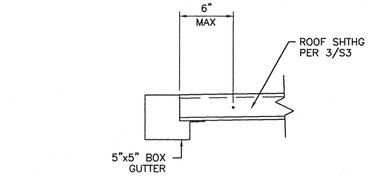
1 1/2" = 1'-0"



ALTERNATE ROOF W/ PLYWOOD SHEATHING

1A/S3A DETAIL

1 1/2" = 1'-0"



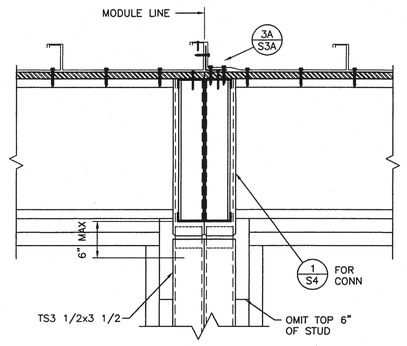
ALT ENCLOSED SOFFIT STL PROFILE

7/S3A DETAIL

NO SCALE

8/S3A DETAIL

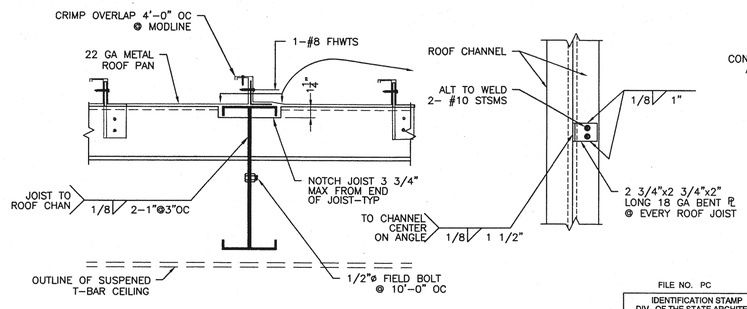
NO SCALE



ALT W/ PLYWOOD DECKING

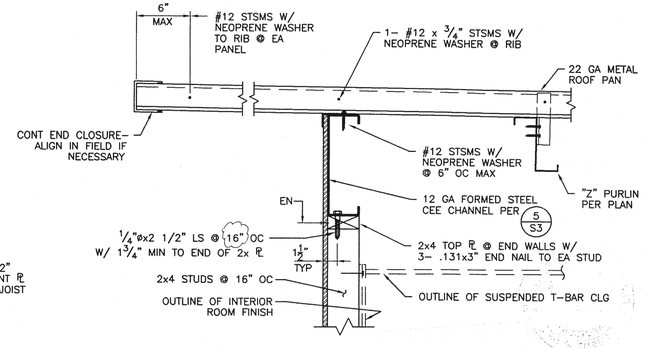
4A/S3A DETAIL

1 1/2" = 1'-0"



3/S3A DETAIL

1 1/2" = 1'-0"



(2'-0" OVERHANG DETAIL SIM)

2/S3A DETAIL

1 1/2" = 1'-0"

FILE NO. PC

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPLICATION NO. 02-101837
AC. - FLS. - SS.
DATE JAN 1 2 2000

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1418
EXP. 3-31-01
Structural Engineer
STATE OF CALIFORNIA

CUSTOMER:

ROOF FRAMING DETAILS

DATE: 12/27/99
SCALE: AS NOTED
DRAWN BY: PWD
DESIGNED BY: MDB
CHECKED BY: KAL
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			5		
2			6		
3			7		
4			8		

PROJECT No. 99100

SHEET No. S3A

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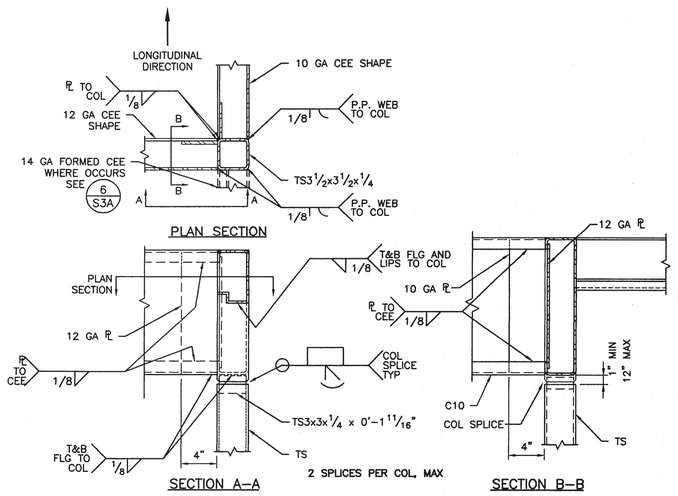
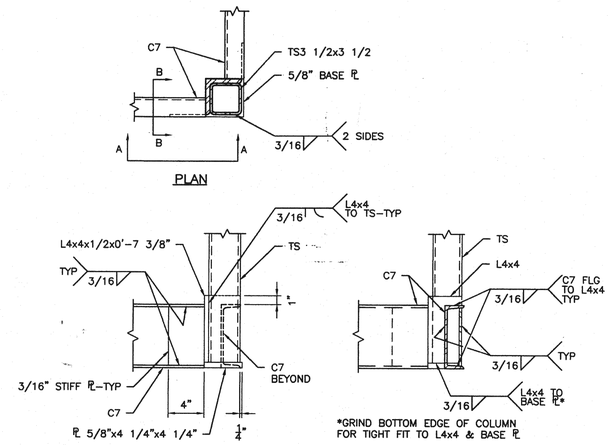
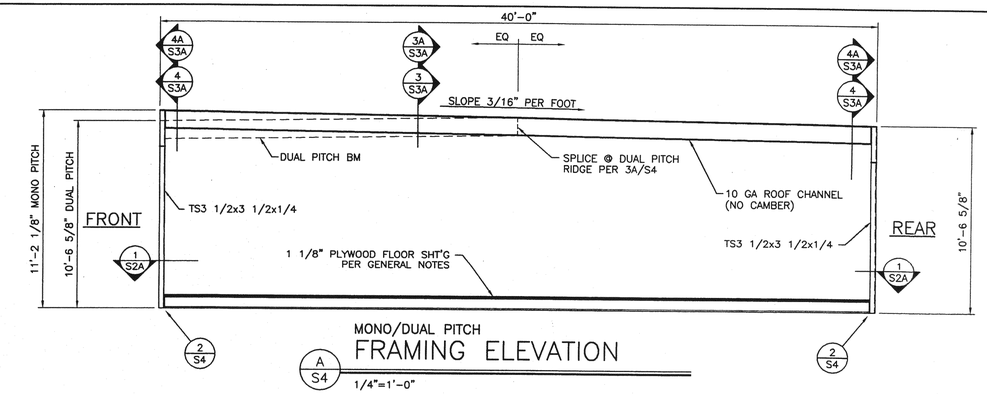


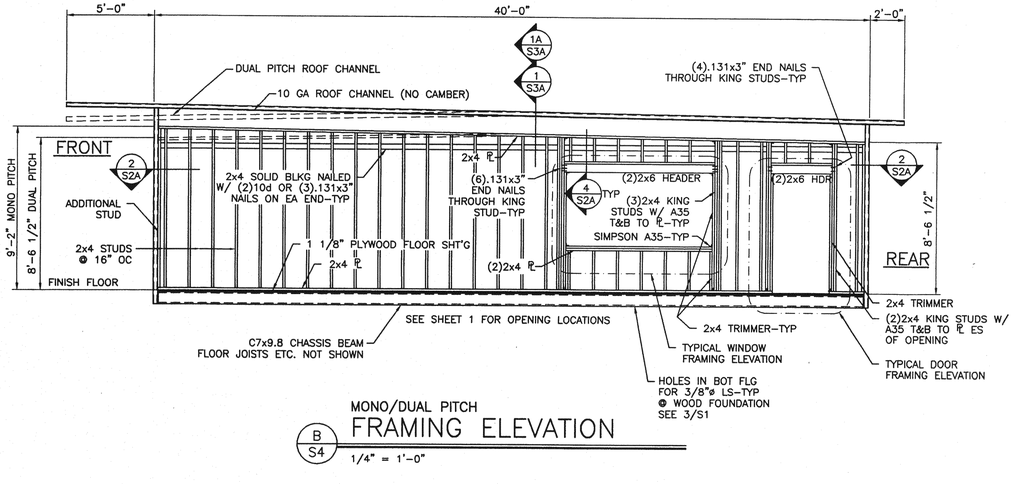
TOP CONNECTION
DETAIL
1 S4 — 1 1/2" = 1'-0"



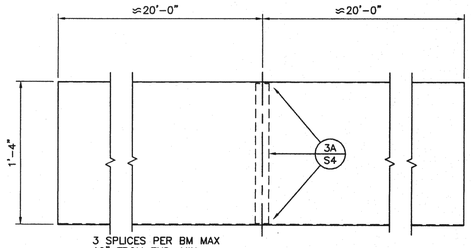
BOTTOM CONNECTION
DETAIL
2 S4 — 1 1/2" = 1'-0"



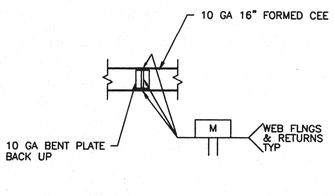
MONO/DUAL PITCH
FRAMING ELEVATION
A S4 — 1/4"=1'-0"



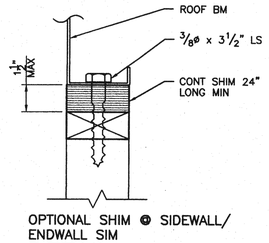
MONO/DUAL PITCH
FRAMING ELEVATION
B S4 — 1/4" = 1'-0"



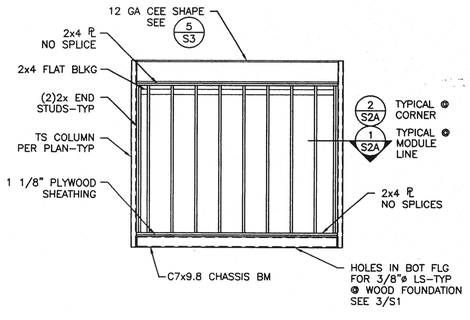
OPTIONAL BEAM SPLICE LOCATION
DETAIL
3 S4 — 1 1/2" = 1'-0"



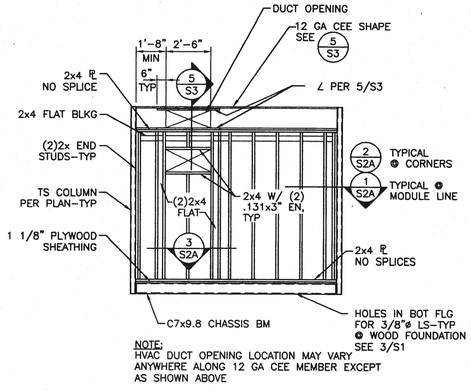
BEAM SPLICE
DETAIL
3A S4 — 1 1/2" = 1'-0"



DETAIL
4 S4 — 1 1/2" = 1'-0"

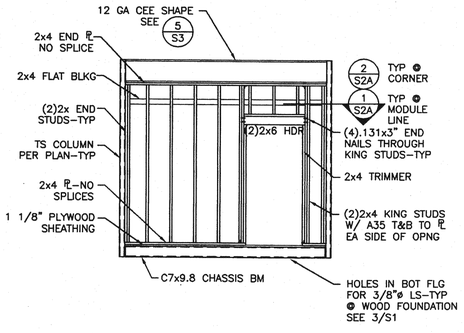


SOLID END WALL ELEVATION
C S4 — 1/4" = 1'-0"

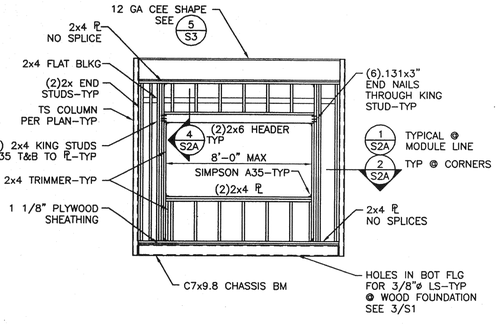


NOTE:
HVAC DUCT OPENING LOCATION MAY VARY ANYWHERE ALONG 12 GA CEE MEMBER EXCEPT AS SHOWN ABOVE

SEE SHEET 1 FOR OPENING LOCATION
HVAC END WALL ELEVATION
D S4 — 1/4" = 1'-0"



SEE SHEET 1 FOR OPENING LOCATION
DOOR END WALL ELEVATION
E S4 — 1/4" = 1'-0"



SEE SHEET 1 FOR OPENING LOCATION
WINDOW END WALL ELEVATION
F S4 — 1/2" = 1'-0"

FILE NO. PC
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPLICATION NO.
02-101937
AC. FLS SS
DATE JAN 12 2000

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1418
EXP. 3-31-01
Structural Engineer
STATE OF CALIFORNIA

CUSTOMER:

FRAMING ELEVATIONS AND DETAILS

DATE: 12/27/99
SCALE: AS NOTED
DRAWN BY: PWD
DESIGNED BY: MDB
CHECKED BY: KAL
SERIAL NO.

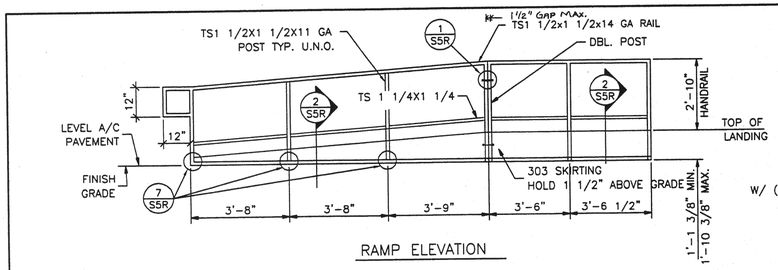
REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			4		
2			5		
3			6		

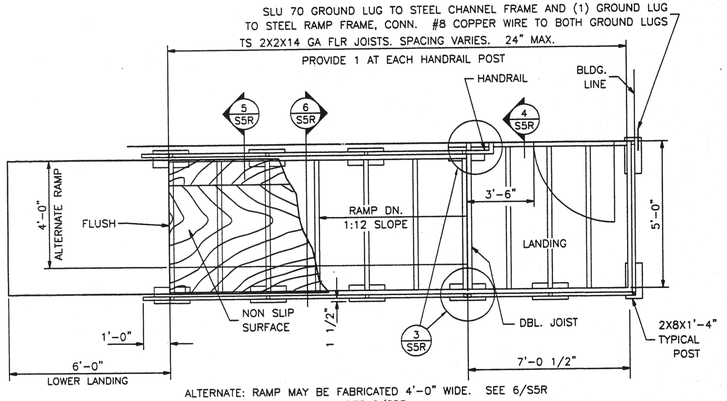
PROJECT No. 99100

SHEET No. S4

M:\99100\ACAD\STRU\S4.dwg 102899 104740



RAMP ELEVATION

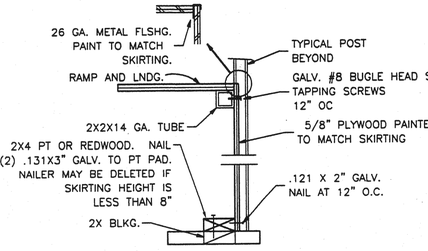


ALTERNATE: RAMP MAY BE FABRICATED 4'-0" WIDE. SEE 6/S5R
OPTIONAL RAMP SEE 8/S5R

RAMP PLAN

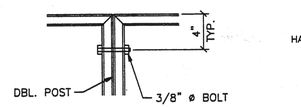
NOTE: RAMP & LANDING TO BE FABRICATED IN SECTIONS (2 MIN) FOR MOVING

A S5R RAMP
3/8"=1'-0"

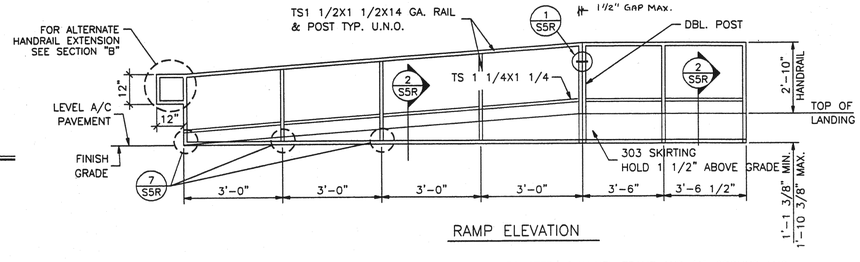


NOTE: FIT PLYWOOD WITHIN 1" MAX OF SOIL,PT PADS AND FRAMING

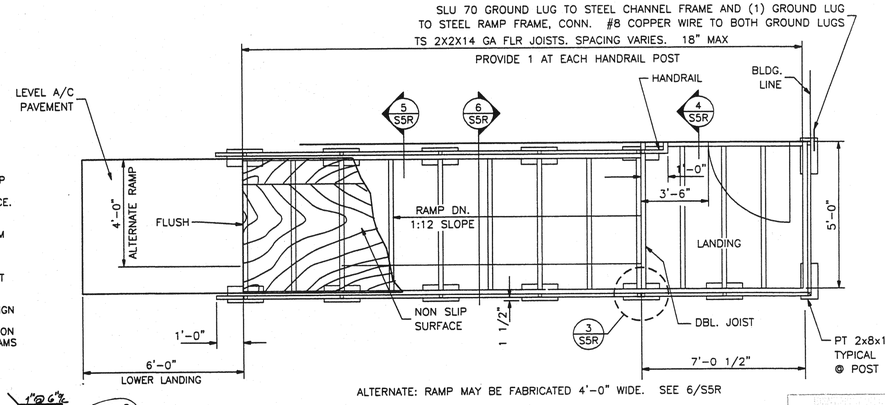
2 S5R RAMP SKIRT DETAIL
NO SCALE



1 S5R DETAIL
NO SCALE



RAMP ELEVATION



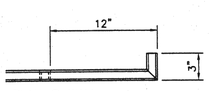
ALTERNATE: RAMP MAY BE FABRICATED 4'-0" WIDE. SEE 6/S5R

RAMP PLAN

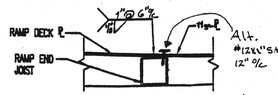
NOTE: RAMP & LANDING TO BE FABRICATED IN SECTIONS (2 MIN) FOR MOVING

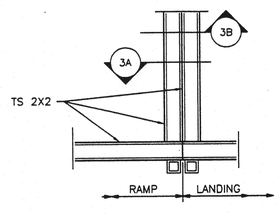
NOTES:

1. RAMPS: RAMPS SHALL NOT SLOPE MORE THAN 1" IN 12"
2. HANDRAILS: HANDRAILS AT BOTH SIDES OF RAMP @ 34".
3. LANDING AND RAMP TO HAVE NON SLIP SURFACE.
4. PROVIDE GROUNDING OF RAMP TO BLDG FRAME W/ #8 CU TO BOTH GROUND LUGS.
5. DUE TO VARYING SITE CONDITIONS THE MAXIMUM HEIGHT OF FINISH FLOOR FROM GRADE IS 26". THEREFORE, IT IS POSSIBLE THAT THE ACCESS RAMP ATTACHED TO THE BUILDING COULD BE 26'-0" AT A SLOPE OF 1:12. ARCHITECT MUST TAKE INTO ACCOUNT THAT THE RAMP SUPPLIED BY AMS INC. IS 12'-0" AT A SLOPE OF 1:12. THEREFORE, THE ARCHITECT WILL HAVE TO DESIGN AND PROVIDE SUFFICIENT DETAILS OF RAMP EXTENSIONS AND BOTTOM LANDING DEPENDING ON PARTICULAR SITE CONDITIONS. IN NO WAY IS AMS INC. RESPONSIBLE FOR ANY RAMP EXTENSION EXCEEDING THE ORIGINAL PLAN AS SHOWN ON SHEET S5R.

