KENZIE H&H HOMES - GARAGE LEFT

PLAN REVISIONS

Ø1-10-13 COMPLETED CONSTRUCTION DOCUMENTS INCLUDING CLIENT REVIEW COMMENTS

Ø1-15-19 CLIENT BACK END COMMENTS

Ø1-24-19 MIRROR PLAN TO CREATE LEFT HAND VERSION

03-26-20 UPDATED ROOM NAMING FER HIH STANDARDS ADDED 7x6 WALL FLOOR FLAYS 4 ELECTRICAL PLAYS CHANGED ELEVATION 'A' & 'C' TO 'A-I' & 'C-I' ADDED ELEVATIONS 'A-2' & 'C-2' CHAYSED ELEVATION 'B' TO ELEV. 'B-1' AND ADDED NEW ELEV. 'B-1' BROKE OUT OPTIONS FROM THE FLOOR PLANS AND MADE A SEPARATE PAGE FOR

ELEVATION "	Α"	
MAIN FLOOR	804	SF.
UPPER FLOOR	1154	SF.
TOTAL LIVING	1958	SF.
GARAGE	480	SF.
FRONT PORCH	82	SF.
PATIO	120	SF.
TOTAL SQ. FT.	2640	SF.
OPT. COV. PORCH	120	SF.
OPT. EXT. PORCH	160	SF.
OPT. I CAR GARAGE	240	SF.

ELEVATION "E	3"	
MAIN FLOOR	804	SF.
UPPER FLOOR	1170	SF.
TOTAL LIVING	1974	SF.
GARAGE	480	SF.
FRONT PORCH	83	SF.
PATIO	120	SF.
TOTAL SQ. FT.	2657	SF.
OPT. COV. PORCH	120	SF
OPT. EXT. PORCH	160	SF
OPT. I CAR GARAGE	240	SF

ELEVATION "	C"	
MAIN FLOOR	804	SF.
UPPER FLOOR	1170	SF.
TOTAL LIVING	1974	SF.
GARAGE	480	SF.
FRONT PORCH	81	SF.
PATIO	120	SF.
TOTAL SQ. FT.	2655	SF.
OPT. COV. PORCH	120	SF.
OPT. EXT. PORCH	160	SF.
OPT. I CAR GARAGE	240	SF.

HOMES KENZIE T S T

9

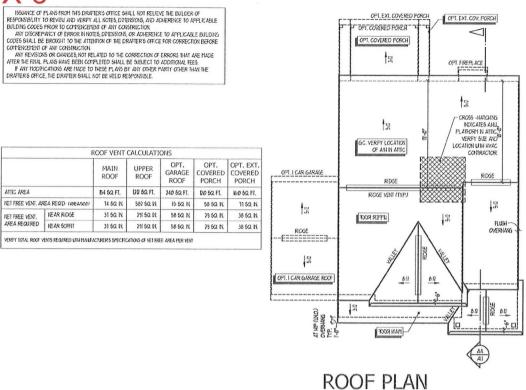
DAVIS BEWS DESIGN GROVE

DRAWNGS ON II"XIT" SHEET ARE ONE HALF THE SCALE NOTED

1958

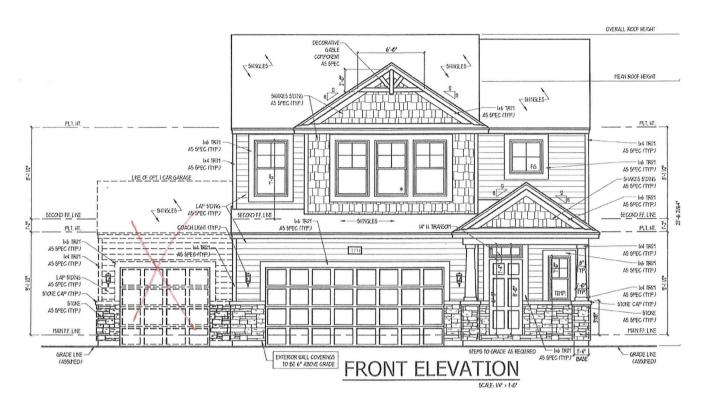


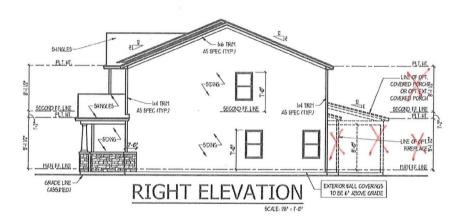
ISSUAVE OF PLANS FROM THIS DRAFIERS OFFICE SHALL NOT RELIEVE THE BUILDER OF RESPONSION IN TO REVER AND MERT ALL NOTES, DISSIONS, AND AGMERINCE TO APPLICABLE BUILDING CORSES FROM TO COTTEMENT OF ANY CONSTRUCTION. ANY TOSCREPANCY OF PEROR IN NOTES, DISSISSION, OR ADMERINCE TO APPLICABLE BUILDING CORSES SHALL BE BROADED TO BE ATTEMICATED THE DRAFTERS OFFICE FOR CORRECTION BEFORE COTTEMENT OF ANY CONSTRUCTION. ANY TRANSON OF COLMANS FOR THE TED THE CORPECTION OF PROCESS THAT ARE HADE AFTER THE FINAL PLANS HAVE BEST COTTEMED SHALL BE SIZECT TO ADDITIONAL FIELS FAIR TOORCATIONS ARE HADE TO THESE PLANS BY ANY OTHER THAN THE DRAFTER SHALL NOT BE HELD RESPONSIBLE.



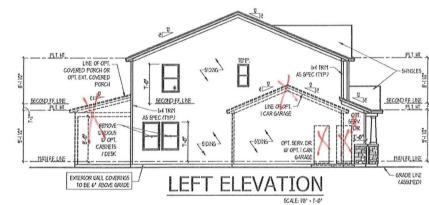
OPT. EXT. COVERED PORCH OFT. COVERED PORCH

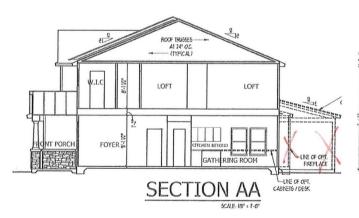
OPT. COVERED PORCH

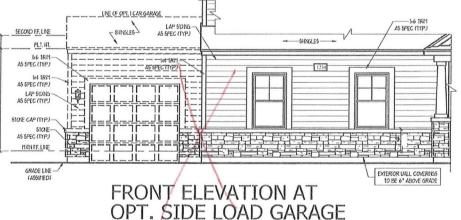


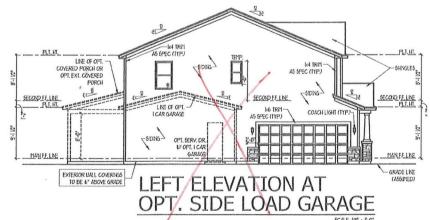












ELEVATION "B-2"



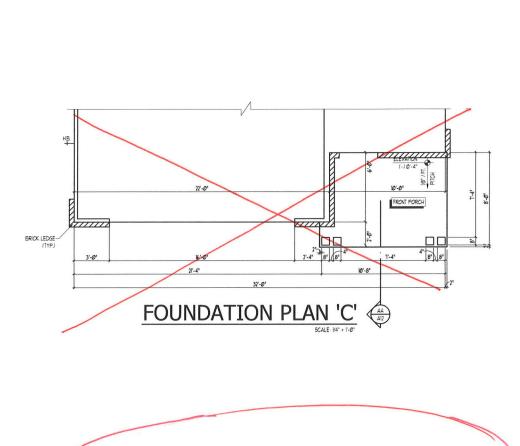




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1958

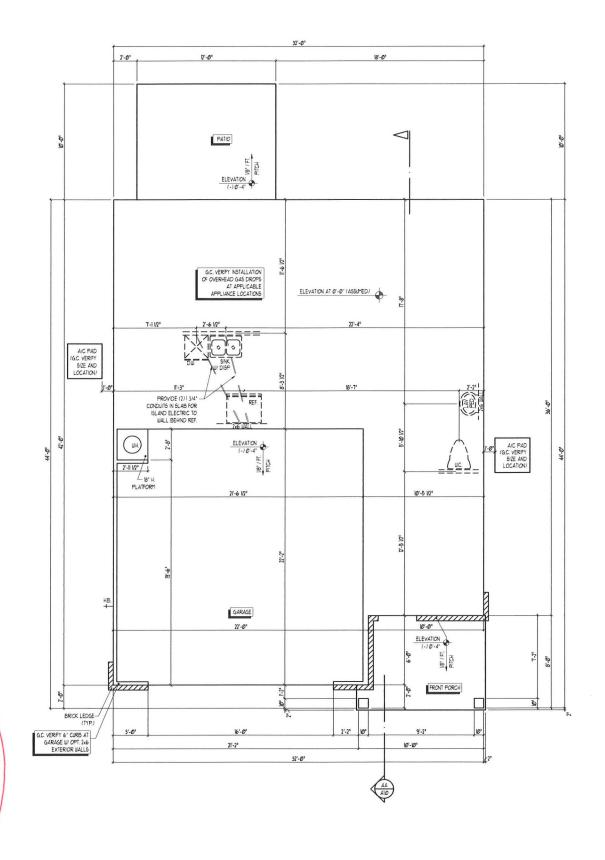
ELEVATIONS ROOF PLAN BUILDING SECTION DETAILS



FOUNDATION PLAN 'B'

FRONT PORCH

11'-4"









