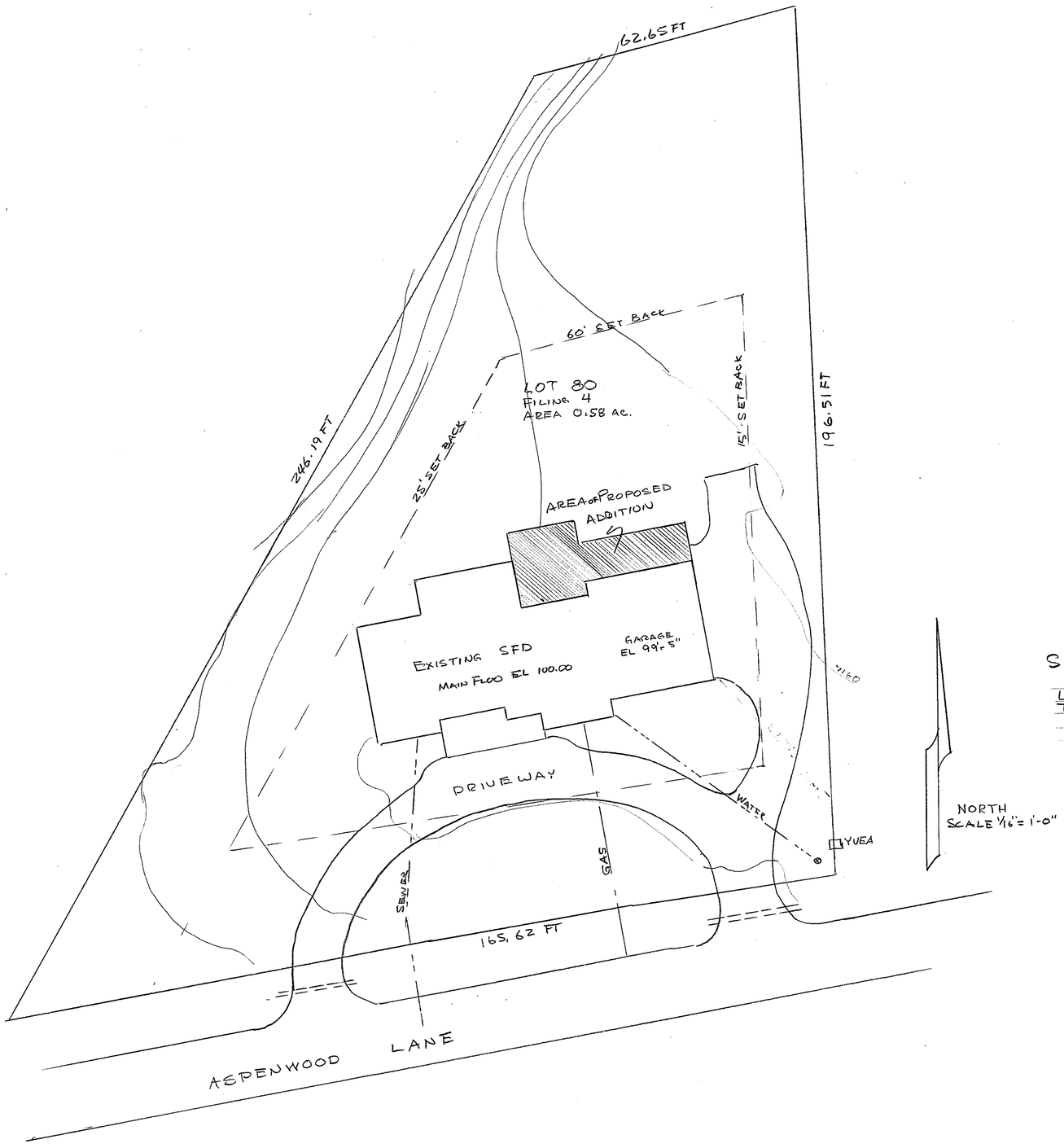

SITE PLAN

LOT 80 FILING 4
THE SANCTUARY
3070 ASPENWOOD LANE

8-26-20

DRAWING #	20-03
REVISED:	
PAGE #	A-1

Vanatta

COVER PAGE

SITE PLAN

Lot 80, Filing 4, The Sanctuary
3070 Aspenwood Lane, Steamboat Springs 80487

SCALE: 1" = 20'
DATE: 8/17/20
DRAWN BY: GCH

GRAHAM CUSTOM HOMES
DESIGN
PO BOX 776338
STEAMBOAT SPRINGS CO 80477
970-846-3562

NOTES BASED ON 2015 I.R.C.
GENERAL NOTES

EVERY ATTEMPT HAS BEEN TAKEN TO AVOID OR ELIMINATE ERRORS DURING THE PREPARATION OF THESE PLANS. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THE PLANS WITH ACTUAL FIELD CONDITIONS.

IT IS THE BUILDERS RESPONSIBILITY TO DICTATE METHODS OF CONSTRUCTION. THE BUILDER SHALL VERIFY ALL DIMENSIONS OF MANUFACTURED COMPONENTS AND RELATIONSHIPS BETWEEN MATERIALS OR COMPONENTS. THE BUILDER SHALL VERIFY EXISTING CONDITIONS AND DIMENSIONS SHOWN ON THE DRAWINGS INCLUDING ALL EXISTING GRADES AT THE SITE.

ALL WORK SHAL COMPLY WITH ALL STATE, COUNTY AND CITY CODS AND ORDNANCES.

THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES OR DEFICIENCIES IN THE DRAWINGS PRIOR TO CONSTRUCTION.

IF A DISCREPANCY ARISES BETWEEN THE DRAWINGS AND FIELD CONDITIONS, OR WHERE A DETAIL IS DOUBTFUL OFF INTERPRETATION, OR AN UNANTICIPATED FIELD CONDITION IS ENCOUNTERED, THE ENGINEER SHALL BE CALLED RIGHT AWAY FOR CORRECT PROCEDURE TO BE FOLLOWED. SUCH INSTRUCTIONS SHALL BE CONFIRMED IN WRITING AND DISTRIBUTED TO ALL AFFECTED PARTIES.

WHERE EVER THERE IS A CONFLICT BETWEEN DETAILS AND SPECIFICATIONS, OR BETWEEN DETAILS, OR WHERE DOUBTFUL OF INTERPRETATION, THE MOST RESTRICTIVE SHALL GOVERN AS DETERMINED BY THE ENGINEER OF RECORD.

THIS IS A CUSTOM DESIGN FOR A SPECIFIC SITE. THESE PLANS MAY NOT BE USED ON ANY OTHER SITE WITHOUT GRAHAM CUSTOM HOMES PRIOR WRITTEN APPROVAL.

THE CONTRACTOR SHALL PROVIDE MECHANICAL AND ELECTRICAL ENGINEERING AS REQUIRED TO COMPLETE WORK AND FOR INTENDED PURPOSE. MECHANICAL CONTRACTORS SHALL VERIFY DIMENSIONS OF ALL NECESSARY FLUE CHASES, DUCTS, AND EQUIPMENT.

THE BUILDER/CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONFORM TO ALL APPLICABLE BUILDING CODES.

THE BUILDING OR DWELLING SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE NOT EXCEEDING THREE AIR CHANGES PER HOUR IN CLIMATE ZONE 7 AS PER R402.4.1.2 TESTING.

BUILDING CODE CRITERIA

THE GENERAL STRUCTURAL DESIGN HAS BEEN CONDUCTED IN CONFORMANCE WITH THE INTERNATIONAL RESIDENTIAL CODE (I.R.C.) 2015 EDITION AND THE FOLLOWING.

2015 INTERNATIONAL ENERGY CODE (IECC)
2014 NATIONAL ELECTRIC CODE (NEC)
LOCAL UTILITY REGULATIONS
ALL CITY AND COUNTY CODES AND ORDINANCES
APPLICABLE COVENANTS OF THE SUBDIVISION

WOOD: NATIONAL DESIGN SPECIFICATIONS BY AMERICAN FOREST & PAPER ASSOCIATION/AMERICAN WOOD COUNCIL CURRENT EDITION AND THE I.R.C. 2015 EDITION. MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES BY AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) 7-10, SECTION 301, 2015 I.R.C. AND SECTION 1605, 2015 I.B.C.

BUILDING DESIGN LOADS

ROOF:	95 PSF
ATTIC:	20 PSF
FLOORS:	40 PSF
DECKS:	95 PSF
PORCH'S:	60 PSF
WIND:	115 MPH, EXPOSURE C
SEISMIC DESIGN CATEGORY	B

SOIL DESIGN LOADS

MAX SOIL BEARING PRESSURE	2500 PCF
MIN SOIL BEARING PRESSURE	NA
AT-REST	45 PCF
ACTIVE	35 PCF

REFER TO SOILS REPORT NUMBER 97-2943 FROM Northwest Colorado Consultants FOR ADDITIONAL REQUIREMENTS

SITE NOTES

FIELD LOCATE ALL UTILITIES BEFORE ANY CONSTRUCTION ACTIVITY.

THE SLOPE OF CUT OR FILL SHAL BE NO GREATER THAN 2:1 (50% SLOPE)

WASHED ROCK OR EARTHED FILL USED TO SUPPORT THE SLABS OF THIS BUILDING SHALL BE PLACED IN ACCORDANCE WITH THE SOILS INVESTIGATION REPORT AND ACCEPTABLE ENGINEERING PRACTICE.

BUILDER SHALL ENSURE POSITIVE DRAINAGE AWAY FROM GARAGE STRUCTURE AND ACROSS SITE AS PER SECTION R401.3, 2015 I.R.C. IT IS RECOMMENDED THAT A MINIMUM SLOPE OF 6 INCHES IN THE FIRST 10 FEET IN UNPAVED AREAS, AND A MINIMUM SLOPE OF 2% IN PAVED AREAS BE PROVIDED AWAY FROM THE STRUCTURE. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO FOUNDATION INSTALLATION.

BUILDER SHALL PROVIDE PROPER COMPACTION OF ALL EXCAVATED & TRENCHED AREAS AT TIME OF BACKFILL.

EARTHWORK AND FOUNDATION NOTES

FIELD LOCATE ALL UTILITIES BEFORE ANY CONSTRUCTION ACTIVITY.

CONTRACTOR SHALL ALSO LOCATE THE WATER SUPPLY LINE AND SEPTIC DRAIN WHEN APPROPRIATE.

FOUNDATION WALLS SHALL EXTEND A MIN OF 4" ABOVE FINISHED GRADE WHERE MASONRY VENEER IS USED AND 6" ELSEWHERE.

BACKFILL SHALL NOT BE PLACE AGAINST THE FOUNDATION WALL UNTIL THE WALL HAS SUFFICIENT STRENGTH OR BRACED TO PREVENT DAMAGE FROM BACKFILLING. BRACING IS NOT REQUIRED IF WALL IS LESS THAN 4 FEET TALL.

NOTIFY SOILS ENGINEER WHEN EXCAVATION IS COMPLETE SO THAT THAT CONDITIONS MAY BE INSPECTED PRIOR TO PLACEMENT OF FOOTERS.

REINFORCING STEEL

STEEL REINFORCING BARS SHALL BE GRADE 420 DEFORMED BARS (ASTM SPEC, GRADE 60) FREE FROM MUD, OIL, RUST OR ANY ITEMS THAT MAY REDUCE BONDING. MINIMUM CONCRETE COVER ON TIES, STIRRUPS AND MAIN BARS SHALL BE 1" NOT EXPOSED TO EARTH OR WEATHER, 2" FOR FORMED SURFACES EXPOSED TO WEATHER OR IN CONTACT WITH GROUND, AND 3" FOR UNFORMED SURFACES DEPOSITED AGAINST THE GROUND UNLESS OTHERWISE NOTED.

