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# MEMORANDUM – BASELINE CONSTRAINTS REPORT

**TO:** Chuck Beatty, Planning Director, Amador County

**FROM:** Kelly Boyle, Project Manager, AES-Montrose

**PROJECT:** Wicklow Way Specific Plan Mixed-Use Development Project

**DATE:** 11/24/2021

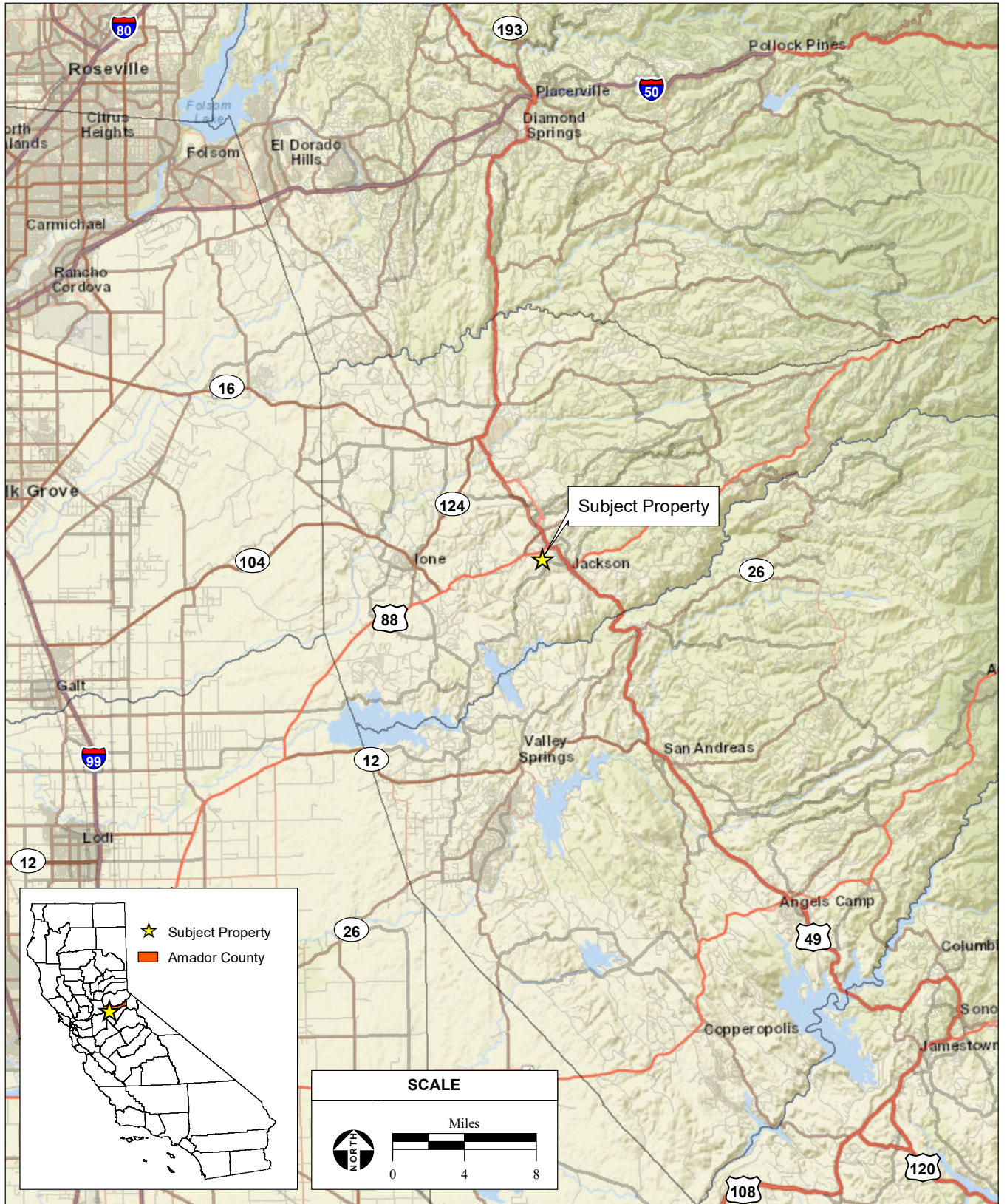
## INTRODUCTION

An SB-2 Planning Grant was awarded by the California Department of Housing and Community Development to Amador County for the Wicklow Way Specific Plan and Environmental Impact Report (Proposed Project). The Specific Plan Area (Subject Property) encompasses 201 acres of open space (**Figures 1 and 2**) west of the County of Jackson and south of State Route 88, and is bordered by a Walmart, a former K-Mart, Argonaut High School, single-family residential development, and grazing land included in California Land Conservation Act (Williamson Act) contracts. The site includes three zoning districts (Single Family Residential, High Density Multi-Family Residential, and Light Commercial [Retail/Commercial/Office]).

