



APPEALS HEARING OFFICER MEETING AGENDA

Department of Community and Economic Development
Meeting Date: January 14, 2021

NOTICE is hereby given that the **Cottonwood Heights Appeals Hearing Officer** will electronically hold a business meeting beginning at approximately 5:00 p.m. on **Thursday, January 14, 2021**. In view of the current COVID-19 pandemic, **this meeting will occur only electronically**, without a physical location, as authorized by the Governor's Executive Order 2020-05 dated March 18, 2020 and related legislation enacted by the Utah Legislature since that date. (See the attached written determination of the Appeals Hearing Officer that conducting this meeting with a physical anchor location presents a substantial risk to the health and safety of those who may be present at the anchor location). The public may remotely hear the open portions of the meeting through live broadcast by connecting to <http://mixlr.com/chmeetings>.

To View the Business Meeting: Each citizen desiring to view the Business Meeting *must register in advance* to view the online video broadcast at the following link:

https://cwh.zoom.us/webinar/register/WN_vJcL2YqvSUCJM6cKTB_u-g.

Each registrant will receive a confirmation email containing information about joining the webinar.

5:00 p.m. BUSINESS MEETING

1.0 Welcome and Acknowledgements

2.0 Action Items

2.1 (Project AHO-20-002)

Action on a request from Dennis Wilson to expand a legal non-conforming building at 6696 S. 1620 E.

3.0 Consent Agenda

3.1 Approval of January 14, 2021 Minutes

(The Appeals Hearing Officer will approve the minutes of the January 14, 2021 meeting after the following process is met. The recorder will prepare the minutes and email them to the hearing officer. The hearing officer will have five days to review the minutes and provide any changes to the recorder. If, after five days there are no changes, the minutes will stand approved. If there are changes, the process will be followed until the changes are made and the hearing officer is in agreement, at which time the minutes shall be deemed approved.)

4.0 Adjourn

Meeting Procedures

Items will generally be heard in the following order:

1. Staff Presentation
2. Applicant Presentation
3. Appeals Hearing Officer Deliberation
4. Appeals Hearing Officer Decision

Appeals Hearing Officer applications may be tabled if: 1) Additional information is needed in order to act on the item; OR 2) The Appeals Hearing Officer feels there are unresolved issues that may need further attention before the Officer is ready to make a decision. **NO agenda item will begin after 9 pm** without approval from the Appeals Hearing Officer. The Appeals Hearing Officer may carry over agenda items, scheduled late in the evening and not heard, to the next regularly scheduled meeting.

Submission of Written Public Comment

Written comments on any agenda item should be received by the Cottonwood Heights Community and Economic Development Department no later than the day prior to the meeting at noon. Comments should be emailed to ahulka@ch.utah.gov. After the public hearing has been closed, the Appeals Hearing Officer will not accept any additional written or verbal comments on the application.

Notice of Participation by Telephonic/Digital Means

The Appeals Hearing Officer may participate in the meeting via telephonic communication. If the Appeals Hearing Officer does participate via telephonic communication, the Officer will be on speakerphone. The speakerphone will be amplified so that all other persons present in the room will be able to hear all discussions.

Notice of Compliance with the American Disabilities Act (ADA)

In compliance with the Americans with Disabilities Act, individuals needing special accommodations or assistance during this meeting shall notify the City Recorder at (801)944-7021 at least 24 hours prior to the meeting. TDD number is (801)270-2425 or call Relay Utah at #711.

Confirmation of Public Notice

On January 8th, 2021 by 5:00 p.m. a copy of the foregoing notice was posted in conspicuous view in the front foyer of the Cottonwood Heights City Offices, Cottonwood Heights, Utah. The agenda was also posted on the City's website at www.ch.utah.gov and the State Public Meeting Notice website at <http://pmn.utah.gov>.

DETERMINATION OF THE APPEALS HEARING OFFICER CONCERNING AN ANCHOR LOCATION

Pursuant to UTAH CODE ANN. 52-4-207(4), the Cottonwood Heights Appeals Hearing Officer hereby determines that conducting any meetings of the Appeals Hearing Officer within 30 days after this date at an anchor location presents a substantial risk to the health and safety of those who may be present at the anchor location. It is well recognized that a global pandemic currently exists related to the COVID-19 coronavirus, which has the potential to overwhelm Utah's healthcare system. Therefore, due to the state of emergency caused by the global pandemic, I find that conducting a meeting at an anchor location under the current state of public health emergency constitutes a substantial risk to the health and safety of those who may be present at the location.

Paxton R. Guymon, Esq.
Appeals Hearing Officer

January 8, 2021
Date

DATED THIS 8th DAY OF JANUARY, 2021
Paula Melgar, City Recorder



APPEALS HEARING OFFICER STAFF REPORT

Expansion of a Non-Conforming Structure

Meeting Date: January 14, 2021

Staff Contact: Andy Hulka, Senior Planner

Gabrielle Regenhardt, Assistant Planner

Summary

Applicant:

Dennis & Michelle Wilson

Subject Property:

6696 S. 1620 E.

Action Requested:

Expansion of a Non-Conforming Structure

Recommendation:

APPROVE

Project #:

AHO-20-002



Context

Property Owner:

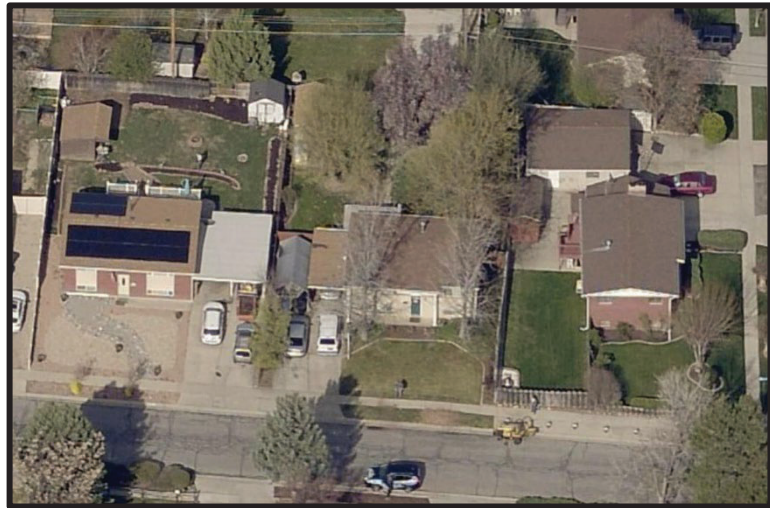
Dennis & Michelle Wilson

Acres:

0.18 acres

Parcel #

22-21-328-016



Aerial Imagery (West Facing)

Site Photos



6696 S. 1620 E., Street View

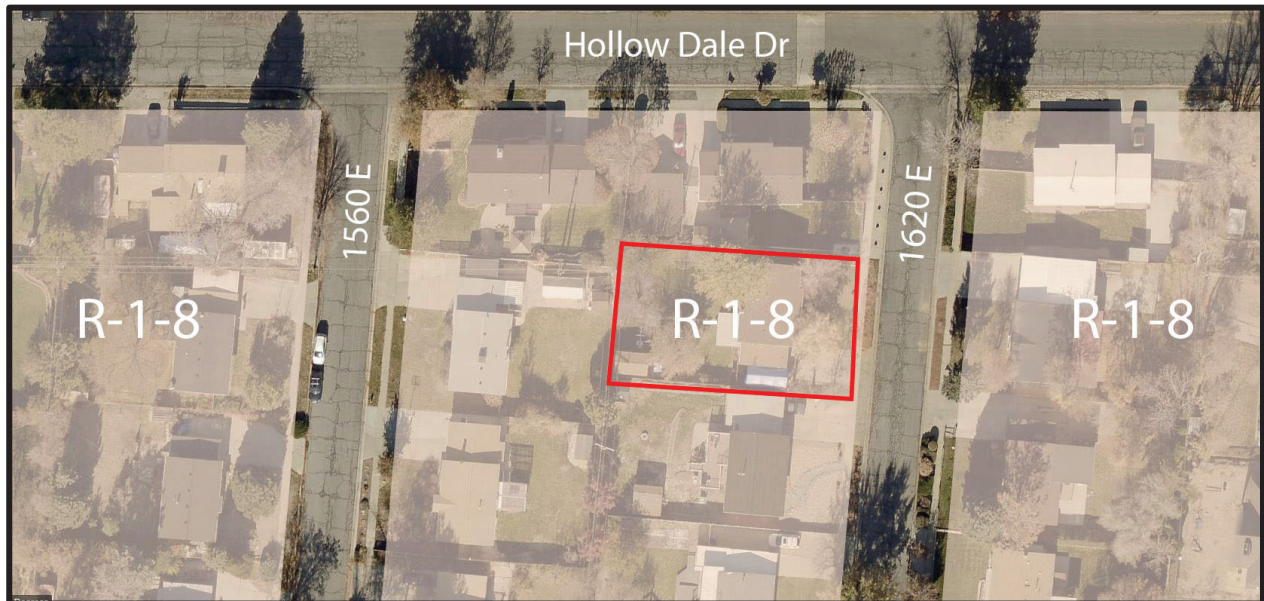
Zoning

Site:

R-1-8: Residential Single-Family zone

Surrounding Properties:

R-1-8: Residential Single-Family zone

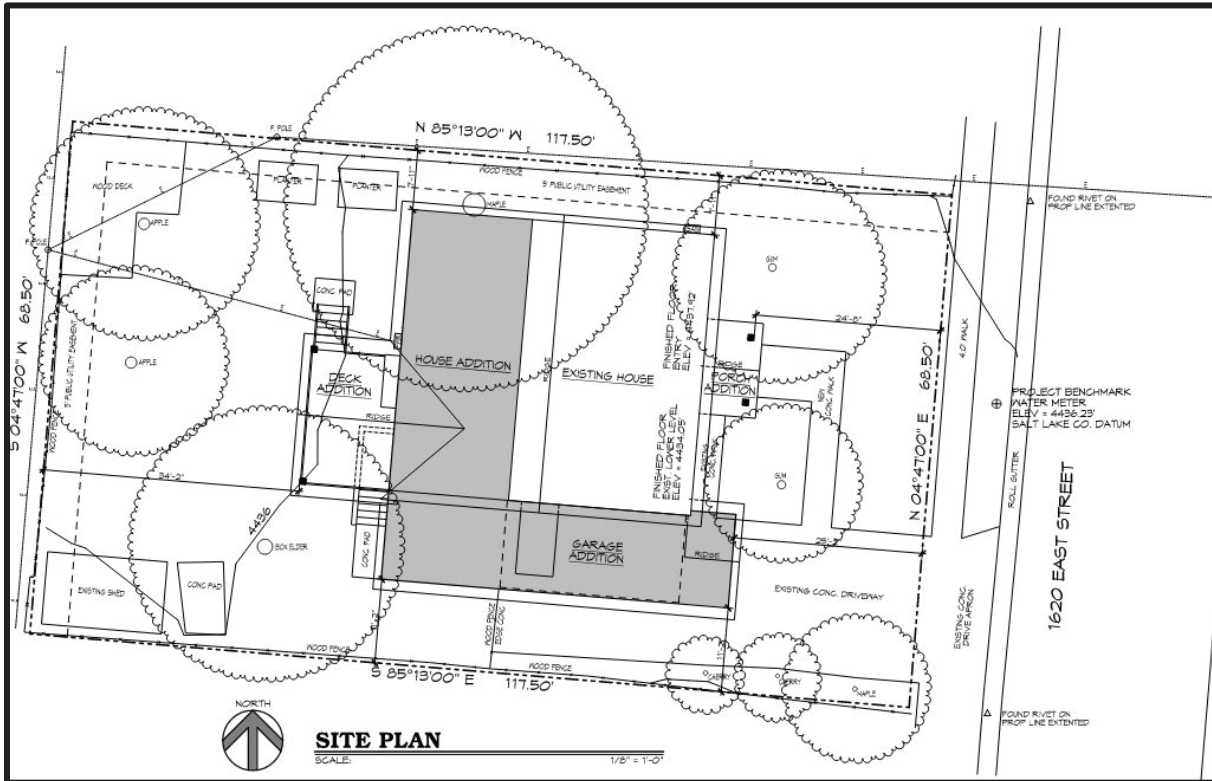


Zoning Map

Analysis

Request

The applicant's proposal is to expand a non-conforming structure by adding a new garage to the existing home at 6696 S. 1620 E. The applicant is proposing to construct the garage where an existing legal non-conforming carport currently exists and expand it towards the front and rear of the property.



Appeals Hearing Officer Authority

Chapter 19.88 of the Cottonwood Heights Zoning Ordinance allows for additions to non-conforming structures upon approval from the city's Appeals Hearing Officer:

19.88.070 Additions, enlargements, moving and reconstruction of building.

B. A building occupied by a nonconforming use or a building noncomplying as to height, area, or yard regulations may be added to or enlarged or moved to a new location on the lot or reconstructed at a new location on the lot upon a permit authorized by the Appeals Hearing Officer provided that the Appeals Hearing Officer, after the hearing, shall find:

1. *The addition to, enlargement of, moving of, or reconstruction of the noncomplying building at a new location on the lot will be in harmony with one or more of the purposes stated in section 19.02.020, and shall be in keeping with the intent of this title;*
2. *That the proposed change does not impose any unreasonable burden upon the lands located in the vicinity of the nonconforming use or noncomplying building.*

19.02.020 Purpose of provisions.

This title is designed and enacted for the purpose of promoting the health, safety, convenience, order, prosperity and welfare of the present and future inhabitants of the city, including, among other things, the lessening of congestion in the streets or roads, securing safety from fire and other dangers, providing adequate light and air, classification of land uses and distribution of land development and utilization, protection of the tax base, and securing economy in governmental expenditures, fostering the city's industries, and the protection of both urban and non-urban development.

Context

The subject property is in the R-1-8 (Single-Family Residential) zone. Required setbacks in the R-1-8 zone are as follows:

Setbacks	Existing	Proposed	Required
Front (1620 E.)	25'+	25'	25'
Side (North)	7'11"	No Change	8'
Side (South)	11'2"	No Change	12'
Rear (West)	61'	34'2"	20'

The existing home was legally constructed in 1964. The home has an existing covered carport with an approximately 30-foot setback in the front and a 11-foot-2-inch setback along the side. As such, the combined setback between the two side yards is 19 feet, which does not meet the current zoning requirement of 20 feet. The existing home is considered a non-conforming structure which "legally existed before its current land use designation and, because of one or more subsequent land use ordinance changes, does not conform to the setback, height restrictions, or other regulations, excluding those regulations which govern the use of the land" (Section 19.04.1800 – Definitions, "Noncomplying Structure").

The applicant's proposal does not increase the degree of non-conformity of any existing non-conforming setbacks. It does seek to enclose the existing carport into a garage and expand the structure towards the front and rear lot lines. This proposed expansion is compliant with the required 25' front and 20' rear setback in this zone.

Analysis: Staff finds that the proposed addition introduces no significant impact, given that the existing building is already nonconforming. The conversion of the carport into a garage promotes reinvestment in the property. The proposed addition will not increase the degree of nonconformity as it affects the rear and front setback only, which remains compliant with the requirements of the R-1-8 zone. A building permit will be required prior to construction to ensure safe building standards are followed, and approval of the expansion promotes reinvestment in an older home in the city.

Recommendation & Findings

Staff recommends APPROVAL of the request for an expansion of a non-conforming structure with the following findings:

1. The proposal will not negatively affect the health, safety, convenience, order, prosperity and welfare of the present and future inhabitants of the city because the use is the same as currently exists;
2. The proposal will not create any additional congestion in the streets or roads;
3. The proposal will not create a fire safety issue;
4. The proposal will not affect air flow or block natural light from adjoining properties by conforming with all height regulations;
5. The proposal will have no apparent negative effect on the city's tax base;
6. The proposal will not place any type of unreasonable burden upon neighboring properties;
7. The proposal is in keeping with the intent of the Cottonwood Heights Zoning Ordinance.

Attachments

1. Applicant Narrative
2. Plans

Dear Cottonwood Heights Development Committee,

We are simply requesting the replacement of a carport with a garage. The garage needs to be approximately 12-feet in width to meet the ADA standard for automobile access. This is roughly the width of the carport.

Thank you for your time and consideration of this proposal.

