ATTACHMENT 19

CULTURAL RESOURCES DATA RECOVERY PLAN

DRAFT CULTURAL RESOURCES DATA RECOVERY PLAN

POINT MOLATE MIXED-USE DEVELOPMENT PROJECT

JULY 2020

PREPARED FOR:

City of Richmond
450 Civic Center Plaza
Richmond, CA 94804

PREPARED BY:

Charlane Gross, M.A., RPA
Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, CA 95811
(916) 447-3479
www.analyticalcorp.com

DRAFT CULTURAL RESOURCES DATA RECOVERY PLAN

POINT MOLATE MIXED-USE DEVELOPMENT PROJECT

JULY 2020

PREPARED FOR:

City of Richmond
450 Civic Center Plaza
Richmond, CA 94804

PREPARED BY:

Charlane Gross, M.A., RPA
Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, CA 95811
(916) 447-3479
www.analyticalcorp.com

TABLE OF CONTENTS

FIGURES

1.0 OVERVIEW

Historically, the Point Molate Site has been used for fishing, commercial, and naval activities from the latter part of the 19th into the 20th century. From around 1870 to 1912, a Chinese shrimp camp was established at Point Molate where Chinese shrimpers lived and worked. From 1907 to 1919, the historic Winehaven Winery occupied the northern portion of the Point Molate Site. Beginning in 1942, the Point Molate Site served as a U.S. Navy (Navy) fuel storage and transfer facility, and in September 2003, the Navy transferred approximately 85 percent of the property to the City of Richmond. Since then, two development projects have been proposed for the Point Molate Site and corresponding environmental documents have been prepared in compliance with the California Environmental Quality Act (CEQA). The first, an Environmental Impact Report (EIR) certified in 2011, was for a casino and destination resort that was ultimately not approved or constructed. The second, a Subsequent EIR prepared in 2020, is for a mixed-use development incorporating reuse of some existing buildings and structures, demolition of others, and development of a combination commercial and residential complex (Modified Project).

However, the Point Molate Site was used by Native American tribes well before the 19th century. A number of prehistoric shell midden sites have been identified in immediate proximity to the remnants of historic usage. These sites include CA-CCO-282, -283, -284, and -423 (**Figure 1**). Investigations of these resources began near the turn of the 20th century and continued through 2008. Data collected indicate a significant degree of historic-era disturbance of each site and the presence of human remains at CA-CCO-283 and -284. However, in the event that as-yet unidentified archaeological or tribal cultural resources (TCR) are discovered during construction, this Cultural Resources Data Recovery Plan (CRDRP) outlines methods to be followed in the event of such discoveries.

The Modified Project is subject to the requirements of the CEQA which requires review and analysis of the environmental impacts of certain project, including impacts to TCRs. During coordination with members of the Native American community, including the Confederated Villages of Lisjan (Lisjan), Guidiville Rancheria, and Wilton Rancheria, Lisjan identified sites CA-CCO-282, -283, -284, and -423 as TCRs.

Information contained in the EIRs, including natural, cultural, and archaeological settings, summaries of the known cultural resources, and a summary of the consultation process are not included here, but may be found in Section 4.4 of the Draft SEIR.

The methodology discussed in this CRDRP uses the term “site;” however, “site” is synonymous with “find.” In other words, the same methods would be applied to finds made within CA-CCO-282, -283, -284, -423, or -506H, individual features uncovered during construction, or new archaeological sites found during construction.

1.1 PROJECT LOCATION

The Project Site is located in the Potrero Hills along the northeastern shore of the San Francisco Bay in the City of Richmond, Contra Costa County, California. It is located on the west side of the San Pablo Peninsula, which is the landmass between San Pablo Bay and San Francisco Bay, approximately 1.5 miles north of the Richmond-San Rafael Bridge. The Project Site occupies approximately 1.6 miles of shoreline and extends into adjacent hillsides up to the top of the San Pablo ridge.

