

GENERAL NOTES

ALL WORK SHALL CONFORM TO THE 2022 CALIFORNIA BUILDING CODE, CALIFORNIA ELECTRIC CODE AND CALIFORNIA PLUMBING CODE INCLUDING ALL THE REVISIONS AND AS ADOPTED BY THE LOCAL BUILDING CODES AND ORDINANCES.

ALL DIMENSIONS RELATING TO THE EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD. DIMENSIONS SHALL NOT BE SCALED FROM THE DRAWINGS.

ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER. WORK SHALL NOT BE COMMENCED UNLESS THE DISCREPANCIES ARE CLARIFIED AND THE REVISED DRAWINGS ARE ISSUED BY THE CONTRACTOR/OWNER.

ALL FRAMING LUMBER SHALL BE DOUGLAS FIR NO. 1 OR BETTER. ALL LUMBER IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED DOUGLAS FIR.

ALL STEEL HANGERS AND CONNECTORS TO BE BY SIMPSON OR EQUIVALENT.

ALL NAILS SHALL BE STEEL COMMON WIRE NAILS UNLESS OTHERWISE NOTED.

INSULATION - USE R30 BENEATH ROOF AND IN GARAGE CEILING; R13 IN ALL EXTERIOR WALLS AND PARTITION WALLS BETWEEN GARAGE AND HABITABLE ROOMS.

FINISHES:

INTERIOR WALLS AND CEILINGS - 1/2" SMOOTH WALL FINISH.

OWNER WILL FURNISH CONTRACTOR WITH A LIST OF SELECTED COLORS AND LOCATION OF WHERE SAME IS TO BE APPLIED.

GREEN BUILDING NOTES:

**Construction and Demolition Debris:** 100% of mixed debris must be transported by a registered hauler to a registered facility and be processed for recycling, in compliance with the Construction & Demolition Debris Ordinance

**Recycling by Occupants:** Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials. - See Administrative Bulletin 088.

**Indoor Water Efficiency:**Install water-efficient fixtures and fittings as summarized in CalGreen 4.303 (See "Indoor Water Efficiency" at left.) Replace all noncompliant fixtures in project area (CalGreen 3.301.1.1, )

**Energy Efficiency:** Comply with California Energy Code (Title 24, Part 6)

**Pest Protection:** Annular spaces around pipes, electric cables, conduits, or other openings in sole/bottom plates at exterior walls shall be closed with cement mortar, concrete masonry, or a similar method acceptable to DBI for protection against rodents.

**Moisture content of building materials:** Verify wall and floor framing does not exceed 19% moisture content prior to enclosure. Materials with visible signs of moisture damage shall not be installed. Moisture content shall be verified in compliance with the following: (CalGreen 4.505.3 )

1) Moisture content shall be determined with either a probe-type or a contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements in Section 101.8.

2) Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade-stamped end of each piece to be verified.

3) At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing. Insulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Manufacturers' drying recommendations shall be followed for wet-applied insulation products prior to enclosure

**Design and Install HVAC System to ACCA Manual J, D, and S** (CalGreen 4.507.2)

**HVAC Installer Qualifications:** HVAC system installers must be trained and certified in the proper installation of

**HVAC Installer Qualifications:** HVAC system installers must be trained and certified in the proper installation of HVAC systems, such as via a state certified apprenticeship program, public utility training program (with certification as installer qualification), or other program acceptable to the Department of Building Inspection. (CalGreen 702.1)

**Covering duct openings and protecting mechanical equipment during construction:** Duct openings and other air distribution component openings shall covered during all phases of construction with tape, plastic, sheetmetal, or other acceptable methods to reduce the amount of water, dust, and debris entering the system.

**Bathroom exhaust fans:** Must be ENERGY STAR compliant, ducted to terminate outside the building, and controlled by humidistat capable of adjustment between relative humidity of less than 50% to maximum of 80%. Humidity control may be a separate component from the exhaust fan.

**Interior paints and coatings:** Comply with VOC limits in the Air Resources Board Architectural Coatings Suggested Control Measure and California Code of Regulations Title 17 for aerosol paints. See CalGreen Table 4.504.3.

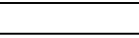
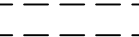
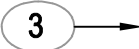
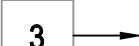
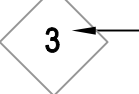
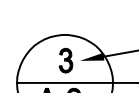
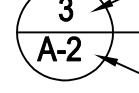
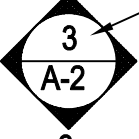
**Low-VOC aerosol paints and coatings:** Meet BAAQMD VOC limits (Regulation 8, Rule 49) and Product-Weighted MIR Limits for ROC. (CalGreen 4.504.2.3.)

**Low VOC Caulks, Construction adhesives, and Sealants:** Meet SCAQMD Rule 1168. See CalGreen Tables

ABBREVIATIONS

|        |                   |          |                        |
|--------|-------------------|----------|------------------------|
| @      | AT                | FND      | FOUNDATION             |
| ⌀      | CENTERLINE        | FIN      | FINISH                 |
| Ø      | DIAMETER          | FLR      | FLOOR                  |
| (E)    | EXISTING          | FOS      | FACE OF STUD           |
| ℙ      | PROPERTY LINE     | FOF      | FACE OF FINISH         |
|        |                   | FLUOR    | FLUORESCENT            |
| AD     | AREA DRAIN        | GA       | GAUGE                  |
| ASB    | ASBESTOS          | G.C.     | GEN. CONTRACTOR        |
| A.F.F. | ABOVE FIN. FLR.   | GND      | GROUND                 |
| BD     | BOARD             | GYP. BD. | GYP. BOARD             |
| BLDG   | BUILDING          |          |                        |
| BLK    | BLOCK             | H.C.     | HANDICAP               |
| BOT    | BOTTOM            | HDWR     | HARDWARE               |
| BUR    | BUILT-UP ROOFING  | HP       | HIGH POINT             |
|        |                   | H.W.     | HOT WATER              |
| CAB    | CABINET           | INSUL    | INSULATION             |
| C.B.   | CATCH BASIN       | INT      | INTERIOR               |
| CEM    | CEMENT            |          |                        |
| CER    | CERAMIC           |          |                        |
| CLG    | CEILING           | MECH     | MECHANICAL             |
| CLR    | CLEAR             | MET      | METAL                  |
| CLO    | CLOSET            |          |                        |
| COL    | COLUMN            | (N)      | NEW                    |
| CONSTR | CONSTRUCTION      | NIC      | NOT IN CONTRACT        |
| CONT   | CONTINUOUS        | NO.#     | NUMBER                 |
| CTR    | CENTER            | O.C.     | ON CENTER              |
|        |                   | OPP      | OPPOSITE               |
| DBL    | DOUBLE            | PLAS     | PLASTER                |
| D.F.   | DRINKING FOUNTAIN | PLYWD    | PLYWOOD                |
| DET    | DETAIL            |          |                        |
| DIM    | DIMENSION         | RD       | ROOF DRAIN             |
| DIA    | DIAMETER          | RO       | ROUGH OPENING          |
| DISP   | DISPENSER         |          |                        |
| DN     | DOWN              | SHT      | SHEET                  |
| DR     | DOOR              | STOR     | STORAGE                |
| DWR    | DRAWER            |          |                        |
| DS     | DOWNSPOUT         | T.B.A.   | TO BE ASSIGNED         |
| DWG    | DRAWING           | T/G      | TONGUE & GROOVE        |
|        |                   | TYP.     | TYPICAL                |
|        |                   |          |                        |
| E      | EAST              | UNF.     | UNFINISHED             |
| EA     | EACH              | UON      | UNLESS OTHERWISE NOTED |
| EL     | ELEVATION         |          |                        |
| ELEC   | ELECTRICAL        |          |                        |
| EQ     | EQUAL             | WD       | WOOD                   |
| EQUIP  | EQUIPMENT         | WP       | WATERPROOF             |
| EXIST  | EXISTING          |          |                        |
| EXP    | EXPANSION         |          |                        |
| EXT    | EXTERIOR          |          |                        |

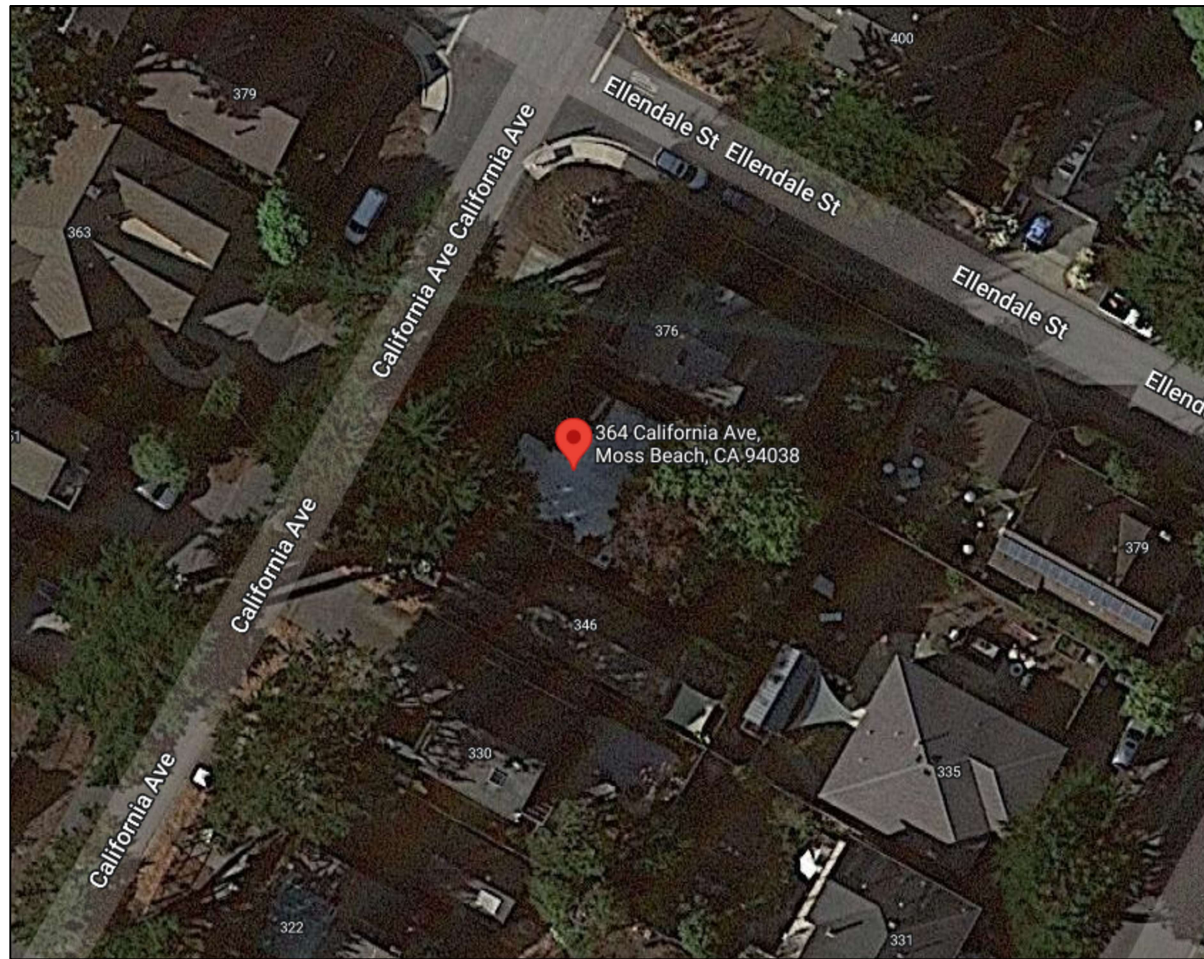
LEGEND / SYMBOLS

|                                                                                     |                                                             |                                                                                       |                                                               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------|
|  | EXISTING STRUCTURE TO REMAIN                                |  | TREE/PLANT                                                    |
|  | EXISTING TO BE REMOVED                                      |  |                                                               |
|  | NEW CONSTRUCTION                                            |                                                                                       |                                                               |
|  | DEMOLITION KEY NOTES                                        |  | SMOKE DETECTOR<br>110V W/ BATTERY BACKUP                      |
|  | CONSTRUCTION KEY NOTES                                      |  | SMOKE / CARBON<br>MONOXIDE DETECTOR<br>110V W/ BATTERY BACKUP |
|  | WINDOW NUMBER SYMBOL                                        |                                                                                       |                                                               |
|  | DETAIL # ON WHICH DET. OCCURS                               |                                                                                       |                                                               |
|  | SECTION # ON WHICH DET. OCCURS                              |                                                                                       |                                                               |
|  | DETAIL PLAN NUMBER                                          |                                                                                       |                                                               |
|  | INTERIOR ELEVATION # WITH INDICATOR SHOWING DIRECTION TAKEN |                                                                                       |                                                               |
|  | DOOR NUMBER SYMBOL                                          |                                                                                       |                                                               |

NOTES:  
IF THE WORK IS OR IS NOT A SUBSTANTIAL ALTERATION AS DEFINED IN SECTION 9102 OF SAN MATEO COUNTY ORDINANCE NO. 4873. WHEN THE RENOVATION OF ANY STRUCTURE AND/OR WHEN COMBINED WITH ANY ADDITIONS TO THE STRUCTURE, AFFECTS A GROSS FLOOR AREA WHICH EXCEEDS FIFTY PERCENT(50%) OF THE EXISTING FLOOR AREA OF THE STRUCTURE, THE STRUCTURE SHALL BE PROVIDED WITH SPRINKLERS PER SECTION 9105 OF SAN MATEO COUNTY ORDINANCE NO. 4803. THE SQUARE FEET OF ADDITION PLUS INTERIOR REMODEL DIVIDED OVER EXISTING FLOOR AREA. NOTE SPRINKLERS ARE REQUIRED IF WORK AFFECTS 50% OR MORE OR NOT REQUIRED IF LESS.

BACK ADDITION  
364 CALIFORNIA AVE.  
MOSS BEACH, CA. 94038  
APN: 037-118-050

ROOF VIEW



FRONT VIEW



VICINITY MAP



APPLICABLE CODES:

JURISDICTION: SAN MATEO COUNTY BUILDING CODE:

2022 CALIFORNIA BUILDING CODE ADMENDMENTS  
2022 CALIFORNIA RESIDENTIAL CODE  
2022 CALIFORNIA MECHANICAL CODE  
2022 CALIFORNIA ELECTRICAL CODE  
2022 CALIFORNIA PLUMBING CODE  
2022 CALIFORNIA ENERGY CODE  
2022 CALIFORNIA FIRE CODE & ALL RELATED  
2022 SAN MATEO COUNTY BUILDING CODE ORDINANCES

**\*\*SPRINKLER UNDER SEPARATE PERMIT**

OWNER INF. / PROJECT DATA

OWNER: MCDOW, ALEX

ADDRESS: 364 CALIFORNIA AVE.  
MOSS BEACH, CA. 94038

|                      |                               |
|----------------------|-------------------------------|
| APN#:                | 037-118-050                   |
| ZONING:              | S-17-DR1(SINGLE FAMILY)       |
| AVERAGE SLOPE:       | 2%                            |
| SITE AREA:           | 5,180 SF                      |
| FAR:                 | 50%                           |
| ALLOWED FLOOR AREA:  | 2,590 SF                      |
| PROPOSED FLOOR AREA: | EXISTING/REMODELING NEW TOTAL |
| MAIN LEVEL           | 1395 1190 2585                |

(E)LOT COVERAGE 1395/5180=27%  
(N)LOT COVERAGE 2585/5180=49.9%  
OCCUPANCY GROUP: R-3/U  
CONSTR. TYPE: V-B  
FIRE PROTECTION: SPRINKLER UNDER SEPARATE PERMIT  
RES.UNITS: 1(NO CHANGE)  
No OF STORIES: 1(NO CHANGE)  
GARAGE: 1 TO 2

DRAWINGS

| ARCHITECTURAL |                                        |
|---------------|----------------------------------------|
| A1.0          | COVER SHEET; GENERAL INFORMATION       |
| -             | TOPOGRAPHIC SURVEY PLAN                |
| A1.1          | EXISTING/PROPOSED SITE/ROOF PLANS      |
| A1.1.1        | DRAINAGE PLAN                          |
| A1.2          | ARBORIST REPORT                        |
| A1.3          | APPROVED LETTERS                       |
| A2.1          | EXISTING/PROPOSED FLOOR PLANS          |
| A2.2          | EXISTING/PROPOSED ELEVATION PLANS      |
| A2.3          | PROPOSED SECTION PLANS & DETAILS       |
| MEP-1         | MECHANICAL/ELECTRICAL/PLUMBING PLANS   |
| A3.0          | RESIDENTIAL MANDATORY MEASURES SUMMARY |
| T24.1         | ENERGY CALCULATIONS                    |
| T24.2         | ENERGY CALCULATIONS & SPECS.           |

| STURCTURAL |                 |              |
|------------|-----------------|--------------|
| S1.0       | GENERAL NOTES   | S2.0 PLANS   |
| S1.1       | TYPICAL DETAILS | S3.0 DETAILS |
| S1.2       | TYPICAL DETAILS | S4.0 DETAILS |
| S1.3       | TYPICAL DETAILS |              |
| S1.4       | TYPICAL DETAILS |              |

SCOPE OF WORK PER PLAN

THE PURPOSE OF THESE PLANS AND THE BUILDING PERMIT APPLIED FOR UNDER SAME IS TO:

- ADDING 1190 SQFT AT BACK OF THE EXISTING HOUSE.
- REMODEL/RECONFIGURE EXISTING APPROXIMATELY 1395 SQ.FT. INTERIOR W/NEW KITCHEN AND NEW BATHROOM.

AM ASSOCIATE

210 GIRARD ST  
SAN FRANCISCO  
CALIFORNIA 94134

T: 415-722-9611

~~F: 415-333-7041~~

E: ACHUONG@GMAIL.COM

REVISIONS

| NO. | DATED    | REVISION                      | BY |
|-----|----------|-------------------------------|----|
| 1   | 01-29-22 | SUBMITTAL                     | AC |
| 2   | 05-05-22 | PRE-APP COMPLETE              | AC |
| 3   | 06-18-22 | SUBMITTAL                     | AC |
| 4   | 07-27-22 | REVISED FOR PLANNING          | AC |
| 4.1 | 07-24-25 | REVISED FOR PLANNING          | AC |
| 5   | 11-03-25 | REVISED FOR PLANNING/BUILDING | AC |
| 5.1 | 04-06-26 | REVISED FOR PLANNING/BUILDING | AC |
|     |          |                               |    |
|     |          |                               |    |

OWNER

SLM RESIDENCE

364 CALIFORNIA AVE.  
MOSS BEACH, CA 94038  
APN: 037-118-050

SHEET CONTENTS

COVER SHEET  
GENERAL INFO

Title

Designed By

Drawn By

As Noted

Scale

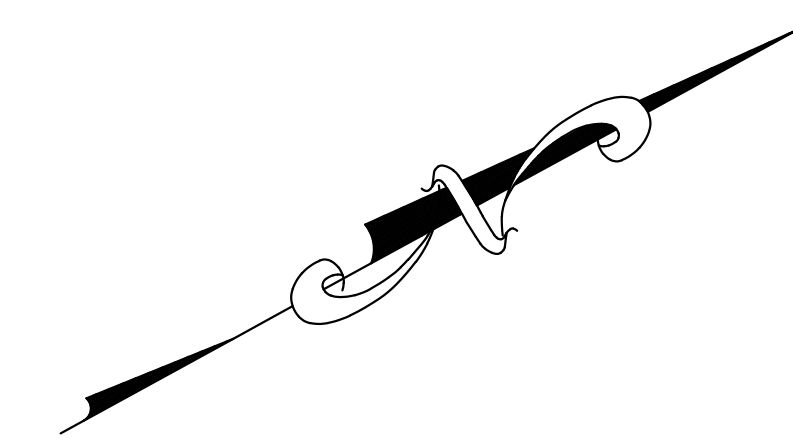
AM-RA/364-012822

File Name

Of 20 Sheets

A-1.0

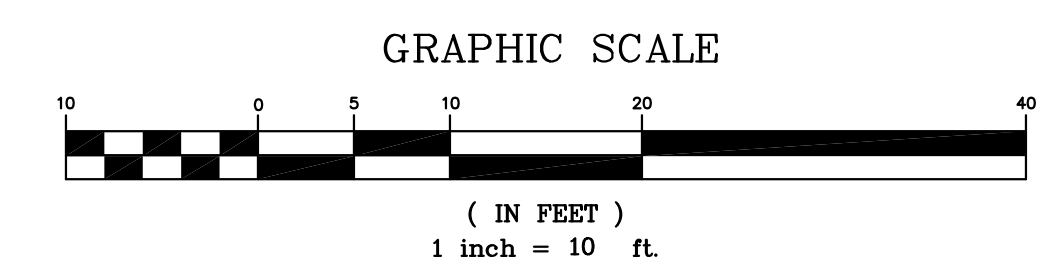




THE SUBJECT PROPERTY LIES ENTIRELY WITHIN FLOOD ZONE "X", BASED ON FLOOD INSURANCE RATE MAP 06081C0119F, DATED AUGUST 2, 2017.

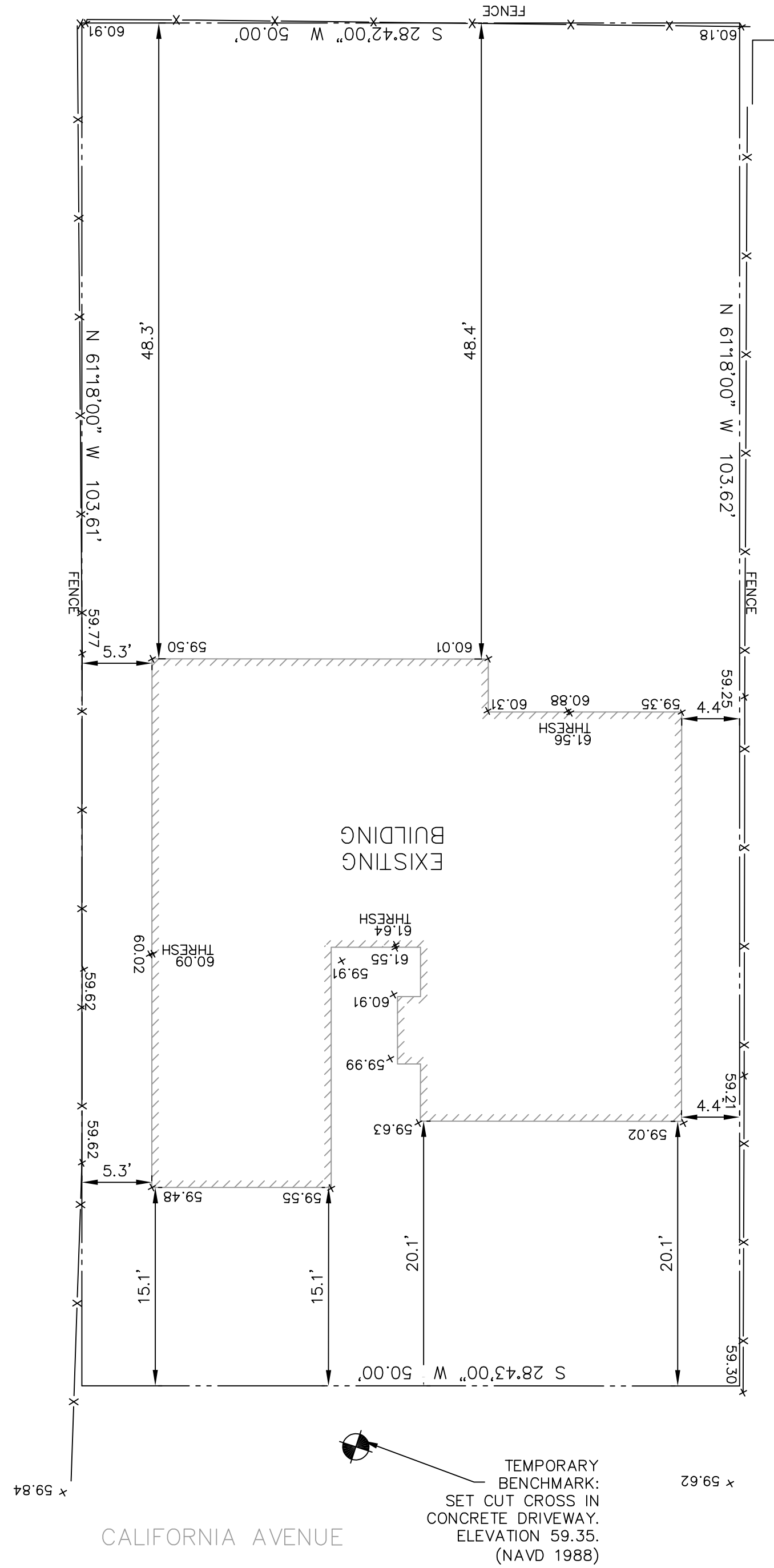
EASEMENTS, IF ANY, ARE NOT INDICATED HEREON.

= 5,181 SQ. FT. ±  
= 0.119 ACRES ±



|         |  |                  |  |                                                                                |  |                  |  |                                                                                                                                                                                                   |  |
|---------|--|------------------|--|--------------------------------------------------------------------------------|--|------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| SHEET   |  | DRAWN BY: RJD    |  | PARTIAL TOPOGRAPHIC SURVEY PLAN                                                |  | PREPARED FOR:    |  | <div>DAINS LAND SURVEYING</div> <div>rdains@dalnslandsurveying.net</div> <div>(650) 743-0831</div> <div></div> |  |
| 1 OF 1  |  | DESIGNED BY: --- |  | 364 CALIFORNIA AVENUE<br>A.P.N. 037-118-050<br>LOTS 19-20, BLOCK 63, 6 MAPS 10 |  | ANGELINA CHUONG  |  |                                                                                                                                                                                                   |  |
| 22-1124 |  | CHECKED BY: RJD  |  | UNINCORPORATED<br>MOSS BEACH                                                   |  | SAN MATEO COUNTY |  |                                                                                                                                                                                                   |  |
|         |  | SCALE: 1"=10'    |  | CALIFORNIA                                                                     |  |                  |  |                                                                                                                                                                                                   |  |
|         |  | DATE: 04/07/22   |  |                                                                                |  |                  |  |                                                                                                                                                                                                   |  |
|         |  | PROJECT NO.      |  |                                                                                |  |                  |  |                                                                                                                                                                                                   |  |
|         |  | 22-1124          |  |                                                                                |  |                  |  |                                                                                                                                                                                                   |  |
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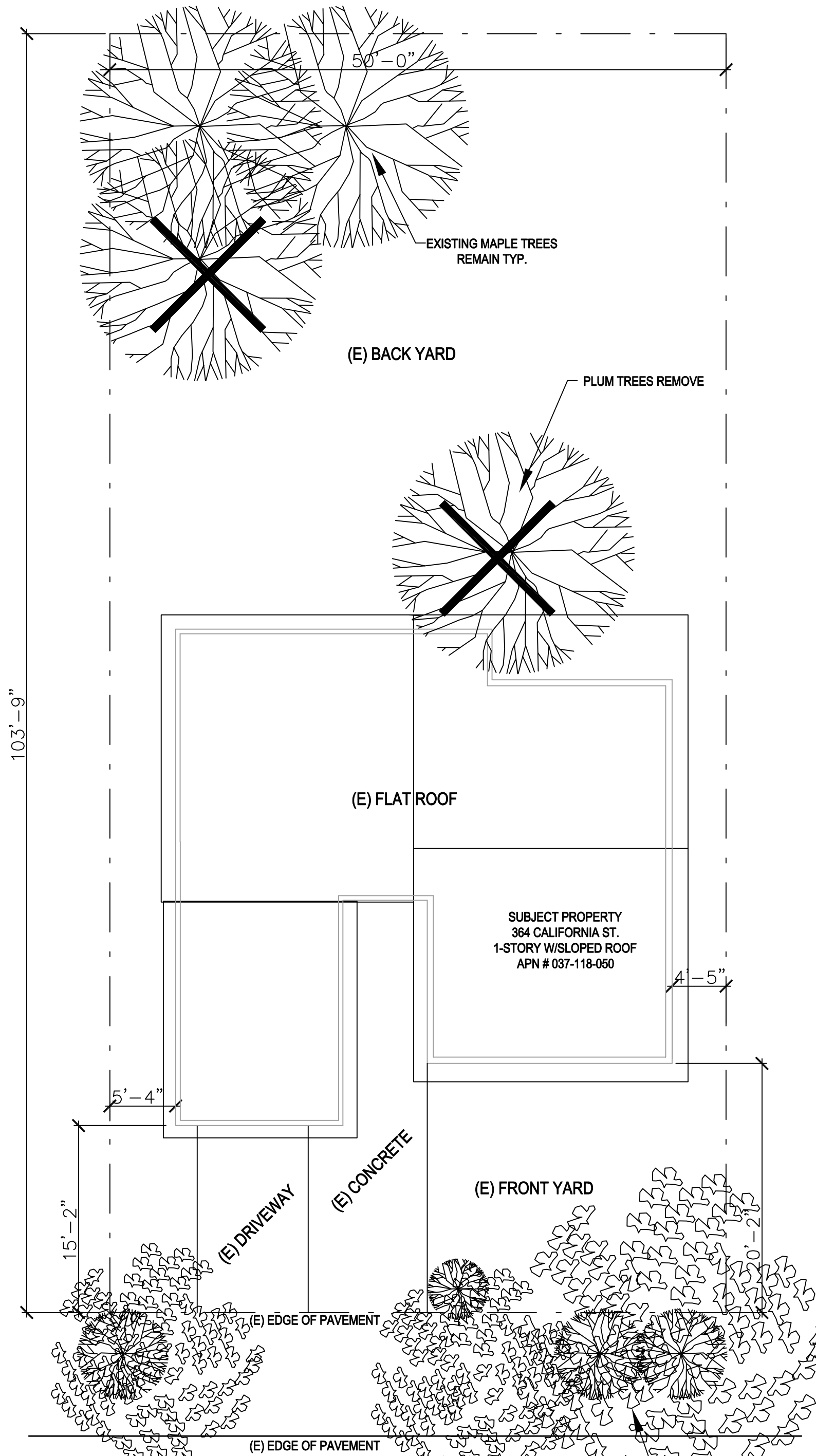
③ (E) BOUNDARY SURVEY PLAN  
SCALE: 1"=1'-0"



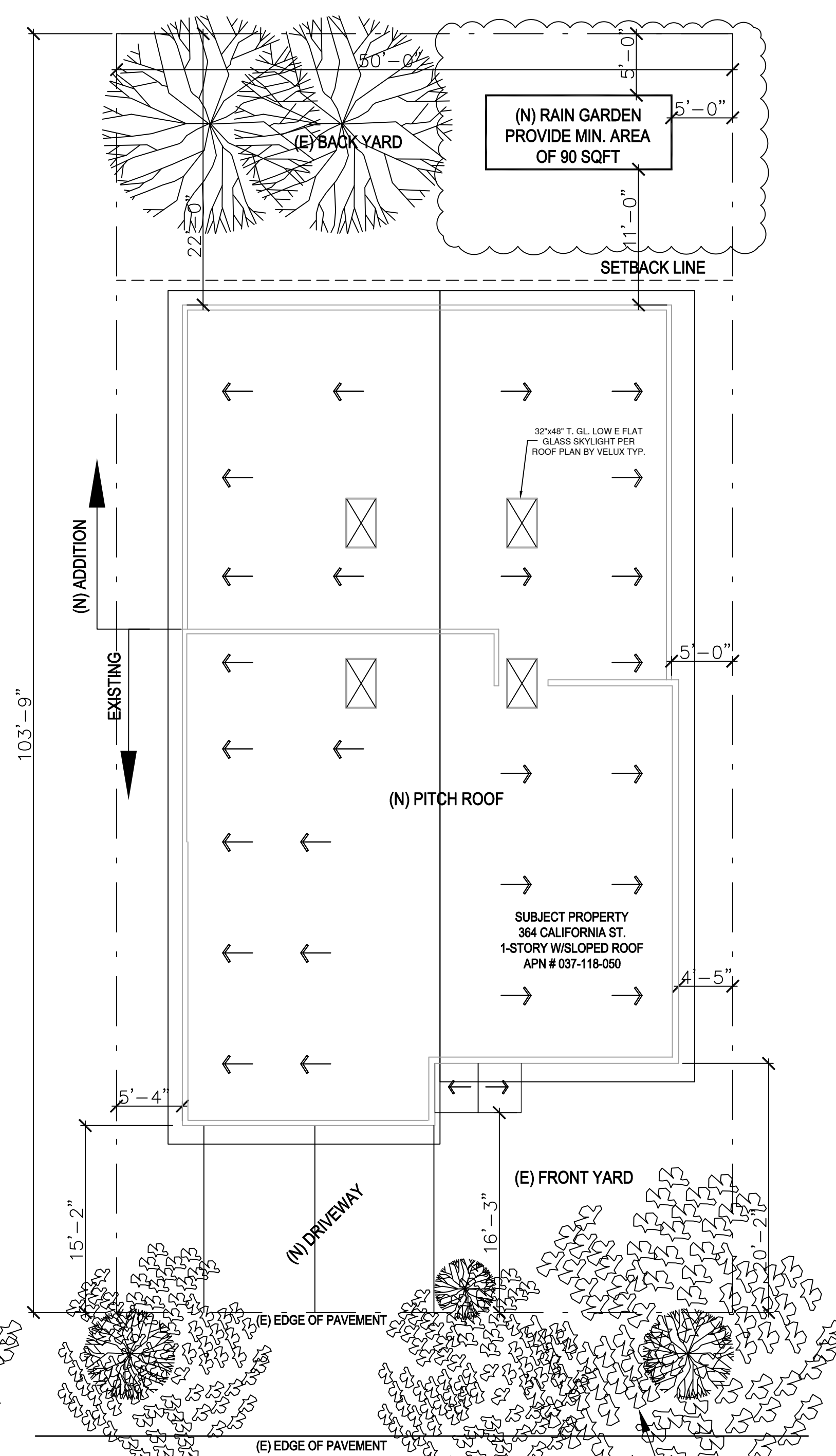
④ COLOR RENDITION  
SCALE: N.T.S.

Fiber rolls are typically spaced as follows:  
10 feet apart for slopes steeper than 2:1 (horizontal:vertical)  
15 feet apart for slopes from 2:1 to 4:1 (horizontal:vertical)  
20 feet apart for slopes from 4:1 to 10:1 (horizontal:vertical)  
50 feet apart for slopes flatter than 10:1 (horizontal:vertical)

THE EXISTING LANDSCAPING  
WILL BE KEPT AS NATURAL  
AND TREES REMAIN ACCEPT  
TWO "NO NEW LANDSCAPING  
IS PROPOSED



① (E) SITE/ROOF PLAN  
SCALE: 1/8"=1'-0"



② (N) SITE/ROOF PLAN  
SCALE: 1/8"=1'-0"

REVISIONS

| NO. | DATED    | REVISION                      | BY |
|-----|----------|-------------------------------|----|
| 1   | 01-29-22 | SUBMITTAL                     | AC |
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| 3   | 06-18-22 | SUBMITTAL                     | AC |
| 4   | 07-27-22 | REVISED FOR PLANNING          | AC |
| 4.1 | 07-24-25 | REVISED FOR PLANNING          | AC |
| 5   | 11-03-25 | REVISED FOR PLANNING/BUILDING | AC |
| 5.1 | 04-06-26 | REVISED FOR PLANNING/BUILDING | AC |

OWNER

SLM RESIDENCE

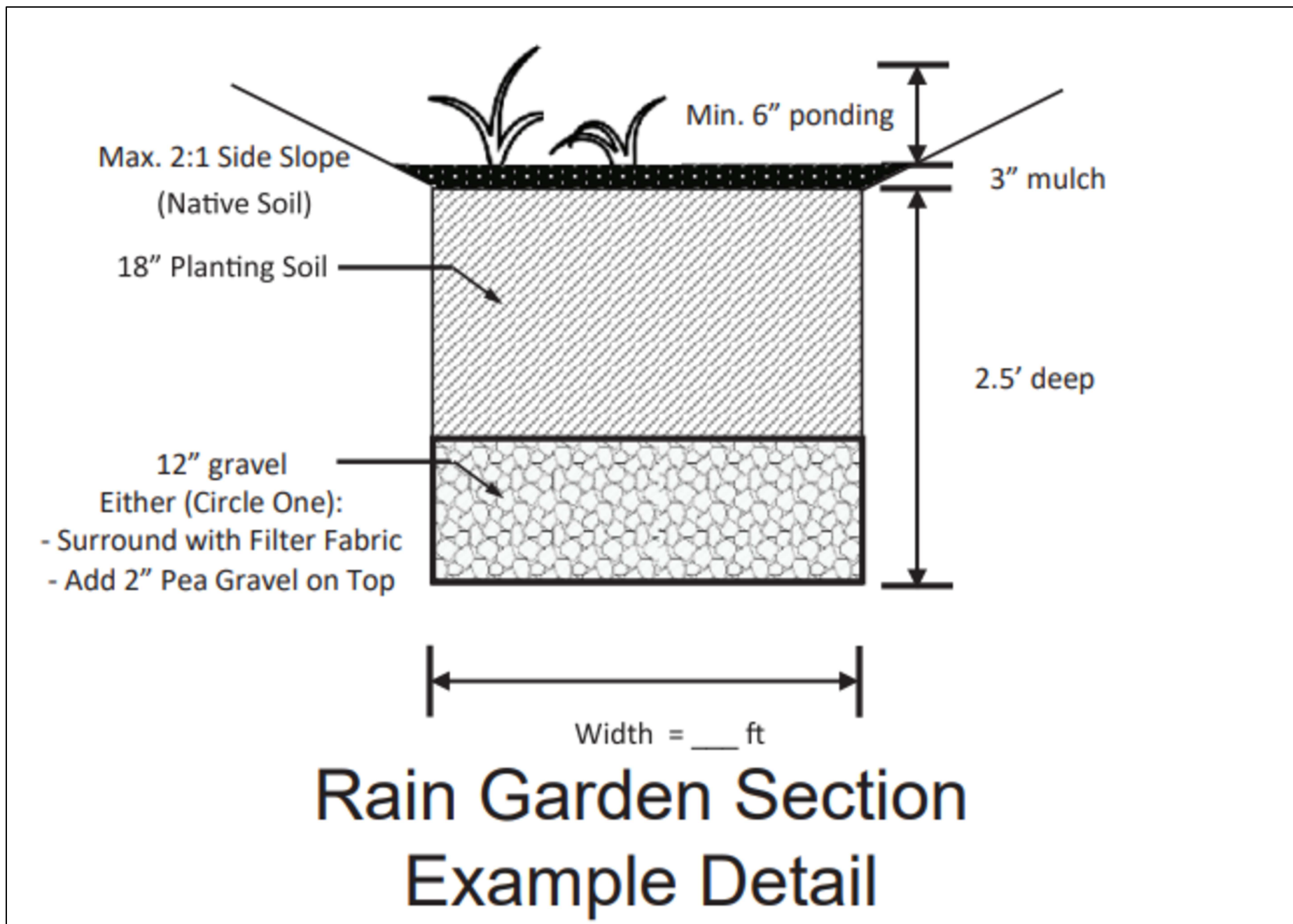
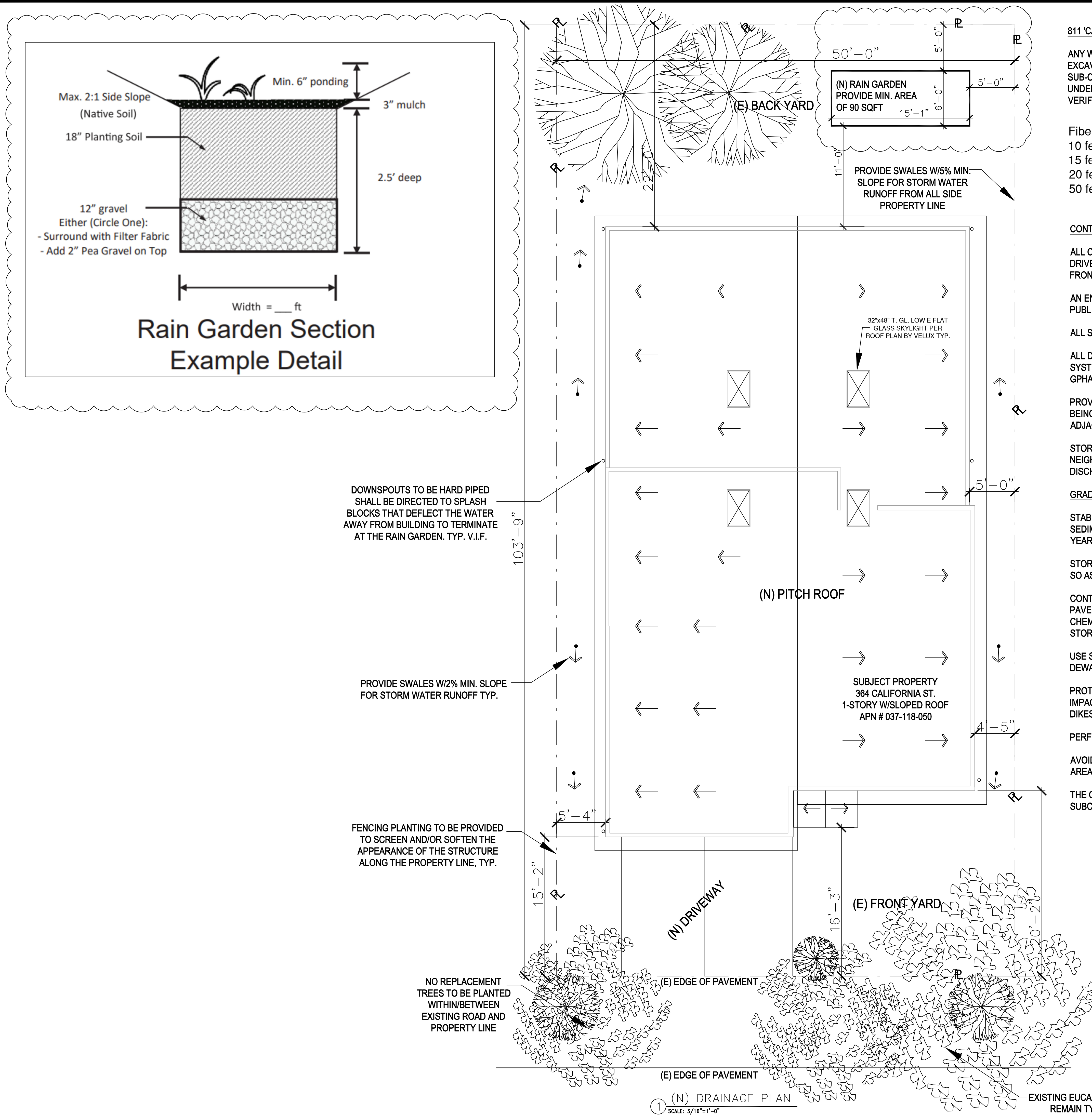
364 CALIFORNIA AVE.  
MOSS BEACH, CA 94038  
APN: 037-118-050

SHEET CONTENTS

EXISTING/PROPOSED  
SITE/ROOF PLANS

|                  |              |
|------------------|--------------|
| Title            | A-1.1        |
| Designed By      |              |
| Drawn By         |              |
| As Noted         |              |
| Scale            |              |
| AM-RA/364-012822 |              |
| File Name        | Of 20 Sheets |





811 'CALL BEFORE YOU DIG':

ANY WORK THAT DISTURBS THE GROUND; SUCH AS EARTHWORK, DEMOLITION, EXCAVATION, GRADING, AND LANDSCAPE REQUIRES HOMEOWNERS, CONTRACTORS, SUB-CONTRACTORS, OR ANY PERSON RESPONSIBLE TO INDIVIDUALLY CALL 811 FOR UNDERGROUND UTILITY AND/OR SERVICE LOCATIONS, AND TO POTHOLE VERIFY/EXPOSE UTILITY AND /OR SERVICE PRIOR TO COMMENCEMENT OF WORK.

Fiber rolls are typically spaced as follows:  
10 feet apart for slopes steeper than 2:1 (horizontal:vertical)  
15 feet apart for slopes from 2:1 to 4:1 (horizontal:vertical)  
20 feet apart for slopes from 4:1 to 10:1 (horizontal:vertical)  
50 feet apart for slopes flatter than 10:1 (horizontal:vertical)

CONTRACTOR/SITE PLAN NOTES:

ALL CONTRACTORS ARE REQUIRED TO REPAIR ANY BROKEN AREAS OF THE LOT'S DRIVEWAY APPROACH, SIDEWALK, CURB AND GUTTER ALONG THE STREET FRONTAGE OF THE PROPERTY.

AN ENCROACHMENT PERMIT WILL BE REQUIRED TO INSTALL ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.

ALL SURFACE DRAINAGE IS EXISTING TO REMAIN U.O.N.

ALL DOWNSPOUT SHALL BE HARD PIPED TO TERMINATE @ CITY STORM DRAIN SYSTEM AS NOTED ON SITE PLAN AND INDICATED IN EXTERIOR ELEVATION GPHALLCALLY.

PROVIDE POSITIVE (2%) SLOPE FROM ALL STRUCTURES WHERE (E) GRADING IS BEING ALTERED. NO FINAL GRADING IS TO INCREASE OR SHIFT FLOW ONTO ADJACENT PROPERTIES.

STORM WATER SHALL DRAIN AWAY FROM THE BUILDING AND AWAY FROM THE NEIGHBORING PROPERTIES TO EITHER ON SITE RETENTION/DETENTION OR TO DISCHARGE TO THE PUBLIC WAY.

GRADING & EROSION CONTROL NOTES:

STABILIZE ALL DENUDED AREAS & INSTALL & MAINTAIN ALL TEMPORARY EROSION & SEDIMENT CONTROLS CONTINUOUSLY BETWEEN OCT. 15TH & APRIL 15TH OF EACH YEAR, UNTIL PERMANENT EROSION CONTROL HAVE BEEN ESTABLISHED.

STORE, HANDLE & DISPOSE OF CONSTRUCTION MATERIALS & WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.

CONTROL & PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENTS CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASHWATER OR SEDIMENTS & NON-STORMWATER DISCHARGES TO STORM DRAINS & WATERCOURSES.

USE SEDIMENT CONTROLS OR FILTRATION TO REMOVE SEDIMENT WHEN DEWATERING SITE & OBTAIN ALL NECESSARY PERMITS.

PROTECT ADJACENT PROPERTIES & UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, MULCHING OR OTHER MEASURES AS APPROPRIATE.

PERFORM CLEARING & EARTH MOVING ACTIVITIES ONLY DURING DRY WEATHER.

AVOID TRACKING DIRT OR OTHER MATERIALS OFF-SITE; CLEAN OFF-SITE PAVED AREAS & SIDEWALKS USING DRY SWEEPING METHODS.

THE CONTRACTOR SHALL TRAIN & PROVIDE INSTRUCTION TO ALL EMPLOYEES & SUBCONTRACTORS REGARDING THE CONSTRUCTION BMPs.

AM ASSOCIATE

210 GIRARD ST  
SAN FRANCISCO  
CALIFORNIA 94134

T: 415-722-9611

~~77-888-888-7014~~

E: ACHUONG@GMAIL.COM

REVISIONS

| NO. | DATED    | REVISION                      | BY |
|-----|----------|-------------------------------|----|
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OWNER

SLM RESIDENCE

364 CALIFORNIA AVE.  
MOSS BEACH, CA 94038  
APN: 037-118-050

SHEET CONTENTS

PROPOSED  
SITE/DRAINAGE PLAN  
AND NOTES

Title

Designed By

Drawn By **A-1.1.1**

As Noted

Scale

AM-RA/364-012822

File Name

Of 20 Sheets



Tree Protection Plan

Prior to any construction, a Tree Protection Zone, TPZ, shall be established below the canopy of the trees.

The TPZ between the demolition/construction area and the trees, within the Drip Line of the trees, shall be established. The Drip Line is the area directly located under the outer circumference of the tree branches. A chain link fence, or other suitable material shall be erected around each tree trunk or group of trees as protection from injury to the bark, (see figure #1 and #2 as an examples).

Wood chips or mulch shall be spread within the TPZ of a depth of four (4") inches to six (6") inches, leaving the trunk clear, to help reduce moisture loss and compaction.

A warning sign shall be prominently displayed on each fence, indicating Warning Trunk Protection Zone on a minimum of 8.5 x 11-inches and shall not be removed, (see fig. #3).

The protection shall remain in place on the trees until construction is complete. A Certified Arborist or county inspector shall inspect and approve the TPZ fencing prior to starting construction. This can be done in person or by photos sent via email.

If any roots are encountered during construction that are 2 inches or greater in diameter that need to be cut in order to perform the necessary construction, a Certified Arborist shall be called in to inspect the site and make recommendations.

No storage of material, waste, topsoil, or equipment shall be permitted within the TPZ. The soil, grade, drainage, and degree of soil compaction in the TPZ shall not be altered.

Any damage or injury to the roots, trunk, or branches of a Protected Tree(s) or City Tree(s) shall be reported to the Director within twelve (12) hours by contacting the Director in writing with a detailed description of the damage and location of the tree.

On the following pages contain the Tree Protection Plan and is meant to comply with regulations stated in The Significant Tree Ordinance of San Mateo County, chapter 3, section 12,020.5.

This should be printed out and given to the contractor prior to any demolition or construction being performed.

Respectfully submitted,

*Phil Danielson*

Phil Danielson - Certified Arborist with ISA #5021A



TREE SHAPERS, LLC

PHIL DANIELSON (WE-ISA #5021) Certified Arborist  
Member of Bay Area Arborist Cooperative, Inc. • License No. 707545  
411 Melrose Avenue, San Francisco, CA 94127 • (415) 239-2420

Tree Protection Plan  
for  
364 California Ave.  
Moss Beach, CA.

Submitted To

Vince Lotti

By

Phil Danielson, CERTIFIED ARBORIST  
ISA #WE5021A  
Tree Shapers, San Francisco, CA.  
[info@treeshapers.com](mailto:info@treeshapers.com)

May 5, 2025



Fig. #3



Fig. #1



Fig. #2

AM ASSOCIATE

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T: 415-722-9611

~~F: 415-333-7840~~

E: [ACHUONG@GMAIL.COM](mailto:ACHUONG@GMAIL.COM)

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OWNER

MCDOW RESIDENCE

364 CALIFORNIA AVE.  
MOSS BEACH, CA 94038  
APN: 037-118-050

SHEET CONTENTS

ARBORIST  
REPORT

Title

Designed By

Drawn By

As Noted

Scale

AM-RA/364-012822

File Name

A-1.2

Of 19 Sheets

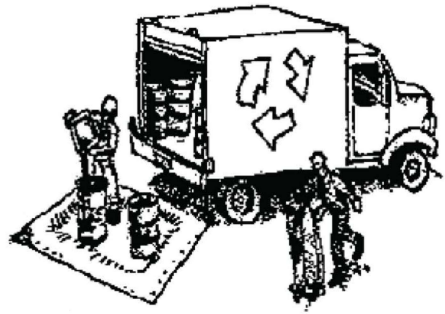




# Construction Best Management Practices (BMPs)

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



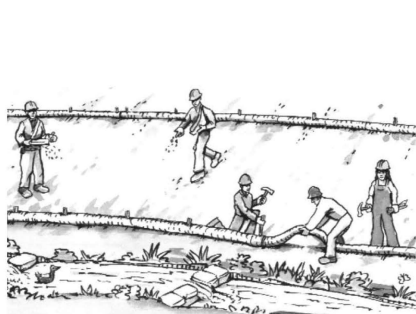
### Maintenance and Parking

- ❑ 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 or drop cloths 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, or steam cleaning equipment.

### Spill Prevention and Control

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) 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).

## Earthmoving



### Schedule grading and excavation work during dry weather.

- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

### 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, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ 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

- ❑ Protect nearby 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, absorb, 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



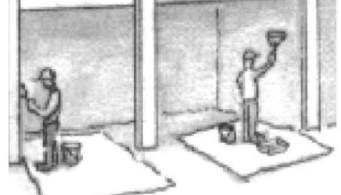
- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

## Landscaping



- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

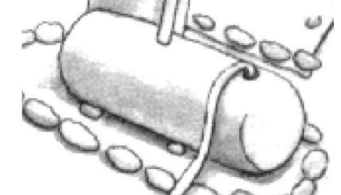
## Painting & Paint Removal



### Painting Cleanup and Removal

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm 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 excess liquids 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.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead-based paint removal requires a state-certified contractor.

