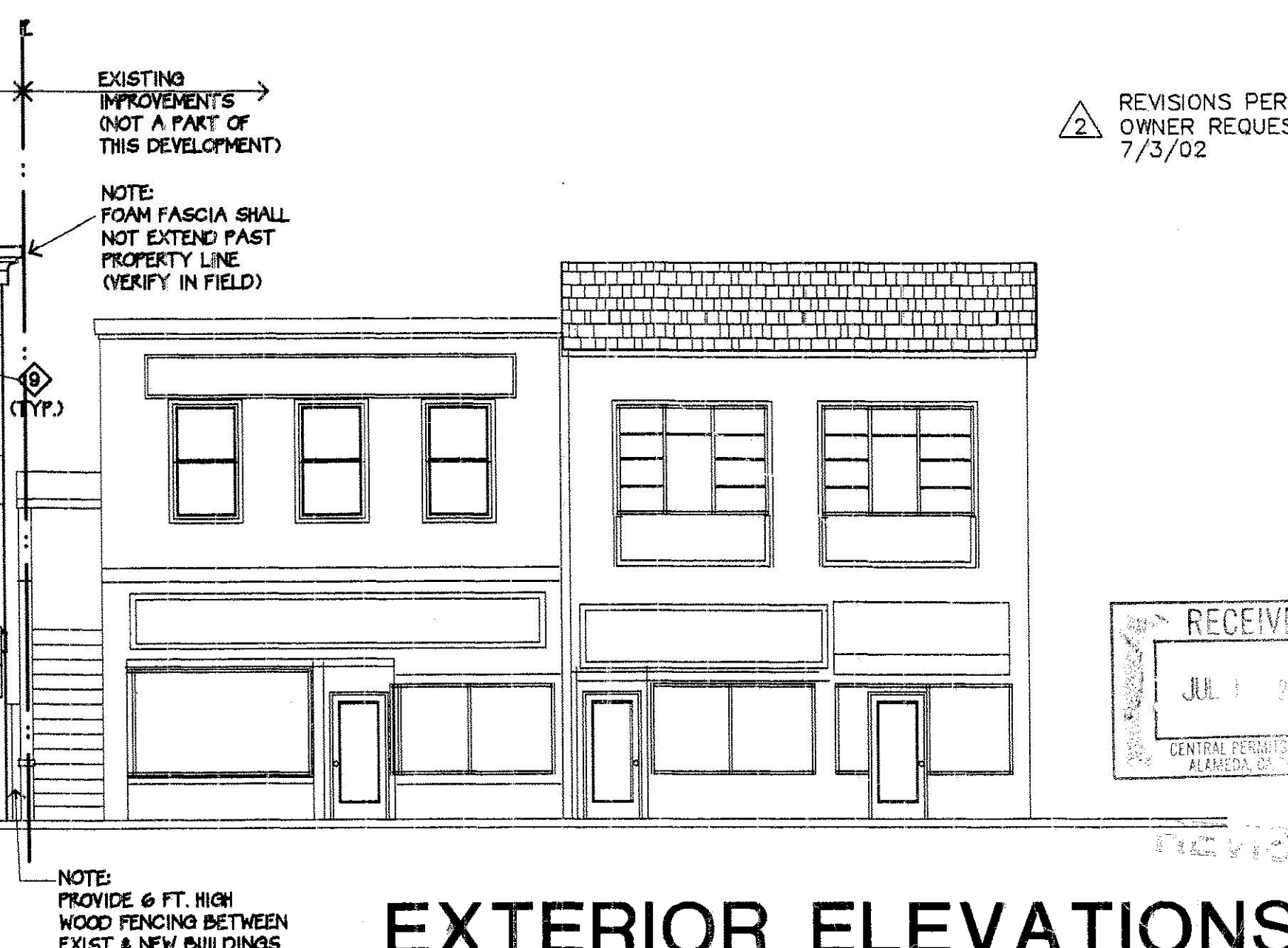
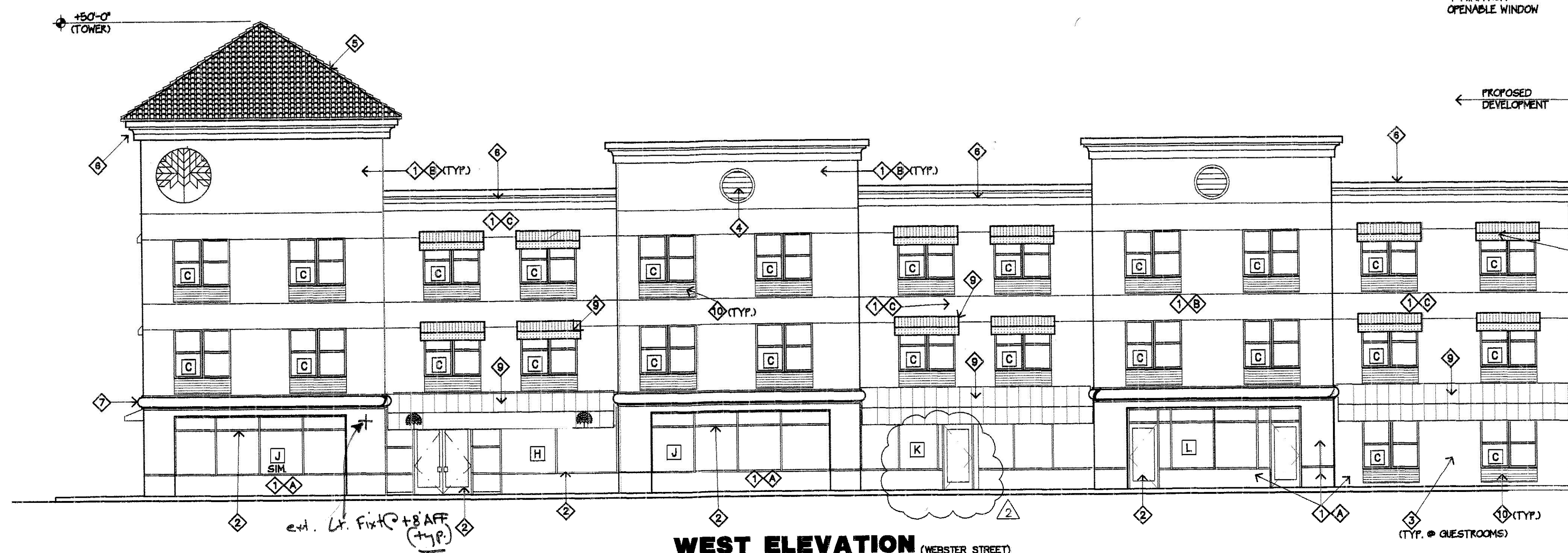
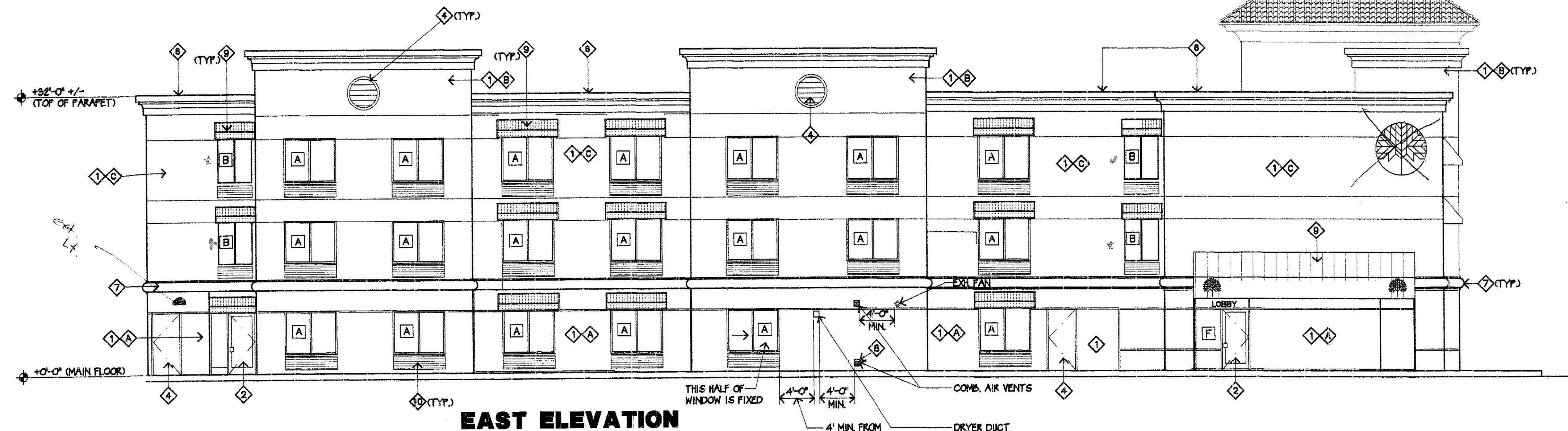


EXTERIOR FINISH SCHEDULE		
SYMBOL	MATERIAL	COLOR
1	CEM. PLASTER WALLS FIRST FLOOR	COPPER NAIL B SW 2315
2	CEM. PLASTER WALLS UPPER EXTRUDED WALLS	HONEY BEE TWT SW2330
3	CEM. PLASTER WALLS UPPER INDENTED WALLS	MONTE CARLO B SW 2314
4	PRE-FINISHED ALUMINUM STOREFRONT ENTRANCE METAL	ENGLISH IVY N SW2935
5	METAL WINDOWS (CLEAR GLASS)	ENGLISH IVY N SW2935
6	METAL DOOR & FRAME - UPPER DECORATIVE VENTS	COPPER NAIL B SW 2315
7	CLAY TILE ROOFING MATCH WITH FIRST FLOOR	TERRA COTTA FLASHED 1ESSS 6300R/1ESSS 6300R
8	CEM. PLASTER/FOAM CORNICE	CREAMY WHITE B SW 2445
9	CEM. PLASTER/FOAM BAND	COPPER NAIL B SW 2315
10	METAL WALL LOUVER	PAINTED TO MATCH ADJACENT WALL COLOR
11	CANVAS AWNING (FIRE RESISTANT)	SUNBRELLA FOREST GREEN
12	HVAC GRILLE	PAINTED TO MATCH ADJACENT WALL COLOR

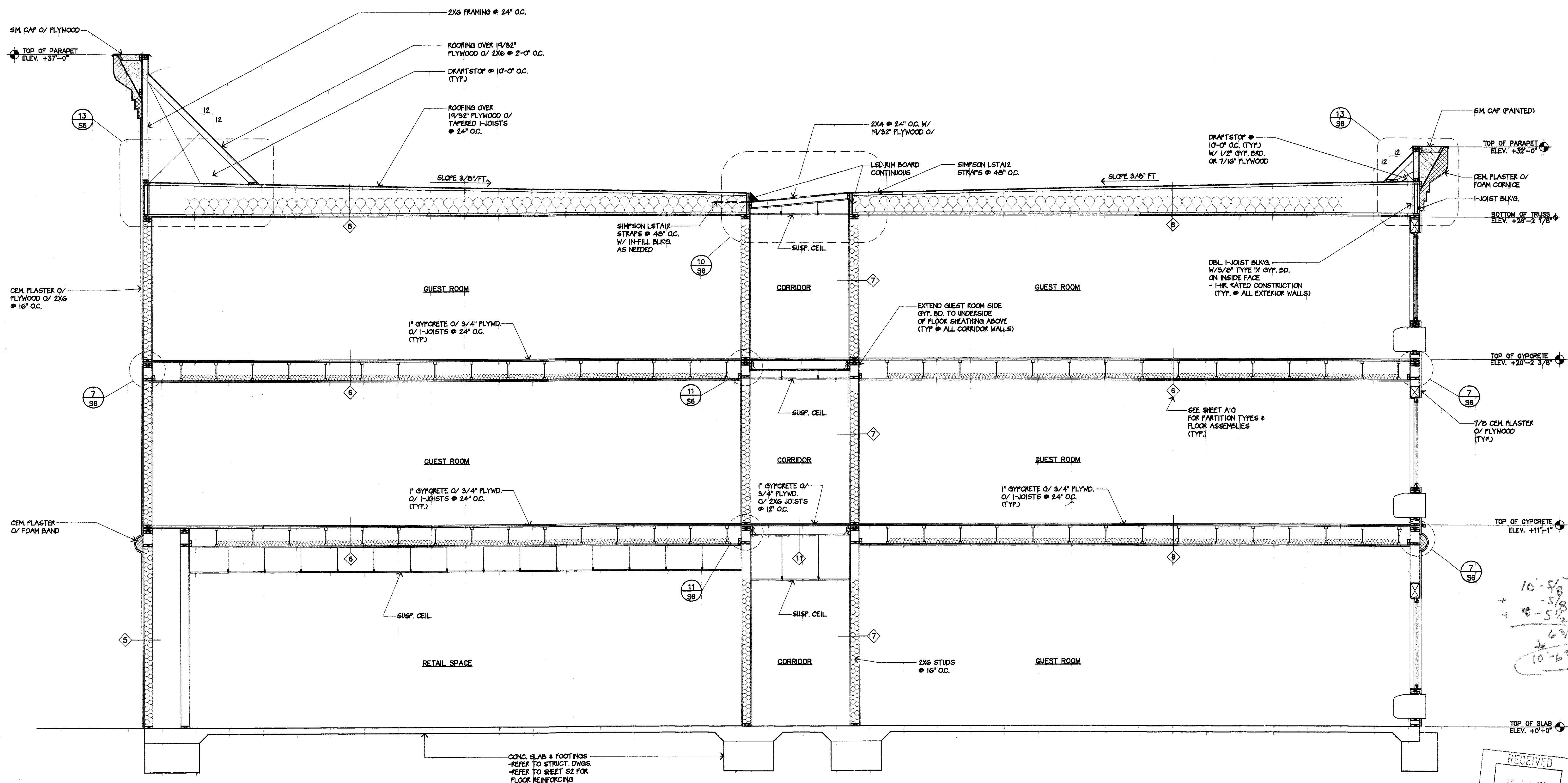
SW = SHERMAN WILLIAMS COLOR CHART

DARK - AWNING RED B SW 2314  
MEDIUM - MONTE CARLO B SW 2314  
LIGHT - HONEY BEE TWT SW2330  
WINDOW FRAMES - ENGLISH IVY N SW2935  
AWNINGS - SUNBRELLA FOREST GREEN