Placeholder for Confidential Figure 1

Figure 1 contains confidential information about Tribal Cultural Resources and is, therefore, not included in this public draft document.

2.0 WORK PLAN

2.1 FIELD METHODS

Implementation of this CRDRP will begin as soon as possible after a find is reported, however it is not possible to calculate a timeline as the nature and extent of any finds cannot be known until they are encountered. If initial explorations of finds indicates any lengthy delay (more than a few hours), the Project Site construction supervisor will be asked to relocate machines and operators to another construction area.

The basic unit of excavation and documentation for prehistoric resources will be a 1 x 1-meter unit by 10-centimeter (cm) level; for historic resources, the basic unit of excavation will be a 5 x 5-foot unit by 6-inch levels. All soil removed from standard control units shall be screened through ¼-inch hardware cloth. Shovels and trowels shall be used for excavation, except for the excavation of features, where trowels, whisk brooms, brushes, and similar implements shall be used. All cultural remains and ecofacts found in the screens (artifacts, flakes, bone, and shell) shall be collected and placed into separate resealable, plastic storage bags by category. These plastic bags shall then be placed in a sealed paper bag with the pertinent provenience information (site, unit, level) written in permanent marker on the front of each bag. Procedures used, materials retrieved, and general deposit characteristics shall be recorded on level record forms, including a scaled diagram of the level floor and stratigraphic profiles compiled for representative control units in each deposit. The location of all excavation units shall be accurately mapped using a global positing system (GPS) device.

More complex subsurface remains that may be encountered will require more detailed hand excavation, careful field recording (e.g., profile and plan drawings, maps, photographs). Special samples (e.g., charcoal, bulk flotation, fish bone, and other organic remains) shall be retrieved as necessary and handled according to accepted professional standards. All other artifacts shall be provenienced to the excavation level from which they were recovered. Tools, large identifiable bone elements, and other distinctive remains shall be bagged individually and given a separate field specimen number. Debitage, bone fragments, and other bulk remains shall be bagged as a lot for each provenience from which they were collected. Each lot of debitage, bone, and other bulk remains shall be recorded on a field log.

Features shall be excavated as discrete units, defined and exposed horizontally, then one half shall be excavated to expose a cross section. After completion of the cross section, the rest of the feature fill shall be excavated. All feature soils shall be screened through ⅛-inch hardware cloth. A plan map and cross section shall be drawn for each feature. Multiple photographs shall also be taken for each feature during various phases of its excavation and a feature form shall be completed. Descriptive data categories encoded on the feature form shall include: feature type/morphology; dimensions; feature fill characteristics; the presence/absence and nature of any oxidation; artifacts and other remains recovered from the feature fill during excavation; heat-altered rock number, weight, and size distributions by rock type; sample numbers and types; preservation; stratigraphic position; and general remarks. Microdebris and plant macrofossils recovered from the heavy and light fractions of fill samples shall also be subsequently entered on those forms in the laboratory.

Fill shall be collected from features for radiometric and plant macrofossil analysis. Charcoal samples shall be placed in foil pouches that will then be placed in resealable, plastic storage bags. Bulk fill samples shall be double-bagged in clean resealable, plastic storage bags. Feature fill not taken as samples shall be screened.

Attributes analyzed for individual features shall include: shape in cross section; nature and position of any oxidation; darkness of fill staining; nature of any identifiable charcoal present; amount and characteristics of fill rock; and types and quantities of artifacts, faunal remains, and botanical remains recovered from the feature. Features shall be treated as the primary provenience unit for any artifacts recovered from their fill. All remains recovered from feature fill flotation samples shall be analyzed. Remains recovered from the heavy fraction of flotation samples shall be treated the same as artifacts recovered in the field during excavation and shall be integrated into the overall feature and artifact analyses. Bone and debitage recovered from features shall be discussed separately from those recovered from general excavation due to different sampling intensity resulting from different screen mesh sizes.

