LAKE TAHOE AIRPORT

COMPREHENSIVE LAND USE PLAN

Prepared for
Airport Land Use Commission
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Prepared by
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JULY 1990

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REFERENCES

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I. INTRODUCTION

A. BACKGROUND

This document establishes a specific planning boundary map and comprehensive land use plan that defines compatible types and patterns for any future development that might occur in the area surrounding the Lake Tahoe Airport. The policies and guidelines contained in the plan are intended to protect the safety and general welfare of the people in the vicinity of the airport and to assure the safety of air navigation. Specifically, the plan seeks to protect the public from any adverse effects of aircraft noise, to stabilize if not reduce the number of people exposed to potential airport-related hazards and to ensure that no structures affect navigable airspace.

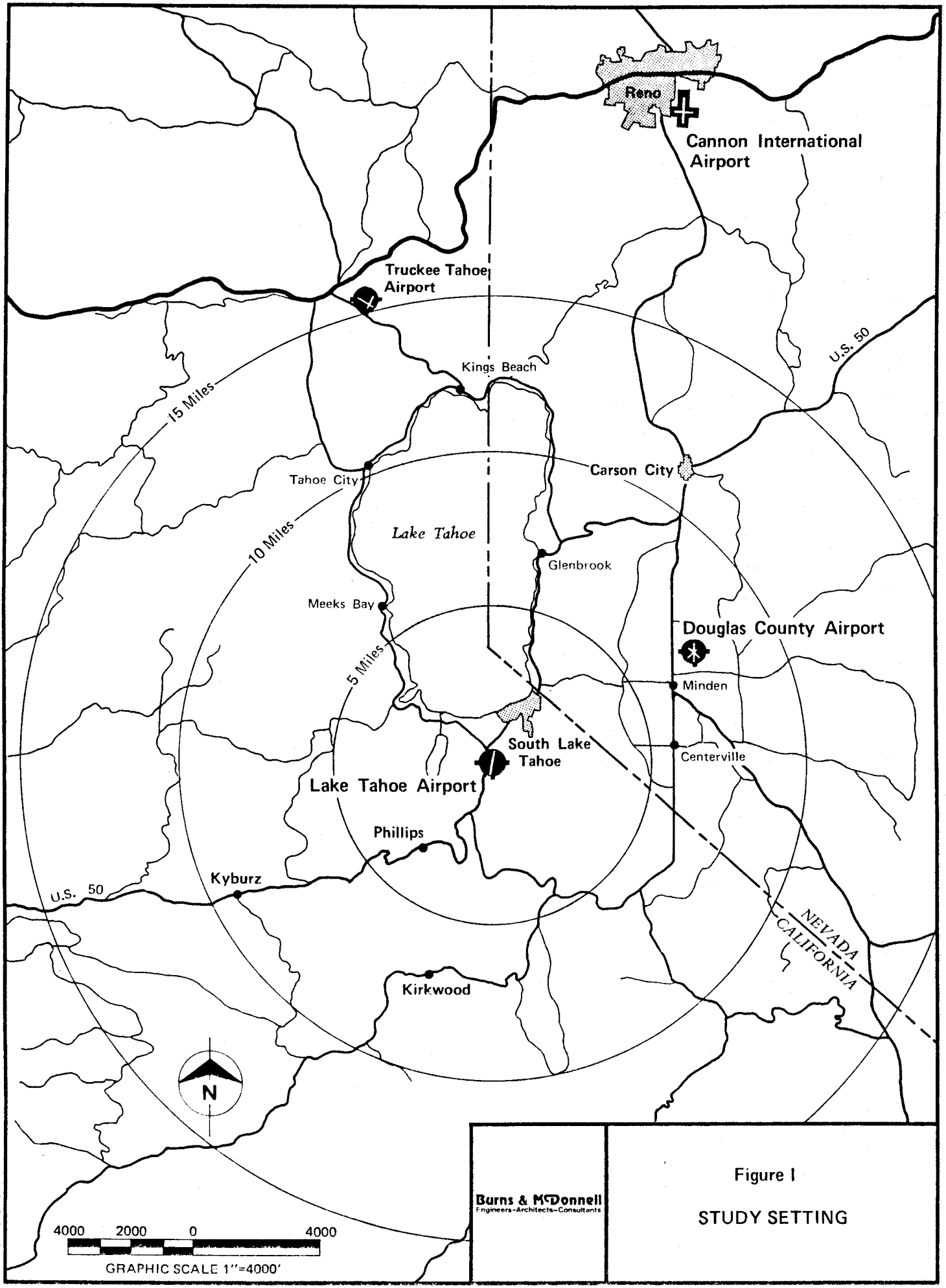
It should be understood that the purpose of this plan is to provide a basis for determining various land uses which are compatible with ALUC policies and is not necessarily a specific development plan or development goal.

The City of South Lake Tahoe Planning Commission has been designated the Airport Land Use Commission (ALUC) for the City of South Lake Tahoe under provisions of article 3.5 of the California Public Utilities Code (See Appendix 2). This Article of the code mandates the establishment of ALUCs and details their various duties. The ALUC is required to establish planning boundaries around each public use airport within its jurisdiction and to formulate a comprehensive land use plan (CLUP) to provide for the sensible growth of the airport and the airport environs.

This plan does not set forth specific land uses for any particular parcels of land, nor is it retroactive with respect to any existing inconsistent land uses.

The Lake Tahoe Airport is owned and operated by the City of South Lake Tahoe. The airport is recognized by the City of South Lake Tahoe and the Tahoe Regional Planning Agency as a primary element in the transportation system and the economy of El Dorado County and the Lake Tahoe Basin. Its regional significance extends to Placer, Amador, Alpine, Douglas (NV) and Carson (NV) counties. Since it is situated in the City and adjoining land may be suited for urban development, continuing residential development within existing subdivisions which could conflict with Airport use are inevitable. The need to assure compatible use in any adjoining development resulted in the drafting of an ANCLUC study in 1981 by El Dorado County, then owner and operator of the Lake Tahoe Airport. That study was prepared by the consulting firm of Burns and McDonnell.

Recognizing that the unadopted study needed updating and that land use issues in the environs still were unsettled, the City of South Lake Tahoe decided to prepare the CLUP. Their intent was to reach agreement on uniform policies for development in the planning area.

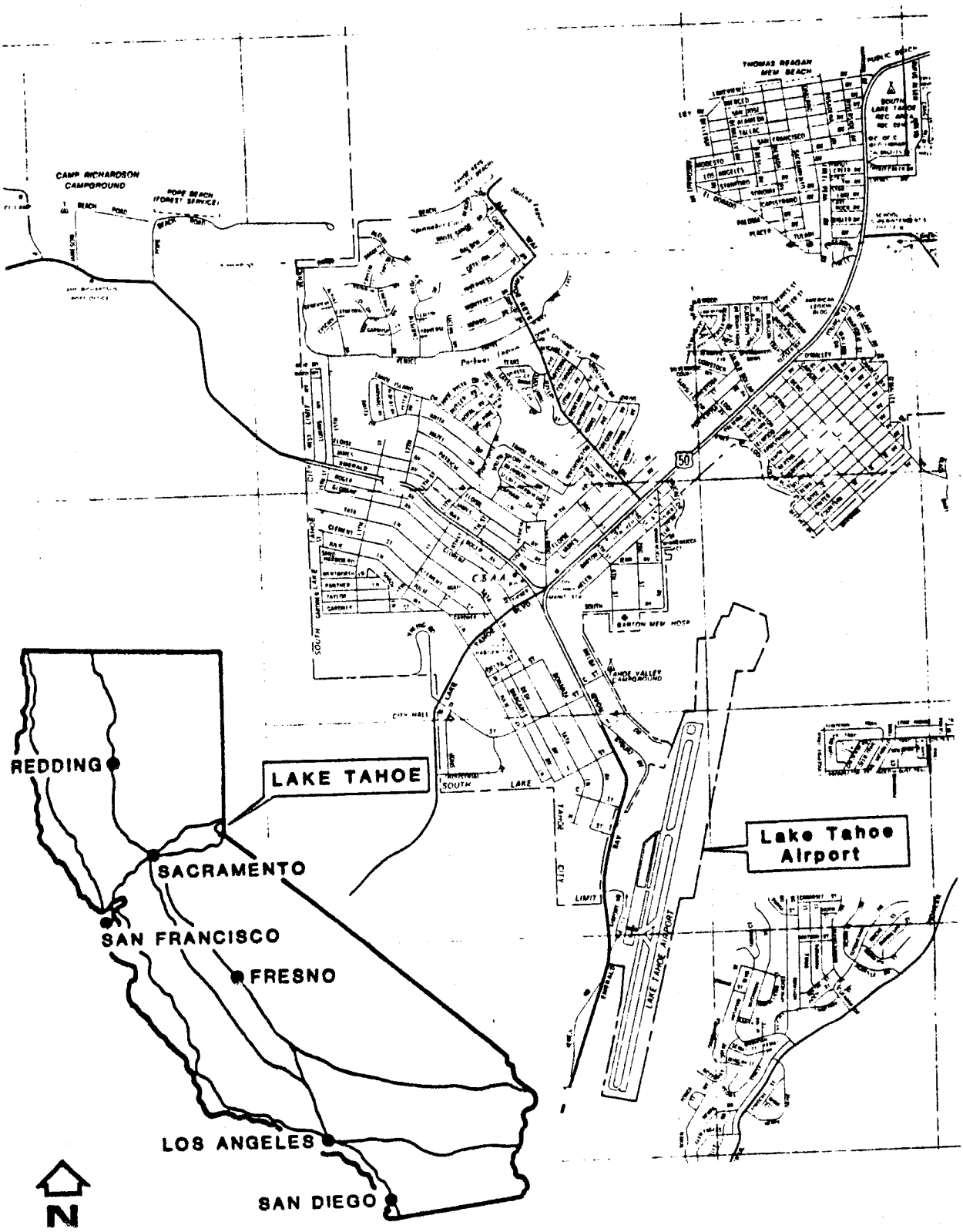


Burns & McDonnell
Engineers–Architects–Consultants

Figure 1

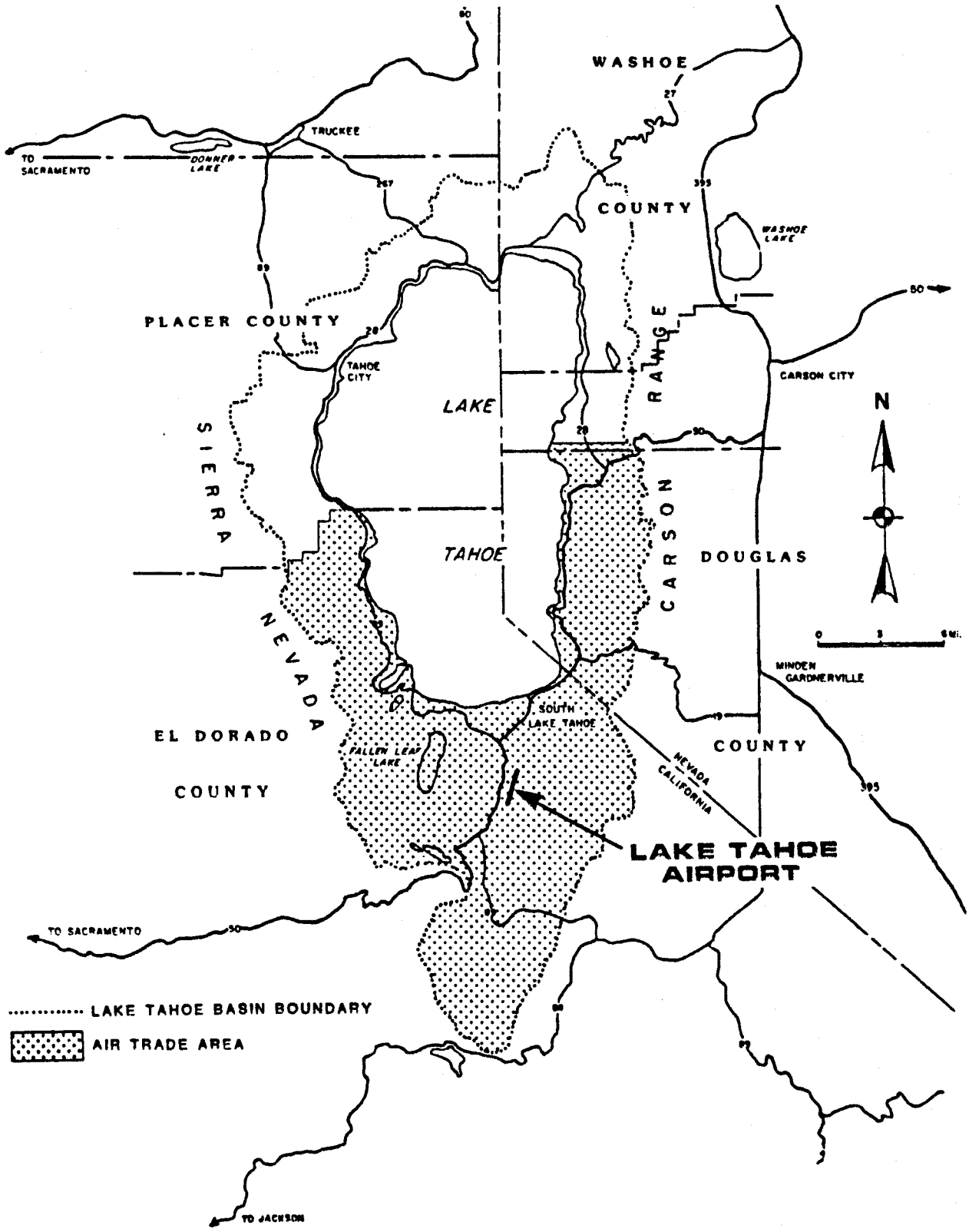
STUDY SETTING

TAHO 79-045-4



PROJECT LOCATION

Figure 2



LAKE TAHOE AIRPORT

AIR TRADE AREA

Figure 3

B. SUMMARY

The Lake Tahoe Basin is located in the Sierra Nevada and Carson Mountain Ranges, straddling the California-Nevada border, and is approximately 55 miles southwest of Reno, Nevada, and 100 miles east of Sacramento, California. The topography of the Basin is generally steep with only one-seventh of the land having slopes of less than 10 percent.

The economy of Lake Tahoe is heavily dependent on the resort-tourism industry and is consequently subject to extreme seasonal and annual variations. Only 17 percent of the land area of the Tahoe basin is privately owned. The lack of suitable land resources and regional transportation facilities have been significant inhibiting factors for economic development within the basin. In consideration of these factors, there are three objectives of this CLUP:

1) To achieve compliance with the requirements established in the California Public Utilities Code for airport land use planning.
2) To provide a means of coordinating joint planning studies for the designation of appropriate land uses in the Airport area.
3) To maintain and protect current commercial zoning in the Airport area for the benefit and welfare of the basin.

The Airport is a recent addition to the Basin. Airport construction started in 1958. Air carrier service is provided by national carriers such as American Airlines. General aviation activity is a vital component of the total aviation picture at the Airport.

The impact of aircraft noise on the basin can and should play a role in decisions made regarding the development of the Airport and its surrounding area. The fragile environment of the Basin mandates this. This study provides the guidance necessary for developing a reasonable framework for making these decisions.

Following this introductory section, Section II describes existing and planned airport facilities, existing airport activity and off-airport land use patterns. Section III discusses land compatibility issues and addresses three critical land use planning concerns:

1) Compatibility of surrounding land uses with respect to airport noise levels;
2) Compatibility of surrounding land uses in terms of exposure of persons on the ground to crash hazards associated with aircraft; and
3) The need for appropriate height restrictions to protect the airspace used by aircraft.

Within this section, planning boundaries are defined for noise, safety and height areas. Airport noise compatibility guidelines, land use compatibility guidelines, and height restrictions are also presented. The Plan is a positive step taken to realize the full potential of the Plan area in the Lake Tahoe Basin. Paramount concerns were to protect the Airport, to ameliorate serious circulation problems and to protect public health and safety.

While this Plan sets forth many proposals for implementation, it does not establish new regulations or legislation nor does it rezone property. The preparation or amendment of any city,county or regional ordinances such as zoning, subdivision, housing, building, or other development control must be enacted separately through the regular legislative process. In the absence of such regulations or when already adopted regulations clearly conflict with the Plan, the Plan shall act as a guide for the development of public and private projects and the making of findings of consistency until such time as new regulations are adopted to implement the Plan. Regulations contained in this Plan do not apply outside of the plan area.

C. OBJECTIVES

The major objectives of the Plan are:

1. Safeguard the Airport from intrusion by uses that limit the expansion of air service to Lake Tahoe and the surrounding region by recognizing the vital service provided by the Airport and the need to maintain a level of operations necessary to satisfy existing and future aviation requirements of the user communities.

2. Prevent development that will lead to safety problems for air travelers and persons residing or working in the airport environs.

3. Permit persons who live, work, and own property near the airport to enjoy a maximum amount of freedom from excessive noise and other impacts generated by the operation of the airport.

4. Comply with airport noise standards mandated by the State of California and ensure a development pattern that is compatible with airport-generated noise.

5. Protect the public investment in the airport, a facility for which there is no feasible replacement.

6. Recognize the airport's role as a major entry point for the City of South Lake Tahoe and the surrounding counties, and protect and enhance both the environment and the appearance of the Airport area.

7. Provide sufficient development opportunities for airport-related uses, including those which offer goods and services to air travelers and those which benefit from the proximity to the passenger and air cargo service provided by the airport.

8. Comply with the operational and safety requirements of the Federal Aviation Regulations (FARs).

II. THE AIRPORT

A. DESCRIPTION OF EXISTING FACILITIES AND AIRPORT ACTIVITY

The Lake Tahoe Airport is located approximately two miles south of the intersection of Highway 50 and Highway 89 in the City of South Lake Tahoe at an elevation of 6,264 feet. The airport is a commercial air carrier/general aviation airport owned and operated by the City of South Lake Tahoe.

The airport has a single north-south asphalt runway (runway 18-36) which is 8,544 feet long by 150 feet wide. The runway has a rated weight bearing capacity of 210,000 pounds for aircraft with a dual/tandem wheel landing gear.

Landing aids at the airport consist a rotating beacon, medium intensity runway lighting (MIRL), and a Localizer/DME. A precision approach path indicator (PAPI) and medium intensity approach lights with sequenced flashers (MALSF) are installed on Runway 18. The displaced threshold for runway 36 is denoted by runway end identifier lights.

The FAA operated Air Traffic Control Tower is open from 8 a.m to 8 p.m. local time daily; frequency is 118.4 MHz. The fixed base operator maintains a Unicom station available on 122.95 MHz.

Other airport facilities include a commercial passenger terminal, open tie-down spaces, transient spaces, T-hangars, a commercial hangar, and a fixed base operator pilot lounge. As of June 1, 1990, there were 54 based aircraft. 38,779 annual operations were counted by the FAA Tower in 1989, but has had as high as 63,868 as reported by the FAA for 1979.

B. FUTURE AIRPORT DEVELOPMENT

Airport facility development recommendations and future airport activity predictions are contained in the Airport Master Plan for Lake Tahoe Airport, currently being drafted by Quad Consultants of Sacramento, California. Adoption is anticipated by late 1990. Ultimate future airport facilities and service levels will be addressed in the Master Plan.

C. OFF-AIRPORT LAND USE

The City of South Lake Tahoe city limits abut the airport property to the north, northwest and west. To the north of the airport, the area is predominantly zoned R-1, single-family residential. Immediately north and adjacent to the airport is the Upper Truckee River and stream environment zone (SEZ) meadowlands which are restricted from development.

North of the airport there are some commercial areas and a few small pockets of multiple-family designated land, all located along the Highway 50 corridor.

Immediately southwest of the runway exists a horse ranch and golf course, both zoned recreational. Beyond the golf course there are several large subdivisions and a small commercial area along Highway 50.

The SEZ area north and the areas located to the east, south and southeast are within El Dorado County. The county has designated the areas located immediately south and east of the airport as single-family residential. Further south are rural residential land uses at densities ranging from one unit per ..... acres to one unit per ..... acres.

Although with certain restrictions, the Tahoe Regional Planning Agency anticipates a probability of an additional 6,000 homes in the Lake Tahoe Basin over the next 20 years. These homes are not to be in new subdivisions, but located through infilling of existing housing areas, many within the areas surrounding the Airport.

See Figure 4 for current zoning.