Best regards,

Dennis & Michelle Wilson

Property owners

WILSON REMODEL

6696 S. 1620 E.

GOVERNING CODE:

DESIGNER :

STRUCTURAL :

CONTRACTOR :

Highland Group Building Design Inc. (801) 277-4433

Focus Engineering (801) 352-0075

Rustic Prime Construction (801) 787-6434

COTTONWOOD HEIGHTS, UTAH

2018 IRC

TABLE M1506.2 DUCT LENGTH

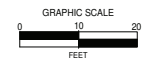
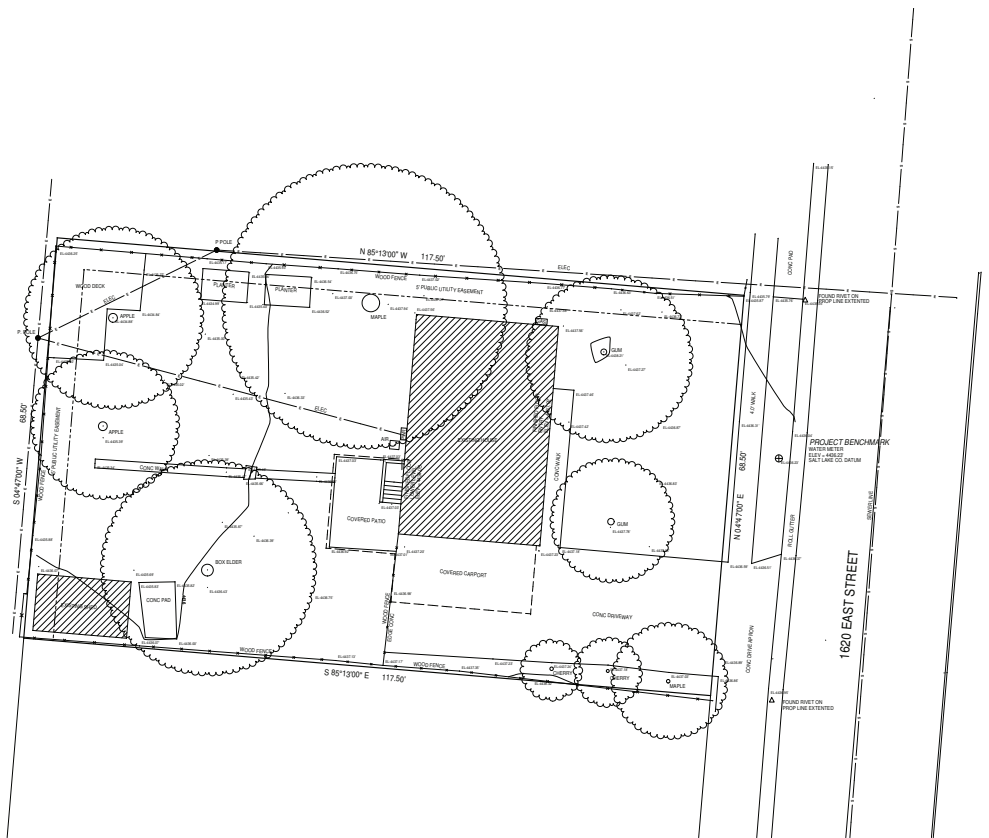
DUCT TYPE	FLEX DUCT										SMOOTH-WALL DUCT									
	50	80	100	125	150	200	250	300	350	400	50	80	100	125	150	200	250	300	350	400
Fan airflow rating (CFM @ 0.25 inch w.g.)																				
Diameter ^a (inches)																				
3	X	X	X	X	X	X	X	X	X	5	X	X	X	X	X	X	X	X	X	X
4	56	4	X	X	X	X	X	X	X	114	51	10	X	X	X	X	X	X	X	X
5	NL	81	42	18	2	X	X	X	NL	152	41	51	20	4	X	X	X	X	X	X
6	NL	NL	150	41	55	15	1	X	NL	NL	NL	160	112	55	25	4				
7	NL	NL	NL	NL	161	70	40	19	NL	NL	NL	NL	NL	NL	145	60	54			
8 and above	NL	NL	NL	NL	NL	184	111	64	NL	NL	NL	NL	NL	NL	NL	145	133			

For SI: 1 foot = 304.8 mm.
a. Fan airflow rating shall be in accordance with ANSI/AMCA 210-ANSI/AHRI 85.
b. For noncircular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.
c. This table assumes that elbows are not used. Fifteen feet of allowable duct length shall be deducted for each elbow installed in the duct run.
d. NL = no limit on duct length of this size.
e. XL = not allowed. Any length of duct of this size with assumed turns and fittings will exceed the rated pressure drop.

THE IDEAS, CONCEPTS, DETAILS,
FLOOR PLANS, AND ELEVATIONS
ARE COPYRIGHTED AND ARE THE
EXCLUSIVE PROPERTY OF
HIGHLAND GROUP
WE HAVE ENFORCED AND WILL CONTINUE
TO ENFORCE OUR FEDERAL COPYRIGHTS
TO PROTECT THE INVESTMENT OF OUR
DESIGNS.

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
	COVER SHEET
	SURVEY
1	SITE PLAN
2	EXISTING LOWER LEVEL FLOOR PLAN
3	EXISTING MAIN LEVEL FLOOR PLAN
4	LOWER LEVEL FLOOR PLAN
5	MAIN LEVEL FLOOR PLAN
6	FRONT AND RIGHT SIDE ELEVATIONS
7	REAR AND LEFT SIDE ELEVATIONS
8	TYPICAL WALL SECTION, DOOR & WINDOW SCHEDULES
9	BUILDING SECTIONS A AND B
10	ROOF PLAN
11	LOWER LEVEL ELECTRICAL & UTILITY PLAN
12	MAIN LEVEL ELECTRICAL & UTILITY PLAN
13	FOOTING & FOUNDATION PLAN
14	MAIN LEVEL FLOOR FRAMING PLAN
15	ROOF FRAMING PLAN
16	LOWER LEVEL LATERAL REINFORCEMENT PLAN
17	MAIN LEVEL LATERAL REINFORCEMENT PLAN
SD.0	STRUCTURAL NOTES
SD.1	STRUCTURAL DETAILS
SD.2	STRUCTURAL DETAILS
SD.3	STRUCTURAL DETAILS



SURVEYORS CERTIFICATE

I, BYRON T. CURTIS, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR, AND THAT I HOLD LICENSE NO. 16348, AS PRESCRIBED BY UTAH STATE LAW. I FURTHER CERTIFY, THAT BY AUTHORITY OF THE OWNER, OR HIS REPRESENTATIVE, THAT I HAVE MADE A SURVEY ON THE GROUND OF THE PROPERTY SHOWN ON THIS PLAT FOR THE PURPOSE OF DETERMINATION OF BUILDING LOCATION AND HEIGHTS AND OTHER IMPROVEMENTS THAT MAY BE CONSTRUCTED ON THE PROPERTY.

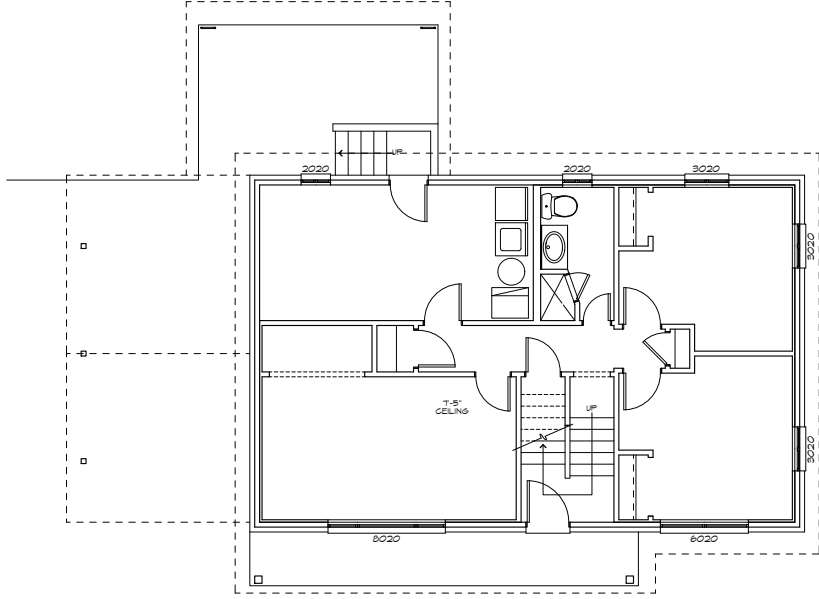
JUNE 8, 2020
DATE



LEGEND

- SECTION, QUARTER SECTION, STREET OR OTHER SURVEY MONUMENT
- PROPERTY CORNER, NOT SET
- BOUNDARY OR PROPERTY LINE, WITH CORNER, FOUND OR SET
- RIGHT OF WAY LINE
- CENTERLINE
- FENCE LINE
- UTILITY LINE, TYPICAL
- SEWER, STORM DRAIN OR OTHER UTILITY MANHOLE
- SPOT ELEVATION
- MAJOR ELEVATION CONTOUR
- MINOR ELEVATION CONTOUR
- EDGE OF PAVEMENT, ASPHALT OR GRAVEL
- TREE OR BRUSH LINE

TITLE		CURTIS & ASSOCIATES LAND SURVEYORS LAND PLANNING 700 S. EMERSON AVE SALT LAKE CITY, UT 84105 801-898-7667	
TOPOGRAPHIC AND EXISTING CONDITIONS SURVEY			
PREPARED FOR:	DENNIS AND MICHELLE WILSON		
LOCATION AND ADDRESS			
6696 EAST 1820 SOUTH, HOLLADAY, UT LOT 37, GREENFIELD VILLAGE PLAT M			
DATE:	JUNE 9, 2014	SCALE:	1" = 20'
		FILENAME:	WILSON, DENNIS RD.PCS

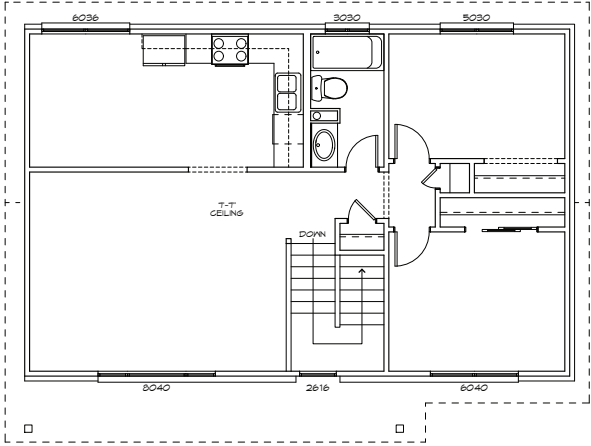


EXISTING LOWER LEVEL FLOOR PLAN

SCALE:

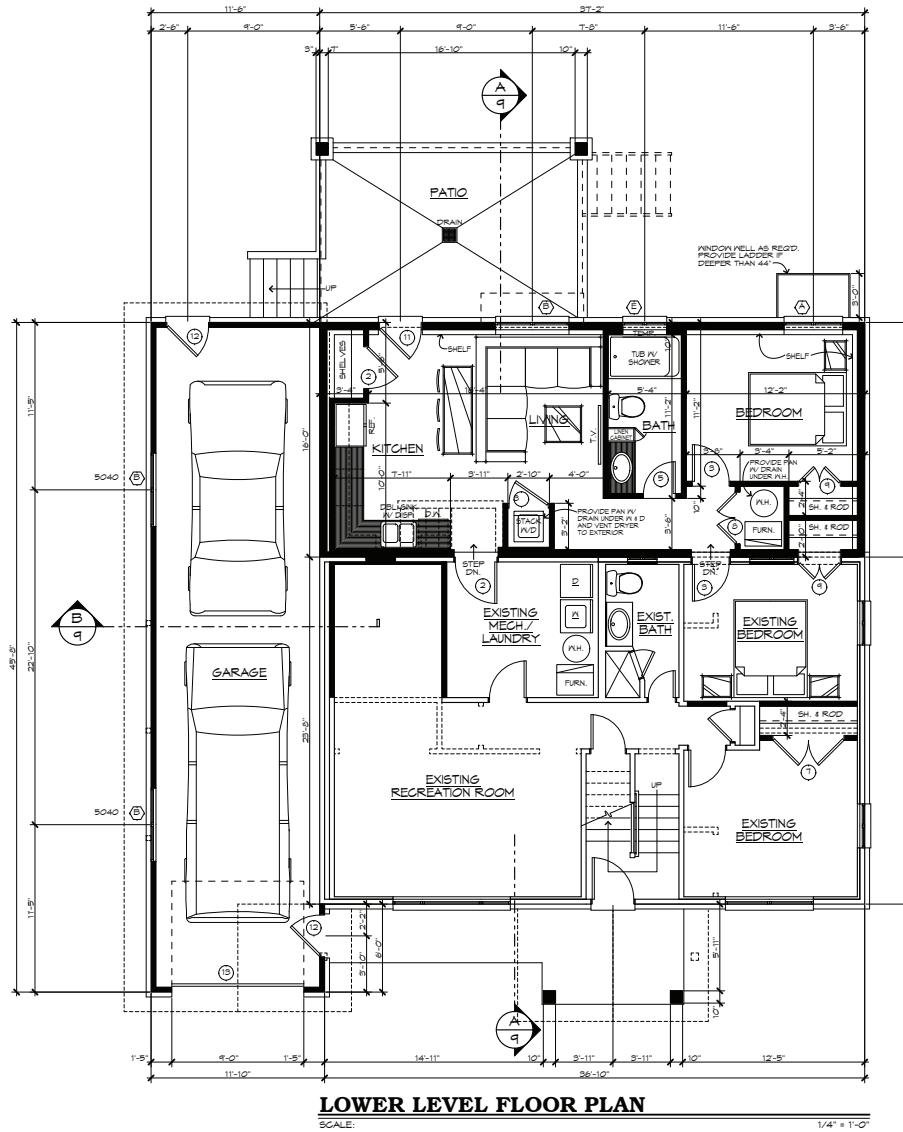
1/4" = 1'-0"

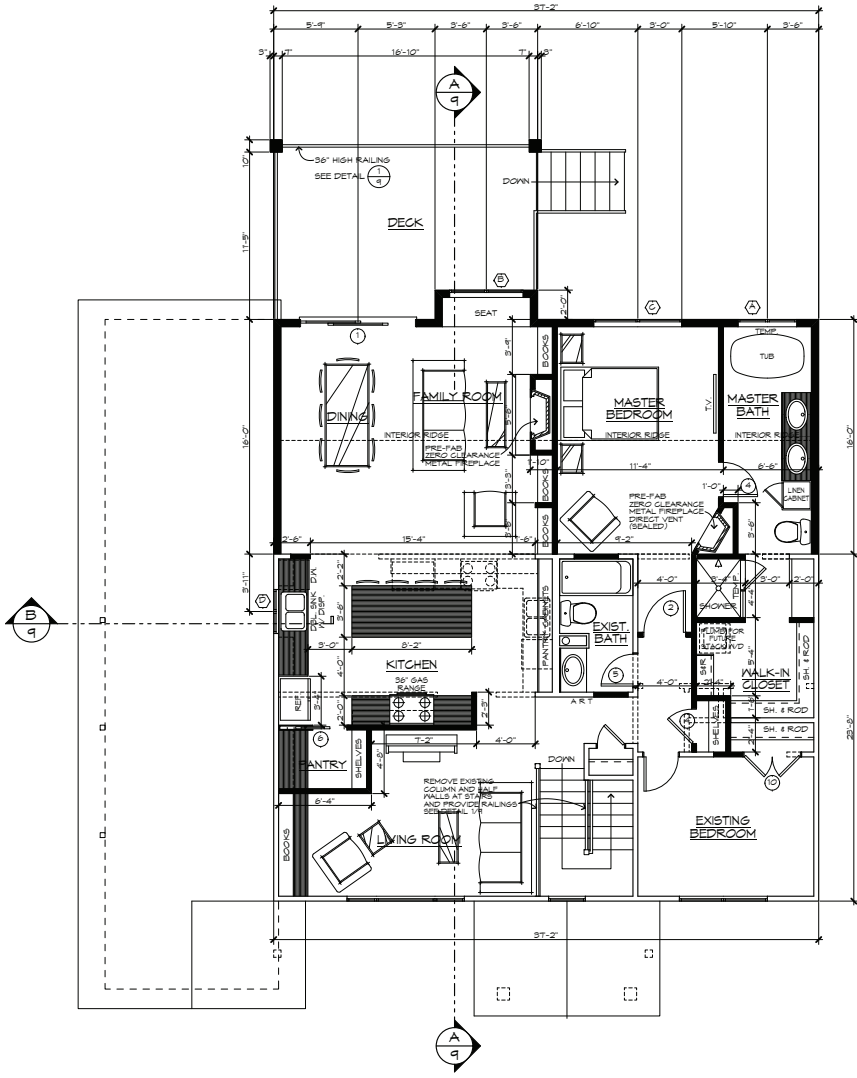
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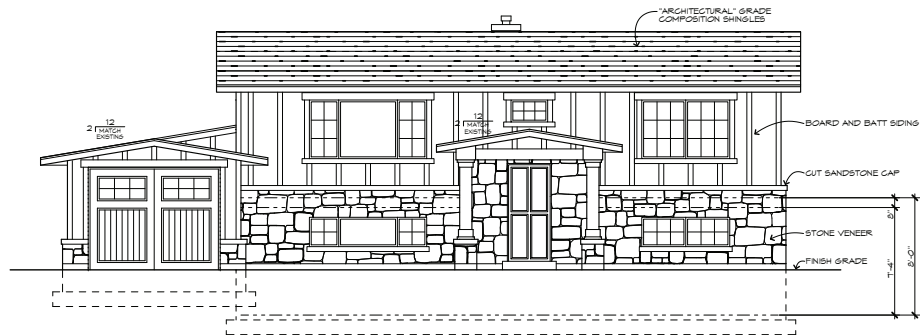
EXISTING MAIN LEVEL FLOOR PLAN

