

REISSUED: 12/26/2024



| Square Footage  |         | Division: RALEIGH                                   |                              |
|---|---------|---|------------------------------|
| Living Areas  |         | Building Code: 2018 NORTH CAROLINA RESIDENTIAL CODE |                              |
|   |         | Index to the Drawings                               |                              |
| First Floor   | 1679 SF | Sheet No.   | Sheet Name                   |
| Second Floor  | 878 SF  | 0C.1  | Cover Sheet                  |
|   | 2557 SF | 0N.1  | General Notes                |
| Unfinished Areas  |         | 0P.1  | Plot Plan                    |
|   |         | 1.01  | Foundation Plan              |
| Covered Entry   | 151 SF  | 2.01F   | First Floor Framing Plan     |
| Garage  | 437 SF  | 2.01S   | First Floor Structural Plan  |
| Outdoor Living  | 151 SF  | 2.02F   | Second Floor Framing Plan    |
|   | 739 SF  | 2.02S   | Second Floor Structural Plan |
|   |         | 2.04  | Roof Plan                    |
|   |         | 3.02  | Second Floor Subfloor Plan   |
|   |         | 4.01  | First Floor Mechanical Plan  |
|   |         | 4.02  | Second Floor Mechanical Plan |
|   |         | 5.01  | Building Section             |
| Square Footage total may vary by +1 SF due to automated rounding of first and second floor area |         | 6.01  | Front Elevation              |
| Redraws   |         | 6.02  | Garage Side Elevation        |
| Plan Review: 12/06/2024   |         | 6.03  | Rear Elevation               |
| - CONVERT FOUNDATION FROM CRAWL SPACE TO SLAB   |         | 6.04  | Side Elevation               |
| - REMOVE TRAY CEILING FROM PRIMARY SUITE  |         | 7.01  | House Specific Details       |
|   |         | S-0   | Structural Notes             |
|   |         | SD-1  | Structural Details           |

Plan Review: 12/18/24

-REDRAW TO DELETE GARAGE SERVICE DOOR

Space for Architect Seal

RESIDENCE FOR:  
MARKET  
TBD  
SERENITY

|              |               |             |              |
|--------------|---------------|-------------|--------------|
| Job Number:  | Drawing Date: | Coord Name: | Coord Phone: |
| STY5-0215-00 | 11.11.2024    | G. PIEPER   | 859.578.4355 |

|             |                            |                    |
|-------------|----------------------------|--------------------|
| House Name: | Drawing Scale: 1/8" = 1'0" | Contract Drawn By: |
|             |                            | CM                 |

|         |           |
|---------|-----------|
| Series: | Plan No.: |
|         |           |

|               |          |               |    |
|---------------|----------|---------------|----|
| Born on Date: | 10/24/24 | CDs Drawn By: | CM |
|---------------|----------|---------------|----|



8521 Six Forks Road, Suite 500, Raleigh, NC 27615  
Phone: (919) 844-9288

Sheet Information

0C.1

Cover Sheet  
Elevation "A"

Architecture Plan Review: ☒ No Comments ☐ See Comments Items drawn on any drawings and not written in the contract selctions **WILL NOT** be included in the site specific drawings.

| Customer Request: | Design Solution: | Reason For Modification: | Comments: |
|-------------------|------------------|--------------------------|-----------|
| 1. XXX            | 1. XXX           | 1. XXX                   | 1. XXX    |
| 2. XXX            | 2. XXX           | 2. XXX                   | 2. XXX    |
| 3. XXX            | 3. XXX           | 3. XXX                   | 3. XXX    |
| 4. XXX            | 4. XXX           | 4. XXX                   | 4. XXX    |

I understand that my new Drees home will be built in general conformance to the plans, specifications, selections and the Purchase Agreement, all of which I have reviewed and approved. This set of plans may not reflect the elevations or options for my house. Drees draws the standard plans complete with the most common options. The subcontractor's sets will show only the options I selected in my selection sheets. I have reviewed the plot plan for my house and understand that there may be some field adjustments as to the exact location of the house on the lot. I further understand that my home will not be built exactly like any other Drees home or Model and that some minor variations from my plans and specifications may occur since every home that is built has it's own set of unique construction problems that must be dealt with as the home is being built.

Customer: \_\_\_\_\_ Date: \_\_\_\_\_

Customer: \_\_\_\_\_ Date: \_\_\_\_\_

GENERAL NOTES - RALEIGH

FOUNDATION NOTES

CRAWL SPACES:  
- SLOPE CONCRETE SLAB 4" MINIMUM TOWARDS GARAGE DOOR  
- EXTERIOR FLATWORK/GARAGES SHALL HAVE A MINIMUM CONCRETE SRENGTH OF 4,500 PSI  
- FOOTINGS TO A MINIMUM CONCRETE STRENGTH OF 2500 PSI, UNLESS OTHERWISE NOTED  
- ASSUMED ALLOWABLE SOIL BEARING PRESSURE: 2,000 p.s.f.  
- WATERPROOF FOUNDATION WITH BITUMINOUS SPRAY.  
- WALL TIES EMBEDDED IN THE HORIZONTAL MORTAR JOINT SHALL BE 16" ON CENTER. TIES IN ALTERNATE COURSES SHALL BE STAGGERED. THE MAXIMUM VERTICAL DISTANCE BETWEEN TIES SHALL NOT EXCEED 16" AND THE MAXIMUM HORIZONTAL DISTANCE SHALL NOT EXCEED 16" ADDITIONAL TIES SHALL BE PROVIDED AT ALL OPENINGS, AND WITHIN 12" OF THE OPENING.  
- CORE FILL ENTIRE BLOCK WALL WHEN THE WALL IS 4'-0" TALL OR HIGHER. INSTALL #4 REBAR IN EACH HOLLOW AREA OF EACH BLOCK FROM FOOTING TO TOP OF WALL, ON THE ENTIRE WALL PRIOR TO CORE FILLING IT.  
- TOP COURSE OF BLOCK ON ALL WALLS WILL BE FILLED SOLID WITH MORTAR PLACING THE FOUNDATION STRAPS OR BOLTS IN THE MORTAR 6'-0" ON CENTER, AND 12" FROM EACH CORNER.  
- 12"x16" PIERS: HOLLOW MASONRY UP TO 48" HIGH, SOLID MASONRY UP TO 9'0" HIGH  
- 16"x16" PIERS: HOLLOW MASONRY UP TO 64" HIGH, SOLID MASONRY UP TO 12'0" HIGH  
- BLOCK PIERS SHOULD BE PLACED DIRECTLY ON CONCRETE FOOTINGS PER PLAN. THEY SHOULD BE PLUMBED AND SQUARE WITHIN ¼".  
- SILL PLATES TO BE A MINIMUM OF 2x4 NOMINAL LUMBER.

FRAMING NOTES

DESIGN LOADS:  
FLOORS: 40 psf LIVE LOAD + 10 psf DEAD LOAD = 50 psf GARAGE FLOOR: 50 psf LIVE LOAD SEISMIC: "A" & "B"  
ROOF: 18 psf LIVE LOAD + 17psf DEAD LOAD = 35 psf WIND SPEED: 120 MPH  
DESIGN DEFLECTION LIMITS (BASED ON LIVE LOAD, EXCEPT MASONRY):  
RAFTERS GREATER THAN 3:12 L/180 CEILINGS L/240  
MASONRY VENEER L/600  
NOMINAL LUMBER FLOORS: L/360  
MANUFACTURED WOOD FLOORS: DESIGNED TO MINIMUM PRO RATING OF 35 (OR EQUIVALENT). NO MORE THAN 8 POINT DIFFERENCE BETWEEN ADJACENT SPANS.  
L/480 FOR SPANS UP TO 16'-0" AND NO GREATER THAN 1/2" DEFLECTION  
L/600 FOR SPANS OVER 16'-0" IF SIMPLE SPAN AND NO GREATER THAN 1/2" DEFLECTION  
L/840 FOR SPANS OVER 16'-0" IF CONTINUOUS SPAN. AND NO GREATER THAN 1/2" DEFLECTION

-JOIST SPACING: 19.2" o.c. MAXIMUM SPACING  
DOUBLE EVERY OTHER FLOOR JOIST UNDER KITCHEN ISLANDS  
INSTALL UNCOUPLING MEMBRANE IN TILE FLOOR AREAS IF 19.2" o.c. FLOOR JOIST SPACING  
GLUE AND MECHANICALLY FASTEN [SCREWS] WOOD FLOOR IF 19.2" o.c. FLOOR JOIST SPACING

- MANUFACTURED WOOD PRODUCTS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL WOOD BEAMS AND I-JOISTS) SHALL BE FABRICATED, HANDLED, AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.  
-JOISTS ARE NOT TO BE PLACED DIRECTLY OVER INTERIOR PARALLEL WALLS. (TO PREVENT UNEVEN FLOOR DEFLECTION FROM OCCURRING)  
- ALL WOOD BEAMS/HEADERS: 2x6's TO BE SPF STUD GRADE OR BETTER/ 2x8 OR LARGER TO BE SYP #2 [ PER NDS 2012 ] OR BETTER, U.O.N.  
- ALL HEADERS SHALL BE SUPPORTED BY (1) 2x JACK STUD AND (1) 2x KING STUD MINIMUM. THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACKS REQUIRED, U.N.O. AT FLUSH OR DROPPED BEAMS, THE NUMBER OF STUDS SPECIFIED INDICATES THE TOTAL NUMBER OF STUDS REQUIRED TO SUPPORT THE BEAM.  
- EXTERIOR WALLS TO BE 2x4 SPF STUD GRADE AT 16" o.c. UNLESS OTHERWISE NOTED (10'4-1/2" MAXIMUM WALL HEIGHT)  
- ALL INTERIOR BEARING WALLS AND WALLS AT BASEMENT & FIRST FLOOR STAIRWELLS, KITCHEN, BATH, & GARAGE TO BE 2x4 SPF STUD GRADE @ 16" o.c.; ALL OTHER NON-BEARING INTERIOR WALLS TO BE 2x4 SPF STUD GRADE @ 24" o.c. U.O.N.  
- ALL WALLS TO BE 3 1/2" UNLESS OTHERWISE NOTED.  
- PROVIDE SOLID BEARING TO FOUNDATION OR BEAM BELOW FOR ALL BEAMS, HEADERS & GIRDER TRUSSES. PROVIDE BLOCKING BETWEEN JOISTS AS REQUIRED.  
- SEE SELECTION SHEET FOR SIZE AND STYLE OF FIREPLACE. SEE FIREPLACE ELEVATION DETAIL FOR ADDITIONAL FRAMING REQUIREMENTS, IF ANY.  
- CHECK SELECTION SHEETS FOR FLOOR COVERING AT TOP AND BOTTOM OF STAIR RISERS AND ADJUST RISERS AS REQ'D.  
- PROVIDE BLOCKING AT ALL HANDRAIL TERMINATION AND BRACKET LOCATIONS.  
- 20-MINUTE FIRE RATED DOOR BETWEEN GARAGE AND LIVING AREA.  
- EXTERIOR WALL TO BE 2x4 SPF STUD G AT 16" o.c. UNLESS OTHERWISE NOTED (10'-0" MAXIMUM UNBRACED WALL HEIGHT).  
- ALL EXTERIOR WALLS AND INTERIOR BEARING WALLS, FRAMED HIGHER THAN THE STANDARD PLATE HEIGHT, SHALL BE FRAMED WITH CONTINUOUS FULL HEIGHT STUDS TO THE HIGHEST CEILING (I.E. NO INTERMEDIATE BREAKS) TO PREVENT LATERAL HINGE CONDITIONS.  
- IN THE GARAGE, PROVIDE 1/2" GYP. BOARD AT ALL WALLS COMMON TO LIVING SPACE AND ALL STRUCTURAL MEMBERS SUPPORTING FLOOR/CEILING ASSEMBLY. GARAGE CEILING TO BE 1/2" SAG RESISTANT GYP. BOARD WHEN THERE ARE NO HABITABLE SPACES ABOVE, OR 5/8" TYPE X GYP. BOARD WHEN HABITABLE SPACES ARE ABOVE.  
- ALL EMERGENCY ESCAPE & RESCUE OPENINGS TO BE A MAXIMUM OF 44" OFF OF FINISHED FLOOR AND HAVE MINIMUM OPENING DIMENSIONS OF 24" IN HEIGHT, 20" IN WIDTH, & HAVE A MINIMUM OPENING AREA OF 5.7 S.F.  
ALL DOORS TO BE 6'-8" TALL UNLESS OTHERWISE NOTED.  
- ALL GLASS IN INTERIOR AND EXTERIOR DOORS TO BE TEMPERED (INCLUDING SIDELITES AND TRANSOMS)  
- ALL LUMBER CONTACTING CONCRETE TO BE PRESSURE TREATED.  
- ALL FASTENERS, HANGERS, AND OTHER CONNECTORS TO BE USED WITH PRESSURE TREATED WOOD ARE TO HAVE ZMAX COATING (OR EQUIVALENT) HOT-DIPPED GALVANIZED OR STAINLESS STEEL.  
- AT STAIR HANDRAIL, ON ONE SIDE ONLY, SHALL BE CONTINUOUS FOR THE ENTIRE LENGTH OF THE STAIRWAY, AND ENDS SHALL BE RETURNED TO A WALL OR POST. THE HANDRAIL MAY BE INTERRUPTED AT A NEWEL POST AT A TURN.  
- ALL HANDRAIL GRIP PORTIONS SHALL NOT EXCEED 2-1/4" IN CROSS SECTIONAL DIMENSION.  
- HANDRAILS SHALL BE INSTALLED ON ALL STAIRS WITH 4 OR MORE RISERS, HANDRAIL HEIGHTS SHALL BE A MINIMUM OF 34" AND A MAXIMUM OF 38".  
- ALL STAIRS TO BE CONSTRUCTED SO AS NOT TO ALLOW A 4" SPHERE TO PASS THROUGH THE RISER.  
- GUARDRAILS MUST BE A MINIMUM OF 36" HIGH. GUARDRAILS AT THE OPEN SIDES OF STAIRS MUST BE A MINIMUM OF 34" HIGH MEASURED VERTICALLY FROM THE NOSING AT THE TREADS. THE HORIZONTAL SPACING OF THE VERTICAL BALUSTERS SHALL BE 4" O.C.  
- GUARDRAIL DESIGN TO RESIST A MINIMUM OF 200 LBS LATERAL FORCE

BASEMENTS:  
- SLOPE CONCRETE SLAB 4" MINIMUM TOWARDS GARAGE DOOR  
- EXTERIOR FLATWORK/GARAGES SHALL HAVE A MINIMUM CONCRETE SRENGTH OF 4,500 PSI  
- FOOTINGS TO A MINIMUM CONCRETE STRENGTH OF 2500 PSI, UNLESS OTHERWISE NOTED- ALL FOUNDATION WALLS TO BE CAST IN PLACE CONCRETE 3000 PSI MIN. UNLESS OTHERWISE NOTED.  
- BASEMENT WINDOW LOCATIONS MAY VARY FROM DRAWING DUE TO LOT CONDITIONS.  
- BACKFILL ADJACENT TO FOUNDATION WALLS SHALL NOT BE PLACED UNTIL THE WALL HAS SUFFICIENT STRENGTH AND HAS BEEN ANCHORED TO THE FLOOR OR HAS BEEN SUFFICIENTLY BRACED TO PREVENT DAMAGE BY THE BACKFILL.  
- ASSUMED ALLOWABLE SOIL BEARING PRESSURE: 2,000 p.s.f.  
- WATERPROOF FOUNDATION WITH BITUMINOUS SPRAY.  
- VERTICAL CONTROL JOINTS IN BASEMENT FOUNDATION WALLS - STANDARD LOCATION GUIDELINES:  
1) PLACE A CONTROL JOINT IN ALL UNBRACED WALLS OVER 30' IN LENGTH. (NOTE: "T" WALLS AND CORNERS COUNT AS A BRACE).  
2) WINDOWS THAT ARE LARGER THAN THE STANDARD BASEMENT WINDOW REQUIRE A CONTROL JOINT.  
3) CONTROL JOINTS ARE NOT REQUIRED AT EVERY WINDOW THAT IS STANDARD SIZE.  
4) IF THERE IS A STANDARD WINDOW LOCATED IN A WALL SEGMENT THAT REQUIRES A CONTROL JOINT, THEN THE CONTROL JOINT SHOULD BE PLACED ON THE SIDE OF THE WINDOW THAT IS ADJACENT TO THE LONG SIDE OF THE WALL. IF THERE IS MORE THAN ONE WINDOW IN A WALL THEN ONLY ONE WINDOW SHOULD HAVE A CONTROL JOINT.  
5) DOORS DO NOT GET CONTROL JOINTS.  
6) CONTROL JOINTS SHOULD NOT BE LOCATED WITHIN 3' OF A BEAM POCKET.  
7) CONTROL JOINTS ARE REQUIRED AT THE FIRST AND LAST STEP DOWN AT STEPPED BASEMENT FOUNDATION WALLS.  
- INTERIOR FLATWORK SHALL HAVE A MINIMUM CONCRETE STRENGTH OF 3,000 PSI.  
- ALL VERTICAL STEEL AND ALL STEEL IN STRUCTURAL SLABS TO BE GRADE 60. ALL HORIZONTAL STEEL IN FOUNDATION WALLS AND FOOTERS TO BE GRADE 40 STEEL.

