THE DONA SUSANA DR. RESIDENCE
2968 N. DONA SUSANA Dr.
STUDIO CITY, CA. 91604

ONLY USE CITY APPROVED PLANS FOR CONSTRUCTION

OWNER AND CONSULTANT INFORMATION

OWNER: JON PEPER
ADDRESS: 2968 N. DONA SUSANA Dr. STUDIO CITY, CA. 91604
Ph: 818269-0978

DESIGNER: ENR DESIGN & DRAFTING, INC.
ADDRESS: 18570 SHERMAN WAY (SUITE R) RESEDA, CA. 91335
Ph: 818-282-0437

ENGINEER: KR STRUCTURAL ENGINEERIN, INC.
ADDRESS: 2753 WAVERLY DR. #403
LOS ANGELES, CA. 90039
PH: 818-378-7173

TITLE-24 ENERGY CALCULATIONS: CASTRO DRAFTING AND DESIGN
ADDRESS: 13109 KORNBLUM Ave. #13 HAWTHORNE, CA. 90250
PH: 310-892-0517

APPLICABLE CODES

Codes:
This project shall comply with:
2022 CALIFORNIA RESIDENTIAL CODE (LARC)
2022 edition of California Building Codes. (Title 24)
2022 edition of California Plumbing Codes. (Title 24)
2022 edition of California Mechanical Codes. (Title 24)
2022 edition of California Electrical Codes. (Title 24)
2022 edition of California ENERGY CODE EDITIONS.
2023 LARC
2023 LABC
2023 LAGBC
2023 LAMC

AREA CALCULATIONS

AREA CALCULATIONS:

E. RESIDENCE ---------2868.0 S.F. --------RFA = 2,731.0 S.F.
E. GARAGE ---------- 537.5 S.F.
E. PORCH (UNDER E. BALCONY) ---------- 141.0 S.F.
E. 2ND FLOOR BALCONY ---------- 141.0 S.F.

NEW AREA CALCULATIONS:

1st FLOOR ADDITION ---------107.6 S.F. --------RFA = 94.9 S.F.
2nd FLOOR ADDITION #1 ---------141.3 S.F. --------RFA = 128.0 S.F.
2nd FLOOR ADDITION #2 ---------577.6 S.F. --------RFA = 547.7 S.F.
AREA OF GARAGE CONVERSION TO LIVING SPACE ---------141.3 S.F. --------RFA = 127.6 S.F.

TOTAL ADDITION (SCHOOL FEE AREA) 967.8 S.F. | TOTAL RFA = 898.2 S.F.

NEW OPEN TRELLIS PATIO --------- 326.7 S.F.

RFA SUMMARY

ALLOWED RFA PER SLOPE BAND ANALYSIS = 3,902.8 S.F.

	EXISTING	NEW	CREDIT	TOTAL	
DWELLING	2731.0	898.2	0.0	3,629.2	
COVERED PARKING	396.2	0.0	-200	196.2	
ATTACHED COVERED PATIOS/PORCH	0.0	21.0	0.0	21.0	
TOTAL				3,846.4 S.F.	

PROJECT NOTES

1. IT IS THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER/CONTRACTOR TO DETERMINE THE EXACT LOCATION OF THE PROPERTY LINES. A STATE LICENSED LAND SURVEYOR MAY BE REQUIRED.
2. THE CONSTRUCTION SHALL NOT RESTRICT A 5'-0" CLEAR AND UNOBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULL BOXES, TRANSFORMERS, VAULTS, PUMPS, VALVES, METERS, APPURTENANCES, ETC.) OR TO THE LOCATION OF THE HOOK-UP. THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINES-WHETER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/OR ADDITIONAL EXPENSES.
3. AN APPROVED SEISMIC GAS SHUT OFF VALVE OR EXCESS FLOW SHUT OFF VALVE WILL BE INSTALLED ON THE FUEL GAS LINE ON THE DOWN STREAM SIDE OF THE UTILITY METER AND BE RIGIDLY CONNECTED TO THE EXTERIOR OF THE BUILDING OR STRUCTURE CONTAINING THE FUEL GAS PIPING. (PER ORDINANCE 170,158 AND 180,670) SEPARATE PLUMBING PERMIT IS REQUIRED.
4. BUILDINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY VISIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY.
5. PROVIDE ANTI-GRAFFITI FINISH WITHIN THE FIRST 9 FEET, MEASURE FROM GRADE, AT EXTERIOR WALLS AND DOORS. EXEPTION: MAINTENANCE OF BUILDING AFFIDAVIT IS RECORDED BY THE OWNER TO COVENANT AND AGREE WITH THE CITY OF LOS ANGELES TO REMOVE ANY GRAFFITI WITHIN 7-DAYS OF THE GRAFFITI BEING APPLIED.

SHEET INDEX

PROJECT INFORMATION

LEGAL INFORMATION:

ZONING: ----------- RE 15-1-H
APN: ----------- 2380029015
LOT#: ----------- 168
TRACT: ----------- TR 25056

BUILDING INFORMATION:

CONSTRUCTION TYPE: ----------- VB
OCCUPANCY: ----------- R3/U
NO. OF STORIES: ----------- 2
EXIST. MAIN DWELLING FIRE SPRINKLERS?: ----------- NO

SCOPE OF WORK

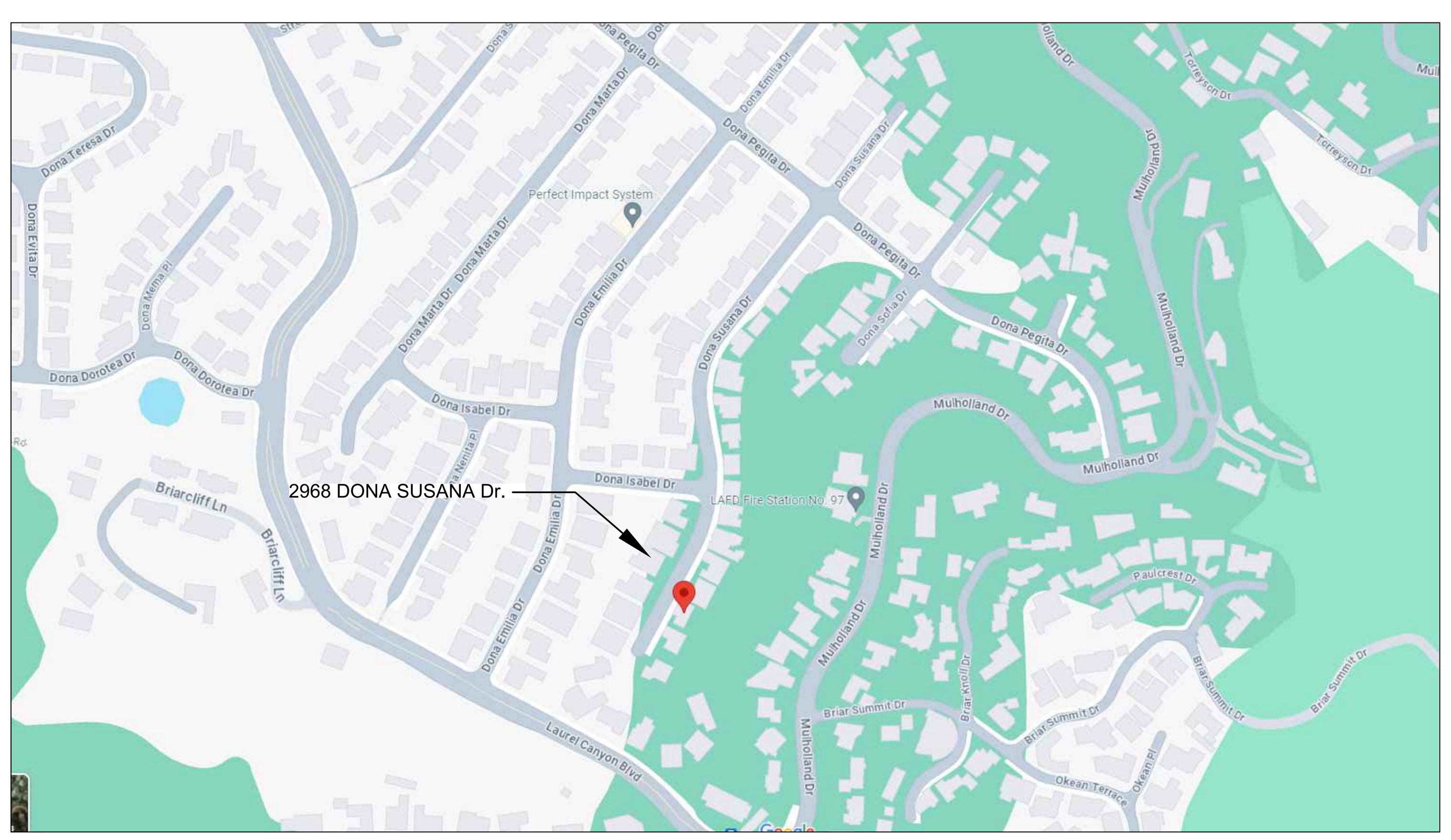
- ADDITION AND REMODEL THROUGHOUT THE EXISTING RESIDENCE.
- ADDITIONS TO CONSIST OF THE FOLLOWING:
  - -ADD TO THE FRONT OF THE RESIDENCE TO ENLARGE EXISTING ENTRY AND FAMILY ROOM.
  - -ADD TO THE SECOND FLOOR OF THE EXISTING RESIDENCE TOWARDS THE FRONT TO ENLARGE EXISTING BEDROOMS AND ADD NEW BATHROOM.
  - -ADD NEW MASTER BEDROOM AND BATHROOM ON THE SECOND FLOOR ABOVE THE EXISTING GARAGE.
  - -ADD NEW OPEN TRELLIS PATIO AT THE REAR OF THE EXISTING RESIDENCE.

INTERIOR REMODEL TO INCLUDE THE FOLLOWING:
-REMODEL EXISTING KITCHEN.
-REMODEL EXISTING LIVING ROOM, FAMILY ROOM AND DINING ROOM.
-REMODEL EXISTING GARAGE AND CONVERT PORTION OF GARAGE TO LAUNDRY AND BATHROOM.
-REMODEL ALL BEDROOMS ON SECOND FLOOR.
-REMODEL ALL BATHROOMS AND CLOSETS ON SECOND FLOOR.

- NEW RETAINING WALL AT REAR OF LOT.
- NEW POOL AT REAR OF LOT.

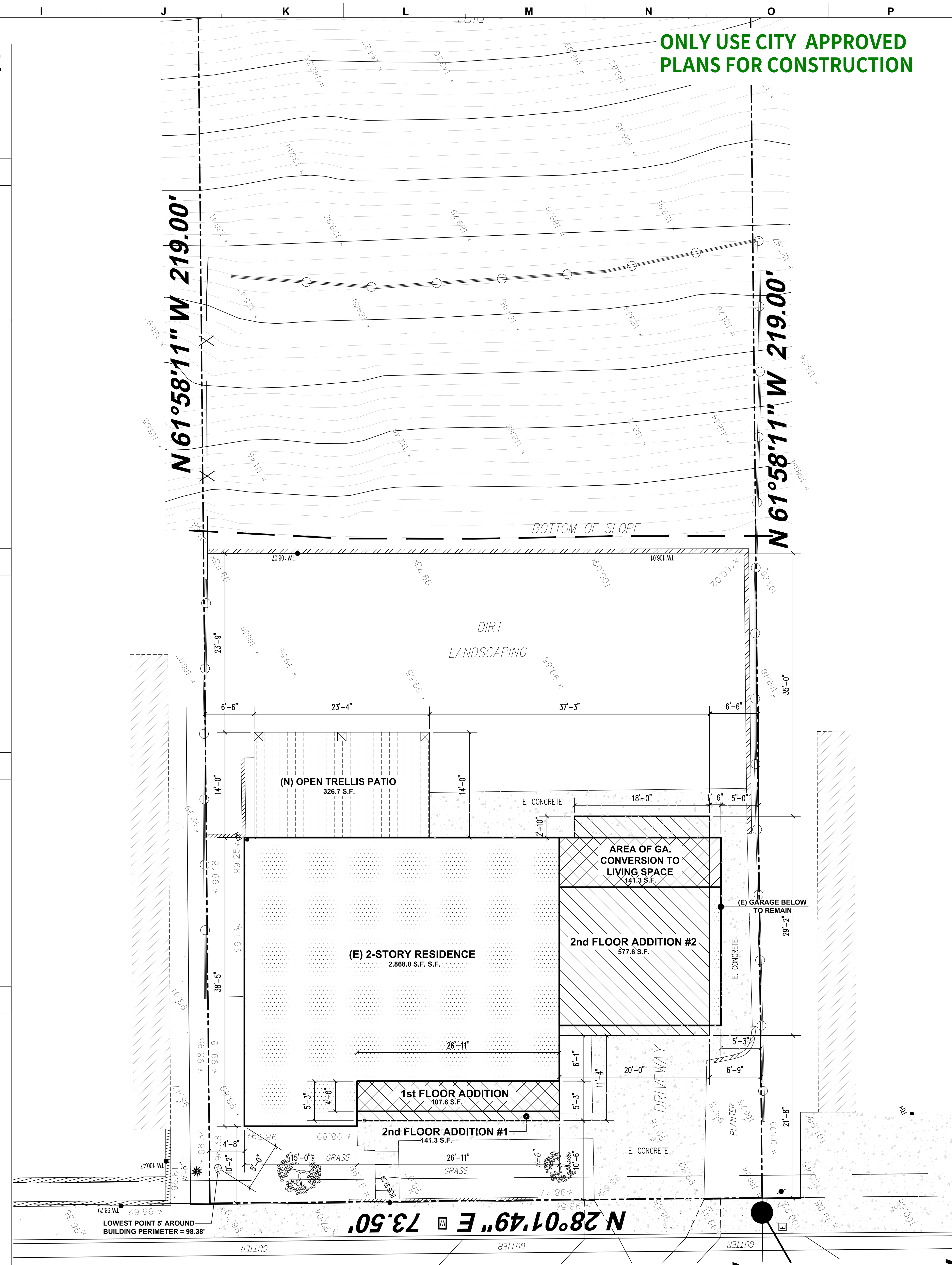
UNDER SEPARATE PERMIT

VICINITY MAP



SITE PLAN LEGEND

- EXIST. LANDSCAPED AREA/ DIRT
- E. CONCRETE PADS, DIRVEWAYS, WALKWAYS LANDINGS
- EXIST. BUILDING AREAS
- ADDITION AT GROUND LEVEL
- NEW SECOND FLOOR ADDITION
- OVERLAP OF FIRST AND SECOND FLOOR ADDITIONS



PROPOSED SITE PLAN

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

ALL CONCENTRATED DRAINAGE, INCLUDING ROOF WATER, SHALL BE CONDUCTED, VIA GRAVITY TO THE STREET OR AN APPROVED LOCATION AT A 2% MINIMUM.

PROJECT NAME: THE DONA SUSANA Dr. RESIDENCE

PROJECT ADRESS: 2968 DONA SUSANA Dr. STUDIO CITY, CA. 91604

COVER SHEET AND SITE PLAN

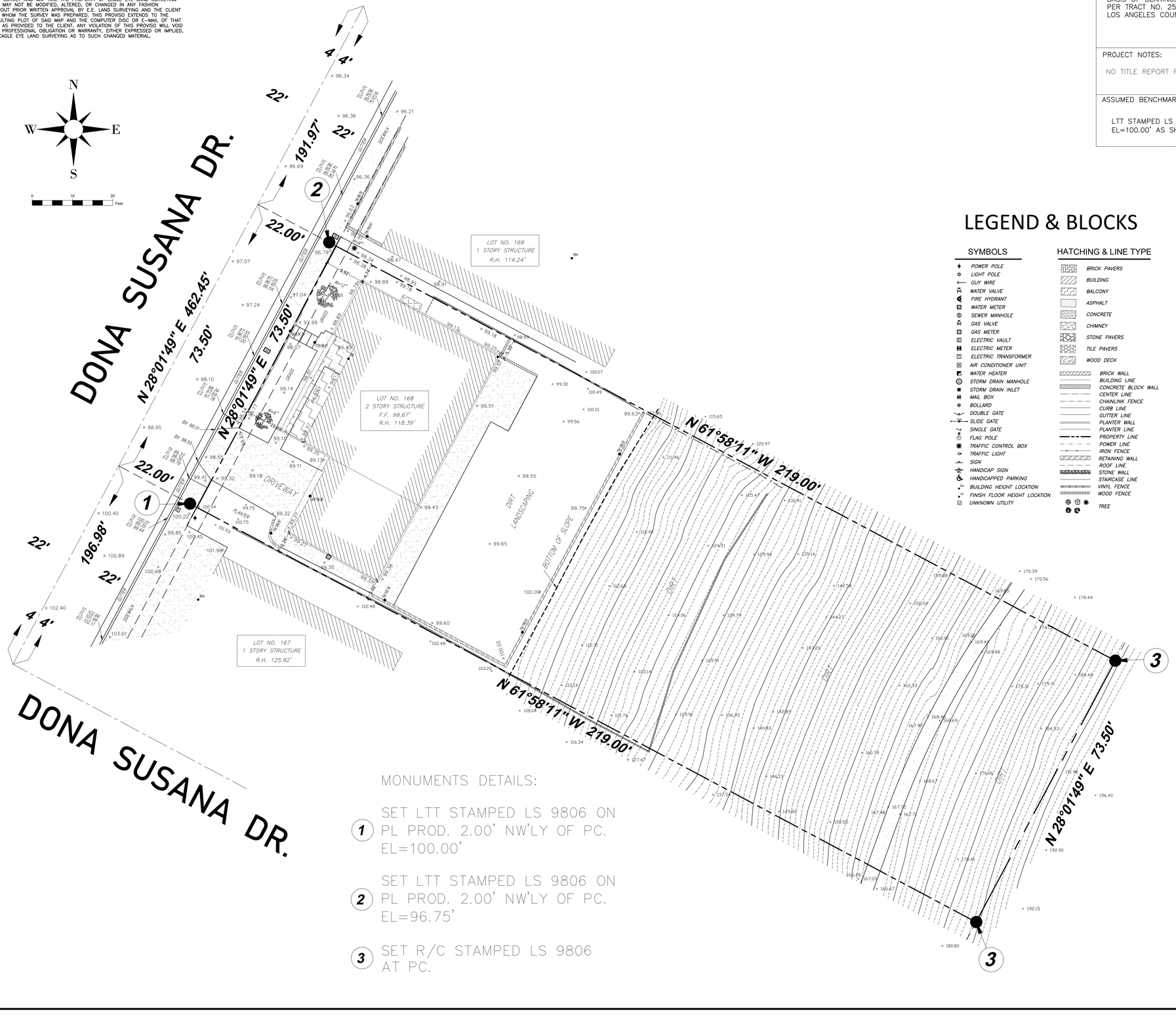
DESIGNER: ENR DESIGN & DRAFTING, INC.
Ph: (818) 282-0437
Fax: (818) 401-0713

No	SUBMITTAL	DATE	BY
	2nd PLAN CHECK SET	01-08-25	

Date: 00-00-00
Scale: AS NOTED
Drawn By: AC
Job No.

SHEET #
A1.0
OF SHTS

NOTE



MONUMENTS DETAILS:

(1) SET LTT STAMPED LS 9806 ON PL PROD. 2.00' NW'LY OF PC. EL=100.00'

(2) SET LTT STAMPED LS 9806 ON PL PROD. 2.00' NW'LY OF PC. EL=96.75'

(3) SET R/C STAMPED LS 9806 AT PC.

LEGEND & BLOCKS

SYMBOLS

- POWER POLE
- LIGHT POLE
- GUY WIRE
- WATER VALVE
- FIRE HYDRANT
- WATER METER
- SEWER MANHOLE
- GAS VALVE
- GAS METER
- ELECTRIC VAULT
- ELECTRIC METER
- ELECTRIC TRANSFORMER
- AIR CONDITIONER UNIT
- WATER HEATER
- STORM DRAIN MANHOLE
- STORM DRAIN INLET
- MAIL BOX
- BOLLARD
- DOUBLE GATE
- SLIDE GATE
- SINGLE GATE
- FLAG POLE
- TRAFFIC CONTROL BOX
- TRAFFIC LIGHT
- SIGN
- HANDICAP SIGN
- HANDICAPPED PARKING
- BUILDING HEIGHT LOCATION
- FINISH FLOOR HEIGHT LOCATION
- UNKNOWN UTILITY

HATCHING & LINE TYPE

- BRICK PAVERS
- BUILDING
- BALCONY
- ASPHALT
- CONCRETE
- CHIMNEY
- STONE PAVERS
- TILE PAVERS
- WOOD DECK
- BRICK WALL
- BUILDING LINE
- CONCRETE BLOCK WALL
- CENTER LINE
- CHAINLINK FENCE
- CURB LINE
- GUTTER LINE
- PLANTER WALL
- PLANTER LINE
- PROPERTY LINE
- POWER LINE
- IRON FENCE
- RETAINING WALL
- ROOF LINE
- STONE WALL
- STAIRCASE LINE
- VINYL FENCE
- WOOD FENCE
- TREE

BASIS OF BEARINGS: N 28°01'49" E CENTERLINE OF DONA SUSANA DR. PER TRACT NO. 25056, M.B. 666-10-20 AS FILED IN THE RECORDS OF LOS ANGELES COUNTY.

PROJECT NOTES:

NO TITLE REPORT PROVIDED, NO EASEMENTS SHOWN.

ASSUMED BENCHMARK:

LTT STAMPED LS 9806 ON PL PROD. 2.00' NW'LY OF SW'LYPC. EL=100.00' AS SHOWN HEREON.

ITEM	#	DATE OF REVISIONS:

MAP ISSUE DATE: 11/18/2023

DRAFTED BY: M.A.P.

ABBREVIATIONS :

AB	AGGREGATE BASE
AC	ASPHALT PAVEMENT
AD	AREA DRAIN
BM	BENCHMARK
BOS	BOTTOM OF STAIRS
BOW	BACK OF WALK
BRMP	BOTTOM OF RAMP
BS	BOTTOM OF SLOPE
CB	CATCH BASIN
CBW	CONCRETE BLOCK WALL
CF	CURB FACE
CLF	CHAIN LINK FENCE
CONC	CONCRETE
E	EAST
EG	EDGE OF GUTTER
EL	ELEVATION
EM	ELECTRIC METER
EMH	ELECTRIC MANHOLE
EP	EDGE OF PAVEMENT
EPB	ELECTRIC PULL BOX
EV	ELECTRIC VAULT
EVB	ELECTRICAL VENTILATION BOX
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FND	FOUND
FOW	FACE OF WALK
FS	FINISHED SURFACE
GB	GRADE BREAK
GM	GAS METER
GV	GAS VALVE
ICV	IRRIGATION CONTROL VALVE
IE	INVERT ELEVATION
IP	IRON PIPE
LP	LEAD, TACK & TAG
LT	LEAD & TACK
MP	METAL POST
N	NORTH
NG	NATURAL GROUND ELEVATION
O/S	OFFSET
OHW	OVERHEAD WIRE
PB	PULL BOX
PC	PROPERTY CORNER
PL	PROPERTY LINE
PLS	PROFESSIONAL LAND SURVEYOR
PLT	PARKING LOT LIGHT
PM	PARKING METER POST
PP	POWER POLE
PROD	PRODUCED
RCE	REGISTERED CIVIL ENGINEER
RW	RETAINING WALL
S	SOUTH
SB	SPLASH BOX
SDMH	STORM DRAIN MANHOLE
SMH	SEWER MANHOLE
SPB	SIGNAL PULL BOX
STLT	STREET LIGHT
SW	SPIKE & WASHER
TBM	TEMPORARY BENCHMARK
TC	TOP OF CURB
TELMH	TELEPHONE MANHOLE
TG	TOP OF GRATE ELEVATION
TOS	TOP OF STAIRS
TR	TREE
TS	TRAFFIC SIGNAL
TS	TOP OF SLOPE
TW	TOP OF WALL
TX/BX	TOP/BOTTOM OF X
W	WEST
WD-FENCE	WOOD FENCE
WI-FENCE	WROUGH IRON FENCE
WM	WATER METER
WV	WATER VALVE

E.E.

LAND SURVEYING

CLIENT:
PEPPER

PROJECT NO.
23-263

DATE:
11/14/23

ASSESSORS'S I.D. NUMBER:
APN: 2380-029-015

LEGAL DESCRIPTION
LOT NO. 168
TRACT NO. 25056
M.B. 666-10-20

BOUNDARY/TOPOGRAPHIC SURVEY

SITE ADDRESS:
2968 DONA SUSANA DR, STUDIO CITY, CA 91604

LICENSED LAND SURVEYOR

ALL MAPS, PLATS, REPORTS, DESCRIPTIONS, OR OTHER DOCUMENTS ARE PREPARED UNDER THE RESPONSIBLE CHARGE OF A LICENSED LAND SURVEYOR, LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF CALIFORNIA, MICHAEL PROFET, LS 9806, PURSUANT TO THE PROFESSIONAL LAND SURVEYOR'S ACT BUSINESS AND PROFESSIONS CODE SECTION 8700-8805.

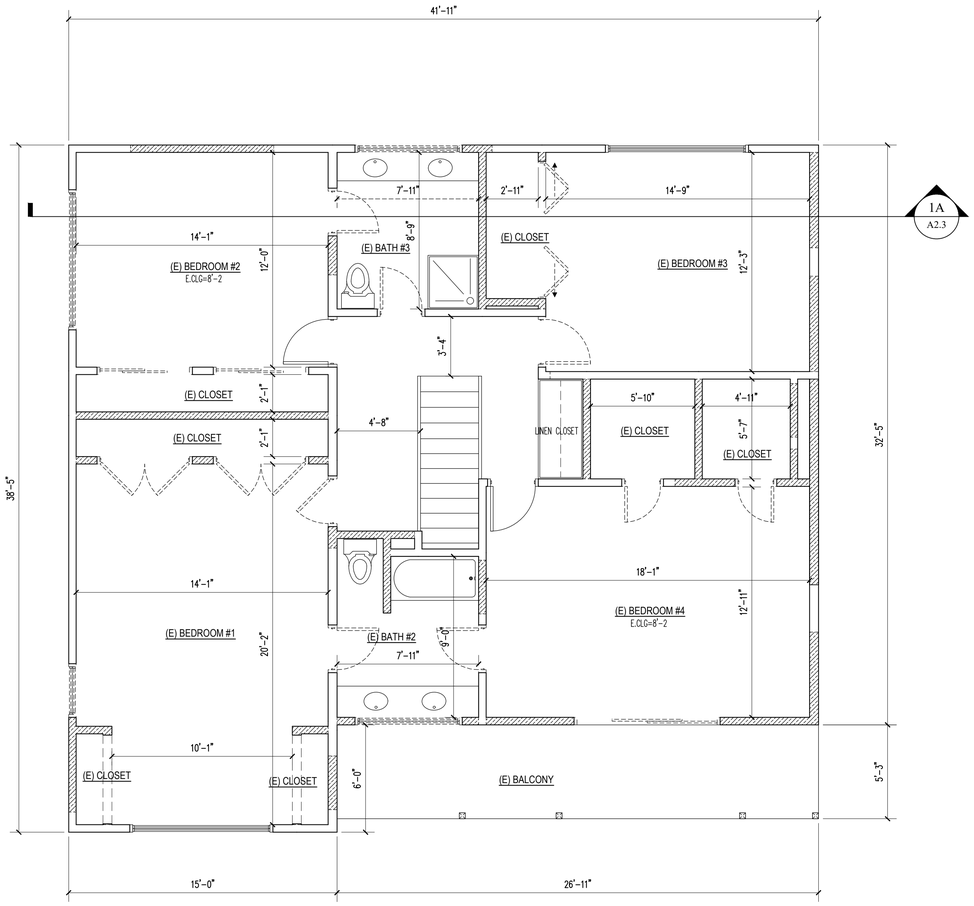
LICENSED LAND SURVEYOR
MICHAEL A. PROFET
9806
STATE OF CALIFORNIA

11/18/2023

PREPARED BY:

EAGLE EYE LAND SURVEYING

CIVIL ENGINEERING & LAND SURVEYING
1311 MANHATTAN BEACH BLVD.
#4 MANHATTAN BEACH, CA 92780
PHONE (310)955 8901



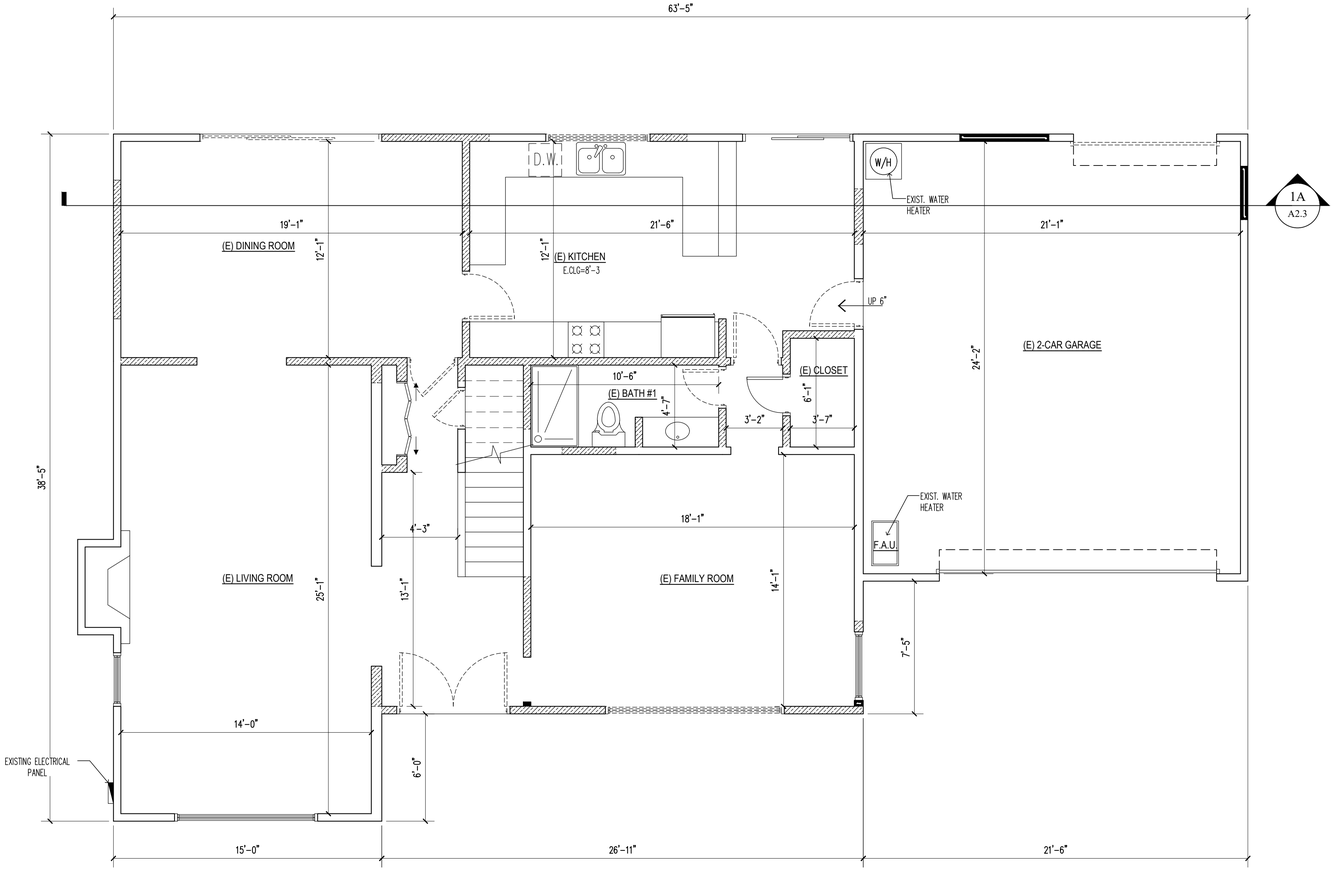
EXISTING 2nd FLOOR PLAN / DEMOLITION PLAN

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

NOTE TO CLIENT:
ALL DIMENSIONS SHOWN ON PLAN ARE WITHIN A +/-2" TOLERANCE. DISCREPANCIES ARE ALLOWED DUE TO UNEVEN EXTERIOR STUCCO THICKNESS AND/OR EXISTING INTERIOR PLUMBING WALLS.

LEGEND:

- DEMO WALL
- UPPER WALLS OR HEADERS
- NEW WALL — PLUMBING WALLS SHALL BE FRAMED 2X6 Min. (FOR DRILLING AND NOTCHING OF STUDS)
- EXISTING WALL TO REMAIN
- 1 HR RATED WALL 5/8" TYPE X GYP BOARD ON THE GARAGE SIDE, FROM FLOOR TO UNDERSIDE OF ROOF SHEATHING.
- (1) SEE DOOR SCHEDULE
- <1> SEE WINDOW SCHEDULE
- (E) EXISTING TO REMAIN
- SMOKE DETECTOR –HARD WIRED 110 VOLT–W/ BATTERY BACK–UP & LOW BATERY SIGNAL– INTERCONNECTED
- SMOKE DETECTOR –HARD WIRED WITH BATTERY BACK UP– INTERCONNECTED
- CARBON MONOXIDE ALARM
  AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EVERY LEVEL INCLUDING THE BASEMENT IN DWELLING UNITS THAT HAVE FUEL–FIRED APPLIANCES OR ATTACHED GARAGES. CARBON MONOXIDE ALARM SHALL BE INTERCONNECTED HARD–WIRED WITH BATTERY BACK–UP.



EXISTING 1st FLOOR PLAN / DEMOLITION PLAN

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

NOTE TO CLIENT:
ALL DIMENSIONS SHOWN ON PLAN ARE WITHIN A +/-2" TOLERANCE. DISCREPANCIES ARE ALLOWED DUE TO UNEVEN EXTERIOR STUCCO THICKNESS AND/OR EXISTING INTERIOR PLUMBING WALLS.

PROJECT NAME
THE DONA SUSANA Dr. RESIDENCE

PROJECT ADRESS
2968 DONA SUSANA Dr.
STUDIO CITY, CA. 91604

EXISTING PLANS

DESIGNER
ENR DESIGN & DRAFTING, INC.
Ph.: (818) 282-0437
Fax: (818) 401-0713

No	SUBMITTAL	DATE	BY
	SUBMITTAL	00/00/00	

Date: 00/00/00
Scale: 1/4"=1'-0"
Drawn By: AC
Job No.

SHEET #
A1.1
OF SHTS

DEPARTMENT OF BUILDING AND SAFETY/PUBLIC WORKS
PRELMINNARY REFERRAL FORM FOR
BASELINE HILLSIDE ORDINANCE NO. 181,624 AND HILLSIDE ORDINANCE No. 174,652

Building and Safety
Address 2968 N DONA SUSANA DR **District map** 156B173 **APN** 2380029015
Tract TR 25056 **Block** **Lot** 168

Public Works:

Street designations: Standard vs., Substandard Hillside Limited (for all the streets, public or private, abutting or adjacent to the lot(s)) **(LAMC 12.21A17(e)(1)) or LAMC 12.21C10(i)(1))**

Street Name (1) N DONA SUSANA DR
R/W width 44' **Roadway width:** 35' **Plan Index** AERIAL
☑ **Lot fronts on a standard hillside limited street (R/W ≥ 36' AND Rdwy ≥ 28')**
☐ **Lot fronts on a substandard hillside limited street** Dedication required? ☒ No ☐ Yes - width

Street Name (2)
R/W width **Roadway width:** **Plan Index**
☐ **Lot fronts on a standard hillside limited street (R/W ≥ 36' AND Rdwy ≥ 28')**
☐ **Lot fronts on a substandard hillside limited street** Dedication required? ☒ No ☐ Yes - width

Street Name (3)
R/W width **Roadway width:** **Plan Index**
☐ **Lot fronts on a standard hillside limited street (R/W ≥ 36' AND Rdwy ≥ 28')**
☐ **Lot fronts on a substandard hillside limited street** Dedication required? ☒ No ☐ Yes - width

Vehicular Access:

1. Is the **Continuous Paved Roadway (CPR)*** at least 28 feet wide from the driveway apron of the subject lot to the boundary of the Hillside Area? ☑ Yes ☐ No
2. Do **any** of the streets listed in the **Street designations section** have a roadway width of less than 20 feet adjacent to the lot(s)? **(LAMC 12.21A17(e)(2) or LAMC 12.21.C10(i)(2))**
   ☐ **Yes– A Zoning Administrator Determination (ZAD) is required per 12.24X21 or 12.24X28** OR the roadway shall be widened to a minimum 20 foot width via a Public Works construction permit**
   ☑ No
3. Is the **CPR** at least **20** feet wide from the driveway apron of the subject lot to the boundary of the Hillside Area? **(LAMC 12.21A17(e)(3) or LAMC 12.21.C10(i)(3))**
   ☑ Yes
   ☐ **No – A Zoning Administrator Determination (ZAD) is required per 12.24X21 or 12.24X28** OR the roadway shall be widened to a minimum 20 foot width throughout via a Public Works construction permit**

*CPR – begins at the driveway apron and must be continuous and without obstacles to the boundary of the Hillside Area

Sewer Connection: (LAMC 12.21.A17(g) or LAMC 12.21.C10(j)
Lot located within 200 feet of available sewer mainline:
☑ Use existing wye and permit ☐ Obtain new connection and new permit
☐ Use existing wye and obtain new permit ☐ Construct mainline (B permit from BOE)
Lot located greater than 200 feet from an available sewer mainline:
☐ Obtain LADBS approval for onsite sewer ☐ Construct mainline (B permit from BOE)

Public Works Employee signing form: **PAGE 1 of 2**

Sign Colin C. Loredo Print name COLIN C. LOREDO

Date: 9/25/2023 Phone 818-374-4629 Location VALLEY

DEPARTMENT OF BUILDING AND SAFETY/PUBLIC WORKS
PRELMINNARY REFERRAL FORM FOR
BASELINE HILLSIDE ORDINANCE NO. 181,624 AND HILLSIDE ORDINANCE No. 174,652

****IMPORTANT**: If a ZAD is required as a result of a CPR having a width of less than 20 feet, typically a BOE investigation and report is not required.

If a ZAD is required for lot(s) that are abutting street(s) with roadway width(s) of less than 20 feet, a formal investigation and engineering report **WILL BE REQUIRED**. The engineering report will be provided after submittal of all documentation and payment of fees. Measurements and statements contained herein may be adjusted in the engineering report.

Applicants subject to a ZAD as listed above are advised to submit the following documents and pay the BOE investigation fee to either the BOE Valley District Office Public Counter at 6262 Van Nuys Blvd. Rm. 251 Van Nuys CA 91401 or BOE Land Development Group Public Counter at 201 N. Figueroa St. Ste. 1150, Los Angeles, CA 90012

1. BOE investigation fee. (check made payable to the City of Los Angeles) (Per LAMC 62.106)
2. Two (2) copies of the Planning Master Land Use Application.
3. Two (2) copies of the project site plan.
4. Two (2) copies of the radius map.
5. Picture of the existing building, sidewalk, curb, and gutter.

Due to the possible implications that dedications and improvements may have on the development of a project, applicants that do not pay the BOE investigation fee for the preparation of a detailed engineering report may have their application placed on hold until such information is provided. Questions and concerns regarding the engineering report may be presented at the hearing.

The typical BOE standard improvement requirement is: Construct a minimum 20 foot wide roadway with a 14 foot half roadway and 4 foot sidewalk adjacent to the property within a minimum 18 foot half right of way. Sidewalk easement may be required to make driveway apron ADA compliant.

Applicants wishing to complete public improvements required in lieu of applying for a ZAD for relief from minimum street access requirements are advised to contact the B permit section of the BOE district in which the property is located to discuss requirements for public street improvements or deviations from the standard improvement requirement.

Central: 201 N Figueroa St, Ste. 770, Los Angeles CA, 90012

Harbor 608 Harbor Blvd 4th floor, San Pedro, CA 90731

Valley 6262 Van Nuys Blvd, Rm. 351, Van Nuys, CA 91401

West LA: 1828 Sawtelle Blvd, 3rd floor, West Los Angeles CA 90025

City of Los Angeles
Department of Building and Safety

Version 1

Grading Pre-Inspection Report

Address: **2968 N DONA SUSANA DR**
Council District: **4** Permit Application: **23030-20000-06729**

Work Description:
GRADING PREINSPECTION FOR ADDITION/REMODEL TO (E) SFD, (N) POOL, AND (N) RETAINING WALL.

Inspector/Telephone: **MANUEL TEJADA, (818) 374-4357**
Inspection District: **VN**
Inspection Date: **11/03/2023**

Property Posted: **N/A** Posting Date: **N/A** Posting Fees Paid? **No**
Tract: **TR 25056**
Block: Lot(s): **168** ARB: County Ref No: **M B 666-10/20**

Approved Graded Lot: **No**	Bearing Value:
Fill Over 100 Feet: **No**	Buttress Fill: **No**
Slope of Surface: **Ascending**	Natural Soil Classification 1804.2: **Silty sand bedrock**
	Cut: degrees Height: ft in
Fill: degrees Height: ft in	
Natural: **2-1** degrees Height: **100' +**ft in	Slide Area: **No**
Sewer Available: **N/A**	PSDS Sized Per Code: **N/A**
Site is **Above** Street	Roof Gutters: **No**
Condition of Street for Drainage Purposes **Paved**	Recommended Termination of Drainage **Street**
Driveway Grade: **% -**	Maximum Rough Grade Allowed: **%**

GRADING APPROVAL TO ISSUE PERMIT(S)
OK TO ISSUE. SEE BELOW FOR COMMENTS.
X DO NOT ISSUE UNTIL BELOW REQUIREMENTS HAVE BEEN SATISFIED.

Page 1 of 3

X 1. A grading permit is required for **retaining wall footings inspection and subdrain insp. back fill.**

X 2. A retaining wall permit is required. .

3. OSHA permit required for **vertical cuts 5 feet or over.**

4. All footings shall be founded in undisturbed natural soil per Code.

5. Design for expansive soil or submit a soils report to the grading division per information bulletin P/BC 2008-116 and 91.1805.8.

6. In the event excavations reveal unfavorable conditions, the services of a soils engineer and/or geologist may be required.

X 7. **Geological and Soils** report(s) are required. Submit three copies (1 original and 2 copies), with appropriate fees, to the Grading Section for review and approval.

X 8. Incorporate all recommendations of the approved Geological and Soils report(s) and Department letters dated To come into the plans. **Geologist and Soils Engineer** to sign plans.

9. Site is subject to mudflow. Comply with provisions of Section 91.7014.3. Geological and soils report required.

10. Buildings shall be located clear of the toe of all slopes which exceed a gradient of 3 horizontal to 1 vertical as per Section 91.1805.3.1.

11. Footings shall be set back from the descending slope surface exceeding 3 horizontal to 1 vertical as per Section 91.1805.3.7.

12. Swimming pools and spas shall be set back from descending and ascending slopes as per Section 91.1805.3.3.

X 13. Department approval is required for construction of Ret, walls. on or over slopes steeper than 2 horizontal to 1 vertical.

14. Provide complete details of engineered temporary shoring or slot cutting procedures on plans. Call for inspection before excavation begins.

X 15. All concentrated drainage, including roof water, shall be conducted, via gravity, to the street or an approved location at a 2% minimum. Drainage to be shown on the plans.

X 16. A Registered Deputy Inspector is required.

X 17. All fill or backfill shall be compacted by mechanical means to a minimum 90% relative compaction as determined by ASTM method D-1557. Subdrains shall be provided where required by Code.

X 18. Specify on the plans: "The soils engineer is to approve the key or bottom and leave a certificate on the site for the grading inspector. The grading inspector is to be notified before any grading begins and, for bottom inspection, before fill is placed. Fill may not be placed without approval of the grading inspector."

X 19. Existing non-conforming slopes shall be cut back at 2:1 (26 degrees) or retained. All concentrated drainage, including roof water, shall be conducted, via gravity, to the street or an approved location at a 2% minimum. Drainage to be shown on the plans.

