Residence for

Garman Homes Lot 0191 Serenity Fuquay Varina, North Carolina

INDEX TO DRAWINGS

| COVER SHEET 1 FRONT & LEFT SIDE ELEVATIONS 2 REAR & RIGHT SIDE ELEVATIONS 3 FIRST & SECOND FLOOR PLANS E FIRST & SECOND FLOOR ELECTRICAL PLANS M FIRST & SECOND FLOOR MECHANICAL PLANS P FIRST FLOOR PLUMBING PLAN D CONSTRUCTION DETAILS | S1AFOUNDATION PLAN & FIRST FLOOR FRAMING PLANS2ASECOND FLOOR FRAMING PLAN & ROOF FRAMING PLANS3ASECOND FLOOR WALK UP ATTIC FRAMING PLAN & ATTIC FRAMING PLANS4AROOF FRAMING PLAN- WALK UP ATTIC OPTIONS5ASTRUCTURAL OPTIONSS6ASTRUCTURAL OPTIONSS7ABRICK FOUNDATION PLAN- LEFT & RIGHTSD1STRUCTURAL DETAILSSD2STRUCTURAL DETAILSSD3STRUCTURAL DETAILS |
|--|--|
| <u>GENERAL NOTES</u> | RESIDENTIAL BUILDING CODE SUMMARY 1. PLANS ARE DESIGNED TO THE 2018 N.C.S.R.B.C. |
| ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE, 2018 EDITION (HEREWITH SHOWN AS N.C.S.R.B.C.). | HOUSE IS DESIGNED FOR 115 MPH ULTIMATE DESIGN WIND SPEED (89 MPH NOMI DESIGN WIND SPEED), EXPOSURE B. |
| 2. DIMENSIONS SHOWN ON DRAWINGS GOVERN OVER SCALE. | ANCHOR BOLTS SHALL BE MIN. 1/2" DIAMETER AND SHALL EXTEND 7" MIN. INTO MASONBY OR CONCRETE. BOLTS TO BE NO MORE THAN 6" O.C. AND WITHIN 12" |
| 3. STUD WALL DESIGN SHALL CONFORM TO ALL N.C.S.R.B.C. REQUIREMENTS | FROM THE CORNER. 4. MEAN ROOF HEIGHT: 35'-0" |
| CONTRACTOR SHALL USE TEMPERED SAFETY GLASS IN ALL LOCATIONS AS REQUIRED BY N.C.S.R.B.C., 2018 EDITION, SECTION | 5. COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS: |
| R308.4. 5. ANY HABITABLE ROOM SHALL MEET ALL LIGHT/VENTILATION AND EGRESS AS REQUIRED BY N.C.S.R.B.C. 2018 EDITION, SECTIONS R-303.1 AND R-310.1. | MEAN ROOF HGT: UP TO 30' 30'-1" TO 35' 35'-1" TO 40' 40'-1" TO 45' ZONE 1 16.5,-18.0 17.3,-18.9 17.3,-18.9 17.3,-18.9 ZONE 2 16.5,-21.0 17.3,-22.1 17.3,-22.1 17.3,-22.1 ZONE 3 16.5,-21.0 17.3,-22.1 17.3,-22.1 17.3,-22.1 ZONE 4 18.0,-19.5 18.9,-20.5 18.9,-20.5 18.9,-20.5 |

- 6. ALL EXTERIOR WALLS SHOWN ON FLOOR PLANS ARE 2X6 FRAME UNLESS NOTED OTHERWISE. ALL INTERIOR WALLS SHOWN ON FLOOR PLANS ARE 2X4 FRAME UNLESS NOTED OTHERWISE.
- 7. ALL ANGLED WALLS SHOWN ON FLOOR PLANS ARE 45 UNLESS NOTED OTHERWISE.
- 8. ALL WINDOWS SHALL HAVE A MINIMUM DPI RATING OF 25. BUILDER SHALL VERIFY WITH WINDOW MANUFACTURER THAT UNITS INSTALLED MEET THESE REQUIREMENTS AS PER N.C.S.R.B.C., 2018 EDITION, TABLE 301.2(4).
- 9. ENERGY EFFICIENCY REQUIREMENTS FOR THE SPECIFIC CLIMATE ZONE WHERE STRUCTURE IS BEING BUILT SHALL BE IN ACCORDANCE WITH CHAPTER 11 OF THE N.C.S.R.B.C., 2018 EDITION, AS SHOWN IN SECTION N1101.2.

MATERIALS LEGEND

| | EARTH/COMPACT FILL | UT. | FINISH WOOD |
|-------------|----------------------|-----|------------------|
| 3 - 4 | CONCRETE | | ROUGH WOOD |
| | BRICK | | BLOCKING |
| \boxtimes | CONCRETE BLOCK/STONE | | PLYWOOD |
| | STEEL | | BATT INSULATION |
| | ALUMINUM | | RIGID INSULATION |

ATTIC VENTILATION REQUIREMENTS

| NATURAL ROOF VENTILATION CALCULATIONS | MECHANICAL ROOF VENTILATION CALCULATIONS |
|---|--|
| <u>1357 SQ. FT.</u> = 9.05 SQ. FT. 150 VENT REQ'D | 1357 SQ. FT. = 4.53 SQ. FT. 300 VENT REQ'D |
| BUILDER TO PROVIDE APPROPRIATE VENTILATING AS REQUIRED PER CODE | BUILDER TO PROVIDE APPROPRIATE VENTILATING AS REQUIRED PER CODE |

| S7A | BRICK FOUNDATION PLAN- LEFT & RIGHT |
|----------|--|
| SD1 | STRUCTURAL DETAILS |
| SD2 | STRUCTURAL DETAILS |
| SD3 | STRUCTURAL DETAILS |
| П | |
| <u> </u> | ESIDENTIAL BUILDING CODE SUMMARY |
| 1. PLAN | IS ARE DESIGNED TO THE 2018 N.C.S.R.B.C. |

- DESIGN WIND SPEED (89 MPH NOMINAL
- R AND SHALL EXTEND 7" MIN. INTO MORE THAN 6' O.C. AND WITHIN 12"
- HE FOLLOWING LOADS:

| MEAN ROOF HGT: | UP TO 30' | 30'-1" TO 35' | 35'-1" TO 40' | 40'-1" TO 45' |
|----------------|------------|---------------|---------------|---------------|
| ZONE 1 | 16.5,-18.0 | 17.3,-18.9 | 17.3,-18.9 | 17.3,-18.9 |
| ZONE 2 | 16.5,-21.0 | 17.3,-22.1 | 17.3,-22.1 | 17.3,-22.1 |
| ZONE 3 | 16.5,-21.0 | 17.3,-22.1 | 17.3,-22.1 | 17.3,-22.1 |
| ZONE 4 | 18.0,-19.5 | 18.9,-20.5 | 18.9,-20.5 | 18.9,-20.5 |
| ZONE 5 | 18.0,-24.1 | 18.9,-25.3 | 18.9,-25.3 | 18.9,-25.3 |
| | | | | |

- 6. MINIMUM VALUES FOR ENERGY COMPLIANCE: Zone 4
- 7. MAXIMUM GLAZING U-FACTOR: .35
- 8. INSULATING VALUES: CEILING: R-38 / WALLS: R-15 / FLOOR: R-19 SLABS: R-10. CODE REFERENCE: TABLE N1102.1

AREA CALCULATIONS

| HEATED (SQ. | FT.) | UNHEATED (SC | <u> 2. FT.)</u> | UNFINISHED | (SQ. FT.) |
|--|--------------------|-----------------------------------|------------------|--|------------------|
| 1ST FLOOR: 2ND FLOOR: 3RD FLOOR: | 848 1186 489 | GARAGE: FRONT PORCH: PATIO: | 428 81 100 | 1ST FLOOR: 2ND FLOOR: 3RD FLOOR: | N/A N/A 63 |
| TOTAL: | 2523 | TOTAL: | 609 | TOTAL: | N/A |
| | | | | OVERALL DIMEN | |
| | | | | WIDTH: DEPTH: | 33'-8" 52'-3" |

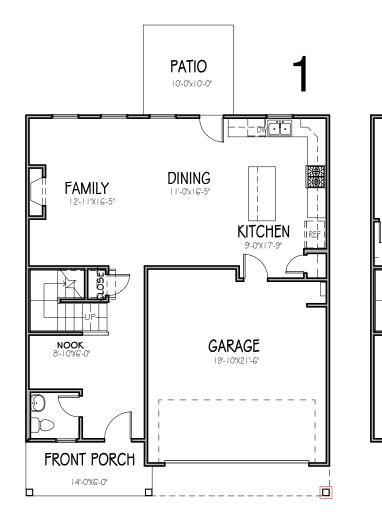
FOUNDATION VENTILATION CALCULATIONS

REFERENCE: N.C.S.R.B.C. 2018 EDITION SECTION R408)