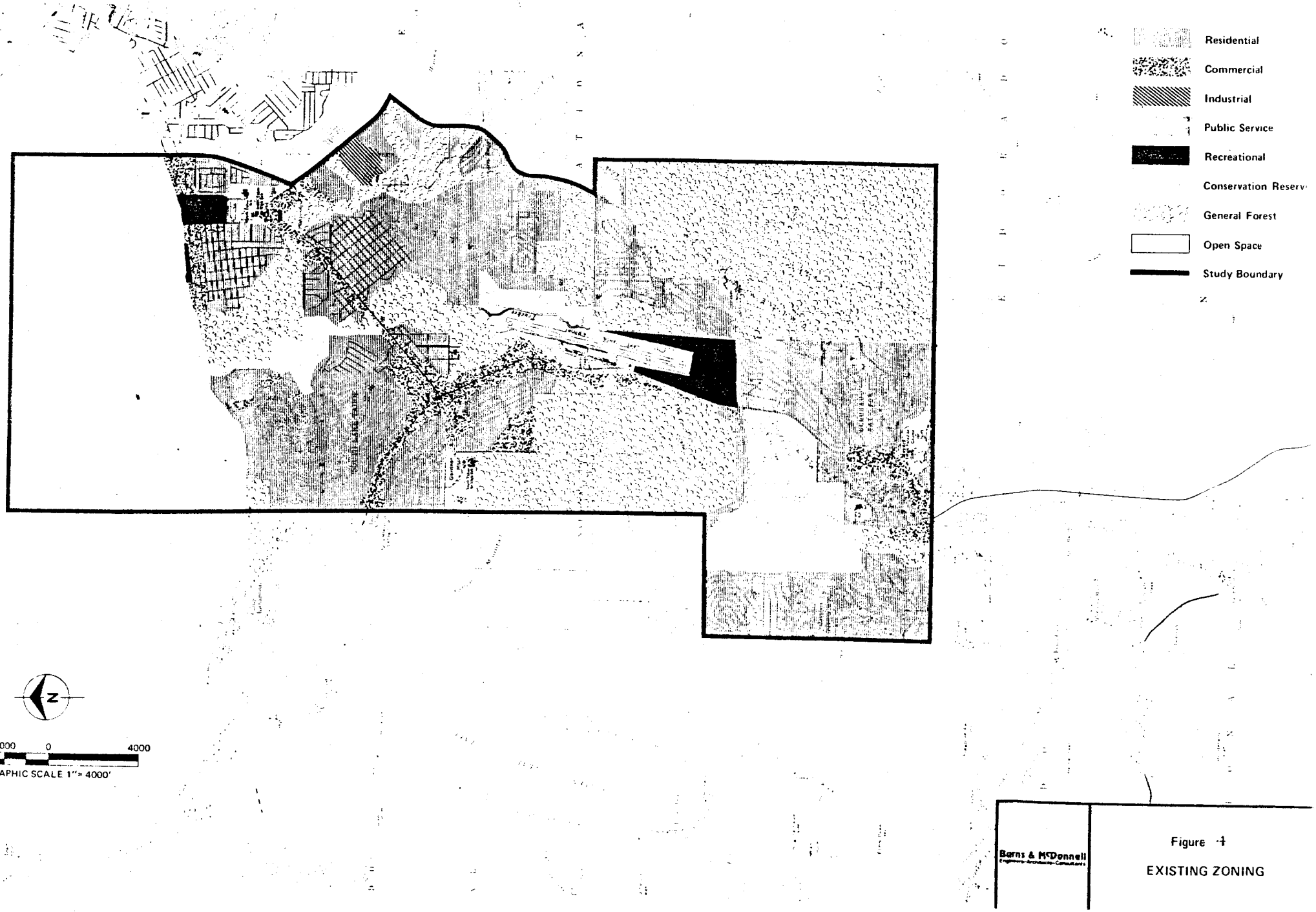


Figure 4

EXISTING ZONING

III. FINDINGS, POLICIES AND IMPLEMENTATION

The concerns of airport land use planning fall into three categories:

1) Height Restrictions - protecting the navigable airspace around airports for aircraft safety;
2) Noise Compatibility - minimizing the degree to which noise from aircraft affects the communities around airports; and
3) Safety of Persons on the Ground - minimizing the danger to the population around airports from aircraft accidents.

Thoughtful planning in these three areas, reflected in land use policies and regulations, will minimize the exposure of the public to noise and safety hazards, provide safer aircraft operations, and help protect airports and the public resource they represent from encroachment by incompatible land development.

At the Lake Tahoe Airport, the airport area of influence is made up of the boundaries of the three areas of major concern: height, noise and safety.

A. AIRPORT HEIGHT RESTRICTION AREA

Height restrictions are necessary to insure that objects will not impair flight safety or decrease the operational capability of the airport. Federal Aviation Regulations (FAR) Part 77, Objects Affecting Navigable Airspace, defines a series of imaginary surfaces surrounding all public use airports. In the Tahoe basin, some natural terrain features penetrate the FAA defined surfaces. Any proposed object or structure which would penetrate any of these imaginary surfaces as they apply to the Lake Tahoe Airport is considered by the Federal Aviation Administration (FAA) to be an obstruction to air navigation. While an obstruction to air navigation may not necessarily be a hazard to air navigation, the FAA presumes it to be and treats it as such until an FAA aeronautical study has determined that it does not have a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft.

While the FAA requires a project sponsor to provide notice to them if a proposed project could exceed any of the imaginary surfaces, they cannot prohibit the construction of any structure determined to be a hazard. State law goes further, however, and prohibits the construction of any structure that would penetrate an imaginary surface, unless the State Division of Aeronautics has first issued a permit allowing its construction.

The imaginary surfaces which the FAA uses to determine whether or not a structure or an object would be an obstruction to air navigation include the primary surface, approach surface, horizontal surface, conical surface and transitional surfaces. These imaginary surfaces are described in section 2.b. below and illustrated in Figure 5.

1. Objective: To assure the safe passage of aircraft in, out and around the Lake Tahoe Airport by safeguarding and preserving navigable airspace.

2. Findings:

   a. FAR Part 77.13 requires each person proposing any kind of construction or alteration to give notice to the FAA on form 7460-1 (Notice of Proposed Construction or Altermation) if such construction or alteration:

      i. Is more than 200 feet in height above the ground level at its site, or

      ii. Is of a greater height than an imaginary surface extending outward and upward at a slope of 100 to 1 for a horizontal distance of 20,000 feet from all edges of the runway surface.

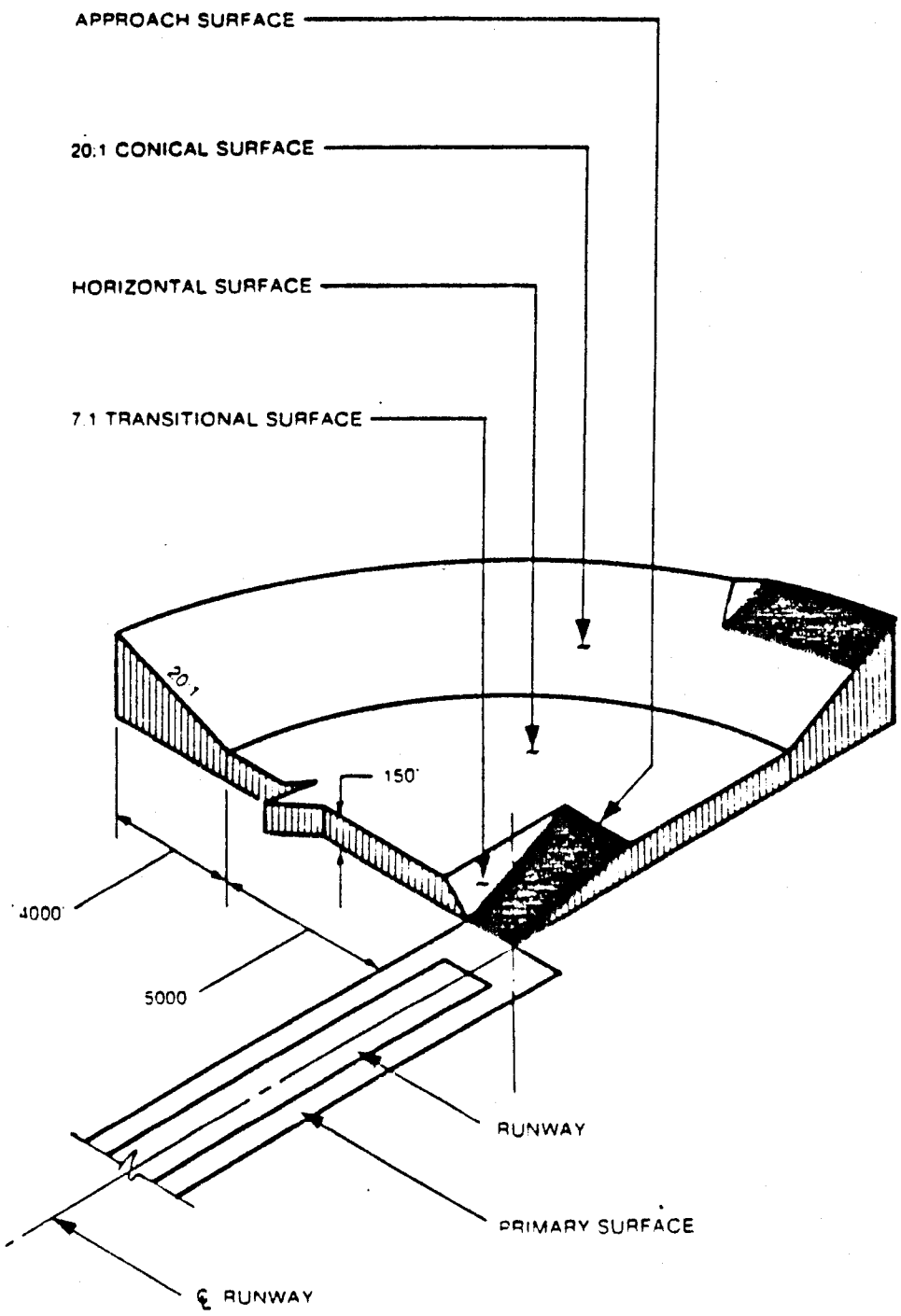
   b. Following receipt of a Notice of Construction or Alteration, the FAA determines whether or not the proposed structure is a hazard to air navigation. For the Lake Tahoe Airport, the standards used by the FAA to determine whether or not a proposed structure would be a hazard to air navigation include the following airport imaginary surfaces defined in FAR Part 77.25 and illustrated in Figure 5:

      i. Primary Surface: A surface logitudinally centered along the runway, extending 200 feet beyond each end of the paved runway and having a total width of 500 feet.

      ii. Horizontal Surface: A horizontal plane 150 feet above the established airport elevation (the highest point of usable landing area measured in feet above mean sea level), the perimeter of which is constructed by swinging arcs 5,000 feet out from the center of each end of the primary surface and connecting the adjacent arcs with lines tangent to these arcs.

      iii. Conical Surface: A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.

      iv. Approach Surface: A surface longitudinally centered on the extended runway centerline, extending outward and upward from each end of the primary surface. An approach surface is applied to each end of the runway based upon the type of approach available or planned for that runway end. The approach surface for runway 18 has a slope of 34:1, for runway 36 it is 20:1; both have a length of 5,000 feet. The approach surface for runway 18 has an outer width of 1,500 feet while the approach surface for runway 36 has an outer width of 3,500 feet.



PART 77 CIVIL AIRPORT IMAGINARY SURFACES

Isometric View

FIGURE 5

v. Transitional Surface: A surface extending outward and upward at right angles to the runway centerline plus runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces.

Note: Where imaginary surfaces overlap, such as is the case where the approach surface penetrates and continues upward and outward from the horizontal surface, the lowest surface is used to determine whether or not an object would be an obstruction to air navigation.

c. State law (California Public Utilities Code Section 21659) prohibits the construction of any proposed structure that would penetrate any of the imaginary surfaces defined above, unless:

i. The FAA has determined that the proposed structure does not constitute a hazard to air navigation, or

ii. The State Division of Aeronautics has issued a permit allowing construction of the proposed structure.

3. Policy:

Caution: Land use compatibility is determined by comparing proposed land use against height, noise, and safety guidelines. Proposed land uses must be compatible with each.

a. Any proposed structure that would penetrate any of the imaginary surfaces for the Lake Tahoe Airport, as defined in FAR Part 77.25, is deemed to be an incompatible land use, unless either the FAA has determined that the proposed structure does not constitute a hazard to air navigation or the State Division of Aeronautics has issued a permit allowing contruction of the proposed structure.

4. Implementation of Airport Heights Restriction Policy:

a. The Lake Tahoe Airport Land Use Commission or the County Land Use Commission, as appropriate, should be notified by the proponent and/or the responsible local jurisdiction of any development proposal that could result in the erection of objects which could penetrate the airport height restrictions contained in this plan. The proponent should also give notice of possible obstructions to navigable airspace to the FAA as required by FAR Part 77.

Before a proposed project that would penetrate the FAR Part 77.25 imaginary surfaces can be approved by the City and/or County, the City and/or County must take action to override the ALUC determination of

incompatibility. The action to override, including the required findings, is governed by the Airport Land Use Commission Law, Article 3.5 of the California Public Utilities Code.

b. A detailed mapping of the area boundaries should be performed by the City of South Lake Tahoe and the El Dorado County planning departments which specifically delineates those parcels impacted by restrictions.

B. AIRPORT NOISE RESTRICTION AREA

Complaints of general annoyance caused by aircraft noise are the most common concern associated with land use around airports. The annoyance is usually related to interference with personal activities such as sleeping, conversing, relaxing or watching TV. While individual responses to noise are quite varied, methods have been developed to correlate noise level with community reaction.

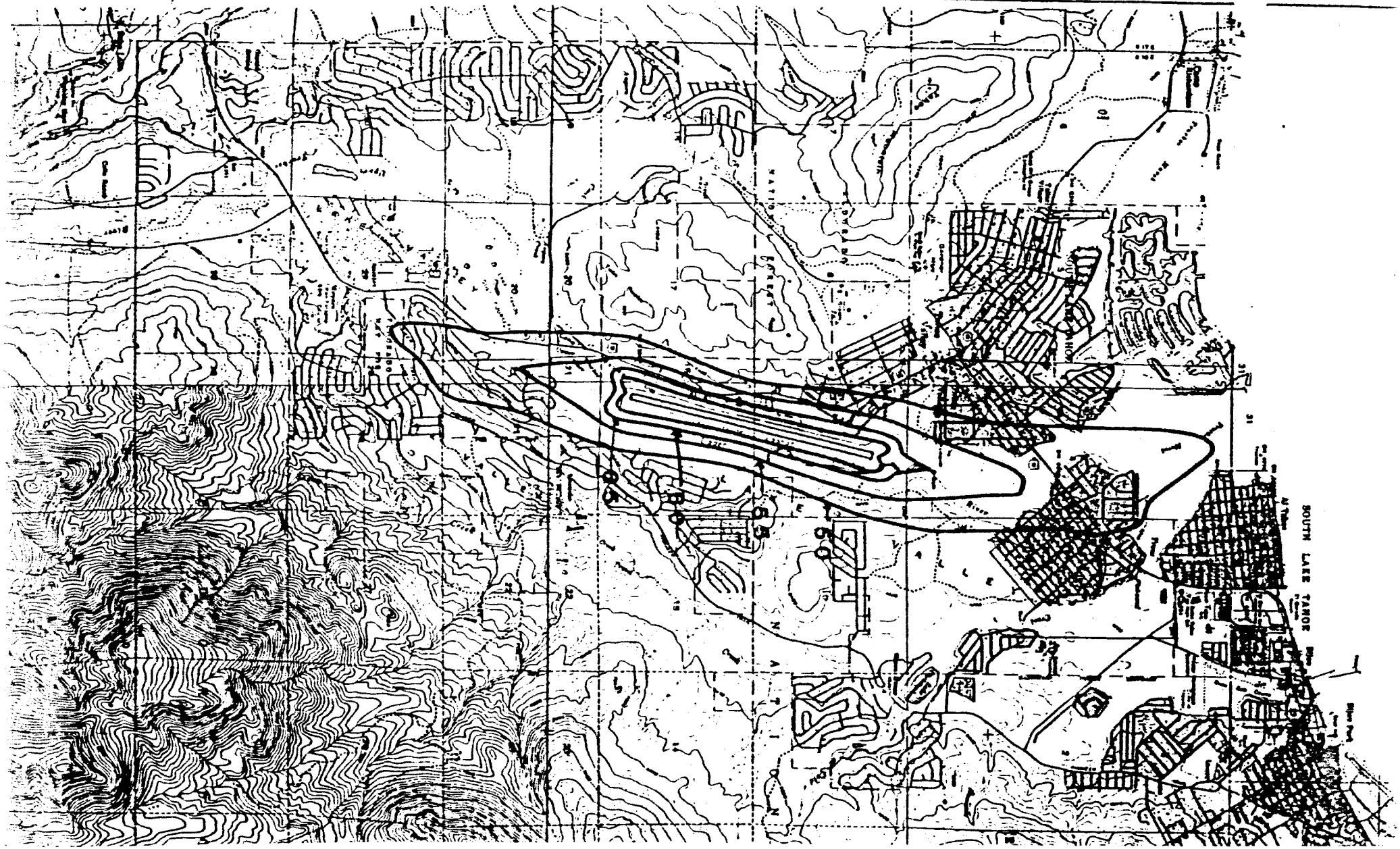
The boundary for an airport noise area is determined by noise contours developed according to noise standards for California airports as defined by California Administrative Code, Title 21, Sections 5000 et. seq. This standard uses the Community Noise Equivalent Level (CNEL) method to determine noise level boundaries. These state regulations establish as a general standard that single-family and multi-family dwellings, mobile homes and schools of standard construction are incompatible with noise levels above 65 CNEL. In addition, California Noise Insulation Standards (California Administrative Code, Title 25, Section 28) require acoustical analysis of residential structures, other than detached single-family dwellings, within a 60 CNEL noise contour. The Tahoe Regional Planning Agency further reduces the allowed annual noise to 55 dB.

The most recent noise contours for Lake Tahoe Airport were prepared as a part of the Master Plan Scenario Analysis, Figure 6. 1980, 1984, and estimated 1990 contours are presented as Figures 7, 8 and 9 from the unadopted 1984 Master Plan Study.

The worst case or most extensive noise contours were those based upon projected year 2000 levels of air traffic at the airport and were prepared in the unadopted 1979 ANCLUC Study. See Figure 10. Areas determined to be noise sensitive in the study are outlined in Figure 11. As new noise contours are developed, they will be included in this plan.

1. Objective:

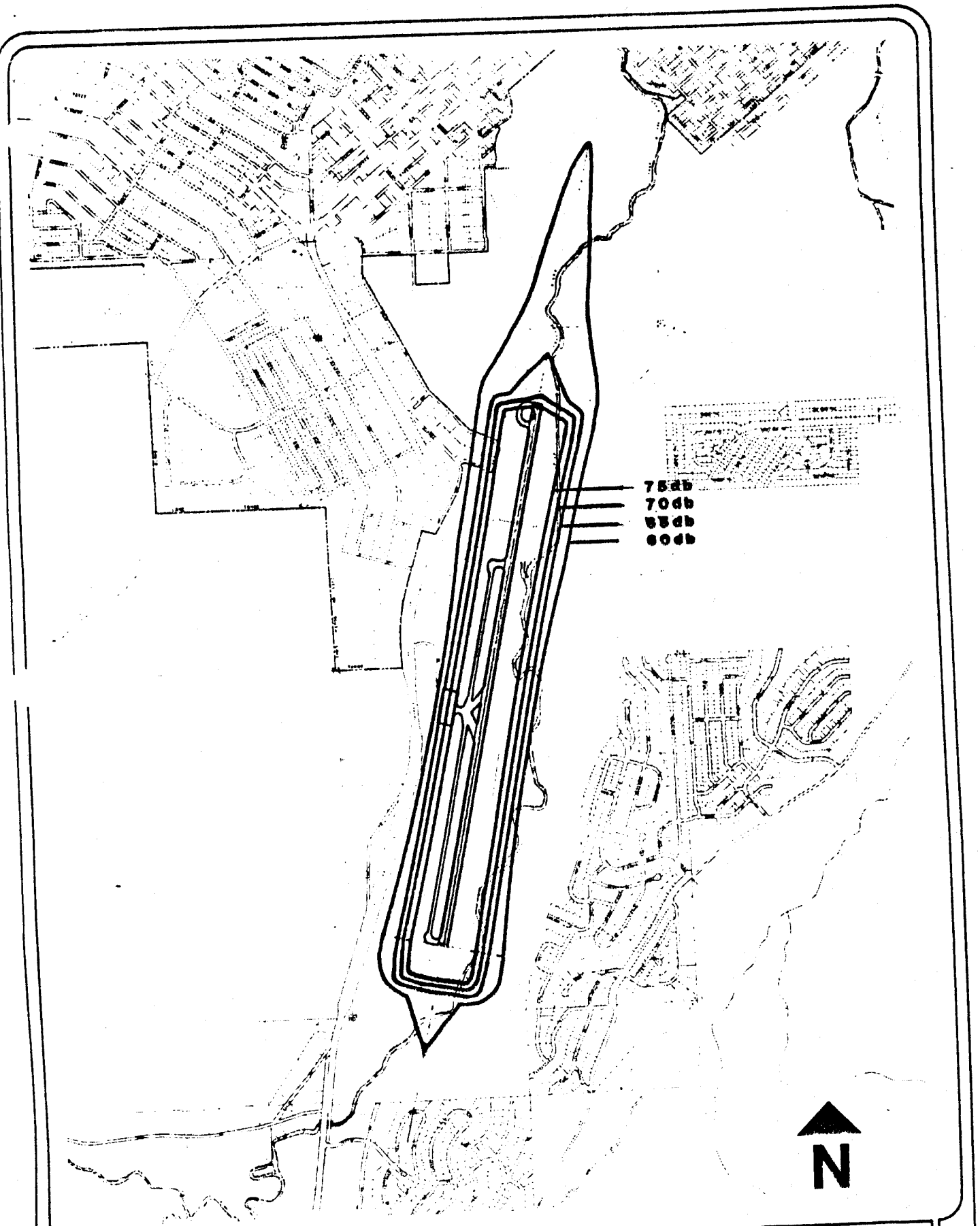
To promote the overall goals and objectives of the California Airport Noise Standards (California Administrative Code, Title 21, Section 5000 et. seq.) and the California Noise Insulation Standards (California Admin. Code, Title 25, Section 28), to prevent the creation of new noise problems around the Airport, and to minimize the public's exposure to excessive aircraft generated noise.



