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June 16, 2021

Honorable Chief Justice Tani Cantil-Sakauye and Associate Justices
California Supreme Court
350 McAllister Street, Room 1295
San Francisco, California 94102-4797

Re: *City of Berkeley & Confederated Villages of Lisjan v. Ruegg & Ellsworth and Frank Spenger Company*, Case No. S269012

Amicus Letter by Professor Kent Lightfoot, PhD Candidate Lucy Gill, and PhD Student Jordan Brown (University of California Berkeley, Department of Anthropology) in Support of Petition for Review

Dear Chief Justice Cantil-Sakauye and Associate Justices:

We submit this letter as amicus curiae in support of the petition for review of Petitioners City of Berkeley and Confederated Villages of Lisjan. Our interest in this matter comes from our experience as archaeologists active in the San Francisco Bay Area and as cultural heritage professionals concerned with the preservation of important historic structures in our community.

If the Court of Appeal decision stands, the foundation of *the oldest extant structure in the Bay Area (the West Berkeley Shellmound) would be demolished*, without any meaningful opportunity for research or mitigation.

We are troubled by the Court of Appeal's tacit agreement with the Appellants' mischaracterization of the West Berkeley Shellmound as a "heap" of refuse, a description that is both factually incorrect and flagrantly Eurocentric. A classic example of the Bay Area shellmound tradition, the West Berkeley Shellmound is *a complex structure* built for communal activity: a cemetery, a fishing village, a craft production site, and a ceremonial gathering place, with structural signatures that can be identified archaeologically. The treatment of these shellmounds in the Court of Appeal Decision sets a precedent with potentially disastrous implications for the preservation of these historic structures, as in the present case.

As archaeologists employed by the Department of Anthropology at the University of California, Berkeley, we are in a unique position to comment on the importance of the West Berkeley Shellmound (CA-ALA-307) within the cultural heritage landscape of California. Archaeologists at UC Berkeley initiated the foundational studies of the great shellmounds of the San Francisco Bay Area in 1901, with the establishment of the Anthropology Department and what is now the Phoebe A. Hearst Museum of Anthropology. For 120 years, UC Berkeley scholars have continued to document and study the shellmounds of the San Francisco Bay, a legacy which Kent G. Lightfoot inherited with his appointment as Professor of Anthropology at UC Berkeley and carries on in his capacity as Curator of North American Archaeology at the Hearst Museum. Lightfoot has directed research teams in the study of shellmounds, using

archival sources and curated archaeological materials from recent and historical field research carried out by both academic and cultural resource management archaeologists. His shellmound studies have been funded by multiple sources, including two major grants from the National Science Foundation[1] (NSF), and have made important advances in scholarly understanding of Indigenous people's construction and use of these monumental structures. Lightfoot and his colleagues have presented this research in multiple public lectures, conference papers, and 12 scholarly publications.

Lightfoot's team recently completed a multi-year, NSF-funded study of the multi-millennium process of construction of the West Berkeley Shellmound. High-resolution radiocarbon dating, carried out as part of this research, confirms that the West Berkeley Shellmound is indeed the oldest extant structure in the San Francisco Bay Area. Indigenous people began its construction nearly five thousand years ago and subsequently occupied and expanded the structure in phases. The descendants of these people, who make up the contemporary Indigenous communities of the East Bay, still use this tribal cultural resource for prayer, ceremony, and other communal activities.

The significance of the West Berkeley Shellmound has already been recognized at the local, state, and national level. It

[1] The National Science Foundation is an independent, nonpartisan agency of the United States government that funds research and education in most fields of science and engineering. This funding is competitive and prestigious, and all funded projects have been subjected to rigorous peer review.

has been designated a City of Berkeley Landmark (#227) and is listed in the California Register of Historical Resources. In 2020, the National Trust for Historic Preservation, a nonprofit specializing in historic preservation within the United States, named the Shellmound one of America's 11 Most Endangered Historic Places. The Shellmound has been determined eligible for listing in the National Register of Historic Places, and a formal nomination (under Criteria A, C, and D) is currently in preparation for submission to the California Office of Historic Preservation.

In what follows, we focus on the issue—raised in both Petitions—of determining what constitutes a "historic structure." On the basis of the best available archaeological expertise, we demonstrate (1) that the West Berkeley Shellmound is a structure and (2) that the Shellmound is still intact within the area to be excavated under the proposed project.