NOT APPLICABLE WITH SLAB FOUNDATIONS







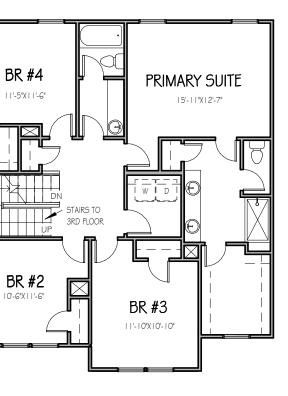


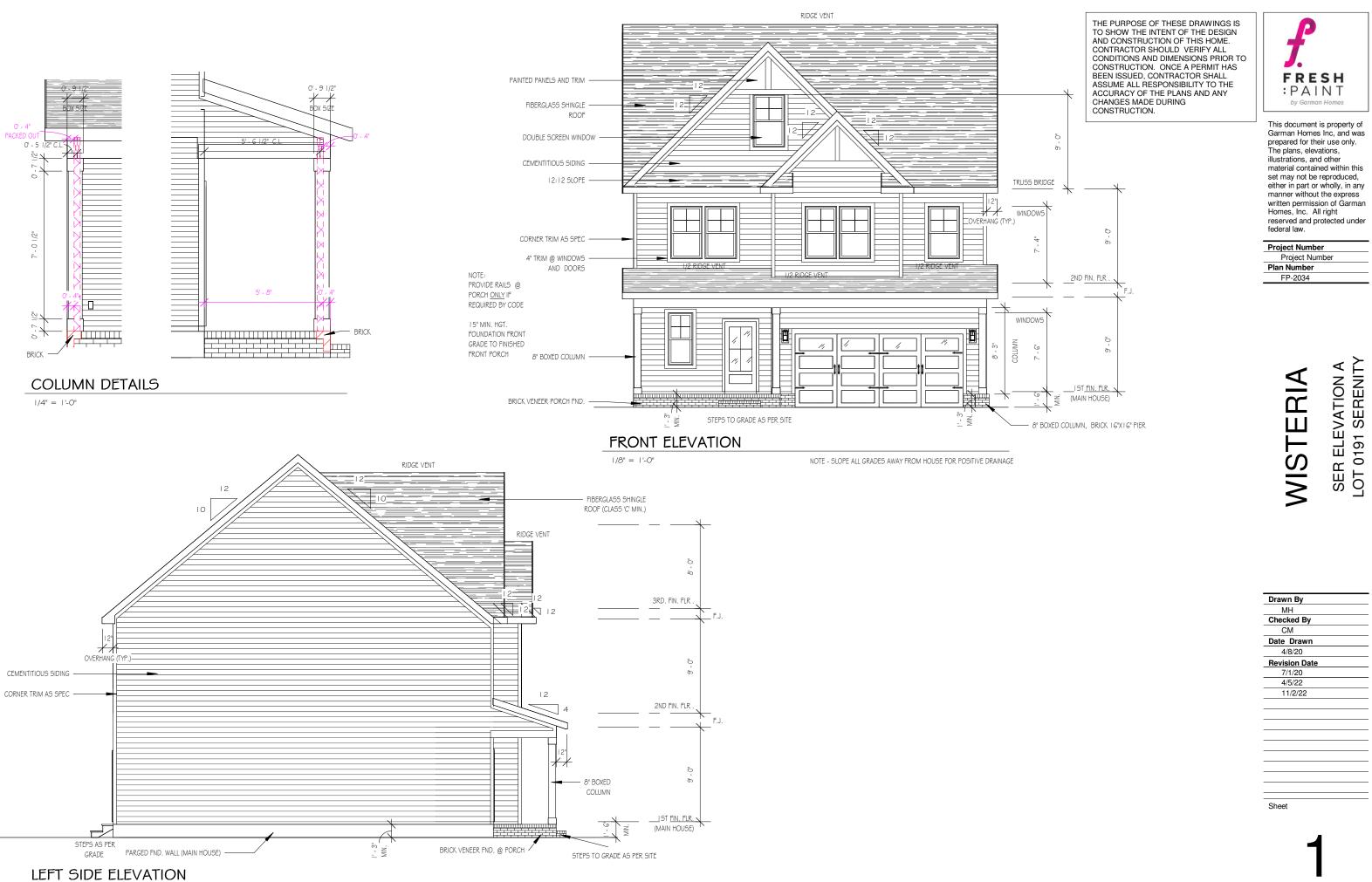


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|---------------|---|
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| Checked By | |
| JM | |
| Date Drawn | |
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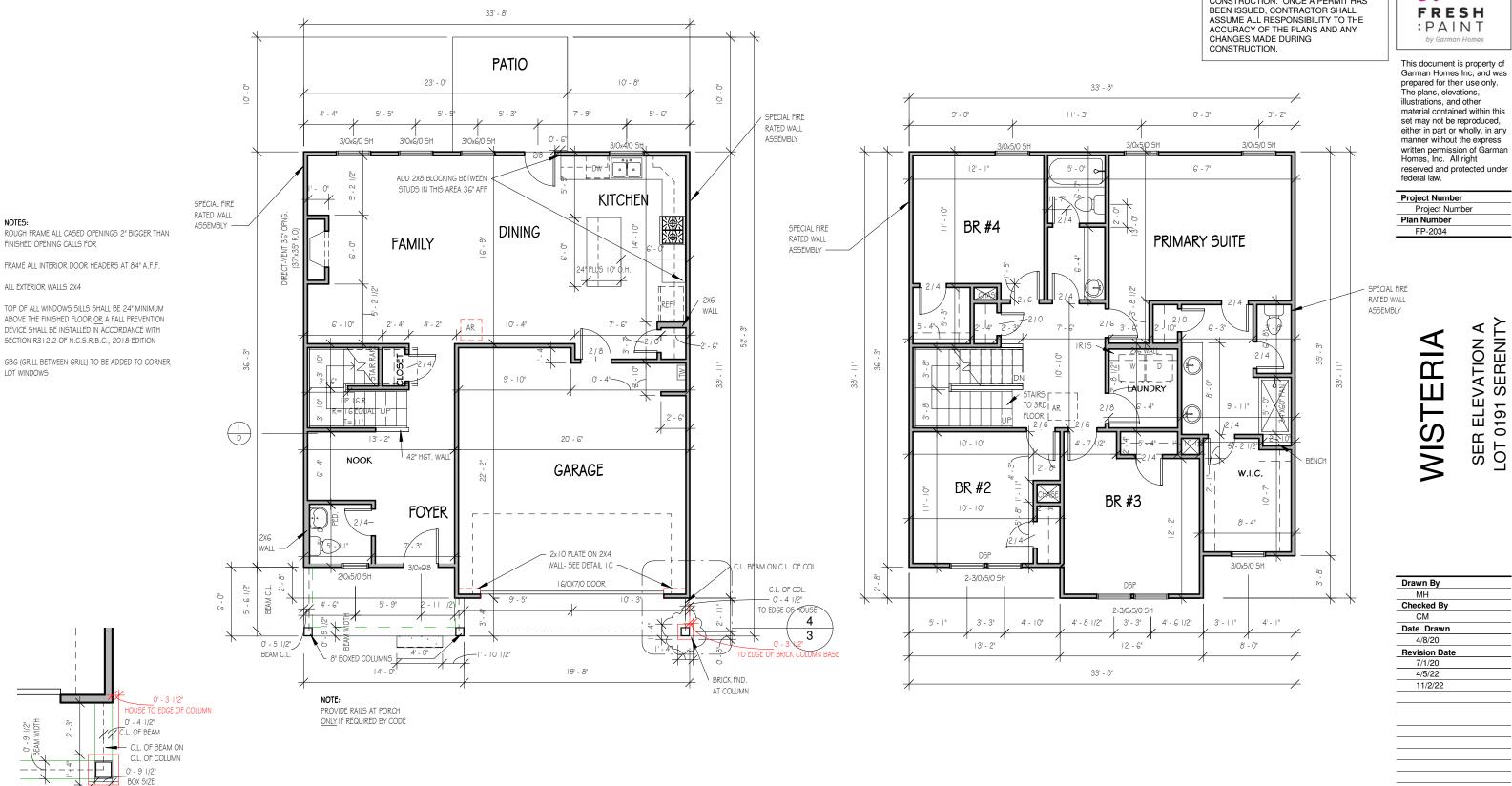
RIGHT SIDE ELEVATION

NOTE - SLOPE ALL GRADES AWAY FROM HOUSE FOR POSITIVE DRAINAGE

1/8" = 1'-0"

NOTE:

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| MH |
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FIRST FLOOR

9'-0" CLG. HGT. U.N.O.

