



REPORT TO THE PLANNING COMMISSION

AGENDA ITEM NO. V-B-1
COMMISSION MEETING 04/20/11

April 20, 2011

FROM: KEVIN FABINO, Planning Manager  (for)
Development & Resource Management Department


DEPARTMENT DIRECTOR

BY: SANDRA BROCK, Planner III 
Development Services Division

SUBJECT: CONSIDERATION OF A REQUEST BY THE FRESNO COUNTY OFFICE OF EDUCATION TO PROVIDE A RECOMMENDATION REGARDING THE PROPOSED PURCHASE OF A 3± ACRE COMMUNITY SCHOOL SITE LOCATED AT 4939 EAST YALE AVENUE, SOUTHEAST OF THE INTERSECTION OF NORTH WINERY AVENUE AND EAST CLINTON WAY

RECOMMENDATION

Staff recommends that the Planning Commission take the following action:

RECOMMEND CONDITIONAL APPROVAL of purchase of this site for a school, provided that the Fresno County Office of Education amend the City of Fresno General Plan and the McLane Community Plan to redesignate the site's land use from "Light Industrial" to "Public Facility – High School."

EXECUTIVE SUMMARY

California Public Resources Code Section 21151.2 and Government Code Section 65402(c) require that school districts inform the local land use jurisdiction of intent to purchase and develop facilities; and that the local jurisdiction, in turn, provide a report to the school district within 30 days with recommendation regarding site acquisition. The Fresno County Office of Education (FCOE) sent a letter to the Development and Resource Management Department on March 18, 2011, providing notice of its intention to acquire the 3.08-acre property located at 4939 East Yale Avenue, southeast of North Winery Avenue and East Clinton Way (vicinity map and copy of the FCOE letter are attached).

The subject property is not planned for a public school site; it is designated for light industrial use by the Fresno-Yosemite Airport Land Use Compatibility Plan, McLane Community Plan and 2025 Fresno General Plan, and it is zoned M-1-P, *Industrial Park Manufacturing District*, but the existing building on this property has been leased by FCOE for public educational purposes. In 2008, Conditional Use Permit (CUP) No. C-08-018 was approved to establish a community school serving up to 120 students, spanning 7th through 12th grades, at the subject property. In the intervening time, the site has been named the "Violet Heintz Education Academy" and its programming has been revised to encompass education and services for students in 9th through 12th grades (the updated Program Description is attached).

Fresno Municipal Code Subsection 12-304-B.10 provides that governmental facilities essential and desirable for the public welfare and convenience and in conformity with General Plan objectives may be located by Conditional Use Permit in any zone district where the proposed governmental facility use is not expressly prohibited. The CUP application was also evaluated pursuant to Director's Classifications Nos. 43, 110-A, and 181 which provide for outpatient substance abuse counseling, educational services, and vocational schools to be sited in the M-1-P zone district. The February 28, 2008 approval letter for CUP No. C-08-018 is attached. No appeals were received and no Planning Commission hearing was necessary for this CUP.

REPORT TO THE PLANNING COMMISSION

Fresno County Office of Education Request for Report on Proposed Purchase of a School Site,

4939 East Yale Avenue

April 20, 2011

Page 2

PROJECT INFORMATION

PROJECT	Request for a report on plan consistency for proposed purchase of the subject property for use as a public school
APPLICANT	Fresno County Office of Education (proposed buyer); current owner is Austin Enterprises.
LOCATION	4939 East Yale Avenue: Located on the north side of East Yale Avenue, southeast of the intersection of North Winery Avenue and East Clinton Way (APN 494-231-03) Council District 4, Larry Westerlund
SITE SIZE	Approximately 3.08 acres
PLANNED LAND USE	Existing - Light Industrial
ZONING	Existing - M-1-P (<i>Industrial Park Manufacturing District</i>)
PLAN DESIGNATION AND CONSISTENCY	<p>Pursuant to Table 2 (Planned Land Use and Zone District Consistency Matrix) of the 2025 Fresno General Plan and McLane Community Plan, the proposed school (public facility) would not be consistent with the site's planned light industrial land use.</p> <p>The subject property is located within the 60-65 CNEL noise contour of Fresno-Yosemite International (FYI) Airport. Pursuant to Tables 1 and 2 of the <i>Fresno Yosemite International Airport Land Use Compatibility Plan</i> (copies attached), a school located in the 60-65 CNEL noise contour may be conditionally acceptable provided that the building meets noise attenuation standards. An on-site survey of the property by Ambient Air Quality & Noise Consulting has determined that the building's acoustical characteristics make it acceptable without additional insulation necessary (see attached Noise Monitoring Report dated October 22, 2010).</p> <p>The subject property is not within any approach protection zones but it is located in the Traffic Pattern Zone (Safety Zone 6) of FYI Airport. The proposed use would not present distracting light or glare, sources of smoke or electrical interference, nor would it attract birds. Table 3 ("Airport Land Use Safety Compatibility Criteria") of the <i>FYI Airport Land Use Compatibility Plan</i> states that all land uses are acceptable in Safety Zone 6 with little or no risk (see attached Table 3).</p>
ENVIRONMENTAL FINDING	A Categorical Exemption for Conditional Use Permit No. C-08-018 for the "Forward Bound Academy" was filed on February 27, 2008 (copy attached). FCOE has subsequently engaged consultants for supplemental studies required by the California Department of Education and will make its own updated finding prior to purchase.

REPORT TO THE PLANNING COMMISSION

Fresno County Office of Education Request for Report on Proposed Purchase of a School Site,

4939 East Yale Avenue

April 20, 2011

Page 3

STAFF RECOMMENDATION Recommend Conditional Approval of FCOE purchase of this site, provided that the Fresno County Office of Education amend the Fresno General Plan and McLane Community Plan to change the designated land use of this site from "Light Industrial" to "Public Facility – High School"

BORDERING PROPERTY INFORMATION

	Planned Land Use	Existing Zoning	Existing Land Use
North	Light Industrial	M-1-P <i>Industrial Park Manufacturing District</i>	Office buildings
East	Light Industrial	M-1-P <i>Industrial Park Manufacturing District</i>	Office/warehouse buildings
South	Light Industrial	M-1-P <i>Industrial Park Manufacturing District</i>	Office buildings
West	Light Industrial	M-1-P <i>Industrial Park Manufacturing District</i>	Office buildings

ENVIRONMENTAL FINDING

On February 27, 2008, a Class 1 Categorical Exemption was filed for the Conditional Use Permit No. C-08-318, based upon the determination that the project met criteria under CEQA Guidelines Section 15301. A copy of the Categorical Exemption and its receipt of filing are attached.

Pursuant to requirements of the California Department of Education, FCOE has conducted supplemental studies to ensure the health and safety of students attending this facility. The Fresno County School Board will adopt its own updated environmental finding for the acquisition of this property.

BACKGROUND / ANALYSIS

Land Use Plans and Policies

Objective E-28 of the 2025 Fresno General Plan directs the City to "Cooperate with and encourage all school districts within the metropolitan area to provide the educational facilities and programs necessary to meet the needs of the area's student population." The Violet Heintz Education Academy serves countywide needs under the aegis of Fresno County Office of Education's specialized programs. General Plan Policies E-28-a and E-28-e specifically address the proposed acquisition of this site by FCOE:

- E-28-a.** Support strategies and programs of school districts and the Fresno County Office of Education to efficiently and consistently provide access to and utilization of the highest quality educational programs and support services feasible.
- E-28-c.** Support measures to acquire planned school sites and construct school facilities, including the assessment of additional school fees on new development, consistent with applicable state and federal laws....

Objective E-29 of the 2025 Fresno General Plan directs the City to “Plan for location and design of schools to ensure their physical and functional compatibility with surrounding urban development, and the proposed acquisition of this existing building appears to fulfill that objective. The building on the subject property was constructed in accordance to Fresno Airport Center No. 3 (Tract 2605) covenants, which established local design rules that exceed City Zoning regulations. Construction plan checks for the interior renovations were reviewed by the City’s Building and Safety Division to ensure that the building met standards for an educational (“E”) occupancy under the California Building Code. The Violet Heintz Academy has successfully operated at this location for nearly two years, evidence of its functional compatibility.

Policy E-29.a provides more specific guidance on locating school sites:

- E-29-a.** Schools should be located and designed to facilitate safe and convenient access to circulation systems including pedestrian and bicycle routes whenever possible; maintain compatibility with surrounding land uses; contribute to a positive neighborhood identity; and, support the overall community design objectives of the general plan, community plan or applicable specific plan.

• • •

- When school districts propose a new school site inconsistent with an adopted plan, or in zone districts where schools are not permitted, the city shall require a plan amendment and rezone application for the site. Pursuant to state law, districts shall also obtain the appropriate special permit.

The final bullet point under General Plan Policy No. E-28-a is the basis for conditionally recommending in favor of FCOE acquisition of the subject property. The County Office of Education has not yet applied for or received approval for a plan amendment to depict the subject property as “public facility” on the McLane Community Plan and 2025 Fresno General Plan maps.

