CITY OF San Rafael

Agenda Item No: _____

Meeting Date: December 17, 2012

SAN RAFAEL CITY COUNCIL AGENDA REPORT

Department: Community Development

Prepared by: Paul A. Jensen [KT] Community Development Director

City Manager Approval: _____

SUBJECT: San Rafael Airport Recreational Facility – 397-400 Smith Ranch Road –Consider Final EIR (FEIR) certification and entitlements for the project consisting of a Zoning Amendment to Planned Development-Wetland Overlay District (revised PD1764-WO), Master Use Permit and Environmental and Design Review Permit to allow development of an 85,700 square foot private recreational facility building, outdoor soccer field and warm-up field on a vacant portion of the 119.52-acre San Rafael Airport property; APN: 155-230-10 through -16; Zoning: Planned Development-Wetland Overlay (PD1764-WO); San Rafael Airport, LLC, Owner; Bob Herbst, Applicant; File Numbers ZC05-01, UP05-08 & ED05-15. **Continued from the December 3, 2012 City Council meeting.**

RECOMMENDATION:

Staff recommends that the City Council take the following actions:

- Adopt Resolution to Certify the FEIR
- Adopt Resolution making CEQA Findings of Fact required to support project approval and approve the MMRP
- Introduce and Pass PD Ordinance to print amending PD1764-WO District
- Adopt Resolution to approve a Master Use Permit and Environmental and Design Review Permit

BACKGROUND:

Overview

On Monday, December 3, 2012 the City Council held a public hearing on the San Rafael Airport Recreational Facility development project proposed on a vacant portion of the 119.52 acre San Rafael Airport property. The Council accepted public testimony and reviewed and considered the written materials and recommendations of the Planning Commission and staff on the project. At the City Council hearing 53 members of the public provided testimony, expressing both support and opposition for the project. The City Council closed the public hearing (including closure of the receipt of written comments) voted to continue the matter to December 17, 2017 to conduct its deliberations on the project, and directed staff to provide responses to specific questions identified by the City Council.

Response to Questions and Comments

The following is a list of the questions and key comments raised at the hearing for which the City Council requested a staff response. Responses have been prepared and reviewed by City staff and its primary CEQA environmental consultants consisting of Lamphier & Gregory, Monk & Associates and Mead & Hunt. Staff notes that the responses to questions regarding the project and FEIR, for the most part, are a repeat of or an expansion of or clarification to information previously used and disclosed for analysis of this project.

As a point of clarification for the record, staff notes that the City has independently selected and hired the

FOR CITY CLERK ONLY

File No.: _____

Council Meeting: _____

Disposition: _____

CEQA environmental consultants to prepare an impartial independent analysis of this project as well as to peer review documentation submitted by the applicant's consultants. The identification and selection of the City's environmental consulting team occurred in 2006, following the determination by City staff that it was appropriate to prepare an Environmental Impact Report (EIR). The environmental firms selected by the City have excellent credentials and integrity, which is demonstrated by a review of their extensive experience and record.

1. **How does the State Department of Transportation - Division of Aeronautics (Caltrans) define "group recreation" use in the *California Airport Land Use Planning Handbook*, (Handbook) which was last updated in 2011?**

   The risk assessment for the San Rafael Airport was discussed in response to the March 9, 2012 Caltrans Division of Aeronautics letter, in which Caltrans recommended that the City should consider the changes to the 2011 Handbook. Staff provided its analysis of this issue in a May 17, 2012 memorandum that was provided to the Planning Commission (for the May 29, 2012 Public Hearing). This memorandum includes a May 16, 2012 response to the Caltrans letter from Mead & Hunt. This information has been published on the City website and is accessible by the following link:
   http://acm.cityofsanrafael.org/Assets/CDD/Airport+Rec+Facility/May+29$!2c+2012+PC+Mtg/PC+Staff+Report.pdf
   This issue was discussed and considered in detail by the Planning Commission during its review of the project FEIR and merits.

   The Handbook does not provide a definition or any qualifying factors for the term "group recreation use." In fact, the Handbook does not explicitly define any land use type.

   Based on previous discussions with Caltrans staff, Mead & Hunt understands that the Handbook does not include land use definitions because the Division recognizes that, although there is a common land use classification system in place (e.g., residential, commercial, industrial), local planning agencies have their own unique set of land use definitions. Therefore, the Handbook establishes parameters for what constitutes a compatible/incompatible land use, but ultimately each agency must individually interpret the criteria. At the time of this response, Mead & Hunt had requested and was awaiting an affirmation of its understanding from Caltrans staff. Any further communication from Caltrans will be forwarded under separate cover prior to the meeting.

   Mead & Hunt's interpretation of "group recreation" is that it is a land use that falls within a wide mid-range of usage intensity as measured in people per acre. It is more intensive than individual or pairs recreational uses (e.g., tennis courts), but less intensive than uses with stadium-type seating (e.g., a high school football field). In the view of Mead & Hunt, distinguishing characteristics of group recreation are that the use: a) involves substantially more spectators than participants; and b) typically includes several rows of bleacher seats (such as at a little league baseball field).

   Given the intensity range associated with this description, Mead & Hunt has provided the following qualifying parameters to determine if a group recreational use should be allowed in the airport safety zones:
   - Will the use attract large groups of people that will exceed the Handbook intensity criteria?
   - Will the use include fixed seating or other physical barriers that can restrict a person's ability to escape the area of impact?
   - Will the use include vulnerable occupants (children, elderly or disabled) who may have difficulty knowing how to vacate the premises in the event of an aircraft crash or may be physically unable to do so?
   - Are there safety enhancements that can be incorporated into the project to minimize the consequences of an aircraft accident (injury or property damage) if one should occur? Safety enhancements may include:
     - Additional emergency exits (seek input from the Fire Department)
     - One or more risk-reduction construction features (no skylights, limited number of windows, upgraded roof strength, concrete walls, zoned sprinkler systems)

- A sufficient number of clearly marked exit gates if a fence is used to separate the outdoor fields from the parking lot or other portions of the facility.
- Fencing separating the facility from the airport should be sufficient to prevent adults and children from accessing the airfield (see FAA Advisory Circular 150/5370-10B). Access gates to the Airport should be prohibited unless for airport staff and emergency use only.

Mead & Hunt's Safety Study revealed that the proposed recreational facility fundamentally would accommodate group recreational activities. However, for purposes of defining this land use activity in order to apply the safety criteria specified in the Handbook and evaluating risks associated with this particular airport site, the detailed analysis reveals that the recreational activities proposed for this project would not: a) exceed the Handbook intensity criteria; and b) include fixed seating in the indoor or outdoor areas. Thus, the land use would not be considered to be an incompatible land use under the criteria of the Handbook. However, given that children are anticipated to be present at the site additional safety enhancements have been recommended to minimize risks to this group of sensitive users. The following safety enhancements have been incorporated into the project as mitigation measures and conditions of approval to address potential risks to flights and reduce hazards to occupants:

- Use Permit Condition 60 requires that the building and site design shall implement the requirements of Mitigation Measures MM Haz-1 (Risk Reduction Design Features) and MM Haz-2 (Elimination of Flight Hazards).

- Environmental and Design Review Permit Condition 68 requires that the project shall implement mitigation measure MM Haz-2: Elimination of Flight Hazards. In order to ensure that the proposed Project does not expose aircraft to hazards associated with the operations of the proposed Project, the Project Applicant shall demonstrate compliance with the following on detailed construction plans:

  a. Limit height of proposed structures to assure clearance of the 7:1 Transitional Surface (aka, 'ascending clear zone').

  b. Redesign, modify or relocate the row of parking stalls nearest to the airfield in accordance with federal and state requirements so that no penetration into the ascending clear zone would result; e.g., maintaining a minimum clearance of 10' above parking areas and driveways.

  c. Add obstruction lights to the following features to make them more conspicuous to pilots:

     i. Southwesterly and southeasterly corners of building

     ii. Southwesterly and southeasterly ends of the fence fronting the airfield

     iii. Most easterly field light along the southeastern edge of the outdoor soccer field

  d. Tall trees shall be trimmed and maintained to ensure that they do not constitute an airspace obstruction (or, alternatively, shorter species can be planted.

  e. Outdoor parking lot lights and outdoor soccer field lights, in particular, shall be shielded so that they do not aim above the horizon. Additionally, outdoor lights should be flight checked at night to ensure that they do not create glare during landings and takeoffs.

  f. Construction cranes and other tall construction equipment shall be lowered at the end of each day.

  g. Incorporate the two mitigation measures for enhanced exiting and fire sprinkler systems (as currently required in the FEIR).

h. Post maximum occupancy signage at 480 people inside the building (note: this occupancy level accommodates the maximum occupancy level of 345 people anticipated to be inside the recreational building during peak usage).

i. Post maximum occupancy signage at 336 people for the outdoor soccer field area (note: this occupancy level accommodates the maximum occupancy anticipated for the soccer field and is set at the low end of the 2011 Handbook's acceptable intensity range).

j. Post maximum occupancy signage for 104 people in the outdoor warm-up area (note: this occupancy level exceeds the range anticipated for use of the warm-up field and is set at the low end of the 2011 Handbook's acceptable intensity range).

k. Post clearly marked exit gates and fencing around the outdoor field areas to further enhance safety in outdoor field areas.

l. Install and maintain fencing (chain link or equivalent) between the recreation and airport facilities to prevent trespass by children onto the airfield and protect the site from any potential accident from planes that could veer off the runway; with a barrier that complies with FAA Advisory Circular 150/5370-10B, Standards for Specifying Construction of Airports, Item F-162, Chain Link Fences.

m. Prohibit installation of fixed-seating, including temporary bleachers, around the outdoor field areas to avoid creating confined spaces and higher than anticipated per-acre intensity occupancy levels.

n. Prohibit conduct of any special events that would draw a large number of people to the site that would exceed the above-noted occupancy limits established for the recreation facility use.

2. **In the past year, what is the total number of reported incidents (e.g., aircraft accidents) in Safety Zones 2 and 5 at airports that are of similar size to the San Rafael Airport (e.g., airports with runways of less than 4,000 feet in length)?**

Mead & Hunt reports that the National Transportation Safety Board (NTSB) maintains records of all the aircraft accidents ever recorded by NTSB or other government agency. The NTSB distinguishes between "accidents" and "incidents." Accidents are events in which either the aircraft receives substantial damage or persons in the aircraft or on the ground receive serious or fatal injury. Incidents are lesser types of events. The collective term for accidents and incidents is "mishaps." The NTSB does not have detailed records on most incidents.

The NTSB crash data was used to develop crash statistics around airports, and was determined and filtered to a certain level as discussed further below. To parse the NTSB records down further to a level required to answer the above question would take a significant amount of additional analysis. In lieu of doing this additional research, Mead & Hunt has summarized the pertinent findings of the research conducted by Caltrans Division of Aeronautics in its planning efforts related to the California Airport Land Use Planning Handbook (Handbook), and has provided results of its preliminary review of accidents identified near airports of a comparable runway size and/or activity.

California Handbook Accident Data

For the 2002 Handbook, Caltrans analyzed the NTSB records for general aviation aircraft accidents that occurred nationwide between the years of 1983 and 1992. The purpose of the study was to identify aircraft accident location characteristics. Of the available records for this period, there were 873 accident reports that included reliable accident location information and took place within 5 miles of an airport, but not on the runway itself. Only one of roughly every 30 accidents met all of these qualifying criteria for entry into the Handbook database. The accident points were analyzed by various variables including runway length and type of operation (arrival versus departure). The findings of the study led to the creation of the generic safety zones

provided in the Handbook for various types of public-use airports. The Division updated the accident study for the 2011 Handbook. The new study revalidated the 2002 Handbook data and safety zones. The lowest data set was established for airports with runways less than 4,000 feet. Thus, this was utilized to identify safety zones and evaluate uses risks associated with development near the subject San Rafael Airport facility.

Figure 1 (following page) overlays the database accident points for public-use airports with runway lengths of 4,000 feet or less onto the San Rafael Airport runway. Of the 344 accident points for this category of runway, 4 accident points fall within Safety Zone 5 (1 arrival and 3 departures) which overlie the project site north of the runway. An additional 5 accident points fall within Safety Zone 5 south of the runway. There are 79 accident points in Safety Zone 2, but only one of those points fall within the project area. It is important to note that the database accident points associated with runways of 4,000 feet or less still represents a fairly broad range of small airports. Public use and private use airports are captured within this data set. Given that the San Rafael Airport is a private use airport with a limited number of based planes, the characteristics associated with the subject San Rafael Airport represent the lower range of intensity of use. Therefore, as noted in Mead & Hunt's May 16, 2012 response to the Caltrans Division of Aeronautics comment letter (referenced in response 1 above), the risk analysis prepared for the San Rafael Airport has considered its flight intensity and use characteristics to develop a realistic risk assessment for this site, which is considered to result in low risk.

California Special-Use Airports

Mead & Hunt also looked at the number of accidents that have occurred at or near special-use airports in California of similar size to San Rafael Airport. The first step in this analysis was to determine what airport characteristics constitute similarity. The most relevant characteristics for this purpose are: the airport classification (public use, special use, or personal use); runway length; number of based aircraft; and type of activity (typical general aviation versus glider towing or skydiving, for example).

As previously reported, the San Rafael Airport is classified by Caltrans Division of Aeronautics as a special-use facility (that is, it is not open to the general public, but has more users than does a personal-use airport). The airport has a short runway length (2,140 feet), a basing capacity of 100 aircraft, and no glider, skydiving, or other special types of activity. Also unique about the San Rafael Airport is that it mostly operates in a "muzzle loader" manner—wind permitting, aircraft land from east to west and take off in the opposite direction, from west to east.

