Community Services Department

Planning and Building

SPECIAL USE PERMIT (see page 7)

SPECIAL USE PERMIT FOR GRADING
(see page 9)

SPECIAL USE PERMIT FOR STABLES (see page 12)

APPLICATION



Community Services Department Planning and Building 1001 E. Ninth St., Bldg. A Reno, NV 89512-2845

Telephone: 775.328.6100

Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Building staff at 775.328.6100.

Project Information St		Staff Assigned Case No.:	
Project Name: Vater	Detached	Accessory Dw	elling
Project Single story, w Description:	ood framed, deta	ched accessory dwelling.	
Project Address: 505 E 1st Av	ve, Sun Valley NV 894	433	
Project Area (acres or square fe	eet): 768		
Project Location (with point of r	eference to major cross	streets AND area locator):	
west corner lot	on e1st Av	e and Oetting	
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
085-182-08	0.35		
Indicate any previous Wash Case No.(s).	oe County approval	s associated with this applica	tion:
Applicant In	formation (attach	additional sheets if neces	sary)
Property Owner:		Professional Consultant:	
Name:Ben Vater		Name: Ben Vater	
Address: 505 e 1st Ave		Address: 505 E 1st Ave	
Sun Valley	Zip: 89433	Sun Valley	Zip: 89433
Phone: 408 710 2903	Fax:	Phone: 4087102903	Fax:
Email: ben.vater.bv@gmail.com		Email: ben.vater.bv@gmail,com	
Cell:	Other:	Cell:	Other:
Contact Person: Ben Vater		Contact Person:	
Applicant/Developer:		Other Persons to be Contacted:	
Name: Ben Vater		Name:	
Address: 505 e 1st Ave		Address:	
Sun Valley	Zip: 89433		Zip:
Phone: 408 710 2903	Fax:	Phone:	Fax:
Email: ben.vater.bv@gmail.co	om	Email:	
Cell:	Other:	Cell:	Other:
Contact Person: Ben		Contact Person:	
	For Office	Use Only	
Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

Property Owner Affidavit

Applicant Name: Benjamín Vater	
The receipt of this application at the time of submittal does not guarantee the application comprequirements of the Washoe County Development Code, the Washoe County Master Fapplicable area plan, the applicable regulatory zoning, or that the application is deemed complete processed.	lan or the
STATE OF NEVADA)	
COUNTY OF WASHOE)	
1. Benjamin Voter	
(please print name)	,
being duly sworn, depose and say that I am the owner* of the property or properties involved application as listed below and that the foregoing statements and answers herein contain information herewith submitted are in all respects complete, true, and correct to the best of my and belief. I understand that no assurance or guarantee can be given by members of P Building. (A separate Affidavit must be provided by each property owner named in the title re-	ed and the knowledge anning and
Assessor Parcel Number(s): 085-182-08	• /
· · · · · · · · · · · · · · · · · · ·	-
Printed Name Ben Jamin Vate	
Printed Name Benjamin Vate Signed RV W	
Address 505 E 15+ AV	•
Sun Valley, NV, 8i4	3)
Subscribed and sworn to before me this	
Notary Public in and for said county and state My commission expires: January 25, 2024 S. VAMPOLA Notary Public, State of Nevada Appointment No. 16-1967-2 My Appt. Expires Jan 25, 2024	
*Owner refers to the following: (Please mark appropriate box.)	
■ Owner	
☐ Corporate Officer/Partner (Provide copy of record document indicating authority to sig	n.)
☐ Power of Attorney (Provide copy of Power of Attorney.)	
Owner Agent (Provide notarized letter from property owner giving legal authority to ag	ent.)
☐ Property Agent (Provide copy of record document indicating authority to sign.)	
Letter from Government Agency with Stewardship	

Special Use Permit Application Supplemental Information

(All required information may be separately attached)

1. What is the project being requested?

	Detached accessory dwelling.
2.	Provide a site plan with all existing and proposed structures (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.)
	Please see attached.
3.	What is the intended phasing schedule for the construction and completion of the project?
	intended start date 8-1-22 intended finish date 8-1-23
4.	What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?
	The property has ample room to handle an additional structure with out being too crowded. The property is a corner lot so an additional driveway is convenient and will not look out of place.
5.	What are the anticipated beneficial aspects or affects your project will have on adjacent properties and the community?
	This project will benefit the adjacent properties by encouraging stick built construction as opposed to manufactured construction.

6. What are the anticipated negative impacts or affect your project will have on adjacent properties? How will you mitigate these impacts?

I do not foresee any major negative impacts on adjacent properties. There will be small increase in traffic in the neighborhood. However, I don't see this as a major dilemma.

7. Provide specific information on landscaping, parking, type of signs and lighting, and all other code requirements pertinent to the type of use being purposed. Show and indicate these requirements on submitted drawings with the application.

Please see attached plans

8.	Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to
	the area subject to the special use permit request? (If so, please attach a copy.)

□ Voo	■ No
u res	■ INO

9. Utilities:

a. Sewer Service	Washoe County Utilities	
b. Electrical Service	NV energy	
c. Telephone Service	Charter	
d. LPG or Natural Gas Service	NV energy	
e. Solid Waste Disposal Service	Waste Managment	
f. Cable Television Service	Charter	
g. Water Service	TMWA	

For most uses, Washoe County Code, Chapter 110, Article 422, Water and Sewer Resource Requirements, requires the dedication of water rights to Washoe County. Please indicate the type and quantity of water rights you have available should dedication be required.

h. Permit#	acre-feet per year
i. Certificate #	acre-feet per year
j. Surface Claim #	acre-feet per year
k. Other #	acre-feet per year

Title of those rights (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources).

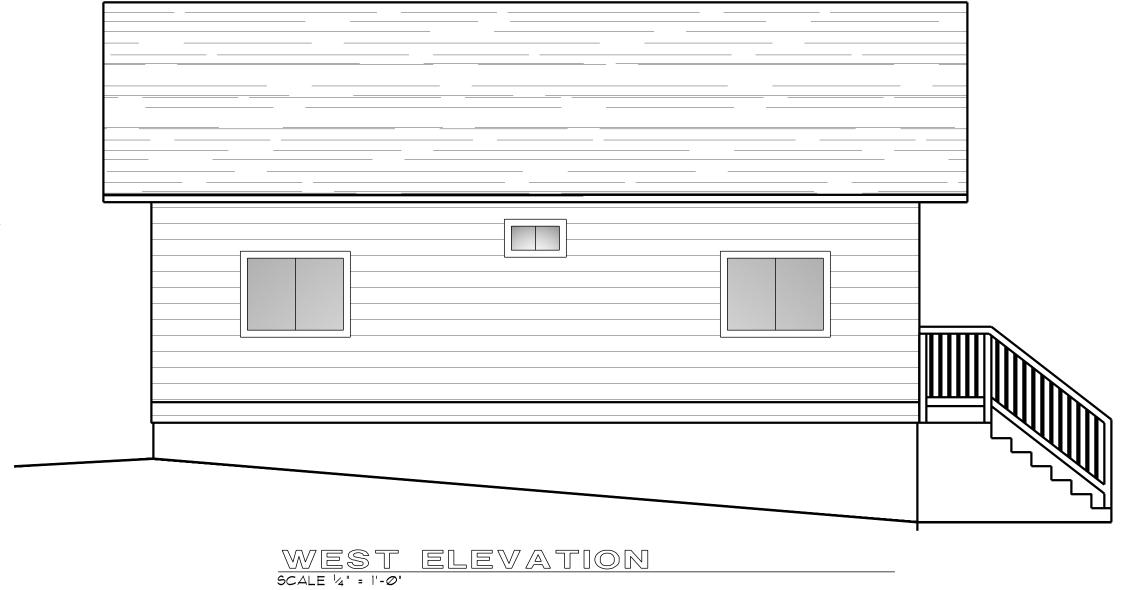
10. Community Services (provided and nearest facility):

a. Fire Station	Reno Fire Department, 110 Quartz Ln, Sun Valley, NV 89433	
b. Health Care Facility	Renown Regional Medical Center, 1155 Mill St, Reno, NV 89502	
c. Elementary School	Sun Valley Elementary, 5490 Leon Dr, Sun Valley, NV 89433	
d. Middle School	Fred Tanner middle school, 1700 Carville Dr, Reno, NV 89512	
e. High School	Procter R Hug High School, 2880 Sutro St, Reno, NV 89512	
f. Parks	Sun Valley Community Park, 115 W 6th Ave, Sun Valley, NV 89433	
g. Library	North Valleys Library, 1075 N Hills Blvd, Reno, NV 89506	
h. Citifare Bus Stop	Sun Valley Boulevard and E 1st Avenue	

What	are the planned hours of operation?
impro	improvements (e.g. new structures including the square footage, roadway/driverbyements, utilities, sanitation, water supply, drainage, parking, signs, etc.) will have to tructed or installed and what is the projected time frame for the completion of each?
What	is the intended phasing schedule for the construction and completion of the project?
impad The	physical characteristics of your location and/or premises are especially suited to deal with cts and the intensity of your proposed use? property has ample room to handle an additional structure with out being too crowder property is a corner lot so an additional driveway is convenient and will not look out of
	e. are the anticipated beneficial aspects or affects your project will have on adjacent proper he community?
groun	are the adverse impacts upon the surrounding community (including traffic, noise, odors, ondwater contamination, flies, rats, mice, etc.) and what will you do to minimize the anticipative impacts or effects your project will have on adjacent properties?
	se describe operational parameters and/or voluntary conditions of approval to be imposed on nistrative permit to address community impacts.

Vater Jetached Accessory Dwelling

505 Eist Ave Sun Valley, Nv.



GENERAL NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL JOB SITE REQUIREMENTS AND FOR COORDINATION OF ARCHITECTURAL DRAWINGS.

- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESIDENTIAL DESIGNER OF ANY DISCREPANCIES, ERRORS, OMISSIONS OR OTHER QUESTIONS RELATING TO THE CONSTRUCTION DOCUMENTS. DO NOT PROCEED WITH THE WORK UNTIL THE INTENT OF THE DOCUMENTS IS
- THE CONTRACT DOCUMENTS ARE COMPLEMENTARY, WORK REQUIRED TO BE DONE BY ONE DOCUMENT AND NOT BY OTHERS SHALL BE DONE AS IF REQUIRED BY ALL.
- CONTRACTORS AND SUBCONTRACTORS SHALL ENSURE THAT ALL WORK IS PERFORMED IN A PROFESSIONAL AND WORKMANLIKE MANNER BY SKILLED MECHANICS OF THE TRADE. SUBCONTRACTORS AND SUPPLIERS ARE HEREBY NOTIFIED THAT THEY ARE TO CONFER AND COOPERATE FULLY WITH EACH OTHER DURING THE COURSE OF CONSTRUCTION TO DETERMINE THE EXACT EXTENT AND OVERLAP OF EACH OTHER'S WORK AND TO SUCCESSFULLY COMPLETE THE EXECUTION OF THE WORK IN A
- CONTRACTOR AND SUBCONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES SEQUENCES AND PROCEDURES, AND FOR THE SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE RESIDENTIAL DESIGNER SHALL NOT BE RESPONSIBLE FOR JOB SITE CONDITIONS OR COMPLIANCE WITH SAFETY REGULATIONS GOVERNING WORK PERFORMED ON THIS PROJECT. ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK ON, OR RELATED TO THESE PLANS, SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED - AND SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR, AND WITH ANY AND ALL OTHER APPLICABLE STATE AND LOCAL SAFETY REGULATIONS. THE CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE SAFETY CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT AND THAT THIS REQUIREMENT SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER AND THE RESIDENTIAL DESIGNER FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
- CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, ADEQUACY AND SAFETY OF ERECTION, BRACING, SHORING, TEMPORARY SUPPORTS, ETC. OF THE WORK AND SHALL BE RESPONSIBLE FOR ANY DAMAGES TO THE WORK PRIOR TO THE APPLICATION AND INSTALLATION OF ALL SHEAR WALLS, ROOF AND FLOOR DIAPHRAGMS, AND FINISH MATERIALS. THE STRUCTURE IS NOT DESIGNED AS A STABLE UNIT UNTIL AFTER ALL COMPONENTS ARE IN PLACE, AND THEREFORE THE CONTRACTOR SHALL PROVIDE ALL SHORING AND BRACING NECESSARY TO ENSURE THE STABILITY OF ANY AND ALL PARTS OF THE PROJECT DURING CONSTRUCTION.
- CONTRACTOR AND SUBCONTRACTOR SHALL MAINTAIN THE PREMISES, CLEAN AND FREE OF ALL TRASH AND DEBRIS, AND SHALL PROTECT ALL ADJACENT WORK FROM DAMAGE, SOILING, AND PAINT OVERSPRAY.
- BUILDER'S SET: THIS SET OF DRAWINGS HAS BEEN PREPARED SUFFICIENT TO OBTAIN A BUILDING PERMIT. ALL MATERIALS AND METHODS OF CONSTRUCTION NECESSARY TO COMPLETE THE PROJECT ARE NOT NECESSARILY DESCRIBED IN THIS "BUILDER'S SET". THE IMPLEMENTATION OF THE DRAWINGS REQUIRES THE CONTRACTOR TO BE THOROUGHLY KNOWLEDGEABLE WITH THE APPLICATION CODES AND METHODS OF CONSTRUCTION SPECIFIC TO THIS PROJECT AND TYPE OF CONSTRUCTION.
- THE CONTRACTOR AND SUBCONTRACTORS SHALL MAKE NO STRUCTURAL SUBSTITUTIONS, CHANGES OR MODIFICATIONS WITHOUT WRITTEN APPROVAL OF STRUCTURAL ENGINEER.
- Ø. UNLESS SPECIFICALLY SHOWN OR NOTED ON THE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED, BORED, OR OTHERWISE WEAKENED WITHOUT THE PERMISSION OF THE STRUCTURAL ENGINEER.
- CODE COMPLIANCE A. ALL WORK FOR THIS PROJECT SHALL COMPLY WITH THE CODES LISTED UNDER THE BASIS OF DESIGN, MUNICIPAL CODES AND OTHER CODES AND ORDINANCES AS CURRENTLY ADOPTED AND AMENDED BY AGENCIES HAVING JURISDICTION OVER THE

BASIS OF DESIGN

BUILDING CODE:

2018 INTERNATIONAL BUILDING CODE - "IBC"

2018 INTERNATIONAL RESIDENTIAL CODE - "IRC"

2018 INTERNATIONAL ENERGY CONSERVATION CODE - "IECC"

2017 NATIONAL ELECTRICAL CODE - "NEC"

2018 NORTHERN NEVADA CODE AMENDMENTS BY THE NNCICO

ALL OTHER CODES AND ORDANANCES AS CURRENTLY ADOPTED AND AMENDED BY AGENCIES HAVING JURISDICTION OVER THE PROJECT

PROJECT INFORMATION

SCOPE OF WORK:

A NEW DETACHED I-STORY STRUCTURE TO BE BUILT W/ 2×4 EXTERIOR WOOD STUD WALLS, TRUSSED ROOF, PRE-MANUF. FLOOR JOISTS, CONCRETE STEMWALL FOUNDATION. CORRUGATED METAL TO MATCH (E) AND SIDING TO

ADDRESS:

505 E IST AVE, SUN VALLEY NV

085-182-08

ZONING:

FLOOD ZONE

NUMBER OF STORIES: ONE

PARCEL AREA:

Ø.35 ACRES

1,568 S.F.