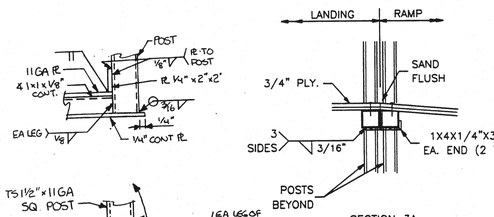


PLAN @ WALL

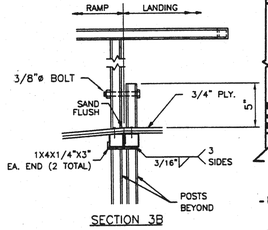




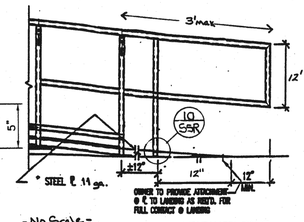
PLAN



SECTION 3A



SECTION 3B

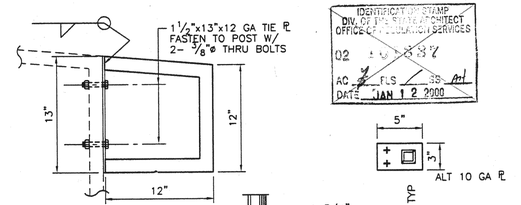


- No Scale -

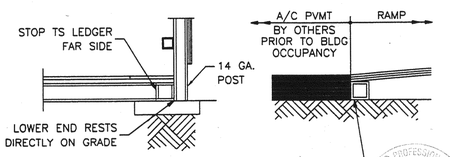
9 S5R TYP. ZERO CLEARANCE RAMP

THE ZERO CLEARANCE RAMP LAYOUT IS AN OPTIONAL METHOD ONLY. IT MUST BE APPROVED IN WRITING, IF AMS IS TO PROVIDE THIS OPTION. ARCHITECT/OWNER MUST TAKE INTO ACCOUNT VARYING SITE CONDITIONS, GRADE CHANGES, BUILDING SEPARATION ETC.

8 S5R RAMP- OPTIONAL (14 GA POSTS)
3/8"=1'-0"

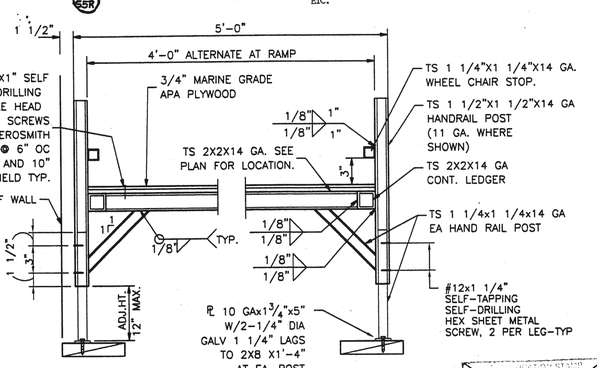


POST 4'-0" OR LESS FROM LOWER END

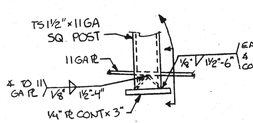


LOWER END POST

7 S5R DETAIL
NO SCALE

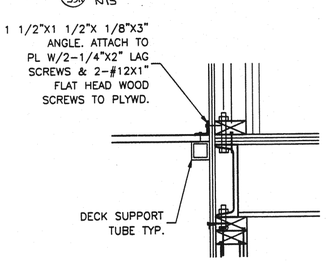


6 S5R HANDRAIL AND RAMP DETAIL
NO SCALE

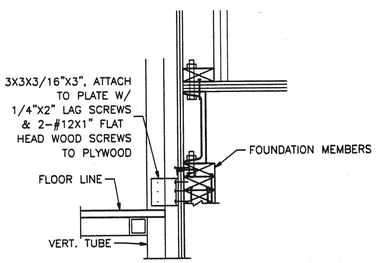


10 S5R DETAIL
NTS

HANDRAIL 3 S5R DETAIL
NO SCALE



4 S5R LANDING ATTACHMENT DETAIL
NO SCALE



5 S5R RAMP CONNECTION DETAIL
NO SCALE

ENTRY RAMP AND LANDING SPECIFICATIONS

EACH BUILDING SHALL HAVE A RAMP AND LANDING TO CONFORM TO TITLE 24 CCR SECTIONS 1006 AND 1007. THE RAMP AND LANDING STRUCTURES INCLUDING HANDRAIL AND WHEEL GUIDES ARE TO BE PREFABRICATED METAL IN SECTIONS THAT ARE DEMOUNTABLE FOR MOVING AND REINSTALLATION AT A NEW SITE.
DESIGN SHALL BE SUCH THAT HEIGHT ADJUSTMENT CAN BE MADE AT THE INSTALLATION SITE. TUBING SHALL BE STEEL CONFORMING TO ASTM A500 GRADE B.
THE RAMP SURFACE SHALL BE 3/4" MARINE GRADE PLYWOOD.
RAMP AND LANDING SHALL HAVE A NON-SKID SURFACE FINISH APPLIED. NON-SKID FINISH SHALL BE AMCOE GRIP II MANUFACTURED BY AMERICAN CHEMICAL CO. OR EQUIVALENT. ALL RAMP SURFACES SHALL BE PAINTED AS INDICATED IN SECTION 3.3.19. RAMPS SHALL HAVE HANDRAILS ON BOTH SIDES. WALL MOUNTED HANDRAILS SHALL BE OF SIMILAR CONSTRUCTIONN TO THE INTEGRAL RAMP HANDRAIL.
RAMP AND LANDING SHALL BE FULLY SKIRTED WITH THE SAME MATERIAL USED FOR BUILDING SKIRT. SIDES OF RAMP AND LANDING THAT DO NOT ADJOIN BUILDING WALL SHALL BE SKIRTED. ALL EDGES OF THE PLYWOOD SKIRT SHALL BE SUPPORTED AND PROTECTED FROM WEATHER. FOUNDATION MEMBERS SHALL BE AS FOR BUILDING FOUNDATION. ONLY THE FOUNDATION PAD RESTING ON GRADE MAY EXTEND BEYOND THE OUTSIDE FACE OF THE SKIRT 1" MAXIMUM

{OPTIONAL}

FLOOR DECKING:

3/4" MARINE EXT. APA 48/24 PLYWOOD W/ NON-SKID SURFACE. (SEE ALTERNATE) DECK SURFACES SHALL BE SEALED ON ALL SIDES. FASTENED TO STEEL FLOOR MEMBERS WITH #10-24 X 1 1/4" LONG PLY-METAL TYPE SCREWS @ 12" O.C.

ALT. FLOOR DECKING:

1. 11 GA SHEET METAL WITH NON-SKID SURFACE.

GROUNDING OF BUILDING COMPONENTS:

CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING NECCESSARY CONNECTORS TO GROUND THE METAL PORTIONS OF THE BUILDING (I.E. FRAME, RAMP, ETC.) GROUNDING ROD, WIRES AND TESTING SHALL BE PROVIDED BY OTHERS AND MEET THE REQUIREMENTS OF I.R. M-5 ISSUED BY DSA.

02 102021
3-9-00

IDENTICAL TO STAMP DIV. OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES
02
AC FLS SS
DATE JAN 12 2000

02 101488
AC FLS SS
DATE OCT 20 1999

REGISTERED PROFESSIONAL ENGINEER
Kenneth A. Luttrell
No. 1418
EXP. 3-31-01
Structural Engineer
STATE OF CALIFORNIA

24 x 40
RELOCATABLE
CLASSROOM

American Modular Systems

CUSTOMER:

RAMP PLAN, ELEVATIONS AND DETAILS

DATE:	10/18/99
SCALE:	AS NOTED
DRAWN BY:	PWD
DESIGNED BY:	MDB
CHECKED BY:	KAL
SERIAL NO.	

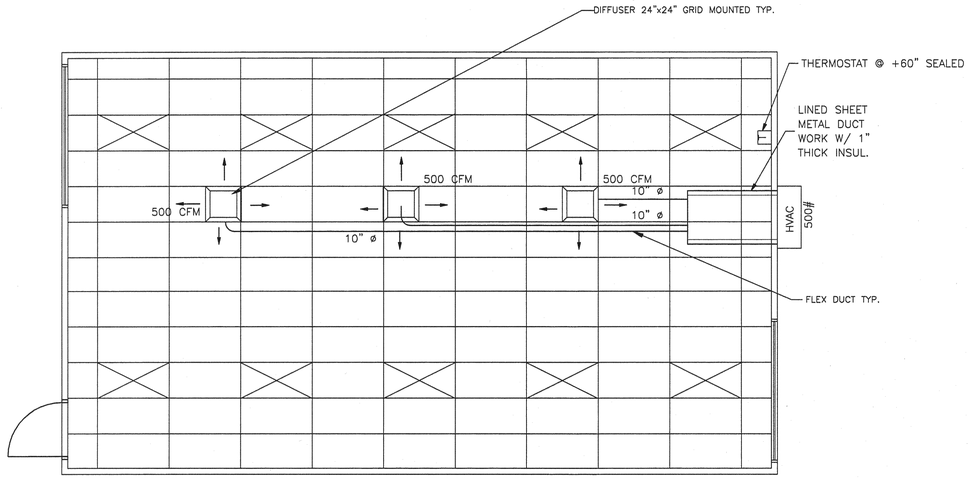
REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION

PROJECT No. 99100

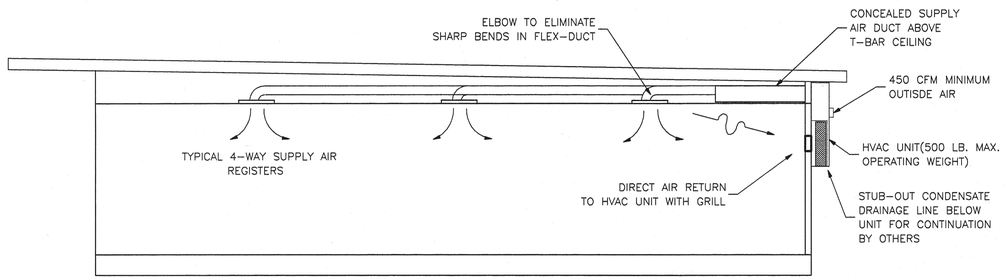
SHEET No. S5R

M:\99100\CAD\STR\S5r.dwg 10-18-99 9:26:21 am EST



HEAT/SUPPLY AIR DUCT LAYOUT

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



HEAT/SUPPLY AIR DUCT CROSS SECTION

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

GENERAL NOTES
HEATING VENTILATING AND AIR CONDITIONING (HVAC)

1. Heat Pump: Single package wall mounted air to air electric heat pump unit shall be rated in accordance with ARI Standard 240-77.
   Reference
   Brands: BARD WH48A-XXXXXXCRV

   All units shall be 230/208 volt, 1 phase system, UL tested & approved or comparable and meet current energy standards.

   A.) The system shall maintain an automatically controlled indoor classroom temperature of 78 degrees F. When the outdoor dry bulb temperature varies between 100 degrees F. in the summer
   B.) The system must maintain the above temperature when the damper is adjusted to use approximately one third fresh air.
2. Duckwork.
   A.) Construct all ductwork of galvanized sheet metal in accordance with C.M.C., Ashrae Guide Equipment volume and Smacna Low Velocity Duct Construction manual latest editions. All ductwork shall be insulated with 1" thick fiberglass duct wrap with vapor barrier. Provide 1" duct attenuation at all ductwork within 2-'0" of HVAC unit.

   B.) Non-metallic ductwork option: In accessible concealed portions of duct system rigid 1" fiberglass or insulated flex-duct with vapor barrier may be substituted for sheet metal ductwork. All ductwork within 5' of the HVAC unit and all interface connections shall be metal. Ductwork and reinforcement shall be designed for 2" static pressure.
   Reference Brands: Owens-Corning fiberglass ducttboard, 1" thick, and Micro-aire, TYPE 475.
   Non-metallic ductwork shall conform to NFPA 90-A and SMACNA Class 1 rating.
3. Air duct insulation and linings shall comply with flame spread less than or equal to 25, smoke generation less than or equal to 50.
4. Supply air diffusers shall be 675 CFM max. 15"x15" neck, steel, rigid 1" fiberglass or flexduct ductwork specifically designed to provide air thermal cooling systems. 24"x8"x1" Micro-Aire type #475 Owens-Corning, Knauf, Certainteed, or equal and 90- B: UL #131 test, class 1 rating with "SMACNA".
5. Registers and diffusers: Provide three (Min) 4-way throw air diffusers as manufactured Carnes, Titus, Hart and Cooley, Metalaire, Shoemaker, Barber-Coleman or Krueger commercial grade grills and registers
6. Air conditioning controls.
   Thermostat: Provide electronic programmable thermostat. Thermostat shall have the following functions.
   A.) 5 and 2 weekday/weekend programming with 4 separate time/temperature setting for 24-hour period.
   B.) Key board lockout switch.
   C.) Programmable display.
   D.) 2-hour override minimum.
   E.) Status Indicated Led's.
   F.) Battery back-up.
   Provide locking clear thermostat cover with thermostat cover with access hole for program override. White Rodgers IF92 @ +60" SEALED.
7. Thermal insulation
   A.) Roof Insulation: R-19 Unfaced.
   B.) Walls Insulation: R-11 Kraft Faced.
   C.) Floors Insulation: R-11 Kraft Faced.
   Flame spread and smoke development shall conform to California Building Code sec. 707.
8. Factory-made air ducts. Factory-made air ducts shall be approved for the use intended or shall conform to the requirements of U.M.C. Standard No. 6-1. Each portion of a factory-made air duct system shall be identified by the manufacturer with a label or other suitable identification indicating compliancewith U.M.C. Standard No. 6-1 and its class designation. These ducts shall be listed and shall be installed in accordance with the terms of their listing and the requirements of UMC STD. 6-1.

DUCT SUPPORT
Flex duct to be supported with 1-1/2" wide x 26 ga. galv. strap @ max 6'-0" o.c. Attach to rafter W/2 #8 SMS @ each end.
Supply air plenum to be supported with 1-1/2" wide x 26 ga. galv. straps min. 2 per plenum.
Supply air box and diffusers to be supported with (2) 12 ga. hanger wires to box @ opposite corners.
Supply air box and diffusers to be braced with (2) 12 ga. slack wires to box @ opposite corners. Attach supply air diffusers to ceiling grid to resist a lateral load equal to the weight of the diffuser and supply air box W/2 #8 SMS.

THESE DRAWINGS COMPLY
WITH THE ENERGY CONSERVATION REQUIREMENTS
OF TITLE 24 OF THE STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
02 102021
AC 94 FLS SS
DATE 3-9-00

REGISTERED PROFESSIONAL ENGINEER
R. H. LAWLESS
No. 2310
Exp 3-31-01
STRUCTURAL
STATE OF CALIFORNIA

FILE NO.
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL.
AC____ FLS.____ SS____
DATE

24 X 40
RELOCATABLE
CLASSROOMS

American Modular Systems
333 EAST CARNEGIE CT. MANTECA, CALIFORNIA 95337
PHONE (209) 825-1921 FAX. (209) 825-7018

CUSTOMER:
MOBILE MODULAR MANAGEMENT

MECHANICAL PLAN & NOTES

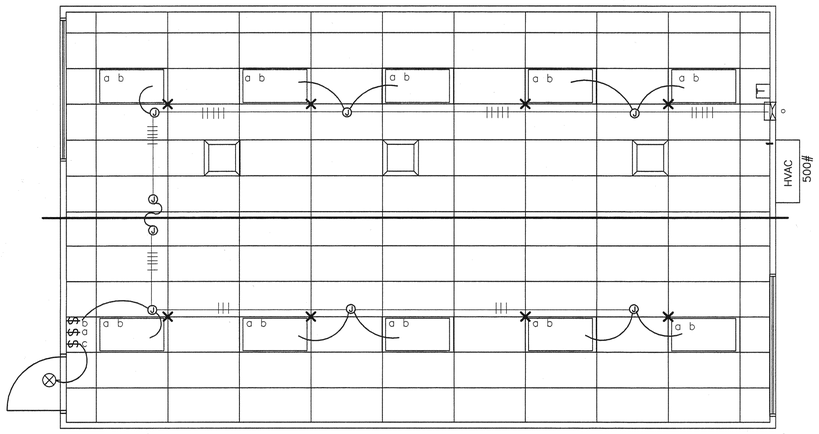
DATE: 03-01-00
SCALE: NONE
DRAWN BY: R.S.
CHECKED BY:
CHECKED BY:
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			5		
2			6		
3			7		
4			8		

PROJECT No.

SHEET No.
M 1



1 / E1 **LIGHT FIXTURE PLAN**

1/4" = 1'-0"

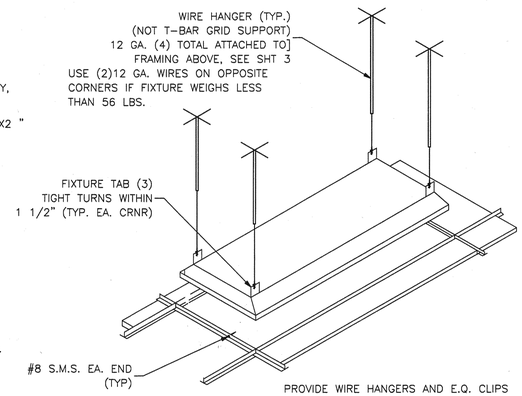
The H.V.A.C. unit feeder circuit – panel circuit breaker, feeder wire, unit disconnect and fuses (where used) – is to be coordinated with the name plate data at the time ofmanufacture. H.V.A.C. units having KVA ratings larger than that indicated on this panel schedule will not be allowed to be installed on this building. If 60 degrees C. wire is to be used in this installation, calculations demonstrating ampacity be provided on the drawing.