Lake Tahoe Airport

LAKE TAHOE AIRPORT 1987 NOISE CONTOURS - SCENARIO ANALYSIS

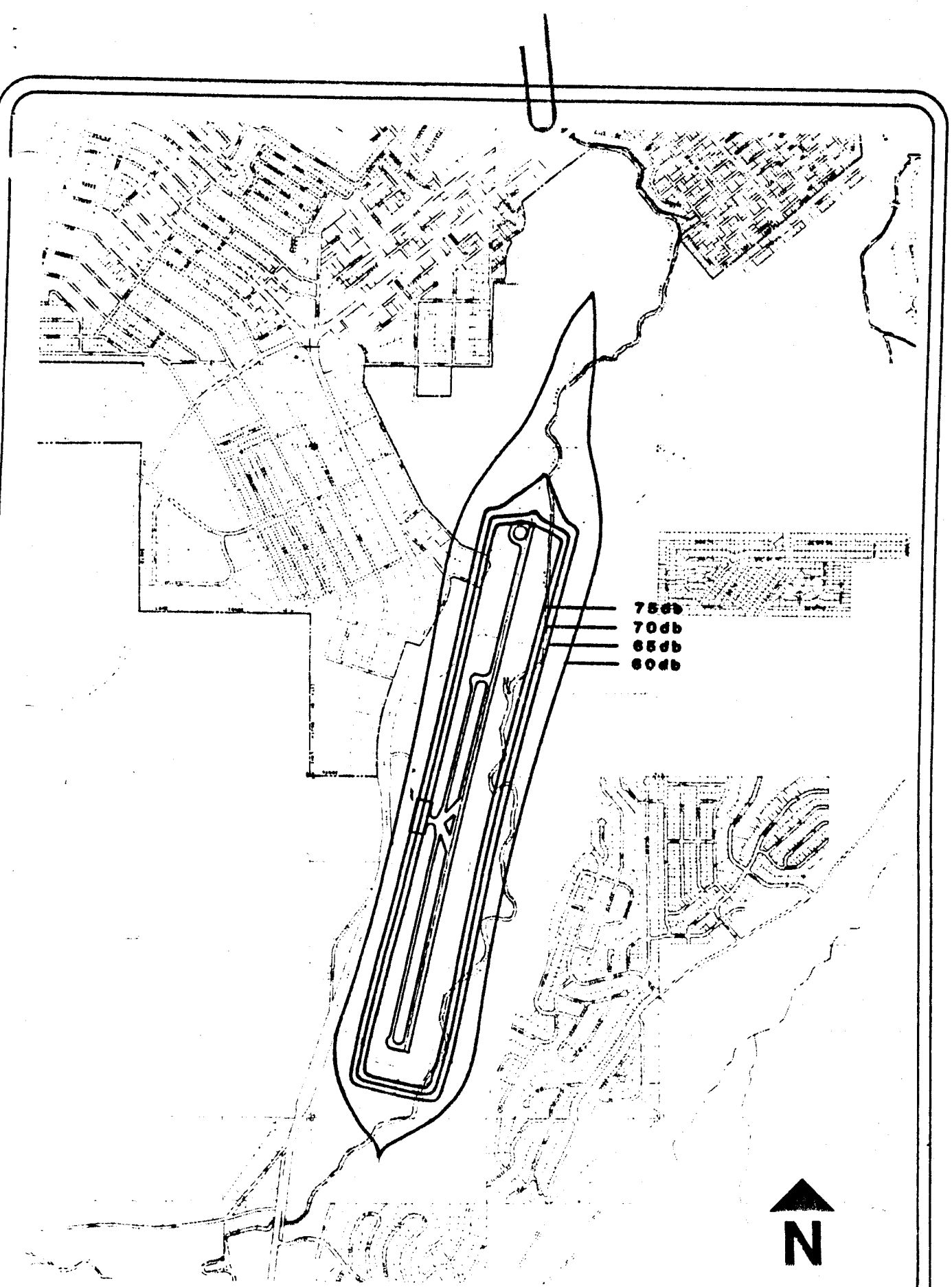
FIGURE 6



QUAD PROJECT TEAM

LAKE TAHOE AIRPORT
1980 CNEL CONTOURS

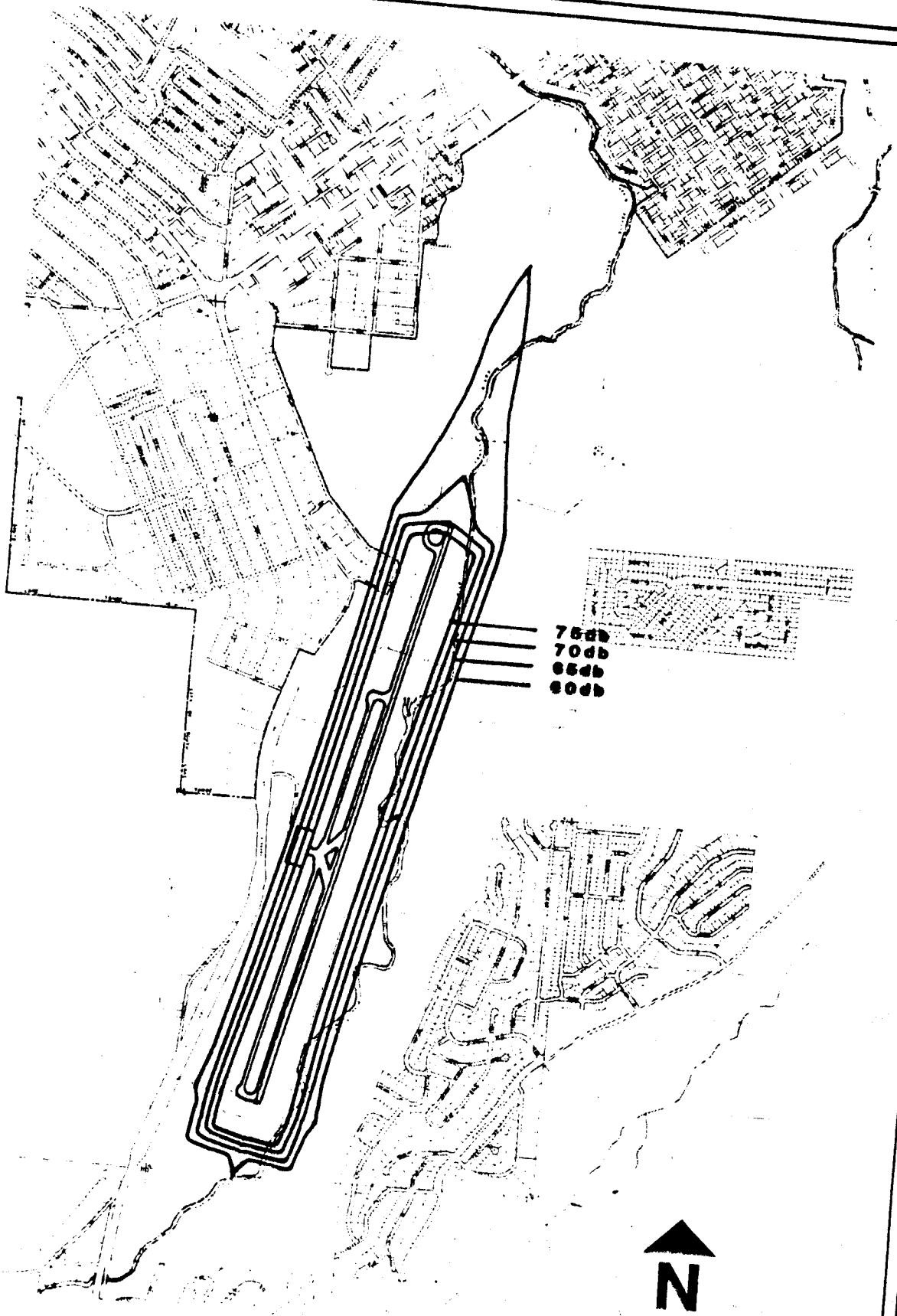
FIGURE 7



QUAD PROJECT TEAM

LAKE TAHOE AIRPORT
1984 CNEL CONTOURS

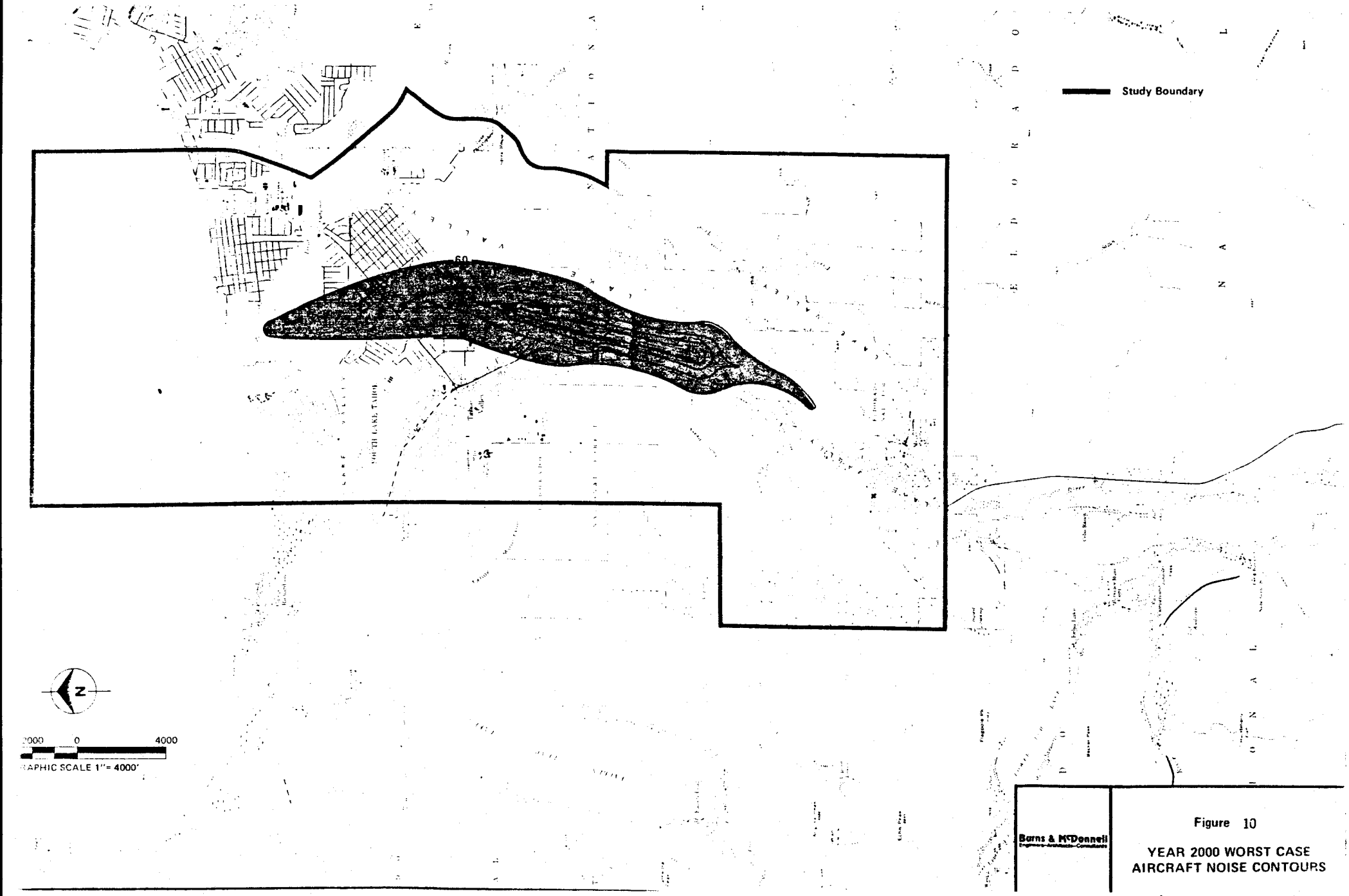
FIGURE 8



QUAD PROJECT TEAM

LAKE TAHOE AIRPORT
1990 CNEL CONTOURS

FIGURE 9



Barns & McDonnell

Figure 10

YEAR 2000 WORST CASE
AIRCRAFT NOISE CONTOURS

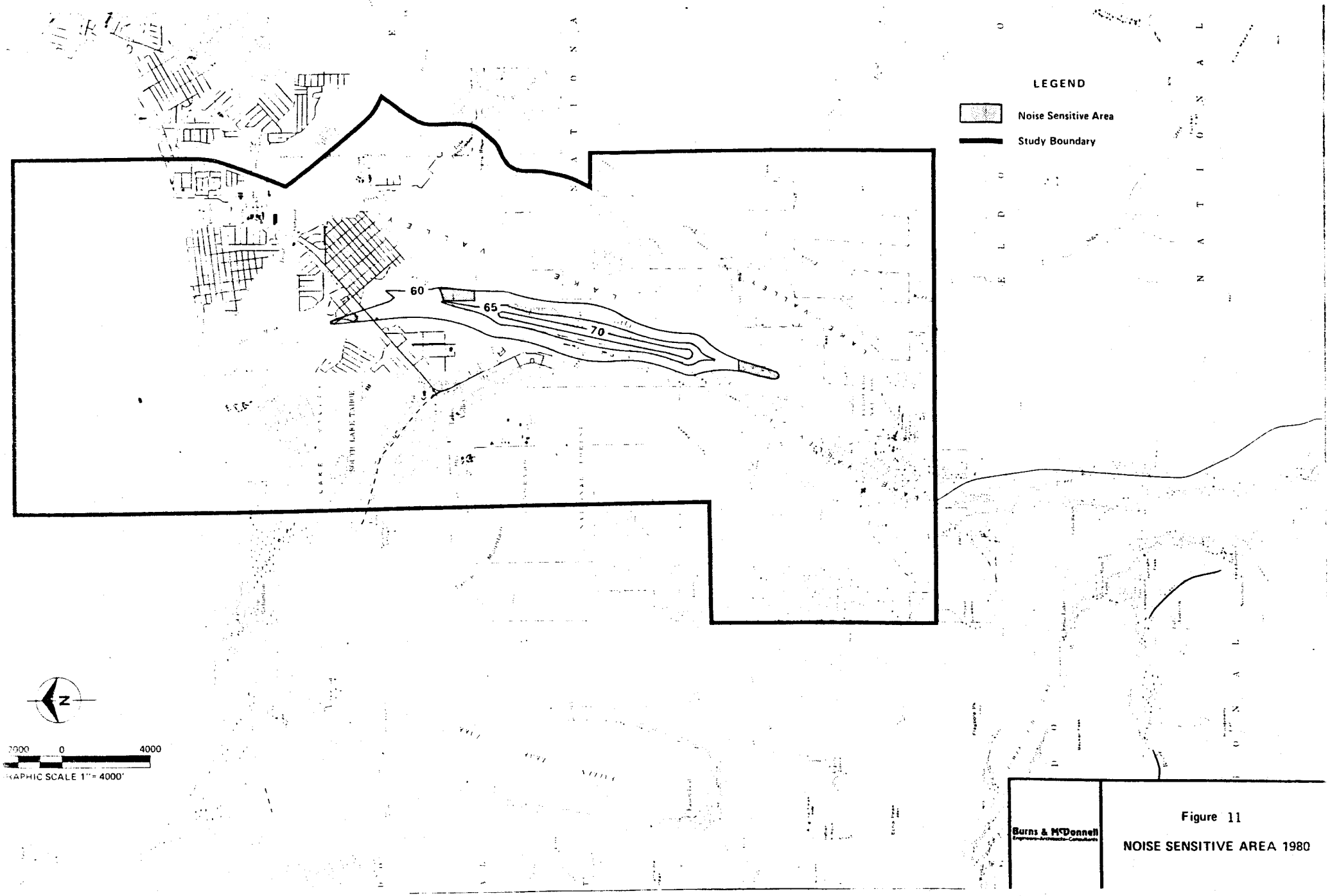


Figure 11

NOISE SENSITIVE AREA 1980

2. Findings:

   a. The impact of aircraft generated noise can be influenced in several ways:

      i. Noise emitted can be reduced at the source by technological advancements and revisions to the aircraft.

      ii. Aircraft operational procedures can be implemented to reduce or select the ground area impacted by the noise emitted.

      iii. Special acoustical treatment of structures can reduce interior noise levels.

   b. The California Division of Aeronautics has established the Community Noise Equivalent (CNEL) noise rating method for use in measuring noise around airports.

   c. The California Airport Noise Standards establish 65 CNEL as a guideline for the maximum amount of airport noise in residential communities.

   d. The California Noise Insulation Standards require an acoustical analysis of proposed residential structures, other than detached single-family dwellings, located within a 60 CNEL noise contour.

3. Policy:

Caution: Land use compatibility is determined by comparing proposed land use against height, noise, and safety guidelines. Proposed land uses must be compatible with each.

   a. The CNEL method of rating noise impact is adopted for general guidance by the ALUC.

   b. The creation of new residential parcels in the Lake Tahoe basin is prohibited by the Tahoe Regional Planning Agency.

   c. On existing single-family parcels within the 55 CNEL contours, new residential structures shall be designed to limit intruding noise such that interior noise levels shall not exceed 45 CNEL in any habitable room.

   d. The Land Use Compatibility Chart for Aircraft Noise, presented in Figure 14 A, B and C, is adopted as an aid for the general determination of noise compatible land uses in the area surrounding the Lake Tahoe Airport.

   e. Restriction of night operations by loud aircraft.

4. Implementation of Airport Noise Policies:

   a. Within the established 60 CNEL noise contour restricting residential development established by this plan, the City of South Lake Tahoe and El Dorado County should submit for ALUC review any proposed land use changes including general plan or specific plan adoptions or amendments, prezonings, rezonings, use permits, variances, and to the extent possible, all new construction withint the established noise zone, except for detached single-family dwellings on existing parcels zoned for single-family uses.

   b. For any residential development occurring between the 55 CNEL noise contour and the 60 CNEL noise contour, the City of South Lake Tahoe and El Dorado County should evaluate the impact of aircraft noise on such development and consider the implementation of appropriate mitigation measures such as noise insulation standards (mandatory within the 60 CNEL contour), a buyer notification requirement to inform potential buyers of the exterior noise levels projects by the CNEL method at their property, and the attachment of a noise easement (Figure 15) to title of all property sold in the areas affected by aircraft noise.

   c. For existing residential development and future residential development, if any, allowed by this plan within the 65 CNEL contour, buyer notification programs, and noise easements (Appendix B) shall be implemented.

   d. A detailed mapping of the CNEL noise contours should be performed by the city and county planning departments which specifically delineates those parcels impacted by noise restrictions.

   e. Restriction of night operations by loud aircraft is accomplished by Airport Order #85-100A (Figure 13), by which the Airport is closed to aircraft operations exceeding 77.1 dB Lmax from 8 p.m. to 8 a.m. Government, emergency and mercy flights are excepted from the closure period. Examples of exempt aircraft are listed on Figure 12.

