

## 4.4 Cultural Resources

The following discussion evaluates potential impacts to prehistoric and historical sites and human remains resulting from the Proposed Project.

### 4.4.1 **Thresholds of Significance**

A significant cultural resource impact would occur if the Proposed Project would:

1. Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5 of the State CEQA Guidelines. This shall include the destruction, disturbance or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of Interior Standards.
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the State CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.
3. Disturb any human remains, including those interred outside of formal cemeteries.

Guidelines 1 and 2 are derived directly from CEQA. Subchapters 21083.2 of the Public Resources Code and 15064.5 of the CEQA Guidelines recommend evaluating historical and archaeological resources to determine whether or not a proposed action would have a significant effect on unique historical or archaeological resources. Guideline 3 is included because human remains must be treated with dignity and respect and CEQA requires consultation with the “Most Likely Descendant” as identified by the NAHC for any project in which human remains have been identified. These significance guidelines are also from the County’s Guidelines for Determining Significance – Cultural Resources: Archaeological and Historic Resources (2007a).

### 4.4.2 **Proposed Project**

#### 4.4.2.1 *Analysis of Project Effects and Determination as to Significance*

##### Archaeological Resources (Guideline Nos. 2 and 4)

The following assumptions were used in assessing the impact of the Proposed Project and its alternatives on cultural resources in the area:

- The area of potential impact would include all areas that lie within the MUP footprint.
- In areas where land disturbance is indicated on the plot plan, impacts to cultural resources are assumed to be direct, particularly those resulting from grading and extraction activities. All direct impacts would result in the disturbance or removal of the resources.
- Cultural resources that are located outside of the grading or extraction envelope would not be affected by the Project; however, indirect impacts might be a concern for those sites that

lie near the construction aggregate extraction operation or along graded roads that pass along the major elevations on the north side of the Project impact footprint.

As noted in Subchapter 3.4, *Cultural Resources*, seven archaeological sites were discovered and documented during field surveys of the 105-acre Project impact footprint. These include: SDI-7,195, SDI-10,298, SDI-11,793, SDI-10,297/H, SDI-16,788, SDI 17,431, and SDI-17,433/H. A detailed discussion of each site can be found in Appendix F. Because the cultural resources study determined that two archaeological sites (SDI-10,297/H and SDI-10,298) located within the development envelope of the Project impact footprint are considered to be significant cultural resources according to the criteria listed in Section 3.4.4, the Project would be expected to result in significant direct impacts to these two prehistoric sites. (Impact CR-1)

The remaining five prehistoric sites (SDI-7,195, SDI-11,793, SDI-16,788, SDI 17,431, and SDI-17,433H) were evaluated as containing limited significance or importance; therefore, Project-related impacts to these sites would be considered less than significant.

#### Historical Sites (Guideline Nos. 1 and 4)

As noted in Subsection 3.4.2.6, two historical sites, SDI-10,297/H and SDI-17,433/H, were discovered and documented within or adjacent to the 105-acre impact footprint. Detailed discussions of the sites can be found in Appendix F. Because the cultural resources study determined that the historic components of sites SDI-10,297/H and SDI-17,433/H are not considered to be significant according to the criteria listed in Subsection 3.4.2.4, 4, impacts to historical sites resulting from the Project are expected to be less than significant.

#### Human Remains (Guideline No. 3)

No evidence of human remains, including those interred outside of formal cemeteries, was discovered during the records search, literature review or during site surveys. As discussed in Subsection 3.4.2.3, a search of the Sacred Lands File was conducted by the NAHC for the Project area. The results of this search are provided in Appendix F and the NAHC search failed to indicate the presence of burial sites within the Major Use Permit footprint. Therefore, no impacts to Native American burial sites would be anticipated.

#### **4.4.2.2 Significance of Impacts Prior to Mitigation**

Impact CR-1 There is the potential that brushing, grading and extraction activities by the Project could result in significant direct impacts to two archaeological sites (SDI-10,298 and SDI-10,297/H) located within the development envelope of the 105-acre Project impact footprint.

#### **4.4.2.3 Mitigation Measures**

In general, the mitigation of impacts to important archaeological sites may be achieved through avoidance (preservation) or data recovery. Because cultural resources are finite, avoidance and preservation are the preferred mitigation measures. Avoidance would require that cultural resources be set aside and preserved in open space easements. The sizes of the easements would

be based upon the boundaries of the sites or the areas of significance as defined by the testing program and appropriate buffers.

Where the aggregate extraction operations would directly impact significant sites and avoidance is not feasible, mitigation of potential impacts may be achieved through data recovery. The significance of the identified significant sites is based on the information potential represented by the subsurface deposits of artifacts. Therefore, the research potential of the sites may be realized through the data recovery program that would include the analysis of artifacts and provenance information. The data recovery programs would include adequate subsurface samples of the significant deposits to meet the requirements for data recovery.