No other airports in California are similar in all these respects. Of the 65 airports that the Division classifies as special use, most have very few based aircraft or have activity focusing on gliders or parachute jumping. Four airports that are relatively comparable are:

- Ranchaero Airport, Chico, Butte County (30 based aircraft, 2,156-foot runway)
- Paradise Skypark Airport, Paradise, Butte County (45 based aircraft, 3,017-foot runway)
- Lake California Air Park, Cottonwood, Tehama County (19 based aircraft, 3,000-foot runway)
- Swansboro Country Airport, Placerville, El Dorado County (24 based aircraft, 3,100-foot runway)

As for the accident history of these four airports, a review of the NTSB records reveals the following:

- Ranchaero Airport: 10 reported crashes between 1983 and 2010
- Paradise Skypark: 6 reported crashes between 1984 and 2002
- Lake California Air Park: 1 reported crash in 2000
- Swansboro Country Airport: 6 reported crashes between 1982 and 2009

On-line data does not indicate where these accidents occurred relative to the runway, thus without extensive investigation it is not possible to determine whether any involved Safety Zones 2 or 5.

On the whole, nothing in Mead & Hunt's previous or current analysis suggests that San Rafael Airport has any particular physical or operational characteristics that increase the likelihood of accidents, especially accidents that would affect the recreational facility site. Aircraft accidents can occur almost anywhere and a site adjacent to an airport runway clearly is at greater risk than a location miles from any airport. That said, as Mead & Hunt has pointed out in the past, several aspects of the way that San Rafael Airport operates reduce the likelihood of an accident occurring on the recreational facility site:

- Because of the short runway length and the location of the site near the middle of the runway, nearly all aircraft will still be on the ground when passing the site during the takeoff roll.
- If an aircraft were to have engine failure at low altitude on takeoff to the east, the extensive flat marshlands present pilots with an attractive emergency landing spot, thus reducing the temptation to turn around and try to return to the airport and potentially crash adjacent to the runway.
- Especially with the short runway, pilots will aim to land close to the runway end and therefore would be on the ground when passing the project site. A common type of landing mishap is for the pilot to lose directional control during landing roll-out. Because the aircraft is on the ground at that point, the chain link fence between the runway and the recreational facility would serve to stop the aircraft from entering the recreational facility site.
- The special-use classification and city use permit conditions limit use of the airport solely to based aircraft and thus to pilots who are familiar with the facility and its constraints.

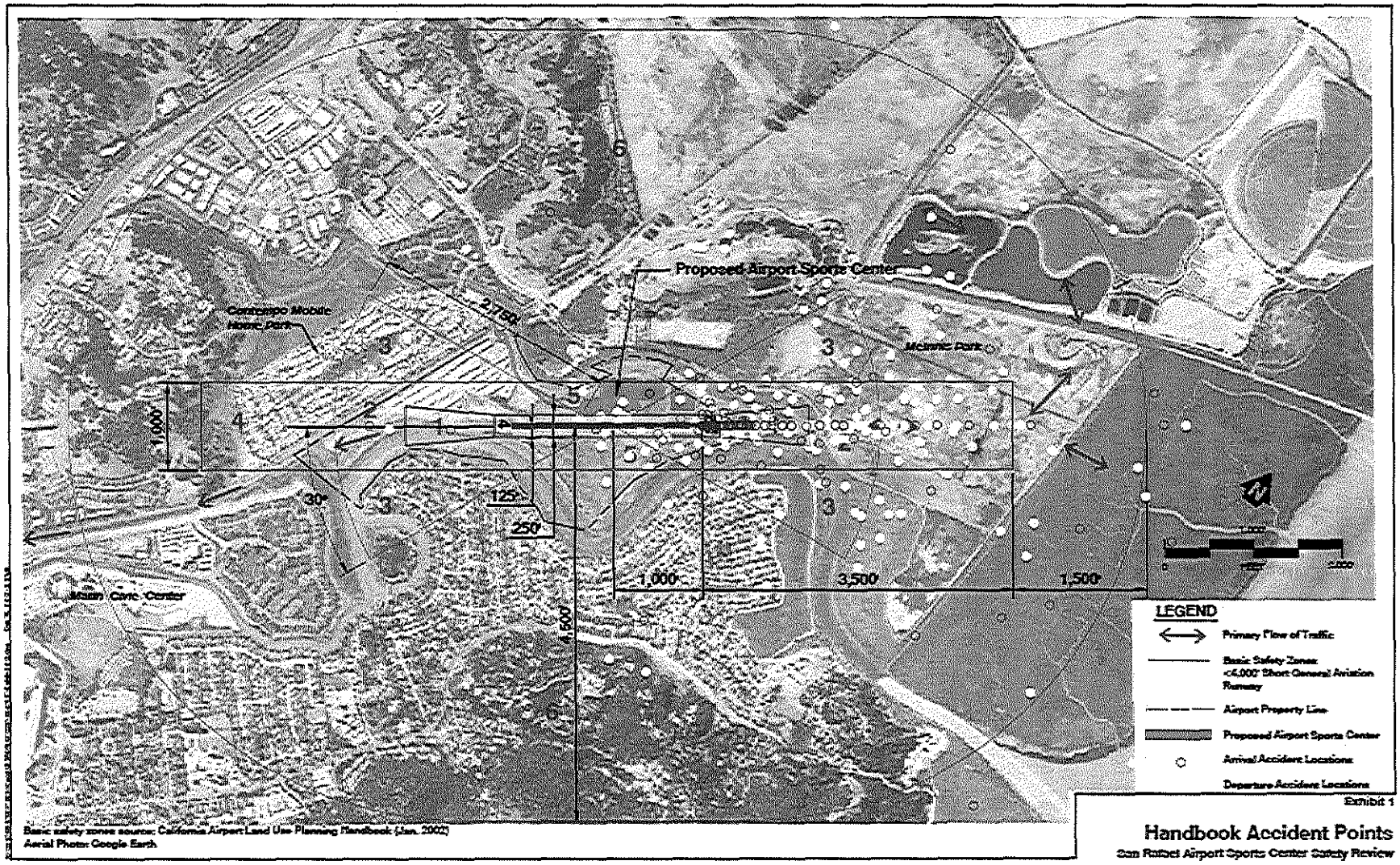

FIGURE 1 – NTSB Accident Points

3. Clarify the purpose and the specifications for the airport obstruction lights, which are required by FAA regulations. Were obstruction lights addressed in the project EIR?

Mead & Hunt reports that obstruction lighting standards are provided in FAA Advisory Circular 70/7460-1K.[1] The advisory circular recommends marking or lighting all structures that exceed the obstructions standards established in FAR Part 77. Mead & Hunt understands that the proposed recreational facility will be designed to clear the FAR Part 77 surfaces.

As part of the airport permitting process, Caltrans Division of Aeronautics typically requires obstruction lighting of objects in close proximity to an airport, even if the objects clear the FAR Part 77 surfaces. For airports with nighttime activity, the Division recommends using red steady burning obstruction lights (FAA-approved L-810) to increase conspicuity of objects during nighttime (see Figure 2).

Exhibit B in Mead & Hunt's Safety Study identifies the anticipated location and number of obstruction lights for the proposed project. The ultimate layout will be determined by Caltrans Division of Aeronautics.

Lighting intensity was addressed in the project EIR (Draft EIR volume) under review of potential aesthetic impacts, although obstruction lights were not specifically addressed. Obstruction lights are designed to be visible from long distances, but would not generate lighting intensity that would exceed glare or illumination thresholds of significance identified in the Draft EIR (Page 5-5 and 5-6). Analysis of lighting impacts is addressed on Draft EIR pages 5-23 through 5-27. The significant light source associated with this project consists of the proposed outdoor field lighting, which would contribute a potentially significant new source of nighttime lighting in the area. The obstruction lights are intentionally designed with a 116w intensity bulb and Fresnel globe colored red that would be visible from long distances but not produce glare, which could pose a hazard to pilots. Therefore, obstruction lights would not result in any significant impact not identified in the area or a substantial increase in the severity of impacts identified in the EIR.

[1] FAA Advisory Circular and 150/5345-43 contains specifications for obstruction lighting equipment.

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FAA L-810

Compliance

FAA AC: 150/5345-43F
ETL Certified L-810
ICAO Annex 14, Vol. 1, Type B

Flight Light L-810 obstruction lights are used on buildings, antennas, towers, cranes, and any other kind of obstacle which occupies airspace. Each fixture includes a glass Fresnel globe which is colored red for most applications. The fixtures are either a single or a double lamp housing and made with 3/4" or 1" internally threaded housing. A side-mounted option is also available. These obstruction lights operate on a 120V or 230V circuit. The fixture is illuminated with a 116W, A21 medium screw base lamp.

Features

- **FAA approved L-810, certified and tested by ETL with a red lens and 116W lamp #32B.**
- **Direct installation into existing voltage power circuit.**
- **Direct mounting to conduit, bottom or side mounting options available.**
- **Photocell option for automatic activation at night.**
- **Optional grounding wire available.**

Electronic Controls

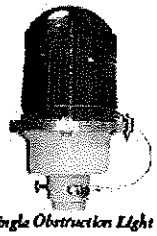
Single and double obstruction lights can be outfitted with electronic controls to enhance the operation, automation and reduce the maintenance cycle of the fixture. Common configurations include photocells, flashers, transfer relays and alarms. Note: flashing obstruction lights are not FAA approved. Other options and custom combinations may be available upon request.

Features

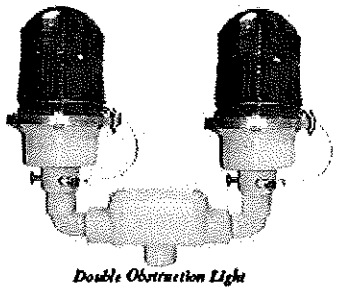
- **Flashers used in fixtures are set at 45 FPM, 50% duty cycle. These fixtures are not FAA certified when flashing.**
- **Standard configurations come with 3/4" threaded fittings. 1" threaded and side mount configurations available on request.**
- **FAA style photocells with a 45 second time delay prevents activation and de-activation from momentary light condition.**

Common Replacement Parts

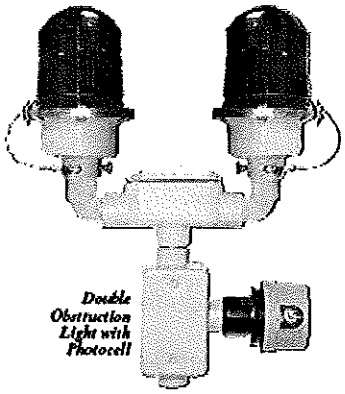
P/N	Description
13-161R-T	Red globe with tether
61-10001	Clamp band
61-10004	Medium base socket
LA-22483-2	116W, 120V lamp
LA-116W/230V	116W, 230V lamp
61-10002	O-ring



Single Obstruction Light



Double Obstruction Light



Double Obstruction Light with Photocell

Obstruction Lights

Fixture Type	FAA Number	Globe Color	Lamp & Power	Mounting	Fixture Style	Options
FL-	810	R: Red	116: 120V, 116W 116A2: 230V, 116W	34B: 3/4" hub - bottom 10B: 1" hub - bottom 34S: 3/4" hub - side 10S: 1" hub - side	SI: Single DI: Double	T: Transfer Relay F: Flasher P: Photocell

Shipping Weight (Single): 4 lb./2 kilo., Volume: 0.5 cu. Feet/0.01 cu. Meter
Shipping Weight (Double): 10 lb./4.5 kilo., Volume: 1 cu. Feet/0.02 cu. Meter

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FIGURE 2 – FAA Approved Obstruction Lights

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MADE IN USA

Obstruction Lighting Controls

Obstruction Lighting Controls

Lighting controls are designed for use when multiple obstruction light fixtures are to be controlled with common electronics or when alarms or transfer relay circuits must be switched remotely from the fixture. The electronic control module comes in a cast iron device box with threaded hubs on both top and bottom. Replacement modules (controls without device box) are also available upon request. Photocell options, available for models 81001-81004, are built into the cast iron device box.

Flasher

Model 81001 120VAC, 2500W, 30 FPM flasher. Includes circuitry to reduce EMI for sensitive RF locations. Beacon tower flasher. FAA approved.

Model 81002 120-240VAC, 2400W flasher. Adjustable rate flasher, 10-100 FPM.

Model 81001

Lamp Alarm/Transfer Relay

Model 81010 120VAC lamp alarm or transfer relay module. Monitors current for one to four 116W fixtures or one L-864 fixture with two 620W lamps. If any fixtures are detected out, 120VAC (1A) output and a 10A isolated relay (SPDT) are activated. Can be used as a transfer relay with isolated alarm for double obstruction fixtures with one primary and one standby lamp. For Buzzer option, add '-B' to model number.

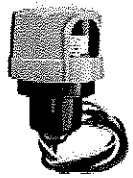
Model 81011 120VAC lamp alarm for two to nine lamps. Monitors current for two to nine 116W fixtures. If any fixtures are detected out, 120VAC (1A) output and 10A isolated relay (SPDT) are activated.

Model 81010

Photocell

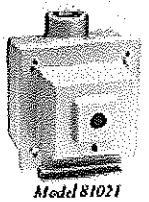
Model 81020 120VAC, 1000W photocell. FAA style photocells activate at 35 ft-cd and turn off at 58 ft-cd. A 45 second time delay prevents activation and de-activation from momentary light conditions. Does not come with device box, includes 1/2" threaded male fitting.

Model 81021 120VAC, 4800W photocell. Meets FAA/FCC requirements for obstruction lighting. Energized at 35 ft-cd and de-energized at 60 ft-cd. Time delay eliminates contact chatter. Contains dual 20A load contacts. Front plastic housing mounts to cast aluminum junction box (included).



Model 81020

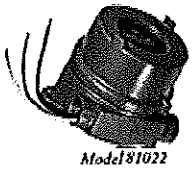
Model 81022 Hazardous Location Photocontrol Unit. Outdoor lighting control for exterior lighting in hazardous locations: explosion proof, dust-ignition proof, and weatherproof. Nominal Voltage 50/60 Hz: 120/208/240/277. Voltage Range: 105-305. Housing: sand cast copper-free aluminum - epoxy powder coated.



