

David D Grorud
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 www.DynamicDesignGroupInc.com

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PROJECT FOR: ICG HOMES
 LOCATION: ---
 LOT: ---
 SUBDIVISION: ---
 COUNTY: ---

MANTEO
 PLAN NAME
C2-3668-68GL
 PLAN I.D.
3.28.22
 DATE

A-1B.1
 SHEET



FRONT ELEVATION "B"
 SCALE: ----- 1/4" = 1'-0"



RIGHT SIDE ELEVATION
 SCALE: ----- 1/4" = 1'-0"

THIS PLAN CONFORMS TO THE 2018 EDITION OF THE I.R.C. / NORTH CAROLINA RESIDENTIAL CODE.

TABLE 402.1.1 ENERGY CONSERVATION CODE INSULATION AND PENETRATION REQUIREMENTS BY COMPONENT

| CLIMATE ZONE | FENS U-FAC | SKY-LIGHT U-FAC | GLAZED FENS SHGC | MINIMUM INSULATION R-VALUE | | | | | | |
|--------------|------------|-----------------|------------------|----------------------------|-----------------------------------|------------------------|-------|---------------------|------|-------|
| | | | | CEILING | WOOD WALL | MASS WALL | FLOOR | ESNT'L WALL & DEPTH | SLAB | CRACK |
| 3 | 0.35 | 0.55 | 0.30 | 38 or 30 cont. | 15 or 13-2.5 | 5/13 or 5/10 cont. | 19 | 5/13 | 0 | 5/13 |
| 4 | 0.35 | 0.55 | 0.30 | 38 or 30 cont. | 15 or 13-2.5 | 5/13 or 5/10 cont. | 19 | 10/13 | 10 | 10/13 |
| 5 | 0.35 | 0.55 | NR | 38 or 30 cont. | 13-15-6 or 13-11 or 13-12.5 cont. | 13/11 or 13/12.5 cont. | 30 | 10/13 | 10 | 10/13 |

SEE TABLE 301 CLIMATE ZONES BY COUNTY ENERGY CONSERVATION CODE
 SEE FOOTNOTES OF TABLE N100.1 FOR FOOTNOTES AND DETAILED EXPLANATIONS.

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 COUNTY: ---



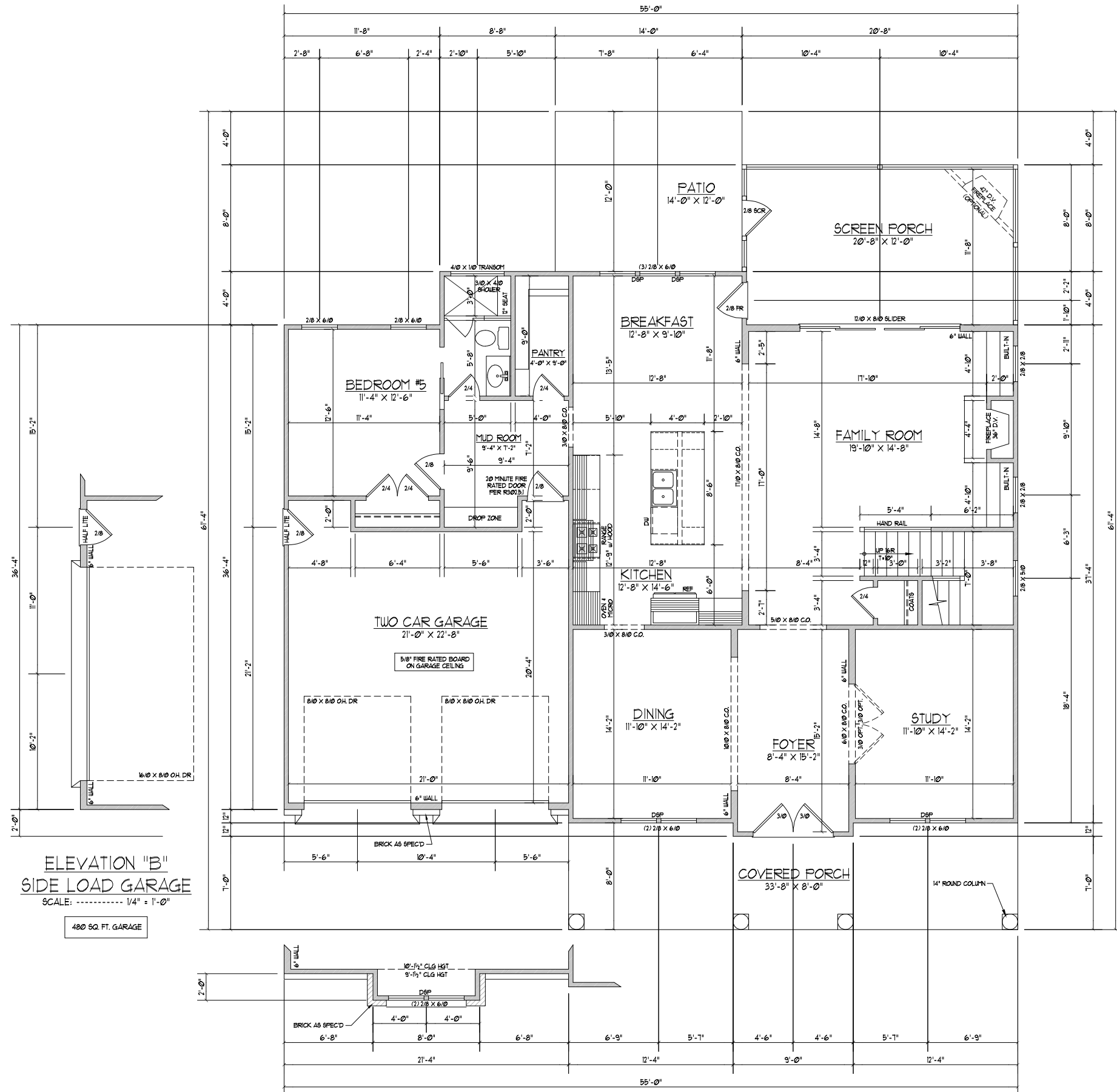
REAR ELEVATION
 SCALE: ----- 1/4" = 1'-0"



LEFT SIDE ELEVATION
 SCALE: ----- 1/4" = 1'-0"

MANTEO
 PLAN NAME
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 DATE

A-1B.2
 SHEET



ELEVATION "B"
 SIDE LOAD GARAGE
 SCALE: ----- 1/4" = 1'-0"
 480 SQ. FT. GARAGE

ELEVATION "B"
 FIRST FLOOR PLAN
 SCALE: ----- 1/4" = 1'-0"

1669 HEATED SQ. FT.
 465 SQ. FT. GARAGE
 260 SQ. FT. COVERED PORCH
 241 SQ. FT. SCREEN PORCH
 168 SQ. FT. PATIO

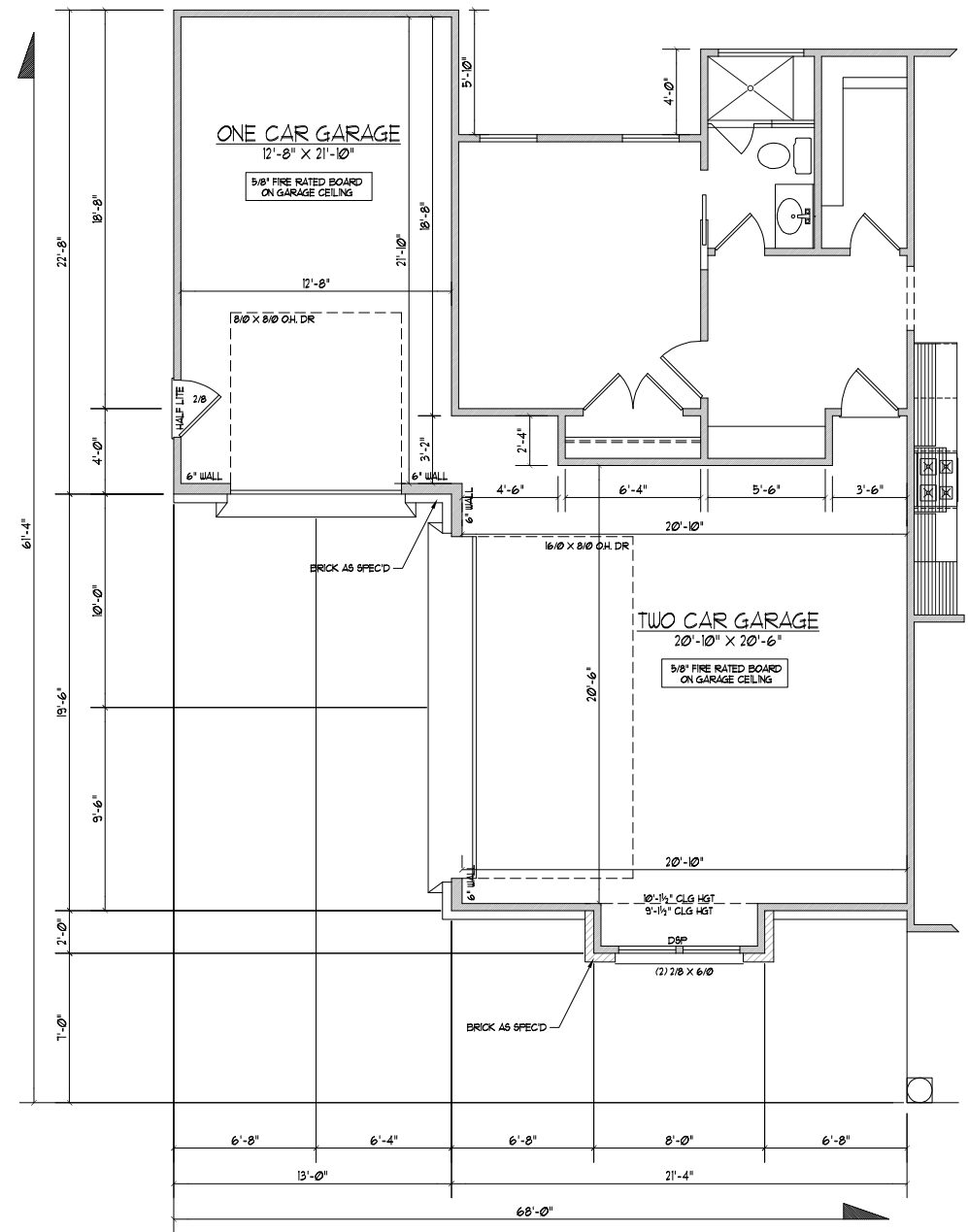
- NOTES:
- 1) 9'-0" CLG. HGT. (9' - 1 1/2" FLT. HGT.) UNLESS OTHERWISE NOTED.
 - 2) ALL WALLS DRAIN AT 4" WIDTHS
 - 3) SET WINDOWS AT 8'-0" A.S.F. UNLESS OTHERWISE NOTED.
 - 4) DIMENSIONS ARE TO FRAMING UNLESS OTHERWISE NOTED.
 - 5) CONSULT WINDOW MANUFACTURER'S SPECS. FOR EGRESS REQUIREMENTS, PRESSURE RATINGS, & ROUGH OPENINGS.
 - 6) ELECTRICAL LAYOUT BY BUILDER

