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WP, LLC'S RESPONSES TO REPORT OF CONVERSATION
TN 230445 – FAA SURFACES
WALSH BACKUP GENERATING FACILITY (19-SPPE-02)

INTRODUCTION

On October 31, 2019, CEC Staff docketed a Report of Conversation between CEC Staff Andrea Koch and Cary Greene, Airport Planner for the City of San Jose (TN 230445). In that record, Mr. Greene provided responses to three questions posed by Ms. Koch. WP, LLC provides the following to respond to Mr. Greene's comments and responses.

The following documents show that the Walsh Data Center (WDC) and the Walsh Backup Generating Facility (WBGF) does not in fact penetrate or encroach on any Federal Aviation Administration (FAA) protected surfaces and therefore, is likely to obtain a determination of No Hazard from the FAA. It is important to note that a project that has not yet filed its Application For Small Power Plant Exemption (SPPE) with the Commission (Lafayette), which is immediately adjacent to the WDC site and closer to the FAA Part 77 surface than the WDC, has recently obtained a No Hazard Determination from the FAA.

Item 1) **FAA Notification**

This item refers to the requirement to file a notification with the FAA for any project that has the potential to penetrate a FAA protected surface. Any project with a height that is higher than a sloping line measured from the closest runway and sloping upward a 100:1 slope would be required to file a FAA Form 7460-1 seeking a No Hazard Determination from the FAA. Mr. Greene correctly outlined this requirement in his response and WP, LLC is currently preparing the Form 7460-1 for filing and will docket proof of its filing.

Item 2) **Obstruction Analysis**

Mr. Greene correctly states that there are FAA protected surfaces in addition to the Part 77 Surfaces. WP, LLC retained a consultant to perform the same analysis that would be conducted by FAA concerning such protected surfaces. The results of that analysis are provided in this response and show that the WP, LLC will not obstruct and FAA protected surface.

Part 77.19 Imaginary Surfaces

The transitional and horizontal imaginary surfaces (*Figure 1*) range from 168 to 212 feet AMSL and are the lowest imaginary surfaces overlying the study area. However, at 123 feet AGL, proposed buildings within the defined study area should not exceed these surfaces.

