PALEO ENVIRONMENTAL ASSOCIATES
Paleontologic Resource Management

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September 18, 2013

Ms. Jennifer M. Sanka, M.A.
Atkins North America, Inc.
650 East Hospitality Lane, Suite 460
San Bernardino, CA 92408

Subject: final paleontologic resource evaluation for Ling Yen Mountain Temple parcel

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The Ling Yen Mountain Temple parcel lies immediately above the southern foot of the San Gabriel Mountains and just north of Rancho Cucamonga in unincorporated San Bernardino County. Development is proposed in only the southeastern portion of the parcel. The development area is bounded to the south by Decliff Drive and to the east and north by Dawnridge Drive (Figure 1). As mapped by Dibblee (2003a, 2003b) and in Figure 1, that portion of the parcel is underlain by Quaternary alluvial deposits, including Pleistocene older alluvium, Holocene younger alluvium and stream channel deposits, and historic artificial fill. Mark A. Roeder of Paleo Environmental Associates, Inc., conducted a cursory field survey of the parcel on May 30th (as discussed in earlier report by Lander 2013) and a second survey of the four, recently excavated, geotechnical trenches was conducted on September 13th. Each of the trenches was about 1,000 feet long and 15 feet deep. The upper 1 to 2 feet of the trench walls were found to consist of rocky soil overlying 13 to 14 feet of tan, poorly sorted, fanglomerate comprising subrounded to angular cobbles in a pebbly, coarse-grained sandy matrix. Such fanglomerate deposits are generally too coarse grained to contain fossil remains, whereas younger alluvium and stream channel deposits are usually too young to contain remains old enough to be considered fossilized. For these reasons, no mitigation measure is recommended in support of earth-moving activities associated with development of the southeastern portion of the parcel. On the other hand, if remains are uncovered by such activities, those activities will avoid the remains until a paleontologist approved by the County of San Bernardino has been called to the site, evaluated the remains, and removed them, if warranted. If appropriate, the paleontologist will recommend mitigation measures to be implemented following the evaluation of the remains.

Dibblee, T.W., Jr. 2003a. Geologic map of the Devore Quadrangle, San Bernardino County, California. *Dibblee Geology Center Map* DF-105.

Dibblee, T.W., Jr. 2003b. Geologic map of the Cucamonga Peak Quadrangle, San Bernardino County, California. *Dibblee Geology Center Map* DF-106.

Lander, E.B. 2013. Preliminary paleontologic resource evaluation for Ling Yen Mountain Temple parcel. Paleo Environmental Associates, Inc., project no. 2013-8. Prepared for Atkins North America, Inc.

Thank you for your consideration.