ANCHOR BOLTS SHALL BE A MIN OF ½" DIAMETER X 10" LONG @ 24" ON CENTER, WITHIN 12" OF ALL CORNERS.

ALL REINFORCEMENT SHALL BE ACCURATELY PLACED AND SUPPORTED BEFORE CONCRETE IS PLACED AND SHALL BE SECURED AGAINST DISPLACEMENT. REINFORCING IN CONCRETE PLACED AGAINST EARTH IS TO BE SUPPORTED WITH APPROVED NON-METALLIC CHAIRS OR ANOTHER METHOD APPROVED BY ENGINEER. ALL REINFORCEMENT IS TO BE INSPECTED BY THE BUILDING DEPARTMENT AND DESIGN ENGINEER AS REQUIRED BY THE JURISDICTION PRIOR TO CONCRETE PLACEMENT.

CONCRETE FLATWORK SHALL BE A MINIMUM OF 4" THICK WITH 6X6 W2.2 / W2.1W.W.F. SHEETS UNLESS OTHERWISE NOTED. W.W.F. SHALL LAP 6" AND BE PLACED UPON 2" CHAIRS WITHIN THE FORMS. REINFORCING INSIDE CORNERS WITH 4 FOOT LENGTHS OF #3 REBAR LAID DIAGONALLY TO MINIMIZE CRACKING.

METALS

ALL STEEL SHALL CONFORM TO THE FOLLOWING: BEAMS: A992

ANGLES & MISCELLANEOUS: ASTM A36

BOLTS: ASTM 307

TUBE COLUMNS: ASTM A500, GRADE B 46KSI

FITTED WEB STIFFENERS SHALL BE 3/8" PLATES WELDED CONTINUOUS ON EACH SIDE OF STEEL BEAM WEB UNDER POINT LOADS ABOVE AND AT POINTS OF SUPPORT.

MISCELLANEOUS CLIPS, ANCHORS AND CONNECTORS SHALL BE SIMPSON STRONG TIE OR APPROVED EQUAL, UNLESS OTHERWISE NOTED. PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

ALL STEEL SHALL BE FABRICATED AND ERECTED PER AISC STEEL CONSTRUCTION MANUAL.

WELDING SHALL BE DONE BY A QUALIFIED WELDERS WITH E70XX ELECTRODES.

ANCHOR BOLTS INSTALLED IN CONTACT WITH PRESSURE TREATED WOOD SHALL MEET THE MANUFACTURERS SPECIFICATIONS FOR CORROSION PROTECTION.

ALL STEEL BEAMS SHALL HAVE WOOD NAILER PLATES WITH Y2"Ø CARRIAGE BOLTS AT 36" GLUED, UNO. ALT: DRIVE PINS AT 24". UNLESS OTHERWISE NOTED.

CONCRETE

ALL CONCRETE FLATWORK SHALL DEVELOP 4500 PSI COMPRESSIVE STRENGTH AT 28 DAYS, HAVE A MINIMUM OF 6 - 94 POUND SACKS OF CEMENT PER CUBIC YARD, A MAXIMUM WATER/CEMENT RATIO OF 0.53, AIR ENTRAINMENT BETWEEN 5.5% AND 6.5% AND A SLUMP OF 5". SUBSTITUTE MIXES CONTAINING FLY ASK ARE ACCEPTABLE AS LONG AS THEY MEET THE 4500 PSI STRENGTH.

SAW CUT OR TOOLED CONTROL JOINTS ¼ THE SLAB THICKNESS SHALL BE PLACED AT A MAXIMUM SPACING OF 2 TO 3 TIMES - IN FEET - THE THICKNESS OF THE SLAB EACH WAY UNLESS THE SOIL REPORT INDICATES A TIGHTER SPACING.

APPLICATION OF SPRAY MEMBRANE CURING COMPOUND AT A RATE OF NO MORE THAN 200 SQUARE FEET PER GALLON AFTER FINISHING IS STRONGLY RECOMMENDED.

PROVIDE ½" WIDE ISOLATION JOINTS BETWEEN SLAB AND FOUNDATION WALLS.

CENTER ALL FOOTINGS UNDER WALL OR COLUMNS UNLESS OTHERWISE NOTED.

ALL FOUNDATION WALLS SHALL HAVE A ¾" CHAMFER ON EXTERIOR EDGE.

ALL REINFORCING SHALL CONFORM TO ASTM A615-73 AND SHALL BE GRADE PER PLANS. ALL REINFORCING SHAL BE COLD BENT UNLESS OTHERWISE APPROVED BY THE ENGINEER.

PROVIDE CONCRETE INCASED ELECTRODE (UFER GROUND) COORDINATE LOCATION WITH YAMPA VALLEY ELECTRIC AND WITH ELECTRICAL CONTRACTOR.

CONCRETE SHALL BE THORLEY VIBRATED INTO ALL AREAS OF THE FOUNDATION WALLS AND CORNERS.

FRAMING NOTES

ALL DIMENSION ARE TO ROUGH FRAME OR CONCRETE FACE UNLESS NOTED OTHERWISE.

ALL GENERAL LUMBER SHALL BE HEM-FIR GRADE NO. 2 OR BETTER, WITH A BASE MINIMUM ALLOWABLE EXTREME FIBER BENDING STRESS FOR MEMBERS (Fb) OF 850 PSI EXCLUDING ADJUSTMENT FACTORS FOR USE, SIZE, LOAD, DURATION, ENVIRONMENT, ETC., UNLESS OTHERWISE NOTED.

STUDS SHALL BE STANDARD GRADE OR BETTER. DIMENSION LUMBER SHALL BE MARKED WITH A GRADE STAMP. ALL LUMBER IN CONTACT WITH CONCRETE SHALL BE ACQ TREATED TO 0.40 PCF.

ALL DOUG-FIR LUMBER SHALL BE GRADE NO. 2 OR BETTER, WITH A BASE MINIMUM ALLOWABLE EXTREME FIBER BENDING STRESS FOR MEMBERS (Fb) OF 900 PSI EXCLUDING ADJUSTMENT FACTORS FOR USE, SIZE, LOAD, DURATION, ENVIRONMENT, ETC., UNLESS OTHERWISE NOTED.

GLUE LAMINATED BEAMS (GL) SHALL BE STRESS RATED TO A COMBINATION SYMBOL 24 F-V4 FOR SIMPLE SPANS AND 24 F-V8 FOR MULTI SPANS AND CANTILEVERS. EXPOSED GL NOT PROTECTED FROM THE ELEMENTS MUST CONFORM TO (IRC R317.1.5)

LVL BEAMS SHALL BE MICRO-LAMS AS MANUFACTURED BY TRUSS JOIST CORP OR EQUAL WITH Fb 2600 PSI, Fv 285 PSI, E 1900 KSI TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.

FLOOR JOIST SHALL BE TJI'S AS MANUFACTURED BY TRUSS JOIST CORP. OR APPROVED EQUALS INSTALLED PER MANUFACTURER'S SPECIFICATIONS. SEE MANUFACTURER'S MANUAL FOR REQUIRED BLOCKING, FILLERS AND NAILING REQUIREMENTS. INSTALL DOUBLE FLOOR JOISTS UNDER WALLS PARALLEL TO JOIST DIRECTION WHERE NOTED.

WOOD STRUCTURAL MEMBERS SHALL NOT BE CUT, BORED, OR NOTCHED, EXCEPT AS PERMITTED BY I.R.C. R502.8, R602.6, AND R802.7.

FLOOR ASSEMBLIES SHALL BE PROVIDED WITH A 1/2-INCH GYPSUM WALLBOARD MEMBRANE, 5/8-INCH WOOD STRUCTURAL PANEL MEMBRANE, OR EQUIVALENT ON THE UNDER UNDERSIDE OF THE FLOOR FRAMING MEMBER UNLESS LOCATED OVER A SPACE PROTECTED BY AUTOMATIC SPRINKLER SYSTEM PER SECTION P2904, NFPA 13D, OR OVER CRAWL SPACE NOT INTENDED FOR STORAGE OR FUEL FIRED APPLIANCES OR USING MINIMUM 2X10 DIMENSION LUMBER PER SECTION R302.13, 2015 I.R.C. UP TO 80 SQUARE FEET AGGREGATE AREA PER STORY MAY BE UNPROTECTED IF SEPARATED FROM THE ASSEMBLY WITH FIRE BLOCKING PER SECTION R302.11.1, 2015 I.R.C.

ALL MULTI-PLY BEAMS SHALL BE GLUED, NAILED AND/OR BOLTED AS PER MANUFACTURER'S RECOMMENDATIONS OR AS NOTED ON PLANS. FOR 2-PLY SAWN LUMBER, USE (2) ROWS OF 10D NAILS @ 16" OC. USE 16D NAILING BOTH SIDES ON ANYTHING GREATER THAT 2 PLYS.

THE NUMBER OF JACK AND KING STUDS INSTALLED ON EACH SIDE OF A HEADER SHALL COMPLY WITH TABLE R602.7. KING, JACK, AND CRIPPLE STUDS SHALL BE OF THE SAME DIMENSION AND THICKNESS AS THE ADJACENT WALLS STUDS. HEADERS SHALL BE CONNECTED TO THE KING STUDS IN ACCORDANCE WITH TABLE R602.3.

CARRY ALL POINT LOADS CONTINUOUS TO THICKENED SLAB, CONCRETE PAD, OR FOOTING FOUNDATION DESIGNED TO CARRY LOADS. PROVIDE "SOLID STUDS" OR 2 MINIMUM GANGED STUDS IN WALLS AT BEAM BEARINGS AS SHOWN, CONTINUOUS THROUGH SOLID BLOCKING IN FLOORS.

ALL EXTERIOR WALLS ARE 2X6 WOOD STUDS AT 24" ON CENTER UNLESS OTHERWISE NOTED ON THE PLANS. ALL EXTERIOR WALLS TO BE PLATFORM FRAMED TO BOTTOM OF JOIST, RAFTERS OR TRUSS WITH DOUBLE TOP PLATE AND SINGLE BOTTOM PLATE. WALLS OVER 10' UNSUPPORTED HEIGHT SHALL HAVE MIDSPAN BLOCKING. WALLS OVER 14' UNSUPPORTED HEIGHT SHALL BE 2X6 AT 24" ON CENTER WITH LVL KING STUDS AT HEADERS.

ALL INTERIOR WALLS ARE 2X4 WOOD OR METAL STUDS AT 24" ON CENTER UNLESS OTHERWISE NOTED ON PLANS. INTERIOR BEARING WALLS TO BE FRAMED WITH DOUBLE TOP PLATE AND SINGLE BOTTOM PLATE.

RECOMMEND USING LSL STUDS AT ALL WALL WHERE CABINETRY WILL BE INSTALLED. INSTALL BACKING/BLOCKING AT ALL LOCATIONS NECESSARY FOR MOUNTING CABINETS, SHELVING, HARDWARE, GRAB BARS, ETC. INCLUDING KITCHEN, BATHROOMS, CLOSETS, ETC.

ALL BEARING WALLS WITH OPENINGS (DOORS, WINDOWS, ETC) SHALL HAVE (2) 2X10 IF NOT CALLED OUT ON THE PLANS. PROVIDE A MINIMUM (1) 2X POST UNDER HEADERS LESS THAN 5' AND A MINIMUM (2) 2X POSTS UNDER HEADER GREATER THAN 5'. REFERENCE STRUCTURAL PLANS FOR ALL OTHER SPECIALIZED POST SIZES AND OR 2X QUANTITIES UNDER HEADERS AND BEAMS.

16" ON CENTER FRAMED FLOORS SHALL BE ¾" T&G, APA RATED 48/24 GLUED AND NAILED. USE CONSTRUCTION ADHESIVE MEETING ASTM D 3498 (AFG-01) WITH MINIMUM DRY STRENGTH OF 350 PSI. AREAS RECEIVING TILE SHALL HAVE AN ADDITIONAL CEMENTOUS BACKER UNIT UNDERLAYMENT FASTENED OVER THE SHEATHING PER TCA F151.

