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2 March 2017

Ms Shannon Allen, AICP
Planning and Development Department, Current Planning Division
City of Berkeley
2120 Milvia Street
Berkeley, CA 94704

RE: Public Comment for the Draft Environmental Impact Report for the 1900 Fourth Street Project,
State Clearinghouse Number 2016022038

Dear Ms Allen:

I'm commenting on the Draft Environmental Impact Report (DEIR) for the 1900 Fourth Street Project (project). I'm commenting as a Registered Professional Archaeologist who has worked in California since 1996. Specifically, in relevance to this project:

- I rediscovered the location of the "lost" West Berkeley Site (CA-ALA-307) in 1999 working for Archaeological Mapping Specialists. This work was the basis upon which Berkeley's City Landmark 227 was established.
- I was the Principal Investigator for the archaeological work conducted by Garcia and Associates on behalf of the City of Berkeley Planning Department and Public Works Department for capital improvement projects in West Berkeley during 2001 and 2002. As a part of this project, CA-ALA-307 was spatially defined and evaluated for listing in the California Register of Historical Resources (California Register) and the National Register of Historic Places (National Register).
- I consulted with Berkeley's Planning Department, Public Works Department, and Landmarks Preservation Commission from 1999-2002 on the management of CA-ALA-307 and other archaeological resources in the area.
- As a resident and property owner in West Berkeley at that time, property that partially included archaeological site CA-ALA-390, I took an active interest in the historical resources of this neighborhood, exploring, monitoring, and assessing historical resources, development activities, and archaeological work.
- Some of the publications I have written about CA-ALA-307 are cited in the DEIR.

This background gives me the insight and standing to make the following comments.

My comments pertain to the Cultural (Archaeological) Resources sections of the DEIR. To aid in your response to my comments, I've organized them as numbered points in outline form.

Setting

1. The blue box in Figure IV.A-1 on Page 71 claims to show the "Designated Shellmound Location" attributed to CA-ALA-307. The spatial depiction of the resource is incorrect. The official spatial designation of the site for its listing in the California Register, reported on Form DPR 523, spans portions of eight blocks (and adjacent streets and the railroad), not two blocks as shown in the DEIR

figure. The City of Berkeley Landmark 228 boundaries are different, but for California Environmental Quality Act (CEQA) purposes it is the California Register-recognized boundary that must be used. Thus, the entire project area is located within the boundaries of CA-ALA-307.

2. Throughout the DEIR, the historical resource that is mentioned is the “shellmound”. This is not the resource that must be considered in the DEIR. The significant historical resource that the DEIR must address is archaeological site CA-ALA-307.
3. The shellmound is one archaeological feature within the boundaries of CA-ALA-307. There are significant, undisturbed, cultural and natural deposits within CA-ALA-307 that are *not directly related* to the shellmound. These deposits are documented in archaeological reports cited in the DEIR, but are not discussed or considered within the DEIR.

One of the names for CA-ALA-307 that has been used historically is the West Berkeley Shellmound. This is just a “shortcut” name for this entire historical resource; both the parts that relate to the actual shellmound (the archaeological feature) and other archaeological components of the site within the site boundary. The resource that the DEIR must consider, the resource that is listed on the California Register, is CA-ALA-307.

For example, the DEIR erroneously states on Page 70 that “Due to its listing in the California Register of Historical Resources and status as a City Landmark, the Shellmound is a “historical resource” as defined in the CEQA Guidelines (Section 15064.5(a)).” The shellmound is not the historical resource! Site CA-ALA-307 is the historical resource....and the entire project area falls within the boundaries of CA-ALA-307.