768 S.F.

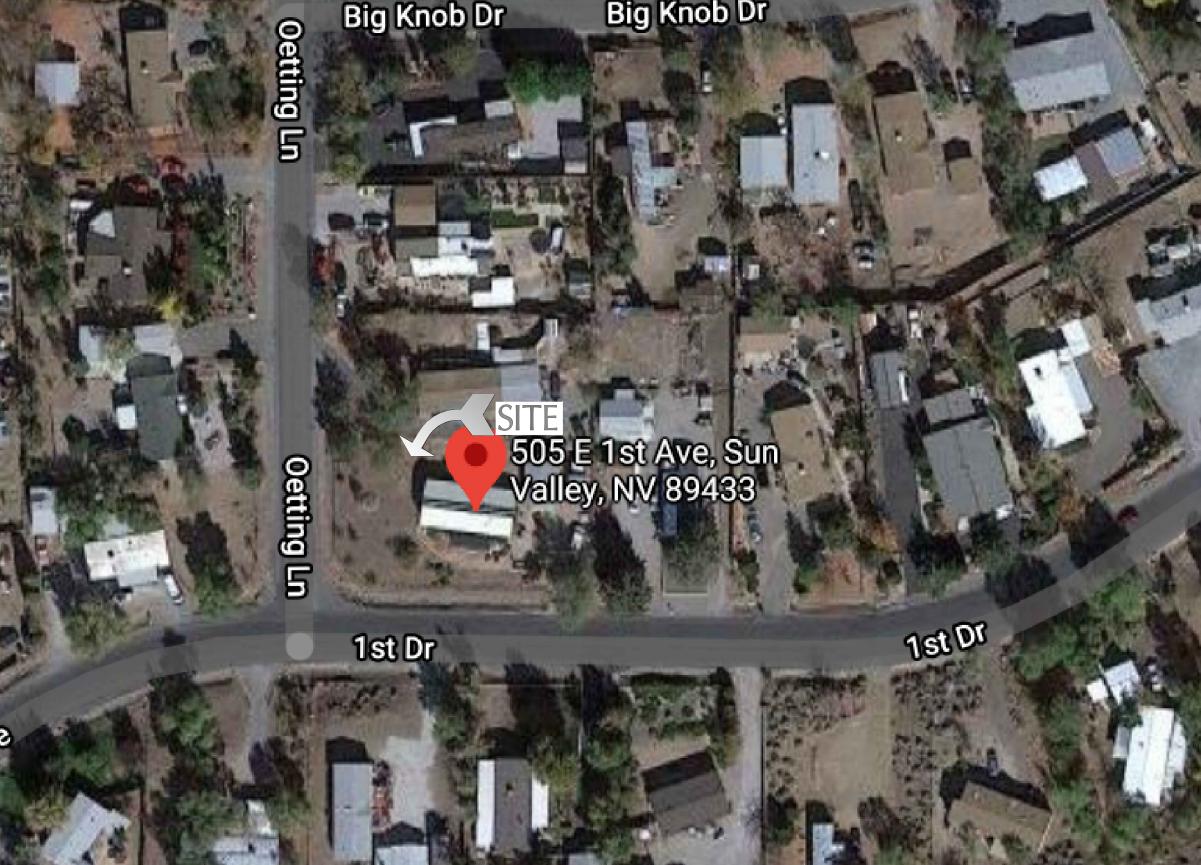
AREA TABULATIONS:

(E) RESIDENCE:

(N) DETACHED STRUCTURE

VICINITY MAP

SYMBOL LEGEND



KEY NOTE NUMBER

/X REVISION SYMBOL

DRAWING INDEX

ARCHITECTURAL

COVER SHEET, PROJECT DATA, BASIS OF DESIGN, VICINITY MAP, SYMBOL LEGEND

SITE PLAN

ELEVATIONS

SECTION & DETAILS

STRUCTURAL

FOUNDATION PLAN, SHEAR-WALL PLAN, ROOF FRAMING PLAN

STRUCTURAL NOTES AND SCHEDULES

STRUCTURAL DETAILS

SD-3 STRUCTURAL DETAILS

DIRECTORY

OWNER

BENJAMIN VATER 505 E IST AVE. SUN

BENJAMIN VATER PE K2 ENGINEERING 860 MAESTRO DR., STE. A RENO, NV 89511 P: (775) 355-0505 F: (775) 355-*0*566 WWW.K2ENG.NET

VALLEY, NEVADA 89433

ENGINEER

Reno, NV 89511 P: (775) 355-0505 F: (775) 355-0566 www.K2eng.net

Brandt T. Kennedy, P.E. Jared A. Krupa, P.E.

Revisions

Checked 22-BWV Project No.

Cover Sheet

ALL IMPROVEMENTS WITHIN THE CITY OF RENO RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST CITY OF RENO CODES AND THE LATEST STANDARD SPECIFICATIONS AND DETAILS.

A STREET EXCAVATION AND ENCROACHMENT PERMIT IS REQUIRED FOR ANY WORK TO BE PERFORMED WITH THE CITY OF RENO RIGHT-OF-WAY.

CITY OF RENO ENGINEERING (115-334-2063)
MUST APPROVE THE NEW DRIVEWAY
APPROACH INSTALLATION PRIOR TO PERMIT
FINAL/CERTIFCATE OF OCCUPANCY.

GRADES AND TOPOGRAPHY ARE FOR REFERENCE ONLY. CONTRACTOR TO COORDINATE AND VERIFY AND ADJUST AS REQUIRED ALL F.F. ELEVATIONS TO ENSURE THAT POSITIVE DRAINAGE WILL BE PROVIDED AT THE NEW STRUCTURE, AND WATER WILL BE MITIGATED AWAY FROM STRUCTURE AND ON TO RIGHT OF WAY.

GENERAL SITE NOTES

- I. ALL WORK MUST CONFORM W/LOCAL BUILDING CODES, CITY, COUNTY AND STATE ORDINANCES, SUBDIVISION REGULATIONS AND THE INTERNATIONAL BUILDING CODE, INTERNATIONAL RESIDENTIAL CODE, UNIFORM MECHANICAL CODE, UNIFORM PLUMBING CODE, INTERNATIONAL ENERGY CONSERVATION CODE (2018 EDITIONS) AND THE 2017 NATIONAL ELECTRICAL CODE.
- 2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING AND PROPOSED GRADES, UTILITIES, AND DIMENSIONS PRIOR TO THE START OF CONSTRUCTION.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND COORDINATING ALL SERVICE REQUIREMENTS WITH THE APPROPRIATE PUBLIC AGENCY OR UTILITY PROVIDER. CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH ALL APPLICABLE CODES AND REQUIREMENTS.
- 4. PLACEMENT OF STRUCTURE WITHIN SETBACKS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, NOTIFY OWNER OF ANY DISCREPANCIES.
- 5. CONC. FLATWORK TO BE FINISHED PER OWNERS REQUIREMENTS.
- 6. SLOPE LAWN AREAS FOR DRAINAGE MIN. 1/4" PER 1'-0".
- 1. MAINTAIN EXISTING DRAINAGE WITH 5% (2% MIN.) SLOPE AWAY FROM PROPOSED STRUCTURE FOR A MINIMUM OF 10' AND DRAINAGE SWALE 2'-6" MIN. IN FROM PROPERTY LINES AS REQUIRED TO PREVENT DRAINAGE ONTO ADJACENT PRIVATE PROPERTY. MINIMUM SLOPE OF DRAINAGE SWALE SHALL BE 1%.
- 8. THIS SITE IS LOCATED IN FEMA FLOOD ZONE X WHICH IS DETERMINED TO BE OUTSIDE OF THE 100 YEAR FLOOD PLAIN. BOUNDARY OF THE 100-YEAR FLOOD PLAN IS NOT WITHIN 100 FEET OF PROPERTY.
- 9. THIS SITE IS SERVICED BY MUNICIPAL WATER AND MUNICIPAL SEWER.
- 10. THE DESIGN FOR THIS SITE HAS BEEN BASED ON THE BEST AVAILABLE INFORMATION. ALL ASSUMED EXISTING AND PROPOSED INFORMATION SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ALL PARTIES SHOULD ANTICIPATE THE POTENTIAL NEED FOR MODIFICATIONS TO THE INITIAL DESIGN IN ORDER TO ACCOMMODATE ACTUAL FIELD CONDITIONS. ALL DISCREPANCIES DISCOVERED IN THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 11. NEITHER A TOPOGRAPHICAL OR BOUNDARY SURVEY WAS PERFORMED FOR THIS SITE. THE TOPOGRAPHY SHOWN IS FROM THE WASHOE COUNTY GIS WEBSITE AND THE BOUNDARY SHOWN IS BASED ON RECORD INFORMATION. IT IS RECOMMENDED THAT PRIOR TO CONSTRUCTION A FULL SURVEY IS PERFORMED IN ORDER TO ACCURATELY PLACE THE IMPROVEMENTS.
- 12. SHOULD ANY PREHISTORIC OR HISTORIC REMAINS/ARTIFACTS BE DISCOVERED DURING SITE DEVELOPMENT, WORK SHALL TEMPORARILY BE HALTED AT THE SPECIFIC SITE AND THE STATE HISTORIC PRESERVATION OFFICE OF THE DEPARTMENT OF MUSEUMS, LIBRARY AND ARTS, SHALL BE NOTIFIED TO RECORD AND PHOTOGRAPH THE SITE. THE PERIOD OF TEMPORARY DELAY SHALL BE LIMITED TO A MAXIMUM OF TWO (2) WORKING DAYS FROM THE DATE OF NOTIFICATION.
- 13. THERE ARE NO WATERCOURSES WITHIN 100' OF PROPERTY.

EARTHWORK ANALYSIS

SITE AREA	Ø.138 ACRES
SITE DISTURBANCE	0.04 ACRES
PROPOSED CUT	0.00 YD3
PROPOSED FILL	0.00 YD3
NET EARTHWORK	0.00 YD3 CUT

THESE QUANTITIES ARE FOR PERMITTING PURPOSES ONLY AND DO NOT ACCOUNT FOR ANY OVER EXCAVATION, SHRINKAGE OR EXPANSION OF MATERIALS. THE CONTRACTOR SHALL REVIEW THE GEOTECHNICAL INVESTIGATION IF AVAILABLE AND PERFORM AN INDEPENDENT EARTHWORK ANALYSIS FOR CONSTRUCTION PURPOSES.

. NET EARTHWORK TO BE DISPERSED EVENLY WITHIN THIS PROPERTY.

3. RESEED DISTURBED AREAS WITH NATIVE SEED MIX AND/OR VEGETATION.

ENGINEERING
AND STRUCTURAL DESIGN

860 Maestro Dr., Ste. A Reno, NV 89511 P: (775) 355-0505 F: (775) 355-0566 www.K2eng.net

> ey, Nevada 89433

Valley, I

 $\sum_{\text{V ann V}}$

Accesso

etached

305E 1st Ave

505E A.P.

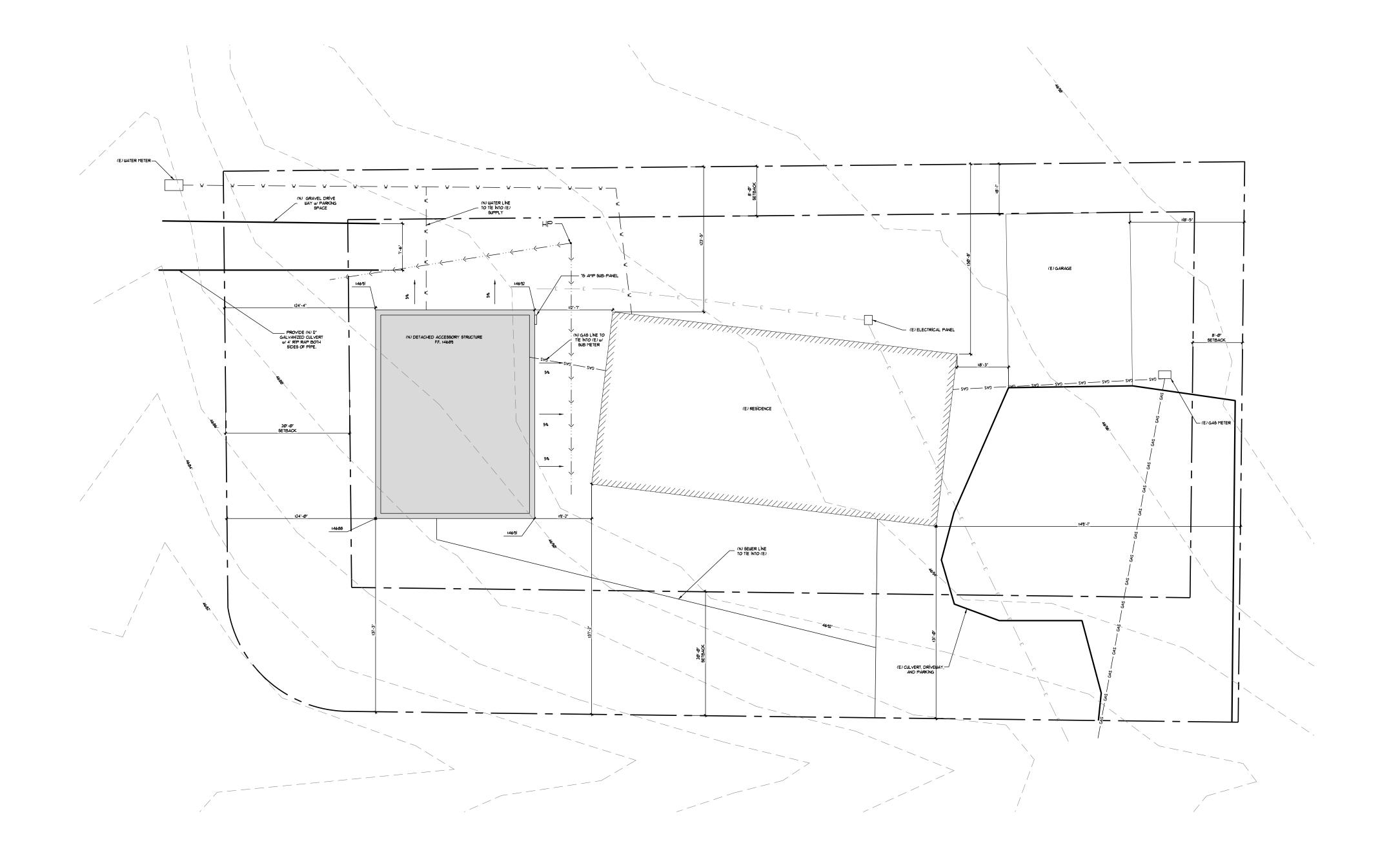
Brandt T. Kennedy, P.E. Jared A. Krupa, P.E.