The West Berkeley Shellmound is a structure

The Court of Appeal Decision reflects archaeological interpretations of Bay Area shellmounds from over a century ago, rather than contemporary archaeological understandings. The erroneous assumption that shellmounds represent domestic refuse, deposited haphazardly adjacent to habitation structures, was based on unexamined generalizations from so-called "kitchen middens" commonly found in Denmark. On the basis of literally superficial similarities (mounded shape and visible presence of shell), early researchers assumed that Bay Area *shellmounds*

were formed by the same processes as the aforementioned *middens*. However, more than a century of research by UC Berkeley scholars and others has demonstrated that this Eurocentric assumption was profoundly wrong. Rather, Bay Area shellmounds were constructed intentionally, as one of the major structural elements that make up ceremonial, village, and mortuary complexes. At the beginning of the decade during which Senate Bill 35 was drafted, scholarly understanding had evolved to the point that discussions of Bay Area shellmounds concerned primarily their functions as monumental *structures*, playing important social, political, and cultural roles in the complex Indigenous societies of the San Francisco Bay Area over the past several millennia.

As a "type site" for Bay Area shellmounds, the West Berkeley Shellmound is constructed on a characteristic plan. As a matter of cultural tradition, the Shellmound's builders situated the monument at the saltwater-freshwater interface and built it up from alternating layers of ritual and domestic deposits. These deposits themselves exhibit internal structure—including systematically-oriented burials, compacted floors with postholes (indicating roofed structures), storage pits, hearths, ovens, and intentionally-burned constructional horizons—and characteristic building materials: thousands of tons of intentionally-deposited imported soil, human-modified stones, water-worn pebbles, large quantities of shell fragments of particular species, organic material, and ash layers. Throughout its history, the Shellmound has served many forms of human activity, including interment of

ancestors; gathering for meetings, rituals, dances, and prayers; shelter and accompanying domestic activities; stone and bone tool production; weaving of nets, mats, and baskets; and the coordination of a multi-component fishing village economy, the first of its kind in the Bay Area.

The structure of Bay Area shellmounds represents a specific architectural tradition, distinguishable even from that of other shell-bearing monuments known elsewhere in North America, yet (imperfect) analogies may still be drawn with European architectural traditions, in order to facilitate understanding for non-specialists. As in the great cathedrals of Europe, often constructed over many centuries, the particular stylistic elements employed in the construction of a shellmound typically change over time, while an overarching (or undergirding) plan remains evident. The Duomo of Milan offers a particularly enlightening comparison. The Duomo as it stands today was built atop an earlier church constructed in the fourth century AD. While no above-ground elements of this earlier structure remain visible, its below-ground foundations remain intact. These foundations both played an important role in guiding the subsequent architectural development of the Duomo itself, and continue to function as integral parts of the Duomo's present foundation. The Duomo thus lies on ground consecrated by the earlier structure that forms its foundations, and it is also this older structure that remains in active use as a sacred resting place for notable parishioners, who are interred in a crypt below ground.

In much the same way, the earliest component layers of the West Berkeley Shellmound consecrated this particular site, which is acknowledged as an important place of origin in Ohlone oral tradition. These earliest foundations were initially built up on the ground surface. However, for at least the past five thousand years, the bedrock underneath the East Bay has been undergoing tectonic subsidence (at a rate of ~1 mm/yr). As a result, after each subsequent millennium, the Shellmound's foundational layers would have subsided by one meter, while the structure continued to be built up at a rate that outpaced this subsidence, increasing its topographic expression. At the same time, sediments accumulated on top of the East Bay plain in approximate equilibrium with bedrock subsidence, depositing alluvium around the flanks of the increasingly prominent above-ground portion of the Shellmound. Thus, the Shellmound's foundations came to lie deeper beneath the alluvial plain, even as its elevated surface was built progressively higher. Significantly, the Indigenous people who built up the Shellmound maintained a conscious and active engagement with its foundations, as it was among these foundations that they chose to bury their dead. (This fact was confirmed by UC Berkeley excavations at the West Berkeley Shellmound in the 1950s.) Like the Basilica di Santa Tecla below the Duomo, these subsurface foundation deposits are not mere "remnants," as the Court of Appeal Decision states, but the foundations of a larger structure, embracing a cemetery that remains an important place, linking living communities with their ancestors over millennia.

We therefore affirm that the West Berkeley Shellmound, as originally constructed, is a "historic structure," for the purposes of SB 35.

The West Berkeley Shellmound is extant within the project excavation area

The topography of the West Berkeley Shellmound was recorded in a map of the Alameda County shoreline made by the United States Coast Survey in 1856, on which the surveyor explicitly delineated the areal extent of the above-ground mound. This topographic signature can be a useful guide to the horizontal extent of the buried Shellmound deposits too, so long as account is taken of the wider footprint of the foundational layers, given the process of subsidence described above. When georeferenced according to indicated Coast Survey base stations with known United States Standard Datum coordinates, the northeastern edge of the above-ground mound lies within a few meters of the northwestern edge of the excavation area of the proposed development project. Any reasonable below-ground projection of the topographic slope of the northeastern edge of the Shellmound leads to the conclusion that, in 1856, considerable buried layers of the West Berkeley Shellmound were located within the area now proposed for development.