4. The DEIR looks at the parcel in isolation, and this is in error given that it is in the middle of a significant archaeological site. Cultural resources must be examined as a whole and in their context. This is codified in the significance criteria of the California and National registers with regards to integrity, as referenced on Page 88 of the DEIR. Location, setting, and association are factors that must be considered and context must be examined to consider these factors. Resources, or parts of resources (i.e. the project parcel) can’t be treated in isolation. While the project parcel is located in the middle of a site listed on the California Register, the DEIR and the supporting 2014 archaeological report, ignores this. Instead, it only acknowledges the Berkeley Landmark boundary (not the site boundary), assumes that any data outside the project parcel may be ignored, and seeks to identify and evaluate deposits that exist within the parcel. The site and its cultural and natural deposits have already been determined to be significant and this was done in 2003. The decision in *Madera Oversight Coalition, Inc. v. County of Madera* (2011, 199 Cal. App. 4th 48) states that it’s not acceptable to go back and “verify” or reevaluate an existing evaluation of eligibility.
5. Significant archaeological deposits at CA-ALA-307 include more than cultural deposits. One of the reasons this site is listed on the California Register is because it can provide paleoenvironmental data critical to understanding why people chose this location as the first settlement in the Bay Area following the stabilization of San Francisco Bay. These data are located in the *natural* deposits that underlie the cultural deposits. Yet, the DEIR only focuses on cultural deposits that may exist within the project area. These data-laden natural deposits must be considered as significant within the DEIR.

6. The DEIR (Page 67) states that a 2014 archaeological testing report (Pastron 2014) was used as a primary source of technical information used in the identification of baseline conditions. For CEQA purposes (to identify historical resources in the project area), the 2014 archaeological project was not necessary. The entire project area is located within the boundary of CA-ALA-307, a resource listed on the California Register, and this was established in 2003 by the U.S. Federal Highway Administration with concurrence by California State Historic Preservation Officer Dr. Knox Mellon. No additional archaeological work was needed to provide locational or eligibility data for the DEIR. Further, this archaeological work should not have been allowed by the City as it unnecessarily destroyed portions of a National Register determined-eligible site, a site listed on the California Register, and a Berkeley Landmark. Undertaking such work was unnecessary, and perhaps in violation of City law and Berkeley's eligibility criteria as a Certified Local Government.
7. The DEIR (Page 70) states that the 1999, 2000, and 2014 archaeological work conducted in the project area was done under the supervision of archaeologists that meet the Secretary of the Interior's Professional Qualifications Standards for Archaeology. Federal qualification standards are not appropriate for a CEQA project without a federal nexus. The qualification standards that are appropriate are the standards of the Society for California Archaeology developed in response to a California State Historical Resources Commission Standards and Guidelines White Paper (2010). Preferable, though, are the standards established by the Register of Professional Archaeologists. These standards are preferable because they not only provide base-line qualification standards for a professional archaeologist, Registered Professional Archaeologists must abide by *performance standards* codified in a Code of Conduct and Standards of Research Performance. This provides *public accountability* as grievances may be filed against Registered Professional Archaeologists by the public and professionals alike for failure to uphold professional conduct and standards. None of the archaeological work done within the project area was under the supervision of a Registered Professional Archaeologist.
8. Although used during the 2014 archaeological work in the project area, a ground penetrating radar (GPR) report has not been made available. Typically, archaeological work using subsurface geophysics will include a separate technical report to support the specialized study. This is important at CA-ALA-307 because the sediment characteristics and conditions within the site area are not conducive to the use of GPR as a method. In particular,
 - 8.1. GPR electromagnetic energy will not penetrate salt water and the depth of the salt water table could be above the depth of archaeological deposits (e.g. see photo on DEIR Page 74 showing a high level of ground water),
 - 8.2. GPR electromagnetic energy will have difficulty penetrating clay-rich sediments and these types of sediments are known to exist throughout the site area, and
 - 8.3. GPR data are difficult to interpret and base conclusions upon. Conclusions based on GPR data are used in this DEIR, yet data are not provided to allow the conclusions to be evaluated.
9. The DEIR's claim (Page 74) that the methods used in the 2014 study are "consistent with standard archaeological practice, and that the study represents a reasonable and good faith effort to identify archaeological deposits in the Project site" are not supported. Most problematic are the following:
 - 9.1. The review of prior research showed that pockets of undisturbed deposits, and human remains, exist around the exterior of the project area. No data were presented to suggest that this pattern doesn't continue on the interior of the project area. Given this, the sampling design used in the 2014 archaeological work, focused on two specific areas, was inappropriate as a method to identify cultural deposits within the project area given this *a priori* knowledge. Due