Model 81021

Obstruction Lighting Controls

Fixture Type	Model
FL-	81001: HP Flasher (120VAC, 2500W) 81002: MP Flasher (adj. 10 amps) 81010: 1-4 Lamp Alarm/Transfer Relay (Buzzer option '-B') 81011: 2-9 Lamp Alarm 81020: Photocell only (120VAC, 1000W max) 81021: Photocell with aluminum box (120VAC, 4800W max) 81022: Hazardous Location Photocontrol Unit



Model 81022

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FIGURE 2 – FAA Approved Obstruction Lights

4. Clarify whether the project would conflict with FAA regulation 77.19 regarding obstructions.

Mead & Hunt reports that Federal Aviation Regulation (FAR) Title 14, Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace* (Effective January 18, 2012) establishes standards and notification requirements for objects affecting navigable airspace. As described below, the proposed project does not conflict with the obstruction standards of FAR Part 77.

Is FAA Review Required?
No. FAR Part 77, Subpart B, Section 77.9 requires that any person/organization who intends to sponsor any of the following construction or alterations must notify the FAA[2]:

1. Any construction or alteration exceeding 200 feet above ground level (AGL)
2. Any construction or alteration:
    a. Within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with at least one runway more than 3,200 feet
    b. Within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet
    c. Within 5,000 feet of a public use heliport which exceeds a 25:1 surface
3. Any highway, railroad or other traverse way whose prescribed adjusted height would exceed that above noted standards
4. When requested by the FAA
5. Any construction or alteration located on a public use airport or heliport regardless of height or location

Based on the above criteria, the regulations would not require FAA review of the proposed project as the San Rafael Airport is not a public-use facility. However, a similar project sited near a public-use airport would require FAA review.

Is Caltrans Review Required?
Yes. Caltrans Division of Aeronautics has several regulatory and safety functions, including issuing airport and heliport permits. Additionally, the Division conducts safety/permit compliance inspections at public and special-use facilities to ensure permit safety standards are met.

As the airport permitting agency, Caltrans prohibits the construction or alteration of any structure or allowance of natural growth to have a height that exceeds the obstruction standards set forth in FAR Part 77, unless a permit allowing the construction, alteration, or growth is issued by the Division. The Division may refuse issuance of a permit if it determines that the object constitutes a hazard to air navigation or creates an unsafe condition for air navigation.[3]

Since the proposed recreational facility is proposed on airport property and the project proponent is also the airport operator, the Division of Aeronautics will review the project for permit and airspace compliance. This review pertains only to the height of the objects, not the land use involved.

Obstruction Standards and Project Conditions
FAR Part 77, Subpart C, Sections 77.17 and 77.19 establish the standards for determining obstructions to air navigation.

Section 77.17 indicates that an object, including a mobile or temporary object, which would exceed the airport obstruction surfaces would constitute an obstruction to air navigation. The Section also indicates a required vertical clearance of:

[2] Visit FAA's website https://oeaaa.faa.gov/oeaaa/external/portal.jsp for clarification on who needs to file a notice.
[3] Public Utilities Code Section 21659 and 21660.

- 15 feet over public roadways; and
- 10 feet over a private road or, if greater, the height of the highest mobile object that would normally traverse the road.

FAR Section 77.19 defines the airport obstruction surfaces. Exhibit B of Mead & Hunt's Safety Study (April 15, 2008 Mead & Hunt Technical Report) depicts the applicable obstruction surfaces for San Rafael Airport, drawn in accordance with FAR Section 77.19, which overlay the proposed project.

Based on preliminary site plan elevations, Mead & Hunt's Safety Study identified several potential obstructions including the proposed building, landscaping, field lights and portions of the parking lot. Proposed remedies included grading the site to achieve proper vertical clearance or lowering and removing violating objects. The Safety Study also identified two additional options for addressing insufficient vertical clearance over the parking lot, including:

- Designing the first row of parking stalls nearest to the airfield for compact vehicles; and/or
- Adding signs along the fence-line notifying drivers not to back-in their vehicles.

Concerns with the inability to properly monitor adherence to these restrictions were raised at the public hearings. Therefore, to fully comply with federal and state airspace obstruction standards, no permanent, temporary, natural or mobile object should penetrate the FAR Part 77 obstruction surfaces. Mead & Hunt also recommends that the entrance road and parking lot be configured and graded in a manner to achieve the required 10-foot vertical clearance. Relocating or eliminating the first row of parking stalls may be necessary if grading the site will not provide the required vertical clearance.

The Planning Commission recommended incorporation of Environmental and Design Review Permit Condition 68b to assure the project would be consistent with FAR Section 77, as follows:

> "Redesign, modify or relocate the row of parking stalls nearest to the airfield in accordance with federal and state requirements so that no penetration into the ascending clear zone would result; e.g., maintaining a minimum clearance of 10' above parking areas and driveways."

As noted on pages 18 and 19 of the March 27, 2012 Staff Report to the Planning Commission, the recreational use triggers demand for a maximum of 228 parking spaces and 270 spaces are proposed. A total of 52 paved parking spaces are proposed along the southern edge of the project. The site plan shows that there is a significant amount of land west of the building that could be proposed as parking, well outside of the ascending clear zone restriction. Thus, this condition can be achieved without causing conflict with the site plan or parking demand. Further, the drive aisle located adjacent to this parking row would not conflict with the required vertical clearance of 10 feet.

5. **A plane accident recently occurred at a soccer facility located near an airport in Vernon, British Columbia. How does this airport and the adjacent soccer facility compare with the conditions at the San Rafael Airport? Did the crash occur in an area that would be designated as Safety Zone 5?**

Mead & Hunt has reviewed this question and provides the following response. Vernon Regional Airport is a public-use facility with a single 3,517-foot long runway. The airport website indicates that "typical commercial service activity includes aircraft such as the Citation II, Cessna Conquest, Cessna 414 and 340, Otters and Beavers. Typical general aviation aircraft vary from smaller aircraft such as home-builts to the Cessna 172 and twin-engine 6-seaters. Currently, there are approximately 110 aircraft based at the airport.

The aircraft accident at Vernon Regional Airport, British Columbia occurred on July 7, 2012. Reports indicate that a twin-engine Piper Apache veered left shortly after takeoff and crashed in the sports fields adjacent to the airport. As depicted in Figure 3, below, the crash site is approximately 3,269 feet from the estimated start of takeoff roll (i.e., 3,150 down the runway and

875 feet lateral to the runway centerline). If the California Airport Land Use Planning Handbook safety zones for a short general aviation runway were applicable at Vernon Airport, the crash site would have occurred within Safety Zone 6.

Figure 4 (next page) superimposes the Vernon crash site at San Rafael Airport. Given the shorter runway at San Rafael Airport, the crash site would have occurred within Zone 3.

According to Mead & Hunt, it is important to note that when an aircraft accident occurs, it does so under a very specific set of circumstances (runway length, aircraft type, takeoff weight, weather, altitude, aircraft maintenance records, etc.) and it is unlikely to ever occur again under the exact same circumstances. For that reason, an accident location at one airport does not directly relate to a similar hypothetical location at another airport. As an example, the longer runway at Vernon (3,517 feet) might have allowed the aircraft to depart with a higher takeoff weight than could have occurred on a runway length like San Rafael's (2,140 feet). A reduced takeoff weight could equate to a shorter takeoff roll, and thus an accident site closer to the start of takeoff roll.

In reporting back to the City on responses to the airport safety questions, Mead & Hunt provided the following, additional points:

a. Regarding concerns about risk perception, the various data present in this and earlier letters and technical papers from Mead & Hunt address only part of the issue. Mead & Hunt notes that risk analysis is seldom strictly an objective exercise, it is also subjective. They report that objective reality is that users of the recreation center have a greater chance of being seriously injured while playing sports there than as a result of an aircraft accident. The perceptual element is that Mead & Hunt looked at these two types of risks differently. Playing sports is voluntary, under the control of the participants, and those involved gain some benefit from it. In contrast, being at the site of an aircraft accident involves none of those factors. There also is the potential for calamity, the prospect of multiple injuries or even death, associated with an aircraft accident that is not present with participating in sports. These factors mean that aircraft accident risks are weighed much more heavily than are sports injury risks.

b. Second, Mead & Hunt has emphasized that it is not an advocate of either being for or against the proposed recreational facility. This consultant was directed by city staff to provide an impartial review of the project from an aviation safety perspective and specifically to address the risks to which users of the facility would be exposed as a result of its proximity to San Rafael Airport. As airport planners and engineers, Mead & Hunt have reported that their bias is toward opposing development that could be detrimental to the long-term viability of airports. When evaluating the aviation safety risks of the project, this factor is important to consider.

c. In sum, Mead & Hunt regards this project as "falling in the large gray area in the spectrum of risk." They have reported that the risk of the site being involved in an aircraft accident is neither so minimal as to make the project clearly acceptable from an aviation safety perspective nor so high as to make the project totally unacceptable. Instead, Mead & Hunt finds that the project falls in the middle range, where the benefits must be weighed against the risks in order for a decision to be made. Toward this end, the many other pluses and minuses that have been noted about the proposed facility are perhaps more definitive factors than is the aviation safety component.