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



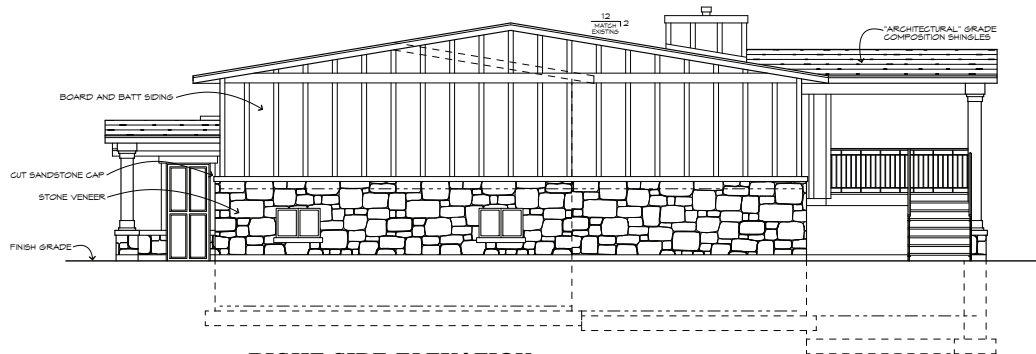


MAIN LEVEL FLOOR PLAN
SCALE: 1/4" = 1'-0"



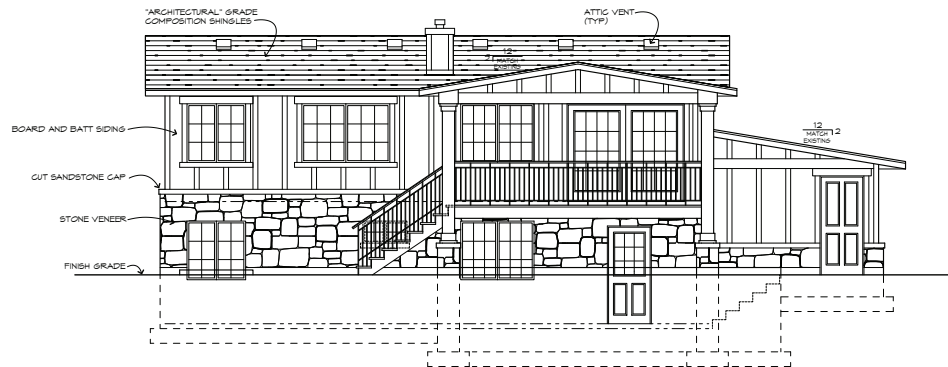
FRONT ELEVATION

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



RIGHT SIDE ELEVATION

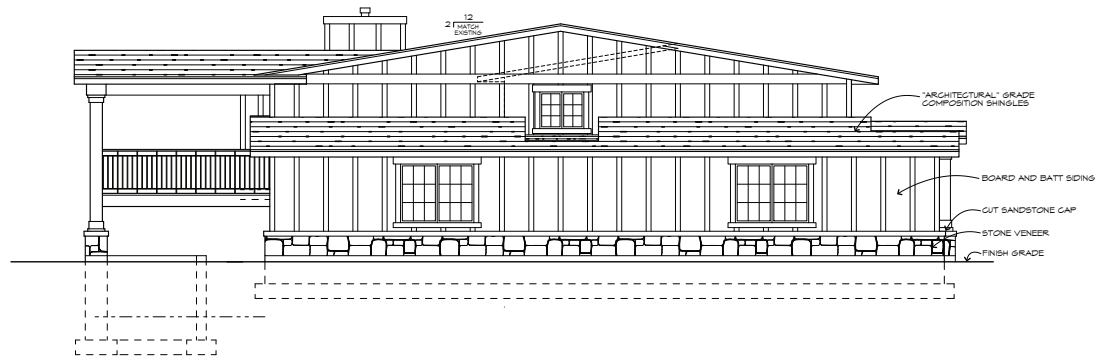
SCALE: 1/4" = 1'-0"



REAR ELEVATION

SCALE:

1/4" = 1'-0"

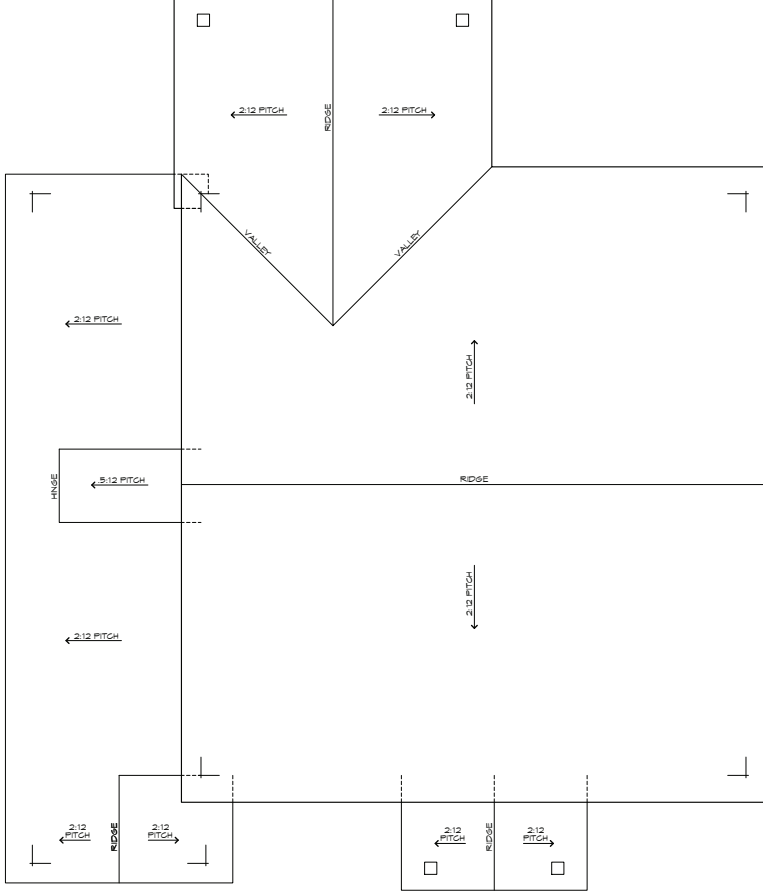


LEFT SIDE ELEVATION

SCALE:

1/4" = 1'-0"





ROOF PLAN

SCALE:

1/4" = 1'-0"

ELECTRICAL NOTES

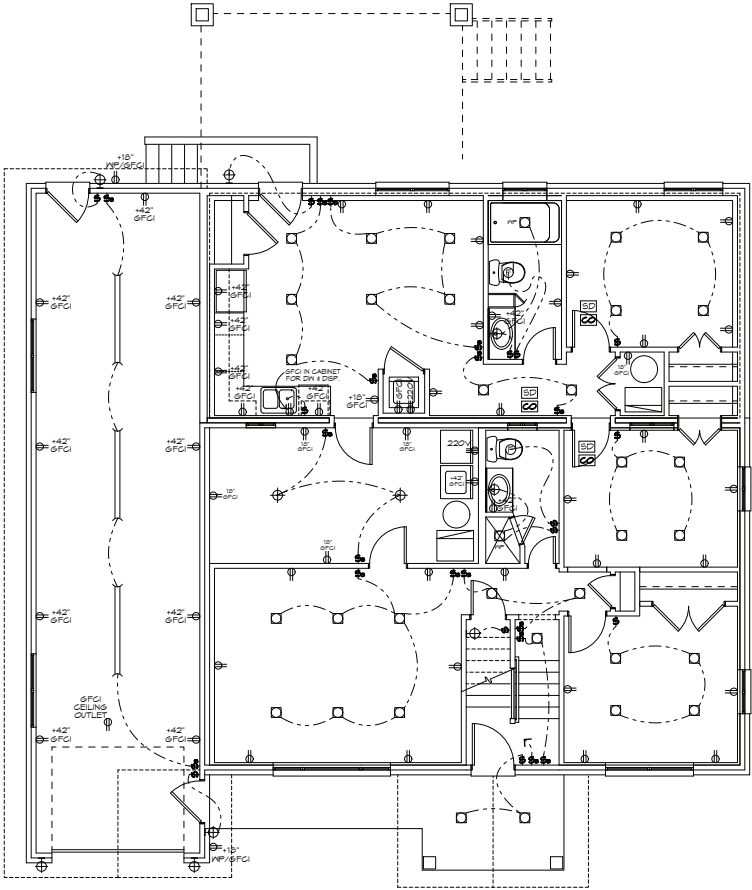
1. LIGHTS IN CLOSETS TO MEET IRC E4003.12
2. ELECTRICAL PANELS TO COMPLY WITH IRC E3405.2 30" CLEARANCE MIN. WIDTH AND 6'-0" FLOOR TO HEAD ROOM
3. KEEP GAS AND ELECTRICAL METERS IN AN AREA THAT IS PROTECTED FROM SNOW AND ICE.
4. ALL SMOKE DETECTORS SHALL BE HARD WIRED AND HAVE BATTERY BACKUP. #1 BE INTERCONNECTED IN ACCORDANCE W/ IRC R314
5. PROVIDE ONE MULTI-FUNCTION SWITCH TO COVER FULL FUNCTIONS OF FAN.
6. PROVIDE OUTLET BOX THAT IS APPROVED FOR FAN SUPPORT ON ALL CEILING FANS
7. ALL OUTLETS IN BATHROOMS TO BE +42" AND G.F.I. PROTECTED UNLESS NOTED OTHERWISE.
8. ALL EXTERIOR OUTLETS TO BE +18" G.F.I. AND WATERPROOFED UNLESS NOTED OTHERWISE.
9. PROVIDE G.F.I. PROTECTED OUTLET FOR JETTED TUB MOTOR
10. ALL OUTLETS IN KITCHEN TO BE +42" G.F.I. UNLESS NOTED OTHERWISE.
11. ALL OUTLETS IN GARAGES TO BE +18" AND G.F.I. PROTECTED UNLESS NOTED OTHERWISE.
12. PROVIDE DOOR CHIME AT EACH LEVEL. #1 WIRE TO PUSH BUTTON AT ENTRY.
13. ALL OUTLETS IN UNFINISHED BASEMENTS TO BE +18" AND G.F.I. PROTECTED UNLESS NOTED OTHERWISE.
14. AUTOMATIC GARAGE DOOR OPENERS SHALL BE TESTED IN ACCORDANCE WITH UL603. R301.4
15. CARBON MONOXIDE DETECTORS SHALL BE INSTALLED ON EACH HABITABLE LEVEL OF A DWELLING UNIT EQUIPPED WITH A FUEL BURNING APPLIANCE. IN ACCORDANCE TO R315
16. TAMPER RESISTANT TYPE RECEPTACLE OUTLETS REQUIRED THROUGHOUT BUILDING

MECHANICAL NOTES

1. PROVIDE COMBUSTION AIR FOR ALL GAS APPLIANCES AT A RATE OF 1/2 SQ. INCH PER 1000 BTU'S. COMBUSTION AIR SHALL BE OBTAINED FROM OUTDOORS OR FROM SPACES FREELY COMMUNICATED WITH THE OUTDOORS. COMBUSTION AIR DUCTS SHALL HAVE AN EXTERIOR COVER OF SCREEN. TWO SEPARATE COMBUSTION AIR DUCTS SHALL BE PROVIDED. ONE OF THE REQUIRED DUCTS IS TO TERMINATE IN UPPER 1/2 OF THE ROOF 1/4 FOR 1000 BTU. THE OTHER IS TO TERMINATE WITHIN 12" OF FLOOR 1/4 1000 BTU. -IRC M1003.1-M1003.6
2. DRYER DUCTS SHALL CONFORM TO THE REQUIREMENTS OF SECTIONS M1502.4.1 THROUGH M1502.4.7.
3. INSULATE HEATING TRUNK AND BRANCH SUPPLY DUCTS IN UNFINISHED AREAS, CRAWL SPACES, ATTICS GARAGES, ETC.
4. PROVIDE 30" CLEARANCE FROM RAMPING UP TO COMBUSTIBLE MATERIALS. FOR EXCEPTIONS, SEE INTERNATIONAL MECHANICAL CODE SIDE CLEARANCE SHALL BE AS SPECIFIED BY PERMANENT MARKINGS ON THE UNIT. -IRC M101.1
5. PROVIDE EXPANSION TANK ON CULINARY WATER SYSTEM. IRC P2003.4
6. PROVIDE SEISMIC STRAPS #1 PRESSURE RELIEF VALVE ON ALL WATER HEATERS.
7. PROVIDE MIN. 30" WORK SPACE IN FRONT OF FURNACE AND MIN. 5' ALONG SIDE AND BACK.
8. GAS LOSS SHALL BE PROVIDED WITH A SHUT-OFF VALVE LOCATED OUTSIDE OF THE FIREBOX AND WITHIN 8" OF THE APPLIANCE IRC 24420.8. IF GAS LOSS LIGHTERS ARE USED, FLUE MUST BE PERMANENTLY BLOCKED OPEN. ALL GAS LOSS LIGHTERS AND/OR GAS FIREPLACES REQUIRE OUTSIDE COMBUSTION AIR. ALL FLUES MUST EQUAL 1 SQ. INCH OF PERMANENTLY BLOCKED OPEN AREA PER 1000 BTU'S. ALL ROOMS WITH GAS LOSS, LOSS LIGHTERS, OR FIREPLACES ARE INSTALLED MUST EQUAL 50 CUBIC FEET OF VOLUME PER 1000 BTU FOR EVERY PIECE OF EQUIPMENT IN ADDITION TO THE REQUIRED OUTSIDE AIR. IRC M1003.1
9. PROVIDE VENTILATION SYSTEM IN BATHROOMS/WATER CLOSET COMPARTMENTS. CAPABLE OF PRODUCING EXHAUST RATES IN ACCORDANCE WITH SECTION M1501. EXHAUST AIR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS
10. PROVIDE A COMFORT HEATING SYSTEM CAPABLE OF MAINTAINING 65 DEGREES AT A POINT 36" ABOVE THE FLOOR IN ALL ROOMS.
11. FUEL-BURNING APPLIANCES, INCLUDING FIREPLACES, ARE NOT PERMITTED TO BE INSTALLED IN SLEEPING ROOMS, BATHROOMS, OR TOILET ROOMS UNLESS THE APPLIANCES ARE DIRECT VENT APPLIANCES.
12. FUEL-FIRED WATER HEATERS SHALL NOT BE INSTALLED IN A ROOM USED AS A STORAGE CLOSET. NON-DIRECT-VENT WATER HEATERS LOCATED IN A BEDROOM OR BATHROOM SHALL BE INSTALLED IN A SEALED ENCLOSURE SO THAT COMBUSTION AIR WILL NOT BE TAKEN FROM THE LIVING SPACE. IRC R2009.3
13. APPLIANCES HAVING AN IGNITION SOURCE SHALL BE ELEVATED SUCH THAT THE SOURCE OF IGNITION IS NOT LESS THAN 18 INCHES ABOVE THE FLOOR IN GARAGES, ROOMS OR SPACES THAT ARE NOT PART OF THE LIVING SPACE OF A DWELLING UNIT AND THAT COMMUNICATE WITH A PRIVATE GARAGE THROUGH OPENINGS SHALL BE CONSIDERED TO BE PART OF THE GARAGE. IRC M1501.3
14. APPLIANCES LOCATED IN A GARAGE OR CARPORT SHALL BE PROTECTED FROM IMPACT BY AUTOMOBILES. IRC M1501.3.1

PLUMBING NOTES

1. HOSE BIBBS TO BE NON-FREEZE, BACK FLOW PREVENTER TYPE.
2. WATER CLOSETS TO HAVE A FLOW RATE OF 1.6 GALLONS OR LESS PER FLUSH. IRC P2003.2
3. SHOWER HEADS TO HAVE A FLOW RATE OF 2.5 GALLONS PER MINUTE OR LESS. IRC P2003.2
4. SHOWERS SHALL BE FINISHED TO A HEIGHT OF NOT LESS THAN 72 INCHES ABOVE THE FLOOR. MATERIAL SHALL BE NON-ABSORBENT. IRC P201.2
5. ALL PLUMBING VENTS THROUGH THE ROOF TO BE SIZED ACCORDING TO P5113.1
6. PROVIDE A FLOOR DRAIN BY THE WATER HEATER. IF WATER HEATER OR STEAM SHOWER EQUIPMENT IS LOCATED ON A MOOD FLOOR, PROVIDE A METAL PAN. IRC P2001.6
7. BATHROOM EXHAUST FAN DUCTS MUST CONTINUE AND DISCHARGE DIRECTLY OUTSIDE THE STRUCTURE. CLOSE PROXIMITY TO ATTIC VENTS OR TO SORFITT AREAS ARE SPECIFICALLY FORBIDDEN. ALL EXHAUST DUCTS ARE NON-CONDUCTIVE TO OPENING WITH PROPER SCREEN FOR TERMINATIONS IN SORFITT AND WALL AREAS AND TO AN APPROVED THRU THE ROOF DISCHARGE FITTING INSTALLED AS NOT TO BE BLOCKED OR STOPPED BY SNOW OR ICE.
8. BATHTUBS AND WHIRLPOOL TUBS MUST HAVE ANTI-SCALD MIXING VALVES LIMITING WATER TEMPERATURE TO 120 DEGREES
9. TUBS AND SHOWERS WITH TILED WALLS REQUIRE CEMENT, FIBER CEMENT OR GLASS MAT GYPSUM BACKERS. GREEN BOARD IS NO LONGER ALLOWED IN ANY APPLICATION.
10. BACKWATER VALVES REQ. UNLESS IT CAN BE ESTABLISHED A FIXTURE IN THE LOWEST LEVEL OF THE HOME IS NOT BELOW THE ELEVATION OF THE UPSTREAM MANHOLE COVER. THIS WILL REQUIRE THE BASEMENT FLOOR TO BE FLOUSED INDEPENDENT FROM THE UPPER FLOORS. BACKWATER VALVES MUST BE ACCESSIBLE.