X 20. All cut or fill slopes shall be no steeper the 2:1 (26 degrees).

X 21. Stake and flag the property lines in accordance with a licensed survey map. .

22. Approval required by the Department for **.**

23. Approval required by the Department of Public Works, Urban Forestry Division, for native tree protected ORD. 177,040. Phone # (213) 847-3077

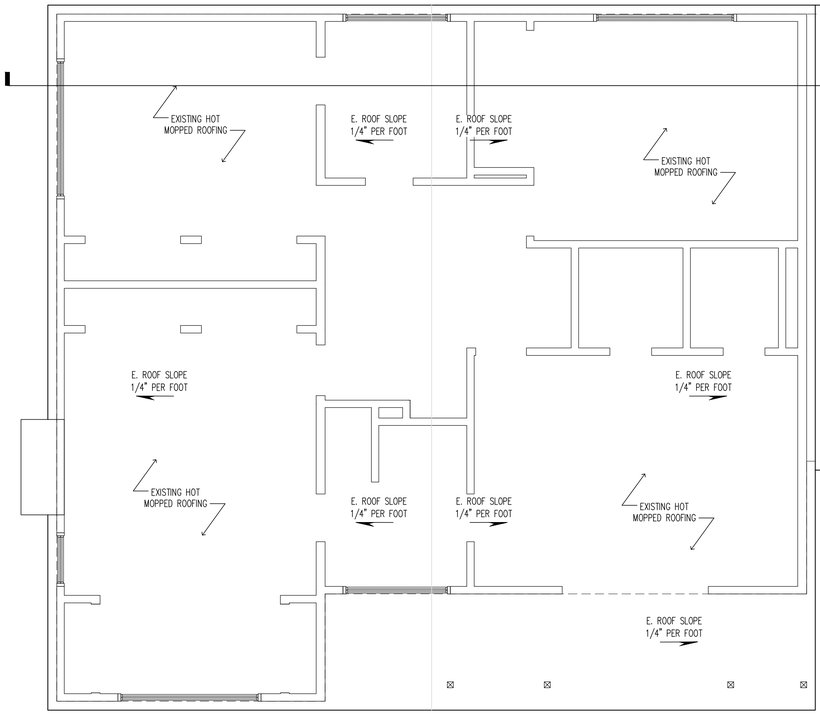
24. This is a preliminary pre-inspection only - base on limited information. When complete plans (and possibly calculations and/or required reports) are submitted for a permit, a new pre-inspection and fee will be required.

Page 2 of 3

** Additional requirements: **"NOTE" to plan check ret. wall has already been built with out Department inspections or approvals , do not issue permit for pool until retaining wall has been permit and approved.**

Construction of new occupied buildings or major additions to buildings on sites located in any of the Seismic Hazard Zones (liquefaction, Landslide or Alquist-Priolo Fault Zone) will require a geology and/or soil engineering report. For questions call (213) 482-0480.

Page 3 of 3



EXISTING ROOF PLAN

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

PROJECT NAME
THE DONA SUSANA Dr. RESIDENCE

PROJECT ADRESS
2968 DONA SUSANA Dr.
STUDIO CITY, CA. 91604

EXISTING ROOF PLAN

DESIGNER
ENR DESIGN & DRAFTING, INC.
Ph: (818) 282-0437
Fax: (818) 401-0713

No	SUBMITTAL	DATE	BY
	SUBMITTAL	00/00/00	

Date: 00/00/00
Scale: 1/4"=1'-0"
Drawn By: AC
Job No.

SHEET # A1.2 OF SHTS

STORM WATER POLLUTION CONTROL **FORM GRN 1**

(2023 Los Angeles Green Building Code)

Storm Water Pollution Control Requirements for Construction Activities
Minimum Water Quality Protection Requirements for All Construction Projects

The following notes shall be incorporated in the approved set of construction/grading plans and represents the minimum standards of good housekeeping which must be implemented on all construction projects.

Construction means constructing, clearing, grading or excavation that result in soil disturbance. Construction includes structure teardown (demolition). It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility; emergency construction activities required to immediately protect public health and safety; interior remodeling with no outside exposure of construction material or construction waste to storm water; mechanical permit work; or sign permit work. (Order No. 01-182, NPDES Permit No. CAS004001 – Part 5: Definitions)

1. Eroded sediments and pollutants shall be retained on site and shall not be transported from the site via sheet flow, swales, area drains, natural drainage or wind.
2. Stockpiles of earth and other construction-related materials shall be covered and/or protected from being transported from the site by wind or water.
3. Fuels, oils, solvents and other toxic materials must be stored in accordance with their listing and shall not contaminate the soil nor the surface waters. All approved toxic storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of properly and shall not be washed into the drainage system.
4. Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained on the project site.
5. Excess or waste concrete may not be washed into the public way or any drainage system. Provisions shall be made to retain concrete waste on-site until it can be appropriately disposed of or recycled.
6. Trash and construction –related solid wastes must be deposited into a covered receptacle to prevent contamination of storm water and dispersal by wind.
7. Sediments and other materials shall not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the street/public ways. Accidental depositions must be swept up immediately and may not be washed down by rain or by any other means.
8. Retention basins of sufficient size shall be provided to retain storm water runoff on-site and shall be properly located to collect all tributary site runoff.
9. Where retention of storm water runoff on-site is not feasible due to site constraints, runoff may be conveyed to the street and the storm drain system provided that an approved filtering system is installed and maintained on-site during the construction duration.

VOC AND FORMALDEHYDE LIMITS **FORM GRN 11**

2023 Los Angeles Green Building Code
(Incorporate this form into the plans)

2020 Los Angeles Green Building Code Tables 4.504.1, 4.504.2, 4.504.3, 4.504.5, 5.504.4.1, 5.504.4.2, 5.504.4.3, 5.504.4.5

VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS [2,3]
Grams of VOC per Liter of Coating, Less Water and Less Exempt Compounds

COATING CATEGORY [3]	CURRENT LIMIT
Flat coatings	50
Nonflat coatings	50
Nonflat-high gloss coatings	50
Specialty Coatings	
Aluminum roof coatings	100
Basement specialty coatings	400
Bituminous roof coatings	50
Bituminous roof primers	350
Bond breakers	350
Concrete curing compounds	100
Concrete curing compounds, Roadways & Bridges	350
Concrete/masonry sealers	100
Driveway sealers	50
Dry fog coatings	50
Faux finishing coatings	
Clear Top Coat	100
Decorative Coatings	350
Glazes	350
Japan	350
Trowel Applied Coatings	50
Fire resistive coatings	150
Floor coatings	50
Form-release compounds	100
Graphic arts coatings (sign paints)	200
High temperature coatings	420
Industrial maintenance coatings	100
Low solids coatings	120
Magnesite cement coatings	450
Mastic texture coatings	100
Metallic pigmented coatings	150
Multicolor coatings	250
Pretreatment wash primers	420
Primers, sealers, and undercoaters	100
Reactive penetrating sealers	350
Recycled coatings	250
Roof coatings	50
Roof coatings, aluminum	100
Rust preventative coatings	100
Shellacs	
Clear	730
Opaque	550
Specialty primers, sealers and undercoaters	100
Stains	100
Stains, Interior	250
Stone consolidants	450
Swimming pool coatings	340
Traffic marking coatings	100
Tub and tile refinish coatings	420
Waterproofing membranes	100
Wood coatings	275
Wood preservatives	350
Zinc-rich primers	100

[1] Grams of VOC per liter of coating, including water and including exempt compounds.
[2] The specified limits remain in effect unless revised limits are listed in subsequent columns in the table.
[3] Some values in this table are derived from those specified by the California Air Resources Board, Architectural Coatings Suggested Control Measure, February 5, 2016. More information is available from the Air Resources Board.

FORMALDEHYDE LIMITS[1]
Maximum Formaldehyde Emissions in Parts per Million

PRODUCT	CURRENT LIMIT
Hardwood plywood veneer core	0.05
Hardwood plywood composite core	0.05
Particleboard	0.09
Medium density fiberboard	0.11
Thin medium density fiberboard[2]	0.13

[1] Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E 1333. For additional information, see California Code of Regulations, Title 17, Sections 93120 through 93120.12.
[2] Thin medium density fiberboard has a maximum thickness of 5/16 inches (8 mm).

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

SEALANTS	CURRENT VOC LIMIT
Architectural	50
Marine deck	760
Nonmarine roof	300
Roadway	250
Single-ply roof membrane	450
Other	420
SEALANT PRIMERS	
Architectural	
Nonporous	250
Porous	775
Modified bituminous	500
Marine deck	760
Other	750

Note: For additional information regarding methods to measure the VOC content specified in these tables, see South Coast Air Quality Management District Rule 1168.

ADJUNCT VOC LIMIT [1,2]
Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
Indoor carpet adhesives	50
Carpet pad adhesives	50
Outdoor carpet adhesives	150
Wood flooring adhesive	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	100
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and trim adhesive	250
SUBSTRATE SPECIFIC APPLICATIONS	
Metal to metal	30
Plastic foams	50
Porous material (except wood)	50
Wood	30
Fiberglass	80

[1] If an adhesive is used to bond dissimilar substrates together, the adhesive with the highest VOC content shall be used.
[2] For additional information regarding methods to measure the VOC content specified in this table, see South Coast Air Quality Management District Rule 1168, http://www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF.

2023 Los Angeles Green Building Code **FORM GRN 14**

GREEN BUILDING CODE PLAN CHECK NOTES

RESIDENTIAL BUILDINGS

1. For each new dwelling and townhouse, provide a listed raceway that can accommodate a dedicated 208/240 volt branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter), shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. The panel or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE". (4.106.4.1)
2. For common parking area serving R-occupancies, the electrical system shall have sufficient capacity to simultaneously charge all designated EV spaces at the full rated amperage of the Electric Vehicle Supply Equipment (EVSE). Design shall be based upon a 40-ampere minimum branch circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter), shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of an EV charger. Raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the Los Angeles Electrical Code. (4.106.4.2)
3. Roofs with slopes < 2:12 shall have a 3-year aged SRI value of at least 75 or both a 3-year aged solar reflectance of at least 0.63 and a thermal emittance of at least 0.75. Roofs with slopes ≥ 2:12 shall have an aged SRI value of at least 16 or both a 3-year solar reflectance of at least 0.20 and a thermal emittance of at least 0.75. (4.106.5)
4. The required hardscape used to reduce heat island effects shall have a solar reflectance value of at least 0.30 as determined per ASTM E1918 or ASTM C1549. (4.106.7)
5. The flow rates for all plumbing fixtures shall comply with the maximum flow rates in Section 4.303.1. (4.303.1)
6. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads controlled by a single valve shall not exceed 2.0 gallons per minute at 80psi, or the shower shall be designed to only allow one showerhead to be in operation at a time. (4.303.1.3.2)
7. Installed automatic irrigation system controllers shall be weather- or soil-based controllers. (MWELO, § 492.7)
8. For projects that include landscape work, the *Landscape Certification*, Form GRN 12, shall be completed prior to final inspection approval. (State Assembly Bill No. 1881)
9. Annular spaces around pipes, electric cables, conduits, or other openings in the building's envelope at exterior walls shall be protected against the passage of rodents by closing such openings with cement mortar, concrete masonry, or metal plates. Piping prone to corrosion shall be protected in accordance with Section 313.0 of the Los Angeles Plumbing Code. (4.406.1)
10. Materials delivered to the construction site shall be protected from rain or other sources of moisture. (4.407.4)
11. Only a City of Los Angeles permitted hauler will be used for hauling of construction waste. (4.408.1)
12. For all new equipment, an Operation and Maintenance Manual including; at a minimum, the items listed in Section 4.410.1, shall be completed and placed in the building at the time of final inspection. (4.410.1)
13. All new gas fireplaces must be direct-vent, sealed combustion type. Wood burning fireplaces are prohibited per AQMD Rule 445. (4.503.1, AQMD Rule 445)
14. All duct and other related air distribution component openings shall be covered with tape, plastic, or sheet metal until the final startup of the heating, cooling and ventilating equipment. (4.504.1)
15. Paints and coatings, adhesives, caulks and sealants shall comply with the Volatile Organic Compound (VOC) limits listed in Tables 4.504.1-4.504.3.
16. The *VOC Content Verification Checklist*, Form GRN 2, shall be completed and verified prior to final inspection approval. The manufacturer's specifications showing VOC content for all applicable products shall be readily available at the job site and be provided to the field inspector for verification. (4.504.2.4)
17. All new carpet and carpet cushions installed in the building interior shall meet the testing and product requirements of one of the following (4.504.3):
    a. Carpet and Rug Institute's Green Label Plus Program
    b. California Department of Public Health's Specification 01350
    c. NSF/ANSI 140 at the Gold level
    d. Scientific Certifications Systems Indoor Advantage™ Gold
18. 80% of the total area receiving resilient flooring shall comply with one or more of the following (4.504.4):
    a. VOC emission limits defined in the CHPS High Performance Products Database
    b. Certified under UL GREENGUARD Gold
    c. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program
    d. Meet the California Department of Public Health's Specification 01350
19. New hardwood plywood, particle board, and medium density fiberboard composite wood products used in the building shall meet the formaldehyde limits listed in Table 4.504.5. (4.504.5)
20. The *Formaldehyde Emissions Verification Checklist*, Form GRN 3, shall be completed prior to final inspection approval. (4.504.5)
21. Mechanically ventilated buildings shall provide regularly occupied areas of the building with a MERV 13 filter for outside and return air. Filters shall be installed prior to occupancy and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual. (4.504.6)
22. A 4-inch thick base of ½ inch or larger clean aggregate shall be provided for proposed slab on grade construction. A vapor barrier shall be provided in direct contact with concrete for proposed slab on grade construction. (4.505.2.1)
23. Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed until it is inspected and found to be satisfactory. (4.505.3)
24. Newly installed bathroom exhaust fans shall be ENERGY STAR compliant and be ducted to terminate to the outside of the building. Fans must be controlled by a humidistat which shall be readily accessible. Provide the manufacturer's cut sheet for verification. (4.506.1)
25. A copy of the construction documents or a comparable document indicating the information from Energy Code Sections 110.10(b) through 110.10(c) shall be provided to the occupant. (Energy Code §110.10(d))
26. The heating and air-conditioning systems shall be sized and designed using ANSI/ACCA Manual J-2004, ANSI/ACCA 29-D-2009 or ASHRAE handbooks and have their equipment selected in accordance with ANSI/ACCA 36-S Manual S-2004. (4.507.2)

2023 Los Angeles Green Building Code **FORM GRN 9**

MANDATORY REQUIREMENTS CHECKLIST

ADDITIONS AND ALTERATIONS TO RESIDENTIAL BUILDINGS

(COMPLETE AND INCORPORATE THIS FORM INTO THE PLANS)

Permit # 24014 - 20000 - 03449 Date: 12-26-24

ITEM #	CODE SECTION	REQUIREMENT	REFERENCE SHEET (Sheet # or N/A)	COMMENTS (e.g. note #, detail # or reason for N/A)
		PLANNING AND DESIGN		
1	4.106.2	**Storm water drainage and retention during construction**	A1.3	GRN #1
2	4.106.3	**Grading and paving**	A1.0	SITE PLAN
3	4.106.5	**Cool roof (additions ≥ 500 sq. ft. or ≥ 50%)**	A4.0	ROOF PLAN / SPECS SHEET
		ENERGY EFFICIENCY		
4	4.211.4	**Solar ready (additions ≥ 2,000 sq. ft.)**	N/A	N/A
		WATER EFFICIENCY & CONSERVATION		
5	4.303.1	**Water conserving plumbing fixtures and fittings**	A1.3	GRN #14, NOTE #5
6	4.303.1.3.2	**Multiple showerheads serving one shower**	A1.3	GRN #14, NOTE #6
7	4.303.4	**Water use reduction**	N/A	SFD
8	4.304.1	**Outdoor water use in landscape areas**	N/A	E. LANDSCAPE
9	4.304.2	**Irrigation controllers**	N/A	E. LANDSCAPE
10	4.304.3	**Metering outdoor water use**	N/A	E. LANDSCAPE
11	4.304.4	**Exterior faucets**	N/A	RESIDENTIAL
12	4.304.5	**Swimming pool covers**	N/A	NO POOL
13	4.305.1	**Graywater ready**	N/A	E. LANDSCAPE
14	4.305.2	**Recycled water supply to fixtures**	N/A	
15	4.305.3.1	**Cooling towers (buildings ≤ 25 stories)**	N/A	
16	4.305.3.2	**Cooling towers (buildings > 25 stories)**	N/A	
		MATERIAL CONSERVATION & RESOURCE EFFICIENCY		
17	4.406.1	**Rodent proofing**	A1.3	GRN #14, NOTE #9
18	4.407.3	**Flashing details**	A5.0	DETAIL #1, #2, #4
19	4.407.4	**Material protection**	A1.3	GRN #14, NOTE #10
20	4.408.1	**Construction waste reduction**	A1.3	GRN #14, NOTE #11
21	4.410.1	**Operation and maintenance manual**	A1.3	GRN #14, NOTE #12
		ENVIRONMENTAL QUALITY		
22	4.503.1	**Fireplaces and woodstoves**	N/A	NO PROPOSED FIREPLACE

PLUMBING FIXTURE FLOW RATES **FORM GRN 16**

Residential Occupancies
2023 Los Angeles Green Building Code
(Incorporate this form into the plans)

SECTION 4.303.1
WATER REDUCTION FIXTURE FLOW RATES

FIXTURE TYPE	MAXIMUM ALLOWABLE FLOW RATE
Showerheads	1.8 gpm @ 80 psi
Lavatory faucets, residential	1.2 gpm @ 60 psi[1,3]
Lavatory faucets, nonresidential	0.4 gpm @ 60 psi[1,3]
Kitchen faucets	1.5 gpm @ 60 psi[2,4]
Metering Faucets	0.2 gallons/cycle
Gravity tank type water closets	1.28 gallons/flush[5]
Flushometer tank water closets	1.28 gallons/flush[5]
Flushometer valve water closets	1.28 gallons/flush[5]
Urinals	0.125 gallons/flush
Clothes Washers	ENERGY-STAR certified
Dishwashers	ENERGY-STAR certified

[1] Lavatory Faucets shall not have a flow rate less than 0.8 gpm at 20 psi.
[2] Kitchen faucets may temporarily increase flow above the maximum rate, but not above 2.2gpm @ 60psi and must default to a maximum flow rate of 1.8 gpm @ 60psi.
[3] Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.
[4] Kitchen faucets with a maximum 1.8 gpm flow rate may be installed in buildings that have water closets with a maximum flush rate of 1.06 gallons/flush installed throughout.
[5] Includes single and dual flush water closets with an effective flush of 1.28 gallons or less.
Single Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is the average flush volume when tested in accordance with ASME A112.19.233.2.
Dual Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush. Flush volumes will be tested in accordance with ASME A112.19.2 and ASME A112.19.14.

2023 Los Angeles Green Building Code **FORM GRN 18R**

WATER CONSERVATION NOTES - ORDINANCE #184248

RESIDENTIAL BUILDINGS

PLUMBING SYSTEM

1. Multi-family dwellings not exceeding three stories and containing 50 units or less shall install a separate meter or submeter within common areas and within each individual dwelling unit. (4.303.3)
2. Water use reduction shall be met by complying with one of the following:
   A. Provide a 20% reduction in the overall potable water use within the building. The reduction shall be based on the maximum allowable water use for plumbing fixtures and fittings as required by the Los Angeles Plumbing Code. Calculations demonstrating a 20% reduction in the building "water use baseline", as established in Table 4.303.4.1, shall be provided; or
   B. New fixtures and fittings shall comply with the maximum flow rates shown in Table 4.303.4.2, or
   C. Plumbing fixtures shall use recycled water.
   Exception: Fixture replacements (4.303.4)
3. New building on a site with 500 square feet or more of cumulative landscape area shall have separate meters or submeters for outdoor water use. (4.304.3)
4. Additions and alterations on a site with 500 square feet or more of cumulative landscape area and where the entire potable water system is replaced, shall have separate meters or submeters for outdoor water use. (4.304.3)
5. In other than single family dwellings, locks shall be installed on all publicly accessible exterior faucets and hose bibs. (4.304.4)
6. Provide a cover having a manual or power-operated reel system in any permanently installed outdoor in-ground swimming pool or spa in one- and two-family dwellings. For irregular-shaped pools where it is infeasible to cover 100% of the pool due to its irregular shape, a minimum of 80% of the pool shall be covered. (4.304.5)
7. Except as provided in this section, for sites with over 500 square feet of landscape area, alternate waste piping shall be installed to permit discharge from the clothes washer, bathtub, showers, and bathroom/restrooms wash basins to be used for a future graywater irrigation system. (4.305.1)
8. Except as provided in this section, where City-recycled water is available within 200 feet of the property line, water closets, urinals, floor drains, and process cooling and heating in the building shall be supplied from recycled water and shall be installed in accordance with the Los Angeles Plumbing Code. (4.305.2)
9. In new buildings of 25 stories or less, the cooling towers shall comply with one of the following:
   A. Shall have a minimum of 6 cycles of concentration (blowdown); or
   B. A minimum of 50% of the makeup water supply to the cooling towers shall come from non-potable water sources, including treated backwash. (4.305.3.1)
10. In new buildings over 25 stories, the cooling towers shall comply with all of the following:
    A. Shall have a minimum of 6 cycles of concentration (blowdown); and
    B. 100% of the makeup water supply to the cooling towers shall come from non-potable water sources, including treated backwash. (4.305.3.2)
11. Where groundwater is being extracted and discharged, develop and construct a system for onsite reuse of the groundwater. Alternatively, the groundwater may be discharged to the sewer. (4.305.4)
12. Provide a hot water system complying with one of the following (Los Angeles Plumbing Code Section 610.4.1):
    A. The hot water system shall not allow more than 0.6 gallons of water to be delivered to any fixture before hot water arrives.
    B. Where a hot water recirculation or electric resistance heat trace wire system is installed, the branch from the recirculating loop or electric resistance heat trace wire to the fixture shall contain a maximum of 0.6 gallons.
    C. Residential units having individual water heaters shall have a compact hot water system that meets all of the following:
       a. The hot water supply piping from the water heater to the fixtures shall take the most direct path.
       b. The total developed length of pipe from the water heater to farthest fixture shall not exceed the distances specified in Table 3.6.5 of the California Energy Code Residential Appendix.
       c. The hot water supply piping shall be installed and insulated in accordance with Section RA5.6.2 of the California Energy Code Residential Appendix.

IRRIGATION SYSTEM

12. A water budget for landscape irrigation use that conforms to the California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO) is required for new landscape areas of 500 sq. ft. or more. The following methods to reduce potable water use in landscape areas include, but are not limited to, use of captured rainwater, recycled water, graywater, or water treated for irrigation purposes and conveyed by a water district or public entity. (4.304.1)

2023 Los Angeles Green Building Code **FORM GRN 9**

ITM #	CODE SECTION	REQUIREMENT	REFERENCE SHEET (Sheet # or N/A)	COMMENTS (e.g. note #, detail # or reason for N/A)
23	4.504.1	**Covering of duct openings and protection of mechanical equipment during construction**	A1.3	GRN #14, NOTE #14
24	4.504.2	**Finish material pollutant control**	A1.3	GRN #14, NOTE #15
25	4.504.2.1	– **Adhesives, sealants, caulks**		
26	4.504.2.2	– **Paints and coatings**		
27	4.504.2.3	– **Aerosol paints and coatings**		
28	4.504.2.4	– **Verification**	A1.2	GRN #14, NOTE #16
29	4.504.3	**Carpet systems**	A1.2	GRN #14, NOTE #17
30	4.504.3.1	**Carpet cushion**	A1.2	GRN #14, NOTE #17
31	4.504.4	**Resilient flooring systems**	A1.2	GRN #14, NOTE #18
32	4.504.5	**Composite wood products**	A1.2	GRN #14, NOTE #19
33	4.504.6	**Filters**	A1.2	GRN #14, NOTE #21
34	4.505.2.1	**Capillary break**	N/A	RAISED FOUNDATION
35	4.505.3	**Moisture content of building materials**	A1.2	GRN #14, NOTE #23
36	4.506.1	**Bathroom exhaust fans**	A2.0, A2.1	LEGEN / FLR PLAN
37	4.507.2	**Heating and air-conditioning system design**	A1.3	GRN #14, NOTE #26

NOTES TO CONTRACTOR:

-CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO THE COMMENCEMENT OF/DEMOLITION/CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGNER AND ENGINEER.

PROJECT NAME
THE DONA SUSANA Dr. RESIDENCE

PROJECT ADRESS
2968 DONA SUSANA Dr.
STUDIO CITY, CA. 91604

GREEN BUILDING CODE NOTES

DESIGNER
ENR DESIGN & DRAFTING, INC.
Ph.: (818) 282-0437
Fax.: (818) 401-0713

No	SUBMITTAL	DATE	BY
	SUBMITTAL	00/00/00	

Date: 00/00/00
Scale: 1/4"=1'-0"
Drawn By: AC
Job No.

SHEET # A1.3 OF SHTS

DOOR SCHEDULE (#)

#	SIZE (WxH)	THK.	TYPE	CONST.	DESCRIPTION	REMARKS	U-FACTOR	SHGC
1	5'-4" x 7'-0"	1 3/4"	B	---	PIVOT DOOR	Exterior Door – W/ TEMPERED GLASS PANEL		
2	2'-8" x 6'-8"	1 3/4"	A	---	SINGLE HINGE	INTERIOR DOOR		
2B	2'-8" x 6'-8"	1 3/4"	F	---	SINGLE HINGE	LAUNDRY DOOR		
3	2'-8" x 6'-8"	1 3/4"	A	---	SINGLE HINGE	20 Min. Fire rated. Self closing, Tight fitting.		
4	2'-8" x 6'-8"	1 3/4"	A	---	SINGLE HINGE	EXTERIOR DOOR		
5	6'-0" x 6'-8"	1 3/4"	C	---	SLIDING	Exterior Door – W/ TEMPERED GLASS PANEL	0.30	0.23
6	15'-10" x 6'-10"	1 3/4"	C	---	SLIDING	Exterior Door – W/ TEMPERED GLASS PANEL	0.30	0.23
7	5'-0" x 6'-8"	1 3/4"	D	---	SLIDING	INTERIOR – CLOSET DOOR		
8	15'-6" x 7'-0"	1 3/4"	E	---	OVERHEAD	GARAGE DOOR		

Provide emergency egress from sleeping rooms. Minimum 24" clear height, 20" clear width, 5.7 sq. ft. minimum area and 44" maximum Opening Height.
Glazing in the following locations should be of safety glazing material in accordance with Section 2406.4:

a) Ingress and egress doors.

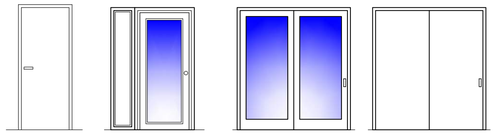
b.) Fixed and sliding panels of sliding door assemblies and panels in swinging doors other than wardrobe doors.

c.) Doors and enclosures for hot tubs, whirlpools, saunas, steam room, bathtubs and showers and in any portion of a building wall enclosing these compartments where the bottom exposed edge of the glazing is less than 60 inches above a standing surface drain inlet.

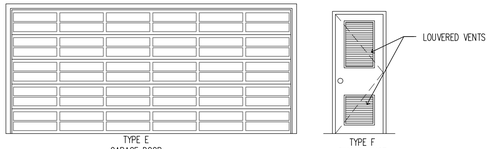
d). If within 2 feet of vertical edge of closed door and within 5 feet of standing surface.

e). In wall enclosing stairway landing.

The exterior doors must open over a landing not more than 1" below the threshold.
exception: Providing the door does not swing over the landing, landing shall be not more than 8" below the threshold.
ENTRY LOCKS AND DEADBOLTS LOCKS REQUIRED FOR ALL EXTERIOR DOORS, INCLUDING THE GARAGE TO THE HOUSE THE GARAGE TO THE REAR YARD AND THE OPTIONAL FRENCH DOORS.



TYPE A SINGLE HINGED | TYPE B PIVOT DOOR W/ SIDEPANEL | TYPE C SLIDING W/ GLASS PANELS | TYPE D SLIDING –CLOSET



TYPE E GARAGE DOOR | TYPE F SINGLE HINGE WITH LOUVERED VENT

WINDOW SCHEDULE (#)

#	SIZE (WxH)	HD.	TYPE	GLAZE	DESCRIPTION	SPECIFICATIONS	MANUFACTURER	U-FACTOR	SHGC
1	8'-0" x 4'-0"	6'-8"	C	Dual	FIXED		MILGARD	0.30	0.23
2	8'-0" x 4'-0"	6'-8"	C	Dual	FIXED		MILGARD	0.30	0.23
3	8'-0" x 4'-0"	6'-8"	C	Dual	FIXED		MILGARD	0.30	0.23
4	3'-0" x 1'-6"	6'-8"	B	Dual	SLIDING	TEMPERED	MILGARD	0.30	0.23
5	5'-0" x 3'-4"	6'-8"	B	Dual	SLIDING	TEMPERED	MILGARD	0.30	0.23
6	6'-9" x 3'-5"	6'-8"	C	Dual	FIXED		MILGARD	0.30	0.23
7	7'-9" x 3'-5"	6'-8"	C	Dual	FIXED		MILGARD	0.30	0.23
8	3'-0" x 3'-11"	6'-8"	B	Dual	SLIDING		MILGARD	0.30	0.23
9	8'-0" x 4'-0"	6'-8"	C	Dual	FIXED		MILGARD	0.30	0.23
10	2'-6" x 3'-6"	6'-8"	A	Dual	CASEMENT	TEMPERED	MILGARD	0.30	0.23
11	8'-0" x 4'-0"	6'-8"	C	Dual	FIXED		MILGARD	0.30	0.23
12	8'-0" x 4'-0"	6'-8"	C	Dual	FIXED		MILGARD	0.30	0.23
13	8'-0" x 4'-0"	6'-8"	B	Dual	SLIDING		MILGARD	0.30	0.23
14A	2'-0" x 4'-0"	7'-6"	C	Dual	FIXED		MILGARD	0.30	0.23
14B	8'-0" x 4'-0"	7'-6"	C	Dual	FIXED		MILGARD	0.30	0.23
14C	2'-0" x 4'-0"	7'-6"	C	Dual	FIXED		MILGARD	0.30	0.23
15	8'-0" x 4'-0"	7'-6"	B	Dual	SLIDING		MILGARD	0.30	0.23
16	6'-0" x 1'-6"	7'-6"	C	Dual	FIXED	TEMPERED	MILGARD	0.30	0.23
17	6'-0" x 5'-0"	7'-6"	C	Dual	FIXED	TEMPERED	MILGARD	0.30	0.23
18	2'-6" x 2'-0"	7'-6"	A	Dual	CASEMENT	TEMPERED	MILGARD	0.30	0.23
19	8'-0" x 3'-4"	6'-8"	D	Dual	XOX		MILGARD	0.30	0.23
20	3'-0" x 4'-0"	6'-8"	B	Dual	SLIDING	TEMPERED	MILGARD	0.30	0.23
21	8'-0" x 3'-4"	6'-8"	D	Dual	XOX		MILGARD	0.30	0.23
22	8'-0" x 3'-4"	6'-8"	B	Dual	SLIDING		MILGARD	0.30	0.23
	SECOND FLOOR WINDOWS WITH SILL LESS THAN 42" ABOVE FINISHED FLOOR REQUIRE WINDOW OPENING CONTROL DEVICE, SEE SHEET A4.0								

TYPE A CASEMENT | TYPE B SLIDING | TYPE C FIXED | TYPE D XOX

BEDROOM EGRESS WINDOWS SHALL HAVE A NET CLEAR WINDOW OPENING OF MIN. AREA OF 5.7 S.F.
MINIMUM NET HEIGHT: 24" AND MINIMUM NET WIDTH: 20", SILL HEIGHT SHALL BE 44" MAX. ABOVE FINISH FLOOR.

ENERGY REQ'D

PROVIDE DUEL GLAZING W/ U=(PER TITLE-24) AND SHGC = (PER TITLE-24).

THE MANUFACTURED WINDOWS SHALL HAVE A LABEL ATTACHED CERTIFIED BY THE NATIONAL FENESTRATION RATING COUNCIL (NFRC) AND SHOWING COMPLIANCE WITH THE ENERGY CALCULATIONS.

GLAZING AN HAZARDOUS LOCATIONS SHALL BE TEMPERED.

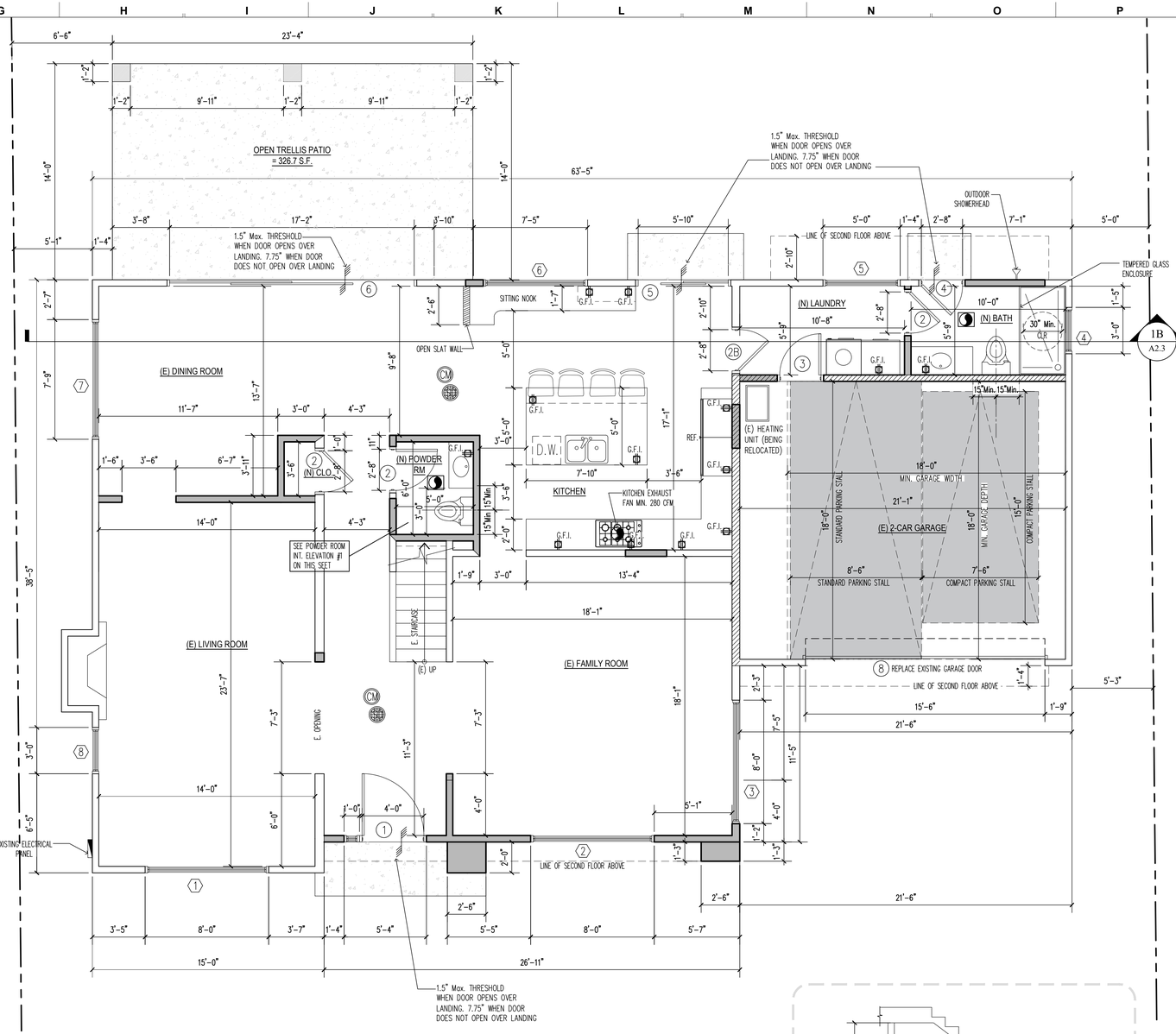
NOTE:
THE NFRC TEMPORARY LABEL DISPLAYED ON WINDOWS AND SKYLIGHTS (INCL. TUBULAR) MUST REMAIN ON THE UNIT UNTIL FINAL INSPECTION HAS BEEN COMPLETED

HABITABLE ROOM LIGHTING REQUIREMENT:

EVERY SPACE INTENDED FOR HUMAN OCCUPANCY SHALL BE PROVIDED WITH NATURAL LIGHT BY MEANS OF EXTERIOR GLAZED OPENINGS IN ACCORDANCE WITH SECTION R303.1 OR SHALL BE PROVIDED WITH ARTIFICIAL LIGHT THAT IS ADEQUATE TO PROVIDE AND AVERAGE ILLUMINATION OF 6-FOOT CANDLES OVER THE AREA OF THE ROOM AT A HEIGHT OF 30 INCHES ABOVE THE FLOOR LEVEL.

LEGEND:

- DEMO WALL
- UPPER WALLS OR HEADERS
- NEW WALL — PLUMBING WALLS SHALL BE FRAMED 2X6 Min. (FOR DRILLING AND NOTCHING OF STUDS)
- EXISTING WALL TO REMAIN
- 1 HR RATED WALL 5/8" TYPE X GYP BOARD ON THE GARAGE SIDE, FROM FLOOR TO UNDERSIDE OF ROOF SHEATHING.
- (1) SEE DOOR SCHEDULE
- (1) SEE WINDOW SCHEDULE
- (E) EXISTING TO REMAIN
- SMOKE DETECTOR –HARD WIRED 110 VOLT-W/ BATTERY BACK-UP & LOW BATERY SIGNAL– INTERCONNECTED
- (CM) CARBON MONOXIDE ALARM
  AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EVERY LEVEL INCLUDING THE BASEMENT IN DWELLING UNITS THAT HAVE FUEL-FIRED APPLIANCES OR ATTACHED GARAGES.
  CARBON MONOXIDE ALARM SHALL BE INTERCONNECTED HARD-WIRED WITH BATTERY BACK-UP.
- PROVIDED BY AIR KING, ECO-EXHAUST SERIES.
  MODEL#: ES80S, 80 CFM. DUCTED TO TERMINATE OUTSIDE OF THE BUILDING. CONTROLLED BY A HUMIDISTAT.
  Bathroom exhaust fans. Mechanical exhaust fans which exhaust directly from bathrooms shall comply with the following:
  Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building.Unless functioning as a component of a whole house ventilation system, fans must be controlled by a humidistat which shall be readily accessible. Humidistat controls shall be capable of adjustment between a relative humidity range of 50 to 80 percent.
- HIGH EFFICACY LIGHTING OR SHALL BE CONTROLLED BY AN OCCUPANT SENSOR.
- $SD3 ELECTRICAL SWITHC W/DIMMER, 3-WAY
- $ ELECTRICAL SWITCH, SINGLE POLE
- $3 ELECTRICAL SWITCH, 3 WAY
- $D ELECTRICAL SWITCH, DIMMER
  OCCUPANCY SENSORS MUST HAVE NO MANUAL OVERRIDE, 30 MINUTE MAXIMUM TIMER AND BE MICROWAVE/ULTRASONIC OR PASSIVE INFRA-RED TYPE.
- WALL SCONCE HIGH EFFICACY SHALL BE CONTROLLED BY A MANUAL-ON OCCUPANT SENSOR.
- $S SWITCH WITH OCCUPANCY SENSOR.
- EXTERIOR HIGH EFFICACY LIGHTING SHALL BE CONTROLLED BY A PHOTOCONTROL/MOTION SENSOR COMBINATION.
- RECESSED 6" HIGH EFFICACY LIGHTING.
  ALL HIGH EFFICACY LUMINARES MUST BE PIN BASED.
  LUMINARIES RECESSED IN INSULATED CEILINGS MUST MEET THE REQUIREMENTS OF §150(k)12.
- SURFACE MOUNTED CEILING HIGH EFFICACY LIGHT FIXTURE
- DENOTES NEW RECESSED AFCI DUPLEX WALL OUTLET AT 15" A.F.F. UNLESS OTHERWISE NOTED (TO BOTTOM OF COVER PLATE). ALL BEDROOM LIGHTS OUTLETS AND SMOKE DETECTORS SHALL BE AFCI PROTECTED, TAMPER RESISTANT.
- G.F.I. NEW EXTERIOR G.F.I. WATERPROOF OUTLET (210-52 OF CEC.) OUTLET SHALL BE ACCESSIBLE WHILE STANDING AT GRADE LEVEL AND LOCATED NO MORE THAN 6-1/2 FEET ABOVE GRADE.
- G.F.I. NEW INTERIOR G.F.I. WATERPROOF OUTLET (210-52 OF CEC.) TAMPER RESISTANT
- CEILING FAN WITH HIGH EFFICACY OR FLUORESCENT LIGHTING.
- 1.5" Max. THRESHOLD
  WHEN DOOR OPENS OVER LANDING.
  7.75" WHEN DOOR DOES NOT OPEN OVER LANDING



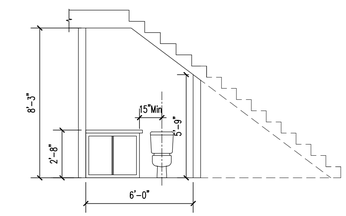
PROPOSED FIRST FLOOR PLAN

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

NOTE TO CLIENT:
ALL DIMENSIONS SHOWN ON PLAN ARE WITHIN A +/-2" TOLERANCE. DISCREPANCIES ARE ALLOWED DUE TO UNEVEN EXTERIOR STUCCO THICKNESS AND/OR EXISTING INTERIOR PLUMBING WALLS.

GUARDRAIL REQUIREMENTS ADJACENT TO OPENABLE WINDOWS
PROVIDE WINDOW OPENING CONTROL DEVICE (WOCD)

Section 1015.8 of the Los Angeles Building Code (LABC) and Section R312.2.1 of Los Angeles Residential Code (LARC) require that in residential occupancies, when the sill portion of an operable window is located more than 72 inches above the finished grade or other exterior surface below, a solid wall or fixed glazing measuring a minimum of 36 inches high shall be provided above the finished floor surface of the room in which the window is located.
Section 1015.3 of the LABC and Section R312 of LARC require that 42 inch high guards be provided along open-sided walking surfaces that are located more than 30 inches above the finished grade below.
To provide consistency among Section 1015.8, Section R312.2.1, Section 1015.3, and Section R312, when the sill portion of an operable window opening is located over 72 inches above the adjacent finished grade below in buildings with any occupancy, the Department will require compliance with Section 1015.3 and Section R312, and a solid wall or fixed glazing or guards measuring a minimum of 42 inches high above the finished floor surface of the room in which the window is located shall be provided. The diagram below illustrates this condition.



POWDER RM INT. ELEVATION #1

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

NOTES TO CONTRACTOR:
-CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO THE COMMENCEMENT OFDEMOLITION/CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGNER AND ENGINEER.

PROJECT NAME
THE DONA SUSANA Dr. RESIDENCE

PROJECT ADRESS
2968 DONA SUSANA Dr.
STUDIO CITY, CA. 91604

PROPOSED FIRST FLOOR PLAN

DESIGNER
ENR DESIGN & DRAFTING, INC.
Ph: (818) 282-0437
Fax: (818) 401-0713

No	SUBMITTAL	DATE	BY
	SUBMITTAL	00/00/00	

Date: 00/00/00
Scale: 1/4"=1'-0"
Drawn By: AC
Job No.

SHEET # A2.0
OF SHTS

CARBON MONOXIDE

AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS WITHIN WHICH FUEL BURNING APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES. CARBON MONOXIDE ALARM SHALL BE PROVIDED OUTSIDE OF EACH SEPARATE DWELLING UNIT SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM(S) AND ON EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS. R315

a. ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WITH BATTERY BACKUP.

b. ALARMS SHALL BE INTERCONNECTED SUCH THAT THE ACTUATION OF ONE ALARM SHALL ACTIVATE ALL ALARMS.

c. LOCATE ALARMS OUTSIDE EACH SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.

d. LOCATE ALARMS ON EVERY LEVEL OF A DWELLING UNIT INCLUDING BASEMENTS.

e. APPROVED COMBINED SMOKE ALARMS AND CARBON DIOXIDE ALARMS SHALL BE ACCEPTABLE.

