

Community Services Department
Planning and Building
VARIANCE 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		Staff Assigned Case No.: _____	
Project Name:			
Project Description:			
Project Address:			
Project Area (acres or square feet):			
Project Location (with point of reference to major cross streets AND area locator):			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
Indicate any previous Washoe County approvals associated with this application: Case No.(s).			
Applicant Information (attach additional sheets if necessary)			
Property Owner:		Professional Consultant:	
Name:		Name:	
Address:		Address:	
Zip:		Zip:	
Phone: Fax:		Phone: Fax:	
Email:		Email:	
Cell: Other:		Cell: Other:	
Contact Person:		Contact Person:	
Applicant/Developer:		Other Persons to be Contacted:	
Name:		Name:	
Address:		Address:	
Zip:		Zip:	
Phone: Fax:		Phone: Fax:	
Email:		Email:	
Cell: Other:		Cell: Other:	
Contact Person:		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: Jeanne Marie Ruefer

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.

STATE OF NEVADA)
)
COUNTY OF WASHOE)

I, Jeanne Marie Ruefer
(please print name)

being duly sworn, depose and say that I am the owner* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true, and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Building.

(A separate Affidavit must be provided by each property owner named in the title report.)

Assessor Parcel Number(s): 050-340-06

Printed Name Jeanne Marie Ruefer

Signed Jeanne Ruefer

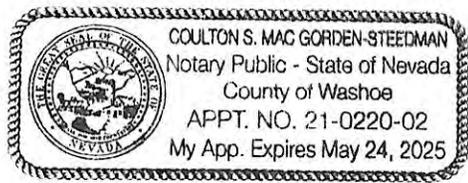
Address 3095 Lakeshore Dr
Washoe Valley, NV 89704

Subscribed and sworn to before me this 29 day of July, 2022.

[Signature]
Notary Public in and for said county and state

My commission expires: May 24, 2025

(Notary Stamp)



*Owner refers to the following: (Please mark appropriate box.)

- Owner
- Corporate Officer/Partner (Provide copy of record document indicating authority to sign.)
- Power of Attorney (Provide copy of Power of Attorney.)
- Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
- Property Agent (Provide copy of record document indicating authority to sign.)
- Letter from Government Agency with Stewardship

Property Owner Affidavit

Applicant Name: BARRY MICHAEL CERNOCH

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.

STATE OF NEVADA)
)
COUNTY OF WASHOE)

I, BARRY MICHAEL CERNOCH
(please print name)

being duly sworn, depose and say that I am the owner* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true, and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Building.

(A separate Affidavit must be provided by each property owner named in the title report.)

Assessor Parcel Number(s): 050-340-06

Printed Name BARRY MICHAEL CERNOCH

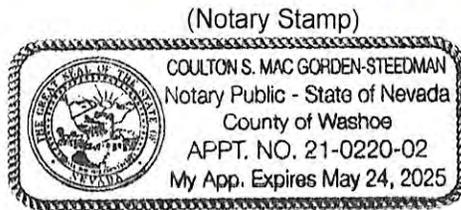
Signed Barry Michael Cernoch

Address 3095 LAKESHORE DR.
WASHOE VALLEY, NV

Subscribed and sworn to before me this
29 day of July, 2022.

[Signature]
Notary Public in and for said county and state

My commission expires: May 24, 2025



*Owner refers to the following: (Please mark appropriate box.)

- Owner
- Corporate Officer/Partner (Provide copy of record document indicating authority to sign.)
- Power of Attorney (Provide copy of Power of Attorney.)
- Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
- Property Agent (Provide copy of record document indicating authority to sign.)
- Letter from Government Agency with Stewardship

Variance Application Supplemental Information

(All required information may be separately attached)

1. What provisions of the Development Code (e.g. front yard setback, height, etc.) must be waived or varied to permit your request?

The side yard setback must be varied to permit our request. The barn was built in 1991 when the side yard setback was 12'. The current setback requirement is 50', but there are only 43' from the property line to the barn to be converted into an ADU.

You must answer the following questions in detail. Failure to provide complete and accurate information will result in denial of the application.

2. What are the topographic conditions, extraordinary or exceptional circumstances, shape of the property or location of surroundings that are unique to your property and, therefore, prevent you from complying with the Development Code requirements?

Not applicable.

3. What steps will be taken to prevent substantial negative impacts (e.g. blocking views, reducing privacy, decreasing pedestrian or traffic safety, etc.) to other properties or uses in the area?

The structure is existing, but does not block any views from neighboring properties nor does it impact pedestrian/traffic safety.

4. How will this variance enhance the scenic or environmental character of the neighborhood (e.g. eliminate encroachment onto slopes or wetlands, provide enclosed parking, eliminate clutter in view of neighbors, etc.)?

The conversion will increase the visual appeal of the existing structure through the renovation of the exterior and addition of window openings to the sides of the building.

5. What enjoyment or use of your property would be denied to you that is common to other properties in your neighborhood?

Due to the acreage of the surrounding properties, many of the neighbors have additional dwelling units on their properties.

6. Are there any restrictive covenants, recorded conditions or deed restrictions (CC&Rs) that apply to the area subject to the variance request?

Yes No If yes, please attach a copy.

7. How is your current water provided?

Well (well meter shall be installed and usage shall be approved by the Nevada State Water Engineer)

8. How is your current sewer provided?

Current Residence will continue to use the existing septic, and the proposed ADU will have a new septic system.

ABBREVIATIONS:

- ADDL. ADDITIONAL
- ALT. ALTERNATE
- A.B. ANCHOR BOLT
- APPROX. APPROXIMATE
- BM. BEAM
- BRG. BEARING
- BEL. BELOW
- BET. BETWEEN
- BLK. BLOCK
- B/S. BOTH SIDES
- BOT. BOTTOM
- B.N. BOUNDARY NAILING
- BLDG. BUILDING
- CANT. CANTILEVER
- C.B. CARRIAGE BOLT
- CLG. CEILING
- CL. CENTERLINE
- CHNL. CHANNEL
- CLR. CLEAR
- COL. COLUMN
- CP. COMPLETE PENETRATION
- CONC. CONCRETE
- CMU. CONCRETE MASONRY UNIT
- CONT. CONTINUOUS
- CJ. CONTROL JOINT
- C.M.J. CONTROL MASONRY JOINT
- C/S. COUNTERSINK
- D.L. DEAD LOAD
- DET. DETAIL
- DIA. DIAMETER
- DIM. DIMENSION
- DO. DITTO
- DJ. DOWEL JOINT
- DBL. DOUBLE
- DF. DOUGLAS FIR
- DWG. DRAWING
- EA. EACH
- EE. EACH END
- EF. EACH FACE
- ES. EACH SIDE
- EW. EACH WAY
- EN. EDGE NAIL
- ELEV. ELEVATION
- EMBED. EMBEDMENT
- EQ. EQUAL
- (E). EXISTING
- EXP. EXPANSION
- E.B. EXPANSION BOLT
- EJ. EXPANSION JOINT
- EXT. EXTERIOR
- F.O.C. FACE OF CONCRETE
- F.O.M. FACE OF MASONRY
- F.O.S. FACE OF STUD
- F.N. FIELD NAIL/FACE NAIL
- FIN.FLR. FINISH FLOOR
- FTG. FOOTING
- FEF. FORCED-ENTRY FASTNERS
- FDN. FOUNDATION
- GA. GAGE
- GALV. GALVANIZED
- G.L. GLULAM
- G.L.B. GLUED-LAMINATED BEAM
- GYP.BD. GYPSUM BOARD
- HGR. HANGER
- HSA. HEADED STUD ANCHOR
- HDR. HEADER
- HT. HEIGHT
- HF. HEM-FIR
- HSB. HIGH-STRENGTH BOLT
- HORIZ. HORIZONTAL
- INFO. INFORMATION
- ID. INSIDE DIAMETER
- INT. INTERIOR
- IF. ISOLATION
- JST. JOINT
- KD. JOIST KILN DRIED
- KING. KING STUD
- LVL. LAMINATED VENEER LUMBER
- LT. LIGHT
- LL. LIVE LOAD
- LG. LONG
- LLH. LONG LEG HORIZONTAL
- LLV. LONG LEG VERTICAL
- MB. MACHINE BOLT
- MIW. MALLEABLE IRON WASHER
- MANUF. MANUFACTURER
- MAX. MAXIMUM
- MECH. MECHANICAL
- ML. MICRO-LAM (BY TRUS JST)
- MIN. MINIMUM
- MISC. MISCELLANEOUS
- (N). NEW
- N.I.C. NOT IN CONTRACT
- NTS. NOT TO SCALE
- #. NUMBER/POUNDS
- O.C. ON CENTER
- O/S. ONE SIDE
- OPP. OPPOSITE
- OH. OPPOSITE HAND
- O.S.B. ORIENTED STRAND BOARD
- OD. OUTSIDE DIAMETER
- OV. OVER
- PSL. PARALLAM (BY TRUS JST)
- PARL. or // PARALLEL
- PP. PARTIAL PENETRATION
- PEN. PENETRATION
- PL. PLATE
- P.L.Y. PLYWOOD
- PSF. POUNDS PER SQUARE FOOT
- PSI. POUNDS PER SQUARE INCH
- P.A.F. POWER ACTUATED FASTENER
- P.D.F. POWER DRIVEN FASTENER
- PT. PRESURE TREATED
- PRT. PRESERVATIVE TREATED
- PL. PROPERTY LINE or PLATE
- R. RADIUS
- RWD. REDWOOD
- REF. REFERENCE
- REQD. REQUIRED
- RMT. ROSBORO MFG. TIMBER
- SCHED. SCHEDULE
- SAD. SEE ARCHITECTURAL DWGS
- SMD. SEE MECHANICAL DWGS
- STS. SELF-TAPPING SCREW
- SW. SHEAR WALL
- SIM. SIMILAR
- SJ. SLAB JOINT
- S.O.G. SLAB ON GRADE
- SB. SOLID BLOCK
- SPEC. SPECIFICATION
- SQ. SQUARE
- STD. STANDARD
- STL. STEEL
- SYM. SYMMETRICAL
- THRD. THREADED
- T.N. TOE NAIL
- T&G. TONGUE & GROOVE
- T&B. TOP & BOTTOM
- T.O. TOP OF
- TS. TUBE STEEL
- TRMR. TRIMMER
- TYP. TYPICAL
- UBC. UNIFORM BUILDING CODE
- UNO. UNLESS NOTED OTHERWISE
- VERT. VERTICAL
- WT. WEIGHT
- WS. WELDED STUD/WOOD SCREW
- WWF. WELDED WIRE FABRIC
- WWM. WELDED WIRE MESH

BARN CONVERSION

ENGINEER OF RECORD:



Dunagan Engineering, Inc.
 4790 Caughlin Parkway #766, Reno, NV 89519
 P. 775.329.2733 | F. 888.873.0790 | W. DEIengineers.com

**PROPERTY OWNER /
 GENERAL CONTRACTOR :**

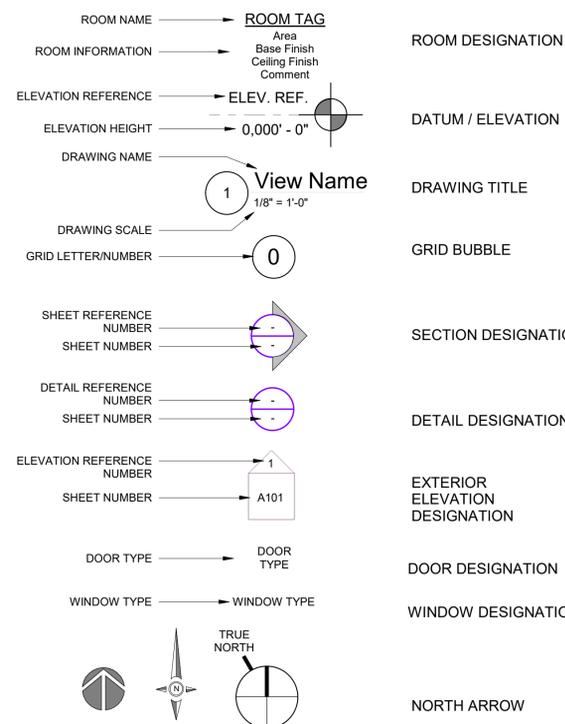
BARRY CERNOCH
 3095 LAKESHORE DR.
 WASHOE COUNTY, NV 89704
 APN:050-340-06



SHEET INDEX

- A0.0 COVER SHEET
- A0.1 SITE PLAN
- A1.1 EXISTING FLOOR PLAN w/ DEMOLITION
- A1.2 EXISTING ELEVATIONS w/ DEMOLITION
- A1.3 PROPOSED FLOOR PLAN
- A1.4 PROPOSED ROOF PLAN
- A1.5 PROPOSED ELEVATIONS
- A1.6 SECTIONS / ELECTRICAL FLOOR PLAN
- S0.1 GENERAL NOTES & TYPICAL DETAILS
- S0.2 TYPICAL DETAILS
- S0.3 TYPICAL DETAILS
- S0.4 DETAILS
- S1.1 FOUNDATION PLAN
- S1.2 STRUCTURAL FLOOR PLAN
- S2.1 ROOF FRAMING PLAN / CEILING JOIST

SYMBOLS



WIND DESIGN DATA

Ultimate Design Wind Speed, $V_u = 120$ m.p.h. (3-Second Gust)
 Risk Category II
 Wind Importance Factor, $I_w = 1.00$
 Wind Exposure C
 Internal Pressure Coefficient = ± 0.18
 Components & Cladding Design Pressures (ASCE 7 Section 30.4.2):
 $a = 3.2$ ft (ASCE 7 Figure 30.4-1)

Refer to ASCE 7-16 Figure 30.4-1 for layout.			
Roof/Wall	Zone	Effective Wind Area (sq ft)	Design Wind Pressure, P_{net} (psf)
Roof - 20 to 27'	1	10	58.0
	1	20	58.0
	1	50	35.2
	1	100	18.0
	2	10	84.5
	2	20	73.1
Wall	2	50	58.0
	2	100	46.5
	3	10	100.4
	3	20	86.0
	3	50	67.0
	3	100	52.6
	4	10	34.0
	4	20	32.5
	4	50	30.7
	4	100	29.3
5	10	42.0	
5	20	39.2	
5	50	35.5	
5	100	32.5	

SEISMIC DESIGN DATA

Importance Factor, $I_e = 1.00$ (Risk Category II)
 $S_s = 2.212$ g and $S_1 = 0.781$ g
 Site class = D
 $SD_s = 1.474$ g, $SD_1 = 0.885$ g
 Seismic design category = D
 Basic seismic-force-resisting system(s) =
 Light-Framed Walls Sheathed with Wood Structural Panels Rated for Shear Resistance, $R = 6.5$
 N/S Design Base Shear (LRFD) = 9.1 kips
 E/W Design Base Shear (LRFD) = 9.1 kips
 C_s (LRFD) = 0.2269
 Analysis Procedure Used = Equivalent Lateral Force Procedure

SNOW LOAD DATA:

Site Elevation 5048 FT.
 Ground Snow Load $P_g = 31$ psf
 Flat-Roof Snow Load $P_f = 21$ psf
 Snow Exposure Factor $C_e = 0.9$
 Snow Importance Factor $I_s = 1.0$
 Thermal Factor $C_t = 1.1$

FLOOR FRAMING DESIGN LOADS

Floor Live Load = 40 PSF
 Floor Dead Load = S.O.G.
 Total Floor Load = 40 PSF

ROOF LOADING:

TYPICAL
 Snow Load = 21 PSF
 Dead Load = 15 PSF
 Total Load = 36 PSF

PROJECT DATA

PROPERTY OWNER: BARRY CERNOCH
 4205 SLIDE MOUNTAIN DR.
 RENO, NV 89511

PROPERTY LOCATION: 3095 LAKESHORE DR.
 WASHOE VALLEY, NV 89704

PROPERTY INFORMATION: LAKESHORE FARMS SUBDIVISION
 LOT 12
 9.657 ACRES
 APN: 530-340-06

ZONING: LDR

OCCUPANCY GROUP: R-3 (House) S-2 (Garage)

FIRE SPRINKLERS: NONE - NOT REQUIRED PER 2018 INTERNATIONAL RESIDENTIAL CODE

NUMBER OF STORIES: 1

CODE EDITIONS: 2018 INTERNATIONAL RESIDENTIAL CODE (IRC)
 2018 INTERNATIONAL BUILDING CODE (IBC)
 2018 UNIFORM MECHANICAL CODE
 2018 UNIFORM PLUMBING CODE
 2017 NATIONAL ELECTRICAL CODE
 2018 INTERNATIONAL FIRE CODE
 ANSI 2017
 2018 IECC
 2018 NORTHERN NEVADA AMENDMENTS

IGNITION RESISTANCE CONSTRUCTION TYPE: IR1 N.C. w/ NON-CONFORMING WATER SUPPLY & WITH 30FT DEFENSIBLE SPACE

SUBMITTAL SET

REVISIONS			
#	Date	Description	By

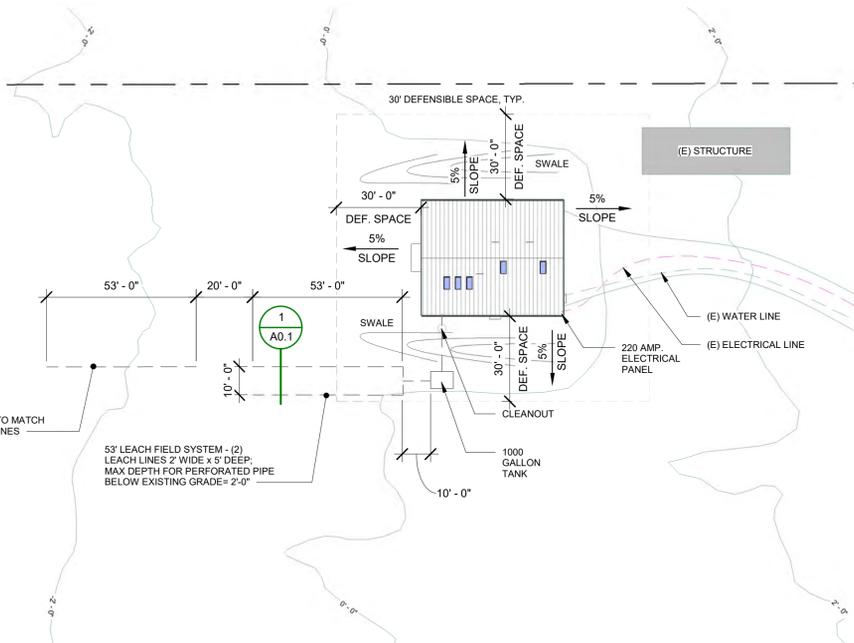
4/19/2022 10:31:52 AM

COVER SHEET

A0.0

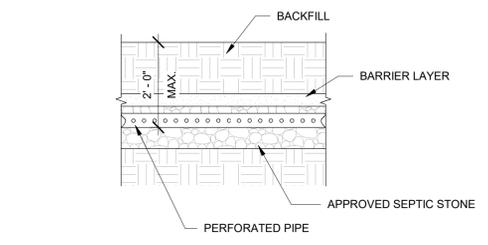
SHEET of SHEETS

PLEASE RECYCLE



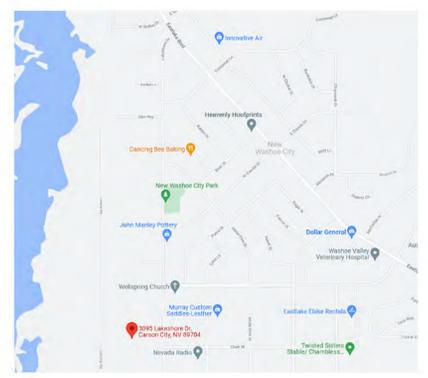
KEY PLAN
1" = 30'-0"

DEFENSIBLE SPACE NOTES:
ESTABLISH AND MAINTAIN DEFENSIBLE SPACE SURROUNDING STRUCTURES IN ACCORDANCE WITH THE 2018 INTERNATIONAL WILDLAND URBAN INTERFACE CODE (IWUIC) SECTION 603 AND 604. DEFENSIBLE SPACE SHALL BE ESTABLISHED WITHIN 30' OF THE PERIMETER OF THE STRUCTURE. THE DISTANCE SHALL BE MEASURED FROM THE EVES OR ANY ATTACHED APPENDAGE OF THE STRUCTURE.