- to this methodological oversight, conclusions that deposits don't exist within the project area are not supported.
- 9.2. Excavation at an archaeological site already listed on the California Register of Historic Resource was unnecessary for CEQA compliance, is not customary practice, and destroyed archaeological deposits.
 - 9.3. The use of ground penetration radar (GPR) as a method was questionable given *a priori* knowledge of the sediments and hydrology, and that a GPR technical report was not provided.
 - 9.4. The use of the U.S. Secretary of Interior's professional qualification standards do not apply, and do not inform on professional conduct and standards for research performance.
10. Given these points (9.1-9.4), to assist the City in reviewing, evaluating, and guiding the technical archaeological work required to fulfill its CEQA requirements on this project, I recommend that the City establish and convene a "third-party" peer review committee of Registered Professional Archaeologists experienced in both scholarly and compliance aspects of Bay Area archaeology. There is precedence to do this from other CEQA projects with complicated and controversial historical resource issues. To assist with the longer-term stewardship and management of archaeological resources within the City, I recommend that a designated Registered Professional Archaeologist position be added to the Landmarks Preservation Commission.
11. The DEIR statement (Page 74) that "no evidence was found of intact primary Shellmound deposits anywhere within the Project site" is irrelevant.
- 11.1. The shellmound is one feature within Site CA-ALA-307. Significant archaeological deposits that are not directly associated with the shellmound have been documented at the edge of the project site area. These deposits have no less, and in fact may have more, archaeological significance than deposits from the shellmound itself. Given the inappropriate methods used to investigate potential deposits within the project area, the probability is high that such deposits do exist but were not located.
 - 11.2. Natural deposits underlying the cultural deposits also are significant deposits given the reasons the site has been listed in the California Register. These deposits were not discussed in the DEIR, nor were they investigated in the 2014 archaeological report.
 - 11.3. California Register eligibility Criterion 4 includes a past-tense clause: "*has yielded...* information important to the prehistory or history". Thus, this site is eligible because of seminal information it *has provided* in the past...as well as it's potential to provide information in the present/future. This was not considered in the DEIR, yet this information existed as a part of the record of eligibility. Thus, it is irrelevant whether or not intact cultural deposits are present within the site. The site is significant and the project will have an adverse effect upon it. Recovering archaeological data alone will not adequately reduce these effects to a less-than-significant level. Additional mitigation is required.
12. As correctly noted in the DEIR on Pages 76-78, there are four criteria of eligibility met by CA-ALA-307. To reduce the level of significance of the project impacts to a less-than-significant level, each criterion must be addressed and mitigation must be developed to address that specific criterion of significance. Currently, the mitigation measures proposed in the DEIR do not reduce the level of significance to a less-than-significant level for *any* of the four criteria, including Criterion 4.
13. On Page 79, the DEIR notes that the 1911 Sanborn Fire Insurance map of the project site depicts Strawberry Creek crossing the southern third of the property. Note, however, that this is a relocated and channelized "creek". The creek was relocated to the project parcel and channelized in

approximately 1874 as indicated on historical maps. Prior to 1874 maps show the natural creek location farther to the south. The natural creek bank can still be seen today in the microtopography at Addison Street.