## Dewatering



- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible, send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ 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 or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

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



## COASTSIDE FIRE PROTECTION DISTRICT

1191 Main Street, Half Moon Bay, CA 94019 | Website: [www.coastsidefire.org](http://www.coastsidefire.org)  
Tel: (650) 726-5213 | Fax: (650) 726-0132 | Email: [cfpdadmin@fire.ca.gov](mailto:cfpdadmin@fire.ca.gov)

May 4, 2023

SUBJECT: PLN2022-00201, 364 California Ave  
ADD-REMODEL

This is a preliminary design review of your planning case for fire department requirements at time of submittal. When this design is submitted for a building permit, there may be additional requirements according to the actual design submitted and the current codes at time of building permit submittal. This review is neither permission nor approval for final plan check for a permit. Submit the following information to the planner with the Planning & Building Division of San Mateo County under the above permit. I offer the following comments/conditions, which will be applied to this project:

1. Smoke Alarm which are hard wired: As per the California Building Code, and State Fire Marshal regulations, the applicant is required to install State Fire Marshal approved and listed smoke detectors which are hard wired, interconnected, and have battery backup. These detectors are required to be placed in each new and recondition sleeping room and at a point centrally located in the corridor or area giving access to each separate sleeping area. In existing sleeping rooms, areas may have battery powered smoke alarms. A minimum of one detector shall be placed on each floor. Smoke detectors shall be tested and approved prior to the building final. Date of installation must be added to exterior of the smoke alarm and will be checked at final.
2. Smoke alarm/detector are to be hardwired, interconnected, or with battery back-up. Smoke alarms to be installed per manufactures instruction and NFPA 72.
3. Escape or rescue windows shall have a minimum net clear openable area of 5.7 square feet, 5.0 sq. ft. allowed at grade. The minimum net clear openable height dimension shall be 24 inches. The net clear openable width dimension shall be 20 inches. Finished sill height shall be not more than 44 inches above the finished floor. (CFC 2019 section 1030.2).
4. Identify rescue windows in each bedroom and verify that they meet all requirements. Add this to plans.
5. As per Coastside Fire District Standard CI-013, building identification shall be conspicuously posted and visible from the street. (TEMPORARY ADDRESS NUMBERS SHALL BE POSTED PRIOR TO COMBUSTIBLES BEING PLACED ON SITE). The letters/numerals for permanent address signs shall be 4 inches in height with a minimum 1/2-inch stroke. Such letters/numerals shall be internally illuminated and facing the direction of access. Residential address numbers shall be at least six feet above the finished surface of the driveway. Where buildings are located remotely to the public roadway, additional signage at the driveway/roadway entrance leading to the building and/or on each individual building shall be required by the Coastside Fire District. This remote signage shall consist of a 6 inch by 18 inch green reflective metal sign with 3 inch reflective Numbers/ Letters similar to Hy-Ko 911 or equivalent shall be placed at the entrance from the nearest public roadway.
6. As per Coastside Fire District Ordinance 2019-03, the roof covering of every new building or structure, and materials applied as part of a roof covering assembly, shall have a minimum fire rating of Class "B" or higher as defined in the current edition of the California Building Code.

7. The installation of an approved spark arrester is required on all (WOOD BURNING) chimneys. Spark arresters shall be made of 12-gage woven or welded wire screening having openings not exceeding 1/8 inch. If not wood burning disregard this note.
8. Vegetation Management (LRA) – The Coastside Fire District Ordinance 2019-03, the 2019 California Fire Code 304.1.2  
A fuel break of defensible space is required around the perimeter of all structures to a distance of not less than 30 feet and may be required to a distance of 100 feet or to the property line. This is neither a requirement nor an authorization for the removal of living trees.  
Trees located within the defensible space shall be pruned to remove dead and dying portions, and limbed up 6 feet above the ground. New trees planted in the defensible space shall be located no closer than 10' to adjacent trees when fully grown or at maturity.  
Remove that portion of any existing trees, which extends within 10 feet of the outlet of a chimney or stovepipe or is within 5' of any structure. Maintain any tree adjacent to or overhanging a building free of dead or dying wood.
9. As per 2019 CFC, Appendix B and C, a fire district approved fire hydrant (Clow 960) must be located within 500 feet of the proposed single-family dwelling unit measured by way of drivable access. As per 2019 CFC, Appendix B the hydrant must produce a minimum fire flow of 500 gallons per minute at 20 pounds per square inch residual pressure for 2 hours.
10. Traffic calming devices shall be prohibited unless approved by the fire official. CFC 2019 section 503.4.1.

All fire conditions and requirements must be incorporated into your building plans, (see attached conditions) prior to building permit issuance. It is your responsibility to notify your contractor, architect and engineer of these requirements.

Our review is not construed as encompassing the structural integrity of the facility nor abrogating more restrictive requirements by other agencies having responsibility. Final acceptance is subject to field inspection and necessary tests.

NOTE: An additional re-inspection fee may be charged for missed appointments, failure to comply or not being ready.

For additional information or to schedule an inspection you may contact the Fire Marshal's Office at [cfpdfiremarshal@fire.ca.gov](mailto:cfpdfiremarshal@fire.ca.gov)

Clinton Dyer  
Deputy Fire Marshal



## MONTARA WATER & SANITARY DISTRICT

Serving the Communities of Montara and Moss Beach  
P.O. Box 370131 Tel: (650) 728-3545  
8888 Cabrillo Highway Fax: (650) 728-8556  
Montara, CA 94037-0131 E-mail: [mwsd@coastside.net](mailto:mwsd@coastside.net)  
Visit Our Web Site: <http://www.mwsd.montara.com>

March 14, 2023

Recommended Conditions of Approval for PLN2022-00201, APN 037118050,  
Owner Alex McDow, 364 California Ave, Moss Beach:

Submit Existing Service Application and pay for the initial application fees based on the remodeling type determined by MWSD. Applicant shall follow the procedures specified in the Existing Service Application Packet.

Video CCTV lower lateral and submit to MWSD (sanitary district) for review. Any defects or pipe that is not to current District code shall be replaced. Current code construction details and additional backflow protection requirements shall apply.

Water meter upgrade may be required. The condition of the existing water meter(s), BFP and water lateral connection shall be inspected by MWSD to determine if they are in good working condition; MWSD may require repair or replacement of the existing water meter(s), BFP and water lateral connection.

If connection to the District's fire protection system is required: Certified Fire Protection Contractor must certify adequate fire flow calculations. Connection fee for fire protection system is required. Connection charge must be paid prior to issuance of Private Fire Protection permit.

Applicants must first apply directly to District for permits and not their contractor.

Clemens Heldmaier  
MWSD

AM ASSOCIATE

210 GIRARD ST  
SAN FRANCISCO  
CALIFORNIA 94134

T: 415-722-9611

F: 415-398-7014

E: [ACHUONG@GMAIL.COM](mailto:ACHUONG@GMAIL.COM)

## REVISIONS

| NO. | DATED    | REVISION                      | BY |
|-----|----------|-------------------------------|----|
| 1   | 01-29-22 | SUBMITTAL                     | AC |
| 2   | 05-08-22 | PRE-APP COMPLETE              | AC |
| 3   | 06-18-22 | SUBMITTAL                     | AC |
| 4   | 07-27-22 | REVISED FOR PLANNING          | AC |
| 4.1 | 07-24-25 | REVISED FOR PLANNING          | AC |
| 5   | 11-03-25 | REVISED FOR PLANNING/BUILDING | AC |
| 5.1 | 04-06-26 | REVISED FOR PLANNING/BUILDING | AC |
|     |          |                               |    |
|     |          |                               |    |

## OWNER

SLM RESIDENCE

364 CALIFORNIA AVE.  
MOSS BEACH, CA 94038  
APN: 037-118-050

## SHEET CONTENTS

APPROVED LETTER  
BMPs

Title

Designed By

Drawn By

As Noted

Scale

AM-RA/364-012822

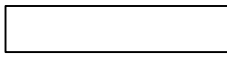
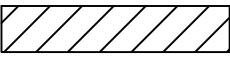
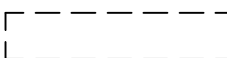
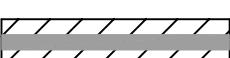
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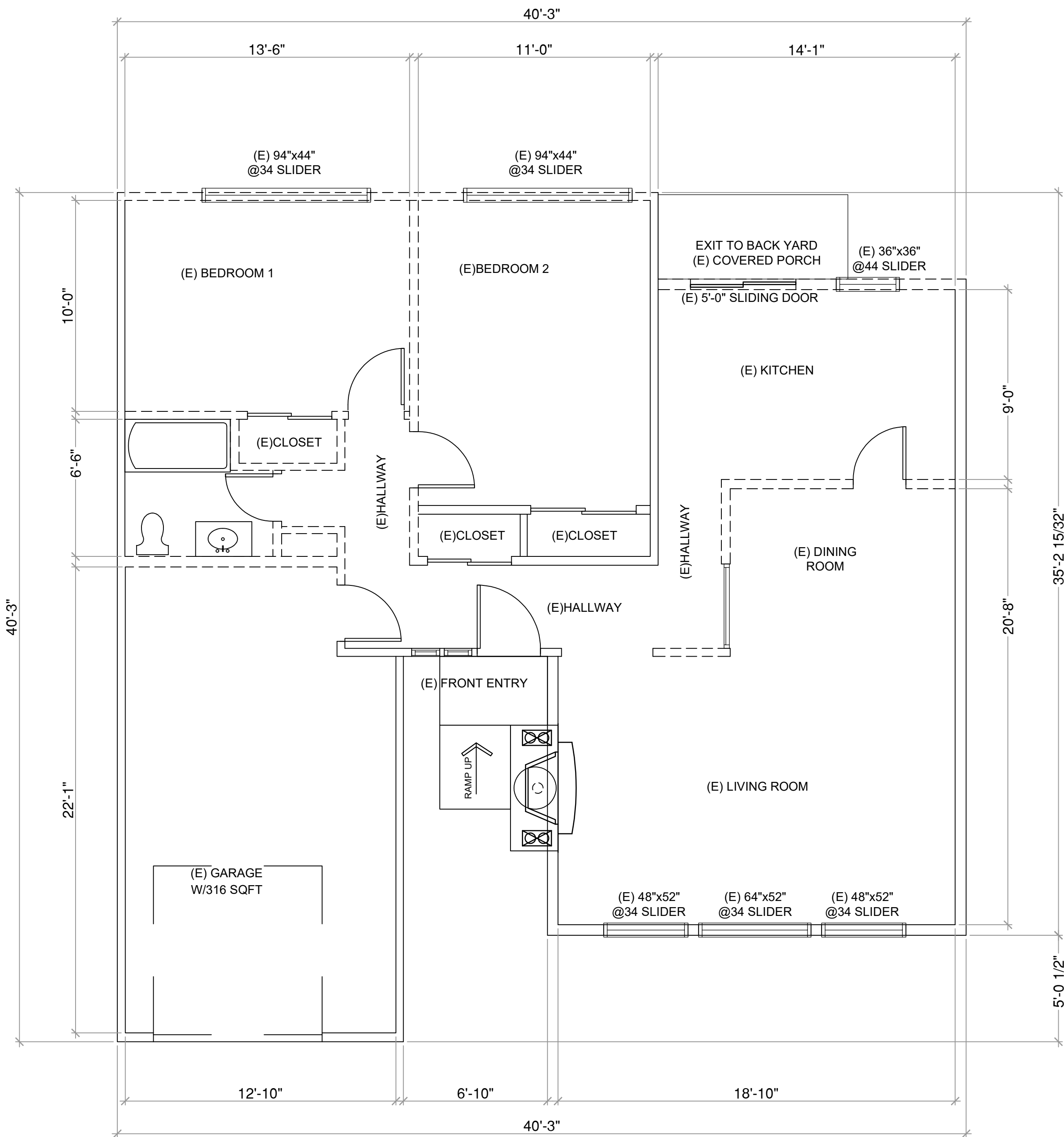
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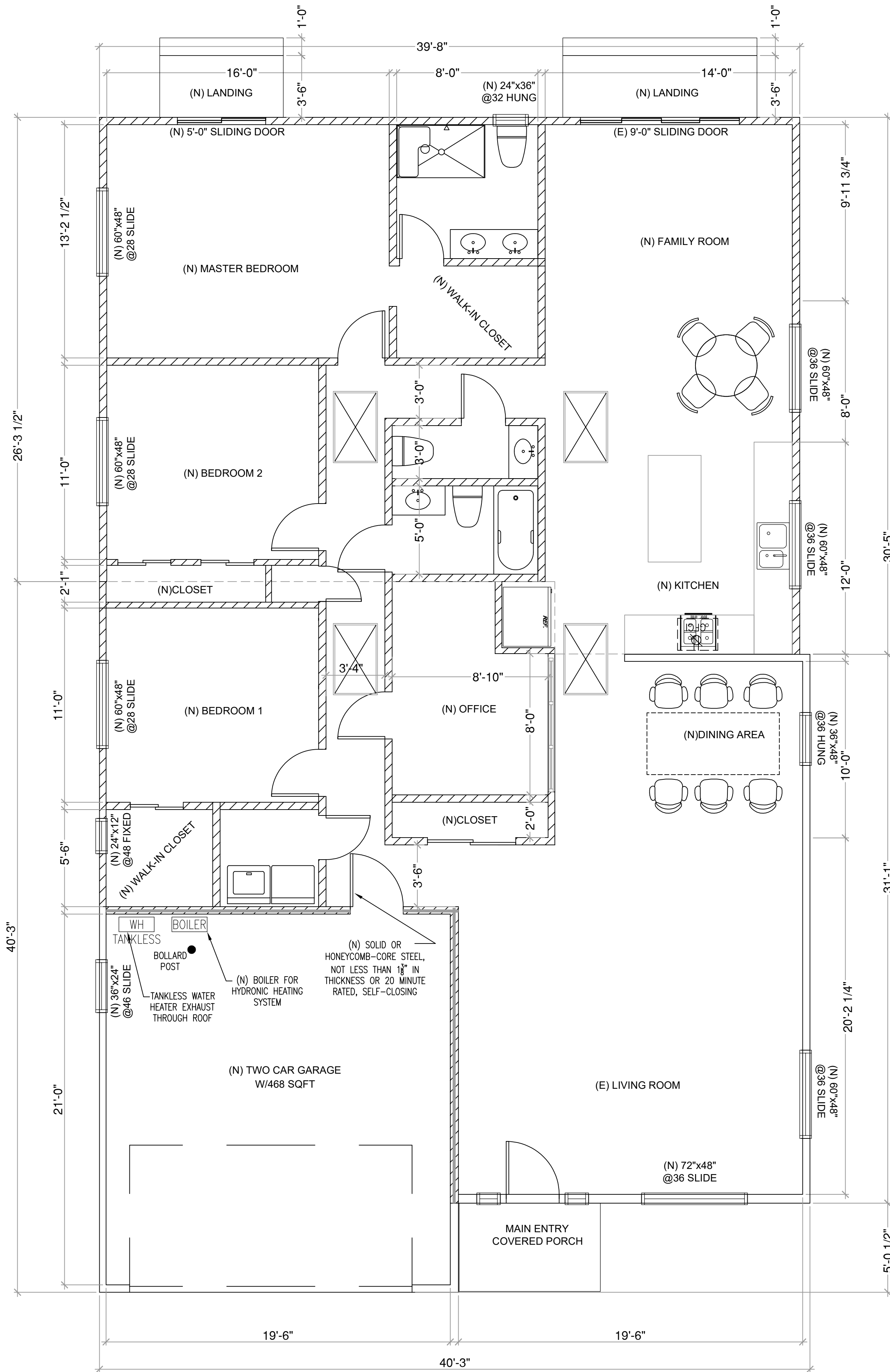
LEGEND

|                                                                                   |                       |                                                                                   |                   |
|-----------------------------------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------|-------------------|
|  | EXISTING CONSTRUCTION |  | NEW CONSTRUCTION  |
|  | WALL TO BE REMOVED    |  | 1-HR CONSTRUCTION |

| LIGHT AND VENTILATION CALCULATIONS |            |                   |                   |                      |                      |
|------------------------------------|------------|-------------------|-------------------|----------------------|----------------------|
| ROOM LOCATION                      | FLOOR AREA | LIGHTING REQUIRED | LIGHTING PROVIDED | VENTILATION REQUIRED | VENTILATION PROVIDED |
| (N)BEDROOM 1                       | 132        | 10.56             | 20                | 5.28                 | 10                   |
| (N)BEDROOM 2                       | 132        | 10.56             | 20                | 5.28                 | 10                   |
| (N)MASTER BEDROOM                  | 211        | 16.88             | 53.3              | 8.44                 | 26.6                 |
| (N)ROOMS                           | 1326       | 106.08            | 158               | 53.04                | 79                   |



1 EXISTING FLOOR PLAN WITH DEMO NOTES  
SCALE: 1/4" = 1'-0"



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

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REVISIONS

| NO. | DATED    | REVISION                      | BY |
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| 1   | 01-29-22 | SUBMITTAL                     | AC |
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364 CALIFORNIA AVE.  
MOSS BEACH, CA 94038  
APN: 037-118-050

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EXISTING/PROPOSED

FLOOR PLANS

Title

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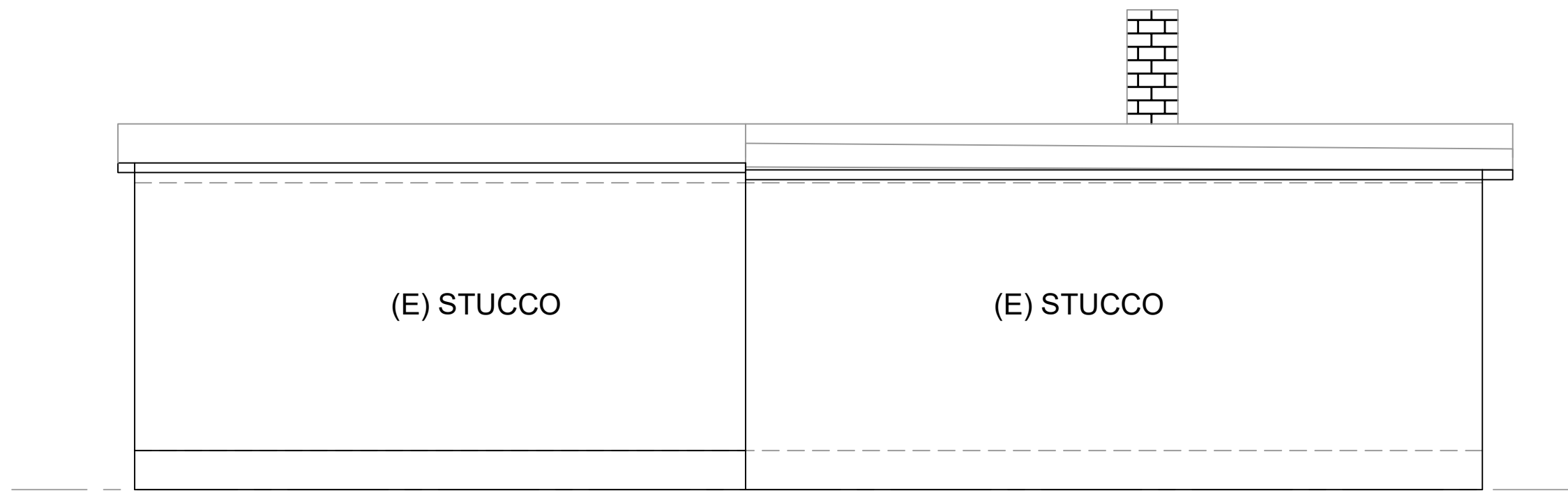
AM ASSOCIATE

210 GIRARD ST  
SAN FRANCISCO  
CALIFORNIA 94134

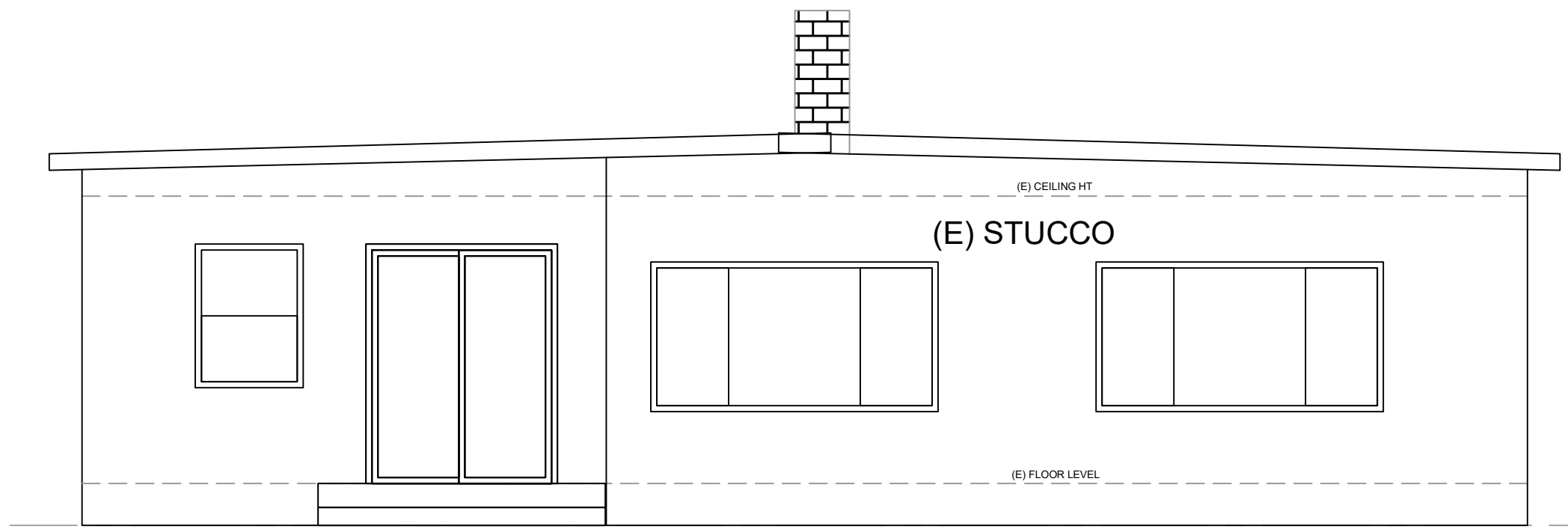
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~~F: 415-333-7311~~

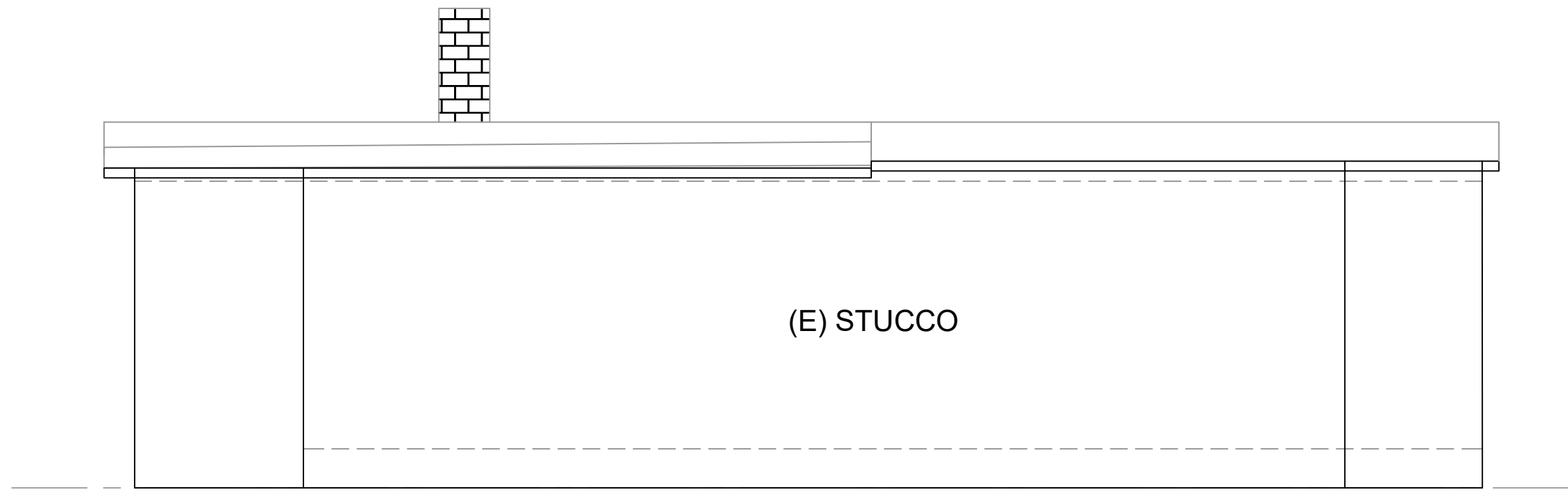
E: ACHUONG@GMAIL.COM



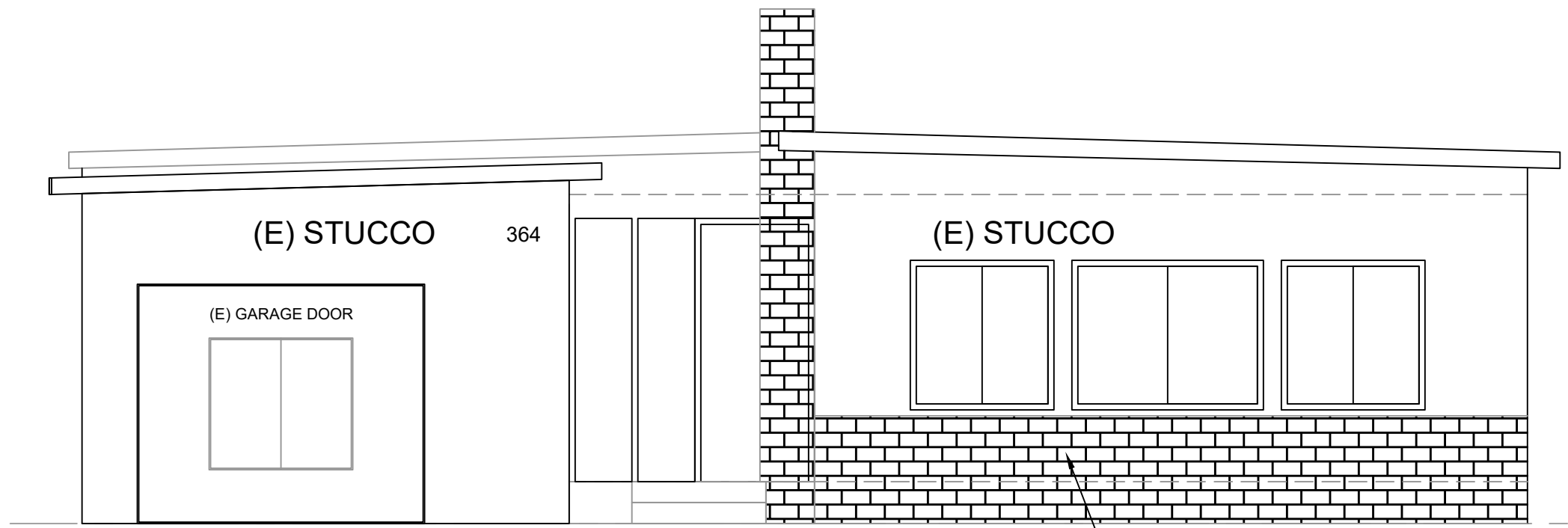
④ (E) LEFT SIDE ELEVATION PLAN  
SCALE: 1/4"=1'-0"



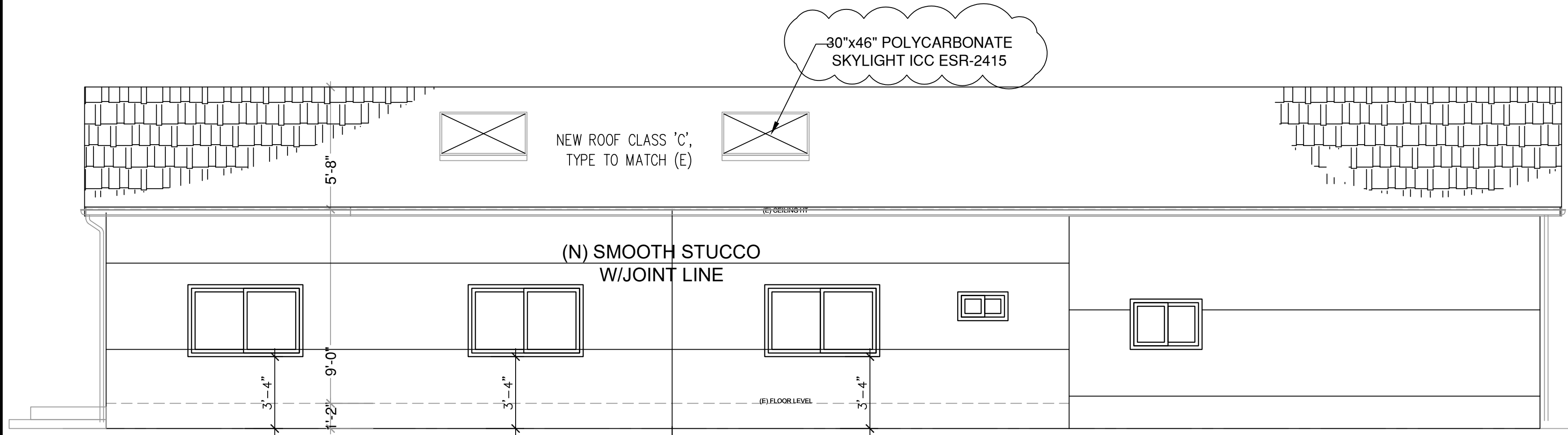
② (E) REAR ELEVATION PLAN  
SCALE: 1/4"=1'-0"



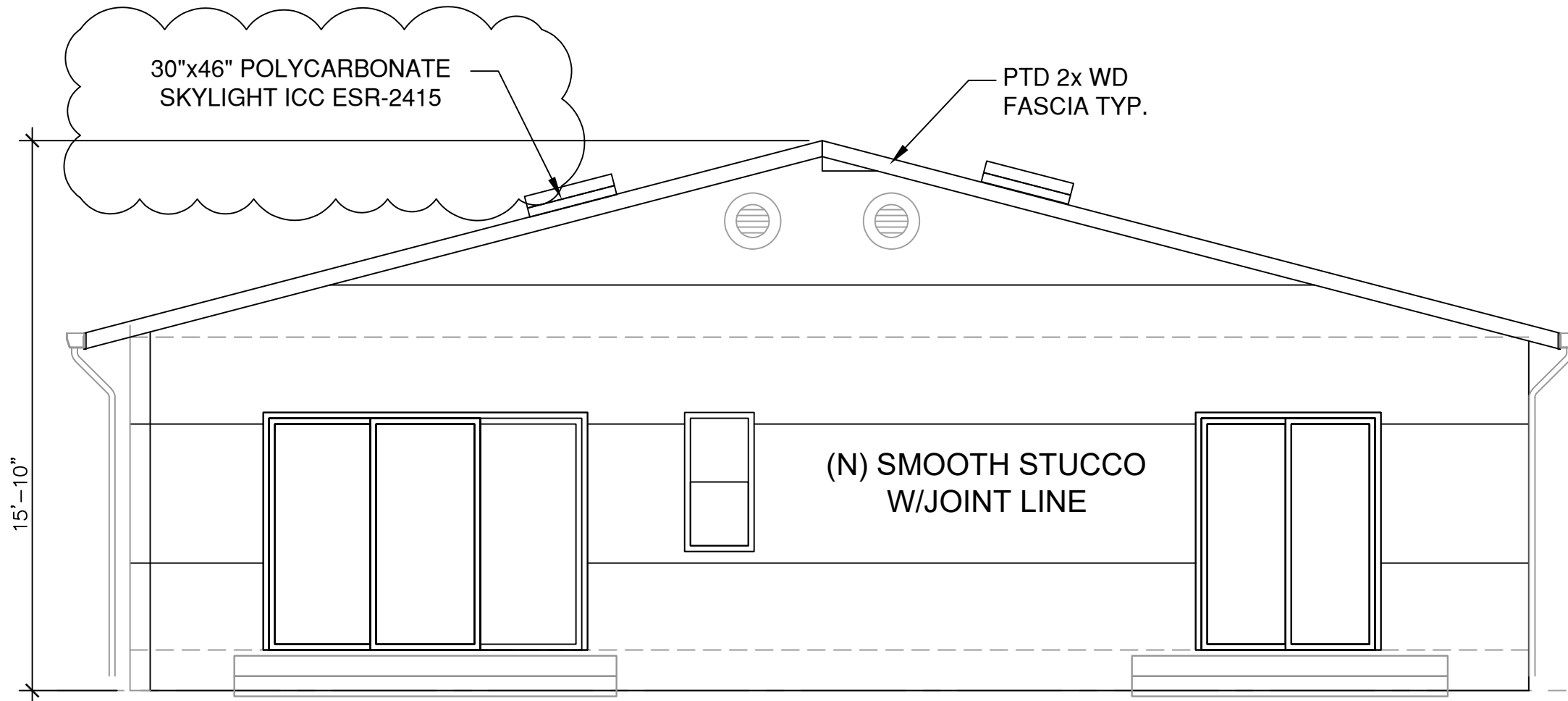
③ (E) RIGHT SIDE ELEVATION PLAN  
SCALE: 1/4"=1'-0"



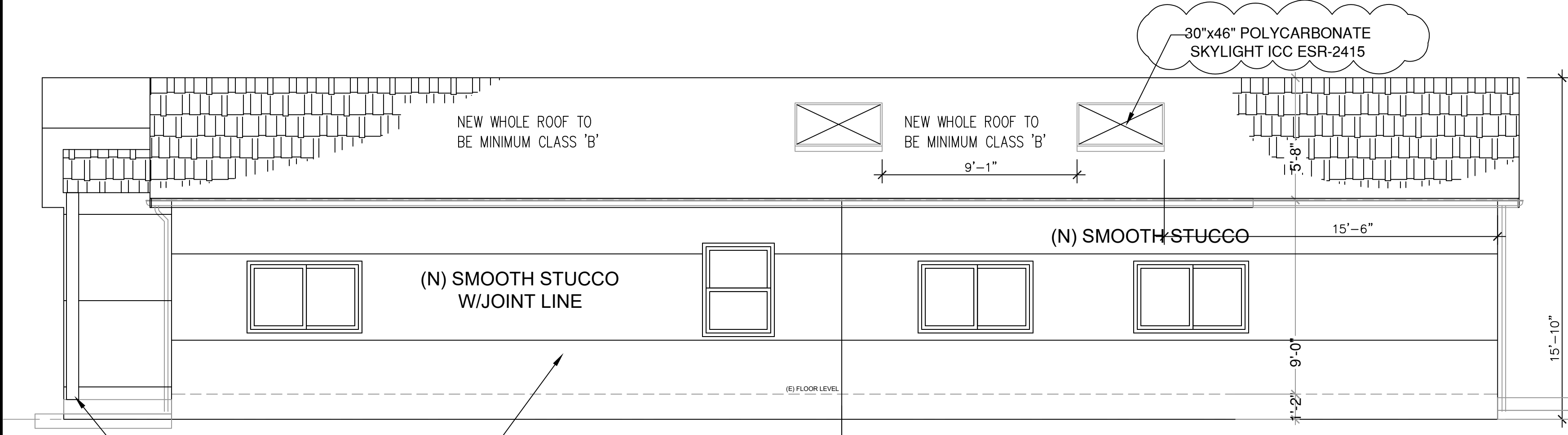
① (E) FRONT ELEVATION PLAN  
SCALE: 1/4"=1'-0"



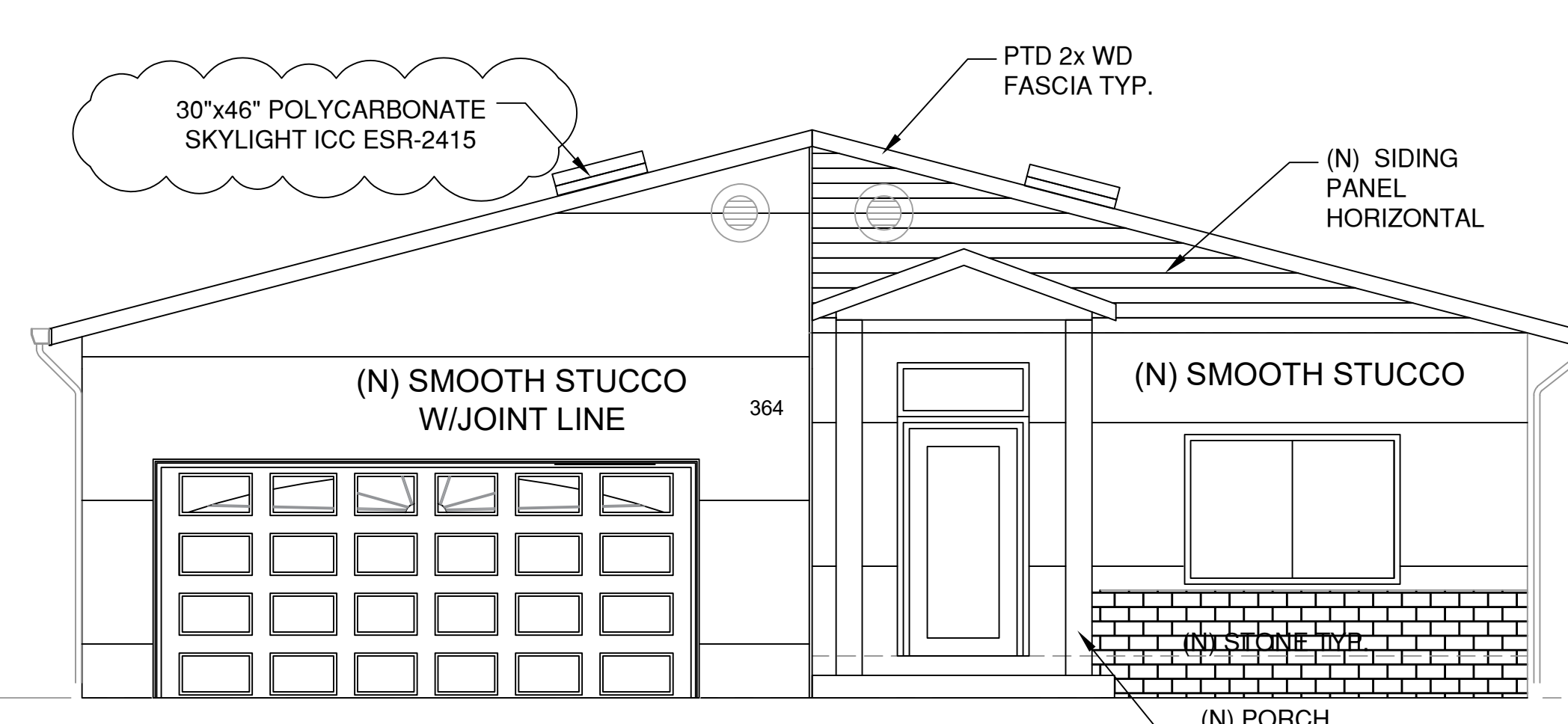
④ (N) LEFT SIDE ELEVATION PLAN  
SCALE: 1/4"=1'-0"



② (N) REAR ELEVATION PLAN  
SCALE: 1/4"=1'-0"



③ (N) RIGHT SIDE ELEVATION PLAN  
SCALE: 1/4"=1'-0"



① (N) FRONT ELEVATION PLAN  
SCALE: 1/4"=1'-0"

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ELEVATION PLANS

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Scale

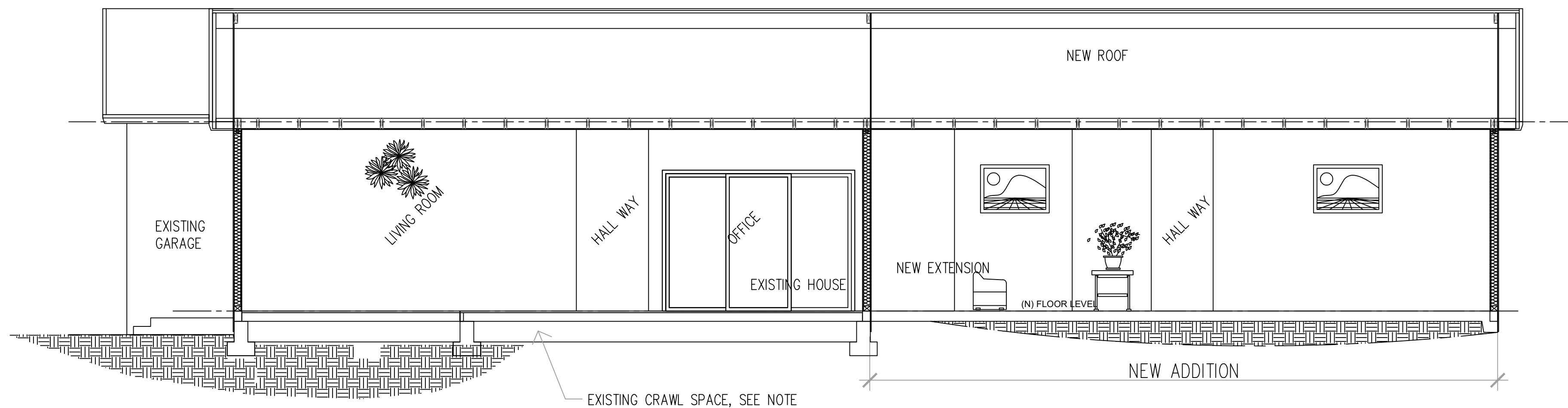
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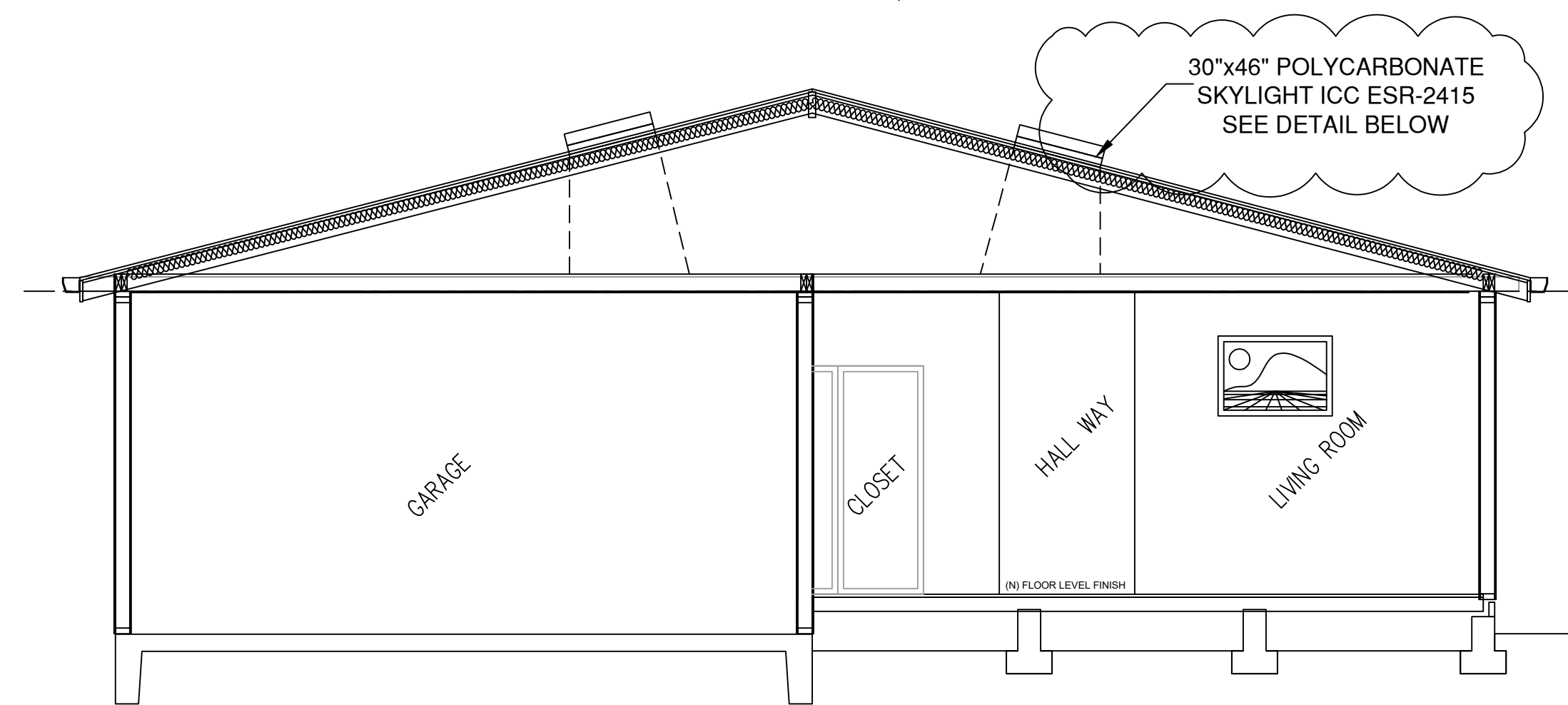
A-2.2

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**B BUILDING CROSS SECTION B-B**  
SCALE: 1/4" = 1'-0"



**A BUILDING CROSS SECTION A-A**  
SCALE: 1/4" = 1'-0"

ESR-2415 **ICC-ES** Meet Widely Accepted and Trusted Page 4 of 6

| TABLE 3—DETAILS AND ALLOWABLE LOADS FOR ACRALIGHT INTERNATIONAL A-5-ST-CM AND A-5-ST-SF SKYLIGHTS WITH SKY-ARC™ POLYCARBONATE DOMES |                                 |                         |                    |                                                  |                                    |                               |                                        |
|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------|--------------------|--------------------------------------------------|------------------------------------|-------------------------------|----------------------------------------|
| MODEL NO.                                                                                                                           | INSIDE CURB DIMENSIONS (inches) | DOME THICKNESS (inches) | DOME RISE (inches) | PERFORMANCE GRADE, PG, AND ALLOWABLE LOADS (psf) |                                    | NUMBER OF RETAINER FASTENERS* | NUMBER OF SKYLIGHT MOUNTING FASTENERS* |
|                                                                                                                                     |                                 |                         |                    | PG <sub>max</sub> (inward forces)                | PG <sub>max</sub> (outward forces) |                               |                                        |
| 2246                                                                                                                                | 22.25 x 46.25                   | 0.118                   | 5.5                | 30                                               | 30                                 | 12                            | 16                                     |
| 4646                                                                                                                                | 46.25 x 46.25                   | 0.118                   | 11                 | 30                                               | 30                                 | 16                            | 20                                     |
| 4848                                                                                                                                | 48 x 48                         | 0.118                   | 12                 | 30                                               | 30                                 | 16                            | 20                                     |
| 4896                                                                                                                                | 48 x 96                         | 0.118                   | 12                 | 30                                               | 30                                 | 24                            | 30                                     |
| 6072                                                                                                                                | 60 x 72                         | 0.118                   | 15                 | 30                                               | 30                                 | 22                            | 26                                     |

For St: 1 inch = 25.4 mm, 1 psf = 0.0479 kN/m².  
\*Retainer fasteners are No. 10, self-drilling and -tapping, electrogalvanized steel sheet metal screws, spaced at 12 inches maximum.  
\*Fasteners to attach skylights to wood curbs or wood roof framing members, with specific gravity of 0.5, are 1/4-inch-diameter, corrosion-resistant steel lag screws having sufficient length to penetrate the wood member curb or wood roof framing member a minimum of 1 1/2 inches.

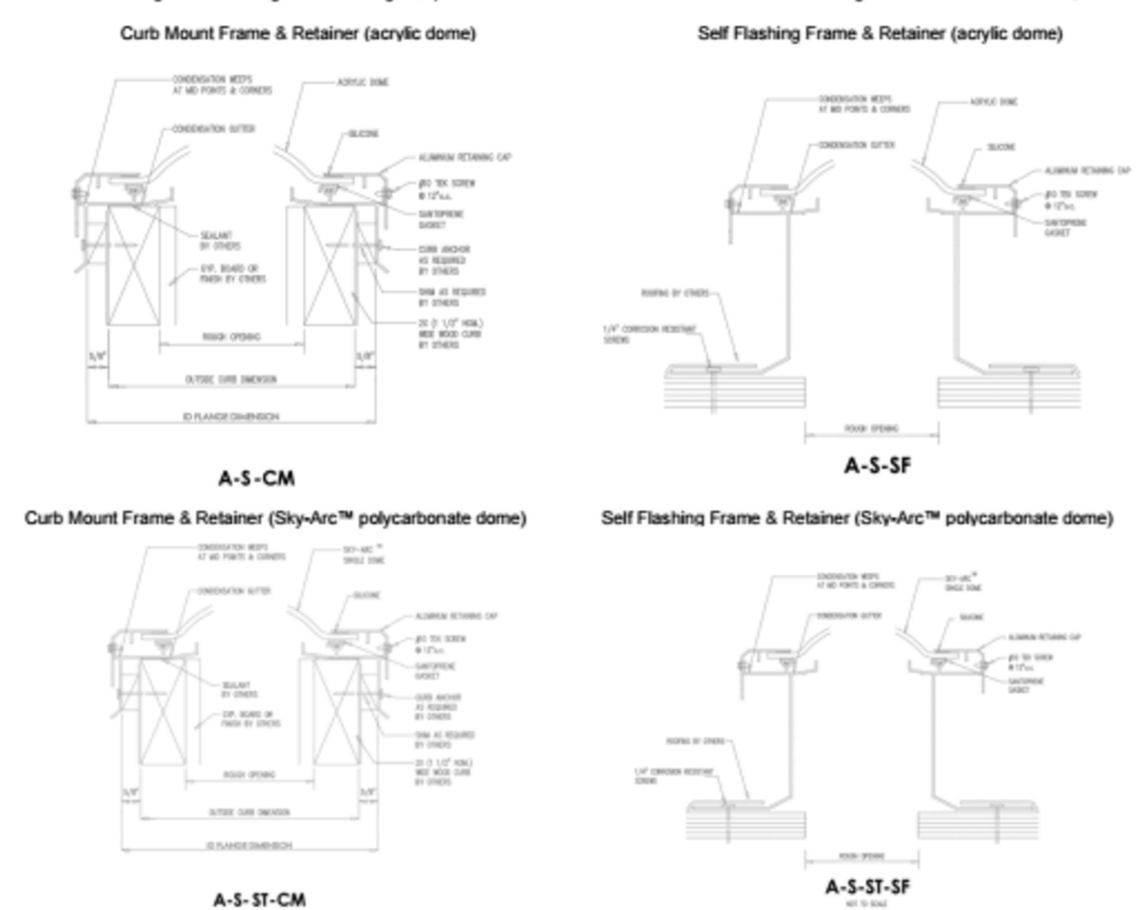


FIGURE 1—SKYLIGHT DETAILS

A. ATTIC VENTILATION (PER 1303.2)

NEW : 492 SF

VENTILATION REQUIRED: 492 X 1/150 = 3.0 SQ. FT. = 432 SQ. IN.

USING: 4" DIAMETER VENT HOLES AT EAVE— EACH HOLE IS 12.56 SQ. IN.

CALCULATION FOR HOLES: (432)/12.56 = 34 HOLES

NUMBER OF RAFTER BAYS AT EAVE: 20 BAYS (24" O.C.)