MECHANICAL/ELECTRICAL NOTES

- ANY GAS APPLIANCES MUST BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.  
- HOLD THE CENTERLINE OF ALL EXTERIOR LIGHT FIXTURES AT 5'-8" OFF BOTTOM OF DOOR OPENING.  
- ALL KITCHEN CABINET DIMENSIONS ARE CABINET TO CABINET.  
- CABINET STYLES MAY VARY FROM INTERIOR ELEVATIONS DEPENDING ON STYLE, MANUFACTURER, ETC. FOR CABINET DETAILS SEE SHOP DRAWINGS.  
- CABINET SIZES MAY VARY WITH FULL-OVERLAY CABINETS.  
- GROUND FAULT INTERRUPTER (GFCI) OUTLETS TO BE INSTALLED PER NEC 2017, SECT. 210.8  
- PROVIDE HOSE BIBS PER DIVISION SPEC. SHEET. EXACT LOCATION TO BE FIELD DETERMINED UNLESS OTHERWISE NOTED ON THE PLANS.  
- MIN. 50 C.F.M. FOR ALL EXHAUST FANS IN BATHROOMS

INSULATION DETAILS  
EXTERIOR STUD WALL CAVITY: (2x4) R-15  
(2x6) R-19  
FLOOR JOIST CAVITY AT STANDARD PERIMETER: R-19  
FLOOR JOIST CAVITY AT CANTILEVER: R-19  
OVER GARAGE: (OVER HORIZONTAL SPACE) R-38 BLOWN  
(SLOPED AND VERTICAL SPACE) R-38 BATT

ELEVATION NOTES

- WINDOW STYLE AND MULLIONS MAY VARY FROM ELEVATION DEPENDING UPON MANUFACTURER, STYLE, PATTERN, TYPE, ETC.  
- USE SECONDARY HEAT BARRIER ON ALL DIRECT VENT FIREPLACES 7" OR LESS ABOVE A WALKWAY.  
- GRADE AWAY FROM FOUNDATION WALLS SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST 10'.  
- PROVIDE TYVEK OR EQUIVALENT HOUSE WRAP BEHIND BRICK AND STONE VENEER OVER WOOD SHEATHING.  
- PROVIDE BRICK WEEP HOLES AT 24" O.C. WITH BRICK VENEER AND MORTER NET BEHIND AND THROUGH WEEP HOLES.  
- PROVIDE FLASHING AND WEEP HOLES ABOVE ALL BRICK ANGLE IRONS, BELOW ALL BRICK SILLS AND ABOVE SILL PLATE SEALERS.  
- EXTERIOR STEPS TO HAVE A MAXIMUM 8" RISER. WHEN VERTICAL RISE EXCEEDS 30" OR FOUR OR MORE CONTINUOUS RISERS, A HANDRAIL IS REQUIRED.


ROOF PLAN NOTES

- ALL OVERHANGS TO HAVE (2) SOFFIT VENTS PER EACH 8' SOFFIT SECTION.  
- PROVIDE BAFFLES AT EXTERIOR TRUSS BEARING FOR VENTILATION.  
- PROVIDE 15# FELT PAPER UNDER SHINGLES.

SLAB ON GRADE:  
- ALL CONCRETE SLABS ON GRADE SHALL BE THE THICKNESS AS INDICATED ON THE DETAILS OVER MINIMUM 6 MIL. POLYETHYLENE (VISQUEEN) VAPOR BARRIER. SLABS SHALL BE REINFORCED WITH 6x6 W1.4 WWF LAPPED 8" AT EDGES AND ENDS IN CONFORMANCE WITH ASTM-A 185, OR FIBERMESS REINFORCEMENT SHALL BE USED WITH A MINIMUM FIBER LENGTH OF ½" TO 2 ¼" COMPLYING WITH ASTM C 1116. THE DOSAGE AMOUNT SHALL BE 0.75 TO 3.0 POUNDS PER CUBIC YARD IN ACCORDANCE WITH MANUFA TURER'S RECOMMENDATIONS.  
- SLABS ON GRADE SHALL BEAR ON STRUCTURAL FILL WHICH SHALL BE CLEAN SAND FREE OF DEBRIS AND OTHER DELETERIOUS MATERIAL. STRUCTURAL FILL SHALL BE COMPACTED TO A DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUMN DRY DENSITY (ASTM D1557). TERMITE PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS. IF SOIL TREATMENT IS USED, THE TREATMENT SHALL BE DONE AFTER ALL EXCAVATION, BACKFILLING, AND COMPACTION IS COMPLETED.  
- FOOTINGS MAY BEAR UPON UNDISTURBED SOIL OR UPON STRUCTURAL FILL. STRUCTURAL FILL SHALL BE COMPACTED TO A DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUMN DRY DENSITY (ASTM D1557) FOR A DEPTH OF AT LEAST TWO FEET (2'-0") BELOW THE BOTTOM OF THE FOOTING.  
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:  
3" CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH  
2" CONCRETE EXPOSED TO EARTH AND WEATHER  
1 ½" CONCRETE NOT EXPOSED TO EARTH OR WEATHER  
- SLOPE CONCRETE SLAB 4" MINIMUM TOWARDS GARAGE DOOR  
- EXTERIOR FLATWORK/GARAGES SHALL HAVE A MINIMUM CONCRETE SRENGTH OF 4,500 PSI  
- ASSUMED ALLOWABLE SOIL BEARING PRESSURE: 2,000 p.s.f.  
- INTERIOR FLATWORK SHALL HAVE A MINIMUM CONCRETE STRENGTH OF 3,000 PSI.  
- ALL STEEL IN STRUCTURAL SLABS TO BE GRADE 60. ALL HORIZONTAL STEEL IN FOUNDATION WALLS AND FOOTERS TO BE GRADE 40 STEEL.

Space for Architect Seal

FOR STRUCTURE ONLY



2025-01-16


RESIDENCE FOR:

MARKET

TBD

SERENITY

|               |               |                            |                    |
|---------------|---------------|----------------------------|--------------------|
| Job Number:   | Drawing Date: | Coord Name:                | Coord Phone:       |
| STY5-0215-00  | 11.11.2024    | G. PIEPER                  | 859.578.4355       |
| House Name:   |               | Drawing Scale: 1/8" = 1'0" | Contract Drawn By: |
|               |               |                            | CM                 |
|               |               | Series:                    |                    |
|               |               | Plan No.:                  |                    |
| Born on Date: | 10/24/24      | CDs Drawn By:              | CM                 |



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Sheet Information

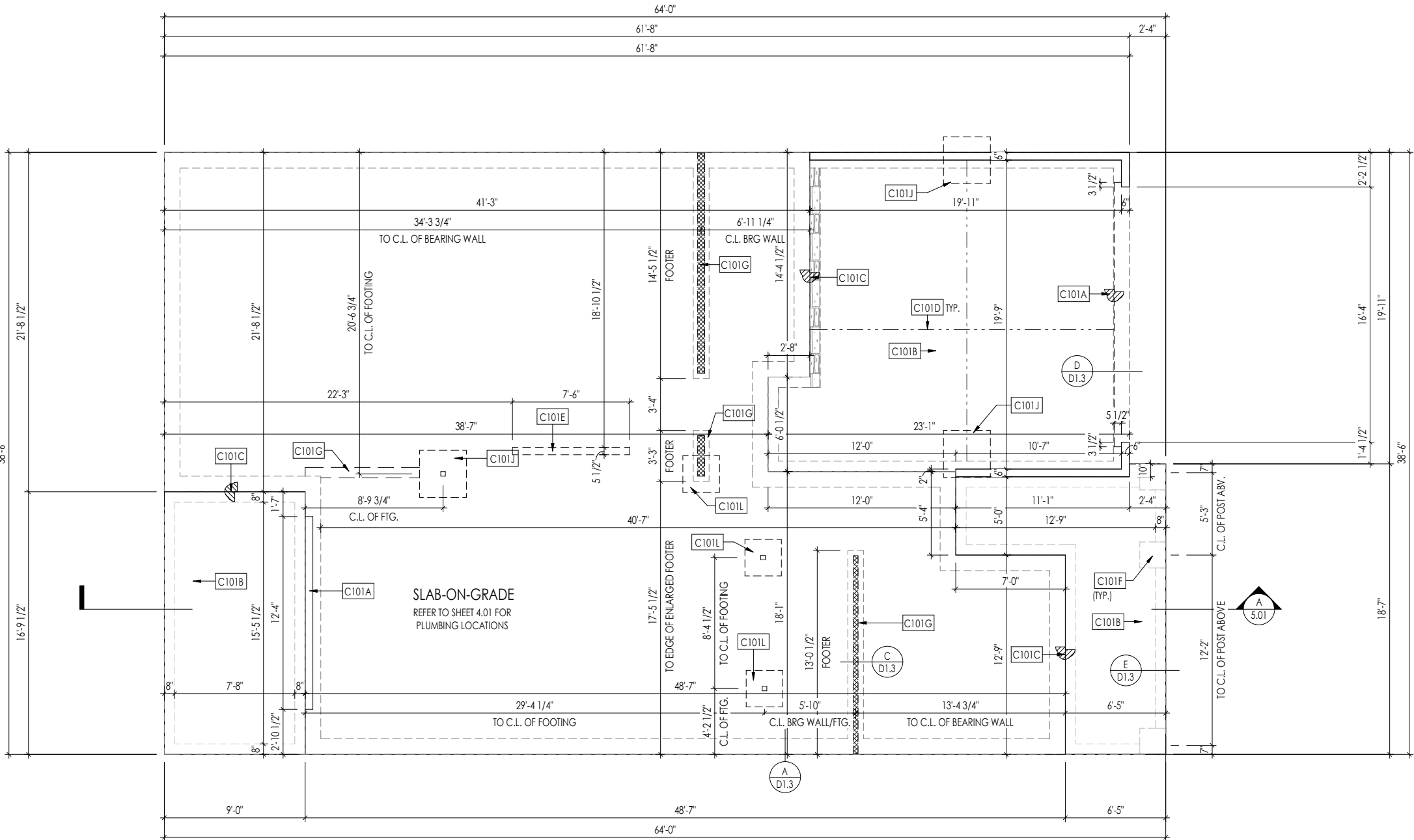
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General Notes  
Elevation "A"

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1/22/2024 09:36:51 AM

REISSUED: 12/26/2024



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|--|--|
| General Notes:   |  |
| 1. REFER TO SHEET 0N.1 FOR GENERAL NOTES.                      |  |
| 2. REFER TO SHEET S-0 FOR ENGINEERING NOTES.                   |  |
| 3. ALL FOUNDATION WALLS TO BE 8" THICK UNLESS OTHERWISE NOTED. |  |
| Key Notes:   |  |
| C101A  | 3/4" WEATHER LIP (1-1/2" @ SLIDING GLASS DOOR)                   |
| C101B  | SLOPE SLAB 1/8" PER FOOT   |
| C101C  | DROP SLAB 3-1/2"   |
| C101D  | SLAB CONTROL JOINT   |
| C101E  | PROVIDE CONDUIT FOR ELECTRIC TO KITCHEN ISLAND                   |
| C101F  | PAD FOOTING UNDER PORCH COLUMN ABOVE - SEE DETAIL F/D1.3         |
| C101G  | 8"x16" THICKENED PLAIN CONCRETE FOOTING UNDER BEARING WALL ABOVE |
| C101J  | 36"x36"x12" ENLARGED CONCRETE FOOTING UNDER POST ABOVE           |
| C101L  | 28"x28"x12" PLAIN CONCRETE FOOTING UNDER POST ABOVE              |

Space for Architect Seal

FOR STRUCTURE ONLY

2025-01-16

RESIDENCE FOR:

MARKET

TBD

SERENITY

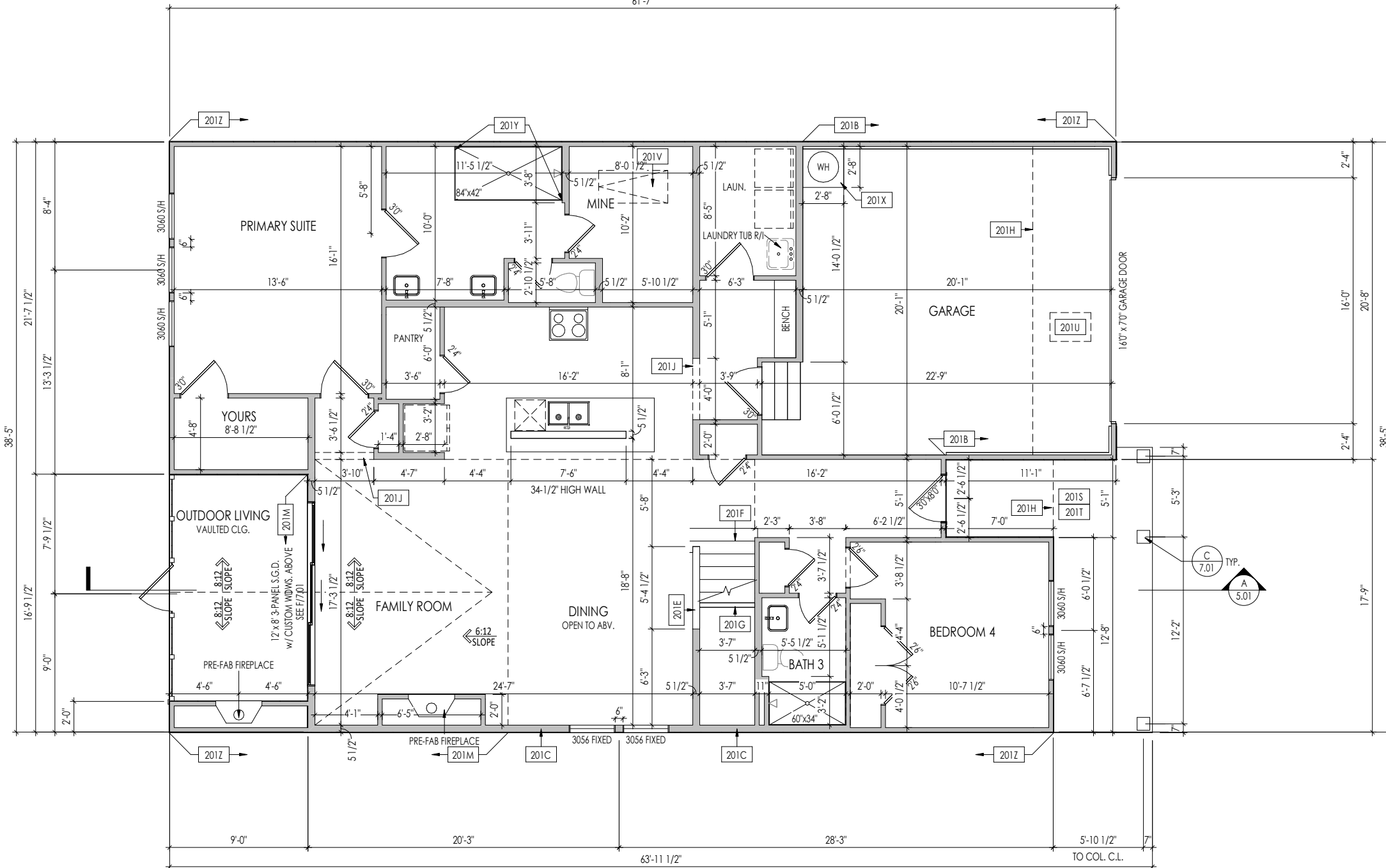
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| STY5-0215-00  | 11.11.2024                 | G. PIEPER          | 859.578.4355 |
| House Name:   | Drawing Scale: 1/8" = 1'0" | Contract Drawn By: |              |
| the ALTON     |                            | CM                 |              |
| Born on Date: | CDs Drawn By:              | Plan No.:          |              |
| 10/24/24      | CM                         |                    |              |

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Phone: [919] 844-9288

Sheet Information

1.01  
Foundation Plan  
Elevation "A"

PROVIDE 8' TALL DOORS  
THROUGHOUT FIRST FLOOR,  
U.N.O.



General Notes:

1. REFER TO SHEET ON.1 FOR GENERAL NOTES.
2. ALL FIRST FLOOR CEILINGS TO BE 10'-1" ABOVE SUBFLOOR UNLESS OTHERWISE NOTED.
3. FRAME TOP OF ALL WINDOWS AT 1'-10" BELOW TOP OF PLATE UNLESS OTHERWISE NOTED.
4. ALL DROPPED, INTERIOR HEADERS (FALSE AND BEARING) ARE DROPPED 1'-3" FROM CEILING.
5. REFER TO SELECTION SHEETS FOR FLOORING MATERIAL PRIOR TO CONSTRUCTING STAIRS TO DETERMINE RISER HEIGHTS.
6. REFER TO SHEET 2.01S FOR STRUCTURAL INFORMATION.

