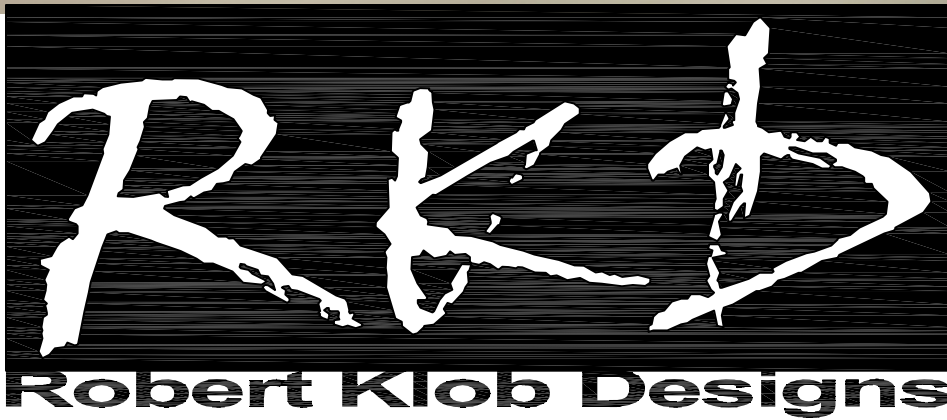


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"DESIGNS THAT LIVE
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LIFESTYLE &
BUDGET"

5980 W. BLUE STAR TP.
HOWARD MESA RANCH PHASE 2 UNIT 2
Lot: 100
APN: 500-99-052

A CUSTOM HOME FOR
**LARRY & CHERYL
SCHUG**

COVER

SHEET TITLE

REV	COMMENT
1	
2	
3	
4	

date: 7/29/15
drawn: VF/PK

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0.0

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GENERAL SPECIFICATIONS

ATTIC VENTILATION, SCUTTLE, AND VENTS

ATTIC SCUTTLE SHALL BE NOT LESS THAN 22"x30" & 30" MIN., CLEAR HEADROOM ABOVE THE ACCESS OPENING. AT ACCESS PANEL PROVIDE MIN., 5/8" TYPE 'X' GYP. BD. & 3/4" PARTICLE BD. ON GARAGE SIDE FACE DOWN.

VENTILATION SHALL COMPLY WITH 2012 IRC. SEE ATTIC VENTILATION CALCULATION ON FRAMING PLAN FOR APPLICABLE VENTILATION CALCULATION.

WHERE THIN COAT STUCCO IS USED AT ATTIC AREAS, A THERMAL BARRIER BEHIND THE FOAM OR IN LIEU OF THE FOAM SHALL BE USED - PER 2012 I.R.C. PROVIDE CORROSION RESISTANT METAL MESH @ EXTERIOR VENTS w/ MESH OPENINGS LESS THAN 1/4"

LOCATION FOR REQUIRED FIREBLOCKING

CONCEALED SPACES OF STUD WALLS AT CEILING LEVEL, FURRED SPACES AND SOFFITS @ 10' LEVELS BOTH VERT. & HORIZ. ALL INTERCONNECTIONS BETWEEN CONCEALED VERT. & HORIZ. SPACES SUCH AS OCCUR @ DROP CLGS, SOFFITS, & COVE CLGS.

OPENINGS AROUND PIPES, DUCTS, VENTS AND CHIMNEYS w/ NON- COMBUSTIBLE MATERIALS SUCH AS UNFACED FIBERGLASS INSULATION.

GRADING AND DRAINAGE

FINISH GRADE SHALL SLOPE 5% FOR A DISTANCE OF 10'-0" TO APPROVED WATER DISPOSAL AREA.

AREA SEPARATIONS

GARAGE WALLS & CLG. TO HAVE A MIN., OF 5/8" TYPE 'X' GYP. BOARD & SHALL COMPLY 2012 IRC

EXTERIOR MATERIAL:

- STUCCO: USE ICC APPROVED FIBER REINFORCED STUCCO SYSTEM WITH 1" POLYSTYRENE INSUL. BOARD. AIS @ ATTIC AREAS.
- ULTRAKOTE STUCCO SYSTEM - ESR-1471
 - WESTERN ONE COAT STUCCO SYSTEM - ESR-1607 w/ APPR. WEATHER RESISTIVE BARRIER.

GYPSUM BOARD BOARD USED ON EXTERIOR SOFFITS MUST BE APPROVED EXTERIOR TYPE REFER TO CURRENT IRC. EXTERIOR SOFFIT BOARD MUST BE SPECIFIED AS EXTERIOR GRADE - ESR-1338

- STONE VENEER: USE ICC APPROVED STONE VENEER AND INSTALL PER ESR REPORTS AND MANUFACTURERS SPECIFICATIONS. SPECIAL INSPECTION AS REQUIRED PER MUNICIPALITY.
- MODERN STONE - ESR-1956
 - EL DORADO STONE - ER-3568

CONCRETE ROOF TILE: (EAGLE TILE - ESR-4660) TO BE INSTALLED PER MFR. SPECIFICATIONS

POOL BARRIER NOTE:

ALL DOORS & WINDOWS ACCESSING THE POOL AREA MUST COMPLY WITH IRC SEC. AG 105.1 POOL BARRIERS & IRC SEC. R308.4 #9. GLAZING IN HAZARDOUS LOCATIONS. A POOL FENCE IS AN APPROVED ALTERNATIVE.

TABLE R602.3(1)

FASTENER SCHEDULE FOR STRUCTURAL MEMBERS				
DESCRIPTION OF BUILDING ELEMENTS	NUMBER & TYPE OF FASTENER (A,B,C,D)	SPACING OF FASTENERS		
JOIST TO SILL OR GROSSER, TOE NAIL	3-6d	-		
1"x6" SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2 STAPLES, 1 3/4"	-		
2" SUBFLOOR TO JOIST OR GROSSER, BLIND & FACE NAIL	2-5d	-		
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d	12" o.c.		
TOE OR SOLE PLATE TO STUD, END NAIL	2-5d	-		
STUD TO SOLE PLATE, TOE NAIL	3-6d OR 2-5d	-		
DOUBLE STUDS, FACE NAIL	10d	24" o.c.		
DOUBLE TOP PLATES, FACE NAIL	10d	24" o.c.		
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANELS	3-5d	12" o.c.		
DOUBLE TOP PLATES, MIN. 48 INCH OFFSET OF END JOISTS, FACE NAIL IN LAP JOINT AREA	6-16d	-		
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOE NAIL	3-6d	-		
RUN JOIST TO TOP PLATE, TOE NAIL	3-6d	P.O.C.		
TOP PLATES, JOIST AT CORNERS & INTERSECTIONS, FACE NAIL	2-5d	12" o.c. AT BOTTOM		
BUILT-UP HEADER, TWO PIECES w/ 1/2" SPACER	16d	12" o.c. ALONG EA. EDGE		
CONTINUOUS HEADER, TWO PIECES	16d	-		
CEILING JOIST TO PLATE, TOE NAIL	3-6d	-		
CEILING JOIST TO STUD, TOE NAIL	4-6d	-		
CEILING JOIST LAP OVER PARTITIONS, FACE NAIL	2-5d	-		
CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	2-5d	-		
RAFTER TO PLATE, TOE NAIL	2-5d	-		
1" BRACE TO EACH STUD & PLATE, FACE NAIL	2 STAPLES, 1 3/4"	-		
1"x6" SHEATHING TO EACH BEARING, FACE NAIL	2-5d	-		
1"x6" SHEATHING TO EACH BEARING, FACE NAIL	2 STAPLES, 1 3/4"	-		
MORE THAN 1"x6" SHEATHING TO EACH BEARING, FACE NAIL	3 STAPLES, 1 3/4"	-		
BUILT-UP CORNER STUDS	10d	24" o.c.		
BUILT-UP ORDERS & BEAMS, 2 INCH LUMBER LAYERS	10d	NAIL EA. LAYER AS FOLLOWS: 12" o.c. AT BOTTOM STAGGERED, TWO NAILS @ ENDS AT EA. SPURCE AT EACH BEARING		
2" PLANKS	2-5d	-		
ROOF RAFTERS TO RIDGE, VALLEY OR HP RAFTERS	4-16d	-		
TOE NAIL	2-5d	-		
FACE NAIL	3-6d	-		
RAFTER TIES TO RAFTERS, FACE	3-6d	-		
WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND WALL SHEATHING TO FRAMING, AND PARTICLEBOARD WALL SHEATHING TO FRAMING				
5/16 - 1/2	8d COMMON NAIL (SUBFLOOR WALL) 8d COMMON NAIL (ROOF)	6	12"	
1/2 - 1	8d COMMON NAIL	6	12"	
1 1/8 - 1 1/4	10d COMMON NAIL OR 8d DEFORMED NAIL	6	12"	

DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER	CODE	SPACING OF FASTENERS		
			EDGES (INCHES) ¹	INTERMEDIATE SUPPORTS ² (INCHES)	
OTHER WALL SHEATHING					
1/2" REGULAR CELLULOSE FIBERBOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL 8d COMMON NAIL STAPLE 15ga, 1 1/2" LONG	3	6	6	
1/2" STRUCTURAL CELLULOSE FIBERBOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL 8d COMMON NAIL STAPLE 15ga, 1 1/2" LONG	3	6	6	
25/32" STRUCTURAL CELLULOSE FIBERBOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL 8d COMMON NAIL STAPLE 15ga, 1 1/2" LONG	4	6	6	
1/2" GYPSUM SHEATHING	1 1/2" GALVANIZED ROOFING NAIL 8d COMMON NAIL STAPLE GALV., 1 1/2" LONG	4	6	6	
5/8" GYPSUM SHEATHING	1 3/4" GALVANIZED ROOFING NAIL 8d COMMON NAIL STAPLE GALV., 1 5/8" LONG	4	6	6	
	1 5/8" SCREWS, TYPE 19 OR S ²	-	-	-	
WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING					
3/4" AND LESS	8d DEFORMED NAIL OR 8d COMMON NAIL	6	12	12	
7/8 - 1	8d DEFORMED NAIL OR 8d COMMON NAIL	6	12	12	
1 1/8 - 1 1/4	10d DEFORMED NAIL OR 8d COMMON NAIL	6	12	12	

FOR S: 1 INCH = 25.4 MM, 1 FOOT = 304.8 MM, 1 MILE PER HOUR = 1.609 KMH

A. ALL NAILS ARE SMOOTH-COMMON, BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED

B. STAPLES ARE 16 GAUGE WIRE AND HAVE A MIN. 7/16 INCH OR DIAMETER CROWN WIDTH

C. NAILS SHALL BE SPACED AT NOT MORE THAN 6 INCHES O.C. AT ALL SUPPORTS WHERE SPANS ARE 48" OR GREATER

D. 4-FEET-BY-8-FOOT OR 4-FEET-BY-8-FOOT PANELS SHALL BE APPLIED VERTICALLY

E. SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON TABLE R602.3(1)

F. FOR REGIONS HAVING BASIC WIND SPEED OF 110 MPH OR GREATER, 8d DEFORMED NAILS SHALL BE USED FOR ATTACHING PLYWOOD AND WOOD STRUCTURAL PANEL, ROOF SHEATHING TO FRAMING WITHIN MINIMUM 48-INCH DISTANCE FROM GABLE END WALLS, IF NEAR ROOF HEDGHT IS MORE THAN 25 FEET. UP TO 36 FEET MAXIMUM

G. FOR REGIONS HAVING BASIC WIND SPEED OF 100 MPH OR LESS, NAILS FOR ATTACHING WOOD STRUCTURAL PANEL ROOF SHEATHING TO GABLE END WALL FRAMING SHALL BE SPACED 4 INCHES ON CENTER, WHEN BASIC WIND SPEED IS GREATER THAN 100 MPH, NAILS FOR ROOF SHEATHING TO INTERMEDIATE SUPPORTS SHALL BE SPACED 6 INCHES ON CENTER FOR MINIMUM 48-INCH DISTANCE FROM RIDGES, EAVES AND GABLE END WALLS, AND 4 INCHES ON CENTER TO GABLE END WALL FRAMING

H. GYPSUM SHEATHING SHALL CONFORM TO ASTM C 79 AND SHALL BE INSTALLED IN ACCORDANCE WITH GA 253. FIBERBOARD SHEATHING SHALL CONFORM TO EITHER AIA 194.1 OR ASTM C 208.

I. SPACING OF FASTENERS ON FLOOR SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND AT ALL FLOOR PERIMETERS ONLY. SPACING OF FASTENERS ON ROOF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND AT ALL ROOF PLANE PERIMETERS. BLOCKING OF ROOF OR FLOOR SHEATHING PANEL EDGES PERPENDICULAR TO THE FRAMING MEMBERS SHALL NOT BE REQUIRED EXCEPT AT INTERSECTION OF ADJACENT ROOF PLANES. FLOOR AND ROOF PERIMETER SHALL BE SUPPORTED BY FRAMING MEMBERS OR SOLID BLOCKING.

GENERAL SPECIFICATIONS

INSULATION:

MIN., INSULATION SHALL BE PROVIDED ADJACENT TO HABITABLE AREAS AS FOLLOWS:

- R-38 @ CEILING
- R-19 @ 6" EXTERIOR FRAME WALLS (OVERALL)
- R-13 @ 4" EXTERIOR FRAME WALLS (OVERALL)

EXPANSIVE FOAM WITH A RATED VALUE HIGHER THAN THE MINIMUM REQUIREMENTS IS ACCEPTABLE PER OWNER REQUEST. INSTALL PER MANUFACTURERS SPECIFICATIONS.

BATT INSULATION SHALL BE INSTALLED SO THAT NO PILLOWING OCCURS AND SO THAT ALL SIX SIDES OF BATT ARE TOUCHING A MEMBRANE PER MANUFACTURERS SPECIFICATIONS.

INSULATION SHALL BE INSTALLED OVER ALL VOIDS, SOFFITS AND ATTIC ACCESS HATCHES WHEN INSTALLED IN A VENTED ATTIC.

INTERIOR MATERIAL:

WHEN APPLYING A WATER BASED TEXTURE MATERIAL, THE MIN., GYP. BD. THICKNESS SHALL BE INCREASED FROM 1/2" TO 3/4" FOR 16" O.C. FRAMING & FROM 1/2" TO 3/4" FOR 24" O.C. FRAMING OR 1/2" SAG RESISTANT CLG. GYP. BD.

5/8" TYPE "X" AT GARAGE CEILING AND BEARING WALLS AND WALLS COMMON TO HOUSE, UNDER STAIRS AND ALL STORAGE AREAS.

GYPSUM WALLBOARD INSTALLED AS BACKING IN SHOWERS SHALL BE TYPE W.A. IDENTIFIED AND REFERRED TO AS "GREEN BOARD" ICC #1046 (UP TO 7'-0" ABOVE DRAIN)

ALL DOORS TO BE A MIN. OF 6'-8" HIGH, 1-3/8" HOLLOW CORE AT INTERIOR, 1-3/4" SOLID CORE AT EXTERIOR, UNLESS OTHERWISE NOTED. SLIDING GLASS DOORS SHALL HAVE TEMPERED GLASS.

CEILINGS AT KITCHEN AND BATHS SHALL BE TAPE, TEXTURED AND PAINTED SEMI-GLOSS. ALL OTHERS SHALL BE TAPE, TEXTURED AND PAINTED SATIN. ALL INTERIOR DOORS AND TRIM SHALL BE PAINTED SEMI-GLOSS.

GLASS BLOCK

GLASS BLOCK PANELS SHALL HAVE A MINIMUM 3" THICKNESS AT THE MORTAR JOINT.

MORTARED SURFACES OF BLOCKS SHALL BE TREATED FOR MORTAR BONDING.

GLASS BLOCK SHALL BE LAID IN TYPE N MORTAR. MORTAR SHALL HAVE 750 P.S.I. MINIMUM 28 DAY COMPRESSIVE STRENGTH

BOTH VERTICAL AND HORIZONTAL MORTAR JOINTS SHALL BE AT EAST 1/4" AND NOT MORE THAN 3/8" THICK AND SHALL BE COMPLETELY FILLED.

GLASS BLOCK PANELS SHALL HAVE JOINT REINFORCEMENT SPACED NOT MORE THAN 16" ON CENTER AND LOCATED IN THE MORTAR BED. JOINT EXTENDING THE ENTIRE LENGTH OF THE PANEL. THE REINFORCEMENT SHALL ALSO BE PLACED IN THE JOINTS IMMEDIATELY BELOW AND ABOVE ANY OPENINGS IN THE PANEL. JOINT REINFORCEMENT SHALL BE GALVANIZED IN ACCORDANCE WITH 2000 I.R.C. STANDARDS

EXTERIOR GLASS BLOCK PANELS SHALL BE PROVIDED WITH MINIMUM 3/8" EXPANSION JOINTS AT THE SIDES AND TOP. EXPANSION JOINTS SHALL BE ENTIRELY FREE OF MORTAR AND SHALL BE FILLED WITH RESILIENT MATERIAL.

GLASS BLOCK PANELS SHALL NOT BE USED AS LOAD BEARING MEMBERS.

WATER RESISTANT APPLICATIONS

WALLS COMMON TO SHOWER, TUBS, WASHER, AND LAV. SINKS SHALL BE FINISHED w/ M.R. GYP. BOARD.

MECHANICAL

- AIR HANDLER SHALL BE ATTIC MOUNTED & SHALL INCLUDE:
- PLYWOOD PLATFORM FOR UNIT w/ CORE CLEARANCES
 - LIGHT SWITCHABLE @ UNIT S 110v OUTLET
 - 2 CONDENSER LINES
 - CATWALK TO UNIT NOT TO EXCEED 20'-0" IN LENGTH

CONDENSER NOT TO BE LOCATED IN REQ. 5' SIDE YARD

UNITS OVER LIVABLE AREA TO RECEIVE EXTERNAL COND. DRAIN PAN

3/4" COND. DRAIN (FROM EA. PAN) w/ P-TRAP & C.O. TO GRADE @ 6"

MECHANICAL EQUIPMENT SHALL BE GROUND MOUNTED.

DRYER VENT SHALL NOT EXCEED 14'-0" MAX. LENGTH

PLUMBING

WATER HEATER SHALL BE CERTIFIED BY THE MFG. AND INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES - 50 GAL. MIN. ACTUAL SIZE PER OWNERS SPECS.

- WATER CLOSETS - 1.5 GAL / FLUSH MAX.
- ALL SHOWERS SHALL BE EQUIP. WITH FLOW CONTROL DEVICES TO LIMIT TOTAL FLOW TO MAX. 2.75 GPM
- LAVATORY FAUCETS - 2.5 GPM
- SINK FAUCETS - 2.5 GPM

SOLDERS AND FLUX HAVING A LEAD CONTEXT IN EXCESS TO TWO TENTHS OF ONE PERCENT SHALL NOT BE USED IN THE INSTALLATION OR REPAIR OF ANY PLUMBING IN RESIDENTIAL OR NONRESIDENTIAL FACILITIES PROVIDING WATER FOR HUMAN CONSUMPTION WHICH ARE CONNECTED TO PUBLIC WATER SYSTEMS (A.R.S. SEC 49-353)

PROVIDE WATER HEATER WITH TEMP / PRESSURE RELIEF VALVE AND DRAIN LINE TO BE FULL SIZE STEEL PIPE OR HARD DRAWN COPPER TUBING EXTENDING TO THE EXTERIOR OF BUILDING AND TERMINATING IN A DOWNWARD POSITION NOT MORE THAN TWO FEET NOR LESS THAN SIX INCHES ABOVE GRADE.

WATER PIPES TO BE:

- COPPER TYPE "L" UNDER FLOOR
- COPPER TYPE "M" ABOVE SLAB (OPTIONAL PEX TUBING MAY BE USED FOR DOMESTIC WATER PER OWNERS OPTION)
- PVC SCH 40 FROM METER TO HOUSE.

ALL WASTE AND VENT PIPES TO BE PLASTIC ABS

FIXTURES SHALL BE MARKED AS TO ITS FLOW RATE OR WITH A VERIFIABLE MODEL NO. AT THE TIME OF FINAL INSPECTION.

JACUZZI TUB:

- PROVIDE REMOVABLE PANEL OF SUFFICIENT SIZE TO ACCESS PUMP.
- CIRCULATION PUMP SHALL BE LOCATED ABOVE THE CROWN VEIL OF THE TRAP
- PUMP AND CIRCULATION PIPING SHALL BE SELF-DRAINING
- SUCTION FITTINGS SHALL COMPLY WITH THE LISTED STANDARDS.
- PROVIDE G.F.I. CIRCUIT FOR PUMP. (N.E.C. ARTICLE 680-70).

ELECTRICAL

- RECEPTACLES SHALL BE PLACED SO THAT NO POINT ALONG THE FLOOR LINE OF AN UNBROKEN WALL TWO OR MORE FEET IN IS MORE THAN SIX FEET FROM AN OUTLET WITHIN THAT WALL WALL SPACE - ARTICLE 210-52(a) NEC
- OUTLETS AT KITCHEN COUNTER GREATER THAN 12" SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24" FROM A RECEPTACLE OUTLET - ARTICLE 210-52 NEC
- ALL RECEPTACLE OUTLETS IN BATHROOMS AND GARAGE AT GRADE LEVEL & WITHIN 6'-0" OF THE KITCHEN SINK SHALL HAVE GROUND FAULT CIRCUIT INTERRUPTING PROTECTION.
- ONE 20 AMP BRANCH CIRCUIT SHALL BE INSTALLED TO SERVE THE LAUNDRY ROOM & SHALL HAVE ANOTHER OUTLETS.
- OUTLET BOXES IN THE WALL BETWEEN THE DWELLINGS & THE GARAGE SHALL BE METAL OR UL APPROVED FIRE-RESISTIVE PLASTIC. OUTLET BOXES IN GARAGE CEILING SHALL BE METAL - PER 2012 I.R.C.
- SMOKE DETECTORS ARE TO BE INSTALLED AT EACH SLEEPING ROOM. DETECTORS AT NON-SLEEPING AREAS ARE TO BE WIRED TO THOSE IN SLEEPING AREA SO THAT ALARM WILL BE AUDIBLE IN EVERY ROOM - PER 2012 I.R.C.
- SMOKE DETECTORS SHALL ALSO HAVE BATTERY BACK-UP & EMIT A SIGNAL WHEN BATTERIES ARE LOW.
- SMOKE DETECTORS - FOR ALL SLEEPING AREAS SHALL BE A MINIMUM OF 3'-0" FROM DUCT OPENINGS.
- 1-BOXES TO BE UL LISTED.
- TWO OR MORE 20 AMP SMALL APPLIANCE CIRCUITS SHALL BE INSTALLED TO SERVE KITCHEN NOOK & DINING AREAS. NO OTHER OUTLETS SHALL BE ON THESE CIRCUITS.

GENERAL NOTES

SUMMARY OF WORK

THE MISPLACEMENT, ADDITION OR OMISSION OF ANY LETTER, WORD, OR PUNCTUATION MARK, OR LACK OF CAPITALIZATION OF A WORD SHALL IN NO WAY DAMAGE THE TRUE SPIRIT, INTENT, OR MEANING OF THESE SPECS. WHERE SPECIFIC INSTRUCTIONS IN THESE SPECS REQUIRE THAT A PARTICULAR PRODUCT AND/OR MATERIAL(S) BE INSTALLED AND/OR APPLIED, SHALL BE BY AN APPROVED APPLICATOR OF THE MFR. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ENSURE ALL WORK BE DONE PER CODE REQUIREMENTS.

SUBSTITUTIONS

THE CONTRACTOR SHALL BASE HIS PROPOSAL ON THE EXACT BRANDS, SYSTEMS, METHODS, AND MATERIALS SHOWN, IF THE CONTRACTOR DESIRES TO MAKE SUBSTITUTIONS, HE SHALL LIST THEM w/ HIS BID & IN HIS CONTRACT. THE LISTING SHALL BE IN SUFFICIENT DETAIL TO AFFORD THE OWNER MEANS OF COMPARISON & MUST INCLUDE THE MONETARY DIFFERENCE IN CONTRACT PRICE IF THE SUBSTITUTION IS ACCEPTED. SUBSTITUTIONS AFTER SIGNING THE CONTRACT SHALL BE BY CHANGE ORDER ONLY.

DISCREPANCIES, ERRORS AND OMISSIONS

IF ANY DISCREPANCIES, ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, SPECS, OR OTHER DOCUMENTS, THE CONTRACTOR OR SHALL NOTIFY ROBERT KLOB DESIGNS, INC. (RKD) IN WRITING OF SUCH DISCREPANCIES, OMISSIONS OR ERRORS PRIOR TO PROCEEDING WITH ANY WORK WHICH APPEARS IN QUESTION. IN THE EVENT OF THE CONTRACTORS FAILURE TO GIVE SUCH NOTICE, HE SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH DISCREPANCIES, ERRORS OR OMISSIONS AND THE COST OF RECTIFYING THE SAME. THE CONTRACTOR SHALL HAVE ALL ITEMS OR DETAILS CLARIFIED w/ RKD, PRIOR TO SUBMITTING A BID OR STARTING CONSTRUCTION; OTHERWISE RKD INTERPRETATION SHALL BE FINAL.

STANDARD OF CARE

ALL CONTRACTORS AND SUBCONTRACTORS SHALL VISIT THE SITE AND VERIFY EXISTING CONDITIONS OR CONDITIONS THAT WOULD EFFECT THE LOOK, INTEGRITY OR CONSTRUCTION METHODOLOGY PRIOR TO ANY CONSTRUCTION AND/OR FABRICATION. ANY DISCREPANCIES FOUND WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR, OWNER & RKD IN WRITING PRIOR TO STARTING WORK. CONSTRUCTION TECHNIQUES AND FINISHES SHALL MEET OR EXCEED SIMILAR FINISHES OF SIMILAR HOMES IN ADDITION TO ALL GOVERNING CODES AND HOA REQUIREMENTS.

GENERAL IRC NOTES

NOTE: THE FOLLOWING ITEMS ARE SPECIFIC AREAS IN WHICH THE 2012 I.R.C. IS MORE RESTRICTIVE THAN THE U.B.C. ADHERENCE TO THE FOLLOWING "MORE RESTRICTIVE" I.R.C. CODES IS REQUIRED FOR THESE I.R.C. COMPLAINT PLANS

- CONSTRUCTION DOCUMENTS SHALL BE RETAINED FOR 180 DAYS FROM THE COMPLETION OF THE WORK.
- CERTIFICATE OF OCCUPANCY REQUIRED ON RESIDENCES.
- 50 SF GROSS FLOOR AREA REQUIRED FOR KITCHENS
- SHOWERS SHALL HAVE A NONABSORBENT SURFACE TO 6" ABOVE THE FLOOR
- CARPART & GARAGE FLOORS SHALL SLOPE TO A DRAIN OR VEHICLE DOOR
- REQUIRED EXIT DOOR TO BE SIDE-HINGED 3' BY 68" MIN.
- CONTINUOUS STAIR HANDRAIL REQUIRED ON SIDE WHERE TREAD IS NARROWER
- TREADS - 10" MIN. RISERS - 7/32" MAX
- HANDRAIL REQUIRED AT THREE OR MORE RISERS
- VAPOR RETARDER REQUIRED ON WARM-IN-WINTER SIDE OF INSULATION IN WALLS, FLOOR AND CEILINGS
- GRADE AWAY FROM FOUNDATION SHALL FALL 6" MIN. WITHIN 10'
- UNDER-FLOOR VENTILATION AND ACCESS REQUIRED IN ALL SPACES BETWEEN FOOT JOISTS AND EARTH
- FILL MATERIAL LIMITED TO 24" FOR SAND OR GRAVEL AND 8" FOR EARTH
- UNFACED FIBERGLASS BATT INSULATION SHALL BE 16" HIGH MIN. FOR FIREBLOCKING
- MORTAR BED JOINTS OF STARTING COURSE LIMITED TO 3/4" THICK
- CLEANOUTS IN GROUTED HOLLOW UNIT MASONRY AT THE BOTTOM COURSES WHERE THE POUR EXCEEDS 4'
- TRUSS MEMBERS CANNOT BE CUT, NOTCHED, DRILLED OR SPLICED WITHOUT APPROVAL OF REGISTRANT
- ROOF VENTILATION REQUIRED OR PER NON-VENTED ATTIC REQUIREMENTS
- CHIMNEY CHIMNEYS REQUIRED WHEN DIMENSION PARALLEL TO RIDGE EXCESS 30"
- COMBUSTIBLE MATERIALS NOT ALLOWED WITHIN 4" OF BACK FACE OF MASONRY FIREPLACE
- INSULATION REQUIRED. SEE PLANS
- RANGE HOODS TO DUCT TO OUTSIDE UNLESS LISTED/LABELLED AS DUCTLESS
- ELECTRIC SERVICES LIMITED TO 400 AMPS. SEE ELECTRICAL PLANS
- SLEEVES SHALL BE TWO PIPES SIZE BIGGER THAN THE PIPE SHALL BE PROVIDED UNDER A FOOTING OR THROUGH A FOUNDATION WALL FOR WASTE PIPES.
- MINIMUM WATER PRESSURE TO THE BUILDING IS 40 PSI

ADDRESS MARKING:

A HOUSE NUMBER IS TO BE DISPLAYED IN A PROMINENT MANNER SO IT IS READILY VISIBLE TO ENABLE EMERGENCY VEHICLES TO LOCATE THE RESIDENCE.

WINDOWS & DOORS:

DOOR AND WINDOW CONTRACTOR TO VERIFY SIZES, LOCATIONS AND STYLES AS SPECIFIED AND GRAPHICALLY REPRESENTED ON PLANS & ELEVATIONS. IT IS THE RESPONSIBILITY OF THE WINDOW CONTRACTOR TO ENSURE THAT ALL DOORS AND WINDOWS MEET APPLICABLE CODES AND REQUIREMENTS. OWNER TO HAVE FINAL SELECTION APPROVAL ON STYLES, TYPES AND MATERIALS.

LIGHT/VENTILATION/EGRESS

WINDOWS

ALL BEDROOM ESCAPE OR RESCUE WINDOWS SHALL HAVE A MIN. NET CLEAR OPENABLE AREA OF 5.7 SQ. FT. THE MIN. NET CLEAR OPENABLE HEIGHT DIMENSION SHALL BE 24 INCHES. THE MIN. NET CLEAR OPENABLE WIDTH DIMENSION SHALL BE 20 INCHES. WHEN WINDOWS ARE PROVIDED AS A MEANS OF ESCAPE OR RESCUE THEY SHALL HAVE A FINISHED SILL HEIGHT OF NOT MORE THAN 44 INCHES ABOVE THE FINISHED FLOOR.

LIGHT & VENTILATION REQUIREMENTS FOR ALL WINDOWS ARE TO COMPLY w/ 2012 I.R.C. GLASS IN HAZARDOUS AREAS AND ALL GLASS WITHIN 18" OF THE FLOOR SHALL BE SAFETY GLASS. PER 2012 I.R.C.

SAFETY GLAZING

GLAZING IN ANY PART OF A BUILDING WALL ENCLOSING A TUB/SHOWER/SALINA COMPARTMENT WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING WALKING SURFACE.

GLAZING IN AN INDIVIDUAL FIXED OR OPENABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24 INCH ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACES.

EXCEPTION-GLAZED WHEN THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN THE DOOR AND THE GLAZING. GLAZING WHERE ACCESS THROUGH THE DOOR IS TO CLOSET OF A STORAGE AREA 3' OR LESS IN DEPTH.

SAFETY GLAZING SHALL BE INSTALLED WHEN ALL OF THE FOLLOWING CONDITIONS ARE MET EXPOSED AREA OF AN INDIVIDUAL PANEL IS GREATER THAN 36 INCHES ABOVE THE FLOOR, AND ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE GLAZING.

GLAZING IN RAILINGS REGARDLESS OF AN AREA OR HEIGHT ABOVE A WALKING SURFACE SHALL BE SAFETY GLAZING. INCLUDED ARE STRUCTURAL BALUSTER PANELS AND NON STRUCTURAL INFILL PANELS.

GLAZING IN WALLS ENCLOSING STAIRWAY LANDINGS OR STAIRWAYS WHERE THE BOTTOM EDGE OF THE GLASS IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE SHALL BE SAFETY GLAZING.

ARTIFICIAL LIGHT & MECHANICAL VENTILATION

(LIGHTING PER R303.1.1 FOR ROOMS NOT REQUIRING EGRESS PER R310):

THE WALL LINE IS MORE THAN 24" FROM A RECEPTACLE OUTLET - ARTICLE 210-52 NEC

THE GLAZED AREAS NEED NOT BE PROVIDED IN ROOMS WHERE ARTIFICIAL LIGHT IS PROVIDED CAPABLE OF PRODUCING AN AVERAGE ILLUMINATION OF 6 FOOT-CANDLES OVER THE AREA OF THE ROOM AT A HEIGHT OF 30 INCHES ABOVE THE FLOOR LEVEL.

(VENTING PER R303.1.1 FOR ROOMS NOT REQUIRING EGRESS PER R310):

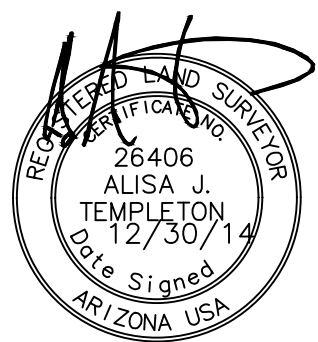
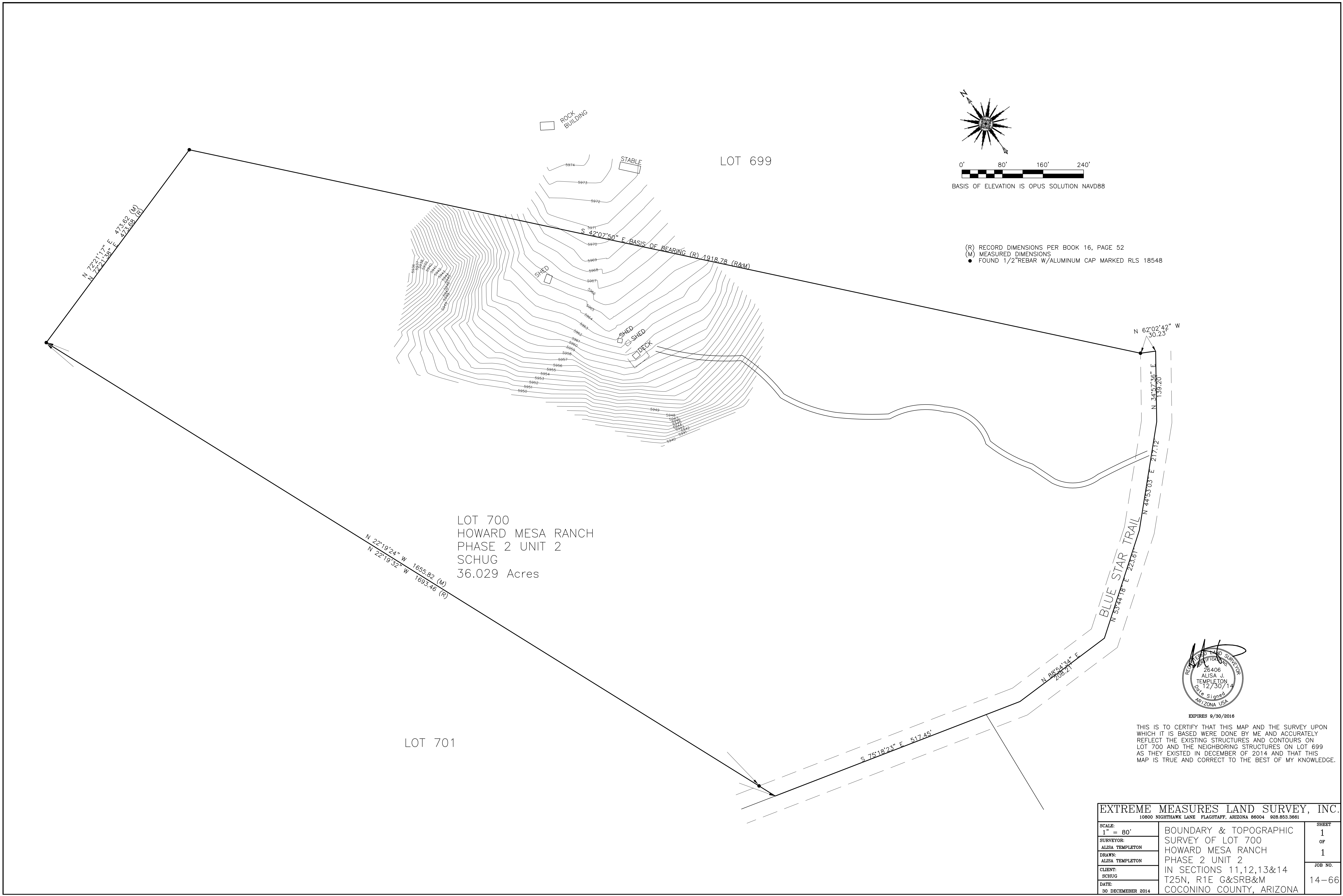
THE GLAZED AREAS NEED NOT BE PROVIDED IN ROOMS WHERE A MECHANICAL VENTILATION SYSTEM IS PROVIDED CAPABLE OF PRODUCING 0.35 AIR CHANGES PER HOUR OR SUPPLYING OUTDOOR VENTILATION AIR OF 15 CUBIC FEET PER MIN. (2) 100 CFM EXHAUST FANS WITH AUTOMATIC ON/OFF CAN BE INSTALLED I.L.O. MECHANICAL SYSTEM.

MINIMUM ENERGY EFFICIENCY

THE BUILDING ENVELOPE MUST COMPLY WITH THE FOLLOWING: FENESTRATION = 0.75 MAX, U-FACTOR, 0.40 MAX, SHGC, MIN. R-13 @ FRAME WALLS & FLOORS, R-4 @ MASS WALLS, R-30 @ CEILINGS. DUCT INSULATION REQUIRES A MIN. OF R-8. MINIMIZE AIR LEAKAGE PER 2012 IRC, N1102.4

BUILDING SAFETY

</



EXPIRES 9/30/2016

THIS IS TO CERTIFY THAT THIS MAP AND THE SURVEY UPON WHICH IT IS BASED WERE DONE BY ME AND ACCURATELY REFLECT THE EXISTING STRUCTURES AND CONTOURS ON LOT 700 AND THE NEIGHBORING STRUCTURES ON LOT 699 AS THEY EXISTED IN DECEMBER OF 2014 AND THAT THIS MAP IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

EXTREME MEASURES LAND SURVEY, INC.		
10800 NIGHTHAWK LANE FLAGSTAFF, ARIZONA 86004 928.853.3661		
SCALE: 1" = 80'	BOUNDARY & TOPOGRAPHIC SURVEY OF LOT 700 HOWARD MESA RANCH PHASE 2 UNIT 2 IN SECTIONS 11,12,13&14 T25N, R1E G&SRB&M COCONINO COUNTY, ARIZONA	SHEET 1 OF 1
SURVEYOR: ALISA TEMPLETON		JOB NO. 14-66
DRAWN: ALISA TEMPLETON		
CLIENT: SCHUG		
DATE: 30 DECEMBER 2014		

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SHED

HOUSE LOCATION NOTES:
1. CONTRACTOR TO VERIFY WITH OWNER EXACT POSITION & LOCATION OF HOME PRIOR TO ANY CONSTRUCTION AND STAKING.
2. CONTRACTOR SHALL ENSURE ALL ELEMENTS OF THE STRUCTURE DO NOT ENCR OACH INTO ANY SETBACK OR EASEMENT.

WELL

R100'-0" WELL CLEARANCE

PROPANE TANK

D.G.DRIVEWAY

2-WAY SCO

SCO

NOTE:
Septic by others, not a part of this permit.

3' SD

SEPTIC SYSTEM

SEPTIC & WELL NOTES:
1. SEPTIC AND WELL SERVICE, INSTALLATION & PERMITS ARE BY OTHERS AND NOT A PART OF THIS PERMIT.
2. SEPTIC AND WELL SYSTEMS TO BE INSTALLED PER ALL FEDERAL, STATE & COUNTY GUIDELINES.

LEECH LINE

PLUMBING NOTE:
SEE PLUMBING DRAWINGS FOR LINE LOCATIONS & FIXTURE CALCULATIONS

SOIL COMPACTION NOTES:

ALL BACKFILL UNDER AND WITHIN 5'-0" OF ALL BUILDINGS SHALL BE COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY BACKFILL DIRECTLY UNDER FOOTINGS AND WITHIN 2'-0" EACH SIDE SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY.

IF ANY UNSTABLE OR COLLAPSIBLE OR OTHERWISE POOR SOIL CONDITIONS ARE DISCOVERED DURING EXCAVATION, A SOILS ENGINEER SHOULD BE NOTIFIED IMMEDIATELY FOR A SOILS STUDY.

SITE PLAN

SCALE: 1"=20'-0"

GENERAL SITE NOTES

THIS SET OF PLANS HAS BEEN REVIEWED FOR COMPLIANCE WITH CITY REQUIREMENTS PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS. HOWEVER, SUCH REVIEW SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN PLANS FOUND TO BE IN VIOLATION OF ANY LAW OR ORDINANCE.

THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OR RELOCATION OF ALL OBSTRUCTIONS WITHIN THE RIGHT-OF-WAY PRIOR TO STARTING NEW CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING THE RELOCATION AND ASSOCIATED COSTS OF ALL UTILITIES. A UTILITY RELOCATION SCHEDULE SHALL BE SUBMITTED PRIOR TO THE START OF NEW CONSTRUCTION.

A SURVEYOR SHALL MARK ALL CORNERS OF THE BUILDING THAT ARE LOCATED WITHIN 24 INCHES OF ALL SETBACKS AND/OR EASEMENTS.

LOTS ARE NOT TO BE SPLIT WITHOUT PRIOR CITY APPROVAL AND SHALL BE RECORDED WITH THE COUNTY RECORDERS OFFICE PRIOR TO THE ISSUANCE OF BUILDING PERMITS. A COPY OF THE RECORDED DOCUMENT SHALL BE SUBMITTED WITH THE APPLICATION FOR BUILDING PERMIT AND RECORDED DOCUMENT NOTED ON THE SUBMITTED SITE PLAN.

THE CONTRACTOR SHALL CONTACT BLUE STAKE (602- 263-1100, 1-800-STAKE IT) 48 HOURS PRIOR TO CONSTRUCTION.

TEMPORARY/SECURITY FENCING THAT IS REQUIRED OR IS OPTIONALLY PROVIDED SHALL BE IN ACCORDANCE WITH THE ZONING ORDINANCE AND THE DESIGN STANDARDS AND POLICIES MANUAL.

THE CONTRACTOR MAY OBTAIN A FIRE HYDRANT METER FOR CONSTRUCTION WATER FROM CUSTOMER SERVICES. THIS METER SHOULD BE ORDERED TWO WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. THE UNLAWFUL REMOVAL OF WATER FROM A FIRE HYDRANT IS A VIOLATION OF THE MUNICIPAL CODE, PUNISHABLE BY FINE AND/OR IMPRISONMENT.

ALL BROKEN OR DISPLACED EXISTING CONCRETE CURB, GUTTER, OR SIDEWALK SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE MUNICIPALITY ENGINEERING DIVISION INSPECTOR.

CONTRACTOR TO INSTALL 2" P.V.C. SLEEVES 10' O.C. UNDER DRIVEWAY & SIDEWALKS FOR LANDSCAPE SPRINKLER LINES.

SANITARY SEWER SERVICE & JOINTS SHALL CONFORM TO MUNICIPALITY & I.C.C. REQUIREMENTS. IN THE EVENT THERE IS AN EXISTING SEWER ON THE SITE, THE NEW SEWER SERVICE MAY BE CONNECTED TO THE EXISTING SANITARY SEWER SERVICE IF A CURRENT VIDEOTAPE IS PROVIDED TO THE BUILDING INSPECTOR AND ROBERT KLOB DESIGNS, INC. FOR REVIEW AND, IN THE SOLE OPINION OF THE BUILDING INSPECTOR, THE EXISTING SERVICE IS IN SOUND CONDITION. IF THE EXISTING SERVICE IS NOT SOUND, THE NEW SERVICE MUST CONNECT TO THE EXISTING NYE OR TEE AT THE MAIN.

ALL VEHICLES, CONSTRUCTION EQUIPMENT, AND MATERIAL ASSOCIATED WITH THIS DEVELOPMENT SHALL BE PARKED, OPERATED AND STORED ON THE SUBJECT PROPERTY ONLY.

ONE COPY OF THE APPROVED SITE DEVELOPMENT PLAN SHALL BE ON SITE THROUGHOUT CONSTRUCTION OPERATIONS.

A REGISTERED SURVEYOR SHALL STAKE AND ROPE OR FENCE THE NAOS EASEMENT IN ACCORDANCE WITH THE SITE PLAN AND THE EASEMENT LEGAL DESCRIPTION.

CONTRACTOR TO ENSURE THE LOWEST FLOOR ELEVATION(S) AND/OR FLOOR PROOFING ELEVATION(S) ARE SUFFICIENTLY HIGH ENOUGH TO PROVIDE PROTECTION FROM FLOODING CAUSED BY A 100-YEAR STORM, AND ARE IN ACCORDANCE WITH THE MUNICIPALITY FLOOD CONTROL & DRAINAGE ORDINANCES, FLOODPLAIN AND STORMWATER REGULATION.

ALL MECHANICAL EQUIPMENT (AIR CONDITIONER, POOL EQUIP. ETC.) SHALL BE SCREENED A MIN. OF 1' ABOVE THE HIGHEST PORTION OF THE EQUIPMENT FROM ALL SIDES AND SHALL BE COMPATIBLE WITH THE ADJACENT BUILDING.

GUESTHOUSE SHALL NEVER BE OFFERED FOR RENT. GUEST HOMES ON LOTS UNDER 35,000 S.F. MAY NOT PROVIDE COOKING FACILITIES.

A GUESTHOUSE OR ACCESSORY STRUCTURE SHALL NOT EXCEED A GROSS FOOTPRINT SIZE GREATER THAN 50% OF THE FOOT PRINT SIZE OF THE PRINCIPAL BUILDING.

AREA CALCULATIONS

SQUARE FOOTAGE CALCULATIONS	
AREA DESIGNATION	FLOOR AREA
MAIN FLOOR	2,426 SQ. FT.
	0.00 SQ. FT.
TOTAL LIVABLE	2,426 SQ. FT.
FRONT PORCH	70 SQ. FT.
REAR PATIO	366 SQ. FT.
W/MP/ARND PORCH	700 SQ. FT.
2 CAR GARAGE	1,071 SQ. FT.
TOTAL UNDER ROOF	5,074 SQ. FT.
GROSS SITE AREA	14.360321 ACRES
LOT COVERAGE THIS SITE	3%
Zoning Type	G
Lot Coverage Maximum	30%
Front Setback	30'
Rear Setback	30'
Side Setback	20'

SITE LEGEND

- G MAIN ELECTRICAL LINE
- E MAIN ELECTRICAL LINE
- S MAIN SEWER LINE
- W MAIN WATER LINE
- SES SEVERICE ENTRANCE
- FH FIRE HYDRANT
- SCO SURFACE CLEAN OUT (SEWER)
- SOV SHUT OFF VALVE, MAIN WATER CONN.

SITE NOTES

SIDEWALKS:

ALL SIDEWALKS SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE WITH A COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS AND A MINIMUM THICKNESS OF 4".

ALL SIDEWALKS ARE TO HAVE A WIDTH OF 4' AND SHALL BE CONSTRUCTED AS PER THE LOCATION SHOWN ON THIS PLAN.

ALL SIDEWALKS SHALL BE SCORED TO A DEPTH OF 3/4" AT 4 FOOT INTERVALS WITH EXPANSION JOINTS PLACED AT 20 FOOT INTERVALS. EXPANSION JOINTS SHALL BE CONSTRUCTED OF 1/2" THICK PRE-MOLDED EXPANSION MATERIAL WITH ALL CORNERS TO BE FORMED BY EXPANSION JOINTS.

ANY SIDEWALK OR ACCESSIBLE ROUTE THAT IS NOT AT A LEVEL ELEVATION AT ITS INTERSECTION WITH A DRIVEWAY OR STREET WILL BE REQUIRED TO INSTALL A CURB RAMP AT A MAXIMUM SLOPE OF 1:12 WITH A MAXIMUM RISE OF 30" AND A MINIMUM LEVEL STRAIGHT CURB SEGMENT OF 48". SIDEWALK SHALL BE SLOPED 1" TOWARDS THE STREET.

DRIVEWAYS

ALL DRIVEWAYS BETWEEN STREET AND PROPERTY LINE SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE WITH A COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS AND A MINIMUM THICKNESS OF 4". ALL DRIVEWAYS BETWEEN STREET AND PROPERTY LINE CONNECTING WITH AN EXISTING ROADWAY ARE TO BE CONSTRUCTED IN ACCORDANCE WITH LOCAL MUNICIPALITY REQUIREMENTS.

DRAINAGE

ALL PROPOSED UNDERGROUND UTILITIES, UNDER SLAB UTILITIES, SWALES OR OTHER DRAINAGE IMPROVEMENTS SHALL BE CONSTRUCTED AND IN OPERATION PRIOR TO VERTICAL CONSTRUCTION.

ALL EXCESS FILL OR SPOIL SHALL BE REMOVED FROM THE SITE OR STORED IN THE LOCATION INDICATED ON A LANDSCAPE PLAN (BY OTHERS).

IF, AFTER CONSTRUCTION IS COMPLETED, THE DRAINAGE ON THIS SITE PROVES TO BE INADEQUATE OR FLOWS ONTO ADJACENT PROPERTY FROM IMPERVIOUS AREAS, IN THE OPINION OF THE BUILDING INSPECTOR, A SWALE OR STORM DRAIN SHALL BE CONSTRUCTED BY THE CONTRACTOR TO THE NEAREST FEASIBLE DRAINAGE OUTLET AT HIS EXPENSE.

FINISHED FLOOR ELEVATION SHALL BE A MINIMUM OF 6" ABOVE THE FINISHED GRADE WITH THE FINISHED GRADE SLOPING AWAY FROM THE RESIDENCE A MINIMUM OF 5% FOR A DISTANCE OF 10'-0".

TOP OF EXTERIOR FOUNDATION SHALL BE 12" PLUS 2% ABOVE THE ELEVATION OF THE STREET GUTTER AT POINT OF DISCHARGE OR THE INLET OF AN APPROVED DRAINAGE DEVICE.

TRAFFIC CONTROLS

ANY WORK IN THE ROADWAY OR ADJACENT TO THE ROADWAY CAUSING AN INTERFERENCE TO VEHICULAR TRAFFIC REQUIRES PRIOR NOTIFICATION TO THE MUNICIPALITY TRAFFIC ENGINEERING DIVISION AND CONFORMITY TO THEIR REQUIREMENTS. THE CONTRACTOR MUST FURNISH ALL NECESSARY TRAFFIC SIGNS AND/OR BARRICADES AND MAINTAIN THEM DURING CONSTRUCTION ACTIVITY.

TREE PROTECTION NOTES

EXISTING VEGETATION WHICH IS TO REMAIN IN PLACE SHALL BE PROTECTED AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING AND BRUISING OF BARK, SMOTHERING BY STOCKPILING OF CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN THE DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC OR PARKING OF VEHICLES WITHIN THE DRIP LINE.

ALL TREES TO REMAIN SHALL BE PROTECTED WITH A FENCE.

EXISTING VEGETATION WHICH IS TO REMAIN IN PLACE SHALL BE WATERED AS REQUIRED TO MAINTAIN ITS HEALTH DURING THE COURSE OF CONSTRUCTION OPERATIONS.

PROTECTION SHALL BE PROVIDED FOR ROOTS OVER 1-1/2" IN DIAMETER WHICH ARE CUT DURING CONSTRUCTION OPERATIONS. WHENEVER SUCH A ROOT IS CUT, THE CUT FACES SHALL BE COATED WITH AN EMULSIFIED ASPHALT OR OTHER ACCEPTABLE COATING SPECIALLY FORMULATED FOR HORTICULTURAL USE ON DAMAGED OR CUT PLANT TISSUES. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH WET BURLAP TO PREVENT THE ROOTS FROM DRYING OUT. EXPOSED ROOTS SHALL BE PROVIDED WITH EARTH COVER AS SOON AS POSSIBLE.

VEGETATION THAT BECOMES DAMAGED BY CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED IN A MANNER ACCEPTABLE TO THE OWNER.

DAMAGED TREES SHALL BE REPAIRED BY A CERTIFIED ARBORIST. DAMAGED TREES WHICH CANNOT BE REPAIRED AND RESTORED TO FULL GROWTH STATUS, AS DETERMINED BY THE ARBORIST SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

NO NATIVE PLANTS ARE PERMITTED TO BE DISTURBED DUE TO CONSTRUCTION AND RELATED ACTIVITIES ASSOCIATED WITH THIS APPROVAL.

NATIVE PLANS TO BE PROTECTED, MARKED, RELOCATED AND MAINTAINED PER CITY, COUNTY & STATE REQUIREMENTS.

POOL NOTES:

POOLS REQUIRE SEPARATE APPROVAL AND PERMIT. POOLS SHALL NOT BE EMPTIED OR BACKWASHED INTO WASHES, STREETS, NAOS, SCENIC CORRIDORS, ON TO AN ADJACENT LOT OR TRACT OF LAND. ALL DOORS & WINDOWS ACCESSING THE POOL AREA MUST COMPLY WITH IRC SEC. AG 105.1 POOL BARRIERS & IRC SEC. R308.4 #1, GLAZING IN HAZARDOUS LOCATIONS. A POOL FENCE IS AN APPROVED ALTERNATIVE.



ROBERT KLOB
DESIGNS, INC.



480.968.2474

www.rkdznz.com

411 N. KYRENE RD.
SUITE 123
CHANDLER, AZ 85226

"DESIGNS THAT LIVE
WITH YOUR FAMILY,
LIFESTYLE &
BUDGET"

PROJECT ADDRESS

5980 W. BLUE STAR TP.

HOWARD MESA RANCH PHASE 2 UNIT 2

Lot: 700

APN: 500-99-052

PROJECT NAME

A CUSTOM HOME FOR

LARRY & CHERYL

SCHUG

SHEET TITLE

REV	COMMENT
1	
2	
3	
4	

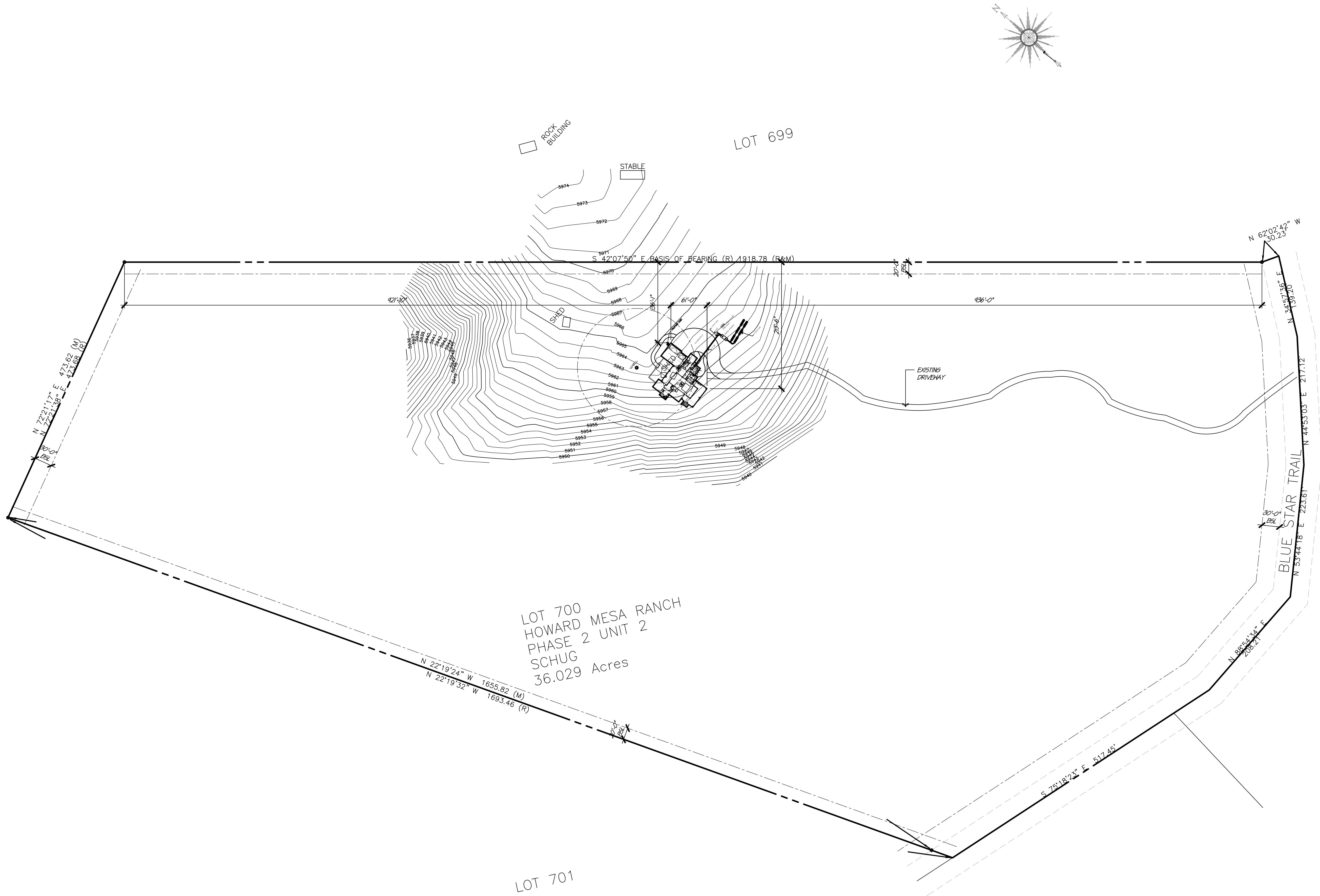
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drawn: VF/PR

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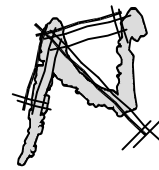
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LOT 700
HOWARD MESA RANCH
PHASE 2 UNIT 2
SCHUG
36.029 Acres

OVERALL SITE PLAN

SCALE: 1"=80'-0"



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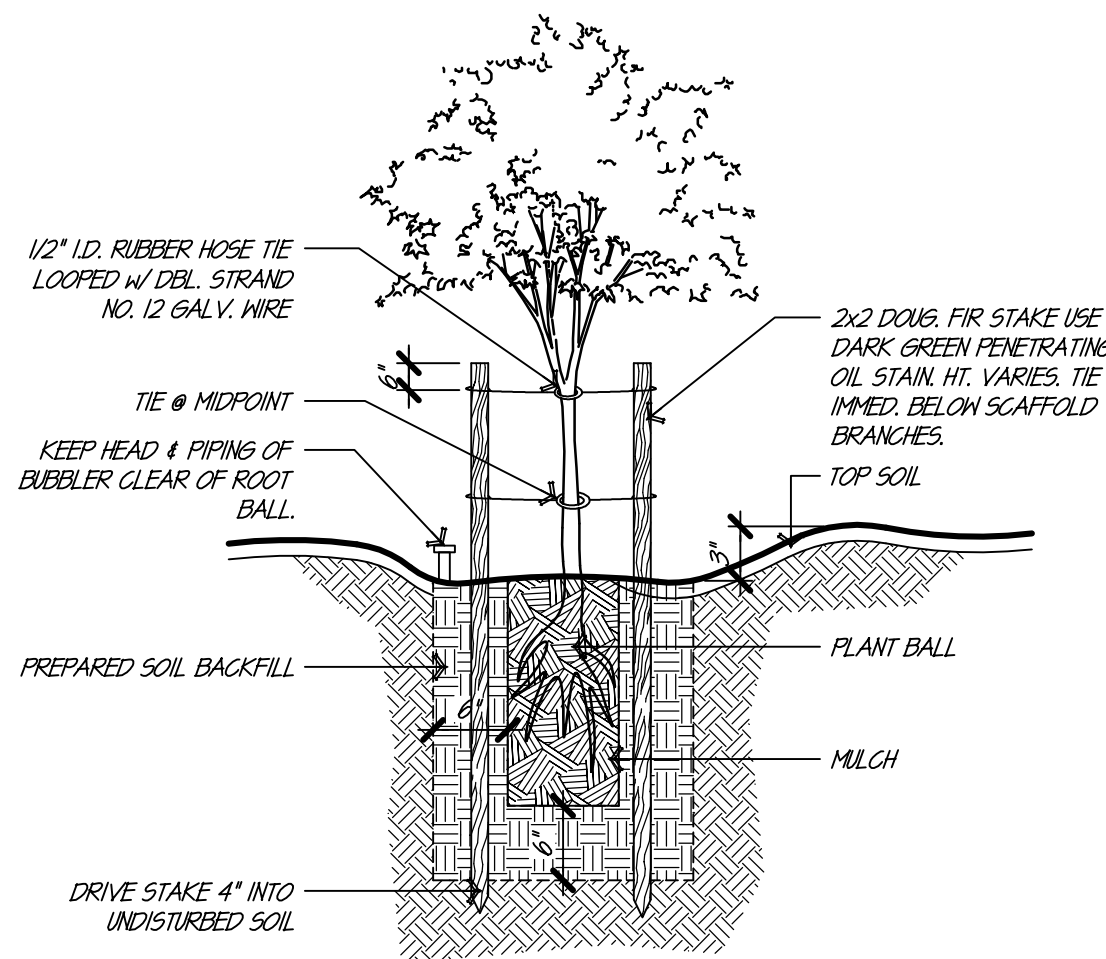
**OVERALL
SITE PLAN**

REV	COMMENT
1	
2	
3	
4	

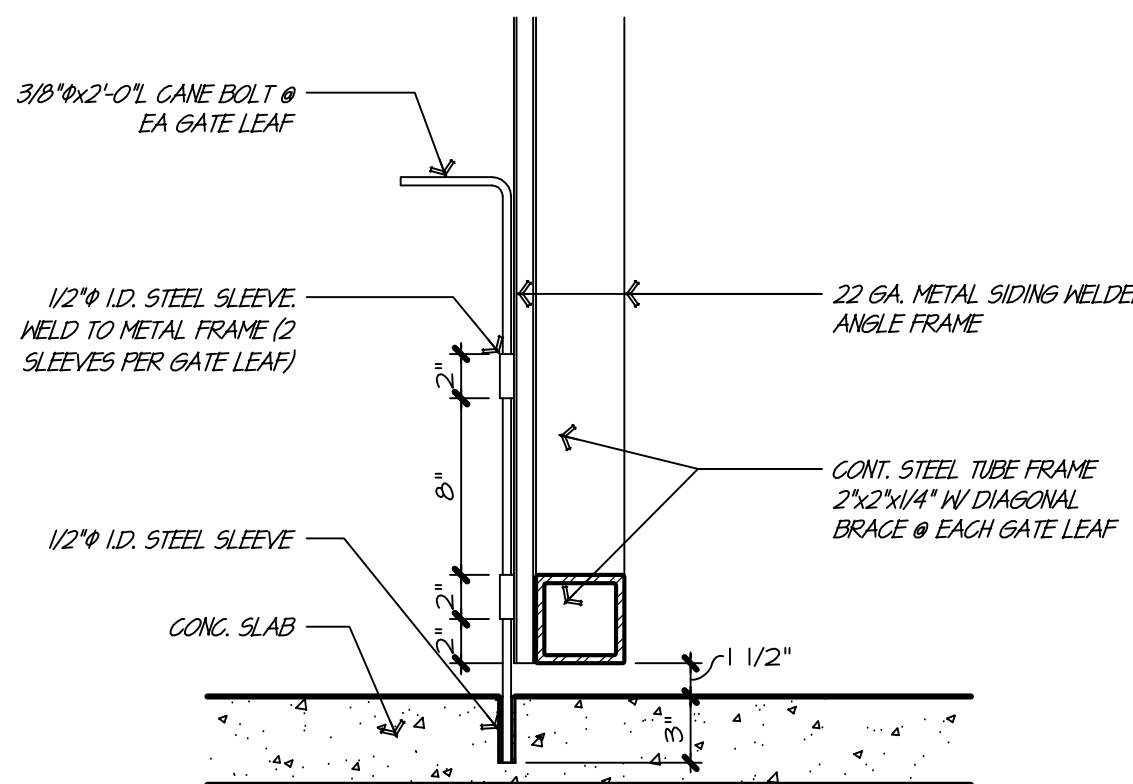
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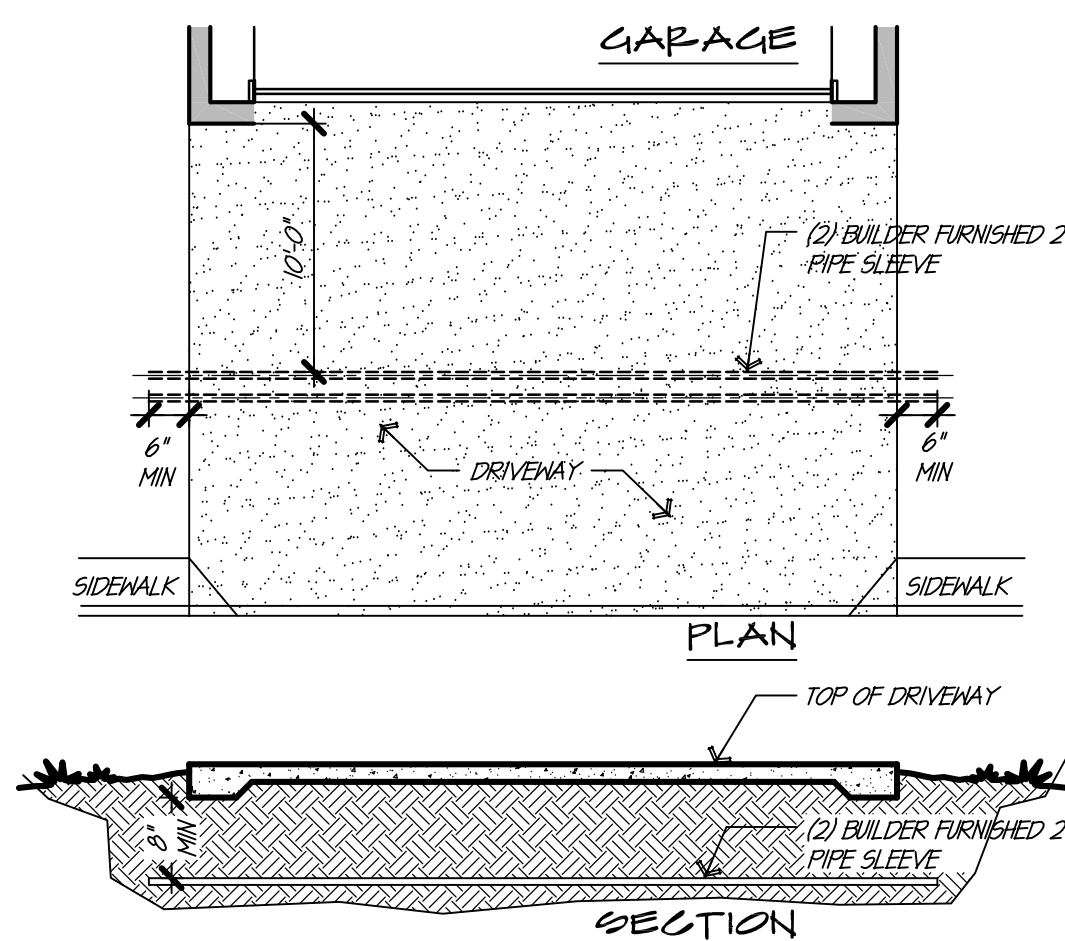
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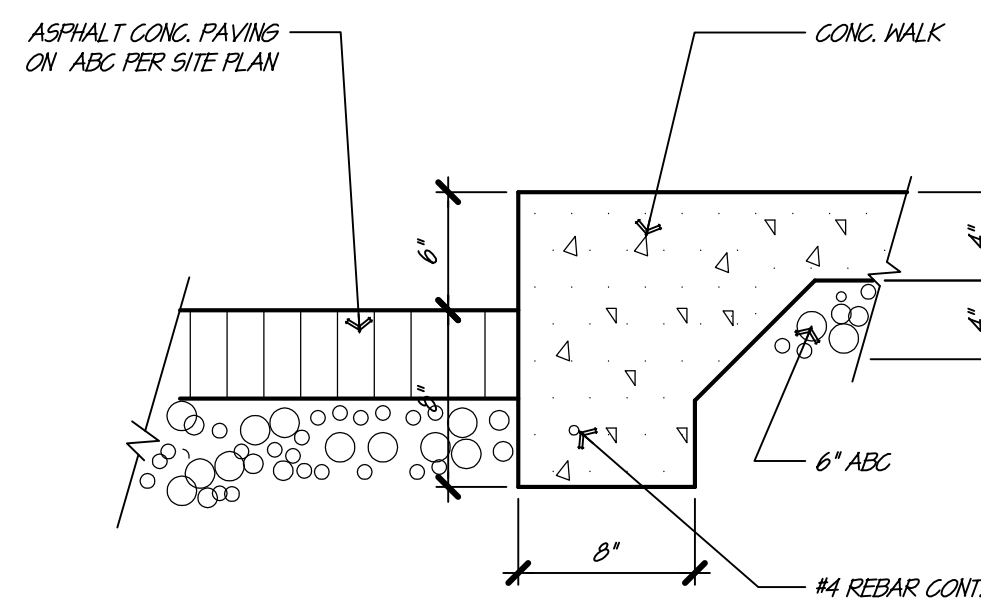
TREE PLANTING DETAIL



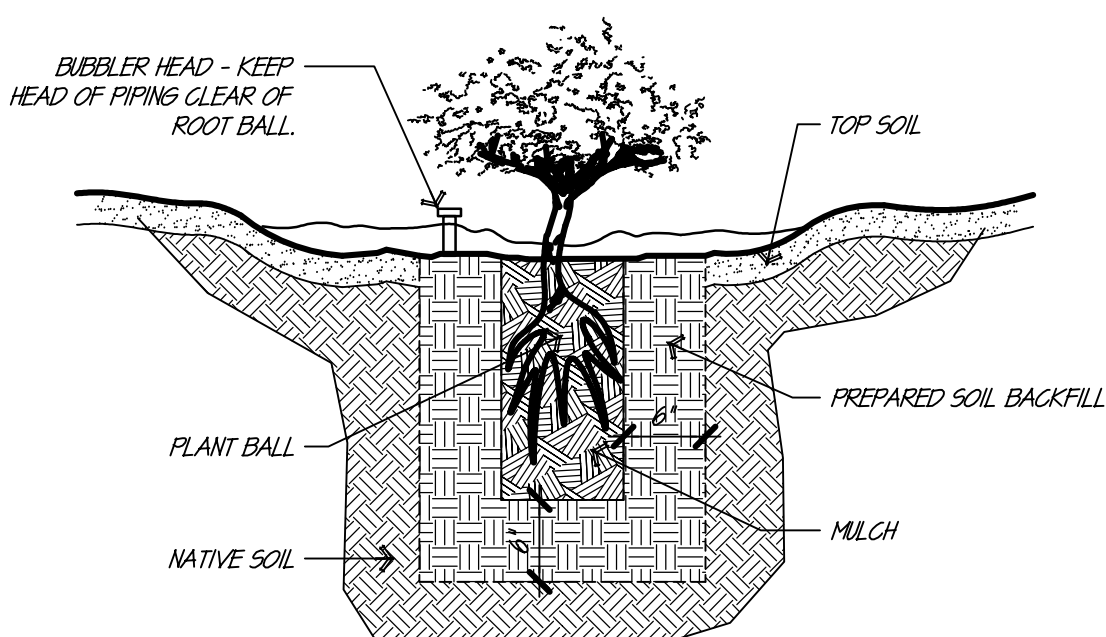
CANE BOLT @ GATE (OPT.)