The Subject Property is within the Martell Regional Service Center that is planned to include a mix of retail commercial, industrial, and high-density housing with the potential for mixed-use development. The Martell Regional Service Center is the largest future housing location in the County, as well as the dominant commercial center. Therefore, a critical component of the Specific Plan involves creating a compatible residential component that allows residents to live nearby while also improving circulation and encouraging use of alternative transportation for local trips.

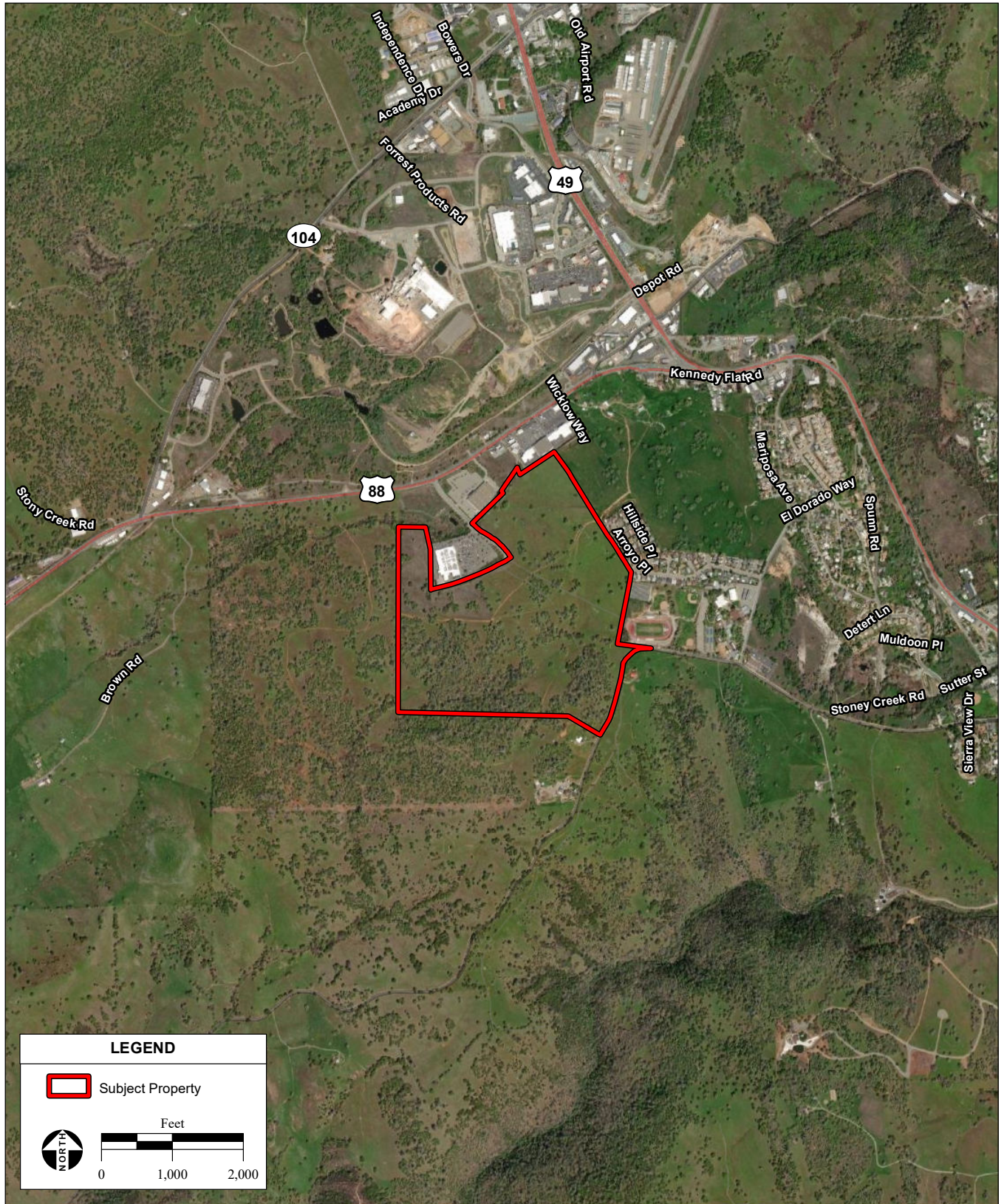
The Subject Property is generally relatively flat with gently rolling hills, gradually sloping downward from east to west and ranging in elevation from approximately 1,500 feet above mean sea level in the east portion of the Subject Property to 1,400 feet above mean sea level in the south portion of the Subject Property. There are no pre-existing structures or developments on the Subject Property; however, various access roads for vehicles such as trucks and light off-road utility vehicles are present. The Subject Property is fenced for the majority of its perimeter. Previous and current land uses include livestock grazing and leased cattle pasture, respectively.

