

## TEXAS BOARD of PROFESSIONAL ENGINEERS Engineering For A Better Texas

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January 23, 2018

James R. Drebelbis, AIA, PE, NAFE Drebelbis Engineering 2909 Cole Ave, Ste 100 Dallas, TX 75204-1304

RE: Formal Response to request for Policy Advisory Request Regarding residential foundation repair methods

Dear Mr. Drebelbis:

The Texas Board of Professional Engineers (Board) met in public session on November 16, 2017 and directed staff to develop this response to your request, dated September 9, 2017.

## **Request:**

Engineers designing and detailing the insertion of piers or piling beneath a slab-on-grade and/or soil supported grade beams do so only after verifying that the flexural member has the structural capacity to be converted to a suspended structural member and meets all building code requirements associated with the conversion process.

Professional Engineers repeatedly issue signed and sealed plans showing the location of and specification for piers and piling beneath slab on grade foundations. In these cases:

- 1. The Engineers are working on behalf of, or were recommended by, the Foundation company who directly benefits from the Professional Engineer's validation of the assumed foundation repair, and
- 2. No evidence exists that the Engineer has adequately and properly evaluated the components of the revised system to ensure that insertion of piers beneath the slab does not jeopardize the structural integrity of the slab, and that the foundation system as revised complies with relevant, governing Codes and Standards.

When a Professional Engineer signs, seals and dates a foundation design, by the Rules, that Engineer, certifies that the above referenced analysis of the slab was performed by him/her, or under his/her supervision, and meets all the above stated governing codes and statutes. I contend that this analysis is not being performed, because if the analyses were performed, most of the slabs signed, sealed and dated by Professional Engineers could not be "adjusted" by placing piers beneath them.

## **Response:**

The Policy Advisory Opinion process allows the Board to issue interpretations of the Texas Engineering Practice Act and Board Rules to address specific questions. The Texas Engineering Practice Act establishes practice requirements for engineers in the state of Texas, but does not set specific technical standards. As such, the committee has determined that this request does not seem appropriate to address via the Policy Advisory Opinion process.

The request refers to the practice of residential foundation repair and certain codes, standards, and means and methods to perform foundation repairs. The requestor contends that the engineering community in Texas is generally in violation of the Texas Engineering Practice Act by recommending repairs of slab-on-grade foundations by leveling with piers, acknowledging that it may be appropriate in special situations if the proper analysis is performed.

The committee noted that if there are concerns with the proper interpretation of technical standards or there are suggestions for revisions of those standards they should be addressed by the organization or other body that is responsible for establishing the standards.

The Texas Board takes any complaint against engineers in the state seriously, and if the requestor has documentation or evidence of an engineer practicing incompetently, the Board will consider the case.

## **Conclusion:**

No new Policy Advisory Opinion will be developed for this request. The Board will investigate any substantiated complaints filed against individual Texas PE practicing incompetently. This includes any design that was done incorrectly or without proper analysis.

Thank you for your support of the policy advisory opinion process. If you have any questions, please contact Mr. David Howell, P.E. at (512) 440-7723.

Sincerely,

Lance Kinney, P.E. Executive Director

LK:DLH:asm