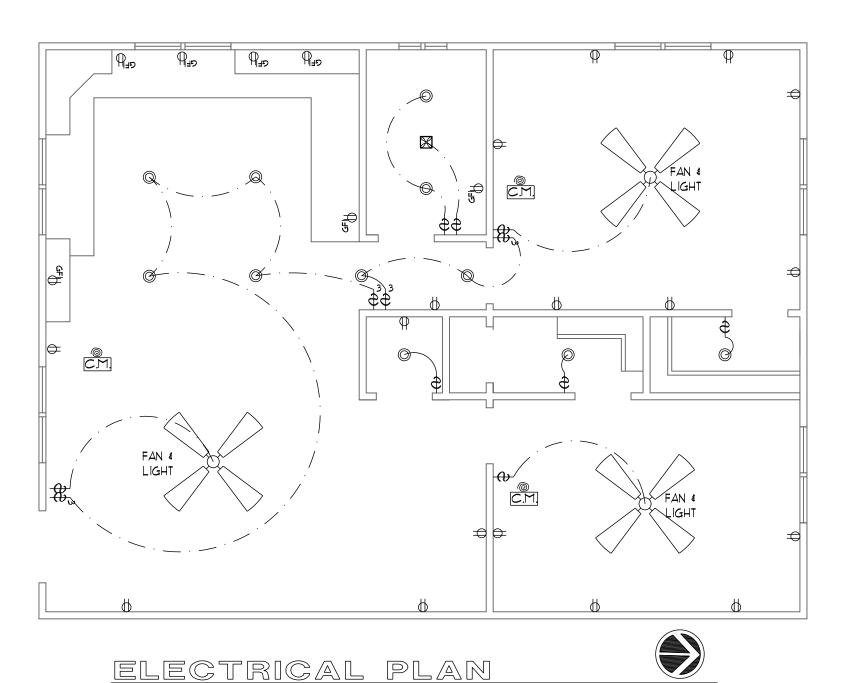
Revisions

Date1-29-22DrawnBWVCheckedBWVProject No.22-BWV

Site Plan





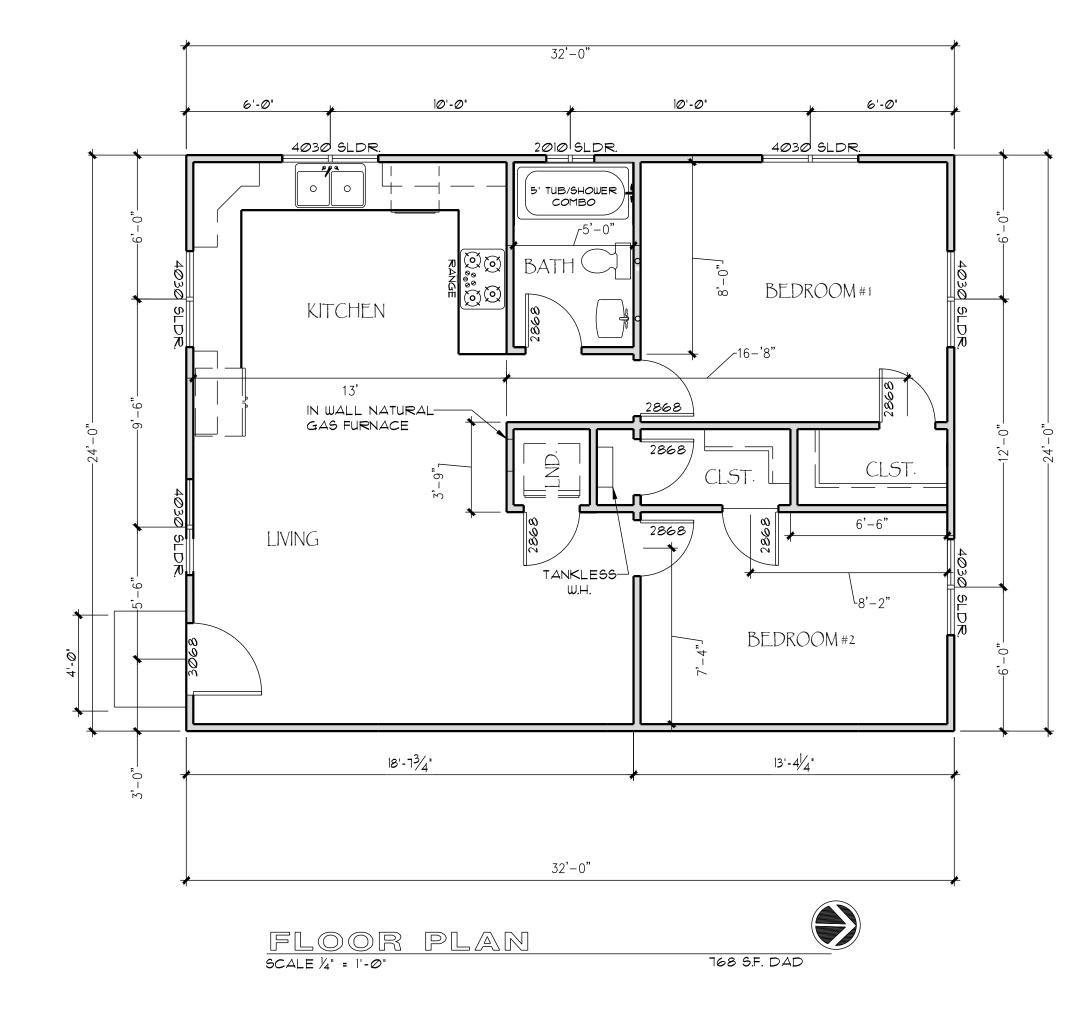


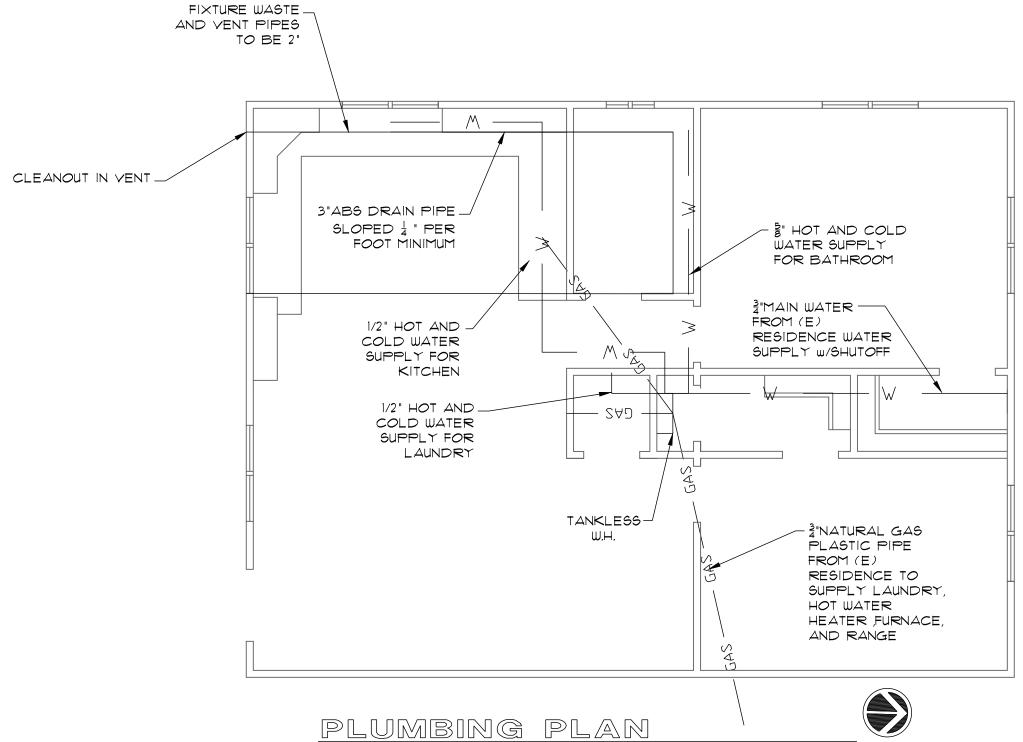
SCALE 1/4" = 1'-0"

ELECTRICAL LEGEND 120 VOLT GFI WALL OUTLET 220 VOLT GFI WALL OUTLET WALL SWITCH - +52" U.N.O. 3-WAY WALL SWITCH - +52" U.N.O. \bigcirc RECESSED LIGHT SMOKE/CARBON MONOXIDE DETECTOR CARBON MONOXIDE DETECTOR WALL MOUNTED \Diamond LIGHT FIXTURE CEILING MOUNTED $\dot{\phi}$ LIGHT FIXTURE EXHAUST FAN / LIGHT COMBO INCANDESCENT 000 3-LIGHT BATH BAR LIGHT T.V. CABLE OUTLET |=====|| 2 LAMP FLUORESCENT ===== = LIGHT FAN & LIGHT COMBO GARAGE DOOR OUTLET \ ELECTRICAL CIRCUIT

ELECTRICAL PLAN NOTES

- I. ALL ELECTRICAL INSTALLATION SHALL COMPLY W/ THE 2017 NATIONAL ELECTRICAL & LOCAL
- 2. ALL PLUG SPACING PER 2017 N.E.C. TYP.
- 3. BACK TO BACK ELEC. PER 2017 N.E.C. TYP.
- 4. COORDINATE ALL HANGING FIXTURES W/ OWNER.
- 5. SHOULD ANY LIGHTING CONFLICT W/ FRAMING, RELOCATE PER OWNER SPEC'S
- 6. LOCATION(S) OF COLD AIR RETURN TO BE VERIFIED W/ OWNER.
- 1. ALL RECESSED LIGHTING FIXTURES TO BE IC RATED AND LABELED FOR MAX. AIR LEAKAGE AND SEALED TO CEILING W/ GASKET OR CAULKING.
- 8. IN EVERY KITCHEN, FAMILY ROOM, DINING ROOM, LIVING ROOM, PARLOR, LIBRARY, DEN, SUN ROOM, BEDROOM, RECREATION ROOM, OR SIMILAR ROOM OR AREA OF DWELLING UNITS, RECEPTACLE OUTLETS SHALL BE INSTALLED IN ACCORDANCE WITH THE GENERAL PROVISIONS PER 2018 IRC SPECIFIED IN SECTIONS E3901.2.1 THROUGH E3901.2.3.
- 9. CONTRACTOR TO PROVIDE TAMPER PROOF RECEPTACLES PER 2018 IRC SECTION E4002.14.
- 10. PROVIDE 30" WIDE X 36" DEEP WORKSPACE IN FRONT OF ELECT. PANEL.
- 11. ELECTRIC OUTLET BOXES LOCATED IN FLOORS SHALL BE LISTED FOR INFLOOR INSTALLATION.
- 12. THERMAL INSULATION SHALL NOT BE INSTALLED ABOVE OR WITHIN 3" OF RECESSED LUMINARIES' ENCLOSURE, WIRING COMPARTMENT OR BALLAST EXCEPT WHERE SUCH LUMINARIES IS IDENTIFIED FOR CONTACT WITH INSULATION, TYPE IC. PER I.R.C. E4004.9
- 13. CEILING FAN/LIGHT OUTLET BOXES SHALL BE RATED FOR WEIGHT OF FAN / LIGHT.
- 14. INSTALL SMOKE ALARMS AS REQUIRED BY 2018 IRC SECTION R314 AND LOCAL BUILDING CODES.
- 15. PROVIDE CARBON MONOXIDE ALARMS AS REQUIRED BY 2018 IRC SECTION R315 AND LOCAL BUILDING CODES.
- 16. WITH THE EXCEPTION OF SMOKE DETECTORS, CARBON MONOXIDE DETECTORS, AND HOME SECURITY SYSTEMS INSTALLED ON INDIVIDUAL BRANCH CIRCUITS, ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE-PHASE, 15 AND 20-AMPHERE OUTLETS INSTALLED IN FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BED ROOMS, SUN ROOMS, RECEPTION ROOMS, CLOSETS, HALLWAYS, AND SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A COMBINATION TYPE ARC FAULT CIRCUIT INTERRUPTER (AFCI) INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
- 17. ELECTRICAL PLAN IS FOR SCHEMATIC PURPOSES ONLY. OWNER TO COORDINATE WITH CONTRACTOR AND FIELD VERIFY LOCATION OF ELECTRICAL FIXTURES.
- 18. 90% OF LAMPS IN PERMANENTLY INSTALLED LIGHTING TO BE HIGH EFFICACY.





SCALE 1/4" = 1'-0"

FLOOR PLAN NOTES

- 1. TYPICAL EXTERIOR WALL EXT. SIDING 0/ SHEAR PLY. 0/ 2×4's @ 24" O.C. WALL FRAMING. SEE RES CHECK FOR INSULATION VALUES.
- 2. INTERIOR WALLS: 2x4 STUDS @ 24" O.C. U.N.O.
- 3. CONTRACTOR TO VERIFY OVERHEAD GARAGE DOOR CLEARANCE IN RAISED POSITION.
- 4. ALL 4x AND LARGER LUMBER TO BE DF#1 OR BETTER ALL SMALLER LUMBER TO BE DF#2 OR BETTER UNLESS NOTED OTHERWISE.
- 5. PROVIDE SAFETY GLAZING IN HAZARDOUS LOCATIONS PER I.R.C. R308.4
- 6. SOUND INSULATE ALL INTERIOR PLUMBING WALLS (BATH ROOMS) AND WALL AREAS W/ DRAIN LINES FROM ABOVE.
- 1. PROVIDE WATER-RESISTANT GYPSUM BOARD AT
- 8. PROVIDE R-3 INSULATION AT ALL HOT WATER PIPING CONT. 24" FROM H.W.T. TO FIXTURE PER IECC R403.4.

LOCATIONS REQUIRED PER I.R.C. SECTION R702.3.8.

- 9. 90% OF LAMPS IN PERMANENTLY INSTALLED LIGHTING TO BE HIGH-EFFICACY.
- 10. EGRESS WINDOW: MIN. OPEN AREA = 5.1 SQ.FT., 5 SQ.FT. (GRADE FLOOR). MIN. CLEAR OPENING WIDTH = 20" MAX. 44" FROM FIN. FLR TO CLR. OPENING
- II. LANDINGS AT DOORS PER R3II.3. AND LANDINGS AT STAIRWAYS PER R311.7.6.

AND R703.

13. WOOD STRUCTURAL PANEL ROOF SHEATHING EXPOSED ON THE UNDERSIDE SHALL BE BONDED WITH EXTERIOR GLUE PER R803.2.1.1.

12. SIDING SHALL BE INSTALLED PER MFGR.'S INSTRUCTIONS

- 14. CENTRAL HEATING EQUIPMENT OTHER THAN FIXED ELECTRIC SPACE-HEATING EQUIPMENT SHALL BE SUPPLIED BY AN INDIVIDUAL BRANCH CIRCUIT PER IRC
- 15. WATER HEATER IGNITION SOURCE SHALL BE 18" ABV. GARAGE FLOOR.
- 16. ALL EXHAUST FANS REQUIRE RIGID, SMOOTH INTERIOR
- 17. ALL DUCT WORK TO CONFORM WITH CHAPTER 16.
- 18. GAS PIPE SIZING PER CHAPTER 24 AND CONFORMANCE WITH LOCAL FUEL GAS SUPPLIER.
- 19. SHOWERS AND TUB-SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE OR THERMOSTATIC MIXING VALVE TYPE. THE WATER HEATER THERMOSTAT SHALL NOT BE CONSIDERED A SUITABLE CONTROL FOR MEETING THIS PROVISION PER P2708.3.
- 20. MAXIMUM STATIC WATER PRESSURE SHALL BE 80 P.S.I. WHEN MAIN PRESSURE EXCEEDS 65 P.S.I., AN APPROVED PRESSURE REDUCING VALVE CONFORMING TO ASSE 1003 SHALL BE INSTALLED.



860 Maestro Dr., Ste. A Reno, NV 89511 P: (775) 355-0505 F: (775) 355-0566 www.K2eng.net

> da 33 ey, Neva

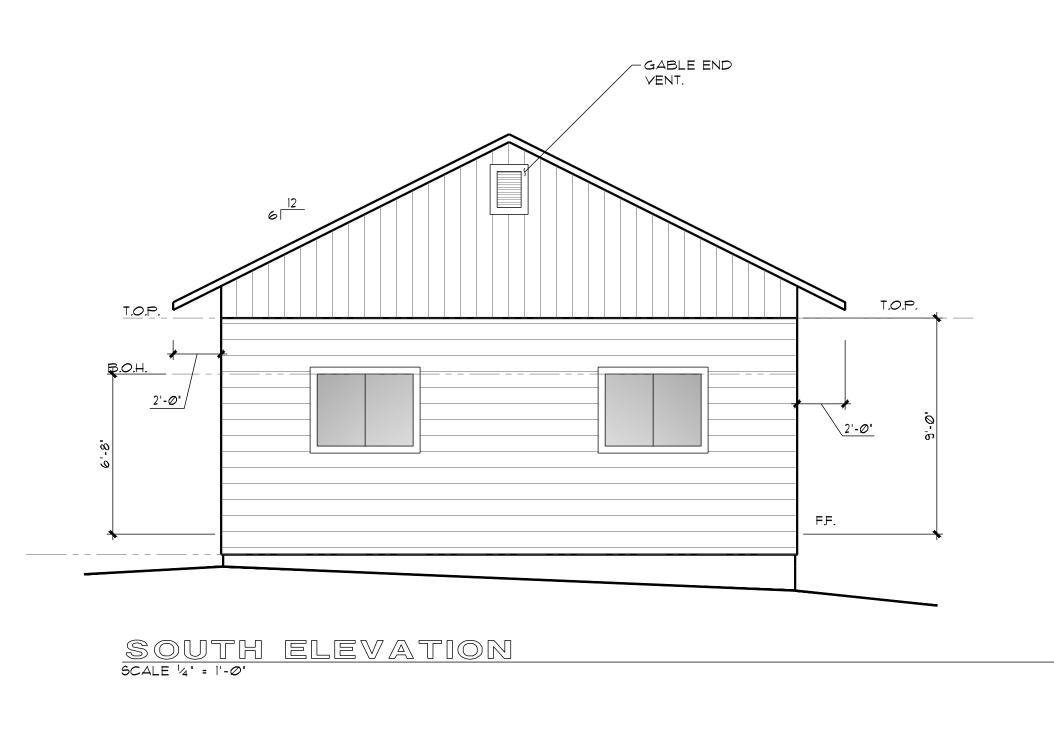
7

Brandt T. Kennedy, P.E. Jared A. Krupa, P.E.

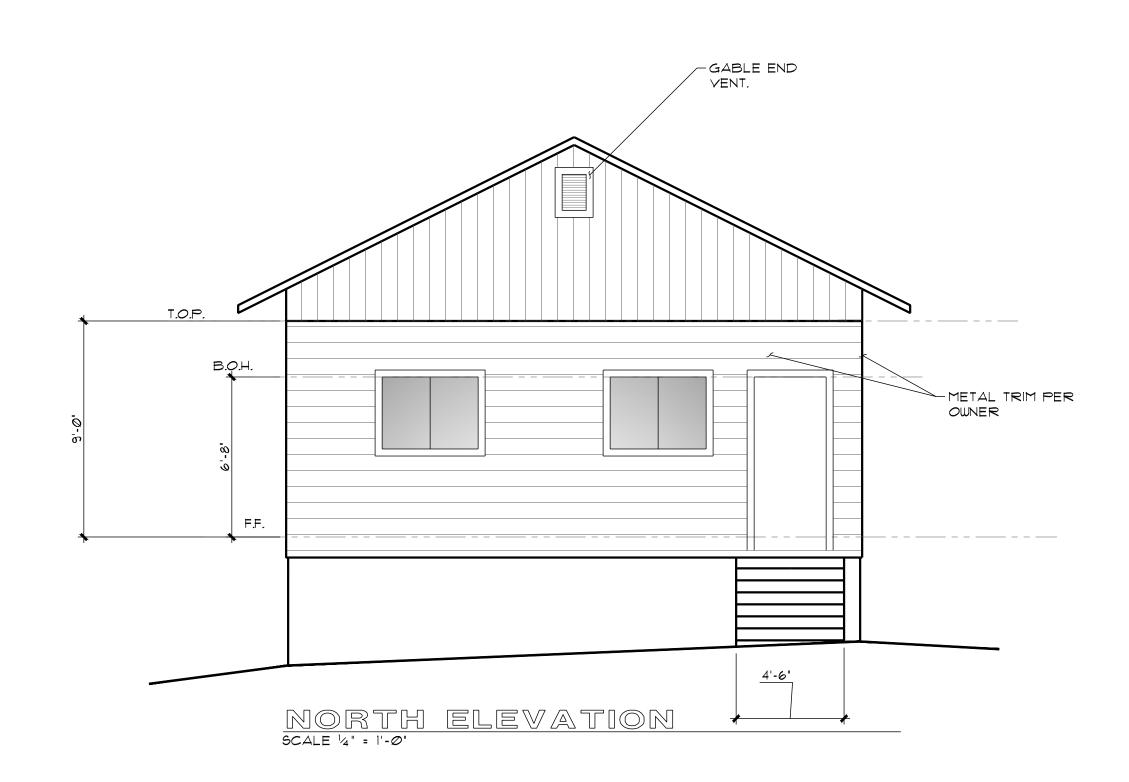
Revisions

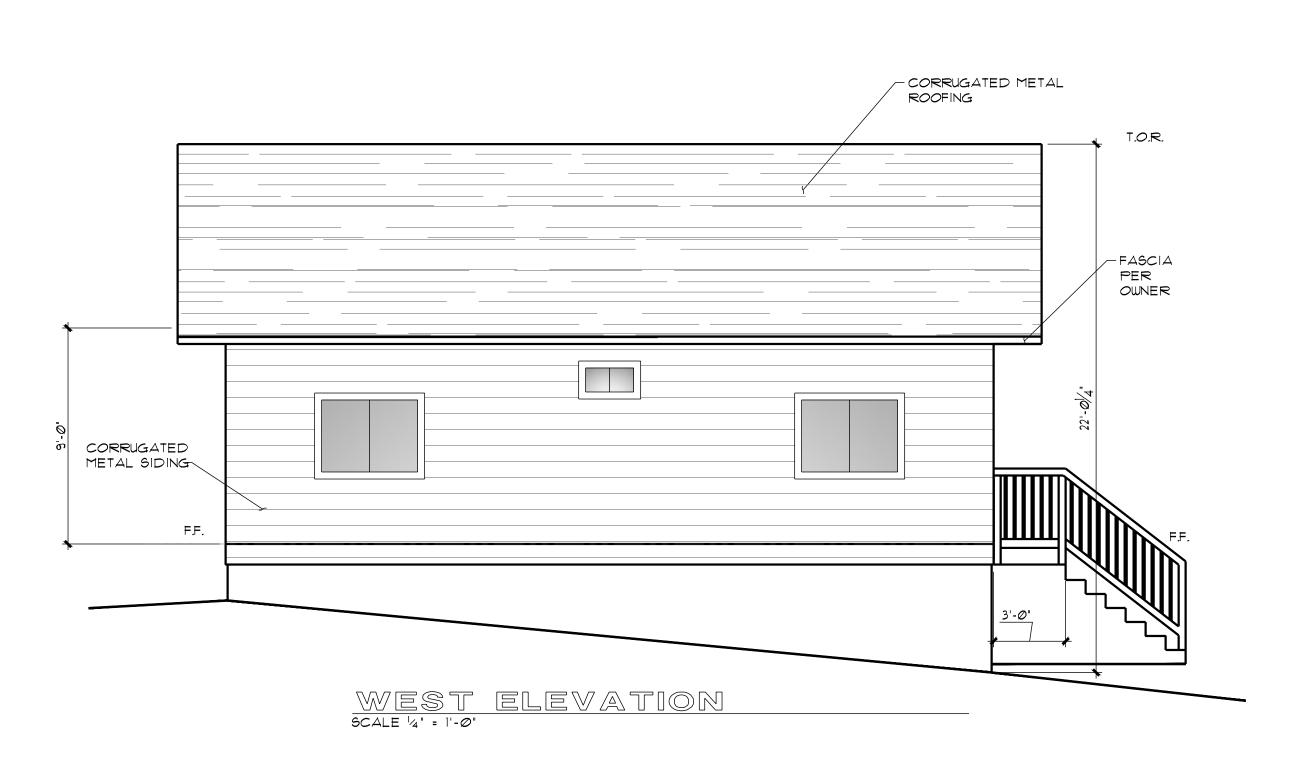
1-29-22 Drawn BWV Checked 22-BWV Project No.

