

FILE: .../Hammond Clear Creek/Revit

# STRATEGIC PROPERTIES GROUP, LLC.

# LOT 342 / C56, UNIT 2 CLEAR CREEK, NV

BUILDINGS AND STRUCTURES CONSTRUCTED. MODIFIED OR RELOCATED INTO OR WITHIN WILDAND-URBAN INTERFACE AREAS SHALL MEET THE CONSTRUCTION REQUIREMENTS IN ACCORDANCE WITH TABLE 503.1. CLASS 1, CLASS 2 OR CLASS 3, IGNITION-RESISTANT CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTIONS 504, 505 AND 506, REPECTIVELY.

-DRIVEWAYS SHALL BE PROVIDED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY OF A BUILDING IS LOCATED MORE THAN 150 FEET FROM A FIRE -DRIVEWAYS SHALL PROVIDE A MINIMUM UNOBSTRUCTED WIDTH OF 12 FEET AND A MINIMUM UNOBSTRUCTED HEIGHT OF 13 FEET 6 INCHES -DRIVEWAYS IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH TURNAROUNDS. DRIVEWAYS IN EXCESS OF 200 FEET IN LENGTH AND LESS THAN 20 FEET II

ROOFS: ROOFS SHALL HAVE A ROOF ASSEMBLY THAT COMPLIES WITH A CLASS A RATING WHEN TESTED IN ACCORDANCE WITH ASTM E 108 OR UL 790. FOR ROOF COVERING WHERE THE PROFILE ALLOWS A SPACE BETWEEN THE ROOF COVERING AND ROOF DECKING, THE SPACE AT THE EAVE ENDS SHALL BE FIRESTOPPED TO PRECLUDE ENTRY OF FLAMES OR EMBERS, OR HAVE ON LAYER OF 72-POUND MINERAL-SURFACED, NON-PERFORATED CAP SHEET COMPLYING WITH ASTM D 3909 INSTALLED OVER THE COMBUSTIBLE

ROOF VALLEYS: WHEN PROVIDED, VALLEY FLASHINGS SHALL BE NOT LESS THAN 0.019 INCH CORROSION-RESISTANT METAL INSTALLED OVER A MINIMUM 36 INCH WIDE UNDERLAYMENT CONSISTING OF ONE LAYER OF 72 - POUND MINERAL-SURFACED, NONPERFORATED CAP SHEET COMPLYING WITH ASTM D 3909 RUNNING THE FULL LENGTH OF THI

PROTECTION OF EAVES: EAVES AND SOFFITS SHALL BE PROTECTED ON THE EXPOSED UNDERSIDE BY IGNITION-RESISTANT MATERIALS OR BY MATERIALS APPROVED FOR NOT LESS THAN 1-HOUR FIRE-RESISTANCE RATED CONSTRUCTION, 2 INCH NOMINAL DIMENSION LUMBER, OR 1 INCH NOMINAL FIRE-RETARDANT TREATED LUMBER OR 3/4 INCH NOMINALLY FIRE-RETARDANT TREATED PLYWOOD, IDENTIFIED FOR EXTERIOR USE AND MEETING THE REQUIREMENTS OF SECTION 2303,2 OF THE INTERNATIONAL BUILDING CODE. FASCIAS ARE REQUIRED AND SHALL BE PROTECTED ON THE BACKSIDE BY IGNITITION-RESISTANT MATERIALS OR BY MATERIALS APPROVED FOR NOT LESS THAN 1 HOUR FIRE-RESISTANCE RATED

GUTTERS AND DOWNSPOUTS: GUTTERS AND DOWNSPOUTS SHALL BE CONSTRUCTED OF NONCOMBUSTIBLE MATERIAL. GUTTERS SHALL BE PROVIDED WITH AN APPROVED MEANS

-FIRE-RETARDANT TREATED WOOD ON THE EXTERIOR SIDE. THE FIRE-RETARDANT WOOD SHALL BE LABELED FOR EXTERIOR USE AND MEET THE REQUIREMENTS OF

SUCH MATERIAL SHALL EXTEND FROM THE TOP OF THE FOUNDATION TO THE UNDERSIDE OF THE ROOF SHEATHING. 2018 WUI CODE SECTION R504.5 UNDERFLOOR ENCLOSURE: BUILDINGS OR STRUCTURES SHALL HAVE UNDERFLOOR AREAS ENCLOSED TO THE GROUND WITH EXTERIOR WALLS IN ACCORDANCE WITH

EXCEPTION: COMPLETE ENCLOSURE SHALL NOT BE REQUIRED WHERE THE UNDERSIDE OF EXPOSED FLOORS AND EXPOSED STRUCTURAL COLUMNS, BEAMS AND SUPPORTING WALLS ARE PROTECTED AS REQUIRED FOR EXTERIOR 1 HOUR FIRE-RESISTANCE RATED CONSTRUCTION OR HEAVY TIMBER CONSTRUCTION OR FIRE-RETARDANT TREATED WOOD. THE FIRE-RETARDANT TREATED WOOD SHALL BE LABELED FOR EXTERIOR USE AND MEET THE REQUIREMENTS OF SECTION 2303.2 OF

APPENDAGES AND PROJECTIONS: UNENCLOSED ACCESSORY STRUCTURES ATTACHED TO BUILDINGS WITH HABITABLE SPACES AND PROJECTIONS, SUCH AS DECKS, SHALL BE NOT LESS THAN 1 HOUR FIRE-RESISTANCE RATED CONSTRUCTION, HEAVY TIMBER CONSTRUCTION OR CONSTRUCTED OF ONE OF THE FOLLOWING: -FIRE-RETARDANT TREATED WOOD IDENTIFIED FOR EXTERIOR USE AND MEETING THE REQUIRMENTS OF SECTION 2303.2 OF THE INTERNATIONAL BUILDING CODE

UNDERFLOOR AREAS: WHERE THE ATTACHED STRUCTURE IS LOCATED AND CONSTRUCTED SO THAT THE STRUCTURE OR ANY PORTION THEROF PROJECTS OVER A DESCENDING

EXTERIOR GLAZING: EXTERIOR WINDOWS, WINDOW WALLS AND GLAZED DOORS, WINDOWS WITHIN EXTERIOR DOORS, AND SKYLIGHTS SHALL BE TEMPERED GLASS, MULTILAYERED

EXTERIOR DOORS: EXTERIOR DOORS SHALL BE APPROVED NONCOMBUSTIBLE CONSTRUCTION, SOLID CORE WOOD NOT LESS THAN 1 3/4 INCHES THICK, OR HAVE A FIRE PROTECTION RATING OF NOT LESS THAN 20 MINUTES. WINDOWS WITHIN DOORS AND GLAZED DOORS SHALL BE IN ACCORDANCE WITH SECTION 504.8. EXCEPTION: VEHICLE ACCESS

VENTS: ATTIC VENTILATION OPENINGS, FOUNDATION OR UNDERFLOOR VENTS, OR OTHER VENTILATION OPENINGS IN VERTICAL EXTERIOR WALLS AND VENTS THROUGH ROOFS SHALL NOT EXCEED 144 SQUARE INCHES EACH. SUCH VENTS SHALL BE COVERED WITH NONCOMBUSTIBLE CORROSION RESISTANT MESH WITH OPENINGS NOT TO EXCEED 1/4 INCH, SHALL BE DESIGNED AND APPROVED TO PREVENT FLAME OR EMBER PENETRATION INTO THE STRUCTURE. 2018 WUI CODE SECTION R504.10(1)

VENT LOCATIONS: ATTIC VENTILATION OPENINGS SHALL NOT BE LOCATED IN SOFFITS, IN EAVE OVERHANGS, BETWEEN RAFTERS AT EAVES OR IN OTHER OVERHANG AREAS. GABLE END AND DORMER VENTS SHALL BE LOCATED NOT LESS THAN 10 FEET FROM LOT LINES. UNDERFLOOR VENTILATION OPENINGS SHALL BE LOCATED AS CLOSE TO

DETACHED ACCESSORY STRUCTURES: DETACHED ACCESSORY STRUCTURES LOCATED LESS THAN 50 FEET FROM A BUILDING CONTAINING HABITABLE SPACE SHALL HAVE EXTERIOR WALLS CONSTRUCTED WITH MATERIALS APPROVED FOR NOT LESS THAN 1 HOUR FIRE-RESISTANCE RATED CONSTRUCTION, HEAVY TIMBER, LOG WALL CONSTRUCTION, OR CONSTRUCTED WITH APPROVED NONCOMBUSTIBLE MATERIALS OR FIRE-RETARDANT TREATED WOOD ON THE EXTERIOR SIDE. THE FIRE RETARDANT TREATED WOOD SHALL BE LABELED FOR EXTERIOR USE AND MEET THE REQUIREMENTS OF SECTION 2303.2 OF THE INTERNATIONAL BUILDING CODE. 2018 WUI CODE SECTION 504.11 UNDERFLOOR AREAS: WHERE THE DETACHED STRUCTURE IS LOCATED AND CONSTRUCTED SO THAT THE STRUCTURE OR ANY PORTION THEREOF PROJECTS OVER A DESCENDING

SLOPE SURFACE GREATER THAN 10 PERCENT, THE AREA BELOW THE STRUCTURE SHALL HAVE UNDERFLOOR AREAS ENCLOSED TO WIHIN 6 INCHES OF THE GROUND, THE EXTERIOR WALL CONSTRUCTION IN ACCORDANCE WITH SECTION 504.5 OR UNDERFLOOR PROTECTION IN ACCORDANCE WITH SECTION 504.6. EXCEPTION: THE ENCLOSURE SHALL NOT BE REQUIRED WHERE THE UNDERSIDE OF EXPOSED FLOORS AND EXPOSED STRUCTURAL COLUMNS, BEAMS AND SUPPORTING

WALLS ARE PROTECTED AS REQUIRED FOR EXTERIOR 1 HOUR FIRE-RESISTANCE RATED CONSTRUCTION OR HEAVY TIMBER CONSTRUCTION OR FIRE-RETARANT TREATED WOOD ON THE EXTERIOR SIDE. THE FIRE-RETARDANT TREATED WOOD SHALL BE LABELED FOR EXTERIOR USE AND MEET THE REQUIREMENTS OF SECTION 2303.2 OF THE

1.) FUEL MODIFICATION DISTANCE SHALL NOT BE LESS THAN 30 FEET OR TO THE LOT LINE, WHICHEVER IS LESS. DISTANCES SHALL BE MEASURED ON A HORIZONTAL PLANE FROM

.) DEADWOOD AND LITTER SHALL BE REGULARLY REMOVED FROM TREES. WHERE ORNAMENTAL VEGETATIVE FUELS OR CULTIVATED GROUND COVER, SUCH AS GREEN GRASS, IVY, SUCCULENTS OR SIMILAR PLANTS ARE USED AS GROUND COVER, THEY ARE ALLOWED TO BE WITHIN THE DESIGNATED DEFENSIBLE SPACE, PROVIDED THEY DO NOT FORM A

4.) TREE CROWNS EXTENDING TO WITHIN 10 FEET OF ANY STRUCTURE SHALL BE PRUNED TO MAINTAIN A MINIMUM HORIZONTAL CLEARANCE OF 10 FEET. TREE CROWNS WITHING THE DEFENSIBLE SPACE SHALL BE PRUNED TO REMOVE LIMBS LOCATED LESS THAN 6 FEET ABOVE THE GROUND SURFACE ADJACENT TO THE TREES. 5.) PORTIONS OF TREE CROWNS THAT EXTEND TO WITHIN 10 FEET OF THE OUTLET OF A CHIMNEY SHALL BE PRUNED TO MAINTAIN A MINIMUM HORIZONTAL CLERANCE OF 10 FEET.

6.) CHIMNEYS SERVING FIREPLACES, BARBECUES, INCINERATORS OR DECORATIVE HEATING APPLIANCES IN WHICH SOLID OR LIQUID FUEL IS USED, SHALL BE PROVIDED WITH A SPARK ARRESTOR. SPARK ARRESTORS SHALL BE CONSTRUCTED OF WOVEN OR WELDED WIRE SCREENING OF 12 USA STANDARD GAUGE WIRE HAVING OPENINGS NOT EXCEEDING 7.) THE NET FREE AREA OF THE SPARK ARRESTOR SHALL NOT BE LESS THAN FOUR TIMES THE NET FREE AREA OF THE OUTLET OF THE CHIMNEY.

8.) FIREWOOD AND COMBUSTIBLE MATERIAL SHALL NOT BE STORED IN UNENCLOSED SPACES BENEATH BUILDING OR STRUCTURES, OR ON DECKS OR UNDER EAVES, CANOPIES OR OTHER PROJECTIONS OR OVERHANGS. WHEN REQUIRED BY THE CODE OFFICIAL, STORAGE OF FIREWOOD AND COMBUSTIBLE MATERIAL STORED IN THE DEFENSIBLE SPACE SHALL BE LOCATED A MINIMUM OF 20 FEET FROM THE STRUCTURES AND SEPARATED FROM THE CROWN OF TREES BY A MINIMUM HORIZONTAL DISTANCE OF 15 FEET

# PROJECT TEAM

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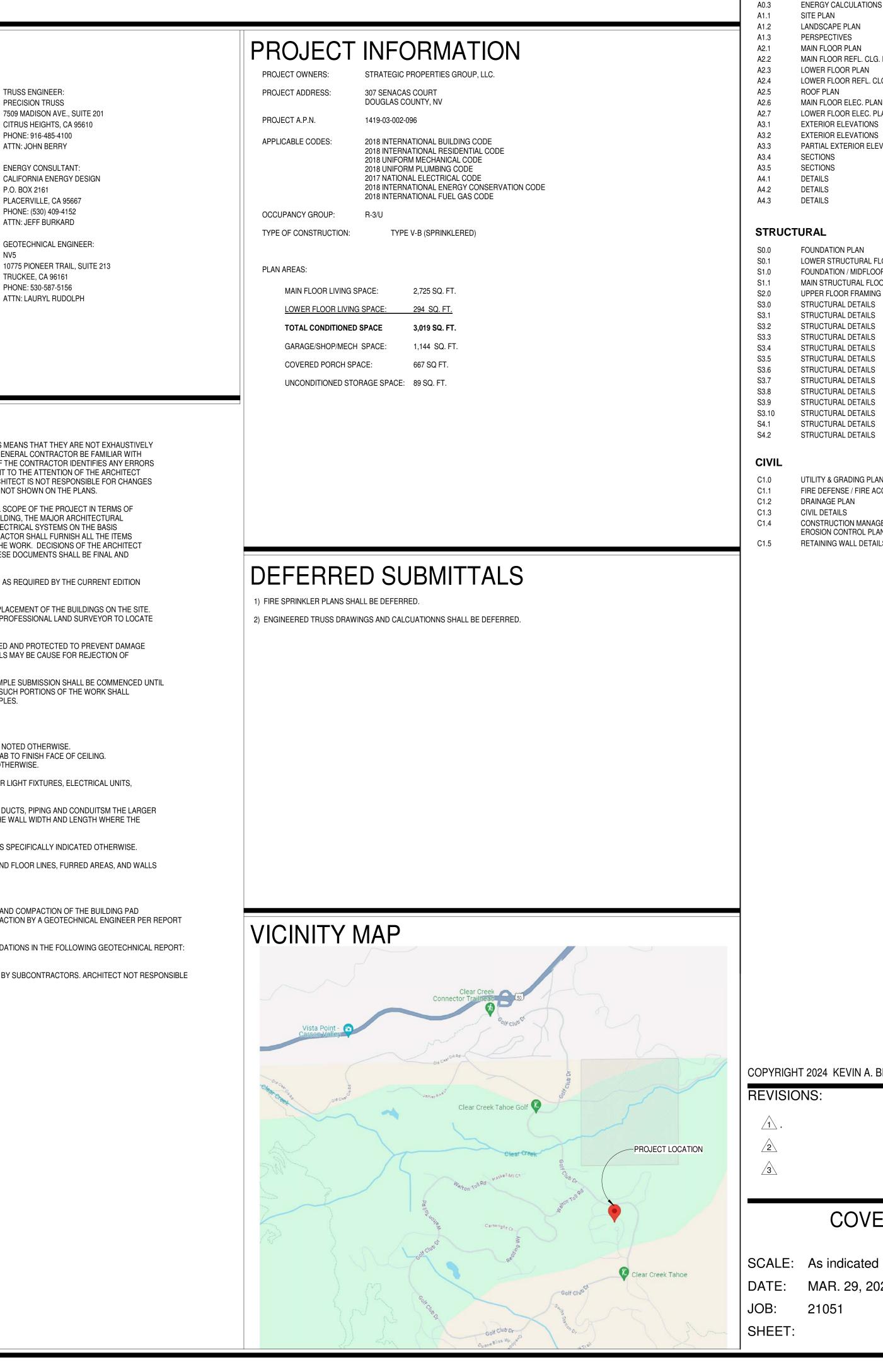
# GENERAL NOTES

- THESE DRAWINGS CONSTITUTE A 'BUILDERS SET' OF PLANS. THIS MEANS THAT THEY ARE NOT EXHAUSTIVELY DETAILED NOR EXTENSIVEL SPECIFIED AND REQUIRE THAT THE GENERAL CONTRACTOR BE FAMILIAR WITH CURRENT BEST PRACTICES FOR RESIDENTIAL CONSTRUCTION. IF THE CONTRACTOR IDENTIFIES ANY ERRORS OMISSIONS OR DISCREPANCIES ON THE PLANS, HE SHALL BRING IT TO THE ATTENTION OF THE ARCHITECT IN THE FORM OF A WRITTEN R.F.I. FOR DETERMINATION. THE ARCHITECT IS NOT RESPONSIBLE FOR CHANGES OR WORK CARRIED OUT BY THE GENERAL CONTRACTOR THAT IS NOT SHOWN ON THE PLANS.
- 2. SCOPE DOCUMENTS: THESE DRAWINGS INDICATE THE GENERAL SCOPE OF THE PROJECT IN TERMS OF ARCHITECTURAL DESIGN CONCEPT, THE DIMENSIONS OF THE BUILDING, THE MAJOR ARCHITECTURAL ELEMENTS AND THE TYPE OF STRUCTURAL, MECHANICAL AND ELECTRICAL SYSTEMS ON THE BASIS OF THE GENERAL SCOPE INDICATED OR DESCRIBED. THE CONTRACTOR SHALL FURNISH ALL THE ITEMS. REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK. DECISIONS OF THE ARCHITECT AS TO THE ITEMS OF WORK INCLUDED WITHIN THE SCOPE OF THESE DOCUMENTS SHALL BE FINAL AND BINDING ON THE CONTRACTOR AND THE OWNER.
- 3. ALL CONSTRUCTION AND MATERIALS SHALL BE AS SPECIFIED AND AS REQUIRED BY THE CURRENT EDITION OF THE I.B.C., LOCAL CODES, AND AUTHORITIES. 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT OF THE BUILDINGS ON THE SITE.
- THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A LICENSED PROFESSIONAL LAND SURVEYOR TO LOCATE THE BUILDING ON EACH LOT.
- 5. ALL MATERIAL STORED ON THE SITE SHALL BE PROPERLY STACKED AND PROTECTED TO PREVENT DAMAGE AND DETERIORATION UNTIL USE. FAILURE TO PROTECT MATERIALS MAY BE CAUSE FOR REJECTION OF WORK
- 6. NO PORTION OF THE WORK REQUIRING A SHOP DRAWING OR SAMPLE SUBMISSION SHALL BE COMMENCED UNTIL THE SUBMISSION HAS BEEN APPROVED BY THE ARCHITECT. ALL SUCH PORTIONS OF THE WORK SHALL BE IN ACCORDANCE WITH APPROVED SHOP DRAWINGS AND SAMPLES.
- 7. DIMENSIONS: A. ALL DIMENSIONS SHALL HAVE PREFERENCE OVER SCALE. B. ALL DIMENSIONS SHALL ARE TO ROUGH FRAMING UNLESS NOTED OTHERWISE. C. CEILING HEIGHT DIMENSIONS ARE FROM FINISH FLOOR SLAB TO FINISH FACE OF CEILING. D. ALL DIMENSIONS ARE TO FACE OF STUD UNLESS NOTED OTHERWISE.
- 8. PROVIDE ALL NECESSARY BLOCKING, BACKING AND FRAMING FOR LIGHT FIXTURES, ELECTRICAL UNITS, A.C. EQUIPMENT AND ALL OTHER ITEMS AS REQUIRED.
- 9. WHERE LARGER STUDS OR FURRINGS ARE REQUIRED TO COVER DUCTS, PIPING AND CONDUITSM THE LARGER STUD SIZE OR FURRING SHALL EXTEND THE FULL SURFACE OF THE WALL WIDTH AND LENGTH WHERE THE FURRING OCCURS.
- 10. DETAILS MARKED AS 'TYPICAL' SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY INDICATED OTHERWISE.
- 11. FIRE-STOP ALL CONCEALES DRAFT OPENINGS AT THE CEILING AND FLOOR LINES, FURRED AREAS, AND WALLS AT 10 FEET HORIZONTALLY AS REQUIRED.
- 12. ALL WORK SHALL BE LEVEL, PLUMB, AND SQUARE U.N.O.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER GRADING AND COMPACTION OF THE BUILDING PAD AND SHALL HAVE THE BUILDING PAD TESTED FOR PROPER COMPACTION BY A GEOTECHNICAL ENGINEER PER REPORT REQUIREMENTS.
- 14. THE CONTRACTOR SHALL REVIEW AND FOLLOW ALL RECOMMENDATIONS IN THE FOLLOWING GEOTECHNICAL REPORT: PROJECT NO. 43264.00 BY NV5, DATED DECEMBER 28, 2023
- 15. ALL PLUMBING AND MECHANICAL WORK SHALL BE DESIGN BUILD BY SUBCONTRACTORS. ARCHITECT NOT RESPONSIBLE FOR PLUMBING OR MECHANICAL DESIGN.

GENERAL NOTES:

A0.1

A0.2

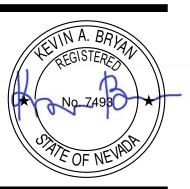




ARCHITECTURAL

- COVER SHEET M.E.P. NOTES & SPECIFICATIONS ENERGY CALCULATIONS SITE PLAN LANDSCAPE PLAN PERSPECTIVES MAIN FLOOR PLAN MAIN FLOOR REFL. CLG. PLAN LOWER FLOOR PLAN LOWER FLOOR REFL. CLG. PLAN ROOF PLAN MAIN FLOOR ELEC. PLAN LOWER FLOOR ELEC. PLAN EXTERIOR ELEVATIONS **EXTERIOR ELEVATIONS** PARTIAL EXTERIOR ELEVATIONS SECTIONS SECTIONS DETAILS DETAILS DETAILS FOUNDATION PLAN
- LOWER STRUCTURAL FLOOR PLAN FOUNDATION / MIDFLOOR FRAMING PLAN MAIN STRUCTURAL FLOOR PLAN UPPER FLOOR FRAMING PLAN STRUCTURAL DETAILS STRUCTURAL DETAILS
- UTILITY & GRADING PLAN FIRE DEFENSE / FIRE ACCESS PLAN DRAINAGE PLAN CIVIL DETAILS CONSTRUCTION MANAGEMENT PLAN, RE-VEGETATION & EROSION CONTROL PLAN RETAINING WALL DETAILS

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# COVER SHEET

DATE: MAR. 29, 2024 21051



# MECHANICAL

1.) DUCTS IN A PRIVATE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING UNIT FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAUGE (0.019-INCH: 0.48 MM) SHEET STEEL AND SHALL HAVE NO OPENINGS INTO THE GARAGE. 2018 IRC 302.5.2; IBC 406.3.2.2.