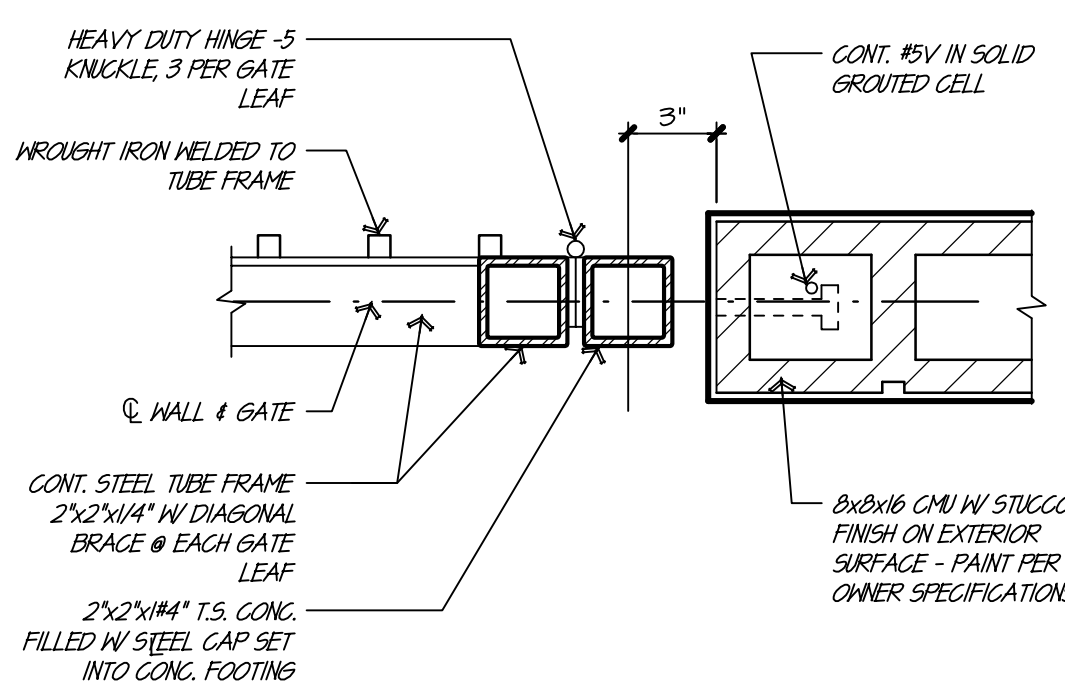
PVC SLEEVE DETAIL



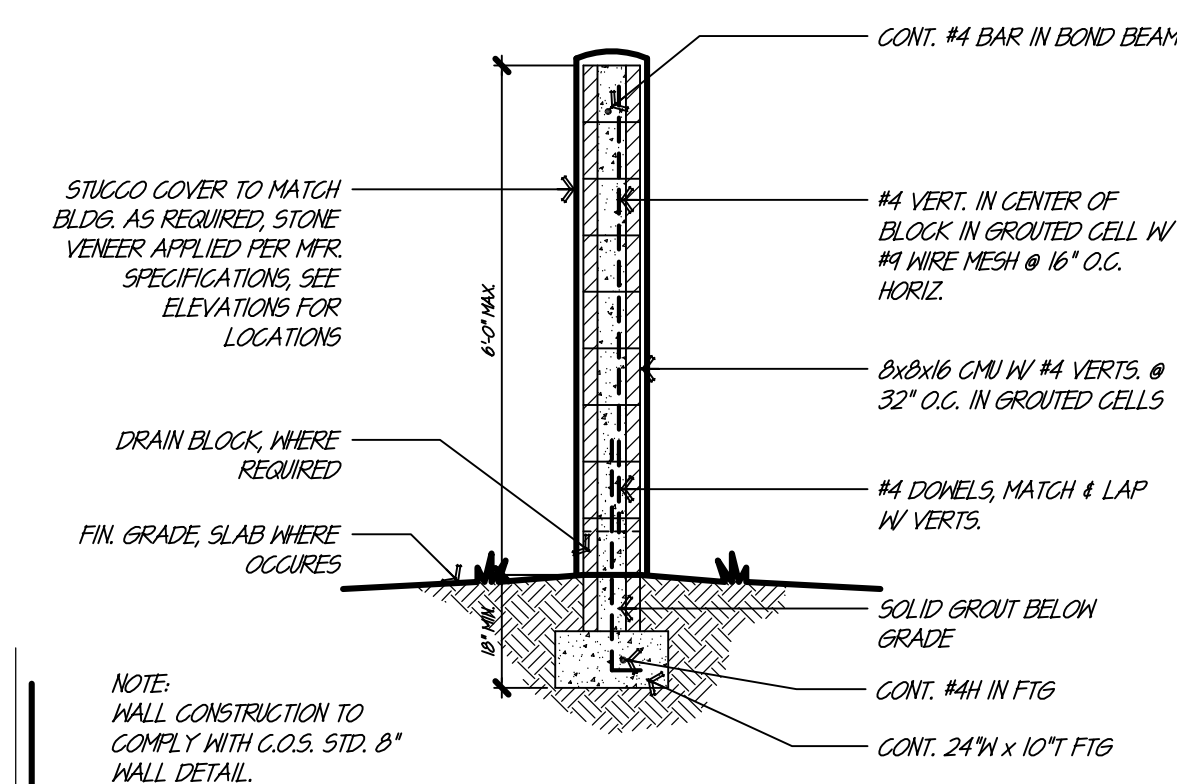
PAYMENT @ SIDEWALK



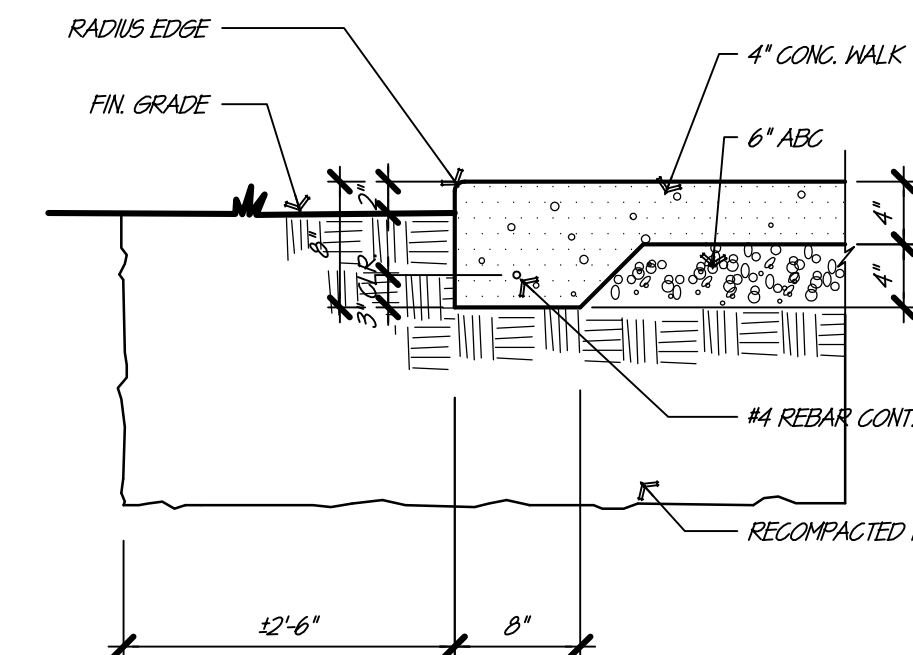
SHRUB PLANTING DETAIL



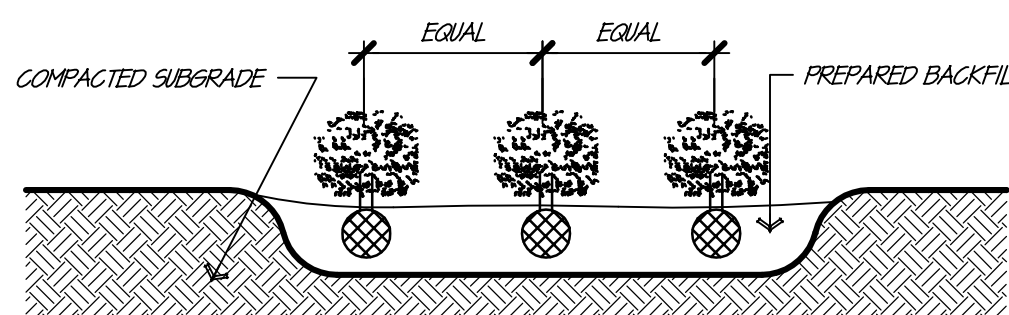
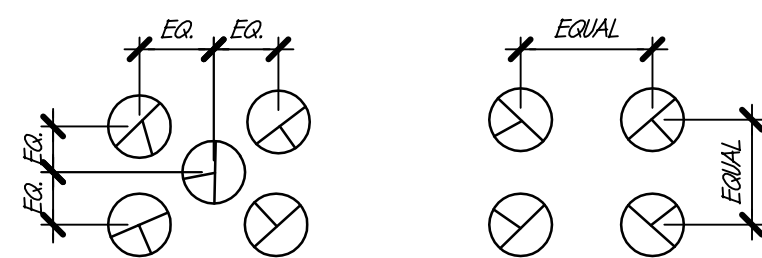
GATE HINGE DETAIL (OPT.)



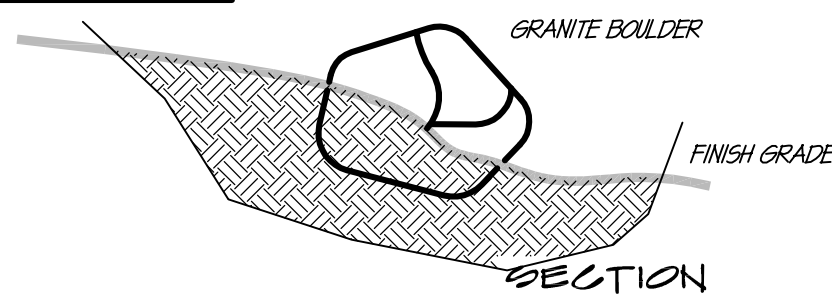
BLOCK @ SITE WALL (OPT.)



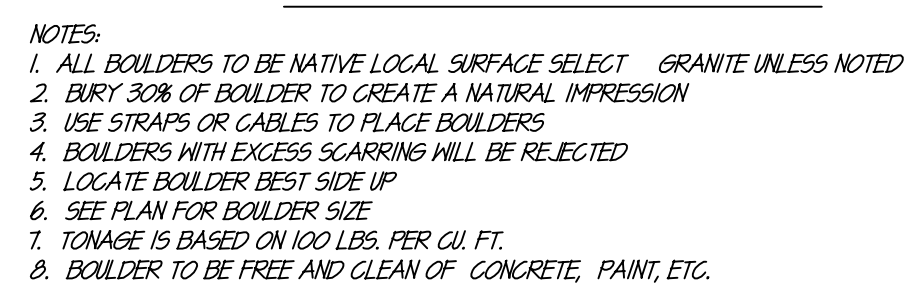
SIDEWALK TURNDOWN



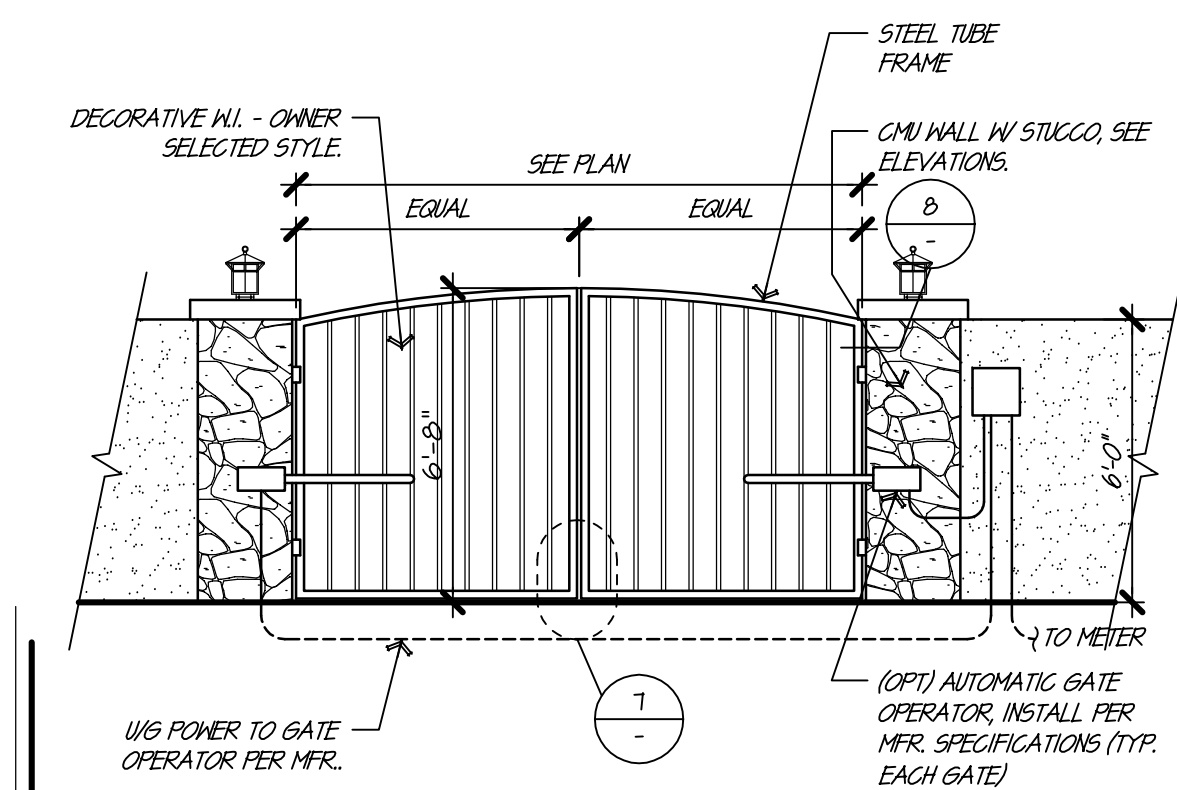
GROUND COVER DETAIL



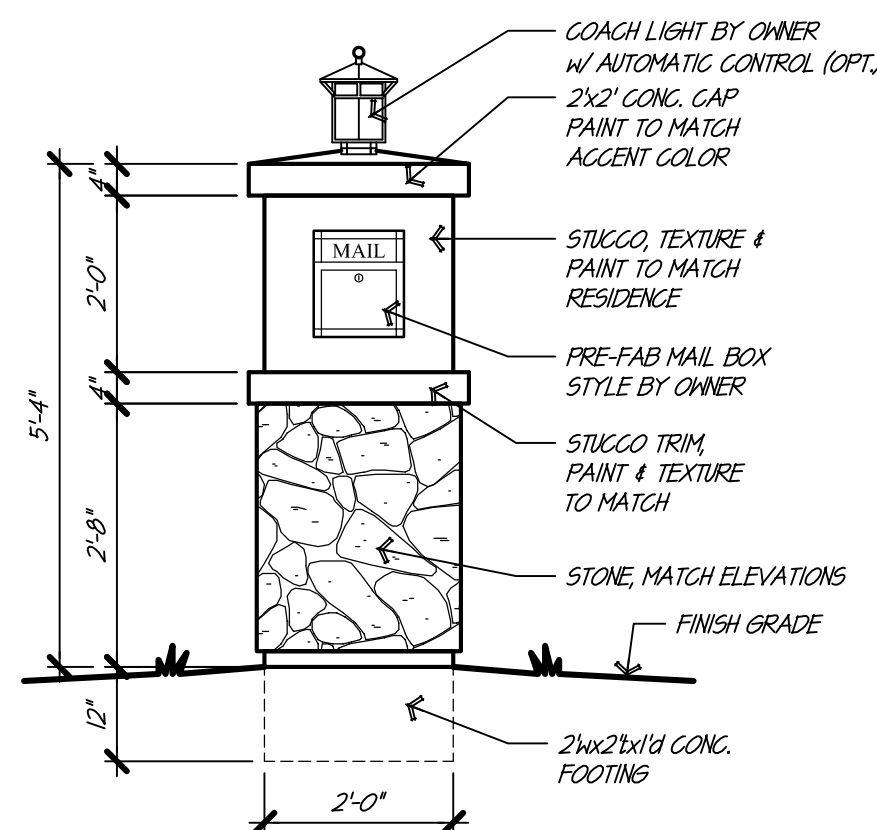
BOULDER IN CONCRETE



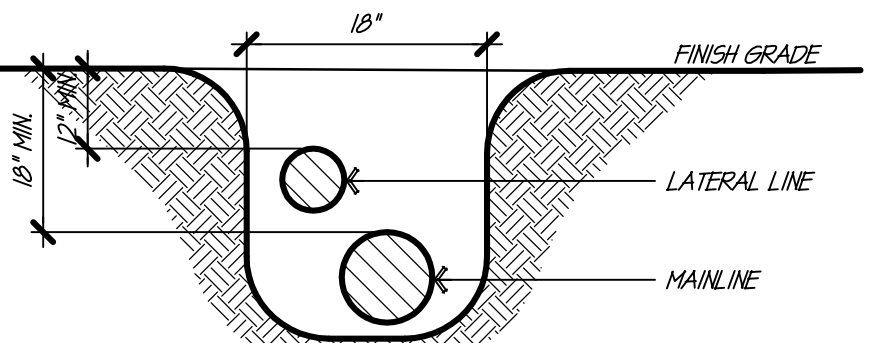
BOULDER DETAIL



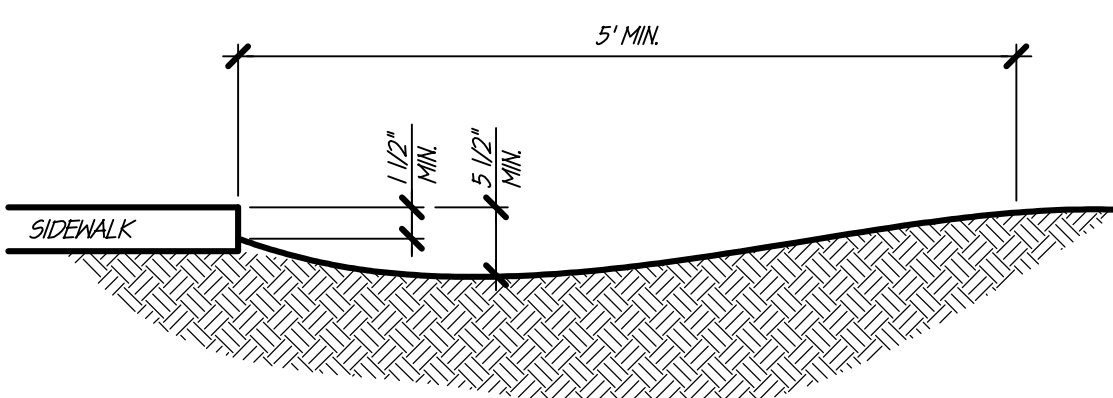
GATE ELEVATION (OPT.)



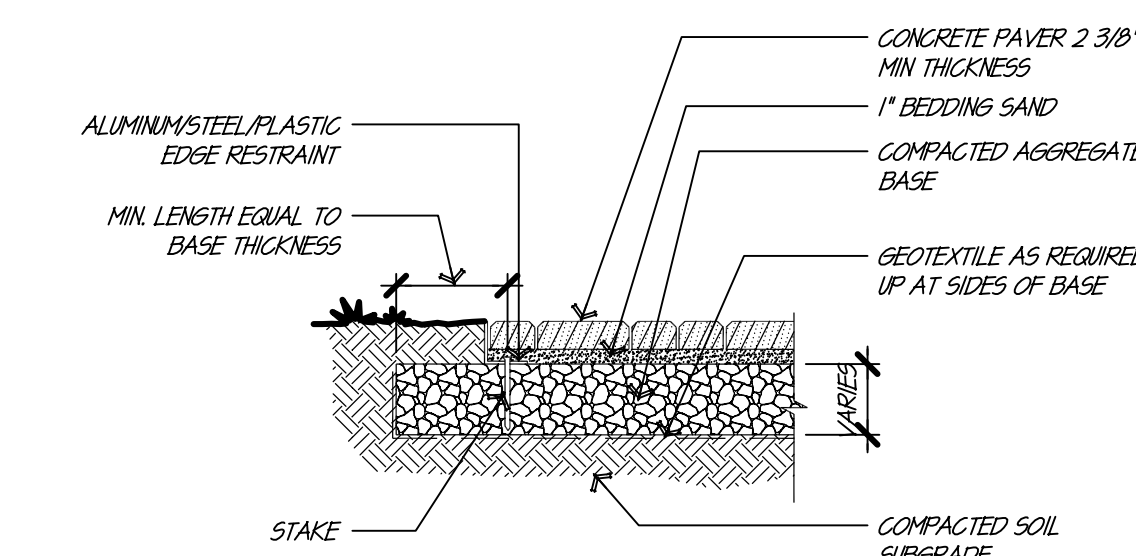
MAILBOX & LIGHT BASE (OPT.)



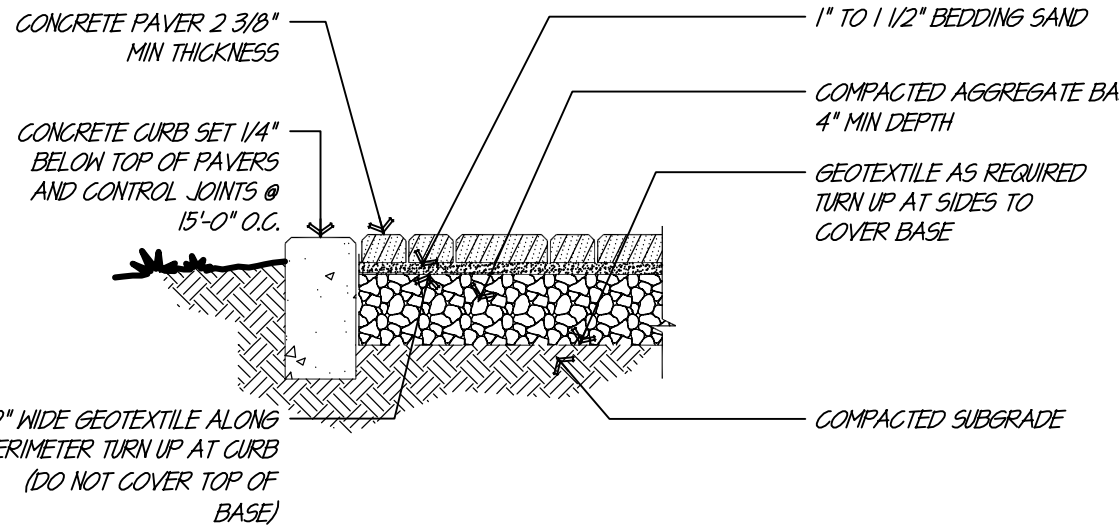
TRENCHING



SWALE DETAIL



PATIO/WALK EDGE @ PAVERS

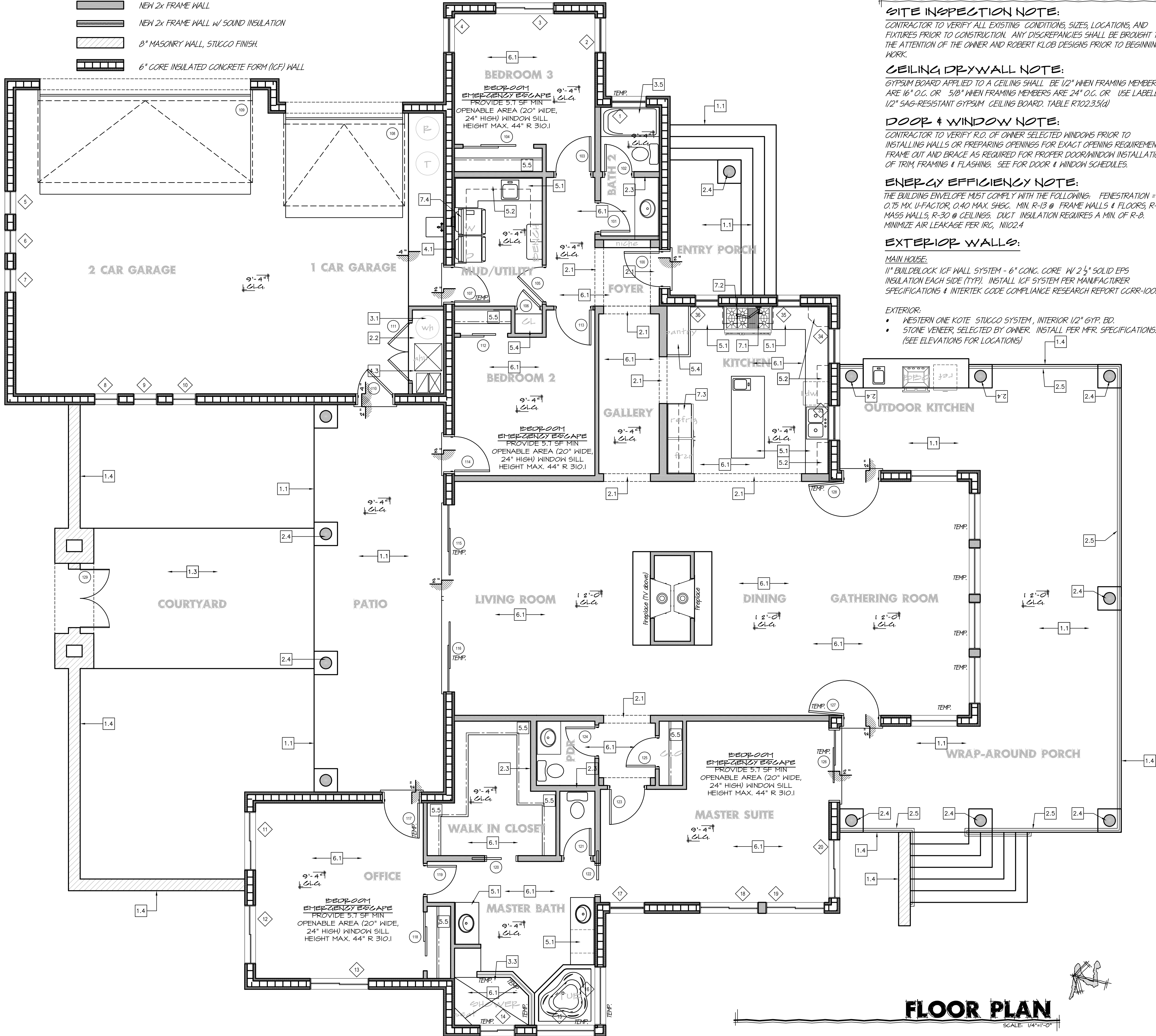


DRIVE W/ CONC. EDGE

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WALL LEGEND:

- GLASS PARTITION, TEMPERED
- NEW 2x FRAME WALL
- NEW 2x FRAME WALL w/ SOUND INSULATION
- 8" MASONRY WALL, STUCCO FINISH
- 6" CORE INSULATED CONCRETE FORM (ICF) WALL



GENERAL PLAN NOTES

SITE INSPECTION NOTE:

CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS, SIZES, LOCATIONS, AND FIXTURES PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ROBERT KLOB DESIGNS PRIOR TO BEGINNING WORK.

CEILING DRYWALL NOTE:

GYPSUM BOARD APPLIED TO A CEILING SHALL BE 1/2" WHEN FRAMING MEMBERS ARE 16" O.C. OR 5/8" WHEN FRAMING MEMBERS ARE 24" O.C. OR USE LABELED 1/2" SAG-RESISTANT GYPSUM CEILING BOARD. TABLE R102.3.5(d)

DOOR & WINDOW NOTE:

CONTRACTOR TO VERIFY R.O. OF OWNER SELECTED WINDOWS PRIOR TO INSTALLING WALLS OR PREPARING OPENINGS FOR EXACT OPENING REQUIREMENTS. FRAME OUT AND BRACE AS REQUIRED FOR PROPER DOOR/WINDOW INSTALLATION OF TRIM, FRAMING & FLASHING. SEE FOR DOOR & WINDOW SCHEDULES.

ENERGY EFFICIENCY NOTE:

THE BUILDING ENVELOPE MUST COMPLY WITH THE FOLLOWING: FENESTRATION - 0.75 MAX U-FACTOR, 0.40 MAX SHGC, MIN R-13 @ FRAME WALLS & FLOORS, R-4 @ MASS WALLS, R-30 @ CEILINGS. DUCT INSULATION REQUIRES A MIN. OF R-8. MINIMIZE AIR LEAKAGE PER IRC, N102.4

EXTERIOR WALLS:

MAIN HOUSE:
1" BUILDBLOCK ICF WALL SYSTEM - 8" CONC. CORE w/ 2 1/2" SOLID EPS INSULATION EACH SIDE (TYP). INSTALL ICF SYSTEM PER MANUFACTURER SPECIFICATIONS & INTERTEK CODE COMPLIANCE RESEARCH REPORT CGRR-1003

EXTERIOR:

- WESTERN ONE KOTE STUCCO SYSTEM, INTERIOR 1/2" GYP. BD.
- STONE VENEER, SELECTED BY OWNER. INSTALL PER MFR. SPECIFICATIONS. (SEE ELEVATIONS FOR LOCATIONS)

KEY NOTES

FOUNDATION:

- EXPOSED CONCRETE, SALT FINISH
- EDGE OF CONCRETE
- CONCRETE SLAB, PAVER OPTION
- 8" MASONRY WALL, +/- 36" TALL w/ OPT. STUCCO FINISH
- NOT USED

FRAMING:

- ARCH SOFFIT
- 18" PLATFORM w/ 3"DIA. STL. PIPE BOLLARD, FILL w/ CONC.
- 2x6 PLUMBING WALL
- 10" DIA WOOD VIGA POST - PAINT/STAIN PER OWNER SPECS.
- 42" HIGH RAILING, STYLE PER OWNER
- NOT USED

PLUMBING:

- 50 GAL. WATER HEATER OR OWNER APPROVED EQ.
- HOSE BIB w/ ANTI-SIPHON VALVE
- ZERO CLEARANCE SHOWER w/ TRENCH DRAIN, TILE PER OWNER SPECS
- SHOWER HEAD
- TUB/SHOWER COMBO INSERT UNIT - STYLE PER OWNER
- WATER SOFTENING SYSTEM (OWNER OPT.)

MECHANICAL:

- 4" DRYER IN WALL, UP THRU ROOF -SEE SHEET C1.0 FOR SIZE REQ.
- CONDENSING UNIT, SEE MECHANICAL
- VERTICAL AIR HANDLER - SEE MECHANICAL DRAWINGS.

MILLWORK:

- STANDARD LOWER CABINET
- STANDARD UPPER CABINET
- COUNTERTOP, ADD CORBELS FOR SPANS >8"
- 5 SHELVES EVENLY SPACED -DEPTH VARIES PER LOCATION
- SHELF & ROD, OPT. CLOSET ORGANIZER PER OWNER
- NOT USED

FINISHES:

- FLOORING - SPECIFIED BY OWNER
- NOT USED

APPLIANCES:

- HOOD FOR RANGE -VENTED TO OUTSIDE
- RANGE/OVEN - PROVIDED BY OWNER
- REFRIGERATOR, PRE-PLUMB FOR ICE MAKER, PROVIDED BY OWNER.
- CLOTHES WASHER & DRYER, PROVIDED BY OWNER

GENERAL NOTES

FOUNDATION:

- 42" SIDEWALK FROM ENTRY TO BACK OF SIDEWALK (BROOM FINISH)
- SLOPE PATIO & PORCH SLAB 1/8"12 MIN. AWAY FROM HOUSE (SMOOTH FINISH)
- SLOPE GARAGE FLOOR 2" MIN. FROM BACK TO FRONT EDGE OF CONC.

FRAMING:

- 6" ICF & 2x6 WALLS - ALL NEW EXTERIOR WALLS U.N.O.
- 2x4 WALLS - ALL INTERIOR WALLS U.N.O.
- 2x6 WALLS - PLUMBING WALLS - BEHIND WASHERS & TOILETS

CEILING HEIGHTS SHALL BE AS NOTED ON PLAN

ARCH SOFFITS -TOP AT 8'-0", 7'-0" LEG, U.N.O.

PLUMBING:

AT WATER CLOSETS, PROVIDE 15" MIN. ON EA. SIDE AND 24" MIN. CLEAR SPACE IN FRONT.

MILLWORK:

DOORS:

- EXTERIOR DOORS SHALL BE METAL OR FIBERGLASS U.N.O.
- INTERIOR DOORS SHALL BE SOLID CORE U.N.O.
- DOOR LEADING INTO HOUSE FROM GARAGE SHALL BE SELF-CLOSING, SELF LATCHING, TIGHT-FITTING WITH GASKET AND SWEEP, & SHALL BE A 20 MINUTE RATED DOOR.

1R/1S - PROVIDE 1 ROD AND 1 SHELF @ 60" A.F.F.
2R/2S -PROVIDE 2 RODS AND 2 SHELVES -TOP SHELF @ 60" A.F.F.

FINISHES:

ALL DOOR AND WINDOWS TO HAVE KERF EDGES, PER OWNER SPECS.

PROVIDE WEATHERPROOF DRYWALL ON ALL PORCH AND PATIO CEILINGS

PROVIDE 1/2" GYPSUM BOARD AT GARAGE WALLS AND CEILING ADJACENT TO LIVING AREAS & BEARING WALLS. FOR CEILINGS WITH 24"O.C. SPACING 5/8" GYPSUM BOARD OR 1/2" SAG RESISTANT GYPSUM BOARD SHALL BE USED PER TABLE R102.3.5.

PROVIDE MOISTURE RESISTANT GYP. BD. ON WALLS @ SHOWER / TUB / W.C. COMPARTMENT TO A MIN. HEIGHT OF 10" A.F.F.

APPLIANCE DESIGNATION:

- D/W -DISHWASHER-PROVIDE APPROVD AIR GAP
- REF. - REFRIGERATOR (BY OWNER), PROVIDE CLR. SPACE & PRE PLUMB w/ SOV FOR ICE MAKER
- WH - STANDARD WATER HEATER
- TWH - TANKLESS WATER HEATER
- SOFT - WATER SOFTENER & LOOP
- W - LOCATION OF WASHER
- D - LOCATION OF ELECTRIC DRYER, OPT. GAS

ACCESSORIES:

ALL MIRRORS IN BATHROOMS SHALL BE 42" HIGH AND RUN THE ENTIRE LENGTH OF VANITY.

LEGEND:

- 4' DENOTES ELEVATION CHANGE IN FLOOR
- ARCHED OR FLAT SOFFIT -SEE KEYNOTES FOR HEIGHTS
- DENOTES LOCATION FOR STONE VENEER -SEE ELEVATIONS
- DENOTES DOOR NUMBER, SEE DOOR SCHEDULE
- DENOTES WINDOW NUMBER, SEE WINDOW SCHEDULE

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PROJECT ADDRESS:
5980 W. BLUE STAR TP.
HOWARD MESA RANCH PHASE 2 UNIT 2
Lot: 100
APN: 500-99-052

PROJECT NAME:
A CUSTOM HOME FOR
LARRY & CHERYL
SCHUG

SHEET TITLE:
KEYNOTE
FLOOR PLAN

REV	COMMENT
1	
2	
3	
4	

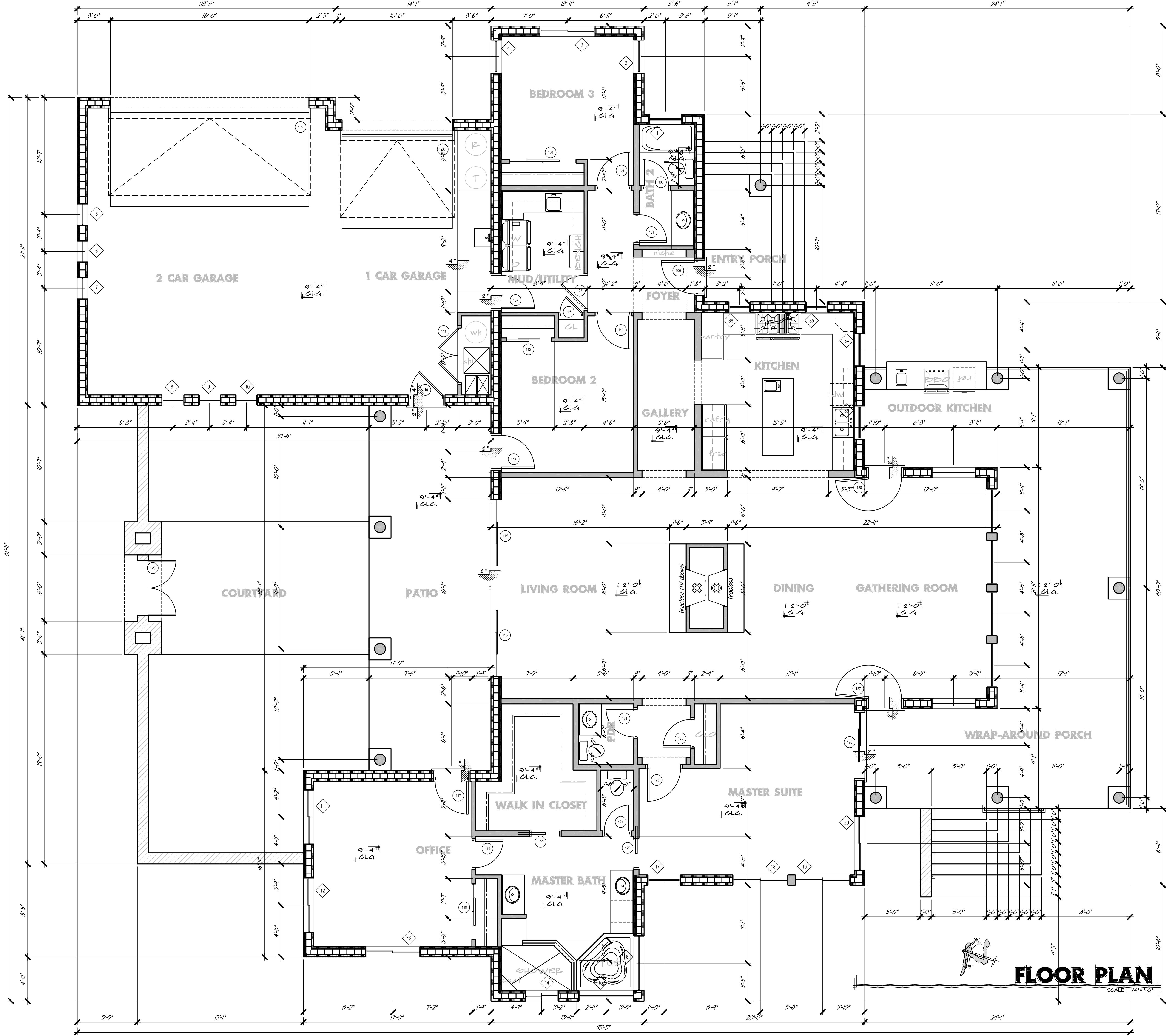
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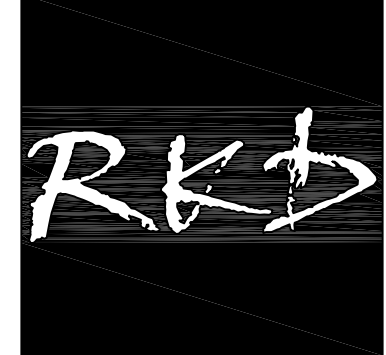
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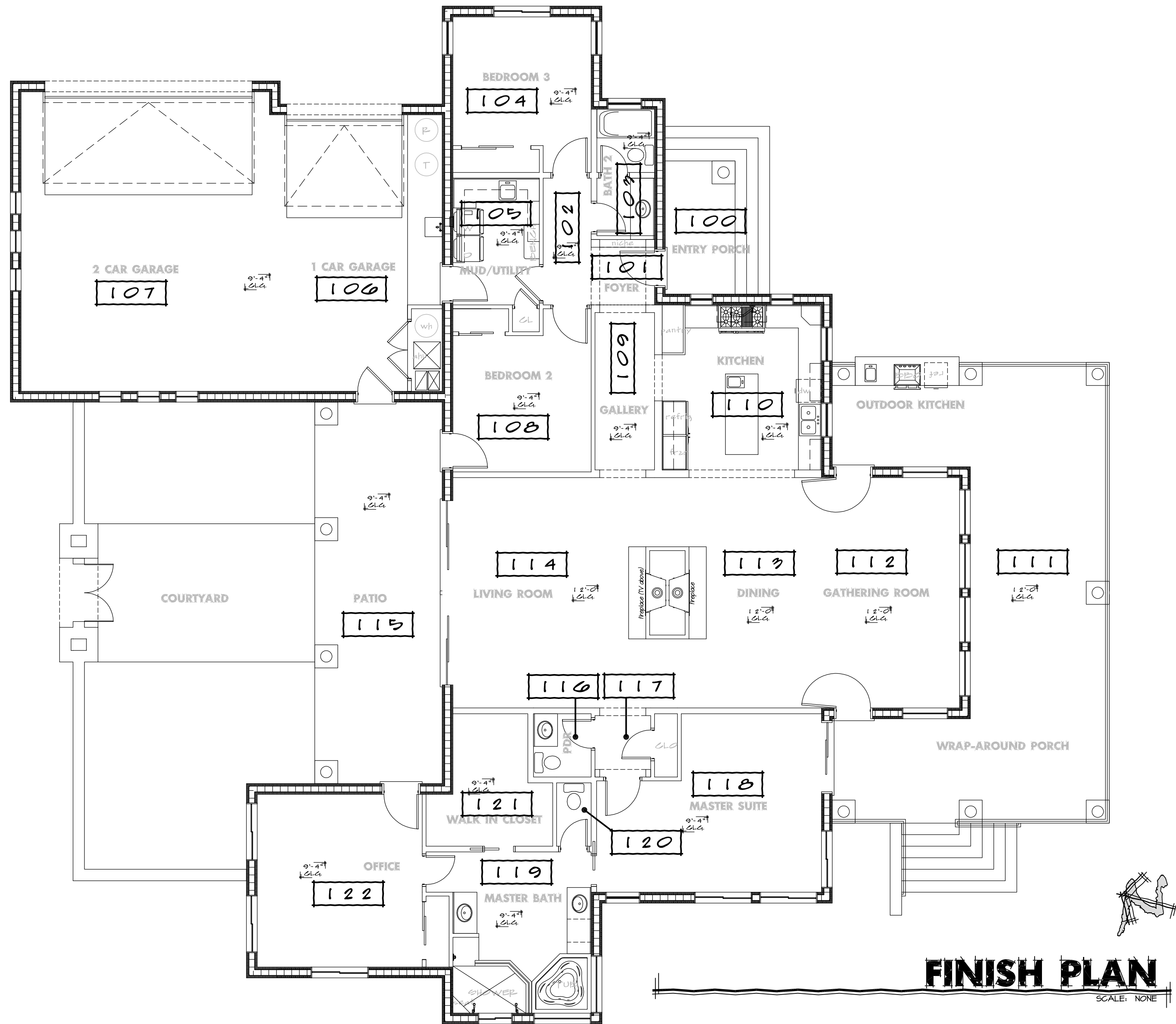
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PROJECT ADDRESS
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HOWARD MESA RANCH PHASE 2 UNIT 2
Lot: 100
APN: 500-99-052

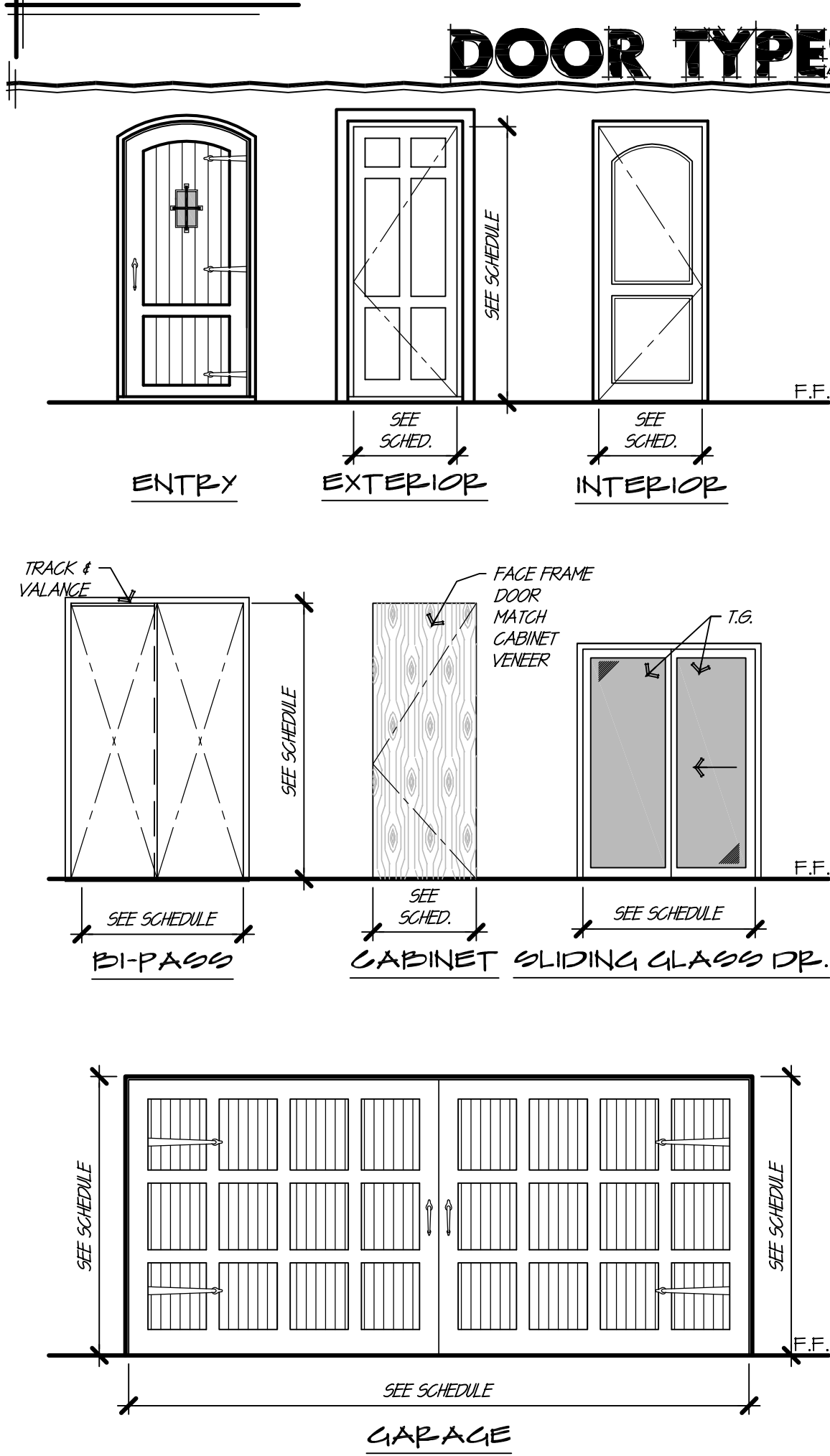
PROJECT NAME
A CUSTOM HOME FOR
**LARRY & CHERYL
SCHUG**

SHEET TITLE	
DIMENSION FLOOR PLAN	
REV	COMMENT
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date: 7/29/15	
drawn: VF/PR	
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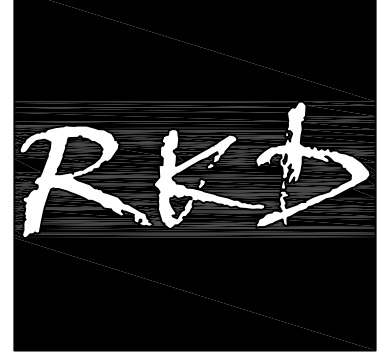
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Mark	Window Size		Head Height	Frame	Type	Remarks
	Width	Height				
1	3'-0"	4'-4"	8'-0"	CLAD	SH	DOUBLE HUNG
2	3'-0"	5'-0"	8'-0"	CLAD	SH	DOUBLE HUNG
3	5'-0"	5'-0"	8'-0"	CLAD	XO	SLIDING
4	3'-0"	5'-0"	8'-0"	CLAD	SH	DOUBLE HUNG
5	5'-0"	2'-0"	8'-0"	CLAD	FIXED	
6	2'-0"	2'-0"	8'-0"	CLAD	FIXED	
7	2'-0"	2'-0"	8'-0"	CLAD	FIXED	
8	2'-0"	2'-0"	8'-0"	CLAD	FIXED	
9	2'-0"	2'-0"	8'-0"	CLAD	FIXED	
10	2'-0"	2'-0"	8'-0"	CLAD	FIXED	
11	5'-0"	5'-0"	8'-0"	CLAD	XO	SLIDING
12	5'-0"	5'-0"	8'-0"	CLAD	XO	SLIDING
13	5'-0"	5'-0"	8'-0"	CLAD	XO	SLIDING
14	3'-0"	2'-0"	8'-0"	CLAD	XO	SLIDING
15	5'-0"	5'-0"	8'-0"	CLAD	FIXED	
16	5'-0"	5'-0"	8'-0"	CLAD	FIXED	
17	3'-0"	4'-4"	8'-0"	CLAD	SH	DOUBLE HUNG
18	5'-0"	5'-0"	8'-0"	CLAD	XO	SLIDING
19	5'-0"	5'-0"	8'-0"	CLAD	XO	SLIDING
20	5'-0"	5'-0"	8'-0"	CLAD	XO	SLIDING
21	4'-0"	7'-0"	11'-0"	CLAD	FIXED	
22	4'-0"	2'-6"	4'-0"	CLAD	AWNING	--
23	4'-0"	7'-0"	11'-0"	CLAD	FIXED	
24	4'-0"	2'-6"	4'-0"	CLAD	AWNING	--
25	4'-0"	7'-0"	11'-0"	CLAD	FIXED	
26	4'-0"	2'-6"	4'-0"	CLAD	AWNING	--
27	4'-0"	7'-0"	11'-0"	CLAD	FIXED	
28	4'-0"	2'-6"	4'-0"	CLAD	AWNING	--
29	4'-0"	7'-0"	11'-0"	CLAD	FIXED	
30	4'-0"	2'-6"	4'-0"	CLAD	AWNING	--
31	4'-0"	7'-0"	11'-0"	CLAD	FIXED	
32	4'-0"	2'-6"	4'-0"	CLAD	AWNING	--
33	3'-0"	4'-4"	8'-0"	CLAD	SH	DOUBLE HUNG
34	3'-0"	4'-4"	8'-0"	CLAD	SH	DOUBLE HUNG
35	2'-0"	4'-4"	8'-0"	CLAD	SH	DOUBLE HUNG
36	2'-0"	4'-4"	8'-0"	CLAD	SH	DOUBLE HUNG

Mark	Door Size			Head Height	Material	Type	Remarks	
	Width	Height	Thickness					
100.000	3'-0"	8'-0"	1 3/4"	8'-0"	CLAD	SC	Exterior door w/ 180° viewer	
101.000	2'-6"	8'-0"	1 3/4"	8'-0"	WOOD	SC		
102.000	2'-4"	8'-0"	1 3/4"	8'-0"	WOOD	SC		
103.000	3'-0"	8'-0"	1 3/4"	8'-0"	WOOD	SC		
104.000	PR 3'-0"	8'-0"	1 3/4"	8'-0"	WOOD	SC	closet bi-pass w/ mfr. track	
105.000	3'-0"	8'-0"	1 3/4"	8'-0"	WOOD	SC		
106.000	2'-0"	6'-8"	1 3/4"	6'-8"	WOOD	SC	w/ Self Closing Hinge	
107.000	3'-0"	8'-0"	1 3/8"	8'-0"	WOOD	SC		
108.000	10'-0"	8'-0"	1 3/4"	8'-0"	METAL	MTL.		
109.000	18'-0"	8'-0"	1 3/4"	8'-0"	METAL	MTL.		
110.000	3'-0"	8'-0"	1 3/4"	8'-0"	CLAD	SC	Exterior door w/ 180° viewer	
111.000	PR 2'-6"	8'-0"	1 3/4"	8'-0"	WOOD	SC		
112.000	PR 2'-0"	8'-0"	1 3/4"	8'-0"	WOOD	SC	closet bi-pass w/ mfr. track	
113.000	3'-0"	8'-0"	1 3/4"	8'-0"	WOOD	SC		
114.000	3'-0"	8'-0"	1 3/4"	8'-0"	CLAD	SC	Exterior door w/ 180° viewer	
115.000	PR 4'-0"	8'-0"	1 1/4"	8'-0"	CLAD	SGD		
116.000	PR 4'-0"	8'-0"	1 1/4"	8'-0"	CLAD	SGD	Sliding Glass Door, Tempered	
117.000	3'-0"	8'-0"	1 3/4"	8'-0"	CLAD	SC		
118.000	PR 2'-6"	8'-0"	1 3/4"	8'-0"	WOOD	SC	Exterior door w/ 180° viewer closet bi-pass w/ mfr. track	
119.000	2'-6"	8'-0"	1 3/4"	8'-0"	WOOD	SC		
120.000	2'-6"	8'-0"	2"	8'-0"	--	--	--	
121.000	2'-4"	8'-0"	1 3/4"	8'-0"	WOOD	SC	Sliding Glass Door, Tempered	
122.000	2'-6"	8'-0"	2"	8'-0"	--	--		--
123.000	3'-0"	8'-0"	1 3/4"	8'-0"	WOOD	SC		
124.000	2'-6"	8'-0"	1 3/4"	8'-0"	WOOD	SC		
125.000	2'-6"	8'-0"	1 3/4"	8'-0"	WOOD	SC	Sliding Glass Door, Tempered	
126.000	PR 3'-0"	8'-0"	1 1/4"	8'-0"	CLAD	SGD		
127.000	3'-0"	8'-0"	1 3/4"	8'-0"	CLAD	SC		
128.000	3'-0"	8'-0"	1 3/4"	8'-0"	CLAD	SC		
129.000	PR 2'-6"	6'-8"	3/4"	13'-4"	WI	WI	Pair Wrought Iron Gates	



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5980 W. BLUE STAR TR.
HOWARD MESA RANCH PHASE 2 UNIT 2

APN: 500-33-052
Lot: 700

APN: 500-33-052

PROJECT ADDRESS

PROJECT NAME

A CUSTOM HOME FOR
LARRY & CHERYL
SCHUG

SCHING


FINISH PLAN
DOOR &
WINDOW INFO

EV	COMMENT
----	---------

REV	COMMENT
①	
②	
③	
④	

date: 7/29

drawn: VF/RK



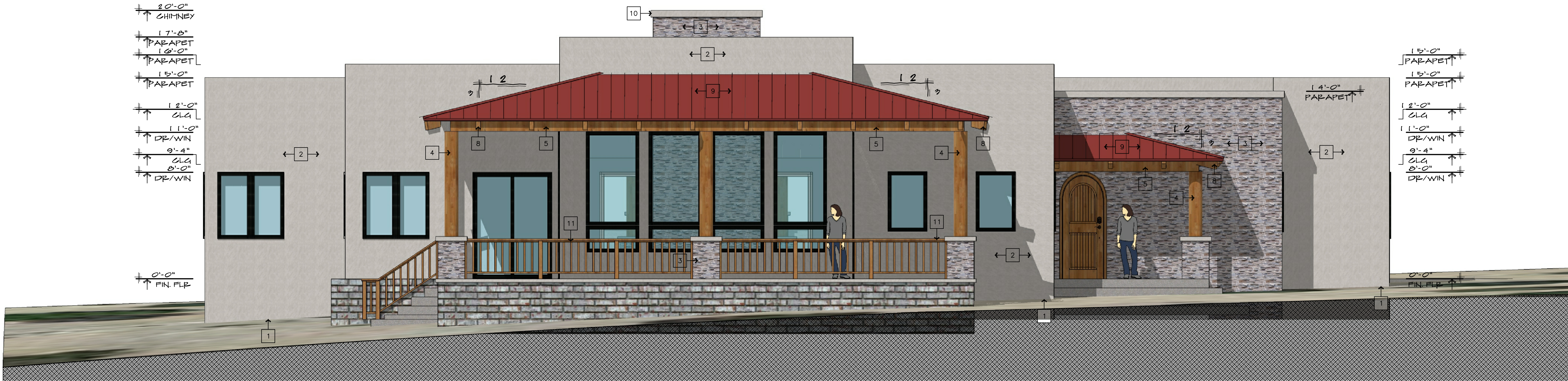
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FINISH NOTES:

1. FLAME SPREAD RATINGS FOR INTERIOR FINISHES NOT TO EXCEED 200
2. CONTRACTOR TO COORDINATE WITH OWNER ACTUAL FINISHES, TEXTURE TYPES AND MATERIALS PRIOR TO INSTALLATION.
3. MOISTURE RESISTANT DRYWALL TO BE USED ON ANY WALL CONTAINING PLUMBING PIPING AND PER IRC SPECIFIED LOCATIONS.
4. GYP. BD. FINISH GRADES PER NATIONAL GYPSUM PUBLICATION GA-214-10e.
5. DRYWALL CONTRACTOR SHALL FOLLOW ICC AND NATIONAL GYPSUM CURRENT SPECIFICATIONS FOR FINISHES, INSTALLATION AND EXPANSION.
6. DRYWALL CONTRACTOR TO WARRANTY AGAINST CRACKING AT SEAMS AND CORNERS FOR NOT LESS THAN 2 YEARS FROM CERTIFICATE OF OCCUPANCY.
7. SEE DETAIL SHEETS "AD-X" FOR ADDITIONAL INFORMATION. WHERE ONE DETAIL IS SHOWN FOR A CERTAIN CONDITION, THAT DETAIL SHALL COVER @ ALL SIMILAR LOCATIONS. WHERE MULTIPLE DETAILS ARE SHOWN FOR SIMILAR CONDITIONS, CONTRACTOR TO VERIFY MATERIALS SHOWN IN DETAIL TO DETERMINE LOCATIONS. CONTRACTOR TO NOTIFY RCD IN WRITING REGARDING ANY QUESTIONS AND/OR DISCREPANCIES.

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FRONT ELEVATION - A
SCALE: 1/4"=1'-0"

GENERAL NOTES

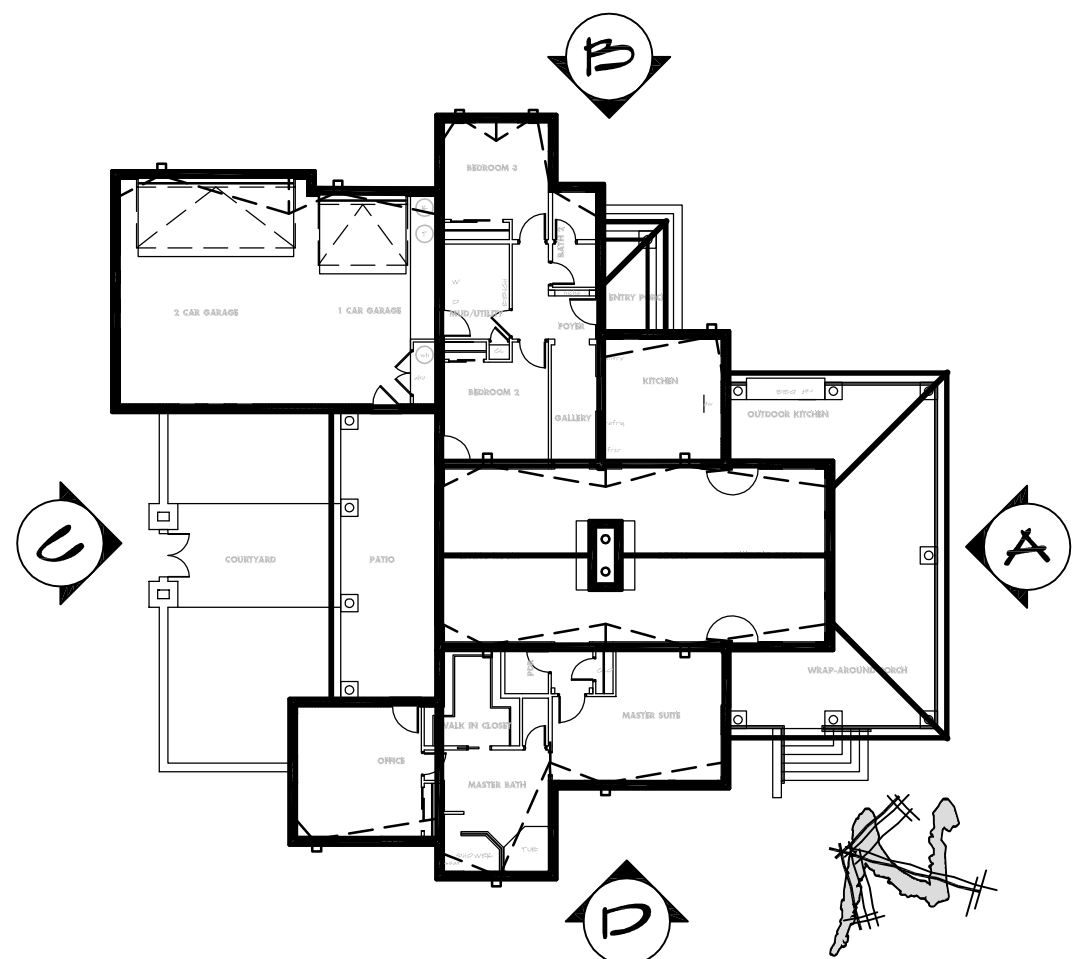
1. STUCCO WALL FINISH (ESR-1601) OVER RESISTIVE BARRIER OF (1) LAYER OF TYPE 15 ASPHALT- SATURATED ORGANIC FELT PAPER.
2. FLASHING OF EXTERIOR OPENINGS PER IRC AND SHALL BE NOT LESS THAN NO. 26 GAUGE CORROSION RESISTANT METAL.
3. KEEF SCREED SHALL BE OF NO. 26 GAUGE CORROSION RESISTANT METAL WITH A MIN. VERT. ATTACHMENT FLANGE OF 3 1/2" AND PLACED A MIN OF 3/4" BELOW SLAB AND MIN. 4" A.F.S. @ ALL EXTERIOR WALLS.
4. N/A
5. BUILT UP ROOFING W/ 3 LAYERS 15# FELT AND 30# PER SQ. FT. OF GRAVEL OR OTHER APPROVED SURFACING MATERIAL INSTALLED PER MFG. SPEC.

