

**HARRIS RANCH AIRPORT
LAND USE POLICY PLAN**

**FRESNO COUNTY
AIRPORT LAND USE COMMISSION
October 16, 1995**



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HARRIS RANCH AIRPORT LAND USE POLICY PLAN

INTRODUCTION

This Policy Plan 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 Harris Ranch Airport.

Additionally, the adopted Policy Plan is intended to give public agencies and the general public an indication of the nature and extent of the Commission's involvement in airport land use planning. The statutory authority for establishment of the Fresno County Airport Land Use Commission and its adoption of procedures and policies is provided by the California Public Utilities Code, Sections 21670-21679.5 (Chapter 4, Article 3.5).

Section 21675 requires that the Commission adopt a land use compatibility plan for each public airport and for the area surrounding. Proposals submitted, to or proposed by local jurisdictions for the adoption or amendment of general and specific plans, zoning ordinances, building regulations, and airport master plans are to be referred to the Commission for a determination of consistency with the land use compatibility plan prior to final action being taken by the appropriate governing body.

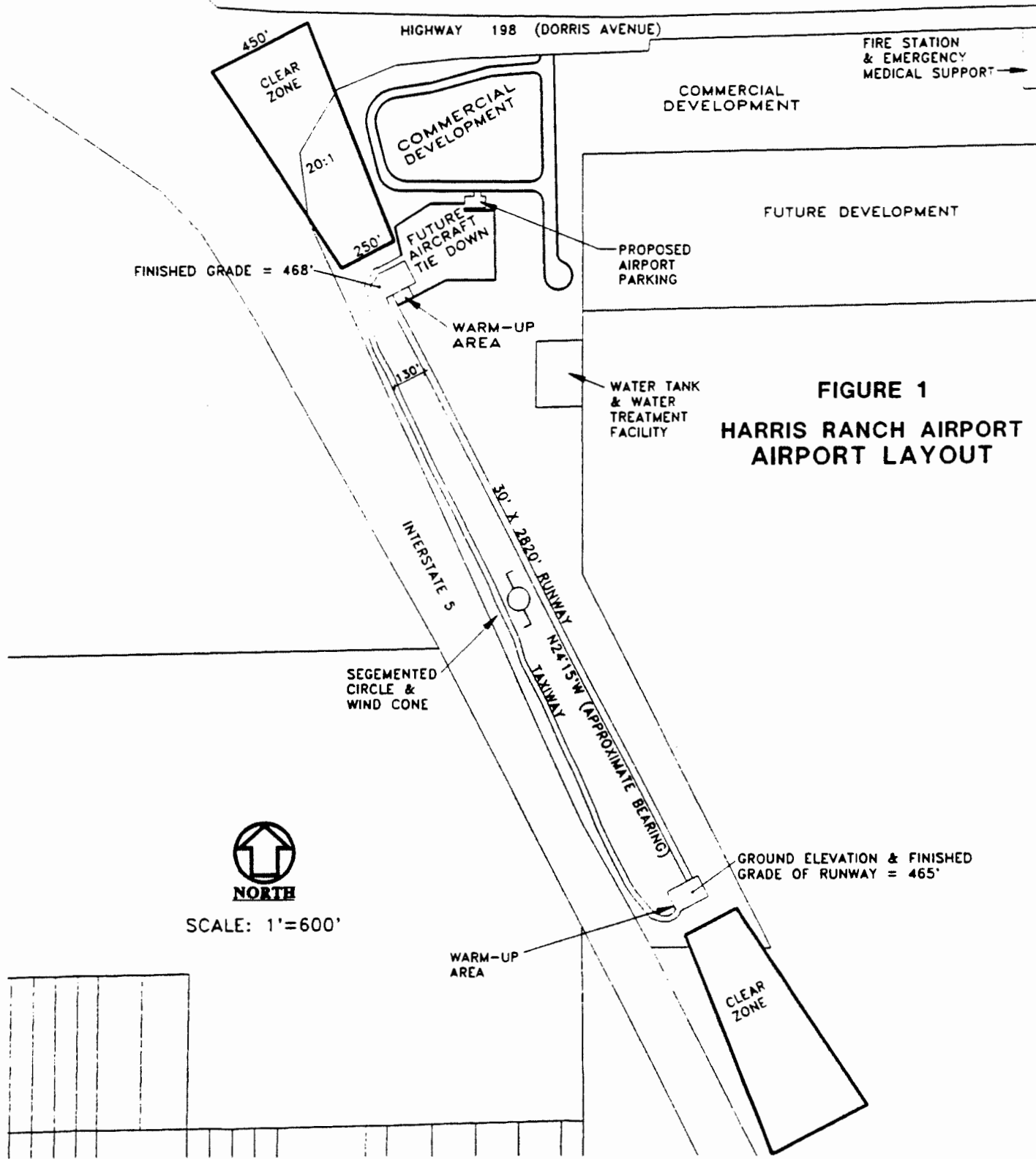
The following section presents policies addressing land use compatibility with airports' noise, airspace protection, safety, and general nuisance impacts. The final section indicates the specific types of projects which are subject to Commission review and establishes the geographic limits of the area within which projects are to be referred to the Commission for review.