STANDARD ELECTRICAL SYMBOLS

- FLUORESCENT LIGHTING FIXTURE – SURFACE MOUNTED.
- FLUORESCENT LIGHTING FIXTURE – RESCESSED.
- FLUORESCENT LIGHTING FIXTURE – WALL MOUNTED (EXTERIOR)
- INCANDESCENT LIGHTING FIXTURE – WALL MOUNTED (INTERIOR).
- DUPLEX WALL CONVENIENCE OUTLETS +18".
- SINGLE POLE LIGHT SWITHCES +48", HUBBELL PREMIUM, BRYANT HEAVY DUTY, OR LEVITON SPECIFICATIONS GRADE.
- LECTRICAL CROSSOVER J–BOXES ABOVE T–BAR CEILING #1–4"X1 ",#22 4"X2 "
- WALL CLOCK OUTLET WITH POWER OUTLET +84".
- a — SWITCH SUBSCRIPTS – a=DEVICE CONTROLLED.
- 15 AMP DUPLEX RECEPTACLE +18".
- JUNCTION BOX – SIZE AND TYPE AS REQUIRED.
- PANELBOARD – SEE SCHEDULE.
- TERMINAL CABINET – SIZE AND TYPE AS NOTED.
- CONDUIT CONCEALED IN CEILING OR WALL.
- CONDUIT CONCEALED BELOW FLOOR OR GRADE.
- HOMERUN TO RESPECTIVE PANEL TO TERMINAL.
- INDICATES 1#14 (GREEN) GROUND WIRE, OTHER SIZES AS INDICATED.

NOTE — BRANCH CIRCUIT WITHOUT FURTHER DESIGNATION IS A 2#14 WIRE CIRCUIT, FOR MORE THAN 2#14 WIRES AS FOLLOWS, –///– 3#14, –////– 4#14 ETC. FOR OTHER SIZES AS FOLLOWS, –//// 10 3#10, –//// 6 4#6 ETC.

- (A) — FIXTURE IDENTIFICATION – LETTER INDICATES TYPE.
- N.I.E.S. — ABBREV. FOR NOT IN ELECTRICAL SECTION OF THESE PLANS AND SPEC'S.
- MT — ABBREV. FOR EMPTY CONDUIT WITH POLY PULL CORD.
- FUSED DISCONNECT SWITCH SIZE AS REQUIRED. PROVIDE FUSES AS RECOMMENDED BY EQUIPMENT SUPPLIER.
- [W.E.F.] — WALL MOUNTED EXHAUST FAN N.I.E.S. CONNECT AS REQUIRED.
- 50 AMP 250 VOLT RANGE RECEPTACLE.
- F — FIRE ALARM STATION – OUTLET ONLY, 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +48"CENTERLINE
- FIRE ALARM HORN – OULET ONLY – 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +90" MIN. AND NOT LESS THAN 6" BELOW FINISHED CEILING.
- FIRE ALARM VISUAL ALARM– OUTLET ONLY – 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER BOTTOM +80". A.F.F. BUT NO GREATER THAN +96". IF CEILING MOUNTED PER NFPA72 TABLE 6–4.4.1(b).
- SPEAKER– OUTLET ONLY – 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +84"
- INTERCOM TELEPHONE– OUTLET ONLY– 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +48"
- M — FIRE ALARM MINI HORN – OULET ONLY – 4" SQ. BOX W/ SINGLE DEVICE RING AND COVER +90" MIN. AND NOT LESS THAN 6" BELOW FINISHED CEILING.



SUPPORT DETAIL

PROVIDE WIRE HANGERS AND E.Q. CLIPS AS REQUIRED BY CALIFORNIA SEISMIC REGULATIONS CBC 2501.A.5 & IR. M–3

SYMBOL	DESCRIPTION	WATTS	MANUFACTURER
	2'X4' FLOURESCENT DROP IN FIXTURE, ACRYLIC PRISMATIC LENS. ENERGY SAVING BALLAST. (4)35 WATT TUBES, WT. 27 LBS.	156 W	CRESCENT 24TF440DLA
	FLOURESCENT SURFACE MOUNTED EXTERIOR LIGHT WITH IMPACT RESISTANT ENCLOSURE. .125 THICK CLEAR PRISMATIC ONE PIECE LENS W/ NEOPRENE GASKET & "POSIGRIP" STAINLESS STEEL SCREWS.	(2) 7W TT 2700 K	KENALL 3714 OR LITHONIA 202 2/7PL LP
	INCANDESCENT WALL MOUNTED	150W	PROGRESS P3011x30"

SEE TYPICAL CLASSROOM LAYOUT FOR LOCATIONS OF ALL DEVICES.
FIXTURE MOUNTING SHALL COMPLY WITH CALIFORNIA SEISMIC REGULATIONS.

FIRE ALARM SYSTEM

1. THE FIRE ALARM SYSTEM SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE, ARTICLE 760 &CA. FIRE CODE ART. 10.
2. INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING CALIFORNIA STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY THE DIVISION OF THE STATE ARCHITRCT.
3. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING AGENCY.

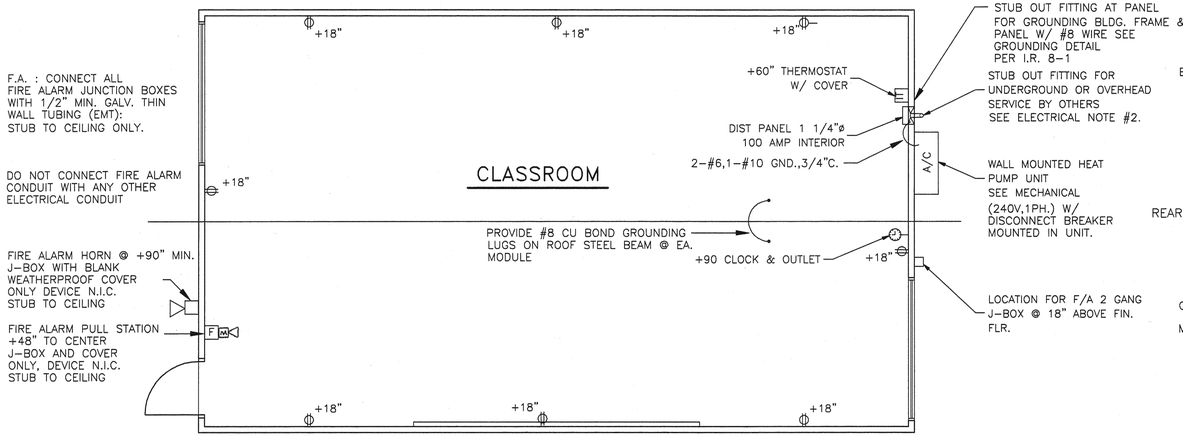
GENERAL NOTES

1. GROUNDING ELECTRODE CONDUCTOR SIZED PER CEC 250–94 & 95.
2. ALLOW FOR 12' MOVEMENT IN ANY DIRECTION IF PAD FOUNDATION IS USED.
3. PROVIDE BONDS TO BLDG. STEEL & PANEL (#8 CU)
4. PANEL TO LISTED FOR USE AS SERVICE EQUIPMENT.

FIXTURE NOTES:

1. ALL FLUORESCENT LIGHT FIXTURES SHALL HAVE ENERGY SAVING LAMPS AND BALLASTS.
2. LUMINATES/BALLASTS SHALL BE CERTIFIED PER CALIFORNIA BUILDING CODE TITLE 24.
3. FLUORESCENT LIGHT FIXTURE TYPE "A" SHALL BE CONTROLLED TO PROVIDE TWO LEVELS OF LIGHTING. SWITCH (SA) SHALL CONTROL THE TWO OUTER LAMPS AND SWITCH (SB) SHALL CONTROL THE TWO INNER LAMPS.

ELECTRICAL
1. Electrical service drop and connections supplied by others.
2. Manufacturer to provide stub–out from back of electrical panel through the exterior wall for receiving either underground or overhead service & fitting for grounding cable.
3. Electrical panel board shall be recess mounted inside the building. Sized to accommodate all connected loads including spaces as shown. Overcurrent protective devices in the panel boards have adequate short circuit interrupting capacity. All buses including bus shall be copper or aluminum.
4. 2x4 Flourescent fixtures shall be steel frame, lens shall be hinged and locked in place by two locking devices. The lens diffusers shall be KHS, Inc. #KSH–12, Carolite, Inc. #C–12 or Plaskolite, Inc. #PL21A. Minimum lens thickness shall be .125 inch.
5. Flourescent ballast shall be energy saver while maintaining full light output, class "P" equipped with thermal protectors, guaranteed against failure for (2) years and be replaced from inside the fixture.
6. Clock – 12" dial clock on clock outlet.
   A) Clock shall be General Electric model 2912 129V 60 cycle
   B) Clock outlet shall be Bryant #2828 or equal with seperable hanging clip & app'd recept.

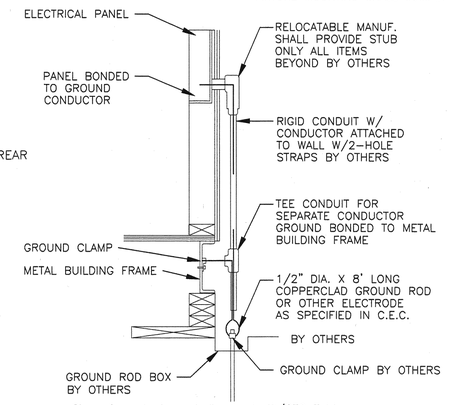


2 / E1 **ELECTRICAL PLAN**

1/4" = 1'-0"

FIRE ALARM
Junction boxes – Galvanized sheet metal, square or rectangular with blank covers. Locate one box at rear of building near main electrical panel at +18– above finish floor for future connection.
Covers – Install gasketed, metal, waterproof, finish covers at exterior locations. Install finish covers at interior locations.

If testing results determine fire alarm audibility does not meet 15db over ambient noise levels, additional fire alarm signaling devices may be required by the enforcing anency



Size of conductors shall comply W/CEC Table
Bond separate conductors from ground rod to electrical panel & metal building from.
In addition to the detail shown above, bond the electrical ground to metal water pipe embedded @ least 10' into the soil if available.
Electrical bond modules together W/#8 CU @ modline. By manufacturer. Check resistance to ground. If resistance exceeds 25 OHMS, install additional ground rods as required. Grounding detail per I–R M–3
INSPECTOR TO WITTNESS GROUNDING TEST.

A / E1 **BUILDING GROUND DETAIL**

N.T.S.

VOLTS: 120/240 SINGLE PHASE			PANEL: A						FEED: EXTERIOR LB		
MAIN: 100 AMP MAIN BKR.			LOCATION: INTERIOR						MOUNTING: FLUSH		
LOAD	WATTS A	WATTS B	BRK. AMP	C I R	A	B	C I R	BRK. P AMP	WATTS A	WATTS B	LOAD
LIGHTS, FLUORESCENT	960		15	1	1		2	2 80	7040		A/C HVAC UNIT
LIGHTS, FLUORESCENT		960	15	1	3		4	2 80		7040	
EXTERIOR LIGHT & CLOCK	100		15	1	5		6				SPACE
DUPLEX RECEPT.		720	15	1	7		8				
DUPLEX RECEPT.	720		15	1	9		10				
SPACE					11		12				
					13		14				
					15		16				
PHASE WATTAGE	1780	1680			17		18		7040	7040	PHASE WATTAGE
TOTAL WATTS "A"LEG: 8820			TOTAL WATTS A+B= 17540						TOTAL WATTS "B" LEG 8720		
TOTAL WATTS: 17540		73 AMPS	120/240V		SINGLE PHASE				100AMP BUS.		

FEEDERS: TO BE RUN BY THE DISTRICT EITHER UNDERGROUND OR OVERHEAD, SEE SITE ELEC. PLAN.

3 / E1 **ELECTRICAL DISTRIBUTION PLAN**

1/4" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER — JOHN H. LANDRETH — No. 2310 — Exp 3-31-01 — STRUCTURAL — STATE OF CALIFORNIA

FILE NO.
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL 02-102.01
AC. FLS. SS
DATE 3-9-00

24 X 40
RELOCATABLE
CLASSROOMS

American Modular Systems
333 EAST CARNEGIE CT. MANTECA, CALIFORNIA 95337
PHONE (209) 825–1921 FAX. (209) 825–7018

CUSTOMER:
MOBILE MODULAR MANAGEMENT CORP.

ELECTRICAL PLAN & NOTES

DATE: 03–01–00
SCALE: NONE
DRAWN BY: R.S.
CHECKED BY:
CHECKED BY:
SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION
1			5		
2			6		
3			7		
4			8		

PROJECT No.

SHEET No. E 1

mobile modular

11450 MISSION BLVD.
MIRA LOMA, CA 91752

DSA FOUNDATION PLANS

FOR EXISTING STOCKPILE BUILDINGS

(BASED ON PC 04 – 113193)

WITH OPTIONAL S_s = 2.183 AND S_s = 3.08

NOTE: SEE SHEET F–1 FOR FOUNDATION PC ONLY LIMITATIONS

DATE CHECKED AUG 11 2017

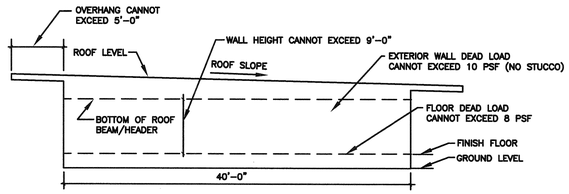
This drawing and the material contained therein are the property of Mobile Modular Management Corporation (MMMC) and shall not be reproduced, copied or otherwise disposed of directly or indirectly and shall not be used in whole or in part to assist in the making of, or for the purpose of furnishing, any information for the making of drawings, prints, apparatus or parts thereof without the full knowledge and written consent of MMMC and all patentable material contained herein and originating with MMMC and shall be the property of MMMC.

FOUNDATION PC ONLY LIMITATIONS

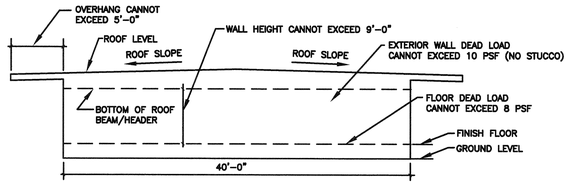
THIS WOOD FOUNDATION ONLY PC HAS BEEN DESIGNED TO SUPPORT THE SUPERSTRUCTURE FOR THE RELOCATABLE BUILDINGS LISTED ON SHEET F–2 OF THESE DRAWINGS. THE DESIGN CALCULATIONS HAVE BEEN BASED ON THE FOLLOWING:

- A ROOF OVERHANG OF 5 FEET MAX
- A WALL HEIGHT OF 9 FEET MAX (FROM FINISH FLOOR IN BUILDING TO BOTTOM OF STEEL ROOF BEAMS/HEADERS)
- WALL DEAD LOAD OF 10 PSF (NO STUCCO)
- FLOOR DEAD LOAD OF 8 PSF
- SEE SEISMIC DESIGN DATA, SHEET F–1, FOR S_{DS} LIMITATIONS FOR SITE.

THE TYPICAL ELEVATIONS BELOW ARE TO CLARIFY THESE LIMITATIONS. DOCUMENTATION SHALL BE PROVIDED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE, WHICH NEEDS TO BE REVIEWED AND APPROVED BY THE DSA STRUCTURAL PLAN REVIEWER.



SINGLE SLOPE BUILDING



DUAL SLOPE BUILDING

LIST OF CALIFORNIA CODE OF REGULATIONS

BUILDING CODE:

ALL WORK SHALL COMPLY AND CONFORM TO THE REQUIREMENTS OF THE 2016 CBC AND ORDINANCES OF ALL LOCAL CODES AND AUTHORITIES

LIST OF 2016 CALIFORNIA CODE OF REGULATIONS
2016 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2016 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 2, TITLE 24 C.C.R.
2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2015 INTERNATIONAL BUILDING CODE VOLUMES 1–2 AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2014 NATIONAL ELECTRICAL CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (2015 UNIFORM MECHANICAL CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2015 UNIFORM PLUMBING CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
2016 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R. (2015 INTERNATIONAL FIRE CODE AND 2016 CALIFORNIA AMENDMENTS)
2016 CALIFORNIA GREEN BUILDING STANDARDS, PART 11, TITLE 24 C.C.R.
2016 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
NFPA 13 – 2016
NFPA 72 – 2016

CALIFORNIA REFERENCED FOR APPLICABLE STANDARDS
2016 CBC, CHAPTER 35
2016 CFC, CHAPTER 45

APPROVALS	APPROVALS	APPROVALS
REGISTERED PROFESSIONAL ENGINEER JAMES T. SIMPSON No.3602 STRUCTURAL STATE OF CALIFORNIA LICENSE EXPIRES 6-30-18		

PRE–CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04–116149
AC FLS SS
DATE: SEP 19 2017
KCS D.Fenlason
EGS D.Fenlason
SSS : DANNY WONG

SHEET INDEX

OPTIONS	SHEET TITLE	SHEET NUMBER
COVER SHEET	GENERAL NOTES; APPLICABLE CODES; BUILDING DATA; WIND DESIGN DATA, EARTHQUAKE DESIGN DATA	F-1
ALL	DSA A NUMBER LISTING MATRIX	F-2
BUILDING SIZE		
24X40	□ 50 PSF + 20 PSF (Ss 2.183)	F-3
	□50 PSF (Ss 2.183)	F-3
	□ 50 PSF + 20 PSF (Ss 3.08)	F-3A
	□50 PSF (Ss 3.08)	F-3A
36X40	□ 50 PSF + 20 PSF (Ss 2.183)	F-4
	□50 PSF (Ss 2.183)	F-4
	□ 50 PSF + 20 PSF (Ss 3.08)	F-4A
	□50 PSF (Ss 3.08)	F-4A
48X40	□ 50 PSF + 20 PSF (Ss 2.183)	F-5
	□50 PSF (Ss 2.183)	F-5
	□ 50 PSF + 20 PSF (Ss 3.08)	F-5A
	□50 PSF (Ss 3.08)	F-5A
ALL	REFERENCE DETAILS	F-6
ALL	GENERAL SPECIFICATIONS / DSA FORM 103	F-7
ALL	ADJACENT BLDGS DETAILS	F-8
ALL	ADJACENT BLDGS DETAILS	F-9

DESIGN DATA			
NUMBER OF STORIES:	1-STORY		
OCCUPANCY:	□ E-1	□ E-2	□ E-3
TYPE OF CONSTRUCTION:	VB		
FLOOR LIVE LOAD:	□ 50 PSF	□ 50 PSF + 20 PSF PARTITION LOAD	
ROOF LIVE LOAD:	□ 20 PSF (PROJECT IS NOT LOCATED IN A SNOW LOAD AREA		
BUILDING AREA:	□ 24'X40' (960 S.F.)		
	□ 36'X40' (1,440 S.F.)		
	□ 48'X40' (1,920 S.F.)F		
ALLOWABLE BUILDING AREA (MAX):	9,500 S.F.		
FOUNDATION:	□ WOOD	□ WAIVER OF DURABILITY	□ NON-PERMANENT FOUNDATION

WIND DESIGN DATA	SECTION 1603.A.1.4
1. ULTIMATE WIND SPEED .3 SEC GUST (MPH):	110
2. RISK CATEGORY:	II
3.WIND EXPOSURE:	"C"
4. APPLICABLE INTERNAL PRESSURE COEFFICIENT:	+ or - 0.18
	Kzt = 1.0

EARTHQUAKE DESIGN DATA		SECTION 1603.A.1.5
1. SEISMIC IMPORTANCE FACTOR:		1
2. MAPPED SPECTRAL RESPONSE:		
OPTION Ss:	3.08	2.183
Ss	3.08	2.183
S_1	1.389	1.389
3. SITE CLASS		D
4. SPECTRAL RESPONSE COEFFICIENTS:		
OPTION Ss:	3.08	2.183
S_{DS}	1.44	1.019
S_{D1}	1.389	1.389
5. SEISMIC DESIGN CATEGORY:		E
6. BASIC SEISMIC-FORCE-RESISTANCE-SYSTEM		□ LIGHT MODULAR STEEL MOMENT FRAME
7. DESIGN BASE SHEAR:		
OPTION S_s	3.08	2.183
24'X40'	9,092#	6,453 #
36'X40'	13,679#	9,680#
48'X40'	18,184#	12,906#
8. SEISMIC RESPONSE COEFFICIENT (Cs)		
OPTION S_s	3.08	2.183
Cs	0.41	0.291
9. RESPONSE MODIFICATION FACTOR (R)		3.5
10. ANALYSIS PROCEDURE USED:		EQUIVALENT LATERAL FORCE
		NO HORIZONTAL OR VERTICAL IRREGULARITIES PRESENT
11. FLOOD DESIGN DATA:		PROJECT IS NOT LOCATED IN FLOOD ZONE

REVISIONS	BY

MEMBER STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA
AMERICAN CONCRETE INSTITUTE
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FAX(909) 815-0236

STRUCTURAL ENGINEERS, INC.
4081 RIVERSIDE DRIVE, SUITE 114
CHINO, CALIFORNIA 91710

COVER SHEET
PC 04–116149

MOBILE MODULAR
11450 MISSION BLVD.
MIRA LOMA, CA 91752

04-116149

SITE:

DRAWN
CHECKED
DATE JUN. 15, 2017
SCALE
JOB NO.