REPRESENTATIVE LIST OF AIRCRAFT WHICH
MEET NIGHT OPERATION NOISE LIMITS
LAKE TAHOE AIRPORT

MANUFACTURER	AIRPLANE	ENGINE	GR WGT. 1000 LBS.	EST. DBA
BEECH	A36 (2 BL.)	IO-520-B	3.6	73.0
BEECH	35-B33	IO-470-K	3.0	73.0
CESSNA	320C	TSIO-470-D	5.2	73.0
CESSNA	337H	IO-360-G	4.6	73.0
IAI	1124 WESTWIND	TFE731-3-1G	22.9	72.2
BEECH	V35B	IO-520-B	3.4	72.0
BEECH	35-C33A	IO-520-B	3.3	72.0
BEECH	F33A	IO-520-B	3.4	72.0
GATES LEARJET	LEARJET 35	TFE731-2	17.0	72.0
GATES LEARJET	LEARJET 36	TFE731-2	17.0	72.0
GATES LEARJET	LEARJET 35A	TFE731-2	18.0	71.6
GATES LEARJET	LEARJET 36A	TFE731-2	18.0	71.6
GATES LEARJET	LEARJET 36	TFE731-2	17.0	71.4
GATES LEARJET	LEARJET 35	TFE731-2	17.0	71.4
CESSNA	T210L	TSIO-520-R	3.8	71.0
CESSNA	340	TSIO-520-K	6.0	71.0
CESSNA	310Q	IO-470-VO	5.2	71.0
EMBRAER	EMB 110-P2	PT6A-34	12.5	71.0
PIPER	PA-31-310	TIO-540-A2C	6.5	71.0
PIPER	PA32KT-300	IO-540-K1G-5D	3.6	71.0
SWEARINGEN	SA226-T	TPE-331-3U-303G	12.5	71.0
SWEARINGEN	SA226-TC	TPE-331-30W-303G	12.5	71.0
SWEARINGEN	SA226-AT	TPE-331-3U-303G	12.5	71.0
BEECH	B80	IGSO-540-AID	8.8	70.0
CESSNA	T310R	TSIO-520-B	5.5	70.0
PIPER	PA-32-300	IO-540-KIA5	3.4	70.0
TED SMITH	601	IO-540-SIA5	6.0	70.0
BEECH	B60	TIO-541-E1C4	6.8	69.0
CESSNA	TU206G	TSIO-520-M	3.6	69.0
CESSNA	T210M	TSIO-520-R	3.8	69.0
CESSNA	185F	IO-520-D	3.4	69.0
CESSNA	401	TSIO-520-E	6.3	69.0
CESSNA	414	TSIO-520-N	6.8	69.0
DEHAVILLAND	DHC-7	PT6A-50	43.5	69.0
PIPER	PA-23-250	IO-540-C1A	5.2	69.0
PIPER	PA-28B-235	O-540-B4B5	2.9	69.0
CESSNA	182Q	O-470-U	3.0	68.0
DASSAULT BREGUET	FALCON 10	TFE731-2	18.7	67.6
BEECH	E55	IO-520-C	5.3	67.0
CESSNA	180	O-470-U	2.8	67.0
DEHAVILLAND	DHC-6	PT6A-27	12.5	67.0
PIPER	PA-34-200T	TSIO-360-E	4.8	67.0

FIGURE 12

MANUFACTURER	AIRPLANE	ENGINE	GR WGT. 1000 LBS.	EST. DBA
ROCKWELL INTERNATIONAL	680FL	IGSO-540-81A	8.5	67.0
BEECH	99A	PT6A-27	10.4	66.0
BEECH	58	IO-520-C	5.4	66.0
CESSNA	177RG	IO-360-A186	2.8	66.0
MITSUBISHI	MU-2B-36A	TPE-331-5-252M	11.0	66.0
PIPER	PA-42	PT6A-41	10.5	66.0
BEECH	A24R	IO-360-A186	2.8	65.0
BELLANCA	17-30A	IO-540-T4B5D	3.3	65.0
BEECH	C90	PT6A-21	9.7	64.0
MITSUBISHI	MU-2B-26A	TPE-331-5-252M	10.0	64.0
MOONEY	M20C	O-360-AID	2.6	64.0
ROCKWELL INTERNATIONAL	112	IO-360-C1D6	2.6	64.0
AEROSPATIALE	SN601 CORVETTE	JT15D-4	13.9	63.8
CESSNA	404	GTS10-520-M	8.4	63.0
GRUMMAN AMERICAN	GA-7	O-320-D1D	3.8	63.0
PIPER	PA-24-260	IO-540-R1A5	3.2	63.0
PIPER	PA-28-200	IO-360-C1C	2.7	63.0
BEECH	A100	PT6A-28	11.5	62.0
CESSNA	421B	GTSIO-520-L	7.5	62.0
PIPER	PA31T	PT6A-28	9.0	62.0
CESSNA	500	JT15D-1	11.5	61.1
BEECH	C23	O-360-A4K	2.5	60.0
CESSNA	170B	O-300-A	2.2	60.0
GRUMMAN AMERICAN	AA-5	O-320-E2G	2.2	60.0
PIPER	PA-28-140	O-320-E2A	2.2	60.0
BELLANCA	8GCBC	O-360-C2E	2.2	59.0
CESSNA	172	O-320-A	2.3	58.0
MOONEY	M20J	IO-360-A1B6D	2.7	58.0
GRUMMAN AMERICAN	AA-1A	O-235-62C	1.6	57.0
CESSNA	152	O-235-L2C	1.7	55.0
CESSNA	150	O-200-A	1.6	55.0
PIPER	PA-18-150	O-320-A2B	1.8	54.0
ROCKWELL INTERNATIONAL	690B	TPE-331-5-251K	10.3	54.0
BELLANCA	7GCAA	O-320-A2B	1.7	51.0

SOURCE: FAA ADVISORY CIRCULAR 36-3A

Let Make a New Sheet w/ Both TKOS & Landing DB

LAKE TAHOE AIRPORT

ORDER NO. 85-100A AIRPORT CURFEW

This order is issued pursuant to Article II, Section 3 of the City of South Lake Tahoe Airport ordinance to continue in effect until adoption by the City Council of the Airport Master Plan, the presently existing interim curfew at South Lake Tahoe Airport.

The City ordinance which adopted said curfew expired by its term one year after the adoption thereof. This order is intended to extend the interim curfew during the period between that expiration and the adoption of the Master Plan, anticipated to be in October 1990.

This order is adopted to protect, in so far as is practicable and lawful, the peace and quiet of residential areas which would be impacted by aircraft operations during the nighttime hours.

IT IS THEREFORE ORDERED THAT:

1. The South Lake Tahoe Airport shall be closed to all operations between the hours of 8:00 p.m. and 8:00 a.m. local time daily. Exempted from this curfew are: 1) emergency and mercy flights, 2) military and governmentally-owned aircraft in performance of governmental functions, 3) any aircraft which will not result in a single event L_{max} reading exceeding 77.1 under the FAA Advisory Circular 36-3 series.

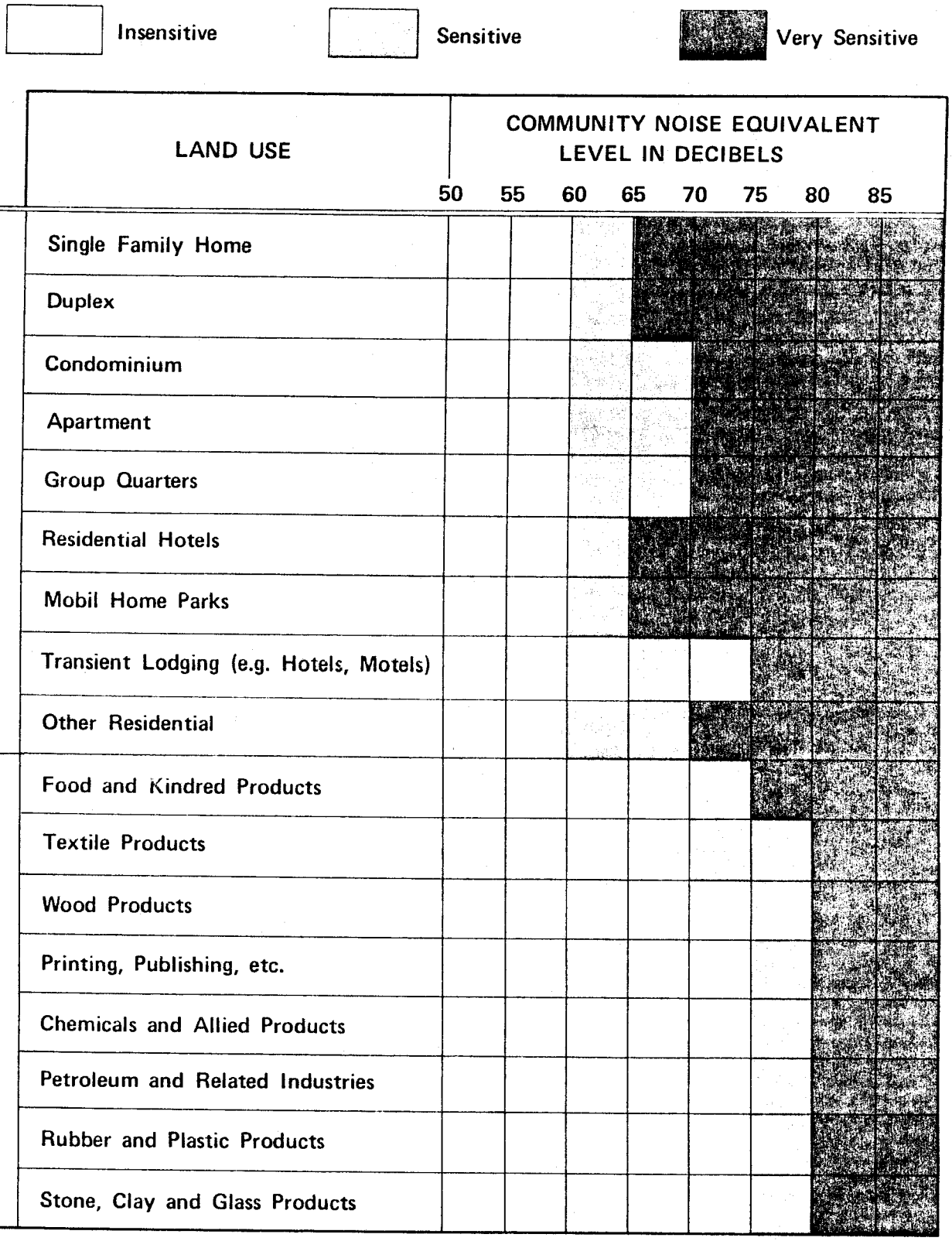
2. In addition to any other penalty provided by law, any person, firm, corporation, or aircraft owner or operator which violates this order or allows this order to be violated shall, upon reasonable written notice, and a subsequent violation after such notice, be denied use of the Airport and its facilities.

DATED: 11-16-89

RICHARD D. FRENCH, AAE
Airport Director

This Order supercedes Airport Order No. 85-100 issued August 22, 1985

FIGURE 13



Burns & McDonnell
Engineers-Architects-Consultants

Figure 14A

LAND USE NOISE SENSITIVITY MATRIX

TAHO 79-045-4

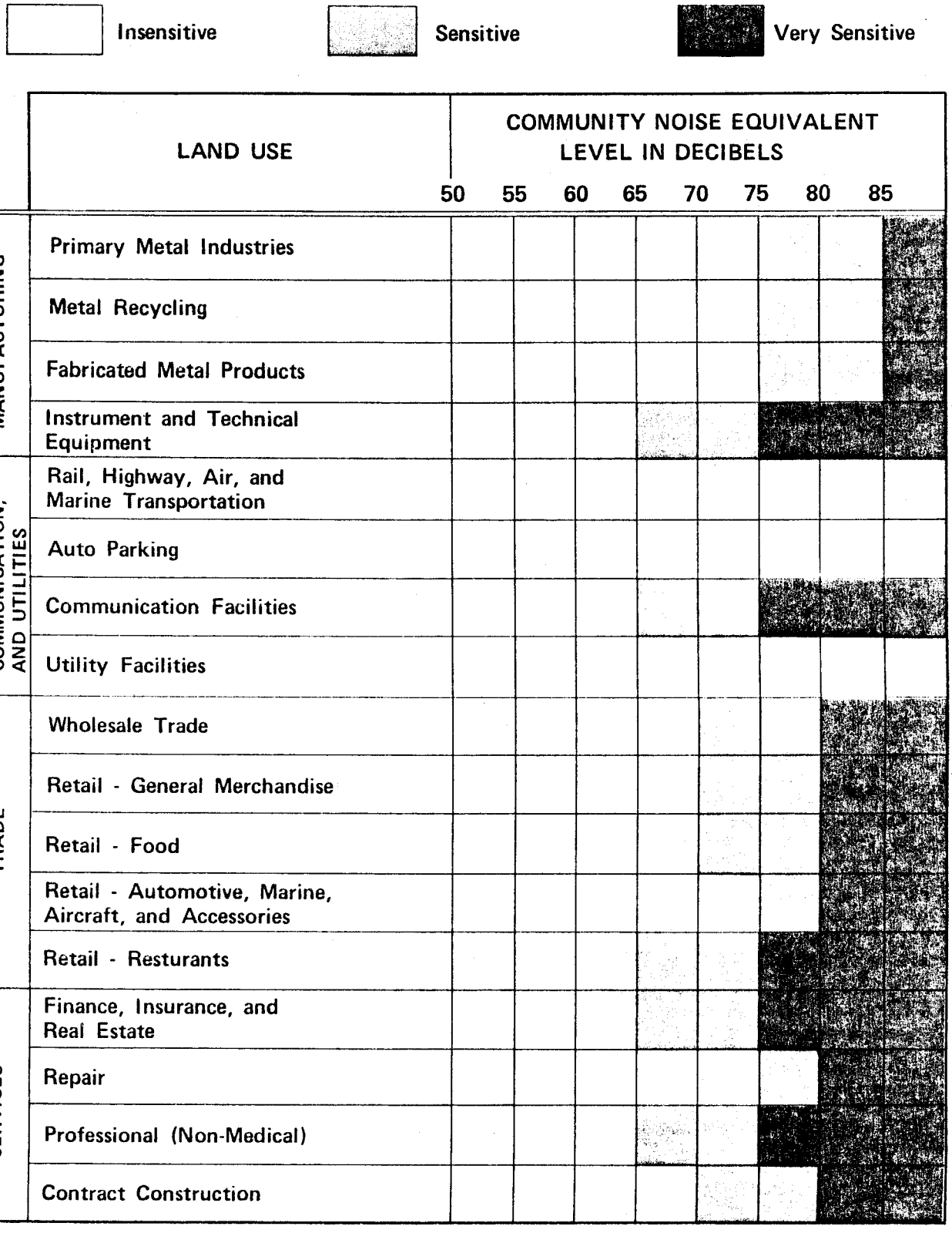


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Figure 14B

LAND USE NOISE SENSITIVITY MATRIX

TAHO 79-045-4

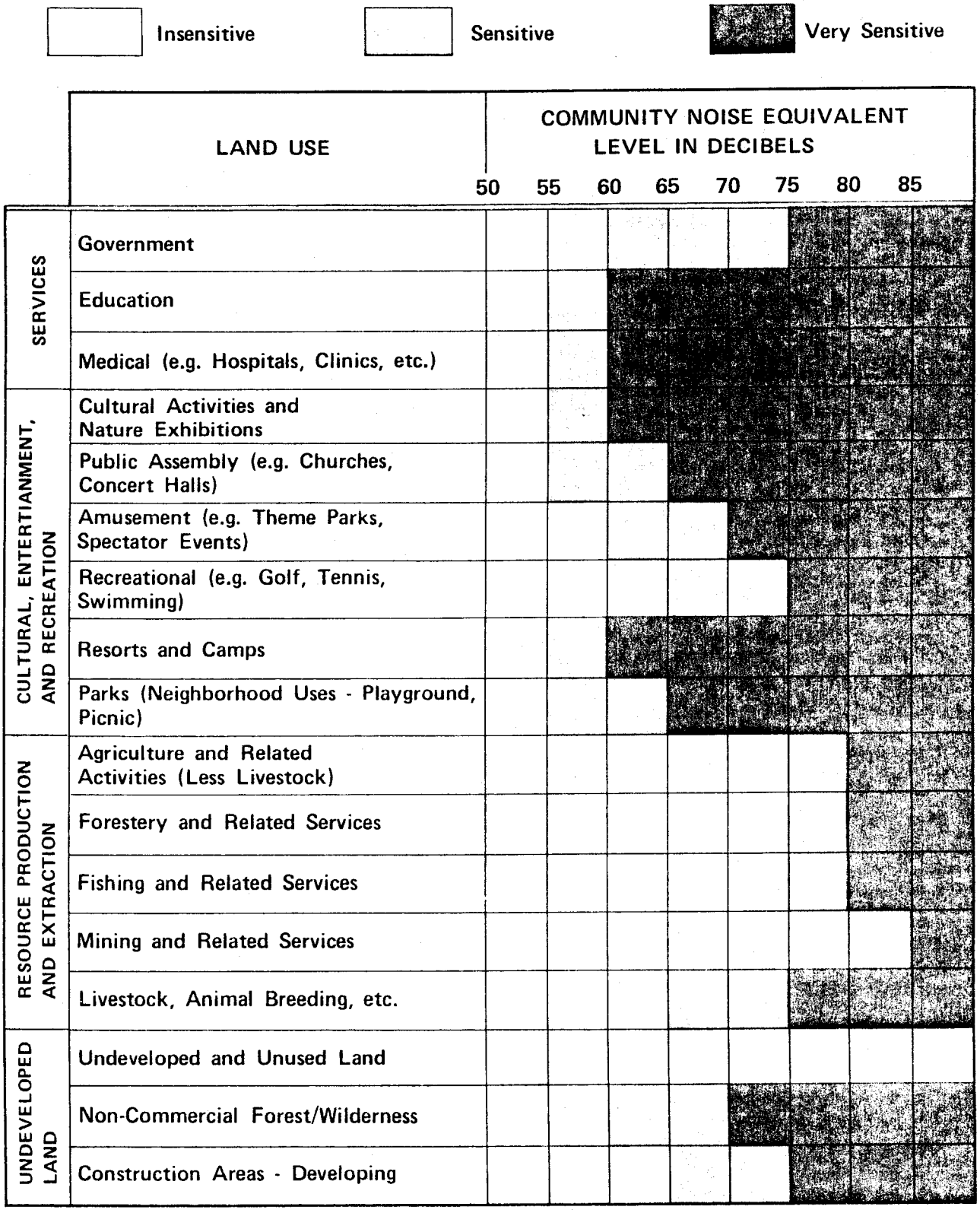

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Figure 14C

LAND USE NOISE SENSITIVITY MATRIX

TAHO 79-045-4

C. AIRPORT SAFETY RESTRICTION AREA:

The most important concern for airport land use planning is the safety of persons on the ground. While the safety record of general aviation is quite good, accidents do happen and they must be considered in land use planning around airports.

Recorded data on nationwide general aviation accidents from 1974-1979 showed that 45 percent of accidents occurred on airport property, 15 percent were in the traffic pattern or within one mile of the airport boundary. Considering just those accidents within one mile of the airport boundary, 33 percent were within 1/4 mile and 29 percent occurred in the traffic pattern. This data suggests that land use off the immediate ends of the runway and under the airport traffic pattern is a significant safety concern in preparing airport land use safety zones.

1. Objective:

   To protect the safety and general welfare of people in the vicinity of the Lake Tahoe Airport by minimizing the public exposure to airport-related safety hazards.

2. Findings:

   a. Controls over aircraft operating procedures and hazardous land uses around airports can greatly reduce the likelihood of aircraft accidents around airports. These precautions, however, cannot guarantee absolute safety. Policies can be established to prevent development of land use related hazards to air navigation and to limit casualties on the ground in the event of a crash.

   b. Nationwide studies of air accidents indicate that:

      i. Almost half of all accidents occur on airport property.

      ii. An additional 15 percent of aircraft accidents occur outside airport property but within one mile of the airport runway(s).

      iii. A substantial concentration of aircraft accidents occur within the initial climbout and the final approach sectors of airports.

   c. Land uses and developments that can create hazards to air navigation are objects that exceed FAR Part 77 height standards, attract large concentrations of birds within approach/departure areas, produce smoke, have flashing lights, reflect light or generate electronic interference.