1 PERFORATED PIPE DETAIL
1/2" = 1'-0"

- SITE PLAN NOTES:**
1. DIMENSIONS TO EXISTING AND PROPOSED STRUCTURES ARE ESTIMATES TO THE NEAREST ONE FOOT INTERVAL. PROPERTY WAS NOT SURVEYED. SITE INFORMATION DERIVED FROM WASHOE COUNTY ASSESSOR PROPERTY DATA ONLINE GIS INTERNET MAP SERVER, EXISTING DOCUMENTS AND SITE VISIT.
 2. EXISTING LANDSCAPING, GRADING AND DRAINAGE TO REMAIN. DO NOT DISTURB DURING CONSTRUCTION.
 3. PROJECT ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY, FUNCTION OR COMPLIANCE OF EXISTING SEPTIC SYSTEMS AS SHOWN ON THIS SITE.
 4. NO DOCUMENTED EXISTING WELLS ON ADJACENT PROPERTIES LOCATED WITHIN 200' OF THE SUBJECT PROPERTY. PROPERTY HAS SEPTIC PER PLAN.
 5. NO DOCUMENTED EXISTING SEPTIC SYSTEMS LOCATED WITHIN 200' OF THE SUBJECT PROPERTY BASED UPON INFORMATION SUPPLIED BY WASHOE COUNTY HEALTH DEPARTMENT.
 6. NO DOCUMENTED NATURAL DRAINAGES NOTED ON SITE OR WITHIN 100' OF SUBJECT PROPERTY.
 7. PROPERTY IS OUTSIDE FEMA FLOOD ZONE DESIGNATIONS AND NO 100 YEAR FLOOD PLAIN BOUNDARIES WITHIN 100' OF PROPERTY.
 8. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SEPTIC SYSTEM AND WELL AND VERIFY COMPLIANCE WITH WASHOE COUNTY HEALTH DEPARTMENT GUIDELINES AND APPLICABLE BUILDING CODES.
 9. CONTRACTOR SHALL PROVIDE 5% SLOPE DRAINAGE AWAY FROM EXISTING AND NEW CONSTRUCTION MIN. 10' FROM STRUCTURES.
 10. TOTAL WATER USAGE FROM EXISTING WELL FOR EXISTING RESIDENCE AND PROPOSED DETACHED ADDITIONAL DWELLING UNIT SHALL NOT EXCEED 2 ACRE-FEET PER YEAR PER CHAPTER 534.180 OF NEVADA REVISED STATUTES.



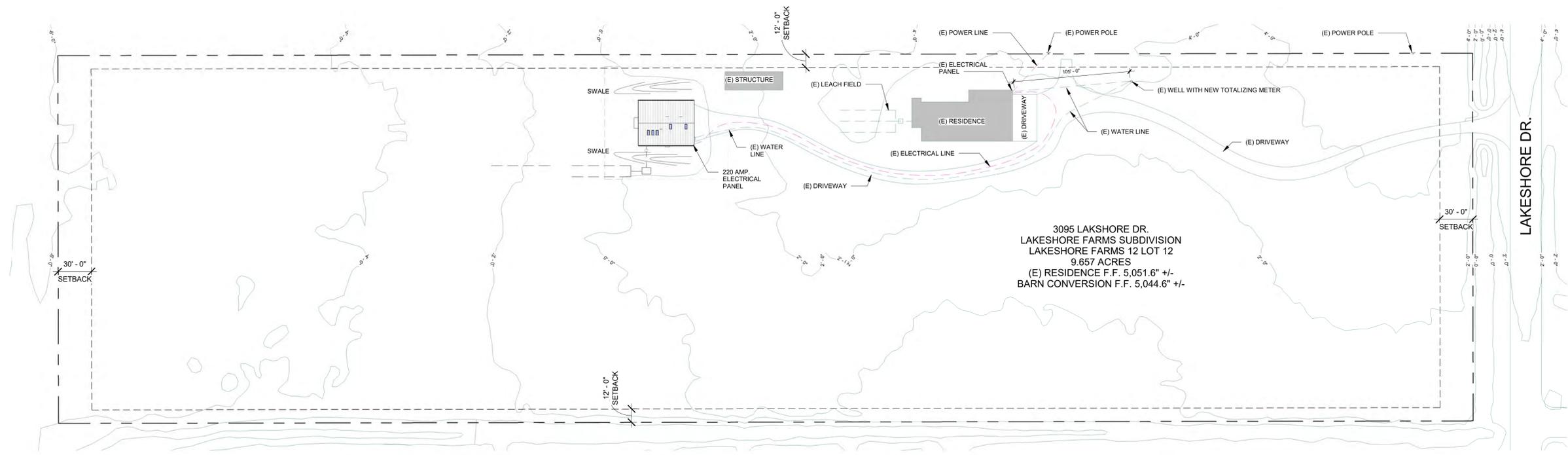
VICINITY MAP
N.T.S.

REVISIONS		
#	Date	Description

DEI
engineers
Dunagan Engineering, Inc.
4790 Caughlin Parkway #766, Reno, NV 89519
P: 775-329-2733 | F: 888-873-0790 | W: DEIengineers.com

Professional Engineer Seal for Erika K. Hull-Stancliff, No. 27423, State of Nevada, Civil, Exp. 6-30-23.

4/19/2022 10:31:54 AM



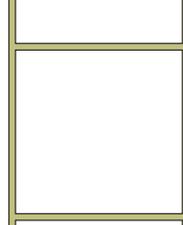
SITE PLAN
1" = 50'-0"

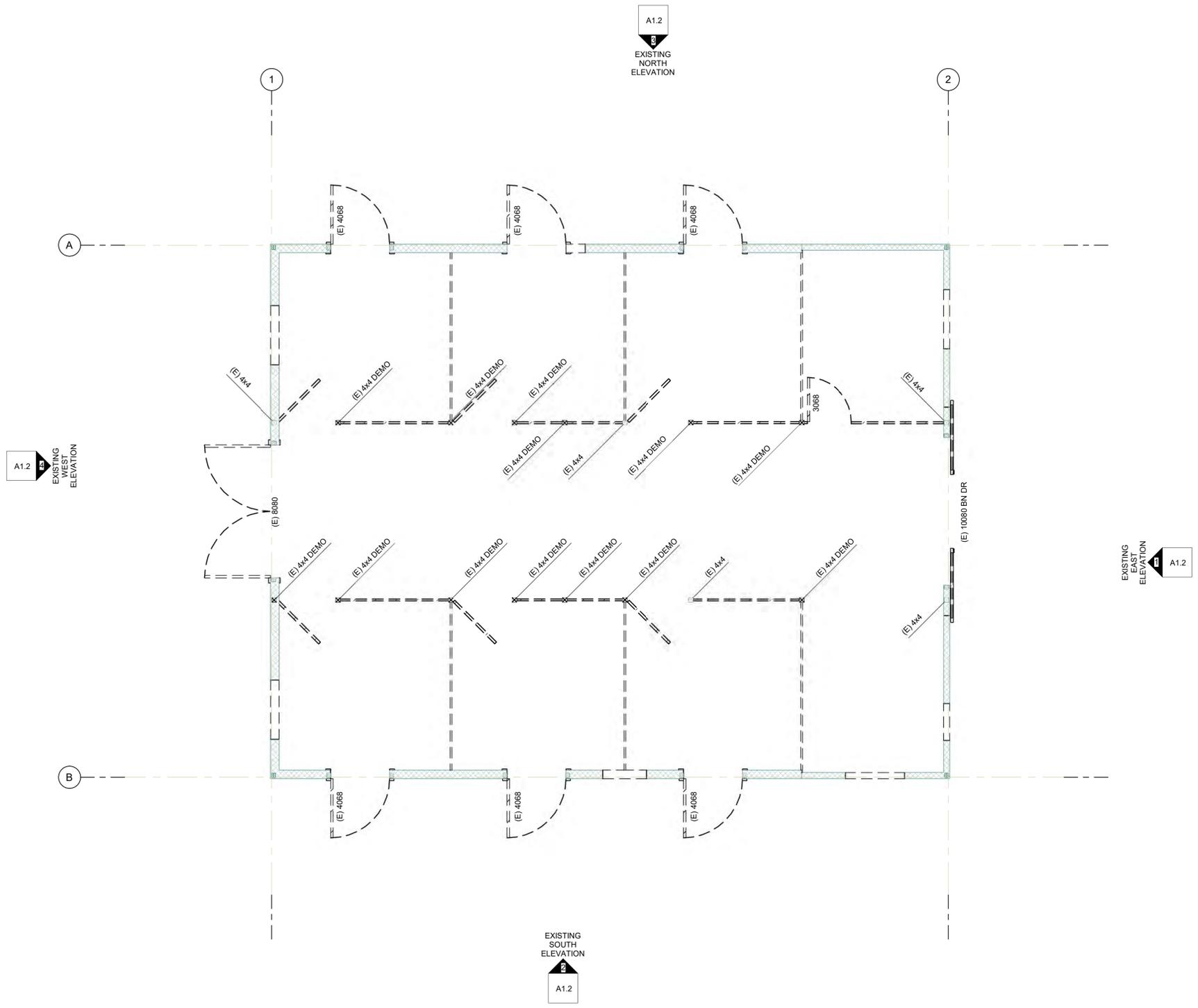
BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06

SUBMITTAL SET

DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

SITE PLAN





DEMOLITION LEDGEND

	REMOVE DOORS, FRAMES, WINDOWS, WALLS AND PARTITIONS AS SHOWN, TYP. U.N.O.
	REMOVE COUNTERS, SHELVES, CABINETS, APPLIANCES, FIXTURES, BUILT-INS, DECKS AND FLOORS AS SHOWN, TYP. U.N.O.

REVISIONS

#	Date	Description	By

DEI
engineers

Dunagan Engineering, Inc.
4750 Caughlin Parkway #766, Reno, NV 89519
P: 775-329-2733 | F: 888-873-0790 | W: DEIengineers.com

Professional Engineer Seal for Erika K. Hull-Stancliff, Civil, No. 27423, Exp. 6-30-23.

4/19/2022 10:31:55 AM

BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06

SUBMITTAL SET

DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

EXISTING FLOOR PLAN w/
DEMOLITION

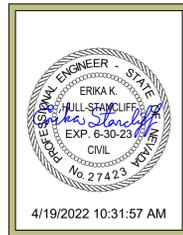
A1.1
SHEET of SHEETS

EXISTING FLOOR PLAN w/ DEMOLITION
1/4" = 1'-0"

DEMOLITION LEDGEND		
	REMOVE DOORS, FRAMES, WINDOWS, WALLS AND PARTITIONS AS SHOWN, TYP. U.N.O.	
	REMOVE COUNTERS, SHELVES, CABINETS, APPLIANCES, FIXTURES, BUILT-INS, DECKS AND FLOORS AS SHOWN, TYP. U.N.O.	

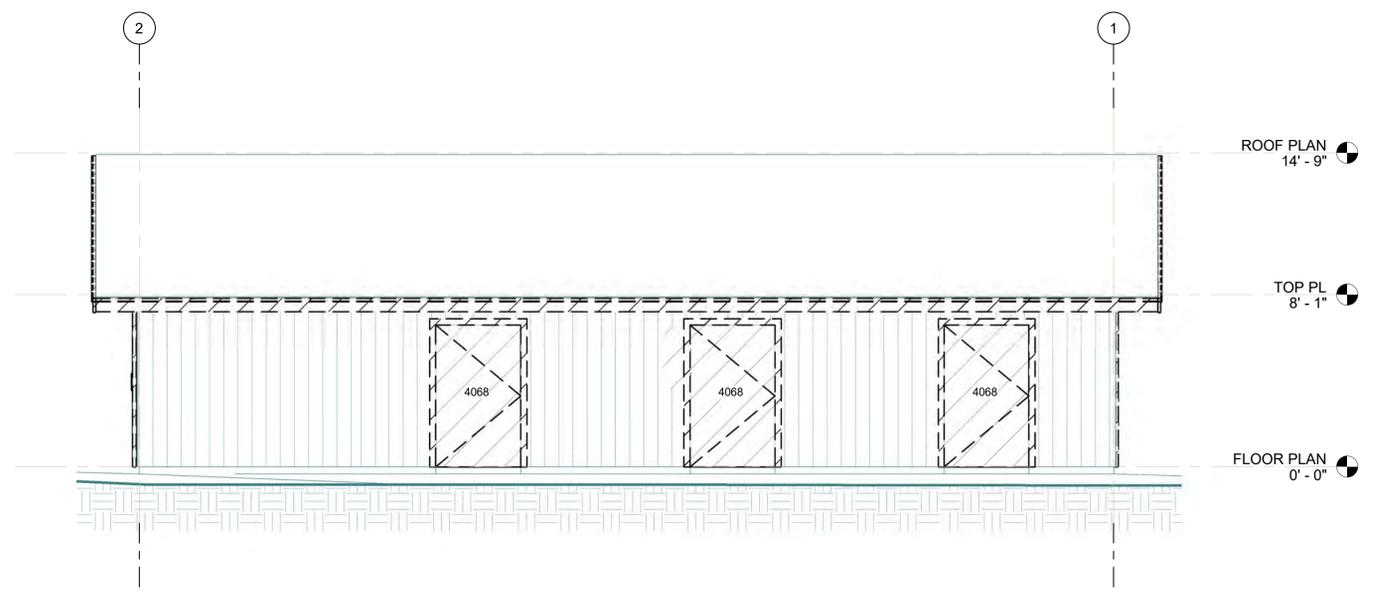
REVISIONS			
#	Date	Description	By

DEI
engineers
Dunagan Engineering, Inc.
4750 Caughlin Parkway #766, Reno, NV 89519
P: 775-329-2733 | F: 888-873-0790 | W: DEIengineers.com



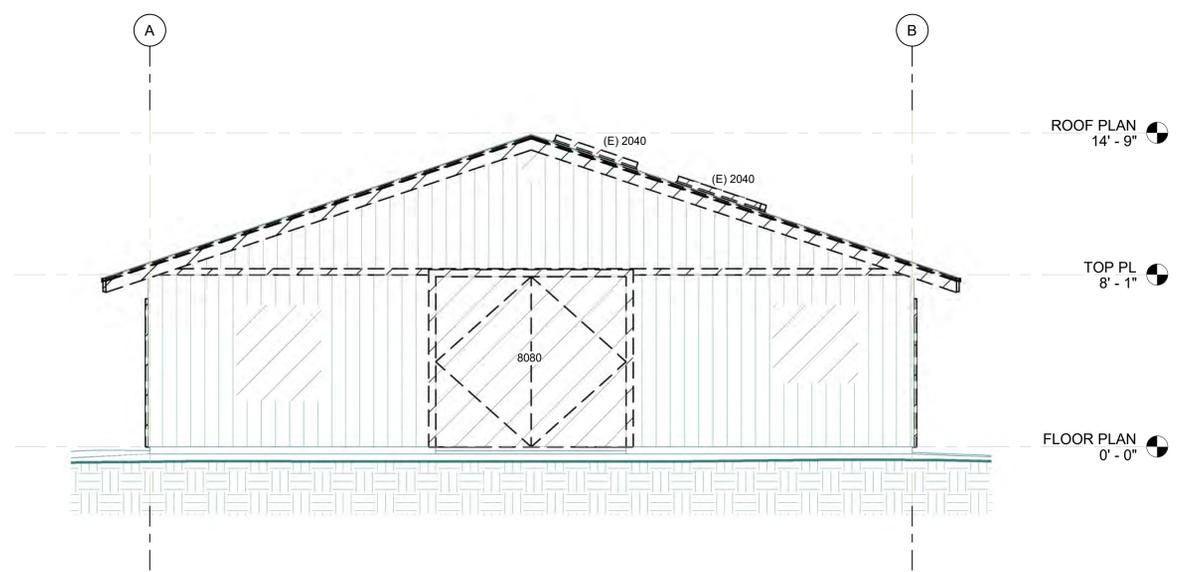
4/19/2022 10:31:57 AM

BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06



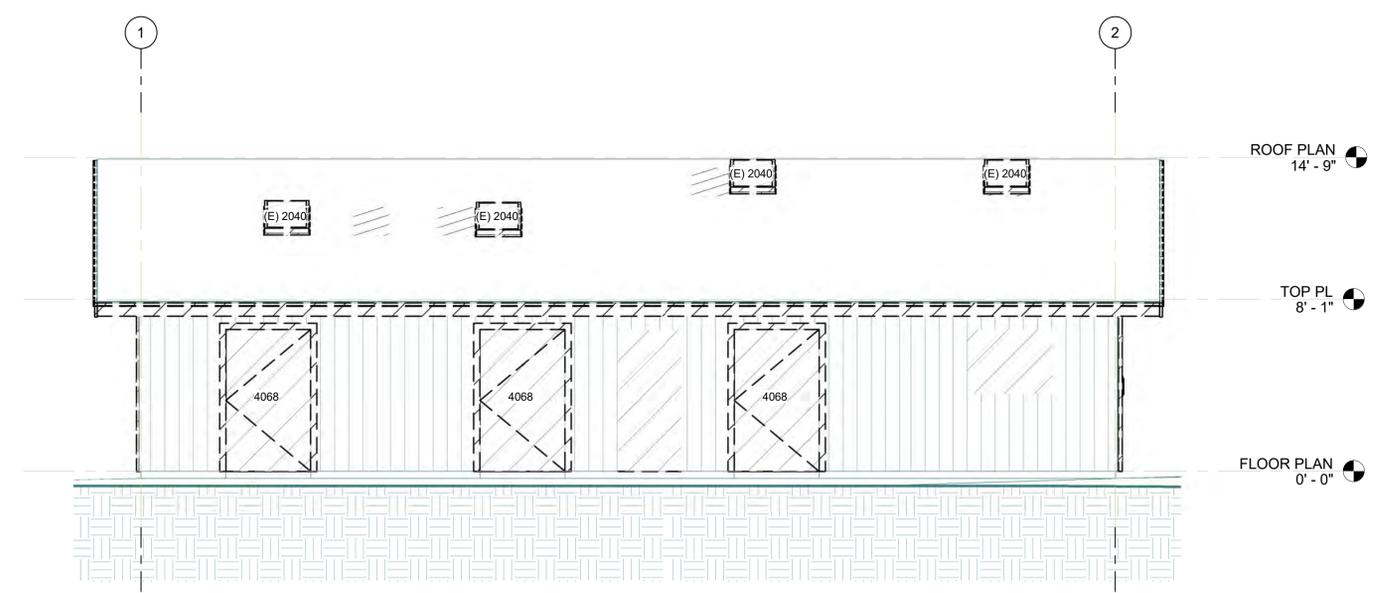
EXISTING NORTH ELEVATION w/ DEMOLITION

1/4" = 1'-0"



EXISTING WEST ELEVATION w/ DEMOLITION

1/4" = 1'-0"



EXISTING SOUTH ELEVATION w/ DEMOLITION

1/4" = 1'-0"



EXISTING EAST ELEVATION w/ DEMOLITION

1/4" = 1'-0"

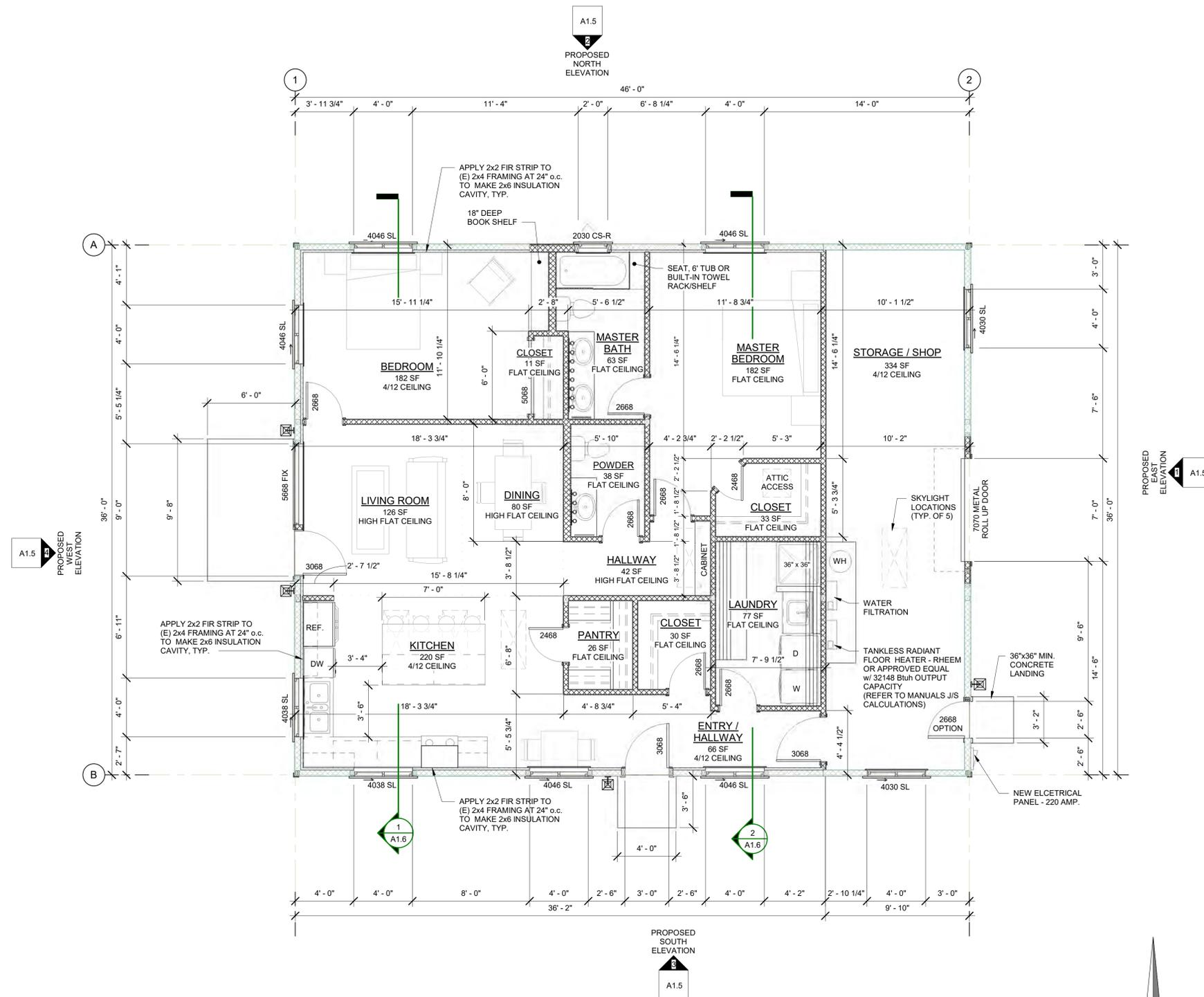
SUBMITTAL SET

DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

EXISTING ELEVATIONS w/ DEMOLITION



A1.2
SHEET of SHEETS



PROPOSED FLOOR PLAN

1/4" = 1'-0"