SMOKE DETECTOR NOTES

AN APPROVED SMOKE ALARM SHALL BE INSTALLED IN EACH SLEEPING ROOM & HALLWAY OR AREA GIVING ACCESS TO A SLEEPING ROOM, AND ON EACH STORY AND BASEMENT FOR DWELLINGS WITH MORE THAN ONE STORY. SMOKE ALARMS SHALL BE INTERCONNECTED SO THAT ACTUATION OF ONE ALARM WILL ACTIVATE ALL THE ALARMS WITHIN THE INDIVIDUAL DWELLING UNIT. IN NEW CONSTRUCTION SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER SOURCE FROM THE BUILDING WIRING AND SHALL BE EQUIPPED WITH BATTERY BACKUP AND LOW BATTERY SIGNAL. R314

HARD-WIRED, FIRE MARSHAL APPROVED SMOKE DETECTORS WITH A BATTERY BACKUP ARE REQUIRED.

A. CENTRALLY LOCATED IN ROOMS OR CORRIDORS GIVING DIRECT ACCESS TO EACH SLEEPING AREA.

B. ON CEILING INSIDE EACH SLEEPING ROOM.

C. ON EACH STORY OF MULTISTORY DWELLINGS AND IN BASEMENTS.

D. IN SPLIT-LEVELS, DETECTORS SHALL BE INSTALLED ON THE UPPER LEVEL. IF THE LOWER LEVEL CONTAINS SLEEPING AREAS, THEN IT TOO SHALL BE EQUIPPED WITH A DETECTOR.

E. WHEN SLEEPING AREAS ARE ON AN UPPER LEVEL, THE DETECTOR SHALL BE LOCATED IN CLOSE PROXIMITY TO THE STAIRWAY.

F. IN ROOMS WITH HIGH OR SLOPED CEILINGS 24" ABOVE THAT OF THE ADJACENT HALLWAY LEADING TO SLEEPING AREAS.

G. DETECTORS SHALL SOUND AN ALARM AUDIBLE IN ALL SLEEPING AREAS OF THE DWELLING UNIT WHICH THEY SERVE.

H. DETECTORS ARE REQUIRED IN EXISTING DWELLINGS WHEN AN ADDITION, ALTERATION, OR REPAIR IS MADE AND MAY BE BATTERY TYPE IN EXISTING CONSTRUCTION.

LEGEND:

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- UPPER WALLS OR HEADERS
- NEW WALL — PLUMBING WALLS SHALL BE FRAMED 2X6 Min. (FOR DRILLING AND NOTCHING OF STUDS)
- EXISTING WALL TO REMAIN
- 1 HR RATED WALL 5/8" TYPE X GYP BOARD ON THE GARAGE SIDE, FROM FLOOR TO UNDERSIDE OF ROOF SHEATHING.
- (1) SEE DOOR SCHEDULE
- (1) SEE WINDOW SCHEDULE
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  OCCUPANCY SENSORS MUST HAVE NO MANUAL OVERRIDE, 30 MINUTE MAXIMUM TIMER AND BE MICROWAVE/ULTRASONIC OR PASSIVE INFRA–RED TYPE.
- WALL SCONCE HIGH EFFICACY SHALL BE CONTROLLED BY A MANUAL–ON OCCUPANT SENSOR.
- $S SWITCH WITH OCCUPANCY SENSOR.
- EXTERIOR HIGH EFFICACY LIGHTING SHALL BE CONTROLLED BY A PHOTOCONTROL/MOTION SENSOR COMBINATION.
- RECESSED 6" HIGH EFFICACY LIGHTING.
  ALL HIGH EFFICACY LUMINARIES MUST BE PIN BASED. LUMINARIES RECESSED IN INSULATED CEILINGS MUST MEET THE REQUIREMENTS OF §150(k)12.
- SURFACE MOUNTED CEILING HIGH EFFICACY LIGHT FIXTURE
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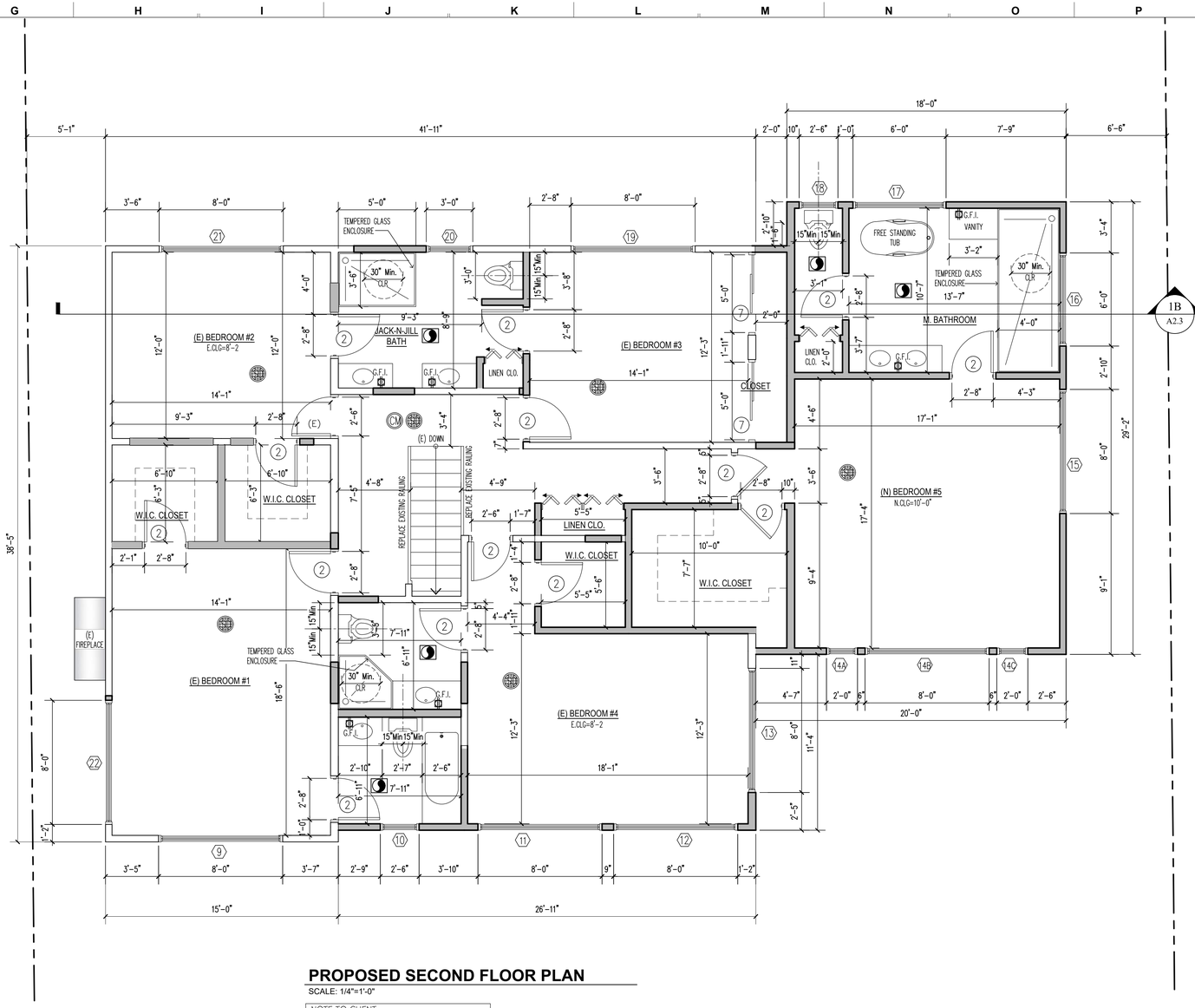
- 1.5" Max. THRESHOLD WHEN DOOR OPENS OVER LANDING. 7.75" WHEN DOOR DOES NOT OPEN OVER LANDING



1B A2.3

PROPOSED SECOND FLOOR PLAN

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

NOTE TO CLIENT:
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NOTES TO CONTRACTOR:
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PROJECT NAME
THE DONA SUSANA Dr.
RESIDENCE

PROJECT ADRESS
2968 DONA SUSANA Dr.
STUDIO CITY, CA. 91604

PROPOSED SECOND FLOOR PLAN

DESIGNER
ENR DESIGN & DRAFTING, INC.
Ph: (818) 282-0437
Fax: (818) 401-0713

No	SUBMITTAL	DATE	BY
	SUBMITTAL	00/00/00	

Date: 00/00/00
Scale: 1/4"=1'-0"
Drawn By: AC
Job No.

SHEET # A2.1
OF SHTS

THIS SECTION TO BE COMPLETED BY PLANNING STAFF

Consultation Completed

Does the project require Project Compliance?	☐ YES	☑ NO
Does the project require DRB review?	☐ YES	☑ NO
Is the applicant submitting a Risk of Assumption Affidavit?	☐ YES	☑ NO

Project Description:

Addition of 899 square feet to an existing 2,868 square-foot home. Addition consists of second floor addition above the garage and first floor. Includes a rear trellis, and interior remodel for most of the home. Proposed max height of 20' 6" and no grading

- ☐ All exterior colors must match existing colors or 25% gray scale or darker. No white is proposed.
- ☑ All glass is non-glare, non-reflective and a note/statement has been added to the window schedule.
- ☑ No more than 50 cubic yards proposed for administrative approval on any request.
- ☑ All dimensions, colors, materials, type of material and manufacturer are called out on the plans.
- ☐ The Clearance Summary Worksheet (CSW) clearly identifies the additions, dimensions, or the cubic yards. The numbers on the plans, the CSW, and the signed Joint Referral Form match.
- ☑ The project complies with all the specific and applicable guidelines to the project.
- ☐ Color, Materials, and design of exterior changes, including landscaping, are consistent with the intent andprovisions of the MSPSP.
- ☑ The total cumulative floor area of all additions since 06/29/1992 does not exceed 900 square feet. Previous additions: 0 sq. ft.

- ☑ The building height does not exceed the standards set forth in this Specific Plan (almost always superseded by restrictions set for the Baseline Hillside Ordinance unless property is on Mulholland Drive.)

  ☑ Inner ☐ Outer Corridor ☑ Visible ☐ Not Visible

  ☐ Upslope ☑ Downslope Max. Height 20' 6"
- ☑ The proposed project is not on a prominent ridge and/or does not break an existing skyline according to Specific Plan Maps 1 – 12.
- ☑ The proposed project is not located on a lot which contains a stream according to Specific Plan Maps 1-12.
- ☑ The proposed project does not propose grading or require a grading permit.
- ☑ The project is not grading within 200 feet of park land or an identified stream.
- ☑ The project does not remove any protected trees.
- ☑ The property is identified on SurveyLA/HistoricPlacesLA. ☐ YES ☑ NO

  *If **YES**, coordinate with Office of Historic Resources.*

NOTES:

The exterior color for this home can longer be white, and shall be 25% gray scale or darker. Per Mulholland Design guidelines, no black or white exterior color, permit will not be cleared until reflected in the exhibit. Refer to OAS for more detailed notes on required revisions on plan set

Project Planning Signature: Jude Hernandez

Print Name: Jude Hernandez

Phone Number: 213-482-7076 **Date:** 5/12/2024

THRESHOLD NOTES:

REQUIRED EXIT DOORS:
LANDING OR FLOOR AT REQUIRED EGRESS DOOR SHALL NOT BE MORE THAN 1.5" INCHES THRESHOLD

DOORS:
ONE EXIT DOOR SHALL NOT BE LESS THAN 3ft. WIDE AND 6'-8" IN HEIGHT SO MOUNTED THAT THE CLEAR WIDTH OF EXIT WAY IS NOT LESS THAN 32". THIS DOOR SHALL ALSO HAVE A 0.5" Max. THRESHOLD. EXIT MAY NOT PASS THOURGH GARAGE.

LANDINGS:

LANDINGS SHALL BE AT LEAST AS WIDE AS THE DOOR OR STAIRWAY SERVED AND SHALL BE 36 INCHES MINIMUM IN THE DIRECTION OF TRAVEL.

GAS SHUTOFF VALVE

AN APPROVED SEISMIC GAS SHUTOFF VALVE WILL BE INSTALLED ON THE FUEL GAS LINE ON THE DOWN STREAM SIDE OF THE UTILITY METER AND BE RIGIDLY CONNECTED TO THE EXTERIOR OR THE BUILDING STRUCTURE CONTAINING THE FUEL GAS PIPING.

GENERAL NOTES CONT'D:

1. PIPE INSULATOIN IS A MANDATORY REQUIREMENT IN THE FOLLOWING CASES:
   A. RECIRCULATING SECTIONS OF DOMESTIC HOT WATER SYSTEMS MUST BE INSULATED (THE ENTIRE LENGTH OF PIPING WHETHER BURIED OR EXPOSED)
   B. INDIRECT FIRED DOMESTIC HOT WATER SYSTEM PIPING FROM THE HEATING SOURCE TO THE STORAGE TANK
2. DUCT SEALING IS PRESCRIPTIVELY REQUIRED IN ALL CLIMATE ZONES WHEN AN AIR CONDITIONER OR FURNACE IS REPLACED AND WHEN NEW DUCTS ARE ADDED OR DUCTS ARE ALTERED IN AN EXISTING HOME.
3. OCCUPANCY SENSORS MUST HAVE NO MANUAL OVERRIDE, 30 MINUTE MAXIMUM TIMER AND BE MICROWAVE/ULTRASONIC OR PASSIVE INFRA-RED TYPE.
4. PROVIDE UFER OR OTHER APPROVED GROUND PER CEC 250.
5. BATHROOM OUTLETS SHALL BE GFI AND O A DEDICATED 20 Amp. CIRCUIT

DUCTS-AND GARAGE PENETRATIONS

- DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING UNIT FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM No.26 GAGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL NOT HAVE OPENINGS INTO THE GARAGE.
- OTHER PENETRATIONS OF GARAGE/DWELLING CEILINGS AND WALLS SHALL BE PROTECTED AS REQUIRED BY SECTION R302.11 ITEM 4(R302.5.3)
- MEMBRANE PENETRATIONS SHALL SOMPLY WITH SECTION 3302.4.1. WHERE WALLS ARE REQUIRED TO HAVE FIRE RESISTANCE RATING, RECESSED FIXTURES SHALL BE INSTALLED SO THAT THE REQUIRE FIRE-RESISTANCE RATING WILL NOT BE REDUCED.

DRYER EXHAUST

- CLOTHES DRYER MOISTURE EXHAUST DUCT (Min. 4" Dia.) TO THE OUTSIDE AND EQUIP WITH A BACK-DRAFT DAMPER. EXHAUST DUCT LENGTH IS LIMITED TO 14ft. WITH 2-90° ELBOWS.
- A FLEXIBLE DUCT CANNOT EXTEND MORE THAN 6ft AND CONNOT BE CONCEALED.
- DRYER EXHAUST CANNOT EXCEED 14ft WITH MAX. OF TWO 90 DEGREE ELBOWS.

ELECTRICAL / LIGHTING NOTES:

LUMINARIES THAT ARE RECESSED INTO INSULATED CEILINGS ARE REQUIRED TO BE RATED FOR INSULATED CONTACT. ("IC-RATED")
BATHROOM LUMINARIES SHALL BE APPROVED FOR WET OR DAMP LOCATIONS AND SHALL BE INSTALLED IN ACCORDANCE WITH ANY INSTRUCTIONS INCLUDED IN THE LISTING OR LABELING.

PROVIDE UFER GROUNDING (IR EQUIVALENT)

ELECTRICAL OUTLETS IN BEDROOMS SHALL BE PROTECTED BY AN ARC FAULT CIRCUIT INTERRUPTER. (CEC 210-12)

PROVIDE A MIN. OF 100 AMPERE ELECTRICAL SERVICE PANEL WITH 1/2" DIAMETER X 20' LONG REBAR FOR BACKUP UFER GROUND BOUNDED TO COLD WATER PIPE. PLEASE CONTACT EDISON FOR METER LOCATION AND UNDERGROUND SERVICE IF REQUIRED.
BATHROOM RECEPTACLE SHALL BE SERVED BY DEDICATED 20 AMP. CIRCUITS.

ALL NEW RECEPTACLES REQUIRING AFCI PROTECTION SHALL BE PROVIDED WITH SUCH. ALL 120-VOLT, SINGLE PHASE, 15 & 20-AMP BRANCH CIRCUITS SUPPLYING OUTLETS IN DWELLING UNIT KITCHENS, DINING ROOMS, FAMILY ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, REC. ROOMS, CLOSETS, LAUNDRY AREAS, HALLWAY AND SIMILAR ROOMS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, OR COMBINATION TYPE, INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.

ALL HIGH EFFICACY LUMINARIES MUST BE PIN BASED.

SURFACE MOUNTED LIGHTING FIXTURES IN CLOSETS MUST BE 18" FROM STORAGE AREA(S). FLUSH MOUNTED MUST BE 6 INCHES AWAY.

- RECEPTACLE OUTLETS SHALL BE SPACED @ 12'-0" O.C. MAXIMUM AND SHALL BE LOCATED WITHIN 6' OF DOOR OPENINGS (E.G. CLOSET DOORS ETC.)ALSO EVERY 2' OR WIDER OF WALLS. OUTLETS ALSO REQUIRED FOR COUNTER TOPS @ 4' O.C. AND WITHIN 2' OF ENDS OR BREAKS OR COUNTERS CEC SECT.210-52.

BATHROOM OUTLETS

BATHROOM OUTLETS SHALL BE ON A DEDICATED 20 AMP. CIRCUIT

ACCUPANCY SENSORS:

OCCUPANCY SENSORS MUST HAVE NO MANUAL OVERRIDE, 30 MINUTE MAXIMUM TIMER AND BE MICROWAVE/ULTRASONIC OR PASSIVE INFRA-RED TYPE.

SHOWERS:

SHOWERS SHALL HAVE A MINIMUM OF AREA OF 1024 S.I. WITH A 30-INCH CLEAR TURNING CIRCLE.

WALL COVERING SHALL BE CEMENT PLASTER, TILE OR APPROVED EQUAL TO 72 INCHES ABOVE DRAIN AT SHOWERS OR TUBS WITH SHOWERS. MATERIALS OTHERS THAN STRUCTURAL ELEMENTS TO BE MOISTURE RESISTANT.

PROVIDE PRESSURE BALANCE, THERMOSTATIC MIXING VALVES (OR CONBO) IN SHOWERS AND TUB & SHOWERS.
PROVIDE ULTRA FLUSH WATER CLOSETS FOR ALL NEW CONSTRUCTION.
EXISTING SHOWER HEADS AND TOILETS MUST BE ADAPTED FOR LOW WATER COMSUPTION.

APPROVED METALLIC WATER LINE CONNECTORS FROM SHUTOFFS TO PLUMBING FIXTURES. RUBBER AND PLASTICS ARE NOT PERMITTED.

GLAZING NOTES:

Glazing in the following locations shall be safety glazing conforming to the human impact loads of Section R308.3 (see exceptions) (R308.4):

a. Fixed and operable panels of swinging, sliding and bi-fold door assemblies.
b. Glazing in an Individual fixed or operable panel adjacent to a door where the nearest vertical edge is within a 24-inch arc of either vertical edge of the door in a closed position and whose bottom edge is less than 60 inches above the floor or walking surface.
c. Glazing in an Individual fixed or operable panel that meets all of the following conditions:
   i. Exposed area of an individual pane greater than 9 square feet.
   ii. Bottom edge less than 18 inches above the floor.
   iii. Top edge greater than 36 inches above the floor.
   iv. One or more walking surfaces within 36 inches horizontally of the glazing.
d. Glazing in guards and railings.
e. Glazing in enclosures for or walls facing hot tubs, whirlpools, saunas, steam rooms, bathtubs and showers where the bottom edge of the glazing is less than 60 inches measured vertically above any standing or walking surface.
f. Glazing in walls and fences adjacent to indoor and outdoor swimming pools, hot tubs and spas where the bottom edge of the glazing is less than 60 inches above a walking surface and within 60 inches, measured horizontally and in a straight line, of the water's edge.
g. Glazing where the bottom exposed edge of the glazing is less than 36 inches above the plane of the adjacent walking surface of stairways, landings between flights of stairs and ramps.
h. Glazing adjacent to the landing at the bottom of a stairway where the glazing is less than 36 inches above the landing and within a 60 inch horizontal arc less than 180 degrees from the bottom tread nosing (R304.2).

WOOD AND WOOD BASED PRODUCTS:

PROTECTION OF WOOD AND WOOD BASED PRODUCTS FROM DECAY SHALL BE RPOVIDED IN THE LOCATIONS SPECIFIED PER SECTION R.317.1 BY THE USE OF NATURALLY DURABLE WOOD OR WAOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE WITH AWPA U1 FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END-USE. PRESERVATIVES SHALL BE LISTED IN SECTION FOR OF AWPA U1.

HEATER

HEATER SHALL BE CAPABLE OF MAINTAINING A MINIMUM ROOM TEMPERATURE OF 68 F AT A POINT 3 FEET ABOVE THE FLOOR AND 2 FEET FROM EXTERIOR WALLS IN ALL HABITABLE ROOMS AT THE DESIGN TEMPERATURE.

FINISH MATERIAL POLLUTANT CONTROL

THE FOLLOWING FINISH MATERIALS SHALL COMPLY WITH THE VOC CONTENT LIMITS SET FORTH IN CAL GREEN SECTIONS 4.504.2 THROUGH 4.504.5:
- ADHESIVES, SEALANTS AND CAULKS, PAINTS AND COATINGS, CARPET SYSTEMS, CUSHION AND ADHESIVE, RESILIENT FLOORING, AND COMPOSITE WOOD PRODUCTS USED ON THE EXTERIOR ON INTERIOR.

COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT

ALL DUCTS AND AIR DISTRIBUTION OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, OR SHEET METAL DURING STORAGE ON THE SITE AND BY THE TIME OF ROUGH INSTALLATION THROUGH FINAL START UP OF THE HEATING AND COOLING EQUIPMENT.

WATER HEATER

NEW WATER HEATER PER TITLE-24

A T&P RELIEF VALVE INSTALLED IN ACCORDANCE WITH THE MANIFACTURER'S INSTRUCTIONS IS REQUIRED.

FUEL BURNING WATER HEATERS INSTALLED IN BEDROOMS OR BATHROOM SHALL BE IN A CLOSET USED EXCLUSIVELY FOR THE WATER HEATER AND SEPARATED WITH A GASKETED, SELF-CLOSING DOOR. ALL COMBUSTION AIR SHALL BE OBTAINED FROM THE EXTERIOR. THE WATER HEATER SHALL BE DIRECT-VENT TYPE.

MOISTURE CONTENT OF MATERIALS REQUIREMENT

BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED. WALL AND FLOOR FRAMING SHALL NOT BE ENCLOSED WHEN FRAMING MEMBERS EXCEED 19 PERCENT MOISTURE CONTENT. INSULATION WHICH IS VISIBLY WET OR HAS HIGH MOISTURE CONTENT SHALL BE REPLACED OR ALLOWED TO DRY PRIOR TO ENCLOSURE IN WALL OR FLOOR CAVITIES.

NOTES TO CONTRACTOR:

-CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO THE COMMENCEMENT OFDEMOLITION/CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGNER AND ENGINEER.

SECURITY REQUIREMENTS

1. ALL ENTRY DOORS TO DWELLING UNITS OR GUEST ROOMS SHALL BE ARRANGED SO THAT THE OCCUPANT HAS A VIEW OF THE AREA IMMEDIATELY OUTSIDE THE DOOR WITHOUT OPENING THE DOOR. SUCH VIEW MAY BE PROVIDED BY A DOOR VIEWER, THROUGH WINDOWS LOCATED IN THE VICINITY OF THE DOOR OR THROUGH VIEW PORTS IN THE DOOR OR ADJOINING WALL. (6706)

2. SCREENS, BARRICADES, OR FENCES MADE OF A MATERIAL WHICH WOULD PRECLUDE HUMAN CLIMBING SHALL BE PROVIDED AT EVERY PORTION OF EVERY ROOF, BALCONY, OR SIMILAR SURFACE WHICH IS WITHIN 8 FT. OF THE UTILITY POLE OR SIMILAR STRUCTURES. (6707)

3. WOOD FLUSH-TYPE DOORS SHALL BE 1-3/8" THICK MINIMUM WITH SOLID CORE CONSTRUCTION. 91.6709.1 – DOOR STOPS OF IN-SWINGING DOORS SHALL BE OF ONE-PIECE CONSTRUCTION WITH THE JAMB OR JOINED BY RABBET TO THE JAMB. (6709.4)

4. EVERY DOOR IN A SECURITY OPENING FOR AN APARTMENT HOUSE SHALL BE PROVIDED WITH A LIGHT BULB (60 WATTMIN.) AT A MAXIMUM HEIGHT OF8 FEET ON THE EXTERIOR. (6708)

5. ALL PIN-TYPE DOOR HINGES ACCESSIBLE FROM OUTSIDE SHALL HAVE NON-REMOVABLE HINGE PINS. HINGES SHALL HAVE MIN. 1/4" DIA. STEEL JAMB STUD WITH 1/4" MIN. PROTECTION. THE STRIKE PLATE FOR LATCHES AND HOLDING DEVICE FOR PROJECTING DEAD BOLTS IN WOOD CONSTRUCTION SHALL BE SECURED TO THE JAMB AND THE WALL FRAMING WITH SCREWS NO LESS THAN 2-1/2" LONG. (6709.5, 6709.7)

6. PROVIDE DEAD BOLTS WITH HARDENED INSERTS; DEADLOCKING LATCH WITH KEY-OPERATED LOCKS ON EXTERIOR. DOORS MUST BE OPERABLE FROM THE INSIDE WITHOUT A KEY, SPECIAL KNOWLEDGE, OR SPECIAL EFFORT (LATCH NOT REQUIRED IN B, F, AND S OCCUPANCIES). (6709.2)

7. STRAIGHT DEAD BOLTS SHALL HAVE A MIN. THROW OF 1" AND AN EMBEDMENT OF NOT LESS THAN 5/8", AND A HOOK-SHAPED OR AN EXPANDING-LUG DEADBOLT SHALL HAVE A MINIMUM THROW OF 3/4". (6709.2)

8. WOOD PANEL TYPE DOORS MUST HAVE PANELS AT LEAST 9/16 IN. THICK WITH SHAPED PORTIONS NOT LESS THAN 1/4 IN. THICK AND INDIVIDUAL PANELS MUST BE NO MORE THAN 300 SQ. IN. IN AREA. MULLIONS SHALL BE CONSIDERED A PART OF ADJACENT PANELS EXCEPT MULLIONS NOT OVER 18 INCHES LONG MAY HAVE AN OVERALL WIDTH OF NOT LESS THAN 2 INCHES. STILES AND RAILS SHALL BE OF SOLID LUMBER IN THICKNESS WITH OVERALL DIMENSIONS OF NOT LESS THAN 1-3/8 INCHES AND 3 INCHES IN WIDTH. (91.6709.1 ITEM 2)

9. SLIDING DOORS SHALL BE PROVIDED WITH A DEVICE IN THE UPPER CHANNEL OF THE MOVING PANEL TO PROHIBIT RAISING AND REMOVING OF THE MOVING PANEL FROM TRACK WHILE IN THE CLOSED POSITION. (6710)

10. SLIDING GLASS DOORS PANELS SHALL BE CLOSED AND LOCKED WHEN SUBJECTED TO THE TESTS SPECIFIED IN SEC. 6717.1

11. METAL OR WOODEN OVERHEAD OR SLIDING DOORS SHALL BE SECURED WITH A CYLINDER LOCK, PADLOCK WITH A MIN. 9/32" DIAMETER HARDENED STEELSHACKLE AND BOLTED, HARDENED STEEL HASPS, METAL SLIDE BOARD, BOLT OR EQUIVALENT DEVICE UNLESS SECURED ELECTRICALLY OPERATED. (6711)

12. PROVIDE METAL GUIDES AT TOP AND BOTTOM OF METAL ACCORDION GRATE OR GRILLE-TYPE DOORS AND CYLINDER LOCKS OR PADLOCKS. CYLINDER GUARDS SHALL BE INSTALLED ON ALL CYLINDER LOCKS WHENEVER THE CYLINDER PROJECTS BEYOND THE FACE OF THE DOOR OR IS OTHERWISE ACCESSIBLE TO GRIPPING TOOLS. (6712)

13. IN GROUP B, F, M, AND S OCCUPANCIES, PANES OF GLAZING WITH AT LEAST ONE DIMENSION GREATER THAN 5 IN. BUT LESS THAN 48 IN, SHALL BE CONSTRUCTED OF TEMPERED OR APPROVED BURGLARY-RESISTANT MATERIAL OR PROTECTED WITH METAL BARS OR GRILLES (6714)

14. GLAZED OPENINGS WITHIN 40" OF THE REQUIRED LOCKING DEVICE OF THE DOOR, WHEN THE DOOR IS IN THE CLOSED AND LOCKED POSITION AND WHEN THE DOOR IS OPENABLE FROM THE INSIDE WITHOUT USE OF KEY, SHALL BE FULLY TEMPERED GLASS PER SECTION 2406, OR APPROVED BURGLARY RESISTANT MATERIAL, OR SHALL BE PROTECTED BY METAL BARS, SCREENS OR GRILLS HAVING A MAXIMUM OPENING OF 2". THE PROVISIONS OF THIS SECTION SHALL NOT APPLY TO SLIDE GLASS DOORS WHICH CONFORM TO THE PROVISIONS OF SECTION 6710 OR TO VIEW PORTS OR WINDOWS WHICH DO NOT EXCEED 2" IN THEIR GREATEST DIMENSIONS. (6713)

15. LOUVERED WINDOWS SHALL BE PROTECTED BY METAL BARS OR GRILLS WITH OPENINGS THAT HAVE AT LEAST ONE DIMENSION OF 6" OR LESS, WHICH ARE CONSTRUCTED TO PRECLUDE HUMAN ENTRY. (6715.3) PC/STR/CORR.LST.103 (REV. 1/1/14) WWW.LADBS.ORG PAGE 2 OF 2.

16. OTHER OPENABLE WINDOWS SHALL BE PROVIDED WITH SUBSTANTIAL LOCKING DEVICES. IN GROUP B, F, M AND S OCCUPANCIES, SUCH DEVICES SHALL BE GLIDE BARS, BOLTS, CROSS-BARS, AND/OR PADLOCKS WITH MINIMUM 9/32" HARDENED STEEL SHACKLES AND BOLTED, HARDENED STEEL HASPS. (6715.2)

17. SLIDING WINDOWS SHALL BE PROVIDED WITH LOCKING DEVICES. A DEVICE SHALL BE INSTALLED IN THE UPPER CHANNEL OF THE MOVING PANEL TO PROHIBIT RAISING AND REMOVING OF THE MOVING PANEL IN THE CLOSED OR PARTIALLY OPEN POSITION. 6715.1

18. SLIDING GLASS WINDOWS SASH SHALL BE CLOSED AND LOCKED WHEN SUBJECTED TO THE TESTS SPECIFIED IN SEC. 6717.2.

19. ANY RELEASE FOR METAL BARS, GRILLS, GRATES OR SIMILAR DEVICES CONSTRUCTED TO PRECLUDE HUMAN ENTRY THAT ARE INSTALLED SHALL BE LOCATED ON THE INSIDE OF THE ADJACENT ROOM AND AT LEAST 24 INCHES FROM THE CLOSEST OPENING THROUGH SUCH METAL BARS, GRILLS, GRATES OR SIMILAR DEVICES THAT EXCEEDS TWO INCHES IN ANY DIMENSION. (6715.4)

20. ALL OTHER OPENINGS OTHER THAN DOORS OR GLAZED OPENINGS MUST BE PROTECTED BY METAL BARS OR GRILLES WITH OPENINGS OF NOT LESS THAN 6 INCHES IN ONE DIMENSION. (6716.6)

CITY OF LOS ANGELES NOTES

1. The construction shall not restrict a five- foot clear and unobstructed access to any water or power distribution facilities (Power poles, pull-boxes, transformers, vaults, pumps, valves, meters, appurtenances, etc.) or to the location of the hookup. The construction shall not be within ten feet of any power lines-whether or not the lines are located on the property. Failure to comply may cause conslruction delays and/or additional expenses.
2. An approved Seismic Gas Shutoff Valve will be installed on the fuel gas line on the downstream side of the utility meter and be rigidly connected to the exterior of the building or structure containing the fuel gas piping" (Per Ordinance 170,158) (Separate plumbing permit is required).
3. Plumbing fixtures are required to be connected to a sanitary sewer or to an approved sewage disposal system. R306.3
4. Kitchen sinks, lavatories, bathtubs, showers, bidets, laundry tubs and washing machine outlets shall be provided with hot and cold water and connected to an approved water supply, R306.4
5. Bathtub and shower floors, walls above bathtubs with a showerhead, and shower compartments shall be finished with a nonabsorbent surface. Such wall surfaces shall extend to a height of not less than 6 feet above the floor. R307.2
6. Provide ultra-low flush water closets for all new construction. Existing shower heads and toilets must be adapted for low water consumption,
7. Unit Skylights shall be labeled by a LA City Approved Labeling Agency. Such label shall state the approved labeling agency name, product designation and performance grade rating. (Research Report not required). R308.6.9
8. Water heater must be strapped to wall. Sec. 507.3, LAPC
9. For existing pool on site, provide an alarm for doors to the dwelling that form a part of the pool enclosure. The alarm shall sound continuously for a min. of 30 seconds when the door is opened. It shall automatically reset and be equipped with a manual means to deactivate (for 15 secs. max.) for a single opening. The deactivation switch shall be at least 54" above the floor. 6109 of LABC
10. For existing pool on site, provide anti- entrapment cover meeting the current ASTM or ASME for the suction outlets of the swimming pool, toddler pool and spa for single family dwellings per Assembly Bill (AB) No. 2977. s1628
11. Automatic garage door openers, if provided, shall be listed in accordance with UL 325. R309.4
12. Smoke detectors shall be provided for all dwelling units intended for human occupancy, where a permit is required for alterations, repairs, or additions. R314.2
13. Where a permit is required for alterations, repairs or additions, existing dwellings or sleeping units that have attached garages or fuel-burning appliances shall be provided with a carbon monoxide alarm in accordance with Section R315.2. Carbon monoxide alarms shall only be required in the specific dwelling unit or sleeping unit for which the permit was obtained. R315.2
14. Every space intended for human occupancy shall be provided with natural light by means of exterior glazed openings in accordance with Section R303.1 or shall be provided with artificial light that is adequate to provide an average illumination of 6 foot-candles over the area of the room at a height of 30 inches above the floor level. R303.1
15. A copy of the evaluation report and/or conditions of listing shall be made available at the job site

PROJECT NAME
THE DONA SUSANA Dr.
RESIDENCE

PROJECT ADRESS
2968 DONA SUSANA Dr.
STUDIO CITY, CA. 91604

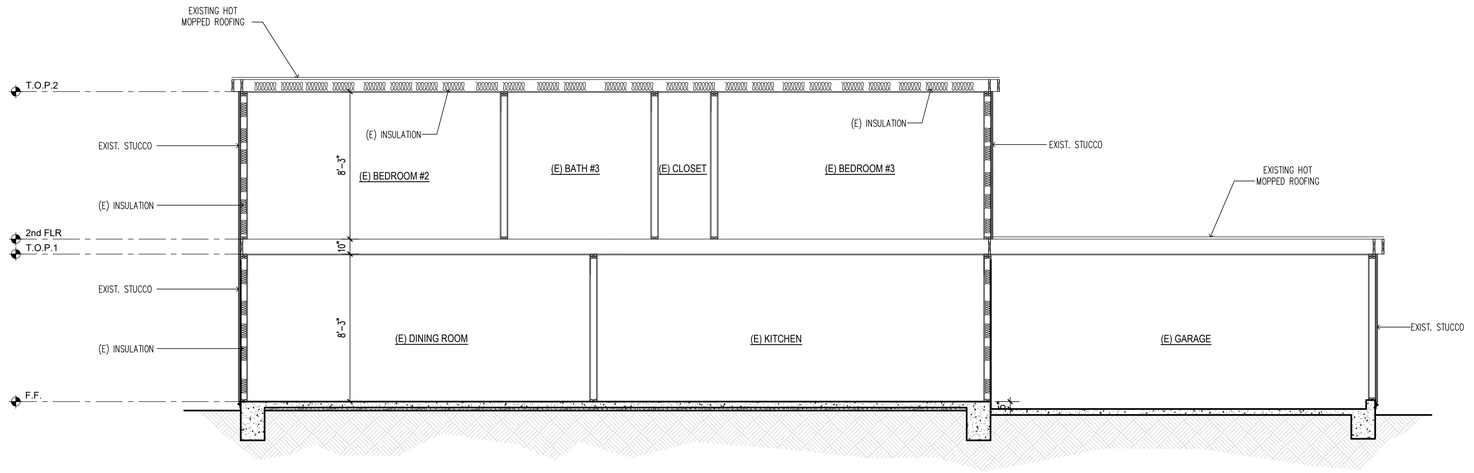
GENERAL NOTES

DESIGNER
ENR DESIGN & DRAFTING, INC.
Ph: (818) 282-0437
Fax: (818) 401-0713

No	SUBMITTAL	DATE	BY
	SUBMITTAL	00/00/00	

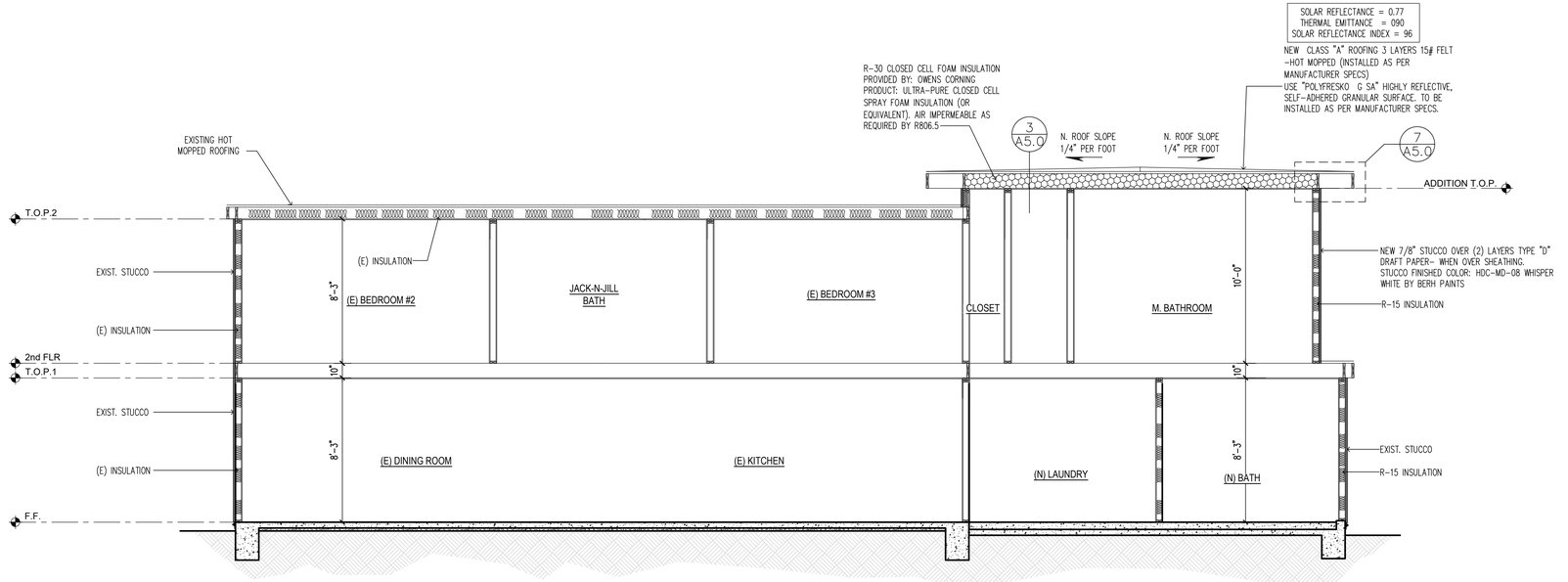
Date: 00/00/00
Scale: 1/4"=1'-0"
Drawn By: AC
Job No.

SHEET #
A2.2
OF SHTS



SECTION 1A (EXISTING CONDITIONS)

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



SECTION 1B (PROPOSED CONDITIONS)

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

PROJECT NAME
THE DONA SUSANA Dr.
RESIDENCE

PROJECT ADRESS
2968 DONA SUSANA Dr.
STUDIO CITY, CA. 91604

BUILDING SECTIONS

DESIGNER
ENR DESIGN & DRAFTING, INC.
Ph.: (818) 282-0437
Fax.: (818) 401-0713

No	SUBMITTAL	DATE	BY
	SUBMITTAL	00/00/00	

Date: 00/00/00
Scale: 1/4"=1'-0"
Drawn By: AC
Job No.

SHEET #
A2.3
OF SHTS

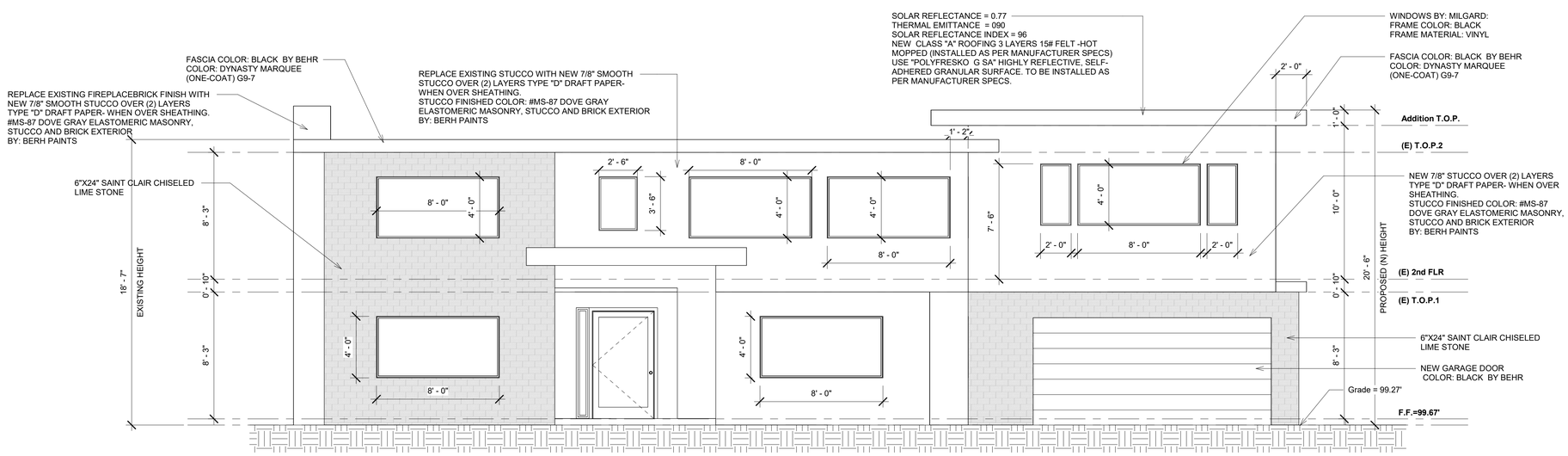
(7) EXTERIOR FINISH NOTES:
1/4" = 1'-0"

1. ALL STUCCO/PLASTER PATCHING TO BE 7/8" STUCCO OVER (2) LAYERS TYPE "D" DRAFT PAPER- WHEN OVER SHEATHING.

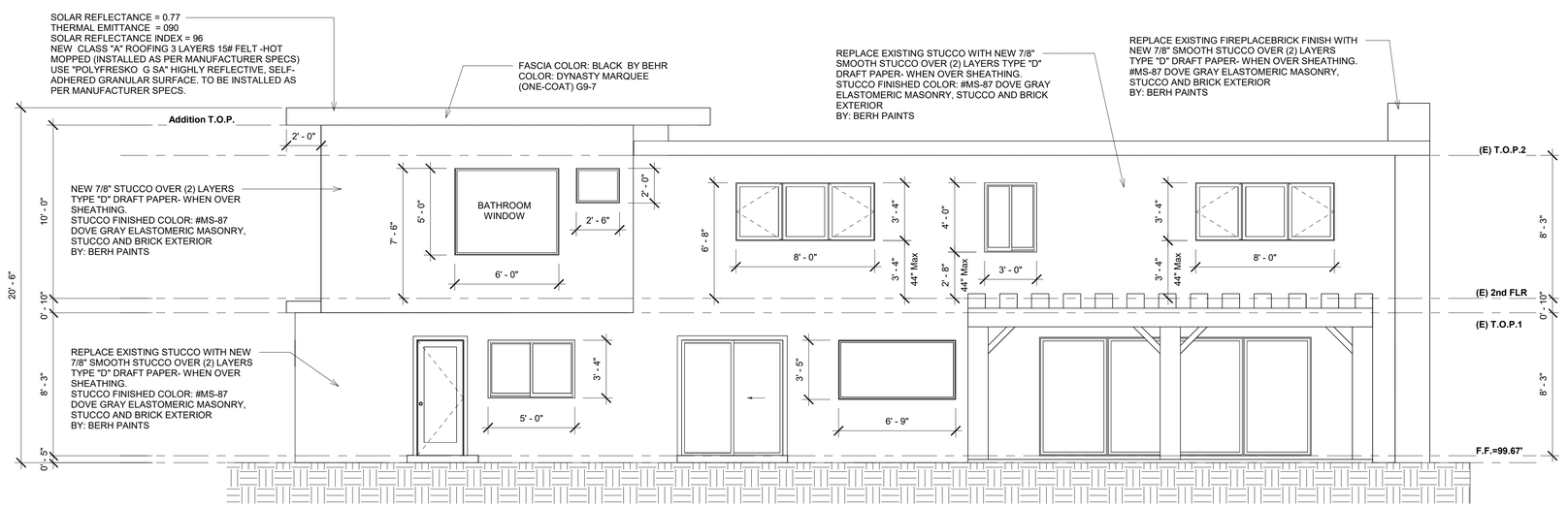
2. NOTE TO CONTRACTOR:
-CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO THE COMMENCEMENT OF DEMOLITION/CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGNER AND ENGINEER.