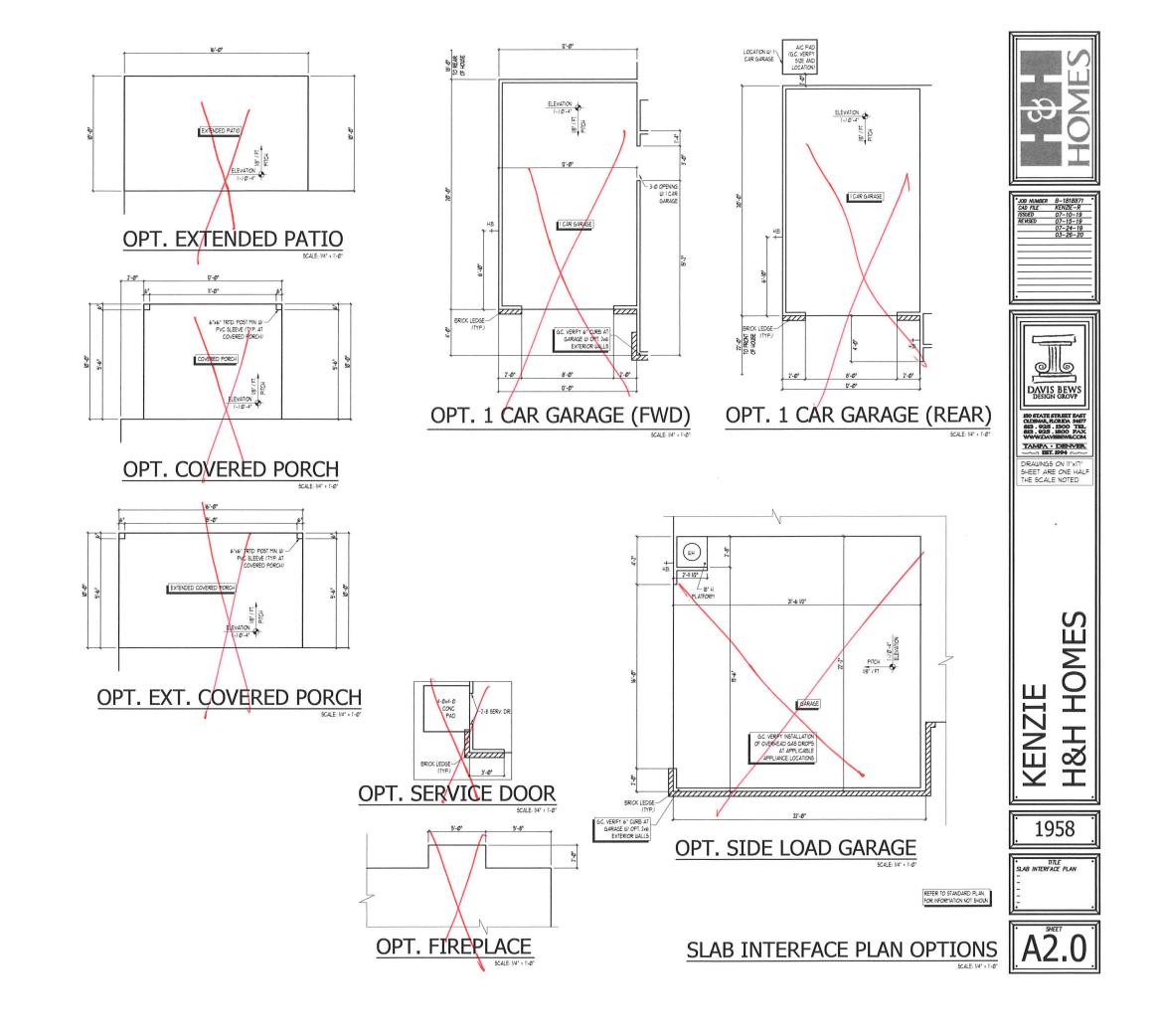
KENZIE H&H HOMES

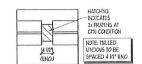
1958

* TITLE SLAB INTERFACE PLAN ----

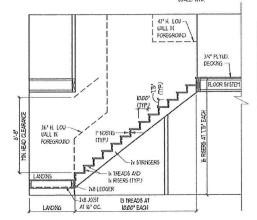
SLAB INTERFACE PLAN SCALE WY . T. OF

A2.0





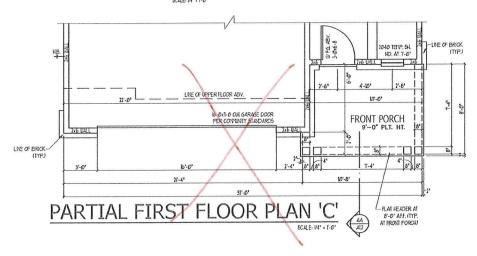
TYP. MULL DETAIL

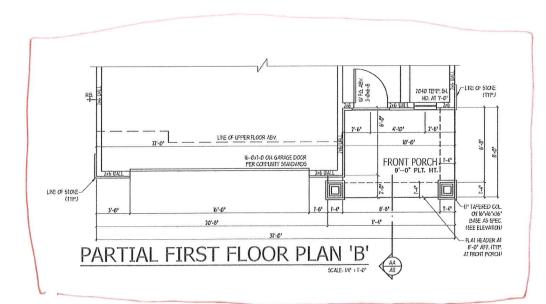


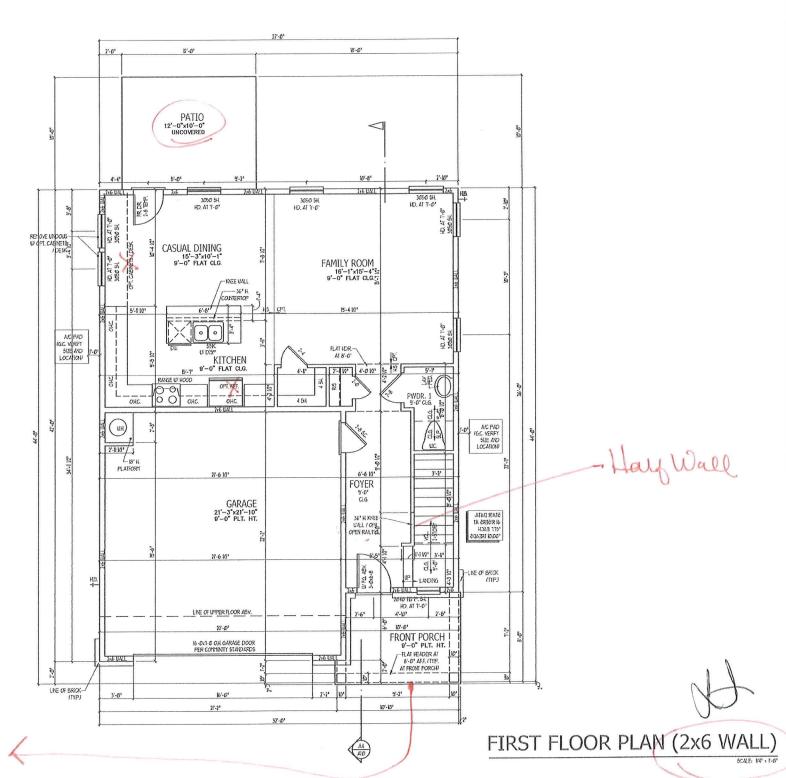
HADRALS HADRALS FOR STAPLAYS SHALL BE COMMINDS FOR THE FILL EINSTHOF THE FLORIF, FORM A POINT DIRECTLY ABOVE THE TOP RISER OF THE HASH TO A POINT DIRECTLY ABOVE THE LOZES IN SERVE AMOUNTAL BODS SHALL BE FERNARED OR SHALL TERMINE IN LEVEL FOSTS OR SAFETY TERMINES HADRALS SOLIKENT TO A VILLE SHALL HAVE A SPACE OF NOT LESS THAN I-VA NOTH BERLEDH THE WALL AND HANDRALS.

COMMON GRASPABLE HANDRAL MIST YEET TIPE ONE OR TIPE TWO CRIT

STAIR SECTION SCARE, W. 1.0°











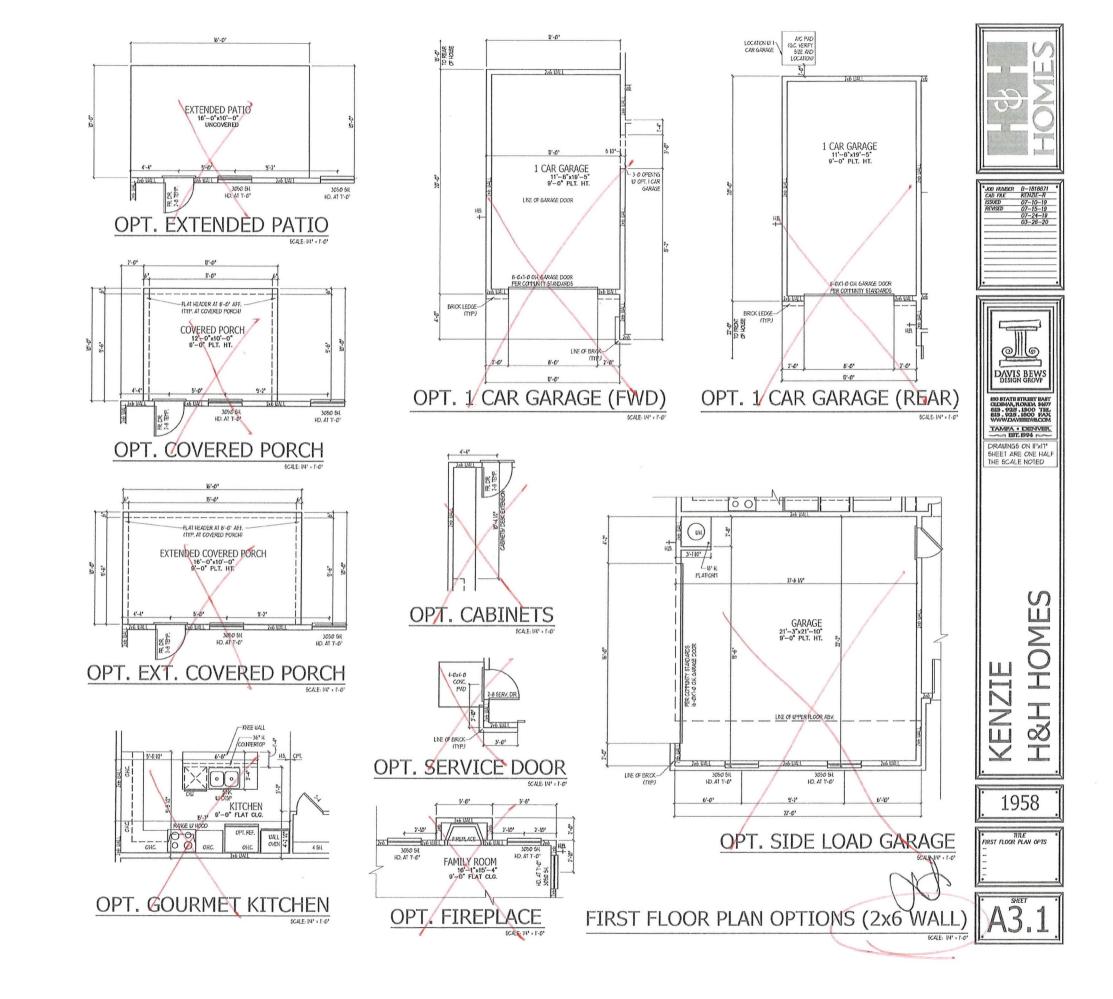


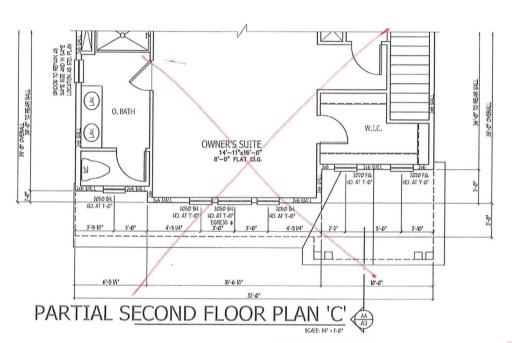
H&H HOMES

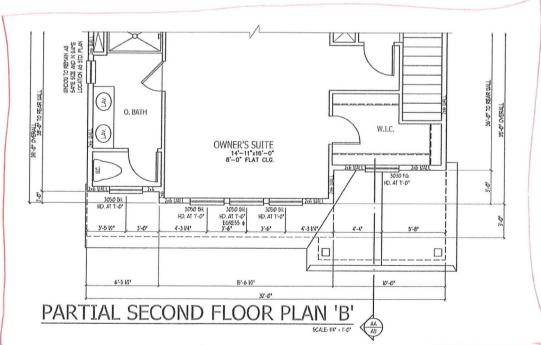
1958

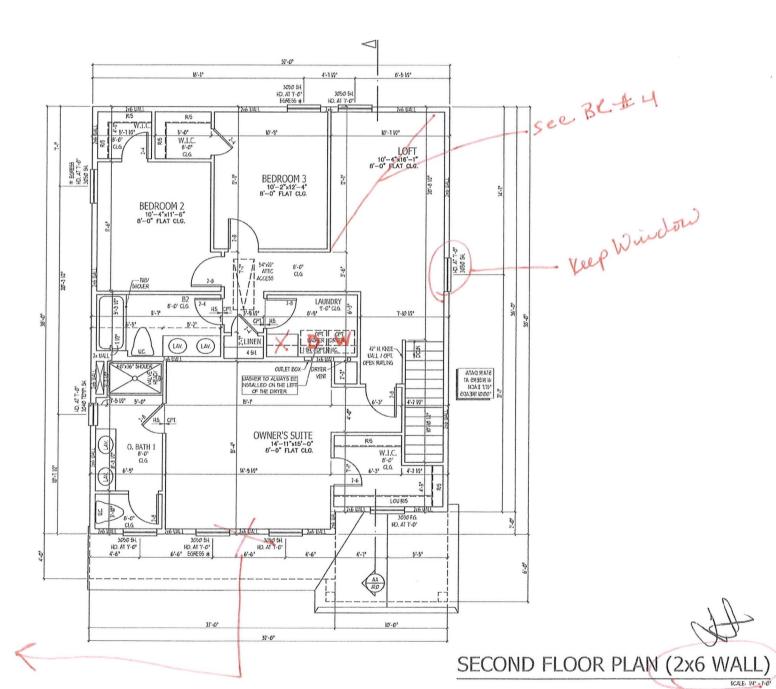
• TITLE
• FIRST FLOOR PLAN

A3.0













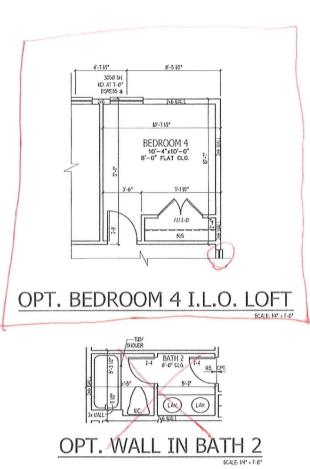


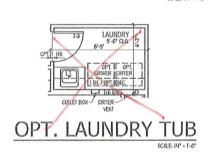
KENZIE H&H HOMES

1958

• TITLE • SECOND FLOOR PLAN

A3.2











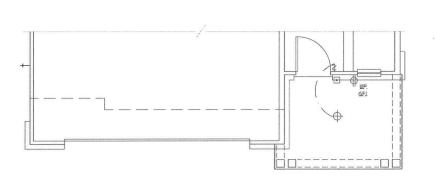
KENZIE H&H HOMES

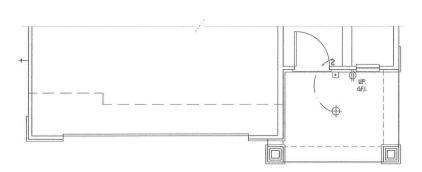
1958

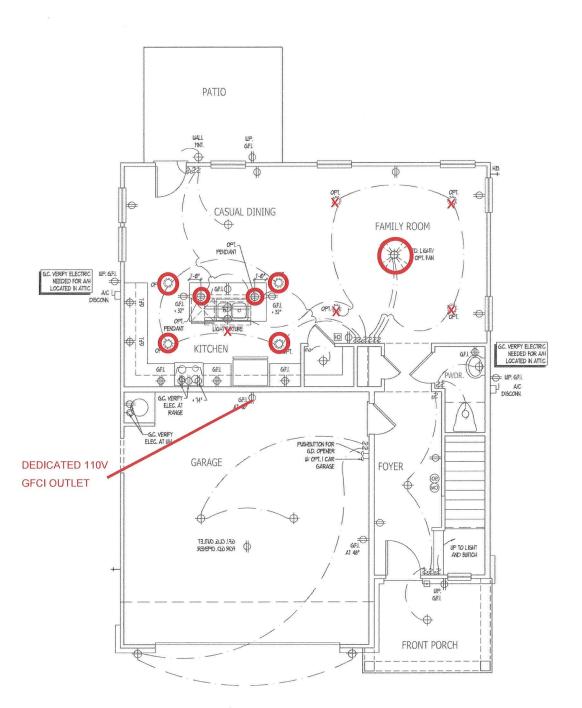
TITLE
SECOND FLOOR PLAN OPTS

A3.3

SECOND FLOOR PLAN OPTIONS (2x6 WALL)







ELECTRICAL KEY

DUPLEX CONVENIENCE OUTLET

DUPLEX OUTLET ABOVE COUNTER

HEATHERPROOF DUPLEX OUTLET

GROUND FAULT INTERRUPTER DUPLEX OUTLET

HALF-SUTCHED DUPLEX OUTLET

HO SPECIAL PURPOSE OUTLET

DUPLEX OUTLET IN PLOOR
170 YOLT OUTLET

WALL SWITCH

THREE-WAY SWITCH

FOUR-WAY SUTTCH DIMER SUTCH

CEILING MOUNTED INCANDESCENT LIGHT FIXTURE

MALL MOUNTED INCANDESCENT LIGHT FOTURE RECESSED NCANDESCENT LIGHT FIXTURE

PRC. LIGHT FIXTURE UTTH PULL CHAN
TRACK LIGHT

FLUORESCENT LIGHT FIXTURE Ó EXHAUST FAN

EXHAUST FAVALIGHT COMBINATION

ELECTRIC DOOR OPERATOR (OPTIONAL)

CHMES (OPTIONAL)

PUSHBUTTON SUITCH (OPTIONAL)

CARBON MONOXIDE DETECTOR

® SMOKE DETECTOR

⑤ SHOKE / CARBON MONO, COMBO DETECTOR
★ TELEPHONE (OPTIONAL)

TELEVISION (OPTIONAL)

THERMOSTAT ELECTRIC METER

ELECTRIC PAVEL

___ DISCONNECT SUITCH

⊗ SPEAKER (OPTIONAL)

ROUGH-IN FOR OPT, CEILING FAN

CELLING MOUNTED INCANDESCENT LIGHT FOXTURE IV ROUGH-IN FOR OPT. CELLING FAN

NOTES:

1, PROVIDE AND INSTALL <u>GROUND FAULT CIRCUIT-NTERRUPTERS</u> (GF.U AS INDICATED ON PLANS OR AS ITEM NO. 4 AND 5 BELOW INDICATES.