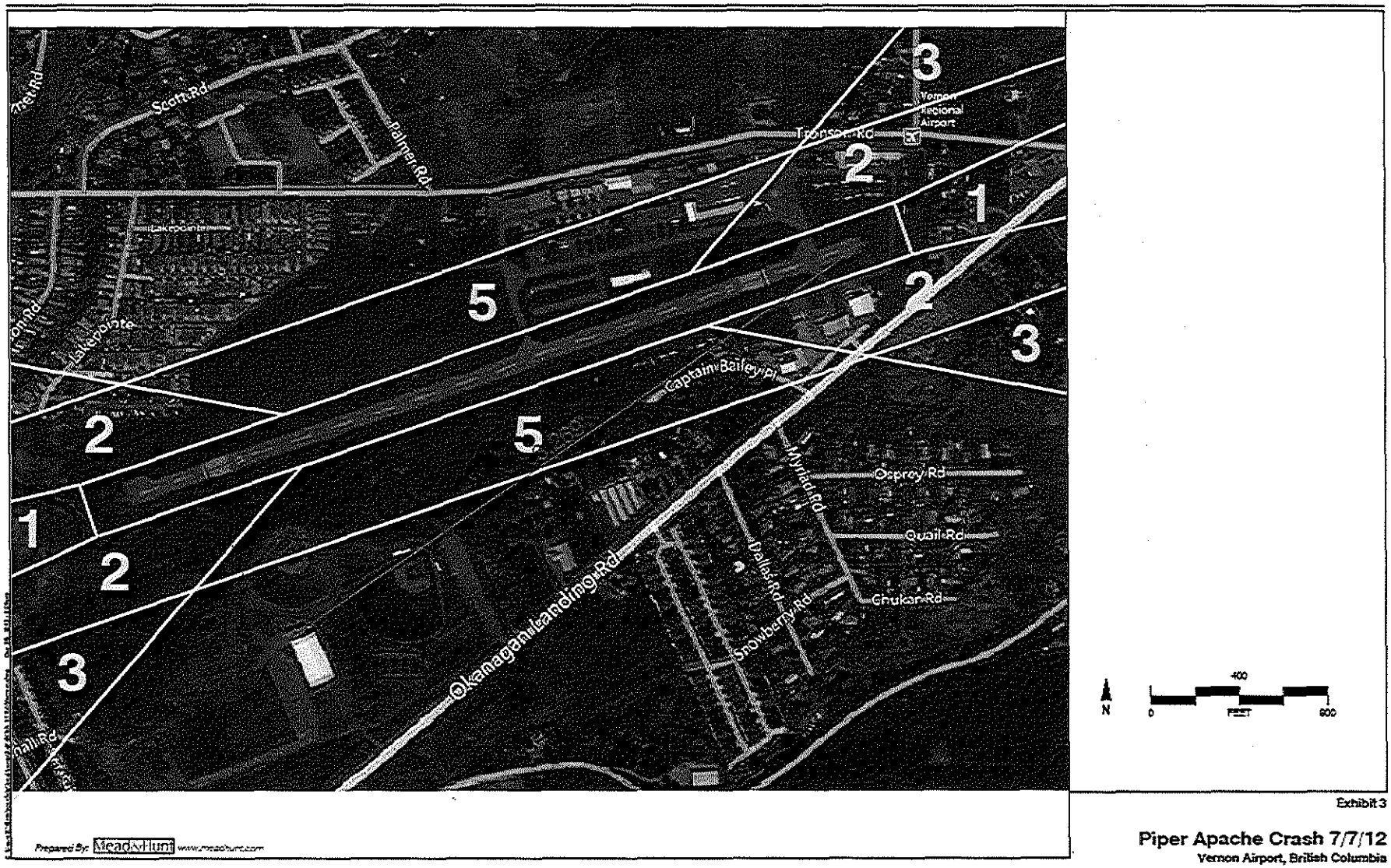

FIGURE 3 – Vernon Airport Crash Site

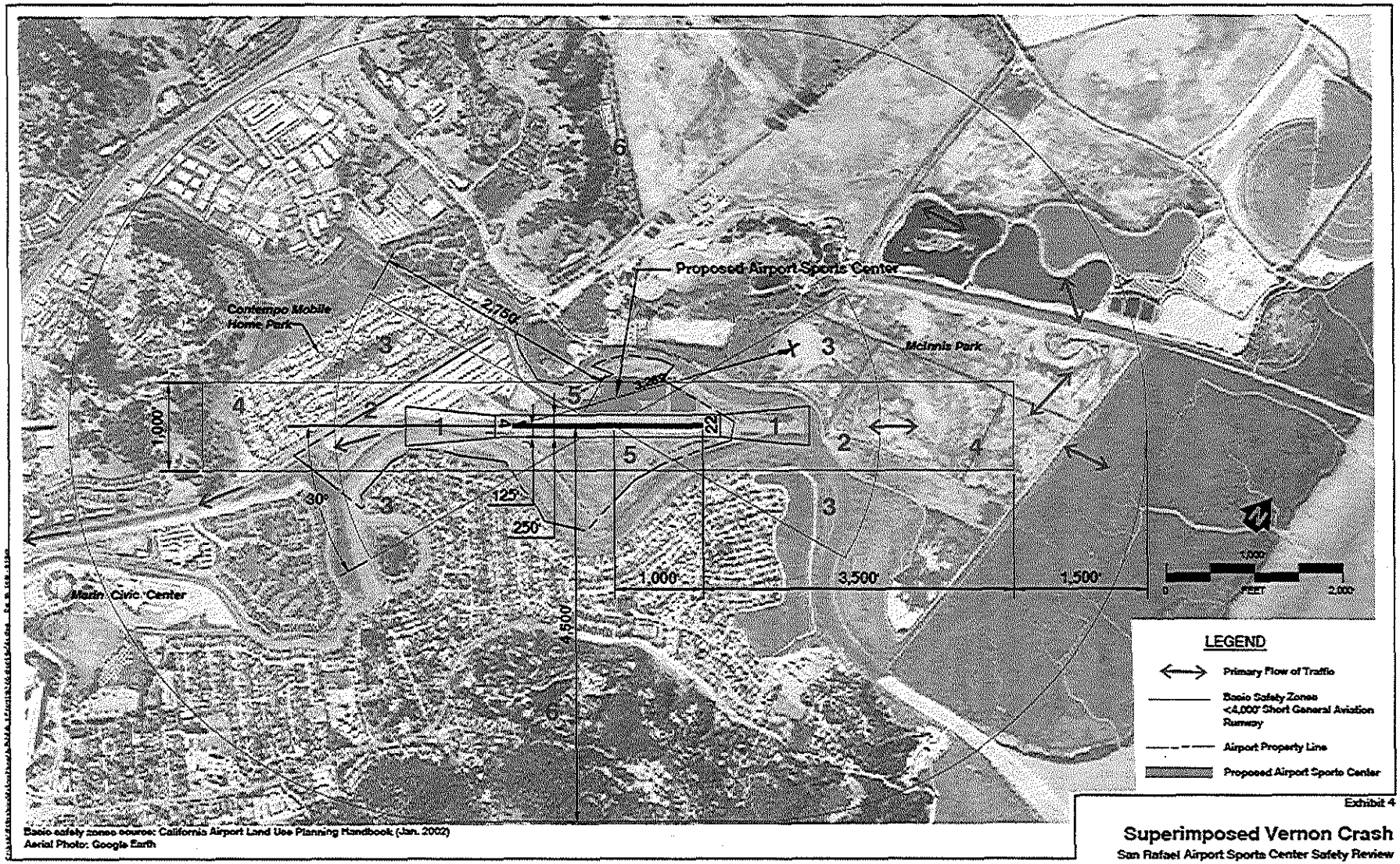

FIGURE 4 – Superimposed Vernon Crash

6. **How many calls for Police Department service have been made to the McInnis Park facility to address intoxicated or inebriated patrons/visitors?**

Response: While the airport is served by the City of San Rafael Police Department, McInnis Park is not; the park is serviced by the County of Marin Sheriff's Department. A yearly review of calls for service in and around this area conducted by SRPD revealed 6 incidents prior to the gate of McInnis Park and at the airport, as follows:

- Found Property (2);
- a "welfare check;"
- a Municipal Code violation (Tow truck violation of some type);
- a Priority Missing Person;
- an Assist Outside Agency for some stolen property.

These calls for service represent six (6) YTD out of a total of 39,225 received Citywide.

The City's Police Department also requested a similar review from the Marin County Sheriff's Department of their calls for service to McInnis Park. The Sheriff's Department reports that there were a total of 143 calls for service during the past calendar year to McInnis Park. Of the 143, two (2) calls were for public intoxication calls for service. The remaining 141 were other calls, such as patrol check, medical assist, juvenile disturbance, welfare check, burglary report, traffic stop, suspicious circumstances, etc. The SRPD notes that although some of these other 141 calls were not identified as alcohol-related, alcohol could have been involved in the issue.

Carlene, McCart, Community Services Department Director has provided an opinion that alcohol sales would not be problematic at a multi-purpose recreational facility use. Because of the closure time it would not be considered a gathering location, and most likely any such activity occurs off-site at a bar, club or restaurant that is open later into the evening and more conducive to socializing. As this site is so isolated and the closing time is early, it is also not considered likely to draw customers looking for a place to drink and gather, unrelated to sports activities on-site.

7. **Review the comments made regarding the project EIR and provide a general response from legal.**

Response: The City Council requested a summary of comments on the EIR and a report back. Separately, the City Council requested further information on many topics raised at the December 3, 2012 hearing, and some of those topics raise EIR issues. To the extent that specific topics are addressed in other sections of the staff report, they are not further addressed below. The list of topics below summarizes the major "themes" of the comments on the EIR.

Comments Associated with Safety Risk Due to Proximity to Airport

The Draft EIR (Chapter 10) contains an analysis of airport hazards based on the technical report *San Rafael Airport Sports Center Aeronautical Safety Review* prepared by Mead & Hunt, which is included as Appendix H to the Draft EIR. The issue of safety and potential hazards related to airplane crashes and the Caltrans safety standards have been addressed at the hearings, and Mead & Hunt will be providing further information to the Council in response to other questions. Two additional issues that have been raised in the EIR context are discussed below.

Maximum Occupancy

Many questions on the Draft EIR focused on the maximum number of people who could be present at the site during highest demand, focusing on the airport hazards impact analysis. Master Response 1 of the Final EIR explains how the maximum number of people at the site was calculated. According to the Aeronautical Safety Review, the maximum number of occupants would be 475 people. This intensity reflects the maximum number of people anticipated to be present within the entire recreational facility site area at any one time during the period of most usage.

Commenters also wanted to know if the occupancy calculations were consistent with the intensity of use used for the traffic analysis. Master Response 1 explains that although different methodologies are used for the two different purposes (aeronautical safety and traffic), the methodologies result in generally consistent occupancy rates.

Leaded Aviation Fuel

Some commenters raised the issue of potential health risks associated with the recreational facility's location next to the airport because of the leaded fuel used in aviation. Responses to comments in the Final EIR explained that exposure of individuals is expected to be minute because: emissions associated with the airport are quite small (low concentration of lead in aviation fuel, only 20 landings and take-offs per day), distance to the playing fields, and low duration of exposure.

Comments Related to the Land Use Declaration of Restriction

Many comments on the Draft EIR questioned the uses allowed under the 1983 Declaration of Restrictions. This issue has been thoroughly examined by staff and presented as a separate, merits and land use issue. The EIR did consider the uses allowed under the Declaration of Restrictions in various analyses, such as the formulation of alternatives.

Issues Related to Aesthetics and Light and Glare

Many comments focused on the story poles and the visual depictions of the project prepared for the EIR's analysis of aesthetics. Other comments focused on impacts from headlights on residential areas.

Aesthetic Impacts

Visual simulations of the project were prepared to depict how the project would impact views from several public vantage points. The views included: views from the McInnis Park trailhead and McInnis Park parking lot that are located directly across the North Fork of Gallinas Creek from the proposed building; a view from the levee trail at the pump house directly across from the proposed building, and a distant view from the levee trial at the bend in the North Fork of Gallinas Creek. The visual simulations are included in Chapter 5 of the Draft EIR.

The Draft EIR considers whether the project will: have a substantial adverse effect on a scenic vista; substantially damage scenic resources; or substantially degrade the existing visual character or quality of the site and its surroundings. After adequately disclosing the project's visual impacts on views – such as views of Mt. Tamalpais and the Civic Center – the Draft EIR concludes that impacts would be less than significant. The Final EIR made only minor revisions to this analysis.

Headlights

Several comments identified concerns with potential glare from vehicle headlights as cars travel along the access road, which would be shining headlights in the direction of homes located within the Captains Cove development at the end of Sailmaker Court. Master Response AES-2 provides a detailed analysis of the potential impact of increased vehicles on the Sailmaker Court. A condition of approval, which the applicant has agreed to implement, would require the applicant to provide a solid wall, fence, or hedge to screen headlights. The impact is considered less than significant.

Similar concerns regarding headlights in the parking lot were raised by residents of the Santa Venetia neighborhood. Master Response AES-2 explains that the existing levee and a 5-foot screened fence along the south side of the parking lot would block the glare from vehicle headlights on the Santa Venetia neighborhood.

California Clapper Rail and Other Biological Issues

Comments regarding impacts to the Clapper Rail can be categorized into issues of: noise and human disturbance, lights, construction noise, and sea level rise. Geoff Monk, the City's biologist has provided testimony to the City Council on why he believes that, with mitigation, the project will not result in significant impacts to clapper rails. The project is separated from clapper rail habitat in the North Fork of Gallinas Creek by a minimum 100 foot buffer from proposed development

and a 9-foot tall levee. The levee and the buffer area are currently mowed/maintained as an airport safety practice, and thus clapper rails are already disturbed by these current activities to an extent that these birds do not inhabit these maintained areas. Clapper rails have continued to exist and nest in the North Fork of Gallinas Creek adjacent to the proposed project site despite high levels of human disturbance from sporting events and other recreational activities at McInnis Park located immediately to the north of the North Fork of Gallinas Creek and the proposed project. There is no protection buffer or levee between McInnis Park and the North Fork of Gallinas Creek, yet clapper rails continue to use and nest in this creek immediately adjacent to this park. Thus, there is ample evidence that clapper rails have acclimated to high levels of human disturbance in the proposed project area. Because the proposed project is buffered by a minimum 100 foot buffer and a 9-foot high levee from the North Fork of Gallinas Creek, the City's biologist believes that the proposed project would not result in significant impacts on clapper rails with mitigation presented in the DEIR. Construction impacts near the North Fork of Gallinas Creek associated with the reconstruction of the airport access bridge that could disturb nesting clapper rails were identified in the DEIR as potentially significant impacts but mitigated to less than significant. Mitigation measures that would be implemented will include limiting the timing of construction so noise impacts near the North Fork of Gallinas Creek will not interfere with clapper rail breeding activity. Mr. Monk has also provided detailed responses to comments raised by the USFWS. The EIR's conclusions that the proposed project will not result in significant impacts to clapper rails are supported by substantial evidence.

Levees and Flooding

Issues related to levee maintenance have been discussed in detail in previous staff reports.

Flooding

The Draft EIR disclosed potential impacts related to flooding in the event of levee failure. (Draft EIR, pp. 11-30 to 11-32.) First, the EIR found, based on a study prepared by JCH & Associates, that potential levee failure due to liquefaction during an earthquake was unlikely. Further, Oberkamper & Associates (Oberkamper), civil engineers prepared an analysis of potential impacts related to a levee breach at the time of a 100-year flood event. That analysis took a very conservative approach and analyzed a wide levee breach (100 feet wide, down to +3 NGVD, continuing to widen at a rate of 100 feet per hour) and assumed it occurred instantaneously. With such a breach, flood waters would reach an elevation of +1 in 45 minutes, and +1.75 in 1.5 hours, and +2 in 2.25 hours.

Oberkamper concluded that visitors of the site would have sufficient time to evacuate safely before rising water presents a hazard. The Draft EIR, therefore, potential impacts related to flooding were considered less than significant. Nevertheless, in order to comply with City and FEMA standards, Mitigation Measure Hyd-2a requires floodproofing of the building up to +7 NGVD.

Levee Condition and Maintenance

To further examine the conditions of the levees, Jon C. Hom & Associates drilled boreholes to verify the conditions of the levee as reported in their initial report, upon which the Draft EIR was based. That report was peer reviewed by Questa Engineering. The reports further verify the conclusions in the EIR that earthquake-induced liquefaction is unlikely. Master Response HYD-2 contains an explanation of the current ownership and maintenance of the levees. Maintenance includes annual mowing, and capping and compacting the levees. More extensive capping is performed every 5-10 years.

Sea Level Rise

Many comments have been raised regarding sea level rise as both a merits issue (whether to construct a project in an area potentially subject to inundation), and as a CEQA issue. The Draft EIR determined that potential impacts related to sea level rise are less than significant. That determination was based on projections of a 0.5-foot sea level rise. After release of the Draft EIR, the San Francisco Bay Conservation and Development Commission (BCDC) released a report that identified the project area, as well as the nearby residential areas of Santa Venetia and Contempo Marin, as within an "area vulnerable to an approximate 16-inch sea level rise."

The Final EIR explains that the existing flood control features which provide protection from inundation of the site – including the 9-foot tall levee system at +8 NGVD elevation at top of bank – would continue to operate to protect the project site. It therefore concludes that even considering the higher levels of anticipated sea level rise, impacts would be less than significant.

The Final EIR further notes that depending on the estimated useful economic life of each of the project facilities, at some point it may become unreasonable for the property owner to make the necessary investment in infrastructure improvements intended to continue protecting those facilities from inundation, and at that point, those uses would be discontinued and abandoned. The Final EIR also notes that the levees that protect the project site also protect the airport and the Contempo Marin development. The memorandum dated December 2011 and Plat Map (Figure 5) included on the following pages were previously providing by Oberkamper documenting this point.

Noise

The Draft EIR uses the City's Noise Ordinance as significance thresholds. The Noise Ordinance provides that "No person shall produce, suffer or allow to be produced . . . a noise level greater than the following when measured on any residential property: Daytime: 60 dBA intermittent [L_{max}], 50 dBA constant [L_{eq}]; Nighttime: 50 dBA intermittent, 40 dBA constant." Based on noise studies, the project is expected to result in project-generated noise levels of 41 dBA L_{eq}, one decibel above the City's nighttime standard. Although this noise level would be below the existing ambient noise levels measured in the closest nearby residential neighborhoods (49 dBA to 54 dBA south of the project site and 54 dBA to 56 dBA at Contempo Marin), the EIR concluded that the impact was potentially significant. Staff has recommended mitigation that would end outside activities at 9:00 pm Sunday through Thursday and 10:00 pm Friday and Saturday unless and until noise studies can demonstrate the noise levels do not exceed the City's Noise Ordinance. If monitored noise levels do not exceed the City's Noise Ordinance, the outside facilities could remain open an additional hour, until 10:00 pm, on weekdays as well as weekends.

