



January 28, 2016

Mr. David McCray  
L&M Properties, LLC.  
3330 Hollins Road, NE Suite A  
Roanoke, Virginia 24012

Re: Floor Slab Loading  
728 Wertz Road NE  
Roanoke, Virginia 24014  
Balzer Project #: 07160005.00

Dear Mr. McCray:

This letter is provided to you by Balzer and Associates, Inc., as a summary of review of the structural analysis completed for the floor slab at the commercial property located at the above referenced address in Roanoke, Virginia. The purpose of this analysis is to determine that loading capacity of the first floor concrete slab atop of the basement space.

The first floor of the commercial warehouse space is approximately 80,000 square feet with 40,000 square feet of the slab being atop a basement space. The existing concrete slab is 5" thick spanning atop wide flange steel joists supported by wide flange steel girders and columns. The typical column grid layout is 25 feet between column supporting the girder and 24 feet joist spans. The joists are located at third points along the length of the girders. Through the visual analysis of the floor joists and girders revealed that the joists were 16" deep wide flange sections and the girders were 18" deep wide flange sections with an additional 10" wide plated welded to the underside of the girder. Based upon visual inspection the joists were assumed to be W16x26 spaced at 6 feet 3 inches on center and the girder is assumed to be a W18x50 with a 1/2" x 10" steel plate. These assumed steel beam sections can support a live load of 125psf, which is the standard design load for a light storage warehouse building according to the 2012 Virginia Construction Code.

Please be in contact should you have any questions or require any additional information or assistance. Thank you for the opportunity to provide you with our professional services.

Sincerely,

**BALZER AND ASSOCIATES, INC.**

Michael J. Fitzgerald, P.E.  
Structural Engineer

