Original

Community Services Department

Planning and Building

ADMINISTRATIVE PERMIT APPLICATION

(**Care for the Infirm** see page 9)

Community Services Department
Planning and Building
1001 E. Ninth St., Bldg. A
Reno, NV 89520

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: Zweifel Garage Addition	
Project Description: A Detached accessory structure that is larger than the dwelling on same parcel.	
Project Address: 2405 Walnut st.	
Project Area (acres or square feet): 700sq feet	
Project Location (with point of reference to major cross streets **AND** area locator): walnut st / Derbish way	

Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
021-132-04			

Section(s)/Township/Range:

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: Jerry/Adrienne Zweifel	Name:
Address: 2405 Walnut st.	Address:
Zip: 89502	Zip:
Phone: 775-622-6477 Fax:	Phone: Fax:
Email: jwzweifel@yahoo.com	Email:
Cell: 775-622-6477 Other:	Cell: Other:
Contact Person: Jerry Zweifel	Contact Person:
Applicant/Developer: SAME	**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: Jerry Zweifel

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, Jerry Zweifel,
(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): 021-132-04

Printed Name Jerry Zweifel

Signed Jerry Zweifel

Address 2405 Walnut st.
Reno Nv. 89502

STATE OF NEVADA
COUNTY OF WASHOE

Subscribed and sworn to before me this
24 day of December, 2018.

Nevada Washoe
Notary Public in and for said county and state

(Notary Stamp)

Notary

My commission expires: 10.25.2022

DANIELLE ST. GERMAINE
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No: 18-4374-2 - Expires Oct. 25, 2022

*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

Administrative Permit Application
Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to administrative permits may be found in Article 808, Administrative Permits.

1. What is the type of project or use being requested?

garage / storage

Detached Accessory Structure of 700 sq ft. added to make storage Large.

2. What currently developed portions of the property or existing structures are going to be used with this permit?

The Structure is larger because it was added to a previously permitted structure.

3. What improvements (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.) will have to be constructed or installed and what is the projected time frame for the completion of each?

Existing permitted Structure was enlarged by means of unpermitted addition. which is completed.

4. What is the intended phasing schedule for the construction and completion of the project?

Permitting and improvement to meet code will Begin immediately upon approval

5. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

In addition to much needed Storage, this structured was engineered to beautify our property and not affect or depreciate neighbors or area values

6. What are the anticipated beneficial aspects or effect your project will have on adjacent properties and the community?

This structure will eliminate clutter on premises to improve curb appeal and property values and a more visual improvement

7. What will you do to minimize the anticipated negative impacts or effect your project will have on adjacent properties?

We've planted 20 Pine trees around the property, painted house and out buildings all the same color making property attractive for curb apeal
siding and roof match house. See photos.

8. Please describe operational parameters and/or voluntary conditions of approval to be imposed on the administrative permit to address community impacts.

We planted 20 Pine trees around the parameters and are willing to plant additional trees if you tell us to. or feel it is nessary.

9. How many improved parking spaces, both on-site and off-site, are available or will be provided? (Please indicate on site plan.)

NA

10. What types of landscaping (e.g. shrubs, trees, fencing, painting scheme, etc.) are proposed? (Please indicate location on site plan.)

NA

11. What type of signs and lighting will be provided? On a separate sheet, show a depiction (height, width, construction materials, colors, illumination methods, lighting intensity, base landscaping, etc.) of each sign and the typical lighting standards. (Please indicate location of signs and lights on site plan.)

NA

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

❑ Yes	☑ No

13. Utilities:

a. Sewer Service	~~N/A~~ SEPTIC
b. Water Service	~~N/A~~ WELL

For most uses, the 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:

c. Permit #		acre-feet per year	
d. Certificate #		acre-feet per year	
e. Surface Claim #		acre-feet per year	
f. Other, #		acre-feet per year	

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

N/A

NOTICE OF TAXES
WASHOE COUNTY, NEVADA

TAMMI DAVIS TREASURER
tax@washoecounty.us
Annual - Real

2018028275
www.washoecounty.us/treas
PHONE 775-328-2510
FAX 775-328-2500
12/24/2018 10:05 am

OFFICE LOCATION:
1001 E NINTH ST-BLDG D RM140
RENO, NV

TAX YEAR	PIN	NAME	PROPERTY LOCATION AND DESCRIPTION
2018	02113204	ZWEIFEL, JERRY & ADRIENNE	2405 WALNUT ST SUBDIVISIONNAME _UNSPECIFIED TOWNSHIP 19 SECTION 28 LOT BLOCK RANGE 20
AREA	TAX RATE		
4000	3.2402000000		

ASSESSED VALUATION		EXEMPTION VALUES	
LAND	28,000	EXEMPTION	0.00
IMPROVEMENT	49,552		
TOTAL ASSESSED VALUE	77,552		

2018 ACCOUNT SUMMARY

GROSS AD VALOREM TAX	2,512.86
ABATEMENT AMOUNT *ABATEMENT APPLIED LIMITS INCREASE TO 4.2%*	-45.77
RECAPTURE TAX	0.00
NET AD VALOREM TAX	2,467.09
EXEMPTION AMOUNT	0.00
SPECIAL ASSESSMENTS	0.03
PENALTIES	0.00
FEES	0.00
INTEREST	0.00
TOTAL AMOUNT BILLED	**2,467.12**
LESS PAYMENTS APPLIED	**1,233.58**
BALANCE REMAINING	**1,233.54**
PRIOR YEAR DELINQUENCIES	**0.00**
TOTAL BALANCE OWING	**$1,233.54**
Amount good through 12/24/2018	

2018 BILLING DETAIL

TAXING AGENCY	RATE	AMOUNT	SPEC. ASSESSMENTS	RATE	AMOUNT
STATE OF NEVADA	0.170000000	129.44	TRUCKEE/SUN VLY WATER BASIN		0.03
TRUCKEE MEADOWS FIRE	0.540000000	411.15			
SCHOOL DEBT	0.388500000	295.80			
SCHOOL GENERAL	0.750000000	571.05			
COUNTY GENERAL	1.340700000	1,020.81			
COUNTY DEBT	0.021000000	15.99			
ANIMAL SHELTER	0.030000000	22.85			

IF PROPERTY IS PROTECTED BY BANKRUPTCY, THIS IS FOR YOUR INFORMATION. DO NOT CONSIDER THIS AS AN ATTEMPT TO COLLECT.

PAYMENTS RECEIVED WILL BE APPLIED TO THE OLDEST CHARGES FIRST.
TO AVOID LATE CHARGES, PAYMENTS MUST BE POSTMARKED BY THE DUE DATE.
ALL DELINQUENT AMOUNTS ARE DUE IMMEDIATELY.

PLEASE INCLUDE APPROPRIATE STUBS WITH PAYMENT TO ASSURE PROPER CREDIT.

02113204
JERRY & ADRIENNE ZWEIFEL
2405 WALNUT ST
RENO NV 89502

MAKE REMITTANCES PAYABLE TO:
WASHOE COUNTY TREASURER
P O BOX 30039
RENO NV 89520-3039

SEE REVERSE FOR INFORMATION.

Property Tax Reminder Notice

WASHOE COUNTY
PO BOX 30039
RENO, NV 89520-3039
775-328-2510

PIN: 02113204
AIN:

Balance Good Through:	**12/24/2018**
Current Year Balance:	**$1,233.54**
Prior Year(s) Balance: (see below for details)	**$0.00**
Total Due:	**$1,233.54**

AUTO
:895026:
JERRY & ADRIENNE ZWEIFEL
2405 WALNUT ST
RENO NV 89502

Description:

Situs: 2405 WALNUT ST
WCTY

This is a courtesy notice. If you have an impound account through your lender or are not sure if you have an impound account and need more information, please contact your lender directly. Please submit payment for the remaining amount(s) according to the due dates shown. Always include your PIN number with your payment. Please visit our website: www.washoecounty.us/treas

Current Charges

PIN	Year	Bill Number	Inst	Due Date	Charges	Interest	Pen/Fees	Paid	Balance
02113204	2018	2018028275	1	08/20/2018	616.81	0.00	0.00	616.81	0.00
02113204	2018		2	10/01/2018	616.77	0.00	0.00	616.77	0.00
02113204	2018		3	01/07/2019	616.77	0.00	0.00	0.00	616.77
02113204	2018		4	03/04/2019	616.77	0.00	0.00	0.00	616.77
Current Year Totals					2,467.12	0.00	0.00	1,233.58	1,233.54

Prior Years

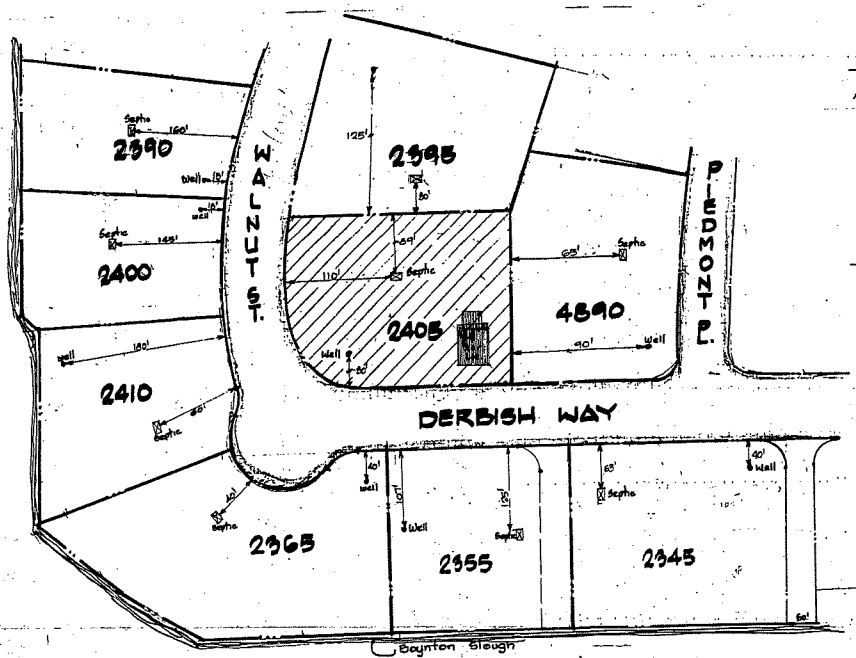
PIN	Year	Bill Number	Charges	Interest	Pen/Fees	Paid	Balance
Prior Years Total							

Jerry Zweifel (775) 622-4

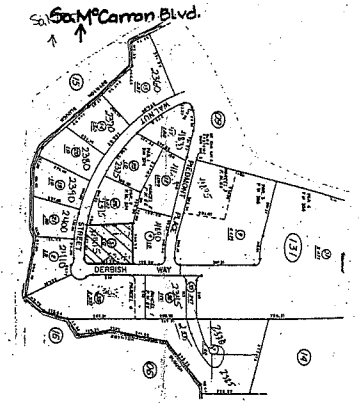
SHEET INDEX

DESIGN CRITERIA

assessor's parcel number:	021-132-04
zoning:	mds
total building square footage:	2090 (existing) 300 (addition) 2390 (total)
building code:	2012 irc 2012 ibc - structural design 2012 iecc
occupancy group:	u (garage)
type of construction:	vb



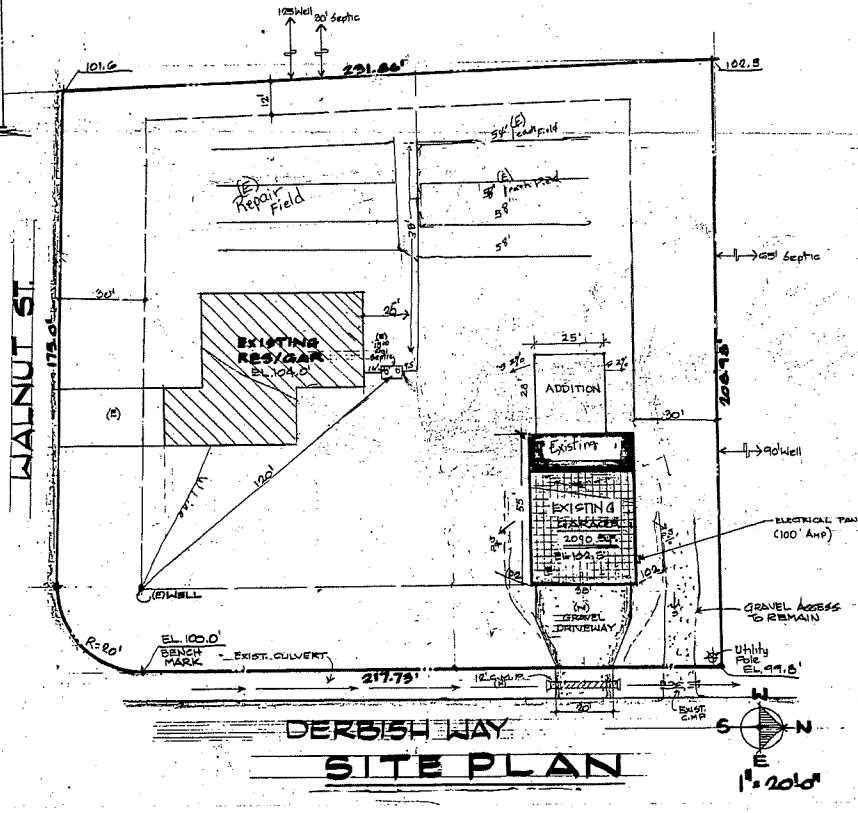
WELL & SEPTIC LOC'TN. n.t.s.
(within 200')