14. Regarding the eligibility evaluation of CA-ALA-307, the DEIR states that “GANDA’s study also evaluated the Shellmound for its eligibility for listing in the National Register of Historic Places, based on cultural deposits identified outside of the current Project site.” This is incorrect. The Garcia and Associates eligibility recommendation, done on behalf of the City of Berkeley, recommended the entire site (not the shellmound in isolation) of CA-ALA-307 eligible for listing based on a wide range of information that included archaeological data from *within* the parcel.
15. On Page 74, the DEIR states that “The archaeological testing program determined that Shellmound materials identified within the parking lot in 2000 are in secondary deposition (Figure IV.A-2). That is, while these materials possibly originated from CA-ALA-307, they were likely relocated due to natural creek deposition or during one of many episodes of site disturbance and grading activities that occurred in the vicinity in the late-19th or early-20th century. No evidence was found of intact primary Shellmound deposits anywhere within the Project site.”
 - 15.1. The parking lot is within the boundaries of CA-ALA-307, so there is little doubt that disturbed deposits originated from the site...although they may not have originated from the shellmound feature at the site. As noted, there are significant undisturbed cultural and natural deposits not directly related to the mound still remaining within the site boundary.
 - 15.2. Deposits would not likely have been redeposited by the creek, as the natural, pre-1874, creek location was not located on the project parcel.
 - 15.3. Historic data indicates that the project parcel, while the subject of some building and disturbance during the 19th and 20th centuries, is one of the least disturbed parcels in the area. Data indicate that the majority of this parcel has *never* been built upon.
 - 15.4. Finally, while no intact primary archaeological deposits were found within the project area, it doesn’t mean that they are not there.
 - 15.4.1. The archaeological sampling strategy was not appropriate for locating the pockets of cultural material that data suggest are likely to exist within the parcel.
 - 15.4.2. Further, archaeological work did not even address the issue of the significant natural deposits within the project area, and these deposits also are not addressed in the DEIR.
 - 15.4.3. Finally, note that human remains have the same probability of being located in disturbed cultural deposits as undisturbed cultural deposits. Given the archaeological and historical data demonstrating that a large number of human remains have, and continue to be, discovered within the boundaries of CA-ALA-307, the probability of human remains within the project parcel is high.

Impacts

Potential Impacts to Historical Resources (Page 94)

16. That the proposed project would occur within the boundary of Berkeley Landmark 227 is true, but of less importance than the fact that the project parcel is entirely within the boundaries of CA-ALA-307, a site that is listed on the California Register and that has been determined eligible for listing on the National Register. Continuing to only reference the local landmark listing in the DEIR is misleading and has the effect of lessening the importance of this significant historical resource.

17. While undisturbed cultural deposits have not been located within the project parcel, they likely exist.
 - 17.1. The archaeological sampling design utilized to locate deposits in 2014 was inappropriate given the *a priori* knowledge of the distribution of intact deposits in the site that the investigators acknowledge in the 2012 archaeological report (Pastron 2012) on the project parcel, a report not discussed in this DEIR.
 - 17.2. Such a strategy would *not* be expected to identify deposits.
 - 17.3. Additionally, archaeological excavations in 2014, 11 years after the site was listed on the California Register, were unnecessary for the preparation of an EIR.
 - 17.4. Given the reasons for CA-ALA-307's eligibility under Criterion 4, the natural deposits that underlie the cultural deposits also are significant archaeological deposits. Thus, disturbance of these deposits is also a substantial adverse change to this historical resource. These deposits were not investigated in the project parcel, are not discussed in the DEIR, and must be addressed.

Thus, as concluded in the DEIR, the proposed project would have a substantial adverse change on a historical resource.

Impact CUL-2 (Page 94).

18. The resource for which project construction *will* have a substantial adverse change in the significance of a historical resource is the West Berkeley Shellmound (City Landmark 227), but more importantly it is archaeological site CA-ALA-307. The City Landmark is a smaller area within the established boundaries of Site CA-ALA-307, the site listed in the California Register. The resource being substantially and adversely changed is CA-ALA-307. Continuing to only focus on the City Landmark misleads the public by downplaying the significance of the impacts
19. As noted on Pages 76-78 of the DEIR, there are four California Register criteria of eligibility met by CA-ALA-307. To reduce the impacts of the project to a less-than-significant level, each criterion must be addressed and mitigation must be developed to address that specific criterion of significance. Mitigation measures CUL-2a, CUL-2b, CUL-2c, and CUL-2d are not adequate to reduce the impact to a less-than-significant level for any of the four criteria, including Criterion 4.

