



Project No. G2755-42-01 November 15, 2021

VWP-OP Nirvana Owner, LLC 2390 East Camelback Road, Suite 305 Phoenix, Arizona 85016

Attention:

Mr. Steven Schwarz

Subject:

SUPPLEMENTAL GEOTECHNICAL FAULT INVESTIGATION

NIRVANA PROPERTY 821 MAIN STREET

CHULA VISTA, CALIFORNIA

References: 1.

- 1. Preliminary Geotechnical Investigation, Nirvana Industrial Buildings and Self-Storage Complex, 821 Main Street, Chula Vista, California, prepared by Geocon Incorporated, dated September 14, 2021 (Project No. G2755-42-01).
- 2. Update Geotechnical Report and Grading Plan Review, Energy Park, Chula Vista, California, prepared by Advanced Geotechnical Solutions, Inc., dated September 29, 2014 (Report No. 1404-05-B-2).

Dear Mr. Schwarz:

In accordance with your request, we have performed a supplemental geotechnical investigation to evaluate the presence or absence of a segment of the La Nacion Fault which is shown transecting the site on regional fault maps and United States Geological Survey (USGS) databases.

The La Nacion Fault Zone is comprised of a series of north and northwest trending fault segments mapped west and south of Interstate 805 and Interstate 8, respectively. The relative age of displacement on all segments of the fault is listed in the USGS fault database as "Undifferentiated Quaternary (<1.6 million years). Active faults, as defined by the State of California, are faults with known displacement within the last 11,700 years and are typically mapped within State delineated "Earthquake Fault Zones." Proposed development within an Earthquake Fault Zone requires a fault study to obtain development approval from the local governing agency. The La Nacion Fault is not mapped within an Earthquake Fault Zone, as defined by the State of California. Locally, the City of San Diego Seismic Safety Study maps show all segments of the La Nacion fault as "Potentially Active" implying possible displacement within the last 100,000 years, however, these maps are only applicable to areas within the San Diego City limits.

The USGS database shows a segment of the La Nacion Fault transecting the western edge of the site with the designation "location inferred," implying that no direct field evidence is available supporting the presence of the fault segment in the mapped location. The regional San Diego geologic map (Kennedy and Tan, 2008) shows the fault segment mapped in the same location as the USGS database. However, the regional geologic map depicts the fault as "concealed," implying it is not visible at the

ground surface (or inferred at the ground surface by juxtaposed unconformable geologic units) and is buried by surficial geologic units such as the Older Alluvium or Terrace Deposits mapped at the site (References 1 and 2). The Terrace Deposits at the site are interpreted as middle to late Pleistocene in age, or between approximately 12,000 and 1.8 million years old, substantially older than the State definition of an active fault.

Figure 1 shows the locations of fault trenches performed by Advanced Geotechnical Solutions (AGS; Reference 1; TP-1), and by Geocon Incorporated (FT-1; excavated on November 4, 2021). Fault trench locations and the fault trench log for FT-1 are presented on Figure 1. AGS did not provide a fault trench log in Reference 1.

Based on our field logging, there is no evidence of faulting or offset in the Pleistocene age Terrace Deposits exposed in our fault trench excavation. Our field observations support the conclusions presented in the referenced geotechnical reports. Therefore, we opine that the La Nacion fault segment depicted on regional maps and fault databases is not active as no evidence of faulting in Pleistocene age sediments has been observed on the site. The La Nacion fault segment, if present at the site, is confined to the Oligocene age Otay Formation (approximately 23 to 34 million years old) that underlies the Quaternary Terrace Deposits at the site and will not impact site development. A fault setback for the proposed development is not required.

If you have any questions regarding this letter, or if we may be of further service, please contact the undersigned at your convenience.

Very truly yours,

GEOCON INCORPORATED

Rodney C. Mikesell

GE 2533

RCM:RSA:arm

Attachments: Figure 1

(e-mail) Addressee

Rupert S. Adams CEG 2561

RUPERT S.
ADAMS
NO. 2561
CERTIFIED
ENGINEERING
GEOLOGIST