2.) APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE FASTENED OR ANCHORED IN AN APPROVED MANNER. SUPPORTS FOR APPLIANCES SHALL BE DESIGNED AND CONSTRUCTED TO SUSTAIN VERTICAL AND HORIZONTAL LOADS WITHIN THE STRESS LIMITATIONS SPECIFIED IN THE BUILDING CODE. ANCHORAGE AND STRAPPING SHALL BE DESIGNED TO RESIST A HORIZONTAL FORCE EQUAL TO ONE-THIRD OF THE OPERATING WEIGHT OF THE WATER HEATER STORAGE TANK, ACTING IN ANY HORIZONTAL DIRECTION. STRAPPING SHALL BE AT POINTS WITHIN THE UPPER AND LOWER 1/3 OF THE APPLIANCE'S VERTICAL DIMENSIONS. AT THE LOWER POINT. THE STRAPPING SHALL MAINTAIN A MINIMUM DISTANCE OF 4" ABOVE THE CONTROLS. (THIS CRITERIA WILL BE ENFORCED) 2018 IRC M1307.2 ; 2018 UMC 303.4 (STEEL BRACES REQUIRED, NOT PLUMBER'S TAPE.) EQUIPMENT AND APPLIANCES INSTALLED AT GRADE LEVEL SHALL BE SUPPORTED ON A LEVEL CONCRETE SLAB OR OTHER APPROVED MATERIAL EXTENDING NOT LESS THAN 3" ABOVE THE ADJOINING GRADE OR SHALL BE SUSPENDED NOT LESS THAN 6 INCHES ABOVE ADJOINING GRADE. 2018 IRC M1305.1.3.1

3.) APPLIANCES HAVING AN IGNITION SOURCE SHALL BE ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS THAN 18 INCHES ABOVE THE FLOOR IN GARAGES. 2018 IRC M1307.3

4.) APPLIANCES, CONTROL DEVICES, HEAT EXCHANGERS AND HVAC SYSTEM COMPONENTS THAT UTILIZE ENERGY SHALL BE ACCESSIBLE FOR INSPECTION. SERVICE. REPAIR AND REPLACEMENT WITHOUT DISABLING THE FUNCTION OF A FIRE-RESISTANCE-RATED ASSEMBLY OR REMOVING PERMANENT CONSTRUCTION, OTHER APPLIANCES, VENTING SYSTEMS OR ANY OTHER PIPING OR DUCTS NOT CONNECTED TO THE APPLIANCE BEING INSPECTED, SERVICED, REPAIRED OR REPLACED. A LEVEL WORKING SPACE NOT LESS THAN 30 INCHES DEEP AND 30 INCHES WIDE SHALL BE PROVIDED IN FRONT OF THE CONTROL SIDE TO SERVICE AN APPLIANCE. 2018 UMC 304.1

5.) ATTICS AND UNDERFLOOR SPACES CONTAINING A WATER HEATER SHALL BE PROVIDED WITH AN OPENING AND UNOBSTRUCTED PASSAGEWAY LARGE ENOUGH TO ALLOW REMOVAL OF THE WATER HEATER. THE PASSAGEWAY SHALL BE NOT LESS THAN 30 INCHES IN HEIGHT AND 22 INCHES IN WIDTH AND NOT MORE THAN 20 FEET IN LENGTH WHEN MEASURED ALONG THE CENTERLINE OF THE PASSAGEWAY FROM THE OPENING TO THE WATER HEATER. THE PASSAGEWAY SHALL HAVE CONTINUOUS SOLID FLOORING NOT LESS THAN 24 INCHES IN WIDTH. A LEVEL SERVICE SPACE NOT LESS THAN 30 INCHES IN LENGTH AND 30 INCHES IN WIDTH SHALL BE PRESENT AT THE FRONT OR SERVICE SIDE OF THE WATER HEATER, THE CLEAR ACCESS OPENING DIMENSIONS SHALL BE NOT LESS THAN 20 INCHES BY 30 INCHES WHERE SUCH DIMENSIONS ARE LARGE ENOUGH TO ALLOW REMOVAL OF THE WATER HEATER. A PERMANENT 120V RECEPTACLE OUTLET AND LIGHTING FIXTURE SHALL BE INSTALLED NEAR THE APPLIANCE. THE SWITCH CONTROLLING THE LIGHTING FIXTURE SHALL BE LOCATED AT THE ENTRANCE TO THE PASSAGEWAY. 2018 UMC 304.4 ; UPC 2018 508.4

6.) FURNACES OR BOILERS INSTALLED IN CLOSETS AND ALCOVES SHALL BE LISTED FOR SUCH INSTALLATION. 2018 UMC 303.2 APPLIANCES SHALL NOT BE LOCATED IN SLEEPING ROOMS, BATHROOMS, TOILET ROOMS, STORAGE CLOSTES, OR IN A SPACE THAT OPENS ONLY INTO SUCH ROOMS OR SPACES, EXCEPT WHERE THE INSTALLATION COMPLIES WITH ITEMS ONE THROUGH 5 OF 2018 IRC G2406.2.; 2018 UMC 904.1 ALL COMBUSTION AIR FOR SUCH INSTALLATIONS PER 2018 IRC G2407.5 THROUGH G2407.9. ACCESS TO SUCH ENCLOSURE SHALL BE THROUGH LISTED, GASKETED DOOR ASSEMBLY, A LISTED SELF-CLOSING DEVICE. 2018 UMC 904.1.1, 2

7.) CENTRAL-HEATING FURNACES AND LOW PRESSURE BOILERS SHALL BE PERMITTED TO BE INSTALLED WITH REDUCED CLEARANCES TO COMBUSTIBLE MATERIAL PROVIDED THAT THE COMBUSTIBLE MATERIAL OR APPLIANCE IS PROTECTED AS DESCRIBED IN TABLE G2409.2 AND SUCH REDUCTION IS ALLOWED BY THE MANUFACTURER'S INSTRUCTIONS. 2018 IRC G2409.4 (308.4)

8.) THE TOTAL REQUIRED VOLUME SHALL BE THE SUM OF THE REQUIRED CALCULATED FOR ALL APPLIANCES LÓCATED WITHIN THE SPACE. 2018 IRC 2407.5. THE MINIMUM REQUIRED VOLUME SHALL BE 50 CUBIC FEET PER 1,000 BTU/HR OF THE APPLIANCE INPUT RATING, INFILTRATION MAY BE REGARDED AS ADEQUATE TO PROVIDE COMBUSTION AIR. IF NOT, PROVIDE COMBUSTION AIR FOR APPLIANCES. 2018 IRC G2407.5.1 & G2407.5.2.: 2018 UMC 701.4.1 MAKEUP AIR SHALL BE PROVIDED FOR THE INTERFERENCE OPERATION OF EXHAUST FAN. CLOTHES DRYER AND KITCHEN VENTILATION SYSTEM WITH COMBUSTION APPLIANCES 2018 IRC G2407.4: 2018 UMC 701.3

9.) OUTDOOR COMBUSTION AIR OPENING LOCATIONS SHALL BE PROVIDED IN COMPLIANCE WITH 2018 IRC G2407; 2018 UMC 701.6 TWO PERMANENT OPENINGS METHOD (G2407.6.1) OR ONE PERMANENT OPENING METHOD (G2407.6.2) OR PROVIDE CALCULATIONS TO COMPLY WITH ALLOWED INTERIOR AND EXTERIOR AIR PROVISIONS AS ALLOWED BY 2018 IRC G2407.7.1 THROUGH G2407.7.3. COMBUSTION AIR DUCTS SHALL BE CONSTRUCTED OF GALVANIZED STEEL COMPLYING WITH CHAPTER 16 OR OF A MATERIAL HAVING EQUIVALENT CORROSION RESISTANCE, STRENGTH AND RIGIDITY. 2018 IRC G2407.11; 2018 UMC 701.11

10.) UNDERFLOOR SPACES CONTAINING APPLIANCES SHALL BE PROVIDED WITH AN ACCESS OPENING AND UNOBSTRUCTED PASSAGEWAY LARGE ENOUGH TO REMOVE THE LARGEST APPLIANCE. THE PASSAGEWAY SHALL BE NOT LESS THAN 30 INCHES HIGH AND 22 INCHES WIDE, NOR MORE THAN 20 FEET IN LENGTH MEASURED ALONG THE CENTERLINE OF THE PASSAGEWAY FROM THE OPENING TO THE APPLIANCE. 2018 UMC 304.4 ; UPC 2018 508.4

11.) CLOTHES DRYER VENT SHALL HAVE A SMOOTH INTERIOR FINISH AND BE CONSTRUCTED OF METAL HAVING A MINIMUM THICKNESS OF 0.0157 INCHES (NO. 28 GAGE). THE DUCT SHALL BE 4 INCHES NOMINAL IN DIAMETER. 2018 IRC M1502.4.1; 2018 UMC 504.4.2. DRYER MOISTURE EXHAUST DUCT SHALL NOT EXCEED A TOTAL COMBINED HORIZONTAL AND VERTICAL LENGTH OF 14 FEET, INCLUDING 2 90 DEGREE ELBOW, A LENGTH OF 2 FEET SHALL BE DEDUCTED FOR EACH 90 DEGREE ELBOW IN EXCESS OFF TWO 2018 UMC 504.4.2.1. TRANSITION DUCTS NOT MORE THAN 6 FEET SHALL BE PERMITTED TO CONNECT TO EXHAUST DUCTS. TRANSITION AND FLEXIBLE DUCTS SHALL NOT BE CONCEALED 2018 UMC 504.4.2.2

12.) WHERE A CLOSET IS DESIGNED FOR THE INSTALLATION OF A CLOTHES DRYER, AN OPENING HAVING AN AREA OF NOT LESS THAN 100 SQUARE INCHES SHALL BE PROVIDED IN THE CLOSET ENCLOSURE OR MAKEUP AIR SHALL BE PROVIDED IN THE DOOR OR BY OTHER APPROVED MEANS. 2018 UMC 504.4.1 (1)

13.) FACTORY BUILT FIREPLACES SHALL COMPLY WITH UL 127 AND STOVE FIREPLACES SHALL COMPLY WITH UL737. INSTALL IN ACCORDANCE WITH MANUFACTURERS INSTALLATION INSTRUCTION. 2018 UMC 913.1, 2 14.) CHIMNEY VENT. CATEGORY 1 OR LISTED APPLIANCES FOR USE WITH TYPE B VENT, TERMINATION SHALL BE IN ACCORDANCE WITH 2018 UMC 802.6.1 ITEM 1,2,4,5

15.) VENTING SYSTEMS OF DIRECT VENT APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLIANCE AND THE VENT MANUFACTURER'S INSTRUCTIONS. 2018 UMC 802.6. VENT TERMINAL OF DIRECT VENT APPLIANCES WITH INPUT OF 10,000 BTU OR LESS SHALL BE AT LEAST 6 INCHES AWAY FROM ANY AIR OPENING INTO THE BUILDING. APPLIANCE WITH INPUT OF 50.000 BTU SHALL BE 9 INCHES CLEARANCE. AND APPLIANCE EXCEEDING 50,000 BTU SHALL HAVE AT LEAST 12 INCHES VENT TERMINATION CLEARANCE 2018 UMC 802.8.2

16.) VENTS INSTALLED PER MANFUFACTURER'S SPECIFICATIONS THROUGH THE WALL VENTS SHALL TERMINATE NOT LESS THAN 3 FEET ABOVE ANY FORCED AIR INLET LOCATED WITHIN 10 FEET HORIZONTALLY. 2018 UMC 802.8

17.) MECHANICAL DRAFT VENTING SYSTEM OTHER THAN DIRECT-VENT SHALL TERMINATE AT LEAST 4 FEET BELOW, 4 FEET HORIZONTALLY FROM OR 1 FOOT 1 FOOT ABOVE ANY DOOR, WINDOW OR GRAVITY AIR INLET INTO THE BUILDING. 2018 UMC 802.8.1

18.) WHERE LOCAL EXHAUST OR WHOLE-HOUSE MECHANICAL VENTILATION IS PROVIDED. THE EQUIPMENT SHALL BE DESIGNED IN ACCORDANCE PER 2018 IRC SECTION M1505. 19.) THE WHOLE BUILDING VENTILATION AIRFLOW REQUIREMENTS IN ASHRAE 62.2 ARE REQUIRED IN

RESIDENTIAL PROJECT ADDITIONS GREATER THAN 1,000 SF. THE REQUIRED SIZE OF THE NEW SYSTEM SHALL CONSIDER BOTH THE EXISTING AND NEW CONDITIONED SPACE. FIELD VERIFICATION AND DIAGNOSTIC TESTING OF AIRFLOW REQUIRED.

20.) WHOLE BUILDING MECHANICAL VENTILATION SYSTEMS REQUIRE "APPROPRIATELY LABELED" CONTROLS. PROVIDE APPROPRIATE NOTATION/SPECIFICATIONS ON PLANS FOR LABELING TO INFORM OCCUPANT(S) THAT THE FAN SHOULD BE OPERATING WHENEVER THE HOME IS OCCUPIED. THE SIGN AND ITS POSTING SHALL BE PERMANENT. (SUGGESTED VERBIAGE: "TO MAINTAIN MINIMUM LEVELS OF OUTSIDE AIR VENTILATION REQUIRED FOR GOOD HEALTH, THE FAN CONTROL SHOULD BE ON AT ALL TIMES WHEN THE BUILDING IS OCCUPIED, UNLESS THERE IS SEVERE OUTDOOR AIR CONTAMINATION.") PROVIDE APPROPRIATE NOTATION(S) ON PLANS.

21.) IF A CENTRAL HEATING/COOLING SYSTEM AIR HANDLER FAN IS UTILIZED FOR PROVIDING VENTILATION TO THE DWELLING (CENTRAL FAN INTEGRATED VENTILATION), THE AIR HANDLER MUST MEET THE PRESCRIPTIVE FAN WATT DRAW WHICH REQUIRES HERS RATER INSPECTION AS WELL.

22.) WHERE ATMOSPHERICALLY VENTED COMBUSTION APPLIANCES OR SOLID-FUEL BURNING APPLIANCES ARE LOCATED INSIDE THE PRESSURE BOUNDARY. THE TOTAL NET EXHAUST FLOW OF THE TWO LARGEST EXHAUST FANS (NOT INCLUDING A SUMMER COOLING FAN INTENDED TO BE OPERATED ONLY WHEN WINDOWS OR OTHER AIR INLETS ARE OPEN) SHALL NOT EXCEED 15 CFM/100 SQUARE FEET OF OCCUPIED SPACE WHEN IN OPERATION AT FULL CAPACITY. IF THE DESIGNED TOTAL NET FLOW EXCEEDS THIS LIMIT, THE NET EXHAUST FLOW MUST BE REDUCED BY REDUCING THE EXHAUST FLOW OR PROVIDING COMPENSATING OUTDOOR AIRFLOW.

23.) DOMESTIC COOKING EXHAUST EQUIPMENT SHALL DISCHARGE TO THE OUTDOORS THROUGH A DUCT. THE DUCT SHALL HAVE SMOOTH INTERIOR SURFACE, AIR TIGHT, AND EQUIPPED WITH BACKDRAFT DAMPER AND SHALL BE INDEPENDENT OF ALL OTHER EXHAUST SYSTEMS. IT SHALL NOT TERMINATE IN AN ATTIC. CRAWL SPACE OR AREAS INSIDE THE BUILDING. 2018 IRC M1503.3

(RECIRCULATING RANGE HOODS THAT DO NOT EXHAUST TO THE OUTSIDE DO NOT MEET REQUIREMENT. THE ONLY WAY TO AVOID A VENTED KITCHEN HOOD IS TO PROVIDE MORE THAN 5 AIR CHANGES PER HOUR OF CONSTANT LOCAL EXHAUST VENTILATION). DESIGN FOR CONTINUOUS OR INTERMITTENT OPERATION.

CONTINUOUSLY OPERATING KITCHEN FANS MUST OPERATE AT 5 AIR CHANGES PER HOUR. WITH A SOUND RATING OF 1 SONE AND INSTALLED TO OPERATE WITHOUT OCCUPANT INTERVENTION. INTERMITTENT VENTILATION AIRFLOW OF 100 CFM IS REQUIRED WITH A SOUND RATING OF 3 SONES FOR THE KITCHEN RANGE HOOD: OR CEILING OR WALL-MOUNTED EXHAUST FAN. OR A DUCTED FAN OR DUCTED VENTILATION SYSTEM THAT PROVIDES AT LEAST 5 AIR CHANGES OF THE KITCHEN VOLUME PER HOUR. INTERMITTENT LOCAL EXHAUST FANS TO BE OPERATED BY THE OCCUPANT (WALL SWITCH, ETC.) PROVIDE BACKDRAFT DAMPER

24.) BATHROOMS SHALL HAVE LOCAL EXHAUST SYSTEMS VENTED TO THE OUTDOORS. 2018 IRC M1503.3 (BATHROOM IS ANY ROOM CONTAINING A BATHTUB, SHOWER, SPA, OR OTHER SIMILAR SOURCE OF MOISTURE - DOES NOT INCLUDE A TOILET OR SINK). DESIGN FOR CONTINUOUS OR INTERMITTENT OPERATION. CONTINUOUSLY OPERATING BATHROOM FANS MUST OPERATE AT A MINIMUM OF 20 CFM WITH A SOUND RATING OF 1 SONE OR LESS. A MINIMUM INTERMITTENT VENTILATION AIRFLOW OF 50 CFM IS REQUIRED FOR THE BATH FAN WITH A SOUND RATING OF 3SONES OR LESS, WITHOUT OCCUPANT INTERVENTION. INTERMITTENT LOCAL EXHAUST FANS TO BE OPERATED BY THE OCCUPANT. (WALL SWITCH, ETC.) AND AN INTEGRAL TIMER SHALL BE USED TO DEFINE THE FRACTIONAL TIME CONSIDERED IN DESIGN. ON PLANS, DEFINE THE PROPOSED OPERATION OF AND REQUIRED CFM RATE OF BATHROOM LOCAL

25.) ASHRAE 62.2 REQUIRES THAT THE INSTALLER OR BUILDER PROVIDE WRITTEN INFORMATION ON THE BASIC VENTILATION CONCEPT BEING USED AND THE EXPECTED PERFORMANCE OF THE SYSTEM. THESE INSTRUCTIONS MUST INCLUDE HOW TO OPERATE THE SYSTEM AND WHAT MAINTENANCE IS REQUIRED. CONTRACTOR/OWNER TO PROVIDE THIS INFORMATION AS PART OF HOME MANUAL.

# ELECTRICAL

### 1.) ANY PROPOSED INSTALLATION OF ELECTRICAL PANEL WITHIN A SHEAR WALL SHALL BE ADDRESSED WITH ENGINEER.

AS IN CLOTHES CLOSETS, IN DWELLING UNITS, DORMITORIES, AND GUEST ROOMS OR GUEST SUITES OVERCURRENT DEVICES, OTHER THAN SUPPLEMENTARY OVERCURRENT PROTECTION, SHALL NOT BE LOCATED IN BATHROOMS. OVERCURRENT DEVICES SHALL BE READILY ACCESSIBLE AND SHALL BE INSTALLED SO THAT THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF THE SWITCH OR CIRCUIT BREAKER IN HIGHEST POSITION NOT GREATER THAN 6'-7" ABOVE FLOOR OR WORKING PLATFORM. 2017 NEC ARTICLE 240-24(A, D, E)

3.) ACCESS AND WORKING SPACE SHALL BE PROVIDED AND MAINTAINED ABOUT ALL ELECTRICAL EQUIPMENT TO PERMIT READY AND SAFE OPERATION AND MAINTENANCE OF SUCH EQUIPMENT. THE WIDTH OF THE WORKING SPACE IN FRONT OF THE ELECTRICAL EQUIPMENT SHALL BE THE WIDTH OF THE EQUIPMENT OR 30", WHICHEVER IS GREATER. THE HEIGHT OF WORKING SPACE SHALL BE CLEAR AND EXTEND FROM THE GRADE, FLOOR, OR PLATFORM TO A HEIGHT OF 6' - 1/2" OR HEIGHT OF THE EQUIPMENT, WHICHEVER IS GREATER. THE DEPTH OF WORKING SPACE SHALL NOT BE LESS THAN THAT SPECIFIED IN THE TABLE 110.26(A)(1) 2017 NEC ARTICLE 110-26 (A 1,2,3)

4.) SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS: EACH SLEEPING ROOM, ON THE CEILING OR WALL OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE AND WHERE PRIMARY POWER IS INTERRUPTED, SHALL RECEIVE POWER FROM A BATTERY, SMOKE ALARMS SHALL EMIT A SIGNAL WHEN THE BATTERIES ARE LOW. THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE DWELLING UNIT. PHYSICAL INTERCONNECTION OF SMOKE ALARMS SHALL NOT BE REQUIRED WHERE LISTED WIRELESS ALARMS ARE INSTALLED AND ALL ALARMS SOUND UPON ACTIVATION OF ONE ALARM. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER

907.2.10.2 ; 907.2.10.5 5.) SMOKE ALARMS SHALL RECEIVE PRIMARY POWER FROM THE BUILDING WIRING SUCH IS SERVED FROM A COMMERCIAL SOURCE AND, WHERE THE POWER IS INTERRUPTED, SHALL RECEIVE FROM A BATTERY, WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAT THOSE REQUIRED FOR THE OVERCURRENT PROTECTION 2018 IRC R314.6; 2018 IBC 907.2.10.6 6.) CARBON MONOXIDE ALARMS COMBINED WITH SMOKE ALARMS IS PERMITTED 2018 IRC R315; R314.7.4,

STANDARDS, AND REQUIREMENTS FOR LISTING AND APPROVAL BY THE OFFICE OF THE STATE FIRE MARSHALL, FOR SMOKE ALARMS. 7.) RECEPTACLES THAT PROVIDE POWER FOR A SPA, HOT TUB OR HYDRO MASSAGE BATHTUB SHALL BE GROUND-FAULT CIRCUIT INTERRUPTER PROTECTED. ELECTRICAL LIGHTING FIXTURES AND OUTLETS IN AREA OF SPAS AND HOT TUBS SHALL COMPLY WITH 2017 NEC ARTICLE 680.

8.) RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE BETWEEN CONDITIONED AND UNCONDITIONED SPACES. ALL RECESSED LUMINAIRES SHALL BE SEALED WITH A GASKET OR CAULK BETWEEN THE HOUSING AND THE INTERIOR WALL OR CEILING COVERING. 2018 INTERNATIONAL ENERGY CONSERVATION CODE R402.4.5. 9.) THE ENERGY CONSUMPTION OF POOLS AND PERMANENT SPAS SHALL BE IN ACCORDANCE WITH SECTIONS R403.10.1 THROUGH R403.10.3 OF THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE. 10.) SNOW AND ICE-MELTING SYSTEMS, SUPPLIED THROUGH ENERGY SERVICE TO THE BUILDING, SHALL

CONTROL THAT WILL ALLOW SHUTOFF WHEN THE OUTDOOR TEMPERATURE IS ABOVE 40°F. 2018 INTERNATIONAL ENERGY CONSERVATION CODE R403.9. 11.) NOT LESS THAN ONE THERMOSTAT SHALL BE PROVIDED FOR EACH SEPARATE HEATING AND COOLING SYSTEM. 2018 INTERNATIONAL ENERGY CONSERVATION CODE R403.1.

ONLY HIGH-EFFICACY LAMPS. 2018 INTERNATIONAL ENERGY CONSERVATION CODE R404.1. 13.) ALL REVISIONS PROPOSED DUE TO REMODEL/ALTERATION SHALL COMPLY WITH SECTIONS R502.1.1.1 THROUGH R502.1.1.4 OF THE 2018 INTERNATIONAL ENERGY CONSERVATION CODE.

SPACE THAT IS 12" OR WIDER. RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24" MEASURED HORIZONTALLY FROM A RECEPTACLE OUTLET IN THAT SPACE. ISLAND AND PENINSULA COUNTER TOPS WITH A LONG DIMENSION OF 24" OR GREATER AND A SHORT DIMENSION OF 12" OR GREATER SHALL BE PROVIDED WITH AT LEAST ONE RECEPTACLE. (A PENINSULA COUNTER IS MEASURED FROM THE CONNECTING EDGE. RECEPTACLE OUTLETS SHALL BE LOCATED NOT MORE THAN 20" ABOVE THE COUNTERTOP. 2017 NEC ARTICLE 210-52(C)(1) THROUGH (C)(5).

FEWER THAN TWO SMALL-APPLIANCE BRANCH CIRCUITS. FITHER OR BOTH OF WHICH SHALL BE PERMITTED TO SUPPLY RECEPTACLE OUTLETS IN THE SAME KITCHEN AND IN OTHER ROOMS. MUST BE SUPPLIED BY NO FEWER THAN TWO 20 AMP SMALL-APPLIANCE BRANCH CIRCUITS. THESE CIRCUITS MAY ALSO SUPPLY THE RECEPTACLE OUTLETS FOR THE REFRIGERATOR AND IN THE PANTRY, DINING ROOM, AND BREAKFAST ROOM. 2017 NEC ARTICLE 210-52(B)(1-3).

BEDROOM, RECREATION ROOM, OR SIMILAR ROOM OR AREA OF DWELLING UNITS, RECEPTACLE OUTLETS SHALL BE INSTALLED SUCH THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE OF ANY WALL SPACE IS MORE THAN 6' FROM A RECEPTACLE OUTLET. INCLUDING ANY SPACE 2' OR MORE IN WIDTH AND UNBROKEN ALONG THE FLOOR LINE BY DOORWAYS AND SIMILAR OPENINGS, FIREPLACES AND FIXED CABINETS. THE SPACE OCCUPIED BY FIXED PANELS IN EXTERIOR WALLS. EXCLUDING SLIDING PANELS. THE SPACE AFFORDED BY FIXED ROOM DIVIDERS, SUCH AS FREESTANDING BAR-TYPE COUNTERS OR RAILINGS. 2017 NEC ARTICLE 210-52(A).