Fire-Cracked rock (FCR) shall be recorded in the field for each level of each excavation unit and/or for each feature and then discarded. All FCRs shall be recorded by general material type. Attributes recorded for each material type shall be: count by size class, total weight, and nature of alteration (e.g., heat-reddening, degree of fragmentation, etc.). The set of size classes used shall be: less than 1 cm; 1-3 cm; 3-5 cm; 5-10 cm; and >10 cm. Only presence/absence shall be noted for rock fragments less than 1 cm in size. Size class sorting shall be completed using a size template. Weight shall be recorded using a graduated series of metric spring scales.

General documentation shall include a map of the area surrounding the site, a map showing the location of the excavations, and photographs documenting both the site setting and the excavations. Detailed field notes shall also be taken concerning site setting, microtopography, deposits, vegetation, and similar traits. Stratigraphic profiles shall be drawn for most excavation units. Information recorded shall include degree of consolidation, color, and texture of each stratum, as well as any discernible culturally stained layers or lenses, features, stains, exposed artifacts, and areas of obvious rodent disturbance. Stratigraphic distinctions shall be made based on any discernible differences, including color, texture, and cultural staining.

2.2 LABORATORY METHODS

After completion of fieldwork, all collected materials and field records shall be taken to an archaeological laboratory for processing and analysis. Upon acceptance of the final report, all artifacts collected from the Project Site shall be curated at Sonoma State University along with original excavation records, field notes, photographs, and primary data analysis files.

All artifacts, faunal remains, and other specimens shall be cleaned, processed, and cataloged. Selected materials shall be submitted for specialized analyses. Because the nature and amounts of archaeological materials are unknown prior to excavation, the scope has been developed to accommodate a range of materials that may be encountered. It is anticipated that the collection from the prehistoric sites will minimally include flaked stone, groundstone, and faunal remains. These will be analyzed as needed to address the research interests outlined above. It is anticipated that the historic site will produce a variety of domestic artifacts including earthenware, bottle glass, window glass, milled wood, etc. Other categories of artifacts, and appropriate analyses, will accommodate the range of items that could potentially be encountered. The amount of analysis allocated is likely to shift according to the nature, condition, and information potential of particular materials. The types and amount of analysis for each constituent will become apparent after excavation and processing of the collection.

The following analyses may be conducted, as appropriate to the nature of recovered materials: morphological analysis of formed tools, typology of historic items, technological analysis of flaked stone tools and debitage, groundstone analysis, analysis of faunal (vertebrate and invertebrate) and floral (micro- and macro-botanical) remains, obsidian hydration determinations, geochemical sourcing of lithic materials, and radiocarbon assays. Sample sizes shall be limited to those considered necessary to establish the potential for addressing important research questions at the sites.

2.2.1 CARBON DATING

Radiocarbon dating shall be conducted for any charcoal recovered from features. When necessary, charcoal shall l be culled from multiple feature fill flotation samples prior to flotation to compile a sufficient charcoal sample. If the sample remains too small for standard radiocarbon dating, samples shall be processed by accelerated mass spectrometer. Charcoal, burned flora, or fauna samples that retain sufficient depositional integrity and association to provide valuable site information shall be submitted to Beta Analytic in Miami, Florida via an express mail carrier.

2.2.2 FLAKED STONE ANALYSIS

Flaked stone tools, cores, and lithic debitage resulting from the flaking and/or use of flaked stone tools or raw material nodules shall be classified as flaked stone artifacts. Flaked stone tools comprise those flaked stone artifacts, including flakes, which 1) have been deliberately flaked to produce a tool (including lost or discarded intermediate manufacturing stages) or 2) exhibit evidence indicative of utilization (macroscopic use, retouch, or other macroscopic use-wear). This term shall not imply that all of these artifacts were actually used as tools since this category will include lost, broken, and discarded tool (e.g., biface) manufacturing stages. Cores shall be defined as nodules of raw material from which flakes have been removed to procure those flakes for use as tools or platforms for the manufacture of tools. Pebbles, cobbles, and chunks of raw material from which flakes have been detached for the purpose of examining the quality of the stone (tested material) and/or which were procured as potential sources of flaked stone tool material shall be classified as tested material/manuports. All other flaked stone artifacts will be classified as (lithic) debitage. The debitage category will include all flakes, shatter, and other secondary debris produced as a result of tool manufacture, tool maintenance, and/or tool use.

