Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

December 15, 2020
Project No. 800055001

Mr. Francis Lilly, AICP
Planning Director
City of Millcreek
3330 South 1300 East
Millcreek, Utah 84106

Subject: Geotechnical Addendum - Paver Recommendations - Revised
Millcreek Commons
Near 1300 East 3300 South
Millcreek, Utah

Dear Mr. Lilly:

Ninyo & Moore is pleased to submit this revised letter providing our recommendations for design of the proposed impermeable pavers. To form a basis for design of the paver section, we have assumed the following:

- A design Equivalent Single Axial Load (ESAL) value of 5,000 (approximately 5 light trucks and 1 delivery truck each day for 20 years).
- A subgrade resilient modulus (MR) of 7,600 pounds per square inch (psi).

Using these values, a structural number associated with the proposed paver areas was calculated using design procedures in accordance with the American Association of State Highway and Transportation Officials method of designing pavement (AASHTO, 1993) requirements. Based on these assumptions, we recommend the pavers be underlain by 13 inches of Untreated Base Course.

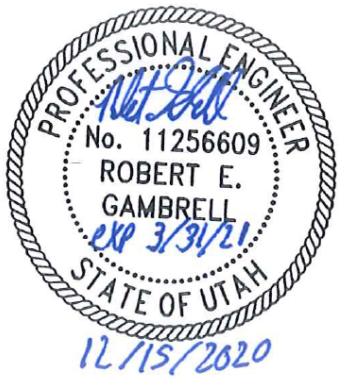
If the assumed design ESAL values are not considered appropriate, this office should be notified. In providing these recommendations for pavement sections, we have assumed that the Untreated Base Course material will conform to Section 02721 of the UDOT Standard Specifications for Road and Bridge Construction (SSRBC). Untreated Base Course material should be placed and compacted to 95 percent relative compaction, as evaluated by ASTM D 1557, and in accordance with Section 02721 of the UDOT SSRBC.

Adequate surface drainage should be provided to reduce the potential for ponding and infiltration of water into the subgrade materials. We suggest that the paver areas have a surface gradient of 1 percent or more. In addition, surface runoff from surrounding areas should be intercepted, collected, and not permitted to flow onto the pavers or infiltrate the base and subgrade. We recommend that perimeter swales, edge drains, curbs and gutters, or combination of these drainage devices be constructed to reduce the adverse effects of surface water runoff.

Respectfully submitted,
NINYO & MOORE

Robert E. Gambrell, PE
Project Engineer

REG/EDE/ts



Eric D. Elison, PE
Principal Engineer