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PROJECT FOR: ICG HOMES
 LOCATION: ---
 LOT: ---
 SUBDIVISION: ---
 COUNTY: ---

MANTEO
 PLAN NAME
C2-3668-55GL
 PLAN I.D.
3.28.22
 DATE



OPT. 3rd CAR SIDE LOAD GARAGE
 SCALE: ----- 1/4" = 1'-0"
 111 SQ. FT. GARAGE

ELEVATION "B"

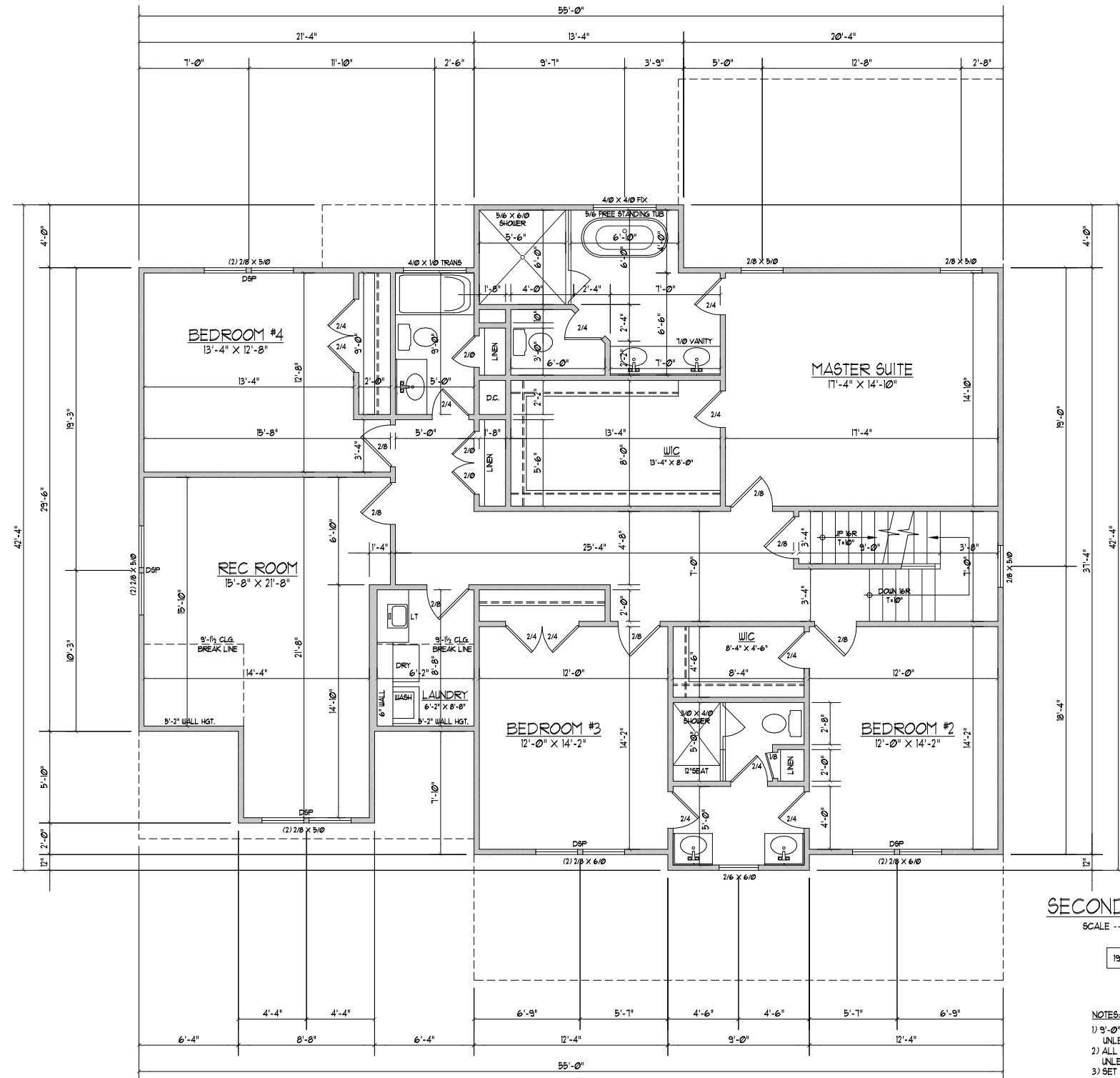
- NOTES:
- 1) 9'-0" CLG. HGT. (9' - 1 1/2" FLT. HGT.) UNLESS OTHERWISE NOTED.
 - 2) ALL WALLS DRAWN AT 4" WIDTHS
 - 3) SET WINDOWS AT 8'-0" A.S.F. UNLESS OTHERWISE NOTED.
 - 4) DIMENSIONS ARE TO FRAMING UNLESS OTHERWISE NOTED.
 - 5) CONSULT WINDOW MANUFACTURER'S SPECS. FOR EGRESS REQUIREMENTS, PRESSURE RATINGS, & ROUGH OPENINGS.
 - 6) ELECTRICAL LAYOUT BY BUILDER

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 COUNTY: ---

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C2-3668-68GL
 PLAN I.D.
3.28.22
 DATE



SECOND FLOOR PLAN

SCALE 1/4"=1'-0"

1999 HEATED SQ. FT.

NOTES:

- 1) 9'-0" CLG. HGT. (9' - 1 1/2" FLT. HGT.) UNLESS OTHERWISE NOTED.
- 2) ALL WALLS DRAWN AT 4" WIDTHS UNLESS OTHERWISE NOTED.
- 3) SET WINDOWS AT 1'-4" A.S.F. UNLESS OTHERWISE NOTED.
- 4) DIMENSIONS ARE TO FRAMING UNLESS OTHERWISE NOTED.
- 5) CONSULT WINDOW MANUFACTURER'S SPEC'S. FOR EGRESS REQUIREMENTS, PRESSURE RATINGS, & ROUGH OPENINGS.
- 6) ELECTRICAL LAYOUT BY BUILDER

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PROJECT FOR: ICG HOMES

LOCATION: ---

LOT: ---

SUBDIVISION: ---

COUNTY: ---

MANTEO

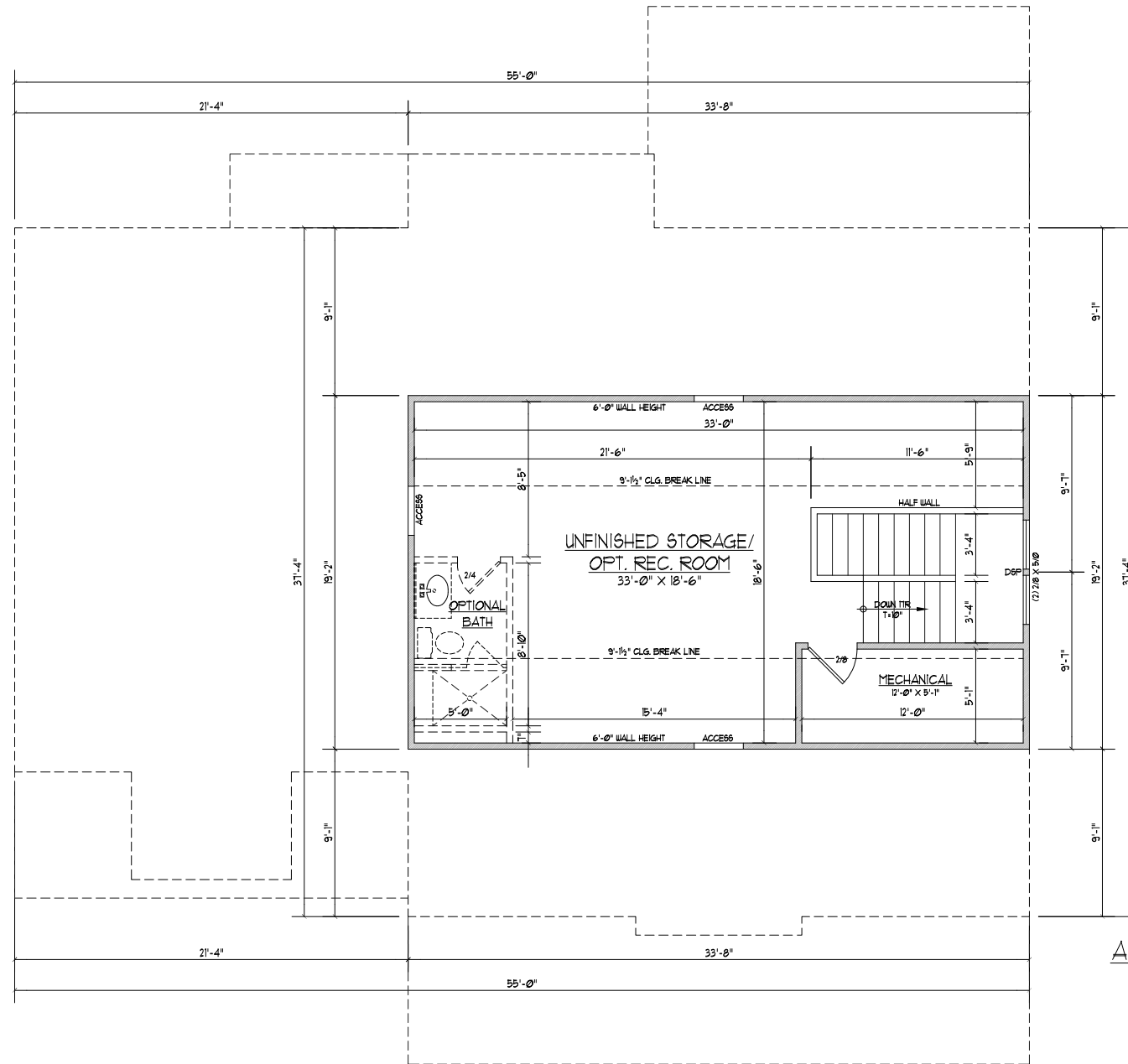
PLAN NAME

C2-3668-55GL

PLAN I.D.