Climate Change

Many of the comments raising climate change issues have focused on sea level rise, which is discussed above. Others have focused on the project's contribution to global climate change. When the Draft EIR was released in 2009, there was little guidance on the analysis of project impacts related to climate change in CEQA documents. The Draft EIR concluded that determining the project's contribution to climate change was too speculative, but likely less than significant. The Draft EIR identified sources of project-generated GHG emissions, and discussed the project's energy efficiency (including achieving LEED certification).

Following release of the Draft EIR, the Bay Area Air Quality Management District (BAAQMD) updated its CEQA Guidance to include thresholds of significance for GHG emissions. According to BAAQMD, these new thresholds do not apply to projects for which a Notice of Preparation was circulated prior to June 2010 (such as this project). Nevertheless, the project's GHG emissions were calculated using the recommended methodology and compared to BAAQMD's quantitative threshold. The Final EIR discloses that the project's emissions would exceed BAAQMD's quantitative thresholds. But because the EIR did not apply BAAQMD's quantitative threshold, the EIR's conclusion that the project's impacts are less than significant did not change.

BAAQMD's thresholds (and the CEQA Guidelines) also recognize that a project that is consistent with a qualified GHG Emission Reduction Strategy could be considered to have a less-than-significant impact. The City adopted a GHG Emission Reduction Strategy in July 2011. The applicant has completed the City's GHG reduction checklist and staff has confirmed that the project would meet all required GHG reduction measures as well as several recommended elements of the checklist. This further supports the EIR's conclusion that the project's climate change impacts will be less than significant.

OBERKAMPER & ASSOCIATES

CIVIL ENGINEERS, INC.

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December 12, 2011
Job No. 04-155

City of San Rafael
Community Development Dept.
1400 Fifth Avenue
PO Box 151560
San Rafael, CA 94915-1560
Attn. Kraig Tamborini

Re. Contempo Marin Flood Protection

Dear Kraig:

We prepared the attached Plat, Flood Protection Facilities and Flood Protection description which illustrates and describes the location of the levees which protect Contempo Marin from flooding as well as protecting the airport. Our firm prepared the plans for construction of Contempo Marin as well as providing civil engineering services for the airport property.

Contempo Marin includes areas which are as low as elevation 3 NGVD29 which is several feet below the 100 year flood elevation of 6 NGVD29. At first glance it might appear that the railroad embankment would provide protection to Contempo Marin, however, the railroad embankment has top elevations as low as elevation 4 and is constructed of ballast which is permeable and will allow water to pass through in addition to being susceptible to overtopping by a flood elevation of 6. The levee elevations along the westerly side of Contempo Marin are at about elevation 6 which will provide little or no freeboard with respect to the 100 year flood elevation.

Thus there is mutual protection of the two properties by the combined levee system which surrounds them with each property therefore having an essential interest in the continued integrity of the entire system as well as the portion of the system adjoining the individual properties.

If there are questions regarding any of the foregoing or if you need further information, please let me know. Thanks.

Very Truly Yours,

L. E. Oberkamper
RCE 12094

cc. Bob Herbst

REGISTERED PROFESSIONAL ENGINEER
LEON E. OBERKAMPER
No. 12094
CIVIL
STATE OF CALIFORNIA

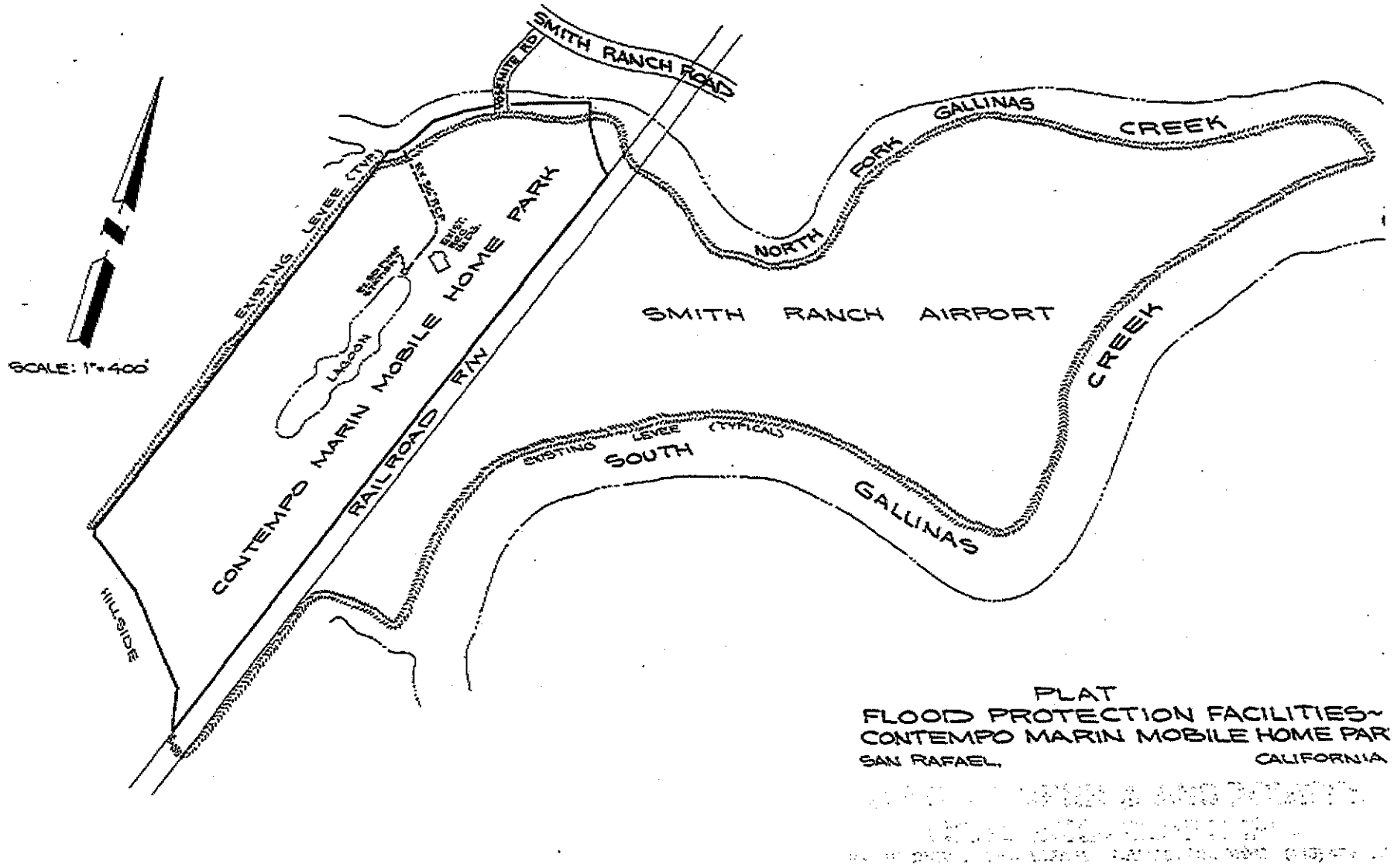


FIGURE 5 – Contempo Marin/San Rafael Airport Flood Protection Facilities

8. **What additional conditions or restrictions can be imposed by the City to address long-range planning (e.g., long range planning for wetland protection/restoration, adaptive measures for climate change/sea level rise) for the remaining, undeveloped portions of the airport site? Do the PD (Planned Development) District and the Wetland-Overlay (WO) District provide an opportunity to impose such conditions and restrictions?**

Response: This question focuses on the portions of the airport site that are proposed to remain undeveloped and retained in private ownership. This undeveloped land located within the City urban boundary covers approximately 24 acres of the airport site, the bulk of which is comprised of the diked baylands located between the airstrip and the South Fork of Gallinas Creek (See Figure 6 for an aerial of the airport site and the *general* boundaries of this undeveloped land). As described in the December 3 City Council report, the entire airport site is located within the Planned Development (PD-1764) zoning district. In addition, the site is overlaid by the Wetland Overlay (WO) zoning district. For most low-lying areas near waterways, the WO District is applied to sites that are known to contain wetlands. The WO District is broadly applied to an entire site as a precautionary measure to ensure that wetlands are identified as part of site and development review; this broad application does not mean that the entire property is a wetland.

At present, the proposed amendment to the PD District (attached Exhibit 4, Sections II.D and III.I) acknowledges the 24 acres of undeveloped land as "undesignated land area" that: a) is not approved for development with structures or additional land uses; and b) is to be maintained for airport safety purposes (includes grazing, maintenance of grasses and aviation aids). However, the PD District amendment is currently not drafted to *permanently* encumber or restrict this area for conservation purposes. While, the PD District would not allow development in this area (except as specified above) it would not prevent or preclude the property owner from requesting a change in this zoning for further development in the future. If that were to occur, any future application would require an application for PD Rezoning, and would be reviewed and considered by the City based on its merits and after conducting a full environmental review.

In order for the City to condition, permanently restrict or encumber this undeveloped land, there must be a "nexus," which is a link or connection to an adopted plan, ordinance, study, or program that recommends, supports or requires such an action by the City. Staff has worked closely with the City Attorney on this issue. While staff have found that certain General Plan policies and the project EIR findings make it challenging to find a nexus for this action, the PD District does provide potential support for this nexus. Because the PD District and the required supportive permits (Use Permit and Design Review Permit) are *discretionary*, they provide the City the ability to impose conditions and restrictions, which must be supported by findings. Per SRMC 14.07.010, the purposes of a PD District include, among others:

- *Promote and encourage cluster development on large sites to avoid sensitive areas of property*
- *Encourage establishment of open space areas in land development*
- *Enable affected governmental bodies to receive information and provide an integrated response to both the immediate and long-range impacts of such proposed development*

The PD District is mandated for large sites and offers "customized" zoning, which is intended to take a comprehensive approach at site planning and development. The findings required for adopting a PD District (SRMC Section 14.07.090) include a specific finding for nonresidential uses that reads:

> *"Any nonresidential use shall be appropriate in area, location and overall planning for the purpose intended, and the design and development standards shall create a nonresidential environment of sustained desirability and stability, and where applicable, adequate open space shall be provided".*

The "open space" provided in this project must be deemed adequate by the City Council. Therefore, the Council would have the discretion to encumber some or all of the remaining, undeveloped lands as open space if it were to determine that this action is necessary to make this finding.

Regarding the -WO District (SRMC Chapter 14.13), this overlay zone is intended to: a) identify wetland resources; b) address their protection; c) avoid or regulate the filling of wetlands; and d) require setbacks or buffers. This overlay zone does not include any provisions that mandate or require that the City impose a permanent restriction or encumbrance of lands in this zone.

In order to adopt a PD District for a specific project, it must be determined that all required mitigation measures for environmental impacts are addressed and that the action is consistent with the General Plan. These issues are addressed as follows:

a. With the exception of the undeveloped portions of the site located north of the proposed recreation facility (diked baylands between the project and the North Fork of Gallinas Creek), there is no environmental or "CEQA" nexus from project impacts to permanently restrict or encumber the remaining, undeveloped portions of the airport site. For the area north of the proposed recreation facility, a "conservation area" restriction is required as a mitigation measure (per project EIR, Mitigation Measure Bio-2b) to provide a permanent buffer for wildlife habitat protection (primarily protection for California Clapper Rail, endangered species). This "conservation area" encompasses an estimated two acres of land inboard of the levee/creek bank and provides a minimum buffer width of 100 feet (between development area and creek) and minimum setbacks of 50 feet from designated wetlands (see Figure 6 aerial). This mitigation measure has already been incorporated as a land use restriction in the proposed PD District (Exhibit 4, page 4-9 of the PD) and as a Environmental and Design Review Permit condition of approval for the project (Exhibit 5, condition number 59). The project EIR concludes that: a) the setback buffers identified for this project are required to mitigate project impacts on adjacent wetlands and the North Fork of Gallinas Creek; and b) there are no other significant environmental impacts associated with the project that would result in a mitigation measure or requirement to permanently conserve the remaining, undeveloped lands located south of the airport runway.