SET WINDOWS @ 7'-6" U.N.O.

CASED OPENINGS 8'-0" TALL

1/8" = 1'-0"



1/8" = 1'-0"

GARAGE COLUMN DETAIL

|/4" = |'-0"

1/2" VIDTH

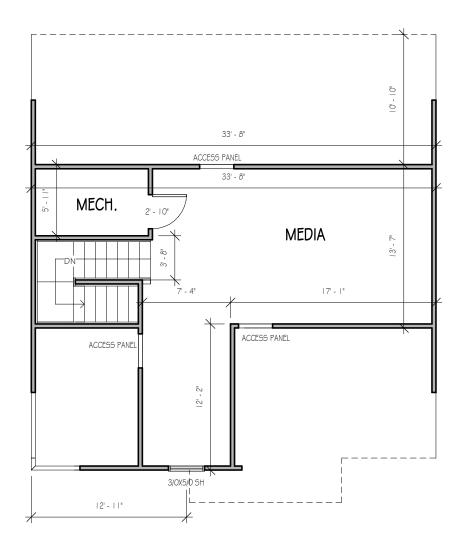
NOTES:

LOT WINDOWS

THE PURPOSE OF THESE DRAWINGS IS TO SHOW THE INTENT OF THE DESIGN AND CONSTRUCTION OF THIS HOME. CONTRACTOR SHOULD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ONCE A PERMIT HAS



9'-0" CLG. HGT. U.N.O. SET WINDOWS @ 7'-4" U.N.O.



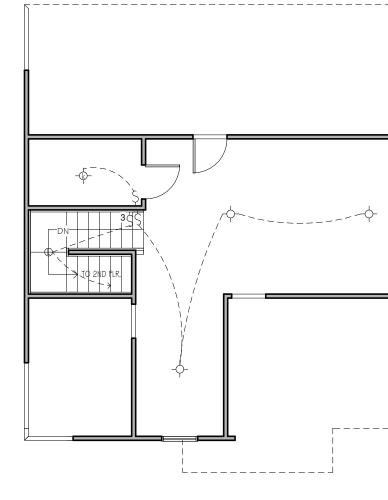
OPT. FINISHED THIRD FLOOR

1/8" = 1'-0"

489 SQ.FT. HEATED 63 SQ.FT UNFINISHED

7'-0" CLG. HGT. U.N.O. ED SET WINDOWS @ 7'-0" U.N.O. OPT. FINISHED THIRD FLOOR ELECTRICAL

1/8" = 1'-0"



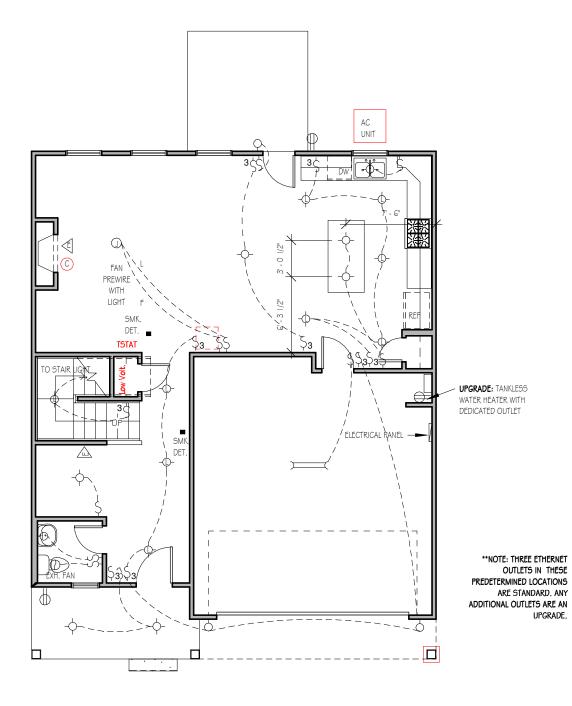
THE PURPOSE OF THESE DRAWINGS IS TO SHOW THE INTENT OF THE DESIGN AND CONSTRUCTION OF THIS HOME. CONTRACTOR SHOULD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ONCE A PERMIT HAS BEEN ISSUED, CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY TO THE ACCURACY OF THE PLANS AND ANY CHANGES MADE DURING CONSTRUCTION.

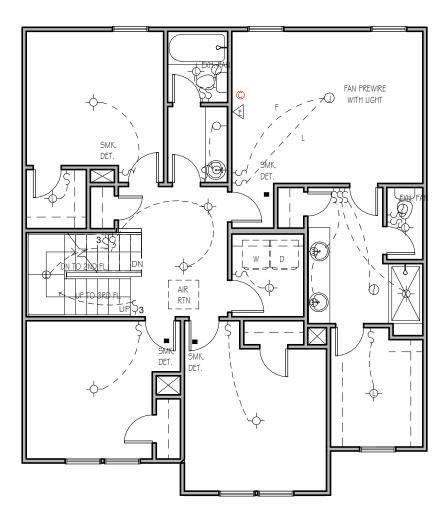


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FIRST FLOOR ELECTRICAL PLAN

1/8" = 1'-0"

NOTE - ELECTRICAL RECEPTACLE AND SWITCH QUANTITIES AND LOCATIONS SHOWN ON PLAN ARE FOR ILLUSTRATION PURPOSES ONLY. ACTUAL NUMBER AN D LOCATIONS SHALL BE FIELD DETERMINED AS PER CLIENT AND BUILDER EXCEPT WHERE CODE REQUIREMENTS APPLY.

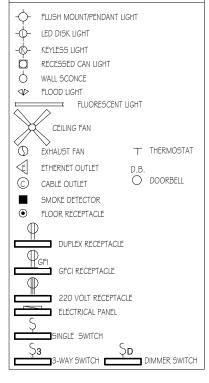
SECOND FLOOR ELECTRICAL PLAN

1/8" = 1'-0"

NOTE - ELECTRICAL RECEPTACLE AND SWITCH QUANTITIES AND LOCATIONS SHOWN ON PLAN ARE FOR ILLUSTRATION PURPOSES ONLY. ACTUAL NUMBER AN D LOCATIONS SHALL BE FIELD DETERMINED AS PER CLIENT AND BUILDER EXCEPT WHERE CODE REQUIREMENTS APPLY.

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ELECTRICAL LEGEND



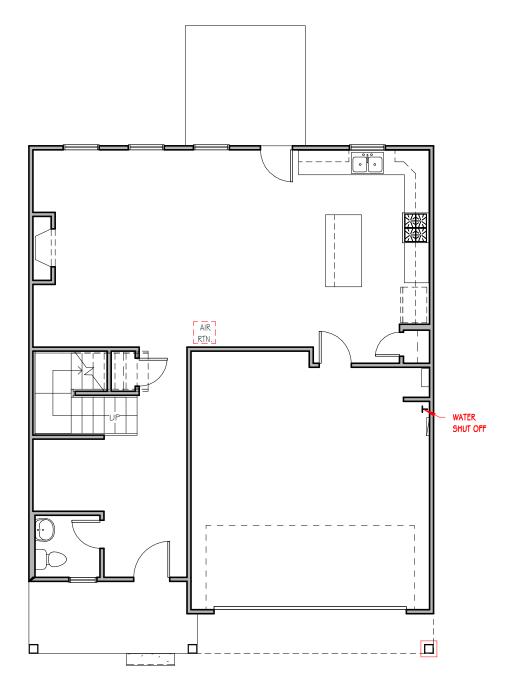


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| Project Number |
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| Plan Number |
| FP-2034 |
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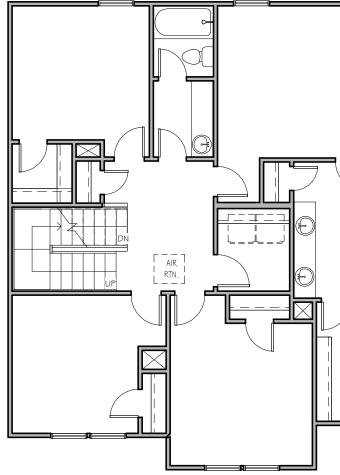
| WISTERIA SER ELEVATION |
|---------------------------|
|---------------------------|

| Drawn By | |
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| MH | |
| Checked By | |
| CM | |
| Date Drawn | |
| 4/8/20 | |
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FIRST FLOOR MECHANICAL PLAN

1/8" = 1'-0"



SECOND FLOOR MECHANICAL PLAN

|/8" = |'-0"