A site reconnaissance inspection of the Subject Property was performed by AES-Montrose staff on November 03, 2021. The inspection included biological and cultural resources surveys. AES-Montrose reviewed aerial photographs and topographic maps of the Subject Property. Other documents reviewed include those from cultural historical records and biological databases, as well as the 2008 Environmental Impact Report (EIR) prepared for the Subject Property associated with a past development project that did not come to fruition (Quad



**Figure 1**  
Regional Location





SOURCE: Vivid Maxar aerial photography, 4/3/2020; ESRI, 2021; AES-Montrose, 10/28/2021

**Figure 2**  
Site and Vicinity

Knopf, 2008). For reference, the project associated with the previous EIR included 504 single family residential lots, 99 townhomes, five acres for apartments, four commercial parcels totaling 29.4 acres, 8.5 acres dedicated to a future school site, and 29.8 acres dedicated to parks and pathway areas.

The following issues are expected to inform potential site plan constraints and are addressed in this report:

- Biological Resources
- Cultural Resources
- Geology and Soils
- Land Use/Planning/Airport Compatibility
- Hydrology/Water Quality
- Noise
- Utilities/Infrastructure

## ENVIRONMENTAL CONSTRAINTS

### 2.1 BIOLOGICAL RESOURCES

A pedestrian survey of the Subject Property was conducted on November 3, 2021 using a meandering transect method to classify the habitats within the Subject Property, determine the suitability for special status species to occupy the Subject Property and vicinity, and document the location of any potential wetlands and water courses within the Subject Property. Prior to conducting the reconnaissance survey, aerial photographs and topographic maps were reviewed. State and federally listed special status species were queried during the desktop research of potential special status species.

#### Habitats

##### Annual Grassland

Annual grassland habitat is the dominant habitat type throughout the Subject Property. Trees are largely absent within this community type and it is generally dominated by non-native annual grasses and forbs. Sparsely distributed oaks are found within this habitat type, with some being very large especially to the north of the Subject Property in the most open areas of annual grassland. Small areas of annual grassland habitat are found within the oak woodland habitat in the southern third of the Subject Property. Cattle utilize this habitat type especially for grazing, and evidence of hoof-prints and trample erosional features were observed. Weedy forbs and non-native grasses were the dominant ground cover of this habitat type. These species included tarweeds (*Hemizonia* sp.), filaree (*Erodium* sp.), dogtail grass (*Cynosurus echinatus*), barley (*Hordeum* sp.), and oats (*Avena* sp.).

##### Oak Woodland

Oak woodland habitat covers approximately a third of the Subject Property's area. Blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), valley oak (*Quercus lobata*), and gray pine (*Pinus sabiniana*) trees comprise the vast majority of the canopy in this habitat type. The herbaceous forbs and grasses described in the annual grassland habitat type are present as ground cover. There are very few immature trees and shrubs within this habitat type, likely due to shade cover and livestock grazing. Sizes of trees within this habitat type vary greatly from small trees less than 5 inches in diameter growing densely to larger trees of varying health and condition measuring in excess of 36 inches in diameter. There are several large old-growth oaks present within the Subject Property which are mainly valley oaks. This habitat type supports many species through production of food, habitat, duff, and other valuable habitat functions. Approximately 10 mature oaks are present within the Subject



Property. Should these or other oaks be impacted by future development associated with the Proposed Project through removal or grading within tree dripline, mitigation may occur through a combination of replanting and/or replacement, conservation easements, and/or contribution to oak woodland conservation funds among other means of mitigation. Per the Amador County General Plan, at a minimum, one acre of oak woodland habitat providing similar functions and values would need to be placed under conservation easement for every acre of oak woodland habitat lost. The Subject Property has approximately 74 acres of oak woodland. Assuming maximum removal of oak woodland (i.e., half of the existing oak woodland), at least 37 acres of oak woodland would need to be preserved. **Figure 3** displays an example oak woodland preservation of 37 acres; however, it should be noted that the specific oaks to be removed would vary depending on the project site plans.