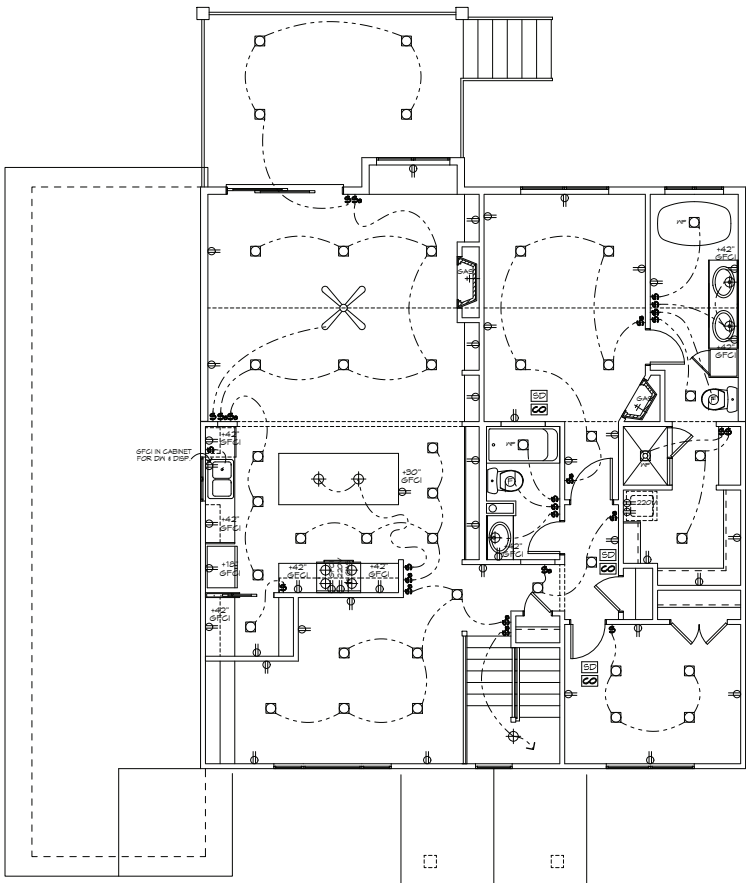


LOWER LEVEL ELECTRICAL & UTILITY PLAN

SCALE:

1/4" = 1'-0"

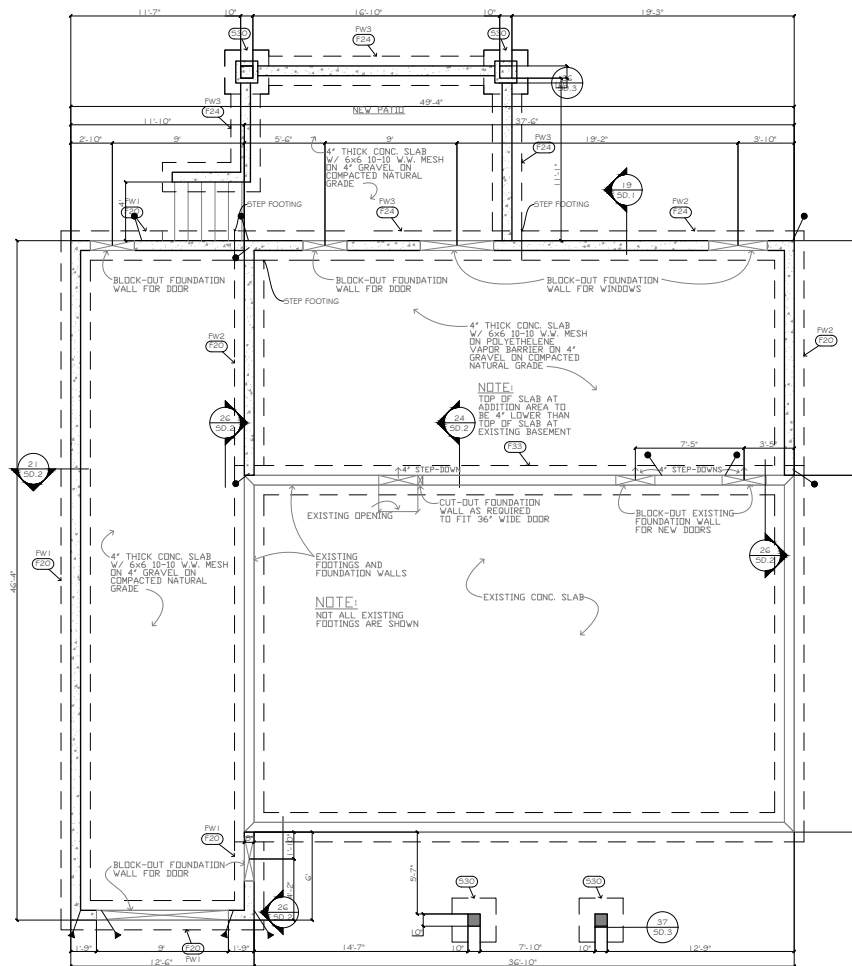
SYMBOL LEGEND	
SYMBOL	DESCRIPTION
○	110 VOLT OUTLET
●	110 VOLT FOURPLEX
○	220 VOLT OUTLET
○	FLOOR OUTLET
○	SWITCHED OUTLET
○	SWITCH
○	3-WAY SWITCH
○	MOTION DETECTOR SWITCH
○	DIMMER SWITCH
○	T.V. JACK
○	TELEPHONE JACK
○	CEILING MOUNTED FIXTURE
○	WALL MOUNTED FIXTURE
○	RECESSED CAN FIXTURE
○	RECESSED CAN HALOGEN
○	ADJUSTABLE CAN FIXTURE
○	RECESSED STAR FIXTURE
○	L.V. HALOGEN "HOCKEY PUCK"
○	2 TUBE FLUORESCENT FIXTURE
○	SURFACE MOUNTED FLUORESCENT FIXTURE
○	TRACK LIGHTING
○	EXHAUST FAN
○	SMOKE DETECTOR
○	DOOR CHIME
○	GAS BIBB
○	HOSE BIBB
○	CEILING MOUNTED FAN
○	MOTION DETECTOR
○	PUSH BUTTON
○	ELECTRICAL PANEL
○	CARBON MONOXIDE DETECTOR



SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	110 VOLT OUTLET
	110 VOLT FOURPLEX
	220 VOLT OUTLET
	FLOOR OUTLET
	SWITCHED OUTLET
	SWITCH
	3-WAY SWITCH
	MOTION DETECTOR SWITCH
	DIMMER SWITCH
	T.V. JACK
	TELEPHONE JACK
	CEILING MOUNTED FIXTURE
	WALL MOUNTED FIXTURE
	RECESSED CAN FIXTURE
	RECESSED CAN HALOGEN
	ADJUSTABLE CAN FIXTURE
	RECESSED STAR FIXTURE
	L.V. HALOGEN "HOCKEY PUCK"
	2 TUBE FLUORESCENT FIXTURE
	SURFACE MOUNTED FLUORESCENT FIXTURE
	TRACK LIGHTING
	EXHAUST FAN
	SMOKE DETECTOR
	DOOR CHIME
	GAS BIBB
	HOSE BIBB
	CEILING MOUNTED FAN
	MOTION DETECTOR
	PUSH BUTTON
	ELECTRICAL PANEL
	CARBON MONOXIDE DETECTOR

MAIN LEVEL ELECTRICAL & UTILITY PLAN

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



FOOTING & FOUNDATION PLAN

SCALE:

1/4" = 1'-0"

FOOTING SCHEDULE												
MARK	LENGTH	WIDTH	HEIGHT	CONTINUOUS REINFORCEMENT				CROSS-SE REINFORCEMENT				NOTES
				QTY.	SIZE	LENGTH	SPACING	QTY.	SIZE	SPACING		
F33	CONT.	33"	10"	3	#4	CONT.	EQ.	-	#4	27"	47"	DEF. 24/50.2
F34	CONT.	24"	10"	4	#4	CONT.	EQ.	-	#4	27"	47"	
F20	CONT.	20"	10"	2	#4	CONT.	EQ.	-	#4	27"	47"	
F18	CONT.	18"	10"	4	#4	CONT.	EQ.	-	#4	27"	47"	
S24	24"	24"	10"	3	#4	18"	EQ.	3	#4	18"	10"	
S30	30"	30"	10"	3	#4	24"	EQ.	3	#4	24"	10"	
S36	36"	36"	10"	4	#4	30"	EQ.	4	#4	30"	10"	
S42	42"	42"	10"	4	#4	36"	EQ.	4	#4	36"	10"	
S48	48"	48"	10"	5	#4	42"	EQ.	5	#4	42"	10"	
NOTES:												
1. FOOTING 1.00 PSI / SF = 60,000 PSI												
2. EXTEND ALL FOOTINGS BELOW THE FRONT LINE OF THE LOCALITY (47")												
3. FOOTING SHALL BEAR ON NATIVE UNDISTURBED SOILS OR COMPACTED STRUCTURAL FILL AS APPROVED AND SPECIFIED BY A LICENSED GEOTECHNICAL ENGINEER.												
4. NO PENETRATIONS SHALL BE ALLOWED THROUGH FOOTINGS. WHEN CONFLICTS ARISE THE FOOTING SHALL BE STEPPED BELOW THE CONFLICT AND THE FOUNDATION WALL SHALL EXTEND TO THE FOOTING AS REQUIRED AND THE PENETRATION CAN GO THROUGH THE FOUNDATION.												
5. FOOTINGS SHALL BE CENTERED UNDER ALL WALLS & COLUMNS, U.N.O.												
6. PLACE ALL REINFORCING STEEL ACCURATELY & SUPPORT AGAINST DISPLACEMENT PRIOR TO POURING CONCRETE.												
7. LONGITUDINAL AND CROSSWISE REINFORCEMENT SHALL HAVE 3" OF CLEAR COVER FROM THE BASE OF THE FOOTING.												

FOUNDATION WALL SCHEDULE									
MARK	THICKNESS	MAX HEIGHT	VERTICAL REINFORCEMENT			HORIZONTAL REINFORCEMENT			NOTES
			SIZE	SPACING	QTY.	SIZE	SPACING	QTY.	
FW1	8"	7'-0"	#4	24"	3	#4	EQ.	4	EQ.
FW2	8"	8'-0"	#4	24"	4	#4	EQ.	4	EQ.
FW3	8"	6'-0"	#4	24"	5	#4	EQ.	4	EQ.
FW4	8"	8'-0"	#4	24"	6	#4	EQ.	4	EQ.
FW5	8"	9'-0"	#4	24"	7	#4	EQ.	4	EQ.

NOTES:

1. FOUNDATION WALLS OVER 9'-0" REQUIRE ADDITIONAL ENGINEERING.
2. $f_c = 3000$ PSI, $f_y = 60,000$ PSI
3. PLACE VERTICAL AND HORIZONTAL REINFORCEMENT IN THE CENTER OF FOUNDATION WALL.
4. (1) HORIZONTAL BAR SHALL BE PLACED WITHIN 4" OF THE TOP AND BOTTOM OF THE FOUNDATION WALL. ALL OTHER BARS SHALL BE EQUALLY SPACED U.N.O. VERTICAL BARS TO TERMINATE 3" FROM TOP OF WALL.
5. PLACE (2) HORIZONTAL #4 BARS WITHIN 2" OF EACH OPENING AND EXTEND BARS 24" BEYOND THE EDGE OF OPENING. VERTICAL BARS MAY TERMINATE 3" FROM THE TOP OF THE CONCRETE. PLACE (1) #4 BARS AT EACH SIDE AND BELOW EACH OPENING. HEIGHT OF CONCRETE OVER OPENINGS SHALL BE A MINIMUM OF 12" U.N.O.
6. PROVIDE 24" LONG LAP SPLICES FOR CONTINUOUS REINFORCEMENT.
7. PROVIDE ANCHOR BOLTS EMBEDDED INTO FOUNDATION WALLS AT ALL EXTERIOR AND SHEAR WALLS U.N.O. SEE ANCHOR BOLT SCHEDULE AND PLANS FOR SIZE AND SPACING OF ANCHOR BOLTS.

NOTES:

1. FOOTING TO BEAR 30" MIN. BELOW FINISHED GRADE.
2. SEE LATERAL REINFORCEMENT PLANS FOR ADDITIONAL ANCHORS TO BE CAST INTO FOUNDATION WALLS.
3. SEE EXTERIOR ELEVATIONS FOR FOOTING AND FOUNDATION STEPS & ELEVATIONS IN RELATION TO EXISTING AND FINISH GRADES.
4. CONTRACTOR TO VERIFY ALL FOOTING & FOUNDATION HEIGHTS IN RELATION TO EXISTING FINISHED GRADE PRIOR TO CONSTRUCTION.

HOLDOWN SCHEDULE	
MARK	SIZE
●	LSTD60RJ
■	STHD1010RJ
▲	STHD1414RJ
○	CS16 x 46" LONG STRAP
□	MST37 STRAP
△	MST48 STRAP

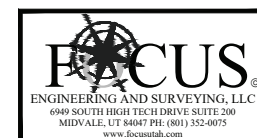
NOTES:

1. HOLDOWNS SHALL BE INSTALLED ON A MINIMUM OF (2) FULL HEIGHT KING STUDS.
2. SEE DETAILS FOR TYPICAL HOLDOWN INSTALLATION.
3. SEE DETAILS FOR TYPICAL FLOOR TO FLOOR STRAP INSTALLATION.
4. POST-INSTALLED HOLDOWNS MAY BE INSTALLED IN LIEU OF CAST IN PLACE HOLDOWNS PER DETAILS.
5. 16d SINKER NAILS MAY BE SUBSTITUTED WITH 16d COMMON NAILS. MINIMUM NAIL LENGTH = 2 1/2".
6. USE 9/16" HOLDOWN MODEL AT TYPICAL RIMJOIST APPLICATIONS.
7. FLOOR TO FLOOR STRAPS SHALL BE CENTERED OVER THE FLOOR CAVITY.

ANCHOR BOLT SCHEDULE			
MARK	DIAMETER OPTION 1	SPACING	DIAMETER OPTION 2
AB-1	1/2"	32"	5/8"
AB-2	1/2"	24"	5/8"
AB-3	1/2"	18"	5/8"
AB-4	1/2"	12"	5/8"

NOTES:

1. PROVIDE ANCHOR BOLTS WITH 7" EMBEDMENT INTO FOUNDATION WALL W/ 3"x3"x70.229" PLATE WASHERS AT ALL EXTERIOR AND SHEAR WALLS. PLACE (1) ANCHOR BOLT WITHIN 4" OF THE EDGE OF EACH PLATE. GALVANIZED ANCHORS W/ TREATED PLATES REQUIRED.
2. ALL UNMARKED FOUNDATION WALLS SHALL BE ASSUMED TO BE AB-1.



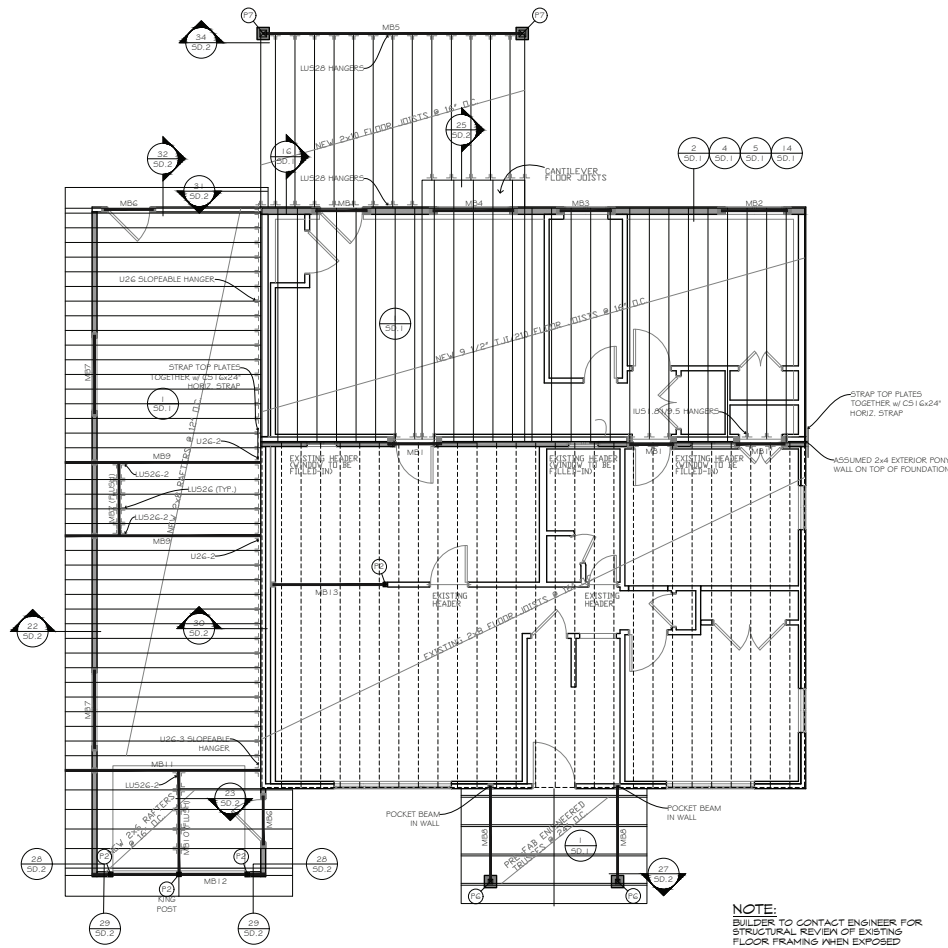
SHEET

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WILSON REMODEL HIGHLAND GROUP

DRAWN BY: BS
PROJECT ENG: FOCUS
DATE: 11-5-2020
REV.