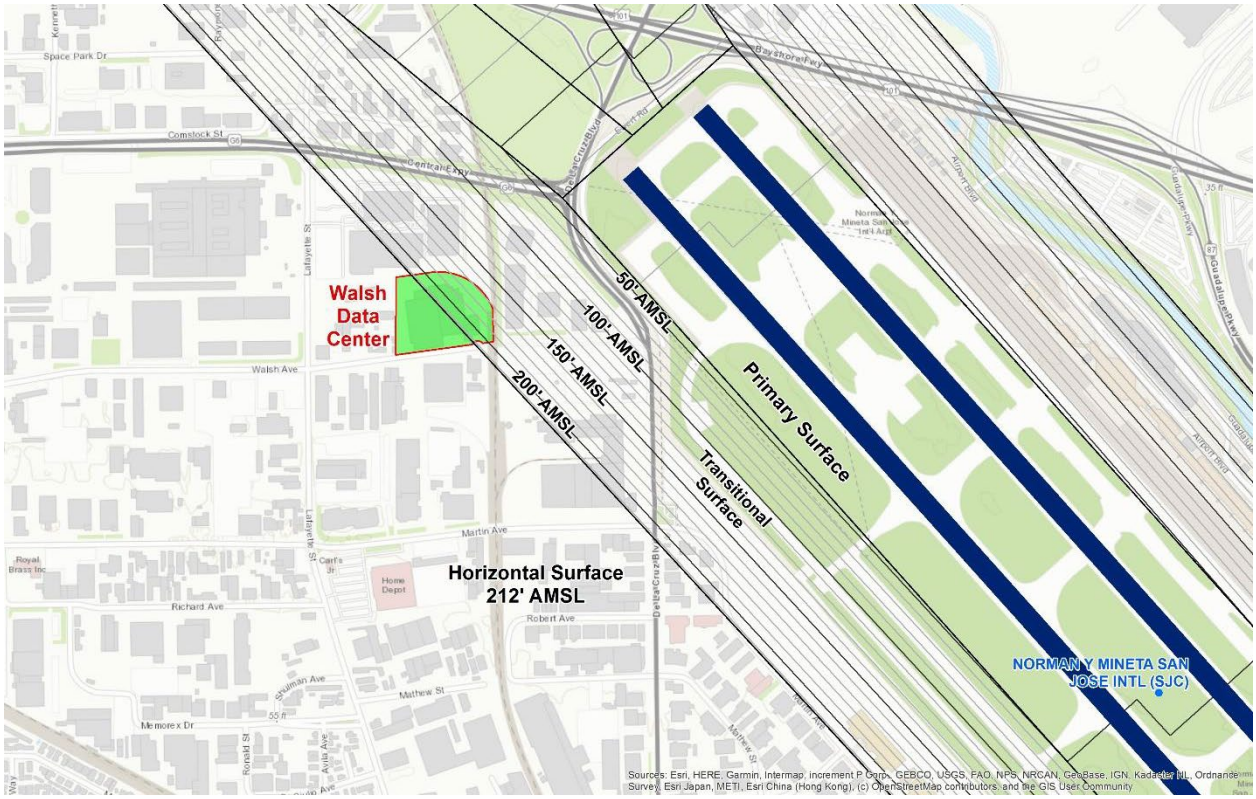

Figure 1: Norman Y Mineta San Jose International Airport (SJC) 77.19 imaginary surfaces (black) overlying the Walsh Data Center building project

Runway Protection Zones

The FAA has established Runway Protection Zones (RPZ) to designate areas located along the extended runway centerline where the protection of people and property on the ground is enhanced. In order to ensure enhanced safety, the FAA recommends airport control of this area to guarantee the RPZ remain clear of incompatible objects and activities. The size of the RPZ is directly related to the airplane design group and approach categories that the runway is expected to serve as well as the visibility minimums associated with instrument approach procedures.

Norman Y Mineta San Jose International Airport RPZs (e.g., *Figure 2*) do not overlie the Walsh Data Center building project study area. Therefore, RPZs should not limit development within the defined study area.