KEEPSCREED NOTES:
PROVIDE A 26 GA. CORROSION RESISTANT KEEF SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2" FOR STUCCO SYSTEMS. BOTTOM OF 3 1/2" ATTACHMENT FLANGE SHALL BE PLACED A MINIMUM OF 3/4" BELOW THE FOUNDATION PLATE LINE ON ALL EXTERIOR STUD WALLS.

KEEPSCREED SHALL BE PLACED A MINIMUM OF 4" ABOVE FINISH GRADE OR 2" ABOVE ADJACENT WALKS, DRIVES, AND PATIO SURFACES.

KEY NOTES

1. KEEF SCREED TO MIN. 3/4" BELOW FINISHED FLOOR OR TRIM AS SPECIFIED BY SIDING MFR.
2. STUCCO - INSTALL PER MFR. SPECIFICATIONS
3. STONE VENEER, CORONADO STONE "IDAHO DRYSTACK, ANTIQUE BUFF" INSTALL PER MFR. SPECIFICATIONS
4. 10" WOOD VISA POST - PAINT/STAIN PER OWNER
5. BEAM - SEE STRUCTURAL - PAINT/STAIN PER OWNER
6. COACH LIGHT - STYLE PER OWNER.
7. STEEL, INSULATED GARAGE DOOR - CARRIAGE TYPE.
8. WOOD PATIO FRAMING, STAIN & SEAL ALL EXPOSED WOOD
9. STANDING SEAM METAL ROOF - INSTALL & FLASH PER MFR. SPECS
10. VENT FROM FIREPLACE W/ SPARK ARRESTOR
11. 42" HIGH RAILING - STYLE & MATERIALS PER OWNER
12. 12" PLUMB CUT FASCIA W/ 4" TRIM. SEAL/PAINT PER OWNER SPECS



KEY PLAN

SCALE: NTS

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PROJECT ADDRESS

5980 W. BLUE STAR TP.
HOWARD MESA RANCH PHASE 2 UNIT 2

Lot: 700

APN: 500-99-052

A CUSTOM HOME FOR
LARRY & CHERYL
SCHUG

PROJECT NAME

EXTERIOR
ELEVATIONS

SHEET TITLE

REV	COMMENT
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A	
date: 7/29/23	
drawn: VF/PR	

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SIDE ELEVATION - B
SCALE: 1/4"=1'-0"



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FRONT ELEVATION - C
SCALE: 1/4"=1'-0"

GENERAL NOTES

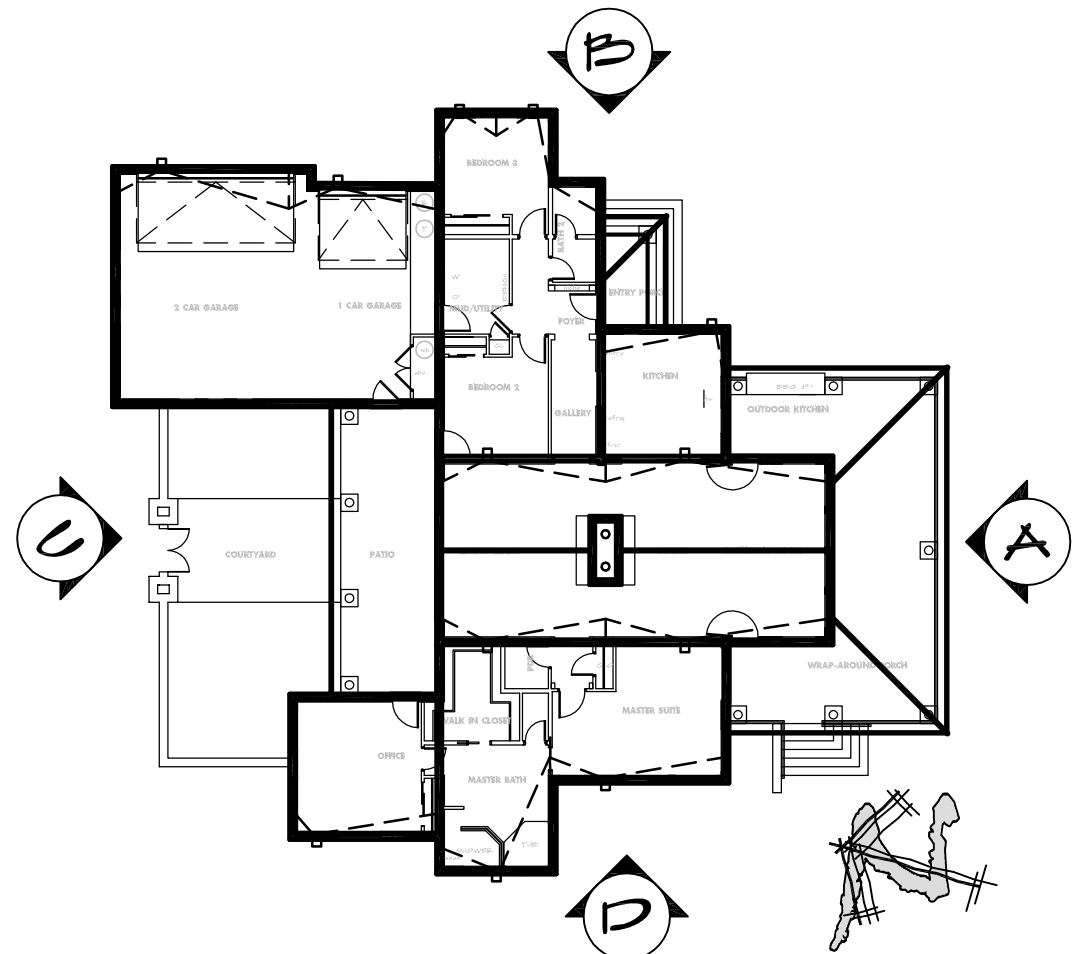
1. STUCCO WALL FINISH (ESR-1601) OVER RESISTIVE BARRIER OF (1) LAYER OF TYPE 15 ASPHALT- SATURATED ORGANIC FELT PAPER.
2. FLASHING OF EXTERIOR OPENINGS PER IRC AND SHALL BE NOT LESS THAN No. 26 GAUGE CORROSION RESISTANT METAL.
3. KEEF SCREED SHALL BE OF NO. 26 GAUGE CORROSION RESISTANT METAL WITH A MIN. VERT. ATTACHMENT FLANGE OF 3 1/2" AND PLACED A MIN OF 3/4" BELOW SLAB AND MIN. 4" A.F.G. @ ALL EXTERIOR WALLS.
4. N/A
5. BUILT UP ROOFING W/ 3 LAYERS 15# FELT AND 30# PER SQ. FT. OF GRAVEL OR OTHER APPROVED SURFACING MATERIAL INSTALLED PER MFG. SPEC.

KEEPSCREED NOTES:
PROVIDE A 26 GA. CORROSION RESISTANT KEEF SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2" FOR STUCCO SYSTEMS. BOTTOM OF 3 1/2" ATTACHMENT FLANGE SHALL BE PLACED A MINIMUM OF 3/4" BELOW THE FOUNDATION PLATE LINE ON ALL EXTERIOR STUD WALLS.

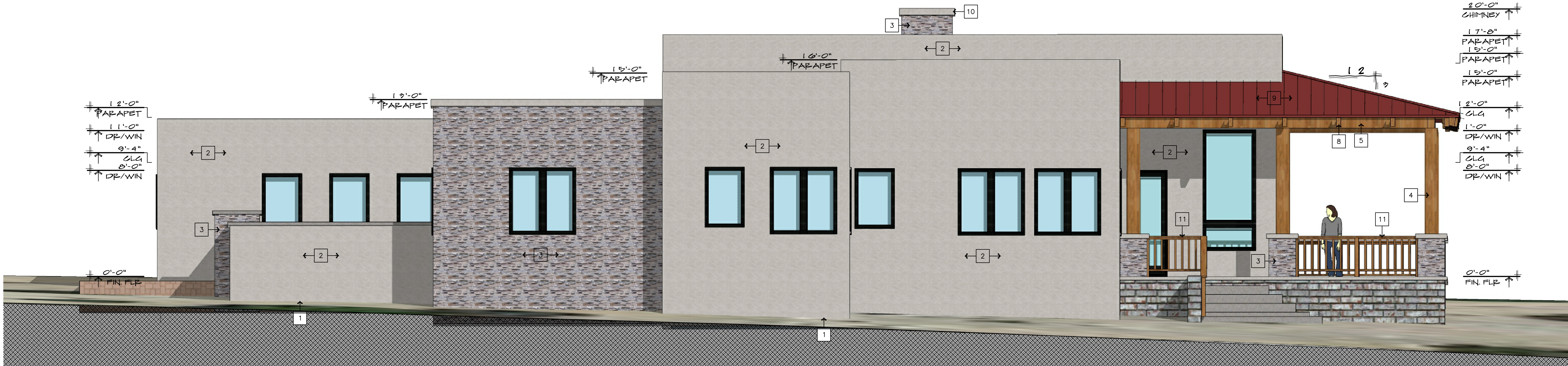
KEEPSCREED SHALL BE PLACED A MINIMUM OF 4" ABOVE FINISH GRADE OR 2" ABOVE ADJACENT WALKS, DRIVES, AND PATIO SURFACES.

KEY NOTES

1. KEEF SCREED TO MIN. 3/4" BELOW FINISHED FLOOR OR TRIM AS SPECIFIED BY SIDING MFR.
2. STUCCO - INSTALL PER MFR. SPECIFICATIONS
3. STONE VENEER, CORONADO STONE "IDAHO DRYSTACK, ANTIQUE BUFF" INSTALL PER MFR. SPECIFICATIONS
4. 10" WOOD VISA POST - PAINT/STAIN PER OWNER
5. BEAM - SEE STRUCTURAL - PAINT/STAIN PER OWNER
6. COACH LIGHT - STYLE PER OWNER.
7. STEEL, INSULATED GARAGE DOOR - CARRIAGE TYPE.
8. WOOD PATIO FRAMING, STAIN & SEAL ALL EXPOSED WOOD
9. STANDING SEAM METAL ROOF - INSTALL & FLASH PER MFR. SPECS
10. VENT FROM FIREPLACE W/ SPARK ARRESTOR
11. 42" HIGH RAILING - STYLE & MATERIALS PER OWNER
12. 12" PLUMB CUT FASCIA W/ 4" TRIM. SEAL/PAINT PER OWNER SPECS



KEY PLAN
SCALE: NTS



SIDE ELEVATION - D
SCALE: 1/4"=1'-0"

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A CUSTOM HOME FOR
**LARRY & CHERYL
SCHUG**

SHEET TITLE
**EXTERIOR
ELEVATIONS**

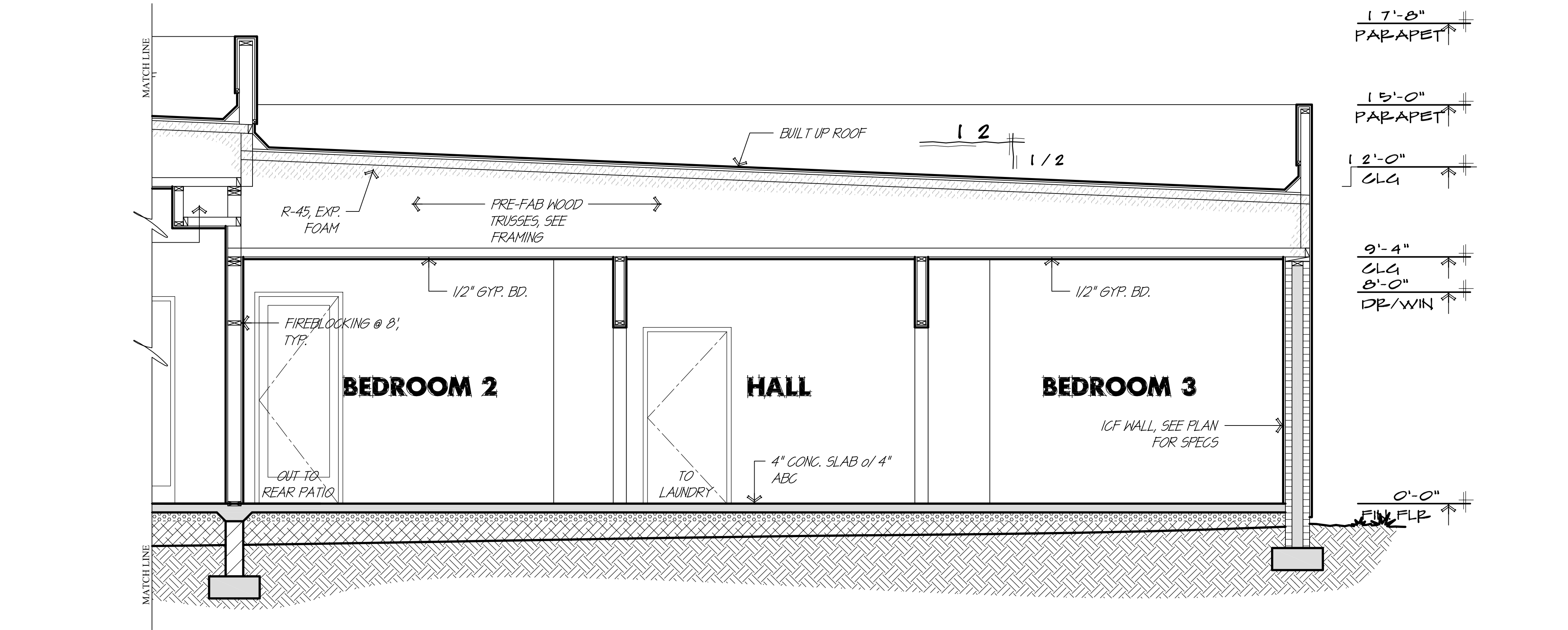
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date: 7/29/23
drawn: VF/PR

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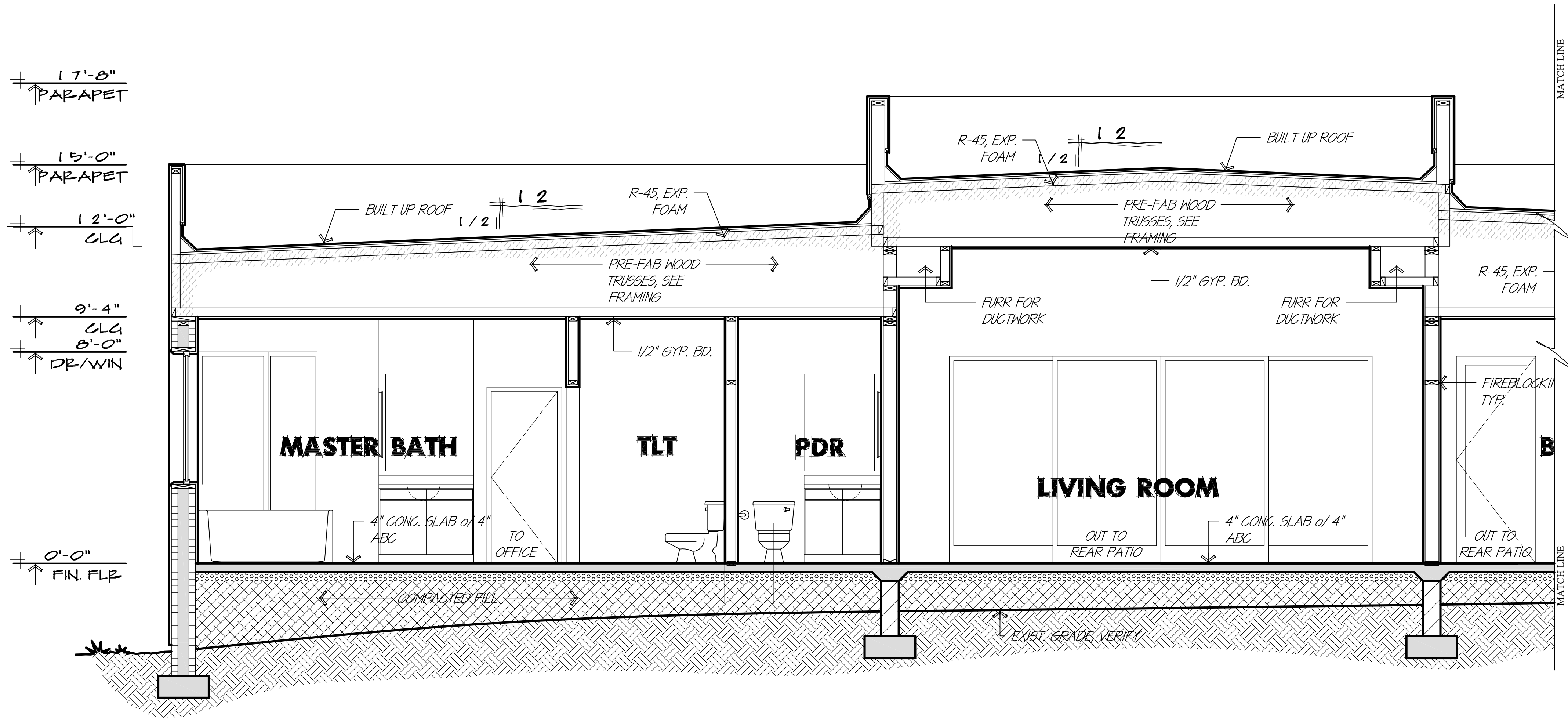
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CROSS SECTION A-A

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



CROSS SECTION A-A

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

GENERAL NOTES

- USE SIMPSON H2.5 @ EA. TRUSS/JOIST AND EVERY OTHER STUD. IF SPAN EXCEEDS 22' AT UNCLOSED AREAS AND GARAGES, USE 1 ANCHORS PER TRUSS/JOIST AND 1 ANCHOR PER STUD. FRAMING ANCHOR OF TYPE THAT ENGAGES BOTH PLATES (FRAMING ANCHOR AT STUD MAY BE OMITTED IF PLYWD OR EQUAL SHEATHING IS USED WITH NAILS TO TOP PLATE, EXCEPT UNCLOSED AREAS AND GARAGE.)
- SEE DETAIL SHEETS "AD-X" FOR ADDITIONAL INFORMATION. WHERE ONE DETAIL IS SHOWN FOR A CERTAIN CONDITION, THAT DETAIL SHALL GOVERN @ ALL SIMILAR LOCATIONS. WHERE MULTIPLE DETAILS ARE SHOWN FOR SIMILAR CONDITIONS, CONTRACTOR TO VERIFY MATERIALS SHOWN IN DETAIL TO DETERMINE LOCATIONS. CONTRACTOR TO NOTIFY RKD IN WRITING REGARDING ANY QUESTIONS AND/OR DISCREPANCIES.

FIREBLOCKING IS REQUIRED IN THE FOLLOWING LOCATIONS:

- CONCEALED SPACES OF STUD WALLS AT CEILING AND FLOOR LEVELS
- FURRED SPACES AND SOFFITS @ 10' LEVELS BOTH ERTICAL AND HORIZONTAL.
- ALL INTERCONNECTIONS BETWEEN CONCEALED ERTICAL & HORIZ. SPACES SUCH AS OCCUR AT DROP CEILINGS, SOFFITS, AND COVE CLG.
- BETWEEN STAIR STRINGERS IN TOP & BOTTOM OF RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE STRINGERS.
- OPENINGS AROUND PIPES, DUCTS, VENTS AND CHIMNEYS WITH NONCOMBUSTABLE MATERIALS (SUCH AS UNFACED FIBERGLASS INSULATION)
- AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY BUILT CHIMNEYS

INSTALLING FOAM INSULATION IN CONDITIONED ATTICS (R806.4)

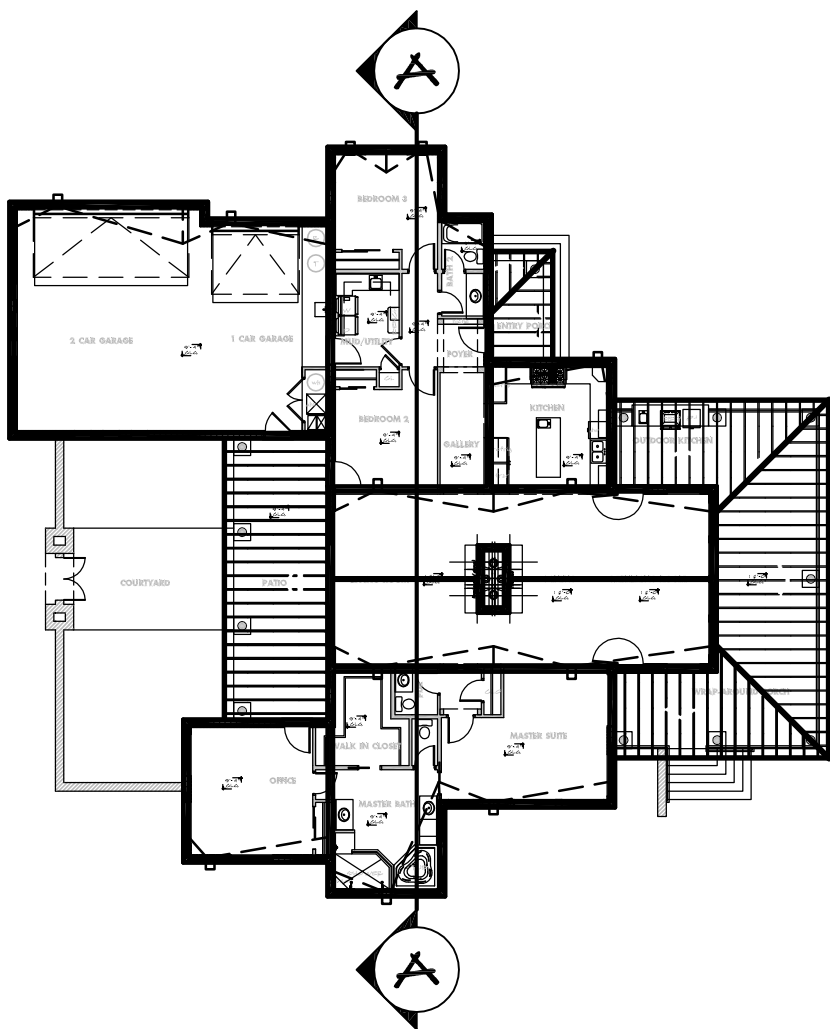
PER CURRENT EVALUATION REPORT NUMBER 3181 FOR PRODUCT MANUFACTURED BY IOTENE, INC., 6 INCHES OF FOAM WILL BE INSTALLED PER TABLE 1 OF THE REPORT.

PER THE REPORT, THIS INSTALLATION WILL PROVIDE AN R' VALUE OF 38.

SPECIAL INSPECTION REQUIRED FOR THE APPLIED IGNITION BARRIER.

WALL HEIGHT NOTE.

- ICF WALL HEIGHTS SHALL BE THE CLOSEST NOMINAL HEIGHT TO THOSE SHOWN. FOR "REVERSABLE" ICF SYSTEMS, THE HEIGHT SHALL BE TO THE NEAREST 1/2 HEIGHT OF BLOCK.
- THE ACTUAL HEIGHTS OF THE CONTRACTOR SELECTED ICF WALL SYSTEM SHALL GOVERN ALL ICF WALLS AND FRAME WALLS.
- CONTRACTOR SHALL PROVIDE DETAILS OF FINAL WALL HEIGHTS TO RKD AND OWNER IN WRITING PRIOR TO CONSTRUCTION FOR FINAL APPROVAL BEFORE STARTING WORK.



ROBERT KLOB
DESIGNS, INC.



480.968.2474

www.rkdznz.com

411 N. KYRENE RD.
SUITE 123
CHANDLER, AZ 85226

"DESIGNS THAT LIVE
WITH YOUR FAMILY,
LIFESTYLE &
BUDGET"

PROJECT ADDRESS
5980 W. BLUE STAR TP.
HOWARD MESA RANCH PHASE 2 UNIT 2
Lot: 700
APN: 500-99-052

A CUSTOM HOME FOR
**LARRY & CHERYL
SCHUG**

BUILDING
SECTIONS

REV	COMMENT
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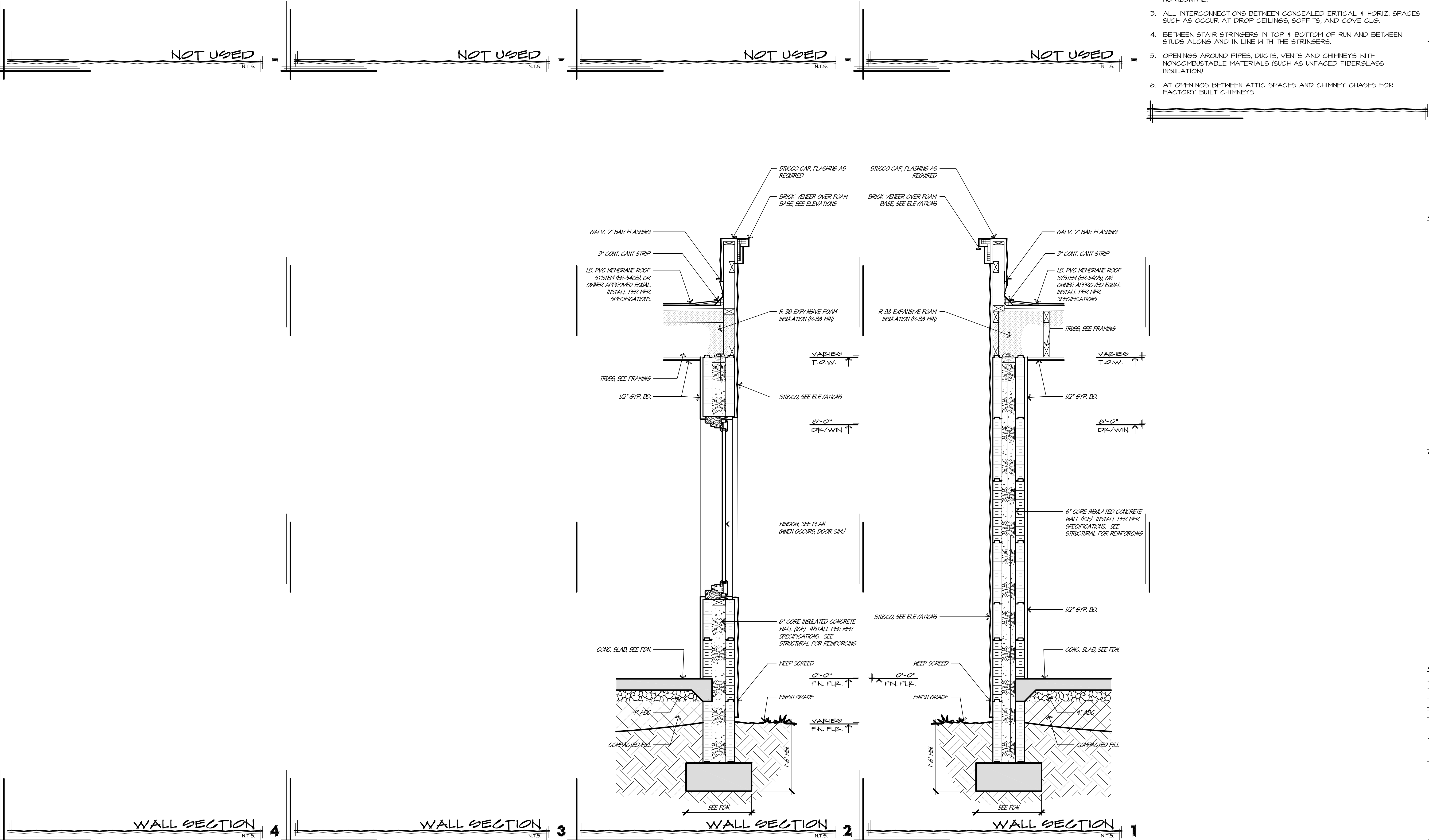
date: 7/29/23

drawn: VF/PK

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GENERAL NOTES

- USE SIMPSON H2.5 @ EA. TRUSS/JOIST AND EVERY OTHER STUD. IF SPAN EXCEEDS 22' AT UNCLOSED AREAS AND GARAGES, USE 1 ANCHORS PER TRUSS/JOIST AND 1 ANCHOR PER STUD. FRAMING ANCHOR OF TYPE THAT ENGAGES BOTH PLATES (FRAMING ANCHOR AT STUD MAY BE OMITTED IF PLYWD OR EQUAL SHEATHING IS USED WITH NAILS TO TOP PLATE, EXCEPT UNCLOSED AREAS AND GARAGE.)
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 - ALL INTERCONNECTIONS BETWEEN CONCEALED ERTICAL & HORIZ. SPACES SUCH AS OCCUR AT DROP CEILINGS, SOFFITS, AND COVE CLG.
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 - OPENINGS AROUND PIPES, DUCTS, VENTS AND CHIMNEYS WITH NONCOMBUSTABLE MATERIALS (SUCH AS UNFACED FIBERGLASS INSULATION)
 - AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY BUILT CHIMNEYS

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DESIGNS, INC.



480.968.2474

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SUITE 123
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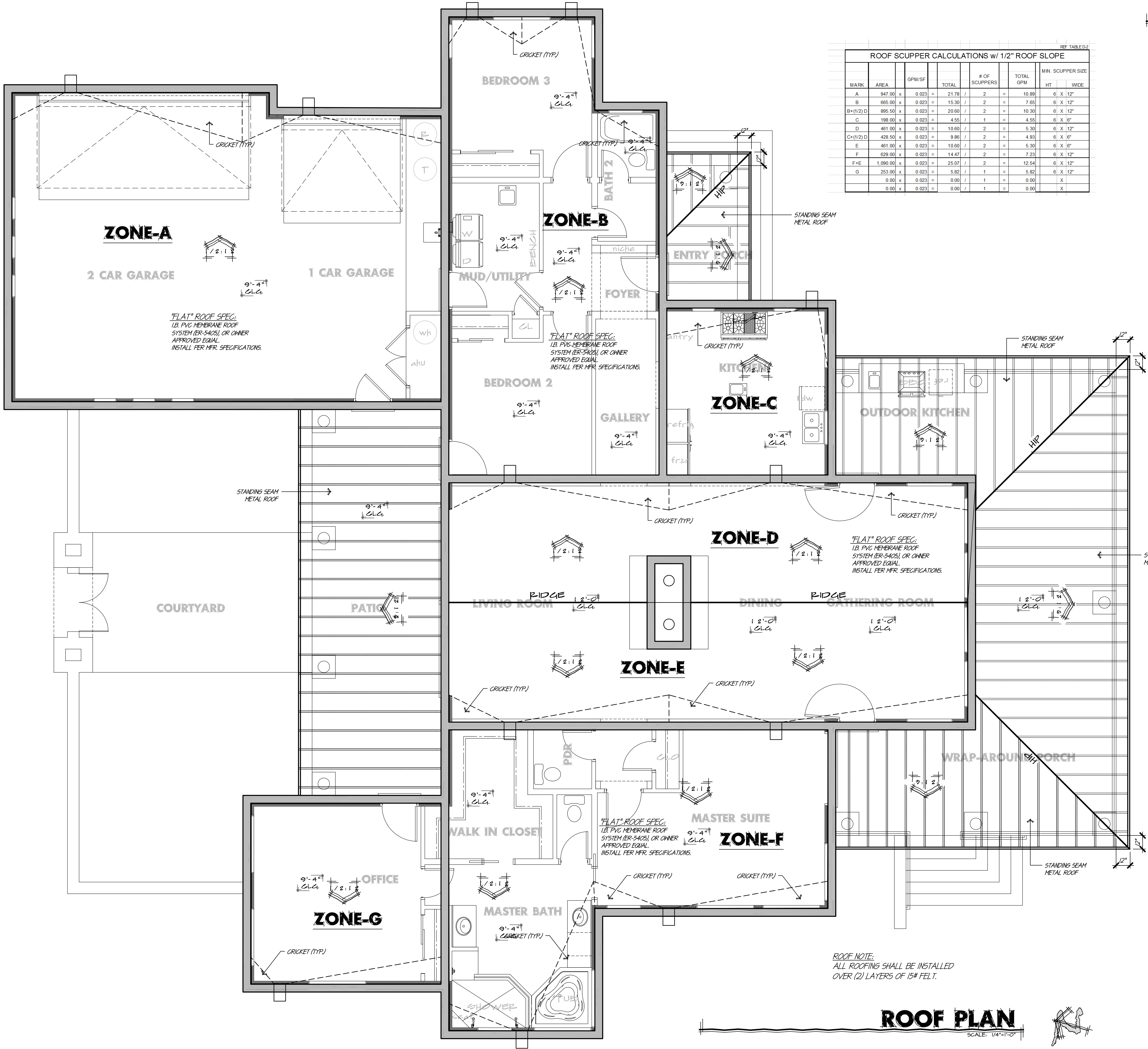
PROJECT ADDRESS
5980 W. BLUE STAR TP.
HOWARD MESA RANCH PHASE 2 UNIT 2
LOT: 700
APN: 500-99-052

PROJECT NAME
A CUSTOM HOME FOR
**LARRY & CHERYL
SCHUG**

BUILDING
SECTIONS

SHEET TITLE	
REV	COMMENT
1	
2	
3	
4	
date: 7/29/23	
drawn: VF/PR	
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GENERAL NOTES

- DASHED LINES DENOTE WALLS BELOW THE ROOF FRAMING.
- 2X4 PARTITIONS ARE TYPICAL, U.N.O.
- PROVIDE ALL BLOCKING AND FIRE STOPS AS REQUIRED.
- SEE GENERAL STRUCTURAL NOTES FOR ROOF SHEATHING.
- ROOF TO BE FLASHED & COUNTERFLASHED AT WALLS, VALLEYS, PENETRATIONS AND ALL OTHER APPROPRIATE AREAS.
- ALL ROOF PENETRATIONS TO BE A MINIMUM OF 1'-0" FROM EDGE OF ROOF CRICKETS ON CANT. STRIPS (TYP.)
- ALL ROOF PENETRATIONS TO BE FIELD VERIFIED BETWEEN TRADES PRIOR TO INSTALLATION TO AVOID CONFLICTS.
- BUILT-UP, ROLLED OR VINYL ROOFING TO BE INSTALLED, FLASHED & SEALED PER MANUFACTURERS INSTRUCTIONS.
- SEE DETAIL SHEETS "AD-X" FOR ADDITIONAL INFORMATION. WHERE ONE DETAIL IS SHOWN FOR A CERTAIN CONDITION, THAT DETAIL SHALL GOVERN @ ALL SIMILAR LOCATIONS. WHERE MULTIPLE DETAILS ARE SHOWN FOR SIMILAR CONDITIONS, CONTRACTOR TO VERIFY MATERIALS SHOWN IN DETAIL TO DETERMINE LOCATIONS. CONTRACTOR TO NOTIFY RKD IN WRITING REGARDING ANY QUESTIONS AND/OR DISCREPANCIES.

NON-VENTED ATTIC NOTE:
CONTRACTOR TO INSULATE ATTIC ALONG TOP CHORD OF TRUSS SYSTEM ABOVE LIVABLE AREAS AND SEAL ALL VOIDS @ UNDERSIDE OF ROOF SHEATHING. ICENYNE (NER 420) EXPANSIVE FOAM OR EQUAL. NO ATTIC VENTILATION REQUIRED PER THE FOLLOWING REQUIREMENTS (R206.4):
1. NO INTERIOR VAPOR RETARDERS ARE INSTALLED ON THE CEILING SIDE ATTIC FLOOR) OF THE UNVENTED ATTIC ASSEMBLY.
2. AN AIR-IMPERMEABLE INSULATION IS APPLIED IN DIRECT CONTACT TO THE UNDERSIDE OF THE STRUCTURAL ROOF DECK (ASTM E 283).

ROBERT KLOB
DESIGNS, INC.



480.968.2474
www.rkdznz.com
411 N. KYRENE RD.
SUITE 123
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PROJECT ADDRESS
5980 W. BLUE STAR TP.
HOWARD MESA RANCH PHASE 2 UNIT 2
LOT: 700
APN: 500-99-052

PROJECT NAME
A CUSTOM HOME FOR
**LARRY & CHERYL
SCHUG**

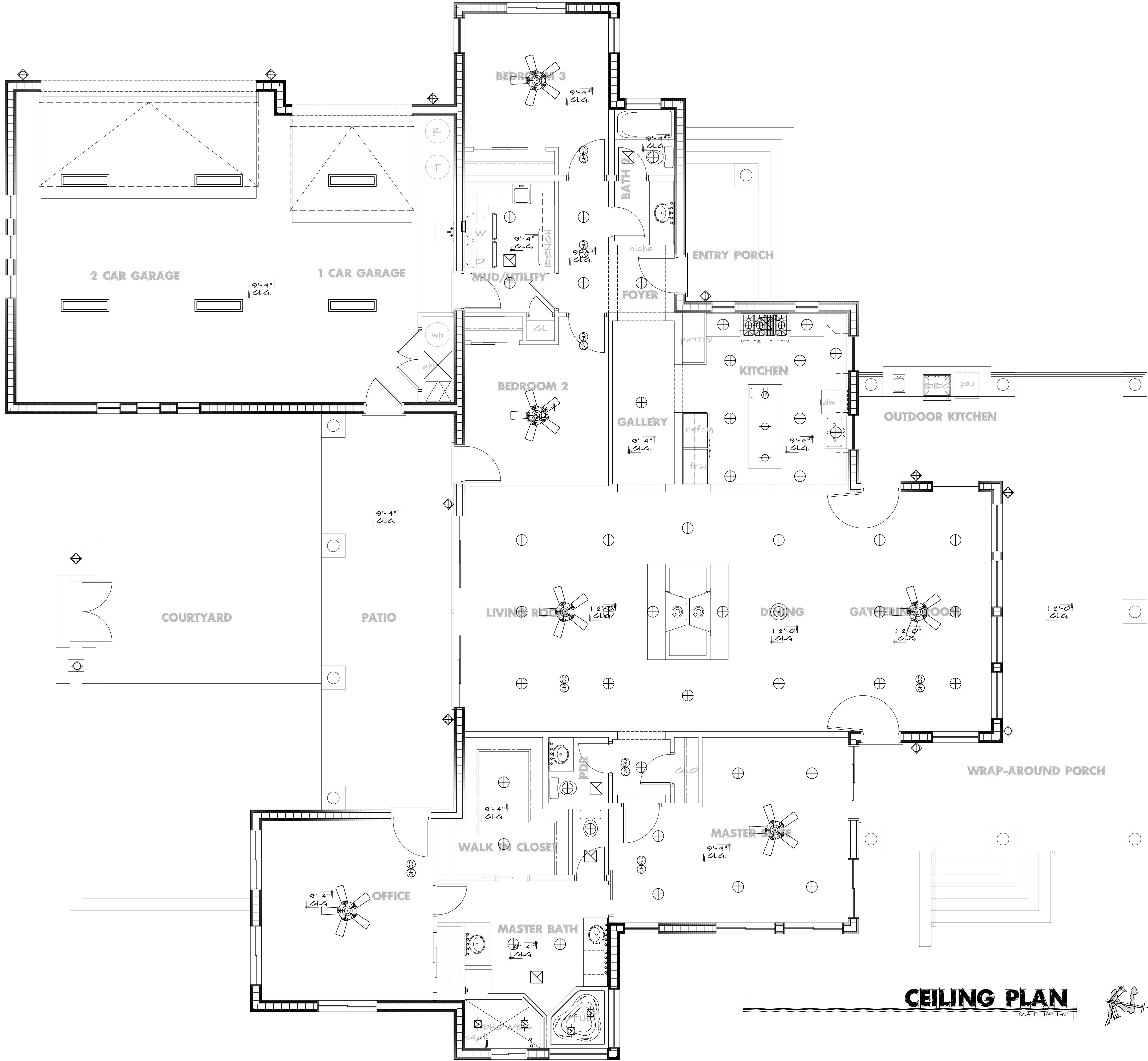
SHEET TITLE
ROOF PLAN

REV	COMMENT
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date: 7/29/15
drawn: VF/PR

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4.0**

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SYMBOL LEGEND

- = CLG. MTD. "GLOBE" LT
- ⊕ = "VAPOR PROOF" LIGHT
- ⊕ = SMALL CAN LIGHT
- ⊕ = STD. CAN LIGHT
- ⊕ = STD. WALL MOUNT LIGHT
- ⊕ = DECORATIVE PENDANT LIGHT
- ⊕ = CHANDELIER
- ⊕ = EXTERIOR COACH LIGHT
- ▭ = 2'x4' FLUORESCENT LIGHT
- ▭ = 1'x4' FLUORESCENT LIGHT
- ⋯ = MULTI-BULB VANITY LIGHT
- ⬤ = STD. SWITCHED OUTLET
- ⊕ = STD. CEILING FAN W/ LIGHT
- ⊕ = OPT. CLG. FAN / STD. LIGHT
- ⊕ = SMOKE DETECTOR
- ⊕ = CARBON MONOXIDE DET.
- ⊕ = CEILING MTD HEAT LAMP
- ⊕ = DUSK TO DAWN PHOTO CELL
- ⊕ = EXHAUST FAN 5 AIR CHANGES PER HOUR
- ⊕ = 22"x30" ATTIC ACCESS

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www.rkdznns.com

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LOT: 700
APN: 500-99-002

PROJECT NAME
A CUSTOM HOME FOR
**LARRY & CHERYL
SCHUG**

SHEET TITLE
**REFLECTED
CEILING PLAN**

REV	COMMENT
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date: 7/29/25
drawn: VF/PR

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ROOFING-VARIES
SEE EXTERIOR ELEVATIONS.
ROOFING FELT OVER
ROOF SHEATHING

NOTE:
-PROVIDE STARTER STRIPS
AS REQUIRED PER ROOF
MANUFACTURER INSTRUCTIONS
-NO FASTENER PENETRATIONS
ALLOWED THRU FLASHING
MATERIAL

FULLY ADHERED
ELASTOMERIC MEMBRANE
SEALANT STRIP

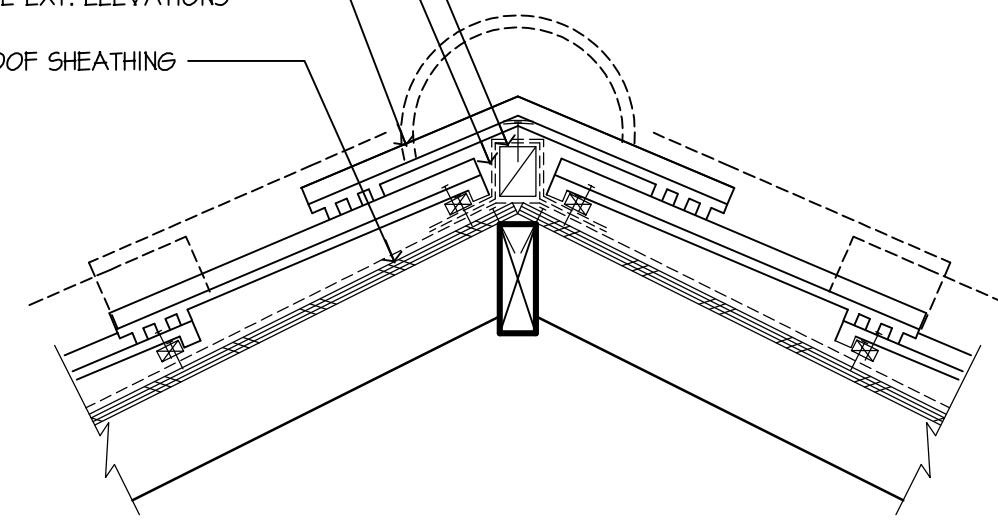
CORROSION RESISTANT
METAL FLASHING W/
1" MINIMUM "V" CRIMP

REQUIRED CLEARANCE
PER ROOF MANUFACTURER
INSTRUCTIONS

VALLEY FLASHING

N.T.S. 17

UNDERLAYMENT
2x NAILER
ROOFING VARIES
SEE EXT. ELEVATIONS
ROOF SHEATHING



RIDGE DETAIL

N.T.S. 13

ONE COAT STUCCO O/
WIRE MESH O/ 1" RIGID
INSULATING BOARD
GRADE D' PAPER
MOISTOP' OR EQUAL
FLASHING
STUCCO O/ FOAM TRIM AS
OCCURS, SEE ELEVATIONS
SEALANT
WINDOW FRAME
WINDOW, SEE SCHEDULE

NOTE:
WINDOW FRAMES ARE TO BE SET OVER A
CONTINUOUS BEAD OF SEALANT.

NOTE: DOOR/WINDOW
FLASHING PAPER REFER TO
VAPOR BARRIER DETAIL

WINDOW HEAD

N.T.S. 9

1-COAT STUCCO SYSTEM O/
FOAM BOARD (ON AIS
BOARD @ ATTIC AREAS)
CORROSION RESISTANT 12"
BAR METAL FLASHING
OVER PAN FLASHING
1x CURB
ROOFING OVER PAN
FLASHING OVER ROOFING
FELT OVER ROOF
SHEATHING
PAN FLASHING
UNDERLAYMENT
ELASTOMERIC MEMBRANE
AT TERMINATION
1" U.N.O.
BY ROOF MANUFACTURER
4" MIN. LAP
4" MIN. LAP
6"

NOTE:
1. THE 1" RETURN MUST NOT BE DEFORMED
2. NO NAILS ARE TO PENETRATE THE PAN FLASHING

FLASHING DETAIL

N.T.S. 5

ROOFING SEE EXTERIOR
ELEVATIONS.
2x BLOCKING - SEE VENT
CALCS FOR LOCATION OF
EAVE VENTS
UNDERLAYMENT
ROOF SHEATHING
EAVE CLOSURE
G.I. DRIP
1x TRIMMER
2x6 FASCIA FOR
PERPENDICULAR CUTS
LINE OF DECORATIVE
FOAM & STUCCO FASCIA
LINE OF DECORATIVE RAFTER
TAIL END - INSTALL PER
MANIF. INSTRUCTIONS
1x STUCCO STOP
OVERHANG MAY VARY
SEE ROOF PLAN
INSULATION BATTLES
TO PREVENT
INSULATION FROM
BLOCKING EAVE
VENTING - TYP.
PRE-FAB WOOD
TRUSSES
VARIES
12
SLOPE
1 COAT STUCCO SYSTEM
PLYWOOD SHEATHING MAY
OCCUR

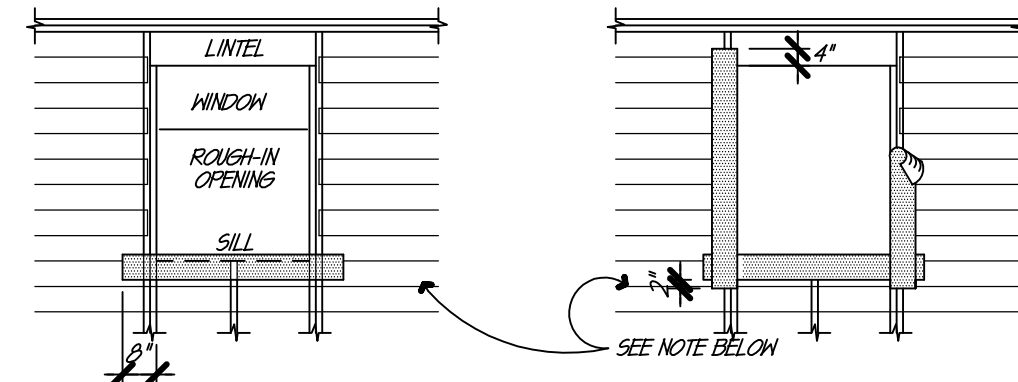
TYPICAL EAVE

N.T.S. 1

WINDOW DOOR ASSEMBLIES TO BE FASTENED PER MANUFACTURER
RECOMMENDATIONS IN ORDER TO MEET THE MINIMUM MINELoads
PRESCRIBED IN SEC. 606 FBC REFER TO APPROVED
MANUFACTURER'S DATA SHEETS OR THE "MASTER ON FILE"
DOCUMENT.

WINDOW FLASHING

EXTERIOR OPENINGS EXPOSED TO THE WEATHER
SHALL BE FLASHED IN SUCH A MANNER AS TO MAKE
THEM WATERPROOF.

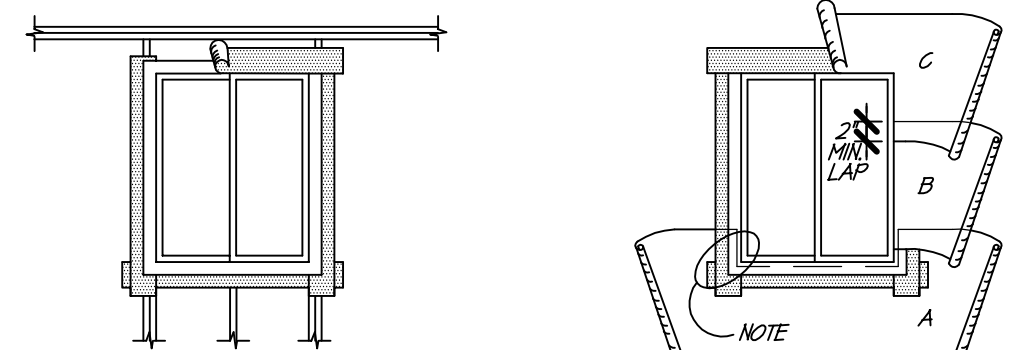


1. ATTACH SILL STRIP WITH TOP EDGE LEVEL WITH
ROUGH SILL - EXTEND BEYOND EDGE OF ROUGH
OPENING AT LEAST 8". SECURE ALL MOISTOP'
(OR EQUAL) WITH GALVANIZED NAILS OR
POWER-DRIVEN STAPLES.

2. ATTACH JAMB STRIP WITH SIDE EDGE EVEN WITH
ROUGH JAMB FRAMING. START STRIP 1" BELOW
LOWER EDGE OF SILL STRIP AND EXTEND 4"
ABOVE LOWER EDGE OF LINTEL. OR
POWER-DRIVEN STAPLES.

NOTE: LINE-WIRE, WHEN USED AS BACKING TO SUPPORT BUILDING PAPER BENEATH WIRE LATH (NETTING)
FOR PORTLAND CEMENT PLASTER (STUCCO), SHALL BE INSTALLED AS FOLLOWS:

1. WIRE GAUGE, SPACING AND ATTACHMENT SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF
BUILDING NEWS ITEMS 25-1.
2. PERIPHERAL FLASHING, AT ALL EDGES OF WALL OPENINGS, MUST COVER THE WIRE BACKING.
3. NO ATTACHMENT DEVICES NOR THE WIRE BACKING SHALL COVER OR PENETRATE THE FLASHING
MATERIAL.



3. INSTALL WINDOW JAMB NAILING FLANGES OVER
A CONTINUOUS BEAD OF SEALANT ON THE MOISTOP'
(OR EQUAL). INSTALL THE WINDOW HEAD MOISTOP'
(OR EQUAL) ON A CONTINUOUS BEAD OF SEALANT
APPLIED TO THE WINDOW HEAD NAILING FLANGE.

4. COMMENCING AT THE BOTTOM (SOLE PLATE) OF
THE WALL, LAY BUILDING PAPER UNDER SILL STRIP.
NOTE: CUT ANY EXCESS BUILDING PAPER THAT
MAY EXTEND ABOVE THE SILL FLANGE LINE ON
EACH SIDE OF (SHOWN AS SHORT DASHED LINES).
DO NOT SLICE BUILDING PAPER HORIZONTALLY
SO THAT THE PAPER WILL LAP OVER THE JAMB
STRIPS. INSTALL SUCCESSIVE LINES OF BUILDING
PAPER (B.C.D. ETC.) OVER JAMB AND HEAD
FLANGES, LAPPING EACH COURSE.

VAPOR BARRIER @ OPENINGS

N.T.S. 19

10 1/4 x 5 1/4 MIN. 26ga REAR
SCUPPER FLANGE
BUILT-UP ROOFING SYSTEM
COORDINATE SCUPPER &
FLASHING TO ROOF SYSTEM
RECOMMENDATIONS
STUCCO
EXTEND FOR ROPOUTS AS
SPECIFIED ON ELEVATIONS
STUCCO CASING BEAD, TYP
@ PERIMETER
1/4" SEALANT JOINT W/
BACKER ROD
26ga SHEET METAL
SCUPPER, SOLDER ALL
JOINTS
4" MIN.
SEE PLAN
FOR WIDTH
3-3/4" (MIN.)
3" MIN.
1/2" AIR
5/8"
2" MIN.
GALV. METAL LATH PER
ROOFING SYSTEM
SPECIFICATIONS
RING SHANK ROOFING
NAILS @ 4" O.C.
PLYWOOD, SEE FRAMING
FOR SIZE
WALL FRAMING
NOTE: SEE ROOF PLAN FOR SCUPPER
WIDTH

SCUPPER DETAIL

N.T.S. 14

BUTYLENE WATERPROOF
MEMBRANE O/ WOOD
EXTEND 8" DOWN FACE
OF WALL, EDGE NAIL (TYP)
DEBL. LAYER OF INSL. BD.
AT TOP OF PARAPET.
SHAPE TO DRAIN
2-2x6 CONT. WITH 2-1x6d
AT EACH STUD
CORNER-AID
EDGE NAILING
PERFORATED J-METAL
GALV. 2" BAR FLASHING
ROOFING BASE SHEET
BASE FLASHING
3" CONT. CANT STRIP
ROOFING (PER SPEC) OVER
3/4" T&G ROOF SHEATHING.
SLOPE TO DRAIN 1/2" PER
FOOT OR AS NOTED.
2x BLOCKING
T.O. PARAPET
VARIES
2 LAYERS OF TYPE D' BLDG.
PAPER OVER VERTICAL
INSL. BD. & UNDER
HORIZONTAL INSL. BD. CAP
TYPICAL EXTERIOR FINISH
SYSTEM PER
SPECIFICATIONS
WOOD SHEATHINGS, SPACE
ALL EDGES 1/4", TYPICAL
2 LAYERS OF TYPE D'
BUILDING PAPER OVER
SHEATHING, TYP. FULL
LENGTH AND WIDTH OF
EXT. WALL AND
PARAPETS, TYPICAL

TYPICAL PARAPET

N.T.S. 15

ONE COAT STUCCO O/
WIRE MESH O/ 1" RIGID
INSULATING BOARD
GRADE D' PAPER
MOISTOP' OR EQUAL
FLASHING
STUCCO O/ FOAM TRIM AS
OCCURS, SEE ELEVATIONS
SEALANT
WINDOW FRAME
WINDOW, SEE SCHEDULE
2x STUDS, SPACING PER
STRUCT. DNES.
BATT INSULATION AS OCCURS
GYP. BD.
KING STUD
TRIMMER

NOTE:
WINDOW FRAMES ARE TO BE SET OVER A
CONTINUOUS BEAD OF SEALANT.

NOTE: DOOR/WINDOW
FLASHING PAPER REFER TO
VAPOR BARRIER DETAIL

WINDOW JAMB

N.T.S. 10

1-COAT STUCCO SYSTEM O/
FOAM BOARD (ON AIS
BOARD @ ATTIC AREAS)
CORROSION RESISTANT 12"
BAR METAL FLASHING
CORROSION RESISTANT
METAL BASE FLASHING
ROOFING OVER ROOFING
FELT OVER ROOF
SHEATHING
MORTAR
UNDERLAYMENT
4" MIN.
4" MIN. LAP
4" MIN. LAP

FLASHING DETAIL

N.T.S. 6

CONCRETE FLAT ROOF TILE
INSTALL PER MFR'S SPECS.
B.N. OF PLYND SHEATHING
TO BLOCKING
TRUSS OR, 2 RAFTER SPACES
ROOF SHEATHING PER
SPECIFICATION
UNDERLAYMENT PER SPEC.
ONE COAT STUCCO OVER
WIRE MESH OVER 1" RIGID
INSULATING BOARD
GRADE D' PAPER
TRUSSES /RAFTERS, PER
STRUCT. DNES. (NOTCH AT
LOOKOUTS)
INTERIOR FINISH
NOTE: PROVIDE
NAILING AND WIRE
CLIPS PER MFRS.
INSTALLATION
PROCEDURES

RAKE W/ FOAM FASCIA

N.T.S. 2

ONE COAT STUCCO OVER
WIRE MESH OVER 1" RIGID
INSULATING BOARD
GRADE D' PAPER
MOISTOP' OR EQUAL
FLASHING
2" RADIUS
SLOPE STUCCO TO DRAIN
3/4" J-MOLD
DOOR FRAME
2x STUDS, SPACING PER
STRUCT. DNES.
BATT INSULATION AS
OCCURS
GYP. BD.
HEADER, SEE STRUCTURAL
SHIM SPACE
WEATHERSTRIPPING
DOOR (REFER TO FLOOR
PLAN)
NOTE: DOOR/WINDOW
FLASHING PAPER REFER TO
VAPOR BARRIER DETAIL

EXTERIOR DOOR HEAD

N.T.S. 7

FLASHING OVER PAN
FLASHING
PAN FLASHING TURNED UP
WALL
ANGLE FLASHING AWAY
FROM WALL
1 LAYER ELASTOMERIC
MEMBRANE OVER BUILDING
PAPER AT AT WALL
CONTINUOUS BEHIND FIRST
RAFTER
G.I. DRIP CAP
FASCIA, SEE ELEVATIONS
1'-0"
1'-0"
1'-0"

USE OF THE ARCHITECTURAL DETAILS

THE DETAILS SHOWN ARE INTENDED TO FURTHER ILLUSTRATE THE VISUAL
DESIGN CONCEPT AND THE MINIMUM RECOMMENDED WEATHER PROTECTION FOR
THIS PROJECT.

THE SUBCONTRACTOR SHALL INCORPORATE THE REQUIREMENTS OF THE
BUILDING CODE, STRUCTURAL CONSIDERATIONS, TRADE ASSOCIATION MANUALS
AND PUBLICATIONS, AND PRODUCT MANUFACTURERS WRITTEN INSTRUCTIONS
FOR THE COMPLETE CONSTRUCTION OF THE DETAILS.

ALL POSSIBLE FIELD CONDITIONS WHICH MAY BE ENCOUNTERED ARE NOT
NECESSARILY DESCRIBED, FIELD CONDITIONS ENCOUNTERED WHICH REQUIRE
CLARIFICATION SHALL BE BROUGHT TO THE ATTENTION OF ROBERT KLOB
DESIGNS, INC. IN WRITING PRIOR TO CONSTRUCTION.

DOOR
METAL THRESHOLD
EXPANSION JOINT
CONCRETE HOUSE SLAB
4" MIN.
3 1/2" MIN.
SLOPE
2" MIN.
2" MAX.

THRESHOLD

N.T.S. 20

CAP FLASHING (CLIP TO
PREVENT WIND UPLIFT)
ASPHALT PRIMER ON
NONPAVABLE SURFACES
WALL MATERIAL VARIES
ALTERNATE TERMINATION OF
ROOF MEMBRANE. LEAVE DRY
TO PROVIDE SLIP SHEET
BEHIND BASE FLASHING
4" OPTIONAL STRIPPING OF
BASE FLASHING OVER JOINTS
BUILT-UP ROOF (NUMBER
OF FLIES VARIES)
COMPOSITION BASE FLASHING
(NUMBER OF FLIES VARIES)
WOOD NAILER
FIBER OR WOOD CANT
STRIP
6" MIN.
4" MIN.
8" TO 12"
6" MIN.