### Riparian Forest

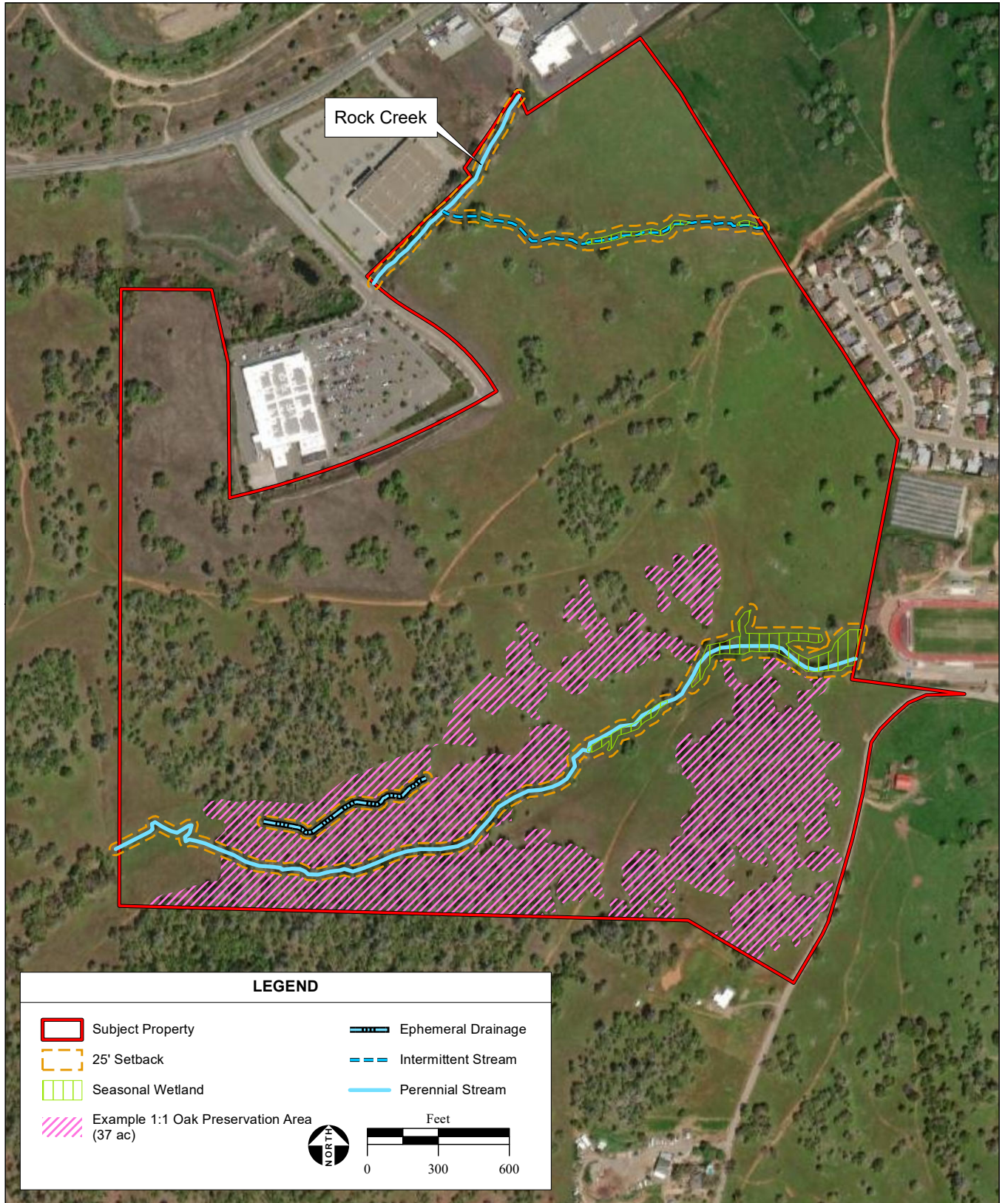
Riparian forest lines the northern border of the Subject Property and is strongly associated with Rock Creek. This habitat type is present along the bed bank and channel of Rock Creek and exhibits an understory and canopy of densely wooded young to mid-aged oaks, cottonwoods (*Populus* sp.), and willows (*Salix* sp.). This habitat type is highly overgrown with Himalayan blackberry (*Rubus armeniensis*) and is generally rocky throughout.

### Special Status Species

Based on the results of the agency database queries, several State and federally listed special status plant and animal species have the potential to occur within the Subject Property (CDFW, 2021). The special status species with the potential to occur on the Subject Property include California red-legged frog (*Rana draytonii*), California tiger salamander (CTS) (*Ambystoma californiense*), monarch butterfly (*Danaus plexippus*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), Rudolph's cave harvestman (*Banksula rudolphi*), tricolored blackbird (*Agelaius tricolor*), Tulare cuckoo wasp (*Chrysis tularensis*), western pond turtle (*Emys marmorata*), North American porcupine (*Erethizon dorsatum*), lone manzanita (*Arctostaphylos myrtifolia*), big-scale balsamroot (*Balsamorhiza macrolepis*), Tuolumne button-celery (*Eryngium pinnatisectum*), and prairie wedge grass (*Sphenopholis obtusata*) (CNPS, 2021). The Subject Property does not lie within critical habitat of any federally listed species (USFWS, 2021a). The closest designated critical habitats for assorted special status species listed in the Amador County General Plan are found at approximately 12.2, 7.8, 14.7, and 11.3 miles for CTS, California red-legged frog, steelhead, and vernal pools, respectively, from the Subject Property (NOAA, 2021 and FWS, 2021c). No federally listed special status species were observed within the Subject Property during the site visit.