Depicting school sites on plan maps is important for emergency response planning and for subsequent environmental assessments in the vicinity of schools. Students are considered “sensitive receptors” for air pollutants, and Public Resources Code Section 21151.4 has specific requirements for assessing proposed emitters of hazardous air pollutants within one-quarter mile of school sites. While the light industrial/business park nature of surrounding properties does not potentiate large industrial emissions, there are some chemicals used in light industries which require special consideration. Having this property depicted on plan maps as a “Public Facility – High School” would properly denote the site for future assessments to ensure ongoing health and safety for the students attending the Violet Heintz Education Academy.

REPORT TO THE PLANNING COMMISSION

Fresno County Office of Education Request for Report on Proposed Purchase of a School Site,

4939 East Yale Avenue

April 20, 2011

Page 5

CONCLUSION / RECOMMENDATION

Based upon review and analysis of this request, staff recommends that the Planning Commission make the following determination:

The proposed acquisition of the property located at 4939 East Yale Avenue for educational use may be conditionally approved, provided that the Fresno County Office of Education amends the City of Fresno General Plan and McLane Community Plan to re-designate the land use of this site from "Light Industrial" to "Public Facility - High School."

Attachments: Vicinity Map

March 18, 2011 letter from Fresno County Office of Education with attached aerial photograph

Current Violet Heintz Education Academy Program Description updated by FCOE on April 12, 2011

March 28, 2008 letter of final approval for CUP C-08-018 which established a community school at the subject property

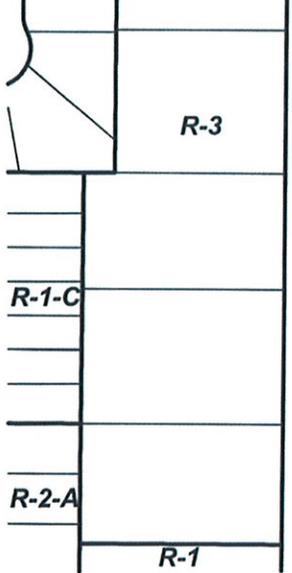
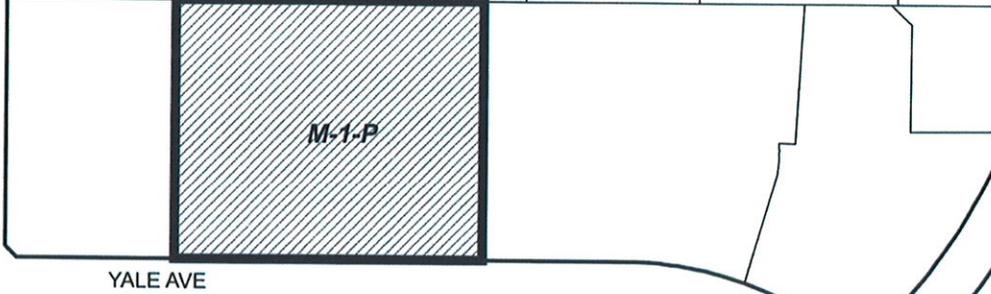
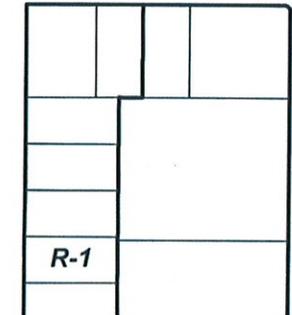
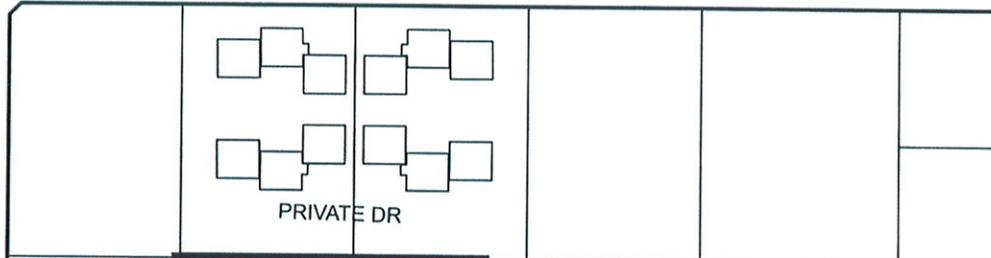
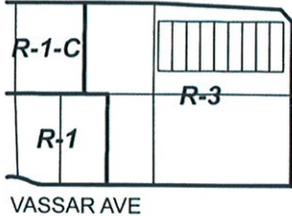
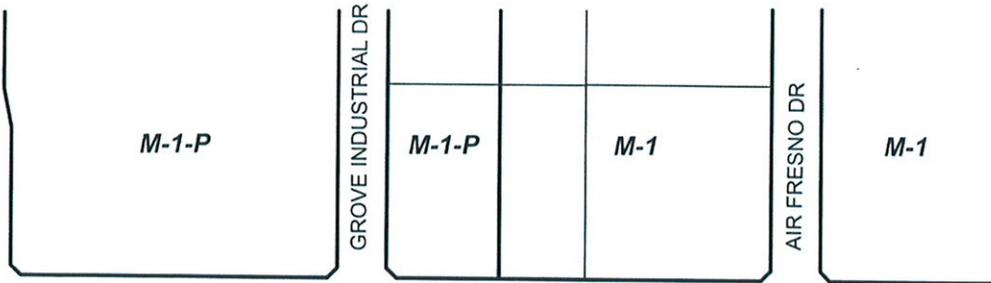
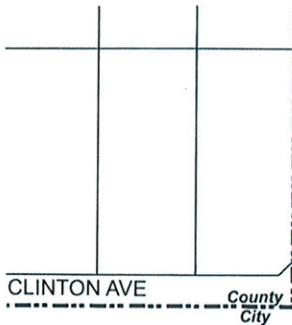
Table 1, Airport Land Use Noise Compatibility Criteria, *Fresno-Yosemite International Airport Land Use Compatibility Plan*

Table 2, Interior Noise Level Reduction (dBA) CNEL Range (Annual Average), *Fresno-Yosemite International Airport Land Use Compatibility Plan*

Noise Monitoring Report for Violet Heintz Education Academy, Fresno, CA, dated October 22, 2010, prepared by Ambient Air Quality and Noise Consulting

Table 3, Airport Land Use Safety Compatibility Criteria, *Fresno-Yosemite International Airport Land Use Compatibility Plan*

City of Fresno "Class 1" Categorical Exemption, Environmental Assessment No. C-08-018, filed on February 27, 2008 with Fresno County Clerk receipt for filing



LEGEND

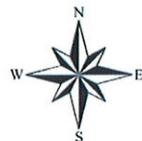


VICINITY MAP

CONDITIONAL USE PERMIT NO. C-08-018

4939 E. YALE AVE.

PLANNING & DEVELOPMENT DEPARTMENT



NOT TO SCALE

A.P.N.: 494-231-03

ZONE MAP: 2254

BY/DATE: D.N. / 2-20-08



Larry L. Powell
Superintendent

fresno county office of education

March 18, 2011

John M. Dugan, AICP
Director/Planning Commission Secretary
City of Fresno
Development & Resource Management Department
2600 Fresno Street, Third Floor
Fresno, CA 93721

PLANNING COMMISSION DEPT
FRESNO

Subject: Request for Planning Commission Report on Violet Heintz Education Academy (4939 E. Yale Avenue)

Dear Mr. Dugan:

The Fresno County Office of Education (FCOE) has been operating the Violet Heintz Education Academy (VHEA) in a leased building at 4939 E. Yale Avenue since 2008. VHEA operates as a community school for up to 120 students. On February 22, 2008, the City of Fresno approved Conditional Use Permit No. C-08-018 to allow school use of the site.

FCOE wishes to acquire ownership of the 3.08-acre site. One of the requirements of the California Department of Education for site acquisition is for FCOE to request a Planning Commission report and general plan conformity evaluation in accordance with Public Resources Code Section 21151.2 and Government Code Section 65402(c). Public Resources Code Section 21151.2 requires the Planning Commission to investigate the site and within 30 days after receipt of this notice, submit a written report of its investigation and recommendations concerning acquisition of the site. Government Code Section 65402(c) requires the planning agency to report to the District within 40 days as to the conformity of the proposed school project with the adopted general plan.

The use of the site as a school would not change as a result of FCOE's acquisition of the site. A map showing the location of the site is attached.

Please contact me or our consultant Scott Odell, AICP, of Paoli & Odell, Inc. (233-7260) if you have any questions regarding this request or the project.

Thanks for your assistance.