FLASHING @ CANT STRIP

N.T.S. 16

1-COAT STUCCO SYSTEM
BLDG PAPER
2x STUDS
CAULK
PRESSURE TREATED SILL
PLATE
CORROSION RESISTANT 1"
SCREED W/ NEEPHOLES
BRUSH COAT OF STUCCO
FINISH BELOW SCREED
FINISH GRADE
SL
6" MIN.
4" MIN.
2" MIN.
2" MIN.
ABOVE GRADE
ABOVE PAVEMENT

STUCCO SCREED

N.T.S. 12

ONE COAT STUCCO OVER
WIRE MESH OVER 1" RIGID
INSULATING BOARD
GRADE D' PAPER
MOISTOP' OR EQUAL
FLASHING
KING STUD
TRIMMER
2" RADIUS
SLOPE STUCCO TO DRAIN
3/4" J-MOLD
DOOR FRAME
2x STUDS, SPACING PER
STRUCT. DNES.
BATT INSULATION AS
OCCURS
GYP. BD.
HEADER, SEE STRUCTURAL
SHIM SPACE
WEATHERSTRIPPING
DOOR (REFER TO FLOOR
PLAN)
NOTE: DOOR/WINDOW
FLASHING PAPER REFER TO
VAPOR BARRIER DETAIL

EXTERIOR DOOR JAMB

N.T.S. 8

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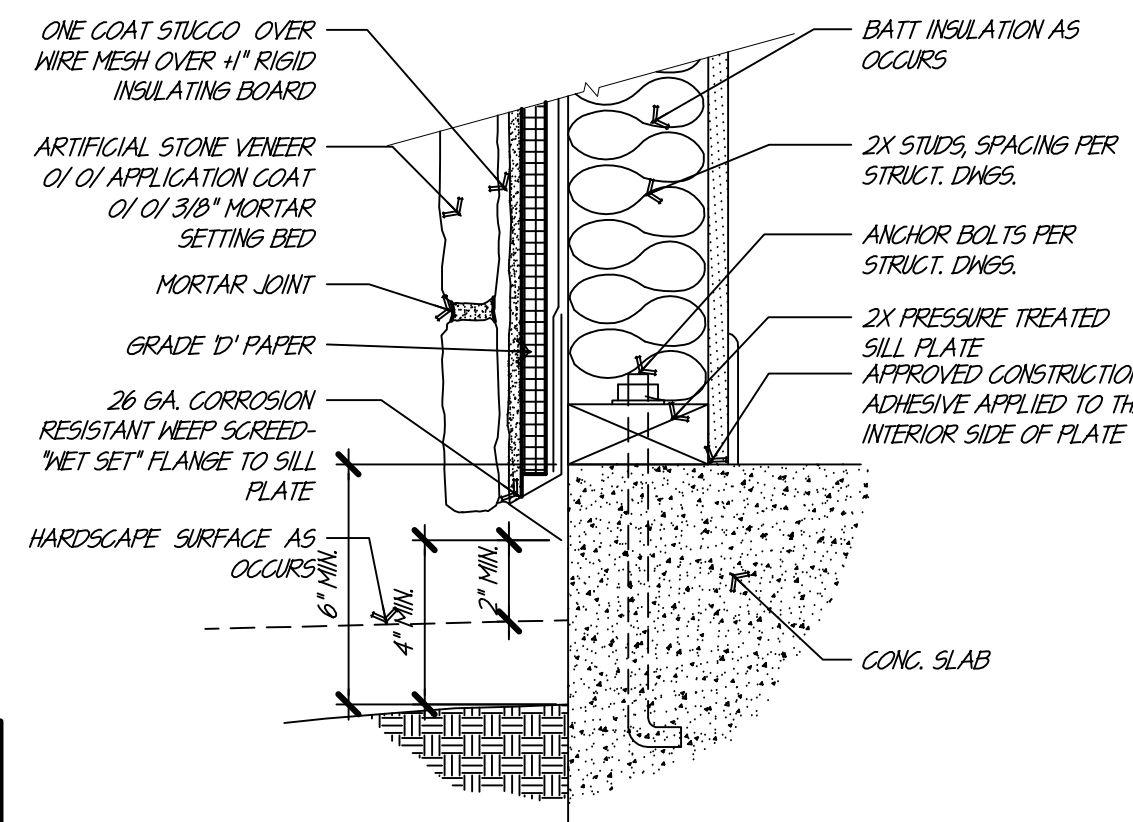
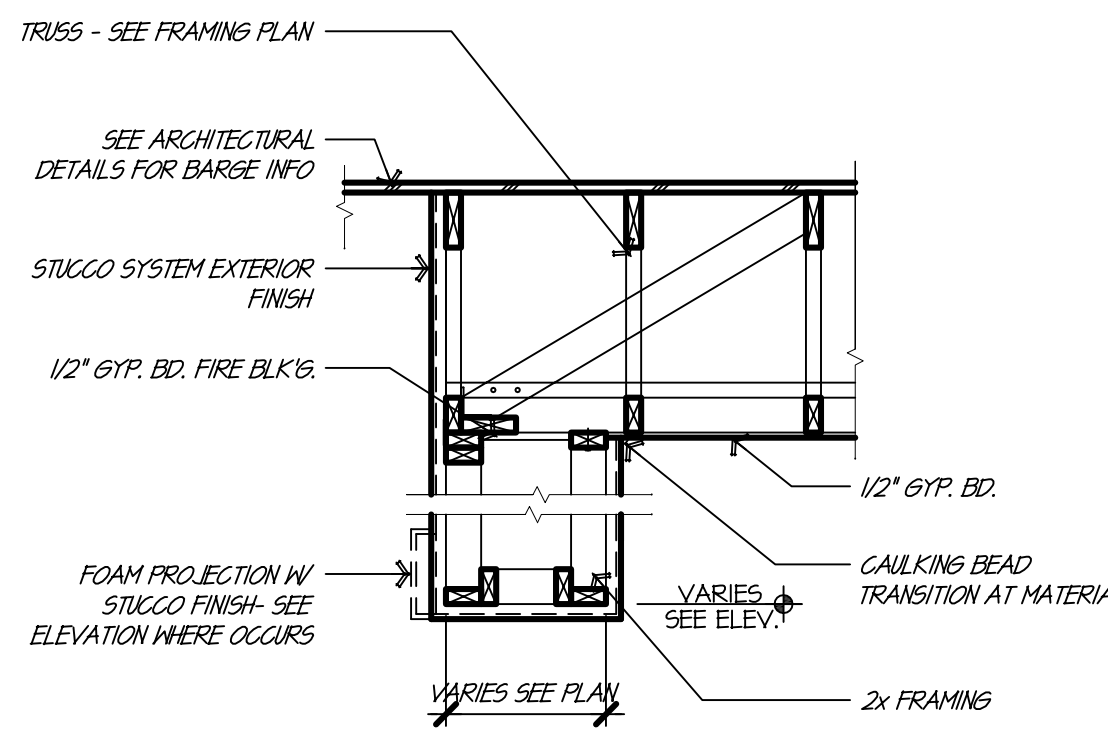
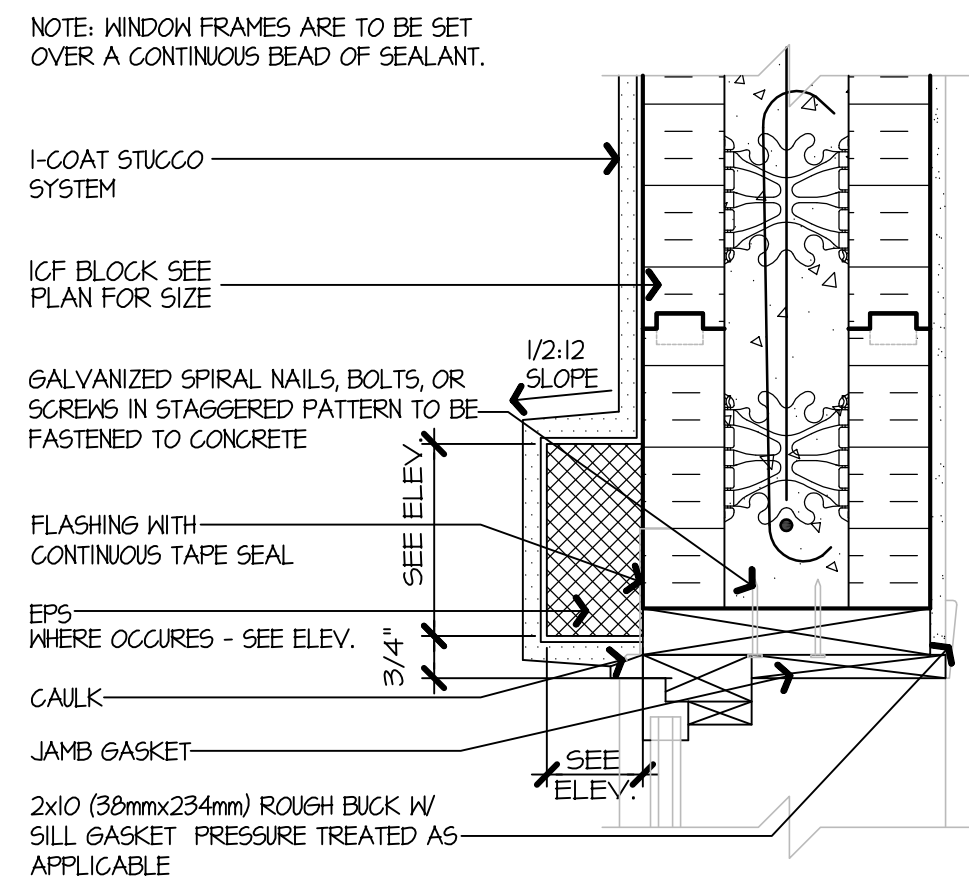
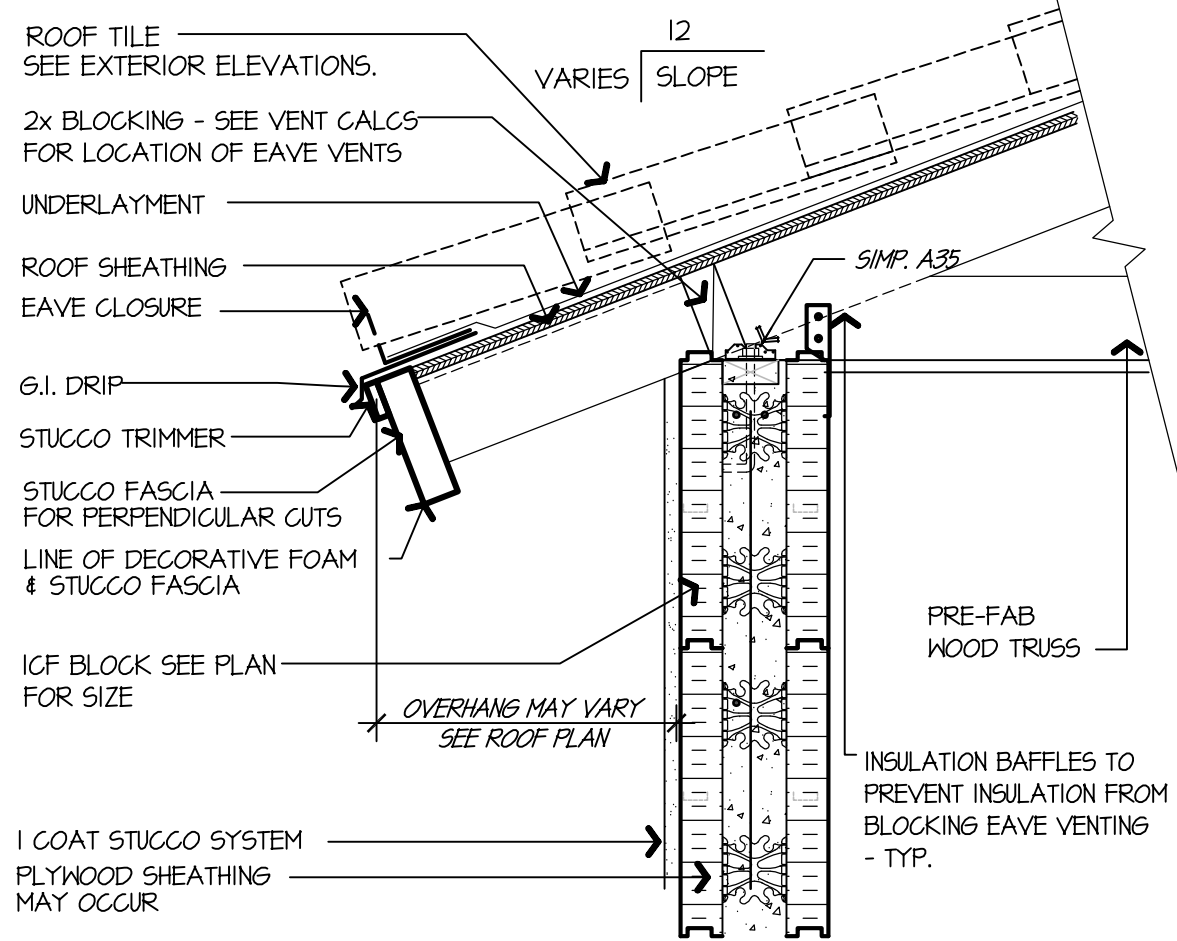
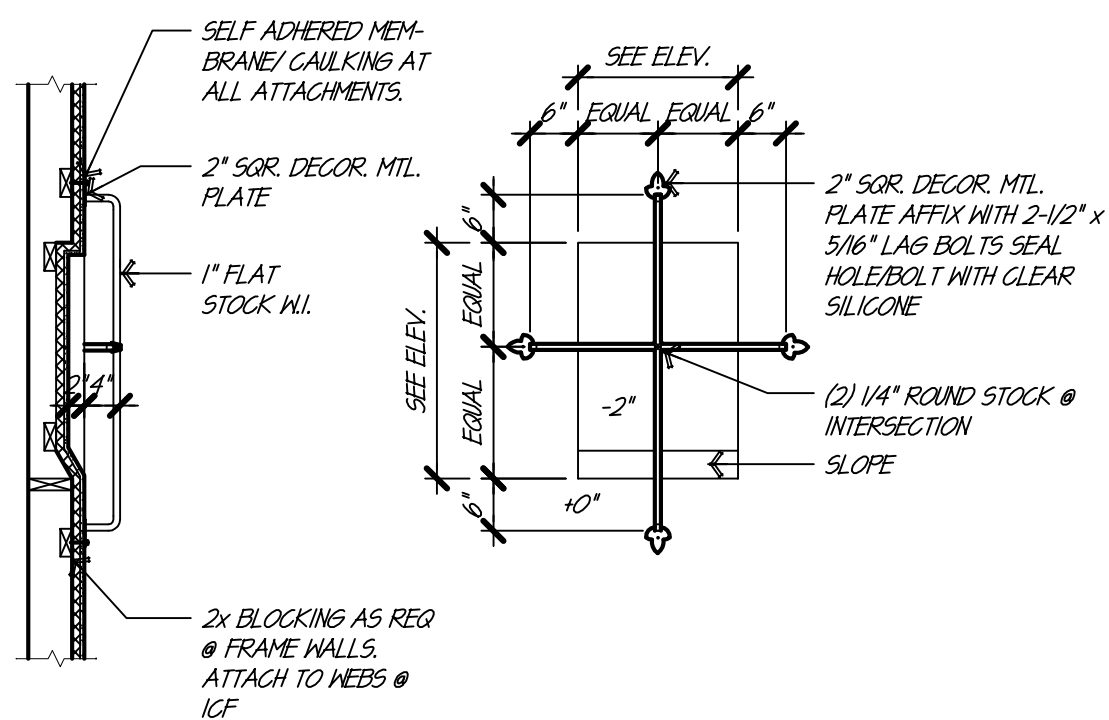
DETAILS

SHEET TITLE

REV COMMENT
DATE: 7/29/15
DRAWN: VFP/PR

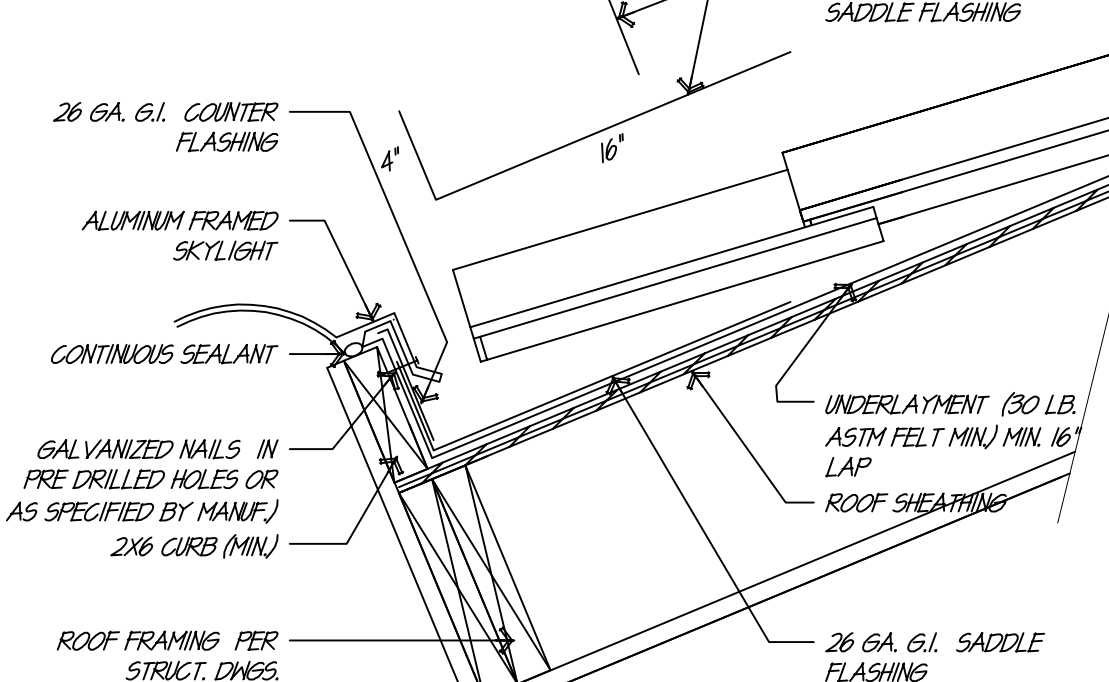
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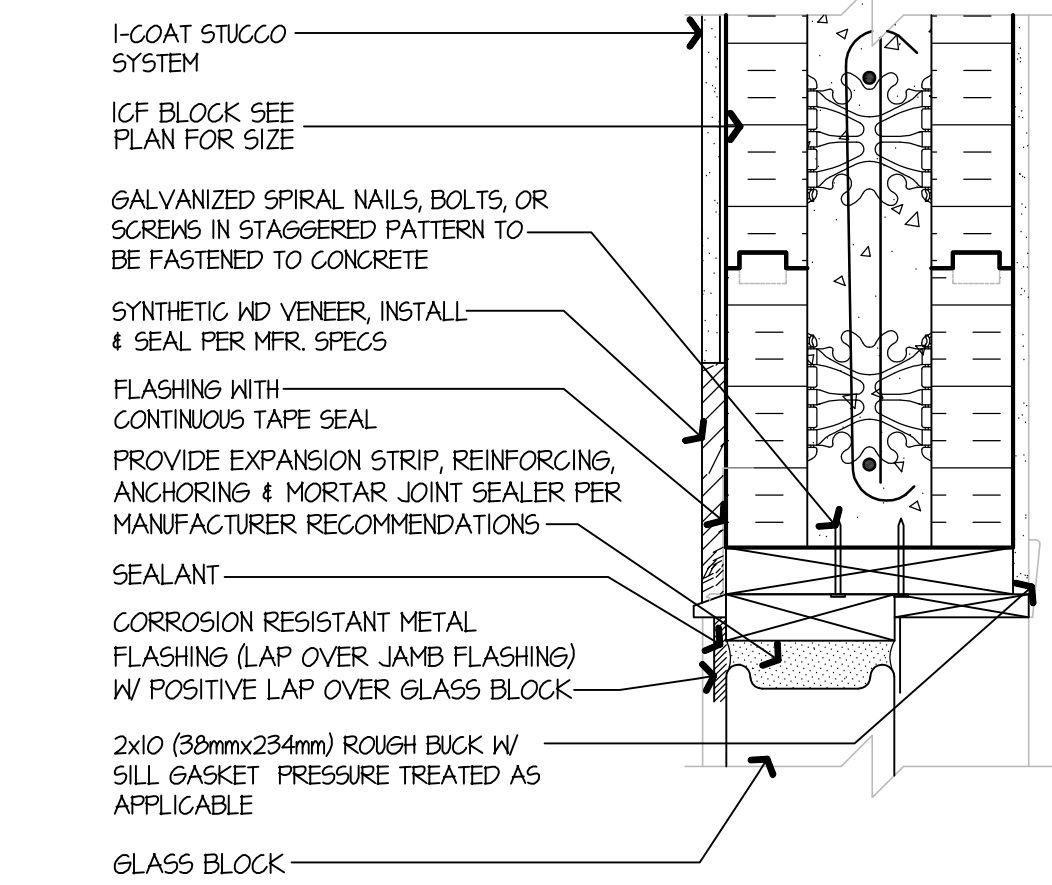


WROUGHT IRON DETAIL

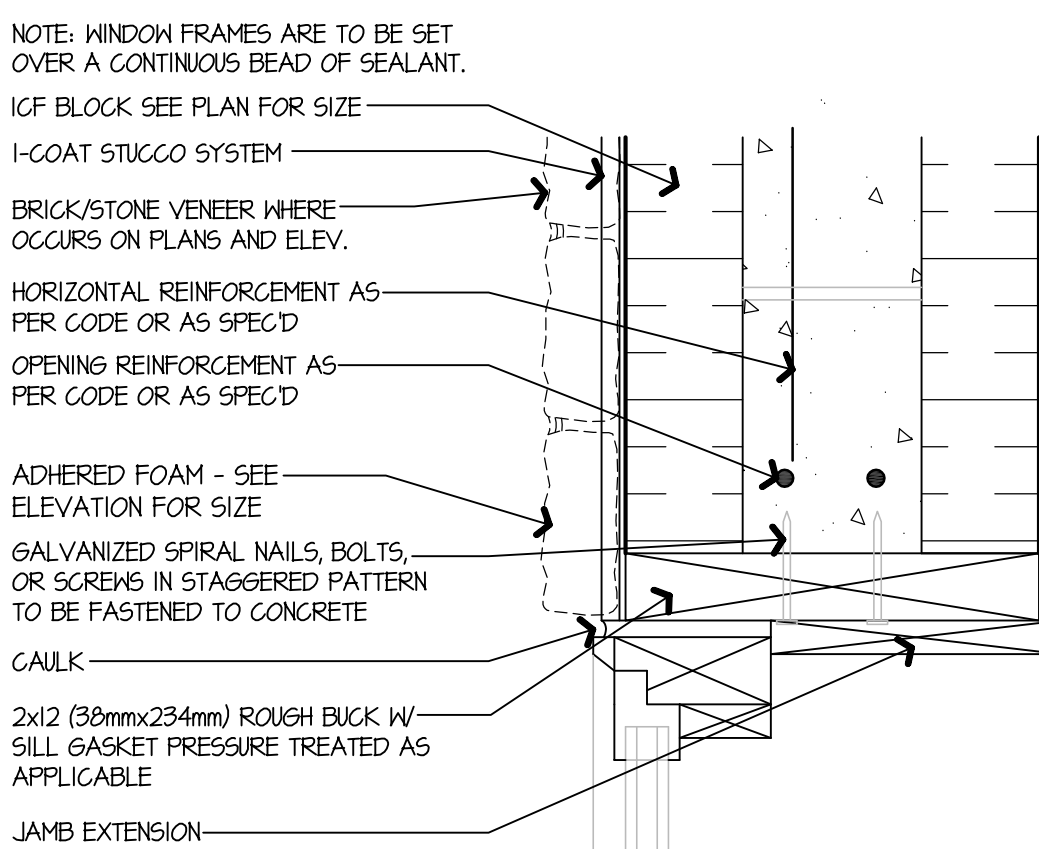
NOTES:	PAINT ALL EXPOSED FLASHING WITH RUST PROOF METAL PRIMER
REMOVE NAILING, BATTING, AND WIND CLIPS PER MFRS. INSTALLATION PROCEDURES	INSTALL CONDENSATION GUTTER WHERE REQUIRED PER MANUFACTURER'S SPECIFICATIONS
PROVIDE POSITIVE DRAINAGE TO BOTH ENDS AT TOP CONDITION	VERIFY METHOD OF FLASHING AND/OR WATERPROOFING WITH S/LIGHT MANUFACTURER
APPLY ADDITIONAL MASTIC TO FLASHING AT ALL TOP CORNERS	1/2" 5" PROFILE: 26 GA. G.I.



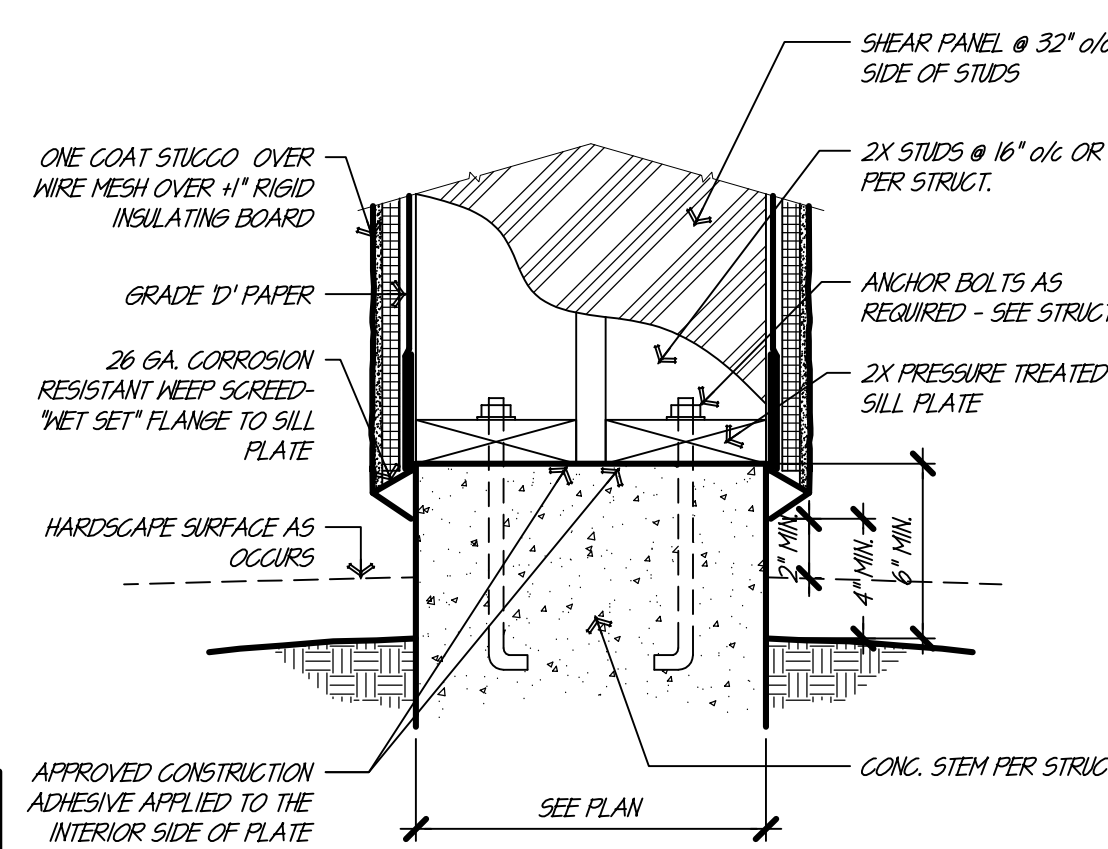
SKYLIGHT @ S-TILE (TOP)



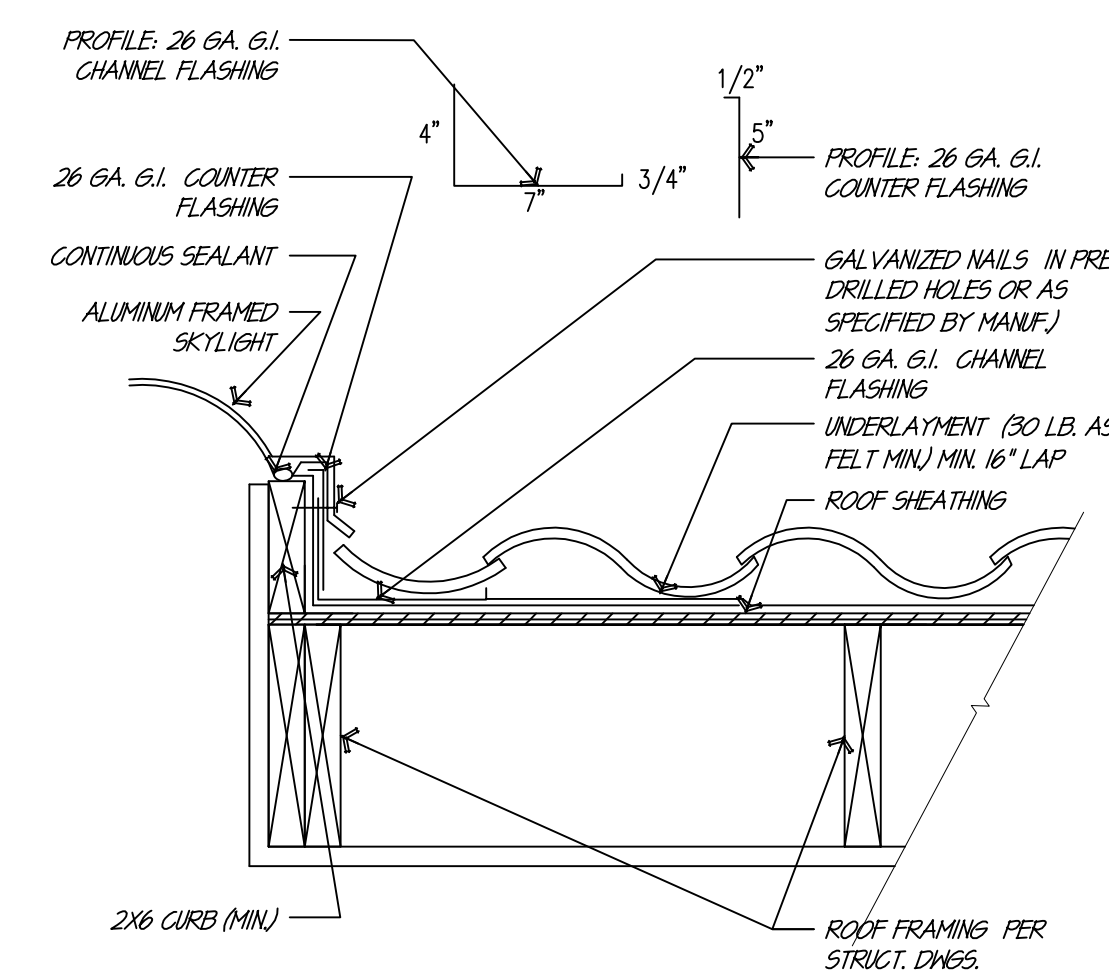
GLASS BLOCK HEAD @ 10F



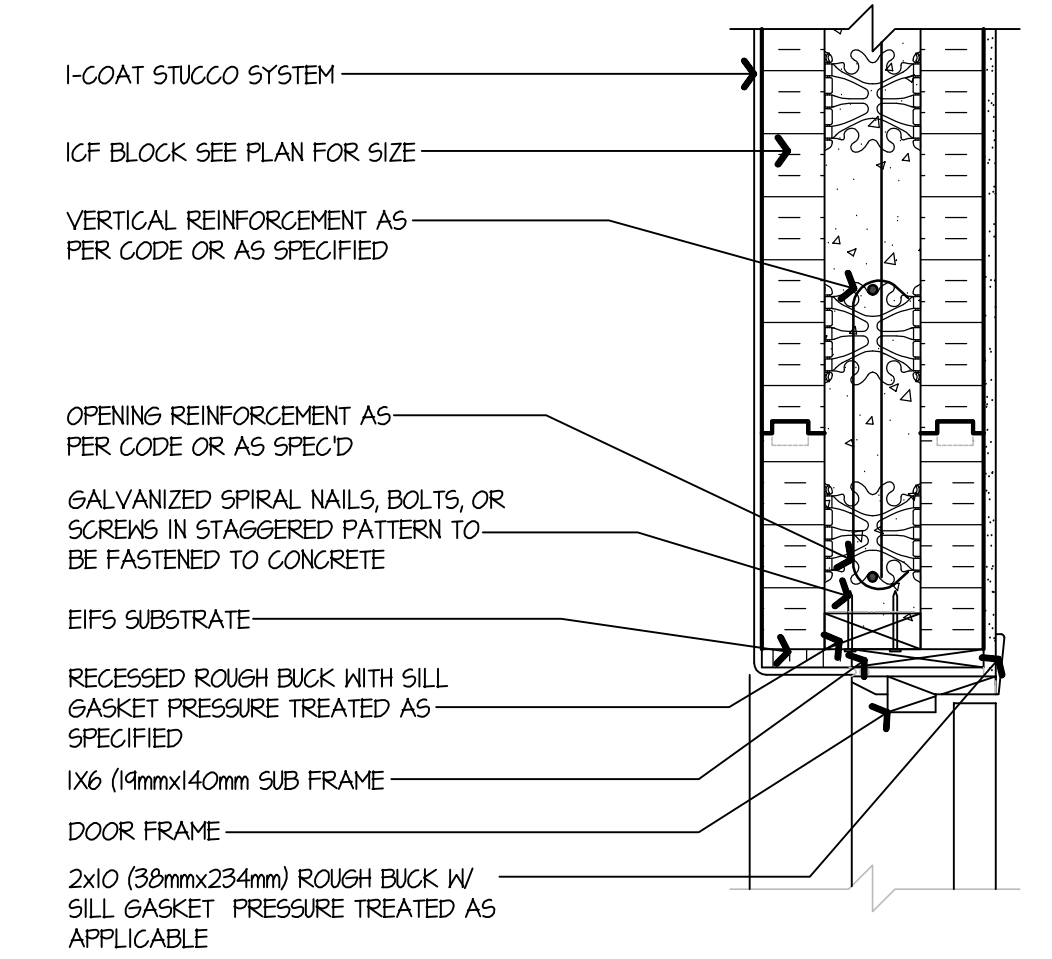
16F WINDOW JAMBS



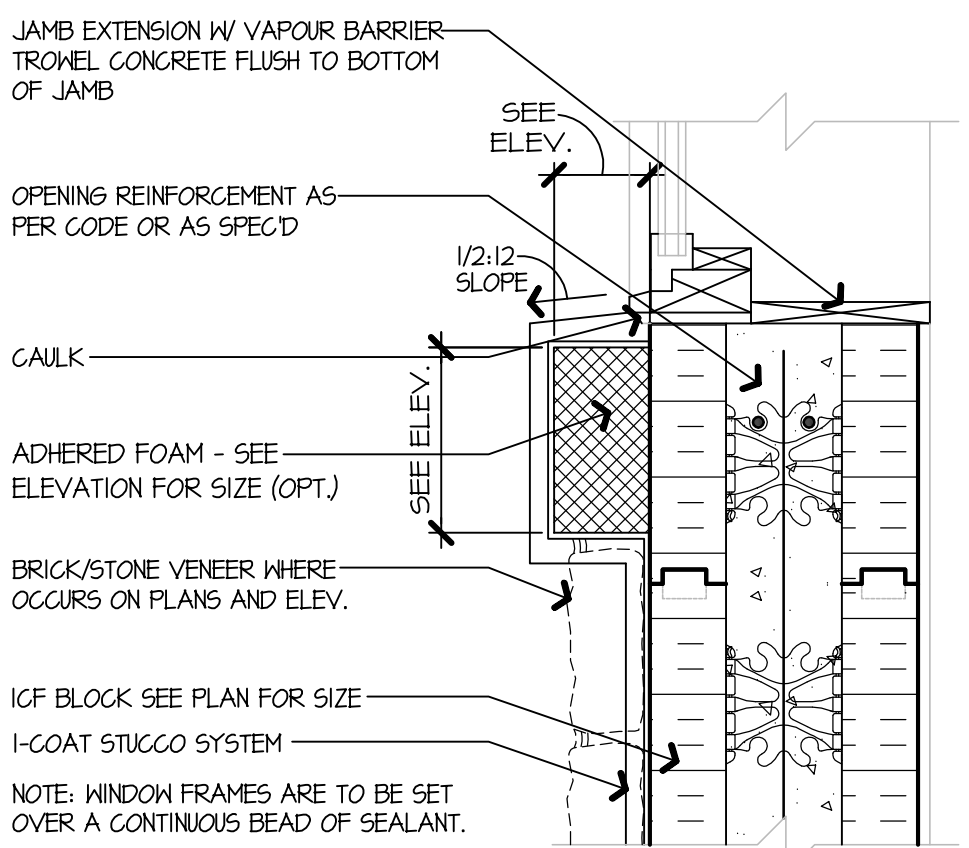
COLUMN BASE



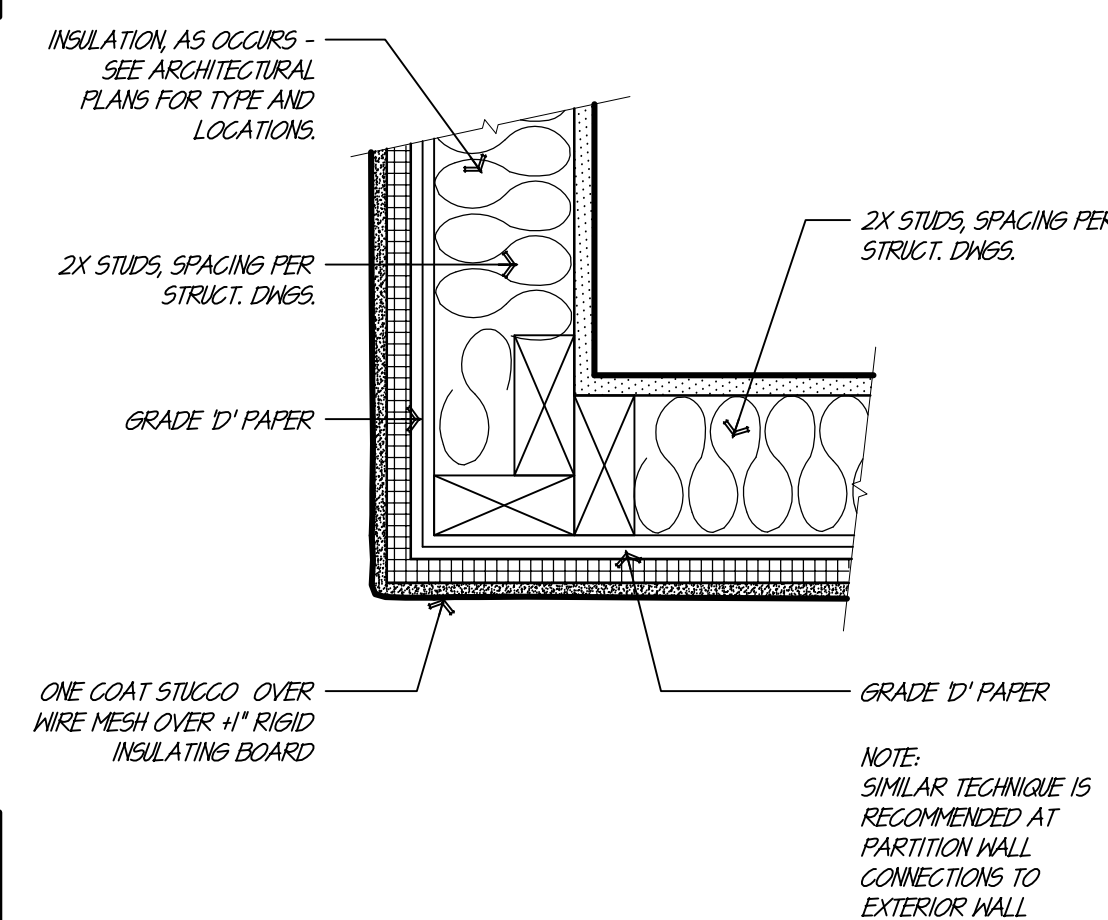
SKYLIGHT @ S-TILE (SIDE)



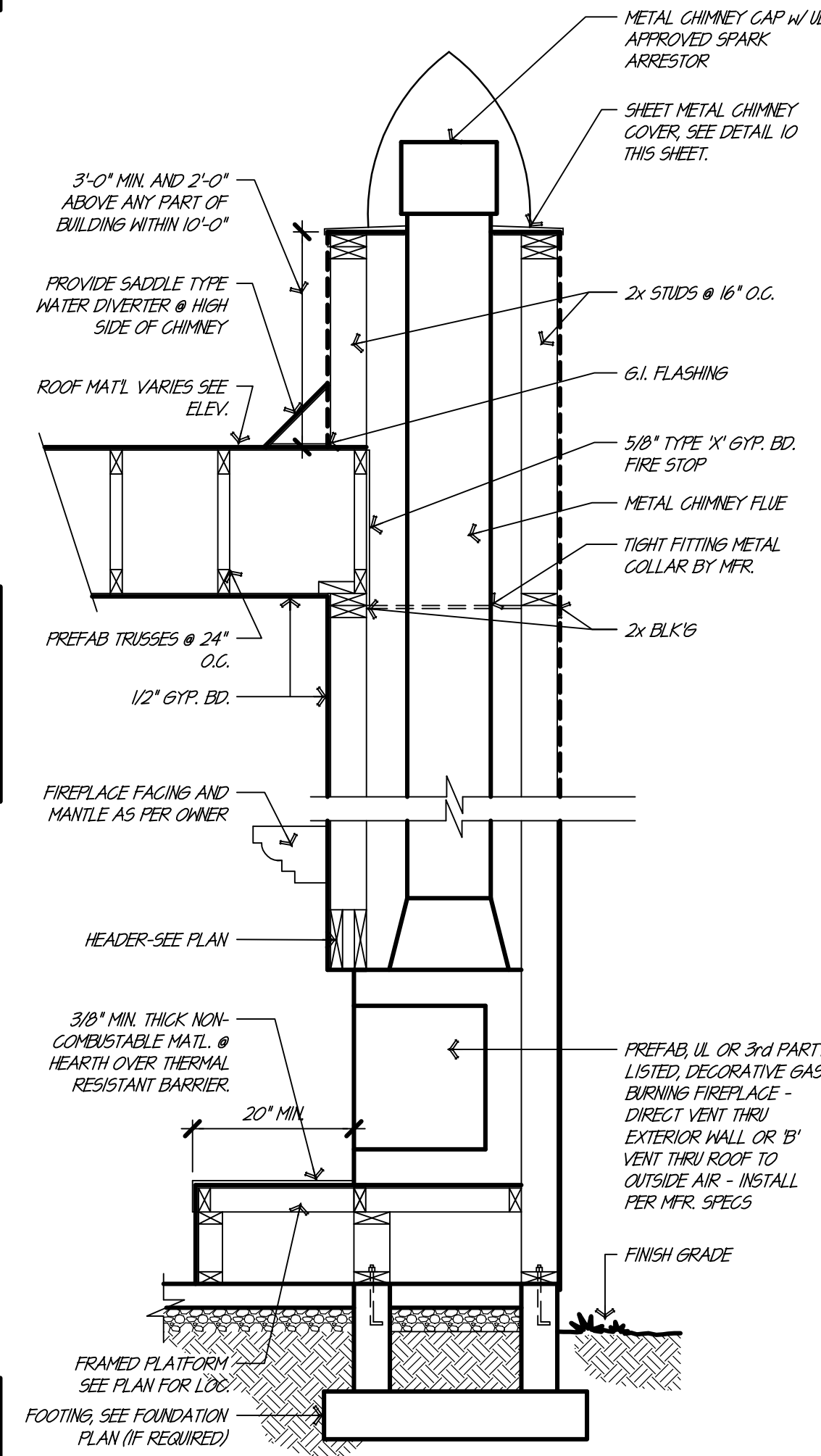
16F DOOR HEAD



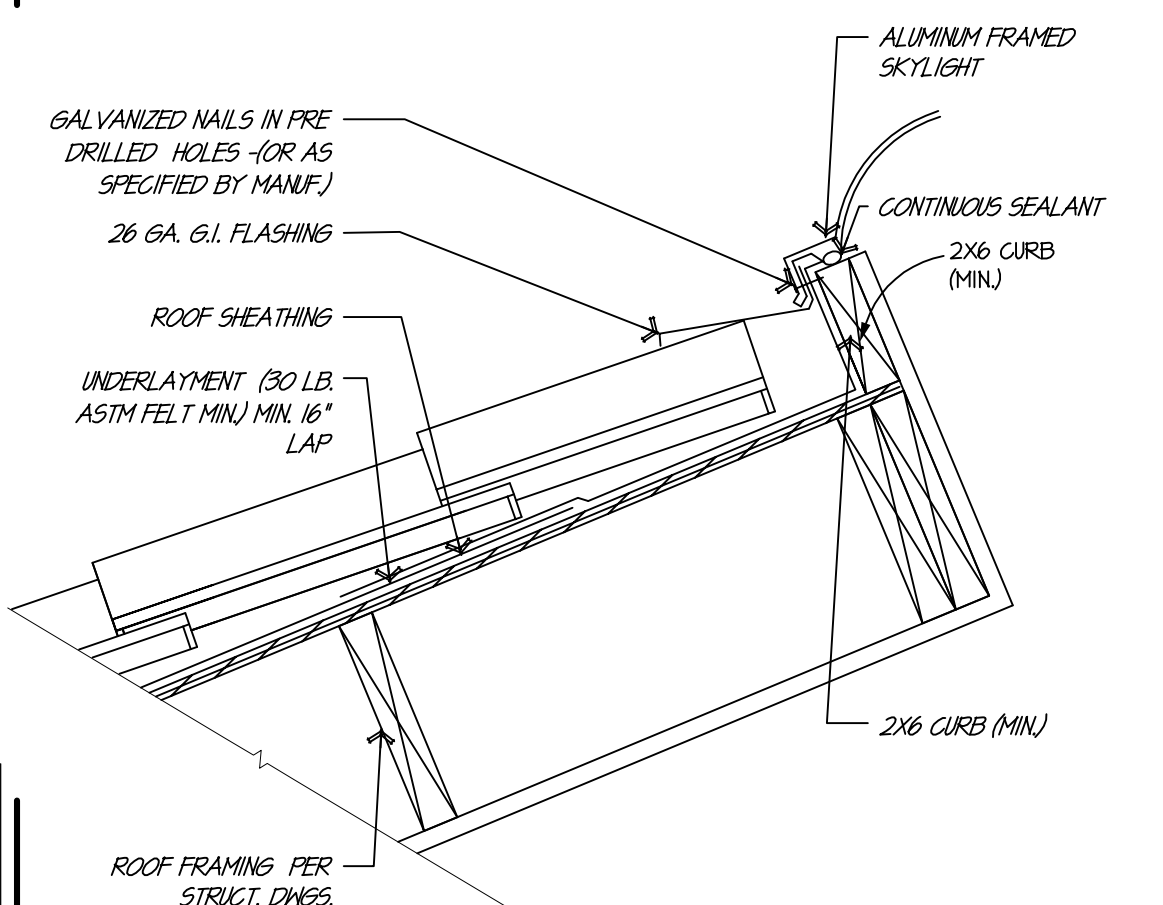
ICF WINDOW SILL



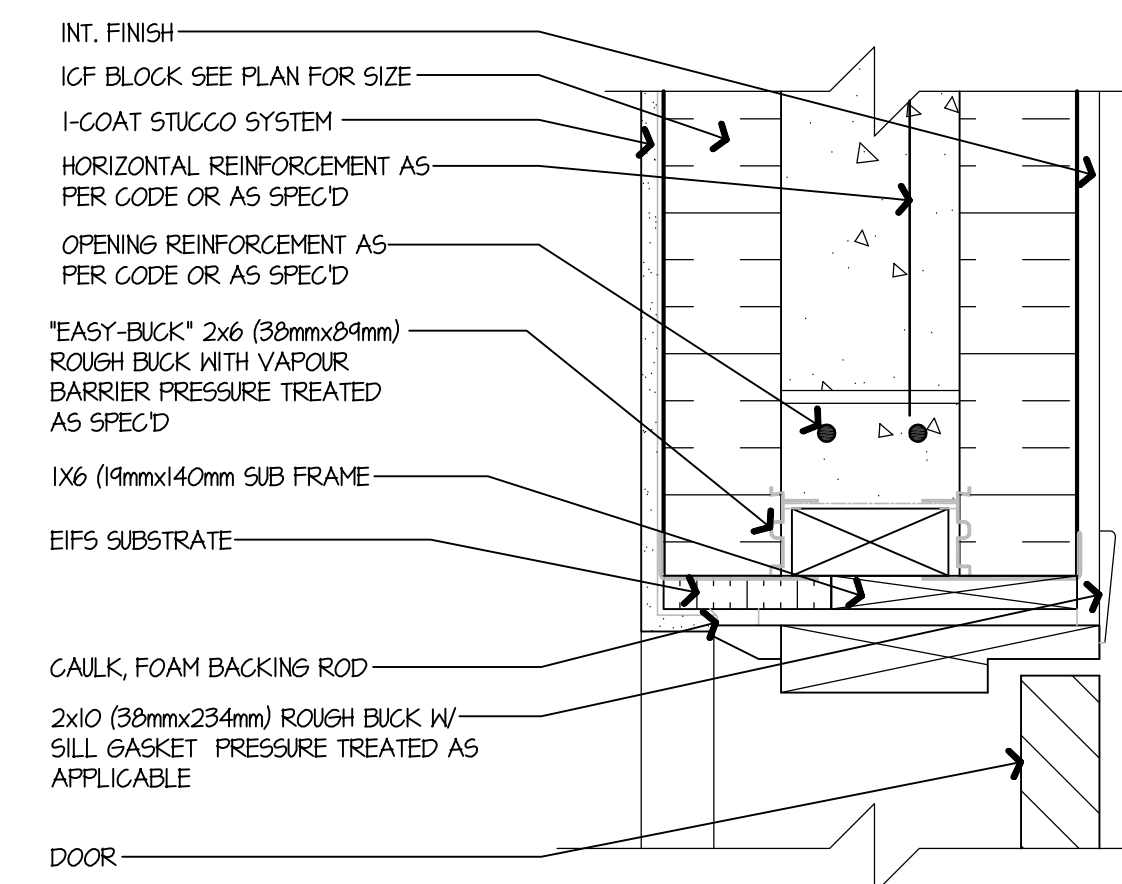
EXTERIOR FRAME CORNER



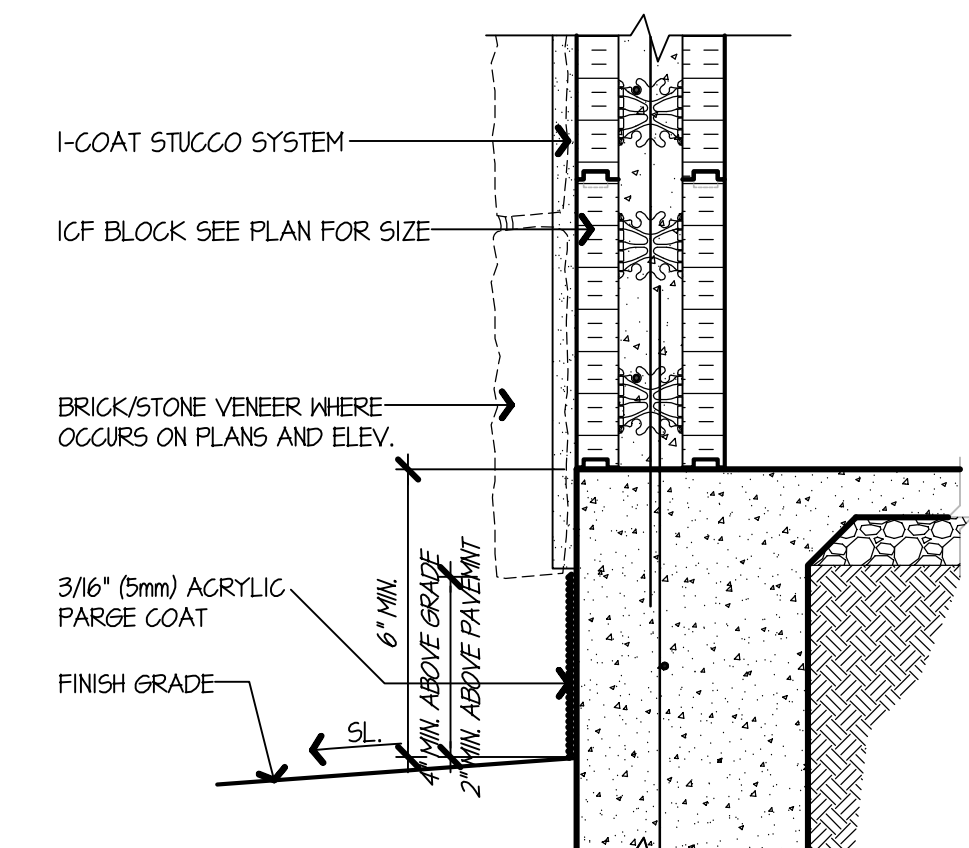
GAS FIREPLACE



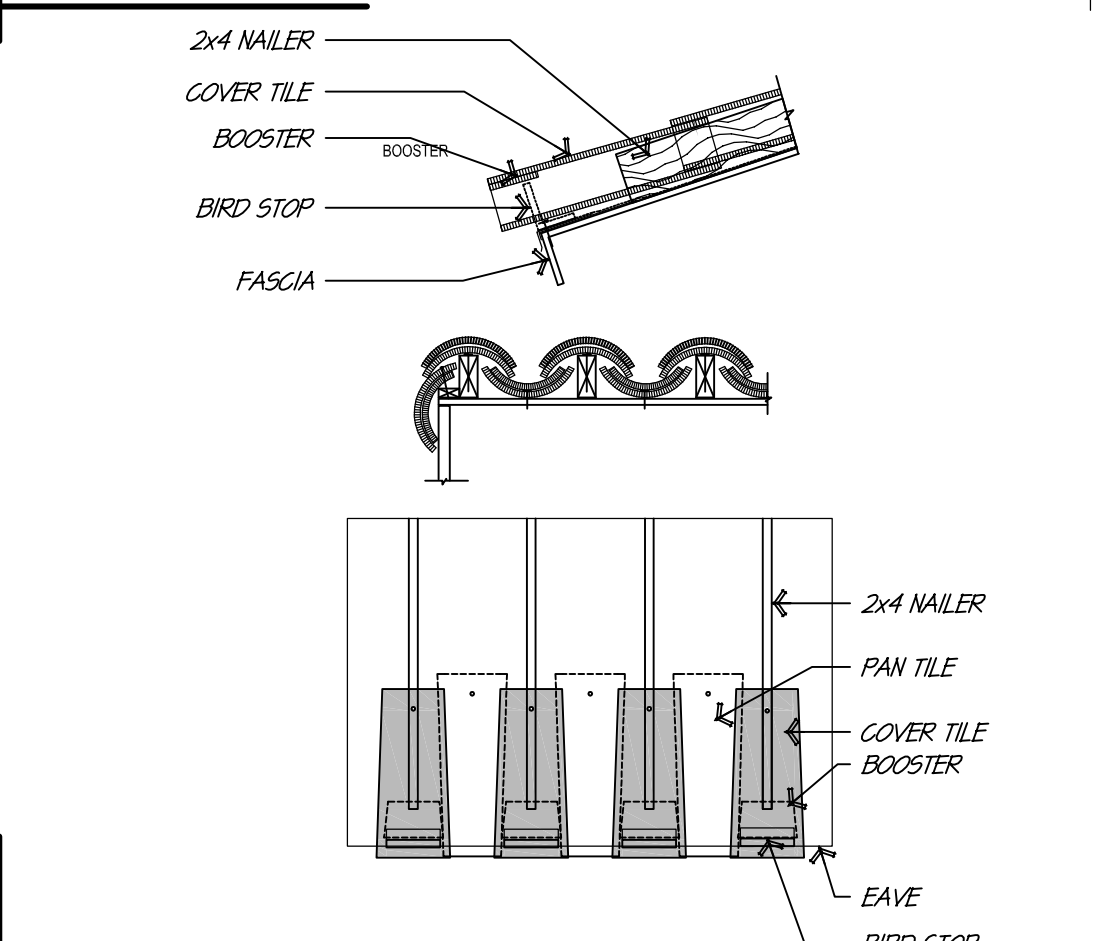
SKYLIGHT @ S-TILE (BOTTOM)



ICF DOOR JAMB



STULLO SCREED @ 1CF



ROOF TILE @ EDGE


USE OF THE ARCHITECTURAL DETAILS

THE DETAILS SHOWN ARE INTENDED TO FURTHER ILLUSTRATE THE VISUAL DESIGN CONCEPT AND THE MINIMUM RECOMMENDED WEATHER PROTECTION FOR THIS PROJECT.

THE SUBCONTRACTOR SHALL INCORPORATE THE REQUIREMENTS OF THE BUILDING CODE, STRUCTURAL CONSIDERATIONS, TRADE ASSOCIATION MANUALS AND PUBLICATIONS, AND PRODUCT MANUFACTURERS WRITTEN INSTRUCTIONS FOR THE COMPLETE CONSTRUCTION OF THE DETAILS.

ALL POSSIBLE FIELD CONDITIONS WHICH MAY BE ENCOUNTERED ARE NOT NECESSARILY DESCRIBED. FIELD CONDITIONS ENCOUNTERED WHICH REQUIRE CLARIFICATION SHALL BE BROUGHT TO THE ATTENTION OF ROBERT KLOB DESIGNS, INC. IN WRITING PRIOR TO CONSTRUCTION.

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CT NAME _____

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LARRY & CHERYL


SCHUG

DETAILS

REV	COMMENT
1	
2	
3	
4	

date: 7/29/53

drawn: VF/PK



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ICF REINFORCING

ICF WALL DESIGN SHALL BE BASED ON THE FOLLOWING INFORMATION UNLESS NOTED OTHERWISE ON THE PLANS. DETAILS, STRUCTURAL CALCULATIONS OR SPECIFICATIONS:

ABOVE GRADE WALL WIND PRESSURE DESIGN (TABLE R611.3(1)):

WIND SPEED	EXPOSURE	DESIGN WIND PRESSURE
90MPH	B	20PSF
90MPH	C	27PSF

DESIGN CRITERIA FOR TABLES:

TABLES BASED ON CONC. W/ A MIN. SPECIFIED COMPRESSIVE STRENGTH OF 2,500 PSI, REINFORCING STEEL W/ A MIN. YIELD STRENGTH OF 40,000 PSI & AN ASSUMED EQUIVALENT RECTANGULAR CROSS SECTION. WHEN REINFORCEMENT WITH A MIN. YIELD STRENGTH OF 60,000 PSI IS USED THE SPAN LENGTHS IN THE SHADED CELLS SHALL BE INCREASED BY 1.2x THE TABLE VALUES (SEE IRC FOR SHADED AREAS)

THESE TABLES ARE NOT INTENDED TO TO PROHIBIT THE USE OF ICF MANUFACTURERS TABLES BASED ON ENGINEERING ANALYSIS IN ACCORDANCE WITH ACI 318

SEE IRC R611 FOR ADDITIONAL INFORMATION AND REQUIREMENTS FOR REINFORCING.

TABLE R611.3(2) SEE IRC FOR ADDITIONAL TABLE INFORMATION							
MINIMUM VERTICAL WALL REINFORCEMENT FOR FLAT ICF ABOVE-GRADE WALLS							
DESIGN WIND PRESSURE (TABLE R611.3(1)) PSF	MAXIMUM UNSUPPORTED WALL HEIGHT (FEET)	MINIMUM VERTICAL REINFORCEMENT					
		NON-LOAD BEARING WALL OR SUPPORTING ROOF	SUPPORTING LIGHT-FRAME SECOND STORY & ROOF		SUPPORTING ICF SECOND STORY AND ROOF		
		MINIMUM WALL THICKNESS (INCHES)					
		4"	6"	4"	6"	4"	6"
20	8'-0"	#4@48"	#4@48"	#4@48"	#4@48"	#4@48"	#4@48"
	9'-0"	#4@48"	#4@48"	#4@48"	#4@48"	#4@48"	#4@48"
	10'-0"	#4@36"	#4@48"	#4@40"	#4@48"	#4@42"	#4@48"
30	8'-0"	#4@42"	#4@48"	#4@48"	#4@48"	#4@48"	#4@48"
	9'-0"	#4@32" #5@48"	#4@48"	#4@34" #5@48"	#4@48"	#4@34" #5@48"	#4@48"
	10'-0"	DESIGN REQ.	#4@48"	DESIGN REQ.	#4@48"	DESIGN REQ.	#4@48"

TABLE R611.7(2) SEE IRC FOR ADDITIONAL TABLE INFORMATION							
MAX. CLEAR SPANS FOR ICF LINTELS (#4 BOTTOM BAR)							
MINIMUM LINTEL THICKNESS	LINTEL DEPTH (INCHES)	MAXIMUM CLEAR SPAN (S=H/3 STIRRUPS "3" O.C. EXCEPT THE MIDDLE [X])					
		SUPPORTING ROOF ONLY		SUPPORTING LIGHT-FRAME SECOND STORY & ROOF		SUPPORTING ICF SECOND STORY AND ROOF	
		LOAD					
		30 PSF	70 PSF	30 PSF	70 PSF	30 PSF	70 PSF
4"	8"	4'-0"	4'-2"	3'-10"	3'-4"	3'-5"	3'-1"
		S=4" [1'-2"]	S=4" [8"]	S=4" [8"]	S=4" [8"]	S=4" [8"]	S=4" [8"]
	12"	6'-0"	5'-5"	5'-0"	4'-5"	4'-0"	4'-0"
		S=6" [1'-1"]	S=6" [1'-3"]	S=6" [1'-1"]	S=6" [1'-1"]	S=6" [1'-1"]	S=6" [1'-1"]
	16"	7'-11"	6'-5"	6'-0"	5'-3"	5'-4"	4'-10"
		S=8" [2'-4"]	S=8" [1'-4"]	S=8" [1'-4"]	S=8" [1'-2"]	S=8" [1'-2"]	S=8" [1'-4"]
6"	8"	6'-11"	7'-4"	6'-9"	6'-0"	6'-1"	5'-6"
		S=10" [3'-5"]	S=10" [2'-3"]	S=10" [1'-1"]	S=10" [1'-4"]	S=10" [1'-7"]	S=10" [1'-7"]
	12"	8'-10"	8'-1"	7'-5"	6'-7"	6'-2"	6'-1"
		S=12" [4'-1"]	S=12" [2'-9"]	S=12" [2'-4"]	S=12" [1'-10"]	S=12" [1'-11"]	S=12" [1'-12"]
	16"	9'-2"	8'-2"	7'-10"	6'-9"	6'-5"	5'-11"
		S=14" [1'-10"]	S=14" [1'-2"]	S=14" [1'-4"]	S=14" [8"]	S=14" [1'-10"]	S=14" [8"]
8"	8"	6'-8"	5'-5"	5'-0"	4'-5"	4'-0"	4'-1"
		S=10" [3'-0"]	S=10" [2'-4"]	S=10" [1'-9"]	S=10" [1'-4"]	S=10" [1'-4"]	S=10" [1'-1"]
	12"	7'-10"	6'-5"	6'-0"	5'-3"	5'-4"	4'-10"
		S=12" [4'-1"]	S=12" [2'-9"]	S=12" [2'-4"]	S=12" [1'-10"]	S=12" [1'-11"]	S=12" [1'-12"]
	16"	8'-10"	7'-3"	6'-9"	6'-2"	5'-11"	5'-6"
		S=14" [5'-3"]	S=14" [3'-4"]	S=14" [3'-1"]	S=14" [2'-4"]	S=14" [2'-5"]	S=14" [2'-9"]
10"	8"	9'-8"	8'-0"	7'-5"	6'-7"	6'-8"	6'-0"
		S=16" [6'-3"]	S=16" [4'-3"]	S=16" [3'-8"]	S=16" [2'-11"]	S=16" [3'-0"]	S=16" [2'-12"]

SEE TABLE R611.7(3) FOR LINTELS W/ #5 BOTTOM BAR

TABLE R611.7(8) SEE IRC FOR ADDITIONAL TABLE INFORMATION						
MAX. CLEAR SPANS FOR ICF LINTELS WITHOUT STIRRUPS (#4 OR #5 BOTTOM BAR)						
MINIMUM LINTEL THICKNESS	LINTEL DEPTH (INCHES)	MAXIMUM CLEAR SPAN				
		SUPPORTING ROOF ONLY	SUPPORTING LIGHT-FRAME SECOND STORY & ROOF		SUPPORTING ICF SECOND STORY AND ROOF	
LOAD						
30 PSF	70 PSF	30 PSF	70 PSF	30 PSF	70 PSF	
4"	8"	2'-6"	2'-6"	2'-4"	2'-4"	2'-2"
	12"	4'-2"	4'-2"	4'-1"	3'-10"	3'-7"
	16"	4'-11"	4'-8"	4'-6"	4'-2"	3'-11"
	20"	6'-3"	5'-3"	4'-11"	4'-8"	4'-3"
	24"	7'-7"	6'-4"	6'-0"	5'-6"	5'-2"
6"	8"	2'-10"	2'-6"	2'-6"	2'-5"	2'-2"
	12"	4'-8"	4'-4"	4'-3"	3'-11"	3'-7"
	16"	6'-5"	5'-1"	4'-8"	4'-2"	3'-11"
	20"	8'-2"	6'-6"	6'-0"	5'-4"	5'-0"
	24"	9'-8"	7'-11"	7'-4"	6'-8"	6'-1"

TABLE R611.7(9) SEE IRC FOR ADDITIONAL TABLE INFORMATION									
MIN. BOTTOM BAR ICF LINTEL REINF. FOR LARGE CLEAR SPAN IN BRG. WALLS									
MINIMUM LINTEL THICKNESS	LINTEL DEPTH (INCHES)	MINIMUM BOTTOM LINTEL REINF.							
		SUPPORTING ROOF ONLY		SUPPORTING LIGHT-FRAME SECOND STORY & ROOF		SUPPORTING ICF SECOND STORY AND ROOF		LOAD	
		30 PSF		70 PSF		30 PSF		70 PSF	
		30 PSF		70 PSF		30 PSF		70 PSF	
FLAT ICF LINTEL, 12'-3" MAX. CLEAR SPAN									
4"	24"	1 #5	1 #7	DES. REQ.	DES. REQ.	DES. REQ.	DES. REQ.	DES. REQ.	DES. REQ.
	20"	1 #6	1 #7	DES. REQ.	DES. REQ.	DES. REQ.	DES. REQ.	DES. REQ.	DES. REQ.
6"	24"	1 #5	1 #7	1 #7	1 #8	1 #8	DES. REQ.	DES. REQ.	DES. REQ.
	24"	1 #5	1 #7	1 #7	1 #8	1 #8	DES. REQ.	DES. REQ.	DES. REQ.
FLAT ICF LINTEL, 16'-3" MAX. CLEAR SPAN									
6"	24"	1 #7	DES. REQ.	DES. REQ.	DES. REQ.	DES. REQ.	DES. REQ.	DES. REQ.	DES. REQ.

#3 STIRRUPS REQUIRED A MAX. DEPTH2 SPACING FOR SPANS GREATER THAN 48"

FRAMING NOTES

LUMBER:

- ALL FRAMING SHALL HAVE A MAXIMUM MOISTURE CONTENT NOT TO EXCEED 19%.
- ALL WOOD BEARING ON CONCRETE OR MASONRY FOUNDATIONS SHALL BE PRESSURE TREATED DF/L #2. OTHER PLATES DF/L #2.
- NAILING SCHEDULE (USE COMMON WIRE OR BOX NAILS). USE ALL GALVANIZED FRAMING NAILS.
- ALL WOOD CONSTRUCTION SHALL CONTAIN AN APPROVED GRADING STAMP ON EACH PIECE.
- ALL ROUGH LUMBER USED IN THE WORK SHALL BE WEST COAST DOUGLAS FIR OR HEM-FIR, UNLESS OTHERWISE SPECIFIED.
- PLYWOOD SHALL BE CD INT. APA WITH EXTERIOR GLUE WITH THICKNESS AS NOTED ON THE DRAWINGS.
- ROOF SHEATHING SHALL BE NAILED @ 8" O.C. IN THE FIELD AND @ 6" O.C. AT THE EDGE.
- GLU-LAM & MICRO-LAM BEAMS:
 - ALL GLU-LAM BEAMS SHALL BE MANUFACTURED, AND ERECTED IN ACCORDANCE WITH ANSI/AITC A190-11983 USING EXTERIOR GLUE AND SHALL BE SEALED AND BUNDLED WRAPPED (APPEARANCE GRADE PER ARCHITECTURAL SPECIFICATIONS).
 - ALL CONTINUOUS GLU-LAM BEAMS SHALL BEAR THE COMBINATION SYMBOL 24F-6E.
 - ALL CONTINUOUS GLU-LAM BEAMS WITH Fb=2400 PSI (24F).
 - 6X BEAMS AND POSTS FREE OF HEART CENTERS SELECT STRUCTURAL.
 - ALL OTHER: NO. 2 OR BETTER.
 - "TRUSS JOISTS" SHALL BE DESIGNED, MANUFACTURED, AND ERECTED IN ACCORDANCE WITH MANUFACTURERS STANDARD SPECIFICATIONS AND DETAILS.
- MICRO-LAMS:
 - FLEXURAL STRESS
 - HORIZ. SHEAR PERP. TO GLUE LINE
 - COMPR. PERP. TO GRAIN PARALLEL W/ GLUE LINE
 - MODULUS OF ELASTICITY;
- NATIONAL DESIGN SPECIFICATIONS AND AITC STANDARDS APPLY.
- FRAMING LUMBER SHALL COMPLY WITH 1991 N.D.S. STANDARDS
- STUD LENGTH GREATER THAN 8'-1" TO BE HEM-LOCK/FIR #2 OR BETTER. STUD LENGTH LESS THAN 8'-1" TO BE CONSTRUCTION GRADE OR BETTER.
- ON NON-BRG. EXTERIOR GABLE ENDWALLS USE 2X4 HEM-FIR #2 STUDS OF BETTER AT 16" O.C. TO T.O. PLATE FOR SPANS 9'-0" TO 13'-0" USE 2X4 HEM-FIR #2 STUDS OR BETTER AT 12" O.C. TO T.O. PLATE FOR SPANS 13'-0" TO 15'-0".
- ALL SAWN LUMBER SHALL BEAR STAMP OF W/WPA OR APPROVED TESTING AGENCY.
- SAWN LUMBER SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES U.N.O.:

MEMBER	SPECIES/GRADE	E-PSI
JOISTS	DFL-2	1,600,000
4x4 OR 4x6 POSTS	DFL-2	1,600,000
5x6 POSTS	DFL-1	1,600,000
2x4 OR 3x4 STUDS	HEM-FIR-2 OR BETTER	1,300,000
2x6 STUDS	HEM-FIR-2 OR BETTER	1,300,000
LEDGERS	DFL-2	1,600,000
TOP PLATES	HEM-FIR-2	1,300,000
4x BEAMS	DFL-2	1,600,000

SEE FRAMING PLANS FOR ADDITIONAL STRUCTURAL NOTES

ICF WALL NOTES

INSULATED CONCRETE FORMS (ICF):

CONTRACTOR TO ENSURE ICF WALL IS INSTALLED PER MANUFACTURER ER REPORT OR THESE SPECIFICATIONS - WHICHEVER IS MORE STRINGENT.

- ICF WALL SHALL BE ADEQUATELY BRACED PRIOR TO PLACEMENT OF CONCRETE. A MIN. OF ONE BRACE IN 10 LINEAR FEET OF WALL IS RECOMMENDED ALONG WITH BRACING AT ALL CORNERS IN BOTH DIRECTIONS. BRACING SHOULD PROVIDE TURNBUCKLE OR OTHER MEANS OF ADJUSTMENT SO THAT WALL CAN BE ADJUSTED FOR PLUMB.
- WALL SHOULD BE PLUMB PRIOR TO POURING AT +/- 1/2" IN 10'-0" OF HEIGHT. WALLS SHOULD BE PERIODICALLY CHECKED AS CONCRETE IS POURED TO ENSURE THAT WALLS REMAIN PLUMB. ADJUSTMENTS SHOULD BE MADE IMMEDIATELY AS EACH SECTION OF WALL IS COMPLETED.
- USE ASTM A615 GRADE 40 FOR #4 REINFORCEMENT.
- ALL REBAR REINFORCEMENT SHALL BE PLACED WITHIN INTEGRAL GUIDES AND HANGERS ACCORDING TO THE STRUCTURAL CALLOUTS SPECIFIED ON THE PLANS AND/OR CALCULATIONS. IF NOT SPECIFICALLY NOTED OTHERWISE, VERTICAL REBAR SHALL BE PLACED AS SPECIFIED ON THE PLANS WITHIN THE FORMS INCLUDING NEXT TO WINDOWS, DOORS AND OTHER OPENINGS. HORIZONTAL REBAR REINFORCEMENT SHALL BE PLACED WITHIN WALL AS SPECIFIED ON THE PLANS WITH LAP JOINTS A MINIMUM OF 48 BAR DIAMETERS. STAGGER SPLICES A MINIMUM OF 48 BAR DIAMETERS. PROVIDE BENT REBAR AT CORNERS TO MATCH AND LAP HORIZONTAL REINFORCEMENTS.
- CONCRETE SHALL BE 3000 PSI OR STRONGER, 3/8" CHIP OR ROCK MIX, 6" SLUMP MAXIMUM, 5" MINIMUM OUT OF THE PUMP HOSE. MIX SHOULD YIELD 3000 PSI STRENGTH AT A DESIGNED SLUMP OF 5 1/2" TO 6". FLY ASH MIX IS ACCEPTABLE (18% MAX). RETARDERS TO INCREASE WORKING TIME ARE ACCEPTABLE. WATER REDUCER IS ENCOURAGED.
- ACCEPTABLE DELIVERY SYSTEMS: BOOM PUMP WITH REDUCER HOSE OR TRAILER PUMPS, HYDRAULIC TRAILER PUMPS WITH 3" HOSE REDUCED TO 2" ARE RECOMMENDED. FILLING TO HEIGHT OF 4' TO 5' ON THE FIRST LIFT IS RECOMMENDED HOWEVER WITH THE PROPER DELIVERY SYSTEM WALLS CAN BE FILLED TO THE BOTTOM OF THE BOND BEAM IN ONE LIFT. IT IS RECOMMENDED THAT THE BOND BEAM AT THE TOP OF WALL BE FILLED IN ONE CONTINUOUS POUR. IF POSSIBLE, START POUR IN THE MIDDLE SECTION OF A WALL, AWAY FROM CORNERS AND OPENINGS.
- PROPER MIX AND DELIVERY WALL MINIMIZE THE RISK OF VOIDS; HOWEVER IT IS RECOMMENDED THAT AN EXTERNAL WALL VIBRATOR BE USED TO ENSURE PROPER CONSOLIDATION. PENCIL VIBRATORS MAY BE UTILIZED WITH CARE. VIBRATION OF VERTICAL REBAR IS NOT RECOMMENDED AS IT MAY HAVE A TENDENCY TO SEPARATE THE AGGREGATE FROM THE CONCRETE AT THE BOTTOM OF THE WALL.
- FILL PORTS ARE PROVIDED AT THE SILLS OF WINDOW OPENINGS. PLACE CONCRETE WITHIN THESE AREAS AS THE POUR PROGRESSES AND TROWEL FLUSH. DO NOT WAIT UNTIL THE END OF THE POUR TO LEVEL OF THESE AREAS OR THE CONCRETE MAY BECOME TOO STIFF TO WORK.
- ALLOW CONCRETE TO ATTAIN A MINIMUM OF 2500 PSI OR A MINIMUM OF 24 HOURS BEFORE REMOVING WINDOW AND DOOR BUCKS.
- SHOULD THE WALL FORM SYSTEM BREAKOUT DURING A POUR, STOP THE POUR IN THE AREA OF THE BREAKOUT AND REMOVE ANY EXCESS CONCRETE. REPLACE AS MUCH OF THE RUPTURED FOAM AS POSSIBLE AND COVER THE AREAS WITH A 1/2" PLYWOOD PANEL SECURED TO ADJACENT VERTICAL WEBS WITH DRYWALL SCREWS. PLYWOOD SHOULD BE AT LEAST 4X LARGER THAN THE RUPTURE IN ALL DIRECTIONS. PLACE A 2X4 KICKER FROM THE CENTER OF THE PLYWOOD TO THE FLOOR OR GROUND AT A 45 DEGREE ANGLE AND SECURE AT EACH END. CONTINUE POUR.
- REFER TO THE MECHANICAL, PLUMBING AND ELECTRICAL PLANS FOR PLACEMENT OR PENETRATIONS OF ICF WALLS. WALL CONTRACTOR TO COORDINATE WITH TRADES TO ENSURE PROPER LOCATIONS AND SIZES ARE MAINTAINED.

