GREENVILLE COUNTY REDEVELOPMENT AUTHORITY DESCRIPTION OF MATERIALS AND FINAL WORK WRITE-UP "The Belmont" 233 Whitney Street, Slater, SC 29683 BB# 0518.00-03-017.00 July 10, 2019

Note: This house is to be built in accordance with the Energy Star requirements and GCRA's *General Construction Specifications*. Additional notes are highlighted throughout the Work Write-Up. Builder will be required to provide input to an Energy Star inspector and advance notification to schedule inspections. Builder is required to engage the services of a certified HERS Rater at his/her own expense for the purposes of obtaining Energy Star Version 3.0 certification for this house.

- 1. Excavation: Clear area of all debris, bearing Soil, Type: soil and clay.
- 2. Foundation: Builder's choice to build on a crawl space or a slab.
 - Footings: Concrete mix 1:3:5: strength PSI 2500 lb min.
 - Piers: Concrete block, block to be capped with solid block.
 - Slab to have brick walls minimum 12" high from finish grade elevation.
 - Access Door: Frame: Treated, 2" thickness, Door: ¹/₂" exterior plywood with 3/4" batten, hinges and hasp
 - Foundation Vents: 16" x 8" automatic
 - Foundation Wall: Material: Brick, Contractor to allow \$250 per cube of brick. Brick to be approved by Construction Specialist prior to installation.
 - Wall to be a 4" curtain wall tied into the piers around the perimeter of the house per local codes.
 - Waterproofing: The perimeter to be waterproofed with <u>MasterSeal 581</u> and French drain to be installed.
 - See GCRA General Construction Specifications for slab requirements.
 - <u>Termite Treatment</u> All foundations shall be pre-treated for termites in accordance with the South Carolina Standards for the control of termites and other wood destroying pests and the Department of Pesticide Regulations. Properly executed and certified treatment certificates (forms <u>HUD-NPCA-99A</u>, Subterranean Termite Soil Treatment Builders Guarantee and <u>HUD-NPCA-99-B</u> New Construction Subterranean Termite Soil Treatment Record) shall be issued to UHC <u>prior to any payment</u> being dispersed.
 - Prior to the final walk through properly executed <u>HUD-92544</u> Warranty of Completion of Construction form and <u>HUD-92541</u> Builders Certification of Plans, Specifications, & Site will be required.
 - Install a moisture proof vapor barrier and radon pipe in the crawl space per specifications.
- 3. Front Porch: Approximate 6' x 28' concrete porch as shown on the plan, with a brick row lock perimeter.
 - Any required steps are to be <u>brick</u>. 5' wide as shown on the plan. End bricks to be solid.
 - Provide and install 5 1/2" square vinyl clad columns (with treated posts inside) with standard capitals and bases at top & bottom (with PVC pickets intermediate), newels, and rails if required by code.
 - Porch beam: Cover all three sides of the porch beam with one-piece wood-grain James Hardie or MiraTEC © (or equivalent) trim. Beam to be a minimum 6" x 13". Exterior to be painted with Sherwin Williams paint and the color is to be selected by GCRA.

- 4. Deck/patio: Approximately 8' x 10
 - Provide brick curtain wall with rowlock matching house foundation.
 - Pour min 4" slab for patio per GCRA General Construction Specs.
- 5. Floor Framing: per plan (Slab to have brick walls minimum 12" high from finish grade elevation.)
- 6. Exterior Walls:
 - Studs: 2" x 4" 16" o.c., Grade: #2 Constr. Fir
 - Top Plate: 2 2" x 4", Grade: #2 Constr. Fir
 - Sole/Sill/Bottom Plate: 2" x 4", Grade: #2 pressure treated SYP
 - Sheathing: 7/16" O.S.B. wafer board
 - House Wrap: Walls and Gables are to be wrapped in Tyvec, or equivalent house wrap.
 - Height: Walls should be framed for 8' ceiling.
- 7. Partition Framing:
 - Studs: Wood, #2 Constr. Fir
 - Size & Spacing: 2" x 4" 16" o.c.
 - Height: Walls should be framed for an 8' ceiling.
- 8. Ceiling Framing:
 - Wood, #2 KD SYP
 - Size: 2" x 8" 16" o.c. or as per code.
- 9. Roof Framing:

House:

- Rafters: #2 KD SYP
- Size: 2" x 8" 16' o.c. or as per code.
- Truss roof permitted
- Type: GABLE
- Pitch: 8/12
- Sheathing: ¹/₂" CDX plywood 4 ply or 7/16" OSB wafer board
- Underlay: #15 felt or synthetic underlayment
- 10. Roofing:
 - Roofing: 30-year Architectural wind seal fiberglass shingles
 - Flashing: aluminum
 - Ventilation: Ridge and soffit vents.
- 11. Exterior finish:
 - Provide and install vinyl raised panel shutters per plan.
 - Vinyl Siding: Royal Crest or equivalent.
 - Cover all three sides of the porch beam with one-piece wood-grain James Hardie or MiraTEC © trim. Beam to be a minimum 6" x 13".
 - Fascia & Soffits: Wood-grain vinyl coated aluminum fascia & vented vinyl soffit, overhang per plan, including porch.
 - Aluminum guttering on all eaves complete with downspouts and fiberglass splash blocks.