VICINITY MAP n.t.s.

revisions
1 PLAN CHECK 8-9-18

project



ZWEIFEL GARAGE ADDITION

2405 WALNUT ST.
RENO, NV

drawn:
date:
scale: as noted
project no:

A-1
drawing #

WASHOE COUNTY

TAMMI DAVIS, TREASURER

Accounts Receivable Payment Listing

Mar-15-2019 09:19 AM	Tax Accounts Receivable	Printed By: nhuangman

Report Parameters:

Business Date Range

From Date: 1/1/2018

To Date: 12/31/2018

Transaction Types:

Payment
Reversal
Cancel - No Surplus
Cancel - Create Surplus
Reapply
Reallocate
Bad Check
Apply Advance

Tax Year:

Bill Number:

PIN: 02113204

Revenue Sources:

Property

Accounts Receivable Payment Listing

Date	Till	User	Receipt Number	Taxyear Bill Number	PIN	Tax	Penalty/ Interest/ Discount	Fees/Misc	Total Transaction
02/16/2018	ACH Wire	ling	2017 B17.215565	2017 2017037402	02113204	591.91	0.00	0.00	591.91 Payment
08/09/2018	ACH Wire	ling	2018 B18.30016	2018 2018028275	02113204	616.81	0.00	0.00	616.81 Payment
09/19/2018	ACH Wire	ling	2018 B18.94871	2018 2018028275	02113204	616.77	0.00	0.00	616.77 Payment
12/24/2018	ACH Wire	ling	2018 B18.164995	2018 2018028275	02113204	616.77	0.00	0.00	616.77 Payment

Total Tax:	2,442.26
Total Penalty:	0.00
Total Interest:	0.00
Total Discount:	0.00
Total Fee:	0.00
Total Misc.	0.00
Grand Total:	2,442.26

ABBREVIATIONS:

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

GENERAL NOTES AND SPECIFICATIONS:

DIVISION 1 - GENERAL

a. All work shall conform to the 2012 IBC and applicable local codes.
b. Where applicable allowable stresses have been increased 15% (Except Alpine and Placer 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 diaphrams and 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 and consent 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 SET-XP Epoxy per ESR-2508 with ASTM A36 threaded rod or approved equal, u.n.o. Expansion anchors shall be Simpson Strong Bolts per ESR-1771, 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 are assumed to be drained and free 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 2500 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 Table 1940.2 of the IBC. No special inspection is required as design assumes 2500 psi.
b. Reinforcement shall be per ASTM A615 grade 60 ksi, U.N.O.
c. Lap reinforcing Per Detail 6/SO.2, U.N.O.
d. Reinforcement cover in cast-in-place concrete shall be as follows:
   - 3" - Concrete cast against and permanently exposed to earth.
   - 1 1/2" - Concrete exposed to earth or weather with #5 bars or smaller.
   - 1 1/2" - Concrete not exposed to weather or in contact with ground, #11 bars and smaller.
   - 1 1/2" - 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.
h. All Post Tension concrete shall be Type II and have a minimum 28 day compressive strength of 4000 psi., U.N.O.
i. Post Tension Concrete shall be air-entrained per Post Tension Designer.

DIVISION 4 - MASONRY

a. All masonry units shall conform to ASTM C90-75 grade N units, U.N.O.
b. All masonry cells are to be solid grouted with mortar conforming to ASTM C279, type S, with a 28 day compressive strength of 1500 psi. minimum, U.N.O.
c. Vertical steel placement in masonry walls to be #4 bars at 16" o.c. maximum spacing, U.N.O.
d. Horizontal steel placement in masonry walls to be #4 bars at 24" o.c. maximum spacing, U.N.O.

DIVISION 5 - METALS

a. All hardware called for shall be Simpson Strong-Tie Co, Inc. and installed per the manufacturers 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 grout 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 fabricators 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-retardant 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 2304.9.1
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" inch 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 2305.3.11 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 contractors 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: Fb=2600 psi, Fv=285 psi, E=1,900,000 psi. 3 1/2" wide and greater: Fb=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 from each side.
i. Foundation sill plates, nailers, and ledgers in direct contact with concrete and within 6" 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 ASTMA 153.
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 plates .....standard
   - all 2x and 3x sills .....standard
   - manuf. truss components .....grade 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.

THESE NOTES APPLY TO ALL SHEETS

1. It shall be the contractors direct responsibility to comply with typical details and general notes as delineated or defined on the typical detail drawings of these contract documents regardless of specific flagging or reference to applicable note or detail.
2. It shall be the contractor's responsibility to coordinate with all trades regarding utilities passing through and under footings. Structural requirements for these conditions are delineated in typ. details.
3. Top of footing elevations noted are minimum. See note 2 for additional requirements.
4. Contractor to verify and coordinate all locations and sizes of openings in slabs, slab depressions, and curbs for all related construction prior to floor layout or construction. Contractor shall then use appropriate detail's or appropriate wall section for each applicable condition.
5. Contractor to verify dimensions with architect prior to construction.
6. Drawings are diagrammatic in nature and are not intended to indicate every opening or penetration in roof or other structure. Contractor shall coordinate and verify location and size of all such openings and penetrations with related subcontractors prior to roof or other framing layout or construction. Contractor shall then use appropriate typical or referenced detail's for each opening or penetration.
7. Contractor to verify with appropriate sub-contractors the exact location, weight, and intended method of attachment of all items to be suspended from or in any way attached to any roof framing or other structural member unless such item(s) are clearly addressed by the structural construction documents. This information shall be transmitted in writing to structural engineer prior to final design or fabrication of structural framing members.
8. Contractor to verify all existing conditions and dimensions and notify the architect in writing of any discrepancies.

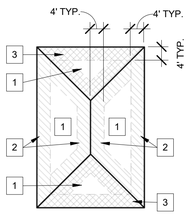
SPECIAL INSPECTIONS AND DEFERRED SUBMITTALS:

a. Special inspection, per the International Building Code chapter 17, Table 1704.3 for steel and 1704.4 for concrete shall be required for the following types of work. See project Specifications for specified requirements:
b. All concrete work for strengths greater than 2500 psi, except for slabs on grade, footings and non structural concrete.
c. All reinforcing steel for concrete strengths greater than 2500 psi.
d. All field welding (except metal studs, furring channels, etc.). Shop welding for procedures and multiple pass welds.
e. All full penetration welds shall be specially inspected in accordance with AWS and the current International Building Code.
f. All fillet welds shall be visually inspected in accordance with AWS and the current International Building Code.
g. All masonry work, see notes under `MASONRY" for requirements. All masonry inspection shall also comply with the National Concrete Masonry Institute.
h. Bolts installed in conc. or masonry. Does not include sill PL, anchor bolts and Holdown anchor bolts.
i. All ASTM A-325 and/or ASTM A-490 High Strength Bolts.
j. All expansion bolts and adhesive anchors.
k. All grouted dowels.
l. All insulating concrete.

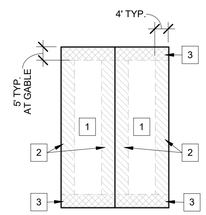
ROOF SHEATHING FASTENING SCHEDULE

NAILS	PANEL LOCATION	ROOF FASTENING ZONE		
		ZONE 1	ZONE 2	ZONE 3
		FASTENER SCHEDULE (INCHES ON CENTER)		
SEE NOTE #2	PANEL EDGES	6	6	4
SEE NOTE #2	PANEL FIELD	12	6	6

1. BLOCKING NOT REQUIRED, UNLESS NOTED OTHERWISE ON PLANS.
2. USE 8d NAILS FOR 1/2" ROOF PLY & 10d NAILS FOR 5/8" ROOF PLY.



HIP ROOF



GABLE ROOF

ROOF SHEATHING

1/2" CDX APA Rated (32/16) or OSB equivalent, Apply face grain perpendicular to framing. Stagger panels and nail with 8d's common at 6" o.c. at edges and boundaries (blocking, drag trusses, shear blocks, etc.), and 12" o.c. field. U.N.O. (See special diaphragm nailing requirements this sheet)

FRAMING MATERIAL:

ROOF HEADERS:
6x8 D.F. #1 (4x8 D.F. #2 at 2x4 walls) or RMT U.N.O. Provide (2) Trimmers at openings greater than 5'-0" U.N.O.
WALL FRAMING
Use 2x6 or 2x4 D.F. Stud or Construction Grade at 16" o.c. as occurs Typ. U.N.O.

DESIGN CRITERIA

2012 International Building Code (IBC)
Local Building Department Standards
Soil Bearing (IBC Table 1806.2)

WIND DESIGN DATA

Ultimate Design Wind Speed, Vu = 130 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 30.5.2):
a = 3.2 ft (ASCE 7 Figure 30.5-1)

Refer to ASCE 7-/-0 Figure 30.5-1 for layout.			
Roof/Wall	Zone	Effective Wind Area (ft²)	Design Wind Pressure, P_{net} (psf)
Roof > 7 to 27°	1	10	33.6
	1	20	32.7
	1	50	31.5
	1	100	30.5
	2	10	58.6
	2	20	54.0
	2	50	47.7
	2	100	43.1
	3	10	86.6
	3	20	81.1
	3	50	73.6
	3	100	68.0
Wall	4	10	39.9
	4	20	38.2
	4	50	36.1
	4	100	34.4
	4	500	30.5
	5	10	49.2
	5	20	46.0
	5	50	41.5
	5	100	38.2
	5	500	30.5

SEISMIC DESIGN DATA

Importance Factor, Ie = 1.00 (Risk Category II)
Ss = 1.932 g and S1 = 0.631 g
Site class: = D
SDs = 1.288 g , SD1 = 0.631 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) = 7.7 kips
E/W Design Base Shear (LRFD) = 7.7 kips
Cs (LRFD) = 0.1981
Analysis Procedure Used = Equivalent Lateral Force Procedure

SNOW LOAD DATA:

Site Elevation	< 5000	FT.
Ground Snow Load	Pg =	30 psf
Flat-Roof Snow Load	Pf =	23 psf
Snow Exposure Factor	Ce =	0.9
Snow Importance Factor	Is =	1.0
Thermal Factor	Ct =	1.2

FLOOR FRAMING DESIGN LOADS:

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

TRUSSES (if used)

- Engineering to be provided by truss manufacturer.
- The truss manufacturer shall provide shop drawings for approval by this engineer and shall be responsible for the design and certification of the trusses.

TRUSS REVIEW APPROVAL:

CONTRACTOR: OWNER / BUILDER
DATE: -
TRUSS MANUFACTURER: PIEDMONT TRUSS

This letter is to confirm that Dunagan Engineering, Inc. has reviewed the above referenced truss calculations for use at the above address, prior to submittal to the Building Dept., and find them to be in general compliance w/ the plans and specifications (including but not limited to drag trusses, connections, loading, and load paths). The contractor is responsible for dimensions, which shall be confirmed and collaborated at the job site, fabrication processes and techniques of construction, the coordination of his work with that of all other trades, and the satisfactory performance of his work.