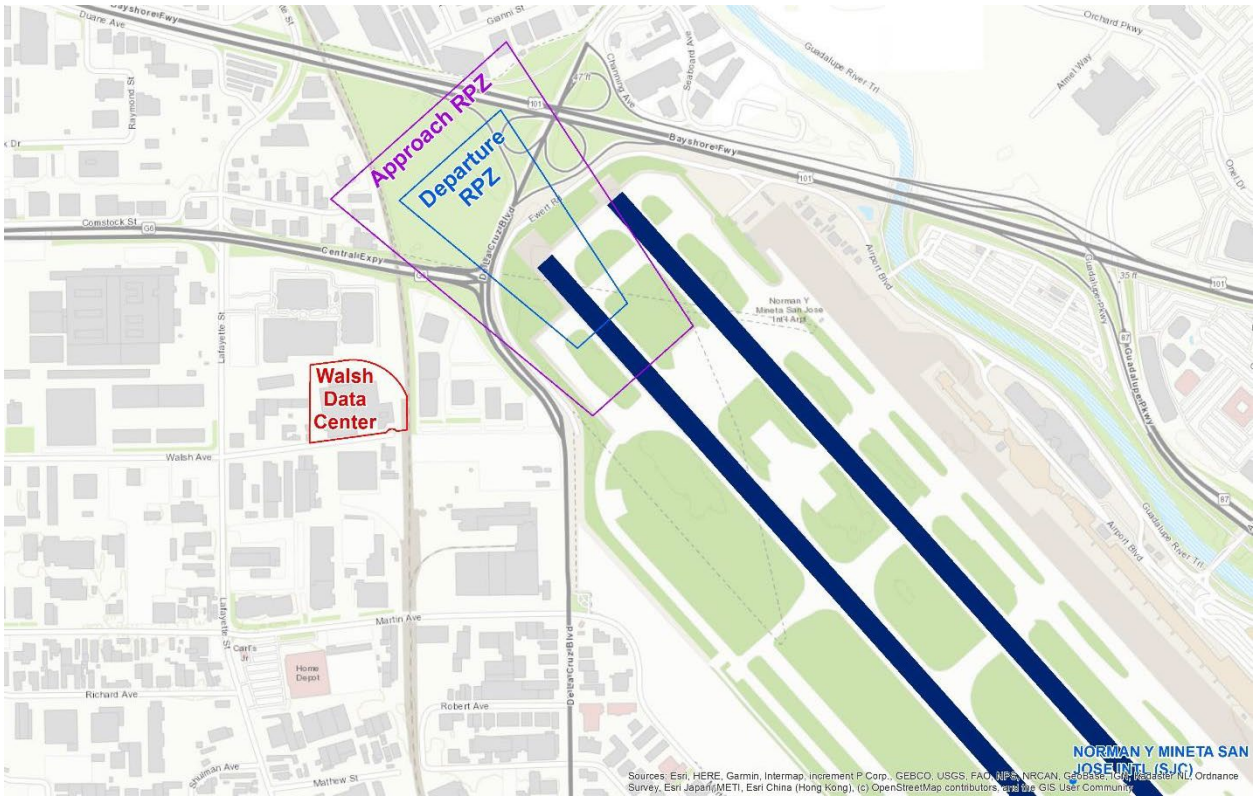

Figure 2: Norman Y Mineta San Jose International Airport (SJC) Runway 12R approach RPZ (purple) and Runway 30L departure RPZ (blue)

Visual Flight Rules (VFR) Traffic Pattern Airspace

VFR traffic pattern airspace is used by pilots operating during visual meteorological conditions. The airspace dimensions are based upon the category of aircraft which, in turn, is based upon the approach speed of the aircraft. 14 CFR Part 77.17(a)(2) and 77.19 (as applied to a *visual* runway) imaginary surfaces establish the obstacle clearance surface heights within VFR traffic pattern airspace.

VFR traffic pattern airspace (e.g., *Figure 3*) is in excess of other lower surfaces and should not limit 123-foot AGL buildings within the defined study area.