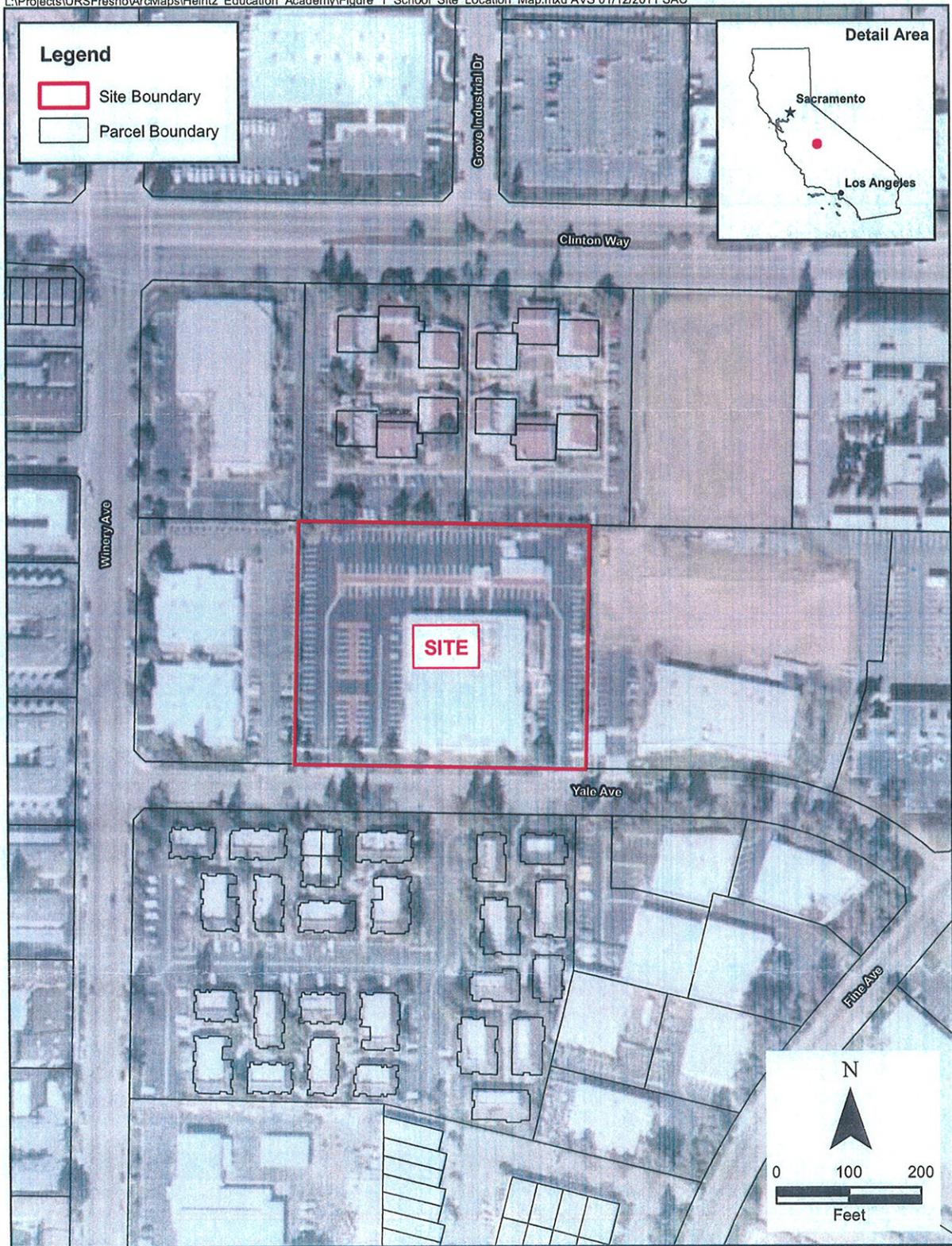
Sincerely,

Jeffrey D. Becker
Director, Facilities & Operations

Attachment

Cc: Scott Odell, AICP, Paoli & Odell

Z:\Projects\Yale Building\Rehabilitation Project\Site Acquisition\Planning Commission\10.04 VHEA PC Consultation.doc



Source: Microsoft Bing Maps, 2010.

Site Location Map

Violet Heintz Education Academy
4939 E. Yale Ave.
Fresno, CA 93727



Figure 1

Fresno County Office of Education
Violet Heintz Education Academy Program Description
4939 E. Yale Ave.
[revised April 12, 2011]

The Violet Heintz Education Academy (VHEA), located at 4939 E. Yale Ave., is operated by the Fresno County Office of Education Community Schools program and consists of a non-comprehensive school program for grades 9-12 between the hours of 7:00 AM and 5:00 PM. There are approximately 100-120 students attending. Students in the Fresno metropolitan area arrive by city bus that drops off students at the intersection of Clinton/Winery. Students then proceed on foot to the school campus. Students from rural areas arrive by a South Valley transportation bus contracted through the FCEOC. Students arrive from approximately 7:45 AM to 8:00 AM and leave from 2:15 PM to 3:30 PM.

The Fresno County Superintendent of Schools is responsible for the operation and the administration of the Community Schools in the County of Fresno. The educational program includes: administrative services, secretarial services, certificated and classified employees, instructional equipment, materials and curriculum supplies. This program has a strong collaborative component comprised of several agencies working together to provide support to students. The collaborative agencies that also have employees occupying the building are as follows: the County of Fresno Probation Department and Mental Health Services, WestCare (substance abuse services), and California Youth Outreach. Staff include probation officers, mental health clinicians, substance abuse counselors, outreach counselors, and clerical staff.

The educational program provides educational services for students who are referred by the probation department or courts pursuant to sections 300, 601, 602, and 654 of the Welfare and Institutions Code or for students who are on probation and are not presently attending school. The program provides students with an educational program tailored to meet their individual academic needs and the curriculum is designed to provide for wide differences in ages and academic abilities. The VHEA program provides the following program tracks designed to address the unique needs of the student population:

1. **The Day Reporting Center (DRC) Program** is a 120-180 calendar day treatment and educational program for 9-12 grade minors. This multi-disciplinary approach is a treatment oriented program among the Fresno County Office of Education, Fresno County Probation, Fresno County Mental Health, WestCare, and California Youth Outreach. The focus is upon those students who have drug and/or alcohol problems. The students are court ordered to attend DRC and receive mental health treatment, substance abuse treatment or both.

2. **The VHEA Education-Only Program** provides educational programs for students who are probation referred, have been expelled from their district of residence, and are not enrolled in any other school. Students in grades 9-12 are provided with an educational program tailored to meet their individual academic and behavioral needs. Students in the education-only program are generally enrolled for up to two semesters.

Future Consideration

In order to better equip these students for successful careers, the VHEA program may expand its offerings to include career technical training such as:

1. Culinary Arts
2. Building Trades
3. Graphics Design
4. First Responders
5. Small Engine Repair

FILE COPY



Planning and Development Department

2600 Fresno Street, Third Floor
Fresno, California 93721-3604
(559) 621-8277 FAX (559) 498-1012

Nick P. Yovino, Director

March 18, 2008

Please Reply To:
Kevin Fabino
(559) 621-8046

Jeffrey Becker
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, CA 93721

SUBJECT: CONDITIONAL USE PERMIT APPLICATION NO. C-08-018 REQUESTING AUTHORIZATION TO UTILIZE AN EXISTING BUILDING AS A COMMUNITY SCHOOL HOUSING THE FRESNO COUNTY OFFICE OF EDUCATION COURT SCHOOLS PROGRAM ON PROPERTY LOCATED AT 4349 EAST YALE AVENUE (APN: 494-231-03U)

Dear Mr. Becker:

The Planning and Development Department Director on February 22, 2008, approved Conditional Use Permit Application No. C-08-018 requesting authorization to convert the use of an existing office building to house a community school facility serving approximately 120 students in grade levels 7 through 12, operated by the Fresno County Office of Education Court Schools: the Forward Bound Academy for students who have been recently released from the Elkhorn Correctional Boot Camp facility; and the Day Reporting Center community-based multi-disciplinary program. The conditional use permit has been noticed to adjacent property owners in accordance with the Fresno Municipal Code, and no appeals have been filed.

You may now obtain the necessary permits and proceed with the development of the project in accordance with the conditions noted in the Notice of Granting Special Permit dated December 11, 2007, a copy of which has previously been sent to you. Please note that in order for the Planning and Development Department to issue building permits, a corrected site plan and landscape plan must be submitted to the Planning Division for review and approval.

CONDITIONS OF APPROVAL

1. Development shall take place in accordance with Exhibit(s) A, E, L-1, L-2, L-3 and L-4 dated January 25, 2008 and the program description statement dated January 25, 2008.
2. Comply with the requirements of the City of Fresno Planning & Development Department, Building & Safety Services Division memorandum dated January 30, 2008. Apply and comply with all requirements thereof, for a Change of Occupancy for the subject property, as required by City of Fresno Planning & Development Department, Building & Safety Services Division memorandum dated January 30, 2008. Contact Yeghia Oulashian with the Building & Safety Division for requirements.

3. All previously imposed conditions for the subject property remain in place (except as may be modified by the approval of this special permit) and are included herein by reference.
4. Approval of this special permit may become null and void in the event of failure by the applicant and/or authorized representative, architect, engineer, or designer to disclose and delineate all facts and information relating to the subject property and the proposed development.
5. Approval of this special permit may become null and void in the event that development is not completed in accordance with all conditions and requirements imposed on this special permit, the Zoning Ordinance, and all Public Works Standards and Specifications. The Planning and Development Department shall not assume responsibility for any deletions or omissions resulting from the special permit review process or for additions or alterations to construction plan not specifically submitted and reviewed and approved pursuant to this special permit or subsequent amendments or revisions. *(Include this note on the site plan.)*
6. The exercise of rights granted by this special permit must be commenced by February 22, 2012 (four years from the date of approval). There is no extension.

Please Note: To complete the backcheck process for building permits relative to planning and zoning issues, submit eight copies of the corrected site plan and six copies of elevations, landscaping and irrigation plans, together with required covenants (or preparation fees) and studies or analysis to the Planning Division for final review and approval, ten days before applying for building permits.

Copies of the final approved site plan, elevations, landscaping and irrigation plans stamped by the Planning Division must be submitted for unstamped copies of the same in each of the four sets of construction plans submitted for plan check prior to the issuance of building permits.