DUNAGAN ENGINEERING INC. _____ DATE: _____

- Truss Manufacturer to design "shear" trusses to resist the lateral load indicated on plans (minimum shear load = 1500 lbs).
- Truss Manufacturer to verify location of and provide reinforced trusses for the support of any mechanical equipment where occurring.
- Truss Manufacturer to verify location of and design for all ceiling height changes, attic accesses, return air grills, etc as required by the Architect.
- Approved truss shop drawings shall be a part of these construction documents. They shall be attached to these drawings and shall be on the construction site for duration of the project.
- Each truss shall be legibly branded, marked or otherwise have permanently affixed thereto the following information located within 2 feet of the center of the span on the face of the bottom chord:
  a. identity of the company manufacturing the truss.
  b. the design load.
  c. the spacing of trusses.
- It is the responsibility of the truss manufacturer to conform the truss design according to the loading conditions as called for in the structural calculations, such as (1) snow, live and dead loads; (2) truss spacing; (3) spans and eave overhangs and their loading; (4) roof pitch; and (5) bearing points of all trusses.
- When trusses are spaced at 16"o.c. the truss manufacturer shall provide a means of attic access.
- When snow loads exceed 30 psf the trusses shall be designed to stack over wall studs at bearing points unless truss manufacturer provides alternate design.
- All girder trusses are to be supported by multiple studs, U.N.O.
- Gable end trusses shall be structural; designed to support the overhang and to allow a top chord notch of 1 1/2". Use min. drag load of 200 P.L.F.
- All non bearing walls are to have a 1/4" gap to the bottom chord of the trusses. Secure bottom chord to wall with Simpson STC clip.
- Trusses are to be handled, installed, and braced in accordance with BCSI-B1 of the Truss Plate Institute (TPI).
- Truss Spacing = 24" o.c.

TRUSS LOADING:

	TYPICAL	
Top Chord Live/Snow Load =	23	PSF
Top Chord Dead Load =	10	PSF
Bottom Chord Live Load =	0	PSF (10 psf. NON-CONCURRENT Per IBC Table 1607.1)
Bottom Chord Dead Load =	8	PSF
Total Load=	41	PSF

CONNECTION CROSS REFERENCE

Simpson Strong-Tie	USP Structural Connectors	Simpson Strong-Tie	USP Structural Connectors	Simpson Strong-Tie	USP Structural Connectors	Simpson Strong-Tie	USP Structural Connectors
Product Number	Product Number	Product Number	Product Number	Product Number	Product Number	Product Number	Product Number
SSTB16	STB16	CB66	KCB66	HU410	HD410	HGUS26-3	THDH26-3
SSTB24	STB24	CB68	KCB68	HU412	HD412	HGUS28-3	THDH28-3
HDU5-SDS2.5	PHD5	HUCQ1.81/9-SDS	HDQ179IF	HU68	HD68	TJC37	SNP3
HDQ8-SDS3	UPHD8	HUCQ1.81/11-SDS	HDQ171121F	HU610	HD610	THJA26	HJC26
HHDQ11-SDS2.5	UPHD11	-- --	HDQ171141F	HU612	HD612	MTHM	HJHC26
HHDQ14-SDS2.5	UPHD14	HUCQ310-SDS	HDQ310IF	LSU26	LSSH15-TZ	DSC4R/L-SDS3	DSC4R/L
HD15	TD15	HUCQ210-2-SDS	HDQ210-2IF	LSSU28	-- --	ST6224	KST224
ABU44	PAU44	HUCQ410-SDS	HDQ410IF	LSSU210	LSSH210	CS16	RS150
ABU46	PAU46	HUCQ412-SDS	HDQ412IF	SUR/L24	SKH24R/L	MSTC48B3	-- --
ABU66	PAU66	HUCQ210-3-SDS	HDQ210-3IF	SUR/L26	SKH26R/L	H1	RT15
ABU88	PAU88	HUCQ5.25/9-SDS	HDQ5210IF	SUR/L210	SKH210R/L	H2.5A	RT7A
PB44	WE44	HUCQ5.25/11-SDS	HDQ5212IF	IUS	THF	H2A	RT10
PB46	WE46	HUCCQ610-SDS	HDQ610IF	HU11	HD17112	HGA10KT	HGA10
PB66	WE66	HUCQ612-SDS	HDQ612IF	IUT	THF	A34	MP34
CBQ44	KCBQ44	LUS24	JUS24	ITS	THO/TFL	A35	MPA1
CBQ46	KCBQ46	LUS26	JUS26	ITT	THO/TFL	LTP4	MP4F
CBQ66	KCBQ66	LUS28	JUS28	LUS26-2	JUS26-2	LS50	MP5
CB44	KCB44	LUS210	JUS210	HHUS26-2	THDH26-2	LS70	MP7
CB46	KCB46	LUS46	JUS46	HGUS26-2	THDH26-2	LS90	MP9
CB48	KCB48	HU46	HD46	HHUS28-2	THD28-2	CCQ/ECCQ	KCCQ/KECCQ

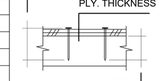
HOLDOWN SPECIFICATION TABLE

(ALSO SEE SIMPSON STRONG-TIE CATALOG)

HOLDOWN	CL	POST MIN. THICKNESS	SCREWS, BOLTS OR NAILS	THREADED ROD			SSTB BOLT	
				A.B. DIA.	EMBEDMENT		SGL. POUR	DBL. POUR
					8" STEM WALL	FOOTING		
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"x2 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"x2 1/2"	7/8"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	N/A	N/A
HDQ8	1 1/4"	4 1/2"	(20) SDS 1/4"x3"	7/8"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	N/A	N/A
HHDQ11	1 1/2"	5 1/2"	(24) SDS 1/4"x2 1/2"	1"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	N/A	N/A
HHDQ14	1 1/2"	5 1/2"	(30) SDS 1/4"x2 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"x2 1/2"	1"	SEE HOLDOWN SCHEDULE PER PLAN	SEE HOLDOWN SCHEDULE PER PLAN	N/A	N/A
HD19	2 1/8"	5 1/2"x5 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
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.)				

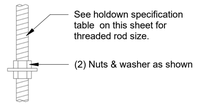
FOOTING AND STEMWALL REQUIREMENTS

- 8" Wide w/ (1) #4 continuous top and #4 at 48" o.c. vertical, hook at footing (alternate hooks). 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.

THREADED ROD END CONDITION AT HOLDOWNS



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 2012 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.

SHEET INDEX

REVISIONS

#	Date	Description	By

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

STRUCTURAL ONLY

1/25/2017 10:43:18 AM

ZWEIFEL GARAGE ADDITION

2405 WALNUT ST.
RENO, NV

DRAWN BY	CSB
CHECKED BY	BDD
DATE	1-25-2017
SCALE	AS NOTED
JOB NO.	B16820
SHEET NO.	S0.1
OF	SHEETS

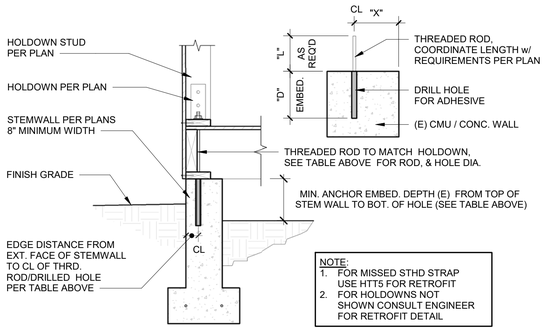
PLEASE RECYCLE

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 STRUCURAL 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
				2x4	2x6	
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



NOTE:
1. FOR MISSED STHD STRAP USE HTT5 FOR RETROFIT
2. FOR HOLDOWNS NOT SHOWN CONSULT ENGINEER FOR RETROFIT DETAIL

1. 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.
2. DRILLING HOLES: HOLES FOR ADHESIVE CONNECTIONS SHALL BE DRILLED WITH A ROTARY DRILL.
3. CLEANING HOLES: HOLES FOR ADHESIVE CONNECTIONS SHALL BE THOROUGHLY CLEANED WITH THE FOLLOWING PROCEDURE:
   a. BLOW OUT ALL DUST AND LOOSE MATERIAL WITH COMPRESSED AIR.
   b. CLEAN HOLE SURFACE WITH WIRE BOTTLE BRUSH WHICH IS SLIGHTLY LARGER THAN THE HOLE DIAMETER THEN USE A DOWEL WRAPPED WITH A MOIST RAG TO REMOVE REMAINING DUST.
   c. BLOW OUT HOLE COMPRESSED AIR.
   d. REPEAT PROCEDURE AS REQUIRED UNTIL ALL SURFACES ARE CLEAN.
4. 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.
5. 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:
   a. HOLES ARE CORRECT DIAMETER AND DEPTH.
   b. HOLES ARE CLEAN.
   c. PROPER ADHESIVE IS USED.
   d. ADHESIVE IS CORRECTLY INSTALLED PER MANUFACTURE'S RECOMMENDATION.
   e. BOLTS ARE CORRECT DIAMETER AND LENGTH.
   f. TEMPERATURE OF MATERIALS TO BE BONDED ARE WITHIN THE RANGE ALLOWED BY THE MANUFACTURER'S SPECIFICATIONS.
6. THE ADHESIVE HAS A "GEL TIME" OF 4 MINUTES AND A "CURE TIME" OF APPROXIMATELY 24 HOURS. THUS THE 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"),

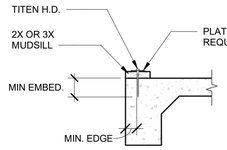
10 THREADED ROD RETROFIT

3/4" = 1'-0"

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

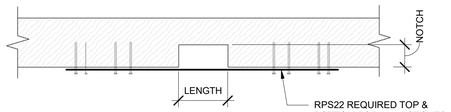
1. ICC-ES CODE REPORT ESR-1056.
2. SPECIAL INSPECTION IS NOT REQUIRED FOR TITEN HD INSTALLATIONS RESISTING ONLY SHEAR LOADS.
3. MINIMUM EDGE AND END DISTANCES ARE BASED ON DISTANCE FROM EDGE (OR END) OF CONCRETE TO CENTER OF BOLT.
4. MINIMUM CONCRETE THICKNESS IS 1.5 TIMES THE TITEN HD ANCHOR EMBEDMENT.
5. 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 11E OF THE 2005 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 AND 2012 IBC SECTIONS 2304.3.1
   - 2000, 2003, 2006 AND 2012 IRC SECTION R403.1.6
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.
7. FOR ACQ-C, ACQ-D, CA-B AND CBA-A PRESSURE-TREATED WOOD, USE MECHANICALLY GALVANIZED TITEN HD. FOR ADDITIONAL INFORMATION CORROSION AND PRESSURE TREATED WOOD SEE
8. SEE SIMPSON STRONG-TIE ANCHORING AND FASTENING SYSTEMS CATALOG FOR COMPLETE INFORMATION ON THE TITEN HD.



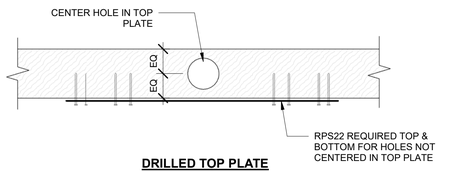
TITEN HD IN NORMAL-WEIGHT CONCRETE SLAB-ON-GRADE (INSTALLATION IN STEMWALL SIMILAR)

9 RETRO FIT SILL PL w/ TITEN

3/4" = 1'-0"



NOTCHED TOP PLATE

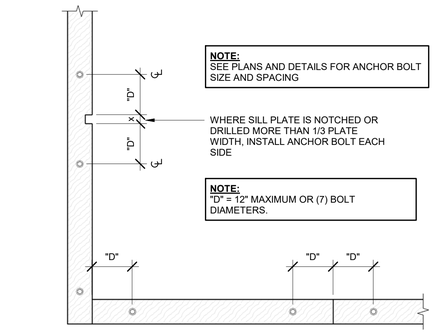


DRILLED TOP PLATE

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.

8 NOTCH IN TOP PLATE

1 1/2" = 1'-0"



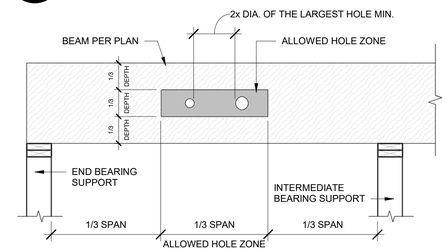
NOTE:
SEE PLANS AND DETAILS FOR ANCHOR BOLT SIZE AND SPACING

WHERE SILL PLATE IS NOTCHED OR DRILLED MORE THAN 1/3 PLATE WIDTH, INSTALL ANCHOR BOLT EACH SIDE

NOTE:
"D" = 12" MAXIMUM OR (7) BOLT DIAMETERS.