SEE FRAMING & FOUNDATION PLANS FOR ADDITIONAL ICF NOTES

FOUNDATION NOTES

MASONRY

BLOCK UNITS SHALL BE GRADE "N-1", FM=1350 PSI, AND SHALL CONFORM TO ASTM C-90 OR MOST RECENT REVISION.

GROUT SHALL BE TYPE "S" AND SHALL CONFORM TO ASTM C-270 WITH AN ULTIMATE COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.

MORTAR SHALL BE TYPE "S" AND SHALL CONFORM TO ASTM C-270 WITH AN ULTIMATE COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.

VERTICAL REINFORCING IN MASONRY SHALL BE AT CENTER OF GROUTED CELL. CONTINUOUS FULL HEIGHT OF WALL AS FOLLOWS: # 4 AT 48" OC MINIMUM IN ALL EXTERIOR AND INTERIOR WALLS. #4 AT ALL CORNERS, WALL ENDS, INTERSECTIONS WITH/ STUD BEARINGS, AND AT JAMBS AROUND ALL OPENINGS, TYPICAL UNLESS OTHERWISE NOTED ON DETAILS AND DRAWINGS.

HORIZONTAL REINFORCING IN MASONRY SHALL BE TWO # 4'S IN MINIMUM 8" DEEP CONTINUOUS GROUTED BOND BEAM AT FLOOR AND ROOFLINES. USE HORIZONTAL WIRE "LADDER" TYPE DESIGN (DUR-O-WIRE) AT 16" OC. PROVIDE BENT CORNER BARS TO MATCH AND LAP HORIZONTAL REINFORCING. THE INTERSECTIONS OF BOTH BLOCK WALLS AND FOUNDATIONS STEM WALLS.

PROVIDE DOWELS FROM FOOTINGS TO MATCH VERTICAL REINFORCING IN WALL AND COLUMNS. PROVIDE CORNER BARS TO MATCH AT ALL HORIZONTAL REINFORCING.

ALL CELLS WITH REBAR TO BE GROUTED SOLID.

FRAMING NOTES

TRUSSES:

TO BE MANUFACTURED BY CITY AND STATE APPROVED FABRICATOR (AS REQUIRED BY GOVERNING MUNICIPALITY) DESIGN SHALL BE SUBMITTED & SEALED BY AN ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS TO BE BUILT.

SHEATHING:

ROOF SHEATHING SHALL BE 1/2" STD. GRADE SHEATHING (5-PLY) w/ EXTERIOR GLUE, SPAN INDEX RATIO 32/16 W/ STAMP OF APPROVED TESTING AGENCY OR ORIENTED STRAND BOARD (NER-108).

ALL ROOF SHEATHING SHALL HAVE: 8d COMMON @ 6" O.C. AT EDGES AND BOUNDARY, 8d @ 12" O.C. AT INTERMEDIATE FRAMING MEMBERS, OR 14 GA. x 1-3/4" LONG x 7/16" O.D. CROWN GALVANIZED WIRE STAPLES AT 6" O.C. @ EDGES & BOUNDARY, AT 12" O.C. AT INTERMEDIATE (NER-272).

FLOOR SHEATHING TO BE 3/4" TONGUE AND GROOVE UNDERLAYMENT. (48/24) GROUP 1 W/ EXTERIOR GLUE WITH STAMP OF AN APPROVED TESTING AGENCY OR ORIENTED STRAND BOARD (NER-108).

ALL FLOOR SHEATHING SHALL HAVE: 10D NAILS AT 6" O.C. AT EDGES AND BOUNDARY, 10" O.C. AT INTERMEDIATE

GLU-LAM BEAMS:

- ALL GLU-LAM BEAMS SHALL COMFORM TO 1991 N.D.S. STANDARDS.
- 24F-V4 FOR SIMPLE SPANS, 24F-V8 FOR CONTINUOUS AND CANTILEVERS.
- VISUALLY GRADED WESTERN SPECIES DOUGLAS FIR/HEM FIR WITH THE FOLLOWING PROPERTIES:
 - Fb = 2400 PSI, Fv = 165 PSI, Fc (PERP) = 650 PSI, E = 1,600,000 PSI.
 - FABRICATION AND HANDLING PER AITC AND WLCA STANDARDS.
 - ADHESIVE FOR INTERIOR BEAMS, WATER RESISTANT GLUE ADHESIVE FOR PART OR FULL BEAM EXPOSED DIRECTLY TO RAIN. WATER-PROOF GLUE BEAMS TO BEAR AITC STAMP AND CERTIFICATE AND GRADE STAMP.
 - STANDARD CAMBER R = 2000" U.N.O.

WELDING:

E70xx LOW HYDROGEN RODS

ROOF FRAMING PLAN NOTES

ROOFING CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO VERIFY ON-SITE MEASUREMENTS AND CONDITIONS.

ALL TRUSSES TO BE FABRICATED BY AN APPROVED MANUFACTURER, AND SHALL CONFORM TO U.B.C. STANDARD #25-17.

ALL TRUSSES SHALL HAVE A ROOF SLOPE AS INDICATED BY ARROWS ON THE ROOF FRAMING PLAN, UNLESS NOTIFIED OTHERWISE.

ALL INTERIOR CEILINGS TO BE FLAT, WITH HEIGHTS NOTED ON THE FLOOR PLAN.

ELEVATION OF THE TOP OF THE DOUBLE PLATE AS NOTED ON THE ARCHITECTURAL PLANS

ALL ALTERED (STUBBED) TRUSSES SHALL BE DONE BY THE MANUFACTURER.

GENERAL CONTRACTOR SHALL HAVE THE OPTION OF USING MANUFACTURED STANDARD TRUSSES @24" O.C., OR JACK TRUSSES @ 24" O.C.

PREFAB TRUSSES SHALL BE 2X4 NO. 2 D.F.L., SFP, HEM FIR, OR BETTER.

ROOF SHEATHING: ALL ROOF FRAMING SHALL BE COMPLETELY SHEATHED AND NAILED EVEN UNDER ALL OVERFRAMING WITH MINIMUM OPENINGS LEFT FOR ATTIC VENTILATION AND ACCESS.

JOIST HANGERS AND OTHER MISCELLANEOUS FRAMING ANCHORS SHALL BE AS MANUFACTURED BY SIMPSON COMPANY OR APPROVED EQUAL.

ALL EXT. BEARING WALLS TO BE 2x6 @ 16" O.C. - INT. BEARINGS TO BE 2x4 STUDS @ 16" O.C. - INT. NON-BEARING STUDS @ 24" O.C. (U.N.O.).

ALL BEARING PARTITIONS TO HAVE DOUBLE TOP PLATES.

ROOF AND FLOOR PLYWOOD SHEATHING PANEL EDGES SHALL BEAR ON FRAMING MEMBERS AND BUTT ALONG THEIR CENTER LINES W/ PANEL EDGES STAGGERED & FACE GRAIN PERPENDICULAR TO SUPPORT.

FIRE STOPS SHALL BE PLACED IN ALL CONCEALED SPACES IN WALLS, @ FURRED SPACES & @ FLOOR/CEILING LEVELS AS SO NO CONCEALED SPACE EXCEEDS 10'-0"

USE DOUBLE STUDS UNDER BEARING POINTS OF GIRDER & BEAMS U.N.O. ON PLANS.

ALL FRAMING MEMBERS SHALL BE BLOCKED AND BRIDGED PER I.R.C.

USE SIMPSON H2.5 @ EA. TRUSS/JOIST AND EVERY OTHER STUD. IF SPAN EXCEEDS 22'-0" AT UNCLOSED AREAS AND GARAGES, USE ONE ANCHOR PER TRUSS/JOIST AND ONE ANCHOR PER STUD. FRAMING ANCHOR OF TYPE THAT ENGAGES BOTH PLATES (FRAMING ANCHOR AT STUD MAY BE OMITTED IF PLYWOOD OR EQUAL SHEATHING IS USED WITH NAILS TO TOP PLATE, EXCEPT UNCLOSED AREAS AND GARAGE.)

2x4 WOOD POST w/ KING STUD AT EACH END OF ALL EXTERIOR DOOR AND WINDOW OPENINGS

FOUNDATION NOTES

STRUCTURAL STEEL

ASTM A - 36, Fy = 36 KSI), STRUCTURAL TUBES SHALL BE ASTM A-500 (Fy=46 KSI)

BOLTS - ASTM A - 307, LATEST AISC AND AWS CODES APPLY. ALL CONSTRUCTION PER LATEST AISC HANDBOOK. MIN. EMBEDMENT OF ALL BOLTS IN MASONRY, GROUT OR CONC. TO BE 7" U.N.O. ON PLANS.

ALL EXPANSION BOLTS TO BE "RED HEAD, ESR-2251" OR "HILTI, ESR-2302" WITH A 360 EXPANSIVE WEDGING ACTION.

SEE DETAILS, PLANS OR STRUCTURAL CALCULATIONS FOR SIZES.

REINFORCING

REINFORCING BARS TO BE #4'S (UNLESS OTHERWISE NOTED) AND TO CONFORM TO THE REQUIREMENTS ALL METAL OF THE "STANDARD SPECIFICATION ASTM 615 GRADE 40 (Fy=40 KSI) DEFORMED BARS FOR #4'S AND SMALLER.

ASTM A615 GRADE 60 (Fy=60 KSI) DEFORMED BARS FOR #5 AND LARGER. SEC 2614.

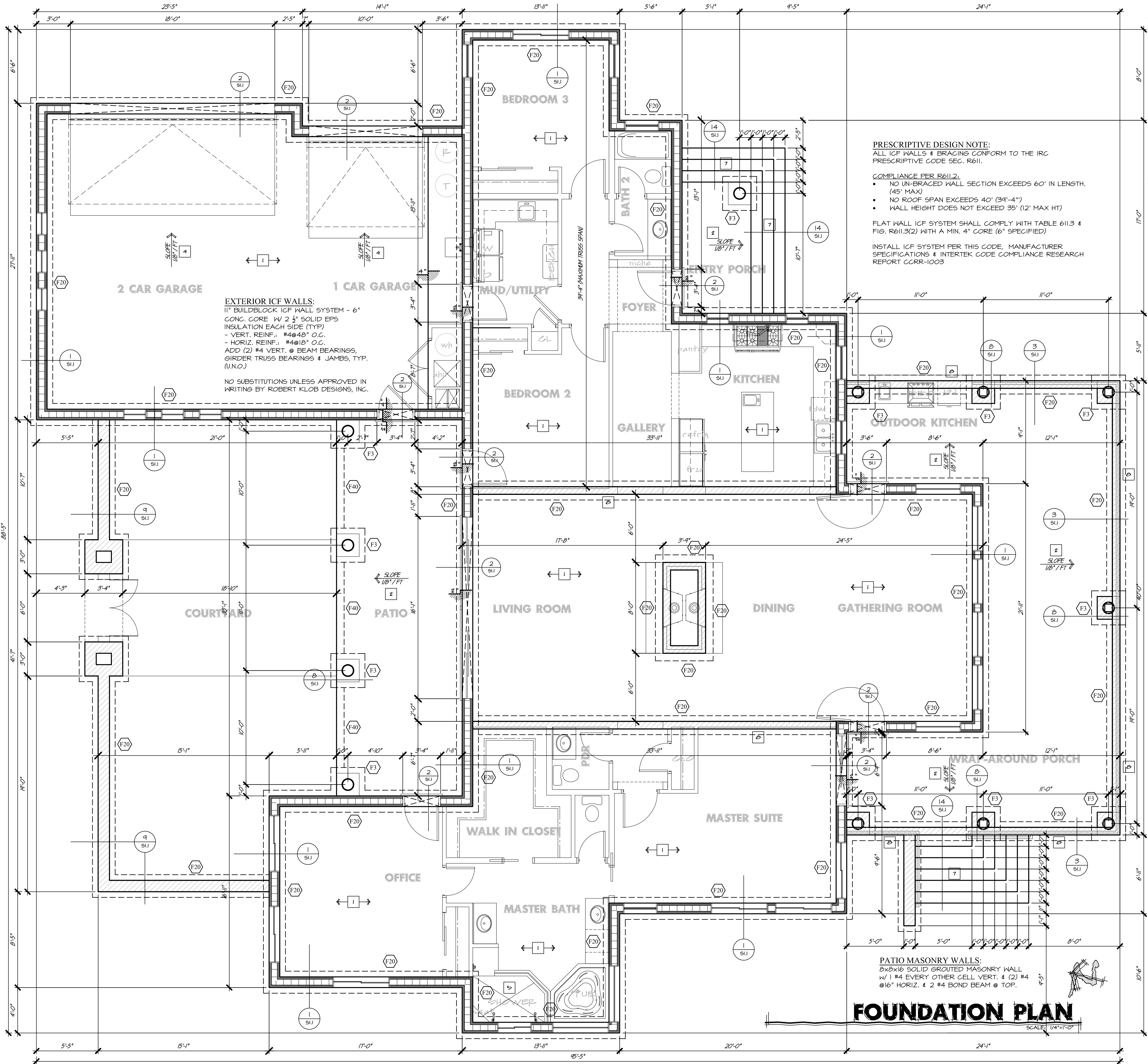
WELDED WIRE FABRIC MESH TO COMPLY WITH ASTM A185.

ALL WORK SHALL COMPLY WITH THE ACI CODE AND DETAILING MANUAL.

MAXIMUM SPACING OF HORIZONTAL BARS IN STEM WALLS TO BE 12" OC. SEE DETAILS AS CODED.

ALL REINFORCING BARS TO BE ANCHORED AND SPACED FROM THE FORMS (UNLESS OTHERWISE NOTED) AS FOLLOWS: * BEAMS AND COLUMNS, 3/4" IN PROTECTED WALLS AND SUSPENDED SLABS, 2" IN UNPROTECTED WALLS,

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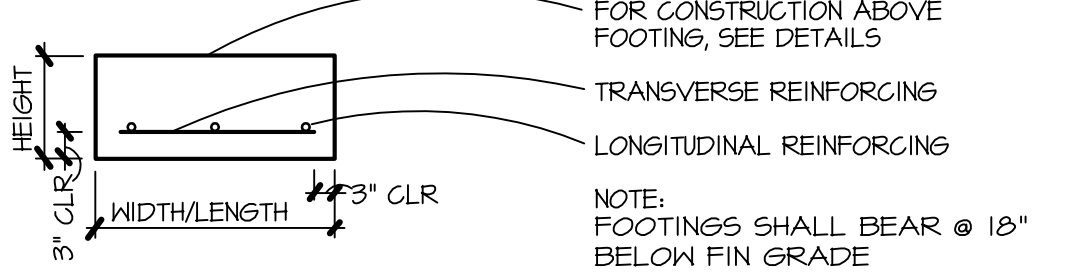
KEY NOTES

- 4" CONCRETE SLAB OVER 4" TERMITE TREATED ABC, SANCUT JOINTS AS REQ'D.
- PATIO SLAB, SLOPE 1/8" PER FOOT
- CONC. STOOP FOR CONDENSER UNIT - HOLD 6" AWAY FROM HOUSE
- SLOPE GARAGE FLOOR 1/8" PER FOOT BACK TO FRONT
- SLOPE SLAB @ SHOWER
- CONTROL JOINT
- CONCRETE STAIRS
- 8x8x16 MASONRY STEM WALL TO PATIO, SOLID GROUT W/ (1) #4 IN EACH CELL VERT, BOND BEAM @ TOP W/ (2) #4 HORIZ. BEND VERTS INTO SLAB

GENERAL NOTES

PLUMBING TRENCH BACKFILL SHOULD BE MOISTURE CONDITIONED & COMPACTED TO 85% MIN. DENSITY.
INTERIOR BEARING FOOTINGS SHALL NOT BE PLACED OVER ANY TRENCHES.
TYPICAL SLABS ARE 4" CONCRETE ON 4" ABC. FILL - UNO.
PROVIDE THE FOLLOWING:
P.V.C. SLEEVES THROUGH STEM WALL AS REQUIRED AT EACH CONDENSER LOCATION
TEE (AS REQ'D) W/ CAPPED STUB OUT TO FRONT HOSE BIB. TEE TO BE INSTALLED ON THE STREET SIDE OF THE SHUT OFF VALVE
P.V.C. SLEEVES UNDER DRIVEWAY & SIDEWALKS AS REQUIRED BY OWNERS SPEC.
EXPANSION JOINTS @ 34'-0" O.C. MAX. & SHALL NOT 4. BE PLACED UNDER ANY TILE FLOOR.

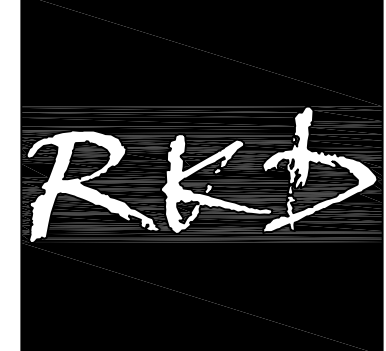
FOOTING SCHEDULE



F	DIMENSION	FOOTING REINFORCING	REMARKS
F1	2'-0" x 2'-0" x 10"T	3 #4 EACH WAY	COLUMN FTG.
F2	2'-6" x 2'-6" x 10"T	3 #4 EACH WAY	COLUMN FTG.
F3	3'-0" x 3'-0" x 12"T	3 #5 EACH WAY	COLUMN FTG.
F4	3'-6" x 3'-6" x 12"T	4 #5 EACH WAY	COLUMN FTG.
F5	4'-0" x 4'-0" x 12"T	4 #5 EACH WAY	COLUMN FTG.
F6	4'-6" x 4'-6" x 12"T	5 #5 EACH WAY	COLUMN FTG.
F7	5'-0" x 5'-0" x 12"T	5 #6 EACH WAY	COLUMN FTG.
F8	5'-6" x 5'-6" x 12"T	6 #6 EACH WAY	COLUMN FTG.
F9	6'-0" x 6'-0" x 14"T	6 #6 EACH WAY	COLUMN FTG.
F10	6'-6" x 6'-6" x 14"T	7 #6 EACH WAY	COLUMN FTG.
F11	4'-0" x 4'-0" x 16"T	#4 @ 12" O.C. E.W.	COLUMN FTG.
-	-	-	-
F20	1'-4"w x 18"d x CONT.	2 #4 CONT	WALL FTG.
F21	-	-	-
F30	2'-0"w x 18"d x CONT.	2 #4 CONT	INT. BRG. WALL
F31	-	-	-
F40	12"w x 8"d x CONT	1 #4 CONT	TURN DN. FTG.
F41	-	-	-
-	-	-	-
E	EXISTING FOOTING TO REMAIN	-	-

SOIL PRESSURE = 1500 PSI
CONCRETE - FC = 3000 PSI (DESIGN BASED ON 2500 PSI)
REINFORCEMENT - GRADE 60
NOTES: REF. ACI 318-04/318R-04, STRENGTH DESIGN METHOD

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HOWARD MESA RANCH PHASE 2 UNIT 2
LOT: 100
APN: 500-99-052

PROJECT NAME:
A CUSTOM HOME FOR
**LARRY & CHERYL
SCHUG**

SHEET TITLE:
**FOUNDATION
PLAN**

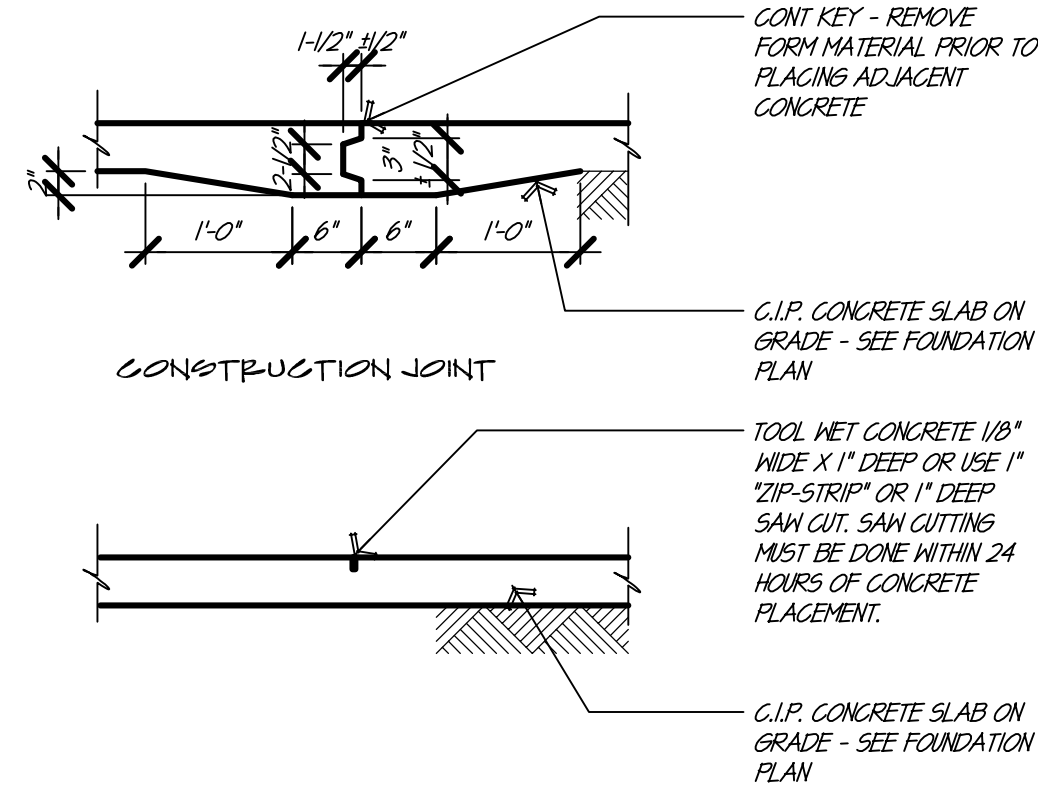
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drawn: VF/PR

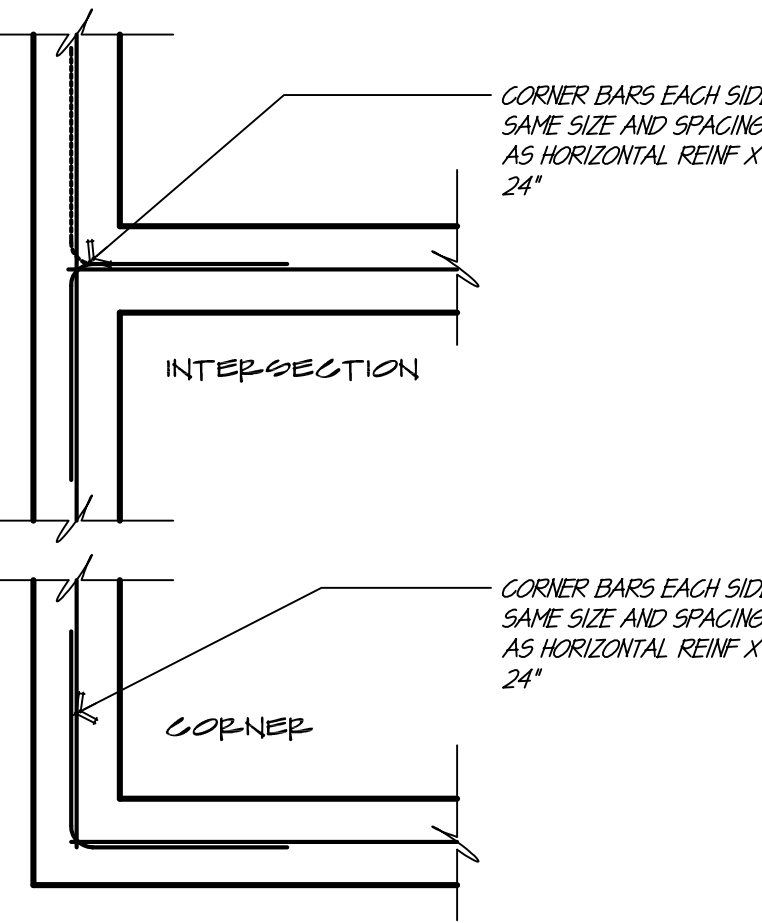
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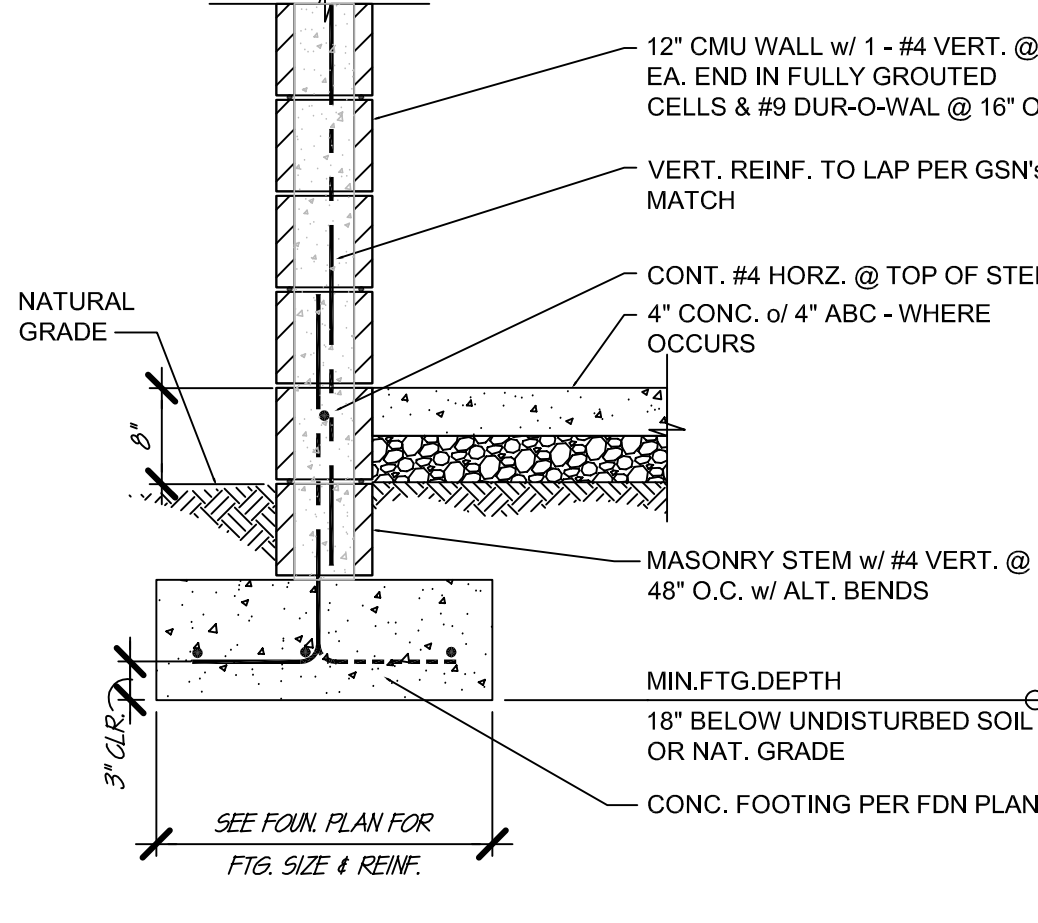
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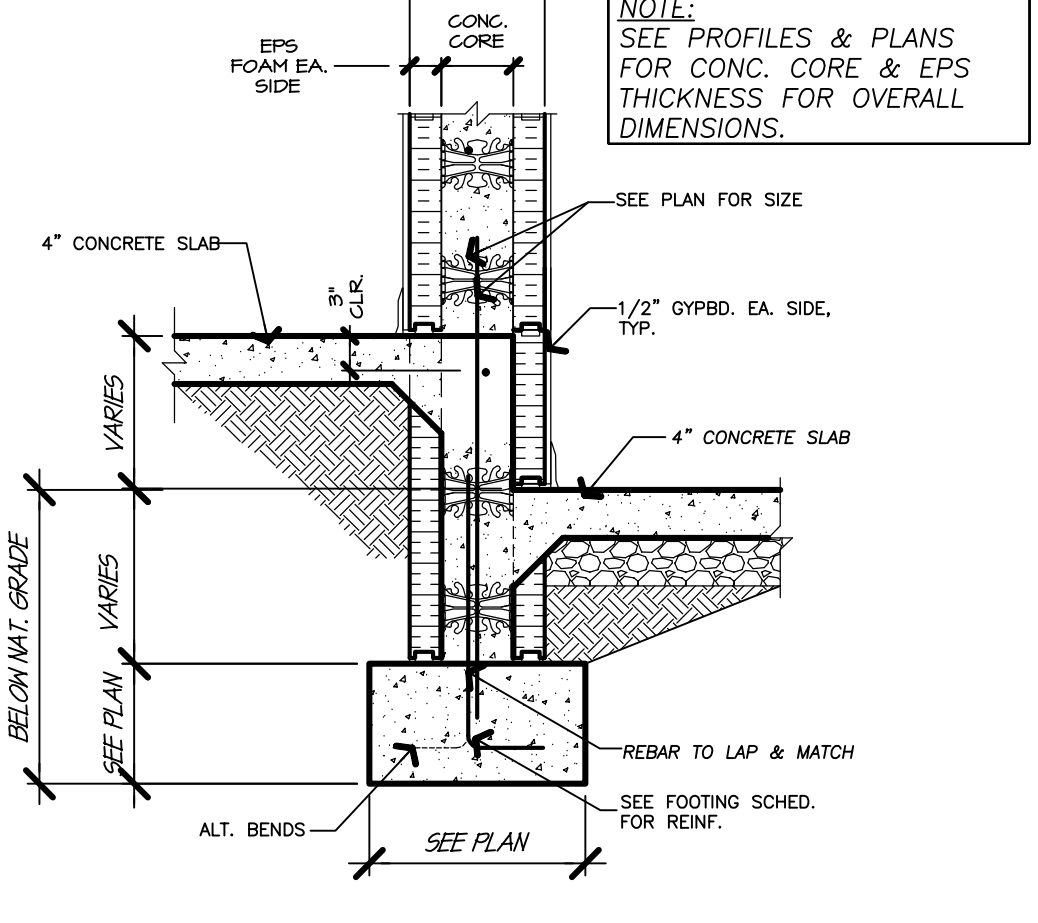
SHRINKAGE CONTROL JOINT 17