Mitigation Measure CUL-2a (Page 95)

20. The use of GPR to identify areas within the project area most likely to have archaeological deposits is problematic as an archaeological method. However, its use alone does nothing to reduce the level of significance of Impact CUL-2. Discovery is not mitigation. If GPR is being proposed as a method to assist in the identification and recovery of archaeological deposits, then it should be discussed in an archaeological data recovery plan submitted to the City for review and approval prior to the approval of this EIR.
21. However, the use of GPR as a method at CA-ALA-307 is problematic because the sediment characteristic and conditions within the site are known to create issues of implementation and interpretation.
 - 21.1. First, GPR electromagnetic energy will not penetrate salt water and the depth of the salt water table could be above the depth of archaeological deposits. See, for example, the photo on DEIR Page 74 showing the high level of ground water.

- 21.2. Second, GPR electromagnetic energy will have difficulty penetrating clay-rich sediments and these types of sediments are known to exist throughout the site area. See, for example, Appendix 1 of the 2014 archaeological report (Pastron 2014) and Appendix D of Dore et al. (2002).
- 21.3. Third, GPR data are difficult to interpret and base conclusions upon, often creating ambiguity rather than resolving problems such as deposit identification.
- 21.4. In the absence of a technical report on the prior GPR work in the project area that would have addressed these issues and provided data to review, proposing additional GPR work is not justified.

Mitigation Measure CUL-2b (Page 95)

22. Mitigation Measure CUL-2b, cultural awareness and sensitivity training, doesn't reduce the level of significant of Impact CUL-2. Cultural awareness and sensitivity training of construction workers has no relationship to destroying archaeological deposits. It makes no difference if an archaeological deposit is destroyed by a culturally aware and sensitive worker or a worker who is not aware and sensitive.
23. Training of construction workers may be appropriate as a part of an archaeological monitoring or data recovery program, just not as a mitigation measure. As with the use of GPR, the details of such a program should be discussed in an archaeological data recovery plan submitted to the City for review and approval prior to the approval of this EIR. Should it be included, this training plan also needs to
 - 23.1. include how training will be handled for new employees hired after the training has occurred,
 - 23.2. specify how training will be documented,
 - 23.3. and include a visual indicator of training completion (e.g. hard had stickers) so inspectors may quickly ensure compliance.
 - 23.4. Trainers should be Registered Professional Archaeologists and, while the inclusion of an Ohlone representative is valuable, the requirement of them being eligible to consult with the City isn't relevant to this task.

Mitigation Measure CUL-2c (Page 95)

24. Mitigation Measure CUL-2c is problematic for a number of reasons:
 - 24.1. Utilities are a part of this proposed project and must be included as a part of this EIR.
 - 24.2. Work conducted adjacent to but outside of the project parcel is still within the boundary of CA-ALA-307. As such, these activities will cause a substantial adverse change in the significance of a historical resource. No additional analysis needs to be undertaken to identify or evaluate historical resources.
 - 24.3. It is known from archaeological work immediately outside of the project area on all sides that intact, undisturbed deposits (cultural and natural) that are a part of CA-ALA-307 do exist in these areas.
 - 24.4. The development of mitigation measures for this can't be deferred until after this EIR is finalized. The proposed mitigation must be included as a part of this EIR.