Key Notes:

|      |  |
|------|--|
| 201B | FRAME GARAGE WALL FULL HEIGHT STUDS AT 11'-3 1/8" WITH 2x4 STUDS AT 16" O.C. FROM TOP OF FOUNDATION WALL |
| 201C | 2x6 BALLOON FRAMED WALL - SEE SHEET 2.01S FOR MORE INFO  |
| 201E | SLOPE WALL EVEN WITH TOP OF STAIR STRINGER, RAILING ABOVE  |
| 201F | SEE DETAIL B/5.01 FOR STAIR FRAMING DETAILS  |
| 201G | APPROX. LOCATION OF 36" HIGH WALL UNDER STAIRS (FIELD VERIFY)  |
| 201H | OUTLINE OF SECOND FLOOR ABOVE  |
| 201J | FRAME TOP OF OPENING AT HEIGHT SPECIFIED IN GENERAL NOTES ON THIS SHEET                                  |
| 201M | BALLOON FRAME WALL TO UNDERSIDE OF SCISSOR TRUSS   |
| 201S | DO NOT CENTER FLOOR JOIST OVER FRONT DOOR TO ALLOW FOR CAN LIGHT INSTALLATION                            |
| 201T | CARPENTER TO DROP ELECTRICAL WIRE THROUGH PORCH CEILING FOR LIGHTS                                       |
| 201U | 22-1/2" x 32" ATTIC ACCESS   |
| 201V | PULL DOWN ATTIC ACCESS STAIRS (25-1/2" x 54") WITH LIGHT AND OUTLET                                      |
| 201X | 18" HIGH WATER HEATER PLATFORM   |
| 201Y | PROVIDE BLOCKING FOR SHOWER DOOR/ENCLOSURE   |
| 201Z | PROVIDE 1/2" FIRE RATED PLYWOOD ON SIDE ELEVATIONS   |

Space for Architect Seal

|   |                                    |                                 |                                     |
|---|------------------------------------|---------------------------------|-------------------------------------|
| RESIDENCE FOR:<br><b>MARKET</b><br>TBD<br><b>SERENITY</b> |                                    |                                 |                                     |
| Job Number:<br><b>STY5-0215-00</b>                        | Drawing Date:<br><b>11.11.2024</b> | Coord Name:<br><b>G. PIEPER</b> | Coord Phone:<br><b>859.578.4355</b> |
| House Name:   |                                    | Drawing Scale: 1/8" = 1'0"      | Contract Drawn By:<br><b>CM</b>     |
| <b>the ALTON</b>  |                                    |                                 | Series:                             |
|   |                                    |                                 | Plan No.:                           |
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|                                    |                                    |                                 |                                     |
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**the ALTON** Series:

|                        |  |                  |           |
|------------------------|--|------------------|-----------|
| Born on Date: 10/24/24 |  | CDs Drawn By: CM | Plan No.: |
|                        |  |                  |           |



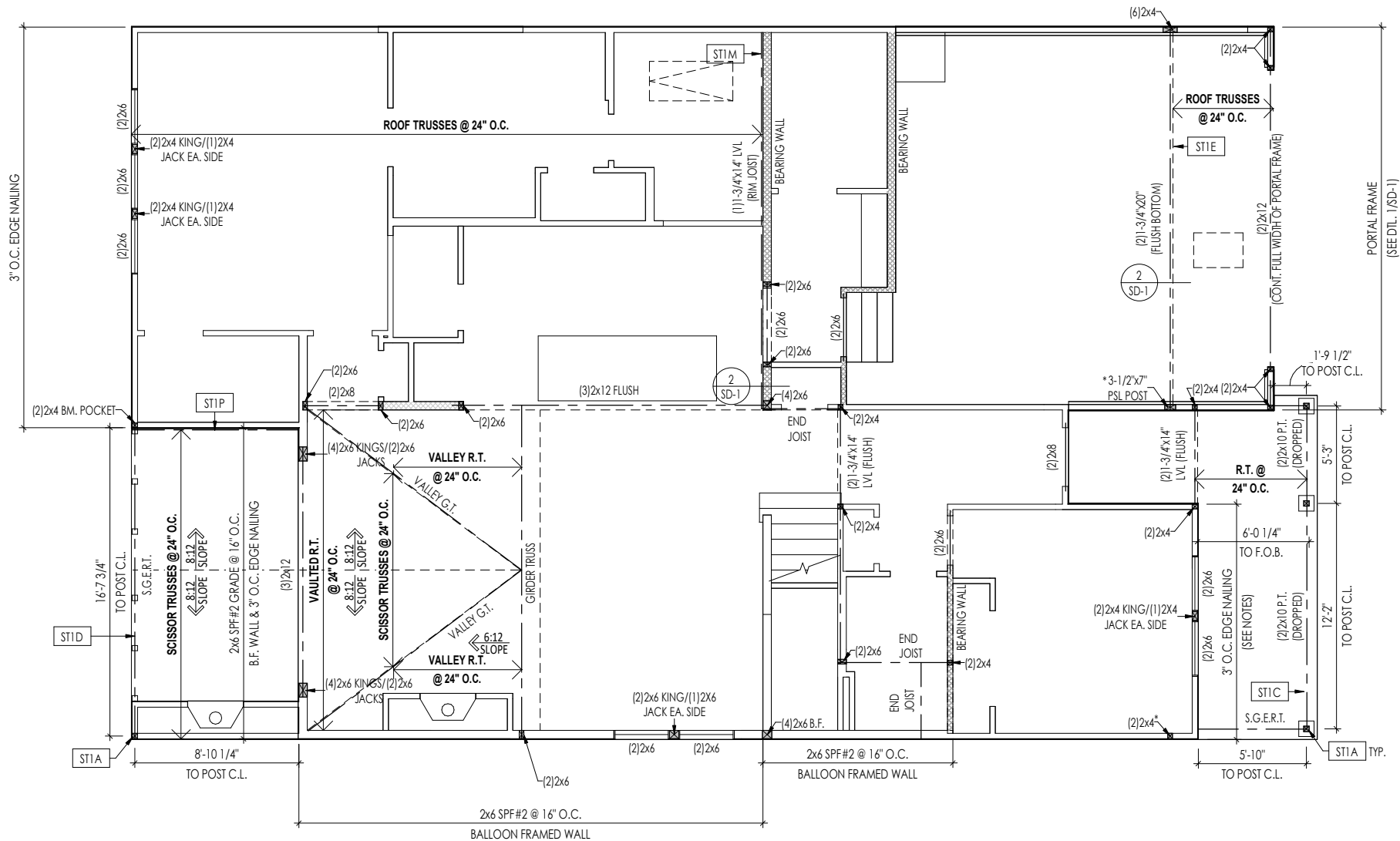
# 2.01 F

First Floor Framing Plan  
Elevation "A"

# 2.01F

First Floor Framing Plan  
Elevation "A"

REISSUED: 12/26/2024



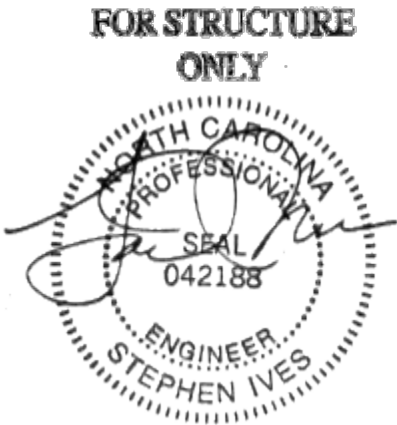
General Notes:

1. REFER TO SHEET S-0 FOR ENGINEERING NOTES.

Key Notes:

|      |  |
|------|--|
| ST1A | 4x4 P.T. POST W/ SIMPSON BCS2-2/4 CAP & ABW44Z BASE (verify w/ engineering redlines) |
| ST1C | FRAME TOP OF BEAM AT 9'-1" ABOVE INTERIOR FINISHED FLOOR                             |
| ST1D | FRAME TOP OF BEAM AT 10'-1" ABOVE INTERIOR FINISHED FLOOR                            |
| ST1E | OUTLINE OF SECOND FLOOR ABOVE  |
| ST1M | HANG ROOF TRUSSES THROUGH SHEATHING DIRECTLY TO LVL RIM.                             |
| ST1P | 2x10 P.T. LEDGER FASTENED TO FRAMING w/ (4)0.131"x3-1/2" NAILS @ 16" O.C.            |

Space for Architect Seal



2025-01-16

RESIDENCE FOR:  
**MARKET**  
TBD  
**SERENITY**

|                                    |                                    |                                 |                                     |
|------------------------------------|------------------------------------|---------------------------------|-------------------------------------|
| Job Number:<br><b>STY5-0215-00</b> | Drawing Date:<br><b>11.11.2024</b> | Coord Name:<br><b>G. PIEPER</b> | Coord Phone:<br><b>859.578.4355</b> |
| House Name:<br><b>the ALTON</b>    |                                    |                                 | Contract Drawn By:<br><b>CM</b>     |
| Born on Date:<br>10/24/24          |                                    |                                 | CDs Drawn By:<br>CM                 |
| Series:                            |                                    |                                 | Plan No.:                           |



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Sheet Information

**2.01S**

First Floor Structural Plan  
Elevation "A"



K:\Contracts\SOUTHEAST\RALEIGH\STY5-0215-00\STY5-0215-00.mt



1. REFER TO SHEET ON.1 FOR GENERAL NOTES.
2. ALL SECOND FLOOR CEILINGS TO BE 9'-1" ABOVE SUBFLOOR UNLESS OTHERWISE NOTED.
3. FRAME TOP OF ALL WINDOWS AT 1'-0 1/4" BELOW TOP OF PLATE UNLESS OTHERWISE NOTED.
4. ALL DROPPED, INTERIOR HEADERS (FALSE AND BEARING) ARE DROPPED 1'-0" FROM CEILING.
5. REFER TO SELECTION SHEETS FOR FLOORING MATERIAL PRIOR TO CONSTRUCTING STAIRS TO DETERMINE RISER HEIGHTS.
6. REFER TO SHEET 2.02S FOR STRUCTURAL INFORMATION.

|      |   |
|------|---|
| 202C | 2x6 BALLOON FRAMED WALL - SEE SHEET 2.01S FOR MORE INFO             |
| 202F | SEE DETAIL B/5.01 FOR STAIR FRAMING DETAILS                         |
| 202P | HVAC CHASE  |
| 202V | PULL DOWN ATTIC ACCESS STAIRS (25-1/2" x 54") WITH LIGHT AND OUTLET |
| 202Z | PROVIDE 1/2" FIRE RATED PLYWOOD ON SIDE ELEVATIONS                  |

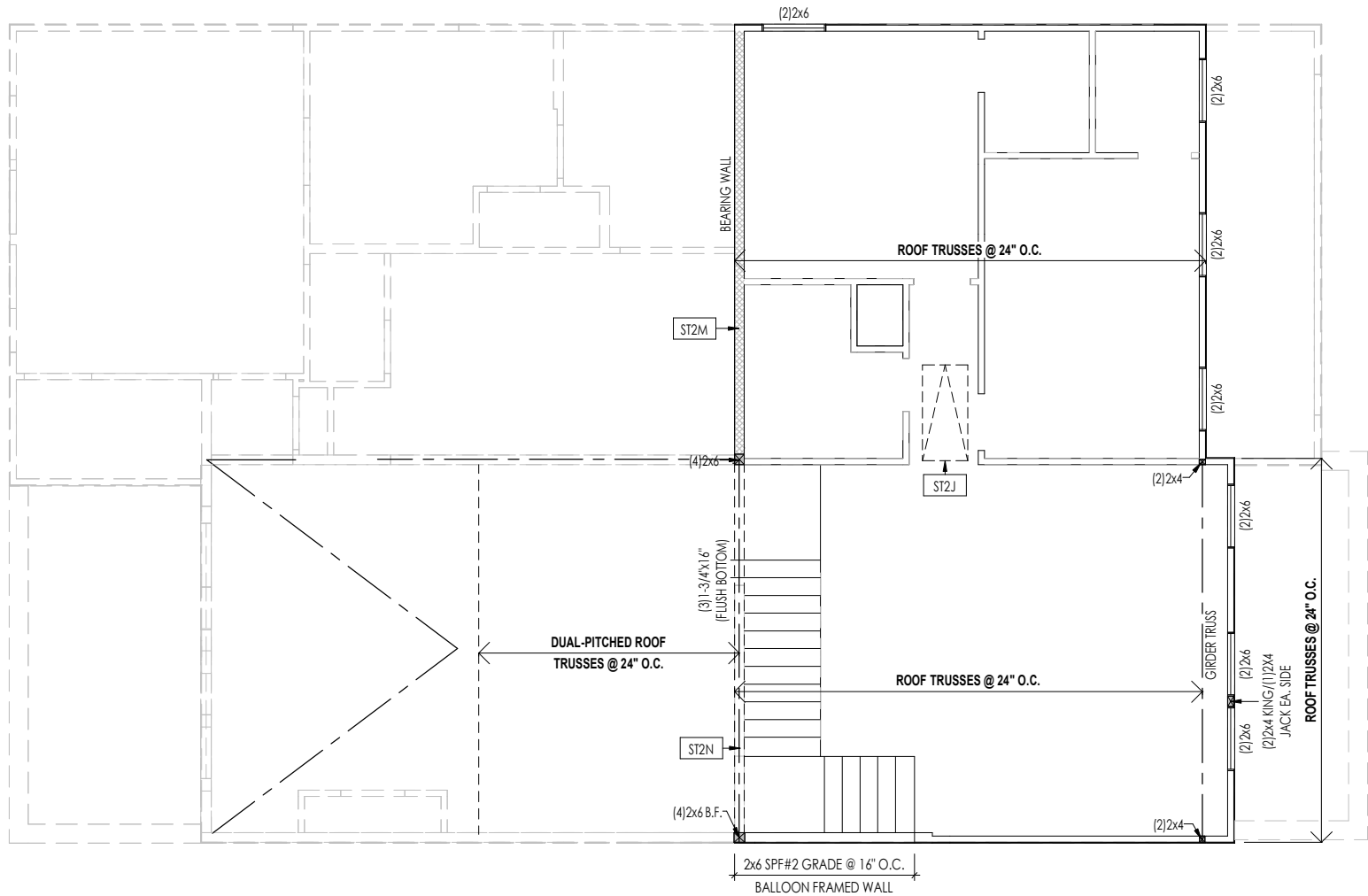
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|------------------------------------|------------------------------------|---------------------------------|-------------------------------------|
| Job Number:<br><b>STY5-0215-00</b> | Drawing Date:<br><b>11.11.2024</b> | Coord Name:<br><b>G. PIEPER</b> | Coord Phone:<br><b>859.578.4355</b> |
| House Name:<br><b>the ALTON</b>    |                                    |                                 | Contract Drawn By:<br><b>CM</b>     |
| Born on Date:<br><b>10/24/24</b>   |                                    |                                 | CDs Drawn By:<br><b>CM</b>          |



# 2.02F

Second Floor Framing Plan  
Elevation "A"

REISSUED: 12/26/2024



|  |  |
|--|--|
| General Notes:                               |  |
| 1. REFER TO SHEET S-0 FOR ENGINEERING NOTES. |  |
| Key Notes:                                   |  |
| ST2J   | PROVIDE BLOCKING FOR PULL DOWN ATTIC ACCESS STAIRS                       |
| ST2M   | PROVIDE CONTINUOUS FULL HEIGHT SHEATHING DOWN TO SECOND FLOOR SOLE PLATE |
| ST2N   | HANG ROOF TRUSSES THROUGH SHEATHING DIRECTLY TO FLUSH BEAM               |

Space for Architect Seal

FOR STRUCTURE ONLY

Professional Engineer  
STEPHEN IVES  
042188  
NORTH CAROLINA

2025-01-16

RESIDENCE FOR:

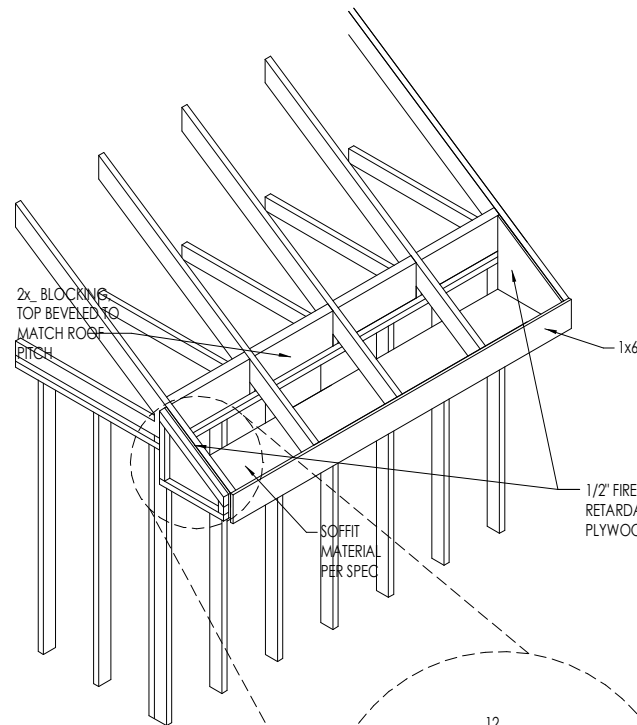
MARKET

TBD

SERENITY

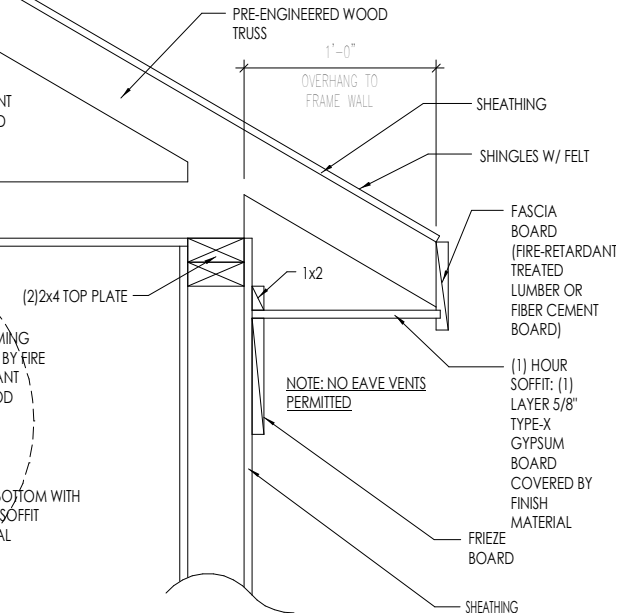
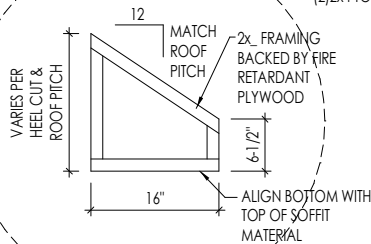
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|--|-----------------------------|--------------------------|---|
| Job Number:<br>STY5-0215-00  | Drawing Date:<br>11.11.2024 | Coord Name:<br>G. PIEPER | Coord Phone:<br>859.578.4355  |
| House Name:<br>the ALTON   |                             |                          | Contract Drawn By:<br>CM  |
| Born on Date:<br>10/24/24  |                             |                          | CDs Drawn By:<br>CM   |
| <div><p>Copyright © 2023 ( 2024 ) The Drees Company. All Rights Reserved.<br/>8521 Six Forks Road, Suite 500, Raleigh, NC. 27615<br/>Phone: (919) 844-9288</p></div> |                             |                          | <div>Sheet Information</div> <div>2.02S</div> <div>Second Floor Structural Plan<br/>Elevation "A"</div> |