The timing for mitigation of individual sites would be prior to any earth disturbing activities for data recovery, disposition of cultural materials, and fencing. The Archaeological Monitoring Program will be timed according to the individual phases of extraction.

The following mitigation measures are recommended for potential impacts to cultural resource sites on the MUP footprint:

M-CR-1a All earth disturbing activities that affect areas in the native soil within the MUP footprint shall be monitored by one or more archaeologists and Kumeyaay Native American monitors, as dictated by the size of the grading operation. All utility excavations, road grading, or brush removal must be coordinated with the archaeological monitor(s) and Kumeyaay Native American monitor(s). Any known resources must be intensively monitored during any earth disturbing activities to ensure that any important features, isolates, or deposits are either recorded and collected or evaluated. Should any resources be encountered during the monitoring of the earth disturbing activities that were not previously recorded, the earth disturbing activities shall be temporarily halted or redirected to another area while the nature of the discovery is evaluated. Any resources that may be encountered shall be evaluated to determine their significance. If the evaluation demonstrates that a resource is significant, then a data recovery program shall be implemented.

M-CR-1b Significant cultural resource sites SDI-10,298 and SDI-10,297/H shall be subject to a data recovery program. Earth disturbing activities at these sites shall be intensively monitored by the designated archaeological monitor and Kumeyaay Native American monitor to ensure that any important features, isolates, or deposits are either recorded and collected, or evaluated. Should any resources be encountered during the monitoring of the earth disturbing activities which were not previously recorded, the earth disturbing activities shall be temporarily halted or redirected to another area while the nature of the discovery is evaluated. The archaeological monitor in consultation with the Kumeyaay Native American monitor shall determine the excavation methods, laboratory analyses, and special studies for these resources. Cultural materials recovered from the Project shall be placed in permanent storage at a San Diego curation facility or a culturally affiliated Tribal curation facility or repatriated to a tribe of appropriate cultural affinity.

Table 4.4-1, *Summary of Data Recovery Mitigation Measures for Impacted Significant Sites*, provides additional information regarding timing and extent of the recommended data recovery mitigation program for sites SDI-10,297/H and SDI-10,298.

Cultural resource sites SDI-7195, SDI-11,793, SDI-16,788, SDI-17,431, and SDI-17,433/H have been tested and evaluated by both CEQA and County of San Diego cultural resources guidelines. All of these resources were evaluated as containing limited significance, and no mitigation measures are recommended.

Significant and potentially significant cultural resources (SDI-10297/H [portion], SDI-10,298 [portion], SDI-12,707, and SDI-12,710) are located adjacent to the Project impact footprint. In order to prevent inadvertent disturbance to these resources, fencing surrounding the entire project site is included in the project design.

#### **4.4.2.4 Conclusion**

In accordance with the guidelines identified in Subsection 4.4.1, including CEQA Guidelines Subchapter 15064.5, four archaeological sites and one archaeological/historical site located in or adjacent to the study area were determined to be not important/significant resources.

Potentially significant impacts to two important prehistoric sites within the Major Use Permit footprint would be mitigated to less than significant levels through implementation of a County-approved data recovery program, thereby recovering and preserving the important information retained within these sites.

### **4.4.3 Extraction to Natural Grade Alternative**

#### **4.4.3.1 Analysis of Project Effects and Determination as to Significance**

##### Archaeological Resources (Guideline Nos. 2 and 4)

The assumptions described in Subsection 4.4.3.1 are also used in analyzing the impacts of this alternative.

The Extraction to Natural Grade Alternative would involve the same operations and the same footprint as the Proposed Project but would only be extracted to natural grade elevation. Because the footprint of this alternative is identical to the Proposed Project, it would result in impacts to the same cultural resources identified for the Proposed Project. As discussed above for the Proposed Project, two sites (SDI-10,297/H and SDI-10,298) are considered significant prehistoric resources according to the criteria listed in Subsection 3.4.2.4. Accordingly, this alternative would result in significant direct impacts to these two prehistoric sites. (Impact CR-1)

The remaining five prehistoric sites (SDI-7,195, SDI-11,793, SDI-16,788, SDI 17,431, and SDI-17,433H) were determined to have limited significance or importance; therefore, impacts to these sites associated with this alternative would be considered less than significant.

#### Historical Sites (Guideline Nos. 1 and 4)

As noted in Subsection 3.4.2.6, because the cultural resources study determined that the historic components of Sites SDI-10,297/H and SDI-17,433/H are not considered to be a significant cultural resource according to the criteria listed in Section 3.4.2.4, impacts to historical sites resulting from this alternative would be less than significant.