(SEE ROOF PLAN)

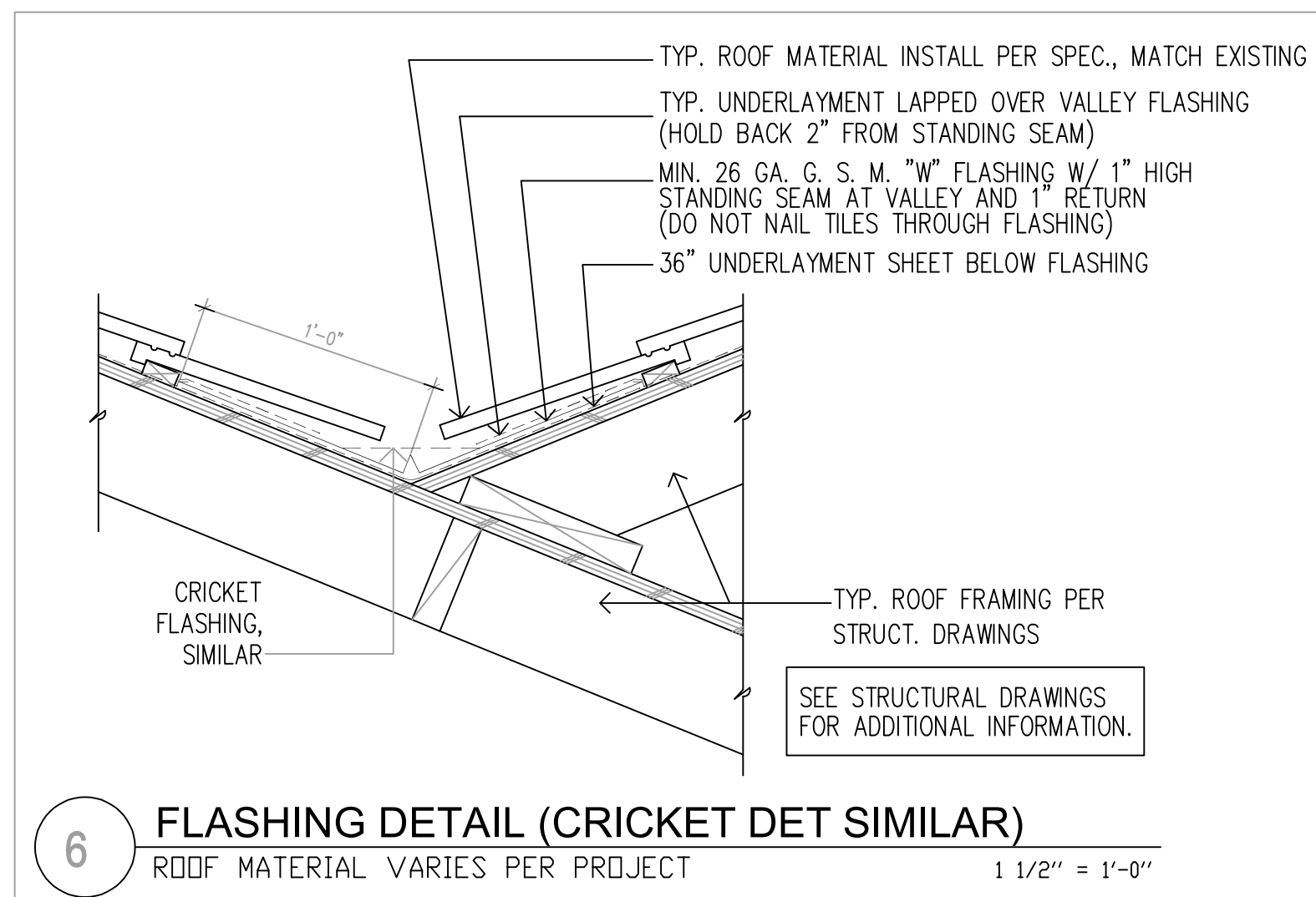
PROVIDE 2 HOLE AT EVERY 1 BAY.

NOTE:

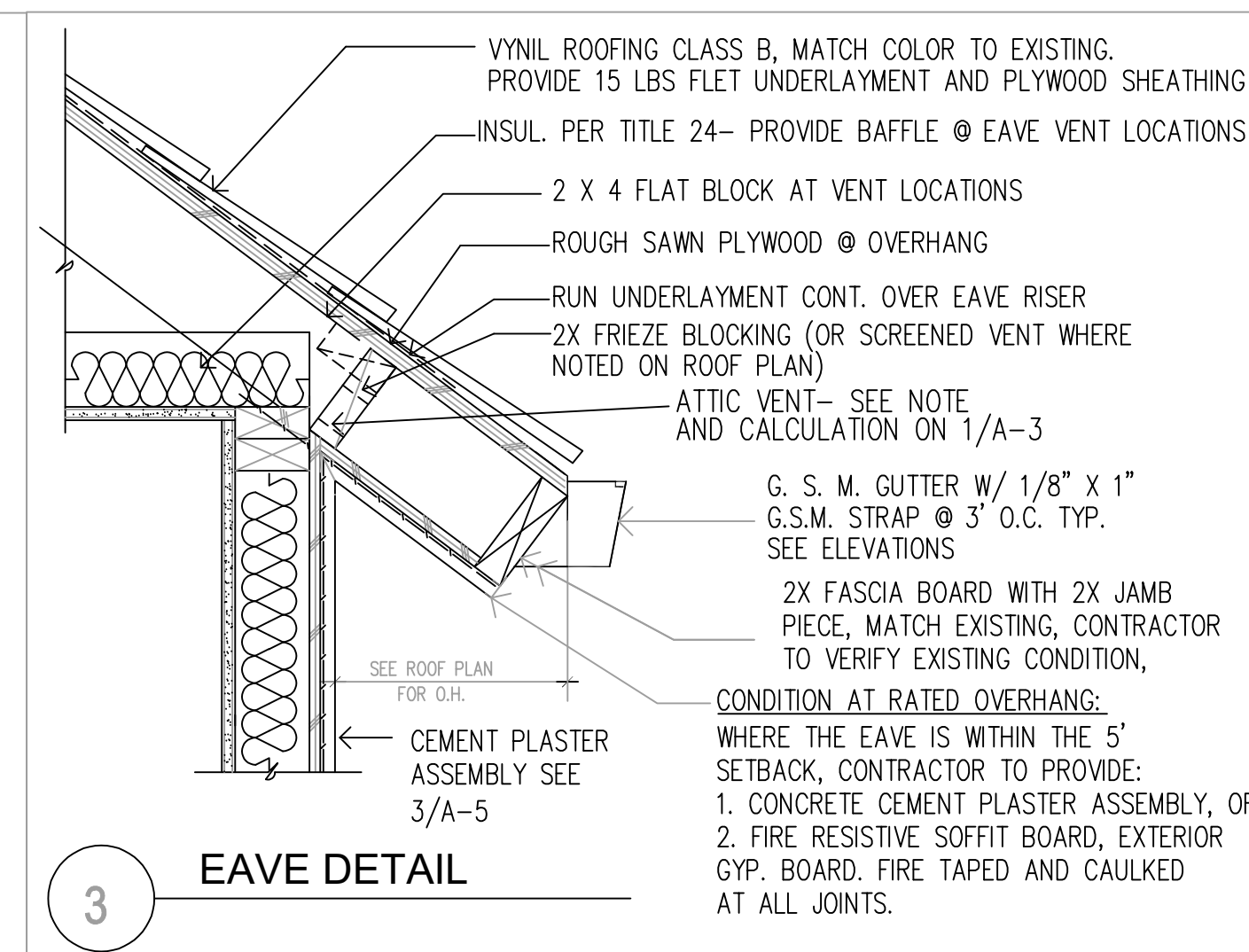
CODE REQUIREMENT FOR DISTANCE BETWEEN THE GROUND AND THE BOTTOM OF THE JOISTS OR BEAMS, UNLESS THE FRAMING IS PRESSURE TREATED LUMBER (OR NATURALLY ROT RESISTANT)

a. THE BOTTOM OF THE JOISTS NEED TO BE AT LEAST 18" FROM THE GROUND,

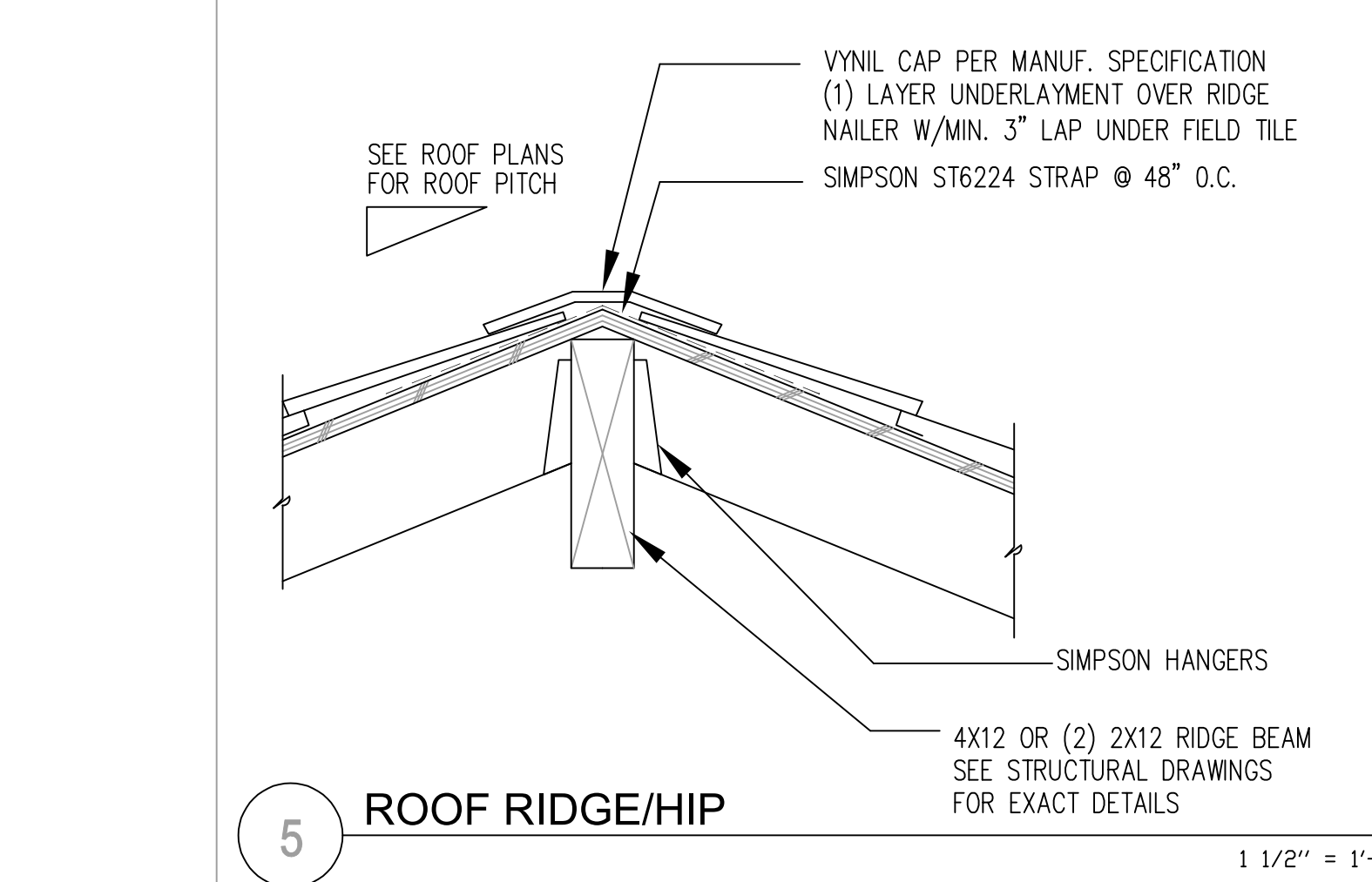
b. GIRDERS OR BEAMS NEED TO BE AT LEAST 12". (REF 2000 ICC SEC R323.1)



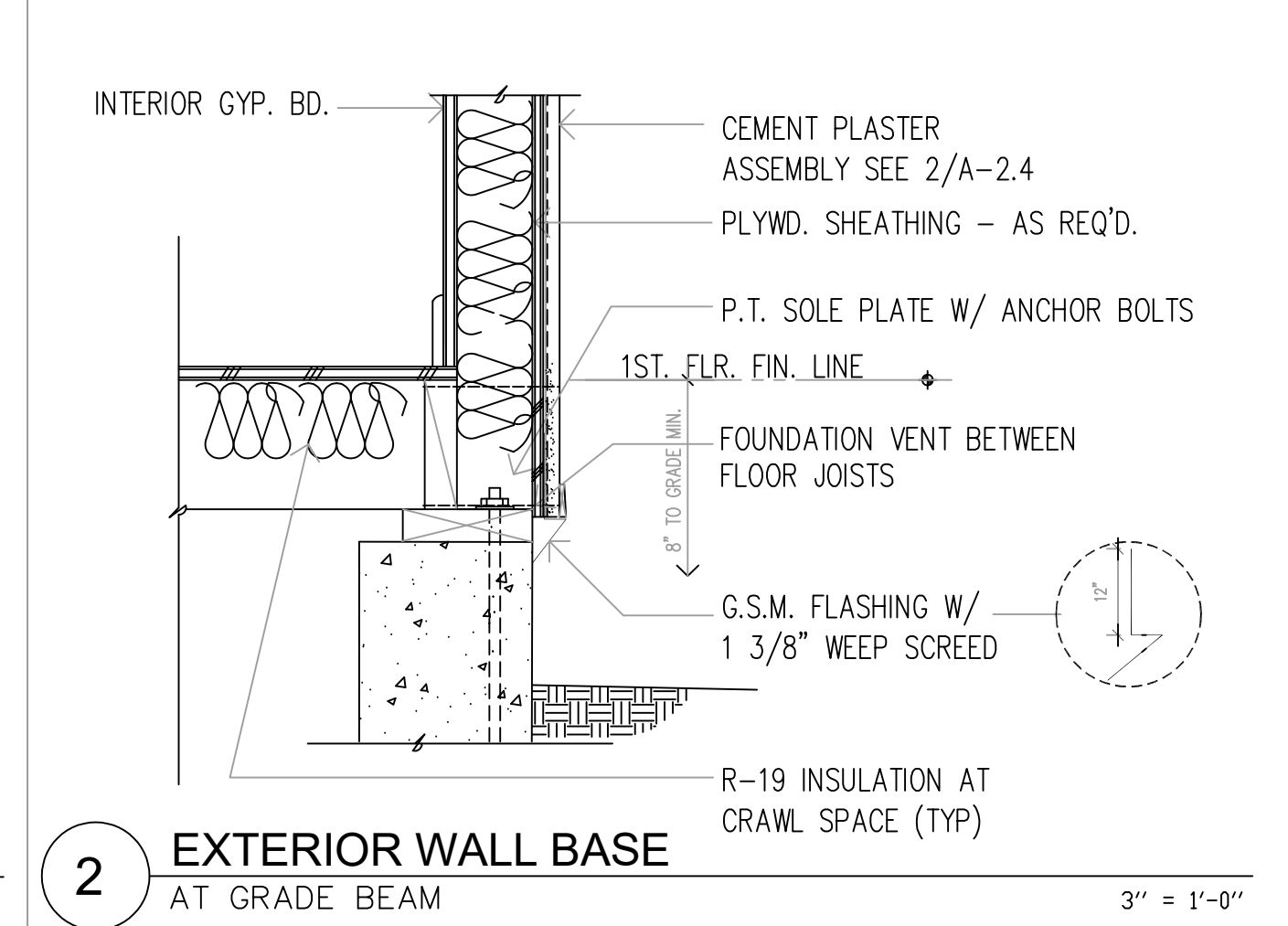
**6 FLASHING DETAIL (CRICKET DET SIMILAR)**  
ROOF MATERIAL VARIES PER PROJECT  
1 1/2" = 1'-0"



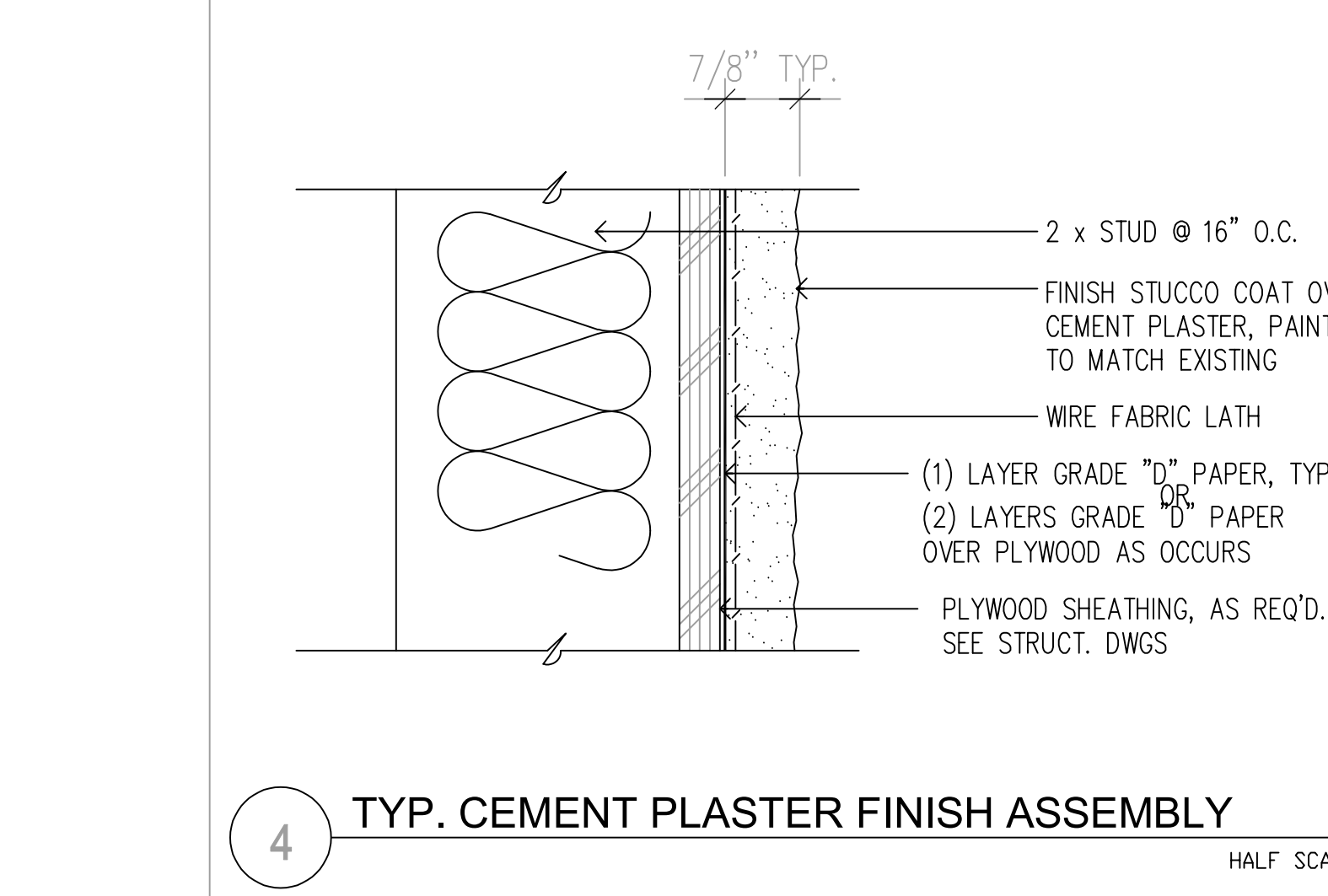
**3 EAVE DETAIL**



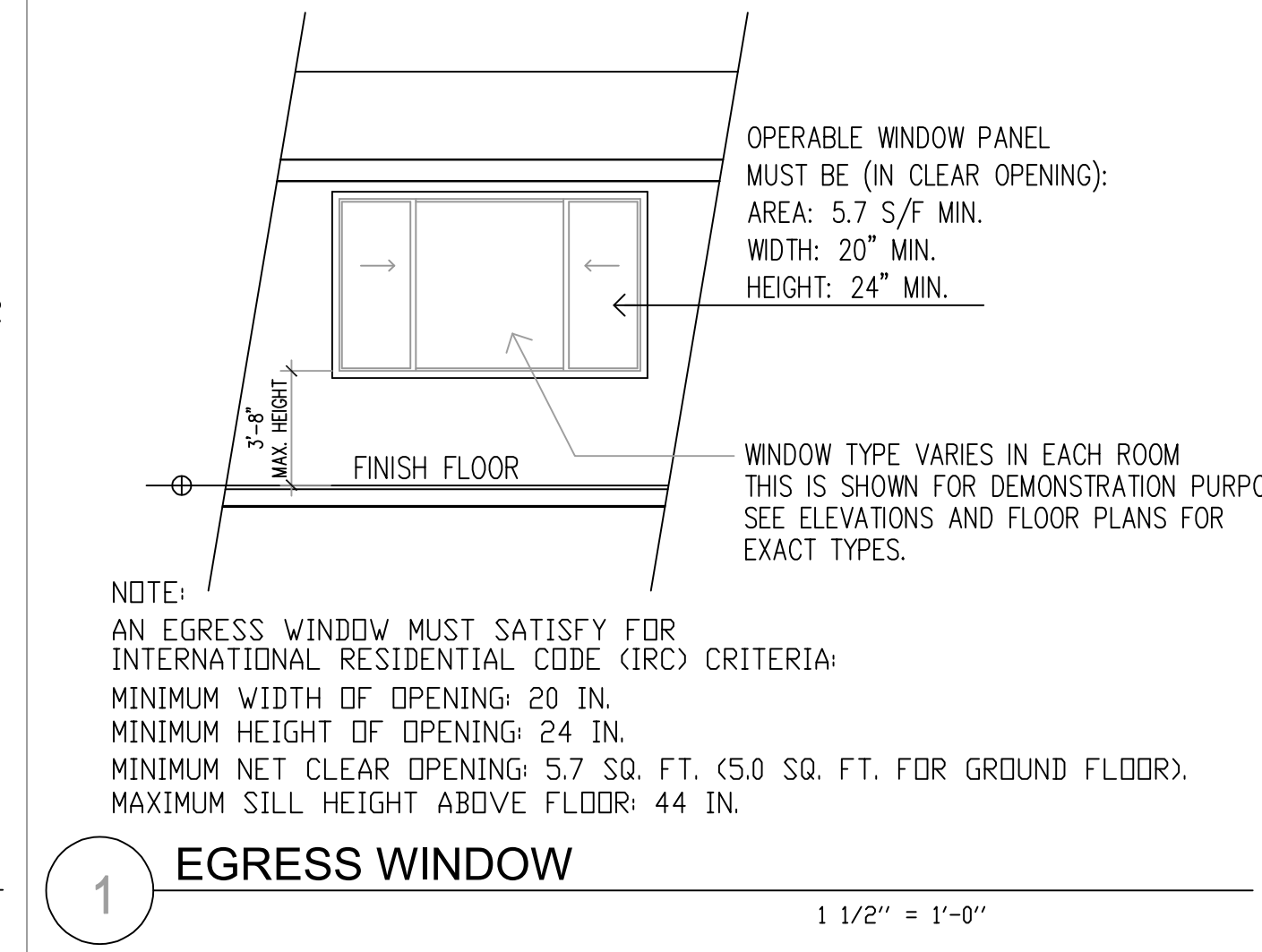
**5 ROOF RIDGE/HIP**  
1 1/2" = 1'-0"



**2 EXTERIOR WALL BASE AT GRADE BEAM**  
3" = 1'-0"



**4 TYP. CEMENT PLASTER FINISH ASSEMBLY**  
HALF SCALE



**1 EGRESS WINDOW**  
1 1/2" = 1'-0"

AM ASSOCIATE

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#### REVISIONS

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|     |          |                               |    |

#### OWNER

SLM RESIDENCE

364 CALIFORNIA AVE.  
MOSS BEACH, CA 94038  
APN: 037-118-050

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### PROPOSED

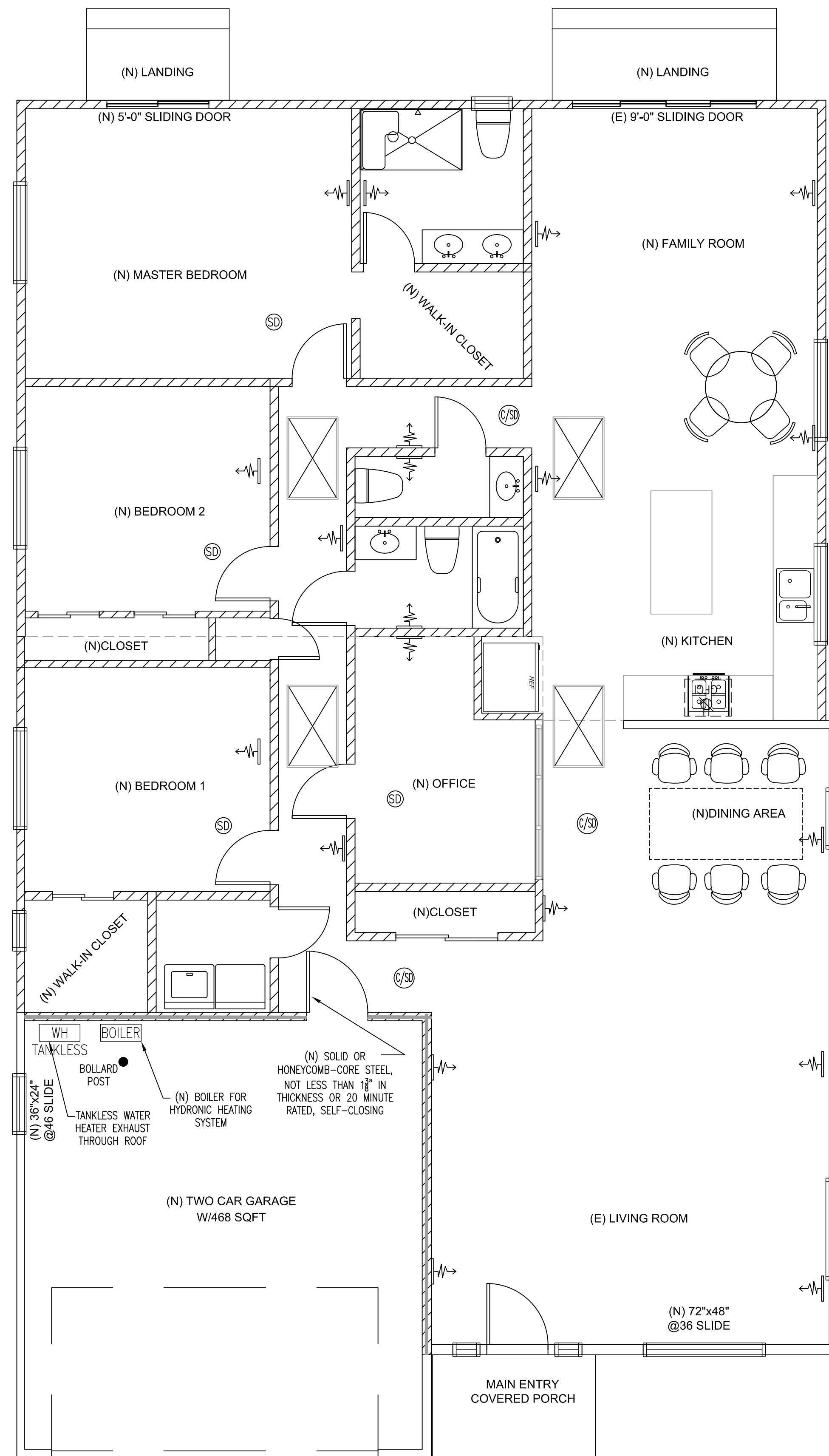
#### SECTION PLANS DETAILS

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|------------------|--|
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| Drawn By         |  |
| As Noted         |  |
| Scale            |  |
| AM-RA/364-012822 |  |
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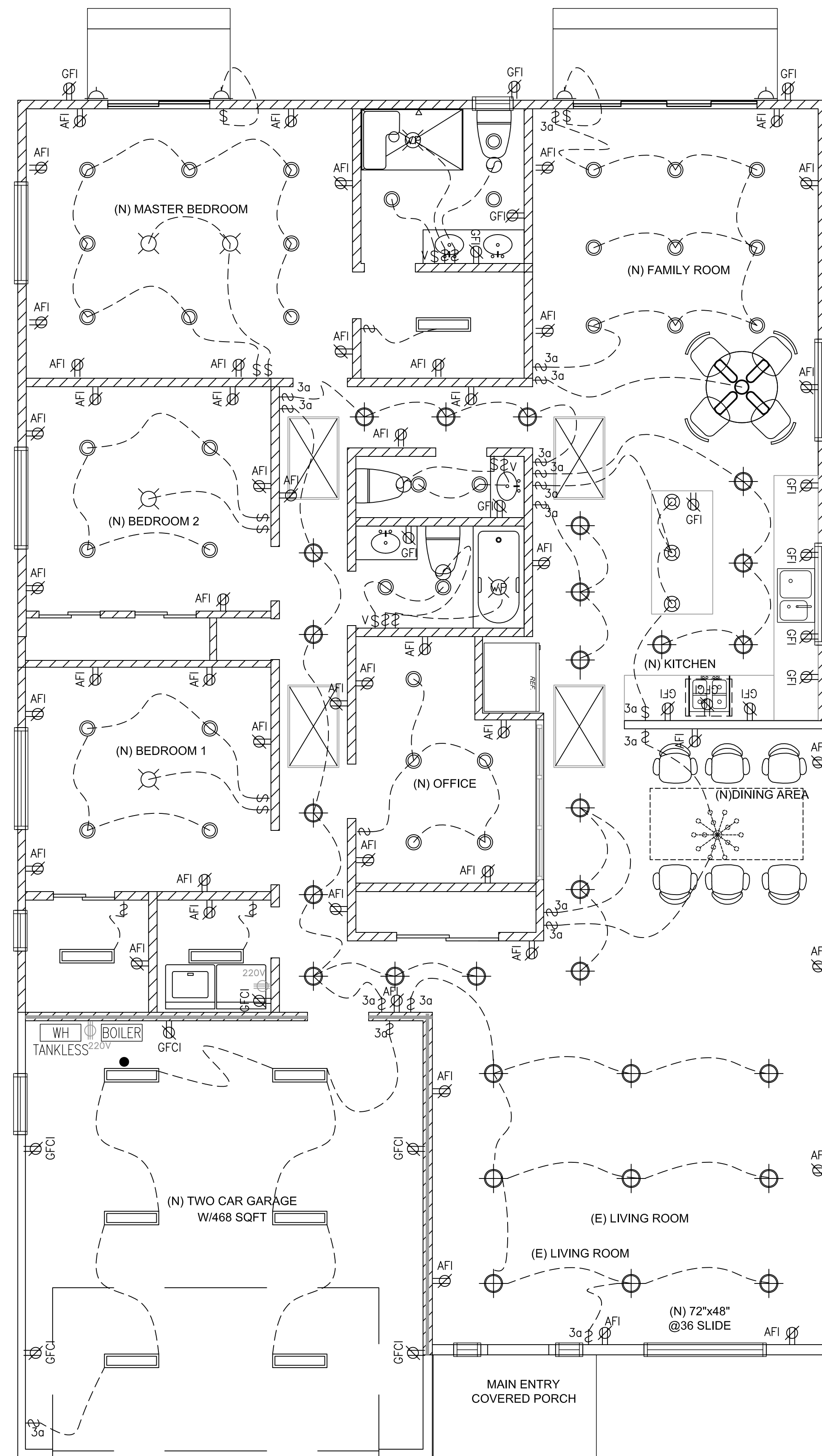
**A-2.3**

Of 20 Sheets





① (N) PROPOSED MECH./PLUMBING PLAN  
SCALE: 1/4"=1'-0"



② (N) ELECTRICAL/LIGHTING PLAN  
SCALE: 1/4"=1'-0"

## ELECTRICAL SYMBOLS

- RECESSED INTERIOR CAN LIGHT - LED
- RECESSED INTERIOR CAN LIGHT, DAMP LOCATION - LED
- WALL MOUNT BATH VANITY SCONCE - LED BULB
- WALL MOUNT EXTERIOR SCONCE - LED BULB
- CEILING MOUNT INTERIOR PENDANT - LED BULB(S)
- CEILING MOUNT EXTERIOR PENDANT, DAMP LOCATION - LED BULB(S)
- CEILING MOUNT INTERIOR CHANDELIER - LED BULB(S)
- BATH EXHAUST FAN
- STEP LIGHT - LED
- UNDER CABINET LIGHT - LINEAR LED
- CEILING FAN - W/ INCANDESCENT
- LIGHT SWITCH, SINGLE POLE
- LIGHT SWITCH, DIMMER
- LIGHT SWITCH, 3-POLE
- LIGHT SWITCH, 4-POLE
- DUPLEX OUTLETS
- 220V DUPLEX OUTLETS
- PHONE JACK
- TV CABLE JACK
- DOOR BELL
- THERMOSTAT
- SMOKE/CO2 DETECTOR/ALARM
- ELECTRIC MAIN PANEL
- GAS BIB
- HOT WATER BIB
- COLD WATER BIB
- HOSE BIB
- CEILING FLUSH MOUNT INTERIOR LIGHT - LED
- CEILING FLUSH MOUNT INTERIOR LIGHT, DAMP LOCATION - LED
- HOSE BIBB
- GAS
- SUPPLY AIR HVAC REGISTER FLOOR MOUNTED
- SUPPLY AIR HVAC REGISTER TOE KICK

AM ASSOCIATE

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## OWNER

MCDOW RESIDENCE

364 CALIFORNIA AVE.  
MOSS BEACH, CA 94038

APN: 037-118-050

## SHEET CONTENTS

PROPOSED

MEP. PLANS

|                  |  |
|------------------|--|
| Title            |  |
| Designed By      |  |
| Drawn By         |  |
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| AM-RA/364-012822 |  |
| File Name        |  |
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MEP-1





2022 Single-Family Residential Mandatory Requirements Summary

NOTE: Single-family residential buildings subject to the Energy Codes must comply with all applicable mandatory measures, regardless of the compliance approach used. Review the respective section for more information.

(04/2022)

Building Envelope:

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| § 110.6(a)1: | <b>Air Leakage.</b> Manufactured fenestration, exterior doors, and exterior pet doors must limit air leakage to 0.3 CFM per square foot or less when tested per NFRC-400, ASTM E293, or AAMA/MQMA/SCA 101/1.5/2/4/40-2011. *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| § 110.6(a)5: | <b>Labeling.</b> Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| § 110.6(b):  | <b>Field fabricated exterior doors and fenestration</b> products must use U-factors and solar heat gain coefficient (SHGC) values from Tables 110.6-A, 110.6-B, or JA4.5 for exterior doors. They must be caulked and/or weather-stripped. *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| § 110.7:     | <b>Air Leakage.</b> All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, sealed, or weather-stripped.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| § 110.8(a):  | <b>Insulation Certification by Manufacturers.</b> Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| § 110.8(a):  | <b>Insulation Requirements for Heated Slab Floors.</b> Heated slab floors must be insulated per the requirements of § 110.8(c).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| § 110.8(b):  | <b>Roofing Products Solar Reflectance and Thermal Emittance.</b> The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(b) and be labeled per §10-113 when the installation of a cool roof is specified on the CFIIR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| § 110.8(b):  | <b>Radiant Barrier.</b> When required, radiant barriers must have an emittance of 0.05 or less and be certified to the Department of Consumer Affairs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| § 150.0(a):  | <b>Roof Deck, Ceiling and Rafter Roof Insulation.</b> Roof decks in newly constructed attics in climate zones 4 and 8-16 area-weighted average U-factor not exceeding U-0.184. Ceiling and rafter roofs minimum R-22 insulation in wood-frame ceiling, or area-weighted average U-factor must not exceed 0.043. Rafter roof alterations minimum R-19 or area-weighted average U-factor of 0.054 or less. Attic access doors must have permanently attached insulation using adhesive or mechanical fasteners. The attic access must be gasketed to prevent air leakage. Insulation must be installed in direct contact with a roof or ceiling which is sealed to limit infiltration and exfiltration, as specified in § 110.7, including but not limited to placing insulation either above or below the roof deck or on top of a drywall ceiling. |
| § 150.0(b):  | <b>Loose-Fill Insulation.</b> Loose fill insulation must meet the manufacturer's required density for the labeled R-value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| § 150.0(c):  | <b>Wall Insulation.</b> Minimum R-13 insulation in 2x4 inch wood framing wall or have a U-factor of 0.102 or less, or R-20 in 2x6 inch wood framing or have a U-factor of 0.071 or less. Opaque non-framed assemblies must have an overall assembly U-factor not exceeding 0.102. Masonry walls must meet Tables 150.1-A or B. *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| § 150.0(d):  | <b>Raised-floor Insulation.</b> Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| § 150.0(f):  | <b>Slab Edge Insulation.</b> Slab edge insulation must meet all of the following: have a water absorption rate, for the insulation material alone without facings, no greater than 0.3 percent; have a water vapor permeance no greater than 2.0 perm per inch; be protected from physical damage and UV light deterioration; and, when installed as part of a heated slab floor, meet the requirements of § 110.8(g).                                                                                                                                                                                                                                                                                                                                                                                                                             |
| § 150.0(g)1: | <b>Vapor Retarder.</b> In climate zones 1 through 16, the earth floor of unvented crawl space must be covered with a Class I or Class II vapor retarder. This requirement also applies to controlled ventilation crawl space for buildings complying with the exception to § 150.0(d).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| § 150.0(g)2: | <b>Vapor Retarder.</b> In climate zones 14 and 16, a Class I or Class II vapor retarder must be installed on the conditioned space side of all insulation in all exterior walls, vented attics, and unvented attics with air-permeable insulation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| § 150.0(i):  | <b>Fenestration Products.</b> Fenestration, including skylights, separating conditioned space from unconditioned space or outdoors must have a maximum U-factor of 0.45, or area-weighted average U-factor of all fenestration must not exceed 0.45. *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

Fireplaces, Decorative Gas Appliances, and Gas Log:

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| § 110.5(a):  | <b>Pilot Light.</b> Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.                                                                                                                                                           |
| § 150.0(a)1: | <b>Closable Doors.</b> Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.                                                                                                                    |
| § 150.0(a)2: | <b>Combustion Intake.</b> Masonry or factory-built fireplaces must have a combustion outside air intake, which is at least six square inches in area and is equipped with a readily accessible, operable, and light-tight damper or combustion-air control device. |
| § 150.0(a)3: | <b>Flue Damper.</b> Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *                                                                                                                                               |

Space Conditioning, Water Heating, and Plumbing System:

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| § 110.0-§ 110.3: | <b>Certification.</b> Heating, ventilation, and air conditioning (HVAC) equipment, water heaters, showerheads, faucets, and all other regulated appliances must be certified by the manufacturer to the California Energy Commission.                                                                                                                                                                                                                                                                                 |
| § 110.2(a):      | <b>HVAC Efficiency.</b> Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N.                                                                                                                                                                                                                                                                                                                                                                                            |
| § 110.2(b):      | <b>Controls for Heat Pumps with Supplementary Electric Resistance Heaters.</b> Heat pumps with supplementary electric resistance heaters must have controls that prevent supplementary heater operation when the heating load can be met by the heat pump alone, and in which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating. * |
| § 110.2(c):      | <b>Thermostats.</b> All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *                                                                                                                                                                                                                                                                                                                                                              |
| § 110.3(a)3:     | <b>Insulation.</b> Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.                                                                                                                                                                                                                                                                                                                                                   |
| § 110.3(a)6:     | <b>Isolation Valves.</b> Instantaneous water heaters with an input rating greater than 6.6 kBtu per hour (2 kW) must have isolation valves with hose bibbs or other fittings on both cold and hot water lines to allow for flushing the water heater when the valves are closed.                                                                                                                                                                                                                                      |

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| § 110.5:      | <b>Pilot Lights.</b> Continuously burning pilot lights are prohibited for natural gas, fan-type central furnaces; household cooking appliances (except appliances without an electrical supply voltage connection with pilot lights that consume less than 150 Btu per hour); and pool and spa heaters.                                                                                                                                                                                                                                                                                   |
| § 150.0(h)1:  | <b>Building, Cooling and Heating Loads.</b> Heating and/or cooling loads are calculated in accordance with the ASHRAE Handbook, Equipment Volume, Applications Volume, and Fundamentals Volume, the SMACNA Residential Comfort System Installation Standards Manual, or the ACCA Manual J using design conditions specified in § 150.0(h)2.                                                                                                                                                                                                                                               |
| § 150.0(h)3A: | <b>Cleanances.</b> Air conditioner and heat pump outdoor condensing units must have a clearance of at least five feet from the outlet of any dryer.                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| § 150.0(h)3B: | <b>Liquid Line Drier.</b> Air conditioners and heat pump systems must be equipped with liquid line filter driers if required, as specified by the manufacturer's instructions.                                                                                                                                                                                                                                                                                                                                                                                                            |
| § 150.0(i)1:  | <b>Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.</b> All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. *                                                                                                                                                                                                                                                                                                                                                                        |
| § 150.0(i)2:  | <b>Insulation Protection.</b> Piping insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind as required by § 120.3(b). Insulation exposed to weather must be water resistant and protected from UV light (no adhesive tapes). Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space must include, or be protected by, a Class I or Class II vapor retarder. Pipe insulation buried below grade must be installed in a waterproof and non-crushable casing or sleeve. |
| § 150.0(i)1:  | <b>Gas or Propane Water Heating Systems.</b> Systems using gas or propane water heaters to serve individual dwelling units must designate a space at least 2.5' x 2.5' x 7' suitable for the future installation of a heat pump water heater, and meet electrical and plumbing requirements, based on the distance between this designated space and the water heater location, and a condensate drain no more than 2" higher than the base of the water heater.                                                                                                                          |
| § 150.0(i)3:  | <b>Solar Water-heating Systems.</b> Solar water-heating systems and collectors must be certified and rated by the Solar Rating and Certification Corporation (SRCC), the International Association of Plumbing and Mechanical Officials, Research and Testing (IAPMO R&T), or by a listing agency that is approved by the executive director.                                                                                                                                                                                                                                             |

Ducts and Fans:

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| § 110.8(a)3:  | <b>Ducts.</b> Insulation installed on an existing space-conditioning duct must comply with § 604.0 of the California Mechanical Code (CMC). If a contractor installs the insulation, the contractor must certify to the customer, in writing, that the insulation meets this requirement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| § 150.0(j)3:  | <b>CMC Compliance.</b> All air-distribution system ducts and plenums must meet CMC §§ 601.0-605.0 and ANSI/SMACNA-006-2006 HVAC Duct Construction Standards Metal and Flexible 3rd Edition. Portions of supply-air and return-air ducts and plenums must be insulated to R-6.0 or higher; ducts located entirely in conditioned space as confirmed through field verification and diagnostic testing (RA3.1.4.3.8) do not require insulation. Connections of metal ducts and inner core of flexible ducts must be mechanically fastened. Openings must be sealed with mastic, tape, or other duct-closure system that meets the applicable UL requirements, or aerosol sealant that meets UL 723. The combination of mastic and other mesh or tape must be used to seal openings greater than ¼", if mastic or tape is used. Building cavities, air handler support platforms, and plenums designed or constructed with materials other than sealed sheet metal, duct board or flexible duct must not be used to convey conditioned air. Building cavities and support platforms may contain ducts; ducts installed in these spaces must not be compressed. * |
| § 150.0(j)1:  | <b>Factory-Fabricated Duct Systems.</b> Factory-fabricated duct systems must comply with applicable requirements for duct construction, connections, and closures; joints and seams of duct systems and their components must not be sealed with cloth based rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| § 150.0(j)3:  | <b>Field-Fabricated Duct Systems.</b> Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| § 150.0(j)7:  | <b>Backdraft Damper.</b> Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| § 150.0(j)8:  | <b>Gravity Ventilation Dampers.</b> Gravity ventilating systems serving conditioned space must have either automatic or readily accessible, manually operated dampers in all openings to the outside, except combustion inlet and outlet air openings and elevator shaft vents.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| § 150.0(j)9:  | <b>Protection of Insulation.</b> Insulation must be protected from damage due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather must be suitable for outdoor service (e.g., protected by aluminum, sheet metal, painted canvas, or plastic cover). Cellular foam insulation must be protected as above or painted with a water resistant and solar radiation-resistant coating.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| § 150.0(j)10: | <b>Porous Inner Core Flex Duct.</b> Porous inner cores of flex ducts must have a non-porous layer or air barrier between the inner core and outer vapor barrier.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| § 150.0(j)11: | <b>Duct System Sealing and Leakage Test.</b> When space conditioning systems use forced air duct systems to supply conditioned air to an occupiable space, the ducts must be sealed and duct leakage tested, as confirmed through field verification and diagnostic testing, in accordance with Reference Residential Appendix RA3.1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| § 150.0(j)12: | <b>Air Filtration.</b> Space conditioning systems with ducts exceeding 10 feet and the supply side of ventilation systems must have MERV 13 or equivalent filters. Filters for space conditioning systems must have a two inch depth or can be one inch if sized per Equation 150.0-A. Clean filter pressure drop and labeling must meet the requirements in § 150.0(m)12. Filters must be accessible for regular service. Filter racks or grilles must use gaskets, sealing, or other means to close gaps around the inserted filters to and prevents air from bypassing the filter. *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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| § 150.0(m)13: | <b>Space Conditioning System Airflow Rate and Fan Efficacy.</b> Space conditioning systems that use ducts to supply cooling must have a hole for the placement of a static pressure probe, or a permanently installed static pressure probe in the supply plenum. Airflow must be ≥ 350 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≥ 0.45 watts per CFM for gas furnace air handlers and ≤ 0.58 watts per CFM for all others. Small duct high velocity systems must provide an airflow ≥ 250 CFM per ton of nominal cooling capacity, and an air-handling unit fan efficacy ≥ 0.62 watts per CFM. Field verification testing is required in accordance with Reference Residential Appendix RA3.3. * |
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Ventilation and Indoor Air Quality:

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| § 150.0(n)1:    | <b>Requirements for Ventilation and Indoor Air Quality.</b> All dwelling units must meet the requirements of ASHRAE Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings subject to the amendments specified in § 150.0(n)1. *                                                                                                                                                                                                                                                                                                                             |
| § 150.0(n)1B:   | <b>Central Fan Integrated (CFI) Ventilation Systems.</b> Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per § 150.0(n)1C. A motorized damper(s) must be installed on the ventilation duct(s) that prevents all airflow through the space conditioning duct system when the damper(s) is closed and uncontrolled per § 150.0(n)1B and/or CFI ventilation systems must have controls that track outdoor air ventilation run time, and either open or close the motorized damper(s) for compliance with § 150.0(n)1C. |
| § 150.0(n)1C:   | <b>Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses.</b> Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(n)1C-4.                                                                                                                                                                                                                                      |
| § 150.0(n)1G:   | <b>Local Mechanical Exhaust.</b> Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of § 150.0(n)1Gii, enclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting § 150.0(n)1Giii-v. Airflow must be measured by the installer per § 150.0(n)1Gv, and rated for sound per § 150.0(n)1Gvi. *                                                                                                                                                                       |
| § 150.0(n)1H&I: | <b>Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems.</b> The airflow required per § 150.0(n)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/signs per Reference Residential Appendix RA3.7. Whole-dwelling unit ventilation systems must be rated for sound per ASHRAE 62.2 § 7.2 at no less than the minimum airflow rate required by § 150.0(n)1C.                                                                                                                          |
| § 150.0(n)2:    | <b>Field Verification and Diagnostic Testing.</b> Whole-Dwelling Unit ventilation airflow, vented range hood airflow and sound rating, and HRV and ERV fan efficacy must be verified in accordance with Reference Residential Appendix RA3.7. Vented range hoods must be verified per Reference Residential Appendix RA3.7.4.3 to confirm if it is rated by HVI or AHAM to comply with the airflow rates and sound requirements per § 150.0(n)1G.                                                                                                                                           |

Pool and Spa Systems and Equipment:

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| § 110.4(a):  | <b>Certification by Manufacturers.</b> Any pool or spa heating system or equipment must be certified to have all of the following compliance with the Appliance Efficiency Regulations and listing in MAECDS; an on-off switch mounted outside of the heater that allows shutting off the heater without adjusting the thermostat setting, a permanent weatherproof plate or card with operating instructions, and must not use electric resistance heating. * |
| § 110.4(b)1: | <b>Piping.</b> Any pool or spa heating system or equipment must be installed with at least 36 inches of pipe between the filter and the heater, or dedicated suction and return lines, or built-in or built-up connections to allow for future solar heating.                                                                                                                                                                                                  |
| § 110.4(b)2: | <b>Covers.</b> Outdoor pools or spas that have a heat pump or gas heater must have a cover.                                                                                                                                                                                                                                                                                                                                                                    |
| § 110.4(b)3: | <b>Directional Inlets and Time Switches for Pools.</b> Pools must have directional inlets that adequately mix the pool water, and a time switch that will allow all pumps to be set or programmed to run only during off-peak electric demand periods.                                                                                                                                                                                                         |
| § 110.5:     | <b>Pilot Light.</b> Natural gas pool and spa heaters must not have a continuously burning pilot light.                                                                                                                                                                                                                                                                                                                                                         |
| § 150.0(p):  | <b>Pool Systems and Equipment Installation.</b> Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.                                                                                                                                                                                                                                                                            |

Lighting:

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| § 110.9:      | <b>Lighting Controls and Components.</b> All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. *                                                                                                                                                                                                      |
| § 150.0(q)1A: | <b>Luminaire Efficacy.</b> All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, built vanity mirrors, and garage door openers; navigation lighting less than 5 watts; and lighting internal to drawers, cabinets, and linen closets with an efficacy of at least 45 lumens per watt. |
| § 150.0(q)1B: | <b>Screw based luminaires.</b> Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA6. *                                                                                                                                                                                                                                            |
| § 150.0(q)1C: | <b>Recessed Downlight Luminaires in Ceilings.</b> Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or mastic. California Electrical Code § 410.116 must also be met.                                                                                                                       |
| § 150.0(q)1D: | <b>Light Sources in Enclosed or Recessed Luminaires.</b> Lamps and other separable light sources that are not compliant with the JAB elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.                                                                                                    |
| § 150.0(q)1E: | <b>Blank Electrical Boxes.</b> The number of electrical boxes that are more than five feet above the finished floor and do not contain a luminaire or other device shall be no more than the number of bedrooms. These boxes must be served by a dimmer, vacancy sensor control, low voltage wiring, or fan speed control.                                           |
| § 150.0(q)1F: | <b>Lighting Integral to Exhaust Fans.</b> Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(q). *                                                                                                                                                              |

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| § 150.0(k)1G: | <b>Screw based luminaires.</b> Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA6. *                                                                                                                                                                                                                                                                                                                                                                               |
| § 150.0(k)1H: | <b>Light Sources in Enclosed or Recessed Luminaires.</b> Lamps and other separable light sources that are not compliant with the JAB elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.                                                                                                                                                                                                                                       |
| § 150.0(k)1I: | <b>Light Sources in Drawers, Cabinets, and Linen Closets.</b> Light sources internal to drawers, cabinetry or linen closets are not required to comply with Table 150.0-A or be controlled by vacancy sensors provided that they are rated to consume no more than 5 watts of power, emit no more than 150 lumens, and are equipped with controls that automatically turn the lighting off when the drawer, cabinet or linen closet is closed.                                                          |
| § 150.0(k)2A: | <b>Interior Switches and Controls.</b> All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.                                                                                                                                                                                                                                                                                                                                                                          |
| § 150.0(k)2B: | <b>Interior Switches and Controls.</b> Exhaust fans must be controlled separately from lighting systems. *                                                                                                                                                                                                                                                                                                                                                                                              |
| § 150.0(k)2A: | <b>Accessible Controls.</b> Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *                                                                                                                                                                                                                                                                                                                                                     |
| § 150.0(k)2B: | <b>Multiple Controls.</b> Controls must not bypass a dimmer, occupant sensor, or vacancy sensor function if the dimmer or sensor is installed to comply with § 150.0(k).                                                                                                                                                                                                                                                                                                                                |
| § 150.0(k)2C: | <b>Mandatory Requirements.</b> Lighting controls must comply with the applicable requirements of § 110.9.                                                                                                                                                                                                                                                                                                                                                                                               |
| § 150.0(k)2D: | <b>Energy Management Control Systems.</b> An energy management control system (EMCS) may be used to comply with dimming, occupancy, and control requirements if it provides the functionality of the specified control per § 110.9 and the physical controls specified in § 150.0(k)2A.                                                                                                                                                                                                                 |
| § 150.0(k)2E: | <b>Automatic Shutoff Controls.</b> In bathrooms, garages, laundry rooms, utility rooms and walk-in closets, at least one installed luminaire must be controlled by an occupancy or vacancy sensor providing automatic off functionality. Lighting inside drawers and cabinets with opaque fronts or doors must have controls that turn the light off when the drawer or door is closed.                                                                                                                 |
| § 150.0(k)2F: | <b>Dimmers.</b> Lighting in habitable spaces (e.g., living rooms, dining rooms, kitchens, and bedrooms) must have readily accessible wall-mounted dimming controls that allow the lighting to be manually adjusted up and down. Forward phase cut dimmers controlling LED light sources in these spaces must comply with NEMA SSL 7A.                                                                                                                                                                   |
| § 150.0(k)2K: | <b>Independent controls.</b> Integrated lighting of exhaust fans shall be controlled independently from the fans. Lighting under cabinets or shelves, lighting in display cabinets, and switched outlets must be controlled separately from ceiling-installed lighting.                                                                                                                                                                                                                                 |
| § 150.0(k)3A: | <b>Residential Outdoor Lighting.</b> For single-family residential buildings, outdoor lighting permanently mounted to a residential building, or to other buildings on the same lot, must have a manual on/off switch and either a photoelectric and motion sensor or automatic time switch control; or an astronomical time clock. An energy management control system that provides the specified control functionality and meets all applicable requirements may be used to meet these requirements. |
| § 150.0(k)4:  | <b>Internally illuminated address signs.</b> Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.                                                                                                                                                                                                                                                                                                                                             |
| § 150.0(k)5:  | <b>Residential Garages for Eight or More Vehicles.</b> Lighting for residential parking garages for eight or more vehicles must comply with the applicable requirements for nonresidential garages in §§ 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0.                                                                                                                                                                                                                                                  |

Solar Readiness:

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| § 110.10(a)1:  | <b>Single-family Residences.</b> Single-family residences located in subdivisions with 10 or more single-family residences and where the application for a tentative subdivision map for the residences has been deemed complete and approved by the enforcement agency, which do not have a photovoltaic system installed, must comply with the requirements of § 110.10(b)-(e).                                                                                                                                                                                                                                                                                                                                                                                                            |
| § 110.10(b)1A: | <b>Minimum Solar Zone Area.</b> The solar zone must have a minimum total area as described below. The solar zone must comply with access, pathway, smoke ventilation, and spacing requirements as specified in Title 24, Part 9 or other parts of Title 24, in any requirements adopted by a local jurisdiction. The solar zone total area must be comprised of areas that have no dimension less than 5 feet and are no less than 80 square feet each for buildings with roof areas less than or equal to 10,000 square feet or no less than 160 square feet each for buildings with roof areas greater than 10,000 square feet. For single-family residences, the solar zone must be located on the roof or overhang of the building and have a total area no less than 250 square feet. * |
| § 110.10(b)2:  | <b>Azimuth.</b> All sections of the solar zone located on steep-sloped roofs must have an azimuth between 90-300° of true north.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| § 110.10(b)3A: | <b>Shading.</b> The solar zone must not contain any obstructions, including but not limited to: vents, chimneys, architectural features, and roof mounted equipment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| § 110.10(b)3B: | <b>Shading.</b> Any obstruction located on the roof or any other part of the building that projects above a solar zone must be located at least twice the horizontal distance of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane. *                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| § 110.10(b)4:  | <b>Structural Design Loads on Construction Documents.</b> For areas of the roof designated as a solar zone, the structural design loads for roof dead load and roof live load must be clearly indicated on the construction documents.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| § 110.10(c):   | <b>Interconnection Pathways.</b> The construction documents must indicate: a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service; and for single-family residences and central water heating systems, a pathway reserved for routing plumbing from the solar zone to the water heating system.                                                                                                                                                                                                                                                                                                                                                              |
| § 110.10(d):   | <b>Documentation.</b> A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(e) must be provided to the occupant.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| § 110.10(e)1:  | <b>Main Electrical Service Panel.</b> The main electrical service panel must have a minimum busbar rating of 200 amps.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| § 110.10(e)2:  | <b>Main Electrical Service Panel.</b> The main electrical service panel must have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space must be permanently marked as "For Future Solar Electric."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

Electric and Energy Storage Ready:

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|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| § 150.0(s): | <b>Energy Storage System (ESS) Ready.</b> All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backfeed capacity of 60 amps or more and four or more ESS supplied branch circuits; or a dedicated raceway from the main service to a subpanel that supplies the branch circuits in § 150.0(s), at least four branch circuits must be identified and have their source collocated at a single panelboard suitable to be supplied by the ESS, with one circuit supplying the refrigerator, one lighting circuit near the primary exit, and one circuit supplying a sleeping room receptacle outlet; main panelboard must have a minimum busbar rating of 225 amps; sufficient space must be reserved to allow future installation of a system isolation equipment/transfer switch within 3' of the main panelboard, with raceways installed between the panelboard and the switch location to allow the connection of backup power source. |
| § 150.0(t): | <b>Heat Pump Space Heater Ready.</b> Systems using gas or propane furnaces to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the furnace with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| § 150.0(u): | <b>Electric Cooktop Ready.</b> Systems using gas or propane cooktop to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the cooktop with circuit conductors rated at least 50 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| § 150.0(v): | <b>Electric Clothes Dryer Ready.</b> Clothes dryer locations with gas or propane plumbing to serve individual dwelling units must include: A dedicated unobstructed 240V branch circuit wiring installed within 3' of the dryer location with circuit conductors rated at least 30 amps with the blank cover identified as "240V ready," and a reserved main electrical service panel space to allow for the installation of a double pole circuit breaker permanently marked as "For Future 240V use."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

\*Exceptions may apply.