Mitigation Measure CUL-2d

25. Monitoring construction activities is typically done by archaeologists in situations when it is not known if a historic resource is present or not. This condition does not exist. It is known that the entire project parcel is located within the boundaries of historical resource CA-ALA-307. This site is known to contain significant natural and cultural deposits in both undisturbed and disturbed conditions. The cultural deposits are known to contain human remains. Thus, this mitigation measure is inappropriate and will not reduce the level of significance of Impact CUL-2 to a less-than-significant level.
26. This mitigation measure states that “If found to be significant by the on-site archaeologist (i.e., eligible for listing in the California Register of Historical Resources, ...”
- 26.1. First, an evaluation of significance does not need to be done. The site and its archaeological deposits are significant and are listed in the California Register.
- 26.2. Evaluations of significance of any type of historical resource cannot be done in the field. This is because there isn’t anything visibly inherent in the resource that makes it eligible or not. Eligibility is determined by examining the scholarly, historical, cultural, and geographical context of the resource. Eligibility status of a resource may change through time without any physical changes to the resource itself.
- For example, because research questions change through time, what constitutes significant data that allows answering those questions changes. A resource that is insignificant today may be significant tomorrow due to a breakthrough in methodology, not because the site changed. During the 1950s when the last major excavation occurred at CA-ALA-307, chronology was a significant archaeological question and the focus was on the stylistic change of artifacts through time. Today, the regional chronology is much better understood and research focus is on the paleoenvironment of the site. Thus, the natural deposits under the cultural deposits are a key source of data when, in the past, they were ignored.
- 26.3. On-site archaeologists making professional judgements of any kind should be Registered Professional Archaeologists and, at a minimum, meet the professional qualification standards of the Society for California archaeology for a Field Director.
27. Because the spatial extent and the significance of CA-ALA-307 are known, it is inappropriate to propose a monitoring strategy as a mitigation measure. Instead, an appropriate mitigation measure would be based on the systematic and planned recovery of data at the site. Such a mitigation measure might read

The recovery of no less than a twenty percent, spatially stratified, statistically valid sample of data from CA-ALA-307, conducted per the CEQA Guidelines Section 15126.4 (b)(3)(C) and (b)(3)(D). Data recovery fieldwork must be completed 15 days prior to the initiation of construction and must be supervised by a Registered Professional Archaeologist meeting the professional qualification standards of the Society for California archaeology for a Principal Investigator. Data recovery includes laboratory processing, analysis, and curation of recovered data. Mitigation will be considered complete when a data recovery plan, execution of the plan, and final data recovery report for the resource is accepted by 1) a third-party panel of Registered Professional Archaeologists selected by the City of Berkeley, 2) the City of Berkeley’ Landmarks Preservation Commission and Planning Department, and 3) the California Historical Resources

Information System. Mitigation will be funded by the project applicant. Post-field work expenses shall be guaranteed by the project applicant through bonding or an escrow account. This measure partially mitigates for Criterion 4.

28. Such a mitigation measure would compensate for the disturbance or destruction of archaeological deposits (cultural and natural) that may be likely to yield information important in prehistory, should preservation in place not be feasible. CEQA Guidelines Section 15126.4 (b)(3) outlines guidance for preservation in place and states that “preservation in place is the preferred manner of mitigating impacts to archaeological sites.” The ruling in *Madera Oversight Coalition, Inc. v. County of Madera* (2011, 199 Cal. App. 4th 48) states that “feasible preservation in place must be adopted to mitigate impacts to historical resources of an archaeological nature unless the lead agency determines that another form of mitigation is available and provides superior mitigation of the impacts”. The DEIR does not provide the justification for not adopting preservation in place as mitigation. The mitigation proposed (CUL-2a through d) do not provide superior mitigation of Impact CUL-2.
29. While the example mitigation measure provided, above, is adequate mitigation for the portion of Criterion 4 that states “may be likely to yield information important in prehistory”, it does not adequately mitigate for CA-ALA-307s eligibility for having yielded information important in prehistory and history—the past tense clause. Additional mitigation is necessary to reduce Impact CUL-2 to a less-than-significant level.
30. I propose that to mitigate for this part of Criterion 4, attention be given to the extant collections of archaeological materials, including human remains, that have been recovered in the past from the site and are currently distributed around the world. These data from these collections, if not the collections themselves, need to be organized and cataloged so that they may be accessible and usable to researchers. Thus, I propose the following mitigation measure.