F — 1

OF 12 SHEETS

MOBILE MODULAR MIRA LOMA PC 113193 SHEET_ F-1.DWG

APPROVED A NUMBERS APPLICABLE TO THIS PC PLAN

MANUFACTURER OF MODULAR BUILDING	DSA A NUMBER OF MODULAR BUILDING	BASED ON PC	YEAR OF APPROVAL OF MODULAR BUILDING	MODULAR BUILDING SIZE	DESIGN FLOOR LIVE LOAD
MB	A04106168	PC 04–104778	2004	48 X 40	50
MB	A04106292	PC 04–104778	2004	48 X 40	50
MB	A04106743	PC 04–104778	2005	24 X 40	50
MB	A04107176	PC 04–104778	2005	48 X 40	50
MB	A04107310	PC 04–104778	2006	24 X 40	50
MB	A101926	04–101244	2000	36 X 40	50
MB	A52938	PC57	1990	24 X 40	50
MB	A04103266	04–101244	2001	48 X 40	50
MB	A04107251	04–104778	2005	36 X 40	50
MB	A04107207	04–104778	2006	36 X 40	50
MT	A54198	PC 121	1990	24 X 40	50
MT	A60811	PC 243	1994	24 X 40	50
MT	A61172	PC 243	1994	24 X 40	50
MT	A65965	PC 266	1997	24 X 40	50
MT	A69746	PC 282	1998	24 X 40	50
MT	A04100727	PC 300	1999	36 X 40	50
MT	A04101194	PC 270	1999	24 X 40	50
MT	A04101767	PC 04–101419	2001	24 X 40	50
MT	A04101891	PC 04–101419	2000	48 X 40	50
MT	A04103044	PC 04–101419	2001	24 X 40	50
MT	A04103205	PC 04–101268	2001	36 X 40	50+20
MT	A04102365	PC 04–101768	2001	24 X 40	50
MT	A04105219	PC 04–101419	2003	24 X 40	50
MT	A04105400	PC 04–104801	2003	48 X 40	50+20
MT	A04105434	PC 04–104796	2003	24 X 40	50
MT	A04105483	PC 04–104796	2004	24 X 40	50
MT	A04106558	PC 04–104801	2004	36 X 40	50+20
MT	A04100726	282	1998	36 X 40	50
MT	A64873	243	1996	36 X 40	50
MT	A02105794	04–104801	2004	36 X 40	50
MT	A04103205	04–101268	2001	36 X 40	50
MT	A54130	79	1991	24 X 40	50
SI	A04108525	PC 04–107557	2007	48 X 40	50
SI	A04108870	PC 04–107557	2008	24 X 40	50
SI	A04108943	PC 04–107557	2007	36 X 40	50 + 20
SI	A04109410	PC 04–107557	2008	48 X 40	50 + 20
SI	A04109518	PC 04–107557	2008	48 X 40	50 + 20
SI	A04109520	PC 04–107557	2008	24 X 40	50 + 20
SI	A04109615	PC 04–107557	2008	48 X 40	50 + 20
SI	A04109640	PC 04–107557	2008	24 X 40	50+20
SI	A04110549	04–109299	2009	24 X 40	50
SI	A04109641	04–107557	2008	36 X 40	50
SI	A04110811	04–109299	2010	36 X 40	50
SI	A04110041	04–107557	2009	24 X 40	50
SI	A04110433	04–109295	2009	24 X 40	50
SI	A04110434	04–109295	2009	24 X 40	50
SI	A04109754	04–107557	2008	36 X 40	50
SI	A04110142	04–109299	2009	24 X 40	50
SI	A04108944	04–107557	2007	48 X 40	50
WS	A04107179	PC 04–105135	2005	24 X 40	50 + 20
GD	A66762	269	1997	24 X 40	50
KS	A68188	PC 266	1997	24 X 40	50

APPROVED A NUMBERS APPLICABLE TO THIS PC PLAN

MANUFACTURER OF MODULAR BUILDING	DSA A NUMBER OF MODULAR BUILDING	BASED ON PC	YEAR OF APPROVAL OF MODULAR BUILDING	MODULAR BUILDING SIZE	DESIGN FLOOR LIVE LOAD
AM	A59780	PC 237	1993	24 X 40	50
AM	A64301	PC 237	1995	24 X 40	50
AM	A65821	PC 264	1996	24 X 40	50
AM	A65821	PC 264	1997	24 X 40	50
AM	A69217	PC 328	1998	24 X 40	50
AM	A02101284	PC 387	1999	24 X 40	50
AM	A02102021	PC 02–101488	2003	24 X 40	50
AM	A02102043	PC 02–101488	2001	24 X 40	50
AM	A02102350	PC 02–101488	2001	24 X 40	50
AM	A02102259	PC 02–101488	2000	24 X 40	50
AM	A02103141	PC 02–101837	2001	24 X 40	50
AM	A02105185	PC 02–101837	2003	24 X 40	50
AM	A02105619	PC 02–104915	2003	24 X 40	50
AM	A02105634	PC 02–104915	2003	36 X 40	50
AM	A02106165	PC 02–104915	2004	24 X 40	50
AM	A02106184	PC 02–104917	2004	48 X 40	50
AM	A02106185	PC 02–104925	2004	36 X 40	50
AM	A02106215	PC 02–104925	2004	36 X 40	50
AM	A02106239	PC 02–104925	2004	24 X 40	50
AM	A02106374	PC 02–104915	2004	24 X 40	50
AM	A02106845	PC 02–104915	2005	24 X 40	50
AM	A02107161	PC 02–104915	2005	24 X 40	70 50+20
AM	A02107390	PC 02–104915	2005	24 X 40	50
AM	A02108179	PC 02–104917	2006	48 X 40	50
AM	A02105619	02–104920	2003	24 X 40	50
AM	A02106214	02–104915	2004	24 X 40	50
AM	A02106499	02–101285	2004	48 X 40	50
AM	A02101583	388	1999	48 X 40	50
AU	A65301	PC 253	1996	24 X 40	50
AU	A65601	PC 253	1996	24 X 40	50
AU	A67426	PC 272	1997	36 X 40	50
AU	A03107543	PC 04–104816	2004	24 X 40	50
AU	A04101310	PC 04–100335	2000	24 X 40	50
AU	A04105339	PC 04–104816	2003	24 X 40	50
AU	A04106096	PC 04–104816	2004	24 X 40	50
AU	A04106097	PC 04–104816	2004	24 X 40	50 + 20
AU	A64839	A64839 STOCKPILE	2000	24 X 40	50
AU	A59725	A59725 STOCKPILE	1991	48 X 40	50
AU	A04105948	104816	2004	36 X 40	50
AU	A67425	A67425 STOCKPILE	1999	48 X 40	50
EN	A01100789	PC 271	1999	24 X 40	50
EN	A02101478	PC 271	1999	24 X 40	50
EN	A01102792	PC 02–101236	2000	24 X 40	50
EN	A02102108	PC 02–101236	2000	24 X 40	50
EN	A02102873	PC 02–101236	2002	24 X 40	50
EN	A02103726	PC 02–101236	2002	24 X 40	50
EN	A02104123	PC 02–101236	2003	24 X 40	50
EN	A02105136	PC 02–101236	2003	24 X 40	50
EN	A02105898	PC 02–104899	2003	48 X 40	50
EN	A02105944	PC 02–104899	2004	36 X 40	50
EN	A02105945	PC 02–104899	2004	24 X 40	50+20
EN	A02107272	PC 02–104899	2005	48 X 40	50
EN	A02107937	PC 02–104899	2006	48 X 40	50+20
EN	A02108109	PC 02–104899	2006	36 X 40	50
EN	A02108288	PC 02–104899	2006	24 X 40	50
EN	A02107484	PC 02–104899	2005	24 X 40	50
EN	A02109360	PC 02–104899	2008	24 X 40	50
EN	A02107401	02–104899	2005	36 X 40	50
EN	A01102793	02–101236	2000	48 X 40	50
EN	A02103384	02–101236	2001	48 X 40	50
MB	A52144	PC 307	1989	24 X 40	50
MB	A52350	PC 57	1990	24 X 40	50
MB	A53703	PC 57	1990	24 X 40	50
MB	A53982	PC 57	1990	24 X 40	50
MB	A54553	PC 57	1990	24 X 40	50
MB	A65714	PC 253	1996	24 X 40	50
MB	A68436	PC 323	1997	24 X 40	50
MB	A101905	PC 04–101244	2000	24 X 40	50
MB	A04103407	PC 04–101244	2001	36 X 40	50
MB	A04103659	PC 04–101244	2001	24 X 40	50
MB	A04104262	PC 04–101244	2002	24 X 40	50
MB	A04104623	PC 04–101244	2003	48 X 40	50
MB	A04104624	PC 04–101244	2003	24 X 40	50
MB	A04105648	PC 04–104778	2003	48 X 40	50
MB	A04105913	PC 04–104778	2005	24 X 40	50
MB	A04107230	PC 04–104778	2005	24 X 40	50
MB	A04106102	PC 04–104778	2004	24 X 40	50

LEGEND:

AM = AMERICAN MODULAR SYSTEMS, INC.

AU = AURORA MODULAR INDUSTRIES, INC.

EN = ENVIRONOPLEX, INC.

MB = MODULAR STRUCTURES INTERNATIONAL, INC.

MT = MODTECH, INC.

SI = SILVER CREEK INDUSTRIES, INC.

WS = WALDEN STRUCTURES & CONSTRUCTION

GD = GARY DOUPNIK MANUFACTURING, INC.

KC = KARSTON COMPANY

NOTES:

1. ONLY THOSE BUILDINGS BUILT WITH 50# OR 50#+20# PARTITION LOADS AS NOTED IN TABLE WILL BE A PART OF THIS PC.
2. ONLY THOSE BUILDINGS MANUFACTURED BY THE SAME MANUFACTURER AND WITH PLANS AND DETAILS SHOWN ON PLAN SHEETS F–8 AND F–9 MAY BE PLACED ADJACENT TO EACH OTHER.

APPROVALS

REGISTERED PROFESSIONAL ENGINEER JAMES T. SIMPSON No.3602 STRUCTURAL STATE OF CALIFORNIA

LICENSE EXPIRES 6-30-18

DATE APPROVED AUG 02 2017

PRE–CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES

PC 04–116149

AC. FLS SS

DATE: SEP 29 2017

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REVISIONS	BY

MEMBER STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA
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STRUCTURAL ENGINEERS, INC.
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A–NUMBERS
PC 04–116149

SITE:
MOBILE MODULAR
11450 MISSION BLVD.
MIRA LOMA, CA 91752

DRAWN

CHECKED

DATE
JUN. 15, 2017

SCALE

JOB NO.

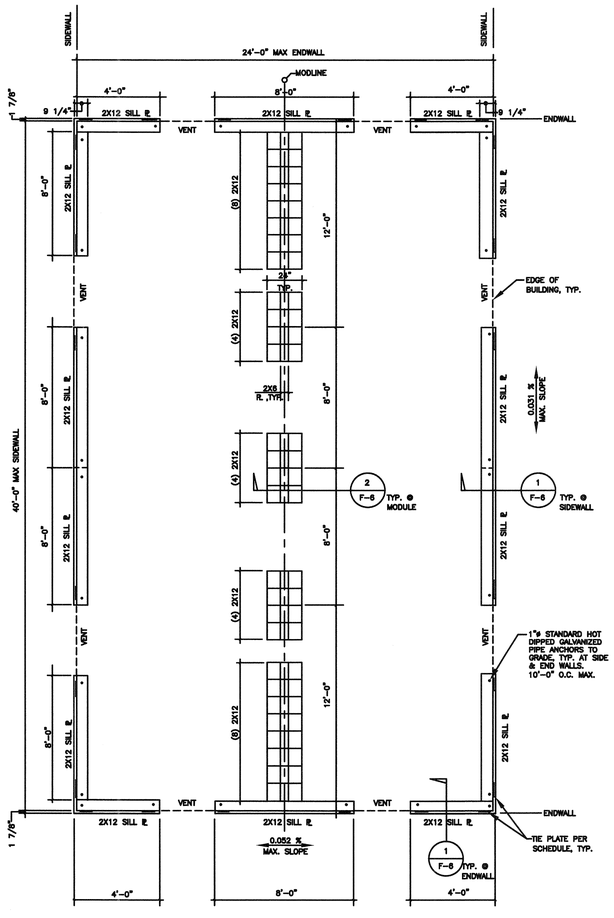
F — 2

OF 12 SHEETS

04-116149

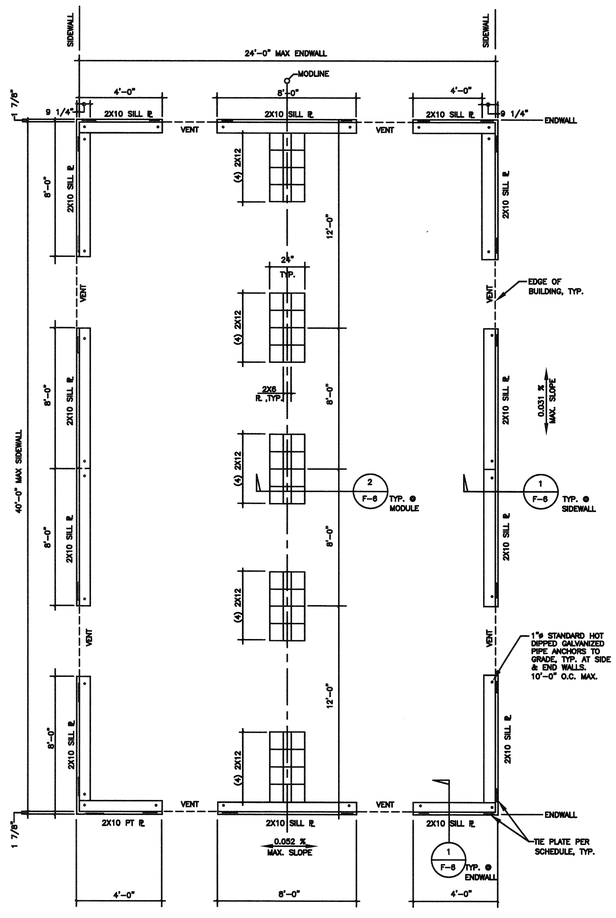
MOBILE MODULAR MANAGEMENT PC – 113163 SHEET_F–2.DWG

S_S=2.183 (MAPPED VALUE)



FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD + 20 PSF PARTITIONS

1/4" = 1'-0"



FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD

1/4" = 1'-0"

NOTES:

1. SEE SHEET F-1 FOR GENERAL NOTES.
2. SEE SHEET F-7 FOR TYPICAL NOTES.
3. UNDER FLOOR VENTILATION: (@24'X40' BLDG.)*
   REQUIRED VENT. AREA = 24' X 40'/150 = 6.4 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.25' X (4X4 + 4X 3.385) = 7.38 SQ. FT. (OK)
4. UNDERFLOOR VENTILATION: (@36'X40' BLDG.)*
   REQUIRED VENT. AREA = 36'X40'/150 = 9.6 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.375' X (6X4 + 4X3.387) = 14.08 SQ. FT. (OK)
5. UNDERFLOOR VENTILATION: (@48'X40' BLDG.)*
   REQUIRED VENT. AREA = 48'X40'/150 = 12.8 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.375' X (8X4 + 4X3.385) = 17.08 SQ. FT. (OK)
6. PROVIDE 2-2X PLATES OR BLOCKS @ 24'X40' BUILDING (MIN. HEIGHT = 3")
   PROVIDE 3-2X PLATES OR BLOCKS @ 36' & 48'X40' BUILDINGS (MIN. HEIGHT = 4 1/2")
7. ALLOWABLE SOIL BEARING = 1000 PSF, PER DSA I.R.16-1.
8. ALL NAILS FOR PLATE TO PLATE NAILING SHALL BE 16d GALV. BOX.
   ALL NAILS FOR PLYWOOD SKIRTING SHALL BE 8d GALV. BOX.
   ALL FOUNDATION NAILS SHALL BE HOT DIPPED GALVANIZED
   WITH A MIN. OF 1 OZ. OF ZINC PER SQ. FT.
9. UNDERFLOOR DRAINAGE SHALL BE PROVIDED TO PREVENT WATER FROM PONDING BENEATH THE STRUCTURE. UNDERFLOOR DRAINAGE SHALL BE NOTED AND DETAILED ON THE PROJECT SPECIFIC SITE PLANS.
10. HEIGHT OF BUILT UP PLATES WITH SILL PLATE IS NOT TO EXCEED 18" MAX.
11. ALL 2X PLATES AT EXTERIOR FOUNDATIONS AND 2X6 PLATES AT MODLINES TO BE 4' OR 8' LONG WITH NO SPLICES. IF SHORTER PIECES OF 2X PLATES ARE TO BE USED, SPLICE PLATES PER DETAIL 9/F-6.

* NOTE: UNDER FLOOR VENTILATION CALCULATION BASED ON 3" OR 4 1/2" HIGH VENTS. CALCULATIONS CAN VARY BASED ON ACTUAL SITE GRADE ELEVATIONS AND VENT HEIGHTS, MIN. VENT HEIGHT = 1 1/2" AND MAX. VENT HEIGHT = 16 1/2". PROVIDE NOTED REQUIRED VENT. AREA FOR EACH SIZE BUILDING.