3. Policy:

Caution: Land use compatibility is determined by comparing proposed land use against height, noise, and safety guidelines. Proposed land uses must be compatible with each.

a. The ALUC designates airport safety areas identified as Safety Area 1 (Clear Zone), Safety Area 2 (Approach/Departure Zone), and Safety Area 3 (Overflight Zone). These safety areas are illustrated in Figure 15, detailed in Figure 17 and have the following dimensions:

i. Safety Area 1 (Clear Zone) - Runway 18: begins 200 feet beyond the end of the runway surface, and is centered along the extended runway centerline. Safety Area 1 for runway 18 has an inner width of 500 feet, and outward length of 1,700 feet and an outer width of 1,010 feet.

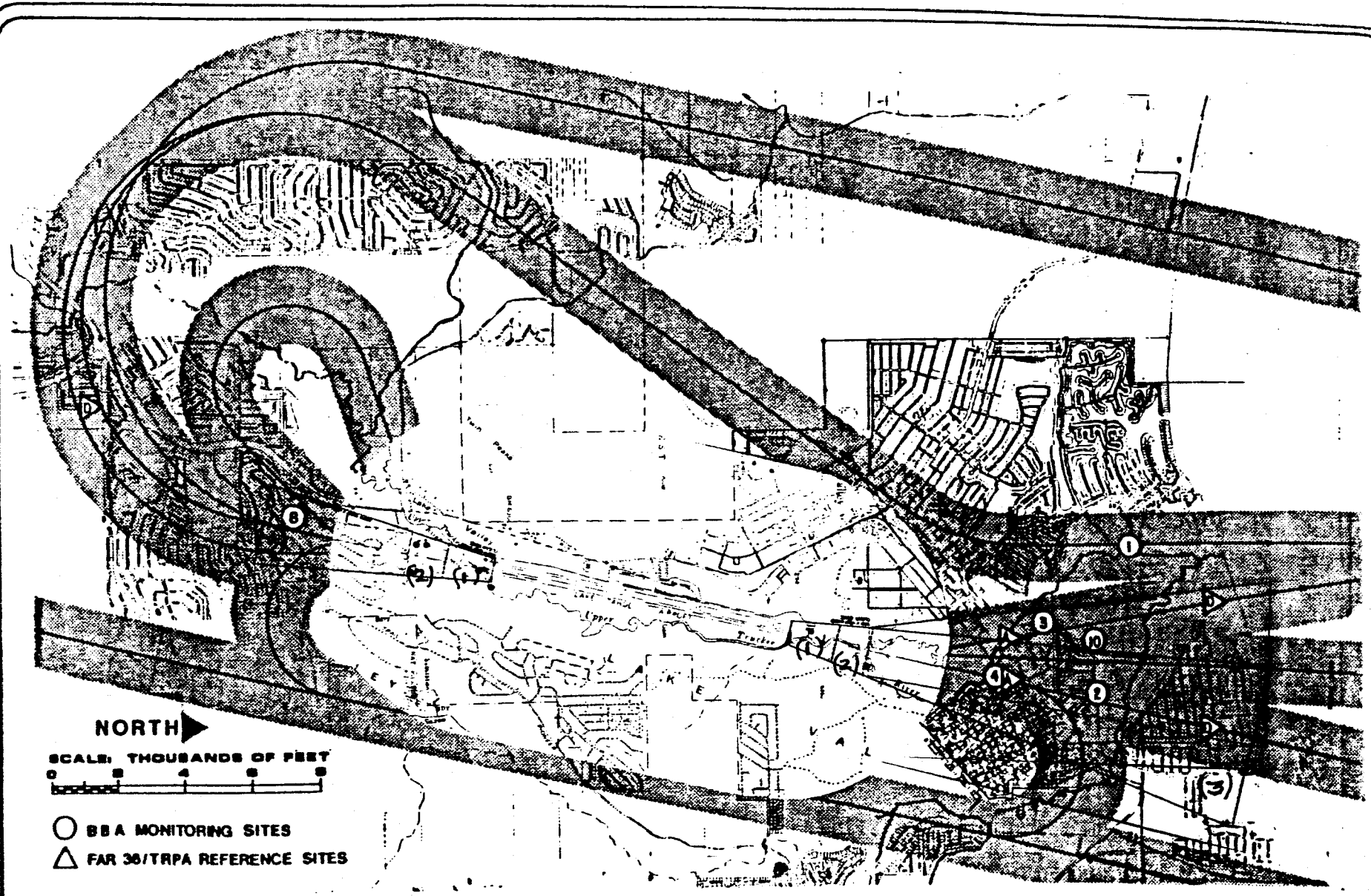
ii. Safety Area 1 (Clear Zone) - Runway 36: begins 200 feet beyond the end of the runway surface, and is centered along the extended runway centerline. Safety Area 1 for runway 36 has an inner width of 500 feet, and outward length of 1,000 feet and an outer width of 700 feet.

iii. Safety Area 2 (Approach/Departure Zone) - Runway 18: begins at the outer end of Safety Area 1 and is centered along the extended runway centerline, has an inner width of 1,010 feet, an outward length of 10,000 feet and an outer width of 3,500 feet.

iv. Safety Area 2 (Approach/Departure Zone) - Runway 36: begins at the outer end of Safety Area 1 and is centered along the extended runway centerline. Safety Area 2 from runway 36 has an inner width of 700 feet, extends outward for a length of 5,000 feet, and has an outer width of 1,500 feet.

v. Safety Area 3 (Overflight Zone): generally coincides with the area overflown by aircraft during traffic pattern procedures but consists only of that area underlying the horizontal surface (figure 5) which is outside of Safety Area 1 and Safety Area 2. For the Lake Tahoe Airport, the perimeter of the Overflight Zone is constructed by swinging arcs of 5,000 foot radii from the center of each end of the primary surface of the runway and connecting these arcs by lines tangent to the arcs.

Note: Safety area dimensions for each runway end are different because runway 18 has visual omnidirectional range (VOR) and localizer (LOC-LDA) approaches which allow for non-precision instrument approaches. See Figure 16 for detail.



Lake Tahoe Airport

LAKE TAHOE AIRPORT SAFETY ZONES AND GENERALIZED FLIGHT TRACKS

FIGURE 15

(1) Safety Area 1 - Clear Zone (2) Safety Area 2 - Approach/Departure Zone (3) Safety Area 3 - Overflight Zone

AIRPORT SAFETY AREAS 1 AND 2 (DETAIL)

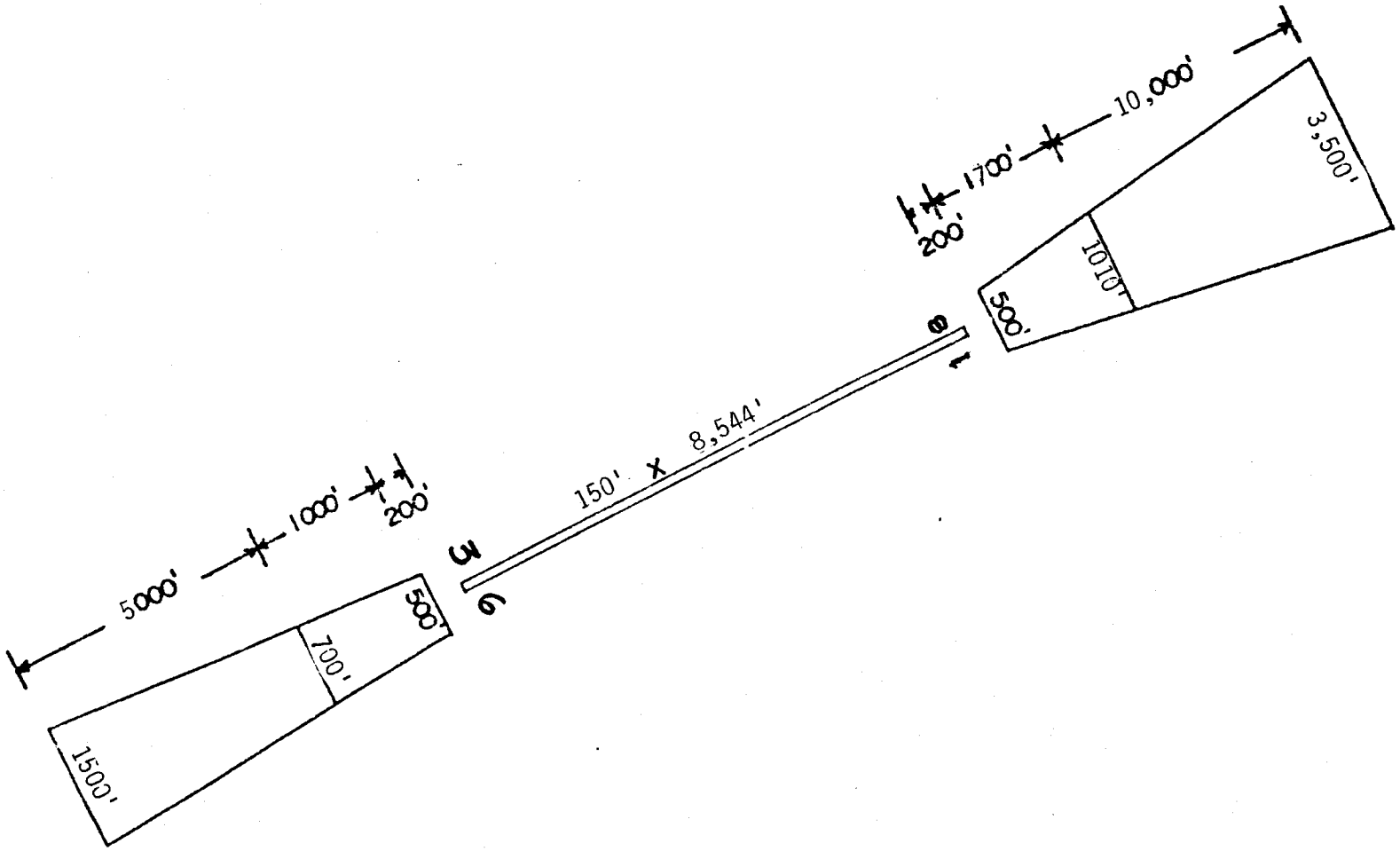
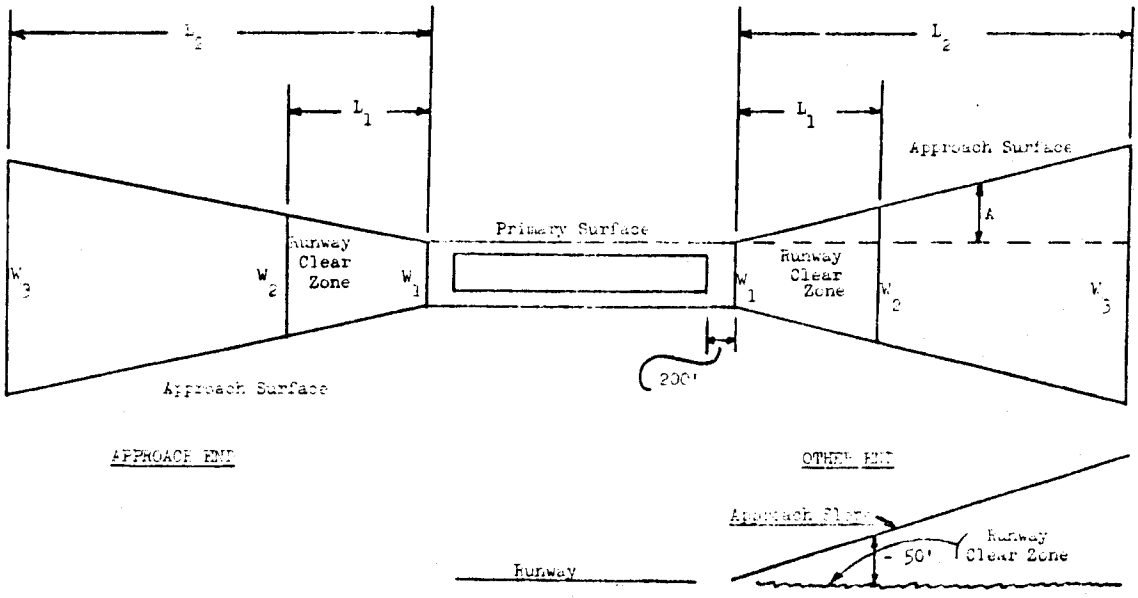


FIGURE 16

FIGURE 17A - RUNWAY CLEAR ZONE DIMENSIONS



R/W TYPE	SET NO.	RUNWAY END		DIMENSIONS (FEET)						R/W OZ AREA	FLARE RATIO A
		APPROACH	OTHER	L 1	L 2	W 1	W 2	W 3	SLOPE		
UTILITY RUNWAYS	1	V		1,000	5,000	250	450	1,250	20:1	8.03[illegible]	.1:1
			V	1,000	5,000	250	450	1,250	20:1	8.03[illegible]	.1:1
	2	V		1,000	5,000	500	650	1,250	20:1	13.200	.075:1
			N.P.	1,000	5,000	500	800	2,000	20:1	14.922	.15:1
	3	N.P.		1,000	5,000	500	800	2,000	20:1	14.922	.15:1
			N.P.	1,000	5,000	500	800	2,000	20:1	14.922	.15:1
OTHER THAN UTILITY RUNWAYS	4	V		1,000	5,000	500	700	1,500	20:1	13.77	.1:1
			V	1,000	5,000	500	700	1,500	20:1	13.77	.1:1
	5	V		1,000	5,000	500	700	1,500	20:1	13.77	.1:1
			N.P. 3/4+	1,700	10,000	500	1,010	3,500	34:1	29.465	.15:1
	6	V		1,000	5,000	1,000	1,100	1,500	20:1	21.105	.05:1
			N.P. 3/4	1,700	10,000	1,000	1,510	4,000	34:1	48.978	.15:1
	7	V		1,000	5,000	1,000	1,100	1,500	20:1	21.105	.05:1
			P	2,500	50,000	1,000	1,750	16,000	50:1/40:1	78.914	.15:1
	8	N.P. 3/4+		1,700	10,000	500	1,010	3,500	34:1	29.465	.15:1
			N.P. 3/4+	1,700	10,000	500	1,010	3,500	34:1	29.465	.15:1
	9	N.P. 3/4+		1,700	10,000	1,000	1,425	3,500	34:1	47.320	.125:1
			N.P. 3/4	1,700	10,000	1,000	1,510	4,000	34:1	48.978	.15:1
	10	N.P. 3/4+		1,700	10,000	1,000	1,425	3,500	34:1	47.320	.125:1
			P	2,500	50,000	1,000	1,750	16,000	50:1/40:1	78.914	.15:1
	11	N.P. 3/4		1,700	10,000	1,000	1,510	4,000	34:1	48.978	.15:1
			N.P. 3/4	1,700	10,000	1,000	1,510	4,000	34:1	48.978	.15:1
	12	N.P. 3/4		1,700	10,000	1,000	1,510	4,000	34:1	48.978	.15:1
			P	2,500	50,000	1,000	1,750	16,000	50:1/40:1	78.914	.15:1
	13	P		2,500	50,000	1,000	1,750	16,000	50:1/40:1	78.914	.15:1
			P	2,500	50,000	1,000	1,750	16,000	50:1/40:1	78.914	.15:1

ABBREVIATIONS USED IN THE ABOVE CHART

V = Visual approach
N.P. = Non-precision approach
N.P. 3/4+ = Non-precision approach with visibility minimums greater than 3/4-mile
N.P. 3/4 = Non-precision approach with visibility minimums as low as 3/4-mile
P = Precision instrument approach

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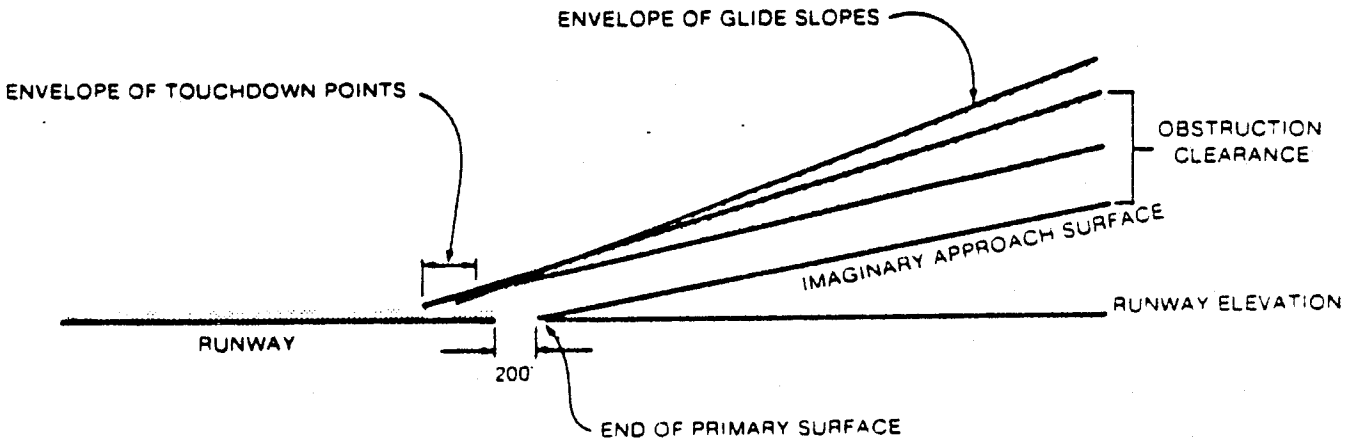
Theoretical Clearances For VFR And IFR Approaches
(Feet)

Imaginary Surface Slope	Type of Aircraft/Approach	Distance from End of Runway 0'	200'	1/4 mi.	1/2 mi.	3/4 mi.	1 mi.
20:1	General Aviation/VFR						
	- Single engine	30-50	45-70	65-125	90-190	110-260	130-325
	- Multi-engine	35	50	80	110	140	175
	- VASI approach	25	35	40	42	45	50
50:1	General Aviation/IFR	50'	60	100	140	185	225
	Air Carrier/IFR	50'	60	100	140	185	225
	Military/IFR	40-50	50-60	80-100	110-140	140-185	170-225
	Military/VFR	30	40	85	135	190	240

Assumptions

Type of Aircraft/Approach	Glide Slopes (Degrees)
General Aviation:	
- Single engine aircraft	3.8° to 5.7°
- Multi-engine aircraft	4.2°
- VASI approach	3°
- IFR approach	3°
Air Carrier/Military:	
- Air carrier IFR approach	3°
- Military IFR approach	2.5° to 3.0°
- Military VFR apporach	3.4°
- STOL (Short Takeoff and Landing)	8.1° to 9.5°
Helicopter	11.3° to 18.4°

FIGURE 17B



THEORETICAL OBSTRUCTION CLEARANCES PROVIDED BY PART 77 IMAGINARY APPROACH SURFACES

FIGURE 17C

Aircraft Climb Rates with All Engines Operating

Type of Aircraft	Representative Climb Rates
General Aviation[1]	
- Single Engine	660 feet/ naut. mi.
- Twin Engine	860 feet/ naut. mi.
- Twin Engine Turboprop	1125 feet/ naut. mi.
- Business Jet	4100 feet/min.
Air Carrier[2]	
- Twin Engine	960 feet/ naut. mi.
- Three Engine	580 feet/ naut. mi.
- Four Engine	465 feet/ naut. mi.

1. Average climb gradients for currently manufactured aircraft

2. Calculated from formula provided by FAA for maximum gross weights

FIGURE 17D

b. The Land Use Noise Sensitivity Matrix (Figure 14) and the Land Use Compatibility Guidelines for Safety (Figure 18), are adopted as the criteria to be used when reviewing projects in Safety Areas 1, 2 and 3. The Guidelines list potential uses and indicate compatibility, conditional compatibility or noncompatibility for each safety area. In the event compatibility cannot be determined through use of the Guidelines, the ALUC should be contacted by the local jurisdiction to make a determination. The guidelines address safety concerns only, and noise or height restrictions may also apply to specific projects under review.

c. In addition to the uses specified in the Land Use Compatibility Guidelines for Safety, the following generalized land uses are defined as non-compatible for the Lake Tahoe Airport:

i. Safety Areas 1 and 2 Combined (Clear and Approach/Departure Zones):

a) Any use which would direct a steady light or flashing light of white, red, green or amber color toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at the airport, other than an FAA approved navigational signal light or visual approach slope indicator (VASI).

b) Any use which would cause sunlight to be reflected toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at the airport.

c) Any use which would generate smoke or which could attract large concentrations of birds, or which may otherwise affect safe air navigation within this area.

d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or airport instrumentation.

e) Any hazardous installations such as above-ground oil, gas or chemical storage facilities, excluding facilities for non-commercial, private domestic or private agricultural use.

i. Safety Area 1 (Clear Zones):

a) Permanent structures (not necessarily including such items as roads or underground vaults).

b) Residential development.

c) Any use resulting in a gathering of more than ten persons per acre at any time.

iii. Safety Area 2 (Approach/Departure Zones):

a) Any new residential development which would result in a building density of greater than two dwelling units per acre excepting, however, minor alteration to existing structures and the construction of new structures on single-family residential lots created by residential subdivision maps recorded prior to the date this plan is adopted.

b) Any use which would result in concentrations of people such as, but not limited to, shopping centers, restaurants, schools, factories, hospitals, office complexes or stadiums.

iv. Safety Area 3 (Overflight Zone):

a) Schools not satisfying the requirements of Section 39005 of the Education code, stadiums, arenas, spectator sports facilities, auditoriums, concert halls, outdoor amphitheaters, concert shells, and theaters.