2. UNLESS OTHERUSE NOVCATED, NOTALL SUTCHES AND RECEPTACLES AT THE FOLLOWING HEIGHTS ABOVE PRISHED FLOOR OF THE PROPERTY OF THE PRISHED FLOOR OF THE PRISHED

3. ALL SMOKE DETECTORS SHALL BE HARDWIRED INTO AN ELECTRICAL POWER SOURCE AND SHALL BE EQUIPPED WITH A MONITORED BATTERY BACKUP, PROVIDE AND INSTALL LOCALLY CERTIFED SHOKE DETECTORS.

4, ALL BA AND 26A RECEPTACLES IN BLEEPING ROOMS, FAMILY ROOMS, DINING ROOMS, LINNS ROOMS, PARLORS, LIBRARIES, DEBS, SURROOMS, ECORGATION ROOMS CLOSETS, HALLINGS, AND SIMILAR RAGES WILL REQUIRE A COMBANISM THE AFEAL, DEVICE AND TAMPER-PROOF RECEPTACLES FER NEC. 2011 466 BF AND 466 BF.

5, ALL IBA AND 20A 1989 RECEPTACLES LOCATED IN THE GARAGE AND UTILITY ROOMS SHALL BE GEC.I. PROTECTED (GFI).

6. IT IS THE RESPONSIBILITY OF THE LICENSED ELECTRICIAN TO EISURE THAT ALL ELECTRICAL WORK IS IN FILL CONFILIANCE WITH NEPA TO, NEC. 7891, AND ALL APPLICABLE LOCAL STANDARDS, CODES, AND ORDINANCES.

1. EVERY BULDINS HAVING A POSOIL-REEL-BURNING HEATER OR APPLIANCE, FIREPLACE, OR AN ATTACHED GARAGE SHALL HAVE AN OPERATIONAL CARBON MONOXIDE DETECTOR INSTALLED WITHIN BY FIET OF EACH ROOM USED FOR SLEEPI PURPOSES.

8. ALAPIS SHALL RECEIVE THEIR PRIVARY POWER FROM THE BUILDING WIRNS WEN SICH WIRNS IS BERKED RECH THE LOCAL POWER UTILITY, BUICH ALAPIS SHALL HAVE BATTERY BACOLO COMBANION SHOKECARBON HOROUTE ALAPIS SHALL HAVE LISTED OR LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY;

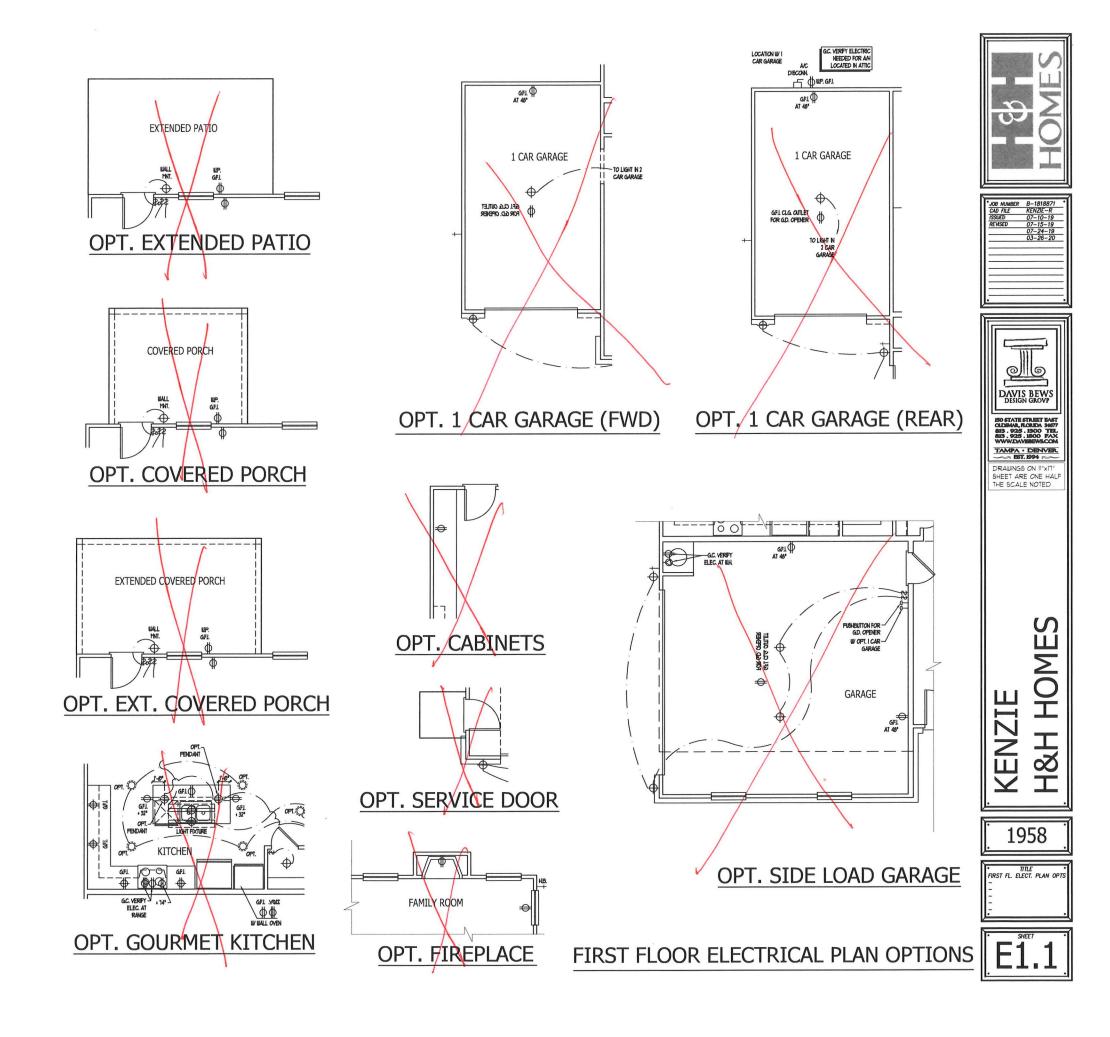


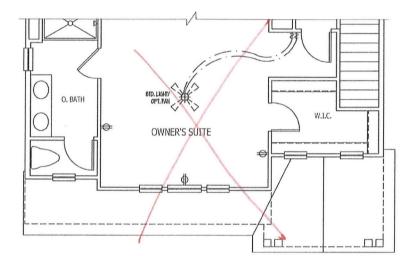


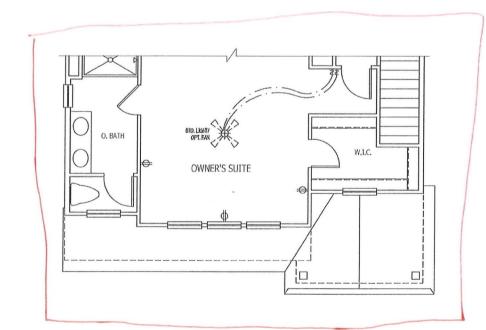
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1958

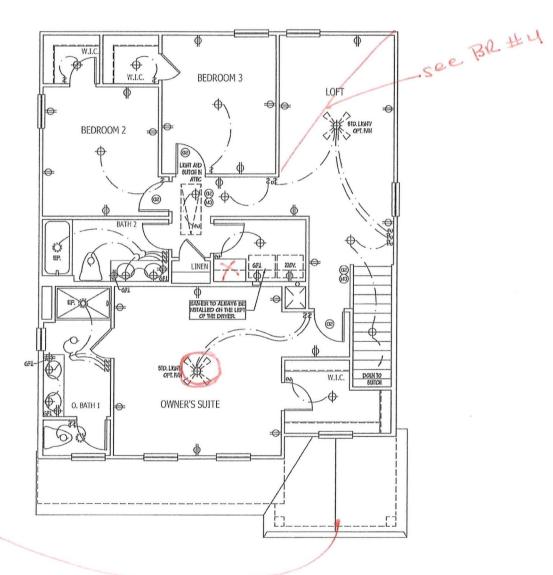
TITLE FIRST FL. ELECT. PLAN







Prewie BR 2,3, :4 Fy ceiling fan.



ELECTRICAL KEY

I DUFLEX CONVENIENCE CUTLET

THE CUPLEX CATLET ABOVE CONTER

HOIA HEATHERPROOF DUPLEX CUTLET

|⊕ | HAT-WITCHED DEFLEX WITET

|⊕ | HAT-WITCHED DEFLEX WITET

HO SPECIAL FURFORE CUTLET

DIFLEX OUTLET NELOOR

220 YOUT OWNER WALL SUTTON

\$3 THREE-LIAY BUTTCH FOUR-MAY BUTTON

\$D DIMERBUICH

CELING HOLNTED INCANDESCENT LIGHT FIXTURE WALL HOUNTED INCANDESCENT LIGHT FORTURE

O RECEISED NOADESCENT LIGHT FIXTURE

LISHIT FATURE WITH FILL CHAN
TRACK LISHIT
HUDREACHT LISHIT HATURE

DOWNST FAN EXHAUST FANGLIGHT COMBINATION

ELECTRIC DOOR OPERATOR (OPTICHAL) O PUMBUTON BUTCH (OPTIONAL)

CARBON HONOXIDE DETECTOR 60 CHOKE DETECTOR

SOOD SHOKE / CAFBOX HOND, COMBO DETECTO

H TELEPHONE (OPTIONAL)

TELEVISION (OPTIONAL) ① THERMOSTAT

DE ELECTRIC HETER

ELECTRIC PAREL

___ DECONECT SUITCH

⊗ GFEKER (OFTICNAL)

THE ROUGHN FOR OPT. CELING FAN

CELING HONTED INCANDESCENT LIGHT FIXTURE IN
ROUGH-IN FOR OPT, CELING FAN

NOTES:

3. ALL (YCKE DETECTORS (HALL BE HARDURED NTO AN ELECTRICAL POWER COURCE AND GHALL BE COMPRED WITH A MONITORED BATTERY BACKEP, PROVIDE AND NSTALL LOCALLY CERTIFED <u>(YCKE DETECTORS)</u>

4. AL BA AD JAA RECEPTACLES IN ALEFFNIS ROCKS, FARLY ROCKS, DNN'S ROCKS, LIM'S ROCKS, PARLORS, LERARES, DBIS, GUNOCHS, RECREATOR ROCKS, CLOSES, INLILIANS, AND SHILLOR AREAS UILL RECITES A CORRAMICIN FROM RECREATOR ROCKS. BUT RECREASED A CORRESPONDED IN THE AREA CORRESPONDED IN THE RECREASED A CORRESPONDED FOR THE AREA CORRESPONDED FOR THE CORR

B. ALL BA AND 26A DBY RECEPTACLES LOCATED IN THE GARAGE AND UTILITY ROOMS SHALL BE GECL PROTECTED (GFL).

6. IT IS THE PERPONSIBILITY OF THE LICENSED ELECTRICAN TO BINNET THAT ALL ELECTRICAL LOOK IS NITLL COPPLINGE WITH KEPA TO, NEC, 2011, AND ALL APPLICABLE LOCAL STANDARDS, CODES, AND OFFINANCES.

LEMENT BULDN'S HAMIS A ROSSE, FIEL FURB'S HEATER OR AFFLIANCE, FREFLACE, OR ALATACIED GARAGE GALL HAVE ALOFERATIONE, CAPICAL HOLD/ODE DETECTOR NETALLED LIBIN IN HET OF EACH FOOM USED FOR SELEFT

A JUATE GULL RECENT THEN FROM TOWN FOUR TRAIN THE BUILDING SIRRIG GUEL GULT HIRSE IS BERKED FROM THE LOCAL FOURR UTLITT, GUELT JUATES GULL HAVE BUTTERY BUCKED, COMBINITION OF MERCHANDOUSE ALAMES GULL TE LISTED OR LIBELED BY A MINICIPALITY RECONSIDED TRAINED LARANDORY.