WITH POWER AND AT THE EXTERIOR SIDE OF OUTDOOR ENTRANCES OR EXITS WITH GRADE LEVEL ACCESS. AT THE POINT OF ENTRY TO THE ATTIC, UNDERFLOOR SPACE, UTILITY ROOM AND BASEMENTAT AT LEAST ONE LIGHTING OUTLET CONTAINING A SWITCH OR CONTROLLED BY A WALL SWITCH SHALL BE INSTALLED WHERE THESE SPACES ARE USED FOR STORAGE OR CONTAIN EQUIPMENT REQUIRING SERVICING. WHERE ONE OR MORE LIGHTING OUTLETS ARE INSTALLED FOR INTERIOR STAIRWAYS, THERE SHALL BE A WALL SWITCH AT EACH FLOOR LEVEL AND LANDING LEVEL THAT INCLUDES AN ENTRYWAY, TO CONTROL THE LIGHTING OUTLETS WHERE THE DIFFERENCE BETWEEN FLOOR LEVELS HAS 6 RISERS OR MORE. 2017 NEC ARTICLE 210-70(A - C).

AIR CONDITIONING CONDENSER EQUIPMENT. THE OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING, AIR CONDITIONING AND REFERIGERANT EQUIPMENT. THE RECEPTACLE HALL BE LOCATED ON THE SAME LEVEL WITHIN 25 FEET OF THE EQUIPMENT. THE RECEPTACLE SHALL NOT BE CONNECTED TO THE LOAD SIDE OF THE EQUIPMENT DISCONNECTION MEANS. 2017 NEC ARTICLE 210.63

RECESSED INCANDESCENT OR LED LUMINAIRES WITH COMPLETELY ENCLOSED LIGHT SOURCES. (2) SURFACE-MOUNTED OR RECESSED FLUORESCENT LUMINAIRES. (3) SURFACE MOUNTED FLOURESCENT OR LED LUMINAIRES IDENTIFIED AS SUITABLE FOR INSTALLATION WITHIN THE CLOSET STORAGE SPACE. MINIMUM 12" CLEARANCE FOR SURFACE-MOUNTED INCANDESCENT OR LED LUMINAIRES WITH A COMPLETELY ENCLOSED LIGHT SOURCE INSTALLED ON THE WALL ABOVE THE DOOR OR ON THE CEILING. MINIMUM 6" CLEARANCE FOR SURFACE-MOUNTED FLOURESCENT OR RECESSED INCANDESCENT OR LED LUMINAIRES WITH A COMPLETELY ENCLOSED LIGHT SOURCES INSTALLED IN THE WALL OR THE CEILING. 2017 NEC ARTICLE 410-16(A - C).

CRAWL SPACES, UNFINISHED BASEMENTS, KITCHENS (RECEPTACLES SERVING THE COUNTERTOP SPACES), SINKS WHERE RECEPTACLES ARE INSTALLED WITHIN 6' OF THE EDGE OF THE OUTSIDE EDGE OF THE SINK, ON CONSTRUCTION POWER POLE, IN CRAWL SPACES AT OR BELOW GRADE LEVEL, IN UNFINISHED BASEMENTS, GRADE LEVEL PORTIONS OF UNFINISHED ACCESSORY BUILDINGS USED FOR STORAGE OR WORK AREAS. 2017 NEC ARTICLE 210-8(A.D.E). AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED IN BATHROOMS WITHIN 3' OF THE OUTSIDE EDGE OF EACH BASIN. THE RECEPTACLE OUTLET SHALL BE LOCATED ON A WALL OR PARTITION THAT IS ADJACENT TO THE BASIN OR BASIN COUNTERTOP. LOCATED ON THE COUNTERTOP. OR INSTALLED ON THE SIDE OR FACE OF THE BASIN CABINET. IN NO CASE SHALL THE RECEPTACLE BE LOCATED MORE THAN 12" BELOW THE TOP OF THE BASIN. 2017 NEC 210-52(D).

21.) AT LEAST ONE 20-AMP BRANCH CIRCUIT SHALL BE PROVIDED TO SUPPLY A BATHROOM RECEPTACLE OUTLET. SUCH CIRCUITS SHALL HAVE NO OTHER OUTLETS. 2017 NEC ARTICLE 210-11(C)(3). 22.) AT LEAST ONE RECEPTACLE OUTLET READILY ACCESSIBLE FROM GRADE AND NOT MORE THAN 6'-6" ABOVE GRADE LEVEL SHALL BE INSTALLED AT THE FRONT AND BACK OF THE DWELLING: IN AREAS DESIGNATED FOR THE INSTALLATION OF LAUNDRY EQUIPMENT; IN EACH ATTACHED / DETACHED GARAGE. AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED FOR EACH CAR SPACE AND IN EACH SEPARATE

RECEPTACLE OUTLET. 2017 NEC ARTICLE 210-52. 23.) ARC FAULT PROTECTION REQUIRED. ALL 120 VOLT, SINGLE PHASE, 15- AND 20- AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS. FAMILY ROOMS. DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY ANY OF THE MEANS DESCRIBED IN 210.12(A)(1) THROUGH (6). 2017 NEC ARTICLE 210.12 (A) 24.) DWELLING UNIT TAMPER RESISTANT RECEPTACLES. IN ALL AREAS SPECIFIED IN 2017 NEC 210.52. ALL

RECEPTACLES. 2017 NEC 406.12 25.) GENERAL-USE DIMMER SWITCHES SHALL BE USED ONLY TO CONTROL PERMANENTLY INSTALLED INCANDESCENT LUMINAIRES UNLESS LISTED FOR THE CONTROL OF OTHER LOADS AND INSTALLED ACCORDINGLY. 2017 NEC 404.14 (E) 26.) AN INTERSYSTEM BONDING TERMINATION FOR CONNECTING INTERSYSTEM BONDING CONDUCTORS

OR METERING EQUIPMENT ENCLOSURE AND AT THE DISCONNECTING MEANS FOR ANY ADDITIONAL BUILDINGS OR STRUCTURES AS SPECIFIED IN 2017 NEC 800.100(B) AND NEC 250.94 (A) 27.) PERMANENTLY INSTALLED SPA MANUAL DISCONNECT DEVICE SHALL BE ADJACENT TO HOT TUB, AT LEAST 5-FEET AWAY FROM THE INSIDE WALL, AND WITHIN LINE OF SIGHT 2017 NEC 680.13

EXHAUST SYSTEMS.

2.) OVERCURRENT DEVICES SHALL NOT BE LOCATED IN THE VICINITY OF EASILY IGNITABLE MATERIAL SUCH

BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED. 2018 IRC R314.3-4; 2018 IBC

PROVIDED THAT THEY ARE LISTED IN ACCORDANCE WITH UL268 AND UL2075 AND ALL APPLICABLE

INCLUDE AUTOMATIC CONTROLS CAPABLE OF SHUTTING OFF THE SYSTEM WHEN THE PAVEMENT TERMPERATURE IS ABOVE 50°F, AND NO PRECIPITATION IS FALLING AND AN AUTOMATIC OR MANUAL

12.) NOT LESS THAN 90 PERCENT OF THE PERMANENTLY INSTALLED LIGHTING FIXTURES SHALL CONTAIN

14.) IN KITCHENS, PANTRIES, BREAKFAST ROOMS, DINING ROOMS, AND SIMILAR AREAS OF DWELLING UNITS, RECEPTACLE OUTLETS FOR COUNTER SPACES SHALL BE INSTALLED AT EACH WALL COUNTERTOP

15.) RECEPTACLES INSTALLED IN A KITCHEN TO SERVE COUNTERTOP SURFACES SHALL BE SUPPLIED BY NOT

16.) IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, PARLOR, LIBRARY, DEN, SUNROOM,

17.) AT LEAST ONE LIGHTING OUTLET SWITCH-CONTROLLED LIGHTING OUTLET SHALL BE INSTALLED IN EVERY HABITABLE ROOM, BATHROOM, HALLWAYS, STAIRWAYS, ATTACHED GARAGES, DETACHED GARAGES

18.) PROVIDE A 125-VOLT, SINGLE PHASE 15 0R 20 AMPERE RATED RECEPTACLE OUTLET FOR THE OUTDOOR

19.) LUMINAIRE IN CLOTHES CLOSETS SHALL BE INSTALLED AS FOLLOWS: (1) SURFACE-MOUNTED OR

20.) GFCI PROTECTION IS REQUIRED FOR RECEPTACLES INSTALLED IN BATHROOMS, GARAGES, OUTDOORS,

UNFINISHED PORTION OF A BASEMENT. HALLWAYS OF 10' OR MORE IN LENGTH SHALL HAVE AT LEAST ONE

NONLOCKING-TYPE 125 VOLT, 15 AND 20 AMPERE RECEPTACLES SHALL BE LISTED TAMPER-RESISTANT

REQUIRED FOR OTHER SYSTEMS SHALL BE PROVIDED EXTERNAL TO ENCLOSURES AT THE SERVICE EQUIPMENT

# PLUMBING

1.) AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH 2018 IRC SECTION P2904 OR NFPA 13D.

2.) WOOD-FRAMED STRUCTURAL MEMBERS SHALL NOT BE DRILLED. NOTCHED OR ALTERED IN ANY MANNER EXCEPT AS PROVIDED IN SECTIONS R502.8. R602.6. R802.7 AND R802.7.1. HOLES IN LOAD-BEARING MEMBERS OF COLD-FORMED STEEL LIGHT-FRAME CONSTRUCTION SHALL BE PERMITTED ONLY IN ACCORDANCE WITH SECTIONS R505.2.5, R603.2.5 AND R804.2.5. CUTTING AND NOTCHING OF FLANGES AND LIPS OF LOAD-BEARING MEMBERS OF COLD-FORMED STEEL LIGHT-FRAME CONSTRUCTION SHALL NOT BE PERMITTED. STRUCTURAL INSULATED PANELS (SIPS) SHALL BE DRILLED AND NOTCHED OR ALTERED PER 2018 IRC R610.7 2018 IRC P2603.2

3.) WATER, SOIL OR WASTE PIPE SHALL NOT BE INSTALLED OUTSIDE OF A BUILDING, IN EXTERIOR WALLS, IN ATTICS OR CRAWL SPACES, OR IN ANY OTHER PLACE SUBJECTED TO FREEZING TEMPERATURE UNLESS ADEQUATE PROVISION IS MADE TO PROTECT IT FROM FREEZING BY INSULATION OR HEAT OR BOTH. WATER SERVICE PIPE SHALL BE INSTALLED NOT LESS THAN 12 INCHES DEEP AND NOT LESS THAN 6 INCHES BELOW THE FROST LINE PER 2018 IRC P2603.5.

4.) ACCESS OPENINGS THROUGH THE FLOOR SHALL BE A MINIMUM OF 18"x24". OPENINGS THROUGH A PERIMETER WALL SHALL NOT BE LESS THAN 16"x24". WHEN ANY PORTION OF THE THROUGH-WALL ACCESS IS BELOW GRADE, AN AREAWAY NOT LESS THAN 16"x24" SHALL BE PROVIDED. THE BOTTOM OF THE AREAWAY SHALL BE BELOW THE THRESHOLD OF THE ACCESS OPENING. THROUGH WALL ACCESS OPENINGS SHALL NOT BE LOCATED UNDER A DOOR TO THE RESIDENCE. 2018 IRC R408.4; 2018 IBC 1208.1;

5.) WATER CLOSET, LAVATORY OR BIDET SHALL NOT BE CLOSER THAN 15 INCHES FROM ITS CENTER TO ANY SIDE WALL, PARTITION OR VANITY OR CLOSER THAN 30 INCHES CENTER-TO-CENTER BETWEEN ADJACENT FIXTURES. THERE SHALL BE A CLEARANCE NOT LESS THAN 21 INCHES IN FRONT OF A WATER CLOSET. LAVATORY OR BIDET TO ANY WALL, FIXTURE OR DOOR. 2018 IRC R307.1 / P2705.1

6.) WATER CLOSETS MUST USE NO MORE THAN 1.6 GALLONS PER FLUSH. 2018 IRC P2903.2 SHOWER HEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 2.5 GPM AT 80 PSI 2018 UPC 408.2

7.) SHOWER COMPARTMENTS, REGARDLESS OF SHAPE, SHALL HAVE MINIMUM FINISHED INTERIOR AREA OF 1,054 SQUARE INCHES AND CAPABLE OF ENCOMPASSING A 30 INCH CIRCLE. THE MINIMUN REQUIRED AREA AND DIMENSIONS SHALL BE MEASURED AT A HEIGHT EQUAL TO THE TOP OF THE THRESHOLD AND A POINT TANGET TO ITS CENTERLINE. THE AREA AND DIMENSIONS SHALL BE MAINTAINED TO A POINT OF NOT LESS THAN 70 INCHES ABOVE THE SHOWER DRAIN OUTLET WITH NO PROTRUSIONS OTHER THAN THE FIXTURE VALVE/S, SHOWERHEADS, SOAP DISHES, SAFETY GRAB BARS OR RAILS. FOLD DOWN SEATS IS PERMITTED TO PROTRUDE 2018 UPC 408.6

8.) SHOWER COMPARTMENTS AND WALL ABOVE BATHTUBS WITH INSTALLED SHOWER HEADS SHALL BE FINISHED WITH SMOOTH NON-ABSORBENT SURFACE 2018 IBC 1209.2.3

SHOWER RECEPTORS BUILT ON-SITE SHALL BE WATERTIGHT AND CONSTRUCTED FROM APPROVED-TYPE DENSE, NONABSORBENT AND NON-CORROSIVE MATERIALS. IT SHALL HAVE SMOOTH, IMPERVIOUS AND DURABLE SURFACE. 2018 UPC 408.6

9.) INDIVIDUAL SHOWER AND TUB-SHOWER COMBINATION VALVES SHALL BE BALANCED-PRESSURE. THERMOSTATIC OR COMBINATION BALANCED-PRESSURE/THERMOSTATIC VALVES THAT PROVIDES SCALD AND THERMAL SHOCK PROTECTION FOR THE RATED FLOW RATE OF THE INSTALLED SHOWERHEAD. SHALL BE INSTALLED AT THE POINT OF USE AND COMPLY WITH ASSE 1016/ASME A112.1016/CSA B125.16 OR ASME A112.18.1/CSA B125.1. SHOWER AND TUB-SHOWER COMBINATION VALVES REQUIRED BY THIS SECTION SHALL BE EQUIPPED WITH A MEANS TO LIMIT THE MAXIMUM SETTING OF THE VALVE TO 120°F (49°C), WHICH SHALL BE FIELD ADJUSTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WATER HEATER THERMOSTATS SHALL NOT BE CONSIDERED A SUITABLE CONTROL FOR MEETING THIS PROVISION 2018 UPC 408.3

10.) NO UNDERFLOOR CLEAN-OUT SHALL BE LOCATED EXCEEDING 5-FEET FROM ACCESS DOOR OR TRAP DOOR OR CRAWL SPACE ACCESS 2018 UPC 707.9

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GENERAL NOTES:

**REVISIONS:** 

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SCALE: DATE: MAR. 29, 2024 SHEET



COPYRIGHT 2024 KEVIN A. BRYAN NEVADA LIC. #7493 M.E.P. NOTES & **SPECIFICATIONS** 

Gene Gene	rated by REScheck-Web Sof	tware			
	mpliance Certific	ate	Assembly	Gross Area or Perimeter	Cavity R-Value
			Right Wall 2x6: Wood Frame, 16" o.c. Orientation: Right side	760	21.0
Project Strate	gic Properties Group Lot 342 Custom	Home	Right Windows: Metal Frame w/ Thermal Break Orientation: Right side	136	
Energy Code:	2018 IECC		Left Wall 2x6: Wood Frame, 16" o.c. Orientation: Left side	760	21.0
Location: Construction Type:	Carson City, Nevada Single-family		Left Windows: Metal Frame w/ Thermal Break Orientation: Left side	95	
Project Type: Orientation:	New Construction		Rear Wall 2x6: Wood Frame, 16" o.c. Orientation: Back	1,090	21.0
Conditioned Floor Area:	Bldg. faces 195 deg. from North 3,019 ft2		Rear Windows: Metal Frame w/ Thermal Break Orientation: Back	364	
Glazing Area Climate Zone: Permit Date:	16% 5 (5691 HDD) 2024-03-23T07:00:00.000Z		Front Concrete Wall w/2x6 fur: Solid Concrete or Masonry Orientation: Front	355	21.0
Permit Number: All Electric	Pending false		Right Concrete Wall w/2x6 fur: Solid Concrete or Masonry Orientation: Right side	250	21.0
ls Renewable Solar Ready:	false false		Right Door: Solid Door (under 50% glazing) Orientation: Right side	24	
Has Charger Has Battery:	false false		Right Window: Metal Frame w/ Thermal Break Orientation: Right side	25	
Has Heat Pump: Electric Ready: Responsive Water Heating:	false false false		Left Concrete Wall w/2x4 fur: Solid Concrete or Masonry Orientation: Left side	220	15.0
Construction Site: Lot 342 / C56, Unit 2	Owner/Agent: Strategic Properties Group, LLC	Designer/Contractor: Kevin Bryan	Rear Concrete Wall w/2x4 fur: Solid Concrete or Masonry Orientation: Left side	120	15.0
Clear Creek, NV 89701		Donald Joseph Inc 2620 21st Street Sacramento, Ca 95818	Rear Concrete Wall w/2x6 fur: Solid Concrete or Masonry Orientation: Back	355	21.0
		916-456-2300 kbryan@donaldjoseph.com	Rear Window: Metal Frame w/ Thermal Break Orientation: Back	12	
			Raised Floor: All-Wood Joist/Truss	2,431	30.0
Compliance: Passes u	ising UA trade-off		1st Flr Slab: Slab-On-Grade (Unheated) Insulation depth: 2.0'	118	

Report date: 03/23/24

Page 1 of 10

Envelope Assemblies Gross Area Cavity Cont. Prop. Req. Prop. Req. or R-Value R-Value U-Factor U-Factor UA UA Perimeter Assembly Ceiling: Flat Ceiling or Scissor Truss 2,725 38.0 0.0 0.030 0.026 82 71 Front Wall 2x6: Wood Frame, 16" o.c. 810 21.0 0.0 0.057 0.060 36 38 **Orientation:** Front Door: Solid Door (under 50% glazing) 0.200 0.300 5 7 24 Orientation: Front Entry Door: Solid Door (under 50% glazing) Orientation: Front 0.200 0.300 7 11 36 Window 2: Metal Frame w/ Thermal Break 117 0.300 0.300 35 35 **Orientation:** Front

Slab-on-grade tradeoffs are no longer considered in the UA or performance compliance path in REScheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R-value and depth requirements.

Compliance: 1.4% Better Than Code Maximum UA: 641 Your UA: 632

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules. It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Project Title: Strategic Properties Group Lot 342 Custom Home Data filename:

Section #	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
& Req.ID 102.1.1,	Door U-factor.	U	U		See the Envelope Assemblies
602.3.4 FR1] <sup>1</sup>		0	<u> </u>	Does Not	table for values.
0					
402.1.1, 402.3.1,	Glazing U-factor (area-weighted average).	U	U	□Complies □Does Not	See the Envelope Assemblies table for values.
402.3.3, 402.5 FR2] <sup>1</sup>				□Not Observable □Not Applicable	
303.1.3	U-factors of fenestration products				Requirement will be met.
FR4] <sup>1</sup> 😡	are determined in accordance with the NFRC test procedure or taken from the default table.			Does Not	
				Not Applicable	-
402.4.1.1 [FR23] <sup>1</sup>	Air barrier and thermal barrier installed per manufacturer's instructions.			Complies Does Not	Requirement will be met.
0	instructions.			□Not Observable □Not Applicable	
402.4.3 [FR20] <sup>1</sup>	Fenestration that is not site built is listed and labeled as meeting			Complies	Requirement will be met.
0	AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC			□Not Observable	
	400 that do not exceed code limits.			□Not Applicable	
402.4.5 FR16] <sup>2</sup>	IC-rated recessed lighting fixtures sealed at housing/interior finish			□Complies □Does Not	Requirement will be met.
	and labeled to indicate $\leq$ 2.0 cfm leakage at 75 Pa.			□Not Observable □Not Applicable	
403.3.1 [FR12] <sup>1</sup>	Supply and return ducts in attics insulated >= R-8 where duct is			Complies	
0	>= 3 inches in diameter and >= R-6 where < 3 inches. Supply and return ducts in other portions of			□Not Observable □Not Applicable	
	the building insulated $>=$ R-6 for diameter $>=$ 3 inches and R-4.2 for < 3 inches in diameter.				
403.3.2 FR13] <sup>1</sup>	Ducts, air handlers and filter boxes are sealed with			Complies	
0	joints/seams compliant with International Mechanical Code or			□Not Observable	
	International Residential Code, as applicable.			□Not Applicable	
403.3.5 [FR15] <sup>3</sup>	Building cavities are not used as ducts or plenums.			Complies	Requirement will be met.
0				□Not Observable □Not Applicable	
403.4 [FR17] <sup>2</sup>	HVAC piping conveying fluids above 105 °F or chilled fluids	R	R	Complies	Exception: Requirement is not applicable.
0	below 55 $^{\circ}$ F are insulated to $\geq$ R-3.			Not Observable	
403.4.1 FR24] <sup>1</sup>	Protection of insulation on HVAC piping.			Not Applicable Complies	<b>Exception:</b> Requirement is not applicable.
[FR24]* ()	ымпа			Does Not	not applicable.
103.5.3	Hot water pipes are insulated to	R	R	Not Applicable Complies	
FR18] <sup>2</sup>	≥R-3.	9a1X		Does Not	

 1
 High Impact (Tier 1)
 2
 Medium Impact (Tier 2)
 3
 Low Impact (Tier 3)

 Project Title: Strategic Properties Group Lot 342 Custom Home Report date: 03/23/24 Data filename: Page 5 of10

Section #	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumption
& Req.ID 403.6.1 [FI25] <sup>2</sup>	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits per Table R403.6.1.			Complies Does Not Not Observable Not Applicable	Requirement will be met.
403.2 [FI26] <sup>2</sup>	Hot water boilers supplying heat through one- or two-pipe heating systems have outdoor setback control to lower boiler water temperature based on outdoor temperature.			Complies Does Not Not Observable Not Applicable	Exception: Requirement is not applicable.
403.5.1.1 [FI28] <sup>2</sup>	Heated water circulation systems have a circulation pump. The system return pipe is a dedicated return pipe or a cold water supply pipe. Gravity and thermos- syphon circulation systems are not present. Controls for circulating hot water system pumps start the pump with signal for hot water demand within the occupancy. Controls automatically turn off the pump when water is in circulation loop is at set-point temperature and no demand for hot water exists.			Complies Does Not Not Observable Not Applicable	Exception: Requirement is not applicable.
403.5.1.2 [FI29] <sup>2</sup>	Electric heat trace systems comply with IEEE 515.1 or UL 515. Controls automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping.			Complies Does Not Not Observable Not Applicable	<b>Exception:</b> Requirement is not applicable.
403.5.2 [FI30] <sup>2</sup>	Demand recirculation water systems have controls that manage operation of the pump and limit the temperature of the water entering the cold water piping to $\leq 104^{\circ}F$ .			Complies Does Not Not Observable Not Applicable	Exception: Requirement is not applicable.
403.5.4 [FI31] <sup>2</sup>	Drain water heat recovery units tested in accordance with CSA B55.1. Potable water-side pressure loss of drain water heat recovery units < 3 psi for individual units connected to one or two showers. Potable water- side pressure loss of drain water heat recovery units < 2 psi for individual units connected to three or more showers.			Complies Does Not Not Observable Not Applicable	Exception: Requirement is not applicable.
404.1 [FI6] <sup>1</sup>	90% or more of permanent fixtures have high efficacy lamps.			Complies Does Not Not Observable	Requirement will be met.
404.1.1 [FI23] <sup>3</sup>	Fuel gas lighting systems have no continuous pilot light.			Complies Does Not Not Observable Not Applicable	Requirement will be met.
401.3 [FI7] <sup>2</sup>	Compliance certificate posted.			Complies Does Not Not Observable Not Applicable	

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Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value
403.6 [FR19] <sup>2</sup>	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.		

