PARTNER
Engineering and Science, Inc.

M E M O R A N D U M

To: Patrica Kelly
Senior VP Property Management Services, Woods Road I, LLC

From: D. Matthew Stuart, P.E., S.E., P.Eng., F.ASCE, F.SEI, A.NAFE
Senior Consulting Structural Engineer, Partner Engineering and Science, Inc.

Date: June 10, 2024

RE: Slab on Grade Load Carrying Capacity
Existing Dollar Tree Store
671 J. Clyde Morris Blvd., Newport News, VA 23601

Project No#: 24-447928.3

The following information was provided from a separate Partner Geotechnical investigation, which served as the basis for the subsequent estimation of the equivalent uniform load carrying capacity of the existing concrete slab at the referenced location.

1. The existing concrete is a floating slab on grade and not pile supported.
2. Concrete Compressive Strength, f'c: Average 6,000 psi, with minimum f'c of 5,400 psi.
3. Slab thickness was approximately 4-inhes.
4. Modulus of Subgrade Reaction, k: 150 psi
5. Per a GPR scan, the slab is reinforced with Welded Wire Fabric (WWF) 6x6 (wire gauge unknown).

Based on the above information in conjunction with the recommendations of the Portland Cement Association (PCA) recommendation for the design of concrete floors on grade, and an assumed minimum WWF gage of W1.4 x W1.4 (i.e. As = 0.28 in^2 per foot), it was determined that the existing 4-inch slab on grade has a uniform load capacity of 100 pounds per square foot (PSF).

Sincerely,

Partner Engineering and Science, Inc.

COMMONWEALTH OF VIRGINIA
DENNIS MATTHEW STUART
Lic. No. 029761
PROFESSIONAL ENGINEER

D. Matthew Stuart, P.E., S.E., P.Eng, F.ASCE, F.SEI, A.NAFE
Senior Structural Consulting Engineer

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