REISSUED: 12/26/2024



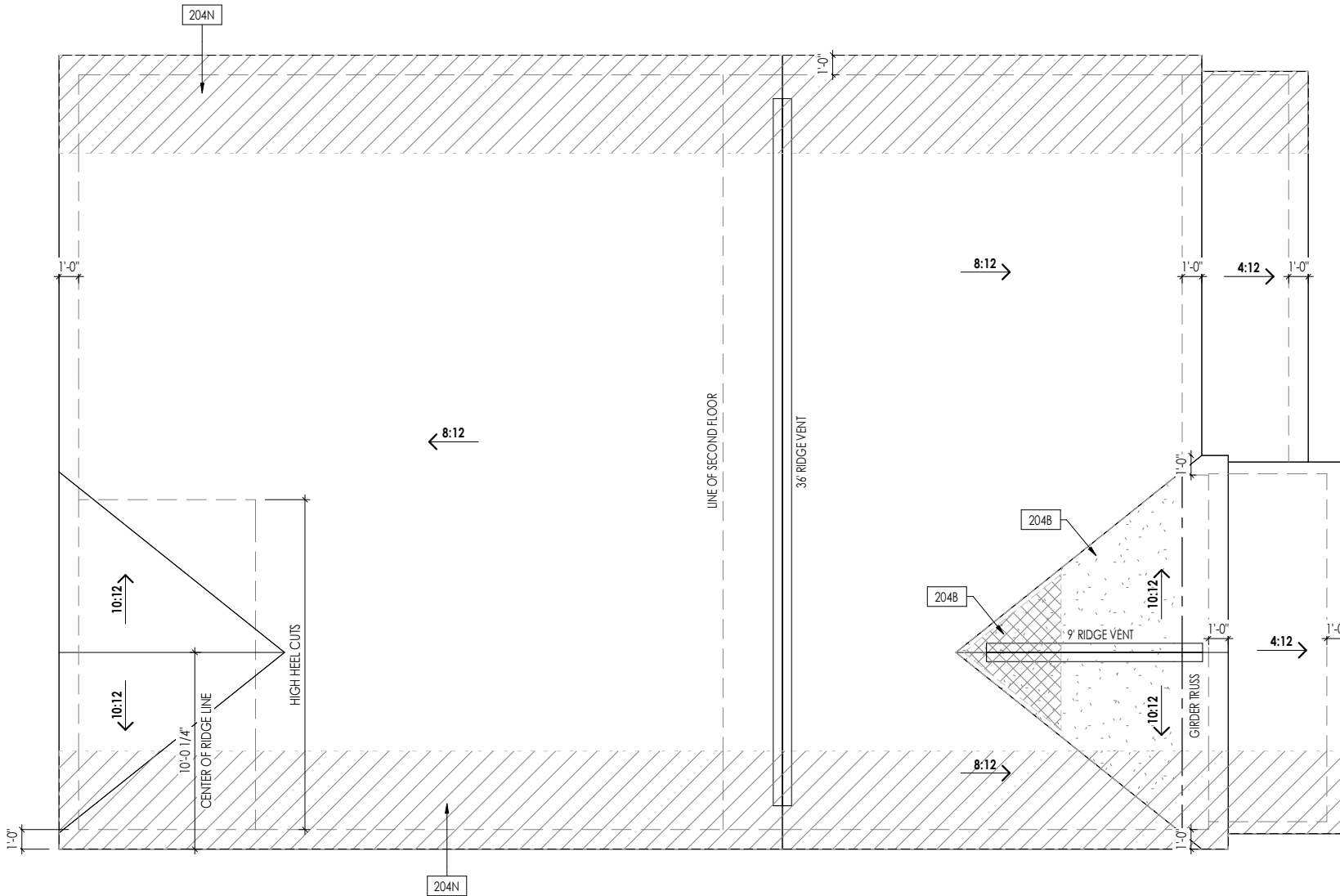
### FIRE BLOCKING AT SOFFIT

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



(1) HOUR RATING ON  
UNDERSIDE OF SOFFIT OVERHANG (WHEN  
WITHIN 2'-0" TO 5'-0" OF PROPERTY LINE)

SCALE: 1" = 1'-0"



| ROOF VENTILATION                                |         |
|---|---------|
| CITY/SERIES:                                    | RALEIGH |
| MAIN HOUSE                                      |         |
| TOTAL ATTIC AREA:                               | 2,378   |
| REQUIRED NET FREE VENTILATION (ATTIC AREA/300): | 7.93    |
| ACTUAL NET FREE VENTILATION (UPPER + LOWER):    | 8.03    |
| DOWNSPOUT CALCULATION                           |         |
| MAIN HOUSE                                      |         |
| TOTAL DRAINABLE ROOF AREA:                      | 3091.4  |
| MINIMUM # OF DOWNSPOUTS:                        | 6       |

| HEEL CUT STANDARDS |          |         |
|--------------------|----------|---------|
|                    | OVERHANG |         |
|                    | 1'-0"    | 2'-0"   |
| 4:12               | 3-3/4"   | 7-3/4"  |
| 5:12               | 4-3/4"   | 9-3/4"  |
| 6:12               | 5-3/4"   | 11-3/4" |
| 7:12               | 6-3/4"   | 13-3/4" |
| 8:12               | 7-3/4"   | N/A     |
| 9:12               | 8-3/4"   | N/A     |
| 10:12              | 9-3/4"   | N/A     |
| 12:12              | 11-3/4"  | N/A     |
| 14:12              | 13-3/4"  | N/A     |

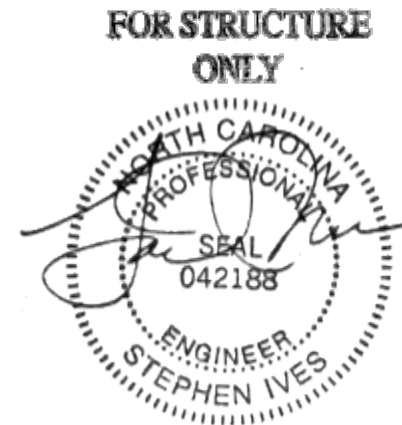
### General Notes:

1. REFER TO SHEET ON.1 FOR GENERAL NOTES AND SHEET SD-0 FOR ENGINEERING NOTES.

### Key Notes:

|      |   |
|------|---|
| 204B | NO ROOF DECKING UNDER OVER-FRAMING IN THIS AREA TO ALLOW FOR PROPER ATTIC VENTILATION   |
| 204N | 4'-0"(MIN.) OF FIRE RETARDANT TREATED ROOF SHEATHING, NO PENETRATION ALLOWED WITHIN 4' OF EXTERIOR WALL - SEE DETAIL B/2.04 FOR FIRE BLOCKING AT SOFFIT |

Space for Architect Seal



2025-01-16

RESIDENCE FOR:  
**MARKET**  
TBD  
**SERENITY**

|                                    |                                    |                                 |                                     |
|------------------------------------|------------------------------------|---------------------------------|-------------------------------------|
| Job Number:<br><b>STY5-0215-00</b> | Drawing Date:<br><b>11.11.2024</b> | Coord Name:<br><b>G. PIEPER</b> | Coord Phone:<br><b>859.578.4355</b> |
| House Name:<br><b>the ALTON</b>    |                                    | Drawing Scale: 1/8" = 1'-0"     |                                     |
|                                    |                                    | Contract Drawn By:<br><b>CM</b> | Series:                             |
| Born on Date:<br><b>10/24/24</b>   |                                    | CDs Drawn By:<br><b>CM</b>      | Plan No.:                           |

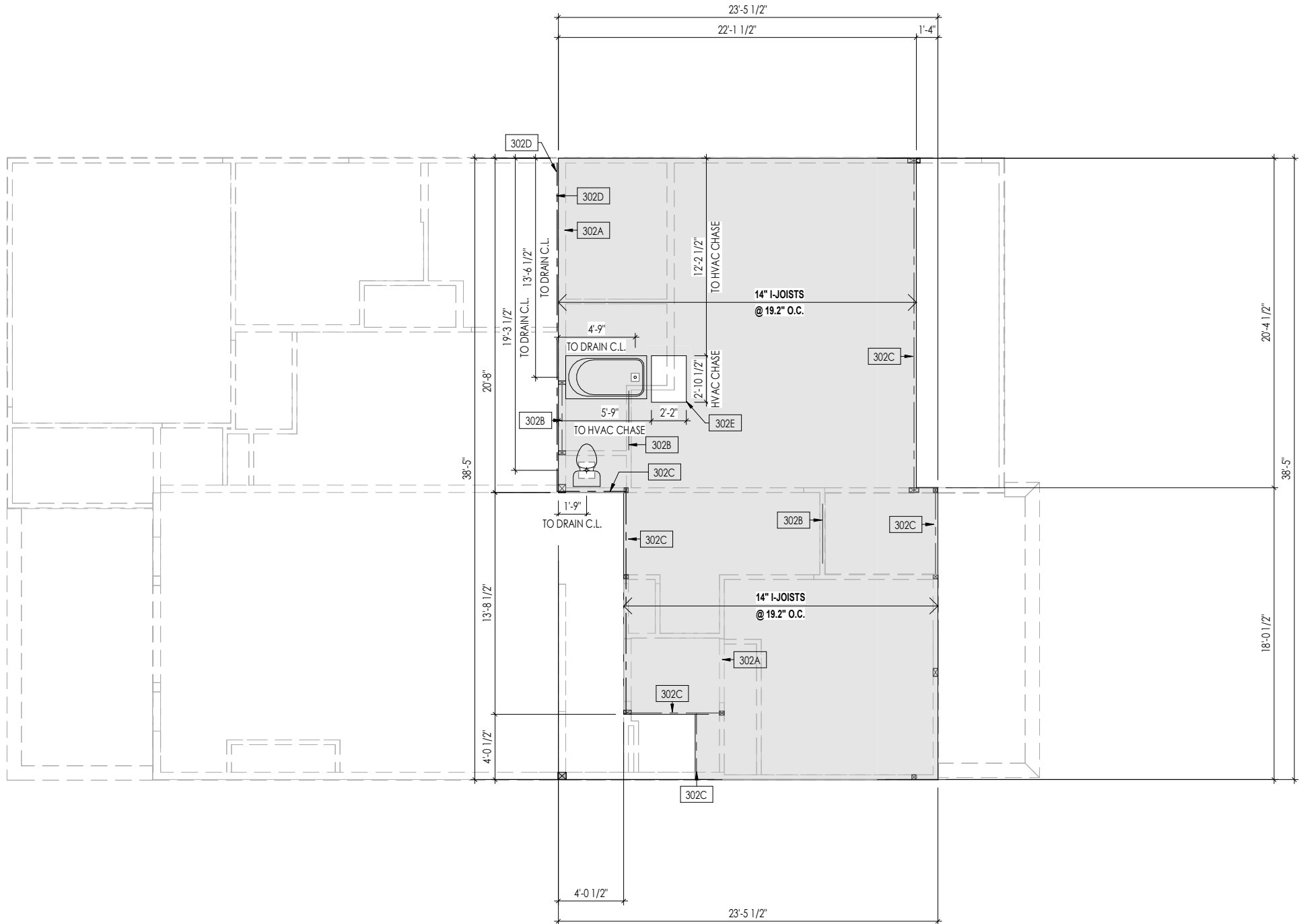


Sheet Information

**2.04**  
Roof Plan  
Elevation "A"



REISSUED: 12/26/2024



|   |   |
|---|---|
| General Notes:  |   |
| 1. REFER TO SHEET 0N.1 FOR GENERAL NOTES.<br>2. FLOOR JOISTS TO BE 14" TJI 210 SERIES, OR EQUAL, @ 19.2" O.C., UNLESS OTHERWISE NOTED.<br>3. JOISTS ARE NOT TO BE PLACE DIRECTLY OVER INTERIOR PARALLEL WALL.<br>(TO PREVENT UNEVEN FLOOR DEFLECTION FROM OCCURRING)<br>4. ADD'L JOISTS MAY BE LOCATED UP TO 2" AWAY FROM THE PARTITION WALL ABOVE IN CASES WHERE MECHANICAL PENETRATIONS |   |
| Key Notes:  |   |
| 302A  | BEARING WALL BELOW  |
| 302B  | BEAM BELOW - SEE SHEET 2.01S FOR MORE INFO  |
| 302C  | FLUSH BEAM - SEE SHEET 2.01S FOR MORE INFO  |
| 302D  | PROVIDE (1)1-3/4"x14" LVL RIM. HANG ROOF TRUSSES THOUGH SHEATHING DIRECTLY TO LVL RIM   |
| 302E  | KEEP THIS SPACE OPEN FOR HVAC CHASE(S) - VERIFY LOCATION WITH TJI MANUFACTURER DRAWINGS |

Space for Architect Seal

FOR STRUCTURE  
ONLY

SEAL  
042188  
ENGINEER  
STEPHEN IVES

2025-01-16

RESIDENCE FOR:  
**MARKET**  
TBD  
**SERENITY**

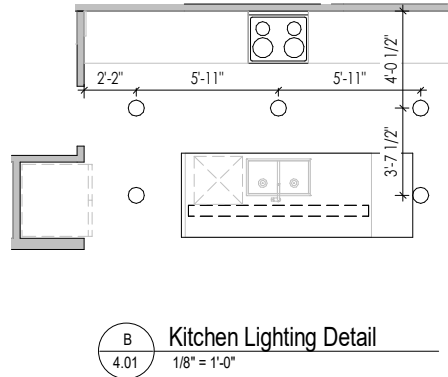
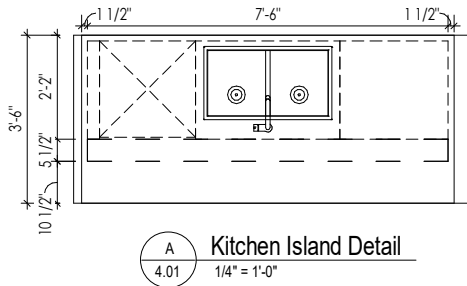
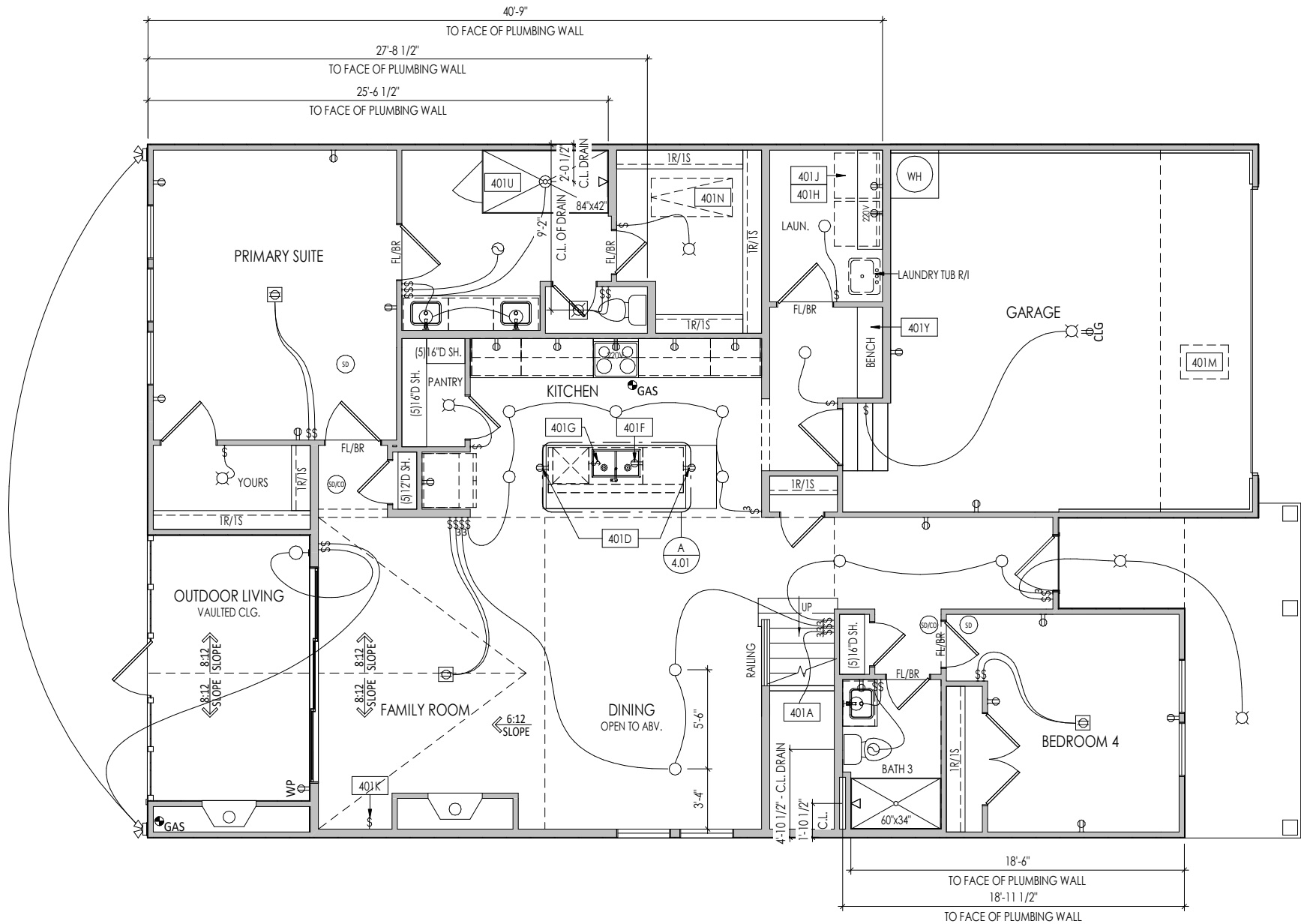
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| Job Number:<br><b>STY5-0215-00</b> | Drawing Date:<br><b>11.11.2024</b> | Coord Name:<br><b>G. PIEPER</b> | Coord Phone:<br><b>859.578.4355</b> |
| House Name:<br><b>the ALTON</b>    |                                    |                                 | Contract Drawn By:<br><b>CM</b>     |
| Born on Date:<br>10/24/24          |                                    |                                 | CDs Drawn By:<br>CM                 |