WALL SHEATHING SHALL BE ZIP SYSTEMS R-SHEATHING (INSULATING SHEATHING) R-6 PANELS. CLOSELY FOLLOW NAILING PATTERNS NOTED TO MEET 2015 I.R.C. CODE FOR WALL BRACING AND SHEARWALL PANELS.. SEE TABLE-1 AND TABLE-2 ATTACHED TO PLANS. PROVIDE FULL SHEATHING AT ALL LEVELS UNLESS OTHERWISE NOTED FOR SWAY BRACING PER SECTION R602.10, 2015 I.R.C. ALL EXTERIOR WALL SHEATHING SHOULD SPAN OVER FLOOR SYSTEM TO WALL ABOVE OR BELOW WHERE POSSIBLE WITH HORIZONTAL BLOCKING AT SEAMS AS NOTED.

ROOF SHEATHING SHALL BE 15/32" O.S.B. APA RATED SHEATHING EXP1, 32/16 PLACED WITH 8' DIMENSIONS PERPENDICULAR TO THE JOIST, RAFTER OR TRUSS ENDS AND EDGES. COVER ROOF AS SOON AS POSSIBLE WITH UNDERLAYMENT FOR PROTECTION AGAINST EXCESSIVE MOISTURE.

PROVIDE IRC APPROVED JOIST HANGERS AT ALL "FLUSH FRAME" CONDITIONS AND AS DEPICTED ON FRAMING PLANS. PROVIDE ANY OTHER POST BASES, MULTIPLE JOIST HANGERS, AND BEAM CONNECTORS AS REQUIRED. INSTALL WITH NUMBER AND TYPE OF NAILS RECOMMENDED BY MANUFACTURER.

FIRE BLOCKS ARE REQUIRED WITHIN STUD WALLS HORIZONTALLY AND VERTICALLY AT 10' INTERVALS AND AT THE FLOOR AND CEILING. FIRE BLOCKING IS ALSO REQUIRED AT FLOOR AND CEILING PENETRATIONS AROUND VENTS, PIPES, DUCTS, CABLES, WIRES, ETC., THE INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES (SOFFITS), BETWEEN STAIRS STRINGERS AT THE TOP AND BOTTOM OF RUN, AND THE SPACES BETWEEN CHIMNEY CHASES AND FLOORS, CEILINGS, AND ATTIC SPACES. FIRE BLOCK MATERIAL MAY BE 2" NOMINAL LUMBER, ½" GYPSUM BOARD, OR ANY OTHER APPROVED METHOD PER SECTION R302.11.1 I.R.C.

FRAMER RESPONSIBLE FOR REQUIRED PLUMBING AND HEATING, RUNS AND CHASES.

REQUIRED MINIMUM NAILING SCHEDULE: (SEE I.R.C. TABLE R602.3(1))
NAILS SHALL BE COMMON AND COMPLY WITH ASTM F 1667
(8D COMMON 2.5" X 0.131", 10D COMMON 3" X0.148", 16D COMMON 3" X 0.162")

STUD TO PLATES	TOENAIL 4-8D OR END NAIL 2-16D.
ROOF BLOCKING	TOENAIL 3-8D.
DOUBLE TOP PLATES	FACE NAIL 1-10D STAGGERED 16" OC.
DOUBLE TOP PLATES LAP SPLICE	FACE NAIL 8 16D IN 24" LAPPED AREA
DOUBLE STUDS	FACE NAIL 2-10D 24" OC.
CORNER STUDS AND ANGLES	1-16D COMMON 24" OC.
RIM JOIST TO SILL	TOENAIL 1-10D 6" OC.
BRIDGING TO JOIST	TOENAIL 2-8D AT EACH END
SHEATHING TO RAFTERS/TRUSSES	FACE NAIL 8D 12" OC FIELD, 6" EDGE
SHEATHING TO STUDS	FACE NAIL 8D 12" OC FIELD, 6" ON EDGE
ZIP SYSTEM R-SHEATHING R-6 PANELS	SEE TABLE-1 AND TABLE-2

NAILS OR OTHER APPROVED SHEATHING CONNECTORS SHALL BE DRIVEN FLUSH BUT SHALL NOT BREAK THE SURFACE OF THE SHEATHING.

DRAWING # 20-03
REVISED:
PAGE # S-2

Vanatta

JOB NOTES

1/4" = 1'
DATE: 8/17/20
DRAWN BY: GCH

Lot 80, Filing 4, The Sanctuary
3070 Aspenwood Lane, Steamboat Springs 80487

GRAHAM CUSTOM HOMES
DESIGN
PO BOX 776338
STEAMBOAT SPRINGS CO 80477
970-846-5552

ROOF NOTES

ALL TRUSSES TO BE PRE-ENGINEERED BY TRUSS MANUFACTURE TO INCORPORATE ALL LOADING AS SPECIFIED IN GENERAL FRAMING NOTES AS WELL AS ANY ADDITIONAL LOADS AS MAY BE REQUIRED BY CODE AND SPECIFIC POINT LOADS AS SHOWN ON DRAWINGS.

ROOF FRAMING SHALL BE PER THE ROOF FRAMING PLAN. THE ROOF LAYOUT IN THIS DRAWING PORTRAYS DESIGN INTENT ONLY. REFER TO TRUSS DRAWINGS BY TRUSS MANUFACTURER FOR ACTUAL CONSTRUCTION.

WOOD ROOF TRUSSES SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF COLORADO. CALCULATED LIVE LOAD DEFLECTIONS OF TRUSSES SHALL NOT EXCEED 1/360TH OF THE SPAN LENGTH. SHOP DRAWINGS AND CALCULATIONS BEARING THE SEAL AND SIGNATURE OF THE DESIGN ENGINEER SHALL BE SUBMITTED FOR REVIEW BY THE STRUCTURAL ENGINEER. THESE SHOP DRAWINGS SHALL SHOW THE LOCATIONS OF ALL TRUSSES, CONNECTION PLATE SIZE AND CAPACITY, AND THE SIZE AND GRADE OF LUMBER TO BE USED. SHOP DRAWING REVIEW BY THE STRUCTURAL ENGINEER OR BUILDER SHALL BE COMPLETED PRIOR TO TRUSS FABRICATION. TRUSS MANUFACTURER SHALL PROVIDE BLOCKING AT BEARING LOCATIONS, BRIDGING AS REQUIRED FOR TRUSS STABILITY AND AT ALL TRUSS AND GIRDER HANGERS. STRESS INCREASES ARE NOT ALLOWED.

ALL TRUSSES SHALL HAVE A MINIMUM HEAL HEIGHT OF 14" UNLESS OTHERWISE NOTED.

ROOF TRUSS ENGINEERING AND VERIFICATION OF DIMENSIONS/PLATE HEIGHTS WILL BE THE RESPONSIBILITY OF THE SUPPLIER AND BUILDER. PROVIDE SOLID BLOCKING BETWEEN TRUSSES AT BEARING POINTS FOR LATERAL SUPPORT, TO PREVENT ROTATION AND LATERAL DISPLACEMENT.

ATTACH ALL RAFTERS / TRUSSES TO TOP PLATE WITH A MINIMUM OF (2) 10D TOE NAILS AT EACH BEARING POINT. PROVIDE SIMPSON H2.5A HURRICANE OR EQUAL ANCHORS AND REQUIRED BLOCKING AT ALL RAFTER / TRUSS BEARING UNLESS OTHERWISE NOTED.

COMPOSITE ASPHALT SHINGLE ROOF INSTALLED AS PER MANUFACTURERS SPECIFICATIONS OVER ONE (1) LAYER OF SYNTHETIC UNDERLAYMENT (PERM RATING GREATER THAN 0.5) OVER APA RATED SHEATHING. PROVIDE ICE & WATER SHIELD AS REQUIRED AT EDGE OF ROOF 24" INTO INTERIOR FROM EXTERIOR WALL AND AT ALL VALLEYS.

CONTRACTOR SHALL COMPLY WITH MANUFACTURER'S INSTALLATION REQUIREMENTS RECOMMENDATIONS FOR SHINGLE ROOFING MATERIALS REGARDING NAILING PATTERNS AND NAIL PENETRATION.

FLOOR PLAN NOTES

SAFETY GLAZING SHALL BE PROVIDED IN ALL FIXED AND OPERABLE PANELS OF SWINGING. SLIDING AND BIFOLD DOORS AS PER SECTION R308.4.1. 2015 I.R.C.

SAFETY GLAZING SHALL BE PROVIDED IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60" ABOVE THE FLOOR OR WALKING SURFACE AS PER SECTION R308.4.2, 2015 I.R.C.

SAFETY GLAZING SHALL BE PROVIDED IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT HAS AN EXPOSED AREA OF AN INDIVIDUAL PANE LARGER THAN 9 S.F. AND WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR, AND WHOSE TOP EDGE IS GREATER THAN 36" ABOVE THE FLOOR AND WITHIN 36" HORIZONTALLY OF ONE OR MORE WALKING SURFACES MUST BE SAFETY GLASS AS PER SECTION R308.4.3, 2015 I.R.C.

SAFETY GLAZING SHALL BE PROVIDED IN RAILINGS REGARDLESS OF AREA OR HEIGHT ABOVE A WALKING SURFACE AS PER SECTION R308.4.4, 2015 I.R.C.

SAFETY GLAZING SHALL BE PROVIDED FOR FENCES, ENCLOSURES FOR AND WALLS ADJACENT TO WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS WHERE THE
BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE AND STANDING OR WALKING SURFACE AS PER SECTION R308.4.5, 2015 I.R.C.

SAFETY GLAZING SHALL BE PROVIDED ADJACENT TO STAIRWAYS, LANDINGS, AND RAMPS WITHIN 36" HORIZONTALLY OF THE WALKING SURFACE WHEN THE EXPOSED SURFACE OF THE GLAZING IS LESS THAN 36" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE AS PER SECTION R308.4.6 2015 I.R.C.

INSTALL GYPSUM WALL BOARD, CEMENT, FIBER-CEMENT, AND GLASS MAT GYPSUM BACKERS PER R702.3 THROUGH R702.4.2, 2015 I.R.C.

PROVIDE A MECHANICALLY OPERATED EXHAUST SYSTEM TO THE EXTERIOR (50 CFM INTERMITTENT OR 20 CFM CONTINUOUS) IN ALL BATHROOMS, WATER CLOSET COMPARTMENTS, AND SIMILAR ROOMS WHOSE OPERABLE EXTERIOR OPENINGS ARE ONE HALF OF 3 SQ. FT. PER SECTION R303.3, 2015 I.R.C.

TOILETS SHOULD BE 1.28 GALLONS PER FLUSH AND SHOWER HEADS SHOULD BE 2.5 GPM.

FIRE-RATED GYPSUM BOARD SHALL BE APPLIED AT ALL NECESSARY LOCATIONS TO COMPLY WITH SECTION R302 I.R.C. AND LOCAL BUILDING CODES.

DWELLING TO ATTACHED GARAGE OPENING AND PENETRATION PROTECTION SHALL COMPLY WITH SECTION R302.5 I.R.C.

ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE 1/2" GYPSUM BOARD ON WALLS, UNDER STAIR SURFACE AND SOFFITS PER SECTION R302.7, 2015 I.R.C.

BASEMENTS, HABITABLE ATTICS, AND EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPENABLE EMERGENCY ESCAPE AND RESCUE OPENING WITH A SILL HEIGHT OF NOT MORE THAN 44" (MEASURED FROM THE FINISHED FLOOR TO THE BOTTOM OF THE CLEAR OPENING), A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET, A MINIMUM OPENING HEIGHT OF 24". AND A MINIMUM OPENING WIDTH OF 20" PER SECTION R310, 2015 I.R.C.