Existing Conditions/Airport Layout

The Harris Ranch Airport is located in the southeast quadrant of the intersection of the Interstate 5 freeway and State Route 198 (Dorris Avenue) interchange. The City of Coalinga is located ten miles to the southwest along State Route 198 and the Fresno-Clovis area is located 35 miles to the northeast. The Lemoore Naval Air Station is located 16 miles to the east on State Route 198.

The airport is a Basic Utility, Stage 1 facility developed with a single runway that is 2,820 feet in length and 30 feet wide. It is a visual approach facility and is not lighted. The principal use is from itinerant traffic supporting the commercial development located in the quadrant and there are no based aircraft.

A formal Master Plan has not been developed for the facility. However, the County of Fresno has approved a series of Conditional Use Permits both for commercial development within the quadrant and for the existing and planned airport facilities. In addition, the California Department of Transportation, Aeronautics Program, approved a long-term airport layout plan in March of 1980. This provides the basis for development of this Land Use Policy Plan and its policies and standards. Figure 1 shows the current configuration and proposed facility development on the airport.



**FIGURE 1
HARRIS RANCH AIRPORT
AIRPORT LAYOUT**

Land Use Compatibility

A. Noise

1. Airport/land use noise compatibility shall be evaluated in terms of the Community Noise Equivalent Level (CNEL), as defined in Title 21, Subchapter 6 of the California Administrative Code.
2. The maximum noise exposure which shall be considered normally acceptable for residential areas is 60 dBA CNEL. The residential area criterion establishes the baseline from which noise compatibility for other land uses shall be evaluated.
3. The relative acceptability or unacceptability of particular land uses with respect to the noise levels to which they would be exposed is indicated in the "Airport/Land Use Noise Compatibility Criteria" matrix, Table 1. These criteria shall be the principal determinants of whether a proposed land use is compatible with the noise impact from nearby airport, but special circumstances which would affect the specific proposal's noise sensitivity (e.g., the extent or lack of outdoor activity) also shall be taken into account.
4. As determined by the Commission, a condition of approval of a proposed land use which is shown on Table 1 to be "marginal" or "normally unacceptable" for a given noise environment shall be that any building intended for habitation or occupation will provide a satisfactory degree of noise attenuation. Table 2, Interior Noise Level Criteria, sets forth the maximum acceptable interior noise levels for commonly occurring noises from exterior sources. If the structure can reduce the noise exposure by the indicated amount, the use may be acceptable.

Note: The interior noise criteria are measured in terms of maximum noise levels of individual events and not average noise levels as represented by CNEL values. Since maximum exterior, individual event noise levels are greater than the CNEL value at a given location, the required noise reduction of the structure thus will be greater than the difference between the interior noise level criterion and the CNEL value.

5. In addition to the interior noise level criteria for individual exterior noises, the interior CNEL attributable to exterior sources shall not exceed 45 CNEL, with windows and doors closed, in any habitable room of a residential dwelling.