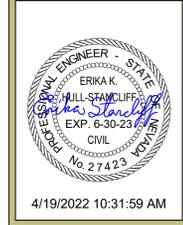
PROJECT AREAS	
AREA NAME	AREA SIZE
BARN CONVERSION AREA	1306 SF
STORAGE/SHOP AREA	364 SF



- TYPICAL FLOOR PLAN NOTES:**
- GYP. BOARD CEILINGS. 5/8" GYP. BD. CEILINGS TO HAVE FRAMING MEMBERS AT 24" o.c., 1/2" GYP. BD. CEILINGS TO HAVE FRAMING MEMBERS AT 16" o.c.
 - PROVIDE 1/2" GYP. BD. CONTINUOUS ON GARAGE FACE OF HOUSE/GARAGE COMMON WALLS. PROVIDE 1/2" GYP. BD. ON GARAGE CEILING AT HOUSE / GARAGE AS REQUIRED BY LOCAL GOVERNING CODES.
 - SLOPE GARAGE FLOOR DOWNWARD 2" TO GARAGE DOOR.
 - WATER HEATER: PROVIDE ELEVATED PLATFORM (18" A.F.F.) AND SEISMIC ANCHORAGE PER 2018 IRC. PROVIDE TEMPERATURE AND PRESSURE RELIEF VALVE w/ DRAIN TO EXTERIOR. SUPPLY WATER PRESSURE THROUGH BUILDING. SUPPLY NOT TO EXCEED PRESSURE RELIEF RATING. PROVIDE COMBUSTION AIR. HOT WATER LINES TO HAVE CIRCULATION PUMP OR HOT WATER LINES TO BE MAX. 1/2" DIAMETER. INSULATE ALL HOT WATER LINES TO w/ MIN. R-2 INSULATION.
 - EXTERIOR HOSE BIBS TO BE FROST FREE WITH NON-REMOVABLE BACKFLOW PREVENTION DEVICES.
 - EMERGENCY EGRESS IN SLEEPING ROOMS SHALL COMPLY WITH GOVERNING FIRE AND BUILDING CODES. MAXIMUM SILL HEIGHT AT EGRESS WINDOW SHALL NOT EXCEED 44" A.F.F. CLEAR OPENING OF 24" HIGH MIN. X 20" WIDE MIN.
 - SHOWER AND TUB/SHOWER COMBINATIONS SHALL HAVE A SMOOTH HARD, NON-ABSORBENT SURFACE OVER MOISTURE RESISTANT GYP. BD. TO A HEIGHT OF 70" MIN. DRAIN INLET.
 - ALL DIMENSIONS ARE FROM FACE OF STUD TO FACE OF STUD U.N.O.
 - ALL EXTERIOR WALLS AND INTERIOR PLUMBING WALLS TO BE INSULATED.
 - ALL EXTERIOR DOORS SHALL HAVE A LANDING A MIN. 36" IN THE DIRECTION OF TRAVEL BY WIDTH OF THE DOOR. EXTERIOR DOORS SHALL BE APPROVED NONCOMBUSTIBLE CONSTRUCTION WITH SOLID CORE NOT LESS THAN 1 3/4" THICK OR HAVE FIRE PROTECTION RATING OF NOT LESS THAN 20 MIN. COMPLY WITH REQUIREMENTS OF THE 2018 IWUC SECTION 504.9.
 - PROVIDE FIRE-BLOCKING AT 10' MAX.
 - ALL APPLIANCES, MECHANICAL UNITS, PLUMBING FIXTURES, LIGHTING FIXTURES, FIREPLACE, ETC. WITH BRAND, MODEL NUMBER AND SIZE TO BE SUPPLIED TO CONTRACTOR, BY OWNER, PRIOR TO CONSTRUCTION.
 - MIN. CLEARANCE FOR STUCCO WEEP SCREED TO BE 4" MIN. AT EARTH AND 2" MIN. AT CONC./ASPHALT/PAVERS. PROVIDE WATER RESISTANT BARRIER PER R703.2/R703.63
 - PRESSURE REDUCING VALVES REQUIRED ON INCOMING WATER SERVICE.
 - WHERE WATER HEATER VENTS PASS THROUGH INSULATION ASSEMBLIES AND INSULATION SHIELD CONSTRUCTED OF NOT LESS THAN 26 GA. SHEET METAL AND EXTENDING 2" ABOVE INSULATION SHALL BE INSTALLED AS PER 2018 IRC SECT. G2426.4.
 - DESIGNATE SAFETY GLAZING PER IRC R308.
 - WINDOW & SKYLIGHTS U-FACTOR 0.30 MIN. ALL WINDOW GLAZING SHALL MEET THE REQUIREMENTS OF SECTION 504.8 OF THE 2018 IWUC OR HAVE FIRE RATING OF 20 MIN.
 - FIRESTOP ANY ROOF PROFILE WITH SPACE BETWEEN ROOF DECKING AND ROOF COVERING PER SECTION 504.2 OF THE 2018 IWUC.

REVISIONS		
#	Date	Description

DEI
engineers
Dunagan Engineering, Inc.
4750 Caughlin Parkway #766, Reno, NV 89519
P. 775.329.2731 F. 888.873.0790 W. DEIengineers.com



4/19/2022 10:31:59 AM

BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06

SUBMITTAL SET

DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

PROPOSED FLOOR PLAN



A1.3
SHEET of SHEETS

PLEASE RECYCLE

NOTES

1. ALL SIDING SHALL BE NON-COMBUSTIBLE, 1-HOUR MIN. FIRE RATED, OR IGNITION RESISTANCE.
2. ALL ROOFING SHALL BE CLASS A OR APPROVED NONCOMBUSTIBLE MATERIAL.
3. REFER TO 2018 INTERNATIONAL WILDLAND URBAN INTERFACE CODE (IWUIC) SECTION 504 FOR CLASS 1 IGNITION-RESISTANCE CONSTRUCTION REQUIREMENTS.

TYPICAL FLOOR PLAN NOTES:

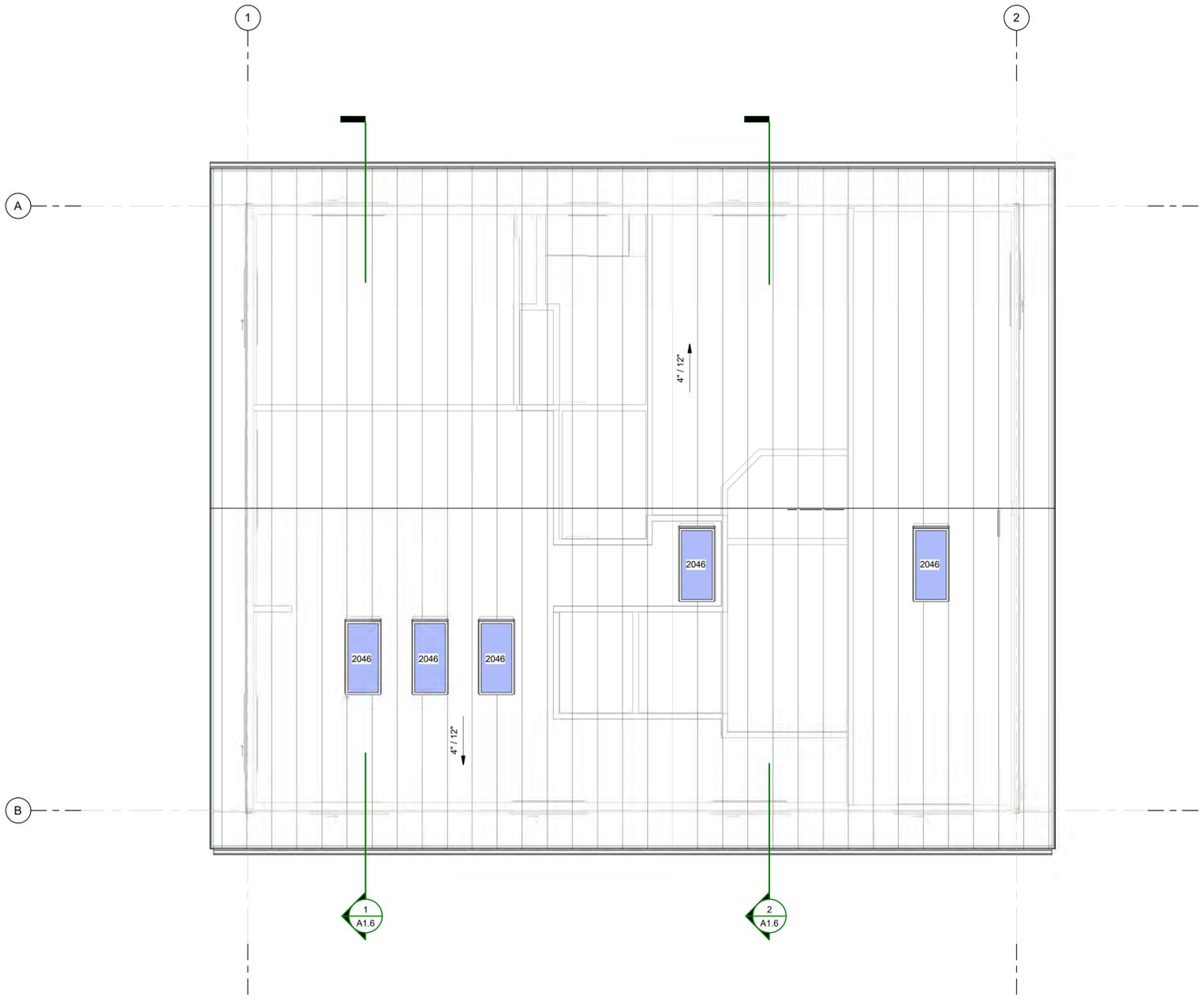
1. GYP. BOARD CEILINGS: 5/8" GYP. BD. CEILINGS TO HAVE FRAMING MEMBERS AT 24" o.c., 1/2" GYP. BD. CEILINGS TO HAVE FRAMING MEMBERS AT 16" o.c.
2. PROVIDE 1/2" GYP. BD. CONTINUOUS ON GARAGE FACE OF HOUSE/GARAGE COMMON WALLS. PROVIDE 1/2" GYP. BD. ON GARAGE CEILING AT HOUSE / GARAGE AS REQUIRED BY LOCAL GOVERNING CODES.
3. SLOPE GARAGE FLOOR DOWNWARD 2" TO GARAGE DOOR.
4. WATER HEATER: PROVIDE ELEVATED PLATFORM (18" A.F.F.) AND SEISMIC ANCHORAGE PER 2018 IRC. PROVIDE TEMPERATURE AND PRESSURE RELIEF VALVE W/ DRAIN TO EXTERIOR. SUPPLY WATER PRESSURE THROUGH BUILDING. SUPPLY NOT TO EXCEED PRESSURE RELIEF RATING. PROVIDE COMBUSTION AIR. HOT WATER LINES TO HAVE CIRCULATION PUMP OR HOT WATER LINES TO BE MAX. 1/2" DIAMETER. INSULATE ALL HOT WATER LINES TO W/ MIN. R-2 INSULATION.
5. EXTERIOR HOSE BIBS TO BE FROST FREE WITH NON-REMOVABLE BACKFLOW PREVENTION DEVICES.
6. EMERGENCY EGRESS IN SLEEPING ROOMS SHALL COMPLY WITH GOVERNING FIRE AND BUILDING CODES. MAXIMUM SILL HEIGHT AT EGRESS WINDOW SHALL NOT EXCEED 44" A.F.F. CLEAR OPENING OF 24" HIGH MIN. X 20" WIDE MIN.
7. SHOWER AND TUB/SHOWER COMBINATIONS SHALL HAVE A SMOOTH HARD NON-ABSORBENT SURFACE OVER MOISTURE RESISTANT GYP. BD. TO A HEIGHT OF 70" MIN. DRAIN INLET.
8. ALL DIMENSIONS ARE FROM FACE OF STUD TO FACE OF STUD U.N.O.
9. ALL EXTERIOR WALLS AND INTERIOR PLUMBING WALLS TO BE INSULATED.
10. ALL EXTERIOR DOORS SHALL HAVE A LANDING A MIN. 36" IN THE DIRECTION OF TRAVEL BY WIDTH OF THE DOOR. EXTERIOR DOORS SHALL BE APPROVED NONCOMBUSTIBLE CONSTRUCTION WITH SOLID CORE NOT LESS THAN 1 3/4" THICK OR HAVE FIRE PROTECTION RATING OF NOT LESS THAN 20 MIN. COMPLY WITH REQUIREMENTS OF THE 2018 IWUIC SECTION 504.9.
11. PROVIDE FIRE-BLOCKING AT 10" MAX.
12. ALL APPLIANCES, MECHANICAL UNITS, PLUMBING FIXTURES, LIGHTING FIXTURES, FIREPLACE, ETC. WITH BRAND, MODEL NUMBER AND SIZE TO BE SUPPLIED TO CONTRACTOR, BY OWNER, PRIOR TO CONSTRUCTION.
13. MIN. CLEARANCE FOR STUCCO WEEP SCREED TO BE 4" MIN. AT EARTH AND 2" MIN. AT CONC./ASPHALT/PAVERS. PROVIDE WATER RESISTANT BARRIER PER R703.2/R703.63
14. PRESSURE REDUCING VALVES REQUIRED ON INCOMING WATER SERVICE.
15. WHERE WATER HEATER VENTS PASS THROUGH INSULATION ASSEMBLIES AND INSULATION SHIELD CONSTRUCTED OF NOT LESS THAN 26 GA. SHEET METAL AND EXTENDING 2" ABOVE INSULATION SHALL BE INSTALLED AS PER 2018 IRC SECT. G2426.4.
16. DESIGNATE SAFETY GLAZING PER IRC R308.
17. WINDOW & SKYLIGHTS U-FACTOR 0.30 MIN. ALL WINDOW GLAZING SHALL MEET THE REQUIREMENTS OF SECTION 504.8 OF THE 2018 IWUIC OR HAVE FIRE RATING OF 20 MIN.
18. FIRESTOP ANY ROOF PROFILE WITH SPACE BETWEEN ROOF DECKING AND ROOF COVERING PER SECTION 504.2 OF THE 2018 IWUIC.

REVISIONS		
#	Date	Description

DEI
engineers
Dunagan Engineering, Inc.
4790 Caughlin Parkway #766, Reno, NV 89519
P: 775-329-2733 | F: 888-873-0790 | W: DEIengineers.com

4/19/2022 10:32:00 AM

BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06



SUBMITTAL SET

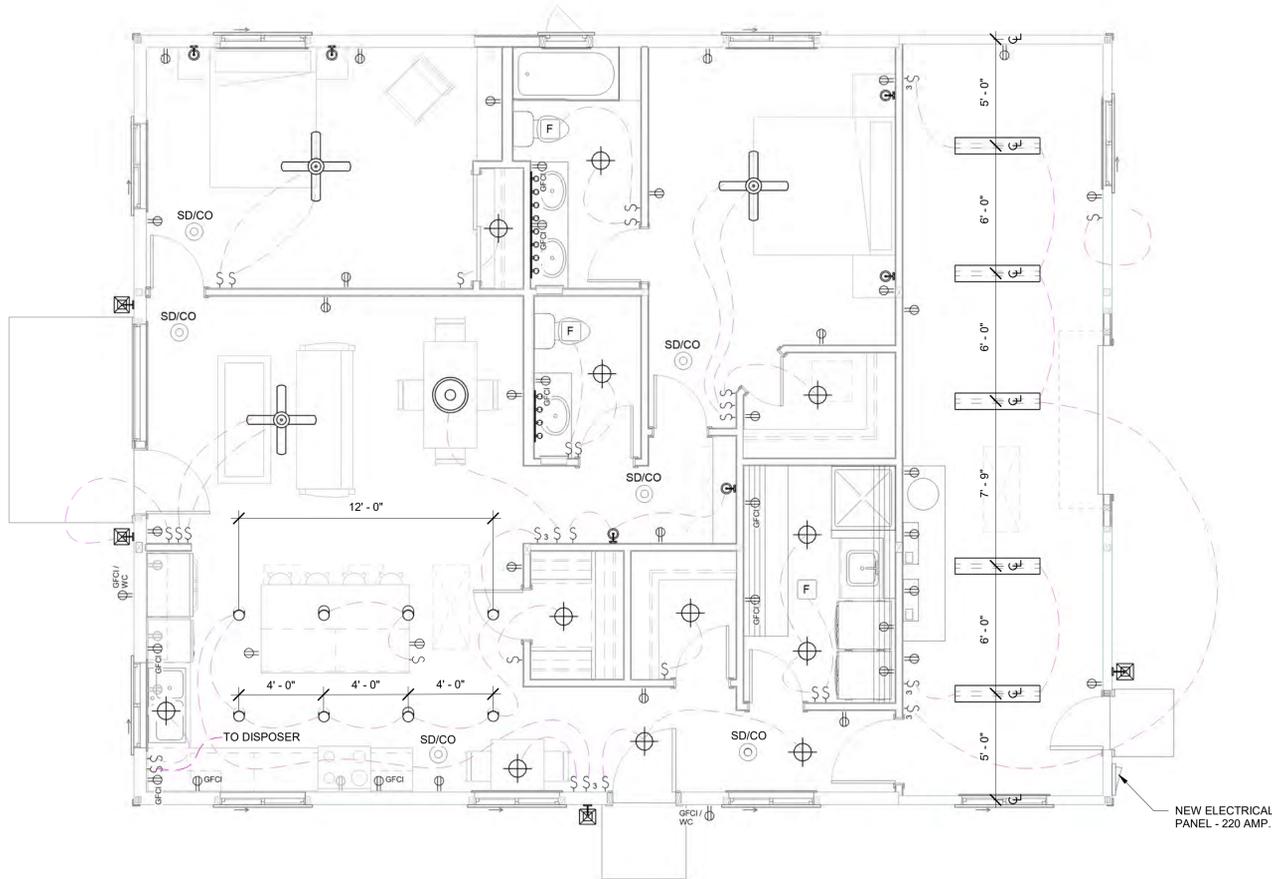
DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

PROPOSED ROOF PLAN

A1.4
SHEET of SHEETS

PROPOSED ROOF PLAN

1/4" = 1'-0"



ELECTRICAL FLOOR PLAN

1/4" = 1'-0"

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
[F]	EXHAUST FAN	[S]	SWITCH
[SD/CO]	COMBINATION 120V SMOKE DETECTOR / CARBON MONOXIDE ALARM - HARD WIRED w/ BATTERY BACKUP (ALL DETECTORS SHALL BE INTERCONNECTED)	[S3]	3-WAY SWITCH
[⊙]	RECESSED CAN LIGHT	[S0]	SWITCH w/ DIMMER
[⊕]	SURFACE MOUNT CEILING LIGHT	[S30]	3-WAY SWITCH w/ DIMMER
[⊖]	INTERIOR SURFACE MOUNT WALL FIXTURE	[T]	TELEPHONE
[⊖]	FLUORESCENT LIGHT	[TV]	CABLE TV / MEDIA
[⊖]	EXTERIOR SURFACE MOUNT WALL FIXTURE	[CF]	CEILING FAN
[DU]	DUPLEX OUTLET	[GDO]	GARAGE DOOR OPENER
[220]	220V OUTLET / CONNECTION	[HBO]	HOSE BIB w/ SHUT OFF
[GFCI]	GROUND-FAULT CIRCUIT-INTERRUPTER DUPLEX OUTLET	[GSM]	GAS SERVICE AND METER
[GFCI/WC]	GROUND-FAULT CIRCUIT-INTERRUPTER DUPLEX OUTLET w/ WEATHERPROOF COVER		

- NOTES:**
- ALL BEDROOM, FAMILY ROOM, DINING, LIVING, HALLWAYS, ETC. OUTLETS (E.G. RECEPTACLE, LIGHTING, AND SMOKE DETECTOR) REQUIRE ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION PER IRC E3902.12
 - RECEPTACLE OUTLET DISTRIBUTION SHALL COMPLY w/ IRC, E3901.2
 - EXHAUST FAN TO HAVE MIN. 51 CFM, MAXIMUM .25WATTS/CFM, AND 1 SOUND LEVEL FOR MAKE UP AIR. CEILING FAN MOUNTING BOXES SHOULD STRUCTURALLY SUPPORT FAN IN MOTION. FANS WILL HAVE VARIABLE SPEED SWITCH CONTROL.
 - PROVIDE ELECTRICAL DISCONNECT AT A READILY ACCESSIBLE LOCATION OUTSIDE OF THE BUILDING NEAREST TO THE POINT OF ENTRANCE OF THE SERVICE CONDUCTORS
 - FURNACE AND WATER COMBUSTION AIR TO COMPLY w/ IRC M1402.3
 - PROVIDE GFI PROTECTION TO ALL KITCHEN COUNTER RECEPTACLES
 - PROVIDE MINIMUM SPACING OF KITCHEN COUNTER RECEPTACLES PER IRC E3901.4.1
 - ALL BATHROOM SHOWER AND TUB FIXTURES SHALL BE LISTED FOR WET OR DAMP LOCATIONS.
 - LAMPS IN PERMANENTLY INSTALLED LIGHT FIXTURES TO BE HIGH EFFICACY LAMPS PER 2018 IECC SECTION 404.1
 - SMOKE DETECTORS MUST BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL THE ALARMS IN THE DWELLING.
 - VERIFY IF EXTERIOR LIGHTS TO BE ON PHOTO CELL OR TIMER.
 - VERIFY ELECTRICAL REQUIREMENTS OF LANDSCAPING LIGHTS, TIMER, ETC.
 - PROVIDE LIGHT AND SWITCH FOR ATTIC ACCESS.
 - ALL NEW OUTLETS THAT ARE 5'-6" OR LESS OFF OF THE FINISHED FLOOR ARE TO BE TAMPER-RESISTANT PER 2018 IRC SECTION E4002.14

- CO2 / SMOKE DETECTORS:**
The code requires the following:
- One in each sleeping room.
 - One outside each sleeping area and in the immediate vicinity of the sleeping rooms.
 - One at each level of the building.