If you have any questions regarding this letter, feel free to give me a call at the number listed above.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kevin Fabino', written in a cursive style.

Kevin Fabino, Planning Manager
Current Planning Division

**TABLE 1
AIRPORT LAND USE NOISE COMPATIBILITY CRITERIA**

LAND USE CATEGORY	Exterior Noise Exposure (CNEL)		
	60-65	65-70	70-75
Residential, Lodging, and Care			
*Residential (including single-family, multi-family)	0	–	–
Retirement homes, residential support facilities, hospitals, nursing homes, large child day care centers, adult day care facilities	0	0	–
*Hotels, motels, other transient lodging	0	0	–
*Mobile Homes	0	–	–
Public and Institutional			
* Schools, libraries	0	0	–
*Places of worship, auditoriums, concert halls, theaters, indoor arenas	0	0	–
Cemeteries, Parking	+	+	0
Commercial and Industrial			
Offices, service commercial, retail, shopping centers, restaurants	+	0	–
Wholesale, warehousing, research and development, light industrial	+	+	0
Extractive industry, industrial, manufacturing, utilities	+	+	0
Agricultural, and Recreational			
Cropland	+	+	+
Nature preserves, Livestock breeding, Zoos	0	0	–
Regional parks, athletic fields, golf courses, outdoor spectator sports, water recreational facilities, horse stables	+	0	0
Amphitheaters	0	–	–

TABLE 1 (cont)
AIRPORT LAND USE NOISE COMPATIBILITY CRITERIA

LEGEND

Symbol	Land Use Acceptability	Interpretation/Conditions
+	Compatible	The activities associated with the specific land use may be carried out with essentially no interference from aircraft noise.
0	Conditional	<p>The indicated noise exposure will cause interference with the activities. Building structure must be capable of attenuating noise to the indoor acceptable CNEL, standard construction methods will normally suffice.</p> <p>Indoor Uses: Noise exposure may cause moderate interference with indoor activities, extensive construction features required to make the indoor environment acceptable.</p> <p>Outdoor Uses: CNEL is acceptable for outdoor activities, although some noise interference may occur, caution should be exercised with regards to noise-sensitive uses.</p>
-	Incompatible	Unacceptable noise interference upon these activities will occur indoor and outdoor. Adequate structural noise insulation is not practical under most circumstances. Severe noise interference makes outdoor activities unacceptable
*	Acoustical Analysis Required	An acoustical analysis shall be performed by an individual or firm experienced in Acoustical Engineering

TABLE 2

INTERIOR NOISE LEVEL REDUCTION (dBA)
CNEL RANGE (Annual Average)

GENERALIZED LAND USE	60-65	65-70	70-75
Residential	AS	--	--
Transient Lodging	AS	25 ¹ dBA	--
Schools, Hospitals and Nursing Homes	AS	25 ¹ dBA	--
Commercial	AS	AS	25dBA
Manufacturing ²	+	AS	25dBA

Legend

+ Uses normally acceptable.

-- Uses should not be permitted.

¹ Acoustical studies may indicate a need for additional insulation in noise sensitive living areas such as sleeping quarters and areas of the facility used at night for relaxing and conversing.

² Noise level reductions are for those portions of the buildings where the public is received, office areas, and noise sensitive areas where noise levels are low.

AS Acoustical studies shall be performed to determine if insulation should be added to sensitive occupancy areas.

NOISE MONITORING REPORT

FOR

VIOLET HEINTZ
EDUCATION ACADEMY
FRESNO, CA

OCTOBER 22, 2010

PREPARED FOR:
FRESNO COUNTY
OFFICE OF EDUCATION
1111 VAN NESS AVENUE
FRESNO, CA 93721

PREPARED BY:



1214 PARK STREET, SUITE 301
PASO ROBLES, CA 93446
805.226.2727

TABLE OF CONTENTS

Introduction	1
Background	1
Acoustic Fundamentals	1
Amplitude	1
Frequency	1
Addition of Decibels	1
Common Noise Descriptors	3
Sound Level Weighting	3
Noise Descriptors	3
Human Response to Noise	3
Annoyance	4
Speech Communication	4
Learning	5
Existing Noise Environment & Regulatory Framework	5
Airport Noise & Land Use Compatibility Planning	5
Federal Aviation Administration	5
Caltrans Division of Aeronautics	6
Fresno Yosemite International Airport – Airport and Environs Plan	6
Fresno Yosemite International Airport – Airport Land Use Compatibility Plan	6
Fresno Yosemite International Airport – 14 CFR Part 150 Noise Compatibility Program	7
Fresno Yosemite International Airport Operations	7
Airport Noise Exposure Maps	7
Noise Monitoring Survey	9
Procedures	9
Results	9
Compatibility with FYI Airport Noise Environs & Plans	12
FYI Airport and Environs Plan	12
Fresno County Airport Land Use Compatibility Plan for FYI Airport	12
Summary Conclusions	12
References	14

LIST OF TABLES

Table 1 Summary of Noise Monitoring Results	11
---	----

LIST OF FIGURES

Figure 1 Common Noise Levels	2
Figure 2 Fresno International Airport CNEL Contours (2009)	8
Figure 3 Noise Monitoring Locations	10

TERMS & ACRONYMS

AEP	Airport and Environs Plan
ALUC	Airport Land Use Commission
AMP	Airport Master Plan
ANSI	American National Standards Institute, Inc.
Caltrans	California Department of Transportation
CLUP	<i>Land Use Compatibility Plan</i>
CNEL	Community Noise Equivalent Level
dB	Decibel
dBA	A-weighted Decibel
DNL	Day-Night Average Noise Level
FAA	Federal Aviation Administration
FYI	Fresno Yosemite International
HVAC	Heating Ventilation and Air Conditioning
Hz	Hertz
Leq	Energy-Equivalent Noise Level
NLR	Noise Level Reduction
SEL	Single-Event Noise Level

INTRODUCTION

This purpose of this noise monitoring report is to evaluate the exterior and interior aircraft noise levels at the existing Violet Heintz Academy, located at 4939 E. Yale Avenue, Fresno, CA (Assessor's Parcel Number 494-231-03U). A background discussion of acoustic fundamentals, the existing noise environment in the vicinity of the existing Violet Heintz Academy, and applicable regulatory framework is also included to assist in the interpretation of this report.

BACKGROUND

ACOUSTIC FUNDAMENTALS

Noise is generally defined as sound that is loud, disagreeable, or unexpected. Sound is mechanical energy transmitted in the form of a wave because of a disturbance or vibration. Sound levels are described in terms of both amplitude and frequency.

AMPLITUDE

Amplitude is defined as the difference between ambient air pressure and the peak pressure of the sound wave. Amplitude is measured in decibels (dB) on a logarithmic scale. For example, a 65 dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by 3 dB). Amplitude is interpreted by the ear as corresponding to different degrees of loudness. Laboratory measurements correlate a 10 dB increase in amplitude with a perceived doubling of loudness and establish a 3 dB change in amplitude as the minimum audible difference perceptible to the average person.

FREQUENCY

The frequency of a sound is defined as the number of fluctuations of the pressure wave per second. The unit of frequency is the Hertz (Hz). One Hz equals one cycle per second. The human ear is not equally sensitive to sound of different frequencies. For instance, the human ear is more sensitive to sound in the higher portion of this range than in the lower and sound waves below 16 Hz or above 20,000 Hz cannot be heard at all. To approximate the sensitivity of the human ear to changes in frequency, environmental sound is usually measured in what is referred to as "A-weighted decibels" (dBA). On this scale, the normal range of human hearing extends from about 10 dBA to about 140 dBA. Common community noise sources and associated noise levels, in dBA, are depicted in **Figure 1**.

ADDITION OF DECIBELS

Because decibels are logarithmic units, sound levels cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one automobile produces a sound level of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together would result in an increase of 5 dB.

**Figure 1
Common Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
<u>Jet Fly-over at 300m (1000 ft)</u>	110	<u>Rock Band</u>
<u>Gas Lawn Mower at 1 m (3 ft)</u>	100	
<u>Diesel Truck at 15 m (50 ft), at 80 km (50 mph)</u>	90	<u>Food Blender at 1 m (3 ft)</u>
<u>Noisy Urban Area, Daytime</u>	80	<u>Garbage Disposal at 1 m (3 ft)</u>
<u>Gas Lawn Mower, 30 m (100 ft)</u>	70	<u>Vacuum Cleaner at 3 m (10 ft)</u>
<u>Commercial Area</u>		<u>Normal Speech at 1 m (3 ft)</u>
<u>Heavy Traffic at 90 m (300 ft)</u>	60	
<u>Quiet Urban Daytime</u>	50	<u>Large Business Office</u>
		<u>Dishwasher Next Room</u>
<u>Quiet Urban Nighttime</u>	40	<u>Theater, Large Conference Room (Background)</u>
<u>Quiet Suburban Nighttime</u>		<u>Library</u>
<u>Quiet Rural Nighttime</u>	30	<u>Bedroom at Night,</u>
		<u>Concert Hall (Background)</u>
	20	<u>Broadcast/Recording Studio</u>
	10	
<u>Lowest Threshold of Human Hearing</u>	0	<u>Lowest Threshold of Human Hearing</u>

Source: Caltrans 2008

COMMON NOISE DESCRIPTORS

SOUND LEVEL WEIGHTING

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the sound-pressure level in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz, and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies, which is referred to as the "A-weighted" sound level. The A-weighting network most closely approximates the frequency response of the human ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments tend to correlate well with the A-weighted scale. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, and D-scales), but these scales are rarely used.

