

**IGES®**

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May 1, 2019

Jessica & Jared Schneider
3387 East 9980 South
Sandy, Utah 84092

IGES Project No. 02441-005

Subject: CIP Concrete Retaining Wall Evaluation
Schneider Residence
3387 East 9980 South
Sandy, Utah

Reference: IGES, 2017, Lock+Load and Concrete Retaining Wall Design Package, Schneider Residence, 3387 East 9980 South, Sandy, Utah, Project No. 02441-003, dated June 6, 2017

As requested, IGES is providing the following letter addressing the construction of the cast-in-place concrete wall constructed north of the Schneider residence. The wall was designed by IGES (2017) and was intended to both retain soils and provide some level of protection for the home to mitigate rockfall hazards.

Observations

IGES did not directly observe the wall during construction; information regarding construction is based on information provided by the Contractor (Limitless Construction, Mr. Jake Myler), and photos of the construction provided by same. Based upon a qualitative review of the provided photos, the rebar used in the construction appears to be of the correct size and has been tied in the correct positions and spaced appropriately (although direct measurements could not be made). The wall's foundation subgrade was not observed directly; however, based on the photos, and considering the wall was constructed a few feet into a natural slope, it is likely that the wall foundations were founded on relatively undisturbed native subgrade.

On May 1, 2019, IGES conducted a site visit to evaluate the completed wall. By observation, the wall appeared to be relatively straight and plumb. The wall does extend further to the east than originally designed, however this does not negatively impact the over-all performance of the wall. IGES did note that there was several feet of soil and rock stockpiled behind the rockfall barrier portion of the wall, just behind the home; we understand that this is a temporary condition, as the earth materials are being stockpiled there temporarily while the Lock-+Load MSE wall is being adjusted and the landscaping is being completed (Jessica Schneider, personal communication). No wall distress was observed.

Conclusions and Recommendations

Based on our limited observations and data provided by the Contractor, the retaining wall appears to have been constructed in general accordance with the referenced design documents and is considered acceptable from a geotechnical standpoint.

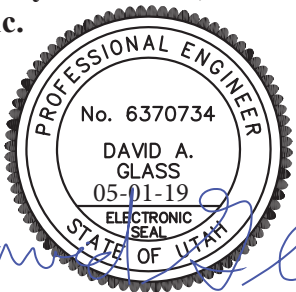
The soil stockpiled behind the wall should be removed as soon as feasible, as the wall is not designed for a full-height 6-foot retainage, and the stockpiled soil also compromises the ability of the wall to mitigate against rockfall (a clear distance of four feet is recommended). Temporary stockpiling is acceptable for a period of short duration to facilitate completion of the backyard improvements (about four weeks or less).

Closure and Limitations

IGES does not guarantee the contractor's work, nor do our services relieve the contractor or his subcontractors of their responsibility if defects are subsequently discovered in their work. IGES responsibilities did not include any supervision or direction of the work of the contractor or the contractor's personnel or subcontractors. The conclusions in this letter are based on limited observations and represent our engineering opinion as to the contractor's compliance with the original wall design documents.

We appreciate the opportunity to provide you with our services. If you have any questions, please contact the undersigned at your convenience at (801) 748-4044.

Respectfully Submitted,
IGES, Inc.



David A. Glass, P.E.
Senior Geotechnical Engineer

Attachments:

Figure 1 – Site Observations

Figure 2 – Photos Provided by the Contractor



Photos Taken on May 1, 2019



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Sandy, Utah

**Retaining Wall
Observation
Photos**

**Figure
1**



Photos Provided by Limitless Construction



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Schneider Residence
3387 East 9980 South
Sandy, Utah

**Retaining Wall
Contractor
Photos**

**Figure
2**