Cody Johnston, PE Stonewall Structural Engineering, PLLC 4800 Falls of Neuse Rd. #120 Raleigh, NC 27609 (919)407-8663



Paul Pepe 24 W. Landing Sanford, NC 27332

Re: Structural Observation—24 West Landing, Sanford, NC 27332

Mr. Pepe,

At your request, we analyzed the front kitchen window opening that is proposed to be widened to accommodate a larger window at the Sanford residence noted above. Renovation drawings by Robert Mikesell dated 12/2/2005 were provided during a previous site visit. The structure is a conventionally framed, detached, single family residence with raised 1st floor framing over a pier/girder foundation system with perimeter masonry foundation walls (*see picture 1*).

Our observations and recommendations are listed below. Indicators such as "left," "right," "front," and "back" are referenced as viewing the front of the home.

FRONT KITCHEN WINDOW MODIFICATION

- The right window at the front of the kitchen is to be widened to an approximately 64" wide opening. A new beam is to be installed over the new opening (see picture 2).
 - The beam should be a (2)2x6 #2 Southern Yellow Pine (SYP) or #2 Spruce Pine Fir (SPF) member. It should be installed with continuous span between end supports and built-up using (2) rows of 10d sinkers at 12" o.c. spacing along the length of the member.
 - Support each end of the beam with (2)2x4 #2 SPF jack studs and one 2x4 king stud.

The above-listed determinations were made in accordance with common engineering principles and the intent of the 2018 edition of the *North Carolina Residential Building Code*. Sequencing, and means and methods of construction are considered to be beyond the scope of this report. Contractor is to provide adequate temporary shoring prior to cutting or removing any structural load bearing elements. Please feel free to contact us, should you have any questions or concerns regarding this matter.

Sincerely, Cody Johnston, PE *Stonewall Structural Engineering, PLLC* Lic. #P–0951



PICTURE ADDENDUM



Picture 1 – 24 West Landing, Sanford, NC



Picture 2 – Front kitchen window to be widened (at right of picture)