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





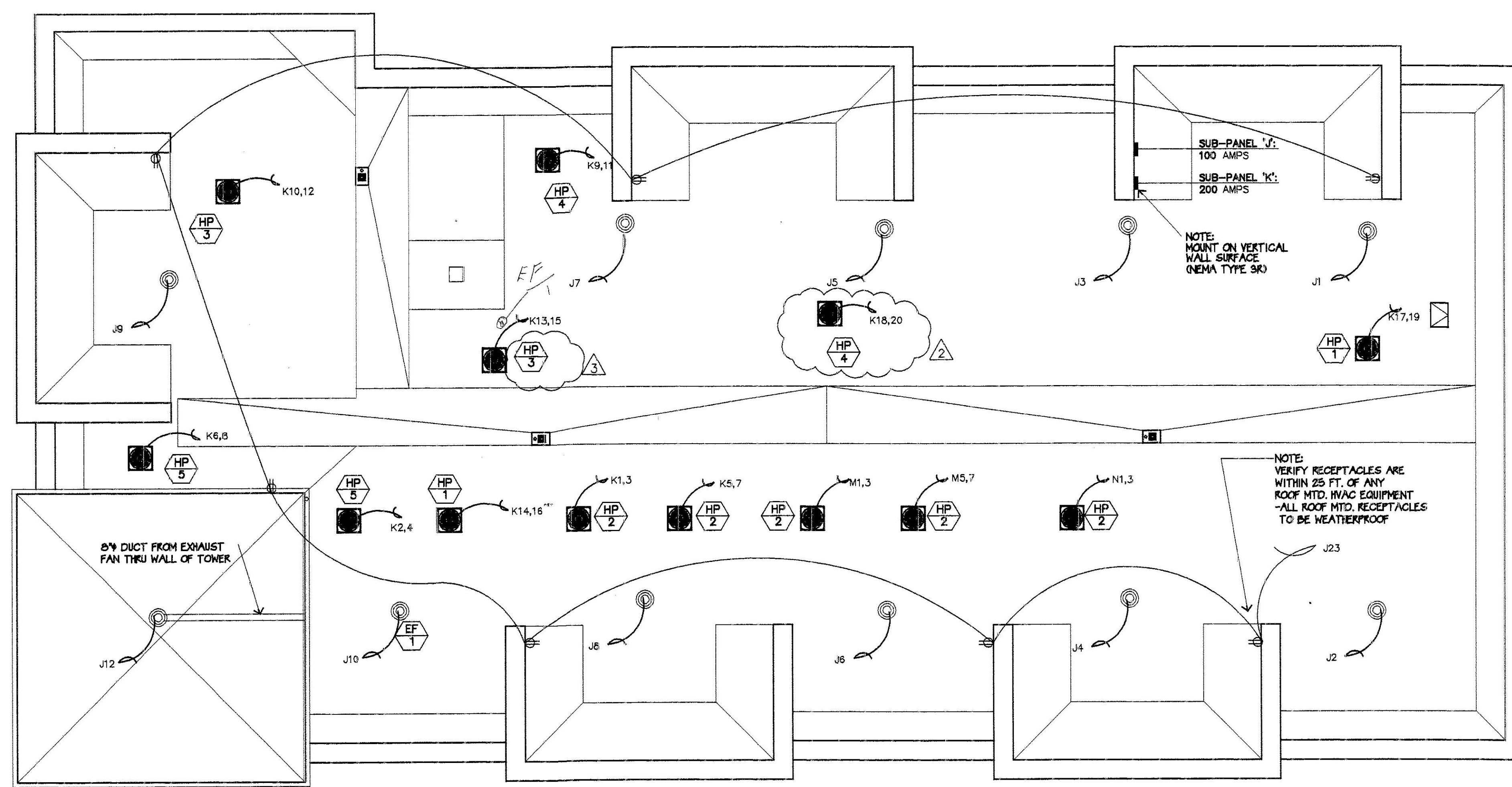
**BUILDING SECTION**  
SCALE: 3/8" = 1'-0"

RECEIVED  
JUL 11 2002  
CENTRAL PERMITS OFFICE  
ALAMEDA, CA 94601

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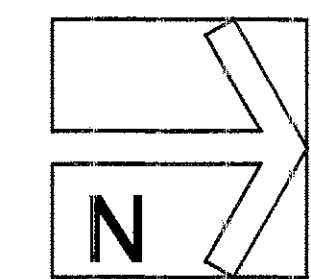
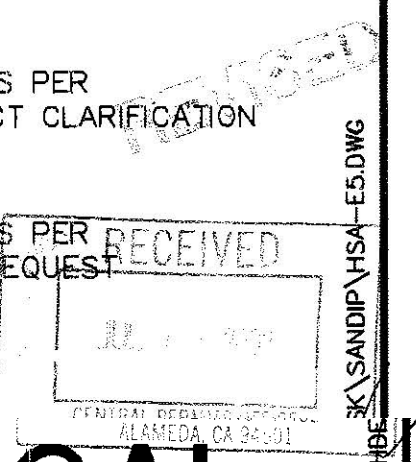
**A7B**  
SHEET  
OF





3 REVISIONS PER ARCHITECT CLARIFICATION 7/3/02

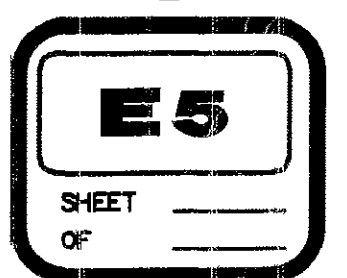
2 REVISIONS PER OWNER REQUEST 7/3/02



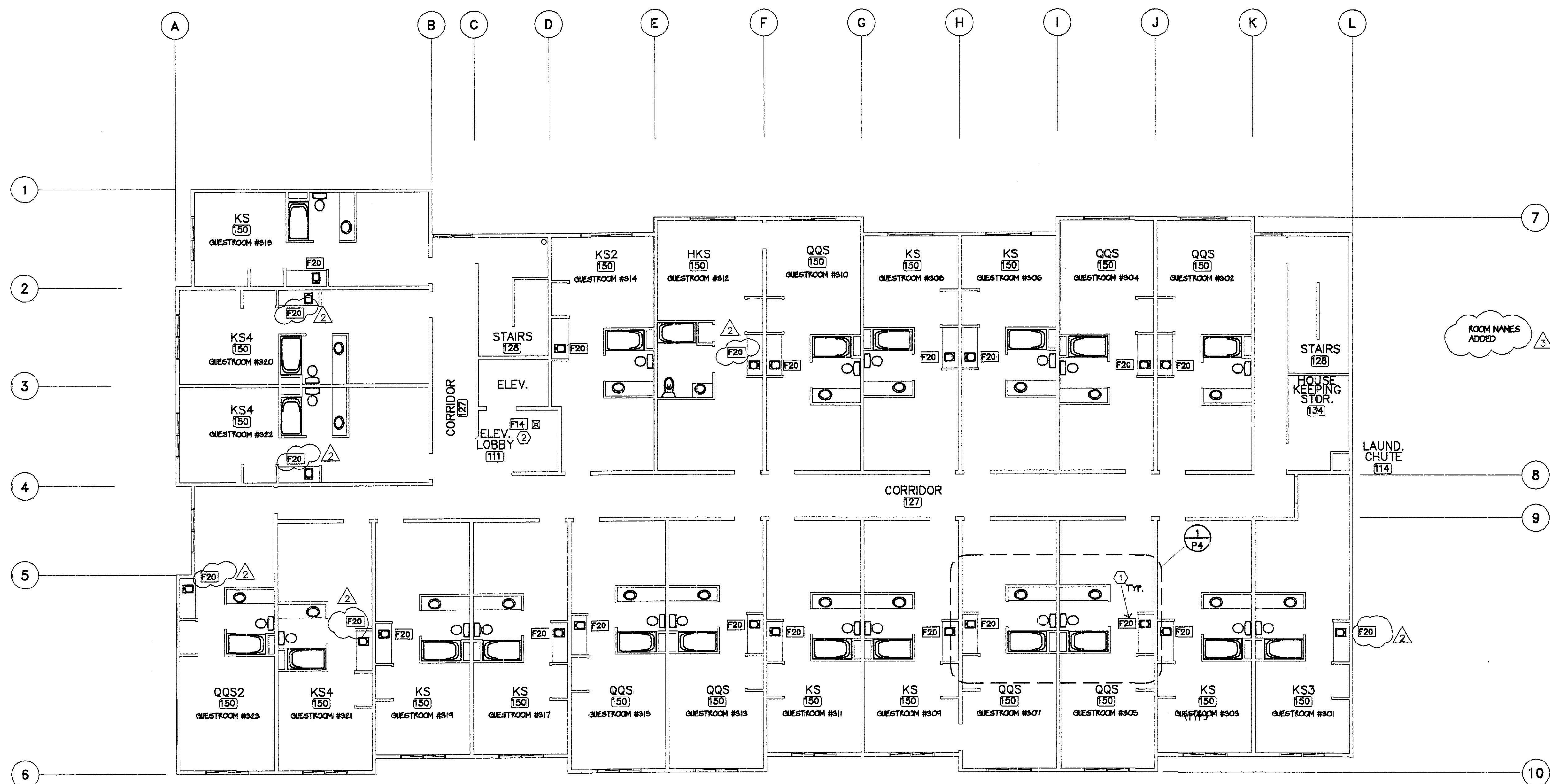
# ELECTRICAL ROOF PLAN

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

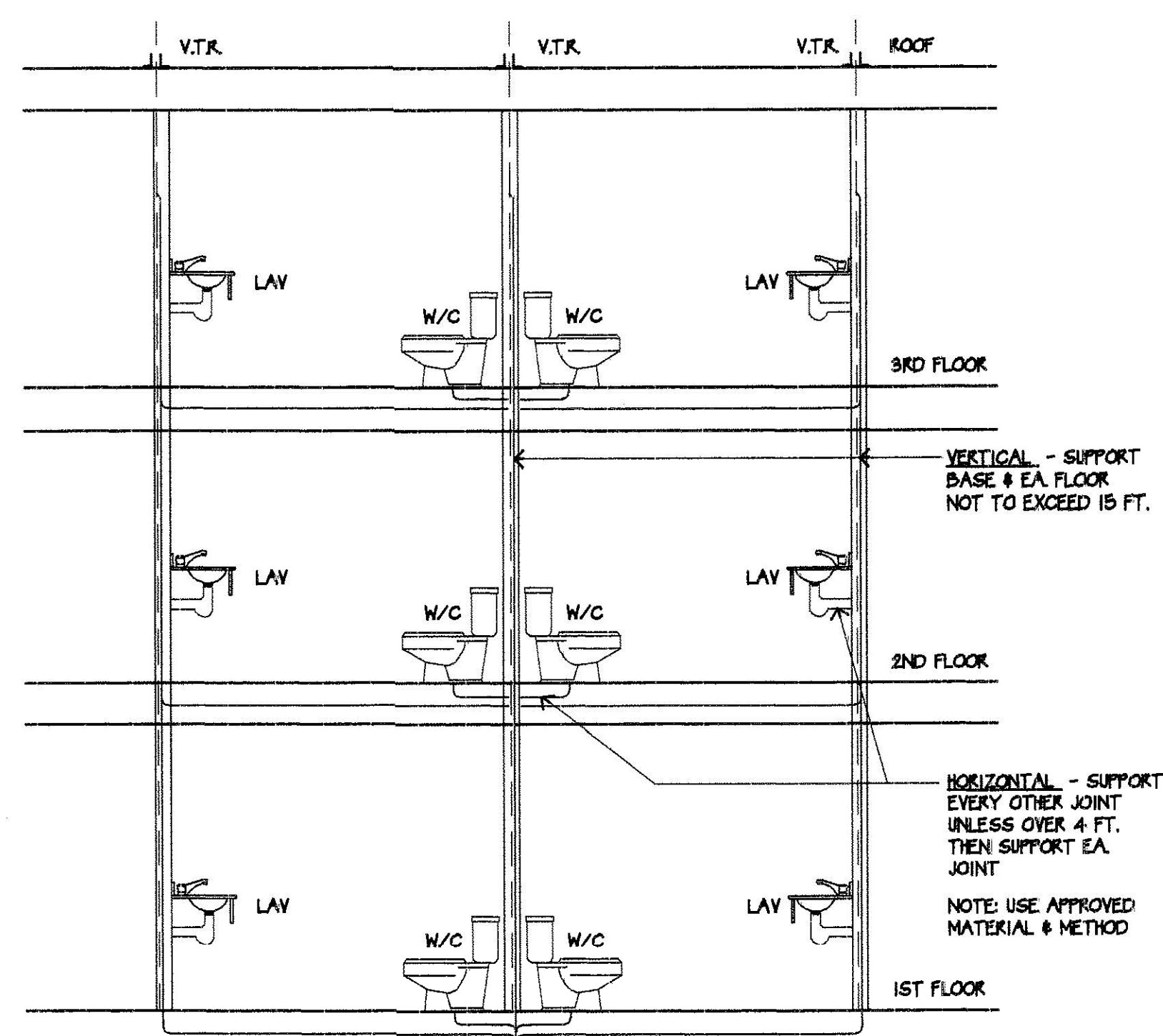
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F. VARCHER