Floor Plan Electrical Plan









860 Maestro Dr., Ste. A Reno, NV 89511 P: (775) 355-0505 F: (775) 355-0566 www.K2eng.net

ccessory

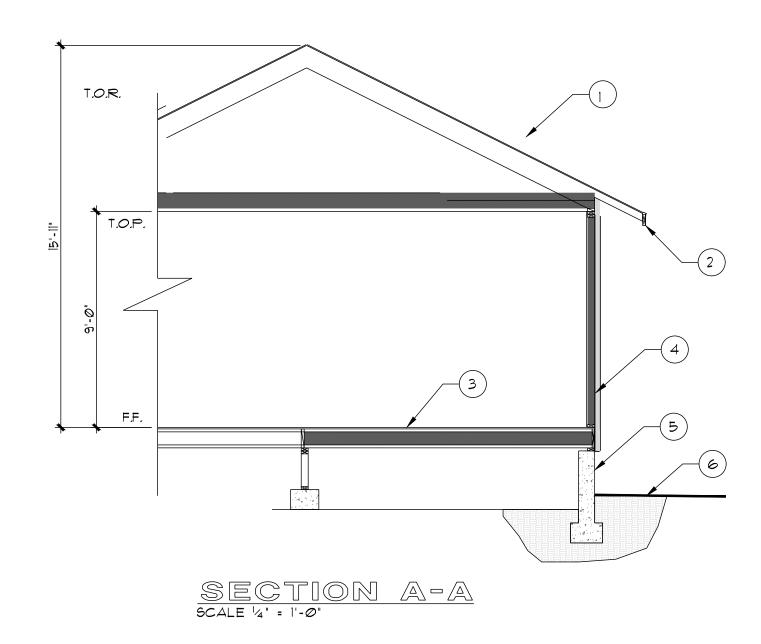
Detached

Brandt T. Kennedy, P.E. Jared A. Krupa, P.E.

Revisions

Checked Project No. 22-BWV

Elevations



ATTIC VENTILATION

ATTIC VENTILATION PER 2018 IRC SECTION R806

THE NET FREE AREA SHALL NOT BE LESS THAN 150 OF THE AREA OF THE SPACE VENTILATED.

THE OPENING AREA MAY BE $\frac{1}{300}$ OF THE AREA OF THE SPACE VENTILATED PROVIDED ONE OF THE FOLLOWING IS PROVIDED.

1.) AT LEAST 50 PERCENT (80% MAX.) OF THE REQUIRED OPENING AREA IS LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED (AT LEAST 3' FEET ABOVE THE EAVE VENTS).

2.) A CLASS I OR II VAPOR BARRIER IS INSTALLED ON THE WARM SIDE OF THE ATTIC INSULATION, CLASS I (.ØI PERM), CLASS II (.ØI PERM I.Ø PERM)

MAINTAIN I" AIR SPACE BETWEEN THE INSULATION AND ROOF SHEATHING. INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR (USE INSULATION BAFFLES)

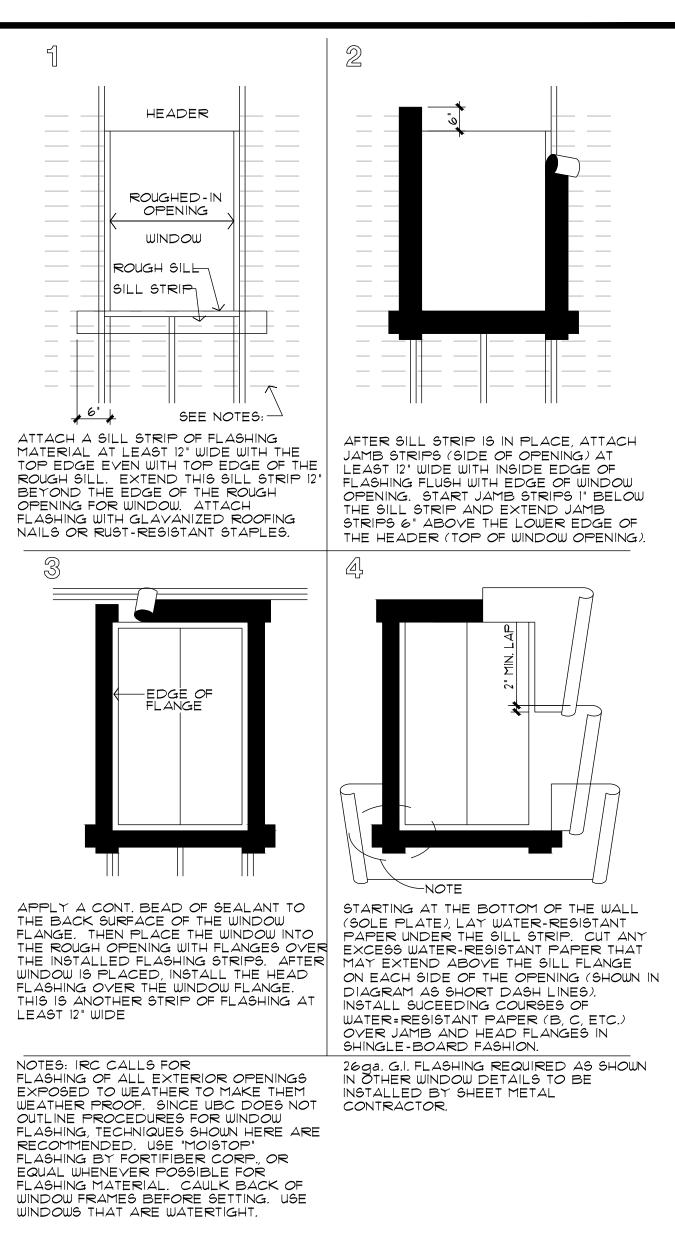
168 SQ. FT. / 300 = 2.56 SQ. FT. OF NET FREE VENTILATION AREA

PROVIDE 2.56 SQ. FT. (50%) OF REQUIRED VENTILATION AT OR NEAR RIDGE (WITHIN 2' OF RIDGE IS RECOMMENDED). (USE (1) 14" \times 24" GABLE VENT @ EACH GABLE END)

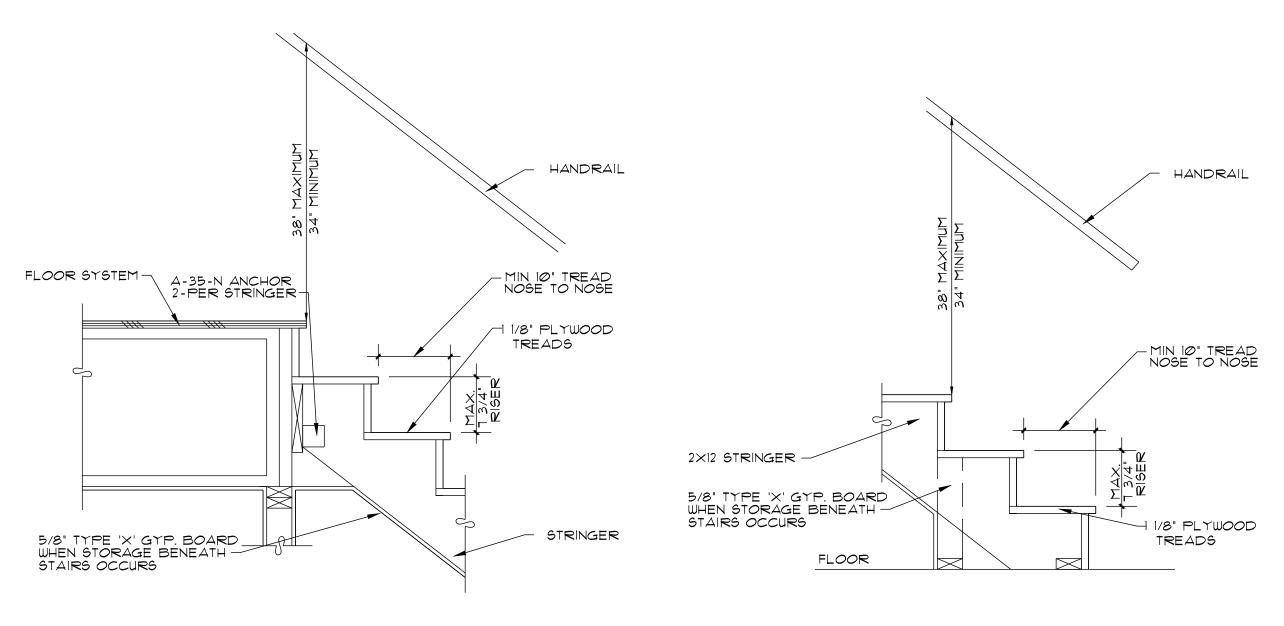
PROVIDE 2.56 SQ. FT. (50%) OF REQUIRED VENTILATION AT EAVE LINE. (USE VENTED BLOCKING @ EVERY OTHER BLOCK)

SECTION NOTES

- TYPICAL ROOF/ CEILING • ROOFING MATERIAL - SEE EXT. ELEV. OI LAYER ICE AND WATER SHEILD · SHEATHING - SEE STRUCT. O TRUSS FRAME ROOF - SEE ROOF FRAMING PLAN • R-40 BLOWN IN INSUL. °%"GYP.BD.
- (2) TYPICAL FASCIA / BARGE ∘2×6 PVC FASCIA
- (3) TYPICAL FLOOR OFLOOR FINISH PER OWNER/CONTRACTOR · FLOOR JOISTS PER STRUCT. • R-38 FIBERGLASS INSUL.
- (4) TYPICAL EXTERIOR WALL OCORRUGATED METAL SIDING ∘ EXT. SHEAR - SEE STRUCT. ° 2×4 ∅ 24" O.C. STUDS U.N.O. OR-10 RIGID FOAM BOARD INSULATION OR-13 FIBERGLASS BATT INSULATION ° 1/2" GYP. BD.
- TYPICAL FOUNDATION ∘8" STEM WALL AND FOOTING BOTTOM OF FOOTING MIN. 2'-0" BELOW FIN. GRADE.
- 6 FINISH GRADE • SLOPE A MINIMUM OF 5% AWAY FROM BUILDING AT ALL AREAS, TYP.







Stair Details SCALE: N.T.S.

ENGINEERING

860 Maestro Dr., Ste. A Reno, NV 89511 P: (775) 355-0505 F: (775) 355-0566 www.K2eng.net

evada 89433

eling ley, Neva

7

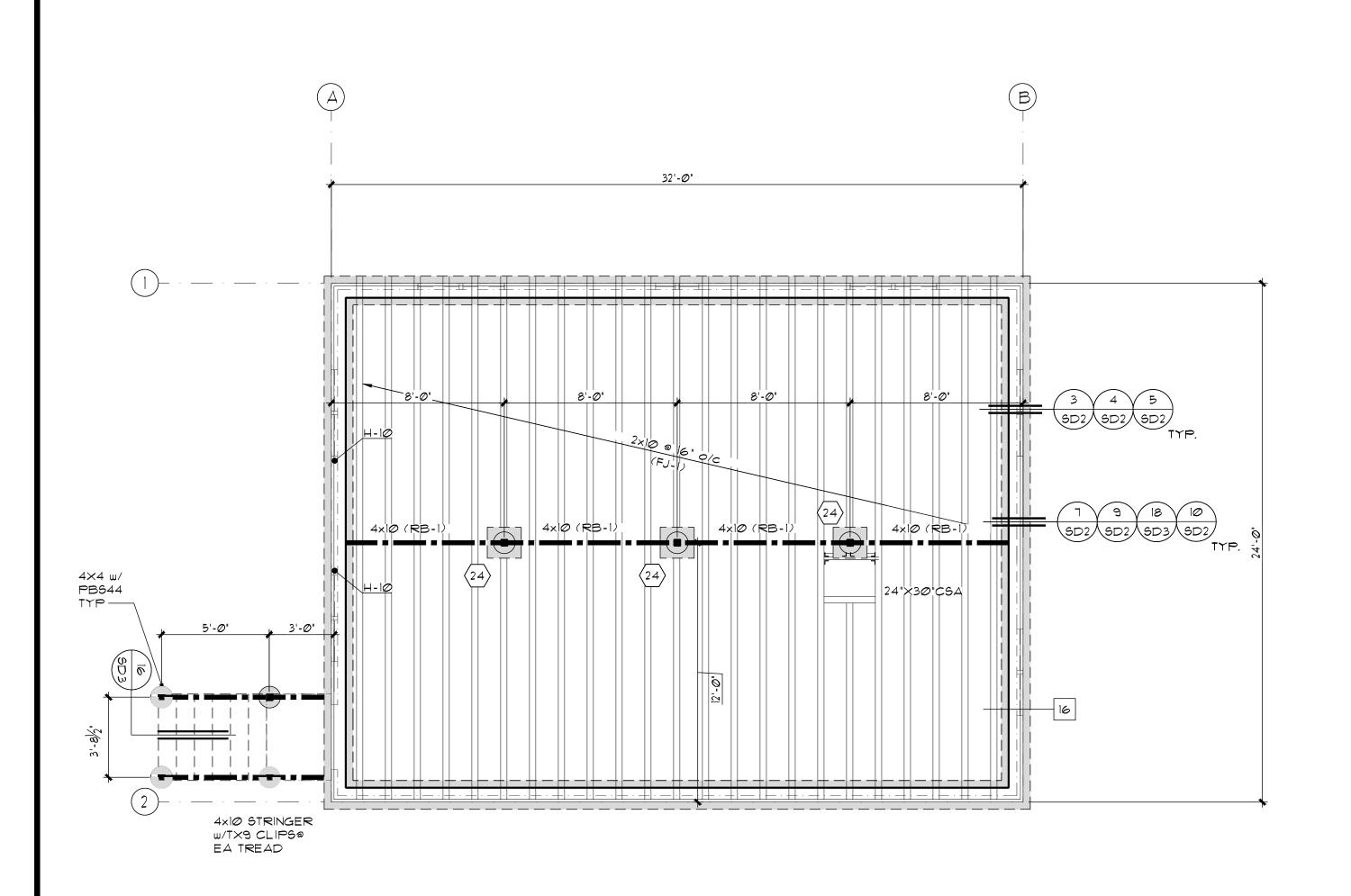
Brandt T. Kennedy, P.E. Jared A. Krupa, P.E.

Revisions

1-29-22 BWV <u>Drawn</u> BWV Checked Project No. 22-BWV

> Section & Details

 A^{-2}



ROOF FRAMING NOTES

ROOF LOADS: LIVE 21# SQ. FT. : DEAD 15# SQ. FT.

USE (1)-LAYER 1/2" (40/20) CDX APA RATED ROOF SHEATHING OR OSB EQUIVALENT, APPLY FACE GRAIN/LONG DIMENSION PERPENDICULAR TO SUPPORT FRAMING. STAGGER PANELS & NAIL w/ 10d'S @ 6" O.C. EDGES & BOUNDARIES & 10d'S @ 12" O.C. FIELD. NAIL ALL DRAG MEMBERS, SHEAR PANELS, BLOCKING, E.T.C. w/ NAILS SPACED @ 4" O.C. SEE DETAILS FOR ADDITIONAL NAILING REQUIREMENTS.