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:

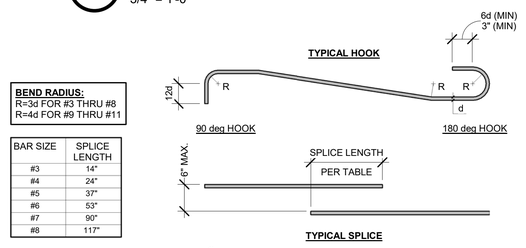
1. DO NOT CUT, NOTCH, OR DRILL BEAM, EXCEPT AS INDICATED WITHOUT PRIOR
2. APPROVAL FROM THE ENGINEER OF RECORD.
3. SQUARE & RECTANGULAR HOLES ARE NOT PERMITTED.
4. ROUND HOLES MAY BE DRILLED OR CUT WITH A HOLE SAW ANYWHERE WITHIN
5. THE ALLOWED HOLE ZONE OF THE BEAM.
6. THE HORIZONTAL DISTANCE BETWEEN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

6 HOLES IN BEAM

3/4" = 1'-0"

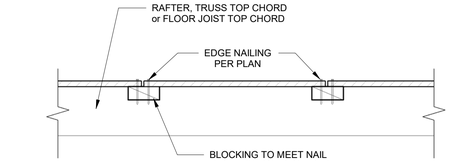
BEND RADIUS:
R=3d FOR #3 THRU #8
R=4d FOR #9 THRU #11

BAR SIZE	SPLICE LENGTH
#3	14"
#4	24"
#5	37"
#6	53"
#7	90"
#8	117"



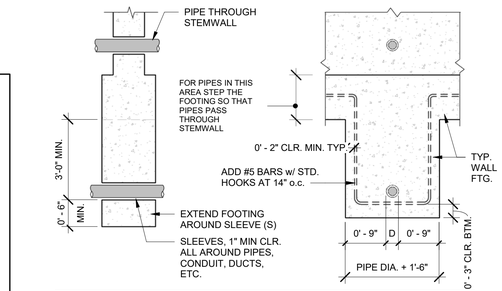
5 REBAR BENDS & LAP REQUIREMENTS

3/4" = 1'-0"



3 BLOCKED DIAPHRAGM

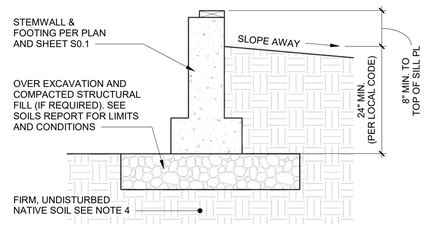
1 1/2" = 1'-0"



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"

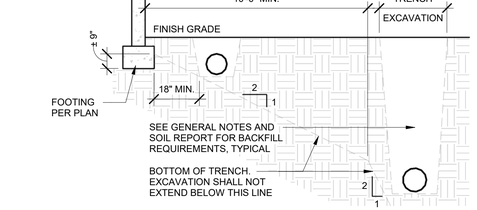


NOTES:

1. REFERENCE FOUNDATION NOTES ON SHEET S0.1 FOR ALL SOILS AND FOUNDATION REQUIREMENTS.
2. PROVIDE COMPACTED STRUCTURAL FILL BENEATH CONTINUOUS AND SPREAD FOOTINGS IF REQUIRED (SEE SOILS REPORT).
3. SEE THE PROJECT SOILS REPORT, GRADING PLANS AND SHEET S0.1 FOR ALL SOILS REQUIREMENTS INCLUDING COMPACTION, FILL AND ALL OTHER REQUIREMENTS.
4. NATIVE SOIL SHOULD BE SCARIFIED A MINIMUM OF 12" AND BROUGHT TO NEAR OPTIMUM MOISTURE CONTENT AND COMPACTED TO AT LEAST 90% OF RELATIVE COMPACTION.

1 TYPICAL SOIL PREPARATION

3/4" = 1'-0"



NOTE:
1. THE CONTRACTOR SHALL COORDINATE ALL EXCAVATION OPERATIONS WITH BUILDING FOUNDATION REQUIREMENTS.

4 EXCAVATION PARALLEL TO FOOTING

3/4" = 1'-0"

REVISIONS

#	Date	Description	By

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

STRUCTURAL ONLY

PROFESSIONAL ENGINEER - STATE OF NEVADA
ROBERT C. CORBIN
EXP. 12-31-18
CIVIL
No. 21329

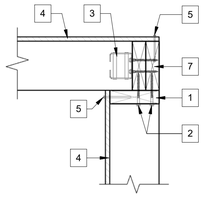
1/25/2017 10:43:24 AM

ZWEIFEL GARAGE ADDITION

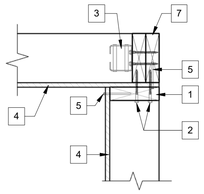
2405 WALNUT ST.
RENO, NV

DRAWN BY	CSB
CHECKED BY	BDD
DATE	1-25-2017
SCALE	AS NOTED
JOB NO.	B16820
SHEET NO.	S0.2
OF	SHEETS

PLEASE RECYCLE



SINGLE TO SINGLE



REENTRANT CORNER

LEGEND:

1	2x OR 3x MEMBER RECEIVING SHEARWALL, EDGE NAIL (SEE SHEAR WALL SCHEDULE)
2	- 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
3	HOLDOWN PER PLAN
4	SHEAR PLY PER PLAN
5	EDGE NAILING (SEE SHEAR WALL SCHEDULE)
6	SOLID FRAMING
7	HOLDOWN POSTS / STUDS PER PLAN (SEE SHEARWALL SCHEDULE)
8	CROSS WALL INTERRUPTING SHEARWALL

NOTES:

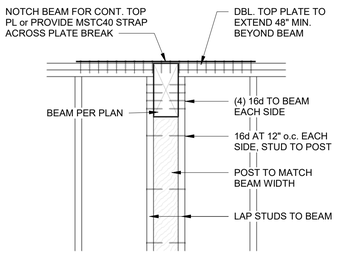
1. THIS DETAIL SUPERCEDES HOLDOWN SCHEDULE, i.e. NO DOUBLE STUDS PER HOLDOWN SCHEDULE, CONNECT HOLDOWNS AS SHOWN.

2. SIMILAR SITUATIONS GET SIMILAR CONNECTIONS.

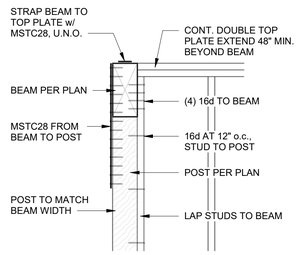
3. EVERY EXTERIOR / PERIMETER / LOAD BEARING CORNER GETS MINIMUM (3) STUDS OR (1) HOLDOWN POST & (1) STUD

10 HOLDOWN IN CORNER

1 1/2" = 1'-0"



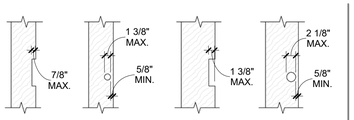
BEAM POCKET AT INTERIOR



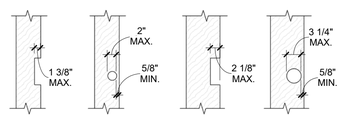
BEAM POCKET AT CORNER

9 BEAM POCKET

3/4" = 1'-0"



BEARING CONDITION

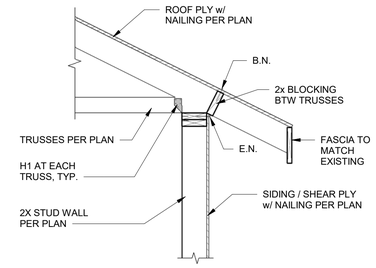


NON-BEARING CONDITION

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.

8 STUD WALL NOTCH & DRILL

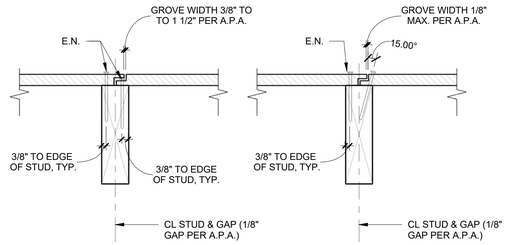
3/4" = 1'-0"



7 DETAIL

3/4" = 1'-0"

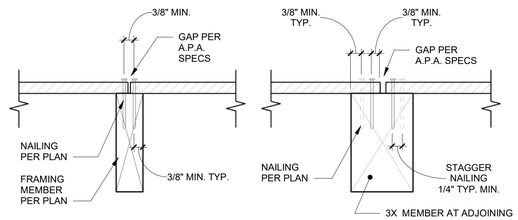
320-200M



6 SIDING NAILING

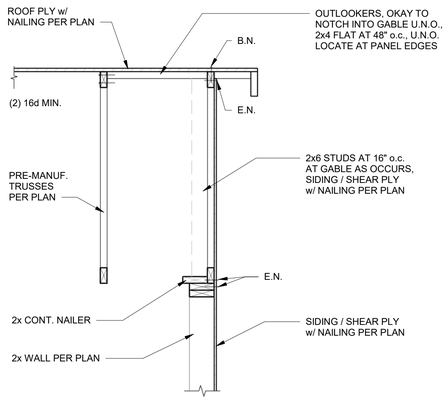
3" = 1'-0"

NOTE:
PLYWOOD SHEETS ARE TO BE AS LARGE AS POSSIBLE (MIN. 2'x4').
NAIL HEADS SHALL BE DRIVEN FLUSH WITH TOP OF LAMINATION



5 PLYWOOD NAILING

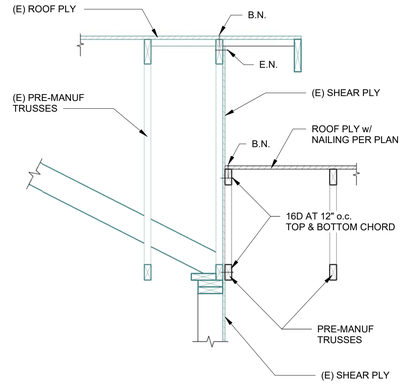
3" = 1'-0"



4 DETAIL

3/4" = 1'-0"

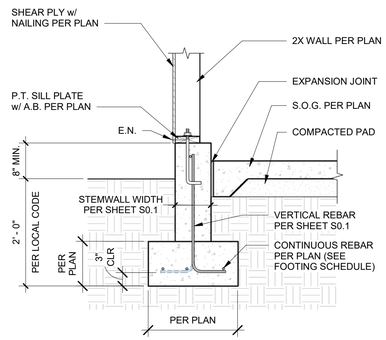
320-308



3 DETAIL

3/4" = 1'-0"

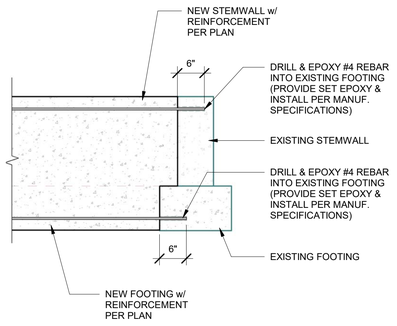
320-272M



2 DETAIL

3/4" = 1'-0"

110-303



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.

1 DETAIL

3/4" = 1'-0"

110-020

REVISIONS

#	Date	Description	By

DE engineering
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STRUCTURAL ONLY

PROFESSIONAL ENGINEER · STATE OF NEVADA
ROBERT C. CORBIN
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1/25/2017 10:43:28 AM

ZWEIFEL GARAGE ADDITION

2405 WALNUT ST.
RENO, NV

DRAWN BY	CSB
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SCALE	AS NOTED
JOB NO.	B16820
SHEET NO.	S0.3
OF	SHEETS

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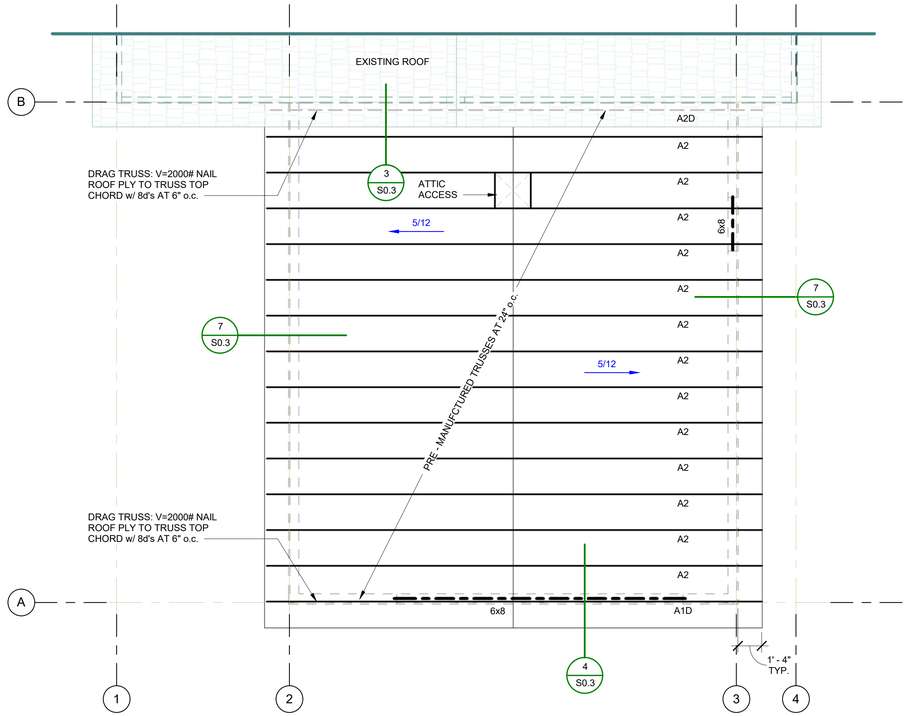