4471 SOUTH HIGHLAND DRIVE SALT LAKE CITY, UTAH 84143 (801) 277-4433



MAIN LEVEL FLOOR FRAMING PLAN

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

- GENERAL FRAMING NOTES**
1. REFER TO DETAIL SHEET SD-0 FOR GENERAL STRUCTURAL NOTES.
 2. ALL DETAILS SHALL APPLY IN SIMILAR TYPICAL SITUATIONS.
 3. ALL STRUCTURAL PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
 4. USE (B) 16d NAILS BETWEEN TOP PLATE LAP SPLICES SEE DET. 5-SD-1.
 5. INTERIOR STUD WALLS SHALL BE 2X4 OR 2X6 (AS PER PLANS) @ 16" O.C. U.N.O.
 6. EXTERIOR STUD WALLS SHALL BE 2X6 @ 16" O.C. U.N.O.
 7. ALL NAIL FASTENERS SHALL BE COMMON WIRE OR ROSS NAILS.
 8. SHEAR WALL HOLD-DOWNS INDICATED ON FLOOR PLANS PERTAIN TO THE BOTTOM OF THE WALLS ON THE PLAN.
 9. ROOF FRAMING SHALL BE STICK FRAMED OR PRE-MANUFACTURED TRUSSES AS PER PLANS W/ APA RATED 5/8" OSB OR CDX PLYWOOD W/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
 10. FLOOR FRAMING SHALL BE FLOOR JOISTS AS PER PLANS W/ APA RATED 3/4" T&G OSB OR CDX PLYWOOD W/ 16d RING SHANK NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
 11. ALL WOOD IN DIRECT CONTACT WITH CONCRETE, MASONRY AND/OR THAT IS NOT PERMANENTLY PROTECTED FROM THE ELEMENTS SHALL BE OF A NATURALLY DECAY RESISTANT SPECIES OR PRESERVATIVE TREATED LUMBER.
 12. ANY TRUSS OR JOIST LABELED AS A DRAG TRUSS OR DRAG JOIST SHALL RECEIVE ROOF/FLOOR SHEATHING EDGE NAILING PER NOTES 9 & 10 ABOVE.

MAIN FLOOR BEAM SCHEDULE

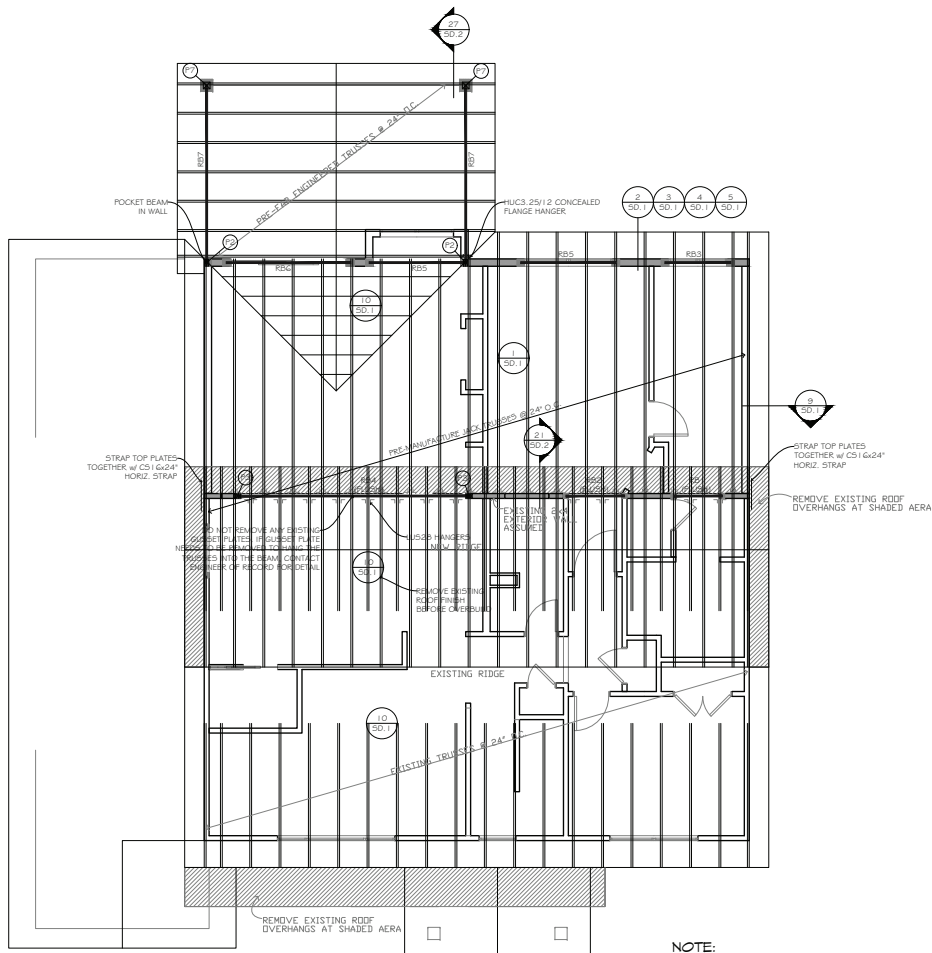
MARK	QTY	SIZE	MATERIAL	GRADE
MB1	2	2x6	DIM LUMBER	DF-4.2
MB2	2	2x6	DIM LUMBER	DF-4.2
MB3	2	2x8	DIM LUMBER	DF-4.2
MB4	2	2x10	DIM LUMBER	DF-4.2
MB5	1	5 1/8" x 13 1/2"	CELLAM	24C-M10-09
MB6	2	2x6	DIM LUMBER	DF-4.2
MB7	2	2x6	DIM LUMBER	DF-4.2
MB8	2	2x6	DIM LUMBER	DF-4.2
MB9	2	2x8	DIM LUMBER	DF-4.2
MB10	2	2x6	DIM LUMBER	DF-4.2
MB11	3	2x8	DIM LUMBER	DF-4.2
MB12	2	2x10	DIM LUMBER	DF-4.2
MB13	2	1 3/4" x 9 1/2"	MICROLAM	15C

POST SCHEDULE

MARK	SIZE
P1	(1) 2x
P2	(2) 2x
P3	(3) 2x
P4	(4) 2x
P5	(5) 2x
P6	4 x 4
P7	6 x 6
P8	1 1/2" x 5 1/2" PARALLAM POST
P9	1 1/2" x 5 1/4" PARALLAM POST
P10	1 1/2" x 7" PARALLAM POST
P11	1 1/4" x 5 1/4" PARALLAM POST
P12	5 1/4" x 7" PARALLAM POST
P13	7" x 7" PARALLAM POST

- NOTES:**
1. INSTALL (1) TRIMMER AND (1) KING STUD ON BOTH SIDES OF EACH OPENING U.N.O.
 2. ATTACH 2X BUILT UP POST PLIES TOGETHER W/ 16d NAILS @ 6" O.C. STAGGERED.
 3. POST C/O LOTS AT HEADERS INDICATE THE NUMBER OF TRIMMER STUDS REQUIRED.
 4. PROVIDE SOLID 2x SQUASHING BLOCKING BELOW EACH POST AT FLOOR FRAMING. BLOCKING SHALL MATCH DIMENSIONS OF POST ABOVE. PROVIDE POSTS OF EQUAL DIMENSION OR GREATER BELOW SQUASHING BLOCKING AND POSTS ABOVE THROUGH TO FOUNDATION/FOOTING U.N.O. OR UNLESS POST ENDS OVER A BEAM.
 5. BUILT UP 2x POSTS (P2 - P5) SHALL MATCH THE WALL DIMENSION FOR WHICH THEY ARE PLACED.
 6. BUILT UP POSTS SHALL BE DF-4.2 GRADE. PARALLAM POSTS SHALL BE 2.0E PSL.
 7. POSTS SHALL BE CENTERED BELOW THE BEAMS/POSTS ABOVE FOR WHICH LOADS THE POSTS ARE INTENDED TO CARRY.





NOTE:
 BUILDER TO CONTACT ENGINEER FOR
 STRUCTURAL REVIEW OF EXISTING
 ROOF FRAMING WHEN EXPOSED

ROOF FRAMING PLAN
 SCALE:

1/4" = 1'-0"

GENERAL FRAMING NOTES

1. REFER TO DETAIL SHEET SD-0 FOR GENERAL STRUCTURAL NOTES.
2. ALL DETAILS SHALL APPLY IN SIMILAR TYPICAL SITUATIONS.
3. ALL STRUCTURAL PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
4. USE (8) 16d NAILS BETWEEN TOP PLATE LAP SPICES SEE DET. 5 SD-1.
5. INTERIOR STUD WALLS SHALL BE 2X4 OR 2X6 (AS PER PLANS) @ 16" O.C. U.N.O.
6. EXTERIOR STUD WALLS SHALL BE 2X6 @ 16" O.C. U.N.O.
7. ALL NAIL FASTENERS SHALL BE COMMON WIRE OR BOX NAILS.
8. SHEAR WALL HOLD-DOWNS INDICATED ON FLOOR PLANS PERTAIN TO THE BOTTOM OF THE WALLS ON THE PLAN.
9. ROOF FRAMING SHALL BE STOCK FRAMED OR PRE-MANUFACTURED TRUSSES AS PER PLANS W/ APA RATED 5/8" OSB OR CDX PLYWOOD W/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
10. FLOOR FRAMING SHALL BE FLOOR JOISTS AS PER PLANS W/ APA RATED 3/4" T&G OSB OR CDX PLYWOOD W/ 10d RING SHANK NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
11. ALL WOOD IN DIRECT CONTACT WITH CONCRETE, MASONRY AND/OR THAT IS NOT PERMANENTLY PROTECTED FROM THE ELEMENTS SHALL BE OF A NATURALLY DECAY RESISTANT SPECIES OR PRESERVATIVE TREATED LUMBER.
12. ANY TRUSS OR JOIST LABELED AS A DRAG TRUSS OR DRAG JOIST SHALL RECEIVE ROOF/FLOOR SHEATHING EDGE NAILING PER NOTES 9 & 10 ABOVE.

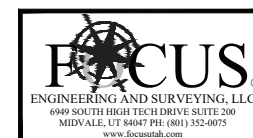
ROOF BEAM SCHEDULE

MARK	QTY	SIZE	MATERIAL	GRADE
RB1	2	2 x 6	DM LUMBER	DF-L#2
RB2	2	2 x 8	DM LUMBER	DF-L#2
RB3	2	2 x 6	DM LUMBER	DF-L#2
RB4	2	1 3/4" x 14"	MICROLAM	-156
RB5	2	2 x 8	DM LUMBER	DF-L#2
RB6	2	2 x 10	DM LUMBER	DF-L#2
RB7	1	3 1/8" x 9"	CELULAM	24F-VAD/DF

POST SCHEDULE

MARK	SIZE
P1	(1) 2x
P2	(2) 2x
P3	(3) 2x
P4	(4) 2x
P5	(5) 2x
P6	4 x 4
P7	6 x 6
P8	3 1/2" x 3 1/2" PARALLAM POST
P9	3 1/2" x 3 1/4" PARALLAM POST
P10	3 1/2" x 7" PARALLAM POST
P11	5 1/4" x 5 1/4" PARALLAM POST
P12	5 1/4" x 7" PARALLAM POST
P13	7" x 7" PARALLAM POST

- NOTES:**
1. INSTALL (1) TRIMMER AND (1) KING STUD ON BOTH SIDES OF EACH OPENING. U.N.O.
 2. ATTACH 2x BUILT UP POST PILES TOGETHER W/ 16d NAILS @ 6" O.C. STAGGERED.
 3. POST CALLOUTS AT HEADERS INDICATE THE NUMBER OF TRIMMER STUDS REQUIRED.
 4. PROVIDE SOLID 2x SQUASHING BLOCKING BELOW EACH POST AT FLOOR FRAMING. BLOCKING SHALL MATCH DIMENSIONS OF POST ABOVE. PROVIDE PORTS OF EQUAL DIMENSION OR GREATER BELOW SQUASHING BLOCKING AND POSTS ABOVE THROUGH TO FOUNDATION/POSTING U.N.O. OR UNLESS POST ENDS OVER A BEAM.
 5. BUILT UP 2x POSTS (P2 - P5) SHALL MATCH THE DIMENSION FOR WHICH THEY ARE PLACED.
 6. BUILT UP POSTS SHALL BE DF-L #2 GRADE. PARALLAM POSTS SHALL BE 2.0E PSL.
 7. POSTS SHALL BE CENTERED BELOW THE BEAMS/POSTS ABOVE FOR WHICH LOADS THE POSTS ARE INTENDED TO CARRY.



SHEET

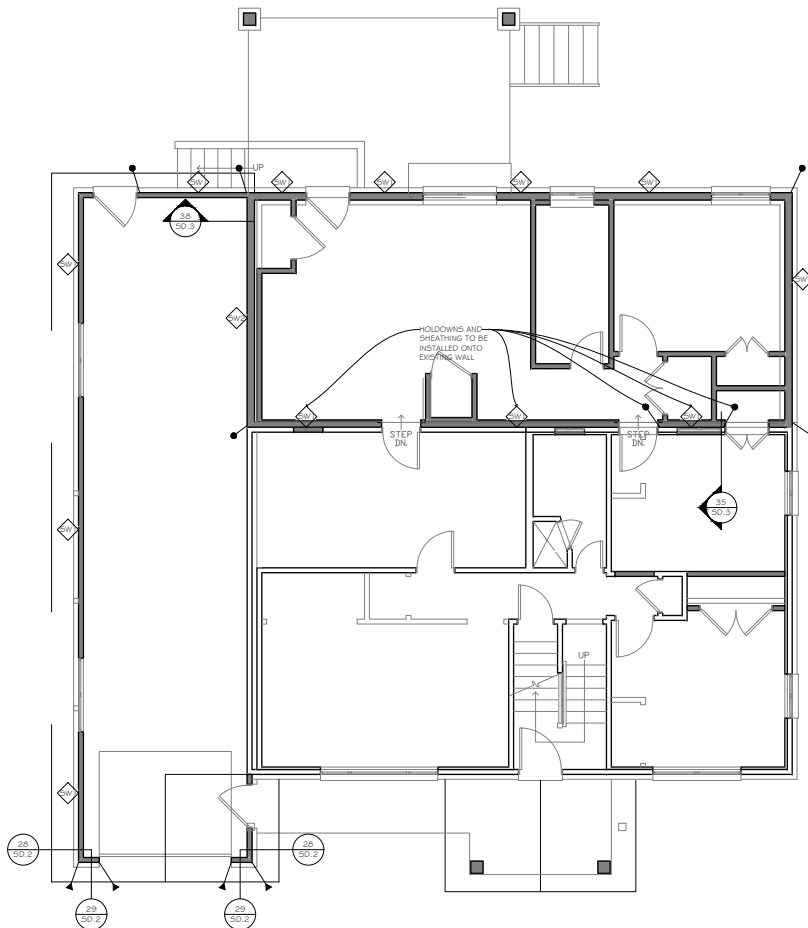
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WILSON REMODEL

HIGHLAND GROUP

DRAWN BY: BS
 PROJECT ENG: FOCUS
 DATE: 11-5-2020
 REV.