6. In applying the interior noise level criteria listed in Table 2, engine run-up noise shall be considered as a source of commonly occurring exterior noise.
7. When a proposed project will involve a land use which is "marginal" or "normally unacceptable" within a noise environment in excess of 60 dBA CNEL, analysis shall be done in a manner indicated in the California Noise Insulation Standards (California Administrative Code, Title 25, Chapter 1, Subchapter 1, Article 4, Section 28).
8. When applying the noise compatibility criteria to a given location, the basis for evaluation shall be the maximum CNEL to which the location is or is forecast to be exposed. For the Harris Ranch Airport, the 55-CNEL and above contours are depicted in Figure 2.
9. If a noise analysis, including noise monitoring, is conducted for a particular location and the results indicate that the maximum CNEL will be less than shown herein, the lower exposure level may be used for land use evaluation at the discretion of the Airport Land Use Commission.

TABLE 1

HARRIS RANCH AIRPORT - AIRPORT/LAND USE
NOISE COMPATIBILITY CRITERIA

LAND USE CATEGORY ²	CNEL OR L _{dn} (dBA) ¹		
	50-55	55-60	60-65
Residential			
Single-family detached and duplexes	+	0	-
Multi-family and transient lodging	++	+	0
Mobile homes	+	-	-
Public			
Schools, libraries, hospitals, nursing homes	+	0	-
Churches, auditoriums, concert halls	+	0	0
Transportation, parking, cemeteries	++	++	++
Commercial and Industrial			
Offices, retail trade	++	+	0
Service commercial, wholesale trade, warehousing, light industrial	++	++	+
General manufacturing, utilities, extractive industry	++	++	++
Agricultural and Recreational			
Cropland	++	++	++
Livestock breeding	++	+	0
Parks, playgrounds, zoos	++	+	+
Golf courses, riding stables, water recreation	++	++	+
Outdoor spectator sports	++	+	+
Amphitheaters	+	0	-

Notes: ¹ See Figure 2 for the location of the noise contours.

² See explanation of land use acceptability symbols on following page.

LAND USE ACCEPTABILITY

INTERPRETATION/CONDITIONS

++ Clearly Acceptable

The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.

+ Normally Acceptable

Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.

o Marginal

Acceptable only by ALUC determination

The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. Uses that fall within this category must be reviewed on a case by case basis by the Commission. The Commission may determine the land use to be acceptable under conditions where outdoor activities are minimal and normal construction features provide sufficient noise attenuation (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged.

- Normally Unacceptable

Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses which have conventionally constructed structures and/or involve outdoor activities which would be disrupted by noise should generally be avoided.

-- Clearly Unacceptable

Unacceptable noise intrusion upon land use activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided unless strong overriding factors prevail and it should be prohibited if outdoor activities are involved.

TABLE 2
INTERIOR NOISE LEVEL CRITERIA

Maximum Acceptable Interior Noise Levels for Commonly
Occurring Individual Noise Events from Exterior Sources

GENERALIZED LAND USE	ACCEPTABLE NOISE LEVEL (dBA) ¹	BASIS FOR CRITERION
Residential: Single- and Multi-Family Dwellings		
1. Living Area		
a. Daytime	60	Conversation - 5 feet - normal voice
b. Nighttime	55	Conversation - 10 feet - normal voice
2. Sleeping Areas	50	Sleeping
Educational Facilities, etc.		
1. Concert Hall	25	Intrusion of noise may spoil artistic effect
2. Legitimate Theater	30	Intrusion of noise may spoil artistic effect
3. School Auditorium	35	Minimize intrusion into artistic performance
4. School Classroom	55	Speech communication - 20 feet - raised voice
5. School Laboratory	60	Speech communication - 50 feet - normal voice
6. Church Sanctuaries	45	Speech communication - 50 feet - raised voice
7. Library	55	Speech communication - 3 feet - normal voice
Recreational Facilities		
1. Motion Picture Theater	45	Minimize intrusion into artistic performance
2. Sports Arena	75	Conversation - 2 feet - raised voice
3. Bowling Alley	75	Conversation - 2 feet - raised voice
Commercial, Miscellaneous		
1. Hotel, Motel Sleeping	50	Sleeping
2. Hospital Sleeping	50	Sleeping
3. Executive Offices, Conference Rooms	55	Speech communication - 12 feet - normal voice
4. Staff Offices	60	Speech communication - 6 feet - normal voice
5. Sales, Secretarial	65	Satisfactory telephone use
6. Restaurants	65	Speech communication - 4 feet - normal voice
7. Markets, Retail Store	65	Speech communication - 4 feet - normal voice
Light Industrial		
1. Office Areas	2	2
2. Laboratory	60	Speech communication - 6 feet - normal voice
3. Machine Shop	75	Speech communication - 3 feet - raised voice
4. Assembly, Construction	75	Speech communication - 2 feet - raised voice
Heavy Industrial		
1. Office Areas	2	2
2. Machine Shop	75	Speech communication - 3 feet - raised voice
3. Assembly, Construction	75	Speech communication - 2 feet - raised voice

Source: Adapted from Table 2 in "Noise Insulation Problems in Buildings", Paul S. Veneklasen & Associates, January 1973.