TIE PLATE SCHEDULE: (1)(2)(3)

BUILDING SIZE	NUMBER OF TIE ℄'S PER ENDWALL	NUMBER OF TIE ℄'S PER SIDEWALL
24'X40'	6	6
36'X40'	8	8
48'X40'	13	12

(1) SEE DETAIL 7/F-6 FOR TYPICAL TIE ℄.

(2) USE TIE ℄'S FOR ALL MODULAR BUILDING MANUFACTURERS EXCEPT AMERICAN MODULAR SYSTEMS, INC.

(3) SEE DETAIL 8/F-6 FOR TIE PLATE APPLICABLE TO AMERICAN MODULAR SYSTEMS, INC.

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APPROVALS

STATE OF CALIFORNIA — DIVISION OF THE STATE ARCHITECT — STRUCTURAL SAFETY — JAMES N. SIMAS — No. 3602 — REGISTERED PROFESSIONAL ENGINEER — STRUCTURAL — STATE OF CALIFORNIA

LICENSE EXPIRES 6-30-18

UNDER REVIEW AUG 02 2017

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-116149
AC. FLS. SS
DATE: SEP 19 2017

REVISIONS	BY

MEMBER STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA
AMERICAN CONCRETE INSTITUTE
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Fax(909) 613-0238
STRUCTURAL ENGINEERS, INC.
4091 RIVERSIDE DRIVE, SUITE 114
CHINO, CALIFORNIA 91710

FOUNDATION PLANS
PC 04-116149

MOBILE MODULAR
11450 MISSION BLVD.
MIRA LOMA, CA 91752

SITE:

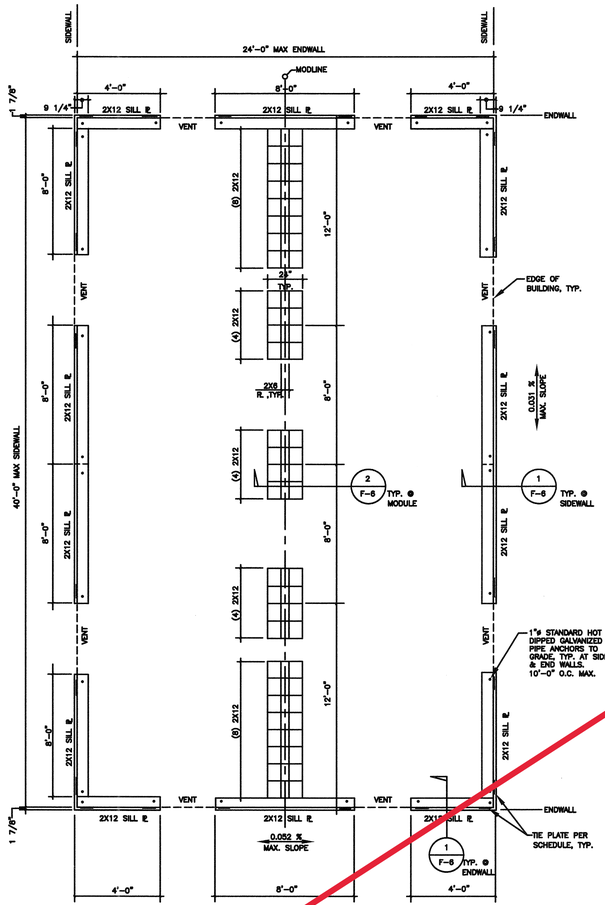
DRAWN
CHECKED
DATE JUN. 15, 2017
SCALE
JOB NO.

F – 3

OF 12 SHEETS

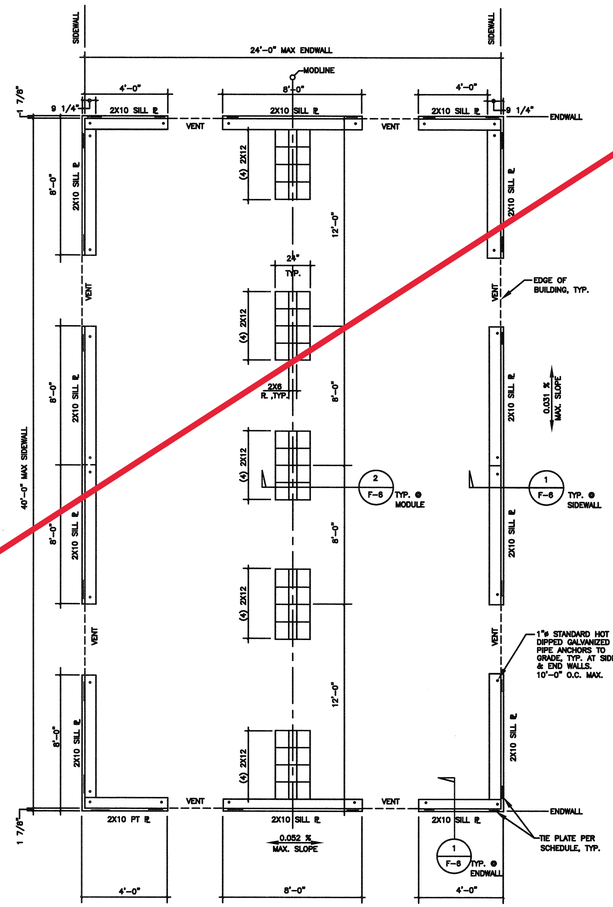
S_S=3.08 (MAPPED VALUE)

NOT APPLICABLE



FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD + 20 PSF PARTITIONS

1/4" = 1'-0"



FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD

1/4" = 1'-0"

NOTES:

1. SEE SHEET F-1 FOR GENERAL NOTES.
2. SEE SHEET F-7 FOR TYPICAL NOTES.
3. UNDER FLOOR VENTILATION: (@24'X40' BLDG.)*
   REQUIRED VENT. AREA = 24' X 40' /150 = 6.4 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.25' X (4X4 + 4X 3.385) = 7.38 SQ. FT. (OK)
4. UNDERFLOOR VENTILATION: (@36'X40' BLDG.)*
   REQUIRED VENT. AREA = 36'X40'/150 = 9.6 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.375' X (6X4 + 4X3.387) = 14.08 SQ. FT. (OK)
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   REQUIRED VENT. AREA = 48'X40'/150 = 12.8 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.375' X (8X4 + 4X3.385) = 17.08 SQ. FT. (OK)
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   PROVIDE 3-2X PLATES OR BLOCKS @ 36' & 48'X40' BUILDINGS (MIN. HEIGHT = 4 1/2")
7. ALLOWABLE SOIL BEARING = 1000 PSF, PER DSA I.R.16-1.
8. ALL NAILS FOR PLATE TO PLATE NAILING SHALL BE 16d GALV. BOX.
   ALL NAILS FOR PLYWOOD SKIRTING SHALL BE 8d GALV. BOX.
   ALL FOUNDATION NAILS SHALL BE HOT DIPPED GALVANIZED
   WITH A MIN. OF 1 OZ. OF ZINC PER SQ. FT.
9. UNDERFLOOR DRAINAGE SHALL BE PROVIDED TO PREVENT WATER FROM PONDING BENEATH THE STRUCTURE. UNDERFLOOR DRAINAGE SHALL BE NOTED AND DETAILED ON THE PROJECT SPECIFIC SITE PLANS.
10. HEIGHT OF BUILT UP PLATES WITH SILL PLATE IS NOT TO EXCEED 18" MAX.
11. ALL 2X PLATES AT EXTERIOR FOUNDATIONS AND 2X6 PLATES AT MODLINES TO BE 4' OR 8' LONG WITH NO SPLICES. IF SHORTER PIECES OF 2X PLATES ARE TO BE USED, SPLICE PLATES PER DETAIL 9/F-6.

* NOTE: UNDER FLOOR VENTILATION CALCULATION BASED ON 3" OR 4 1/2" HIGH VENTS. CALCULATIONS CAN VARY BASED ON ACTUAL SITE GRADE ELEVATIONS AND VENT HEIGHTS, MIN. VENT HEIGHT = 1 1/2" AND MAX. VENT HEIGHT = 16 1/2". PROVIDE NOTED REQUIRED VENT. AREA FOR EACH SIZE BUILDING.

TIE PLATE SCHEDULE: (1)(2)(3)

BUILDING SIZE	NUMBER OF TIE ℄'S PER ENDWALL	NUMBER OF TIE ℄'S PER SIDEWALL
24'X40'	6	6
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48'X40'	13	12

(1) SEE DETAIL 7/F-6 FOR TYPICAL TIE ℄.

(2) USE TIE ℄'S FOR ALL MODULAR BUILDING MANUFACTURERS EXCEPT AMERICAN MODULAR SYSTEMS, INC.

(3) SEE DETAIL 8/F-6 FOR TIE PLATE APPLICABLE TO AMERICAN MODULAR SYSTEMS, INC.

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APPROVALS

REGISTERED PROFESSIONAL ENGINEER JAMES T. SIMMONS No.38021 STRUCTURAL STATE OF CALIFORNIA

CIVIL ENGR. LICENSE EXPIRES 6-30-18

AUG 02 2017

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-116149
AC. DE FLS. DE SS. GR
DATE: SEP 19 2017

REVISIONS	BY

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Fax(909) 913-0339

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4281 PRESSLEY AVE. SUITE 114
CHINO, CALIFORNIA 91710

FOUNDATION PLANS
PC 04-116149

MOBILE MODULAR
11450 MISSION BLVD.
MIRA LOMA, CA 91752

SITE:

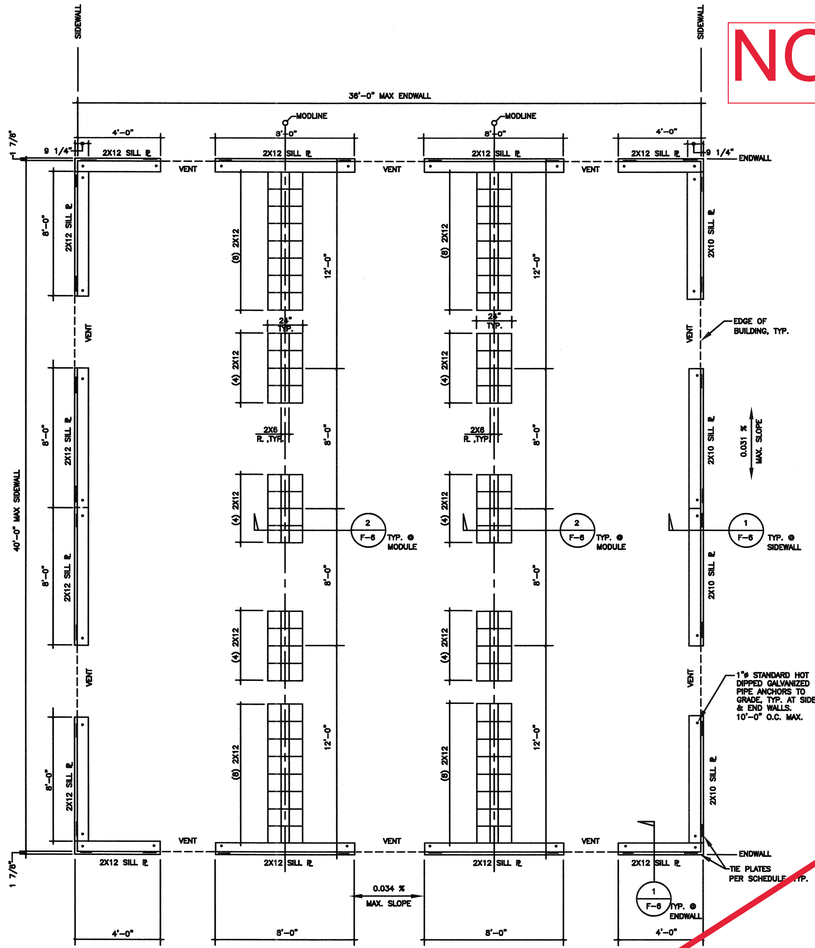
DRAWN
CHECKED
DATE JUN. 15, 2017
SCALE
JOB NO.

F-3A

OF 12 SHEETS

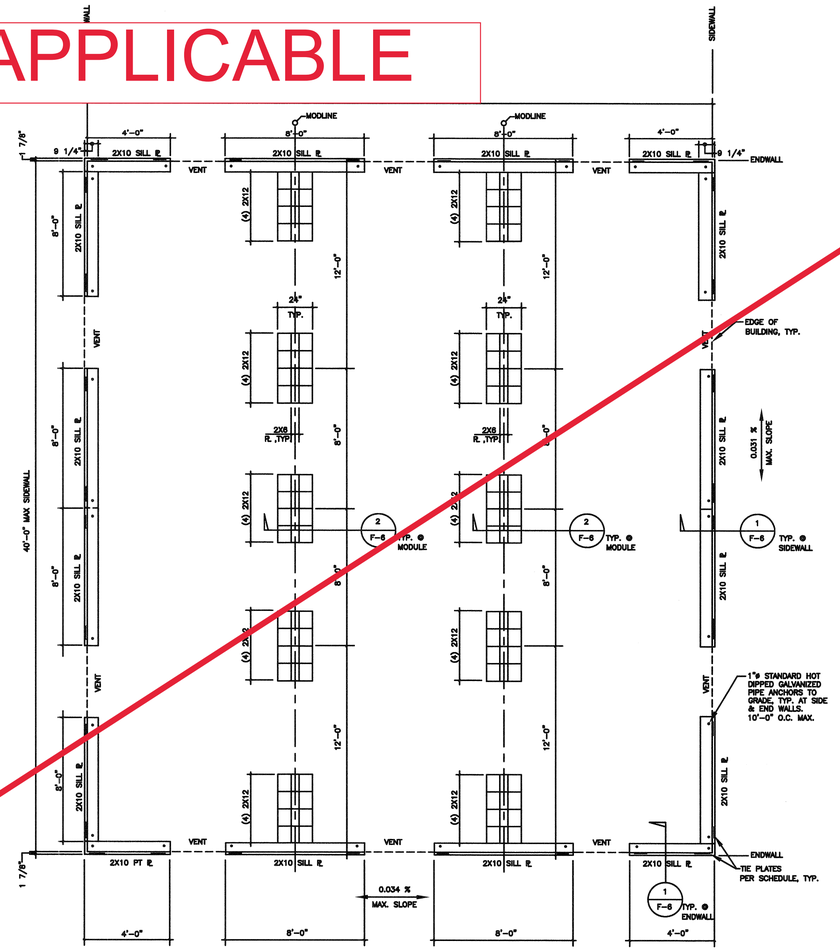
S_S=2.183 (MAPPED VALUE)

NOT APPLICABLE



FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD + 20 PSF PARTITIONS

1/4" = 1'-0"



FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD

1/4" = 1'-0"

NOTES:

1. SEE SHEET F-1 FOR GENERAL NOTES.
2. SEE SHEET F-7 FOR TYPICAL NOTES.
3. UNDER FLOOR VENTILATION: (@24'X40' BLDG.)*
   REQUIRED VENT. AREA = 24' X 40'/150 = 6.4 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.25' X (4X4 + 4X 3.385) = 7.08 SQ. FT. (OK)
4. UNDERFLOOR VENTILATION: (@36'X40' BLDG.)*
   REQUIRED VENT. AREA = 36'X40'/150 = 9.6 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.375' X (6X4 + 4X3.387) = 14.08 SQ. FT. (OK)
5. UNDERFLOOR VENTILATION: (@48'X40' BLDG.)*
   REQUIRED VENT. AREA = 48'X40'/150 = 12.8 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.375' X (8X4 + 4X3.385) = 17.08 SQ. FT. (OK)
6. PROVIDE 2-2X PLATES OR BLOCKS @ 24'X40' BUILDING (MIN. HEIGHT = 3")
   PROVIDE 3-2X PLATES OR BLOCKS @ 36' & 48'X40' BUILDINGS (MIN. HEIGHT = 4 1/2")
7. ALLOWABLE SOIL BEARING = 1000 PSF, PER DSA I.R.16-1.
8. ALL NAILS FOR PLATE TO PLATE NAILING SHALL BE 16d GALV. BOX.
   ALL NAILS FOR PLYWOOD SKIRTING SHALL BE 8d GALV. BOX.
   ALL FOUNDATION NAILS SHALL BE HOT DIPPED GALVANIZED WITH A MIN. OF 1 OZ. OF ZINC PER SQ. FT.
9. UNDERFLOOR DRAINAGE SHALL BE PROVIDED TO PREVENT WATER FROM PONDING BENEATH THE STRUCTURE. UNDERFLOOR DRAINAGE SHALL BE NOTED AND DETAILED ON THE PROJECT SPECIFIC SITE PLANS.
10. HEIGHT OF BUILT UP PLATES WITH SILL PLATE IS NOT TO EXCEED 18" MAX.
11. ALL 2X PLATES AT EXTERIOR FOUNDATIONS AND 2X6 PLATES AT MODLINES TO BE 4' OR 8' LONG WITH NO SPLICES. IF SHORTER PIECES OF 2X PLATES ARE TO BE USED, SPLICE PLATES PER DETAIL 9/F-6.

* NOTE: UNDER FLOOR VENTILATION CALCULATION BASED ON 3" OR 4 1/2" HIGH VENTS. CALCULATIONS CAN VARY BASED ON ACTUAL SITE GRADE ELEVATIONS AND VENT HEIGHTS, MIN. VENT HEIGHT = 1 1/2" AND MAX. VENT HEIGHT = 16 1/2". PROVIDE NOTED REQUIRED VENT. AREA FOR EACH SIZE BUILDING.

TIE PLATE SCHEDULE: (1)(2)(3)

BUILDING SIZE	NUMBER OF TIE ℄'S PER ENDWALL	NUMBER OF TIE ℄'S PER SIDEWALL
24'X40'	6	6
36'X40'	8	8
48'X40'	13	12

(1) SEE DETAIL 7/F-6 FOR TYPICAL TIE ℄.
(2) USE TIE ℄'S FOR ALL MODULAR BUILDING MANUFACTURERS EXCEPT AMERICAN MODULAR SYSTEMS, INC.
(3) SEE DETAIL 8/F-6 FOR TIE PLATE APPLICABLE TO AMERICAN MODULAR SYSTEMS, INC.

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APPROVALS

REGISTERED PROFESSIONAL ENGINEER JAMES T. SIMPSON No.3602 STRUCTURAL STATE OF CALIFORNIA

LICENSE EXPIRES 6-30-18

RECEIVED AUG 02 2017

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-116149
AC DF FLS DF SS DF
DATE: SEP 19 2017

REVISIONS	BY

MEMBER STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA
AMERICAN CONCRETE INSTITUTE
(909) 613-4234
Fax(909) 613-4235
STRUCTURAL ENGINEERS, INC.
4081 RIVERSIDE DRIVE, SUITE 114
CHINO, CALIFORNIA 91710

FOUNDATION PLANS
PC 04-116149

MOBILE MODULAR
11450 MISSION BLVD.
MIRA LOMA, CA 91752

SITE:

DRAWN
CHECKED
DATE JUN. 15, 2017
SCALE
JOB NO.