12. Finish Floor:

- Carpet, 6-pound density pad, and installation allowance of \$20.00 per square yard in all bedrooms and bedroom closets, living room, hall and hall closet.
- Enduring Elegance vinyl plank flooring or equivalent in bathrooms, kitchen, dining, and laundry area.
- Shoe moulding is required with the vinyl sheet goods and/or ceramic tile.
- All colors and patterns to be pre-approved by GCRA.
- Builder shall provide flooring warranties and maintenance information.
- 13. Interior walls & ceilings:
 - Ceilings: ¹/₂" drywall
 - Walls: ¹/₂" drywall
 - Pull down attic stairs with 100 sf platform storage. Storage to be blocked to allow for R38 insulation installation. Light switch for attic to be located on wall below attic access and not in the attic.
 - Above the disappearing attic stairway provide an insulated box with hinged lid the lid must be fitted with weather stripping to insure an airtight seal. Affix insulation to the upper side of the lid to equal a minimum of R-38.
 - Interior doors: Material six-panel molded Masonite, 1³/₈" (pre-hung units), with door stops.
 - All double-door closets complete with six-panel Masonite hinged doors that open in the center with <u>magnetic catches</u> complete with door stops.
 - <u>All doors to have lever handles</u>, finish to match deadbolts, either satin stainless steel or brushed nickel this includes hinges.
 - Vinyl coated steel shelving in all closets
 - Interior moulding: 356 casings, minimum 3¹/₂" base board.
 - Walls and trim painted with Sherwin Williams semi-gloss GCRA to pick all colors.
 - Attached utility room to have drywall walls.
- 14. Exterior doors:
 - Front door Energy Star steel-clad or fiberglass insulated door with Low E thermal pane door as shown on the front elevation plan, complete with door stop.
 - Rear door Energy Star steel clad or fiberglass insulated door per plan, rot proof jambs and trim.
 - Exterior utility room door six-panel steel clad insulated door with two bores, rot proof jambs and trim.
 - Storm doors Andersen 3000 Series (or equal) full-length clear safety glass, insect screen, and Nickel finish hardware (store screens in attic upon completion) at both entrance doors with dual pneumatic closers, springs and chains to prevent wind damage.
 - All exterior doors to have double bores with entrance lock and dead bolt-keyed alike and builder will furnish 4 keys to GCRA when the house is dried in. Finish to match deadbolts, either satin stainless steel or brushed nickel this includes hinges. If house is built on a crawl space builder will furnish a lock and keys for the crawl space door.
 - Final locksets to be installed at punch-out. Construction locks to be used until punch-out.
- 15. Windows:
 - Type: Energy Star qualified double-hung, welded viny1 per plan, for all windows. Low-E with a minimum window U-factor and SHGC of 0.40. Builder to provide window fenestration ratings or performance labels to HERS rater.
 - All windows are to have screens
 - Exterior Trim: Window flange to accept vinyl siding.
 - Interior Trim: Window jamb extensions to be wood or composition MDF board and shall be cased with 356 casing with a stool and apron. No turning of drywall to complete the window.
 - Furnish and install one-inch mini blinds at each window (includes 9 lite two panel door).

16. Cabinets:

- Kitchen & Bath: Stain grade alder
- Cabinet hinges and pulls are to be satin stainless steel or brushed nickel.
- Tops of kitchen wall cabinets to be flush with ceiling and trimmed out with bed moulding minimum 35%", plan-specific, grade to match stain or cabinets.
- Note: Minimize the vent chase in the wall cabinet above the microwave. The microwave is to be vented outside the building envelope.
- Top: Formica (roll top).
- GCRA will pick all colors.
- 17. Plumbing: General The builder is responsible for determining <u>all</u> utility connection requirements and paying <u>all</u> associated permits, costs and fees. <u>NOTE</u>: It is the builder's responsibility to check with the water and sewer companies to determine the requirements, permits, fees, installation, replacements, rodding, etc. for connecting this house to each utility. The water and sewer lines, clean out, and the sewer line from the clean-out to the house and the water line from the meter to the house are also the responsibility of the builder. **Builder is responsible for visiting the site to determine requirements before bidding.**

At all supply locations transition from Pex to a copper stub out and sweat on a Brasscraft (Home Depot) or Keeney Manufacturing Co (Lowes) straight or angle quarter-turn ball valve shut off (½" inlet and ¾" outlet).