3.28.22

DATE



ATTIC FLOOR PLAN

SCALE 1/4"=1'-0"

13 SQ. FT. MECHANICAL ROOM
 572 SQ. FT. STORAGE

- NOTES:
- 1) 0'-0" CLG. HGT. (0' - 1 1/2" FLT. HGT.) UNLESS OTHERWISE NOTED.
 - 2) ALL WALLS FIGURED AT 4" WIDTHS UNLESS OTHERWISE NOTED.
 - 3) SET WINDOWS AT 6'-0" ASF. UNLESS OTHERWISE NOTED.
 - 4) DIMENSIONS ARE TO FRAMING UNLESS OTHERWISE NOTED.
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 - 6) ELECTRICAL LAYOUT BY BUILDER

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MANTEO

PLAN NAME

C2-3668-55GL

PLAN I.D.

3.28.22

DATE



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DYNAMIC
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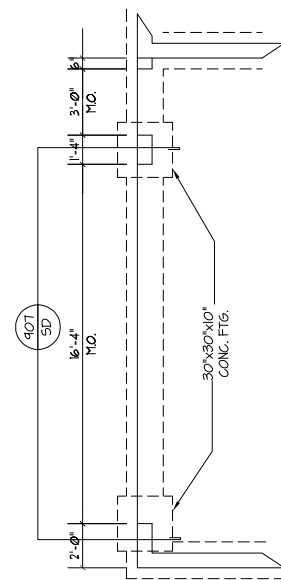
Lot 316, Serenity
"Manteco-GL"
ICG-HOMES

| WALL VENTED CRAWL SPACE | |
|-------------------------|---|
| REQUIRED | 1669 SQ. FT. / 150' x 1113 SQ. FT. OF VENTILATION |

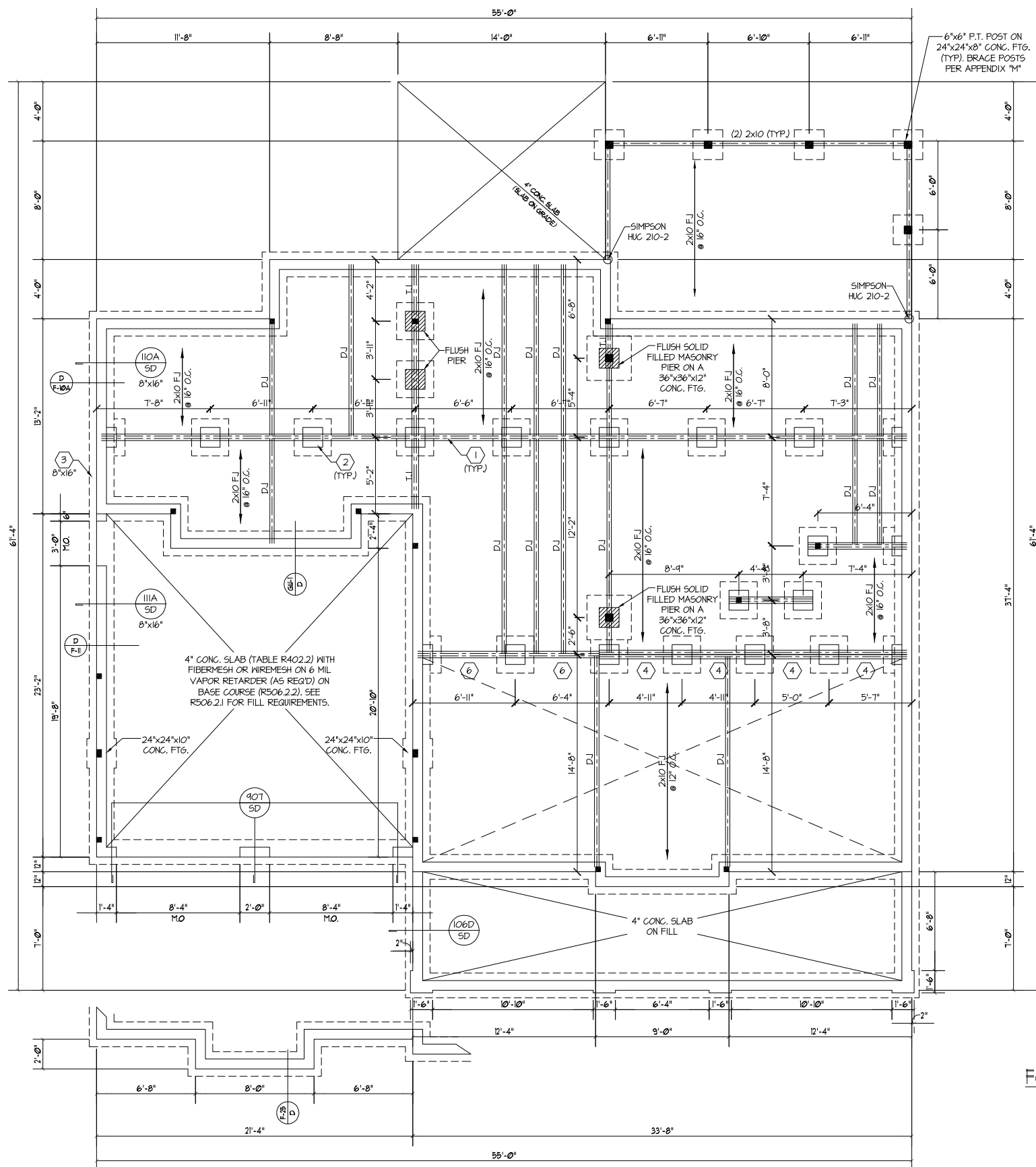
| CLOSED CRAWL SPACE VENTILATION METHODS | |
|--|---|
| (SEE REFERENCED SECTIONS IN CODE BOOK FOR DETAILED INSTRUCTIONS) | |
| (R409.5.1) DEHUMIDIFIER | A PERMANENTLY INSTALLED DEHUMIDIFIER SHALL BE PROVIDED IN THE CRAWL SPACE WITH THE MINIMUM RATED CAPACITY OF 5 PNTS PER DAY. |
| (R409.5.2) SUPPLY AIR | 1669 SQ. FT. / 30' x 56 CFM |
| (R409.5.3) HOUSE AIR | 1669 SQ. FT. / 50' x 33 CFM |
| (R409.5.4) EXHAUST FAN | 1669 SQ. FT. / 50' x 33 CFM |
| (R409.5.5) CONDITIONED SPACE | THE CRAWL SPACE SHALL BE DESIGNED AS A HEATED AND COOLED, CONDITIONED SPACE WITH WALL INSULATION INSTALLED AS PER THE REQUIREMENTS OF SECTION R409.5.1. |

FOUNDATION STRUCTURAL NOTES
NC (2018 NCRG); Wind: 115-120 mph - CRANL

1. (3)2x10 SYP#2 OR SFP#2 GIRDER, TYPICAL UNO.
2. CONCRETE BLOCK PIER SIZE SHALL BE:
 - SIZE HOLLOW SOLID
 - 8x16 UP TO 32' UP TO 5'-0"
 - 12x16 UP TO 48' UP TO 9'-0"
 - 16x16 UP TO 64' UP TO 12'-0"
 - 24x24 UP TO 96'
 - WITH 30" x 30" x 10" CONCRETE FOOTING, UNO.
3. WALL FOOTING AS FOLLOWS
 - DEPTH: 8" - UP TO 2 STORY
 - 10" - 3 STORY
 - WIDTH:
 - SIDING: 16" - UP TO 2 STORY
 - 20" - 3 STORY
 - BRICK: 16" - 1 STORY
 - 20" - 2 STORY
 - 24" - 3 STORY
4. FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO CODE TABLE R404.1.1 (1 THRU 4) NOTE: ASSUMED SOIL BEARING CAPACITY = 2000 PSF. CONTRACTOR MUST VERIFY SITE CONDITIONS AND CONTACT SOILS ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.
4. (4) 2x10 SFP #2 OR SYP #2 GIRDER
5. (2) 1.75x9.25 LVL OR LSL GIRDER
6. (3) 1.75x9.25 LVL OR LSL GIRDER
7. "■" DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO PIER. SOLID BLOCK ALL BEAM BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO FND, TYPICAL.
8. ABBREVIATIONS:
 - "S.J." = SINGLE JOIST
 - "D.J." = DOUBLE JOIST
 - "T.J." = TRIPLE JOIST
9. ADJUST SUBFLOOR THICKNESS OR JOIST SPACING AS REQ'D FOR FLOOR FINISH MATERIALS.