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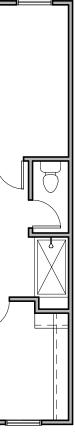
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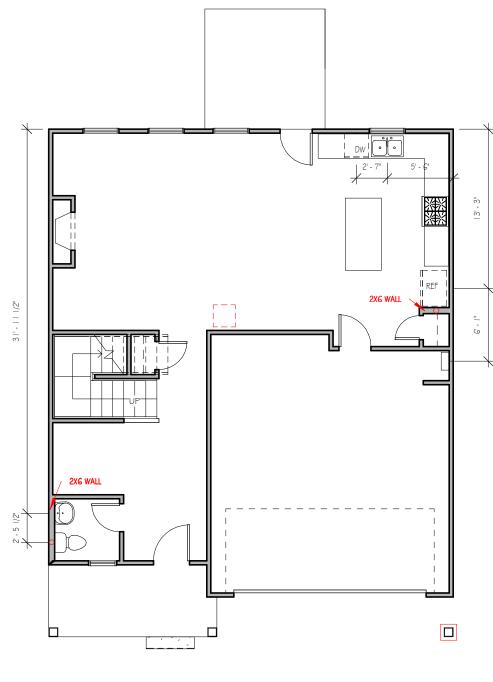


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FIRST FLOOR PLUMBING

1/8" = 1'-0"

THE PURPOSE OF THESE DRAWINGS IS TO SHOW THE INTENT OF THE DESIGN AND CONSTRUCTION OF THIS HOME. CONTRACTOR SHOULD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ONCE A PERMIT HAS BEEN ISSUED, CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY TO THE ACCURACY OF THE PLANS AND ANY CHANGES MADE DURING CONSTRUCTION.



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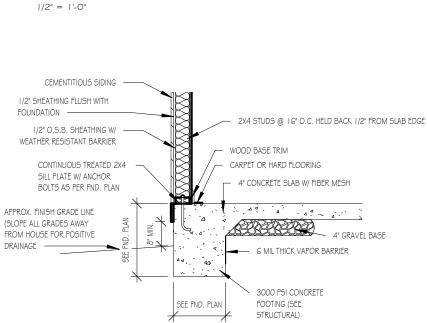
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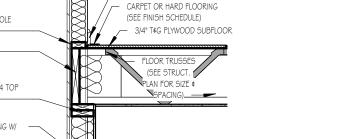
WISTERIA SER ELEVATION A LOT 0191 SERENITY

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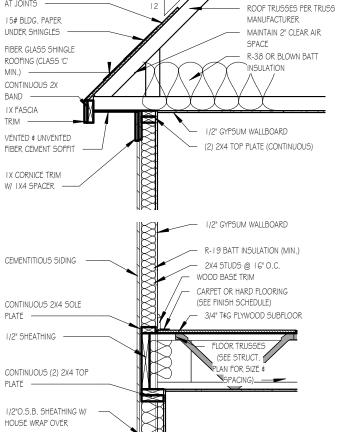
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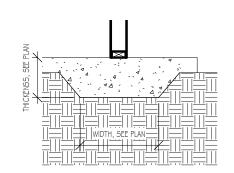






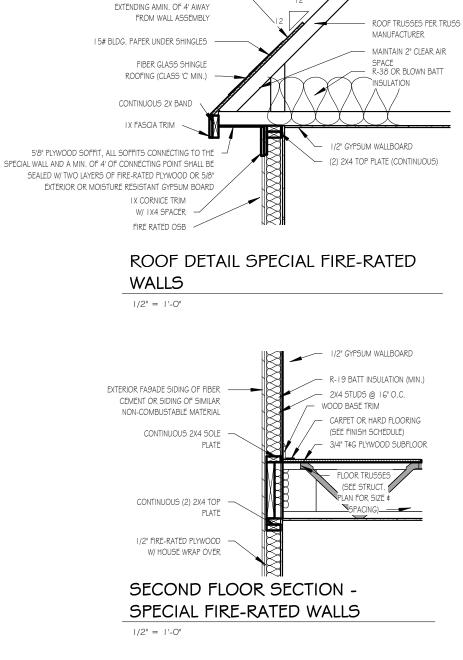






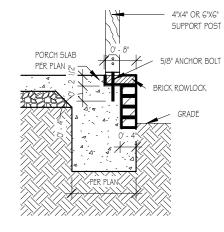
LUG FOOTING





1/2" FIRE-RATED PLYWOOD -

DECKING W/ PLY CLIPS AT JOINTS





5/8" PLYWOOD

AT JOINTS

DECKING W/ PLY CLIPS

FRONT PORCH COLUMNS SUPPORT ATTACHMENT

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CONSTRUCTION. ONCE A PERMIT HAS

BEEN ISSUED, CONTRACTOR SHALL

ACCURACY OF THE PLANS AND ANY

CHANGES MADE DURING

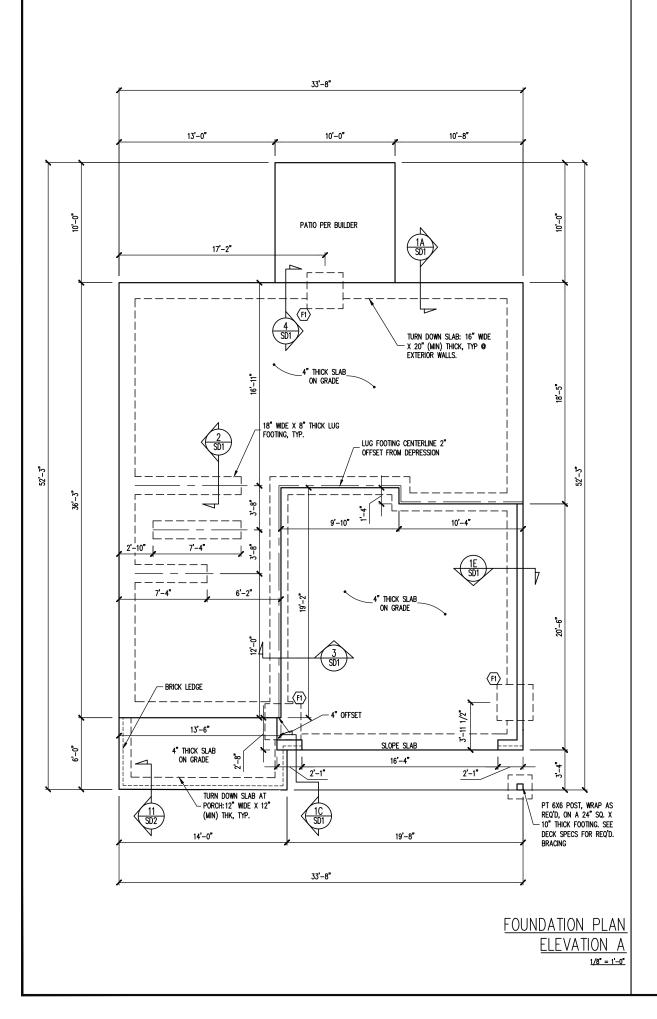
CONSTRUCTION.