BIFACES

Bifaces shall be classified as: blanks; preforms; and final bifaces on the basis of the point at which they were removed from the biface reduction sequence. Along a second axis, all bifaces shall also be classified as: tool fragments; biface manufacture discards/failures; or indeterminate, based on evidence such as usewear or fracture patterns. Bifaces in each class shall be further classified as: small; medium; or large, depending on actual or estimated dimensions of the original biface. Biface fragments shall be classified to size classes based on the extrapolated size of the complete biface from which they derive. Small and medium biface stages roughly correspond to arrow and dart point manufacture stages, respectively, while large biface stages generally correspond to other types of bifacial tools. Large, medium, and small bifaces in each size class shall, in turn, be classified as: thin; moderately thick; or thick, relative to their actual size and particular reduction stage. For example, large bifaces less than 10 millimeters (mm) thick shall be classified as thin while large bifaces greater than 20 mm thick shall be classified as thick.

FLAKE TOOLS

Flake tools shall be classified using a general tripartite classification scheme. Flake tools that represent stylized types (e.g., planoconvex end scrapers, stylized spokeshaves, gravers) shall be classified as formalized flake tools. Flake tools that exhibit deliberate-edge modification for use as a tool (e.g., retouch, serration) but are not stylized tool types shall be classified as modified flake tools. Flakes that evidence use as tools without deliberate modification shall be classified as expedient flake tools. Measurements shall be recorded for each flake tool.

COBBLE TOOLS

The cobble tool category to be used includes both: flaked cobbles, pebbles, or other chunks of raw material modified for use as tools; and unflaked nodules cobbles, pebbles, or other chunks of raw material with edge damage indicating that they were used as tools. Unflaked cobbles which evidence use as percussors during flaked stone tool reduction shall be classified as hammerstones, while those which exhibit heavier battering or spalling will be classified as battered cobbles. Attributes to be recorded for cobble tools include: the form or size of the raw material nodule (e.g., cobble, pebble, or chunk); type of flaking (e.g., bifacial or unifacial); and the nature and extent of the usewear (e.g., heavy step-fracturing, spalling, light crushing).

CORES

Cores shall be defined as nodules of raw material exhibiting flake scars resulting from the removal of flakes to obtain those flakes for further use. Nodules of raw material shall include cobbles, pebbles, and chunks. Nodules of raw material from which flakes have been detached for the purpose of examining the quality of the stone as toolstone material shall be classified as tested material. Raw material nodules which were transported to the Project Site locality for use as lithic raw material, but which were not flaked or otherwise tested, shall be classified as manuports. Cores from which flakes have been removed randomly or in a variety of directions shall be classified as multidirectional cores, cores from which flakes have been removed in two opposing directions (as from a biface) shall be classified as bidirectional cores, and cores from which flakes have been removed in a single direction (as from the base of a cone or cylinder) shall be classified as unidirectional cores.

DEBITAGE

The unutilized debris resulting from flaked-stone tool reduction shall be classified as debitage and includes flakes and debris resulting from reduction activities. Debitage attributes that shall be recorded are material type, flake type, flake size, and percentage of cortex. Debitage size shall be measured with a template consisting of a set of concentric circles 1 cm, 2 cm, 3 cm, etc. in diameter. Artifacts will be classified to the smallest size class within which they entirely fit. Percentage of cortex shall be recorded as: 0 percent, 1-33 percent, 33-67 percent, and 67-100 percent.