3. ANTI-GRAFFITI
Provide anti-Graffiti finish within the first 9 feet, measured from grade, at exterior walls and doors. Exception: Maintenance of building affidavit is recorded by the owner to covenant and agree with the City of Los Angeles to remove any graffiti within 7-days of the graffiti being applied. (6306)

4. EXTERIOR GLASS
ALL EXTERIOR GLASS SHALL BE NON-GLARE AND NON-REFLECTIVE.



(1) Front Elevation (North-West)
1/4" = 1'-0"



(2) Rear Elevation (Sotuh-East)
1/4" = 1'-0"

PROJECT NAME:
THE DONA SUSANA Dr. RESIDENCE

PROJECT ADDRESS:
2988 N. DONA SUSANA Dr.
STUDIO CITY, CA. 91604

ELEVATIONS

DESIGNER
ENR DESIGN, INC
PH: (818) 282-0437

NO.	DATE	BY

SUBMITTAL

DATE:

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

DRAWN BY: Author

JOB #: Project Number

SHEET #
A3.0

3 EXTERIOR FINISH NOTES
1/4" = 1'-0"

1. ALL STUCCO/PLASTER PATCHING TO BE 7/8" STUCCO OVER (2) LAYERS TYPE "D" DRAFT PAPER- WHEN OVER SHEATHING.

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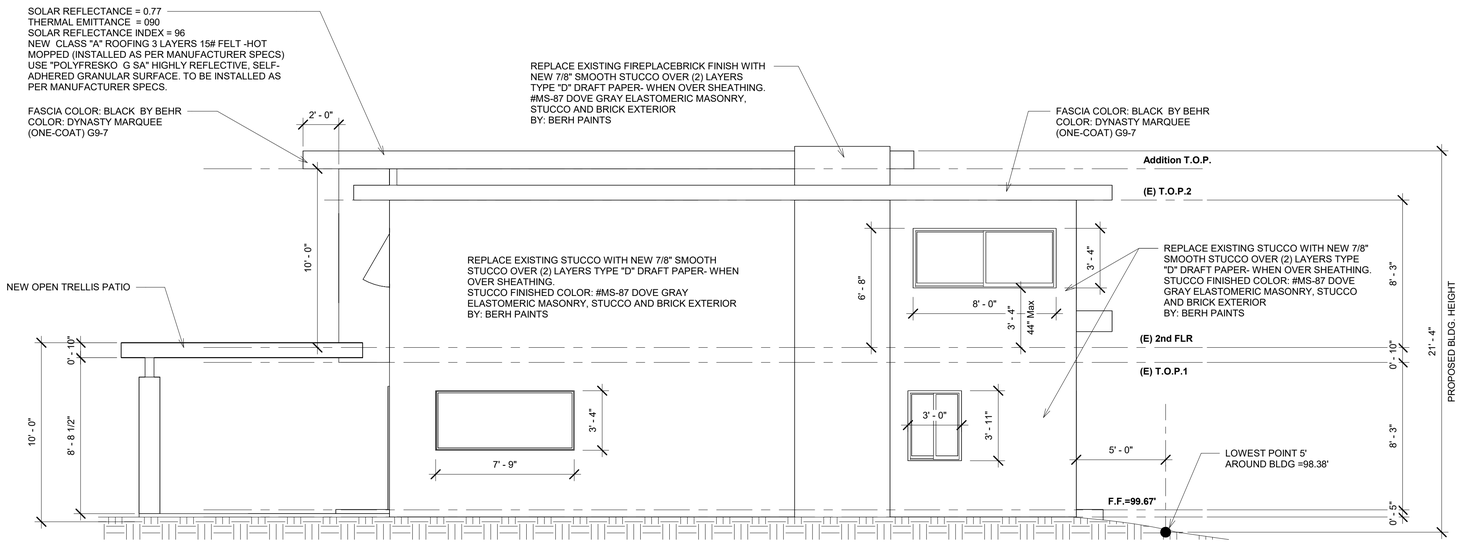
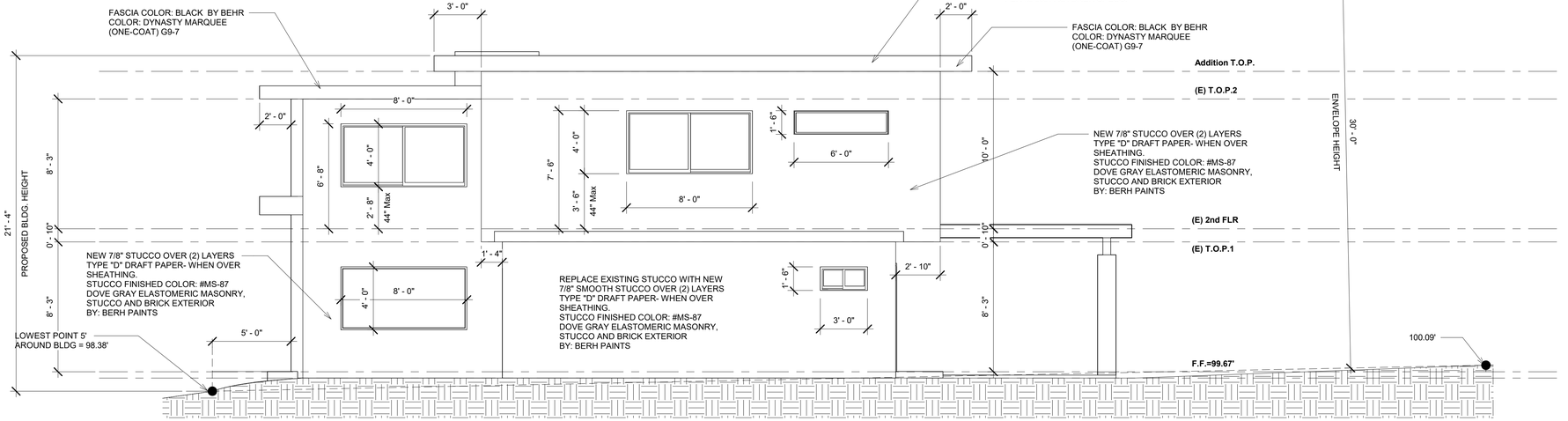


1 Left Elevation (North-East)
1/4" = 1'-0"



2 Right Side Elevation (South-West)
1/4" = 1'-0"

PROJECT NAME
THE DONA SUSANA Dr. RESIDENCE

PROJECT ADDRESS
2968 N. DONA SUSANA Dr.
STUDIO CITY, CA. 91604

ELEVATIONS

DESIGNER
ENR DESIGN, INC
PH: (818) 282-0437

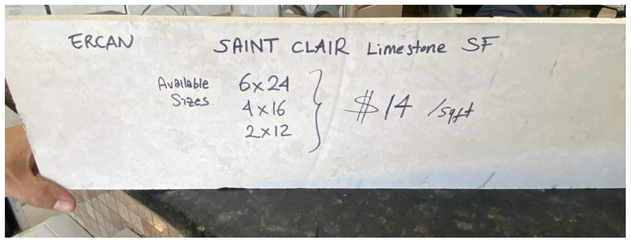
NO.	DATE	BY
SUBMITTAL		

DATE:
SCALE: 1/4" = 1'-0"
DRAWN BY: Author
JOB #: Project Number

SHEET #
A3.1

COLORS AND MATERIALS:

STUCCO COLOR:
#MS-87 DOVE GRAY ELASTOMERIC
MASONRY, STUCCO AND BRICK EXTERIOR
BY: BERH PAINTS



LIME STONE
STILE: SAIN CLAIR
SIZE: 4"X16"

TRELLIS COLOR:
#SC-533 CEDAR NATURAL SOLID COLOR
WATERPROOFING EXTERIOR WOOD SATIN
AND SEALER
BY: BERH PAINTS

Front View Rendering #1

#MS-87 DOVE GRAY ELASTOMERIC
MASONRY, STUCCO AND BRICK EXTERIOR
BY: BERH PAINTS

WINDOWS BY: MILGARD:
FRAME COLOR: BLACK
FRAME MATERIAL: VINYL

FASCIA COLOR: BLACK BY BEHR
COLOR: DYNASTY MARQUEE
(ONE-COAT) G9-7

#SC-533 CEDAR NATURAL SOLID
COLOR WATERPROOFING
EXTERIOR WOOD SATIN AND
SEALER
BY: BERH PAINTS

Rear View Rendering #1

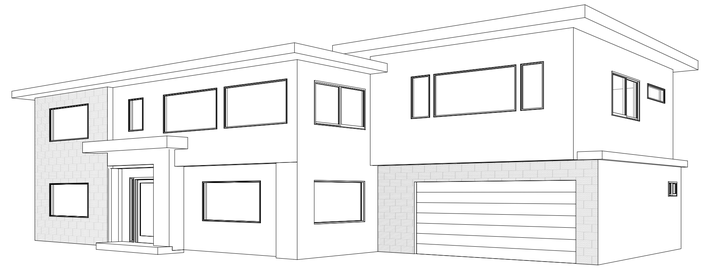
FASCIA COLOR: BLACK BY BEHR
COLOR: DYNASTY MARQUEE
(ONE-COAT) G9-7

WINDOWS BY: MILGARD:
FRAME COLOR: BLACK
FRAME MATERIAL: VINYL

LIME STONE
STILE: SAIN CLAIR
SIZE: 4"X16"

#MS-87 DOVE GRAY ELASTOMERIC
MASONRY, STUCCO AND BRICK EXTERIOR
BY: BERH PAINTS

Front View Rendering #2



1 3D View 1

4 EXTERIOR FINISH NOTES.
1/4" = 1'-0"

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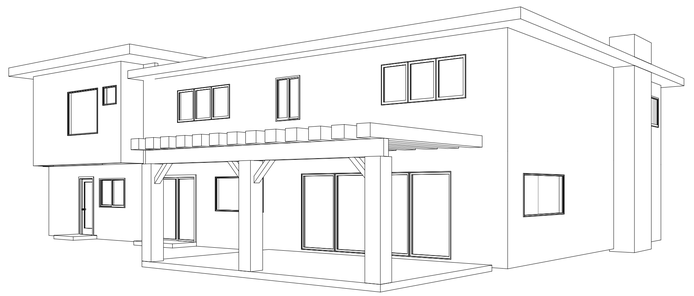
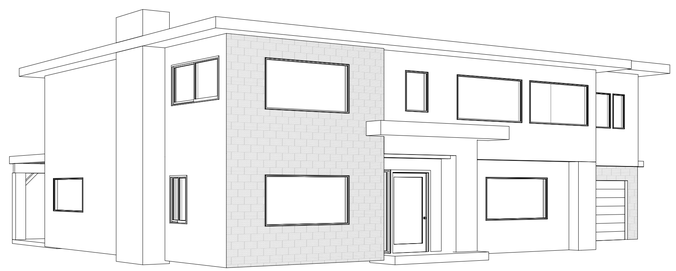


2 3D View 5



3 3D View 4

PROJECT NAME:
THE DONA SUSANA Dr. RESIDENCE

PROJECT ADDRESS:
2968 N. DONA SUSANA Dr.
STUDIO CITY, CA. 91604

3D VIEWS & MATERIALS

DESIGNER
ENR DESIGN, INC
PH: (818) 282-0437

NO.	DATE	BY
	SUBMITTAL	

DATE:
SCALE: 1/4" = 1'-0"
DRAWN BY: Author
JOB #: Project Number

SHEET #
A3.2

Window Opening Control Device

Meets ASTM F2090-10 Standard

Windows let in the fresh air, and in emergencies can be the only means of escape. Although a beautiful day may drive us to open the windows, it's imperative that children and toddlers can remain safe, especially on upper floors.

Milgard provides an optional Window Opening Control Device (WOCD) that meets the ASTM F2090-10 standard which limits the window sash opening to less than 4", helping to reduce the risk of dangerous falls. It also manually disengages for full operation of the window and resets by closing the window.

WOCD's are available as an upgrade on these Milgard products:

Material	Series	Operating Styles
Vinyl Windows	Tuscany® Series | V400 Trinsic™ Series | V300 Style Line® Series | V250	Casement Single Hung Double Hung (Tuscany Series only) Horizontal Slider
Fiberglass Windows	Ultra™ Series | C650	Casement
Aluminum Windows	Thermally Improved Aluminum | A250	Single Hung Horizontal Sliders

OPERATION OF WOCD

Single Hung, Double Hung and Horizontal Slider - tab stop prevents sash from opening until it is pushed in and sash is moved beyond the tab. Tab resets when sash is closed.

Casement - arm sits in a track until disengaged by releasing a tab on the track.

Features and Benefits:

- Automatically limits sash opening to less than 4 inches
- Manual override for full operation and emergency escape and rescue
- Device automatically resets by closing the window
- Meets the ASTM F2090-10 standard
- One alternative to minimum sill height requirement (consult local building codes)

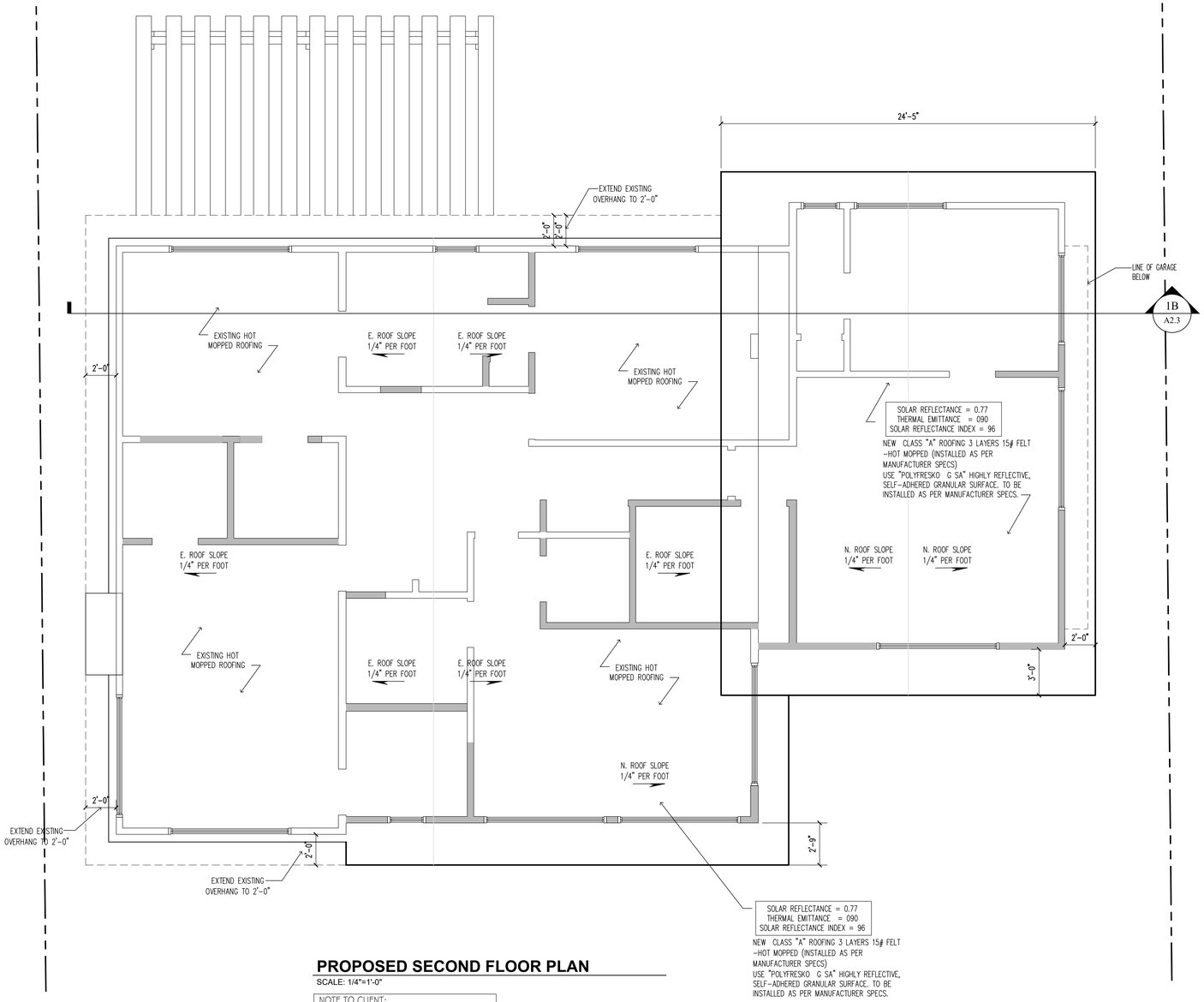
WOCD for Tuscany and Trinsic Series single hung, double hung and horizontal slider

WOCD for Tuscany and Trinsic Series casement

WOCD for Style Line Series single hung and horizontal slider

WOCD for Aluminum Series single hung and horizontal slider

MILGARD.COM



PROPOSED SECOND FLOOR PLAN

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

NOTE TO CLIENT:
ALL DIMENSIONS SHOWN ON PLAN ARE WITHIN A +/-2" TOLERANCE. DISCREPANCIES ARE ALLOWED DUE TO UNEVEN EXTERIOR STUCCO THICKNESS AND/OR EXISTING INTERIOR PLUMBING WALLS.

NOTES TO CONTRACTOR:
-CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO THE COMMENCEMENT OFDEMOLITION/CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE DESIGNER AND ENGINEER.

PROJECT NAME
THE DONA SUSANA Dr.
RESIDENCE

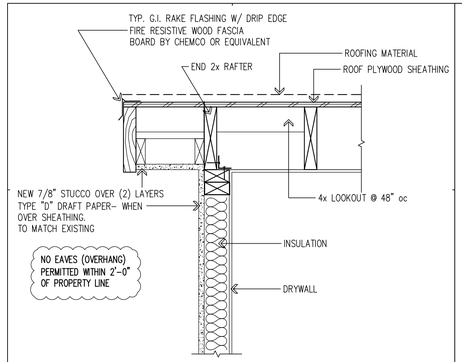
PROJECT ADRESS
2968 DONA SUSANA Dr.
STUDIO CITY, CA. 91604

DESIGNER
ENR DESIGN & DRAFTING, INC.
Ph: (818) 282-0437
Fax: (818) 401-0713

No	SUBMITTAL	DATE	BY
	SUBMITTAL	00/00/00	

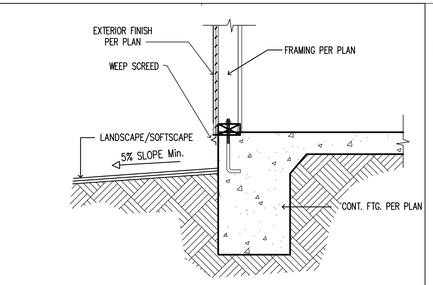
Date: 00/00/00
Scale: 1/4"=1'-0"
Drawn By: AC
Job No.

SHEET #
A4.0
OF SHTS



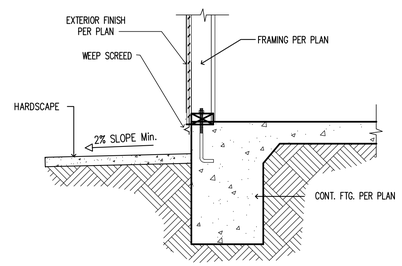
STUCCO @ OVERHANG

N.T.S. | 7



A DRAINAGE SLOPE OVER SOFTSCAPE/LANDSCAPE

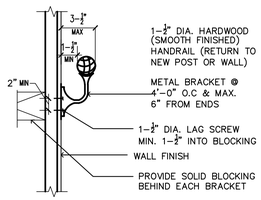
NOTE:
DRAINAGE SHALL BE CONDUCTED AWAY FROM THE BUILDING FOR THE FIRST 5ft AT 2% Min. SLOPE WHEN OVER HARDSCAPE AND AT 5% Min. SLOPE WHEN OVER SOFTSCAPE.



B DRAINAGE SLOPE OVER HARDSCAPE

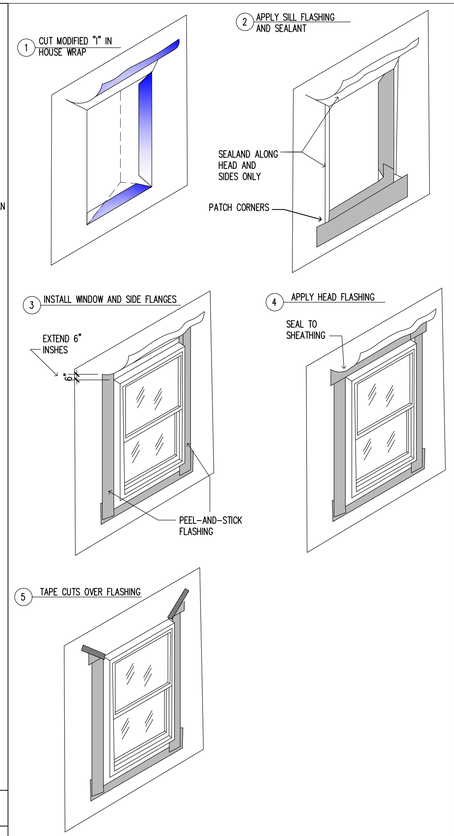
DRAINAGE AWAY FROM FOOTING

N.T.S. | 5



TYP. W.I. RAILING DETAIL

1"=1'-0" | 6

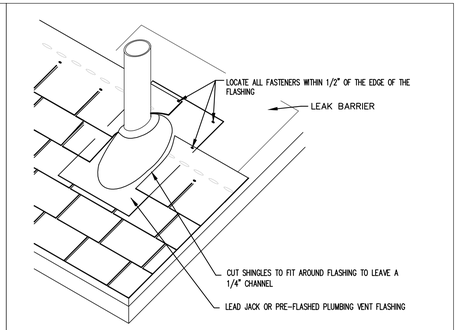


INSTALLATION PROCEDURE FOR WINDOW AND DOOR OPENINGS (TYP.)

- Cut the house wrap at the header at 45-degree angles to create a flap. Tape the flap temporarily out of the way.
- Once the house wrap is taped back, you can start applying the door flashing. Apply the peel-and-stick flashing to the sill first; then lap the flashing up onto the jambs.
- Follow the manufacturer's instructions to install the door into the rough opening.
- Next, apply the self-stick flashing to the side jambs of the door. The jamb flashing should overlap the edges of the sill and extend down past it by one inch and extend past the head by two inches.
- Install a drip edge extending past 2 inches on each side of the door. Then tuck the drip edge underneath the house wrap flap that you cut earlier. This will allow any water to run off of the door header.
- Install the self-stick flashing at the head of the door overlapping the drip edge and the house wrap. Extend the header flashing piece past the jambs at least one inch.
- After installing the header flashing, fold the house wrap flap back over, taping it down so that the house wrap material overlaps the header flashing.

WINDOW OPENING WATER PROOFING

4

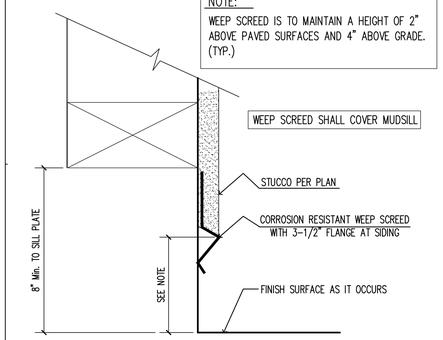


NOTES:
1.) INSTALL 24" WEATHERWATCH OR STORMGUARD LEAK BARRIER TARGET SHEET.
2.) DO NOT FACE NAIL THE PLUMBING VENT FLASHING.

PLUMBING VENT FLASHING

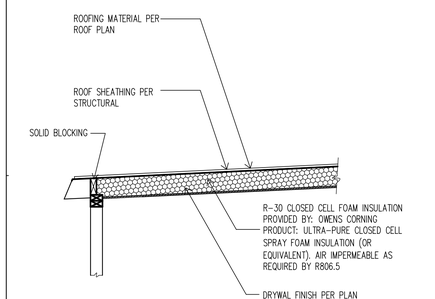
GAF FIBERGLASS – ASPHALT COMPOSITE SHINGLES

1



WEEP SCREED

N.T.S. | 2



ENCLOSED RAFTER BAY

N.T.S. 1 | 3

PROJECT NAME
THE DONA SUSANA Dr.
RESIDENCE

PROJECT ADRESS
2968 DONA SUSANA Dr.
STUDIO CITY, CA. 91604

TYPICAL DETAILS

DESIGNER
ENR DESIGN & DRAFTING, INC.
Ph: (818) 282-0437
Fax: (818) 401-0713

No	SUBMITTAL	DATE	BY
	SUBMITTAL	00/00/00	

Date: 00/00/00
Scale: 1/4"=1'-0"
Drawn By: AC
Job No.

SHEET #
A5.0
OF SHTS

GENERAL STRUCTURAL REQUIREMENTS

BUILDING CODES

1. THE INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION AND THE MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-16), AMERICAN CONCRETE INSTITUTE ACI 318-14, SEISMIC DESIGN MANUAL AISC 341, STEEL CONSTRUCTION MANUAL AISC 15TH EDITION, BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (TMS 402-16), AND NATIONAL DESIGN SPECIFICATION NDS 2018 EDITION, AWC SDPWS-15.
2. CALIFORNIA BUILDING CODE (CBC), 2022 EDITION.
3. LOS ANGELES BUILDING CODE (LABC), 2023 EDITION WHERE APPLICABLE.

LOADS:
- DESIGN FLOOR LOADS

SUPER IMPOSED LOADS ASSUMED IN THE DESIGN	
ROOF DEAD LOAD	15 PSF.
FLOOR DEAD LOAD	15 PSF.
CEILING DEAD LOAD	6 PSF.
UNREDUCED ROOF LIVE LOAD	20 PSF.
FLOOR LOAD	40 PSF.
CEILING LIVE LOAD	10 PSF.
STAIRS	PSF.

-SEISMIC DESIGN FACTORS

RISK CATEGORY	II	ANALYSIS PRECEDURE USED: EQUIVALENT LATERAL FORCE PROCEDURE	
SITE CLASS	D	ρ	1.3
S_s	2.097	S_{DS}	1.678
S_1	0.751	S_{D1}	0.7
R (N-S')	6.5	Ω	3.0
R (E-W)	6.5	C_d	4.0
SDC	D	C_s	0.258
BASE SHEAR	28,876#	I	1.0
LAT.= 34.1254		LONGIT.= -118.3758	

-WIND DESIGN FACTORS

GUST EFFECT FACTOR	0.8
WIND DIRECTIONALITY FACTOR	0.85
VELOCITY PRESSURE EXPOSURE COEFFICIENTS	0.7
TOPOGRAPHIC FACTOR	1.0
EQUIVALENT BASIC WIND SPEED	95 MPH
IMPORTANCE FACTOR (CATEGORY II)	1.0
EXPOSURE CATEGORY	C

1. ALL WORK SHALL COMPLY WITH ALL THE APPLICABLE FEDERAL LAWS, STATE STATUTES LOCAL ORDINANCES AND THE REGULATIONS OF AGENCIES HAVING JURISDICTION OVER THE PROJECT. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR COMPLYING WITH THE CONSTRUCTION SAFETY ORDERS AND THE GENERAL INDUSTRIAL SAFETY ORDERS OF THE STATE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION AND SUCH OTHER AGENCIES GOVERNING THE CONTRACTOR'S ACTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND HOLD HARMLESS THE STRUCTURAL ENGINEER, ARCHITECT AND OWNER FOR ANY DAMAGES AND/OR PENALTIES RESULTING FROM HIS FAILURE TO COMPLY WITH SAID LAWS, STATUTES, ORDINANCES AND REGULATIONS.

2. THE FOLLOWING NOTES AND SPECIFICATIONS ARE " UNLESS OTHERWISE NOTED". CONFLICT BETWEEN THE SPECIFIC NOTES AND THE GENERAL SHOULD BE CLARIFIED WITH THE STRUCTURAL ENGINEER-OF-RECORD PRIOR TO THE COMMENCEMENT OF WORK. NO OTHER METHOD CONSTRUCTION OR SUBSTITUTION SHALL BE ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER OR ARCHITECT.

3. ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK. NOTED DIMENSIONS SHALL SUPERSEDE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.

4. THE DESIGN, ADEQUACY, AND OVERALL SAFETY OF ANY ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND HAS NOT BEEN TAKEN INTO CONSIDERATION BY THE ARCHITECT OR STRUCTURAL ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE PRIOR TO THE APPLICATION OF ALL SHEATHING AND FINISH MATERIALS. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR STRUCTURAL ENGINEER DO NOT CONSTITUTE INSPECTION OF ANY OF THE ABOVE ITEMS.

5. REFERENCE THE STRUCTURAL CALCULATIONS OR CONSULT THE STRUCTURAL ENGINEER FOR ANSWERS TO QUESTIONS REGARDING LUMBER GRADES OR SIZES, REQUIRED FASTENERS, AND/OR FOOTING SIZES AND REINFORCEMENT.

6. ALL WORK SHALL BE PERFORMED IN A SOUND MANNER, PROVIDING A COMPLETED PROJECT WITH ALL MATERIALS, ASSEMBLIES, AND SYSTEMS CORRECTLY INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND PERFORMING IN A MANNER CONSISTENT WITH INDUSTRY STANDARDS.
A. BY DEFINITION "CONSTRUCTION DOCUMENTS" SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING; DRAWINGS, SPECIFICATIONS, STRUCTURAL CALCULATIONS, SOILS REPORT, STATE MANDATED ENERGY CALCULATIONS AND NOTES, GEOLOGY REPORT, ACOUSTICAL REPORT, ADDENDUM, CHANGE ORDERS, AND CLARIFICATIONS.

7. THE CONTRACTOR SHALL ARRANGE FOR ALL TESTING AND INSPECTIONS REQUIRED BY THE CONSTRUCTION DOCUMENTS AND ANY AGENCY HAVING JURISDICTION OVER THIS PROJECT (i.e. LOCAL BUILDING, GRADING AND HEALTH DEPARTMENTS).
A. ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE SOILS ENGINEER AND LOCAL BUILDING INSPECTOR PRIOR TO PLACEMENT OF REINFORCING.

8. ALL RECOMMENDATIONS OF THE SOILS AND/OR GEOLOGY REPORTS ARE CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS AND SHALL BE IMPLEMENTED. A COPY OF THE SOILS REPORT SHOULD BE KEPT ON SITE FOR THE DURATION OF CONSTRUCTION.
A. PRIOR TO THE ISSUANCE OF THE BUILDING AND/OR GRADING PERMIT THERE SHALL BE NO TRENCHES OR EXCAVATIONS 5 FEET OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND.

10. THE ENTIRE CONSTRUCTION SITE SHALL BE ACCESSIBLE TO FIRE DEPARTMENT PERSONNEL BY MEANS OF OPENING GATES, ACCESS LADDERS, OR OTHER MEANS WHICH WILL NOT PROHIBIT FIRE FIGHTING ON SITE.

11. THERE SHALL BE NO DEVIATION FROM THE STRUCTURAL DETAILS WITHOUT A WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER-OF-RECORD. APPROVAL BY THE LOCAL BUILDING INSPECTOR DOES NOT CONSTITUTE AUTHORITY TO DEVIATE FROM THE CONSTRUCTION DOCUMENTS.

12. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.

13. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.

14. OPENINGS, POCKETS, ETC., LARGER THAN 6" SHALL NOT BE PLACED IN CONCRETE SLABS, DECKS, WALLS, UNLESS SPECIALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC., LARGER THAN 6" NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN STRUCTURAL MEMBERS. FOR ANY FURTHER RESTRICTIONS ON OPENINGS IN STRUCTURAL ELEMENTS, SEE APPLICABLE SECTIONS BELOW.

15. PIPES SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE EXCEPT WHERE SPECIFICALLY APPROVED.

16. CONTRACTOR SHALL INVESTIGATE SITE DURING CLEARING AND EARTHWORK PERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

17. CONTRACTOR TO PREPARE SHOP DRAWINGS FOR ALL CONCRETE REINFORCEMENT, STRUCTURAL STEEL, SPECIAL FLOOR & ROOF JOISTS, WOOD TRUSSES, ETC.. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORDS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
18. CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED ROOF OR FLOOR. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.

19. CONTROLLED ACTIVITY INSPECTION IS REQUIRED FOR (BUILDINGS OVER 5 STORIES)(BUILDINGS OVER 50,000 SQ FT OF GROUND FLOOR AREA) (BUILDINGS OVER 200,000 SQ FT OF FLOOR AREA)

STRUCTURAL CONCRETE NOTES

1. ALL REINFORCED AND UN-REINFORCED CONCRETE WORK SHALL COMPLY WITH THE LATEST EDITION OF THE ACI 318-14 CODE AT THE TIME THIS PROJECT IS DESIGNED AND PERMITTED.

2. MATERIALS
A. CONCRETE:
i) MINIMUM SPECIFIED CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE. (UNLESS NOTED OTHERWISE ON PLANS)
ii) THE CONCRETE SLUMP SHALL NOT EXCEED 4 ½ INCHES WITHOUT PLASTICIZER. CONSULT WITH THE STRUCTURAL ENGINEER IF HIGHER SLUMP IS SUGGESTED.
iii) PROPERLY VIBRATE ALL CONCRETE EXCEPT CONCRETE FOR SLAB-ON-GRADE IN FLAT AREAS.
iv) NO FLY ASH ADDITIVES SHALL BE USED IN FLATWORK OR ARCHITECTURALLY EXPOSED CONCRETE UNLESS APPROVED BY THE ENGINEER OF RECORDS

ELEMENT	f'c (PSI)	DEPUTY INSPECTION	ELEMENT	f'c (PSI)	DEPUTY INSPECTION
ISOLATED PADS	2500	NOT REQUIRED	STRUCTURAL SLABS	~~5000~~	REQUIRED
CONT. FOOTINGS	2500	NOT REQUIRED	BEAMS	~~5000~~	REQUIRED
PILES & GRADE BEAMS	3000	REQUIRED	COLUMNS	~~5000~~	REQUIRED
SLAB-ON-GRADE	2500	NOT REQUIRED	RETAINING WALLS	~~5000~~	REQUIRED

B. CEMENT: TESTED TYPE I PORTLAND (ASTM C-150)
C. AGGREGATES: 1.0" MAX FOR FOOTINGS AND ¾" MAX FOR ALL OTHER WORK. (ASTM C-33)
D. WATER: DRINKABLE
E. REINFORCING :
i) ASTM A615 (Fy= 60KSI) DEFORMED BARS FOR ALL BARS, EXCEPT GRADE BEAMS AND PILE CAPS. FOR GRADE BEAM PROVIDE LOW ALLOY ASTM A706 (Fy= 60KSI) DEFORMED BARS. ALL GRADE 60 REINFORCING TO BE WELDED SHALL BE ASTM A706. WELDED WIRE FABRIC PER ASTM A185, WIRE PER ASTM A83. NO TACK WELDING OR REINFORCING BAR ALLOWED WITHOUT PRIOR EVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY. CLEAR CONCRETE COVERAGE AS FOLLOWS:(UNLESS NOTED OTHERWISE ON PLANS)

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
EXPOSED TO EARTH OR WEATHER	
#6 OR LARGER	2"
#5 AND SMALL	1 ½"
COLUMNS (TO TIE	1 ½"
BEAM (TO STIRRUP	1 ½"
FLAT SL	1 ½"
ALL OTHER PER LATEST EDITION OF ACI 318 -14	.

ii) LAP SPLICES IN CONCRETE: LAP SPLICES, UNLESS NOTED OTHERWISE, SHALL BE CLASS 'B' TENSION LAP SPLICES PER LATEST EDITION OF ACI 318. LAP SPLICES IN CONCRETE COLUMNS SHALL BE STANDARD COMPRESSION LAP SPLICES. STAGGER SPLICES A MINIMUM OF ONE LAP LENGTH. LAPS IN WELDED WIRE FABRIC SHALL BE MADE SO THAT THE OVERLAP, MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET, IS NOT LESS THAN THE SPACING OF CROSS WIRES PLUS 2 INCHES. ALL WELDED WIRE FABRIC SHALL BE CHAIRED TO ENSURE PROPER CLEARANCES.

ALL SPLICE LOCATIONS SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS PER TYPICAL DETAILS. REINFORCING BAR SPLICING GIVEN ARE MAXIMUM ON CENTERS. ALL BARS PER CRSI SPECIFICATIONS AND HANDBOOK. DOWEL ALL VERTICAL REINFORCING TO FOUNDATION WITH STANDARD 90-DEGREE HOOKS UNLESS NOTED OTHERWISE. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE. CONCRETE COLUMN DOWEL EMBEDMENT SHALL BE A STANDARD COMPRESSION DOWEL WITH EMBEDMENT LENGTH ACCORDING TO THE LATEST EDITION OF THE ACI 318. (UNLESS NOTED OTHERWISE ON PLANS OR DETAILS) F. DRYPACK: DRYPACK SHALL BE 5,000 PSI NON-SHRINK GROUT, FIVE STAR OR EQUIVALENT. INSTALL DRYPACK UNDER BEARING PLATES BEFORE FRAMING MEMBER IS INSTALLED. AT COLUMNS, INSTALL DRYPACK UNDER BASEPLATES AFTER COLUMN HAS BEEN PLUMBED BUT PRIOR TO FLOOR OR ROOF INSTALLATION.

3. ONLY ONE GRADE OF CONCRETE SHALL BE PERMITTED ON THE JOB SITE AT ONE TIME.

MATERIALS

1. STRUCTURAL STEEL BARS, PLATES AND ROLLED SHAPES ---- A.S.T.M. A992
2. STEEL TUBE (SQ.. OR RECT.) ---- A.S.T.M. A-501, GRADE B, TYPE E OR S.
3. STEEL PIPE ---- A.S.T.M. A-53 , GRADE B, TYPE E OR S
4. BOLTS ---- A.S.T.M. A-307 (OR A-325 AS INDICATED) GRADE A
5. GALVANIZING ---- A.S.TM. A-123 FOR ASSEMBLED PRODUCTS. A.S.T.M. A-123 FOR ROLLED, PRESSED, AND FORGED STEEL SHAPES, PLATES, BARS, AND STRIP GREATER THAN 1/8" THICK. A.S.T.M. A-153 FOR HOT-DIP GALVANIZED FASTENERS. GALVANIZING REPAIR PAINT SHALL MEET MILK-P-21035 OR SSPC- PAINT 20.
6. SHOP PAINT ---- SSPC-PAINT 13. SHOP PRIME ALL STRUCTURAL STEEL EXCEPT PORTIONS TO BE EMBEDDED IN CONCRETE OR MORTAR.
7. WELDING SHALL BE ELECTRIC ARC PROCESS (E70XX) PERFORMED BY QUALIFIED WELDERS AND CERTIFIED THE CITY OF L.A. BLDG.. & SAFETY DEPT.. ALL FIELD WELDING SHALL BE PROVIDED WITH CONT. INSPECTION BY A CERTIFIED DEPUTY INSPECTOR.

EXECUTION

1. POSITION, SUPPORT AND SECURE REINFORCEMENT AGAINST DISPLACEMENT WITH METAL CHAIRS, RUNNERS, SPACERS, BOLSTERS, OR HANGERS AS REQUIRED TO PROVIDE REQUIRED CLEARANCES. DIRECT WIRE TIES INTO CONCRETE, NOT TOWARDS EXPOSED CONCRETE SURFACES. MINIMUM CLEAR DISTANCE BETWEEN SOIL AND REINFORCEMENT SHALL BE 3 INCHES UNLESS OTHERWISE NOTED.

2. PROVIDE CONSTRUCTION, ISOLATION, SEISMIC, AND CONTROL JOINTS AS REQUIRED. LOCATE JOINTS SO AS NOT TO IMPAIR THE STRENGTH AND/OR APPEARANCE OF THE STRUCTURE. PLACE ISOLATION AND CONTROL JOINTS IN SLABS-ON-GRADE AT 20 FEET ON CENTER EACH WAY TO MINIMIZE CRACKING.

3. 5/8" MINIMUM NOMINAL DIAMETER, EMBEDDED AT LEAST 7" INTO THE CONCRETE AND SPACED NOT MORE THAN 6 FT. APART, WITH TWO BOLTS PER PIECE EACH ONE NOT MORE THAN 12" OR LESS THAN 7 BOLT DIAMETERS (4-3/8") FROM END.

4. FORMWORK SUPPORTING VERTICAL SURFACES MAY BE REMOVED AFTER A MINIMUM OF 2 DAYS. ALL OTHER FORMWORK MAY BE REMOVED ONLY WHEN THE CONCRETE HAS REACHED 75% OF ITS 28 DAY STRENGTH.

5. POWDER ACTUATED FASTENERS (i.e. SHOTPINS) SHALL BE ICC APPROVED.

6. CONSOLIDATE CAST-IN-PLACE CONCRETE USING MECHANICAL VIBRATING EQUIPMENT, HAND RODDING AND TAMPING SO THAT CONCRETE IS WORKED AROUND ALL REINFORCEMENT AND OTHER EMBEDDED ITEMS AND TIGHT TO ALL EDGES.

7. PROTECT CONCRETE FROM PHYSICAL DAMAGE OR REDUCED STRENGTH DUE TO WEATHER EXTREMES DURING MIXING, PLACEMENT, AND CURING BY COMPLYING WITH THE FOLLOWING;
A. IN COLD WEATHER ---- A.C.I. 306
B. IN HOT WEATHER ---- A.C.I. 305
8. PRIOR TO PLACING CONCRETE REMOVE ALL DEBRIS, WATER, MUD, AND LOOSE EARTH FROM EXCAVATED AREA.

