

HC-2204, Jeff Green, 8710 NC Hwy 45, Belhaven, NC  
(Revised 1/10/23)

SITE NOTES: #

- 1. The lot is primarily a grass lawn with ornamental shrubs along front and west side of house and a small ornamental tree in front yard. Contractor to remove as needed to permit elevation. Do not replace. However, owner may salvage any shrubs they want to keep but such removal needs to be performed in advance of the Contractor's scheduled date of moving onto site. Contractor to provide advance notice of his moving on to site to allow timer for owner to salvage/relocate any of the existing ornamental shrubs he may want to keep.
2. There is a gutter on the rear eave above the double French doors. A downspout is located at the southwest corner of the house and pierces the deck floor. Once house has been elevated, extend downspout to grade and place a splash pad below downspout.
3. Remove ornamental rubber border around shrubbery. If suitable for reuse, place at a location on site designated by owner. Do not replace after construction. Owner to replace.
4. A stone drive serves as access to rear parking. If damaged or rutted due to the elevation construction process, add ABC and grade smooth to a condition equal to or better than the existing. If lawn is rutted, add topsoil, regrade, and place seed and mulching.
5. Concrete Walk/Patio:
a. Walk: A short concrete walk leads from the driveway parking to the rear deck. Remove as the pad will be covered by the new stairs constructed to grade which will include a new concrete landing pad.
b. Patio: Though there is no immediate access, a concrete patio abuts the rear deck on the south. Pad exhibits significant shrinkage cracks creating a somewhat 2x2 grid pattern. Grass is growing in the cracks.
c. Contractor to place either planking, mats, or earthen fill over patio to try to protect from equipment damage. If damaged beyond what already exists, isolated repairs can be made to restore damaged areas. Coordinate with Inspector.
6. Prior to moving on site, the Contractor shall video/photograph both the grounds and interior prior to elevation to avoid/minimize the potential of false claims of damage.
7. A detached hip roof garage with a small porch/carport (on east end) exists at rear of lot. Structure is in fair condition. See photo at right. Structure will not interfere with elevation of house.
8. According to owner, the original well is located near the shed. Verify location to ensure crews do not damage.
9. Roof: The house has a new screw-down metal roof. Evidence exists in the interior ceiling of past roof leaks. The new roof was the apparent response to correcting the roof leaks.
Floor Framing
10. An attempt to repair some of the floor in the bathroom has been made by owner. Improve areas as noted on foundation plan.
11. At the front east end of the crawl space, approximately 4 feet from the existing east curtain wall, a sister joists stops short of full span. Add a new 2x8 PT sister joist to the opposite side of the fungal decayed joist.
a. Where other sistered joists are found to exist in similar manner, correct in likewise manner.
b. Where new sister joists abut band sills bearing on ledger strips, and the ledger strips exhibits fungal decay that has weakened them, either remove the pledger strip (or portions) and replace with a new PT 2x2 ledger strip; or, add a Simpson LUS28-2 SS joist hangers (w/ SS nails); joist hangers to incorporate both the original joist and the new sister joist.
12. Where new drop girders support either in-line 2x10 girders/band sills, and existing wiring is located immediately below an existing 2x10 girder, notch the existing girder to allow wiring to recess into the original framing. Do not notch the new drop girders without first securing approval of engineer.
13. The existing floor system consists of 3 bays 2x8 floor joists spaced at 16" o/c. There are two rows of triple 2x8 drop girders.
14. Floor Damage:
a. Evidence of both significant fungal and moisture damage was evident & prevalent throughout the crawl space during our first inspection. Significant damage has occurred to nearly 80% of the floor framing.
b. Holes in floor exist due to water damage primarily in the bath, the kitchen sink area, and rear wing doorway area.
c. At the rear wing door, severe water damage has damaged the rear band sill, floor sheathing and some of the floor joists. An attempt has been made to begin repairs; however, the repairs are unacceptable as improper joist sistering exists as well as improperly headed off joists were observed. Improve area as noted on foundation plan.
d. After reviewing initial findings w/ Owner, he made repairs using new pressure treated sister joists (or new replacement joists) and repaired the water damaged areas.
e. Improve any deficient areas noted either in these notes or on the foundation plan.
15. Most of the insulation was either hanging from the joists or on the ground. After house has been elevated, remove any remaining insulation so that a thorough inspection of the framing can be made. Replace insulation with R-19 fiberglass batts.
16. Some depressions adjacent to the east perimeter curtain wall were observed to be wet with some water.
17. Bonded Pilasters: Bond porch/deck 4"x16"x8" CMU pilasters to new 12" CMU foundation wall with (2) Hohmann & Barnard #344 Rigid Partition Anchors at every other vertical joint (see photo). See detail S-20.
18. Masonry Veneer Cracking (Existing):
a. There are two stair-step cracks on the corner of the house; one at each front corner. The east end is the worse of the two and is likely due to foundation subsidence. At the west corner, the cracking is much less and the cause less determinable. In both cases, it is possible the cracks may close after the house is set on the new level 12" CMU foundation wall.
b. A crack was observed on the west side of the rear wing door rowlock.
c. After elevation, repoint crack(s) as required/directed by project inspector.
19. Grading (Site/Crawl Space): Contractor to add a minimum of 6 inches of fill (above the highest adjacent exterior elevation) inside the crawl space to ensure surface water will not pond inside the crawl space and to permit adding fill along the perimeter of the house to affect a minimum 5% negative grade away from the house for the 1st 10 feet.
d. Ref fls 401.3 & 408.10 of NC State Building Code: Residential Code.
20. Note location of interior drywall cracks and advise owner. Also advise owner that some possible racking of doors or minor crack may result after the house rest on the new level foundation. Contractor to repair according to the contract documents.
21. Footing Subgrade:
a. The contractor will need to call for an inspection and/or evaluation of the footing subgrade after the footing subgrade has been reached (and before steel has been placed). Coordinate footing inspection with the project inspector. If required, the Engineer will recommend improvements for subgrade improvement.
b. No existing footings are to be left in place.
22. Cutting & Repairing Existing Patio Slab:
a. Saw cut the existing patio slab as necessary to permit construction of the new deck posts.
b. Replace with concrete matching existing thickness (but no less than 4 inches in thickness for walks and 5 inches for drives and carport slab).
c. Score to match existing score joints. If none are present, the maximum spacing of score joints shall be limited to 2 times the width of the rectangular section but not more than 12" o/c.
23. Provide conventionally framed pressure treated timber decks or porches (if applicable), stairs, handrails, and pickets per the NC Residential Building Code, HMGP requirements at each of the following locations. Coordinate location, orientation, and configuration with inspector and owner.
a. Setbacks:
i. Before placing/constructing ensure that no access encroaches into the side yard setbacks. Coordinate location of all access with project inspector and owner.