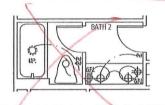
&H HOMES KENZIE I

1958

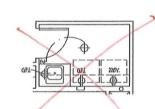


SECOND FLOOR ELECTRICAL PLAN





OPT. WALL IN BATH 2



OPT. LAUNDRY TUB







KENZIE H&H HOMES

1958



E2.1

SECOND FLOOR ELECTRICAL PLAN OPTIONS



1900 AM DRIVE, SUITE 201, QUAKERTOWN, PA 18951 (215) 804 - 4449 www.kse-eng.com

KENZIE

NORTH CAROLINA

THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. THIS COORDINATION IS NOT THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER OF RECORD (SER). SHOULD ANY DISCREPANCIES BECOME APPARENT, THE CONTRACTOR SHALL NOTIFY KSE ENGINEERING, P.C. BEFORE CONSTRUCTION BEGINS. IT IS THE INTENT OF THE ENGINEER LISTED ON THESE DOCUMENTS THAT THESE DOCUMENTS BE ACCURATE, PROVIDING LICENSED PROFESSIONALS CLEAR INFORMATION. EVERY ATTEMPT HAS BEEN MADE TO PREVENT ERROR. THE BUILDER AND ALL SUBCONTRACTORS ARE REQUIRED TO REVIEW ALL OF THE INFORMATION CONTAINED IN THESE DOCUMENTS PRIOR TO THE COMMENCEMENT OF ANY WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ANY PLAN ERRORS, OMISSIONS, OR MISINTERPRETATIONS UNDETECTED AND NOT REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION. ALL CONSTRUCTION MUST BE IN ACCORDANCE TO THE INFORMATION FOUND IN THESE DOCUMENTS.

DESIGN SPECIFICATIONS:

DESIGN BUILDING CODE (REFERRED TO HEREIN AS 'THE BUILDING CODE'): • 2018 NORTH CAROLINA RESIDENTIAL CODE. WALL BRACING PER INTERNATIONAL RESIDENTIAL

DESIGN LIVE LOADS:

- NOOF = 20 PSF (LOAD DURATION FACTOR=1.25)

 UNINHABITABLE ATTICS WITH LIMITED STORAGE = 20 PSF (WHERE SPECIFIED ON PLANS)

 HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS = 30 PSF
- FLOOR = 40 PSF • FLOOR (SLEEPING AREAS) = 30 PSF
- DECK = 40 PSF
- BALCONY = 40 PSF
 STAIRS = 40 PSF

DESIGN DEAD LOADS:

- ROOF TRUSS = 17 PSF (TC=7, BC=10)
- FLOOR TRUSS = 15 PSF (TC=10, BC=5)
- FLOOR JOIST = 10 PSF
- QUEEN ANNE BRICK = 25 PSF

NOTE: STRUCTURAL FRAMING HAS NOT BEEN DESIGNED FOR TILE, GRANITE, MARBLE OR OTHER MATERIALS HEAVIER THAN THE ABOVE LOADING UNLESS SPECIFICALLY NOTED ON PLANS..

- ULTIMATE WIND SPEED = Up to 130 MPH
 EXPOSURE CATEGORY = B

ASSUMED SOIL BEARING CAPACITY = 2000 PSF

ASSUMED LATERAL SOIL PRESSURE = 45 PCF

FROST DEPTH = 12"

SEISMIC DESIGN CATEGORY = B

ENGINEERED LUMBER SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:

- TJI 210 SERIES (SERIES AND SPACING PER PLANS)
- LSL: E=1,550,000 PSI, F_B=2,325 PSI, F_V=310 PSI, F_C=900 PSI • LVL: E=2,000,000 PSI, F_B =2,600 PSI, F_V =285 PSI, F_C =750 PSI
- PSL: E=2,100,000 PSI, F_B=2,900 PSI, F_V=290 PSI, F_C=625 PSI

THIS PLAN HAS BEEN DESIGNED PER THE 2018 EDITION OF THE NC RESIDENTIAL CODE. WHERE FRAMING, FOUNDATION, OR OTHER STRUCTURAL ITEMS DO NOT COMPLY WITH THE PRESCRIPTIVE METHODS OF THE CODE, THOSE ITEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE PER NCRC R301.1.3.





Project #: 105-19004 Designed By: KRK Checked By: Issue Date: 8/29/19 Re-Issue: 4/30/20 Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

Sheet

Model

Kenzie Up to

GENERAL STRUCTURAL NOTES:

- THE DESIGN PROFESSIONAL WHOSE SEAL APPEARS ON THESE DRAWINGS IS THE STRUCTURAL ENGINEER OF RECORD (SER) FOR THIS PROJECT. THE SER BEARS THE RESPONSIBILITY OF THE PRIMARY STRUCTURAL ELEMENTS AND THE PERFORMANCE OF THIS STRUCTURE. NO OTHER PARTY MAY REVISE, ALTER, OR DELETE ANY STRUCTURAL ASPECTS OF THESE CONSTRUCTION DOCUMENTS WITHOUT WRITTEN CONSENT OF KSF ENGINFERING, P.C. OR THE SER, FOR THE URPOSES OF THESE CONSTRUCTION DOCUMENTS, THE SER AND KSE
- ENGINEERING SHALL BE CONSIDERED THE SAME ENTITY.
 THE STRUCTURE IS ONLY STABLE IN ITS COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY BRACING DURING CONSTRUCTION TO STABILIZE THE STRUCTURE
- THE SER IS NOT RESPONSIBLE FOR CONSTRUCTION SEQUENCES. METHODS, OR TECHNIQUES IN CONNECTION WITH THE CONSTRUCTION OF THIS STRUCTURE. THE SER WILL NOT BE HELD RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CONFORM TO THE CONTRACT DOCUMENTS, SHOULD ANY NON-CONFORMITIES OCCUR.
- THE SER DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF GEOMETRY. THE SER ASSUMES NO LIABILITY FOR CHANGES MADE TO THESE PLANS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS. THE SER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE NOTED ON THE PLANS.
- ANY STRUCTURAL ELEMENTS OR DETAILS NOT FULLY DEVELOPED ON THE CONSTRUCTION DRAWINGS SHALL BE COMPLETED UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. THESE SHOP DRAWINGS SHALL BE SUBMITTED TO KSE ENGINEERING FOR REVIEW BEFORE ANY CONSTRUCTION BEGINS. THE SHOP DRAWINGS WILL BE REVIEWED FOR OVERALL COMPLIANCE AS IT RELATES TO THE STRUCTURAL DESIGN OF THIS PROJECT. VERIFICATION OF THE SHOP DRAWINGS FOR DIMENSIONS, OR FOR ACTUAL FIELD CONDITIONS, IS NOT THE RESPONSIBILITY OF THE SER OR KSE ENGINEERING, P.C.
- VERIFICATION OF ASSUMED FIELD CONDITIONS IS NOT THE RESPONSIBILITY OF THE SER. THE CONTRACTOR SHALL VERIFY THE FIELD CONDITIONS FOR ACCURACY AND REPORT ANY DISCREPANCIES TO KSE ENGINEERING, P.C. BEFORE CONSTRUCTION BEGINS.
- THE SER IS NOT RESPONSIBLE FOR ANY SECONDARY STRUCTURAL ELEMENTS OR NON-STRUCTURAL ELEMENTS, EXCEPT FOR THE ELEMENTS SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS
- THIS STRUCTURE AND ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE BUILDING CODE AND ANY LOCAL CODES OR RESTRICTIONS.
- DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. ALL DIMENSIONS ARE TO FACE OF STUD OR TO FACE OF FRAMING UNLESS OTHERWISE NOTED.
- 10. PROVIDE MOISTURE PROTECTION AND FLASHING PER ARCHITECTURAL

FOUNDATIONS:

- FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE BUILDING CODE.

 CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE SUITABILITY
- THE SITE SOIL CONDITIONS AT THE TIME OF CONSTRUCTION. THE BUILDER SHALL FURNISH ANY AND ALL REPORTS RECEIVED FROM THE GEOTECHNICAL ENGINEER ON THE STUDY OF THE PROPOSED SITE TO THE DESIGNER, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN THE BUILDING CODE.
- THE SER HAS NOT PERFORMED A SUBSURFACE INVESTIGATION. VERIFICATION OF THE ASSUMED VALUE IS THE RESPONSIBILITY OF THE OWNER OR THE CONTRACTOR, SHOULD ANY ADVERSE SOIL CONDITION BE ENCOUNTERED, THE SER MUST BE CONTACTED BEFORE PROCEEDING.
- THE BOTTOM OF ALL FOOTINGS SHALL EXTEND BELOW THE FROST LINE FOR THE REGION IN WHICH THE STRUCTURE IS TO BE CONSTRUCTED, BUT NOT LESS THAN A MINIMUM OF 12" BELOW GRADE. ALL FOOTINGS TO HAVE A MINIMUM PROJECTION OF 2" ON EACH SIDE OF FOUNDATION WALLS. MAXIMUM FOOTING PROJECTION SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.
- WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH 1/2" ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT, SPACED A MAXIMUM OF 6'-0" O.C. INSTALL MINIMUM 2 ANCHOR BOLTS PER SECTION, 12" MAXIMUM FROM CORNERS. 1/8" DIAMETER x 8" LONG SIMPSON TITEN HD 1. OR USP SCREW-BOLT+ SCREWS MAY BE SUBSTITUTED ON A 1 FOR 1
- ANY FILL SHALL BE PLACED UNDER THE DIRECTION OR RECOMMENDATION OF A LICENSED PROFESSIONAL ENGINEER. THE RESULTING SOIL SHALL BE COMPACTED TO A MINIMUM OF 95% MAYIMIIM DRY DENSITY
- EXCAVATIONS OF FOOTINGS SHALL BE LINED TEMPORARILY WITH A 6 MIL POLYETHYLENE MEMBRANE IF PLACEMENT OF CONCRETE DOES NOT OCCUR WITHIN 24 HOURS OF EXCAVATION.
- NO CONCRETE SHALL BE PLACED AGAINST ANY SUBGRADE CONTAINING WATER, ICE, FROST, OR LOOSE MATERIAL
- 10. PROVIDE FOUNDATION WATERPROOFING AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS (SEE ARCHITECTURAL PLANS AND DETAILS)
- 11. NONE OF THE FOUNDATION DESIGNS IN THESE DOCUMENTS ARE SUITABLE FOR INSTALLATION IN SHRINK/SWELL CONDITIONS. REFER TO GEOTECHNICAL ENGINEER FOR APPROPRIATE DESIGN.
- 12. LOTS SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS. THE GRADE SHALL FALL A MINIMUM OF 6 INCHES WITHIN THE FIRST TEN FEET.
- 13 CRAWL SPACE TO BE GRADED LEVEL AND CLEAR OF ALL DEBRIS
- 14. PROVIDE MINIMUM 6 MIL APPROVED VAPOR BARRIER. ALL JOINTS TO BE LAPPED MINIMUM 12" AND SEALED.

CONCRETE & REINFORCING

- CONCRETE DESIGN BASED ON ACI 318 AND ACI 318.1 OR ACI 332. CONCRETE SHALL HAVE A NORMAL WEIGHT AGGREGATE AND A MINIMUM COMPRESSIVE STRENGTH (f'c) = 3,000 PSI MINIMUM AT 28 DAYS PER CODE (VARIES W/ WEATHER), UNLESS OTHERWISE NOTED ON THE PLAN.
- CONCRETE SHALL BE PROPORTIONED, MIXED, AND PLACED IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 318: "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ACI 301: "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
- AIR ENTRAINED CONCRETE MUST BE USED FOR ALL STRUCTURAL ELEMENTS EXPOSED TO FREEZE/THAW CYCLES AND DEICING CHEMICALS. AIR ENTRAINMENT AMOUNTS (IN PERCENT) SHALL BE WITHIN -1% TO +2% OF 5% FOR FOOTINGS AND EXTERIOR SLABS
- NO ADMIXTURES SHALL BE ADDED TO ANY STRUCTURAL CONCRETE WITHOUT WRITTEN PERMISSION OF THE SER. WATER ADDED TO CONCRETE ON SITE SHALL NOT EXCEED THAT ALLOWED BY THE MIX
- CONCRETE SLABS-ON-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 302.1R: "GUIDE FOR CONCRETE SLAB AND SLAB CONSTRUCTION"
- CONTROL OR SAW CUT JOINTS (CUT OR TOOLED) SHALL BE SPACED IN INTERIOR SLABS-ON-GRADE AT A MAXIMUM OF 15'-0" O.C. AND IN EXTERIOR SLARS-ON-GRADE AT A MAXIMUM OF 10'-0" LINLESS. OTHERWISE NOTED. CARE SHALL BE TAKEN TO AVOID RE-ENTRANT CORNERS
- CONTROL OR SAW CUT JOINTS SHALL BE PRODUCED USING CONVENTIONAL CUT OR TOOLED PROCESSES WITHIN 4 TO 12 HOURS AFTER THE SLAB HAS BEEN FINISHED.
- ALL WELDED WIRE FABRIC (W.W.F.) FOR CONCRETE SLABS-ON-GRADE SHALL BE PLACED AT MID-DEPTH OF SLAB. THE W.W.F. SHALL BE SECURELY SUPPORTED DURING THE CONCRETE POUR. FIBROUS CONCRETE REINFORCEMENT, OR POLYPROPYLENE FIBERS MAY BE USED IN LIEU OF W.W.F. APPLICATION OF POLYPROPYLENE FIBERS PER CUBIC YARD OF CONCRETE SHALL BE PER MANUFACTURER AND COMPLY WITH ASTM C1116. ANY LOCAL BUILDING CODE REQUIREMENTS AND SHALL MEET OR EXCEED CURRENT INDUSTRY STANDARD.
- POLYPROPYLENE REINFORCING TO BE 100% VIRGIN CONTAINING NO REPROCESSED OLEFIN MATERIALS AND SPECIFICALLY MANUFACTURED FOR USE AS CONCRETE SECONDARY REINFORCEMENT.
- STEEL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615 CRADE 60 11. DETAILING, FABRICATION, AND PLACEMENT OF REINFORCING STEEL SHALL
- BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315: "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES".
- 12. HORIZONTAL FOOTING AND WALL REINFORCEMENT SHALL BE CONTINUOUS AND SHALL HAVE 90° BENDS, OR CORNER BARS WITH THE SAME SIZE/SPACING AS THE HORIZONTAL REINFORCEMENT.
- 13. PROVIDE REINFORCEMENT LAP AS NOTED BELOW, UNLESS NOTED OTHERWISE:
- #4 BARS 30" LENGTH #5 BARS - 38" LENGTH #6 BARS - 45" LENGTH
- WHERE REINFORCING DOWELS ARE REQUIRED, THEY SHALL BE FOUIVALENT IN SIZE AND SPACING TO THE VERTICAL REINFORCEMENT. THE DOWEL SHALL EXTEND 48 BAR DIAMETERS VERTICALLY AND 20 BAR
- DIAMETERS INTO THE FOOTING. SEE KSE FOUNDATION DETAILS.
 WHERE FOOTING BOTTOMS ARE TO BE STEPPED AT SLOPING GRADE CONDITIONS. PROVIDE CONTINUOUS REINFORCING WITH Z BARS (TO MATCH FOOTING REINFORCING) AS REQUIRED.
- BAR SUPPORT ACCESSORIES SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, EXCEPT THAT REINFORCING SHALL BE CHAIRED ON THE BOTTOM AND/OR THE SIDES ON BOLSTERS SPACED NOT MORE THAN 4 FEET ON CENTER. NO ROCKS, CMU, CLAY TILE, OR BRICK SHALL BE USED TO SUPPORT REINFORCING.
- FOR GRADE SUPPORTED SLABS, SLAB REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS AND ACCESSORIES AS DESCRIBED IN THE CRSI MANUAL OF STANDARD PRACTICE. BAR SUPPORTS SHALL BE SPACED A MAXIMUM OF 4'-0" O.C. BOTH WAYS IN STRAIGHT LINES ON

