January 12, 2022

Tapani Materials
PO Box 1900
Battle Ground, WA 98604

Attention: Shane Tapani

Slope Stability Considerations
La Center Rockery
31313 NW Paradise Park Road
La Center, Washington
Project: Tapani-20-01

INTRODUCTION

NV5 has prepared this letter to discuss slope stability considerations associated with the proposed La Center Rockery in La Center, Washington. The approximately 4.4-acre site is located at 31313 NW Paradise Park Road.

Based on correspondence with Tapani Materials, the site will be developed with a new rockery. New fill will not be placed as part of the development and the rockery will utilize the existing gravel parking area for all operations. All activities will be conducted west of the up-to-20-foot-tall slope traversing southeast to northwest on the property.

We understand that the City of La Center has requested a geotechnical engineer evaluate if the proposed rockery will negatively impact the slope stability at the site. To evaluate slope stability and impacts from the proposed use, we conducted a geotechnical reconnaissance at the site and spoke to the property owner.

BACKGROUND

Based on a review of historical aerial photography and discussion with the existing owner, the slope traversing southeast to northwest is a cut slope that was constructed approximately 40 to 50 years ago for the building southeast of the site. With the exception of the minor grading at the top of the slope, additional activity has not been conducted since the slope was cut. We understand that the extreme northeastern portion of the site previously operated as a landfill.

SITE RECONNASIANCE

A reconnaissance was conducted at the site on January 11, 2022, by a geotechnical engineer licensed in the state of Washington with 17 years of experience in Clark County, Washington. The approximately 4.4-acre site is located at 31313 NW Paradise Park Road in La Center, Washington. It is east of NW Paradise Park Road approximately 0.25 mile south of the intersection of NW La Center Road and NW Paradise Park Road.

The western portion of the site is currently a gravel parking area used for storage and logistics. The parking area grades gently downward from southwest to northeast between elevations of approximately 278 and 270 feet.

In the center of the site, in an approximately southeast to northwest orientation, is the previously described cut slope. The slope varies in height from approximately 5 feet in the northern portion to approximately 20 feet in the southern portion. The slope is generally vegetated with brush and mature trees and varies between approximately 4H:1V and 1.5H:1V. There is a small drainage at the base of the slope that transports seasonal water south and away from the slope. Based on correspondence with the owner and observations during the reconnaissance, slope failures do not appear to have occurred over its approximately 40- to 50-year existence. Some evidence of erosion was observed on portions of the slope from heavy rainfall events where stormwater flowed over the face of the slope from the parking area. We did not observe evidence of "pistol butted" trees on the slope or seepage within the slope face.

East of the slope is an access road and an approximately 7,000-square-foot metal storage building southeast of the site. East of the access road, the topography slopes upward and toward the former landfill.

SUMMARY AND CONCLUSIONS

The proposed rockery will consist of storage and sale of bulk landscape materials adjacent to NW Paradise Park Road and away from the slope in the center of the site. Based on discussion with the existing owner, the slope is a man-made cut slope and has been in place for approximately 40 to 50 years without stability issues. We did not observe evidence of prior slope instability or seepage that could lead to future slope failures. Based on the development use and its location with respect to the slope, it is our opinion that the proposed rockery will not negatively impact the existing slope at the site. To reduce the potential for future instability, we recommend that material not be stored within 20 feet of the top of the slope and that surface water from rockery activities not be allowed to flow over the face of the slope.

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We appreciate the opportunity to submit this letter. Please call if you have questions concerning the information provided.

Sincerely,

NV5

Nick Paveglio, P.E.
Principal Engineer

Signed 01/12/2022

cc: Janette Pipkin, Tapani Materials (via email only)

NNP:sn
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