NOISE DESCRIPTORS

The intensity of environmental noise fluctuates over time and several descriptors of time-averaged noise levels are typically used. In most cases, the noise exposure in areas around airports is expressed in terms of the Day-Night Average Sound Level (DNL). DNL is a measure of the average A-weighted sound level of all aircraft flights occurring over a 24-hour period with penalty of 10 dB added to nighttime flight operations that occur between the more noise-sensitive hours of 10 p.m. and 7 a.m. In California, noise exposure around airports is expressed in terms of the Community Noise Equivalent Level (CNEL). CNEL is identical to DNL except that, in addition to the penalty added to nighttime flight operations, there is an additional penalty of 5 dB added to operations that occur between 7 p.m. and 10 p.m. In some instances, energy-equivalent noise levels (L_{eq}) and single-event noise levels (SEL) are used to supplement discussions of aircraft noise exposure. The L_{eq} noise level is an average of the instantaneous noise levels occurring during a specific period of time converted to relative energy values. L_{eq} noise levels are typically used to express hourly-average noise levels. SELs are sometimes used to express levels associated with intermittent noise events, such as aircraft fly-overs.

HUMAN RESPONSE TO NOISE

The human response to noise is subjective and varies considerably from individual to individual. The acceptability of noise and the threat to public well-being is the basis for land use planning policies preventing exposure to excessive community noise levels. In terms of land use compatibility, with regard to institutional land uses, noise is often evaluated in terms of the potential for noise events to result in increased levels of annoyance or interference with speech communication and learning.

ANNOYANCE

With regard to potential increases in annoyance and activity interference, land use compatibility determinations are typically based on the use of the cumulative noise exposure metrics (i.e., CNEL or DNL). Past research has identified a correlation between the cumulative noise exposure metric and individuals who were highly annoyed by transportation noise. Based on these identified correlations, the day-night average noise exposure metric became a basis for noise standards. When expressed graphically, this correlation indicates that approximately 13 percent of the population is highly annoyed at a noise level of 65 dBA DNL. It also indicates that the percent of people describing themselves as being highly annoyed accelerates smoothly between 55 and 70 dBA DNL. A noise level of 65 dBA DNL is a commonly referenced dividing point between lower and higher rates of people describing themselves as being highly annoyed.

Research related to the use of the day-night average noise exposure metric became the basis for many of the noise criteria subsequently established for federal, state, and local entities. Most federal and state of California regulations and policies related to transportation noise sources establish a noise level of 65 dBA CNEL/DNL as the basic limit of acceptable noise exposure for residential and other noise-sensitive land uses. For instance, with respect to aircraft noise, both the Federal Aviation Administration (FAA) and the State of California have identified a noise level of 65 dBA DNL as the typical dividing point between normally compatible and normally incompatible noise-sensitive land use for determination of land use compatibility. An interior noise level of 45 dBA CNEL/DNL is generally considered sufficient to protect against activity interference at most noise-sensitive land uses. For noise-sensitive land uses exposed to aircraft noise, noise levels in excess of 65 dBA CNEL/DNL are typically considered to result in a potentially significant increase in levels of annoyance (Caltrans 2002.)

The day-night average noise exposure metric is currently the only noise metric for which there is a substantial body of research data and regulatory guidance defining the relationship between noise exposure, people's reactions, and land use compatibility. However, when evaluating environmental noise impacts involving intermittent noise events, such as aircraft overflights, the use of cumulative noise metrics may not provide a thorough understanding of the resultant impact. The general public often finds it difficult to understand the relationship between intermittent noise events and cumulative noise exposure metrics. In such instances, supplemental use of average energy-equivalent or single-event noise metrics may be helpful as a means of increasing public understanding regarding the relationship between these metrics and the extent of the resultant noise impact. Although the use of supplemental noise descriptors can provide increased understanding of intermittent noise events and relationship to the cumulative noise metrics, current regulations do not identify quantitative criteria, metrics, or computation methods pertaining to the use of other noise descriptors for determination of land use compatibility with regard to aircraft noise exposure. (Caltrans 2002.)

SPEECH COMMUNICATION

For most noise-sensitive land uses, an interior noise level of 45 dB L_{eq} is typically identified for the protection of speech communication in order to provide for 100-percent intelligibility of speech sounds. For outdoor voice communication, an exterior noise level of 60 dBA L_{eq} allows normal conversation at distances up to 2 meters with 95 percent sentence intelligibility. Based on this information, speech interference begins to become a problem when steady exterior noise levels reach approximately 60 to 65 dBA (Caltrans 2002.)

LEARNING

Recent studies have shown a strong relationship between noise and children's reading ability. The attention spans of children, as well as adults, also appear to be adversely affected by noise. Some studies indicate that, in a noisy environment, adults have increased difficulty accomplishing complex tasks. For institutional land uses, such as schools, interior noise levels are typically limited to a maximum of 45 dBA CNEL/DNL.

One of the issues associated with assessment of noise effects related to learning is which noise metric correlates most closely with the impacts. For example, CNEL/DNL, with its nighttime weighting, may not be the best measure of noise impacts on schools given that operational activities at schools are often limited to the daytime hours (Caltrans 2002.) As a result, various standards and recommended criteria have been developed to specifically address classroom noise. For instance, in June 2002, the American National Standards Institute, Inc. (ANSI) released a new classroom acoustics standard entitled *Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools* (ANSI S12.60-2002). For schools exposed to intermittent noise sources, such as airport and other transportation noise, the ANSI standards recommend that interior noise levels not exceed 40 dBA L_{eq} during the noisiest hour of the day. At present complying with the ANSI-recommended standard is voluntary in most locations.

EXISTING NOISE ENVIRONMENT & REGULATORY FRAMEWORK

Exterior ambient noise levels at Violet Heintz Education Academy are influenced primarily by aircraft operations conducted at Fresno Yosemite International (FYI) Airport, which is located approximately 0.3 miles to the northeast. The following provides a discussion of the current regulatory framework pertaining to airport noise and land use compatibility planning, FYI Airport operations, and projected airport noise exposure contours.

AIRPORT NOISE & LAND USE COMPATIBILITY PLANNING

Airport noise abatement and land use compatibility planning in the United States is performed at the national, state, regional, and local levels. The following provides a summary of the more pertinent regulations and planning efforts associated with land use compatibility planning at FYI Airport.

FEDERAL AVIATION ADMINISTRATION

As a means of implementing the Aviation Safety and Noise Abatement Act of 1979, the FAA adopted the *Federal Aviation Regulation (FAR) Part 150 Noise Compatibility Program* (Part 150 Program). These regulations establish a voluntary program which airports can utilize to conduct airport noise compatibility planning. Airports which choose to undertake a Part 150 study are eligible for federal funding both for the study itself and for implementation of approved components of the local program. The FAR Part 150 Program allows airport operators to voluntarily submit noise exposure maps and noise compatibility programs to the FAA for review and approval. A noise compatibility program sets forth the measures that an airport operator "has taken" or "has proposed" for the reduction of existing incompatible land uses and the prevention of additional incompatible land uses within the area covered by noise exposure maps. Airport noise exposure maps are typically depicted in terms of the average-daily noise level (i.e., DNL or CNEL). For the purposes of federal regulations, all land uses are considered compatible with noise levels of less than 65 dBA CNEL/DNL. At higher noise exposures, selected land uses are also deemed acceptable, depending upon the nature of the use and the degree of structural noise attenuation provided. FAA determinations under Part 150 are not intended to

substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses (Caltrans, 2002).

CALTRANS DIVISION OF AERONAUTICS

The Caltrans Division of Aeronautics has adopted CNEL as the noise descriptor to be used in describing the noise impact boundary of California airports. The Division of Aeronautics has identified a maximum allowable noise criterion of 65 dBA CNEL for noise-sensitive land uses (Caltrans 2002.)

FRESNO YOSEMITE INTERNATIONAL AIRPORT – AIRPORT AND ENVIRONS PLAN

The *FYI Airport and Environs Plan* (AEP) was adopted in September 1992 and subsequently amended on June 24, 1997. The AEP sets forth the criteria which the Fresno County Airport Land Use Commission (ALUC) will use in evaluating general and specific plans, zoning ordinances, building regulations, and airport master plans proposed for adoption or amendment in the vicinity of the airport. The *FAR Part 150 Airport Noise Compatibility Program* is not replaced or superseded by the AEP (City of Fresno 1992).

The primary goal of the AEP is to safeguard the general welfare of the inhabitants within the vicinity of the airport and to ensure the continued operation of the airport. The AEP utilizing the CNEL noise descriptor for evaluation of airport noise and land use compatibility. In accordance with the airport/land use noise compatibility criteria identified in the AEP, schools are considered "Conditionally Acceptable" within exterior noise environments of 60 to 65 dBA CNEL, "Normally Unacceptable" within exterior noise environments of 65 to 70 dBA CNEL, and "Clearly Unacceptable" at levels in excess of 70 dBA CNEL. A "Conditionally Acceptable" noise exposure is defined as having moderate interference with outdoor activities and with indoor activities when windows are open. The land use is considered acceptable on the conditions that outdoor activities are minimal and that construction features have been incorporated sufficient to achieve acceptable exterior-to-interior noise attenuation. Within "Conditionally Acceptable" noise environments, interior noise levels attributable to exterior noise sources are limited to a maximum of 45 dBA CNEL. New or redeveloped school uses are prohibited within the 70 dBA CNEL contour (City of Fresno 1992).