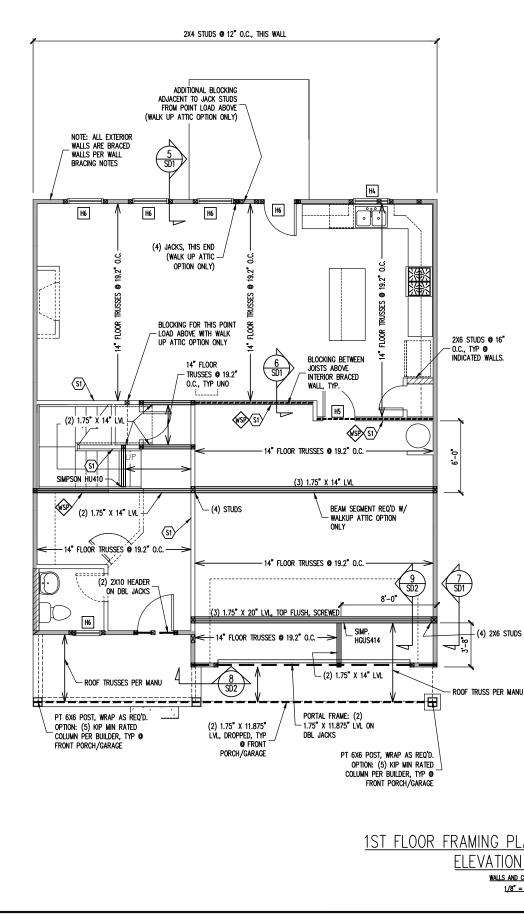
ASSUME ALL RESPONSIBILITY TO THE

Project Number Project Number Plan Number

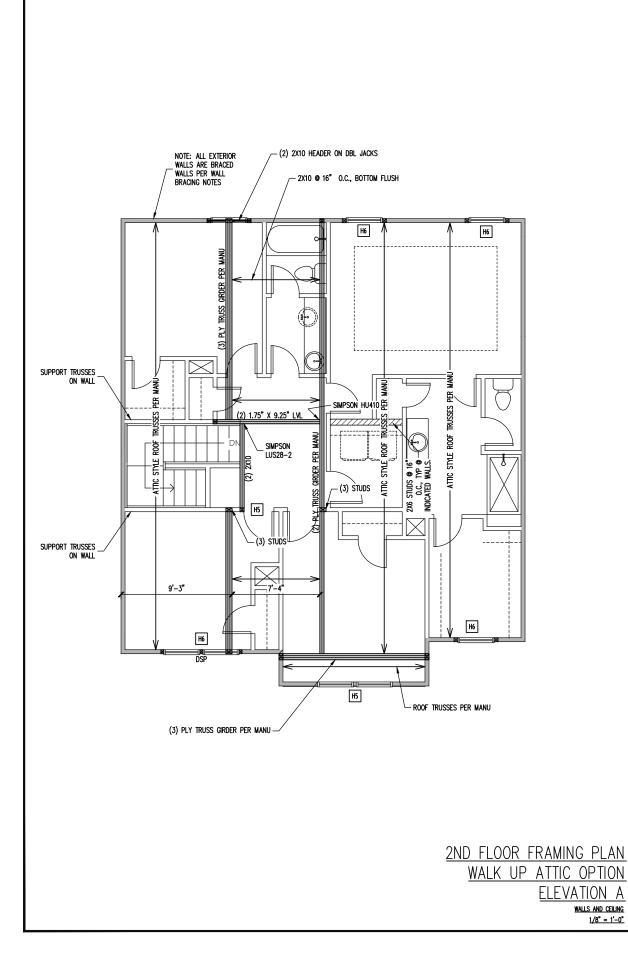


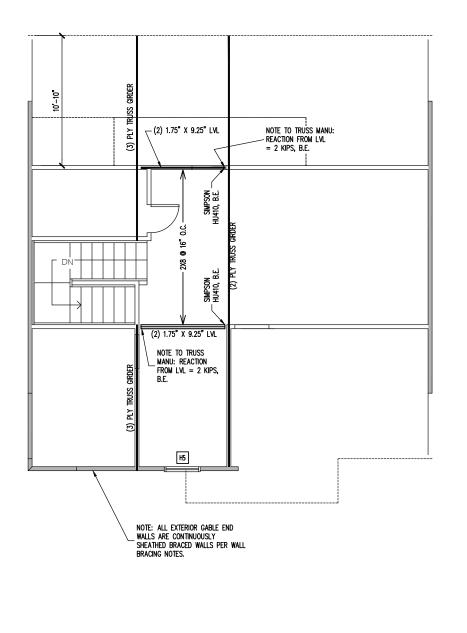
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|---------------|--|
| MMH | |
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| JM | |
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| FOUNDATION SCHEDULE F1 12" THICK X 36" SQ. FOOTING | SEAL CARDINITION OF CARDINATION OF C |
|---|--|
| SI INTERIOR LOAD BEARING WALL: SECURE TO THICKENED SLAB BELOW WITH 1/2'9 RED HEADER ANCHOR (OR EQUAL) @ 6'-0' O.C., 12' MAX FROM ENDS / CORNES OF WALL, 7'' MIN EMBEDMENT INTO SLAB BELOW. <u>JOIST SUBSTITUTION</u> 14'' FLOOR TRUSSES PERMITTED TO BE SUBSTITUTED WITH 14'' I-JOISTS. MAINTAIN MINIMUM SPACING AS CALLED OUT ON PLANS. SIMP. IUS/ITS3.56/14 HANGERS TO BE SUBSTITUTED WITH SIMP. IUS/ITS2.06/14 HANGER WHEN I-JOISTS HAVE BEEN INSTALLED. <u>CONSTRUCTION SPECIFICATIONS</u> INSTANT REFERENCES REFER TO THE CONSTRUCTION SPECIFICATIONS SECTIONS FOR THE FOLLOWING INFORMATION: PART 1.01: CURRENT GOVERNING CODE | the client listed only. Engineering Tech Associates, P.A. assumes no out written permission from Engineering Tech Associates, P.A. STRUCTURAL ENCINERS Itemse No. C-3870 318 W Milbrook Rd, Suite 201 ASSOCIATES, P.A. Phone (919) 844-1661 |
| PART 14: STUD SUPPORT FOR BEAMS PART 14: STUD SUPPORT FOR BEAMS PART 17: KING STUDS FOR EXTERIOR WALLS SEE DETAIL / CONSTRUCTION SPECIFICATIONS SHEETS FOR I-JOISTS ALLOWABLE SUBSTITUTIONS WALL BRACING SHADED WALLS: ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED 08B NAILED TO STUDS WITH 8d NAILS © 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD. WSP – ONE SDE OF INTERIOR WALL OR INSIDE OF EXTERIOR WALL WITH 8d NAILS © 4" O.C. AT PANEL EDGES, 8" O.C. IN PANEL FIELD. NOTES: PROVIDED CONTINUOUS SHEATHING = 145' MIN. REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION. HEADER SCHEDULE H1 SINGLE 2X4 TURNED FLAT (A) H2 (2) 2X4'S ON SINGLE JACKS (C) | perty of Engineering Tech Associates, P.A. These plans are for armitting takes place more than 1 year after the seal date with FRESH PAINT SCOPE STRUCTURAL ADDENDUM LOC TBD PLAN: WISTERIA |
| H4 (2) 1.75" X 9.25" LVL'S ON DEL JACKS H5 (2) 2X8'S ON SINGLE JACKS H6 (2) 2X8'S ON DEL JACKS (A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX. (B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX. (C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO. NOTES: -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED. | ENC: CMC DATE 4/16/2024 Inte structural design of this plan is the pro Internation of this plan is the pro BATE 4/16/2024 DATE 4/16/2024 PROJECT NO. 24-30-030 SHEET NO. SHEET NO. 1 of 10 |

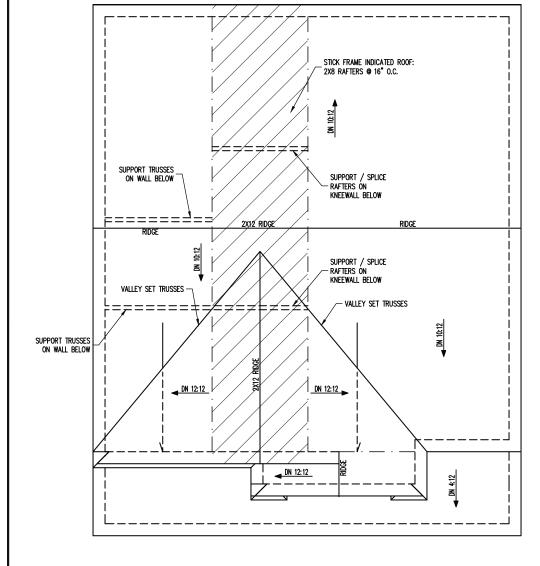




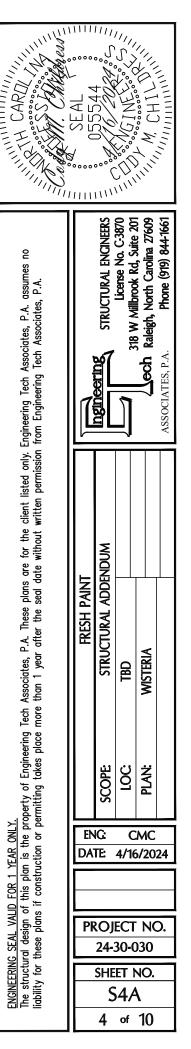
ATTIC FRAMING PLAN ELEVATION / walls and celu 1/8" = 1'=

