



# Memo

<b>To</b>	Sarah Whitney, Amazon Web Services
<b>From</b>	Ariana Jensen and Michele Barlow, ERM
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<b>Reference</b>	PN 0527032
<b>Subject</b>	SFO069 Camino Arroyo Natural Resources Memorandum

## 1. INTRODUCTION

Environmental Resources Management Inc. (ERM), in partnership with Arup and Gensler, was retained by Amazon Web Services (the “Client” or “AWS”) to complete a natural resources assessment memorandum in respect to SFO069 data center site development in Gilroy, California (the “Site”). This natural resources assessment describes the background to the assessment, the scope of work undertaken by ERM and the significant (as defined below) natural resources issues identified during the assessment.

### 1.1 Project Background and Objectives

The Client is considering developing a Site in Gilroy, California for the purpose of a multi-story datacenter. ERM has been engaged in partnership with Arup and Gensler to undertake a natural resources assessment for the Site. The objectives of the natural resources assessment are to:

- Identify and depict the boundaries of surface waters and wetland resources at the Site in order to establish potential project effects using aerial photographs, topographic maps, and other available inventory data in addition to field observations.
- If applicable, identify local, state, and federal/national threatened, endangered, or otherwise protected species occurring or potentially occurring at the Site. ERM will also identify the existence of agency, local, state, and federally designated wildlife habitat or critical habitat within the Site boundaries or on property adjacent to the Site.

### 1.2 Project Scope

The ERM scope of work for this evaluation is as follows:

1. Conduct a desktop evaluation of the following environmental characteristics of the Site area based on readily available data.
- Identify relevant natural resources legislation and policy.
  - Identify aquatic resources potentially present in the Site area.

- Identify (if applicable) local, state and federal threatened, endangered, or otherwise protected vegetation species, or state designated significant wildlife habitat potentially present in the Site area or adjacent properties.
- 2. Conduct a Site visit to visually evaluate the potential presence of species and habitat, particularly those identified during the desktop research.
- 3. Based on the above evaluation, ERM prepared this natural resources assessment memorandum that compiles and summarizes the findings of the desktop evaluation and documents the identified limitations and constraints in the Site area.
- Summary of relevant legislation, regulations, and timelines.
- Description of and map which identify biodiversity, water resource, and other natural resource constraints.
- Summary of site constraints, including potential risks to Site development and future operations.

## 2. LOCAL SETTING

The Site consists of one approximately 56.33-acre irregular shaped parcel, east of Arroyo Circle, in the southern portion of Gilroy, California within the Gilroy General Plan (GPA) (Figure 1). The Site consists entirely of agricultural land with two soil piles and remnants of recent tomato crops.

The nearest surface water body is an unnamed irrigation channel running along the southern boundary of the Site. Miller Slough is located approximately 0.17 miles west and Llegas Creek is located approximately 0.75 miles east of the Site.

According to the City of Gilroy Zoning Map, the Site is located within a General Industrial and Shopping Center Commercial area. Surrounding land uses include commercial, industrial, and agricultural properties.

## 3. PROPOSED DEVELOPMENT

The proposed development of the Site would consist of two approximately 200,000-square foot datacenters, parking areas, a substation, a storm water detention pond, and future water treatment system. The Client is evaluating multiple future development layouts at this time.

## 4. PLANNING AND LAND USE

### 4.1 Strategic Framework

The Site is located east of the center of Gilroy. The General Plan (2016) for the City of Gilroy outlines the following priorities for the area:

- Small Town Character: Relatively compact city space surrounded by open space and agricultural lands, with buildings typically one to two stories
- Rural Identify: City's boundaries remain as natural open space and working agricultural lands

- Compact/Integrated Development Pattern: The City will grow inward from its historic core, protecting the boundaries from urban sprawl
- Links between growth and resources: New growth will be planned to account for resource capacity constraints and be coordinated with basic services such as streets, sewer, water, fire, police and schools. New development will be coordinated with funding and necessary infrastructure improvements.

The proposed development of the datacenter would align with the plan by matching the surrounding land use of the present area, along with close coordination with local government regarding the character of the surrounding area.