TYPICAL FLOOR PLAN NOTES:

- GYP. BOARD CEILINGS: 5/8" GYP. BD. CEILINGS TO HAVE FRAMING MEMBERS AT 24" o.c., 1/2" GYP. BD.. CEILINGS TO HAVE FRAMING MEMBERS AT 16" o.c.
- PROVIDE 1/2" GYP. BD. CONTINUOUS ON GARAGE FACE OF HOUSE/GARAGE COMMON WALLS. PROVIDE 1/2" GYP. BD. ON GARAGE CEILING AT HOUSE / GARAGE AS REQUIRED BY LOCAL GOVERNING CODES.
- SLOPE GARAGE FLOOR DOWNWARD 2" TO GARAGE DOOR.
- WATER HEATER: PROVIDE ELEVATED PLATFORM (18" A.F.F.) AND SEISMIC ANCHORAGE PER 2018 IRC. PROVIDE TEMPERATURE AND PRESSURE RELIEF VALVE w/ DRAIN TO EXTERIOR. SUPPLY WATER PRESSURE THROUGH BUILDING. SUPPLY NOT TO EXCEED PRESSURE RELIEF RATING. PROVIDE COMBUSTION AIR. HOT WATER LINES TO HAVE CIRCULATION PUMP OR HOT WATER LINES TO BE MAX. 1/2" DIAMETER. INSULATE ALL HOT WATER LINES TO w/ MIN. R-2 INSULATION.
- EXTERIOR HOSE BIBS TO BE FROST FREE WITH NON-REMOVABLE BACKFLOW PREVENTION DEVICES.
- EMERGENCY EGRESS IN SLEEPING ROOMS SHALL COMPLY WITH GOVERNING FIRE AND BUILDING CODES. MAXIMUM SILL HEIGHT AT EGRESS WINDOW SHALL NOT EXCEED 44" A.F.F. CLEAR OPENING OF 24" HIGH MIN. X 20" WIDE MIN.
- SHOWER AND TUB/SHOWER COMBINATIONS SHALL HAVE A SMOOTH HARD, NON-ABSORBENT SURFACE OVER MOISTURE RESISTANT GYP. BD. TO A HEIGHT OF 70" MIN. DRAIN INLET.
- ALL DIMENSIONS ARE FROM FACE OF STUD TO FACE OF STUD U.N.O.
- ALL EXTERIOR WALLS AND INTERIOR PLUMBING WALLS TO BE INSULATED.
- ALL EXTERIOR DOORS SHALL HAVE A LANDING A MIN. 36" IN THE DIRECTION OF TRAVEL BY WIDTH OF THE DOOR. EXTERIOR DOORS SHALL BE APPROVED NONCOMBUSTIBLE CONSTRUCTION WITH SOLID CORE NOT LESS THAN 1 3/4" THICK OR HAVE FIRE PROTECTION RATING OF NOT LESS THAN 20 MIN. COMPLY WITH REQUIREMENTS OF THE 2018 IWUIC SECTION 504.9.
- PROVIDE FIRE-BLOCKING AT 10' MAX.
- ALL APPLIANCES, MECHANICAL UNITS, PLUMBING FIXTURES, LIGHTING FIXTURES, FIREPLACE, ETC. WITH BRAND, MODEL NUMBER AND SIZE TO BE SUPPLIED TO CONTRACTOR, BY OWNER, PRIOR TO CONSTRUCTION.
- MIN. CLEARANCE FOR STUCCO WEEP SCREED TO BE 4" MIN. AT EARTH AND 2" MIN. AT CONC./ASPHALT/PAVERS. PROVIDE WATER RESISTANT BARRIER PER R703.2/R703.63
- PRESSURE REDUCING VALVES REQUIRED ON INCOMING WATER SERVICE.
- WHERE WATER HEATER VENTS PASS THROUGH INSULATION ASSEMBLIES AND INSULATION SHIELD CONSTRUCTED OF NOT LESS THAN 26 GA. SHEET METAL AND EXTENDING 2" ABOVE INSULATION SHALL BE INSTALLED AS PER 2018 IRC SECT. G2426.4.
- DESIGNATE SAFETY GLAZING PER IRC R308.
- WINDOW & SKYLIGHTS U-FACTOR 0.30 MIN. ALL WINDOW GLAZING SHALL MEET THE REQUIREMENTS OF SECTION 504.8 OF THE 2018 IWUIC OR HAVE FIRE RATING OF 20 MIN.
- FIRESTOP ANY ROOF PROFILE WITH SPACE BETWEEN ROOF DECKING AND ROOF COVERING PER SECTION 504.2 OF THE 2018 IWUIC.

REVISIONS

#	Date	Description	By

DEI
engineers
Dunagan Engineering, Inc.
4750 Caughlin Parkway #166, Reno, NV 89519
P: 775-329-2733 | F: 888-837-0790 | W: DEIengineers.com

Professional Engineer Seal:
ERIK A. K. HULL-STANCLIFF
CIVIL ENGINEER
No. 27423
EXPIRES 6-30-23

4/19/2022 10:32:06 AM

BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06

ROOF VENTILATION NOTES

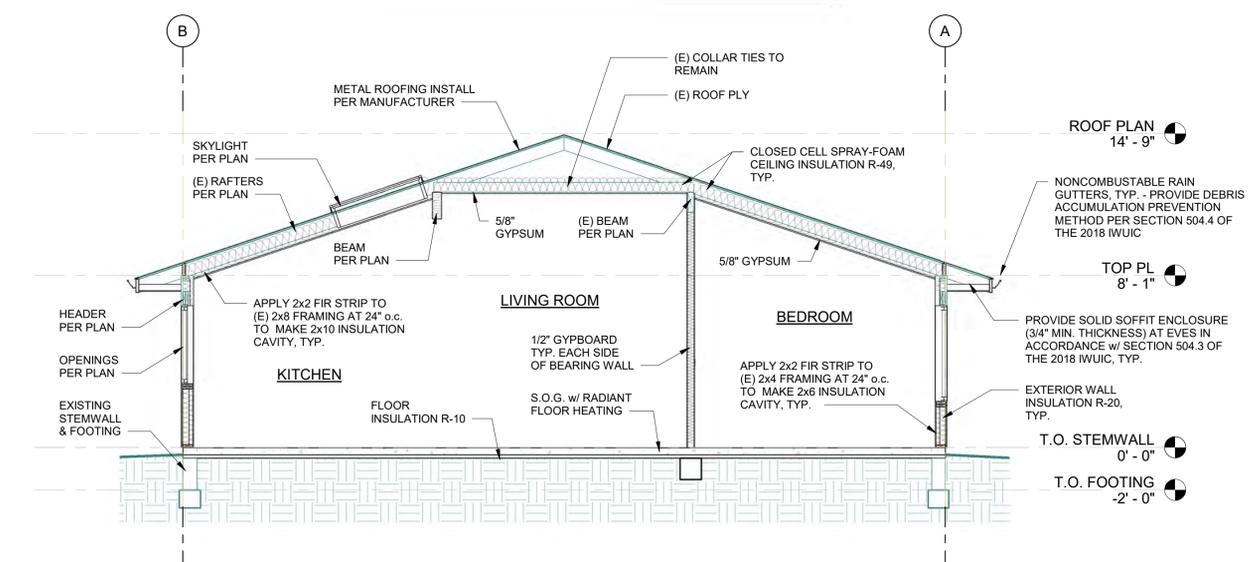
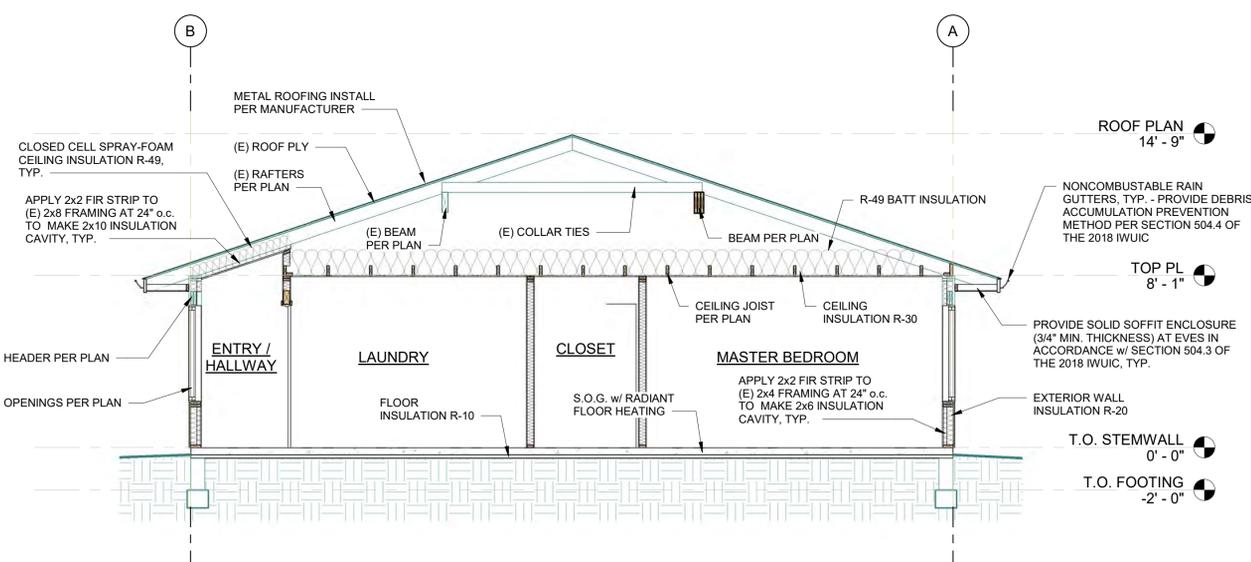
ALL ROOF VENTILATION SHALL COMPLY W/ IRC, SECTION 806

REQUIRED	PROVIDED
ROOF AREA 2050/150=13.7 SF	EAVE VENTING - APPROXIMATELY EVENLY SPACED TABBED EAVE VENT - 5.5" x 22" OPENING - COVER WITH 1/4" COPPER WIRE MESH - (0.52 SF NET FREE VENT AREA EACH) PROVIDE (26) BLOCKS AT EAVE; NET FREE VENT AREA = 28 (0.52) SF = 14.56 SF TOTAL NET FREE VENT AREA = 14.56 SF > 13.7 SF

ARCHITECTURAL NOTE(S):

- INSULATION SCHEDULE:**
- CEILING - OPTIMA BLOWN-IN INSULATION R-49.
 - EXTERIOR WALLS - 2X6 PLUMBING - R-20 BATT INSULATION or LOOSE FILL INSULATION
- DOOR & WINDOW NOTES:**
- THE NEW EXTERIOR DOORS WITH MORE THAN 50% GLAZING MUST HAVE A MINIMUM R = 3.33 (U = 0.30 EQUIVALENT). SOLID DOORS ARE REQUIRED TO HAVE A MINIMUM R = 3.33 (U = 0.30 EQUIVALENT).
 - ALL NEW EXTERIOR WINDOWS MUST CONSIST OF DOUBLE PANE INSULATING GLASS, SUSPENDED FILM AND LOW-E w/ A MINIMUM R=3.33 (U=0.30 EQUIVALENT).

- NOTE:**
- AT CONTRACTOR'S OPTION, ALTERNATIVE VENTILATION METHODS MAY BE USED PROVIDED THAT THE METHODS COMPLY WITH THE OVERALL VENTILATION REQUIREMENTS.
 - ALL EAVE VENTS SHALL COMPLY WITH THE REQUIREMENTS FOR SECTION 504.10 OF THE 2018 IWUIC.



SUBMITTAL SET

DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

SECTIONS / ELECTRICAL FLOOR PLAN

A1.6
SHEET of SHEETS

PLEASE RECYCLE

ABBREVIATIONS:

- ADDL ADDITIONAL
- ALT ALTERNATE
- A.B. ANCHOR BOLT
- APPROX APPROXIMATE
- BM BEARING
- BRG BEARING
- BEL BELOW
- BET BETWEEN
- BLK BLOCK
- B/S BOTH SIDES
- BOT BOTTOM
- B.N. BOUNDARY NAILING
- BLD BUILDING
- CANT CANTILEVER
- C.B. CARRIAGE BOLT
- CLG CEILING
- CL CENTERLINE
- CHNL CHANNEL
- CLR CLEAR
- COL COLUMN
- CP COMPLETE PENETRATION
- CONC CONCRETE
- CONC. CONCRETE MASONRY UNIT
- CONT CONTINUOUS
- CJ CONTROL JOINT
- C.M.J. CONTROL MASONRY JOINT
- C/S COUNTERSINK
- D.L. DEAD LOAD
- DET DETAIL
- DIA DIAMETER
- DIM DIMENSION
- DO DITTO
- DJ DOWEL JOINT
- DL DOUBLE
- DF DOUGLAS FIR
- DWG DRAWING
- EA EACH
- EE EACH END
- E.F. EACH FACE
- ES EACH SIDE
- EW EACH WAY
- EDGE NAIL
- ELEV ELEVATION
- EMBED EMBEDMENT
- EQ EQUAL
- EX EXISTING
- EXP EXPANSION
- EXP. EXPANSION BOLT
- EX. EXPANSION JOINT
- EXT EXTERIOR
- F.O.C. FACE OF CONCRETE
- F.O.M. FACE OF MASONRY
- F.O.S. FACE OF STUD
- F.N. FIELD NAIL/FACE NAIL
- FIN FINISH FLOOR
- FTG FOOTING
- FEF FORCED-ENTRY FASTENERS
- FN FOUNDATION
- GAGE
- GALV GALVANIZED
- GL GLULAM
- G.L.B. GLUED-LAMINATED BEAM
- GYP BD GYPSUM BOARD
- HGR HANGER
- HT HEAD
- HT HEIGHT
- HF HF-FIR
- HSB HIGH-STRENGTH BOLT
- HORIZ HORIZONTAL
- INFO INFORMATION
- ID INSIDE DIAMETER
- INT INTERIOR
- IS ISOLATION
- JST JOINT
- KD KD JOIST/KILN DRIED
- KING KING STUD
- LVL LAMINATED VENEER LUMBER
- LT LIGHT
- LIVE LOAD
- LG LONG
- LLH LONGS LEG HORIZONTAL
- LLV LONGS LEG VERTICAL
- MB MACHINE BOLT
- MW MALLEABLE IRON WASHER
- MANUF MANUFACTURER
- MAX MAXIMUM
- MECH MECHANICAL
- MECH. MECHANICAL (BY TRUS JST)
- MIN MINIMUM
- MISC MISCELLANEOUS
- NEW NEW
- N.I.C. NOT IN CONTRACT
- NTS NOT TO SCALE
- # NUMBER/POUNDS
- O.C. ON CENTER
- O/S ONE SIDE
- OPP OPPOSITE
- OH OPPOSITE HAND
- O.S.B. ORIENTED STRAND BOARD
- OD OUTSIDE DIAMETER
- OVER OVER
- PSL PARALLAM (BY TRUS JST)
- PARL or // PARALLEL
- PP PARTIAL PENETRATION
- PEN PENETRATION
- PL PLATE
- PLY PLYWOOD
- PSF POUNDS PER SQUARE FOOT
- PSI POUNDS PER SQUARE INCH
- P.A.F. POWER ACTUATED FASTENER
- PDF POWER DRIVEN FASTENER
- PT PRESSURE TREATED
- PRT PRESERVATIVE TREATED
- PL PROPERTY LINE or PLATE
- R RADIUS
- RWD REDWOOD
- REF REFERENCE
- RECD REQUIRED
- ROSBORO ROSBORO MFG. TIMBER
- SCHED SCHEDULE
- SAD SEE ARCHITECTURAL DWGS
- SMD SEE MECHANICAL DWGS
- SELF SELF-TAPPING SCREW
- SW SHEAR WALL
- SIM SIMILAR
- SJ SLAB JOINT
- S.O.G. SLAB ON GRADE
- SB SOLID BLOCK
- SPEC SPECIFICATION
- SQ SQUARE
- STD STANDARD
- STL STEEL
- SYM SYMMETRICAL
- THRD THREADED
- T.N. TOE NAIL
- T&G TONGUE & GROOVE
- T&B TOP & BOTTOM
- T.O. TOP OF
- TS TUBE STEEL
- TRMR TRIMMER
- TYP TYPICAL
- UBC UNIFORM BUILDING CODE
- UNO UNLESS NOTED OTHERWISE
- VERT VERTICAL
- WT WEIGHT
- WS WELDED STUD/WOOD SCREW
- WWF WELDED WIRE FABRIC
- WWM WELDED WIRE MESH

GENERAL NOTES AND SPECIFICATIONS:

DIVISION 1 - GENERAL:

- a. All work shall conform to the 2018 International Building Code (IBC) and applicable local codes.
- b. Where applicable allowable stresses have been increased 15% (Except Allow and Pacer Counties) for short duration and 60% for seismic and wind loading.
- c. Dunagan Engineering, Inc. 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 by others, Dunagan Engineering, Inc. assumes no responsibility for the structure. No deviation from structural details shall be made without the written approval of the Structural Engineer. Approval by governing agency does not constitute authority to deviate from plans or specifications.
- d. All codes and standards shall be the most current edition as of the date of the calculations.
- e. The details shown on the drawings are typical. Similar details apply to similar conditions.
- f. The calculations are based upon a complete structure. Should an unfinished structure be subjected to loads, Dunagan Engineering, Inc. should be consulted for an interim design or if not, will assume no liability.
- g. Temporary supports, etc., are the sole responsibility of the framing contractor and have not been considered by the structural engineer. Framing contractor is responsible for the stability of the structure prior to the application of shear walls, roof and floor diaphragms and finish materials. He shall provide the necessary bracing to provide stability prior to the application of the aforementioned materials. Observation visits to the site by field representative of the Structural Engineer do not include inspections of construction means and methods. Observation performed by Architect and/or Structural Engineer during construction are not continuous and detailed inspection services are performed by others. Observations performed by Structural Engineer are performed solely for the purpose of determining if contractor understands design intent conveyed in the contract documents. Observations do not guarantee contractor's performance and are not to be construed as supervision of construction.
- h. Dunagan Engineering, Inc. 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 manner whatsoever, nor are to be assigned to a third party without first obtaining the written permission of Dunagan Engineering, Inc. In the event of unauthorized reuse of these plans by a third party, the third party shall hold Dunagan Engineering, Inc. harmless.
- i. These drawings and all written material herein are instruments of service and constitute original and unpublished work of the Engineer. They remain the property of the Engineer whether the project for which they are made be executed or not. They may not be duplicated, used on other projects or by other than the original Owner whose name appears herein without the express written consent of the Engineer.
- j. Adhesive anchors shall be Simpson AT-XR Epoxy per ESR-2508 with ASTM A36 threaded rod or approved equal, U.N.O., Expansion anchors shall be Simpson Strong Bolts per ESR-3037, U.N.O., Adhesive or expansion anchors shall not be installed without authorization by Structural Engineer and until concrete and masonry has cured to design strength.