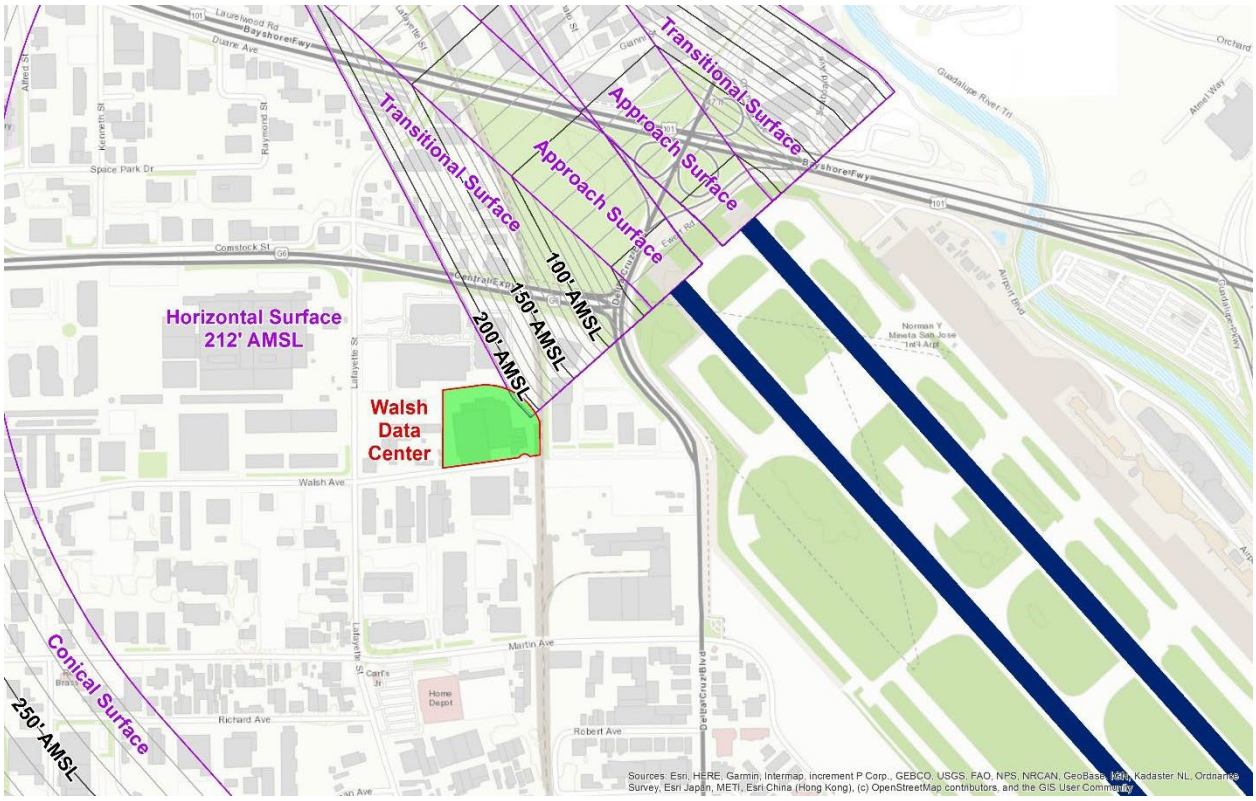

Figure 3: VFR traffic pattern airspace overlying the Walsh Data Center building project

Visual Glide Slope Indicators

Visual Glide Slope Indicators (VGSI) provide a visual aid to aircraft approaching to land. Different light combinations indicate an approaching aircraft's position relative to the published visual glide path angle. Proposed obstacles that exceed VGSI obstacle clearance surfaces would require an increase to the published visual glidepath angle and/or threshold crossing height. If the FAA determines this impact to constitute a substantial adverse effect, it could be used as the basis for determinations of hazard.

VGSI obstacle clearance surfaces and light signal clearance surfaces (e.g., *Figure 4*) do not overlie the Walsh Data Center building project and should not limit 123-foot AGL buildings within the defined study area.