## 5. ENVIRONMENTAL CONSTRAINTS

### 5.1 Water Resources

#### Methodology

Desktop studies have assessed both the flooding potential and water quality at the Site. Flooding potential was assessed through a review of Santa Clara County Flood Insurance Rate Map (FIRM) low, medium, and high flood risk areas based on waterbodies located within and adjacent to the Site boundary.

Rivers and groundwater monitoring well locations in the vicinity of the Site were evaluated to assess potential water and groundwater quality issues respectively.

#### Results

Based on a review of aerial imagery and confirmed during the Site visit, the nearest surface water body is an unnamed irrigation channel running along the southern boundary of the Site. Miller Slough is located approximately 0.17 miles west and Llegas Creek is located approximately 0.75 miles east of the Site. According to the FIRM, the northeast and southern portion of the Site are located within Zone X, which is defined as “areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood”. According to flood zone and National Wetland Inventory (NWI) data presented in the EDR® Radius Map™ Report, the Site is located within the 500-year flood plain and partially located within the 100-year flood plain. No wetland-delineated areas are mapped on or adjacent to the Site and none were observed during ERM’s Site visit.

The development plans for the datacenter have not been finalized, but ERM understands that large-scale grading will be utilized to raise the footprint of the datacenter to a higher elevation to reduce flooding potential.

Storm water at the Site currently infiltrates into the ground throughout the parcel. The proposed development plants would re-direct storm water flows towards a detention pond prior to discharge to the City of Gilroy municipal storm water system. .

## Potential Risks

Based on the desktop assessment, the Site lies within the 100- and 500-year flood areas and is therefore at risk of flooding. ERM understands that the Site grading is being evaluated by others to raise the building pad elevations and include storm water drainage features. No natural waterways currently exist at the Site that would require alteration or permitting prior to development. The Site will need to consider storm water drainage management and overland flow to assess and prevent a potential increase to flooding risks to adjacent parcels.

Water quality risks at the Site are expected to be low after appropriate site grading design and implementation. Appropriate measures should be implemented at the future development to reduce potential contaminant run-off into the future detention pond.

## 5.2 Biological Resources

### Methodology

Desktop studies and field assessments were conducted for potential biological resources present at the Site. ERM reviewed the following public resources for the Site:

- City of Gilroy General Plan
- Santa Clara Valley Habitat Conservation Plan (HCP)
- United States Fish and Wildlife Service (USFWS) Critical Habitat
- California Natural Diversity Database (CNDDB), and
- United States Geological Survey (USGS) Biodiversity Information Serving Our Nation (BISON).

### Results

The Site is comprised of disturbed (tilled) agricultural land. No wetlands were mapped on the Site on NWI maps or observed by ERM during the Site visit. No USFWS Critical Habitat is listed at the Site. The following species were mapped with CNDDB occurrences within 2-miles of the Site (Figure 2):

- Pallid Bat (*Antrozous pallidus*): The pallid bat is listed as a California Department of Fish and Wildlife (CDFW) Species of Special Concern (SSC). The species habitat includes semi-arid and arid landscapes throughout California within primarily grasslands, shrub-steppe, and desert environments. Bat roosts are most commonly found in rock crevices although bridges, live trees, and snags can also be used. ERM's Biologist did not identify suitable habitat for this species during the site visit.
- Hoary Bat (*Lasiurus cinereus*): The hoary bat is listed as a Western Bat Working Group (WBWG) Medium Priority species. The species habitat includes forested habitats in which roosts can be developed in the dense foliage of trees. Habitat can also include suburbs with older large trees. During migration, males are found in foothills, deserts and mountains while

females are found in lowlands and coastal valleys. ERM's Biologist did not identify suitable habitat for this species during the Site visit.

Additionally, no burrowing owl habitats or burrows were observed at the Site or listed on the natural resources mapper for the Santa Clara Valley Habitat Conservation Plan.

The Site is located within the boundaries of the Santa Clara Valley Habitat Conservation Plan (HCP). The Site is characterized within the Habitat Plan Permit Area, Area 4 (Urban Development), and Fee Zone B for agricultural and valley floor properties. Due to HCP requirements and Site location, potential pre-development requirements, fees, and mitigation requirements may apply to the Site. No significant natural resource issues were identified during the desktop review.

### Potential Risks

Based on the desktop assessment, it is unlikely that there will be significant risks to biological resources and biodiversity from proposed development at the Site. Appropriate mitigation measures may be required by the HCP agency to avoid any potential impacts to the Site. The specific mitigation measures potentially required under the HCP should be evaluated well in advance of development to avoid potential project development schedule issues.