ALL FRAMING HARDWARE NOTED SHALL BE "SIMPSON" INSTALL PER MANUFACTURES REQUIREMENTS.

PROVIDE MIN. DOUBLE STUDS BELOW ALL (1) & (2) PLY GIRDER TRUSSES w/ SIMPSON H6. USE (3) STUDS @ 3-PLY TRUSSES & (4) STUDS @ 4-PLY TRUSSES, U.N.O. CONNECT GIRDER TRUSS TO POST w/ SIMPSON H6 U.N.O.

ALL GLU-LAM BEAMS SHALL BE DOUG-FIR 24F-V4 U.N.O.

TYP HEADER U.N.O. USE (2) 2x6 D.F. #2

USE 12-16d BETWEEN TOP PLATE SPLICES. TYP U.N.O. USE 2x6 FLAT w/ 2x6 STRONGBACK @ 48" O.C. @ GABLE END

FRAMING PROVIDE G.I. FLASHING @ ALL VALLEYS & ROOF-TO-WALL

CONNECTIONS, TYP PROVIDE BITUTHANE MEMBRANE @ CRICKETS SLOPING LESS THAN 3:12 & AS NOTED ON ROOF PLAN

USE BOUNDARY NAILING @ ALL DRAG TRUSSES U.N.O.

A35 @ 48" O.C. TRUSS BLK'G TO TOP PLATE TYP U.N.O.

PROVIDE ICE & WATER DAM MEMBRANE @ HIPS, EAVES,

VALLEYS & RIDGES AS PER LOCAL BLDG DEPT STANDARDS PROVIDE SNOW DIVERTERS @ ALL ROOF PENETRATIONS

PROVIDE ATTIC ACCESS (22"x30") PER I.R.C. SECTION R801.1

PROVIDE ROOF VENTILATION PER I.R.C. SECTION R806.1

PROVIDE BLOCKING @ ALL RIDGES, HIPS & VALLEYS TYP

PROVIDE CONT ROOF PLY UNDER ALL ROOF OVER FRAMING

TYPICAL LEGEND

SEE SHEET SD-I FOR ADDITIONAL NOTES AND SCHEDULES

===== -- - TYPICAL WALL w/ SHEARPLY AND HOLDOWNS.

CONT. STRIP FOOTING PER SCHEDULE ON SHEET SD-1

INDICATES CONCRETE PIER FOOTING PER SCHEDULE ON SHEET SD-1

SHEARWALL TYPE - SEE SHEET SDI FOR ADDITIONAL INFORMATION

P.T. 3x SILL P w/ 5/8" px12" AB's, SPACING AS INDICATED ON PLANS. AT TYPE 3 WALLS, 2x SILL PMAY BE USED w/ 5/8 " PXIO" AB'S @ HALF THE SPECIFIED SPACING.

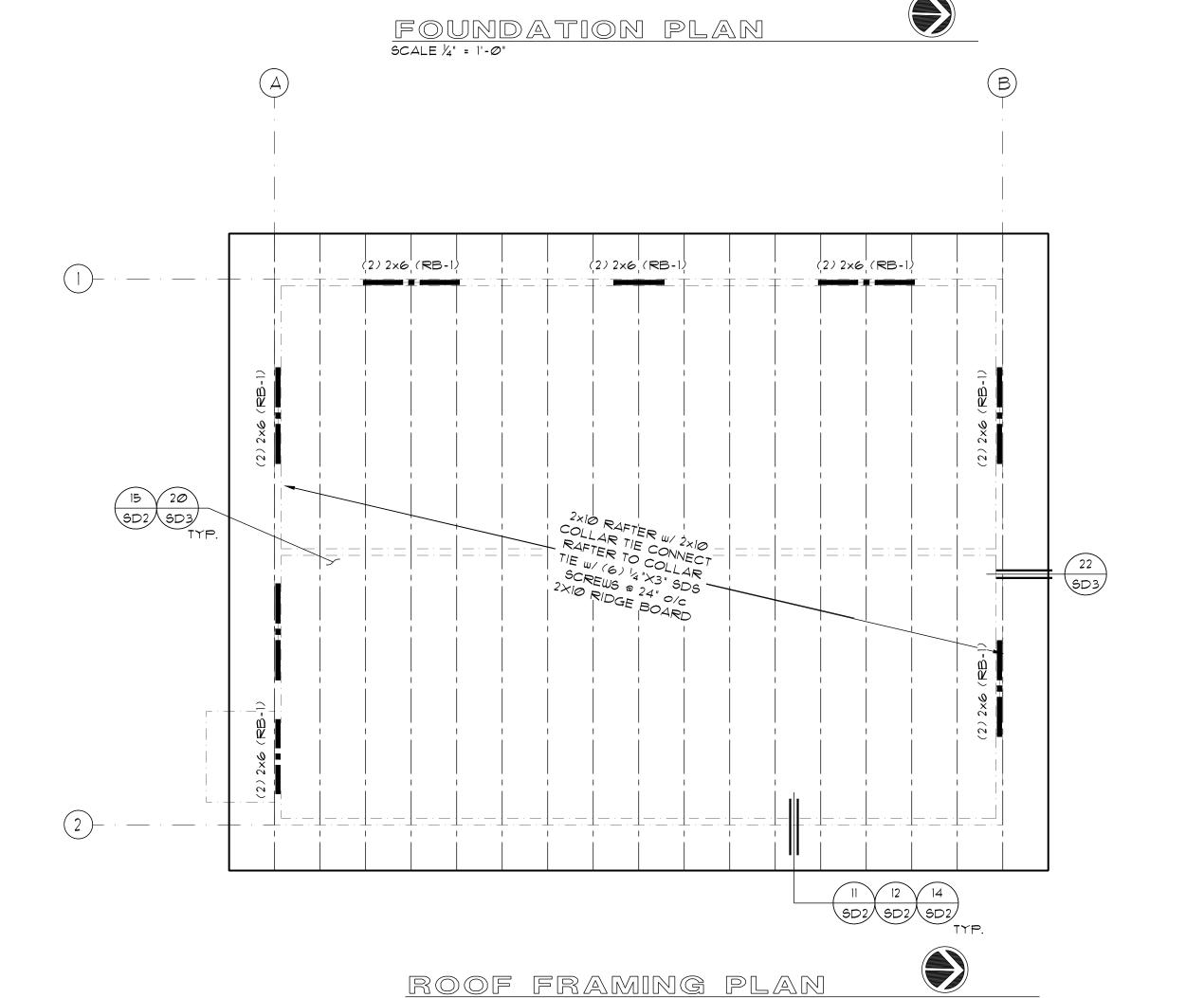
CONCRETE NOTES

SOILS ENGINEER SHALL EXAMINE SITE AFTER EXCAVATION & PRIOR TO SETTING ANY CONC. FORMS. SOIL ENGINEER'S RECOMMENDATIONS CONCERNING OVER EXCAVATION, COMPACTION, ETC. SHALL BE FOLLOWED.

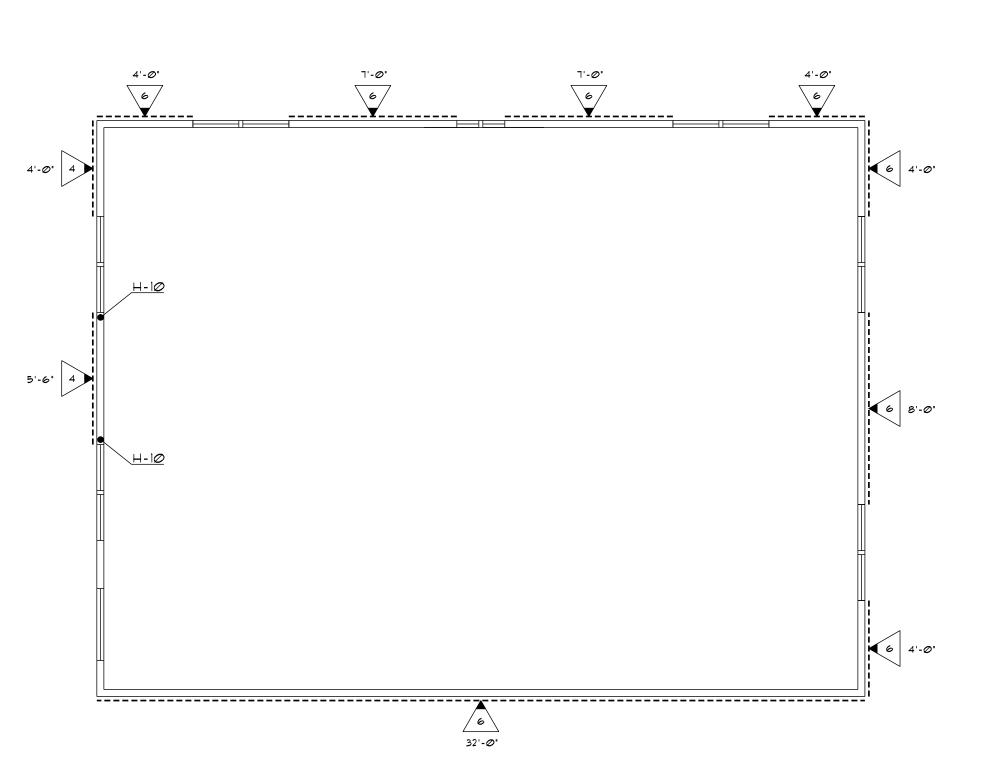
CONC. FOOTINGS 16" x 10" w/ 2-#4 REBAR CONT., TYP. U.N.O. STEP FOOTINGS AS REQ'D. TO BEAR ON NATIVE GRADE OR AS DIRECTED BY SOILS ENGINEER. FOOTING SHALL BE A MIN. OF 2'-0" BELOW FINISHED GRADE.

FOR 2x SILL PLATE, USE 1/8" \$\phi x 10" A.B. FOR 3x OR DOUBLE SILL PLATE, USE %" + x 12" A.B. EXTEND SILL BOLTS 7" INTO FOUNDATION MINIMUM; MAXIMUM SPACING SHALL BE 4'-0" O.C. WITH MINIMUM (2) BOLTS IN EACH SILL BOARD. BOLTS SHALL BE LOCATED NOT MORE THAN (12) NOR LESS THAN (1) BOLT DIAMETERS FROM EACH END OF SILL PIECE. MINIMUM 3"x3"x1/4" THICK PLATE WASHERS SHALL BE INSTALLED ON EACH SILL BOLT.

SILL PLATE: USE FOUNDATION GRADE REDWOOD OR TIMBERSTRAND LSL TREATED $\omega/$ ZINC BORATE OR PRESSURE TREATED DOUGLAS FIR MUDSILL. SEE SHEARWALL SCHEDULE FOR IMPORTANT INFORMATION REGARDING SILL PLATES. FOR ALL SILL PLATES NOTED, USE 2x WALL WIDTH WOOD SILL. ALL SHEAR WALLS, EXCEPT TYPE "6" & "4", REQUIRE FOUNDATION SILL PLATES & ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS TO BE NOT LESS THAN A SINGLE 3" NOMINAL MEMBER. PLYWOOD JOINT & SILL PLATE NAILING SHALL BE STAGGERED IN ALL CASES.



SCALE 1/4" = 1'-0"



SCALE 1/4" = 1'-0"

SHEARWALL PLAN



SEE SHEET SD-I FOR ADDITIONAL NOTES AND SCHEDULES

■ ■ (N) WOOD HEADER/BEAM

(N) ROOF RAFTERS/FLOOR JOIST

TYPICAL WALL W/ SHEARPLY

H-X AND HOLDOWNS.

ANCHOR BOLT SPACING, 48" 0/c TYP.

FLOOR FRAMING NOTES

//////// INTERIOR BEARING WALL

3/4" T&G PLYWOOD APA RATED STURD-I-FLOOR - 48/24 w/ 10d @ 6" O.C. BOUNDARY, EDGES, & DRAG STRUTS w/ 10d @ 10" O.C. FIELD - GLUE & NAIL THROUGHOUT,

2x10 FLOOR JOISTS @ 16" O.C. TYP. BLK. SOLID @ ALL SUPPORT LINES. PROVIDE 14" LSL RIM BOARD THROUGHOUT, TYP. BLOCK SOLID UNDER ALL HOLDOWNS. PROVIDE CRUSH BLOCK, WEB STIFFENERS, ETC. PER MFR.

PROVIDE INSULATION @ RIM JOISTS & FLOOR.

INSULATE ALL PIPES & DUCTWORK.

PROVIDE SOLID BLKG. UP TO SUB-FLOOR, AS REQUIRED, TO SUPPORT POSTS ABOVE.

ALL FRAMING HARDWARE SHALL BE 'SIMPSON'. INSTALL PER MANUF, REQUIREMENTS.

INCHES.

VERIFY THE ENTIRE CRAWLSPACE IS COVERED BY

VAPOR BARRIER TYP. MINIMUM CLEARANCE FROM GROUND UNDER GIRDERS SHALL BE 12 INCHES: UNDER JOISTS SHALL BE 18

ALL EXTERIOR WALLS SHALL BE CONSIDERED SHEARWALLS NAILED AS TYPE "6" WALLS (SEE SHEARWALL SCHEDULE).

860 Maestro Dr., Ste. A Reno, NV 89511 P: (775) 355-0505 F: (775) 355-0566 www.K2eng.net

> da 33 elling

7

Brandt T. Kennedy, P.E.

Jared A. Krupa, P.E.

Revisions

BWV Checked 22-BWV Project No.

Foundation Shear and Roof Plan

HOLD K2 ENGINEERING HARMLESS.

- . ALL WORK, DETAILS OF DESIGN, WORKMANSHIP, AND MATERIALS SHALL CONFORM TO REQUIREMENTS OF THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) OF THE INTERNATIONAL CODE COUNCIL AND THE APPLICABLE COUNTY/CITY BUILDING CODES.
- . K2 ENGINEERING EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED, OR COPIED IN ANY MATTER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO A THIRD PARTY WITHOUT THE EXPRESS WRITTEN CONSENT OF K2 ENGINEERING. IN THE EVENT OF UNAUTHORIZED REUSE OF THESE PLANS BY A THIRD PARTY, THE THIRD PARTY SHALL
- . K2 ENGINEERING RESERVES THE RIGHT TO PERFORM OBSERVATION VISITS TO THE SITE AT ANY TIME. OBSERVATIONS ARE PERFORMED SOLELY FOR THE PURPOSE OF DETERMINING IF THE CONTRACTOR UNDERSTANDS DESIGN INTENT CONVEYED IN THE PLANS. OBSERVATIONS DO NOT GUARANTEE CONTACTOR'S PERFORMANCE AND ARE NOT TO BE CONSTRUED AS SUPERVISION OF THE PROJECT.
- I. IN THE EVENT THAT CERTAIN EXISTING DIMENSIONS AND/OR CONDITIONS ARE FOUND TO BE DIFFERENT FROM THOSE SHOWN ON THE PLANS AND DETAILS, THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED SO THAT THE PROPER REVISIONS CAN BE MADE IF NECESSARY. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY ERRORS,
- DISCREPANCIES, OR OMISSIONS WHICH THE CONTRACTOR FAILED TO NOTIFY K2 ENGINEERING OF BEFORE CONSTRUCTION AND/OR FABRICATION OF THE WORK 5. K2 ENGINEERING IS RESPONSIBLE FOR THE STRUCTURAL ITEMS IN THE PLANS ONLY. SHOULD ANY CHANGES BE MADE, OR SHOULD THE RESULTS OF THESE CALCULATIONS NOT BE FULLY OR PROPERLY TRANSFERRED TO THE PLANS, K2 ENGINEERING ASSUMES
- NO RESPONSIBILITY FOR THE STRUCTURE. 5. THE DETAILS SHOWN ON THE DRAWINGS ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS. NO DEVIATIONS FROM STRUCTURAL DETAILS SHALL BE MADE WITHOUT THE PRIOR WRITTEN APPROVAL OF K2 ENGINEERING.
- . THE CALCULATIONS ARE BASED UPON A COMPLETE STRUCTURE. TEMPORARY SUPPORTS, ETC., ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND HAVE NOT BEEN CONSIDERED BY K2 ENGINEERING. SHOULD AN UNFINISHED STRUCTURE BE SUBJECT TO LOADS, K2 ENGINEERING SHOULD BE CONSULTED FOR AN INTERIM DESIGN OR
- IF NOT, WILL ASSUME NO LIABILITY. 3. ALL NOTES ARE TYPICAL UNLESS NOTED OTHERWISE ON THE PLANS, ALL HARDWARE AND FRAMING MEMBERS SPECIFIED IN THE CALCULATIONS AND/OR PLANS ARE MINIMUMS AND LARGER MEMBERS OF EQUAL OR BETTER GRADE MAY BE SUBSTITUTED.