FOUNDATION

ALLOWABLE BEARING PRESSURE - 1,500 PSF (PER CBC 2022 TABLE 1806.2)

TIMBER NOTES

1. THE FOLLOWING CODES AND SPECIFICATIONS SHALL GOVERN THE CONSTRUCTION OF STRUCTURAL WOOD SYSTEMS;
A. 1. THE INTERNATIONAL BUILDING CODE (IBC), 2021 EDITION AND THE MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7)
2. CALIFORNIA BUILDING CODE (CBC), 2022 EDITION.
3. LOS ANGELES BUILDING CODE (LABC), 2023 EDITION WHERE APPLICABLE.
B. NATIONAL DESIGN SPECIFICATION (NDS) 2018 EDITION
C. WWPA OR WCLIB STANDARD GRADING RULES FOR WESTERN LUMBER
D. PS-1 PLYWOOD STANDARDS
E. ANSI A-208 -- PARTICLEBOARD SPECIFICATIONS

2. NO CHANGES OR SUBSTITUTIONS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

3. DIMENSION LUMBER SHALL BE S4S DOUGLAS FIR-LARCH UNLESS OTHERWISE NOTED. ALL STRUCTURAL MEMBERS SHALL BE GRADE STAMPED BY A CERTIFIED INSPECTION AGENCY.

4. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED. WHERE WOOD IS NEARER THAN 8" TO EARTH USE PRESSURE TREATED WOOD UNLESS SEPARATED BY A 3" CONCRETE SLAB WITH AN IMPERVIOUS MEMBRANE BETWEEN EARTH AND CONCRETE.

5. DIMENSION LUMBER SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF CLOSING IN OF BUILDING.

6. ALL WOOD CONNECTORS INDICATED SHALL BE BY SIMPSON STRONG-TIE UNLESS SUBSTITUTES ARE APPROVED BY THE ARCHITECT AND STRUCTURAL ENGINEER.

MATERIALS

1. DIMENSION LUMBER SHALL BE THE GRADE INDICATED BELOW ;
A. STUDS, PLATES AND BLOCKING DOUGLAS FIR - LARCH #2 GRADE OR BETTER
B. JOISTS AND RAFTERS DOUGLAS FIR - LARCH #2 GRADE OR BETTER
C. POSTS, BEAMS, AND HEADERS DOUGLAS FIR - LARCH #1 GRADE OR BETTER

2. SHEATHING
A. ALL PLYWOOD SHALL CONFORM TO PS 1-09 AND BE OF GRADE, INDEX NO. AND THICKNESS CALLED FOR ON THE PLANS. ALL PLYWOOD SHALL BE BONDED WITH EXTERIOR GLUE.

B. ALL PLYWOOD DIRECTLY EXPOSED TO WEATHER SHALL BE EXTERIOR GRADE.

C. ALL PLYWOOD NAILING SHALL BE INSPECTED BY THE BUILDING INSPECTOR PRIOR TO COVERING.

ROOF SHEATHING: 1/2" THK. PLYWOOD STR-1 W/ 10d NAILS AT 6:6:12 O.C. BOUNDARY PLYWOOD NAILING AT ALL GRIDLINES BLOCKED.

FLOOR SHEATHING: 3/4" THK. PLYWOOD STR-1 W/ 10d NAILS AT 4:6:6 O.C. BOUNDARY PLYWOOD NAILING AT ALL GRIDLINES BLOCKED.

INDICATES SHEAR WALLS (NOT NECESSARILY PLYWOOD)

INDICATES SHEAR WALLS (NOT NECESSARILY PLYWOOD)

EXTERIOR WALLS: 7/8" THK. CEMENT PLASTER ON FURRED OR SELF-FURRING EXPANDED METAL OR FABRIC LATH WITH #11 GA., 1 1/2" LONG, 7/16" DIA. HEAD GALV. AT 6" O.C.
INTERIOR WALLS: 5/8" TYPE "X" GYPSUM WALLBOARD FASTENED TYPE W BUGLE HEAD DRYWALL SCREWS @ 12" O.C. CEILINGS, 16" O.C. WALLS, 5/8" MIN. PENETRATION INTO FRAMING PER CBC2022.
TYP. U.N.O.(2 PLY GYPBD. REQUIRED PER ARCH'L.)

3. PRESSURE TREATED LUMBER
A. LUMBER AND PLYWOOD WITH WATER-BORNE PRESERVATIVES TO COMPLY WITH AWPA C2 AND C9 RESPECTIVELY AND CBC2022. WOOD FOR ABOVE GROUND USES USE AWPA LP-2
C. PRESSURE TREAT CANTS, NAILERS, BLOCKING, STRIPPING AND SIMILAR ITEMS IN CONJUNCTION WITH ROOFING, FLASHING, VAPOR BARRIERS, AN WATER-PROOFING OR USE REDWOOD.
D. PRESSURE TREAT SILLS, SLEEPERS, NAILERS, BLOCKING, FURRING AND SIMILAR ITEMS IN DIRECT CONTACT WITH CONCRETE OR MASONRY OR USE REDWOOD.

4. FASTENERS/ HARDWARE
A. NAILS SHALL BE COMMON WIRE NAILS. SINKERS MUST NOT BE USED.
B. BOLTS SHALL HAVE STANDARD CUT WASHERS UNLESS THEY ARE BEING USED WITH STRUCTURAL STEEL MEMBERS. HOLES FOR BOLTS SHALL BE NOT MORE THAN 1/16" LARGER THAN THE BOLT DIAMETER.
C. LAG SCREWS SHALL BE TURNED (NOT DRIVEN) INTO PRE-DRILLED HOLES OF 2/3 THE SHANK DIAMETER.

LARR # REQUIED FOR THE FOLLOWING INTEMS U.N.O

ITEMS		LARR #	ICC-ES	ITEMS		LARR #	ICC-ES
ANCHOR BOLTS		25827	ESR-2611	PARALLAM		25202	ESR-1387
HOLD DOWNS		25720	ESR-2330	TJI WOOD JOIST		25538	ESR-1153
STRAPS		25910	ESR-3096	HANGER FOR SOLID SAWN		25801	ESR-2552
STEEL STRONG WALL		25202	ESR-1387			25910	ESR-3096
STRONG WALL		25427	ESR-1267			25807	ESR-2549
SHOT PIN		25646	ESR-1663	HANGER FOR GLULAM BM		25801	ESR-2552
VULCRAFT ST'L TRUSS JOIST		23305	ESR-1663	HANGER FOR ENGINEERING WOOD BEAM		25803	ESR-2615
RED-BUILT OPEN WEB TRUSS			ESR-1774			25806	ESR-2877
SET-XP EPOXY		25744	ESR-2508	WD POST BASE	AB,ABU,CPTZ	25712	ESR-1622
WATER PROOFING	BITUTHENE	24386			EPB,PB,EPS,CB	25985	ESR-3050
	MiraPLY V	25934		HARDY FRAME		25759	ESR-2089
GEOFORM BLOCK			ESR-1006	TJI JOIST		25538	ESR-1153
A34,A35,LTP5,H2.5T		25814	ER-0112	GLASS RAILING		26149	
PLASTIC GLAZING			ESR-1253			25784	
VERCO STEEL DECKS		23789	ER-0217	BARRIERS			ESR-3310
SSMA METAL FRAME			ESR-3064P				

ROUGH FRAMING LUMBER

1. ANY PRODUCTS NOT SPECIFICALLY COVERED IN THE ABOVE REFERENCED STANDARDS SHALL COMPLY WITH THE RECOMMENDATIONS OF THE PRODUCT MANUFACTURER FOR THE USE INTENDED.

2. INSTALL FASTENERS WITHOUT SPLITTING WOOD. FASTEN PANEL PRODUCTS TO ALLOW FOR EXPANSION AT JOINTS UNLESS OTHERWISE INDICATED.

3. WALL FRAMING SHALL BE 2X4 @ 16" O/C UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS.

4. FASTEN STRUCTURAL SHEATHING AS FOLLOWS;
A. FLOOR SHEATHING AND SUB-FLOORING ---GLUED AND NAILED AS INDICATED ON THE DRAWINGS.
B. WALL AND ROOF SHEATHING ---NAILED AS INDICATED ON DRAWINGS.
C. UNDERLAYMENT --- NAILED TO SUB-FLOORING.

5. ALL HORIZONTAL PLYWOOD SHALL BE LAID WITH FACE GRAIN PERPENDICULAR TO JOISTS/RAFTERS AND WITH STAGGERED JOINTS.

6. ALL FRAMING, NAILING, LET-IN BRACING, SPLICES, ETC. SHALL CONFORM TO LOCAL BUILDING CODES.

7. CUT, SHAPE, COPE, PLUMB, LEVEL, AND TURN ALL FRAMING MEMBERS TO PROVIDE FULL BEARING UNLESS NOTED OTHERWISE.

8. REFERENCE CBC CHAPTER 23. FOR RULES REGARDING THE CUTTING, NOTCHING, AND BORING OF JOISTS, STUDS AND BEAMS.

9. ALL POSTS FROM THE ROOF MUST BE CONTINUED DOWN TO SUPPORT USING THE SAME SIZE MATERIAL. POSTS MAY BEAR ON SILL PLATES UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING BELOW POSTS TO FOUNDATION.

10. WHERE DOUBLE PLATES ARE INTERRUPTED BY POSTS OR BEAMS, STRAP WITH ST6224 USING A MINIMUM OF (20) 16d EACH END.

11. ALL BEAMS PERPENDICULAR TO WALLS MUST BE SUPPORTED ON POSTS THE SAME THICKNESS AS THE STUDS AND THE SAME WIDTH AS THE BEAM.

12. PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS AND SOLID BLOCKING UNDER ALL PERPENDICULAR PARTITIONS.

13. ROOF FRAMING
A. PROVIDE 2X RIDGE BOARDS, HIPS, AND VALLEYS WHICH ARE AT LEAST AS DEEP AS THE CUT END OF THE RAFTERS.
B. RAFTERS SHALL BE NAILED TO ADJACENT CEILING JOISTS WITH A MINIMUM OF (4) 16d.
C. ALL RAFTERS SHALL BE LATERALLY SUPPORTED AT THE ENDS AND AT EACH SUPPORT BY SOLID 2X FULL HEIGHT BLOCKING UNLESS NAILED TO AN ADJOINING STUD.
D. WHERE CEILING JOISTS RUN OTHER THAN PARALLEL TO THE ROOF RAFTERS, RAFTERS SHALL BE TIED BACK BY 2X4 CROSS TIES AT 4' O.C. NAILED TO THE RAFTERS WITH 4-16d NAILS.

15. FLOOR FRAMING
A. JOISTS SHALL HAVE A MINIMUM OF 1 1/2" OF BEARING ON WOOD OR METAL AND 3" OF BEARING ON MASONRY.
B. JOISTS SHALL BE LATERALLY SUPPORTED AT THE ENDS AND EACH SUPPORT BY SOLID 2X FULL HEIGHT BLOCKING UNLESS NAILED TO AN ADJOINING STUD OR ANCHORED USING A MECHANICAL FASTENER.
C. LAP JOISTS OVER SUPPORTS 4" MINIMUM AND NAIL WITH (4) 16d TO PREVENT SEPARATION.
D. ALL FLUSH FRAMED JOISTS SHALL BE HUNG WITH SIMPSON JOIST HANGERS, TYPE "HU". U.N.O.
E. PROVIDE DOUBLE JOISTS UNDER AND PARALLEL TO ALL BEARING PARTITIONS.
F. JOISTS SHALL BE LOCATED SUCH THAT ANY PLUMBING OR MECHANICAL PIPING HAS REQUIRED CLEARANCE.

16. WALL FRAMING
A. PLACE STUDS WITH WIDE DIMENSION PERPENDICULAR TO WALL. FRAME CORNERS WITH 3 STUDS MINIMUM STUD LENGTH FOR FOUNDATION WALLS IS 14", IF WALL IS SHORTER, THEN PROVIDE SOLID BLOCKING. WHERE FOUNDATION WALL EXCEEDS 4'-0" IN HEIGHT FRAME AND SHEATH AS REQUIRED FOR AN ADDITIONAL STORY.
B. AT ALL WALLS PROVIDE DOUBLE TOP PLATES WITH LAPPED CORNERS AND STAGGERED SPLICE WHICH ARE A MINIMUM OF 4'-0" IN LENGTH.
C. AT ALL WALLS PROVIDE A SINGLE BOTTOM PLATE. WHERE PLATES ARE CUT OR BORED PROVIDE 1/8" X 1 1/2" METAL STRAP EACH SIDE WITH (4) 16d.
D. PROVIDE SOLID 2X BLOCKING FOR ALL HANDRAILS.
E. STUD PARTITIONS CONTAINING PLUMBING, HEATING OR OTHER PIPING SHALL BE FRAMED AS TO GIVE PROPER CLEARANCE FOR THE PIPES.
F. PROVIDE FIRE BLOCKING AT MID-HEIGHT OF STUD WALLS EXCEEDING 8'-0" IN COMPLIANCE WITH LOCAL CODE. FIRE BLOCKING SHALL BE 2X MATERIAL OF SAME WIDTH AS THE STUDS.
STAIR STRINGERS SHALL BE FIRE BLOCKED AT EACH END AND AT MID FLIGHT OF STAIRS. BLOCKING SHALL BE TIGHTLY FITTED.

17. BEAMS AND/OR DRAG STRUTS: MEMBERS LAMINATED OF MULTIPLE JOISTS SHALL BE SPIKED TOGETHER WITH 16d NAILS AT 9" O.C. STAGGERED. IF USING 3 OR MORE JOISTS TOGETHER, LAMINATE WITH 1/2" CARRIAGE BOLTS AT 24" O.C. STAGGERED.

18. WALL BRACING: ALL WALLS NOT OTHERWISE BRACED SHALL HAVE 1X6 DIAGONAL BRACING AT EACH END OF 25'-0" INTERVALS. EACH BRACE SHALL COVER NOT LESS FOUR (4) STUD SPACES AND BENAILED TO TOP AND BOTTOM PLATES WITH 3-8d NAILS. IN THE CITY OF L.A. USE 1X4 LET-IN BRACES WITH 2-8d NAILS.

19. STUDS ADJACENT TO CONCRETE OR MASONRY WALLS SHALL BE BOLTED THERETO WITH 1/2"X8" BOLTS AT TOP, BOTTOM, AND AT INTERVALS NOT TO EXCEED 2'-0" O.C.

20. 2X OR 3X BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL JOINTS OCCURRING IN 20. 2X OR 3X BLOCKING SHALL BE PROVIDED AT ALL HORIZONTAL JOINTS OCCURRING IN.

21. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SHALL CONFORM WITH TABLE 2304.8(1).

22. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX.

23. PROVIDE LEAD HOLE 40%~70% OF THREADED SHANK DIA. AND FULL DIA. FOR SMOOTH SHANK PORTION."

MINIMUM BEARING HEADERS

SUPPORTING ROOF LOADS	SUPPORTING ROOF & FLOOR LOADS
OPENING = 8'-0": USE 4X8	OPENING = 8'-0": USE 4X10
OPENING = 6'-0": USE 4X6	OPENING = 6'-0": USE 4X8
OPENING = 4'-0": USE 4X6	OPENING = 4'-0": USE 4X6

SHEARWALL SCHEDULE

	WALL TYPE	PLYWOOD TYPE	SIDES	EDGE FRM'G*	EDGE NAILS	PLATE NAILS OR ANCHOR BOLTS	A35 SPACING	ALLOW SHEAR
	F	15/32", STR-1	ONE	2x	8d COMMON @ 6,12	16d COMMON @ 5" O.C. 5/8"ø A.B. @ 48" O.C.	24"	220
DEPUTY INSP. REQ'D	G**	15/32", STR-1	ONE	3x	10d COMMON @ 4,12	3/8"øX7" LAG @ 16" O.C. 5/8"ø A.B. @ 32" O.C.	12"	380
DEPUTY INSP. REQ'D	H**	15/32", STR-1	ONE	3x	10d COMMON @ 3,12 STAGG	3/8"øX7" LAG @ 12" O.C. 5/8"ø A.B. @ 24" O.C.	10"	500
DEPUTY INSP. REQ'D	I**	15/32", STR-1	ONE	3x	10d COMMON @ 2,12 STAGG	3/8"øX7" LAG @ 9" O.C. 5/8"ø A.B. @ 16" O.C.	8"	650
DEPUTY INSP. REQ'D	GG**	15/32", STR-1	TWO	3x	10d COMMON @ 4,12 STAGG	3/8"øX7" LAG @ 7" O.C. 5/8"ø A.B. @ 16" O.C.	12" E.S.	760
DEPUTY INSP. REQ'D	HH**	15/32", STR-1	TWO	3x	10d COMMON @ 3,12 STAGG	3/8"øX7" LAG @ 6" O.C. 5/8"ø A.B. @ 16" O.C.	10" E.S.	1000
DEPUTY INSP. REQ'D	II**	15/32", STR-1	TWO	3x	10d COMMON @ 2,12 STAGG	3/8"øX7" LAG @ 4" O.C. 5/8"ø A.B. @ 8" O.C.	8" E.S.	1300

* FRAMING MEMBER THICKNESS AT PLYWD EDGES & BOTTOM PLATES, WITH MINIMUM EDGE DISTANCES OF 3/8" AT 2X MEMBERS AND 1/2" AT 3X MEMBERS.

** USE APPROVED PLATE WASHERS, IN LIEU OF CUT WASHERS, FOR SHEARWALL SILL PLATE ANCHOR BOLTS AND HOLD-DOWN CONNECTOR BOLTS AS FOLLOWS:

BOLT SIZE	PLATE WASHER SIZE
5/8"	3" x 3"x .229"
3/4"	3" x 3"x .229"
7/8"	3" x 3"x .229"
1"	3" x 3"x .229"

SHEARWALL NOTES

1. DOUGLAS FIR OR SOUTHERN PINE FRAMING (S.G. 0.49 MINIMUM). ALL PANEL EDGES FASTENED TO FRAMING.

2. ALL PANEL EDGES BACKED WITH 2-INCH NOMINAL OR WIDER FRAMING. PLYWOOD INSTALLED EITHER HORIZONTALLY OR VERTICALLY.

3. NAIL SPACING ALONG INTERMEDIATE SUPPORTS 12" O.C.

4. WHERE PLYWOOD IS APPLIED ON BOTH FACES OF A WALL AND NAIL SPACING IS LESS THAN 6" ON CENTER ON EITHER SIDE. PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3" NOMINAL OR THICKER AND NAILS ON EACH SIDE SHALL BE STAGGERED.

5. FRAMING AT ADJOINING PANEL EDGES SHALL BE NOMINAL 3" OR WIDER. NAILS SHALL BE STAGGERED IN TWO LINES ALONG PANEL EDGES WHEN NAIL SPACING IS 2" O.C., OR WHEN 10d COMMON NAILS SPACED 3" O.C. PENETRATE FRAMING MORE THAN 1-1/2".

6. NAILS SHALL BE PLACED AT LEAST 3/8" FROM PANEL EDGES AND AT LEAST 1/4" FROM THE EDGE OF THE CONNECTING MEMBER FOR SHEARS OF 300PLF OR LESS.

7. STUCCO AND/OR WITH VENEER OVER PLYWOOD SHEAR WALL SHALL BE WATERPROOFED WITH A MINIMUM OF 2-GRADE "D" PAPER UNDERLAYMENTS.

8. ONLY COMMON NAILS OR GALVANIZED BOX SHALL BE USED FOR ALL PLYWOOD SHEAR WALLS AND DIAPHRAGM. NAIL GUNS USING "CLIPPED HEAD" OR "SINKER NAILS" ARE NOT ACCEPTABLE.

9. ALL BOLT HOLES TO BE DRILLED 1/32" MIN.. TO 1/16" MAX. OVERSIZED. ENGINEER TO VERIFY.

10. DOUGLAS-FIR (GROUP II LUMBER) PRESSURE TREATED SILL PLATES SHALL BE USED. ENGINEER TO BE NOTIFIED FOR REDESIGN IF OTHER SPECIES SILLS ARE DELIVERED TO THE SITE (OR ARE PART OF THE EXISTING BLDG...)

11. THE FOLLOWING APPLIES TO G, H, I AND BOTH SIDE SHEAR WALLS:
A. ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS SHALL NOT BE LESS THAN A SING 3X STUD OR TWO 2X STUD NAILED TOGETHER IN ACCORDANCE WITH NDS 15.3.
B. NAILS SHALL BE PLACED NOT LESS THAN 1/2" EDGE DISTANCE FROM THE PANEL EDGES AND 3/8" FROM THE EDGE OF THE CONNECTING MEMBERS.
C.ALL WOOD STRUTURAL PANEL JOINT AND SILL PLATE NAILING SHALL BE STAGGERED AT ALL PANEL EDGES.

12. PLATE WASHERS ARE TO BE USED ON THE BACK SIDE OF THE HD POST. SEE 5(d) FOR REQUIRED SIZES.

13. HD ANCHOR NUTS TO BE TIGHTEN PRIOR TO COVERING THE WALL FRAMING. ENGINEER TO VERIFY.

14. MIN. TWO BOLTS PER PIECE OF SILL PLATE & ONE LOCATED WITHIN 12" OF EACH END OF EACH SILL PLATE
PLACEMENT OF LAG BOLTS
- MINIMUM EDGE DISTANCE = 1.5D, MIN END DISTANCE = 5D, MIN. SPACING = 4D. EDGE DISTANCES, END DISTANCES AND SPACING SHALL BE SUFFICIENT TO PREVENT SPLITTING OF WOOD. IF SPLITTING OCCURS, NOTIFY THE STRUCTURAL ENGINEER FOR AN ALTERNATE PRODUCT/HARDWARE OR POSSIBLE SOLUTION.

15. HOLD-DOWN HARDWARE MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.

16. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHER; AND HOLD-DOWNS SHALL BE FINGER TIGHT AND 2 WRENCH TURN JUST PRIOR TO COVERING THE WALL FRAMING. CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE STEEL PLATE WASHERS ON THE POST ON THE OPPOSITE SIDE OF THE ANCHORAGE DEVICE. PLATE SIZE SHALL BE A MINIMUM OF 0.299 INCH BY 3 INCHES BY 3 INCHES.

SPECIAL INSPECTION NOTES:

1. WHERE SPECIAL INSPECTION OR TESTING IS REQUIRED, THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL INCLUDE A "STATEMENT OF SPECIAL INSPECTIONS" ON THE PLANS. (CBC 1705) WHICH INCLUDE MATERIALS, SYSTEMS, COMPONENTS AND WORK REQUIRED TO HAVE SPECIAL INSPECTIONS OR TESTS, THE TYPE AND EXTENT OF EACH SPECIAL INSPECTION AND TEST, AND WHETHER IT WILL BE CONTINUOUS OR PERIODIC.

2. (PERIODIC) SPECIAL INSPECTION BY STRUCTURAL ENGINEER (I.E. STRUCTURAL OBSERVATION) IS REQUIRED FOR SECTION 1705 AND QUALITY ASSURANCE PROGRAM OF AISC 360 AND 341 (STEEL), SDK QA/QC (COLD-FORMED STEEL DECK), TABLES 1705.2.3 (OPEN-WEB STEEL JOIST AND JOIST GIRDERS), 1705.3 (CONCRETE), TMS 402/ACI 530/ASCE 5-13 CH.3 AND TMS 602/ACI 530.1/ASCE 6 1.4B, 1.6 (MASONRY), TABLES 1705.5 (SOILS), 1705.7 (DRIVEN DEEP FOUNDATIONS), AND 1705.8 (CAST-IN PLACE DEEP FOUNDATIONS).

3. SPECIAL INSPECTIONS
a. CONTRACTORS RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED IN THE "STATEMENT OF SPECIAL INSPECTION" SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE LADBS INSPECTORS AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON SUCH SYSTEM OR COMPONENT PER CBC 1704.4.

b. CONTINUOUS SPECIAL INSPECTION BY A REGISTERED DEPUTY INSPECTION IS REQUIRED FOR FIELD WELDING, POST-INSTALLED ADHESIVE ANCHORS INSTALLED HORIZONTALLY OR UPWARDLY INCLINED TO RESIST SUSTAINED TENSION LOADS, SHORCTRETE PLACEMENT, CONCRETE STRENGTH f'c > 2500PSI, SPRAYED-ON FIREPROOFING, ENGINEERED MASONRY, HIGH-LIFT GROUTING, PRE-STRESSED CONCRETE, HIGH LOAD DIAPHRAGMS AND SPECIAL MOMENT RESISTING CONCRETE FRAMES AND HELICAL PILE FOUNDATIONS. (CBC 1705 & CHAPTERS 19,21 AND 22).

c. FIELD WELDING TO BE DONE BY WELDERS CERTIFIED BY AN APPROVED AGENCY FOR (STRUCTURAL STEEL) (REINFORCING STEEL) (LIGHT GAUGE STEEL). CONTINUOUS SPECIAL INSPECTION BY A REGISTERED DEPUTY INSPECTOR IS REQUIRED.

d. PERIODIC SPECIAL INSPECTION BY STRUCTURAL ENGINEER (I.E. STRUCTURAL OBSERVATION) IS REQUIRED FOR WOOD SHEAR WALLS, SHEAR PANELS, AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING, AND OTHER FASTENING TO COMPONENTS OF THE SEISMIC FORCE RESISTING SYSTEM. PERIODIC SPECIAL INSPECTION REQUIRED WHERE THE FASTENER SPACING OF THE SHEATHING IS 4 INCHES ON CENTER OR LESS. SEE SHEET S-1 FOR THE REQUIRED STRUCTURAL OBSERVATIONS.

e. A COPY OF THE LOS ANGELES RESEARCH REPORT AND/OR CONDITIONS OF LISTING SHALL BE MADE AVAILABLE AT THE JOB SITE.

f. SHOP WELDS MUST BE PERFORMED IN A LADBS LICENCED FABRICATOR'S SHOP.

g. LADBS LICENSED FABRICATOR IS REQUIRED FOR TRUSSES, STRUCTURAL STEEL.

h. GLUED-LAMINATED TIMBERS MUST BE FABRICATED IN A LADBS LICENCED SHOP. IDENTIFY GRADE SYMBOL AND LAMINATION SPECIES PER 2018 NDS SUPPLEMENT TABLE 5-A.

i. PROVIDE LEAD HOLE 40%-70% OF THREADED SHANK DIAMETER AND FULL DIAMETER FOR SMOOTH SHANK PORTION.

j. SPECIAL ACTIVITY INSPECTION IS REQUIRED FOR BUILDING OVER 5 STORIES OR 60' IN HEIGHT OR BUILDINGS OVER 50,000 sq. ft OF GROUND FLOOR ARE OR BUILDINGS OVER 200,000 sq.ft OF TOTAL FLOOR AREA.

REQUIRED SPECIAL INSPECTIONS

ITEM	REQUIRED	REMARKS
FIELD WELDING / REBAR WELDING	YES	
SHEAR WALLS WHERE FASTENERS HAS 4"OR LESS SPACING	YES	(Periodic)
CONCRETE GREATER THAN 2500 PSI	YES	
INSTALLATION OF CONCRETE ANCHORS PER LARR	YES	
MASONRY	YES	
EPOXY	YES	(Periodic)

MATERIALS

A. TYPE OF SOIL AND BEARING VALUE PER TABLE 1806.2.
B. STANDARD 2500 PSI MIN CONCRETE FOR GROUP R OR U OF LIGHT-GRAME CONSTRUCTION, TWO STORIES OR LESS IN SDC D, E OR (1808.1)
C. 4000 PSI MIN FOR PRECAST NON-PRESTRESSED DRIVEN PILES, SOCKETED DRILLED SHAFTS, AND MICROPILES. 5000 PSI MIN FOR PRECAST PRESTRESSED DRIVEN PILES.
D. 3000 PSI MIN. FOR CONCRETE FOUNDATIONS IN SDC D, E, OR F OTHER THAN LISTED ABOVE.
E. TYPE AND f=m OF MASONRY UNITS. PROPORTIONS OF MORTAR AND GROUT MIXES.
F. TYPE OF STRUCTURAL STEEL, STRUCTURAL PIPE, TUBING, REINFORCING BARS.
G. GRADE, SPECIES, AND MOISTURE CONTENT OF ALL LUMBER. TYPE AND GRADE OF PLYWOOD SHEETING.
H. THE SIZE, LA RESEARCH REPORT # AND MANUFACTURER OF THE SHOT PINS. SHOW ON PLANS, THE MAXIMUM SPACING OF THE SHOT PINS IN BEARING/NONBEARING WALLS.

EXPANSIVE SOIL REQUIREMENT:

a. "IF SOIL IS FOUND TO BE EXPANSIVE, THE FOOTINGS MUST MEET THE FOLLOWING MINIMUM REQUIREMENTS."

b. DEPTH OF FOOTINGS BELOW THE NATURAL AND FINISH GRADES SHALL NOT BE LESS THAN 24 INCHES FOR EXTERIOR AND 18 INCHES FOR INTERIOR FOOTINGS.

c. EXTERIOR WALLS AND INTERIOR BEARING WALLS SHALL BE SUPPORTED ON CONTINUOUS FOOTINGS.

d. FOOTINGS SHALL BE REINFORCED WITH MINIMUM FOUR ½ INCH DIAMETER DEFORMED REINFORCING BARS. TWO BARS SHALL BE PLACED 4 INCHES OF THE BOTTOM OF THE FOOTING AND TWO BARS WITHIN 4 INCHES OF THE TOP OF THE FOOTINGS.

e. THE SOIL BELOW AN INTERIOR CONCRETE SLAB SHALL BE SATURATED WITH MOISTURE TO A DEPTH OF 18 INCHES PRIOR TO PLACING THE CONCRETE.

f. CONCRETE SLABS ON GRADE ON SHALL BE PLACED ON A 4-INCH FILL OF COARSE AGGREGATE OR ON A 2" SAND BED COVERED MOISTURE BARRIER MEMBRANE. THE SLABS SHALL BE AT LEAST 4 INCHES THICK AND SHALL BE REINFORCED WITH #4 BARS SPACED AT INTERVALS NOT EXCEEDING 16 INCHES EACH WAY.

g. "PROVIDE LEAD HOLE 40%-70% OF THREADED SHANK DIA. AND FULL DIA. FOR SMOOTH SHANK PORTION." ('91 NDS)

h. IF ADVERSE SOIL CONDITIONS ARE ENCOUNTERED A SOIL INVESTIGATION REPORT MAY BE REQUIRED.

i. "CONTINUOUS INSPECTION BY A DEPUTY INSPECTOR REQUIRED FOR(STRONGWALL)

j. FOUNDATION SILLS SHALL BE PRESSURE TREATED, OR FOUNDATION GRADE REDWOOD. (2306.4)

NAILING SCHEDULE

FROM TABLE 2304.10.1 FASTENING SCHEDULE, CBC 2022

CONNECTION	NAILING [1]
1. JOIST TO SILL OR GIRDER, TOENAIL	3-8d
2. BRIDGING TO JST., TOENAIL EA. END	2-8d
3. 1"X6" (25 MM X 152 MM) SUBFLOOR OR LESS TO EA. JST., FACE NAIL	2-8d
4. WIDER THAN 1"X6" (25 MM X 152 MM) SUBFLOOR TO EA. JST., FACE NAIL	3-8d
5. 2" (51MM) SUBFLOOR TO JST. OR GIRDER, BLIND & FACE NAIL	2-16d
6. SOLE PLATE TO JST. OR BLK'G, TYPICAL FACE NAIL 6. SOLE PLATE TO JST. OR BLK'G, AT BRACED WALL PANELS	16d @ 16" (406 MM) O.C. 3-16d PER 16' (406 MM)
7. TOP PLATE TO STUD, END NAIL	2-16d
8. STUD TO SOLE PLATE	4-8d TOENAIL OR 2-16d END NAIL
9. DOUBLE STUDS, FACE NAIL	16d @ 24" (610 MM) O.C.
10. DOUBLE TOP PLATES, TYPICAL FACE NAIL DOUBLE TOP PLATE, LAP SPLICE	16d @ 16' (406 MM) O.C. 8-16d
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
12. RIM JOIST TO TOP PLATE, TOENAIL	8d AT 6" (152MM) O.C.
13. CEILING PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16d
14. CONTINUOUS HEADER TWO PIECES	16d AT 16" (406 MM) O.C. ALONG EACH EDGE
15. CEILING JOISTS TO PLATE TOENAIL	3-8d
16. CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
17. CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d
18. CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d
19. RAFTER TO PLATE, TOENAIL	3-8d
20. 1" (25MM) BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d
21. 1" X 8" (25 MM X 203 MM) SHEATHING OR LESS TO EACH BEARING FACE NAIL	2-8d
22. WIDER THAN 1" X 8" (25 MM X 203 MM) SHEATHING TO EACH BEARING, FACE NAIL	3-8d
23. BUILT-UP CORNER STUDS	16d AT 24" (610 MM) O.C.
24. BUILT-UP GIRDER AND BEAMS	20d AT 32" (813 MM) O.C. AT TOP AND BOTTOM AND STAGGERED 2-20d AT ENDS AND AT EACH SPLICE
25. 2" (51 MM) PLANKS	2-16d AT EACH BEARING
26. WOOD STRUCTURAL PANELS AND PARTICLE BOARD:[2] SUBFLOOR AND WALL SHEATHING (TO FRAMING): 1/2" (12.7 MM) AND LESS 19"/32" 3/4" (15 MM-19 MM) 7/8"-1" (22 MM-25MM) 1 1/8"-1 1/4" (29 MM-32 MM) COMBINATION SUBFLOOR-UNDERLAYMENT(TO FRAMING): 3/4" (19 MM) AND LESS 7/8" -1" (22 MM-25 MM) 1 1/8"- 1 1/4" (29 MM-32 MM)	 6d[3] 8d[4] or 6d[5] 8d[3] 10d[4] or 8d[5] 6d[5] 8d[5] 10d[4] or 8d[5]
27. PANEL SIDING (TO FRAMING) 1/2" (12.7 MM) OR LESS 5/8" (16 MM)	6d[6] 8d[6]
28. FIBERBOARD SHEATHING: 1/2" (12.7 MM) 25/32" (20 MM)	NO.11 ga.[8] 6d[4] NO.16 ga.[9] NO.11 ga.[8] 8d[4] NO.16 ga.[9]
29. INTERIOR PANELING 1/4" (6.4 MM) 3/8" (9.5 MM)	4d[10] 6d[11]

a. NAILS SPACED AT 6 INCHES AT INTERMEDIATE SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2305. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX OR CASING.

b. SPACING SHALL BE 6 INCHES ON CENTER ON THE EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTION APPLICATIONS. PANEL SUPPORTS AT 16 INCHES (20 INCHES IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).

c. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCEDULE AND THE CEILING JOIST IS FASTENED TO THE TOP PLATE IN ACCORDANCE WITH THIS SCEDULE, THE NUMBER OF TOENAILS IN THE RAFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL.

STRUCTURAL OBSERVATION SIGNIFICANT CONSTRUCTION STAGES
(only checked items are required)

Firm or individual to be responsible for the "Structural Observation":
Name: KYLE RHEE
Phone: (818) 378-7173
[ ] Licensed Architect:
Calif. Registration no:
[X] Registered Engineer: KYLE RHEE
Calif. Registration no: C78215

CONSTRUCTION STAGE	CONSTRUCTION TYPE	ELEMENTS / CONNECTIONS TO BE OBSERVED
Foundation	[X] Footing, Stem Walls, Piers [ ] Mat Foundation [X] Caisson, Piles, Grade Beams [ ] Stepping/Retaining Foundation Hillside Special Anchors [ ] Others: REINF. BARS HD'S, A.B.'S & T-ROD	
Wall	[ ] Concrete [ ] Masonry [X] Wood [ ] Others WALL FRAMING NAILING	
Frame	[ ] Steel Moment Frame [ ] Steel Braced Frame [ ] Concrete Moment Frame [ ] Masonry Moment Frame [X] Others CONNECTION	[ ] Orientation and placement of connected components. [ ] Removal of reinforcing fillets, as required. [ ] Placement of reinforcing fillets, as required. [ ] Presence of continuity plates, as required. [ ] Welding of continuity plates, as required. [ ] Presence and type of doubler plates, as required. [ ] Welding of doubler plates, as required. [ ] Configuration and finish of access holes. [ ] Placement of beam stiffners, as required. [ ] Contour and finish of RBS profile, if applicable. [ ] Placement of welds of web connection, as required. [ ] Type and placement of bolts. [ ] Inaccessible conditions.
Diaphragm	[ ] Concrete [ ] Steel Deck [ ] Wood [ ] Others FLOOR FRAMING A35, MST60 STRAPS	
Others		

DECLARATION BY OWNER OR OWNER'S REPRESENTATIVE:
I, [ ] the Owner of the project [ ] the owner's representative, declare that the above listed firm or individual is hired by me to be the Structural Observer.

Signature Date

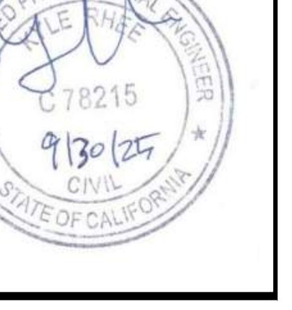
DECLARATION BY THE ENGINEER OF RECORD (required if Structural Observer is different from the Engineer of Record)

KR STRUCTURAL ENGINEERING CONSULTING ENGINEERS RESIDENTIAL COMMERCIAL

KR Structural Engineering, Inc
Total solution & consulting for building Structure
2753 WAVERLY DR #403, LOS ANGELES, CA 90039
Tel. 818-378-7173, Tel. 310-488-7282
Email: kylerheepe@gmail.com

NO.	REVISIONS:	DATE:	BY:
1			

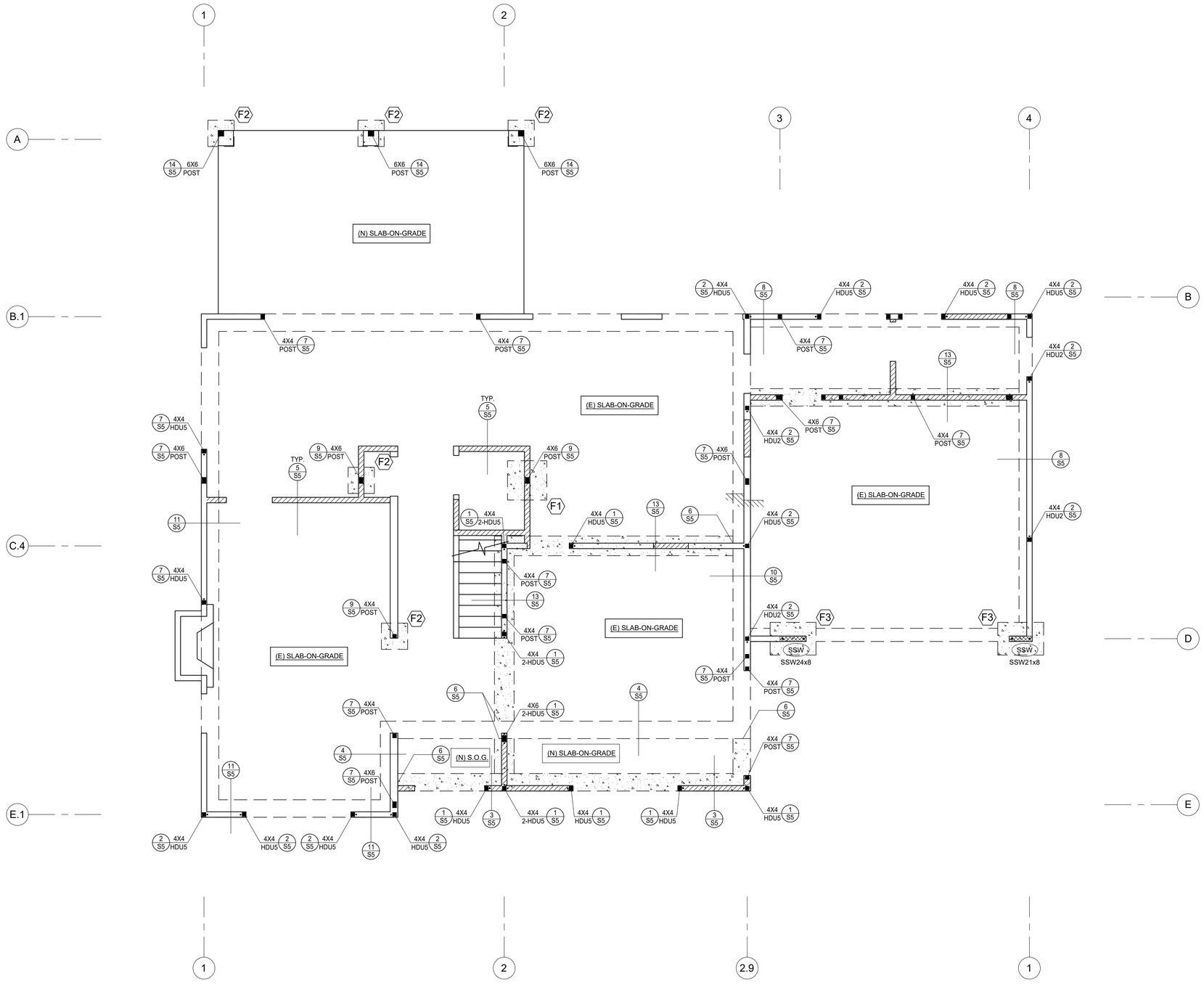
PERMIT NO.



		DATE:
DRAWING DATE:	7/25/24	
DESIGN GROUP		
ENGINEER:	KR	7/25/24
DESIGNED BY:	KR	7/25/24
DRAWN BY:	KR	7/25/24
CHECKED BY:		
APPROVED BY:		

SHEET TITLE: GENERAL NOTES
PROJECT: 1ST & 2ND FLOOR ADDITION AND GARAGE CONVERSION
ADDRESS: 2968 DONA SUSANA AVE STUDIO CITY, CA 91604

PROJECT NO. 2024.242
DRAWING NO. S-1
SHEET 1 OF 9 SHEETS



FOUNDATION NOTES:

1. SEE S-1 FOR GENERAL NOTES
2. SEE S-5 FOR TYPICAL DETAILS
3. VERIFY ALL DIMENSIONS ON SITE AND NOTIFY ENGINEER & ARCHITECT FOR CONFLICTING DIMENSIONS & VERIFY ALL DIMENSION WITH ARCHITECTURAL PLAN
4. ANCHOR BOLTS, DOWELS AND HOLDOWN ANCHOR SHALL BE SECURELY HELD IN PLACE PRIOR TO FOUNDATION INSPECTION
5. HOLD-DOWNS SHALL BE RE-TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING
6. FOUNDATION SILLS SHALL BE NATURALLY DURABLE OR PRESSURE-TEATED WOOD.
7. IF ADVERSE SOIL CONDITIONS ARE ENCOUNTERED, A SOILS INVESTIGATION REPORT MAY BE REQUIRED.
8. HOLD DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS; AND HOLD-DOWNS SHALL BE TIGHTENED JUST PRIOR TP COVERING THE WALL FRAMING. CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE STEEL PLATE
9. WASHERS IN ACCORDANCE WITH TABLE 2306.5 OF THE CBC 2022
10. ALL BOLT HOLES SHALL BE DRILLED 1/32" TO 1/16" OVERSIZED.
11. CONCRETE STRENGTH FOR FOUNDATIONS SHALL BE 2,500 psi MIN. (CBC 2022)
12. MINIMUM ANCHOR BOLT SIZE AND SPACING SHALL BE $\frac{5}{8}$" DIA. AB @ 72" O.C. WITH 7" EMBEDMENT, AND 3"X3"X$\frac{1}{4}$" PLATE WASHERS. ANCHOR BOLTS SHALL BE LOCATED A MAXIMUM OF 12" AND 4 $\frac{1}{2}$" MINIMUM FROM THE END OF THE PLATE (CBC 2022)

FOUNDATION LEGEND

(N) - INDICATES NEW FRAMING PER PLAN.