4471 SOUTH HIGHLAND DRIVE SALT LAKE CITY, UTAH 84124 (801) 277-4433



LOWER LEVEL LATERAL REINFORCEMENT PLAN

SCALE:

1/4" = 1'-0"

MARK	MATERIAL	8d NAILS		1 1/2" 16ga. STAPLES		NOTES
		EDGE	FIELD	EDGE	FIELD	
SW1	7/16" OSB OR CDX PLYWOOD	6"	12"	3"	12"	
SW2	7/16" OSB OR CDX PLYWOOD	4"	12"	-	-	
SW3	7/16" OSB OR CDX PLYWOOD	3"	12"	-	-	
SW4	7/16" OSB OR CDX PLYWOOD	2"	12"	-	-	5
SW5	1/2" GYPSUM SHEET ROCK	7"	7"	7"	7"	
SW6	1/2" GYPSUM SHEET ROCK	4"	4"	4"	4"	

1. ALL EXTERIOR SHEATHING NOT DESIGNATED ON THE PLANS AS A SPECIFIC SHEAR WALL (SW1-SW4) SHALL BE SHEATHED AND NAILED STAPLED AS A SW1.
2. SHEAR WALLS FASTENED TO STUDS THAT ARE SPACED @ 24" O.C. REQUIRE FIELD NAILING @ 6" O.C. IN LIEU OF 12" O.C. AT INTERMEDIATE FRAMING MEMBERS.
3. SOLID BLOCK: ALL PANEL EDGES BETWEEN THE BOTTOM PLATE AND DOUBLE TOP PLATE OF ALL WALLS W/ OSB OR CDX PLYWOOD.
4. 1 1/2" 16ga. STAPLES (w/ 7/16" CROWN) ARE ONLY ALLOWED FOR SW1, SW3, SW6 (IF SW5 AND SW6 SHOWN).
5. FOR SW4 OR DOUBLE SIDED SW2 OR SW3 PANELS, THE WIDTH OF THE NAILED FACT OF FRAMING MEMBERS SHALL BE MINIMUM 2" NOMINAL OR DOUBLE 2x AT ADJOINING PANEL EDGES AND NAILS AT ALL PANEL EDGES SHALL BE STAGGERED. IF DOUBLE 2x IS USED, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING.
6. THE NAILING PATTERNS ABOVE AND BELOW OPENINGS THAT REQUIRE STRAPPED OPENINGS SHALL MATCH THE
7. SHEATHING NAILS SHALL BE COMMON WIRE OR BOX NAILS. THE HEAD OF THE NAIL MUST BE INSTALLED FLUSH WITH THE SURFACE OF THE SHEATHING.

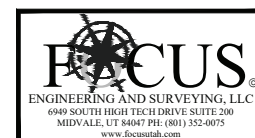
GENERAL FRAMING NOTES

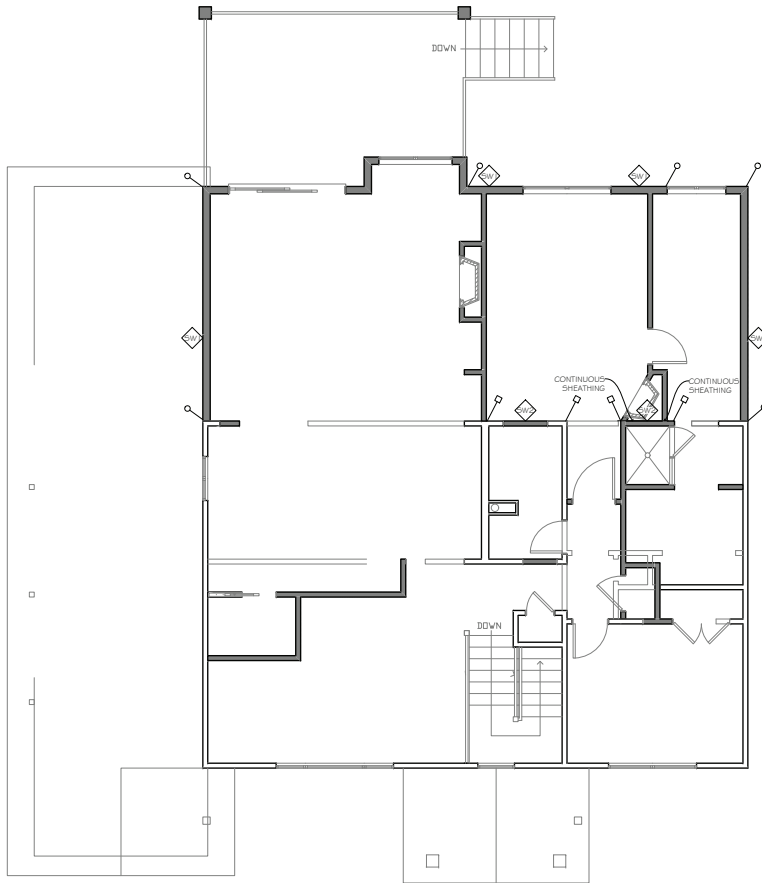
- REFER TO DETAIL SHEET SD-0 FOR GENERAL STRUCTURAL NOTES.
- ALL DETAILS SHALL APPLY IN SIMILAR TYPICAL SITUATIONS.
- ALL STRUCTURAL PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
- USE (8) 16d NAILS BETWEEN TOP PLATE LAP SPLICES SEE DET. S-SD-1.
- INTERIOR STUD WALLS SHALL BE 2X4 OR 2X6 (AS PER PLANS) @ 16" O.C. U.N.O.
- EXTERIOR STUD WALLS SHALL BE 2X6 @ 16" O.C. U.N.O.
- ALL NAIL FASTENERS SHALL BE COMMON WIRE OR BOX NAILS.
- SHEAR WALL HOLDOWNS INDICATED ON FLOOR PLANS PERTAIN TO THE BOTTOM OF THE WALLS ON THE PLAN.
- ROOF FRAMING SHALL BE STEEL FRAMED OR PRE-MANUFACTURED TRUSSES AS PER PLANS W/ APA RATED 5/8" OSB OR CDX PLYWOOD W/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
- FLOOR FRAMING SHALL BE FLOOR JOISTS AS PER PLANS W/ APA RATED 3/4" T&G OSB OR CDX PLYWOOD W/ 10d RING SHANK NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
- ALL WOOD IN DIRECT CONTACT WITH CONCRETE, MASONRY AND/OR THAT IS NOT PERMANENTLY PROTECTED FROM THE ELEMENTS SHALL BE OF A NATURALLY DECAY RESISTANT SPECIES OR PRESERVATIVE TREATED LUMBER.
- ANY TRUSS OR JOIST LABELED AS A DRAG TRUSS OR DRAG JOIST SHALL RECEIVE ROOF/FLOOR SHEATHING EDGE NAILING PER NOTES 9 & 10 ABOVE.

HOLDOWN SCHEDULE

MARK	SIZE
—●—	LSTD8/8RJ
—■—	STD10/10RJ
—▲—	STD14/14RJ
—○—	CS16 x 46" LONG STRAP
—□—	MST37 STRAP
—□—	MST48 STRAP

- NOTES:
- HOLDOWNS SHALL BE INSTALLED ON A MINIMUM OF (2) FULL HEIGHT KING STUDS.
 - SEE DETAILS FOR TYPICAL HOLDOWN INSTALLATION.
 - SEE DETAILS FOR TYPICAL FLOOR TO FLOOR STRAP INSTALLATION.
 - POST-INSTALLED HOLDOWNS MAY BE INSTALLED IN LIEU OF CAST IN PLACE HOLDOWNS PER DETAILS.
 - 16d SINKER NAILS MAY BE SUBSTITUTED WITH 10d COMMON NAILS. MINIMUM NAIL LENGTH = 2-1/2".
 - USE "RF" HOLDOWN MODEL AT TYPICAL RAIN/ROOST APPLICATIONS.
 - FLOOR TO FLOOR STRAPS SHALL BE CENTERED OVER THE FLOOR CAVITY.





MAIN LEVEL LATERAL REINFORCEMENT PLAN

SCALE:

1/4" = 1'-0"

SHEAR WALL SCHEDULE						
MARK	MATERIAL	8d NAILS		1 1/2" 16ga. STAPLES		NOTES
		EDGE	FIELD	EDGE	FIELD	
SW1	7/16" OSB OR CDX PLYWOOD	6"	12"	12"	12"	
SW2	7/16" OSB OR CDX PLYWOOD	4"	12"	-	-	
SW3	7/16" OSB OR CDX PLYWOOD	3"	12"	-	-	
SW4	7/16" OSB OR CDX PLYWOOD	2"	12"	-	-	5
SW5	1/2" GYPSUM SHEET ROCK	7"	7"	7"	7"	
SW6	1/2" GYPSUM SHEET ROCK	4"	4"	4"	4"	

NOTES:

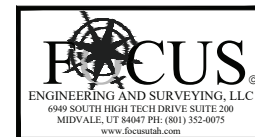
1. ALL EXTERIOR SHEATHING NOT DESIGNATED ON THE PLANS AS A SPECIFIC SHEAR WALL (SW1-SW4) SHALL BE SHEATHED AND NAILED/STAPLED AS A SW1.
2. SHEAR WALLS FASTENED TO STUDS THAT ARE SPACED @ 24" O.C. REQUIRE FIELD NAILING @ 6" O.C. IN LIEU OF 12" O.C. AT INTERMEDIATE FRAMING MEMBERS.
3. SOLID BLOCK, ALL PANEL EDGES BETWEEN THE BOTTOM PLATE AND DOUBLE TOP PLATE OF ALL WALLS W/ OSB OR CDX PLYWOOD.
4. 1 1/2" 16ga. STAPLES (w/ 7/16" CROWN) ARE ONLY ALLOWED FOR SW1, SW5, SW6 (IF SW5 AND SW6 SHOWN).
5. FOR SW4 OR DOUBLE SIDED SW2 OR SW3 PANELS, THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS SHALL BE MINIMUM 3" NOMINAL OR DOUBLE 2x AT ADJOINING PANEL EDGES AND NAILS AT ALL PANEL EDGES SHALL BE STAGGERED. IF DOUBLE 2x IS USED, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING.
6. THE NAILING PATTERNS ABOVE AND BELOW OPENINGS THAT REQUIRE STRAPPED OPENINGS SHALL MATCH THE.
7. SHEATHING NAILS SHALL BE COMMON WIRE OR BOX NAILS. THE HEAD OF THE NAIL MUST BE INSTALLED FLUSH WITH THE SURFACE OF THE SHEATHING.

GENERAL FRAMING NOTES	
1.	REFER TO DETAIL SHEET SD-0 FOR GENERAL STRUCTURAL NOTES.
2.	ALL DETAILS SHALL APPLY IN SIMILAR/TYPICAL SITUATIONS.
3.	ALL STRUCTURAL PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
4.	USE (B) 16d NAILS BETWEEN TOP PLATE LAP SPLICES SEE DET. S-SD-1.
5.	INTERIOR STUD WALLS SHALL BE 2X4 OR 2X6 (AS PER PLANS) @ 16" O.C. U.N.O.
6.	EXTERIOR STUD WALLS SHALL BE 2X6 @ 16" O.C. U.N.O.
7.	ALL NAIL FASTENERS SHALL BE COMMON WIRE OR BOX NAILS.
8.	SHEAR WALL HOLD-DOWNS INDICATED ON FLOOR PLANS PERTAIN TO THE BOTTOM OF THE WALLS ON THE PLAN.
9.	ROOF FRAMING SHALL BE STEEL FRAMED OR PRE-MANUFACTURED TRUSSES AS PER PLANS W/ APA RATED 5/8" OSB OR CDX PLYWOOD W/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
10.	FLOOR FRAMING SHALL BE FLOOR JOISTS AS PER PLANS W/ APA RATED 3/4" T&G OSB OR CDX PLYWOOD W/ 10d RING SHANK NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
11.	ALL WOOD IN DIRECT CONTACT WITH CONCRETE, MASONRY AND/OR THAT IS NOT PERMANENTLY PROTECTED FROM THE ELEMENTS SHALL BE OF A NATURALLY DECAY RESISTANT SPECIES OR PRESERVATIVE TREATED 11/MWR.
12.	ANY TRUSS OR JOIST LABELED AS A DRAG TRUSS OR DRAG JOIST SHALL RECEIVE ROOF/FLOOR SHEATHING EDGE NAILING PER NOTES 9 & 10 ABOVE.

HOLD-DOWN SCHEDULE	
MARK	SIZE
●	LSTDH6/RJ
■	STDH10/10RJ
▲	STDH14/14RJ
○	CS16 x 46" LONG STRAP
□	MST37 STRAP
□	MST48 STRAP

NOTES:

1. HOLD-DOWNS SHALL BE INSTALLED ON A MINIMUM OF (2) FULL HEIGHT KING STUDS.
2. SEE DETAILS FOR TYPICAL HOLD-DOWN INSTALLATION.
3. SEE DETAILS FOR TYPICAL FLOOR-TO-FLOOR STRAP INSTALLATION.
4. POST-INSTALLED HOLD-DOWNS MAY BE INSTALLED IN LIEU OF CAST IN PLACE HOLD-DOWNS PER DETAILS.
5. 16d SINKER NAILS MAY BE SUBSTITUTED WITH 10d COMMON NAILS. MINIMUM NAIL LENGTH = 2' 12".
6. USE "RJ" HOLD-DOWN MODEL AT TYPICAL RIMJOIST APPLICATIONS.
7. FLOOR-TO-FLOOR STRAPS SHALL BE CENTERED OVER THE FLOOR CAVITY.



GENERAL STRUCTURAL NOTES

DESIGN BASIS

GOVERNING DESIGN:

BUILDING CODE:	2018 INTERNATIONAL BUILDING CODE (IBC)
RISK CATEGORY:	II
DESIGN METHOD:	ASD

GRAVITY LOAD:

• ROOF LIVE LOAD (SNOW):	25 PSF
• ROOF DEAD LOAD:	15 PSF
• FLOOR LIVE LOAD:	40 PSF
• FLOOR DEAD LOAD:	10 PSF
• SOIL BEARING PRESSURE:	1,500 PSF (ASSUMED)

LATERAL LOAD:

• WIND SPEED:	115 MPH
• EXPOSURE CATEGORY:	B
• SEISMIC SITE CLASS:	D
• SEISMIC DESIGN CATEGORY:	D

SEE STRUCTURAL CALCULATIONS FOR ADDITIONAL DESIGN COEFFICIENTS AND INFORMATION.

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC), LOCAL AMENDMENTS TO THE THIS CODE, AND/OR ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK.
2. CONSTRUCTION DOCUMENTS ARE VALID FOR A SINGLE USE FOR THE PROJECT LOCATION AND SHALL NOT BE REUSED, COPIED, OR REPRODUCED WITHOUT WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
3. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE METHOD, MEANS AND SEQUENCE OF ALL STRUCTURAL DECTION UNLESS NOTED OTHERWISE ON THE DRAWINGS. FOCUS ENGINEERING AND SURVEYING IS NOT LIABLE FOR ANY DAMAGES OR INJURIES RESULTING FROM ANY METHODS, MEANS AND SEQUENCES OF STRUCTURAL DECTION.
4. IF CHANGES OR DISCREPANCIES ARE MADE OR OBSERVED BEFORE, DURING OR AFTER CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY THE ENGINEER OF RECORD PRIOR TO PERFORMING ANY WORK INVOLVED OR RELATED TO THESE CHANGES OR DISCREPANCIES.
5. THE GENERAL CONTRACTOR AND EACH SUBCONTRACTOR SHALL VERIFY ALL SITE CONDITIONS, EXISTING BUILDINGS OR OTHERWISE, BEFORE BEGINNING WORK INCLUDING, BUT NOT LIMITED TO: SITE CONDITIONS, DIMENSIONS, ELEVATIONS, DOORS, WINDOWS, LOCATION OF INTERIOR AND EXTERIOR WALLS, STAIRS, FINISHES. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY THE ENGINEER OF RECORD OF ANY DISCREPANCIES OR ANY ITEMS THAT ARE NOT IN AGREEMENT WITH THE CONSTRUCTION DOCUMENTS.
6. STRUCTURAL REQUIREMENTS SPECIFIED IN THE ENGINEERING REPORT AND STRUCTURAL DRAWINGS SHALL SUPERSEDE ANY STRUCTURAL ITEMS ADDRESSED IN THE ARCHITECTURAL PLANS, NOTES, DRAWINGS OR DETAILS.
7. THE ENGINEERING REPORT AND STRUCTURAL DRAWINGS ONLY PERTAIN TO THE STRUCTURAL ELEMENTS OF THE PROJECT. THE ENGINEER OF RECORD ASSUMES NO LIABILITY FOR NON-STRUCTURAL ITEMS NOR THE LIABILITY FOR THE ACCURACY, COMPLETENESS, AND CODE COMPLIANCE OF ARCHITECTURAL, MECHANICAL, ELECTRICAL, SITE CIVIL, AND ANY NON-STRUCTURAL SPECIFICATIONS.
8. APPROVAL BY THE MUNICIPAL INSPECTOR DOES NOT IMPLY APPROVAL BY THE ENGINEER OF RECORD OR COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND CODES. FOCUS ENGINEERING AND SURVEYING IS NOT RESPONSIBLE FOR ANY DAMAGES CAUSED BY OR RELATED TO CHANGES TO THE ORIGINAL DESIGN WITHOUT APPROVAL FROM THE ENGINEER OF RECORD.
9. ALL SITE SPECIFIC SPECIFICATIONS THAT APPEAR AMBIGUOUS OR UNCLEAR SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD FOR CLARITY OR INTERPRETATION.
10. ALL SITE COMPACTED FILL SHALL BE FREE OF ANY ORGANIC MATTER AND PLACED PER THE GEOTECH RECOMMENDATIONS.
11. PROJECT SPECIFIC NOTES AND DETAILS SHALL SUPERSEDE GENERAL NOTES AND DETAILS.
12. THE DESIGN, ADEQUACY, AND SAFETY OF ERECTION BRACING, SHORING TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE PRIOR TO THE APPLICATION OF THE SHEAR WALLS, ROOF AND FLOOR DIAPHRAGMS AND FINISH MATERIALS. THE GENERAL CONTRACTOR SHALL PROVIDE THE NECESSARY BRACING TO PROVIDE A STABLE WORKING ENVIRONMENT IN COMPLIANCE WITH OSHA STANDARDS PRIOR TO THE APPLICATION OF THE AFOREMENTIONED MATERIALS.
13. ALL SHORING AND BRACING SHALL REMAIN IN PLACE UNTIL ALL PERMANENT MEMBERS ARE PLACED AND FINAL CONNECTORS ARE INSTALLED.
14. OBSERVATION VISITS TO THE SITE BY THE ENGINEER OF RECORD SHALL NOT INCLUDE THE INSPECTION OF THE CONSTRUCTION BRACING AS MENTIONED ABOVE.
15. ANY DIMENSIONS ON STRUCTURAL PLANS ARE FOR REFERENCE ONLY. VERIFY ALL DIMENSIONS WITH THE ARCHITECTURAL PLANS.
17. THE GENERAL CONTRACTOR SHALL BECOME FAMILIAR WITH ALL PORTIONS OF THE CONSTRUCTION DOCUMENTS RELATED TO THE SCOPE OF THE WORK OF THE STRUCTURE, AND INSURE THAT ALL SUBSTRUCTURES ARE FAMILIAR WITH THOSE PORTIONS THAT PERTAIN TO THEIR AREA OF WORK.