- 1. K2 ENGINEERING HAS NOT MADE A GEOTECHNICAL REVIEW OF THE BUILDING SITE AND IS NOT RESPONSIBLE FOR GENERAL SITE STABILITY OR SOIL SUITABILITY FOR THE PROPOSED PROJECT. K2 ENGINEERING RECOMMENDS A REVIEW OF THE SITE BY A GEOLOGICAL ENGINEER OR A QUALIFIED CIVIL ENGINEER TO DETERMINE GENERAL SITE STABILITY AND SOIL SUITABILITY FOR THE PROJECT.
- . BUILDING SITES ARE ASSUMED TO BE DRAINED AND FREE OF CLAY OR EXPANSIVE SOIL. ALL FOOTINGS SHALL BE LEVEL OR STEPPED AND BEAR ON FIRM, STABLE, NATURAL, UNDISTURBED SOIL OR AN APPROVED COMPACTED FILL
- I. PERIMETER OR EXTERIOR FOOTING DEPTHS MUST EXTEND BELOW FROSTLINE (18" OR 24" AS PER LOCAL CODE REQUIREMENTS). ALL OTHER FOOTINGS (INTERIOR) SHALL BOTTOM 12" MINIMUM BELOW NATURAL UNDISTURBED GRADE.
- 5. BUILDING PADS SHALL BE GRADED 2% TOWARD APPROVED DRAINAGE FACILITIES AND PROVISIONS SHALL BE MADE TO CONTROL AND DRAIN SURFACE WATER AROUND BUILDING. 5. ASSUME CLASS D SOILS WITH ALLOWABLE SOIL BEARING PRESSURE OF 2*000* PSF WITH A CONSTANT EXPANSION INDEX LESS THAN 20. SOIL BEARING PRESSURE HAS BEEN DETERMINED IN ACCORDANCE WITH IBC TABLE 1806.2.

FILL AND BACKFILL

- 1. FILL MATERIAL SHALL BE FREE FROM DEBRIS, VEGETATION, AND OTHER FOREIGN SUBSTANCES.
- ?. BACKFILL TRENCHES SHALL BE COMPACTED TO 90% DENSITY PER ASTM 1557 TO WITHIN 12" OF FINISHED GRADE. THE TOP 12" SHALL BE LANDSCAPE FILL
- 3. BACKFILL AT PIPE TRENCHES SHALL BE COMPACTED ON BOTH SIDES OF PIPE IN 6' LIFTS. 4. WATERPROOF EXTERIOR FACES OF ALL FOUNDATION WALLS ADJACENT TO USABLE SPACES. WATERPROOFING OF ALL FOUNDATION AND RETAINING WALLS TO BE THE RESPONSIBILITY
- OF THE OWNER AND/OR CONTRACTOR. 5. ALL BACKFILL AGAINST FOUNDATION WALLS MUST BE COMPACTED TO 90% RELATIVE
- 6. PROVIDE A 4" DIAMETER PVC PERFORATED DRAINPIPE AT GRADE SIDE OF ALL RETAINING WALLS, SLOPE PIPE TO DRAIN TO DAYLIGHT AND DRYWELL.

- 1. REINFORCED CONCRETE WORK SHALL CONFORM TO APPLICABLE REQUIREMENTS OF THE IBC AND ACI STANDARD 318-11.
- . AGGREGATE SHALL CONFORM TO ASTM C33 FOR STONE CONCRETE. 3. CONCRETE STOOPS TO BE MACHINED MIXED AND PLACED IN ACCORDANCE WITH
- THE IBC. 4. COMPRESSION STRENGTH OF ALL REINFORCED CONCRETE SHALL NOT BE LESS THAN
- 5. STRUCTURAL DESIGN BASED ON FIG = 2500 PSI (SPECIAL INSPECTION NOT REQUIRED). 6. USE NORMAL WEIGHT CONCRETE (145 PCF) FOR ALL CONCRETE, USE TYPE II CEMENT
- TYPICAL. IF SOIL CONTAINS SULFATE CONCENTRATIONS OF .2% OR MORE, USE TYPE Y CEMENT. 1. THE MAXIMUM SLUMP SHALL NOT EXCEED 3". PLASTICIZERS MAY BE USED TO INCREASE
- SLUMP TO 8' MAXIMUM PROVIDED THEY DO NOT INCREASE SHRINKAGE. 8. MAXIMUM WATER/CEMENT RATIO SHALL BE .55 FOR 3000 PSI CONCRETE 9. EXTERIOR SLABS ON GRADE SHALL CONTAIN NOT LESS THAN 5% NOR MORE THAN 6%
- ENTRAINED AIR 10. FOLLOW RECOMMENDED PRACTICES FOR HOT AND COLD WEATHER CONCRETING BY OBSERVING ACI 305 AND ACI 306 GUIDELINES.
- I. PROVIDE STANDARD CRACK CONTROL JOINTS IN ALL SLABS ON GRADE USING MAXIMUM DIMENSION OF 10 FEET FOR 4" SLABS AND 12 FEET FOR 6" SLABS, JOINT DEPTH SHALL NOT EXCEED ONE-FOURTH OF SLAB DEPTH. 2. TOP OF CONCRETE SLABS SHALL BE MINIMUM 6' ABOYE FINISHED GRADE.
- 13. PIPES MAY PASS THROUGH STRUCTURAL CONCRETE IN SLEEVES, BUT SHALL NOT BE EMBEDDED THEREIN. PIPES OR DUCTS EXCEEDING ONE-THIRD THE SLAB OR WALL THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE 14. DO NOT PLACE CONCRETE UNTIL ALL REINFORCEMENT, CONDUIT, OUTLET BOXES, ANCHORS,
- HANGERS, SLEEVES, BOLTS, HOLDOWNS, ANCHOR BOLTS OR OTHER EMBEDDED MATERIALS AND ITEMS ARE SECURELY AND PROPERLY FASTENED IN THEIR PROPER PLACES AND POSITIONS.

- . ALL CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, GRADE N. F'M = 1500 PSI. USE 85 PCF MINIMUM WEIGHT UNITS ABOVE GRADE AND 110 PCF MINIMUM WEIGHT UNITS BELOW GRADE, USE MOISTURE CONTROLLED UNITS ONLY. USE OPEN-END MASONRY UNITS
- AS MUCH AS POSSIBLE AND AT WALL INTERSECTIONS. 2. ALL BRICK SHALL CONFORM TO ASTM C62, GRADE MW.

COURSE. TOOTHING SHALL NOT BE PERMITTED.

- 3. MORTAR FOR CONCRETE MASONRY SHALL CONFORM TO ASTM C279, TYPE S. 4. GROUT FOR CONCRETE MASONRY SHALL BE IN ACCORDANCE WITH IBC SECTION 2103. MINIMUM 28-DAY COMPRESSIVE STRENGTH SHALL NOT BE LESS THAN 2000 PSI.
- 5. ALL WALLS SHALL BE GROUTED SOLID. GROUT SHALL BE VIBRATED INTO PLACE AND SHALL BE PLACED IN LIFTS NOT EXCEEDING 4' UNLESS APPROPRIATE CLEANOUT HOLES ARE PROVIDED IN ACCORDANCE WITH IBC. 5. AGGREGATES FOR MORTAR AND GROUT SHALL BE NATURAL SAND AND ROCK CONFORMING
- TO ASTM C-144 (MORTAR) AND C-404 (GROUT). 1. CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C-150, TYPE I OR II, LOW ALKALI.
- 8. ALL CONCRETE BLOCK AND BRICK SHALL BE LAID IN RUNNING BOND. 9. WHEN ABSOLUTELY NECESSARY FOR CONSTRUCTION PURPOSES TO STOP OFF LONGITUDINAL RUNS OF MASONRY, STOP OFF ONLY BY RACKING BACK ONE-HALF UNIT LENGTH IN EACH
- Ø. MASONRY WALLS SHALL BE REINFORCED WITH *4'S VERT @ 16" O.C. EACH WAY # #4 @ 24" O.C. HORIZ. BAR SPLICES SHALL BE STAGGERED.

REINFORCING STEEL

- I. REINFORCING BARS SHALL BE DEFORMED BARS CONFORMING TO THE REQUIREMENTS OF ASTM A615 GRADE 60 FOR ALL *5 AND LARGER BARS AND GRADE 40 FOR ALL *4 AND SMALLER BARS
- 2. ALL DETAILS OF FABRICATION AND INSTALLATION OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE ACI MANUAL OF STANDARD PRACTICE.
- 3. WELDED FABRIC (MESH) SHALL CONFORM TO LATEST REVISED ASTM A185 AND BE FURNISHED IN FLAT SHEETS. SMOOTH WIRE FABRIC SHALL CONFORM TO ASTM A-85 HAVING A YIELD STRENGTH OF 60 KSI.
- 4. WELDING OF REINFORCING STEEL SHALL CONFORM TO AWS D12-1 USING LOW HYDROGEN ELECTRODES. 5. ALL BARS SHALL BE LAPPED WITH A MINIMUM OF 40 BAR DIAMETERS (2' MINIMUM) AT ALL
- 6. SPLICES OF HORIZONTAL REBAR IN WALLS AND FOOTINGS SHALL BE STAGGERED 4' MINIMUM. 1. DOWELS FOR WALLS AND COLUMNS SHALL BE THE SAME SIZE AND SPACING AS THE WALL/COLUMN REINFORCING.
- 8. ALL REINFORCING STEEL SHALL BE ACCURATELY LOCATED AND ADEQUATELY SECURED IN POSITION BEFORE AND DURING PLACEMENT OF CONCRETE. 9. MASONRY REINFORCEMENT, BOLTS, ETC. SHALL HAVE MINIMUM GROUT COVERAGE OF
- THREE-FOURTHS OF AN INCH. 10. REINFORCEMENT COVER IN CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS:
- A. 3' CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH B. 2" - FORMED SURFACES EXPOSED TO GROUND OR WEATHER

STRUCTURAL STEEL

- 1. STRUCTURAL STEEL AND MISCELLANEOUS IRON SHALL CONFORM TO ASTM A-36.
- W SECTIONS SHALL CONFORM TO ASTM A992, GRADE 50. 2. STEEL PIPE COLUMNS SHALL CONFORM TO ASTM A-53, TYPE E OR S, GRADE B.
- 3. STEEL TUBE SECTIONS SHALL CONFORM TO ASTM A500, GRADE B. 4. STEEL PLATES SHALL CONFORM TO ASTM A-282, GRADE "A".
- 5. ALL DETAILING SHALL CONFORM TO CURRENT AISC SPECIFICATIONS. 6. ALL WELDING SHALL CONFORM TO CURRENT AISC AND AWS 1.1 SPECIFICATIONS, AND SHALL PERFORMED BY CERTIFIED WELDERS APPROVED BY THE LOCAL BUILDING AUTHORITY. ALL SHOP WELDING SHALL BE IN AN APPROVED FABRICATORS SHOP AUTHORIZED BY
- THE BUILDING AUTHORITY OR SPECIFIC INSPECTION PER IBC. 1. ALL COMPLETE JOINT PENETRATION WELDS REQUIRE SPECIAL INSPECTION AND UT TESTING. 8. ALL WELDING ELECTRODES SHALL BE ETØXX OR SHIELDED WIRES WITH FY GREATER THAN OR EQUAL TO TO KSI
- 9. BOLTS, NUTS, AND SCREWS SHALL CONFORM TO ASTM A3ØT GRADE "A". 10. HIGH STRENGTH BOLTS SHALL BE ASTM A325, CONTACT FACES OF STEEL CONNECTIONS
- WHERE HIGH STRENGTH BOLTS ARE TO BE USED SHALL NOT BE PAINTED. 11. ALL FOUNDATION BOLTS SHALL BE ASTM A-36 GALVANIZED ALL THREAD OR ASTM A307 UNFINISHED BOLTS. ALL SILL BOLTS IN SEISMIC ZONE 4 SHALL BE FIVE-EIGHTHS INCHES IN DIAMETER BOLT HOLES TO BE ONE-THIRTY-SECONDS OF AN INCH TO ONE-SIXTEENTH OF
- AN INCH LARGER THAN SPECIFIED BOLT. 12. ALL STRUCTURAL STEEL AND MISCELLANEOUS IRON NOT ENCASED IN CONCRETE SHALL RECEIVE ONE SHOP COAT OF APPROVED PRIMER PAINT.
- 13. ALL STEEL EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION OR OTHER APPROVED WEATHER PROOFING METHOD HAVING EQUIVALENT RESULTS MAY BE USED. 14. WHERE NECESSARY, PROVIDE ONE-HALF INCH DIAMETER X THREE INCH NELSON STUDS
- 15. ALL GROUT UNDER STEEL BEARING PLATES SHALL BE SOLID DRYPACK OR NON-SHRINK GROUT PLACED AS DIRECTED BY THE MANUFACTURER.
- 16. PROVIDE WELDER'S CERTIFICATE FOR ALL SINGLE-PASS FILLET WELDS NOT EXCEEDING 5/16 IN SIZE, OR PROVIDE THE CERTIFICATE OF COMPLIANCE THAT THE WORK WAS PERFORMED IN AN APPROVED FABRICATOR'S SHOP.

WOOD FRAMING NOTES

- I. ALL LUMBER FRAMING AND BEARING STUDS TO BE DOUGLAS FIR-LARCH WITH MOISTURE CONTENT LESS THAN 19%.
- GLUE LAMINATED TIMBER BEAMS TO BE APA/EUS MARKED 24F-V4. GLU-LAMS EXPOSED TO WEATHER SHALL BE RATED FOR EXTERIOR USE BY THE MANUFACTURER OR AN APPROVED PROTECTION FROM EXPOSURE SHALL BE PROVIDED.
- LAMINATED VENEER LUMBER (LVL) TO BE 1.9E, Fb=2600 PSI, FV= 285 PSI EQUIVALENT OR BETTER FOR MEMBERS LESS THAN 10" DEEP, CONNECT PLIES WITH (2) ROWS 16D BOX NAILS AT 12" O.C. FOR MEMBERS GREATER THAN 10" DEEP, CONNECT PLIES WITH (3) ROWS 16d BOX NAILS AT 12"O.C. FOR THREE PIECE MEMBER, NAILING SPECIFIED 15 FROM EACH SIDE.
- PARALLEL STRAND LUMBER (PSL) TO BE 2.0E, Fb= 2900 PSI Fv= 290 PSI EQUIVALENT OR BETTER.
- 4x AND SMALLER FRAMING TO BE DF #2.
- 6x AND LARGER FRAMING TO BE DF *1. • INTERIOR NON-BEARING STUDS AND PLATES MAY BE CONSTRUCTION GRADE OR BETTER. 2. APA RATED SHEATHING SHALL BE MANUFACTURED WITH EXTERIOR GLUE IN ACCORDANCE WITH THE REQUIREMENTS OF THE IBC AND PS 1-1, PS-2, OR APA PRP-108. SHEAR PLYWOOD SHALL BE C-D, C-C, 303 (TI-II), OR AN APPROVED EQUAL
- 3. ALL RESAUN AND ROUGH SAUN BEAMS ARE TO BE FREE OF HEART CENTER 4. ALL FRAMING CLIPS AND DEVICES SHALL BE "SIMPSON TIE" OR ICC APPROVED EQUAL
- 5. MINIMUM NAILING FOR CONNECTION NOT INDICATED ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH IBC 6. ALL MULTIPLE TRIMMERS, MULTIPLE STUDS, OR POSTS SHALL BE STACKED IN ALL WALL FRAMING CONNECTED WITH POSITIVE CONNECTIONS. SOLID BLOCKING SIMILAR IN SIZE
- TO THE FOUNDATION. 7. DO NOT NOTCH BEAMS, JOISTS, OR STUDS. 8. ALL NAILS SHALL BE "COMMON" WIRE NAILS AND SHALL CONFORM TO THE FOLLOWING:

TO FRAMING ABOVE SHALL BE PROVIDED AT ALL FLOORS ALL THE WAY DOWN

SPECIFIC/	ATIONS		
SIZE	SHANK DIA.	LENGTH	EQUIVALENT STAPLE SIZES
8d	Ø.131 "	21/2"	13 GA x 1-3/4"
100d	Ø.148 "	3'	12 GA x 1-3/4"
16d	0.162"	31/2"	

- NO SUBSTITUTIONS UNLESS APPROVED IN WRITING BY K2 ENGINEERING OR SPECIFICALLY ADDRESSED IN THESE CALCULATIONS OR THE PLANS. ALL NAILS EXPOSED TO WEATHER SHALL BE GALVANIZED. • REFER TO SIMPSON SPECIFICATIONS FOR FRAMING HARDWARE ATTACHMENT REQUIREMENTS.
- ALL NAILS SHALL MEET THE REQUIREMENTS OF ASTM F 1667. 9. SHEATH AND NAIL ALL SHEAR PANELS AND GABLE END TRUSSES THE SAME AS THE
- SHEAR WALL ABOVE OR BELOW. IØ. CONNECT DOUBLE STUDS, DOUBLE JOISTS, OR ANY OTHER MULTIPLE PIECE MEMBER W/
- MIN. (2) ROWS 16d BOX NAILS @ 12" O.C. 11. TYPICAL LOAD BEARING AND EXTERIOR STUDWALL CONSTRUCTION:
- STUD HEIGHT ≤ 10'-0" 2x4 @ 16" O.C. STUD HEIGHT ≤ 14'-0" - 2x6 @ 16" O.C.
- STUD HEIGHT ≤ 18'-0" 1-3/4" x 5-1/2" L.Y.L. @ 12" O.C. STUD HEIGHT ≤ 22'-0' - 1-3/4" x 7-1/4" L.V.L. @ 12" O.C.
- STUD HEIGHT ≤ 27'-0" 1-3/4" x 9-1/4" L.V.L. @ 12" O.C. 12. USE (2) CONT. KING STUDS E.S. OF OPENINGS WHERE STUD HEIGHT EXCEEDS 10'-6" U.N.O. DO NOT BREAK CONT. KING STUDS BY SPANNING HEADER OVER MULTIPLE OPENINGS. ALWAYS RAKE/BALLOON FRAME STUDWALLS.
- 13. PORTIONS OF STRUCTURAL GLU-LAM BEAMS, WHICH ARE EXPOSED TO WEATHER, SHALL BE PRESSURE TREATED OR WOOD OF NATURAL RESISTANCE TO DECAY, EQUIVALENT PROTECTION MAY BE PROVIDED WITH TWO COATS MINIMUM OF SEALER.