STAIRS AND STAIR RAILINGS SHALL COMPLY WITH SECTION R311, 2015 I.R.C. ALL HANDRAILS AND GUARDRAILS SHALL BE 34" TO 38" ABOVE THE FLOOR. ALL BALUSTERS SHALL NOT ALLOW PASSAGE OF A SPHERE 4" (4 3/8" ON OPEN SIDE OF STAIRS) OR GREATER IN DIAMETER.

THERE SHALL BE A FLOOR OR LANDING ON EACH SIDE OF EXTERIOR DOOR. LANDINGS OR FINISHED FLOORS SHALL NOT BE MORE THAN 1.5" LOWER THAN THE TOP OF THE THRESHOLD EXCEPT ON THE EXTERIOR SIDE SHALL NOT BE MORE THAN 7 ¾" LOWER THAN THE TOP OF THE THRESHOLD PER SECTION R311, 2015 I.R.C.

OPENINGS FROM THE GARAGE INTO THE DWELLING SHALL HAVE A 1 3/8" THICK SOLID WOOD DOOR, 1 3/8" SOLID OR HONEYCOMBED-CORE STEEL DOOR, OR 20-MINUTE FIRE-RATED DOOR EQUIPPED WITH A SELF CLOSING DEVICE. OPENINGS SHALL NOT OPEN DIRECTLY INTO A ROOM USED FOR SLEEPING.

CEILING HEIGHTS FOR HABITABLE SPACES, HALLWAYS, BATHROOMS, TOILET ROOMS, LAUNDRY ROOMS, AND PORTIONS OF BASEMENTS CONTAINING THESE SPACES SHALL BE AT LEAST 7 FEET MEASURED FROM THE FINISHED FLOOR TO THE LOWEST PROJECTION OF THE CEILING. PORTIONS OF BASEMENTS CONTAINING NON-HABITABLE SPACE MAY HAVE A CEILING HEIGHT OF 6 FEET-8 INCHES WITH CLEARANCE BELOW BEAMS AND DUCTS OF 6 FEET-4 INCHES.
BATHROOMS MUST HAVE A CEILING HEIGHT OF 6 FEET-8 INCHES AT THE FIXTURE FRONT CLEARANCE AREA AND OVER THE FIXTURE PER SECTION R305.1, 2015 I.R.C.

ALL DIMENSIONS ARE TO FACE OF STRUCTURE AND ROUGH OPENINGS.

ELECTRICAL NOTES

INSTALL ALL ELECTRICAL PER THE 2014 NEC.

All 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING RECEPTACLES IN BATH ROOM(S), GARAGE(S), OUTDOORS, CRAWL SPACES, UNFINISHED BASEMENT(S), KITCHEN(S) FOR COUNTER SERVICE, WITHIN 6' OF ANY SINK, LAUNDRY AREAS, AND UTILITY AREAS SHALL BE GFCI PROTECTED PER 210.8(A) THROUGH (D), 2014 NEC.

ALL 125-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING RECEPTACLES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT CIRCUIT INTERRUPTER, COMBINATION-TYPE INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT PER 210.12(A)(1) THROUGH (6), 2014 NEC.

IN EACH ATTACHED AND DETACHED GARAGE WITH ELECTRIC POWER, AT LEAST ONE RECEPTACLE SHALL BE INSTALLED FOR EACH CAR SPACE. THIS BRANCH CIRCUIT SHALL NOT SUPPLY OUTLETS OUTSIDE THE GARAGE PER 210.52(1), 2014 N.E.C. ALL RECEPTACLES IN GARAGES SHALL BE A MINIMUM 18" ABOVE THE FLOOR.

UL 217 LISTED AND LABELED SMOKE DETECTORS SHALL BE LOCATED IN EACH SLEEPING ROOM, OUTSIDE EACH SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS, ON EACH STORY OF THE DWELLING INCLUDING BASEMENTS, BUT NOT INCLUDING CRAWL SPACES OR UNINHABITABLE ATTICS AND INTERCONNECTED WITH BATTERY BACK UP PER NFPA 72 AND SECTION R314, 2015 I.R.C.

UL 2034 LISTED AND LABELED CARBON MONOXIDE ALARMS SHALL BE INSTALLED IN DWELLING UNITS WHEN THE DWELLING UNIT CONTAINS A FUEL-FIRED APPLIANCE OR HAS AN ATTACHED GARAGE WITH OPENING TO DWELLING UNIT PER SECTION R315, 2015 I.R.C. CARBON MONOXIDE DETECTORS SHALL BE INSTALLED OUTSIDE EACH SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. WHERE A FUEL-BURNING APPLIANCE IS LOCATED WITHIN A BEDROOM, OR ITS ATTACHED BATHROOM, A CARBON MONOXIDE ALARM SHALL BE INSTALLED WITHIN THE BEDROOM. UL LISTED 2075 CARBON MONOXIDE DETECTION SYSTEMS IN LIEU OF ALARMS ARE PERMITTED PER NFPA 720, AND SECTION R315.6, 2015 I.R.C.

MAIN ELECTRICAL PANEL TO BE VERIFIED AS SUFFICIENT FOR ADDITIONAL CIRCUITS BY ELECTRICIAN.

COLD WATER PIPING AND GROUND ROD GROUNDING ELECTRODES SHALL BE SHALL BE CONFIRMED AS PRESENT AND ADEQUATE BY ELECTRICIAN.

MECHANICAL NOTES

THE DWELLING SHALL BE PROVIDED WITH A WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IN ACCORDANCE WITH SECTION M1507.3 AND THE MECHANICAL VENTILATION SYSTEM FANS SHALL MEET THE EFFICIENCY REQUIREMENTS OF TABLE R403.6.1.M1503.4

MAKEUP AIR SYSTEM IS REQUIRED WHEN AN EXHAUST HOOD SYSTEM IS INSTALLED AND CAPABLE OF EXHAUSTING IN EXCESS OF 400 CFM.

NEW WOOD BURNING FIREPLACES SHALL HAVE TIGHT FITTING FLUE DAMPERS OR DOORS, AND OUTDOOR COMBUSTION AIR. WHERE USING TIGHT FITTING DOORS ON A FACTORY BUILT FIREPLACES LISTED AND LABLED IN ACCORDANCE WITH UL 127, THE DOORS SHALL BE TESTED AND LISTED FOR THE FIREPLACE. WHERE USING TIGHT FITTING DOORS ON MASONRY FIREPLACES, THE DOORS SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 907. PER IECC R402.4.2

FACTORY BUILT FIREPLACES SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTING. FACTORY BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127. PER IBC R1004.1

SECTION NOTES

THE FOLLOWING SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED, FOAM SEALED OR OTHERWISE SEALED WITH AN AIR BARRIER MATERIAL, SUITABLE FILM OR SOLID MATERIAL
PRIOR TO INSULATION:

- ALL JOINTS, SEAMS, AND PENETRATIONS IN FRAMING/BUILDING ENVELOPE
- SITE-BUILT WINDOWS, DOORS, SKYLIGHTS
- OPENINGS BETWEEN WINDOW AND DOOR ASSEMBLIES AND THEIR RESPECTIVE JAMS AND FRAMING
- UTILITY PENETRATIONS
- DROPPED CEILINGS OR CHASES ADJACENT TO THE THERMAL ENVELOPE
- KNEE WALLS
- WALLS AND CEILINGS OR CHASES SEPARATING THE GARAGES FROM CONDITIONED SPACES
- BEHIND TUBS AND SHOWERS ON EXTERIOR WALLS
- COMMON WALLS BETWEEN DWELLING UNITS
- ATTIC ACCESS OPENINGS
- RIM JOIST JUNCTIONS
- OTHER SOURCES OF INFILTRATION INCLUDING TOP PLATES, BOTTOM PLATES, STUDS, AND SHEATHING.

ALL EXTERIOR WALLS SHALL HAVE A MINIMUM OF R-20 INSULATION. ROOF/CEILING SHALL HAVE A MINIMUM OF R-49 INSULATION. WHERE THE AREA IS LESS THAN 500 SQ. FT. OR 20% OF TOTAL INSULATED AREA, THE INSULATION R-VALUE MAY BE REDUCED TO R-30. FLOORS OVER UNHEATED AREAS SHALL HAVE A MINIMUM OF R-30 INSULATION. THESE REQUIREMENTS ASSURE COMPLIANCE WITH THE INTERNATIONAL ENERGY CONSERVATION CODE. UNDER SLAB INSULATION SHALL COMPLY WITH ASTM C578.

ALL INTERIOR SPRAY FOAM TO BE 1.9 POUND DENSITY OR GREATER FREE RISE, CLOSED CELL MATERIAL WITH A VAPOR PERMEANCE EQUAL OR LESS THAN 0.8 PERM/IN AND A MINIMUM R VALUE OF 6.9 AGED PER INCH.

ALL EXTERIOR FRAMED RIMS SHALL HAVE A MINIMUM OF 3.0 INCHES, R-20 SPRAY FOAM INSULATION. PER SECTION R316.5.11 FOAM PLASTIC DOES NOT REQUIRE A THERMAL BARRIER AS LONG AS THE THICKNESS IS LESS THAN 3 ½", THE DENSITY IS BETWEEN 0.5 AND 2.0 PCF, AND THE FOAM PLASTIC SHALL HAVE A FLAME SPREAD INDEX OF 25 OR LESS, AND A SMOKE DEVELOPMENT INDEX OF 450 OR LESS WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723. THESE REQUIREMENTS ASSURE COMPLIANCE WITH THE INTERNATIONAL RESIDENTIAL CODE AND THE INTERNATIONAL ENERGY CONSERVATION CODE.

PROVIDE ADEQUATE ATTIC AND ENCLOSED RAFTER SPACE CROSS VENTILATION FOR EACH SEPARATE SPACE PER SECTION R806, 2015 I.R.C. PROTECT AGAINST THE ENTRANCE OF RAIN AND SNOW. VENTILATION OPENINGS SHALL BE 1/16" MIN AND ¼" MAX, OR BE PROVIDED WITH CORROSION RESISTANT WIRE MESH, 1/8" TO ¼" OPENINGS. MINIMUM NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED THOUGH MAY BE REDUCED TO 1/300 PER R806.2.

UNVENTED ATTIC ASSEMBLY (SPACE BETWEEN THE CEILING JOISTS AND THE TOP OF THE TOP STORY AND ROOF RAFTERS) SHALL BE PERMITTED PER SECTION R806.5, 2015 I.R.C.

ALL DUCTWORK OUTSIDE THE BUILDING ENVELOPE SHALL BE INSULATED TO A MINIMUM OF R-8 IN ATTICS, AND R-6 IN OTHER PORTIONS OF THE BUILDING PER SECTION N1103.3, 2015
I.R.C.
ALL DUCTWORK SHALL BE SEALED PER SECTION N1103.3.2 AND M1601.4.1, 2015 I.R.C. AS APPLICABLE AND VERIFIED AS SEALED PER SECTION N1103.3.3, 2015 I.R.C.