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Sheet Information

**3.02**  
Second Floor Subfloor Plan  
Elevation "A"

REISSUED: 12/26/2024



| General Notes:                            |  |
|---|--|
| 1. REFER TO SHEET ON.1 FOR GENERAL NOTES. |  |
| Key Notes:                                |  |
| 401A                                      | TO SWITCH OR LIGHT ABOVE   |
| 401D                                      | HOLD OUTLET HIGH ON ISLAND   |
| 401F                                      | OUTLET FOR DISHWASHER LOCATED IN SINK CABINET  |
| 401G                                      | PUSH BUTTON FOR GARBAGE DISPOSAL OR SWITCH LOCATED IN SINK CABINET - REFER TO SELECTIONS       |
| 401H                                      | LOCATE WASHER TO LEFT OF DRYER   |
| 401J                                      | UPPER WALL CABINETS OR 1 6" DEEP x 5'-6" LONG SHELF HELD AT 5'-7" A.F.F. - REFER TO SELECTIONS |
| 401K                                      | SWITCHES FOR BLOWER UNIT WITH DIRECT VENT FIREPLACE ONLY                                       |
| 401M                                      | 22-1/2" x 32" ATTIC ACCESS PANEL IN CEILING  |
| 401N                                      | PULL DOWN ATTIC ACCESS STAIRS (25-1/2" x 54") WITH LIGHT AND OUTLET                            |
| 401U                                      | GLASS SHOWER PANEL/ENCLOSURE   |
| 401Y                                      | BENCH: RE: DETAIL F/D2.2 INSTALLED BY TRIM CARPENTER   |

| MECHANICAL LEGEND          |  |  |
|----------------------------|--|--|
| ⊖ WALL OUTLET              | ⊖ CLG. MOUNTED LIGHT FIXT.   | ⊖ HOSE BIB                               |
| ⊖ WEATHERPROOF GFCI OUTLET | ⊖ SURFACE MOUNT DISC LIGHT OR RECESSED CEILING LIGHT, PER SPECS.                           | ⊖ SHOWER HEAD                            |
| ⊖ 220 VOLT OUTLET          | ⊖ WALL MOUNTED LIGHT FIXT.   | ⊖ GAS GAS HOOK UP                        |
| ⊖ GFCI OUTLET              | ⊖ DOUBLE SPOTLIGHT FIXT.   | ⊖ FLOOR DRAIN                            |
| ⊖ FLOOR OUTLET             | ⊖ DIRECTIONAL CAN LIGHT  | ⊖ SMOKE DETECTOR                         |
| ⊖ COUNTER POP-UP OUTLET    | ⊖ PIN LIGHT  | ⊖ SMOKE DETECTOR/CO DETECTOR COMBINATION |
| ⊖ SINGLE POLE SWITCH       | ⊖ WALL SCONCE @ 5'-6" A.F.F.   | ⊖ EXHAUST FAN AND LIGHT COMBINATION      |
| ⊖ 3-WAY SWITCH             | ⊖ FLUORESCENT LIGHT  | ⊖ CLG. MTD. EXHAUST FAN                  |
| ⊖ 4-WAY SWITCH             | ⊖ UNDER CABINET LIGHTING   | ⊖ DATA JACK                              |
| ⊖ STAIR LIGHT              | ⊖ BLOCK, MOUNT, & SWITCH FOR FUTURE FAN/LIGHT COMBINATION (CENTER, UNLESS OTHERWISE NOTED) | ⊖ CABLE TELEVISION JACK                  |

Space for Architect Seal

| RESIDENCE FOR:<br>MARKET<br>TBD<br>SERENITY |                             |                          |                              |
|---|-----------------------------|--------------------------|------------------------------|
| Job Number:<br>STY5-0215-00                 | Drawing Date:<br>11.11.2024 | Coord Name:<br>G. PIEPER | Coord Phone:<br>859.578.4355 |
| House Name:<br>the ALTON                    |                             |                          | Contract Drawn By:<br>CM     |
| Born on Date:<br>10/24/24                   |                             |                          | Series:<br>Plan No.:         |

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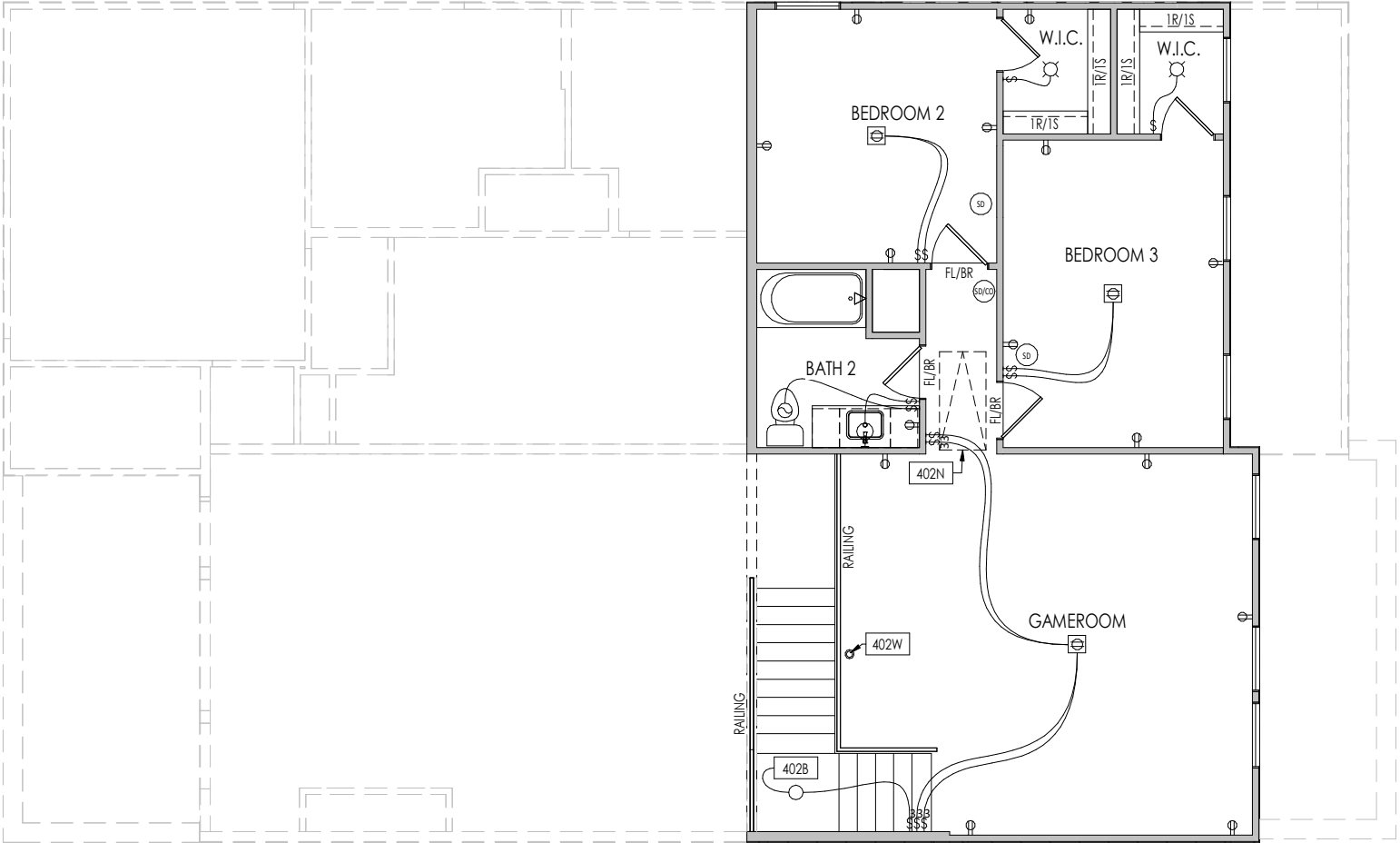
Sheet Information

4.01

First Floor Mechanical Plan  
Elevation "A"

12/26/2024 9:35:51 AM

**REISSUED: 12/26/2024**



General Notes:

1. REFER TO SHEET 0N.1 FOR GENERAL NOTES.

### Key Notes:

402B TO SWITCH OR LIGHT BELOW

402N PULL DOWN ATTIC ACCESS STAIRS (25-1/2" x 54") WITH LIGHT AND OUTLET

402W FLOOR OUTLET - EXACT LOCATION TO BE FIELD DETERMINED

## MECHANICAL LEGEND

- |  |  |  |
|--|--|--|
| ⊖ WALL OUTLET  | ⊙ CLG. MOUNTED LIGHT FIXT.   | + HOSE BIB   |
| ⊖ WEATHERPROOF<br>GFCI OUTLET  | ○ SURFACE MOUNT DISC LIGHT<br>OR RECESSED CEILING LIGHT,<br>PER SPECS. | ◁ SHOWER HEAD  |
| ⊖ 220 VOLT OUTLET  | ○ WALL MOUNTED LIGHT FIXT.   | ⊕ <sub>GAS</sub> GAS HOOK UP                                     |
| ⊖ GFCI OUTLET  | ⊙ DOUBLE SPOTLIGHT FIXT.   | ⊕ FLOOR DRAIN  |
| ⊖ FLOOR OUTLET   | ⊙ DIRECTIONAL CAN LIGHT  | ⊖ SD SMOKE DETECTOR  |
| ⊖ COUNTER POP-UP OUTLET  | ⊙ PIN LIGHT  | ⊖ SD <sub>CO</sub> SMOKE DETECTOR/<br>CO DETECTOR<br>COMBINATION |
| ↔ SINGLE POLE SWITCH   | ⊖ WALL SCONCE @ 5'-6" A.F.F.   | ⊖ EXHAUST FAN AND<br>LIGHT COMBINATION                           |
| ↔ 3-WAY SWITCH   | ▬ FLUORESCENT LIGHT  | ⊖ CLG. MTD. EXHAUST FAN  |
| ↔ 4-WAY SWITCH   | ▬ UNDER CABINET LIGHTING   | ◀ DATA JACK  |
| ■ STAIR LIGHT  |  | Ⓣv CABLE TELEVISION JACK   |
| Ⓣv BLOCK, MOUNT, & SWITCH FOR FUTURE FAN/LIGHT<br>COMBINATION (CENTER, UNLESS OTHERWISE NOTED) |  |  |

## Space for Architect Search

RESIDENCE FOR:  
**MARKET**  
TBD  
SERENITY

|              |               |             |              |
|--------------|---------------|-------------|--------------|
| Job Number:  | Drawing Date: | Coord Name: | Coord Phone: |
| STY5-0215-00 | 11.11.2024    | G. PIEPER   | 859.578.4355 |

|             |                            |                                |
|-------------|----------------------------|--------------------------------|
| House Name: | Drawing Scale: 1/8" = 1'0" | Contract Drawn By<br><b>CM</b> |
|             |                            |                                |

**the ALTON** Series:

|                        |  |                  |           |
|------------------------|--|------------------|-----------|
| Born on Date: 10/24/24 |  | CDs Drawn By: CM | Plan No.: |
|                        |  |                  |           |

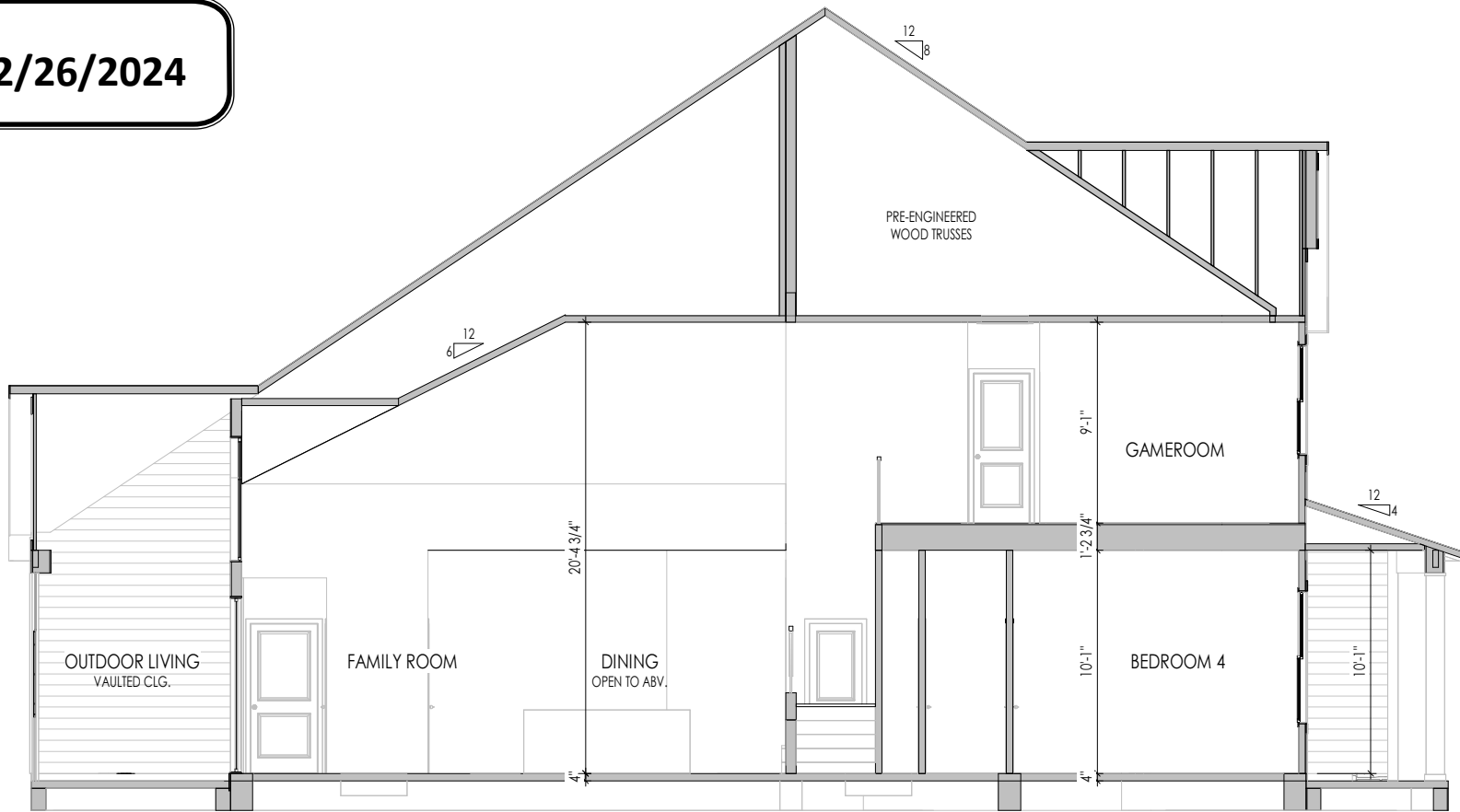


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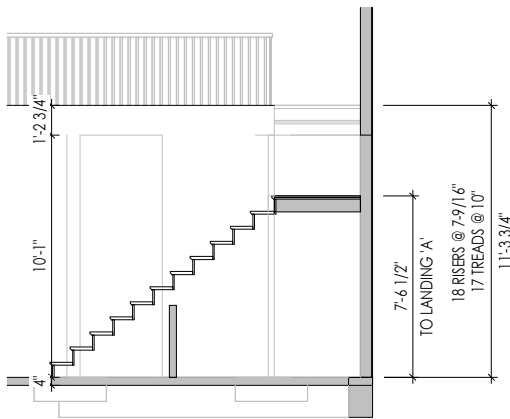
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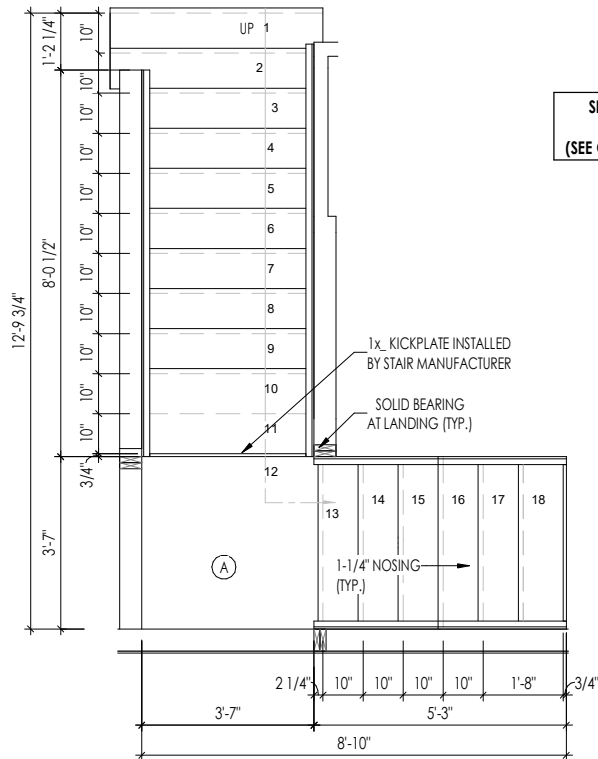
REISSUED: 12/26/2024



A Building Section  
5.01 1/8" = 1'-0"

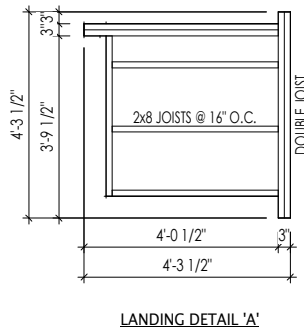


B Stair Section  
5.01 1/8" = 1'-0"



C Stair Framing Details  
5.01 1/4" = 1'-0"

SEE STAIR SECTION B/5.01  
FOR RISER HEIGHTS  
(SEE GENERAL NOTES THIS SHEET)

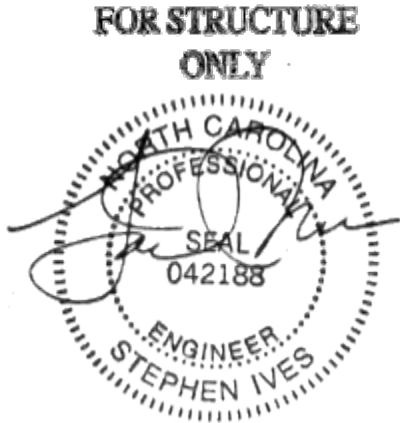


General Notes:

1. REFER TO SHEET ON.1 FOR GENERAL NOTES.
2. REFER TO SELECTION SHEETS FOR FLOORING MATERIAL PRIOR TO CONSTRUCTING STAIRS TO DETERMINE RISER HEIGHTS

Key Notes:

Space for Architect Seal



2025-01-16

RESIDENCE FOR:  
**MARKET**  
TBD  
**SERENITY**

|                                    |                                    |                                 |                                     |
|------------------------------------|------------------------------------|---------------------------------|-------------------------------------|
| Job Number:<br><b>STY5-0215-00</b> | Drawing Date:<br><b>11.11.2024</b> | Coord Name:<br><b>G. PIEPER</b> | Coord Phone:<br><b>859.578.4355</b> |
| House Name:<br><b>the ALTON</b>    |                                    |                                 | Contract Drawn By:<br><b>CM</b>     |
| Born on Date:<br><b>10/24/24</b>   |                                    |                                 | CDs Drawn By:<br><b>CM</b>          |
| Series:<br><b>5.01</b>             |                                    |                                 | Plan No.:                           |

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Sheet Information

**5.01**  
Building Section  
Elevation "A"

REISSUED: 12/26/2024

|   |
|---|
| TYPICAL TRIM:                                     |
| 6" FASCIA<br>(ALL SIDES)                          |
| 8" FRIEZE<br>(FRONT ONLY, UNLESS OTHERWISE NOTED) |

- General Notes:
- REFER TO SHEET 0N.1 FOR GENERAL NOTES.
  - ROOFING MATERIAL PER SELECTIONS.
  - REFER TO SHEET S-0 FOR LINTEL SCHEDULE.
  - CONTACT M&K ENGINEERING FOR HEADER SIZE/BRICK SUPPORT IF GRADE DROPS AND THE AMOUNT OF BRICK OVER GARAGE DOOR SHOWN ON CURRENT ELEVATION IS NO LONGER ACCURATE (IF APPLICABLE).
  - FRONT AND GARAGE DOORS PER SELECTIONS.