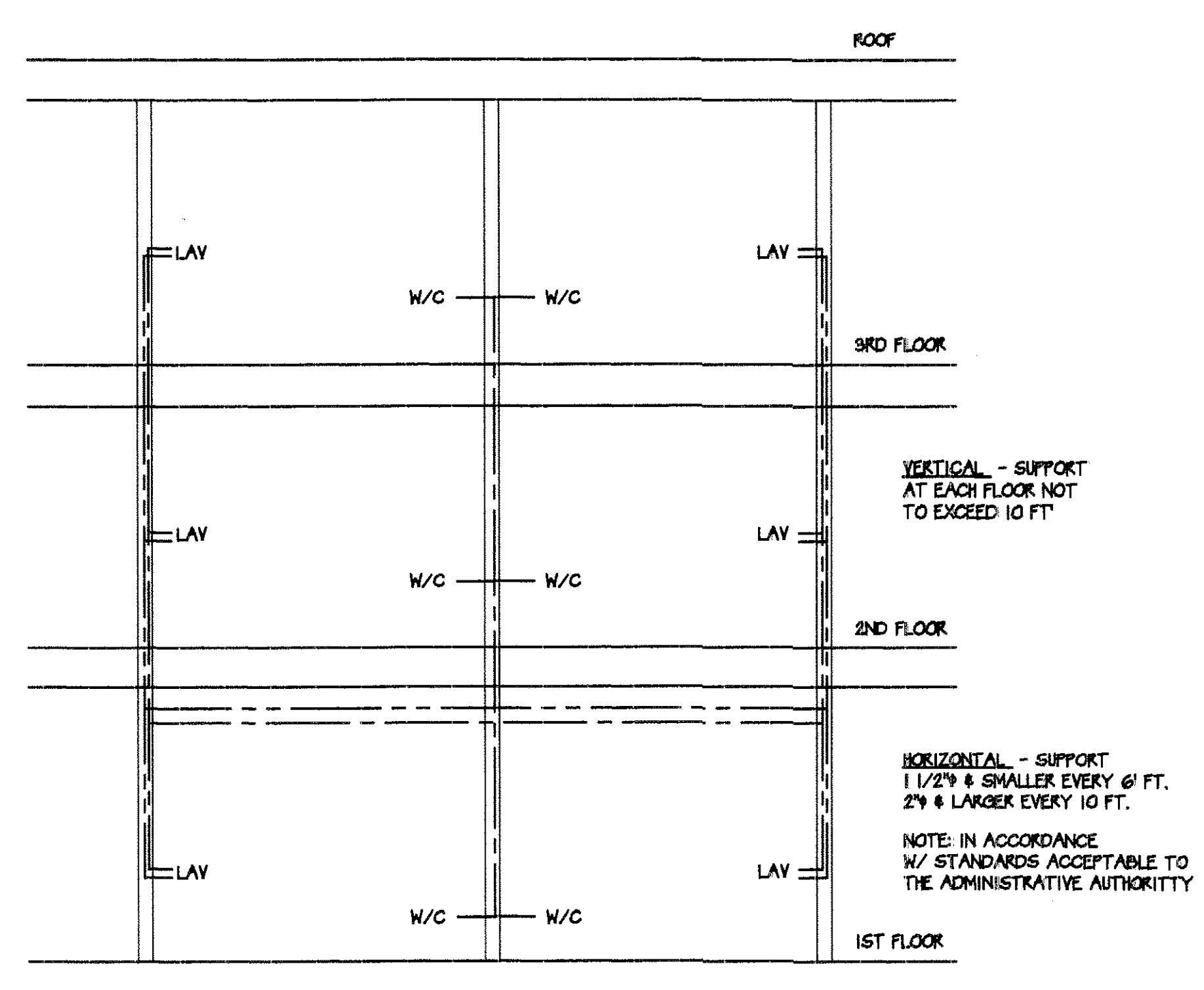




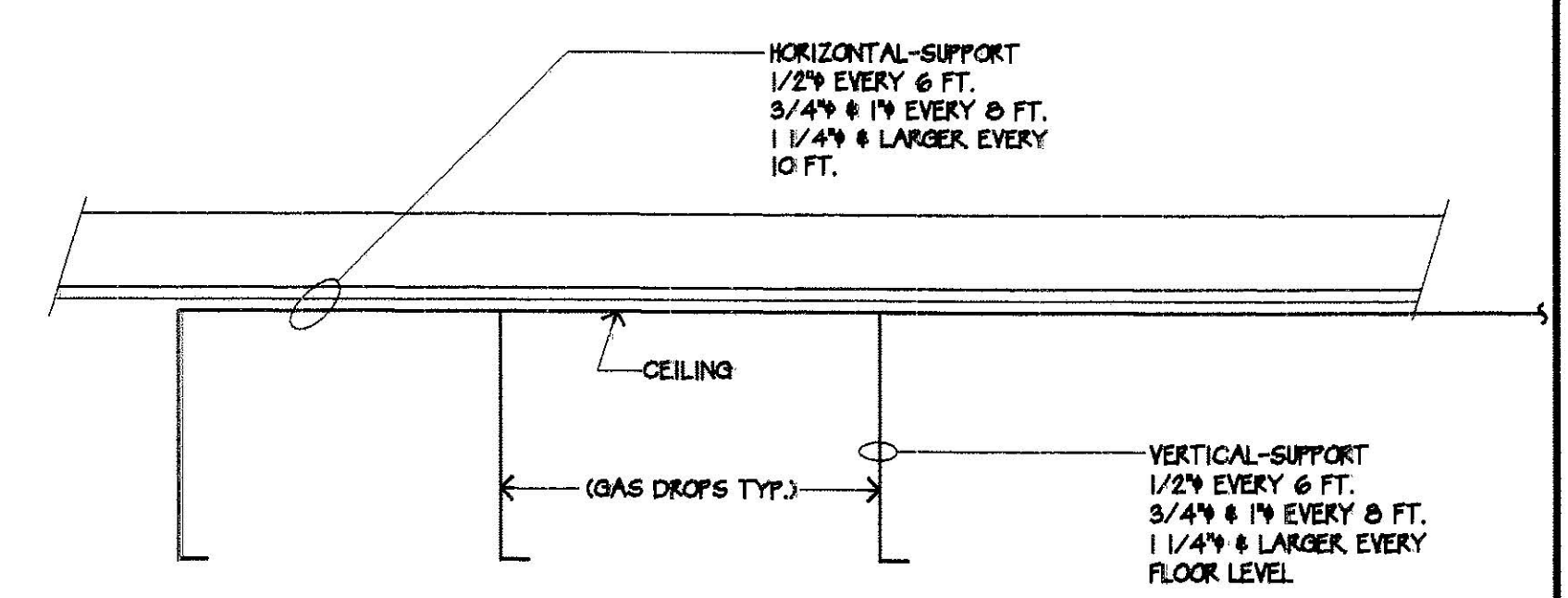
- 3 REVISIONS PER ARCHITECT CLARIFICATION 7/3/02
- 2 REVISIONS PER OWNER REQUEST 7/3/02



1 TYPICAL WASTE SUPPORT DETAIL  
SCALE: NO SCALE



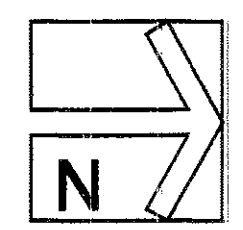
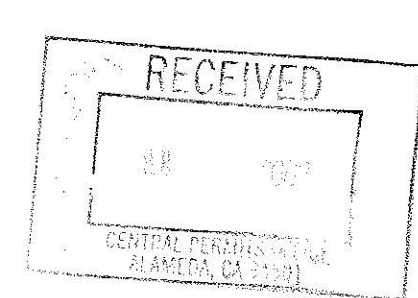
2 TYPICAL WATER SUPPORT DETAIL  
SCALE: NO SCALE



3 TYPICAL GAS SUPPORT DETAIL  
SCALE: NO SCALE

KEY NOTES:

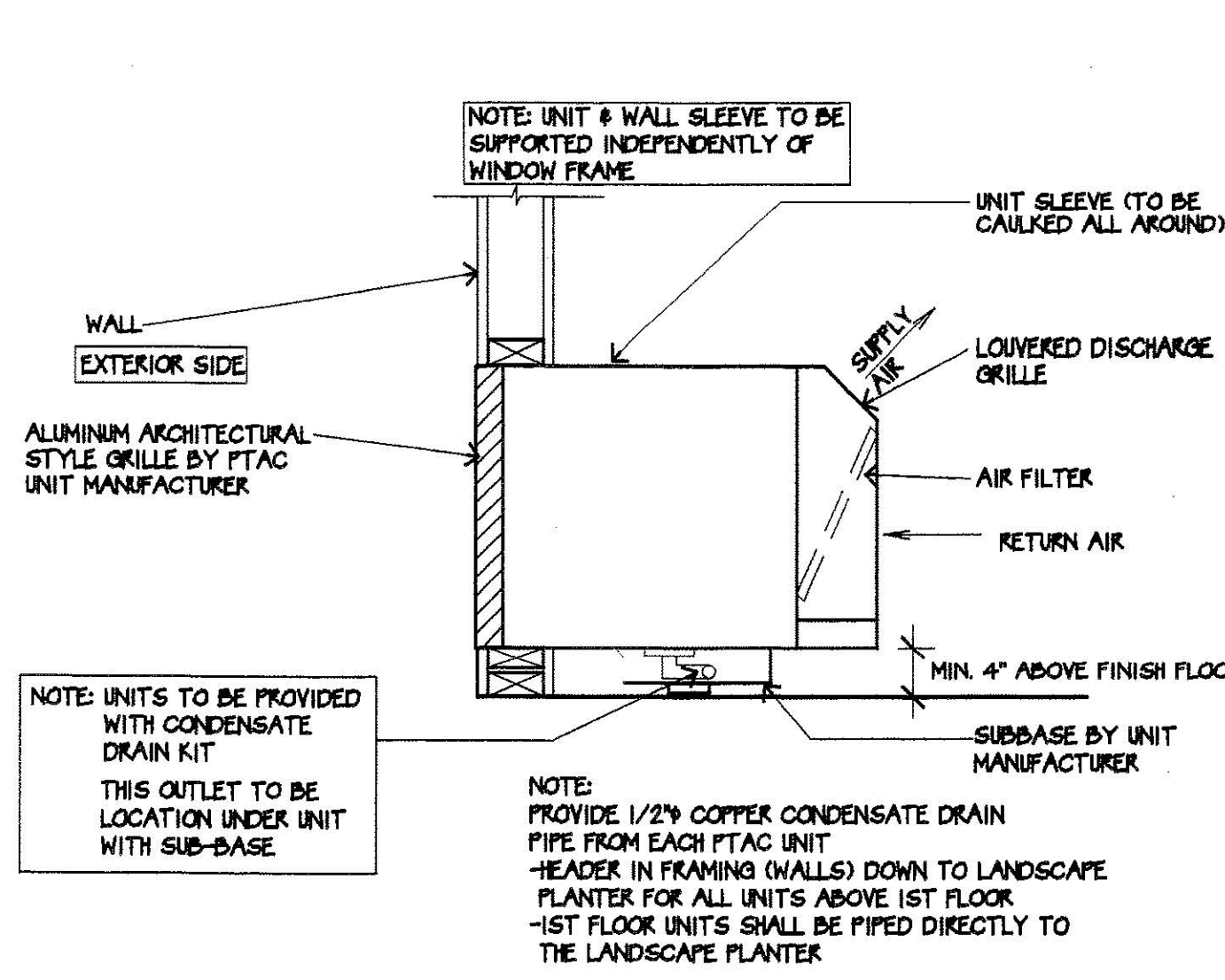
- 1 PLUMBING FIXTURE DESIGNATIONS REFERENCED ARE TYP. FOR GUESTBATHS FOR U.N.O. FOR ACCESSIBLE UNITS
- 2 FLOOR SINK FOR INDIRECT WASTE (ICE MACH.) / 2" WASTE REQ'D. -VERIFY W/ OWNER FOR EXACT PLACEMENT