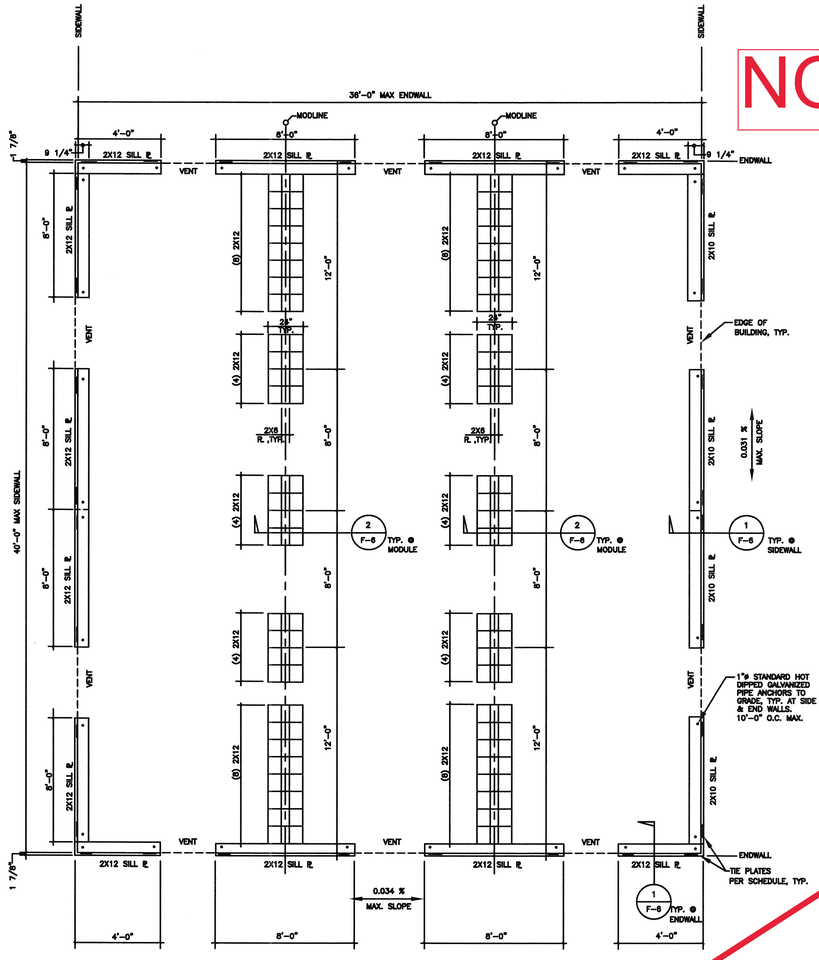
F-4

OF 12 SHEETS

MOBILE MODULAR MANAGEMENT PC 113193 SHEET_F-4.DWG

S_S=3.08 (MAPPED VALUE)

NOT APPLICABLE



FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD + 20 PSF PARTITIONS

1/4" = 1'-0"

FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD

1/4" = 1'-0"

NOTES:

1. SEE SHEET F-1 FOR GENERAL NOTES.
2. SEE SHEET F-7 FOR TYPICAL NOTES.
3. UNDER FLOOR VENTILATION: (@24'X40' BLDG.)*
   REQUIRED VENT. AREA = 24' X 40'/150 = 6.4 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.25' X (4X4 + 4X 3.385) = 7.38 SQ. FT. (OK)
4. UNDERFLOOR VENTILATION: (@36'X40' BLDG.)*
   REQUIRED VENT. AREA = 36'X40'/150 = 9.6 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.375' X (6X4 + 4X3.387) = 14.08 SQ. FT. (OK)
5. UNDERFLOOR VENTILATION: (@48'X40' BLDG.)*
   REQUIRED VENT. AREA = 48'X40'/150 = 12.8 SQ. FT.
   MIN. VENT. AREA PROVIDED = 0.375' X (8X4 + 4X3.385) = 17.08 SQ. FT. (OK)
6. PROVIDE 2–2X PLATES OR BLOCKS @ 24'X40' BUILDING (MIN. HEIGHT = 3")
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   WITH A MIN. OF 1 OZ. OF ZINC PER SQ. FT.
9. UNDERFLOOR DRAINAGE SHALL BE PROVIDED TO PREVENT WATER FROM PONDING BENEATH THE STRUCTURE. UNDERFLOOR DRAINAGE SHALL BE NOTED AND DETAILED ON THE PROJECT SPECIFIC SITE PLANS.
10. HEIGHT OF BUILT UP PLATES WITH SILL PLATE IS NOT TO EXCEED 18" MAX.
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* NOTE: UNDER FLOOR VENTILATION CALCULATION BASED ON 3" OR 4 1/2" HIGH VENTS. CALCULATIONS CAN VARY BASED ON ACTUAL SITE GRADE ELEVATIONS AND VENT HEIGHTS, MIN. VENT HEIGHT = 1 1/2" AND MAX. VENT HEIGHT = 16 1/2". PROVIDE NOTED REQUIRED VENT. AREA FOR EACH SIZE BUILDING.

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24'X40'	6	6
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(1) SEE DETAIL 7/F-6 FOR TYPICAL TIE ℄.
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APPROVALS

STATE OF CALIFORNIA – MARK A. SIMPSON – No. 3602 – STRUCTURAL – LICENSE EXPIRES 6-30-18

DATE STAMPED AUG 02 2017

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-116149
AC FLS SS
DATE: SEP 19 2017

REVISIONS	BY

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STRUCTURAL ENGINEERS, INC.
4091 RIVERSIDE DRIVE, SUITE 114
CHINO, CALIFORNIA 91710

FOUNDATION PLANS
PC 04-116149

MOBILE MODULAR
11450 MISSION BLVD.
MIRA LOMA, CA 91752

SITE:

DRAWN
CHECKED
DATE JUN. 15, 2017
SCALE
JOB NO.

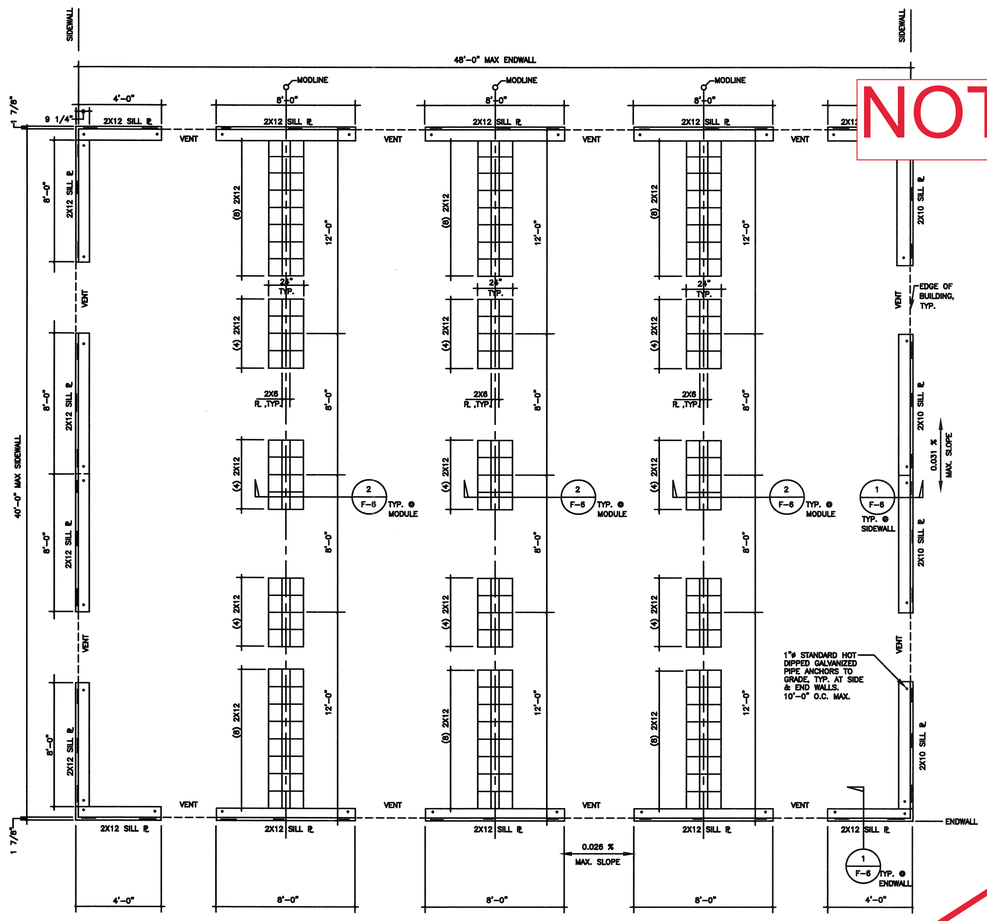
F-4A

OF 12 SHEETS

MOBILE MODULAR MANAGEMENT PC 113163 SHEET_F-4.DWG

S_S=2.183 (MAPPED VALUE)

NOT APPLICABLE



FOUNDATION PLAN – 50 PSF FLOOR LIVE LOAD + 20 PSF PARTITIONS

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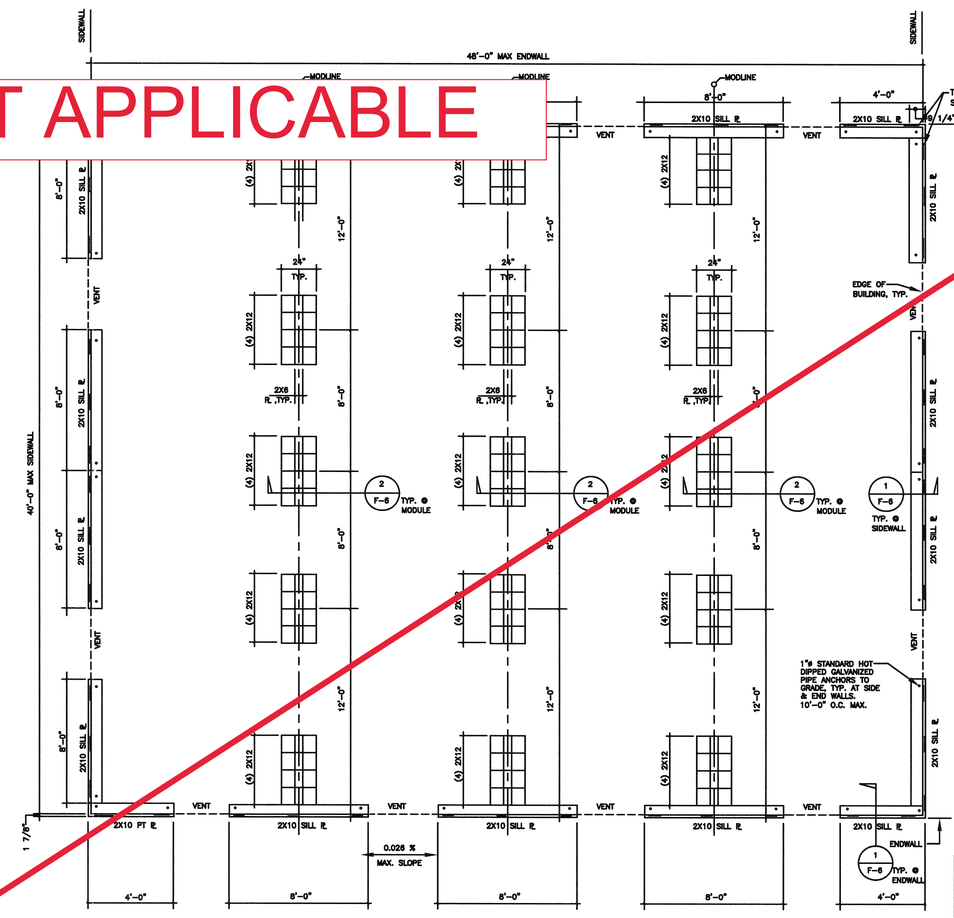

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NOTES:

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APPROVALS

PROFESSIONAL ENGINEER JAMES T. BURNS No. 36602 STRUCTURAL STATE OF CALIFORNIA
LICENSE EXPIRES 6-30-18

E.T.S. SIGNED AUG 02 2017

PRE–CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04–116149
AC. FLS SS
DATE: SEP 19 2017

REVISIONS	BY

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CHINO, CALIFORNIA 91710

FOUNDATION PLANS
PC 04–116149

MOBILE MODULAR
11450 MISSION BLVD.
MIRA LOMA, CA 91752

SITE:

DRAWN	
CHECKED	
DATE	JUN. 15, 2017
SCALE	
JOB NO.	

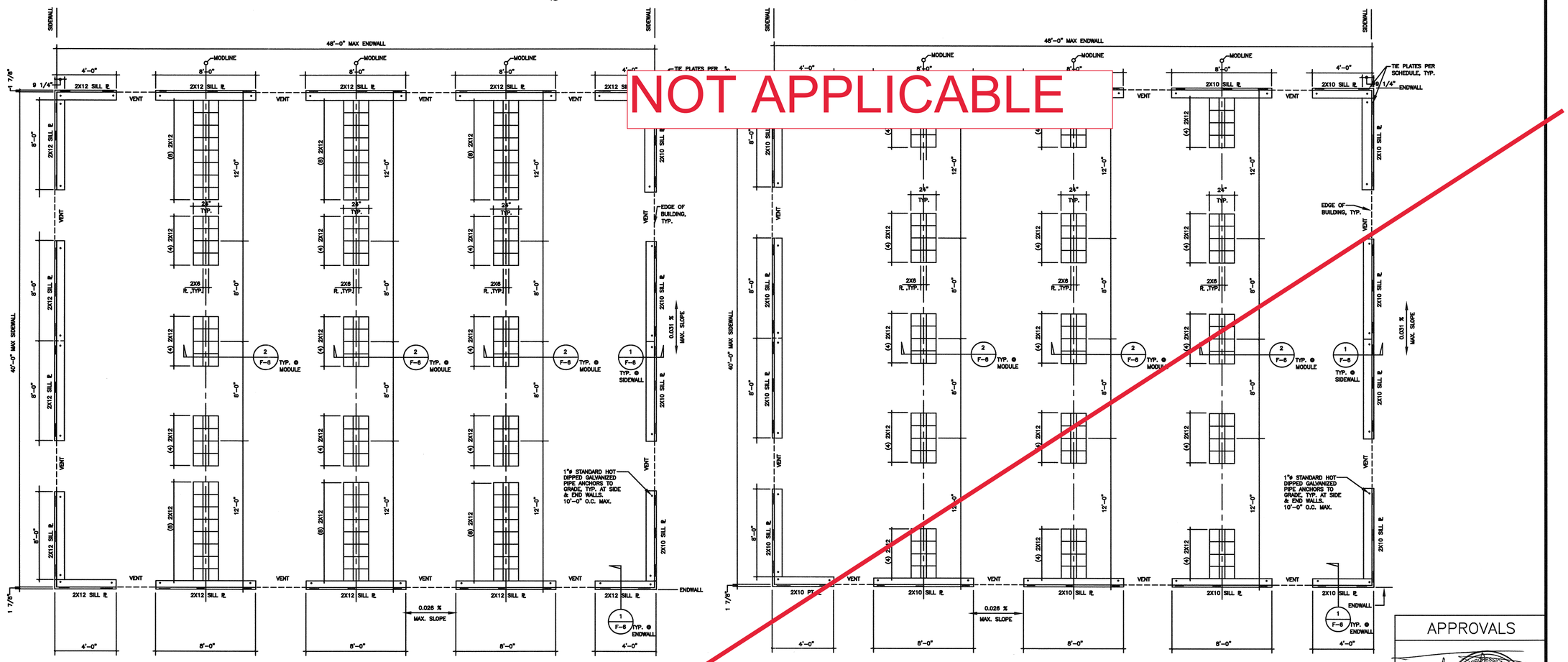
F–5

OF 12 SHEETS

MOBILE MODULAR MANAGEMENT PC 113193 SHEET_F–5.DWG

S_S=3.08 (MAPPED VALUE)

NOT APPLICABLE



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APPROVALS

REGISTERED PROFESSIONAL ENGINEER JAMES W. SIMPSON No.3602 STRUCTURAL STATE OF CALIFORNIA

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F–5A

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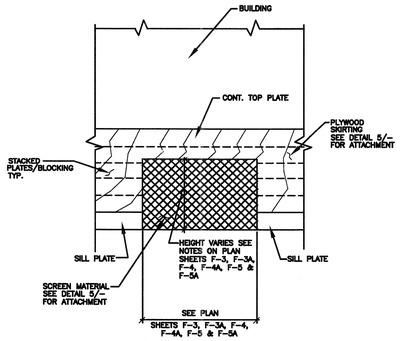
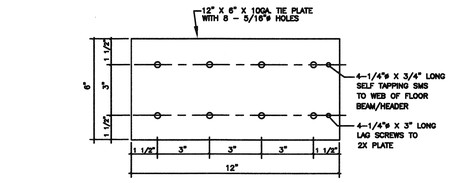
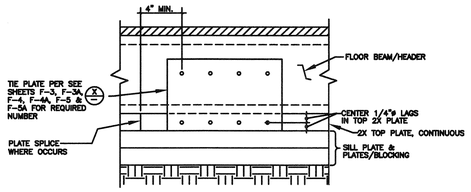


10 SCREEN DETAIL

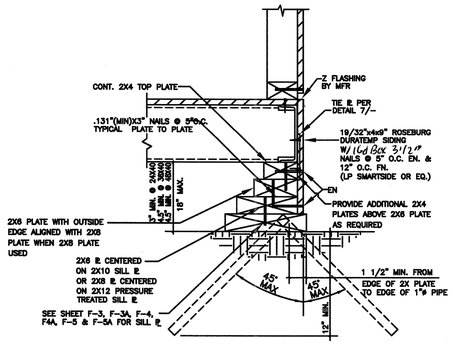
NTS



TIE PLATE X



7 TYPICAL FOUNDATION TIE PLATES

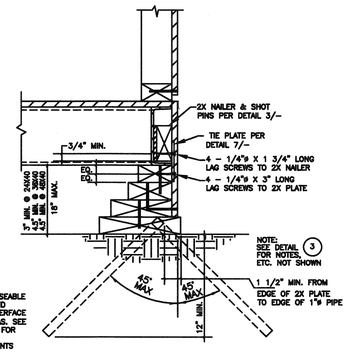


NOTES:
1. EXTERIOR SKIRTING VENTS
- PROTECTED BY CORROSION–RESISTANT, NONCOMBUSTIBLE WIRE MESH WITH OPENING 1/16" TO 1/8"
- MEETS CBC CHAPTER 7A–706A.2 REQUIREMENTS "VENTS – REQUIREMENTS #1 & #2
- CAL–FIRE "LISTING NUMBER" 8165–2192:0100; 8165–2214:0100; 8165–2232:0500 OR EQUIVLANT

2. EXTERIOR SKIRTING (FLOOR LINE TO GRADE)
- 19/32"x4'x9' ROSEBURG DURATEMP SIDING (UN–GROOVED OR GROOVED @ 8" O.C.)
- MEETS APA 303 SPECIFICATIONS FOR PLYWOOD SIDING
- COMPLIES WITH SFM 12–7A–1
- CAL–FIRE "LISTING NUMBER 8140–2031:0004"
- MEETS CBC CHAPTER 7A–707A.3.1 "EXTENT OF EXTERIOR WALL COVERING"
- MATERIAL USED SAME AS EXTERIOR SIDING TO MEET WUI REQUIREMENTS