#### Human Remains (Guideline No. 3)

No evidence of human remains, including those interred outside of formal cemeteries, was discovered during the records search, literature review or during site surveys. Therefore no impacts to Native American burial sites would be expected with implementation of the Extraction to Natural Grade Alternative.

#### **4.4.3.2 Significance of Impacts Prior to Mitigation**

Significant impacts associated with the Extraction to Natural Grade Alternative would be similar to those described for the Proposed Project in Subsection 4.4.3.2.

#### **4.4.3.3 Mitigation Measures**

Potentially impacted cultural resources would be subject to the same mitigation measures (M-CR-1a and M-CR-1b) as those described in Subsection 4.4.3.3.

#### **4.4.3.4 Conclusion**

In accordance with the guidelines identified in Section 4.4.1, including CEQA Guidelines Subchapter 15064.5, five archaeological sites located in the proposed development area under the Extraction to Natural Grade Alternative were determined not to be an important/significant resource.

Potentially significant impacts to two significant prehistoric sites on the property would occur but would be mitigated to below a level of significance through implementation of a County-approved data recovery program, thereby recovering and preserving the important information retained within these disturbed sites.

#### **4.4.4 Extraction to Varying Depth Alternative**

##### **4.4.4.1 Analysis of Project Effects and Determination as to Significance**

#### Archaeological Resources (Guideline Nos. 2 and 4)

The assumptions described in Subsection 4.4.3.1 are also used in analyzing the impacts of this alternative.

The Extraction to Varying Depth Alternative would involve the same operations and the same footprint as the Proposed Project but would include aggregate extraction to a depth between 50 and 200 feet below natural grade (versus 525 feet for the Proposed Project). Because the footprint of

this alternative is identical to the Proposed Project, it would result in impacts to the same cultural resources identified for the Proposed Project. As discussed above for the Proposed Project, two sites (SDI-10,297/H and SDI-10,298) are considered significant prehistoric resources according to the criteria listed in Subsection 3.4.2.4. Accordingly, this alternative would result in significant direct impacts to these two prehistoric sites. (Impact CR-1)

The remaining five prehistoric sites (SDI-7,195, SDI-11,793, SDI-16,788, SDI 17,431, and SDI-17,433-H) were determined to have limited significance or importance; therefore, impacts to these sites associated with this alternative would be considered less than significant.

#### Historical Sites (Guideline Nos. 1 and 4)

As noted in Subsection 3.4.2.6, because the cultural resources study determined that the historic components of Sites SDI-10,297/H and SDI-17,433/H are not considered to be a significant cultural resource according to the criteria listed in Subsection 3.4.2.4, impacts to historical sites resulting from this alternative would be less than significant.

#### Human Remains (Guideline No. 3)

No evidence of human remains, including those interred outside of formal cemeteries, was discovered during the records search, literature review or during site surveys. Therefore no impacts to Native American burial sites would be expected with implementation of the Extraction to Varying Depth Alternative.

#### **4.4.4.2 Significance of Impacts Prior to Mitigation**

Significant impacts associated with the Extraction to Varying Depth Alternative would be similar to those described for the Proposed Project in Subsection 4.4.3.2.

#### **4.4.4.3 Mitigation Measures**

Potentially impacted cultural resource sites would be subject to the same mitigation measures (M-CR-1a and M-CR-1b) as those described in Subsection 4.4.3.3.

#### **4.4.4.4 Conclusion**

Because the proposed impact footprint would be identical to that of the Proposed Project, cultural resource impacts would be the same as the Proposed Project under the Extraction to Varying Depth Alternative. In accordance with the guidelines identified in Section 4.4.1, including CEQA Guidelines Subchapter 15064.5, five archaeological sites located in the proposed development area under the Extraction to Varying Depth Alternative were determined not to be an important/significant resource.

Potentially significant impacts to two significant prehistoric sites on the property would occur but would be mitigated to below a level of significance through implementation of a County-approved data recovery program, thereby recovering and preserving the important information retained within these sites.

#### **4.4.5 No Project/Existing Plan Alternative**

##### **4.4.5.1 Analysis of Project Effects and Determination as to Significance**

###### Archaeological Resources (Guideline Nos. 2 and 4)

The assumptions described in Subsection 4.4.2.1 are also used in analyzing the impacts of this alternative.

This alternative assumes that the current project would not proceed but that the 316 acres of the 410-acre Project site that are within the EOMSP area would be developed per the existing land uses approved by the EOMSP, which includes Mixed Industrial and Rural Residential uses. The No Project/Existing Plan Alternative could potentially impact both significant prehistoric sites identified within the 105-acre impact footprint as well as potential prehistoric sites located outside of the 105-acre surveyed impact footprint, depending on the specifics of the proposed development projects. (Impact CR-1)

Additional surveys for prehistoric sites would be required for the remaining 211 acres that would be developed if this alternative were carried forward.