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) Project Title: Strategic Properties Group Lot 342 Custom Home Data filename:

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.3 [FI18] <sup>3</sup>	Manufacturer manuals for mechanical and water heating systems have been provided.			Complies Does Not Not Observable Not Applicable	Requirement will be met.
Additiona	al Comments/Assumptions:				

Project Title: Strategic Properties Group Lot 342 Custom Home

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Data filename:

FILE: .../Hammond Clear Creek/Revit

Data filename:

Project Title: Strategic Properties Group Lot 342 Custom Home

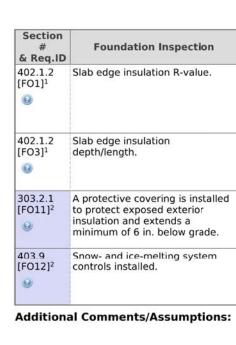
Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Right Wall 2x6: Wood Frame, 16" o.c. Orientation: Right side	760	21.0	0.0	0.057	0.060	36	37
Right Windows: Metal Frame w/ Thermal Break Orientation: Right side	136			0.300	0.300	41	41
Left Wall 2x6: Wood Frame, 16" o.c. Orientation: Left side	760	21.0	0.0	0.057	0.060	38	40
Left Windows: Metal Frame w/ Thermal Break Orientation: Left side	95			0.300	0.300	29	29
Rear Wall 2x6: Wood Frame, 16" o.c. Orientation: Back	1,090	21.0	0.0	0.057	0.060	41	44
Rear Windows: Metal Frame w/ Thermal Break Orientation: Back	364			0.300	0.300	109	109
Front Concrete Wall w/2x6 fur: Solid Concrete or Masonry Orientation: Front	355	21.0	0.0	0.056	0.065	20	23
Right Concrete Wall w/2x6 fur: Solid Concrete or Masonry Orientation: Right side	250	21.0	0.0	0.056	0.065	11	13
Right Door: Solid Door (under 50% glazing) Orientation: Right side	24			0.200	0.300	5	7
Right Window: Metal Frame w/ Thermal Break Orientation: Right side	25			0.300	0.300	8	8
Left Concrete Wall w/2x4 fur: Solid Concrete or Masonry Orientation: Left side	220	15.0	0.0	0.078	0.065	17	14
Rear Concrete Wall w/2x4 fur: Solid Concrete or Masonry Orientation: Left side	120	15.0	0.0	0.078	0.065	9	8
Rear Concrete Wall w/2x6 fur: Solid Concrete or Masonry Orientation: Back	355	21.0	0.0	0.056	0.065	19	22
Rear Window: Metal Frame w/ Thermal Break Orientation: Back	12			0.300	0.300	4	4
Raised Floor: All-Wood Joist/Truss	2,431	30.0	0.0	0.033	0.033	80	80
1st Flr Slab: Slab-On-Grade (Unheated) Insulation depth: 2.0' Insulation position: Vertical Insulation	118		10.0	0.540	0.540	0	0
Compliance Statement: The proposed building desi calculations submitted with the permit application. REScheck Version : REScheck-Web and to comply w	The proposed bu	uilding has l	been desigr	ned to meet	the 2018 IE theck Inspec	ECC requir	ements i klist.
Jeffery J. Burkard CEA# R19-09-30145 Jame - Title	Signal	WKKZ	7.5	$\sim \rightarrow$	<u>03</u> Da	3/28/2024	

<b>N</b>	REScheck Software Version : REScheck-Web Inspection Checklist Energy Code: 2018 IECC
	Energy Code: 2018 IECC
	s: 87.0% were addressed directly in the REScheck software

Additional Comments/Assumptions:

Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.1, 103.2 [PR1] <sup>1</sup> 20	Construction drawings and documentation demonstrate energy code compliance for the building envelope. Thermal envelope represented on construction documents.			Complies Does Not Not Observable Not Applicable	Requirement will be met.
103.1, 103.2, 403.7 [PR3] <sup>1</sup> 😧	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the IECC Commercial Provisions.			Complies Does Not Not Observable Not Applicable	Requirement will be met.
302.1, 403.7 [PR2] <sup>2</sup>	Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J or other methods approved by the code official.	Heating: Btu/hr Cooling: Btu/hr	Heating: Btu/hr Cooling: Btu/hr	Complies Does Not Not Observable Not Applicable	Requirement will be met.



	Report date: 03/23/24	Project Tit	1 High Impact (Tier le: Strategic Properties Group I		Impact (Tier 2)	3 Low Impact (T	Report date: 03/23/24	Project Tit	Ho. Strate
	Page 2 of10	Data filena		LUI 542 CUSION F	lone		Page 3 of 10	Data filen	
Complian?	Commente/Accommetions	Section	Inculation Inconstinu	Plans Verified	Field Verified	Compliant	Commonte (Accumptions	Section	Final I
Complies?	Comments/Assumptions Requirement will be met.	# & Req.ID 303.1	Insulation Inspection All installed insulation is labeled	Value	Value	Complies?	Comments/Assumptions Requirement will be met.	# & Req.ID 402.1.1,	Final I
oors Not lot Observable lot Applicable	Requirement will be met.	[IN13] <sup>2</sup>	or the installed R-values provided.			Does Not Not Observable Not Applicable	Requirement win be met.	402.1.1, 402.2.1, 402.2.2, 402.2.6 [FI1] <sup>1</sup>	Centrig in
		402.1.1, 402.2.6 [IN1] <sup>1</sup> ©	Floor insulation R-value.	R Wood Steel	R U Wood Steel	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.	303.1.1.1, 303.2 [FI2] <sup>1</sup>	Ceiling in manufact Blown ins 300 ft <sup>2</sup> .
		402.2.8 [IN2] <sup>1</sup> 100	Floor insulation installed per manufacturer's instructions and in substantial contact with the underside of the subfloor, or floor framing cavity insulation is in contact with the top side of			Complies Does Not Not Observable Not Applicable	Requirement will be met.	402.2.3 [FI22] <sup>2</sup>	Vented a insulation to soffit a extends o
			sheathing, or continuous insulation is installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.					402.2.4 [FI3] <sup>1</sup> 402.4.1.2	Attic acco insulation adjacent
		402.1.1, 402.2.5, 402.2.6 [IN3] <sup>1</sup>	Wall insulation R-value. If this is a mass wall with at least ½ of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10).	R Wood Mass Steel	R Wood Mass Steel	Complies Does Not Not Observable Not Applicable	See the Envelope Assemblies table for values.	[FI17] <sup>1</sup> 403.3.3	ach in Cli <=3 ach
		303.2	Wall insulation is installed per manufacturer's instructions.			Complies Does Not Not Observable Not Applicable	Requirement will be met.	[FI27] <sup>1</sup>	determin either: Ro leakage r pressure w.g. acro the manu enclosure
		Additiona	I Comments/Assumptions:						test. Post leakage r pressure w.g. acro including handler e
								403.3.4 [FI4] <sup>1</sup>	Duct tigh cfm/100 <=3 cfm handler ( tests, ver occur du
								403.3.2.1 [FI24] <sup>1</sup>	Air handl by manuf design ai
								403.1.1 [FI9] <sup>2</sup>	Programminstalled heating a initially s code spe
								403.1.2 [FI10] <sup>2</sup>	Heat pun on heat p
								403.5.1 [FI11] <sup>2</sup>	Circulatir systems accessibl
Low Impact (Ti	er 3)		1 High Impact (Tier	1) 2 Medium	Impact (Tier 2)	3 Low Impact (T	ier 3)		
	Report date: 03/23/24 Page 6 of10	Project Titl Data filena	le: Strategic Properties Group I ame:	ot 342 Custom H	lome		Report date: 03/23/24 Page 7 of10	Project Ti Data filen	

# Efficiency Certificate

In substitute Bastian	D. Malina		
Insulation Rating	R-Value		
Above-Grade Wall	21.00		
Below-Grade Wall	0.00		
Floor	30.00		
Ceiling / Roof	38.00		
Ductwork (unconditioned spaces):	<u>R-8.0</u>		
Glass & Door Rating	U-Factor	SHGC	
Window	0.30	0.35	
Door	0.20		
Heating & Cooling Equipment	Efficiency		
Heating System: (3) Ducted Gas Furnace	s <u>80%</u> afue	e Minimum	
Cooling System: (3) Ducted Split A/C's	_14.3seer	2 / 11.7eer2	Minimun
Water Heater: (2) Tankless Gas	96% UEF		
Name: Jeffery J. Burkard	Date: 03/28	/2024	

 
 1 High Impact (Tier 1)
 2 Medium Impact (Tier 2)
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ndation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
e insulation R-value.	R Unheated Heated	R Unheated Heated	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
e insulation gth.	ft	ft	Complies Does Not Not Observable Not Applicable	See the Envelope Assemblies table for values.
ive covering is installed t exposed exterior and extends a of 6 in. below grade.			Complies Does Not Not Observable Not Applicable	<b>Exception:</b> Requirement is not applicable.
d ice-melting system nstalled.			Complies Does Not Not Observable Not Applicable	Exception: Requirement is not applicable.

 
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spection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
ulation R-value.	R  _ Wood  _ Steel	R   Wood   Steel	Complies Does Not Not Observable Not Applicable	See the Envelope Assemblies table for values.
ulation installed per rer's instructions. llation marked every			Complies Does Not Not Observable Not Applicable	Requirement will be met.
ics with air permeable include baffle adjacent d eave vents that ver insulation.			Complies Does Not Not Observable Not Applicable	Exception: Requirement is not applicable.
ss hatch and door ≥R-value of the ssembly.	R	R	□Complies □Does Not □Not Observable □Not Applicable	
or test @ 50 Pa. <=5 hate Zones 1-2, and h Climate Zones 3-8.	ACH 50 =	ACH 50 =	Complies Does Not Not Observable Not Applicable	Requirement will be met.
pressure tested to air leakage with ugh-in test: Total easured with a ifferential of 0.1 inch s the system including acturer's air handler if installed at time of onstruction test: Total easured with a ifferential of 0.1 inch s the entire system he manufacturer's air iclosure.	cfm/100 ft <sup>2</sup>	cfm/100	Complies Does Not Not Observable Not Applicable	Requirement will be met.
ess test result of <=4 2 across the system or 00 ft2 without air 25 Pa. For rough-in cation may need to g Framing Inspection.	cfm/100 ft <sup>2</sup>	cfm/100 ft <sup>2</sup>	Complies Does Not Not Observable Not Applicable	Requirement will be met.
leakage designated cturer at <=2% of flow.			Complies Does Not Not Observable Not Applicable	Requirement will be met.
able thermostats r control of primary d cooling systems and by manufacturer to fications.			Complies Does Not Not Observable Not Applicable	Requirement will be met.
thermostat installed mps.			Complies Does Not Not Observable Not Applicable	<b>Exception:</b> Requirement is not applicable.
service hot water ave automatic or manual controls.			Complies Does Not Not Observable	Requirement will be met.

 
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 ategic Properties Group Lot 342 Custom Home

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**REVISIONS:** 

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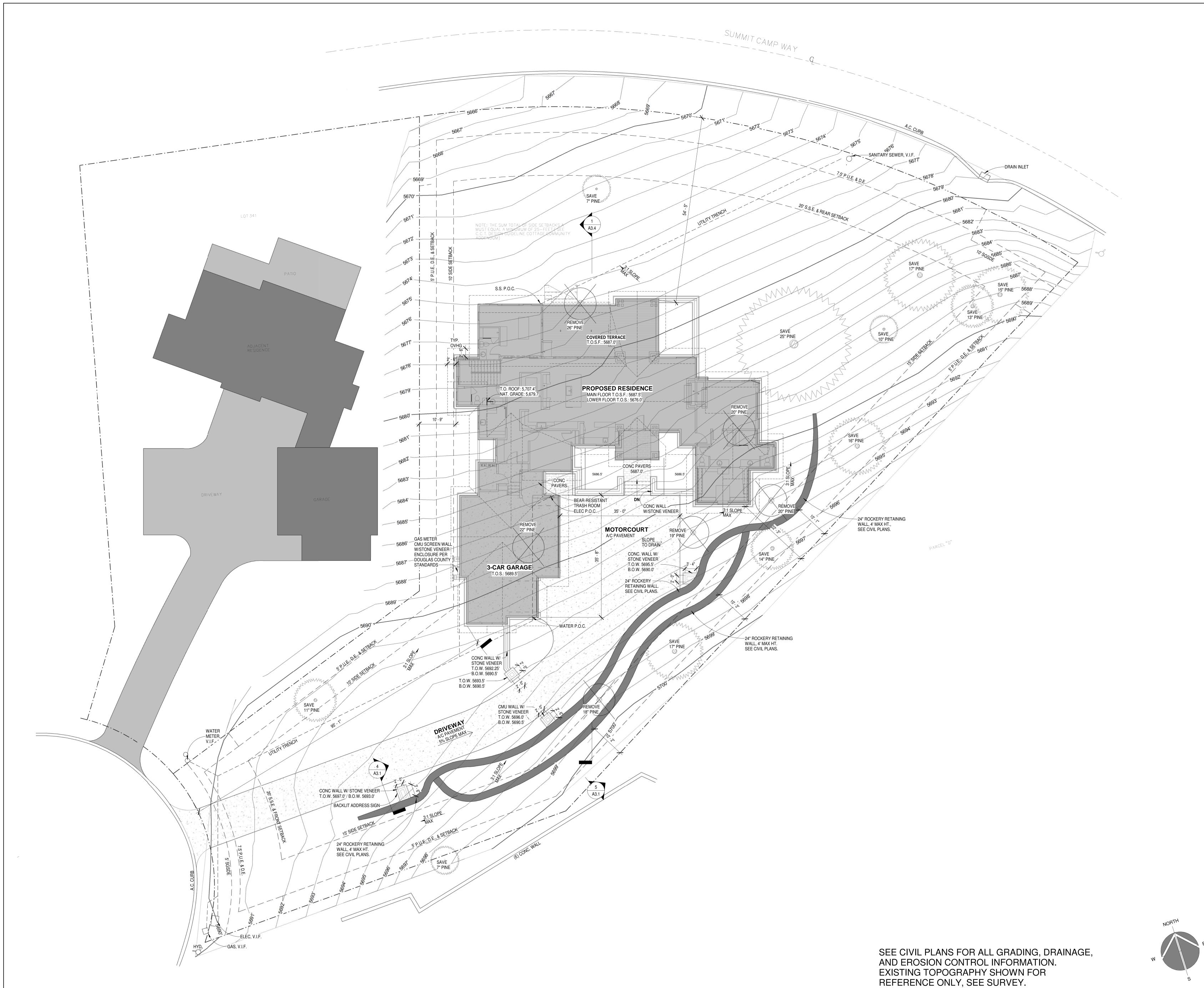
ENERGY CALCULATIONS

SCALE: SHEET:

GENERAL NOTES:







**REVISIONS:** 

<u>∕1</u>∖. 2

JOB: SHEET:



2620 21st Street Sacramento, CA 95818 916.456.2300 · www.donaldjoseph.com



# LOT 342 / C56, UNIT 2 CLEAR CREEK, NV

# GENERAL NOTES:

CONTRACTOR TO CONSTRUCT SUITABLE NEW PAD FOR BUILDING GRADING TO BE REVIEWED AND APPROVED BY PROJECT GEOTECHNICAL ENGINEER

CONTRACTOR TO PROVIDE SUITABLE DRAINAGE AWAY FROM BUILDING - 6" FALL FOR 10 FEET AWAY FROM BLDG - OR AS INDICATED BY CIVIL PLANS

CONTRACTOR TO INSTALL PERIMETER DRAINIAGE SYSTEM PER CIVIL DRAWINGS.

CONTRACTOR TO OBTAIN SERVICES OF LICENSED LAND SURVEYOR TO ACCURATELY LOCATE BUILDING ON PROPERTY.

REFER TO CIVIL PLANS FOR ALL GRADING, DRAINAGE AND UTILITY INFORMATION, AND FLATWORK CONSTRUCTION DETAILS CONTRACTOR TO REVIEW AND FOLLOW ALL GEOTECHNICAL REPORT RECOMMENDATIONS - REFER TO COVER SHEET FOR REPORT REFERENCE

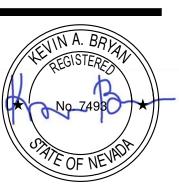
CONTRACTOR TO VERIFY LOCATION OF ALL PROPOSED UTILITY STUB-OUTS AND METERS WITH COUNTY PRIOR TO START OF WORK. 8. SITE ROCKERY WALL DESIGN BY OTHERS.

# PROJECT INFORMATION

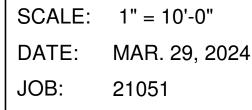
PROJECT OWNERS: STRATEGIC PROPERTIES GROUP, LLC. PROJECT ADDRESS: 307 SENACAS CT. PROJECT A.P.N.: 1419-03-002-096

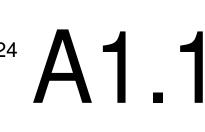
# SITE CALCULATIONS

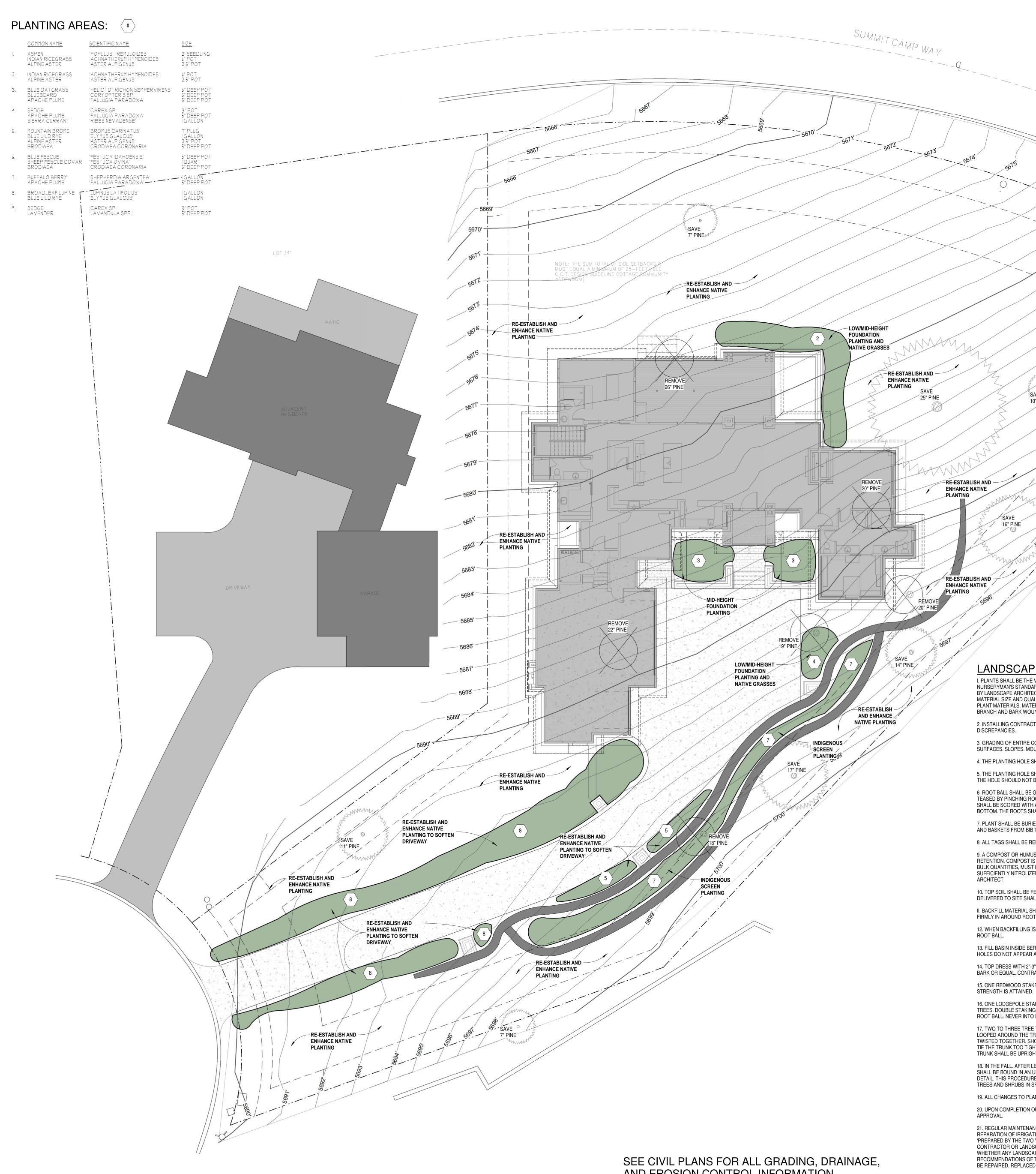
SITE AREA:	29,882 S.F.
BUILDING COVERAGE:	
HOUSE:	2,790 S.F.
GARAGE:	1,143 S.F.
COVERED PATIO:	614 S.F.
TOTAL:	4,547 S.F.
MAX. ALLOWABLE SITE COVERAGE:	8,964 S.F.
SITE IMPERVIOUS AREA:	
DRIVEWAY:	2,897 S.F.
WALKWAYS/UNCOVERED PATIO	220 S.F.
HOUSE (TOT. COVERAGE)	4,547 S.F.
TOTAL:	7,664 S.F.











AND EROSION CONTROL INFORMATION.

CONTROLLER FENCING AND EROSION CONTROL CONTRACTOR WITHIN EXISTING TREE DRIPLINES

TYPE E

# LANDSCAPE PLAN

SAVE

'SAVF

10" PINE ...

I. PLANTS SHALL BE THE VARIETY AND SIZE SPECIFIED ON THE PLAN AND BE HEALTHY. SHAPELY AND WELL ROOTED AND CONFORM TO AMERICAN NURSERYMAN'S STANDARDS. TREES SHALL BE ABLE TO STAND STRAIGHT ON THEIR OWN WITHOUT SUPPORT. ANY CHANGES TO PLAN TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. LANDSCAPE ARCHITECT AND /OR OWNER RESERVES THE RIGHT OF REFUSAL SHOULD PLANT MATERIAL SIZE AND QUALITY BE DEEMED UNSATISFACTORY. INSPECTION BY LANDSCAPE ARCHITECT IS MANDATORY PRIOR TO ACCEPTANCE OF ALL PLANT MATERIALS. MATERIAL SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR. MATERIALS SHALL BE COMPLETELY FREE OF TRUNK. BRANCH AND BARK WOUNDS. STRUCTURE OF PLANT MATERIAL SHALL BE APPROPRIATE TO NATURAL HABIT.

5681

SAVE 17" PINE 5682' -

SAVE 13" PINE

SAVE

15" PINE-

114 5690

2. INSTALLING CONTRACTOR SHALL VERIFY PLANT QUANTITIES AND AREAS TO BE LANDSCAPED AND NOTIFY OWNER AND/OR LANDSCAPE ARCHITECT OF DISCREPANCIES.

3. GRADING OF ENTIRE CONTRACT AREA SHALL BE SMOOTH AND EVEN AND SLOPE TO DRAIN. FINISH GRADES SHALL BE 1/2" BELOW ALL PAVED SURFACES. SLOPES. MOUNDS. AND SWALES SHALL HAVE NO ABRUPT CHANGE IN GRADIENT TO ASSURE A NATURAL AND PLEASING APPEARANCE. 4. THE PLANTING HOLE SHALL BE DUG TWICE THE WIDTH AND TO THE SAME DEPTH OF THE CONTAINER OR ROOTBALL.

5. THE PLANTING HOLE SHALL BE TESTED FOR DRAINAGE. FILL WITH WATER AND ALLOW TO DRAIN. SHOULD DRAINAGE NOT OCCUR WITHIN A FEW HOURS THE HOLE SHOULD NOT BE USED AND AN ALTERNATIVE LOCATION FOR PLANT FOUND.

6. ROOT BALL SHALL BE GENTLY REMOVED FROM CONTAINER AND ROOT INSPECTED PRIOR TO PLACEMENT IN THE HOLE. THE ROOT BALL SHALL BE TEASED BY PINCHING ROOTLETS LOOSE FROM WALL OF BALL TO ENCOURAGE ROOTS TO EXTEND OUTWARD. SHOULD PLANT BE ROOT BOUND THE BALL SHALL BE SCORED WITH A SHARP KNIFE VERTICALLY IN THIRDS DOWN THE ROOTBALL SIDES APPROXIMATELY 1/2 INCH DEEP TWO WAYS ACROSS THE BOTTOM. THE ROOTS SHALL THEN BE LOOSENED AND SPREAD TO ENCOURAGE OUTWARD GROWTH.

7. PLANT SHALL BE BURIED TO STRUCTURAL ROOT DEPTH. EXCESS MATERIAL ON BALLED AND BURLAP TREES SHALL BE REMOVED. REMOVE BURLAP AND BASKETS FROM BIB TREES WITH CARE TO MAINTAIN INTEGRITY OF ROOT BALL 8. ALL TAGS SHALL BE REMOVED FROM PLANTS.