ROOF FRAMING PLAN

1/4" = 1'-0"

ELECTRICAL LEGEND:

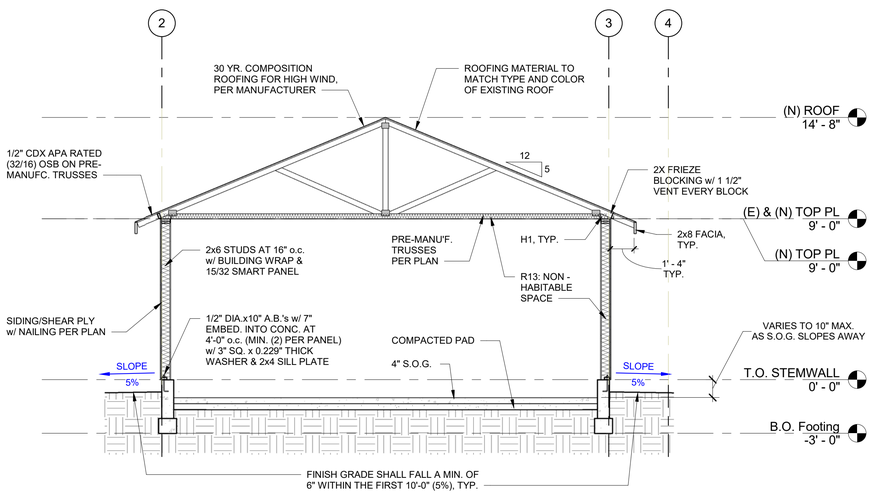
- 110-115 DUPLEX OUTLET
- DOUBLE POLE SWITCH
- EXTERIOR SURFACE MOUNT WALL FIXTURE
- 4'-0" TWO-TUBE FLUORESCENT LIGHT

ATTIC VENTILATION CALCULATIONS:

ATTIC VENTILATION PER 2012 I.R.C., SECTION R806

700 SQ. FT. (ENCLOSED) / 300 = 2.33 SQ. FT.

PROVIDE 1.0 SQ. FT. (144 SQ. IN.) OF VENTILATION AT OR NEAR RIDGE AND 1.33 SQ. FT. (192 SQ. IN.) OF VENTILATION AT EAVE LINE. USE VENTS APPROVED BY WASHOE COUNTY FOR HIGH FIRE RISK SUCH AS VULCAN, ECT.



1 SECTION

1/4" = 1'-0"

FOUNDATION NOTES

SILLS & PADS:
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.

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 HOLDOWNS.

CONT. FOOTING SCHEDULE:

SYMBOL	WIDTH	DEPTH (u.n.o.)	STEEL (continuous)
CF12	12"	8"	(2) #4's
CF16	16"	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.

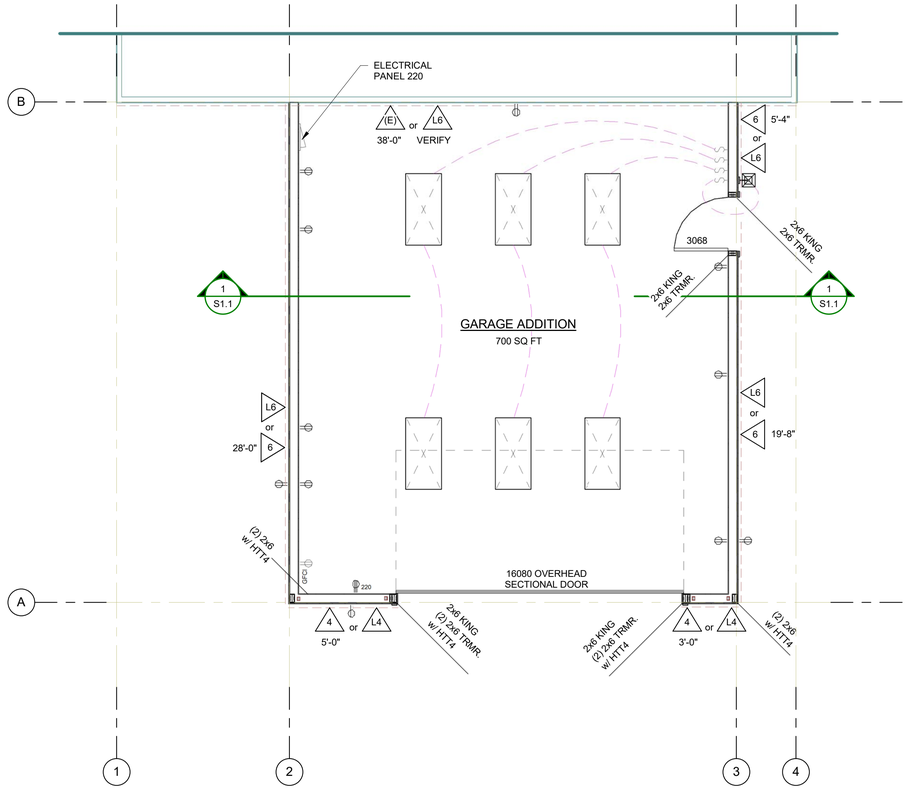
HOLDOWN SCHEDULE NOTES

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

HOLDOWN INFORMATION

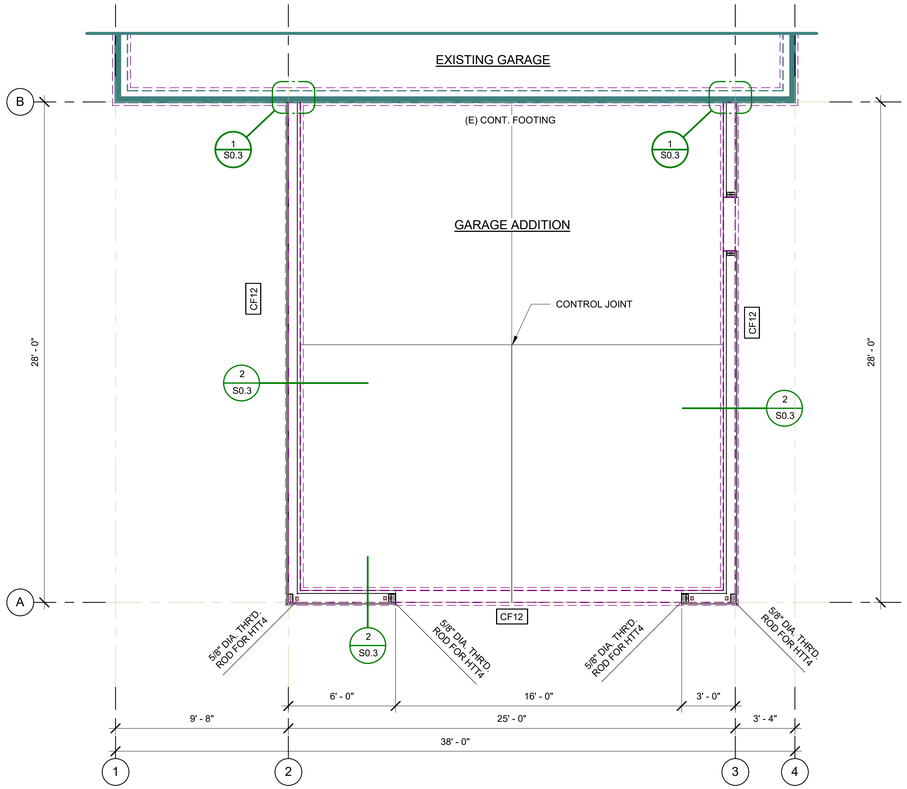
- ALL HOLDOWNS TO BE SCREWED or NAILED TO DOUBLE STUDS, U.N.O.
- PROVIDE (1) #4 HORIZONTAL AT TOP OF STEMWALL AT ALL HOLDOWN ANCHOR BOLTS
- HOLDOWN ANCHOR BOLTS ARE DESIGNED FOR UPLIFT ONLY STANDARD MUDSILL ANCHOR BOLTS ARE REQUIRED (SPACING PER PLAN).
- USE RIM & BLOCKING OR DOUBLE SOLID BLOCKING AT HOLDOWN HTT4, HTT5, HDU5, HDU8, AND HDQ8.
- 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.



STRUCTURAL / ELECTRICAL / FLOOR PLAN

1/4" = 1'-0"



FOUNDATION 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.
L6 *	3/8" T1-11 MIN.	8d AT 6"	NO	6" o.c.
L4 *	3/8" T1-11 MIN.	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.
- Use SIMPSON MSTC52 To Strap Top Plate's Across Breaks, U.N.O.
- Provide Blocking AT All Horizontal Edges of Shear Plywood.
- See standard details for nailing of plywood shear and siding.
- * With Hardipanel option, block wall at 48" o.c. vertical w/ 2x blocking.
- ** Double Shear Walls To Have Shear Ply Both Sides. (Offset Plywood Edges)

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

ROOF FRAMING NOTES:

SHEATHING:
1/2" CDX PLYWOOD (or EQUAL) EXPOSURE 1, APA SPAN RATED (32/16). STAGGER JOINTS, NAIL w/ 8d AT 6" o.c ALL EDGES, GABLE ENDS AND FRIEZE BLOCKS. NAIL w/ 8d AT 12" o.c. FIELD.
ALL PLYWOOD SHALL CONFORM TO APA PS 1. ALL SHEAR PLYWOOD SHALL BE C-D, C-C, 303 (T1-11), or APPROVED EQUAL.

TRUSSES:
PRE-MFG.'d ENGINEERED TRUSSES AT 24" o.c., PROVIDE 2x STUD PER TRUSS PLY AT ALL GIRDER BRG. POINTS AT PLATES. U.N.O.

NOTE:
SEE TRUSS CALCULATIONS FOR TRUSS DESCRIPTIONS

LVL's, PSL's & LSL's:
- ALL LVL's SHALL HAVE Fb= 2600 PSI, Fv= 285 PSI, AND E=1.9x10^6 PSI MIN. UNLESS NOTED OTHERWISE NAIL MULTI-PLY LVL's w/ (3) 16d's AT 12" o.c.
- ALL PSL's SHALL HAVE Fb= 2900 PSI, Fv= 290 PSI, AND E=2.0x10^6 PSI MIN. U.N.O.
- ALL LSL's SHALL HAVE Fb= 2250 PSI, Fv= 400 PSI, AND E=1.5x10^6 PSI MIN. UNLESS NOTED OTHERWISE NAIL MULTI-PLY LVL's w/ (3) 16d's AT 12" o.c.

HEADERS:
6x8 ROSBORO MFG. TIMBER or DF #1 TYP., U.N.O.

TRIMMERS:
DBL. TRIMMERS AT OPENINGS GREATER THAN 5'-0", AT 2x6 WALLS TYP. U.N.O.
DBL. TRIMMERS AT OPENINGS GREATER THAN 4'-0", AT 2x4 WALLS TYP. U.N.O.