   It should be noted that the diked baylands south of the airport runway are adjacent to the South Fork of Gallinas Creek. As this area of the airport site is not proposed for development, a delineation of potential wetlands was not conducted for the project EIR. Nonetheless, it is possible and likely that these diked baylands contain some pockets of isolated seasonal wetlands, similar to the wetlands delineated north of the proposed recreation facility. Further, it should be noted that along the adjacent South Fork of Gallinas Creek, sightings of California Clapper Rail were observed in 1989 (source: San Rafael General Plan 2020 Background Report; 2001). While there is no nexus for project mitigation in this area, protection of the abutting the South Fork of Gallinas Creek is equally important.

b. At this time, the adopted Climate Change Action Plan (CCAP) and the recently adopted San Rafael General Plan 2020 Sustainability Element do not provide the City the ability to encumber or permanently restrict any portion of the site for long-range planning for climate change and sea level rise, unless such action is agreed to (or voluntarily proposed) by the property owner/developer. As noted in the FEIR, the airport site would be impacted by the rise in sea level that has been predicted for the North San Rafael area. Given the size of the airport site, its location (between two forks of Gallinas Creek and base of the Gallinas Watershed) and its physical characteristics (expansive, undeveloped flat diked baylands), it presents opportunities to plan for and accommodate adaptive measures for predicted sea level rise. It is prudent and wise to plan for these areas. However, at present, the City is in the initial phases of reviewing and studying sea level rise and climate change. The adopted CCAP and San Rafael General Plan 2020 (Sustainability Element) recommends, as a first step, a citywide assessment of levees (an inventory of number/location, public vs. private, levee heights), which is a citywide, if

not a countywide effort. The City Department of Public Works must take the lead on this project and it will require multi-agency coordination/ involvement and major funding. At this time, there is no program that is set up and adopted that could be relied upon to obligate the property owner to comply with or participate in this effort.

c. The GP 2020 designates the whole airport site as "Airport/ Recreation." During the City Council public hearing, a comment was made that this site (or portions of this site) is designated as "Conservation," which would provide a degree of nexus to require a restriction or permanent encumbrance on the remaining portions of the airport site. This is not correct; no portion of the site is designated "Conservation" on the General Plan Land Use Map. Therefore, there is little nexus through the General Plan 2020 to condition, restrict or permanently encumber this remaining undeveloped land based on any conservation policies in the General Plan. However, the Airport/Recreation policy does tie the use of the property back to the land use declaration of restriction recorded on the property. Comments and discussion provided in the record indicate that the land use restriction might have been intended to limit intensity of development on the site, as well as uses, due to its historic status as diked baylands; which are considered to have potential for restoration. The Airport/Recreation land use designation -- viewed in conjunction with the land use declaration of restriction and the WO District regulations -- present some recognition that the low-lying, diked baylands contain wetlands and/or potential wetlands, and that portions of this area may be suitable for passive recreational use only. A conservative application of the land use restriction could provide a suitable nexus for limiting development on the remainder of this site in order to allow for a greater intensity of use to be permitted on the subject project site, which may be more readily developed.

   The General Plan Neighborhood Element Policy NH-149 is a site-specific policy for the San Rafael Airport. Policy NH-149 directs the City to "recognize the unique and valuable recreation and environmental characteristics of the airport site" and specifies allowed uses including, among others "open space including wetlands." Program NH-149a states, "Through the development review process, require, as needed, improvements consistent with this policy." In coupling this policy and program with the PD District finding that is described above, there is a possible nexus to support a permanent encumbrance or restriction on the remaining undeveloped lands. However, such action would have to be supported by strong and defensible findings.

   General Plan Exhibit 36 identifies "Baylands" throughout the City's planning area. The entire airport site is identified as "Diked Baylands." Diked baylands are addressed in General Plan Conservation Element Policies CON-1 (Protection of Environmental Resources) and CON-5 (Diked Baylands). Policy CON-5 addresses the protection of diked baylands, which calls for protecting seasonal wetlands and associated upland habitat contained within undeveloped diked baylands, or restore to tidal action. However, this policy states, "support and promote acquisition from willing property owners." This qualifier suggests that the City negotiate with willing property owners to permanently protect or encumber diked baylands. As stated by staff at the December 3 public hearing, this matter was discussed with the property owner, who declined to offer a permanent encumbrance over the remaining, undeveloped portions of the airport lands.

In conclusion, the City has the potential to condition, permanently restrict or encumber the remaining undeveloped land because of the discretion that is afforded with the PD District amendment process. The support for this action is narrowed to the finding that such an encumbrance is necessary to achieve "adequate open space" in this project based on the following:

a. A conservative application of the land use declaration of restriction that limiting development on the remainder of this site is necessary to allow for a greater intensity of use on other portions of the site. This approach also promotes and supports one of the purposes of the PD District, which is to cluster development on large sites in order to avoid sensitive areas of the property.

b. The South Fork of Gallinas Creek provides valuable habitat for the California Clapper Rail. While there is no nexus for project mitigation in this area, protection of the abutting South Fork of Gallinas Creek is equally important.

c. The airport site presents opportunities for long-range study and planning for climate change and potential sea level rise. Reserving the remainder of this site for this purpose could be beneficial.

Should the City Council support an action to condition, encumber or restrict the remaining, undeveloped land on the airport site revisions to the PD text would need to be recommended to establish suitable uses or limitations for this area.

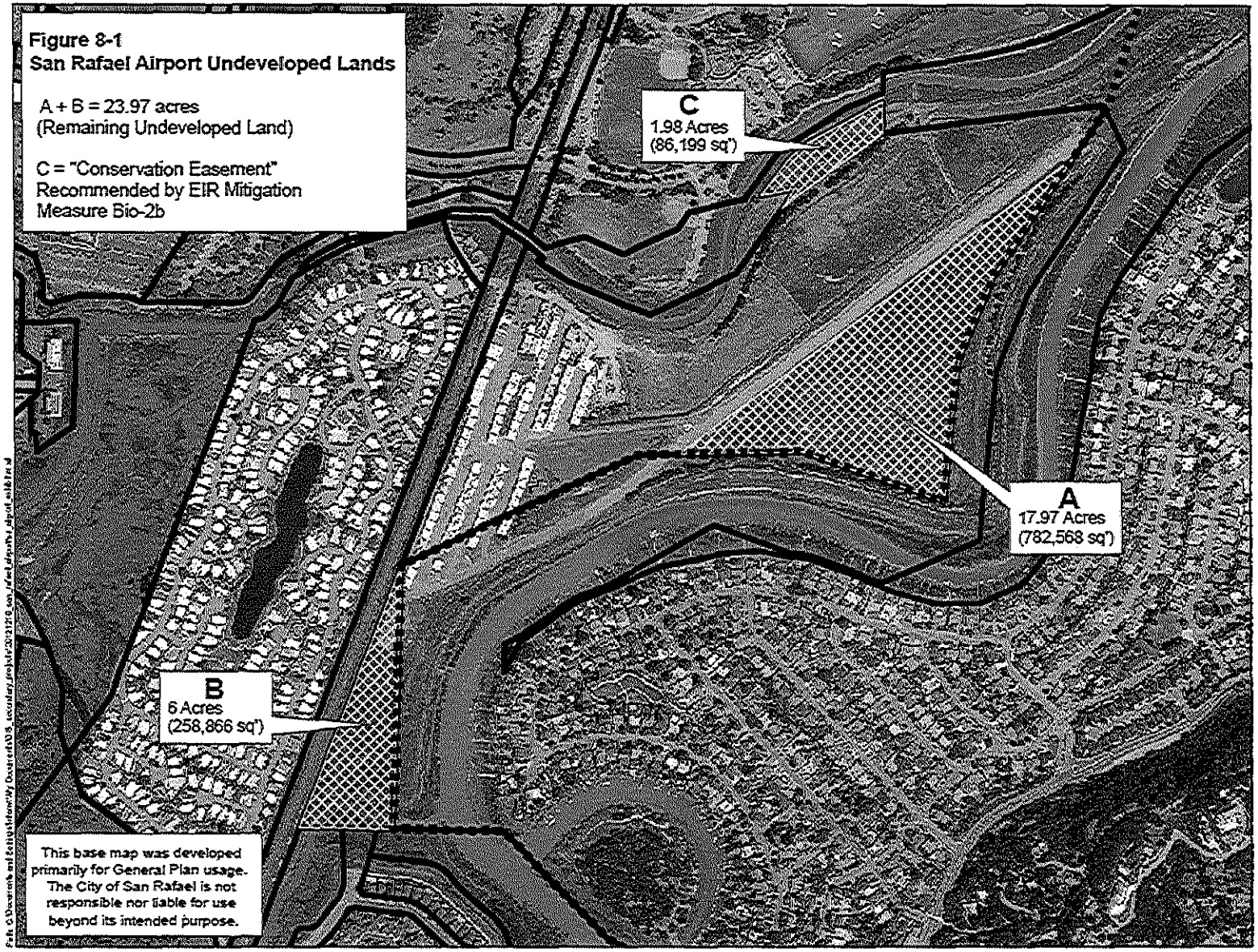


FIGURE 6 – Airport Conservation & Undeveloped Lands (general estimates)

9. **The project EIR provides an assessment of the project's conformance with the wetland protection and conservation policies of the San Rafael General Plan 2020 and the adopted provisions of the Wetland Overlay (WO) zoning district. Do the findings in the project EIR contradict these policies and provisions?**

Response: The EIR has considered the General Plan 2020 Conservation Element policies and City Zoning Regulations that have been adopted to provide for greater protection of wetlands, wildlife and habitat. The findings and conclusions of the EIR are in accordance with these policies and regulations. The EIR does not require revisions or mitigation measures that would conflict with these policies and provisions.

The Land Use and Planning regulations and policies are discussed in Chapter 4 of the EIR. The General Plan 2020 Conservation Element is also considered in the EIR Chapter 7: Biological Resources analysis. A General Plan 2020 Consistency Analysis of the project was prepared for review and consideration in preparing the EIR, and attached in the EIR technical appendices as Appendix C. Review under CEQA is conducted to determine whether the project would have a potentially significant impact on the environment. The EIR (Page 4-17) establishes that an impact would be potentially significant if it would result in one or more of the following conditions:

- Physically divide or disrupt an established community;
- Conflict with the adopted goals and policies of the General Plan or other planning program adopted for the purpose of avoiding or mitigating environmental effects;
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

The proposed land use is consistent with the General Plan Airport/Recreation land use designation and the underlying covenant of restrictions referred to in the General Plan 2020 land use policy. The site location is also physically isolated from its adjoining neighbors, and separated by an existing creek from McInnis Park to the north and Santa Venetia residential neighborhood to the south. Thus, the EIR concludes that the project location would not divide or disrupt an established community. Review of the General Plan 2020 Policies and Zoning Regulations did not reveal any potential conflicts or inconsistencies with the City General Plan or zoning regulations intended to avoid or mitigate environmental effects.

As noted in the General Plan 2020 consistency analysis, which was provided as Exhibit 6 to the December 3, 2012 staff report to the City Council, the EIR has concluded that on balance the project would be in substantial compliance with the General Plan 2020 goals and policies with inclusion of recommended conditions and mitigation measures as noted in the compliance table. This includes all of the applicable Conservation Element policies CON-1 through CON-16 and CON-22 (deemed to be applicable to the project) and adopted for the purpose of avoiding or mitigating environmental effects (12/3/12 CC Report, Exhibit 6 Page 6-17 to 6-21).

Similarly, the EIR considered and discussed the underlying PD1764-WO zoning regulations that must be evaluated by the City in order to allow development on this site (Draft EIR page 4-19). The –WO overlay zone prescribes a minimum 50-foot setback from wetlands and minimum 100-foot setback from creeks. The project plans indicated these prescribed setbacks would be met for the wetland and exceeded for creek setbacks. No wetlands or habitat are located in the area of the development footprint. The EIR analysis has not concluded that a larger buffer zone setback should be required. The EIR has recommended additional restrictions intended to protect the buffer zone including installation of a barrier fence between development and protected buffer zone, and establishment of a conservation easement over the buffer zone area. See FEIR Revised Table 2 Mitigation Measures MMBio-2a and MMBio-2b requiring a perimeter fence and a permanent conservation area established between the project and North Fork of Gallinas Creek.

10. Please confirm if the Fire Department has recommended or required the removal of the eucalyptus tree row that is along the northern boundary of the proposed project area.

Response: The site is not located within a wildland fire urban-interface zone. Thus, vegetation management maintenance practices that apply to hillside sites are not applicable to this site. The Fire Department does not require removal of trees and, therefore, has not required removal of the existing Eucalyptus trees on this property. Fire Department Conditions of Approval are provided in the draft resolution of approval provided as Exhibit 5 of this report (see draft ED Conditions 26-37, 134-138, 178 & 181). The Planning Division has also incorporated draft ED condition 55b, as recommended by the Design Review Board, which requires that gaps in the existing eucalyptus trees shall be filled in. The intent of this condition is to require that vegetative screening shall be provided and maintained on the property in perpetuity to soften distant views of the project.

11. Can the adopted, citywide traffic mitigation fees be applied or allocated to study, monitor and implement improvements (if required) on the local intersection of Smith Ranch Road and Yosemite Drive?

Response: The Traffic Mitigation Fee is based on specific projects listed in Exhibit 21 of Circulation Element Policy C-6a of the General Plan 2020. The intersection of Smith Ranch Road and Yosemite Drive is not included in Exhibit 21 and therefore the traffic mitigation fee funds cannot be used for study and improvements. In addition, as part the San Rafael Airport project EIR and traffic impact study, the Department of Public works required this intersection to be studied for all-way stop control and other traffic control device installation for existing, and existing plus project conditions. The traffic study concluded no traffic control device installation is warranted and did not recommend any improvements.

As part of routine traffic operations the Department of Public Works will monitor and study this intersection once the project is fully operational in the future and recommend improvements such as installation of traffic control devices.

12. Please provide a summary of how and where noise impacts are assessed in the project EIR.

Response: Potential noise impacts have been evaluated in Draft EIR Chapter 12 (pages 12-1 through 12-26), EIR Technical Appendix J (Noise Analysis by Illingworth and Rodkin), and FEIR Master Responses 16&17 (Page C&R-37 through C&R-40). Detailed analysis of applicable noise thresholds, project impacts and recommended mitigation measures for long-term (ongoing operations) and short-term (construction) impacts are contained in the Draft EIR pages 12-13 through 12-26.

The City's environmental consultant, Lamphier & Gregory, conducted a review of the noise study with sub-consultant Geir & Geir which confirmed its adequacy and resulted in revisions to the project mitigation measures. The 3rd paragraph on page 12-3 of the EIR explains that the closest residential receptor is located in Santa Venetia, at approximately 1,000 feet from the south edge of the outdoor soccer field and 750 feet from the south edge of the outdoor warm-up field.