5/6/22

AM ASSOCIATE

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E: ACHUONG@GMAIL.COM

REVISIONS

| NO. | DATED    | REVISION                      | BY |
|-----|----------|-------------------------------|----|
| 1   | 01-29-22 | SUBMITTAL                     | AC |
| 2   | 05-05-22 | PRE-APP COMPLETE              | AC |
| 3   | 06-18-22 | SUBMITTAL                     | AC |
| 4   | 07-27-22 | REVISED FOR PLANNING          | AC |
| 4.1 | 07-24-25 | REVISED FOR PLANNING          | AC |
| 5   | 11-03-25 | REVISED FOR PLANNING/BUILDING | AC |
|     |          |                               |    |
|     |          |                               |    |
|     |          |                               |    |
|     |          |                               |    |

OWNER

MCDOW RESIDENCE

364 CALIFORNIA AVE.  
MOSS BEACH, CA 94038  
APN: 037-118-050

SHEET CONTENTS

RESIDENTIAL  
MANDATORY  
REQUIREMENTS  
SUMMARY

Title

Designed By

Drawn By

As Noted

Scale

AM-RA/364-012822

File Name

Of 19 Sheets

A-3.0



CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: McDow Addition  
Calculation Description: Title 24 Analysis

Calculation Date/Time: 2026-05-07T11:54:36-07:00  
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| GENERAL INFORMATION |                                 |  |                            |    |                                   |  |                  |    |                               |  |        |
|---------------------|---------------------------------|--|----------------------------|----|-----------------------------------|--|------------------|----|-------------------------------|--|--------|
| 01                  | Project Name                    |  | McDow Addition             |    |                                   |  |                  |    |                               |  |        |
| 02                  | Run Title                       |  | Title 24 Analysis          |    |                                   |  |                  |    |                               |  |        |
| 03                  | Project Location                |  | 364 California Ave         |    |                                   |  |                  |    |                               |  |        |
| 04                  | City                            |  | Moss Beach                 | 05 | Standards Version                 |  | 2025             |    |                               |  |        |
| 06                  | Zip code                        |  | 94038                      | 07 | Software Version                  |  | CBECC 2025.2.0.1 |    |                               |  |        |
| 08                  | Climate Zone                    |  | 3                          | 09 | Front Orientation (deg/ Cardinal) |  | 300              |    |                               |  |        |
| 10                  | Building Type                   |  | Single family              |    |                                   |  |                  | 11 | Number of Dwelling Units      |  | 1      |
| 12                  | Project Scope                   |  | Addition and/or Alteration |    |                                   |  |                  | 13 | Number of Bedrooms            |  | 3      |
| 14                  | Addition Cond. Floor Area (ft²) |  | 1190                       |    |                                   |  |                  | 15 | Number of Stories             |  | 1      |
| 16                  | Existing Cond. Floor Area (ft²) |  | 1395                       |    |                                   |  |                  | 17 | Fenestration Average U-factor |  | 0.34   |
| 18                  | Total Cond. Floor Area (ft²)    |  | 2585                       |    |                                   |  |                  | 19 | Glazing Percentage (%)        |  | 12.60% |
| 20                  | ADU Bedroom Count               |  | n/a                        |    |                                   |  |                  | 21 | ADU Conditioned Floor Area    |  | n/a    |
| 22                  | Fuel Type                       |  | Natural gas                |    |                                   |  |                  | 23 | No Dwelling Unit:             |  | No     |

COMPLIANCE RESULTS

Building Complies with Computer Performance  
This building incorporates features that require field testing and/or verification by a certified ECC rater under the supervision of a CEC-approved ECC provider.  
This building incorporates one or more Special Features shown below

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.  
• IAQ Ventilation System: as low as 0.15 W/CFM  
• No cooling system included

ECC FEATURE SUMMARY

The following is a summary of the features that must be field verified by a certified ECC Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF-2Rs and CF-3Rs are required to be completed in the ECC Registry  
• Indoor air quality ventilation  
• Kitchen range hood

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| ENERGY USE INTENSITY                                                                                                                                        |                                             |                                             |                                    |                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------|------------------------------------|-------------------|
|                                                                                                                                                             | Standard Design (kBtu/ft <sup>2</sup> - yr) | Proposed Design (kBtu/ft <sup>2</sup> - yr) | Margin (kBtu/ft <sup>2</sup> - yr) | Margin Percentage |
| Gross EU1 <sup>1</sup>                                                                                                                                      | 20.94                                       | 19.21                                       | 1.73                               | 8.26              |
| Net EU1 <sup>2</sup>                                                                                                                                        | 20.94                                       | 19.21                                       | 1.73                               | 8.26              |
| Notes<br>1. Gross EU1 is Energy Use Total (not including PV) / Total Building Area.<br>2. Net EU1 is Energy Use Total (including PV) / Total Building Area. |                                             |                                             |                                    |                   |

BUILDING - FEATURES INFORMATION

| 01             | 02                                        | 03                       | 04                 | 05              | 06                                    | 07                              |
|----------------|-------------------------------------------|--------------------------|--------------------|-----------------|---------------------------------------|---------------------------------|
| Project Name   | Conditioned Floor Area (ft <sup>2</sup> ) | Number of Dwelling Units | Number of Bedrooms | Number of Zones | Number of Ventilation Cooling Systems | Number of Water Heating Systems |
| McDow Addition | 2585                                      | 1                        | 3                  | 2               | 0                                     | 1                               |

ZONE INFORMATION

| 01        | 02          | 03               | 04                                 | 05                  | 06                     | 07                 |
|-----------|-------------|------------------|------------------------------------|---------------------|------------------------|--------------------|
| Zone Name | Zone Type   | HVAC System Name | Zone Floor Area (ft <sup>2</sup> ) | Avg. Ceiling Height | Water Heating System 1 | Status             |
| Addition  | Conditioned | Hydronics        | 1190                               | 8                   | New DHW System         | New                |
| Existing  | Conditioned | Hydronics        | 1395                               | 8                   | New DHW System         | Existing Unchanged |

OPAQUE SURFACES SUMMARY

| 01             | 02       | 03           | 04      | 05          | 06                            | 07                                      | 08         | 09              | 10       | 11                          |
|----------------|----------|--------------|---------|-------------|-------------------------------|-----------------------------------------|------------|-----------------|----------|-----------------------------|
| Name           | Zone     | Construction | Azimuth | Orientation | Gross Area (ft <sup>2</sup> ) | Window and Door Area (ft <sup>2</sup> ) | Tilt (deg) | Wall Exceptions | Status   | Verified Existing Condition |
| Add Left Wall  | Addition | R-15 Wall    | 30      | Left        | 210                           | 40                                      | 90         | Extension       | New      | n/a                         |
| Add Back Wall  | Addition | R-15 Wall    | 120     | Back        | 320                           | 99.3                                    | 90         | none            | New      | n/a                         |
| Add Right Wall | Addition | R-15 Wall    | 210     | Right       | 240                           | 40                                      | 90         | none            | New      | n/a                         |
| Ex Front Wall  | Existing | R-0 Wall     | 300     | Front       | 160                           | 49.5                                    | 90         | none            | Existing | No                          |

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FENESTRATION / GLAZING

| 01                   | 02       | 03             | 04          | 05      | 06    | 07                      | 08       | 09   | 10            | 11                      | 12      | 13                          |
|----------------------|----------|----------------|-------------|---------|-------|-------------------------|----------|------|---------------|-------------------------|---------|-----------------------------|
| Name                 | Type     | Surface        | Orientation | Azimuth | Mult. | Area (ft <sup>2</sup> ) | U-factor | SHGC | Rating Source | Exception to 150.0 (q)* | Status  | Verified Existing Condition |
| Family @ Right       | Window   | Add Right Wall | Right       | 210     | 1     | 20                      | 0.32     | 0.4  | NFRC          | □                       | New     | NA                          |
| Kitchen              | Window   | Add Right Wall | Right       | 210     | 1     | 20                      | 0.32     | 0.4  | NFRC          | □                       | New     | NA                          |
| Entry Door + Transom | Window   | Ex Front Wall  | Front       | 300     | 1     | 25.5                    | 0.32     | 0.4  | NFRC          | □                       | New     | NA                          |
| Living               | Window   | Ex Front Wall  | Front       | 300     | 1     | 24                      | 0.32     | 0.4  | NFRC          | □                       | Altered | No                          |
| Closet               | Window   | Ex Left Wall   | Left        | 30      | 1     | 2                       | 0.32     | 0.4  | NFRC          | □                       | New     | NA                          |
| BR1                  | Window   | Ex Left Wall   | Left        | 30      | 1     | 20                      | 0.32     | 0.4  | NFRC          | □                       | New     | NA                          |
| Dining               | Window   | Ex Right Wall  | Right       | 210     | 1     | 12                      | 0.32     | 0.4  | NFRC          | □                       | New     | NA                          |
| Living @ Right       | Window   | Ex Right Wall  | Right       | 210     | 1     | 20                      | 0.32     | 0.4  | NFRC          | □                       | New     | NA                          |
| Skylight 1           | Skylight | Add Roof 1     | Left        | 30      | 1     | 10.7                    | 0.45     | 0.45 | NFRC          | □                       | New     | NA                          |
| Skylight 2           | Skylight | Add Roof 2     | Right       | 210     | 1     | 10.7                    | 0.45     | 0.45 | NFRC          | □                       | New     | NA                          |
| Skylight 3           | Skylight | Ex Roof 3      | Left        | 30      | 1     | 10.7                    | 0.45     | 0.45 | NFRC          | □                       | New     | NA                          |
| Skylight 4           | Skylight | Ex Roof 4      | Right       | 210     | 1     | 10.7                    | 0.45     | 0.45 | NFRC          | □                       | New     | NA                          |

\*Project includes fenestration not subject to maximum U-factor requirement per Exception 1 / Exception 2 / Exception 3 to Section 150.0(q).

|                                 |   |
|---------------------------------|---|
| Total North Facing Fenestration | 0 |
| Total East Facing Fenestration  | 0 |

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| Compliance Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                  |                                             |                                               |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------|-----------------------------------------------|-------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Long Term System Cost (LSC) <sup>1</sup>         |                                             | Source Energy Use                             | Peak Cooling**    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Efficiency <sup>2</sup> (\$/ft <sup>2</sup> -yr) | Total <sup>3</sup> (\$/ft <sup>2</sup> -yr) | Total <sup>3</sup> (kBtu/ft <sup>2</sup> -yr) | Electricity (kWh) |
| Standard Design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 20.06                                            |                                             |                                               |                   |
| Proposed Design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 17.65                                            |                                             |                                               |                   |
| Compliance Margins                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.41                                             |                                             |                                               |                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Pass                                             |                                             |                                               |                   |
| RESULT*: Complies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                  |                                             |                                               |                   |
| <sup>1</sup> Long-term System Cost (LSC) is a 30-year present value cost to California's energy system. LSC is not a predicted utility bill.<br><sup>2</sup> Efficiency measures include energy efficient improvements such as better building envelope and more efficient mechanical equipment<br><sup>3</sup> Total includes the sum of efficiency measures, solar photovoltaic (PV) measures and battery storage measures<br>** Peak cooling target represents 120% of the standard design building peak cooling energy use. |                                                  |                                             |                                               |                   |
| Standard Design PV Capacity: 0.00 kWdc                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                  |                                             |                                               |                   |

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OPAQUE SURFACES SUMMARY

| 01                          | 02                 | 03                       | 04      | 05          | 06                            | 07                                      | 08         | 09              | 10       | 11                          |
|-----------------------------|--------------------|--------------------------|---------|-------------|-------------------------------|-----------------------------------------|------------|-----------------|----------|-----------------------------|
| Name                        | Zone               | Construction             | Azimuth | Orientation | Gross Area (ft <sup>2</sup> ) | Window and Door Area (ft <sup>2</sup> ) | Tilt (deg) | Wall Exceptions | Status   | Verified Existing Condition |
| Ex Left Wall                | Existing           | R-0 Wall                 | 30      | Left        | 150                           | 22                                      | 90         | none            | Existing | No                          |
| Ex Right Wall               | Existing           | R-0 Wall                 | 210     | Right       | 250                           | 32                                      | 90         | none            | Existing | No                          |
| Partition                   | Addition>>Existing | R-0 Int Wall             | n/a     | n/a         | 310                           | 0                                       | n/a        |                 | New      | n/a                         |
| Ex Wall to Garage           | Existing>>Garage   | R-15 Interior Wall       | n/a     | n/a         | 290                           | 20                                      | n/a        |                 | New      | n/a                         |
| Add Ceiling 1 (below attic) | Addition           | R-30 Ceiling below Attic | n/a     | n/a         | 1169                          | n/a                                     | n/a        |                 | New      | n/a                         |
| Rebuilt Ceiling             | Existing           | R-30 Ceiling below Attic | n/a     | n/a         | 1374                          | n/a                                     | n/a        |                 | New      | n/a                         |
| Gar Ceiling                 | Garage             | R-0 Garage Ceiling       | n/a     | n/a         | 420                           | n/a                                     | n/a        |                 | Existing | No                          |
| Ex Floor Over Crawlspace    | Existing           | R-0 Floor                | n/a     | n/a         | 1395                          | n/a                                     | n/a        |                 | Existing | No                          |
| Gar Front Wall              | Garage             | R-0 Wall                 | 300     | Front       | 160                           | 0                                       | 90         | none            | Existing | No                          |
| Gar Left Wall               | Garage             | R-0 Wall                 | 30      | Left        | 170                           | 0                                       | 90         | none            | Existing | No                          |
| Gar Right Wall              | Garage             | R-0 Wall                 | 210     | Right       | 40                            | 0                                       | 90         | none            | Existing | No                          |

OPAQUE SURFACES - CATHEDRAL CEILINGS

| 01         | 02       | 03                 | 04      | 05          | 06                      | 07                               | 08                  | 09                          | 10                        | 11     | 12                          |
|------------|----------|--------------------|---------|-------------|-------------------------|----------------------------------|---------------------|-----------------------------|---------------------------|--------|-----------------------------|
| Name       | Zone     | Construction       | Azimuth | Orientation | Area (ft <sup>2</sup> ) | Skylight Area (ft <sup>2</sup> ) | Roof Rise (x in 12) | CRRC Rated Roof Reflectance | CRRC Rated Roof Emittance | Status | Verified Existing Condition |
| Add Roof 1 | Addition | R-30 Roof no Attic | 30      | Left        | 10.7                    | 10.7                             | 3                   | 0.1                         | 0.85                      | New    | n/a                         |
| Add Roof 2 | Addition | R-30 Roof no Attic | 210     | Right       | 10.7                    | 10.7                             | 3                   | 0.1                         | 0.85                      | New    | n/a                         |
| Ex Roof 3  | Existing | R-30 Roof no Attic | 30      | Left        | 10.7                    | 10.7                             | 3                   | 0.1                         | 0.85                      | New    | n/a                         |

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FENESTRATION / GLAZING

| 01                              | 02   | 03      | 04          | 05      | 06    | 07                      | 08       | 09   | 10            | 11                      | 12     | 13                          |
|---------------------------------|------|---------|-------------|---------|-------|-------------------------|----------|------|---------------|-------------------------|--------|-----------------------------|
| Name                            | Type | Surface | Orientation | Azimuth | Mult. | Area (ft <sup>2</sup> ) | U-factor | SHGC | Rating Source | Exception to 150.0 (q)* | Status | Verified Existing Condition |
| Total South Facing Fenestration |      |         |             |         |       | 0                       |          |      |               |                         |        |                             |
| Total West Facing Fenestration  |      |         |             |         |       | 0                       |          |      |               |                         |        |                             |

OPAQUE DOORS

| 01             | 02                | 03                      | 04       | 05     | 06                          | 07               |
|----------------|-------------------|-------------------------|----------|--------|-----------------------------|------------------|
| Name           | Side of Building  | Area (ft <sup>2</sup> ) | U-factor | Status | Verified Existing Condition | NFRC Rating Req. |
| Door to Garage | Ex Wall to Garage | 20                      | 0.5      | New    | n/a                         | No               |

SLAB FLOORS

| 01       | 02       | 03                      | 04             | 05                  | 06                | 07     | 08       | 09                          |
|----------|----------|-------------------------|----------------|---------------------|-------------------|--------|----------|-----------------------------|
| Name     | Zone     | Area (ft <sup>2</sup> ) | Perimeter (ft) | Edge Insul. R-value | Edge Insul. Depth | Heated | Status   | Verified Existing Condition |
| Add Slab | Addition | 1190                    | 97             | none                | 0                 | No     | New      | n/a                         |
| Gar Slab | Garage   | 420                     | 46             | none                | 0                 | No     | Existing | No                          |

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LSC AND SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS

| Energy Use                            | Standard Design Source Energy (kBtu/ft <sup>2</sup> - yr) | Standard Design LSC <sup>1</sup> (\$/ft <sup>2</sup> - yr) | Proposed Design Source Energy (kBtu/ft <sup>2</sup> - yr) | Proposed Design LSC <sup>1</sup> (\$/ft <sup>2</sup> - yr) | Compliance Margin Source (kBtu/ft <sup>2</sup> - yr) | Compliance Margin LSC <sup>1</sup> (\$/ft <sup>2</sup> - yr) |
|---------------------------------------|-----------------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------|
| Space Heating                         | 0                                                         | 14.22                                                      | 0                                                         | 11.78                                                      | 0                                                    | 2.44                                                         |
| Space Cooling                         | 0                                                         | 0                                                          | 0                                                         | 0.03                                                       | 0                                                    | -0.03                                                        |
| IAQ Ventilation                       | 0                                                         | 0                                                          | 0                                                         | 0                                                          | 0                                                    | 0                                                            |
| Water Heating                         | 0                                                         | 5.84                                                       | 0                                                         | 5.84                                                       | 0                                                    | 0                                                            |
| Self Utilization/Healthability Credit | n/a                                                       | n/a                                                        | n/a                                                       | 0                                                          | n/a                                                  | 0                                                            |
| Efficiency Compliance Total           | 0                                                         | 20.06                                                      | 0                                                         | 17.65                                                      | 0                                                    | 2.41                                                         |
| Photovoltaics And Battery             | n/a                                                       | n/a                                                        | n/a                                                       | 0                                                          | n/a                                                  | 0                                                            |
| Flexibility                           | n/a                                                       | n/a                                                        | n/a                                                       | n/a                                                        | n/a                                                  | n/a                                                          |
| Indoor Lighting                       | 0                                                         | 1.71                                                       | 0                                                         | 1.71                                                       | n/a                                                  | 0                                                            |





PERFORMANCE PLATINUM™ High Efficiency Condensing Tankless Gas Water Heaters are designed to provide continuous hot water

- Efficiency**
- 33 UEF with stainless steel condensing heat exchanger
  - Easy Installation and Service**
  - NEW! 2" venting connections**
  - NEW! Vent up to 150 ft with 3" PVC and 60 ft with 2" PVC**
  - Built-in condensate neutralizer
  - 1/2" Gas line compatibility up to 24 ft.1
  - NEW! Includes easy to install hanging bracket for time savings** (indoor models only)
  - Exclusive! Maintenance Notice Setting** – Alerts homeowner, after 500 hours of use, to call for service (optional)
  - Self-diagnostic system for easy installation and service
  - High-altitude capability – up to 8,400 ft. elevation above sea level2
  - Digital remote control **now pre-wired!** 10 ft. of thermostat wire included – shows temperature setting and service codes
  - Requires 120V power supply

- Performance**
- Industry Leading! Low Flow Activation** – Minimum flow rate of .26 GPM and minimum activation flow rate of .40 GPM ensures hot water even in low demand situations
  - Recirculation Pump Kit-Ready** – Providing faster hot water at the tap and savings of up to 12,000 gallons water/year3
  - Exclusive! Hot Start Programming** – Minimizes cold water bursts by staying in ready-fire state for back-to-back hot water needs
- Technology**
- EcoNet® Enabled** – all Tankless products from 2010 to present can connect to EcoNet mobile app via Tankless EcoNet Accessory Kit (REWRAS30TW-H)
  - For higher demand applications, easily link multiple tankless units to operate as one system (20 units max, additional accessories required)

- Environmentally Friendly**
- Low Emissions** – Ultra low NOx burner meets SCAQMD rule 114B.2 requirements
  - Exclusive! Water Savings Setting** – Save up to 1,100 gallons water/year4 by reducing flow at the tap until set temperature is achieved (optional)
- Safety**
- Exclusive! Overheat film wrap** – prevents dangerous temperatures and provides industry best side-to-side clearance of 1/2 inch
  - Maximum water temperature for 140°F. For higher temperature applications, upgrade kits are available
- Warranty**
- 12-Year heat exchanger – residential, 5-year heat exchanger – commercial, 5-year parts and 1-year labor
- See Warranty Certificate for complete information



**PERFORMANCE PLATINUM Tankless Water Heater with EcoNet® WIFI Included**

Shares all efficiency, performance, technology, warranty and safety values as standard models, with added WIFI capability.

**Smart Home Features**

- Water leak detection alert and system shut off (indoor models only) – may qualify for insurance discounts
- Mobile alerts for notifications/maintenance reminders
- Mobile gas and water usage reports
- Integration with NEST & WINK smart home systems

**Product Includes**

- Factory-installed translator
- Leak detection cable (for indoor models)
- Wi-Fi Module, connection cable and power cord

App available free in App Store and Google Play for Android

**ECHOH2000VLN-2**  
Indoor Direct Vent with EcoNet®  
11,000-199,900 BTU/h Only  
(Outdoor model also available)

| PERFORMANCE PLATINUM™ Condensing Tankless Specifications |                   |         |                       |               |                      |                |                |                                          |        |        |        |                       |                             |      |
|----------------------------------------------------------|-------------------|---------|-----------------------|---------------|----------------------|----------------|----------------|------------------------------------------|--------|--------|--------|-----------------------|-----------------------------|------|
| DESCRIPTION                                              |                   |         |                       | FEATURES      |                      |                |                | ROUGHING IN DIMENSIONS (SHOWN IN INCHES) |        |        |        |                       | ENERGY INFO.                |      |
| MODEL NUMBER                                             | GAS INPUT (BTU/H) | TYPE    | NUMBER OF BURNERS/QUE | TEMP. RANGE   | MIN. FLOW RATE (GPM) | GPM RISE (GPM) | GPM RISE (GPM) | CONNECTION GAS                           | HEIGHT | WIDTH  | DEPTH  | VENT DIA. (INCH)      | UNIFORM ENERGY FACTOR (UEF) |      |
| ECHOH2000VLN-2                                           | 11,000-199,900    | Indoor  | 4                     | 80° to 140° F | 0.26/0.40            | 5.7            | 5.5            | 3/4                                      | 3/4    | 27-1/2 | 10-1/2 | 2" x 3" PVC 3/4" Dia. | 82                          | 0.93 |
| ECHOH2000VLN-2                                           | 11,000-199,900    | Indoor  | 4                     | 80° to 140° F | 0.26/0.40            | 5.7            | 5.5            | 3/4                                      | 3/4    | 27-1/2 | 10-1/2 | 2" x 3" PVC 3/4" Dia. | 82                          | 0.93 |
| ECHOH2000VLN-2                                           | 11,000-199,900    | Outdoor | 4                     | 80° to 140° F | 0.26/0.40            | 5.6            | 5.5            | 3/4                                      | 3/4    | 27-1/2 | 10-1/2 | N/A                   | 82                          | 0.93 |
| ECHOH2000VLN-2                                           | 11,000-199,900    | Outdoor | 4                     | 80° to 140° F | 0.26/0.40            | 5.6            | 5.5            | 3/4                                      | 3/4    | 27-1/2 | 10-1/2 | N/A                   | 82                          | 0.93 |
| ECHOH2000VLN-2                                           | 11,000-199,900    | Indoor  | 3-4                   | 80° to 140° F | 0.26/0.40            | 5.2            | 7.7            | 3/4                                      | 3/4    | 27-1/2 | 10-1/2 | 2" x 3" PVC 3/4" Dia. | 82                          | 0.93 |
| ECHOH2000VLN-2                                           | 11,000-199,900    | Indoor  | 3-4                   | 80° to 140° F | 0.26/0.40            | 5.2            | 7.7            | 3/4                                      | 3/4    | 27-1/2 | 10-1/2 | 2" x 3" PVC 3/4" Dia. | 82                          | 0.93 |
| ECHOH2000VLN-2                                           | 11,000-199,900    | Outdoor | 3-4                   | 80° to 140° F | 0.26/0.40            | 5.2            | 7.7            | 3/4                                      | 3/4    | 27-1/2 | 10-1/2 | N/A                   | 82                          | 0.93 |
| ECHOH2000VLN-2                                           | 11,000-199,900    | Outdoor | 3-4                   | 80° to 140° F | 0.26/0.40            | 5.2            | 7.7            | 3/4                                      | 3/4    | 27-1/2 | 10-1/2 | N/A                   | 82                          | 0.93 |
| ECHOH2000VLN-2                                           | 11,000-199,900    | Indoor  | 3                     | 80° to 140° F | 0.26/0.40            | 4.6            | 6.7            | 3/4                                      | 3/4    | 27-1/2 | 10-1/2 | 2" x 3" PVC 3/4" Dia. | 82                          | 0.93 |
| ECHOH2000VLN-2                                           | 11,000-199,900    | Outdoor | 3                     | 80° to 140° F | 0.26/0.40            | 4.5            | 6.7            | 3/4                                      | 3/4    | 27-1/2 | 10-1/2 | N/A                   | 82                          | 0.93 |

\*Based on simultaneous showers using 2.0 GPM flow rate pre-warmed with cold water line. Flow rates vary depending on temperature of incoming cold water and water heater set temperature. Refer to flow rate curves for accurate sizing.

Uniform Energy Factor and Energy Factor based on Department of Energy (DOE) requirements.

All models are available in Natural Gas and Propane (LP). For Propane replace the N with P when ordering.

EOH2000 114B.2 compliant.

Factory set maximum temperature is 120° F. See User and Care Manual for setting.

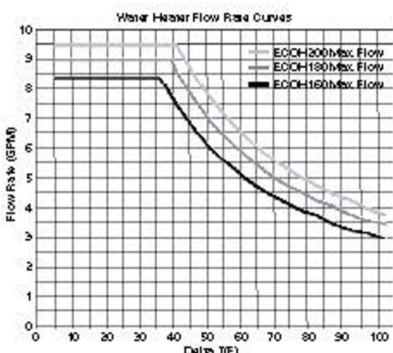
Consult listing for information on listing the appliance.

Vent Termination Kit is required for Direct Vent models. Contact your distributor for details.

Propane gas pressure must be reduced to supply working gas water heaters – up to 150,000 BTU/h for ECHOH2000 models, up to 180,000 BTU/h for ECHOH180 models, up to 157,000 BTU/h for ECHOH180 models. (Consult your gas supply.)

| Temperature Rise (°F)      |     |     |     |     |     |     |     |     |      |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Model Number               | 35° | 45° | 50° | 60° | 67° | 70° | 80° | 90° | 100° |
| ECHOH2000 Water Flow (GPM) | 9.5 | 8.5 | 7.7 | 6.4 | 5.7 | 5.5 | 4.8 | 4.3 | 3.8  |
| ECHOH180 Water Flow (GPM)  | 9.0 | 7.7 | 6.9 | 5.6 | 5.2 | 4.9 | 4.3 | 3.9 | 3.5  |
| ECHOH180 Water Flow (GPM)  | 8.4 | 6.7 | 6.0 | 5.0 | 4.6 | 4.3 | 3.8 | 3.3 | 3.0  |

Above estimates are for sizing purposes only.



| Maximum Vent Length (Intake/Outlet) |                    | MAXIMUM VENT LENGTH (FT.) | MAXIMUM VENT LENGTH (FT.) |
|-------------------------------------|--------------------|---------------------------|---------------------------|
| NUMBER OF EXHAUSTS                  | 2" STAINLESS STEEL | 2" STAINLESS STEEL        | 2" STAINLESS STEEL        |
| 0                                   | 60 ft.             | 1500 ft.                  | 1500 ft.                  |
| 1                                   | 57 ft.             | 1465 ft.                  | 1465 ft.                  |
| 2                                   | 54 ft.             | 1420 ft.                  | 1420 ft.                  |
| 3                                   | 51 ft.             | 1385 ft.                  | 1385 ft.                  |
| 4                                   | 48 ft.             | 1340 ft.                  | 1340 ft.                  |
| 5                                   | 45 ft.             | 1295 ft.                  | 1295 ft.                  |
| 6                                   | 42 ft.             | 1250 ft.                  | 1250 ft.                  |

**Parts and Accessories**

Venting & terminations – 2" or 3" PVC, access boxes, pipe covers, extra remote controls, EZ-Link® cable, manifolds and cables, service valve kits, service parts, bath kits, recirculation pump kits and Airclear® water treatment system. For more information on Tankless parts and accessories, see the Parts and Accessories Catalog or call 866-720-3070.

In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.

Rheem Water Heating • 1115 Northmeadow Parkway, Suite 100  
Roswell, Georgia 30076 • www.rheem.com

1200 FORM NO. T18-0147 Rev. 2

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: McDow Addition  
Calculation Date/Time: 2026-05-07T11:54:36-07:00  
Calculation Description: Title 24 Analysis  
Input File Name: 364CaliforniaMcDow.rbd25

| 01                       | 02                     | 03                  | 04                                         | 05                   | 06                                     | 07       | 08                                                                                                                            | 09                       |
|--------------------------|------------------------|---------------------|--------------------------------------------|----------------------|----------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Construction Name        | Surface Type           | Construction Type   | Framing                                    | Total Cavity R-value | Interior / Exterior Continuous R-value | U-factor | Assembly Layers                                                                                                               | Non-Sid Spray Foam       |
| R-15 Interior Wall       | Interior Walls         | Wood Framed Wall    | 2x4 @ 16 in. O. C.                         | R-15                 | None / None                            | 0.086    | Inside Finish: Gypsum Board<br>Cavity / Frame: R-15 / 2x4<br>Other Side Finish: Gypsum Board                                  | <input type="checkbox"/> |
| R-0 Attic Roof           | Attic Roofs            | Wood Framed Ceiling | 2x4 Top Chord of Roof Truss @ 24 in. O. C. | R-0                  | None / None                            | 0.644    | Roofing: Light Roof (Asphalt Shingle)<br>Roof Deck: Wood Siding/sheathing/decking<br>Cavity / Frame: no insul. / 2x4 Top Chrd | <input type="checkbox"/> |
| R-0 Floor                | Floors Over Crawlspace | Wood Framed Floor   | 2x12 @ 16 in. O. C.                        | R-0                  | None / None                            | 0.216    | Floor Surface: Carpeted<br>Floor Deck: Wood Siding/sheathing/decking<br>Cavity / Frame: no insul. / 2x12                      | <input type="checkbox"/> |
| R-30 Ceiling below Attic | Ceilings (below attic) | Wood Framed Ceiling | 2x6 @ 24 in. O. C.                         | R-30                 | None / None                            | 0.032    | Over Ceiling Joists: R-15.7 Insul.<br>Cavity / Frame: R-14.3 / 2x6<br>Inside Finish: Gypsum Board                             | <input type="checkbox"/> |
| R-0 Garage Ceiling       | Ceilings (below attic) | Wood Framed Ceiling | 2x4 Bottom Chord of Truss @ 24 in. O. C.   | R-0                  | None / None                            | 0.481    | Cavity / Frame: no insul. / 2x4 Bottom Chrd<br>Inside Finish: Gypsum Board                                                    | <input type="checkbox"/> |

Registration Number: 426-P010158480A-000-000-0000000-0000  
Registration Date/Time: 05/09/2026 17:00  
ECC Provider: CHEERS  
Report Generated: 2026-05-07 11:55:03

CF1R-PRF-01-E

(Page 10 of 12)

CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: McDow Addition  
Calculation Date/Time: 2026-05-07T11:54:36-07:00  
Calculation Description: Title 24 Analysis  
Input File Name: 364CaliforniaMcDow.rbd25

| 01             | 02                       | 03                | 04                | 05              | 06                   | 07                   | 08               | 09                    | 10      | 11                          | 12                            |
|----------------|--------------------------|-------------------|-------------------|-----------------|----------------------|----------------------|------------------|-----------------------|---------|-----------------------------|-------------------------------|
| Name           | System Type              | Distribution Type | Water Heater Name | Number of Units | Solar Heating System | Compact Distribution | ECC Verification | Water Heater Name (R) | Status  | Verified Existing Condition | Existing Water Heating System |
| New DHW System | Domestic Hot Water (DHW) | Standard          | New Tankless Gas  | 1               | n/a                  | None                 | n/a              | New Tankless Gas (1)  | Altered | No                          |                               |

| 01               | 02                   | 03            | 04         | 05              | 06                      | 07         | 08               | 09                    | 10                                | 11                           | 12                           | 13            | 14      | 15                          |
|------------------|----------------------|---------------|------------|-----------------|-------------------------|------------|------------------|-----------------------|-----------------------------------|------------------------------|------------------------------|---------------|---------|-----------------------------|
| Name             | Heating Element Type | Tank Type     | # of Units | Tank Vol. (gal) | Heating Efficiency Type | Efficiency | Rated Input Type | Input Rating or Pilot | Tank Insulation R-value (Int/Ext) | Standby Loss or Recovery Eff | 1st Hic. Rating or Flow Rate | Tank Location | Status  | Verified Existing Condition |
| New Tankless Gas | Consumer             | Instantaneous | 1          | 0               | UEF                     | 0.81       | Btu/Hr           | 200000                | 0                                 | n/a                          | n/a                          |               | Altered | No                          |

| HVAC - HEATING UNIT TYPES |             |                 |                    |        |                             |
|---------------------------|-------------|-----------------|--------------------|--------|-----------------------------|
| 01                        | 02          | 03              | 04                 | 05     | 06                          |
| Name                      | System Type | Number of Units | Heating Efficiency | Status | Verified Existing Condition |
| Heating Component 1       | Boiler      | 1               | AFUE - 80          | New    | No                          |

| INDOOR AIR QUALITY (IAQ) FANS |               |                        |              |                                |                                   |                                   |        |
|-------------------------------|---------------|------------------------|--------------|--------------------------------|-----------------------------------|-----------------------------------|--------|
| 01                            | 02            | 03                     | 04           | 05                             | 06                                | 07                                | 08     |
| Dwelling Unit                 | Airflow (CFM) | Fan Efficiency (W/CFM) | IAQ Fan Type | Includes Heat/Energy Recovery? | IAQ Recovery Effectiveness - ASRE | Includes Fault Indicator Display? | Status |
| Sfam IAQ/VentRpt              | 103           | 0.35                   | Exhaust      | No                             | n/a / n/a                         | No                                |        |

Registration Number: 426-P010158480A-000-000-0000000-0000  
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CERTIFICATE OF COMPLIANCE - RESIDENTIAL PERFORMANCE COMPLIANCE METHOD

Project Name: McDow Addition  
Calculation Date/Time: 2026-05-07T11:54:36-07:00  
Calculation Description: Title 24 Analysis  
Input File Name: 364CaliforniaMcDow.rbd25

| DOCUMENTATION AUTHOR'S DECLARATION STATEMENT                                                                                                                                                                                                                                                                                             |                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1. I certify that this Certificate of Compliance documentation is accurate and complete.                                                                                                                                                                                                                                                 |                                                                                     |
| Documentation Author Name:<br>Denise Koval                                                                                                                                                                                                                                                                                               | Documentation Author Signature:<br><i>Denise Koval</i>                              |
| Company:<br>Hummingbird Energy Services                                                                                                                                                                                                                                                                                                  | Signature Date:<br>05/28/2026                                                       |
| Address:<br>14811 Slalom Way<br>City/State/Zip:<br>Truckee, CA 96161                                                                                                                                                                                                                                                                     | CEA/IEA/ECC Certification Identification (if applicable):<br>Phone:<br>530-448-1053 |
| RESPONSIBLE PERSON'S DECLARATION STATEMENT                                                                                                                                                                                                                                                                                               |                                                                                     |
| I certify the following under penalty of perjury, under the laws of the State of California:                                                                                                                                                                                                                                             |                                                                                     |
| 1. The information provided on this Certificate of Compliance is true and correct.                                                                                                                                                                                                                                                       |                                                                                     |
| 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).                                                                                                                            |                                                                                     |
| 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.                                           |                                                                                     |
| 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. |                                                                                     |
| 5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building and shall be made available to the enforcement agency for all applicable inspections. I will take the necessary steps to fulfill this requirement.                                  |                                                                                     |
| 6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. I will take the necessary steps to fulfill this requirement.                                                                                         |                                                                                     |
| Responsible Designer Name:<br>Angelina Chuong                                                                                                                                                                                                                                                                                            | Responsible Designer Signature:<br><i>Angelina Chuong</i>                           |
| Company:<br>Homeowner - Angelina Chuong                                                                                                                                                                                                                                                                                                  | Date Signed:<br>05/30/2026                                                          |
| Address:<br>210 Girard St<br>City/State/Zip:<br>San Francisco, CA 94134                                                                                                                                                                                                                                                                  | License:<br>Phone:<br>4157229611                                                    |

Digitally signed by California Home Energy Efficiency Rating Services (CHEERS). This digital signature is provided in order to secure the content of this registered document, and in no way implies Registration Provider responsibility for the accuracy of the information.

Registration Number: 426-P010158480A-000-000-0000000-0000  
Registration Date/Time: 05/09/2026 17:00  
ECC Provider: CHEERS  
Report Generated: 2026-05-07 11:55:03

| REVISIONS | BY |
|-----------|----|
| 11/08/25  | AC |
| 01/23/26  | AC |
|           |    |
|           |    |
|           |    |

PREPARED BY:  
AM ASSOCIATE  
210 GIRARD ST  
SAN FRANCISCO, CA 94134

REMODEL RESIDENCE FOR:  
McDow Residence  
364 California Ave.  
Moss Beach, CA 94038  
APN: 037-118-050

SHEET TITLE:  
TITLE 24 CALCULATIONS

DATE: 05/28/2026  
DRAWN:  
SCALE: AS NOTED  
SHEET:  
T24-2



| DATE       | ISSUE      |
|------------|------------|
| 12.19.2025 | PERMIT SET |

STAMP



PROJECT NUMBER

2532

TITLE

GENERAL NOTES

SHEET

S1.0

GENERAL NOTES

- ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE 2022 CALIFORNIA BUILDING CODE (REFERRED TO HEREINAFTER AS "CBC")
- STRUCTURAL INFORMATION SHOWN ON THESE DRAWINGS IS FOR RESIDENTIAL REMODEL OF 1-STORY SINGLE FAMILY BUILDING. THE SCOPE OF THIS PROJECT DOES NOT INCLUDE BRINGING THE EXISTING FRAMING OR THE EXISTING FOUNDATION ELEMENTS UP TO CURRENT CODE NOR DOES IT INCLUDE IMPROVING THE SEISMIC PERFORMANCE OF THE EXISTING PORTIONS OF THE BUILDING NOT RELATED TO THE ADDITION. THESE DRAWINGS DO NOT ADDRESS ANY ISSUES THAT MAY OR MAY NOT EXIST WITH THE EXISTING FRAMING OR FOUNDATIONS NOR DOES THE SCOPE SHOWN GUARANTEE THE STRUCTURAL PERFORMANCE OF ANY OF THE EXISTING STRUCTURAL ELEMENTS OF THE BUILDING NOT RELATED TO THE ADDITION.
- REPAIR PORTIONS OF ANY FOUNDATION ELEMENTS SHOWN ON THESE DRAWINGS DO NOT ADDRESS SETTLEMENT PROBLEMS AND DO NOT PREVENT ANY FUTURE SETTLEMENT. THE DETAILS AND EXTENT OF UNDERPINNING OR RETROFIT SHOWN ARE SOLELY TO IMPROVE THE CURRENT EXISTING FOUNDATION CONDITIONS AND DO NOT BRING THE FOUNDATIONS UP TO CURRENT CODE NOR DOES THE SCOPE SHOWN GUARANTEE THE PERFORMANCE OF ALL EXISTING FOUNDATION ELEMENTS.
- ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE. U.O.N. NOTES AND DETAILS ON THE DRAWINGS TAKE PRECEDENCE OVER THE GENERAL NOTES AND TYPICAL DETAILS.
- ALL OMISSIONS AND CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR ARCHITECTURAL SPECIFICATIONS (WHERE APPLICABLE) SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY OF THE WORK INVOLVED.
- AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF THE PERSONS AND PROPERTY, AND FOR ALL NECESSARY INDEPENDENT ENGINEERING REVIEWS OF THESE CONDITIONS. THE ARCHITECTS OR ENGINEER'S JOB SITE REVIEW IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
- DURING AND AFTER CONSTRUCTION, BUILDER AND/OR OWNER SHALL KEEP LOADS ON STRUCTURE WITHIN THE LIMITS OF DESIGN LOADS.
- IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE STRUCTURAL DRAWINGS.
- NO OPENINGS, CHASES, NOTCHES, ETC. SHALL BE PLACED IN COLUMNS, JOISTS, BEAMS, BEARING WALLS, AND SHEAR WALLS UNLESS SPECIFICALLY NOTED ON THESE DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW SUCH OPENINGS.
- CONTRACTOR SHALL COORDINATE ALL STRUCTURAL FRAMING WITH MECHANICAL, PLUMBING AND ELECTRICAL INFRASTRUCTURE, INCLUDING, BUT NOT LIMITED TO, RECESSED AND SEMI-RECESSED LIGHTING, MECHANICAL DUCTS AND PIPING, FIRE SPRINKLER PIPE AND HEADS AND PLUMBING DRAINS, WASTE AND SUPPLY LINES.
- ALL ASTM DESIGNATIONS SHALL BE AS AMENDED TO DATE, U.O.N.
- THIS DOCUMENT HAS BEEN PREPARED BY EKW ENGINEERING FOR THE SPECIFIC PROJECT IDENTIFIED. ANY REPRODUCTION, DISTRIBUTION, MODIFICATION, REUSE, OR RELIANCE UPON THIS DOCUMENT, IN WHOLE OR IN PART, FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PREPARED, WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF EKW ENGINEERING, IS NOT PERMITTED. EKW ENGINEERING ASSUME NO RESPONSIBILITY OR LIABILITY FOR UNAUTHORIZED USE OR RELIANCE.

DESIGN CRITERIA

- DEAD LOADS**

|                            |        |
|----------------------------|--------|
| a. ROOF                    | 20 PSF |
| b. FLOOR (TYPICAL)         | 20 PSF |
| c. WALL (EXTERIOR: STUCCO) | 20 PSF |
- LIVE LOADS**

|          |        |
|----------|--------|
| a. ROOF  | 20 PSF |
| b. FLOOR | 40 PSF |
- SEISMIC DESIGN PARAMETERS**

|                                     |                        |
|-------------------------------------|------------------------|
| a. IMPORTANCE FACTOR                | I = 1.0                |
| b. RISK CATEGORY                    | II                     |
| c. SITE CLASS                       | D                      |
| d. MAPPED SHORT PERIOD ACCELERATION | S <sub>s</sub> = 2.13  |
| e. SITE COEFFICIENT                 | F <sub>a</sub> = 1.20  |
| f. DESIGN SHORT PERIOD ACCELERATION | S <sub>DS</sub> = 1.70 |
| g. MAPPED ONE SECOND ACCELERATION   | S <sub>1</sub> = 0.87  |
| h. SITE COEFFICIENT                 | F <sub>v</sub> = 1.70  |
| i. DESIGN ONE SECOND ACCELERATION   | S <sub>1</sub> = 0.99  |
| j. SEISMIC DESIGN CATEGORY          | D                      |
- DESIGN BASE SHEAR:** V = C<sub>s</sub>W (AT STRENGTH LEVEL), W = EFFECTIVE SEISMIC WEIGHT

|                              |                        |
|------------------------------|------------------------|
| k. WOOD SHEAR WALLS          | C <sub>s</sub> = 0.262 |
| RESPONSE MODIFICATION FACTOR | R = 6.5                |
- FOUNDATION DESIGN PARAMETERS**

|                                     |           |
|-------------------------------------|-----------|
| a. <b>SPREAD FOOTING PARAMETERS</b> |           |
| • ALLOWABLE SOIL PRESSURE           |           |
| DEAD + LIVE LOADS                   | 1,500 PSF |
| DEAD + LIVE + SEISMIC               | 2,000 PSF |
| • PASSIVE PRESSURE                  | 250 PCF   |
| • COEFFICIENT OF FRICTION           | 0.30      |

FOUNDATION

- FOUNDATION DESIGN IS BASED ON THE PRESUMPTIVE LOAD BEARING VALUES OF SOIL GIVEN IN THE CALIFORNIA BUILDING CODE 2022, TABLE 1806.2)
- INSTALLATION OF THE FOUNDATION FOOTINGS OR PIERS WITH RESPECT TO THE DEPTH BELOW FINISHED OR NATURAL GRADE SHALL BE AT A MINIMUM ACCORDING TO THE FOUNDATION DETAILS ON THESE PLANS. FIELD DISCOVERED CONDITIONS MAY NECESSITATE DEEPER FOUNDATIONS.
- EXCAVATIONS SHALL BE MADE AS NEAR AS POSSIBLE TO THE NEAT LINES REQUIRED BY THE SIZE AND SHAPE OF THE STRUCTURE, U.O.N.
- ALL WATER, SOIL, AND OTHER DEBRIS SHALL BE REMOVED FROM FOUNDATION EXCAVATIONS PRIOR TO PLACING OF CONCRETE.
- ALL BACKFILL WITH ENGINEERED FILLS SHALL BE COMPACTED TO 95% RELATIVE DENSITY.

CONCRETE

- ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH CBC CHAPTER 19, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- GOVERNING STANDARDS:

|                        |                                                           |
|------------------------|-----------------------------------------------------------|
| a. CONCRETE:           | AMERICAN CONCRETE INSTITUTE, ACI 318-14                   |
| b. READY-MIX CONCRETE: | ASTM C94                                                  |
| c. CEMENT:             | ASTM C150, TYPE II OR V                                   |
| d. AGGREGATE:          | ASTM C33, ¾" MAXIMUM SIZE AND AS REQUIRED FOR WORKABILITY |
| e. FLYASH:             | ASTM C618, CLASS C OR F                                   |
| f. SLAG CEMENT:        | ASTM C989, CLASS 100 OR 120                               |
| g. SILICA FUME:        | ASTM C1240                                                |
| h. NATURAL POZZOLANS:  | ASTM C618, CLASS N                                        |
- REPLACE A MINIMUM OF 25% AND A MAXIMUM OF 50% OF CEMENT CONTENT WITH FLY ASH, POZZOLAN, SLAG CEMENT, AND/OR SILICA FUME.