FRESNO YOSEMITE INTERNATIONAL AIRPORT – AIRPORT LAND USE COMPATIBILITY PLAN

The *FYI Airport Land Use Compatibility Plan* (CLUP) was recently adopted by the Fresno County ALUC on October 4, 2010. The CLUP sets forth the criteria which the Fresno County Airport Land Use Commission will use in evaluating general and specific plans, zoning ordinances, building regulations, and airport master plans proposed for adoption or amendment in the vicinity of the airport. The primary goal of the CLUP is to safeguard the general welfare of the inhabitants within the vicinity of the airport and to ensure the continued operation of the airport.

The CLUP utilizes the CNEL noise descriptor for evaluation of airport noise and land use compatibility. In accordance with the airport/land use noise compatibility criteria identified in the CLUP, schools are considered "Conditionally Acceptable" within exterior noise environments of 60 to 70 dBA CNEL, and "Incompatible" at levels in excess of 70 dBA CNEL. Prior to approval of new school uses located within the 65 or greater CNEL contour, an acoustical analysis shall be demonstrating that interior noise levels attributable to exterior sources does not exceed 45 dBA CNEL. New or redeveloped schools shall be prohibited within the 70 CNEL contour (Fresno County ALUC 2010).

FRESNO YOSEMITE INTERNATIONAL AIRPORT – 14 CFR PART 150 NOISE COMPATIBILITY PROGRAM

The *Fresno Yosemite International Airport Noise Compatibility Program* (NCP) was approved by the U.S. Department of Transportation, Federal Aviation Administration, on July 28, 2008. The NCP includes various actions that the airport recommends be taken to ensure continued compatibility with airport noise environs. Specifically, the Land Use Element of the NCP includes actions that would encourage the development of compatibility land uses within the 60 CNEL noise contour of the airport. The NCP also encourages local jurisdictions to amend existing zoning regulations and building codes in order to promote the development or redevelopment of compatible land uses. Noise-sensitive uses within the 60 to 65 CNEL contour would be permitted with conditions that they are constructed to achieve an interior noise level of 45 CNEL, or lower. Such measures are within the authority of the local jurisdictions and the Federal government has no authority to control local land uses (FYI Airport 2010).

FRESNO YOSEMITE INTERNATIONAL AIRPORT OPERATIONS

FYI Airport is a joint use civilian/military airport owned and operated by the City of Fresno. It is used by commercial air carriers, air cargo operators, charter operators, the State of California, general aviation, and the United States military. The California Air National Guard occupies a 58 acre area adjacent to McKinley Avenue in the southeast portion of FYI Airport. About 250 general aviation aircraft are based at FYI Airport (Fresno County ALUC 2010).

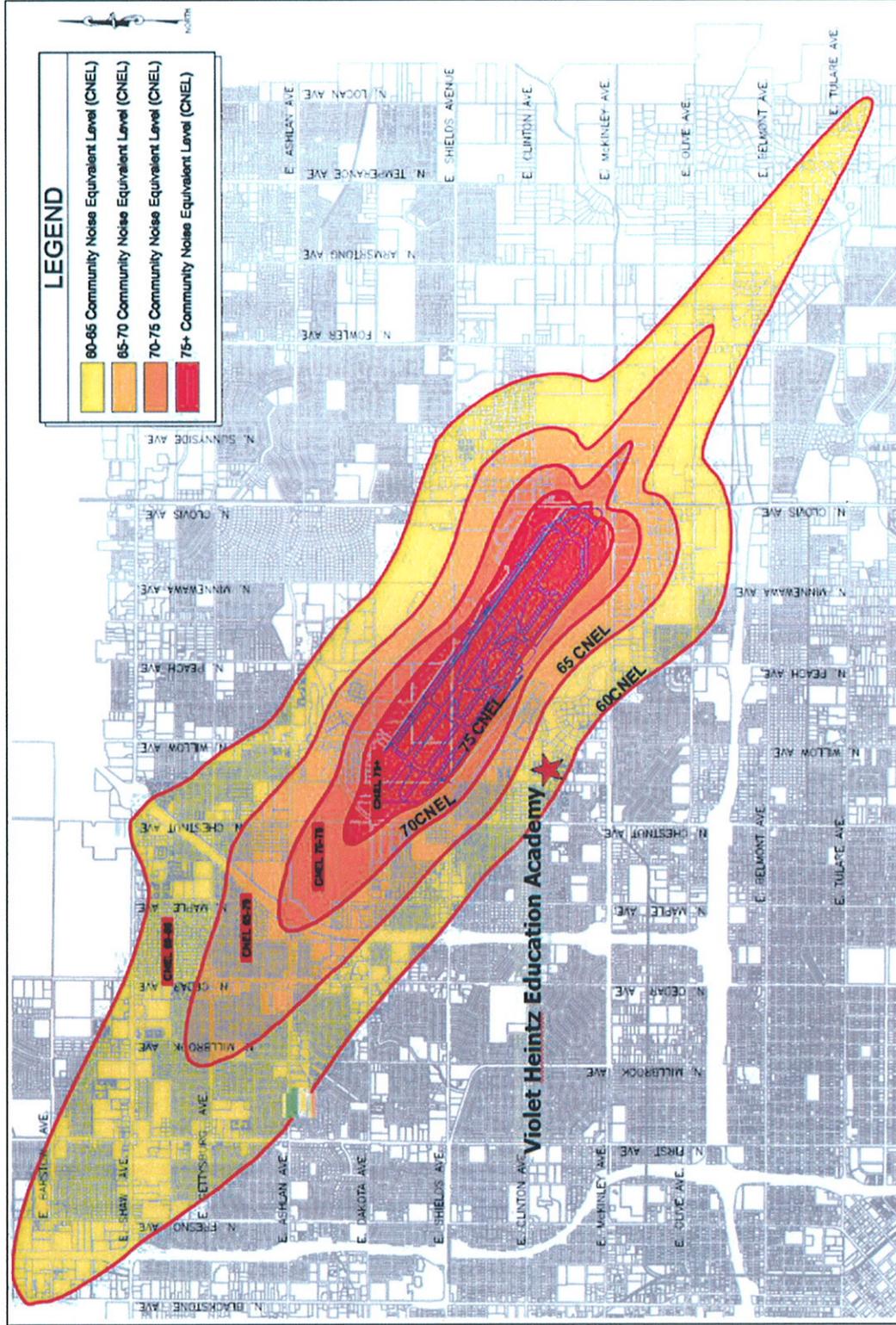
AIRPORT NOISE EXPOSURE MAPS

Aircraft noise exposure in a community is usually described in terms of noise exposure maps. These maps identify noise contours around airports where the average noise level can be expected to fall within the ranges specified by the contour lines. Within California, most airport noise contour maps utilizing the CNEL noise metric, depict contour levels in 5 dB increments. Typically, the CNEL contours reflect average A-weighted CNELs for aircraft activities taking place on an average day. For airports, the average day is determined by analyzing flight activity over the period of one full year. This gives an indication of the year-round average noise exposure for the community.

FYI Airport, in cooperation with the FAA, recently updated the *FYI Airport Master Plan* (AMP) in 2006. Although not formally adopted, the AMP provides a 20-year planning window for FYI. The AMP and the subsequent joint environmental document (EA/EIR) took into consideration the 20-year FAA approved aviation demand forecast. The FYI Airport's current noise contours, which are included in the recently adopted CLUP, are based on activity forecasts obtained from the recently updated AMP and EA/EIR (Fresno County ALUC 2010; FYI Airport 2010). FYI Airport noise contours are depicted in **Figure 2**.

Figure 2 also depicts the location of the Violet Heintz Education Academy in relation to the projected FYI Airport noise contours. As shown, the Violet Heintz Education Academy is located within the projected 60 - 65 CNEL noise exposure contours of FYI Airport.

Figure 2
Fresno International Airport CNEL Contours



Sources: Fresno County ALUC 2010; FYI Airport 2010

NOISE MONITORING SURVEY

A noise monitoring survey was conducted on October 13, 2010 at the Violet Heintz Education Academy. The purpose of the noise monitoring survey was to determine the exterior-to-interior noise level reduction (NLR) for primarily exposed classrooms located at the existing Violet Heintz Education Academy. For noise monitoring purposes, primarily exposed classrooms were identified as those classrooms located along the outer perimeter walls of the building, particularly classroom having windows and/or doors on adjoining exterior classroom walls. Classrooms 101, 102, 202, 303, 305, and 401 and the school library (Room 404) were selected for this monitoring effort. Noise monitoring locations are depicted in **Figure 3**.