9. A COMPOST OR HUMUS SHALL BE INCORPORATED AT A RATE OF SIX CUBIC YARDS PER IOOO SQUARE FEET FOR IMPROVED MOISTURE AND NUTRIENT RETENTION. COMPOST IS GENERALLY AVAILABLE AT MOST NURSERIES - KELLOGG'S 'GROW MULCH' IS RECOMMENDED. HUMUS, AVAILABLE LOCALLY IN BULK QUANTITIES, MUST BE WELL COMPOSTED TO AVOID ROOT BURN. WHEN COMPOSTED HUMUS IS NOT AVAILABLE, AMENDMENT SHALL BE SUFFICIENTLY NITROLIZED TO PREVENT LOCK UP OF NUTRIENTS AND ROOT BURN. CONTRACTOR TO PROVIDE SAMPLE SUBMITTAL TO LANDSCAPE

10. TOP SOIL SHALL BE FERTILE. FRIABLE AND FREE OF ROCKS LARGER THAN I' DIAMETER. NOXIOUS WEED SEEDS OR EXTRANEOUS MATTER. TOP SOIL DELIVERED TO SITE SHALL HAVE ACIDITY RANGE OF PH 5.0 TO 7.0 AND SHALL CONTAIN NOT LESS THAN 15% ORGANIC MATTER. II. BACKFILL MATERIAL SHALL MEET THE LEVEL OF TOP OF ROOTBALL. NEVER ALLOW NEW SOIL TO REACH PLANT STEM. BACKFILL SHALL BE PRESSED

FIRMLY IN AROUND ROOTBALL. 12. WHEN BACKFILLING IS COMPLETE. CONSTRUCT A WATER RETENTION BERM APPROXIMATELY THREE INCHES HIGH AND TWICE THE DIAMETER OF THE

13. FILL BASIN INSIDE BERM WITH WATER AND ALLOW TO DRAIN. FILL ANY HOLES THAT APPEAR WITH ADDITIONAL BACKFILL MATERIAL. REPEAT UNTIL HOLES DO NOT APPEAR AND ALL SOIL AROUND ROOT BALL IS MOISTENED.

14. TOP DRESS WITH 2"-3" LOCALLY OBTAINED I" MINUS GROUND FIR BARK IN ALL PLANTED AREAS. IN WINDIER AREAS MULCH WITH SHREDDED CEDAR BARK OR EQUAL. CONTRACTOR TO PROVIDE A SAMPLE SUBMITTAL TO LANDSCAPE ARCHITECT FOR APPROVAL. 15. ONE REDWOOD STAKE OF 1-1/2" BY 1-1/2" SHALL BE INSTALLED FOR WINTER SUPPORT OF MULTISTEMMED SHRUBS UNTIL ADEQUATE BRANCH

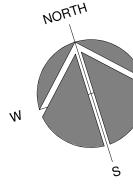
16. ONE LODGEPOLE STAKE OF TWO INCHES DIAMETER AND 8-10 FEET IN LENGTH SHALL BE INSTALLED AT THE WINDWARD SIDE OF ALL DECIDUOUS TREES. DOUBLE STAKING WILL BE REQUIRED IN WINDIER AND HEAVY SNOW LOAD AREAS. STAKE(S) SHALL BE INSERTED INTO GROUND AT EDGE OF ROOT BALL. NEVER INTO ROOTBALL. TREE GUYING METHOD IS RECOMMENDED FOR LARGER CONIFEROUS TREES IN WINDIER LOCATIONS.

17. TWO TO THREE TREE TIES OF DURABLE CONSTRUCTION SHALL BE USED PER TREE. THE RUBBER OR MORE PLIABLE PORTION OF THE TIE SHALL BE LOOPED AROUND THE TRUNK AND WIRE OR OTHER MATERIAL LOOPED AROUND THE STAKE IN A FIGURE EIGHT CONFIGURATION. THE WIRES ARE THEN TWISTED TOGETHER. SHOULD SECURING THE TIE IN PLACE BE REQUIRED. NAIL OR STAPLE THE TIE TO THE STAKE ONLY. NEVER TO THE TREE. DO NOT TIE THE TRUNK TOO TIGHTLY AGAINST THE STAKE. ALLOW SOME ROOM TO MOVE IN BREEZE SO AS TO DEVELOP CALIPER STRENGTH IN TRUNK. THE TRUNK SHALL BE UPRIGHT AND STRAIGHT.

18. IN THE FALL. AFTER LEAVES HAVE DROPPED. BRANCHES OF YOUNG TREES AND SHRUBS AND THOSE CLOSE TO SNOW REMOVAL/STORAGE AREAS SHALL BE BOUND IN AN UPWARD FASHION WITH VINYL TREE TAPE OR EQUAL TO MINIMIZE BREAKAGE FROM WEIGHT AND MOVEMENT OF SNOW. SEE DETAIL. THIS PROCEDURE SHOULD BE REPEATED EACH YEAR UNTIL TREES AND SHRUBS HAVE ATTAINED SUBSTANTIAL STRENGTH AND GIRTH. UNWRAP TREES AND SHRUBS IN SPRING. BEFORE NEW LEAVES APPEAR.

19. ALL CHANGES TO PLANS TO BE APPROVED BY LANDSCAPE ARCHITECT. 20. UPON COMPLETION OF ALL PROJECT PHASES, INSTALLING CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR INSPECTION AND FINAL

21. REGULAR MAINTENANCE-PRUNING FERTILIZING. WEED. DEBRIS AND TRASH REMOVAL. REMOVE AND REPLACE ANY DEAD OR DYING PLANT MATERIAL. REPARATION OF IRRIGATION SYSTEM AS NEEDED. REPORT - PRIOR TO THE TWO YEAR ANNIVERSARY OF COMPLETION OF PROJECT A REPORT SHALL BE 'PREPARED BY THE TWO YEAR ANNIVERSARY OF COMPLETION OF PROJECT A REPORT SHALL BE 'PREPARED BY THE PROJECT LANDSCAPE CONTRACTOR OR LANDSCAPE ARCHITECT WHICH DOCUMENTS THE CONDITION OF THE LANDSCAPING. AND PROVIDES RECOMMENDATIONS AS TO WHETHER ANY LANDSCAPING SHOULD BE REPAIRED. REPLACED OR INSTALLED. THE RECOMMENDATIONS OF THE REPORT SHALL BECOME A PART OF AND INCORPORATED INTO THE FINAL LANDSCAPE PLAN. AND THE LANDSCAPING SHALL BE REPAIRED. REPLACED AND INSTALLED WITHIN SIX MONTHS OF THE DATE OF APPROVAL OF THE REPORT.



**REVISIONS:** 

<u>/1</u> /2\

JOB: SHEET



# LANDSCAPE NOTES

I. THIN ALL DEAD AND DAMAGED NATIVE VEGETATION. ENSURE ALL NATIVE VEGETATION IS THINNED TO PROVIDE AN ADEQUATE WILDFIRE BUFFER 2. ALL IRRIGATION TO CONFORM TO APPLICABLE STATE AND LOCAL CODES 3. IRRIGATION COMPONENTS TO BE COMMERCIAL GRADE AND INSTALLED PER MANUFACTURERS RECOMENDATIONS

4. IRRIGATION SYSTEM TO BE A LOW FLOW DRIP SYSTEM FOR WATER CONSERVATION. EMITTER FLOW TO BE PLANT SPECIFIC AS REQ'D BY SITE LOCATION AND SPECIES WATER REQUIREMENTS

5. PROVIDE MIMIMUM 4 STATION COMMERCIAL WEATHER RESISTANT IRRIGATION

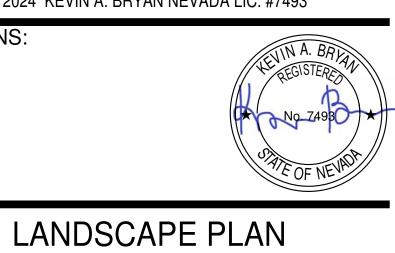
6. ALL AREAS DISTURBED WILL BE REVEGETATED WITH NATIVE SEED MIXTURE AND ALL AREAS OF EXPOSED SOIL WILL BE STABILIZED WITH PINE STRAW 7. ALL AREAS TO BE LANDSCAPED WILL BE PROTECTED WITH CONSTRUCTION

8. IRRIGATION CONTROLLER AND BACKFLOR TO BE LOCATED BY GENERAL

9. PLANITNG AND IRRIGATION MODIFICATIONS TO BE HAND TRENCHED/DUG IF

10. LANDSCAPE BOULDERS TO BE BURIED TO A MINIMUM OF 1/3 TOTAL HEIGHT 11. NO COMBUSTIBLE PLANTING WITHIN 5' OF BUILDING- WITH EXCEPTION OF PLANT

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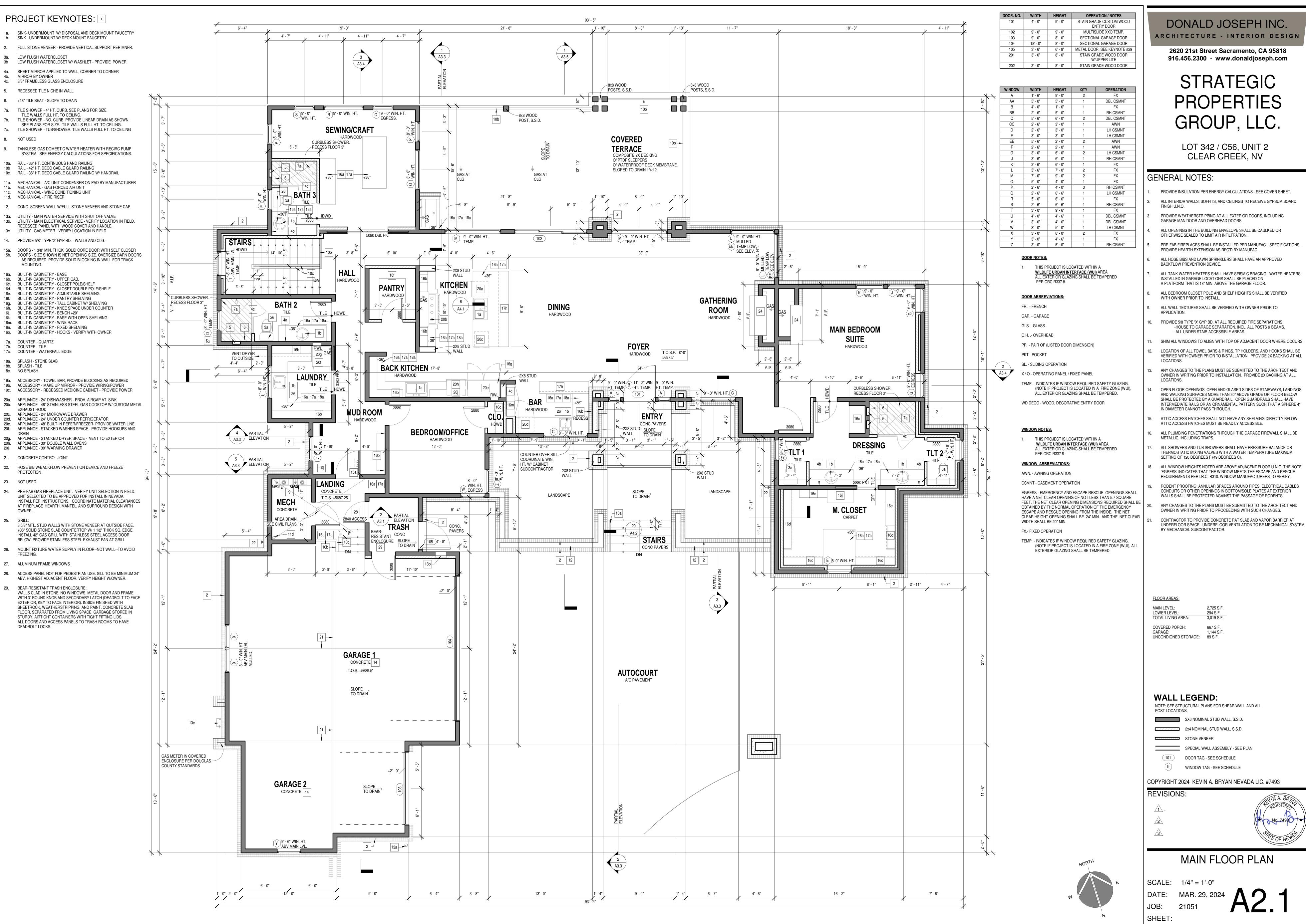
SCALE: As indicated DATE: MAR. 29, 2024 21051

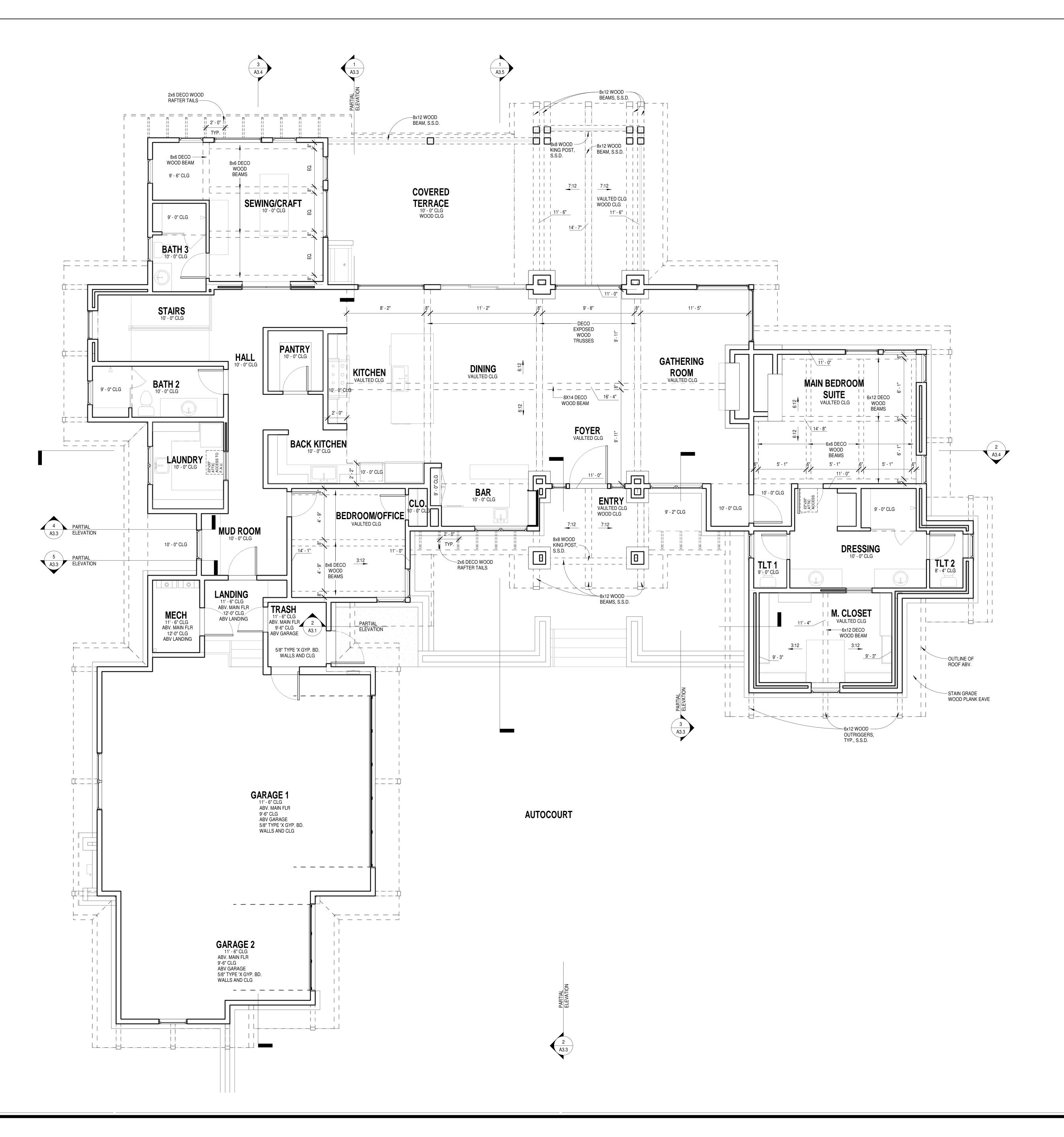






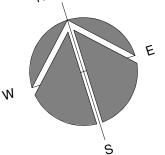
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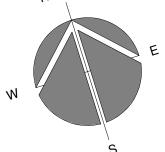




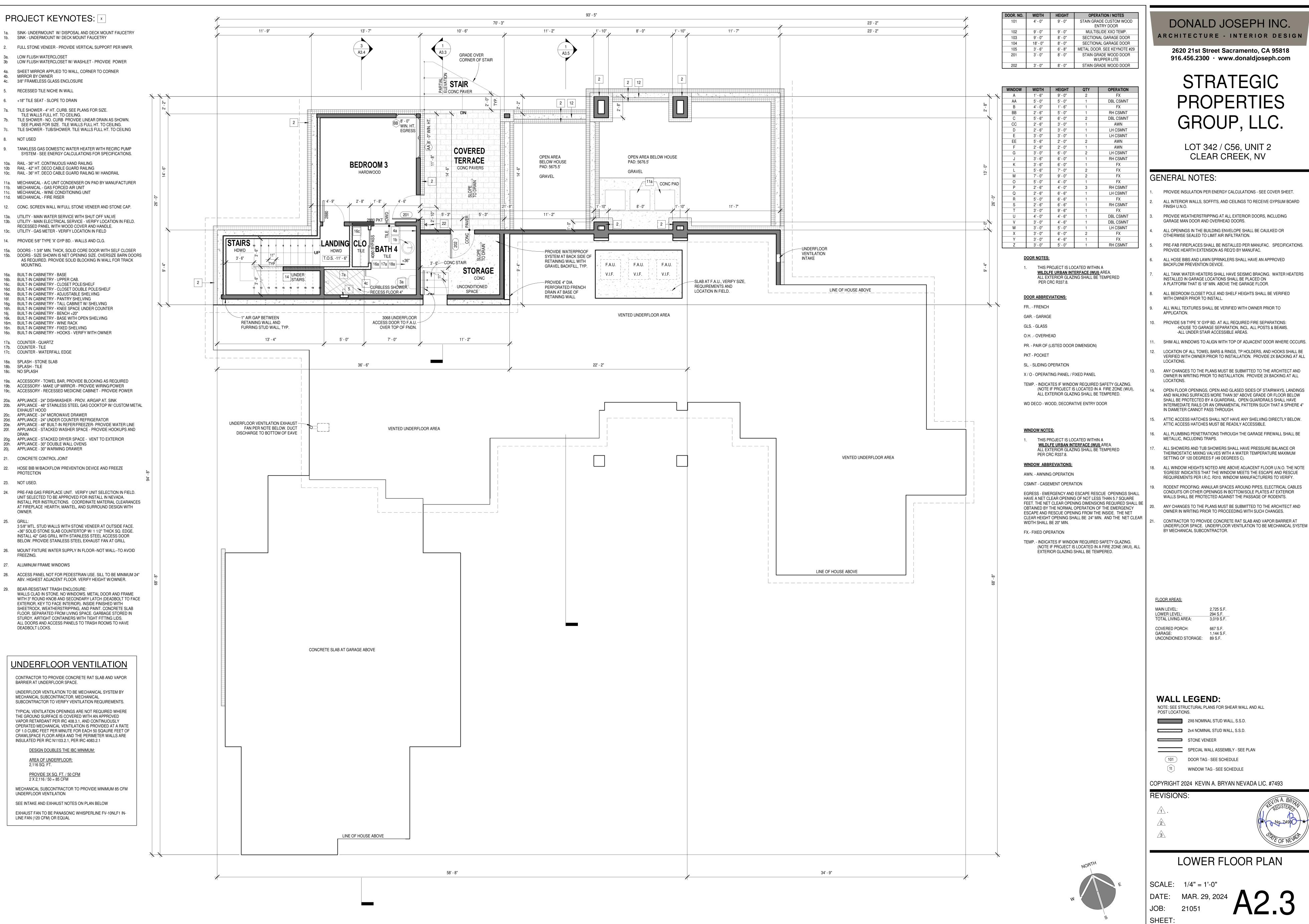
COPYRIGHT 2024 KEVIN A. BRYAN NEVADA LIC. #7493 **REVISIONS:** ∕1∖. 2MAIN FLOOR REFL. CLG. PLAN SCALE: 1/4" = 1'-0" DATE: MAR. 29, 2024 A222

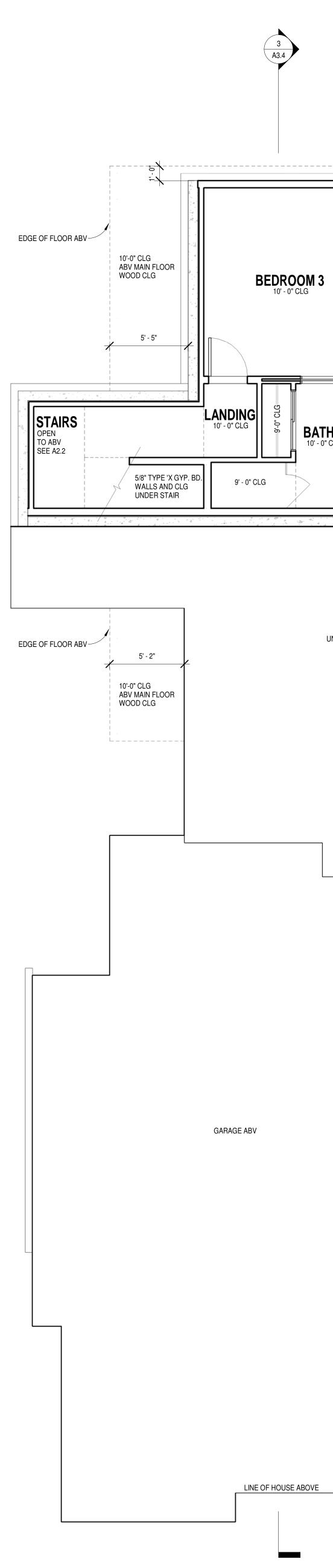
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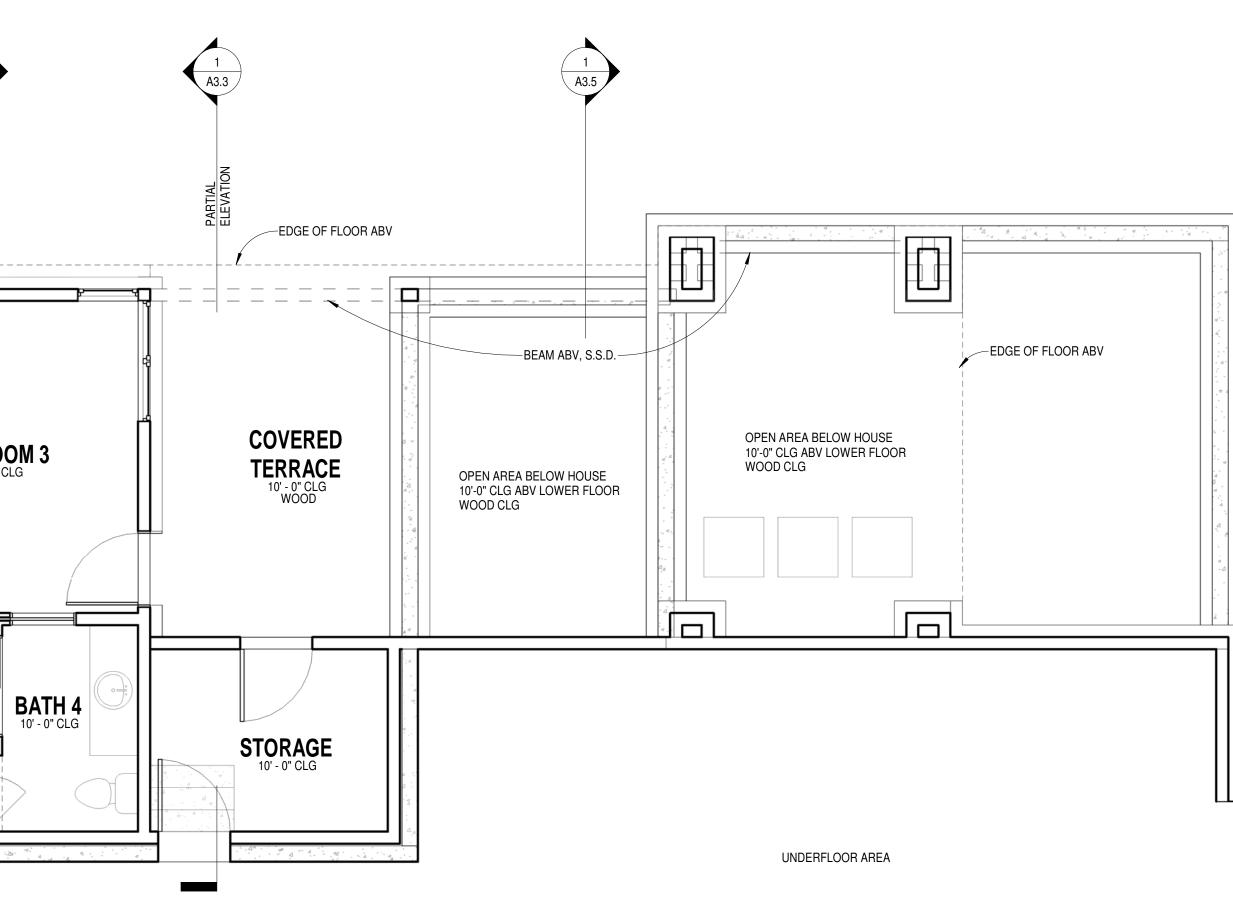