Cordially,

E. Bruce Lander

E. Bruce Lander, Ph.D.
President

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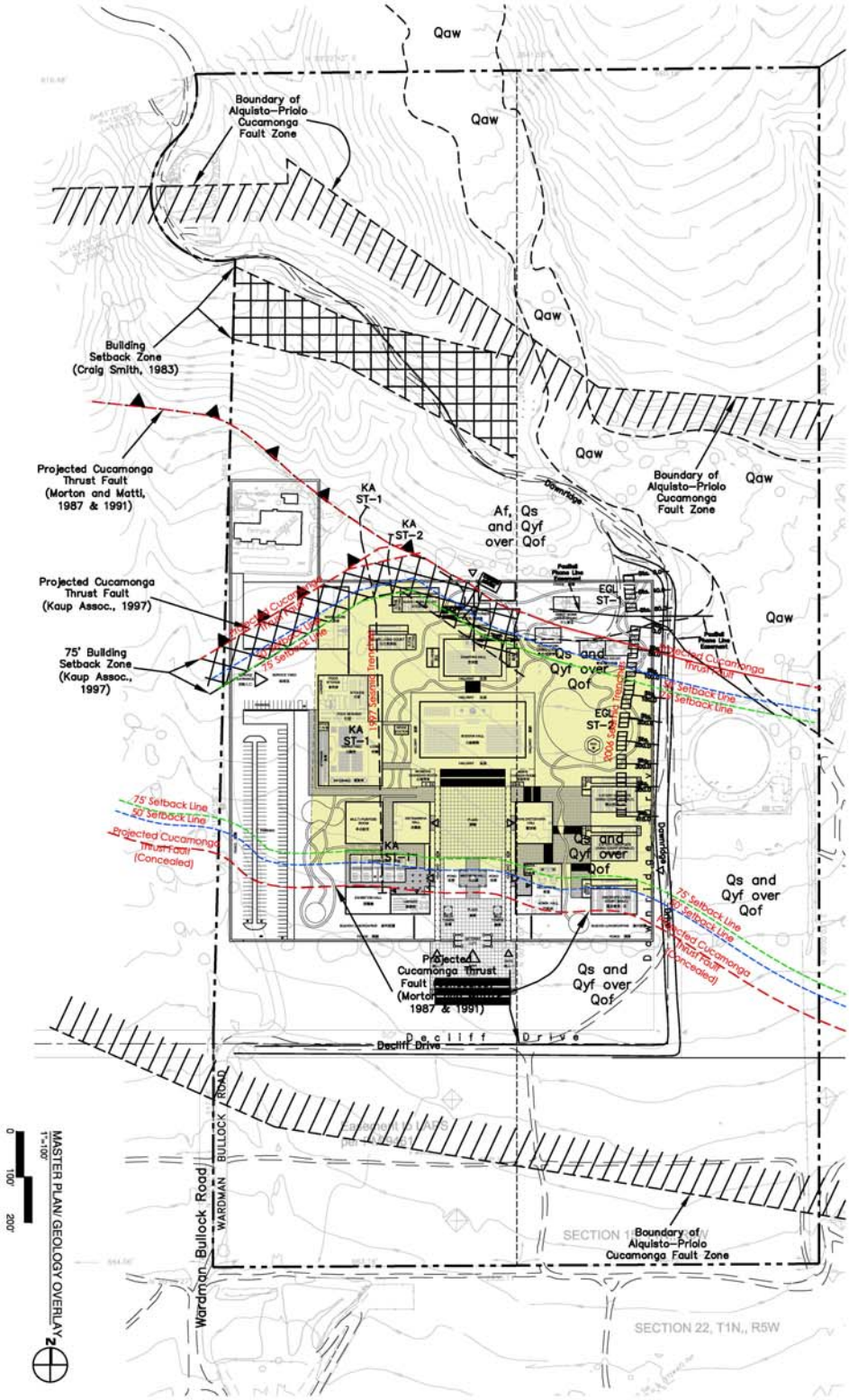
ling yen temple-fr-2.doc


Qaw
Boundary of Alquisto–Priolo Cucamonga Fault Zone
Building Setback Zone (Craig Smith, 1983)
Projected Cucamonga Thrust Fault (Morton and Matti, 1987 & 1991)
Projected Cucamonga Thrust Fault (Kaup Assoc., 1997)
75' Building Setback Zone (Kaup Assoc., 1997)
KA ST-1
KA ST-2
Af, Qs Qyf and over Qof
EQL ST-1
Qs and Qyf over Qof
75' Setback Line
50' Setback Line
Projected Cucamonga Thrust Fault (Concealed)
Projected Cucamonga Thrust Fault (Morton 1987 & 1991)
Decliff Drive
Bullock Road
Wardman
SECTION 22, T1N,, R5W
MASTER PLAN/ GEOLOGY OVERLAY

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July 25, 2013

Ms. Jennifer M. Sanka, M.A.
Atkins North America, Inc.
650 East Hospitality Lane, Suite 460
San Bernardino, CA 92408

Subject: preliminary paleontologic resource evaluation for Ling Yen Mountain Temple parcel

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The Ling Yen Mountain Temple parcel lies immediately above the southern foot of the San Gabriel Mountains and just north of Rancho Cucamonga in unincorporated San Bernardino County. As mapped by Dibblee (2003a, 2003b), the parcel is underlain by unfossiliferous metasedimentary rocks comprising hornblende gneiss with marble lenses, and Quaternary alluvial deposits, including Pleistocene older alluvium and Holocene younger alluvium and stream channel deposits. Mark A. Roeder of Paleo Environmental Associates, Inc., conducted a cursory field survey of the parcel on May 30th and found that the alluvial deposits consisted mostly of gravel fanglomerate. Such deposits are generally too coarse grained to contain fossil remains, whereas younger alluvium and stream channel deposits are usually too young to contain remains old enough to be considered fossilized. On the other hand, Mr. Roeder observed a paleosol (preserved soil horizon) in the cut near the water tank situated behind the temple. Paleosols are comparatively fine grained and often contain fossil remains, particularly of smaller land mammals. No additional work beyond the preparation of this report has been conducted in support of the proposed project.

Dibblee, T.W., Jr. 2003a. Geologic map of the Devore Quadrangle, San Bernardino County, California. *Dibblee Geology Center Map* DF-105.

Dibblee, T.W., Jr. 2003b. Geologic map of the Cucamonga Peak Quadrangle, San Bernardino County, California. *Dibblee Geology Center Map* DF-106.

Thank you for your consideration.

Cordially,

E. Bruce Lander

E. Bruce Lander, Ph.D.
President

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