| | | SEAL CARDINITION CONTRACTION CONTRACTICAL CONTRACTION CONTRACTICAL CONTRACTICAL CONTRACTICAL CONTRACTI | | | |
|-------------------|--|--|-------------|--|--|
| | | plans are for the client listed only. Engineering Tech Associates, P.A. assumes no seal date without written permission from Engineering Tech Associates, P.A. | | ASSOCIATES, P.A. Phone (919) 844-1661 | |
| | CONSTRUCTION SPECIFICATIONS INSTANT REFERENCES REFER TO THE CONSTRUCTION SPECIFICATIONS SECTIONS FOR THE FOLLOWING INFORMATION: PART 1.01: CURRENT GOVERNING CODE PART 1.41: STUD SUPPORT FOR BEAMS PART 14: STUD SUPPORT FOR BEAMS PART 17: KING STUDS FOR EXTERIOR WALLS WALL BRACING SHADED WALLS: ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS © 6° O.C. AT PANEL EDGES, 12° O.C. IN PANEL FIELD. NOTES: PROVIDED CONTINUOUS SHEATHING = 145° MIN. | <u>2 ONLY.</u> the property of Engineering Tech Associates, P.A. These plans are for the client listed only. E n or permitting takes place more than 1 year after the seal date without written permission f | FRESH PAINT | STRUCTURAL ADDENDUM TBD WISTERIA | |
| | REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION. HEADER SCHEDULE H1 SINGLE 2X4 TURNED FLAT (A) H2 (2) 2X4'S ON SINGLE JACKS (B) H3 (2) 2X10'S ON SINGLE JACKS (C) | <u>Y</u> sroperty of Engineering Te permitting takes place m | | SCOPE LOC: PLAN: | |
| | H4 (2) 1.75" X 9.25" LVL'S ON DBL JACKS | the F | _ | | |
| | H5 (2) 2X8'S ON SINGLE JACKS | ENGINEERING SEAL VALID FOR 1 YEAR ON The structural design of this plan is the liability for these plans if construction or | | TE: 4/16/2024 | |
| | H6 (2) 2X8'S ON DBL JACKS | FOR this p consi | ⊢ | | |
| | (A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX. | VALID In of ans if | | | |
| | (B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX. | ise plu | | 24-30-030 | |
| N | (C) TYPICAL FOR ALL CONDITIONS NOT LISTED | stural stural | | | |
| Α | in (A) or (B) uno. Notes: | INEER struc lity fc | \vdash | SHEET NO. | |
| <u>_ING</u> 0" | -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED. | ENG The liabil | | \$3A | |
| | | 1 | 1 | 3 of 10 | |

| RO | OF F | RAMIN | G PL/ | ٩N |
|------|------|-------|---------------|-------|
| WALK | UP | ATTIC | OP TI(| DN |
| | | ELEVA | ATION | Α |
| | | | <u>1/8" =</u> | 1'-0" |



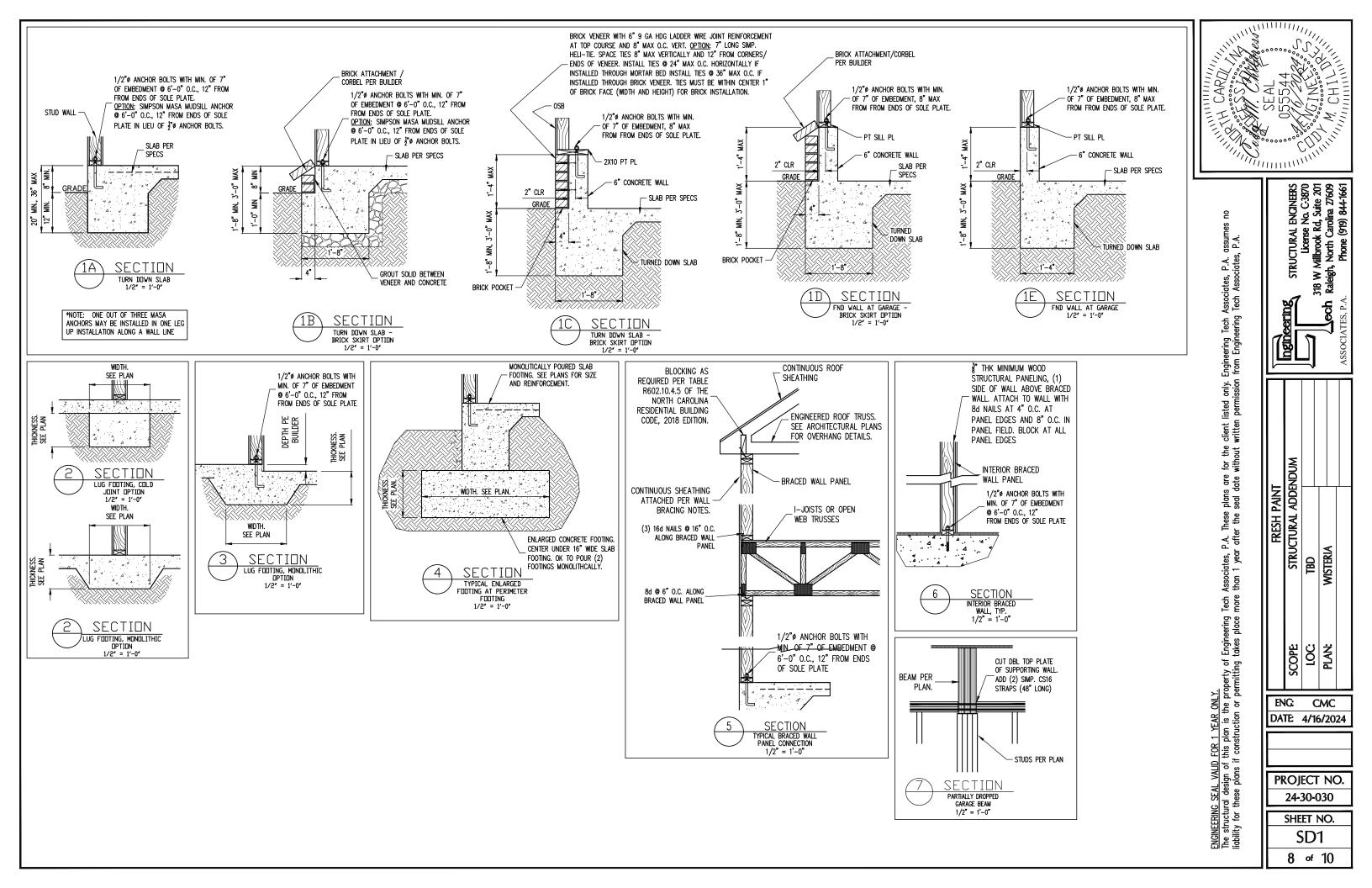
| TRUSS UPLIFT CO | NNECTORS | | |
|--|----------------------------|--|--|
| EXPOSURE B, 120 MPH, ANY PITCH, 24" O.C. MAX ROOF TRUSS SPACING | | | |
| TRUSSES SHALL BE ATTACHED TO SUPPORT WALL FOR UPLIFT RESISTANCE. CONTINUOUS OS® WALL SHEATHING BELOW PROVIDES CONTINUOUS UPLIFT RESISTANCE TO FOUNDATION. ALL TRUSSES SUPPORTED BY INTERMEDIATE. SUPPORT WALLS, KNEEWALLS OR BEAMS SHALL BE ATTACHED TO SUPPORTING MEMBER PER SCHEDULE BELOW. | | | |
| ROOF SPAN IS MEASURED HORIZONTALLY BETWEEN FURTHEST SUPPORT POINTS. | | | |
| ROOF SPAN CONNECTOR UP TO 28' NAILING PER TABLE 60 NCRBC 2018 EDITI | 2.3(1) DN | | |
| OVER 28' (1) SIMPSON H2.5A HUI DBL TOP PLATE | RRICANE CLIP TO DR BEAM | | |
| OR (1) SIMPSON H3 CLIP T | 0 SINGLE 2X4 PLATE | | |