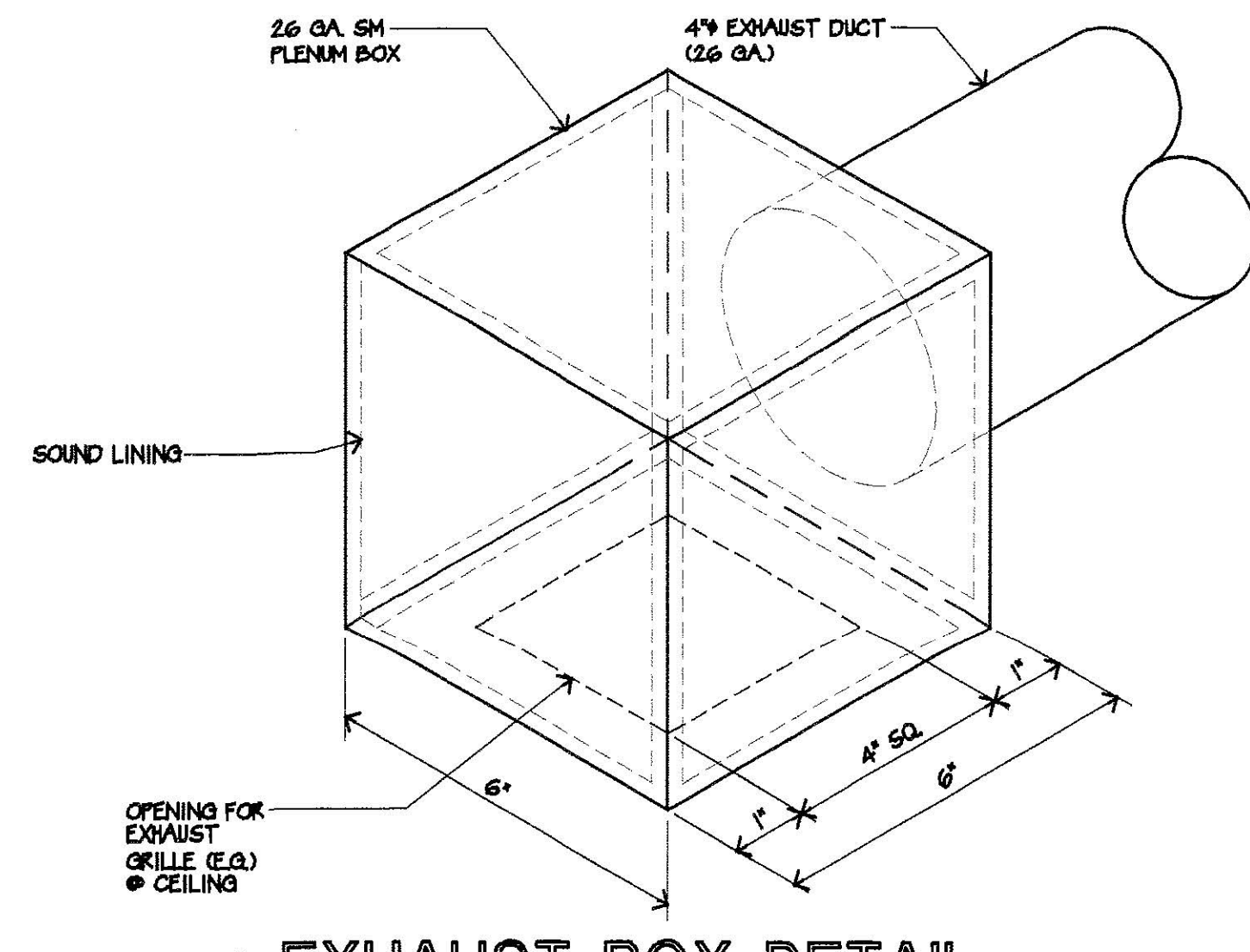
3RD FLOOR - PLUMBING  
SEWER PIPING  
FLOOR PLAN  
SCALE: 1/8"=1'-0"

F:\ARCHITECT\SANDIP\HSA-P6.DWG

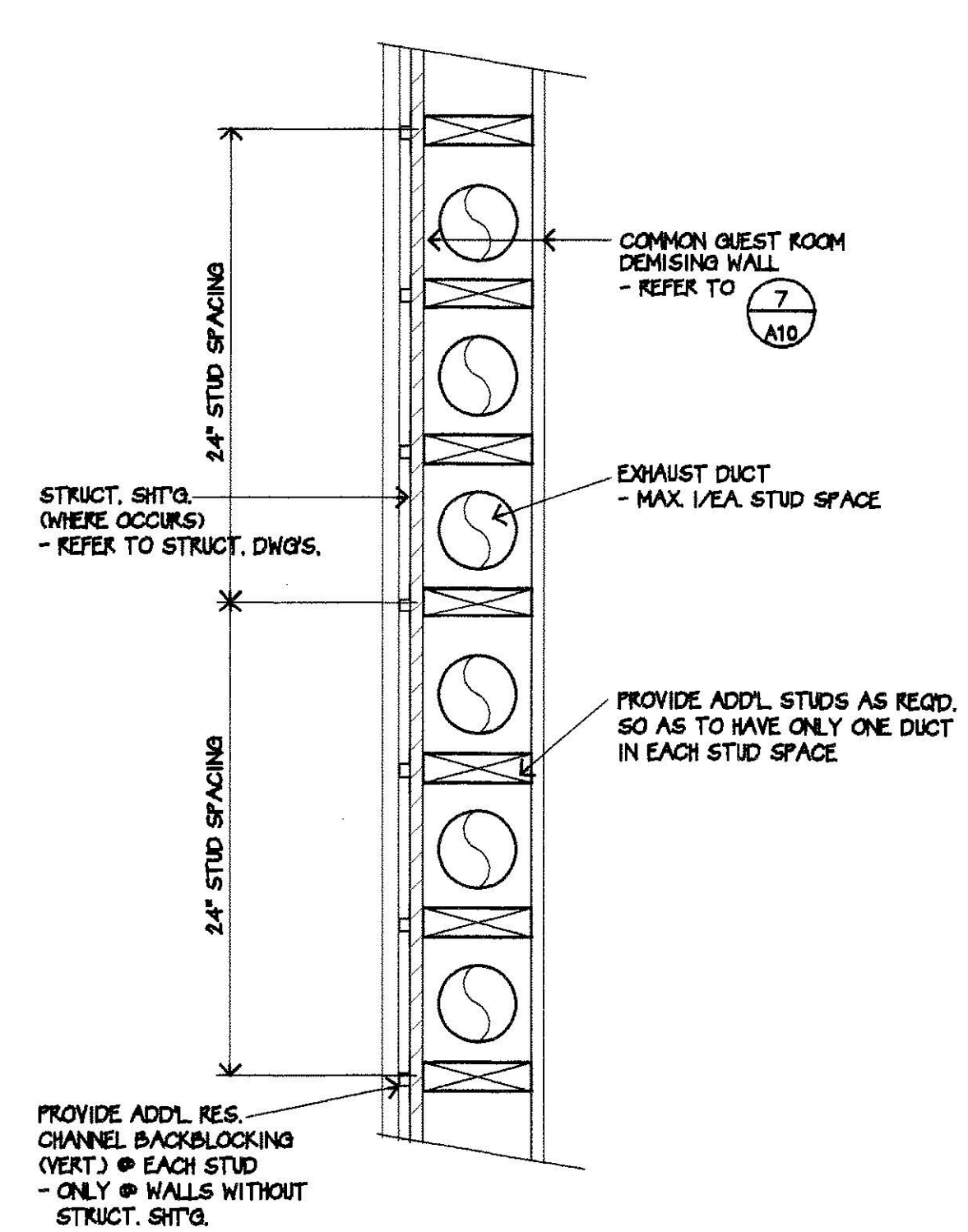




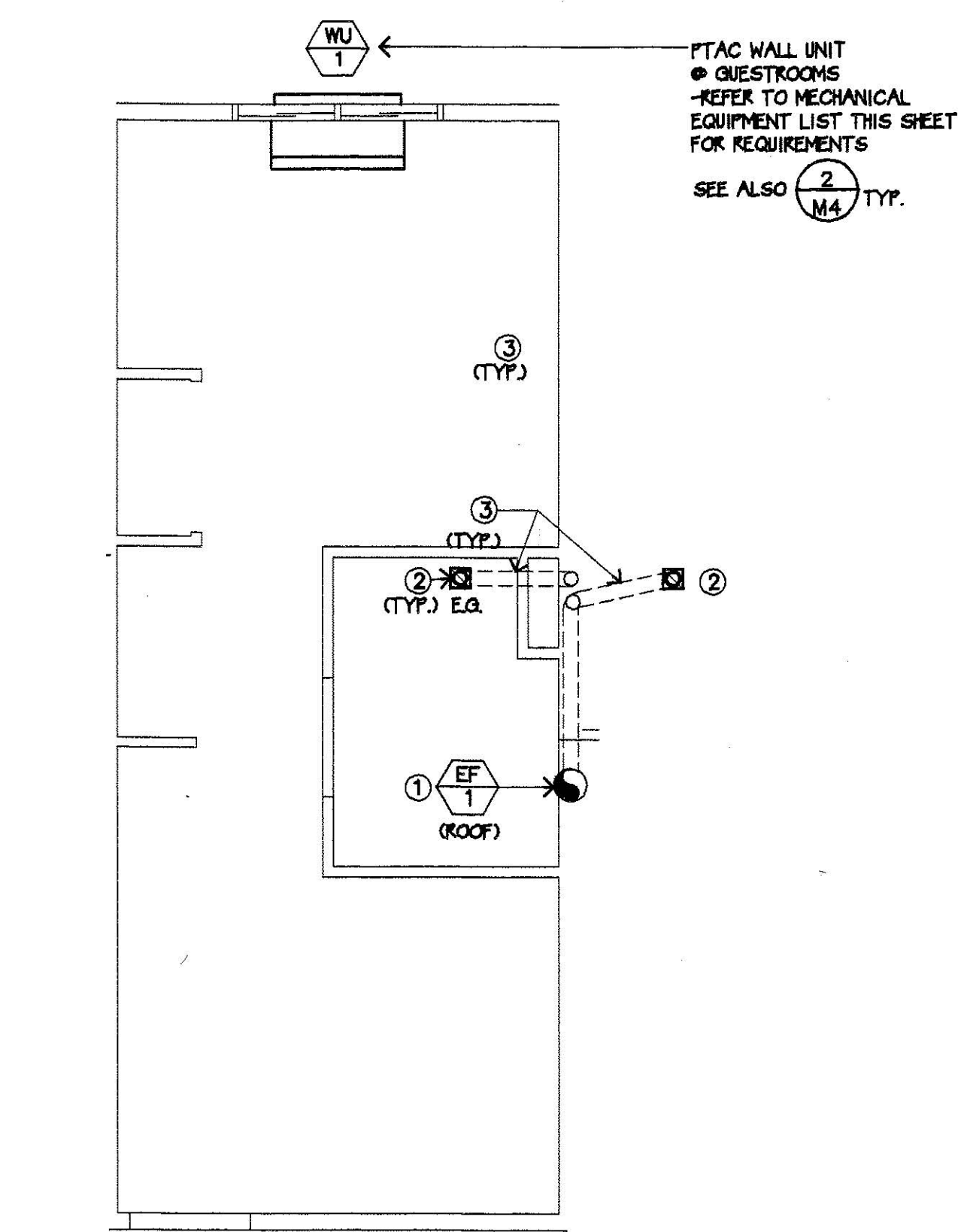
**2 PACKAGED TERMINAL HEAT PUMP UNIT DETAIL**  
M4 NO SCALE



**4 EXHAUST BOX DETAIL**  
M4 SCALE: N.T.S.



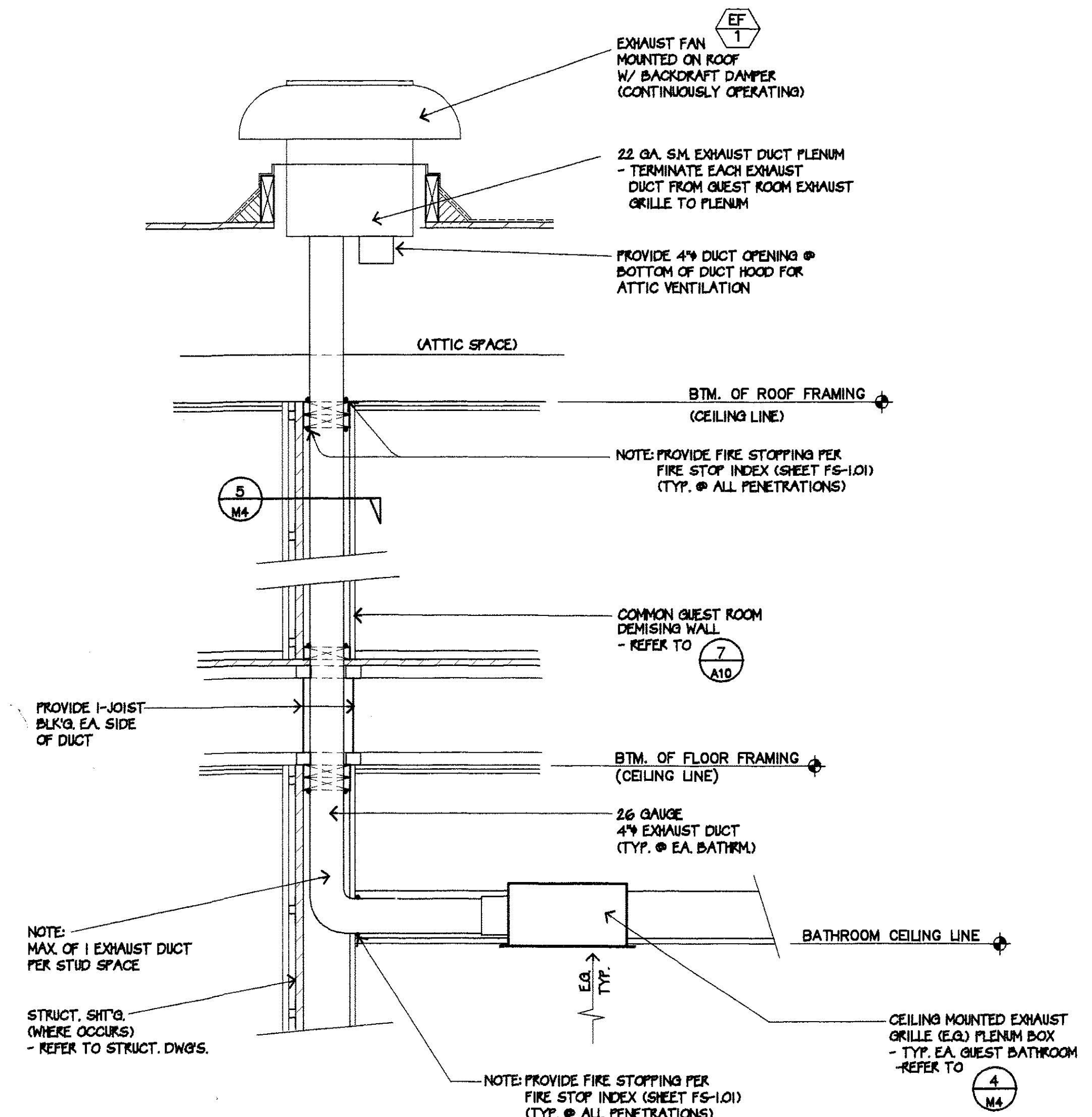
**5 EXHAUST DUCT IN WALL**  
M4 SCALE: 1 1/2"=1'-0"