DIVISION 2 - FOUNDATION:

- a. Building sites assumed to be drained and freed of clay or expansive soil. Any other conditions should be brought to the attention of Dunagan Engineering, Inc.
- b. These calculations assume stable, undisturbed soils and level or stepped footings. Any other conditions should be reported to Dunagan Engineering, Inc.
- c. All footings shall bear on undisturbed soil with a footing depth 24" below frostline.
- d. All finish grade shall slope away from foundation for a minimum of 10'-0".
- e. An assumed soil bearing pressure is determined and will be increased in accordance with IBC Table 1806.2.
- f. Fill material shall be free from debris, vegetation, and other foreign substances.
- g. Backfill trenches shall be compacted to 90% relative density per ASTM D1557 to within 12" of finished grade. The top 12" shall be landscape fill.
- h. Backfill at pipe trenches shall be compacted on both sides of pipe in 6" lifts.
- i. 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.
- j. All backfill against foundation walls must be compacted to 90% relative density, unless otherwise directed by a soils report.
- k. Perforated pipe sub-drain typical behind all retaining walls. Use 4" diameter PVC except where noted otherwise. Slope pipe to drain to daylight and drywell.

DIVISION 3 - CONCRETE:

- a. All concrete shall have a minimum 28 day compressive strength of 3000 psi. To accommodate the "Severe Weather for Concrete" category, concrete shall have a minimum 28 day compressive strength of 3000 psi for foundation walls and other vertical concrete exposed to weather and a minimum compressive strength of 3500 psi for slabs, porches and other exterior flatwork, including garage slabs, exposed to weather as recommended by Table R402.2 of the IRC and Section 1904.1 of the IBC. **No Special Inspection is required as design assumes 2500 psi.**
- b. Reinforcement shall be per ASTM A618 Grade 60 ksi, U.N.O.
- c. Lap reinforcing Per Detail 5/5/2, U.N.O.
- d. Reinforcement cover in cast-in-place concrete shall be as follows: (ACI Table 20.6.1.3.1)
 - 3" Concrete cast against and permanently exposed to earth.
 - 1 1/2" Concrete exposed to earth or weather with #5 bars or smaller.
 - 0 3/4" Concrete not exposed to weather or in contact with ground, #11 bars and smaller, slabs, joists and walls.
 - 1 1/2" Concrete not exposed to weather, beams, columns and pilaster, cover over ties.
 - 1 1/2" Clear to top for reinforcement in slabs on grade.
- e. All slabs on grade, S.O.G., shall have a minimum thickness of 4" and be reinforced with #3 at 18" o.c., or with Fibermesh as per manufacturers specifications equivalent to reinforcement specified above, U.N.O.
- f. Concrete shall be air-entrained to 6% +/- 1%. (For exterior slabs only)
- g. Provide slab control joints (saw cut or plastic inserts) at 10'-0" maximum spacing each way for 4" slab. Joint depth to be 1/4 of slab depth.

DIVISION 5 - METALS:

- a. All work shall conform to Simpson Strong-Tie Co., Inc. and installed per the manufacturer's specifications, U.N.O.
- b. Structural steel shall conform to ASTM A992, grade 50 U.N.O. Miscellaneous steel such as plates, channels and angles may be ASTM A36. Steel pipe columns shall conform to ASTM A53, Type E or S. Steel tube sections shall conform to ASTM A500, Grade B.
- c. All steel exposed to weather shall be hot-dip galvanized after fabrication or other approved weather proofing methods may be used.
- d. Where finish is attached to steel provide 1/2" dia. bolt holes at 36" o.c., U.N.O. For attachment of nailers see architectural drawings for finishes. (alternate 1/2" dia. x 3" nelson studs at 36" o.c., U.N.O.)
- e. All ground under steel bearing plates shall be solid drypack or non-shrink grout placed as directed by the manufacturer.
- f. Shop drawings shall be submitted to the Structural Engineer for review and comment prior to fabrication.
- g. All welding shall conform to the American Welding Society specifications. All welding shall be performed by certified welders approved by the local building authority. All shop welding shall be in an approved fabricator's shop authorized by the local building authority or special inspection per the IBC shall be provided. All field welding shall require special inspection per IBC Section 1704.
- h. All welding electrodes shall be E70XX or shielded wires with Fy = 70 ksi.
- i. All nails specified are common nails. No substitutions unless approved in writing by Dunagan Engineering, Inc. or specifically addressed in these calculations or the plans. All nails exposed to weather shall be galvanized. Fasteners for pressure-preservative treated and fire-retarded treated wood shall be of hot-dipped zinc coated galvanized, stainless steel, silicon bronze or copper.
- j. The minimum nailing for all framing shall conform to IBC Table 2304.10.1
- k. All bolts specified must meet ASTM A307. Bolt holes to be 1/32" to 1/16" larger than specified bolt. Washers shall be used at each bolt head and nut next to wood. All washers to be not less than standard cut washers.
- l. Wood plates or sills shall be bolted to the foundation or foundation wall. Steel bolts with a minimum nominal diameter of 1/2" shall be used. Bolts shall be embedded at least 7 inches into the concrete or masonry. In a two pour system embedment shall be into the first pour. There shall be a minimum of two bolts per piece with one bolt located not more than 12 inches or less than 7 bolt diameters from each end of the piece.
- m. Plate washers a minimum of 3"x3"x1/4" thick shall be used on each bolt. See IBC section 2308.3.1.1 for alternate.

DIVISION 6 - WOOD:

- a. All lumber framing shall be Douglas Fir Larch (DOC PS20) with moisture content < 19% at time of covering, U.N.O.
- b. Glu-Lams used for simple spans shall be 24F-V4 U.N.O. Glu-Lams used for continuous spans or cantilever shall be 24F-V8, U.N.O. Glu-Lams exposed to weather shall be rated for exterior use by manufacturer or approved protection from exposure to be provided.
- c. All plywood shall conform to APA DOC PS1 or DOC PS2. All shear plywood shall be C-D, C-C, 303 (T1-11), or approved equal.
- d. Where multiple trimmers or studs are specified, those trimmers are to be stacked in all wall framing and solid blocking to be provided at all floors down to the foundation.
- e. Where posts with column caps, straps, or bearing plates are called for, the load is to be transferred to the foundation with posts as specified in the plans and solid vertical grain blocking at all floors, U.N.O.
- f. All studs to be stud grade or better, U.N.O. In no instance shall a stud wall be used to resist lateral pressures due to snow or soil. It is the owner and/or contractor's responsibility to eliminate snow and/or soil to stud wall contact.
- g. All laminated veneer lumber (LVL) and parallel strand lumber (PSL) specified shall have the following minimum design strengths: 1 3/4" wide; Fp=2600 psi, Fv=285 psi, E=1,900,000 psi. 3 1/2" wide and greater: Fp=2900 psi, Fv=290 psi, E=2,000,000 psi.
- h. All multiple-PLY LVL members to be attached with (3) rows of 16d common nails at 12" o.c. for entire length of member. For a three piece member the nailing is on each side.
- i. Foundation sill plates, nailers, and ledgers in direct contact with concrete and within 6 1/2" of ground to be preservative treated Douglas fir.
- j. Fasteners for preservative treated and fire treated wood shall be of hot dipped, zinc coated, galvanized steel, silicon, bronze or copper. The coating weights for zinc coated fasteners shall be in accordance with ASTM A153.
- k. All framing members specified in these calculations and/or plans are minimums, and larger members of equal or better grade may be substituted.
- l. All floor openings shall be between joists, U.N.O.
- m. Do NOT notch beams, joists, and studs, U.N.O.
- n. Provide double joists below all parallel partition walls.
- o. No green lumber at time of covering shall be used on this project.
- p. No framing of any type shall be concealed prior to inspection by governing agencies.
- q. Sawn lumber shall have the following minimum grades (U.N.O.):
 - all 4x12 & smaller framing members#2
 - all 4x14, 4x16, 6x & 8x framing members#1
 - 4x4 posts#2
 - all other posts and timbers#1
 - all 2x joists and rafters#2
 - all 2x & 3x studs (unbraced length up to 10')stud or construction
 - all 2x & 3x studs (unbraced length exceeding 10')#2
 - all 2x top platesstandard
 - all 2x and 3x sillsstandard
 - manuf. truss componentsgrade per manuf.
- r. All resawn and roughsawn beams are to be free of heart center.
- s. Double joists shall be attached with (2) rows of 16d's at 12" o.c. edge distance of nailing to be 2".
- t. All multiple studs to be attached with 16d's at 12" o.c.

DESIGN CRITERIA

2018 International Building Code (IBC)
Local Building Department Standards
Soil Bearing (IBC Table 1806.2)

WIND DESIGN DATA

Ultimate Design Wind Speed, Vu = 120 m.p.h. (3-Second Gust)
Risk Category II
Wind Importance Factor, Iw = 1.00
Wind Exposure C
Internal Pressure Coefficient = +/- 0.18
Components & Cladding Design Pressures (ASCE 7 Section 30.4.2):
a = 3.2 ft (ASCE 7 Figure 30.4-1)

Refer to ASCE 7-16 Figure 30.4-1 for layout.			
Roof/Wall	Zone	Effective Wind Area (ft²)	Design Wind Pressure, P _e (psf)
Roof - 30 to 27'	1	10	58.0
	1	20	59.0
	1	50	35.2
	1	100	19.0
	2	10	84.5
	2	20	73.1
Wall	1	10	58.0
	2	100	46.5
	3	20	68.0
	3	50	67.0
	3	100	52.6
	4	10	34.0
	4	20	32.5
	4	50	30.7
	4	100	29.3
	5	10	20.0
5	20	39.2	
5	50	35.5	
5	100	32.5	

SEISMIC DESIGN DATA

Importance Factor, Ie = 1.00 (Risk Category II)
S_s = 2.212 g and S₁ = 0.781 g
Site class: = D
SDs = 1.474 g, SD1 = 0.885 g
Seismic design category = D
Basic seismic-force-resisting system(s) =
Light-Framed Walls Sheathed with Wood Structural Panels Rated for Shear Resistance, R = 6.5
N/S Design Base Shear (LRFD) = 9.1 kips
E/W Design Base Shear (LRFD) = 9.1 kips
Cs (LRFD) = 0.2269
Analysis Procedure Used = Equivalent Lateral Force Procedure

SNOW LOAD DATA:

Site Elevation 5048 FT.
Ground Snow Load P_g = 31 psf
Flat-Roof Snow Load P_f = 21 psf
Snow Exposure Factor C_e = 0.9
Snow Importance Factor I_s = 1.0
Thermal Factor C_t = 1.1

FLOOR FRAMING DESIGN LOADS

Floor Live Load = 40 PSF
Floor Dead Load = S.O.G.
Total Floor Load = 40 PSF

ROOF LOADING:

Snow Load = 21 PSF
Dead Load = 15 PSF
Total Load = 36 PSF

FOOTING AND STEM WALL REQUIREMENTS

- 8" Wide w/ (1) #4 continuous top and #4 at 48" o.c. vertical, hook at footing (alternate hooks). Locate vertical at all Holdown Anchor Bolts. If top of stemwall exceeds 36" above top of footing, use #4 at 18" o.c. horizontal continuous and #4 at 24" o.c. vertical.
- All footings shall bear on undisturbed soil. Assumed soil bearing pressure is determined & increased in accordance w/ IBC Table 1806.2.
- Exterior footings to be placed 24" below grade minimum, U.N.O.

HOLDOWN INFORMATION

- See holdown schedule above and per plan.

SOILS & FOUNDATIONS:

Dunagan Engineering, Inc. 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. A review by a geological engineer or qualified civil engineer may be desirable. Foundation design is based on minimum footing dimensions and bearing capacities set forth in Table 1806.2 of Chapter 18 in the 2018 International Building Code. Assume Class 5 soil with allowable soil bearing pressure of 1500 psf., with a constant expansion index less than 20. Footings shall extend 24" (minimum) below grade.

CONNECTION CROSS REFERENCE

Simpson Strong-Tie	USP Structural Connectors						
Product Number	Product Number						
SSTB16	STB16	CB66	KCB66	HU410	HD410	HGUS26-3	THD26-3
SSTB24	STB24	CB68	KCB68	HU412	HD412	HGUS26-3	THD26-3
HDUS-SDS2.5	PHD5	HUCO1.81/10-SDS	HDQ1791F	HU68	HD68	JL-C23	SNP3
HQ06-SDS3	UPHD8	HUCO1.81/11-SDS	HDQ17112F	HU610	HD610	THJA26	HJC26
HHQ11-SDS2.5	UPHD11	---	HDQ17141F	HU612	HD612	MTMH	HJC26
HHQ14-SDS2.5	UPHD14	HUCO310-SDS	HDQ3101F	LSU26	LSSH15-TZ	DSCAR/L-SDS3	OSCAR/L
HD15	TD15	HUCO210-2-SDS	HDQ210-21F	LSSU28	---	STR224	KST224
ABU44	PAU44	HUCO410-SDS	HDQ4101F	LSSH210	---	CS16	RS150
ABU46	PAU46	HUCO412-SDS	HDQ4121F	SUR/L24	SKH24R/L	MSTC48B3	---
ABU66	PAU66	HUCO210-3-SDS	HDQ210-31F	SUR/L26	SKH26R/L	H1	RT15
ABU88	PAU88	HUCO6.25/9-SDS	HDQ62510F	SUR/L210	SKH210R/L	H2.5A	RT17A
PB44	WE44	HUCO6.25/11-SDS	HDQ62512F	IUS	THF	H2A	RT10
PB46	WE46	HUCO610-SDS	HDQ6101F	HU11	HD17112	HGA10KT	HGA10
PB66	WE66	HUCO612-SDS	HDQ6121F	IUT	THF	A34	MP34
CBQ44	KCBQ44	LUS24	JUS24	ITS	THO/ITFL	A35	MPA1
CBQ46	KCBQ46	LUS26	JUS26	ITT	THO/ITFL	LTP4	MP4F
CBQ66	KCBQ66	LUS28	JUS28	IUS	JUS26-2	LSS0	MP5
CB44	KCB44	LUS10	JUS10	HHUS26-2	THD26-2	LS70	MP7
CB46	KCB46	LUS46	JUS46	HHUS26-2	THD26-2	LS90	MP9
CB48	KCB48	HU46	HD46	HHUS28-2	THD28-2	CCQ/ECQ	KCCQ/KECCO

HOLDOWN SPECIFICATION TABLE

(ALSO SEE SIMPSON STRONG-TIE CATALOG)

HOLDOWN	CL	POST MIN. THICKNESS	SCREWS, BOLTS OR NAILS	THREADED ROD		SSTB BOLT		
				A.B. DIA.	8" STEM WALL EMBEDMENT	FOOTING	SGL. POUR	DBL. POUR
HTT4	1 5/16"	3"	(18) 16d's x 2 1/2"	5/8"	18"	-	SSTB24	SSTB24
HTT5	1 5/16"	3"	(26) 16d's x 2 1/2"	5/8"	24"	-	SSTB28	SSTB28
HDU5	1 5/16"	3"	(14) SDS 1/4"x 2 1/2"	5/8"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	SSTB28	THRD. ROD OPTION ONLY
HDU8	1 3/8"	4 1/2"	(20) SDS 1/4"x 2 1/2"	7/8"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	N/A	N/A
HD08	1 1/4"	4 1/2"	(20) SDS 1/4"x 3"	7/8"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	N/A	N/A
HHQ11	1 1/2"	5 1/2"	(24) SDS 1/4"x 2 1/2"	1"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	N/A	N/A
HHQ14	1 1/2"	5 1/2"	(30) SDS 1/4"x 2 1/2"	1"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	N/A	N/A
HDU14	1 9/16"	5 1/2"	(36) SDS 1/4"x 2 1/2"	1"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	N/A	N/A
HD19	2 1/8"	5 1/2"x 5 1/2"	(5) 1" DIA. BOLTS	1 1/4"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	N/A	N/A

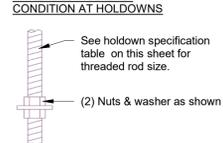
NAIL SPECIFICATIONS

NAIL TYPE	NOMINAL DIAMETER (GAGE)	NOMINAL LENGTH	MIN. EMBED FOR P.W. SHEATHING	MIN. NAIL LENGTH
6d COMMON	0.113" (11 ga.)	2"	1 3/8"	
8d COMMON	0.131" (10 1/4 ga.)	2 1/2"	1 3/8"	
10d COMMON	0.148" (9 ga.)	3"	1 3/4"	
12d COMMON	0.148" (9 ga.)	3 1/2"	-	
16d COMMON	0.162" (8 ga.)	3 1/4"	-	
16d G.V. SINKER	0.148" (9 ga.)	3 1/4"	-	-

DETERMINE REQ'D NAIL DIAMETER AND LENGTH

REQUIRED COMMON NAIL	8d	10d
PLYWOOD THICKNESS	3/8", 1/2", 5/8", 3/4", 1 1/8", 3/8", 1/2", 5/8", 3/4", 1 1/8"	
MINIMUM EMBEDMENT	1 3/8"	1 3/4"
MIN. NAIL LENGTH REQ'D	2", 2 1/8", 2 1/4", 2 3/8", 2 3/4", 2 1/8", 2 1/4", 2 3/8", 2 1/2", 2 7/8"	
MIN. DIAMETER REQ'D	0.131" (10 1/4" ga.)	0.148" (10 1/4" ga.)

THREADED ROD END CONDITION AT HOLDOWNS



REVISIONS		
#	Date	Description

DEI
engineers
Dunagan Engineering, Inc.
4750 Caughlin Parkway #766, Reno, NV 89519
P: 775-329-2733 | F: 888-873-0790 | W: DEIengineers.com

REGISTERED PROFESSIONAL ENGINEER
ERIK A. K. HULL-STANCLIFF
EXP. 6-30-23
CIVIL
No. 27423
4/19/2022 10:32:12 AM

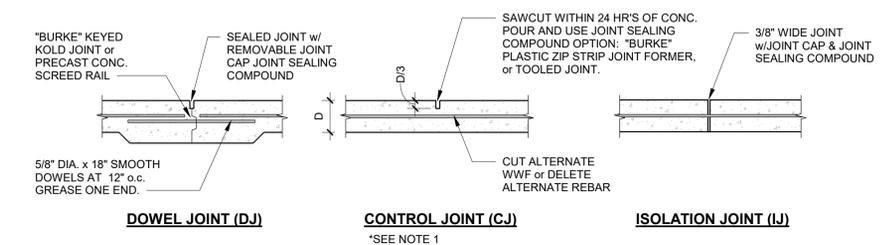
BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06

SUBMITTAL SET

DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

TYPICAL DETAILS

S0.2
SHEET of SHEETS
PLEASE RECYCLE



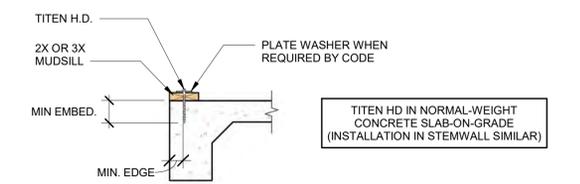
11 SLAB JOINTS
3/4" = 1'-0"

NOTE:
1. PLACE CONCRETE SLAB ON GRADE IN MONOLITHIC POURS IN LARGEST AREAS FEASIBLE. WHERE POURS AND THUS COLD JOINTS OCCUR, USE DOWEL JOINT SEE (DJ) ABOVE.