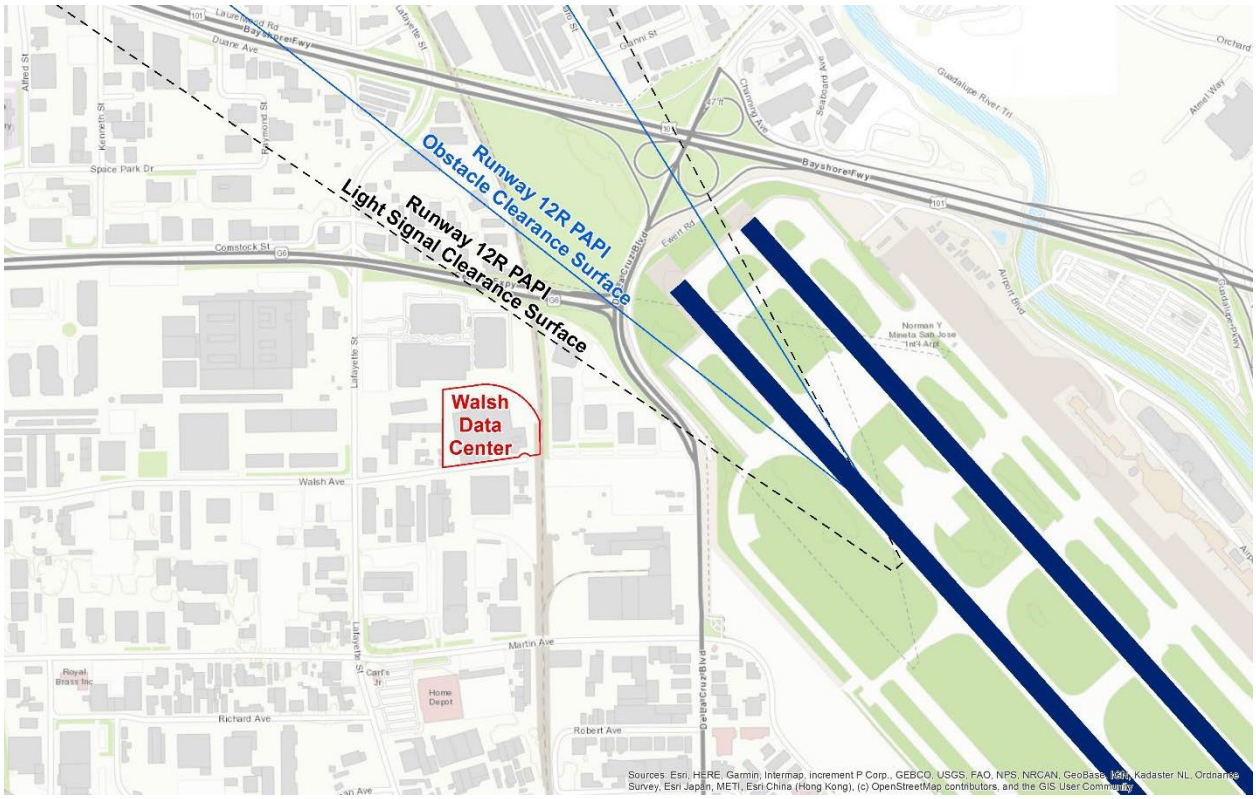

Figure 4: Precision Approach Path Indicators (PAPI) in proximity to the Walsh Data Center building project

Instrument Departures

In order to ensure that aircraft departing during marginal weather conditions do not fly into terrain or obstacles, the FAA publishes instrument departure procedures that provide obstacle clearance to pilots as they transition between the terminal and enroute environments. These procedures contain specific routing and minimum climb gradients to ensure clearance from terrain and obstacles.

Proposed structures that exceed instrument departure procedure obstacle clearance surfaces would require an increase to instrument departure procedure minimum climb gradients. If the FAA determines that this impact would affect as few as one operation per week, it could be used as the basis for determinations of hazard.

Instrument departure procedure obstacle clearance surfaces do not overlie or are in excess of other, lower surfaces (e.g., *Figure 5*) and should not limit 123-foot AGL buildings within the defined study area.