ELEVATION "A"
SIDE LOAD GARAGE
FOUNDATION PLAN
SCALE: 1/4"=1'-0"



ELEVATION "A"
FOUNDATION PLAN
SCALE: 1/4"=1'-0"



PROJECT #
22-1480 (316SR)

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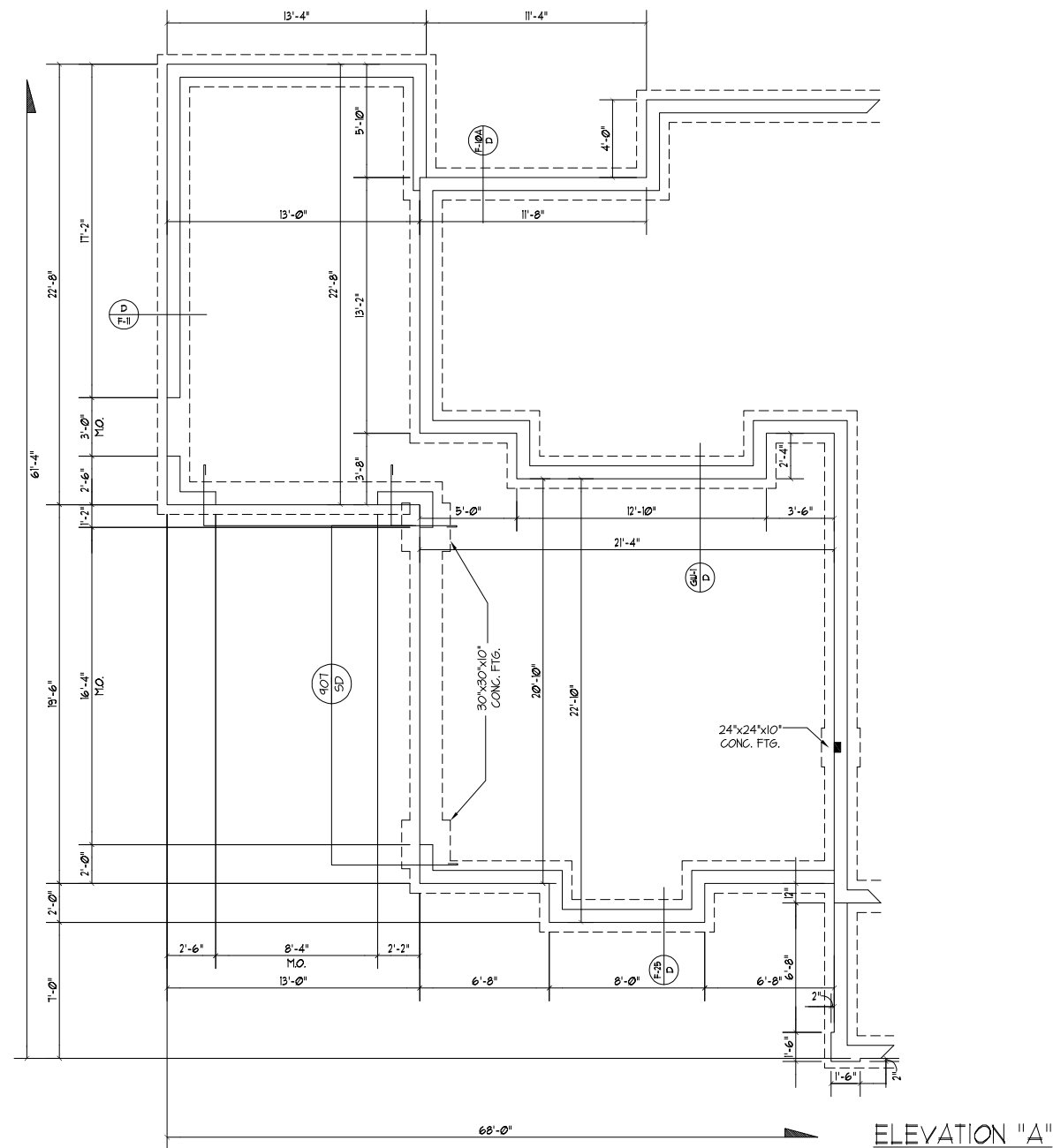
**DYNAMIC
DESIGN
GROUP**

Lot 316, Serenity
"Mantco-GL"
ICG-HOMES

S-1.1

| WALL VENTED CRAWL SPACE | |
|-------------------------|--|
| REQUIRED | |
| 1669 | SQ. FT. / 50 = 1113 SQ. FT. OF VENTILATION |

| CLOSED CRAWL SPACE VENTILATION METHODS | |
|--|--|
| (SEE REFERENCED SECTIONS IN CODE BOOK FOR DETAILED INSTRUCTIONS) | |
| (R409.5.1) DEHUMIDIFIER | A PERMANENTLY INSTALLED DEHUMIDIFIER SHALL BE PROVIDED IN THE CRAWL SPACE WITH THE MINIMUM RATED CAPACITY OF 9 PINTS PER DAY. |
| (R409.5.2) SUPPLY AIR | 1669 SQ. FT. / 50 = 56 CFM |
| (R409.5.3) HOUSE AIR | 1669 SQ. FT. / 50 = 33 CFM |
| (R409.5.4) EXHAUST FAN | 1669 SQ. FT. / 50 = 33 CFM |
| (R409.5.5) CONDITIONED SPACE | THE CRAWL SPACE SHALL BE DESIGNED AS A HEATED AND COOLED CONDITIONED SPACE WITH WALL INSULATION INSTALLED AS PER THE REQUIREMENTS OF SECTION R409.8.1. |



OPT. 3rd CAR SIDE LOAD GARAGE
SCALE: 1/4"=1'-0"



PROJECT #
22-1480 (316SR)

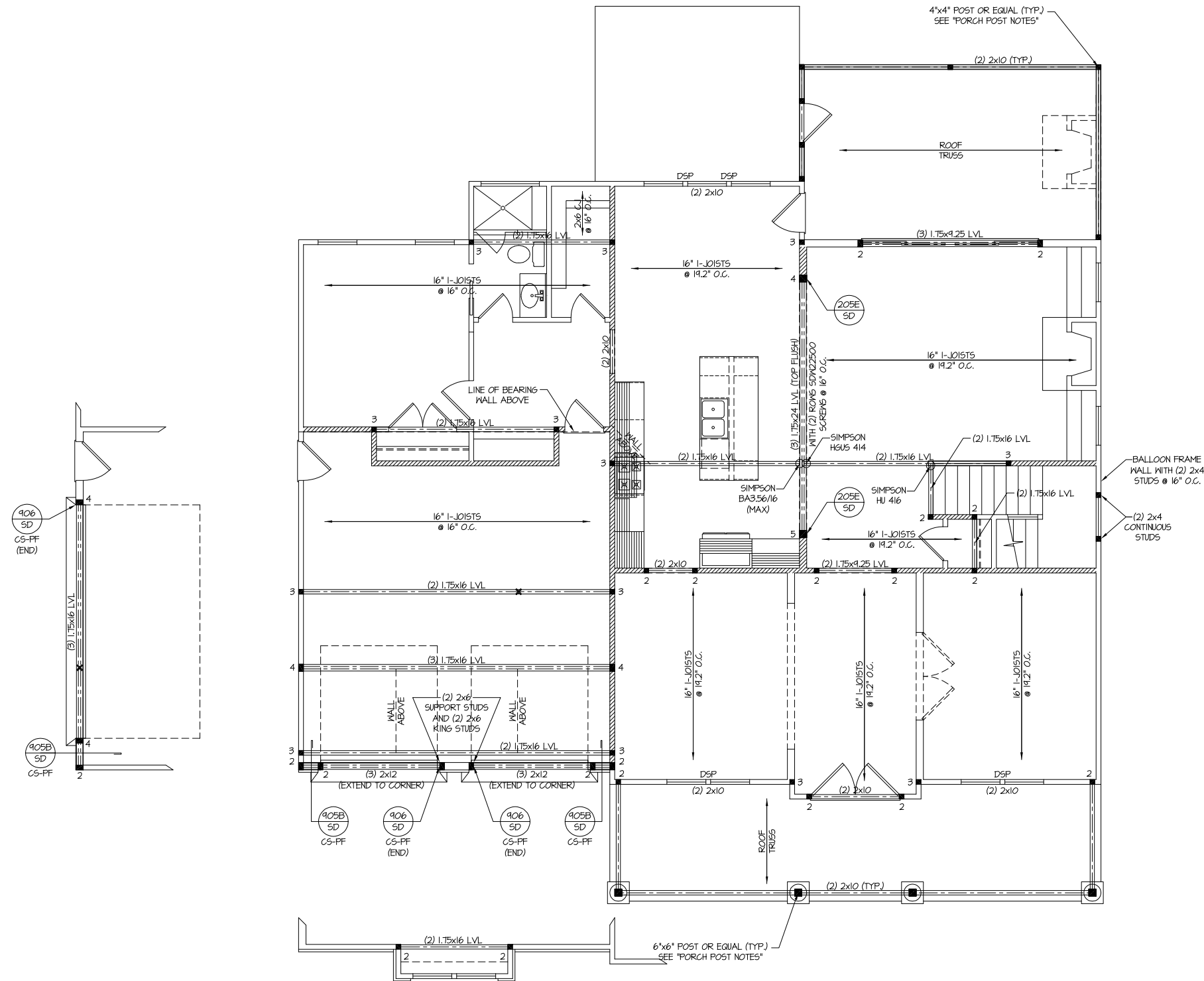
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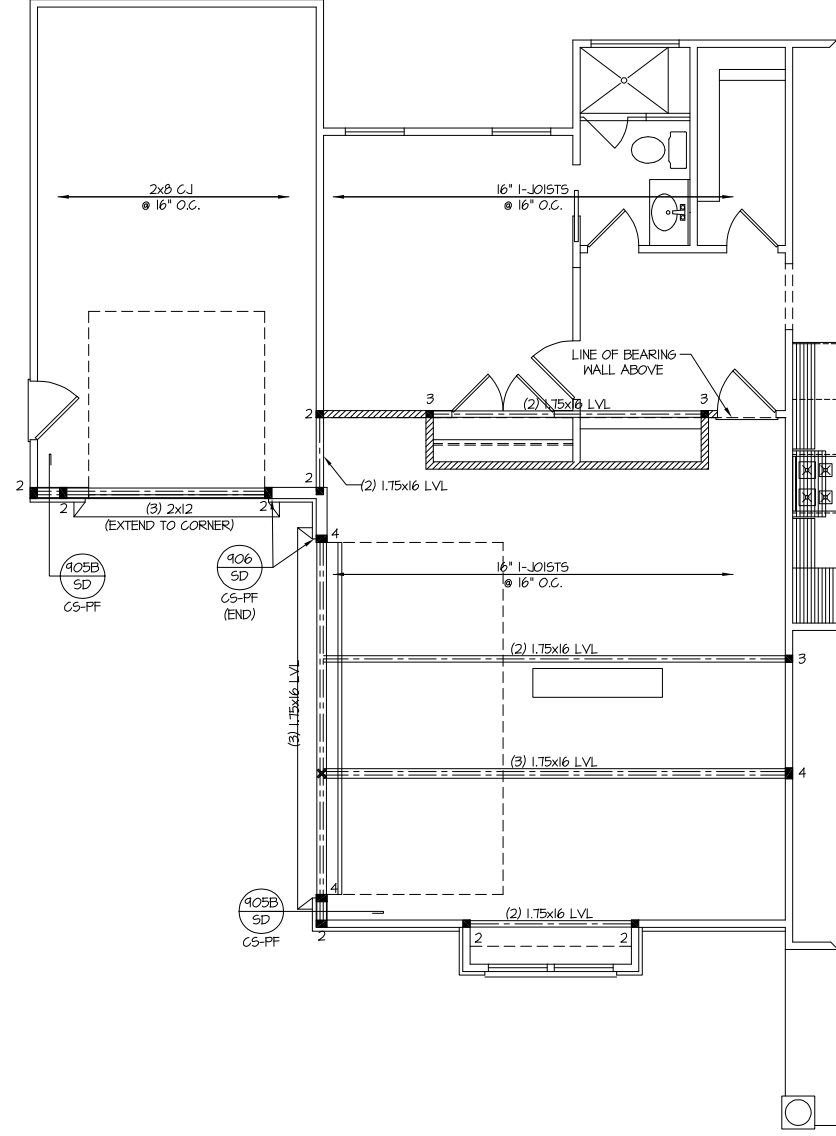
DYNAMIC
DESIGN
GROUP