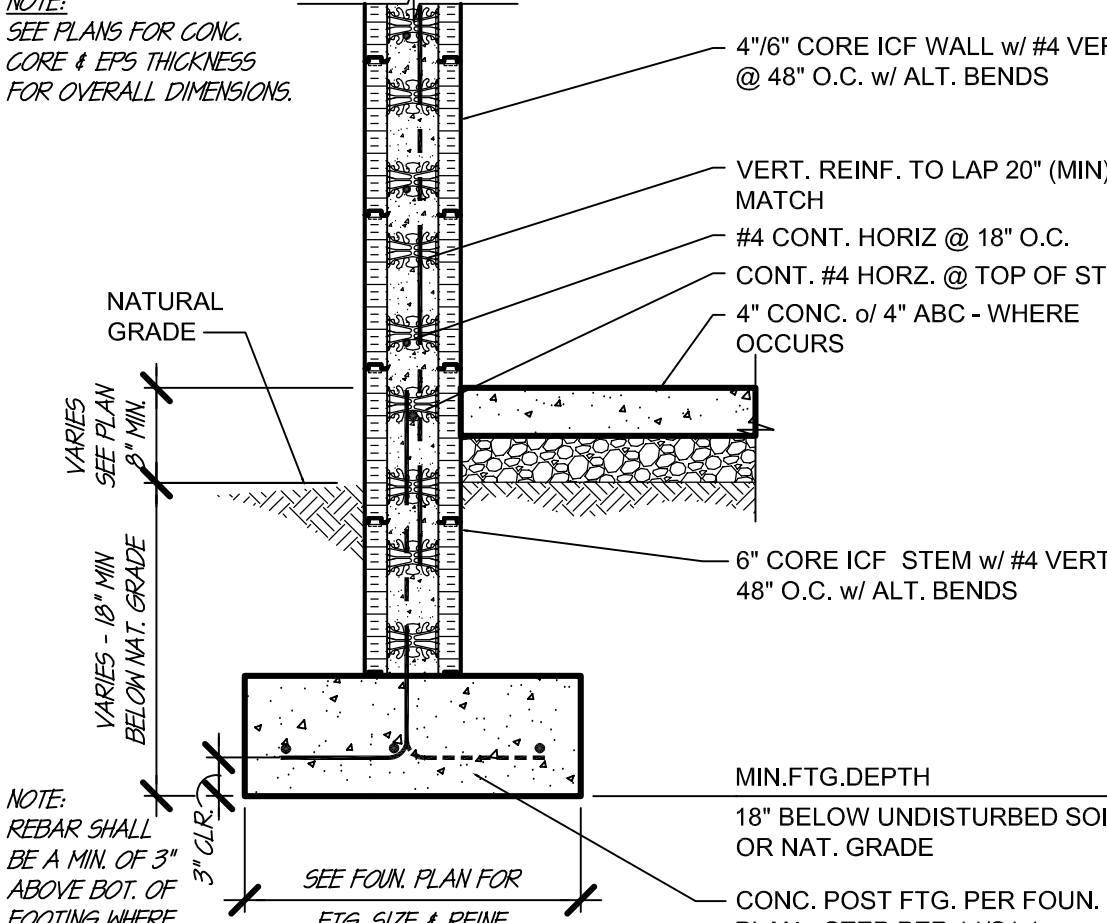
CORNER REINF @ FTG & STEM 13



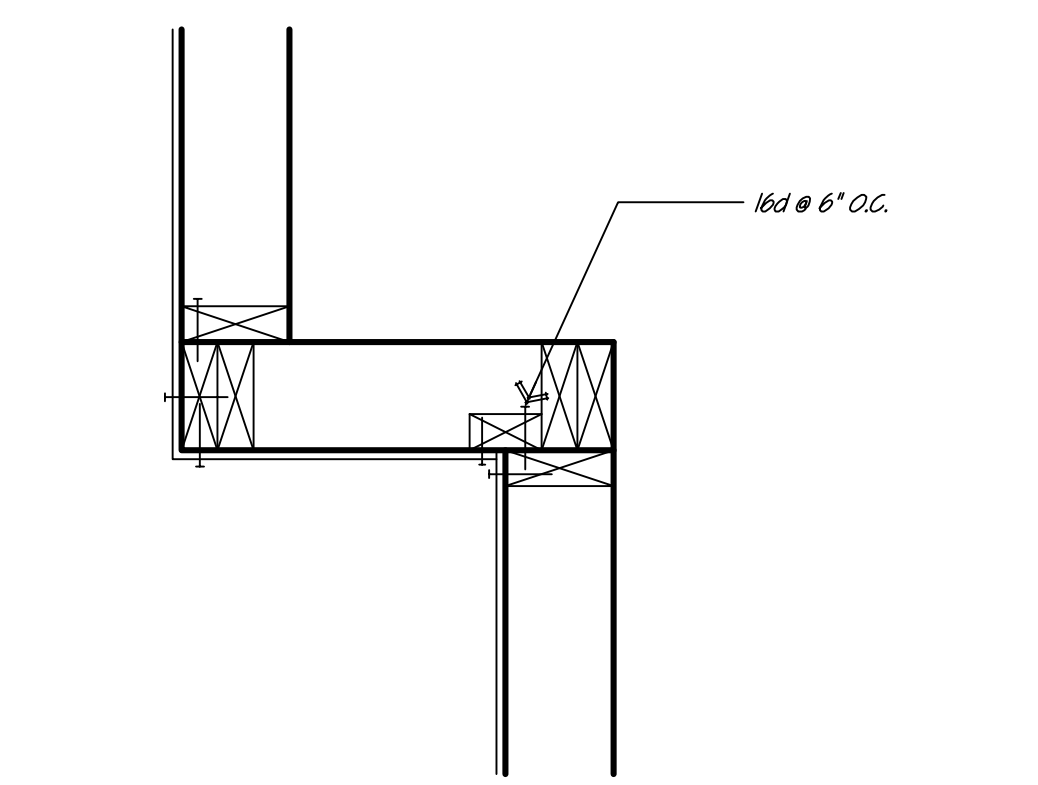
MASONRY WALL - 48" T 9



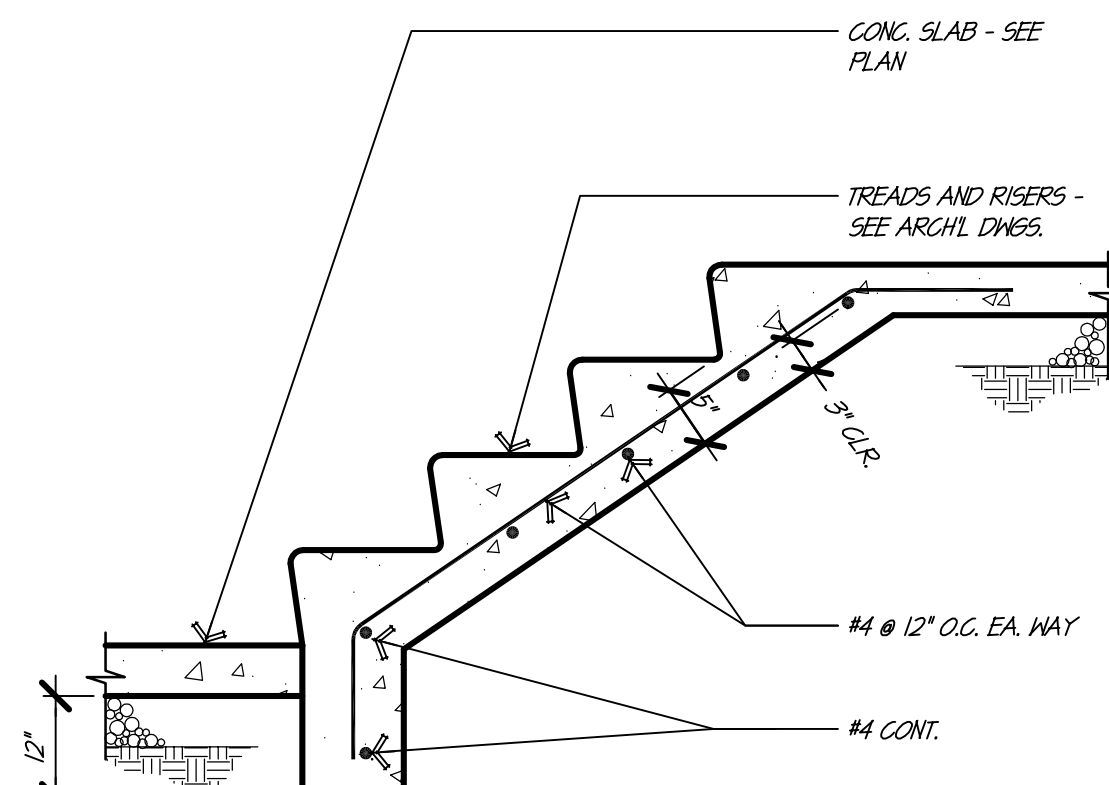
ICF INTERIOR BEARING 5



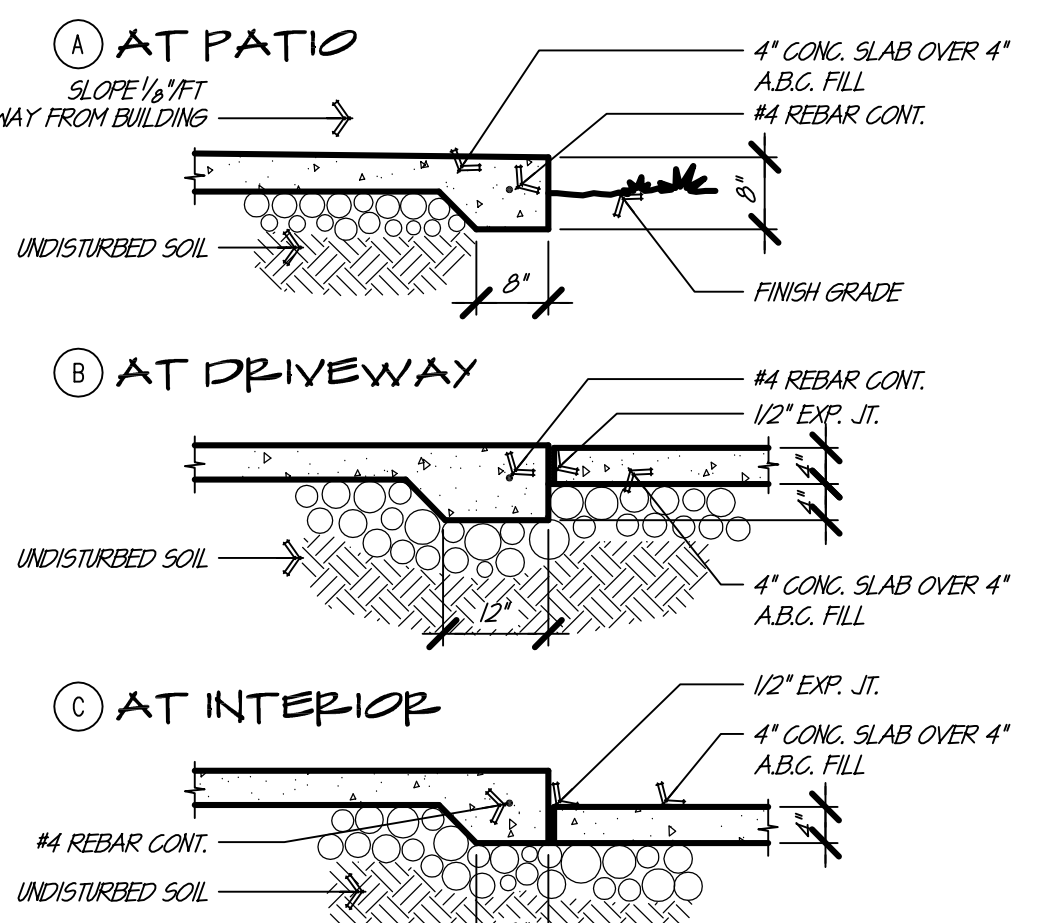
STD. ICF WALL FOOTING 1



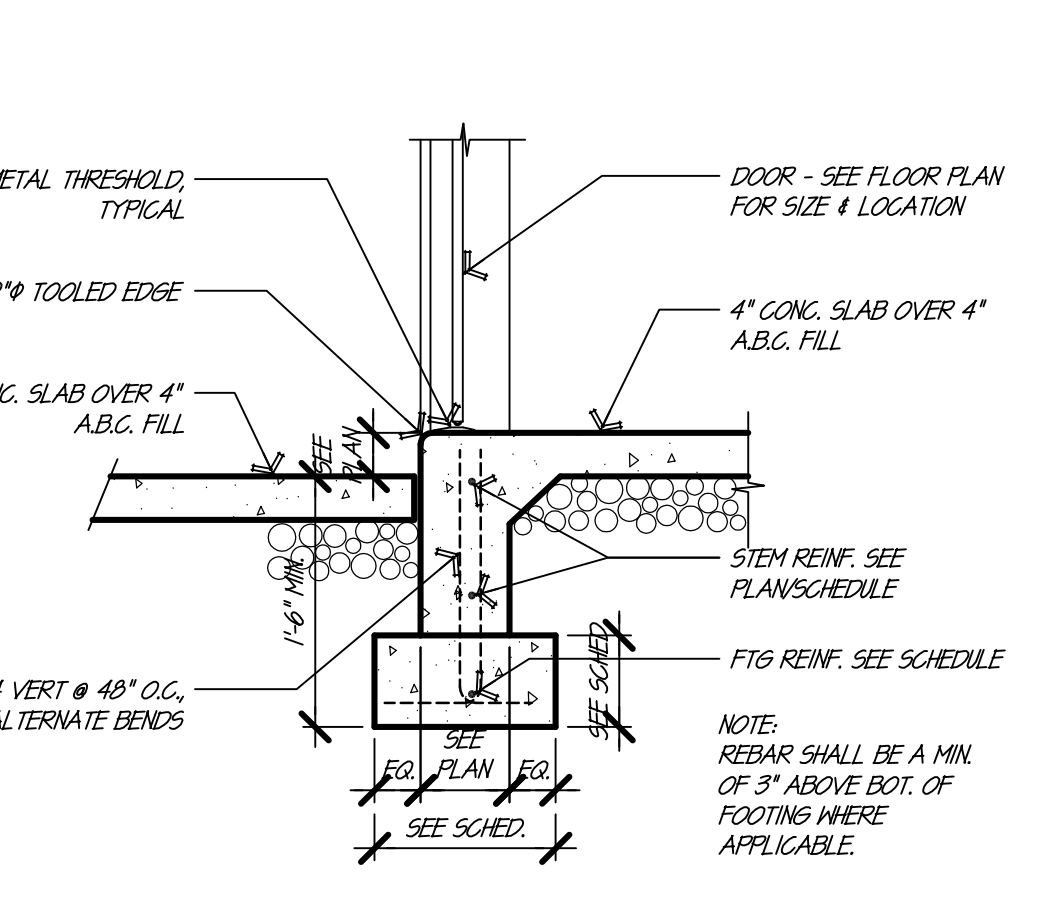
SHEAR WALL AROUND CORNER 18



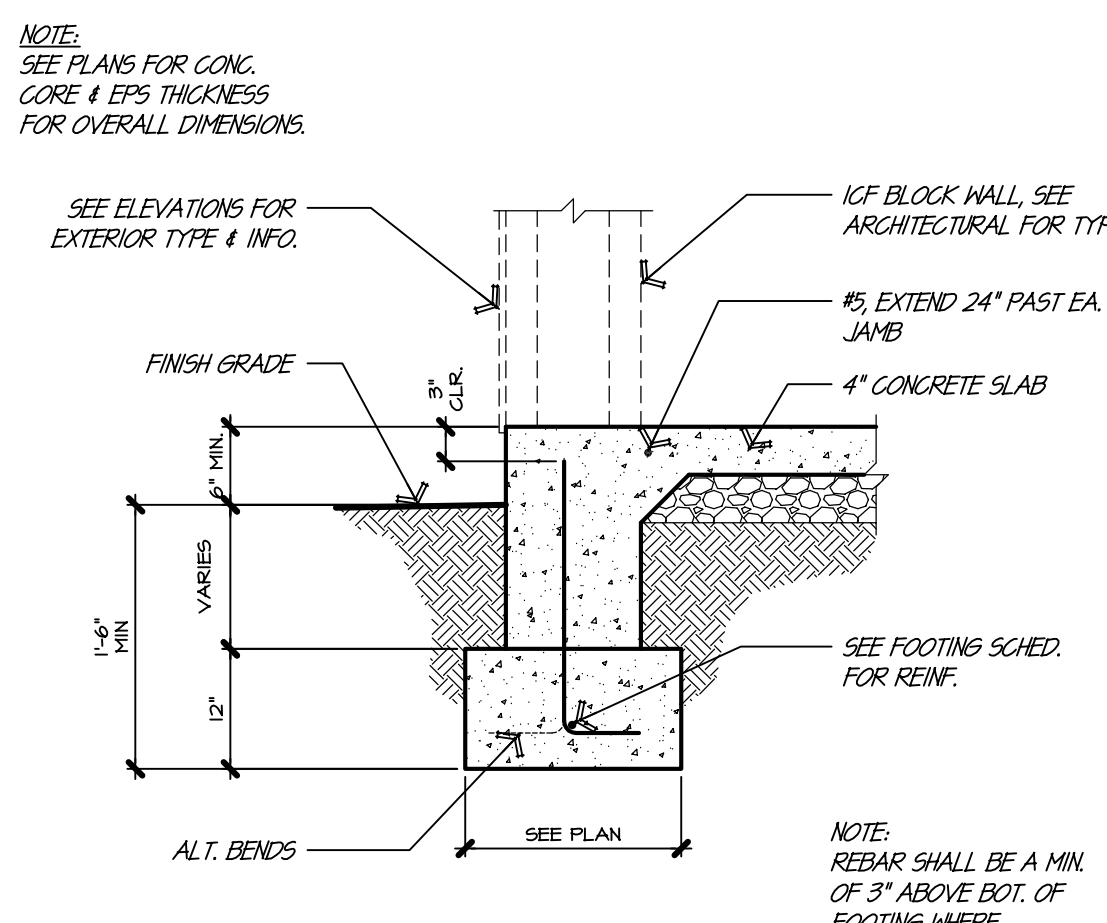
CONC. STAIR 14



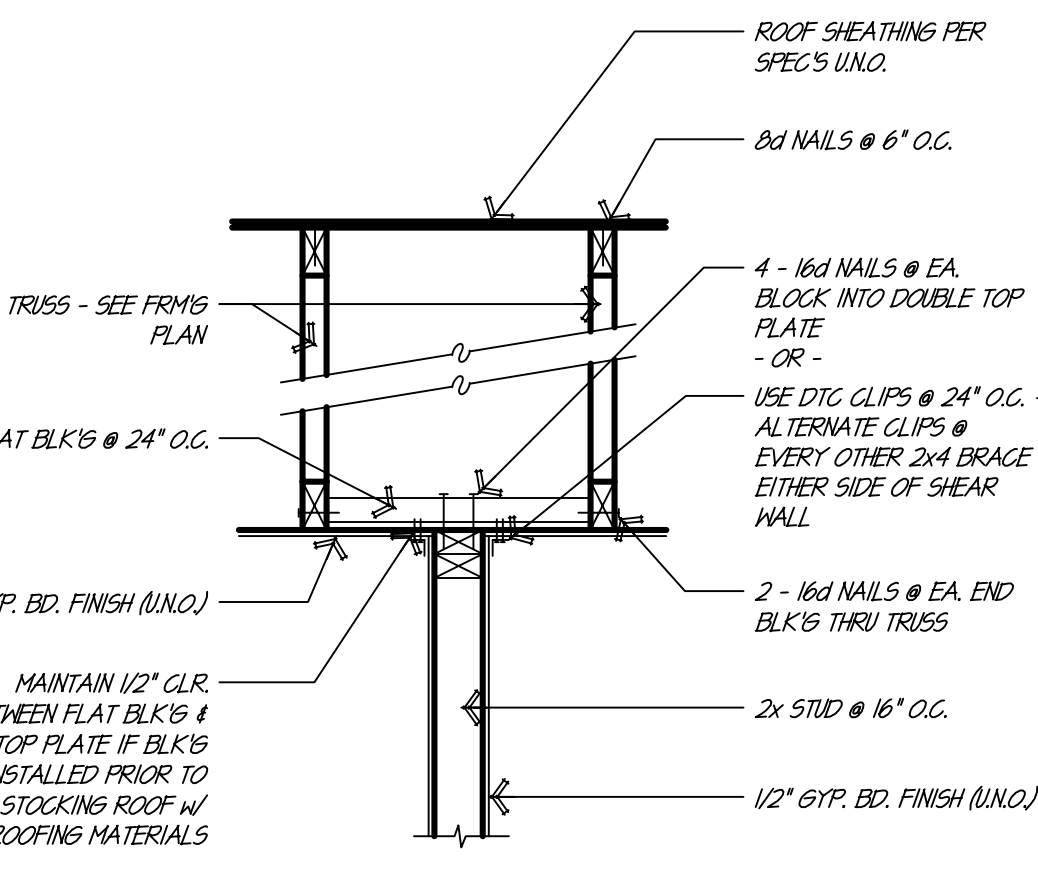
SLAB CONDITIONS 10



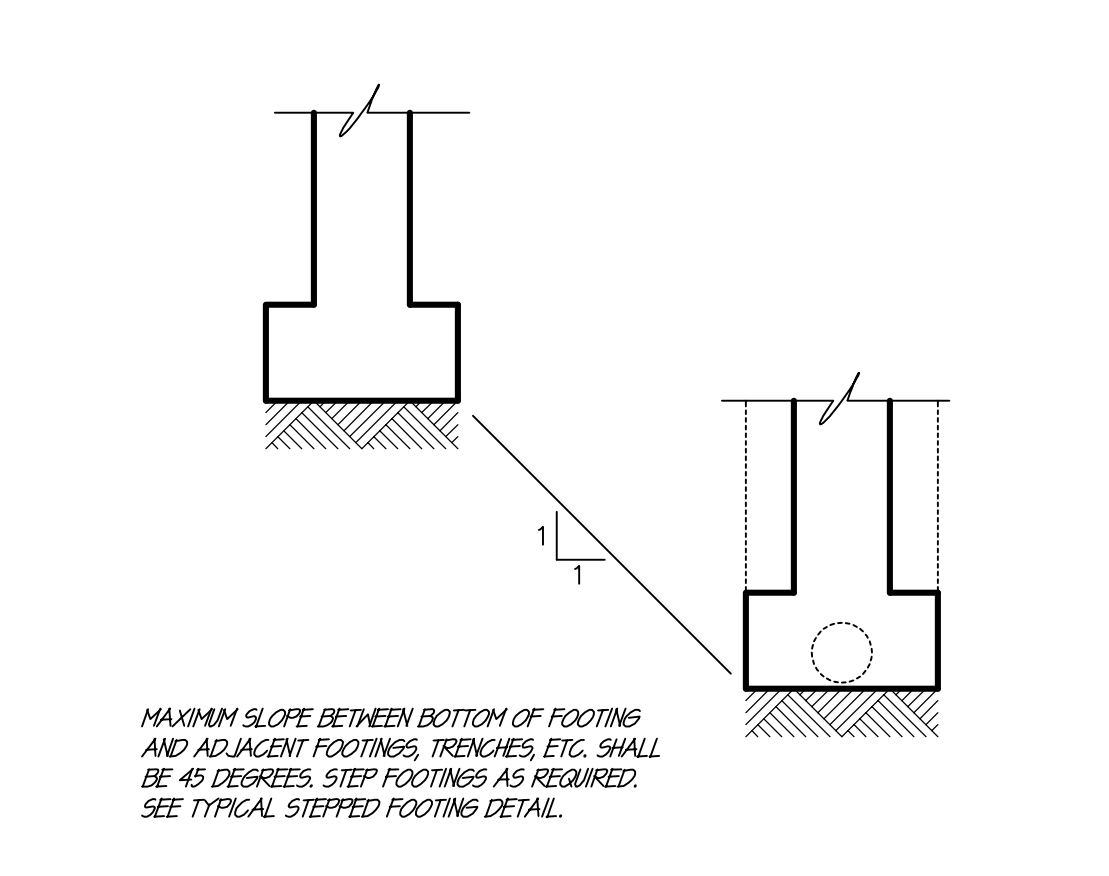
DEP. STEM AT OPEN'G 6



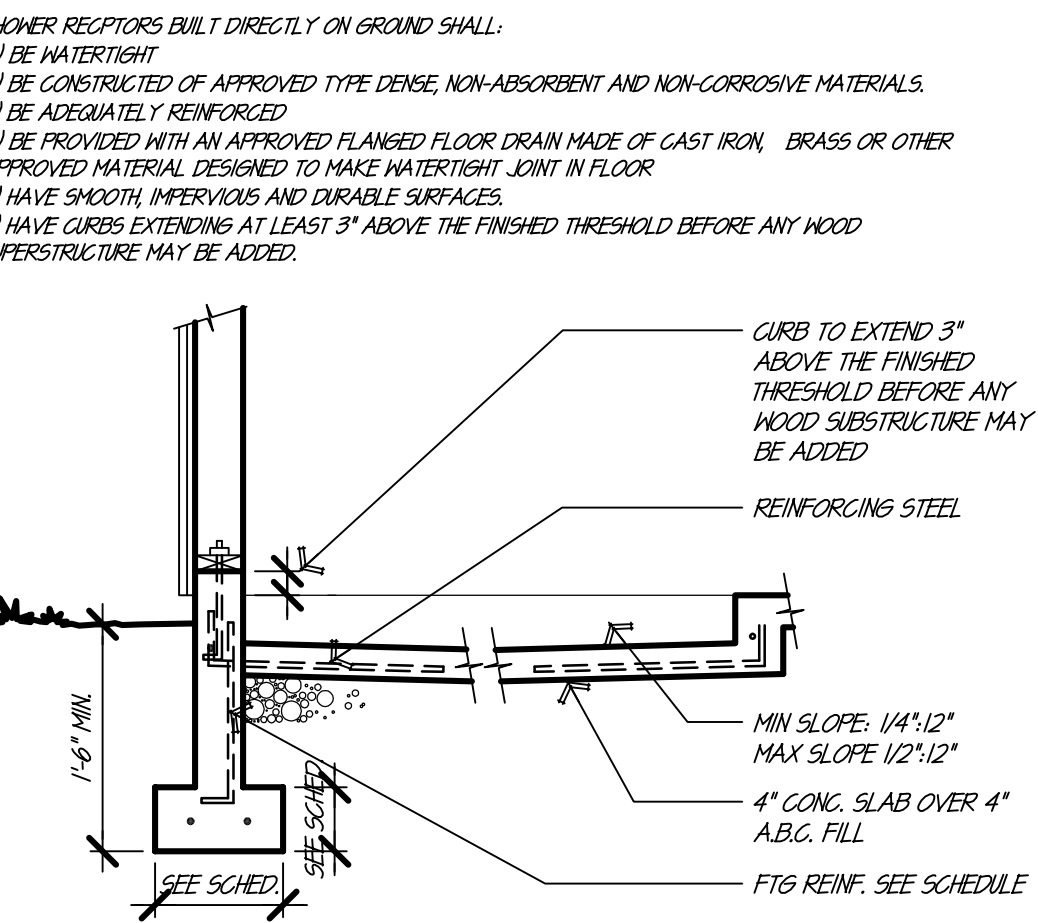
OPENING @ ICF WALL 2



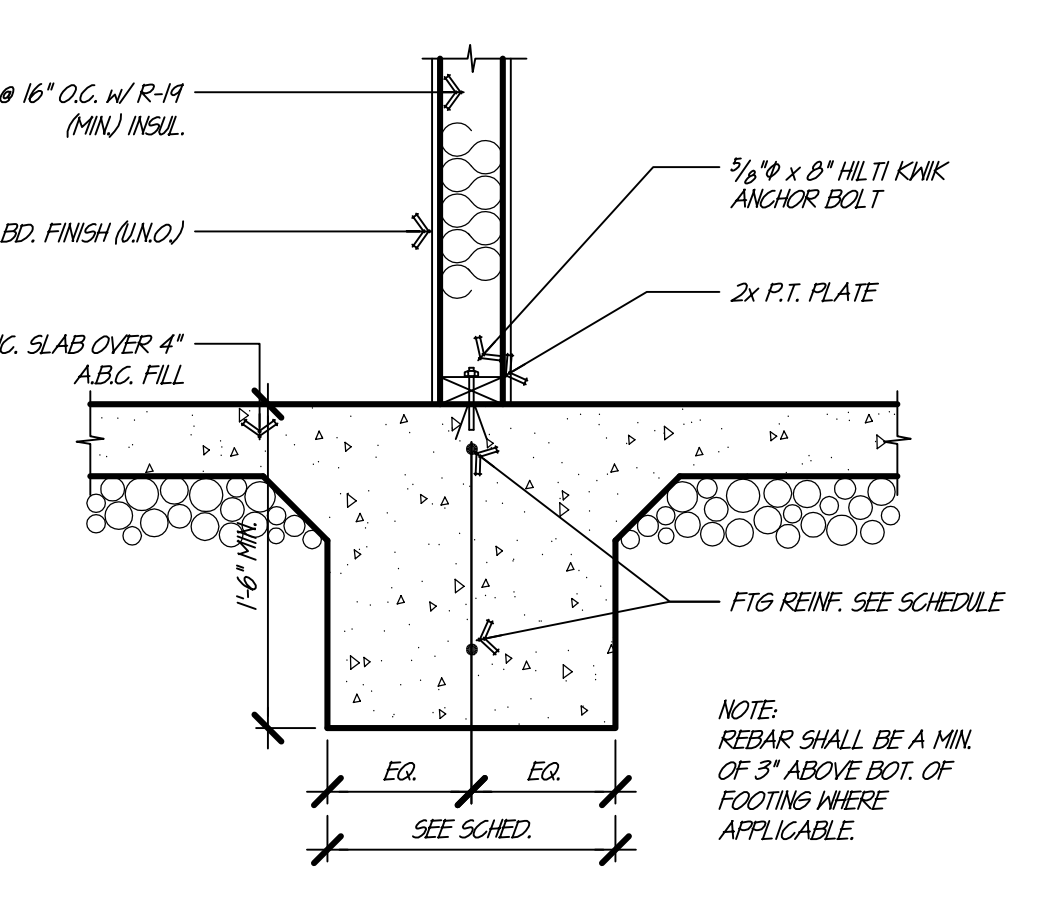
TRUSS / WALL SHEAR TRANS. 19



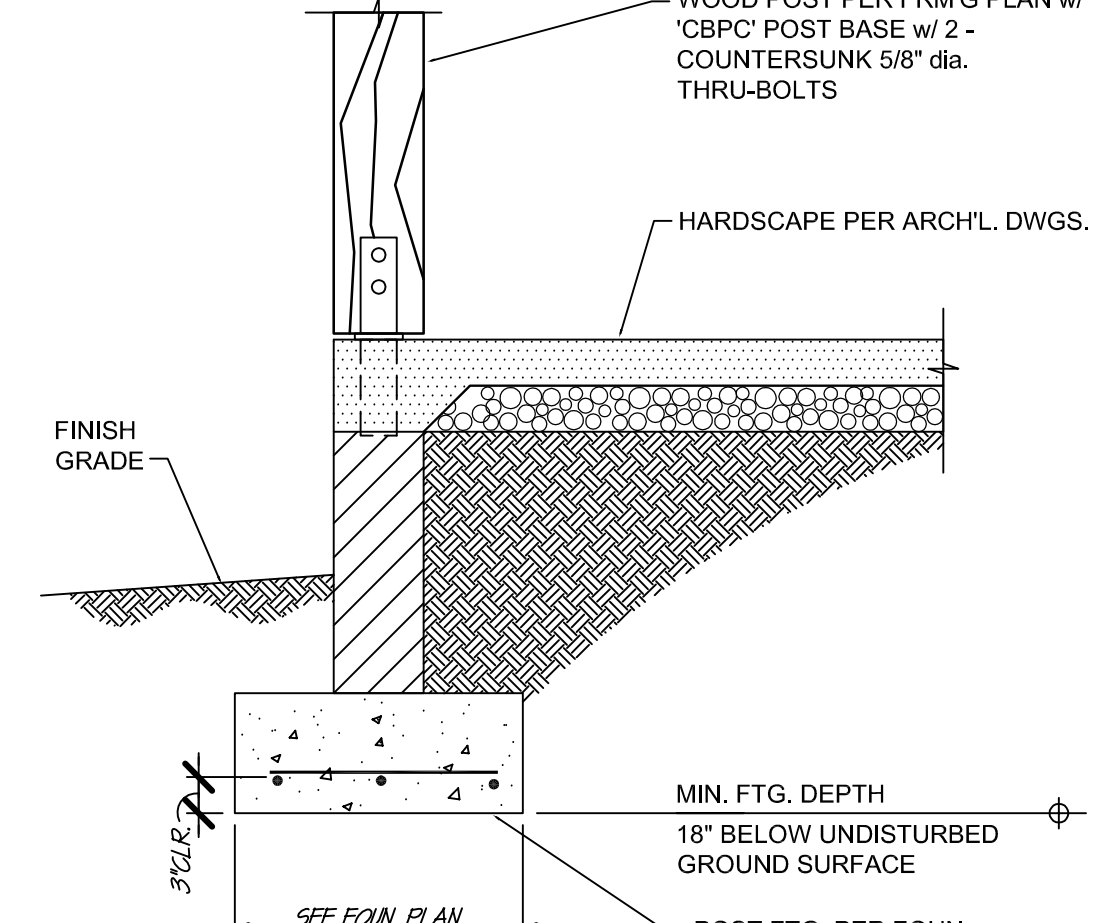
FTG @ ADJACENT CONST 15



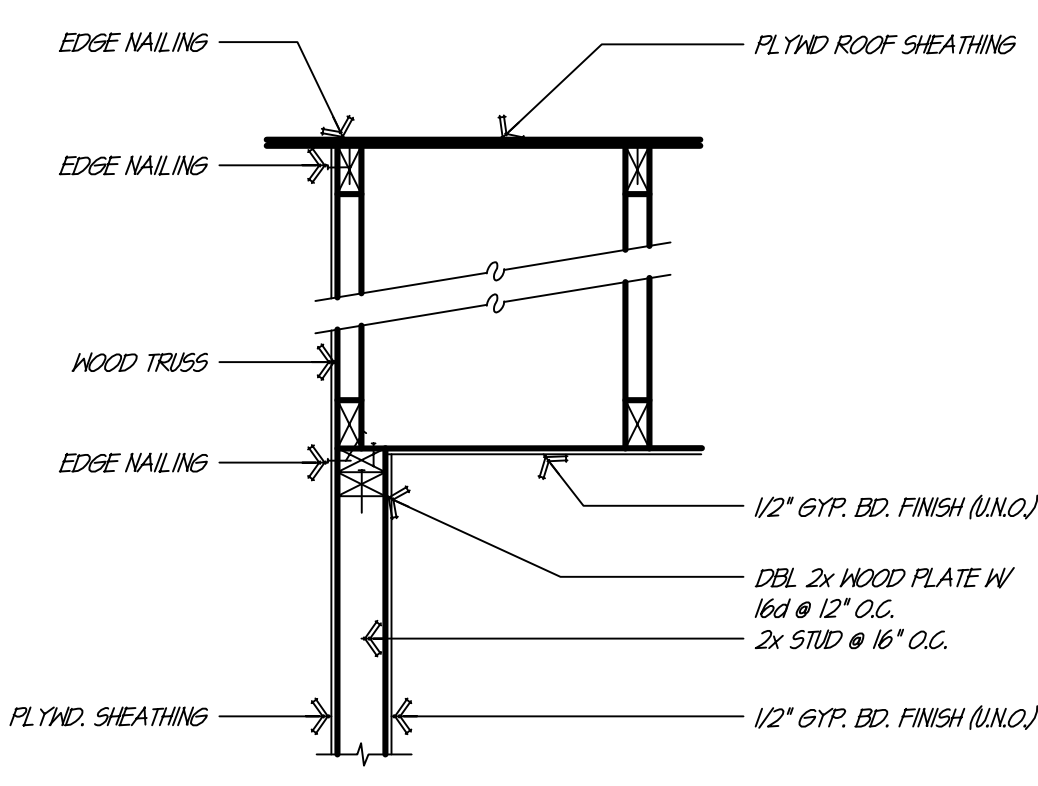
FOUNDATION AT SHOWER 11



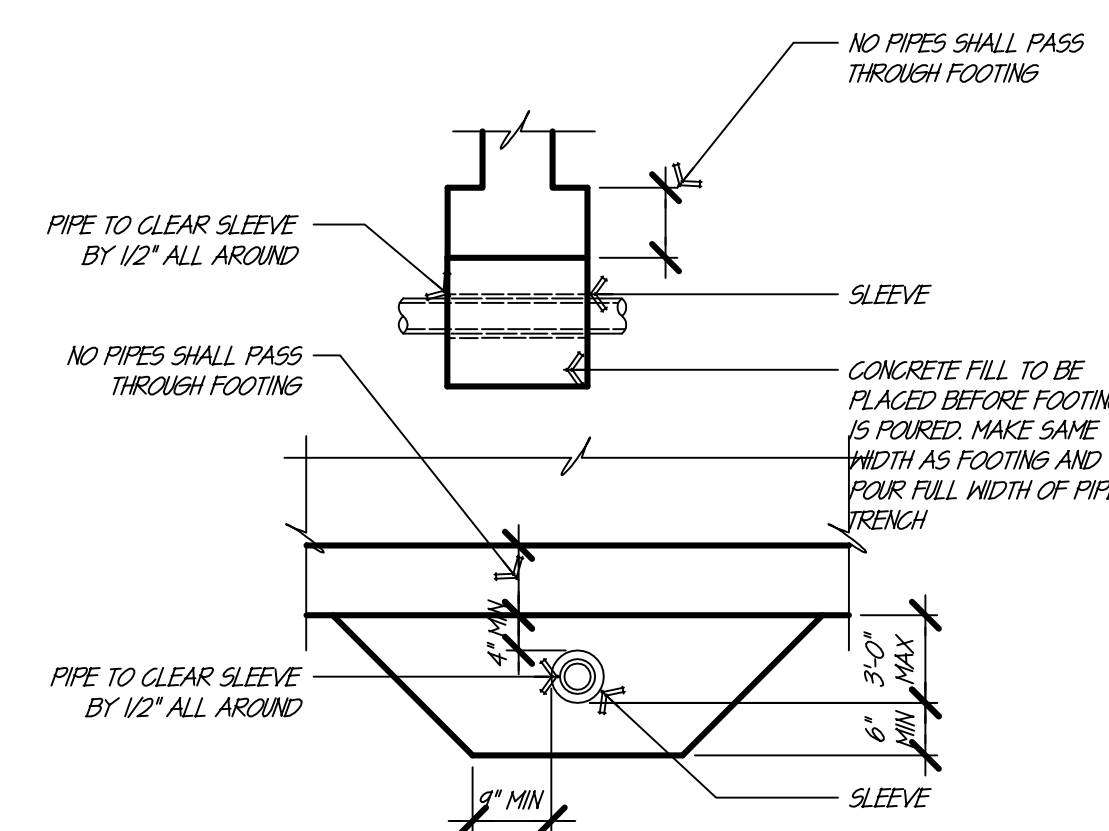
INTERIOR BEARING WALL FTG. 7



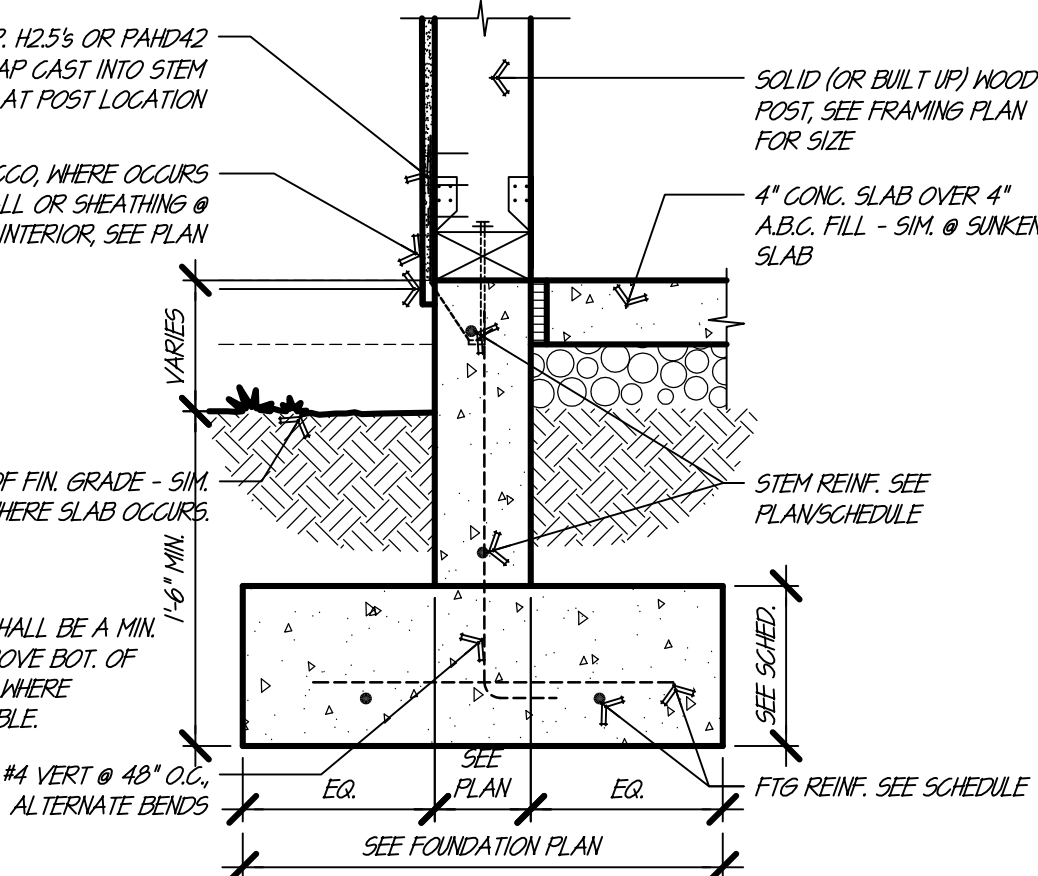
POST FTG @ PATIO 3



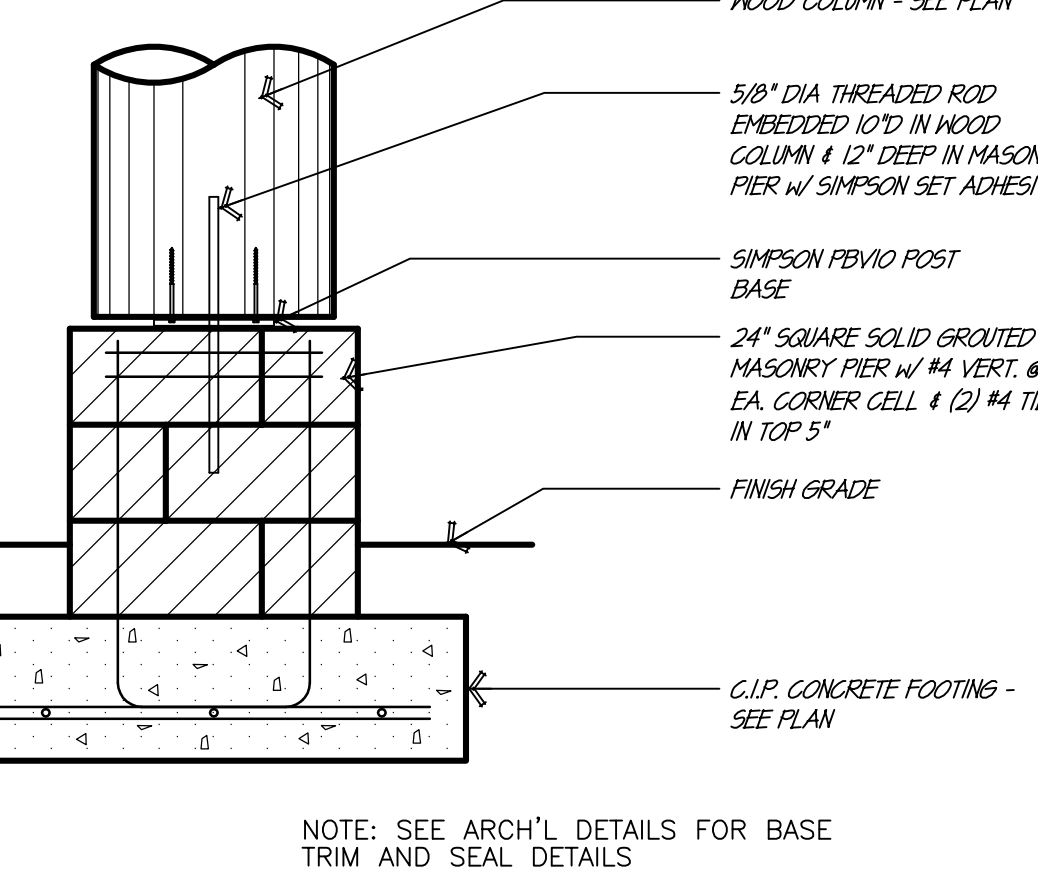
TRUSS / WALL SHEAR TRANS. 20



PIPE UNDER WALL FOOTING 16



COLUMN FTG 12



WOOD POST AT FOOTING 8

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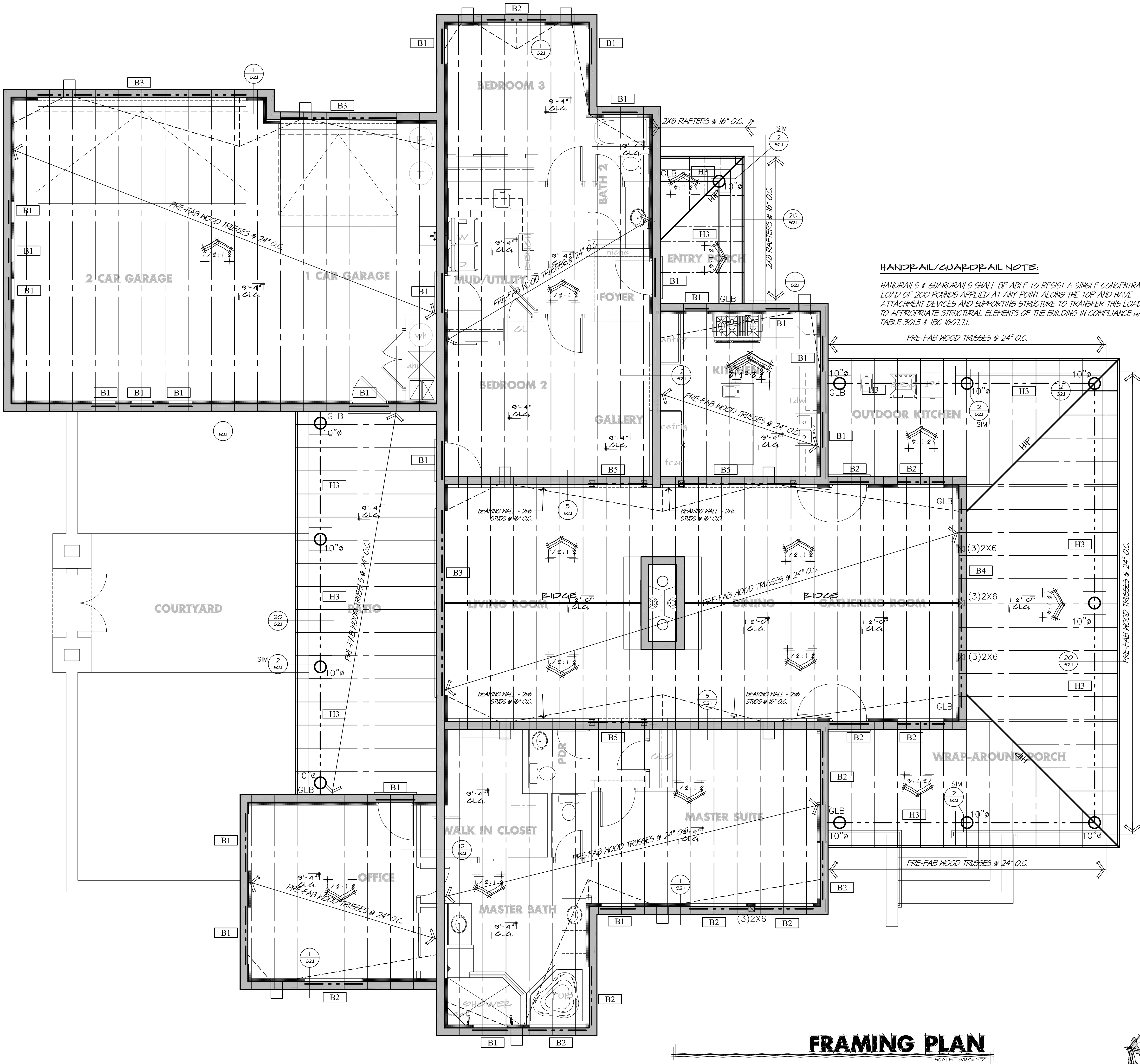
PROJECT ADDRESS
5980 W. BLUE STAR TP.
HOWARD MESA RANCH PHASE 2 UNIT 2
LO# 100
APN: 500-99-002

PROJECT NAME
A CUSTOM HOME FOR
**LARRY & CHERYL
SCHUG**

FOUNDATION
DETAILS

SHEET TITLE
REV COMMENT
date: 7/29/2015
drawn: VFP/RL
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FRAMING PLAN

SCALE: 3/16"=1'-0"

GENERAL NOTES

USE SIMPSON A35 @ EA. TRUSS/JOIST AND EVERY OTHER STUD. IF SPAN EXCEEDS 22'-0" AT UNCLOSED AREAS AND GARAGES, USE ONE ANCHOR PER TRUSS/JOIST AND ONE ANCHOR PER STUD. FRAMING ANCHOR OF TYPE THAT ENGAGES BOTH PLATES (FRAMING ANCHOR AT STUD MAY BE OMITTED IF PLYWOOD OR EQUAL SHEATHING IS USED WITH NAILS TO TOP PLATE, EXCEPT UNCLOSED AREAS AND GARAGE.)

DOUBLE 2x4 WOOD POST w/ DBL. KING STUD AT EACH END OF ALL BEAMS - UNO

2x4 WOOD POST w/ KING STUD AT EACH END OF ALL EXTERIOR DOOR AND WINDOW OPENINGS

PROVIDE ALL BLOCKING AND BRACING PER ALL APPLICABLE CODES AND/OR TRUSS MFG. SPECIFICATIONS - UNO

PROVIDE 2x4 CEILING JOISTS PER CODE AT ALL AREAS WHERE REQUIRED

FLASH ALL CONDITIONS AS REQUIRED

SEE DIMENSION/SHAERWALL PLAN(S) FOR STRUCTURAL ENGINEERING INFORMATION - UNO. ON FRAMING PLANS AND/OR TYPICAL DETAILS

GYPSON BOARD APPLIED TO A CEILING SHALL BE 1/2" WHEN FRAMING MEMBERS ARE 16" O.C. OR 5/8" WHEN FRAMING MEMBERS ARE 24" O.C. OR USE LABELED 1/2" SAG-RESISTANT GYPSON CEILING BOARD, TABLE R102.3.5(d)

HORZ. DISPLACEMENT MUST BE PROVIDED OR AS PER TRUSS DRAWINGS. CHECK TRUSS LAYOUT SHEET OR CALCS FOR ADDITIONAL INFO.

ALL WOOD PLATES, INTERIOR AND EXTERIOR, TO BE PRESSURE TREATED, OR FOUNDATION REDWOOD.

TRUSSES TO BE DESIGNED BY AN ARIZONA LICENSED ENGINEER SHOP DRAWINGS TO BE SUBMITTED FOR REVIEW BY RKD PRIOR TO FABRICATION

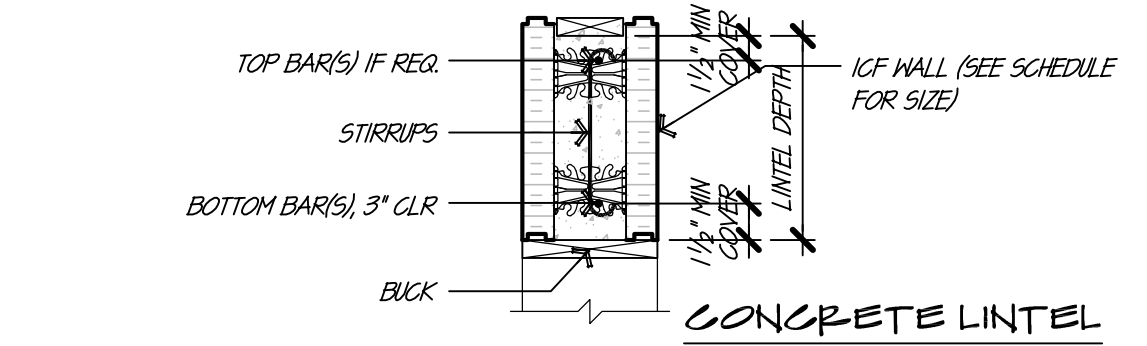
APPROVED TRUSS DRAWINGS ALONG WITH THEIR LAYOUT MUST BE ON JOB SITE WHEN ROOF SHEATHING INSPECTION IS PERFORMED

SHEAR WALL BELOW - CONTRACTORS OPTION TO EITHER EXTEND WALL TO UNDERSIDE OF ROOF SHEATHING AND NAIL WITH (2) ROWS OF PLYND EDGE NAILING OR TO EXTEND WALL TO UNDERSIDE OF TRUSS AND CONTINUE SHEAR WALL SHEATHING UP SIDE OF TRUSS TO ROOF SHEATHING.

BLOCK ALL UNSUPPORTED PLYND PANEL EDGES WITH 2X BLOCKING AND NAIL PLYND EDGES WITH 10D NAILS @ 4'-0". - TYPICAL AT AREA INDICATED

BEAM SCHEDULES

#	SIZE	REINFORCING/REMARKS
B1	6"x12" CONC.	(2) #4 CONT. TOP & BOTTOM 3" CLR. NO STIRRUPS
B2	6"x18" CONC.	(2) #4 CONT. TOP & BOTTOM 3" CLR. NO STIRRUPS
B3	6"x24" CONC.	(2) #4 CONT. TOP & BOTTOM 3" CLR. NO STIRRUPS
B4	5 1/8" x 12 GLB	GLB. CONC. WALL
B5	5 1/8" x 12 GLB	6x6 POST
B6		
B7		
B8		



#	SIZE	REMARKS
H1	(2) 2x6	DOUBLE FIR #2
H2	(2) 2x6	DOUBLE FIR #2
H10	5 1/8" x 12 GLB	

NOTE: SEE STRUCTURAL CALCS FOR ADDITIONAL INFORMATION FOR ALL BEAMS & HEADERS. NOTES, ANCHORING, BRACING, ETC SHOWN IN CALCS SHALL GOVERN ANY DISCREPANCIES ON THE PLANS.

CONNECTOR	CONNECTING MEMBERS
LUS26	JACK TRUSS TO GIRDER
HGUS26-2	GIRDER TRUSS TO GIRDER TRUSS
HUS26	TRUSS TO GIRDER TRUSS
LTHJ	HIP TRUSS TO GIRDER TRUSS
LTHMA	2 HIP JACKS TO GIRDER TRUSS

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A CUSTOM HOME FOR
LARRY & CHERYL
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PROJECT NAME
ROOF FRAMING
PLAN

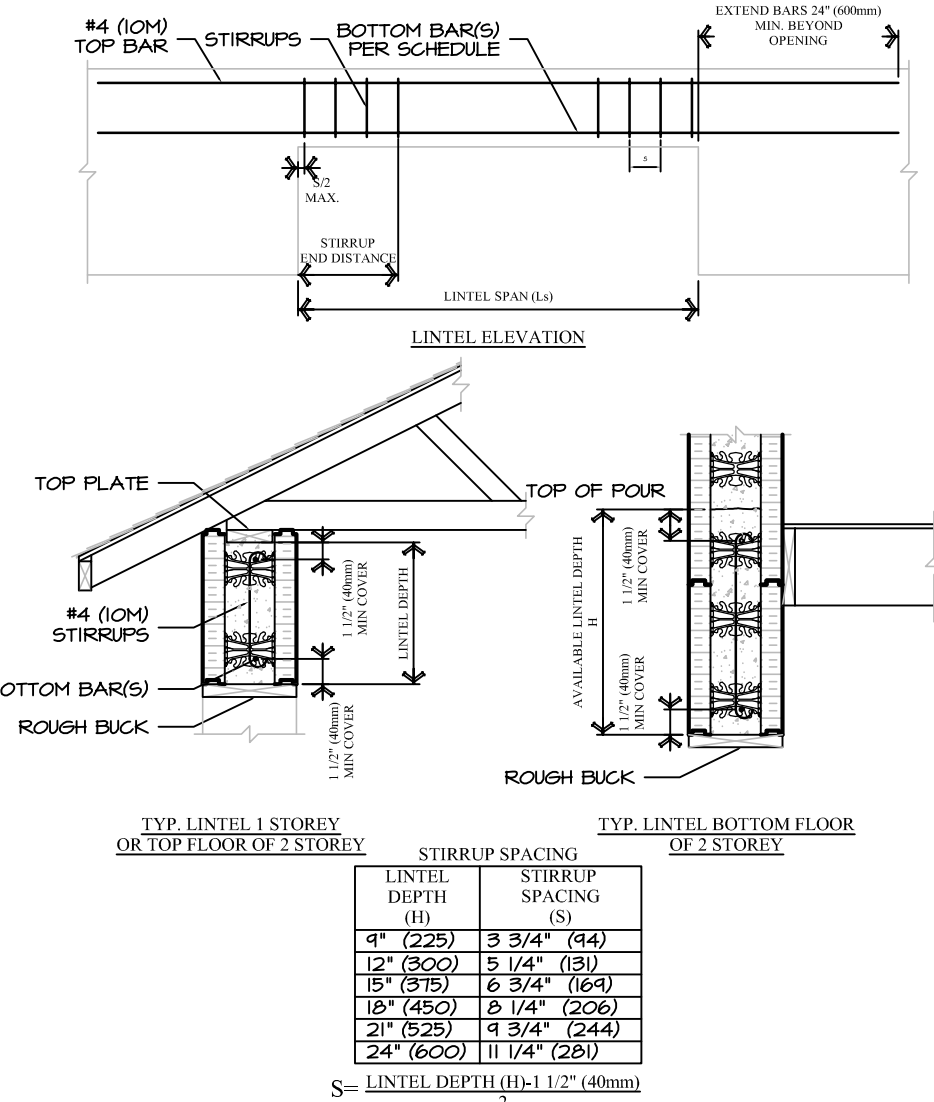
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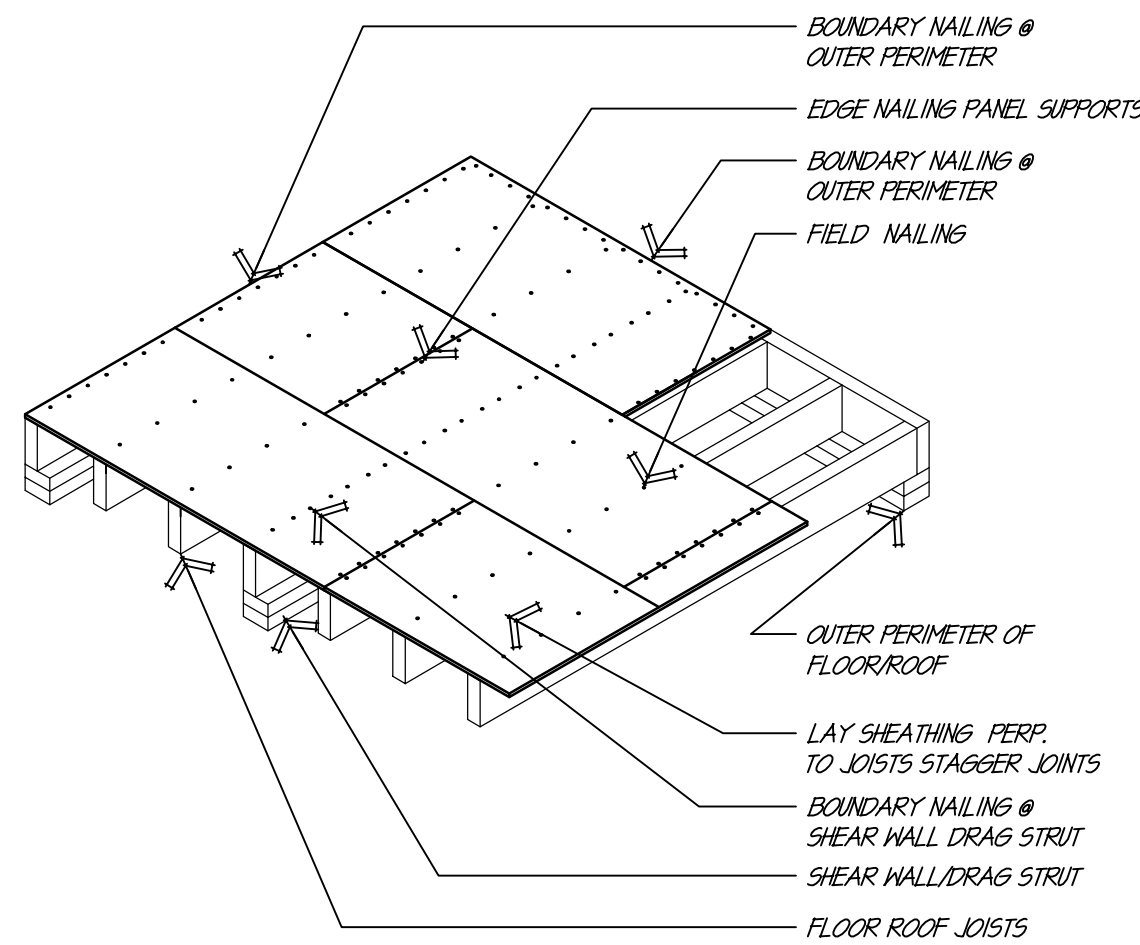
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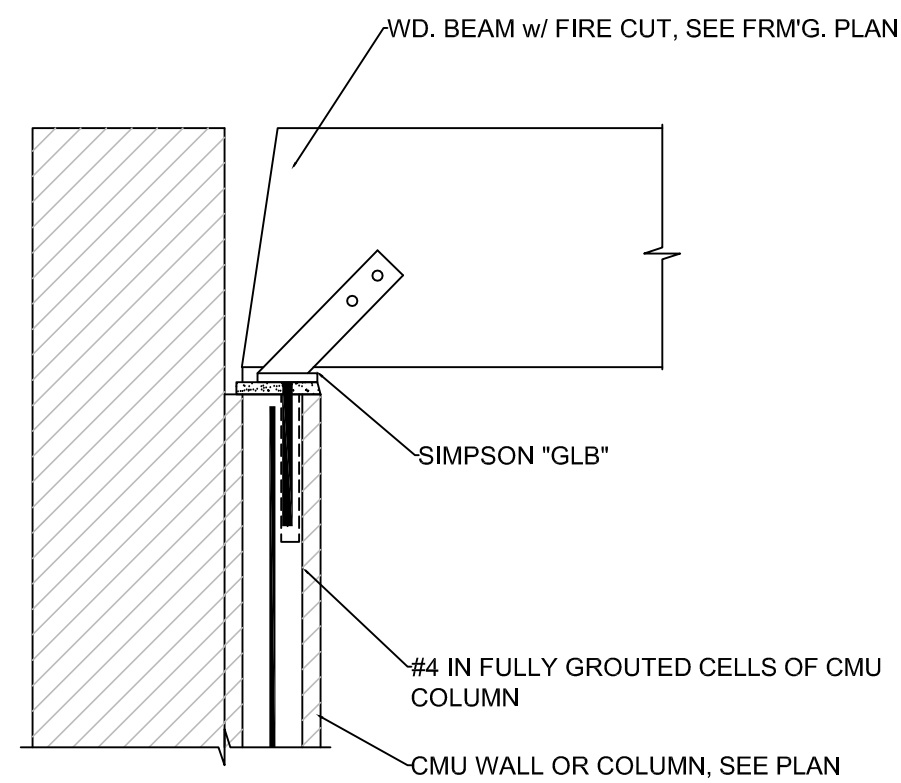
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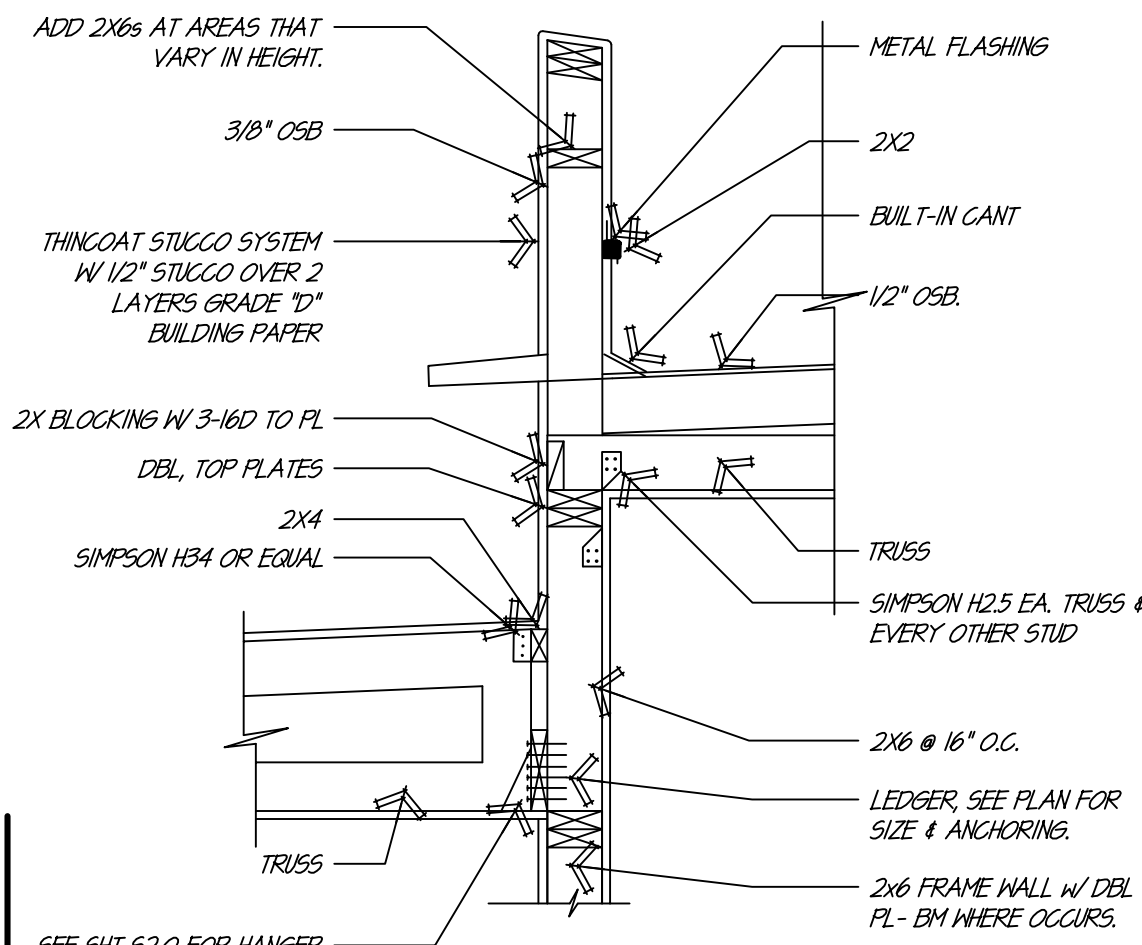
- GENERAL NOTES:
1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE GOVERNING CODES
2. LINTEL DESIGN IN ACCORDANCE WITH ACI 318/CSA A23.3-44.
3. FOR LOADING CONDITIONS BEYOND THE LIMITS IDENTIFIED HEREIN AN ENGINEERED DESIGN SHALL BE REQUIRED.
4. LINTELS SUPPORTING POINT LOADS FROM BEAMS OR GIRDER TRUSSES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER.
5. REFER TO WALL REINFORCING TABLES FOR ADDITIONAL OPENING REINFORCING.
6. STANDARD SPECIFICATION FOR DEFORMED AND PLAIN BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT SHALL CONFORM TO ASTM A615/A615M-04 GRADE 60 KSI CSA-A23.3-02 GRADE 400 MPa.
7. CONFORM TO ACI STANDARDS 304 THROUGH 304 GUIDES FOR CONCRETE DELIVERY AND PLACEMENT METHODS, ACI 332-84 RESIDENTIAL CAST-IN-PLACE CONCRETE CONSTRUCTION, CSA STANDARDS A23.3-A23.1M-02, CONCRETE CONSTRUCTION, CAN/CSA-A23.3-M02, CONCRETE CONSTRUCTION, CAN/CSA-A23.3-M02, METHODS OF TEST CONCRETE AND CAN3-23.3-A23.3-M04 IN DETAILING BENDS, PLACEMENT, SPACING, SPLICING AND PROTECTION OF REINFORCING.
8. MINIMUM 28 DAY CONCRETE STRENGTH 2000 PSI, 20 MPa. MIX DESIGN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
9. DRAWINGS ABOVE ARE NOT TO SCALE



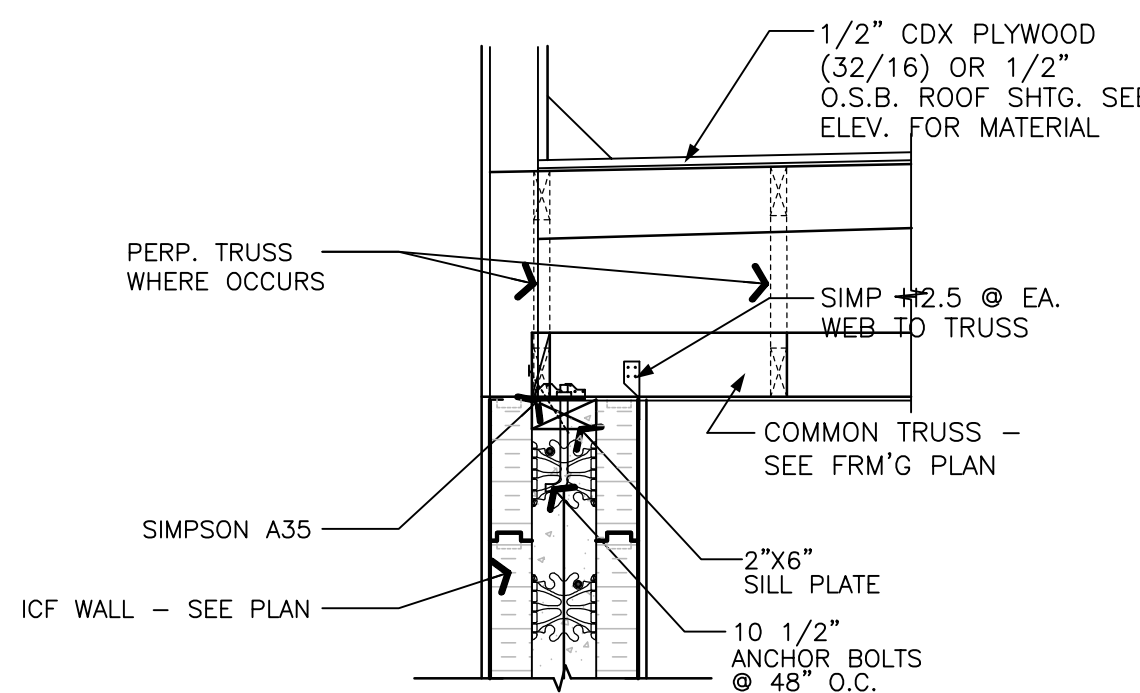
TYPICAL SHEATHING & NAILING



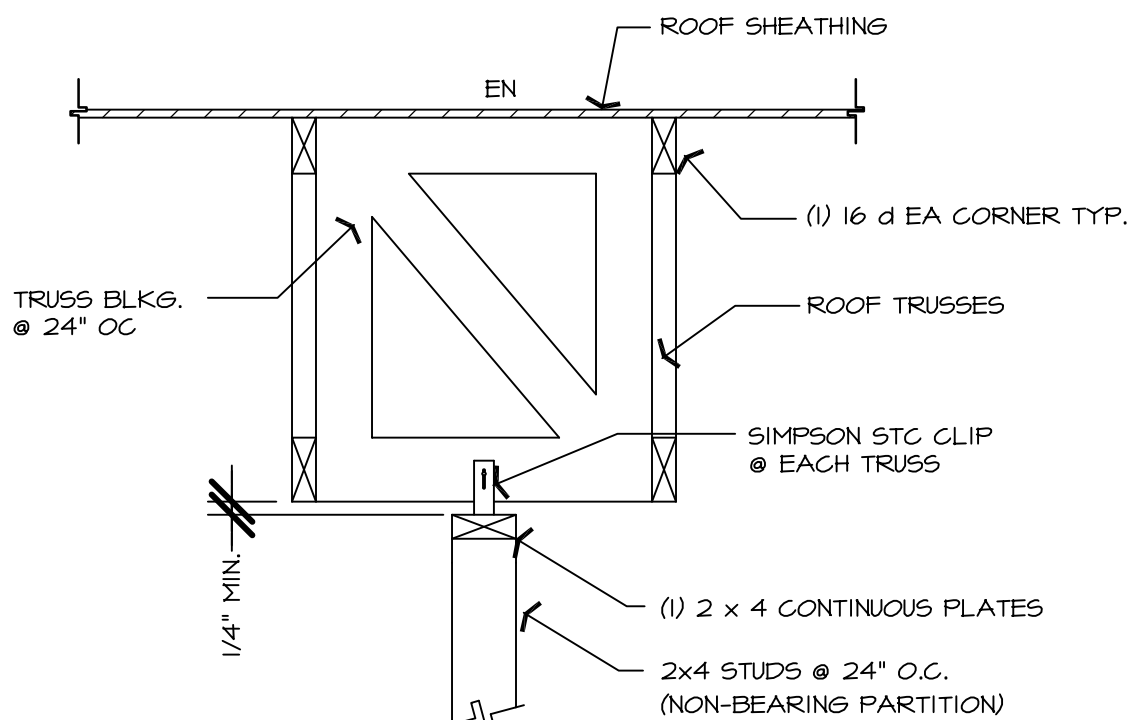
CLB TO MASONRY WALL N.T.S.



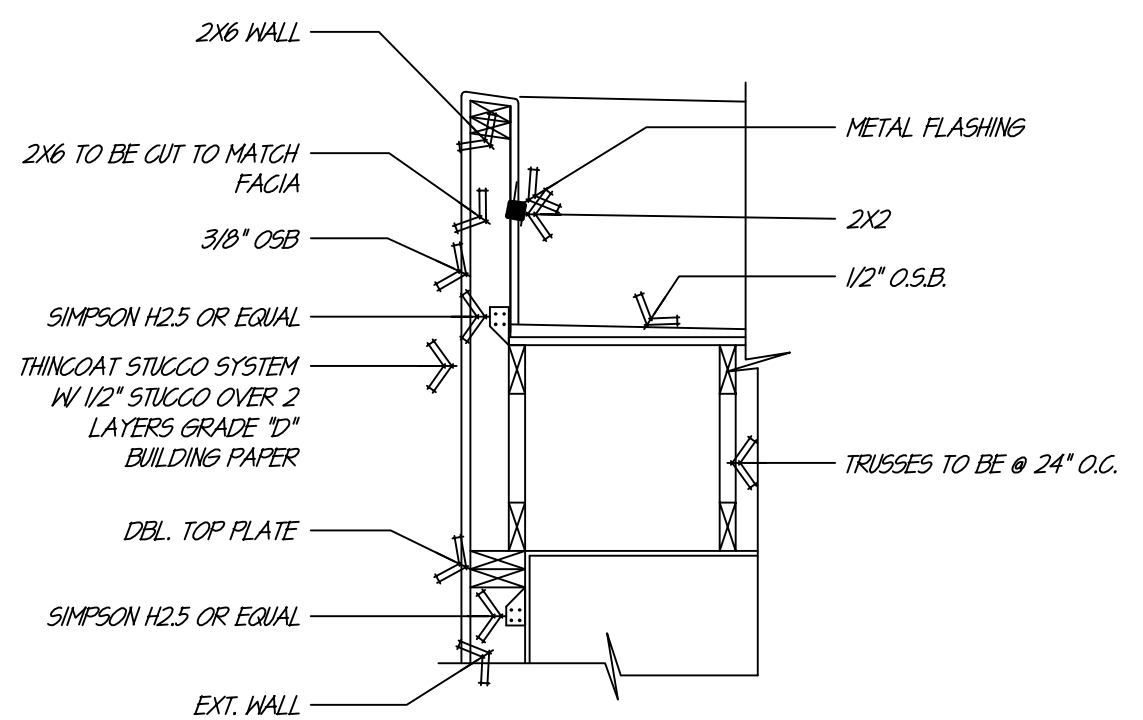
HIGH/LOW TRUSS BEARING



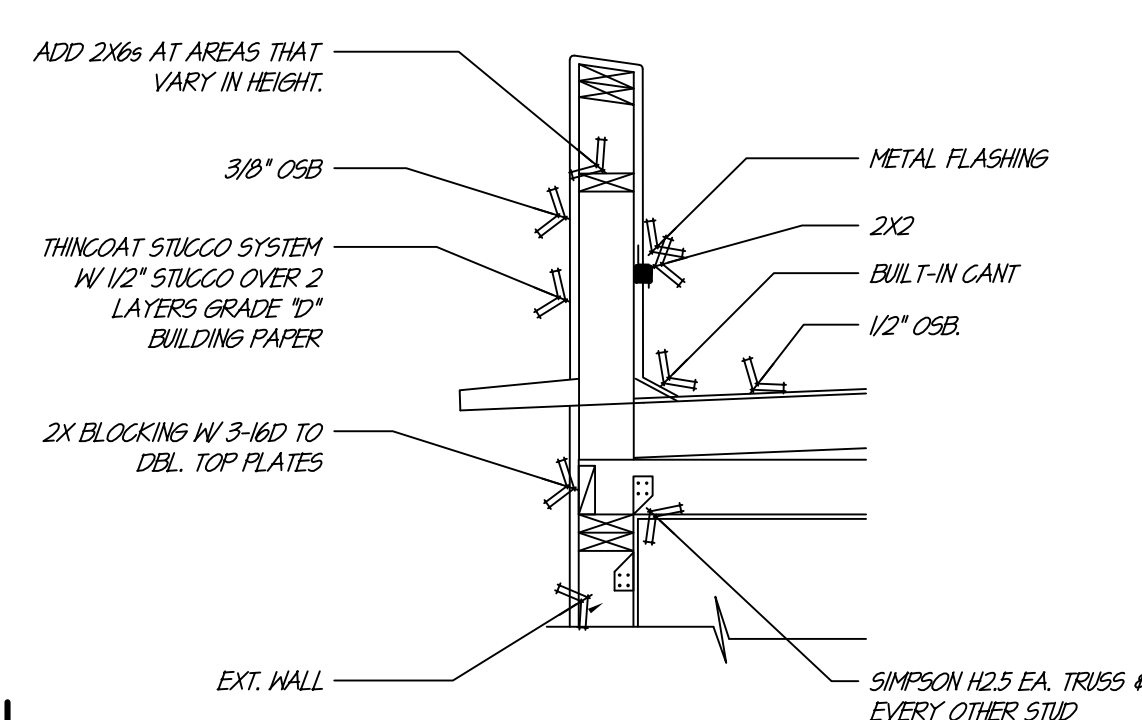
TRUSS / ICF WALL CONN.



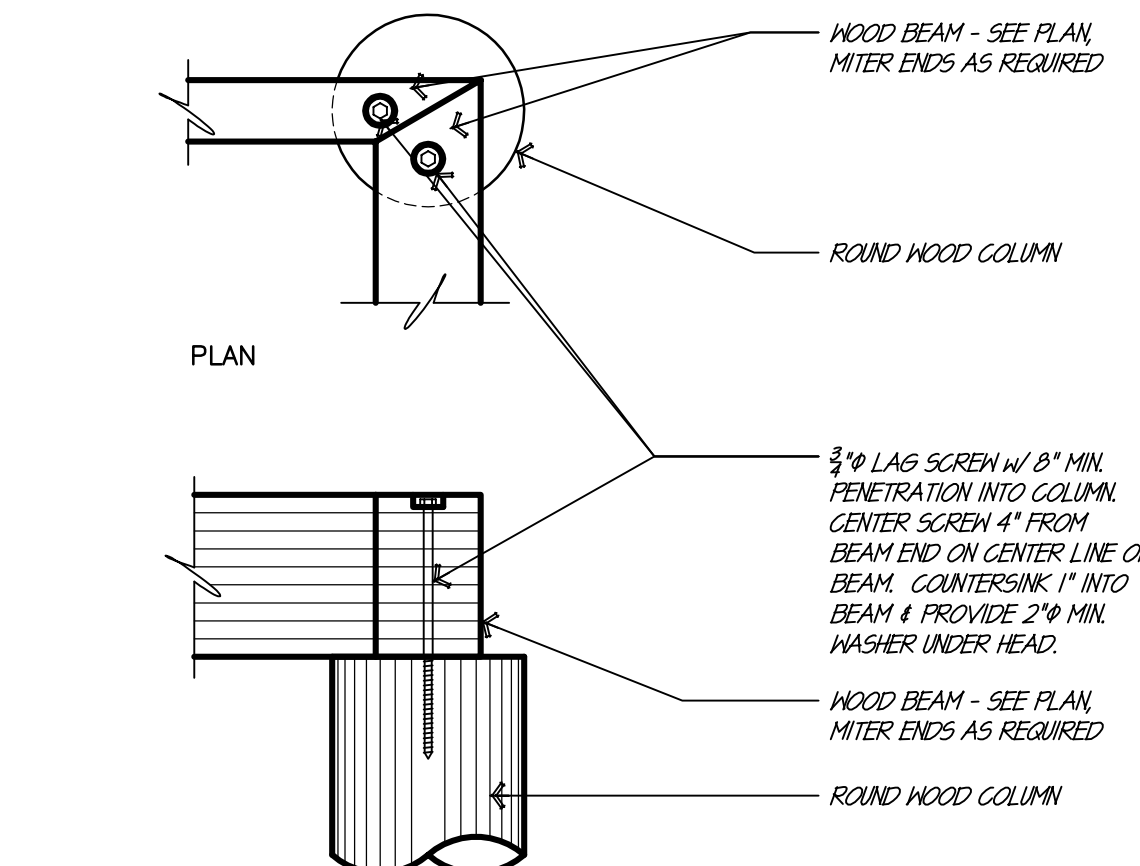
200F AT NON-BEARING WALL 14
N.T.S.



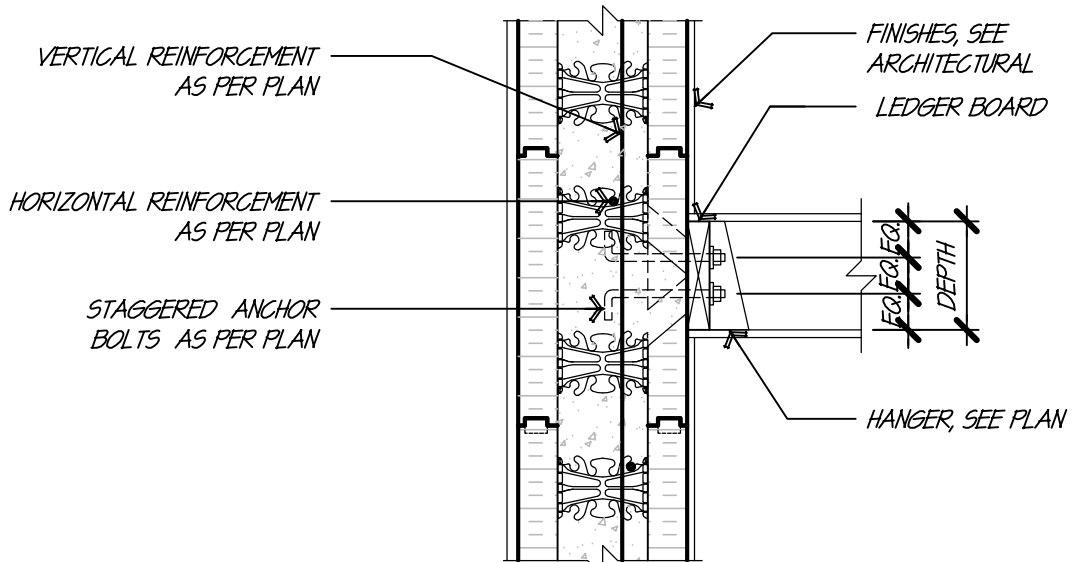
FACIA DETAIL FOR PARAPET



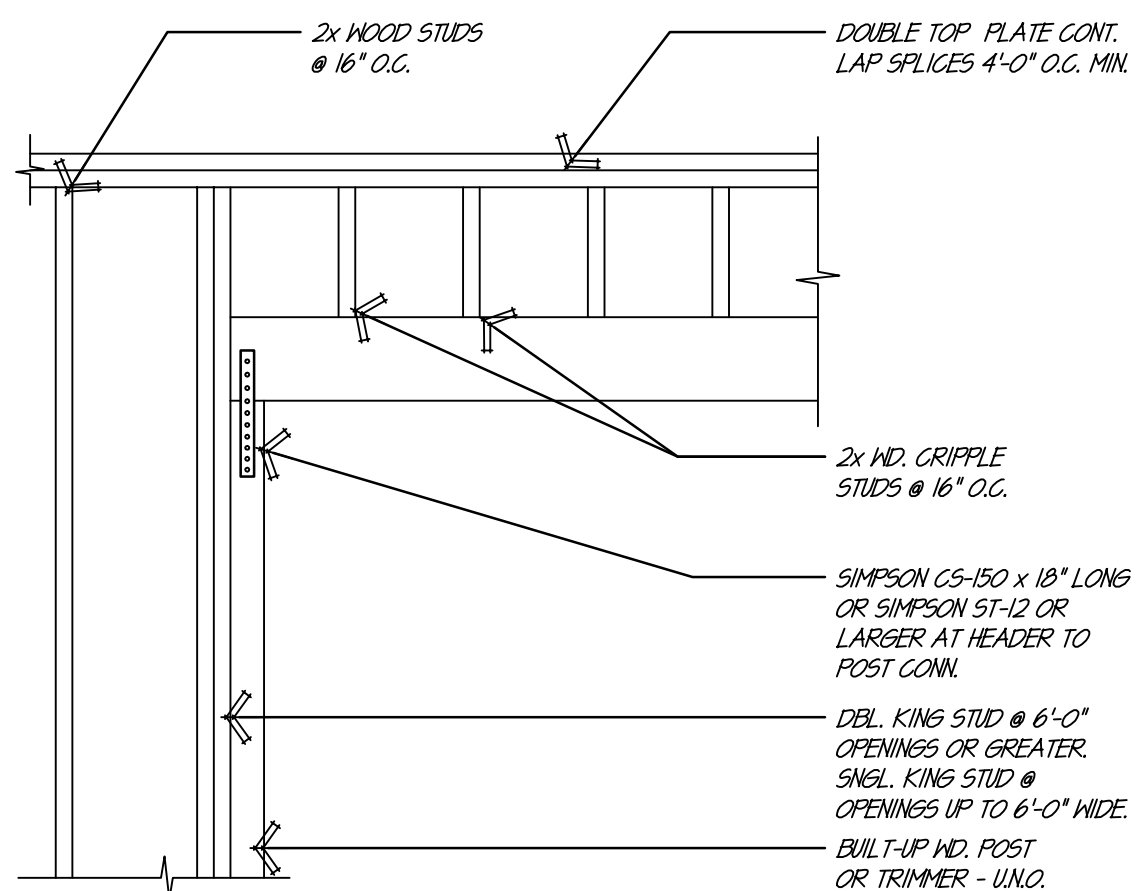
TRUSS BEARING



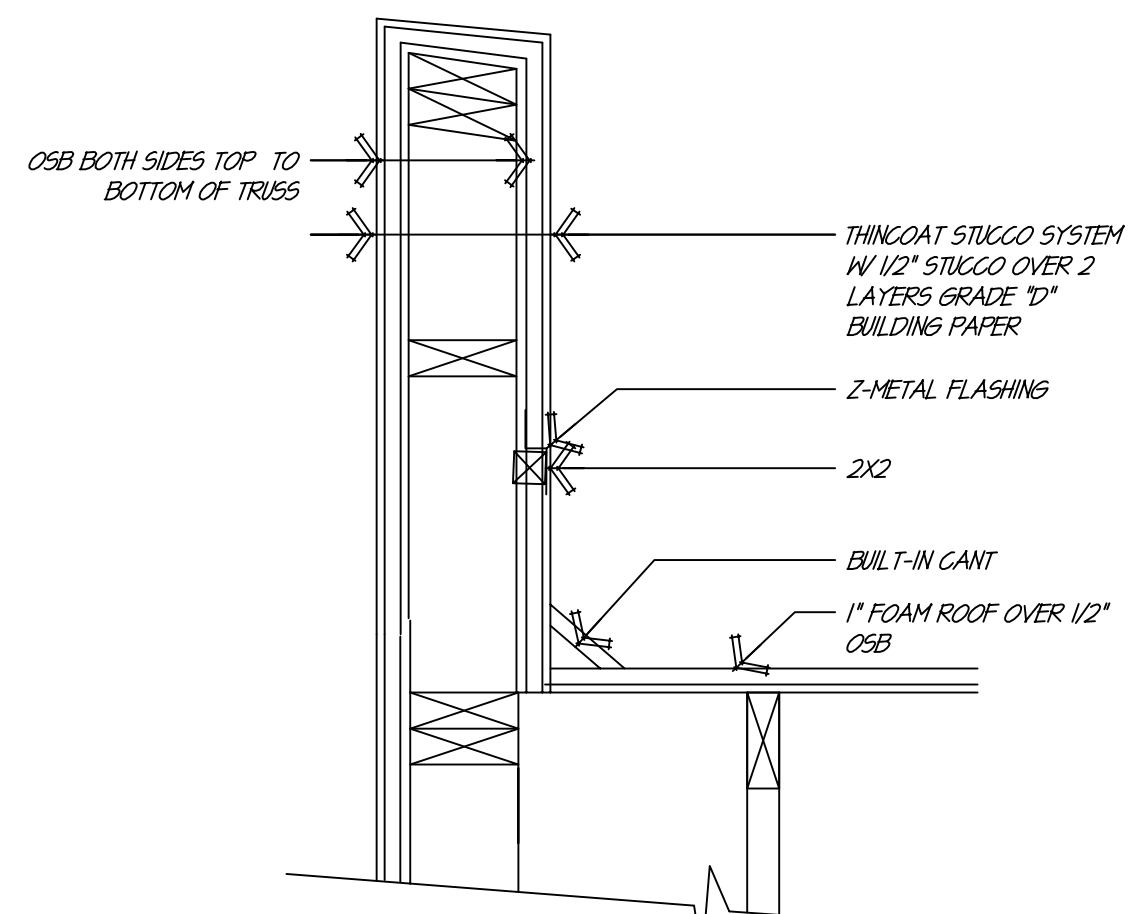
WOOD BEAMS @ VIGA COLUMN



ICF WALL LEDGER

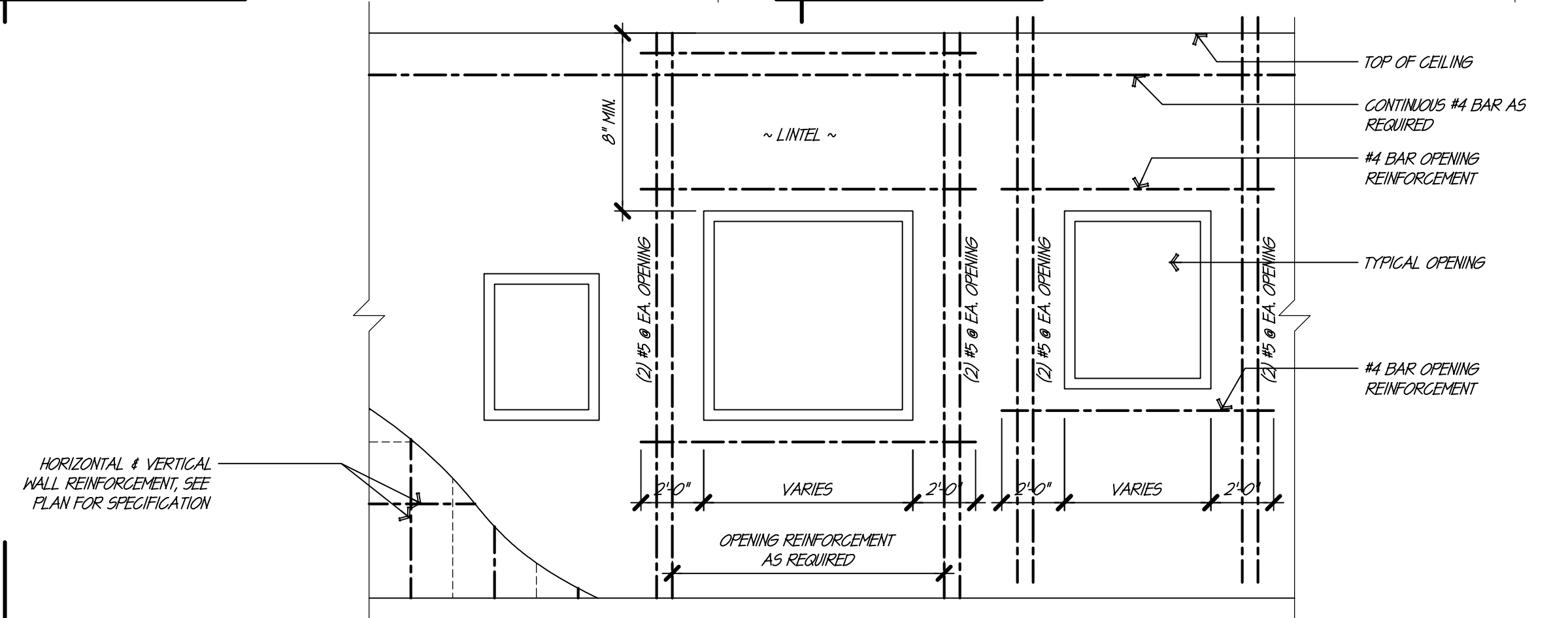


TYPICAL HEADER

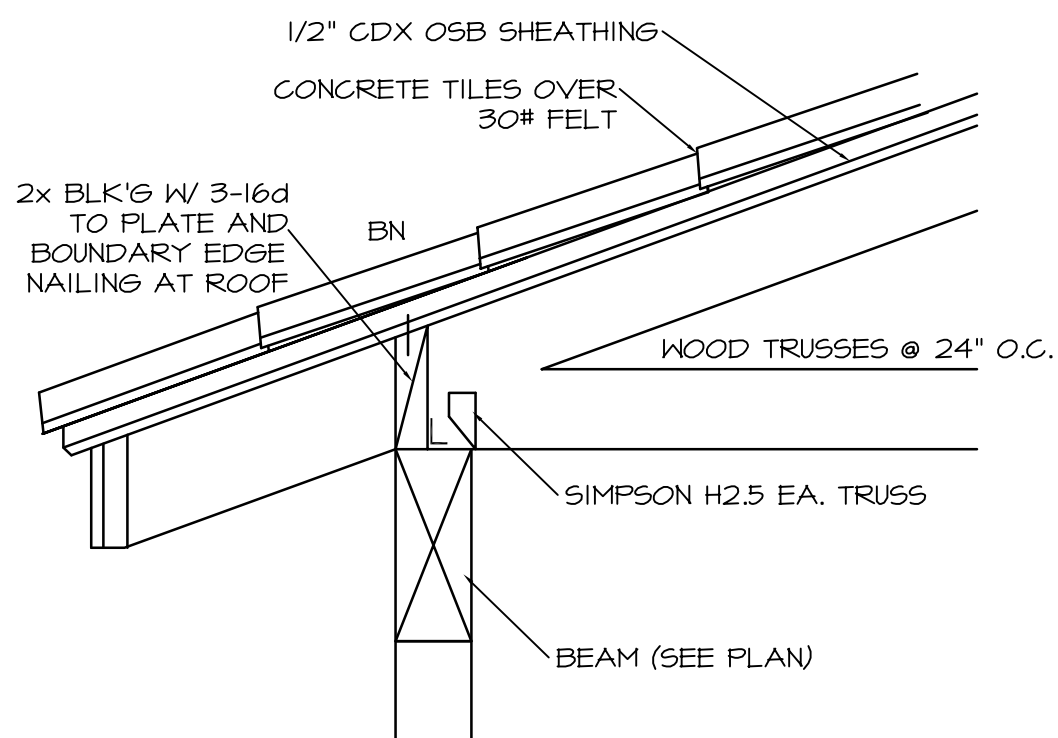


PARAPET DETAIL

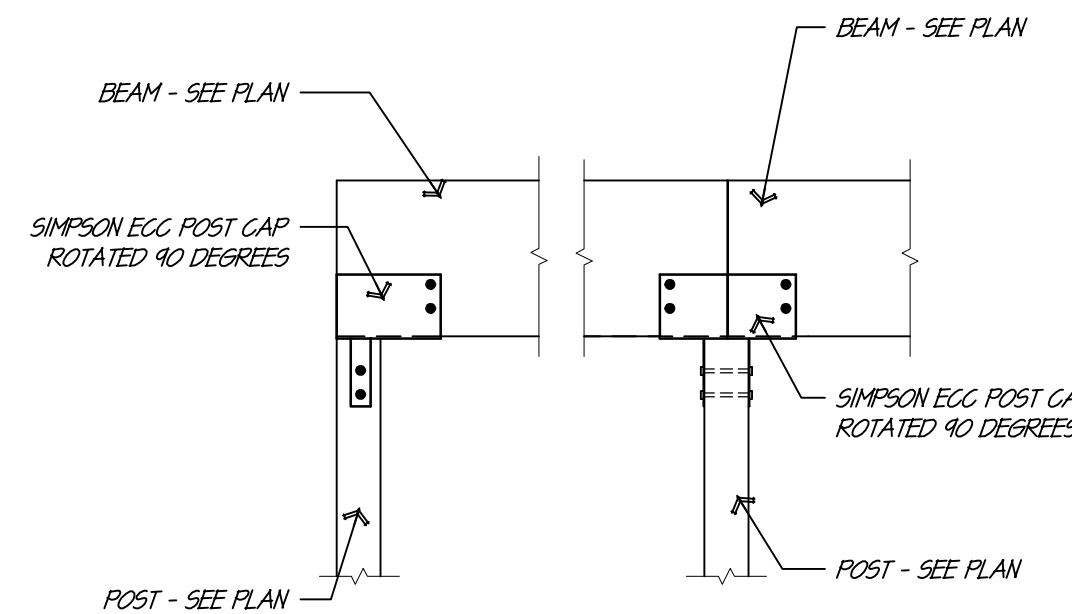
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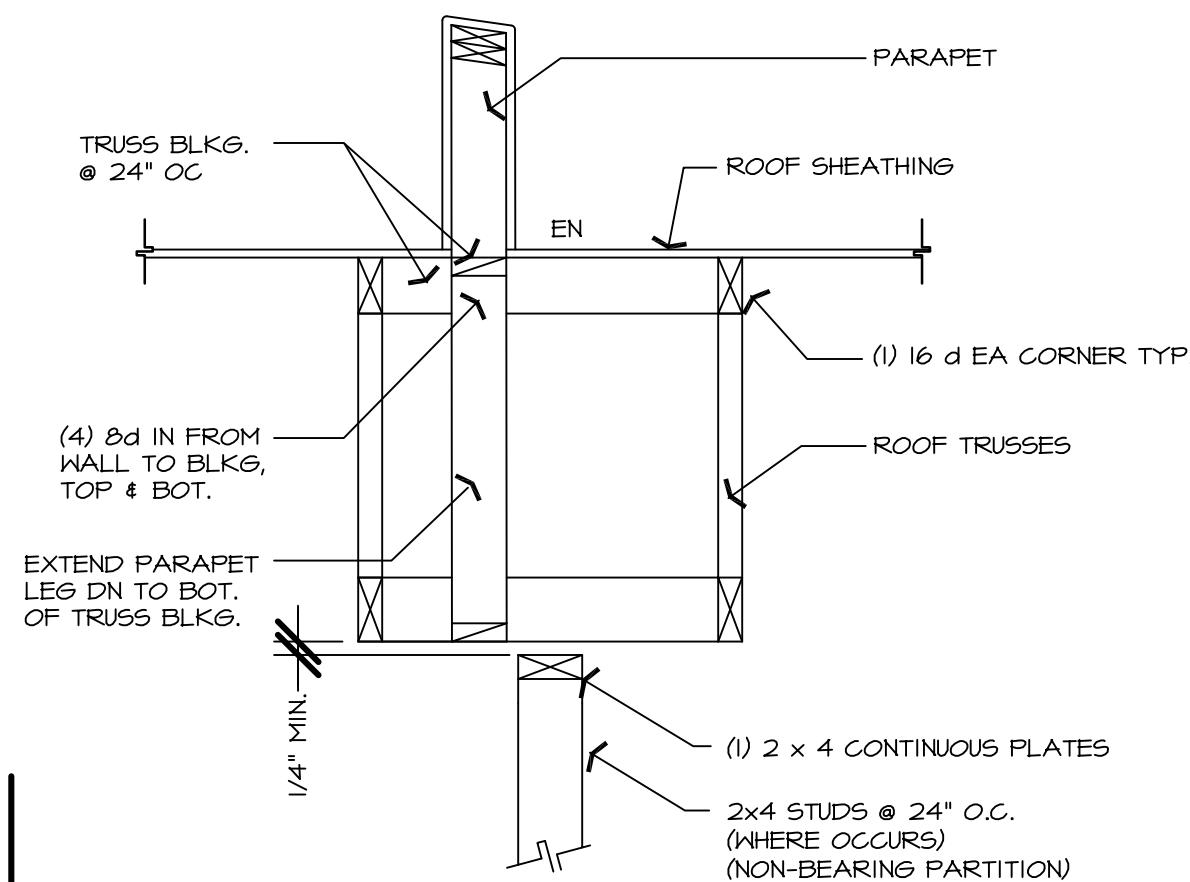
ICF OPENING REINFORCEMENT



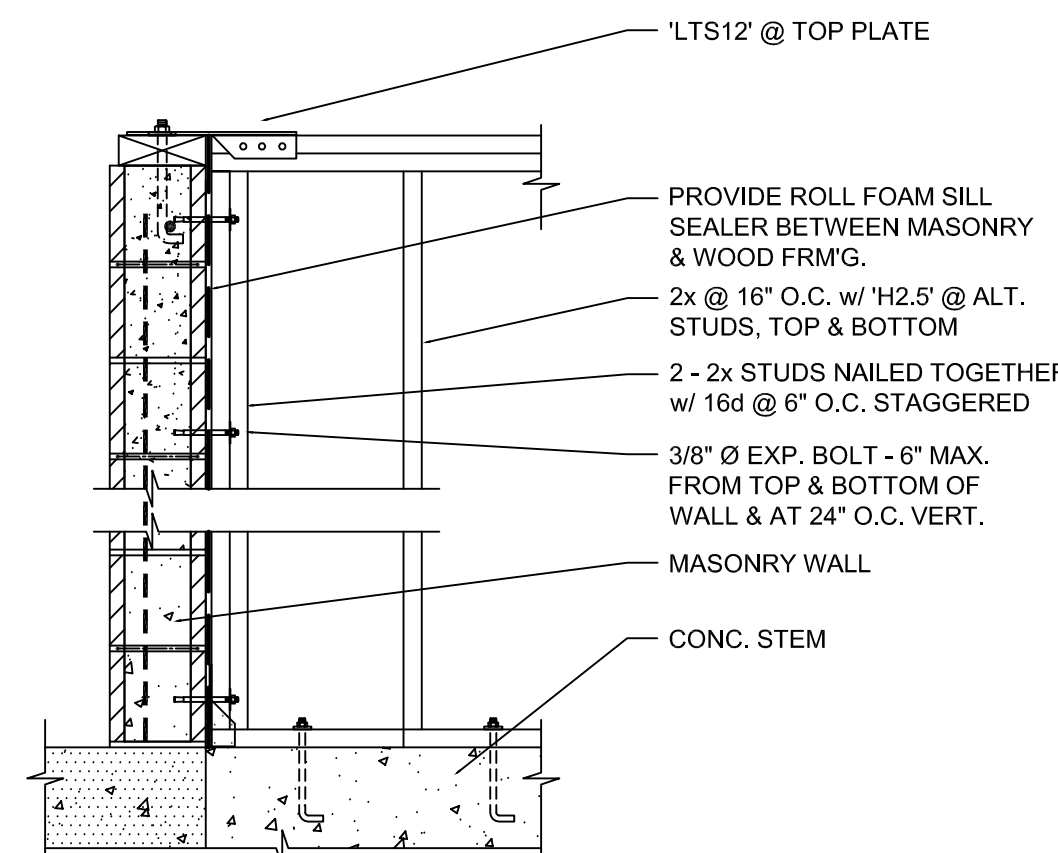
TRUSS/RAFTER TO BEAM 20
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BEAM TO POST

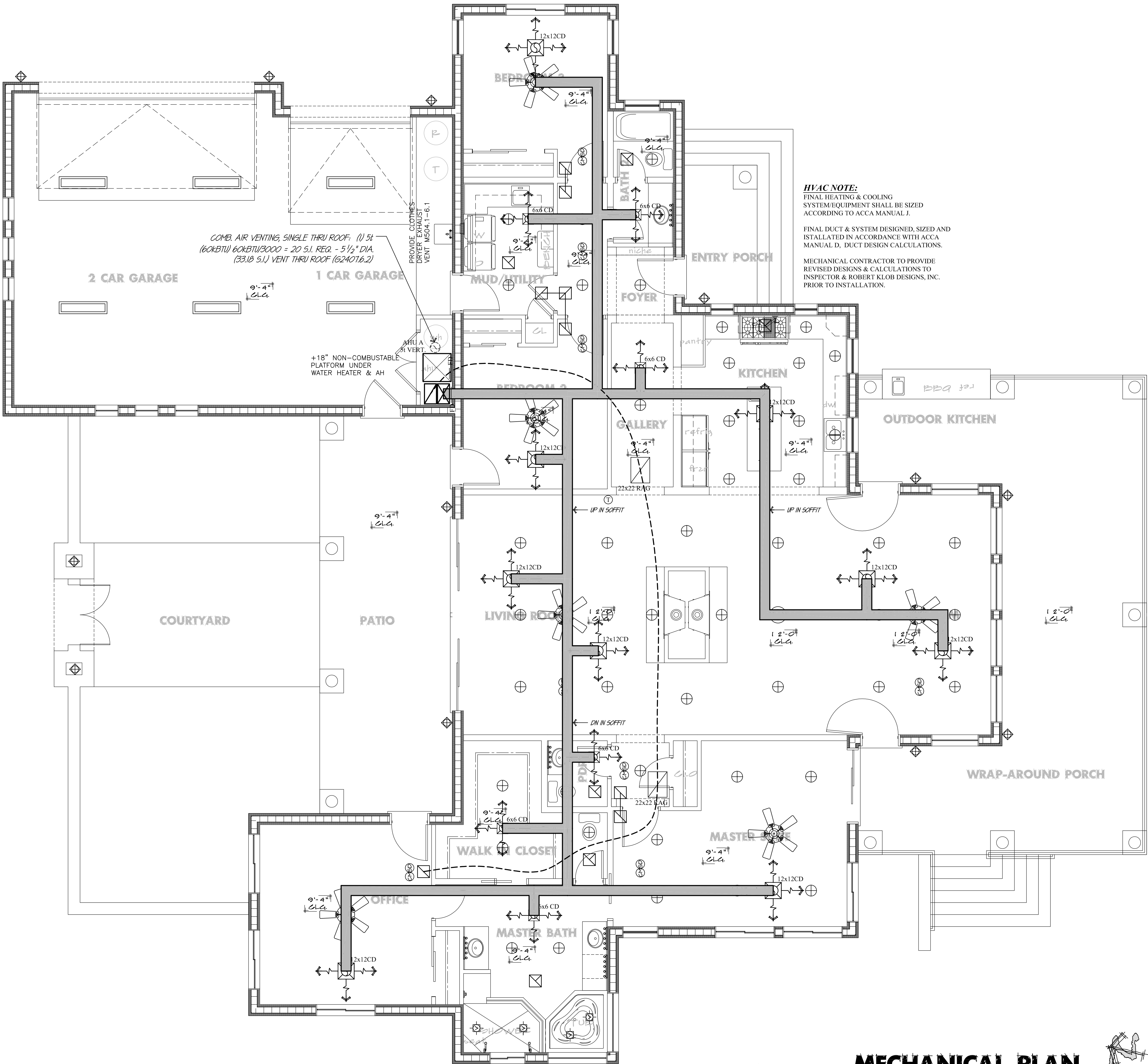


PARAPET DETAIL



FRAME TO MASONRY

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MECHANICAL NOTES

MECHANICAL SYSTEM NOTE:

VERIFY WITH MECHANICAL CONTRACTOR EXACT SYSTEM AND CAPABILITIES OF THAT SYSTEM PRIOR TO INSTALLATION. MECHANICAL CONTRACTOR TO ENSURE PROPER SIZING, BALANCE AND EFFECIENCY OF SYSTEM BASED ON FINAL EQUIPMENT SUPPLIED. MECHANICAL CONTRACTOR TO RETURN PRIOR TO C. OF. O. TO CLEAN DUCTWORK OF CONSTRUCTION DEBRIS AND RE-BALANCE SYSTEM TO MFR. SPECIFICATIONS.