- ALL STRUCTURAL ELEMENTS SHALL OBTAIN A 28-DAY MINIMUM COMPRESSIVE STRENGTH AS FOLLOWS = 2,500 PSI
- ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE, WEIGHING LESS THAN 155 PCF, UNLESS OTHERWISE NOTED.
- NOMINAL MAXIMUM SIZE OF AGGREGATES SHALL BE SELECTED SUCH THAT WORKABILITY AND PLACEABILITY OF CONCRETE ARE FACILITATED.
- CONCRETE WITH SPECIFIED COMPRESSIVE STRENGTH GREATER THAN 2,500 PSI SHALL BE PER A CONCRETE MIX DESIGN. ALL CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
- CONCRETE CLEAR COVER AT REINFORCING SHALL BE AS FOLLOWS:

|                                                          |                          |
|----------------------------------------------------------|--------------------------|
| a. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH         | 3" CLEAR                 |
| b. EXPOSED TO EARTH OR WEATHER BUT CAST AGAINST FORMS    | 2" CLEAR                 |
| c. SLABS (EXCEPT FOR MATS)                               | CENTERED IN SLAB, U.O.N. |
| d. BARS PARALLEL TO COLD JOINTS                          | 2" CLEAR                 |
| e. NOT EXPOSED TO WEATHER OR EARTH: SLABS, WALLS, JOISTS | ¾" CLEAR                 |
| f. NOT EXPOSED TO WEATHER OR EARTH: BEAMS AND COLUMN     | 1½" CLEAR                |
- ALL REINFORCING STEEL, DOWELS, ANCHOR BOLTS, PIPE SLEEVES, AND OTHER INSERTS SHALL BE SECURED IN POSITION PRIOR TO PLACING OF CONCRETE. "WET SETTING" IS NOT PERMITTED.
- DO NOT PLACE CONCRETE WHILE RAIN IS FALLING UNLESS ADEQUATE PROTECTION IS PROVIDED. DO NOT ALLOW RAIN WATER TO INCREASE WATER-CEMENT RATIO IN CONCRETE OR DAMAGE THE SURFACE OF THE CONCRETE.
- PLACE CONCRETE IN A MANNER TO AVOID SEGREGATION.
- THE SURFACE OF ALL CONSTRUCTION JOINTS SHALL BE CLEANED AND ROUGHENED BY REMOVING THE ENTIRE SURFACE AND EXPOSING CLEAN AGGREGATE SOLIDLY EMBEDDED IN MORTAR MIX.
- EPOXY ADHESIVE SHALL BE USED AT ALL LOCATIONS WHERE EITHER THREADED STEEL ROD OR REINFORCING BAR IS BEING EMBEDDED INTO EXISTING HARDENED CONCRETE, U.O.N. DO NOT DAMAGE EXISTING CONCRETE.
- ADMIXTURES SHALL BE USED AS REQUIRED FOR HOT OR COLD WEATHER, SET ACCELERATION, AND WORKABILITY. SUBMIT PRODUCT DATA TO STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO CONCRETE POUR.

REINFORCING BAR

- REINFORCING STEEL SHALL BE DEFORMED BARS PER SPECIFICATION AND GRADE LISTED BELOW WITH BAR MARKS LEGIBLY ROLLED INTO THE SURFACE INDICATION SIZE, TYPE OF STEEL, AND YIELD STRENGTH DESIGNATION:

|                        |                          |
|------------------------|--------------------------|
| a. #3 BARS AND SMALLER | ASTM A615 GRADE 40 OR 60 |
| b. #4 BARS AND LARGER  | ASTM A615 GRADE 60       |
| c. WELDED BARS         | ASTM A706 GRADE 60       |
- REINFORCING SHALL HAVE A MINIMUM LAP IN CONFORMANCE WITH DETAILS AND SPECIFICATIONS SHOWN ON THESE DRAWINGS. STAGGER SPLICES WHENEVER POSSIBLE. VERTICAL WALL REINFORCING BARS SHALL EITHER EXTEND INTO FOOTINGS OR LAP SPLICED WITH FOOTING DOWELS OF THE SAME SIZE BARS.
- BENDING OF REINFORCING SHALL BE IN CONFORMANCE WITH DETAILS AND SPECIFICATIONS SHOWN ON THESE DRAWINGS. FIELD BENDING OF BARS THAT ARE IN PLACE IS NOT PERMITTED UNLESS APPROVED BY THE STRUCTURAL ENGINEER.
- ALL BARS SHALL BE FREE OF LOOSE AND FLAKY RUST AND SCALE, GREASE, OR OTHER MATERIALS WHICH MIGHT AFFECT OR IMPAIR BOND.
- ALL WELDING TO CONFORM TO THE REQUIREMENTS OF AWS D1.4/D1.4M-2018, STRUCTURAL WELDING CODE - STEEL REINFORCING BARS
- WELDED WIRE MESH (WWF) SHALL CONFORM TO ASTM A1064, EXCEPT AT SLABS ON GRADE WHICH MAY BE GR40. USE 6x6 W10/10 AND LAP 12" MIN. U.O.N.

EPOXY ADHESIVE ANCHORS

- EPOXY ADHESIVE SHALL BE ONE OF THE FOLLOWING:

|                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------|
| a. HILT HIT-RE 500 VS ADHESIVE (ICC-ES REPORT ESR-3814)                                                                     |
| b. SIMPSON SET-3G ADHESIVE (ICC-ES REPORT ESR-4057)                                                                         |
| c. EQUIVALENT ALTERNATES WILL BE CONSIDERED UPON REQUEST AND SUBMISSION OF MANUFACTURER'S SPECIFICATIONS AND ICC-ES REPORT. |
- INSTALLATION OF EPOXY ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY AN APPLICABLE CERTIFICATION PROGRAM. CERTIFICATION SHALL INCLUDE WRITTEN AND PERFORMANCE TESTS IN ACCORDANCE WITH THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM, OR EQUIVALENT. THE ACCEPTABILITY OF CERTIFICATION OTHER THAN ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION SHALL BE APPROVED BY THE ENGINEER OF RECORD.
- INSTALLATION REQUIREMENTS: INSTALL ADHESIVE AND ANCHORS PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR SHALL HAVE MANUFACTURER'S PRODUCT INSTALLATION LITERATURE AND PRODUCT EVALUATION REPORT ON SITE FOR REFERENCE DURING INSTALLATION.

|                                                                                                          |
|----------------------------------------------------------------------------------------------------------|
| a. ANCHORS SHALL BE INSTALLED IN CONCRETE THAT HAS A MINIMUM AGE OF 21 DAYS PER ACI D5.5.2               |
| b. HOLE PREPARATION: HOLES SHALL BE DRILLED, BLOWN OUT, AND BRUSHED PER MANUFACTURER'S SPECIFICATIONS    |
| c. CARTRIDGE PREPARATION: EPOXY ADHESIVE SHALL BE MIXED AND DISPENSED PER MANUFACTURER'S SPECIFICATIONS. |
- VISUAL PERIODIC SPECIAL INSPECTION IS REQUIRED DURING INSTALLATION, AND SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND ICC-ES REPORT.

|                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a. THE SPECIAL INSPECTOR MUST BE ON THE JOBSITE TO VERIFY THE INITIAL INSTALLATIONS OF EACH TYPE AND SIZE OF ANCHOR BY CONSTRUCTION PERSONNEL. SUBSEQUENT INSTALLATIONS OF THE SAME TYPE AND SIZE BY THE SAME CONSTRUCTION PERSONNEL ARE PERMITTED TO BE PERFORMED IN THE ABSENCE OF THE SPECIAL INSPECTOR. |
| b. ANY CHANGE IN THE PRODUCT OR PERSONNEL MUST REQUIRE AN INITIAL INSPECTION. FOR ONGOING INSTALLATION OVER AN EXTENDED PERIOD, THE SPECIAL INSPECTOR MUST MAKE REGULAR INSPECTIONS AT INTERVALS DETERMINED BY THE ENGINEER OF RECORD.                                                                      |
| c. IF THE CONTRACTOR FAILS TO ENSURE VISUAL PERIODIC SPECIAL INSPECTION IS ADEQUATELY PERFORMED, OR THE LOCAL BUILDING AUTHORITY SPECIFICALLY REQUIRES TESTING, CONTACT THE ENGINEER FOR PROOF LOADING REQUIREMENTS.                                                                                        |
- QUALITY CONTROL REQUIREMENTS:

|                                                                                                                                                                                                                                                                                                                                                                                      |            |        |     |            |     |            |     |            |     |            |     |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|-----|------------|-----|------------|-----|------------|-----|------------|-----|------------|
| a. SHEAR ANCHORS: 25% OF ANCHORS RESISTING SHEAR FORCES ONLY, SUCH AS SILL PLATE OR LEDGER ANCHORS, SHALL BE TORQUE TESTED TO THE VALUES LISTED BELOW.                                                                                                                                                                                                                               |            |        |     |            |     |            |     |            |     |            |     |            |
| b. TENSION ANCHORS: 5% (BUT NOT LESS THAN TWO) OF ANCHORS RESISTING TENSION FORCES, SUCH AS HOLDOWN ANCHORS, SHALL BE SUBJECT TO DIRECT TENSION TESTS PER THE TYPICAL "HOLDOWN TO EXISTING CONCRETE" DETAILS. AN ADDITIONAL 20% (BUT NOT LESS THAN THREE) SHALL BE TORQUE TESTED TO THE VALUES LISTED BELOW.                                                                         |            |        |     |            |     |            |     |            |     |            |     |            |
| c. TORQUE TESTING REQUIREMENTS: TEST ANCHORS USING A TORQUE CALIBRATED WRENCH TO THE FOLLOWING MINIMUM TORQUE VALUES: <table><tr><td>ANCHOR</td><td>TORQUE</td></tr><tr><td>¾"Ø</td><td>40 FT-LBS.</td></tr><tr><td>¾"Ø</td><td>50 FT-LBS.</td></tr><tr><td>¾"Ø</td><td>60 FT-LBS.</td></tr><tr><td>¾"Ø</td><td>70 FT-LBS.</td></tr><tr><td>1"Ø</td><td>80 FT-LBS.</td></tr></table> | ANCHOR     | TORQUE | ¾"Ø | 40 FT-LBS. | ¾"Ø | 50 FT-LBS. | ¾"Ø | 60 FT-LBS. | ¾"Ø | 70 FT-LBS. | 1"Ø | 80 FT-LBS. |
| ANCHOR                                                                                                                                                                                                                                                                                                                                                                               | TORQUE     |        |     |            |     |            |     |            |     |            |     |            |
| ¾"Ø                                                                                                                                                                                                                                                                                                                                                                                  | 40 FT-LBS. |        |     |            |     |            |     |            |     |            |     |            |
| ¾"Ø                                                                                                                                                                                                                                                                                                                                                                                  | 50 FT-LBS. |        |     |            |     |            |     |            |     |            |     |            |
| ¾"Ø                                                                                                                                                                                                                                                                                                                                                                                  | 60 FT-LBS. |        |     |            |     |            |     |            |     |            |     |            |
| ¾"Ø                                                                                                                                                                                                                                                                                                                                                                                  | 70 FT-LBS. |        |     |            |     |            |     |            |     |            |     |            |
| 1"Ø                                                                                                                                                                                                                                                                                                                                                                                  | 80 FT-LBS. |        |     |            |     |            |     |            |     |            |     |            |

WOOD

- ALL WOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CBC, CHAPTER 23 AND NDS 2018, NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION AND SDPWS 2021, SPECIAL DESIGN PROVISIONS FOR WIND & SEISMIC.
- ALL SOLID SAWN STRUCTURAL LUMBER SHALL CONFORM TO THE GRADING RULES OF THE WESTERN WOOD PRODUCTS ASSOCIATION. LUMBER SHALL BE DOUGLAS FIR WITH GRADE AS FOLLOWS:

|                     |                       |
|---------------------|-----------------------|
| a. JOISTS           | NO. 2, 2" TO 4" THICK |
| b. BEAMS & HEADERS  | NO. 1, POST & TIMBERS |
| c. POSTS            | NO. 1, POST & TIMBERS |
| d. STUDS            | NO. 2                 |
| e. PRESSURE TREATED | NO. 2                 |
- TRUS JOISTS SHALL BE MANUFACTURED BY WEYERHAEUSER. ALL CUTTING, NOTCHING AND DRILLING OF TRUS JOISTS MAY BE DONE ONLY IN ACCORDANCE WITH THE DETAILS PROVIDED BY THE MANUFACTURER.
- ALL PARALLAM (PSL), MICROLAM (LVL), AND TIMBERSTRAND (LSL) MEMBER CALLOUTS REFER TO PRODUCTS OF WEYERHAEUSER. CUTTING, NOTCHING OR DRILLING OF MEMBERS MAY BE DONE ONLY WITH THE APPROVAL OF THE STRUCTURAL ENGINEER. GRADE SHALL BE AS FOLLOWS:

|                             |                            |                          |                   |
|-----------------------------|----------------------------|--------------------------|-------------------|
| a. 2.2E PARALLAM (PSL)      | F <sub>y</sub> = 2,900 PSI | F <sub>v</sub> = 290 PSI | E = 2,200,000 PSI |
| b. 2.0E MICROLAM (LVL)      | F <sub>y</sub> = 2,600 PSI | F <sub>v</sub> = 285 PSI | E = 2,000,000 PSI |
| c. 1.55E TIMBERSTRAND (LSL) | F <sub>y</sub> = 2,325 PSI | F <sub>v</sub> = 310 PSI | E = 1,550,000 PSI |
- ALL STRUCTURAL LUMBER SHALL HAVE THE FOLLOWING MAXIMUM MOISTURE CONTENT (MC): MC LESS THAN OR EQUAL TO 19% AT TIME OF INSTALLATION.
- LUMBER EXPOSED TO PROLONGED RAIN WILL LIKELY EXHIBIT DEFLECTIONS LARGER THAN ANTICIPATED.
- CONTRACTOR TO SUBMIT NAIL SPECIFICATION TO EKW ENGINEERING FOR APPROVAL PRIOR TO INSTALLATION OF NAILS. ALL NAILS USED IN TIMBER-TO-TIMBER CONNECTIONS SHALL BE COMMON NAILS (8d NAIL SHALL HAVE A .131"Ø SHANK AND 2½" LENGTH AND .281"Ø HEAD, 10d NAIL SHALL HAVE A .148"Ø SHANK AND 3" LENGTH AND .312"Ø HEAD, AND 16d NAIL SHALL HAVE A .162"Ø SHANK AND 3½" LENGTH AND .344"Ø HEAD) AND NAILING SHALL CONFORM TO THE APPLICABLE BUILDING CODES. ALL NAILS CONNECTING PRE-MANUFACTURED METAL ITEMS (CONNECTORS, HANGERS, STRAPS, ETC) TO TIMBER SHALL CONFORM TO THE MANUFACTURER'S CATALOGUE AND APPLICABLE ICC REPORTS.
- ALL STUD WALLS SHALL HAVE FIRE BLOCKING AT 10'-0"o.c. MAXIMUM.
- WHERE WOOD IS IN CONTACT WITH CONCRETE OR MASONRY, OR EXPOSED TO WEATHER, PRESSURE-TREATED ("P.T.") DOUGLAS FIR SHALL BE USED, U.O.N. WEATHER RESISTANT SPECIES SUCH AS REDWOOD, CEDAR, OR WOLMANIZED WOOD MAY BE USED WHERE SPECIFIED IN THE DRAWINGS OR APPROVED BY THE ENGINEER.
- BOLTS AND LAG SCREWS SHALL BE PER ANSIS/AISC STANDARD B18.2.1. BOLT HOLES SHALL BE A MINIMUM OF ½" TO MAXIMUM OF ¾" LARGER THAN THE BOLT DIAMETER, BE ACCURATELY ALIGNED IN MAIN MEMBERS AND SIDE MEMBER/PLATE, AND NOT FORCIBLY DRIVEN.
- ALL SILL PLATES IN CONTACT WITH CONCRETE OR MASONRY SHALL BE BOLTED WITH ¾"Ø F1554 ANCHOR BOLTS WITH 7" MINIMUM EMBEDMENT AND 3"x3"x.220" PLATE WASHERS AT 4'-0"o.c. U.O.N. PLATE WASHER SHALL EXTEND TO WITHIN ½" OF PLATE ON SHEATHED SIDE. SEE SHEAR WALL SCHEDULE FOR ADDITIONAL ANCHOR BOLT SPACING AND PLATE WASHER REQUIREMENTS.
- AT NON-STRUCTURAL INTERIOR PARTITIONS, SILL PLATE MAY BE PRESSURE TREATED 2x AND FASTENED TO CONCRETE WITH SIMPSON ¾"Ø "TITEN 2" CONCRETE SCREWS AT 24"o.c. (1½" MIN. EMBEDMENT) OR SIMPSON 0.157"Ø "POPAWL" POWDER-ACTUATED FASTENERS AT 24"o.c. (1" MIN. EMBEDMENT).
- ALL BOLT HEADS AND NUTS WHICH BEAR AGAINST THE FACE OF WOOD MEMBERS SHALL BE PROVIDED WITH WASHERS. NO UPSET THREADS ARE ALLOWED.
- PROVIDE MULTIPLE STUDS FOR SOLID BEARING AT THE ENDS OF MISCELLANEOUS BEAMS OR GIRDER TRUSSES WHERE POSTS ARE NOT SHOWN.
- PROVIDE DOUBLE FLOOR JOISTS UNDER PARALLEL PARTITIONS.
- PROVIDE SOLID BLOCK AT BEARING WALLS, UNDER PERPENDICULAR PARTITIONS AND ELSEWHERE AS REQUIRED PER NDS SECTION 4.4.1. PROVIDE FULL DEPTH BLOCKING AT ENDS AND AT 8'-0"o.c. MAXIMUM SPACING.
- FACE NAIL TWO PIECE BUILT-UP BEAMS WITH 16d AT 12"o.c. AT TOP AND BOTTOM TO ALTERNATE SIDES OF BEAM. PROVIDE ADDITIONAL ROW OF NAILING AT ALL BEAMS GREATER THAN 12" DEEP.
- PREDRILL ALL HOLES FOR 20d AND LARGER NAILS, SPIKES AND LAG SCREWS. LEAD HOLES FOR LAG SCREWS SHALL BE AS FOLLOWS:

|                     |                                                                  |
|---------------------|------------------------------------------------------------------|
| a. SHANK PORTION    | SAME Ø AND LENGTH AS SHANK.                                      |
| b. THREADED PORTION | 60% TO 75% OF THE Ø OF THE THREAD AND THE SAME LENGTH AS THREAD. |
- PROVIDE FULL DEPTH SOLID BLOCKING AT A MAXIMUM OF 8'-0"o.c. FOR 2x10 MEMBERS AND LARGER (CONTACT METAL BRIDGING OR EQUAL MAY BE USED) WHERE SHEATHING OR GYPSUM BOARD IS NOT APPLIED TO TOP AND BOTTOM OF JOISTS FOR ENTIRE LENGTH PER NDS SECTION 4.4.1.
- ALL PREMANUFACTURED METAL ITEMS (CONNECTORS, HANGERS, STRAPS, ETC.) SHALL BE BY SIMPSON STRONG TIE COMPANY, INC., U.O.N. SEE NOTE ABOVE CONCERNING NAILING.
- RETIGHTEN ALL BOLTS BEFORE CLOSING IN.
- FASTENERS & CONNECTORS EXPOSED TO WEATHER SHALL BE STAINLESS STEEL, HOT-DIPPED GALVANIZED PER ASTM A153 - CLASS C OR ASTM A123, OR SIMPSON'S "ZMAX" OR DOUBLE-BARRIER/QUIK GUARD COATING.
- FASTENERS & CONNECTORS IN CONTACT WITH WOOD TREATED WITH AMMONIA OR ACZA (CHEMONITE) OR OTHER CHEMICALS w/ CHEMICAL RETENTION > AWP/ UC4A SHALL BE STAINLESS STEEL. FASTENERS & CONNECTORS IN CONTACT WITH OTHER PRESSURE-PRESERVATIVE TREATED WOOD SHALL BE STAINLESS STEEL, HOT-DIPPED GALVANIZED PER ASTM A153 - CLASS D OR ASTM A123, OR SIMPSON'S "ZMAX" OR DOUBLE-BARRIER/QUIK GUARD COATING.
- ALL STUDS SHALL BE ONE PIECE BETWEEN FLOORS AND FROM FLOOR TO ROOF, U.O.N. ALIGN CENTERLINE OF STUDS WITH CENTERLINE OF FLOOR JOISTS. ALIGN CENTERLINE OF STUDS FOR FULL HEIGHT OF STRUCTURAL, TYP.
- ALL POSTS SHALL BE FULL HEIGHT FROM FOUNDATION TO ROOF, U.O.N. WHERE POSTS ARE DISCONTINUOUS AT JOIST SPACE AND OR FROM TOP OF BEAM OR HEADERS TO LOWER TOP PLATE, BLOCK THIS SPACE WITH STUD POST.

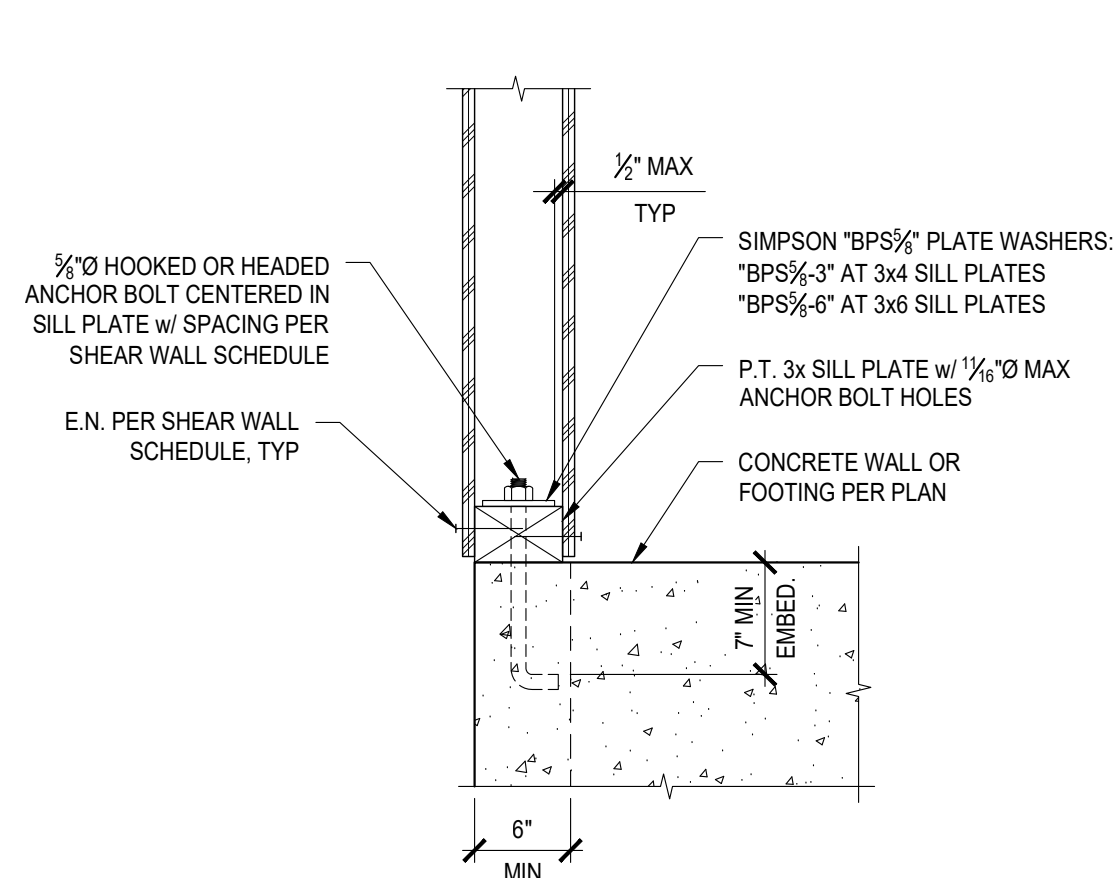
SHEATHING

- ALL SHEATHING TO BE PLYWOOD IN ACCORDANCE WITH THE US PRODUCT STANDARD PS 1-19. ALL SHEATHING TO BE STAMPED BY THE AMERICAN PLYWOOD ASSOCIATION (APA) WITH BOND CLASSIFICATION OF "EXTERIOR" OR "EXPOSURE 1". SEE PLANS FOR THICKNESS AND NAILING PATTERN AT FLOOR AND ROOF SHEATHING. MINIMUM SHEET SIZE 24'. SHEATHING SHALL BE DOUGLAS FIR AND AS FOLLOWS (U.O.N.):

|                                         |
|-----------------------------------------|
| • ¾" APA RATED 32/16, EXPOSURE 1*       |
| • ¾" APA RATED 48/24, T&G, EXPOSURE 1** |
| • ½" APA RATED 32/16, EXPOSURE 1        |

\* PROVIDE PLY CLIPS BETWEEN JOISTS WHERE EDGES ARE NOT BLOCKED.  
\*\* CONTRACTOR MAY OMIT T&G WHERE EDGES ARE BLOCKED
- ALL EXTERIOR WALLS NOT NOTED AS SHEAR WALLS SHALL BE SHEATHED WITH SHEATHING AND CONSTRUCTED AS A TYPE-6 SHEAR WALL, INCLUDING ABOVE AND BELOW ALL WALL OPENINGS, AND GABLED WALLS.
- GLUE FLOOR SHEATHING TO JOISTS WITH A CONTINUOUS BEAD OF CONSTRUCTION GRADE ADHESIVE (ASTM D3498) AND NAIL WITHIN 10 MINUTES OF GLUING.





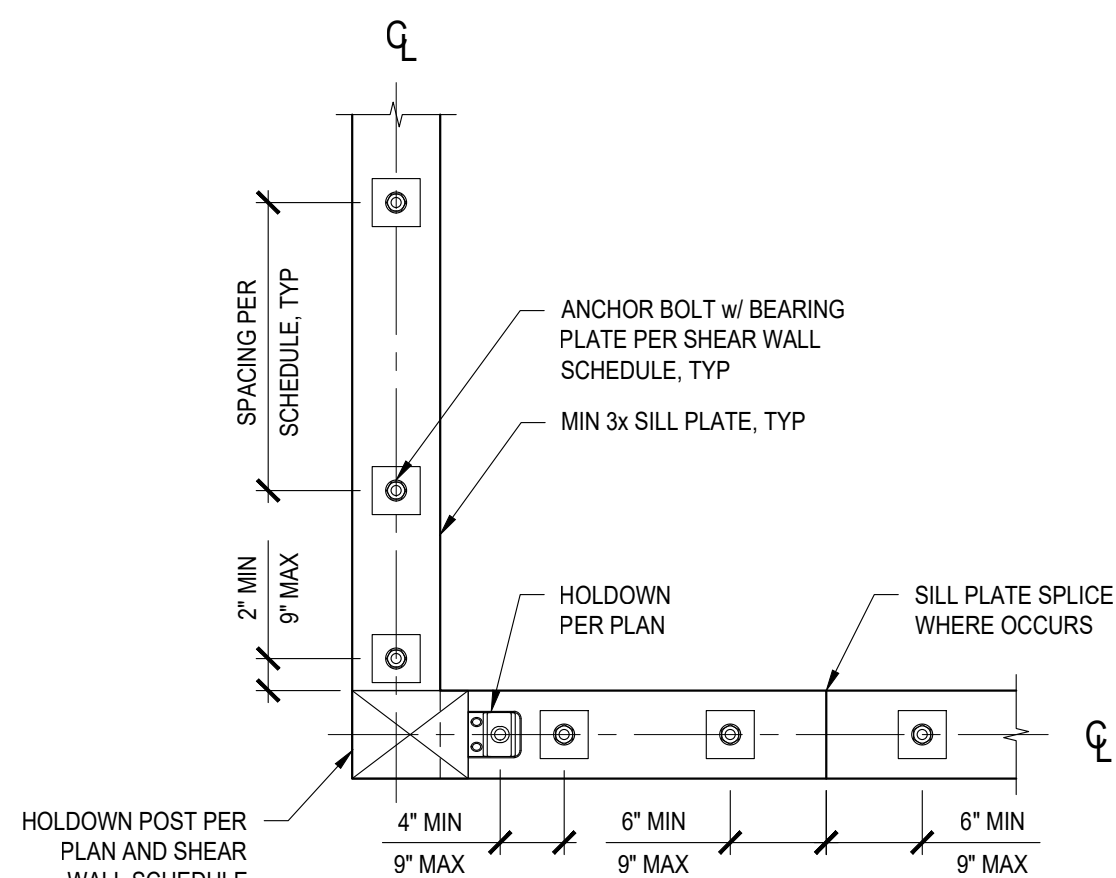
## NOTES:

1. USE "BPS $\frac{5}{8}$ SKT" PLATE WASHER w/ (4) SDS $\frac{1}{2}$ "x $\frac{1}{2}$ " WOOD SCREWS IF SILL PLATE HOLES EXCEED  $\frac{1}{8}$ " $\varnothing$ .
2. SEE SHEAR WALL SCHEDULE FOR CONSTRUCTION REQUIREMENTS.

9

## SHEAR WALL SILL PLATE

SCALE: N.T.S.



## PLAN

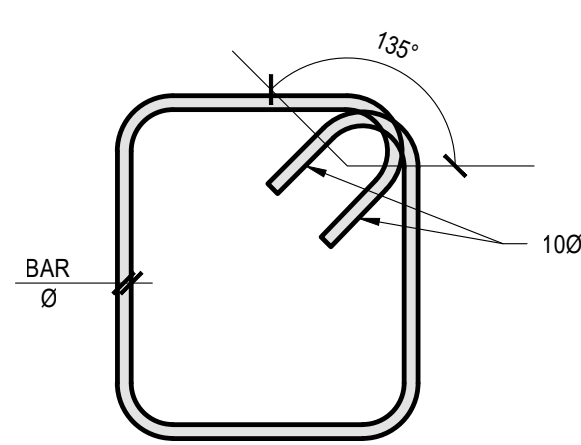
## NOTES:

1. MIN (2) SILL BOLTS PER CONTINUOUS SEGMENT OF SILL PLATE REQUIRED.
2. FOR ALL INTERIOR AND EXTERIOR FRAMING CONDITIONS NOT DESIGNATED AS SHEAR WALLS, INSTALL SILL BOLTS AT SIZE AND SPACING OF "TYPE-B" SHEAR WALL SILL BOLTS, U.O.N.

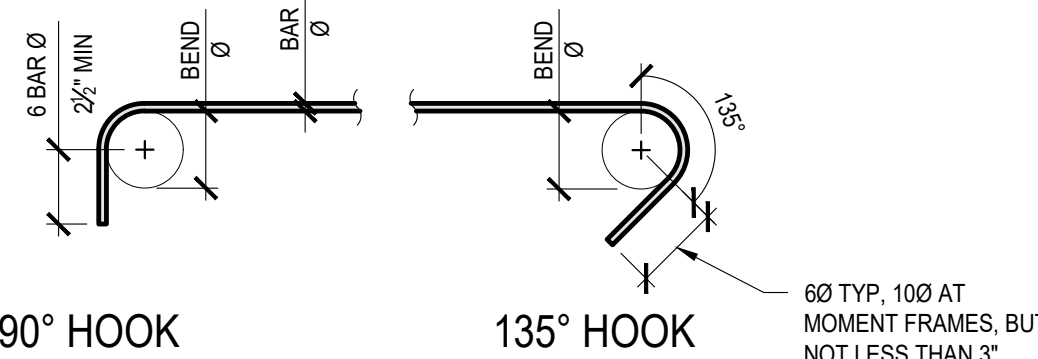
6

## SILL PLATE BOLTING

SCALE: N.T.S.



## TYPICAL STIRRUP (CLOSED-TIE)



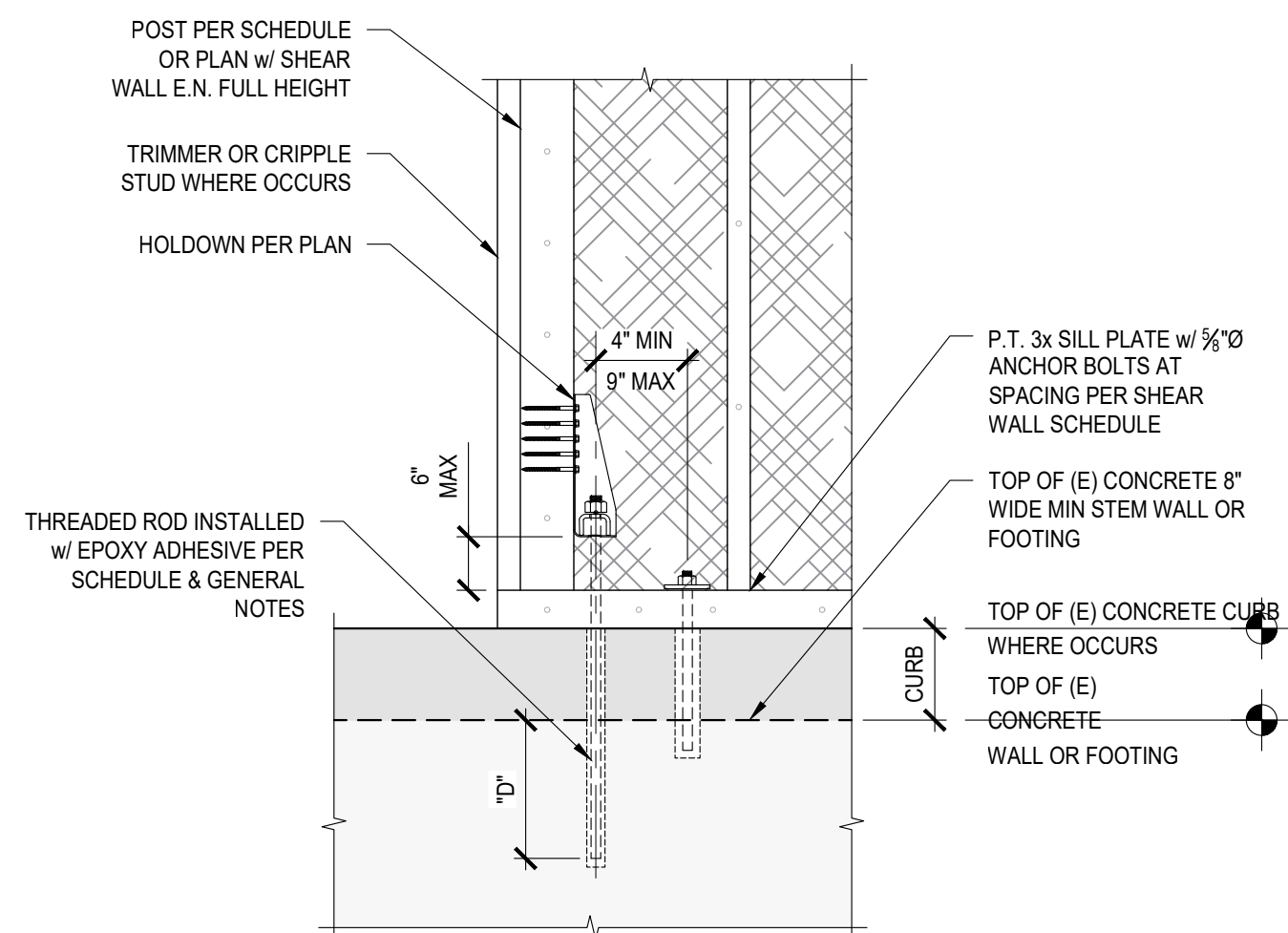
## NOTES:

1. MINIMUM BEND DIAMETER FOR STIRRUPS AND TIES IS 4d FOR #5 BARS & SMALLER AND 6d FOR #6 THRU #8 BARS.
2. STIRRUPS CALLED OUT ON THE DRAWINGS MAY NEED TO BE INSTALLED IN PIECES TO ACCOMMODATE FIELD AND EXISTING CONDITIONS, WHERE THIS NEEDS TO OCCUR EACH PIECE NEEDS TO HAVE HOOKED ENDS AS SHOWN IN THIS DETAIL.
3. ON DRAWINGS, WHERE A STIRRUP CORNER SHOWS DOUBLE HOOKS, IT MEANS THAT HOOKS LAP AT CORNER. THIS THEREFORE IDENTIFIES THE PIECES OF THE STIRRUP

3

## STIRRUP &amp; TIE BENDS

SCALE: N.T.S.



| HOLDOWN TO EXISTING CONCRETE SCHEDULE |                   |          |                               |                     |                                       |
|---------------------------------------|-------------------|----------|-------------------------------|---------------------|---------------------------------------|
| HOLDOWN SIZE                          | MIN END POST SIZE |          | THREADED ROD (SEE NOTE 2)     | EMBEDMENT DEPTH "D" | DIRECT LOAD TENSION TEST (SEE NOTE 3) |
|                                       | 2x4 WALL          | 2x6 WALL |                               |                     |                                       |
| HDU2                                  | 4x4               | 4x6      | $\frac{3}{8}$ " $\varnothing$ | 10"                 | 7,690 LB                              |
| HDU4                                  | 4x4               | 4x6      | $\frac{3}{8}$ " $\varnothing$ | 16"                 | 11,420 LB                             |
| HDU5                                  | 4x4               | 4x6      | $\frac{3}{8}$ " $\varnothing$ | 16"                 | 14,120 LB                             |
| HDU8                                  | 4x6               | 6x6      | $\frac{7}{8}$ " $\varnothing$ | 18"                 | 19,680 LB                             |
| HDU11                                 | 4x8               | 6x8      | 1" $\varnothing$              | 24"                 | 27,940 LB                             |
| HDU14                                 | 4x8               | 6x8      | 1" $\varnothing$              | 24"                 | 35,980 LB                             |

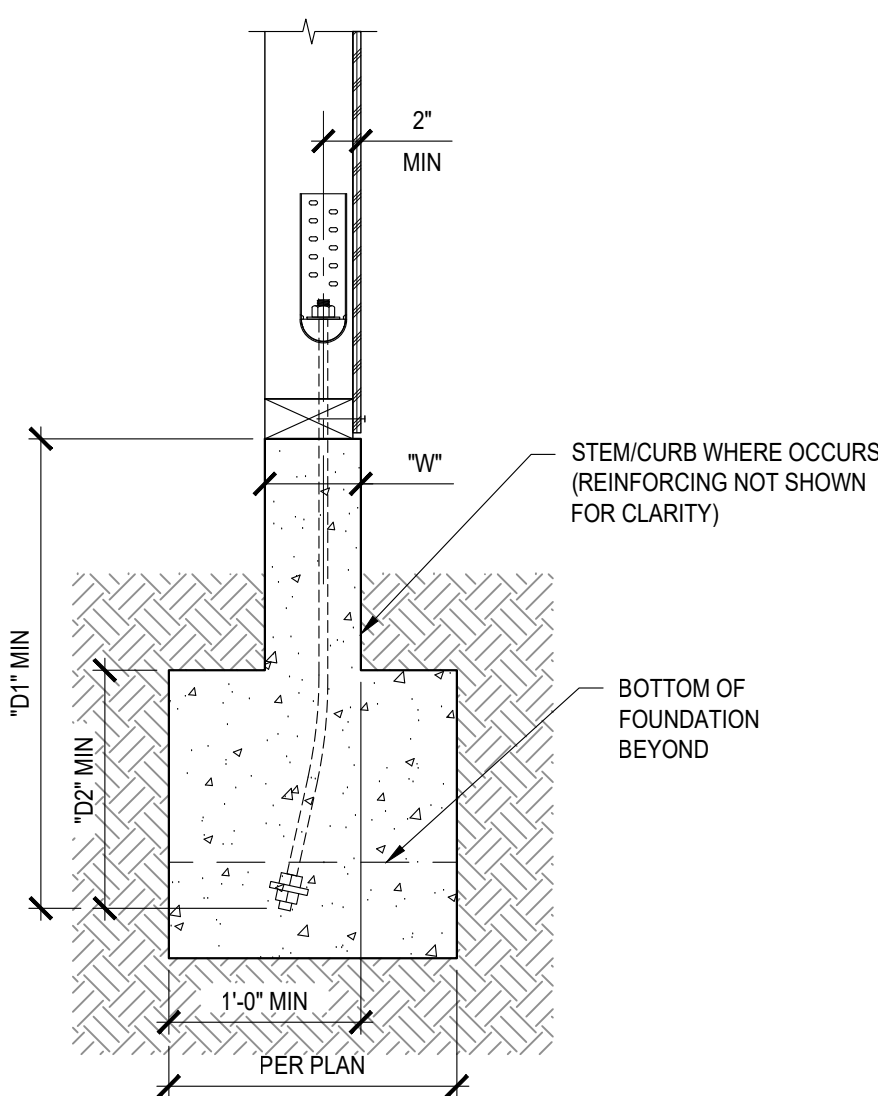
## NOTES:

1. SPECIAL INSPECTION IS REQUIRED FOR THE INSTALLATION OF HOLDOWN ANCHORS IN CONCRETE WITH EPOXY. SEE EPOXY MANUFACTURER'S REQUIREMENTS FOR EPOXY ANCHOR INSTALLATION, SPECIAL INSPECTION, AND TESTING REQUIREMENTS.
2. THREADED ROD ANCHOR BOLTS SHALL BE F1554 GRADE 36.
3. IF SPECIAL INSPECTION OF BOLT INSTALLATION IN CONCRETE IS NOT PROVIDED, THEN PROVIDE DIRECT TENSION TEST AS FOLLOWS:
  - a. APPLICABILITY: AN INDEPENDENT TESTING COMPANY HIRED BY THE OWNER SHALL TENSION TEST HOLDOWN EPOXY ANCHORS.
  - c. TEST LOADS: DIRECT TENSION TEST TO DIRECT TENSION TEST LOAD LISTED IN THE TABLE ABOVE.
  - d. TEST FREQUENCY: TEST ALL ANCHORS.
  - e. TEST ACCEPTANCE CRITERIA: TEST ANCHORS WITH A HYDRAULIC RAM/JACK AND MAINTAIN THE TEST LOAD FOR A MINIMUM 5 MINUTES. ANCHORS SHALL EXHIBIT NO DISCERNABLE MOVEMENT DURING THE TENSION TEST AS EVIDENCED BY LOOSENING OF THE WASHER UNDER THE NUT. THE DISTANCE BETWEEN THE ANCHOR AND TEST APPARATUS SUPPORT SHALL NOT BE LESS THAN 75% OF THE EMBEDMENT DEPTH.

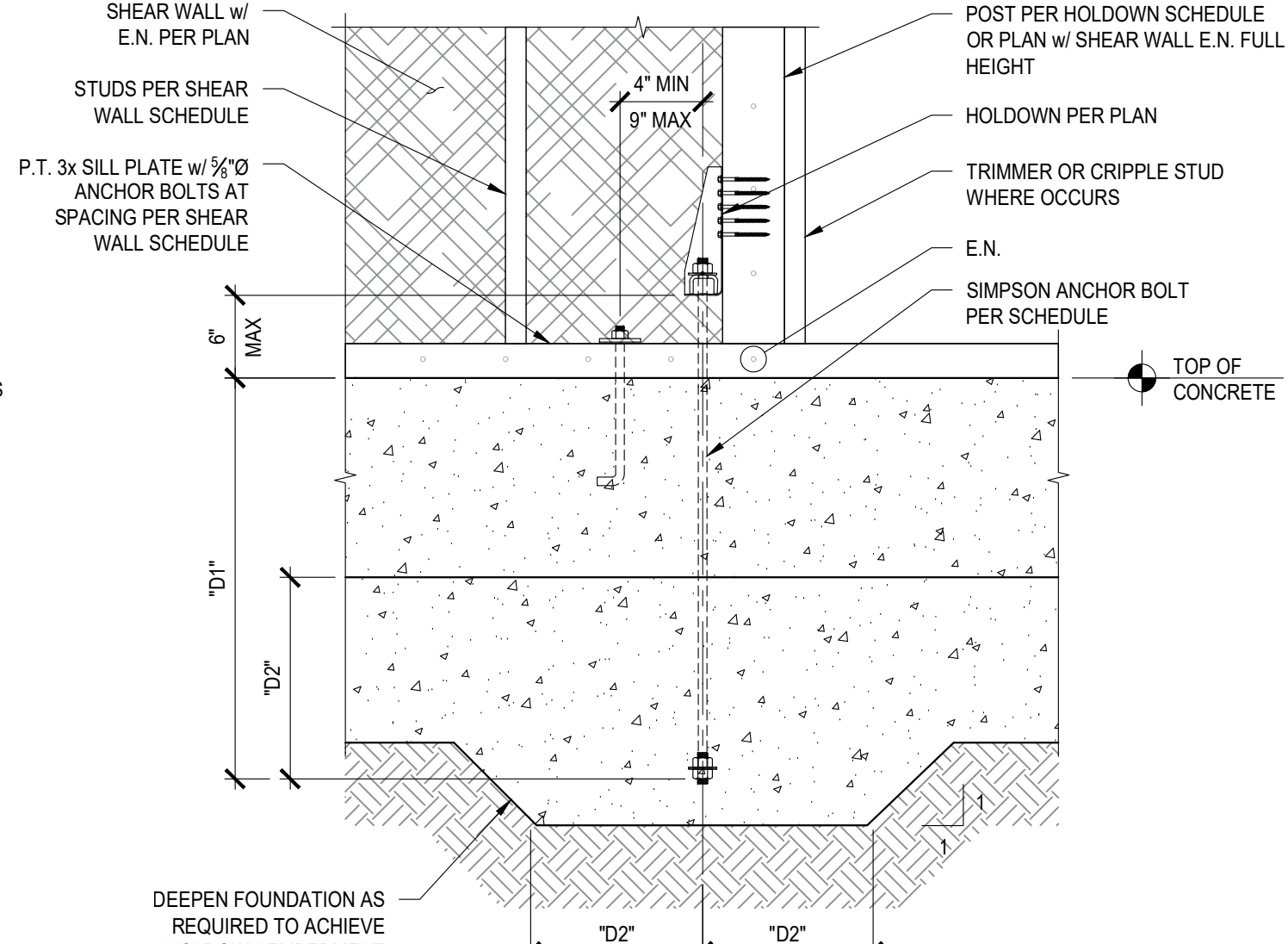
10

## HOLDOWN TO EXISTING CONCRETE

SCALE: N.T.S.



## A: SECTION



## B: ELEVATION

| HOLDOWN AT FOUNDATION SCHEDULE (CONCRETE STRENGTH = 2,500 PSI MIN) |                   |          |                      |                         |                    |                                |                                      |
|--------------------------------------------------------------------|-------------------|----------|----------------------|-------------------------|--------------------|--------------------------------|--------------------------------------|
| HOLDOWN TYPE                                                       | MIN END POST SIZE |          | SIMPSON ANCHOR BOLT  | STEM/CURB MIN WIDTH "W" | MIN EMBEDMENT "D1" | MIN EMBEDMENT & CLEARANCE "D2" | ALTERNATIVE ANCHOR BOLT (SEE NOTE 5) |
|                                                                    | 2x4 WALL          | 2x6 WALL |                      |                         |                    |                                |                                      |
| HDU2                                                               | 4x4               | 4x6      | SB $\frac{5}{8}$ x24 | 6"                      | 1'-6"              | N/A                            | SSTB24                               |
| HDU4                                                               | 4x4               | 4x6      | SB $\frac{5}{8}$ x24 | 6"                      | 1'-6"              | N/A                            | N/A                                  |
| HDU5                                                               | 4x4               | 4x6      | SB $\frac{5}{8}$ x24 | 6"                      | 1'-6"              | N/A                            | N/A                                  |
| HDU8                                                               | 4x6               | 6x6      | SB $\frac{5}{8}$ x24 | 6" (SEE NOTE 7)         | 1'-6"              | N/A                            | N/A                                  |
| HDU11                                                              | 4x8               | 6x8      | SB1x30               | 6" (SEE NOTE 7)         | 2'-0"              | N/A                            | N/A                                  |
| HDU14                                                              | 4x8               | 6x8      | PAB8 (SEE NOTE 6)    | N/A                     | N/A                | 1'-5"                          | N/A                                  |
| HD19                                                               | 4x10              | 6x8      | PAB9 (SEE NOTE 6)    | N/A                     | N/A                | 1'-7"                          | N/A                                  |

## NOTES:

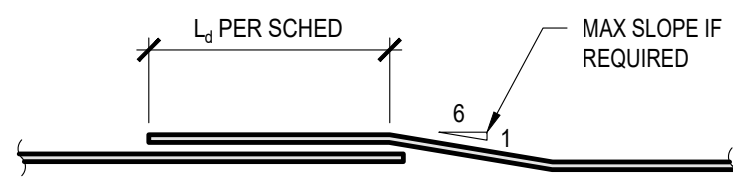
1. REFER TO THE PLANS FOR HOLDOWN SIZE AND HOLDOWN POST SIZES.
2. FOR HOLDOWN ASSEMBLIES, USE SIMPSON HOLDOWNS OR APPROVED EQUAL.
3. BOLTS THROUGH FLOOR AND EMBEDDED IN FOUNDATION SHALL BE F1554 STEEL, GRADE A36, ALL THREAD.
4. HOLDOWNS SHALL NOT BE SUBSTITUTED FOR SILL PLATE ANCHOR BOLTS.
5. EMBEDMENT PER MANUFACTURER'S REQUIREMENTS.
6. USE STANDARD STEEL FOR THE SIMPSON PRE-ASSEMBLED ANCHOR BOLTS AND OVERSIZE PENETRATION IN P.T. SILL PLATE  $\frac{1}{4}$ ".
7. STEM/CURB HEIGHT NOT TO EXCEED 1 $\frac{1}{2}$ ".
8. HOLDOWN ANCHOR BOLT NUT SHOULD BE FINGER TIGHT PLUS  $\frac{1}{2}$  TO  $\frac{1}{2}$  TURN WITH HAND WRENCH.

7

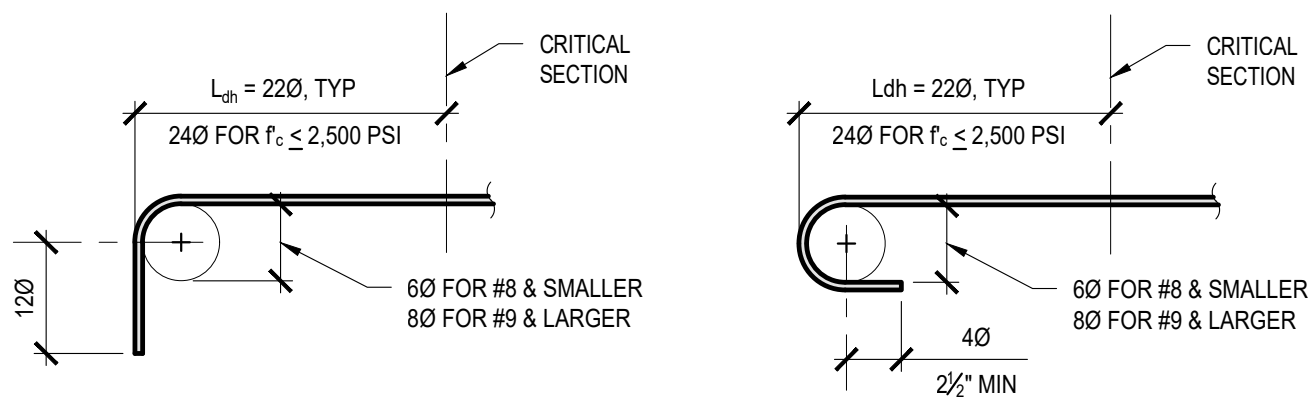
## HOLDOWN ANCHORAGE AT FOUNDATION

SCALE: N.T.S.

| DEVELOPMENT LENGTH & LAP SPICE (L <sub>d</sub> ) SCHEDULE (INCHES) CLASS B |                    |                                     |       |       |       |       |
|----------------------------------------------------------------------------|--------------------|-------------------------------------|-------|-------|-------|-------|
| SIZE                                                                       | LOCATION           | CONCRETE COMPRESSIVE STRENGTH (PSI) |       |       |       |       |
|                                                                            |                    | 2,500                               | 3,000 | 4,000 | 5,000 | 6,000 |
| #4                                                                         | HORIZONTAL TOP BAR | 41                                  | 38    | 33    | 29    | 27    |
|                                                                            | ALL OTHER BARS     | 32                                  | 29    | 25    | 23    | 21    |
| #5                                                                         | HORIZONTAL TOP BAR | 51                                  | 47    | 41    | 36    | 33    |
|                                                                            | ALL OTHER BARS     | 39                                  | 36    | 31    | 28    | 26    |
| #6                                                                         | HORIZONTAL TOP BAR | 61                                  | 56    | 49    | 44    | 40    |
|                                                                            | ALL OTHER BARS     | 47                                  | 43    | 37    | 34    | 31    |
| #7                                                                         | HORIZONTAL TOP BAR | 89                                  | 81    | 71    | 63    | 58    |
|                                                                            | ALL OTHER BARS     | 69                                  | 63    | 54    | 49    | 45    |
| #8                                                                         | HORIZONTAL TOP BAR | 102                                 | 93    | 81    | 72    | 66    |
|                                                                            | ALL OTHER BARS     | 78                                  | 72    | 62    | 56    | 51    |
| #9                                                                         | HORIZONTAL TOP BAR | 115                                 | 105   | 91    | 81    | 74    |
|                                                                            | ALL OTHER BARS     | 88                                  | 81    | 70    | 63    | 57    |
| #10                                                                        | HORIZONTAL TOP BAR | 129                                 | 118   | 102   | 92    | 84    |
|                                                                            | ALL OTHER BARS     | 100                                 | 91    | 79    | 71    | 64    |
| #11                                                                        | HORIZONTAL TOP BAR | 143                                 | 131   | 114   | 102   | 93    |
|                                                                            | ALL OTHER BARS     | 110                                 | 101   | 87    | 78    | 71    |



## C: LAP SPICE



## A: STANDARD 90° HOOK

## B: STANDARD 180° HOOK

## NOTES:

1. LAP SPICE LENGTHS ARE BASED ON 60 KSI REBAR YIELD STRENGTH AND NORMAL CONCRETE WEIGHT.
2. TOP BAR IS A HORIZONTAL BAR PLACED WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW BARS.
3. LAP SPICE LENGTHS ARE BASED ON MINIMUM CLEAR COVER GREATER THAN ONE BAR  $\varnothing$  AND MINIMUM CLEAR SPACING GREATER THAN TWO BAR  $\varnothing$ .
4. IF EITHER REQUIREMENT IN NOTE 3 IS NOT SATISFIED, INCREASE LAP SPICE LENGTH BY 50%.
4. MULTIPLY Ld & Ldh BY 1.2 FOR EPOXY COATED REINFORCING.