ALL PLUMBING TO BE IN THE WALL - NOT COMING UP THROUGH THE FLOOR.

- Install two hose-bibs one the driveway side near the front and one at the rear of the house.
- PEX or equivalent lines from meter to all fixtures
- PVC DWV lines from all fixtures to the clean out.
- Electric Water Heater: Minimum Energy Factor: 50-gallon = 0.92. Whirlpool 50-gallon Energy Smart electric water heater, available at Lowe's item number 188412, Model EE2H50RD045V, EF .92 or equivalent. Expansion tank required.
- Water heater insulation blanket and pipe insulation are required. Builder to provide water heater energy factor documentation to HERS rater. Water heater to be located in attached utility room.
- Washing machine connection and built-in dryer box pipe connection, not an exposed pipe coming up through the floor. Both trimmed out.
- The wall behind the washer/dryer to be 2x6.

Per bath:

- Tub: one-piece fiberglass tub/shower unit NOTE: Tub/shower installed on an exterior wall requires the installation of ¹/₄" Luan (or approved alternate) between the tub/shower unit and the insulation take photo of the insulation to document this.
- Builder to install blocking for <u>FOUR</u> future grab bars (to be installed by others).
- <u>Delta or Moen</u> tub/shower mixing valve with ADA compliant lever handle use Water Sense labeled valve.
- Water closet: American Standard or equal must be Water Sense labeled.
- Lavatory: Cultured marble vanity top with Delta or Moen ADA compliant single lever handle use Water Sense labeled faucet.
- Install a shower curtain rod for the tub/shower

Kitchen:

- Sink: 33" x 22" x 8" deep stainless steel complete with <u>Delta or Moen</u> ADA compliant single lever faucet with sprayer –must be Water Sense labeled.
- Include an Energy Star dishwasher and ½ horsepower food-waste disposer.
- Install a microwave oven above the stove vented outside the building envelope.
- Furnish & install a 30" freestanding electric range smooth stove top Frigidaire FFEF3018L or equivalent.
- Furnish & install a Frigidaire Gallery Custom-Flex 20.4 cubic feet Energy Star top freezer refrigerator with ice maker 29%" W x 28 ½" D x 69" H FGTR2045QP or equivalent.

18. HVAC:

- Energy Star qualified heat pump (15 SEER/11.5 EER/8.5 HSPF).
- Manual J calculation is required for sizing the equipment based on actual house orientation, window/door specs and locations.
- Install Energy Star Programmable thermostat with "Adaptive Recovery" technology to prevent excessive use of electric back-up heating.
- Install return ducts or transfer grilles in every room having a door except baths, kitchens, closets, pantries, and laundry rooms.
- Per ASHRAE 62.2, provide controlled mechanical ventilation. Install one filtered fresh air supply (this filter must be easily accessible for homeowner to change the filter) to the return side of the system and use a manual damper to adjust the flow rate and a motorized damper to control open time.
- Unit to be Heil, Trane, Carrier or pre-approved by the Construction Specialist prior to installation.
- Builder to furnish HVAC equipment ARI matching certificates and actual efficiency ratings.
- Third party will conduct blower door and duct blaster tests.
- Prior to final walk through install new pleated air filters for the return and the fresh air supply.

19. Electrical:

- Wire to meet all code requirements with 200-amp panel with a minimum of 4 unused circuits left in the panel. Panel box to be in the attached utility room.
- Install mechanical exhaust fan/light for the bathrooms vented outside the building envelope.
- Install Energy Star labeled light fixtures in all rooms per plan.
- Install Energy Star labeled ceiling fans with light kit in all bedrooms and family room. Ceiling fan and light are to be controlled by two separate switches.
- Kitchen GFCI circuits to have self-test outlets for both circuits located in kitchen.
- Install smoke detectors to meet codes (hard wired).
- Install a 5-bulb hanging chandelier light in the dining area.
- Install a WP GFCI at front and rear of house.
- All walk-in closets to have light fixtures.
- Provide a LED light over the kitchen sink behind a valence.
- Install a 3-bulb wall sconce centered over all bathroom vanity bowls.
- Install exterior lights on the front porch and side patio.
- Install Energy Star qualified LED bulbs.
- Install a two-bulb flood LED light with motion sensor at front of the house on the driveway side label this switch "Flood Light" and put it in a single gang box near the front door.
- Contractor is to furnish all kitchen appliances to include refrigerator, stove, dishwasher, disposal, and microwave/hood combination.

20. Insulation:

- Ceiling: R-38
- Walls: R-13
- Floor: R-19
- Third-party Energy Star inspection required before installation of drywall
- Attached utility room to be insulated to code.