**1 TYPICAL GUESTROOM MECHANICAL LAYOUT**  
M4 SCALE: 1/4"=1'-0"

**KEYNOTES**

- CONTINUOUSLY OPERATING EXHAUST FAN ON ROOF - PROVIDE DUCT THRU ROOF - SERVES MAX. 8 GUESTBATHS.
- EXHAUST GRILLE @ CEILING LINE - PROVIDE DUCT (IN LOWERED CEILING) TO DEMISING WALL & UP TO EXHAUST FAN ON ROOF. (TYP.)
- 4" Ø (26 GA.) EXHAUST DUCT UP TO EXHAUST FAN/ TYPICAL AT ALL FLOORS



**3 SECTION OF ROOF EXHAUST FAN**  
M4 SCALE: 1"=1'-0"

**MECHANICAL EQUIPMENT LIST**

- HP-1 BRYANT MODEL NO. 661C018-A PAD MOUNTED HEAT PUMP 208/230V. 1ø 11.9 AMPS (17M BTU COOLING/17.5M BTU HEATING)
- HP-2 BRYANT MODEL NO. 661C024-A PAD MOUNTED HEAT PUMP 208/230V. 1ø 15.1 AMPS (22.6M BTU COOLING/22.8M BTU HEATING)
- HP-3 BRYANT MODEL NO. 661C036-A PAD MOUNTED HEAT PUMP 208/230V. 1ø 23.9 AMPS (34.2M BTU COOLING/38M BTU HEATING)
- HP-4 BRYANT MODEL NO. 538BNX018000A PAD MOUNTED HEAT PUMP 208/230V. 1ø 10.5 AMPS (18.0M BTU COOLING/17.6M BTU HEATING)
- HP-5 BRYANT MODEL NO. 661C030-A PAD MOUNTED HEAT PUMP 208/230V. 3ø 12.7 AMPS (28.2M BTU COOLING/29M BTU HEATING)
- FC-1 FIRST COMPANY MODEL NO. 18HX-E-3-051 208/240V. 1ø 2.0 AMPS / 600 CFM (FAN ONLY WITHOUT AUX. HEAT) 208/240V. 1ø 14.5 AMPS / (WITH 3 KW AUX. HEAT)
- FC-2 FIRST COMPANY MODEL NO. 24HX-E-3-059 208/240V. 1ø 2.0 AMPS / 600 CFM (FAN ONLY WITHOUT AUX. HEAT) 208/240V. 1ø 14.5 AMPS / (WITH 3 KW AUX. HEAT)
- FC-3 FIRST COMPANY MODEL NO. 36HX-E-3-070 208/240V. 1ø 2.8 AMPS / 1200 CFM (FAN ONLY WITHOUT AUX. HEAT) 208/240V. 1ø 15.3 AMPS / (WITH 3 KW AUX. HEAT)
- FC-4 BRYANT MODEL NO. 619FNX0240W0A DUCTLESS SPLIT HEAT PUMP FAN COIL (IN-CEILING) 208/230V. 1ø 1/16 HP / 525 CFM 208/230V. 1ø 8.4 AMPS (14,000 BTU COOLING/13,800 BTU HEATING) 208/230V. 1ø 14.5 AMPS / (WITH 3 KW AUX. HEAT)
- FC-5 FIRST COMPANY MODEL NO. 30HX-E-3-070 208/240V. 1ø 2.0 AMPS / 1000 CFM (FAN ONLY WITHOUT AUX. HEAT) 208/240V. 1ø 14.5 AMPS / (WITH 3 KW AUX. HEAT)
- WU-1 AMANA PTH123A PACKAGE TERMINAL HEAT PUMP UNIT (IN WALL) 208/230V. 1ø 6.4AMPS (12,000 BTU COOLING/11,200 BTU HEATING)
- WU-2 AMANA PTH153A PACKAGE TERMINAL HEAT PUMP UNIT (IN WALL) 208/230V. 1ø 8.4 AMPS (14,000 BTU COOLING/13,800 BTU HEATING) - PROVIDE UNIT W/ POWER VENT KIT (95 CFM/ O.S.A.)
- EF-1 DAYTON MODEL 4C097 ROOF MTD. EXHAUST FAN (CONTINUOUSLY OPERATING) 345 CFM @ .375" STATIC PRESSURE, 1/10 H.P.
- EF-2 BROAN MODEL 671 CEILING/WALL EXHAUST FAN 70 CFM, 3.0 SONES, 1.2 AMPS
- EF-3 BROAN MODEL 362 CEILING EXHAUST FAN (CONTINUOUSLY OPERATING) 200 CFM, 2.0 SONES, 1.3 AMPS
- EF-4 BROAN MODEL 506 WALL EXHAUST FAN 480 CFM, 6.5 SONES / CHAIN-OPERATED
- EF-5 GREENHECK MODEL CSP-252 EXHAUST FAN 424 CFM @ .375 SP 3.0 SONES 3.1 AMPS
- EF-6 GREENHECK MODEL CSP-226 EXHAUST FAN 248 CFM @ .375 SP 3.3 SONES 3.1 AMPS
- EF-7 FANTECH EXHAUST FAN MODEL FX10 521 CFM @ .5" SP 4.6 SONES 4.4 AMPS

**AIR DISTRIBUTION DEVICES**

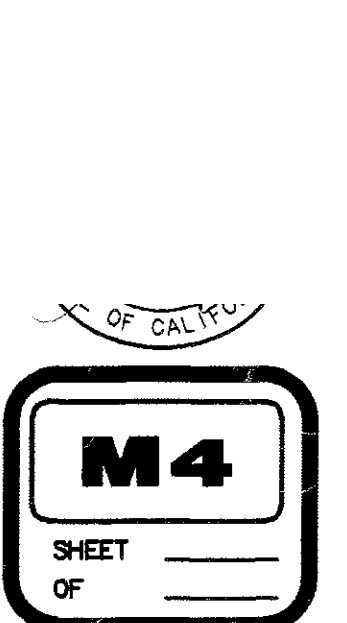
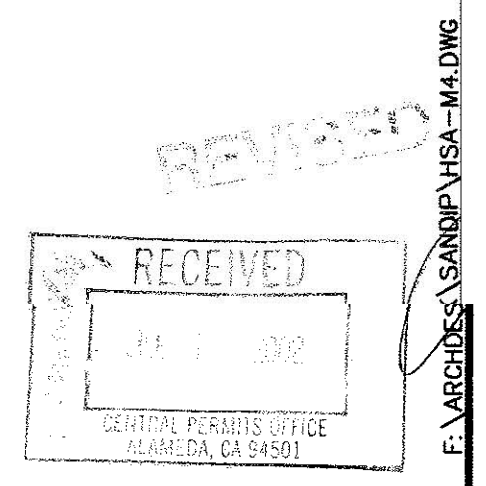
- LSO LINEAR SLOT DIFFUSER, CONSTRUCTED OF EXTRUDED ALUMINUM WITH AIR PATTERN CONTROLLER ADJUSTABLE FOR 180 DEG. AIR PATTERN. EACH AIR SLOT SHALL BE EQUIPPED WITH AN INDIVIDUALLY ADJUSTABLE VOLUME DAMPER.
- CD CEILING DIFFUSER: 4 WAY ADJUSTABLE AIR PATTERN. PROVIDE W/OPOSITE BLADE DAMPER, VOLUME DAMPER CONSTRUCTED OF EXTRUDED ALUMINUM, AND OF COLORS SELECTED BY ARCHITECT.
- CSR CEILING SUPPLY REGISTER SHALL BE TWO WAY PATTERN WITH INDIVIDUALLY ADJUSTABLE CURVED BLADES, CONSTRUCTED OF EXTRUDED ALUMINUM.
- SR SUPPLY REGISTER SHALL BE ONE WAY PATTERN WITH INDIVIDUALLY ADJUSTABLE CURVED BLADES, CONSTRUCTED OF EXTRUDED ALUMINUM.
- RR RETURN/EXHAUST REGISTER (CEILING - 0° DEFLECTION; WALL FIXED 45° CURVED DEFLECTION VANES) MANUFACTURED OF CORROSION RESISTANCE ALUMINUM.

**EQUIPMENT LIST NOTES:**

- EQUIPMENT CAPACITIES FOR HVAC ITEMS LISTED SHALL BE DETERMINED BASED ON LOCATION OF INN AND DESIGN CRITERIA AS SHOWN ON THIS DRAWING.
- FINAL SELECTION OF ELECTRICAL CHARACTERISTICS FOR EQUIPMENT SHALL BE DETERMINED BASED ON SITE VOLTAGE AVAILABILITY.
- GUEST ROOM PACKAGED TERMINAL HEAT PUMP UNITS SHALL HAVE THERMOSTATIC CONTROLS WITH SETPOINTS IN DEGREE FAHRENHEIT OR DEGREE FAHRENHEIT SHALL BEAR A LABEL NEXT TO THE CONTROLS WHICH CLEARLY EXPLAINS THE RELATIONSHIP OF THE CONTROL SETTING TO THE DEGREE FAHRENHEIT - EITHER METHOD CONFORMS THE STATE OF CALIFORNIA, TITLE 24, PART 6, SECTION 122(G)

**SYMBOL AND ABBREVIATION**

— EXH —	EXHAUST AIR DUCT
— SA —	SUPPLY AIR DUCT
— RA —	RETURN AIR DUCT
① OR ④	NOTE NUMBER/LETTER
☒	SUPPLY AIR CEILING DIFFUSER
☒	RETURN AIR CEILING REGISTER
☒	EXHAUST AIR CEILING REGISTER WITH FAN
—	LINEAR SLOT DIFFUSER
☒	SUPPLY AIR DUCT UP
☒	RETURN/EXHAUST AIR DUCT UP
HVAC UNIT	AIR COOLED CONDENSING UNIT
AHU	AIR HANDLING UNIT
CLG.	CEILING
F.D.	FIRE DAMPER (COMBINATION FIRE & SMOKE DAMPER)
OR	
EF	EXHAUST FAN
TG	TRANSFER GRILLE
RR	RETURN REGISTER
UC	UNDER CUT
O.A.	OUTSIDE AIR
L.D.	LOUVERED DOOR
S.A.	SUPPLY AIR
R.A.	RETURN AIR
Ⓢ	THERMOSTAT
Ⓜ	HUMIDISTAT
EG	EXHAUST GRILLE