POSTS:
4x D.F. #2 AND 6x D.F. #1 (LOCATE AS NOTED)

METAL CONNECTORS:
(USE SIMPSON BRAND or APPROVED EQUAL).
HANGERS SHOWN AT TRUSSES ARE TYPICAL. PROVIDE HANGERS AS SPECIFIED ON THE STAMPED TRUSS CALCULATIONS.
SIMPSON H1 CLIPS AT ALL TRUSS BEARING POINTS ON PLATES & BEAMS
SIMPSON H5 CLIPS AT ALL RAFTER BEARING POINTS ON PLATES & BEAMS

REVISIONS

#	Date	Description	By

DE engineering
Dunagan Engineering, Inc.
4790 Caughlin Parkway #766, Reno, NV 89519
T: 775.329.2733 | F: 888.873.0790 | W: DEengineers.com

STRUCTURAL ONLY

PROFESSIONAL ENGINEER - STATE OF NEVADA
ROBERT C. CORBIN
EXP. 12-31-18
CIVIL
No. 21329

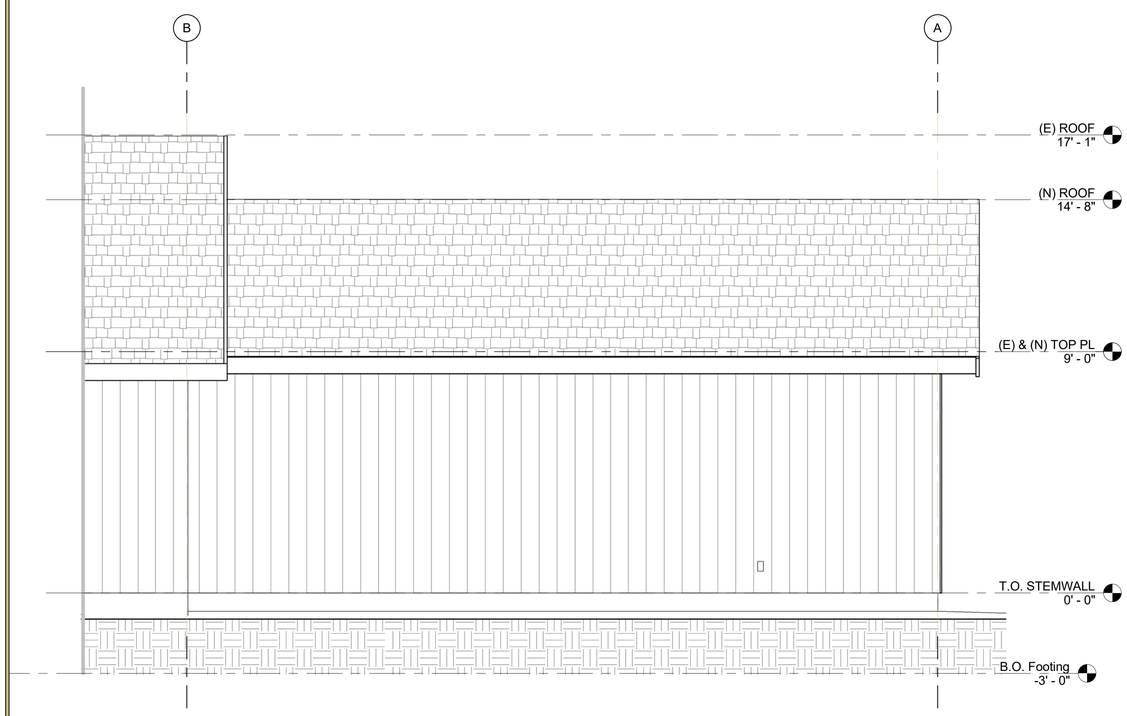
1/25/2017 10:43:31 AM

ZWEIFEL GARAGE ADDITION

2405 WALNUT ST.
RENO, NV

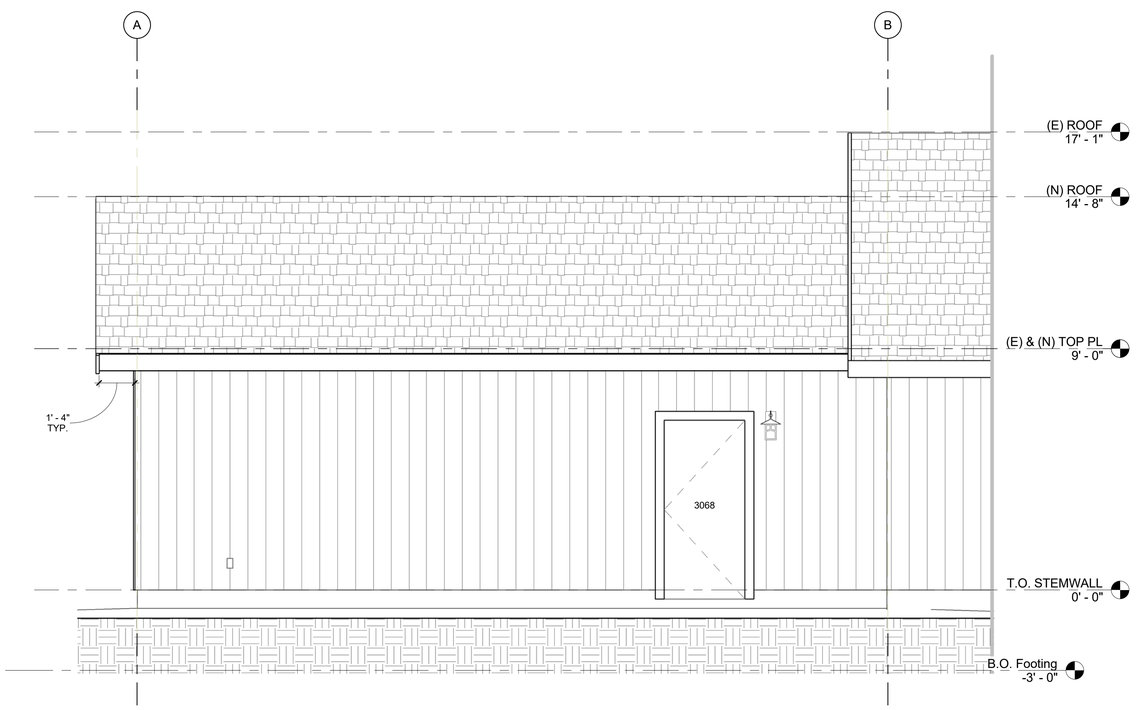
DRAWN BY	CSB
CHECKED BY	BDD
DATE	1-25-2017
SCALE	AS NOTED
JOB NO.	B16820
SHEET NO.	S1.1
OF	SHEETS

PLEASE RECYCLE



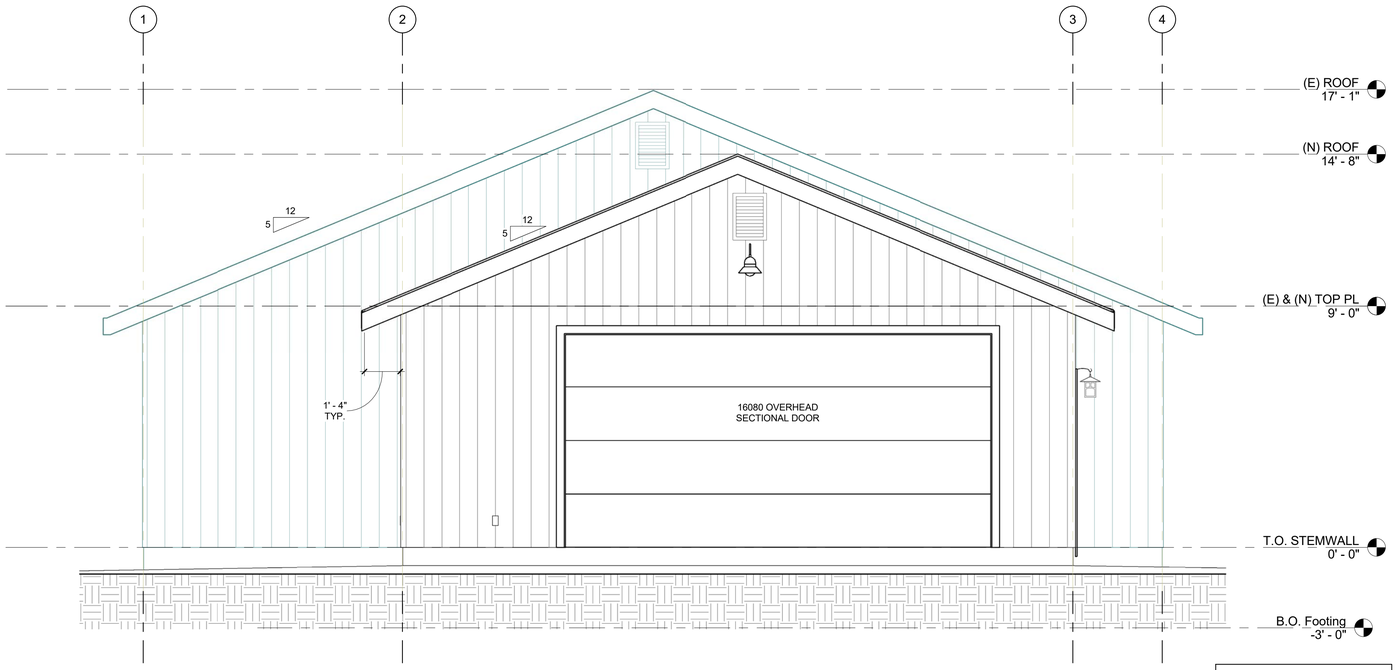
LEFT ELEVATION

3/8" = 1'-0"



RIGHT ELEVATION

3/8" = 1'-0"



FRONT ELEVATION

3/8" = 1'-0"

NOTE:
REFER TO PLAN AND
SECTION FOR ALL NOTES

REVISIONS

#	Date	Description	By

DEI engineering

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

STRUCTURAL ONLY

PROFESSIONAL ENGINEER · STATE OF NEVADA
ROBERT C. CORBIN
EXP. 12-31-18
CIVIL
No. 21329

1/25/2017 10:43:35 AM

ZWEIFEL GARAGE ADDITION

2405 WALNUT ST.
RENO, NV

DRAWN BY	CSB
CHECKED BY	BDD
DATE	1-25-2017
SCALE	AS NOTED
JOB NO.	B16820
SHEET NO.	S1.2
OF	SHEETS

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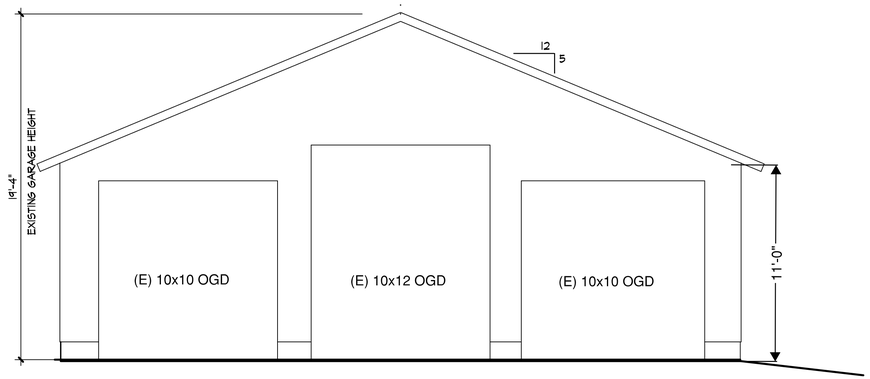
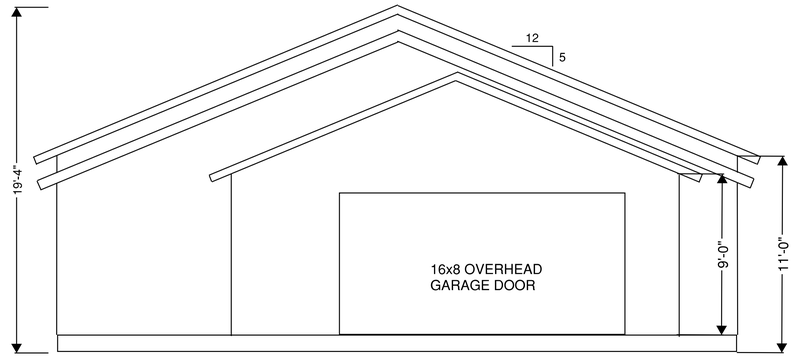
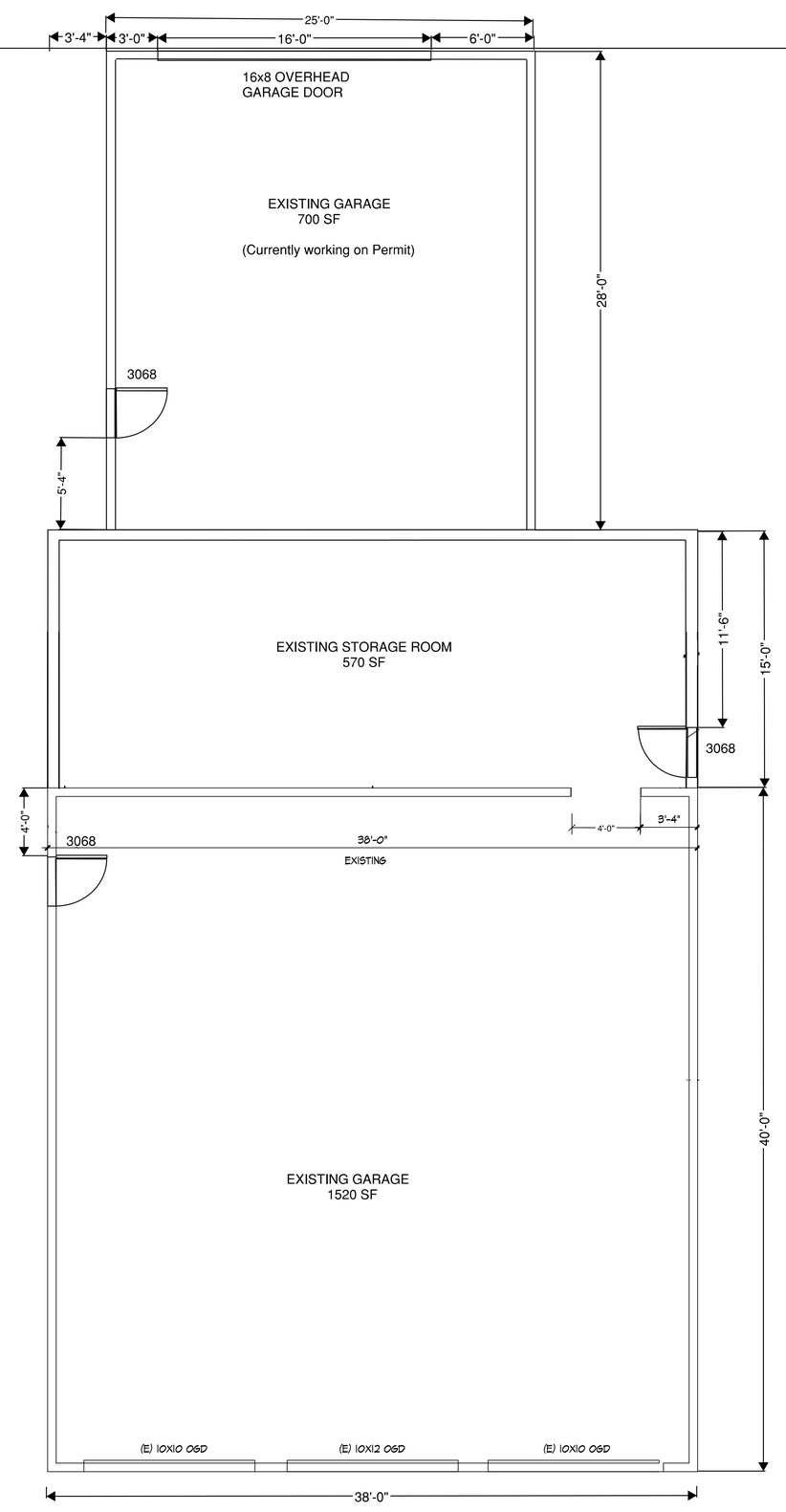