- b. Front Porch:
i. Remove existing Porch/suspended slab, porch handrails and front timber steps and handrails.
ii. Construct a new pressure treated timber porch with new CMU piers/bonded pilasters and with handrails and pickets to match the original construction but in compliance with the NC Residential Building Code. See foundation plan and details 101, 104, and 105
iii. Construct a set of new pressure treated stairs with posts, handrails, and pickets (and with intermediate support and cross bracing as required/shown on plan sheets P-1 and P-2 if applicable). Stairs to extend straight to north. Coordinate stair orientation with owner and Project Inspector.
iv. At the end of the stairs, provide a 3' long concrete landing the same width as the stairs.
c. Rear French Door Access:
i. The existing rear deck is to be elevated with the house.
ii. Remove the existing timber stairs on the east and west sides of the deck plus the two existing original brick steps over which this deck was constructed.
iii. After the house has been elevated, add new CMU piers, and drop girders as shown on the plan and extend post (portion below the deck) as shown on detail S-22.
iv. Construct two sets of pressure treated stairs at the east and west sides of the deck (to match the original locations), with posts, handrails, and pickets (and with intermediate support and cross bracing as required/shown on plan sheets P-1 and P-2 if applicable).
v. At the end of each stair, provide a 3' long concrete landing the same width as the stairs.
vi. Minimum deck PT 6x6 post bury to be 5 feet.
d. Rear Access from South Wing:
i. The access to the rear door at the rear wing is to be via the elevated deck noted in item C, immediately above. The deck will serve as well to provide access to the electric meter.
e. All new access construction is to meet the applicable provisions of chapter 46 "Coastal and Flood Plain Construction Standards" and Appendix M "Wood Decks."
24. Termitte Inspection:
a. No termitte inspection was performed by a third party as of this writing. At the time of the inspection, no apparent evidence of termitte activity was observed; however, significant decay and distress has occurred to the floor framing due both to water and fungal decay.
b. Some evidence of termitte damage is apparent in the rear wing (see photo at end of this report).
c. After house has been elevated, remove all remaining insulation so that a thorough inspection of the framing can be made. Make improvements noted by either the Engineer or Project inspector.
d. Advise Inspector/Engineer if any termitte damaged timber is found after house has been elevated.
e. Contractor to ensure that the soil is treated during foundation construction.
25. Asbestos:
a. As of this writing, no asbestos survey has been performed. For bidding purposes, assume no asbestos containing materials (ACM), were observed in this house.
b. Contractor to advise if other areas of asbestos is found or known to exist. Bring the discovery of any additional asbestos to the attention of the project inspector and/or engineer.
26. Electrical Service:
a. An underground electrical service drop connects to an electrical meter base located on the south wall of the rear wing and east of the rear door. Access to the electric meter will be provided via the deck which is being elevated with the house.
b. According to owner, an underground drop serves the dependent shop building to the rear of the house.
c. Locate underground service drop as well as the service drop to rear shop. Protect from damage and repair if damaged or cut.
d. Since the rear storage building is at grade, to be reconnected to power, the electrical outlets/switches/panel box (if present) in the shop will need to meet the NC State Plumbing Code/Local Flood Ordinance with regard to protection from flooding (i.e., such elements to be raised (by the owner) above the BFE + freeboard. Otherwise, Contractor to advise owner that they will not re-connect electrical service to Shop/storage building.
e. Have the service temporarily disconnected and, after the house has been elevated, have service reconnected. Service to meet the NC State Electrical Code
f. Once house has been elevated, reattach sagging/loose wiring to floor framing in accordance with the NEC.
g. There is a utility service box located on the rear of the home beside the electric meter base and one on the west wall near the rear deck. Verify type of service (i.e., cable TV, telephone, etc.). Owner to coordinate service disconnection/reconnection with service provider. If lines are active and damaged during the elevation process, repair as needed to enable service restoration. Coordinate service termination/re-establishment with owner.
h. A ground mounted TV antenna is located at the southwest corner of the house. Antenna is attached to the house at the roof rake. Temporarily remove and store at a location designated by owner. Owner to reconnect after house is elevated.
i. There are two weather-proof exterior receptacles; one on the rear wall at the east corner and one on the front of the house just east of the porch. Verify both receptacles are a minimum of 2 feet above the BFE (i.e., Minimum elevation 6.0). If not, relocate receptacle to meet code, ensure receptacle is GFCI regardless.
27. Water:
a. The house is on public water. A water meter is located beside driveway at road right of way. Contractor is to verify the location of service line and protect line from damage during construction.
b. According to owner, the original well is located near the shed. Verify location to ensure crews do not damage.
c. Disconnect main water service and reconnect service once house has been elevated.
d. After elevation, reconnect all dependent (rear shed if applicable) potable supply lines/pipe as well as the main house service in accordance with the NEC and the NC Plumbing Code reconnect the noted water services and verify lines are leak-free.
e. The electric water heater, though missing at the time of our inspection, will be located in the Utility Room wing.
f. Strap/staple piping to floor as required by both the NC Residential Building Code and the NC Plumbing code.
g. Note special requirements for sealing floor penetrations in the 2018 NC State Building Code. This applies to wiring, mechanical, water pipe, and wastewater pipe penetrations.
28. Sewer:
a. The house is on a septic tank. The septic tank is located at on the east end of the house.
b. Locate service line, tank, d-box, and field before beginning construction. Cordon off to protect from damage.
c. Owner will need to apply for existing systems permit which will include an inspection/review adequacy of the existing system.
d. Once house has been set back on the new foundation, reconnect all waste pipe in accordance with the NC Plumbing Code.
e. Strap piping to floor as required by both the NC Residential Building Code and the NC Plumbing code.
f. All new plumbing to meet the NC Plumbing Code, latest revision.
g. Note special requirements for sealing floor penetrations in the 2018 NC State Building Code. This applies to wiring, mechanical, water pipe, and wastewater pipe penetrations.
29. Other Utility Requirements:
a. A gas-fired HVAC system no longer exists; having been replaced with an electric heat pump located on east end of house.
b. At the rear eastern inset of the rear wing, a copper gas tube is visible and can be seen entering the crawl space via a crawl space vent. Service appears it may be coming from the direction of the UG propane tank.