### Streams, Wetlands, and other Waters of the US

The National Wetlands Inventory (NWI) database shows the Subject Property's drainages consist of freshwater emergent wetland, freshwater forested/shrub wetland, and riverine wetland and watercourse features (USFWS, 2021b). Observations made during the November 2021 site visit of the Subject Property suggest that the areas mapped in the NWI as emergent and forested/shrub wetland are continuations of riverine water features. Rock Creek, the perennial, and intermittent streams all exhibit a combination of shelving, sediment sorting, and/or incised banks. Several small seasonal wetlands appear to occur in line with and adjacent to the various watercourses present in the Subject Property. Areas determined to be seasonal wetlands for the purposes of this report were classified as wetlands due to the presence of standing water, saturation, changes in vegetation versus the surroundings, and the presence of algae and other biotic wetland indicators. An ephemeral drainage occurs on the southwestern portion of the Subject Property and largely parallels the perennial stream. This ephemeral drainage feature is a linear vegetated depression feature that has accumulated leaf litter and matted vegetation downturned in the direction of flow. The ephemeral drainage feature would likely be classified as an "other water



SOURCE: Amador County Parcels; Amador County Zoning data, 2011; Vivid Maxar aerial photograph, 4/3/2020; ESRI, 2021; AES-Montrose, 11/19/2021

**Figure 3**  
Biological Features

of the US.” These watercourses, the ephemeral drainage feature, and their surrounding potential wetlands are depicted on **Figure 3**.

A jurisdictional wetland delineation determination would need to be completed for the Subject Property to determine the presence of jurisdictional wetlands and other waters of the U.S. should these features be impacted by future development. Impacts to jurisdictional waters of the U.S. within the Subject Property would likely require permitting under the USACE CWA Section 404 should development occur in or around the water features and wetlands. Additionally, a Lake and Streambed Alteration Agreement under Fish and Game Code section 1602 may be required if watercourses are to be altered by projects associated with the Subject Property in the future or if development were to occur in or around the water features. The water features displayed in **Figure 3** should be avoided wherever possible in order to preserve aquatic habitat and avoid costs associated with permitting and delineation. A 25-foot buffer has been placed around all aquatic resources in **Figure 3** to inform avoidance to the degree feasible. Per the Amador County General plan which requires a protective no-disturbance buffer be placed around the outer edge of riparian vegetation, a 25-foot buffer should sufficiently encompass this no-disturbance zone. Adjustments to this buffer around the outer edge of riparian vegetation may need to occur to prevent root and crown damage, soil compaction, and to reduce erosion and water quality impacts (Amador County, 2016a). Project-related impacts to these features are allowable. However, should future site plans require impacts to these water features, then a delineation and permitting would be required as described above.

## 2.2 CULTURAL RESOURCES

Two cultural surveys/reports have previously been conducted of the Subject Property (ASI Archaeology/Cultural Resources Management (2005) and Foothill Resources Ltd. (1994)). Foothill Resources reported a total of seven cultural resources largely associated with historic mining activities: stone lined cellar, oven/fireplace/ditches, mining debris, structure foundation, small prospect pit, mining ditch, old fence line, and a road segment. In June 2005, ASI conducted subsequent archeological site-specific surface investigations at the seven cultural resources identified by Foothill Resources. ASI’s 2005 investigations discovered one additional resource: a dry-laid fieldstone fence. In addition, during an AES-Montrose site visit on November 02, 2021 archaeologist Charlane Gross identified a portion of the road leading to the Monterichard Mine.

Each resource was evaluated for CRHR eligibility; Foothill Resources found that MS-1 (Staats cabin), MS-2 (Brady site), and MS-3 (Rock alignment/enclosure) were CRHR- eligible and recommended testing and further research. ASI concurred with the Foothill recommendations and added that additional documentation should be completed for MP-2 (Monterichard Ditch) and MP-4 (Jackson-Ione Valley stage road). The newly-identified Monterichard Mine road does not appear to include values which would make it eligible for listing on the CRHR, and recordation of this resource is considered sufficient mitigation for any impacts that might be caused by project construction.

An expanded version of the Foothill/ASI recommendations were incorporated into mitigation measures in the 2008 EIR, and it appears that implementation of mitigation measures similar to the 2008 EIR mitigation measures prior to construction would be sufficient to ensure that project-related impacts would be less than significant. Once the mitigation measures have been completed, there would be no constraints on development resulting from cultural resources.



## 2.3 GEOLOGY AND SOILS

The Subject Property consists of five soil types including Argonaut gravelly loam (AnD), Argonaut very rocky loam (AoD), Auburn silt loam (ApD), Auburn silt loam moderately deep (ArC), and Auburn-Argonaut very rocky silt (AxD). These soil types are typical of areas with low to medium slopes and are moderately to well drained (NRCS, 2021). Liquefaction is the sudden loss of soil strength caused by seismic forces acting on water-saturated, granular soil, leading to a “quicksand” condition generating various types of ground failure. Soils comprised of sand and sandy loams that are in areas with high groundwater tables or high rainfall are subject to liquefaction. The soils on the Project Site are moderately to well drained and the groundwater table is deep; therefore, there is a low risk of liquefaction at the Project Site (NRCS, 2021).

Linear extensibility is used to determine the shrink-swell potential of soils, and is a suitable metric to determine the expansive potential of a soil. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots (NRCS, 2021). The soils on the Project Site have a linear extensibility index ranging between 1.5 to 5.2, interpreted as a low to moderate potential for expansion.