GENERAL FRAMING

(PER NDS)

1. ALL STRUCTURAL LUMBER, SHEATHING, AND TIMBER SHALL BE MARKED BY A COMPETENT AND RELIABLE COMPANY, THE COMPANY, GRADING AND GRADE MARKING SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER OF RECORD.
2. ALL STRUCTURAL TIMBER MEMBERS SHALL BE DOUGLAS FIR-LARCH WITH A 19% MAXIMUM MOISTURE CONTENT OF THE FOLLOWING GRADING SCHEDULE:
 - 2X STUD WALLS: STUD GRADE OR BETTER
 - 2X SILL PLATES: STANDARD GRADE OR BETTER
 - 2X JOISTS/RAFTERS: NO. 2
 - BUILT-UP BEAM/HEADER: NO. 2
 - HEAVY TIMBER: NO. 1
 - POSTS: NO. 2
3. ALL WOOD IN DIRECT CONTACT WITH CONCRETE, MASONRY AND/OR THAT IS NOT PERMANENTLY PROTECTED FROM THE ELEMENTS AND ALL STRUCTURAL LUMBER AND STRUCTURAL SHEATHING THAT IS WITHIN 8" TO EXPOSED GROUND SHALL BE OF A NATURALLY DECAY RESISTANT SPECIES OR PRESERVATIVE TREATED LUMBER.
4. STRUCTURAL MEMBERS MAY NOT BE CUT, NOTCHED OR CHAMFERED UNLESS SPECIFICALLY NOTED, DETAILLED OR APPROVED BY THE ENGINEER OF RECORD.
5. FULL-HEIGHT BLOCKING SHALL BE PLACED BETWEEN JOISTS AND RAFTERS AT ALL BEARING LOCATIONS.
6. NO MORE THAN (2) SILL PLATES SHALL BE CONNECTED TO THE FOUNDATION WITH 4-BOLTS THROUGH BOTH MEMBERS WITHOUT ADDITIONAL ENGINEERING.
7. BUILT-UP TIMBER BEAMS SHALL BE NAILED TOGETHER WITH (2) ROWS OF 16D NAILS AT 6" O.C. CAT EACH FACE U.O.O.
8. PROVIDE CONTINUOUS BEARING AND SOLID BLOCKING DOWN TO ALL BEARING POINT LOADS.
9. ALL METAL ANCHORS, TIES AND CONNECTORS SHALL BE FROM SIMPSON STRONG-TIE AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
10. SUBSTITUTIONS MUST BE PRE-APPROVED IN WRITING BY THE ENGINEER OF RECORD.
- 10.05B PLYWOOD FLOOR AND ROOF SHEATHING SHALL BE LAID CONTINUOUS OVER TWO OR MORE FRAMING SPANS WITH THE FACE GRAIN PERPENDICULAR TO THE FRAMING SUPPORTS. STAGGER ALL PLYWOOD JOINTS A MINIMUM OF 4'-0".
11. EXTERIOR WOOD SUPPORTED BY CONCRETE SHALL BE INSTALLED A MINIMUM OF 6" ABOVE EXPOSED EARTH.
12. EXTERIOR WALLS ADJACENT TO VAULTED CEILING SHALL BE BALLOON FRAMED WITH CONTINUOUS STUDS TO BOTTOM CHORD OF TRUSS OR RAFTER.
13. ROOF SHEATHING SHALL BE CONTINUOUS UNDERNEATH OVERBUILT FRAMING.
14. DOUBLE TOP PLATES SHALL HAVE A MINIMUM OF 4" LAP SPACE WITH A MINIMUM OF (8) 16D NAILS PER TOP PLATE SPACE U.O.O. LAP SPACES IN THE DOUBLE TOP PLATE SHALL OFFSET BY AT LEAST 4'-0".
15. TOP PLATE BREAKS SHALL OCCUR OVER STUDS.
16. ALL EXTERIOR WALLS SHALL BE SECURED WITH A MINIMUM OF 1/2"x10" ANCHOR BOLTS @ A MAXIMUM OF 32" O.C. SHEAR WALL DESIGN REQUIREMENTS WILL GOVERN IN ALL CASES.
17. ALL BARWARE SHALL BE INSTALLED AND NAILED PER THE MANUFACTURER'S SPECIFICATIONS.
18. SOLD BLOCK ALL HORIZONTAL JOINTS BETWEEN THE BOTTOM PLATE AND DOUBLE TOP PLATE OF WALLS THAT HAVE OSB PLYWOOD.
19. EXTERIOR AND BEARING WALL STUDS ARE PERMITTED TO BE CUT OR NOTCHED WITH A DEPTH NOT TO EXCEED 25% OF THE STUD WIDTH. CUTS AND NOTCHES MAY NOT OCCUR AT THE SAME LOCATION.
20. EXTERIOR AND BEARING WALLS SHALL BE CAPPED WITH DOUBLE 2" NOMINAL THICK TOP PLATES. PROVIDE OVERLAP AT CORNERS AND INTERSECTIONS WITH OTHER PARTITION WALLS.
21. ALL MANUFACTURED WOOD PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
22. SEE MANUFACTURER'S SPECIFICATIONS FOR DRILLING HOLES AND CUTTING NOTCHES AND CHAMBERS.
23. ALL RAFTERS AND JOISTS OVER 7'-0" SHALL BE HANGARED IF NOT SUPPORTED BY BOTTOM BEARING.
24. ALTERNATE ENGINEERED WOOD PRODUCTS MUST BE PRE-APPROVED IN WRITING BY THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
25. ACCEPTABLE MANUFACTURERS OF ENGINEERED WOOD PRODUCTS:
 - Weyerhaeuser LVL/CLF PRODUCTS
 - Louisiana Pacific Products
 - Boise Cascade Products
 - ALL OTHER MANUFACTURERS SHALL BE PRE-APPROVED BY THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
26. THE USE OF ANY PRODUCT NOT SPECIFIED IN THE PLANS OR CALCULATIONS SHALL BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO INSTALLATION.

GLULAM

1. GLULAM BEAMS SHALL BE 24F-V4 (SIMPLE SPAN) OR 24F-V8 (CANTILEVERED)
2. MINIMUM DESIGN VALUES:
 - E = 1,800,000 PSI
 - F_b = 2,400 PSI
 - F_v = 265 PSI

MICROLAM

1. MICROLAM BEAMS SHALL BE LAMINATED VENEER LUMBER (LVL)
2. MINIMUM DESIGN VALUES:
 - E = 2,000,000 PSI
 - F_b = 2,600 PSI
 - F_v = 285 PSI

PARALLAM

1. PARALLAM BEAMS SHALL BE PARALLEL STRAND LUMBER (PSL)
2. MINIMUM DESIGN VALUES:
 - E = 2,200,000 PSI
 - F_b = 2,900 PSI
 - F_v = 290 PSI

TIMBERSTRAND

1. TIMBERSTRAND BEAMS SHALL BE LAMINATED STRAND LUMBER (LSL)
2. MINIMUM DESIGN VALUES:
 - E = 1,550,000 PSI
 - F_b = 2,225 PSI
 - F_v = 310 PSI

PREFABRICATED WOOD JOIST

1. PREFABRICATED WOOD JOIST SHALL BE WEYERHAEUSER TRUS JOIST TJ SERIES. U.O.O. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

PRE-ENGINEERED WOOD TRUSSES

(PER IRC 2303.4)

1. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE CURRENT IBC, LOCAL BUILDING CODES FOR ALL IMPOSED LOADS, INCLUDING LATERAL LOADS, ROOF OVERBUILDS, OVERHEAD DOORS, AND ANY MECHANICAL EQUIPMENT LOADS.
2. ALL CALCULATIONS AND SHOP DRAWINGS SHALL BE CERTIFIED BY A LICENSED ENGINEER IN THE STATE WHERE THE PROJECT WILL BE CONSTRUCTED. THE MANUFACTURER OR GENERAL CONTRACTOR SHALL SUPPLY ALL THE TRUSS CALCULATIONS AND SHOP DRAWINGS TO THE ENGINEER OF RECORD AND THE LOCAL BUILDING OFFICIAL PRIOR TO FABRICATION.
3. TOTAL AND DEFLECTIONS SHALL BE LIMITED TO 1/240 AND DEFLECTIONS DUE TO LIVE LOADS SHALL BE LIMITED TO 1/360.
4. PERMANENT TRUSS BRACING INFORMATION SHALL BE SUPPLIED BY THE TRUSS MANUFACTURER.
5. THE TRUSS MANUFACTURER SHALL ASSUME LIABILITY OF THE DESIGN AND FABRICATION OF THE PRE-ENGINEERED TRUSSES.
6. THE CONTRACTOR SHALL ASSUME LIABILITY FOR THE INSTALLATION OF THE PRE-ENGINEERED TRUSSES AS PER THE MANUFACTURER'S SPECIFICATIONS.
7. ANY DISCREPANCIES BETWEEN THE TRUSS MANUFACTURER'S TRUSS LAYOUT AND THE DRAWINGS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO THE FABRICATION OF THE TRUSSES.
8. THE TRUSS MANUFACTURER SHALL VERIFY ALL LOADS WITH THE ENGINEER OF RECORD.
9. TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT WRITTEN APPROVAL FROM THE TRUSS ENGINEER.
10. ALTERATIONS RESULTING IN AN ADDITION OF LOADS TO ANY MEMBER SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE TRUSS ENGINEER.

CONCRETE

(ACI 318, 2018 IBC CHAPTER 18.19)

1. ALL CONCRETE MATERIALS, QUALITY CONTROL, AND CONSTRUCTION SHALL COMPLY WITH THE LOCAL BUILDING CODES AND ACI 318.
2. WATER SHALL BE POTABLE AND FREE FROM INJURIOUS AMOUNTS OF OIL, ACIDS, SALTS, ORGANIC MATERIALS, ETC.
3. COMPRESSIVE STRENGTH (MINIMUM SPECIFIED AT 28 DAYS):
 - FOOTINGS: 4,000 PSI
 - FOUNDATION: 3,000 PSI
 - SLAB ON GRADE: 4,000 PSI
3. FOOTINGS:
 - ALL FOOTINGS SHALL BEAR PAST THE FIRST LINE OF THE LOCALITY.
 - WALLS AND COLUMNS SHALL BE CENTERED ON FOOTINGS U.O.O.
 - NO PENETRATIONS ARE ALLOWED THROUGH FOOTINGS.
4. CONCRETE EXPOSED TO FREEZE/THAW CYCLES SHALL CONFORM TO THE MAX WATER/CEMENT RATIO OF ACI 318-14 TABLE 19.3.2.1 AND SHALL USE AIR ENTRAINMENT PER ACI 318-14 TABLE 19.3.3.1 (IN CONFORMANCE WITH ASTM C260).
5. THE GENERAL CONTRACTOR SHALL PROVIDE A WATERPROOFING/DAMP-PROOF MEMBRANE PER THE 2018 IBC SECTION 1805.
6. BACKFILL SHALL NOT BE PLACED AGAINST FOUNDATION WALL UNTIL THE WALL HAS SUFFICIENT STRENGTH AND IS ANCHORED TO THE FLOOR ABOVE OR IS SUFFICIENTLY BRACED TO PREVENT DAMAGE FROM THE BACKFILL.
7. BACKFILL SOIL SHALL BE FREE OF ORGANIC MATERIAL, CONSTRUCTION DEBRIS, CURBLES OR BouldERS. THE BACKFILL SHALL BE PLACED IN LIFTS AND COMPACTED IN A MANNER THAT DOES NOT DAMAGE THE FOUNDATION WALL OR THE WATERPROOFING/DAMP-PROOFING MATERIAL.
8. THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION WALL SHALL HAVE A 5% SLOPE AWAY FROM THE BUILDING FOR A MINIMUM DISTANCE OF 10 FEET MEASURED PERPENDICULAR FROM THE FACE OF THE FOUNDATION WALL.
9. THE THICKNESS OF CONCRETE SLABS ON GRADE FLOORS SHALL NOT BE LESS THAN 3 1/2".
10. ADHESIVE ANCHORS SHALL BE INSTALLED WITH SIMPSON SET-XP EPOXY PER THE MANUFACTURER'S SPECIFICATIONS.
11. REINFORCEMENT STEEL SHALL BE ACCURATELY PLACED AND SUPPORTED AGAINST DISPLACEMENT PRIOR TO CONCRETE POUR.

FASTENERS

(PER IRC 2303A, 2304.10)

1. FASTENERS IN ANY TYPE OF PRESERVATIVE-TREATED AND FIRE-RETARDANT TREATED WOOD PRODUCT SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER.
2. SHEATHING FASTENERS SHALL BE DRIVEN SO THE HEAD OR CROWN OF THE NAIL IS FLUSH WITH THE SHEATHING SURFACE.
3. BOLT HOLES SHALL BE DRILLED WITH A BIT 1/2" TO 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER. ALL BOLTS SHALL HAVE STANDARD CUT WASHERS UNDER HEAD AND NUT.
4. ALL NAILS SHALL BE COMMON WIRE.
5. NAILS:
 - 8D = 0.131" X 2.5"
 - 10D = 0.148" X 3.0"
 - 16D = 0.162" X 3.5"
6. STAPLES:
 - 16GA = 1.5 X 4375° CROWN
7. POWER DRIVEN PINS:
 - CONCRETE DRIVE PINS = 0.145" X 2.5" WITH PRE-ASSEMBLED WASHER
8. POST INSTALLED ANCHORS TO CONCRETE USED FOR WIND AND SEISMIC RESISTANCE APPLICATIONS SHALL BE INSTALLED USING HILTI HY-200 EPOXY U.O.O. BOLT HOLES DRILLED FOR EPOXY ANCHORS SHALL BE CLEANED USING BLOW-BRUSH-LOW STANDARDS AS PER MANUFACTURER SPECIFICATIONS FOR THE EPOXY BEING USED.
9. BOLTS:
 - CONNECTOR BOLTS - ASTM A307
 - HIGH STRENGTH BOLTS - ASTM A325
 - ANCHOR BOLTS - ASTM 307 WITH A 3"X20"X229" PLATE WASHER EMBEDDED 7" INTO CONCRETE

STRUCTURAL STEEL

(IBC 2018 CHAPTER 22, AISC 15TH ED.)

1. ALL STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED AND WELDED IN ACCORDANCE WITH THE CURRENT IBC AND THE CURRENT EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
2. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS AND SHALL CONFORM TO ALL AWS STANDARDS. ALL WELDS SHALL HAVE THE SLAG REMOVED.
3. ALL STRUCTURAL STEEL SHALL BE FABRICATED IN THE SHOP OF A LICENSED FABRICATOR AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.
4. STEEL FABRICATOR SHALL FIELD CHECK ALL DIMENSIONS PRIOR TO FABRICATION.
5. STEEL TO STEEL CONNECTIONS SHALL BE MADE WITH HIGH STRENGTH BOLTS.
6. ALL STEEL EXPOSED TO THE ELEMENTS SHALL BE HOT-DIPPED GALVANIZED OR PROPERLY PRIMED AND PAINTED AFTER FABRICATION.
7. WELD FLANGE SHAPES SHALL CONFORM TO ASTM A992, F_y = 50 KSI.
8. PIPE COLUMNS SHALL CONFORM TO ASTM A53 GRADE B.
9. TUBE COLUMNS SHALL CONFORM TO ASTM A500 GRADE C.
10. PLATES, BARS, ANGLES, CHANNELS AND OTHER MISCELLANEOUS STEEL SHAPES SHALL CONFORM TO ASTM A36, F_y = 36 KSI.