Notes: ¹ These are maximum levels for individual events and are not measured in CNEL values.
² See Basis No. 3, 4 and 5 under Commercial, Miscellaneous Land Use.

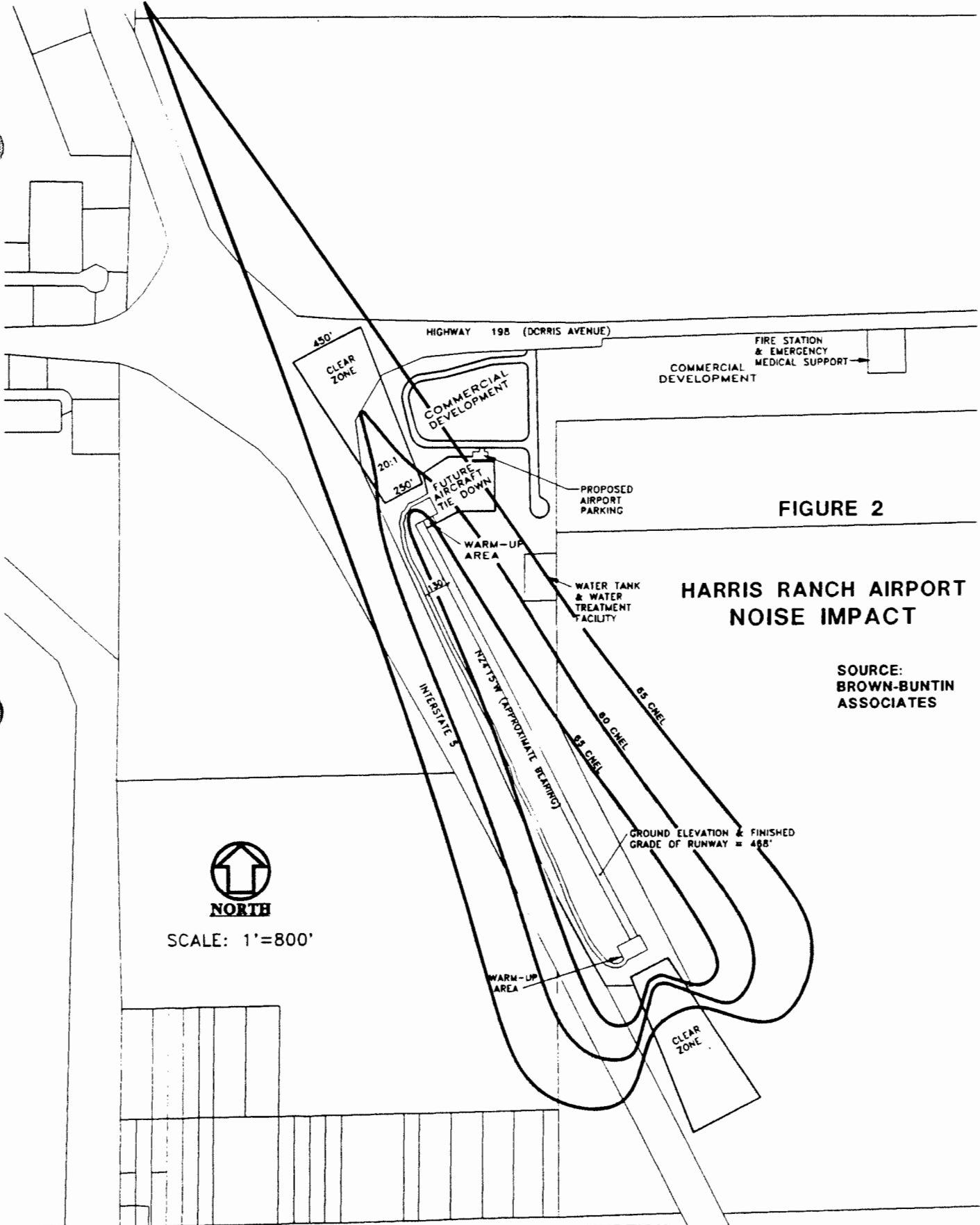


FIGURE 2

**HARRIS RANCH AIRPORT
NOISE IMPACT**

SOURCE:
BROWN-BUNTIN
ASSOCIATES



NORTH

SCALE: 1"=800'