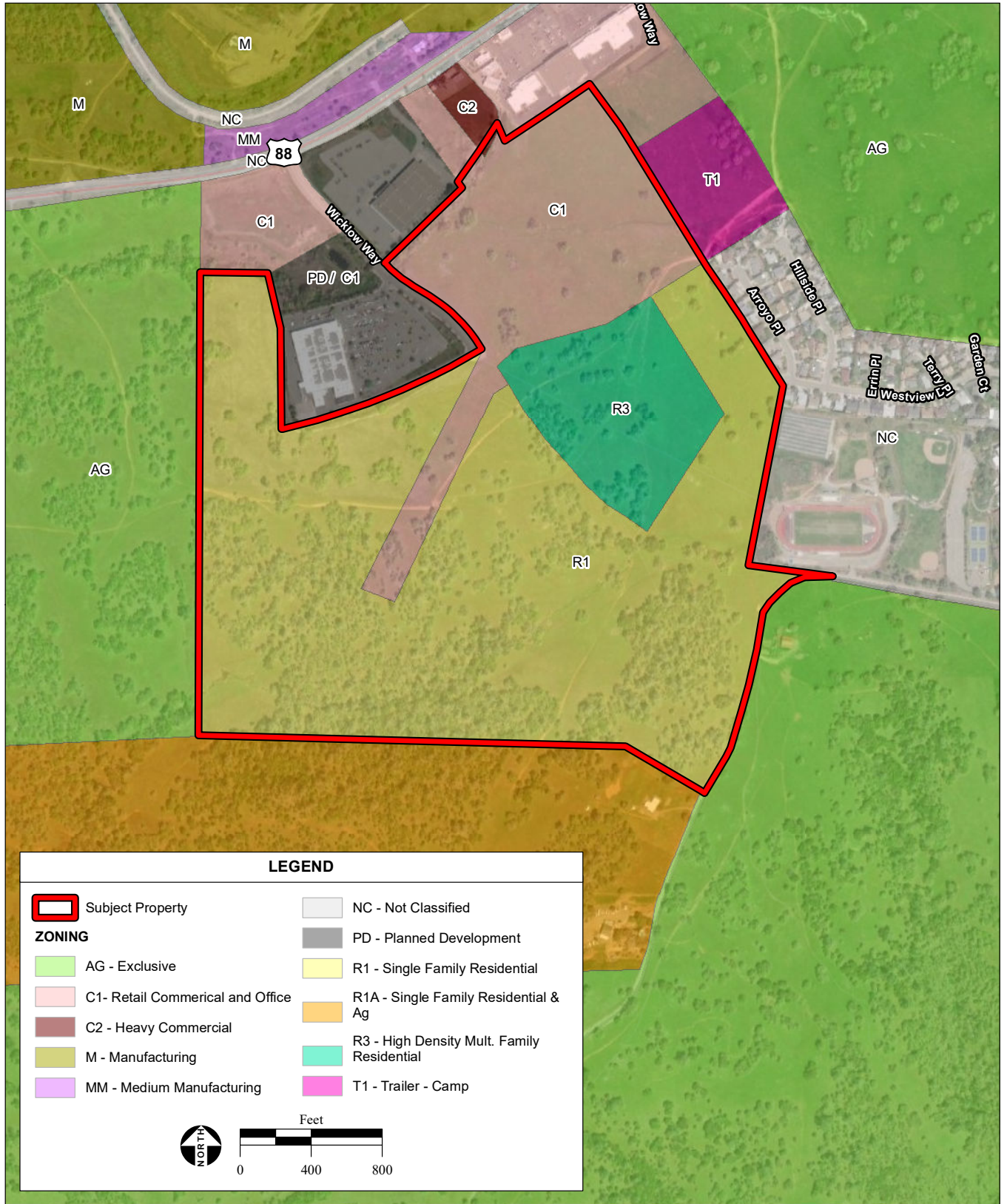
## 2.4 LAND USE / PLANNING / AIRPORT COMPATIBILITY

The Subject Property is currently zoned R1 (Single Family Residential), C1 (Retail Commercial and Office), and R3 (High Density Multiple Family Residential) (**Figure 4**). Lands directly east of the Subject Property, which include Argonaut High School and existing residential development are within the City of Jackson and designated by the City of Jackson’s General Plan as Public and Residential Single family. The Subject Property is not within the City of Jackson’s Sphere of Influence. Lands south and west of the Subject Property are undeveloped and zoned R1A (Single Family Residential-Agricultural) and AG (Exclusive Agriculture District), respectively.