- c. An existing underground propane tank exists rear of house, just east of the concrete patio. A yellow gas tube is rising out of the ground from tank. The tube was not connected to any appliance at the time of the inspection. Owner advises that the tank is empty and leaks due to the tank having holes in wall. A replacement tank was not seen at time of visit.
d. The existing UG propane tank is to be cordoned off to prevent equipment from tracking across the top and damaging the tank or causing injury. Tank is not to be disturbed.
e. It is recommended that the owner have the original gas provider verify/ensure that the existing underground tank is empty, and all tubing is terminated/capped per code.
f. Contractor is not to perform any gas related work.
g. Contractor to coordinate with both inspector and homeowner with any propane gas related services.
30. HVAC:
a. House is heated by an electric heat pump.
b. A condensing unit rests on a timber platform at the rear of the house just east of the rear wing. Platform elevation is approximately 6 inches higher than the floor of the rear deck. A disconnect is attached to the house. Air handling unit is in attic with what appears to be a less than acceptable fabricated pan. HVAC contractor to verify if there is a pan drain. Correct if not.
c. Owner appears to have constructed a new pressure treated platform on the east end of the house; most likely for the relocation of the HVAC. House is empty and in a state of repair/renovation by owner.
d. Temporarily remove and store condensing unit. After the house has been elevated, construct a new pressure treated timber stand/frame independent of the house to support the unit at a location determined by both owner and project inspector (likely on the east end of the house). Contractor's Electrician to raise the unit disconnect (if it is to remain in this approximate location) to meet the elevation requirements of the BFE + freeboard. Coordinate with project inspector. Establish top of platform at a minimum of BFE+2 feet between the BFE and bottom of platform joists. Adjust electrical disconnects, etc. accordingly. Coordinate with project inspector.
e. Prior to disconnecting and removing the unit, contractor to have his HVAC contractor verify the operation and condition of the unit (i.e., operable, age, damaged from flooding, etc.) and make note in writing for future reference. Have owner witness condition in presence of HVAC contractor. Upon completion of the elevation and re-setting the unit, reconnect and, in the presence of the owner and HVAC contractor, verify operation of unit is satisfactory at time of startup and document.
f. After house has been elevated, contractor to have new ducts installed in compliance with the Mechanical Code. Insulate and seal ducts per code and properly suspend from the floor framing.
g. All HVAC related work to conform to the latest edition of both the NC Residential Building Code and the NC Mechanical Code.
h. Note special requirements for sealing floor penetrations in the 2018 NC State Building Code. This applies to wiring, mechanical, water pipe, and wastewater pipe penetrations.
31. Dryer vent pipe is improperly installed. Once house is elevated, hard pipe with a slight negative slope to exterior and terminate with a grilled flap valve.
32. Contractor shall be responsible for verifying all dimensions prior to footing placement. Dimensions and floor plan shown was developed from field made by measurements by Applan Consulting Engineers. These dimensions must be verified and altered as necessary for the proper placement of proposed framing elements beneath the existing structure. Some adjustments to fit the actual structure footprint will be required.
33. Provide crawlspace access (See General Note 4.0). Coordinate actual location of door with owner. Do not locate access door below band sill butt joints. Provide an 8' minimum high by 12" wide precast lintel above door opening with a minimum of (2) #5's. Provide a minimum of 8 inches of bearing at each end of lintel.
34. Provide venting/flood vents on new foundation wall per General Notes Sections 5.0 and 8.0. Ensure ventilation requirements of the Residential Building Code are met. See Detail S-21.
35. All 4-inch deep CMU pilasters are to be bonded to the perimeter wall according to the Residential Building Code. See Detail S-20.

Table with columns: WORK SCALE, AS NOTED, DATE, REVISIONS, DESCRIPTION, DATE, BY, CAD. Includes revision entries for March 2018 and N/A.



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FOUNDATION KEY NOTES
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