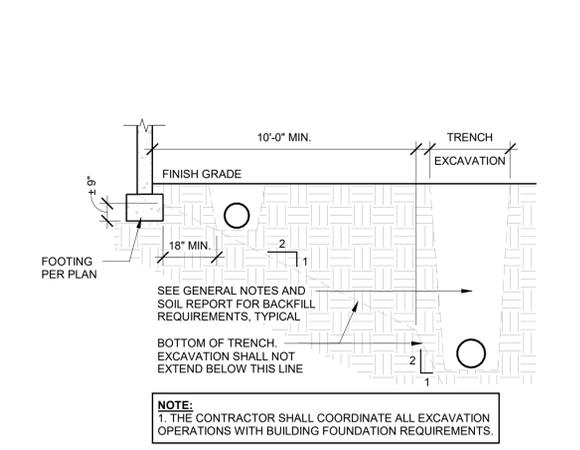
SIMPSON STRONG-TIE TITEN HD AS A 1 TO 1 REPLACEMENT FOR MUDSILL ANCHOR BOLTS FOR SHEAR LOAD APPLICATIONS

CAST-IN-PLACE MUDSILL BOLT DIA (in)	TITEN HD MODEL #	DRILL BIT DIAMETER (in)	MINIMUM EMBEDMENT (in)	SILL PLATE SIZE	MIN. EDGE DISTANCE (in)	MIN. END DISTANCE (in)	MIN. STEM WALL WIDTH (in)
1/2	THD50600H	1/2	3 1/4	2x, 3x	1 3/4	8	6
1/2	THD50800H	1/2	3 1/4	DOUBLE 2x	1 3/4	8	6
5/8	THD62600H	5/8	3 3/4	2x	1 3/4	10	6
5/8	THD62612H	5/8	3 3/4	3x	1 3/4	10	6
5/8	THD62800H	5/8	3 3/4	DOUBLE 2x	1 3/4	10	6

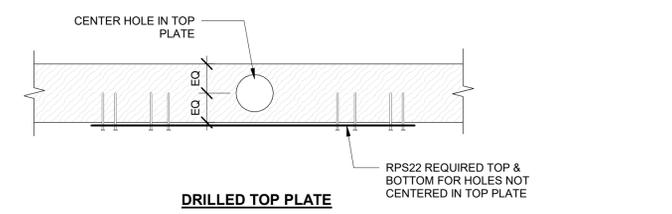
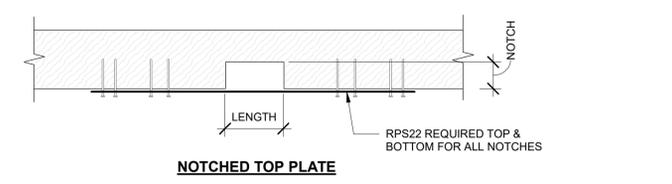
- ICC-ES CODE REPORT ESR-2713.
- SPECIAL INSPECTION IS NOT REQUIRED FOR TITEN HD INSTALLATIONS RESISTING ONLY SHEAR LOADS.
- MINIMUM EDGE AND END DISTANCES ARE BASED ON DISTANCE FROM EDGE (OR END) OF CONCRETE TO CENTER OF BOLT.
- MINIMUM CONCRETE THICKNESS IS 1.5 TIMES THE TITEN HD ANCHOR EMBEDMENT.
- DIRECT 1 TO 1 REPLACEMENT IS BASED ON PARALLEL AND PERPENDICULAR TO PLATE SHEAR CAPACITIES THAT MEET OR EXCEED THE BOLT DESIGN VALUES FOR SINGLE SHEAR CONNECTIONS IN TABLE 12A OF THE 2018 NDS EDITION FOR WOOD CONSTRUCTION FOR CAST-IN-PLACE ANCHOR BOLTS USED TO ANCHOR FOUNDATION PLATES OR SILLS TO CONCRETE FOUNDATIONS PER THE FOLLOWING SECTIONS OF THE CODE:
- 1997 UBC SECTION 1806.6
- 2000, 2003, 2006, 2012 AND 2018 IBC SECTIONS 2304.3.1
- 2000, 2003, 2006, 2012 AND 2018 IRC SECTION R403.1.6
- DRILL THE HOLE TO THE SPECIFIED EMBEDMENT DEPTH PLUS 1/2" TO ALLOW THE THREAD TAPPING DUST TO SETTLE AND BLOW IT CLEAN USING COMPRESSED AIR. ALTERNATIVELY, IN LIEU OF BLOWING THE HOLE CLEAN, DRILL THE HOLE DEEP ENOUGH TO ACCOMMODATE EMBEDMENT DEPTH AND DUST FROM DRILLING AND TAPPING.
- FOR ACO-C, ACO-D, CA-B AND CBA-A PRESSURE-TREATED WOOD, USE MECHANICALLY GALVANIZED TITEN HD. FOR ADDITIONAL INFORMATION CORROSION AND PRESSURE TREATED WOOD SEE TITEN HD FOR ADDITIONAL INFORMATION CORROSION AND PRESSURE TREATED WOOD SEE.
- SEE SIMPSON STRONG-TIE ANCHORING AND FASTENING SYSTEMS CATALOG FOR COMPLETE INFORMATION ON THE TITEN HD.



14 RETRO FIT SILL PL w/ TITEN
3/4" = 1'-0"

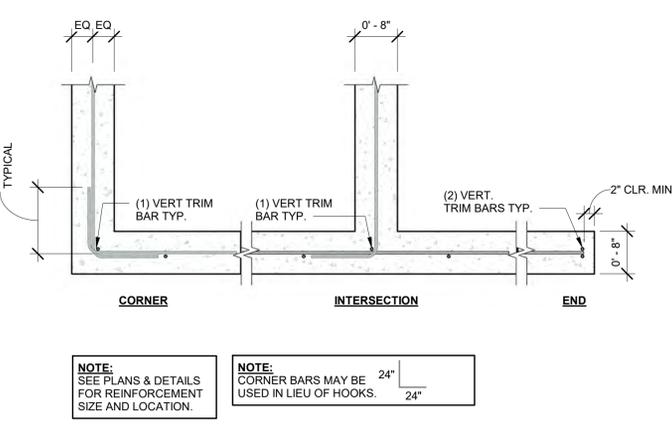


12 EXCAVATION PARALLEL TO FOOTING
3/4" = 1'-0"

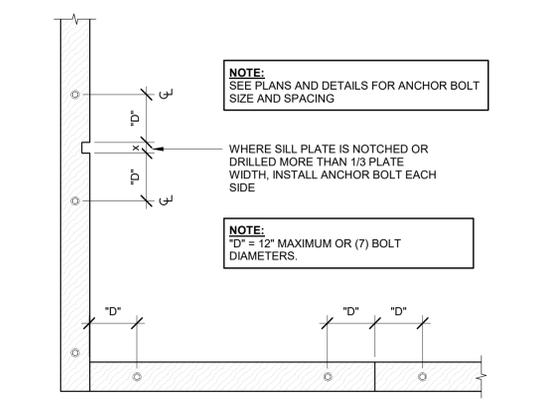


WALL TYPE	MAX. NOTCH	MAX. DRILLED HOLE
2x4 BEARING	1 1/2" x 5 1/2"	1 1/2" DIA AT CL.
2x4 NON-BEARING	2 1/2" x 5 1/2"	2 1/2" DIA AT CL.
2x6 BEARING	2 1/2" x 5 1/2"	3 1/2" DIA AT CL.
2x6 NON-BEARING	3 1/2" x 5 1/2"	4" DIA AT CL.

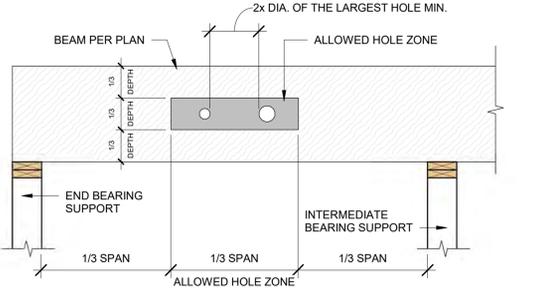
13 NOTCH IN TOP PLATE
1 1/2" = 1'-0"



8 STEMWALL REINFORCING
3/4" = 1'-0"



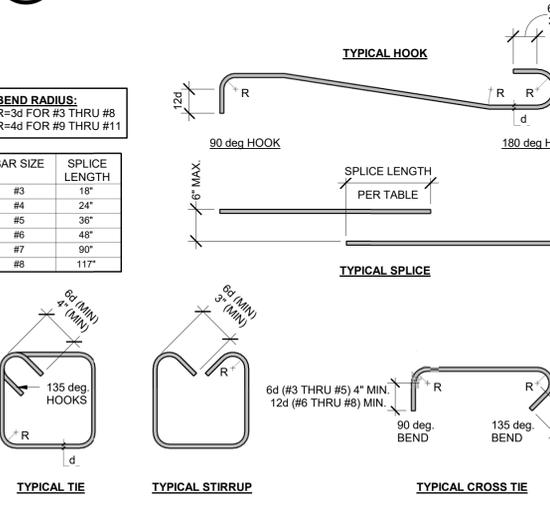
7 SILL PLATE DETAIL
3/4" = 1'-0"



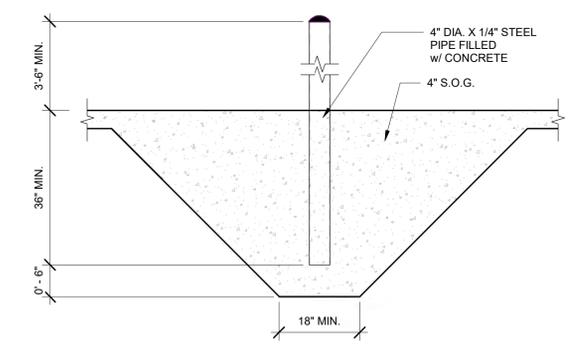
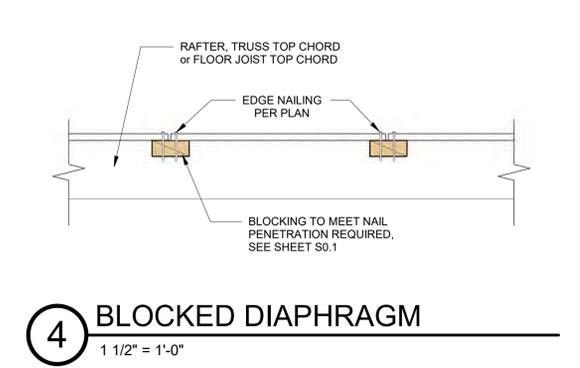
BEAM DEPTH	MAX DIA. HOLE SIZE
5-1/2"	3/4"Ø
7-1/4"	1"Ø
9-1/4" & GREATER	2"Ø

- NOTES:
- DO NOT CUT, NOTCH, OR DRILL BEAM, EXCEPT AS INDICATED WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD.
 - SQUARE & RECTANGULAR HOLES ARE NOT PERMITTED.
 - ROUND HOLES MAY BE DRILLED OR CUT WITH A HOLE SAW ANYWHERE WITHIN THE ALLOWED HOLE ZONE OF THE BEAM.
 - THE HORIZONTAL DISTANCE BETWEEN ADJACENT HOLES MUST BE AT LEAST TWO TIMES THE SIZE OF THE LARGER HOLE.
 - DO NOT CUT MORE THAN THREE ACCESS HOLES IN ANY FOUR FOOT LONG SECTION OF BEAM.
 - THESE LIMITATIONS APPLY TO HOLES DRILLED FOR PLUMBING OR WIRING ACCESS ONLY. THE SIZE AND LOCATION OF HOLES DRILLED FOR FASTENERS ARE GOVERNED BY THE PROVISIONS OF THE NDS FOR WOOD CONSTRUCTION.
 - BEAMS DEFLECT UNDER LOAD. SIZE HOLES TO PROVIDE CLEARANCE WHERE REQUIRED.
 - THE HOLE CHART IS VALID FOR BEAMS SUPPORTING UNIFORM LOAD ONLY. FOR BEAMS SUPPORTING CONCENTRATED LOADS OR FOR BEAMS WITH LARGER HOLES, CONTACT ENGINEER OF RECORD.
 - DO NOT PLACE HOLES BELOW POSTS ABOVE ON BEAMS.
 - HOLES IN CANTILEVERS REQUIRE ADDITIONAL ANALYSIS.

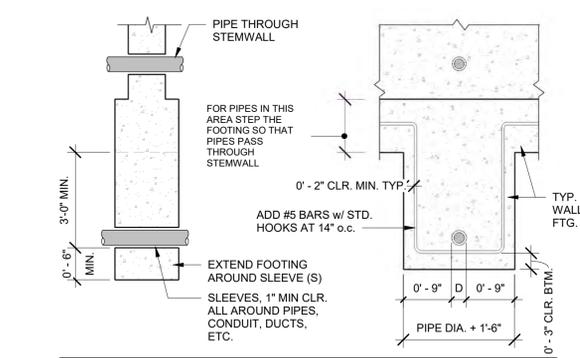
6 HOLES IN BEAM
3/4" = 1'-0"



5 REBAR BENDS & LAP REQUIREMENTS
3/4" = 1'-0"

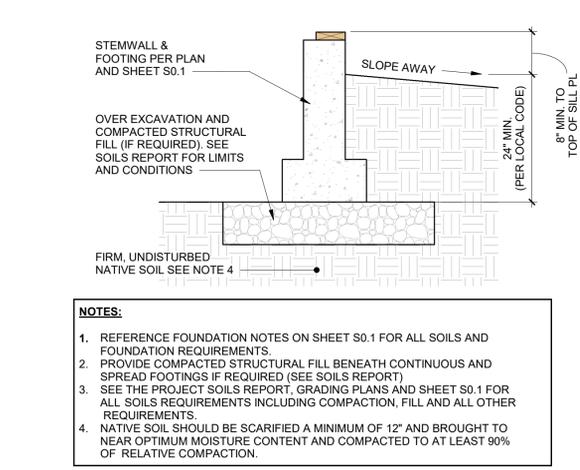


3 PIPE BOLLARD
3/4" = 1'-0"



NOTE:
FOR PIPES 3'-0" OR LESS BELOW BOTTOM OF FOOTINGS PROVIDE SLEEVE & CONCRETE AS SHOWN. MORE THAN 3'-0" USE STEPPED FOOTING TO STAY WITHIN 3'-0" LIMIT

2 PIPE THRU STEMWALL & REINFORCING
3/4" = 1'-0"



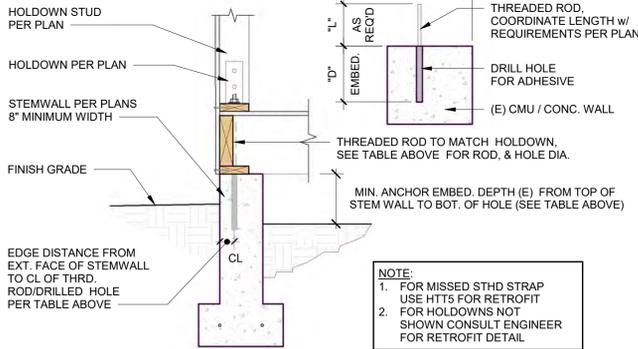
1 TYPICAL SOIL PREPARATION
3/4" = 1'-0"

ANCHOR DIA.	HOLE DIA.	"X" MIN.	"D" MIN.	COMMENTS
1/2" DIA.	5/8"	1-3/4"	4-1/2"	DO NOT DRILL THRU REBAR, CONTACT THE STRUCTURAL ENGINEER IF REBAR IS ENCOUNTERED
5/8" DIA.	3/4"	1-3/4"	5"	

HOLDOWN	THR'D. ROD DIA.	HOLE DIA.	MINIMUM EMBED (E)	EDGE DISTANCE	SIMPSON EPOXY SYSTEM TO BE USED
PHD2 / HDU5 HTT4/HTT5	5/8"	3/4"	12"	1-3/4" - 2-3/4"	SET - XP *
HDU8	7/8"	1"	16"	1-3/4" - 2-3/4"	SET - XP *

SEE CURRENT SIMPSON STRONG-TIE CATALOG - INSTALLATION PER MANUF. SPECIFICATIONS

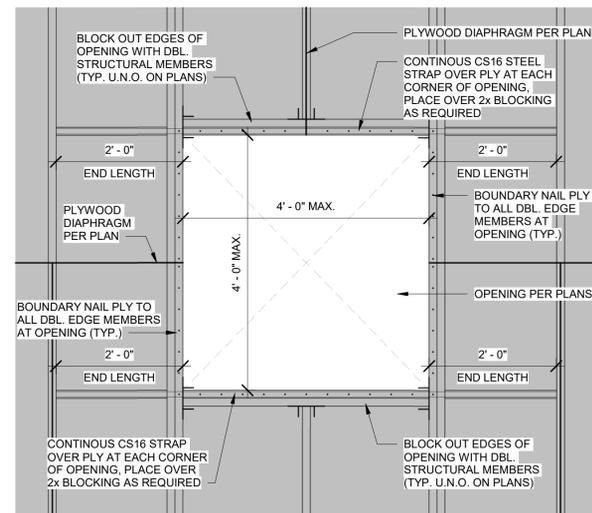
SIMPSON TITEN H.D. (HOLDOWN BOLT OPTION)					
HOLDOWN	ANCHOR SIZE	EMBED.	FOUNDATION TYPE	TITEN H.D. MODEL #	COMMENTS
HTT4, HTT5	1/2" DIA. x 15"	10" MIN.	SLAB ON GRADE	THD501500H	INSTALL PER MANUF. SPECS
HTT4, HTT5	1/2" DIA. x 10 3/8"	10" MIN.	RAISED FLOOR	THD501038C	INSTALL PER MANUF. SPECS



- ADHESIVE SPECIFICATIONS: ADHESIVE ANCHORS SHALL BE SIMPSON SET-XP EPOXY PER ICBO ESR-2508 WITH ASTM A36 THREADED ROD OR APPROVED EQUAL, U.N.O. ADHESIVE ANCHORS SHALL NOT BE INSTALLED WITHOUT AUTHORIZATION BY THE STRUCTURAL ENGINEER AND UNTIL THE CONCRETE HAS CURED TO DESIGN STRENGTH.
- DRILLING HOLES: HOLES FOR ADHESIVE CONNECTIONS SHALL BE DRILLED WITH A ROTARY DRILL.
- CLEANING HOLES: HOLES FOR ADHESIVE CONNECTIONS SHALL BE THOROUGHLY CLEANED WITH THE FOLLOWING PROCEDURE:
 - BLOW OUT ALL DUST AND LOOSE MATERIAL WITH COMPRESSED AIR.
 - CLEAN HOLE SURFACE WITH WIRE BRUSH WHICH IS SLIGHTLY LARGER THAN THE HOLE DIAMETER THEN USE A DOWEL WRAPPED WITH A MOIST RAG TO REMOVE REMAINING DUST.
 - BLOW OUT HOLE COMPRESSED AIR.
 - REPEAT PROCEDURE AS REQUIRED UNTIL ALL SURFACES ARE CLEAN.
- INSTALLATION: ADHESIVE SHALL BE INSTALLED INTO THE BACK OF THE HOLE USING SIMPSON "MIXING NOZZLE" INSTALL PER MANUFACTURER'S RECOMMENDATIONS. DUCT TAPE HOLE AS REQUIRED TO CONTAIN ADHESIVE. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR ALL ADHESIVE CONNECTIONS AND SHALL BE PERFORMED PER CBC SECTION 1704 AND THE MANUFACTURER'S SPECIFICATIONS. THE SPECIAL INSPECTOR SHALL VERIFY:
 - HOLES ARE CORRECT DIAMETER AND DEPTH.
 - HOLES ARE CLEAN.
 - PROPER ADHESIVE IS USED.
 - ADHESIVE IS CORRECTLY INSTALLED PER MANUFACTURER'S RECOMMENDATION.
 - BOLTS ARE CORRECT DIAMETER AND LENGTH.
 - TEMPERATURE OF MATERIALS TO BE BONDED ARE WITHIN THE RANGE ALLOWED BY THE MANUFACTURER'S SPECIFICATIONS.
- THE ADHESIVE HAS A "GEL TIME" OF 4 MINUTES AND A "CURE TIME" OF APPROXIMATELY 24 HOURS. THIS DOWEL SHALL BE INSTALLED AND ANY ADJUSTMENTS TO THE ANGLE OF THE DOWEL WITHIN THE FIRST 4 MINUTES ("GEL TIME") AFTER INJECTING THE ADHESIVE. AFTER THE FIRST 4 MINUTES THE DOWEL SHALL REMAIN UNDISTURBED FOR 24 HOURS ("CURE TIME").

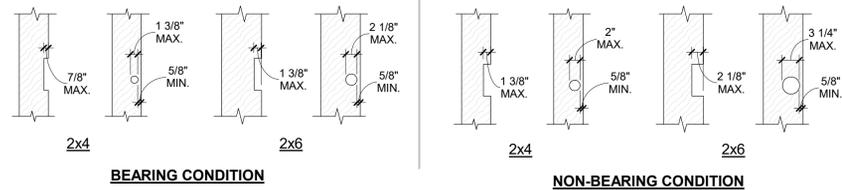
11 THREADED ROD RETROFIT

3/4" = 1'-0"



10 HOLE IN DIAPHRAM

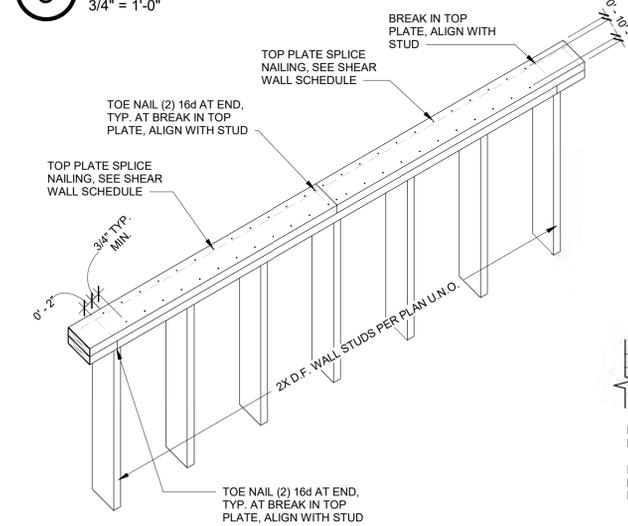
3/4" = 1'-0"



NOTE: BEARING or NON-BEARING WALLS MAY BE DRILLED 2" FOR 2x4 AND 3 1/4" FOR 2x6 WALLS, w/ 5/8" EDGE DISTANCE, IF STUDS ARE DOUBLED AND NOT MORE THAN (2) SUCCESSIVE DOUBLED STUDS ARE DRILLED.