* THESE NOISE CONTOURS REPRESENT AN ASSUMPTION THAT THE NUMBER OF OPERATIONS WILL DOUBLE, FROM 10,000 TO 20,000, OVER THE NEXT 20 YEARS (1995-2015)

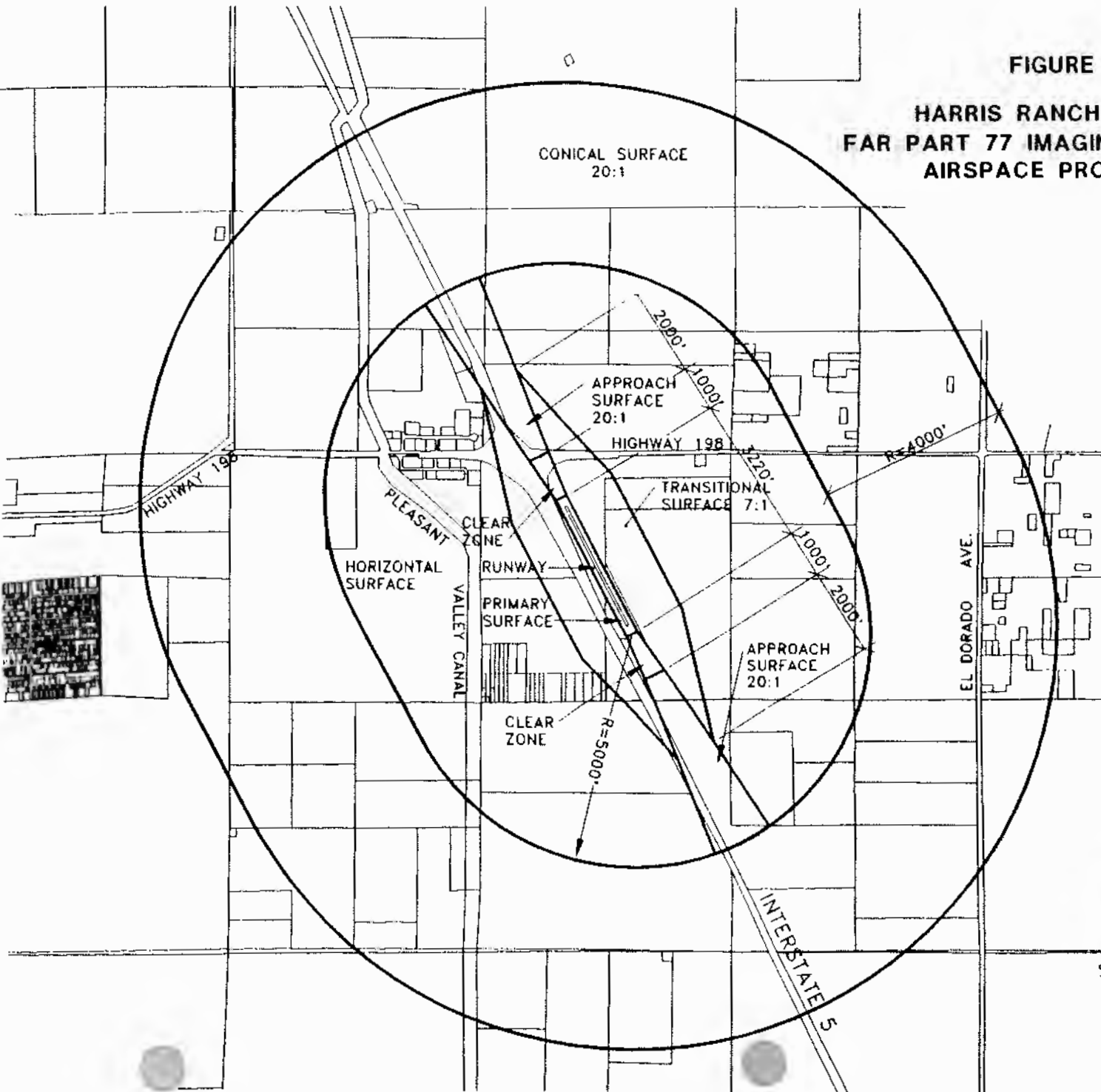
B. Airspace Protection

1. No structure, tree, or other object shall be permitted to exceed the height limits established in accordance with Part 77, Subpart C, of the Federal Aviation Regulations (FAR) (see Figure 3). This criterion applies unless, in the case of a proposed object or growing tree, one or more of the following apply:
 - a. The object would be substantially shielded by existing permanent structures or terrain in a manner such that it clearly would not affect the safety of air navigation;
 - b. The FAA has conducted an aeronautical study and either determined that the object would not result in a hazard to air navigation or has made recommendations for the object's proper marking and lighting as an obstruction;
 - c. The object is otherwise exempted from the requirements of FAR Part 77;

Or, in the case of an existing object, it exceeds the prescribed height limits at the time the Plan is adopted or amended, in which case marking and lighting may still be required.

2. No object shall be permitted to be erected which because of height or other factors would result in an increase in the minimum ceiling or visibility criteria for an existing or proposed instrument approach procedure.