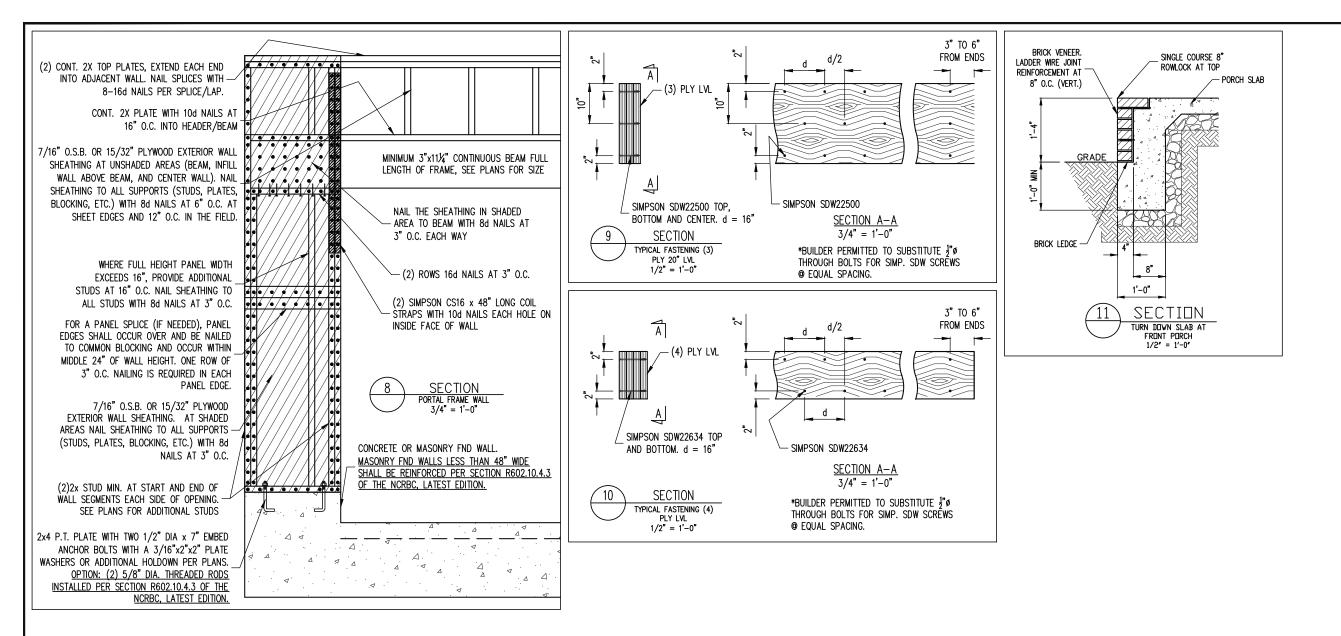


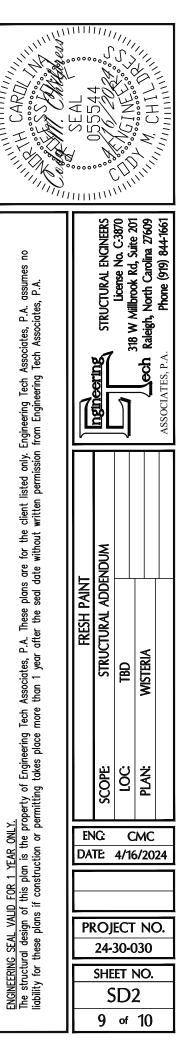
2

FRAMING NOTES

-ROOF TRUSSES PER MANU. TYPICAL U.N.O. -VERIFY ALL KNEEWALL HEIGHTS, ROOF PITCHES, AND ARCHITECTURAL OVERHANGS PRIOR TO CONSTRUCTION