REINFORCING STEEL

1. STEEL REINFORCEMENT SHALL BE FREE FROM MUD, OIL, AND OTHER NON-METALLIC COATINGS THAT DECREASE BONDING CAPACITY AT THE TIME OF INSTALLATION.
2. REINFORCEMENT SHALL BE ACCURATELY PLACED AND ADEQUATELY SUPPORTED BEFORE CONCRETE IS PLACED.
3. ALL SPLICES IN CONTINUOUS REINFORCEMENT SHALL LAP 40 BAR DIAMETERS. U.O.O.
4. COVER:
 - CONCRETE PERMANENTLY EXPOSED TO EARTH OR WEATHER: 3"
 - CONCRETE TEMPORARILY EXPOSED TO EARTH OR WEATHER: 1 1/2"
 - #5 BAR AND SMALLER: 2"
 - #6 BAR AND LARGER: 3"
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER: 1 1/2"
 - SLABS AND WALLS, #11 & SMALLER: 3/4"
 - SLABS ON GRADE: 1 1/2"
 - BEAMS, COLUMNS, MAIN REINFORCING TIES: 1 1/2"
5. F_y = 60 KSI

SOILS

1. FOCUS ENGINEERING & SURVEYING DOES NOT PROVIDE ANY GEOTECHNICAL ENGINEERING SERVICES. ALL GEOTECHNICAL SERVICES ARE TO BE EMPLOYED AT THE EXPENSE OF THE GENERAL CONTRACTOR OR OWNER. FOCUS ENGINEERING & SURVEYING WILL NOT BE LIABLE FOR ANY DAMAGES TO THE STRUCTURE RELATED TO GEOTECHNICAL DEFICIENCIES.
2. IF THE CONTRACTOR FAILS TO PROVIDE FOCUS ENGINEERING & SURVEYING WITH A GEOTECHNICAL INVESTIGATION AT THE TIME A CONTRACT IS MADE, FOCUS ENGINEERING WILL ASSUME AN ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE A MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF. FOCUS ENGINEERING & SURVEYING WILL NOT BE HELD LIABLE FOR ANY STRUCTURAL DAMAGES RELATED TO ANY LACK OF CONFORMANCE BY THE CONTRACTOR TO INSURE THIS MINIMUM ALLOWABLE SOIL BEARING PRESSURE.
3. THE GEOTECHNICAL INVESTIGATION SHALL BE PERFORMED PER THE 2018 IBC SECTION 18.
4. DO NOT PLACE FOOTINGS ON DESTABILIZED, UNDOCUMENTED FILL, FROZEN SOIL, OR IN PONDRED WATER.
5. ALL FOOTINGS, FOUNDATIONS, EXCAVATION, GRADING AND FILL SHALL BE PERFORMED PER THE APPROVED GEOTECHNICAL REPORT.
6. SOIL CONDITIONS SHALL BE OBSERVED PRIOR TO PLACEMENT OF FOOTINGS.
7. AT LOCATIONS WHERE STRUCTURAL FILL IS REQUIRED, FILL SHALL BE PLACED IN 6" LIFTS & COMPACTED AT OPTIMUM MOISTURE CONTENT. REFER TO THE GEOTECHNICAL REPORT FOR DEPTH AND EXTENT OF THE STRUCTURAL FILL.

MASONRY & STONE VENEER

1. MASONRY VENEER ABOVE OPENINGS SHALL BE SUPPORTED BY A STEEL LINTEL. THE STEEL LINTEL SHALL NOT SUPPORT ANY VERTICAL LOAD OTHER THAN THE DEAD LOAD OF THE MASONRY VENEER ABOVE.
2. LINTELS SHALL HAVE 1" OF BEARING FOR EVERY 1' OF SPAN. BEARING LENGTH SHALL NOT BE LESS THAN 4".
3. VENEER SHALL BE ANCHORED TO THE SUPPORTING WALL FRAMING WITH HOT-DIPPED GALVANIZED HOIMANN & BARNARD DW-1085 METAL ANCHOR TIES. EACH TIE SHALL NOT BE SPACED MORE THAN 16" O.C. VERTICALLY AND HORIZONTALLY.
4. ENGAGE #9 WIRE WITH ANCHOR TIES AT THE CENTER OF VENEER AND EMBEDDED IN THE MORTAR JOINT.

SPECIAL INSPECTIONS

(IBC CHAPTER 17, ACI 318)

1. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT IBC, LOCAL AMENDMENTS, AND/OR ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK PERFORMED.
2. THE OWNER OR GENERAL CONTRACTOR SHALL EMPLOY APPROVED AGENCIES TO PERFORM SPECIAL INSPECTIONS DURING CONSTRUCTION WHERE SPECIAL INSPECTIONS ARE REQUIRED AT THEIR EXPENSE.
3. THE SPECIAL INSPECTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL AND THE ENGINEER OF RECORD DEMONSTRATING HIGHER COMPETENCY AND APPROVAL FOR THE INSPECTION.
4. ITEMS THAT REQUIRE SPECIAL INSPECTION:
 - EXISTING SOIL CONDITIONS, FILL PLACEMENT AND LOAD BEARING REQUIREMENTS
 - WOOD SHEAR WALLS, SHEAR PANELS AND MEMBRANE FOR ERECTION, BRACING, ANCHORING, AND OTHER FASTENING COMPONENTS FOR LATERAL FORCE RESISTANT SYSTEM WHERE THE FASTENER SPACING OF THE SHEATHING IS 4" O.C. OR LESS. THIS IS NOT REQUIRED WHENEVER WIND LOADS ON THE STRUCTURE GOVERN LATERAL DESIGN AND THE WIND SPEEDS ARE LESS THAN 120 MPH WITH EXPOSURE CATEGORY B.
 - METAL PLATE CONNECTED WOOD TRUSSES WITH SPANS GREATER THAN 60'-0" OR GREATER IN LENGTH.
 - STRUCTURAL STEEL IN ACCORDANCE WITH AISC 360.
 - POST INSTALLED ADHESIVE ANCHORS.



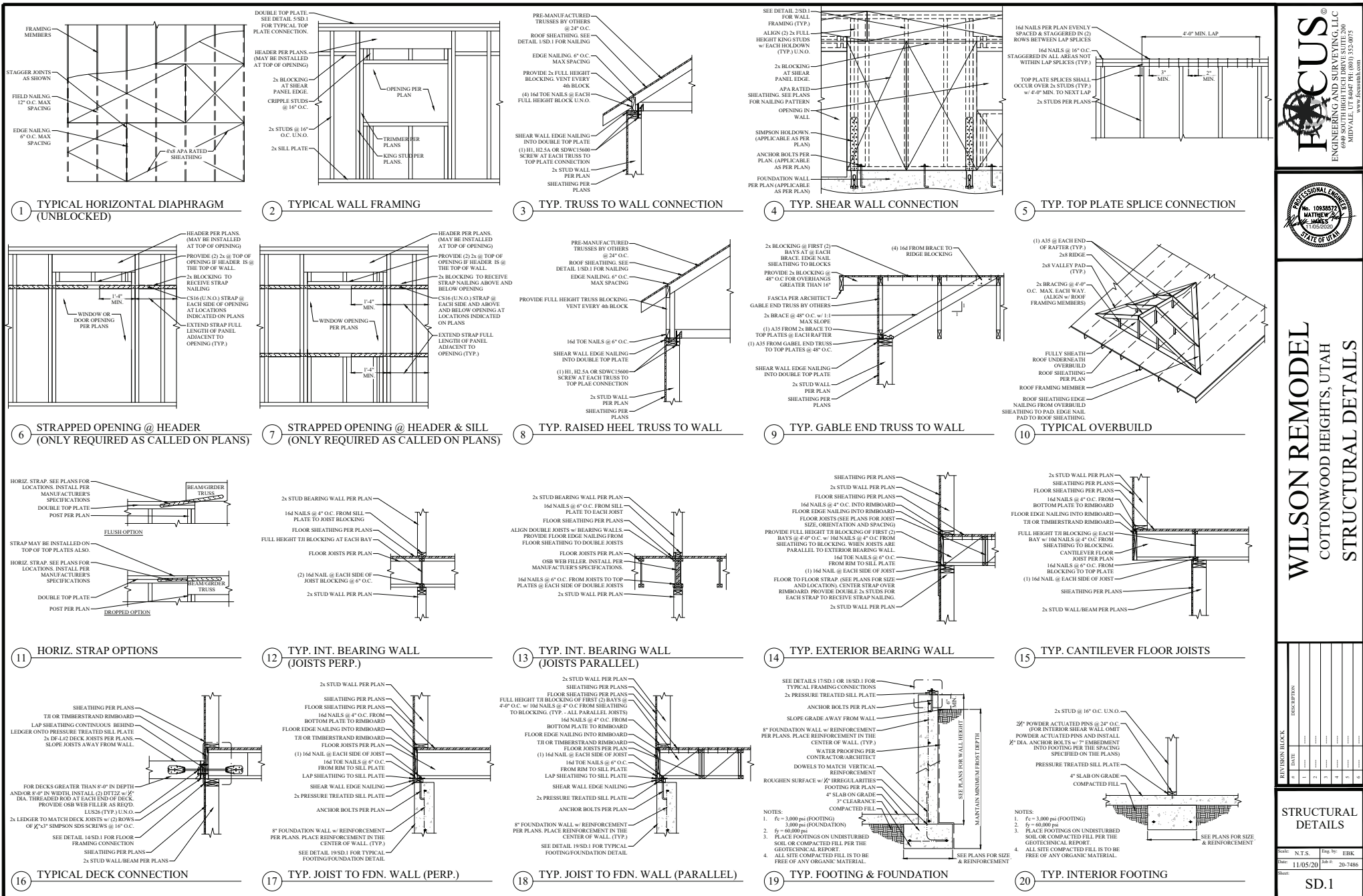
WILSON REMODEL
COTTONWOOD HEIGHTS, UTAH
STRUCTURAL NOTES

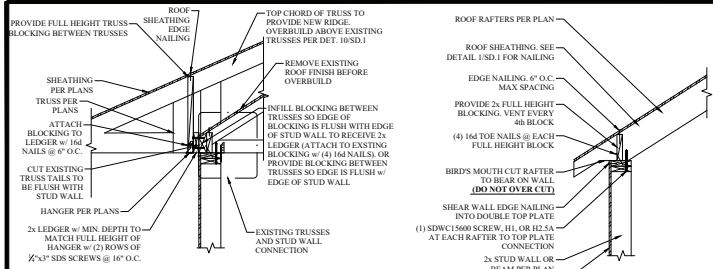
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#	DATE	BY	CHK
1			
2			
3			
4			
5			
6			

STRUCTURAL NOTES

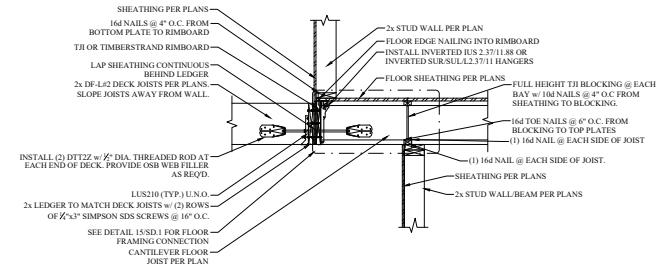
Scale:	N.T.S.	Eng'g:	ERK
Date:	11/05/20	Job #:	20-7486
Sheet:			

SD.0

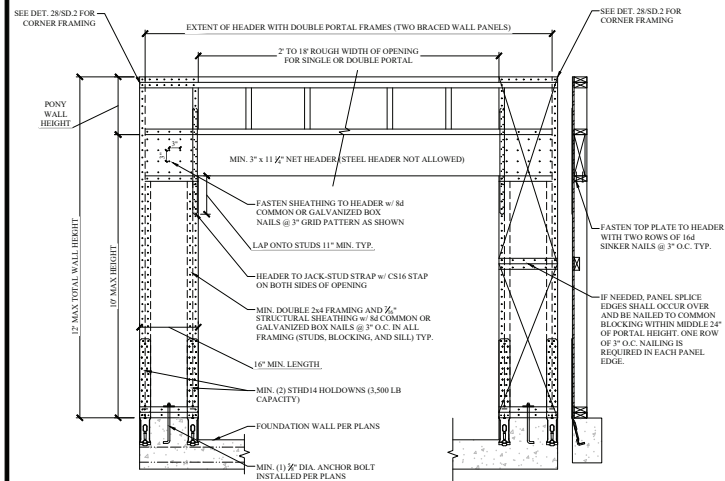




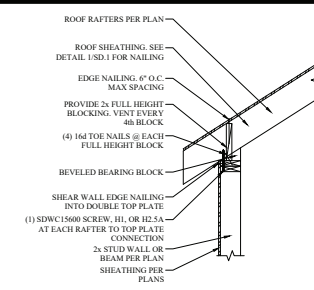
21 JACK TRUSS TO EXISTING TRUSS



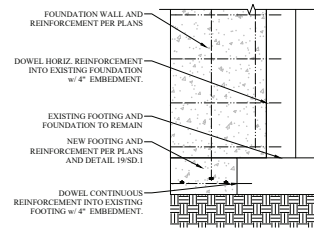
25 CANTILEVER FLOOR JOIST TO DECK CONNECTION



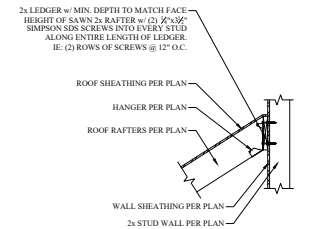
29 APA PORTAL-FRAME DESIGN WITH HOLDOWN



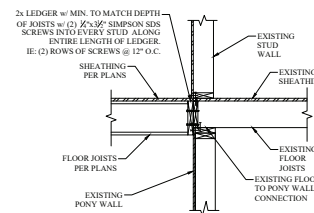
22 RAFTER TO WALL CONNECTIONS



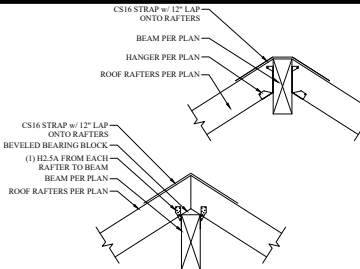
26 NEW FOOTING/FND. TO EXISTING



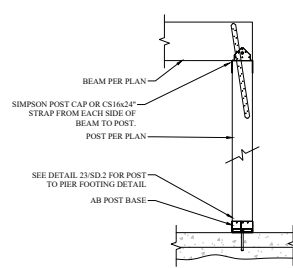
30 RAFTER TO LEDGER



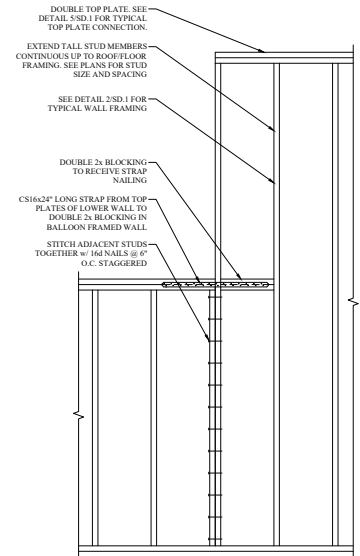
33 NEW JOIST TO EXISTING



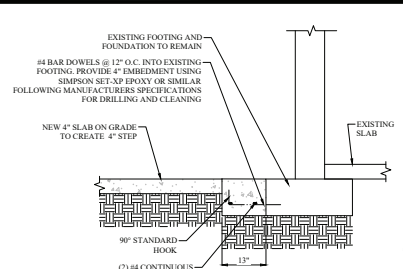
23 RAFTER TO RIDGE BEAM OPTIONS



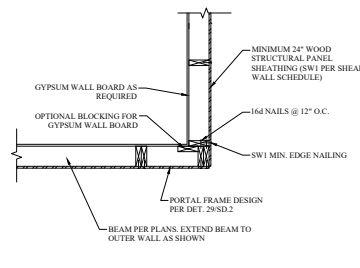
27 TYP. WOOD BEAM TO WOOD POST



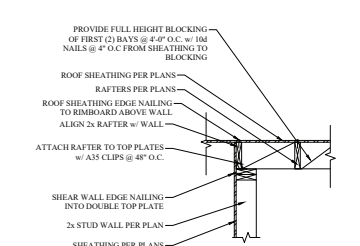
31 TYP. BALLOON FRAMING



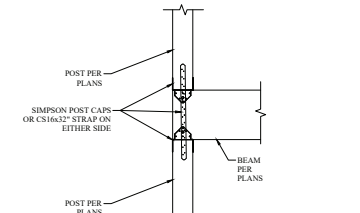
24 NEW FOOTING TO EXISTING



28 CORNER SHORT FOR APA PORTAL FRAME HEADER



32 TYP. GABLE RAFTER TRUSS TO WALL



34 POST TO BEAM TO POST

REVISION BLOCK	NO.	DATE	DESCRIPTION
	1		
	2		
	3		
	4		
	5		



WILSON REMODEL
COTTONWOOD HEIGHTS, UTAH
STRUCTURAL DETAILS

STRUCTURAL DETAILS

SD.3