## 6. SUMMARY OF FINDINGS

Detailed in Table 1 is a summary of all the constraints, impacts, and potential opportunities/benefits for the Site from the natural resource assessment.

The assessment has been completed using a risk-weighted approach based on the below definitions:

- **Red** items indicate high priority risks that would likely have a material impact on the Site development requiring substantial or costly investment and/or mitigation measures
- **Amber** items indicate medium priority risks that may have material impact on the Site development requiring investment and/or mitigation measures
- **Green** items indicate lower priority risks that are typically associated with Site development. These items are not considered likely to impact the Site's development, could be managed under investment profiles, and can be mitigated with the implementation of standard measures.

Table 1. Summary of Constraints and Issues

Item	Issues and Constraints	Impacts	Potential Risk Analysis	Risk Level	Next Steps
<b>Planning and Land Use</b>					
<b>General Planning</b>	The development must consider a variety of factors detailed in the Gilroy General Plan.	Unknown at this point. Impacts depend on local planning consultation and design.	<p>The proposed development of the Site would need to consider local planning requirements including: small town character, rural identify, compact/integrated development pattern, and links between growth and resources.</p> <p>The proposed development of the datacenter could align with the plan by matching the surrounding land use of the present area, along with close coordination with local government regarding the character of the surrounding area.</p>	Low Risk	Consult with the GGP and local planning requirements per the proposed project design.
<b>Biological Resource Planning</b>	This development must consider a variety of factors detailed in the Santa Clara Habitat Conservation Plan.	Unknown at this point. Impacts depend on previous land use conversion and discussion with local agency.	The Site is located within the boundaries of the Santa Clara Valley Habitat Conservation Plan (HCP). The Site is characterized within the Habitat Plan Permit Area, Area 4 (Urban Development), and Fee Zone B for agricultural and valley floor properties. Due to HCP requirements and Site location, potential pre-development requirements, fees, and mitigation	Medium Risk	Review previous HCP documentation and/or decision regarding agricultural to industrial land use conversion along with agency discussion.