3. An object which would be located within a horizontal or conical zone as defined in FAR Part 77, Subpart C, and would be 35 feet or less in height above the ground (i.e., is within the height limits prescribed by most zoning districts codified within Fresno County) shall be considered conditionally acceptable even if it exceeds the prescribed FAR Part 77 height limit due to its geographical location. Marking and lighting may be conditions for acceptability.
4. The FAR Part 77 surfaces depicted herein shall be used in conjunction with the above airspace policies to determine whether the height of an object is acceptable.

FIGURE 3
HARRIS RANCH AIRPORT
FAR PART 77 IMAGINARY SURFACE
AIRSPACE PROTECTION



C. Safety

1. Land uses or land use characteristics which may affect safe air navigation or which, because of their nature and proximity to an airport, may be incompatible with the airport shall be avoided in the vicinity of the Harris Ranch Airport.
2. The criteria which shall be used to evaluate whether a land use is acceptable with respect to its airport proximity are set forth in Table 3. The indicated safety zones shall be used in conjunction with Figure 4.
3. Land uses which attract concentrations of birds are a special concern in Fresno County because of the agricultural uses near many of the airports. In applying the Safety Compatibility Criteria to agricultural areas, attention should be given to whether a particular type of agricultural use commonly attracts birds.
4. Sanitary landfills can attract birds and generate airborne debris, posing a threat to aircraft operations which cannot be satisfactorily mitigated by conventional operating procedures. Landfills should therefore not be permitted in proximity to the Harris Ranch Airport.