Lot 316, Serenity
"Mantec-GI"
ICG-HOMES

S-2



ELEVATION "A"
FIRST FLOOR CEILING /
STRUCTURAL PLAN
SCALE: 1/8" = 1'-0"



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22-1480 (316SR)

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Lot 316, Serenity
"Mantco-GI"
ICG-HOMES

S-2.1



PROJECT #
22-1480 (316SR)

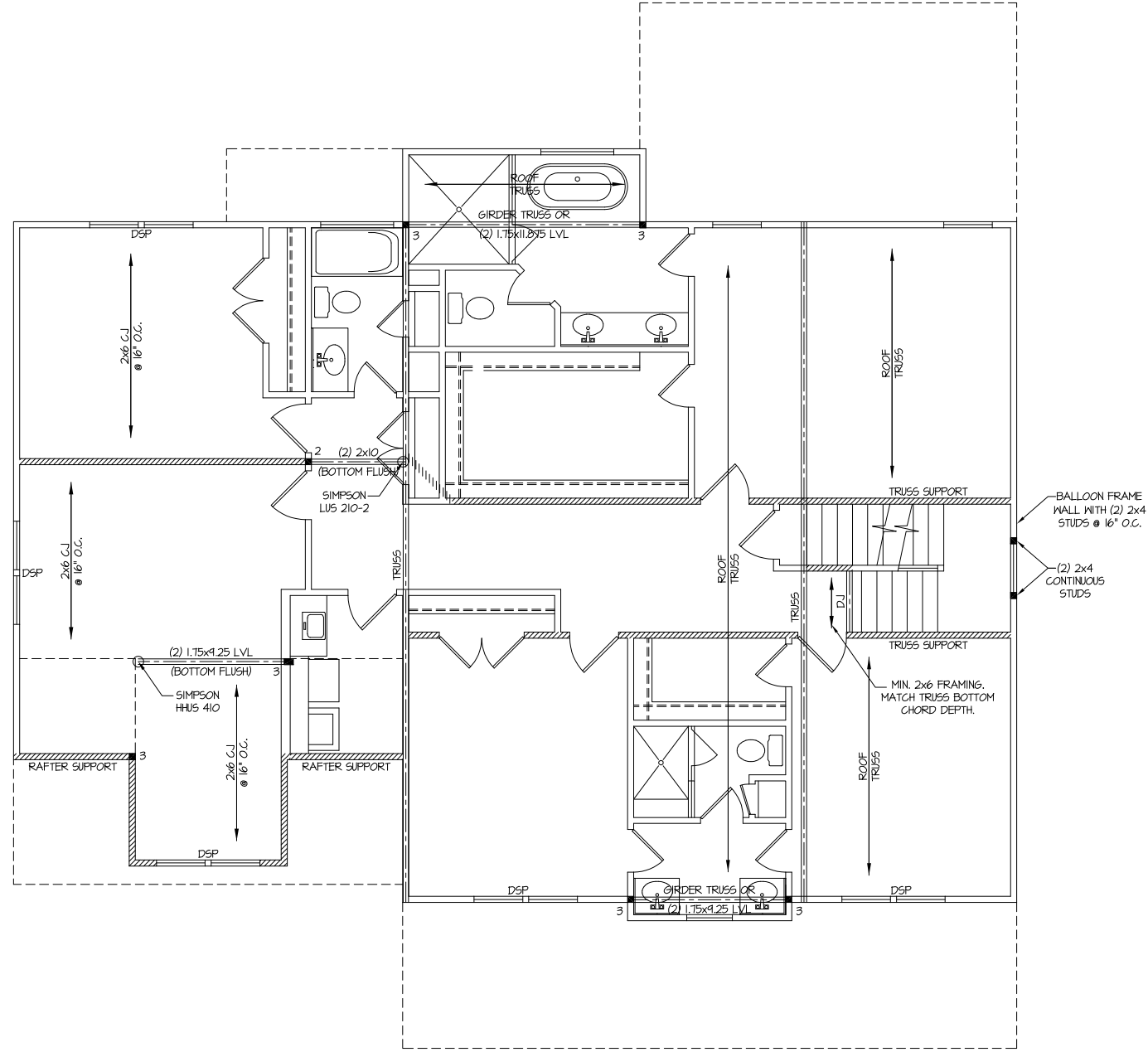
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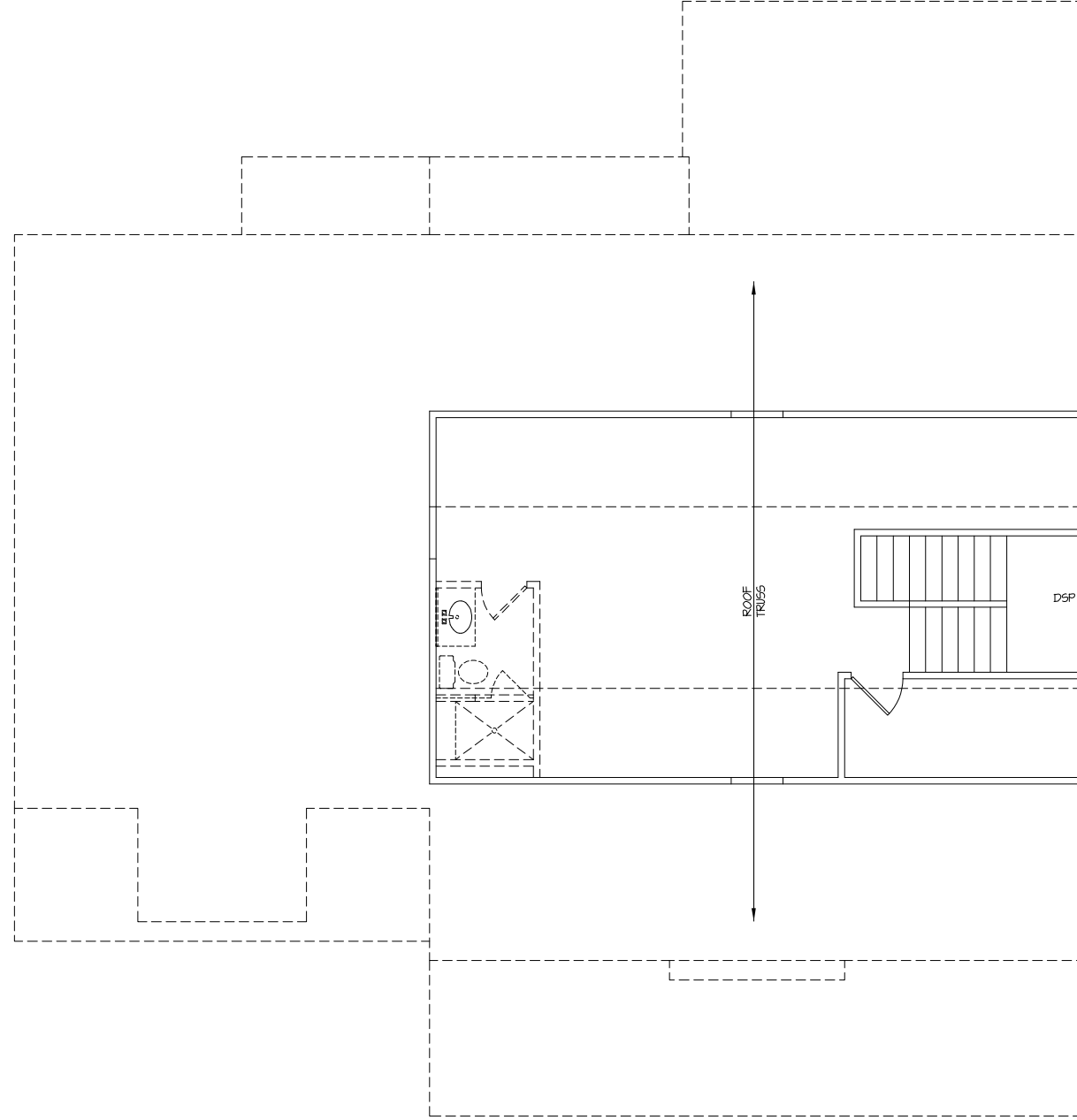
Lot 316, Serenity
 "Mantec-GI"
 ICG-HOMES