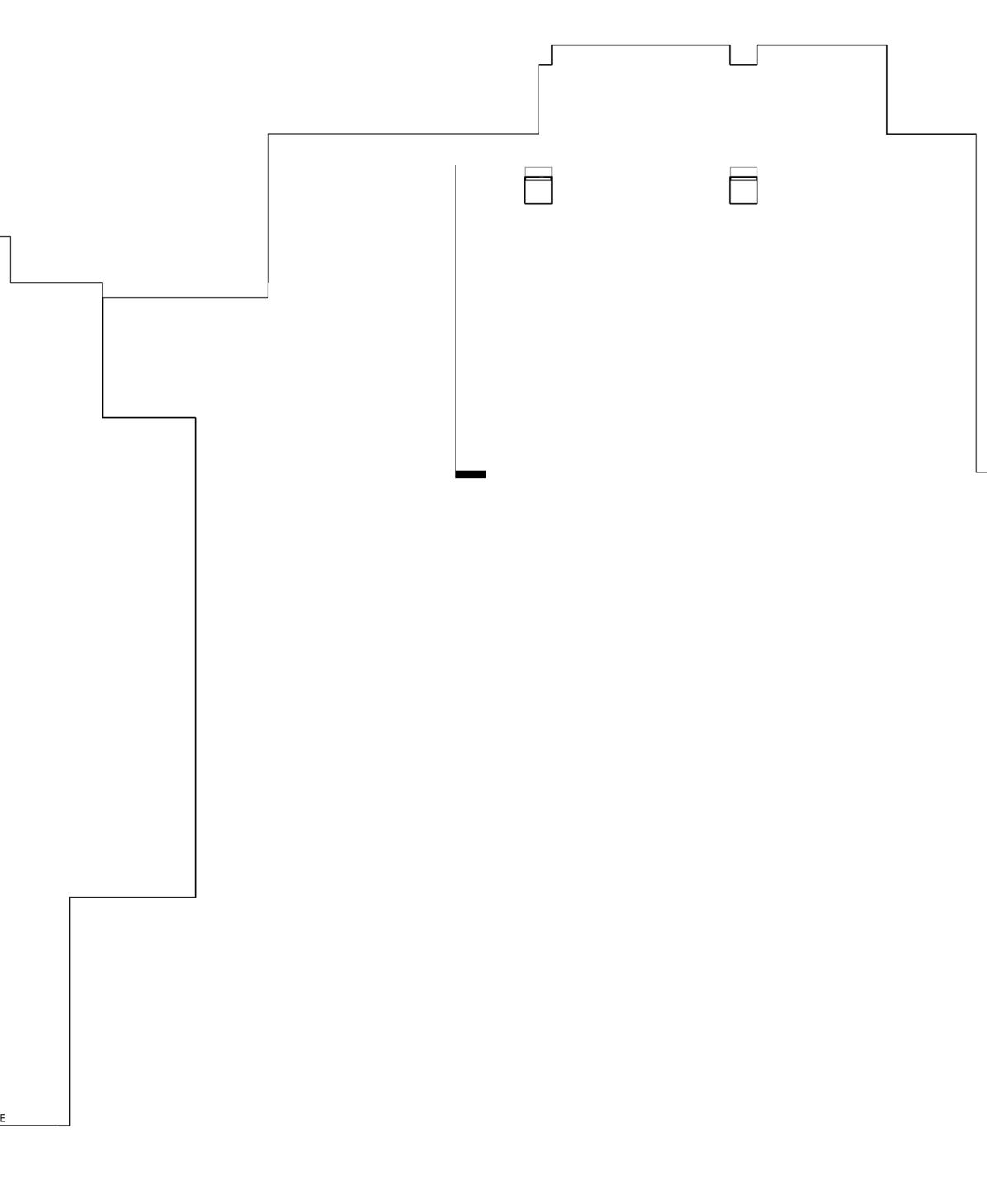








UNDERFLOOR AREA



GENERAL NOTES:

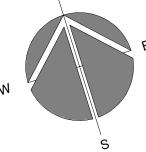
LINE OF HOUSE ABOVE

UNDERFLOOR AREA

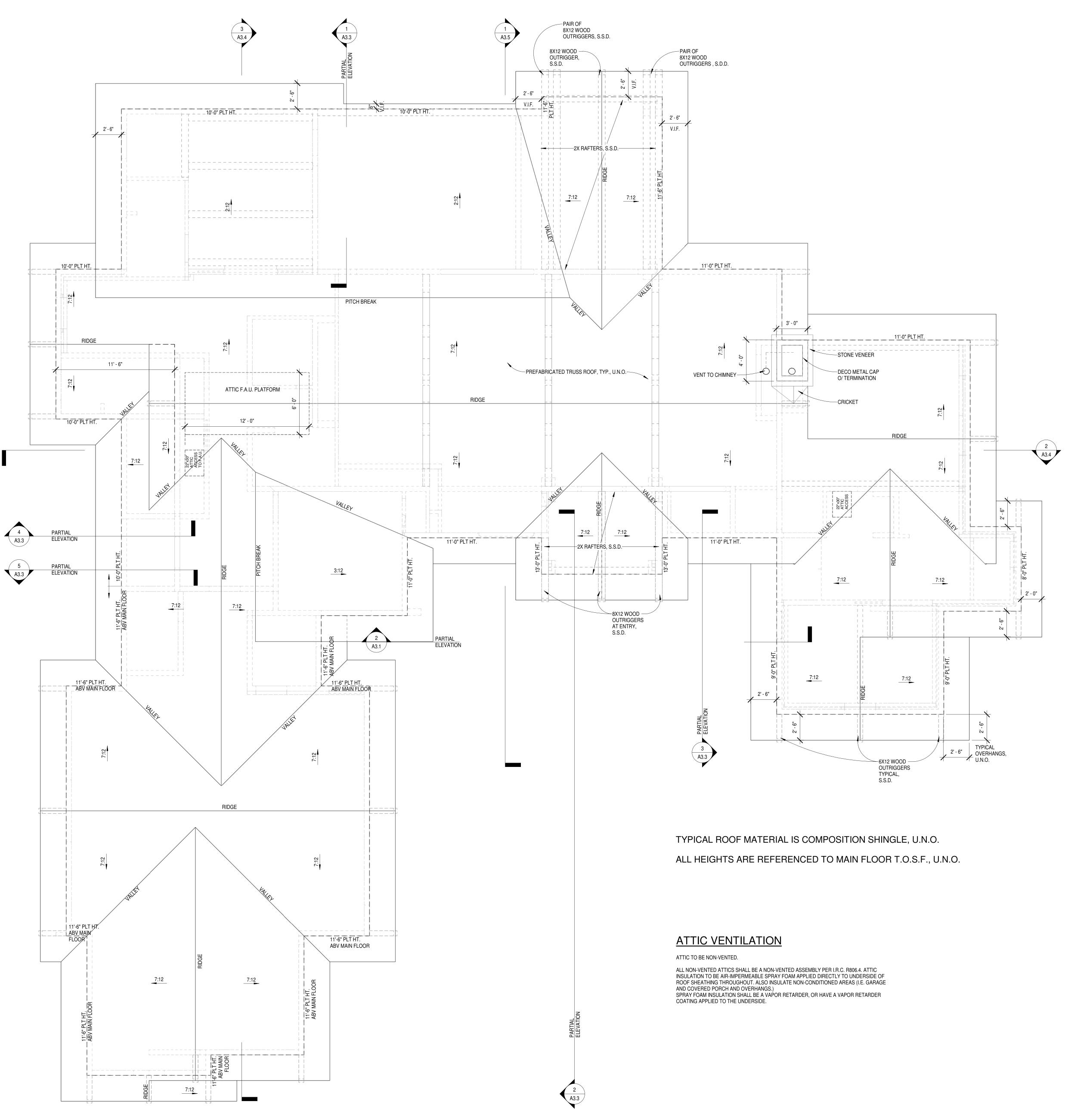
LINE OF HOUSE ABOVE

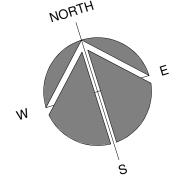
COPYRIGHT 2024 KEVIN A. BRYAN NEVADA LIC. #7493 **REVISIONS:** ∕1. <u>∕2</u>∖ LOWER FLOOR REFL. CLG. PLAN SCALE: 1/4" = 1'-0" DATE: MAR. 29, 2024

SHEET:









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1.

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

GENERAL NOTES:

COUNTERFLASHING AS REQUIRED.

LAYOUT.

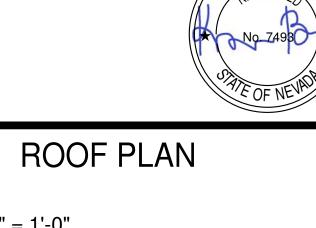


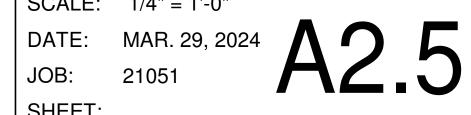
ROOFING SHALL BE <u>'COMPOSITION SHINGLE'</u> TYPE OVER <u>2 LAYERS 'ICE AND WATER SHIELD' UNDERLAYMENT, TYPICAL</u>

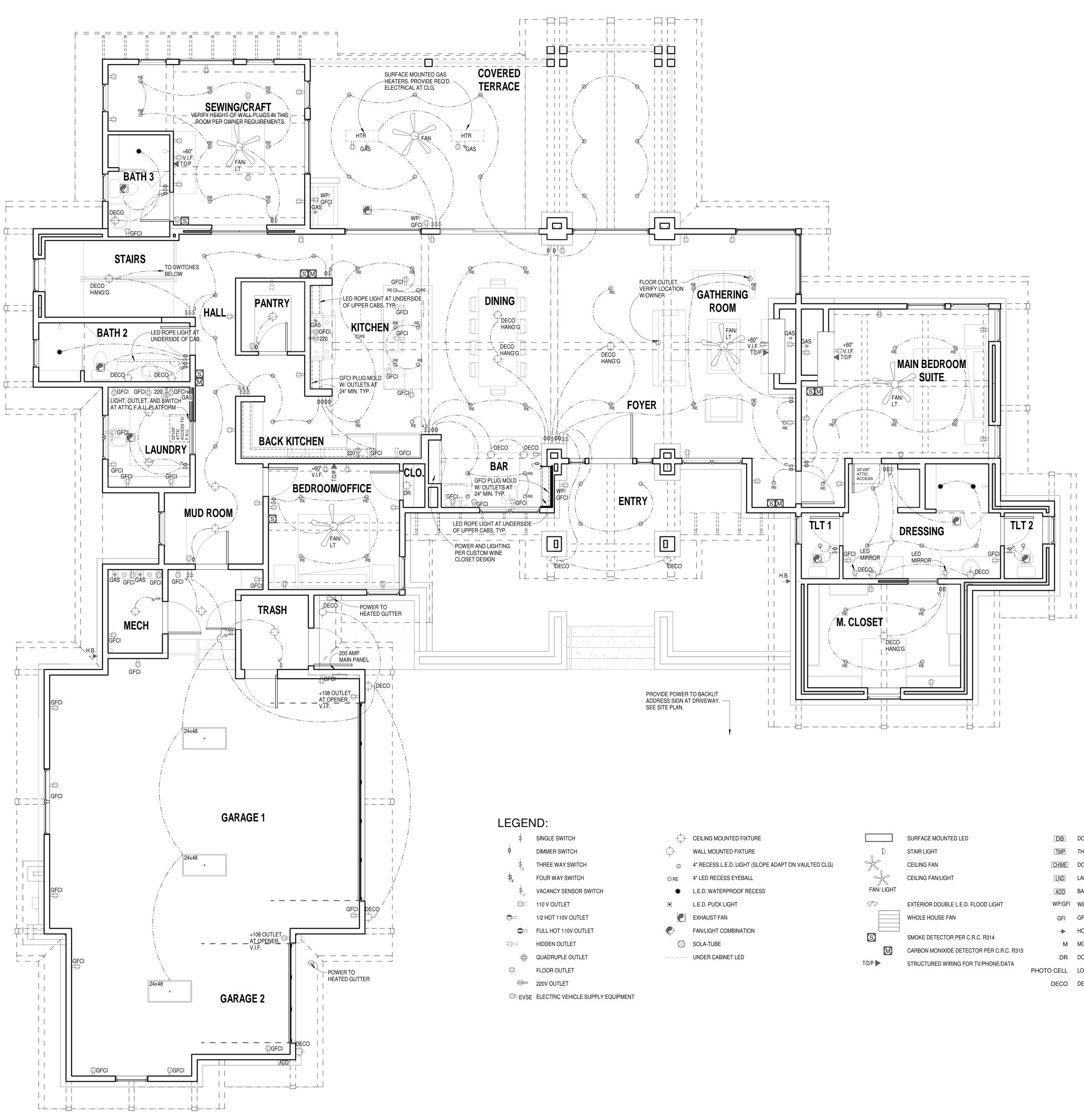
ALL ROOFING SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND CURRENT BEST PRACTICES. SUBCONTRACTOR SHALL PROVIDE ALL FLASHING AND

SEE REF. CLG PLAN FOR ALL DROPPED SOFFIT AND VAULTED CEILING CONDITIONS.

SEE STRUCTURAL PLAN FOR ALL FRAMING CONDITIONS AND TRUSS









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FAN/ LIGHT
$\checkmark$
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M
T/D/P Þ

SURFACE MOUNTED LED
STAIR LIGHT
CEILING FAN
CEILING FAN/LIGHT
EXTERIOR DOUBLE L.E.D. FLOOD LIGHT
WHOLE HOUSE FAN
SMOKE DETECTOR PER C.R.C. R314
CARBON MONIXIDE DETECTOR PER C.R.C. R3
STRUCTURED WIRING FOR TV/PHONE/DATA

- DB DOOR BELL TMP THERMOSTAT CONTROL CHIME DOOR CHIME LND LANDSCAPE IRRIGATION CONTROL ADD BACKLIT ADDRESS SIGN - PROVIDE POWER WP/GFI WEATHERPROOF/GROUND FAULT CIRCUIT INTERRUPT GFI GROUND FAULT CIRCUIT INTERRUPT (GFCI) → HOSE BIB M MOTION ACTIVATED
- DR DOOR ACTIVATED PHOTO CELL LOW LIGHT ACTIVATED FIXTURE
- DECO DECORATIVE FIXTURE

REVISIONS:

<u>∕1</u>∖. <u>/2</u>

SHEET

RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND SHALL BE EQUIPPED WITH A BATTERY BACKUP AND SHALL SOUND AN ALARM AUDIBLE IN ALL SLEEPING AREAS OF THE DWELLING UNIT PER I.R.C. R314 AND R315. ALL SMOKE DETECTORS SHALL BE INTERCONNECTED SUCH THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS.

ALL WALL OUTLETS SHALL BE +16" HT. A.F.F. U.N.O. ALL COUNTER TOP OUTLETS SHALL BE +46" A.F.F. U.N.O. ALL ISLAND OUTLETS SHALL BE +30" A.F.F. U.N.O. ALL OUTLETS IN GARAGE SHALL BE +48" A.F.F. U.N.O. PROVIDE GFI OUTLETS AT ALL WHIRLPOOL TUBS -VERIFY PUMP LOCATIONS.

VERIFY MAIN PANEL LOCATION AND SIZE IN FIELD.

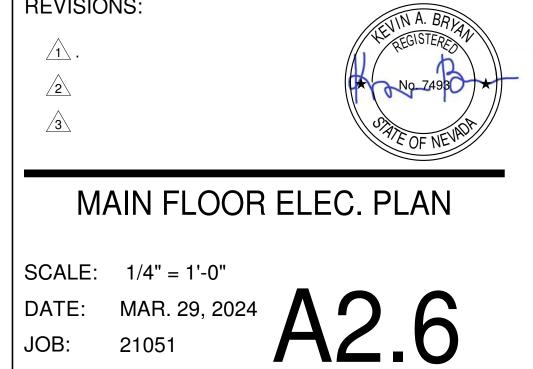
ALL CEILING FANS SHALL BE SUPPORTED BY APPROVED ELECTRICAL BOXES. ALL WORK SHALL BE PER 2018 I.R.C. AND 2017 N.E.C.

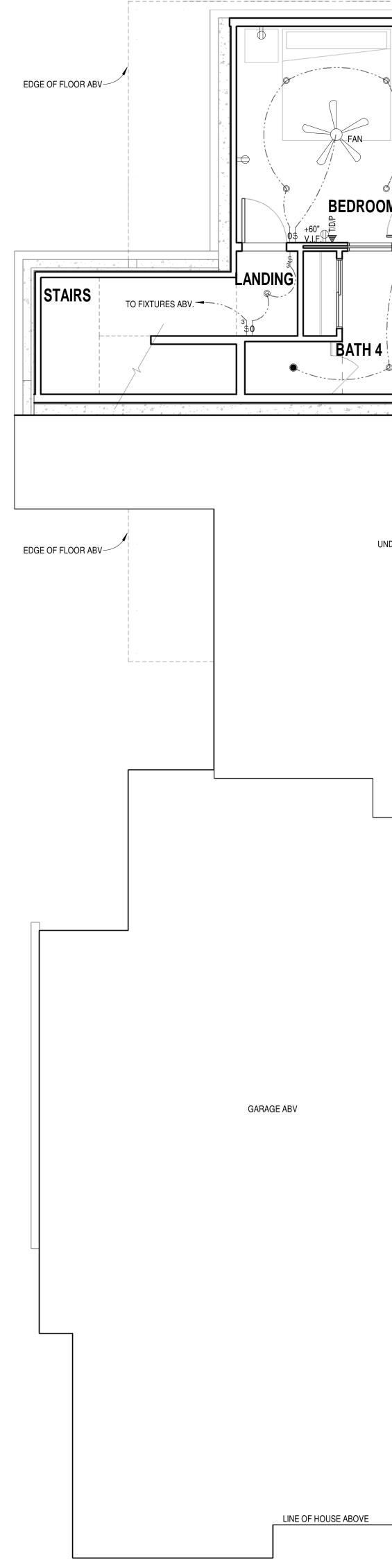
PROVIDE TAMPER RESISTANT RECEPTACLES PER E4002.14 AT THE FOLLOWING LOCATIONS: LOCATED WITHIN CABINETS OR CUPBOARDS, OR CONTROLLED BY A WALL SWITCH IN ACCORDANCE WITH E3903.2, EXCEPTION 1

WHERE SWITCHES CONTROL LIGHTING LOADS SUPPLIED BY A GROUNDED GENERAL PURPOSE BRANCH CIRCUIT, THE GROUNDED CIRCUIT CONDUCTOR FOR THE CONTROLLED LIGHTING CIRCUIT SHALL BE PROVIDED AT THE SWITCH LOCATION.

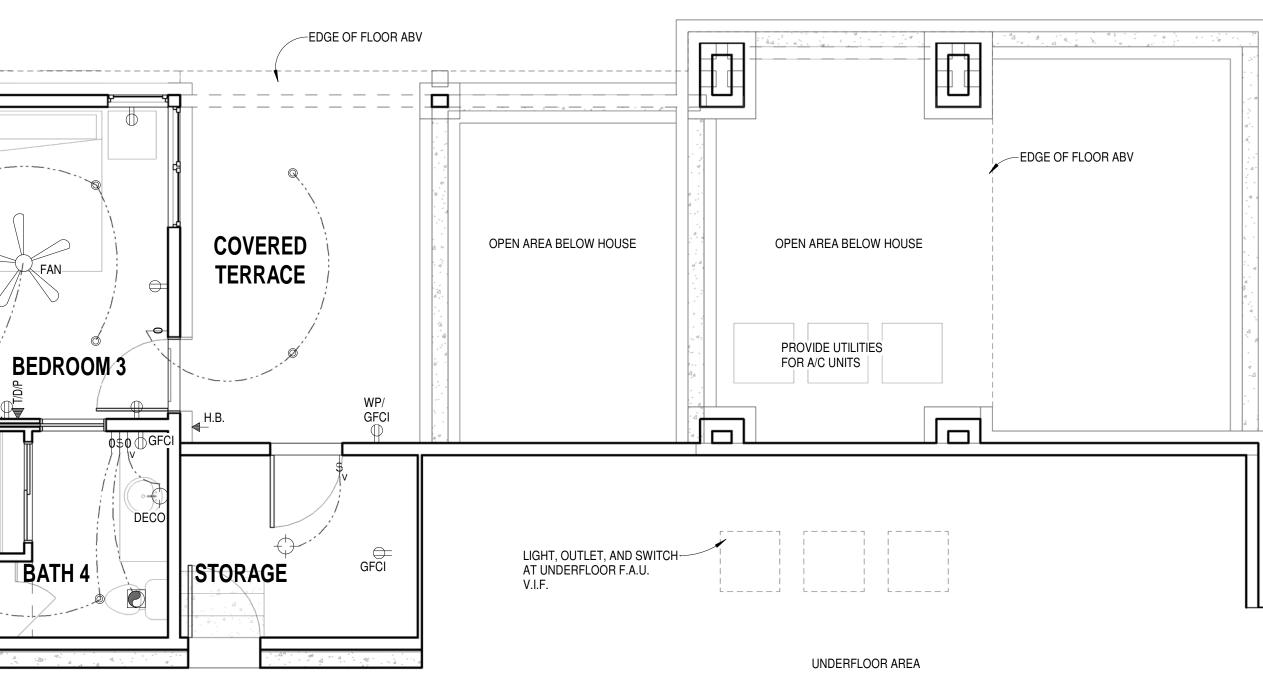
EXCEPTION: THE GROUNDED CIRCUIT CONDUCTOR IS NOT REQUIRED TO BE PROVIDED AT THE SWITCH ENCLOSURE WHERE EITHER OF THE FOLLOWING CONDITIONS APPLY: 1. THE CONDUCTORS ENTER THE BOX THRU A RACEWAY. THE RACEWAY SHALL HAVE A SUFFICIENT CROSS SECTIONAL AREA TO ACCOMMODATE THE EXTENSION OF THE GROUNDED CIRCUIT CONDUCTOR OF THE LIGHTING CIRCUIT TO THE SWITCH LOCATION WHETHER OR NOT THE CONDUCTORS IN THE RACEWAY ARE REQUIRED TO BE INCREASED IN SIZE TO COMPLY WITH SECTION E3705.3

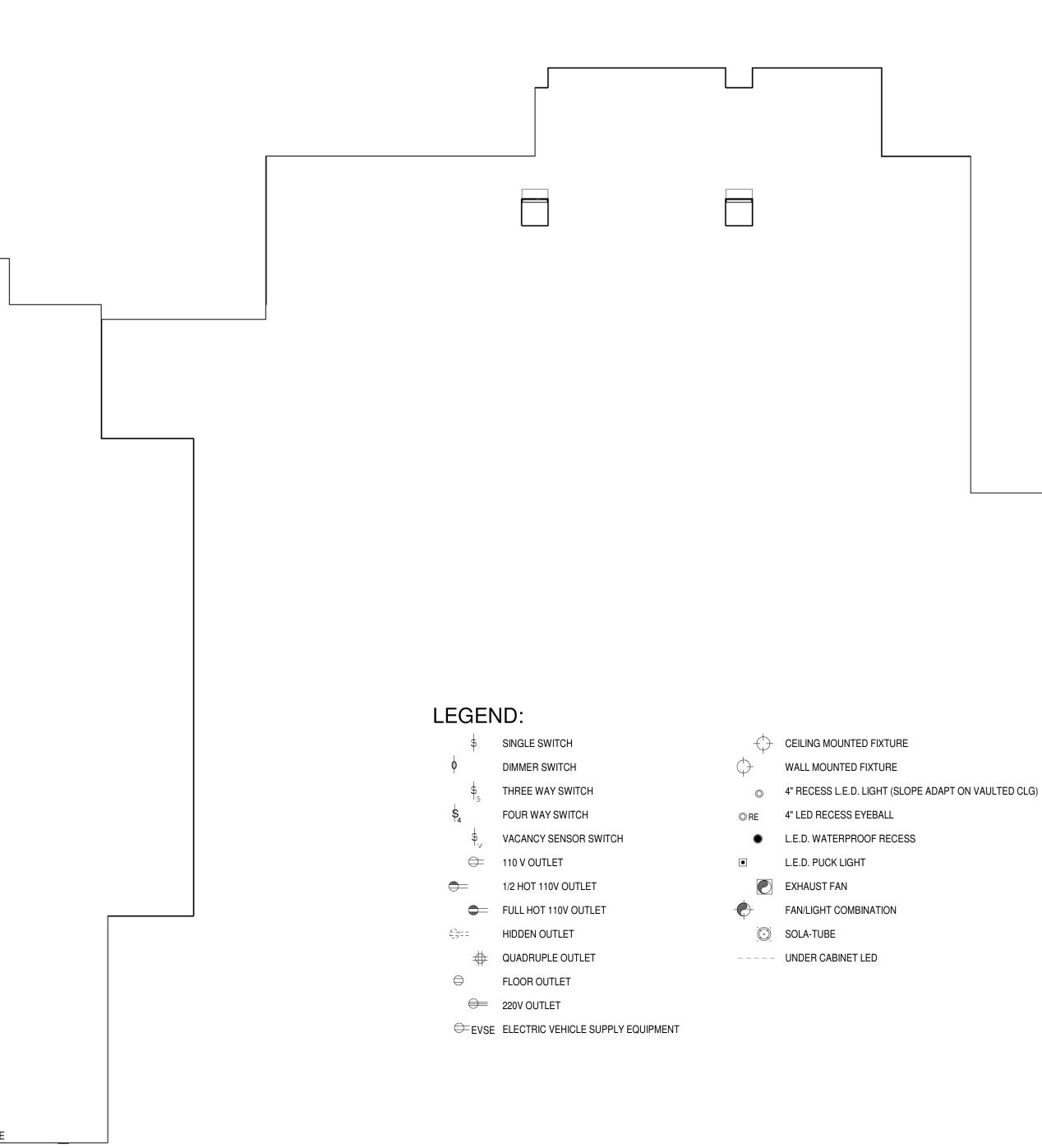
> 2. CABLE ASSEMBLIES ENTER THE BOX THRU A FRAMING CAVITY THAT IS OPEN AT THE TOP OR BOTTOM ON THE SAME FLOOR LEVEL, OR THROUGH A WALL, FLOOR, OR CEILING THAT IS UNFINISHED ON ONE SIDE.