DRAWING # 20-03
REVISED:
PAGE # S-3

Vanatta

JOB NOTES

1/4" = 1'
DATE: 8/17/20
DRAWN BY: GCH

Lot 80, Filing 4, The Sanctuary
3070 Aspenwood Lane, Steamboat Springs 80487

GRAHAM CUSTOM HOMES
DESIGN

PO BOX 776338
STEAMBOAT SPRINGS CO 80477
970-846-5552

NORTH ELEVATION

WEST ELEVATION

GRAHAM CUSTOM HOMES
DESIGN
PO BOX 776338
STEAMBOAT SPRINGS CO 80477
970-846-5562

Vanatta
1/4" = 1'
DATE: 8/17/20
DRAWN BY: GCH
NORTH ELEVATION
WEST ELEVATION
Lot 80, Filing 4, The Sanctuary
3070 Aspenwood Lane, Steamboat Springs 80487
DRAWING # 20-03
REVISED:
PAGE # A-4

MAIN FLOOR PLAN

22'-6½" | 16'-11" | 24'-0"

EXERSIZE RM ADDITION

289 SF

GREAT ROOM

DINING

KITCHEN

ENTRY

BATH

STUDY

LAUNDRY

MUDROOM

UP

DOWN

STAIR FROM ABOVE

ADDITIONAL GARAGE SPACE 216SF

REMOVE EXISTING WALL

REMOVE EXISTING WALLS

EXISITING GARAGE

5'-0" | 7'-0" | 12'-0" | 3'-0"

ADDITIONAL GARAGE 216 SF
ADDITIONAL MAIN FLR. 289 SF
ADDITIONAL UPPER FLR 289 SF
ADDITIONAL FINISHED 578 SF

CO. REGISTERED 28255 PROFESSIONAL ENGINEER 8-26-20

DRAWING #	20-03
REVISED:	
PAGE #	A-5
Vanatta	MAIN FLOOR PLAN
1/4" = 1'	
DATE: 9/17/20	
DRAWN BY: GCH	
Lot 80, Filing 4, The Sanctuary	
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GRAHAM CUSTOM HOMES
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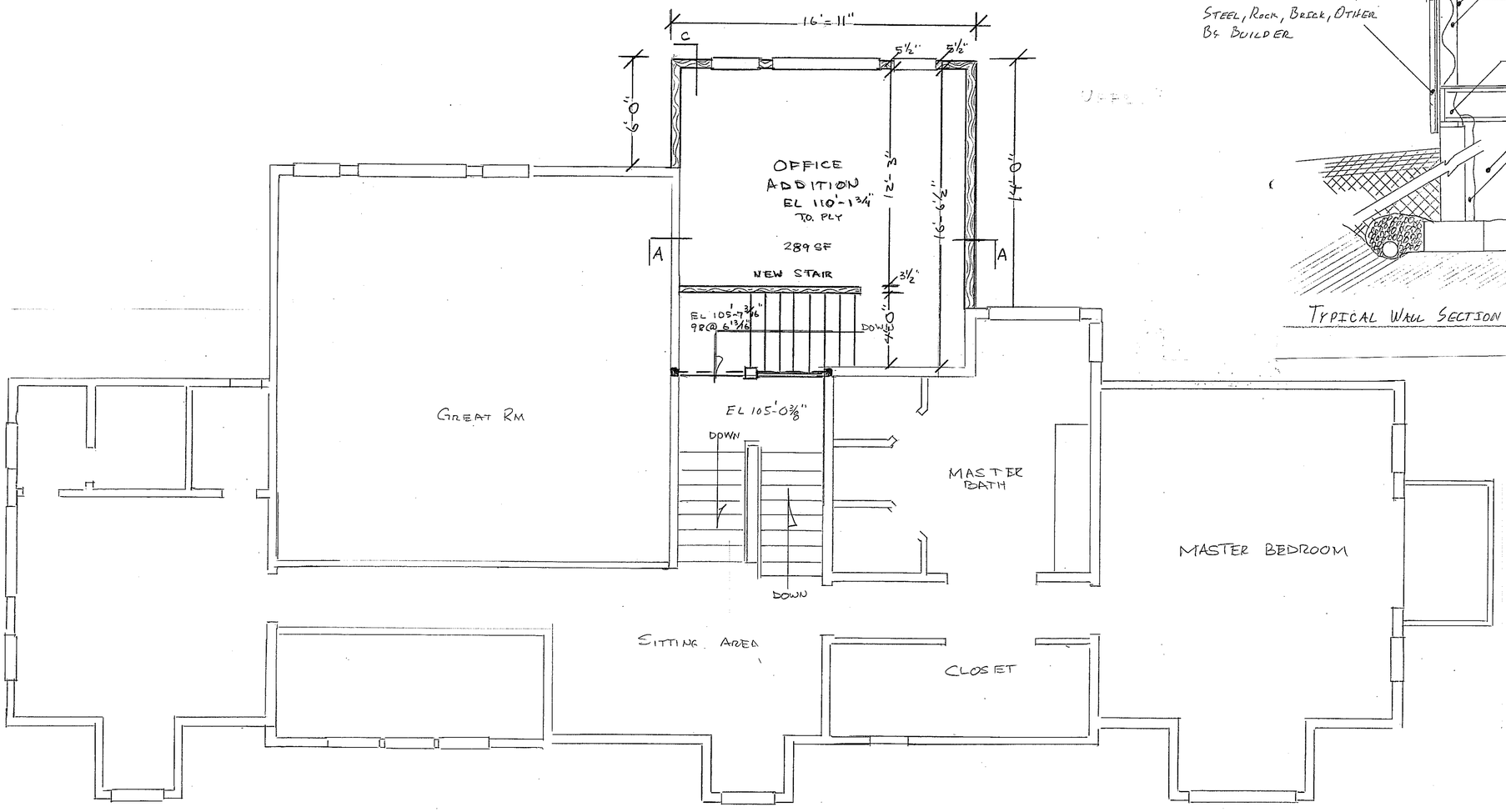

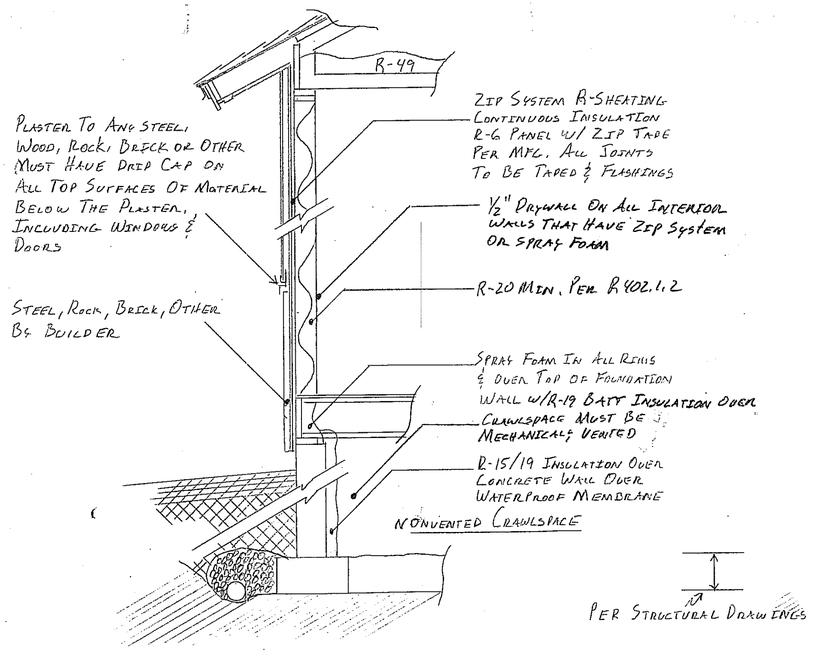

TYPICAL WALL SECTION W/NONVENTED-CRAWLSPACE

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PAGE # A-6

Vanatta

UPPER FLOOR PLAN

1/4" = 1'
DATE: 8/17/20
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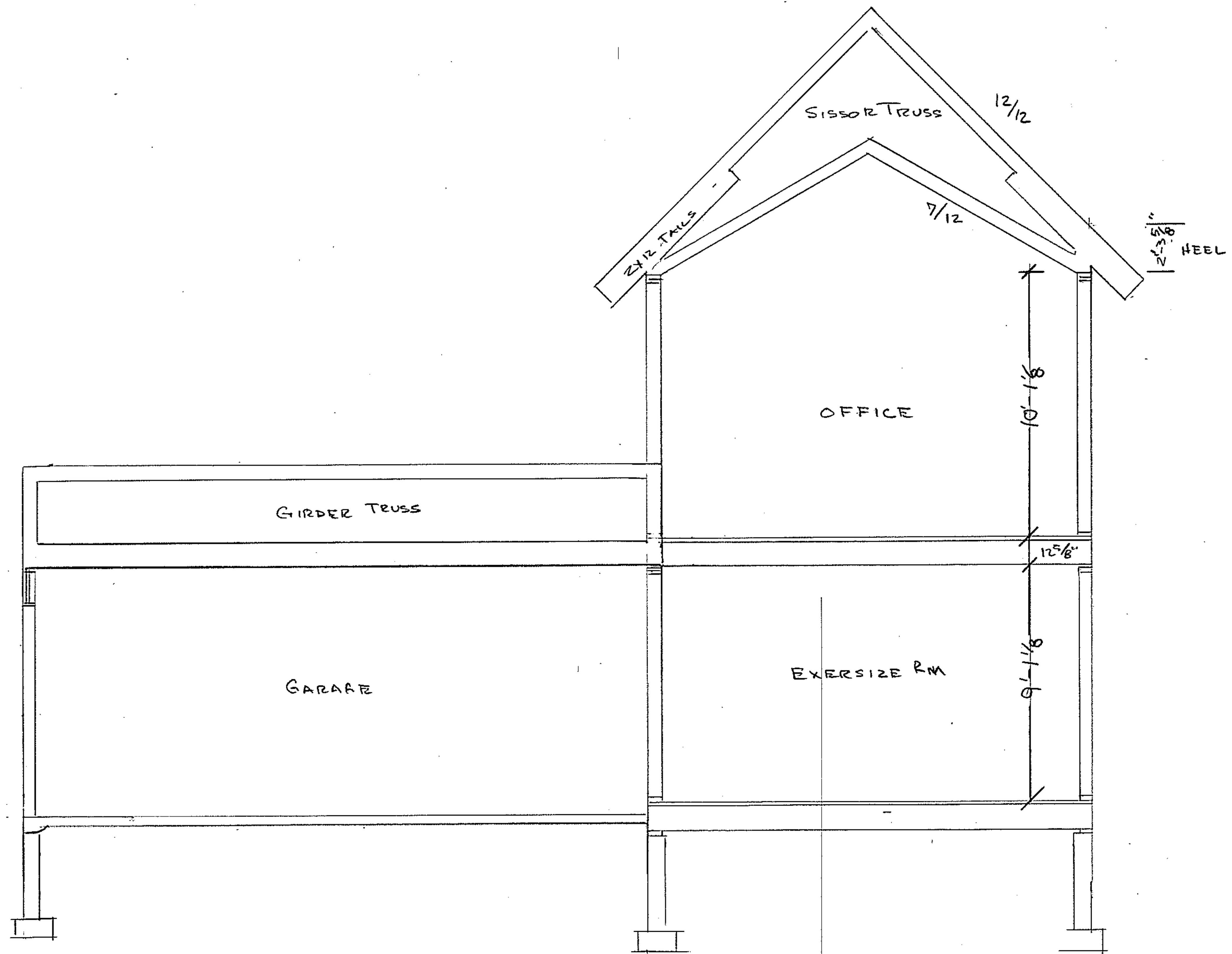
VANATTA 20-03