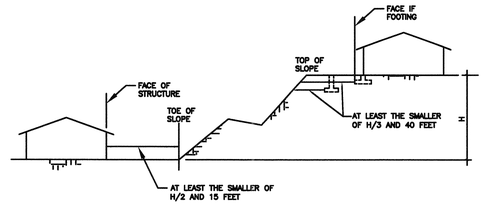
11 END WALL & SIDEWALL SILL ℄'S @ WILDLAND URBAN INTERFACE (WUI)

1 1/2" = 1'–0"



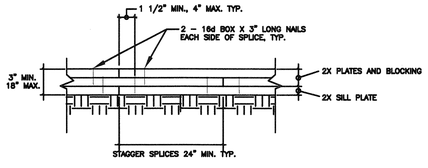
8 END WALL & SIDEWALL SILL ℄'S

@ AMERICAN MODULAR SYSTEMS BUILDINGS 1 1/2" = 1'–0"



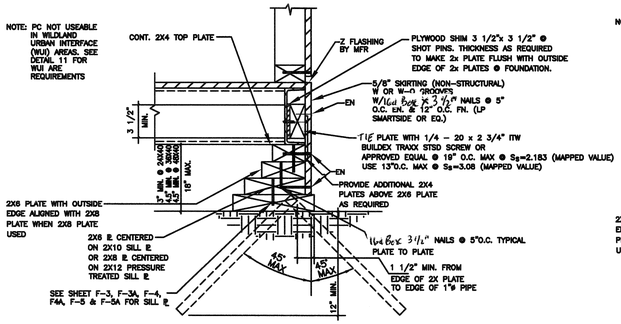
12 FOUNDATION CLEARANCES FROM SLOPES

2016 CBC 1808A.7



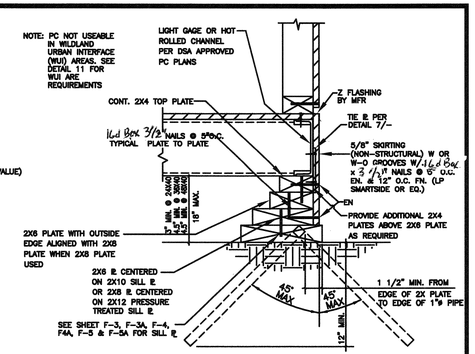
9 TYPICAL 2X PLATE SPLICE

NTS



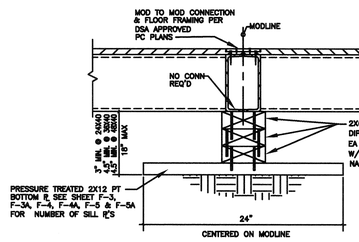
3 END WALL & SIDEWALL SILL ℄'S

@ AMERICAN MODULAR SYSTEMS BUILDINGS 1 1/2" = 1'–0"



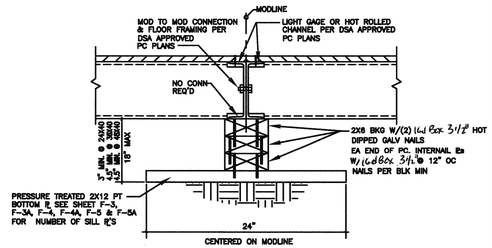
1 END WALL & SIDEWALL SILL ℄'S

1 1/2" = 1'–0"



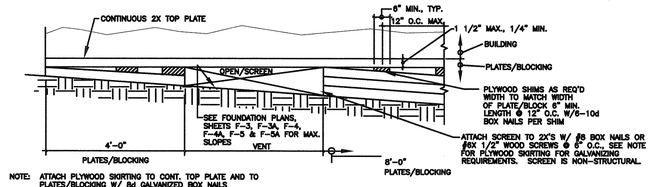
4 MODLINE FOOTING

@ AMERICAN MODULAR SYSTEMS BUILDINGS 1 1/2" = 1'–0"



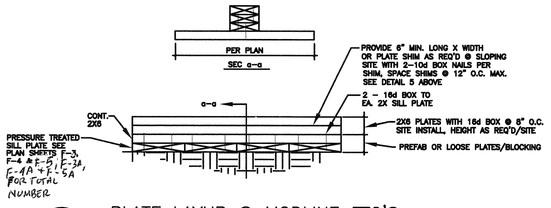
2 MODLINE FOOTING

1 1/2" = 1'–0"



5 PLATE LAYUP @ PERIMETER FTG'S

NTS



6 PLATE LAYUP @ MODLINE FTG'S

NTS

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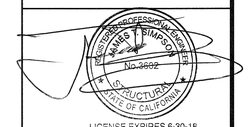
APPROVALS



LICENSE EXPIRES 6-30-18

RECEIVED AUG 02 2017

PRE–CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04–116149
AC. DK FLS DK SS CB
DATE: SEP 19 2017

REVISIONS	BY

MEMBER
STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA
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STRUCTURAL ENGINEERS, INC.
4091 RIVERSIDE DRIVE, SUITE 114
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DETAILS
PC 04–116149

MOBILE MODULAR
11450 MISSION BLVD.
MIRA LOMA, CA 91752

SITE:

DRAWN	
CHECKED	
DATE	JUN. 15, 2017
SCALE	
JOB NO.	

F–6

OF 12 SHEETS

MOBILE MODULAR MANAGEMENT PC 113193 SHEET_F–6.DWG

DSA-103 Issued 12/30/2016

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT #

DSA File No.: PC-27

Application No.: 04-116149

Date Submitted: Revised:

Revised:

School Name		District	

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A.

NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected. **For more information on use of this form, see DSA-103.INSTR.**

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

REQUIRED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
+	SOILS			
+	CONCRETE			Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13
+	MASONRY			TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5
+	STEEL, ALUMINUM			Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10
+	WOOD			
+	OTHER			

List of required verified report(s):

KEY to Columns

1 Type -	2 Performed By -
Continuous – Indicates that a continuous special inspection is required	**GE** – Indicates that the special inspection is to be performed by a registered geotechnical engineer or his or her authorized representative
Periodic – Indicates that a periodic special inspection is required	**LOR** – Indicates that the test or inspection is to be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See section 4-335, 2013 CCR Title 24, Part 1.
Test – Indicates that a test is required	**SI** – Indicates that the special inspection is to be performed by a special inspector

Name of Architect or Engineer in general responsible charge

Name of Structural Engineer (When structural design has been delegated)

Signature of Architect or Structural Engineer date

IDENTIFICATION STAMP
DIV OF THE STATE ARCHITECT
APP. #_____
AC N/A F/LS N/A SS_____
DATE_____

NOTE:

THE EXAMPLE FORM DSA-103 SHOWN IS FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTIRE PROJECT-SPECIFIC FORM DSA-103.

A FORM DSA-103 IS TO BE COMPLETED FOR EACH PROJECT APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND THE EXAMPLE FORM DSA-103 IS TO BE CROSSED OUT ON THIS DRAWING

GENERAL SPECIFICATIONS

SECTION 1A

1. GENERAL

A. THE REQUIREMENTS OF THE GENERAL CONDITIONS OF THE AGREEMENT AND THIS GENERAL 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.

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 (CCR) 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 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. COST OF THESE INSPETNIONS/TESTS SHALL BE BORNE BY THE SCHOOL DISTRICT.

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 MOVE-IN AND REMOVAL OF BUILDINGS SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

SECTION 2A 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. 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.
B. CONNECTION OF THE ELEMENTS TOGETHER SHALL BE DONE ACCORDING TO INSTRUCTIONS ON THE DRAWINGS. FLASHING, TRIM AND OTHER LOOSE ITEMS SHALL BE INSTALLED PER PLANS AND DETAILS OF THE ORIGINAL MANUFACTURER'S DRAWINGS.

SECTION 3A CARPENTRY

1. SCOPE OF WORK

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

2. 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 CCR- TABLE 2304.10.1. NAILS SHALL BE CORROSION RESISTANT BOX NAILS.
C. 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.
D. TRIM SEALED AT ALL EDGES. SEALANT PAINTED TO MATCH TRIM OR SIDING.

SECTION 4A MATERIAL SPECIFICATIONS

1. STRUCTURAL FRAMING SHALL BE HEM FIR – 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 DOC PS 1-07 OR DOC PS-04.
   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 B18.2.1-2012 AND 2015 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 2015 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 TABLE 12J AND 12K 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 2015 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 12L AND 12M 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 BOX NAILS PER ALL REQUIREMENTS OF 2015 NDS. NAILING NOT SPECIFICALLY INDICATED SHALL COMPLY WITH CCR TITLE 24, PART 2, TABLE 2304.9.1. ALL NAILS SHALL BE GALVANIZED OR OTHER CORROSION RESISTANT COATING WHERE EXPOSED TO WEATHER, IN FOUNDATIONS AND AS NOTED ON PLANS, PER THE REQUIRMENTS OF CCR TITLE 24, PART 2, WITH MINIMUM BENDING YIELDS PER TABLE 12N, 12P, 12Q AND 12R 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. PRESSURE PRESERVATIVE TREATMENT SHALL BE PER SECTION 2303.1.9, CCR TITLE 24, PART 2. PROVIDE QUALITY MARK ON ALL TREATED FOUNDATION MEMBERS. PRESSURE TREATED WOOD AND IDENTIFICATION MUST COMPLY WITH CBC 2303.1.9.1. ALL FOUNDATION MEMBERS SHALL BE MARKED AS "FOR GROUND CONTACT (UC4A)" OR "FOR ABOVE GROUND USE (UC3A OR UC3B)" 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 AWPA STANDARD UI.
12. ONLY MATERIAL IN CONTACT WITH GROUND NEEDS TO BE PRESSURE TREATED. ALL OTHER FOUNDATION LUMBER CAN BE DF OR HF#2 OR EQUAL.
13. IF MACHINE NAILING IS UTILIZED FOR THIS PROJECT, CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF CCR TITLE 24, PART 2. MACHINE NAILING IS SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER OR ARCHITECT AND THE DIVISION OF THE STATE ARCHITECT.
14. FASTENERS FOR PRESSURE-PRESERVATIVE TREATED AND FIRE-RETARDANT TREATED WOOD SHALL COMPLY WITH SEC. 2304.10 OF CBC.
15. NAILS AND SPIKES USED IN WET OR EXTERIOR LOCATIONS SHALL COMPLY WITH SEC. 2304.10.5.1 OF CBC.
16. SHIM MATERIAL SHALL BE PLYWOOD CD EXP 1 OR EQUAL (NOT P.T.).
17. USED LUMBER IN GOOD CONDITION IS ACCEPTABLE FOR USE IN FOUNDATION SYSTEM.

SITE INSTALLATION REQUIREMENTS CLAUSE:

SITE INSTALLATION REQUIREMENTS FOR DSA CLASSROOM BUILDINGS. IN THE CASE OF EQUIPMENT LOCATED IN THE STATE OF CALIFORNIA, THE LESSEE IS RESPONSIBLE FOR THE SITE BEING CLEARED (FREE OF GRASS, SHRUBS, TREES, ETC.) AND GRADED TO WITHIN 4 1/2" OF LEVEL GRADE FOR EACH BUILDING. IF THE SITE EXCEEDS THE 4 1/2" REQUIREMENT ADDITIONAL COSTS MAY BE CHARGED TO LESSEE. UNDER NO CIRCUMSTANCES SHOULD THE SITE BE GREATER THAN 9" FROM LEVEL GRADE OR HAVE LESS THAN A 1000 PSF MINIMUM SOIL BEARING PRESSURE. PRIOR TO DELIVERY, THE LESSEE SHALL MARK THE FOUR CORNERS OF THE BUILDING ON THE SITE, INCLUDING THE DOOR LOCATION. SHOULD SPECIAL HANDLING BE REQUIRED TO EITHER PLACE, INSTALL OR REMOVE THE CLASSROOM ON THE LESSEE'S SITE DUE TO SITE OBSTRUCTIONS SUCH AS FENCING, LANDSCAPING, OTHER CLASSROOMS, ETC., ADDITIONAL COSTS WILL BE CHARGED TO LESSEE.

TEST AND INSPECTIONS:

1. PROVIDE ELECTRICAL GROUNDING TEST PER DSA IR E-1
2. NO OTHER TESTS AND INSPECTIONS ARE REQUIRED.

APPROVALS

REGISTERED PROFESSIONAL ENGINEER JAMES R. SIMPSON No. 3602 STRUCTURAL STATE OF CALIFORNIA

LICENSE EXPIRES 6-30-18

RECEIVED AUG 02 2017

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

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DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-116149
AC. DK FLS. DK SS. DM
DATE: SEP 19 2017

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4501 RIVERSIDE DRIVE, SUITE 114
CHINO, CALIFORNIA 91710

GENERAL SPECIFICATIONS/
DSA FORM 103
PC 04-116149

MOBILE MODULAR
11450 MISSION BLVD.
MIRA LOMA, CA 91752

SITE:

DRAWN

CHECKED

DATE JUN. 15, 2017

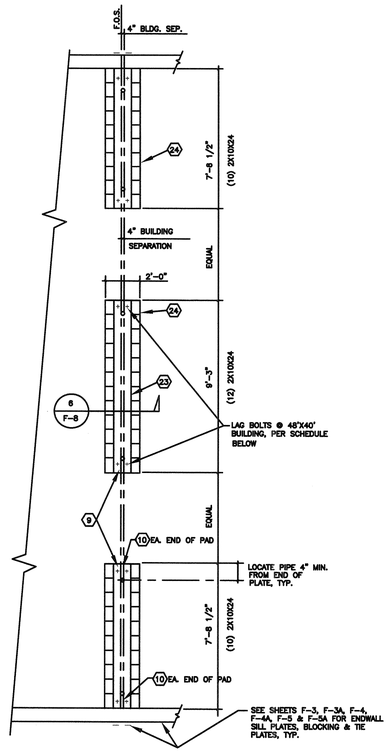
SCALE

JOB NO.

F-7

OF 12 SHEETS

MOBILE MODULAR MANAGEMENT PC 113163 SHEET_F-7.DWG



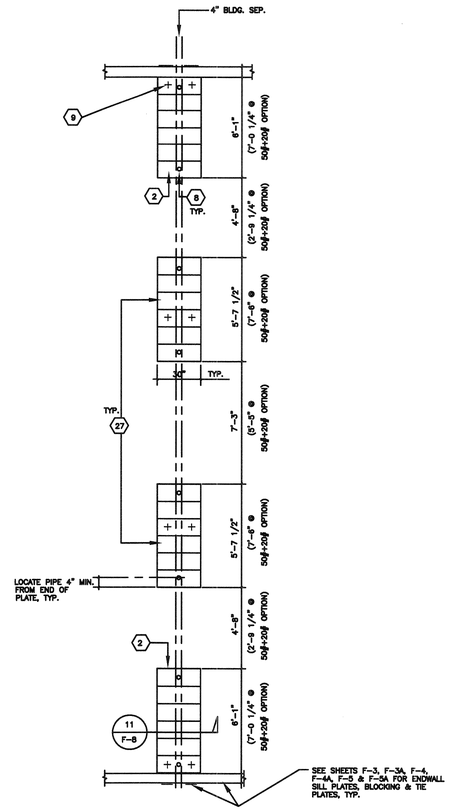
9. LAG BOLT AND HOLE PER LAG SCHEDULE TABLE
10. DRIVE 1" DIA. X 15" G.I. PIPE @ 10'-0" O.C. MAX. DRILL SILL PLATE 1-1/4" MAX. PIPE MAY BE DRIVEN AT MAX. 45 ANGLE TO VERTICAL
11. 7"X 9.8# STEEL FLOOR CHANNEL
21. FLOOR JOIST OR BLOCK BETWEEN FLOOR JOIST.
23. CONTINUOUS 2X12X(SEE PLAN). NAIL(2) 16d AT EACH END AND 5" O.C.
24. 2X10X24" LONG SILL PADS. P.T.H.F. (SEE PLAN FOR QUANTITY 10 AT ENDS & 12 AT INTERIOR)

MODULAR STRUCTURES INTERNATIONAL, INC. (MB) 6 F-8

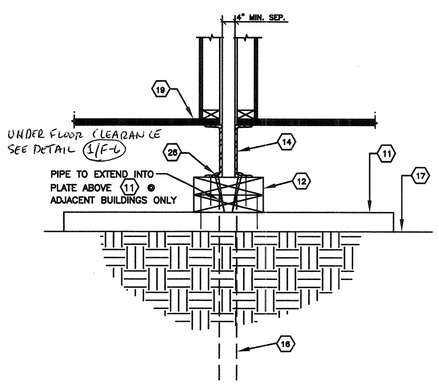
ADJACENT BUILDING FOUNDATIONS

SEE SHEET F-2 FOR DSA APPLICATION NUMBERS.

NOTE: ADJACENT BUILDING PLAN DETAILS ARE PER EXISTING APPROVED DSA STOCKPILE PLANS



PAD FTG'S AT ADJ. BLDG.



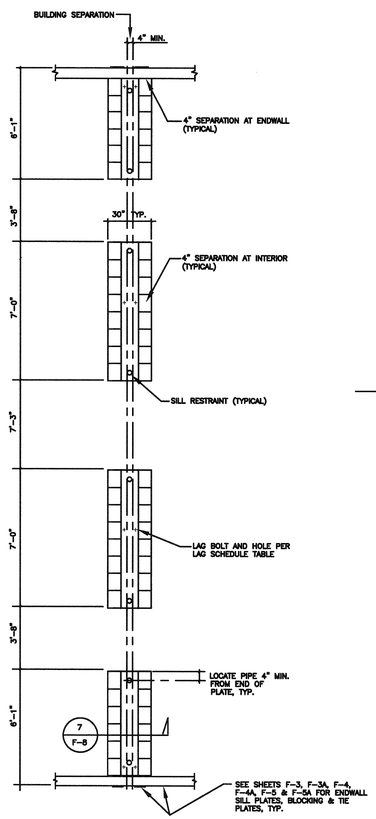
2 6-2X12X30" LONG SILL PADS @ 50 PSF, 7-2X12X30" LONG SILL PADS @ 50 PSF + 20 PSF
8 1"@PIPE EA. END EA. PAD AT ADJ. BLDG LINE
9 LAG BOLT AND HOLE PER LAG SCHEDULE TABLE
11 2X12X2'-6" SILL PLATE SEE FOUND. PLAN FOR QUANTITY REQ'D.
12 2 X 12 PLATES W/2-16d BOX @ 5" O.C.
14 FLOOR FRAME BEAM SEE STRUCTURAL
16 SILL RESTRAINT 1"@PIPE SEE FOUND. FOR LOCATION
17 FINISH GRADE
18 PLYWOOD SUBFLOOR
26 LAG SCREW QUANTITY TO BE PROVIDED PER LAG SCHEDULE
27 6-2X12X30" LONG SILL PADS @ 50 PSF, 8-2X12X30" LONG SILL PADS @ 50 PSF + 20 PSF

MODTECH, INC.(MT) 11 F-8

ADJACENT BUILDING FOUNDATIONS

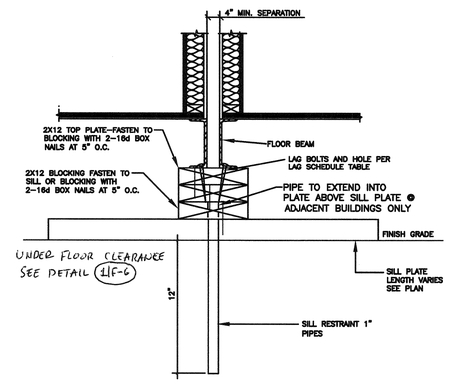
SEE SHEET F-2 FOR DSA APPLICATION NUMBERS.