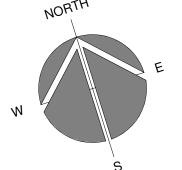




UNDERFLOOR AREA







JOB: SHEET:

<u>∕1</u>∖. 2

**REVISIONS:** 

LINE OF HOUSE ABOVE

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FAN/ LIGHT

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S

T/D/P Þ

SURFACE MOUNTED LED

STAIR LIGHT

CEILING FAN

CEILING FAN/LIGHT

WHOLE HOUSE FAN

EXTERIOR DOUBLE L.E.D. FLOOD LIGHT

SMOKE DETECTOR PER C.R.C. R314

CARBON MONIXIDE DETECTOR PER C.R.C. R315

STRUCTURED WIRING FOR TV/PHONE/DATA

UNDERFLOOR AREA

LINE OF HOUSE ABOVE

DB DOOR BELL

CHIME DOOR CHIME

→ HOSE BIB

M MOTION ACTIVATED

DR DOOR ACTIVATED

PHOTO CELL LOW LIGHT ACTIVATED FIXTURE

DECO DECORATIVE FIXTURE

TMP THERMOSTAT CONTROL

LND LANDSCAPE IRRIGATION CONTROL

ADD BACKLIT ADDRESS SIGN - PROVIDE POWER

GFI GROUND FAULT CIRCUIT INTERRUPT (GFCI)

WP/GFI WEATHERPROOF/GROUND FAULT CIRCUIT INTERRUPT



GENERAL NOTES:

SMOKE DETECTORS AND CARBON MONIXIDE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND SHALL BE EQUIPPED WITH A BATTERY BACKUP AND SHALL SOUND AN ALARM AUDIBLE IN ALL SLEEPING AREAS OF THE DWELLING UNIT PER I.R.C. R314 AND R315. ALL SMOKE DETECTORS SHALL BE INTERCONNECTED SUCH THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL ALARMS.

ALL WALL OUTLETS SHALL BE +16" HT. A.F.F. U.N.O. ALL COUNTER TOP OUTLETS SHALL BE +46" A.F.F. U.N.O. ALL ISLAND OUTLETS SHALL BE +30" A.F.F. U.N.O. ALL OUTLETS IN GARAGE SHALL BE +48" A.F.F. U.N.O. PROVIDE GFI OUTLETS AT ALL WHIRLPOOL TUBS -VERIFY PUMP LOCATIONS.

VERIFY MAIN PANEL LOCATION AND SIZE IN FIELD.

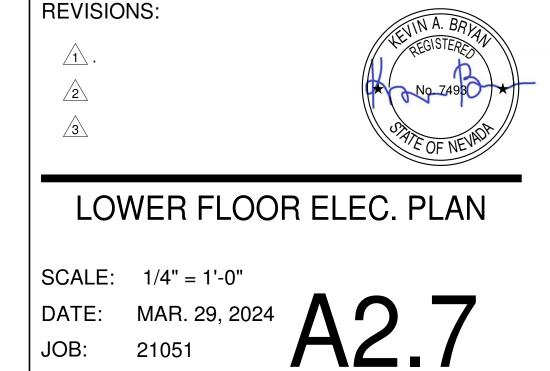
ALL CEILING FANS SHALL BE SUPPORTED BY APPROVED ELECTRICAL BOXES. ALL WORK SHALL BE PER 2018 I.R.C. AND 2017 N.E.C.

PROVIDE TAMPER RESISTANT RECEPTACLES PER E4002.14 AT THE FOLLOWING LOCATIONS: LOCATED WITHIN CABINETS OR CUPBOARDS, OR CONTROLLED BY A WALL SWITCH IN ACCORDANCE WITH E3903.2, EXCEPTION 1

WHERE SWITCHES CONTROL LIGHTING LOADS SUPPLIED BY A GROUNDED GENERAL PURPOSE BRANCH CIRCUIT, THE GROUNDED CIRCUIT CONDUCTOR FOR THE CONTROLLED LIGHTING CIRCUIT SHALL BE PROVIDED AT THE SWITCH LOCATION.

EXCEPTION: THE GROUNDED CIRCUIT CONDUCTOR IS NOT REQUIRED TO BE PROVIDED AT THE SWITCH ENCLOSURE WHERE EITHER OF THE FOLLOWING CONDITIONS APPLY: 1. THE CONDUCTORS ENTER THE BOX THRU A RACEWAY. THE RACEWAY SHALL HAVE A SUFFICIENT CROSS SECTIONAL AREA TO ACCOMMODATE THE EXTENSION OF THE GROUNDED CIRCUIT CONDUCTOR OF THE LIGHTING CIRCUIT TO THE SWITCH LOCATION WHETHER OR NOT THE CONDUCTORS IN THE RACEWAY ARE REQUIRED TO BE INCREASED IN SIZE TO COMPLY WITH SECTION E3705.3.

> 2. CABLE ASSEMBLIES ENTER THE BOX THRU A FRAMING CAVITY THAT IS OPEN AT THE TOP OR BOTTOM ON THE SAME FLOOR LEVEL, OR THROUGH A WALL, FLOOR, OR CEILING THAT IS UNFINISHED ON ONE SIDE.

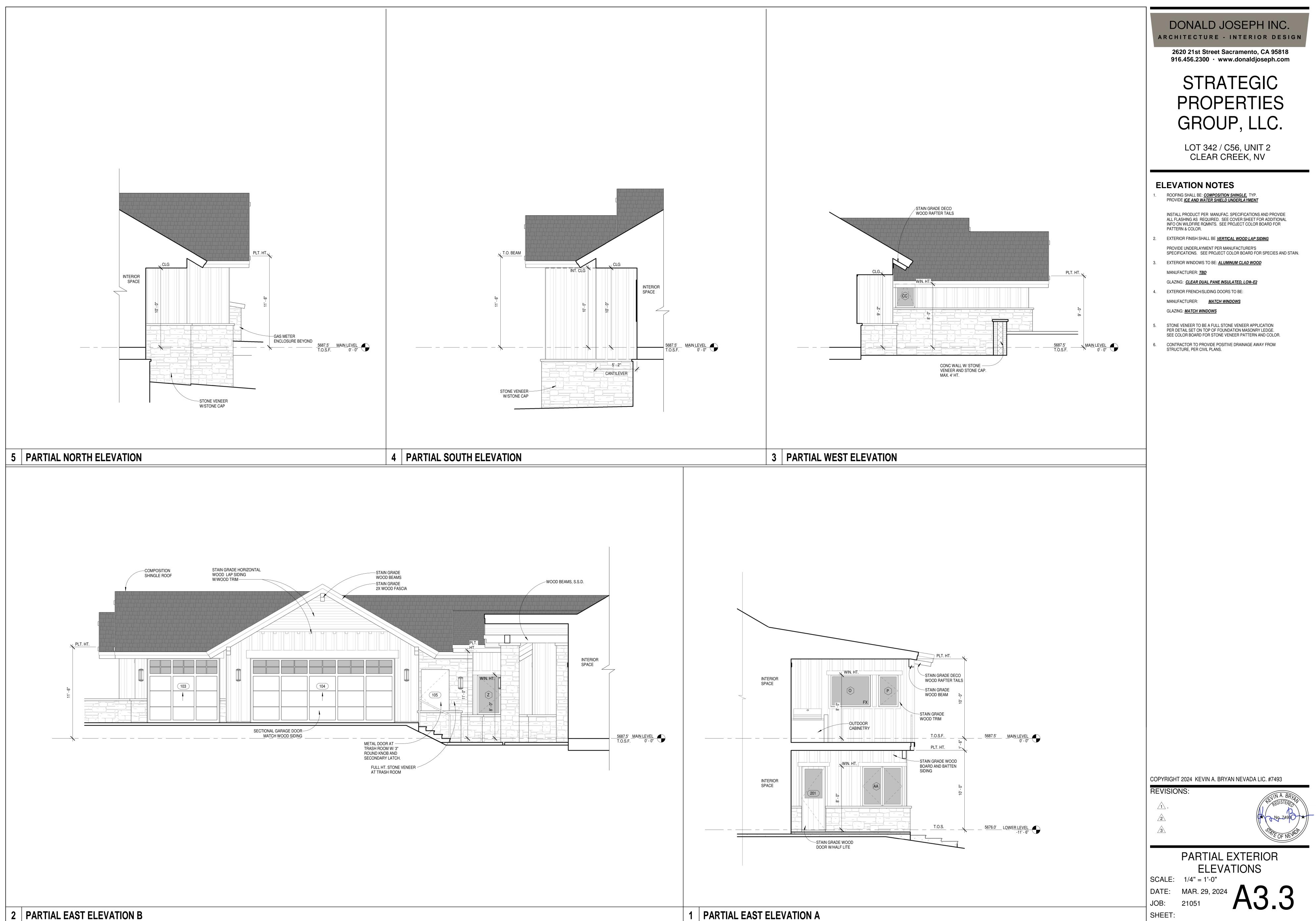




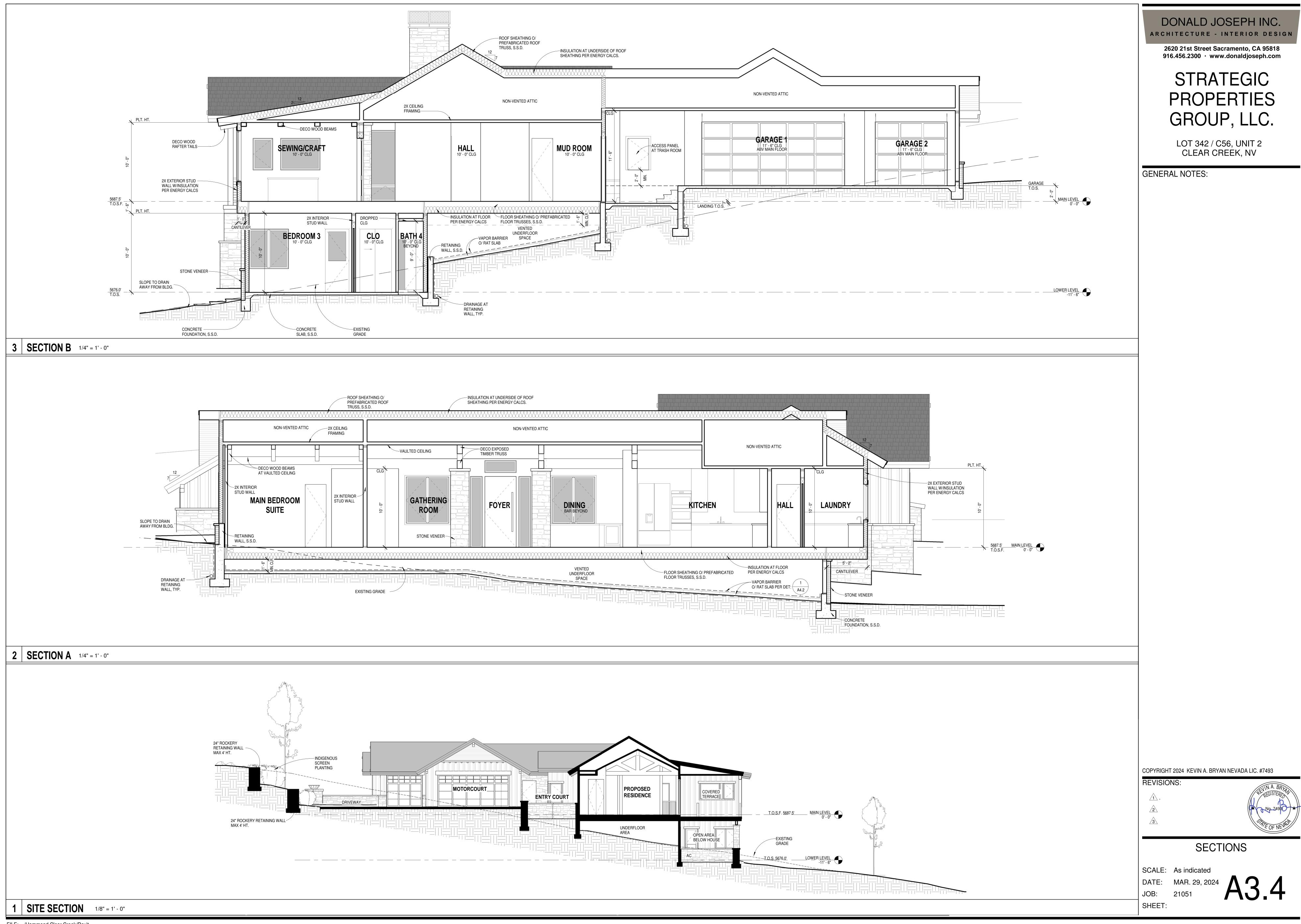
FILE: .../Hammond Clear Creek/Revit



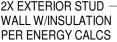
FILE: .../Hammond Clear Creek/Revit

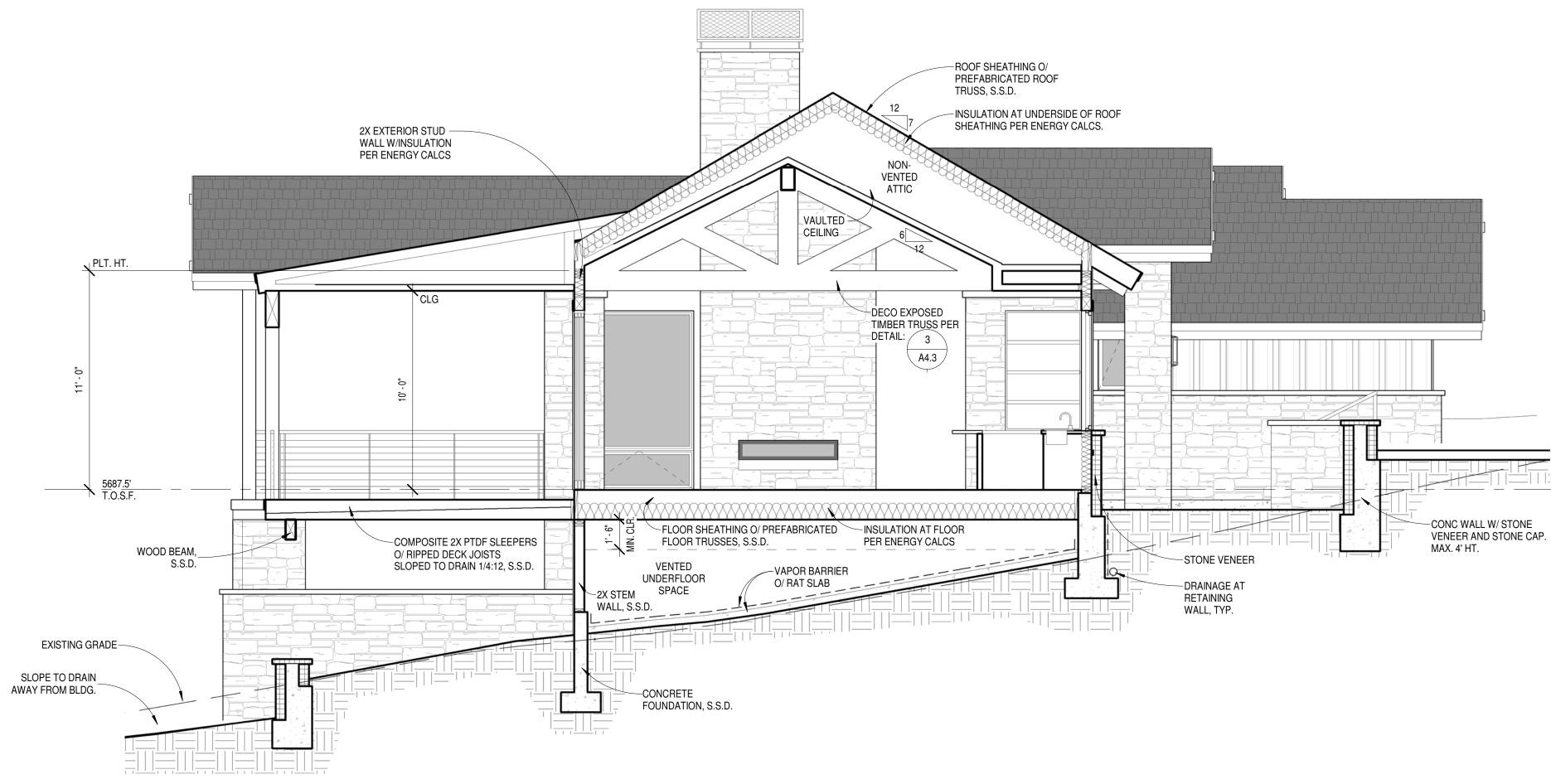


FILE: .../Hammond Clear Creek/Revit



FILE: .../Hammond Clear Creek/Revit





**SECTION C** 

FILE: .../Hammond Clear Creek/Revit

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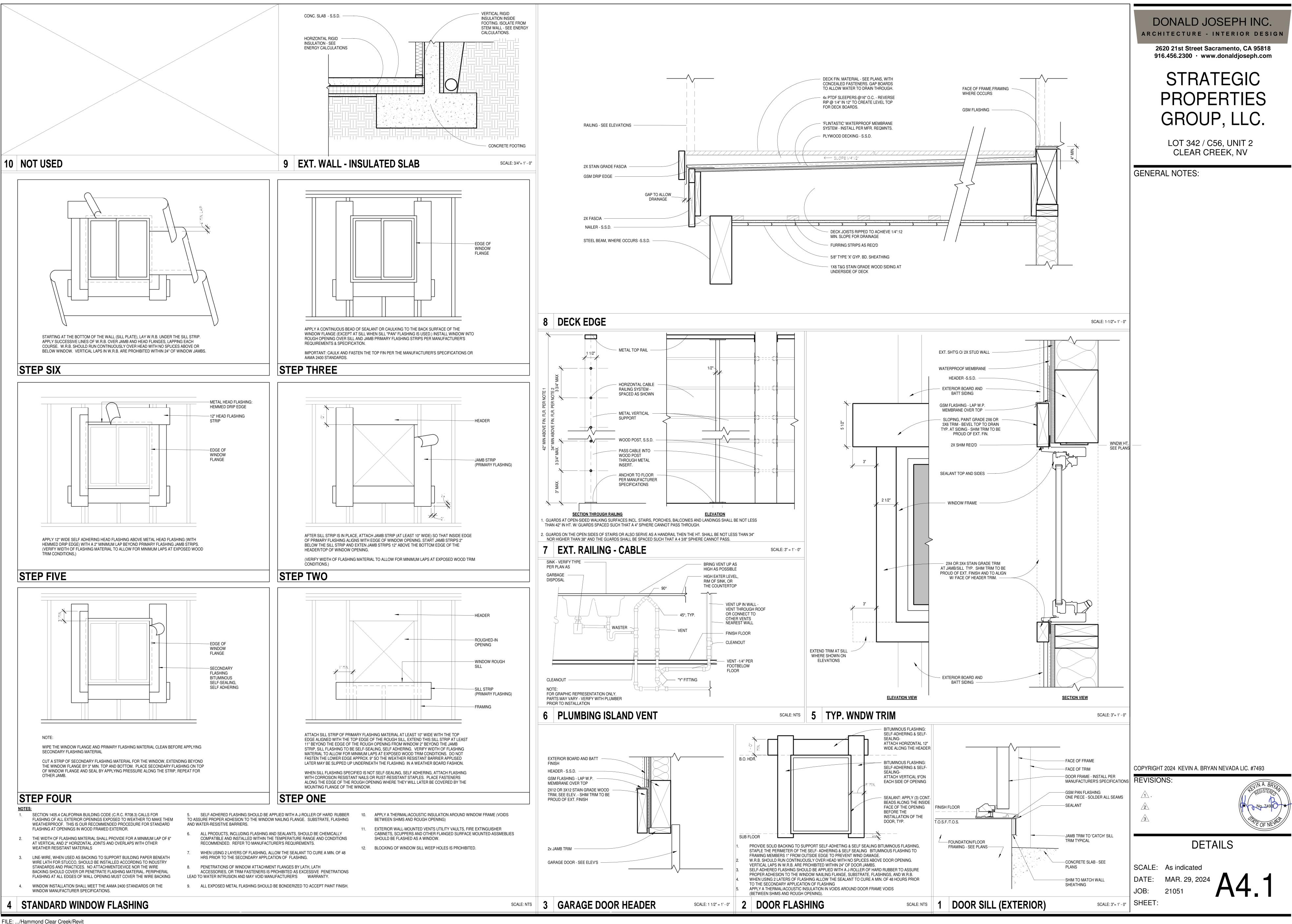
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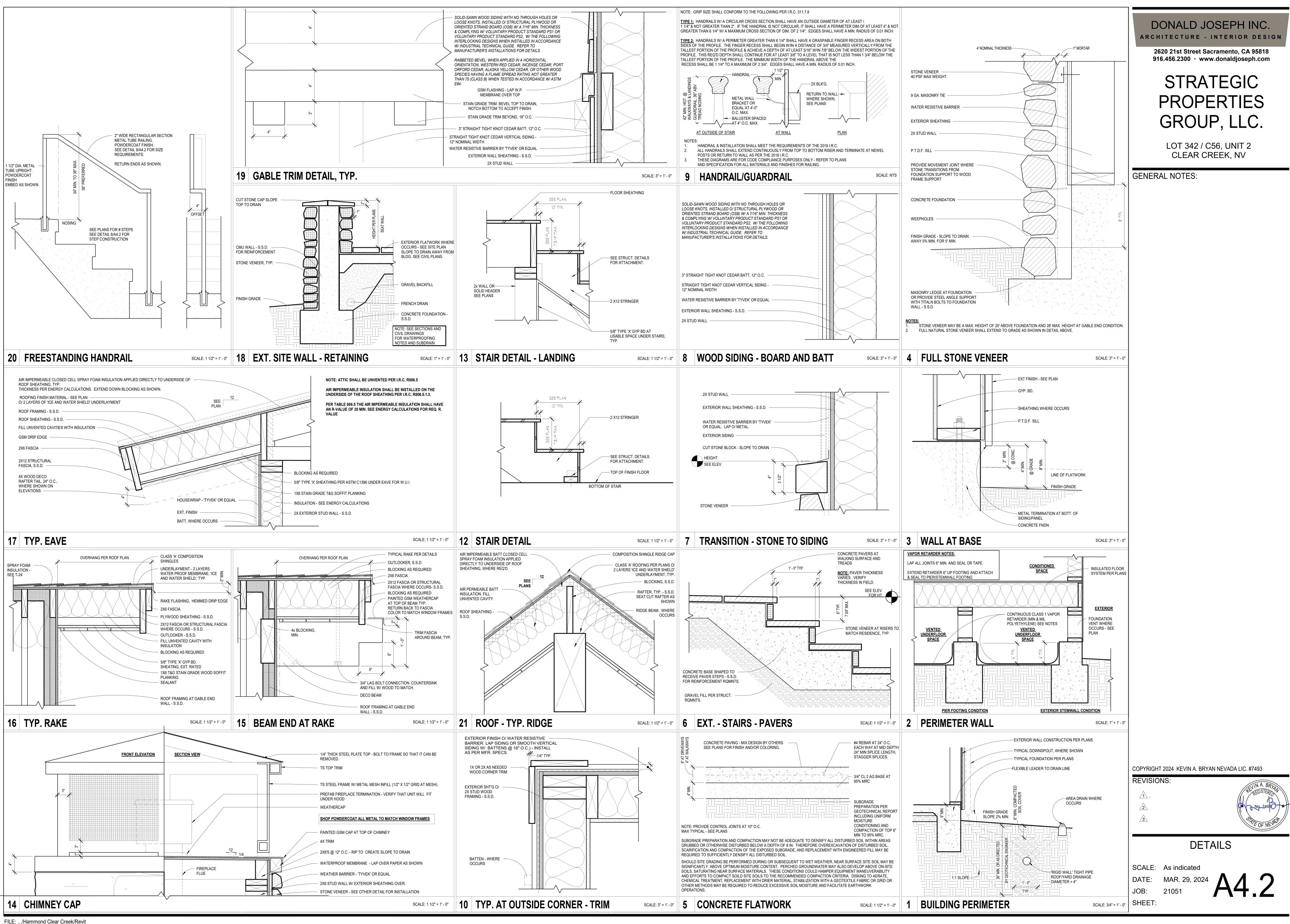
MAIN LEVEL 0' - 0"

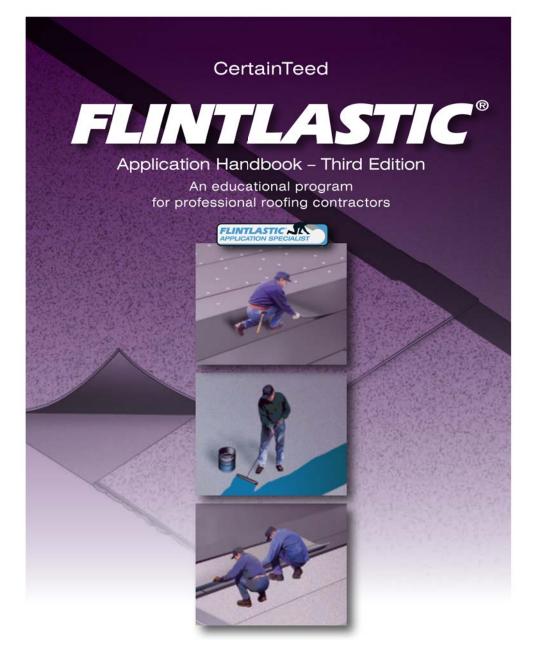
SCALE: 1/4" = 1'-0" DATE: MAR. 29, 2024 A3.5 JOB: 21051 SHEET:



SECTIONS







be either nuclear, capacitance or infrared. All wet roofing materials must be removed prior to any recover

Should the existing roof be used as a bonding substrate, the surface must be properly prepared for the application of the new roof or insulating layer. Loose and large gravel shall be removed; blisters and splits shall be repaired and existing flashings should be removed to create a clean bonding surface for new elements. Where the new roof is mechanically attached to the underlying substrate, withdrawal resistance testing should be carried out to confirm the attachment values for each fastening point. Testing should be carried out in compliance with ANSI/SPRI FX-1-2006 or TAS 105. Copies of the test protocols are available from CertainTeed Technical Services. Fastener values should meet or exceed 325 lbf or the fastener density should be increased. The test data shall be evaluated by the roof designer of record for the evaluation of the fastening pattern. CertainTeed Technical Services can provide test data for a wide variety of system to assist in the evaluation.