Key Notes:



ELEVATION 'A'

Space for Architect Seal

RESIDENCE FOR:  
MARKET  
TBD  
SERENITY

|                             |                             |                          |                              |
|-----------------------------|-----------------------------|--------------------------|------------------------------|
| Job Number:<br>STY5-0215-00 | Drawing Date:<br>11.11.2024 | Coord Name:<br>G. PIEPER | Coord Phone:<br>859.578.4355 |
| House Name:<br>the ALTON    |                             |                          | Contract Drawn By:<br>CM     |
|                             |                             |                          | Series:                      |
|                             |                             |                          | Plan No.:                    |
| Born on Date:<br>10/24/24   | CDs Drawn By:<br>CM         |                          |                              |



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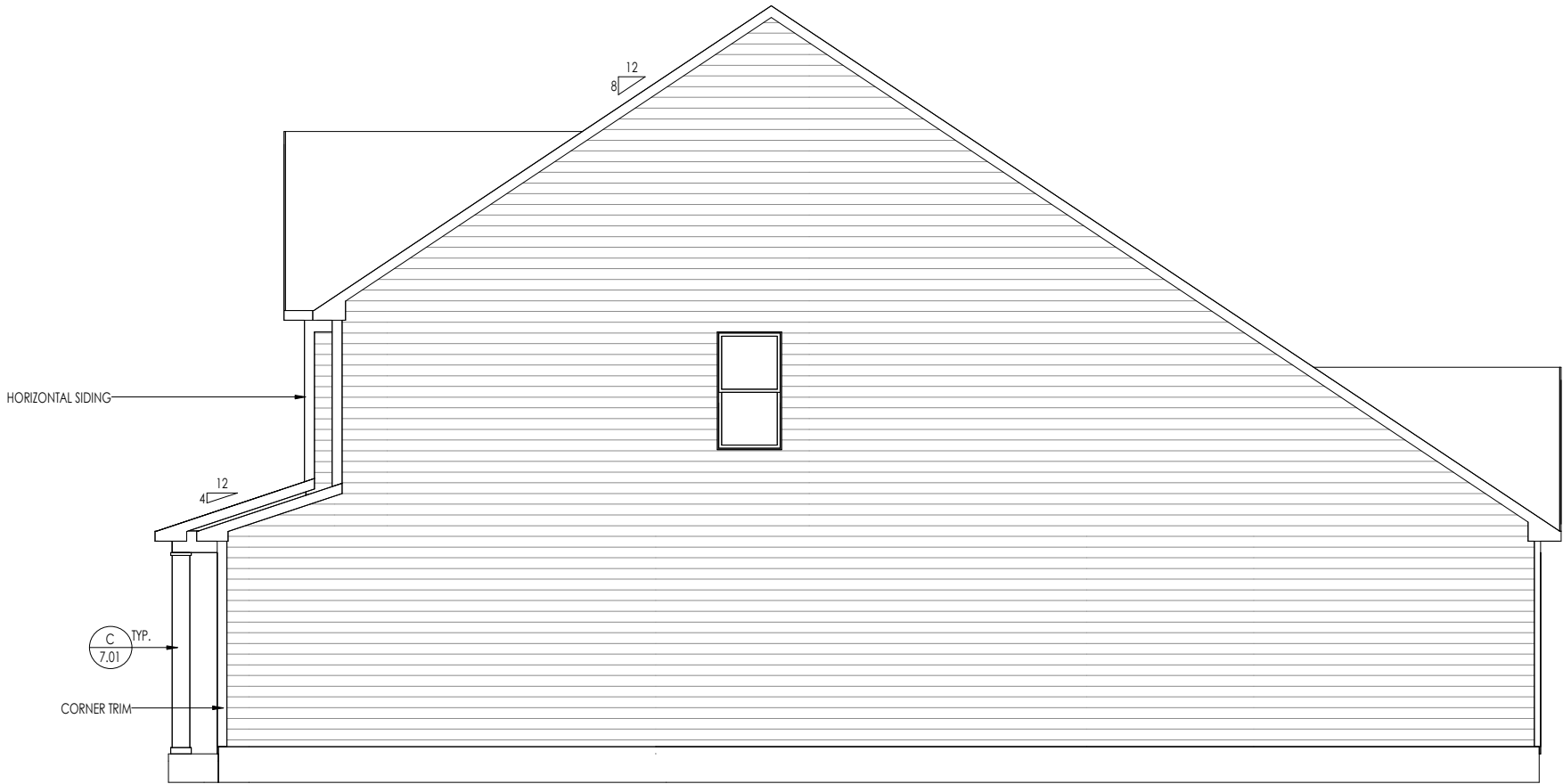
6.01  
Front Elevation  
Elevation "A"

12/26/2024 9:35:52 AM



REISSUED: 12/26/2024

|   |
|---|
| TYPICAL TRIM:                                     |
| 6" FASCIA<br>(ALL SIDES)                          |
| 8" FRIEZE<br>(FRONT ONLY, UNLESS OTHERWISE NOTED) |



- General Notes:
1. REFER TO SHEET 0N.1 FOR GENERAL NOTES.
  2. ROOFING MATERIAL PER SELECTIONS.
  3. REFER TO SHEET S-0 FOR LINTEL SCHEDULE.
  4. CONTACT M&K ENGINEERING FOR HEADER SIZE/BRICK SUPPORT IF GRADE DROPS AND THE AMOUNT OF BRICK OVER GARAGE DOOR SHOWN ON CURRENT ELEVATION IS NO LONGER ACCURATE (IF APPLICABLE).
  5. FRONT AND GARAGE DOORS PER SELECTIONS.

Key Notes:

Space for Architect Seal

RESIDENCE FOR:  
**MARKET**  
TBD  
**SERENITY**

|                                    |                                    |                                 |                                     |
|------------------------------------|------------------------------------|---------------------------------|-------------------------------------|
| Job Number:<br><b>STY5-0215-00</b> | Drawing Date:<br><b>11.11.2024</b> | Coord Name:<br><b>G. PIEPER</b> | Coord Phone:<br><b>859.578.4355</b> |
| House Name:<br><b>the ALTON</b>    |                                    |                                 | Contract Drawn By:<br><b>CM</b>     |
|                                    |                                    |                                 | Series:                             |
|                                    |                                    |                                 | Plan No.:                           |
| Born on Date:<br>10/24/24          | CDs Drawn By:<br>CM                |                                 |                                     |



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Sheet Information

**6.02**  
Garage Side Elevation  
Elevation "A"

12/26/2024 9:35:52 AM

REISSUED: 12/26/2024

|   |
|---|
| TYPICAL TRIM:                                     |
| 6" FASCIA<br>(ALL SIDES)                          |
| 8" FRIEZE<br>(FRONT ONLY, UNLESS OTHERWISE NOTED) |

- General Notes:
- REFER TO SHEET 0N.1 FOR GENERAL NOTES.
  - ROOFING MATERIAL PER SELECTIONS.
  - REFER TO SHEET S-0 FOR LINTEL SCHEDULE.
  - CONTACT M&K ENGINEERING FOR HEADER SIZE/BRICK SUPPORT IF GRADE DROPS AND THE AMOUNT OF BRICK OVER GARAGE DOOR SHOWN ON CURRENT ELEVATION IS NO LONGER ACCURATE (IF APPLICABLE).
  - FRONT AND GARAGE DOORS PER SELECTIONS.

Key Notes:

Space for Architect Seal



RESIDENCE FOR:  
**MARKET**  
TBD  
**SERENITY**

|                                    |                                    |                                 |                                     |
|------------------------------------|------------------------------------|---------------------------------|-------------------------------------|
| Job Number:<br><b>STY5-0215-00</b> | Drawing Date:<br><b>11.11.2024</b> | Coord Name:<br><b>G. PIEPER</b> | Coord Phone:<br><b>859.578.4355</b> |
| House Name:<br><b>the ALTON</b>    |                                    |                                 | Contract Drawn By:<br><b>CM</b>     |
|                                    |                                    |                                 | Series:                             |
|                                    |                                    |                                 | Plan No.:                           |
| Born on Date:<br>10/24/24          | CDs Drawn By:<br>CM                |                                 |                                     |



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Sheet Information

**6.03**  
Rear Elevation  
Elevation "A"

12/26/2024 9:35:52 AM

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REISSUED: 12/26/2024

| TYPICAL TRIM:                                     |
|---|
| 6" FASCIA<br>(ALL SIDES)                          |
| 8" FRIEZE<br>(FRONT ONLY, UNLESS OTHERWISE NOTED) |



General Notes:

1. REFER TO SHEET 0N.1 FOR GENERAL NOTES.
2. ROOFING MATERIAL PER SELECTIONS.
3. REFER TO SHEET S-0 FOR LINTEL SCHEDULE.
4. CONTACT M&K ENGINEERING FOR HEADER SIZE/BRICK SUPPORT IF GRADE DROPS AND THE AMOUNT OF BRICK OVER GARAGE DOOR SHOWN ON CURRENT ELEVATION IS NO LONGER ACCURATE (IF APPLICABLE).
5. FRONT AND GARAGE DOORS PER SELECTIONS.

Key Notes:

Space for Architect Seal

RESIDENCE FOR:  
**MARKET**  
TBD  
**SERENITY**

|                                    |                                    |                                 |                                     |
|------------------------------------|------------------------------------|---------------------------------|-------------------------------------|
| Job Number:<br><b>STY5-0215-00</b> | Drawing Date:<br><b>11.11.2024</b> | Coord Name:<br><b>G. PIEPER</b> | Coord Phone:<br><b>859.578.4355</b> |
| House Name:<br><b>the ALTON</b>    |                                    |                                 | Contract Drawn By:<br><b>CM</b>     |
|                                    |                                    |                                 | Series:                             |
|                                    |                                    |                                 | Plan No.:                           |
| Born on Date:<br><b>10/24/24</b>   | CDs Drawn By:<br><b>CM</b>         |                                 |                                     |



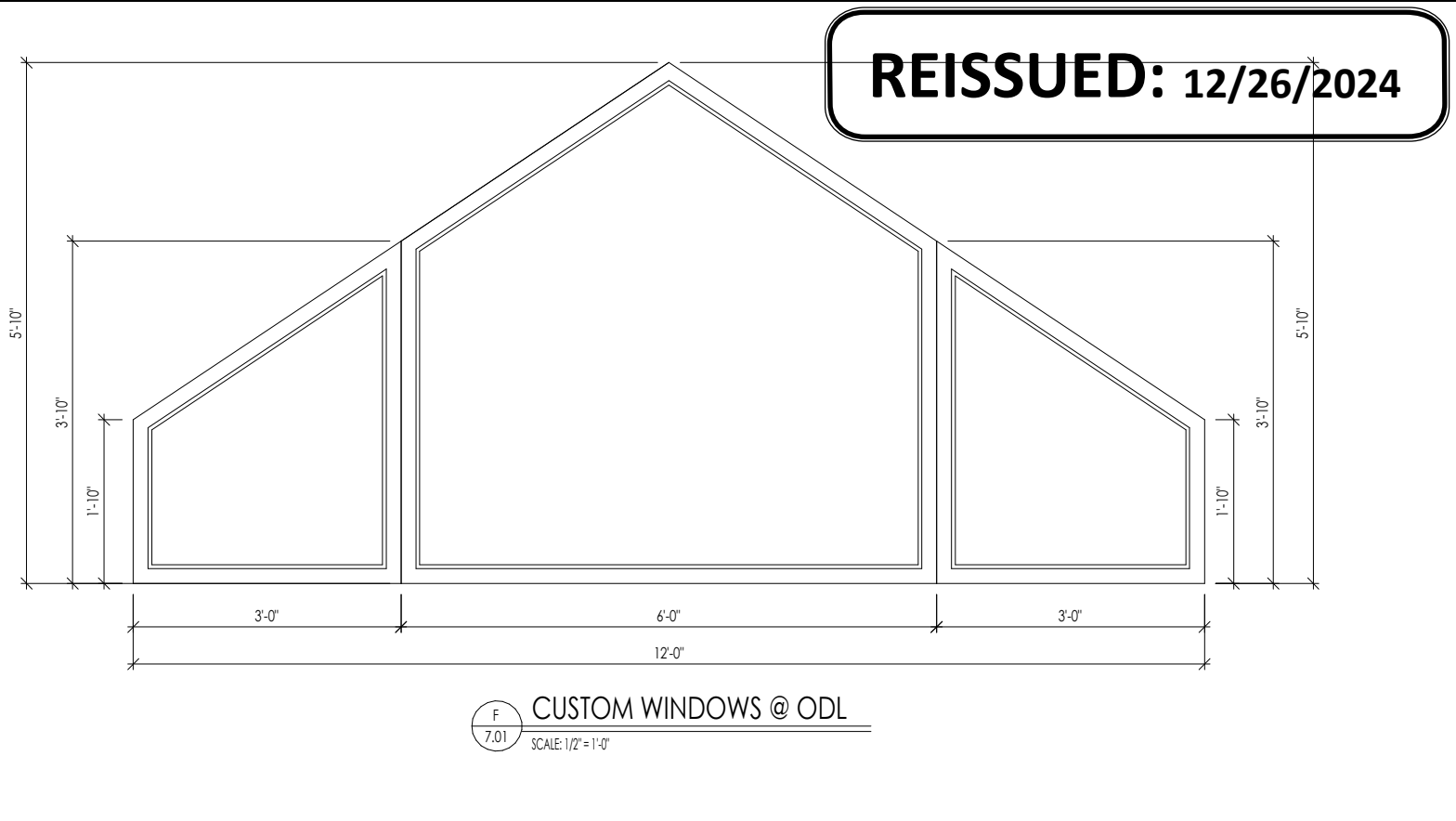
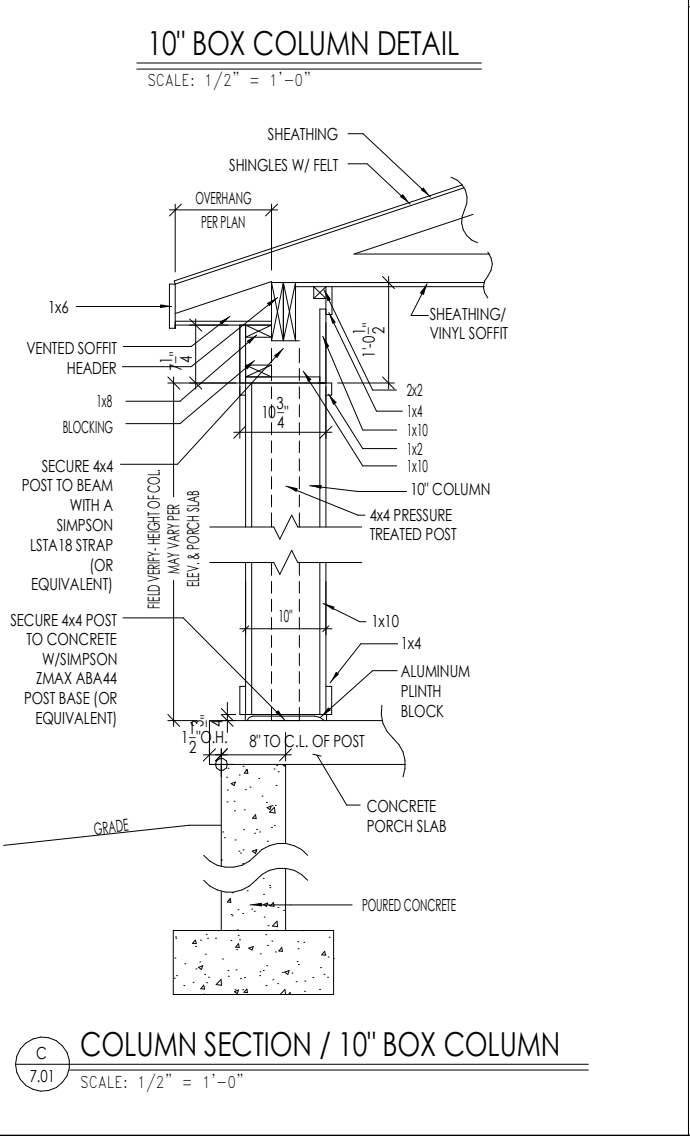
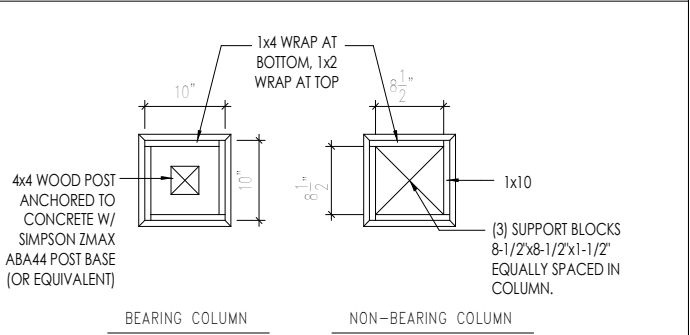
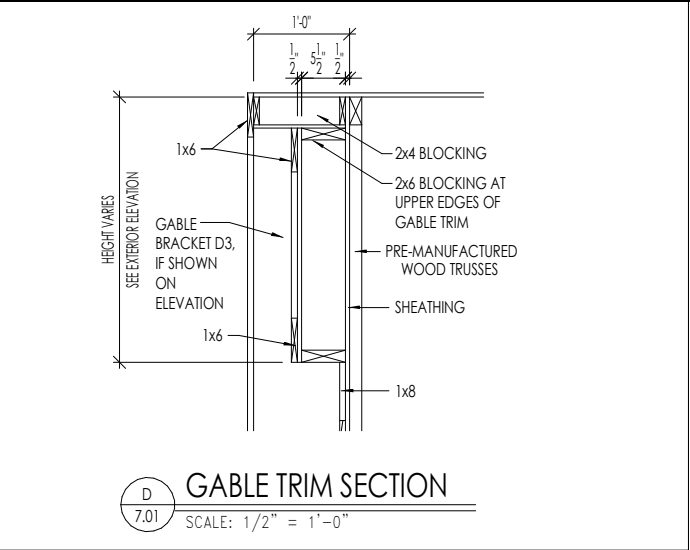
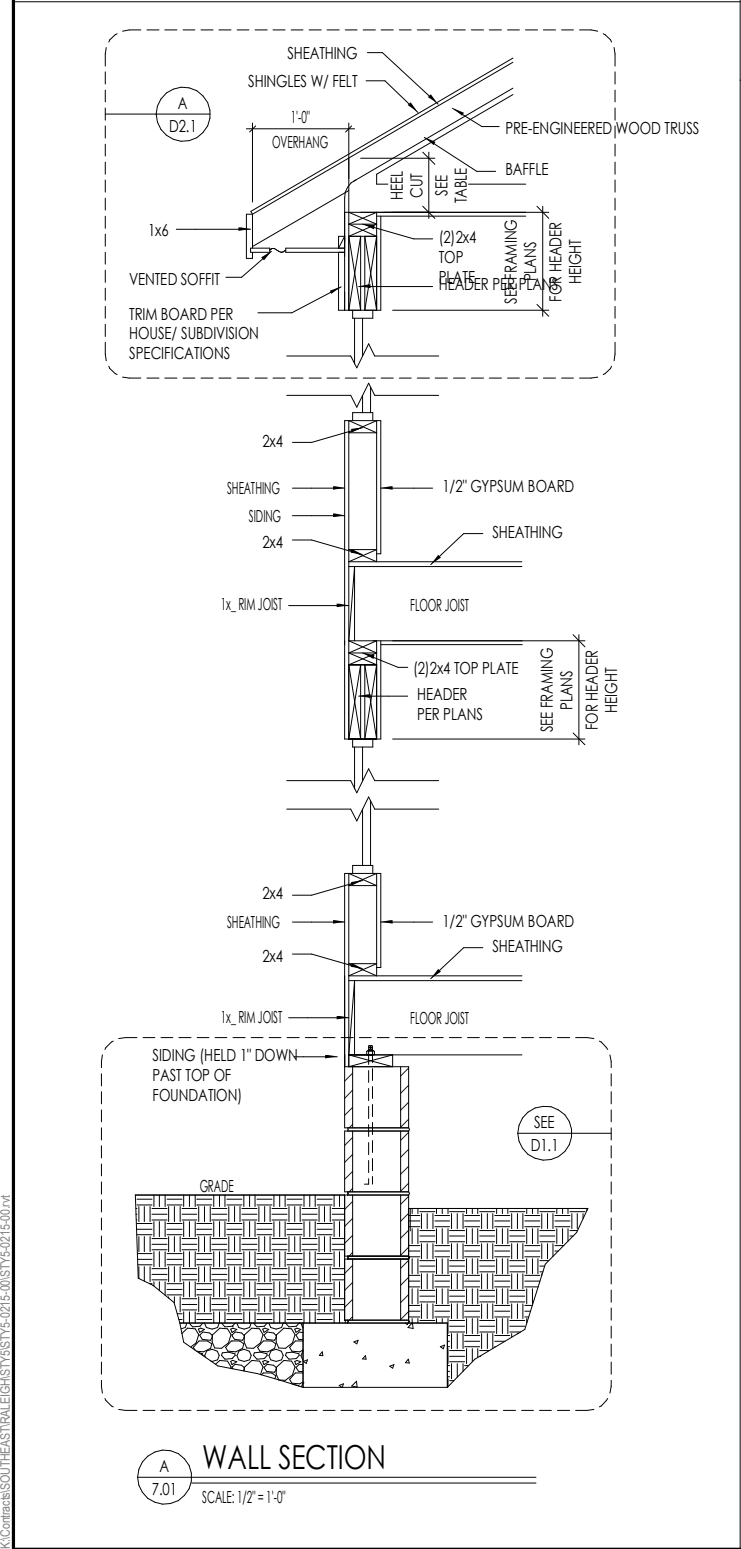
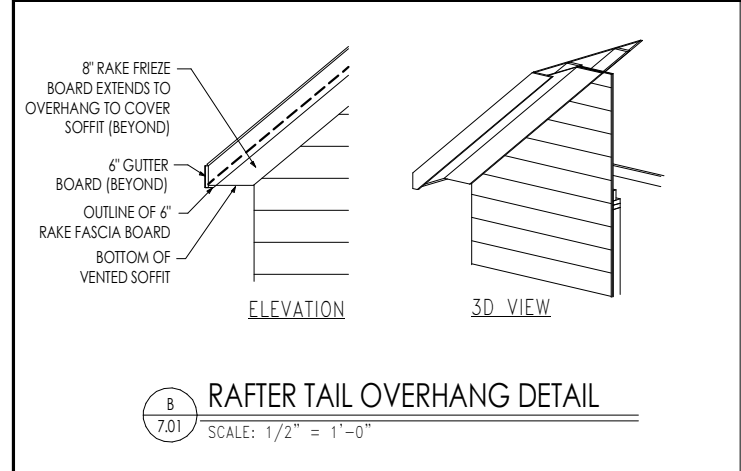
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Sheet Information

