PEAK & ASSOCIATES, INC.



CONSULTING ARCHEOLOGY

January 15, 2021

TECHNICAL MEMORANDUM

TO: Jason Smith, Project Manager, Aggregate Resource Development, Teichert Materials

FROM: Melinda Peak, Peak & Associates

SUBJECT: 2021 Schwarzgruber Mine Reclamation Plan Minor Modification Evaluation

In 2011, Teichert Aggregates ("Teichert") proposed to mine and reclaim the existing Schwarzgruber aggregate mining property ("Project Site") for the purpose of supplying Teichert's existing Woodland aggregate mining and processing facility.

Peak & Associates completed a cultural resource study of the property, and prepared a report for review by the Corps of Engineers and the County of Yolo: (Determination of Eligibility and Effect for the Schwarzgruber Mining and Reclamation Project, Yolo County, California, 2011).

The work undertaken was designed to identify and evaluate any cultural resources within the project area, and included a record search, historic map research, interview with the former mine operators, preparation of a DPR 523 site record for the existing mining related building complex and an evaluation of the cultural resource. The building complex was found to be not eligible for the National Register of Historic Places, and it was believed that there would be no impacts to significant cultural resources in the site from any proposed activities.

Mining and reclamation activities have occurred on the Project Site, and Teichert seeks to make minor modifications to the Reclamation Plan to create more riparian habitat.

The Project Site is within the active stream channel of Cache Creek according to the geologic mapping, so it would be Quaternary/Recent. It can be concluded that all of the upper layers of soil and gravel in the 700-foot setback were removed many years ago by the Schwarzgruber family.

A more detailed statement on the Project Site's geology:

Located in the lower Cache Creek Basin, the Schwarzgruber mine site, along with the other Woodland Properties are within the historic floodplain of Cache Creek. Identified on geologic maps, the Cache Creek Mineral Resource Zone extends along Cache Creek from

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Capay to the town of Yolo (CDMG, 1985). Regional geologic mapping shows that the active channel is classified as Quaternary stream channel or Qsc. Lying outboard of Qsc and parallel to the stream channel is Quaternary alluvium (Qa). These deposits have been the target of mining activities for many years. Qsc and Qa are composed of unconsolidated, interbedded gravel, sand, silt and clay deposited by the present-day fluvial system which drains the Coast Ranges (Helley and Harwood, 1985). In other words, these deposits consist of alluvium derived from the Franciscan Formation, Great Valley Sequence and other units exposed in the Coast Ranges. The Schwarzgruber mine site is mapped as Qsc, being within the active Cache Creek stream channel.

Drilling data and mining experience throughout the Woodland properties indicates that the deposits consist of alternating layers of clean sand and gravel, clayey sand and gravel and clay to silt layers. In general, sand & gravel layers range from 10 to 45 feet in thickness while finer silt-clay layers range from 5 to 16 feet in thickness. Median size gravel is roughly 3/8-inch size and nearly all of the aggregate is minus 3-inch size. According to Goldman, 1964, predominant rock types identified in Qa throughout the Woodland properties are: metagraywacke, greywacke and chert while less common rock types include serpentine and granitic (CDMG, 1964).

In conclusion, the proposed modifications will occur in areas in which the previous soils and gravels have been removed many years ago. The reported removal of the Pleistocene and Holocene gravels and soil would have removed any evidence of surficial or buried traces of historic period resources, prehistoric period resources, and paleontological resources that could have been present in the Project Site. The modifications proposed will in no way impact cultural or paleontological resources.

If you have any further questions, please do not hesitate to call.

Sincerely,

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