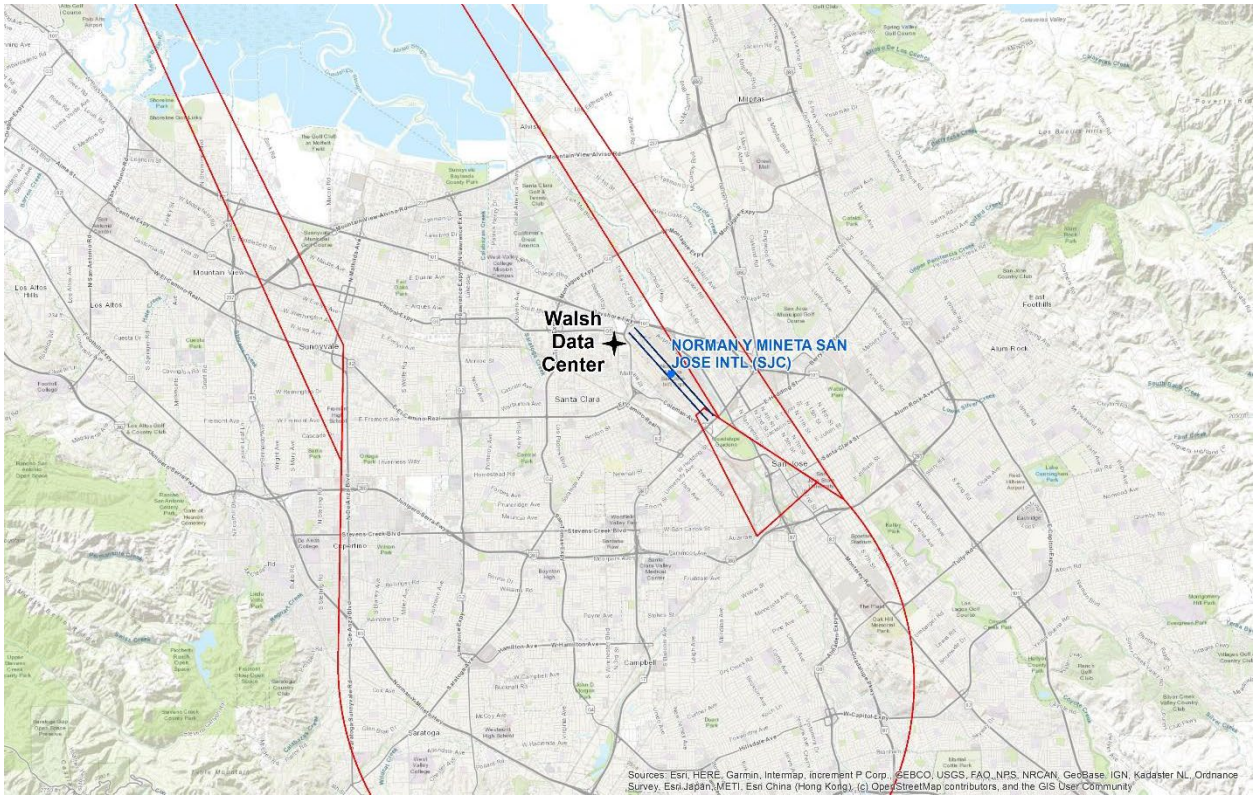

Figure 5: Norman Y Mineta San Jose International Airport (SJC) Runway 12R obstacle departure procedure assessment

Instrument Approaches

Pilots operating during periods of reduced visibility and low cloud ceilings rely on terrestrial and satellite based navigational aids (NAVAIDS) in order to navigate from one point to another and to locate runways. The FAA publishes instrument approach procedures that provide course guidance to on-board avionics that aid the pilot in locating the runway. Capitol Airspace assessed a total of 12 published instrument approach procedures at Norman Y Mineta San Jose International Airport (SJC):

Norman Y Mineta San Jose International Airport (SJC)

ILS or Localizer Approach to Runway 12R
ILS or Localizer Approach to Runway 30L
ILS Approach to Runway 30L (SA CAT I & II)
RNAV (RNP) Z Approach to Runway 12L
RNAV (RNP) Z Approach to Runway 12R
RNAV (RNP) Z Approach to Runway 30L
RNAV (RNP) Z Approach to Runway 30R
RNAV (GPS) Y Approach to Runway 12L
RNAV (GPS) Y Approach to Runway 12R
RNAV (GPS) Y Approach to Runway 30L
RNAV (GPS) Y Approach to Runway 30R
Fairgrounds Visual Approach to Runways 30L/R

Proposed buildings that exceed instrument approach procedure obstacle clearance surfaces would require an increase to their minimum altitudes. Increases to these altitudes, especially critical *decision altitudes (DA)* and *minimum descent altitudes (MDA)*, can directly impact the efficiency of instrument approach procedures. If the FAA determines this impact would affect as few as one operation per week, it could be used as the basis for determinations of hazard.

Norman Y Mineta San Jose International Airport (SJC)

RNAV (GPS) Approach to Runway 12L

The LNAV/VNAV final segment and missed approach segment primary area obstacle clearance surfaces (red outline, *Figure 6*) are 180 feet AMSL and are the lowest height constraints overlying the entire study area. However, USGS elevation data indicates that these surfaces should not limit 123-foot AGL buildings within the defined study area.