S-3



**SECOND FLOOR CEILING/
 STRUCTURAL PLAN**

SCALE: 1/8" = 1'-0"



ATTIC FLOOR CEILING/
STRUCTURAL PLAN
SCALE: 1/8" = 1'-0"



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Lot 316, Serenity
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ICG-HOMES

S-4



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DYNAMIC
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Lot 316, Serenity
"Mantco-GL"
ICG HOMES

S-5

TRUSS SYSTEM REQUIREMENTS

NC (2018 NRC): Wind: 115-120 mph

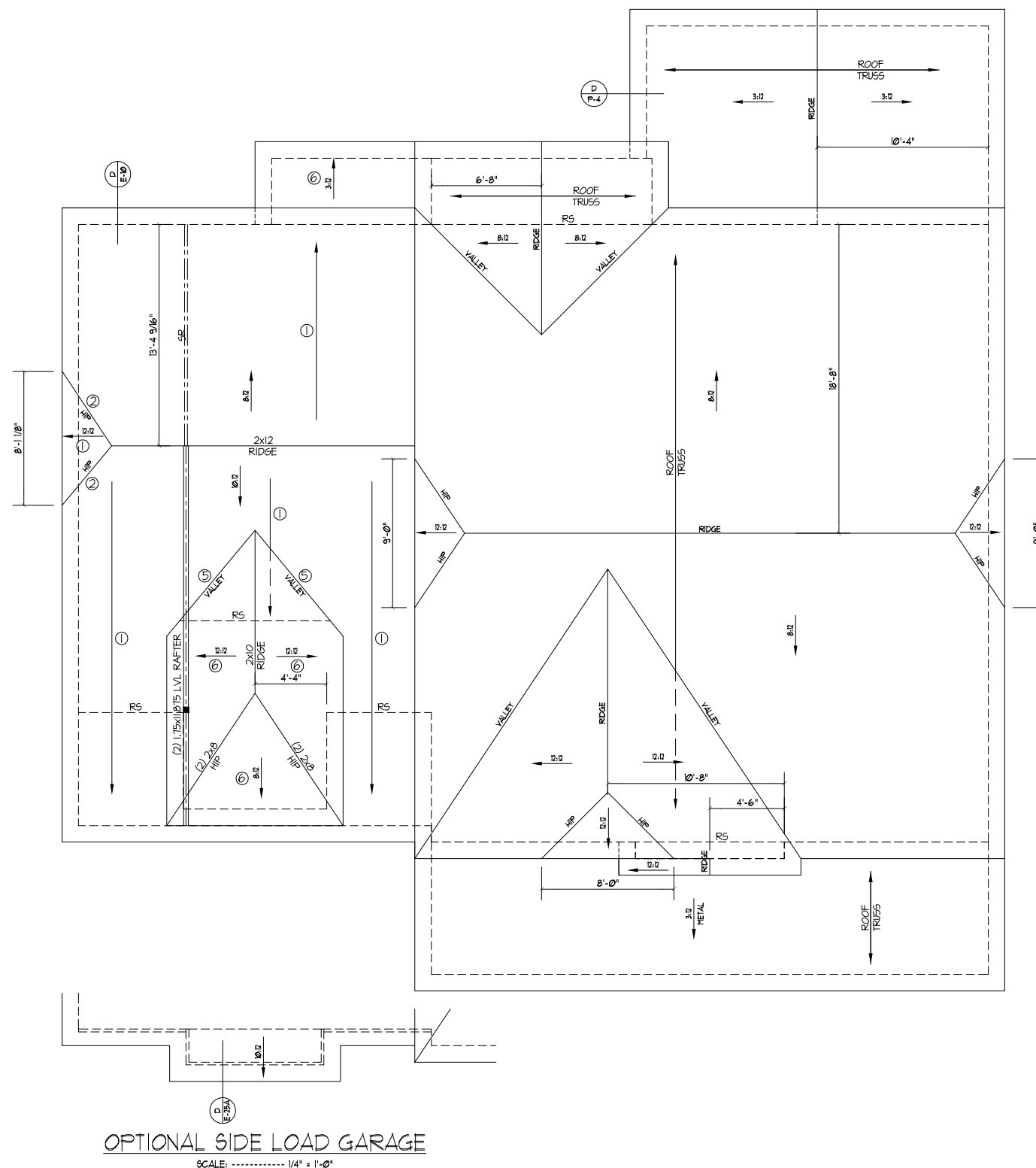
- TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH SEALED STRUCTURAL PLANS. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
- TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURER.
- ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNO).
- ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.

ROOF FRAMING NOTES:

NC (2018 NRC): Wind: 115-120 mph

- 2x8 RAFTERS @ 16" O.C. WITH 2x10 RIDGE, UNO.
 - (2) 2x10 OR 1.75x11.875 LVL HIP. (2) 2x10 HIPs MAY BE SPLICED WITH A MIN. 6'-0" OVERLAP AT CENTER.
 - (2) 2x10 OR 1.75x9.25 LVL VALLEY. DO NOT SPLICE VALLEYS.
 - 1.75x11.875 LVL OR (2) 1.75x9.25 LVL VALLEY.
 - FALSE FRAME VALLEY ON 2x10 FLAT PLATE.
 - 2x6 RAFTERS @ 16" O.C. W/ 2x8 RIDGE, UNO.
 - 2x10 RAFTERS @ 16" O.C. W/ 2x12 RIDGE, UNO.
 - EXTEND RIDGE 12" BEYOND INTERSECTION.
- *SR* = SINGLE RAFTER
 - *DR* = DOUBLE RAFTER
 - *TR* = TRIPLE RAFTER
 - *RS* = ROOF SUPPORT
 - * = (3) STUD OR 4x4 POST FOR ROOF SUPPORT (USE 2x6 STUDS OR 6x6 POST FOR SUPPORT OVER 10'-0" IN HEIGHT)
 - ATTACH VAULTED RAFTERS WITH HURRICANE CLIPS; SIMPSON "H-2.5A" OR EQUIVALENT. TIES TO BE INSTALLED ON THE OUTSIDE FACE OF FRAMING.
 - INSTALL RAFTER TIES AND COLLAR TIES PER SECTION R802.3.1 OF THE 2018 NC RESIDENTIAL CODE.

| ATTIC VENTILATION | | | |
|-------------------|---|--|-----------------------------|
| REQUIRED | 2561 SQ FT OF ATTIC / 300 = 8.54 SQ FT. OF INLET & OUTLET | | |
| PROVIDED (INLET) | 07 SQ. FT. PER X | 116 LINEAR FT. = 8.12 SQ. FT. OF VENT. | 47 (TOTAL OF INLET) |
| (OUTLET) | 11 SQ. FT. PER X | 83 LINEAR FT. = 9.13 SQ. FT. OF VENT. | 53 (TOTAL OF OUTLET) |
| | | | 1125 TOTAL SQ. FT. OF VENT. |



ELEVATION "A"
ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

OPTIONAL SIDE LOAD GARAGE
SCALE: 1/4" = 1'-0"



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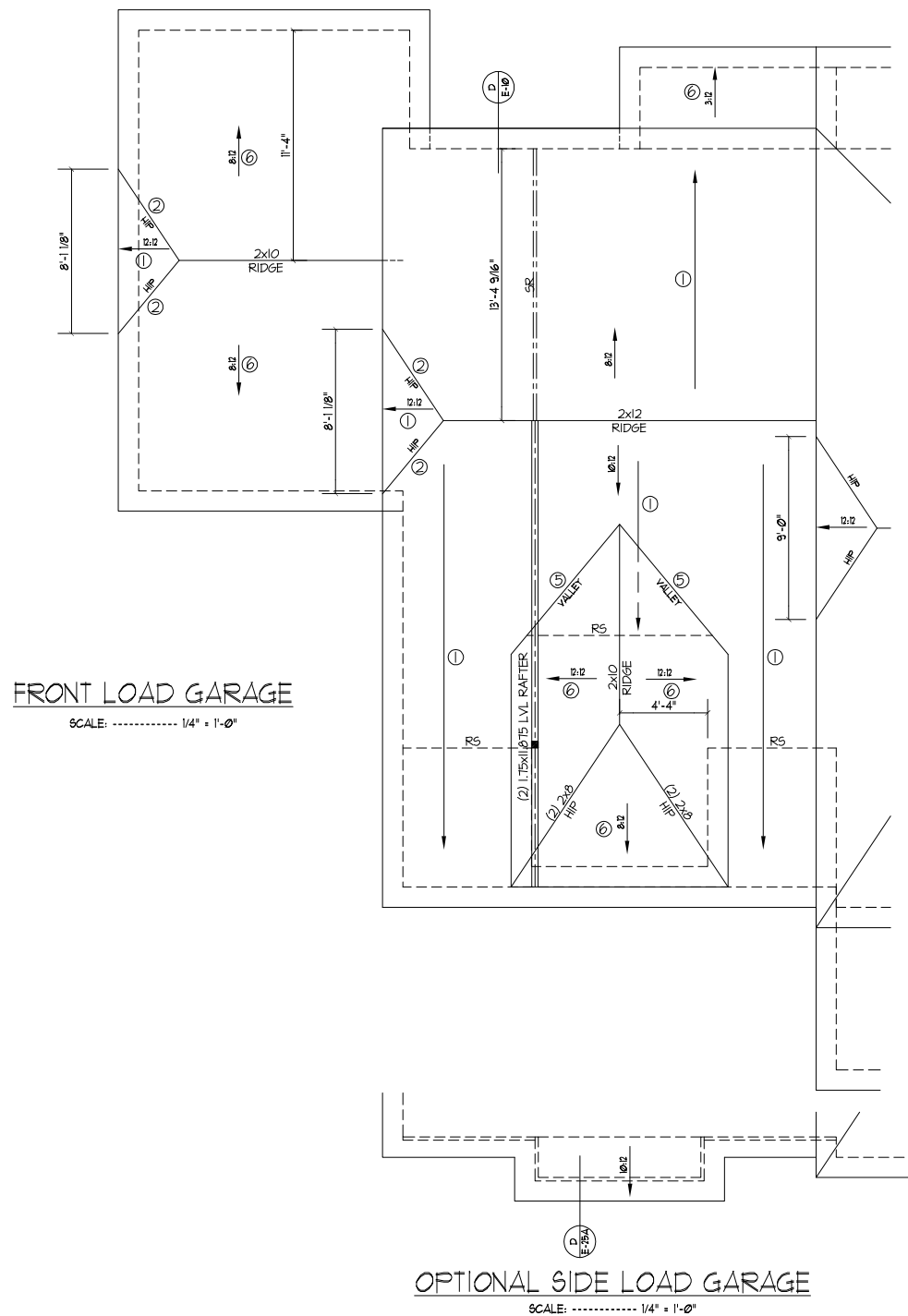
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"Mantco-GI"
ICG-HOMES