(E) - INDICATES EXISTING FRAMING TO REMAIN.

- INDICATES (E) FOOTING TO REMAIN

- INDICATES NEW STRIP FOOTING PER PLAN
16" WIDE X 18" DEEP INTERIOR CONT. FTG W/ 2-#4 T&B

- INDICATES SIMPSON HDU HOLDOWN INTO 4X POST AT FOUNDATION LEVEL SEE 1/S-5, 2/S-5, 8/S-5, 12/S-5 & 13/S-5

- INDICATES NEW 2X4 STUD WALL @ 16" O.C.

GB-1 - INDICATES NEW GRADE BEAM (f'c = 3,000psi) 12"W X 18" D w/ 2-#5 @ TOP AND BOTTOM & #3 STIRRUPS @ 12" O.C.

PAD SCHEDULE:

F1 3'-0" x 3'-0" x 18" THK. PAD FOOTING W/ 6-#4 EACH WAY

F2 2'-0" x 2'-0" x 18" THK. PAD FOOTING W/ 4-#4 EACH WAY

F3 30" x 42" x 18" THK. PAD FOOTING W/ 4-#5 FOR LONG DIR & 5-#5 FOR SHOR DIR.

STRUCTURAL OBSERVATION FOR FOUNDATION IS REQUIRED. CALL WHEN ALL REINFORCEMENTS ARE IN PLACE AND PRIOR TO POURING OF CONCRETE.

FOUNDATION PLAN

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

KR Structural Engineering, Inc
Total solution & consulting for building Structure
1038 FLANDERS RD. LA CANADA FLINTRIDGE, CA 91011
Tel. 818-378-7173
Email: kylerheepe@gmail.com

COMMERCIAL □ RESIDENTIAL

NO.	REVISIONS:	DATE:	BY:
1			
2			
3			
4			
5			

PERMIT NO.

REGISTERED PROFESSIONAL ENGINEER KYLE R. HEEPE C 78215 9/30/25 CIVIL STATE OF CALIFORNIA

	DATE:
DRAWING DATE: 7/25/24	
DESIGN GROUP	
ENGINEER: KR	7/25/24
DESIGNED BY: KR	7/25/24
DRAWN BY: KR	7/25/24
CHECKED BY:	
APPROVED BY:	

KR STRUCTURAL ENGINEERING □ CONSULTING ENGINEERS

SHEET TITLE: FOUNDATION PLAN

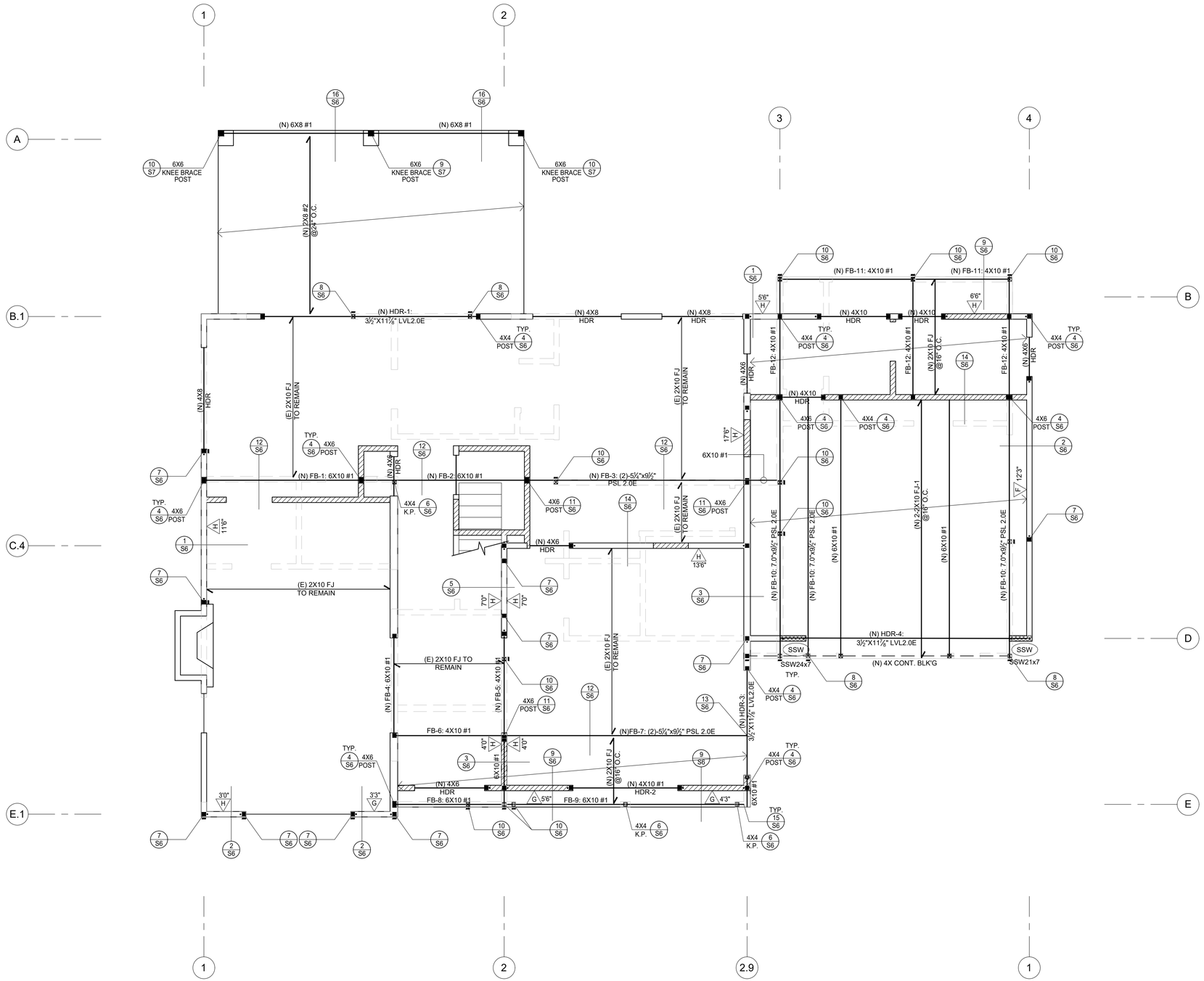
PROJECT: 1ST & 2ND FLOOR ADDITION AND GARAGE CONVERSION

ADDRESS: 2968 DONA SUSANA AVE STUDIO CITY, CA 91604

PROJECT NO. 2024.242

DRAWING NO. S-2

SHEET 2 OF 9 SHEETS



2ND FLR FRAMING NOTES:

1. SEE S-1 FOR GENERAL NOTES
2. SEE S-6 ~ S-7 FOR TYPICAL DETAILS
3. VERIFY ALL DIMENSIONS ON SITE AND NOTIFY ENGINEER & ARCHITECT FOR CONFLICTING DIMENSIONS & VERIFY ALL DIMENSION WITH ARCHITECTURAL PLAN
4. FLOOR SHEATHING SHALL CONSIST OF MIN 3/4" THICK PLYW'D,STR-I, T&G W/10d @ 4:12" O.C.BOUNDARY P/W NAILING @ ALL GRIDLINES!!! SEE 13/S-7 FOR PLYWOOD PANEL LAYOUT & DIAPHRAGM NAILING & 40/20 FOR TYPE OF PANEL INDEX
5. FLOOR DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERINGFACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.8.(CBC 2019)
6. APPLY BOUNDARY NAILING AT ALL BEAMS AND RUNNERS. SEE 14/S-7 SHEARWALL TOP PLATE SPLICE SHALL BE TYPE "A" PER DETAIL 14/S-7 ALL OTHER WALLS SHALL BE TYPE "B" SPLICE
7. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX
8. HEADER TO POST CONNECTION. SEE 15/S-7
9. MINIMUM 2X6 WALL STUD FRAMING AT PLUMBING WALLS TO ACCOMMODATE DRILLING AND NOTCHING OF STUDS CRC 2022 SECTION R602.6
10. FASTENERS FOR PRESSERVATIVE-TREATED OR FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL IN ACCORDANCE WITH ASTM A 153.
11. FASTENERS FOR WOOD STRUCTURAL PANEL SHEATHING ON SHEAR WALLS AND DIAPHRAGMS SHALL BE COMMON NAILS WITH FULL HEADS UNLESS OTHERWISE APPROVED.

2ND FLR FRAMING LEGEND:

- INDICATES NEW FLOOR JOISTS PER PLAN (F.J.)
- INDICATES NEW FLOOR BEAM PER PLAN (F.B.)
- INDICATES EXISTING FLOOR JOISTS TO REMAIN (F.J) TYP.
- INDICATES EXISTING HEADER TO REMAIN
- NEW PLYWOOD SHEARWALLS TYPE "#" AND LENGTH "L" PER S-1 SHEARWALL SCHEDULE.
- INDICATES MST60 (U.N.O.) STRAP HORIZONTAL COLLECTOR STRAP
- INDICATES SIMPSON HDU HOLDOWN INTO POST OR
- POST FROM ABOVE GRAVITY (G/P/A), HOLD-DOWN (O/P/A)
- INDICATES NEW 2X4 STUD WALL @ 16" O.C.
- INDICATES SIMPSON STEEL STRONG WALL SEE SSW-1 & SSW-2

SSW##x##

CONTRACTOR VERIFY DIRECTIONS OF EXISTING ROOF RAFTERS & CEILING JOISTS & CONFIRM WITH STRUCTURAL ENGINEER.

2ND FLOOR FRAMING PLAN

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

KR Structural Engineering, Inc
Total solution & consulting for building Structure
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NO. | REVISIONS: | DATE: | BY:

PERMIT NO.

REGISTERED PROFESSIONAL ENGINEER KYLE HEEPE C78215 9/30/25 CIVIL STATE OF CALIFORNIA

	DATE:
DRAWING DATE: 7/25/24	
DESIGN GROUP	
ENGINEER: KR	7/25/24
DESIGNED BY: KR	7/25/24
DRAWN BY: KR	7/25/24
CHECKED BY:	
APPROVED BY:	

SHEET TITLE: 2ND FLOOR FRAMING PLAN

PROJECT: 1ST & 2ND FLOOR ADDITION AND GARAGE CONVERSION

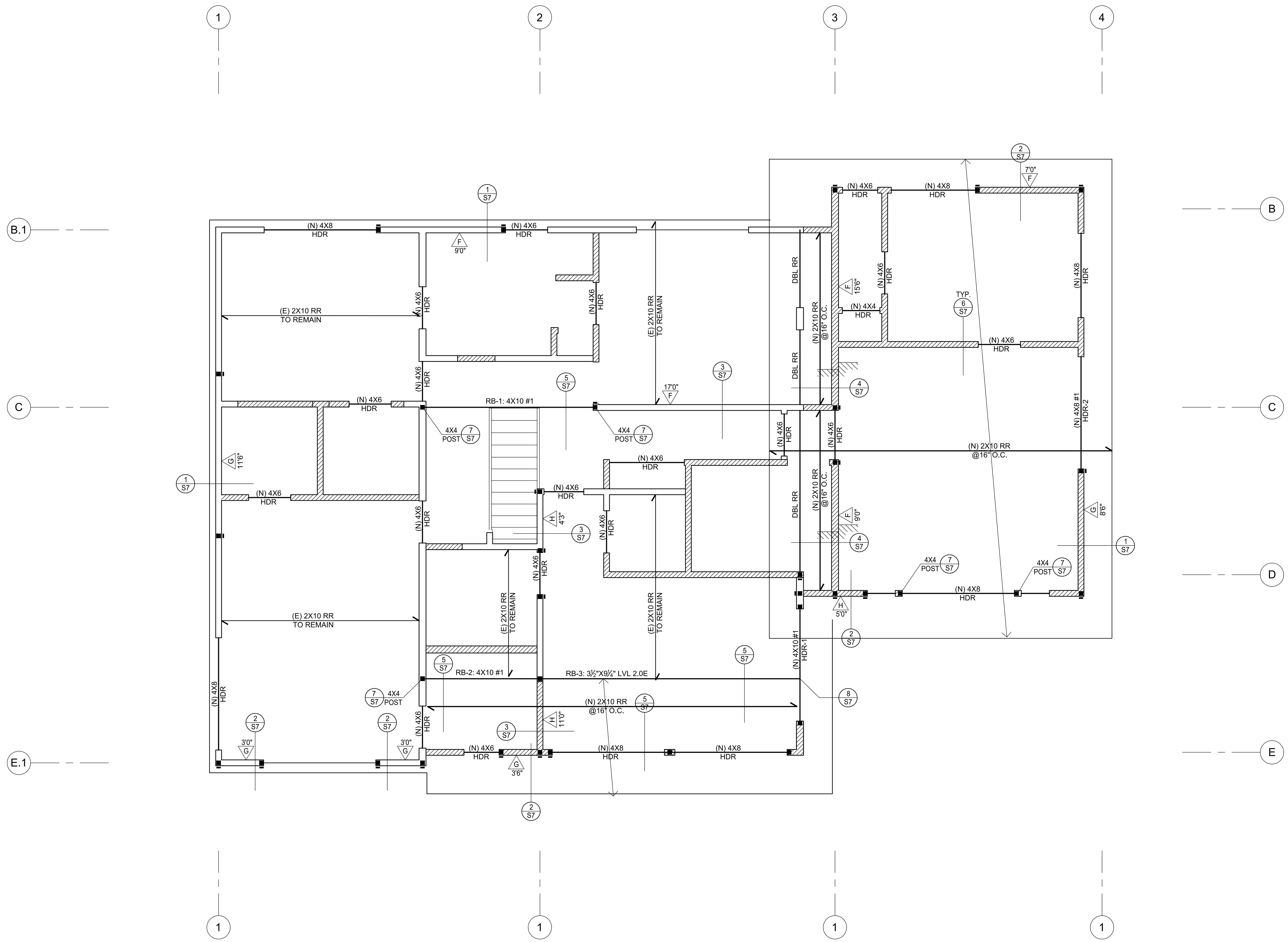
ADDRESS: 2968 DONA SUSANA AVE STUDIO CITY, CA 91604

PROJECT NO. 2024.242

DRAWING NO. S-3

SHEET 3 OF 9 SHEETS

KR STRUCTURAL ENGINEERING - CONSULTING ENGINEERS - RESIDENTIAL - COMMERCIAL



ROOF FRAMING NOTES:

1. SEE S-1 FOR GENERAL NOTES
2. SEE S-7 FOR TYPICAL DETAILS
3. VERIFY ALL DIMENSIONS ON SITE AND NOTIFY ENGINEER & ARCHITECT FOR CONFLICTING DIMENSIONS & VERIFY ALL DIMENSION WITH ARCHITECTURAL PLAN
4. ROOF SHEATHING SHALL CONSIST OF MIN ½" THICK CDX PLYW'D,STR-I W/10d @ 6:12" O.C. SEE 13/S-7 FOR PLYWOOD PANEL LAYOUT & DIAPHRAGM NAILING & GENERAL NOTES FOR TYPE OF PANEL INDEX(32/16)
5. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.8. APPLY BOUNDARY NAILING AT ALL BEAMS AND RUNNERS. SEE 13/S-7
6. APPLY BOUNDARY NAILING AT ALL BEAMS AND RUNNERS. SEE 14/S-7 SHEARWALL TOP PLATE SPLICE SHALL BE TYPE "A" PER DETAIL 14/S-7 ALL OTHER WALLS SHALL BE TYPE "B" SPLICE
7. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX
8. HEADER TO POST CONNECTION. SEE 15/S-7
9. MINIMUM 2X6 WALL STUD FRAMING AT PLUMBING WALLS TO ACCOMMODATE DRILLING AND NOTCHING OF STUDS CRC 2022 SECTION R602.6
10. FASTENERS FOR PRESERVATIVE-TREATED OR FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL IN ACCORDANCE WITH ASTM A 153.
11. FASTENERS FOR WOOD STRUCTURAL PANEL SHEATHING ON SHEAR WALLS AND DIAPHRAGMS SHALL BE COMMON NAILS WITH FULL HEADS UNLESS OTHERWISE APPROVED.

ROOF FRAMING LEGEND:

- INDICATES NEW ROOF RAFTERS PER PLAN (R.R.)
- INDICATES NEW RIDGES / HEADERS (HDR) PER PLAN
- INDICATES EXISTING ROOF RAFTERS TO REMAIN (R.R) TYP.
- INDICATES EXISTING BEAMS/HEADERS (HDR) TO REMAIN
- INDICATES NEW 2X4 STUD WALL @ 16" O.C.
- 4X POST W/ MST60 VERTICAL STRAP U.N.O.
- NEW PLYWOOD SHEARWALLS TYPE "#" AND LENGTH "L" PER SEE S-1 FOR SHEARWALL SCHEDULE
- INDICATES MST60 (U.N.O.) STRAP HORIZONTAL COLLECTOR STRAP

CONTRACTOR VERIFY DIRECTIONS OF EXISTING ROOF RAFTERS & CEILING JOISTS & CONFIRM WITH STRUCTURAL ENGINEER.

ROOF FRAMING PLAN

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

KR STRUCTURAL ENGINEERING CONSULTING ENGINEERS RESIDENTIAL COMMERCIAL

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Total solution & consulting for building Structure
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Tel. 818-378-7173
Email: kylerheepe@gmail.com

NO.	REVISIONS:	DATE:	BY:
1			

PERMIT NO.

REGISTERED PROFESSIONAL ENGINEER KYLE RHEE C 78215 9/30/25 CIVIL STATE OF CALIFORNIA

DRAWING DATE:	7/25/24
DESIGN GROUP	DATE:
ENGINEER: KR	7/25/24
DESIGNED BY: KR	7/25/24
DRAWN BY: KR	7/25/24
CHECKED BY:	
APPROVED BY:	

SHEET TITLE: ROOF FRAMING PLAN

PROJECT: 1ST & 2ND FLOOR ADDITION AND GARAGE CONVERSION

ADDRESS: 2968 DONA SUSANA AVE STUDIO CITY, CA 91604

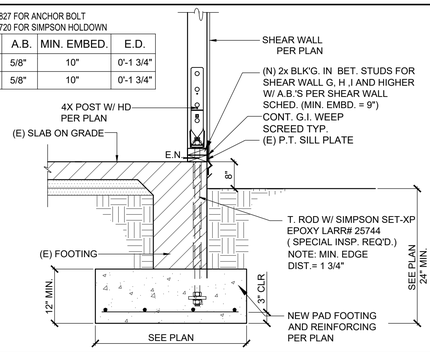
PROJECT NO. 2024.242

DRAWING NO. S-4

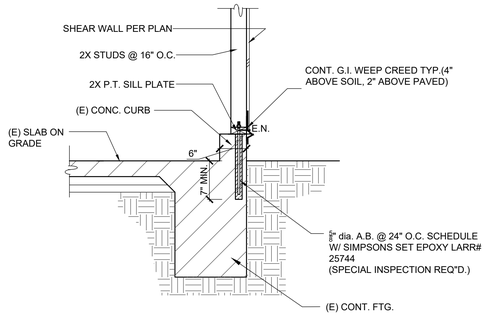
SHEET 4 OF 9 SHEETS

: LARR# 25827 FOR ANCHOR BOLT
: LARR# 25720 FOR SIMPSON HOLDOWN

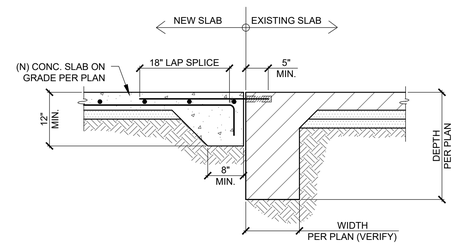
HDU	A.B.	MIN. EMBED.	E.D.
HDU2	5/8"	10"	0'-1 3/4"
HDU5	5/8"	10"	0'-1 3/4"



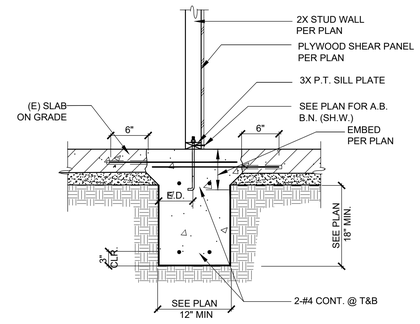
SCALE		
NT.S.	UNDERPING FOOTING FOR SHEARWALL DETAIL	12



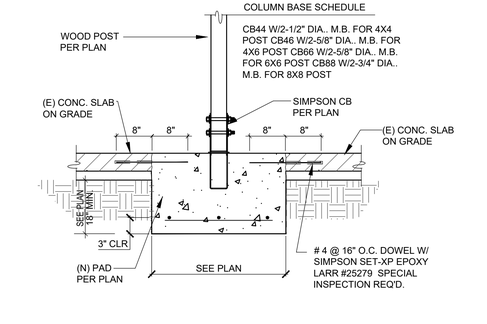
SCALE		
NT.S.	SECTION	8



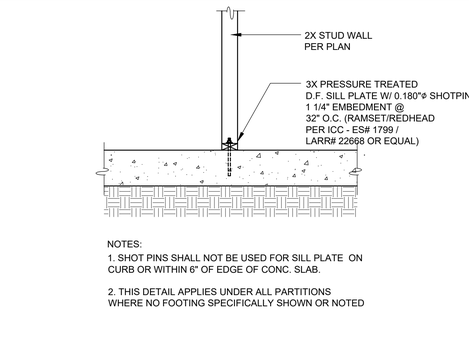
SCALE		
NT.S.	(N) POST TO FOOTING CONNECTION	4



SCALE		
NT.S.	(N) INTERIOR CONTINUOUS FOOTING DETAIL	13



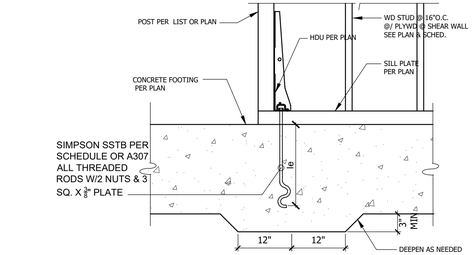
SCALE		
NT.S.	POST TO ISOLATED PAD FOOTING	9



NOTES:
1. SHOT PINS SHALL NOT BE USED FOR SILL PLATE ON CURB OR WITHIN 6" OF EDGE OF CONC. SLAB.

2. THIS DETAIL APPLIES UNDER ALL PARTITIONS WHERE NO FOOTING SPECIFICALLY SHOWN OR NOTED

SCALE		
NT.S.	NON-BEARING WALL SHOP PIN DETAIL	5



H.D	A. B. (MONO/TWO POUR)	EDGE DISTANCE	SCREW QUANTITY TO POST		WASHER	LARR#
HDU2	SSTB16/20	1 3/4	6 -SDS 1/4 x 2.5"	/ 4x4 #1	3x3x0.229"	25720
HDU5	SSTB24/24	1 3/4	14-SDS 1/4 x 2.5"	/ 4x4 #1	3x3x0.229"	25720
HDU8	SSTB28/34	1 7/8	20-SDS 1/4 x 2.5"	/ 4x4 #1	3x3x0.229"	25720

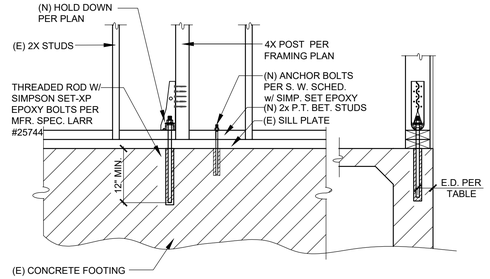
: LARR# 25248 FOR ANCHOR BOLT : LARR# 25720 FOR SIMPSON HOLDOWN

MODEL #	DIAMETER (INCHES)	LENGTH L (INCHES)	MIN. EMBED. le (INCHES)	MIN. END DISTANCE dc (INCHES)	MIN. EDGE DISTANCE de (INCHES)	MIN. WALL WIDTH b (INCHES)
SSTB16	5/8"	1'-5"	12 5/8"	0'-5"	0'-1 3/4"	0'-8"
SSTB20	5/8"	1'-9"	16 5/8"	0'-5"	0'-1 3/4"	0'-8"
SSTB24	5/8"	2'-1"	20 5/8"	0'-5"	0'-1 3/4"	0'-8"

SCALE		
NT.S.	HOLD-DOWN DETAIL	1

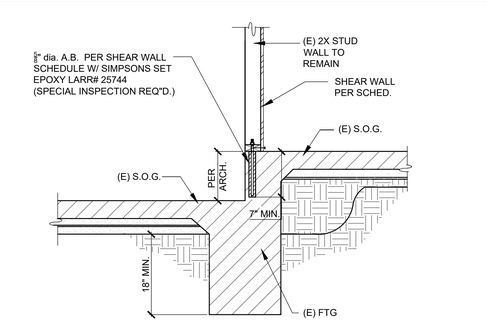
LARR# : 25720, (ICC ESR-2330)

HDU	ANCHOR BOLT ø	MIN. EMBED.	E.D.
HDU2	5 / 8 " ø	10"	0'-1 3/4"
HDU5	5 / 8 " ø	10"	0'-1 3/4"
HDU11	7 / 8 " ø	1'-7"	0'-1 3/4"



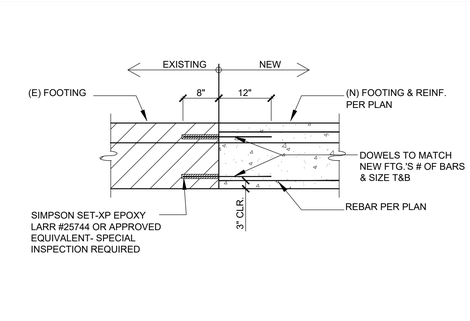
NOTE: SPECIAL INSPECTION IS REQUIRED FOR EPOXY BOLT

SCALE		
NT.S.	(N) HOLDOWN TO EXISTING FOOTING DETAIL	2



SCALE		
NT.S.	ISOLATED PAD FOOTING DETAIL	14

SCALE		
NT.S.	(N) SHEARWALL TO (E) FTG DETAIL	10

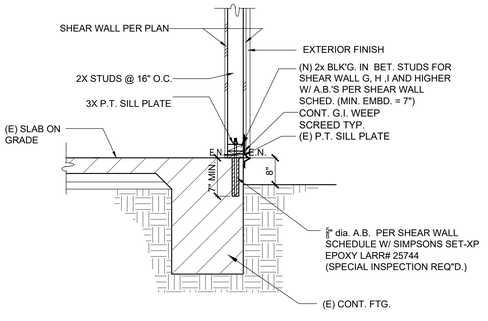


SCALE		
NT.S.	NEW FOOTING TO EXISTING FOOTING CONNECTION DETAIL	6

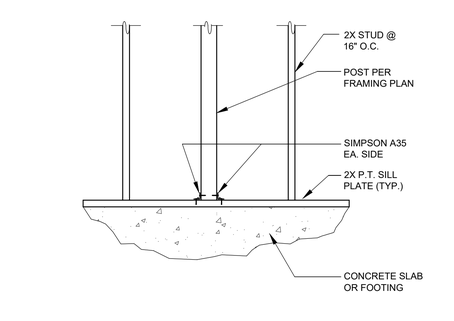
GREEN NOTES:
1. A 4"-INCH THICK OF ¾" INCH OR LARGER CLEAN AGGREGATE SHALL BE PROVIDED FOR THE PROPOSED SLAB ON GRADE CONSTRUCTION.

2. A VAPOR BARRIER SHALL BE PROVIDED A DIRECT CONTACT WITH CONCRETE FOR THE PROPOSED SLAB ON GRADE CONSTRUCTION.

SCALE		
NT.S.	EXTERIOR SLAB ON GRADE WITH CONTINUOUS FOOTING DETAIL	3



SCALE		
NT.S.	(N) SHEARWALL TO (E) FTG DETAIL	11



SCALE		
NT.S.	POST TO FOUNDATION DETAIL	7

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COMMERCIAL ▫ RESIDENTIAL

NO.	REVISIONS:	DATE:	BY:

PERMIT NO.

KR STRUCTURAL ENGINEERING ▫ CONSULTING ENGINEERS

	DATE:
DRAWING DATE:	7/25/24
DESIGN GROUP	
ENGINEER: KR	7/25/24
DESIGNED BY: KR	7/25/24
DRAWN BY: KR	7/25/24
CHECKED BY:	
APPROVED BY:	

SHEET TITLE: FOUNDATION DETAILS

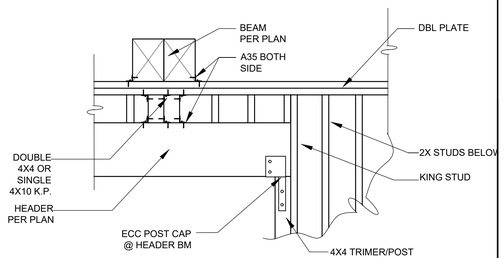
PROJECT: 1ST & 2ND FLOOR ADDITION AND GARAGE CONVERSION

ADDRESS: 2968 DONA SUSANA AVE STUDIO CITY, CA 91604

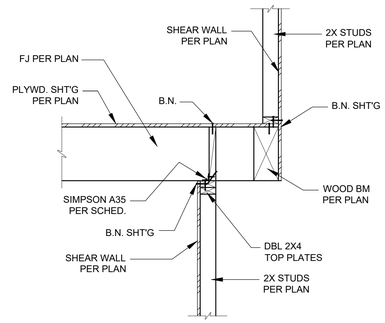
PROJECT NO. 2024.242

DRAWING NO. S-5

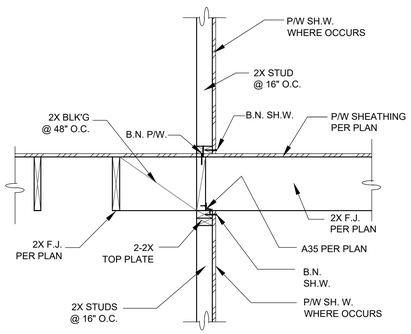
SHEET 5 OF 9 SHEETS



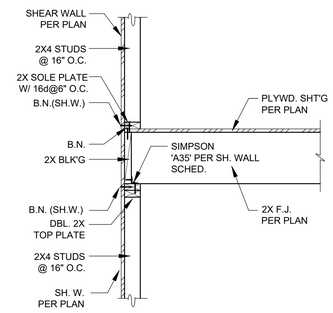
SCALE NT.S. | STEEL BEAM TO HEADER CONNECTION DETAIL | 13



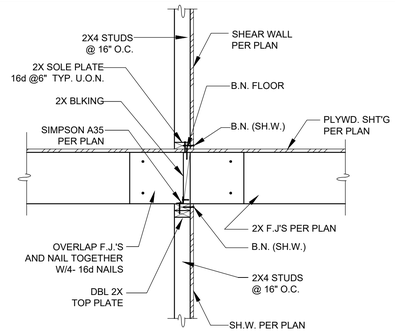
SCALE NT.S. | SECTION | 9



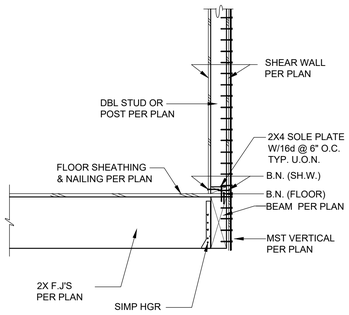
SCALE NT.S. | INTERIOR SHEAR WALL AND PERPENDICULAR FLOOR JOISTS SHEAR TRANSFER DETAIL | 5



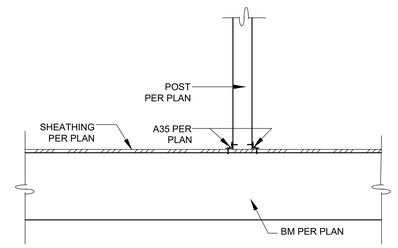
SCALE NT.S. | EXTERIOR SHEAR WALL PERPENDICULAR TO FLOOR JOISTS SHEAR TRANSFER DETAIL | 1



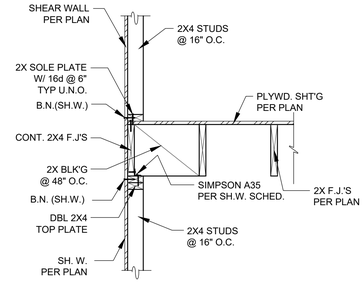
SCALE NT.S. | INTERIOR SHEAR WALL PERPENDICULAR TO FLOOR JOISTS SHEAR TRANSFER DETAIL | 14



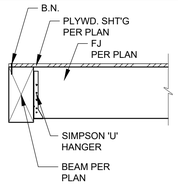
SCALE NT.S. | VERTICAL STRAP TO BEAM DETAIL | 10



SCALE NT.S. | KING POST TO BEAM CONNECTION | 6



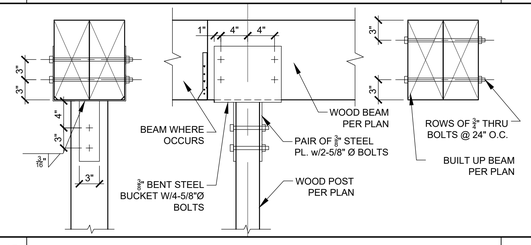
SCALE NT.S. | EXTERIOR SHEAR WALL PARALLEL TO FLOOR JOISTS SHEAR TRANSFER DETAIL | 2



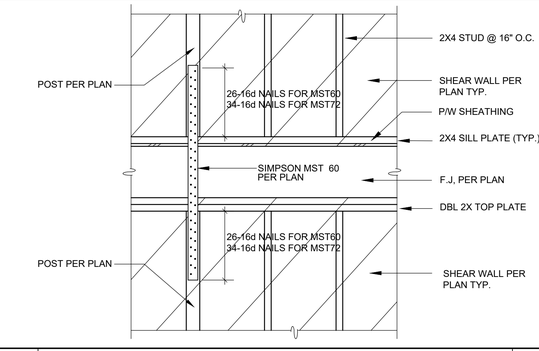
TYP. HANGER SCHEDULE *USE HANGERS ABOVE ON PLANS U.N.O.

MEMBER	HANGER TYPE	LARR #
TJI JOIST	IUS	LARR #25801
F.J. or R.R.	HU,HUS,LB,HUSTF	LARR #25807 LARR #25800
SOLID LUMBER	HU,HUS,HUSTF,W,HW	
PARALLAM BEAM	WM,GLTV,HGLTV	LARR #25803

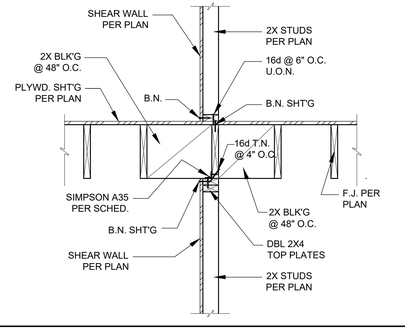
SCALE NT.S. | BEAM TO BEAM CONNECTION | 15



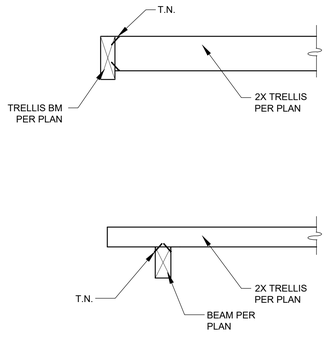
SCALE NT.S. | BUILT-UP BEAM TO POST CONNECTION | 11



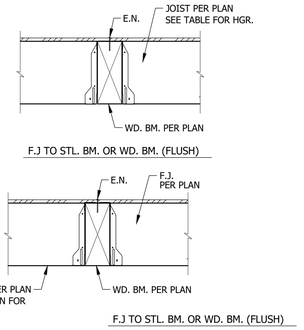
SCALE NT.S. | FLOOR TO FLOOR HOLD-DOWN DETAIL | 7



SCALE NT.S. | INTERIOR SHEAR WALL PARALLEL TO FLOOR JOISTS SHEAR TRANSFER DETAIL | 3



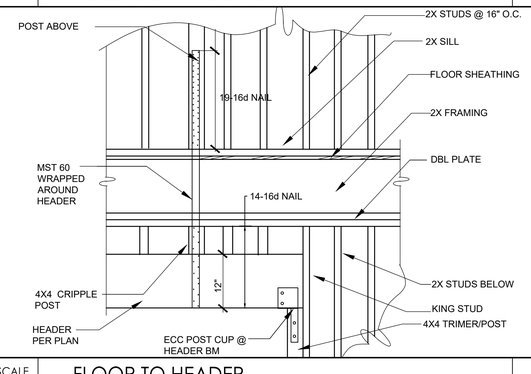
SCALE NT.S. | WOOD BEAM TO STEEL POST DETAIL | 16



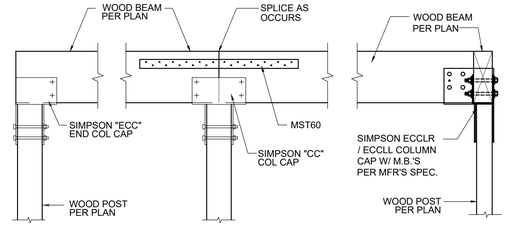
TYP. HANGER SCHEDULE *USE HANGERS ABOVE ON PLANS U.N.O.

MEMBER	HANGER TYPE	LARR #
TJI JOIST	IUS	LARR #25801
F.J. or R.R.	HU,HUS,LB,HUSTF	LARR #25807 LARR #25800
SOLID LUMBER	HU,HUS,HUSTF,W,HW	
PARALLAM BEAM	WM,GLTV,HGLTV	LARR #25803

SCALE NT.S. | STL/WOOD BEAM TO JOIST CONNECTION | 12



SCALE NT.S. | FLOOR TO HEADER HOLD-DOWN DETAIL | 8



LARR# 25714, ESR-2604

NOTE : WHERE POST IS PART OF A STUD WALL, "PC" TYPE CAP MAY BE USED AS A SUBSTITUTE, UNLESS PLANS CALL FOR "CC" TYPE CAP

SCALE NT.S. | BEAM TO POST CONNECTION DETAIL | 4

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Tel. 818-378-7173, Tel. 310-488-7282
Email: kyleheepe@gmail.com

KR STRUCTURAL ENGINEERING ▫ CONSULTING ENGINEERS ▫ RESIDENTIAL ▫ COMMERCIAL

NO.	REVISIONS:	DATE:	BY:

PERMIT NO.

REGISTERED PROFESSIONAL ENGINEER
KYLE HEEPE
78215
9/30/25
CIVIL
STATE OF CALIFORNIA

DRAWING DATE:	7/25/24	
DESIGN GROUP		DATE:
ENGINEER:	KR	7/25/24
DESIGNED BY:	KR	7/25/24
DRAWN BY:	KR	7/25/24
CHECKED BY:		
APPROVED BY:		

SHEET TITLE: FRAMING DETAILS

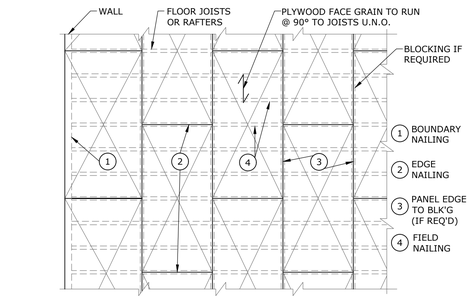
PROJECT: 1ST & 2ND FLOOR ADDITION AND GARAGE CONVERSION

ADDRESS: 2968 DONA SUSANA AVE
STUDIO CITY, CA 91604

PROJECT NO. 2024.242

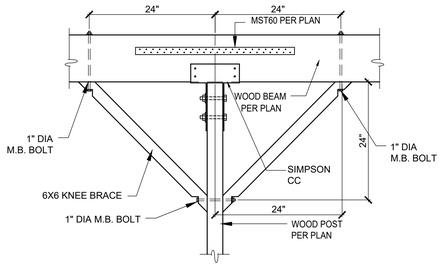
DRAWING NO. S-6

SHEET 6 OF 9 SHEETS

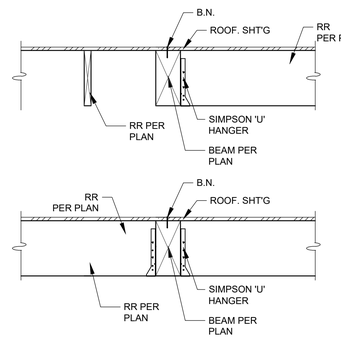


NOTES: 1.) PLYWOOD THICKNESS & GRADE PER PLAN & SPECS.
2.) ALL PLYWOOD SHEETS TO BE 4'x8' EXCEPT WHERE JOB CONDITIONS PROHIBIT.

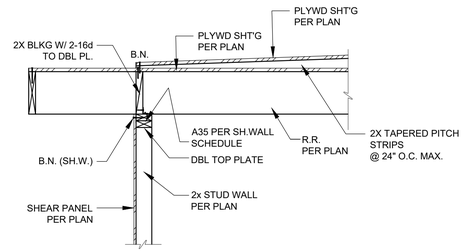
SCALE NT.S. | FLOOR OR ROOF SHEATHING NAILING DETAIL | 13



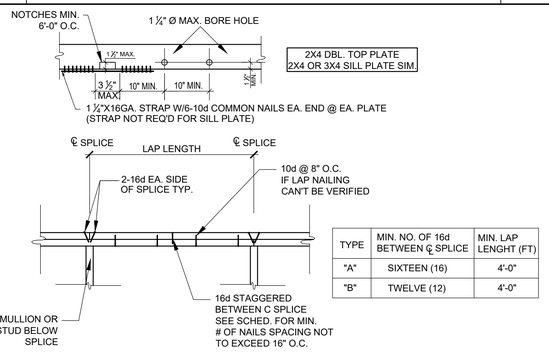
SCALE NT.S. | KNEE BRACE CONNECTION DETAIL | 9



SCALE NT.S. | BEAM TO BEAM CONNECTION DETAIL | 5

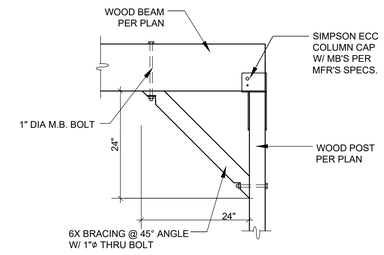


SCALE NT.S. | ROOF RAFTERS AT PERPENDICULAR EXTERIOR SHEAR WALL | 1

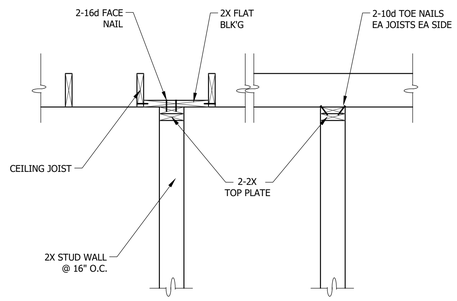


TYPE	MIN. NO. OF 16d BETWEEN ℄ SPLICE	MIN. LAP LENGHT (FT)
"A"	SIXTEEN (16)	4'-0"
"B"	TWELVE (12)	4'-0"

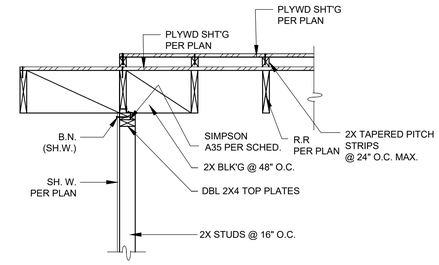
SCALE NT.S. | TOP PLATES SPLICE DETAIL | 14



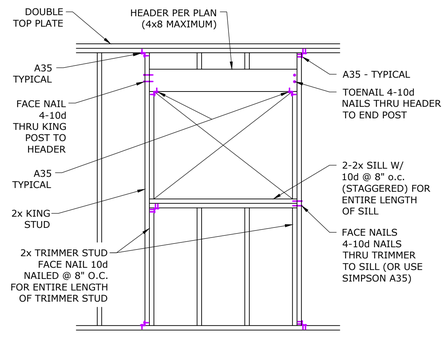
SCALE NT.S. | KNEE BRACE CONNECTION DETAIL | 10



SCALE NT.S. | NON-BEARING WALL DETAIL | 6

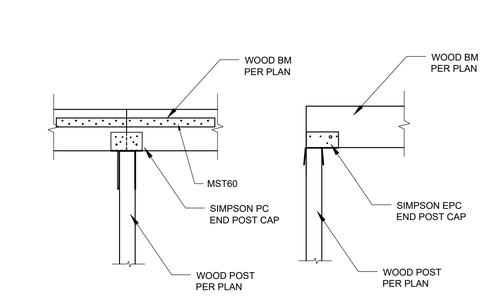


SCALE NT.S. | ROOF RAFTER PARALLEL TO EXTERIOR SHEAR WALL DETAIL | 2

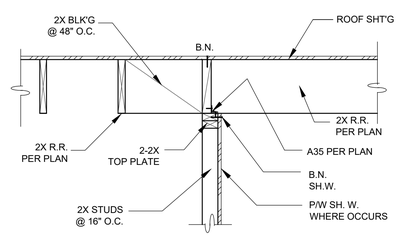


SCALE NT.S. | HEADER DETAIL | 15

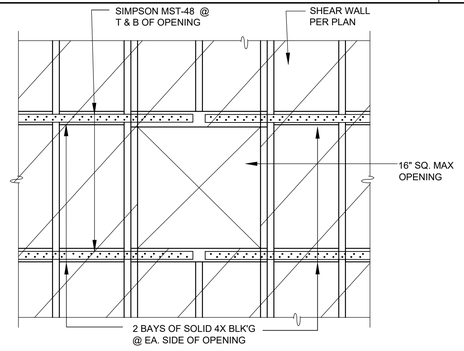
SCALE NT.S. | NOT USED | 11



SCALE NT.S. | BEAM TO POST CONNECTION | 7

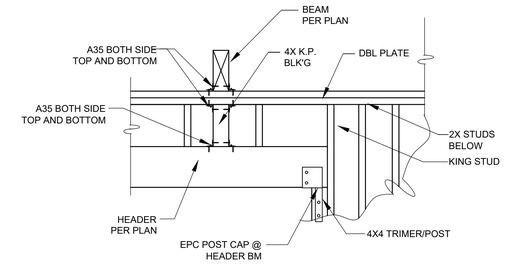


SCALE NT.S. | ROOF RAFTER PARALLEL/PERPENDICULAR TO INTERIOR SHEAR WALL DETAIL | 3

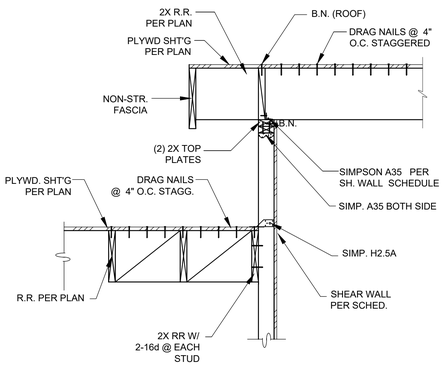


SCALE NT.S. | SMALL OPENING AT SHEAR WALL | 16

SCALE NT.S. | NOT USED | 12



SCALE NT.S. | BEAM TO HEADER CONNECTION DETAIL | 8



SCALE NT.S. | ROOF RAFTERS PERPENDICULAR TO INTERIOR SHEAR WALL DETAIL | 4

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NO.	REVISIONS:	DATE:	BY:
1			
2			
3			
4			
5			

PERMIT NO.