Illingworth and Rodkin utilized noise measurements taken at 3 locations (designated as LT-1, LT-2 and LT-3) to characterize existing ambient noise levels. LT-1 was located at the southern edge of the proposed outdoor soccer field, approximately 225 feet from the center of the runway. LT-2 was located the end of Vendola Drive in Santa Venetia neighborhood. LT-3 was located west of the site on Glacier Way in Contempo Marin residential neighborhood. Noise measurement locations are indicated on Figure 12-2 on page 12-11 of the EIR. The level of noise experienced from all sources at these locations ranged and was characterized as follows:

- LT-1 35 to 45 dBA Leq[4]; with intermittent increases from aircraft noise
- LT-2 49 to 54 dBA Ldn; including aircraft noise
- LT-3 54 to 56 dBA Ldn; with aircraft noise indistinguishable from local street traffic and other neighborhood noise

The project was evaluated for compliance with the City Noise Ordinance (Chapter 8.13), as well as General Plan 2020 Noise Element policies (see Draft EIR Page 12-7 and 12-8). In general terms, the project would be considered to be potentially significant if it would expose sensitive receptors to noise levels that exceed the City noise ordinance limits. Commencing with the last paragraph on page 12-16 through Page 12-17, the EIR explains that the outdoor soccer field use (not the warm-up field) could result in noise levels reaching 41 decibels at the nearest residential property line (e.g., outdoor noise level) in Santa Venetia. Thus, if games were permitted to occur after 9PM weekdays and/or 10PM weekends, the City Noise Ordinance limits of 40 decibels for nighttime could be exceeded by 1 decibel. Interior noise levels are sufficiently attenuated by the building, and use of the unlit outdoor warmup field at night would not occur. The facility would not exceed the noise ordinance daytime noise threshold of 50 decibels (constant) or 60 decibels (intermittent).

Mitigation Measures MM N-1 addresses evening noise from games by establishing a 9PM weekday and 10PM weekend game curfew. MM N-2 and MM N-3 address noise anticipated from construction equipment and pile driving by specifying controls on equipment, scheduling and duration of work to assure it minimizes disturbance on neighbors and complies with the City Noise Ordinance.

13. It has been stated that at present, the number of athletic fields in San Rafael provides only 50% of the need (deficiency). Please confirm if this deficiency is correct.

Response: The applicant has made this statement about the need for fields and the 50% deficiency in various presentations and public meetings. The applicant has indicated that their data was derived from the Marin County Countywide Plan, Parks and Recreation Element. A copy of the applicable sections is included herein.

The Marin Countywide Plan uses a National Park Standards that recommends that cities should have 1 soccer field per 20,000 residents. (See Marin County General Plan Socioeconomic Element pages 4-142 & 4-143 on the following pages). In the City of San Rafael, there are 4 fields, which translates to 1 field per 31,000 residents. This represents a 55% shortage (the need is 155% greater than the supply: 31,000/20,000). Based on this data, Baseball has a 50% shortage and basketball has a 147% shortage.

In addition, Carlene McCart, Community Services Director, has been involved in the review of this project and confirmed that this stated deficiency is correct. The standard states this number should be increased in communities where soccer is of high interest, as is the case in San Rafael as well as Marin County as a whole. Carlene McCart notes that San Rafael should have five to six fields available for public use in order to meet the National Park Standards.

The City of San Rafael has four (4) public soccer fields, and four (4) located on school properties with restricted public access. The four (4) public fields are natural turf and located, two at Pickleweed Park and two at McInnis Park. All four are closed to the public during wet weather, and for annual renovation (3-6 months). There is significant time during the year when no fields are available for public use.

Due to the demand, it is Ms. McCart's opinion 8-10 soccer fields would be needed to serve the public, with at least half of those to be all weather fields. She concurs with the assertion that San Rafael has facilities to serve 50% or less of the need in our community. Further, the outer warm-

[4] Draft EIR pages 12-1 and 12-2 'Setting' discussion describes the Leq and Ldn descriptors; noting that Leq descriptor is energy-equivalent noise level and Ldn is a 24-hour noise descriptor for Leq (used for the residential areas) which adds a 10-dBA penalty to nighttime noise levels (10PM to 7AM) to account for peoples increased noise sensitivity during the night.

up field is considered to be a good use to have as it provides a staging area for players waiting for a field. Without it, players are hanging out in the parking lot or along the field edges to practice.

MARIN COUNTYWIDE PLAN

This section of the Countywide Plan focuses on augmenting and improving active recreation facilities in Marin. (See the Open Space Section in the Natural Systems and Agriculture Element for programs regarding lands managed primarily for habitat and scenic values, and lower-impact, passive recreation. Also see the Natural Systems and Agriculture Element, Map 2-17, Marin County Open Space and Parks.) County and city parks in Marin already provide a variety of active recreation amenities, including playing fields, pools, golf courses, tennis and volleyball courts, skate parks, and children's playgrounds. County Service Areas and special districts manage additional park and recreation facilities, as do some school districts.

"In my view, wholesome pleasure, sport, and recreation are as vital to this nation as productive work and should have a large share in the national budget."

— Walt Disney

Key Trends and Issues

Does Marin have enough developed recreation facilities?

State law allows cities and counties to acquire parkland through dedication or payment of in-lieu fees during subdivision review (Government Code Section 66477, known as the Quimby Act), and to purchase surplus school sites for recreation if public lands in the vicinity are not adequate to meet community outdoor recreation needs (Education Code Sections 17485-17500). The Novato, Las Gallinas, Upper and Lower Ross Valley, and West Marin Planning Areas fall short of the Quimby standard of 3 to 5 acres of parkland per 1,000 residents (see Figure 4-41). The County is even further from reaching the National Park Association requirement of 10 acres per 1,000 residents. The demand for a wide range of developed facilities for active recreation continues to grow.

Figure 4-40 Recreation Standards and Guidelines

Recreation Facilities	Recommended Number of Units per Population	Existing Number of Units per Marin County Population[1]	Recommended Service Radius
Swimming Pools	1 per 20,000	1 per 17,650	15 to 30 minutes travel time
Golf	1 per 25,000	1 per 49,500	½ to 1 hour travel time
Baseball	1 per 5,000	1 per 7,500	¼ to ½ mile
Soccer	1 per 20,000	1 per 31,000	1 to 2 miles
Football	1 per 20,000	1 per 31,000	15 to 30 minutes travel time
Basketball	1 per 5,000	1 per 12,350	¼ to ½ mile
Tennis	1 court per 2,000	1 per 2,100	¼ to ½ mile
Running Track (1/4 mile)	1 per 20,000	1 per 31,000	30 to 60 minutes travel time

[1]Includes facilities open to the public only.
Source: National Recreation and Park Association, 2001.

Figure 4-41
Park Acreage by Planning Area (Excluding Schools) Compared with Quimby Act and National Park Association Requirements

Planning Area	Developed[1] Park Acreage	Quimby Act Requirements (5 acres per 1,000 people)	Quimby Act Surplus or Deficit	National Requirements (10 acres per 1,000 people)	National Requirements Surplus or Deficit
1. Novato	153	273	(120)	545	(392)
2. Las Gallinas	60	143	(82)	286	(225)
3. San Rafael Basin	211	200	11	400	(189)
4. Upper Ross Valley	124	128	(4)	256	(132)
5. Lower Ross Valley	74	170	(95)	340	(265)
6. Richardson Bay	262	260	2	521	(285)
7. West Marin	45	62	(17)	123	(78)
Total in Marin County	**932**	**1,236**	**(304)**	**2,473**	**(1,541)**

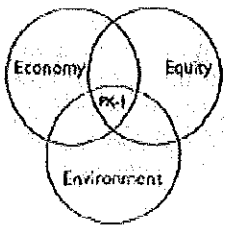
[1] Developed for the purpose of active recreation. Includes city-owned parks.

Source: 2003 Marin County Community Development Agency and 2000 United States Census.

What Are the Desired Outcomes?

GOAL PK-1

A High-Quality Parks and Recreation System. Provide park and recreation facilities and programs to meet the various needs of all county residents.



Policies

PK-1.1 **Conduct and Coordinate Park Planning.** Develop park and recreation facilities and programs to provide for active recreation, passive enjoyment, and protection of natural resources as a complement to local, state, and national parks and open space in Marin.

PK-1.2 **Consider User Needs, Impacts, and Costs.** Plan and develop any needed new park and recreation facilities and programs to meet the desires of the community and protect environmental resources.

PK-1.3 **Protect Park Resources from Impacts of Climate Change.** Identify strategies to protect park resources from the effects of climate change, such as violent weather, plant loss or change due to moisture and temperature changes, and sea level rise.

14. If the recreation facility is developed but is unsuccessful and does not succeed, what will become of the facilities and improvements? What would be the re-use options for these facilities?

Response: The use of this property is regulated by a variety of laws and restrictions. In 1983, there was a restrictive covenant recorded on the title of the property that is a three party agreement between the City of San Rafael, County of Marin, and the property owner. This covenant limits the future use of the site to specific uses, including:

- Existing uses consisted of the airport and related uses,
- Future utility uses as approved by the appropriate government agencies, including flood control, sanitary sewer, gas and electricity and public safety facility,
- Airport and airport related uses,
- Roadways,
- Open space, and
- Private and public recreational uses.

The City's General Plan land use designation mirrors the covenant and designates the site as "Airport/Recreation" land use designation which is defined as:

> *Uses on this site are governed by a land use covenant agreed to by the City, the County and the property owner. Recognize the unique and valuable recreational and environmental characteristics of the airport site. The following uses are allowed on the property:*
>
> - *Uses consistent wit the 200 Master Use Permit, including airport and ancillary airport services and light industrial uses*
> - *Private and public recreational uses*
> - *Public utility uses*

If the City were to approve this application, the Planned Development (PD) District for the site would be updated to reflect the allowance for recreational uses and intensities as proposed and as conditioned in this application. These would be in addition to the other existing uses that are currently allowed on the site by the current PD zoning and Master Use Permit (Airport, airport related and limited light industrial)

Once built, the building would only be allowed to be used in accordance with the PD District and Master Use Permit. If in the future, one or all of the recreational uses in the complex are not successful and vacate the building, other recreational uses would be allowed to re-occupy the building under the terms and conditions of the PD District And Master Use Permit . The draft PD District and draft Master Use Permit allow for a wide variety of recreational use for the building. The environmental review that was conducted for this application studied the worst-case scenario in terms of traffic and intensity and hours.

In the event that economic factors or other circumstances make it impossible for the owner to find a recreational use to re-tenant the building, then the building would be required to remain vacant until such time that an allowable use is found and is consistent with the terms of the PD District and the Master Use Permit.

Should a non-recreational use be proposed for this building, it would not be consistent with the PD District and Master Use Permit and therefore, not be allowed. The owner and applicant would have the right to file an application to amend the PD District and Master Use Permit and undergo environmental review. Any potential use would still have to be consistent with the covenant. The process for a potential PD Rezoning application would be similar to the process currently underway and would require final action by the City Council.

The property owner is aware of the limitations that exist for future reuse. Therefore, they are pursuing this development application with a clear understanding and knowledge of the limitations.

15. On behalf of the City of San Rafael, former Mayor Larry Mulryan signed the "Declaration of Restriction" that has been recorded on this property. Please contact Mr. Mulryan to see if he can provide feedback on his understanding or recollection of the use restriction.

Response: On December 7, 2012, staff contacted former Mayor Larry Mulryan (telephone conversation). Mr. Mulryan reported that he recalls reviewing and signing the declaration of restriction with former County Supervisor Robert Roumiguiere. Mr. Mulryan also reported the following:

a. He recalls agreeing (mutually with Supervisor Roumiguiere) to delete provision 1(g) of the declaration (Limitations on Use). This deleted provision reads, "any other related use agreed to by the City, County and Owner." Mr. Mulryan indicated that this provision was deleted because it was too broadly written.

b. During the time of negotiations and the signing of this declaration, he does not recall any discussion about a "density transfer" from the airport site to the adjacent Civic Center North lands (now Marin Lagoon, Embassy Suites and Autodesk office).

c. He indicated that the declaration is not well written. While it allows for "private and public recreation uses," in his personal opinion, "the proposed facility, including the commercial usage is more intense than what we had in mind when the declaration was written."

16. Solar panels are proposed for the roof of the recreation facility structure. Will these panels be reflective and have the potential glare impacts been assessed?

Response: The roof-mounted solar antennas were not anticipated nor identified to result in potential glare impacts. This has not been a topic of concern raised at prior scoping sessions or at the Planning Commission hearings held on the EIR or project. Installation of solar panels on an existing building or over a developed parking lot in the City generally is considered appropriate. This activity would be statutorily exempt from the California Environmental Quality Act and exempt from City zoning regulations.

In response to this recent question, staff notes that the FAA prepared a guide, "Technical Guidance for Evaluating Selected Solar Technologies on Airports" (aka Solar Guide), version dated November 2010[5], which states the following:

> "Solar PV projects are generally a compatible land use at airports because of their low profile and ease of integration with existing facilities. The economics of projects are favorable because of the large on-site energy demand and good solar exposure. However, projects must meets standards to protect air navigation and existing aviation activities, as well as supporting national environmental policies. Sponsors need to consider several factors to determine the feasibility of a solar project, including the consistency of a project with aviation activities and approved airport master plans, potential environmental issues associated with project siting alternatives, and the need to obtain approvals from the FAA including an update to the Airport Layout Plan. Sponsors should consult with the FAA early and throughout the process to ensure that a proposed project meets all FAA requirements."

The FAA identifies three areas of potential impact: (1) airspace penetration, (2) communications systems interference, and (3) reflectivity. Airspace penetration means that no construction should penetrate the imaginary surfaces that define navigable airspace, as described in FAA Part 77. The solar panels have been considered in determining that they would not interfere with FAA Part 77 regarding avoiding any penetrations into ascending clear zones. The proposed panels would

[5] http://www.faa.gov/airports/environmental/policy_guidance/media/airport_solar_guide_print.pdf

not conflict with the restrictions established for this purpose. Communications systems refer to radar, navigational aids, and infrared instruments. None of these exist at San Rafael Airport.