ROOF FRAMING NOTES

- 1. ROOF LOADS: LIVE = 21 PSF : DEAD = 20 PSF 2. USE (1)-LAYER 5/8' (40/20) CDX APA RATED ROOF SHEATHING OR OSB EQUIVALENT, APPLY FACE GRAIN/LONG DIMENSION PERPENDICULAR TO SUPPORT FRAMING. STAGGER PANELS AND NAIL WITH <u>1001'S</u> AT 6" O.C. EDGES AND BOUNDARIES AND <u>1001'S</u> AT 12" O.C. FIELD. NAIL ALL DRAG MEMBERS, SHEAR PANELS, BLOCKING, E.T.C. W/ NAILS SPACED AT
- 4" O.C. SEE DETAIL FOR ADDITIONAL NAILING REQUIREMENTS. 3, USE (2) TRIMMERS AND (1) KING STUD UNDER ALL OPENINGS 6'-0" OR GREATER. 4. CONNECT TRUSS BLOCKING AND GABLE END TRUSSES TO TOP PLATE OR BEAM BELOW WITH A35's, LTP4's, LTO's, OR L650's @ 48" O.C. UNLESS NOTED OTHERWISE. 5. DOUBLE TOP PLATE LAP SPLICES SHALL BE 4'-0' MINIMUM AND FACE NAILED WITH
- (12)-16d NAILS. 6. THE FOLLOWING COLUMN/POST CAPS ARE INTERCHANGEABLE: CC, ECC, CCQ, & ECCQ. 1. WHERE HEADERS ARE PLACED HIGH IN THE WALL AND BREAK THE DOUBLE TOP PLATE,
- AN MSTC28 SHALL CONNECT THE HEADER TO THE TOP PLATE AT EACH END. 8. ENCLOSED ATTIC AND RAFTER SPACES SHALL HAVE CROSS VENTILATION BY OPENINGS EQUAL TO 1/150TH OF THE AREA. WHERE EAVE OR CORNICE VENTS ARE INSTALLED, INSULATION SHALL NOT BLOCK THE FREE FLOW OF AIR. A MINIMUM OF I' OF AIR SPACE SHALL BE PROVIDED BETWEEN THE INSULATION AND ROOF SHEATHING. ROOFS WITH RAFTERS, BAYS AND/OR YAULTED CEILINGS MUST BE VENTILATED TO OUTSIDE AT RIDGE.

PRE-MANUFACTURED WOOD ROOF TRUSSES

- 1. TRUGG MANUFACTURER SHALL BE RESPONGIBLE FOR ALL ENGINEERING, LAYOUT DRAWINGG CONNECTIONS, BLOCKING, BRACING, AND TRUSS ERECTION INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER COORDINATION BETWEEN ENGINEER/ARCHITECT DRAWINGS, TRUSS MANUFACTURER INFORMATION, ANY REQUIRED FIELD CHANGES, PROPER INSTALLATION OF FINAL PRODUCT AND ITS CONFORMANCE TO THE ARCHITECT'S DESIGN.
- THE ARCHITECT AND ENGINEER ASSUME NO LIABILITY FOR SAID PRODUCT. 2. TRUSS MANUFACTURER TO VERIFY LOCATION OF AND PROVIDE REINFORCED TRUSSES FOR THE SUPPORT OF ANY MECHANICAL EQUIPMENT WHERE OCCURRING. 3. TRUSS MANUFACTURER TO VERIFY LOCATION OF AND DESIGN FOR ALL CEILING HEIGHT
- CHANGES, ATTIC ACCESSES, RETURN AIR GRILLS, ETC. TRUSS MANUFACTURER TO COORDINATE ANY FINDINGS TO BOTH K2 ENGINEERING AND THE ARCHITECT.
- 4. DEAD LOAD DEFLECTIONS SHALL BE LIMITED TO L/240. 5. GABLE END TRUSSES SHALL BE STRUCTURAL, DESIGNED TO SUPPORT OVERHANG AND TO ALLOW A TOP CHORD NOTCH OF ONE AND A HALF INCHES. 6. ALL NON-BEARING WALLS ARE TO HAVE A ONE-FOURTH OF AN INCH GAP TO THE
- BOTTOM CHORD OF THE TRUSSES. SECURE BOTTOM CHORD TO WALL BELOW WITH 7. USE PRE-ENGINEERED MANUFACTURED TRUSSES @ 24" O.C. SOLID BLOCK @ ALL SUPPORTS
- AND PER MANUFACTURER'S SPECIFICATIONS. USE SIMPSON HI @ EACH SUPPORT WALL/BEAM TO EACH TRUSS AND HG @ EACH SUPPORT WALL/BEAM TO EACH GIRDER TRUSS. 8. HANG TRUSSES AND GIRDER TRUSSES W/SIMPSON HUS26 OR AS SPECIFIED ON PLAN.
- 9. TRUSSES ARE TO BE HANDLED, INSTALLED, AND BRACED IN ACCORDANCE WITH HIB-91 OF THE TRUSS PLATE INSTITUTE (TPI).

TRUSS CALCULATIONS HOLD PRECEDENCE OVER PLAN AT ALL TRUSS TO TRUSS

FOUNDATION/FLOOR FRAMING NOTES

- 1. ALL EXTERIOR WALLS SHALL BE CONSIDERED SHEARWALLS NAILED AS TYPE '6' WALLS
- (SEE SHEARWALL SCHEDULE). 2. FLOOR SHEATHING SHALL BE T. &G. APA RATED STURD-I-FLOOR APPLY FACE GRAIN/LONG DIMENSION PERPENDICULAR TO SUPPORT FRAMING. STAGGER PANELS AND NAIL WITH 10d AT 6" O.C. AT ALL EDGES AND BOUNDARIES (BLOCKING AT INTERIOR SHEAR WALLS,
- DRAG MEMBERS, ETC.), AND 10d AT 10" O.C. FIELD. GLUE AND NAIL THROUGHOUT. 3. FLOOR JOISTS SHALL BE BLOCKED SOLID @ ALL SUPPORT LINES (CONNECT BLOCKING TO WALL/BEAM BELOW WITH A35'S @ TWICE THE JOIST SPACING), BENEATH ALL INTERIOR-BEARING WALLS, AND UNDER ALL HOLDOWNS. USE DOUBLE JOISTS BELOW ALL PARALLEL INTERIOR-BEARING WALLS, PROVIDE L.S.L. RIM BOARD THROUGHOUT. PROVIDE CRUSH BLOCKS, WEB STIFFENERS, ETC. PER MANUFACTURER'S SPECIFICATIONS.
- 4. ALL FLOOR OPENINGS SHALL BE BETWEEN JOISTS. 5. ALL HOLDOWNS SHALL BE INSTALLED AT THE TIME APPROPRIATE MEMBERS ARE FRAMED AND ACCORDING TO MANUFACTURER'S SPECIFICATIONS. IF STRUCTURE IS MULTIPLE STORIES, AS MUCH AS POSSIBLE, LINE FLOOR-TO-FLOOR HOLDOWNS UP WITH FLOOR-TO-FOUNDATION HOLDOWNS SO THAT HOLDOWNS ARE ATTACHED TO COMMON MEMBERS. USE SHEAR PLY NAILING TO ALL HOLDOWN MEMBERS.
- 6. PROVIDE FULL BEARING, FULL DEPTH BLOCKING UP TO FLOOR TO SUPPORT POSTS, DOUBLE STUDS, OR DOUBLE TRIMMERS ABOVE. • WHERE COLUMN BASE OR POST BASE IS CALLED OUT ON A PIER BENEATH THE SUBFLOOR.
- PROVIDE POST UP TO SUBFLOOR TO SUPPORT IDENTICAL POST ABOVE, USE (2) SIMPSON ST6224 ON OPPOSITE SIDES OF POST TO STRAP POST ABOVE THROUGH THE FLOOR TO THE POST BELOW.
- T. ANCHOR BOLTS: FOR 2x SILL PLATE, USE ½ 4 x 10 AB.
- FOR 3x OR DOUBLE SILL PLATE, USE ½ 0 x 12 AB. EXTEND SILL BOLTS 1" INTO FOUNDATION MINIMUM, MAXIMUM SPACING SHALL BE 4'-0" O.C. WITH MINIMUM (2) BOLTS IN EACH SILL BOARD. BOLTS SHALL BE LOCATED NOT MORE THAN (12) NOR LESS THAN (7) BOLT DIAMETERS FROM EACH END OF SILL PIECE. MINIMUM 3'x3'x14' THICK PLATE WASHERS SHALL BE INSTALLED ON EACH SILL BOLT. SPACE WASHER
- " FROM SHEATING OR RIM. • SILL PLATES: USE FOUNDATION GRADE REDWOOD OR TIMBERSTRAND L.S.L. TREATED WITH ZINC BORATE OR PRESSURE TREATED MUDSILL. SEE SHEARWALL SCHEDULE FOR IMPORTANT INFORMATION REGARDING SILL PLATES, FOR ALL SILL PLATES NOT NOTED, USE 2'X WALL WIDTH WOOD SILL. ALL SHEAR WALLS, EXCEPT TYPE '6' AND '4', REQUIRE FOUNDATION SILL PLATES AND ALL FRAMING MEMBERS RECEIVING EDGE NAILING FROM ABUTTING PANELS TO BE NOT LESS THAN A SINGLE 3" NOMINAL MEMBER PLYWOOD JOINT AND SILL PLATE NAILING SHALL BE STAGGERED IN ALL CASES.
- 8. AN 8" WIDE CONCRETE FOUNDATION WALL SHALL BE CENTERED ON CONTINUOUS FOOTING BELOW W/ (1) *4 CONTINUOUS @ TOP OF WALL & *4 VERTICALS @ 32" O.C. MAX HOOKED AT FOOTING (ALTERNATE HOOKS).
- 9. CONTINUOUS CONCRETE FOOTINGS TO BE 16"X10" W/ (2) *4"s CONT. STEP FOOTING AS REQUIRED TO BEAR ON NATIVE GRADE OR AS DIRECTED BY SOILS ENGINEER EXTEND EXTERIOR FOOTING DEPTHS TO FROST LINE (2'-Ø'). 10. THE FOLLOWING COLUMN/POST BASES ARE INTERCHANGEABLE: CB & CBQ OR CBS & CBSQ.
- 11. ALL SLABS TO BE 4" THICK CONCRETE W/ 6x6 10/10 WELDED WIRE FABRIC REINFORCING OR CONCRETE SHALL HAVE FIBERMESH ADDITIVE @ PLANT. SLAB SHALL BE PLACED OVER 4" TYPE-II BASE COMPACTED TO 90% RELATIVE DENSITY ON UNDISTURBED NATIVE SOIL. 12. REFERENCE HOLDOWN SCHEDULE FOR IMPORTANT INFORMATION PERTAINING TO FOOTINGS.
- 13. STAIRWAYS SHALL NOT BE LESS THAN 36" IN WIDTH. EVERY STAIRWAY SHALL HAVE MINIMUM 6'-8" HEADROOM. THE MAXIMUM VERTICAL HEIGHT ALLOWED BETWEEN LANDINGS IS 12'-0". THE RISE OF STEPS IN THE STAIRWAY SHALL NOT EXCEED 8", AND THE TREAD SHALL BE NOT LESS THAN 9".
- 14. STAIR HANDRAILS SHALL BE PLACED NOT LESS THAN 34" NOR MORE THAN 38" ABOVE LANDINGS AND THE NOSING OF THE TREADS. THEY SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE STAIRS AND THE ENDS SHALL BE RETURNED. IN RESIDENTIAL OCCUPANCIES HANDRAILS MAY HAVE STARTING NEWELS WITHIN THE FIRST TREAD. HANDGRIP PORTION OF HANDRAILS SHALL BE NOT LESS THAN 11/4" NOR MORE THAN 2" IN CROSS-SECTIONAL DIMENSION AND HAVE A SMOOTH GRIPPING SURFACE. A SPACE OF NOT LESS THAN $1\frac{1}{2}$ "
- SHALL BE PROVIDED BETWEEN THE WALL AND THE RAIL. 15. GUARDRAILS SHALL BE A MINIMUM OF 42" HIGH, UN.O. NO OPENINGS OVER 4", TRIANGULAR OPENINGS FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD AT THE OPEN SIDE OF A STAIRWAY ARE PERMITTED TO BE OF SUCH SIZE THAT A SPHERE 6' IN DIAMETER
- CANNOT PASS THROUGH. 16. FIRE BLOCKING BETWEEN CHIMNEYS AND COMBUSTIBLE CONSTRUCTION SHALL BE INSTALLED AT 10'-0" INTERVALS, BOTH VERTICAL AND HORIZONTAL
- 17. INSTALL ADHERED VENEER IN COMPLIANCE WITH LOCAL CODES, FOUNDATION SUPPORT REQUIRED FOR EXTERIOR ROCK VENEER, ANCHOR TIES SHALL BE PROVIDED TO HORIZONTAL JOINT REINFORCEMENT WIRE OF NO. 9 GAUGE OR EQUIVALENT. 18. EXTERIOR STUCCO WALLS SHALL HAVE A WEEP SCREED AT OR BELOW THE FOUNDATION
- PLATE LINE AND 4" ABOVE GRADE OR 2" ABOVE PAVED AREAS THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR OF THE BUILDING. THE WEATHER-RESISTIVE BARRIER SHALL LAP THE ATTACHMENT FLANGE, AND THE EXTERIOR LATH SHALL COVER AND TERMINATE ON THE ATTACHMENT FLANGE OF THE SCREED.
- 19. COLUMNS OR POSTS LOCATED ON CONCRETE OR MASONRY FLOORS AND THAT SUPPORT PERMANENT STRUCTURES SHALL BE SUPPORTED BY CONCRETE PIERS OR METAL PEDESTALS PROJECTING ABOVE EXPOSED EARTH A MINIMUM OF 6" AND AT LEAST 1" ABOVE SUCH FLOORS UNLESS TREATED WOOD IS USED. INDIVIDUAL CONCRETE OR MASONRY PIERS SHALL PROJECT AT LEAST 8" ABOVE EXPOSED GROUND UNLESS THE COLUMNS OR POSTS THAT THEY SUPPORT ARE OF WOOD RESISTANT TO DECAY.
- 20. MINIMUM CLEARANCE FROM GROUND UNDER GIRDERS SHALL BE 12 INCHES± UNDER JOISTS SHALL BE 18 INCHES.

21. UNDERFLOOR VENTS SHALL EQUAL I SQUARE FOOT FOR EACH 150 SQUARE FEET OF UNDERFLOOR AREA, AND MUST PROVIDE CROSS VENTILATION. Ream Fauivalent Table

beatti Equivaletti Table							
DF No. 1 BEAM	EQUIVALENT BEAM	DF No. 1 BEAM	EQUIVALENT BEAM				
6x8	6x8 DF No. 1 RMT (2) 1-3/4x9-1/2 LVL 1.9E 5-1/4x9-1/2 PSL 2.ØE 5-1/8x1-1/2 GLB 24F-V4	6×12	6x12 DF No. 1 RMT (2) 1-3/4x14 LVL 1.9E 5-1/4x11-7/8 PSL 2.0E 5-1/8x12 GLB 24F-V4				
6xlØ	6x10 DF No. 1 RMT (2) 1-3/4x11-7/8 LVL 1.9E 5-1/4x9-1/2 PSL 2.0E 5-1/8x10-1/2 GLB 24F-V4	6x14	6x14 DF No. 1 RMT (2) 1-3/4x16 LVL 1.9E 5-1/4x14 PSL 2.0E 5-1/8x13-1/2 GLB 24F-V4				

Continuous Footing Schedule Pier Footing Schedule 12 DENOTES FOOTING SIZE 12 DENOTES FOOTING SIZE <u>WIDTH</u> (EACH SIDE) DEPTH <u>SYMBOL</u> (NA TO <u>SYMBOL</u> <u>DEPTH</u> (EACH WAY) (MIN) (CONTINUOUS) MONOPOUR) (12) 12" 10" (2) #4's (2) #4 (14) (2) #4's 14" (2) #4's 10" (16 (2) #4's 18 (2) #4's (18 ે (3) #4's (2) #4's 24 < 21 ` (3) *****4's (3) #4's (24) 28 24" (3) *****4's (3) #4's (28) 32 28' (3) *****4's (3)#4's 36 (32) 32" (4) *****4's (4) #4's (36) (5) #4's

(6) #4's

(T) #4's

(8) *****4's

(9) #4's

< 42)

54

 \langle 60 angle

42"

48"

54"

60'

LOADING AND EARTHQUAKE DESIGN DATA:

1. LOADING: FLOOR LOADS: LIVE = 40 PSF : DEAD = 10 PSF ROOF LOADS: LIVE = 30 PSF : DEAD = 20 PSF 2. EARTHQUAKE DESIGN DATA:

 $S_5 = 1.59$, $S_1 = \emptyset.72$, $S_2 = 1.06$, $S_2 = 0.72$

SEISMIC DESIGN CATEGORY: D BASE SHEAR Y = Cs*W = (I*Rho*F*SDS/I.4*R)*WR = 6.5 (LIGHT FRAMED WOOD WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE).

Design Parameters

Abbreviations

AB

ATR

BM

BRG

BLK

BOT CANT

MAX

MIN

(N)

NTS

O.C.