GROUNDSTONE

Cobbles, slabs, or other pieces of rock that exhibit evidence of grinding on at least one surface shall be classified as groundstone. Groundstone artifacts shall be further classified using traditional categories. Small fragments which possess a ground facet but which are too small to be classified into these categories shall be classified as indeterminate groundstone fragments. Attributes recorded shall include: dimensions; weight; material type; number of ground faces; intensity of grinding; presence or absence of pecking; evidence of

deliberate shaping; battering; degree of weathering; and heat-alteration. As with flaked stone tools, all dimensions shall be relative to the orientation of the original tool. In the case of fragments where the orientation of the original tool cannot be ascertained, the dimensions shall be relative to the proportions of the artifact, with length to be measured along the longest axis, etc.

OBSIDIAN HYDRATION AND SOURCING

Obsidian flakes or tools may be sent to Northwest Obsidian Research Lab in Corvallis, Oregon for X-ray fluorescence analysis to determine the source of the material or to Willamette Analytics in Corvallis, Oregon for hydration analysis to determine the sample's relative age.

2.2.3 FAUNAL ANALYSIS

If bone specimens are found during the excavations, the specimens shall be identified to the genus or species level, when possible. When identification to genus or species is not possible, specimens shall be classified to the most specific general animal size taxon possible on the basis of such attributes as the thickness of the bone wall and the projected size of the element from which the specimen derived. General animal size classes to be employed include taxa defined in terms of the size range of a specific genus or species (e.g., elk-sized mammal or cottontail-sized mammal) and more general taxa based on general animal size taxa or ranges of general animal size taxa (e.g., large mammal or medium-large mammal). Bone specimens judged to be recent and intrusive on the basis of: relative preservation; color; the number of elements represented; the absence of breakage or other modifications; taxon (e.g., rodent sized); and/or stratigraphic context shall be omitted from discussions of bone recovered from a cultural context. Each component shall be examined as a unit to accurately ascertain: minimum number of individuals; age structure of the sample; patterns of preservation; season of occupation; butchering/processing patterns; and other general patterns which can be determined only on the basis of a component-specific analysis. Sufficiently large collections of fauna shall be submitted to the Far Western Anthropological Research Group for analysis.

2.2.4 PLANT MACROFOSSIL ANALYSIS

Soil samples from features with sufficient integrity and opportunity to provide significant scientific data shall be submitted to the Far Western Anthropological Research Group for flotation analysis. The light fraction from any feature fill flotation samples shall be examined for charred plant macrofossils potentially incorporated in features as a direct or accidental result of cultural activity. To avoid faulty interpretations due to contamination from the modern seed rain, only charred seeds shall be considered to represent prehistoric cultural debris since uncharred seeds related to cultural activities generally decompose and disappear from the site record in less than a century after deposition under normal environmental conditions. Based on the results of recent investigations, charred seeds are considered indicative of on-site cultural activities and/or season of site occupation only if they occur in sufficient quantities and densities to differentiate them from the background noise of naturally occurring charred seeds.

2.3 BURIAL TREATMENT

Human remains, in the form of intact burials and isolated fragments, have been recovered from CA-CCO-283 and -284. To the degree possible, these sites will be avoided, however there is the potential that human

remains, in some form, will be encountered during project construction; if remains are recovered, procedures outlined in Draft SEIR Mitigation Measure 4.4-5 will be followed, beginning with contacting the County corner. The following methods may be used in recovery of any human remains, including isolated fragments and intact burials.

Any remains identified shall be plotted using GPS technology and will be illustrated by scale drawings. Clusters of burials shall be mapped on a larger scale. Photographs of human remains may be taken only after receipt of permission from the Most Likely Descendant (MLD) as appointed by the Native American Heritage Commission.

If the MLD wishes, soils from the immediate vicinity of the remains shall be collected in large, heavy-ply plastic bags and retained with the remains for reburial. Burial-Associated artifacts will be sketched and photographed and may, with the specific permission of the MLD, be taken to a laboratory for cleaning and analysis. All human remains shall be subject to in-field analysis targeting the identification of age, sex, and height, pathological and traumatic conditions present at the time of death. No samples shall be taken for Carbon-14 analysis or other destructive analysis unless specific permission is granted by the MLD.