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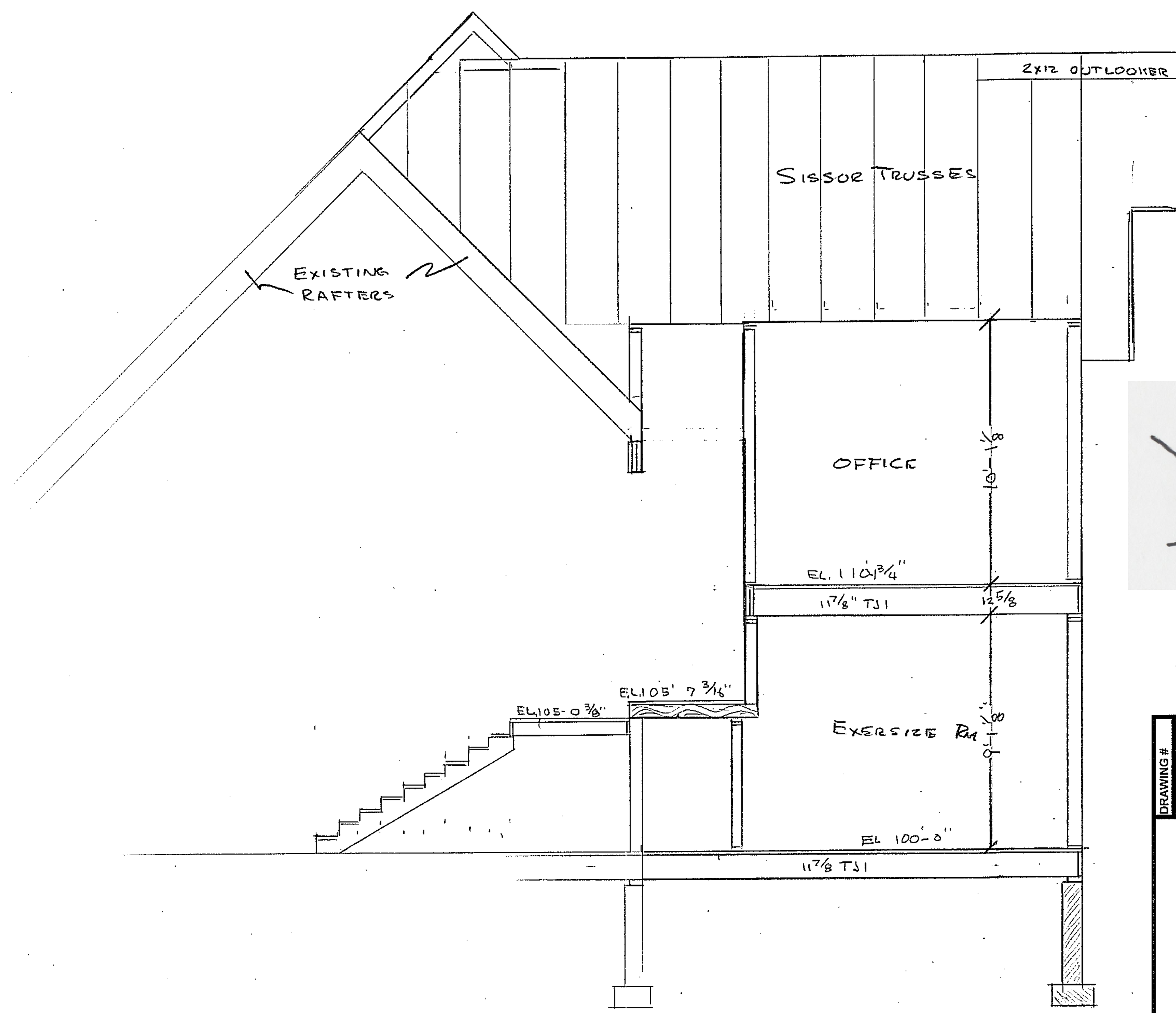
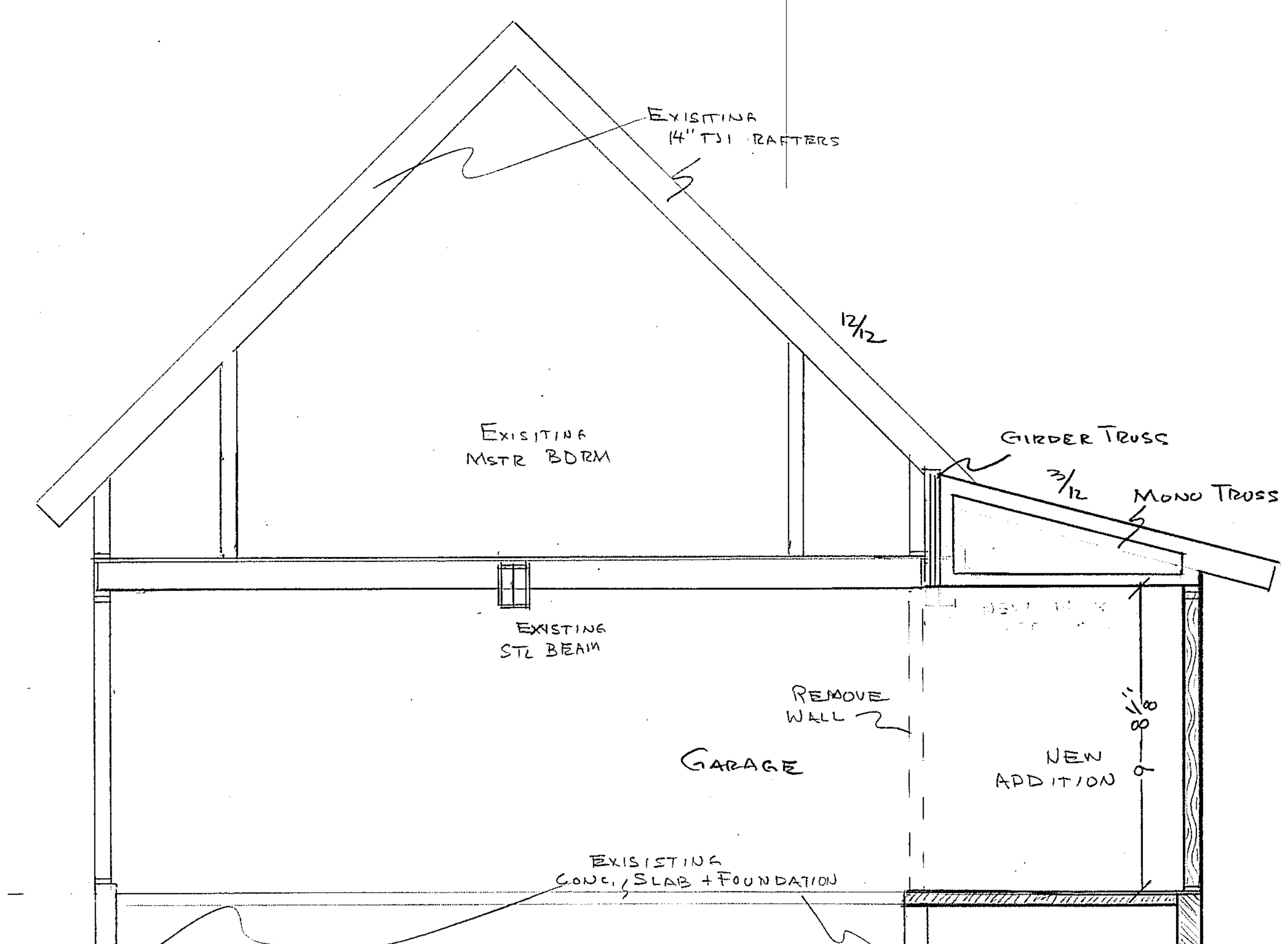
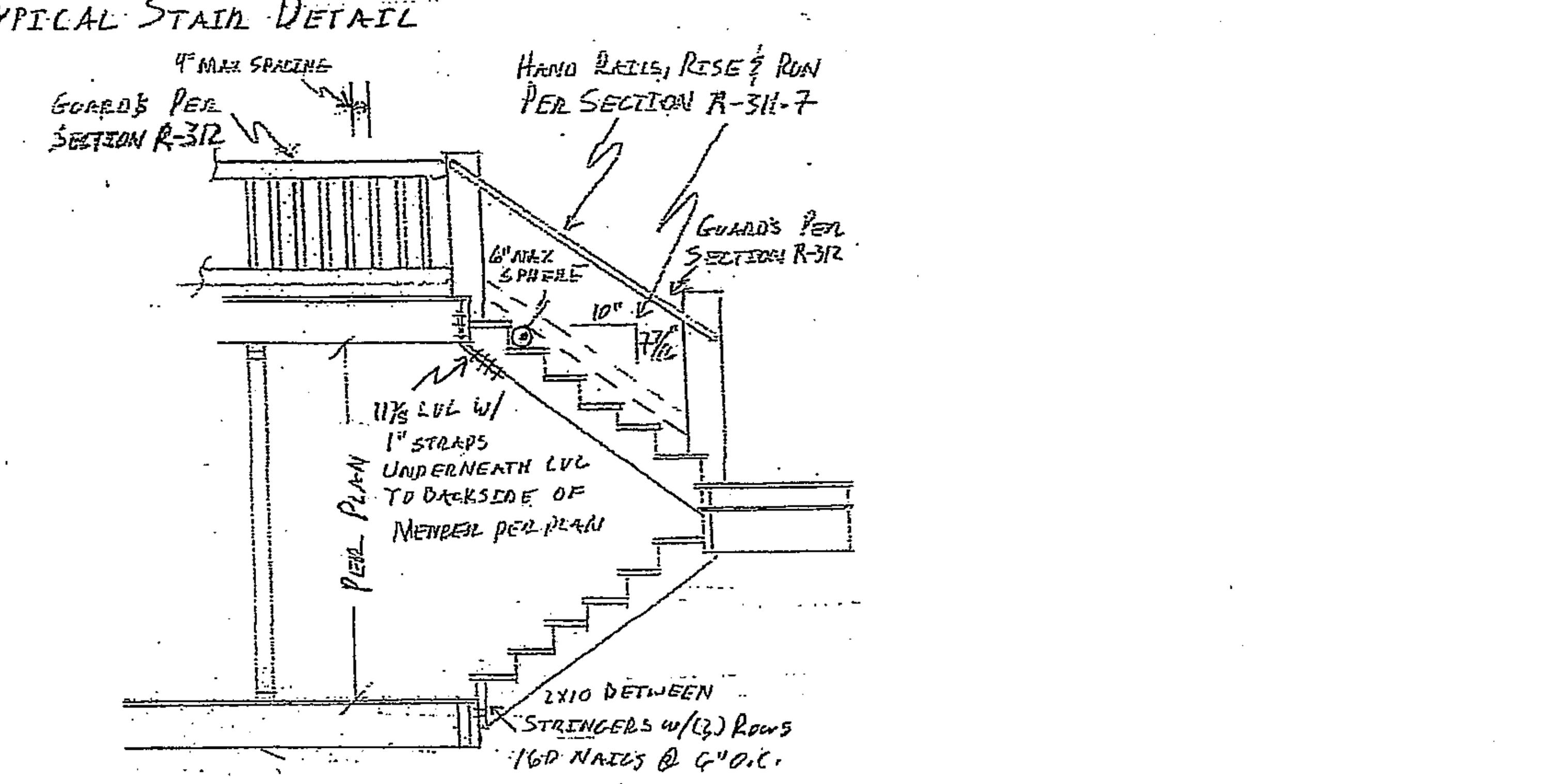