TABLE 3

AIRPORT/LAND USE SAFETY
COMPATIBILITY CRITERIA

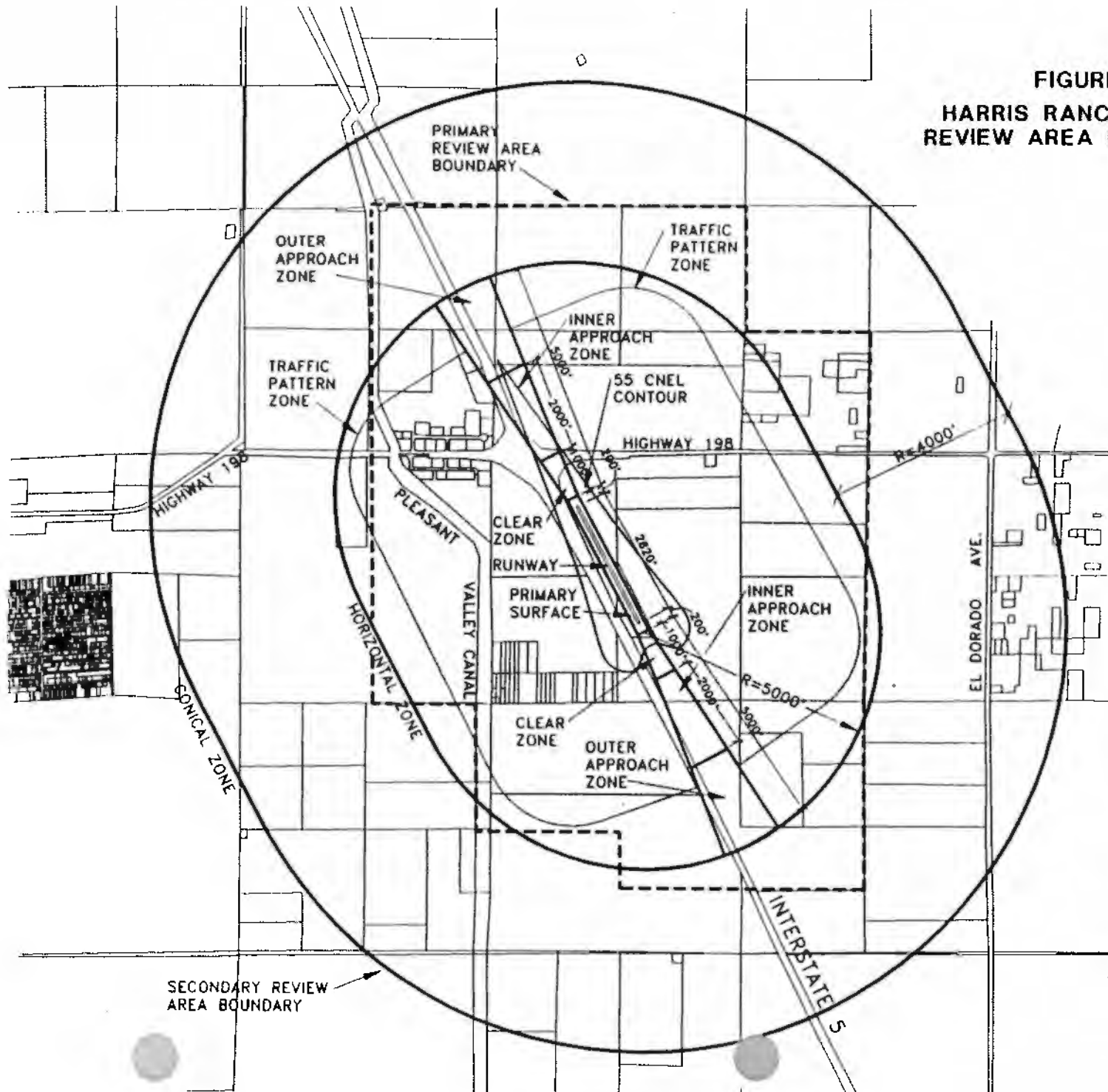
LAND USE CHARACTERISTICS	SAFETY ZONES ¹			
	Clear & Runway Zones	Inner Approach Zones ²	Outer Approach Zones & Traffic Pattern Zone	Horizontal & Conical Zones
Residential	-	(A,F)	(B,F)	+
Other Uses in Structures	-	(C,E,F)	(E,F)	+
Other Uses Not in Structures	(C,G)	(D)	+	+
Special Characteristics				
1. Distracting Light or Glare	-	-	-	(G)
2. Sources of Smoke	-	-	-	(G)
3. Electronic Interference	-	-	-	(G)
4. Attractor of Birds	-	-	-	+

Notes: ¹ See Figure 4 for the location of the zones.
² The inner approach zone extends to the point below where the approach surface intersects the horizontal surface.

INTERPRETATION

- + ACCEPTABLE: Use is acceptable with little or no risks
- () MARGINAL: Risk exist for land use proposals that fall within this category and must be reviewed on a case-by-case basis by the Commission. The Commission may determine the use to be acceptable under conditions cited below .
 - A Density no greater than 1 dwelling units per 3 acres.
 - B Density no greater than 4 dwelling units per acre.
 - C No uses attracting more than 10 persons per acre.
 - D No uses attracting more than 25 persons per acre.
 - E No schools, hospitals, nursing homes, or similar uses.
 - F At least 20% of area open (having a size and shape such that a small aircraft could conceivably make an emergency landing without damage to buildings or serious injury to aircraft occupants).
 - G Characteristic cannot reasonably be avoided or located outside the indicated safety zone.
- UNACCEPTABLE: Use is unacceptable due to associated high risks.