REGISTERED PROFESSIONAL ENGINEER — KYLE HEEPE — 78215 — 9/30/25 — CIVIL — STATE OF CALIFORNIA

KR STRUCTURAL ENGINEERING ▫ CONSULTING ENGINEERS

DRAWING DATE:	7/25/24
DESIGN GROUP	
ENGINEER:	KR
DESIGNED BY:	KR
DRAWN BY:	KR
CHECKED BY:	
APPROVED BY:	

	DATE:
	7/25/24
	7/25/24
	7/25/24

SHEET TITLE: FRAMING DETAILS

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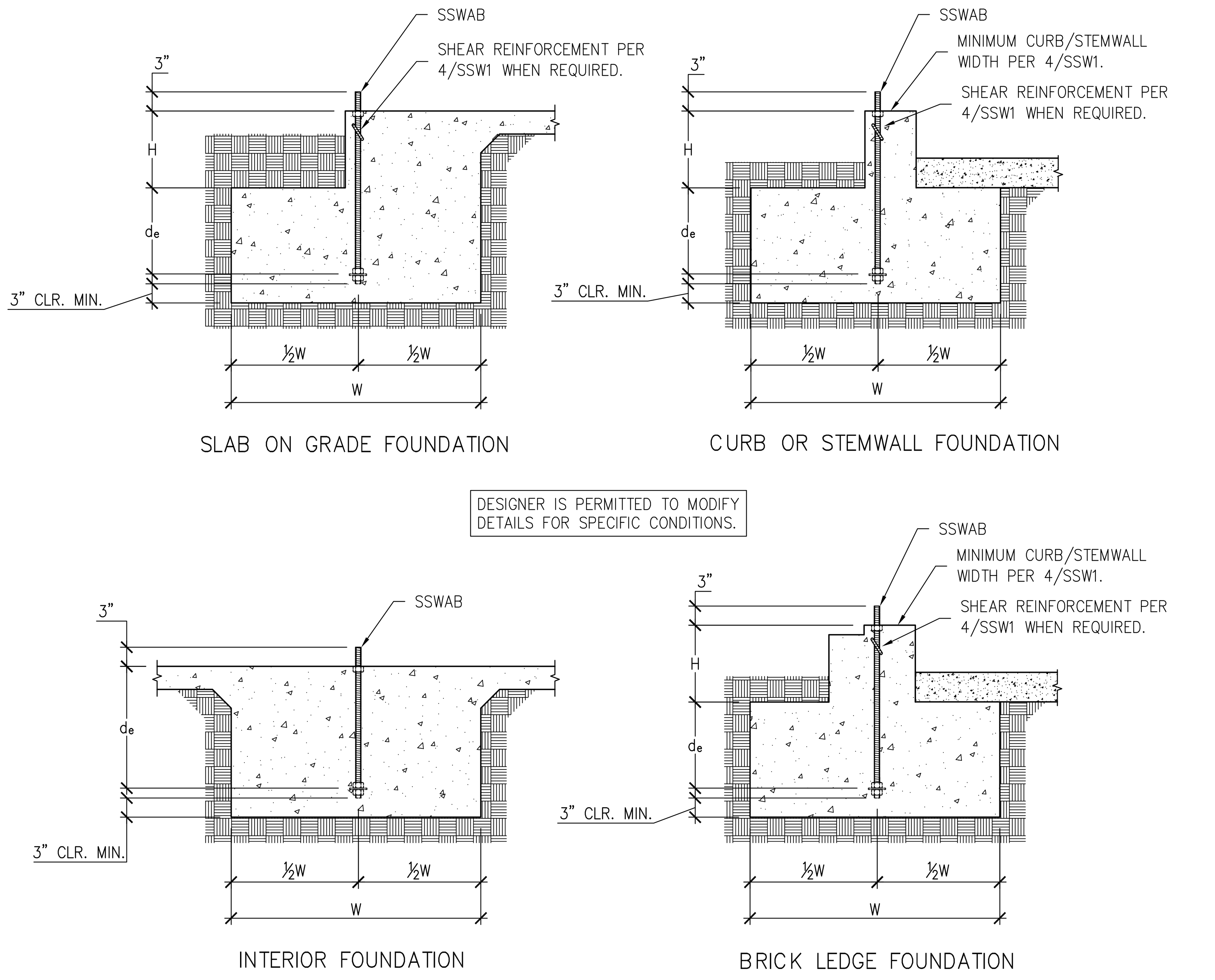
PROJECT NO. 2024.242

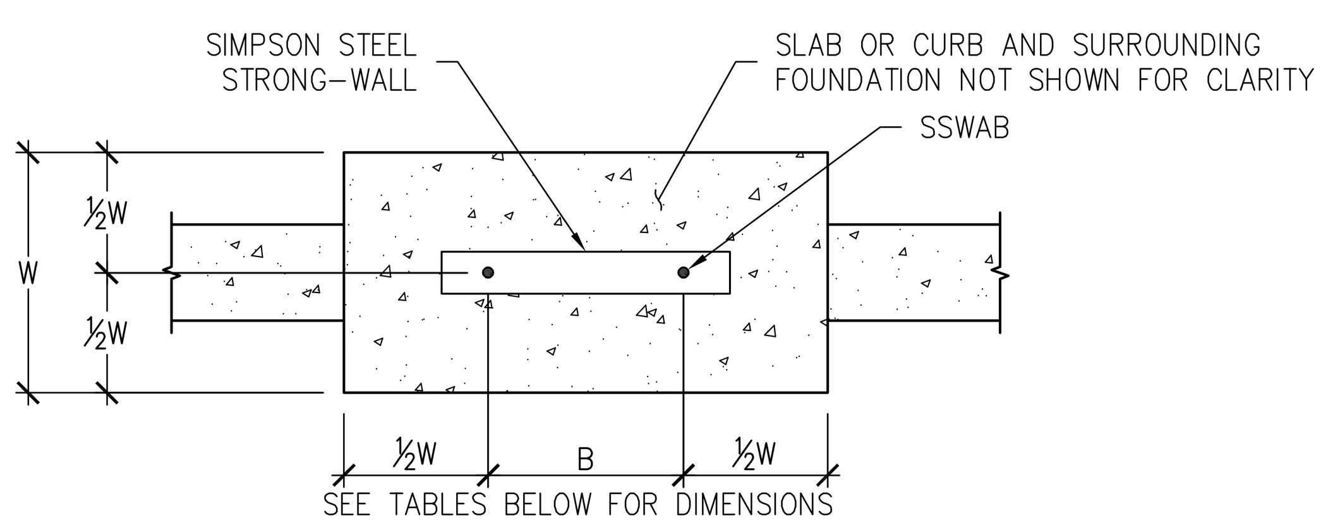
DRAWING NO. S-7

SHEET 7 OF 9 SHEETS



NOTES :
1. SEE 2/SSW1 AND 3/SSW1 FOR DIMENSIONS AND ADDITIONAL NOTES.
2. SEE 4/SSW1 FOR SHEAR REINFORCEMENT WHEN REQUIRED.
3. MAXIMUM H = l_e – d_e. SEE 5/SSW1 AND 6/SSW1 FOR l_e.

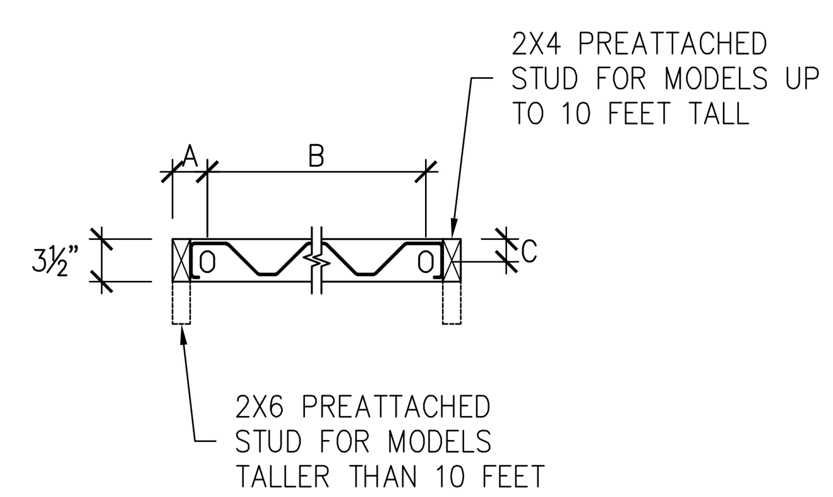
STEEL STRONG-WALL ANCHORAGE – TYPICAL SECTIONS | 1



FOUNDATION PLAN VIEW

STEEL STRONG-WALL ANCHORAGE SOLUTIONS FOR 2500 PSI CONCRETE

DESIGN CRITERIA	CONCRETE CONDITION	ANCHOR STRENGTH	SSWAB ¾" ANCHOR BOLT			SSWAB 1" ANCHOR BOLT		
			ASD ALLOWABLE UPLIFT (lbs)	W (in)	d_e (in)	ASD ALLOWABLE UPLIFT (lbs)	W (in)	d_e (in)
SEISMIC	CRACKED	STANDARD	8,800	22	8	16,100	33	11
			9,600	24	8	17,100	35	12
		HIGH STRENGTH	18,500	36	12	33,000	51	17
			19,900	38	13	35,300	54	18
	UNCRACKED	STANDARD	8,800	19	7	15,700	28	10
			9,600	21	7	17,100	30	10
		HIGH STRENGTH	18,300	31	11	32,300	44	15
			19,900	33	11	35,300	47	16
WIND	CRACKED	STANDARD	5,100	14	6	6,200	16	6
			7,400	18	6	11,400	24	8
			9,600	22	8	17,100	32	11
		HIGH STRENGTH	11,400	24	8	21,100	36	12
			13,600	27	9	27,300	42	14
			15,900	30	10	31,800	46	16
			19,900	35	12	35,300	50	17
	UNCRACKED	STANDARD	5,000	12	6	6,400	14	6
			7,800	16	6	12,500	22	8
			9,600	19	7	17,100	28	10
		HIGH STRENGTH	12,500	22	8	21,900	32	11
			14,300	24	8	26,400	36	12
			17,000	27	9	31,500	40	14
			19,900	30	10	35,300	43	15



STEEL STRONG-WALL® ANCHOR BOLT LAYOUT

WALL MODEL	DISTANCE FROM END OF WALL TO CENTER OF SSWABs (A) (in.)	DISTANCE FROM CENTER TO CENTER OF SSWABs (B) (in.)	DISTANCE FROM EXTERIOR FACE OF WALL TO CENTER OF ALL SSWABs (C) (in.)
SSW12	2 9/16	6 7/8	2
SSW15	2 7/8	9 1/4	1 7/8
SSW18	2 7/8	12 1/4	1 7/8
SSW21	2 7/8	15 1/4	1 7/8
SSW24	2 7/8	18 1/4	1 7/8

NOTES :
1. ANCHORAGE DESIGNS CONFORM TO ACI 318–19, ACI 318–14 AND ACI 318–11 APPENDIX D WITH NO SUPPLEMENTARY REINFORCEMENT FOR CRACKED OR UNCRACKED CONCRETE AS NOTED.
2. ANCHOR STRENGTH INDICATES REQUIRED GRADE OF SSWAB ANCHOR BOLT. STANDARD (ASTM F1554 GRADE 36) OR HIGH STRENGTH (HS) (ASTM A449).
3. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C THROUGH F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C MAY USE WIND ANCHORAGE SOLUTIONS. SEISMIC ANCHORAGE DESIGNS CONFORM TO ACI 318–19 SECTION 17.10.5.3, ACI 318–14 SECTION 17.2.3.4.3 AND ACI 318–11 SECTION D.3.3.4.
4. WIND INCLUDES SEISMIC DESIGN CATEGORY A AND B AND DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C.
5. FOUNDATION DIMENSIONS ARE FOR ANCHORAGE ONLY. FOUNDATION DESIGN (SIZE AND REINFORCEMENT) BY OTHERS. THE DESIGNER MAY SPECIFY ALTERNATE EMBEDMENT, FOOTING SIZE OR ANCHOR BOLT.
6. REFER TO 1/SSW1 FOR d_e.

SSWAB TENSION ANCHORAGE SCHEDULE 2500 PSI | 2

STEEL STRONG-WALL ANCHORAGE SOLUTIONS FOR 3500 PSI CONCRETE

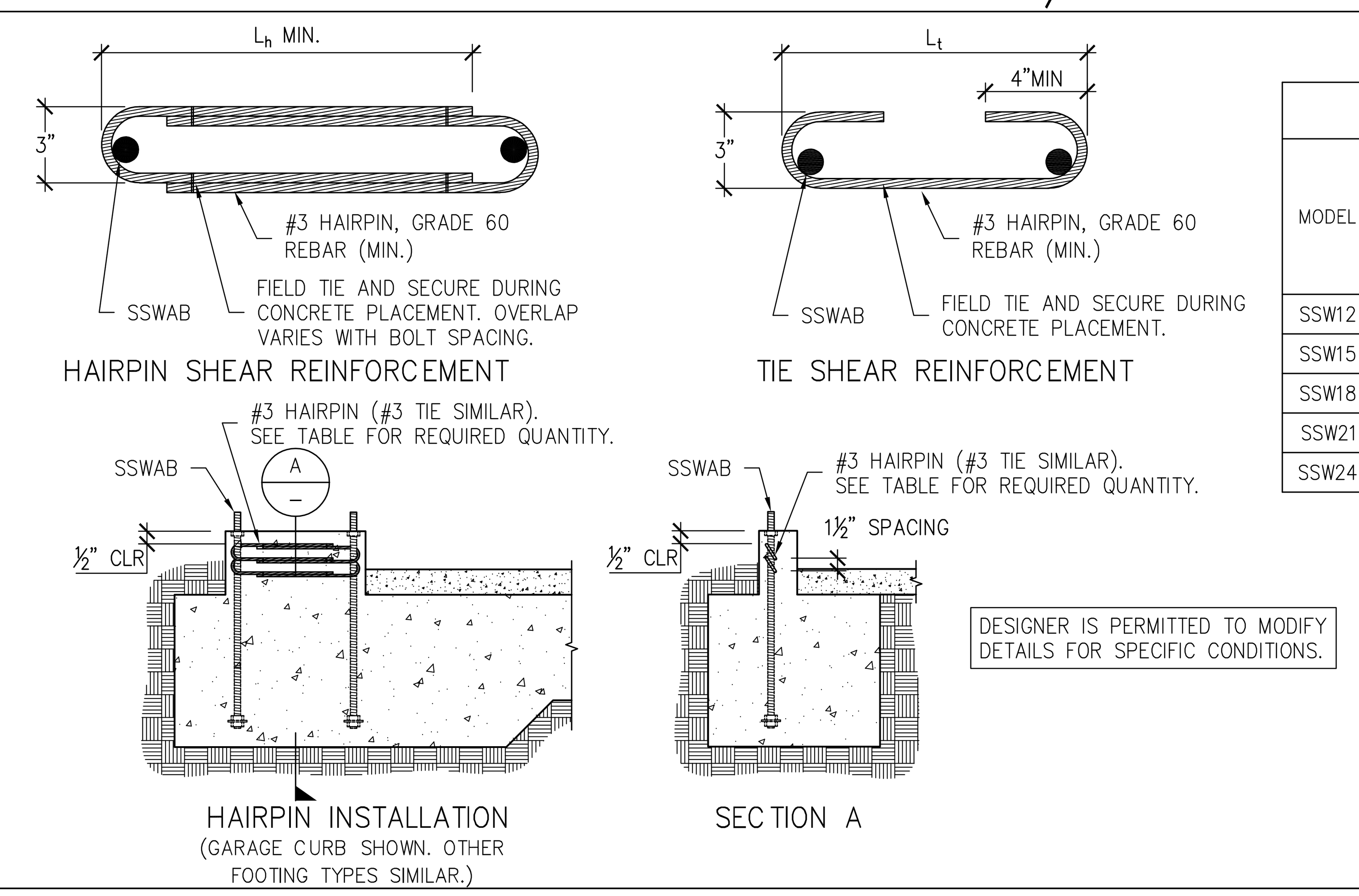
DESIGN CRITERIA	CONCRETE CONDITION	ANCHOR STRENGTH	SSWAB 3/4" ANCHOR BOLT			SSWAB 1" ANCHOR BOLT		
			ASD ALLOWABLE UPLIFT (lbs)	W (in)	d_e (in)	ASD ALLOWABLE UPLIFT (lbs)	W (in)	d_e (in)
SEISMIC	CRACKED	STANDARD	9,000	20	7	15,700	29	10
			9,600	21	7	17,100	31	11
		HIGH STRENGTH	18,200	32	11	33,000	46	16
			19,900	34	12	35,300	48	16
	UNCRACKED	STANDARD	8,800	17	6	15,700	25	9
			9,600	19	7	17,100	27	9
		HIGH STRENGTH	18,600	28	10	32,600	40	14
			19,900	30	10	35,300	42	14
WIND	CRACKED	STANDARD	6,000	14	6	7,300	16	6
			7,300	16	6	13,500	24	8
			9,600	20	7	17,100	29	10
		HIGH STRENGTH	11,800	22	8	22,700	34	12
			13,500	24	8	27,400	38	13
			17,000	28	10	32,300	42	14
			19,900	32	11	35,300	45	15
	UNCRACKED	STANDARD	6,000	12	6	7,500	14	6
			7,500	14	6	12,800	20	7
			9,600	17	6	17,100	25	9
		HIGH STRENGTH	12,800	20	7	21,300	28	10
			14,800	22	8	26,000	32	11
			16,900	24	8	31,300	36	12
			19,900	27	9	35,300	39	13

STEEL STRONG-WALL ANCHORAGE SOLUTIONS FOR 4500 PSI CONCRETE

DESIGN CRITERIA	CONCRETE CONDITION	ANCHOR STRENGTH	SSWAB 3/4" ANCHOR BOLT			SSWAB 1" ANCHOR BOLT		
			ASD ALLOWABLE UPLIFT (lbs)	W (in)	d_e (in)	ASD ALLOWABLE UPLIFT (lbs)	W (in)	d_e (in)
SEISMIC	CRACKED	STANDARD	8,700	18	6	16,000	27	9
			9,600	20	7	17,100	29	10
		HIGH STRENGTH	17,800	29	10	32,100	42	14
			19,900	32	11	35,300	45	15
	UNCRACKED	STANDARD	9,100	16	6	15,700	23	8
			9,600	17	6	17,100	25	9
		HIGH STRENGTH	17,800	25	9	32,500	37	13
			19,900	27	9	35,300	39	13
WIND	CRACKED	STANDARD	5,400	12	6	6,800	14	6
			8,300	16	6	11,600	20	7
			9,600	18	6	17,100	26	9
		HIGH STRENGTH	11,600	20	7	21,400	30	10
			13,400	22	8	25,800	34	12
			17,300	26	9	31,000	38	13
			19,900	29	10	35,300	42	14
	UNCRACKED	STANDARD	6,800	12	6	6,800	12	6
			8,500	14	6	12,400	18	6
			9,600	16	6	17,100	23	8
		HIGH STRENGTH	12,400	18	6	21,600	26	9
			14,500	20	7	26,700	30	10
			16,800	22	8	32,200	34	12
			19,900	25	9	35,300	36	12

NOTES :
1. ANCHORAGE DESIGNS CONFORM TO ACI 318–19, ACI 318–14 AND ACI 318–11 APPENDIX D WITH NO SUPPLEMENTARY REINFORCEMENT FOR CRACKED OR UNCRACKED CONCRETE AS NOTED.
2. ANCHOR STRENGTH INDICATES REQUIRED GRADE OF SSWAB ANCHOR BOLT. STANDARD (ASTM F1554 GRADE 36) OR HIGH STRENGTH (HS) (ASTM A449).
3. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C THROUGH F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C MAY USE WIND ANCHORAGE SOLUTIONS. SEISMIC ANCHORAGE DESIGNS CONFORM TO ACI 318–19 SECTION 17.10.5.3, ACI 318–14 SECTION 17.2.3.4.3 AND ACI 318–11 SECTION D.3.3.4.
4. WIND INCLUDES SEISMIC DESIGN CATEGORY A AND B AND DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C.
5. FOUNDATION DIMENSIONS ARE FOR ANCHORAGE ONLY. FOUNDATION DESIGN (SIZE AND REINFORCEMENT) BY OTHERS. THE DESIGNER MAY SPECIFY ALTERNATE EMBEDMENT, FOOTING SIZE OR ANCHOR BOLT.
6. SEE 1/SSW1 AND 2/SSW1 FOR W AND d_e.

SSWAB TENSION ANCHORAGE SCHEDULE 3500/4500 PSI | 3

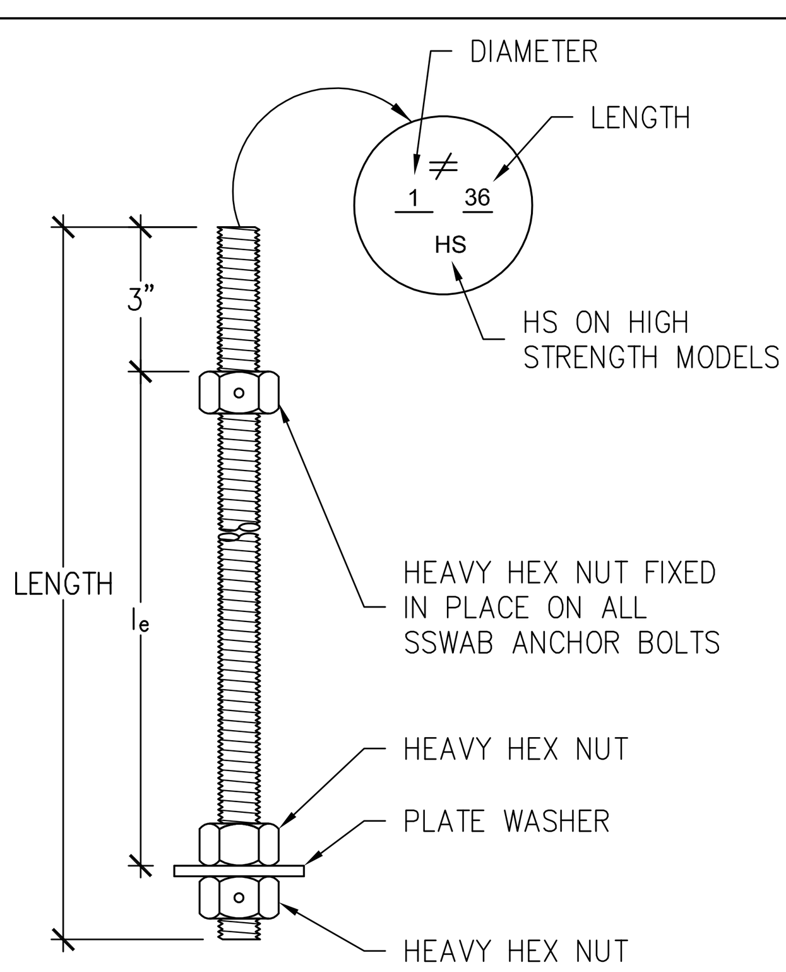


STEEL STRONG-WALL SHEAR ANCHORAGE

MODEL	SEISMIC[3]			WIND[4]					
	L_t OR L_h (in.)	SHEAR REINFORCEMENT	MIN. CURB/ STEMWALL WIDTH (in.)	SHEAR REINFORCEMENT	MIN. CURB/ STEMWALL WIDTH (in.)	ASD ALLOWABLE SHEAR LOAD V (lbs.)[6]			
						6" MIN CURB/STEMWALL		8" MIN CURB / STEMWALL	
						UNCRACKED	CRACKED	UNCRACKED	CRACKED
SSW12	9	(1) #3 TIE	6	NONE REQUIRED	–	1230	880	1440	1030
SSW15	12	(2) #3 TIES	6	NONE REQUIRED	–	1590	1135	1810	1295
SSW18	14	(1) #3 HAIRPIN	8[5]	(1) #3 HAIRPIN	6	HAIRPIN REINFORCEMENT ACHIEVES MAXIMUM ALLOWABLE SHEAR LOAD OF THE STEEL STRONG–WALL PANEL			
SSW21	15	(2) #3 HAIRPIN	8[5]	(1) #3 HAIRPIN	6				
SSW24	17	(2) #3 HAIRPIN	8[5]	(1) #3 HAIRPIN	6				

NOTES :
1. SHEAR ANCHORAGE DESIGNS CONFORM TO ACI 318–19, ACI 318–14 AND ACI 318–11 AND ASSUME MINIMUM f'_c=2,500 PSI CONCRETE. SEE DETAILS 1/SSW1 TO 3/SSW1 FOR TENSION ANCHORAGE.
2. SHEAR REINFORCEMENT IS NOT REQUIRED FOR PANELS INSTALLED ON A WOOD FLOOR, INTERIOR FOUNDATION APPLICATIONS (PANEL INSTALLED AWAY FROM EDGE OF CONCRETE), OR BRACED WALL PANEL APPLICATIONS.
3. SEISMIC INDICATES SEISMIC DESIGN CATEGORY C THROUGH F. DETACHED 1 AND 2 FAMILY DWELLINGS IN SDC C MAY USE WIND ANCHORAGE SOLUTIONS.
4. WIND INCLUDES SEISMIC DESIGN CATEGORY A AND B.
5. MINIMUM CURB/STEMWALL WIDTH IS 6" WHEN STANDARD STRENGTH SSWAB IS USED.
6. USE (1) #3 TIE FOR SSW12 AND SSW15 WHEN THE STEEL STRONG–WALL PANEL DESIGN SHEAR FORCE EXCEEDS THE TABULATED ANCHORAGE ALLOWABLE SHEAR LOAD.
7. CONCRETE EDGE DISTANCE FOR ANCHORS MUST COMPLY WITH ACI 318–19 SECTION 17.9.2, ACI 318–14 SECTION 17.7.2 AND ACI 318–11 D.8.2.

STEEL STRONG–WALL ANCHOR BOLT SHEAR ANCHORAGE | 4

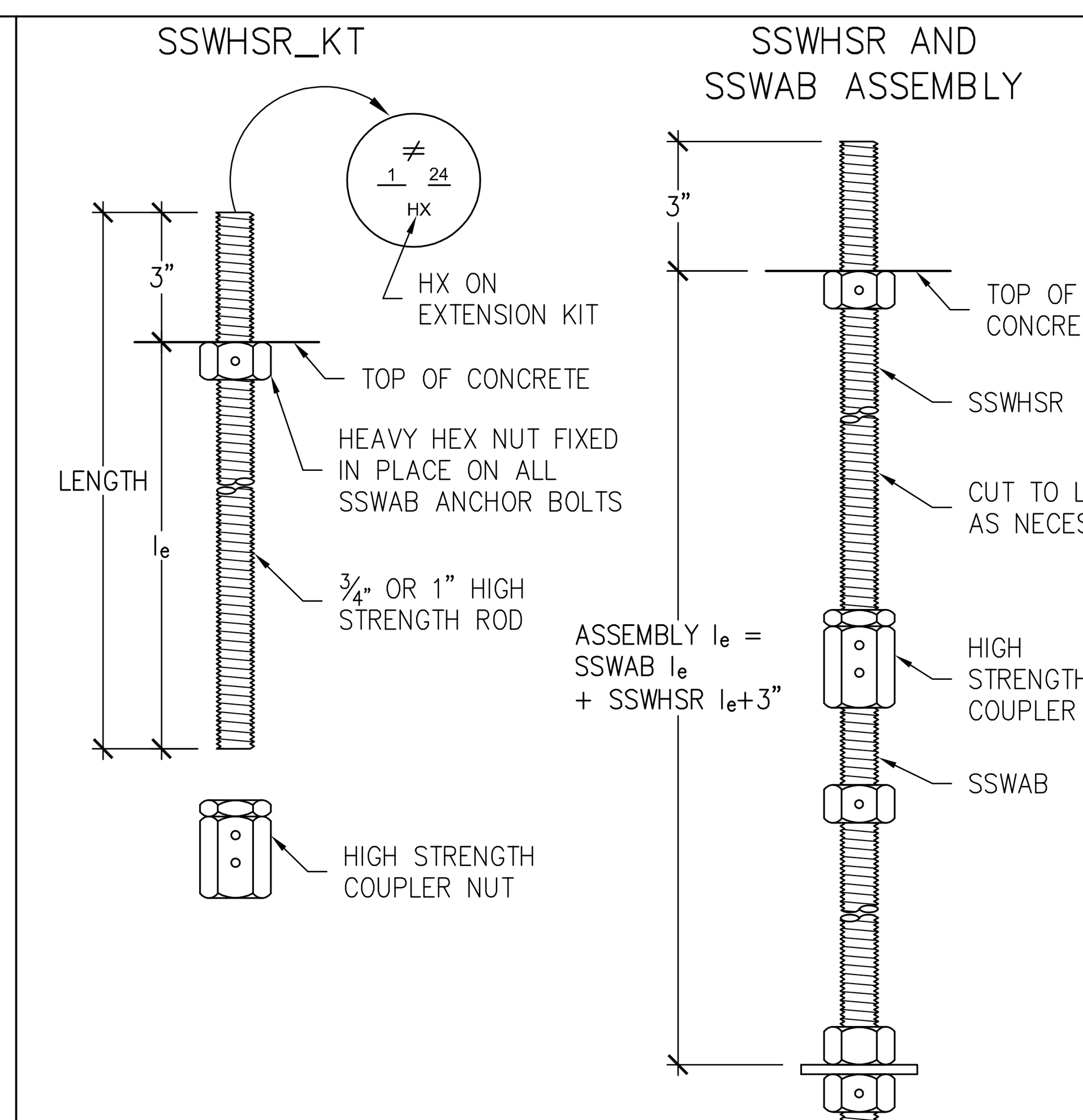


STEEL STRONG–WALL WIDTH	MODEL NO.	DIAMETER	LENGTH	l_e
12" MODEL	SSWAB3/4x24	¾"	24"	19"
	SSWAB3/4x24HS	¾"	24"	19"
	SSWAB3/4x30	¾"	30"	25"
	SSWAB3/4x30HS	¾"	30"	25"
	SSWAB3/4x36HS	¾"	36"	31"
15", 18", 21" AND 24" MODELS	SSWAB1x24	1"	24"	19"
	SSWAB1x24HS	1"	24"	19"
	SSWAB1x30	1"	30"	25"
	SSWAB1x30HS	1"	30"	25"
	SSWAB1x36HS	1"	36"	31"

SSW ANCHOR BOLTS | 5

SSWHSR_KT

SSWHSR AND SSWAB ASSEMBLY



SSW WIDTH	MODEL NO.	DIAMETER	TOTAL LENGTH	l_e
12" MODEL	SSWHSR3/4–2KT	¾"	24"	21"
	SSWHSR3/4–3KT	¾"	36"	33"
15", 18", 21" AND 24" MODELS	SSWHSR1–2KT	1"	24"	21"
	SSWHSR1–3KT	1"	36"	33"

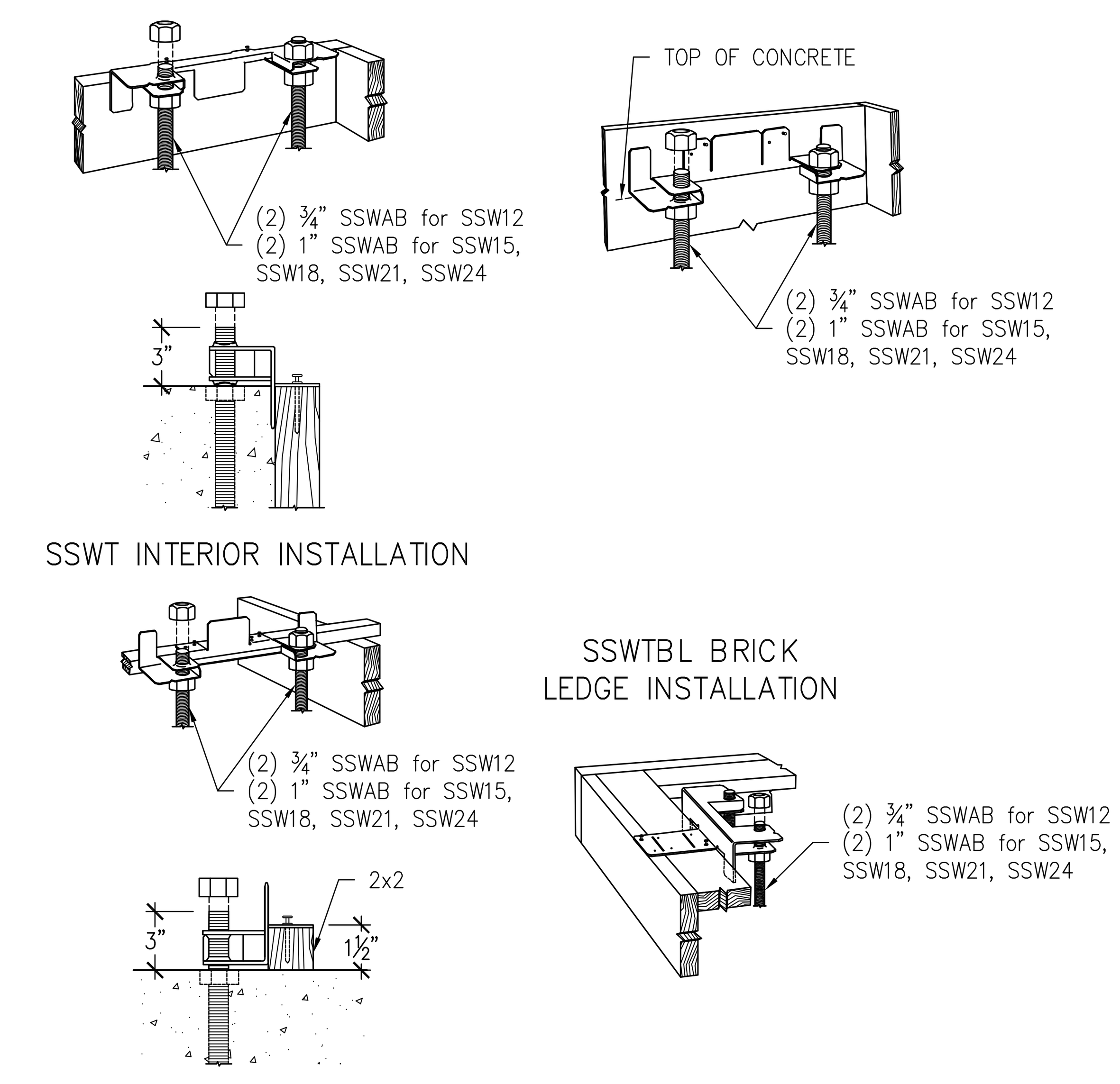
SSW ANCHOR BOLT EXTENSION | 6

SSWT EXTERIOR INSTALLATION

SSWTPF PANEL FORM INSTALLATION

SSWT INTERIOR INSTALLATION

SSWTBL BRICK LEDGE INSTALLATION



SSW ANCHOR BOLT TEMPLATES | 7

NO.	DATE	REVISIONS
1	09-21-2009	2006 IBC REVISIONS
2	04-16-2014	2012 IBC REVISIONS
3	08-08-2016	2015 IBC REVISIONS
4	06-18-2020	2018 IBC REVISIONS
5	03-16-2021	2021 IBC REVISIONS

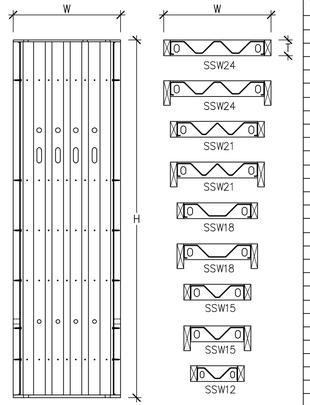
SIMPSON Strong-Tie, Co. Inc.
• 5956 W. Las Positas Blvd.
Pleasanton, CA 94588
• Tel: (800) 999-5099
• Website: www.strongtie.com

SIMPSON Strong-Tie
THERE IS NO EQUAL

STEEL STRONG-WALL
ANCHORAGE DETAILS ENGINEERED DESIGNS

SIMPSON Strong-Tie
THERE IS NO EQUAL

NAME
DATE 03-16-2021
SCALE N.T.S.
CHECKED
SHEET SSW1
OF SHEETS
JOB NO.

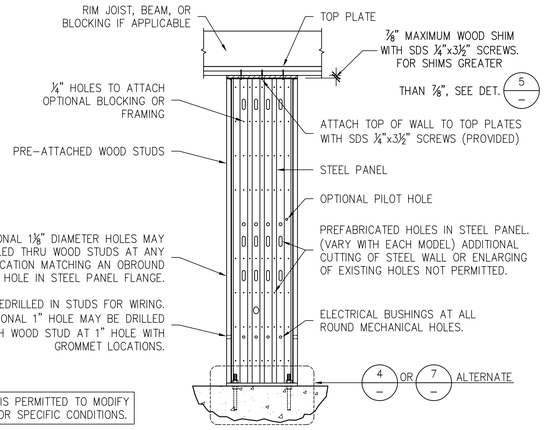


WALL PROFILES

STEEL STRONG-WALL MODELS					
STD. WALL MODEL NO.	-STK WALL MODEL NO.	H(in)	T(in)	HOLDOWN ANCHOR BOLTS[2]	QTY.OF TOP OF WALL SCREWS[1]
SSW12x7	--	80	3½	2-¾"	4
SSW15x7	--	80	3½	2-1"	6
SSW18x7	--	80	3½	2-1"	9
SSW21x7	--	80	3½	2-1"	12
SSW24x7	--	80	3½	2-1"	14
SSW12x7.4	--	85½	3½	2-¾"	4
SSW15x7.4	--	85½	3½	2-1"	6
SSW18x7.4	--	85½	3½	2-1"	9
SSW21x7.4	--	85½	3½	2-1"	12
SSW24x7.4	--	85½	3½	2-1"	14
SSW12x8	--	93¼	3½	2-¾"	4
SSW15x8	SSW15x8-STK	93¼	3½	2-1"	6
SSW18x8	SSW18x8-STK	93¼	3½	2-1"	9
SSW21x8	SSW21x8-STK	93¼	3½	2-1"	12
SSW24x8	SSW24x8-STK	93¼	3½	2-1"	14
SSW12x9	--	105¼	3½	2-¾"	4
SSW15x9	SSW15x9-STK	105¼	3½	2-1"	6
SSW18x9	SSW18x9-STK	105¼	3½	2-1"	9
SSW21x9	SSW21x9-STK	105¼	3½	2-1"	12
SSW24x9	SSW24x9-STK	105¼	3½	2-1"	14
SSW12x10	--	117¼	3½	2-¾"	4
SSW15x10	SSW15x10-STK	117¼	3½	2-1"	6
SSW18x10	SSW18x10-STK	117¼	3½	2-1"	9
SSW21x10	SSW21x10-STK	117¼	3½	2-1"	12
SSW24x10	SSW24x10-STK	117¼	3½	2-1"	14
SSW15x11	SSW15x11-STK	129¾	5½	2-1"	6
SSW18x11	SSW18x11-STK	129¾	5½	2-1"	9
SSW21x11	SSW21x11-STK	129¾	5½	2-1"	12
SSW24x11	SSW24x11-STK	129¾	5½	2-1"	14
SSW15x12	SSW15x12-STK	141¼	5½	2-1"	6
SSW18x12	SSW18x12-STK	141¼	5½	2-1"	9
SSW21x12	SSW21x12-STK	141¼	5½	2-1"	12
SSW24x12	SSW24x12-STK	141¼	5½	2-1"	14
SSW18x13	SSW18x13-STK	153¾	5½	2-1"	9
SSW21x13	SSW21x13-STK	153¾	5½	2-1"	12
SSW24x13	SSW24x13-STK	153¾	5½	2-1"	14

TABLE NOTES :
1. SDS ¼"x3½" SCREWS PROVIDED WITH WALL.
2. SEE SHEET SSW1 FOR ANCHORAGE SOLUTIONS.