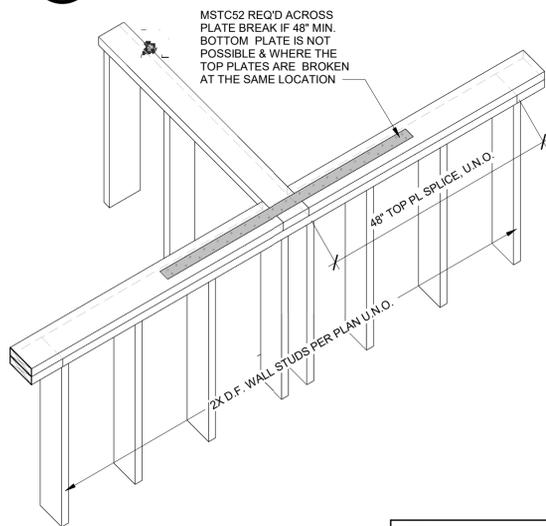
9 STUD WALL NOTCH & DRILL

3/4" = 1'-0"



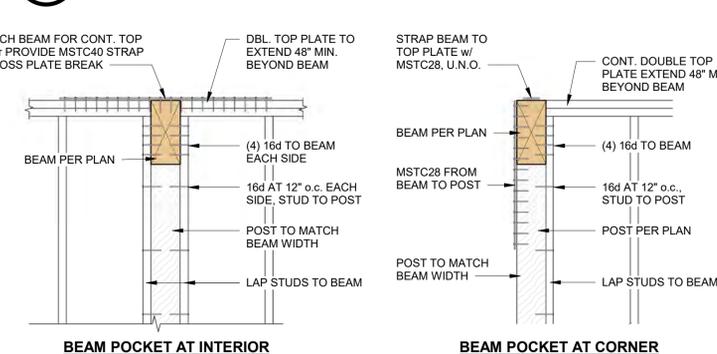
8 TOP PLATE SPLICE

3/4" = 1'-0"



7 TOP PLATE BREAKS

3/4" = 1'-0"

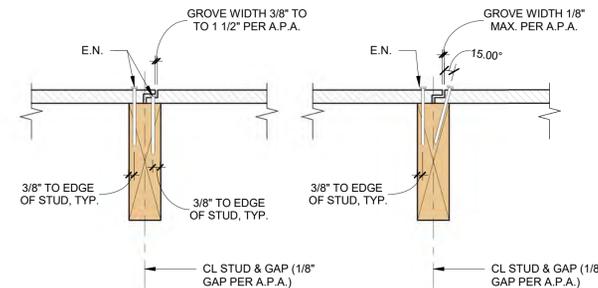


6 BEAM POCKET

3/4" = 1'-0"

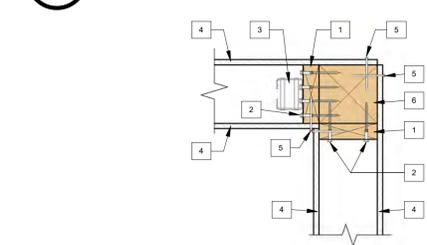
5 PLYWOOD NAILING

3" = 1'-0"

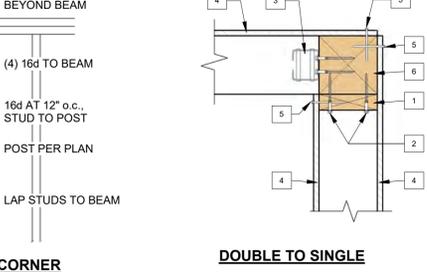


4 SIDING NAILING

3" = 1'-0"

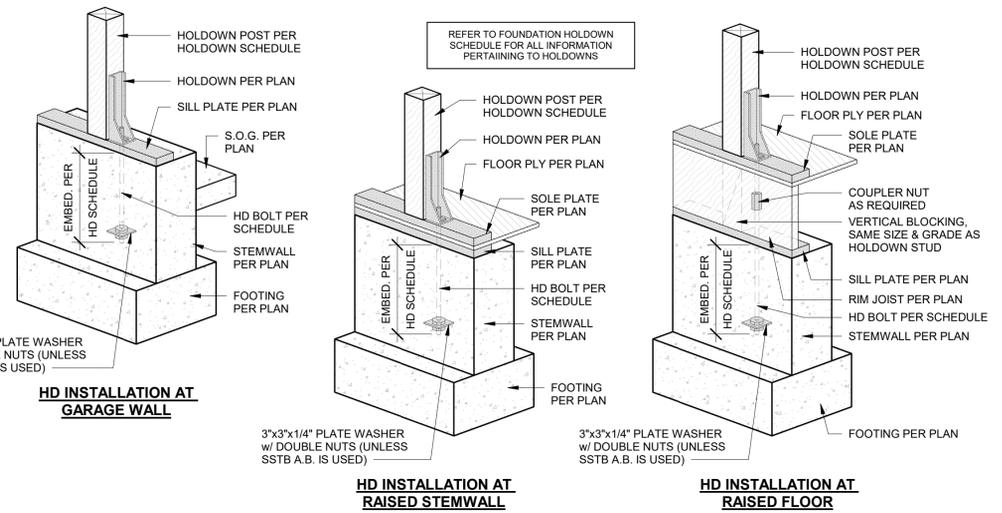


DOUBLE TO DOUBLE



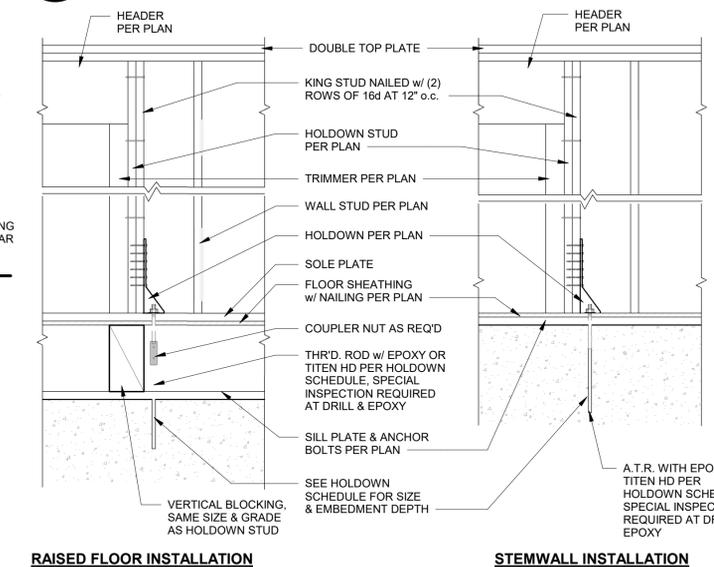
1 HOLDOWN IN CORNER

1 1/2" = 1'-0"



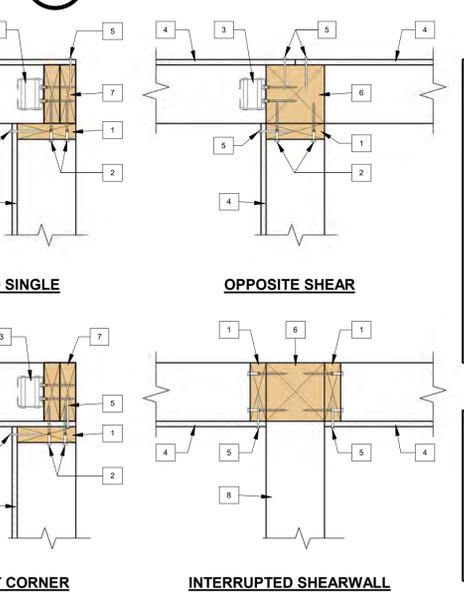
3 FOUNDATION HOLDOWN

3/4" = 1'-0"



2 HOLDOWN INSTALLATION

3/4" = 1'-0"



- LEGEND:**
- 2x or 3x MEMBER RECEIVING SHEARWALL, EDGE NAIL (SEE SHEAR WALL SCHEDULE)
 - FOR TYPE "6" & "4" SHEARWALLS, USE (2) 16d NAILS AT 6" o.c.
 - ALL OTHER SHEARWALL TYPES USE SDS 1/4"Ø x 4.5" SCREWS AT 4" o.c. STAGGERED ABOUT CENTERLINE OF STUD
 - HOLDOWN PER PLAN
 - SHEAR PLY PER PLAN
 - EDGE NAILING (SEE SHEAR WALL SCHEDULE)
 - SOLID FRAMING
 - HOLDOWN POSTS / STUDS PER PLAN (SEE SHEARWALL SCHEDULE)
 - CROSS WALL INTERRUPTING SHEARWALL
- NOTES:**
- THIS DETAIL SUPERCEDES HOLDOWN SCHEDULE, I.E. NO DOUBLE STUDS PER HOLDOWN SCHEDULE, CONNECT HOLDOWNS AS SHOWN.
 - SIMILAR SITUATIONS GET SIMILAR CONNECTIONS.
 - EVERY EXTERIOR / PERIMETER / LOAD BEARING CORNER GETS MINIMUM (3) STUDS OR (1) HOLDOWN POST & (1) STUD

REVISIONS

#	Date	Description	By

DEI *engineers*

Dunagan Engineering, Inc.
4790 Caughlin Parkway #766, Reno, NV 89519
P: 775-329-2731 F: 888-837-0790 W: DEIengineers.com

Professional Engineer State of Nevada
ERIKA K. HILL-STANCLIFF
No. 27423
CIVIL
4/19/2022 10:32:14 AM

BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06

SUBMITTAL SET

DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

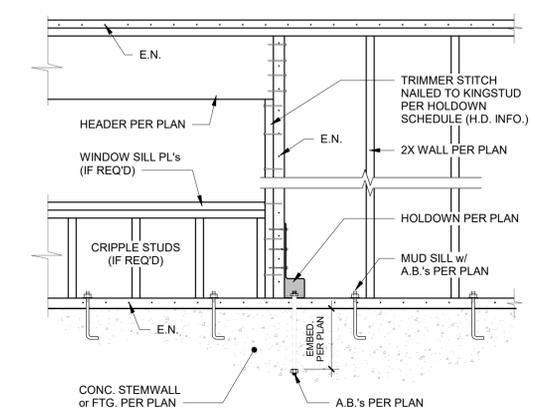
TYPICAL DETAILS

REVISIONS		
#	Date	Description

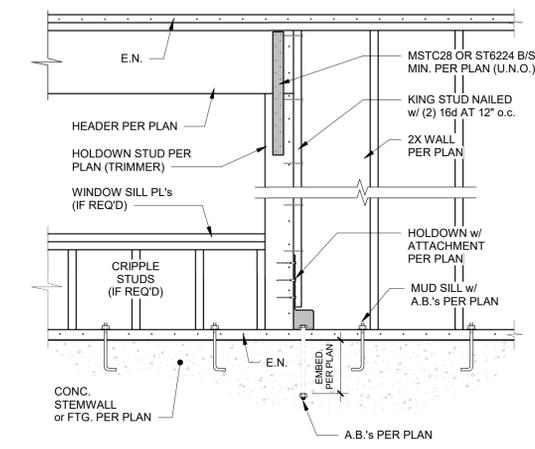
DEI
engineers

Dunagan Engineering, Inc.
4790 Caughlin Parkway #766, Reno, NV 89519
P: 775-329-2733 | F: 888-873-0790 | W: DEIengineers.com

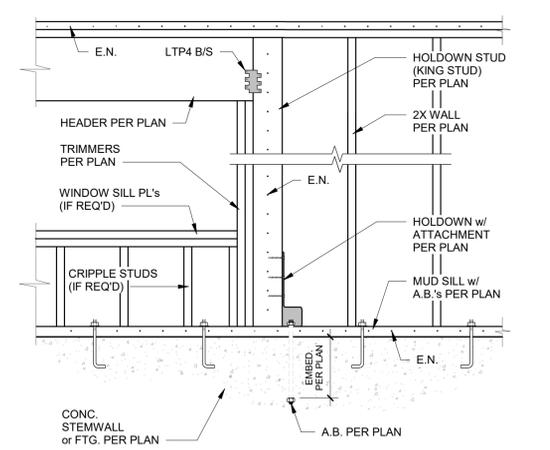
Professional Engineer
Erika K. Hull-Stancliff
No. 27423
Civil
4/19/2022 10:32:15 AM



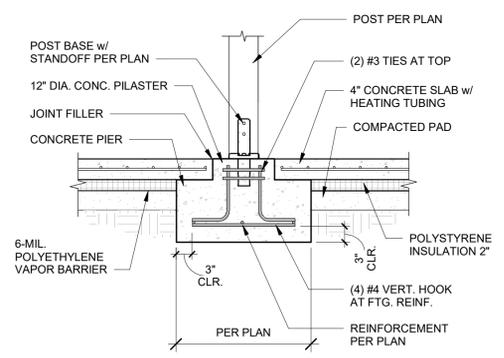
3 HD AT OPENING TO TRIMMER-KING STUD
3/4" = 1'-0" CONDITION 'G'



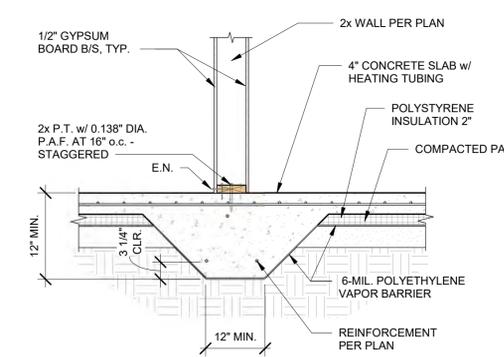
2 HD AT OPENING TO TRIMMER
3/4" = 1'-0" CONDITION 'F'



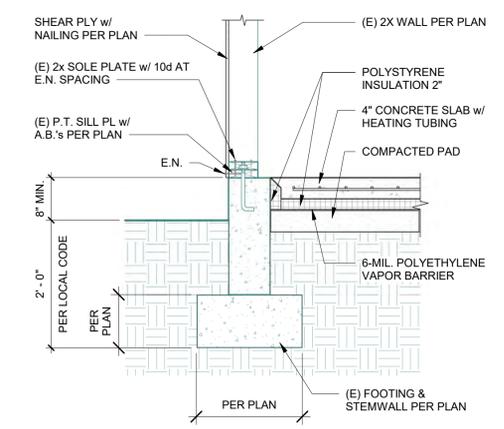
1 HD AT OPENING TO KING STUD
3/4" = 1'-0" CONDITION 'E'



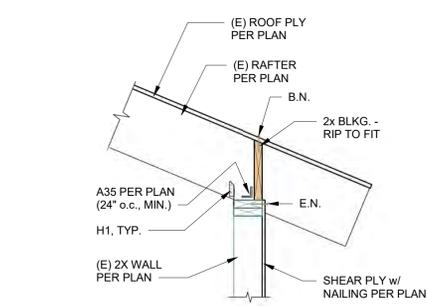
6 DETAIL
3/4" = 1'-0" 120-022



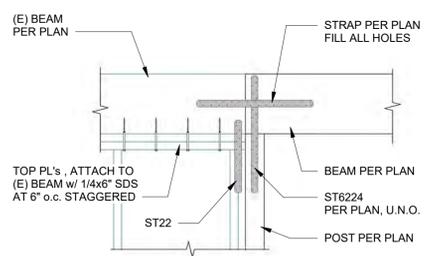
5 DETAIL
3/4" = 1'-0" 130-008M



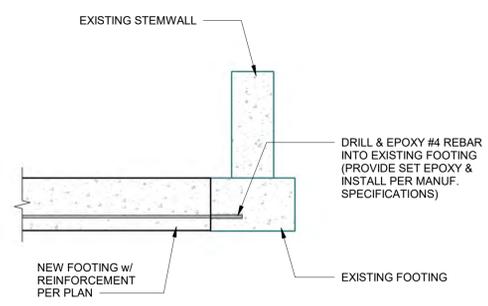
4 DETAIL
3/4" = 1'-0" 110-303M



9 DETAIL
3/4" = 1'-0" 320-104

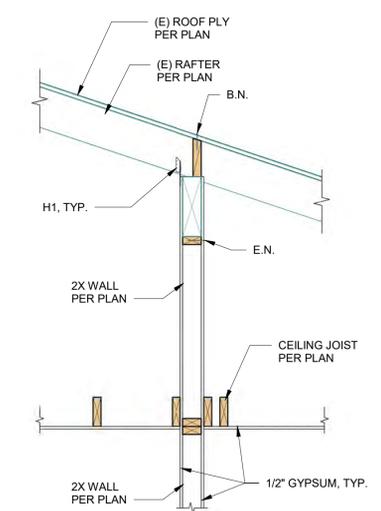


8 DETAIL
3/4" = 1'-0" 220-013M

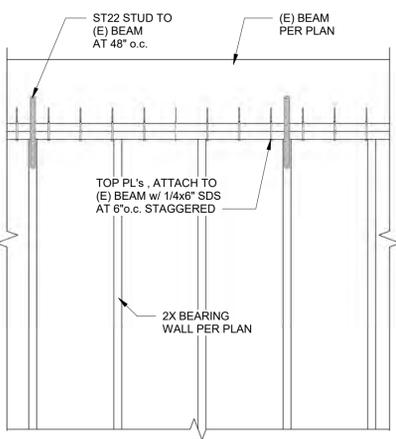


7 DETAIL
3/4" = 1'-0" 110-020M

NOTES:
1. DRILL & EPOXY #4 REBAR AS FOLLOWS:
- 5/8" DIA. BORE HOLE
- 6" MIN. CONCRETE EMBEDMENT
- SIMPSON SET EPOXY (INSTALL PER MANUFACTURER'S SPECS.)
2. SPECIAL INSPECTION NOT REQUIRED.



11 TALL SHEAR WALL
3/4" = 1'-0"



10 DETAIL
3/4" = 1'-0" 250-015aM

BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06

SUBMITTAL SET

DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

DETAILS

PLAN NOTES:

- CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND COORDINATE AND VERIFY ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS. CONTACT THE ENGINEER-OF-RECORD WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- SEE GENERAL NOTES AND STRUCTURAL DETAILS FOR BALANCE OF INFORMATION.
- SHORE EXISTING FRAMING AS REQUIRED TO INSTALL THE NEW INTERIOR CONTINUOUS FOOTINGS AND 2x4 BEARING WALL.

FOUNDATION NOTES

SILLS & PADS:
EXISTING 2X PRESSURE TREATED LUMBER, TYP., U.N.O., TIMBERSTRAND LSL TREATED SILL PL.'s PER ICC-ES ESR-1387.

ANCHOR BOLTS:
1/2" DIAMETER A.B. AT 4'-0" o.c. MAX. U.N.O. (2) ANCHOR BOLTS PER BOARD MIN. 12" FROM ENDS MAX. ANCHOR BOLTS EMBEDDED 7" MIN. INTO CONCRETE. SEE DETAIL 14/S0.2 FOR EXISTING CONCRETE CONDITIONS

DIMENSIONS:
BUILDING DIMENSIONS SHOWN ARE FOR GENERAL REFERENCE ONLY. SEE THE ARCHITECTURAL DRAWINGS (S.A.D.) FOR ACTUAL BUILDING DIMENSIONS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND ARCHITECT SO CLARIFICATION CAN BE MADE. ALL DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR AND SUBMITTED IN WRITING TO THE ENGINEER AND ARCHITECT FOR REVIEW PRIOR TO CONSTRUCTION.

NOTE: SEE STRUCTURAL FLOOR PLANS FOR LOCATION OF HOLDDOWNS.