EXISTING EAST ELEVATION

2090 sf.....EXISTING TOTAL
700 sf.....ADDITION
2790sf.....TOTAL



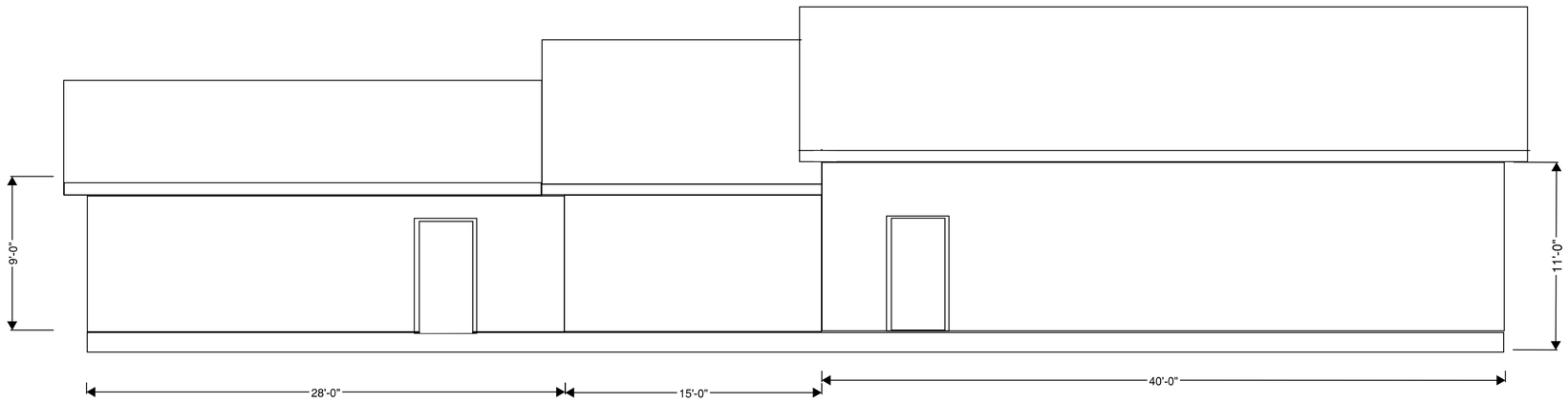
EXISTING WEST ELEVATION



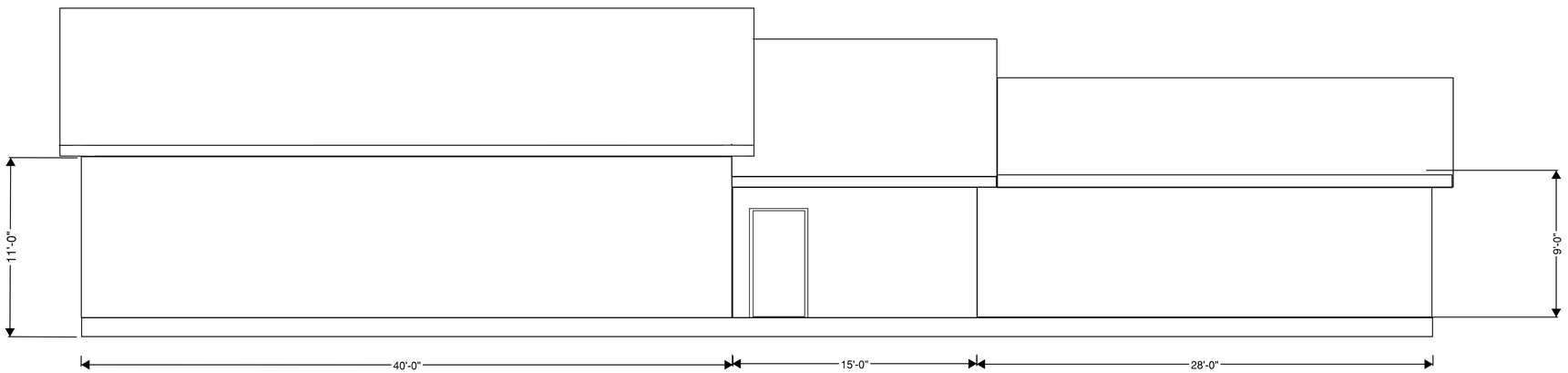
EXISTING GARAGE FLOOR PLAN
1/4" = 1'-0"

ZWEIFEL GARAGE
2405 WALNUT ST
RENO, NV 89502

1



EXISTING SOUTH ELEVATION
1/4" = 1'-0"



EXISTING NORTH ELEVATION
1/4" = 1'-0"

ZWEIFEL GARAGE
2405 WALNUT ST
RENO, NV 89502

Jerry & Adrienne Zweifel
2405 Walnut St. Reno NV

Main Residence – South Elevation

Main Residence – South-East Elevation

Jerry & Adrienne Zweifel
2405 Walnut St. Reno NV

Main Residence – East Elevation

Main Residence – North – East Elevation

Jerry & Adrienne Zweifel
2405 Walnut St. Reno NV

Main Residence – North - East

Main Residence – North Elevation

Jerry & Adrienne Zweifel
2405 Walnut St. Reno NV

Main Residence – North – West Elevation

Main Residence – South – West Elevation

2405 Walnut Street Reno NV 89502 A.P.N. 021-132-04

March 14, 2019

APN

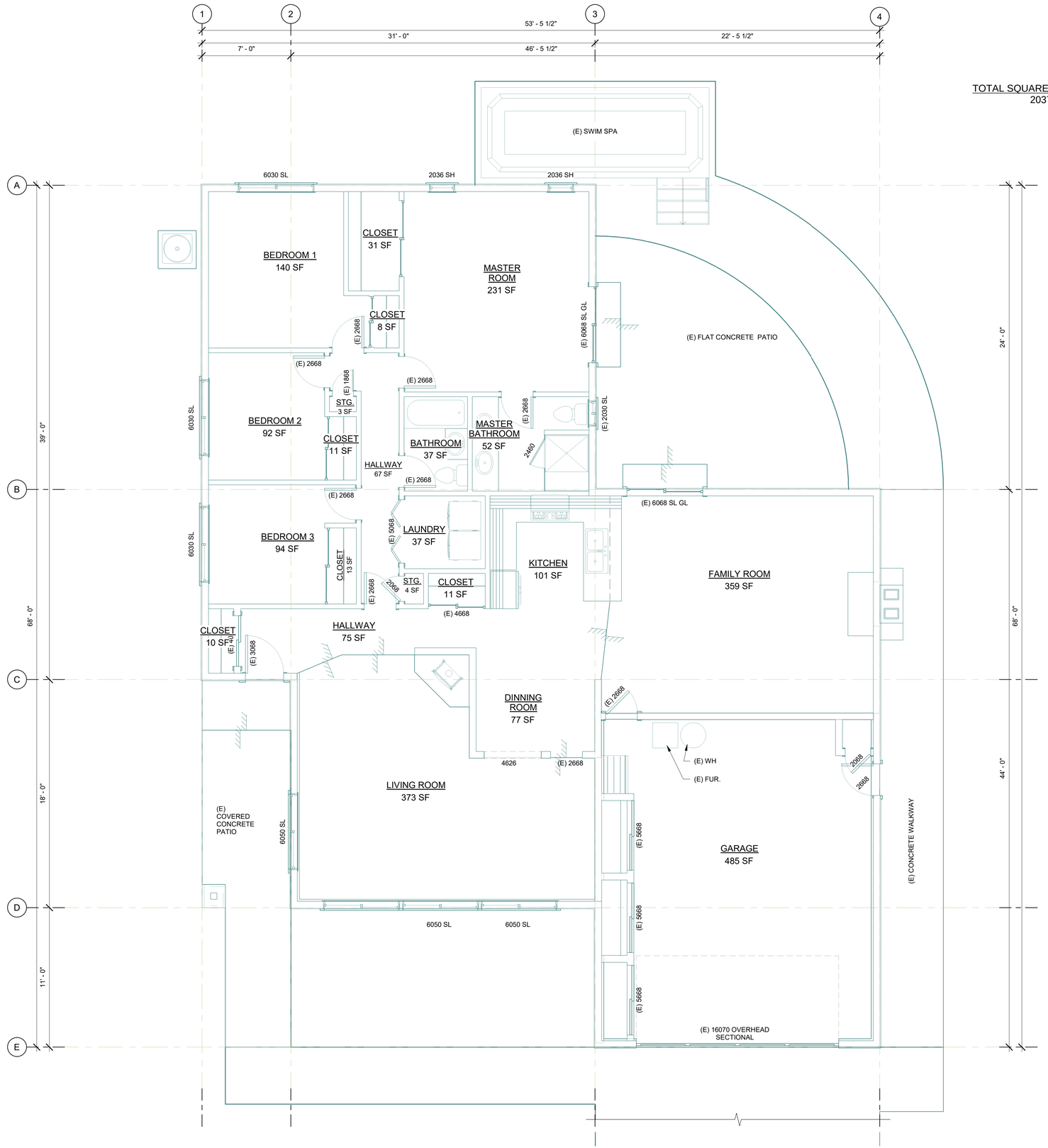
1:1,128

0 70 140 280 ft

0 20 40 80 m

Washoe County
Washoe County GIS
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