4. Implementation of Airport Safety Policies:

a. The Land Use Compatibility Guidelines (Figure 18) provide the basis for determining compatibility of a particular land use with ALUC safety policies for Lake Tahoe Airport. Basic compatibility may be determined by first identifying the safety area within which a project is located, and then finding the use category on the guidelines chart. If a "yes" is indicated for the use in the particular zone, the project is compatible with ALUC policy. A "no" indicates incompatibility. A "yes" with a footnote indicates a conditional compatibility depending upon the size and intensity of use. In the event that a particular parcel lies close to any safety area boundary, the City or County planning department should be contacted to determine precisely which safety area the parcel in question is located within.

b. In the case of a safety area line splitting a parcel, the parcel may be developed to split uses and densities as long as the individual portions of the parcel are consistent with the land use policies for the safety zone in which they lie.

c. Upon adoption of this plan by the ALUC, existing land uses which are inconsistent may be continued; however, inconsistent land uses, buildings and structures may not be expanded or changed to another inconsistent use.

FIGURE 18
LAND USE COMPATIBILITY GUIDELINES FOR SAFETY*

LAND USE CATEGORY	COMPATIBILITY WITH SAFETY AREA		
	1 CLEAR ZONE	2 APPROACH ZONE	3 OVERFLIGHT ZONE
RESIDENTIAL			
Single family	No	Yes[1]	Yes
Two family	No	Yes[1]	Yes
Multi-family dwelling	No	No	Yes
Group quarters	No	No	Yes
Mobile home parks or courts	No	No	Yes
Custodial care facilities	No	No	Yes[6]
INDUSTRIAL/MANUFACTURING			
Food and kindred product	No	Yes[2]	Yes
Textile mill products	No	Yes[2]	Yes
Apparel	No	Yes[2]	Yes
Lumber and wood products	No	Yes[2]	Yes
Furniture and fixtures	No	Yes[2]	Yes
Paper and allied products	No	Yes[2]	Yes
Printing, publishing	No	Yes[2]	Yes
Chemicals and allied products	No	No	Yes
Petroleum refining & related industries	No	No	No
Rubber and miscellaneous plastic	No	No	No
Stone, clay and glass products	No	Yes[2]	Yes
Primary metal industries	No	Yes[2]	Yes
Fabricated metal products	No	Yes[2]	Yes
Miscellaneous manufacturing	No	Yes[2]	Yes
Warehousing/storage	No	Yes[2]	Yes
TRANSPORTATION, COMMUNICATIONS AND UTILITIES			
Railroad	Yes[3]	Yes	Yes
Highway and street ROW	Yes[3]	Yes	Yes
Auto parking lots/airplane parking areas	No	Yes[2]	Yes
Communications	Yes[3]	Yes[2]	Yes
Utilities	Yes[3]	Yes[2]	Yes
Other trans., comm., and util.	Yes[3]	Yes[2]	Yes

1. Single-family residential is a compatible land use only if the building density is two or less dwelling units per acre.
2. Uses compatible only if they do not result in a large concentration of people. A large concentration of people is defined as a gathering of individuals in an area that would result in an average density of greater than 25 people per acre during a 24 hour period, not to exceed 50 persons per acre at any time. (see Appendix 1 for a suggested method of determining concentrations of people).
3. No building, structures, fences, above-ground transmission lines, or storage of flammable or explosive material above ground, and no uses resulting in a gathering of more than 10 persons per acre at any time.
4. No high-intensity use or facilities, such as structured playgrounds, ballfields, or picnic pavillions.
5. Uses compatible only if they do not result in a possibility that a water area may cause ground fog or result in a bird hazard.
6. No more than six persons under care.
7. If the requirements of Section 39005 of the Education Code have been satisfied.

* Note: These guidelines define only those land uses which are compatible within safety areas. Where proposed land uses fall within the established noise contours or may penetrate any of the height imaginary surfaces, additional restrictions apply as contained in the height and noise policy sections of this plan.

LAND USE CATEGORY	COMPATIBILITY WITH SAFETY AREA		
	1 CLEAR ZONE	2 APPROACH ZONE	3 OVERFLIGHT ZONE
COMMERCIAL/RETAIL TRADE			
Wholesale trade	No	No	Yes
Building materials-retail	No	No	Yes
General merchandise-retail	No	No	Yes
Food-retail	No	No	Yes
Automotive service, sales or repair	No	No	Yes
Apparel and accessories-retail	No	No	Yes
Eating and drinking places	No	No	Yes
Furniture, home furnishing-retail	No	No	Yes
Other retail trade	No	No	Yes
Residential hotels	No	No	Yes
Transient lodging-hotels, motels	No	No	Yes
PERSONAL AND BUSINESS SERVICES			
Finance, insurance and real estate	No	Yes[2]	Yes
Personal services	No	Yes[2]	Yes
Business services	No	Yes[2]	Yes
Repair services	No	Yes[2]	Yes
Contract construction services	No	Yes[2]	Yes
Indoor recreation services	No	Yes[2]	Yes
Other services	No	Yes[2]	Yes
PUBLIC AND QUASI-PUBLIC SERVICES			
Hospital, custodial care, preschool	No	No	Yes[6]
Government services	No	No	Yes
Schools	No	No	Yes[7]
Cultural activities inc. churches, libraries	No	No	Yes
Medical and other health clinics	No	No	Yes
Cemeteries	No	Yes[2]	Yes
Other public and quasi-public services	No	No	Yes
RECREATION			
Neighborhood parks	No	Yes[2,4]	Yes
Community and regional	No	Yes[2,4]	Yes
Nature exhibits	No	Yes[2]	Yes
Spectator sports, stadiums, arenas	No	No	No
Golf course, riding stables	No	Yes[2]	Yes
Water based recreational areas	No	Yes[2,4,5]	Yes
Resort and group camps	No	No	Yes
Auditoriums, concert halls, theaters	No	No	No
Outdoor amphitheaters, music shells	No	No	No
RESOUPCE PRODUCTION, EXTRACTION AND OPEN SPACE			
Agricultural production (except livestock)	Yes[3,5]	Yes[5]	Yes
Permanent open space	Yes[3,5]	Yes[5]	Yes
Water areas	Yes[3,5]	Yes[5]	Yes
Wholesale horticultural production	Yes[3,5]	Yes[2,5]	Yes
Livestock farming, animal breeding	No	Yes[2]	Yes

When an existing inconsistent land use sustains damage or destruction of 50 percent of the value of the building or structure, subsequent use of the land must comply with the policies set forth in this plan.

d. Strict applications of the Land Use Compatibility Guidelines for Safety may create undue hardships which outweigh interests of public health and safety. Deviation from the guidelines through an overrule by the City of South Lake Tahoe or El Dorado County should be approved only upon a finding that such hardships clearly outweigh the public health, safety and welfare objectives of this plan.

e. The City of South Lake Tahoe and El Dorado County should implement the airport safety policies established by this plan through such actions as preparing and adopting an airport safety area zoning ordinance (Figure 15), the preparation and adoption of a specific plan for the airport area of influence, or inclusion of appropriate standards in the general plan for each jurisdiction.

f. Within the safety areas established by this plan, the City of South Lake Tahoe and El Dorado County will submit for ALUC review any proposed land use change including general plan or specific plan adoptions or amendments, prezonings, rezonings, use permits or variances.

g. A detailed mapping of the safety area boundaries should be performed by the City of South Lake Tahoe and El Dorado County which specifically delineates those parcels impacted by safety restrictions.

D. COMPREHENSIVE LAND USE PLAN IMPLEMENTATION PROCESS

1. Adoption of this plan sets in motion a 180 day period, within which the City of South Lake Tahoe and El Dorado County must take one of two possible actions:

   a. The first option is to amend the city and county general plans and other land use controls and regulations, where necessary, to be consistent with this plan.

   b. The second options, if the city or county does not concur with provisions of this plan, is to overrule that portion of the plan it does not agree with. The overruling must, however, be by two-third (2/3) vote of the governing body and must be based on findings that the action to overrule is consistent with Section 21670 of the California Public Utilities Code.

Section 21670 of the California Public Utilities Code makes it clear that the purpose of the California Airport Land Use Commission Law is to protect the public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards.

2. Prior to the amendment of the general plans or specific plan, or the adoption or approval of a zoning ordinance or building regulations that would affect land that lies within the airport area of influence, the proposal must be submitted to the Airport Land Use Commission for review and determination of compatibility. The city and county are responsible for submitting such proposals to the ALUC.

3. It is perceived that there are no contradictions between this plan and the plan area statement by the Tahoe Regional Planning Agency for the Lake Tahoe Airport (Appendix F) and its environs. This plan shall be submitted to the TRPA prior to adoption and said agency's recommendations for modification considered.

Article 3.5. Airport Land Use Commission

Creation; Membership; Selection

21670. (a) The Legislature hereby finds and declares that:

(1) It is in the public interest to provide for the orderly development of each public use airport in this state and the area surrounding these airports so as to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669 and to prevent the creation of new noise and safety problems.

(2) It is the purpose of this article to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.

(b) In order to achieve the purposes of this article, every county in which there is located an airport which is served by a scheduled airline shall establish an airport land use commission. Every county, in which there is located an airport which is not served by a scheduled airline, but is operated for the benefit of the general public, shall establish an airport land use commission, except that the board of supervisors of the county may, after consultation with the appropriate airport operators and affected local entities and after a public hearing, adopt a resolution finding that there are no noise, public safety, or land use issues affecting any airport in the county which require the creation of a commission and declaring the county exempt from that requirement. The board shall, in this event, transmit a copy of the resolution to the Director of Transportation. For purposes of this section, "commission" means an airport land use commission. Each commission shall consist of seven members to be selected as follows:

(1) Two representing the cities in the county, appointed by a city selection committee comprised of the mayors of all the cities within that county, except that if there are any cities contiguous or adjacent to the qualifying airport, at least one representative shall be appointed therefrom. If there are no cities within a county, the number of representatives provided for by paragraphs (2) and (3) shall each be increased by one.

(2) Two representing the county, appointed by the board of supervisors.

(3) Two having expertise in aviation, appointed by a selection committee comprised of the managers of all of the public airports within that county.

(4) One representing the general public, appointed by the other six members of the commission.

(c) Public officers, whether elected or appointed, may be appointed and serve as members of the commission during their terms of public office.

(d) Each member shall promptly appoint a single proxy to represent him or her in commission affairs and to vote on all matters when the member is not in attendance. The proxy shall be designated in a signed written instrument which shall be kept on file at the commission offices, and the proxy shall serve at the pleasure of the appointing member. A vacancy in the office of proxy shall be filled promptly by appointment of a new proxy.

(e) A person having an "expertise in aviation" means a person who, by way of education, training, business, experience, vocation, or avocation has acquired and possesses particular knowledge of, and familiarity with, the function, operation, and role of airports, or is an elected official of a local agency which owns or operates an airport. The commission shall be constituted pursuant to this section on and after March 1, 1988.

Action by Designated Body Instead of Commission

21670.1. (a) Notwithstanding any other provision of this article, if the board of supervisors and the city selection committee of mayors in the county each makes a determination by a majority vote that proper land use planning can be accomplished through the actions of an appropriately designated body, then the body so designated shall assume the planning responsibilities of an airport land use commission as provided for in this article, and a commission need not be formed in that county.

(b) A body designated pursuant to subdivision (a) which does not include among its membership at least two members having an expertise in aviation, as defined in subdivision (e) of Section 21670, shall, when acting in the capacity of an airport land use commission, be augmented so that that body, as augmented, will have at least two members having that expertise. The commission shall be constituted pursuant to this section on and after March 1, 1988.

Applicability to Counties Having Over 4 Million Population

21670.2. Sections 21670 and 21670.1 do not apply to counties of more than 4 million population. In such counties, the county regional planning commission has the responsibility for coordinating the airport planning of public agencies within the county. In instances where impasses result relative to this planning, an appeal may be made to the county regional planning commission by any public agency involved. The action taken by the county regional planning commission on such an appeal may be overruled by a four-fifths vote of the governing body of a public agency whose planning led to the appeal.

Airport Owned by a City, District, or County; Appointment of Certain Members by Cities and Counties

21671. In any county where there is an airport operated for the general public which is owned by a city or district in another county or by another county, one of the representatives provided by paragraph (1) of subdivision (b) of Section 21670 shall be appointed by the city selection committee of mayors of the cities of the county in which the owner of that airport is located, and one of the representatives provided by paragraph (2) of subdivision (b) of Section 21670 shall be appointed by the board of supervisors of the county in which the owner of that airport is located.

Term of Office; Removal of Members; Vacancies; Compensation; Staff Assistance; Meetings

21671.5. Except for the terms of office of the members of the first commission, the term of office of each member shall be four years and until the appointment and qualification of his successor. The members of the first commission shall classify themselves by lot so that the term of office of one member is one year, of two members is two years, of two members is three years, and of two members is four years. The body which originally appointed a member whose term has expired shall appoint his successor for a full term of four years. Any member may be removed at any time and without cause by the body appointing him. The expiration date of the term of office of each member shall be the first Monday in May in the year in which his term is to expire. Any vacancy in the membership of the commission shall be filled for the unexpired term by appointment by the body which originally appointed the member whose office has become vacant. The chairman of the commission shall be selected by the members thereof.

Compensation, if any, shall be determined by the board of supervisors.

Staff assistance, including the mailing of notices and the keeping of minutes, and necessary quarters, equipment, and supplies shall be provided by the county. The usual and necessary operating expenses of the commission shall be a county charge.

Notwithstanding any other provisions of this article, the commission shall not employ any personnel either as employees or independent contractors without the prior approval of the board of supervisors.

The commission shall meet at the call of the commission chairman or at the request of the majority of the commission members.

Rules and Regulations

21672. Each commission shall adopt rules and regulations with respect to the temporary disqualification of its members from participating in the review or adoption of a proposal because of conflict of interest and with respect to appointment of substitute members in such cases.

Initiation of Proceedings for Creation by Owner of Airport

21673. In any county not having a commission or a body designated to carry out the responsibilities of a commission, any owner of a public airport may initiate proceedings for the creation of a commission by presenting a request to the board of supervisors that a commission be created and showing the need therefor to the satisfaction of the board of supervisors.

Powers and Duties

21674. The commission has the following powers and duties, subject to the limitations upon its jurisdiction set forth in Section 21676:

(a) To assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses.

(b) To coordinate planning at the state, regional, and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare.

(c) To prepare and adopt an airport land use plan pursuant to Section 21675.

(d) To review the plans, regulations, and other actions of local agencies and airport operators pursuant to Section 21676.

(e) The powers of the commission shall in no way be construed to give the commission jurisdiction over the operation of any airport.

(f) In order to carry out its responsibilities, the commission may adopt rules and regulations consistent with this article.

Land Use Plan

21675. (a) Each commission shall formulate a comprehensive land use plan that will provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The commission plan shall include a long-range master plan that reflects the anticipated growth of the airport during at least the next 20 years. In formulating a land use plan, the commission may develop height restrictions on buildings, may specify use of land, and may determine building standards, including soundproofing adjacent to airports, within the planning area. The comprehensive land use plan shall be reviewed as often as necessary in order to accomplish its purposes, but shall not be amended more than once in any calendar year.

(b) The commission may include, within its plan formulated pursuant to subdivision (a), the area within the jurisdiction of the commission surrounding any federal military airport for all the purposes specified in subdivision (a). This subdivision does not give the commission any jurisdiction or authority over the territory or operations of any military airport.

(c) The planning boundaries shall be established by the commission after hearing and consultation with the involved agencies.

AMENDED IN ASSEMBLY MAY 7, 1990

CALIFORNIA LEGISLATURE—1989-90 REGULAR SESSION

ASSEMBLY BILL No. 4265

Introduced by Assembly Member Clute

March 2, 1990

The people of the State of California do enact as follows:

SECTION 1. Section 21675 of the Public Utilities Code is amended to read:

~~21673. (a) Each commission shall formulate a~~

21675. (a) Each commission shall formulate a comprehensive land use plan that will provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The commission plan shall include *and shall be based on* a long-range master plan *or an airport layout plan, as determined by the Division of Aeronautics of the Department of Transportation,* that reflects the anticipated growth of the airport during at least the next 20 years. In formulating a land use plan, the commission may develop height restrictions on buildings, ~~may~~ specify use of land, and ~~may~~ determine building standards, including soundproofing adjacent to airports, within the planning area. The comprehensive land use plan shall be reviewed as often as necessary in order to accomplish its purposes, but shall not be amended more than once in any calendar year.

(b) The commission may include, within its plan formulated pursuant to subdivision (a), the area within the jurisdiction of the commission surrounding any federal military airport for all *of* the purposes specified in subdivision (a). This subdivision does not give the commission any jurisdiction or authority over the territory or operations of any military airport.

(c) The planning boundaries shall be established by the commission after hearing and consultation with the involved agencies.

(d) The commission shall submit to the Division of Aeronautics of the department one copy of the plan and each amendment to the plan.

(e) If a comprehensive land use plan does not include the matters required to be included pursuant to this article, the Division of Aeronautics of the department shall notify the commission responsible for the plan.

~~comprehensive land use plan that will provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the~~

Need cy of current Sec 21675.

It appears that the CLUP now must be based on A Master Plan.

Does not appear to refer to airport facilities, only surrounding area. If so, reference to Master Plan or facilities should work.

~~federal military airport for all the purposes specified in subdivision (a). This subdivision does not give the commission any jurisdiction or authority over the territory or operations of any military airport.~~

~~(d) The planning boundaries shall be established by the commission after hearing and consultation with the involved agencies.~~

~~(e) The commission shall submit to the Division of Aeronautics of the department one copy of the plan and each amendment to the plan.~~

O

Review of Local General Plans

21676. (a) Each local agency whose general plan includes areas covered by an airport land use commission plan shall, by July 1, 1983, submit a copy of its plan or specific plans to the airport land use commission. The commission shall determine by August 31, 1983, whether the plan or plans are consistent or inconsistent with the commission's plan. If the plan or plans are inconsistent with the commission's plan, the local agency shall be notified and that local agency shall have another hearing to reconsider its plans. The local agency may overrule the commission after such hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670.

(b) Prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The local agency may, after a public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670.

(c) Each public agency owning any airport within the boundaries of an airport land use commission plan shall, prior to modification of its airport master plan, refer such proposed change to the airport land use commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The public agency may, after a public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article stated in Section 21670.

(d) Each commission determination pursuant to subdivision (b) or (c) shall be made within 60 days from the date of referral of the proposed action. If a commission fails to make the determination within that period, the proposed action shall be deemed consistent with the commission's plan.

Review of Local Plans

21676.5. (a) If the commission finds that a local agency has not revised its general plan or specific plan or overruled the commission by a two-thirds vote of its governing body after making specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670, the commission may require that the local agency submit all subsequent actions, regulations, and permits to the commission for review until its general plan or specific plan is revised or the specific findings are made. If, in the determination of the commission, an action, regulation, or permit of the local agency is inconsistent with the commission plan, the local agency shall be notified and that local agency shall hold a hearing to reconsider its plan. The local agency may overrule the commission after the hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes of this article as stated in Section 21670.

(b) Whenever the local agency has revised its general plan or specific plan or has overruled the commission pursuant to subdivision (a), the proposed action of the local agency shall not be subject to further commission review, unless the commission and the local agency agree that individual projects shall be reviewed by the commission.

Marin County Override Provisions

21677. Notwithstanding Section 21676, any public agency in the County of Marin may overrule the Marin County Airport Land Use Commission by a majority vote of its governing body.

Airport Owner's Immunity

21678. With respect to a publicly owned airport that a public agency does not operate, if the public agency pursuant to Section 21676 or 21676.5 overrides a commission's action or recommendation, the operator of the airport shall be immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the public agency's decision to override the commission's action or recommendation.