1

## REBAR DEVELOPMENT LENGTHS

SCALE: N.T.S.







NOTES:

1. VERTICAL SPLICE JOINTS SHALL BE STAGGERED WHERE THEY OCCUR.
2. E.N. SPACING PER SHEAR WALL SCHEDULE.



### DOUBLE-SIDED INTERIOR SHEAR WALL



NOTES:

1. PROVIDE FULL HEIGHT EDGE NAILING AT ALL SHEAR WALL END POSTS AND EDGES OF ALL OPENINGS.
2. SEE SHEAR WALL SCHEDULE FOR NAILING REQUIREMENTS AT PANEL EDGES.
3. AT SINGLE SIDED SHEATHED WALLS, APPLY DETAIL TO SHEATHED SIDE OF WALL.
4. AT DOUBLE SIDED SHEATHED WALLS, APPLY DETAIL TO EACH SIDE OF SHEATHED WALL.
5. DEPTH OF BLOCKING TO MATCH STUD DEPTH.
6. FOR INFORMATION NOT SHOWN, SEE "OPENING IN STUD WALL" DETAIL.

10

## SHEAR WALL FRAMING AND ALLOWABLE OPENINGS

SCALE: N.T.S

4

## SHEAR WALL SCHEDULE

SCALE: N.T.S.

| SHEAR WALL SCHEDULE |                                                 |                          |                                                        |                                                         |                                 |                                                           |                                                |                            |                                                                        |                             |
|---------------------|-------------------------------------------------|--------------------------|--------------------------------------------------------|---------------------------------------------------------|---------------------------------|-----------------------------------------------------------|------------------------------------------------|----------------------------|------------------------------------------------------------------------|-----------------------------|
| TYPE<br>PER<br>PLAN | "APA RATED"<br>½" WALL<br>SHEATHING<br>STRUCT 1 | 10d EDGE NAIL<br>SPACING | WALL STUDS &<br>BLOCKING AT<br>ABUTTING PANEL<br>EDGES | (N) P.T. 3x OR (E) P.T.<br>2x SILL PLATE TO<br>CONCRETE | 2x SOLE PLATE TO<br>RIMBLOCKING | SOLID SAWN<br>OR LSL<br>RIMBLOCKING<br>JOIST MIN<br>WIDTH | DBL. 2x TOP PLATE CONNECTION TO<br>RIMBLOCKING |                            | ½"Ø<br>THREADED<br>RODS<br>STEEL BEAM<br>TO SOLE<br>PLATE/TOP<br>PLATE | ALLOWABLE<br>SHEAR<br>(PLF) |
|                     |                                                 |                          |                                                        | ½"Ø ANCHOR BOLTS                                        | SDS½"x6" WOOD<br>SCREWS U.O.N.  | 1½"                                                       | "LTP4" OR "A35"<br>CLIPS U.O.N.                | SDS½"x6"<br>WOOD<br>SCREWS |                                                                        |                             |
| 6                   | ONE SIDE                                        | 6"O.C.                   | 2x                                                     | 48"O.C.                                                 | 16d NAILS @6"O.C.               | 1½"                                                       | 16"O.C.                                        | 8"O.C.                     | 16"O.C.                                                                | 340                         |
| 4                   | ONE SIDE                                        | 4"O.C.                   | 3x OR DBL. 2x                                          | 32"O.C.                                                 | 8"O.C.                          | 1½"                                                       | 12"O.C.                                        | 8"O.C.                     | 16"O.C.                                                                | 510                         |
| 3                   | ONE SIDE                                        | 3"O.C.                   | 3x OR DBL. 2x                                          | 24"O.C.                                                 | 6"O.C.                          | 1½"                                                       | 8"O.C.                                         | 6"O.C.                     | 16"O.C.                                                                | 665                         |
| 2                   | ONE SIDE                                        | 2"O.C.                   | 3x OR DBL. 2x                                          | 16"O.C.                                                 | 6"O.C.                          | 3¼"                                                       | 6"O.C.                                         | 6"O.C.                     | 16"O.C.                                                                | 870                         |
| 6-6                 | TWO SIDES                                       | 6"O.C.                   | 2x                                                     | 24"O.C.                                                 | 6"O.C.                          | 1½"                                                       | 8"O.C.                                         | 6"O.C.                     | 16"O.C.                                                                | 680                         |
| 4-4                 | TWO SIDES                                       | 4"O.C.                   | 3x OR DBL. 2x                                          | 16"O.C.                                                 | 6"O.C.                          | 3¼"                                                       | 6"O.C.                                         | 6"O.C.                     | 16"O.C.                                                                | 1020                        |
| 3-3                 | TWO SIDES                                       | 3"O.C.                   | 3x OR DBL. 2x                                          | 12"O.C.                                                 | 4"O.C.                          | 3½"                                                       | A35 CLIPS 5"O.C.                               | 4"O.C.                     | 8"O.C.                                                                 | 1330                        |
| 2-2                 | TWO SIDES                                       | 2"O.C.                   | 3x OR DBL. 2x                                          | 8"O.C.                                                  | 3"O.C.                          | 3½"                                                       | A34 CLIPS 3"O.C.                               | 3"O.C.                     | 8"O.C.                                                                 | 1740                        |

NOTES:

1. SCHEDULE IS BASED ON AISC SDPWS TABLE 4.3A.
2. USE COMMON OR GALVANIZED BOX NAILS FOR ALL NAILING. 10d COMMON NAIL SHALL HAVE .148"OD. 16d COMMON NAIL SHALL HAVE .162"OD. 10d GALVANIZED BOX NAIL SHALL HAVE .128"OD. 16d GALVANIZED BOX NAIL SHALL HAVE .135"OD. NAILS SHALL HAVE 1/2" MIN PENETRATION INTO FRAMING MEMBER OR BLOCKING.
3. THIS SCHEDULES SHALL APPLY TO NAILING AT ALL STUDS, WALL SHEATHING JOINTS, TOP PLATES, SILL PLATES, SOLE PLATES, RIMS, AND BLOCKING.
4. NAILING AT INTERMEDIATE MEMBERS (FIELD NAILING) SHALL BE 10d NAIL @12"O.C.
5. WALL SHEATHING SHALL BE APPLIED OVER STUDS SPACED AT 16"O.C.
6. ALL SILL FASTENING TO CONCRETE SHALL HAVE AS A MINIMUM 3/4"OD ANCHOR BOLTS w/ SIMPSON H.D.G. BPS#6 (BPS 3/4" AT 2x4 WALLS); BEARING PLATE WASHER OR EQUIVALENT. BEARING PLATE SHALL EXTEND TO WITHIN 3/4" OF THE EDGE OF THE SILL PLATE ON THE SIDE(S) WITH SHEATHING. ANCHOR BOLTS SHALL BE EMBEDDED 7" MIN IN CONCRETE WALL OR FOUNDATION.
7. PENETRATING PRESSURE TREATED WOOD SHALL BE HOT-DIPPED GALVANIZED PER ASTM A153, CLASS D.
8. DOUBLE 2x STUDS AT BUTTING PANEL EDGES SHALL BE FASTENED TOGETHER W/ 16d NAILS AT EDGE NAIL SPACING.
9. NAILING SPACED AT 3"O.C. OR LESS SHALL BE STAGGERED 1/2" MIN AND INSTALLED 3/4" MIN FROM EDGE OF WALL SHEATHING AND STUD.

| DATE       | ISSUE      |
|------------|------------|
| 12.19.2025 | PERMIT SET |

STAMP



PROJECT NUMBER

2532

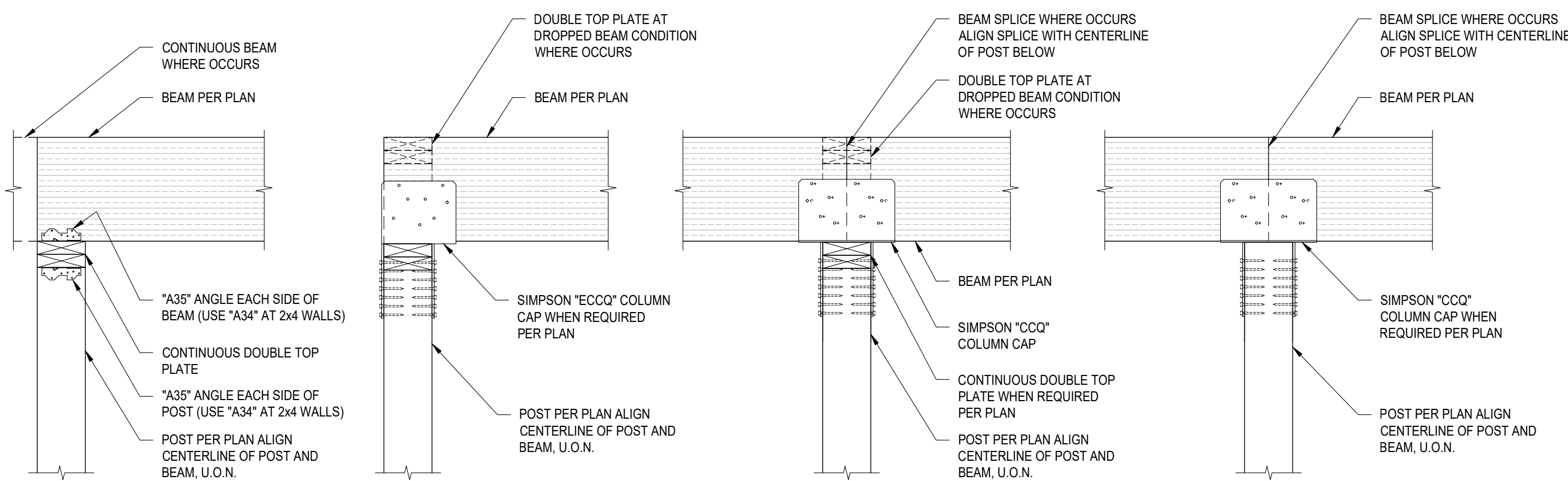
TITLE

## TYPICAL DETAILS

SHEET

# S1.2





A: BEAM AT POST IN WALL

B: END CONDITION COLUMN CAP AT POST IN WALL

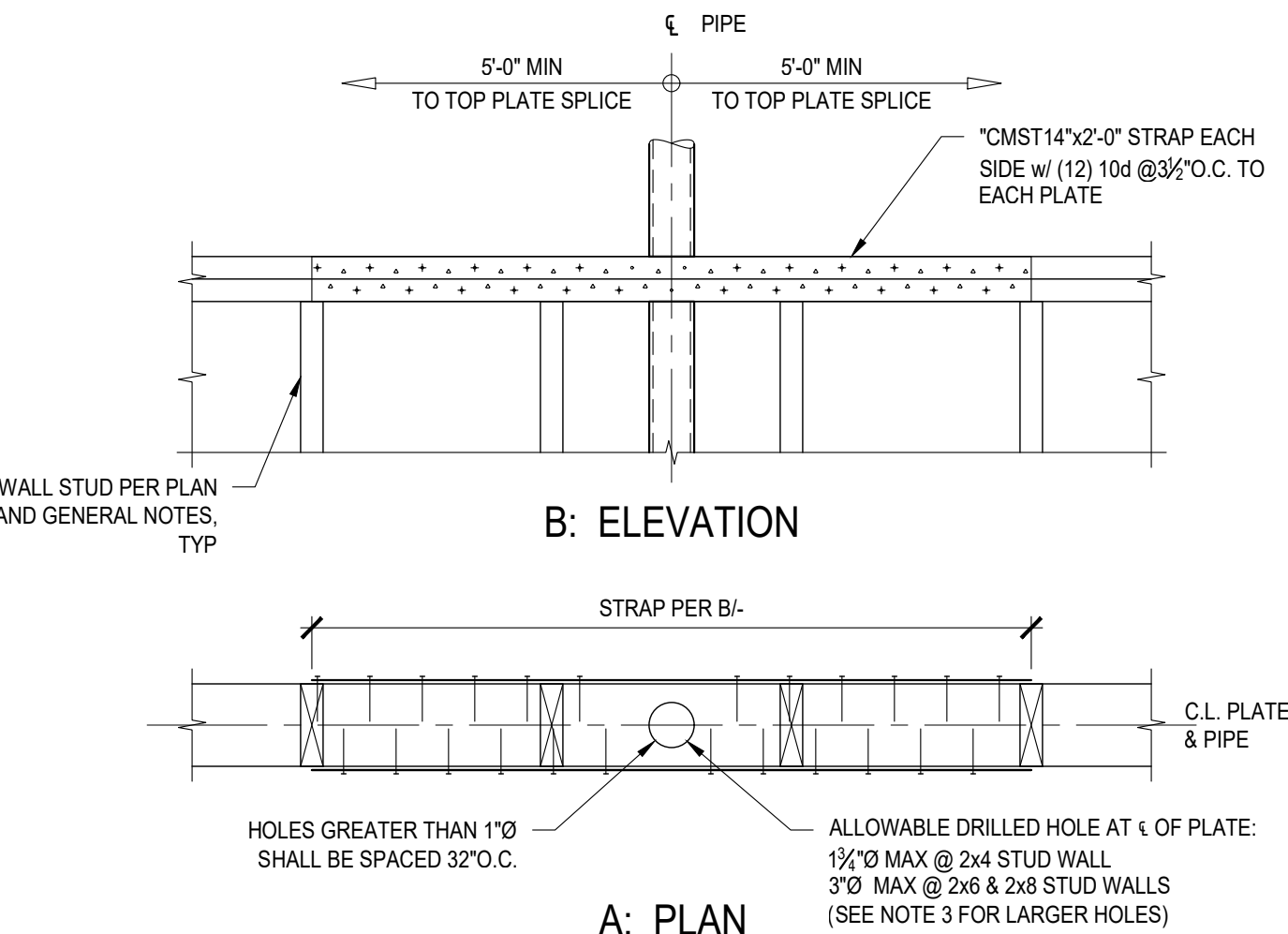
C: BEAM SPLICE AT POST IN WALL

D: BEAM SPLICE AT ISOLATED POST

- NOTES:
1. SHEATHING NOT SHOWN FOR CLARITY.
  2. BEAM TO POST CONNECTION AT WALL PER DETAIL A UNLESS COLUMN CAP SPECIFIED IN PLAN.
  3. ROUTE CORNERS OF BEAM AS REQUIRED TO SIT FLUSH IN COLUMN CAP.
  4. OPTION TO USE "PCZ" AND "EPCZ" COLUMN CAPS WHEN APPROVED BY ENGINEER OF RECORD.

12 BEAM TO POST CONNECTION

SCALE: N.T.S.



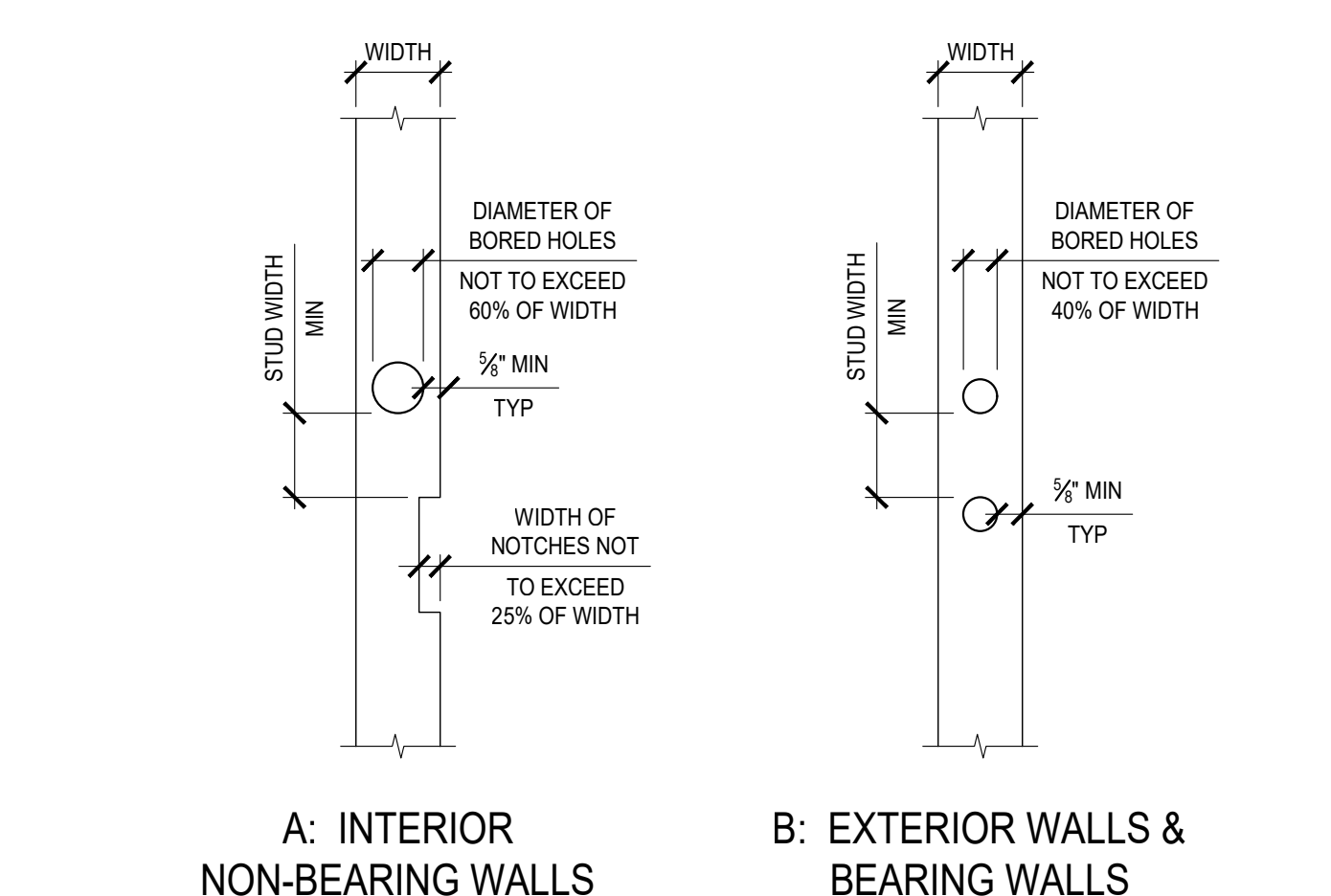
A: PLAN

B: ELEVATION

- NOTES:
1. REQUIREMENTS APPLY TO ALL SHEAR WALLS, LOAD BEARING WALLS, & EXTERIOR WALLS.
  2. STRAPS NOT REQUIRED FOR 1"Ø MAX HOLES LOCATED IN THE MIDDLE 1/2 OF THE PLATE.
  3. FOR DRILLED HOLES GREATER THAN DIAMETERS SHOWN, USE "CTS218" STRAPS IN LIEU OF "CMST14" SHOWN TO EACH PLATE, EACH SIDE (4 TOTAL).

11 PENETRATIONS IN WALL PLATES

SCALE: N.T.S.



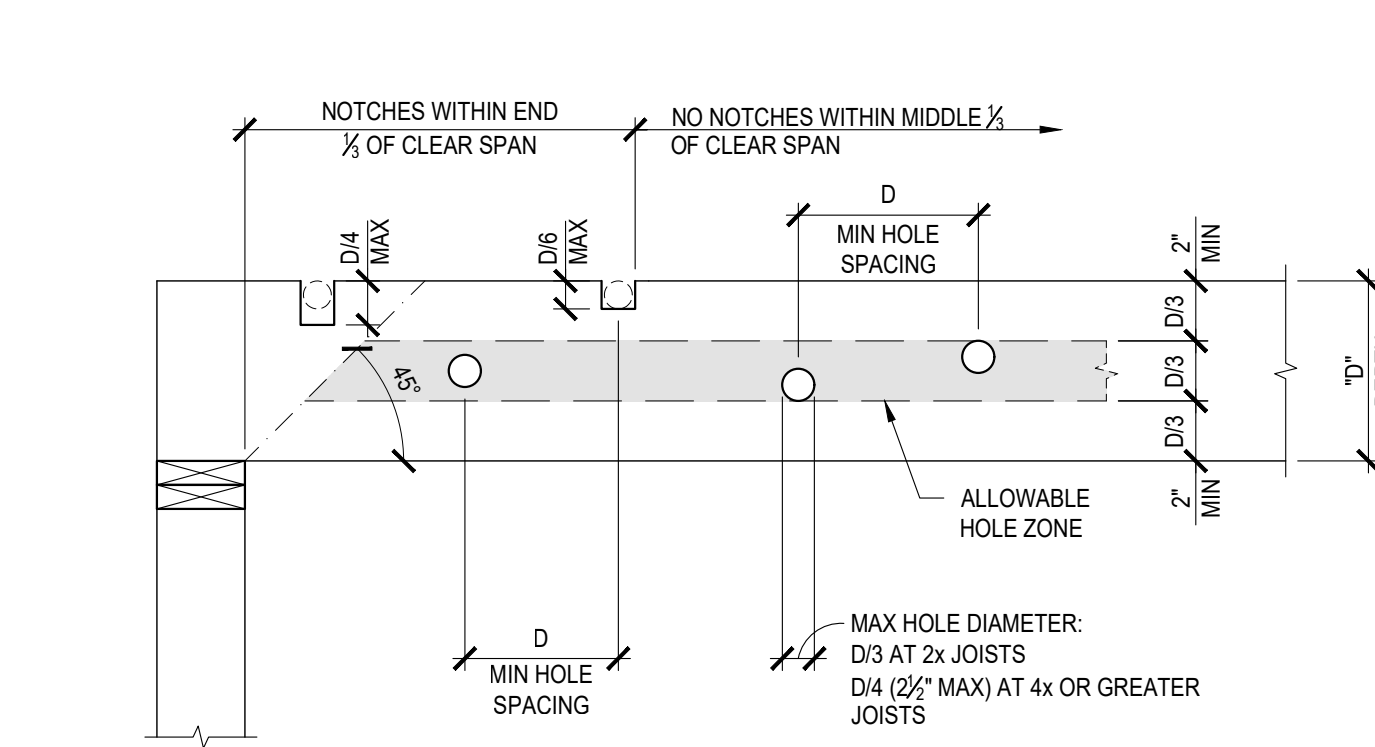
A: INTERIOR NON-BEARING WALLS

B: EXTERIOR WALLS & BEARING WALLS

- NOTE:
1. PORTION OF STUD REMAINING AT NOTCHES OR HOLES SHALL BE SOUND WOOD WITHOUT EXCESSIVE STRENGTH-REDUCING PROPERTIES SUCH AS KNOTS, BREAKS, SPLITS, EXCESSIVE SLOPE OF GRAIN, ETC.

8 HOLES & NOTCHES IN STUDS

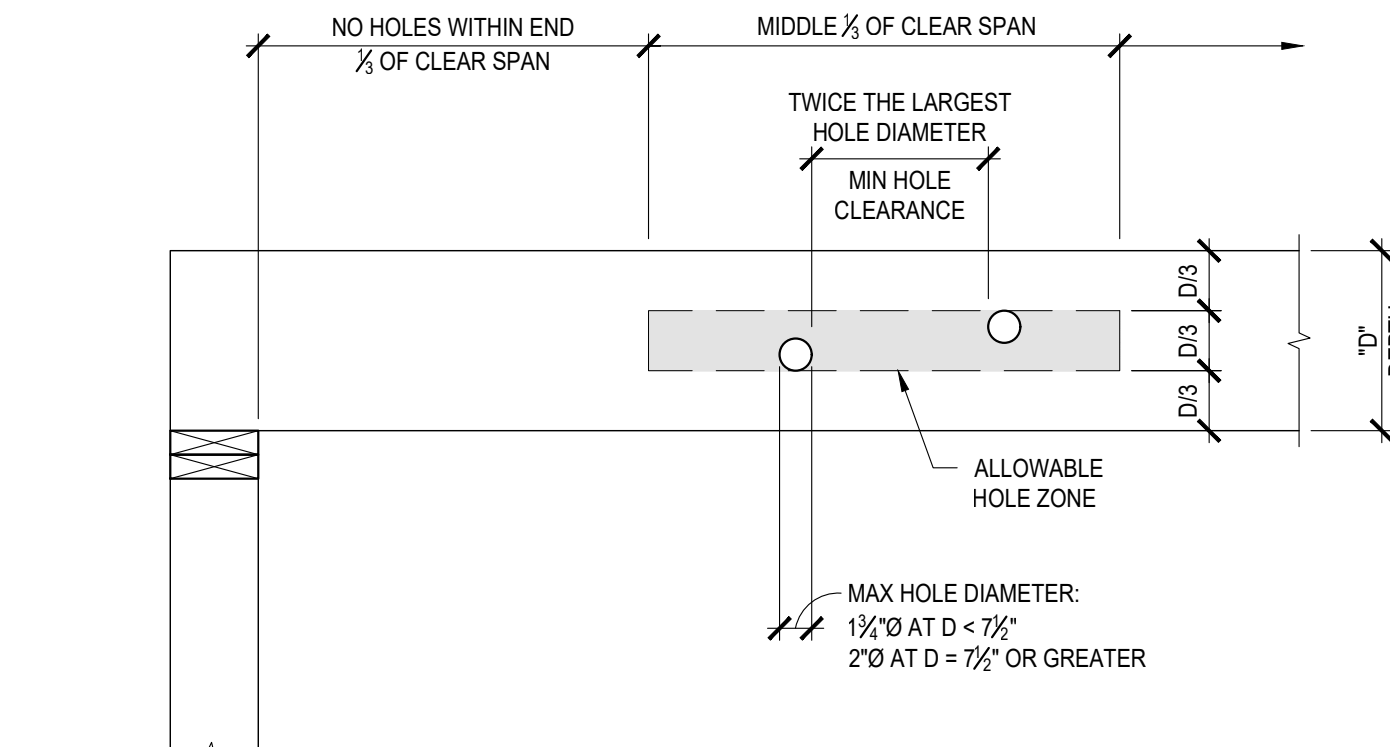
SCALE: N.T.S.



- NOTE:
1. CLEAR SPAN IS THE DISTANCE BETWEEN THE INSIDE FACE OF TWO WALLS OR BEAM SUPPORTING THE STRUCTURAL MEMBER.
  2. HOLES AND NOTCHES NOT PERMITTED IN THE BOTTOM EDGE.
  3. HOLES AND NOTCHES NOT PERMITTED WHERE DEPTH IS 5" OR LESS.
  4. APPLY PRESERVATIVE TO HOLES IN PRESSURE TREATED WOOD.

10 HOLES & NOTCHES IN SAWN LUMBER JOISTS

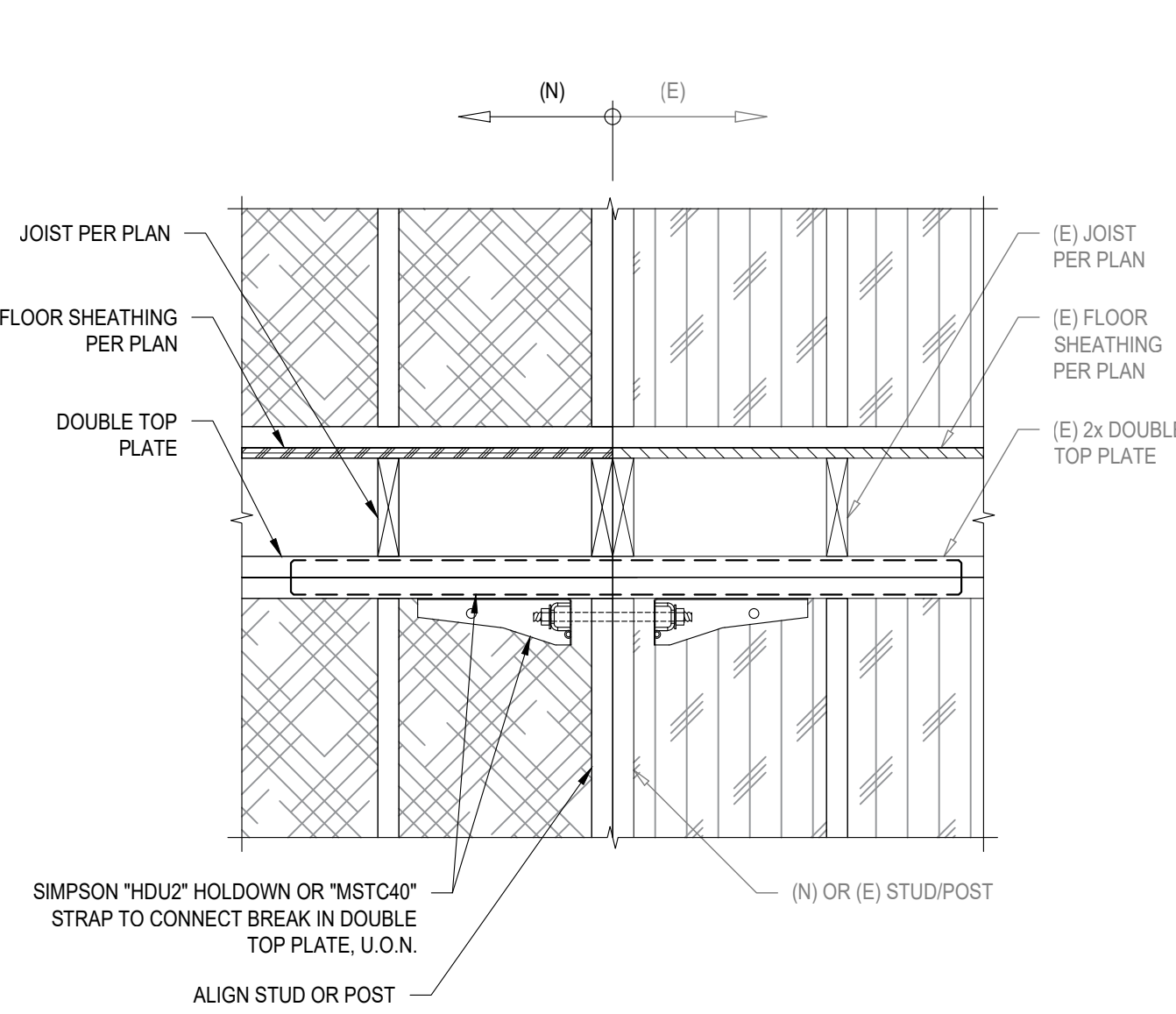
SCALE: N.T.S.



- NOTE:
1. CLEAR SPAN IS THE DISTANCE BETWEEN THE INSIDE FACE OF TWO WALLS OR BEAM SUPPORTING THE STRUCTURAL MEMBER.
  2. ROUND HOLES ONLY.
  3. NOTCHES NOT PERMITTED IN THE TOP OR BOTTOM EDGE.
  4. HOLES AND NOTCHES NOT PERMITTED IN CANTILEVERS.
  5. HOLES AND NOTCHES NOT PERMITTED WHERE DEPTH IS 5" OR LESS.
  6. ALLOWABLE HOLE ZONE SHOWN IS SUITABLE FOR BEAMS WITH UNIFORM LOADS ONLY, CONTACT THE STRUCTURAL ENGINEER FOR BEAMS SUPPORTING POSTS AND BEAMS.

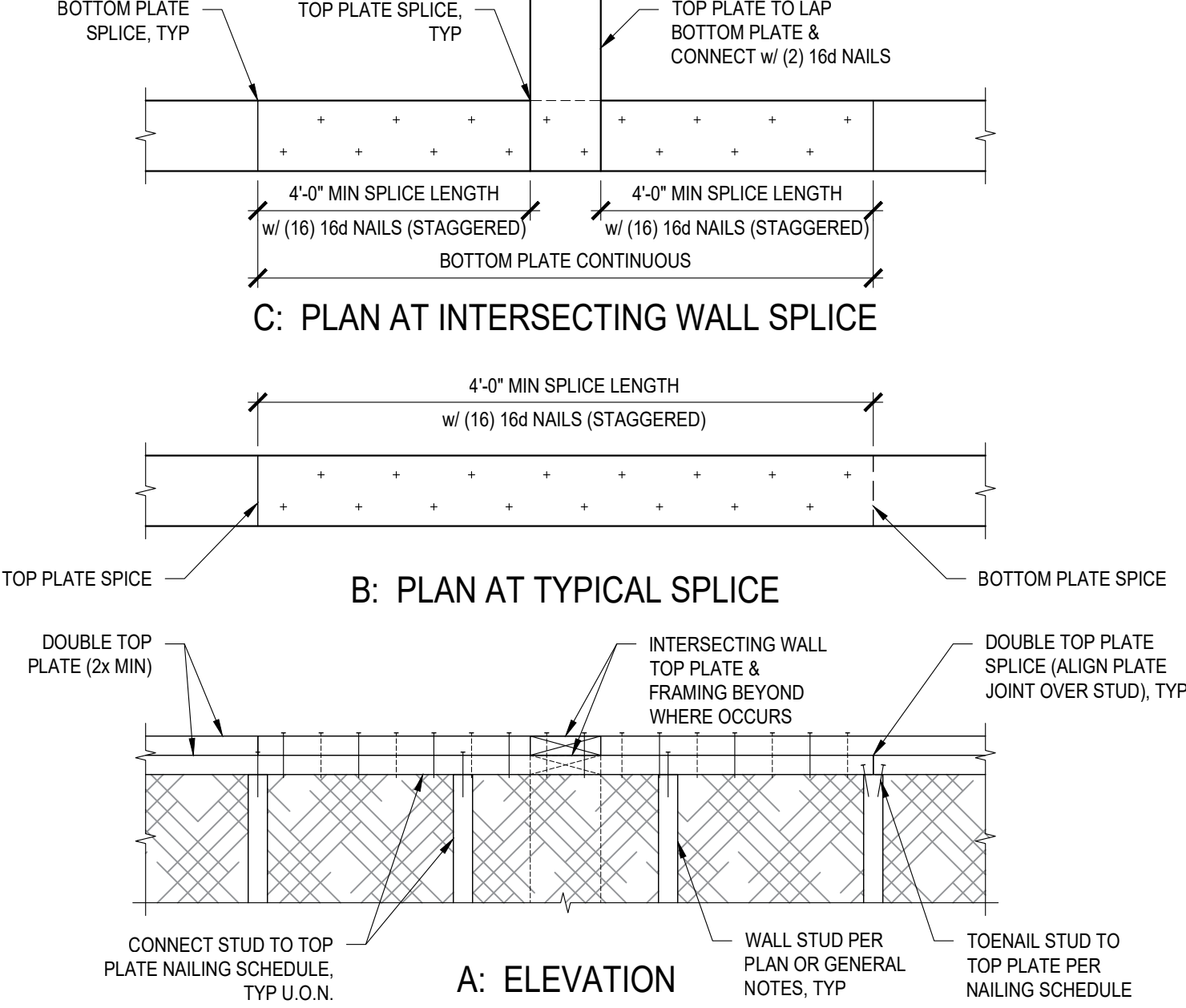
7 HOLES & NOTCHES IN LSL/LVL/PSL

SCALE: N.T.S.



6 NEW TO (E) TOP PLATE SPLICE

SCALE: N.T.S.



A: ELEVATION

B: PLAN AT TYPICAL SPLICE

C: PLAN AT INTERSECTING WALL SPLICE

3 DOUBLE TOP PLATE SPLICE

SCALE: N.T.S.

| NAILING SCHEDULE (CBC TABLE 2304.10.1 EXCERPT) |                                                                                                       |                          |                                                                 |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------|
| #                                              | DESCRIPTION OF BUILDING ELEMENTS                                                                      | #/TYPE OF FASTENER(S)    | SPACING & LOCATION(S)                                           |
| ROOF                                           |                                                                                                       |                          |                                                                 |
| 1                                              | BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW               | (3) 8d COMMON            | EACH END, TOENAIL                                               |
|                                                | BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS                       | (2) 8d COMMON            | EACH END, TOENAIL                                               |
|                                                | FLAT BLOCKING TO TRUSSWEB FILLER                                                                      | (2) 16d COMMON           | END NAIL                                                        |
|                                                | CEILING JOISTS TO TOP PLATE                                                                           | 16d COMMON               | FACE NAIL                                                       |
| 2                                              | CEILING JOISTS TO TOP PLATE                                                                           | (3) 8d COMMON            | EACH JOIST, TOENAIL                                             |
| 3                                              | CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST)                       | (3) 16d COMMON           | FACE NAIL                                                       |
| 4                                              | CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT) (SEE CBC SECTION 2308.7.3.1, TABLE 2308.7.3.1) | PER CBC TABLE 2308.7.3.1 | FACE NAIL                                                       |
| 5                                              | COLLAR TIE TO RAFTER                                                                                  | (3) 10d COMMON           | FACE NAIL                                                       |
| 6                                              | RAFTER OR ROOF TRUSS TO TOP PLATE (SEE CBC TABLE 2308.7.5)                                            | (3) 10d COMMON           | TOENAIL                                                         |
| 7                                              | ROOF RAFTERS TO RIDGE/VALLEY/HIP RAFTERS OR ROOF RAFTER TO 2" RIDGE BEAM                              | (2) 16d COMMON           | END NAIL                                                        |
|                                                |                                                                                                       | (3) 10d COMMON           | TOENAIL                                                         |
| WALL                                           |                                                                                                       |                          |                                                                 |
| 8                                              | STUD TO STUD (NOT AT BRACED WALL PANELS)                                                              | 16d COMMON               | FACE NAIL @24" O.C.                                             |
| 9                                              | STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALLS (AT BRACED WALL PANELS)                         | 16d COMMON               | FACE NAIL @16" O.C.                                             |
| 11                                             | CONTINUOUS HEADER TO STUD                                                                             | (4) 8d COMMON            | TOENAIL                                                         |
| 12                                             | TOP PLATE TO TOP PLATE                                                                                | 16d COMMON               | FACE NAIL @16" O.C.                                             |
| 14                                             | BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST/BLOCKING (NOT AT BRACED WALL PANELS)                     | 16d COMMON               | FACE NAIL @16" O.C.                                             |
| 15                                             | BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING AT BRACED WALL PANELS                        | (2) 16d COMMON           | FACE NAIL @16" O.C.                                             |
| 16                                             | STUD TO TOP/BOTTOM PLATE                                                                              | (4) 8d COMMON            | TOENAIL                                                         |
| 17                                             | TOP OR BOTTOM PLATE TO STUD                                                                           | (2) 16d COMMON           | END NAIL                                                        |
| 18                                             | TOP PLATES, LAPS AT CORNERS/INTERSECTIONS                                                             | (2) 16d COMMON           | FACE NAIL                                                       |
| FLOOR                                          |                                                                                                       |                          |                                                                 |
| 22                                             | JOIST TO SILL/TOP PLATE/GIRDER                                                                        | (3) 8d COMMON            | TOENAIL                                                         |
| 23                                             | RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW                          | 8d COMMON                | TOENAIL @6" O.C.                                                |
| 27                                             | BUILT UP GIRDERS & BEAMS, 2" LUMBER LAYERS                                                            | 20d COMMON               | FACE NAIL @32" O.C. AT TOP & BOTTOM STAGGERED ON OPPOSITE SIDES |
|                                                |                                                                                                       | (2) 20d COMMON           | ENDS & AT EACH SPLICE, FACE NAIL                                |
| 29                                             | JOIST TO BAND JOIST OR RIM JOIST                                                                      | (3) 16d COMMON           | END NAIL                                                        |
| 30                                             | BRIDGING/BLOCKING TO JOIST, RAFTER/TRUSS                                                              | (2) 8d COMMON            | EACH END, TOENAIL                                               |

- NOTES:
1. ANY FASTENING SPECIFIED ON PLANS, DETAILS OR GENERAL NOTES TAKES PRECEDENCE OVER THIS SCHEDULE.
  2. FOR FULL FASTENING SCHEDULE, REFERENCE CBC.

4 NAILING SCHEDULE

SCALE: N.T.S.

| JOIST AND BEAM HANGER SCHEDULE |                   |                     |                         |
|--------------------------------|-------------------|---------------------|-------------------------|
| JOIST / BEAM                   | FACE MOUNT HANGER | TOP FLANGE HANGER   | CONCEALED FLANGE HANGER |
| 2x4                            | LUS24             | HU24TF              | -                       |
| 2x6                            | LUS26             | LB26                | LUC26Z                  |
| 2x8                            | LUS28             | LB28                | LUC26Z                  |
| 2x10                           | LUS210            | LB201AZ             | LUC210Z                 |
| 2x12                           | LUS210            | LB212AZ             | LUC210Z                 |
| 3x6                            | HU36              | HU36TF              | HUC36                   |
| 4x6                            | HU46              | HU46TF              | HUC46                   |
| 4x8                            | HU48              | HU48TF              | HUC48                   |
| 4x10                           | HU410             | HU410TF             | HUCQ410-SDS             |
| 4x12                           | HU412             | HU412TF             | HUCQ412-SDS             |
| 1 1/2"x5 1/2" LVL              | HU1.81/5          | -                   | -                       |
| 1 1/2"x7 1/2" LVL              | HU7               | BA1.81/7.25         | -                       |
| 1 1/2"x9 1/2" LSL/LVL          | HUS1.81/10        | BA1.81/9.5          | HUCQ1.81/9-SDS          |
| 1 1/2"x11 1/4" LSL/LVL         | HUS1.81/10        | BA1.81/11.88        | HUCQ1.81/11-SDS         |
| 1 1/2"x14" LSL/LVL             | HUS1.81/10        | BA1.81/14           | HUCQ1.81/11-SDS         |
| 1 1/2"x16" LSL/LVL             | HU14              | BA1.81/16           | -                       |
| 3 1/2"x9 1/2" LSL/PSL          | HHUS410           | BA3.56/9.5          | HUCQ410-SDS             |
| 3 1/2"x11 1/4" LSL/PSL         | HHUS410           | BA3.56/11.88        | HUCQ412-SDS             |
| 3 1/2"x14" LSL/PSL             | HHUS410           | HGLTV3.514          | HUCQ412-SDS             |
| 3 1/2"x16" LSL/PSL             | HGUS414           | HGLTV3.516          | HUCQ412-SDS             |
| 5 1/2"x9 1/2" PSL              | HHUS5.50/10       | HGLTV5.37, H=9.5    | HUCQ610-SDS             |
| 5 1/2"x11 1/4" PSL             | HHUS5.50/10       | HGLTV5.37, H=11.875 | HUCQ612-SDS             |
| 5 1/2"x14" PSL                 | HHUS5.50/10       | HGLTV5.37, H=14     | HUCQ612-SDS             |
| 5 1/2"x16" PSL                 | HGUS5.50/14       | HGLTV5.37, H=16     | HUCQ612-SDS             |
| 7"x9 1/2" PSL                  | HHUS7.25/10       | HGLTV7, H=9.5       | HUC410-2                |
| 7"x11 1/4" PSL                 | HHUS7.25/10       | HGLTV7, H=11.875    | HUC412-2                |
| 7"x14" PSL                     | HHUS7.25/10       | HGLTV7, H=14        | HUC414-2                |
| 7"x16" PSL                     | HGUS7.25/14       | HGLTV7, H=16        | HUC414-2                |
| 9 1/2" TJI 210                 | IUS2.06/9.5       | ITS2.06/9.5         | -                       |
| 9 1/2" TJI 230                 | IUS2.37/9.5       | ITS2.37/9.5         | -                       |
| 1 1/2" TJI 210                 | IUS2.06/11.88     | ITS2.06/11.88       | -                       |
| 1 1/2" TJI 230/360             | IUS2.37/11.88     | ITS2.37/11.88       | -                       |
| 1 1/2" TJI 560                 | IUS3.56/11.88     | ITS3.56/11.88       | -                       |

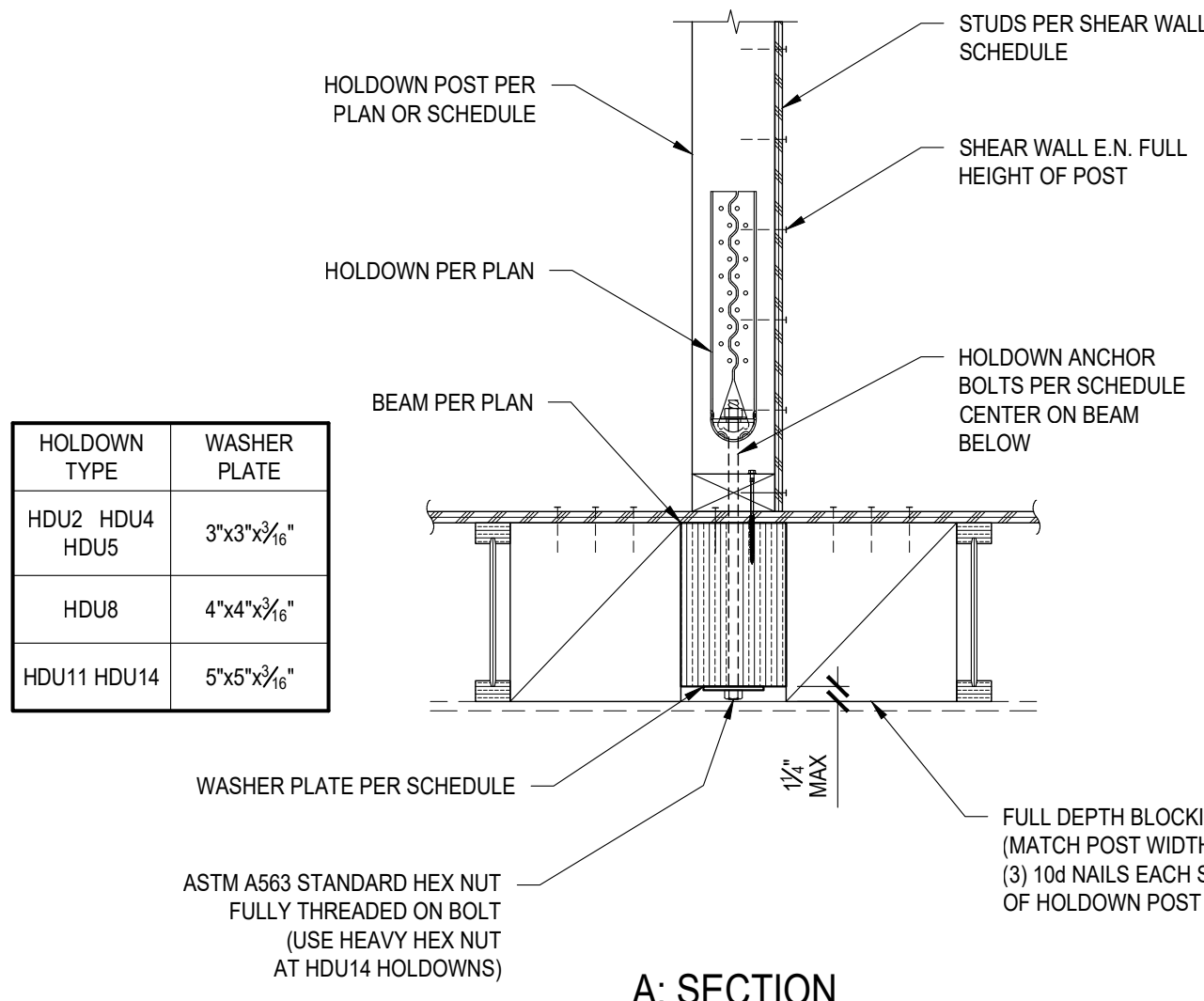
- NOTE:
1. USE JOIST AND BEAM HANGERS PER SCHEDULE, U.O.N. ON PLANS OR DETAILS.
  2. LVL/LSL/PSL REPRESENTS STRUCTURAL COMPOSITE LUMBER.
  3. FOR BUILT-UP MEMBERS, USE HANGERS PER BEAM OF EQUIVALENT WIDTH.
  4. USE FACE MOUNTED HANGER, U.O.N.
  5. USE CONCEALED FLANGE HANGERS ONLY WHERE INDICATED ON PLANS.
  6. HANGERS SHALL BE PRODUCED BY SIMPSON STRONG-TIE U.O.N., FOR EQUIVALENT ALTERNATIVES/SUBSTITUTIONS, NOTIFY STRUCTURAL ENGINEER OF RECORD FOR APPROVAL.
  7. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS. USE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER, DO NOT SUBSTITUTE, PROVIDE MAXIMUM FASTENERS LISTED BY MANUFACTURER, FILL ALL ROUND AND TRIANGULAR HOLES.
  8. CONTACT STRUCTURAL ENGINEER OF RECORD FOR BEAM SIZES NOT SHOWN.

1 JOIST & BEAM HANGER SCHEDULE

SCALE: N.T.S.