The Proposed Project would be consistent with Amador County’s General Plan Land Use Element Goal LU-1: “Attain a diverse and integrated mix of residential, commercial, agricultural, industrial, recreational, public, and open space land uses”. The Proposed Project is also compatible with the Housing Element Goal H-1-1: “To ensure that there is a sufficient supply of multi-family and single-family-zoned land to meet the regional housing needs allocation (RHNA) (ESA, 2016). Based on the RHNA and current market conditions, possible land uses could include at least 100 acres of residential (30 acres at 750 units (high density residential), 30 acres at 150 units (low density residential), 30 acres at 270 units (medium density residential) and 10 acres for roadways and utilities), 40 acres of open space, and 10 acres of commercial and remaining acreage for public/quasi-public uses. Based on preliminary feedback it may not be feasible to include more than 30 acres of commercial space. This land use mix could be subject to change based on County and community feedback.

A portion of the Subject Property is located in Safety Zone 6 of the Westover Field Airport Land Use Compatibility Plan (ALUCP; Amador County, 2017). Incompatible uses within Safety Zone 6 are listed in Table 3-2 of the ALUCP. All development uses are either compatible with Safety Zone 6 or conditional based on consistency with noise compatibility criteria (under 55 decibel (dB) Community Noise Equivalent Level (CNEL) for residential land uses and up to 70 dB CNEL for commercial uses; Table 3-1 of the ALUCP) and land use compatibility criteria (200 maximum people per acre for nonresidential uses and 800 people on any single acre; Table 3-3 of the ALUCP). Development associated with the Proposed Project would need to avoid intersecting 55 dB CNEL noise contours, as shown on Figure 3-2 of the ALUCP and **Figure 5**. This is further discussed in **Section 2.6** below.



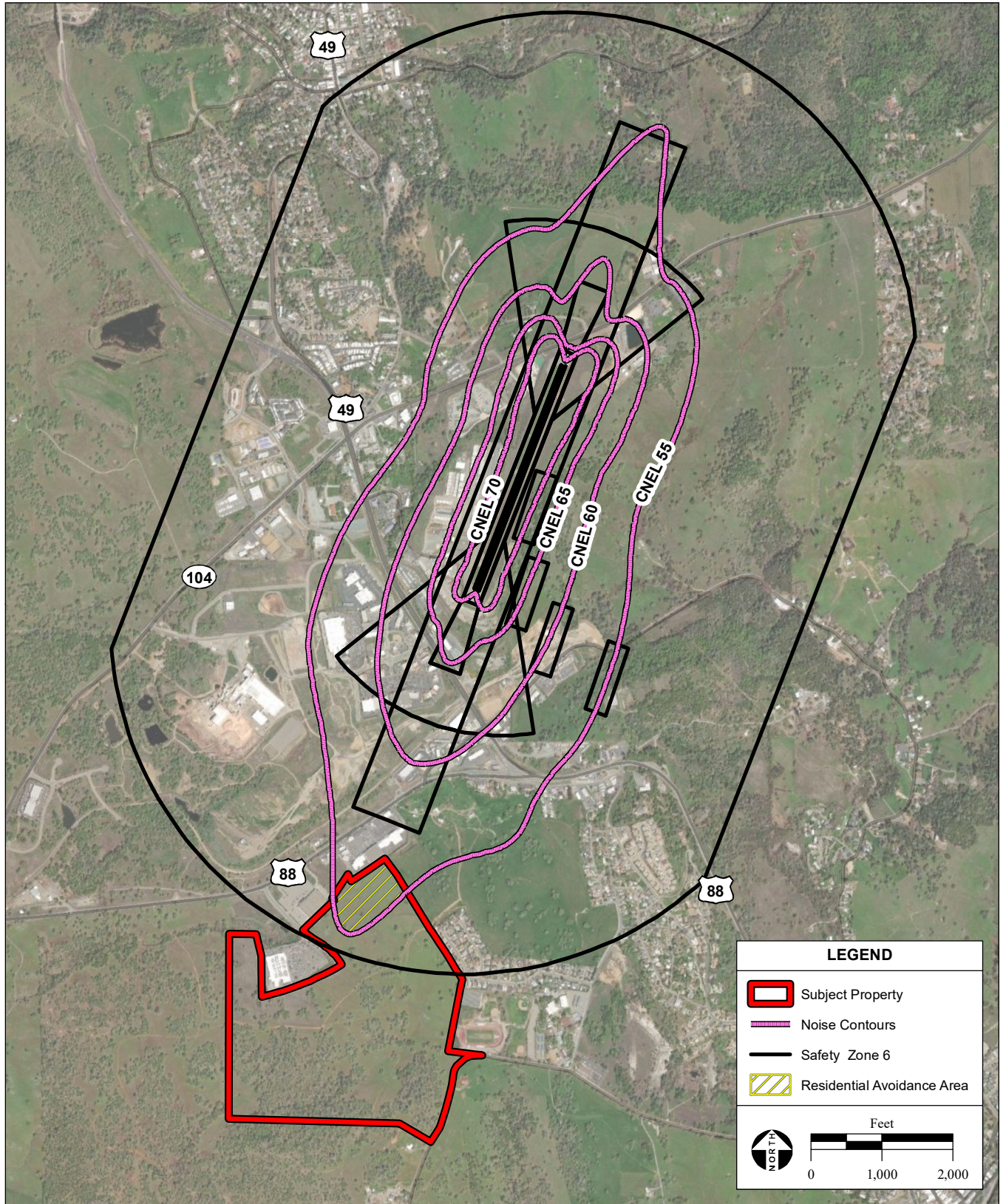


SOURCE: Amador County Parcels; Amador County Zoning data, 2011; Vivid Maxar aerial photograph, 4/3/2020; ESRI, 2021; AES-Montrose, 11/11/2021