The remaining five prehistoric sites (SDI-7,195, SDI-11,793, SDI-16,788, SDI-17,431, and SDI-17,433H) within the 105-acre Project impact footprint were determined to have limited significance or importance; therefore, impacts to these sites associated with this alternative would be considered less than significant.

###### Historical Sites (Guideline Nos. 1 and 4)

As noted in Section 3.4.6, because the cultural resources study determined that the historic components of Sites SDI-10,297/H and SDI-17,433/H located within the 105-acre Project impact footprint are not considered to be a significant cultural resource according to the criteria listed in Section 3.4.4; therefore, impacts to historical sites resulting from this alternative would be less than significant. Additional surveys for historic sites would be required for the remaining 211 acres that would be developed if this alternative were carried forward.

###### Human Remains (Guideline No. 3)

No evidence of human remains, including those interred outside of formal cemeteries, was discovered within the 105-acre Project impact footprint during the records search, literature review or during site surveys. Therefore, no impacts to Native American burial sites would be expected with implementation of the No Project/Existing Plan Alternative. Additional surveys for human remains would be required for the remaining 211 acres that would be developed if this alternative were carried forward.

##### **4.4.5.2 Significance of Impacts Prior to Mitigation**

Depending of the specifics of developments associated with the No Project/Existing Plan Alternative, there is potential for significant impacts to cultural resources, which would be similar to those described for the Proposed Project in Subsection 4.4.2.2.

#### **4.4.5.3 Mitigation Measures**

As described above, either or both of the two significant identified cultural sites located within the 105-acre Project impact footprint could be subject to significant, project-related impacts, depending on the specifics of the proposed development projects. Any potentially impacted cultural sites would be subject to mitigation measures similar to those described in Subsection 4.4.2.3. Additional surveys would be required for the remaining 211 acres that would be developed outside the Project impact footprint and identified cultural resources would be subject to mitigation measures similar to those described in Subsection 4.4.2.3.

#### **4.4.5.4 Conclusion**

In accordance with the guidelines identified in Section 4.5.1 of this subchapter, including CEQA Guidelines Subchapter 15064.5, there would be the potential for significant impacts to two significant prehistoric sites within the 105-acre Project impact footprint as well as potential significant prehistoric sites within the remaining un-surveyed 211 acres that would be developed outside of the Project impact footprint, depending on the specifics of the proposed development. Any identified impacts would be required to be mitigated to below a level of significance through implementation of a County-approved data recovery program, thereby recovering and preserving the important information retained within these disturbed sites.

#### **4.4.6 No Project Alternative**

##### **4.4.6.1 Analysis of Project Effects and Determination as to Significance**

The No Project Alternative assumes that the project area would not be mined and would remain undeveloped. If this scenario were chosen, no impacts to cultural resources would occur, as all of the sites within the area would not be impacted by development projects.

##### **4.4.6.2 Significance of Impacts Prior to Mitigation**

No cultural resource impacts would occur.

##### **4.4.6.3 Mitigation Measures**

No mitigation measures are required under this alternative.

##### **4.4.6.4 Conclusion**

Under this alternative, there would be no project-related impacts to cultural resources and no need for mitigation measures.

**Table 4.4-1  
SUMMARY OF DATA RECOVERY MITIGATION MEASURES  
FOR IMPACTED SIGNIFICANT SITES**

Site Designation	Size of Subsurface Deposit (m <sup>2</sup> ) <sup>1</sup>	Proposed % of Total Subsurface to be Excavated <sup>2</sup>	Proposed Test Units per Phase (m <sup>2</sup> or units)			Total Area Excavated (m <sup>2</sup> or units)
			Phase 1	Phase 2	Phase 3	
SDI-10,297/H	4,300	4.1 to 7.3%	172 to 300	5 to 12	Unlikely	177 to 312
SDI-10,298	1,116	5.0 to 10.0%	45 to 78	11 to 34	Unlikely	56 to 112

Source: BFSa 2011

<sup>1</sup> Due to the small size of the testing sampling program, the actual size of the subsurface deposits may be adjusted during data recovery to more accurately reflect the deposit dimensions. Any adjustments to the deposit dimensions will affect the quantity of test units needed to accomplish data recovery goals.

<sup>2</sup> The proposed percentage of subsurface area to be excavated is dependent on site size and complexity, as well as agency requirements. A 10 percent sample is recommended for Otay Mesa Prehistoric Resources (Gallegos et al. 1998).

m<sup>2</sup> = square meters

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