PROCEDURES

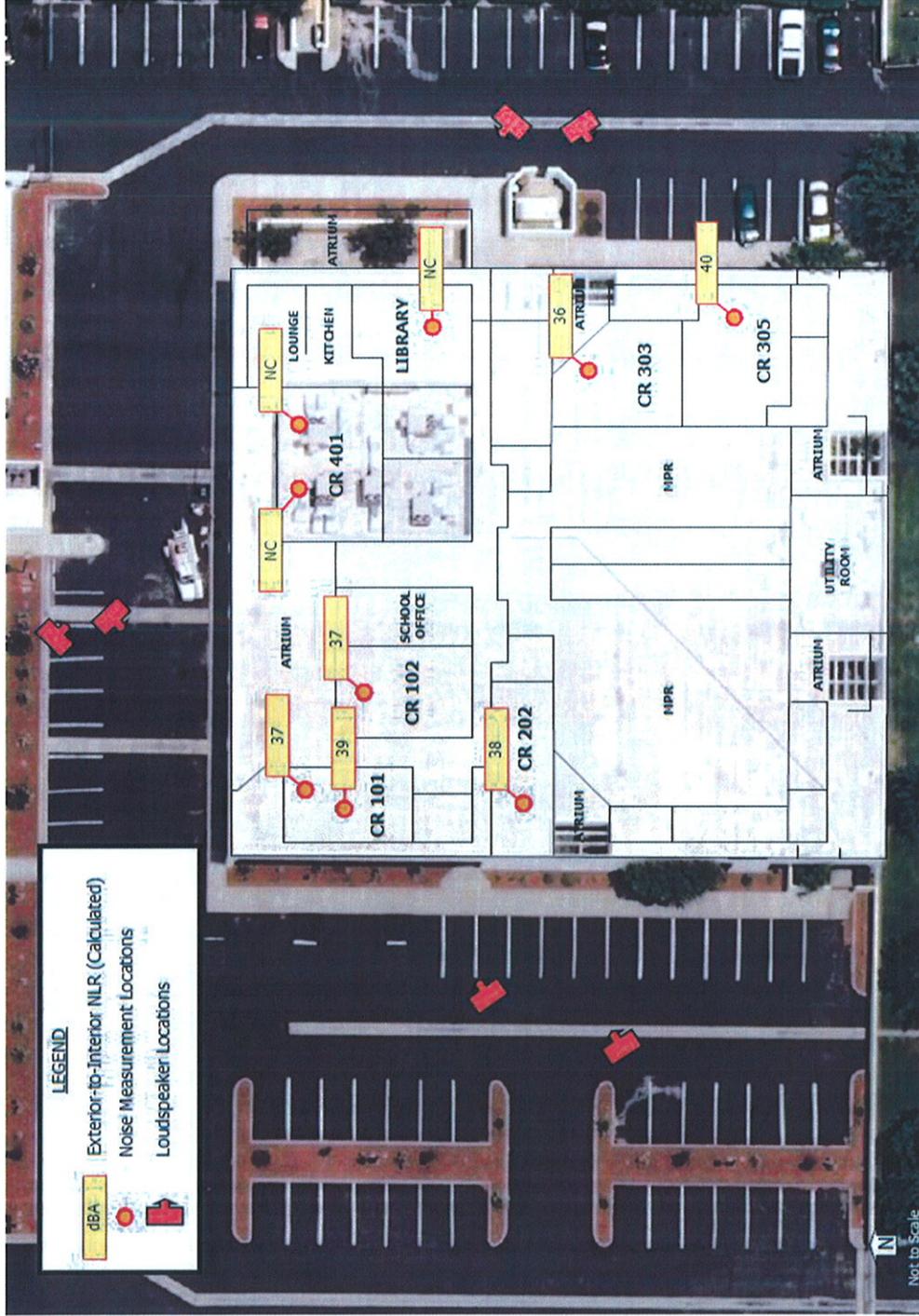
An exterior artificial noise source consisting of a loudspeaker, sound amplifier, and a pink noise generator was used to achieve an exterior noise level of approximately 20 dBA above ambient noise levels, measured at approximately 10 feet from the exterior building façade of primarily affected classrooms. The loudspeaker was positioned at a height of approximately 8 feet above ground level and angled at an incidence of approximately 45 degrees perpendicular to the building facade. For determination of exterior-to-interior NLR, noise measurements were conducted within the classroom and at exterior locations at equivalent distances from the exterior loudspeaker. The amplified sound level output was kept constant during corresponding exterior and interior noise monitoring surveys. All noise measurements were conducted using a Larson Davis Model 820 integrating sound level meter, placed at a height of 5 feet above ground/floor level. The sound level meter was calibrated prior to and upon completion of each measurement. Monitored classrooms, exterior loudspeaker locations, and interior noise monitoring locations are depicted in **Figure 3**.

For interior classroom noise measurement surveys, the sound meter was placed at a minimum of five feet from classroom walls. Monitoring was conducted with classroom doors closed and heating, ventilations and air conditioning (HVAC) systems turned off. Windows within all of the monitored classrooms are fixed dual-pane and non-operational. The NLR was calculated from the exterior and interior noise measurement data obtained for each of the classrooms monitored. The NLR was then subtracted from the corresponding FYI Airport noise contour values to determine interior CNEL noise levels for monitored classrooms.

RESULTS

Table 1 provides a summary of the noise monitoring results for each classroom, including exterior and interior noise levels, and calculated NLR for each classroom. Based on the monitoring conducted, the exterior-to-interior NLR for monitored classrooms ranged from 36 to 40 dB. Exterior-to-interior NLR for Classroom 401 and the Library (Room 404) could not be determined due to influences from interior noise sources, including noise generated by refrigeration units located in the adjoining kitchen. Based on the calculated NLR for monitored Classrooms 101 through 305, the calculated average NLR for monitored classrooms located along the outer perimeter walls of the building was 38 dB. However, it is important to note that some interior noise sources, such as computer fans, clocks, and people talking in adjoining rooms/corridors could not be entirely eliminated during the monitoring surveys conducted in these classrooms. As a result, the actual NLR for these classrooms may be slightly higher than indicated. In addition, it is important to note that noise monitoring was conducted within classrooms having windows along the building façade, which would be anticipated to have slightly lower NLR potential when compared to classrooms without windows.

Figure 3
Classroom Noise Monitoring Locations & Exterior-to-Interior Noise Level Reductions



NOTES: Classroom, noise monitoring, and loudspeaker placement locations/orientation angles are approximate and for illustrative purposes only. Refer to Table 1 for corresponding noise monitoring data.
 NC = Not Calculated Due to Interior Noise Interference.

**Table 1
Summary of Noise Monitoring Results**

	INTERIOR NOISE MONITORING LOCATIONS	EXTERIOR NOISE LEVEL ⁽¹⁾	INTERIOR NOISE LEVEL ⁽²⁾	EXTERIOR-TO-INTERIOR NOISE LEVEL REDUCTION ⁽³⁾
Classroom 101	Six Feet from North and East Classroom Wall/Exterior Window	66.1	29.1	37
	Classroom Center, Eight Feet from West Classroom Wall/Exterior Window	67.5	28.9	39
Classroom 102	Six Feet from North and West Classroom Wall/Exterior Window	65.9	29.3	37
Classroom 202	Classroom Center, Six Feet from South Classroom Wall	66.7	28.4	38
Classroom 303	Six Feet from Exterior Window	66.8	31.2	36
Classroom 305	Six Feet from East Classroom Wall	66.9	27.1	40
Classroom 401	Center of Western Half of Classroom, Eight Feet from North Classroom Wall/Exterior Window	67.5	40.1 ⁽⁴⁾	Not Calculated ^(4,5)
	Center of Eastern Half of Classroom, Eight Feet from North Classroom Wall/Exterior Window	66.2	43.0 ⁽⁴⁾	Not Calculated ^(4,5)
Library (Room 404)	10 Feet from East and South Classroom Walls	63.9	39.1 ⁽⁴⁾	Not Calculated ^(4,5)
	Calculated Average Exterior-to-Interior NLR ⁽⁶⁾ :			38

1. Measured exterior noise level (dBA Leq) at approximate equivalent distance from loudspeaker to interior noise monitoring location.
2. Interior noise level (dBA Leq) with classroom doors closed and HVAC systems turned off. Classroom windows are fixed dual-pane and non-operational.
3. Exterior-to-Interior NLR was calculated from the exterior and interior noise monitoring data. However, some interior noise sources, such as computer fans, clocks, and people talking in adjoining rooms/corridors could not be entirely eliminated during the monitoring survey. As a result, the actual exterior-to-interior NLR for monitored classrooms may be slightly higher than indicated.
4. Interior noise levels for Classroom 401 and the Library (Room 404) were influenced by noise generated by refrigeration units located in the adjoining kitchen.
5. The exterior-to-Interior NLR could not be accurately quantified due to influences from interior noise sources (refer to footnote 4, above).
6. Represents the calculated average exterior-to-interior NLR for Classrooms 101-305. Excludes Classroom 401 and the Library (Room 404), due to influences from interior noise sources (refer to footnote 4, above).

Based on the FYI Airport's noise contour map (**Figure 2**), projected exterior airport noise levels at Violet Heintz Education Academy would be between 60 and 65 dBA CNEL. Based on these exterior noise levels and the calculated exterior-to-interior NLR for monitored classrooms, as discussed above, predicted interior noise levels of primarily affected classrooms would range from approximately 20 to 29 dBA CNEL.