- ALL MASONRY SHALL CONFORM TO ASTM C-90, F'm=1500 PSI. ALL BRICK SHALL CONFORM TO ASTM C-216, F'm=1500 PSI, ALL MORTAR SHALL BE TYPE 'S' (TYPE 'M' BELOW GRADE) AND CONFORM TO ASTM C-270. COARSE GROUT SHALL CONFORM TO ASTM C-476 WITH A MAXIMUM AGGREGATE SIZE OF 36" AND A MINIMUM COMPRESSIVE STRENGTH OF 2,000
- ALL MASONRY WORK SHALL BE IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" ACI 530/ASCE 5/TMS 402 AND "SPECIFICATIONS FOR MASONRY STRUCTURES" ACI 530.1/ ASCE 6/TMS 602. THE UNSUPPORTED HEIGHT OF SOLID MASONRY PIERS SHALL NOT
- EXCEED TEN TIMES THEIR LEAST DIMENSION. UNFILLED HOLLOW PIERS MAY BE USED IF THE UNSUPPORTED HEIGHT IS NOT MORE THAN FOUR TIMES THEIR LEAST DIMENSION.
- EACH CRAWL SPACE PIER SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING AND EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS. PILASTERS TO BE BONDED TO PERIMETER FOUNDATION WALL.
- TOP COURSE OF MASONRY SHALL BE GROUTED SOLID.
- HORIZONTAL WALL JOINT REINFORCEMENT SHALL BE STANDARD 9 GAGE GALVANIZED LADDER OR TRUSS TYPE SPACED AT 16" O.C., UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- SPLICED WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" AND CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT WITHIN THE 6". LAP WITH STANDARD 'T' AND 'L' SHAPED PIECES AT INTERSECTIONS AND CORNERS.

WOOD FRAMING:

- SOLID SAWN WOOD FRAMING MEMBERS SHALL CONFORM TO THE SPECIFICATIONS LISTED IN THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION": (NDS). UNLESS OTHERWISE NOTED, ALL WOOD FRAMING MEMBERS ARE DESIGNED TO
- SPRUCE-PINE-FIR (SPF) WITH THE FOLLOWING MINIMUM DESIGN VALUES.
- E=1,400,000 PSI, F_b=875 PSI, F_v=135 PSI 1.1. FRAMING: SPF #2.
- 1.2. PLATES: SPF #2.
- 1.3. STUDS: SPE STUD GRADE.
- WALL STUD SPACING, (MAXIMUM 10' NOMINAL PLATE HEIGHT): 1 & 2 STORY EXTERIOR AND INTERIOR BEARING: 2x4 @ 16" O.C. OR 2x6 @ 24" O.C., U.N.O
- BOTTOM OF 3 STORIES EXTERIOR AND INTERIOR BEARING: 2x6 @ 16" O.C., U.N.O.
- INTERIOR NON-BEARING: 2x @ 24" O.C., U.N.O.
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE SHALL BE PRESERVATIVE TREATED SOUTHERN YELLOW PINE #2 OR BETTER.
- ANCHOR SILL PLATES IN ACCORDANCE W/ GENERAL STRUCTURAL NOTES. ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY. LARGER MEMBERS MAY BE SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION.
- NAILS SHALL BE COMMON WIRE NAILS UNLESS OTHERWISE NOTED.
- BOLT HOLES AND LEAD HOLES FOR LAG SCREWS SHALL BE IN ACCORDANCE WITH NDS SPECIFICATIONS.
- INDIVIDUAL STUDS FORMING A COLUMN SHALL BE ATTACHED WITH (2) ROWS 10d NAILS @ 6" O.C. STAGGERED, THE STUD COLUMN SHALL BE FULLY BLOCKED AT ALL FLOOR LEVELS TO ENSURE PROPER LOAD TRANSFER WALL SHEATHING SHALL BE NAILED TO FDGE OF FACH STUD
- FACE NAIL ALL MULTI-PLY BEAMS AND HEADERS WITH (2) ROWS 16d COMMON NAILS @ 16" O.C., STAGGERED, OR PER MANUFACTURER'S SPECIFICATIONS FOR ENGINEERED LUMBER. APPLY NAILING FROM BOTH FACES FOR (3) OR MORE PLIES.
- 10. FASTEN 4-PLY BEAMS WITH (1) 1/2" DIAMETER THROUGH BOLT W/ NUTS AND WASHERS AT 12" O.C. STAGGERED TOP AND BOTTOM, 1/2" MINIMUM EDGE DISTANCE. (UNLESS OTHERWISE NOTED)
- ALL BEAMS AND HEADERS SHALL HAVE (1)2x JACK STUD & (1)2x KING STUD UNLESS OTHERWISE NOTED. THE NUMBER OF STUDS INDICATED ON PLANS ARE THE TOTAL NUMBER OF JACK STUDS REQUIRED, UNLESS OTHERWISE NOTED.
- 12. PROVIDE KING STUDS AT EACH END OF HEADERS AS NOTED BELOW. (1) STUD UP TO 6' OPENING
- (2) STUDS UP TO 8' OPENING (3) STUDS UP TO 9' OPENING
- 13. ALL BEAMS TO BE CONTINUOUSLY SUPPORTED LATERALLY AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED WITH A MINIMUM OF TWO STUDS, UNLESS OTHERWISE NOTED, ALL BEAM
- SPLICES SHALL OCCUR OVER SUPPORTS.

 14. SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO OTHER STRUCTURAL COMPONENTS.
- ALL LUMBER SPECIFIED ON DRAWINGS IS INTENDED FOR DRY USE ONLY (MOISTURE CONTENT <19%) UNLESS OTHERWISE NOTED. ALL WATERPROOFING AND FIRE SAFETY SYSTEMS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND
- ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF THE STUD UP TO 1" DIAMETER SHALL HAVE STUD PROTECTION SHIELDS. ALL HOLES OVER 1" IN DIAMETER FOR PLUMBING LINES, ETC. SHALL BE REPAIRED WITH SIMPSON HSS2 OR USP STS1
- STUD SHOES, TYPICAL, UNLESS OTHERWISE NOTED. BEARING WALLS SHALL BE SHEATHED ON NOT LESS THAN ONE SIDE WITH OSB OR GYPSUM BOARD, BRIDGING SHALL BE INSTALLED NOT GREATER THAN 4 FEET APART MEASURED VERTICALLY FROM EITHER END OF THE STUD IN LIEU OF SHEATHING.
- DIAGONAL BRACING SHALL BE INSTALLED AT EACH END OF BASEMENT BEARING WALLS AND NOT MORE THAN 20' ON CENTER.

EXTERIOR WOOD FRAMED DECKS:

- DECKS ARE TO BE FRAMED IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND AS REFERENCED ON THE STRUCTURAL PLANS, EITHER THROUGH CODE REFERENCES OR CONSTRUCTION DETAILS. PRESERVATIVE TREATED WOOD FRAMING TO BE SOUTHERN YELLOW
- PINE #2 OR BETTER GUARD RAILS REQUIRED AT DECKS. DESIGN BY OTHERS TO MEET MINIMUM CODE REQUIREMENTS.
- PROVIDE DECK LATERAL LOAD AND BRACING CONNECTIONS PER BUILDING

RAFTER FRAMED ROOF CONSTRUCTION:

- PROVIDE 2x4x4'-0" RAFTER TIES AT 48" O.C RAFTERS SHALL BE SUPPORTED BY PURLINS AND PURLIN BRACES. AS SHOWN ON THE PLAN. PURLIN BRACES SHALL NOT BEAR ON ANY CEILING JOIST STRONGBACK OR HEADER LINLESS SPECIFICALLY
- SHOWN ON PLAN. RAFTERS MAY BE SPLICED AT PURLIN LOCATIONS. CEILING JOISTS SHALL HAVE LATERAL SUPPORT W/ 1x4 FLAT BRACING ON TOP EDGE OF JOIST AT LOOSE JOIST ENDS (WHERE JOISTS NOT FASTENED TO RAFTERS) OR FULL DEPTH BLOCKING.
- FASTEN END OF BRACING TO RAFTER OR GABLE END FRAMING. FASTEN RAFTER AND CEILING JOIST WITH (6) 12d NAILS UNLESS OTHERWISE NOTED
- PROVIDE VERTICAL 2x6 STRONGBACKS AT CEILING JOISTS @ 8'-0" O.C. TIE STRONGBACK ENDS TO GABLE STUDS OR RAFTERS WHERE POSSIBLE PROVIDE BLOCKING BETWEEN TOP PLATES AND STRONGBACKS. PROVIDE 2x4 FLAT FASTENED TO EACH JOIST WITH (2) 12d NAILS FASTEN STRONGBACK TO 2x4 FLAT WITH 12d NAILS @ 12" O.C. AND FASTENED TO EACH JOIST WITH (1) 12d TOENAIL.

WOOD TRUSSES (FLOOR & ROOF)

- THE WOOD TRUSS MANUFACTURER/FABRICATOR IS RESPONSIBLE FOR THE DESIGN OF THE WOOD TRUSSES. SUBMIT SEALED SHOP DRAWINGS AND SUPPORTING CALCULATIONS TO THE SER FOR REVIEW PRIOR TO FABRICATION. THE SER SHALL HAVE A MINIMUM OF (5) DAYS FOR REVIEW. THE REVIEW BY THE SER SHALL BE FOR OVERALL COMPLIANCE OF THE DESIGN DOCUMENTS. THE SER SHALL ASSUME NO RESPONSIBILITY FOR THE CORRECTNESS OF THE STRUCTURAL DESIGN FOR THE WOOD TRUSSES.
- THE WOOD TRUSSES SHALL BE DESIGNED FOR ALL REQUIRED LOADINGS AS SPECIFIED IN THE LOCAL BUILDING CODE. THE ASCE STANDARD "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES. (ASCE 7), AND THE LOADING REQUIREMENTS SHOWN ON THESE SPECIFICATIONS. THE TRUSS DRAWINGS SHALL BE COORDINATED WITH ALL OTHER CONSTRUCTION DOCUMENTS AND PROVISIONS PROVIDED FOR LOADS SHOWN ON THESE DRAWINGS INCLUDING BUT NOT LIMITED TO HVAC EQUIPMENT, PIPING, AND ARCHITECTURAL FIXTURES ATTACHED TO
- THE TRUSSES SHALL BE DESIGNED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/TPI 1: "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION"
- THE TRUSS MANUFACTURER SHALL PROVIDE ADEQUATE BRACING INFORMATION IN ACCORDANCE WITH "BUILDING COMPONENT SAFETY INFORMATION GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" (BCSI). THIS BRACING, BOTH TEMPORARY AND PERMANENT, SHALL BE SHOWN ON THE SHOP DRAWINGS. ALSO, THE SHOP DRAWINGS SHALL SHOW THE REQUIRED ATTACHMENTS FOR THE TRUSSES.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING TEMPORARY BRACING AND SHORING FOR THE FLOOR AND ROOF TRUSSES AS REQUIRED DURING CONSTRUCTION. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE LATEST BCSI. THE CONTRACTOR SHALL KEEP A COPY OF THE BCSI SUMMARY SHEETS ON SITE
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL PERMANENT TRUSS BRACING SHOWN IN THE STRUCTURAL DRAWINGS AND IN THE TRUSS DESIGNS, ALL CONTINUOUS LATERAL BRACING OF WEBS REQUIRES BRACES. REFER TO BCSI SUMMARY SHEET B3 FOR TYPES OF DIAGONAL BRACES TO PROVIDE AT EACH CONTINUOUS LATERAL BRACE LINE, SUCH DIAGONAL BRACES SHALL NOT BE SPACED MORE THAN 20 FEET O.C. DIAGONAL BRACES SHALL BE FASTENED TO EACH TRUSS WEB WITH A MINIMUM OF TWO 10d FACE NAILS. WHERE CONTINUOUS LATERAL BRACING CANNOT BE INSTALLED, DUE TO A MINIMUM OF THREE ADJACENT TRUSSES NOT BEING IDENTICAL. THE CONTRACTOR SHALL COORDINATE WITH THE TRUSS SPECIALTY ENGINEER/MANUFACTURER TO DETERMINE WHAT TYPE OF ALTERNATE BRACE (I.E., T OR L BRACE, ETC.) IS RECUIRED
- ANY CHORDS OR TRUSS WEBS SHOWN ON THESE DRAWINGS HAVE BEEN SHOWN AS A REFERENCE ONLY. THE FINAL DESIGN OF THE TRUSSES SHALL BE PER THE MANUFACTURER.
- TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN ON THE SEALED STRUCTURAL DRAWINGS, TRUSS PROFILES TO BE SEALED BY THE TRUSS MANUFACTURER, TRUSS PLANS TO BE COORDINATED WITH THE SEALED
- TRUSS MANUFACTURER TO PROVIDE REQUIRED UPLIET CONNECTORS FOR
- 10. PROVIDE SIMPSON H2.5A, USP RT7 OR EQUIVALENT AT EACH TRUSS TO TOP PLATE CONNECTION, UNLESS OTHERWISE NOTED.

WOOD STRUCTURAL PANELS:

- FABRICATION AND PLACEMENT OF STRUCTURAL WOOD SHEATHING SHALL BE IN ACCORDANCE WITH THE APA DESIGN/CONSTRUCTION GUIDE "RESIDENTIAL AND COMMERCIAL," AND ALL OTHER APPLICABLE
- ALL REQUIRED WOOD SHEATHING SHALL BEAR THE MARK OF THE
- WOOD WALL SHEATHING SHALL COMPLY WITH THE REQUIREMENTS OF LOCAL BUILDING CODES FOR THE APPROPRIATE STATE AS INDICATED ON THESE DRAWINGS, REFER TO WALL BRACING NOTES IN PLAN SET FOR MORE INFORMATION, EXTERIOR WALLS TO BE FULLY SHEATHED USING 1/16" OSB OR PLYWOOD MINIMUM. AT BRACED WALL PANELS, PROVIDE BLOCKING AT ALL SHEET EDGES NOT FALLING ON STUDS OR PLATES.
- ROOF SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ROOF SHEATHING SHALL BE CONTINUOUS OVER TWO SUPPORTS MINIMUM AND ATTACHED TO ITS SUPPORTING ROOF FRAMING WITH 8d NAILS AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN PANEL FIELD UNLESS OTHERWISE NOTED ON THE PLANS. SHEATHING SHALL BE APPLIED WITH THE LONG DIRECTION PERPENDICULAR TO FRAMING. SHEATHING SHALL HAVE A SPAN RATING CONSISTENT WITH THE FRAMING SPACING. PROVIDE SUITABLE EDGE SUPPORT BY USE OF PLYWOOD CLIPS OR LUMBER BLOCKING UNLESS OTHERWISE NOTED PANEL END JOINTS SHALL OCCUR OVER FRAMING. ROOF SHEATHING TO BE 1/6" OSB MINIMUM.
- WOOD FLOOR SHEATHING SHALL BE APA RATED SHEATHING EXPOSURE 1 OR 2. ATTACH SHEATHING TO ITS SUPPORTING FRAMING WITH (1) 10d NAIL AT 6" O.C. AT PANEL EDGES AND AT 12" O.C. IN PANEL FIELD LINLESS OTHERWISE NOTED ON THE PLANS. SHEATHING SHALL BE APPLIED PERPENDICULAR TO FRAMING SHEATHING SHALL HAVE A SPAN RATING CONSISTENT WITH THE FRAMING SPACING. PROVIDE SUITABLE EDGE SUPPORT BY USE OF T&G PLYWOOD OR LUMBER BLOCKING UNLESS OTHERWISE NOTED PANEL END JOINTS SHALL OCCUR OVER FRAMING.
- SHEATHING SHALL HAVE A 1/4" GAP AT PANEL ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE APA.

STRUCTURAL FIBERBOARD PANELS:

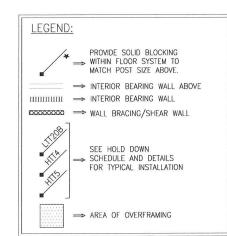
- STRUCTURAL FIBERBOARD SHEATHING SHALL ONLY BE USED WHERE SPECIFICALLY NOTED ON THE STRUCTURAL PLANS
- FABRICATION AND PLACEMENT OF STRUCTURAL FIBERBOARD SHEATHING SHALL BE IN ACCORDANCE WITH THE APPLICABLE AFA STANDARDS
- FIBERBOARD WALL SHEATHING SHALL COMPLY WITH THE REQUIREMENTS OF LOCAL BUILDING CODES FOR THE APPROPRIATE STATE AS INDICATED ON THESE DRAWINGS. REFER TO WALL BRACING NOTES IN PLAN SET FOR MORE INFORMATION.
- SHEATHING SHALL HAVE A %" GAP AT PANEL ENDS AND EDGES AS RECOMMENDED IN ACCORDANCE WITH THE AFA.

STRUCTURAL STEEL:

- STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND OF THE MANUAL OF STEEL CONSTRUCTION "LOAD RESISTANCE FACTOR DESIGN" LATEST EDITIONS
- ALL STEEL SHALL HAVE A MINIMUM YIELD STRESS (F.,) OF 50 KSI UNLESS OTHERWISE NOTED
- WELDING SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY'S STRUCTURAL WELDING CODE AWA ELECTRODES FOR SHOP AND FIELDING WELDING SHALL BE CLASS F70XX, ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER PER THE ABOVE STANDARDS.
- ALL STEEL BEAMS TO BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 31/2" AND FULL FLANGE WIDTH UNLESS OTHERWISE NOTED. BEAMS MUST BE ATTACHED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR (2) 1/2" x 4" LAG SCREWS UNLESS OTHERWISE NOTED.
- INSTALL 2x WOOD PLATE ON TOP OF STEEL BEAMS, RIPPED TO MATCH BEAM WIDTH, FASTEN PLATE TO BEAM W/ HILTI X-DNI 52 P8 PINS AT 12" O.C. STAGGERED OR 1/2" DIAMETER BOLTS AT 24"

MECHANICAL FASTENERS:

- ALL METAL HARDWARE AND FASTENERS TO BE SIMPSON STRONG-TIE OR APPROVED FOLIVALENT.
- ALL HARDWARE AND FASTENERS IN CONTACT WITH PRESERVATIVE PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED IN
- ACCORDANCE WITH ASTM A 153, G-185. MANY OF THE NEW PRESSURE TREATED WOODS USE CHEMICALS THAT ARE CORROSIVE TO STEEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE TYPE OF WOOD TREATMENT AND SELECT APPROPRIATE CONNECTORS THAT WILL RESIST THE APPLICABLE CORROSIVE CHEMICALS.



SPAN	LINTEL SIZE	END BEARING	
UP TO 3'-0"	3½"×3½"×¼"	4"	
UP TO 6'-3"	5"x3½"x¾6" L.L.V.	8"	
UP TO 9'-6"	6"x3½"x5/16" L.L.V.	12"	



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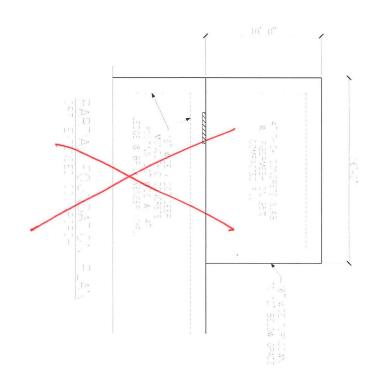
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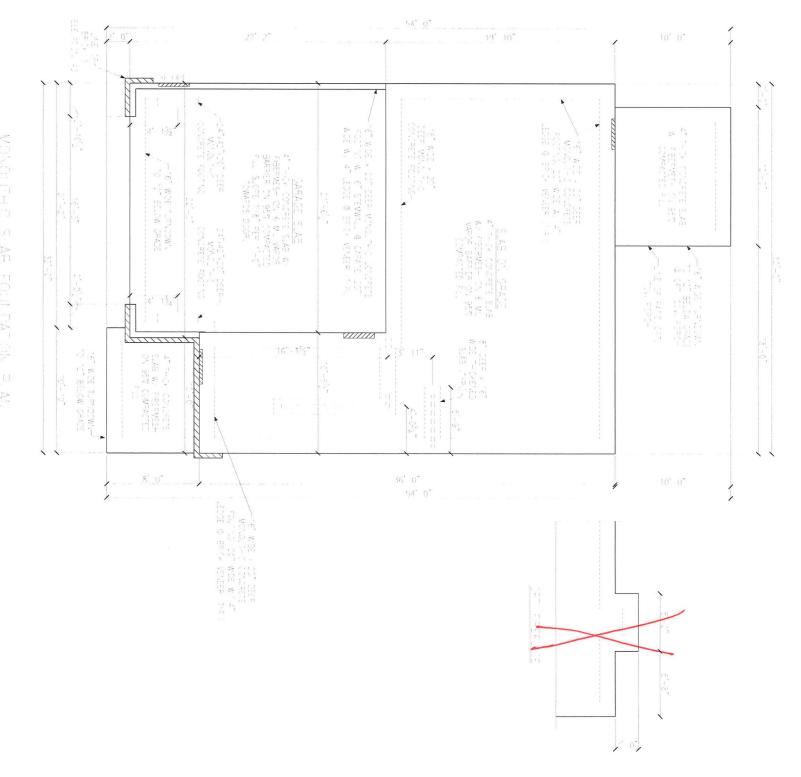
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Carolina

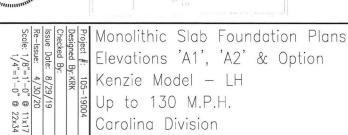
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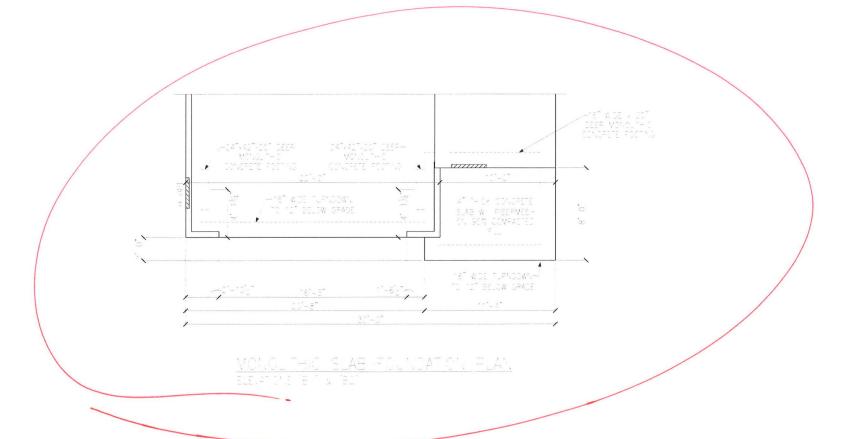


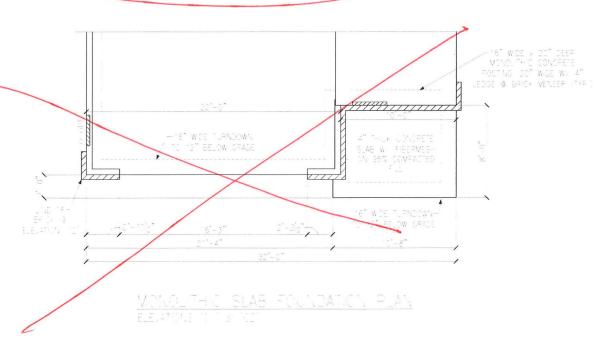












LEGEND

PROVIDE SOUR BUSCHING

WITH FLOOR SYSTEM TO
MATCH POST SIZE ABOVE. ETTTE SEAT NO WALL ABOVE

DUBUMI

SEA SU WALL ABOVE

O'TERIOR BEARING WALL

SHACED WALL FAVEL

(SEE MSE STOUCTURAL DETAILS

SET FOR BRACEL WALL FAVEL

SHEATHING FASTENING &

BLOCKING DETAILS ZZZZZZZ -> LOCATION OF SOOF ABOVE



Monolithic Slab Foundation Plans

| Monolithic Slab Foundation Plans | Flevations |

Checked By: Issue Date: 8/29/19 Re-Issue: 4/30/20 Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

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Plans Options

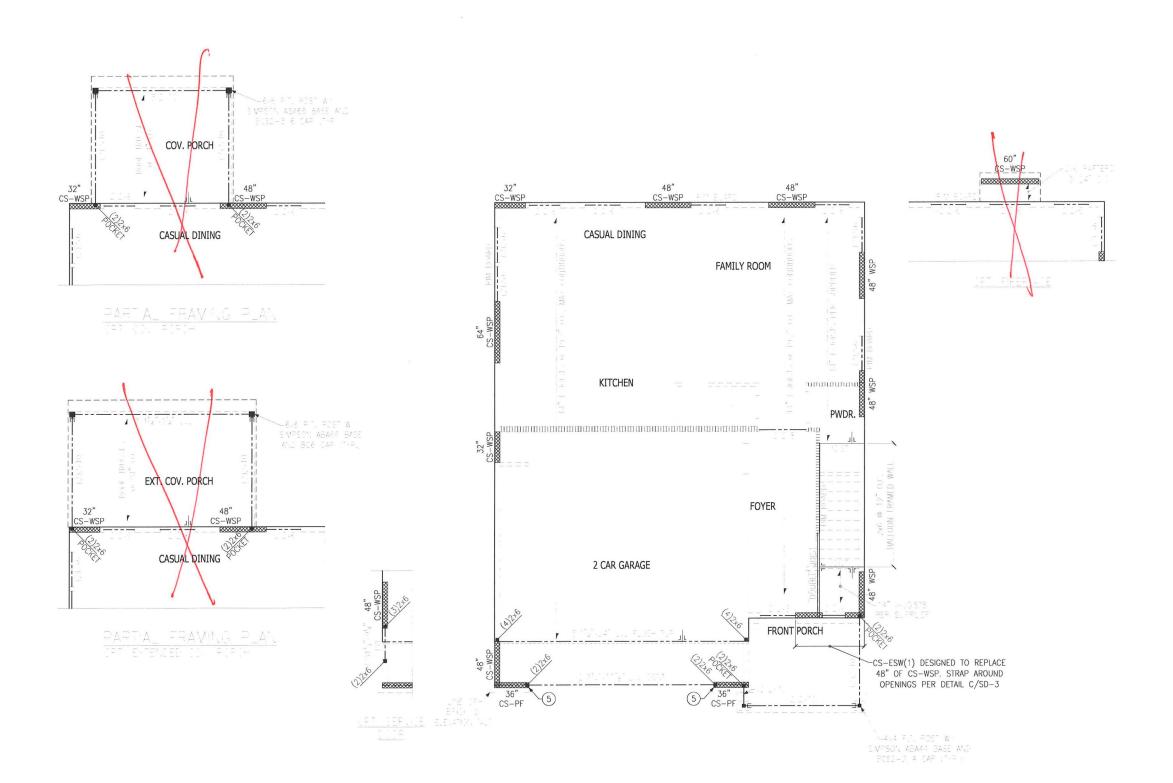
PROVIDE SOLD BLOCK NO WITHN FLOOP SYSTEM TO WATCH POST SIZE ABOVE. ⇒ BEAR '.G WALL ABOVE DIMINITE - NIERIOF BEARING WALL 48" WSP

BRACED WALL FANEL
USEE VSE STRUCTURAL DETAILS
SET FOR BRACED WALL FANEL
SHEATHING FASTENING &
BLOCKING DETAILS, ⇒ NO HEASER REQUIRES

PLAN, DESIGNED WITH 9' WALL PLATES FLOOR FRAMING TO BE 14" DEEP TU 110 SEP ES OF EDUAL, STACING PER WANLFACTURER,

- (4) INSTALL ONE PANEL CS-PF POFTAL FRAME PER DETAL A OF B/SD-4.
- (E) (NSTALL TWO PANEL CS-PF POPTAL FRAVE PER DETAIL A OF B/SC-4



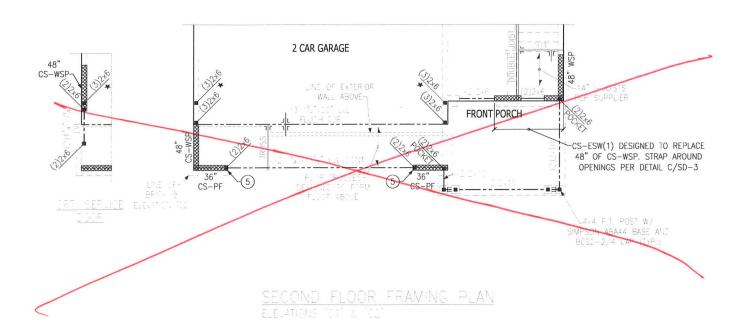


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Second Floor Framing Pl Elevations 'A1', 'A2' & C Kenzie Model — LH Up to 130 M.P.H.

Project #: 105-19004 Designed By: KRK Checked By: Issue Date: 8/29/19 Re-Issue: 4/30/20 Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

SIMPSON ABA44 BASE AND BCS2-2/4 CAP (TYP.)







,C2,

Second Floor Framing Plans

Elevations 'B1', 'B2', 'C1' & 'C

Kenzie Model - LH

Golf Up to 130 M.P.H.

Carolina Division



⇒ PROVIDE SOLID BLOCKING WITHIN FLOOR SYSTEM TO MATCH POST SIZE ABOVE.

⇒ BEARING WALL ABOVE DEMINITE == INTERIOR BEARING WALL

WSP

WSP

WSP

WSP

BRACED WALL PANEL

SEE KSE STRUCTURAL DETAILS

###

⇒ NO HEADER REQUIRED REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

PLAN DESIGNED WITH 9' WALL PLATES

FLOOR FRAMING TO BE 14" DEEP TJE 110 SERIES OR EQUAL, SPACING PER MANUFACTURER.

(A) INSTALL ONE PANEL CS-PF PORTAL FRAME PEP DETAIL A OP B/SD-4.

5 INSTALL TWO PANEL CS-PF PORTAL FRAME PER DETAIL A OR B/SD-4.



Project #: 105-19004 Designed By: KRK Checked By: Issue Date: 8/29/19 Re-Issue: 4/30/20 Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34





PROVIDE SOLID BLOCKING

WITHIN FLOOR SYSTEM TO

MATCH POST SIZE ABOVE. IIIIIII ⇒ BEARING WALL ABOVE □□□□□□ ⇒ INTERIOR BEARING WALL 48" WSP

BRACED WALL PANEL
(SEE KSE STRUCTURAL DETALS
SET FOR BRACED WALL PANEL
SHEATHING FASTENING & BLOCKING DETAILS) NH ⇒ NO HEADER REQUIRED

REFER TO KSE STRUCTURAL DETAILS SET FOR GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS

PLAN DESIGNED WITH 8' WALL PLATES

- 8'x12' HVAC PLATFORM TRUSSES DESIGNED TO SUPPORT HVAC UNITS.
- (1) 2x6 OVERFRAMING W/ 2x8 RIDGE AND VALLEY PLATES OR VALLEY SET TRUSSES @ 24" O.C. (TMP.)



Roof Framing Plan Elevations 'B1' & 'B2' Kenzie Model – LH Up to 130 M.P.H. Carolina Division

Project #: 105-19004 Designed By: KRK Checked By: Issue Date: 8/29/19 Re-Issue: 4/30/20 Scole: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

S - 3.1

DESIGNED TO FORM FLOOR BELOW

48" WSP

LOFT/ BEDROOM 4

W.I.C.

64" WSP

W.I.C.

BATH 2

O. BATH 1

W.I.C.

BEDROOM 2

BEDROOM 3

LAUNDRY

OWNER'S

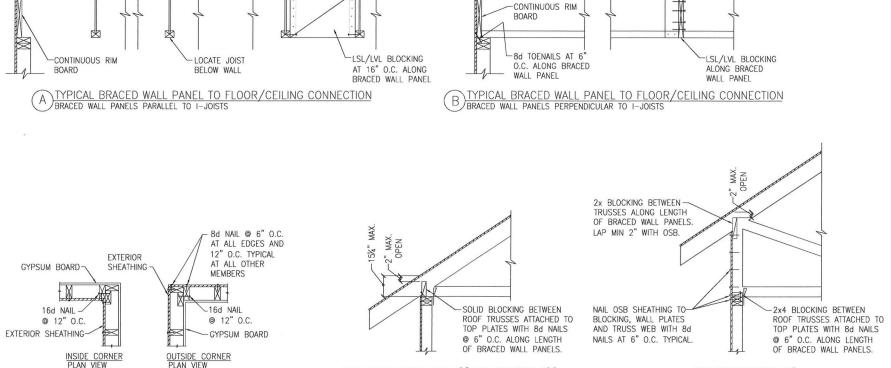
SUITE







ROOF TRUSS BEARING/BLOCKING AT BRACED WALL PANELS



HEEL HEIGHT GREATER THAN 91/4" AND LESS THAN 151/4"

2x4 CLEAT WITH (2)10d

mmynda

NAILS AT CHORDS AND

(4)10d NAILS AT

BLOCKING (TYP.) -

-8d TOENAILS AT 6" O.C.

ALONG BRACED WALL

PANFI

PANEL

-BRACED WALL

-(3)16d NAILS AT

16" O.C. ALONG

BRACED WALL PANEL

-CONTINUOUS RIM LOCATE JOIST

-8d TOENAILS AT 6" O.C.

ALONG BRACED WALL

ON WALL-

DTYPICAL EXTERIOR CORNER WALL FRAMING

BOARD

PANEL

-BRACED WALL

-(3)16d NAILS AT

16" O.C. ALONG

BRACED WALL PANEL

-LSL/LVL BLOCKING

(3)8d TOENAILS

EACH BLOCK

WALL PANEL

-BRACED WALL

-(3)16d NAILS EACH

BRACED WALL PANEL

BLOCK ALONG

PANEL

ALONG BRACED

AT 16" O.C. ALONG

BRACED WALL PANEL

-CONTINUOUS RIM

-8d TOENAILS AT 6" O.C.

ALONG BRACED WALL

BOARD

PANEL

PANEL

-BRACED WALL

-(3)16d NAILS AT

16" O.C. ALONG

BRACED WALL PANEL

BRACED WALL PANEL 1/2" (MIN) GYPSUM WALLBOARD. FASTEN TO WALL ALL SUPPORTS (STUDS, PLATES, BLOCKING) WITH 1.25" TYPE W SCREWS AT 7" O.C. COR 5d COOLER NAILS AT 7" O.C.) 7 -8d TOENAILS AT 6". O.C. ALONG BRACED WALL PANEL 2x4 BLOCKING BTWN-VERTICAL WALL 2x6 FULL HEIGHT STUD STUDS AT ALL AT WALL INTERSECTION HORIZONTAL GYPSUM BRACED -BRACED WALL -(2x8 STUD AT SHEATHING JOINTS. -WALL-PANEL INTERSECTING 2x6 WALL) -(3)16d NAILS EACH BLOCK ALONG BRACED WALL PANEL 3-STUD WALL "T" PLATE WALL INTERSECTION INTERSECTION

-LSL/LVL BLOCKING ALONG

HEEL HEIGHT GREATER 15"

BE FRAMED USING EITHER THE 3-STUD OR THE T-PLATE METHOD.

(C) METHOD GB(1) AND GB(2) INTERSECTION DETAILS

BRACED WALL INTERSECTIONS MAY

M.P.H.

130

to Up to North

Project #: 105-19000 Designed By: KRK Checked By: Issue Date: 1/1/19 Re-Issue:

Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

Carolina

Detai

Wall

Braced

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SE







SIMPSON "SET" OR "ET" ADHESIVE.

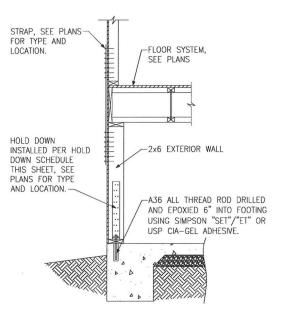
C HOLD DOWN AT STEMWALL SLAB FOUNDATION

-HOLD DOWN INSTALLED PER HOLD DOWN SCHEDULE THIS SHEET, SEE PLANS FOR TYPE AND LOCATION.

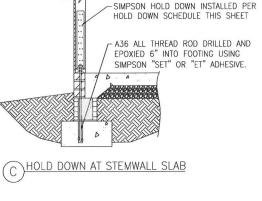
-A36 ALL THREAD ROD DRILLED AND

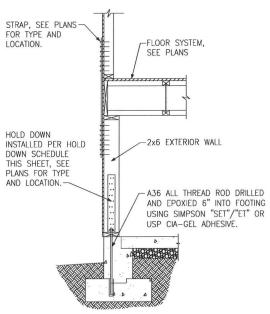
EPOXIED 6" INTO FOOTING USING SIMPSON

"SET"/"ET" OR USP CIA-GEL ADHESIVE.



HOLD DOWN AT BASEMENT FOUNDATION MONOLITHIC TURN-DOWN





G HOLD DOWN AT BASEMENT FOUNDATION STEM WALL

HOLD DOWN SCHEDULE					
HOLD DOWN SIMPSON USP		ALL THREAD ROD	FASTENERS		
SINIFSON	USF				
LTT20B	LTS20B	⅓" DIA.	(10)10d NAILS		
HTT4	HTT16	5⁄8" DIA.	(18)16dx2½" LONG NAILS		
HTT5	HTT45	%" DIA.	(26)16dx2½" LONG NAILS		

Details

Down

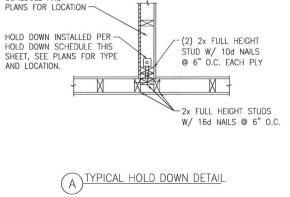
plol

Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

Project #: 105-19000 Designed By: KRK Checked By: Issue Date: 1/1/19 Re-Issue:

130 M.P.H. Carolina

Up to North



SHEAR WALL, SEE SCHEDULE AND



-HOLD DOWN INSTALLED PER HOLD

DOWN SCHEDULE THIS SHEET, SEE

-A36 ALL THREAD ROD DRILLED AND

EPOXIED 6" INTO FOOTING USING SIMPSON

"SET"/"ET" OR USP CIA-GEL ADHESIVE.

PLANS FOR TYPE AND LOCATION.

(D)HOLD DOWN AT MONOLITHIC SLAB FOUNDATION

2x FULL HEIGHT

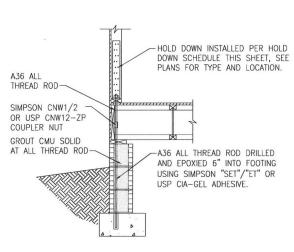
NAILS @ 6" O.C.-

(2)2x FULL HEIGHT -

STUD W/ 10d NAILS

@ 6" O.C. EACH PLY

STUD W/ 16d



B TYPICAL HOLD DOWN DETAIL

SHEAR WALL, SEE

PLANS FOR LOCATION

HOLD DOWN INSTALLED PER HOLD

DOWN SCHEDULE THIS SHEET, SEE PLANS FOR TYPE AND LOCATION.