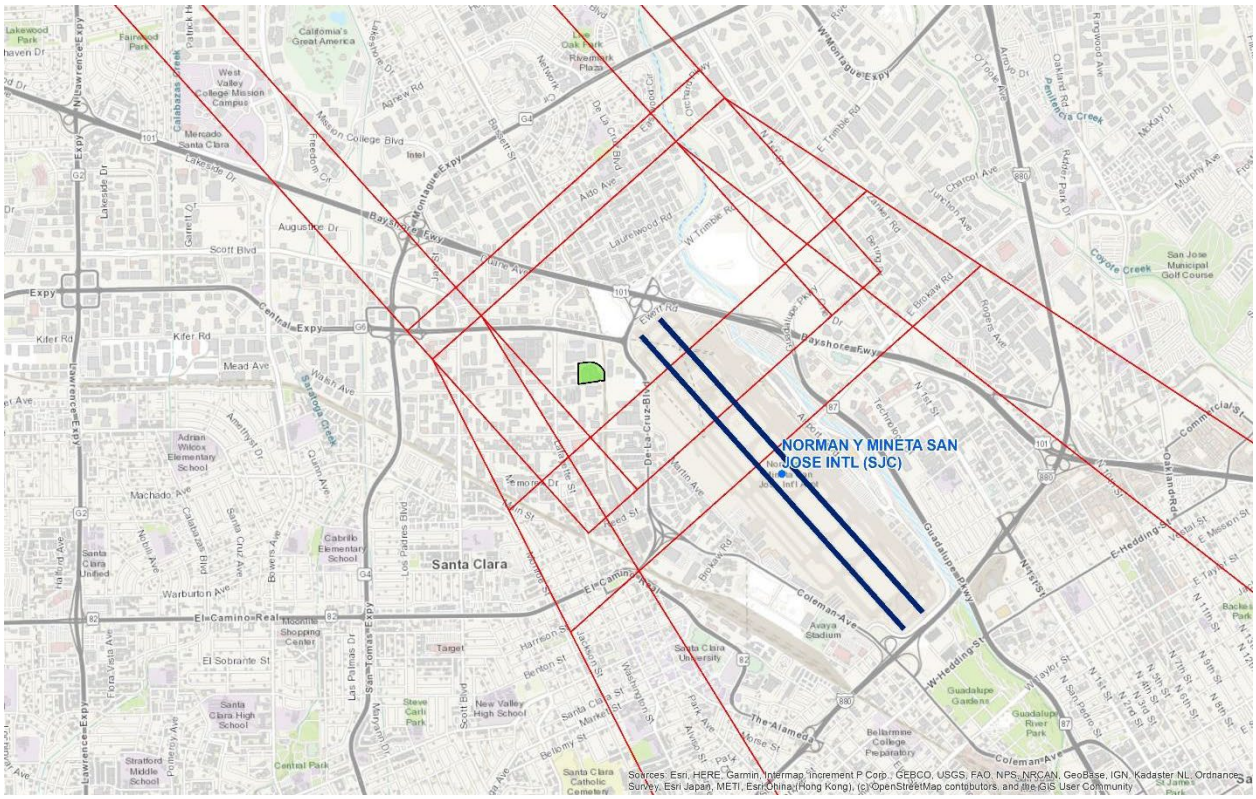

Figure 6: Norman Y Mineta San Jose International Airport (SJC) RNAV (GPS) Approach to Runway 12L with LNAV/VNAV final and missed approach segment obstacle evaluation areas (red)

Enroute Airways

Enroute airways provide pilots a means of navigation when flying from airport to airport and are defined by radials between VHF omni-directional ranges (VORs). The FAA publishes minimum altitudes for airways to ensure clearance from obstacles and terrain. The FAA requires that each airway have a minimum obstacle clearance of 1,000 feet in non-mountainous areas and normally 2,000 feet in mountainous areas.

Proposed structures that exceed enroute airway obstacle clearance surfaces would require an increase to their minimum obstruction clearance altitudes (MOCA) and/or minimum enroute altitudes (MEA). If the FAA determines that this impact would affect as few as one operation per week, it could be used as the basis for determinations of hazard.

Low altitude enroute airway obstacle clearance surfaces (e.g., *Figure 7*) are in excess of other, lower surfaces and should not limit 123-foot AGL buildings within the defined study area.

Figure 7: Low altitude enroute chart L-3 with V485 obstacle evaluation areas (purple)

Minimum Vectoring/IFR Altitudes

The FAA publishes minimum vectoring altitude (MVA) and minimum instrument flight rules (IFR) altitude (MIA) charts that define sectors with the lowest altitudes at which air traffic controllers can issue radar vectors to aircraft based on obstacle clearance. The FAA requires that sectors have a minimum obstacle clearance of 1,000 feet in non-mountainous areas and normally 2,000 feet in mountainous areas.