S-5.1



| ATTIC VENTILATION | | | |
|-------------------|---|-------------------------|-----------------------------|
| REQUIRED | 2561 SQ. FT. OF ATTIC / 300 = 854 SQ. FT. OF INLET 4 OUTLET | | |
| PROVIDED | | | |
| (INLET) SOFFIT | 07 SQ. FT. PER LINEAR FT. OF VENT. | 146 LINEAR FT. OF VENT. | = 1022 SQ. FT. OF VENT. |
| (OUTLET) RIDGE | 11 SQ. FT. PER LINEAR FT. OF VENT. | 94 LINEAR FT. OF VENT. | = 1034 SQ. FT. OF VENT. |
| | | | 2056 TOTAL SQ. FT. OF VENT. |
| | | | 41 (TOTAL INLET) % |
| | | | 53 (TOTAL OUTLET) % |

STRUCTURAL NOTES

NC (2018 NCRG), Wind: 115-120 mph

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPs, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER & GIRDER SYSTEM, FOOTING, AND FILING SYSTEM. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM. ALL REQUIREMENTS FOR PROFESSIONAL CERTIFICATION SHALL BE PROVIDED BY THE APPROPRIATE PROFESSIONAL. SOUTHERN ENGINEERS, P.A. CERTIFIES ONLY THE STRUCTURAL COMPONENTS AS SPECIFICALLY STATED.
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE 2018 NC RESIDENTIAL CODE, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK, NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "CONSTRUCTION REVIEW" SERVICES ARE NOT PART OF OUR CONTRACT. ALL MEMBERS SHALL BE FRAMED ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.
- DESIGN LOADS (LISTED AS: LIVE LOAD, DEAD LOAD, DEFLECTION)
 - ROOMS OTHER THAN SLEEPING ROOMS: (40 PSF, 10 PSF, L/360)
 - SLEEPING ROOMS: (30 PSF, 10 PSF, L/360)
 - ATTIC WITH PERMANENT STAIR: (40 PSF, 10 PSF, L/360)
 - ATTIC WITHOUT PERMANENT STAIR: (20 PSF, 10 PSF, L/360)
 - ATTIC WITHOUT STORAGE: (10 PSF, 10 PSF, L/240)
 - STAIRS: (40 PSF, 10 PSF, L/360)
 - EXTERIOR BALCONIES: (60 PSF, 10 PSF, L/360)
 - DECKS: (40 PSF, 10 PSF, L/360)
 - GUARDRAILS AND HANDRAILS: (200 LBS)
 - PASSENGER VEHICLE GARAGES: (30 PSF, 10 PSF, L/360)
 - FIRE ESCAPES: (40 PSF, 10 PSF, L/360)
 - SNOW: (20 PSF)
- WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANELS. SEE FRAMING NOTES FOR THICKNESS AND NAILING REQUIREMENTS.
- SEE APPENDIX M (DGA6) FOR EXTERIOR DECK REQUIREMENTS INCLUDING ATTACHMENTS FOR LATERAL LOADS.
- CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (INO). AIR ENTRAINMENT PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP. CONTROL JOINTS IN SLABS SHALL BE SPACED ON A GRID OF +30 TIMES THE DEPTH (D). CONTROL JOINTS SHALL BE SAWCUT TO A DEPTH OF 1/4" (I.E. 4" CONCRETE SLABS SHALL HAVE 1/4" DEEP CONTROL JOINTS SAWCUT IN SLAB ON A +10'-0" x +10'-0" GRID).
- ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.
- ALL FRAMING LUMBER SHALL BE SFF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (INO). ALL TREATED LUMBER SHALL BE SYP # 2. PLATE MATERIAL MAY BE SFF # 3 OR SYP #3 (Fb/perp) = 425 PSI - MIN.
- L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2600 PSI, Fv=285 PSI, E=1.9x10⁶ PSI.
 - P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2400 PSI, Fv=240 PSI, E=2.0x10⁶ PSI.
 - L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1.55x10⁶ PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.
- ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
- ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. ALL STEEL TUBING SHALL BE ASTM A500.
- REBAR SHALL BE DEFORMED STEEL, ASTM#615, GRADE 60. LAP ALL REBAR SPLICES 30 BAR DIAMETERS.
- FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A325) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX), AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.
- BRICK LINTELS (WHEN REQUIRED) SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0". SEE PLANS FOR SPANS OVER 9'-0". SEE ALSO SECTION R103.B.3 LINTELS.

TRUSS SYSTEM REQUIREMENTS

NC (2018 NCRG), Wind: 115-120 mph

- TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH SEALED STRUCTURAL PLANS. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
- TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURER.
- ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SFF #2 OR #3 PLATES OR LEDGERS (INO).
- ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.

HEADER/BEAM & COLUMN NOTES

- ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2)2x10 (4" WALL) OR (3)2x10 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.
- THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "1" IN TABLE R602.3(5) OR AS BELOW PER NCCO1 COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-4-2020:
 - UP TO 3' SPAN: (1) KING STUD
 - OVER 3' UP TO 6' SPAN: (2) KING STUDS
 - OVER 6' UP TO 9' SPAN: (3) KING STUDS
 - OVER 9' UP TO 12' SPAN: (4) KING STUDS
 - OVER 12' UP TO 15' SPAN: (5) KING STUDS

FRAMING NOTES

NC (2018 NCRG), Wind: 115-120 mph

- BRACING METHOD AND TYPE: CONTINUOUSLY SHEATHED WSP. CS-WSP. NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED BY SECTION R602.10 OF THE CODE. SEE NOTES BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING AND WALL FRAMING.
- EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (WSP) (EXPOSURE B: 7/16"; EXPOSURE C: 15/32"). SHEATHING SHALL BE ATTACHED WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES.
- WSP SHEATHING SHALL EXTEND TO THE UPPERMOST DOUBLE BEARING PLATE. BLOCK AT ROOF PER SECTION R602.10.4.5 AND ATTACH BRACED WALLS PER CODE. WSP SHEATHING BETWEEN FLOORS SHALL BE SPLICED ALONG CONTINUOUS BAND OR THE WSP SHEATHING MAY BE SPLICED ACROSS STUDS (CONTINUOUS ACROSS FLOOR SYSTEM) WITH BLOCKING AT PANEL EDGES. (MINIMUM 12" BEYOND FLOOR BREAK) OR OTHER APPROVED METHOD.
- "HD" = HOLD-DOWN. HOLD-DOWN DEVICE (NOTED AS "HD" ON PLANS) SHALL BE AN 800 POUND CAPACITY ASSEMBLY AS NOTED ON PLANS. SEE DETAILS FOR HD ASSEMBLY.
 - **GROUND/FIRST FLOOR: USE "HD HOLD-DOWN DETAIL" ON SD SHEET (OR EQUIV).
 - **UPPER FLOORS: ATTACH BASE OF KING STUD WITH A SIMPSON CS22 STRAP DOWN ACROSS THE BAND AND DOWN TO A STUD BELOW OR HEADER BELOW. EXTEND STRAP T^o MIN ALONG EACH STUD (OR HEADER) AND ATTACH EACH END W/ (7) 8d NAILS.
- INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH 1/2" GYPSUM BOARD (GB) ON EACH SIDE OF WALL WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.
- INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "IBW-WSP" ON PLANS). ATTACH ONE SIDE WITH 3/8" WSP SHEATHING WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP AS REQUIRED. ATTACH OPPOSITE SIDE WITH 1/2" GB WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.

