

Virginia:

BEFORE THE  
STATE BUILDING CODE TECHNICAL REVIEW BOARD (REVIEW BOARD)

IN RE: Appeal of Karen McLaughlin  
Appeal No. 11-3

Hearing Date: May 20, 2016

DECISION OF THE REVIEW BOARD

I. PROCEDURAL BACKGROUND

The State Building Code Technical Review Board (Review Board) is a Governor-appointed board established to rule on disputes arising from application of regulations of the Department of Housing & Community Development. See §§ 36-108 and 36-114 of the Code of Virginia. The Review Board's proceedings are governed by the Virginia Administrative Process Act. See § 36-114 of the Code of Virginia.

II. CASE HISTORY

In July of 2009, the Loudoun County Department of Building and Development (local building department) issued a building permit

to Van Metre Homes (Van Metre), a licensed contractor, for the construction of a single-family dwelling on property located at 42975 Park Creek Drive in Ashburn. Once completed, the home was sold to Frank and Karen McLaughlin (McLaughlin).

In December of 2010, the local building department responded to a complaint by McLaughlin concerning the drainage system and the home's backfill. Upon inspection of the home, the local building department issued a Notice of Violation to Van Metre Homes citing Sections 109.3 (Engineering Details) and 115.1 (Violations) of Part I of the 2009 Virginia Uniform Statewide Building Code (Virginia Construction Code or VCC). The notice indicated that previous geotechnical engineering work for the subdivision showed that the plastic soils at the site were not approved as suitable material for use as backfill and that later laboratory testing suggested the material used as backfill against the McLaughlin's foundation were unsuitable for use as backfill material. As a result, the local building department required Van Metre to provide evidence that the soils had been tested and found suitable for use as backfill material.

In February of 2011, after reviewing the results of a subsurface report by Engineering Consulting Services (ECS) indicating that the soil used as backfill around McLaughlin's home fell at or below the maximum liquid and plastic limits established by the preceding report, the local building

department rescinded its Notice of Violation against Van Metre, noting that the "foundation wall is adequately designed to resist the soil pressures."

Consequently, McLaughlin filed an appeal to the County of Loudoun Board of Building Code Appeals (local appeals board) of the local building department's decision to rescind its Notice of Violation against Van Metre Homes. The local appeals board heard the appeal in March of 2011 and upheld local building department's decision.

From 2011 until 2015, both parties agreed to multiple continuances of the appeal. In March of 2015, the Review Board established a policy that any appeal older than two years from its application date must be processed for a hearing. In July of 2015, Review Board staff notified McLaughlin and Van Metre of this new policy.

In January of 2016, Review Board staff contacted the parties to make them aware of plans to schedule a hearing on the appeal. In subsequent discussions with McLaughlin and Bruce Clendenin, (president of Clendenin), representing McLaughlin, the parties expressed concern about the adequacy of the home's basement walls supporting the backfill material, as well as, the type of backfill material used against the home.

### III. FINDINGS OF THE REVIEW BOARD

The Review Board, in its consideration of the issue, finds that McLaughlin's appeal mainly involves two issues: 1) whether the soil used as backfill against her home's foundation was suitable backfill material, and 2) whether the home's foundation walls were designed to resist the soil lateral loads present.

With respect to the first issue, a representative of ECS (a geotechnical engineering company) offered testimony that its more recent soil investigation determined that the soil used as backfill adjacent to McLaughlin's foundation is not highly plastic or expansive. McLaughlin did not have a geotechnical expert witness present to dispute that assertion.

On the second issue, representatives from Van Metre and ECS testified that the vertically and horizontally reinforced 8" and 10" thick solid concrete foundation walls of McLaughlin's home were installed as shown in the wall sections approved with the original building permit. The Review Board finds that that testimony, as well as the January 12, 2011 document from Alliance Structural Engineers, Inc. stating the sufficiency of the foundations walls, to be compelling in this matter. McLaughlin did not provide any testimony or evidence proving that the foundation walls were not constructed as designed.

Section 109.3 of the 2009 VCC authorizes the local building official to require engineering details when deemed necessary.

With respect to this section, the Review Board finds that the local building official requested and obtained the necessary geotechnical and structural details to make a determination concerning the adequacy of the soil used as backfill and the foundation walls of the McLaughlin home.

With regards to Section 115.1 (Violations), the Review Board finds that the local building official correctly rescinded the Notice of Violation against Van Metre once it had been determined that the soils used as backfill and the foundation walls as constructed met the requirements of the 2009 VCC.

#### IV. FINAL ORDER

The appeal hearing has been given due regard, and for the reasons set out herein, the Review Board orders the decision of the local building department and the local appeals board to be, and hereby is, upheld.

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/s/\*  
Chairman, State Technical Review Board

\_\_\_\_\_  
July 15, 2016  
Date Entered

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty (30) days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a Notice of Appeal with Alan W. McMahan, Secretary of the Review Board. In the event that this decision is served on you by mail, three (3) days are added to that period.