All remains shall be repatriated to the MLD on the day that field excavation and analysis are complete, unless other provision is made for temporary storage at a climate-controlled facility until mass reburial plans have been completed in consultation with the MLD and Project Proponent.

2.4 REBURIAL

If agreement regarding field or laboratory studies cannot be reached, when resources are encountered, priority shall be given to immediately reburying the cultural resources in the same location as found, only deeper. In the event that the cultural resources cannot be re-buried in the same location, priority shall next be given to immediately re-burying the cultural resources in an appropriate location within 100 feet of their original discovery in an area that shall not be subject to future subsurface disturbances. If for any reason immediate reburial in place, only deeper, or in an appropriate location within 100 feet of the original discovery is not feasible, then cultural resources may be re-buried in an appropriate location as determined by the MLD/tribal representative in an area that shall not be subject to future subsurface disturbances. In the event that avoidance and reburial above described is not feasible, cultural resources may be removed and transferred to a location designated by the tribal representative.

2.5 REPORTING

The archaeological data and interpretations presented in previous studies will be re-examined in light of new data. Archaeological information generated from the execution of this CRDRP will be incorporated into a Section 106 and CEQA-compliant evaluation report that will include background, finds, and sufficient context for each site to evaluate the archaeological significance of the sites. The report will contain all information specified in Archaeological Resource Management Reports: Recommended Contents and Format, produced by the California Office of Historic Preservation (1990). All final reports will be submitted to the Northwest Information Center for their records.

2.6 CURATION

Final disposition of non-burial associated artifacts shall be subject to agreement between the MLD/tribal representative and the Project Proponent. The Tribe may retain the artifacts, the Project Proponent may retain the artifacts, the artifacts may be placed in the charge of the David A. Fredrickson Archaeological Collections Facility located at Sonoma State University in Rohnert Park, or the artifacts may be reburied at a location agreed to by the tribal representative and Project Proponent within a cultural or biological easement that ensures there will be no future disturbance of the finds.

2.7 QUALIFICATIONS

Archaeological fieldwork shall be directed and overseen by a qualified professional archaeologist who meets the Secretary of the Interior's qualifications for Archaeology. Native American monitors shall have previous experience in construction monitoring.

3.0 REFERENCES

Analytical Environmental Services (AES). 2009. *Cultural Resources Study Point Molate Tribal Destination Resort and Casino Project.* Sacramento, CA.

Busch, Gerald. 2007. Personal Communication between BRAC PMO West Disposal Project Leader (Busch) and Michael Taggart. Sacramento, CA.

Chavez, David and John Holson. 1985. *Cultural/Archaeological Resources Investigation at the Naval Supply Center Fuel Department, Point Molate, Contra Costa, California*. Report on File at the California Historical Resources Information System, Northwest Information Center, Rohnert Park.

Küchler, A.W. 1977. *The Map of the Natural Vegetation of California*. University of Kansas, Lawrence, KS.

Office of Historic Preservation. 1990. *Archaeological Resource Management Reports: Recommended Contents and Format*. Sacramento, CA.

Page, Ben M. 1966. Geology of the Coast Ranges of California. In, *Geology of Northern California.* Bulletin 190. California Division of Mines and Geology, San Francisco, CA.

Welch, Lawrence. 1977. *Soil Survey of Contra Costa County, California.* U.S. Department of Agriculture, Soil Conservation Service, in cooperation with the University of California Agricultural Experimentation Station, Berkeley, CA.

Wiberg, Randy S. 1999. *Cultural Resources Evaluation and Impact Program for the Western Drive Pipeline Replacement Project Near Point Molate, Contra Costa County California*. Report on File at the California Historical Resources Information System, Northwest Information Center, Rohnert Park, CA.