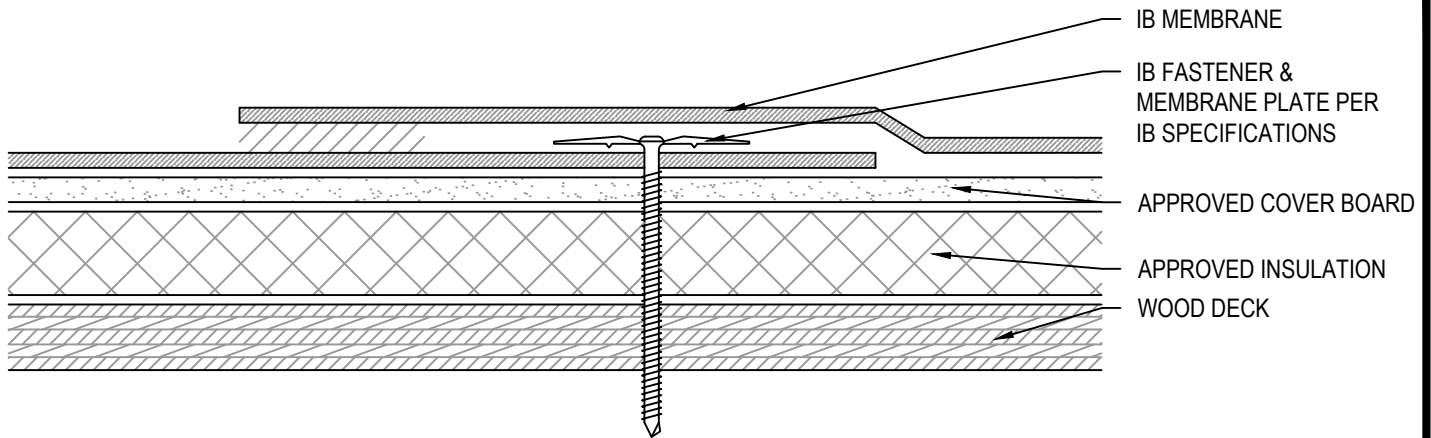











**MA-CB-IN-W**
**Mechanically Attached Membrane - Cover Board - Insulation - Wood Deck (New or Tear-Off)**


Fire Rating / Max. Slope	Deck Type	Cover Board / Insulation		IB Membrane		Max. Design Pressure**
		Type	Attachment	Fasteners	Attachment	
<input type="checkbox"/> Class 'A' Unlimited	7/16" OSB	Approved Cover Board & Approved Insulation	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB HD #14 or IB XHD #15, IB 2" Barbed Seam Plate	In-Seam 6" o.c. x 67"	Minimum Req. for IB Warranty
<input type="checkbox"/> Class 'A' Unlimited	1/2" Plywood	Approved Cover Board & Approved Insulation	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB HD #14 or IB XHD #15, IB 2" Barbed Seam Plate	In-Seam 12" o.c. x 67"	Minimum Req. for IB Warranty
<input type="checkbox"/> Class 'A' Unlimited	5/8" OSB	Approved Cover Board & Approved Insulation	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB HD #14 or IB XHD #15, IB 2" Barbed Seam Plate	In-Seam 12" o.c. x 67"	Minimum Req. for IB Warranty
<input type="checkbox"/> Class 'A' Unlimited	1/2" Plywood	Approved Cover Board & Approved Insulation	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB HD #14, IB 2" Barbed Seam Plate	In-Seam 6" o.c. x 67"	-37.5 psf (Class 75)
<input type="checkbox"/> Class 'A' Unlimited	5/8" Plywood	Approved Cover Board & Approved Insulation	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB HD #14, IB 2" Barbed Seam Plate	In-Seam 12" o.c. x 67"	-30.0 psf (Class 60)
<input type="checkbox"/> Class 'A' Unlimited	5/8" Plywood	Approved Cover Board & Approved Insulation	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB XHD #15, IB 2-3/8" Barbed Seam Plate	In-Seam 6" o.c. x 67"	-67.5 psf (Class 135)
<input type="checkbox"/> Class 'A' Unlimited	5/8" Plywood	Approved Cover Board & Approved Insulation	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB XHD #15, IB 2-3/8" Barbed Seam Plate	In-Seam 6" o.c. x 31"	-127.5 psf (Class 255)

**Approved Cover Board:** Dens Deck, Dens Deck Prime, Securock Glass-Mat or Gypsum-Fiber Roof Board, minimum 1/4" thickness.

**Approved Insulation:** IB Energy Board II & III or IB Approved UL Classified Polyisocyanurate, Expanded Polystyrene, Extruded Polystyrene Insulation.

\*\* Refer to Substrate Resistance table for required pull-out values.

For additional information about IB Roof Systems requirements, recommendations, installation details, approvals and limitations for the above assemblies, please refer to the latest edition of the IB Roof Systems Specifications Manual. For Technical Services please contact us at 800-426-1626.

Membranes:	Colors:	Warranties:	Warranty Lengths:
<input type="checkbox"/> 50 Mil Membrane <input type="checkbox"/> 60 Mil Membrane <input type="checkbox"/> 80 Mil Membrane	<input type="checkbox"/> White* <input type="checkbox"/> Cool Sand* <input type="checkbox"/> ChemGuard* <input type="checkbox"/> Gray <input type="checkbox"/> Green <input type="checkbox"/> Red <input type="checkbox"/> Tan <input type="checkbox"/> Brown <input type="checkbox"/> Custom: <small>* Meets CRRC, Title-24, &amp; EnergyStar Standards</small>	<input type="checkbox"/> Total System (NDL) <input type="checkbox"/> Warranty Plus <input type="checkbox"/> Commercial Limited Material <input type="checkbox"/> Lifetime Residential Limited Material	<input type="checkbox"/> 10 yr (50, 60, and 80 mil) <input type="checkbox"/> 15 yr (50, 60, and 80 mil) <input type="checkbox"/> 20 yr (60 and 80 mil) <input type="checkbox"/> 25 yr (80 mil)

**Submitted By:**

 Address:  
Telephone:

**Project Name:**

Address:

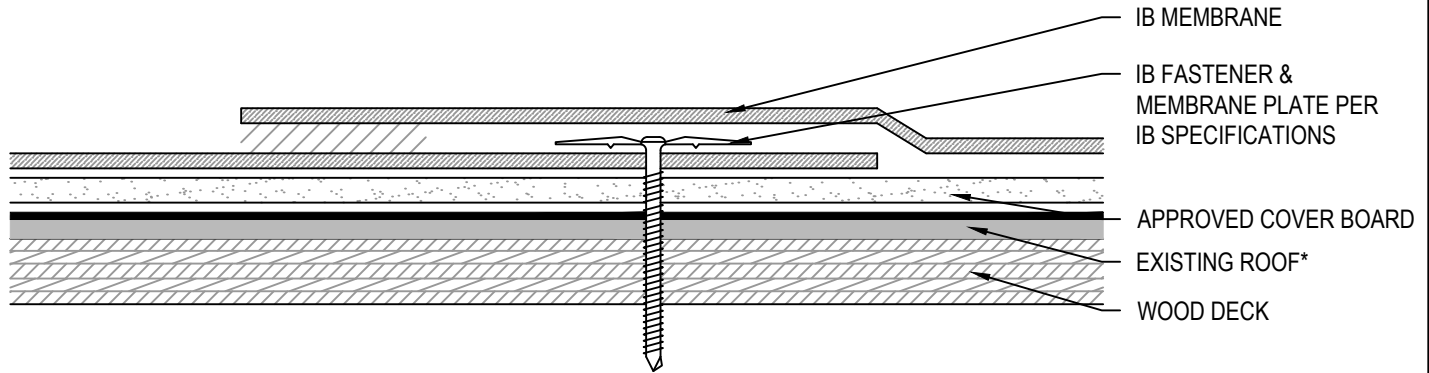






MA-CB-EX-W

### Mechanically Attached Membrane - Cover Board - Existing Roof - Wood Deck (Recover)



Fire Rating / Max. Slope	Deck Type	Cover Board (over Existing Roof)		IB Membrane		Max. Design Pressure**
		Type	Attachment	Fasteners	Attachment	
<input type="checkbox"/> Class 'A' Unlimited	7/16" OSB	Approved Cover Board	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB HD #14 or IB XHD #15, IB 2" Barbed Seam Plate	In-Seam 6" o.c. x 67"	Minimum Req. for IB Warranty
<input type="checkbox"/> Class 'A' Unlimited	1/2" Plywood	Approved Cover Board	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB HD #14 or IB XHD #15, IB 2" Barbed Seam Plate	In-Seam 12" o.c. x 67"	Minimum Req. for IB Warranty
<input type="checkbox"/> Class 'A' Unlimited	5/8" OSB	Approved Cover Board	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB HD #14 or IB XHD #15, IB 2" Barbed Seam Plate	In-Seam 12" o.c. x 67"	Minimum Req. for IB Warranty
<input type="checkbox"/> Class 'A' Unlimited	1/2" Plywood	Approved Cover Board	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB HD #14, IB 2" Barbed Seam Plate	In-Seam 6" o.c. x 67"	-37.5 psf (Class 75)
<input type="checkbox"/> Class 'A' Unlimited	5/8" Plywood	Approved Cover Board	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB HD #14, IB 2" Barbed Seam Plate	In-Seam 12" o.c. x 67"	-30.0 psf (Class 60)
<input type="checkbox"/> Class 'A' Unlimited	5/8" Plywood	Approved Cover Board	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB XHD #15, IB 2-3/8" Barbed Seam Plate	In-Seam 6" o.c. x 67"	-67.5 psf (Class 135)
<input type="checkbox"/> Class 'A' Unlimited	5/8" Plywood	Approved Cover Board	IB SD #12, IB 3" Insulation Plate (6 per 4' x 8')	IB XHD #15, IB 2-3/8" Barbed Seam Plate	In-Seam 6" o.c. x 31"	-127.5 psf (Class 255)

**Approved Cover-Board:** Dens Deck, Dens Deck Prime, Securock Glass-Mat or Gypsum-Fiber Roof Board, minimum 1/4" thickness.

**\* Existing Roof:** SBS or APP modified, or oxidized asphalt smooth coated, mineral surfaced, or gravel surfaced fire rated roofing system.

**\*\* Refer to Substrate Resistance table for required pull-out values.**

For additional information about IB Roof Systems requirements, recommendations, installation details, approvals and limitations for the above assemblies, please refer to the latest edition of the IB Roof Systems Specifications Manual. For Technical Services please contact us at 800-426-1626.

Membranes:	Colors:	Warranties:	Warranty Lengths:
<input type="checkbox"/> 50 Mil Membrane <input type="checkbox"/> 60 Mil Membrane <input type="checkbox"/> 80 Mil Membrane	<input type="checkbox"/> White* <input type="checkbox"/> Cool Sand* <input type="checkbox"/> ChemGuard* <input type="checkbox"/> Gray <input type="checkbox"/> Green <input type="checkbox"/> Red <input type="checkbox"/> Tan <input type="checkbox"/> Brown <input type="checkbox"/> Custom: <small>* Meets CRRC, Title-24, &amp; EnergyStar Standards</small>	<input type="checkbox"/> Total System (NDL) <input type="checkbox"/> Warranty Plus <input type="checkbox"/> Commercial Limited Material <input type="checkbox"/> Lifetime Residential Limited Material	<input type="checkbox"/> 10 yr (50, 60, and 80 mil) <input type="checkbox"/> 15 yr (50, 60, and 80 mil) <input type="checkbox"/> 20 yr (60 and 80 mil) <input type="checkbox"/> 25 yr (80 mil)

Submitted By:

 Address:  
 Telephone:

Project Name:

Address:







July 13, 2023

Chris Miller  
Miller & Sons Independent Roofing Solutions

**Reference:** *Poppy Place*

To Whom It May Concern,

This is to confirm the below listed roof assembly is eligible to receive the proposed IB Roof Systems **Twenty (30)** Year Total Systems Warranty when installed by an IB Master Pro Applicator in accordance with IB Specifications and Warranty Program requirements:

**Overlay Option**

**MA-CB<sup>MA</sup>-EX-W**

**Deck:** Min. ½" Wood Deck

**Existing Roof:** Properly prepare existing roof for new roofing system. Confirm existing components of the existing roof assembly. Conduct moisture survey of entire roof area. Remove and replace any wet, damaged, or deteriorated materials. Submit results of the survey to IB Roof Systems, prior to installation, for analysis.

**Cover Board:** Install one (1) layer of ¼" Securock Glass Mat Roof Board mechanically fastened to the steel deck using Deckfast or IB #14 HD Fastener and IB 3" Insulation Plates at the following rates:

Field: 1 per 5.33 sq. ft. (6 per 4x8 board)  
Perimeter: 1 per 5.33 sq. ft. (6 per 4x8 board)  
Corner: 1 per 5.33 sq. ft. (6 per 4x8 board)

**Membrane:** Install IB PVC Single-Ply 80 (80 mil) membrane, color (white) using in-seam fastening at the rate prescribed below. All membrane side-laps and end-laps welded with hot air welded laps.

Field: 12" o.c. in-seam fastener spacing, using IB #14 HD or #15 XHD Fasteners and 2 3/8" Barbed Seam Plates.

Perimeter: 6" o.c. in-seam fastener spacing, using IB #14 HD or #15 XHD Fasteners and 2 3/8" Barbed Seam Plates.

Corner: 6" o.c. in-seam fastener spacing, using IB #14 HD or #15 XHD Fasteners and 2 3/8" Barbed Seam Plates.

**For All Zones:** Maximum 12" o.c. in seam fastener with minimum #14 HD fastener and 2 ¾" barbed seam plate. A minimum of (3) perimeter half sheets shall be installed with the same in seam fastener spacing. Corners shall be additionally secured by cross-hatching in both directions through the membrane with a minimum 6" wide welded cover strip.

**Flashings:** All flashings are installed in accordance with IB Specifications.

Email: <a href="mailto:technical@ibroof.com">technical@ibroof.com</a>	Toll Free: 800.426.1626	Fax: 541.610.1726	<a href="http://www.ibroof.com">www.ibroof.com</a>	
Grapevine, TX	Atlanta, GA	Chicago, IL	Las Vegas, NV	Springfield, OR



**Tear Off Option****MA-CB<sup>MAIN</sup> LL-W**

- Deck: Min. 1/2" Wood Deck
- Insulation: Install one (1) or more layers of approved Polyisocyanurate loose laid for simultaneous attachment with the cover board.
- Cover Board: Install one (1) layer of 1/4" Securock Glass Mat Roof Board mechanically fastened to the wood deck using #14 Deckfast or IB #14 HD Fastener and IB 3" Insulation Plates at the following rates:
- Field: 1 per 5.33 sq. ft. (6 per 4x8 board)  
 Perimeter: 1 per 5.33 sq. ft. (6 per 4x8 board)  
 Corner: 1 per 5.33 sq. ft. (6 per 4x8 board)
- Membrane: Install IB PVC Single-Ply 80 (80 mil) membrane, color (white) using in-seam fastening at the rate prescribed below. All membrane side-laps and end-laps welded with hot air welded laps.
- Field: 12" o.c. in-seam fastener spacing, using IB #14 HD or #15 XHD Fasteners and 2 3/8" Barbed Seam Plates.  
 Perimeter: 6" o.c. in-seam fastener spacing, using IB #14 HD or #15 XHD Fasteners and 2 3/8" Barbed Seam Plates.  
 Corner: 6" o.c. in-seam fastener spacing, using IB #14 HD or #15 XHD Fasteners and 2 3/8" Barbed Seam Plates.
- For All Zones: Maximum 12" o.c. in seam fastener with minimum #14 HD fastener and 2 3/8" barbed seam plate. A minimum of (3) perimeter half sheets shall be installed with the same in seam fastener spacing. Corners shall be additionally secured by cross-hatching in both directions through the membrane with a minimum 6" wide welded cover strip.
- Flashings: All flashings are installed in accordance with IB Specifications.