21. Painting:

- Exterior: Paint all exterior trim work not covered with aluminum or vinyl with one coat of primer and two coats of exterior paint.
- Interior: Paint all walls and ceilings with primer and two coats of interior latex paint.
- Ceilings are to have a slick finish.
- Paint all trim with satin finish trim paint.
- Kitchen and bath primer and two coats of semi-gloss latex paint.
- Cabinets and vanities may be stained or painted at the option of GCRA.
- All paint/stain will be Sherwin Williams/Minwax and GCRA will pick all colors.
- Attached utility room to be complete with drywall and paint.

22. Grading:

- Provide and install a silt fence and gravel drive as required by code.
- Rough grading to remove any trees, stumps, or vegetation, and preparation of site.
- Trim all trees to prevent limbs from overhanging the roof
- Finish grading to achieve positive drainage to edge of property without turning surface water on to the adjacent property.
- All high and low spots are to be leveled.
- Spread 2" topsoil on disturbed areas of the property.
- Seed, fertilize, and straw the entire lot using a mixture of half fescue and half rye seeds.
- Builder is responsible for disposing of any debris that is on the site.
- Install two seven-gallon red maple trees, 10 three-gallon shrubs, and mulch.

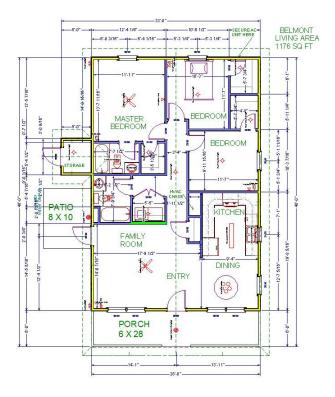
23. Cement Drive and Walkway:

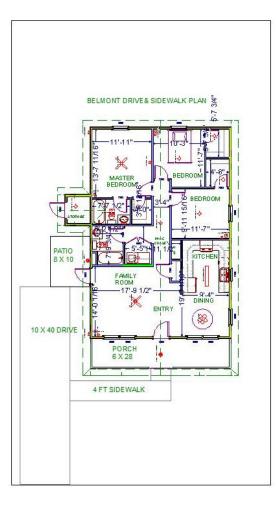
- Grade, form, and pour a 4" thick concrete driveway and walkways, per plan.
- Concrete shall be a minimum of 3000 PSI and have broom finish.
- Backfill all new drives and sidewalks.
- 24. Miscellaneous:
 - Coax and CAT-5 (NC/ANSI/TIA/EIA-568-A) (network cable) outlets, and telephone jacks (combine coax and CAT-5 in one box); include in living room and all bedrooms.
 - Doorbells should be installed at both entrance doors. Wireless systems can be used.
 - Install 30" wide tri-view medicine cabinet centered on all vanity sinks.
 - 2 towel bars and 1 paper holder per bath finish to match satin stainless steel or brushed nickel, provide two additional towel rings at the double vanity in master bath
 - Provide vinyl coated wire shelving for the laundry room, bedroom closets, coat closet, and linen closet (4 shelves). All shelving is to be capable of supporting a 50-pound load. All supports, clips, and brackets are to be installed with screws and shall be screwed to studs, blocking, or other framing members.
 - Provide and install a black mailbox mounted on a white vinyl treated wood core 4 x 4 "Hangman's" type post.
 - Provide keyed-alike padlocks for exterior HVAC disconnect(s) this includes keyed-alike padlock for crawl space door if house is built on a crawl space.

25. Contractor to obtain Builders Risk Insurance and name GCRA on the policy. Proof of Builders Risk must be provided to GCRA prior to first draw request.

NOTES:

- 1. All construction to be completed in accordance with all local codes and the latest edition of GCRA's *General Construction Specifications*. All dimensions, quality of materials and construction details shall be the responsibility of the Contractor.
- 2. All materials used are to be in accordance with the *General Construction Specifications* or equivalent.
- 3. Contractor to furnish GCRA with all permits and warranties, including the signed-off building permit and certificate of occupancy, post-construction list of subcontractors, and Affidavit of Compliance with Immigration Law.
- 4. Contractor is responsible for all final grades on the lot. All lots shall be graded as to allow water to run to the property lines and off the property without discharging onto adjacent properties.
- 5. GCRA reserves the right to mirror or reverse this plan prior to commencement of construction activity.
- 6. This home must earn the ENERGY STAR Certificate. Any additional work or testing to earn the Energy Star Certificate will be at the expense of the builder no change order will be given. The Certificate must be forwarded to GCRA staff immediately upon receipt.













"The Belmont" 233 Whitney Street, Slater, SC 29683 BB# 0518.00-03-017.00 July 10, 2019

Contractor's Bid:

1	
	\$ 0.00

Contractor Signature

DATE