COMPATIBILITY WITH FYI AIRPORT NOISE ENVIRONS & PLANS

FYI AIRPORT AND ENVIRONS PLAN

In accordance with the *FYI Airport and Environs Plan* (1992), schools are considered "conditionally acceptable" within exterior noise environments of 60 to 65 dBA CNEL. Noise-sensitive land uses are considered acceptable on the conditions that outdoor activities are minimal and that interior noise levels attributable to exterior noise sources are reduced to a maximum of 45 dBA CNEL (City of Fresno 1992).

In comparison to the FYI Airport's projected noise contours (**Figure 2**), the Violet Heintz Education Academy is located within the projected 60 CNEL contour of FYI Airport and, thus, would be considered a "conditionally acceptable" land use. Exterior activities at Violet Heintz Education Academy are limited primarily to occasional recreational activities. No exterior activities, such as outdoor classroom or interpretive areas, were identified at the school that would be substantially affected by exterior aircraft noise. As discussed above, calculated interior classroom noise levels attributable to airport noise would be approximately 29 dBA CNEL, or less, and would not exceed 45 dBA CNEL.

FRESNO COUNTY AIRPORT LAND USE COMPATIBILITY PLAN FOR FYI AIRPORT

The *FYI Airport Land Use Compatibility Plan* (CLUP) was recently adopted by the Fresno County ALUC on October 4, 2010. In accordance with the airport/land use noise compatibility policies and criteria identified in the CLUP, schools are considered "conditionally acceptable" within exterior noise environments of 60 to 70 dBA CNEL. Prior to the approval of new school uses located within the 65 CNEL contour, an acoustical analysis is required to demonstrate that interior noise levels attributable to exterior sources would not exceed 45 dBA CNEL (Fresno County ALUC 2010).

In comparison to the FYI Airport's projected noise contours, the Violet Heintz Education Academy is located within the projected 60 CNEL contour and, thus, would be considered a "conditionally acceptable" land use. Violet Heintz Education Academy is not located within the projected 65 CNEL contour of FYI Airport. However, as discussed above, no exterior activities, such as outdoor classroom or interpretive areas, were identified at the school that would be substantially affected by exterior aircraft noise. In addition, calculated interior classroom noise levels attributable to airport noise would be approximately 29 dBA CNEL, or less, and would not exceed 45 dBA CNEL.

SUMMARY CONCLUSIONS

Based on the noise monitoring conducted, the Violet Heintz Education Academy was found to provide a relatively high level of exterior-to-interior structural NLR. The calculated exterior-to-interior NLR for monitored classrooms located along the exterior walls of the building averaged approximately 38 dB. The overall structural NLR for the building, taking into account the more central interior areas of the building, would likely be higher. Assuming an exterior noise level of

60 to 65 dBA CNEL, based on the location of Violet Heintz Education Academy in relation to FYI Airport's projected noise contours (**Figure 2**), the predicted interior average-daily noise levels for classrooms would be approximately 29 dBA CNEL, or less. Predicted interior noise levels at Violet Heintz Education Academy, due to FYI Airport operations, would not exceed the 45 dBA CNEL interior noise standard identified in applicable FYI Airport land use compatibility plans. This conclusion is based on airport operational projections and associated noise contours obtained from the *FYI Airport Land Use Compatibility Plan*, which was recently adopted by the Fresno County ALUC on October 4, 2010.

REFERENCES

- American National Standards Institute, Inc. (ANSI). 2002. *ANSI S12.60-2002: Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools*.
- City of Fresno. September 1992. *Airport and Environs Plan, Fresno Yosemite International Airport*. Available at Website url: <http://www.fresno.gov/NR/rdonlyres/393F4A4F-D3D2-4753-A7DD-143ABFD71172/0/FresnoYosemiteInternationalAirportandEnvironsPlan.pdf>.
- Fresno County Airport Land Use Commission (ALUC). October 4, 2010. *Airport Land Use Compatibility Plan, Fresno Yosemite International Airport*. Available at Website url: <http://www.fresnocog.org/document.php?pid=353>.
- Fresno Yosemite International (FYI) Airport. Accessed October 19, 2010. *Fresno Yosemite International Airport Part 150 Update. Figure 2, 2009 Forecast Conditions Noise Exposure Map with Existing Airport Layout and Land Use*. Available at Website url: <http://www.fresno.gov/NR/rdonlyres/F0000D43-1948-4CFB-941E-D47409096C08/111118/smartMap.pdf>
- State of California Department of Transportation (Caltrans). 2002. *Caltrans Airport Land Use Planning Handbook*.
- State of California Department of Transportation (Caltrans). May 2008. *EIR/EA Annotated Outline*.
- U.S. Department of Transportation, Federal Aviation Administration. July 28, 2008. *Record of Approval. 14 CFR Part 150, Noise Compatibility Program. Fresno Yosemite International Airport, Fresno, CA*.

TABLE 3

AIRPORT LAND USE SAFETY COMPATABILITY CRITERIA

LAND USE CHARACTERISTIC	SAFETY ZONES					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Residential Uses	--	(A)	(B)	(C)	--	+
Other Uses in Structures	--	(D,E)	(E)	(E)	--	+
Other Uses Not in Structures	(D,F)	(D)	+	+	--	+

SPECIAL CHARACTERISTICS (IN OR OUTSIDE OF STRUCTURES)						
Distracting Lights or Glare	--	--	--	--	--	+
Sources of Smoke or Electrical Interference	--	--	--	--	--	+
Attractor of Birds	--	--	--	--	--	+

NOTES

1. See Figure 4.2.1, Safety Compatibility Zones.
2. Refer to figure 4.2.2 for dimensional layout of the Safety Compatibility Zones.

INTERPRETATION

- + Compatible: Use is acceptable with little or no risks.
- () Conditional: land use proposals that fall within this category must be reviewed on a case-by-case basis by Commission or jurisdiction having authority. The Commission or jurisdiction having authority may determine the use to be acceptable under conditions cited below.
 - A Density no greater than 1 dwelling unit per 3 acres.
 - B Density no greater than 2 dwelling units per acre.
 - C Density no greater than 5 dwelling units per acre.
 - D No uses attracting more than 10 persons per acre.
 - E No schools, hospitals, nursing homes, or similar uses.
 - F Characteristic cannot reasonably be avoided or located outside the indicated safety zone.
- Incompatible: Use is unacceptable due to associated high risks.

**CITY OF FRESNO
CATEGORICAL EXEMPTION
ENVIRONMENTAL ASSESSMENT NO. C-08-018**

THE PROJECT DESCRIBED HEREIN IS DETERMINED TO BE CATEGORICALLY
EXEMPT FROM THE PREPARATION OF ENVIRONMENTAL DOCUMENTS
PURSUANT TO ARTICLE 19 OF THE STATE CEQA GUIDELINES

APPLICANT: Jeffrey D. Becker
Fresno County Office of Education
1111 Van Ness Avenue
Fresno, California 93721

PROJECT LOCATION: 4939 East Yale Avenue. Located on the north side of East
Yale Avenue between North Winery and North Fine
Avenues. (APN: 494-231-03)

PROJECT DESCRIPTION: Conditional Use Permit Application No. C-08-018 requests
authorization to to convert the use of an existing office building
to house a community school facility serving approximately 120
students in grade levels 7 through 12, operated by the Fresno
County Office of Education Court Schools Program.

**This project is exempt under Section 15301/Class 01 of the State of California
Environmental Quality Act (CEQA) Guidelines.**

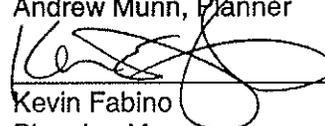
EXPLANATION: Class 1 consists of the operation, repair, maintenance, permitting, leasing,
licensing, or minor alteration of existing public or private structures, facilities,
mechanical equipment, or topographical features, involving negligible or no
expansion of use beyond that existing at the time of the lead agency
determination.

The proposed project is subject to authorization by a special permit and
consists of a change in use and operations of an existing building from office-
commercial to public school with negligible expansion of use beyond existing
conditions. The subject parcel is zoned M-1-P (*Industrial Park Manufacturing
District*) which is consistent with the 2025 General Plan and the McLane
Community Plan land use designation of light industrial. The site has no value
as habitat for endangered, rare or threatened species and complies with all
conditions of the Class 1 Categorical Exemption. No adverse environmental
impacts would occur as a result of the proposed project.

Date: February 22, 2007

Prepared by: Andrew Munn, Planner

Submitted by:


Kevin Fabino
Planning Manager
City of Fresno
Planning and Development Dept
(559)621-8277

FILED

FEB 27 2008

By 
FRESNO COUNTY CLERK
DEPUTY

STATE OF CALIFORNIA - THE RESOURCES AGENCY
DEPARTMENT OF FISH AND GAME
ENVIRONMENTAL FILING FEE CASH RECEIPT

Receipt # E20081000091

Lead Agency: CITY OF FRESNO Date: 02/27/2008

County Agency of Filing: FRESNO COUNTY CLERK Document No: E20081000091

Project Title: ENVIRONMENTAL ASSESSMENT NO C-08-018

Project Applicant Name: JEFFREY D. BECKER Phone Number: (559) 621-8277

Project Applicant Address: 2600 FRESNO STREET, FRESNO, CA 963721

Project Applicant: PRIVATE ENTITY

CATEGORICAL EXEMPTION \$ 50.00

Total Received \$ 50.00

Signature and title of person receiving payment: *Marsha Allen*