PSF

SCHED

SAD

SIM

SQ

STD STL THD

T&G

TŧB

UNO

WWM

TRIMM

SPEC

MECH

BS(B/S

APPROX

ALTERNATE

BEARING

BETWEEN

BOTTOM

BOTH SIDES

CANTILEVER

CENTERLINE

CONTINUOUS

CONTROL JOINT

COUNTERSINK

DEAD LOAD

DETAIL

DIAMETER

DIMENSION

DOUGLAS FIR DRAG TRUSS

DOUBLE

DRAWING

EACH FACE

EACH SIDE

EACH WAY

EDGE NAIL

ELEVATION

EMBEDMENT

EQUAL

EXISTING

FLOOR

FOOTING

FIELD NAIL

FOUNDATION

GALYANIZED

HEADER

HEIGHT

HFM-FIR

HORIZONTAL

INTERIOR

KING STUD

LIVE LOAD

MAXIMUM

MINIMUM

MACHINE BOLT

MECHANICAL

MISCELLANEOUS

NOT TO SCALE

ON OR OVER

PENETRATION

ON CENTER

PLATE

PLYWOOD

REDWOOD

REFERENCE

REQUIRED

SCHEDULE

SIMILAR

SQUARE

STEEL

STANDARD

THREADED

TOP PLATE

TUBE STEEL

TRIMMERS

TYPICAL

VERTICAL

TONGUE & GROOVE

WELDED WIRE MESH

UNLESS NOTED OTHERWISE

TOP & BOTTOM

SHEAR WALL

SPECIFICATION

MANUFACTURER

INFORMATION

GLUED-LAMINATED BEAM

KING STUD EACH SIDE

LAMINATED VENEER LUMBER

POUND PER SQUARE FOOT

POUND PER SQUARE INCH

PRESERVATIVE TREATED

SEE ARCHITECTURAL DRAWINGS

POWDER DRIVEN FASTENER PDF

EXTERIOR

EACH EACH END

CONCRETE MASONRY UNIT

CONCRETE

BLOCK

ANCHOR BOLT

APPROXIMATE

ALL THREAD ROD

PROJECT ELEVATION: SITE CLASS:

DESIGN INCLUDES SNOW LOAD FOR DRIFT AND UNBALANCED LOADING.

		Sileaiwaii Sciledule									
Shearwall Symbol	Sheathing Thickness	Nail Size	Shear Nai E.N.	1 Spacing F.N.	16d Nail Spacing	1/4" SDS Spacing	3x Framing at Adj. Panel Edges	***5/8" A.B. Spacing	***1/2" A.B. Spacing	**MASA SPACING	
6	3/8"	8d	6' O.C.	12" O.C.	6' O.C.	16" O.C.	No	48' O.C.	48' O.C.	48' O.C.	
4	3/8'	8d	4' O.C.	12" O.C.	4' O.C.	12" O.C.	No	48" O.C.	35' O.C.	48' O.C.	
3	3/8"	8d	3' O.C.	12" O.C.	3' O.C.	8" O.C.	Yes:	46' O.C.	3Ø' O.C.	38' O.C.	
2	3/8"	8d	2 ' O.C.	12" O.C.	2 ' O.C.	6' O.C.	Yes	35' O.C.	23 ' O.C.	29' O.C.	
4/2	3/8' B/6	10d	4' O.C.	12" O.C.	2' O.C.	5-1/2" O.C.	Yes	32' O.C.	21" O.C.	26' O.C.	
3/2	3/8" B/6	8d	3' O.C.	12" O.C.	N/A	4" O.C.	Yes	23' O.C.	15' O.C.	19' O.C.	
2/2	3/8' B/6	8d	2" O.C.	12" O.C.	N/A	3' O.C.	Yes	18' O.C.	11' O.C.	14" O.C.	
A	1/2"	1Ød	2 ' O.C.	12" O.C.	N/A	6' O.C.	Yes	29' O.C.	19" O.C.	24" O.C.	
В	5/8"	1Ød	2" O.C.	12" O.C.	N/A	5-1/2" O.C.	Yes	26' O.C.	16' O.C.	21" O.C.	
L6	7/16" Smart Panel Siding	8d	6' O.C.	12" O.C.	6' O.C.	16" O.C.	No	48' O.C.	48' O.C.	48' O.C.	
L4	7/16" Smart Panel Siding	8d	4" O.C.	12" O.C.	4" O.C.	16" O.C.	No	48' O.C.	39' <i>O.C.</i>	48' O.C.	
L3	7/16" Smart Panel Siding	8d	3' O.C.	12" O.C.	3' O.C.	12" O.C.	Yes:	48' O.C.	36' O.C.	45' O.C.	
L2	7/16" Smart Panel Siding	8d	2 ' O.C.	12" O.C.	2 ' O.C.	8' O.C.	Yes*	42" O.C.	27" O.C.	35' O.C.	

Shearwall Schedule

USE APA RATED SHEAR PLYWOOD / OSB / TI-11 SHEATHING OR AN APPROVED EQUAL U.N.O. NAILS SHALL BE COMMON OR GALVANIZED BOX. NAIL HEADS ARE NOT TO PENETRATE PLYWOOD.

ALL FIELD NAILING SHALL BE AT 6" O.C. UN.O. ALL SHEAR WALL STUDS SHALL BE DOUGLAS FIR LARCH SPACED AT 16" O.C. NAIL ALL SHEAR PLY WITH EDGE NAIL SPACING AT TOP PLATES, MUD SILLS,

ALL POSTS, ALL KING STUDS, AND ALL STUDS WITH HOLDOWNS. WHERE APPLICABLE, PLYWOOD JOINT AND SILL PLATE NAILING SHALL BE STAGGERED IN ALL CASES.

FOR ALL SHEAR WALLS EXCEPT TYPES 6, 4, L6, L4 USE: A. 3 INCH NOMINAL OR THICKER SILL PLATES WITH 5/8" X 12" AB'S AND (2) 200 BOX NAILS FOR STUD END NAILING. B. 3 INCH NOMINAL OR THICKER FRAMING MEMBERS, OR DOUBLE 2x FRAMING MEMBERS STITCHED

TOGETHER WITH MINIMUM (2) ROWS OF 16d NAILS @ 12" O.C. AT ALL ADJOINING PANEL EDGES. * FOR SHEAR WALL TYPE 3, L3, * L2, A2' NOMINAL SILL PLATE MAY BE USED IF ANCHOR BOLTS ARE SPACED AT 1/2 THE SPECIFIED SPACING.

PROVIDE BLOCKING OR SOLID FRAMING AT ALL PANEL EDGES. IØ. DOUBLE SHEAR WALLS TO HAVE SHEAR PLY WITH SPECIFIED NAILING BOTH SIDES. PROVIDE 3" NOMINAL OR THICKER FRAMING MEMBERS ON ALL ABUTTING PANEL EDGES, B/S IS BOTH SIDES.

USE SIMPSON MSTC48 OR MSTC52 TO STRAP ACROSS BEAMS AT ANY BREAK IN TOP PLATES, U.N.O. . FOUNDATION SILL ANCHOR BOLTS SHALL BE 5/8"XIØ" SPACED AT 48" O.C. ON ALL EXTERIOR WALL UN.O. . USE 3"x3"x14" THICK STEEL PLATE WASHERS AT ALL WOOD SILL PLATES FOR SHEAR WALLS. SPACE WASHERS 1/2" FROM SHEATHING OR RIM REQ'D

4.*ALL MASA MUDSILL ANCHORS TO BE INSTALLED WITH BOTH LEGS FULLY NAILED INTO SIDE AND TOP OF SILL PLATE. 15;**5/8" AND 1/2" TITEN HD ANCHORS WITH 6" MINIMUM CONCRETE EMBEDMENT MAY BE USED AS A RETROFIT SOLUTION TO SUBSTITUTE AB'S WITH EQUAL DIAMETER
16. ALL NOTES ARE TYPICAL UN.O.

Holdown Schedule

FLOOR TO FLOOR HOLDOWN CONNECTIONS (SEE DETAILS FOR APPLICATIONS) Holdown (1) Min. Vertical Wood Thickness (2) Additional Comments 3ymbol H-1 MSTC4Ø (2) - 2x Studs H-2 MSTC52 (2) - 2x Studs N/A H-3 MSTC66 (2) - 2x Studs N/A H-4 CMST14 (2) - 2x Studs Strap to be at Least 80" Long H-5 CMST12 (2) - 2x Studs Strap to be at Least 102" Long

	FL	OOR TO FOUNDATION	ON HOLDOWN CONNECT	TIONS (SEE DETAIL	S FOR APPLICATIONS	3)	
		١ ١١١ د د د د	Foundati	ion installation Opt	ions (10)	CL (8)	Screws, Bolts, or Nails
Symbol (7)	Holdown Options	Min. Vert Wood Thickness	Threaded Rod w/	Simpson SB	Threaded Rod Retrofit w/		
		(2)	Dbl. Nutted BP	(4)	SET-XP Epoxy (5)		(6)
	STHD1Ø (9)	(2) - 2x Studs	N/A	N/A	N/A	N/A	(20) 16d
H-1Ø	HTT4	(2) - 2x Studs	5/8" W/ 12" Embed	SB 5/8x24 W/ 18" Embed	5/8" W/ 12" Embed	1-3/8"	(18) 16d
	HDU2-6D62.5	(2) - 2x Studs	5/8" W/ 14" Embed	SB 5/8x24 W/ 18" Embed	5/8' W/ 12' Embed	1-5/16"	(6) SDS
H-11	9) (e) AICHT8	(2) - 2x Studs	N/A	N/A	N/A	N/A	(24) 16d
	HTT5	(2) - 2x Studs	5/8" W/ 14" Embed	5B 5/8x24 W/ 18" Embed	5/8" W/ 12" Embed	1-3/8"	(26) 16d
	HDU4-9D62.5	(2) - 2x Studs	5/8' W/ 14' Embed	SB 5/8x24 W/ 18" Embed	5/8' W/ 12' Embed	1-5/16"	(1Ø) SDS
H-12	HDU5-9D62.5	(2) - 2x Studs	5/8" W/ 20" Embed	SB 5/8x24 W/ 18" Embed	5/8" W/ 16" Embed	1-5/16"	(14) SDS
	HDTB	(2) - 2x Studs	7/8" W/ 20" Embed	5B 7/8x24 W/ 18" Embed	7/8" W/ 16" Embed	1-1/4"	(3) 3/4" Bolts
H-13	HDQ8-5D53	3-1/2"	7/8" W/ 20" Embed(3)	5B 7/8x24 W/ 18" Embed	N/A	1-1/4"	(2Ø) SDS
	HD9B	3-1/2"	7/8" W/ 20" Embed(3)	5B 7/8x24 W/ 18" Embed	N/A	1-1/4"	(3) 7/8" Bolts
H-14	HHDQII	5-1/2"	1" W/8" Embed Into Ftg. (3)	N/A	N/A	1-1/2"	(24) SDS
	HD 12	5-1/2"	1" W/8" Embed Into Ftg. (3)	N/A	N/A	2-1/8"	(4) i" Bolts
H-15	HHDQ14	5-1/2"	1" W/8" Embed Into Ftg. (3)	N/A	N/A	1-1/2"	(3Ø) SDS
	HDU14-9D92.5	5-1/2"	1" W/8" Embed Into Ftg. (3)	N/A	N/A	1-9/16"	(36) SDS

INSTALL ALL HOLDOWNS PER SIMPSON'S SPECIFICATIONS, MAINTAINING REQUIRED EDGE CLEARANCES. DOUBLE STUDS TO BE CONNECTED BY (2) ROWS OF 16d NAILS AT 4" O.C. STAGGERED

USE (1) *4 BAR VERTICAL EACH SIDE OF 1/8" OR GREATER THREADED ROD (TOTAL OF 2) TO CONNECT STEMWALL TO FOOTING. SB EMBEDMENTS ARE FOR SINGLE POUR INSTALLATION ONLY. REFER TO LATEST VERSION OF SIMPSON CATALOG FOR DOUBLE POUR APPLICATIONS

DAYS IN ADVANCE PRIOR TO INSTALLATION. USE SIMPSON SET-XP EPOXY FOR CONCRETE DRILL & EPOXY APPLICATIONS & SET EPOXY FOR SOLID GROUTED CMU APPLICATIONS . BOLT HOLES SHALL BE A MINIMUM OF 1/32" AND NO MORE THAN 1/16" LARGER THAN THE SPECIFIED BOLT DIAMETER IT IS ACCEPTABLE TO SUBSTITUTE HOLDOWNS SPECIFIED HIGHER IN THE TABLE WITH HOLDOWNS OCCURING

SPECIAL INSPECTION IS REQUIRED AT ALL EPOXY-SET ANCHORS. CONTACT ENGINEER OF RECORD 2-WORKING

LOWER IN THE TABLE. B. "CL" IS IS THE DIMENSION TO THE CENTERLINE OF AB HOLE IN HOLDOWN. 9. USE STHORJ WHEN RIM JOIST IS PRESENT.

10. USE ASTM A307 ALL THREADED RODS TYPICAL

2018 IBC AND LOCAL

DESIGN CRITERIA < 5*000*0'

120 MPH (3 SECOND GUST) WIND SPEED: WIND EXPOSURE:

P: (775) 355-0505 F: (775) 355-0566 www.K2eng.net

| で

860 Maestro Dr., Ste. A

Reno, NV 89511

7

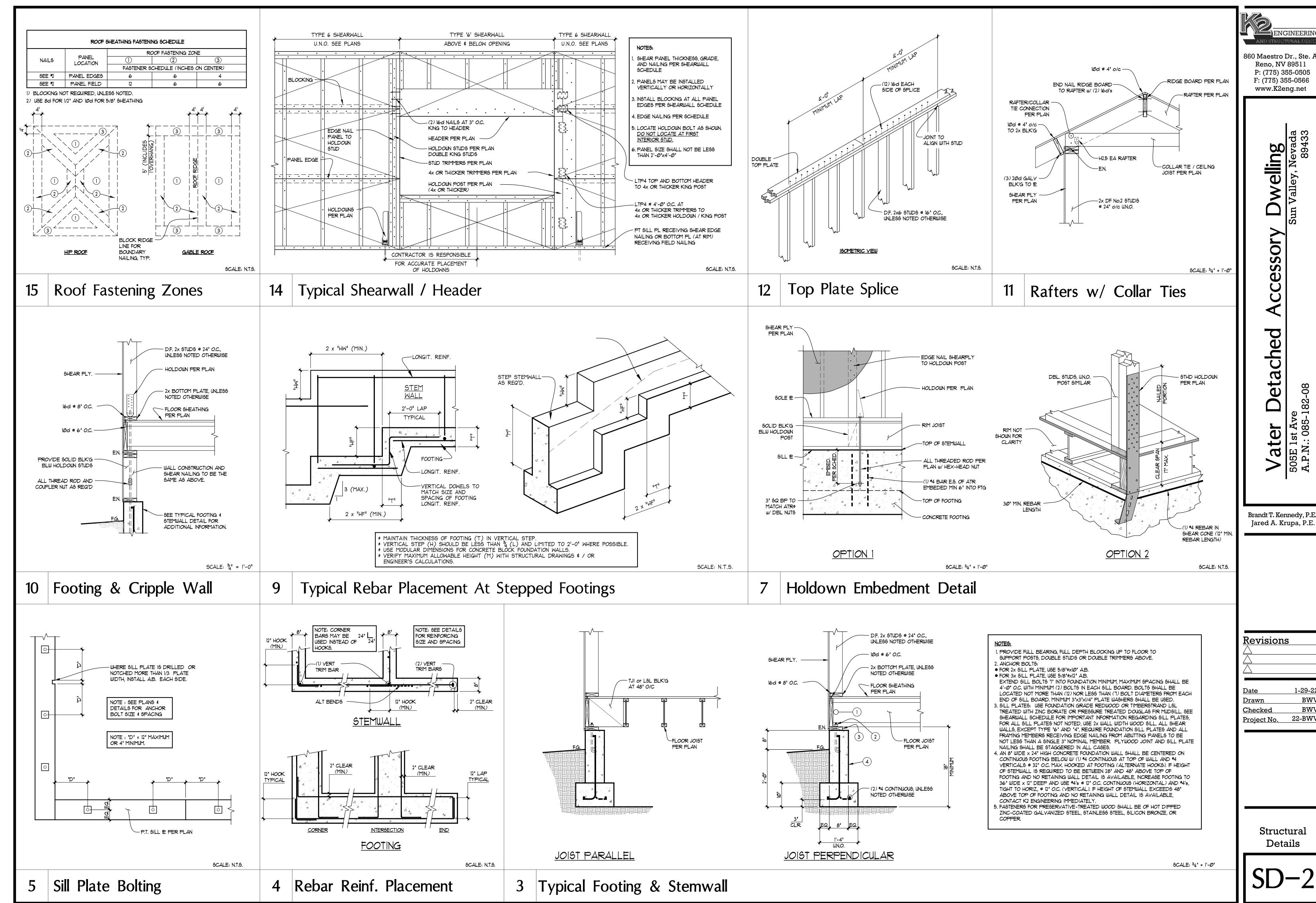
 ∞

Brandt T. Kennedy, P.E. Jared A. Krupa, P.E.

Revisions

<u>Drawn</u> **BWV** Checked 22-BWV Project No.

Structural Notes & Schedules



860 Maestro Dr., Ste. A Reno, NV 89511 P: (775) 355-0505 F: (775) 355-0566

www.K2eng.net

D

Brandt T. Kennedy, P.E.

Revisions

22-BWV

Structural Details