PORCH POST NOTES:

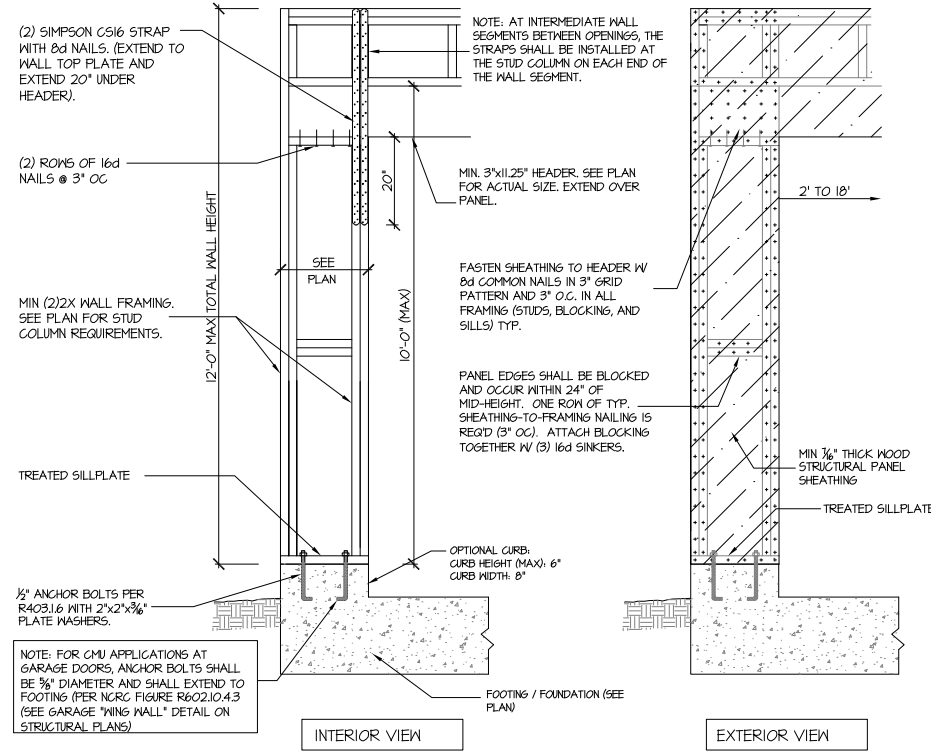
- 4"x4" (6"x6") TRTD POST (OR EQUAL).
- ATTACH TRUSSES (RAFTERS) AT PORCH WITH HURRICANE CONNECTORS.
- POST CAP: SIMPSON AC4-MAX (AC6-MAX)
- POST CAP AT CORNER: (2) SIMPSON LCE4 (MITER HEADER AT CORNER). HIGH WIND; ADD (1) SIMPSON H6.
- POST BASE: SIMPSON ABU44 (ABU66).
- 3.1. MONO: 3/8" ANCHOR (EMBED T^o)
- 3.2. CMU: 3/8" ANCHOR (EXTEND TO FOOTING - HIGH WIND ONLY)
- POST BASE: WOOD FOUNDATION: (2) SIMPSON CS16 STRAPS AT POSTS. EXTEND 12" ONTO EACH POST (UPPER AND LOWER) OR TO GIRDER.
- NOTE: EQUIVALENT POST CAP AND BASE ACCEPTABLE.

NOTE: I-JOISTS MAY BE SUBSTITUTED WITH FLOOR TRUSSES BY THE MANUFACTURER.

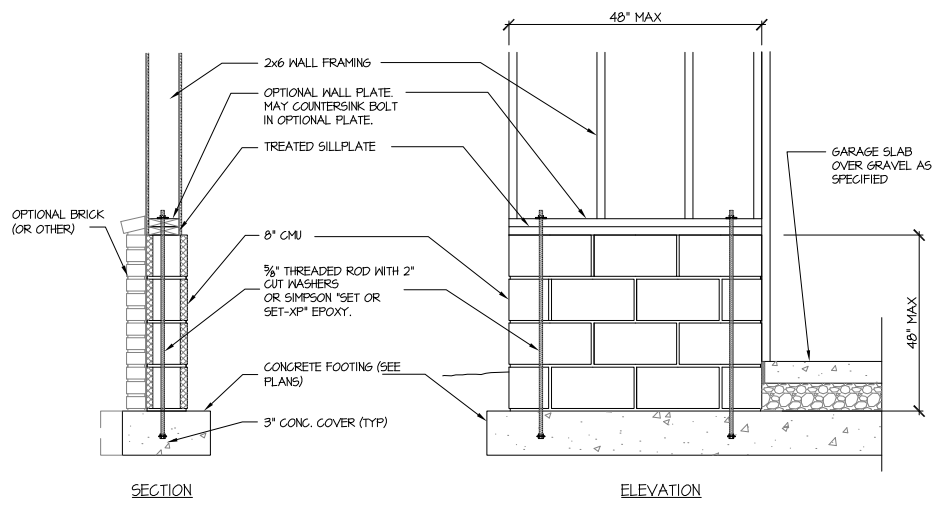
WOOD I-JOISTS

(SHALL BE ONE OF THE FOLLOWING):

- TJI 210 BY TRUS JOIST
- LP1 20 PLUS BY LP
- BC1 5000s 1.8 BY BC
- ALL WOOD I-JOISTS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- INSTALL SQUASH BLOCKS, WEB STIFFENERS, ETC. AS REQUIRED BY AND ACCORDING TO THE I-JOIST MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS.
- HANGERS FOR I-JOISTS ARE THE RESPONSIBILITY OF THE I-JOIST SUPPLIER.



905B SD CS-PF: CONTINUOUS PORTAL FRAME CONSTRUCTION
DETAIL AND APPLICATION BASED ON NCRG FIGURE R602.10.1 - PORTAL FRAME CONSTRUCTION



907 SD GARAGE 'WING WALL' REINFORCING
PER IRC FIGURE R602.10.4.3



PROJECT #
22-1480 (316SR)

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Seal is valid for projects permitted one year from date of seal.
Use of these plans constitutes approval of terms & conditions as defined in the customer agreement.

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DYNAMIC DESIGN GROUP

Lot 316, Serenity
"Mantec-Gl"
ICG-HOMES

SD



PROJECT #
22-1480 (316SR)

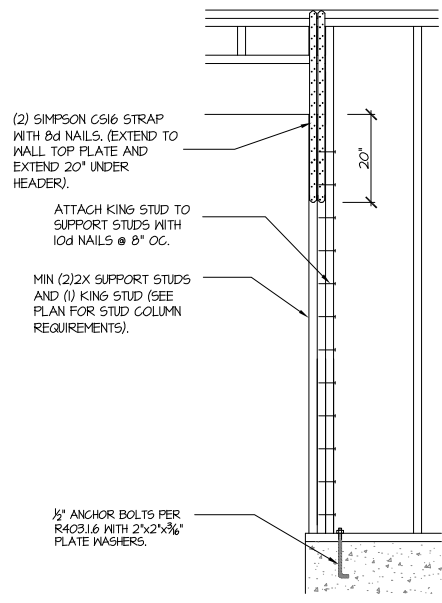
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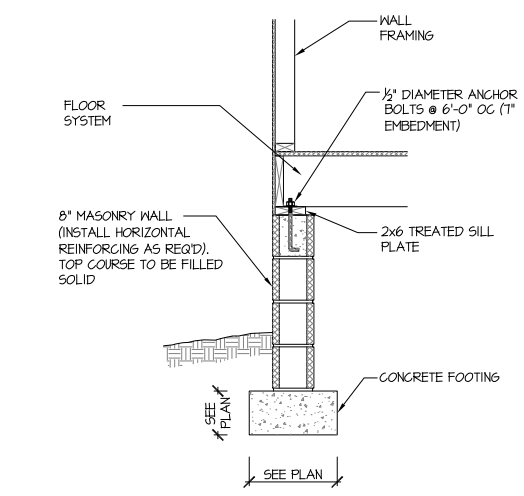
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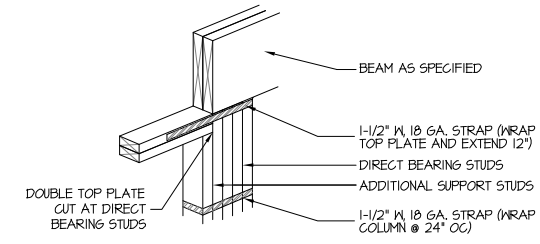
SD



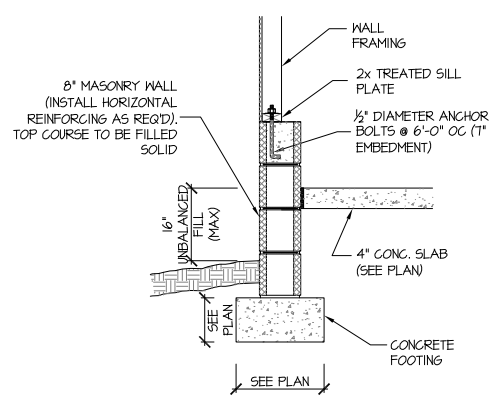
906 SD CS-PF: END CONDITION DETAIL (FOR USE WITH SINGLE CS-PF CONDITION) DETAIL AND APPLICATION BASED ON NCR. FIGURE R602.10.1 - PORTAL FRAME CONSTRUCTION



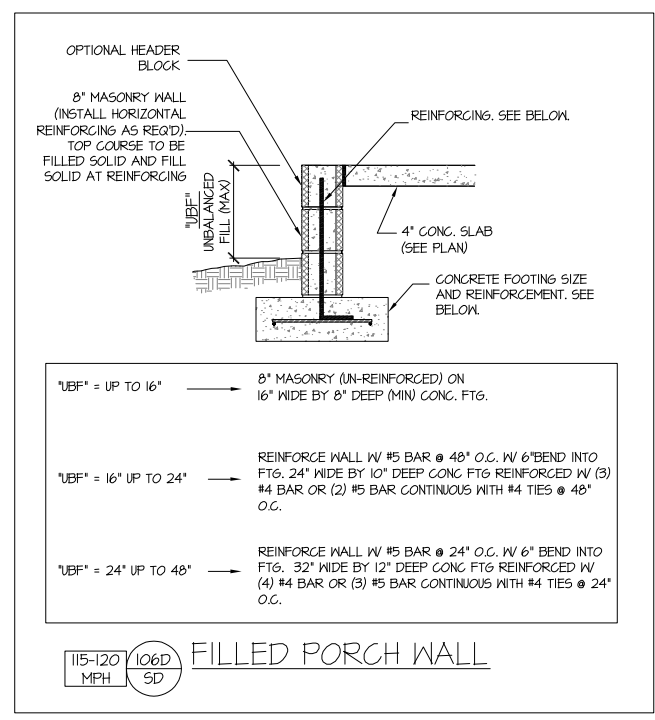
115-120 MPH 110A SD CRAWL SPACE FOOTING (SIDING OR EQUAL)



205E SD DIRECT STUD BEARING



115-120 MPH 111A SD GARAGE WALL FOOTING (SIDING OR EQUAL)



115-120 MPH 106D SD FILLED PORCH WALL