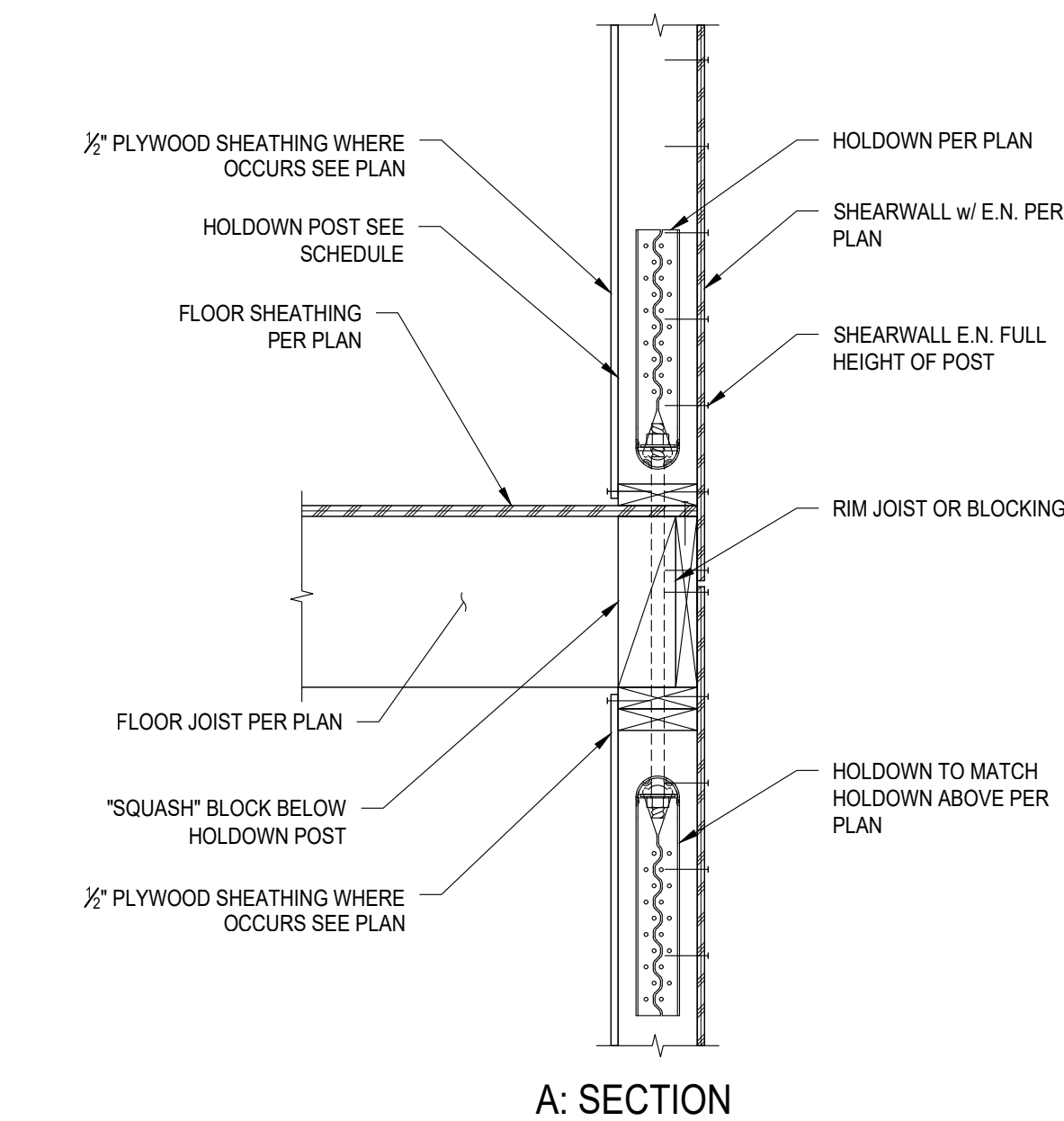






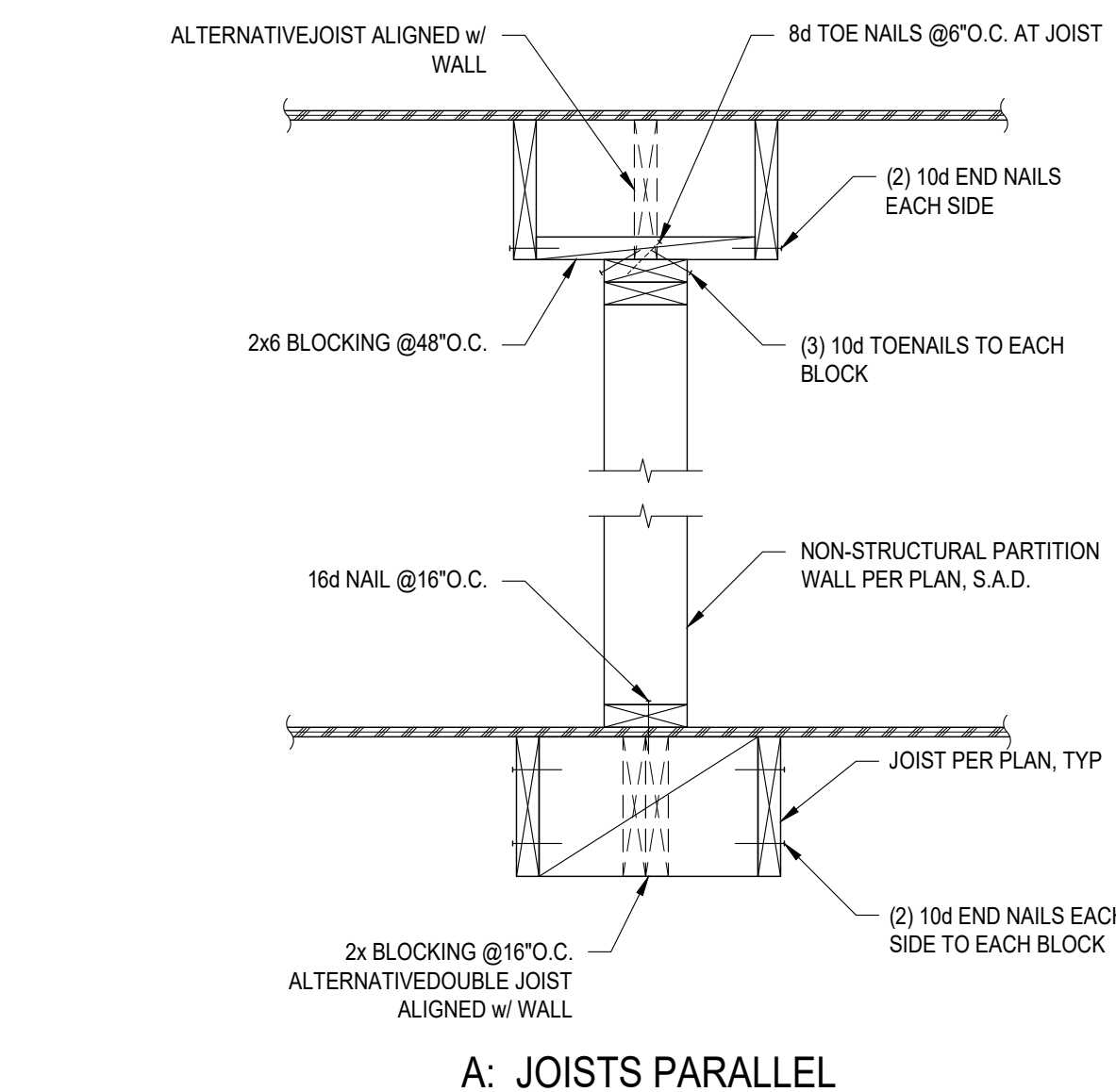
12 HOLDOWN TO WOOD BEAM

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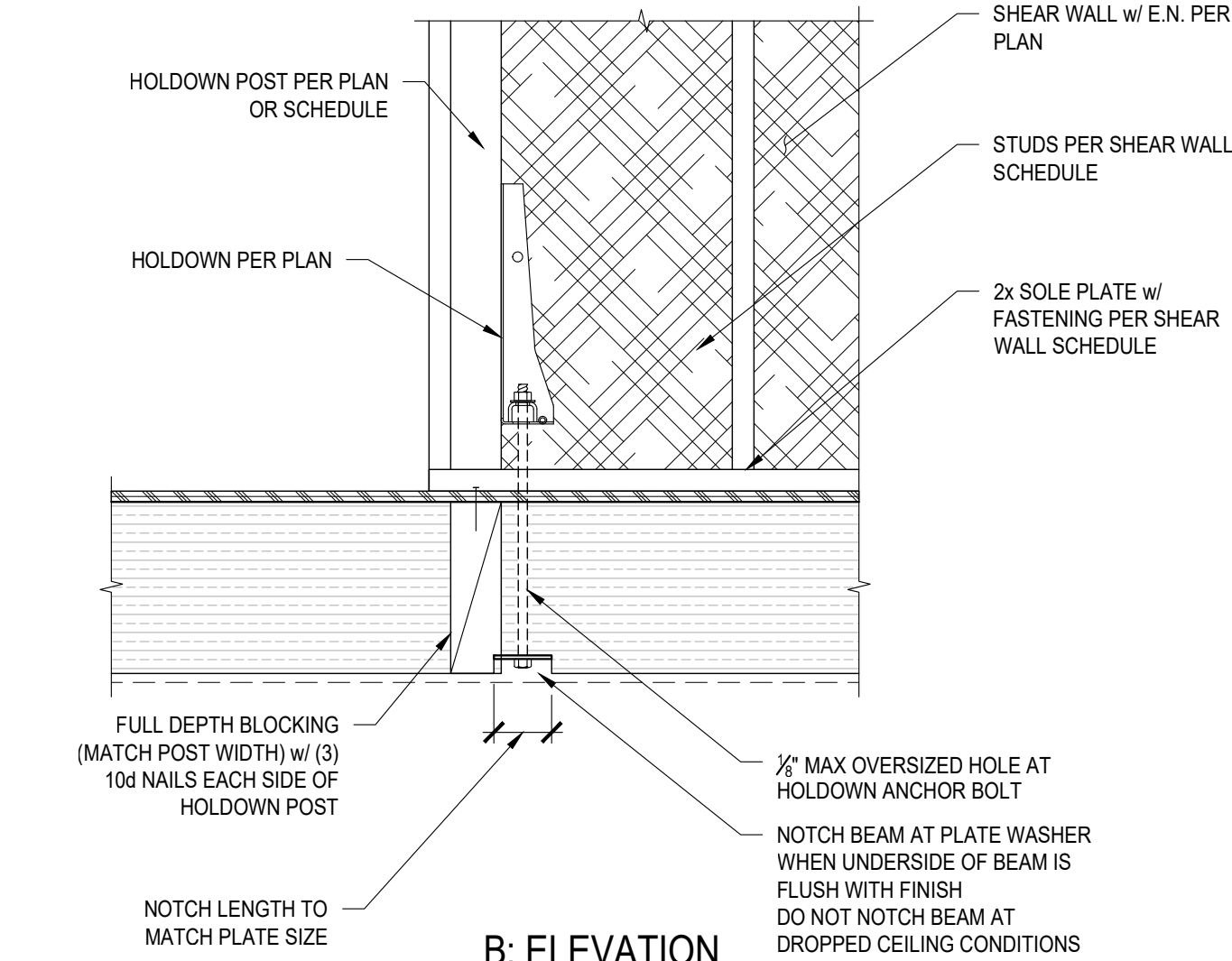
11 HOLDOWN TO HOLDOWN AT FRAMED FLOOR

SCALE: N.T.S.



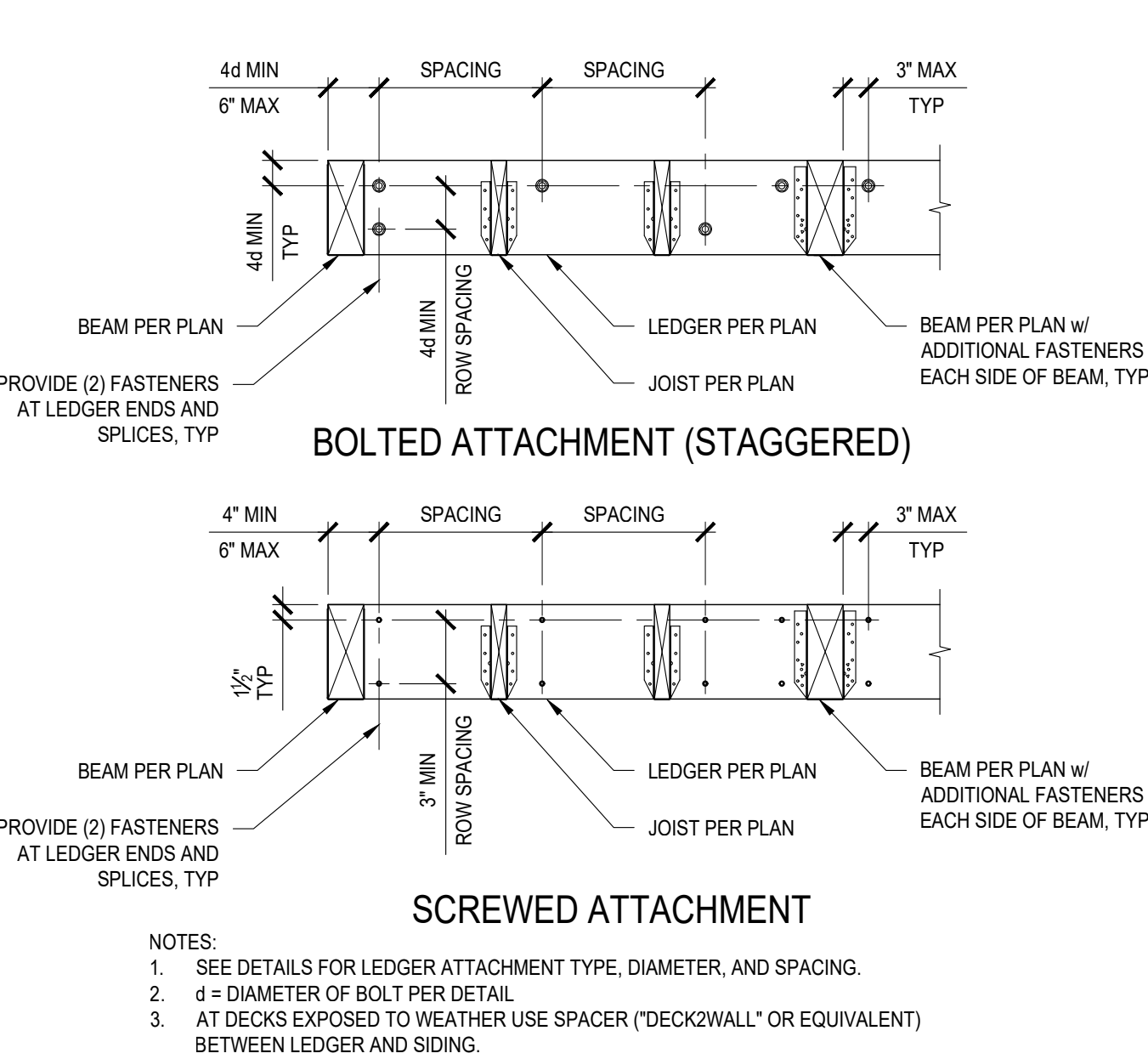
10 NON-STRUCTURAL WALLS

SCALE: N.T.S.



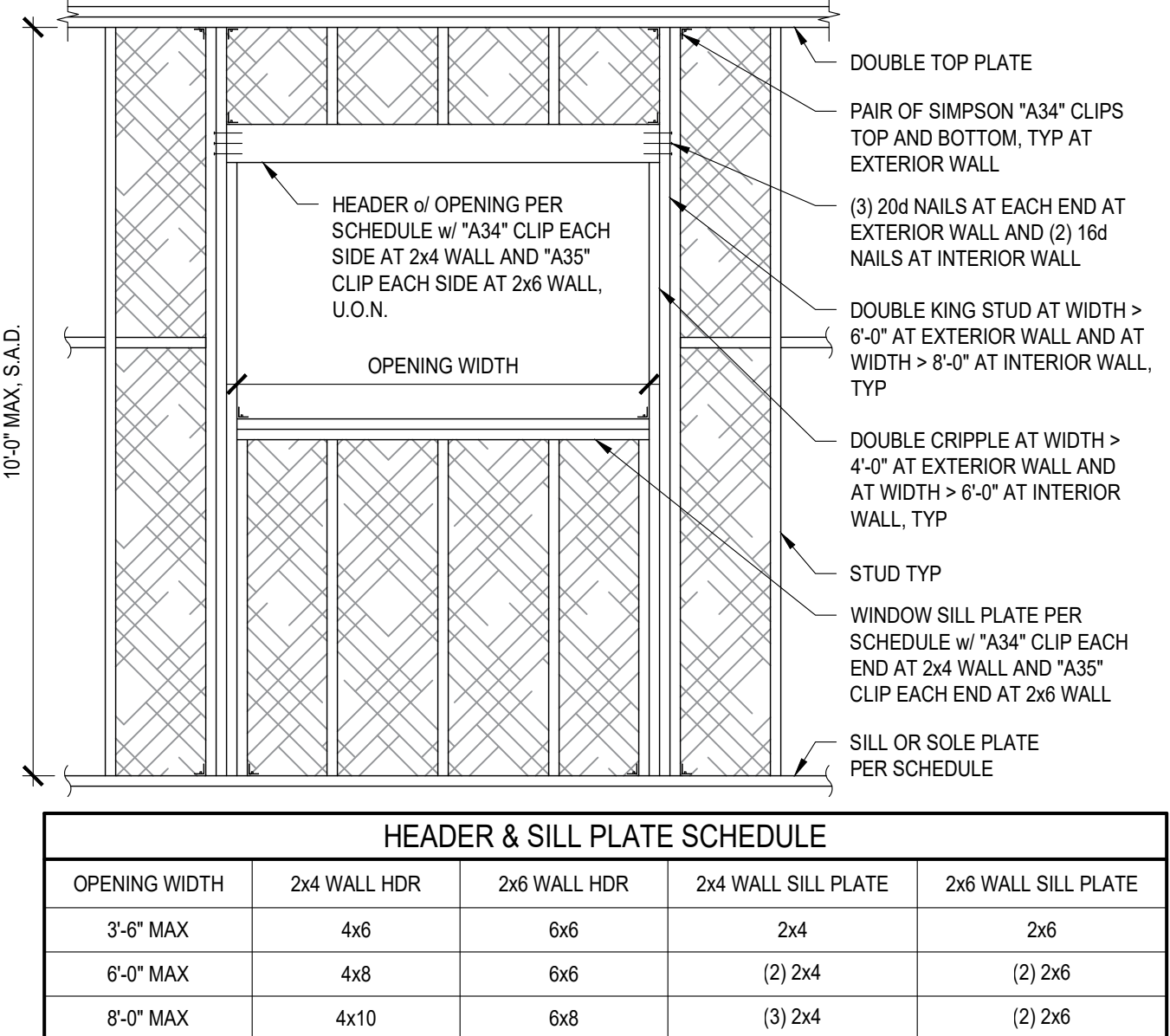
6 SHEAR WALL SILL HOLES & NOTCHES

SCALE: N.T.S.



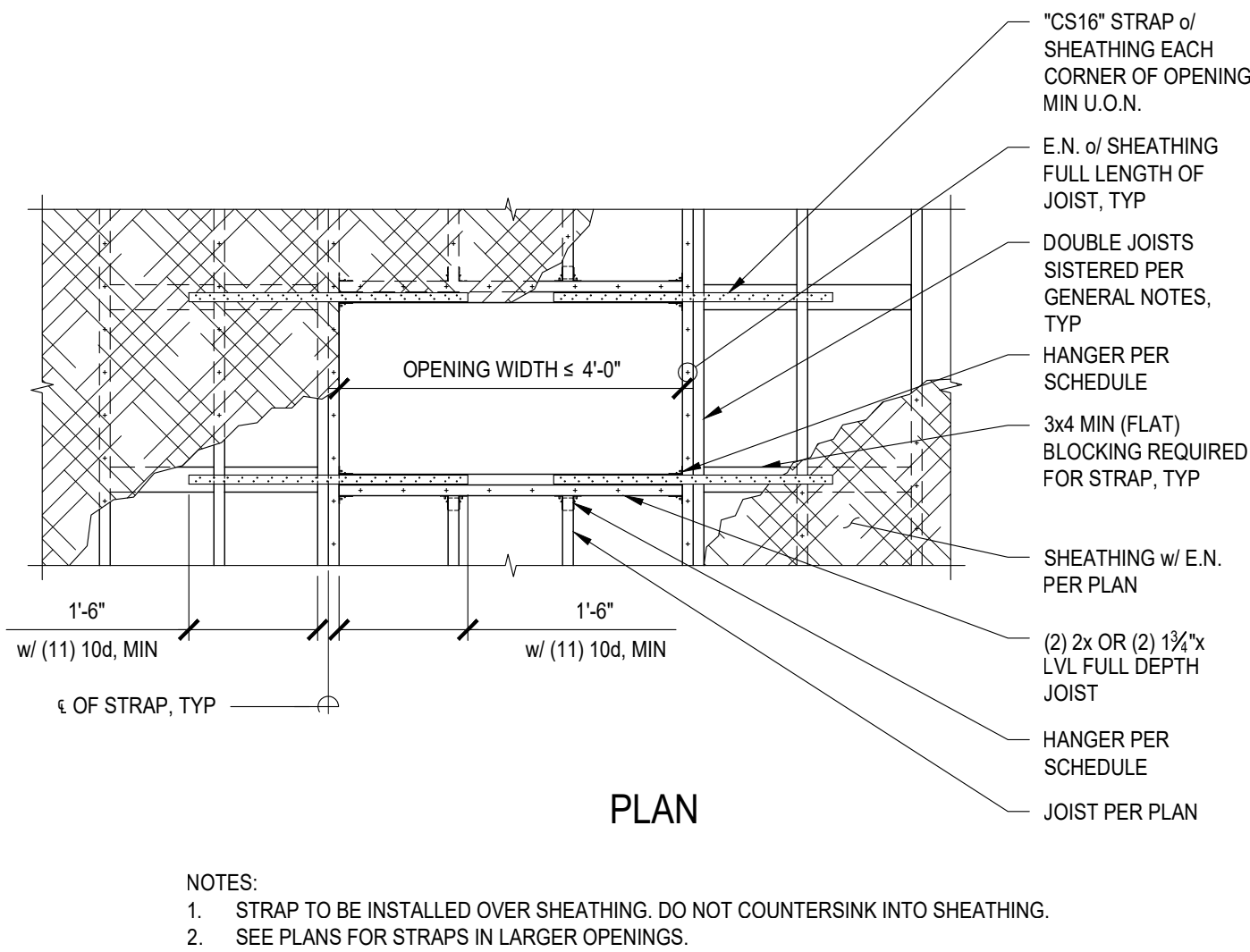
5 LEDGER ATTACHMENT

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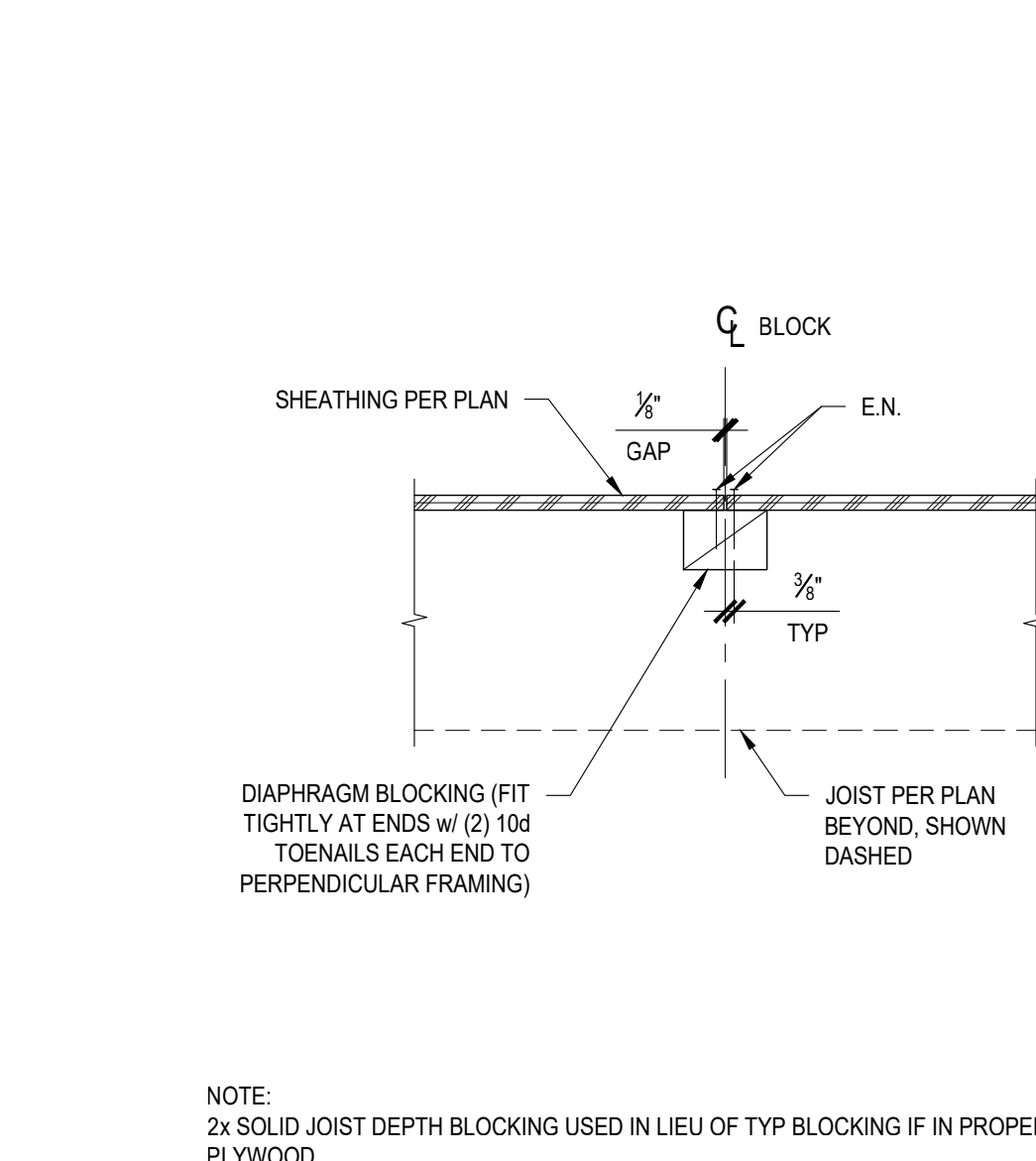
4 OPENING IN STUD WALL

SCALE: N.T.S.



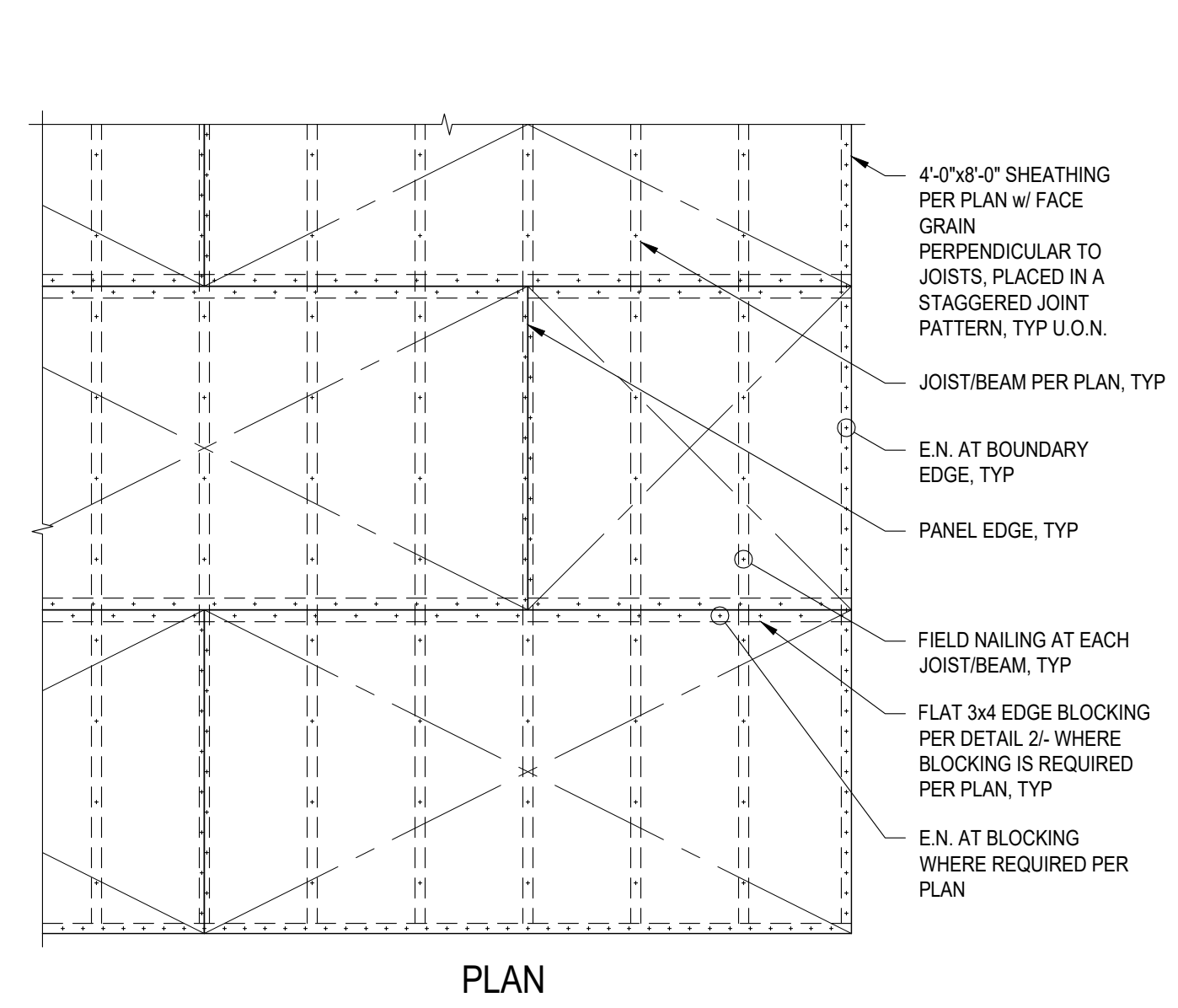
3 HORIZONTAL DIAPHRAGM OPENING

SCALE: N.T.S.



2 HORIZONTAL DIAPHRAGM BLOCKING

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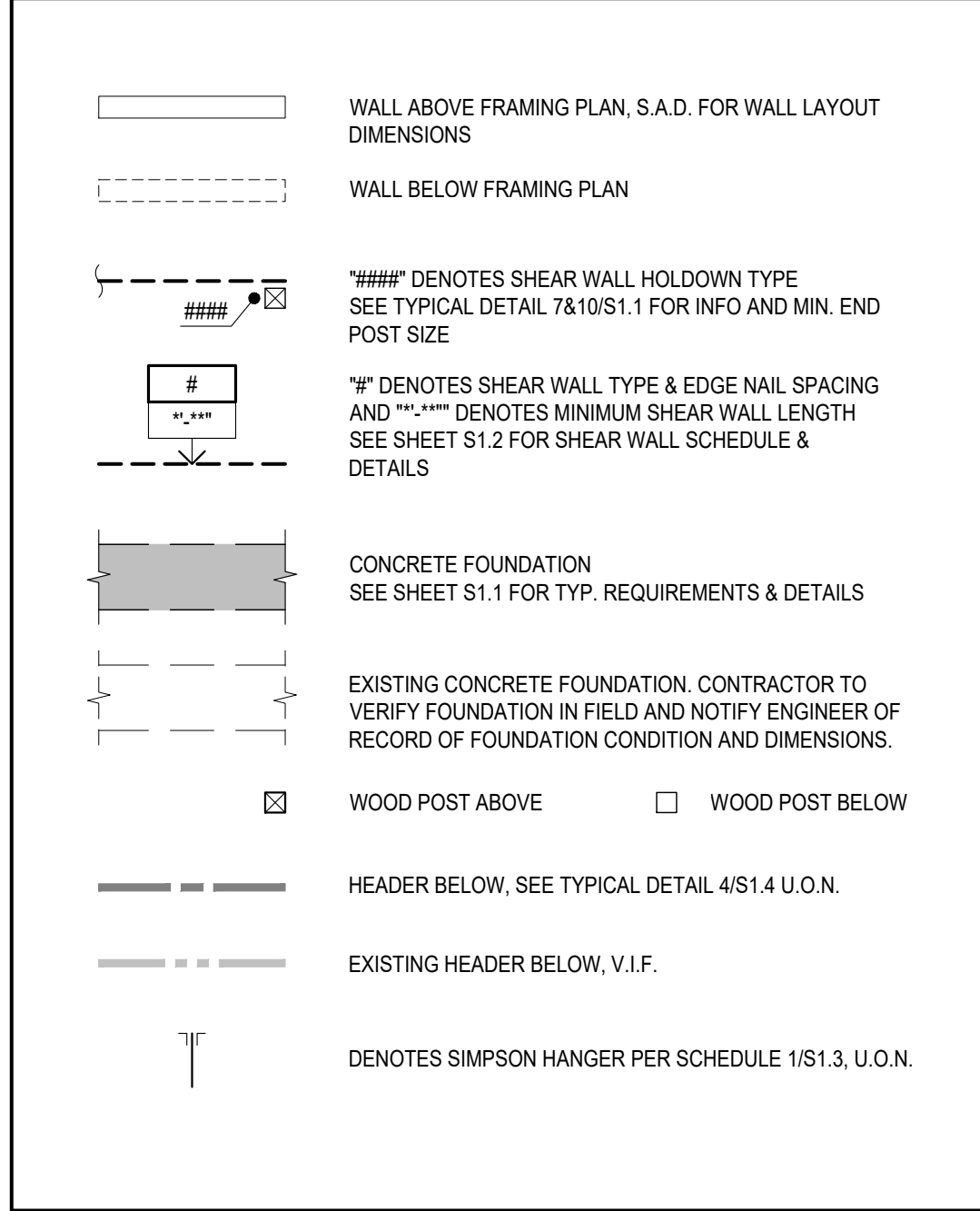


1 HORIZONTAL DIAPHRAGM

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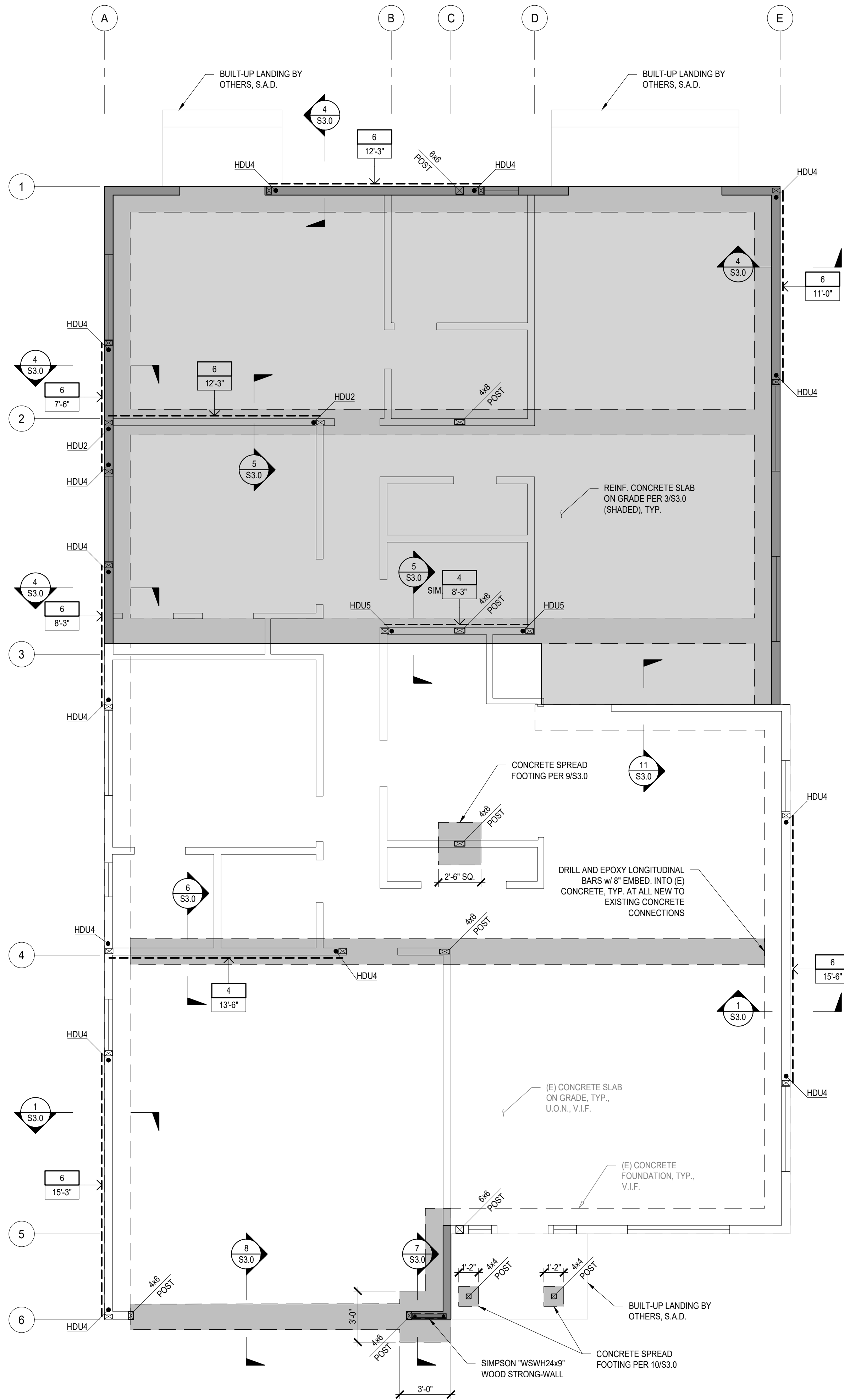
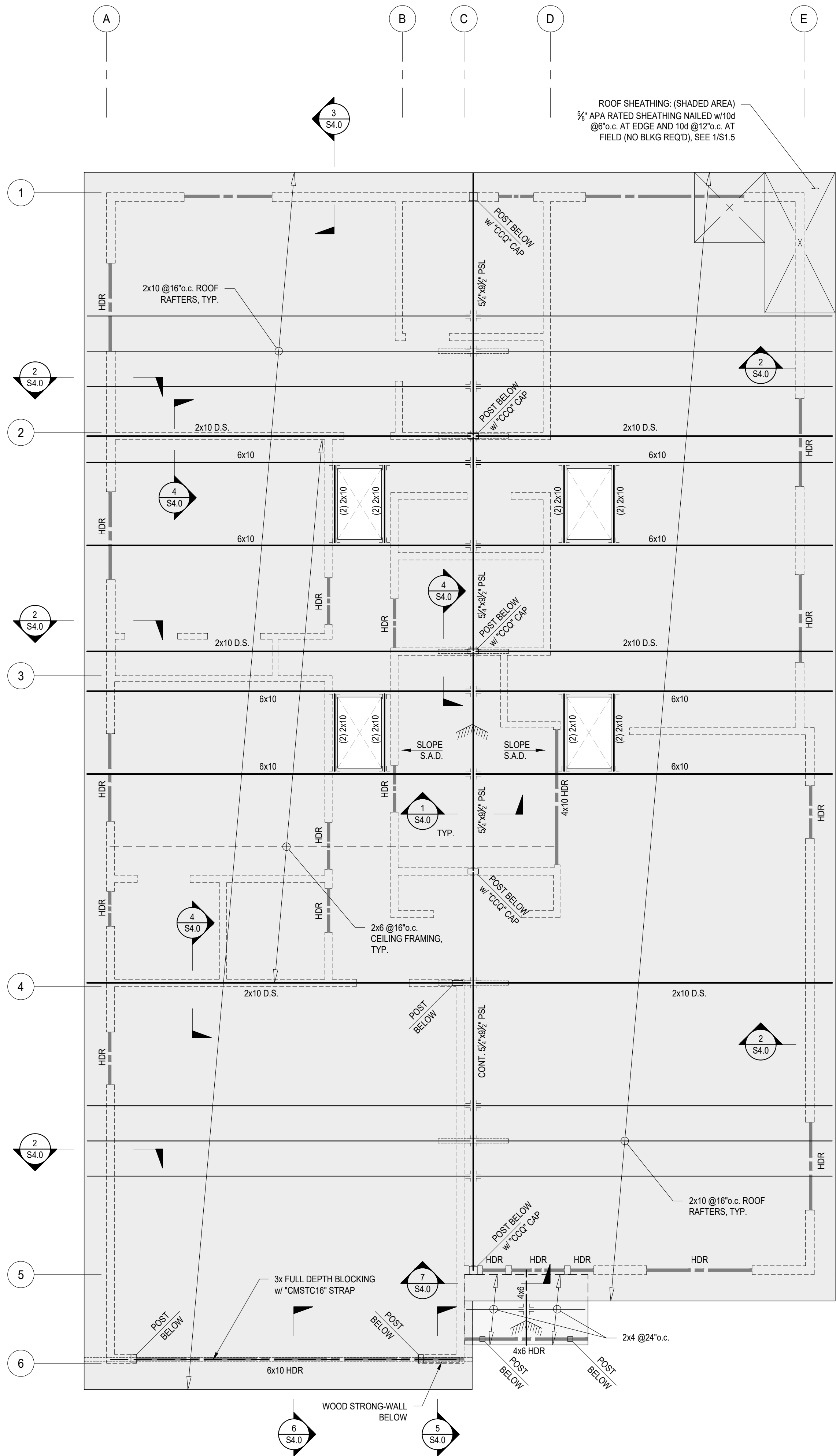


PLAN LEGEND



NOTES

- FOUNDATION PERIMETER SUB-SLAB DRAINAGE, AND WATERPROOFING BY OTHERS.
- REPLACE ALL DRY ROT WOOD FRAMING IN-KIND AS REQUIRED.
- THE CONTRACTOR SHALL COMPENSATE FOR BEAM DEFLECTIONS TO PROVIDE FOR LEVELED FINISHED SURFACES AND ACCOMMODATE FOR THE DEFLECTIONS LISTED BELOW FOR WINDOWS AND DOORS.  
  
ALL BEAM DEFLECTIONS:  
TOTAL LOAD      L/240  
LIVE LOAD      L/360
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR BRACING AND SHORING THE EXISTING STRUCTURE, AND PARTIALLY COMPLETED PORTIONS OF WORK.
- EXTERIOR STUDS SHALL BE 2x6 @16"o.c. U.O.N. AND INTERIOR STUDS SHALL BE 2x4 @16"o.c. U.O.N.
- ALL MEMBERS LABELED AS DRAG STRUT (D.S.) TO RECEIVE 10d NAILS (OR 16d NAILS AS NOTED) THROUGH PLYWOOD SHEATHING AT EDGE NAIL SPACING PER PLAN, TYP. ALTERNATIVELY CONNECT WITH "A38" CLIPS @16"o.c. w/ "SPAX" 0.138"x9/16" PAN HEAD UNIDRIVE WOOD SCREWS TO (E) SHEATHING.
- ALL STEEL EXPOSED TO "WEATHER" OR PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL INCLUDING BUT NOT LIMITED TO WF BEAMS AND FASTENERS. AFTER WELDING, "WELDING SLAG" MUST BE REMOVED AND ZINC-RICH PAINT MUST BE APPLIED TO WELD AND ADJACENT AREAS WHERE COATING HAS BEEN DAMAGED. ZINC-RICH PAINT MUST BE APPLIED TO A THICKNESS EQUIVALENT TO HOT-DIPPED GALVANIZED COATING.
- CONTACT STRUCTURAL ENGINEER OF RECORD PRIOR TO CHANGING GRADE ELEVATIONS ADJACENT TO EXISTING RETAINING WALLS.
- LUMBER EXPOSED TO PROLONGED RAIN WILL LIKELY EXHIBIT DEFLECTIONS LARGER THAN ANTICIPATED.



STRUCTURAL ENGINEER

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DATE      ISSUE

12.19.2025      PERMIT SET

STAMP



PROJECT NUMBER

2532

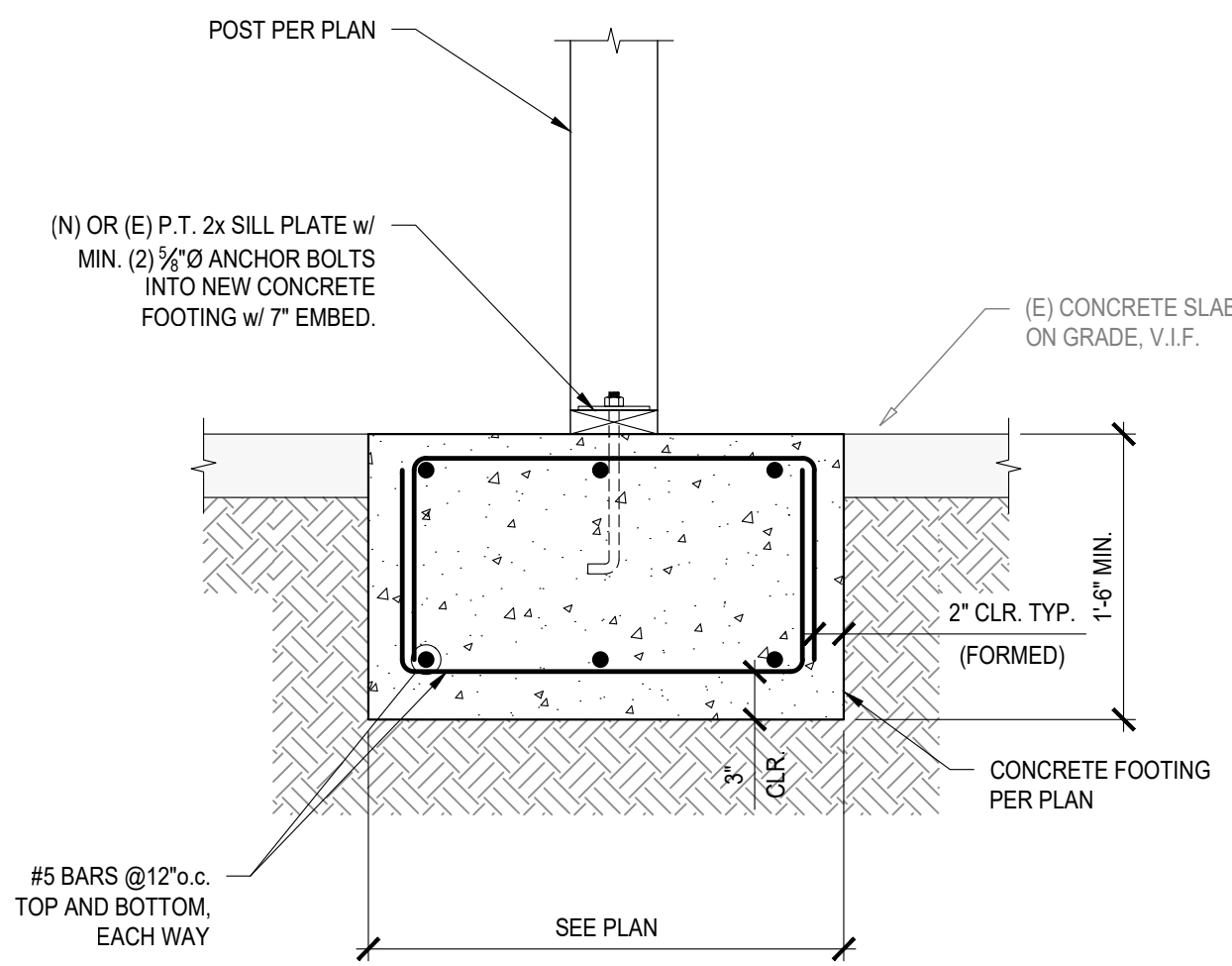
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PLANS

SHEET

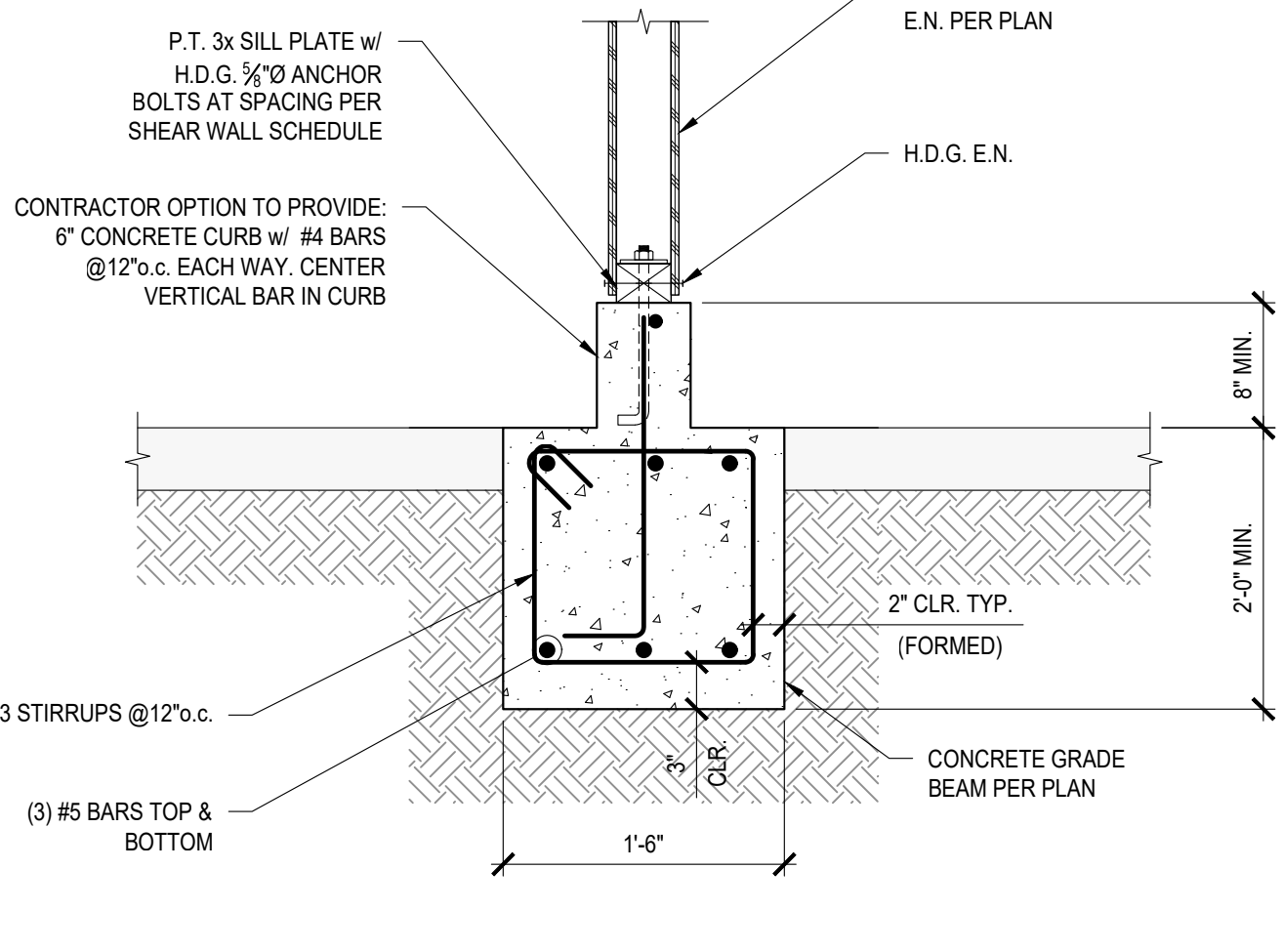
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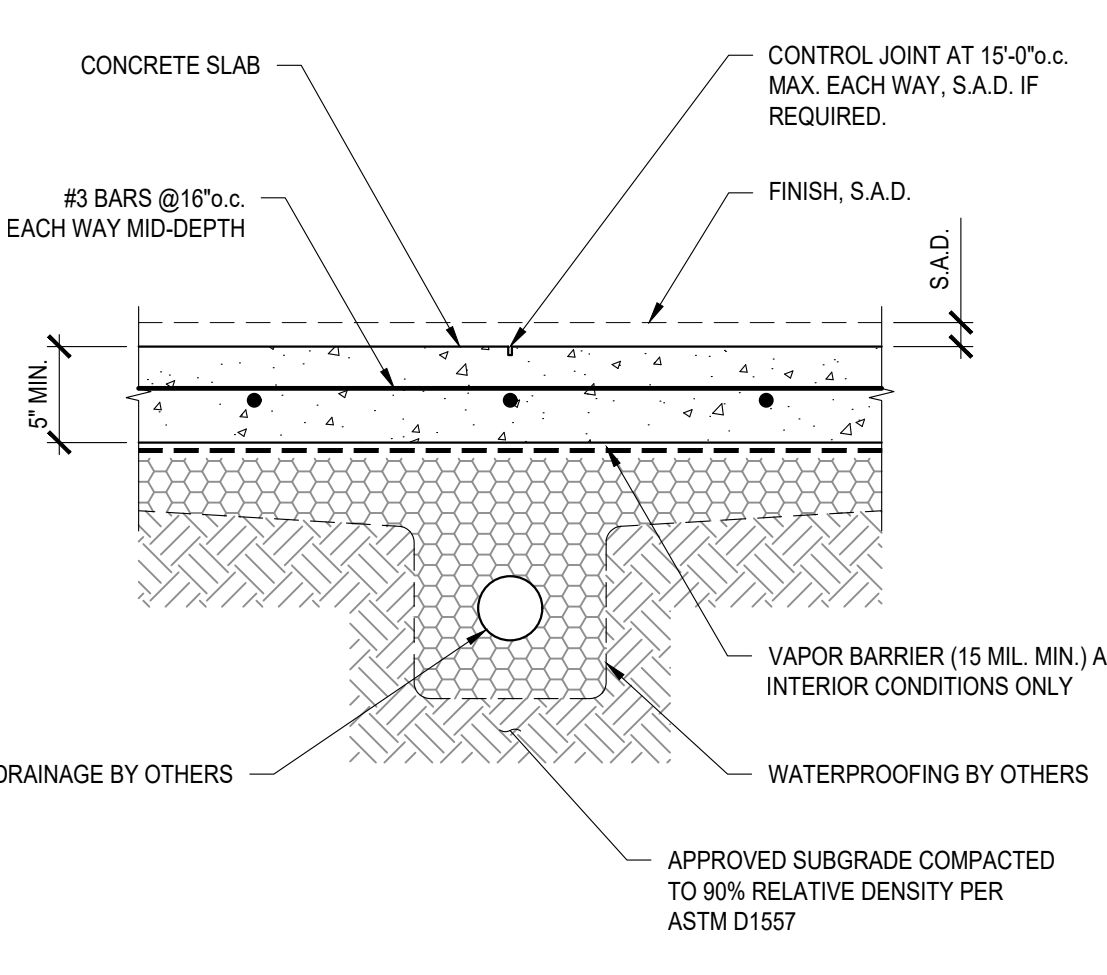
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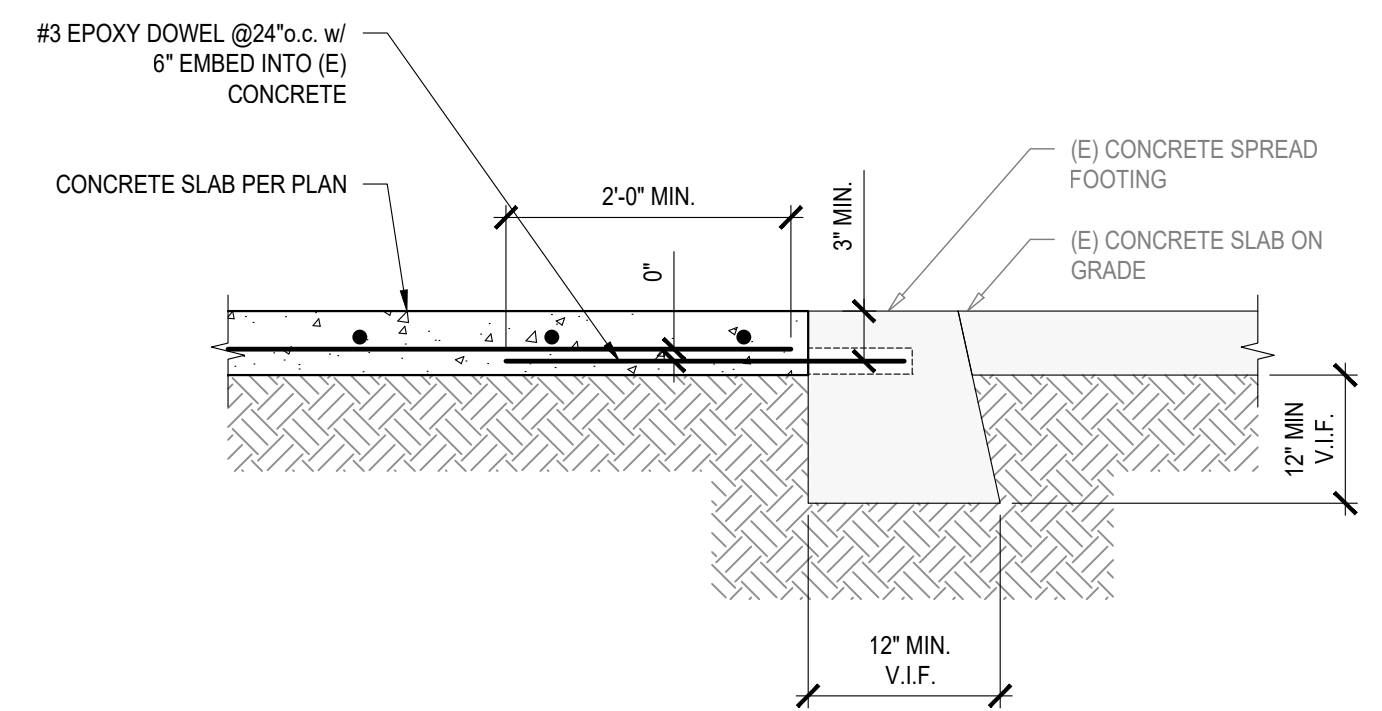
6 DETAIL