REVISIONS

#	Date	Description	By

DEI
engineers
Dunagan Engineering, Inc.
4790 Caughlin Parkway #766, Reno, NV 89519
P: 775-329-2733 | F: 888-873-0790 | W: DEIengineers.com



4/19/2022 10:32:18 AM

PIER SCHEDULE

MARK	WIDTH (each side)	DEPTH	STEEL (each way)
F1.5	18"	10"	(2) #4's
F1.75	21"	10"	(2) #4's
F2.0	24"	10"	(3) #4's

CONT. FOOTING SCHEDULE

SYMBOL	WIDTH	DEPTH (u.n.o.)	STEEL (continuous)
CF12	12"	8"	(2) #4's

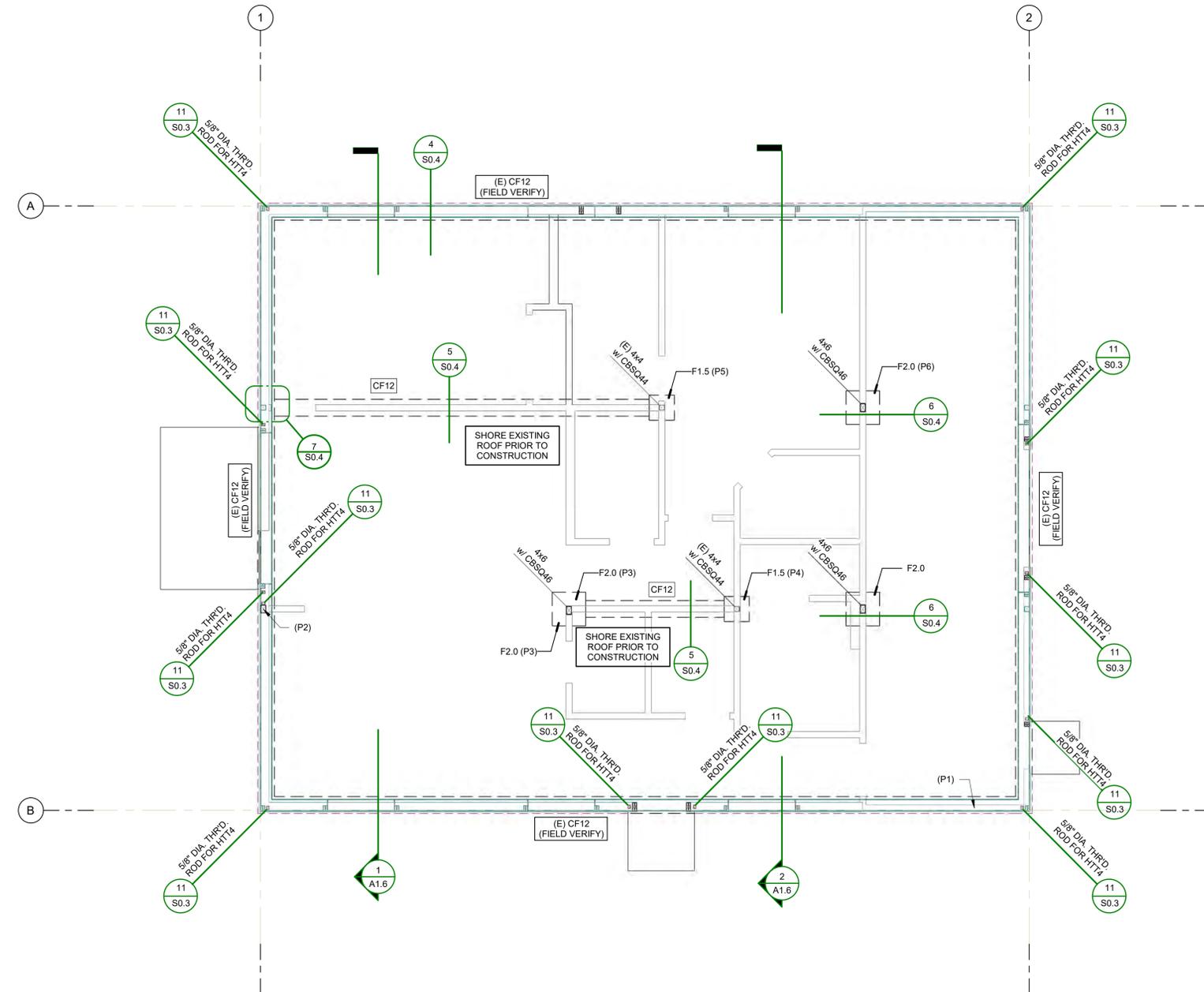
- 8" WIDE STEMWALL w/ (1) #4 CONTINUOUS TOP AND #4 AT 48" o.c. VERTICAL. HOOK AT FOOTING (ALTERNATE HOOKS). IF THE TOP OF STEMWALL EXCEEDS 36" ABOVE THE TOP OF FOOTING, USE #4 AT 18" o.c. HORIZONTAL CONTINUOUS AND #4 AT 24" o.c. VERTICAL.
 - PROVIDE #4 VERTICALS AT 48" o.c. FOR TYPICAL STEM, HOOK AT FOOTING (ALTERNATE HOOKS).
 - ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL. ASSUMED SOIL BEARING PRESSURE IS DETERMINED IN ACCORDANCE w/ IBC TABLE 1806.2. UNLESS SOIL REPORT IS PROVIDED.
 - EXTERIOR FOOTINGS TO BE PLACED 24" BELOW GRADE PER APPLICABLE CODES.
- NOTE:** SEE DETAILS FOR SPECIAL REINFORCING OF STEMWALL AND FOOTINGS.

HOLDOWN SCHEDULE NOTES

HOLDOWN	THREADED ROD-ANCHOR BOLT	HOLDOWN STUD
HTT4	5/8" DIA. w/ 18" EMBED INTO STEMWALL.	(2) 2x, U.N.O.

- HOLDOWN INFORMATION**
- ALL HOLDOWNS TO BE SCREWED or NAILED TO DOUBLE STUDS, U.N.O.
 - PROVIDE (1) #4 HORIZONTAL AT TOP OF STEMWALL AT ALL HOLDOWN ANCHOR BOLTS.
 - HOLDOWN ANCHOR BOLTS ARE DESIGNED FOR UPLIFT ONLY STANDARD MUDSILL ANCHOR BOLTS ARE REQUIRED (SPACING PER PLAN).
 - USE RIM & BLOCKING OR DOUBLE SOLID BLOCKING AT HOLDOWN HTT4.
 - NAIL (2) 2x STUDS TOGETHER w/ 16d's AT 4" o.c. STAGGERED. LOCATE NAILS 3" MIN. FROM END OF STUDS AND PROVIDE 1" MIN. EDGE DISTANCE.
- *SEE HOLDOWN ANCHOR BOLT SCHEDULE SHEET S0.1 FOR SIMPSON SSTB BOLTS.

BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06



FOUNDATION PLAN
1/4" = 1'-0"

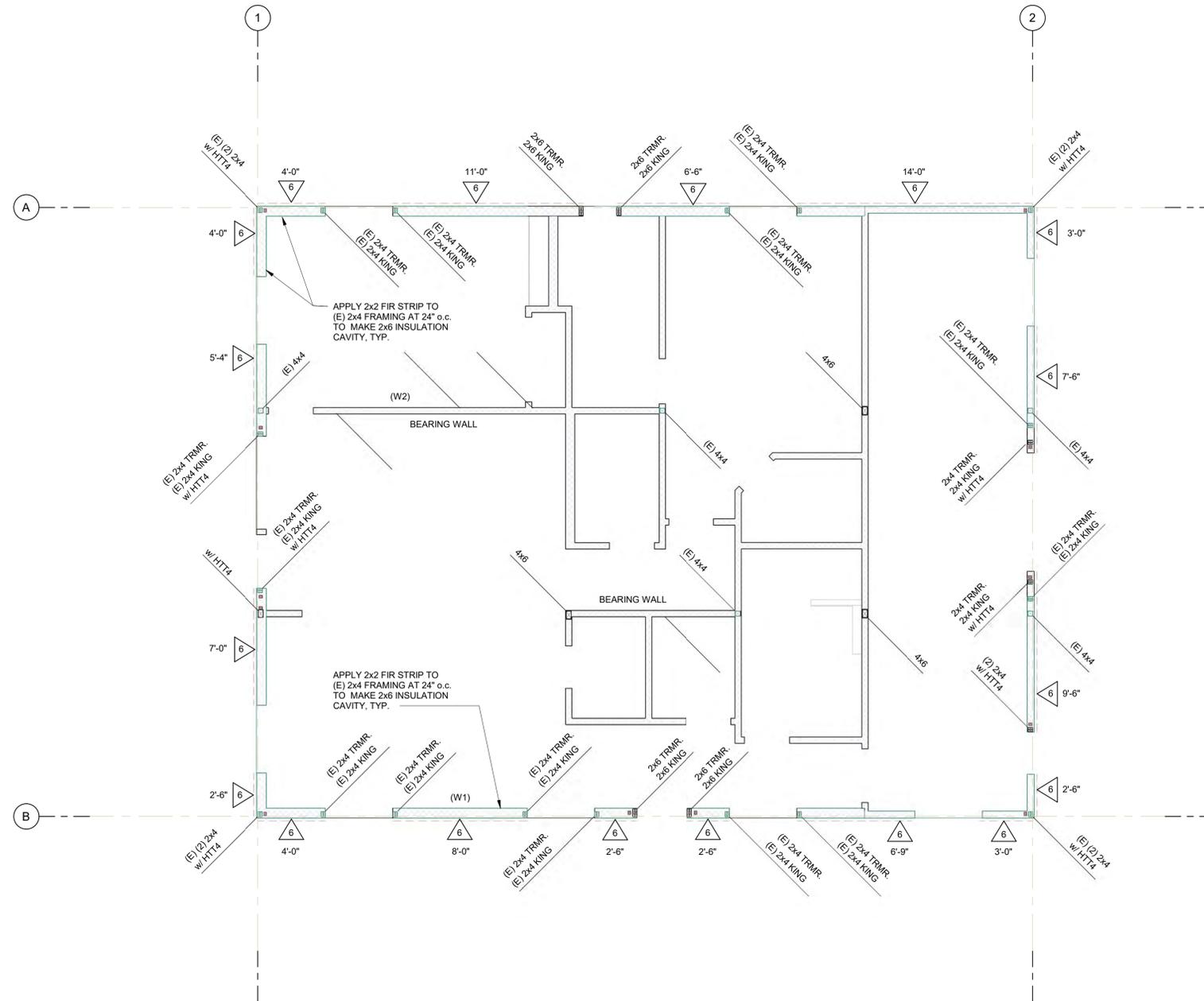
SUBMITTAL SET

DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

FOUNDATION PLAN

S1.1

SHEET of SHEETS



STRUCTURAL FLOOR PLAN

1/4" = 1'-0"

SHEAR WALL SCHEDULE NOTES

SYMBOL	SHEAR PLY	E.N. SPACING	3x STUDS AT ADJOINING PANEL EDGES	16d SPACING AT SHEAR TRANSFER
△ 6	3/8"	8d AT 6"	NO	6" o.c.
△ 4	3/8"	8d AT 4"	NO	4" o.c.

- Use Common Nails, Field Nail AT 12" o.c., U.N.O
- Use 3/8" Shear Ply, OSB, or Rated Equivalent U.N.O.
- Edge Nail AT Top Plate, Mud Sill, All Posts, Sole Plates, & All Studs w/ Holdowns.
- Use (12) 16d Nails AT All Top Plate Splices (60" Long) U.N.O. Per Detail 8/S0.3.
- Use SIMPSON MSTC52 To Strap Top PL's Across Breaks, U.N.O. Per Detail 7/S0.3.
- Provide Blocking AT All Horizontal Edges of Shear Plywood.
- See standard details for nailing of plywood shear and siding.

NOTE:
Shear wall schedule includes all shear options. See plan for specific requirements.

HOLDOWN SCHEDULE NOTES

HOLDOWN	THREADED ROD-ANCHOR BOLT	HOLDOWN STUD
HTT4	5/8" DIA. w/ 18" EMBED INTO STEMWALL	(2) 2x, U.N.O.

HOLDOWN INFORMATION

- ALL HOLDOWNS TO BE SCREWED or NAILED TO DOUBLE STUDS, U.N.O.
 - PROVIDE (1) #4 HORIZONTAL AT TOP OF STEMWALL AT ALL HOLDOWN ANCHOR BOLTS.
 - HOLDOWN ANCHOR BOLTS ARE DESIGNED FOR UPLIFT ONLY STANDARD MUDSILL ANCHOR BOLTS ARE REQUIRED (SPACING PER PLAN).
 - USE RIM & BLOCKING OR DOUBLE SOLID BLOCKING AT HOLDOWN HTT4.
 - NAIL (2) 2x STUDS TOGETHER w/ 16d's AT 4" o.c. STAGGERED. LOCATE NAILS 3" MIN. FROM END OF STUDS AND PROVIDE 1" MIN. EDGE DISTANCE.
- * SEE HOLDOWN ANCHOR BOLT SCHEDULE SHEET S0.1 FOR SIMPSON SSTB BOLTS.

REVISIONS		
#	Date	Description

DEI
engineers
Dunagan Engineering, Inc.
4750 Caughlin Parkway #766, Reno, NV 89519
P: 775-329-2733 | F: 888-873-0790 | W: DEIengineers.com

Professional Engineer
ERIKA K. HULL-STANCLIFF
EXP. 6-30-23
CIVIL
No. 27423
4/19/2022 10:32:20 AM

BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06

SUBMITTAL SET

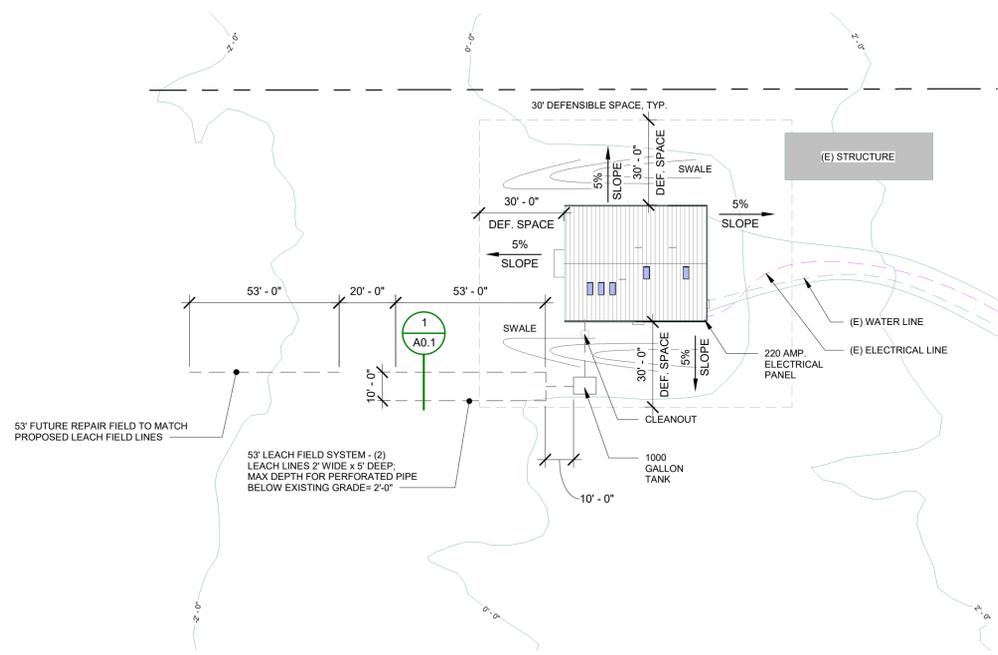
DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

STRUCTURAL FLOOR PLAN

S1.2

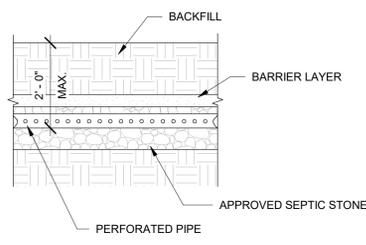
SHEET of SHEETS

PLEASE RECYCLE



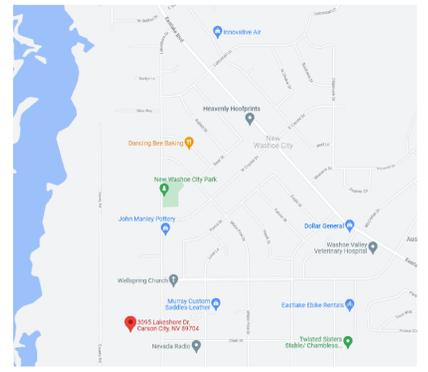
KEY PLAN
1" = 30'-0"

DEFENSIBLE SPACE NOTES:
ESTABLISH AND MAINTAIN DEFENSIBLE SPACE SURROUNDING STRUCTURES IN ACCORDANCE WITH THE 2018 INTERNATIONAL WILDLAND URBAN INTERFACE CODE (IWUIC) SECTION 603 AND 604. DEFENSIBLE SPACE SHALL BE ESTABLISHED WITHIN 30' OF THE PERIMETER OF THE STRUCTURE. THE DISTANCE SHALL BE MEASURED FROM THE EVES OR ANY ATTACHED APPENDAGE OF THE STRUCTURE.



1 PERFORATED PIPE DETAIL
1/2" = 1'-0"

- SITE PLAN NOTES:**
- DIMENSIONS TO EXISTING AND PROPOSED STRUCTURES ARE ESTIMATES TO THE NEAREST ONE FOOT INTERVAL. PROPERTY WAS NOT SURVEYED. SITE INFORMATION DERIVED FROM WASHOE COUNTY ASSESSOR PROPERTY DATA ONLINE GIS INTERNET MAP SERVER, EXISTING DOCUMENTS AND SITE VISIT.
 - EXISTING LANDSCAPING, GRADING AND DRAINAGE TO REMAIN. DO NOT DISTURB DURING CONSTRUCTION.
 - PROJECT ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY, FUNCTION OR COMPLIANCE OF EXISTING SEPTIC SYSTEMS AS SHOWN ON THIS SITE.
 - NO DOCUMENTED EXISTING WELLS ON ADJACENT PROPERTIES LOCATED WITHIN 200' OF THE SUBJECT PROPERTY. PROPERTY HAS SEPTIC PER PLAN.
 - NO DOCUMENTED EXISTING SEPTIC SYSTEMS LOCATED WITHIN 200' OF THE SUBJECT PROPERTY BASED UPON INFORMATION SUPPLIED BY WASHOE COUNTY HEALTH DEPARTMENT.
 - NO DOCUMENTED NATURAL DRAINAGES NOTED ON SITE OR WITHIN 100' OF SUBJECT PROPERTY.
 - PROPERTY IS OUTSIDE FEMA FLOOD ZONE DESIGNATIONS AND NO 100 YEAR FLOOD PLAIN BOUNDARIES WITHIN 100' OF PROPERTY.
 - CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SEPTIC SYSTEM AND WELL AND VERIFY COMPLIANCE WITH WASHOE COUNTY HEALTH DEPARTMENT GUIDELINES AND APPLICABLE BUILDING CODES.
 - CONTRACTOR SHALL PROVIDE 5% SLOPE DRAINAGE AWAY FROM EXISTING AND NEW CONSTRUCTION MIN. 10' FROM STRUCTURES.
 - TOTAL WATER USAGE FROM EXISTING WELL FOR EXISTING RESIDENCE AND PROPOSED DETACHED ADDITIONAL DWELLING UNIT SHALL NOT EXCEED 2 ACRE-FEET PER YEAR PER CHAPTER 534.180 OF NEVADA REVISED STATUTES.



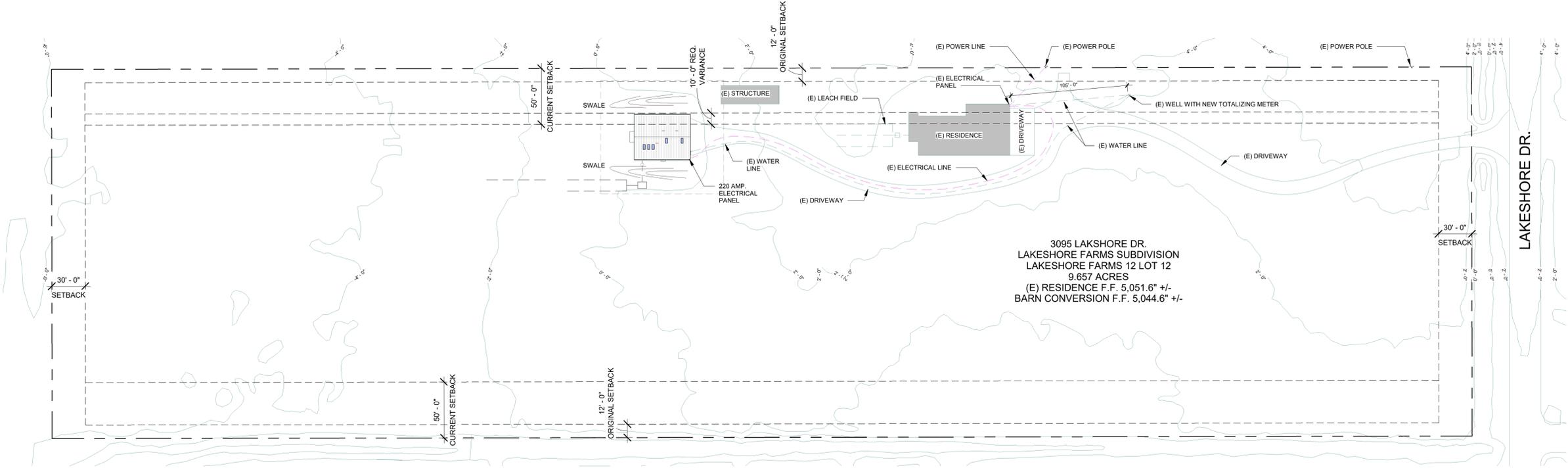
VICINITY MAP
N.T.S.

REVISIONS			
#	Date	Description	By

DEI
engineers
Dunagan Engineering, Inc.
4790 Gaughlin Parkway #766, Reno, NV 89519
P: 775-329-2731 F: 888-873-0790 | W: DEnginers.com

Professional Engineer Seal for Erika K. Full-Stancliff, Civil, No. 27423, NV, Exp. 6-30-23.

8/11/2022 11:15:25 AM



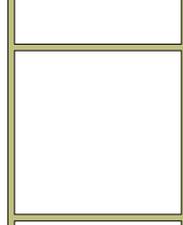
SITE PLAN
1" = 50'-0"

BARRY CERNOCH
BARN CONVERSION
3095 LAKESHORE DR.
WASHOE COUNTY, NV 89704
APN:050-340-06

SUBMITTAL SET

DRAWN BY	CSB
CHECKED BY	BDD
DATE	04-19-2022
SCALE	AS NOTED
JOB NO.	B21110
SHEET NO.	

SITE PLAN



A0.1
SHEET of SHEETS