SECTION C



SECTION B

TYPICAL STAIR DETAIL



GRAHAM CUSTOM HOMES
DESIGN

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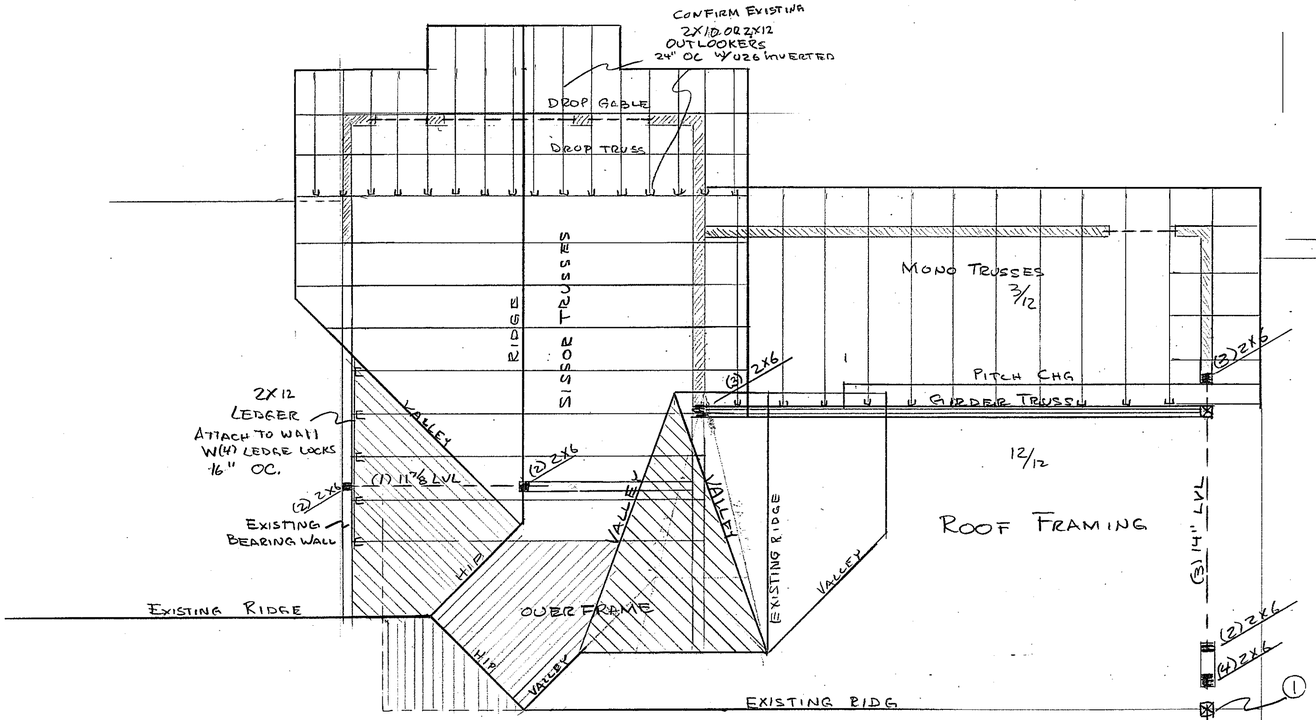
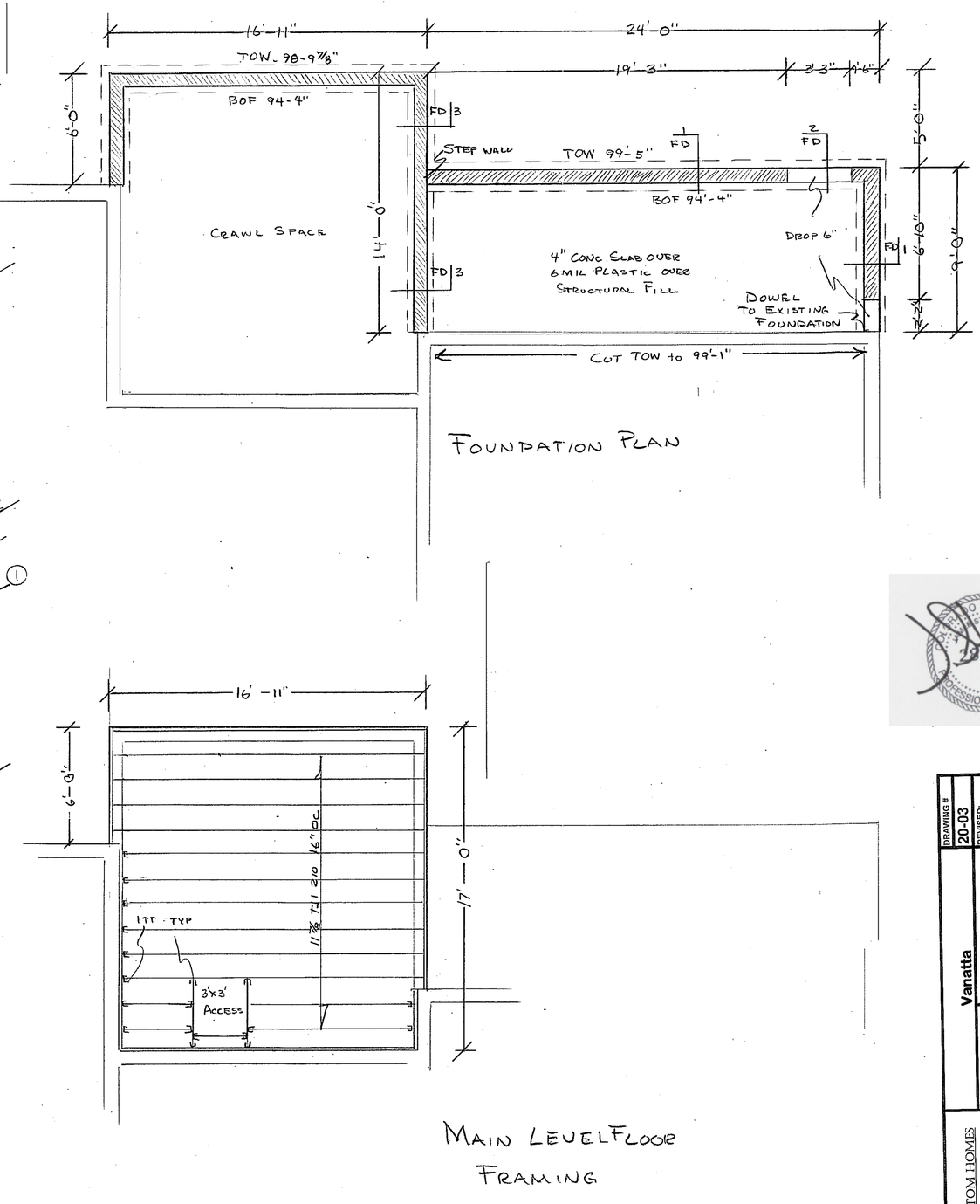
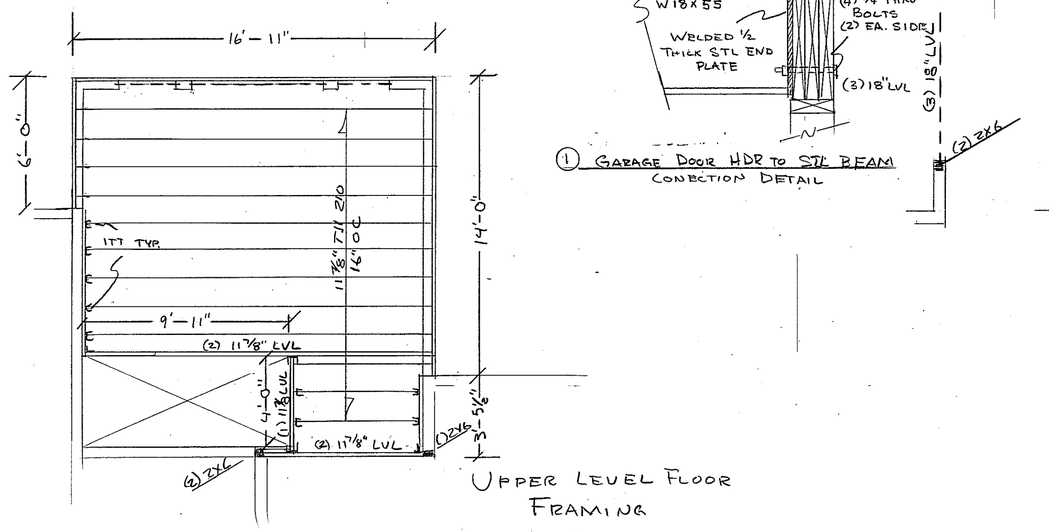
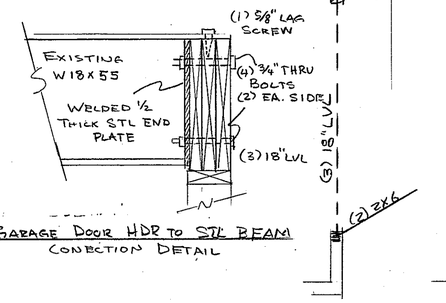
970-846-5552

1/4" = 1'	**Vanatta**		DRAWING # 20-03
DATE: 8/17/20	**SECTIONS**		REVISED:
DRAWN BY: GCH			
Lot 80, Filing 4, The Sanctuary			PAGE #
3070 Aspenwood Lane, Steamboat Springs 80487			A-7









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PAGE # A-8

Vanatta

Framing Plans

Foundation Plan

1/4" = 1'
DATE: 8/17/20
DRAWN BY: GCH

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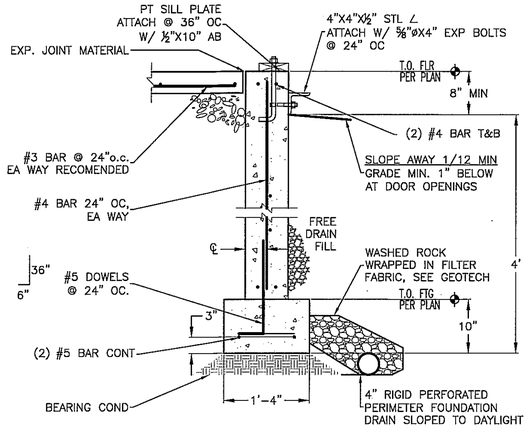
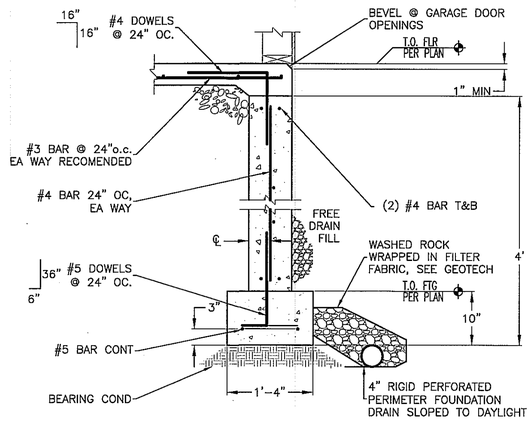


NOTES:
1. MAINTAIN 3" COVER FOR CONC. POURED ON EARTH. 2" FOR FORMED CONC.
2. ENERGY CODE DETAILS PER ARCHITECTUAL PLANS.

1 CONCRETE WALL

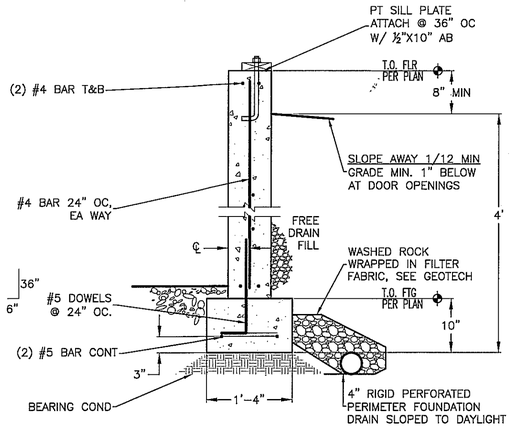
NO SCALE



NOTES:
1. MAINTAIN 3" COVER FOR CONC. POURED ON EARTH. 2" FOR FORMED CONC.
2. ENERGY CODE DETAILS PER ARCHITECTUAL PLANS.

2 CONCRETE WALL @ DOOR OPENING

NO SCALE



NOTES:
1. MAINTAIN 3" COVER FOR CONC. POURED ON EARTH. 2" FOR FORMED CONC.
2. ENERGY CODE DETAILS PER ARCHITECTUAL PLANS.