Added: Court Review

21679. (a) In any county in which there is no airport land use commission or other body designated to assume the responsibilities of an airport land use commission, or in which the commission or other designated body has not adopted an airport land use plan, an interested party may initiate proceedings in a court of competent jurisdiction to postpone the effective date of a zoning change, a zoning variance, the issuance of a permit, or the adoption of a regulation by a local agency, which directly affects the use of land within one mile of the boundary of a public airport within the county.

(b) The court may issue an injunction which postpones the effective date of the zoning change, zoning variance, permit, or regulation until the governing body of the local agency which took the action does one of the following:

(1) In the case of an action which is a legislative act, adopts a resolution declaring that the proposed action is consistent with the purposes of this article stated in Section 21670.

(2) In the case of an action which is not a legislative act, adopts a resolution making findings based on substantial evidence in the record that the proposed action is consistent with the purposes of this article stated in Section 21670.

(3) Rescinds the action.

(4) Amends its action to make it consistent with the purposes of this article stated in Section 21670, and complies with either paragraph (1) or (2) of this subdivision, whichever is applicable.

(c) The court shall not issue an injunction pursuant to subdivision (b) if the local agency which took the action demonstrates that the general plan and any applicable specific plan of the agency accomplishes the purposes of an airport land use plan as provided in Section 21675.

(d) An action brought pursuant to subdivision (a) shall be commenced within 30 days of the decision or within the appropriate time periods set by Section 21167 of the Public Resources Code, whichever is longer.

(e) If the governing body of the local agency adopts a resolution pursuant to subdivision (b) with respect to a publicly owned airport that the local agency does not operate, the operator of the airport shall be immune from liability for damages to property or personal injury from the local agency's decision to proceed with the zoning change, zoning variance, permit, or regulation.

(f) As used in this section, "interested party" means any owner of land within two miles of the boundary of the airport or any organization with a demonstrated interest in airport safety and efficiency.

APPENDIX B

MODEL NOISE EASEMENT AND RELEASE

[Owner][1] (Grantor), hereby grants to [airport operator] (Grantee) a perpetual easement on the following terms:

1. Description. The easement shall be an easement on, over and upon that certain real property situated on within the [City, County], State of California and the airspace above said real property (PARCEL) which property is described in Exhibit 1 attached hereto, and by this reference incorporated herein, the airspace being formed by a plane parallel to the surface of the real property, and having the same boundaries as those described in Exhibit 1 attached hereto and extending the boundaries of the plane perpendicular to the plane upwards to the limits of the atmosphere of the earth.

2. Benefit. The easement shall be appurtenant to and for the benefit of all of the real property comprising the [airport], hereafter called Airport, a legal description of which is attached hereto designated Exhibit 2 and by this reference incorporated herein, and such other additional property or interest therein as shall be subsequently acquired or designated from time to time by Grantee or its successors as constituting a part of the Airport, and the easement shall be in gross for the benefit of Grantee and all other persons and entities who directly or indirectly use the easement as a result of any type of use of the property and facilities constituting the Airport, including aviation ground and flight operations.

3. Use and Purpose. The easement shall be used for the existence on, over, upon and within the described PARCEL, of all noise, vibration, air currents, natural or artificial illumination and such matter, emissions, activities or other things that may occur or result directly or indirectly from the operations of the Airport, now and in the future, including but in no way limited to ground and flight operations of aircraft at, over, on or about the Airport. The easement shall not be used for the passage and flight of aircraft. However, this easement shall not affect such rights for the passage and flight of aircraft as such rights existed prior to the date of the easement and as are now or may be provided or permitted by law.

All of such uses shall be without any liability of Grantee or of any other person or entity entitled to the benefits of this easement to Grantor, Grantor's heirs, assigns or successors in interest to all or any part of the property or any interest therein or to any other person or entity using or located on or in the area subject to the easement for:

[1] Insert appropriate names, titles, etc. in brackets used throughout the model

- o damage to property or physical or emotional injury to persons, animals or any other living thing,

- o the diminution in value of any personal or real property,

- o discomfort or inconvenience of any type or kind to any person or thing,

- o or interference with television, radio or other types or kinds of electrical reception, transmissions or activities in the easement.

4. Release. Grantor, for itself and on behalf of the Grantor's heirs, assigns or successors in interest to all or any part of the property, or any interest therein and each person or entity using or located on or in the area subject to this easement, hereby releases and discharges Grantee and all persons and entities entitled to the benefits of the easement from all claims, demands, actions and causes of action of all types or kinds, known or unknown, existing or that might be created hereinafter by statute or case decision, arising out of any of the foregoing described injuries or damages resulting from the use of this easement by Grantee and any other person or entity entitled to the benefits of this easement pursuant to Civil Code Section 1542. Grantor further agrees to defend at its own cost, hold harmless and indemnify Grantee from any liability for or based upon the exercise of the easement rights granted herein.

5. (a) This grant of easement allows the level of aircraft noise impinging on Grantor's PARCEL to be the lesser of:

(1) The annual CNEL reflected on the latest map validated by the [County of] and filed with the California Department of Transportation, Division of Aeronautics in accordance with Section 5050 of Title 21 of the California Administrative Code, or

(2) The annual CNEL reflected on any subsequent map validated by the [County of] and filed with the California Department of Transportation, Division of Aeronautics in accordance with Section 5050 of Title 21 of the California Administrative Code.

(b) There is hereby created an irrebutable presumption that this grant of easement is overburdened by unreasonable use if the noise which impinges on the burdened property exceeds the easement by an amount equal to or greater than 1.5 dB CNEL, and Grantor may seek injunctive relief from the unreasonable use of the easement.

(c) There is hereby created an irrebutable presumption that this grant of easement is so overburdened by unreasonable use that its purpose is defeated if the noise which impinges on the burdened property exceeds the easement by an amount equal to or greater than 3.0 dB CNEL, and Grantor may seek a court finding that the easement is extinguished.

(d) The provisions of subdivisions (b) or (c) shall not apply under the following circumstances: [specify exceptions, if desired].

6. This easement and release and the uses authorized herein shall run with the property described in Exhibit 1, and bind Grantor's heirs, administrators, executors, successors and assigns to the maximum extent now or hereafter permitted by statute or case law and are intended by the parties to comply with Civil Code Section 1468. The real property first hereinabove described as the PARCEL is the servient tenement and said "airport" is the dominant tenement.

7. This noise easement, covenants and agreements described herein shall continue in effect until [airport] shall be abandoned and shall cease to be used for public airport purposes.

Dated: _____

By: _____

(Signatures of Grantor)

Source: Modified from Harbor Bay Isle Noise Easement and Release for Oakland International Airport, and other examples.

App. C

APPENDIX C

EXAMPLE DEPARTURE PATHS AGREEMENT

Kept from CA Guidelines

The voluntary departure path height limitation at the San Carlos Airport is an example of cooperative pre-project planning activities. Recent development activities in the vicinity of the airport, a general aviation facility, included proposals for high-rise buildings from eight to fourteen stories in height. A 100-foot high hotel was to be located 3800 feet from the runway, almost directly on the runway centerline. Under FAR Part 77, with an approach slope of 20:1 to the runway, the proposed hotel building could be as high as 180 feet. However, members of the San Carlos Chamber of Commerce were concerned that even the 100-foot building would pose a safety hazard to the twin engine aircraft commonly flying out of San Carlos when mechanical problems reduce climb performance on departure.

At the request of the Chamber of Commerce, the developer, Redwood Shores, Inc., met with members of the Chamber's Commercial and Industrial Committee and with the Airport staff to discuss their concerns. In addition to the height limits applicable to the property under current FAR Part 77, the developer agreed to limit the height of buildings above the existing ground level within two defined departure paths at the northwesterly end of the San Carlos Airport runway. Within these zones, building heights will be limited to sixty (60) feet above mean sea level which is approximately fifty (50) feet above the airport runway. This voluntary height limit restricts the height of buildings in these designated paths to one-third of the height presently allowed under Federal Aviation Regulations Part 77. The proposed 100-foot hotel has been relocated, outside these two departure paths.

The agreement, with a map illustrating the protected departure paths, has been recorded in the minutes of the San Mateo County ALUC meeting of April 14, 1983. This is the extent of formality to the agreement.

The key point is to recognize that such negotiated settlements are most successfully achieved when the parties involved consult early, before the development plans progress to a level that major design changes are no longer economically feasible.

Source: San Mateo County ALUC, meeting notes, April 14, 1983.

X 22.D

APPENDIX D

CONCENTRATIONS OF PERSONS PER ACRE STANDARD

Uses are compatible if they do not result in a gathering of individuals in an area that would result in an average density of greater than 25 persons per acre per hour during a 24 hour period, not to exceed 50 persons per acre at any time.

---

1) Average densities of persons per acre per hour during a 24 hour period are determined by calculating the number of persons per acre expected on a site, multiplying by the number of hours they will be on the site, and dividing the total by 24.

Example #1: One 8 hour shift of 30 workers on a one acre site

30 persons expected x 8 hours on site = 240

$\frac{240}{24 \text{ hours}}$ = average density of 10 persons per acre per hour during a 24 hour period

Example #2: Two 8 hour shifts of 30 workers on a one acre site

30 persons expected x 16 hours on site = 480

$\frac{480}{24 \text{ hours}}$ = average density of 20 persons per acre per hour during a 24 hour period

2) The maximum number of persons allowed per acre per hour is calculated by dividing the number of hours persons will be on the site by 24 hours, and then dividing 25 persons per acre per hour by the result. The resulting number is the maximum number of persons allowed per acre per hour, provided it does not exceed 50. 50 persons per acre at any one time is the maximum number of persons allowed under the standard.

Example: A use on a one acre site has two 8 hour shifts.

$25 \quad \frac{16 \text{ hours}}{24 \text{ hours}}$ = 37.5 maximum persons per acre per hour allowed

Application of this formula results in the following table which specifies the maximum persons per acre per hour for the duration of time that persons are expected to be on site during a 24 hour period.

Hours of Operation Per Day	Maximum Persons Allowed Per Acre/During Each Hour
24	25
23	26
22	27
21	28
20	30
19	31
18	33
17	35
16	37
15	40
14	42
13	46
12 or less	50*

Note: Fractions in the maximum persons allowed column are rounded to the lowest whole number.

* Concentrations of persons per acre cannot exceed 50 persons per acre at any time.

APPENDIX E

AIRPORT LAND USE COMMISSION
FOR
LAKE TAHOE AIRPORT

TO: RICHARD FRENCH, AIRPORT DIRECTOR

FROM: AIRPORT LAND USE COMMISSION

DATE:

SUBJECT: CLUP REVISION

Enclosed is a copy of the new noise contours which were adopted into the Lake Tahoe Airport Comprehensive Land Use Plan (CLUP) at the Airport Land Use Commission meeting held on July xx, 19xx. Please include this as Figure X, page XX of you CLUP.

Please call if you have any questions.

enclosure
ab/cd

P.O. Box 1210, South Lake Tahoe, California 95705

(SAMPLE C.L.U.P. NOTIFICATION)

APPENDIX F

116 -- AIRPORT

PLAN DESIGNATION:

Land Use Classification	-	COMMERCIAL/PUBLIC SERVICE
Management Strategy	-	REDIRECTION
Special Designation	-	TDR RECEIVING AREA FOR: 1. Existing Development SCENIC RESTORATION AREA

DESCRIPTION:

Location: This area includes the airport and surrounding area along Highway 50 and is located on TRPA maps G-19 and G-20.

Existing Uses: This area includes the airport, a concrete batch plant, old borrow areas, and miscellaneous commercial uses. The area is approximately 40 percent built out if the airport runways are excluded.

Existing Environment: The lands are classified 70 percent SEZ, 20 percent low hazard and ten percent high hazard. The area is 20 percent covered with an additional 60 percent disturbed.

PLANNING STATEMENT: This area should be rehabilitated to provide appropriate commercial service. The airport should continue to provide commercial and general aviation service in accordance with the adopted Goals and Policies and environmental constraints.

PLANNING CONSIDERATIONS:

1. There are extensive disturbed areas (Px) which are currently misclassified as high hazard and should be considered for man-modified designations.

2. There are scenic problems associated with the existing commercial area.

3. There are a number of unresolved airport issues, including land capability, general aviation and commercial service levels, and establishment of a noise corridor.

SPECIAL POLICIES:

1. The area west of Highway 50 should be evaluated for a man-modified determination. Areas so designated should be subject to a rehabilitation plan, and mitigation measures should emphasize scenic and disturbed land restoration as a condition of new development.

2. Redirection, including relocation of development or change in use of development on areas which do not meet scenic threshold criteria, should be encouraged.

3. The airport and its surrounding land uses shall be the subject of a cooperative planning effort between the City of South Lake Tahoe, the County of El Dorado, an Airport Land Use Commission (if formed), and TRPA, to the extent authorized by applicable state and federal law. Such joint planning efforts shall be incremental, dealing first with the airport proper and then the allowable surrounding land uses. Such joint planning shall be conducted, where practicable, under memorandums of understanding between the various governmental entities to avoid or minimize any jurisdictional questions.

4. This area should be considered as a multi-modal transportation node.

PERMISSIBLE USES: Pursuant to Chapter 18 PERMISSIBLE USES and if applicable, Chapter 51 PERMISSIBLE USES AND ACCESSORY STRUCTURES IN THE SHOREZONE AND LAKEZONE, the following primary uses may be permitted within all or a portion of the Plan Area. The list indicates if the use is allowed (A) or must be considered under the provisions for a special use (S). Existing uses not listed shall be considered nonconforming uses within this Plan Area. The establishment of new uses not listed shall be prohibited within this Plan Area.

General List: The following list of permissible uses is applicable throughout the Plan Area.

Residential	-	Employee housing (S) and multiple family dwelling (S).
Tourist Accommodation	-	Hotels, motels, and other transient dwelling units (S).
Commercial	-	Auto, mobile home and vehicle dealers (S), building materials and hardware (S), eating and drinking places (A), food and beverage retail sales (A), furniture, home furnishings and equipment (S), general merchandise stores (A), mail order and vending (A), nursery (A), outdoor retail sales (S), service stations (S), animal husbandry services (S), auto repair and service (S), broadcasting studios (A), personal services (A), professional offices (A), schools - business and vocational (S), schools - pre-schools (A), secondary storage (S), batch plants (S), food and kindred products (S), fuel and ice dealers (S), industrial services (S), recycling and scrap (S), small scale manufacturing (S), storage yards (S), vehicle and freight terminals (S), vehicle storage and parking (S), warehousing (A), and wholesale and distribution (S).

Public Service	-	Airfields, landing strips and heliports (new non-emergency sites prohibited) (A), cemeteries (S), churches (S), cultural facilities (S), day care centers (A), government offices (S), local assembly and entertainment (S), local post office (A), local public health and safety facilities (A), membership organizations (S), public utility centers (S), regional public health and safety facilities (S), social service organizations (S), pipelines and power transmission (S), transit stations and terminals (S), transportation routes (S), and transmission and receiving facilities (S).
Recreation	-	Day use areas (A), participant sports facilities (S), cross country skiing courses (S), outdoor recreation concessions (S), riding and hiking trails (S), rural sports (S), snowmobile courses (S), and visitor information center (S).
Resource Management	-	Reforestation (A), sanitation salvage cut (A), thinning (A), timber stand improvement (A), tree farms (A), early successional stage vegetation management (A), nonstructural fish habitat management (A), nonstructural wildlife habitat management (A), structural fish habitat management (A), structural wildlife habitat management (A), fire detection and suppression (A), fuels treatment (A), insect and disease suppression (A), sensitive plant management (A), uncommon plant community management (A), erosion control (A), runoff control (A) and SEZ restoration (A).

MAXIMUM DENSITIES: Pursuant to Chapter 21 DENSITY, the following list establishes the maximum allowable densities that may be permitted for any parcel located within the Plan Area. The actual development permitted may be further limited by transfer of development rights limitations, residential density incentive program, special use determinations, allocation limitations and general site development standards.

USE	MAXIMUM DENSITY
Residential	
Employee Housing	15 units per acre
Tourist Accommodation	
Hotel, Motel and other Transient Units	
-with less than 10% of units with kitchens	40 units per acre
-with 10% or more units with kitchens	15 units per acre

RESIDENTIAL BONUS UNITS: Pursuant to Chapter 35, the maximum number of residential bonus units which may be permitted for this Plan Area is 0 units.

MAXIMUM COMMUNITY NOISE EQUIVALENT LEVEL: The maximum community noise equivalent level for this Plan Area is 65 CNEL. The maximum community noise equivalent level for the Highway 50 corridor is 65 CNEL.

ADDITIONAL DEVELOPED OUTDOOR RECREATION: The following are the targets and limits for additional developed outdoor recreation facilities specified in Chapter 13 to be located within this Plan Area. Specific projects and their timing are addressed in the TRPA Five-Year Recreation Program pursuant to Chapter 33 Allocation of Development. The following additional capacities allowed are measured in persons at one time:

SUMMER DAY USES 0 PAOT WINTER DAY USE 0 PAOT OVERNIGHT USES 0 PAOT

IMPROVEMENT PROGRAMS: The capital improvement and other improvement programs required by the Regional Goals and Policies Plan for this area shall be implemented. The improvements include, but are not limited to, the following:

1. Improvements required by the Surface Water Management Plan as shown on Figure VIII-1 through 18 of Volume I of the 208 Water Quality Plan.

2. The highway and transit improvements indicated in the Transportation Element of the Regional Goals and Policies Plan.

3. Stream zone restoration as indicated in the Stream Environment Zone Restoration Program. (To be completed.)

4. The scenic restoration and landscaping improvements indicated in the Scenic Quality Implementation Program for the Highway 50 corridor. (To be completed.)

APPENDIX H

MODEL NOISE EASEMENT AND RELEASE

[Owner][1] (Grantor), hereby grants to [airport operator] (Grantee) a perpetual easement on the following terms:

1. Description. The easement shall be an easement on, over and upon that certain real property situated on within the [City, County], State of California and the airspace above said real property (PARCEL) which property is described in Exhibit 1 attached hereto, and by this reference incorporated herein, the airspace being formed by a plane parallel to the surface of the real property, and having the same boundaries as those described in Exhibit 1 attached hereto and extending the boundaries of the plane perpendicular to the plane upwards to the limits of tne atmosphere of the earth.

2. Benefit. The easement shall be appurtenant to and for the benefit of all of the real property comprising the [airport], hereafter called Airport, a legal description of which is attached hereto designated Exhibit 2 and by this reference incorporated herein, and such other additional property or interest therein as shall be subsequently acquired or designated from time to time by Grantee or its successors as constituting a part of the Airport, and the easement shall be in gross for the benefit of Grantee and all other persons and entities who directly or indirectly use the easement as a result of any type of use of the property and facilities constituting the Airport, including aviation ground and flight operations.

3. Use and Purpose. The easement shall be used for the existence on, over, upon and within the described PARCEL, of all noise, vibration, air currents, natural or artificial illumination and such matter, emissions, activities or other things that may occur or result directly or indirectly from the operations of the Airport, now and in the future, including but in no way limited to ground and flight operations of aircraft at, over, on or about the Airport. The easement shall not be used for the passage and flight of aircraft. However, this easement shall not affect such rights for the passage and flight of aircraft as such rights existed prior to the date of the easement and as are now or may be provided or permitted by law.

All of such uses shall be without any liability of Grantee or of any other person or entity entitled to the benefits of this easement to Grantor, Grantor's heirs, assigns or successors in interest to all or any part of the property or any interest therein or to any other person or entity using or located on or in the area subject to the easement for:

[1] Insert appropriate names, titles, etc. in brackets used throughout the model

- o damage to property or physical or emotional injury to persons, animals or any other living thing,

- o the diminution in value of any personal or real property,

- o discomfort or inconvenience of any type or kind to any person or thing,

- o or interference with television, radio or other types or kinds of electrical reception, transmissions or activities in the easement.

4. Release. Grantor, for itself and on behalf of the Grantor's heirs, assigns or successors in interest to all or any part of the property, or any interest therein and each person or entity using or located on or in the area subject to this easement, hereby releases and discharges Grantee and all persons and entities entitled to the benefits of the easement from all claims, demands, actions and causes of action of all types or kinds, known or unknown, existing or that might be created hereinafter by statute or case decision, arising out of any of the foregoing described injuries or damages resulting from the use of this easement by Grantee and any other person or entity entitled to the benefits of this easement pursuant to Civil Code Section 1542. Grantor further agrees to defend at its own cost, hold harmless and indemnify Grantee from any liability for or based upon the exercise of the easement rights granted herein.