**6.04**  
Side Elevation  
Elevation "A"


12/26/2024 9:35:52 AM

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Space for Architect Seal

FOR STRUCTURE ONLY



2025-01-16


RESIDENCE FOR:

MARKET

TBD

SERENITY

|               |               |                             |                    |
|---------------|---------------|-----------------------------|--------------------|
| Job Number:   | Drawing Date: | Coord Name:                 | Coord Phone:       |
| STY5-0215-00  | 11.11.2024    | G. PIEPER                   | 859.578.4355       |
| House Name:   |               | Drawing Scale: 1/8" = 1'-0" | Contract Drawn By: |
| the ALTON     |               |                             | CM                 |
| Born on Date: |               | CDs Drawn By:               | Plan No.:          |
| 10/24/24      |               | CM                          |                    |



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Sheet Information

7.01

House Specific Details  
Elevation "A"

1/22/2024 9:35:51 AM

CONNECTION SPECIFICATIONS (TYP. U.N.O.)

| NOTE: 10d NAIL = 3" x 0.131" GUN NAIL           |  |
|---|--|
| JOIST TO SOLE PLATE                             | (3)10d TOENAILS  |
| SOLE PLATE TO JOIST/BLK'G.                      | 10d NAILS @ 6" O.C.  |
| STUD TO SOLE PLATE                              | (3)10d TOENAILS  |
| TOP OR SOLE PLATE TO STUD                       | (3)10d NAILS   |
| RIM TO TOP PLATE                                | 10d TOENAILS @ 6" O.C.   |
| BLK'G. BTWN. JOISTS TO TOP PL.                  | (3)10d TOENAILS  |
| RAFTER/TRUSS TO TOP PLATE                       | (3)10d TOENAILS +<br>(1) SIMPSON H2.5A   |
| GAB. END TRUSS TO DBL. TOP PL.                  | 10d TOENAILS @ 8" O.C.   |
| R.T. w/ HEEL HT. 9 1/4" TO 12"                  | 2x10 BLK EVERY 3RD BAY<br>FASTENED TO DBL. TOP PLATE<br>w/ 10d TOENAILS @ 6" O.C.  |
| R.T. w/ HEEL HT. 12" TO 16"                     | 2x12 BLK EVERY 3RD BAY<br>FASTENED TO DBL. TOP PLATE<br>w/ 10d TOENAILS @ 6" O.C.  |
| R.T. w/ HEEL HT. UP TO 24"                      | LAP WALL SHTG. w/ DBL. TOP PL.<br># INSTALL ON TRUSS VERT. -<br>FASTEN w/ 8d NAILS @ 6" O.C.   |
| R.T. w/ HEEL HT. 24" TO 48"                     | LAP WALL SHTG. w/ DBL. TOP PL.<br># INSTALL ON TRUSS VERT. -<br>FASTEN w/ 8d NAILS @ 6" O.C.<br>PROVIDE 2x BLK @ EA. BAY AT<br>TOP OF HEEL |
| DOUBLE STUD                                     | 10d NAILS @ 24" O.C.   |
| DOUBLE TOP PLATE                                | 10d NAILS @ 24" O.C.   |
| DOUBLE TOP PLATE LAP SPLICE                     | (10)10d NAILS IN LAPPED AREA   |
| TOP PLATE LAP @ CORNERS &<br>INTERSECTING WALLS | (2)10d NAILS   |
| WALL TO FOUNDATION                              | WALL SHTG. LAP w/ SILL PL. &<br>FASTENED PER SHEAR WALL<br>FASTENING SPEC.   |

GARAGE SLAB

4" CONC. SLAB w/ 6x6-WL.4xWL.4  
WNF ON 6 MIL VAPOR BARRIER  
ON 4" MIN. GRANULAR FILL ON 95%  
COMPACTED FILL/VIRGIN SOIL

PORCH SLAB

4" CONC. SLAB w/ 6x6-WL.4xWL.4 WNF ON  
95% COMPACTED FILL/VIRGIN SOIL

BASEMENT SLAB

4" CONC. SLAB ON 6 MIL VAPOR BARRIER  
ON 4" MIN. GRANULAR FILL ON  
95% COMPACTED FILL/VIRGIN SOIL

SLAB ON GRADE

4" CONC. SLAB w/ 6x6-WL.4xWL.4 WNF ON 6  
MIL VAPOR BARRIER ON 4" MIN. GRANULAR  
FILL ON 95% COMPACTED FILL/VIRGIN SOIL

VENEER LINTEL SCHEDULE

| SPAN<br>(MAX)  | HEIGHT OF VENEER<br>ABOVE LINTEL | STEEL ANGLE SIZE |
|--|----------------------------------|------------------|
| 3'-0"  | 20 FT. MAX                       | L4"x3"x1/4"      |
| 6'-0"  | 3 FT. MAX                        | L4"x3"x1/4"      |
|  | 16 FT. MAX                       | L5"x3"x3/8"      |
| 8'-0"  | 6 FT. MAX                        | L5"x3"x3/8"      |
| 9'-6"  | 3 FT. MAX                        | L5"x3"x3/8"      |
| 12'-0"   | 2 FT. MAX                        | L5"x3"x3/8"      |
| ALL LINTELS:<br>- SHALL SUPPORT 2 3/4" - 3 1/2" VENEER w/ 40 psf MAXIMUM HEIGHT.<br>- 16" SHALL HAVE 4" MIN. BEARING<br>- 18" SHALL HAVE 8" MIN. BEARING<br>- 12" SHALL NOT BE FASTENED BACK TO HEADER.<br>- 12" SHALL BE FASTENED BACK TO WOOD HEADER IN WALL @48"O.C. w/ 1/2" DIA. x 3 1/2"<br>LONG LAG SCREWS IN 2" LONG VERTICALLY SLOTTED HOLES.<br>- MAX. VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE OPENING.<br>- ALL LINTELS SHALL BE LONG LEG VERTICAL.<br>- ALL LINTELS SHALL BE MADE OF 36 KSI STEEL.<br>- WHEN SUPPORTING VENEER < 3" WIDE THE EXTERIOR TOE OF THE HORIZONTAL LEG<br>MAY BE CUT IN THE FIELD TO BE 3 1/2" WIDE OVER THE BEARING LENGTH ONLY.<br>THIS IS TO ALLOW FOR HORIZONTAL JOINT FINISHING.<br>- SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT ENCOMPASSED BY THE<br>ABOVE PARAMETERS. MKK STD. - MAY 2016 |                                  |                  |

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE
- BEAM / HEADER
- EXTENT OF OVERFRAMING

- J11 METAL HANGER

- INDICATES EXTENT OF INT. OSB  
SHEARWALL, BLOCKED PANEL EDGES,  
AND/OR 3' O.C. EDGE NAILING

- INDICATES HOLDOWN

- INDICATES POST ABOVE (P.A.) PROVIDE  
SOLID BLOCKING UNDER POST OR JAMB  
ABOVE.

ADDITIONAL NOTES FOR TRUSS &  
I-JOIST MANUFACTURER

ROOF TRUSS, FLOOR TRUSS AND ENGINEERED  
JOISTS SHALL BE DESIGNED TO MEET THE  
DEFLECTION CRITERIA BELOW, UNLESS NOTED  
OTHERWISE ON PLAN. MULHERN & KULP CANNOT BE  
HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES  
RELATED TO ANY BUILDING COMPONENT IF  
COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED  
TO MKK FOR REVIEW PRIOR TO FABRICATION,  
DELIVERY, OR INSTALLATION.

TRUSSES/JOISTS SHALL BE DESIGNED SO THAT  
DIFFERENTIAL DEFLECTION BETWEEN ADJACENT  
PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUSH  
BEAMS DO NOT EXCEED THE FOLLOWING:

- ROOF TRUSSES:  
1/4" DEAD LOAD
- FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS:  
1/8" DEAD LOAD

ABSOLUTE DEAD LOAD DEFLECTION OF FLOOR  
TRUSSES/ATTIC TRUSSES WHEN ADJACENT TO FLOOR  
FRAMING BY OTHERS SHALL BE LIMITED TO 3/16". (NOT  
DIFFERENTIAL DEFLECTION)

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2018 NORTH CAROLINA RESIDENTIAL CODE.

- FOOTING DESIGN - 1500 PSF NET ALLOWABLE SOIL BEARING  
PRESSURE IS ASSUMED. BUILDER/CONTRACTOR MUST VERIFY.

- FASTEN 2x SILL PLATES TO CONC FND WITH A MINIMUM OF 2  
ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING:
  - 1/2" DIA. ANCHOR BOLTS @ 6'-0" O.C., 1" MIN. EMBEDMENT
  - SIMPSON MAB STRAPS @ 32" O.C.
  - SIMPSON MASA ANCHOR STRAPS @ 6'-0" O.C.

- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ PERIMETER  
FOUNDATION SHALL BE PRESERVATIVE TREATED SOUTHERN PINE #2.

- BUILDER TO VERIFY CORROSION-RESISTANCE COMPATIBILITY OF  
HARDWARE & FASTENERS IN CONTACT W/ PRESERVATIVE-TREATED  
WOOD. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD.

- FOUNDATION WALLS & FOOTINGS SHALL BE PLAIN CONCRETE, U.N.O.

- CONCRETE DESIGN BASED ON AGI 318, CONCRETE SHALL ATTAIN  
THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.:  
f'c = 4,000 psi: ..... FOUNDATION WALLS  
3,000 psi: ..... FOOTINGS & INTERIOR SLABS ON GRADE  
3,500 psi: ..... GARAGE & EXTERIOR SLABS ON GRADE  
fy = 60,000 psi

- BASEMENT FOUNDATION WALL DESIGN BASED ON:
  - 8' OR 9' HEIGHT (AS NOTED ON PLANS)
  - TALLER WALLS MUST BE ENGINEERED.
  - NOMINAL WIDTH (8" FOR 8' WALL, 10" FOR 10' WALL).

- BASEMENT WALL DESIGN IS BASED ON 30 OR 45 PCF BACKFILL  
SOIL TYPE CLASSIFICATIONS:  
30 PCF TYPE (GM, GP, SM, SP)  
45 PCF TYPE (GM, GC, SM, SM-SG, ML)  
IMPORTANT - IF 60 PCF SOIL TYPE (SC, ML-CL, OR CL) IS  
UTILIZED FOR BACKFILL, CONTACT MULHERN & KULP FOR  
FURTHER EVALUATION OF FOUNDATION DESIGN.

- BASEMENT WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY  
ADEQUATE TEMPORARY BRACING OR INSTALL 1st FLOOR DECK.

- PROVIDE (2) #5 BARS AROUND ALL SIDES OF OPENINGS IN  
CONCRETE BSMT. FND. WALL WITH 2" CLEAR. REINFORCEMENT  
SHALL EXTEND 12" PAST CORNER OF OPENING IN ALL DIRECTIONS.
  - FOR OPENINGS UP TO 36", PROVIDE MINIMUM 10" CONCRETE  
DEPTH OVER OPENING OR (3)2x10 w/ (2)2x6 JACK STUDS, U.N.O.
  - LARGER OPENINGS SHALL BE PER PLAN.

- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS  
THAN 5% OR MORE THAN 1% AIR ENTRAINMENT.

- ALL FOOTINGS SHALL BEAR BELOW FROST LINE (TYP.) OR 12" MIN IN  
REGIONS WHERE CODE FROST DEPTH IS NOT APPLICABLE. CONSULT  
SOILS REPORT OR BUILDING DEPT. FOR MINIMUM DEPTH BELOW  
GRADE.

- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR  
95% COMPACTED FILL.

- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB  
EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY  
TO DEVELOP.

- JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR  
15'-0" O.C. (MAXIMUM)
- JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS  
POSSIBLE (1:1 RATIO), WITH A MAXIMUM OF 1:1.5 RATIO
- CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL  
SLABS

- TYPICAL REINFORCEMENT DETAILS: PROVIDE 3" MIN. CLEAR  
COVER WHERE CAST AGAINST EARTH, 1 1/2" MIN. CLEAR COVER  
AGAINST FORMS. LAP ALL REBAR 48 BAR DIAMETERS MIN. (24"  
FOR #4 BARS) & BEND BARS AND LAP AT CORNERS. PROVIDE 6"  
HOOK INTO SUPPORTING FOOTINGS WHEN FOOTINGS INTERSECT.

- DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

MKK STD. - MAY 2012

LATERAL/WALL BRACING & WALL  
SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST  
LATERAL FORCES RESULTING FROM:  
120 MPH WIND IN 2018 NC5RC

(120 MPH WIND SPEED IN ASCE 7-10  
WIND MAP, PER IRC R301.2.1.1)  
EXP. B & SEISMIC CAT. A/B.

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD:  
FASTEN SHEATHING w/ 2 3/8"x0.113 NAILS @ 6" O.C. AT  
EDGES & @ 12" O.C. IN THE PANEL FIELD. (TYP, U.N.O.)

- ALL SHEATHING PANELS SHALL BE ORIENTED  
VERTICALLY (LONG DIRECTION PARALLEL TO STUDS)  
AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR -  
2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO  
SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE  
FASTENING.

- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED  
AND ARE CONSIDERED SHEAR WALLS.

- ALT. STAPLE CONNECTION SPEC: 1 3/4" 16 GA STAPLES  
(3/16" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C. IN FIELD.

3" O.C. EDGE NAILING

- AT DESIGNATED AREAS - FASTEN PANEL EDGES OF  
WOOD STRUCTURAL WALL SHEATHING TO FRAMING w/  
2 3/8" x 0.113" NAILS @ 3" O.C. AND 12" O.C. IN THE  
PANEL FIELD. NO STAPLE ALTERNATIVE AVAILABLE  
AT THIS SPEC. ALL SHEATHING PANELS SHALL BE  
ORIENTED VERTICALLY (LONG DIRECTION PARALLEL  
TO STUD) AND INSTALLED FULL HEIGHT OF SHEAR  
WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE  
PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES  
AND 3" O.C. EDGE FASTENING.

NOTES

- SEE CONNECTION SPECIFICATIONS CHART FOR  
STANDARD SHEAR TRANSFER DETAILING. IF  
ADDITIONAL CAPACITY IS REQUIRED BY DESIGN,  
IT WILL BE SPECIFICALLY NOTED ON PLAN.

- DESIGN ASSUMES 16" O.C. MAX. STUD SPACING, U.N.O.

- ALL STRUCTURAL PANELS ARE TO BE DIRECTLY  
APPLIED TO STUD FRAMING.

- PRE-MANUFACTURED PANELIZED WALLS:  
FASTEN TOGETHER END STUDS OF WALL PANELS  
SHEATHED w/ OSB OR PLYWOOD w/ 10d NAILS  
@ 4" O.C. (THRU ONE SIDE ONLY)

- INDICATES EXTENT OF INT. OSB  
SHEARWALL, BLOCKED PANEL EDGES,  
AND/OR 3' O.C. EDGE NAILING

- INDICATES HOLDOWN

- INDICATES POST ABOVE (P.A.) PROVIDE  
SOLID BLOCKING UNDER POST OR JAMB  
ABOVE.

MKK STD. - SEPT. 2010

GENERAL STRUCTURAL NOTES

FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR  
EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES  
STONE/MARBLE OR WET BED CONSTRUCTED FLOORS - CONTACT  
MKK FOR EXCLUDED FLOOR DESIGNS)

- PER THE GUIDELINES OF THE TILE COUNCIL OF NORTH AMERICA  
(TCNA HANDBOOK), IT SHALL BE THE FLOOR FINISH INSTALLER'S  
RESPONSIBILITY TO VERIFY THAT THE FINISHES TO BE INSTALLED  
MATCH THE DESIGN CRITERIA NOTED ABOVE (UNDER "DESIGN  
LOADS").

- AT I-JOIST FLOORS, PROVIDE 1 1/8" MIN. OSB RIM BOARD.

- METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O.

- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED STURD-I-FLOOR'  
24" O.C. EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND  
GROOVE EDGES. FASTEN TO FRAMING MEMBERS w/ GLUE AND  
- 2 1/2" x 0.131" NAILS @ 6"O.C. @ PANEL EDGES & @ 12"O.C. FIELD.  
- 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES & @ 8" O.C. FIELD.  
- 2 3/8" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES & @ 6" O.C. IN FIELD.

ROOF FRAMING

- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16  
EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS  
- w/ 2 1/2" x 0.131" NAILS @ 6"O.C. @ PANEL EDGES & @ 12" O.C. FIELD.  
- w/ 2 3/8" x 0.120" NAILS @ 4"O.C. @ PANEL EDGES & @ 8" O.C. FIELD.  
- w/ 2 3/8" x 0.113" NAILS @ 3"O.C. @ PANEL EDGES & @ 6" O.C. FIELD.

- WITHIN 48" OF ALL ROOF EDGES, RIDGES, & HIPs FASTEN ROOF  
SHEATHING FIELDS PER EDGE NAILING SPEC.

- FASTEN EACH ROOF TRUSS TO TOP PLATE w/ SIMPSON H2.5A CLIP  
(OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) H2.5A  
CLIPS AT 2-PLY GIRDER TRUSSES, (3) H2.5A CLIPS AT 3-PLY  
GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS.

- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.O.

- ERECT AND INSTALL ROOF TRUSSES PER WTC & TP1'S BC51 I  
"GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING  
OF METAL PLATE CONNECTED WOOD TRUSSES."

- SUPPORT SHORT SPAN ROOF TRUSSES w/2x4 LEDGER FASTENED TO  
FRAMING w/(2) 3" x 0.120" NAILS @ 16" O.C. (UP TO 7' SPAN).

MKK STD. - MAR 2016



**MULHERN+KULP**  
RESIDENTIAL STRUCTURAL ENGINEERING

300 Brookside Ave, Building 4 - Ambler, PA 19002  
p 215-946-9001 - mulhern+kulp.com

GENERAL STRUCTURAL NOTES

- DESIGN IS BASED ON 2018 NORTH CAROLINA RESIDENTIAL CODE.

- WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN  
SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.

- DESIGN LOADS:  
ROOF LIVE = 20 PSF (18 PSF REDUCED)  
DEAD = 1 PSF T.C., 10 PSF B.C.  
LOAD DURATION FACTOR = 1.15

- FLOOR LIVE = 40 PSF (30 PSF @ SLEEPING AREAS)  
DEAD = 10 PSF (I-JOISTS & SOLID SAWN)  
ADD'L 10 PSF @ CERAMIC TILE IN KITCHEN,  
BATHS, SUNROOM, & LAUND.

- SOIL 1500 PSF ASSUMED ALLOWABLE BEARING PRESSURE  
(TO BE VERIFIED BY BUILDER)

GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD  
CONNECTIONS TABLE (IRC TABLE R602.3(1)) OR ON PLANS. ALL  
NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR  
CONNECTION. ALL HANGER NAILS SHALL BE INSTALLED PER  
MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY.  
NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL  
FRAMING GUN NAILS.

- EXT. & INT. BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON  
PLANS) @ 16" O.C. SFF "STUD" GRADE LUMBER, OR BETTER, U.N.O.
  - WALLS OVER 10' TALL SHALL BE PER PLAN.

- ALL INTERIOR BEARING WALLS ARE ASSUMED TO BE SHEATHED w/  
GYP WALL BOARD (ONE SIDE MIN) OR PROVIDE MID HT. BLOCKING.

- ALL 2x8, 2x10, & 2x12 HEADERS, BEAMS & OTHER STRUCTURAL  
MEMBERS SHALL BE S.Y.P. #2 LUMBER, OR BETTER.

- ALL 2x6 HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL  
BE SFF "STUD" GRADE LUMBER, OR BETTER.

- SUPPORT ALL HEADERS/ BEAMS w/ (1)2x JACK STUD & (1)2x KING  
STUD, MINIMUM.
  - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE  
NUMBER OF JACK STUDS REQUIRED, U.N.O.

- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED  
WITH 2x "STUD" GRADE MEMBERS SPACED @ 24" O.C. (MAX, U.N.O.)
  - HEADERS IN NON-LOAD BEARING WALLS SHALL BE:  
(1)2x4/6 FLAT @ OPENINGS UP TO 4'; (2)2x4/6 FLAT UP TO 8'.

- ALL FRAMING LUMBER SHALL BE DRIED TO 15% MC (KD-15).

- ENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING:
  - L5L' - Fb=2325 psi; Fv=310 psi; E=155x10<sup>9</sup> psi
  - LVL' - Fb=2600 psi; Fv=285 psi; E=2.0x10<sup>9</sup> psi

- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
  - LVL' - Fb=2400 psi; FcII=2500 psi; E=1.8x10<sup>9</sup> psi

- FOR 2 & 3 PLY BEAMS OF EQUAL 1 3/4" MAX. WIDTH, FASTEN PLIES  
TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O/C OR 2 ROWS  
1/4"x3/8" SIMPSON SDS SCREWS (OR 3/8" TRUSSLOK SCREWS) @ 16"  
O/C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR  
GREATER. APPLY FASTENING AT BOTH FACES FOR 3-PLY  
CONDITION. LOCATE TOP & BOTTOM NAILS/SCREWS 2" FROM EDGE.  
SOLID 3 1/2" OR 5 1/4" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF  
NAILS FOR 2x6 & 2x8 MEMBERS.

- FOR 4 PLY BEAMS OF EQUAL 1 3/4" MAX. WIDTH, FASTEN PLIES  
TOGETHER WITH 3 ROWS OF 1/4"x6" SIMPSON SDS SCREWS (OR 6 3/4"  
TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 ROWS FOR  
BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH  
FACES (ONE SIDE ONLY FOR TRUSSLOK SCREWS). LOCATE TOP AND  
BOTTOM SCREWS 2" FROM EDGE. A SOLID 7" BEAM IS ACCEPTABLE.

- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS  
CONTINUOUS TO FND/BEARING. BLOCKING TO MATCH POST ABOVE.

- FASTEN 2x WOOD PLATES TO TOP FLANGE OF STEEL BEAMS WITH  
P.A.F.'s ("HILT") XU PINS OR EQUAL) @ 16" O.C. STAGGERED,  
OR 1/2" DIA. BOLTS @ 48" O.C. STAGGERED.

- STEEL PIPE COLUMN "ASD CAPACITIES" SHALL MEET OR EXCEED  
THE LOADS PROVIDED AT EACH STEEL PIPE COLUMN LOCATION ON  
PLAN. COLUMNS ARE TO BE INSTALLED PER THE MANUFACTURER'S  
REQUIREMENT THAT ACHIEVES THE RATED CAPACITY USED,  
INCLUDING BUT NOT LIMITED TO POSITIVE CONNECTIONS AT THE TOP  
AND BOTTOM OF THE COLUMN. TWO COLUMNS MAY BE USED UNDER  
CONTINUOUS BEAMS TO ACHIEVE THE FULL PLAN SPECIFIED  
REQUIRED CAPACITY IF INSTALLED CENTERED ON THE EXISTING  
FOOTING/ PLAN SPECIFIED SINGLE COLUMN LOCATION.

seal:



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STRUCTURAL NOTES

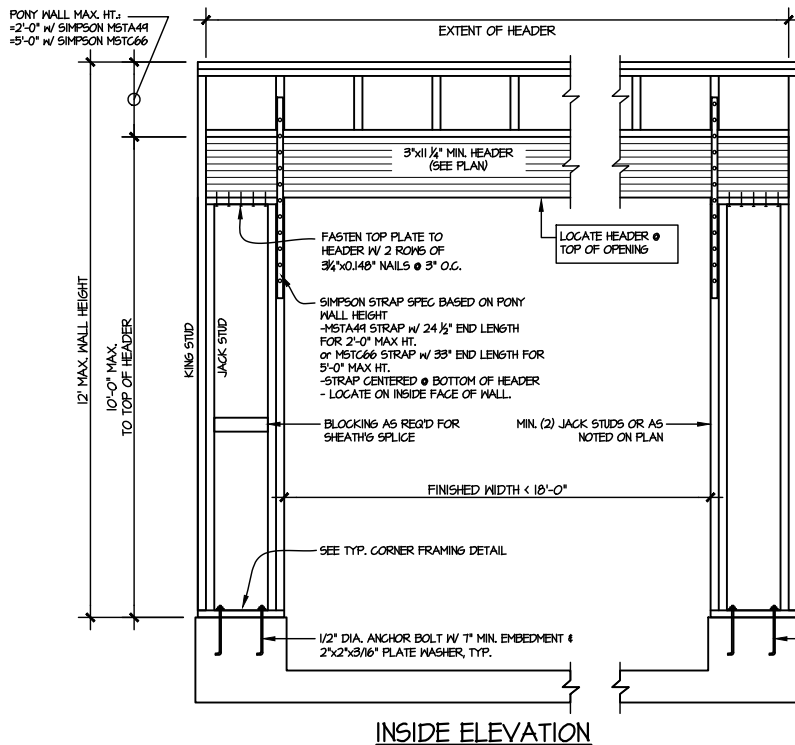
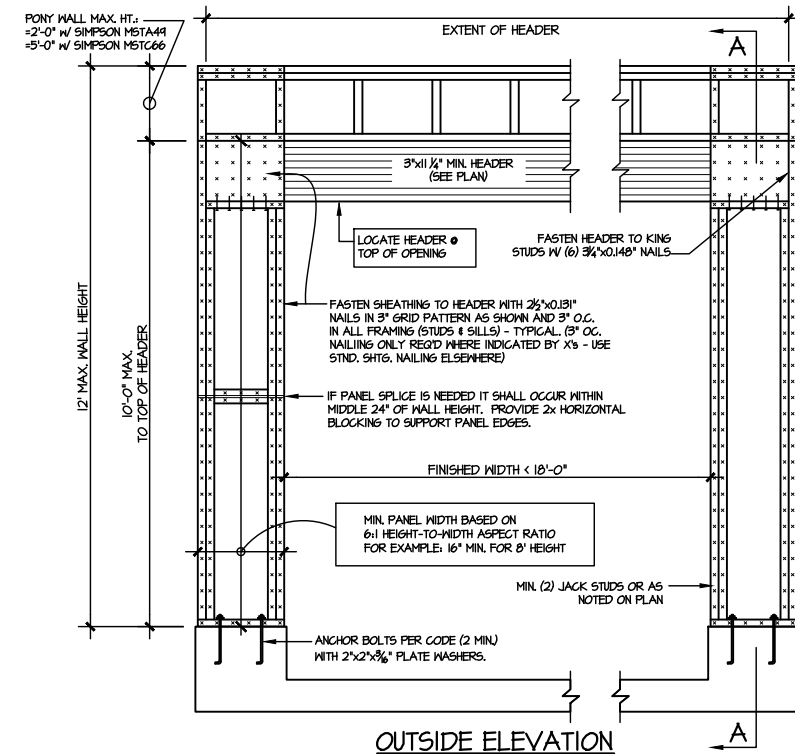
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RALEIGH, NC

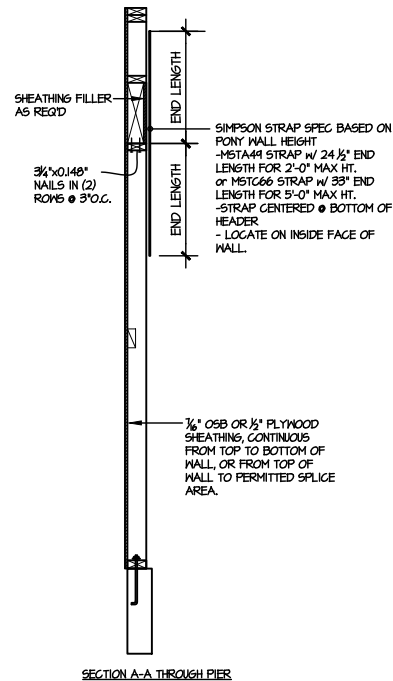
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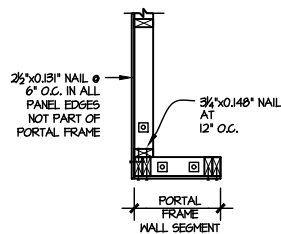


1 GARAGE PORTAL FRAME BRACING ELEVATION  
SCALE: 3/4"=1'-0"  
BOTH SIDES OF GARAGE DOOR  
115 MPH WIND SPEED (AL7)

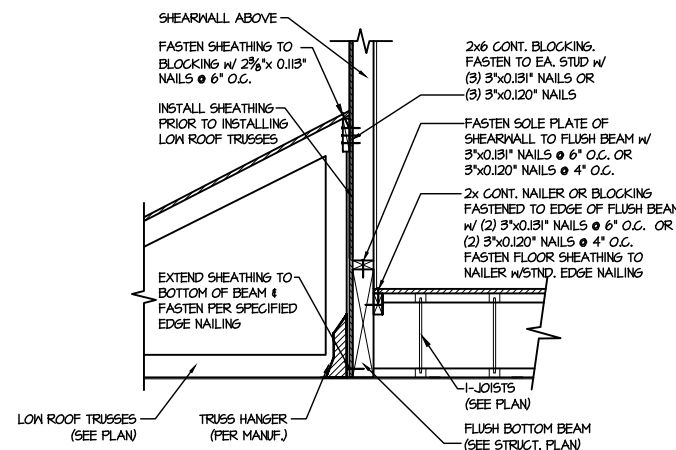


NOTE: ALL SHEATHABLE AREAS OF EXTERIOR  
WALL SHALL BE FULLY SHEATHED WITH 1/2"  
PLYWOOD OR 3/8" OSB

WALL FRAMING SPECIFICATION:  
@2x4 WALL: USE 1# #2 GRADE  
STUDS (OR BETTER)  
@2x6 WALL: USE 2# #2 'STUD'  
GRADE STUDS (OR BETTER)



ALTERNATIVES TO 1/2" DIA. ANCHOR BOLT:  
1) 1/2" DIA. x 6" LONG SIMPSON TITEN HD  
2) 1/2" DIA. THREADED ROD EPOXY SET W/4 1/2" EMBED.  
(MIN. UTILIZING HILTI HY200 EPOXY ANCHORING SYSTEM  
(OR EQUAL)



2 SHEAR TRANSFER DETAIL @  
EXTERIOR SHEARWALL ABOVE  
SCALE: 3/4"=1'-0"