Existing collections of archaeological and archival materials from CA-ALA-307, not limited to the University of California, McKinley High School Museum, California Academy of Sciences, Musée de l'Homme (Paris), Musée du quai Branly-Jacques Chiracand, (Paris), and the private collections of Mr. Richard Wessel, will be identified and researched. Collections of materials will be cataloged, curated, and archived to the standards specified in 36 CFR 79, the State of California Guidelines for the Curation of Archeological Collections (1993), and the American Association of Museums’ The New Museum Registration Methods (Buck and Gilmore 1998). Mitigation will be considered complete when a report of activities, inventory of materials, and material finding aid from the site is published and filed with public and academic libraries, and research institutions including the main and anthropological libraries of each campus of the University of California and California State University, main library of each of California’s county library systems, historical societies of each California county, City of Berkeley library, and the California Historical Resources Information System, and each museum holding collections. The report must be filed within four years of the initiation of construction. Mitigation will be funded by the project applicant and guaranteed through bonding or an escrow account. This measure mitigates for Criteria 1, 3, and partially for 4.

31. In addition to mitigating Impact CUL-2 to the significance of CA-ALA-307 under Criterion 4, this mitigation measure mitigates Impact CUL-2 to the significance of CA-ALA-307 under Criteria 1 and 3. It is important to note that archaeological data recovery is not sufficient mitigation to reduce the

significant impacts to a less-than-significant level when a resource, like CA-ALA-307, meets eligibility criteria 1-3 (see DEIR Pages 76-78). Currently the DEIR lacks mitigation relating to these criteria.

32. As noted on Page 77 of the DEIR, CA-ALA-307 meets Criterion 2 for 1) its association with Nels Nelson and the development of the stratigraphic method in American archaeology, and 2) due to its association with the Ohlone as the first inhabitants of the East Bay. Mitigation for reduction significant Impact CUL-2 to a less-than-significant level is not proposed in the DEIR. For its association with Nels Nelson, I propose the following mitigation measure.

Collections of archival materials relating to the work of Nels Nelson at the West Berkeley site, other San Francisco Bay Area archaeological sites, and his association with the University of California, including but not limited to the University of California and the American Museum of Natural History (New York), will be identified and compiled. This work will be undertaken by an individual meeting The Secretary of the Interior's Proposed Historic Preservation Professional Qualification Standards for History as published in the Federal Register on 20 June 1997. Mitigation will be considered complete when a report of activities, inventory of materials, material finding aid, and history are published and filed with public and academic libraries, and research institutions including the main and anthropological libraries of each campus of the University of California and California State University, main library of each of California's county library systems, historical societies of each California county, City of Berkeley library, and the California Historical Resources Information System. The report must be filed within two years of the initiation of construction. Mitigation will be funded by the project applicant and guaranteed through bonding or an escrow account. This measure partially mitigates for Criterion 2.

33. For Site CA-ALA-307's association with the Ohlone, two mitigation measures have been proposed and labeled as AB 52 Measure CUL-1 and CUL-2. While it is not explicitly clear in the DEIR if CA-ALA-307 is a Tribal cultural resource, I am assuming that it is. If, as directed in Public Resources Code 21084.3 (a), public agencies shall, when feasible, avoid damaging effects to any Tribal cultural resource, then mitigation is not needed as the site will not be damaged. However, if Impact CUL-2 on CA-ALA-307 must be mitigated to a less-than-significant level, additional mitigation is necessary. As mentioned in the May 2015 *Discussion Draft Technical Advisory: AB 52 and Tribal Cultural Resources in CEQA* by the Governor's Office of Planning and Research, four examples of types of mitigation that may be adequate include 1) avoidance and preservation in place, 2) treating the resource with culturally appropriate dignity, 3) permanent conservation easements or other interests in real property, and 4) protecting the resource.
34. The DEIR has two measures to "mitigate" under AB 52 as specified in Sections 21080.3.2 and 21082.3 of the Public Resources Code. Under CEQA, mitigation measures must be linked to a project impact. Thus, impacts to CA-ALA-307 must specifically relate to this resource, the significant impacts on this resource, and the reasons for the resource's significance. The two AB 52 mitigation measures do not specifically relate to CA-ALA-307 and do not fit the framework of adequate mitigation in the May 2015 technical advisory.