STEEL STRONG-WALL MODELS | 1



DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

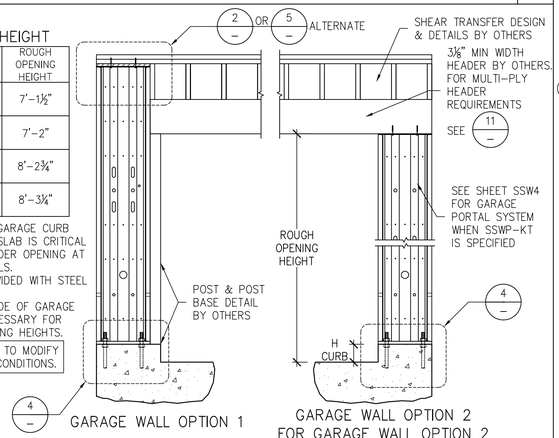
SINGLE-STORY SSW ON CONCRETE | 2

GARAGE HEADER ROUGH OPENING HEIGHT

MODEL NO.	H CURB	ROUGH OPENING HEIGHT
SSW12X7 SSW15X7 SSW18X7 SSW21X7 SSW24X7	5½"	7'-1½"
	6"	7'-2"
SSW12X7 SSW15X7 SSW18X7 SSW21X7 SSW24X7	5½"	8'-2¾"
	6"	8'-3¼"

1. THE HEIGHT OF THE GARAGE CURB ABOVE THE GARAGE SLAB IS CRITICAL FOR THE ROUGH HEADER OPENING AT GARAGE RETURN WALLS.
2. SHIMS ARE NOT PROVIDED WITH STEEL STRONG-WALL.
3. FURRING ON UNDERSIDE OF GARAGE HEADER MAY BE NECESSARY FOR LESSER ROUGH OPENING HEIGHTS.

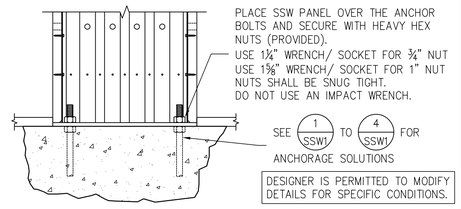
DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.



NOTE:
7-FT. HIGH STEEL STRONG-WALL MODELS ARE 80", 2" TALLER THAN 7-FT. HIGH WOOD STRONG-WALL SHEARWALLS

DESIGNER SHALL DESIGN FOR:
1. SHEAR TRANSFER
2. OUT OF PLANE LOADING EFFECT
3. INCREASED OVERTURNING AND DRIFT DUE TO ADDITIONAL HEIGHT

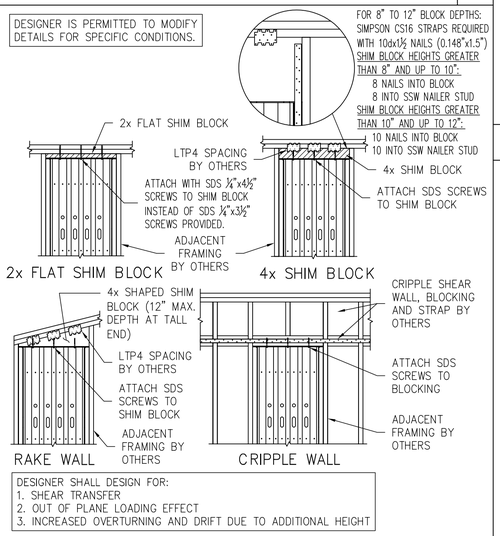
ALTERNATE GARAGE WALL OPTIONS | 3



DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

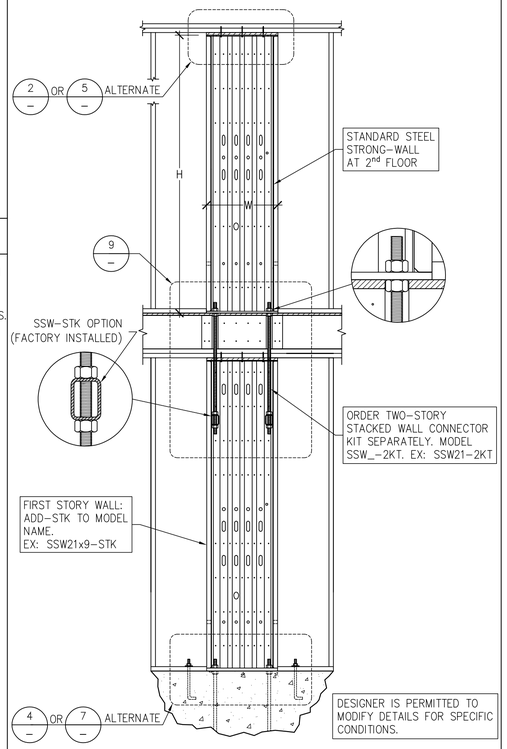
STRONG-WALL ON CONCRETE | 4

DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.



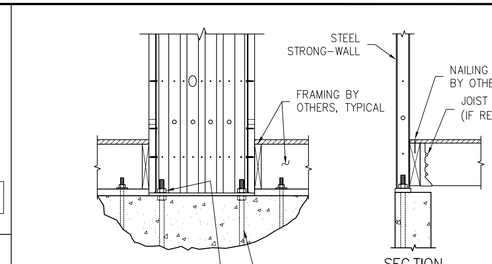
DESIGNER SHALL DESIGN FOR:
1. SHEAR TRANSFER
2. OUT OF PLANE LOADING EFFECT
3. INCREASED OVERTURNING AND DRIFT DUE TO ADDITIONAL HEIGHT

TOP OF WALL HEIGHT ADJUSTMENTS | 5



DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

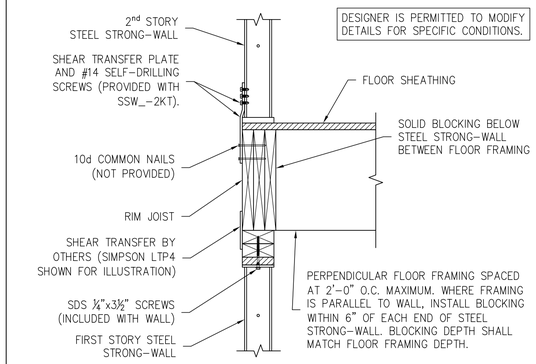
TWO-STORY STACKED | 6



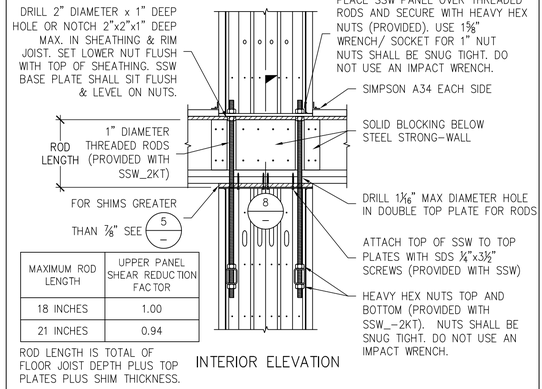
DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

ALTERNATE 1ST FLOOR WOOD FRAMING | 7

DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

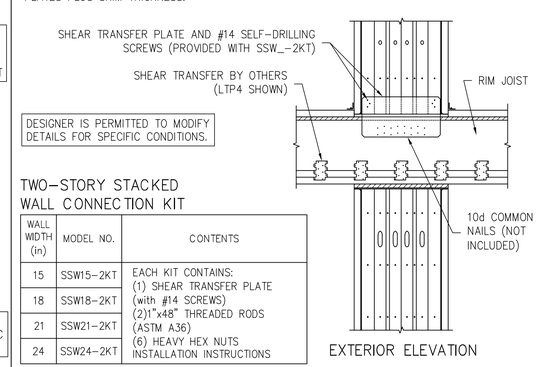


TWO-STORY STACKED FLOOR SECTION | 8



MAXIMUM ROD LENGTH	UPPER PANEL SHEAR REDUCTION FACTOR
18 INCHES	1.00
21 INCHES	0.94

ROD LENGTH IS TOTAL OF FLOOR JOIST DEPTH PLUS TOP PLATES PLUS SHIM THICKNESS.

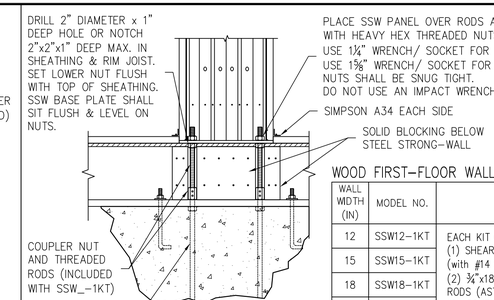


DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

TWO-STORY STACKED WALL CONNECTION KIT

WALL WIDTH (in)	MODEL NO.	CONTENTS
15	SSW15-2KT	EACH KIT CONTAINS: (1) SHEAR TRANSFER PLATE (with #14 SCREWS) (2)1"x48" THREADED RODS (ASTM A36) (6) HEAVY HEX NUTS INSTALLATION INSTRUCTIONS
18	SSW18-2KT	
21	SSW21-2KT	
24	SSW24-2KT	

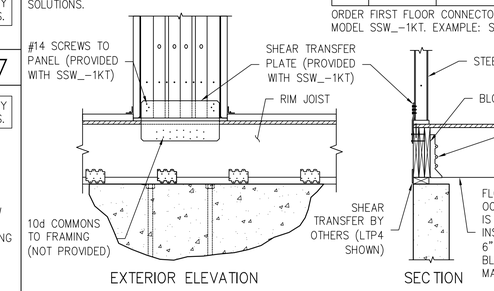
TWO-STORY STACKED FLOOR FRAMING | 9



WOOD FIRST-FLOOR WALL CONNECTION KIT

WALL WIDTH (IN)	MODEL NO.	CONTENTS
12	SSW12-1KT	EACH KIT CONTAINS: (1) SHEAR TRANSFER PLATE (with #14 SCREWS) (2) ¾"x18" or 1"x18" THREADED RODS (ASTM A36) (2) COUPLER NUTS (2) HEAVY HEX NUTS INSTALLATION INSTRUCTIONS
15	SSW15-1KT	
18	SSW18-1KT	
21	SSW21-1KT	
24	SSW24-1KT	

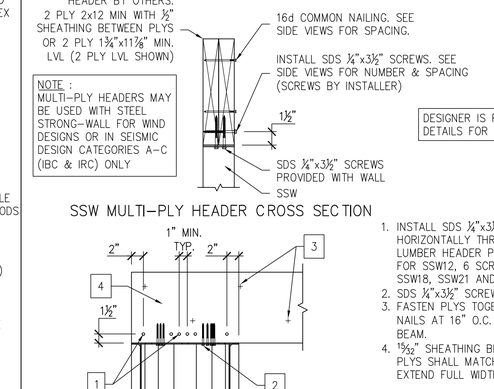
ORDER FIRST FLOOR CONNECTOR KIT SEPARATELY. MODEL SSW_-1KT. EXAMPLE: SSW21-1KT



FIRST FLOOR AT WOOD FRAMING NOTES :
1. USE WOOD FIRST-FLOOR ALLOWABLE LOAD TABLES FROM THE STRONG-WALL CATALOG FOR THIS INSTALLATION.
2. USE ALTERNATE DETAIL 7/– TO ACHIEVE MAXIMUM ON-CONCRETE ALLOWABLE LOADS.
3. FOR TWO-STORY STACKED STEEL STRONG-WALLS WITH WOOD FIRST FLOOR, USE ALTERNATE DETAIL 7/–
4. DESIGNER SHALL DESIGN FOR SHEAR TRANSFER FROM RIM JOIST TO SILL PLATE AND SILL PLATE TO FOUNDATION.

DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

FIRST FLOOR AT WOOD FRAMING | 10



NOTE :
MULTI-PLY HEADERS MAY BE USED WITH STEEL STRONG-WALL FOR WIND DESIGNS OR IN SEISMIC DESIGN CATEGORIES A-C (IBC & IRC) ONLY

DESIGNER IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.

1. INSTALL SDS ¼"x3½" SCREWS HORIZONTALLY THROUGH LVL OR 2x LUMBER HEADER PLYS. 4 SCREWS TOTAL FOR SSW12, 6 SCREWS TOTAL FOR SSW15, SSW18, SSW21 AND SSW24.
2. SDS ¼"x3½" SCREWS PROVIDED WITH WALL
3. FASTEN PLYS TOGETHER WITH 16d COMMON NAILS AT 16" O.C. ALONG EACH EDGE OF BEAM.
4. 1½" SHEATHING BETWEEN 2x HEADER PLYS SHALL MATCH HEADER DEPTH AND EXTEND FULL WIDTH OF SSW, MINIMUM.

MULTI-PLY HEADERS | 11

1. STEEL STRONG-WALL SHEARWALL IS MANUFACTURED AND TRADEMARKED BY "SIMPSON STRONG-TIE COMPANY, INC." HOME OFFICE: 5956 W. LAS POSITAS BLVD., PLEASANTON, CA 94588 TEL: (800) 999-5099, FAX: (925) 847-1597. "SIMPSON STRONG-TIE COMPANY, INC." IS AN ISO 9001 REGISTERED COMPANY.
2. USE OF THIS PRODUCT IS SUBJECT TO THE APPROVAL OF THE LOCAL BUILDING DEPARTMENT.
3. THIS PRODUCT IS PART OF THE OVERALL LATERAL FORCE RESISTING SYSTEM OF THE STRUCTURE. DESIGN OF THE BUILDING'S LATERAL FORCE RESISTING SYSTEM, INCLUDING THE LOAD PATH TO TRANSFER LATERAL FORCES FROM THE STRUCTURE TO THE GROUND, IS THE RESPONSIBILITY OF THE SPECIFIER.
4. ENGINEER OF RECORD IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.
5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS, ELEVATIONS, ETC. PRIOR TO INSTALLATION OF ANY COMPONENTS FOR THE STEEL STRONG-WALL SYSTEM. IF ANY DISCREPANCIES ARE FOUND, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE SPECIFIER FOR CLARIFICATION PRIOR TO CONSTRUCTION.
6. INSTALLATION OF PRODUCT SHALL BE DONE IN CONFORMANCE TO THESE DRAWINGS. THE PERFORMANCE OF MODIFIED PRODUCTS OR ALTERED INSTALLATION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE SPECIFIER.
7. SIMPSON STRONG-TIE COMPANY, INC. RESERVES THE RIGHT TO CHANGE SPECIFICATIONS, DESIGNS, AND MODELS WITHOUT NOTICE OR LIABILITY FOR SUCH CHANGES.
8. ALL HARDWARE CALLED OUT IS SIMPSON STRONG-TIE.

NOTES | 12

NO.	DATE	REVISIONS
1	09-21-2009	2006 IBC REVISIONS
2	04-16-2014	2012 IBC REVISIONS
3	08-08-2016	2015 IBC REVISIONS
4	06-15-2020	2018 IBC REVISIONS
5	03-16-2021	2021 IBC REVISIONS

SIMPSON Strong-Tie, Co. Inc.
• 5956 W. Las Positas Blvd. Pleasanton, CA 94588
• Tel: (800) 999-5099 • Website: www.strongtie.com

SIMPSON StrongTie THERE IS NO EQUAL

STEEL STRONG-WALL
FRAMING DETAILS
ENGINEERED DESIGNS

SIMPSON StrongTie THERE IS NO EQUAL

NAME	
DATE	03-16-2021
SCALE	N.T.S.
CHECKED	
SHEET	SSW2
OF	SHEETS
JOB NO.	

GENERAL INFORMATION					
01	Project Name	2968 N Dona Susana Drive			
02	Run Title	Title 24 Analysis			
03	Project Location	2968 N Dona Susana Drive			
04	City	Studio City	05	Standards Version	2022
06	Zip code	91604	07	Software Version	EnergyPro 9.2
08	Climate Zone	9	09	Front Orientation (deg/ Cardinal)	295
10	Building Type	Single family	11	Number of Dwelling Units	1
12	Project Scope	Addition and/or Alteration	13	Number of Bedrooms	5
14	Addition Cond. Floor Area (ft^2)	967.8	15	Number of Stories	2
16	Existing Cond. Floor Area (ft^2)	2868	17	Fenestration Average U-factor	0.3
18	Total Cond. Floor Area (ft^2)	3835.8	19	Glazing Percentage (%)	17.02%
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	
01	Building Complies with Computer Performance
02	This building incorporates features that require field testing and/or verification by a certified HERS rater under the supervision of a CEC-approved HERS provider.
03	This building incorporates one or more Special Features shown below

ENERGY USE SUMMARY

Energy Use	Standard Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Standard Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Proposed Design Source Energy (EDR1) (kBtu/ft^2 -yr)	Proposed Design TDV Energy (EDR2) (kTDV/ft^2 -yr)	Compliance Margin (EDR1)	Compliance Margin (EDR2)
Space Heating	0	7.39	0	9.08	0	-1.69
Space Cooling	0	22.3	0	23.59	0	-1.29
IAQ Ventilation	0	0	0	0	0	0
Water Heating	0	20.23	0	13.43	0	6.8
Self Utilization/Flexibility Credit						
Efficiency Compliance Total	**0**	**49.92**	**0**	**46.1**	**0**	**3.82**
Photovoltaics		0		0		
Battery				0		
Flexibility						
Indoor Lighting	0	5.94	0	5.94		
Appl. & Cooking	0	11.21	0	11.2		
Plug Loads	0	19.46	0	19.46		
Outdoor Lighting	0	1.58	0	1.58		
TOTAL COMPLIANCE	**0**	**88.11**	**0**	**84.28**		

ENERGY USE INTENSITY

	Standard Design (kBtu/ft^2 - yr)	Proposed Design (kBtu/ft^2 - yr)	Compliance Margin (kBtu/ft^2 - yr)	Margin Percentage
Gross EUI[1]	14.5	12.94	1.56	10.76
Net EUI[2]	14.5	12.94	1.56	10.76

Notes
1. Gross EUI is Energy Use Total (not including PV) / Total Building Area.
2. Net EUI is Energy Use Total (including PV) / Total Building Area.

REQUIRED SPECIAL FEATURES

The following are features that must be installed as condition for meeting the modeled energy performance for this computer analysis.

- Non-standard duct location (any location other than attic)

HERS FEATURE SUMMARY

The following is a summary of the features that must be field-verified by a certified HERS Rater as a condition for meeting the modeled energy performance for this computer analysis. Additional detail is provided in the building tables below. Registered CF2Rs and CF3Rs are required to be completed in the HERS Registry

- Minimum Airflow
- Verified EER/EER2
- Verified SEER/SEER2
- Fan Efficacy Watts/CFM
- Duct leakage testing
- Ducts located entirely in conditioned space confirmed by duct leakage testing

BUILDING - FEATURES INFORMATION

01	02	03	04	05	06	07
Project Name	Conditioned Floor Area (ft^2)	Number of Dwelling Units	Number of Bedrooms	Number of Zones	Number of Ventilation Cooling Systems	Number of Water Heating Systems
2968 N Dona Susana Drive	3835.8	1	5	2	0	1

ZONE INFORMATION

01	02	03	04	05	06	07
Zone Name	Zone Type	HVAC System Name	Zone Floor Area (ft^2)	Avg. Ceiling Height	Water Heating System 1	Status
(E) Home	Conditioned	HVAC System1	2868	8	DHW Sys 1	Existing Unchanged
(N) Addition	Conditioned	HVAC System1	967.8	8	DHW Sys 1	New

OPAQUE SURFACES

01	02	03	04	05	06	07	08	09	10	11
Name	Zone	Construction	Azimuth	Orientation	Gross Area (ft^2)	Window and Door Area (ft2)	Tilt (deg)	Wall Exceptions	Status	Verified Existing Condition
(E) FF Front Wall	(E) Home	Existing Wall	295	Front	120	32	90	none	Existing	No
(E) FF Left Wall	(E) Home	Existing Wall	25	Left	307.33	38.23	90	none	Existing	No
(E) FF Rear Wall	(E) Home	Existing Wall	115	Back	335.33	147.85	90	none	Existing	No
(E) FF Right Wall	(E) Home	Existing Wall	205	Right	56.33	0	90	none	Existing	No
(E) SF Front Wall	(E) Home	Existing Wall	295	Front	120	32	90	none	Existing	No
(E) SF Left Wall	(E) Home	Existing Wall	25	Left	375.33	32	90	none	Existing	No
(E) SF Rear Wall	(E) Home	Existing Wall	115	Back	335.33	57	90	none	Existing	No
(E) SF Right Wall	(E) Home	Existing Wall	205	Right	56.33	0	90	none	Existing	No
(N) FF Front Wall	(N) Addition	R-15 Wall	295	Front	215.33	69.33	90	none	New	n/a
(N) FF Rear Wall	(N) Addition	R-15 Wall	115	Back	172	34.17	90	Extension	New	n/a
(N) FF Right Wall	(N) Addition	R-15 Wall	205	Right	78	36.5	90	Extension	New	n/a
(N) SF Front Wall	(N) Addition	R-15 Wall	295	Front	375.33	120.75	90	none	New	n/a
(N) SF Left Wall	(N) Addition	R-15 Wall	25	Left	22.64	0	90	none	New	n/a
(N) SF Rear Wall	(N) Addition	R-15 Wall	115	Back	144	35	90	none	New	n/a
(N) SF Right Wall	(N) Addition	R-15 Wall	205	Right	265.28	73	90	none	New	n/a
Interior Surface	(E) Homes>(N) Addition	Existing Wall1	n/a	n/a	78	0	n/a		Existing	No

OPAQUE SURFACES - CATHEDRAL CEILINGS

01	02	03	04	05	06	07	08	09	10	11	12	13	14
Name	Zone	Construction	Azimuth	Orientation	Area (ft^2)	Skylight Area (ft^2)	Roof Rise (x in 12)	Roof Reflectance	Roof Emittance	Cool Roof	Status	Verified Existing Condition	Existing Construction
(E) Roof	(E) Home	Existing Roof No Attic	35	n/a	1596	0	0	0.1	0.85	No	Existing	No	
(N) SF Roof	(N) Addition	R-30 Roof No Attic	35	n/a	719	0	0	0.1	0.85	No	New	n/a	

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
(N) Window (1)	Window	(E) FF Front Wall	Front	295			1	32	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No
(N) Window (8)	Window	(E) FF Left Wall	Left	25			1	11.75	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No
(N) Window (7)	Window	(E) FF Left Wall	Left	25			1	26.48	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No
(N) Door (6)	Window	(E) FF Rear Wall	Back	115			1	108.12	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No
(N) Window (6)	Window	(E) FF Rear Wall	Back	115			1	23.06	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No
(N) Door (5)	Window	(E) FF Rear Wall	Back	115			1	16.67	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No
(N) Window (9)	Window	(E) SF Front Wall	Front	295			1	32	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
(N) Window (22)	Window	(E) SF Left Wall	Left	25			1	32	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No
(N) Window (19)	Window	(E) SF Rear Wall	Back	115			1	19	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No
(N) Window (20)	Window	(E) SF Rear Wall	Back	115			1	19	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No
(N) Window (21)	Window	(E) SF Rear Wall	Back	115			1	19	0.3	NFRC	0.23	NFRC	Bug Screen	Altered	No
(N) Window (2)	Window	(N) FF Front Wall	Front	295			1	32	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (5)	Window	(N) FF Rear Wall	Back	115			1	16.67	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (4)	Window	(N) FF Right Wall	Right	205			1	4.5	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (3)	Window	(N) FF Right Wall	Right	205			1	32	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (10)	Window	(N) SF Front Wall	Front	295			1	8.75	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (11)	Window	(N) SF Front Wall	Front	295			1	32	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (12)	Window	(N) SF Front Wall	Front	295			1	32	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (14A)	Window	(N) SF Front Wall	Front	295			1	8	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA

FENESTRATION / GLAZING

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Surface	Orientation	Azimuth	Width (ft)	Height (ft)	Mult.	Area (ft^2)	U-factor	U-factor Source	SHGC	SHGC Source	Exterior Shading	Status	Verified Existing Condition
(N) Window (14B)	Window	(N) SF Front Wall	Front	295			1	32	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (14C)	Window	(N) SF Front Wall	Front	295			1	8	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (17)	Window	(N) SF Rear Wall	Back	115			1	30	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (18)	Window	(N) SF Rear Wall	Back	115			1	5	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (13)	Window	(N) SF Right Wall	Right	205			1	32	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (15)	Window	(N) SF Right Wall	Right	205			1	32	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA
(N) Window (16)	Window	(N) SF Right Wall	Right	205			1	9	0.3	NFRC	0.23	NFRC	Bug Screen	New	NA

OPAQUE DOORS

01	02	03	04	05	06
Name	Side of Building	Area (ft^2)	U-factor	Status	Verified Existing Condition
(N) Door (1)	(N) FF Front Wall	37.33	0.2	New	n/a
(N) Door (4)	(N) FF Rear Wall	17.5	0.2	New	n/a

SLAB FLOORS

01	02	03	04	05	06	07	08	09	10
Name	Zone	Area (ft^2)	Perimeter (ft)	Edge Insul. R-value and Depth	Edge Insul. R-value and Depth	Carpeted Fraction	Heated	Status	Verified Existing Condition
(E) Slab	(E) Home	1596	103	none	0	80%	No	Existing	No
(N) FF Slab	(N) Addition	249	36.75	none	0	80%	No	New	n/a

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
Existing Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-13	None / None	0.101	Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Exterior Finish: 3 Coat Stucco
R-15 Wall	Exterior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-15	None / None	0.095	Inside Finish: Gypsum Board Cavity / Frame: R-15 / 2x4 Exterior Finish: 3 Coat Stucco
Existing Roof No Attic	Cathedral Ceilings	Wood Framed Ceiling	2x8 @ 16 in. O. C.	R-19	None / None	0.054	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-19 / 2x8 Inside Finish: Gypsum Board
R-30 Roof No Attic	Cathedral Ceilings	Wood Framed Ceiling	2x12 @ 16 in. O. C.	R-30	None / None	0.036	Roofing: Light Roof (Asphalt Shingle) Roof Deck: Wood Siding/sheathing/decking Cavity / Frame: R-30 / 2x12 Inside Finish: Gypsum Board

OPAQUE SURFACE CONSTRUCTIONS

01	02	03	04	05	06	07	08
Construction Name	Surface Type	Construction Type	Framing	Total Cavity R-value	Interior / Exterior Continuous R-value	U-factor	Assembly Layers
Existing Wall1	Interior Walls	Wood Framed Wall	2x4 @ 16 in. O. C.	R-13	None / None	0.092	Inside Finish: Gypsum Board Cavity / Frame: R-13 / 2x4 Other Side Finish: Gypsum Board

BUILDING ENVELOPE - HERS VERIFICATION

01	02	03	04	05
Quality Insulation Installation (QII)	High R-value Spray Foam Insulation	Building Envelope Air Leakage	CFM50	CFM50
Not Required	Not Required	N/A	n/a	n/a

WATER HEATING SYSTEMS

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	HERS Verification	Water Heater Name (#)	Status	Verified Existing Condition	Existing Water Heating System
DHW Sys 1	Domestic Hot Water (DHW)	Standard	DHW Heater 1	1	n/a	None	n/a	DHW Heater 1 (1)	Altered	No	

WATER HEATERS

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 Hr. Rating or Flow Rate	Tank Location	Status	Verified Existing Condition
DHW Heater 1	Gas	Consumer Storage	1	50	UEF	0.72	Btu/Hr	75000	0	80	80		Altered	No

REVISIONS		
NO.	DATE	DESCRIPTION

T24 PREPARED BY:
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3201 BELMAC AVE
BAKERSFIELD CA 93312
TITLE 24 ENERGY CALCULATION
CASTROSKAFTINGANDDESIGN@GMAIL.COM
CASTRO ENERGY + DESIGN

PROJECT ADDRESS:
2968 N DONA SUSANA DRIVE
STUDIO CITY CA 91604

PREP BY:
M. CASTRO

DATE:
08/2024

JOB:
1262

SHEET NO.:
T24.1

WATER HEATING - HERS VERIFICATION

01	02	03	04	05	06	07
Name	Pipe Insulation	Parallel Piping	Compact Distribution	Compact Distribution Type	Recirculation Control	Shower Drain Water Heat Recovery
DHW Sys 1 - 1/1	Not Required	Not Required	Not Required	None	Not Required	Not Required

SPACE CONDITIONING SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
Name	System Type	Heating Unit Name	Heating Equipment Count	Cooling Unit Name	Cooling Equipment Count	Fan Name	Distribution Name	Required Thermostat Type	Status	Verified Existing Condition	Existing HVAC System
HVAC System1	Heating and cooling system other	Heating Component 1	1	Cooling Component 1	1	HVAC Fan 1	Air Distribution System 1	Setback	Altered	No	

HVAC - HEATING UNIT TYPES

01	02	03	04	05
Name	System Type	Number of Units	Heating Efficiency	Heating Unit Brand
Heating Component 1	Packaged Gas Furnace	1	AFUE - 80	n/a

HVAC - COOLING UNIT TYPES

01	02	03	04	05	06	07	08	09
Name	System Type	Number of Units	Efficiency Metric	Efficiency EER/EER2/CEER	Efficiency SEER/SEER2	Zonally Controlled	Multi-speed Compressor	HERS Verification
Cooling Component 1	Central packaged AC	1	EER/SEER	12.2	16	Not Zonal	Single Speed	Cooling Component 1-hers-cool

HVAC COOLING - HERS VERIFICATION

01	02	03	04	05	06
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEERSEER2	Verified Refrigerant Charge
Cooling Component 1-hers-cool	Required	350	Required	Required	Not Required

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Design Type	Duct Ins. R-value		Duct Location		Surface Area		Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts >= 25 ft
			Supply	Return	Supply	Return	Supply	Return							
Air Distribution System 1	Conditioned space-entirely	Non-Verified	R-6	R-6	Conditioned Zone	Conditioned Zone	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 1-hers-dist	Alteration	No		No

HVAC DISTRIBUTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	10.0	Required	Not Required	Not Required	Credit not taken	Not Required	No

HVAC COOLING - HERS VERIFICATION

01	02	03	04	05	06
Name	Verified Airflow	Airflow Target	Verified EER/EER2	Verified SEERSEER2	Verified Refrigerant Charge
Cooling Component 1-hers-cool	Required	350	Required	Required	Not Required

HVAC - DISTRIBUTION SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Name	Type	Design Type	Duct Ins. R-value		Duct Location		Surface Area		Bypass Duct	Duct Leakage	HERS Verification	Status	Verified Existing Condition	Existing Distribution system	New Ducts >= 25 ft
			Supply	Return	Supply	Return	Supply	Return							
Air Distribution System 1	Conditioned space-entirely	Non-Verified	R-6	R-6	Conditioned Zone	Conditioned Zone	n/a	n/a	No Bypass Duct	Sealed and Tested	Air Distribution System 1-hers-dist	Alteration	No		No

HVAC DISTRIBUTION - HERS VERIFICATION

01	02	03	04	05	06	07	08	09
Name	Duct Leakage Verification	Duct Leakage Target (%)	Verified Duct Location	Verified Duct Design	Buried Ducts	Deeply Buried Ducts	Low-leakage Air Handler	Low Leakage Ducts Entirely in Conditioned Space
Air Distribution System 1-hers-dist	Yes	10.0	Required	Not Required	Not Required	Credit not taken	Not Required	No

HVAC - FAN SYSTEMS

01	02	03	04
Name	Type	Fan Power (Watts/CFM)	Name
HVAC Fan 1	HVAC Fan	0.45	HVAC Fan 1-hers-fan

HVAC FAN SYSTEMS - HERS VERIFICATION

01	02	03
Name	Verified Fan Watt Draw	Required Fan Efficacy (Watts/CFM)
HVAC Fan 1-hers-fan	Required	0.45

HERS RATER VERIFICATION OF EXISTING CONDITIONS

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Manuel Castro	Documentation Author Signature: Manuel Castro
Company: Castro Energy and Design	Signature Date: 08/01/2024
Address: 9201 Belmac Ave	CEA/ HERS Certification Identification (If applicable):
City/State/Zip: Bakersfield, CA 93312	Phone: 310-892-0517

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design identified on this Certificate of Compliance.
2. I certify that the energy features and performance specifications identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
3. 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.

Responsible Designer Name: Alexis Campos	Responsible Designer Signature: Alexis Campos
Company: ENR Design and Drafting	Date Signed: 08/01/2024
Address: 18570 SHERMAN WAY	License:
City/State/Zip: RESEDA, CA 91335	Phone: (818) 282-0437

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.

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REVISIONS
NO. | DATE | DESCRIPTION

T24 PREPARED BY:

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CASTRO ENERGY + DESIGN

PROJECT ADDRESS:
2968 N DONA SUSANA DRIVE
STUDIO CITY CA 91604

NOTICE:
WRITTEN DIMENSIONS OF THESE DRAWINGS SHALL HAVE PREFERENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS SHOWN BY THESE PLANS.

PREP BY: M. CASTRO
DATE: 08/2024
JOB: 1262
SHEET NO.:
T24.2

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:	**Air Leakage.** 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 E283, or AAMA/WDMA/CSA 101/I.S.2/A440-2011. *
§ 110.6(a)5:	**Labelling.** Fenestration products and exterior doors must have a label meeting the requirements of § 10-111(a).
§ 110.6(b):	**Field fabricated exterior doors and fenestration** 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:	**Air Leakage.** All joints, penetrations, and other openings in the building envelope that are potential sources of air leakage must be caulked, gasketed, or weather stripped.
§ 110.8(a):	**Insulation Certification by Manufacturers.** Insulation must be certified by the Department of Consumer Affairs, Bureau of Household Goods and Services (BHGS).
§ 110.8(g):	**Insulation Requirements for Heated Slab Floors.** Heated slab floors must be insulated per the requirements of § 110.8(g).
§ 110.8(i):	**Roofing Products Solar Reflectance and Thermal Emittance.** The thermal emittance and aged solar reflectance values of the roofing material must meet the requirements of § 110.8(i) and be labeled per §10-113 when the installation of a cool roof is specified on the CF1R.
§ 110.8(j):	**Radiant Barrier.** 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):	**Roof Deck, Ceiling and Rafter Roof Insulation.** 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):	**Loose-fill Insulation.** Loose fill insulation must meet the manufacturer's required density for the labeled R-value.
§ 150.0(c):	**Wall Insulation.** 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):	**Raised-floor Insulation.** Minimum R-19 insulation in raised wood framed floor or 0.037 maximum U-factor. *
§ 150.0(f):	**Slab Edge Insulation.** 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:	**Vapor Retarder.** 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:	**Vapor Retarder.** 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(q):	**Fenestration Products.** 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:

§ 110.5(e)	**Pilot Light.** Continuously burning pilot lights are not allowed for indoor and outdoor fireplaces.
§ 150.0(e)1:	**Closable Doors.** Masonry or factory-built fireplaces must have a closable metal or glass door covering the entire opening of the firebox.
§ 150.0(e)2:	**Combustion Intake.** 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 tight-fitting damper or combustion-air control device. *
§ 150.0(e)3:	**Flue Damper.** Masonry or factory-built fireplaces must have a flue damper with a readily accessible control. *

Space Conditioning, Water Heating, and Plumbing System:

§ 110.0-§ 110.3:	**Certification.** 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):	**HVAC Efficiency.** Equipment must meet the applicable efficiency requirements in Table 110.2-A through Table 110.2-N. *
§ 110.2(b):	**Controls for Heat Pumps with Supplementary Electric Resistance Heaters.** 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):	**Thermostats.** All heating or cooling systems not controlled by a central energy management control system (EMCS) must have a setback thermostat. *
§ 110.3(c)3:	**Insulation.** Unfired service water heater storage tanks and solar water-heating backup tanks must have adequate insulation, or tank surface heat loss rating.
§ 110.3(c)6:	**Isolation Valves.** Instantaneous water heaters with an input rating greater than 6.8 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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§ 150.0(k)1G:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1H:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1I:	**Light Sources in Drawers, Cabinets, and Linen Closets.** 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:	**Interior Switches and Controls.** All forward phase cut dimmers used with LED light sources must comply with NEMA SSL 7A.
§ 150.0(k)2B:	**Interior Switches and Controls.** Exhaust fans must be controlled separately from lighting systems. *
§ 150.0(k)2A:	**Accessible Controls.** Lighting must have readily accessible wall-mounted controls that allow the lighting to be manually turned on and off. *
§ 150.0(k)2B:	**Multiple Controls.** 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:	**Mandatory Requirements.** Lighting controls must comply with the applicable requirements of § 110.9.
§ 150.0(k)2D:	**Energy Management Control Systems.** 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:	**Automatic Shutoff Controls.** 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:	**Dimmers.** 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:	**Independent controls.** 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:	**Residential Outdoor Lighting.** 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 photocell 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:	**Internally illuminated address signs.** Internally illuminated address signs must either comply with § 140.8 or consume no more than 5 watts of power.
§ 150.0(k)5:	**Residential Garages for Eight or More Vehicles.** 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:

§ 110.10(a)1:	**Single-family Residences.** 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:	**Minimum Solar Zone Area.** 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 or 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:	**Azimuth.** 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:	**Shading.** 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:	**Shading.** 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:	**Structural Design Loads on Construction Documents.** 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):	**Interconnection Pathways.** 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):	**Documentation.** A copy of the construction documents or a comparable document indicating the information from § 110.10(b)-(c) must be provided to the occupant.
§ 110.10(e)1:	**Main Electrical Service Panel.** The main electrical service panel must have a minimum busbar rating of 200 amps.
§ 110.10(e)2:	**Main Electrical Service Panel.** 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:

2022 Single-Family Residential Mandatory Requirements Summary

§ 110.5:	**Pilot Lights.** 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:	**Building Cooling and Heating Loads.** 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:	**Clearances.** 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:	**Liquid Line Drier.** 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(j)1:	**Water Piping, Solar Water-heating System Piping, and Space Conditioning System Line Insulation.** All domestic hot water piping must be insulated as specified in § 609.11 of the California Plumbing Code. *
§ 150.0(j)2:	**Insulation Protection.** 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 retardant 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(n)1:	**Gas or Propane Water Heating Systems.** 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(n)3:	**Solar Water-heating Systems.** 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:

§ 110.8(d)3:	**Ducts.** 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(m)1:	**CMC Compliance.** 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 either 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(m)2:	**Factory-Fabricated Duct Systems.** 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 back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.
§ 150.0(m)3:	**Field-Fabricated Duct Systems.** Field-fabricated duct systems must comply with applicable requirements for: pressure-sensitive tapes, mastics, sealants, and other requirements specified for duct construction.
§ 150.0(m)7:	**Backdraft Damper.** Fan systems that exchange air between the conditioned space and outdoors must have backdraft or automatic dampers.
§ 150.0(m)8:	**Gravity Ventilation Dampers.** 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(m)9:	**Protection of Insulation.** Insulation must be protected from damage due tosunlight, 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 retardant and solar radiation-resistant coating.
§ 150.0(m)10:	**Porous Inner Core Flex Duct.** 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(m)11:	**Duct System Sealing and Leakage Test.** 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(m)12:	**Air Filtration.** 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(s)	**Energy Storage System (ESS) Ready.** All single-family residences must meet all of the following: Either ESS-ready interconnection equipment with backed up 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)	**Heat Pump Space Heater Ready.** 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)	**Electric Cooktop Ready.** 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)	**Electric Clothes Dryer Ready.** 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.

2022 Single-Family Residential Mandatory Requirements Summary

§ 150.0(m)13:	**Space Conditioning System Airflow Rate and Fan Efficacy.** 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. *

Ventilation and Indoor Air Quality:

§ 150.0(o)1:	**Requirements for Ventilation and Indoor Air Quality.** 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(o)1. *
§ 150.0(o)1B:	**Central Fan Integrated (CFI) Ventilation Systems.** Continuous operation of CFI air handlers is not allowed to provide the whole-dwelling unit ventilation airflow required per §150.0(o)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 andcontrolled per §150.0(o)1SIii&iv. 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(o)1C.
§ 150.0(o)1C:	**Whole-Dwelling Unit Mechanical Ventilation for Single-Family Detached and townhouses .** Single-family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces must have mechanical ventilation airflow specified in § 150.0(o)1CI-iii.
§ 150.0(o)1G:	**Local Mechanical Exhaust.** Kitchens and bathrooms must have local mechanical exhaust; nonenclosed kitchens must have demand-controlled exhaust system meeting requirements of §150.0(o)1GiiLenclosed kitchens and bathrooms can use demand-controlled or continuous exhaust meeting §150.0(o)1Giii-iv. Airflow must be measured by the installer per §150.0(o)1Ov, and rated for sound per §150.0(o)1Gvi. *
§ 150.0(o)1H&I:	**Airflow Measurement and Sound Ratings of Whole-Dwelling Unit Ventilation Systems.** The airflow required per § 150.0(o)1C must be measured by using a flow hood, flow grid, or other airflow measuring device at the fan's inlet or outlet terminals/grilles 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(o)1C.
§ 150.0(o)2:	**Field Verification and Diagnostic Testing.** 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(o)1G

Pool and Spa Systems and Equipment:

§ 110.4(a):	**Certification by Manufacturers.** 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 MAEDbS; 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:	**Piping.** 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:	**Covers.** Outdoor pools or spas that have a heat pump or gas heater must have a cover.
§ 110.4(b)3:	**Directional Inlets and Time Switches for Pools.** 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:	**Pilot Light.** Natural gas pool and spa heaters must not have a continuously burning pilot light.
§ 150.0(p):	**Pool Systems and Equipment Installation.** Residential pool systems or equipment must meet the specified requirements for pump sizing, flow rate, piping, filters, and valves.

Lighting:

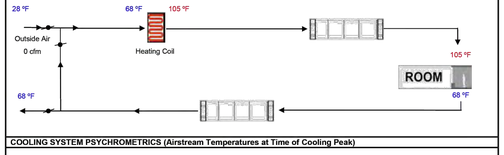
§ 110.9:	**Lighting Controls and Components.** All lighting control devices and systems, ballasts, and luminaires must meet the applicable requirements of § 110.9. *
§ 150.0(k)1A:	**Luminaire Efficacy.** All installed luminaires must meet the requirements in Table 150.0-A, except lighting integral to exhaust fans, kitchen range hoods, bath 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(k)1B:	**Screw based luminaires.** Screw based luminaires must contain lamps that comply with Reference Joint Appendix JA8. *
§ 150.0(k)1C:	**Recessed Downlight Luminaires in Ceilings.** Luminaires recessed into ceilings must not contain screw based sockets, must be airtight, and must be sealed with a gasket or caulk. California Electrical Code § 410.116 must also be met.
§ 150.0(k)1D:	**Light Sources in Enclosed or Recessed Luminaires.** Lamps and other separable light sources that are not compliant with the JA8 elevated temperature requirements, including marking requirements, must not be installed in enclosed or recessed luminaires.
§ 150.0(k)1E:	**Blank Electrical Boxes.** 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(k)1F:	**Lighting Integral to Exhaust Fans.** Lighting integral to exhaust fans (except when installed by the manufacturer in kitchen exhaust hoods) must meet the applicable requirements of § 150.0(k). *

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

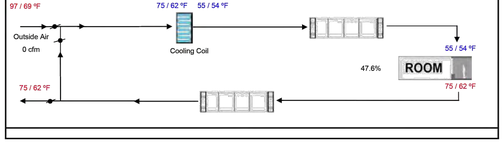
Project Name: 2968 N Dona Susana Drive	Date: 8/1/2024
System Name: HVAC System	Floor Area: 3,836

ENGINEERING CHECKS		SYSTEM LOAD	COIL COOLING PEAK			COIL HTG. PEAK	
			CFM	Sensible	Latent	CFM	Sensible
Number of Systems	1	**Total Room Loads**	1,641	34,233	1,555	866	33,597
Heating System		**Return Vented Lighting**		0			
Output per System	80,000	**Return Air Ducts**		482			468
Total Output (Btuh)	80,000	**Return Fan**		0			0
Output (Btuh/sqft)	20.9	**Ventilation**	0	0	0	0	0
Cooling System		**Supply Fan**		0			0
Output per System	60,000	**Supply Air Ducts**		482			468
Total Output (Btuh)	60,000						
Total Output (Tons)	5.0						
Total Output (Btuh/sqft)	15.6						
Total Output (sqft/Ton)	767.2	**TOTAL SYSTEM LOAD**		35,198	1,555		34,532
Air System							
CFM per System	0	**HVAC EQUIPMENT SELECTION**					
Airflow (cfm)	0	High Efficiency Fau/AC		54,893	0		80,000
Airflow (cfm/sqft)	0.00						
Airflow (cfm/Ton)	0.0						
Outside Air (%)	0.0%	**Total Adjusted System Output** (Adjusted for Peak Design conditions)		54,893	0		80,000
Outside Air (cfm/sqft)	0.00						
Note: values above given at ARI conditions		**TIME OF SYSTEM PEAK**		Aug 3 PM			Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



PREPARED BY:
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