Therefore, we would expect to see, in the northwest corner of the project excavation area at a depth of at least one to two meters, the constructional elements described in the preceding section, e.g., deposits containing quantities of shell fragments and high concentrations of organic material. We note that these

deposits are unlikely to have been disturbed, given that historical maps and aerial photographs show no major construction in the northwest portion of the project excavation area at any point during the 20th century, until the superficial capping of the site by the present parking lot. (Incidentally, the 1856 Coast Survey map also records a second, smaller shellmound that borders and intersects the north*east* corner of the project excavation area. This close association of multiple shellmounds is typical in the East Bay. This second shellmound has received no discussion at all in the present case, but also probably has intact components lying within the project excavation area.)

Recent archaeological testing conducted in the northwest corner of the project excavation area documented intact constructional deposits of the West Berkeley Shellmound, *confirming that the foundations of the oldest historic structure in the San Francisco Bay Area remain in situ, undisturbed in their original position, and would be demolished by the development as currently planned.*

In 2000, Dr. Allen G. Pastron excavated a borehole in the location predicted by the Coast Survey map that yielded organic-rich deposits at a depth of 5-10 feet, described as "anthropic soils … mixed with varying amounts of shell, charcoal, and other prehistoric cultural material." This cultural soil "contained approximately 20 times more shell [than any other deposit within the survey]," and "approximately 20% of the shell recovered was fire-affected," characteristic of Bay Area shellmound constructional horizons. Pastron concluded: "A preliminary

assessment of these materials suggests that the anthropic soils seen in Boring #19 represent a primary deposit of CA-ALA-307 [the West Berkeley Shellmound]."

In 2014, Pastron excavated two trenches in this vicinity. In both trenches, his findings indicate intact Shellmound constructional deposits, at depths equivalent to those recorded in Borehole #19. Both trenches were abandoned at a depth of 5.3-5.5 feet for practical reasons (the trenches had begun to fill with water), with no sign of an end to the Shellmound deposits. (We note that archaeological techniques for studying waterlogged sites have been important to the detailed investigation of East Bay shellmounds since as early as the 1906-1908 UC Berkeley excavations at Ellis Landing.) As previously described, the presence of intact Shellmound deposits below the water table is to be expected due to considerable subsidence. Pastron's earlier report confirms this; in Borehole #19, the water table was met at approximately 9 feet, but Shellmound deposits continued below this point.

Therefore, Pastron's testing indicates the presence of undisturbed West Berkeley Shellmound deposits, of considerable vertical and horizontal extent, located within the project excavation area.

Conclusion

As specialists in the archaeology of Bay Area shellmounds, it is clear to us that Pastron's archaeological testing within the project excavation area documented the intact foundations of the

West Berkeley Shellmound. However, the Decision of the Court of Appeal directly instructed the City to grant ministerial approval. As a result, though the Court is not equipped to make determinations regarding the nature of historic structures, its Decision effectively denied the status of the West Berkeley Shellmound as a historic structure within the project excavation area, thereby preventing further archaeological investigation. By directing the City to grant the developer's permit rather than to reconsider its determination based on the Court's clarifications, the Court of Appeal precluded the additional expert consultation archaeologically necessary to make such determinations. We find this concerning because if this permit is granted, *the development would demolish the foundations of the oldest historic structure in the San Francisco Bay Area*.

As it stands, the Court of Appeal Decision impedes the preservation of not only this structure, but the hundreds of other shellmounds that have been documented in the San Francisco Bay Area and of Indigenous earthworks statewide. This Decision sets a dangerous precedent for historic preservation by incorrectly denying these monumental constructions their archaeologically demonstrated status as "historic structures." While Assembly Bill No. 831 addressed one important oversight of SB 35, the issue remains that many tribal cultural resources are not listed on national, state, tribal, or local historic registers because most tribes in California are federally unrecognized and lack the resources to register these sites and respond quickly to requests for scoping consultation. Therefore, recognizing these

shellmounds as historic structures, in addition to tribal cultural resources, is essential for their protection.

As archaeologists, we urge you to consider these pressing issues in light of the value that the oldest structure in the San Francisco Bay Area holds for all members of the Bay Area community and to grant the petition for review in this case.

Sincerely,

Dr. Kent G. Lightfoot
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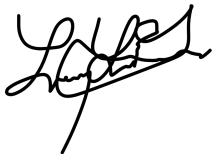

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