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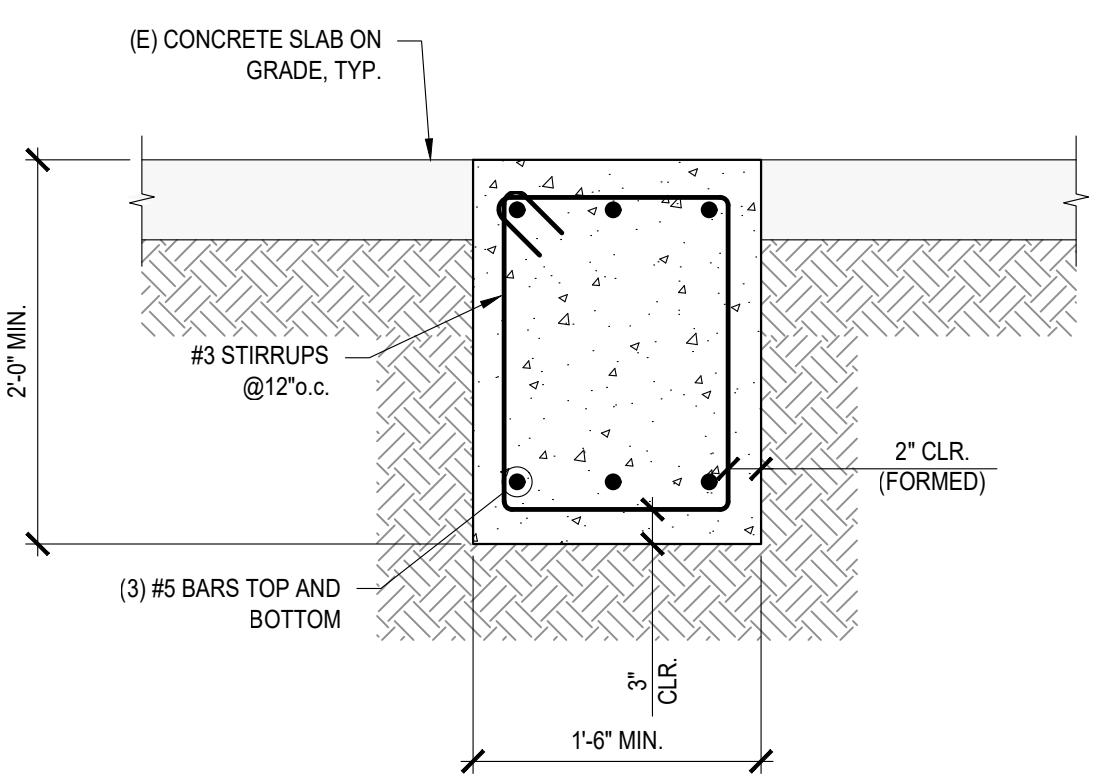
3 TYPICAL INTERIOR SLAB-ON-GRADE

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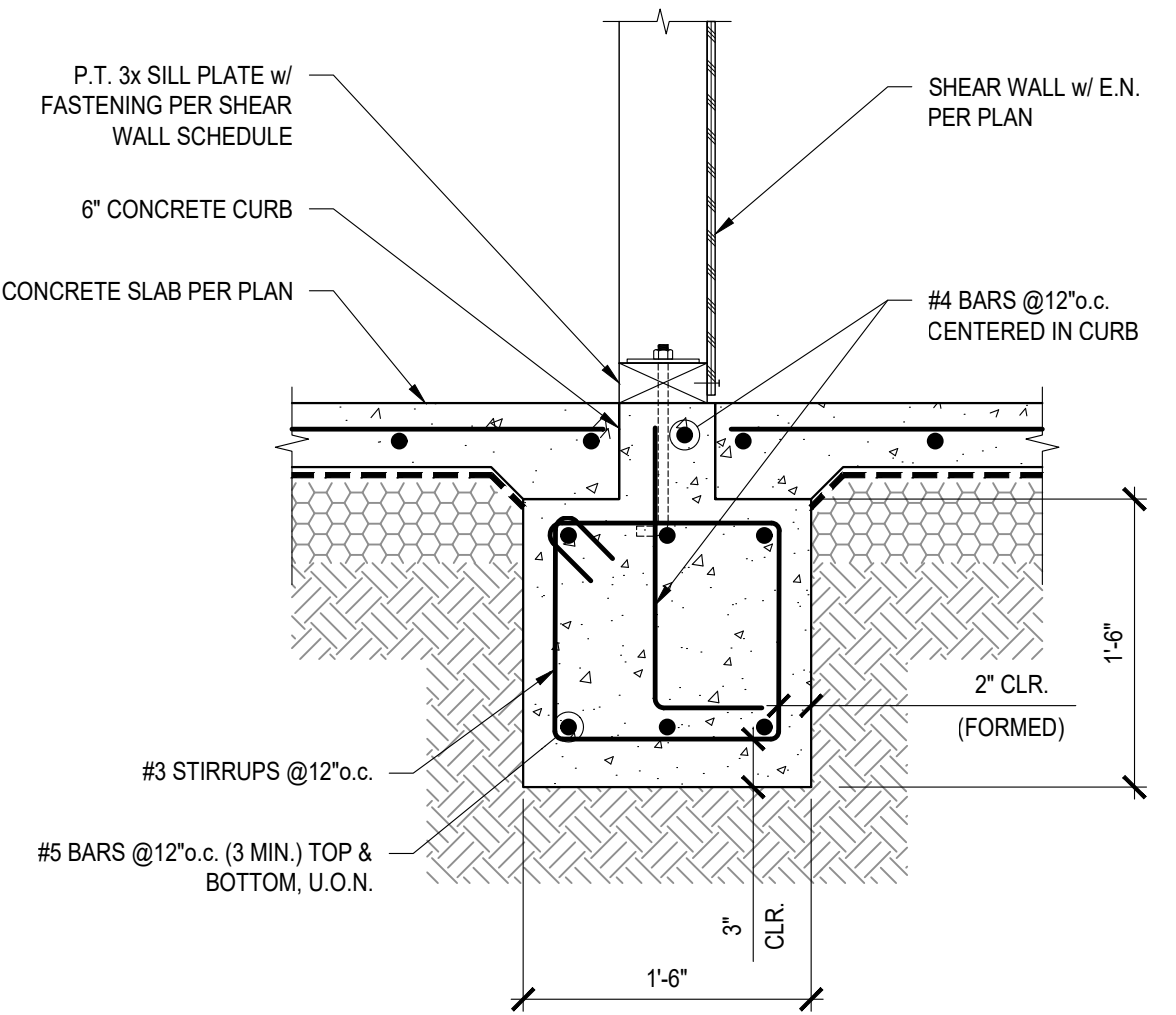
11 DETAIL

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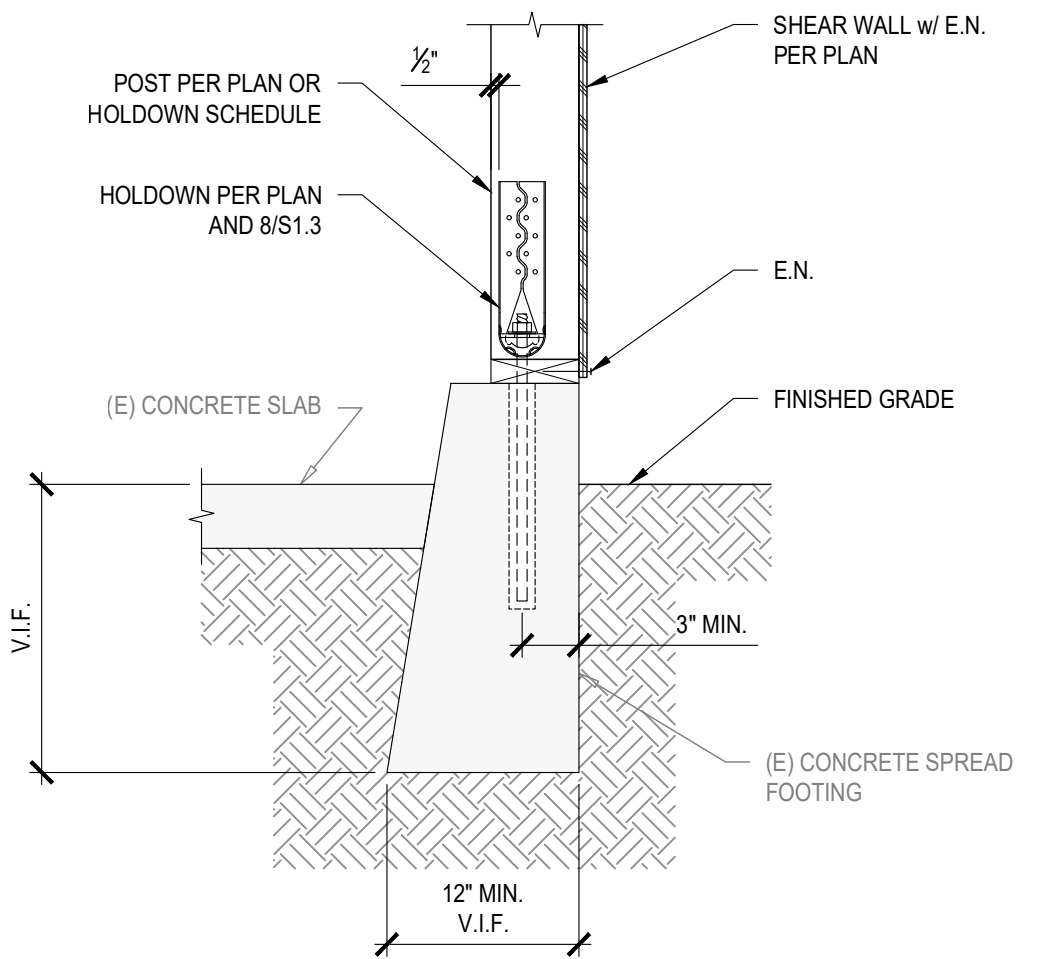
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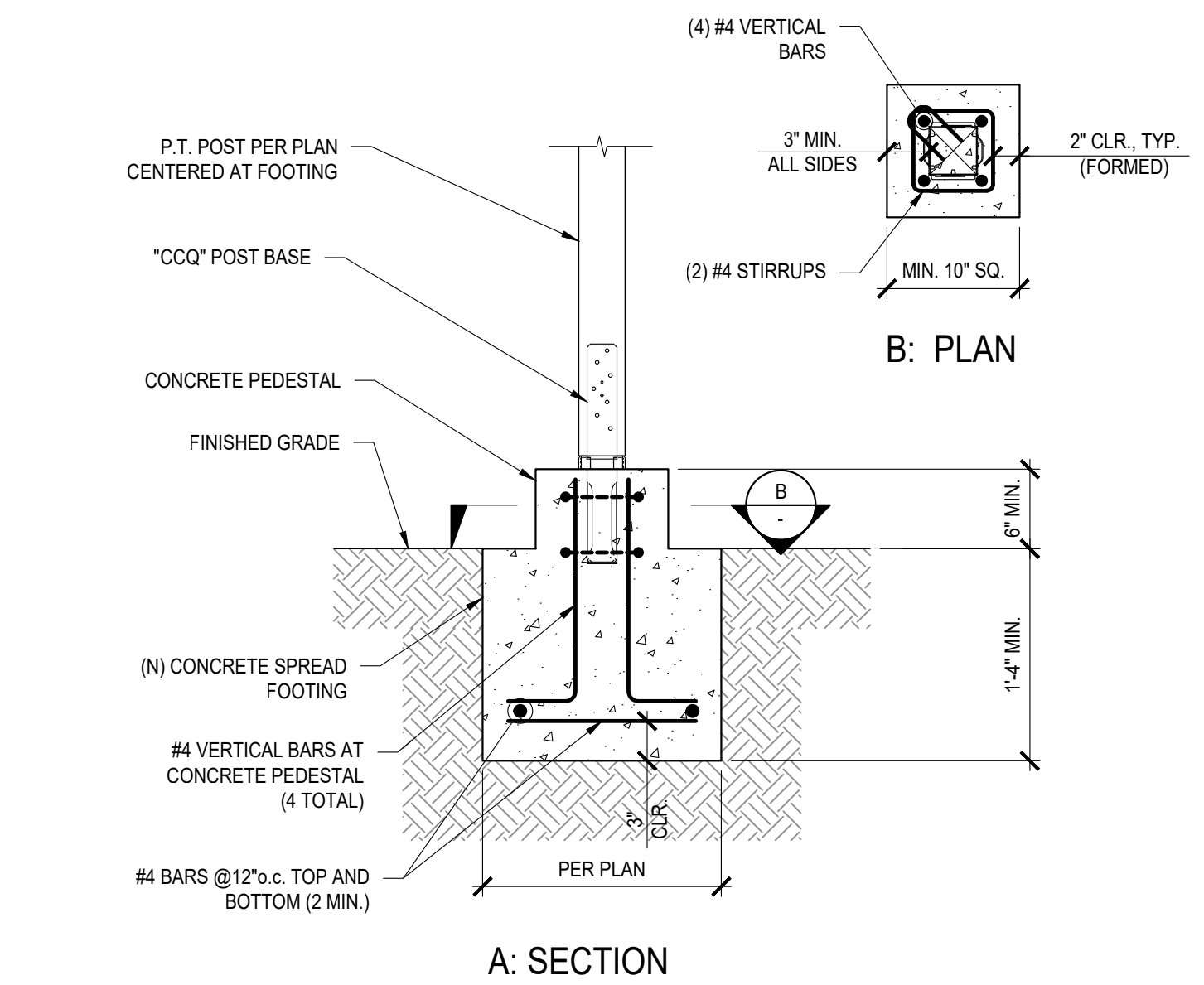
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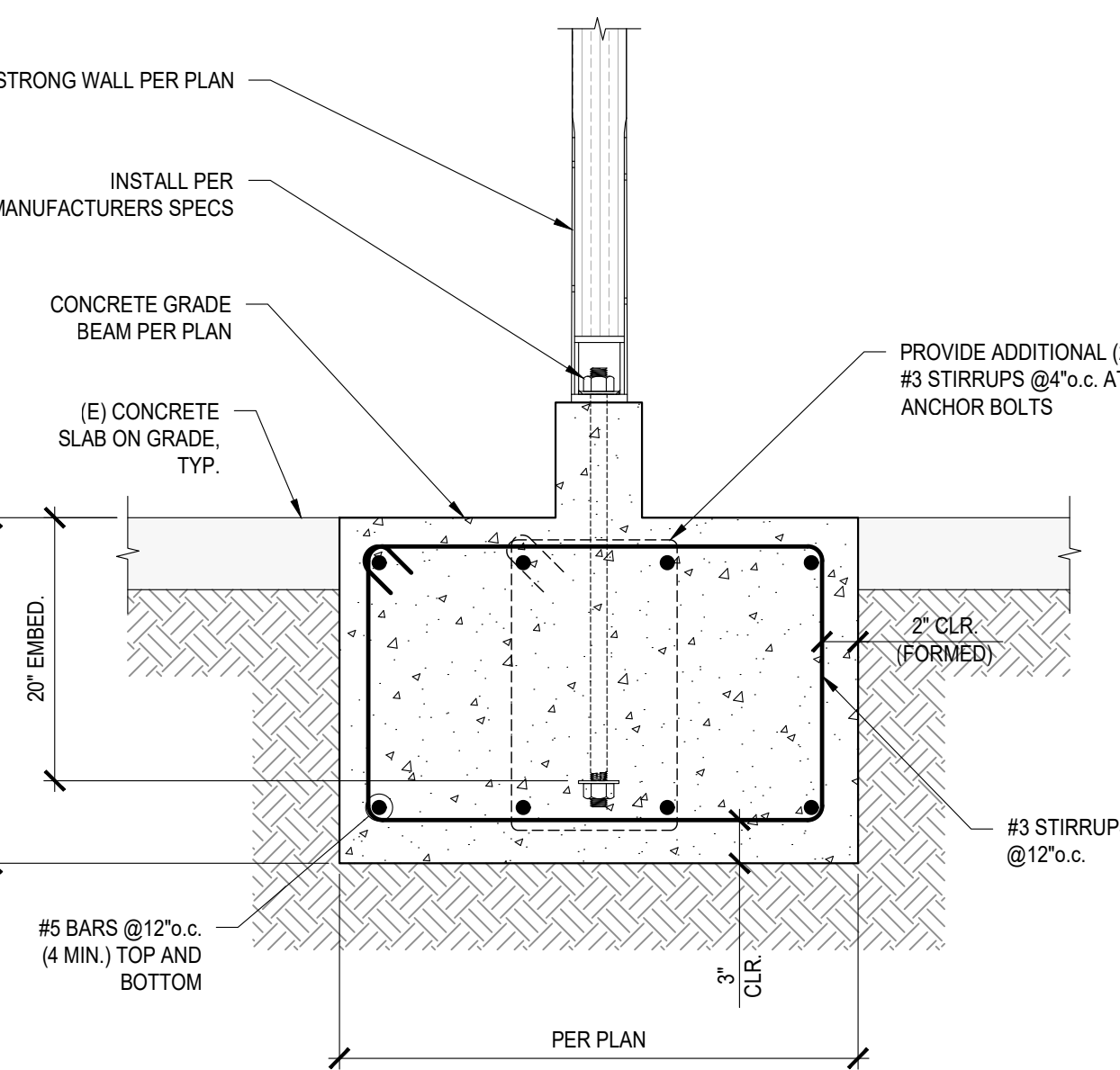
2 DETAIL

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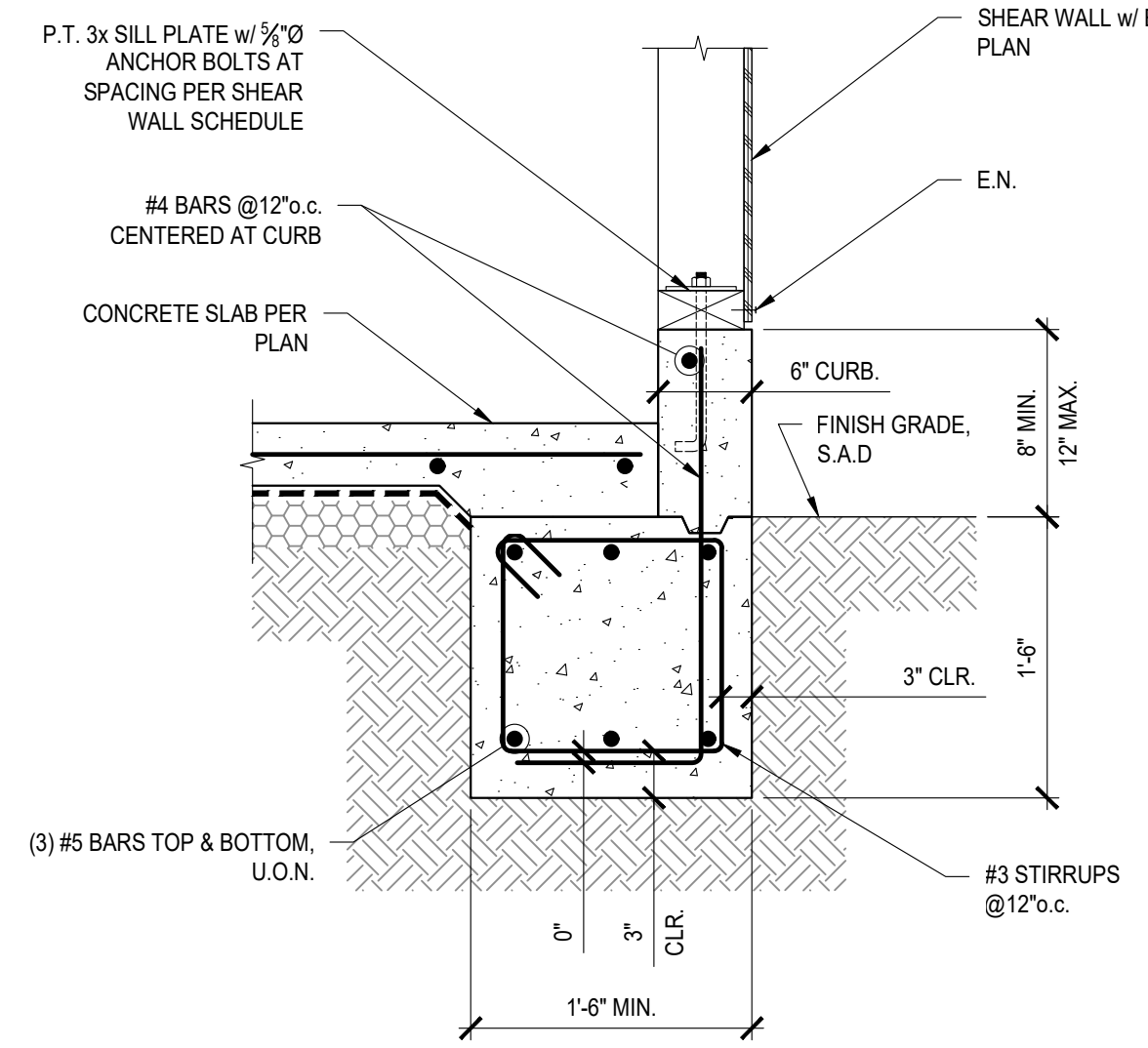
10 DETAIL

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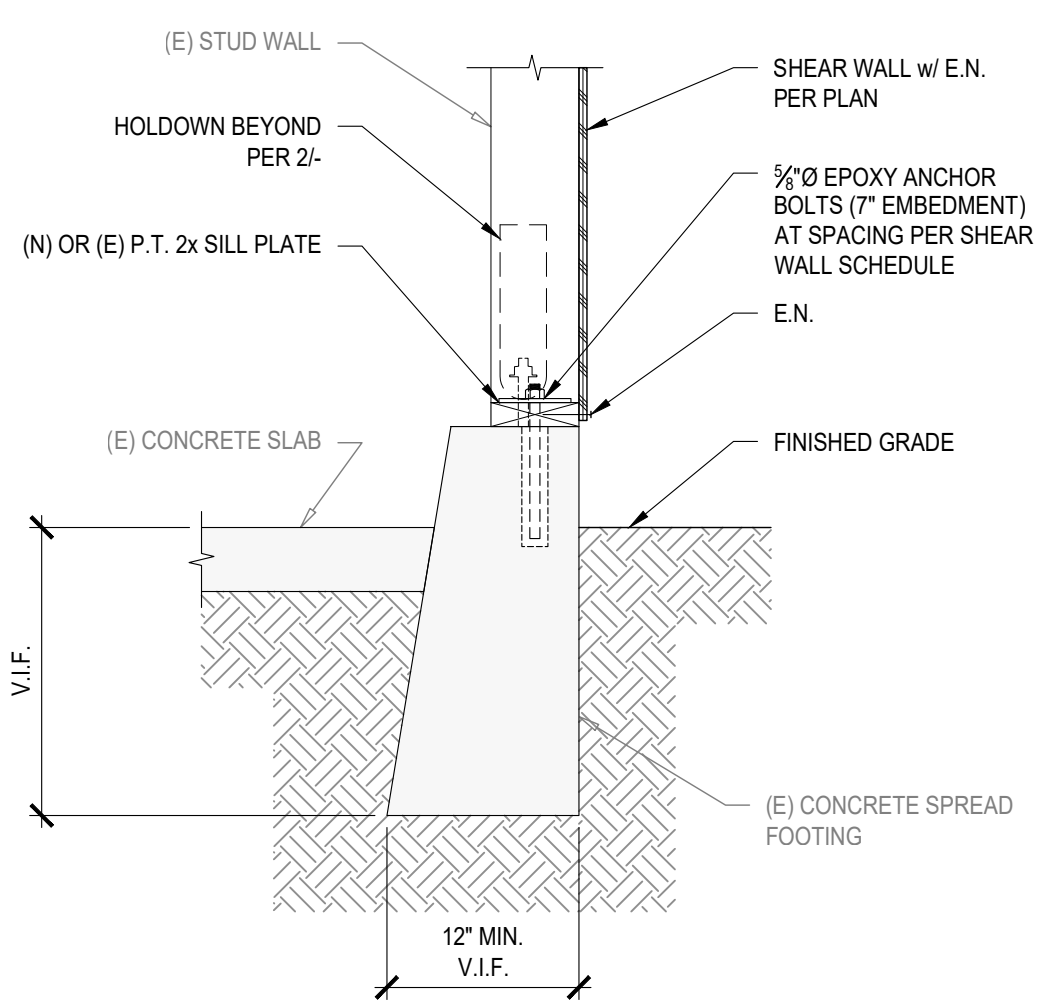
7 DETAIL

SCALE: 1"=1'-0"



4 DETAIL

SCALE: 1"=1'-0"



1 DETAIL

SCALE: 1"=1'-0"



| DATE       | ISSUE      |
|------------|------------|
| 12.19.2025 | PERMIT SET |

STAMP



PROJECT NUMBER

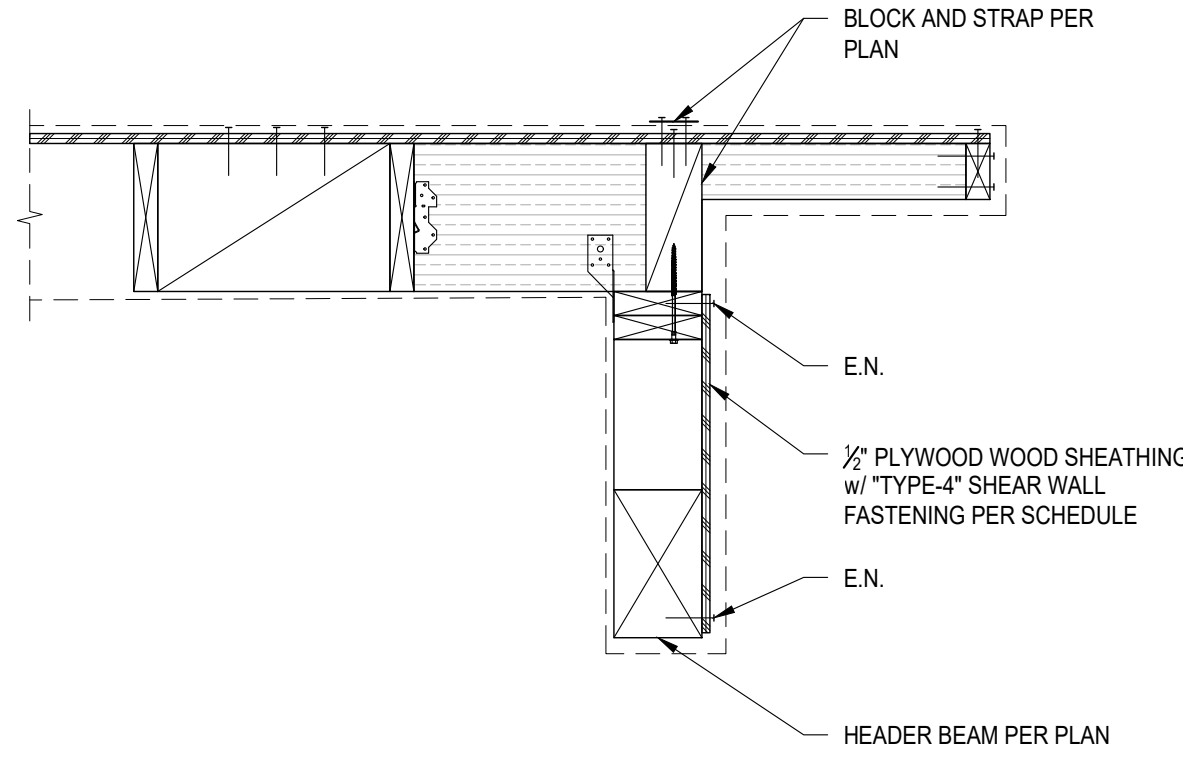
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TITLE

DETAILS

SHEET

S4.0

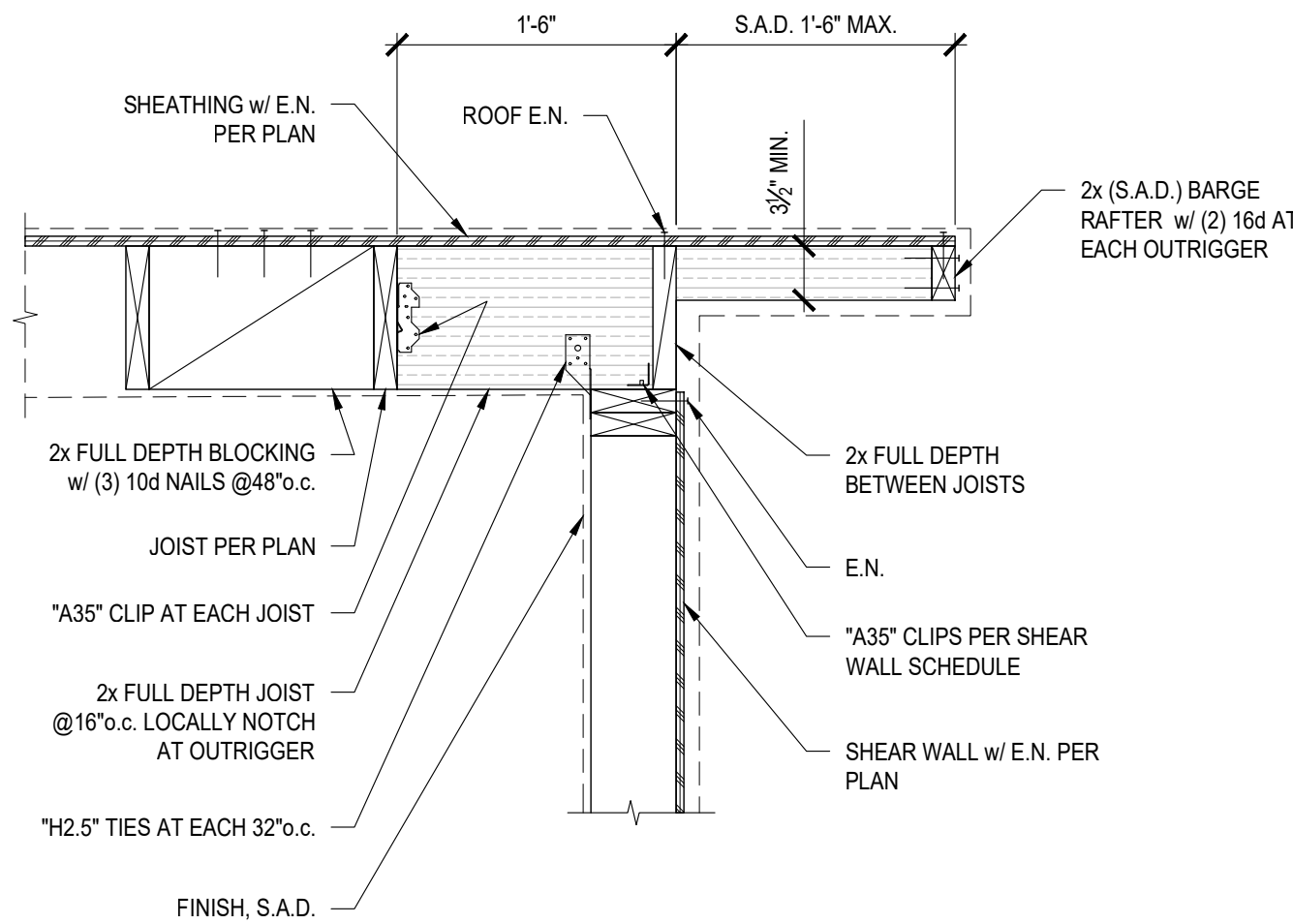


NOTES:  
FOR ADDITIONAL NOTES SEE 3/-

6

DETAIL

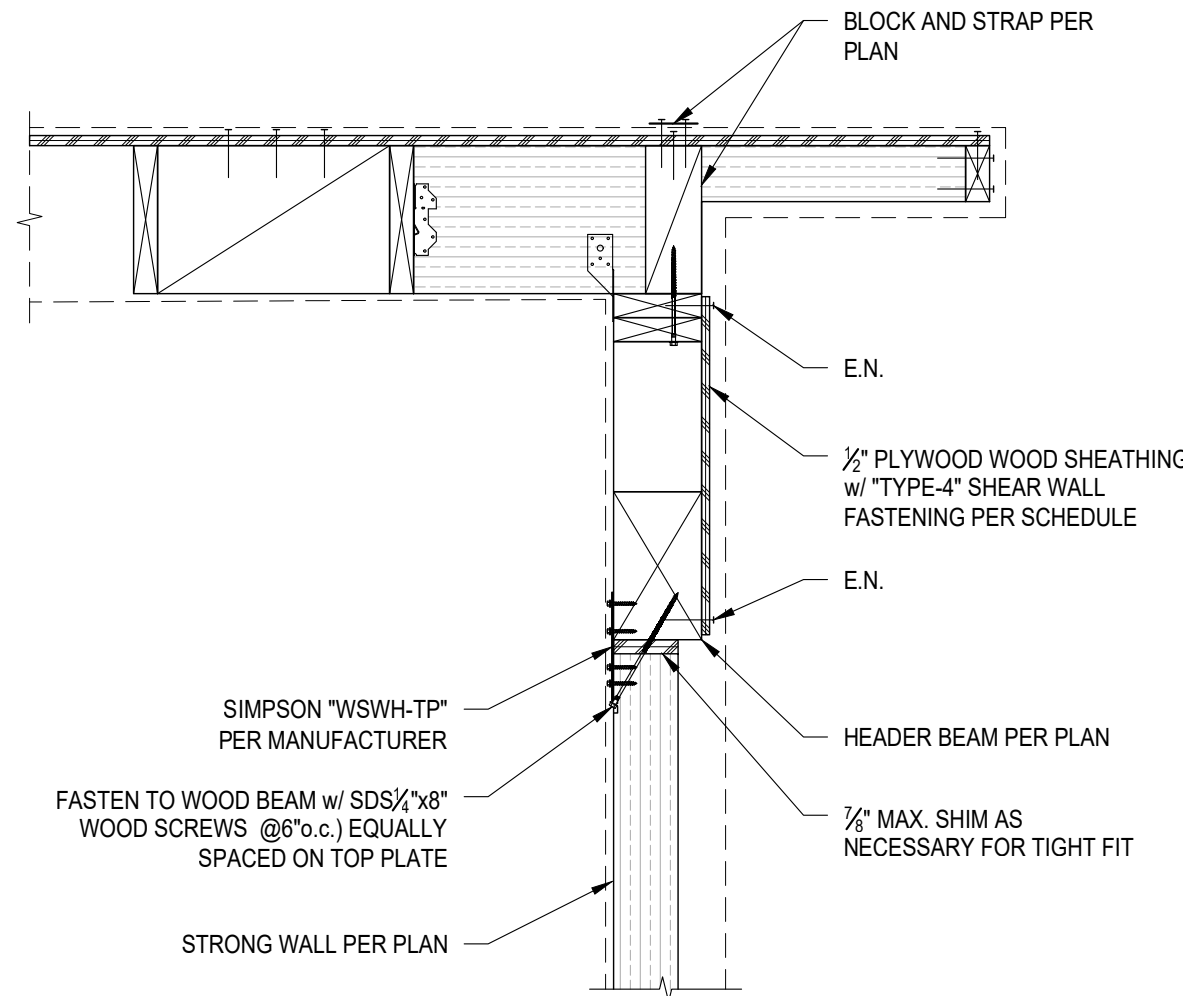
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3

DETAIL

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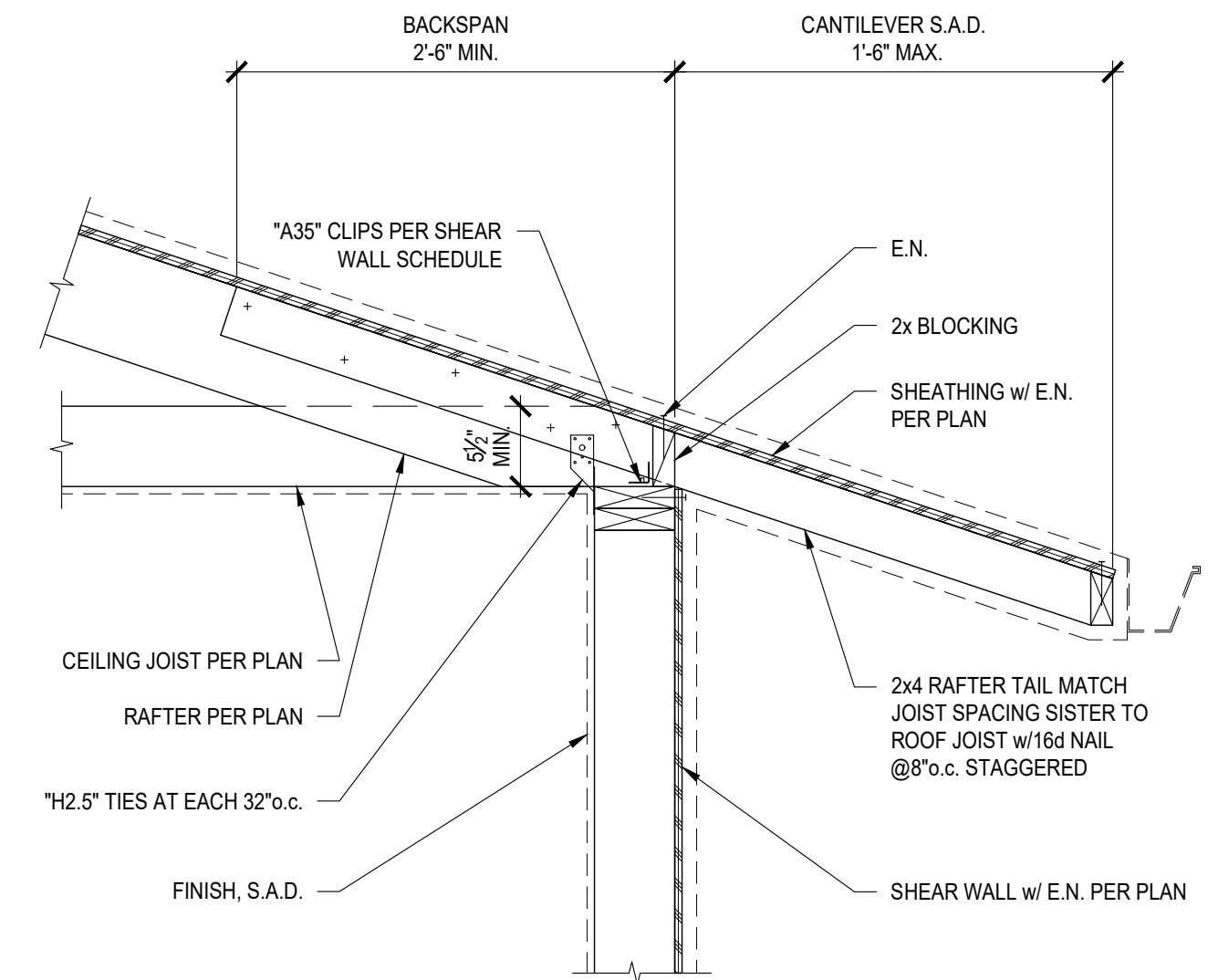


NOTES:  
FOR ADDITIONAL NOTES SEE 3/-

5

DETAIL

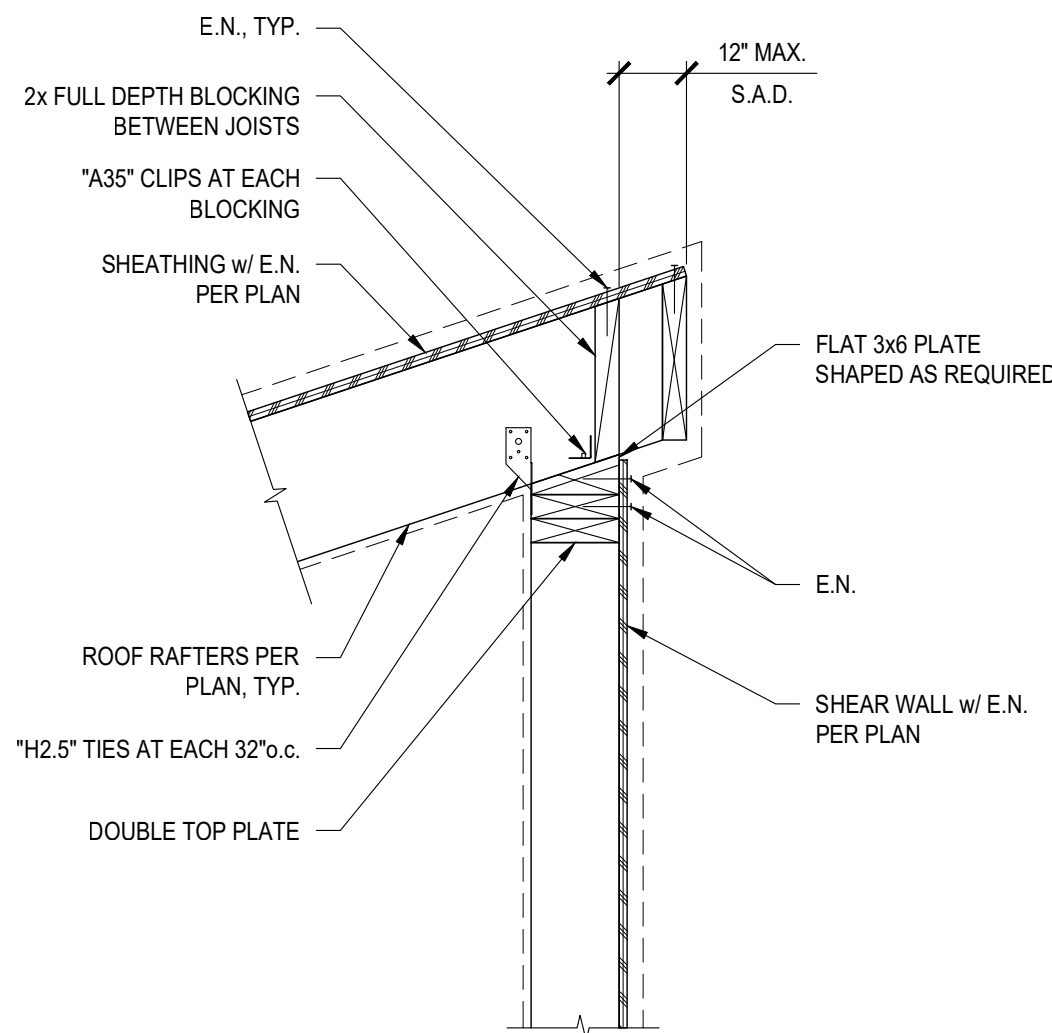
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2

DETAIL

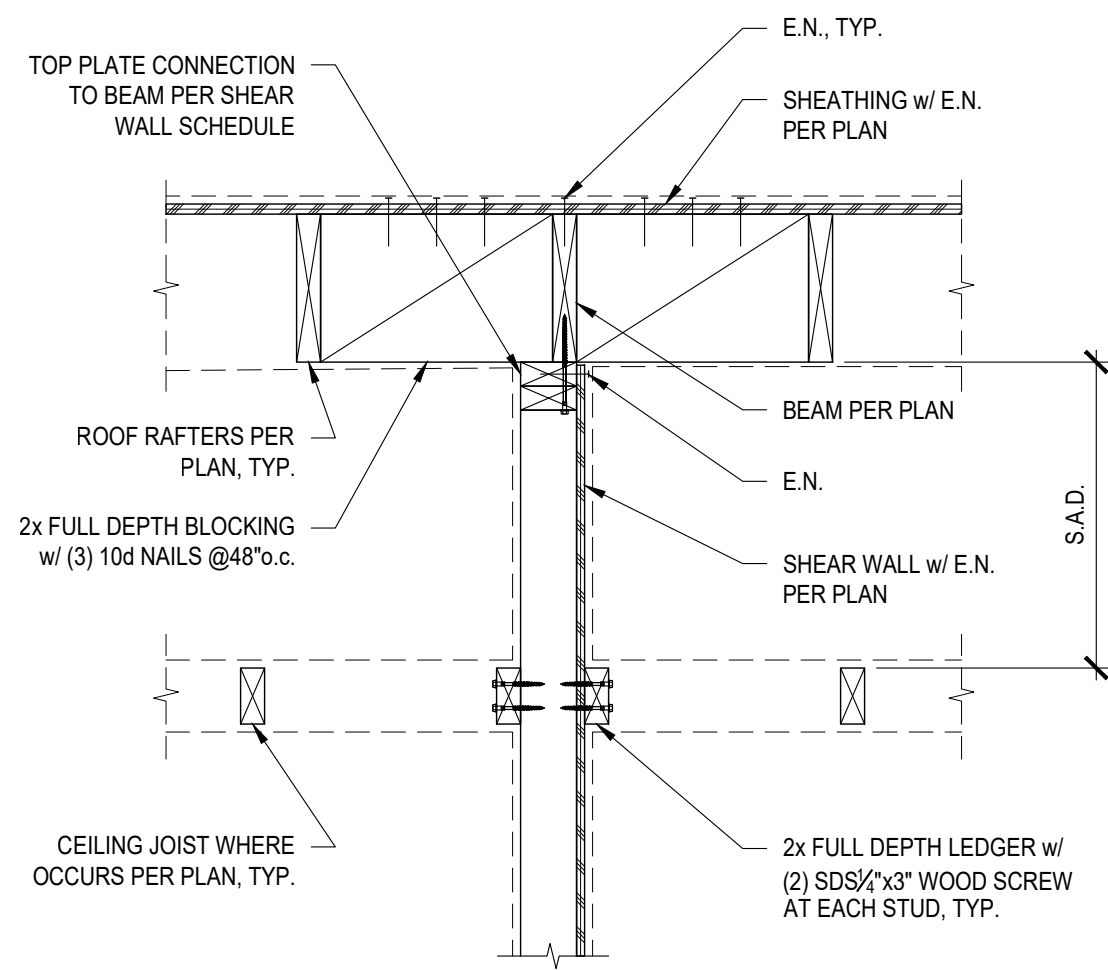
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7

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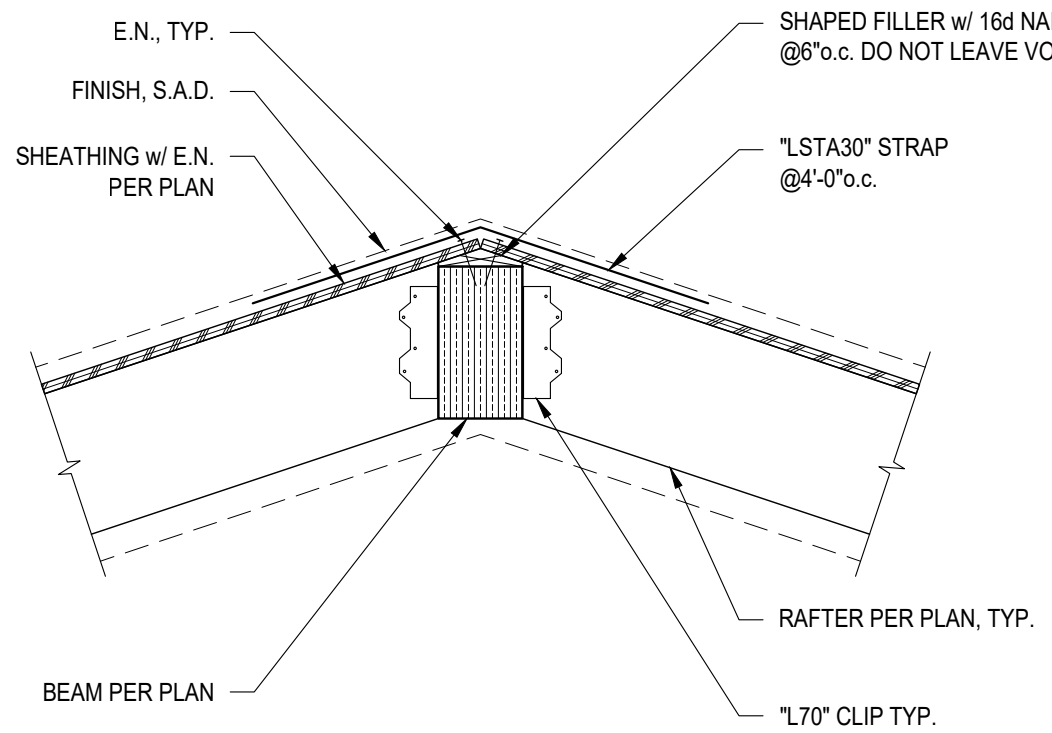
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4

DETAIL

SCALE: 1"=1'-0"



1

DETAIL

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