The above listed roof system is based on IBRS minimum warranty requirements and is not intended to modify or alter supersede any design requirements by the designer of record and recommends that any uplift resistance requirement be verified by a design professional.

Please contact IB Roof Systems with any questions or if I may be of any assistance.

Respectfully,

*Chad T. Ellis*

**Chad Ellis**

Inside Technical Representative



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541-610-1726 (fax)

[chad.ellis@IBRoof.com](mailto:chad.ellis@IBRoof.com)

Cc: Chris Miller, IB Sales Representative.

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Grapevine, TX	Atlanta, GA	Chicago, IL	Las Vegas, NV	Springfield, OR



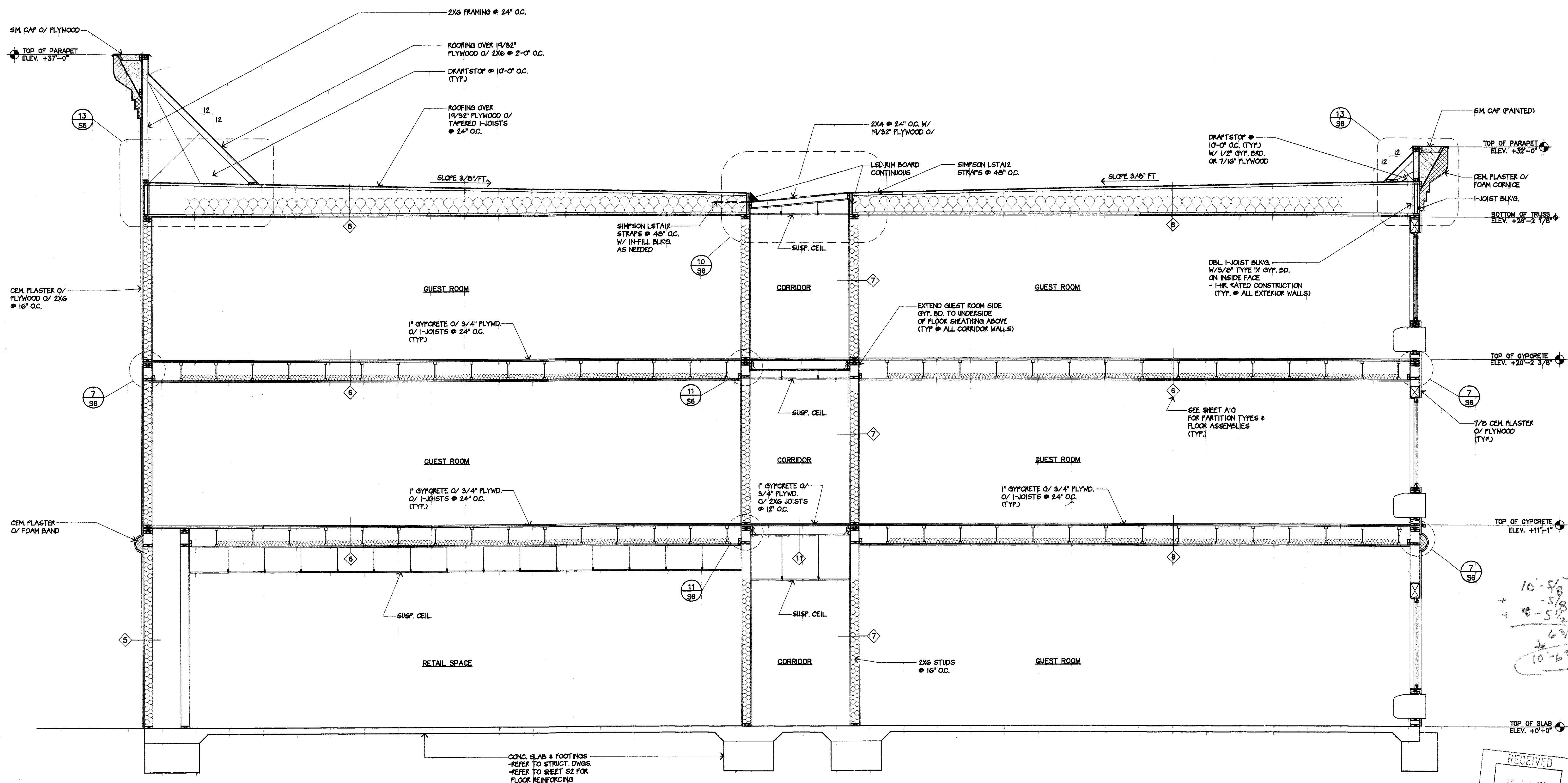
PMRFP07182023 ICD Poppy Place Roofing and/or Solar (PV) ISSUED: July 18, 2023

## Scope II: PV Solar

### POPPY PLACE PV SOLAR

- 1 Contractor to design, supply and install new Photovoltaic system at the Poppy Place Apartments, 50 Residential units and ground floor offices located at 1628 Webster St. Alameda Ca. 95401
- 2 This property is being converted from use as a tourist hotel to full occupancy apartments 50 residential units plus business offices.
- 3 The existing electrical usage is expected to increase due to the additional full residential occupancy demand.
- 4 The new system shall include battery backup storage.
- 5 General: The scope of work for the new systems include engineering, permitting, procurement, construction, and commissioning, supervision, materials and supplies, labor, tools, construction equipment and machinery, utilities and transportation for the proper execution and completion of a fully integrated and operational System. Contractor shall perform, supervise and direct the Work in accordance with Industry Standards, Applicable Law and Project Milestone dates.
- 6 Contractor and Manufacturer shall provide a 25-year performance warranty or performance output warranty to include 100% of repair or replacement costs of defective equipment or component(s), including labor and shipping.
7. Contractor to provide interconnections services with Alameda Municipal Power.





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

RECEIVED  
JUL 11 2002  
CENTRAL PERMITS OFFICE  
ALAMEDA, CA 94601

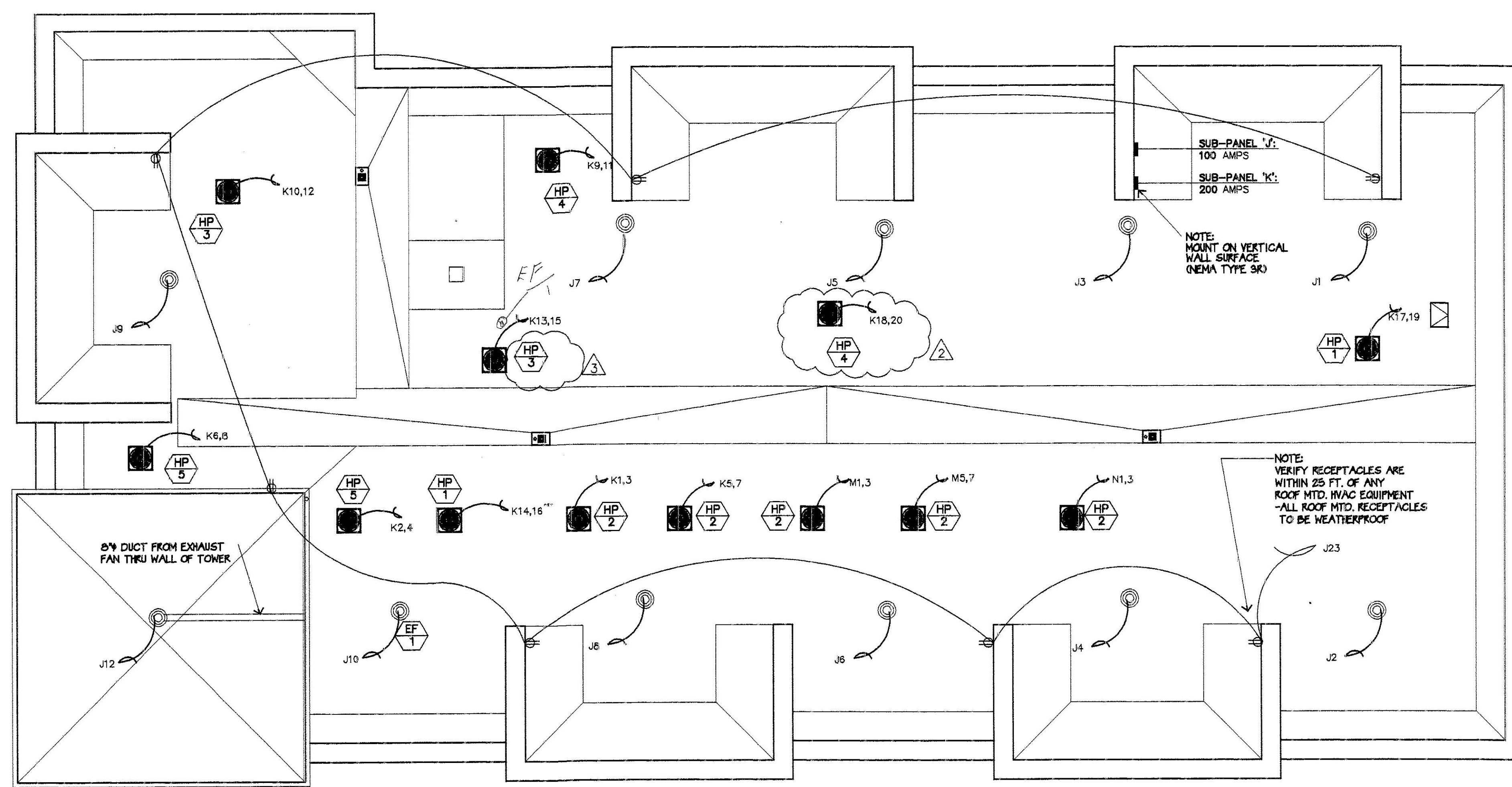
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**A7B**  
SHEET  
OF









REVISIONS PER ARCHITECT CLARIFICATION 7/3/02

REVISIONS PER OWNER REQUEST 7/3/02

**ELECTRICAL ROOF PLAN**  
SCALE: 1/8"=1'-0"

RECEIVED  
F. VARCHER  
K. SANDOZ-VISH-ELDING  
PENNY REBILITATION  
PASADENA, CA 91101

**E5**  
SHEET  
OF



## ELECTRICAL LOAD CALCULATIONS

CODE LOAD:  
A. GENERAL USE LOADS (GUEST ROOMS)

2VA/S.F. [PER 1993 NEC ARTICLE 220-3(b)]

1st FLOOR:	2,840 S.F. x 2VA	5,680 VA
2nd FLOOR:	9,989 S.F. x 2VA	19,978
3rd FLOOR:	9,989 S.F. x 2VA	19,978
SUBTOTAL		45,636

4 ROOMS w/WHIRLPOOL BATH @ 1200VA/RM	4,800
50 ROOMS w/HOSPITALITY BAR @ 1500VA/RM	75,000
50 ROOMS w/GFI @ 1200VA/RM	60,000
50 ROOMS w/HAIR DRYER @ 1500VA/RM	75,000
SUBTOTAL	214,800

DEMAND FACTOR	FIRST 20kVA x 50% NEXT 80kVA x 40% REMAINDER x 30%	10,000 32,000 45,131
SUBTOTAL		90,131

B. LIGHTING (CORRIDOR, PUBLIC & UTILITY AREAS)		
PANEL A	: 4,188 CONNECTED x 125%	5,235 VA
PANEL C	: 3,228 CONNECTED x 125%	4,035
PANEL H	: 11,244 CONNECTED x 125%	14,055
PANEL 2U	: 2,844 CONNECTED x 125%	3,555
PANEL 3U	: 2,844 CONNECTED x 125%	3,555
PANEL L	: 1,260 CONNECTED x 125%	1,575
<b>SUBTOTAL</b>		<b>32,010</b>

C. RECEPTACLES (CORRIDOR, PUBLIC & UTILITY AREAS)		
PANEL	13,056 CONNECTED	13,056 VA
PANEL AA	3,264 CONNECTED	3,264
PANEL PBX	14,460 CONNECTED	14,460
PANEL G	14,580 CONNECTED	14,580
PANEL H	2,160 CONNECTED	2,160
PANEL 2U	7,200 CONNECTED	7,200
PANEL 3U	7,200 CONNECTED	7,200
PANEL J	1,440 CONNECTED	1,440
PANEL L	2,028 CONNECTED	2,028
<b>SUBTOTAL</b>		<b>85,368</b>