Recommended Measure CUL-1

35. It is unclear why a recommended mitigation measure is included in the DEIR. Public interpretation and education about CA-ALA-307 is important and could help to reduce the significant Impact CUL-2 to a less-than-significant level. By itself, though, and as a recommended measure, it fails to do so.
36. Additionally, public displays such as the kind outlined in the recommended measure are very rarely effective in accomplishing their goals. Large number of people are not reached and the intended message is not communicated. Take, as two local examples, the publically accessible permanent displays at the Emeryville Site (CA-ALA-309) and at CA-ALA-307 for Berkeley's rail station project. These examples have not had reach or effective messaging. While public interpretation and education is an important goal that could be incorporated as adequate mitigation, Recommended Measure CUL-1 does not reduce the level of significant impacts to a less-than-significant level and would not be a successful education project.
37. If undertaken, though, professional educators and museum professionals should be responsible for implementation, while consulting with archaeologists, historians, and Ohlone people.

Cumulative Impacts

38. The DEIR is correct that CA-ALA-307 has and is being destroyed by ongoing projects on both public and private property. I believe that few of these projects have had an EIR prepared as would be required for destroying portions of a resource listed on the California Register. Further, historical data indicate that most of the project parcel has never been built upon, unlike other parcels containing portions of CA-ALA-307.
39. The DEIR states on Page 99 the "implication of Project-specific mitigation measures described herein and appropriate City measures and conditions would reduce any potential cumulative impacts related to cultural resources to a less-than-significant level." For the same reasons articulated earlier in these comments, a monitor, find, and excavate strategy for known historic properties isn't adequate to reduce the level of significance to a less-than-significant level.
40. The City has a stewardship obligation for CA-ALA-307 *and the entire resource must be managed as a whole*. Monitoring is appropriate when the presence of a historical resources in unknown. This is not the case in this situation, and for the other past and planned future projects within the CA-ALA-307 boundary.

Alternatives

41. It is correct in the DEIR (Page 230) that the No Project alternative will not cause a substantial adverse change in the significance of a historical resource. Further, this alternative fulfills the CEQA and AB 52 guidance for preservation in place. For cultural and tribal resources, this alternative is the environmentally superior alternative.
42. The reduced commercial use alternative would have significant impacts that would not be reduced to a less-than-significant level with the mitigation proposed in the DEIR.

43. The reduced building alternative would have significant impacts that would not be reduced to a less-than-significant level with the mitigation proposed in the DEIR.

Summary

44. The 2014 archaeological report used to support the DEIR is inadequate and the conclusions offered are not accompanied by data that allow the evaluation of these conclusions. Thus, this DEIR offers an assessment of the impacts to a significant historical resource that cannot be independently assessed.

45. The mitigation measures proposed will not reduce the significant impacts to a less-than-significant level. This is primarily because 1) the proposed mitigation does not address that the project is within the boundaries of CA-ALA-307, 2) the proposed mitigation does not address fully the reasons for the sites importance under all four California Register criteria, and 3) a monitor, evaluate, excavate mitigation strategy is not appropriate when a project takes place within a previously evaluated and listed California Register historical resource. Note, though, that adequate mitigation for Impact CUL-2 is possible and that will reduce the level of the impact to a less-than-significant level. Examples of this mitigation have been provided.

46. The DEIR is based on a premise that it can start with the project parcel and look to see if historical resources exist within the parcel. Further, it erroneously uses the boundary of City Landmark 227 to guide the setting, impacts, and mitigation measures. This overlooks the fact that the entire parcel is within the boundary of an archaeological site (CA-ALA-307) that, since 2003, is listed on the California Register and has been determined eligible for listing for the National Register.

47. The DEIR does not provide the justification required for not adopting preservation in places as mitigation, as is preferred by CEQA and AB 52. The ruling in *Madera Oversight Coalition, Inc. v. County of Madera* (199 Cal. App. 4th 48 (2011)) states that “feasible preservation in place must be adopted to mitigate impacts to historical resources of an archaeological nature unless the lead agency determines that another form of mitigation is available and provides *superior mitigation of the impacts*”.

I appreciate the opportunity to comment on the DEIR for this project, and stand ready to provide any additional information that would aid the City of Berkeley in its CEQA compliance effort.

Sincerely,

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Registered Professional Archaeologist #10331