COLORADO
Department of Transportation
Division of Transportation Development

Environmental Programs Branch
2829 W. Howard Place
Denver, CO 80204-2305

TO: Shannon Ford

FROM: F. Nicole Peavey

DATE: 3 September 2020

RE: Paleontological assessment for Project FBR R200-266 Region 2 Bridges Bundle Grant Part 1

SA: 23558

Project FBR R200-266, for Region 2 Bridges Bundle Grant, Part 1, located at 14 discrete locations in Park, Fremont, Teller, and Otero counties, will not require on-the-ground reconnaissance for paleontological resources.

According to the best available geologic map of each project area:

Bridge Number	Hwy	MP	County	Geology	PFYC
G-12-C	9	71.445	Park	Qa - Holocene alluvium	2
J-14-C	9	20.107	Park	Qp - Holocene alluvium	2
J-15-G	24	15.97	Fremont	Xqd - Precambrian quartz diorite	1
I-13-G	24	227.095	Park	Qa1 - Holocene alluvium	2
I-15-AO	24	271.9	Teller	Ypp - Precambrian Pikes Peak Granite	1
I-15-T	24	271.691	Teller	Ypp - Precambrian Pikes Peak Granite	1
H-13-N	350	240.686	Park	Qa1 - Holocene alluvium	2
M-21-B	350	51.682	Otero	Kcgg - Cretaceous Carlile Shale, Greenhorn Limestone, and Graneros Shale	3
M-21-C	350	50.582	Otero	Qal - Holocene alluvium	2
M-21-J	350	57.069	Otero	Qal - Holocene alluvium	2
M-22-U	350	69.817	Otero	Knf - Fort Hays Limestone Member of the Niobrara Formation	3
M-22-Y	350	57.474	Otero	Qal - Holocene alluvium	2
N-21-C	350	47.131	Otero	Kcgg - Cretaceous Carlile Shale, Greenhorn Limestone, and Graneros Shale	3
N-21-F	350	48.744	Otero	Qal - Holocene alluvium	2

Potential Fossil Yield Classification, or PFYC, is a designation of a geological unit's paleontological sensitivity, and ranges from very low (PFYC 1) to very high (PFYC 5). Units designated PFYC 3 or above often require varying

degrees of survey or monitoring; however, in this case, the only PFYC 3 units identified were on large-scale maps where less sensitive surficial deposits may have been removed. Additionally, no PFYC 4 or 5 units were identified in the project area.

Furthermore, I know of no previously recorded fossil localities within the proposed project limits. As a result, paleontological clearance with no attached mitigation stipulations is recommended for project FBR R200-266. As always, if paleontological resources are uncovered during project construction, work in the immediate area of the find should cease, and I should be notified as soon as possible per Section 107.23 of the Standard Specifications.

Geologic Map References

Barkmann, P.E., Houck, K.J., Dechesne, M., Lovekin, J.R., and Johnson, E.P., 2017, Geologic map of the Hartsel quadrangle, Park County, Colorado: Colorado Geological Survey, Open-File Report 17-04, scale 1:24,000.

Epis, R.C., Wobus, R.A., and Scott, G.R., 1979, Preliminary geologic map of the Black Mountain quadrangle, Fremont and Park Counties, Colorado: U.S. Geological Survey, Open-File Report OF-79-652, scale 1:62,500.

Kirkham, R.M., Houck, K.J., Carroll, C.J., and Heberton-Morimoto, A.D., 2012, Antero Reservoir Geologic Map, Park and Chaffee Counties, Colorado: Colorado Geological Survey, Open-File Report OF-12-01, scale 1:24,000.

Scott, G.R., 1968, Geologic and structure contour map of the La Junta quadrangle, Colorado and Kansas: U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-560, scale 1:250,000.

Widmann, B.L., Bartos, P.J., Madole, R.F., Barba, K.E., and Moll, M.E., 2004, Geologic Map of the Alma Quadrangle, Park and Summit Counties, Colorado: Colorado Geological Survey, Open-File Report OF04-03, scale 1:24,000

Wobus, R.A., and Epis, R.C., 1978, Geologic map of the Florissant 15-minute quadrangle, Park and Teller Counties, Colorado: U.S. Geological Survey, Miscellaneous Investigations Series Map I-1044, scale 1:62,500.

Wobus, R.A., Epis, R.C., and Scott, G.R., 1979, Geologic map of the Cover Mountain quadrangle, Fremont, Park, and Teller Counties, Colorado: U.S. Geological Survey, Miscellaneous Investigations Series Map I-1179, scale 1:62,500.