FIREPLACE NOTE:

CONTRACTOR SHALL PROVIDE MANUFACTURERS INSTALLATION INSTRUCTIONS AND COPY OF APPLICABLE ICBO RESEARCH REPORT WILL BE MADE AVAILABLE TO INSPECTOR ON 0" CLEARANCE FIREPLACE INSTALLATION PER IRC.

LEGEND

	8x8 CLG. TRANSFER GRILLE		ATTIC ACCESS PANEL
	CEILING DIFFUSER		22x30 RETURN GRILLE
	12x18 WALL DIFFUSER		THERMOSTAT
			EXHAUST FAN
			TANKLESS WATER HTR.

(OPT) HRV SYSTEM

HEAT RECOVERY VENTILATOR (HRV) SYSTEM:

BROWN MODEL HRV1000H
VENTILATION UP TO 4500 S.F.
FLOW RATE: 64-146 CFM
TYPE: HRV
EFFICACY (CFM/W): 1.2
(OR OWNER/HVAC CONTRACTOR APPROVED EQUAL)

INSTALL PER MFR. SPECIFICATIONS.

HRV NOTES:

- LOCATE THE FRESH AIR INTAKE AWAY FROM DRIVEWAYS, LAUNDRY & FURNACE VENTS.
- INSTALL A SUPPLY INLET (DEDICATED INLET OR HEATING REGISTER, IF CONNECTED TO FORCED AIR) FOR EACH BEDROOM AND ONE FOR EACH COMMON AREA.
- INSTALL A RETURN OUTLET IN EACH HIGH MOISTURE AREA SUCH AS THE KITCHEN, UTILITY ROOM AND BATHROOM(S).
- RETURN OUTLETS (PICK UP POINTS) SHOULD BE WITHIN ONE FOOT OF CEILING AND 10 FEET AWAY FROM AN OVEN OR COOKTOP, AS VAPORIZED GREASE COULD CLOG THE ENERGY RECOVERY CORE.
- USE SMOOTH, ROUND DUCTWORK.
- INSULATE INTAKE/EXHAUST AND ANY VENTILATION DUCTS IN UNHEATED SPACES AND SEAL ALL JOINTS.
- INSTALL A DRAIN TO CATCH ANY CONDENSATE, IF REQUIRED.

GENERAL HRV NOTES:

FIELD CONDITIONS CAN SIGNIFICANTLY IMPACT THE VENTILATION RATES PROVIDED BY THIS DESIGN. IN TIGHT DWELLINGS, MAKEUP AIR MAY BE REQUIRED FOR EXHAUST-ONLY SOLUTIONS. FOR THIS REASON, RKD RECOMMENDS THAT TECHNICIANS VERIFY THAT THE DWELLING PASS A COMBUSTION APPLIANCE ZONE TEST TO ENSURE THAT OPERATION OF EXHAUST APPLIANCES DO NOT NEGATIVELY IMPACT THE OPERATION OF COMBUSTION APPLIANCES.

THIS DESIGN DOES NOT SPECIFICALLY ADDRESS CONSIDERATIONS FOR COMBUSTION AIR, EQUIPMENT WARRANTY, MOISTURE, OR COMFORT ISSUES WHICH MAY ARISE WITH THE SPECIFICATION OF HRV. VERIFY WITH LOCAL CODES, RELEVANT STANDARDS, AND MANUFACTURER INSTRUCTIONS FOR FURTHER INFORMATION.

INDOOR COMBUSTION AIR CALCULATION

IRC - G2407.5.1 (304.5.1) & TABLE G2413.2 (402.2)

APPLIANCE INFO

APPLIANCE TYPE	APPLIANCE B.T.U.	C.F. PER 1,000 B.T.U.	MIN. CUBIC FEET REQ.
50 GAL WH	50,000.00	50.00	2,500.00

COMBUSTION AREA (GARAGE)

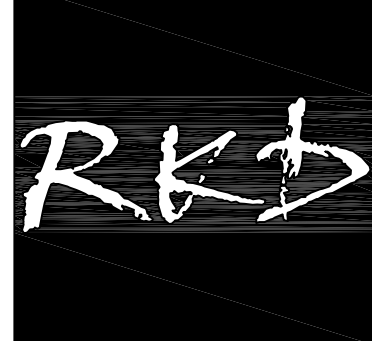
CLEAR WIDTH	CLEAR DEPTH	CLEAR HEIGHT	TOTAL AREA CUBIC FT
20.667	20.000	10.000	4,133.400

IS AREA GREATER THAN MIN REQ: YES

NOTES

- APPLIANCE TYPE & BTU PER TABLE G2413.2
- VERIFY EXACT LOAD IN FIELD WITH APPLIANCE SELECTED.
- IF LOAD IS GREATER THAN OPEN AREA, MUST COMPLY WITH G2407.6

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SUITE 123
CHANDLER, AZ 85226

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LIFESTYLE &
BUDGET"

PROJECT ADDRESS:
5980 W. BLUE STAR TP.
HOWARD MESA RANCH PHASE 2 UNIT 2
Lot: 700
APN: 500-99-052

PROJECT NAME:
A CUSTOM HOME FOR
**LARRY & CHERYL
SCHUG**

MECHANICAL
PLAN

SHEET TITLE

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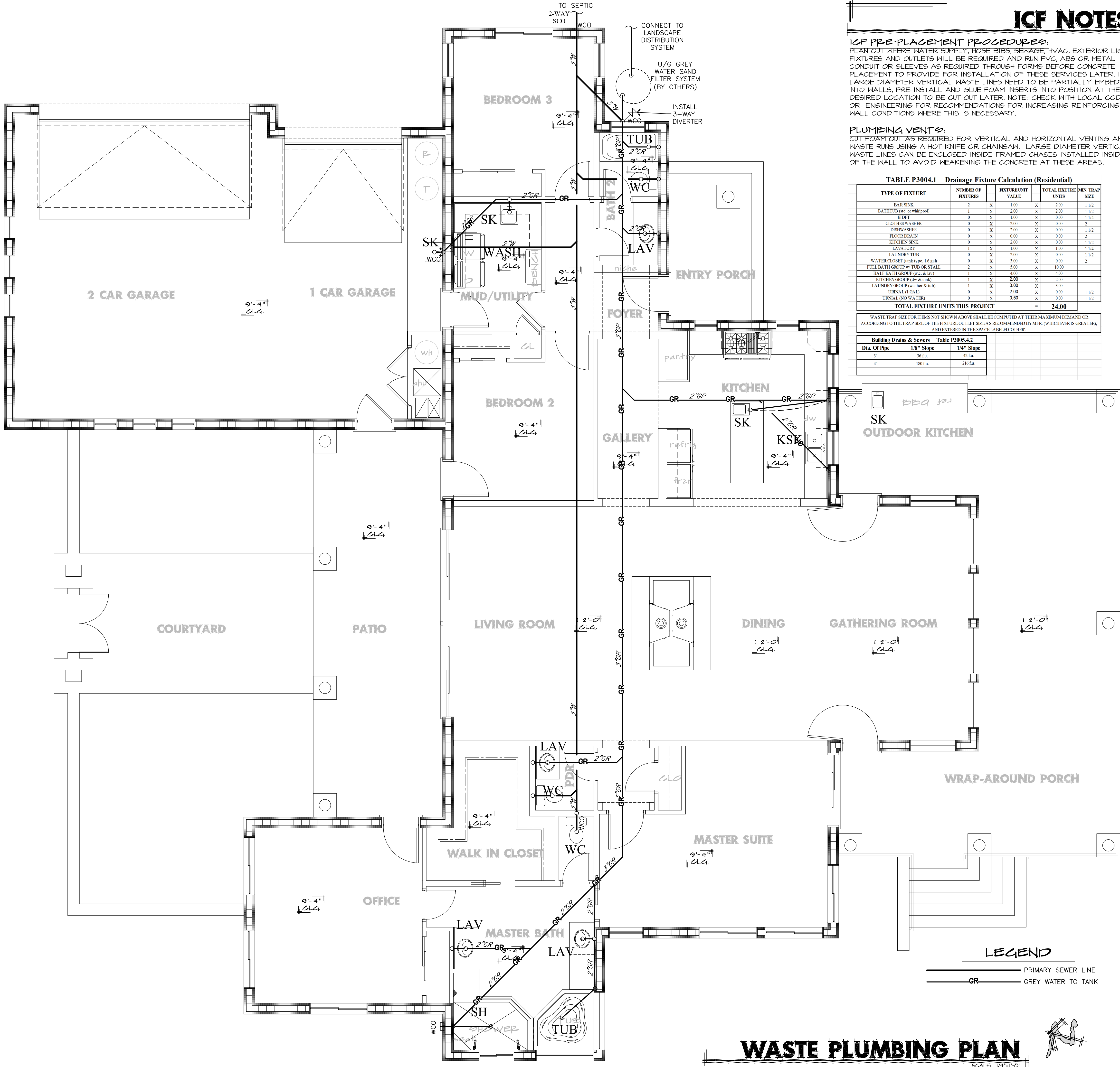
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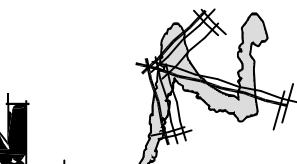
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WASTE PLUMBING PLAN

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



ICF NOTES

ICF PRE-PLACEMENT PROCEDURES:
PLAN OUT WHERE WATER SUPPLY, ROSE BIBS, SEWAGE, HVAC, EXTERIOR LIGHT FIXTURES AND OUTLETS WILL BE REQUIRED AND RUN P.V.C, ABS OR METAL CONDUIT OR SLEEVES AS REQUIRED THROUGH FORMS BEFORE CONCRETE PLACEMENT TO PROVIDE FOR INSTALLATION OF THESE SERVICES LATER. IF LARGE DIAMETER VERTICAL WASTE LINES NEED TO BE PARTIALLY EMBEDDED INTO WALLS, PRE-INSTALL AND BLUE FOAM INSERTS INTO POSITION AT THE DESIRED LOCATION TO BE CUT OUT LATER. NOTE: CHECK WITH LOCAL CODES OR ENGINEERING FOR RECOMMENDATIONS FOR INCREASING REINFORCING AT WALL CONDITIONS WHERE THIS IS NECESSARY.

PLUMBING VENTS:
CUT FOAM OUT AS REQUIRED FOR VERTICAL AND HORIZONTAL VENTING AND WASTE RUNS USING A HOT KNIFE OR CHAINSAW. LARGE DIAMETER VERTICAL WASTE LINES CAN BE ENCLOSED INSIDE FRAMED CHASES INSTALLED INSIDE OF THE WALL TO AVOID WEAKENING THE CONCRETE AT THESE AREAS.

TABLE P3004.1 Drainage Fixture Calculation (Residential)					
TYPE OF FIXTURE	NUMBER OF FIXTURES		FIXTURE UNIT VALUE	TOTAL FIXTURE UNITS	MIN. TRAP SIZE
BAR SINK	2	X	1.00	X 2.00	1 1/2
BATH TUB (bathtub or whirlpool)	1	X	2.00	X 2.00	1 1/2
BEDSET	0	X	1.00	X 0.00	1 1/4
CLOTHES WASHER	0	X	2.00	X 0.00	2
DISHWASHER	0	X	2.00	X 0.00	1 1/2
FLOOR DRAIN	0	X	0.00	X 0.00	2
KITCHEN SINK	0	X	2.00	X 0.00	1 1/2
LAVATORY	1	X	1.00	X 1.00	1 1/4
LAUNDRY TUB	0	X	2.00	X 0.00	1 1/2
WATER CLOSET (tank type, 1.6 gph)	0	X	3.00	X 0.00	2
FULL BATH GROUP w/ TUB OR STALL	2	X	5.00	X 10.00	
BATH BATH GROUP (wc & lav)	1	X	4.00	X 4.00	
KITCHEN GROUP (sink & tub)	1	X	2.00	X 2.00	
LAUNDRY GROUP (washer & tub)	1	X	3.00	X 3.00	
URNAL (1 GAL)	0	X	2.00	X 0.00	1 1/2
URNAL (2 GAL)	0	X	0.50	X 0.00	1 1/2
TOTAL FIXTURE UNITS THIS PROJECT				24.00	
WASTE TRAP SIZE FOR ITEMS NOT SHOWN ABOVE SHALL BE COMPUTED AT THEIR MAXIMUM DEMAND OR ACCORDING TO THE TRAP SIZE OF THE FIXTURE OUTLET SIZE AS RECOMMENDED BY MFR. (WHICHEVER IS GREATER), AND ENTERED IN THE SPACE LABELED OTHER.					
Building Drains & Sewers Table P3005.4.2					
Dia. Of Pipe	18" Slope	1/4" Slope			
3"	36 fu.	42 fu.			
4"	180 fu.	216 fu.			

PLUMBING NOTES

PLUMBING NOTE:
PLUMBING SHALL BE IN ACCORDANCE WITH THE U.P.C. AND ALL APPLICABLE CITY ORDANCES.
WASTE AND VENT PIPE SHALL BE ABS PLASTIC P.V.C. SCHEDULE 40
PROVIDE AN EXPANSION TANK OR OTHER DEVICE DESIGNED FOR INTERMITTENT OPERATION FOR THERMAL EXPANSION CONTROL AT THE WATER HEATER IF A BACKFLOW PREVENTER IS ON OR TO BE INSTALLED ON THE WATER LINE OR AT THE METER.
TOILETS SHALL BE LOW WATER USE TYPE, DESIGNED FOR A MAXIMUM OF 1.6 GALLONS PER FLUSH. SINKS AND SHOWER HEADS, 3.0 GPM PER ARIZONA REVISED STATUTES SECTION 45-312.
GAS AND ELECTRIC HEATING AND COOLING EQUIPMENT AND WATER HEATERS LOCATED IN GARAGES SHALL BE INSTALLED WITH SOURCE OF IGNITION 18" ABOVE THE FLOOR. IRC 2006 P2801.6

GREY WATER DESIGN

MINIMUM DISTANCE (HORIZONTAL) FROM:	IRRIGATION FIELD (FEET)	TANK (FEET)
BUILDING STRUCTURES (NOT INCLUDING PORCHES AND STEPS OR COVERED WALKWAYS, PATIOS, DRIVEWAYS, ETC.)	2	5
PRIVATE PROPERTY LINES	15	5
WATER SUPPLY WELLS	100	50
STREAMS AND LAKES	100	50
ON-SITE DOMESTIC WATER SERVICE LINE	0	5
PRESSURIZED PUBLIC WATER MAIN	10	10
WATER TABLE	3 FEET ABOVE	NA

GREY WATER NOTES

- IF REQUIRED, NOTIFICATION HAS BEEN PROVIDED TO THE ENFORCING AGENCY REGARDING THE PROPOSED LOCATION AND INSTALLATION OF A GRAYWATER IRRIGATION OR DISPOSAL SYSTEM.
- NOTE: A CITY, COUNTY, OR OTHER LOCAL GOVERNMENT MAY, AFTER A PUBLIC HEARING AND ENACTMENT OF AN ORDINANCE OR RESOLUTION, FURTHER RESTRICT OR PROHIBIT THE USE OF GRAYWATER SYSTEMS.
- THE DESIGN SHALL ALLOW THE USER TO DIRECT THE FLOW TO THE IRRIGATION OR DISPOSAL FIELD OR THE BUILDING SEWER. THE DIRECTION CONTROL OF THE GRAYWATER SHALL BE CLEARLY LABELED AND READILY ACCESSIBLE TO THE USER.
- THE INSTALLATION, CHANGE, ALTERATION OR REPAIR OF THE SYSTEM DOES NOT INCLUDE A POTABLE WATER CONNECTION OR A PUMP AND DOES NOT AFFECT OTHER BUILDINGS, PLUMBING, ELECTRICAL OR MECHANICAL COMPONENTS INCLUDING STRUCTURAL FEATURES, EGRESS, FIRE-LIFE SAFETY, SANITATION, POTABLE WATER SUPPLY PIPING OR ACCESSIBILITY.
- THE GRAYWATER SHALL BE CONTAINED ON THE SITE WHERE IT IS GENERATED.
- GRAYWATER SHALL BE DIRECTED TO AND CONTAINED WITHIN AN IRRIGATION OR DISPOSAL FIELD.
- PONDING OR RUNOFF IS PROHIBITED AND SHALL BE CONSIDERED A NUISANCE.
- GRAYWATER MAY BE RELEASED ABOVE THE GROUND SURFACE PROVIDED AT LEAST TWO (2) INCHES OF MULCH, ROCK, OR SOIL, OR A SOLID SHIELD COVERS THE RELEASE POINT. OTHER METHODS WHICH PROVIDE EQUIVALENT SEPARATION ARE ALSO ACCEPTABLE.
- GRAYWATER SYSTEMS SHALL BE DESIGNED TO MINIMIZE CONTACT WITH HUMANS AND DOMESTIC PETS.
- WATER USED TO WASH DIAPERS OR SIMILARLY SOILED OR INFECTIOUS GARMENTS SHALL NOT BE USED AND SHALL BE DIVERTED TO THE BUILDING SEWER.
- GRAYWATER SHALL NOT CONTAIN HAZARDOUS CHEMICALS DERIVED FROM ACTIVITIES SUCH AS CLEANING CAR PARTS, WASHING GREASY OR OILY RAGS, OR DISPOSING OF WASTE SOLUTIONS FROM HOME PHOTO LABS OR SIMILAR HOBBYIST OR HOME OCCUPATIONAL ACTIVITIES.
- EXEMPTION FROM CONSTRUCTION PERMIT REQUIREMENTS OF THIS CODE SHALL NOT BE DEEMED TO GRANT AUTHORIZATION FOR ANY GRAYWATER SYSTEM TO BE INSTALLED IN A MANNER THAT VIOLATES OTHER PROVISIONS OF THIS CODE OR ANY OTHER LAWS OR ORDINANCES OF THE ENFORCING AGENCY.
- AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED. DIRECTIONS SHALL INDICATE THE MANUAL IS TO REMAIN WITH THE BUILDING THROUGHOUT THE LIFE OF THE SYSTEM AND INDICATE THAT UPON CHANGE OF OWNERSHIP OR OCCUPANCY, THE NEW OWNER OR TENANT SHALL BE NOTIFIED THE STRUCTURE CONTAINS A GRAYWATER SYSTEM.

- THE GRAYWATER SYSTEM SHALL NOT BE CONNECTED TO ANY POTABLE WATER SYSTEM WITHOUT AN AIR GAP OR OTHER PHYSICAL DEVICE WHICH PREVENTS BACKFLOW AND SHALL NOT CAUSE THE PONDING OR RUNOFF OF GRAYWATER.
- NO GRAYWATER SYSTEM OR PART THEREOF SHALL BE LOCATED ON ANY LOT OTHER THAN THE LOT THAT IS THE SITE OF THE BUILDING OR STRUCTURE THAT DISCHARGES THE GRAYWATER, NOR SHALL ANY GRAYWATER SYSTEM OR PART THEREOF BE LOCATED AT ANY POINT HAVING LESS THAN THE MINIMUM DISTANCES INDICATED IN TABLE 16A-1.
 - WATER USED TO WASH DIAPERS OR SIMILARLY SOILED OR INFECTIOUS GARMENTS OR OTHER PROHIBITED CONTENTS SHALL BE DIVERTED BY THE USER TO THE BUILDING SEWER. GRAYWATER SHALL NOT BE USED IN SPRAY IRRIGATION, ALLOWED TO POND OR RUNOFF AND SHALL NOT BE DISCHARGED DIRECTLY INTO OR REACH ANY STORM SEWER SYSTEM OR ANY SURFACE BODY OF WATER.
 - HUMAN CONTACT WITH GRAYWATER OR THE SOIL IRRIGATED BY GRAYWATER SHALL BE MINIMIZED AND AVOIDED, EXCEPT AS REQUIRED TO MAINTAIN THE GRAYWATER SYSTEM. THE DISCHARGE POINT OF ANY GRAYWATER IRRIGATION OR DISPOSAL FIELD SHALL BE COVERED BY AT LEAST TWO (2) INCHES OF MULCH, ROCK, OR SOIL, OR A SOLID SHIELD TO MINIMIZE THE POSSIBILITY OF HUMAN CONTACT.
 - GRAYWATER SHALL NOT BE USED TO IRRIGATE ROOT CROPS OR EDIBLE PARTS OF FOOD CROPS THAT TOUCH THE SOIL.

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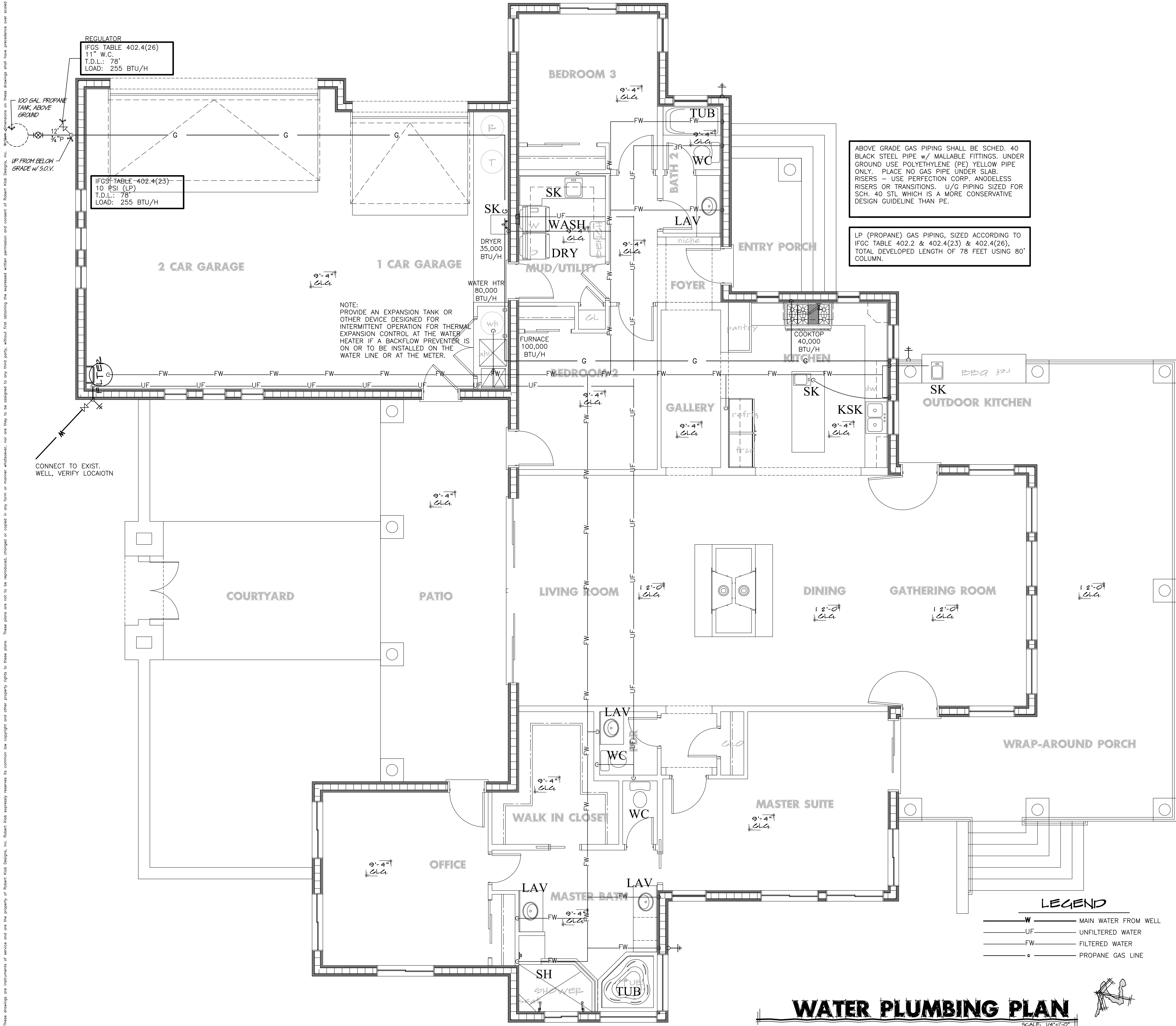
PROJECT ADDRESS
5980 W. BLUE STAR TP.
HOWARD MESA RANCH PHASE 2 UNIT 2
LOT: 700
APN: 500-99-052

A CUSTOM HOME FOR
LARRY & CHERYL
SCHUG

WASTE PLUMBING PLAN

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PLAN OUT WHERE WATER SUPPLY, HOSE BIBS, SEWAGE, HVAC, EXTERIOR LIGHT FIXTURES AND OUTLETS WILL BE REQUIRED AND RUN PVC, ABS OR METAL CONDUIT OR SLEEVES AS REQUIRED THROUGH FORMS BEFORE CONCRETE PLACEMENT TO PROVIDE FOR INSTALLATION OF THESE SERVICES LATER. IF LARGE DIAMETER VERTICAL WASTE LINES NEED TO BE PARTIALLY EMBEDDED INTO WALLS, PRE-INSTALL AND GLUE FOAM INSERTS INTO POSITION AT THE DESIRED LOCATION TO BE CUT OUT LATER. NOTE: CHECK WITH LOCAL CODES OR ENGINEERING FOR RECOMMENDATIONS FOR INCREASING REINFORCING AT WALL CONDITIONS WHERE THIS IS NECESSARY.

PLUMBING VENTS:
CUT FOAM OUT AS REQUIRED FOR VERTICAL AND HORIZONTAL VENTING AND WASTE RUNS USING A HOT KNIFE OR CHAINSAW. LARGE DIAMETER VERTICAL WASTE LINES CAN BE ENCLOSED INSIDE FRAMED CHASES INSTALLED INSIDE OF THE WALL TO AVOID WEAKENING THE CONCRETE AT THESE AREAS.

PER TABLE P2903.6 WATER FIXTURE CALC				
TYPE OF FIXTURE	NUMBER OF FIXTURES	FIXTURE UNIT VALUE	TOTAL FIXTURE UNITS	MIN. PIPE SIZE
TUB OR SHOWER or TUB	1	X	1.40	1/2"
CLOTHES WASHER	0	X	1.40	0.00
DISH WASHER	0	X	1.40	0.00
FULL BATH GROUP w/ TUB OR STALL	2	X	3.60	1/2"
HALF BATH GROUP (toilet, sink and tub)	1	X	2.60	1/2"
HOSE BIBB (if needed)	1	X	2.50	1/2"
HOSE BIBB EACH ADDITIONAL	4	X	2.50	10.00
KITCHEN GROUP (dishwasher and sink)	1	X	2.50	1/2"
KITCHEN SINK	0	X	1.40	0.00
LAUNDRY GROUP (washer and tub)	1	X	2.50	1/2"
LAUNDRY TUB	0	X	1.40	0.00
LAVATORY	3	X	0.75	1/2"
SHOWER STALL	0	X	1.40	0.00
WATER CLOSET (tank type)	0	X	2.20	0.00
TOTAL FIXTURE UNITS THIS PROJECT			30.80	
WATER SUPPLY OUTLETS FOR ITEMS NOT SHOWN ABOVE SHALL BE COMPUTED AT THEIR MAXIMUM DEMAND OR ACCORDING TO THE SIZE OF THE SUPPLY PIPE AS LISTED BELOW (WHICHEVER IS GREATER), AND ENTERED IN THE SPACE LABELED OUTLINE.				
SUPPLY PIPE SIZE	FIXTURE UNIT VALUE	WATER METER INFORMATION		
3/8"	1	TOTAL DEVELOPED LENGTH		
1/2"	2	WATER METER SIZE		
3/4"	3	WATER SUPPLY LINE SIZE		
1"	6			

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Lot: 100
APN: 500-99-052

A CUSTOM HOME FOR
LARRY & CHERYL
SCHUG

SHEET TITLE
**WATER
PLUMBING PLAN**

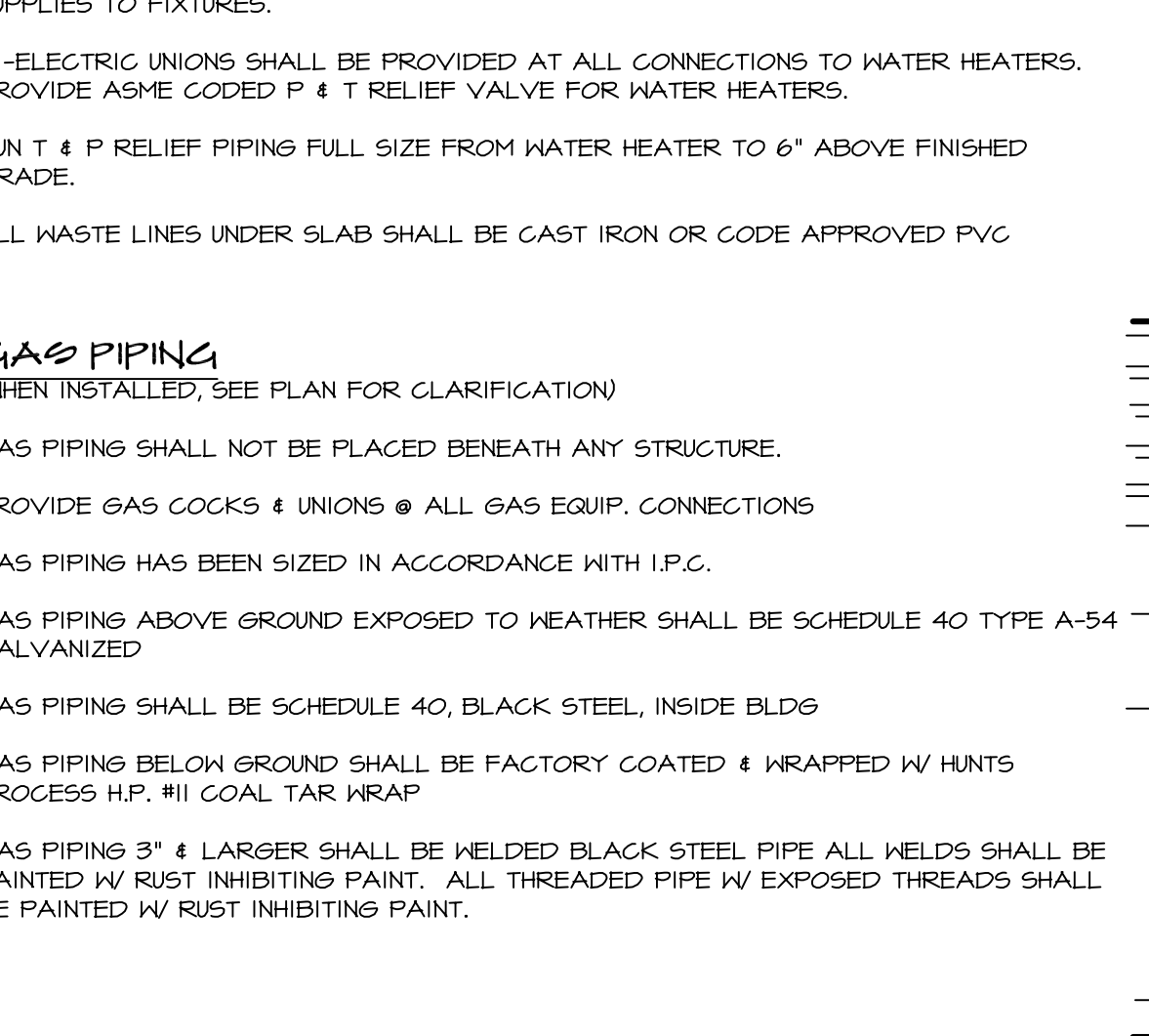
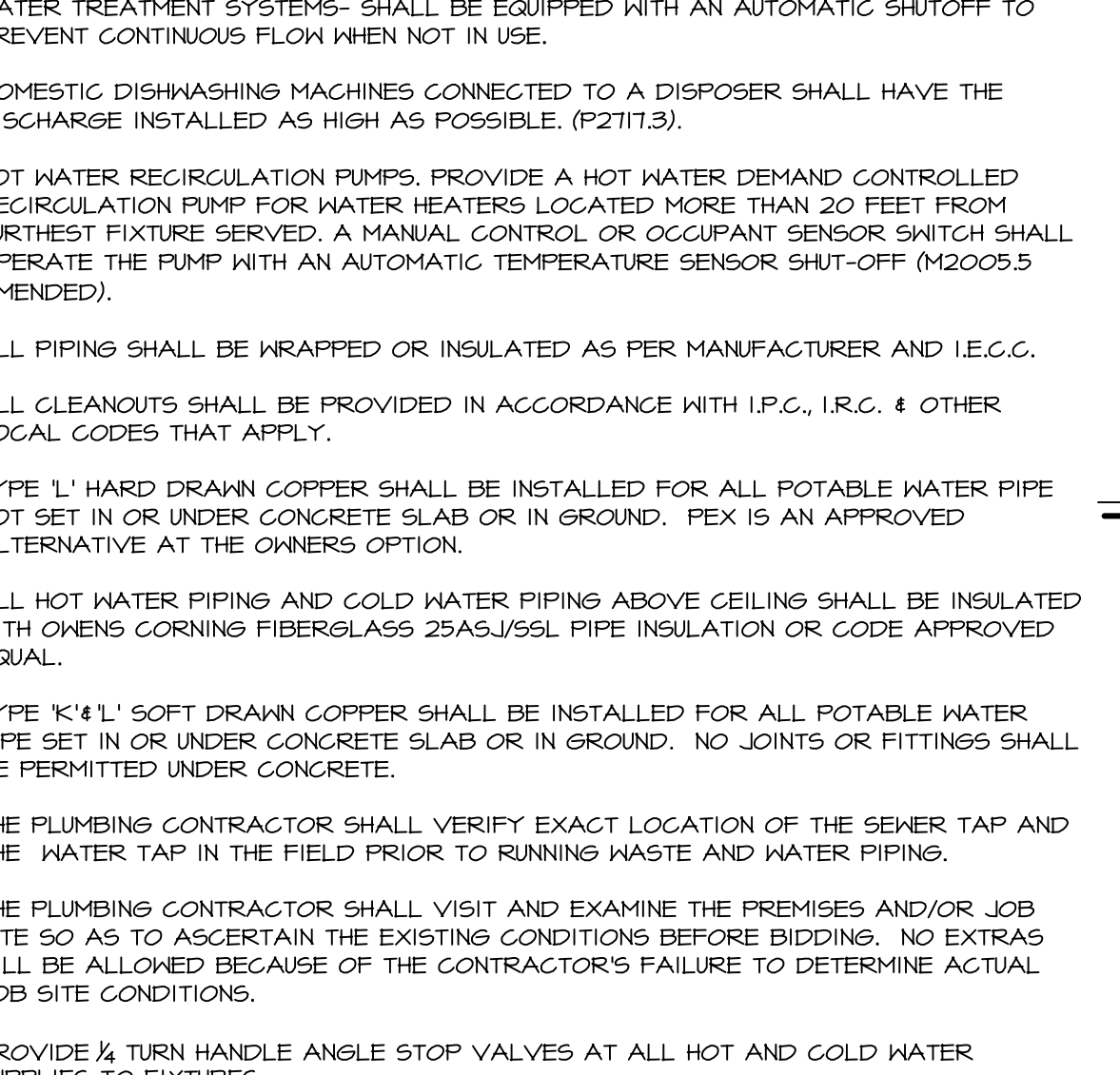
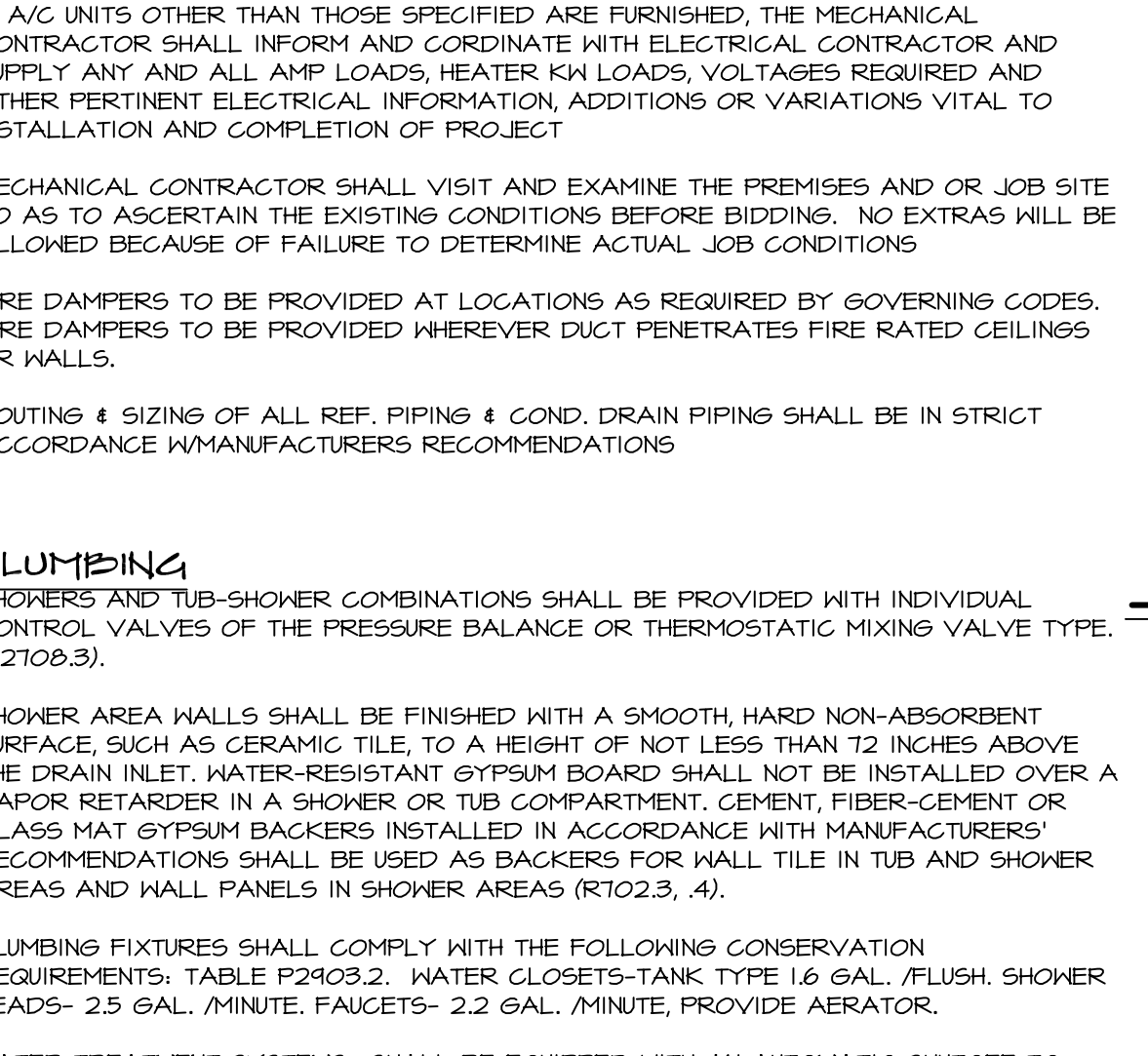
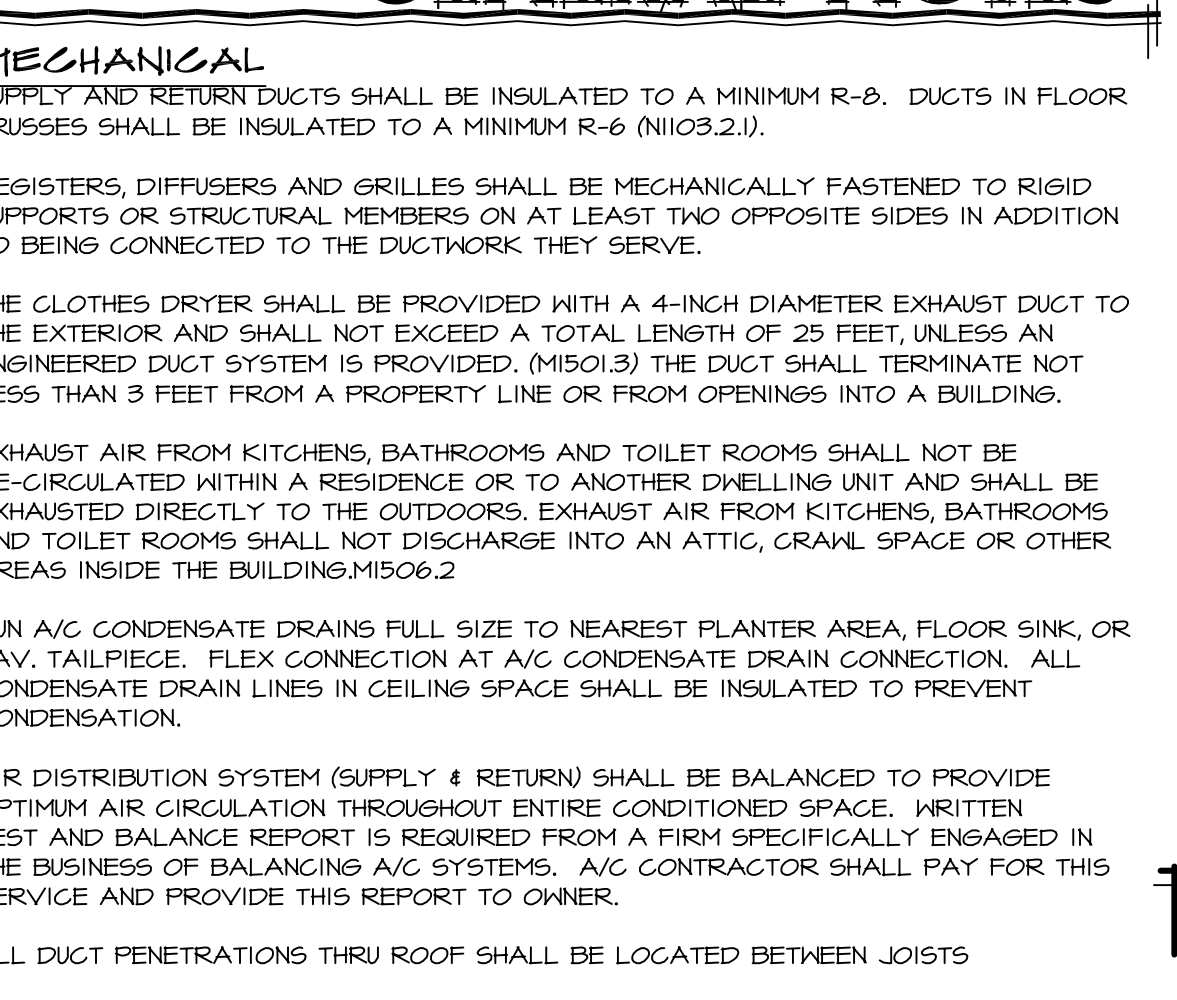
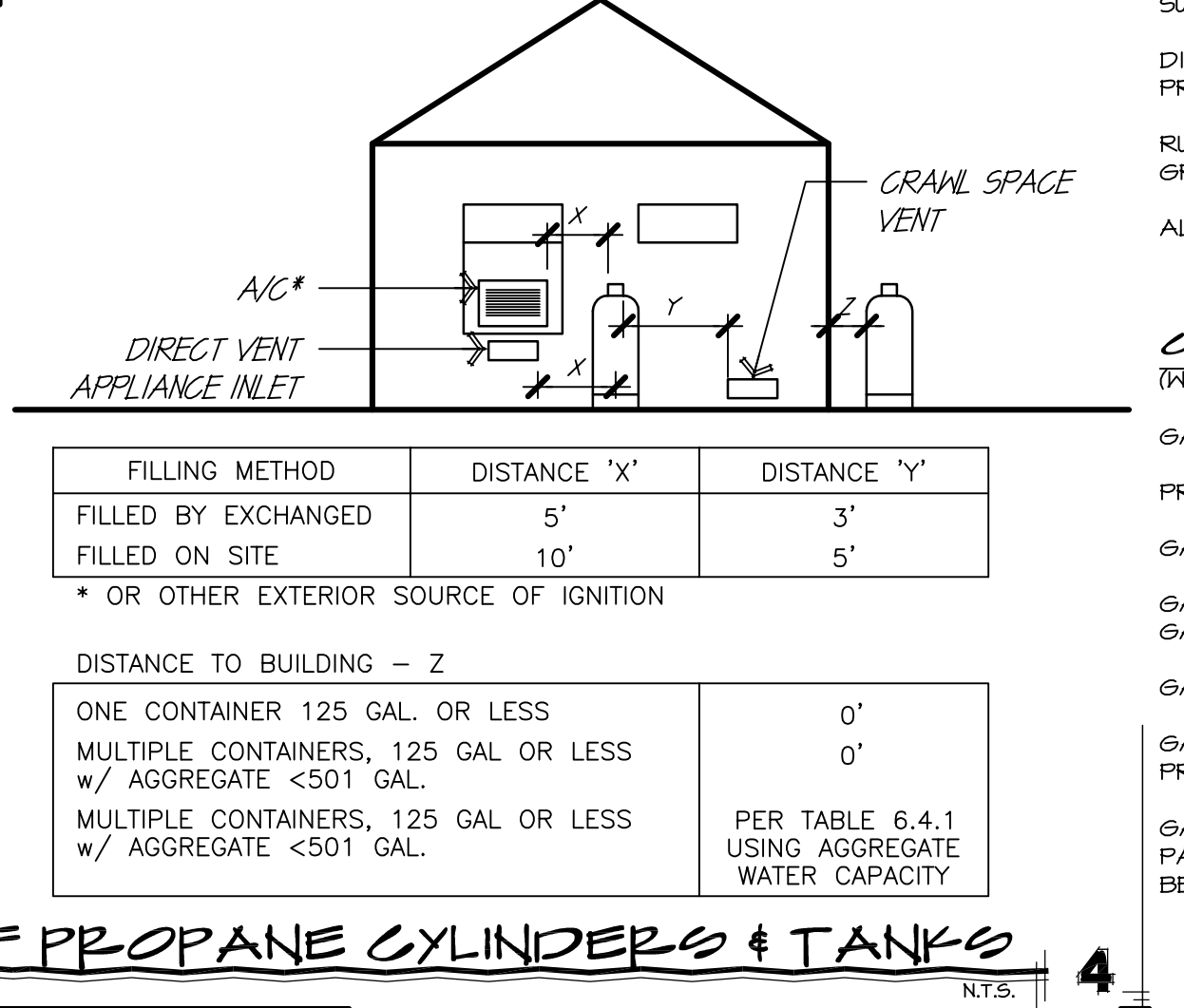
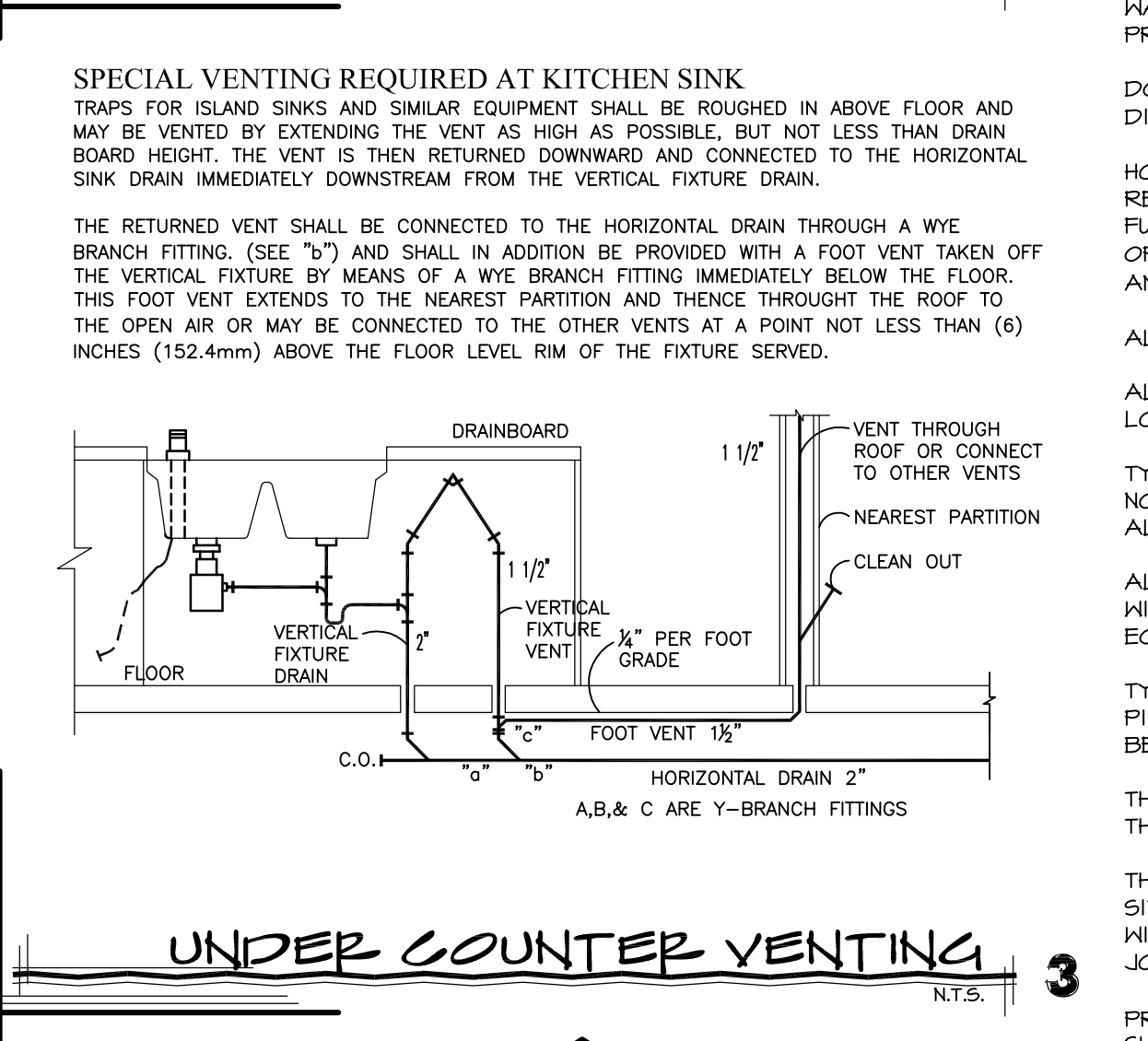
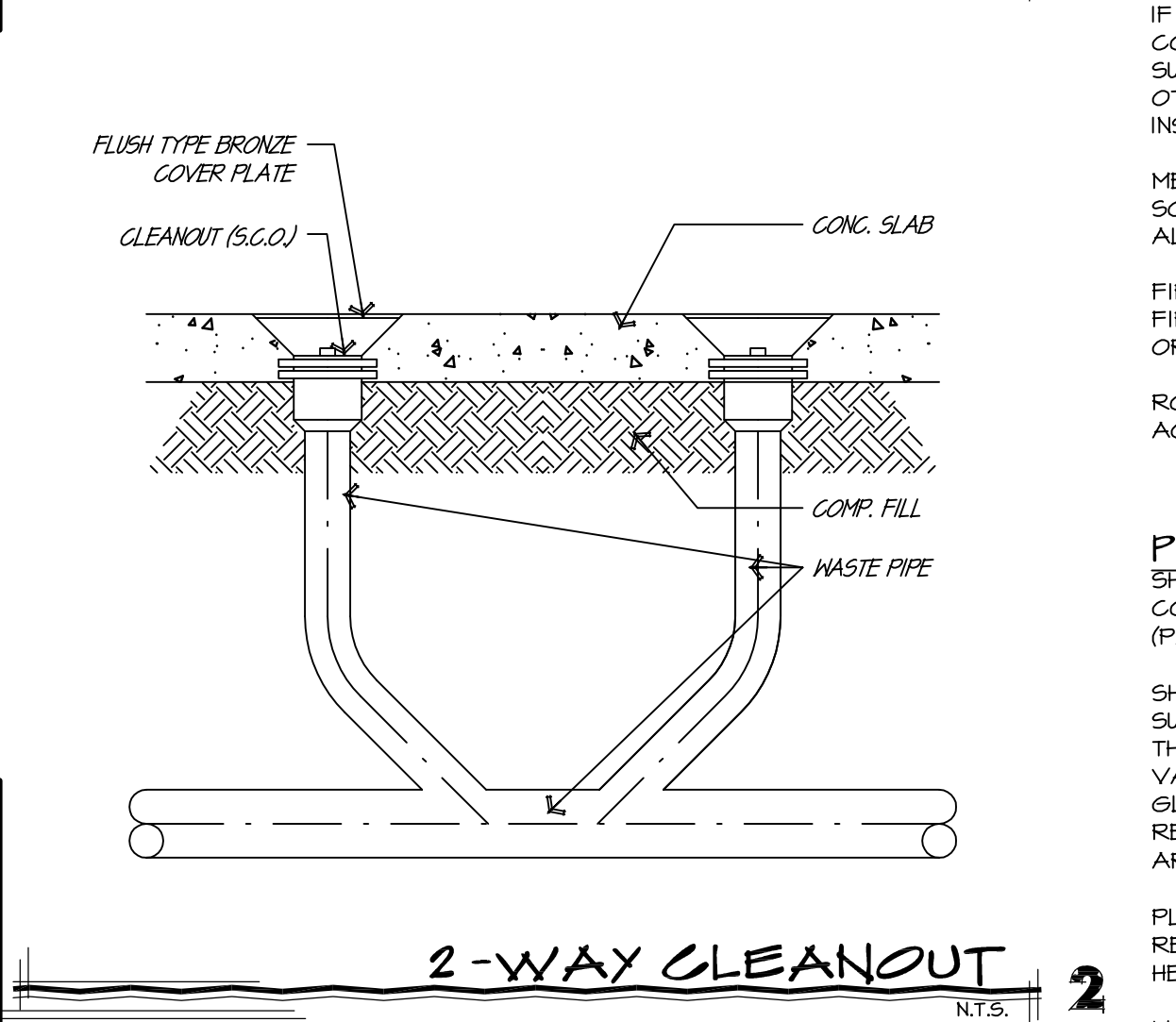
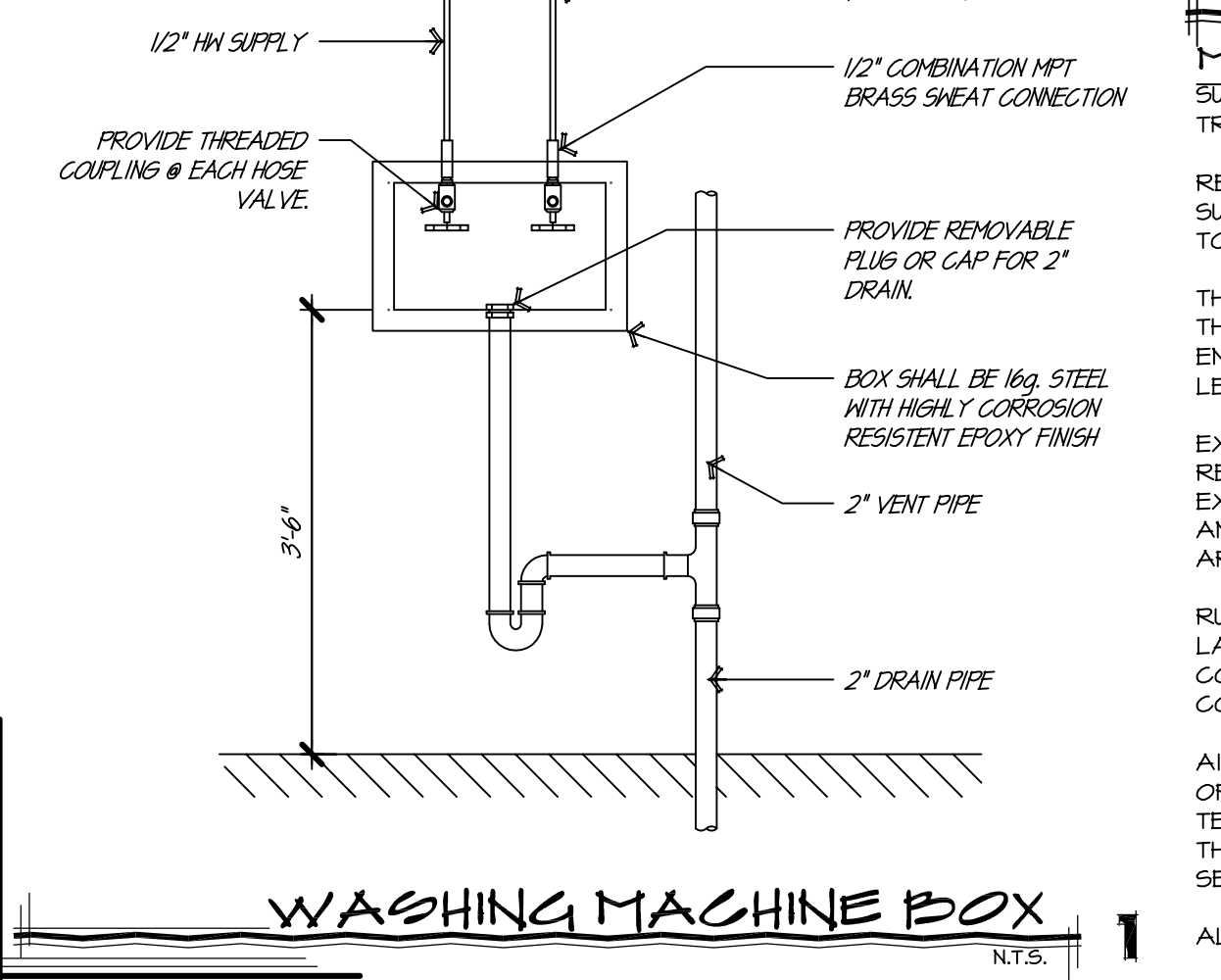
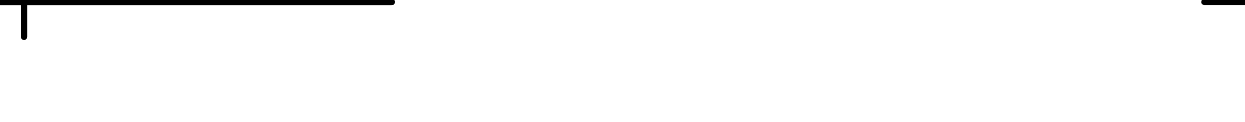
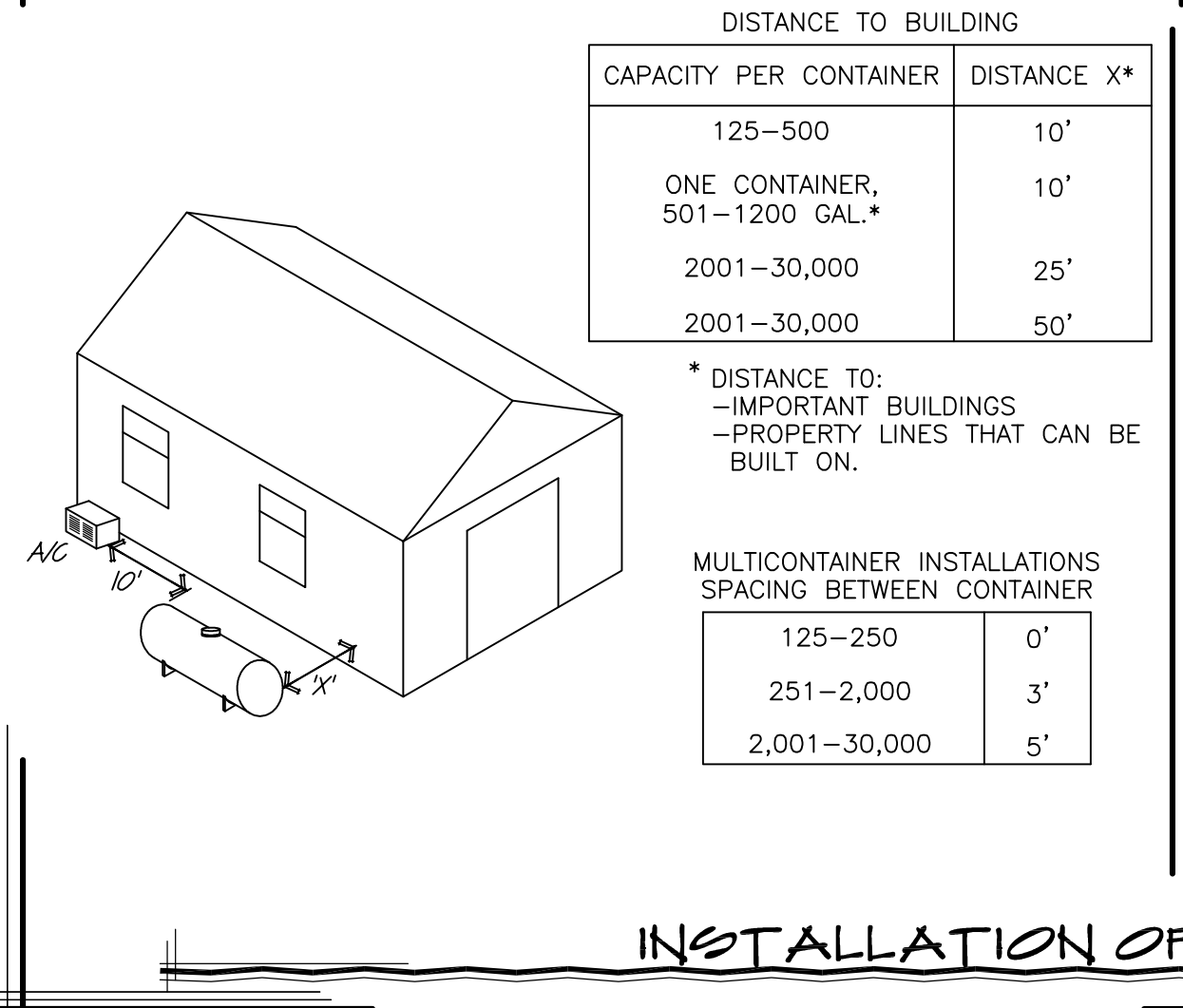
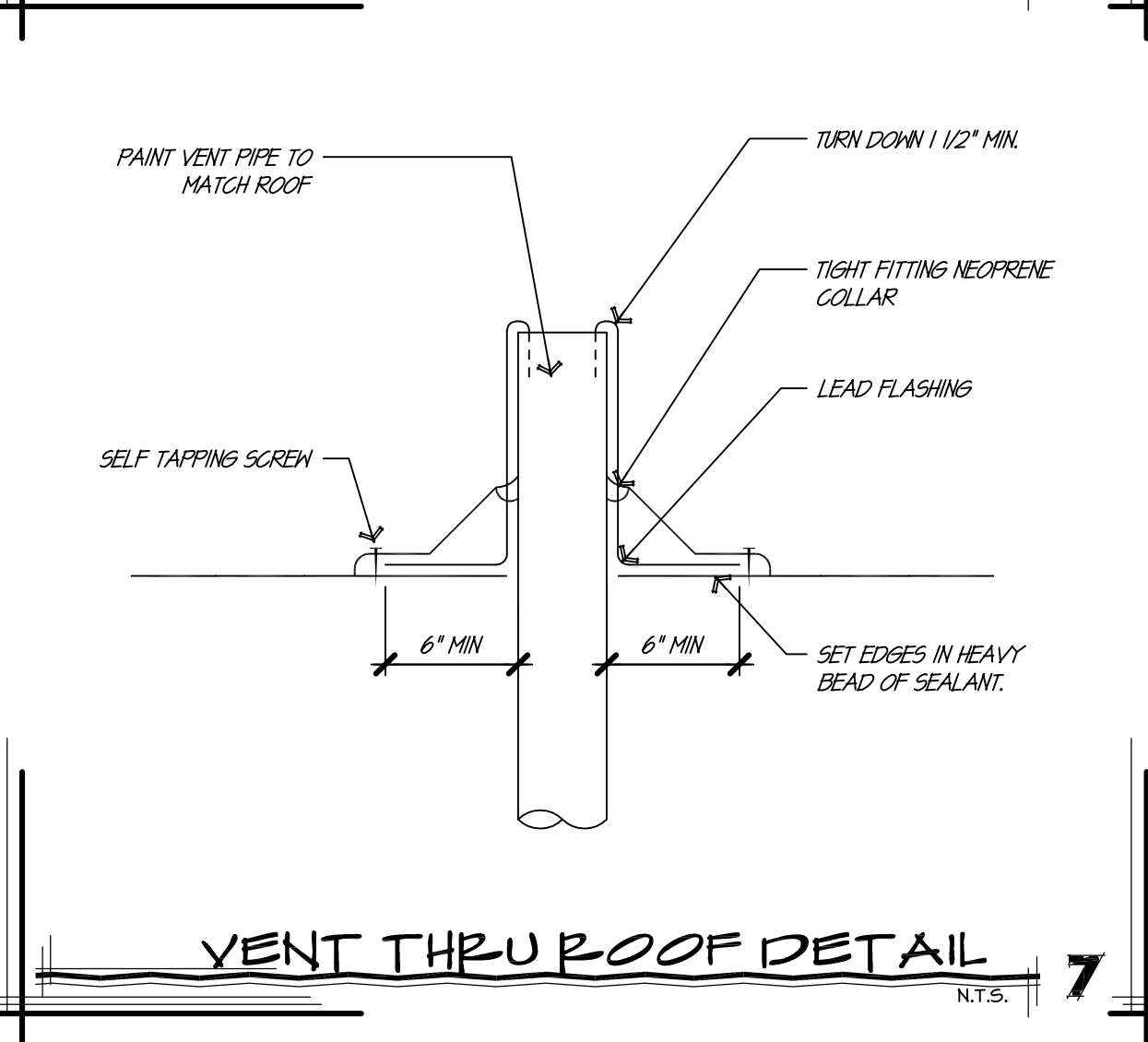
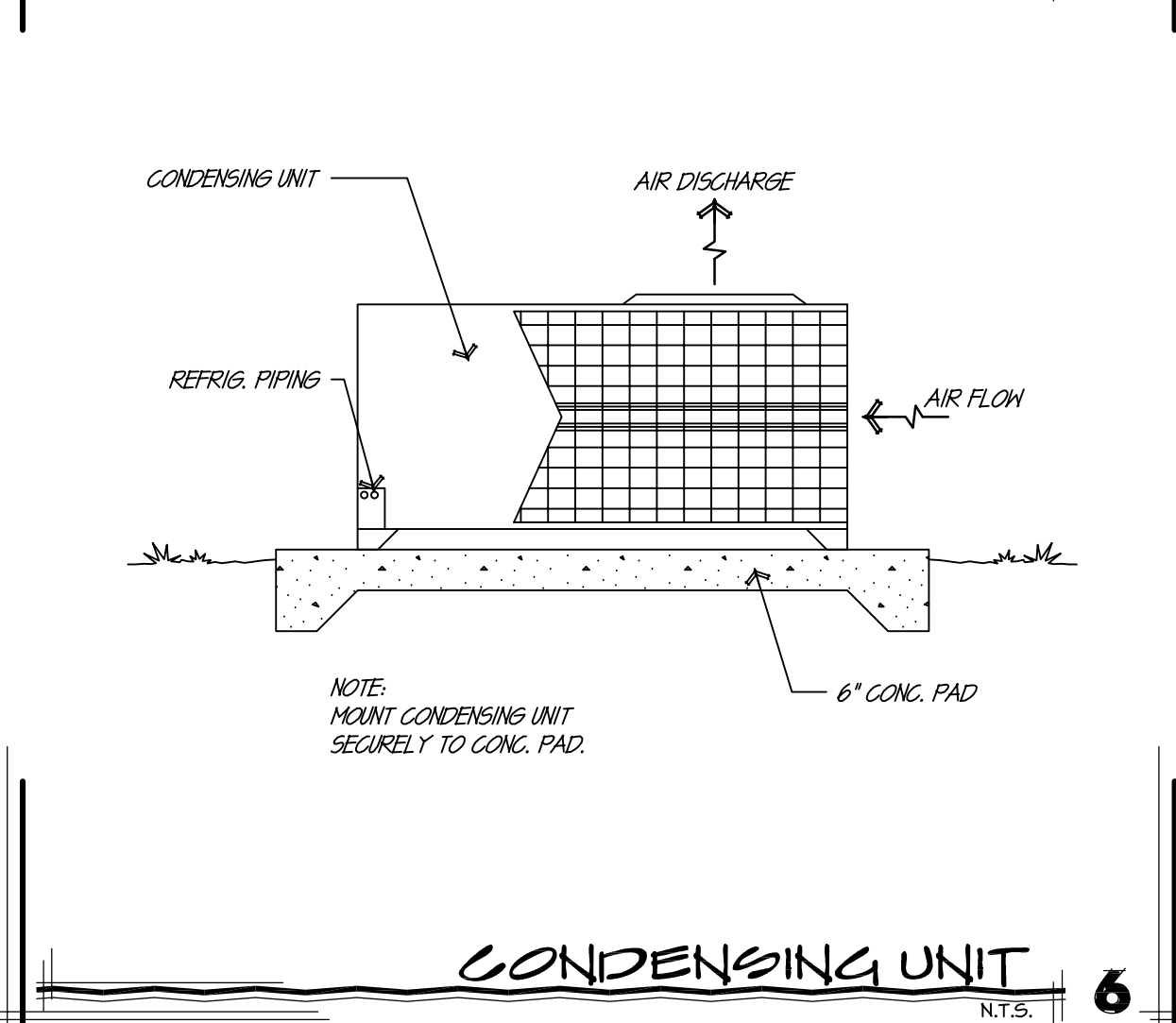
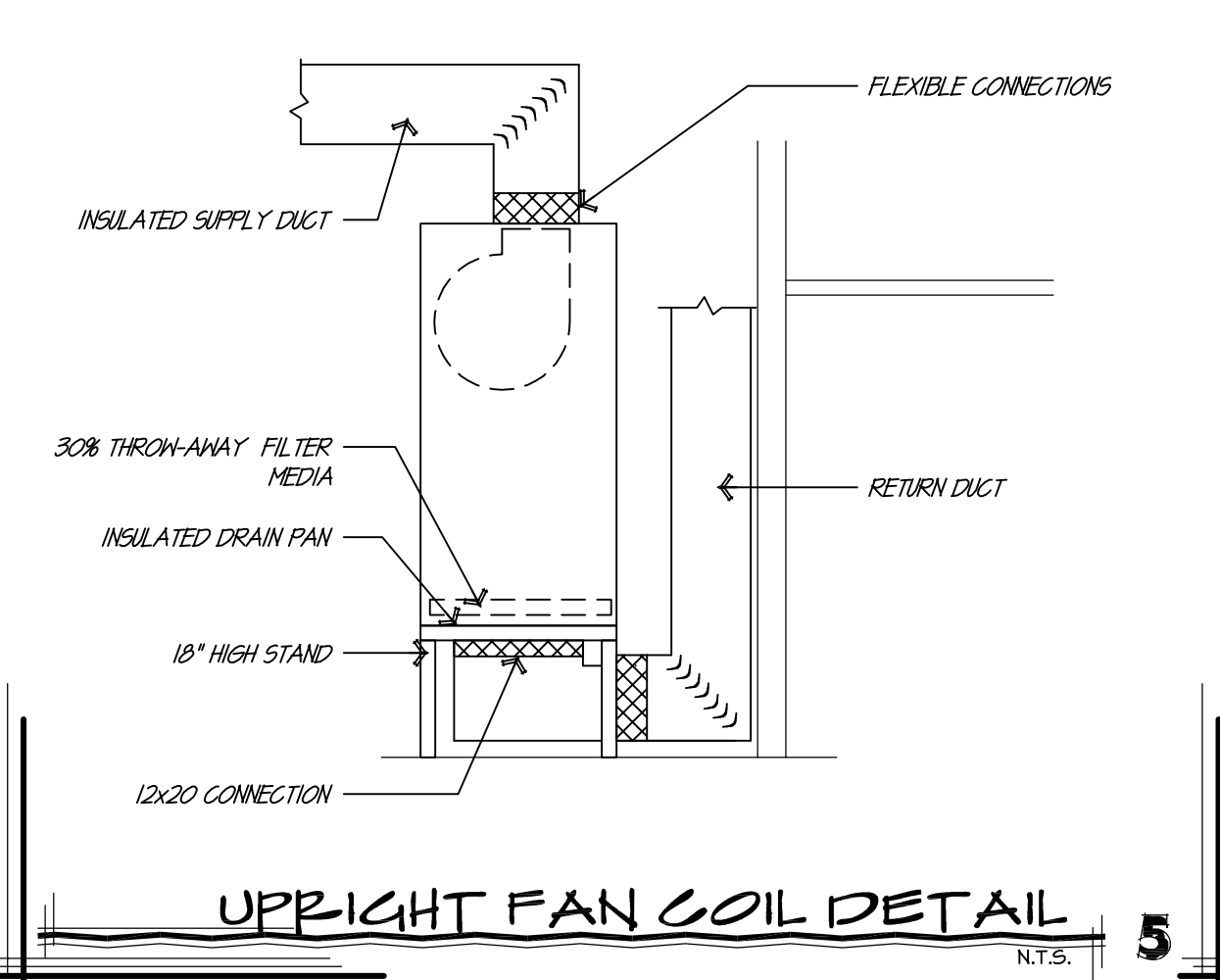
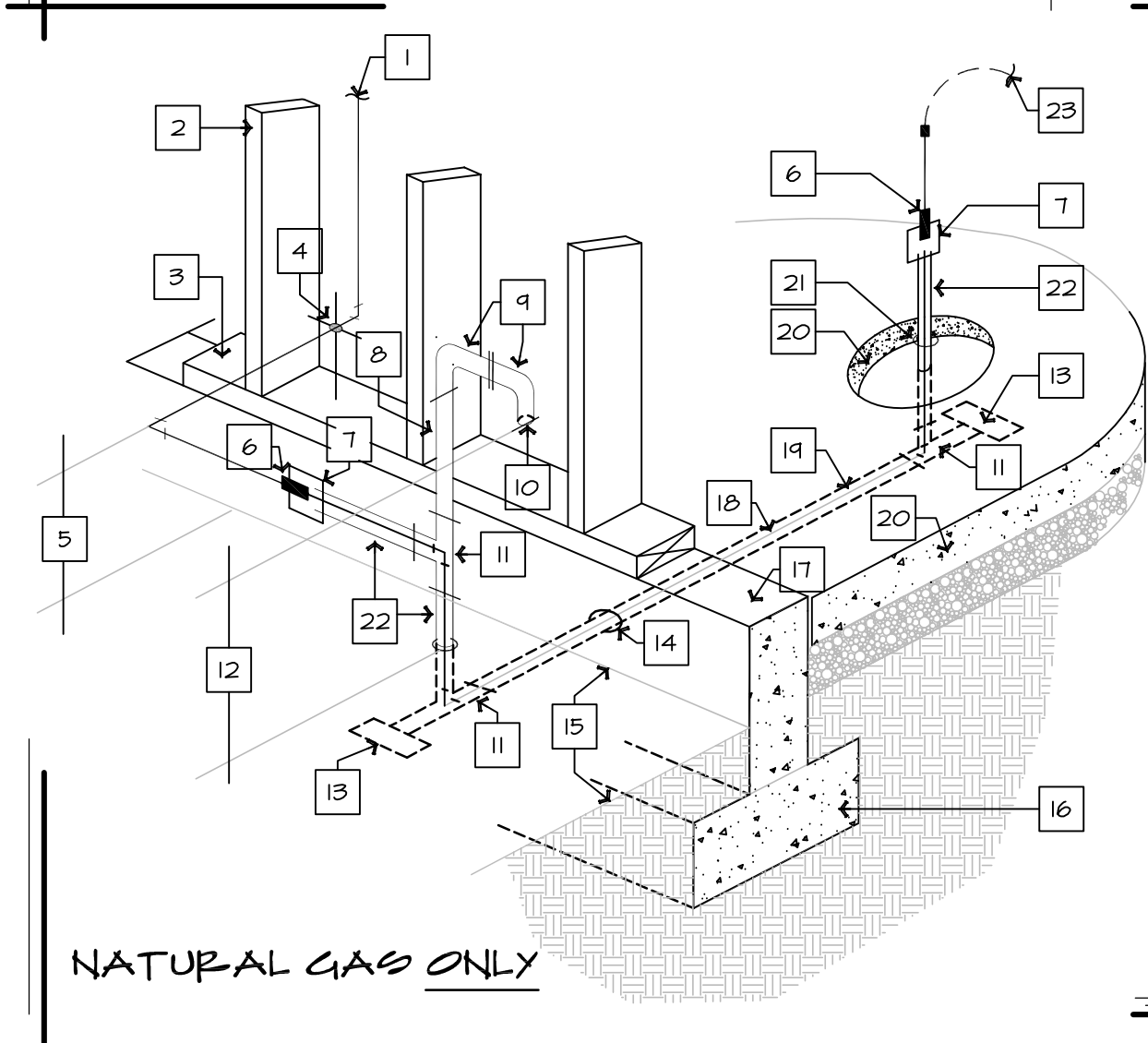
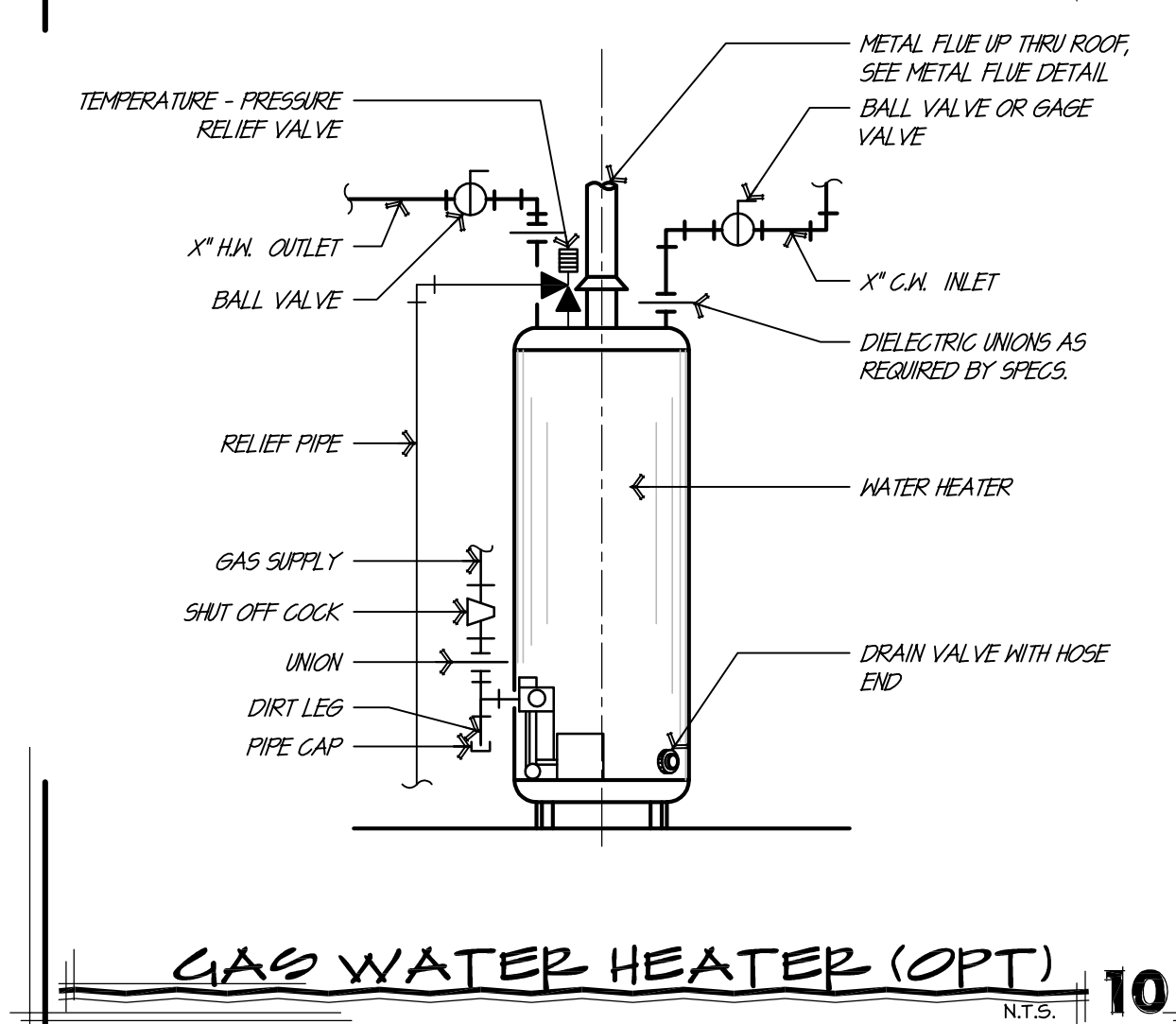
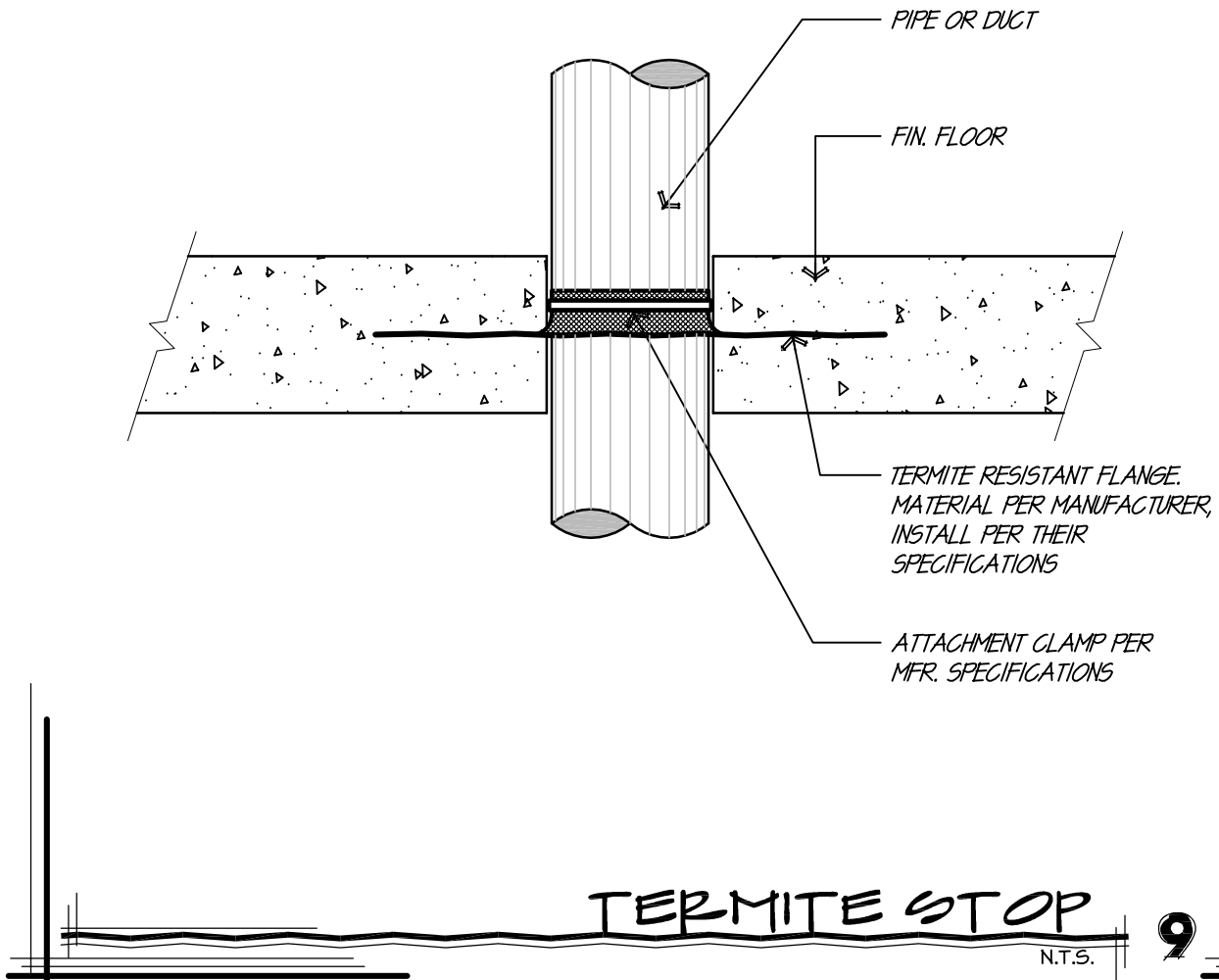
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GENERAL NOTES

MECHANICAL

SUPPLY AND RETURN DUCTS SHALL BE INSULATED TO A MINIMUM R-6. DUCTS IN FLOOR TRUSSES SHALL BE INSULATED TO A MINIMUM R-6 (N103.2.1).

REGISTERS, DIFFUSERS AND GRILLES SHALL BE MECHANICALLY FASTENED TO RIGID SUPPORTS OR STRUCTURAL MEMBERS ON AT LEAST TWO OPPOSITE SIDES IN ADDITION TO BEING CONNECTED TO THE DUCTWORK THEY SERVE.

THE CLOTHES DRYER SHALL BE PROVIDED WITH A 4-INCH DIAMETER EXHAUST DUCT TO THE EXTERIOR AND SHALL NOT EXCEED A TOTAL LENGTH OF 25 FEET, UNLESS AN ENGINEERED DUCT SYSTEM IS PROVIDED. (M501.3) THE DUCT SHALL TERMINATE NOT LESS THAN 3 FEET FROM A PROPERTY LINE OR FROM OPENINGS INTO A BUILDING.

EXHAUST AIR FROM KITCHENS, BATHROOMS AND TOILET ROOMS SHALL NOT BE RE-CIRCULATED WITHIN A RESIDENCE OR TO ANOTHER DWELLING UNIT AND SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS. EXHAUST AIR FROM KITCHENS, BATHROOMS AND TOILET ROOMS SHALL NOT DISCHARGE INTO AN ATTIC, CRAWL SPACE OR OTHER AREAS INSIDE THE BUILDING.M1506.2

RUN A/C CONDENSATE DRAINS FULL SIZE TO NEAREST PLANTER AREA, FLOOR SINK, OR LAV. TAILPIECE. FLEX CONNECTION AT A/C CONDENSATE DRAIN CONNECTION. ALL CONDENSATE DRAIN LINES IN CEILING SPACE SHALL BE INSULATED TO PREVENT CONDENSATION.

AIR DISTRIBUTION SYSTEM (SUPPLY & RETURN) SHALL BE BALANCED TO PROVIDE OPTIMUM AIR CIRCULATION THROUGHOUT ENTIRE CONDITIONED SPACE. WRITTEN TEST AND BALANCE REPORT IS REQUIRED FROM A FIRM SPECIFICALLY ENGAGED IN THE BUSINESS OF BALANCING A/C SYSTEMS. A/C CONTRACTOR SHALL PAY FOR THIS SERVICE AND PROVIDE THIS REPORT TO OWNER.

ALL DUCT PENETRATIONS THRU ROOF SHALL BE LOCATED BETWEEN JOISTS

IF A/C UNITS OTHER THAN THOSE SPECIFIED ARE FURNISHED, THE MECHANICAL CONTRACTOR SHALL INFORM AND COORDINATE WITH ELECTRICAL CONTRACTOR AND SUPPLY ANY AND ALL AMP LOADS, HEATER KW LOADS, VOLTAGES REQUIRED AND OTHER PERTINENT ELECTRICAL INFORMATION, ADDITIONS OR VARIATIONS VITAL TO INSTALLATION AND COMPLETION OF PROJECT

MECHANICAL CONTRACTOR SHALL VISIT AND EXAMINE THE PREMISES AND OR JOB SITE SO AS TO ASCERTAIN THE EXISTING CONDITIONS BEFORE BIDDING. NO EXTRAS WILL BE ALLOWED BECAUSE OF FAILURE TO DETERMINE ACTUAL JOB CONDITIONS

FIRE DAMPERS TO BE PROVIDED AT LOCATIONS AS REQUIRED BY GOVERNING CODES. FIRE DAMPERS TO BE PROVIDED WHEREVER DUCT PENETRATES FIRE RATED CEILINGS OR WALLS.

ROUTING & SIZING OF ALL REF. PIPING & COND. DRAIN PIPING SHALL BE IN STRICT ACCORDANCE W/MANUFACTURERS RECOMMENDATIONS

PLUMBING

SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE. (P2108.3).

SHOWER AREA WALLS SHALL BE FINISHED WITH A SMOOTH, HARD NON-ABSORBENT SURFACE, SUCH AS CERAMIC TILE, TO A HEIGHT OF NOT LESS THAN 72 INCHES ABOVE THE DRAIN INLET. WATER-RESISTANT GYPSUM BOARD SHALL NOT BE INSTALLED OVER A VAPOR RETARDER IN A SHOWER OR TUB COMPARTMENT. CEMENT, FIBER-CEMENT OR GLASS MAT GYPSUM BACKERS INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS SHALL BE USED AS BACKERS FOR WALL TILE IN TUB AND SHOWER AREAS AND WALL PANELS IN SHOWER AREAS (R102.3, 4).

PLUMBING FIXTURES SHALL COMPLY WITH THE FOLLOWING CONSERVATION REQUIREMENTS: TABLE P2403.2. WATER CLOSETS-TANK TYPE 1.6 GAL./FLUSH. SHOWER HEADS- 2.5 GAL./MINUTE. FAUCETS- 2.2 GAL./MINUTE, PROVIDE AERATOR.

WATER TREATMENT SYSTEMS- SHALL BE EQUIPPED WITH AN AUTOMATIC SHUTOFF TO PREVENT CONTINUOUS FLOW WHEN NOT IN USE.

DOMESTIC DISHWASHING MACHINES CONNECTED TO A DISPOSER SHALL HAVE THE DISCHARGE INSTALLED AS HIGH AS POSSIBLE. (P2111.3).

HOT WATER RECIRCULATION PUMPS. PROVIDE A HOT WATER DEMAND CONTROLLED RECIRCULATION PUMP FOR WATER HEATERS LOCATED MORE THAN 20 FEET FROM FURTHEST FIXTURE SERVED. A MANUAL CONTROL OR OCCUPANT SENSOR SWITCH SHALL OPERATE THE PUMP WITH AN AUTOMATIC TEMPERATURE SENSOR SHUT-OFF (M2005.5 AMENDED).

ALL PIPING SHALL BE WRAPPED OR INSULATED AS PER MANUFACTURER AND I.E.C.C.

ALL CLEANOUTS SHALL BE PROVIDED IN ACCORDANCE WITH I.P.C., I.R.C., & OTHER LOCAL CODES THAT APPLY.

TYPE 1\"/>

ALL HOT WATER PIPING AND COLD WATER PIPING ABOVE CEILING SHALL BE INSULATED WITH OWENS CORNING FIBERGLASS 25ASJ/55SL PIPE INSULATION OR CODE APPROVED EQUAL.

TYPE K 1/2\"/>

THE PLUMBING CONTRACTOR SHALL VERIFY EXACT LOCATION OF THE SEWER TAP AND THE WATER TAP IN THE FIELD PRIOR TO RUNNING WASTE AND WATER PIPING.

THE PLUMBING CONTRACTOR SHALL VISIT AND EXAMINE THE PREMISES AND/OR JOB SITE SO AS TO ASCERTAIN THE EXISTING CONDITIONS BEFORE BIDDING. NO EXTRAS WILL BE ALLOWED BECAUSE OF THE CONTRACTOR'S FAILURE TO DETERMINE ACTUAL JOB SITE CONDITIONS.

PROVIDE 1/2\"/>

DI-ELECTRIC UNIONS SHALL BE PROVIDED AT ALL CONNECTIONS TO WATER HEATERS. PROVIDE ASME CODED P & T RELIEF VALVE FOR WATER HEATERS.

RUN T & P RELIEF PIPING FULL SIZE FROM WATER HEATER TO 6\"/>

ALL WASTE LINES UNDER SLAB SHALL BE CAST IRON OR CODE APPROVED PVC

GAS PIPING

(WHEN INSTALLED, SEE PLAN FOR CLARIFICATION)

GAS PIPING SHALL NOT BE PLACED BENEATH ANY STRUCTURE.

PROVIDE GAS COCKS & UNIONS & ALL GAS EQUIP. CONNECTIONS

GAS PIPING HAS BEEN SIZED IN ACCORDANCE WITH I.P.C.

GAS PIPING ABOVE GROUND EXPOSED TO WEATHER SHALL BE SCHEDULE 40 TYPE A-54 GALVANIZED

GAS PIPING SHALL BE SCHEDULE 40, BLACK STEEL, INSIDE BLDG

GAS PIPING BELOW GROUND SHALL BE FACTORY COATED & WRAPPED W/ HINTS PROCESS H.P. #11 COAL TAR WRAP

GAS PIPING 3\"/>

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HOWARD MESA RANCH PHASE 2 UNIT 2
LOT: 700
APN: 500-99-002

PROJECT NAME
A CUSTOM HOME FOR
LARRY & CHERYL
SCHUG

DETAILS

SHEET TITLE

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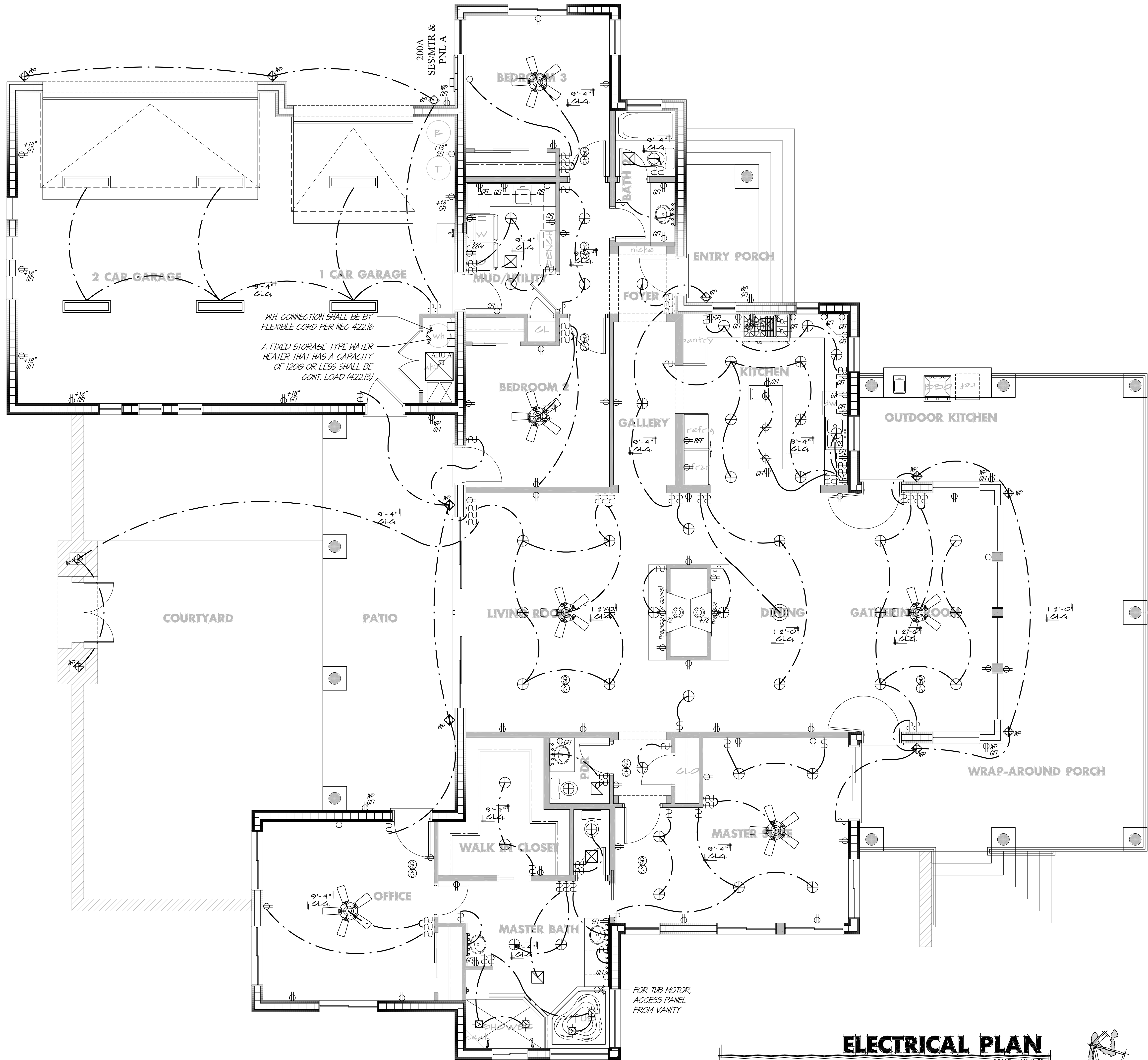
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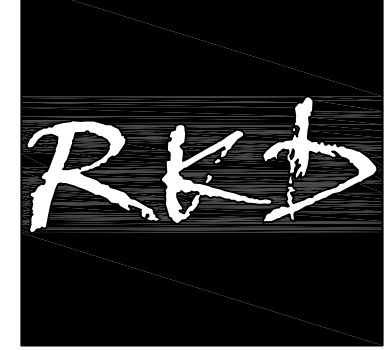
GENERAL NOTES

1. RECEPTACLE OUTLETS SHALL BE PROVIDED NO MORE THAN 6 FT. FROM ANY POINT ALONG THE FLOOR LINE, INCLUDING WALL SPACE 2 FT. OR MORE IN WIDTH. KITCHEN AND DINING COUNTER TOPS WIDER THAN 12 IN. SHALL BE PROVIDED WITH A RECEPTACLE OUTLET. PROVIDE AN OUTLET ADJACENT TO EACH SINK.
2. CENTER ALL CEILING J-BOXES/ LIGHTS IN ROOMS UNLESS NOTED OTHERWISE. OUTLET BOXES SHALL NOT BE USED AS SOLE SUPPORT FOR CEILING FANS, EXCEPT BOXES LISTED FOR THE APPLICATION SHALL BE PERMITTED AS THE SOLE MEANS OF SUPPORT.
3. CEILING FANS NOT EXCEEDING 35 POUNDS (WITH OR WITHOUT ACCESSORIES) MAY BE SUPPORTED BY OUTLET BOXES PROVIDED THE BOXES ARE IDENTIFIED FOR SUCH USE PER IRC SEC. E4001.6.
4. PROVIDE A MINIMUM OF TWO 20-AMPERE-RATED BRANCH CIRCUITS FOR RECEPTACLES LOCATED IN THE KITCHEN, PANTRY, BREAKFAST, AND DINING AREAS, A SEPARATE 20-AMPERE-RATED BRANCH CIRCUIT TO THE LAUNDRY, AND A SEPARATE 20-AMPERE-RATED BRANCH CIRCUIT FOR BATHROOM RECEPTACLE(S).
5. ALL BRANCH CIRCUITS THAT SUPPLY 125-VOLT, SINGLE-PHASE, 15 AND 20-AMPERE RECEPTACLE OUTLETS INSTALLED IN DWELLING UNIT BEDROOMS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER(S).
6. ALL SMOKE DETECTORS EXCLUSIVE OF THOSE LOCATED IN SLEEPING ROOMS ARE REQUIRED TO BE INTERCONNECTED.
7. CARBON MONOXIDE DETECTORS REQ'D WHEN INSTALLING GAS APPLIANCES IN LIVABLE PORTIONS OF RESIDENCES.
8. KITCHEN OVEN/RANGE & ELECTRIC DRYER ARE REQUIRED TO BE SUPPLIED BY A 4-WIRE RECEPTACLE PER IRC SEC. 300.8.
9. COUNTERTOP OUTLETS REQUIRED EVERY 2 FT. NOT TO EXCEED 4 FT BETWEEN OUTLETS, SWITCHES REQUIRED WITHIN 3 FT. OF ROOM OR HALLWAY ENTRANCES. #12 WIRE REQUIRED ON ALL RECEPTACLE CIRCUITS.
10. FIXTURES THAT ARE LOCATED IN DAMP OR WET LOCATIONS SHALL BE "LISTED" TO BE SUITABLE FOR SUCH LOCATIONS PER IRC SEC. E3403.8.
11. 240V. @ RANGE IS OPTIONAL.
12. LOOP ALL GFI PROTECTED RECEPTACLES TO A MINIMUM OF (1) GFI OUTLET.
13. EXHAUST FANS SHALL BE NUTONE MODEL QT80 CEILING MOUNTED OR AN APPROVED EQUAL.
14. PLACE BATHROOM WALL FIXTURES OVER LAV'S AT DUAL LAV'S. AND COUNTERS. CENTER OVER MIRROR AT SINGLE LAV. COUNTERS
15. PROVIDE 1 - 20 AMP CIRCUIT FOR BATHROOM GFI'S WITH NO OTHER OUTLETS.
16. ALL CONVENIENCE OUTLETS WITHIN 6 FT. OF SINKS, IN BATHROOMS, GARAGES AND WITHIN 6'-6" OF DIRECT GRADE LEVEL ACCESS SHALL BE GFI PROTECTED.
17. OWNER TO COORDINATE WITH ELECTRICAL CONTRACTOR EXACT LOCATIONS OF ALL RECEPTACLES, FIXTURES AND SWITCHING LOCATIONS IN FIELD PRIOR TO INSTALLATION.

SYMBOL LEGEND

- | | |
|-----------------------------|--|
| ○ = CLG. MTD. "GLOBE" LT | ⊗ = STD. CEILING FAN W/ LIGHT |
| ⊕ = "VAPOR PROOF" LIGHT | ⊗ = OPT. CLG. FAN / STD. LIGHT |
| ⊕ = SMALL CAN LIGHT | ⊞ = TELEVISION OUTLET |
| ⊕ = STD. CAN LIGHT | ⊞ = J-BOX |
| ⊕ = STD. WALL MOUNT LIGHT | ▽ = OPT. TELEPHONE |
| ⊕ = DECORATIVE CAN LIGHT | ▽ = STD. TELEPHONE |
| ⊕ = CHANDELIER | ● = EXHAUST FAN 5 AIR CHANGES PER HOUR |
| ⊕ = EXTERIOR COACH LIGHT | □ = FUSED DISCONNECT SWITCH |
| ▭ = 2'x4' FLUORESCENT LIGHT | ⊞ = CHIMES |
| ▭ = 1'x4' FLUORESCENT LIGHT | ⊞ = CONDENSOR MOTOR |
| ⊞ = MULTI-BULB VANITY LIGHT | ⊞ = PUSH BUTTON SWITCH |
| ⊞ = STD. SWITCH | ⊞ = SMOKE DETECTOR |
| ⊞ = STD. DUPLEX OUTLET | ⊞ = GARAGE DOOR SENSOR |
| ⊞ = STD. SWITCHED OUTLET | — = ROPE LIGHT |
| ⊞ = STD. 220V. OUTLET | ⊞ = CARBON MONOXIDE DET. |
| ⊞ = FLOOR OUTLET | |

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PROJECT NAME
A CUSTOM HOME FOR
LARRY & CHERYL
SCHUG

SHEET TITLE
ELECTRICAL
PLAN

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GREEN - ELECT

RECESSED LIGHTS DO NOT PENETRATE THE THERMAL BARRIER.

AT LEAST 50% OF FIXTURES HAVE AN EFFICACY OF 40 LUMENS PER WATT (L/W) OR MORE. HIGH-EFFICACY LIGHTING INCLUDES COMPACT OR TUBULAR FLUORESCENT AND LIGHT-EMITTING DIODES (LEDs).

MAXIMUM INTERIOR LIGHTING WATTAGE DOES NOT EXCEED 0.5 WATTS PER SQ. FT., AS DETERMINED BY AGGREGATE WATTAGE NOT INCLUDING PLUG LOADS.

SMART WIRING SYSTEM IS INSTALLED FOR LIGHTING CONTROL & TELECOMMUNICATIONS.

DWELLING HAS ENERGY STAR RATED APPLIANCES INCLUDING REFRIGERATOR, FREEZER, DISHWASHER AND CLOTHES WASHER (WWW.ENERGYSTAR.GOV/PRODUCTS).

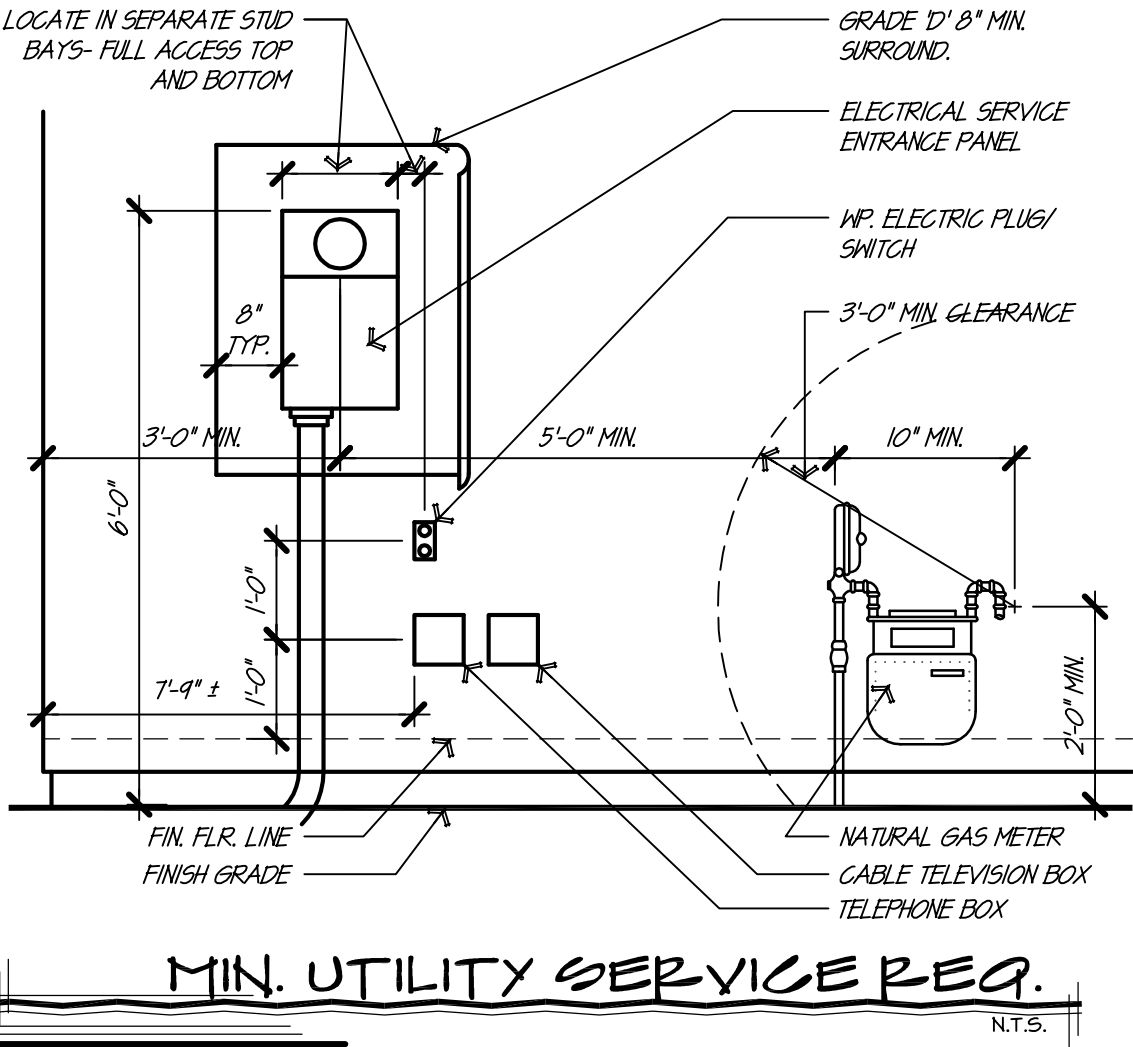
DWELLING HAS A ROOF AREA CONFIGURED TO ACCOMMODATE FUTURE SOLAR ELECTRIC (PHOTOVOLTAIC) PANELS WITH ELECTRICAL ROUGH-IN (CONDUIT RUN FROM ELECTRICAL SERVICE TO ROOF). THE AREA MUST BE MINIMUM OF 400 SQ. FT. AND HAVE A SOUTH SLOPING EXPOSURE. (UNLESS FLAT ROOF WITH OR WITHOUT PARAPET)

NOTE (312.2):
SURFACE TYPE ENCLOSURES LOCATED IN DAMP OR WET LOCATIONS SHALL BE PLACED OR EQUIPPED SO AS TO PREVENT MOISTURE OR WATER FROM ENTERING AND ACCUMULATING WITHIN THE CABINET OR CUTOFF BOX, AND SHALL BE MOUNTED SO THERE IS AT LEAST 1/4" AIRSPACE BETWEEN THE ENCLOSURE AND THE WALL OR OTHER SUPPORTING SURFACE. ENCLOSURES IN WET LOCATIONS SHALL BE WEATHERPROOF. FOR ENCLOSURES IN WET LOCATIONS, RACEMATS OR CABLES ENTERING ABOVE THE LEVEL OF UNINSULATED LIVE PARTS SHALL USE FITTINGS LISTED FOR WET LOCATIONS.

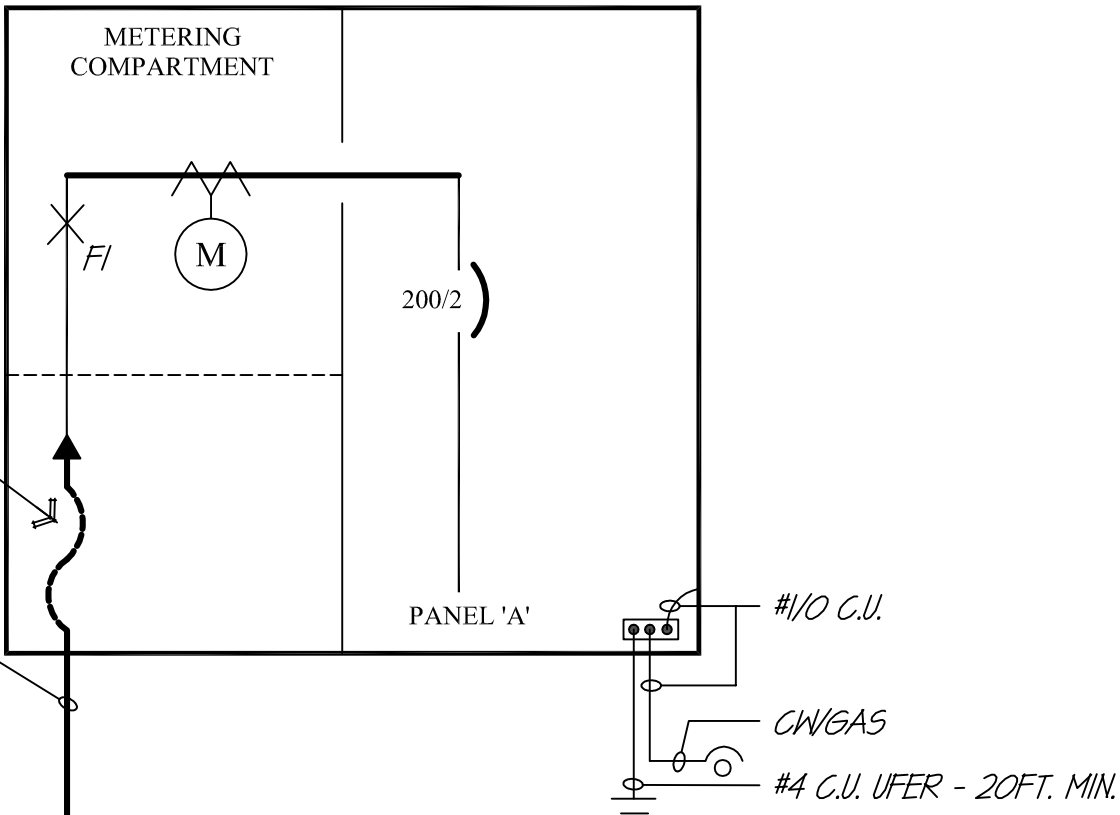
U.G. PULL SECTION PER PWR CO. REQMTS

(1) 3" RIGID STEEL RISER W/ RIGID STEEL ELLS (VERIFY REQMTS W/ PWR CO.)

RUN 3" PVC TO POWER CO. PAD MOUNTED XFMR - CONDUCTORS BY POWER CO. (VERIFY REQMTS W/ PWR CO.)



SERVICE ENTRANCE
METER/PANEL 'A' 200A
120/240v 1P - 3W w/ (1) 200A-2P
DISCONNECTS



200A 1-LINE DIAGRAM

SERIES RATED SYSTEMS

- "SERIES-RATED SYSTEMS" SHALL CONSIST OF EITHER A CIRCUIT BREAKER OR FUSE CONNECTED IN SERIES WITH A DOWNSTREAM CIRCUIT BREAKER, DESIGNED AND LISTED FOR USE AS A SINGLE INTEGRATED SYSTEM.
- THESE NOTES SHALL APPLY WHEN PANELBOARDS OR PROTECTIVE DEVICES ARE IDENTIFIED AS "SERIES RATED". OTHERWISE, SYSTEMS SHALL BE FULLY RATED.
- THE MIN. KAIC SHOWN FOR SERIES RATED EQUIPMENT REFERS TO THE "SERIES CONNECTED SHORT CIRCUIT CURRENT RATING" (SCCR) OF EQUIPMENT.
- ALL SERIES RATED DEVICE COMBINATIONS SHALL BE UL LISTED & LABELED. SUBSTITUTION OF COMPONENTS HAVING DIFFERENT SPECIFICATIONS OR INTERRUPTING RATINGS IS SPECIFICALLY PROHIBITED.
- SYSTEMS ARE IDENTIFIED AS TWO-TIER OR THREE-TIER (EX 22(10); 65(42)/10). RATINGS SHOWN ARE AIC RATING OF INDIVIDUAL DEVICES.
- WHEN SERIES-RATED SYSTEMS ARE SPECIFIED, MOTOR FLA HAS BEEN CALCULATED AT LESS THAN 1% OF THE DOWNSTREAM BREAKER AIC RATING.
- CONTRACTOR SHALL INSTALL & VERIFY MARKINGS ON SERIES-RATED EQUIPMENT PER NEC 110-22, EX. "CAUTION-SERIES RATED SYSTEM (ENTER TIER RATING EX. 22(10) (ENTER VALUE FROM ONE-LINE "XX") KA AVAILABLE IDENTIFIED REPLACEMENT COMPONENT REQUIRED.

Electrical Load Calculations				
Usable Sq. Ft. X 3 kva	2,926	X	3	8,778
Appliance Circuits	2	X	1,500	3,000
Laundry Circuit(s)	1	X	1,500	1,500
Dishwasher / Disposal	1	X	1,500	1,500
Water Heater(s)	1	X	4,500	4,500
Dryer Circuit(s)	1	X	5,000	5,000
Range	0	X	12,000	0
Oven	1	X	10,000	10,000
Cooktop	1	X	10,000	10,000
Microwave	2	X	1,500	3,000
Opt. Whirlpool Tub (20 Amp)	1	X	1,500	1,500
Add'l Klt. Appl. Circs. (20 A)	2	X	1,500	3,000
Bathroom GFCI	2	X	1,500	3,000
Poo. (Est)	2	X	1,500	3,000
Spo (Est)	1	X	5,000	5,000
Total				62,778
First 10,000 @ 100%				-10,000
Total				52,778
Figure Total @ 40%				21,111

Air Conditioning Load				
SIZE (T)	UNIT	QTY	LOAD	
5	Air Handler	1	X	1,920
5	Cond. Unit @ 125%	1	X	9,855
0	Air Handler	0	X	0
0	Cond. Unit @ 125%	0	X	0
0	Air Handler	0	X	0
0	Cond. Unit @ 125%	0	X	0
A/C Total				11,775
First 10,000 @ 100%				10,000
Total Load in Watts				42,886
Total Divided by 240 Volts				178.69

PANEL BOARD SCHEDULE "A"				
1.	AHU #	2	2	TOTAL LOAD, QUA
3.	AHU #	60	40	A/C #
5.	WATER HTR	2	1	LIGHTS MASTER
7.	WATER HTR	40	20	LT DINFROY
9.	ARC FALT MASTER	20	20	LT GREAT RM
11.	WIRING REPT	20	20	LT KITCHEN
13.	BATH 2 RECEPT	20	8	KITCH RECEPT
15.	LAV RECEPT	20	8	KITCH RECEPT
17.	WASHER	20	8	KITCH RECEPT
19.	DRYER	20	20	DISPOSAL
21.	GARAGE	20	20	MICROWAVE
23.	OUTDOOR LTS	20		SPACE
25.	SPACE			SPACE
27.	SPACE			SPACE
29.	BLANK			BLANK

ELECTRICAL SCHEDULES

GENERAL NOTES

RECEPTACLES SHALL BE SPACED SO THAT THERE IS NO POINT ALONG THE FLOOR LINE WHICH IS MORE THAN 6'0" FROM AN OUTLET. PROVIDE ONE OUTLET MIN. FOR EACH COUNTER SPACE IN KITCHEN WHICH IS 12' OR HIDER (MAX 4'-0" O.C.)

RECEPTACLES IN BATHROOMS, GARAGES, SERVING KITCHEN COUNTER TOP AREA AND ANY EXTERIOR LOCATION SHALL BE GROUND FAULT INTERRUPTION SYSTEM (GFI)

SMOKE DETECTORS SHALL BE PLACED NO MORE THAN 12' FROM THE CEILING, CLOSER THAN 4 INCHES FROM AN INSIDE CORNER, AND 3'-0" MIN. FROM DUCT OPENINGS. SD'S SHALL BE PERMANENTLY WIRED AND INTERCONNECTED AND SHALL PROTECT ALL SLEEPING AREAS WITH BATTERY BACK-UP. WHERE THE HIGHEST POINT OF A CEILING IN A ROOM THAT OPENS TO THE HALLWAY SERVING THE BEDROOMS EXCEEDS THAT OF THE HALLWAY BY 24" OR MORE, SMOKE DETECTORS SHALL BE INSTALLED IN THE HALLWAY AND IN THE ADJACENT ROOM.

SWITCH PLATES AND OUTLET HEIGHTS: SWITCH PLATES - +46" TO CL. OUTLETS - +12" TO CL. KITCHEN OUTLETS - +46" TO CL. BATHROOM OUTLETS - +42" TO CL. WASHER & DRYER OUTLETS - +36" TO CL. LAUNDRY OUTLETS - 46" TO CL. GARAGE OUTLETS - 46" TO CL. WATER HEATERS - +60" TO CL.

ALL LIGHTING FIXTURES IN CLOSETS SHALL BE LOCATED 18" MIN FROM ALL SHELVING.

OUTLET BOXES IN HALLS BETWEEN THE DWELLING AND GARAGES SHALL BE METAL OR UL APPROVED PLASTIC. METAL BOXES IN GARAGE CEILINGS.

TWO OR MORE 20 AMP SMALL APPLIANCE CIRCUITS SHALL BE PROVIDED TO SERVE THE KITCHEN, BREAKFAST AND DINING AREAS. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS PER CURRENT CODE.

PROVIDE ONE (MIN) 20 AMP BRANCH CIRCUIT TO SERVE THE LAUNDRY ROOM. SUCH CIRCUIT SHALL HAVE NO OTHER OUTLETS PER CURRENT CODE.

KITCHEN COUNTER TOP RECEPT PER CURRENT CODE.

MINIMUM 40 AMP CIRCUIT REQUIRED FOR RANGE AND/OR OVEN.

WHERE FANS ARE LOCATED ONLY APPROVED OUTLETS SHALL BE USED.

BATHROOM RECEPTACLE OUTLETS TO BE SUPPLIED BY AT LEAST 20 AMP BRANCH CIRCUIT WITH NO OTHER OUTLETS.

GROUNDING NOTES

ALL INTERIOR METALLIC WATER PIPING WHICH MAY BECOME ENERGIZED SHALL BE BONDED TOGETHER AND MADE ELECTRICALLY CONTINUOUS. A BOND OF BARE 4" COPPER WIRE SHALL BE MADE BETWEEN THE BONDED PIPING SYSTEM AND THE ELECTRODE CONDUCTOR.

20'-0" MIN. BARE COPPER WIRE CONDUCTOR (4" MIN) ENCASED BY 2" MIN. OF CONCRETE AT THE BOTTOM OF A FOOTING WHICH IN IN DIRECT CONTACT WITH THE ADJACENT EARTH.

THE INTERIOR METAL COLD WATER PIPING SYSTEM IS TO BE BONDED TO THE SERVICE EQUIPMENT ENCLOSURE, THE GROUNDING CONDUCTOR AT THE SERVICE, THE GROUNDING ELECTRODE OR TO ONE OR MORE GROUNDING ELECTRODES USED.

IF COPPER PIPING IS NOT USED, (SUCH AS WHEN USING WIRSBO PEX) A PERMANENT STICKER MUST BE MOUNTED ON THE ELECTRICAL PANEL STATING THAT NO SECONDARY GROUND IS NECESSARY.

INTERRUPTING RATING

EQUIPMENT INTENDED TO BREAK CURRENT AT FAULT LEVELS SHALL HAVE AN INTERRUPTING RATING SUFFICIENT FOR THE NORMAL CIRCUIT VOLTAGE AND THE CURRENT THAT IS AVAILABLE AT THE LINE TERMINALS OF THE EQUIPMENT. EQUIPMENT INTENDED TO BREAK CURRENT AT OTHER THINALS OF THE EQUIPMENT.

EQUIPMENT INTENDED TO INTERRUPT CURRENT AT OTHER THAN FAULT LEVELS SHALL HAVE AN INTERRUPTING RATING AT NOMINAL CIRCUIT VOLTAGE NOT LES THAN THE CURRENT THAT MUST BE INTERRUPTED.

NOTE (410-4A)

EXTERIOR LIGHT FIXTURES SHALL BE INSTALLED SO THAT WATER CANNOT ENTER OR ACCUMULATE IN WIRING COMPARTMENTS, LAMPHOLDERS, OR OTHER ELECTRICAL PARTS. ALL FIXTURES INSTALLED IN WET OR DAMP LOCATIONS SHALL BE MARKED "SUITABLE FOR WET LOCATIONS"

CEILING FAN NOTE

OUTLET BOXES AND SYSTEMS USED AS THE SOLE SUPPORT FOR CEILING-SUSPENDED FANS ARE TO BE MARKED BY THE MANUFACTURER AS SUITABLE FOR THIS PURPOSE AND ARE NOT TO SUPPORT FANS THAT WEIGH MORE THAN 10 LBS. MARKING FOR BOXES DESIGNED TO SUPPORT FANS WEIGHING MORE THAN 35 LBS. IS TO INCLUDE THE MAXIMUM WEIGHT TO BE SUPPORTED - PER IRC E3803.9

AFCI NOTE

ALL BRANCH CIRCUITS THAT SUPPLY 125V, SINGLE PHASE, 15 & 20 AMPERE OUTLETS INSTALLED IN DWELLING UNIT BEDROOMS SHALL BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT.

"OUTLETS" INCLUDE RECEPTACLES, FANS, LIGHTING, SMOKE ALARMS ETC.

ICF NOTES

ICF PRE-PLACEMENT PROCEDURES:

PLAN OUT WHERE WATER SUPPLY, ROSE BIBS, SEWAGE, TVAC, EXTERIOR LIGHT FIXTURES AND OUTLETS WILL BE REQUIRED AND RUN PVC, ABS OR METAL CONDUIT OR SLEEVES AS REQUIRED THROUGH FORMS BEFORE CONCRETE PLACEMENT TO PROVIDE FOR INSTALLATION OF THESE SERVICES LATER. IF LARGE DIAMETER VERTICAL WASTE LINES NEED TO BE PARTIALLY EMBEDDED INTO WALLS, PRE- INSTALL AND GLUE FOAM INSERTS INTO POSITION AT THE DESIRED LOCATION TO BE CUT OUT LATER. NOTE: CHECK WITH LOCAL CODES OR ENGINEERING FOR RECOMMENDATIONS FOR INCREASING REINFORCING AT WALL CONDITIONS WHERE THIS IS NECESSARY.

ICF POST-PLACEMENT PROCEDURES:

ELECTRICAL:

UTILITY BOXES: CUT INTERIOR FOAM TO REQUIRED SHAPE FOR EACH BOX USING A HOT KNIFE TOOL OR UTILITY KNIFE AT THE REQUIRED LOCATION. BOXES CAN THEN BE SCREWED OR GLUED TO THE CONCRETE PER LOCAL CODE REQUIREMENTS.

WIRING:

CARVE 5/8" (8 MM) WIDE CHANNELS TO A MIN. DEPTH OF 2" (50MM) INTO THE FOAM USING A HOT KNIFE, OR ELECTRIC CHAIN SAW WITH A PRESET DEPTH GUIDE WHEEL. STD. NMC (ROMAX) CABLE WILL THEN BE ABLE TO BE FRICTION FIT INTO THE CHASE CREATED. PUSH THE CABLE TO THE VERY BACK OF THE CHASE SO THAT THE DISTANCE FROM THE FACE OF THE WIRE TO THE INSULATION SURFACE IS NO LESS THAN 1 1/4" (32MM). ONCE COMPLETE, THE CABLE CAN BE ADDITIONALLY SPOT GLUED IN POSITION WITH DABS OF NIDURA+ EXPANSION FOAM ADHESIVE. FOR WIRING BEHIND LEDGER BOARDS, THE FOAM CAN BE MELTED IF REQUIRED USING A HEATED BALL BEARING DROPPED INTO A CHASE CUT ABOVE LEDGER AT THE DESIRED LOCATION AND A SHEET METAL STOP INSERTED INTO THE CHASE BELOW.

ROBERT KLOB
DESIGNS, INC.

RKD

480.968.2474

www.rkdznz.com

411 N. KYRENE RD.
SUITE 123
CHANDLER, AZ 85226

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ELECTRICAL
SCHEDULES

SHEET TITLE

REV	COMMENT
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