| CONSTRUCTION | SPECIFICATIONS | |
|---|---|---|
| PART 1: GENERAL | 7.04 MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530 | WITHIN THE CAVITY FORMED BY THE FLOOR JOISTS. |
| 1.01 CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION. | 7.05 LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A951. 6" MIN LAPS FOR CONTINUOUS WALL APPLICATIONS | PLOUR JUISTS. PART 15: NAILING OF MULTI PLY WOOD BEAMS |
| 1.02 DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS. | PART 8: BOLTS AND LAG SCREWS | 15.01 SOLID SAWN LUMBER JOISTS THAT ARE GANGED TO FORM A BEAM SHA ADJACENT MEMBERS IN THE BEAM NAILED TOGETHER WITH THREE ROWS |
| 1.05 METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION. | 8.03 ANCHOR RODS AND BOLTS SHALL CONFORM TO ASTM F1554-15 GRADE 36 UNO. BENT ANCHOR BOLTS SHALL HAVE A 2" MIN HOOK UNO | © 16" O.C. FOR 2X10 OR LARGER, TWO ROWS OF 10d NAILS © 16" O.C. ROW OF 10d NAILS © 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS |
| P <u>ART 2: DESIGN LOADS</u> 2.01 DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW: | PART 9: DRIVEN FASTENERS 9.01 NAUS, SPIKES AND STAPLES SHALL CONFORM TO ASTM F 1667- 05. NAILS ARE TO BE | 15.02 LVL MEMBERS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJA IN THE BEAM FASTENED TOGETHER PER MANUFACTURERS RECOMMEND UND |
| USE LIVE LOAD (PSF) DEAD LOAD (PSF) | COMMON WIRE OR BOX PART 10: DIMENSIONAL LUMBER | PART 16: WALL FRAMING AND BRACING |
| BALCONIES, DECKS, ATTICS WITH FIXED STAIR ACCESS, DWELLING UNITS INCLUDING ATTICS WITH | 10.01 SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR <u>OR</u> SYP # 2 FOR JOISTS, RAFTERS, GIRDERS, BEAMS, STUDS, ETC. | 16.01 STUD WALLS SHALL CONSIST OF 2X4 STUDS SPACED AT 16" O.C. UNO. BE CONTINUOUS FROM SOLE PLATE AT FLOOR TO DOUBLE TOP PLATE A OR ROOF. NO INTERMEDIATE BANDS OR PLATES SHALL CAUSE DISCONTIN |
| FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES 40 10 | PART 11: ENGINEERED LUMBER | STUD WALL EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. TH FOR SUCH OPENINGS SHALL BE CONTINUOUS, TYP UNO. MAX ALLOWABLE WALL HEIGHTS FOR EXTERIOR STUD WALLS, WITH SI |
| GARAGES (PASSENGER CARS ONLY) 50 ATTICS (NO STORAGE, LESS THAN 5' HEADROOM) 10 10 ATTICS (WITH STORAGE) 20 10 | 11.01 LVL OR PSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS: E= 1.9 X 10E6 PSI, Fb = 2600 PSI, Fv = 285 PSI, Fc = 750 PSI LSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS: E= 1.3 X 10E6 PSI, Fb = 1700 PSI, Fv = 400 PSI, Fc = 680 PSI | AND DBL TOP PLATE AND 7/16" OSB EXTERIOR BRACING AND ROW 2X6 PURLINS AT 8' HEIGHT (AND AT 16' HEIGHT FOR TALL WALLS), 2X4 @ 16" O.C.: 11"-0" 2X6 @ 16" O.C.: 17"-0" |
| ROOF 20 10 (15 FOR VAULTS) NOTES: - INDIVIDUAL STAIR TREADS ARE TO BE DESIGNED FOR THE UNIFORMLY DISTRIBUTED | 11.02 LVL OR PSL MEMBERS MAY BE RIPPED FROM DEEPER MEMBERS TO MATCH THE MEMBER DEPTH SPECIFIED IN THE PLANS | |
| LIVE LOAD OF 40 PSF OR A 300 LB. CONCENTRATED LOAD ACTING OVER AN AREA OF 4 SQ. WHICHEVER PRODUCES THE GREATER STRESS. | PART 12: PRESSURE TREATED LUMBER | 16.02 FOR WALL BRACING THE FOLLOWING SHALL APPLY: -BLOCKING AT UNSUPPORTED PANEL EDGES IS REQUIRED TYP UNO. -WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER |
| BUILDER TO VERIFY DEAD LOAD DOES NOT EXCEED 10 PSF WHEN HEAVY FLOOR OR ROOF FINISHES SUCH AS TILE OR SLATE ARE UTILIZED. NOTIFY ENGINEERING UNDER THESE CONDITIONS | 12.01 LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD C-2 OR BY ANY METHOD | 602.10 OF THE 2018 NCRC. CONTINUOUS SHEATHING HAS BEEN PROV WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SEC OF THE 2018 NCRC HAS REFN MET AND EXCEPTED |
| 2.02 INTERIOR WALLS: 5 PSF LATERAL. | giving equal protection. The building code office may also approve a natural decay resistant wood per section $19-6(A)$ | BRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TAE PROVIDE CONTINUOUS PANEL UPLIFT RESISTANCE AND COMPLIANCE W R602.3.5 AND R802.11 UNLESS NOTED OTHERWISE ON STRUCTURAL P |
| 2.03 BASIC WIND DESIGN VELOCITY OF 120 MPH. | PART 14: STUD SUPPORTS FOR BEAMS | -MAY SUBSTITUTE WSP FOR GB -Single Just; constituous Rim Joist, or Blocking of Equal Depth Above and Below All Braced Walls. Nai. Blocking Above Wall |
| 2.04 SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE). PART 5: CONCRETE AND SLABS ON GRADE | 14.01 STEEL, ENGINEERED LUMBER, AND FLITCH PLATE BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS: | ABOVE AND BELOW ALL BRACED WALLS. NAIL BLOCKING ABOVE WALL WITH 16d TOE NAILS @ 6" O.C. NAIL SOLE PLATE OF BRACED WALL TO BELOW WITH (3) 16d NAILS @ 16" O.C. BLOCKING AT HORIZONTAL JOIN |
| 5.01 CAST IN PLACE CONCRETE SHALL BE OF NORMAL WEIGHT, 6% AIR ENTRAINMENT, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO. ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP UNO. | 1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR <u>FULL WIDTH</u> ON THE SUPPORTING WALL INDICATED AND SHALL BE SUPPORTED BY A MINIMUM OF THERE GANGED STUDS, OR A GANGED STUD COLUNN WITH A NUMBER OF STUDS SUCH THAT THE STUD COLUMN IS AT LEAST AS WIDE AS THE TRUE WIDTH OF | WALL LINES ONLY REQUIRED AT SHADED WALLS, UNO. PART 17: KING STUDS 17.01 KING STUDS FOR OPENINGS IN EXTERIOR WALLS SHALL BE AS FOLLOWS |
| 5.02 REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION. | THE BEAM BEING SUPPORTED, WHICHEVER IS GREATER, TYP UNO, FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM | NUMBER OF KING STUDS |
| 5.03 SLABS ON GRADE, IF ANY, SHALL CONTAIN SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER LENGTH 1 1/2", DOSAGE RATE 1 1/2 LBS/CU YD. SLAB TO BE PLACED ON A 6 MIL VAPOR BARRIER ON 2" MIN GRANULAR FILL ON SOIL WITH 90% | 2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 4 1/2" ONTO THE WALL AND BE SUPPORTED BY A TRPL STUD GANGED COLUMN TYP UNO. | MAX_OPENING_WIDTH 5'-0" 9'-0" 13'-0" 17'-0" 21'-0" 2X4 1 2 3 4 5 STUD SIZE 2X6 1 1 2 2 2 2X8 1 1 1 2 2 2 |
| MIN STANDARD PROCTOR DENSITY. VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT IN ENCLOSED AREAS | 14.02 DIMENSIONAL LUMBER BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS: 1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM | PART 18: SUBSTITUTIONS |
| PART 6: REBAR AND WRE REINFORCEMENT | SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED (LESS 1 1/2" TO ALLOW FOR A CONTINUOUS RIM JOIST WHERE APPLICABLE) AND SHALL BE SUPPORTED BY A GANGED STUD COLUMN THE SAME WIDTH AS THE BEAM TYP UNO. (E.G. A TRIPLE 2X10 IS | 18.01 MATERIAL OR MEMBER SIZE SUBSTITUTIONS OR PLAN DEVIATIONS REQUIRE THE WRITTEN AUTHORIZATION OF THE DESIGNERS. UNAUTHORIZED DEVIATIONS ARE THE SOLE |
| 6.01 REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO 6.02 LAP SPLICES SHALL BE CLASS B AS DEFINED BY ACI 318, TYP UNO | TO BE SUPPORED BY (3) STUDS). FOR THE SKWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD CULIMN IS CENTERED ON THE BEAM | RESPONSIBILITY OF THE CONTRACTOR. |
| 6.03 WIRE REINFORCEMENT SHALL BE 9 GA AND SHALL CONFORM TO ASTM A1064. | 2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 3" ONTO THE WALL AND BE SUPPORTED BY A DBL STUD GANGED COLUMN | PART 19: OWNERSHIP OF STRUCTURAL DESIGN 19.01 THE STRUCTURAL DESIGN OF THIS PLAN IS THE PROPERTY |
| PART 7: MASONRY | TYP UNO. 14.03 EXTRA JOISTS BEARING ON A STUD WALL PERPENDICULAR TO OR SKEWED RELATIVE TO | OF ENGINEERING TECH ASSOCIATES (ETA). THESE PLANS ARE FOR THE ONE TIME USE AT THE LOCATION INDICATED |
| 7.01 Concrete masonry units shall conform to astm C90 and C55, normal weight, fm = 1,500 psi min | THE BEAM SHALL BE SUPPORTED BY ONE ADDITIONAL STUD. 14.04 STUDS THAT ARE GANGED TO FORM A COLUMN SHALL HAVE ADJACENT STUDS WITHIN | AND FOR THE CLIENT LISTED. ETA ASSUMES NO LIABILITY FOR THESE PLANS IF THEY ARE REPRODUCED, IN WHOLE OR IN PART, FOR CONSTRUCTION AT ANY OTHER LOCATION |
| 7.02 CLAY MASONRY UNITS SHALL CONFORM TO ASTM C62-17 GRADE SW | THE COLUMN NAILED TOGETHER WITH ONE ROW OF 10d NAILS AT 8" O.C. (TWO ROWS | WITHOUT WRITTEN PERMISSION FROM ETA |
| 7.03 MORTAR SHALL BE TYPE S. MORTAR AND GROUT SHALL CONFORM TO ASTM C476, MIN COMPRESSIVE STRENGTH OF 2000 PSI. | BE CONTINUOUS DOWN TO THE FOUNDATION OR OTHER PROPERLY DESIGNED STRUCTURAL ELEMENT SUCH AS A BEAM. COLUMNS TRANSFERRING LOADS THROUGH FLOOR LEVELS SHALL BE SOLIDLY BLOCKED FOR THE FULL WIDTH OF THE STUD COLUMN | |
| NOTES | ABBREVIATIONS | <u> </u> |
| The Builder is responsible for reviewing plans prior to construction. The Builder | ABV ABOVE FND FOUNDATION TJ TRIPLE JOIST | ALLOWABLE I-JOIST SUBSTITUTION |
| SHALL IMMEDIATELY CONTACT THE ENGINEER OF RECORD (EOR) BEFORE PROCEEDING IF THE FOLLOWING CONDITIONS ARE NOTED BEFORE OR DURING CONSTRUCTION: | B. BOTH FTG FOOTING TYP TYPICAL B.E. BOTH ENDS HDG HOT DIPPED TRPL TRIPLE | NOTE: MAINTAIN JOIST DEPTH, DIRECTION, AND SPACING SPECIFIED ON PLANS. |
| 1) THE WORKING PLANS DO NOT BEAR THE SEAL OF THE EOR 2) THE PLANS CONTAIN DISCREPANT OR INCOMPLETE INFORMATION | BTWN BETWEEN GALVANIZED TSP TRIPLE STUD POCKE CIP CAST IN PLACE HGR HANGER UNO UNLESS NOTED CONC CONCRETE LVL LAMINATED VENEER OTHERWISE | SIMPSON FACE SIMPSON |
| ANY ERRORS DUE TO A FAILURE TO FOLLOW THE ABOVE PROCEDURES SHALL NOT BE THE RESPONSIBILITY OF THE EOR. FURTHERMORE, IT IS THE RESPONSIBILITY OF THE BUILDER TO ENSURE THAN ANY REVISIONS ISSUED BY THE EOR ARE PROMPLY DISTRIBUTED TO THE SUBCONTRACTORS | CONC. CONCRETE LE LEVEL LAWING LED VENEER OTHERWISE. CS CONTINUOUS SHEATHING LIMBER XJ EXTRA JOIST DIA DIAMETER O.C. ON CENTER DJ DOUBLE JOIST PSL PARALLEL STRAND | MANUFACTURER DEPTH SERIES MOUNT HGR FLANGE H BLUELINX 14" BLI 40 IUS2.56/14 ITS2.56/ BOISE CASCADE 14" BCI 5000s IUS2.06/14 ITS2.06/ BOISE CASCADE 14" BCI 6000S IUS2.37/14 ITS2.37/ |
| THE EOR DOES NOT PERFORM FENESTRATION OR VENTING CALCULATIONS OR ANY OTHER CALCULATIONS THAT ARE NOT DIRECTLY RELATED TO STRUCTURAL ENGINEERING. | DSP DBL STUD POCKET LUMBER EQ EQUAL PT PRESSURE TREATED EA EACH QJ QUAD JOIST | LP CORP 14" LPI 20+ IUS2.56/14 ITS2.56/ NORDIC 14" NI 40X IUS2.56/14 ITS2.56/ |
| ROOF AND FLOOR TRUSSES TO BE DESIGNED BY AN ENGINEER REGISTERED BY THE STATE. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO THE EOR FOR REVIEW | FLG FLANGE SP STUD POCKET FL FL FLITCH PLATE SQ SQUARE FLR FLOOR | ROSEBURG 14" RFPI 40s IUS2.56/14 ITS2.56/ WEYERHAEUSER 14" TJI 210 IUS2.06/14 ITS2.06/ WEYERHAEUSER 14" TJI 210 IUS2.05/14 ITS2.07/ WEYERHAEUSER 14" EEI-20 IUS2.37/14 ITS2.73/ |
| | | JUSTS NOT LISTED IN THE ABOVE TABLE MAY BE USED PROVIDED THE MEET OR EXCEED THE PROPERTIES OF THOSE LISTED. SUBSTITUTE USP BRAND HANGERS WITH EQUIVALENT VALUES AS DESIRED. |