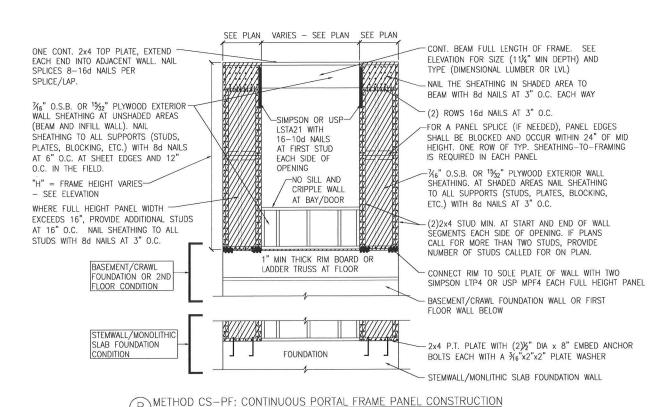
SCHEDULE AND

(E)HOLD DOWN AT CRAWL SPACE FOUNDATION

METHOD CS-PF: CONTINUOUS PORTAL FRAME PANEL CONSTRUCTION

ONE BRACED WALL SEGMENT

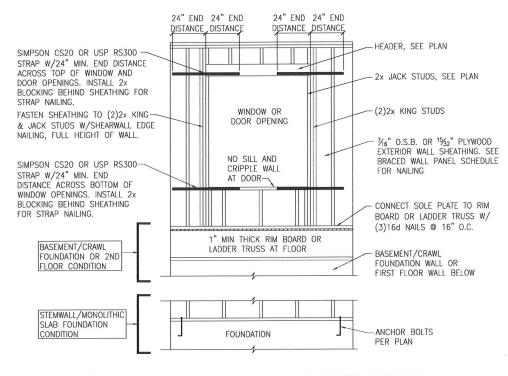
TWO BRACED WALL SEGMENTS



BRACED WALL PANEL AND ENGINEERED SHEAR WALL SCHEDULE **FASTENERS** PANEL TYPES PANEL TYPE MATERIAL 6D OR 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT INTERMITTENT WOOD 7/16" OSB INTERMEDIATE SUPPORTS. ENGINEERED ALTERNATIVE: 16 GAGE BY 1.75" LONG STRUCTURAL PANEL STAPLES AT 3" O.C. AT SHEET EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W 1/2" GYPSUM GB(1) BOARD (SHEATHING ONE DRYWALL SCREWS AT 7" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACE OF WALL) INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W 1/2" GYPSUM GB(1)-4BOARD (SHEATHING ONE DRYWALL SCREWS AT 4" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACE OF WALL) INTERMITTENT GYPSUM 1.5" LONG GALV. ROOFING NAILS, 6d COMMON NAILS, OR 1.25" LONG TYPE W 1/2" GYPSUM GB(2) BOARD (SHEATHING BOTH DRYWALL SCREWS AT 7" O.C. AT SHEET EDGES AND INTERMEDIATE SUPPORTS. FACES OF WALL) 6D OR 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT CONTINUOUS SHEATHED INTERMEDIATE SUPPORTS. ENGINEERED ALTERNATIVE: 16 GAGE BY 1.75" LONG CS-WSP 7/16" OSB WOOD STRUCTURAL STAPLES AT 3" O.C. AT SHEET EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS CONTINUOUS SHEATHED 7/16" OSB CS-PF PORTAL FRAME PORTAL FRAME WITH 7/16" OSB NAILING PER DETAIL PFH HOLD DOWNS 7/16" OSB 8D COMMON NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. AT ENGINEERED SHEAR CS-ESW(1) INTERMEDIATE SUPPORTS, CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS WALL, TYPE 1 8D COMMON NAILS AT 4" O.C. AT SHEET EDGES AND 12" O.C. AT ENGINEERED SHEAR 7/16" OSB CS-ESW(2) WALL, TYPE 2 INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS 8D COMMON NAILS AT 3" O.C. AT SHEET EDGES AND 12" O.C. AT 7/16" OSB ENGINEERED SHEAR CS-ESW(3) INTERMEDIATE SUPPORTS. CONTINUOUS OSB AROUND DOOR/WINDOW OPENINGS WALL, TYPE 3

BRACED WALL PANEL NOTES:

- 1. ALL BRACED WALL PANELS, EXCEPT GB(1) & GB(2), SHALL HAVE 2x BLOCKING BETWEEN WALL STUDS AT ALL HORIZONTAL SHEET EDGES.
- 2. PROVIDE NAILING/BLOCKING ABOVE AND BELOW ALL BRACED WALL PANELS PER KSE BRACED WALL DETAILS.
- 3. SHEATH ALL EXTERIOR WALLS OF THE HOUSE WITH 7/6" O.S.B., OR 15/2" PLYWOOD, FASTENED PER IRC. AT EXTERIOR CORNERS, SHEATHING SHALL BE FASTENED PER KSE BRACED WALL DETAILS. AT INTERIOR WALL INTERSECTIONS, FASTEN STUDS & WALL BRACING PER KSE BRACED WALL DETAILS.
- 4. BRACED WALL PANELS AND ENGINEERED SHEAR WALLS ARE PROVIDED PER IRC. PANEL LENGTHS SHOWN ON PLANS ARE THE MINIMUM LENGTH REQUIRED.



WINDOW OR DOOR REINFORCEMENT IN ENGINEERED SHEAR WALL ONLY REQUIRED WHERE SPECIFED ON PLANS





Braced Wall Notes & Detai

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Project #: 105-19000
Designed By: KRK
Checked By:
Issue Date: 1/1/19

Re-Issue:
Scale: 1/8"=1'-0" @ 11x17
1/4"=1'-0" @ 22x34

SD-3

KSE

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ortal Frame Details

Project #: 105-19000
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М. Р. Н.

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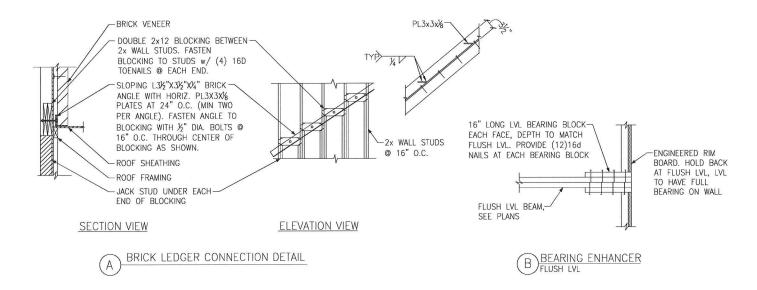
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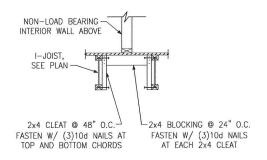
Checked By: Issue Date: 1/1/19

Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

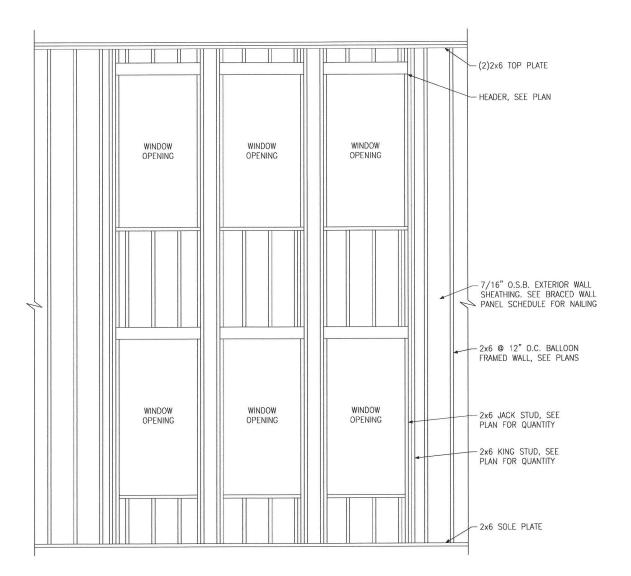
SD-4

METHOD PFH: PORTAL FRAME WITH HOLD-DOWNS MONOLITHIC SLAB OR BASEMENT FOUNDATION





O AS REQUIRED @ PARALLEL WALLS



DBALLOON FRAMED WALL DETAIL N.T.S.





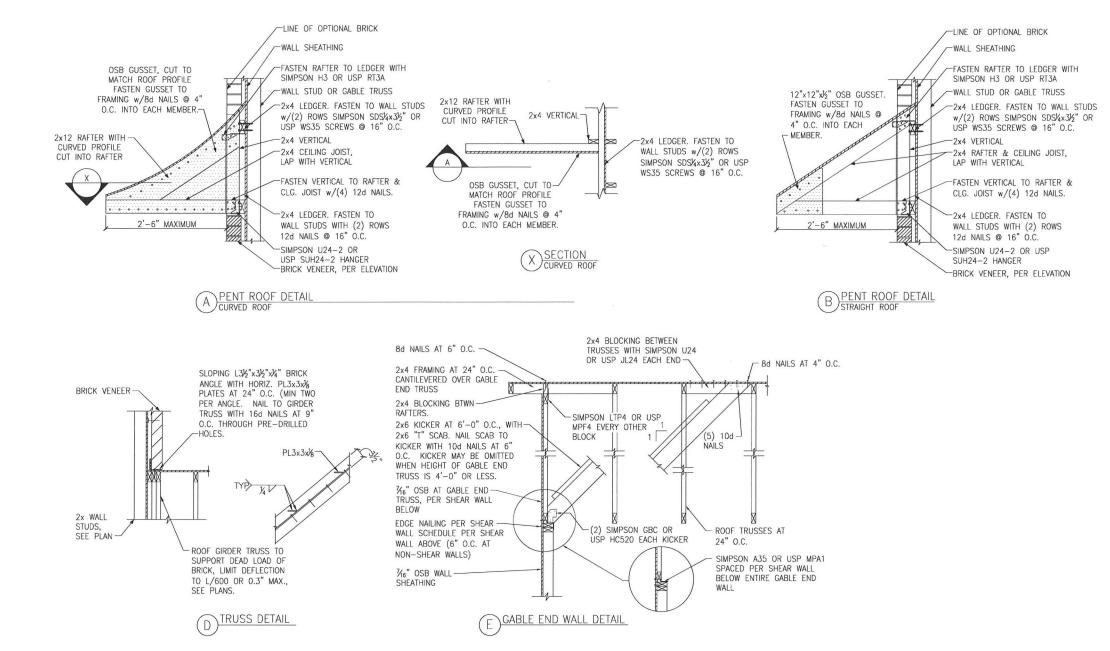
Details Framing

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WALL STUD OR GABLE TRUSS

TOENAIL RAFTER TO LEDGER
WITH (4) 12d NAILS

2x4 LEDGER. FASTEN TO WALL STUDS
W/(2) ROWS SIMPSON SDS¼x¾½" OR
USP WS35 SCREWS @ 16" O.C.

2x4 RAFTER & CEILING JOIST,
LAP AND FACE NAIL WITH (4)
12d NAILS

2x4 LEDGER. FASTEN TO WALL
OR GABLE TRUSS WITH (2)
ROWS 12d NAILS @ 16" O.C.

C EYEBROW ROOF DETAIL STRAIGHT ROOF



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S

Miscellaneous Framing Details

M.P.H.

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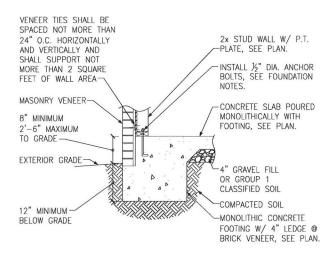
Carolina

Designed By: KRK
Checked By:
Issue Date: 1/1/19

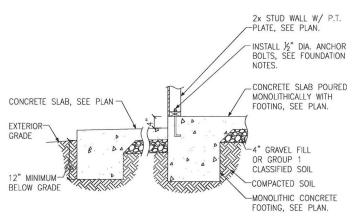
Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

SD-6

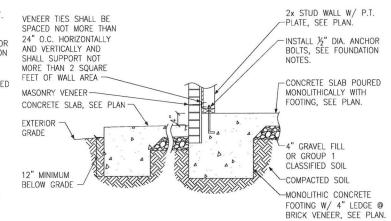




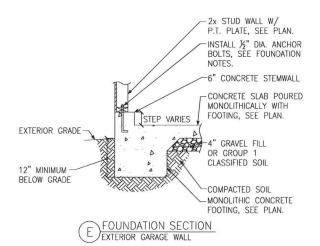


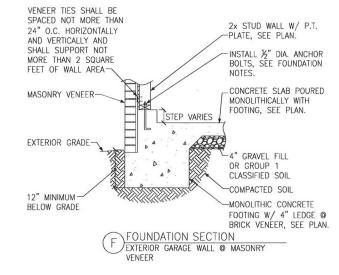


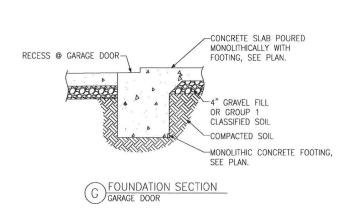
FOUNDATION SECTION EXTERIOR WALL AT PORCH

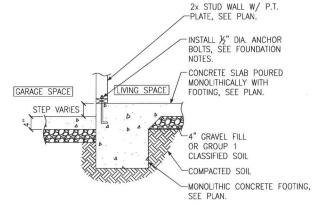


FOUNDATION SECTION EXTERIOR WALL AT PORCH W/ MASONRY

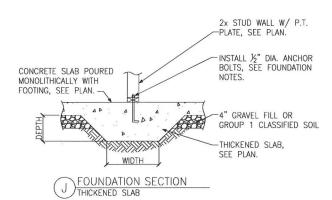


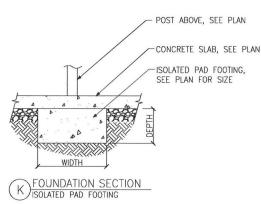






FOUNDATION SECTION H) INTERIOR GARAGE WALL









S Detail Foundation Slab Monolithic Checked By:

Carolina 30 5 Project #: 105-19000 Designed By: KRK

M.P.H.

Issue Date: 1/1/19 Re-Issue: Scale: 1/8"=1'-0" @ 11x17 1/4"=1'-0" @ 22x34