**FIGURE 4
HARRIS RANCH AIRPORT
REVIEW AREA BOUNDARIES**



SCALE: 1"=3000'

D. General Nuisance

1. Avigation Easement and Agreement

a. Except when overriding circumstances exist, a condition for approval of any residential subdivision or zoning change within the airport's Primary Review Area (see Figure 4) shall be the dedication of an avigation easement to the airport owner or the local jurisdiction in which the proposed subdivision is located (city, if area is incorporated; Fresno County, if area is unincorporated). The avigation easement shall contain the following property rights:

- 1) Right-of-flight at any altitude above acquired easement surfaces.
- 2) Right to cause noise, vibrations, fumes, dust, and fuel particle emissions.
- 3) Right-of-entry to remove, mark, or light any structures or growths above easement surfaces.
- 4) Right to prohibit creation of electrical interference, unusual light sources, and other hazards to aircraft flight.
- 5) Right to prevent erection or growth of all objects above acquired easement surfaces.

The easement surface acquired shall be based on Part 77 of the Federal Aviation Regulations except that no easement surface less than 35 feet above ground shall be acquired.

b. As a further condition for approval of a residential subdivision or zoning change within the airport's Primary Review Areas, the local jurisdiction shall, except where overriding circumstances exist (as determined by the Commission) require the property owners to agree to the following:

- 1) That it is understood by the owners and owners' successors in interest that the real property in question lies close to the Harris Ranch Airport and that the operation of the airport and the landing and take-off of aircraft may generate high noise levels.

- 2) That the owners shall not initiate or support any action in any court or before any governmental agency if the purpose of the action is to interfere with, restrict, or reduce the operation of the airport or the use of an airport by any aircraft.
- 3) That the owners shall not protest or object to the operation of the airport or the landing or take-off of aircraft before any court or agency of government.

c. The above easement, and agreement shall be recorded in the office of the Fresno Clerk/County Recorder and shall run with the land and shall be binding upon the present and subsequent owners of the property.

2. Buyer Notification

The Commission encourages local governments to establish a "buyer notification statement" as a requirement for the transfer of title of any property located within the airport's Primary Review Area. This statement should indicate that the buyer is aware of the proximity of the Harris Ranch Airport, the characteristics of the airport's current and projected activity, and the likelihood of aircraft overflights of the affected property.

E. Scope of Commission Review

- a. For the purposes of referral to the Airport Land Use Commission, a "proposed project" is defined as the adoption of and the amendment to general and specific plans, zoning ordinances, building regulations, and airport master plans. Projects shall be referred to the Commission prior to an action being taken by local advisory and governing bodies.

In the case of projects involving the adoption or amendment of an Airport Master Plan, or to the Conditional Use Permit or Site Plan Review for the airport facilities, the project shall be submitted to the Commission for review and comment at the earliest possible point in the application processing and before it is submitted to the Commission for a determination of consistency.

- b. Evaluation of projects shall primarily be based on the land use compatibility policies set forth above. Where an overlap occurs among noise, airspace protection, safety, and general nuisance zones, all policies applicable to the particular location shall be considered. In cases where the noise compatibility criteria indicate the project to be "marginal" and the safety compatibility criteria indicate a risk exists, the type of project should be discouraged.
- c. All proposed projects involving land lying within the geographic boundaries of the Primary Review Area for the Harris Ranch Airport shall be referred to the Fresno County Airport Land Use Commission for review and evaluation as to their consistency with this plan.
- d. Within the Secondary Review Area of the airport, only those projects involving a structure or other object the height of which would exceed that permitted under the adopted land use zoning need be referred to the Commission for review.
- e. The Review Area boundaries for the airport are as depicted in Figure 4.
- f. The Commission may, at its own discretion, request information and review any project occurring within an airport's Secondary Review Area for factors other than excessive height. Such projects, however, need not be routinely submitted to the Commission for review.
- g. A copy of any Notice of Construction or Alteration submitted to the Federal Aviation Administration in accordance with FAR Part 77, Subpart B, shall concurrently be submitted to the Airport Land Use Commission for review regardless of where in the County the object involved is proposed to be located.

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