NOTE: ADJACENT BUILDING PLAN DETAILS ARE PER EXISTING APPROVED DSA STOCKPILE PLANS



FOOTINGS AT ADJACENT BUILDING SEPARATION (4" SEPARATION)

PLAN 10X F-8



4" BUILDING SEPARATION FOOTING 7 F-8

WALDEN STRUCTURES & CONSTRUCTION (WS)

ADJACENT BUILDING FOUNDATIONS

SEE SHEET F-2 FOR DSA APPLICATION NUMBERS.

NOTE: ADJACENT BUILDING PLAN DETAILS ARE PER EXISTING APPROVED DSA STOCKPILE PLANS

BUILDING SIZE	NUMBER OF LAGS PER BUILDING AT ADJACENT BUILDING LINES			
	5/8"ø x 4"		1/2"ø x 3 1/2"	
	Ss=2.183	Ss=3.08	Ss=2.183	Ss=3.08
24' X 40'	4	5	5	7
36' X 40'	5	7	8	11
48' X 40'	7	10	10	14

APPROVALS

JAMES T. SIMPSON — No. 3902 — REGISTERED PROFESSIONAL ENGINEER — STRUCTURAL — STATE OF CALIFORNIA

LICENSE EXPIRES 6-30-18

AUG 02 2017

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-116149
AC. DA FLS. DA SS BC
DATE: SEP 19 2017

REVISIONS	BY

MEMBER
STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA
AMERICAN CONCRETE INSTITUTE
(909) 813-0234
Fax(909) 813-0236

STRUCTURAL ENGINEERS, INC.
4091 RIVERSIDE DRIVE, SUITE 114
CHINO, CALIFORNIA 91710

ADJACENT BLDGS
PC 04-116149

MOBILE MODULAR
11450 MISSION BLVD.
MIRA LOMA, CA 91752

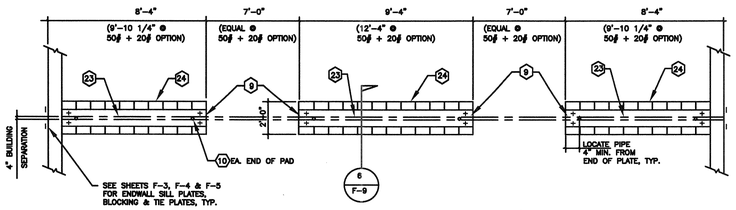
SITE:

DRAWN
CHECKED
DATE JUN. 15, 2017
SCALE
JOB NO.

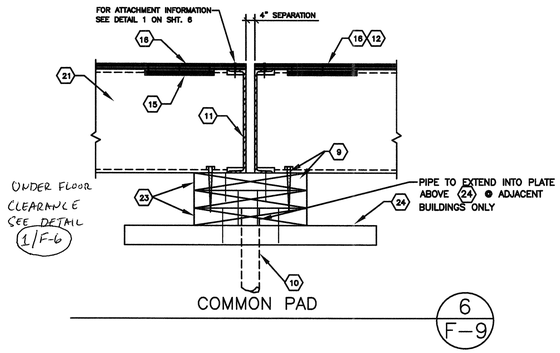
F-8

OF 12 SHEETS

MOBILE MODULAR MANAGEMENT PC 113163 SHEET_F-8ALONG



9. LAG BOLT AND HOLE PER LAG SCHEDULE TABLE
10. DRIVE 1" STANDARD DIA. X 15" G.I. PIPE @ 10'-0" O.C. MAX. DRILL SILL PLATE 1-1/4" MAX. PIPE MAY BE DRIVEN AT MAX. 45 ANGLE TO VERTICAL
11. STEEL FLOOR CHANNEL
12. 5" DIA. ACCESS HOLE AT MODULE CONNECTION BOLT LOCATIONS.
15. PLYWOOD STRIP – 3/4" X 3" X 8" PIECE W/(2) #12X 2-1/4" FLAT HEAD WOOD SCREWS EACH END.
16. PLUG – 5" DIA. PIECE OF FLOOR SHEATHING W/(2) #12X 2-1/4" FLAT HEAD WOOD SCREWS EA. END.
21. FLOOR JOIST OR BLOCK BETWEEN FLOOR JOIST.
23. CONTINUOUS 2X12X(SEE PLAN). NAIL(2) 16d AT EACH END AND 5" O.C.
24. 2X10X24" LONG SILL PADS. P.T.H.F. (SEE PLAN FOR QUANTITY 10 AT ENDS AND 12 AT INTERIOR @ 50# FLOOR LOAD, PROVIDE 12 AT ENDS AND 16 AT INTERIOR @ 50# + 20# FLOOR LOAD OPTION)



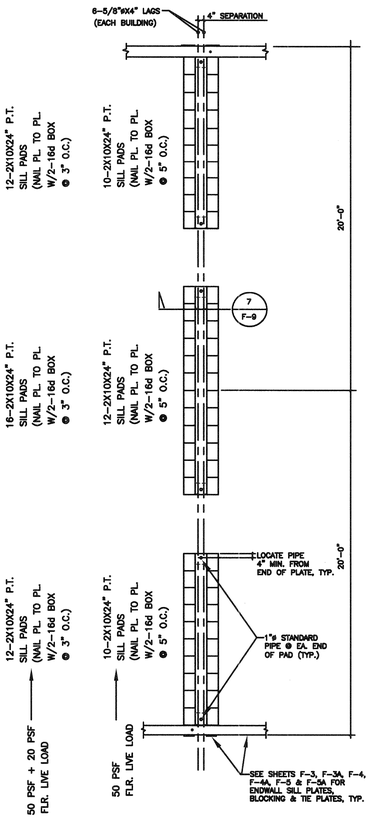
COMMON PAD — 6 / F-9

AURORA MODULAR INDUSTRIES, INC. (AU)

ADJACENT BUILDING FOUNDATIONS

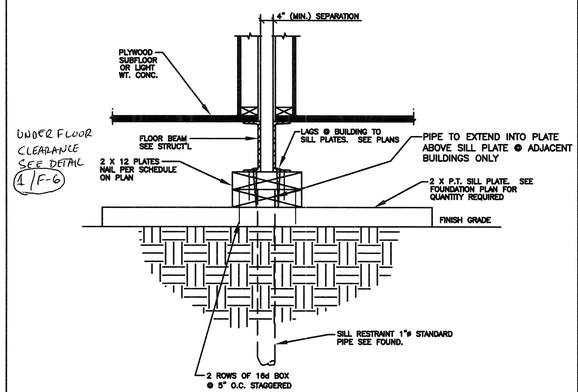
SEE SHEET F-2 FOR DSA APPLICATION NUMBERS.

NOTE: ADJACENT BUILDING PLAN DETAILS ARE PER EXISTING APPROVED DSA STOCKPILE PLANS



PARTIAL PLAN @ BLDG. SEPARATION

(SEPARATION APPLIES WHEN BUILDINGS ARE SET AS TWO INDIVIDUAL UNITS)



4" BLDG. SEPARATION @ FTG. — 7 / F-9

SILVER CREEK INDUSTRIES, INC. (SI)

ADJACENT BUILDING FOUNDATIONS

SEE SHEET F-2 FOR DSA APPLICATION NUMBERS.

NOTE: ADJACENT BUILDING PLAN DETAILS ARE PER EXISTING APPROVED DSA STOCKPILE PLANS

APPROVALS

REGISTERED PROFESSIONAL ENGINEER JAMES T. SIMPSON No. 3802 STRUCTURAL STATE OF CALIFORNIA

LICENSE EXPIRES 6-30-18

AUG 02 2017

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DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
PC 04-116149
AC. DL FLS. DL SS DL
DATE: SEP 18 2017

REVISIONS	BY

MEMBER STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA
AMERICAN CONCRETE INSTITUTE
STRUCTURAL ENGINEERS, INC.
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CHINO, CALIFORNIA 91710
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MIRA LOMA, CA 91752

SITE:

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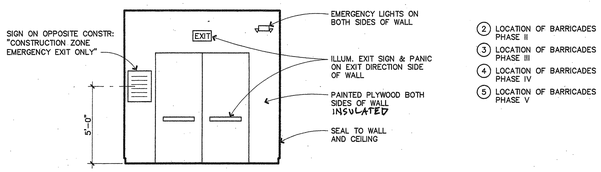
JOB NO.

F — 9

OF 12 SHEETS

MOBILE MODULAR MANAGEMENT PC 113193 SHEET_F-9ALT00



2 LOCATION OF BARRICADES PHASE II
3 LOCATION OF BARRICADES PHASE III
4 LOCATION OF BARRICADES PHASE IV
5 LOCATION OF BARRICADES PHASE V

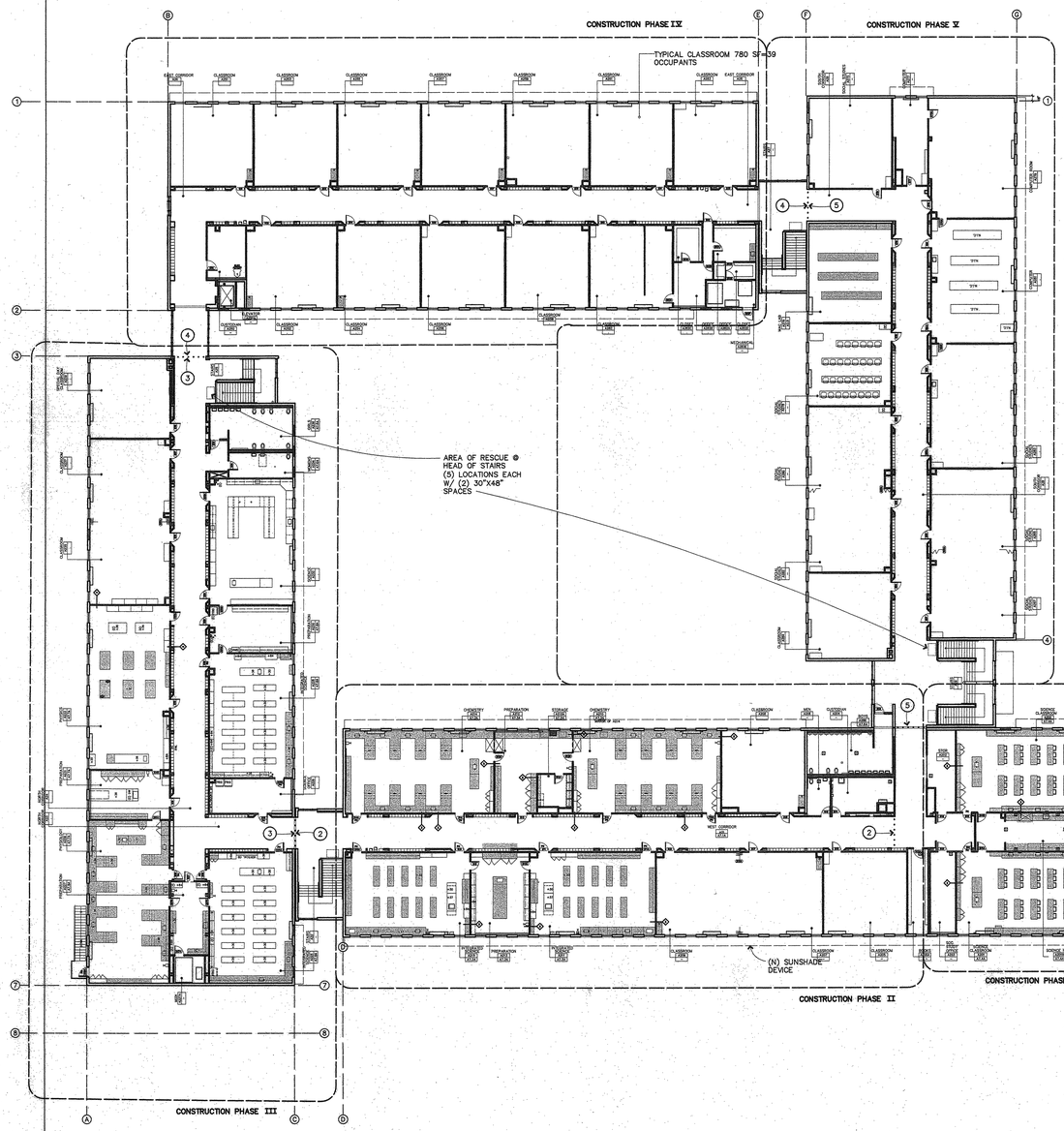
TEMPORARY BARRICADE

BOTH ENDS OF BOTH FLOORS
MOVED PER EACH PHASE REQUIREMENTS

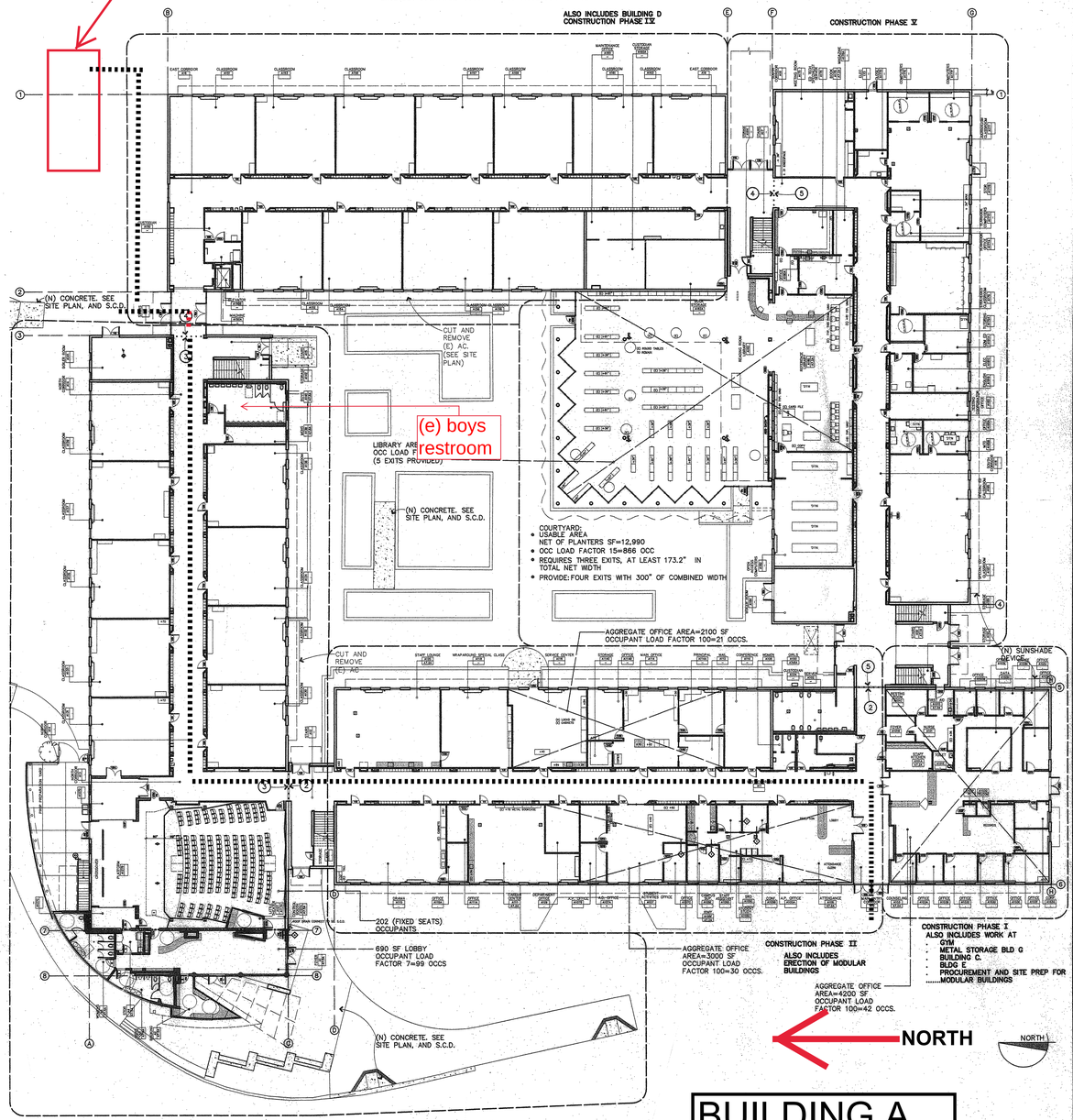
proposed restroom #1

OCCUPANT LOADS AND EXITS				
	EXITS DIRECTED TO EXTERIOR	EXITS THROUGH CORRIDOR	REQ'D EXIT WIDTH	PROVIDED EXIT WIDTH
FIRST FLOOR	241		49"	252"
FIRST FLOOR		1496*	299"	7 PAIR ⅜, 1 PAIR ⅜", 2 SNGL ⅜ @ 2ND FLR =660"
SECOND FLOOR		1560	312"	

*EXCLUDES COURTYARD OCCUPANTS IN "ACCESSORY SPACE"



SECOND FLOOR PLAN
1"=20'-0"



BUILDING A

FIRST FLOOR PLAN
1"=20'-0"

AS-BUILT FOR DSA INFO ONLY

GENERAL NOTE
THIS SHEET TO BE USED ONLY FOR
1. PHASING SEE SPECS FOR MORE DETAILED INFORMATION
2 OVERALL ORIENTATION
3 OCCUPANT LOADS AND EXITS
4 TEMPORARY BARACADE

DSA-ORS APPROVAL
DSA-APPL 01-104562
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APPL # 104562
ACCESS FLS MW SS
DATE MAR 14 2003

QUATTROCCHI KWOK ARCHITECTS
LICENSED ARCHITECT
STEVEN KWOK
NO. C-20161
EXP. APRIL, 2003
STATE OF CALIFORNIA
636 Fifth St.
Santa Rosa CA 95404
Telephone 707 576-0829
Facsimile 707 576-0295

RECORD DRAWING

REDWOOD HIGH SCHOOL INCREMENT 2

TAMALPAIS UNION SCHOOL DISTRICT
395 DOHERTY DRIVE, LARKSPUR, CALIFORNIA

BUILDING A FIRST AND SECOND OVERALL PLANS PHASING

DATE MARCH 19, 2003
PROJECT NO. 561.02 - INC 2
SCALE 1"=20'-0"
DRAWN BY MPT

OPSC # BLD. A
A2.0A
SHEET OF