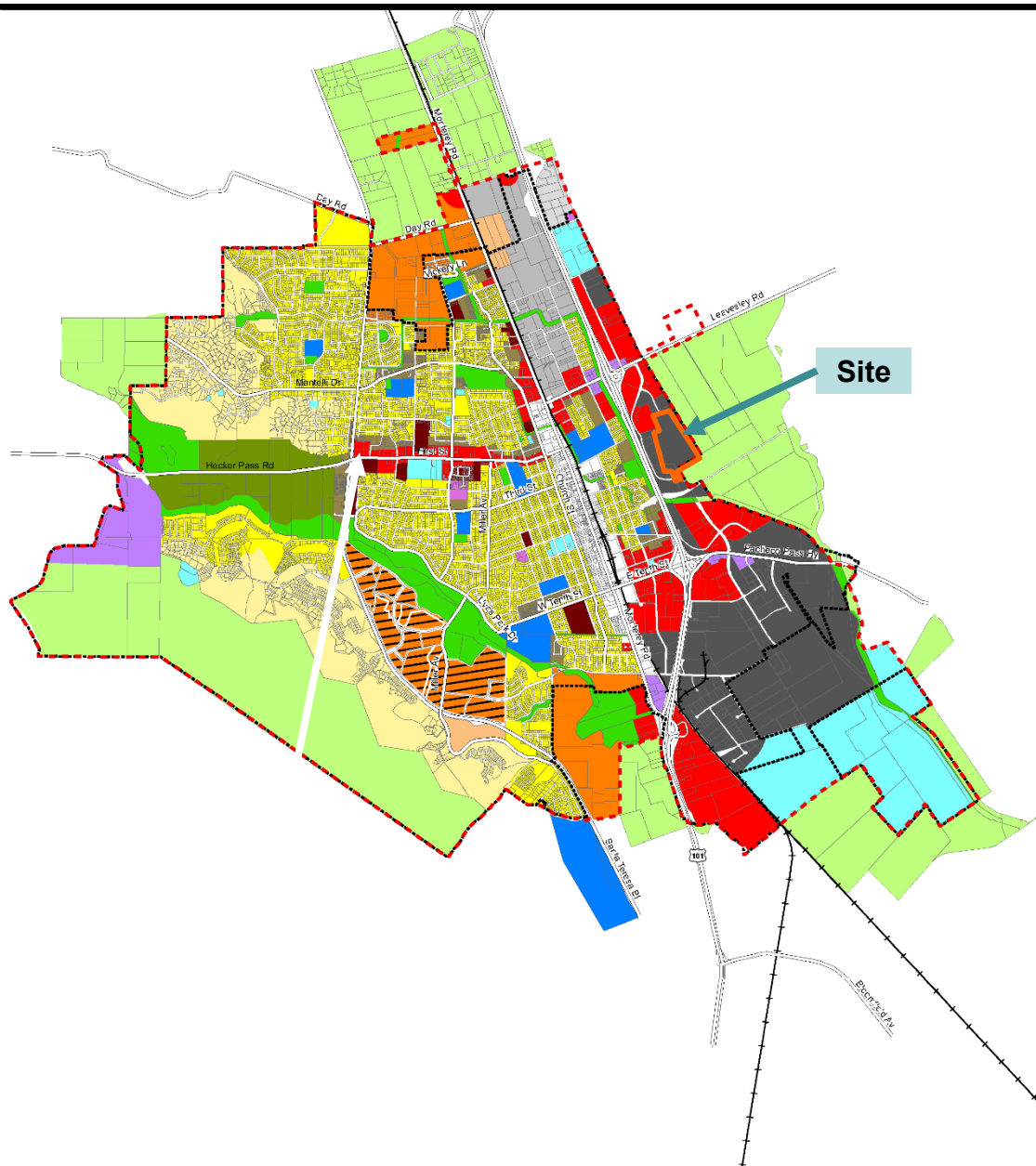
Item	Issues and Constraints	Impacts	Potential Risk Analysis	Risk Level	Next Steps
			requirements may apply to the Site. No significant natural resource issues were identified during the desktop review.		
<b>Environmental Constraints</b>					
Water Resources	Development of the project could result in potential impacts to current surface water flow at the Site.	N/A	<p>There are significant flood risks to the Site in its current configuration, but these are being evaluated by others with the intent to develop a grading plan that raises the site elevation to mitigate these risks.</p> <p>There are no natural waterways at the Site, therefore it does not appear that waterway risk mitigation or associated permits are required.</p>	Medium Risk for flooding and Low Risk for general water resources	<p>Site grading is being planned by others and is expected to be implemented prior to development.</p> <p>Implement best management practices and follow regulatory requirements to reduce potential storm water runoff impacts (sedimentation controls).</p>
Biological Resources	No constraints were documented from threatened or	N/A	The Site is comprised of disturbed (tilled) agricultural land. No wetlands were mapped on the Site on NWI maps or observed by ERM during the	Low Risk	Comply with any potential requirements per the SCHCP.

Item	Issues and Constraints	Impacts	Potential Risk Analysis	Risk Level	Next Steps
	endangered species that may restrict development of the Site.		Site visit. No USFWS Critical Habitat is listed at the Site. CNDDDB shows an occurrence within 2-miles of the Site for the Pallid bat ( <i>Antrozous pallidus</i> ) and Hoary Bat ( <i>Lasiurus cinereus</i> ); however, no on-Site habitat was observed during ERM's Site visit. Additionally, no burrowing owl habitats or burrows were observed at the Site.		



## ATTACHMENT A    FIGURES

# Gilroy 2020 General Plan Land Use Diagram



Urban Growth Boundary

Urban Service Area

## 2020 Land Use

### Residential

Hillside Residential

Low Density Residential

Medium Density Residential

High Density Residential

Neighborhood District

Rural Residential

### Industrial

Campus Industrial

Industrial Park

General Industry

### Commercial

Downtown Specific Plan

Professional Office

General Services Commercial

Visitor-Serving Commercial

### Other

Hecker Pass Special Use District

Open Space

Park and Recreation Facility

Public/Quasi-Public Facility

Educational Facility

Glen Loma Ranch Specific Plan

Approximate Site Boundary



0 1 2 Miles



**GILROY GENERAL PLAN**  
SFO069 Due Diligence  
Assessor's parcel number 841-69-039 Camino Arroyo  
Gilroy, California

Figure

**1**