DEMAND FACTOR	FIRST 10kVA x 100% REMAINDER x 50%	10,000 27,694
SUBTOTAL		37,694

D. LAUNDRY EQUIPMENT (100%)				DISCONNECT RATING
GAS DRYERS	2 @	1,368 VA EA.	2,736 VA	20A / 3 POLE
CLOTHES WASHERS	2 @	1,680 VA EA.	3,360 VA	30A / 3 POLE
GUEST CLOTHES DRYERS (ELECT)	1 @	5,600 VA EA.	5,600 VA	30A / 2 POLE
GUEST CLOTHES WASHERS	1 @	1,440 VA EA.	1,440 VA	20A / 1 POLE
SUBTOTAL			23,456	

E. PREP AREA KITCHEN EQUIPMENT		
TOTAL EQUIPMENT LOAD	33,840 CONNECTED x 65%	21,996 VA
		<u>21,996</u>

F. FUTURE RETAIL SPACES	
BASED ON 1990 NEC EXAMPLE NO. D3 (STORE BUILDING)	
NON-CONTINUOUS LOAD (ESTIMATE BASED ON TENANT FLOOR AREA)	
1,185 S.F. x 1VA	1,185 VA
SUBTOTAL	1,185

DEMAND FACTOR	FIRST 10kVA x 100% REMAINDER x 50%	1,185 1,185
SUBTOTAL		1,185

CONTINUOUS LOAD (ESTIMATE BASED ON TENANT FLOOR AREA)		
GENERAL USE	1,185 S.F. x 3VA	3,555 VA
SHOW WINDOW	30 L.F. x 200 VA	6,000 VA
OUTSIDE SIGNAGE	2 @ 1,800 VA	3,600 VA
SUBTOTAL CONTINUOUS LOAD		13,155
SUBTOTAL NON-CONTINUOUS LOAD		1,185
SUBTOTAL		14,340

ESTIMATED AIR CONDITIONING LOAD BASED ON 350 S.F./TON (INCLUDED IN MOTOR LOADS BELOW)

G. POOL/SPA EQUIPMENT (100%)	14,850
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H. MOTORS		DISCONNECT RATING	CONDUIT/WIRE SIZE
ELEVATOR: (LARGEST MOTOR)	1 @ 31,700 VA EA.	31,700 VA	125A / 3 POLE
ELEVATOR SUMP PUMP:	1 @ 864 VA EA.	864	20A / 1 POLE
CIRCULATING PUMPS:	2 @ 1,176 VA EA.	2,352	2 @ 20A / 1 POLE
DOMESTIC WATER BOOSTER PUMP:	2 @ 6,012 VA EA.	12,024	2 @ 30A / 3 POLE

FAN COIL UNITS:		DISCONNECT RATING	CONDUIT/WIRE SIZE
2 @ 3,480 VA EA.	6,960	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND
2 @ 3,480 VA EA.	6,960	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND
2 @ 3,480 VA EA.	6,960	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND
2 @ 3,480 VA EA.	6,960	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND
2 @ 3,480 VA EA.	6,960	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND
2 @ 3,480 VA EA.	6,960	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND

REMOTE HEAT PUMPS:		DISCONNECT RATING	CONDUIT/WIRE SIZE
2 @ 2,856 VA EA.	5,712	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND
5 @ 3,624 VA EA.	18,120	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND
2 @ 5,736 VA EA.	11,472	30A / 2 POLE	1/2" C w/2-#10 & 1-#10 GND
2 @ 2,520 VA EA.	5,040	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND
2 @ 4,572 VA EA.	9,144	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND

THRU-WALL HEAT PUMPS:		DISCONNECT RATING	CONDUIT/WIRE SIZE
57 @ 2,760 VA EA.	116,736	20A / 2 POLE	1/2" C w/2-#12 & 1-#12 GND

EXHAUST FANS:		DISCONNECT RATING	CONDUIT/WIRE SIZE
13 @ 240 VA EA.	3,120	20A / 1 POLE	1/2" C w/1-#12 & 1-#12 GND
2 @ 200 VA EA.	400	20A / 1 POLE	1/2" C w/1-#12 & 1-#12 GND
3 @ 372 VA EA.	1,116	20A / 1 POLE	1/2" C w/1-#12 & 1-#12 GND

25% LARGEST MOTOR:	7,925		
SUBTOTAL			311,405

TOTAL CODE VOLT/AMPS			545,882 VA
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TOTAL CODE AMPS	545,882 VA (208)(1.732)		1,515 AMPS
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1,600 AMP MAIN SERVICE REQUIRED (100% RATED)

## ROOF

## 3RD FLOOR

## 2ND FLOOR

## 1ST FLOOR

## ELECTRICAL RISER

NO SCALE

## NOTE:

ALL ELECTRICAL EQUIPMENT SHALL HAVE AN APPROVED TESTING LABORATORY LABEL ATTACHED (UL, CSA, ETC.)

INSULATION ON CONDUCTORS LOCATED IN WET LOCATIONS SHALL BE RATED THHN/THWN.

ALL 20A CIRCUITS EXCEEDING 100 FT. IN LENGTH FROM FARTHEST OUTLET TO PANEL WILL BE INSTALLED WITH #10 AWG CONDUCTORS. FIELD VERIFY LENGTH OF RUNS PRIOR TO PULLING CONDUCTORS.

AREA OF CONDUCTORS IN CONDUIT SHALL NOT EXCEED THE FOLLOWING PERCENTAGES PER TABLE 1, CHAPTER 9, 1996 NEC

1 CONDUCTOR	53%
2 CONDUCTORS	31%
OVER 2 CONDUCTORS	40%

IT IS THE INTENT OF THESE DRAWINGS FOR EACH CIRCUIT TO HAVE A SEPARATE HOMERUN TO THE SUB-PANEL WHICH PROVIDES POWER (INCLUDING CONDUIT, CONDUCTORS, GROUNDING, ETC.)

ANY REVISIONS TO THIS REQUIREMENT TO THE LOCAL JURISDICTION FOR REVIEW &amp; PROVIDE THE ARCHITECT WITH COPIES OF APPROVED REVISIONS. (CONTRACTOR TO COMPLY WITH THE DE-RATING REQUIREMENTS FOR AMOUNT OF CONDUCTORS WITHIN SINGLE CONDUITS)

INSTALL PANEL FEEDERS OVERHEAD WHERE POSSIBLE. ALL BELOW GRADE CONDUIT SHALL BE PVC. OTHER WIRING METHODS SHALL BE AS PERMITTED BY STATE &amp; LOCAL CODES &amp; ORDINANCES. PROVIDE &amp; INSTALL APPROVED FIRESTOP MATERIAL AT FIRE RATED WALL PENETRATIONS.

BREAKERS IN SWITCHBOARD AND BRANCH CIRCUIT PANELS SHALL HAVE SERIES RATED INTEGRATED AIC RATING EXCEEDING MAXIMUM FAULT AVAILABLE AT SWITCHBOARD FROM UTILITY COMPANY'S TRANSFORMER.

CONTRACTOR SHALL VERIFY WITH SERVING UTILITY COMPANY PRIOR TO FABRICATION OF SWITCHBOARD.

MINIMUM AIC RATING SHALL BE AS INDICATED

## EQUIPMENT IDENTIFICATION REQUIREMENTS

1. SERIES RATED OVERCURRENT DEVICES SHALL BE IDENTIFIED PER N.E.C. SECTION 110-22 &amp; 240-83.

2. ELECTRICAL EQUIPMENT WITHSTAND RATINGS SHALL COMPLY WITH N.E.C. SECTION 110-10.

PANEL 100A  
PANEL 200AALL EXTERIOR MOUNTED PANELS SHALL HAVE A NEMA-3R RATING LOCATE ON ROOF  
- REFER TO SHEET E2D FOR APPROXIMATE LOCATION  
- REFER TO DETAIL E2D MOUNTING REQ'S.NOTE:  
AIC RATING OF MAIN SERVICE PANEL & SUB-PANEL DISCONNECTS TO BE AS REQUIRED BY SERVING UTILITY CO.  
- PROVIDE LISTED SERIES RATED SYSTEM BY 'GE' 'SQUARE D' OR EQUAL  
AIC RATING  
PER LETTER DATEDNOTE:  
REFER TO WIRE SIZE SCHEDULE THIS SHEET FOR FEEDER & CONDUIT SIZE TO EACH SUB-PANELMETER & BASE  
1600A MAIN SERVICE SWITCH  
PANEL MDP (100% RATED)  
- PROVIDE 3P BREAKER FOR EA. SUB-PANEL  
GROUND PER DETAIL THIS SHEET (CONC. ENCASED GROUND)SERVICE CONDUCTOR SIZING  
LOAD PER PHASE: 1,800 THHN COPPER  
WIRE TYPE: 1000 kcmil  
WIRE SIZE: 430 x 80% = 344 AMPS  
TOTAL WIRES PER PHASE REQ'D: 1800 / 344 = 4.6 USE 5 WIRES  
NUMBER OF CONDUITS REQ'D: 5  
CONDUIT SIZE REQ'D: 4"INCOMING ELECTRIC SERVICE  
1800 AMP 120/208V 3P 4W  
TERMINATE AT POWER CO.  
TRANSFORMER AS DIRECTED BY POWER CO.

## VOLTAGE DROP CALCULATION

$$VD = 1.73 \times L \times R \times I / 1000$$

Panel	Wire Type	Length (L)	Total Load To Panel	Volts	No. of Phase Wires	Wire Size	Wire Resistance (R)	Amps/Wire	Voltage Drop (VD)	VD% (VD / Volts) x 100
A	CU	200	60112	208	1	#3/0	0.0880	139.2619	4.90	2.36%
AA	CU	200	41232	208	1	#3/0	0.0880	114.5843	4.03	1.94%
PBX	CU	200	14820	208	1	#1	0.1600	41.1850	2.64	1.27%
B	CU	200	19320	208	1	#3/0	0.0880	53.6905	1.89	0.91%
C	CU	200	33120	208	1	#3/0	0.0880	92.0409	3.24	1.56%
D	CU	200	35880	208	1	#3/0	0.0880	99.7110	3.51	1.69%
E	CU	200	33120	208	1	#3/0	0.0880	92.0409	3.24	1.56%
F	CU	200	35880	208	1	#3/0	0.0880	99.7110	3.51	1.69%
G	CU	200	44352	208	1	#3/0	0.0880	123.2546	4.34	2.09%
H	CU	200	14808	208	1	#3/0	0.0880	41.1816	1.43	0.70%
I	CU	200	34468	208	1	#3/0	0.0880	95.8426	3.37	1.62%
2U	CU	200	25284	208	1	#3/0	0.0880	70.2646	2.47	1.19%
2A	CU	200	50688	208	1	#3/0	0.0880	140.8626	4.96	2.36%
2B	CU	200	46632	208	1	#3/0	0.0880	129.5909	4.56	2.19%
3U	CU	200	25284	208	1	#3/0	0.0880	70.2646	2.47	1.19%
3A	CU	200	50688	208	1	#3/0	0.0880	140.8626	4.96	2.36%
3B	CU	200	46632	208	1	#3/0	0.0880	129.5909	4.56	2.19%
Roof-J	CU	200	5760	208	1	#1	0.1600	16.0071	1.02	0.49%
Roof-K	CU	200	32880	208	1	#3/0	0.0880	91.3739	3.22	1.55%
Retall - M	CU	200	17952	208	1	#3/0	0.0880	49.8868	1.76	0.84%
Retall - N	CU	200	10128	208	1	#3/0	0.0880	28.1458	0.99	0.48%
Pool-L	CU	200	20928	208	1	#3/0	0.0880	58.1592	2.05	0.98%

## BREAKER/CONDUCTOR SCHEDULE

LOAD	MIN. BREAKER REQUIRED	MINIMUM CONDUCTORS REQUIRED	MIN. CONDUIT REQUIRED
≤16 AMPS	20	#12 THHN (CU)	1/2"
16.1-24 AMPS	30	#10 THHN (CU)	1/2"
24.1-32 AMPS	40	#8 THHN (CU)	3/4"
32.1-40 AMPS	50	#6 THHN (CU)	3/4"
40.1-60 AMPS	75	#4 THHN (CU)	1"

## WIRE SIZE SCHEDULE

PANEL RATING	WIRE SIZE	GROUNDING CONDUCTOR	CONDUIT
400 AMP	4-#500 MCM CU (THHN)	1-#3	1-3 1/2"
225 AMP	4-4/0 CU (THHN)	1-#4	1-2 1/2"
200 AMP	4-3/0 CU (THHN)	1-#6	1-2"
150 AMP	4-1/0 CU (THHN)	1-#8	1-2"
125 AMP	4-#1 CU (THHN)	1-#8	1-1 1/2"
100 AMP	4-#1 CU (THHN)	1-#8	1-1 1/2"

CONDUIT SIZES ARE FOR ELECTRICAL METALLIC TUBING OR SCHEDULE 40 PVC - PER TABLES C1 &amp; C10 (1996 NEC)

## SUB-PANEL BREAKER SCHEDULE

PANEL SIZE	MIN. BREAKER REQ'D @ MAIN POLES
100 AMPS	100
150 AMPS	150
200 AMPS	200
225 AMPS	225
400 AMPS	400

## EQUIPMENT GROUNDING CONDUCTOR SCHEDULE

OVER-CURRENT DEVICE	COPPER (AWG)	ALUMINUM OR COPPER-CLAD ALUMINUM (AWG)
20	10	10
30	10	8
40	10	8
60	10	8
100	8	6
200	6	4

- PER N.E.C. TABLE 250-95

## CONDUCTOR/CONDUIT SCHEDULE