3 CONCRETE WALL @ CRAWLSPACE

NO SCALE

FRAMING NOTES

1. ALL FRAMING NOT SPECIFICALLY SHOWN , DETAILED, OR DRAWN ON PLAN SHALL COMPLY WITH THE NON-ENGINEERED REQUIREMENTS SPECIFIED IN THE IRC.
2. ALL LOADS, POINT OR DISTRIBUTED, SHALL HAVE CONTINUOUS UNINTERRUPTED PATH TO FOUNDATION. 2X SQUASH BLOCKS BETWEEN FLOOR ASSEMBLY TO MATCH COLUMN ABOVE.
3. MINIMUM HEADER SIZE SHALL BE 2-2X10'S, UNO.
4. ALL KING AND TRIMMER STUDS PER PLAN. MINIMUM 1 KING AND 1 TRIMMER STUD AT WALL OPENINGS.
5. ALL HEADERS CONSISTING OF TWO OR MORE LVL's SHALL HAVE A MINIMUM 2 TRIMMERS AND 1 KING.

YVE JOB# 20-047

Design Loads

Roof	95 PSF
Floors	40 PSF
Wind	115 MPH, Exposure C
Seismic design category	B
Maximum soil bearing pressure	2500 PSF

Foundation design is in accordance with the recommendations made in the geotechnical report #97-2943 dated 6-6-97 provided by NWCC. This report is referenced herein as the "Geotech" and the contractor/owner shall implement all recommendations with this report. An open hole investigation should be conducted by the geotechnical engineer to verify conditions prior to construction. Any deviations in the reported design conditions shall be reported to Yampa Valley Engineering, Inc, which may require substantial design changes.

The design herein and all construction standards shall utilize the 2015 International Residential Code.

Concrete:
1. Place footings on firm, undisturbed natural soil. Footings placed on compacted fill shall require the approval of a geotechnical engineer.
2. No concrete shall be poured on frozen sub-grade or be subject to freezing conditions until fully cured.
3. All concrete form work shall be adequately braced and tied to form true lines, square corners and plumb walls. Trench forming is not allowed.
4. All cast-in-place concrete shall be type I/II and develop 3,000 PSI compressive strength in 28 days.
5. All concrete work and reinforcement detailing shall be in accordance with ACI Building Code 301 and 318.
6. All reinforcing shall be deformed bars conforming to ASTM A615 grade 60. Deformed bars specified to be field bent, stirrups, and ties can be grade 40, UNO.
7. Welded wire fabric shall conform to ASTM 185 and shall be lapped 1 full mesh at splices and be tied together.
8. Concrete protection for reinforcement shall be:
   - -3" minimum for concrete cast against earth
   - -2" minimum for concrete poured in forms
   - -3/4" in slabs and walls, not exposed to weather
9. Reinforcement shall be fabricated and placed per ACI 315. Make all bars continuous around corners. Lap splices shall be a minimum of 50 bar diameters.
10. Slabs, footings, and walls shall not have joints in a horizontal plane. Any stop in concrete work (cold joints) must be made at a third point of span with vertical bulkheads and horizontal shear keys. Continue top bar in wall down through corners of openings for 2'-0" & tie with a vertical bar 3' from opening.
11. Anchor bolts shall be spaced at 36" O.C. and within 12" of each foundation corner or end of mudsill plate. Anchor bolts shall have 7" minimum concrete penetration.
12. Provide all accessories necessary to support reinforcing at positions shown on the plans and in accordance with ACI 318.
13. All concrete walls shall be mechanically vibrated.
14. Floor slabs shall be placed with construction joints per the geotechnical report or 10ft max spacing and/or as shown on the plans.

Metals:
1. All steel shall conform to the following:
   - Beams: A992
   - Angles & miscellaneous: ASTM A36
   - Bolts: ASTM 307
   - Tube Columns: ASTM A500, Grade B 46ksi
2. Fitted web stiffeners shall be 3/8" plates welded continuous on each side of steel beam web under point loads above and at points of support.
3. Miscellaneous clips, anchors and connectors shall be Simpson strong tie or approved equal, unless otherwise noted. Products shall be installed in accordance with manufacturer's instructions.
4. All steel shall be fabricated and erected per AISC Steel Construction Manual.
5. Welding shall be done by a qualified welders with E70XX electrodes.
6. Anchor bolts installed in contact with pressure treated wood shall meet the manufacturers specifications for corrosion protection.
7. All steel beams shall have wood nailer plates with ½"ø carriage bolts at 36" glued, UNO. ALT: 5/32"ø drive pins at 24".

Carpentry:
1. All framing not specifically shown, detailed, or drawn on plan shall comply with the non-engineered requirements specified in the IRC.
2. Minimum nailing and wood structural panel attachments shall be as specified in TABLE #R602.3(1) of the IRC. Additional nailing or attachment required for connections are per plan.
3. All treated lumber shall be treated in accordance with AWPA Standard U1 to the requirements of the intended use.
4. All 2"-4" thick dimensional framing lumber shall be visually graded, S-dry with the following minimum design values:
   - Wall framing: SPF Stud grade or better, E=1,200,000 psi, Fb=675 psi, Ft=350 psi, Fv=135 psi, $Fc^{\perp}$=425 psi, $Fc\|$=725 psi
   - Joist or Rafter:
   - SPF No.2 or better, E=1,400,000 psi, Fb=875 psi, Ft=450 psi, Fv=135 psi, $Fc^{\perp}$=425 psi, $Fc\|$=1,150 psi
   - DF-L (N) No.1/No.2 or better, E=1,600,000 psi, Fb=850 psi, Ft=500 psi, Fv=180 psi, $Fc^{\perp}$=625 psi, $Fc\|$=1400 psi
5. All 2"-4" dimensional lumber in contact with concrete or masonry shall be treated and have the following minimum design values:
   - Hem-Fir No.2 or better, E=1,300,000 psi, Fb=850 psi, Ft=525 psi, Fv=150 psi, $Fc^{\perp}$=405 psi, $Fc\|$=1300 psi
6. All 5" thick and greater dimensional timber framing lumber shall be visually graded, S-dry with the following minimum design values:
   - Beams: DF-L (N) No.1 or better, E=1,600,000 psi, Fb=1,300 psi, Ft=675 psi, Fv=170 psi, $Fc^{\perp}$=625 psi, $Fc\|$=925 psi
   - Columns: DF-L (N) No.1 or better, E=1,600,000 psi, Fb=1,200 psi, Ft=825 psi, Fv=170 psi, $Fc^{\perp}$=625 psi, $Fc\|$=1,000 psi
7. All structural glued laminated beams shall be AITC stressed rated and have the following minimum design values:
   - Single Span: (24F-V4) E=1,800,000 psi, Fbc=2,400 psi, Fbt=1,450 psi, $Fc^{\perp}$=650 psi. Fv=265 psi, SG=0.50
   - Multiple Span: (24F-V8) E=1,800,000 psi, Fbc=2,400 psi, Fbt=2,400 psi, $Fc^{\perp}$=650 psi. Fv=265 psi, SG=0.50
   - Glu-lam beams in exterior applications shall be exterior rated.
8. All engineered wood shall be Trus Joist or approved equivalent with the following minimum design values:
   - LVL: E=1,900,000 psi, Fb=2,600 psi, Ft= 1,555 psi, $Fc^{\perp}$=750 psi $Fc\|$=2,510 psi, Fv=285 psi, SG=0.50
   - LSL: E=1,300,000 psi, Fb=1,700 psi, Ft= 1,075 psi, $Fc^{\perp}$=680 psi $Fc\|$=1,400 psi, Fv=400 psi, SG=0.50
   - PSL: E=2,000,000 psi, Fb=2,900 psi, Ft= 2,025 psi, $Fc^{\perp}$=750 psi $Fc\|$=2,900 psi, Fv=290 psi, SG=0.50
9. All prefabricated wood I-joists shall be Trus Joist or approved equivalent with the following minimum design values:
   - 9½" TJI 210: Mr=2,660 ft-lbs, V=1,330 lbs, EI=167x10^6 sq.in.-lbs
   - 11⅞" TJI 210: Mr=3,620 ft-lbs, V=1,655 lbs, EI=283x10^6 sq.in.-lbs
   - 11⅞" TJI 360: Mr=6,180 ft-lbs, V=1,705 lbs, EI=419x10^6 sq.in.-lbs
   - 14" TJI 210: Mr=4,280 ft-lbs, V=1,945 lbs, EI=415x10^6 sq.in.-lbs
   - 14" TJI 360: Mr=7,335 ft-lbs, V=1,955 lbs, EI=612x10^6 sq.in.-lbs
   - Rim Joist: Per Manufacturer
10. All Roof sheathing shall be:
    - MIN. 19/32" APA Rated 40/20 Exp. 1
11. All Floor sheathing shall be:
    - MIN. 23/32" APA Rated 48/24 Exp. 1 T&G, glued and nailed.
12. All Wall sheathing shall be:
    - MIN. 7/16" APA Rated 24/16 Exp. 1.
13. All prefabricated I-joists, pre-engineered trusses, specified connectors shall be installed per manufacturers specifications.
14. Wood framing members, including wood sheathing, that are in contact with exterior foundation walls and are less than 8 inches from exposed earth shall be of naturally durable or preservative-treated wood.
15. ALL EXTERIOR WALLS SHALL BE SHEATHED. Exterior walls shall be a minimum 2 x 6 @ 16" OC, UNO.
16. Interior bearing walls shall be 2x6 @ 16", UNO. For bearing walls perpendicular to floor framing provide full height solid blocking between bays. For bearing walls parallel to floor framing provide additional double floor joists under bearing wall or balloon frame bearing wall below to underside of sheathing.
17. Interior partitions (non load bearing) shall be 2x4 @ 16". Support partitions with 2x blocking @ 24" between joists, top and bottom.
18. All loads, point or distributed, shall have have continuous uninterrupted path to foundation. 2x squash blocks between floor assembly to match column above.
19. Provide solid blocking between joists at all supports, beams or bearing walls. Provide 1x4 cross-bridging or 2x blocking at not over 8' on center for all wood joists.
20. Minimum header size shall be 2-2x10's, UNO.
21. All king and trimmer studs per plan. Minimum 1 king and 1 trimmer stud at wall openings. All headers consisting of two or more LVL's shall have minimum 2 trimmers and 1 king.
22. Crawl spaces shall be vented per Section 408 of the IRC. The contractor is responsible for all ventilation required.
23. Pre-engineered, pre-fabricated trusses shall be designed by a Registered Professional Engineer and shall comply with all applicable codes and the Truss Plate Institute requirements. Truss to Truss connections are by manufacturer.
24. Over-framing rafters shall be 2x6 minimum with 2x6 minimum ridge, supported at 32" O.C. max directly to rafter or truss below. 2x10 sleepers shall support joist ends at valleys. Joist supports shall be horizontally blocked at bottom.

Erection Requirements:
1. Do NOT scale construction documents, if a dimension is necessary and not shown, Yampa Valley Engineering shall be contacted for dimension needed for construction.
2. If a discrepancy exists between the architectural and structural drawings, Yampa Valley Engineering shall be contacted immediately to rectify the discrepancy.
3. All structural elements are shown in final erected position. The contractor is responsible for all sequence of construction, shoring, bracing, or temporary work associated to achieve the final structure.
4. The main level floor shall be installed prior to the backfill of any foundation wall or adequate bracing must be provided by the contractor to ensure foundation wall stability.
5. The basement slab shall be installed and cured prior to the backfill of any foundation wall or adequate bracing must be provided by the contractor to ensure foundation wall stability.
6. Expansive soils may or may not be present on-site. All concrete slabs on grade shall be separated from all building finishes to allow for slab movement. Slab movement is caused by numerous conditions, the owner/contractor should take the necessary precautions to limit slab heave. Yampa Valley Engineering shall not be held liable for damage caused by slab movement.

YVE,
YAMPA VALLEY ENGINEERING, INC.

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VANATTA ADDITION

LOT 80 THE SANCTUARY FILING 4
Steamboat Springs, Colorado

JOB NO:	20-047
DRAWN:	RC
DATE:	8-12-20

SHEET NUMBER

F-D

FOUNDATION