5. (a) This grant of easement allows the level of aircraft noise impinging on Grantor's PARCEL to be the lesser of:

(1) The annual CNEL reflected on the latest map validated by the [County of] and filed with the California Department of Transportation, Division of Aeronautics in accordance with Section 5050 of Title 21 of the California Administrative Code, or

(2) The annual CNEL reflected on any subsequent map validated by the [County of] and filed with the California Department of Transportation, Division of Aeronautics in accordance with Section 5050 of Title 21 of the California Administrative Code.

(b) There is hereby created an irrebutable presumption that this grant of easement is overburdened by unreasonable use if the noise which impinges on the burdened property exceeds the easement by an amount equal to or greater than 1.5 dB CNEL, and Grantor may seek injunctive relief from the unreasonable use of the easement.

(c) There is hereby created an irrebutable presumption that this grant of easement is so overburdened by unreasonable use that its purpose is defeated if the noise which impinges on the burdened property exceeds the easement by an amount equal to or greater than 3.0 dB CNEL, and Grantor may seek a court finding that the easement is extinguished.

(d) The provisions of subdivisions (b) or (c) shall not apply under the following circumstances: [specify exceptions, if desired].

6. This easement and release and the uses authorized herein shall run with the property described in Exhibit 1, and bind Grantor's heirs, administrators, executors, successors and assigns to the maximum extent now or hereafter permitted by statute or case law and are intended by the parties to comply with Civil Code Section 1468. The real property first hereinabove described as the PARCEL is the servient tenement and said [airport] is the dominant tenement.

7. This noise easement, covenants and agreements described herein shall continue in effect until [airport] shall be abandoned and shall cease to be used for public airport purposes.

Dated: _____

By: _____

(Signatures of Grantor)

Source: Modified from Harbor Bay Isle Noise Easement and Release for Oakland International Airport, and other examples.

APPENDIX I

MODEL AVIGATION AND NOISE EASEMENT

WHEREAS, [property owner][1], hereinafter called Grantor, is the owner in fee of that certain parcel of land situated in the [City, County, State] more particularly described and identified in Exhibit A (legal description of property) attached hereto and made a part hereof, hereinafter called "PARCEL" and

WHEREAS, [ ] hereinafter called Grantee, is the [owner and/or operator] of certain properties upon which [airport], described in Exhibit B attached hereto, is located, said properties lying within [City, County, State] and furthermore being in close proximity to said PARCEL; and

WHEREAS, Grantor and Grantee wish to establish provisions so that aircraft using the [airport] shall have the right of flight and the right to cause noise, light, and other effects associated with the operation of aircraft in the airspace over and above said PARCEL.

NOW, THEREFORE, Grantor, for its heirs, executors, administrators, successors and assigns, for and in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration, receipt and sufficiency of which are hereby acknowledged, hereby grants and conveys to Grantee, its successors and assigns forever:

1. A perpetual public-use avigation/noise easement subject to termination as expressly provided herein, and right-of-way for the free and unobstructed passage and flight of aircraft, of any and all kinds now known or hereafter invented, used or designed for navigation or flight in the air, of the class, size and category operationally compatible with [airport]. Said easement shall be in, through, over and across the airspace of said PARCEL in an airspace as described and depicted in Exhibit C (map of areas protected by easement including description of imaginary surfaces and elevations).

2. The rights herein granted shall include the right in such airspace to allow, make and emit such noise, light, vibrations, fumes, exhaust, smoke, air currents, dust, fuel particles, radio, television, and other electromagnetic interferences, and all other effects as may be inherent to the operation of aircraft for navigation or flight in the air.

[1] Insert appropriate names, titles, etc. in brackets used throughout the model.

3. Grantor hereby fully waives, remises and releases any right or cause of action that it may now have or that it may have in the future against Grantee, its successors, and assigns, and covenants not to sue due to such noise, light, vibrations, fumes, exhaust, smoke, air currents, dust, fuel particles, radio, television, and other electromagnetic interferences, and all other effects that may be caused or may have been caused by the operation of aircraft landing at, or taking off from, or operating at or on [airport]. Said release and covenant shall include, but not be limited to claims, known or unknown, for damages for physical or emotional injuries, discomfort, inconvenience, property damage, death, interference with use and enjoyment of property, diminution of property values, nuisance, or inverse condemnation or for injunctive or other extraordinary or equitable relief.

4. It is further agreed that Grantee as [owner and/or operator] of [airport] shall have no duty to avoid or mitigate such damages by, without limitation, setting aside or condemning buffer lands, rerouting air traffic, erecting sound or other barriers, establishing curfews, noise or other regulations, except to the extent, if any, that such actions are validly required by governmental authority. Grantor reserves such use, rights and privileges in said PARCEL as may be exercised and enjoyed without interference with or abridgment of the rights hereby granted.

5. (a) This grant of easement allows the level of aircraft noise impinging on Grantor's PARCEL to be the lesser of:

(1) The annual CNEL reflected on the latest map validated by the [County of] and filed with the California Department of Transportation, Division of Aeronautics in accordance with §5050 of Title 21 of the California Administrative Code, or
(2) The annual CNEL reflected on any subsequent map validated by the [County of] and filed with the California Department of Transportation, Division of Aeronautics in accordance with §5050 of Title 21 of the California Administrative Code.

(b) There is hereby created an irrebutable presumption that this grant of easement is overburdened by unreasonable use if the noise which impinges on the burdened property exceeds the easement by an amount equal to or greater than 1.5 dB CNEL, and Grantor may seek injunctive relief from the unreasonable use of the easement.

(c) There is hereby created an irrebutable presumption that this grant of easement is so overburdened by unreasonable use that its purpose is defeated if the noise which impinges on the burdened property exceeds the easement by an amount equal to or greater than 3.0 dB CNEL, and Grantor may seek a court finding that the easement is extinguished.

(d) The provisions of subdivisions (b) or (c) shall not apply under the following circumstances: [specify exceptions, if desired].

6. This grant of avigation/noise easement shall not operate to deprive the Grantor, his successors or assigns, of any rights that it may from time to time have against any individual or private operator for negligent or unlawful operation of aircraft.

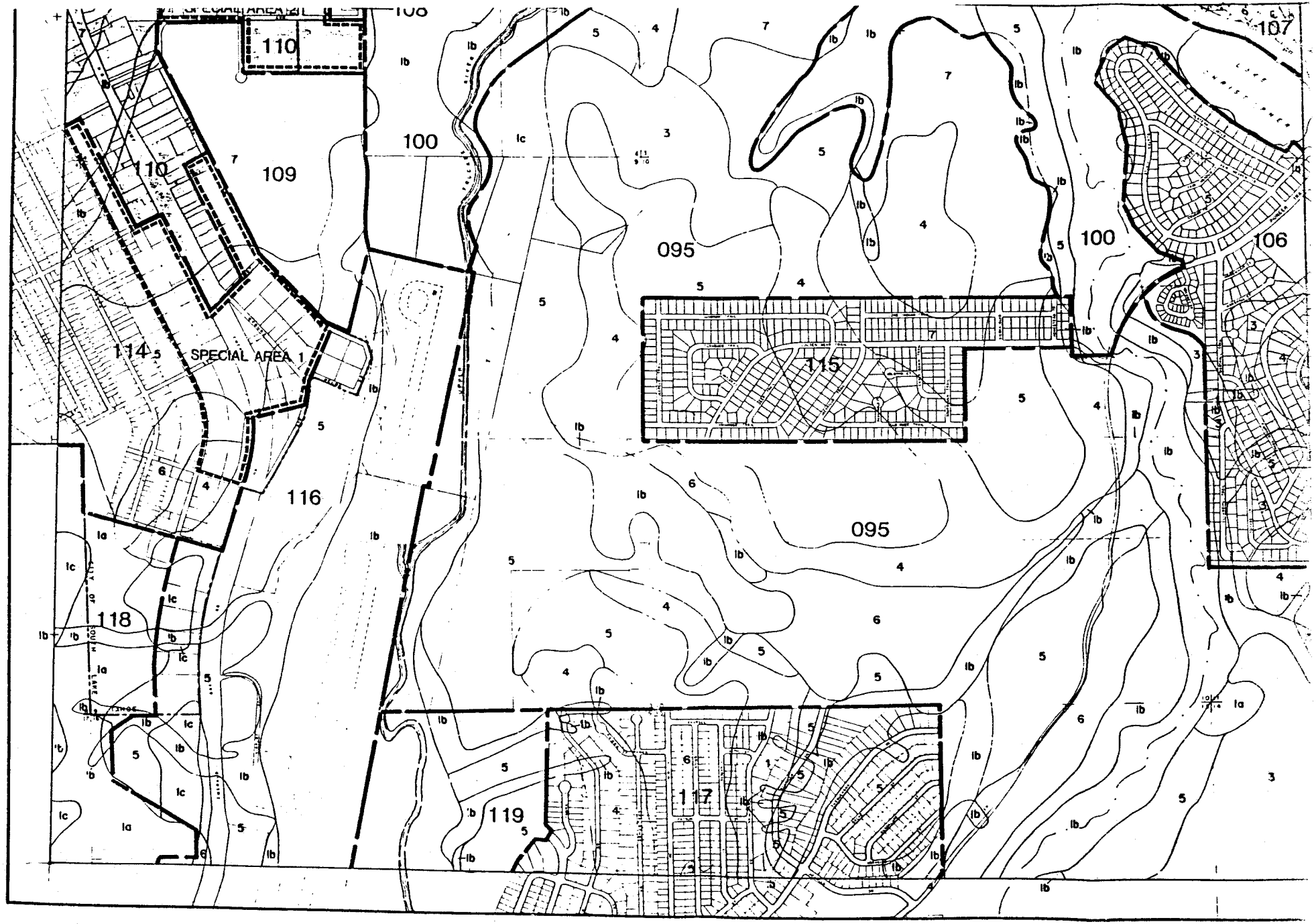
7. For and on behalf of itself, its successors and assigns, Grantor hereby covenants with Grantee for the direct benefit of the real property constituting [airport] that neither Grantor nor its successors in interest or assigns shall hereafter construct or permit the construction or growth of any structure, tree or other object that penetrates an approved transitional, horizontal, or control surface as described and depicted in Exhibit C or that constitutes an obstruction to air navigation under FAA Part 77, or that obstructs or interferes with the use of the flight easements and rights of way herein granted or that creates electrical interference with radio communication between any installation upon said airport and aircraft, or as to make it difficult for pilots to distinguish between airport lights and other lights, or as to impair visibility in the vicinity of the airport, or as otherwise to endanger the landing, take-off or maneuvering of aircraft. Grantee reserves the right to mark and light as obstructions to air navigation any such building, structure, tree or other object now upon, or that in the future may be upon Grantor's property, together with the right of ingress to, egress from, and passage over Grantor's property for the above purpose.

8. All promises, covenants, conditions and reservations contained in this document are made and entered into for the benefit of [owner and/or operator] of [airport]. These promises, covenants, conditions and reservations shall run with the PARCEL, described and identified on Exhibit A attached, and bind Grantor's heirs, administrators, executors, successors and assigns to the maximum extent now or hereafter permitted by statute or case law and are intended by the parties to comply with California Civil Code §1468. The real property first hereinabove described as the PARCEL is the servient tenement and said [airport] is the dominant tenement. Grantor for itself and its successors and assigns waives all rights under Civil Code §1542. "Successors and assigns" as used in this paragraph includes without limitation: invitees, licensees, permittees, tenants, lessees, and others who may use easement rights reserved herein or use or be upon said PARCEL, and/or their respective officers, agents, and employees.

9. Grantor agrees to defend at its own cost, hold harmless and indemnify Grantee from any liability for or based upon the exercise of the easement rights granted herein.

10. The avigation/noise easement, covenants and agreements described herein shall continue in effect until [airport] shall be abandoned and shall cease to be used for public airport purposes.

Dated: _____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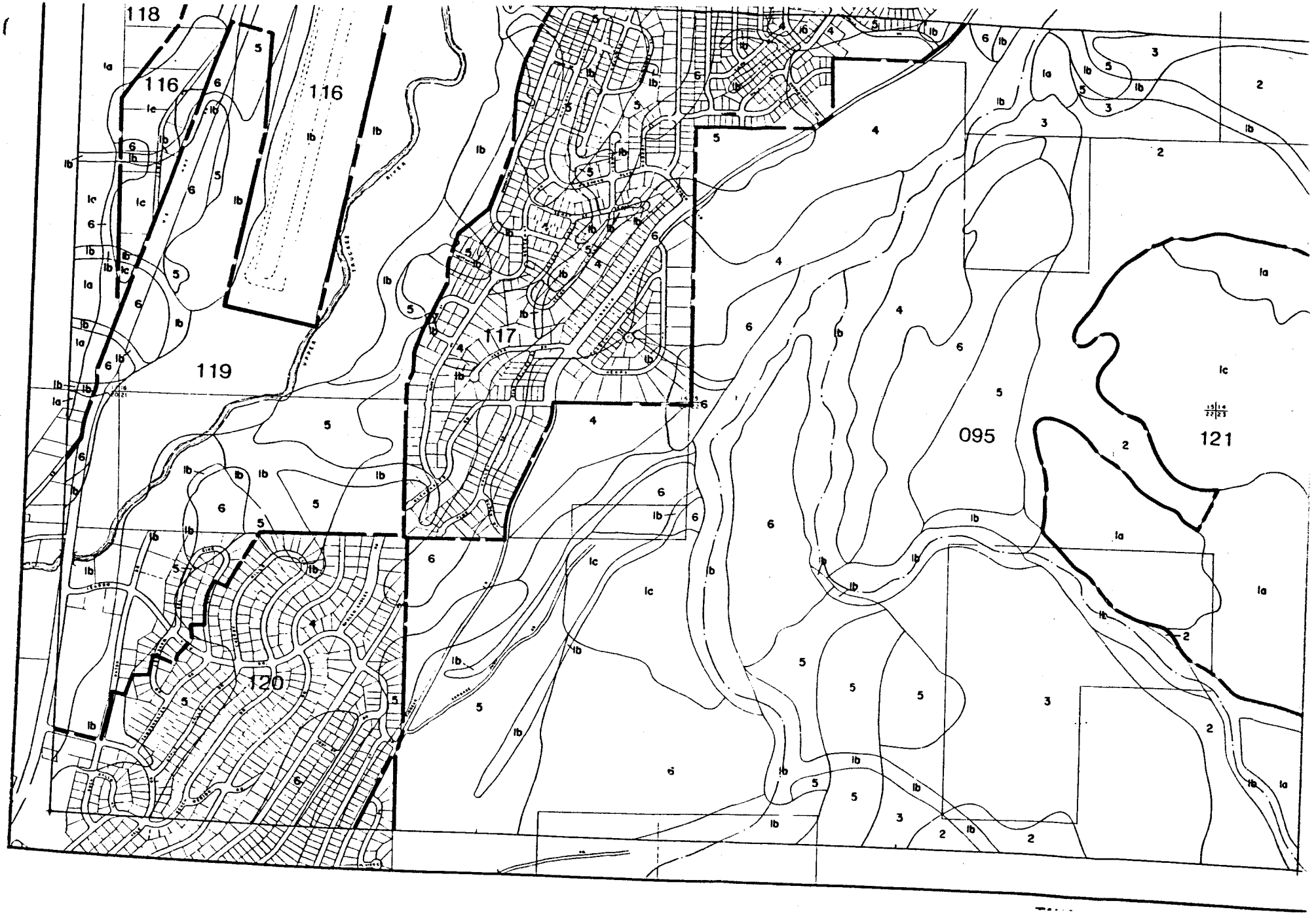
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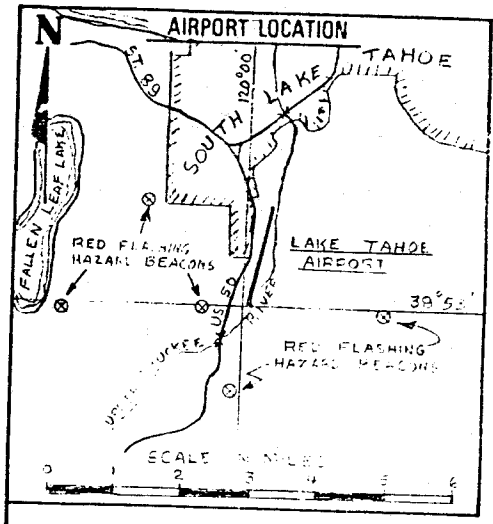
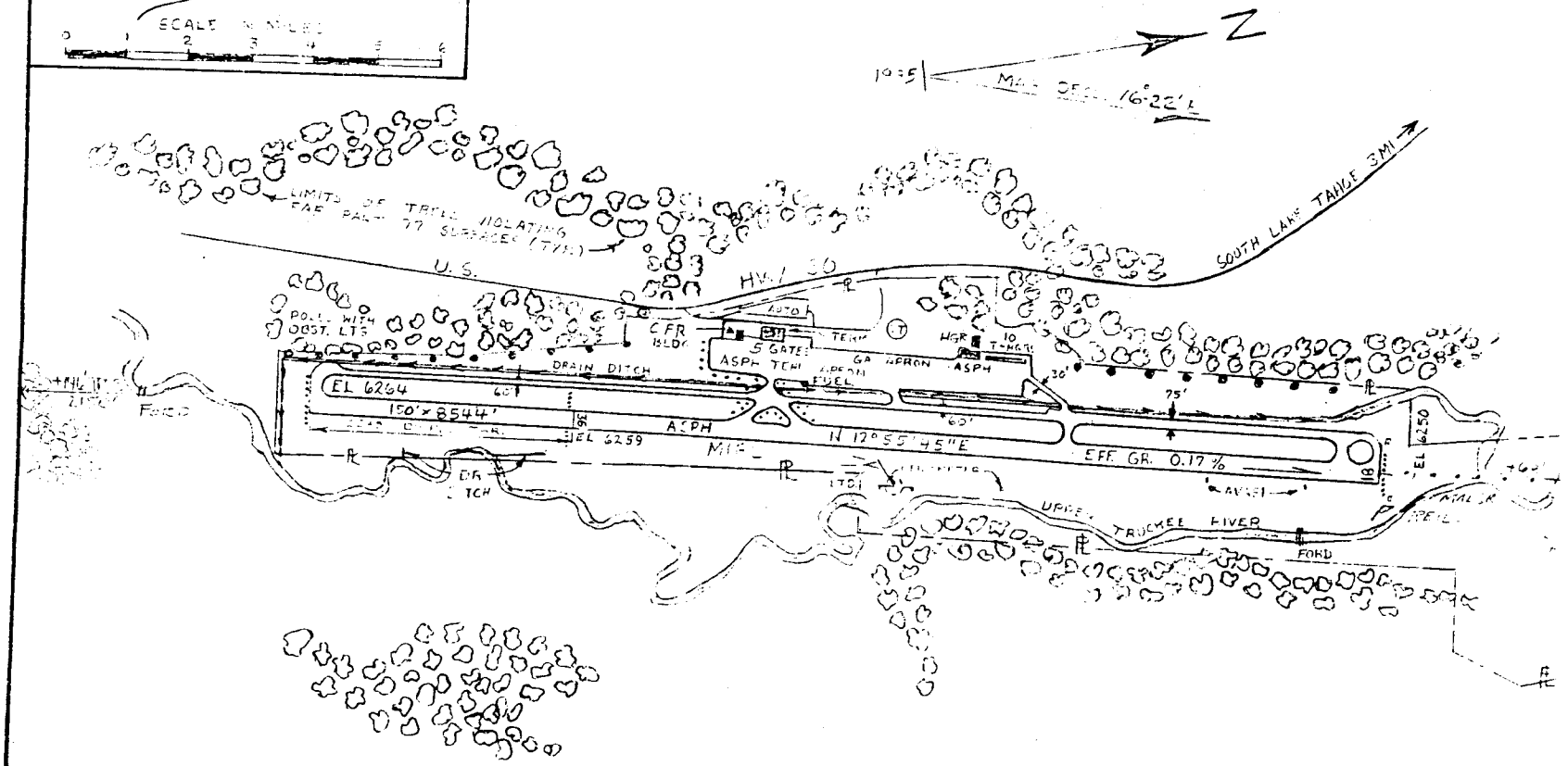


REMARKS:

1. ALL PAVEMENT IS A.C.
2. WIND CONE IN SEG CIRCLE IS LIGHTED
3. ONLY ANGLED TAXIWAYS ARE LIGHTED
4. FUNCTION HAS BASIC MARKING
5. ENTIRE TAXIWAY & APRON HAVE EDGE LIGHT
6. RWY 18 - LEIN NOT STANDARD)



AIRPORT LAYOUT