Proposed structures that exceed MVA/MIA sector obstacle clearance surfaces would require an increase to the altitudes usable by air traffic control for vectoring aircraft. If the FAA determines that this impact would affect as few as one operation per week, it could result in determinations of hazard.

MVA and MIA obstacle clearance surfaces (e.g., *Figure 8*) are in excess of other, lower surfaces and should not limit 123-foot AGL buildings within the defined study area.

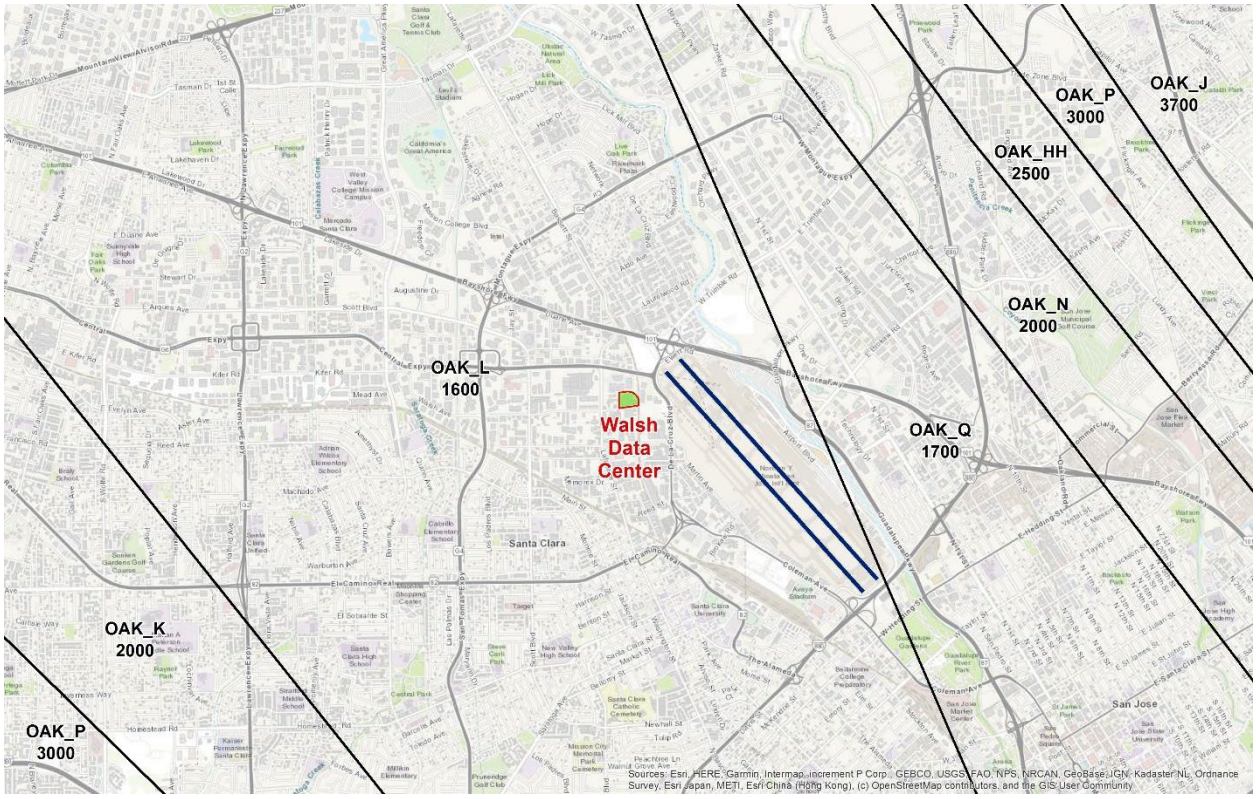

Figure 8: Northern California (NCT) TRACON FUSION 3 MVA sectors (black)

Item 3) **FAA Form 7460-1**

Mr. Greene outlined the number and information required for filing an FAA Form 7460-1. WP, LLC has engaged a consultant who is familiar with the filing requirements and will file the appropriate type and number of forms.