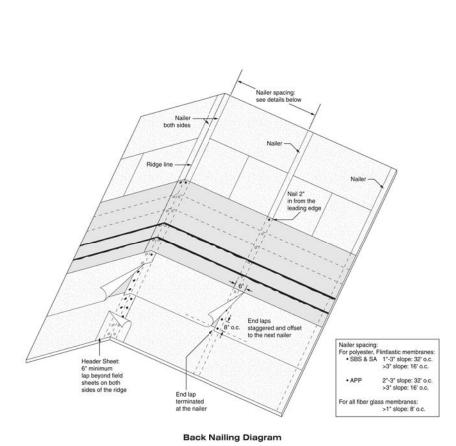
Areas of ponding shall be corrected prior to the installation of a recover roof. Fillers designed to fill low spots should be used to correct these conditions. For a list of available products, please contact CertainTeed Technical Services.

It is the responsibility of the designer of record, and/or building owner to determine whether an existing roof is structurally sound, firmly attached, dry and suitable for recover. CertainTeed Technical Services can provide additional warranty information for specific recover projects.

### Preparation and Field Conditions

The following requirements shall be used in conjunction with good roofing practices to qualify a new assembly for the NDL Limited Warranty or the Limited Product Warranty Program:

- 1. Deck shall be dry, structurally sound and suitable for the application of the roof assembly. 2. Parapet walls, perimeter edges, equipment and load bearing supports,
- platforms, curbs, etc., shall be structurally sound and suitable for the application of the flashings and terminations. 3. Existing roof assemblies should be evaluated to determine if additional
- expansion or control joints are needed. Visual observations of wall cracks, membrane splits and materials out of plane are indicators of such conditions. 4. The designer of record should evaluate combined live and dead loads to
- insure the recover roof assembly meet current code criteria and sound engineering practice.

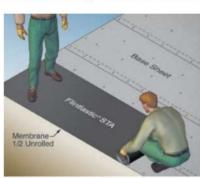


### **Basic Application: Flintlastic APP Modified Bitumen**

Prepare the substrate as described on page 10. Flintlastic APP modified bitumen must be applied using a professional roofer's torch. Use of hand-held roofing torches is recommended and affords the most control. If multiple burner torching machines are utilized care must be taken to assure uniform heat application and to avoid overheating of the membrane.

19

Begin membrane application by unrolling the roll and aligning the sidelaps. Re-roll the roll halfway. Standing on the unrolled portion to prevent shifting, begin torching the exposed polyethylene side of the rolled portion. Walk forward as you torch, pushing the heated coil forward and into place with your boot.



Position and align the rol

### Material Handling and Storage

• Store rolls upright on pallet in dry area. Store indoors in a ventilated area. • Keep rolls protected from exposure to heat, sun,

- cold and moisture. Do not double stack pallets.
- Do not store rolls on their sides. • Use care in the handling of the rolls. Do not overload the roof. Stagger the rolls across the roof. Avoid excessive weight in a concentrated
- area. Weather Precautions

### Do not attempt application if weather conditions and substrate are not drv.

Do not attempt application if ice, frost, moisture or snow is present. Rolls can be installed in cold weather if conditions are dry, the rolls have not been allowed to freeze and proper cold weather handling and storage procedures are followed. Store rolls in a heated area until just prior to use and do not proceed with installation if rolls have been allowed to freeze or weather conditions are unsuitable.

In extremely warm weather, use caution when walking on freshly installed material to avoid "tracking" warm asphalt; when torch applying smooth APP membrane in very warm weather the installer may want to utilize a roll puller and work from front side of the roll (as is the standard torch method for SBS membranes) to avoid tracking.

### **Roof Slope and Drainage**

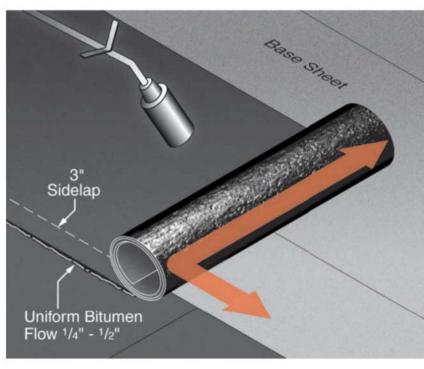
The roof surface that is to receive the roof membrane shall have slope to water collection devices. A drainage calculation determining the quantity of water that will fall on the roof and how it is to be taken off the roof is a part of good roof design. Model building codes and good roofing practice have established a minimum slope for roofs at 1/4":12 running inches. Codes also recognize the challenges to meet this criterion in reroofing of existing buildings. All roof areas shall be designed and installed to drain without holding water on the roof surface. Water collection on the roof surface can be detrimental to the roof membrane and may void an existing warranty. Water should not pond in drain sumps or any other collection area that is covered in roof membrane. Limited and minor areas of ponding may be accepted by CertainTeed under the terms of the warranty; however, sacrificial surfacing may be required to maintain the warranty.

5. Existing plywood decking shall have adequate bearing or support of end joints. In recover applications, remediation of the joints can only be achieved from the underside of the deck.

- 6. All recover roofs shall have positive drainage as defined on page 9. 7. Existing roof insulation shall be dry and firmly attached. Where existing insulation is found to have insufficient attachment, attachment of the
- existing system shall be enhanced. 8. Existing roof system shall be compatible with new roof system.
- 9. Existing membrane shall be dry and clean with all surface defects corrected.
- 10. Existing roof surfacing with 1/2" or larger aggregate surfacing shall be torn off or spudded to provide a smooth surface. Notwithstanding the gravel sizing, all loose gravel shall be swept from the existing roof surface.
- 11. Remove existing metal gravel stops and other termination flashings and replace with new metal to meet current code. Flashing metals shall be corrosion resistant and shall not be thinner than 24 ga.
- 12. Existing counterflashings, copings, dunnage protectors, protective caps and other flashing metals designed to protect the roof shall be replaced where unsuitable for reuse. New metals shall be corrosion resistant and shall not be less than 24 ga.
- 13. Remove all clamping rings from drains and clean to bare metal. Damaged drain components shall be discarded and replaced with new. When in good condition, clamping rings may be saved for reuse. All bolts shall be replaced with new, preferably formed from non-ferrous materials. Stripped bolt holes shall be drilled and tapped. All drains shall be fully secured to the deck with under deck clamps or other factory supplied clamping systems.
- 14. All abandoned and non-functioning equipment shall be removed. Any resulting deck opening shall be blocked and closed with appropriate decking.
- 15. Flashing heights shall be a minimum of 8" from the surface of the roof membrane. Where flashing terminations may be subjected to snow cover, the flashing shall be sealed. 16. Base and wall flashing shall be removed to create a sound surface for
- the installation of new flashings. 17. All roof penetrations require all new flashings in compliance with current CertainTeed detailing

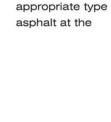
15

Proper torching procedure involves passing the torch flame in an "L" pattern across the coiled portion of the roll and up the sidelap area. As subsequent rolls are installed, heat is applied both to the roll and the exposed laps of the membrane being overlapped onto. As it is heated, the roll becomes shiny and the polyethylene film melts away. Adequate heat is confirmed when a uniform flow of melted bitumen compound flows evenly in a 1/4" -1/2" uniform bead that oozes from the applied membrane's edges. Be sure to heat the entire roll evenly, not just the lap areas, with extra concentration at the laps. Once at the end of the roll, re-roll the untorched half, pulling back to beyond the starting point as much as possible, and repeat the torching procedure.



Proper torching, in an "L" pattern, assures uniform 1/4" -1/2" compound and flow at laps and adequate heat across the coil Trim the lower outside corner of the roll at an angle as shown. Overlap subsequent rolls 3" at sidelaps (or as specified, min. 3") and 6" at endlaps. Sidelap lines are generally indicated for the applicators' convenience.

20



Primer

membrane.





Substrate Preparation All surfaces to which the Flintlastic modified bitumen is to be installed must be smooth, dry, free from dust or debris, free from settling or distortion, and free from cracks, knotholes, or other defects.

Concrete decks must be properly primed with suitable asphalt primer (meeting ASTM D-41) and the primer must be thoroughly dry. FlintPrime SA, water-based primer is recommended when installing self-adhering systems.

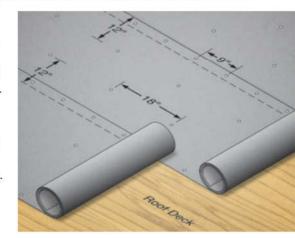
Metal flashings must also be primed with a suitable asphalt primer for metal, and primer must be thoroughly dry and any solvents evaporated prior to application of membrane flashing.

### **Base Sheet Application**

In new construction or re-roofing applications, an appropriate CertainTeed base sheet must be installed over the substrate. Unless otherwise specified, base sheet must be overlapped min. 4" at endlaps and 2" at sidelaps. For mechanical attachment of the base ply on insulated steel substrates, the base sheet at a minimum may be fastened with approved fasteners 12" o.c. on 4" side laps and 18" o.c. in two staggered rows in the field of the sheet 12" in from the edge.

For nailable substrates, base sheet must be mechanically fastened in accordance with NRCA standards (fasteners placed every 9" o.c. at

sidelaps and every 18" o.c. in two staggered rows in the field of the sheet; the two staggered rows are placed 12" from each sidelap). For non-nailable surfaces, spot mopping with hot asphalt at the minimum rate of one 12" circle every 24" o.c. in all directions, using



18. Equipment vibration shall be corrected.

19. Masonry surfaces above flashings shall be tuck-pointed and sealed. All horizontal masonry surfaces above the roof membrane shall be adequately protected from weather.

20. All pipes and condensation line supports shall be properly supported with factory supplied pipe supports or pressure treated woodblocking. All supports shall have a protection layer of not less than one layer of Flintlastic modified bitumen membrane. The support shall be designed to allow for pipe movement and shall not be secured through the roof

21. Condensation lines shall be formed from ultraviolet light resistant materials and shall terminate at drains or scuppers. Condensate shall not run on the roof surface.

22. The practice of installing only a part of a total roof assembly, known as phasing, can be harmful to the finished roof assembly. CertainTeed will not warrant phased applications.

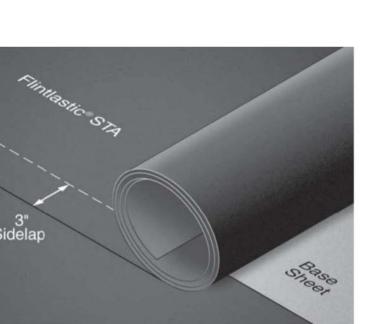
NOTE: Substrates with two or more existing membranes are not eligible for a CertainTeed Warranty. Extended warranties require new construction and/or complete tear-off.

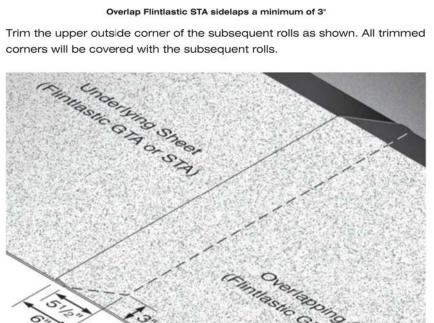
### Application Over an Existing Membrane

After preparing and priming the existing membrane surface spot mop with type III or type IV asphalt, forming 12" circles spaced 24" o.c., and install a Yosemite Venting Base Sheet with side laps of 2" and end laps of 6". Asphalt quantity shall be 15 lbs. per square, or greater, depending on the roughness of the existing membrane surface. Granules and grooves shall be facing down. Alternatively, mechanically attach a Yosemite Venting Base Sheet with minimum #12 diameter roofing fasteners and 3" stress plates to meet the design uplift criteria. At a minimum, mechanical attachment shall be placed 12" o.c. on a 3" lap and two staggered rows in the center of the sheet spaced 18" o.c.

Insulation shall be solid mopped to buffer sheet. Alternate base sheets may be approved on a jcb-by-job basis. Contact CertainTeed Technical Services with project data for consideration of alternate base sheets. Rigid insulation may be applied directly to an existing built-up membrane providing the surface has been properly prepared; there is adequate attachment of the existing roof assembly to resist design and/or code require loads and the deck has been adequately leveled to provide full adhesion of the maximum 4' x 4' insulation boards. An initial glaze coat of asphalt can fill minor variations in the deck surface and provide a more suitable surface for the application of rigid insulation board.

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Endlap cuts are made at an angle as shown

minimum rate of 15 lbs. per square, is the standard spot mopping method. Refer to www.roofnav.com for specific information regarding Factory Mutual requirements, which may differ per individual specification. Refer also to the "Hot Asphalt Application" section on page 30 of this booklet.

### Vapor Retarders

Refer to the General Recommendations Section of the CertainTeed Commercial Roof Systems manual for more information. Insulation

All insulations require the use of appropriate base sheet between the insulation and the new roof system. Insulations must be installed in accordance with CertainTeed's instructions, local code and Factory Mutual requirements.

In general, the following rigid board insulation types are acceptable for use under Flintlastic modified bitumen Roof Systems (consult CertainTeed for specific Factory Mutual requirements): Fiberglass or mineral wool

Conforming to ASTM C726 (CGSB 51.31M) Wood fiberboard

Conforming to ASTM C208 (CGSB 51.26M)

Perlite Conforming to ASTM C728

Extruded polystyrene\*

Conforming to ASTM C578-85-Type IV (CGSB SB-51.20M Type 2-Type 4)

Expanded polystyrene\* Conforming to ASTM C578, Min. 1.1 Density (CGSB 51.26M)

Polyisocyanurate Conforming to ASTM C1289 Type II.

Expanded polystyrene and extruded polystyrene insulations require a coverboard prior to installation of base sheet. Additionally, taping of insulation joints may be required. Refer to NRCA and CertainTeed requirements. CertainTeed self-adhered base sheets may be directly adhered to mechanically attached, fiber glass faced isocyanurate insulation such as FlintBoard ISO cold. Do not expose flammable or heat sensitive insulations to heat, solvents or flame. Multi-layer Insulation Applications

To reduce thermal stress to the roof membrane, multi-layer applications are strongly recommended. Joints in the insulation layers should be staggered a minimum of 6" and joints should be tightly butted. Where mechanical fasteners are used, only the base laver should be mechanically attached. Subsequent layers should be installed in asphalt or adhesive.

**Roof Relief Vents** 

If roof relief vents are deemed appropriate they should be of a suitable type with minimum 4" flange and weather resistant hood, spaced 20' from roof edge perimeter and every 40' o.c. thereafter.

### **Proper Tools**

To the professional roofer, the importance of proper tools is understood. However, here's a brief recap of the ideal tools for

- applying Flintlastic modified bitumen: • For torch applications, a U.L. listed torch designed specifically for the application of modified bitumen membrane with U.L. listed high-pressure hose, and U.L. listed regulator. Use an appropriate length field torch for applying
- the field roof membrane, and a "detail" torch for accomplishing flashing details. • Propane tank with pressure gauge.
- At least one ABC type fire extinguisher, fully charged (min. 20 lbs.) per each operating torch and the appropriate number of fire extinguishers at the kettle area if hot asphalt is used.
- For hot asphalt applications, appropriate asphalt heating, handling and application equipment. Mop size should be not less than 32 ounces. • For self-adhering applications, 18" wide, 2"- 4" diameter industrial steel roller for pressing membrane into place; long-handled (standing) roller
- with 1/8" -1/4" nap for applying primer (1/8" nap for smooth surfaces, 1/4" nap for more porous surfaces); caulk gun for applying beads of FlintBond adhesive; hand-held hot air welding gun such as the Leister Triac™ (110 volt power required) or Primus Sievert PNS-4™ Hot Air Kit; seam probing tool to check for small voids. • A roofer's hooked blade knife (the hooked blade is ideal for cutting the
- membrane). · A roofer's trowel with beveled edges and rounded tip (allows smoothing
- of details without cutting or marking the membrane); trowels that allow adequate room between the roofer's gloved fingers and the warm membrane are the best.

· Long pants and long sleeved shirts.



**Proper Attire** 

Metal Edge Detail - Mineral Surfaced Applications Base sheet must extend over fascia a min. of 2". A min. 9" wide strip of flashing membrane (Flintlastic APP modified bitumen) should then be

applied to the base sheet, flush with the roof edge and extending 9" onto the field of the roof.

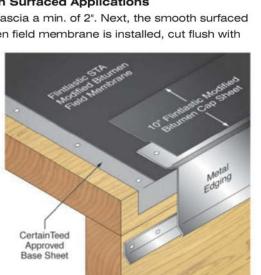
(min. 26 gauge, primed) must be properly installed and secured (in two rows, spaced every 6" staggered, fasteners placed every 3"). Finally the mineral surfaced Flintlastic APP modified bitumen cap sheet is installed securely over the 4" edge metal face (continuous from the field of the roof).



Metal edge details, Flintlastic GTA granule surfaced APP Modified Bitumen Membrane

Metal Edge Detail - Smooth Surfaced Applications Base sheet must extend over fascia a min. of 2". Next, the smooth surfaced Flintlastic APP modified bitumen field membrane is installed, cut flush with

the roof edge. Appropriate edge metal (min. 26 gauge, primed) must be properly installed and secured. A min. 10" wide strip of Flintlastic APP modified bitumen smooth surfaced membrane should then be applied over the metal (flush to the roof edge and extending a min. of 6" onto the field of the roof past the portion of the metal which rests on the field membrane).



Metal edge detail, Flintlastic STA smooth surfaced APP Modified Bitumen Membrane

The insulation or coverboard surface used for the installation of membrane shall be planar and free from debris. Any gaps shall be corrected prior to application of membrane. No insulation or coverboard panels should be less than 12" square when adhered or 24" square when mechanically attached.

### **Mechanical Attachment**

with sufficient fasteners and stress plates to meet the uplift requirements for the project. Fastener density shall be increased at perimeters and corners as required by code and the project requirements. At a minimum, fastener density shall be increased by 50% at the perimeters and 100% at the corners, providing there is no parapet with a height less than 36". Fasteners shall penetrate the top flange of the deck a minimum of 3/4". To ensure securement to the deck, fasteners shall be sized to penetrate the bottom flute by 3/4". Fasteners shall be fully seated but shall not be overdriven to damage the insulation or coverboard surface. Fasteners and stress plates shall be installed in compliance with the recommendations of both the fastener and insulation manufacturers. Where holes must be predrilled, such as gypsum and concrete, deck debris must be cleaned from the insulation surface prior to application of the roofing membrane. When projects are insured by or specified under the requirements of FM Global the requirements under the relevant RoofNav number and the related Loss Prevention Data Sheet shall be followed. For more information, visit www.roofnav.fmglobal.com/. CertanTeed provides a complete line of FlintBoard roof insulations and reserves the right to accept or reject another manufacturer's insulation as an acceptable substrate for attachment of a CertainTeed Commercial Roof System. CertainTeed Corp. does not warrant performance of another manufacturer's insulation unless such approval is granted in writing by CertainTeed in advance of installation.

### **Recover Considerations**

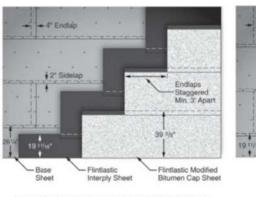
A recover is the application of a new roof over an existing roof. If a roof installation is a recover, the existing roof assembly must be a suitable substrate for the application. Most codes limit recovers to one additional roof. An evaluation of the combined live and dead loads should be carried out by a structural engineer prior to any application over an existing roof. Loading requirements may have changed since the original roof application increasing the live load requirements due to historical snow loading data. The existing roof should be evaluated for moisture and for adhesion to the underlying substrate. Adhesion can be evaluation with either a vacuum test or bonded pull test as detailed in the FM Global Loss Prevention Data Sheet 1-52 or the vacuum test detailed in the ASTM E 907<sup>1</sup>. Moisture analysis can ASTM E 907: Standard Test Method for Field Uplift Resistance of Adhered Membrane Roofing Systems

· Leather work shoes with synthetic or smooth leather soles. · Leather work gloves that adequately shield the wrist area. Refer also to the "Safety" section on page 53 for information regarding proper work attire.

### Roof Layout

As with most types of roof installations, Flintlastic modified bitumen roof installation begins at the low point of the roof with successive rolls installed so that no laps are against the flow of water. When membrane is applied with hot asphalt, where roof slope is 1" per foot or less, sidelaps are installed perpendicular to the direction of the roof slope. In situations where the roof slope exceeds 1" per foot, rolls are installed with the sidelaps running parallel to the slope direction. APP modified membranes can be installed with sidelaps perpendicular to the slope where roof slope is 2" per foot or less (over 2" install sidelaps parallel to roof slope direction). Additionally, where roof slope exceeds 1" per foot for SBS modified and self-adhering membranes or 2" per foot for APP modified "back-nailing" of membrane is required. Refer to the General Recommendations section of the CertainTeed Commercial Roof Systems Manual for back-nailing guide ines.

Endlaps are to be staggered. In multi-ply applications, membrane sidelaps must also be staggered.



In multi-ply systems, stagger sidelaps from interply and base sheet sidelaps Warning: Flintlastic Modified Bitumen application may require the use of hot asphalt and/or an open flame roofing torch. Improper application

practices may cause physical injury to the applicator or damage to the property. Refer to the current CertainTeed Commercial Roof Systems Manual for further information.

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