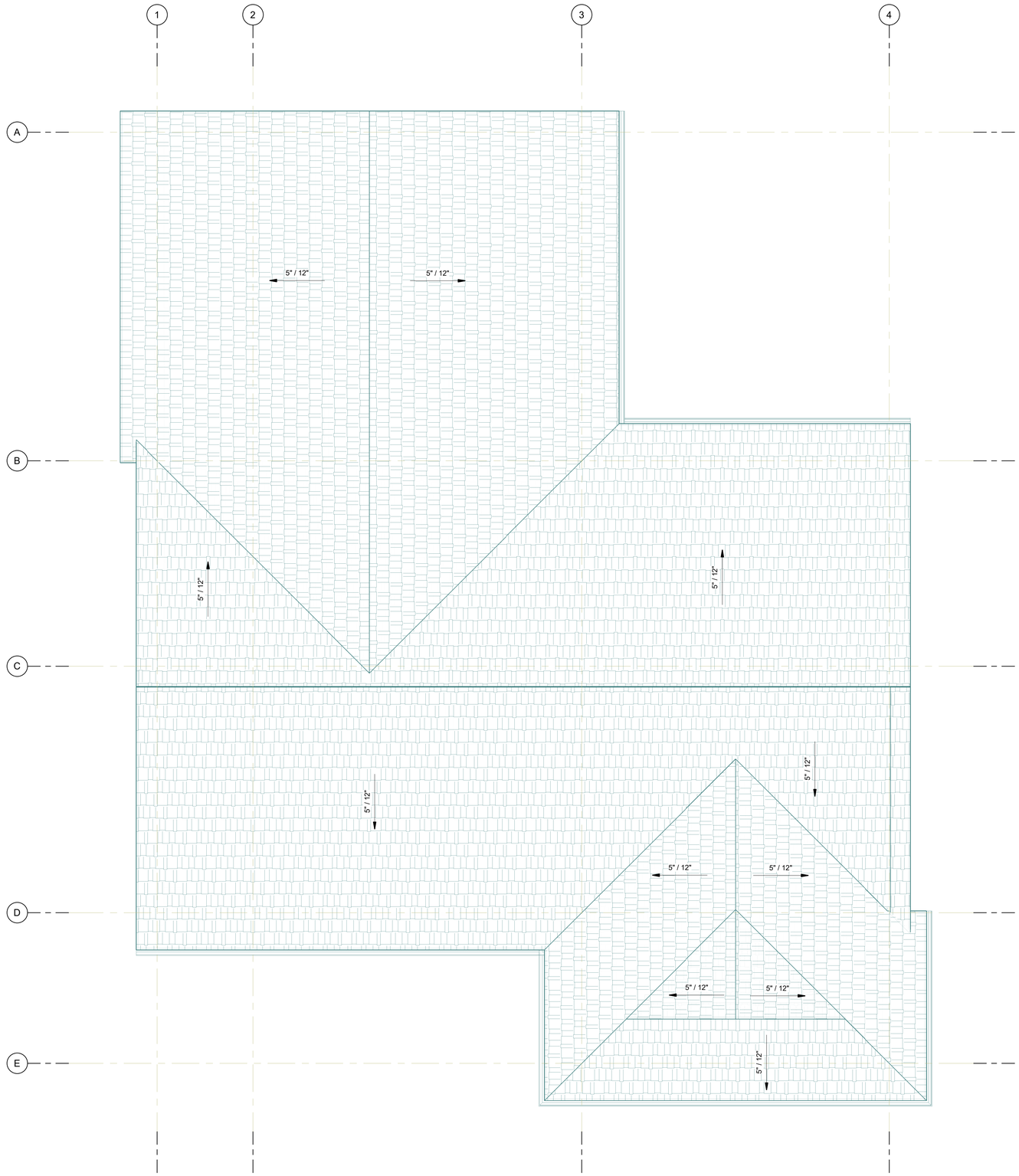
TOTAL SQUARE FOOTAGE OF HOUSE
2037 SF



EXISTING FLOOR PLAN

1/4" = 1'-0"

JERRY & ADRIENNE ZWEIFEL
2405 WALNUT ST.
RENO, NV 89502

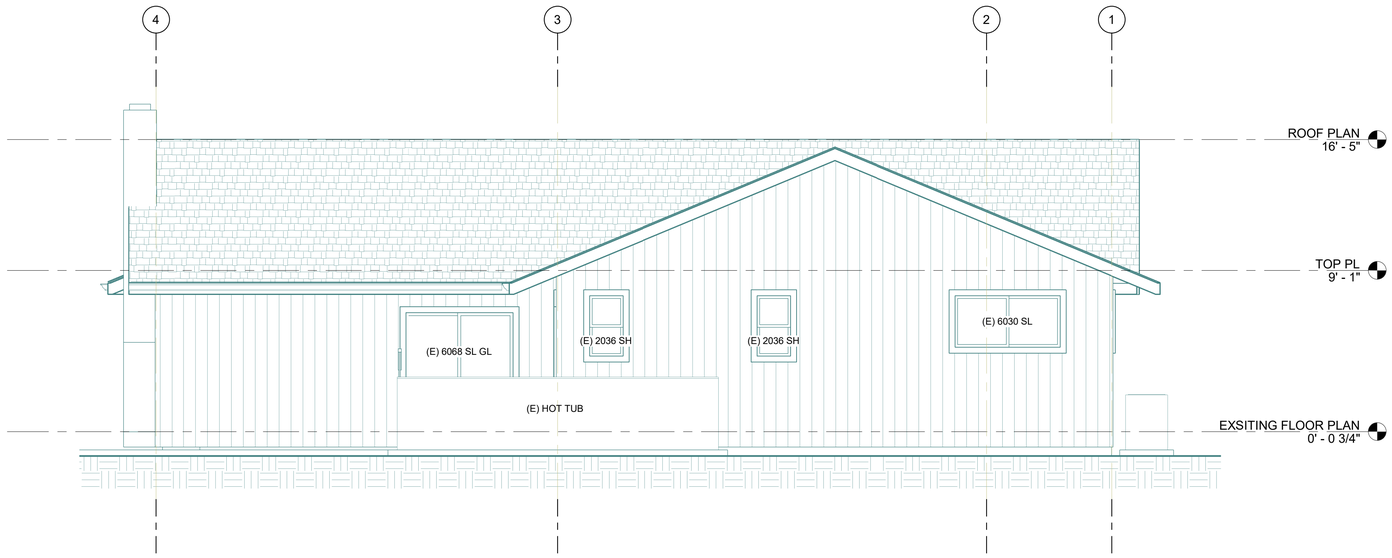


EXISTING ROOF PLAN

1/4" = 1'-0"

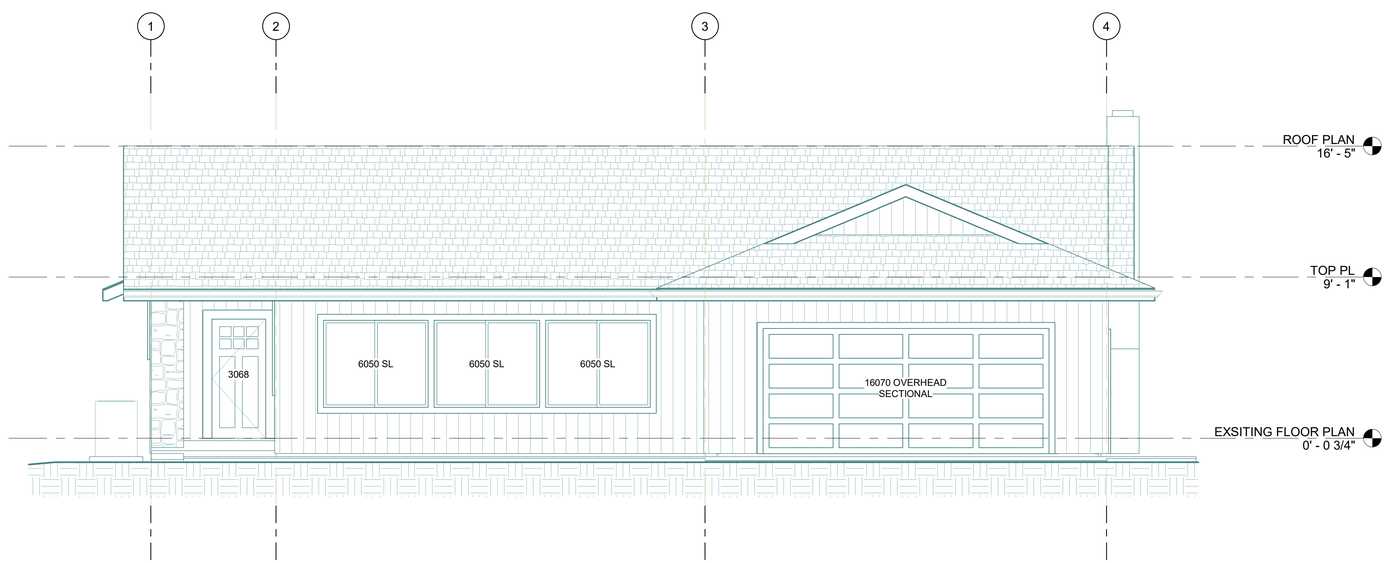
JERRY & ADRIENNE ZWEIFEL

2405 WALNUT ST.
RENO, NV 89502



EXISTING NORTH ELEVATION

1/4" = 1'-0"

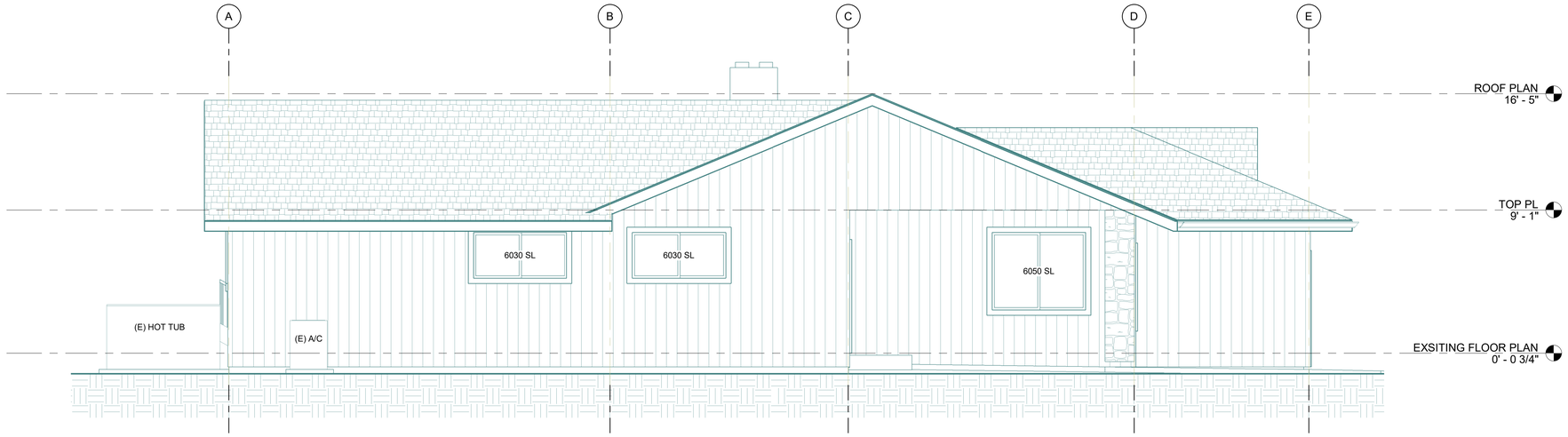


EXISTING SOUTH ELEVATION

1/4" = 1'-0"

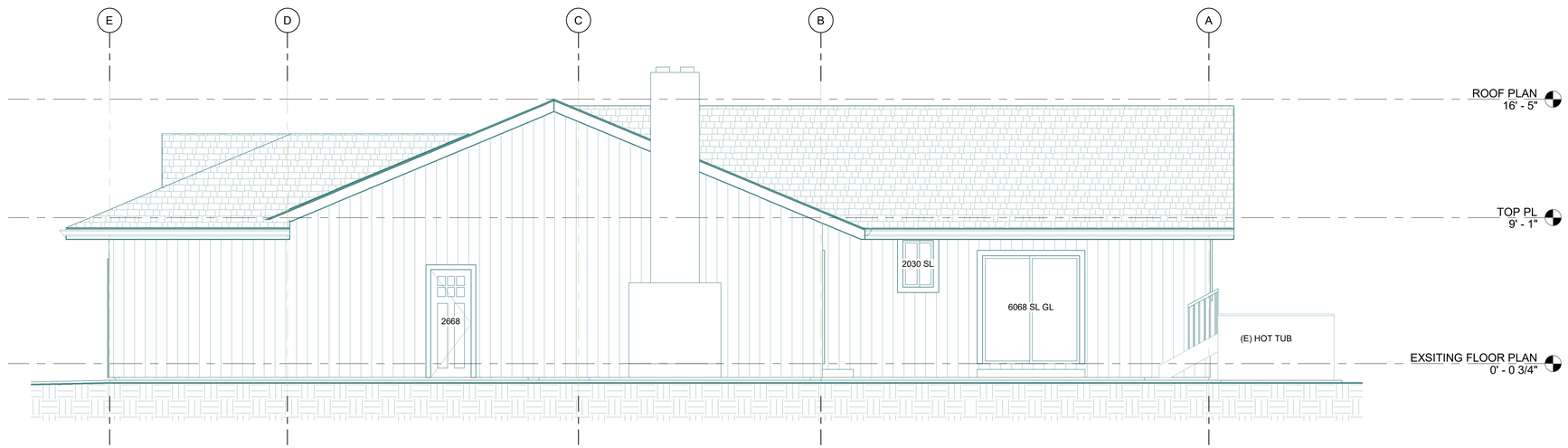
JERRY & ADRIENNE ZWEIFEL

2405 WALNUT ST.
RENO, NV 89502



EXISTING WEST ELEVATION

1/4" = 1'-0"



EXISTING EAST ELEVATION

1/4" = 1'-0"

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2405 WALNUT ST.
RENO, NV 89502