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**Figure 4**  
Zoning Map





SOURCE: ESA, 2017; Vivid Maxar aerial photograph, 4/3/2020; ESRI, 2021; AES-Montrose, 10/29/2021

**Figure 5**  
Airport Noise Contours



## 2.5 HYDROLOGY/WATER QUALITY

The Subject Property has a relatively flat topography with areas of rolling hills. Elevations on the Subject Property range from 1,400 to 1,500 feet above mean sea level. A perennial and an intermittent stream drain the Subject Property. The intermittent stream drains northward into Rock Creek, which flows parallel to the northern boundary of the Subject Property. The perennial stream flows westward, conveying water off-site and links with several tributaries before contributing to Rock Creek approximately 2.5 miles away from the Subject Property. A perennial stream enters the southern portion of the Subject Property from the east and flows east to west across grassland habitat and enters a relatively dense oak woodland. Rock creek eventually flows into Jackson Creek, then into dry Creek and eventually into the Mokelumne River within the San Joaquin River Delta. The Subject Property is not located in a FEMA-designated flood hazard zone (FEMA, 2021). Water features can be seen in **Figure 3**.

## 2.6 NOISE

The ALUCP establishes noise contours for use in evaluating compatibility with surrounding land uses. The Subject Property falls within the Airport Influence Area (AIA) as specified within the ALUCP for the Westover Field Airport. As shown in **Figure 5**, a portion of the Subject Property falls between the 55 and 60 dB CNEL aircraft noise contours. As described in Table 3-1 of the ALUCP, single-family and multi-family residential uses are classified as ‘Normally Unacceptable’ within the 55 to 65 dB CNEL noise contours (ESA, 2017). The “Normally Unacceptable’ classification is defined by noise that will create a substantial interference with both outdoor and indoor activities. Noise intrusion can be mitigated by requiring special noise insulation construction; however, it’s recommended that uses that have conventional constructed structures and/or involve outdoor activities that would be disrupted by noise should generally be avoided. Therefore, this area has been identified as the “Residential Avoidance Area” on **Figure 5**, as residential development associated with the Proposed Project is advised to avoid intersecting the 55 dB CNEL noise contours.

The ALUCP also establishes overflight zones for the purpose of providing overflight notification for land uses near Westover Field. Unlike other compatibility factors, overflight compatibility policies do not restrict how land can be developed or used; rather, the policies form the requirements for notification about airport proximity and aircraft overflights. Overflight Policy O-2 requires realtors to provide disclosure notices to all new home buyers for any properties located within the AIA, indicating the overflight impacts for said property. As such, all residential development associated with the Proposed Project would require adequate disclosure to all new home buyers indicating the potential overflight impacts.

Additionally, main noise generators within the vicinity of the Subject Project are the existing Walmart and the Argonaut Highschool football stadium. Although the Proposed Project is not expected to be exposed to noise levels exceeding Amador County 60 dB day-night average sound level (Ldn) exterior or 45 dB Ldn interior noise levels due to the stadium or Walmart, it is recommended that residential uses not be placed directly near these noise generators.

## 2.7 UTILITIES/INFRASTRUCTURE

Existing utilities are located in the vicinity of the Subject Property associated with existing residential and commercial developments. It is assumed that the Proposed Project would be able to connect into existing services.

## Wastewater

It appears that the residential community on the eastern boundary of the Subject Property, north of Argonaut high School, has a sanitary sewer lift station. The Proposed Project will likely need to pump sewage either north towards Highway 88 or east uphill towards Argonaut Lane. This will require further discussions with Amador Water Agency (AWA) to determine precise locations and ensure capacity availability.

## Water Supply

Potable water supplies appear to be available at both the southern terminus of Wicklow Way and the western terminus of Westview Drive (north of Argonaut high School). It may be desired to connect the two pipeline segments together for reliability purposes. The Subject Property has no existing water supply infrastructure; it is assumed that all required water supply infrastructure would tie into existing connections. Coordination with AWA will be required during the design phase, as offsite water supply infrastructure is owned and maintained by AWA.

# CONCLUSIONS

Based on the review of applicable background materials, databases, and aerial imagery, in addition to the site reconnaissance survey conducted by AES-Montrose staff, the Subject Property may have development constraints associated with ALUCP noise contours and biological features. Recommended avoidance areas related to these constraints are depicted on **Figures 3** and **5**. Although the Subject Property may have other sensitive resources, such as identified cultural resources, these elements can be removed/disturbed through proper mitigation and fees if necessary and do not pose a concrete barrier to development.

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