The concern with reflectivity of sunlight is that it can create glare that can cause a brief loss of vision, thereby potentially affecting a pilot in flight. The section of the FAA Solar Guide addressing reflectivity (Section 3.1.2, at page 37) is currently being reviewed by the FAA for changes. However, currently the guide indicates that PV solar technology is primarily absorptive and therefore well-suited for airport applications. This section of the guide currently states that today's photo-voltaic panels reflect as little as 2% of the incoming sunlight depending on the angle of the sun and assuming use of anti-reflective coatings. Thus, they have calculated that PV panels absorb 98% of sunlight. The Solar Guide page 41 also currently reports the following experiences of existing airports with solar projects:

> "Solar installations are presently operating at a number of airports including megawatt-sized solar facilities covering multiple acres. Project managers from six airports where solar has been operational for one to three years were asked about glare complaints. Air traffic controllers were contacted from three of those airports and asked to comment on the effect of glare on their daily operations. To date, there have been no serious complaints from pilots or air traffic control due to glare impacts from existing airport solar PV installations. Any potential problems in this area have apparently been resolved prior to construction through one or a combination of the strategies described above. The anecdotal evidence suggests that either significant glare is not occurring during times of operation or if glare is occurring, it is not a negative effect and a minor is part of the landscape to which pilots and tower personnel are exposed."

Since 2005, a 40 kw PV solar system has been used at the San Rafael Airport to power existing airport operations. It is located on an airport rooftop, and according to the airport operator there have been no reported incidents of glare or other problems from our pilots. Recently, in 2012 the airport completed installation of solar panels on almost all of its airport hangars under building permit B1204-100 (ministerial-only permit required based on local and state exemptions). The FAA Solar Guide was used to evaluate potential health and safety concerns with the new panels. A refraction and reflectivity summary was provided by REC Solar on behalf of the airport. This memorandum dated October 28, 2011 is attached to the building permit record B1204-100 for the solar project. The memorandum provides the following conclusions:

> "The proposed REC Peak Energy modules use Sunarc technology treated solar glass. This special glass features distinctly higher transmission (and thus lower reflectivity) than standard window glass independent of the wavelength and the incident angle of the incoming light. We therefore conclude that potential glint or glare originating from REC modules installed at airports or next to motorways or railroads cannot impact airspace safety or endanger road and rail traffic."

The new proposed system will be similar in type and construction as the existing panels installed at the airport. The airport has an obligation to maintain safe operating conditions for our pilots. Should panels create any unsafe conditions, the airport would make corrections, including adjusting or removing panels if necessary. If deemed necessary, it would be a simple matter to incorporate this into the project as a requirement through conditions of the Environmental and Design Review Permit.

17. Has there been a firm commitment to provide long-term levee maintenance and repair of the entire levee system by the property owner?

Response: The levees protect major investments at the airport site and must be maintained whether or not the sports project ever gets built. The airport manager Robert Herbst has indicated, "we are committed to raising the levees in the future if necessary, and we see no impediments to doing so." Additionally, he has stated "the levees protect our existing airport and industrial park, along with Contempo Marin and the SMART right-of-way, and they will continue to be maintained for those purposes whether or not the sports project ever gets built. Future sea

level rise will be addressed by raising the levees. There is sufficient land inbound of the levees to accomplish this objective, and doing so will have no negative impact on either the existing airport operations or the proposed sports project, should it be built."

Currently, there remain differences of opinion by the airport owner and County Public Works regarding whether Marin County has any obligation to maintain the levee portions located on public lands. As discussed previously in the March 27, 2012 Staff Report to the Planning Commission, City staff, County staff and the airport owner had investigated whether maintenance for the entire levee could be imposed upon one entity (either the airport owner or county). However, this could not be achieved. At this time, both the owner and County have stated they would continue to work together to allow maintenance of the levees to occur, as reflected in revised Use Permit Condition 8.

18. **The project EIR has provided an assessment of potential biological resource impacts associated with the construction of a new bridge over Gallinas Creek. Did the SMART project EIR assess similar, potential biological resource impacts for their bridge crossing in this area? Have the combined impacts of the two bridge improvements been adequately studied?**

Response: The November 2005 DRAFT EIR (SCH#2002112033) on the Sonoma-Marin Area Rail Transit Project (SMART) identified a number of short-term and temporary significant mitigable impacts to biological resources associated with bridge construction along the SMART route, and identified mitigation measures that could be applied to the bridge replacement at Gallinas Creek to reduce potential impacts to biological resources to a level considered less than significant (see SMART DEIR pages 3-174 through 3-176 for Impact BR-1 [potential damage to sensitive upland vegetation and wildlife habitat] and related Mitigations BR-1a and BR-1b, Impact BR-2 [temporary disturbance of wetland/Waters of the United States] and related Mitigations BR-2a, BR-2b and BR-2c], and Impact BR-3 [disturbance of nesting birds] and related Mitigations BR-3a and BR-3b, and pages 3-184 through 3-187 for Impact BR-16 [loss or disturbance of individuals or habitat of the salt marsh harvest mouse] and related Mitigation BR-12, and Impact BR-19 [disturbance of stream zones, special status species and nesting birds during maintenance] and related Mitigations BR-15a and BR-15b). Long-term cumulative impacts to biological resources associated with SMART construction are addressed on SMART DEIR pages 3-186 through 3-187, and are considered less than significant with the effective implementation of mitigation measures previously identified in that document that address potential SMART-related effects on biological resources.

In the most recent "Project Highlights and Milestones" (11/7/2012), SMART has indicated that the replacement of the existing bridge over Gallinas Creek is expected to be completed during 2013 – 2014. The replacement bridge would be a pre-stressed, pre-cast concrete ballast deck bridge, and construction on this bridge replacement project could be expected to take several months. The most recent drawings of the bridge dated January 9, 2012, Drawing S100 and S100B illustrate anticipated construction details including bridge pilings. At the time of DRAFT EIR preparation (2008/2009), the estimated timing for the replacement of the existing rail bridge crossing Gallinas Creek was not known, and the timing for replacement of the existing single-lane road bridge crossing Gallinas Creek with a two-lane bridge to provide access to the San Rafael Airport (and the proposed Recreational Facility) is not known.

Monk & Associates, Inc. analyzed the cumulative biological effects of the bridge reconstruction project that will provide access over the North Fork of Gallinas Creek to the proposed San Rafael Airport Recreation Facility. In consideration that the SMART Rail Project will also be reconstructing a rail bridge over the North Fork of Gallinas Creek in the near future, and that the rail bridge crosses the North Fork of Gallinas Creek closer to the proposed Recreation Facility than the airport bridge, the question is: could there be a significant cumulative effect? The proposed Airport Facility Recreational Center DEIR did not anticipate that there would be significant cumulative impacts to biological resources from the reconstruction of these two bridges. Since both airport bridge and the SMART Rail bridge reconstruction projects will replace existing bridges in their current locations, the mitigation measures that will be implemented as part of the proposed Airport Recreational Facility project that would reduce airport bridge

construction impacts to less than significant as presented in the DEIR, would also reduce any potential cumulative impacts of the proposed reconstructed airport bridge to a level regarded as less than cumulatively considerable. Mitigation measures in the DEIR included that the airport bridge could not be reconstructed during the clapper rail nesting season or when listed anadromous fish could be found in the North Fork of Gallinas Creek.

As both bridge reconstruction projects have been delayed through regulatory setbacks, there is an unlikely chance that both bridges could be reconstructed at the same time. If both bridges were to be reconstructed at the same time there could be noise impacts that would be greater than either bridge project constructed at different times. In consideration that the two bridge projects could occur at the same time, the City should condition approval of the proposed San Rafael Airport Recreational Facility to ensure the Project-related replacement of the existing one-lane road bridge with a two lane road bridge crossing Gallinas Creek would not occur concurrent with SMART work on the upstream rail bridge replacement project (currently anticipated to be completed by the end of 2014). Such a condition would preclude simultaneous bridge construction activity along Gallinas Creek, and thus noise and human footprint impacts that could indirectly disturb wildlife would not be cumulatively considerable. Revision to draft Use Permit condition 27 is as follows:

> "The San Rafael Airport Recreation Facility bridge replacement shall not occur in the same year as the SMART Rail bridge project in order to avoid potential overlap of construction work."

The applicant is agreeable with this change and assures the bridge work can occur within all prescribed timeframes. In addition, the Airport Facility Recreational Center Bridge as proposed must be a clear span bridge that spans the bed, bank, and channel of the North Fork of Gallinas Creek. As presented in the DEIR "All work associated with the new bridge, including the demolition of existing bridge deck, installation of the new deck, and other bridge improvements, shall be restricted to August 1 to October 15; pile-driving work shall be further restricted to between the dates of September 1 and October 15, when migrating anadromous fish would not be expected to be in Gallinas Creek. This 'avoidance window' was selected to avoid the breeding season of several other special status species as well..." The measures in the EIR ensure that there are no potential significant cumulative impacts to biological resources from the reconstruction of the Airport Facility Recreational Center bridge.

19. How would the project respond to sea level rise predictions?

Response: The responses to an actual increase in sea level that could adversely affect operations at the Project site are addressed in the FINAL EIR (see Master Response #14: HYD-4, pages C&R 33 - 35). The property owner is committed to raising the levees in response to the projected sea level rise. On Page 13 of the March 27, 2012 Staff Report to the Planning Commission also discusses this topic, including opportunities on the site to implement long-term adaptive measures responding to this issue.

Were sea level to actually rise by the now-predicted 12 to 18 inches before 2050 above the +6 NGVD flood elevation (+8.67 NAVD) before 2050, the existing flood control features which provide protection from inundation at the Project site would be expected to remain in place and continue to operate as they do today; including the 9-foot tall levee system at +8 NGVD elevation at top of bank (+10.67 NAVD), and pump station that ejects the drainage from the site into the North Fork of Gallinas Creek. Therefore, the potential impacts related to an incremental sea level rise of this magnitude would continue to be reduced to a level of less than significant.

Were sea level to continue to increase after 2050 (as now formally anticipated by the State of California), at some point it is likely that the proposed Project might not be able to continue to operate at the site without additional measures to prevent possible inundation (e.g., upgrading levee height and strength to resist possible overtopping and infiltration, increasing pump capacity and upgrading on-site drainage infrastructure, etc.). Over time, a gradual rise in sea level can be monitored, and as increases in sea level actually occur, any necessary measures to upgrade existing facilities intended to reduce the risk of possible inundation at the site can be implemented

when considered appropriate by the property owner. If sufficient upgrading of existing flooding prevention infrastructure cannot be completed in sufficient time to provide adequate protection of those who would use the facilities currently proposed at the site (as well as the existing airport), the use of those facilities would need to be discontinued in the interests of protecting public safety. Depending on the estimated useful economic life of the recreational facilities proposed at the Project site (and the existing airport), at some point it may become unreasonable for the property owner to make the necessary investment in infrastructure improvements intended to continue protecting those facilities from inundation, and at that point those uses would be discontinued and abandoned.

It is also worth noting that this is an existing developed site, and that any future protective measures to address anticipated sea level rise and provide additional levee/drainage system protection would be required to protect the currently existing airport site improvements and nearby residential development, with or without Project-related recreational facilities development at the site.

ANALYSIS:

A complete analysis of the project was provided in the December 3, 2012 report to the City Council. This includes review for consistency with the San Rafael General Plan 2020, review for compliance with City zoning ordinances and regulations including design review criteria and guidelines, and recommendations made on the project by the Design Review Board and the Planning Commission. The Planning Commission has the responsibility for conducting hearings and making land use decisions, and serves as the advisory body to the City Council on matters that require its decision. Serving in this capacity the Planning Commission conducted hearings and accepted testimony on the Draft EIR, reviewed and recommended certification of the Final EIR and reviewed and recommended the project merits.

All reports, resolutions and attachments were previously distributed to the City Council and made available to the public on the City website. These documents have not been re-distributed with this report, and remain available in electronic format published on the City website and in the City Clerk and City Planning Division offices.

As outlined in the December 3, 2012 staff report the project has been deemed consistent with the City General Plan 2020, zoning regulations and criteria and is recommended for approval. Staff has included with this report the draft resolutions and ordinance, as recommended by the Planning Commission, for certification of the project FEIR and approval of zoning entitlements. Staff has incorporated the revised Use Permit Condition No. 8 responding to Marin County Public Works request and two new use permit conditions 33 and 34 regarding SMART rail crossing received from the San Rafael Department of Public Works, which were presented to the Council at its December 3 meeting and agreed to by the applicant. Staff and the City Council may have additional edits and/or minor corrections to include prior to taking an action to approve the project.

FISCAL IMPACT:

Pursuant to the City Fee Schedule, the cost of staff time for review of this project has been subject to full cost recovery. The project shall also pay cost of building permit review, $5,000 initial deposit to cover staff time associated with mitigation monitoring, and development impact fees to cover its costs of development, including a $1.13M traffic mitigation impact fee that will be used to fund the projects fair share of traffic improvements in the area.

OPTIONS:

The City Council has the following options available for action on this project:

1. Adopt the Resolutions and pass the Ordinance required to Certify the EIR, adopt CEQA Findings of Fact and the MMRP for Project Approval, adopt PD Rezoning standards, and approve a Master Use Permit and Environmental and Design Review Permit (staff recommended);
2. Reject certification of the EIR and direct staff to prepare further revisions;

3. Deny certification of the FEIR and direct staff to draft resolutions to deny the PD Rezoning, and/or Master Use Permit and Environmental and Design Review; or
4. Continue the matter to future City Council meeting for further review and discussion.

ACTIONS REQUIRED:

Staff recommends that the Council take the following actions:

1. Adopt Resolution to Certify the San Rafael Airport Recreational Facility FEIR
2. Adopt Resolution to Support Findings of Fact and MMRP required for approval of the Project
3. Pass Ordinance to Amend the PD Zoning District Standards for the San Rafael Airport
4. Adopt Resolution to Approve the Master Use Permit and Environmental and Design Review Permit for the proposed San Rafael Airport Recreational Facility use and site development

EXHIBITS: