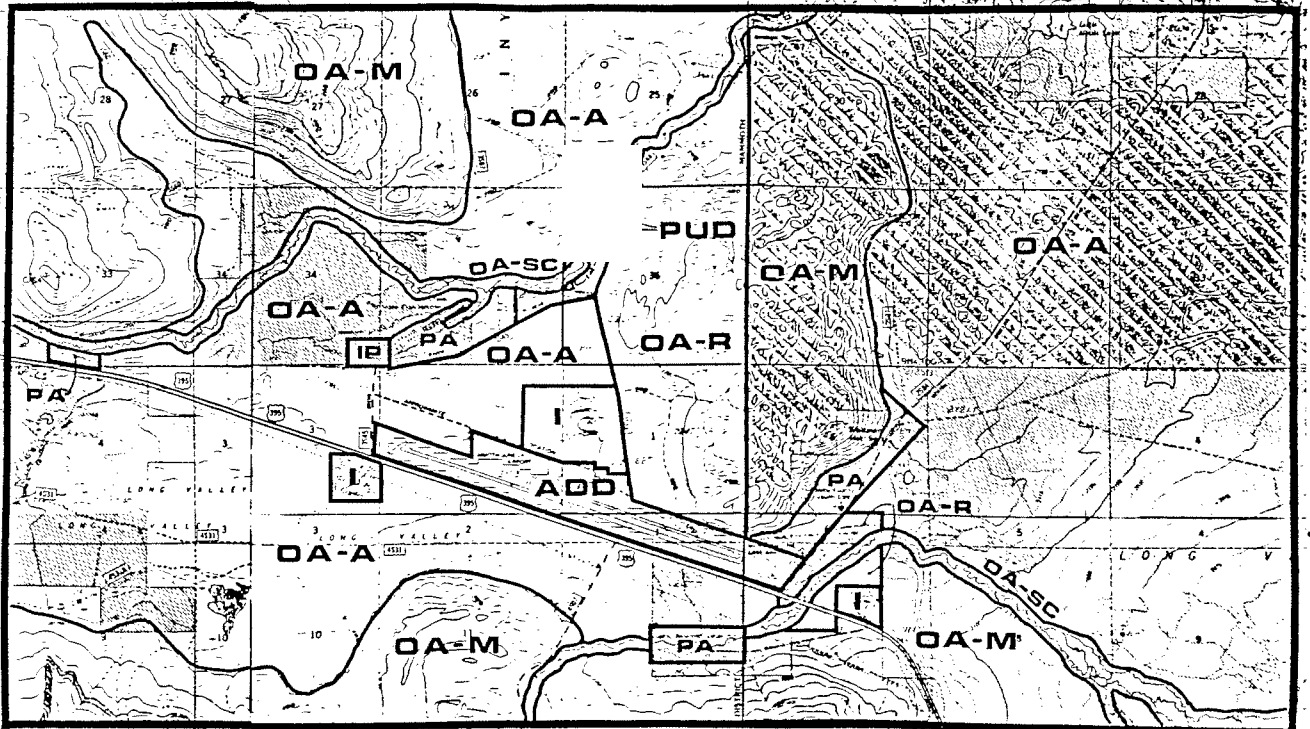


# MAMMOTH/JUNE LAKE

## AIRPORT LAND USE PLAN



PREPARED FOR

MONO COUNTY AIRPORT LAND USE COMMISSION

MARCH 1987



MAMMOTH/JUNE LAKE AIRPORT  
LAND USE PLAN

Prepared for:  
Mono County Airport Land Use Commission  
P.O. Box 8  
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State Clearinghouse No. 86060901

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## INTRODUCTION

### Background

The Mammoth/June Lake Airport is located in the southwestern portion of Mono County approximately eight miles easterly of the resort community of Mammoth Lakes. The California Public Utilities Code requires that each county which contains an air carrier airport must establish an Airport Land Use Commission (ALUC) whose primary function is to maintain the utility and economic viability of air transportation while protecting the public health, safety, and welfare in the vicinity of airports. The Public Utilities Code further requires the Commission to formulate a comprehensive land use plan for areas surrounding or affected by airport operations. The Mammoth/June Lake Airport is the only air carrier airport in Mono County with two commercial aviation companies presently offering scheduled service from the facility.

The proposed Mammoth/June Lake Airport Land Use Plan establishes a comprehensive land use plan which defines the type and pattern of future development in the 28 square mile area surrounding the existing airport. The plan provides more specificity than the County General Plan, the Mammoth-Mono Unit Plan (MMUP) of the Inyo National Forest, or the Benton-Owens Valley Management Plan of the Bureau of Land Management, and is intended to provide the basis for amendment of these planning documents. The Mono County ALUC and the U.S. Forest Service are joint lead agencies for the proposed Airport Land Use Plan. The plan provides a framework for the orderly growth and development of the Mammoth/June Lake Airport planning area which will promote inter-agency coordination for the achievement of regional land management goals.

Specific policies and guidelines established in the plan are also intended to protect the safety and general welfare of people in the vicinity of the airport and to assure the safety of air navigation. Specifically, the plan seeks to protect the public from adverse effects of aircraft noise, reduce the number of people exposed to airport-related hazards, and to ensure that no structures affect navigable airspace. Furthermore, the plan sets forth the criteria by which the Mono County Airport Land Use Commission will evaluate general and specific plans, zoning ordinances, building regulations, and development proposals within the vicinity of the Mammoth/June Lake Airport.

The proposed Airport Land Use Plan is not categorically exempt from environmental review, and an initial study has indicated that there may be environmental impacts associated with the plan which require mitigation.

## SUMMARY

### Planning Location and Boundary

The Mammoth/June Lake Airport is located in the southern portion of Mono County, approximately 35 miles north of Bishop and eight miles east of the Town of Mammoth Lakes. It is situated in the westerly portion of Long Valley immediately adjacent to U.S. Highway 395, which is the principal north-south arterial highway route of the Eastern Sierra Nevadas. The land use planning area encompasses 28 square miles and includes all areas potentially affected by aircraft landing and takeoff zones, approach and departure flight patterns, and general overflight zones. The planning area extends eight miles east-west from the existing Mono County Sheriff Substation to Crowley Lake and four miles north-south from the lower foothills of the Sierra Nevada to the Hot Creek Gorge.

### Objectives

There are three basic objectives of the proposed Mammoth/June Lake Airport Land Use Plan:

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 provide economic development opportunities in the airport area for the benefit and welfare of the county.

It is intended that the adopted Airport Land Use Plan will provide the basis for amendment of the Mono County General Plan, the MMUP Land Management Plan of the Inyo National Forest, and the Benton-Owens Valley Management Plan of the Bureau of Land Management.

### Plan Description

The proposed plan establishes land use designations for existing developments within the planning area, preserves large open space areas and identifies their primary use, and creates an Airport Development District for lands immediately adjacent to the Mammoth/June Lake Airport site. Open space designations represent 93.8% of the total planning area, and existing land uses encompass 3.7%. The remaining area (approximately 455 acres) comprises the proposed Airport Development District (ADD) which includes the existing 256-acre airport site.

The plan provides for major development and expansion of the airport terminal area within the ADD zone, including additional aircraft support facilities, a new passenger terminal, an airport hotel, and extensive infrastructure improvements. The remainder of the ADD zone is designated for light industrial, manufacturing, warehousing, and similar economic development purposes. The plan also considers potential low-intensity recreational uses, such as a golf course, in open space areas adjacent to the airport. Projected ultimate average population associated with implementation of the plan is 663 persons. Maximum daily populations (PAOT) are estimated to ultimately approach 1,552 persons. These projections are considered to represent moderate growth over the 20-year planning period.

The Airport Land Use Plan further establishes specific land use policies to protect the public welfare and the safety of aircraft operations. These include airport safety zone policies, overflight zone and traffic pattern policies, height restriction policies, and noise policies. All private land development within the airport planning area is subject to the restrictions and requirements of these policies. Mono County and the ALUC do not have authority over federal or state lands, but it is anticipated that the policies of the plan will be incorporated into the appropriate land management plans of jurisdictional federal and state agencies.

#### Unavoidable Adverse Impacts.

Environmental analyses and evaluations of the plan elements indicate that the following adverse impacts are unavoidable:

Construction Impacts. Short-term disturbances of the local environment during construction activities are unavoidable but can be mitigated to reasonable levels.

Land Transformation Impacts. Ultimate development of the land uses designated in the plan will result in the loss of 430 acres of natural habitat. The designated development areas are not known to contain any unique habitat for rare, endangered, or threatened species. Loss of habitat and attendant reductions in the productivity of the ecosystem are an unavoidable consequence of any land use within the planning area.

Water Resource Impacts. The proposed land uses, including expansion and development of the airport site, will impose an ultimate projected annual demand of 756 acre-feet on the groundwater resources of the area. Although significant impacts on surface streamflows, spring flows, or riparian meadows are not anticipated, localized declines in groundwater levels are unavoidable.

Air Quality. Additional emissions of air pollutants associated with increased automobile traffic, expansion of aircraft operations, and new development are inevitable and unavoidable. Significant declines in general air quality are not anticipated within the planning area, however.

Visual Impacts. Eventual development of the airport area and associated land uses will result in alterations of the existing viewshed. Adverse visual impacts can be mitigated to acceptable levels, but the modification of the existing visual character of the area is unavoidable.

Noise. General increases in ambient noise levels are an inevitable consequence of expanded airport operations. Although projected noise impacts are generally limited to the immediate vicinity of the airport and are within the acceptable range of federal and state guidelines, cumulative noise increases are unavoidable.

## PROJECT DESCRIPTION

### History

The Mammoth/June Lake Airport was originally constructed by the U.S. Army during World War II and acquired by Mono County shortly following the war. It was operated as an unattended landing strip (known as the Long Valley Airport) for many years with virtually no additional improvements. During the early 1960's, the Mammoth Lakes area began to develop into a major Eastern Sierra resort, and Mono County transferred the property to the U.S. Forest Service with the understanding that private interests would improve and expand the facilities. The runway was subsequently widened and lengthened to 5,000 feet and operated by private parties under a U.S. Forest Service special use permit. The use permit included the development of recreational-resort facilities in addition to airport land uses. The 1979 MMUP of the Inyo National Forest subsequently eliminated resort land uses at the airport site. In the late 1970's, the Mammoth Lakes area experienced a period of extraordinary growth and annual airport traffic increased from less than 6,000 to over 20,000 aircraft operations. Responding to increasing demands being placed on the airport, Mono County prepared a comprehensive Airport Master Plan in 1978 and resumed public operation of the facility in 1980.

In 1983, the county began a \$5,100,000 improvement program to upgrade the airport facility, financed primarily with grants from the Federal Aviation Administration. In addition, two land exchanges were initiated with the Inyo National Forest to return 196 acres of the airport property (total site area is approximately 256 acres) to Mono County ownership. One 57.5-acre exchange was completed in the fall of 1985, and the remaining 138.5-acre exchange is to be finalized soon. The most easterly 60-acre portion of the runway and taxiway is located on land leased from the City of Los Angeles.

The Mammoth/June Lake Airport presently consists of a 7,000-foot asphalt runway, 3,400 feet of paved overrun area, a full-length parallel paved taxiway, and both concrete and paved aircraft parking aprons. The facility includes a small single-story terminal, a management office, an operations office, fueling facilities, and several aircraft maintenance and storage hangars. The airport facility handles in excess of 30,000 aircraft operations annually, and is presently managed by a private firm, Glazov Aviation, Inc., under contract with Mono County.

Land uses in the vicinity of the airport have generally evolved in the absence of coordinated planning concepts. Prior to airport construction, the land surrounding the airport was primarily utilized for livestock pasture and grazing and fishery resource development at Hot Creek. In the past 20 years, however, development has included such

diverse land uses as an elementary school, a church, a regional recreational facility, aquatic research facilities, private and public quarries, and a sheriff's substation. Since most of the land surrounding the airport site is under federal ownership, most historical planning and land management has been accomplished by federal jurisdictional agencies.

#### Authority and Requirements

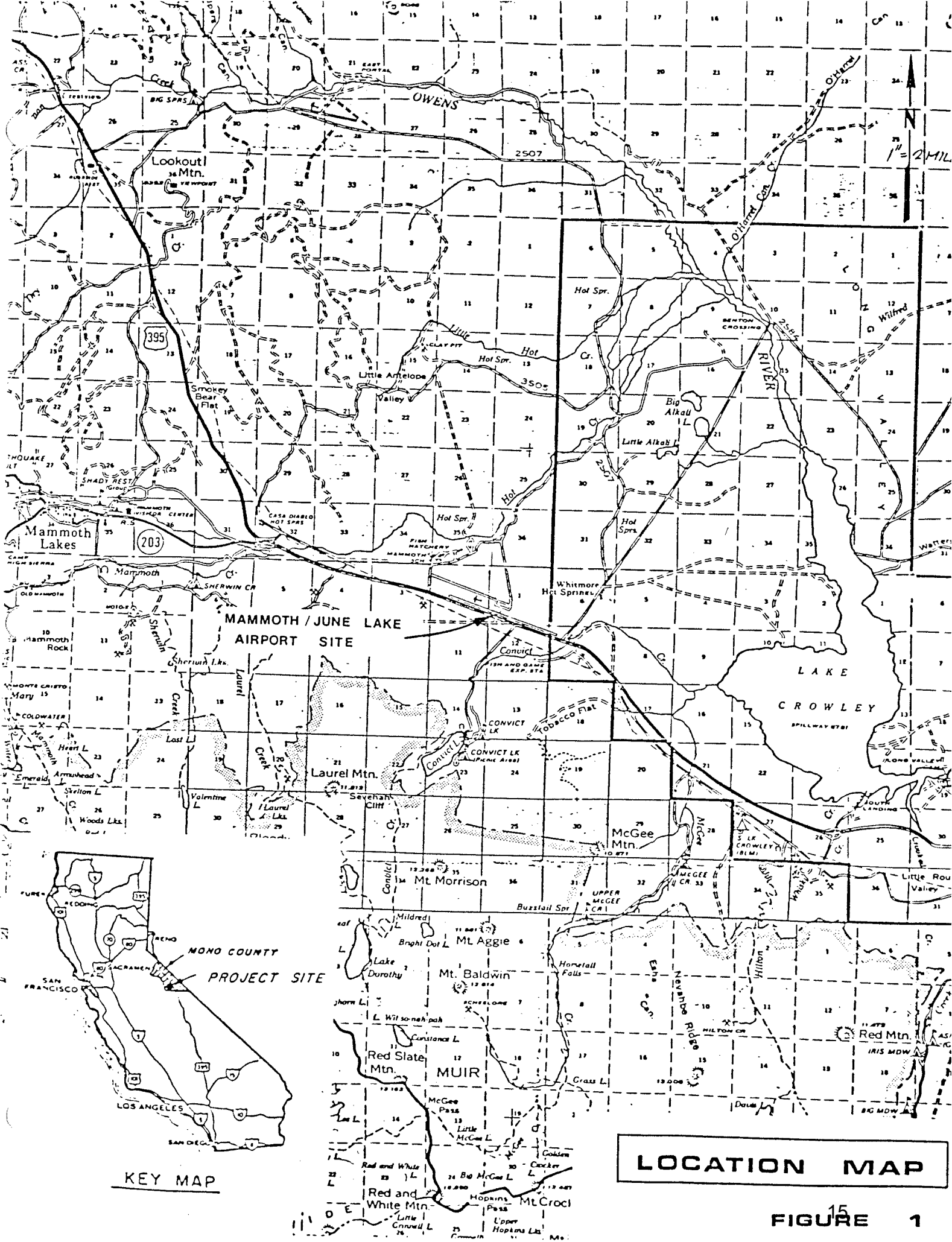
The California Public Utilities Code (Article 3.5, Sections 21670 - 21678, as amended) requires that each county which contains at least one air carrier airport must establish an Airport Land Use Commission. The following powers and duties are assigned to the Commission:

1. 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 such airports is not already devoted to incompatible uses.
2. 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.
3. To prepare and adopt an airport land use plan pursuant to Section 21675.
4. To review the plans, regulations and other actions of local agencies and airport operators pursuant to Section 21676.
5. The powers of the Airport Land Use Commission shall in no way be construed to give the commission jurisdiction over the operation of any airport.

Pursuant to the provisions of the Public Utility Code, the Board of Supervisors established the Mono County Airport Land Use Commission in January, 1986. There are seven designated members of the commission: Two county representatives, two representatives of the Town of Mammoth Lakes, two representatives of airport management in the county, and one member representing the general public.

#### Planning Area Location and Boundaries

The Mammoth/June Lake Airport is located in the southern portion of Mono County, approximately 35 miles north of Bishop and eight miles east of the Town of Mammoth Lakes (see Figure 1). It is located immediately adjacent to U.S. Highway 395 which is the principal north-south arterial highway route of the Eastern Sierra. Highway 395 basically parallels the lower slopes of the Sierra Nevadas, connecting Reno, approximately 180 miles to the north, with Los Angeles, approximately 300 miles to the south.



KEY MAP

LOCATION MAP

FIGURE 1

The airport site is situated in the westerly portion of Long Valley on a broad plain confined by low hills and ridges to the north and the Sierra Nevadas to the south (see Figure 2). Significant geographic features in the area include Crowley Lake to the east, the Convict Lake basin to the south, the Mammoth Creek drainage basin to the west, and the Hot Creek Gorge to the north. The central portion of the area is dominated by Doe Ridge, a large mesa which rises abruptly 200 feet above the surrounding plains.

The California Public Utilities Code requires the airport land use commission to define planning boundaries around each public airport within their jurisdiction. Determination of the planning boundary must consider aircraft operations and physical development of the airport for a 20-year period. The land potentially affected by present and future airport operations is also known as an "area of influence." The land use planning area for the Mammoth/June Lake Airport is shown on Figure 3. It encompasses 28 square miles and includes all areas potentially affected by aircraft landing and takeoff zones, approach and departure flight patterns, and general overflight zones. The airport land use planning area is legally described as follows:

<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>Meridian</u>
28, 29, 30, 31, 32 & 33	T3S	R29E	MDB&M
4, 5, 6, 7, 8 & 9	T4S	R29E	MDB&M
25, 26, 27, 28, 33, 34, 35 & 36	T3S	R28E	MDB&M
1, 2, 3, 4, 9, 10, 11 & 12	T4S	R28E	MDB&M

Land Ownerships and Existing Development

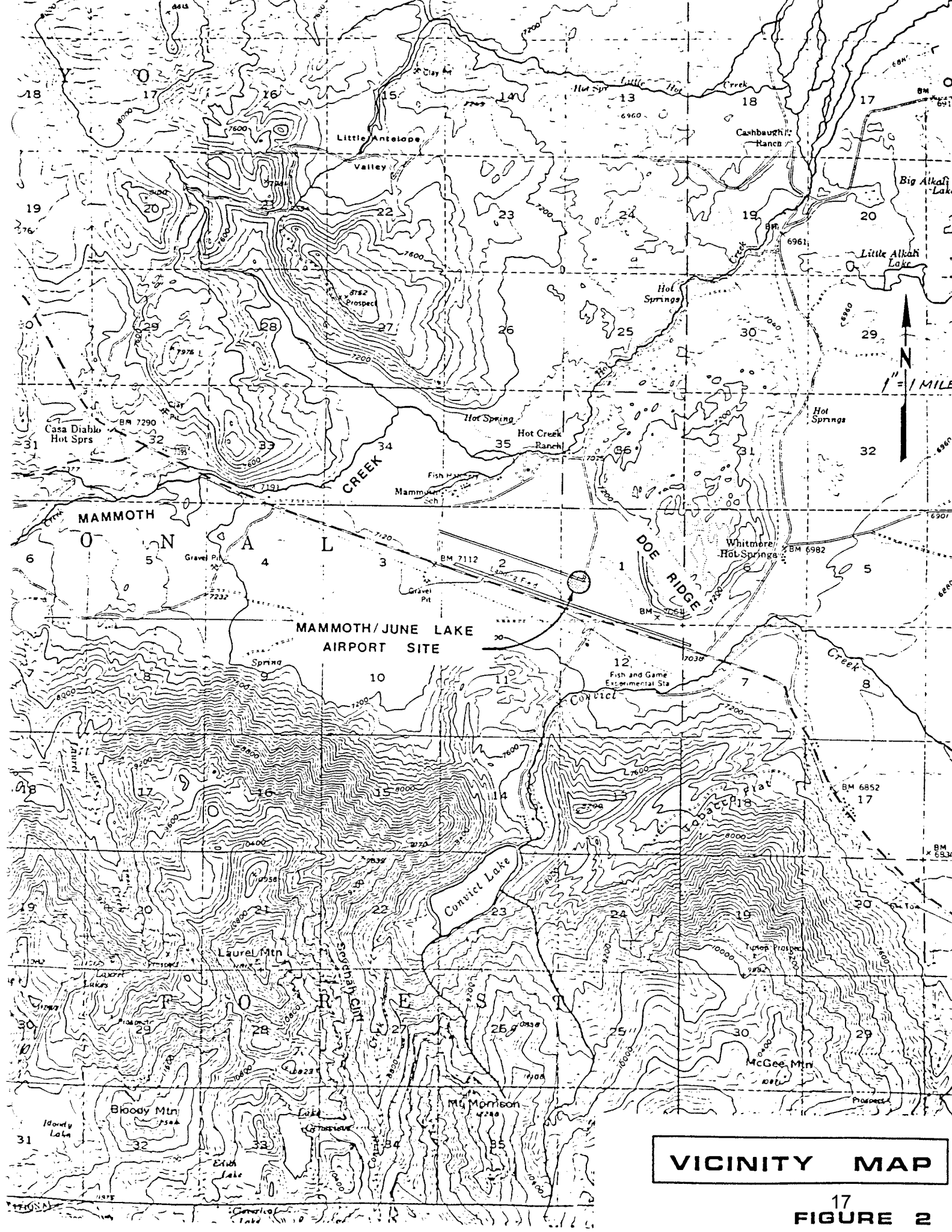
Land ownerships within the planning area are shown on Figure 4 and summarized in Table 1 below.

Table 1. Planning Area Land Ownership

<u>Ownership/Jurisdiction</u>	<u>Approximate Area, acres</u>
Inyo National Forest	8,172
Bureau of Land Management	4,040
City of Los Angeles	5,480
County of Mono	58
Sierra Quarry (private)	40
Hot Creek Ranch (private)	130
TOTAL:	17,920

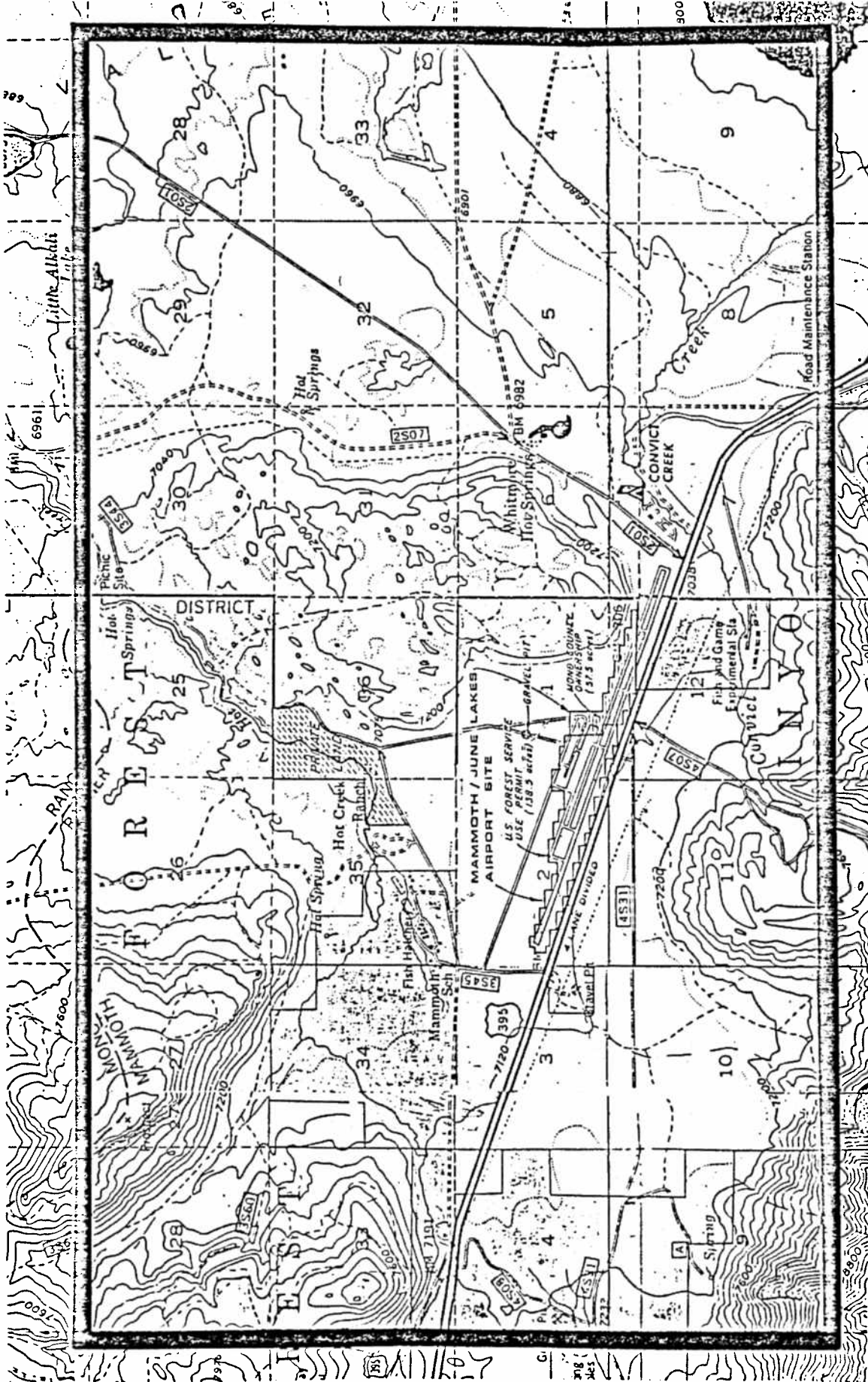
The existing Mammoth/June Lake Airport encompasses approximately 256 acres of land. Mono County presently owns 57.5 acres of the eastern-central portion of the airport site. The westerly 138.5 acres of



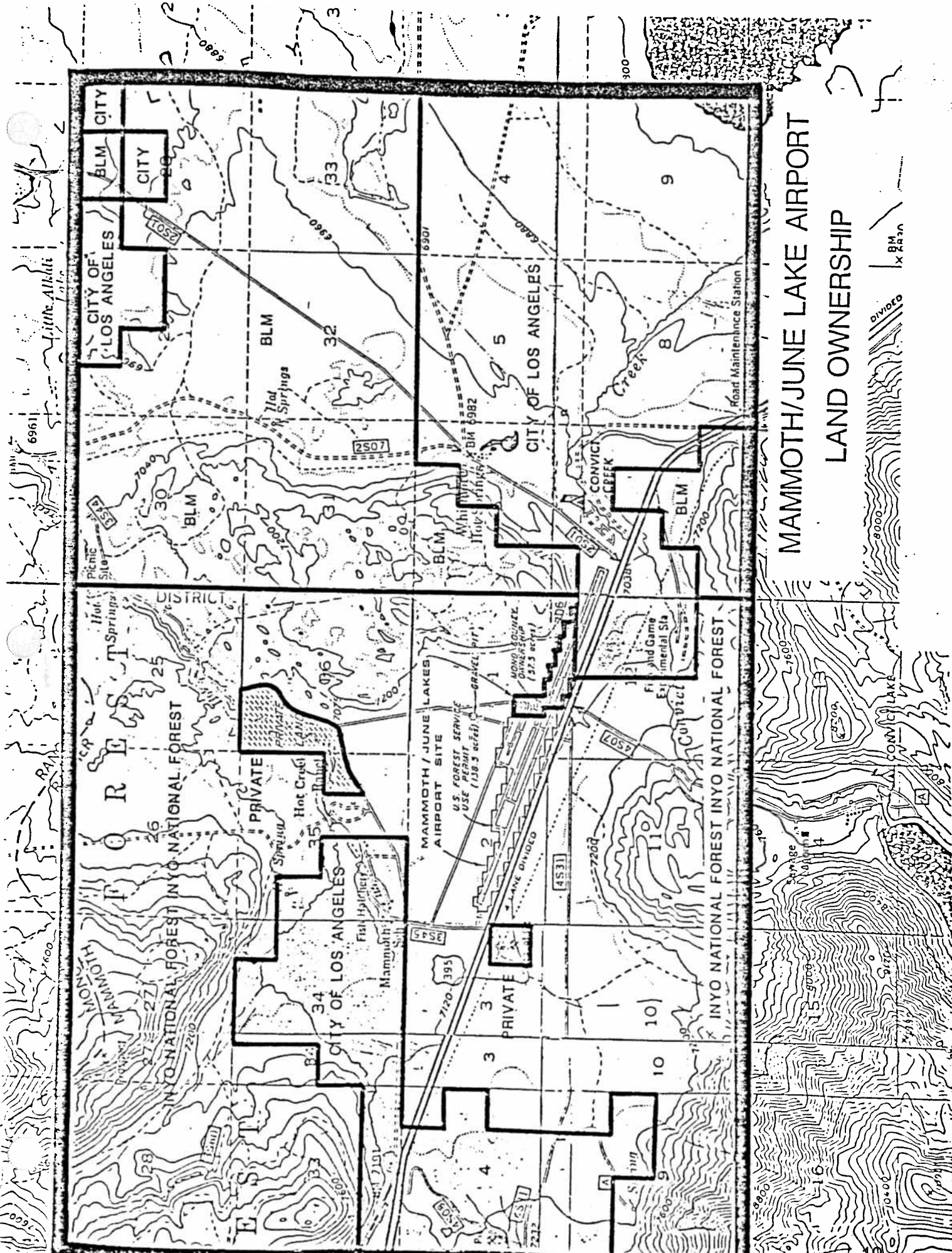


**VICINITY MAP**

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FIGURE 2



MAMMOTH/JUNE LAKE AIRPORT  
PLANNING BOUNDARY



MAMMOTH/JUNE LAKE AIRPORT  
LAND OWNERSHIP

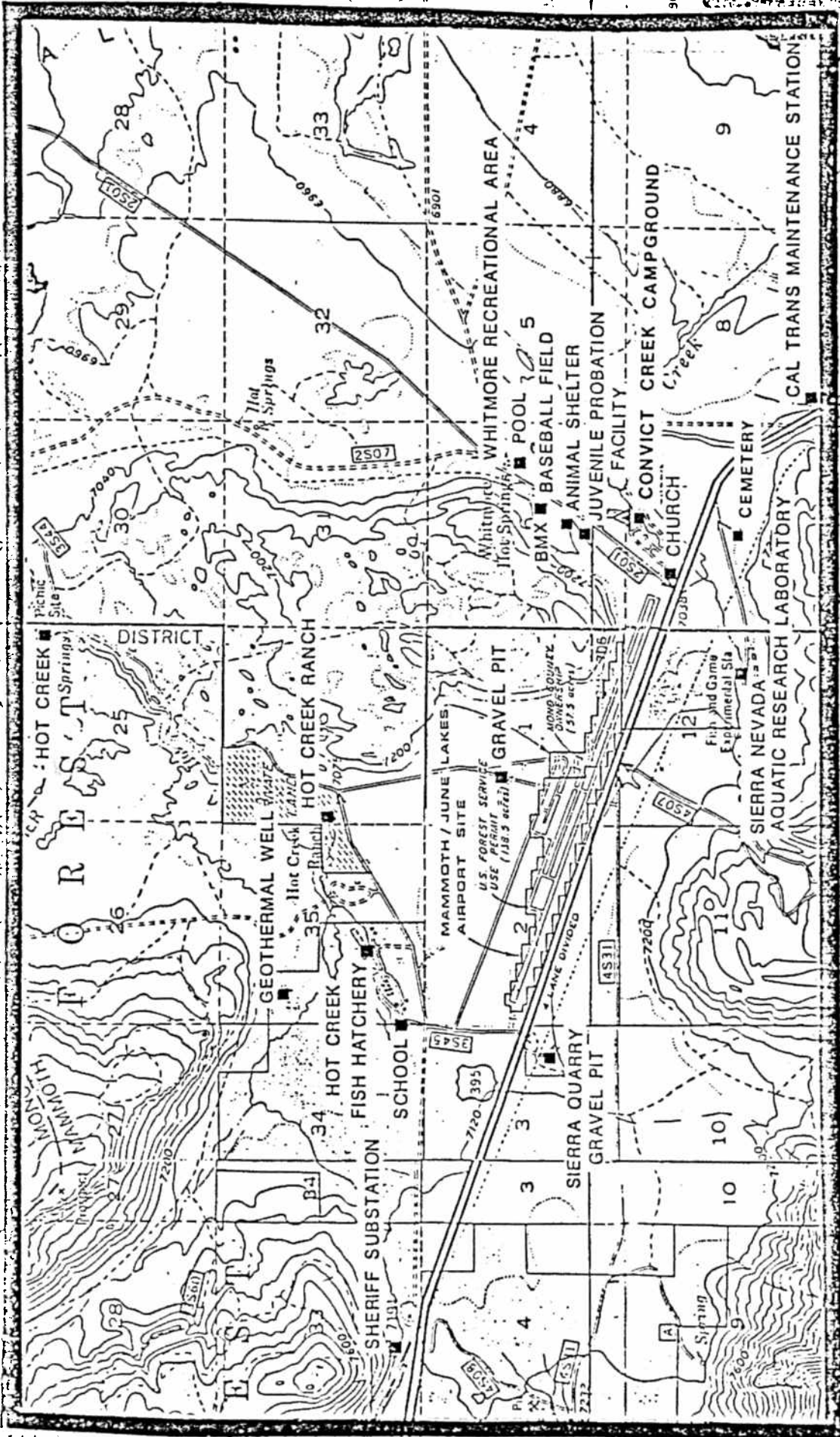
FIGURE 4

the airport is under special use permit from the Inyo National Forest, but negotiations are in progress to exchange this land into Mono County ownership. The remaining 60 acres of the most easterly portion of the airport are leased by Mono County from the City of Los Angeles.

Existing land uses within the Airport Planning Area are shown on Figure 5. Principal developments include: U.S. Highway 395, a four-lane, divided highway which parallels the southerly boundary of the airport site; the Mono County Probation Camp, Animal Shelter, and Whitmore regional recreation complex located easterly of the airport; the Hot Creek Fish Hatchery, and associated residential and administrative structures to the northwest; old Mammoth Elementary School (now abandoned) adjacent to the hatchery; the Hot Creek Ranch private resort to the north; the Mono County Sheriff's substation and governmental center to the west; the Sierra Quarry private sand and gravel pit to the southwest; Convict Lake Resort and campground area to the south; the Sierra Nevada Aquatic Research Laboratory (SNARL) operated by the University of California to the southeast; the High Sierra Community Church to the east; and the Convict Creek campground area further east. Existing land uses in the vicinity of the airport are summarized in Table 2 below.

Table 2. Existing Land Uses

<u>Facility</u>	<u>Location</u>	<u>Ownership</u>
Whitmore County Recreational Area	1 mile east.	City of L.A. (lease)
County Juvenile Probation Facility	1 mile east.	City of L.A. (lease)
County Animal Shelter	1 mile east.	City of L.A. (lease)
Hot Creek Ranch Resort	1 mile north.	Private
Forest Service Gravel/Borrow Pit	1/4 mile north	Inyo N.F. (use permit)
Hot Creek Fish Hatchery (State DFG)	1-1/2 mile northwest.	City of L.A. (lease)
Mammoth Elementary School (abandoned)	1-1/2 mile northwest.	City of L.A. (lease)
Mammoth/Chance Geothermal Project	2 miles northwest.	City of L.A. (lease)
Sheriff Substation and Governmental Center	3 miles west.	City of L.A. (lease)
Sierra Quarry	1 mile west.	Private
Convict Lake Recreational Area	1-1/2 miles south.	Inyo N.F. (use permit)
Sierra Nevada Aquatic Research Laboratory	1 mile southeast.	City of L.A. (lease)
Convict Creek Campground	1-1/2 miles southeast.	City of L.A. (lease)
High Sierra Community Church	1/2 mile southeast.	City of L.A. (lease)
Caltrans Maintenance Station	2 miles southeast.	City of L.A. (lease)
Chance Ranch Headquarters	2 miles west.	B.L.M. (right-of-way) City of L.A. (lease)



# MAMMOTH/JUNE LAKE AIRPORT

## LAND USES



21  
FIGURE 5

<u>Facility</u>	<u>Location</u>	<u>Ownership</u>
Caltrans Gravel Pit	1-1/2 miles southeast.	B.L.M. (right-of-way)
Mono County Cemetery (proposed)	3/4 mile southeast	B.L.M.

In addition to specific site developments, general land uses found throughout the planning area include outdoor recreation activities, livestock grazing, and large lease areas for geothermal exploration and potential development.

#### Existing Planning Documents

There are three independent general land use planning documents which are presently in effect for the planning area:

1. The Mono County General Plan Land Element as adopted in 1982.
2. The Land Management Plan for the Mammoth-Mono Planning Unit of the Inyo National Forest as adopted in 1979.
3. The Benton-Owens Valley Management Plan of the Bureau of Land Management as adopted in 1982.

All of the above documents deal with broad-scope planning concepts and are necessarily general in nature. Specific airport site planning recommendations are presented in the 1978 Mammoth/June Lake Airport Master Plan and the 1982 Mono County Regional Transportation Plan (updated in 1984). Brief summaries of the major features of each planning document are presented in the following paragraphs.

Mono County General Plan Land Use Element. The General Plan designates the majority of the airport planning area for "mixed intensity-multiple use." This land use designation is a general category which is applied to all areas of the county not specifically associated with developed communities or prime agricultural land. The plan defines "mixed-multiple" as a combination of residential, commercial, and recreation land uses.

The Scenic Highway Element of the General Plan notes that U.S. Highway 395 is officially designated as a State Scenic Highway from Long Valley to the State Route 203 junction. It further designates all of Highway 395 from the Inyo County line to State Route 120 (Tioga Pass Road) as a County Scenic Highway. The element defines a scenic highway corridor extending 1,000 feet on either side of the designated highways within which development policies apply. These policies include restrictions on signs and obstructions as well as controls on the height and appearance of building structures.

Mammoth-Mono Planning Unit Land Management Plan. This plan was adopted in 1979 by the U.S. Forest Service and defines general policies and programs for the management of Inyo National Forest lands extending

from Tom's Place to Conway Summit. The Mammoth/June Lake Airport is situated within Management Unit No. 40 of the plan, which is assigned Zone H policies and planning goals. Management emphasis is on watershed, visual quality, forage and wildlife habitat.

Management Zone H encompasses 89,520 acres (140 sq. miles) of non-contiguous land area, and there is only one specific policy reference to Unit 40. The policy provides for the expansion of airport facilities at the Mammoth/June Lake Airport but only addresses aviation-related services. The resource analysis summary for Management Unit No. 40 indicates that Inyo National Forest lands within the unit have only primitive recreational and little timber resource development potential. Visual quality objectives for 96% of the unit land area are established at the "partial retention" level with the remainder at "full retention." 22% of the unit is identified as inventoried roadless area (RARE II). Roadless areas are primarily situated along the most southerly fringe of the airport planning area boundary, adjacent to Convict Canyon.

Benton-Owens Valley Management Plan. The Bureau of Land Management Plan includes specific policies for the Long Valley Management Area which encompasses 40,230 acres primarily surrounding Crowley Lake. Management goals are defined as ". . . manage resources and uses to enhance the scenic, wildlife, recreational, and livestock forage values of the area while allowing geothermal development with limiting constraints." The management plan states that goals and policies are to be implemented consistent with the Inyo National Forest Mammoth-Mono Unit Plan, applicable County General Plan recommendations, and land use policies of the City of Los Angeles.

Mammoth/June Lake Airport Master Plan. The 1978 Airport Master Plan outlined an extensive phased improvement program for the upgrading and expansion of the existing airport facilities. The first phase of the improvements were accomplished in a major FAA funded construction project completed in 1984. This project included extension of the existing runway to 7,000 feet (excluding paved overrun area), installation of a full-length parallel taxiway, construction of aircraft parking aprons, installation of runway and taxiway lighting systems, and construction of a new airport access road. Current improvements consist of the construction of a crash/fire/rescue (CFR) building which is scheduled for completion in late 1986. Future major improvements include expansions of facilities within the centralized "core" area of the existing terminal facilities, improvement of aircraft navigational systems, and basic water and sewer infrastructure improvements necessary to accommodate airport development.

The Master Plan considered ancillary land uses within the immediate vicinity of the airport. In addition to essential airport facilities, the following commercial resort land uses were specifically considered: Lodging, restaurant and cocktail lounge, swimming pool, golf courses, gasoline service stations, a trailer park, taxi and shuttle services, and outdoor recreational facilities.

Mono County Regional Transportation Plan. The 1982 Regional Transportation Plan cited the improvement of the Mammoth/June Lake Airport as the number one aviation priority in the county. Aviation passenger, employment, and traffic forecasts for the airport facility are presented in Table 3.

The Regional Transportation Plan established the following priorities for airport improvements:

1. Mitigation of accident potential.
2. Rehabilitation of existing facilities to protect investments and reduce maintenance costs.
3. Construction of new support facilities to enhance airport use and provide new revenue.

The plan strongly recommends that long-range projects "which are revenue-producing in nature" be developed in cooperation with private enterprise at the airport site.

#### Plan Objectives

The primary objective of the Mammoth/June Lake Airport Land Use Plan is to comply with the authority and requirements established in Section 3.5 of the California Public Utilities Code. The code specifically requires the Airport Land Use Commission to accomplish the following:

"21675. (a) The 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 not be amended more than once in any calendar year."

Most of the land surrounding the Mammoth/June Lake Airport is federally owned under the administration of the Inyo National Forest and the Bureau of Land Management. The City of Los Angeles also has large land holdings in the area, and pending land exchanges will make Mono County a significant landholder. Historically, the only planning direction for the area has been provided by the land management plans of various public agencies which control the lands surrounding the airport. Recent events, including geothermal resource development, the establishment of the Whitmore recreational area, airport expansion and



Table 3. Mammoth/June Lake Airport Demand Forecasts

AIRCRAFT & OPERATIONS FORECAST					
	1975	1980	1985	1990	1995
<b>BASED AIRCRAFT</b>					
Single Engine:	21	30	36	42	48
Multi Engine:	7	10	12	13	14
<b>Total</b>	<b>28</b>	<b>40</b>	<b>48</b>	<b>55</b>	<b>60</b>
<b>ANNUAL AIRCRAFT OPERATIONS</b>					
Local:	14,000	19,200	23,300	26,400	28,800
Itinerant:	12,800	18,200	20,500	25,300	24,600
<b>Total</b>	<b>26,800</b>	<b>37,400</b>	<b>43,800</b>	<b>51,700</b>	<b>53,400</b>
Single Eng. Prop:	17,400	24,000	28,800	33,000	36,000
Multi-Eng. Prop:	5,500	8,000	9,600	11,000	12,000
Business Jet:	-	-	500	800	1,200
Airline:	-	-	-	-	-
Small turboprop	3,900	5,400	2,600	2,600	-
Large turboprop	-	-	2,300	4,300	1,600
Electra/Jet	-	-	-	-	2,600
<b>Total</b>	<b>26,800</b>	<b>37,400</b>	<b>43,800</b>	<b>51,700</b>	<b>53,400</b>
<b>PEAK MONTH</b>	<b>2,700</b>	<b>3,800</b>	<b>4,400</b>	<b>5,200</b>	<b>5,350</b>
<b>BUSY DAY</b>	<b>130</b>	<b>190</b>	<b>220</b>	<b>260</b>	<b>265</b>
<b>BUSY HOUR</b>	<b>20</b>	<b>28</b>	<b>33</b>	<b>39</b>	<b>40</b>

AIRLINE TERMINAL AREA OPERATIONAL FACTORS					
	1975	1980	1985	1990	1995
<b>Busy Hour Aircraft Operations:</b>					
Small turboprop	4	8	4	4	-
Large turboprop	-	-	2	4	2
Jet/Electra	-	-	-	-	3
<b>Total</b>	<b>4</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>5</b>
<b>Busy Hour Passengers:</b>					
Small turboprop	72	108	72	72	-
Large turboprop	-	-	100	200	100
Jet/Electra	-	-	-	-	255
<b>Total</b>	<b>72</b>	<b>108</b>	<b>172</b>	<b>272</b>	<b>355</b>

GENERAL AVIATION AIRCRAFT PARKING DEMAND					
	1975	1980	1985	1990	1995
<b>Aircraft Parking Spaces:</b>					
Hangars	14	20	24	28	30
Tiedowns - Transient Based	52	70	80	90	100
<b>Total</b>	<b>14</b>	<b>20</b>	<b>24</b>	<b>27</b>	<b>30</b>
<b>Total</b>	<b>80</b>	<b>140</b>	<b>128</b>	<b>145</b>	<b>160</b>

TOTAL PASSENGER FORECASTS					
	1975	1980	1985	1990	1995
<b>ANNUAL:</b>					
Airline	31,200	43,500	78,000	134,000	190,000
General Aviation	57,300	80,000	95,000	110,000	120,000
<b>Total</b>	<b>88,500</b>	<b>123,500</b>	<b>174,000</b>	<b>244,000</b>	<b>310,000</b>
<b>PEAK MONTH:</b>					
Airline	3,800	5,300	9,500	16,300	23,200
General Aviation	5,700	8,000	9,500	11,000	12,000
<b>Total</b>	<b>9,500</b>	<b>13,300</b>	<b>19,000</b>	<b>27,300</b>	<b>35,200</b>
<b>BUSY DAY:</b>					
Airline	290	400	720	1,230	1,750
General Aviation	275	390	460	530	580
<b>Total</b>	<b>565</b>	<b>790</b>	<b>1,180</b>	<b>1,760</b>	<b>2,330</b>
<b>BUSY HOUR</b>					
Airline	72	108	172	272	355
General Aviation	40	60	70	80	90
<b>Total</b>	<b>112</b>	<b>168</b>	<b>242</b>	<b>352</b>	<b>445</b>

VEHICLE TRIP GENERATION*					
	1975	1980	1985	1990	1995
<b>Air Carrier:</b>					
Private Auto	54	82	115	141	166
Car Rental	21	28	56	104	154
Taxi/Limo	4	5	9	17	26
Bus	5	7	13	25	37
<b>Subtotal</b>	<b>84</b>	<b>122</b>	<b>193</b>	<b>287</b>	<b>383</b>
<b>(Peak Hour)</b>	<b>(17)</b>	<b>(24)</b>	<b>(39)</b>	<b>(57)</b>	<b>(77)</b>
<b>General Aviation:</b>					
Private Auto	40	56	68	76	87
Car Rental	35	51	58	69	71
Bus/Taxi/Limo	5	6	7	8	8
<b>Subtotal</b>	<b>80</b>	<b>113</b>	<b>133</b>	<b>153</b>	<b>166</b>
<b>(Peak Hour)</b>	<b>(16)</b>	<b>(23)</b>	<b>(27)</b>	<b>(31)</b>	<b>(33)</b>
<b>Employees:</b>					
Private Auto	42	57	120	141	162
<b>(Peak Hour)</b>	<b>(14)</b>	<b>(19)</b>	<b>(40)</b>	<b>(47)</b>	<b>(54)</b>
<b>Total Trips (AADT)</b>	<b>208</b>	<b>292</b>	<b>446</b>	<b>581</b>	<b>711</b>
<b>(Peak Hour)</b>	<b>(47)</b>	<b>(66)</b>	<b>(106)</b>	<b>(135)</b>	<b>(164)</b>

\*All trips are Busy Day except those labeled Peak Hour.

AVIATION RELATED EMPLOYMENT					
	1975	1980	1985	1990	1995
Airline	6	8	10	11	12
FBO	5	6	8	10	12
Airport Management	-	1	2	2	3
Car Rental	3	4	7	10	12
Restaurant	-	-	10	11	12
Other	-	-	3	3	3
<b>Total</b>	<b>14</b>	<b>19</b>	<b>40</b>	<b>47</b>	<b>54</b>

AUTO PARKING SPACE DEMAND					
	1975	1980	1985	1990	1995
<b>Air Carrier</b>					
General Aviation	21	31	38	41	43
Car Rental	13	19	38	66	100
Employees	14	19	40	47	54
<b>Total</b>	<b>80</b>	<b>107</b>	<b>156</b>	<b>230</b>	<b>293</b>

improvements, and private development proposals, have indicated that there is a need for joint planning studies and greater inter-agency cooperation in the planning area.

The economy of Mono County is heavily dependent on the resort-tourism industry and is consequently subject to extreme seasonal and annual variations. With the exception of the Mammoth Lakes community, per capita income levels are low, unemployment rates are high, and the economy of the county has been generally stagnant for over a decade. Only 21% of the land area of Mono County is privately owned, and the vast majority of this land is utilized for agricultural purposes. The lack of suitable land resources and regional transportation facilities have been significant inhibiting factors for economic development within the county.

In consideration of the above factors, there are three objectives of the Mammoth/June Lake Airport Land Use Plan:

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 provide economic development opportunities in the airport area for the benefit and welfare of the county.

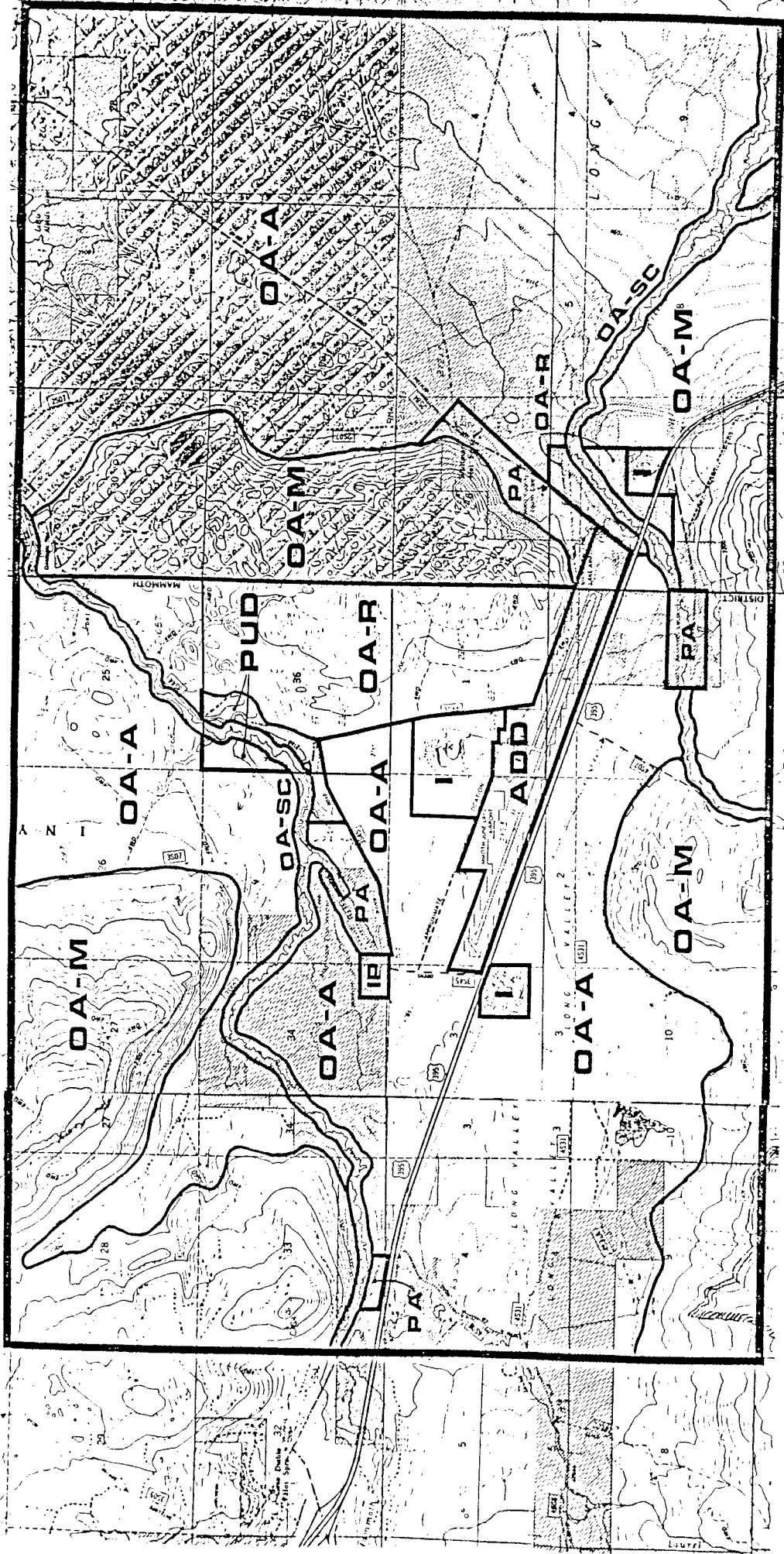
It is intended that the adopted Airport Land Use Plan will provide the basis for amendment of the Mono County General Plan and the MMPU Land Management Plan of the Inyo National Forest.

#### PROPOSED AIRPORT LAND USE PLAN

The proposed Land Use Plan for the Mammoth/June Lake Airport Planning Area is shown on Figure 6. The basic concept of the land use plan includes the following provisions:

1. Recognition of present land uses and consideration of potential future development at existing sites.
2. Preservation of large open space areas and designation of low intensity land uses for the majority of the airport planning area.
3. Designation of an Airport Development District for lands situated immediately adjacent to the Mammoth/June Lake Airport site.

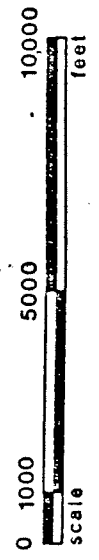
A tabular summary of the land area associated with each land use designation is presented in Table 4 below:



**MAMMOTH / JUNE LAKE AIRPORT  
LAND USE PLAN**

**LEGEND**

Zone Code	Description	Zone Code	Description
OA-A	Open Space - Agriculture	ADD	Airport Development District
OA-M	Open Space - Resource Mgmt.	I	Industrial/ Manufacturing
OA-R	Open Space - Recreation	PA	Industrial/ Public Agency
OA-BC	Open Space - Stream Conservation	PUD	Planned Unit Development



**FIGURE 6**

Table 4. Land Use Areas

<u>Land Use Description</u>	<u>Designation</u>	<u>Approximate Land Area acres</u>	<u>% of Total</u>
Open Space			
Agricultural	OA-A	10,300	57.5
Resource Management	OA-M	5,200	29.0
Recreation	OA-R	1,100	6.1
Stream Conservation	OA-SC	300	1.7
Subtotal:		<u>16,900</u>	<u>94.3</u>
Institutional/Public	PA	300	1.7
Industrial/Industrial Park	I,IP	230	1.3
Planned Unit Development	PUD/RR	110	.6
Airport Development District	ADD	<u>380*</u>	<u>2.1</u>
Subtotal:		<u>1,020</u>	<u>5.7</u>
TOTAL:		17,920	100.0

\*Includes 320 acres of runway, taxiway, parking apron and restricted development areas; 30 acres of existing airport development, and 30 acres of proposed light industry and warehousing.

The various land uses designated in the Airport Land Use Plan are intended to be consistent with the provisions of Title 19, Mono County Zoning and Development Code and are described in the following paragraphs.

Open Area (OA). The open area designation is intended to protect and preserve those lands which provide low-intensity recreational opportunities, visual open space, habitat for wildlife resources, open range for stock grazing, or stream environment zones. Approximately 8,480 acres of open space within the planning area is either currently leased or is available for lease for geothermal exploration and development as shown on Figure 20. General open space development requirements and permitted land uses are defined in Chapter 19.18 of the Zoning Code. Residential land uses are not permitted in the OA district. An additional identifier has been utilized to specify acceptable uses of open area lands (subject to use permit procedures) as follows:

OA-A: Indicates open space land which is presently utilized for non-intensive agricultural uses. Designation primarily includes Inyo National Forest, Bureau of Land Management (BLM) and City of Los Angeles range lands utilized for stock grazing.

OA-M: Indicates open space land which requires resource management for the protection of visual quality, wildlife habitat, and wilderness value. Designation primarily includes Inyo National Forest and BLM lands under federal jurisdiction.

OA-R: Indicates open space lands which provide specific low-intensity recreational opportunities. Designation reflects existing picnic, day use, hot spring facilities along Hot Creek, and an existing campground adjacent to Convict Creek. The westerly portion of Doe Ridge is designated for future diversi-

fied recreational uses including nordic and cross-country ski trails, snowmobiling, equestrian facilities, and potential golf course development.

OA-SC: Designates stream conservation zones along Mammoth Creek/Hot Creek and Convict Creek for the protection of water quality, riparian vegetation, and fishery resources. Conservation zone extends 100 feet on each side of all stream channels. No significant grading alterations, vegetative removals, or building structures are permitted within the stream conservation zone.

Institutional/Public Land (PA). The PA designation is intended to define those public lands which are utilized for regional recreational, natural resource development, institutional, and governmental service purposes. The PA District is described in Chapter 19.19 of the Zoning Code which emphasizes resource development and recreational land uses. The chapter notes that the county may not have permitting authority over lands under state or federal jurisdiction, but indicates the intent of the county to review PA development proposals on the basis of the code.

Industrial (I) and Industrial Park (IP). These land use designations conform with Chapters 19.17 and 19.16 of the County Zoning and Development Code. Virtually all uses within this category are subject to use permit procedures due to the inherent potential for environmental impacts, safety hazards, and nuisances. Lands considered suitable for industrial and manufacturing land uses are limited to three existing sites in the airport planning area: the Sierra Quarry private property, the Forest Service gravel pit, and the Caltrans gravel pit.

The old Mammoth Elementary School site is designated for industrial park (IP) land uses in consideration of its inherent economic development potential. Only non-polluting light industrial uses are permitted within this zone, and all proposed development should be carefully controlled.

Planned Unit Development (PUD). Only one site within the planning area is designated for Planned Unit Development land uses: the 130-acre Hot Creek Ranch property. The site straddles the Hot Creek stream conservation zone and is environmentally sensitive. The use of the PUD designation as defined in Chapter 19.20 of the Zoning Code allows mixed recreational/resort land uses subject to natural resource protection requirements and environmental constraints. Maximum overall development density for the property is equivalent to one residential unit per acre. The intent of the PUD zoning designation is to require the approval of an overall master plan for the property prior to any additional development. Criteria applicable to such development includes the preservation of open space areas, conservation of sensitive riparian and stream zones, and clustering of proposed resort residential uses to minimize environmental disturbances and impacts.

Airport Development District (ADD). The intent of the ADD designation is to permit the development of appropriate resort, commercial, light industrial, and aviation support uses on lands adjacent to the Mammoth/June Lake Airport. The present Zoning Code does not define a land use district that adequately addresses the combination of

commercial and light industrial uses which are anticipated within the airport development district. Accordingly, the Airport Land Use Plan proposes that Title 19, Zoning and Development Code, be amended to include Chapter 19.47 which defines an Airport Development Zone and establishes the requirements and provisions applicable to the district. The proposed text of Chapter 19.47 is presented in Appendix A.

The Airport Development District has been specifically created to recognize the economic development potential associated with the expansion of services and facilities at the airport site. Although light industrial, manufacturing, and warehousing developments are necessary for economic stability and growth, these land uses are frequently incompatible with residential, agricultural, and open space land uses. This inherent incompatibility has limited the land resources available for economic development within the county. Subject to the constraints associated with the proximity of aircraft activities, the following land uses are proposed for the Airport Development District:

1. Airport operational facilities.
2. Aviation products and services.
3. Hotel/motel and lodging developments.
4. Limited light industrial and warehousing.
5. Office, business and commercial.
6. Public buildings.
7. Retail sales and services ancillary to airport terminal or hotel/motel facilities.
8. Automobile fueling facilities in conjunction with other land use/development.

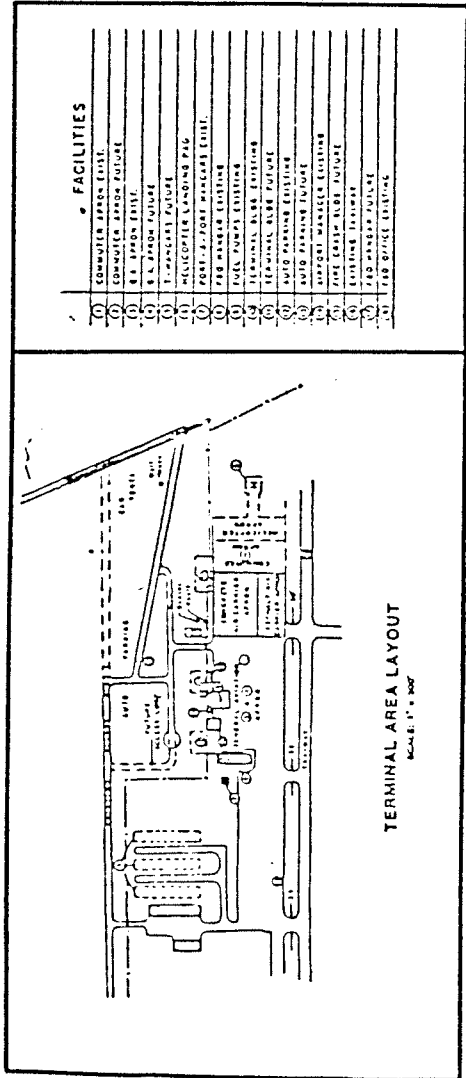
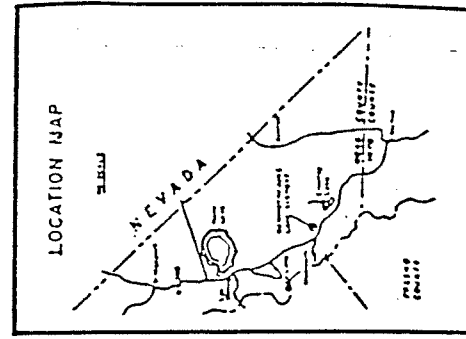
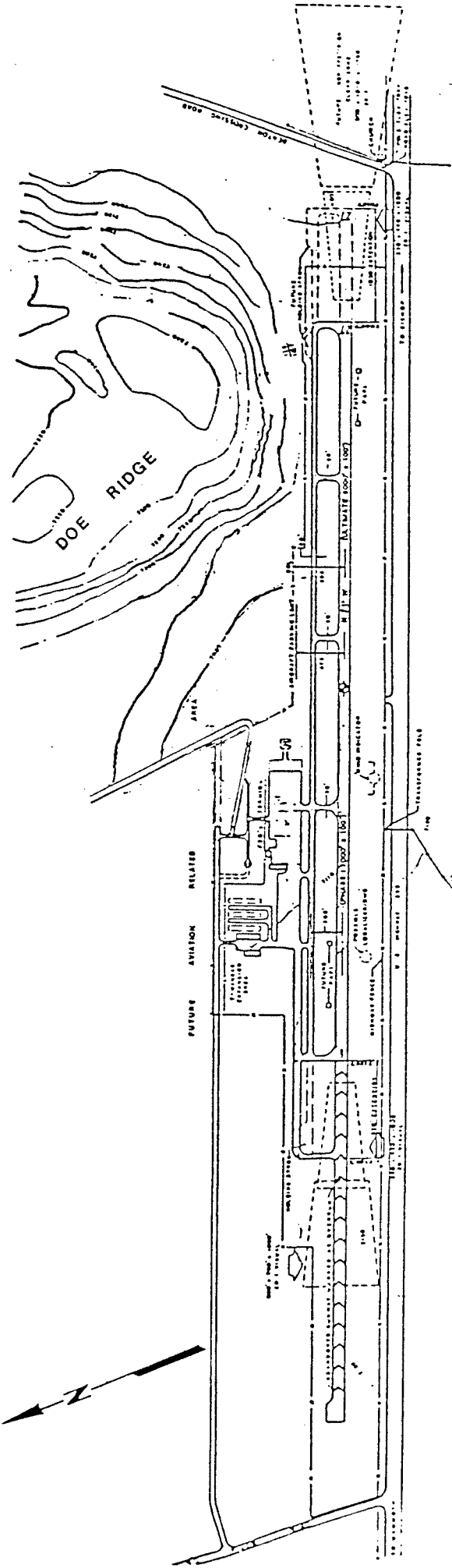
All of the permitted land uses within the Airport Development District are subject to review and approval of the Airport Land Use Commission.

#### Proposed Airport Development and Expansion

The expansion and improvement programs outlined in the 1978 Mammoth/June Lake Airport Master Plan are only partially completed at the present time. A schematic layout of existing airport facilities is presented in Figure 7. As noted previously, proposed Master Plan improvements include expansions and development of the existing terminal area as well as infrastructure systems. In addition, a proposal has been submitted for the development of a major hotel within the core area of the terminal complex. The basic features of current airport development and expansion proposals are described in the following paragraphs.

Terminal Area Development. Proposed improvements for the development of the airport terminal complex are shown in Figure 8 and include the following facilities:

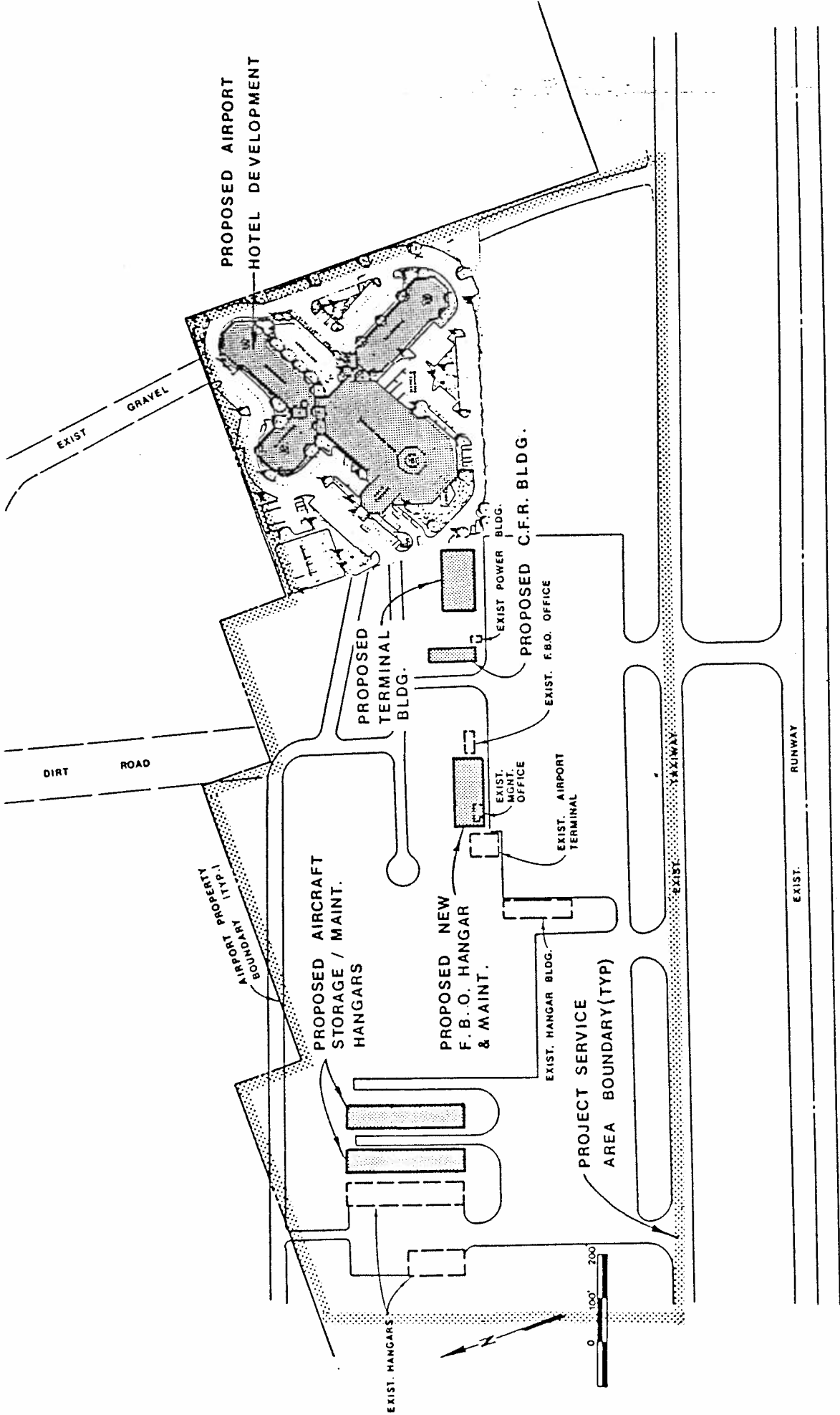
1. Construction of a crash/fire/rescue (CFR) building (5,000 sq. ft.).
2. Construction of an expanded and improved passenger terminal building (up to 20,000 sq. ft.) and paved parking areas.
3. Construction of a new fixed base operator (FBO) hangar and office facility (10,000 sq. ft.).



FACILITIES

COMPUTER SPACE EXIST.
COMPUTER SPACE FUTURE
8.4. TRASH EXIST.
8.4. TRASH FUTURE
1. PASSENGER FUTURE
MANICURIST VANING PAD
238. MARSHAL EXISTING
238. MARSHAL EXISTING
INTERNATIONAL BUS EXISTING
INTERNATIONAL BUS FUTURE
AUTO PARKING EXISTING
AUTO PARKING FUTURE
238. MARSHAL EXISTING
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EXISTING AIRPORT DEVELOPMENT



**PROPOSED TERMINAL AREA DEVELOPMENT**

FIGURE 8



4. Construction of additional hangar, storage, and maintenance facilities (40,000 sq. ft.).
5. Installation of an instrument landing system for alternative non-precision aircraft navigational aids.

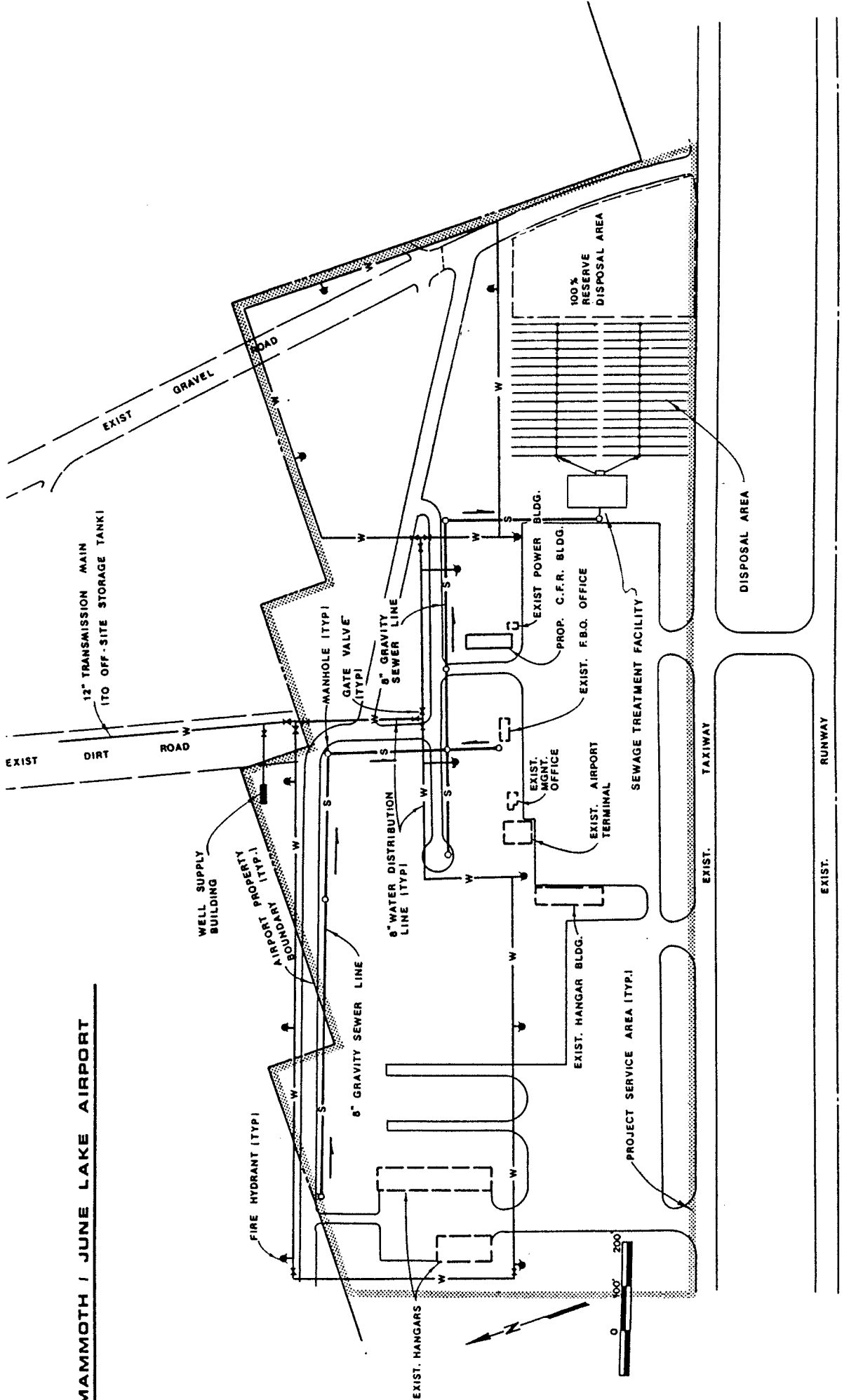
Infrastructure Improvements. The proposed improvements consist of the installation of complete water supply, fire protection, and sewage disposal systems for the central development core of the airport terminal complex. The proposed water and sewer improvements are shown schematically on Figure 9. Water system improvements include a 250 gpm deep well water supply, a complete distribution system sized to accommodate required fire flows and domestic demands, and an off-site 420,000 gallon storage tank with connecting main transmission line. The location of the proposed storage tank is shown on Figure 10. The proposed sewerage improvements include a complete gravity sewer collection system and a centralized septic tank/leach field treatment and disposal facility.

Airport Hotel. The proposed airport resort hotel will include 150 rooms in a two-story building structure which will have a total floor area of approximately 101,000 square feet. It will include shops, offices, convention rooms, indoor exercise and spa facilities, two restaurants (220 seat total capacity) and a bar/lounge room (200 seat capacity.) The hotel facility will be designed as a "destination" development which will accommodate virtually all personal services and amenities on site. Total area occupied by ancillary outdoor recreation facilities is anticipated to be approximately 25,000 square feet. The project proposal includes approximately 250 surface parking spaces for hotel patronage and employees. Gasoline pumps may be provided for the convenience of patrons. Due to the proximity of the site to the airport terminal facilities, there is an opportunity for providing joint parking facilities.

The hotel development plan includes the construction of an 18-hole golf course on Inyo National Forest land adjacent to the airport. The golf course is considered by the project proponent to be an essential element for the financial viability of the hotel development. Preliminary applications have been filed with the U.S. Forest Service for a use permit for the proposed golf course. A site-specific environmental assessment of the proposed golf course will be required prior to Forest Service approval of the project.

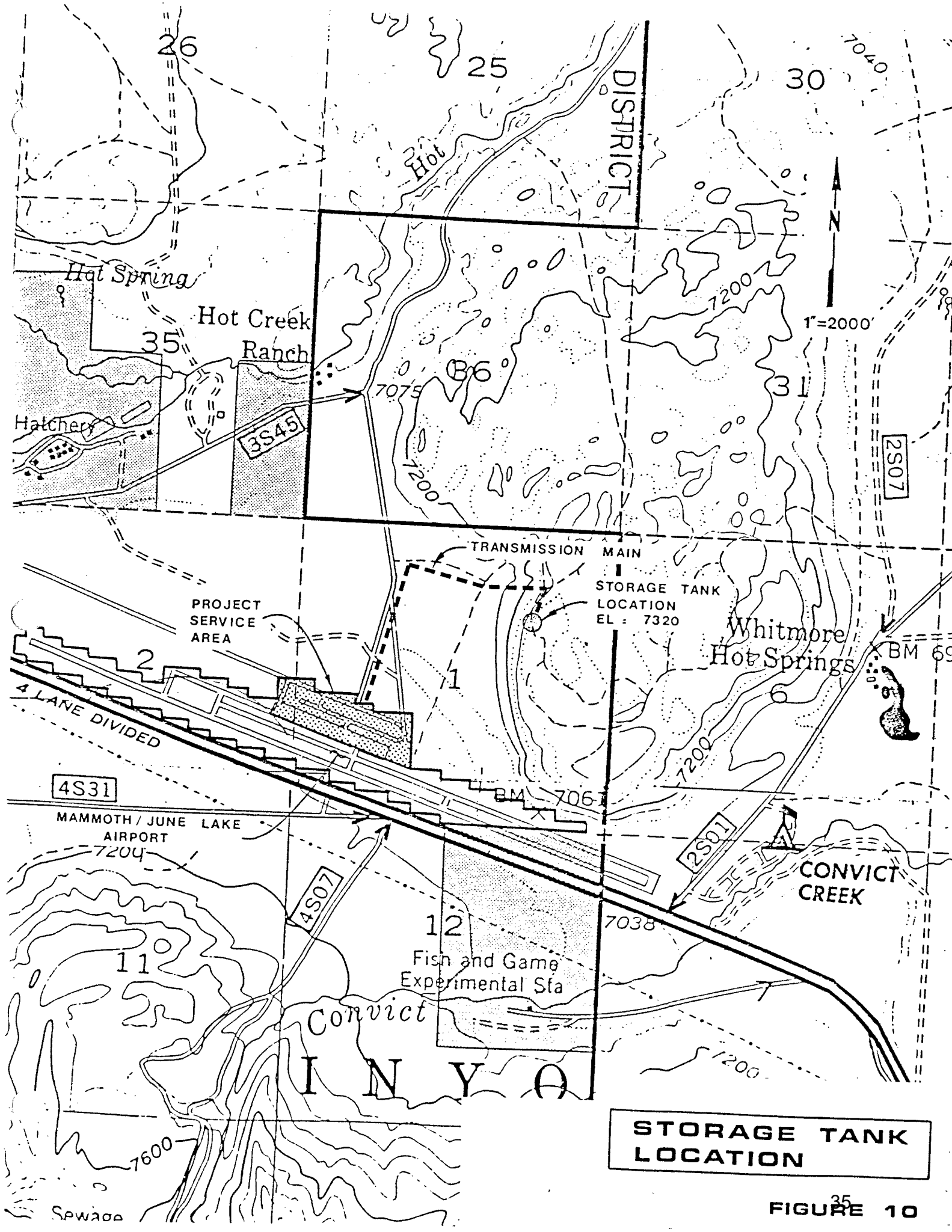
Airport Master Plan Update. An update of the Mammoth/June Lake Airport Master Plan is in progress. The update will address current aircraft activity levels, the status of existing airport improvements, and potential future expansions and improvements. It will also consider potential runway extensions and the need for an additional cross-wind runway.

**MAMMOTH / JUNE LAKE AIRPORT**



**PROPOSED INFRASTRUCTURE IMPROVEMENTS**

**FIGURE 9**



**STORAGE TANK LOCATION**

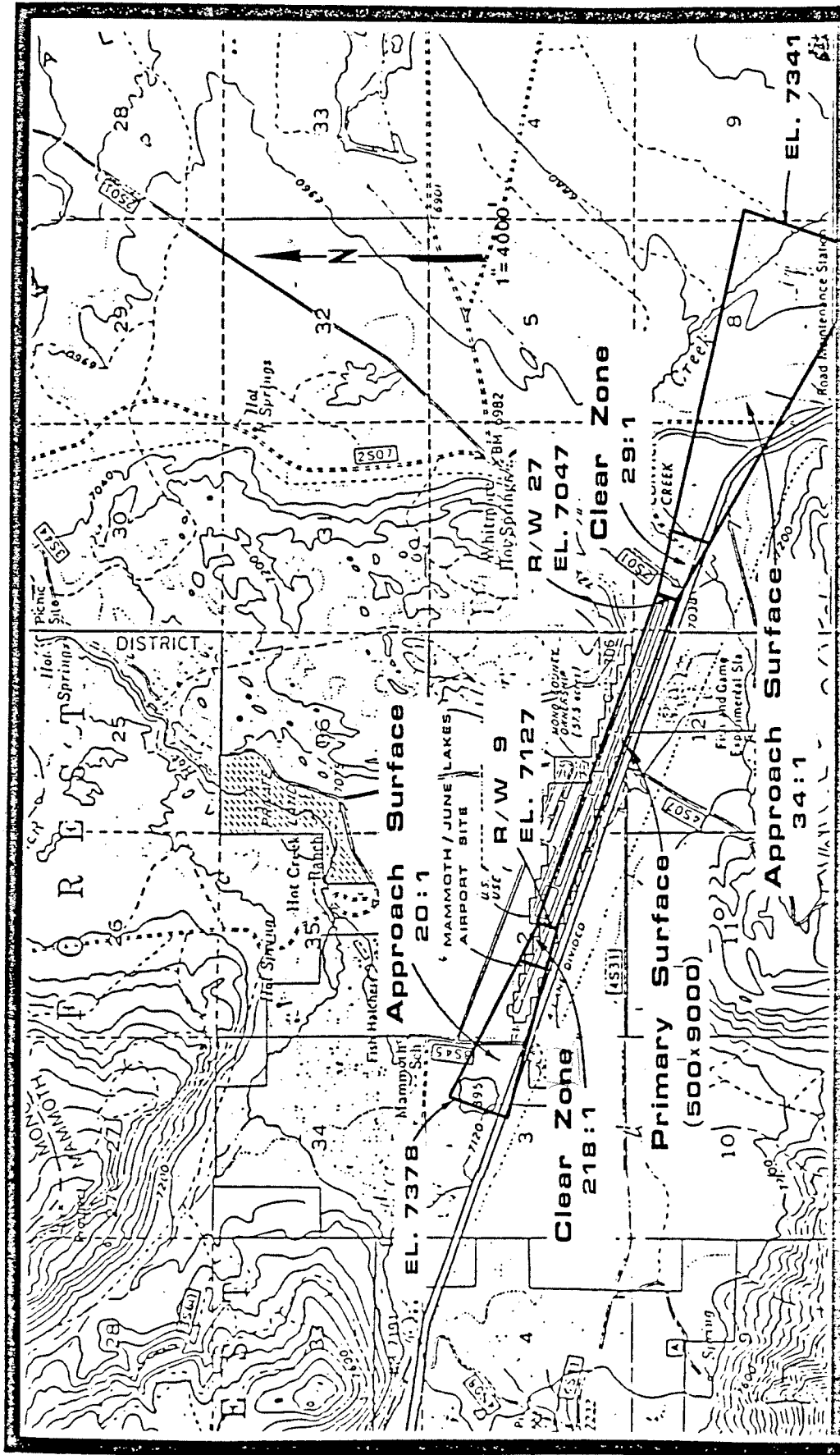
FIGURE 10

## AIRPORT LAND USE POLICY PLAN

The general purpose of the Airport Land Use Plan is to promote the orderly development of the area surrounding the Mammoth/June Lake Airport in order to protect the general welfare of the public, enhance the safety of air navigation and traffic, and maintain the utility and economic viability of the facility. The authority and jurisdiction of the Airport Land Use Commission (ALUC) is limited to the establishment of land use policies and the review of all new land uses on private or county property within the airport planning area. Federal and state lands are not subject to the authority of the ALUC, but it is anticipated that the policy provisions of the Land Use Plan will be incorporated into the jurisdictional land management plans. All of the private and county properties within the planning area boundary are subject to the specific policies established by the Airport Land Use Commission

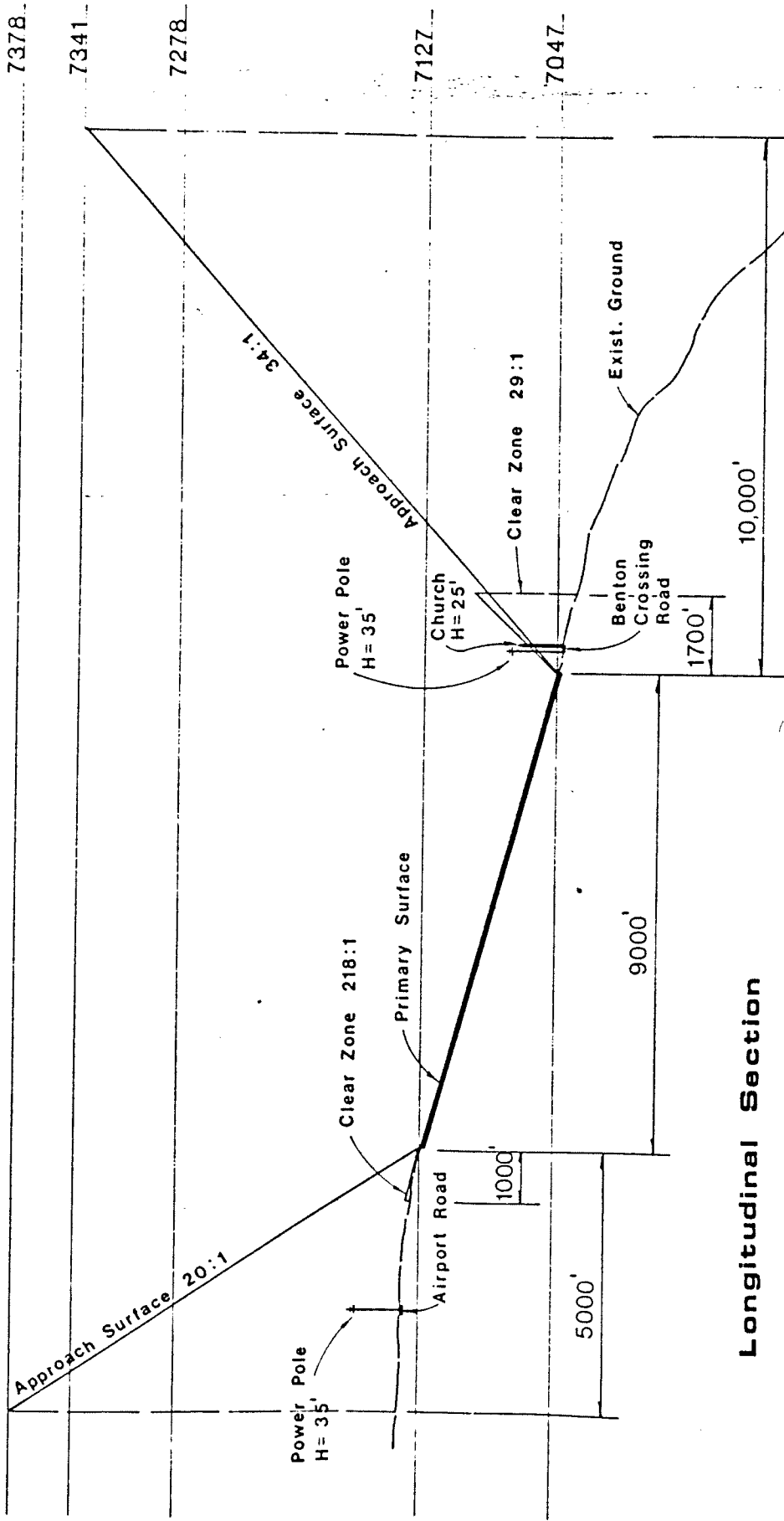
General Land Use Policy. The following are general provisions:

1. All non-federal land uses designated for the airport planning area are subject to the requirements of the Mono County Zoning and Development Code except as specifically modified by the Airport Land Use Plan.
2. The ALUC must review and approve all proposed private land uses prior to formal action by jurisdictional agencies. ALUC review will focus on compatibility with the adopted airport Land Use Plan and compliance with the safety provisions, height restrictions, and noise standards.
3. ALUC criteria regarding land use policy is intended to augment and amend the County General Plan and Zoning and Development Code and, where applicable, may be incorporated into the BLM and U.S. Forest Service unit plans for the planning area.
4. The ALUC land use plan and policies will establish the general parameters for regulation of development within the planning area on non-federal lands. Each local agency or jurisdiction shall be required to amend its general plan to incorporate the provisions of the ALUC Land Use Plan and Policies. Federal agencies may amend applicable land management plans to conform to the ALUP.



**AIRPORT SAFETY ZONE**

FIGURE 11



**Longitudinal Section**

Scales:  
 Horiz.: 1" = 3000'  
 Vert.: 1" = 100'

**AIRPORT SAFETY ZONE**

AIRPORT SAFETY POLICIES. The airport safety zone includes a Clear Zone adjacent to the runway and the Approach/Departure Surface . The limits of the safety zone are shown schematically on Figure 11. It is the most critical zone where aircraft operations might affect the safety of people and property in the airport environs.

**AIRPORT SAFETY ZONE POLICIES:**

1. The Safety Zone shall be kept free of all unrelated airport land uses.
2. No permanent structures or other objects projecting above the level of the primary surface of any runway will be permitted, unless directly related to a necessary airport operation.
3. No residential land uses shall be permitted.
4. No industrial land uses shall be permitted.
5. No use which may result in short or long term concentration of people.
6. No use which would result in large concentrations of people.

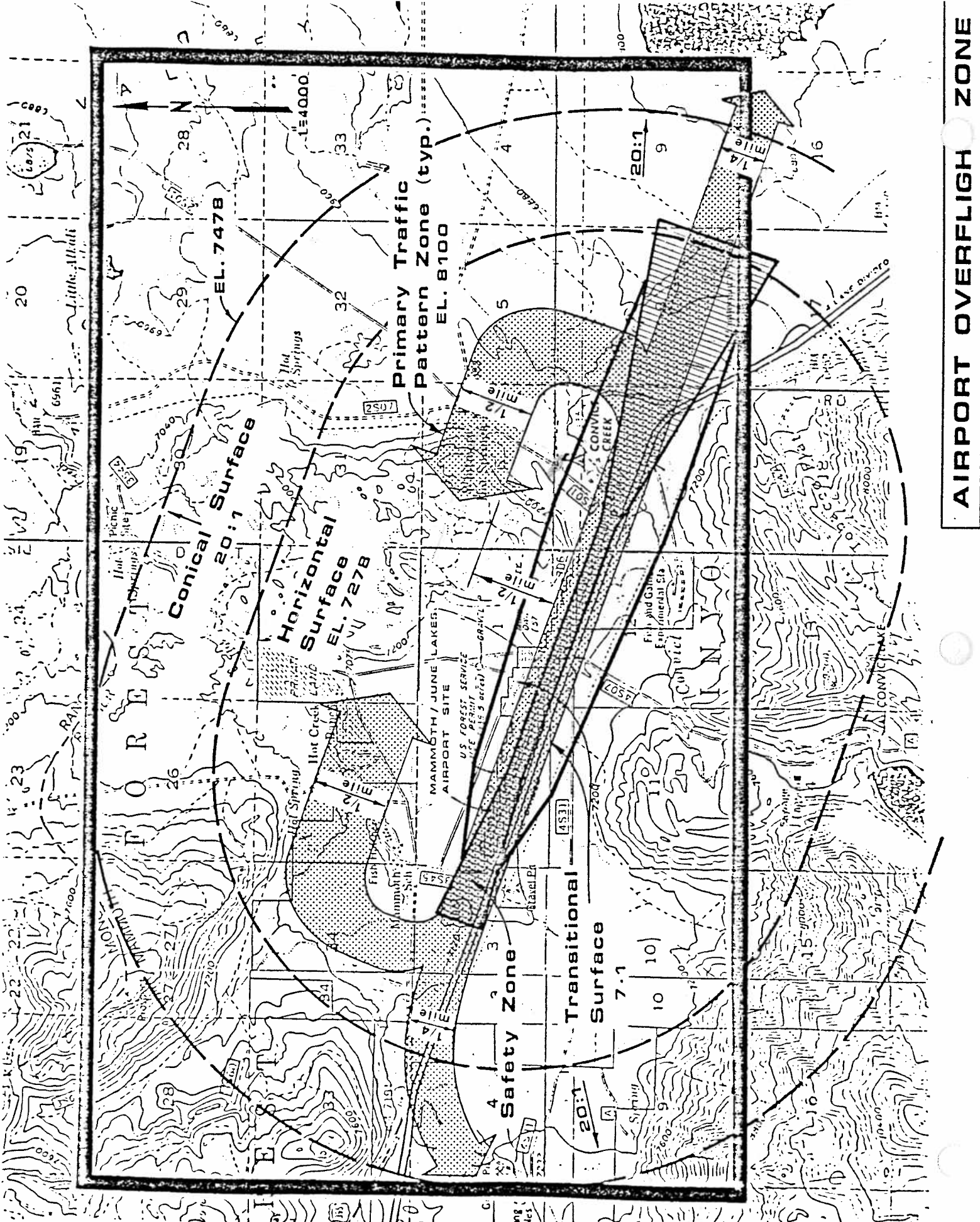
OVERFLIGHT ZONE POLICIES. The overflight zone consists of two components: areas affected by normal approach-/departure traffic patterns, and lands within the general overflight influence area of the airport. The Features of the overflight zone and its components are shown schematically on Figure 12.

**AIRPORT OVERFLIGHT ZONE POLICIES:**

1. The following are considered incompatible land uses within the airport traffic pattern zone.

a. Any use which would direct a steady light or flashing light of red, white, green or amber colors associated with airport operations toward an aircraft engaged in an initial climb following take-off or toward a landing at any airport, unless the use is an FAA approved navigational signal light or visual approach slope indicator (VASI).

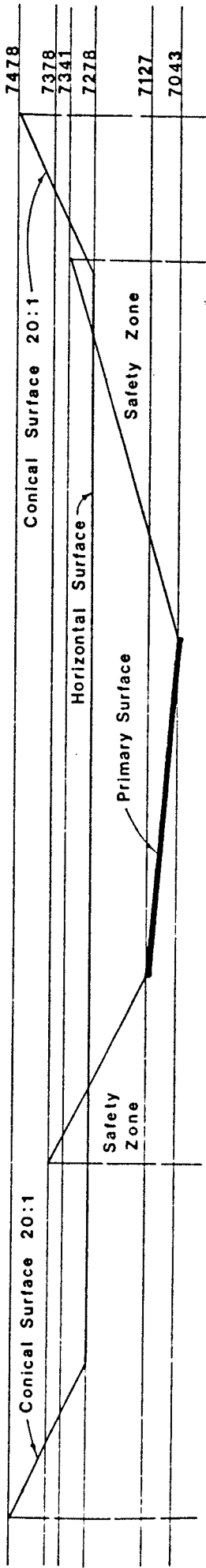
b. Any use which would cause sunlight to be reflected toward an aircraft engaged in an initial climb following take-off or toward an aircraft engaged in a final approach



**AIRPORT OVERFLIGHT ZONE**

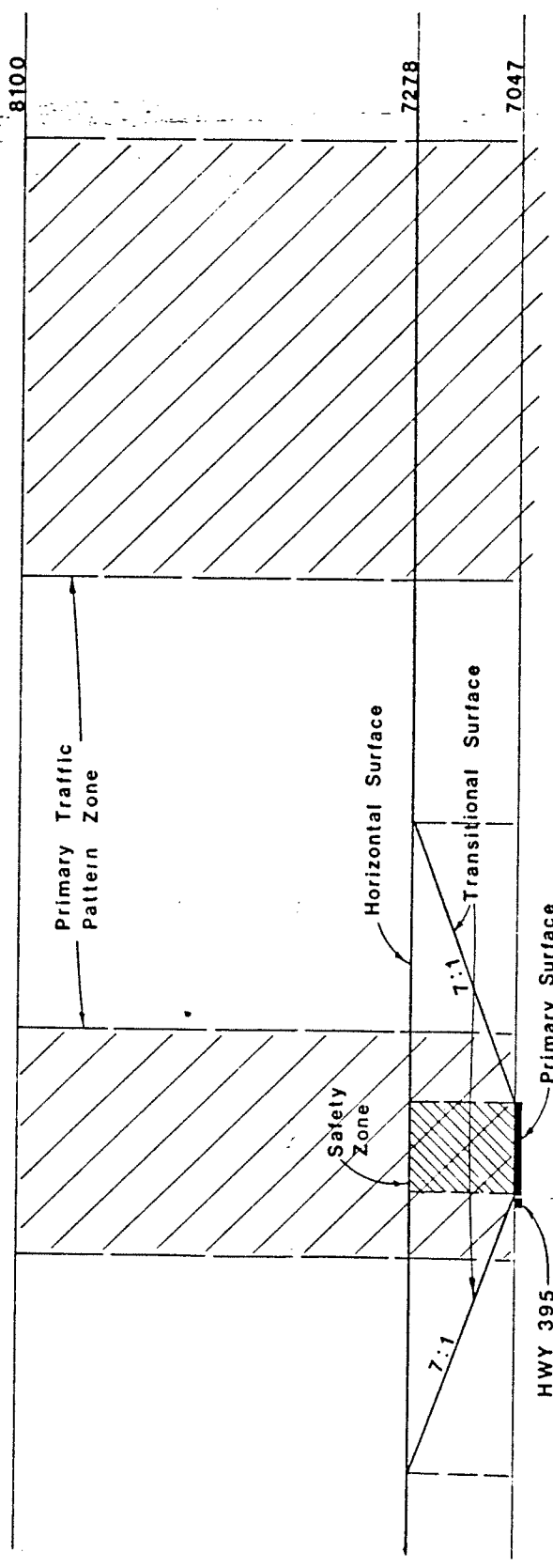
**FIGURE 12**





**Longitudinal Section**

Scales:  
 Horiz.: 1" = 4000'  
 Vert.: 1" = 400'

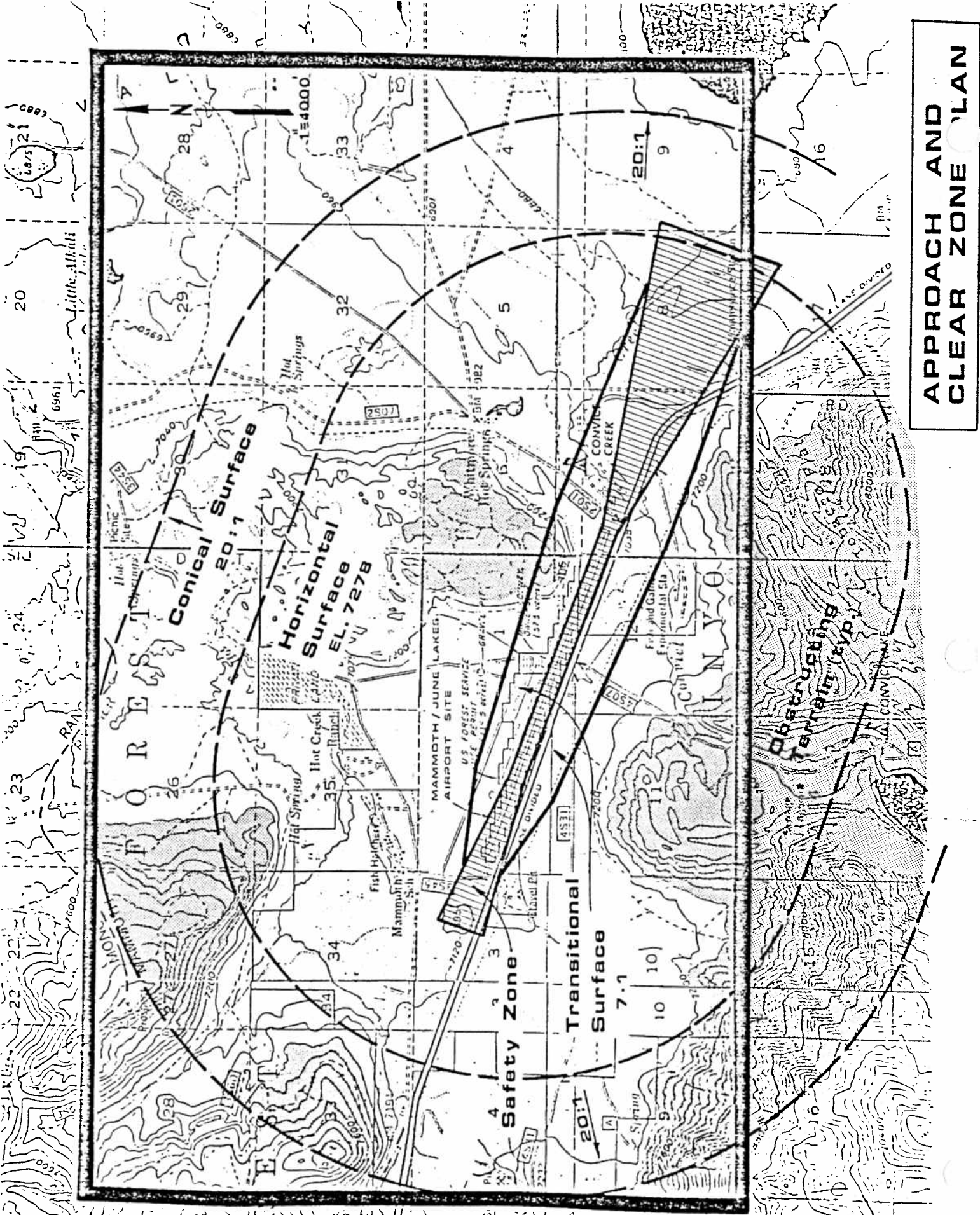


**Cross Section**

Scales:  
 Horiz.: 1" = 100'  
 Vert.: 1" = 400'

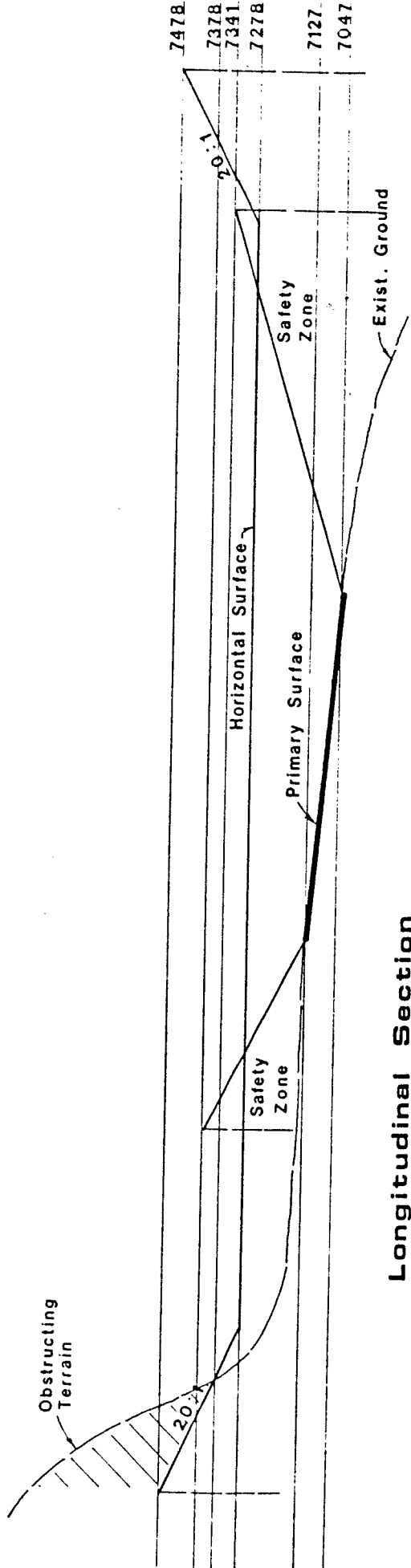
**AIRPORT OVERFLIGHT ZONE**

41  
**FIGURE 12 A**



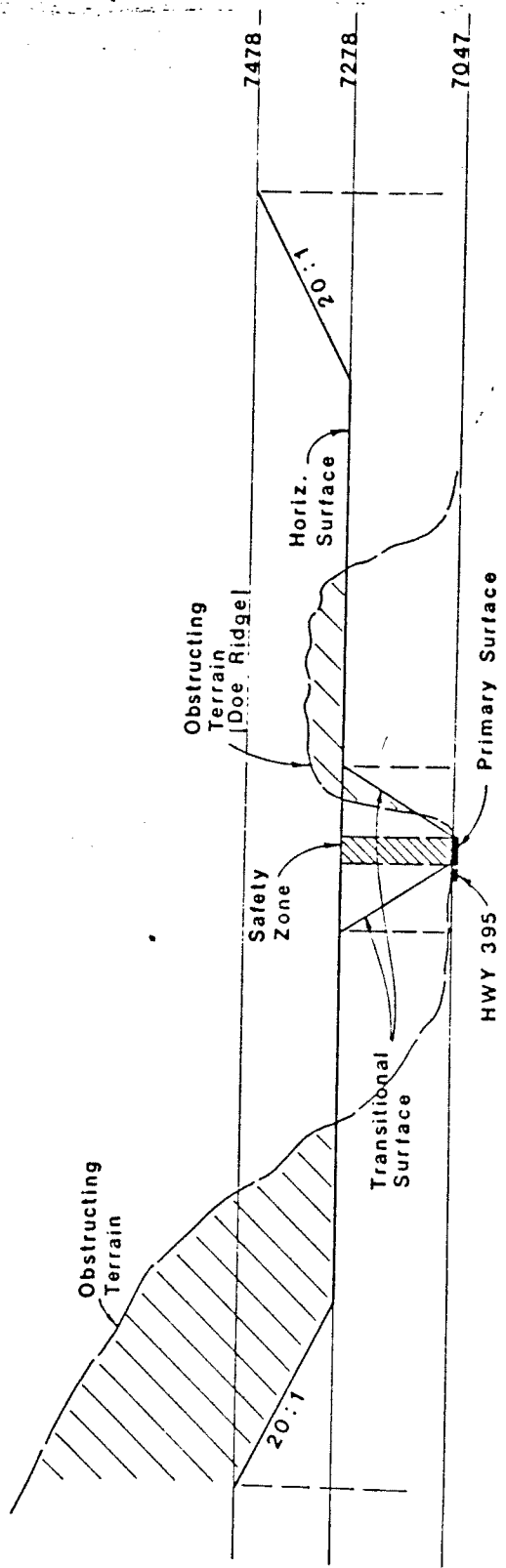
**APPROACH AND CLEAR ZONE PLAN**

FIGURE 13



**Longitudinal Section**

Scales:  
 Horiz.: 1" = 4000'    Vert.: 1" = 400'



**Cross Section**

Scales:  
 Horiz.: 1" = 4000'    Vert.: 1" = 400'

**APPROACH AND CLEAR ZONE PLAN**

FIGURE 43 13 A

toward a landing at an airport.

c. Any use which would generate large amounts of smoke or steam, that may be detrimental to the operation of aircraft.

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

e. Other uses which may affect safe air navigation within this area.

f. Uses which would attract large concentrations of birds.

g. Uses within the primary traffic pattern zone which on a regular basis would result in concentrations of people exceeding 25 persons per acre. Particularly unacceptable uses are shopping centers, restaurants, schools, hospitals, stadiums/arenas, and office complexes, industries and factories which would exceed the 25 persons per acre requirement.

2. Uses or land divisions, which on a regular basis would result in a concentration of people exceeding 25 persons per acre over a 24-hour period, or 50 persons per acre over a period of 2 hours or more within the primary traffic pattern zone.

3. Single Family residential or multiple-family uses, or land divisions, which would result in a density greater than one (1) dwelling unit per acre may be permitted. Multiple-family projects will be evaluated on an individual basis, with specific attention given to location and concentration.

4. The ALUC shall restrict the development of all new non-compatible land uses.

5. All land uses or land use characteristics which may effect safe air navigation or which, because of their nature and proximity to an airport, may pose high risks to the land users shall be avoided/prohibited in the vicinity of an airport.

6. All residential uses shall be soundproofed as necessary to achieve interior annual noise levels attributable to exterior sources, not to exceed 45 db CNEL in any habitable room with windows closed.

7. Development of Airport Master Plans or Layout Plans, or changes to existing plans of any public use airport that involves significant changes in land use, noise sources, or policy changes in size or type of aircraft to use the airport will, prior to finalizing or modifying the plans, be referred to the ALUC for consideration, as required by Section 21676 (c) of the PUC.

8. No hazardous installations such as above-ground oil, gas or chemical storage facilities, excluding facilities for non-commercial, private domestic or private agricultural use shall be permitted.

9. Except when overriding circumstances exist, a condition for approval of any project, subdivision, zoning change, or land exchange shall be the subject of the dedication of an aviation easement to the airport. The aviation easement shall contain and/or address the following:

a. Right-of-flight at any altitude above acquired easements surfaces.

b. Right of cause noise, vibrations, fumes, dust, and fuel particle emissions.

c. Right of entry to remove, mark or light any structures or growths above easement surfaces.

d. Right to prohibit creation of electrical interference, unusual light sources, and other hazards to aircraft flight.

As a further condition for approval of a residential subdivision or land trade, except where overriding circumstances exist, require the property owners to agree to the following:

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

b. That the owners shall not initiate or support any action in any court or before any governmental agency if the purpose of the action is to interfere with, restrict, or reduce the operation of the airport or the use of any airport by any aircraft.

c. That the owners shall not protest or object to the operation of the airport or the landing or take-off of aircraft before any court or agency of government.

d. The above easement and agreement shall run with the land and shall be binding upon the owners and subsequent owners of the property.

10. A buyer notification statement shall be a requirement for the transfer of title of any property located within the airport's planning boundary. This statement should indicate that the buyer is aware of the proximity of an airport, the characteristics of the airports current and projected activity, and the likelihood of aircraft overflights of the affected property.

Airport Height Restriction Policies. The airport height restriction area is defined by Approach and Clear Zone Plan (ACZP) which is specified by Federal Aviation Regulation (FAR) Part 77. The ACZP for the Mammoth/June Lake Airport is Shown on Figure 13. Height restrictions are specified for the safety of aircraft navigation and the general public.

#### **AIRPORT HEIGHT RESTRICTION POLICIES:**

1. No structures or obstructions are permitted within the designated primary runway surface, approach surfaces or clear zones.
2. Structures within the ALUC Planning Boundary over 35 feet in height are permitted only when in conformance with requirements of the Mono County Zoning and Development Code and when not in conflict with any runway surface, approach surface or clear zone.
3. The ALUC shall review any applicable development proposals and restrict the erection or growth of objects which penetrate the established airport height restriction areas.
- 4 Rotating beacons, spot lights, or similar aircraft navigation hazards markers which are not part of airport operations are prohibited within the entire overflight zone.
5. Any structure, either within or outside the ALUC Planning Boundary is not in conformance if it:
  - a. Penetrates the height restriction surfaces adopted by the ALUC (unless it is determined not to be a "hazard" by the FAA).

b. Would result in a loss in airport utility, such as causing the usable length of the runway to be reduced.

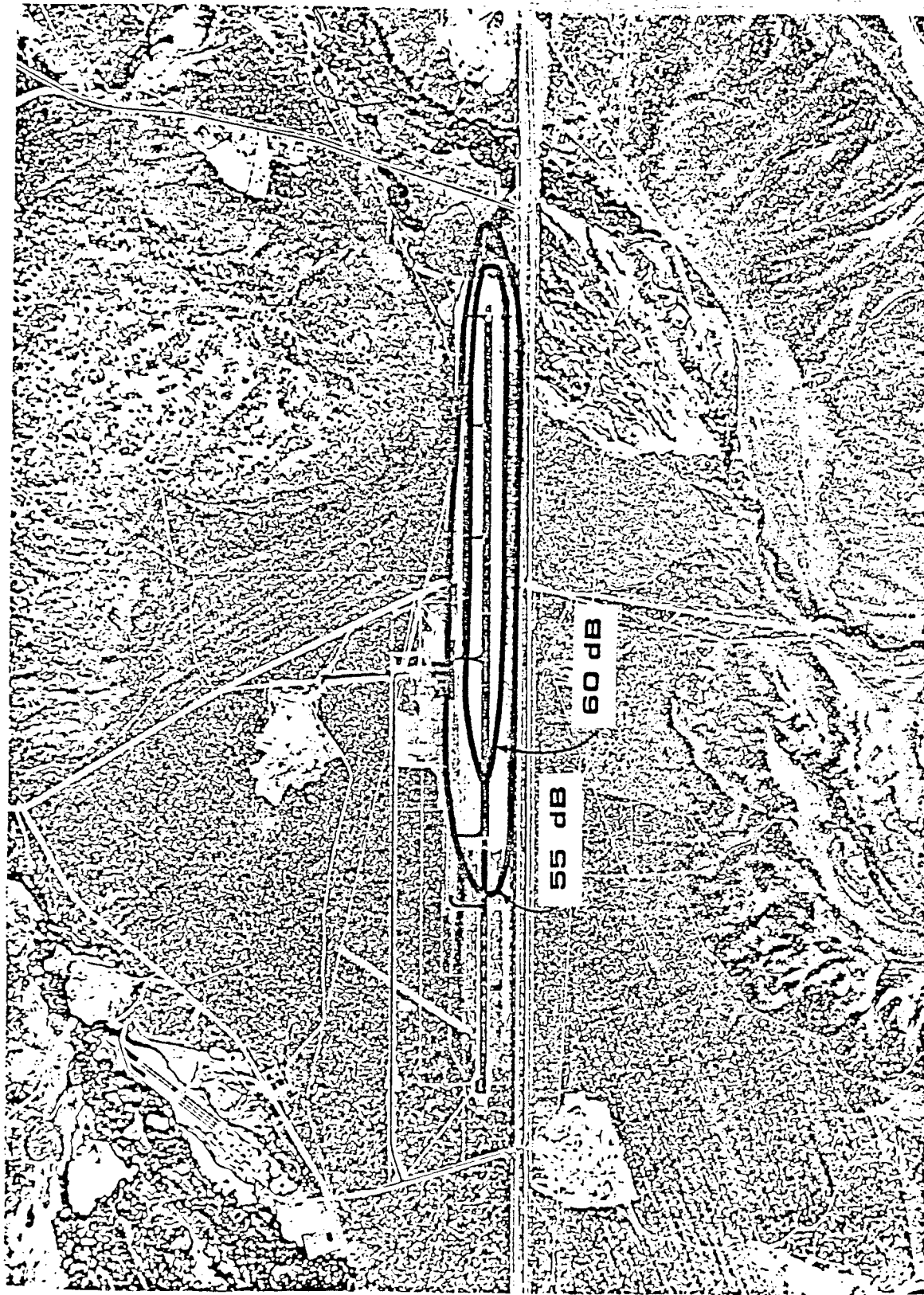
c. Would conflict with the VFR airspace used for the airport traffic pattern or enroute navigation to and from the airport.

d. Is determined to be a "hazard" by the FAA.

Airport Noise Policies. Within the planning area, the impact of airport or aircraft generated noise will be considered by the ALUC in the review of all development proposals. A noise impact analysis prepared for the Mammoth/June Lake Airport Master Plan is presented in Appendix C. The analysis describes the airport noise environment by determination of Community Noise Equivalent Level (CNEL) contours using the methodology defined in Title 21 of the California Administrative Code. The impact of aircraft noise associated with airport operations is the most obvious factor in determining land use compatibility with the planning area.

#### **AIRPORT NOISE POLICIES:**

1. Noise and aviation easements, as necessary, shall be required before approval of any land trade or approval of any project within the Planning Boundary.
2. No residential development is permitted within the 65 dB CNEL contour. Non-residential development may be permitted within the 65 dB CNEL contour if structures are soundproofed to limit interior noise levels to 45 db cnel.
3. The maximum noise exposure considered acceptable for non-residential land uses without special sound reduction construction is 60 dB CNEL.
4. The maximum noise exposure considered acceptable for residential land uses is 55 dB CNEL. All residential structures shall include soundproofing construction to limit interior noise levels to 45 dBA in any habitable room.
5. If a noise analysis, including noise monitoring, is conducted for a particular location and the results indicate that the maximum CNEL will be less than shown herein, then the lower exposure level may be used for the land use evaluation at the discretion of the ALUC.

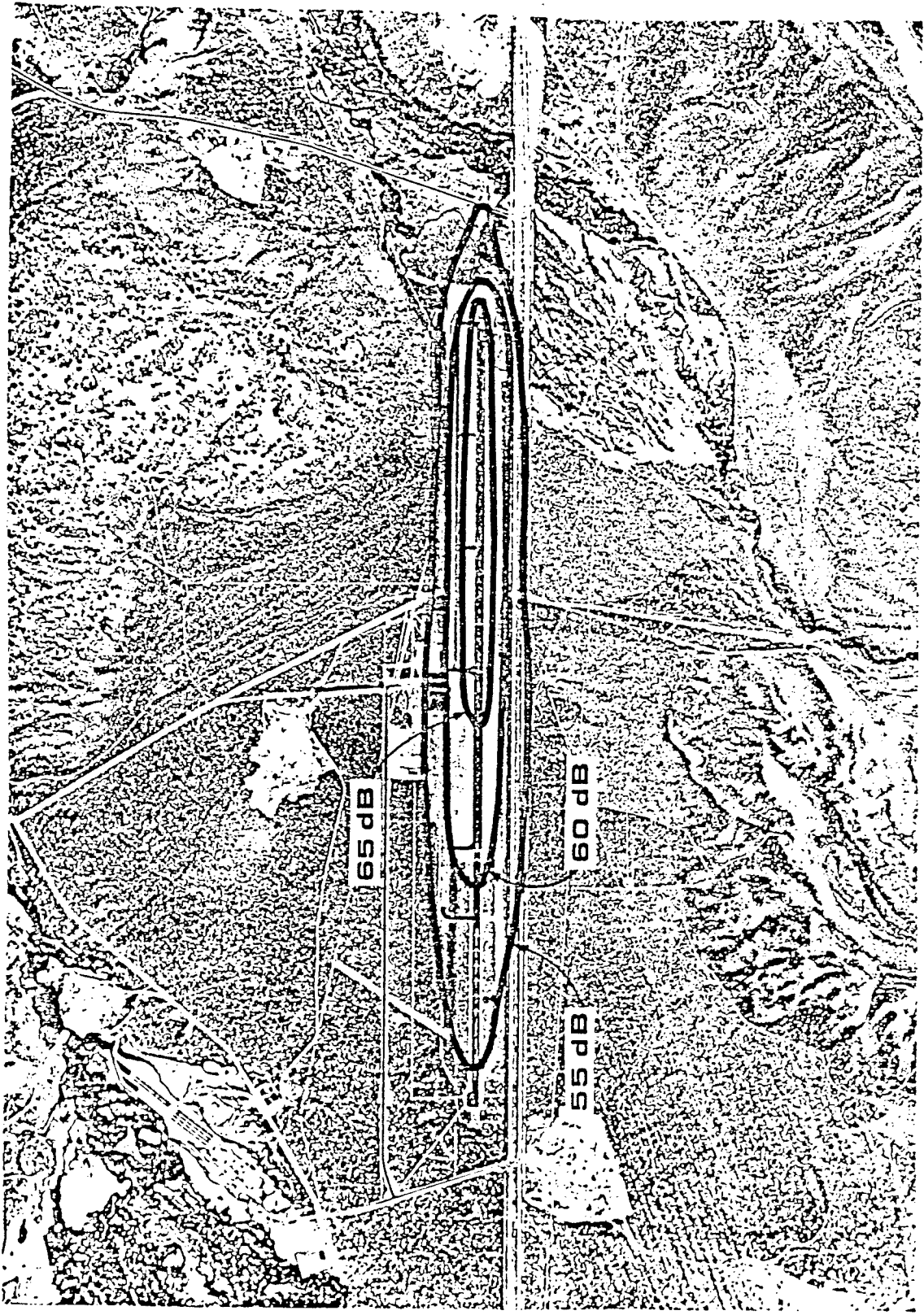


Source: HODGES & SHUTT

121,000 ANNUAL AIRCRAFT OPERATIONS I

EXISTING NOISE CONTROL S





Source: HODGES & SHUTT  
1:51,000 ANNUAL AIRCRAFT OPERATIONS

**PROJECTED NOISE CONTOURS**

ADDITIONAL BASIC POLICIES

In addition to the above basic policies, all development subject to a use permit or involved in a land exchange within the planning boundary shall contain the following provisions:

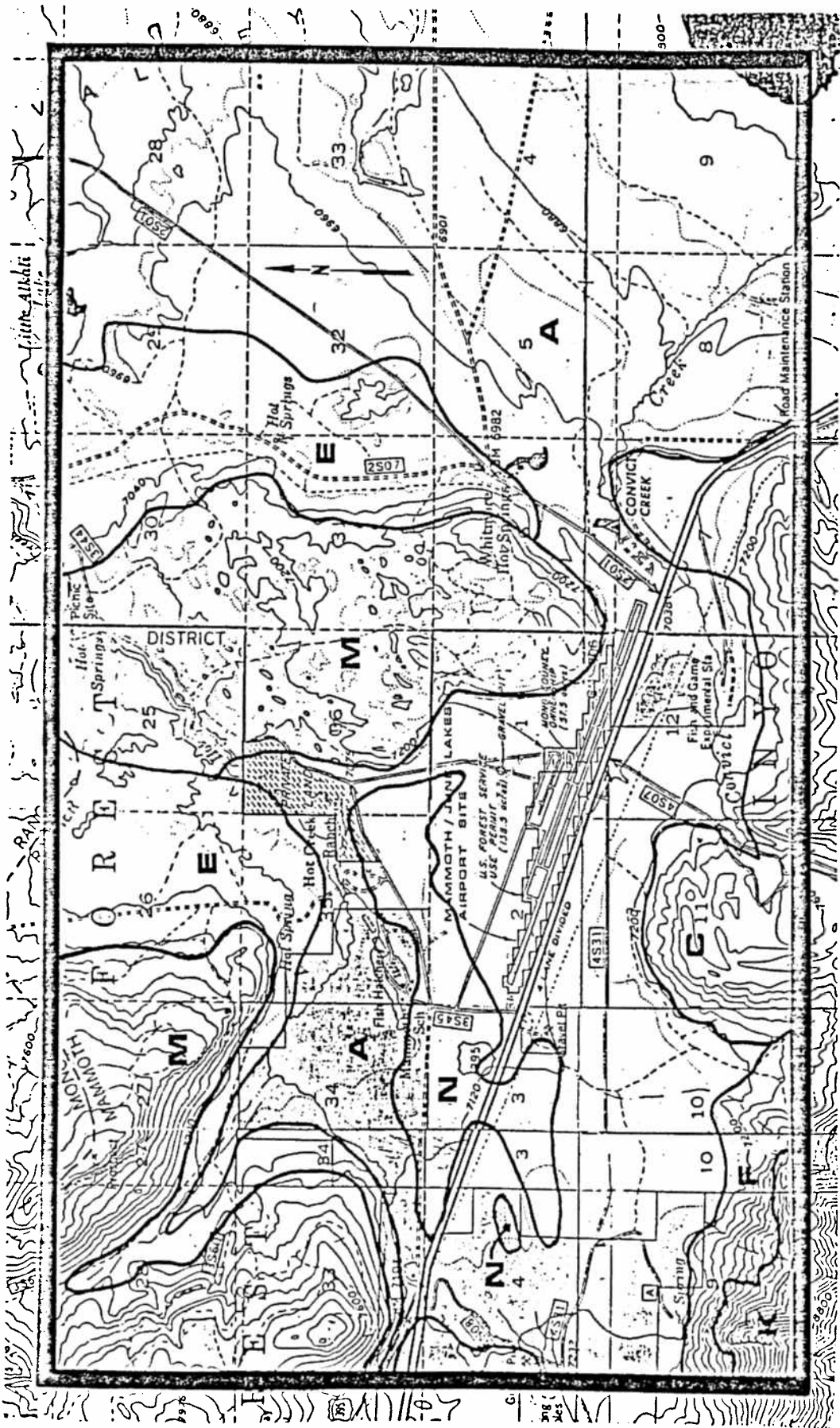
1. It is understood by the owner that the subject property is within the area of influence of an airport and the operation of the airport, including aircraft landings and take-offs may generate high noise levels.
2. The owner shall not initiate or support any action to interfere with, restrict, or reduce the operation of the airport by any aircraft. The owner shall not protest or object to the operation of the airport before any court or agency of the government.
3. The above stipulations shall be binding upon any subsequent owners or successors in interest to the property.

## AIRPORT DESIGN CONSIDERATIONS

Development within the Airport Land Planning Boundary requires that projects be reviewed in light of the following factors to lessen the impacts upon the general area and the environment.

Soils/Land Transformation. Potential long-term impacts associated with soil disturbances and land transformation can be significantly mitigated by appropriate design, construction, and stabilization considerations. All extensive grading and earthwork activities for developments within planning area will require the approval of site specific grading plans and the issuance of a grading permit by the Mono County Department of Public Works or the approval of B.L.M. or the U.S. Forest Service. In addition, the Lahontan Regional Water Quality Control Board Requires the submittal of a waste discharge report and the approval of a drainage and erosion control plan for all major projects on non-federal and within the Mammoth Creek watershed. The following specific design considerations are required for all developments within the planning area.

1. All grading and earthwork activities must be conducted in accordance with an approved construction grading plan and grading permit issued by the Mono County Department of Public Works, the U.S.F.S. or B.L.M. The following provisions must be included in the grading permit:
  - a. All earthwork must be conducted in accordance with a detailed project schedule submitted with the grading application. The schedule shall provide for completion of earthwork in a single construction season.
  - b. Existing drainage patterns shall not be significantly modified and drainage concentrations shall be avoided.
  - c. All loose piles of earthwork materials shall be protected to avoid discharges of silt-laden runoff.
  - d. Limits of construction work should be clearly delineated and disturbances of adjacent soil and vegetation should be strictly avoided. Where considered necessary, temporary fencing shall be erected to delineate the work area.
  - e. Dust control measures (watering trucks or pumped systems) shall be continuously implemented throughout the construction period.
  - f. All exposed soil areas shall be stabilized and reseeded in accordance with an approved landscape/revegetation plan as soon as possible. All stockpiles of unsuitable soil



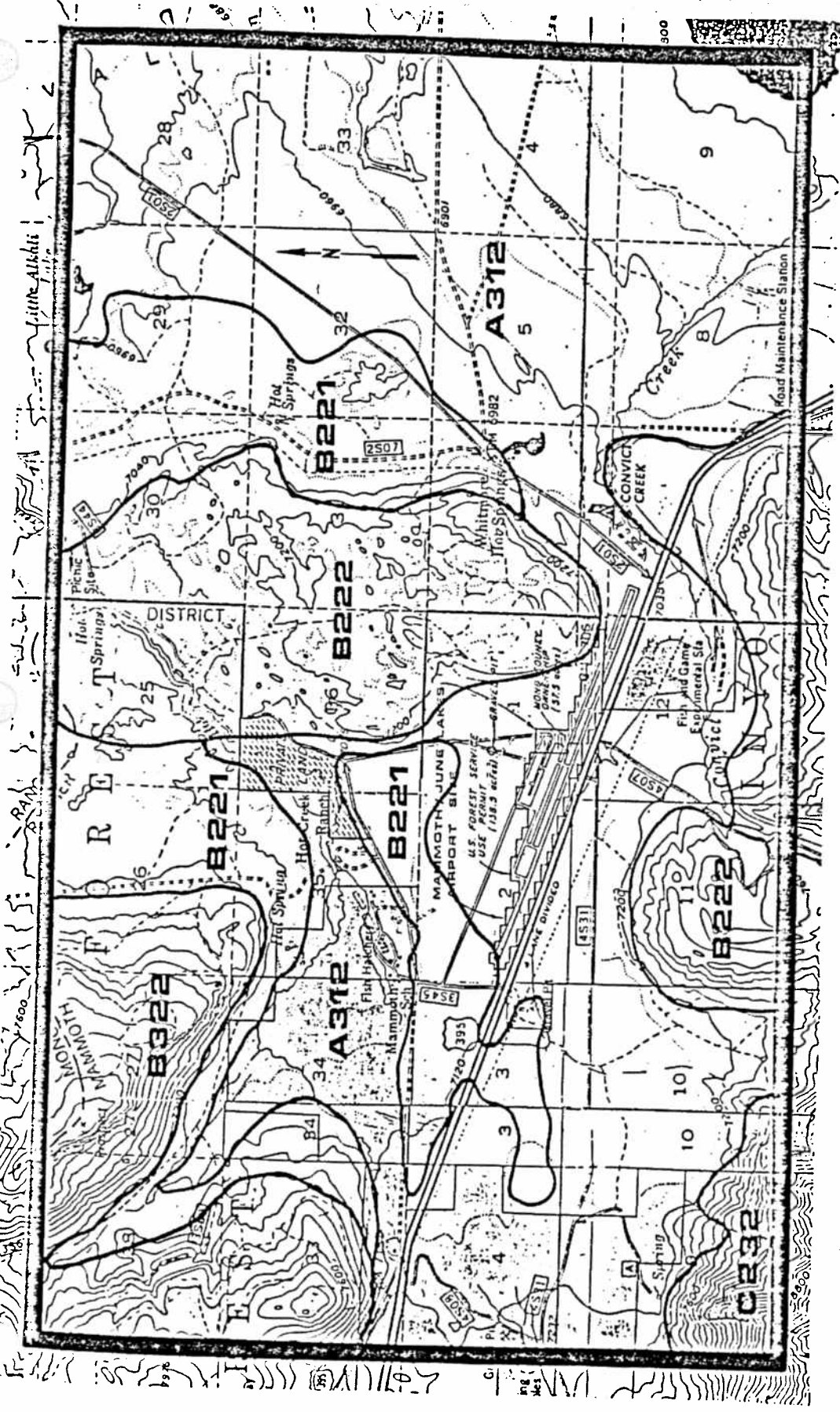
**LEGEND**

- A Alluvial
- C Moraine
- E Lacustrine
- F Colluvial
- K Glaciated Graniticland
- M Dissected Domeland
- N Dissected Flowland

**AREA LANDFORM**

**FIGURE 16**

# AREA SOIL TYPES



**SOIL TYPE CODE**

C 1 3 1																					
<table border="0"> <tr> <th style="text-align: left;">Runoff Potential</th> <th style="text-align: left;">Soil Depth</th> <th style="text-align: left;">Erosion Potential</th> <th style="text-align: left;">Vegetative Productivity</th> </tr> <tr> <td>A Very Low</td> <td>1 0 to 20 in.</td> <td>1 Low hazard</td> <td>1 Low potential</td> </tr> <tr> <td>B Low</td> <td>2 20 to 36 in.</td> <td>2 Moderate hazard</td> <td>2 Medium potential</td> </tr> <tr> <td>C Moderate</td> <td>3 Over 36 in.</td> <td>3 High hazard</td> <td>3 High potential</td> </tr> <tr> <td>D High</td> <td>4 Variable conditions</td> <td></td> <td></td> </tr> </table>	Runoff Potential	Soil Depth	Erosion Potential	Vegetative Productivity	A Very Low	1 0 to 20 in.	1 Low hazard	1 Low potential	B Low	2 20 to 36 in.	2 Moderate hazard	2 Medium potential	C Moderate	3 Over 36 in.	3 High hazard	3 High potential	D High	4 Variable conditions			
Runoff Potential	Soil Depth	Erosion Potential	Vegetative Productivity																		
A Very Low	1 0 to 20 in.	1 Low hazard	1 Low potential																		
B Low	2 20 to 36 in.	2 Moderate hazard	2 Medium potential																		
C Moderate	3 Over 36 in.	3 High hazard	3 High potential																		
D High	4 Variable conditions																				

FIGURE 17 <sup>53</sup>

materials (boulders and stripped vegetation) shall be removed and disposed of at approved sites designated by Mono County.

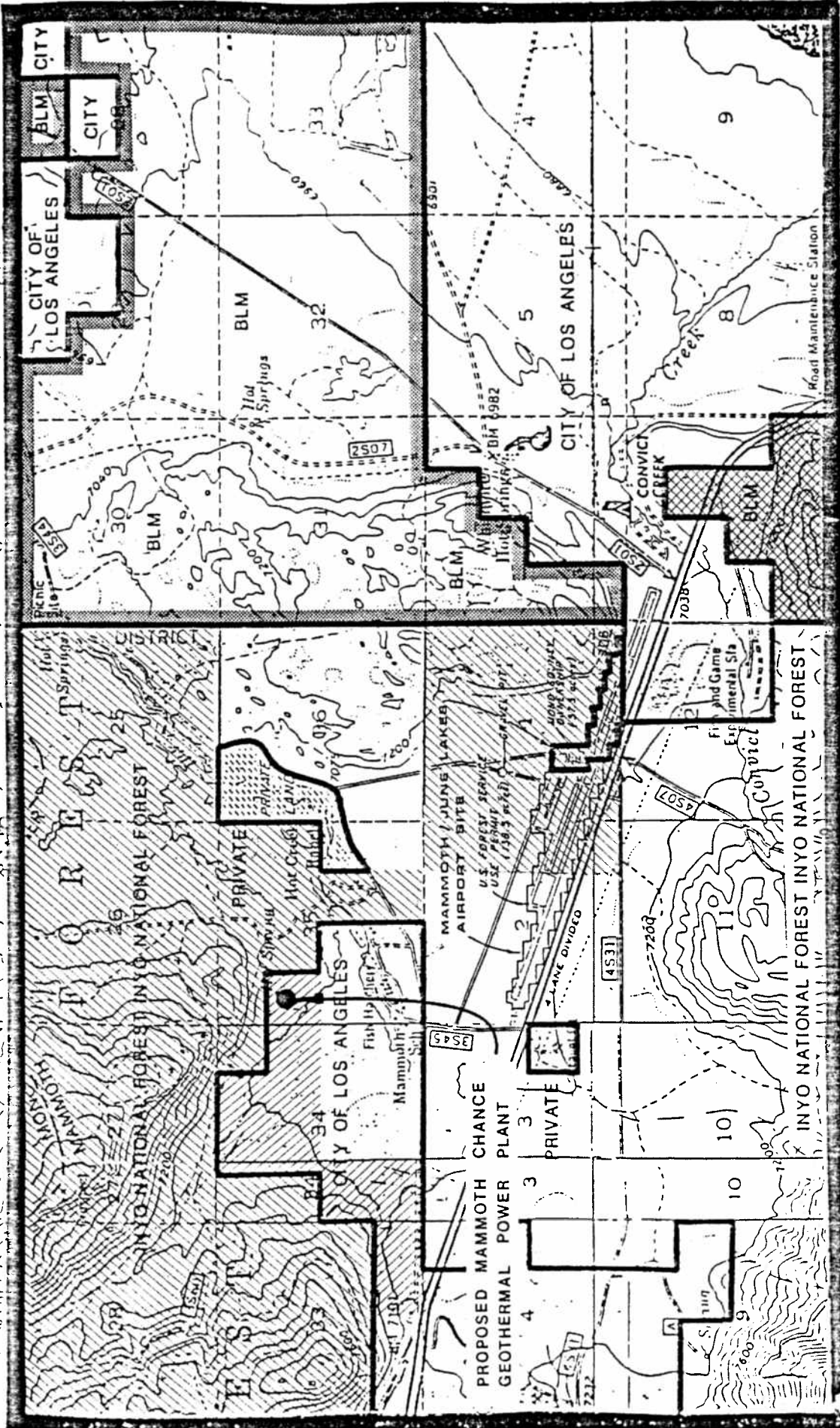
- g. Bonds or other security shall be required to guarantee completion of site stabilization and revegetation measures within the time periods delineated in the project schedule.
2. A drainage and erosion control plan for all major projects shall be submitted to and approved by the Mono County Public Works Department and the Lahontan RWQCB if on private land or the U.S.F.S. or B.L.M. if on federal land. In addition, a waste discharge report must be submitted to the Lahontan RWQCB if the development is on private land. The plan shall include the following provisions:
- a. Interim erosion control measures shall be implemented during the construction period, including such facilities as temporary dikes, filter fences, hay bales, and retention basins as necessary.
  - b. No discharges of silt, waste materials, toxic substances, or other deleterious matter to surface waters shall be permitted.
  - c. Permanent drainage collection, retention, and infiltration facilities shall be constructed and maintained to prevent waste discharges from the completed site.
  - d. All projects shall be designed to retain and infiltrate all runoff from a 20-year, one-hour design storm event.
  - e. Revegetated areas shall be maintained in order to insure adequate establishment and growth. All permanent drainage and erosion control facilities shall be periodically inspected and maintained as required.
3. Large scale earthwork, grading, or soil disturbances within the stream conservation zones of Mammoth Creek, Hot Creek, and Convict Creek are prohibited. The number of utility or road crossings shall be minimized.
- a. All activities within the stream conservation zone shall be conducted in accordance with the requirements of a Stream Alteration Permit (Section 1603) issued by the California Department of Fish and Game.
  - b. All construction activities shall be scheduled during the lowest streamflow period, usually September through November.
  - c. Special control measures shall be implemented to prevent the discharge of silt, sediment, and debris or any other adverse water quality impacts on surface streams.

Geologic/Volcanic Hazards. The primary conclusion to be drawn from the recent series of large earthquakes centered in the Long Valley/Mammoth Lakes area in the summers of 1980 and 1981 is that conventional one and two-story, wood frame structures can withstand considerable seismic forces when designed and constructed in accordance with modern Uniform Building Code Standards. Experience with earthquakes in other areas of California, as well as Mammoth Lakes itself, has shown that such structures have considerable flexibility and are not subject to catastrophic collapses when properly designed. The use of reinforced concrete or concrete block structures should generally be avoided, especially for public buildings. The following design considerations are necessary to reduce potential impacts arising from geologic and volcanic hazards.





1. A building permit shall be obtained from the Mono County Building Department for all structures erected on non-federal land in the planning area. The permit shall incorporate the following design provisions.
  - a. All structures must be designed in accordance with the Uniform Building Code, incorporating lateral force requirements for Seismic Zone 4 (maximum seismic loads).
  - b. A lateral force (seismic) analysis is required to be submitted by a licensed structural or civil engineer for all public, commercial, and residential structures.
  - c. All structures must be designed for seismic forces under maximum snow loading conditions (presently 60 psf).
2. No residential or commercial building structures are permitted within the Alquist-Priolo Special Studies Zones unless site specific geologic and soils investigations conclude that the designated fault zones are inactive or do not represent a hazard.
3. An emergency response plan shall be prepared for the Mammoth/June Lake Airport. All essential facilities, such as power supply and fire protection systems shall be provided with emergency back-up provisions (i.e., engine generators).

Hydrology and Water Resources. The potential impacts of projected water demands associated with implementation of the Airport Land Use Plan can be reduced by the following design considerations.

1. Diversion of surface streams for domestic, irrigation, or industrial water supplies should be prohibited.



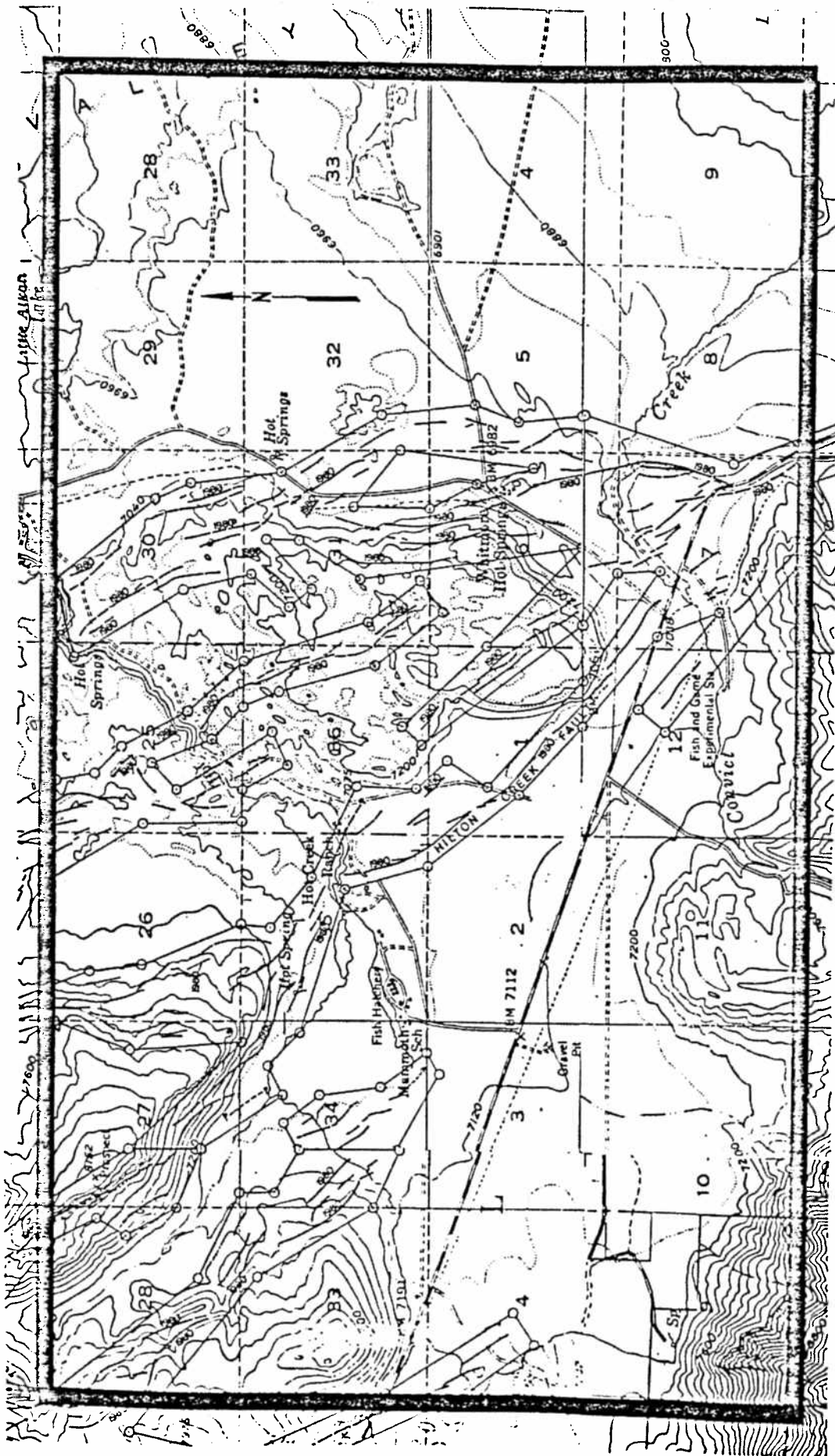
**LEGEND**

-  EXISTING LEASES ON FEDERAL LAND (4320 ACRES)
-  FEDERAL LAND AVAILABLE FOR LEASING, BUT NO EXISTING LEASES (3760 ACRES)
-  FEDERAL LAND WHERE LEASES PROHIBITED (280 ACRES)
-  EXISTING LEASES ON PRIVATE LAND (400 ACRES)

**GEOHERMAL LEASES IN PLANNING AREA**

**FIGURE 19**





**IMPORTANT - PLEASE NOTE**

- 1) This map may not show all faults that have the potential for surface fault rupture, either within special studies zones or outside their boundaries.
- 2) Faults shown are those within the boundaries of the special studies zones.
- 3) The identification and location of these faults are based on the best available data. However, the quality of data used is varied. Traces have been drawn as accurately as possible at the map scale.
- 4) Fault information on this map is not sufficient to serve as a substitute for the geologic site investigations (special studies) required under Chapter 75 of Division 2 of the California Public Resource Code.

**MAP EXPLANATION**

**Potentially Active Faults**

- Faults considered to have been active during Holocene time and to have a relatively high potential for surface rupture; solid line where accurately located, long dash where approximately located, short dash where inferred, dotted where concurred query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake-associated event or C for displacement caused by creep or possible creep.

**Special Studies Zone Boundaries**

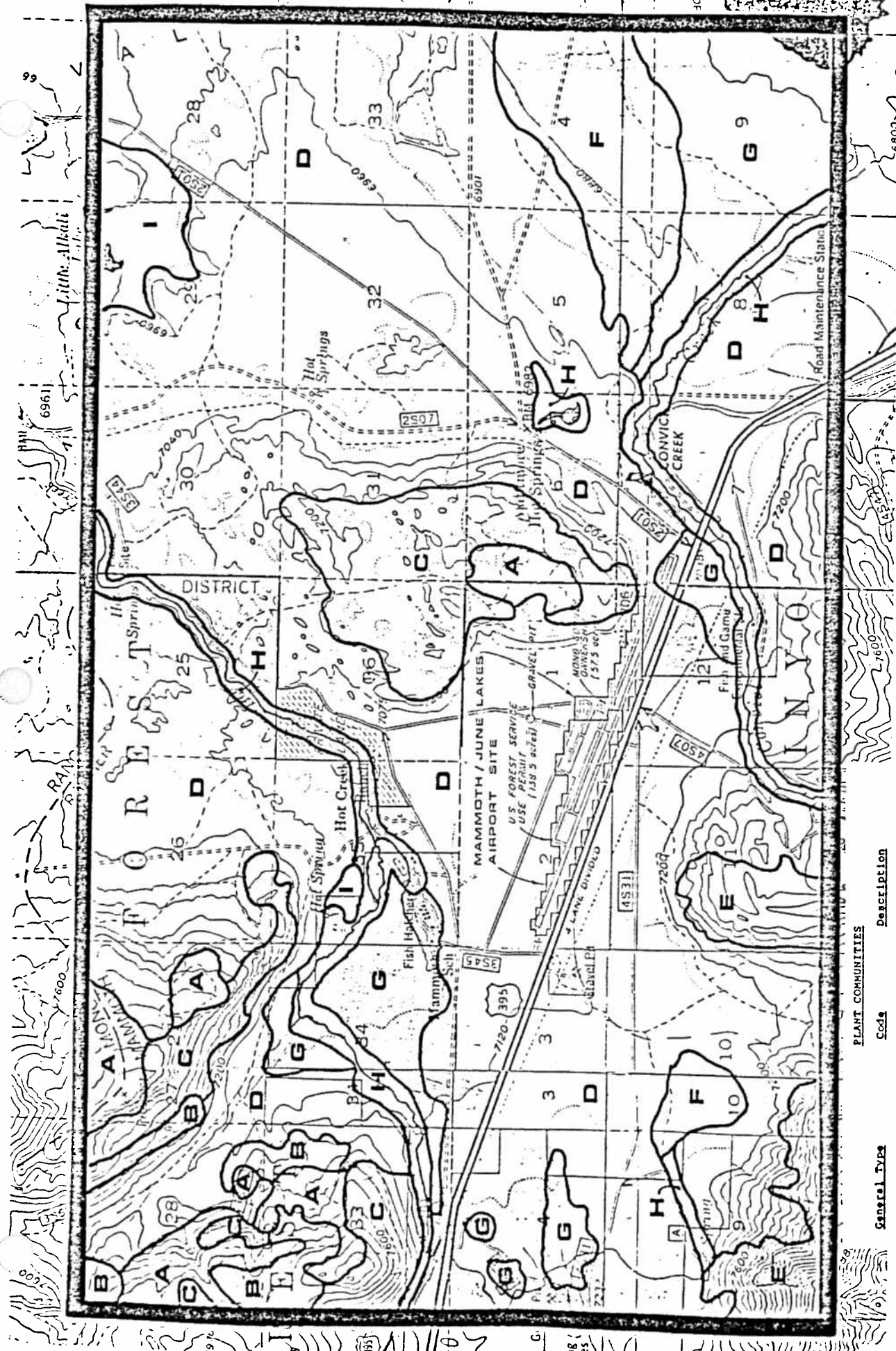
- These are delineated as straight-line segments that connect encircled turning points so as to define special studies zone segmental.
- Seaward projection of zone boundary.

**GEOLOGIC HAZARD ZONES**

**FIGURE 18**

2. Groundwater extraction should be avoided within the Mammoth/ Hot Creek watershed north of U.S. Highway 395 to protect sensitive stream environments as well as unique hot/cold water flow systems.
3. A comprehensive water supply, distribution, and storage system should be developed for the concentrated land uses associated with the Airport Development District. Whenever possible, other water supply facilities should be consolidated within the planning area.
4. The most favorable area for groundwater resource development is in the vicinity of the existing airport site. In order to minimize potential impacts on Hot Creek spring flows, supply wells should be situated as far from the Mammoth/Hot Creek drainage system as possible. The most desirable locations for such wells are shown on Figure 20A. A well development and testing program should be implemented to verify the availability and capacity of the potential groundwater supply at this location.
5. A groundwater level monitoring and reporting program shall be developed to assist public agencies in evaluating the impact of groundwater extractions on downstream spring and surface flows in both the Hot Creek and Convict Creek drainage systems. The suggested locations for monitoring wells are shown on Figure 20A. All development within the ADD zone shall contribute to the cost of the monitoring program.
6. If the groundwater monitoring program documents that groundwater extractions are specifically causing significant adverse impacts on downstream spring and surface water flows, then water use shall be curtailed, modified, or eliminated until such time as the impacts are abated. All new developments within the planning area shall be required to endorse an agreement with Mono County, or appropriate jurisdictional agencies, which specifies the groundwater monitoring program enforcement provisions.
7. All development within the planning area shall incorporate water conservation measures to reduce potential water consumption. The use of reclaimed wastewater for landscape irrigation purposes shall be implemented if technically feasible.
8. All proposed land uses within the airport planning area should be conditioned upon the availability of water supplies.

Water Quality. The following design considerations are considered necessary to mitigate the potential water quality impacts associated with domestic wastewater and industrial waste discharges.



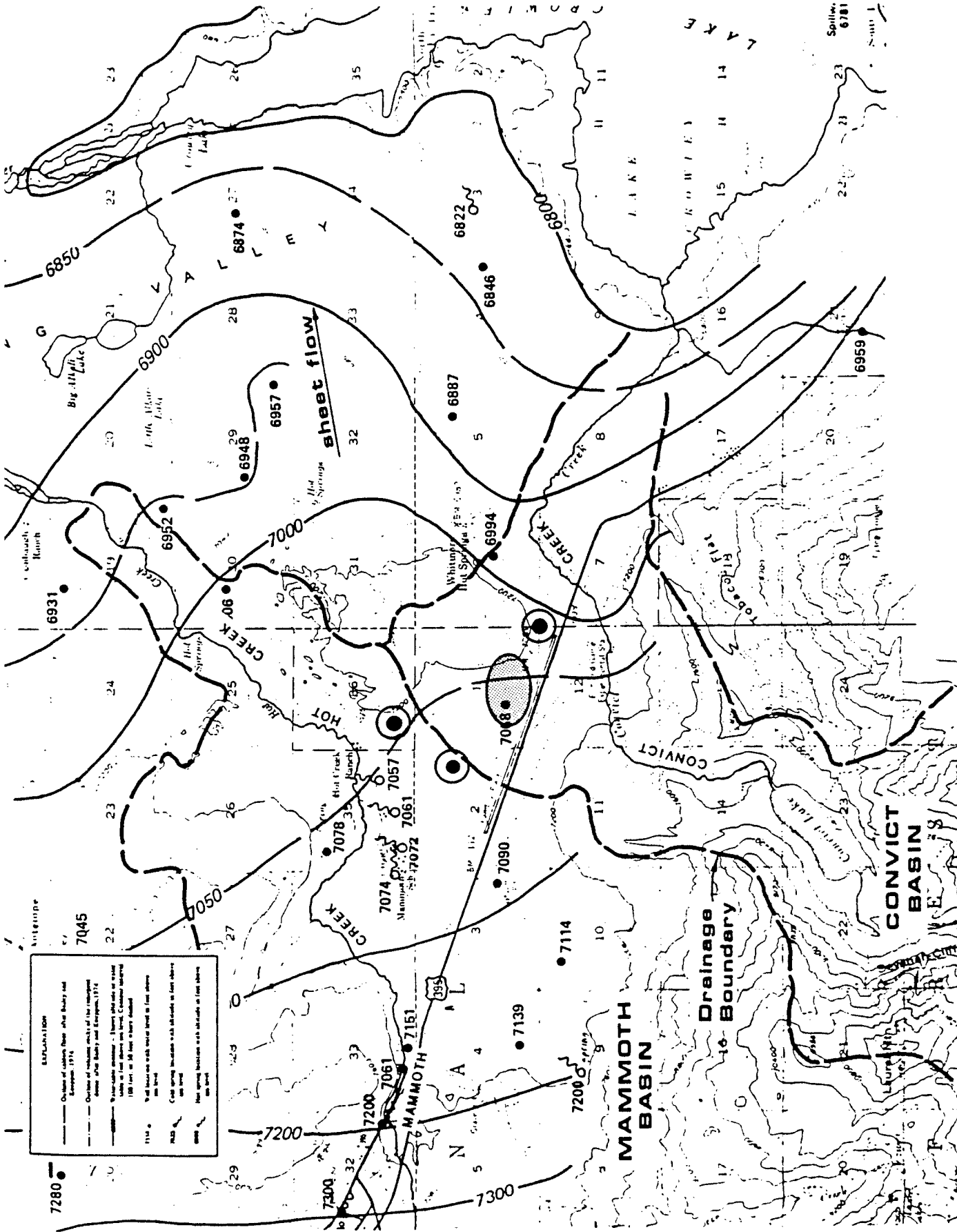
PLANT COMMUNITIES

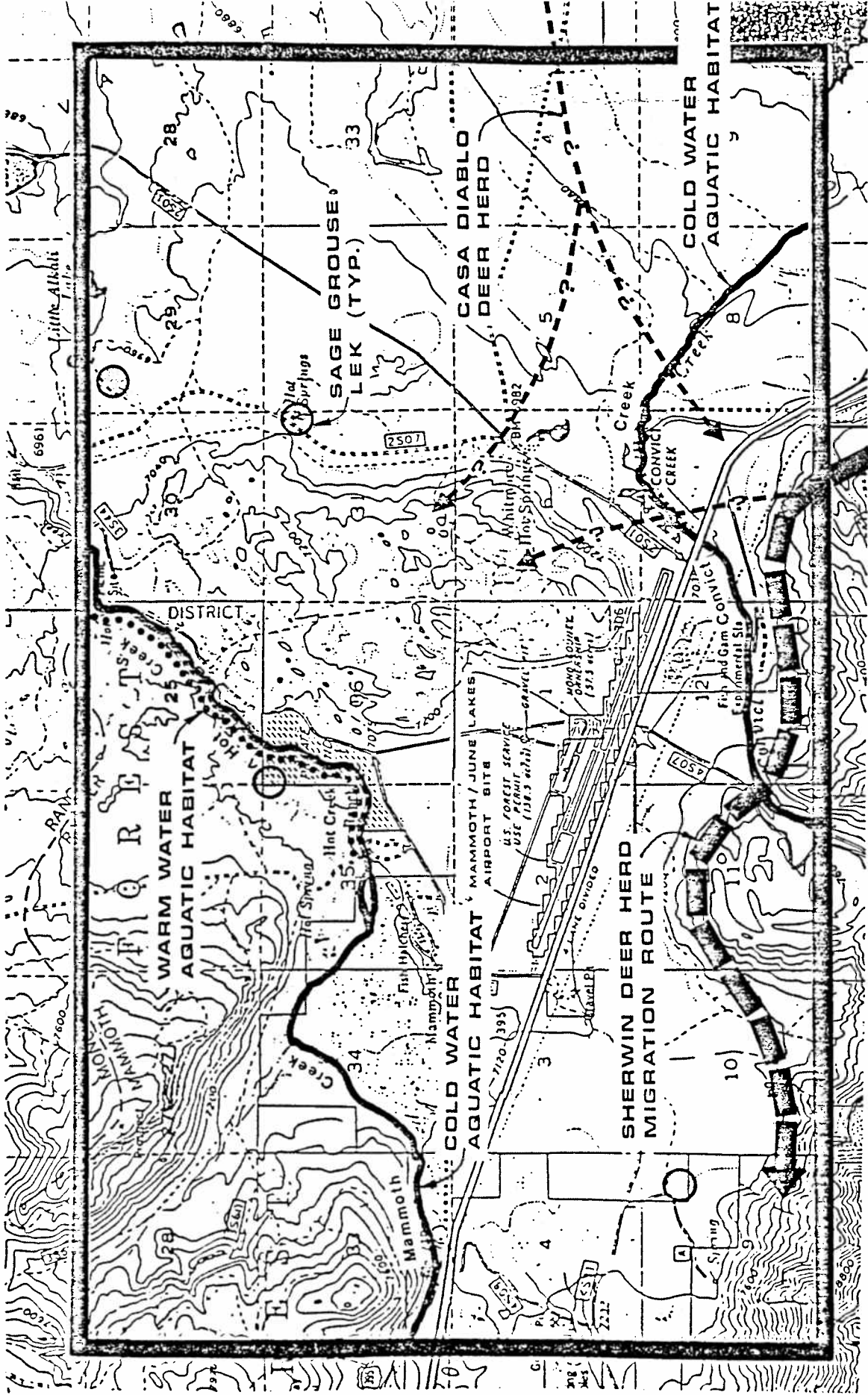
General Type	Code	Description
Jeffrey Pine Forest:	A	Greater than 11-inch caliper, 10%-40% crown cover.
	B	Less than 11-inch caliper, 10%-40% crown cover.
Pinon-Juniper Woodland:	C	Less than 11-inch caliper, 10%-25% crown cover.
Sagebrush Scrub:	D	Great Basin Sagebrush
Mountain Meadow:	E	Mountain Brush/Chaparral
Riparian:	F	Wet Grassland
	G	Riparian Meadow
	H	Stream Environment zones

AREA VEGETATION

FIGURE 20

**WATER SUPPLY AND GROUNDWATER MONITORING WELL LOCATIONS**





**SENSITIVE HABITAT  
LOCATIONS**

61  
**FIGURE 21**

1. All wastewater treatment and disposal systems shall be designed, constructed and maintained in accordance with requirements established by the Lahontan RWQCB and the Mono County Health Department. Waste discharge permits shall be obtained from both agencies prior to the installation of wastewater facilities.
2. No wastewater disposal systems shall be permitted within 100 feet of stream environment zones or in areas where groundwater is less than five feet below ground surface.
3. The direct discharge of treated (or untreated) wastewaters to perennial surface streams is prohibited within the planning area.
4. Wastewater collection, treatment and disposal systems shall be consolidated to the greatest extent possible within all designated land use areas.
5. A centralized sewage collection, treatment, and disposal system shall be developed for the Airport Development District. Effluent discharges shall meet RWQCB requirements for secondary levels of treatment. A sewerage maintenance district shall be established for the ADD land use area. All proposed private development within the district shall be required to contribute to the operation and maintenance of the sewerage system and bear the cost of expansions or extensions as necessary.
6. Sewage treatment facilities shall be designed to provide a quality of effluent which meets RWQCB and State Health Department standards for landscape irrigation purposes. The use of reclaimed water could reduce irrigation requirements by 25-30% and should be implemented if technically feasible. All reclaimed water use shall comply with RWQCB and State Health Department requirements.
7. Groundwater sampling wells shall be provided to monitor the performance of centralized subsurface disposal systems and to assess potential adverse water quality impacts. The size, location, and depth of sampling wells shall conform with Lahontan RWQCB requirements.
8. The discharge of industrial and manufacturing wastes shall be strictly controlled. Pretreatment or containment facilities shall be provided in accordance with RWQCB requirements prior to any discharges of industrial manufacturing wastes to domestic wastewater treatment or disposal systems. Wash-down wastes from aircraft or vehicle maintenance facilities shall be intercepted and pretreated prior to discharge to sewerage facilities.
9. Waste oils, greases, or industrial contaminants shall be contained in holding tanks and periodically pumped out for eventual recycling or disposal at approved industrial waste sites. All holding tanks, fuel storage tanks, and other potential sources of water contamination shall be installed in accordance with State Health Department requirements. All

hazardous material storage tank installations require the issuance of permits by the RWQCB and the County Health Department.

Potential adverse water quality impacts arising from silt and sediment discharges will be most acute during construction periods. It is essential that the design standards discussed under Soils/Land Transformation be effectively implemented and established as project conditions. Briefly summarized, the required measures are:

1. All grading and earthwork activities must be conducted in accordance with an approved construction grading plan and grading permit issued by the Mono County Department of Public Works.
2. A drainage and erosion control plan must be implemented for all major projects as approved by the Public Works Department and the Lahontan RWQCB.
3. No significant soil disturbances are permitted within the stream conservation zones of Mammoth Creek, Hot Creek or Convict Creek.
4. Grading and earthwork shall be expedited to attempt completion in a single summer season. Soil stabilization and initial reseeding shall be completed prior to the onset of winter weather conditions. Bonds or security shall be posted to guarantee completion of necessary site stabilization work as required by county grading ordinance provisions.

Long-term water quality impacts associated with soil disturbances and the installation of impervious surfaces such as paved roadways, parking areas, and building structures can be reduced by the following:

1. All disturbed areas must be revegetated with a variety of climate-adapted plants and ground cover. Consideration should be given to grasses and annuals for immediate cover, perennials for a more permanent cover, and shrubs to provide root binder for natural soil stabilization.
2. All development projects shall be required to install appropriately designed drainage retention facilities (percolation basins or infiltration trenches) in accordance with RWQCB guidelines. The function of such facilities is two-fold: peak storm drainage flows are attenuated and pollutants from impervious surfaces are filtered through natural soil materials.

The potential discharge of nutrients to adjacent surface streams as a result of the use of fertilizers can be reduced by appropriate precautions:

1. Fertilizers should be applied in such a manner that no surface runoff is created. Fertilizer applications should be avoided during peak precipitation periods when the danger of simply washing nutrients into surface streams is the greatest.
2. Mechanical methods of weed control shall be practiced to the greatest extent possible. The use of pesticides and weed control agents should be restricted to the dry summer months. Project proponents shall consult with the Soil Conservation Service, local agricultural agencies, and the Lahontan RWQCB for appropriate weed control agents and pesticide formulas which will not have potential long-term water quality impacts.
3. Large-scale landscaping projects (such as golf courses) should incorporate decorative ponds and lakes as drainage retention basins or should specifically provide similar facilities for runoff control.

Mineral/Energy Resources. All proposed geothermal development should be reviewed by the Airport Land Use Commission for compliance with the requirements of the Mammoth/June Lake Airport Land Use Plan. The following considerations should be included in use permit conditions for geothermal development.

1. Vapor emissions and/or steam plumes shall not interfere with aircraft operations in the vicinity of the airport.
2. All building structures, towers, transmission lines, and other above-ground structures shall comply with the height restrictions of the Airport Land Use Policy Plan.
3. Lighting systems for power plant facilities shall be designed to be low-level and shielded to avoid interferences with night airport operations.

Due to its resource value, the existing Forest Service sand and gravel pit will probably continue in operation for the near future. Conflicts with proposed airport development should be anticipated. The following measures should be implemented in a phased program.



1. Material extraction and processing at the site should only be permitted for public improvement projects. Operations should be closely monitored to avoid unnecessary nuisance impacts.
2. The Mono County Department of Public Works should conduct studies to identify potential alternative sand and gravel pit sites. Potential long-term resources at the existing and alternative site should be evaluated.
3. A surface restoration and revegetation plan for the site should be developed for phased implementation. If feasible, vegetative screening should be provided for the site in the short term. The site should be either restored, contour graded, and revegetated upon its abandonment or converted to other compatible land uses.

Air Quality. The potential levels of pollutant emissions associated with airport operations, residential and industrial land uses, and automobile traffic do not represent significant air quality hazards, although they will contribute to a decline in the air quality of the Long Valley area during adverse meteorological conditions. However, the following measures should be implemented to reduce the potential air quality impacts of the Airport Land Use Plan.

1. Project grading and construction permits shall contain the following provisions:
  - a. Sites shall be adequately watered to control nuisance dust.
  - b. All construction equipment shall be equipped with required exhaust systems and mufflers.
  - c. Burning of waste materials and stripped vegetation shall not be permitted.
2. All project developments within the planning area shall obtain a construction permit from the Great Basin Unified APCD and comply with the following requirements:
  - a. All residential structures shall be designed to comply with state energy conservation standards to reduce the need for fossil fuels and wood burning for heating.
  - b. All industrial and manufacturing uses shall be required to provide filters, scrubbers, or other emission control devices as necessary to reduce the discharge of pollutants to the atmosphere. No emissions of toxic fumes or gasses are permitted.
  - c. The use of alternative energy sources (geothermal, solar) shall be considered in all major development proposals.

- d. Landscaping and ground cover vegetation shall be required to stabilize all exposed or disturbed soil surfaces.
3. The potential air quality impacts associated with automobile traffic shall be considered in all development proposals.
  - a. Provisions should be made in development plans to encourage the use of transit systems, car pools, or other traffic reducing measures.
  - b. The use of sand and cinders for de-icing during winter periods should be avoided to reduce dust generation along roadways.
  - c. Local roadway systems should be designed to minimize traffic congestion and delay.
4. Gravel pit and material processing operations should incorporate the following mitigation measures.
  - a. Sites shall be adequately watered to control dust.
  - b. All plant and processing facilities shall be equipped with scrubbers, precipitators, or other air pollution control devices to reduce pollutant emissions.

Visual/Aesthetic Resources. In general, development within the scenic highway corridor of Highway 395 should be discouraged and visual considerations for all development within the airport planning area should be of primary importance. A phased program for surface restoration and revegetation of the two existing sand and gravel pits should be implemented. Interim vegetative screening, or other mitigation measures, should be provided to reduce the visual impacts of the sites.

Scenic Highway Corridor. All development within scenic highway corridor shall comply with the following requirements of the County Scenic Highways Element.

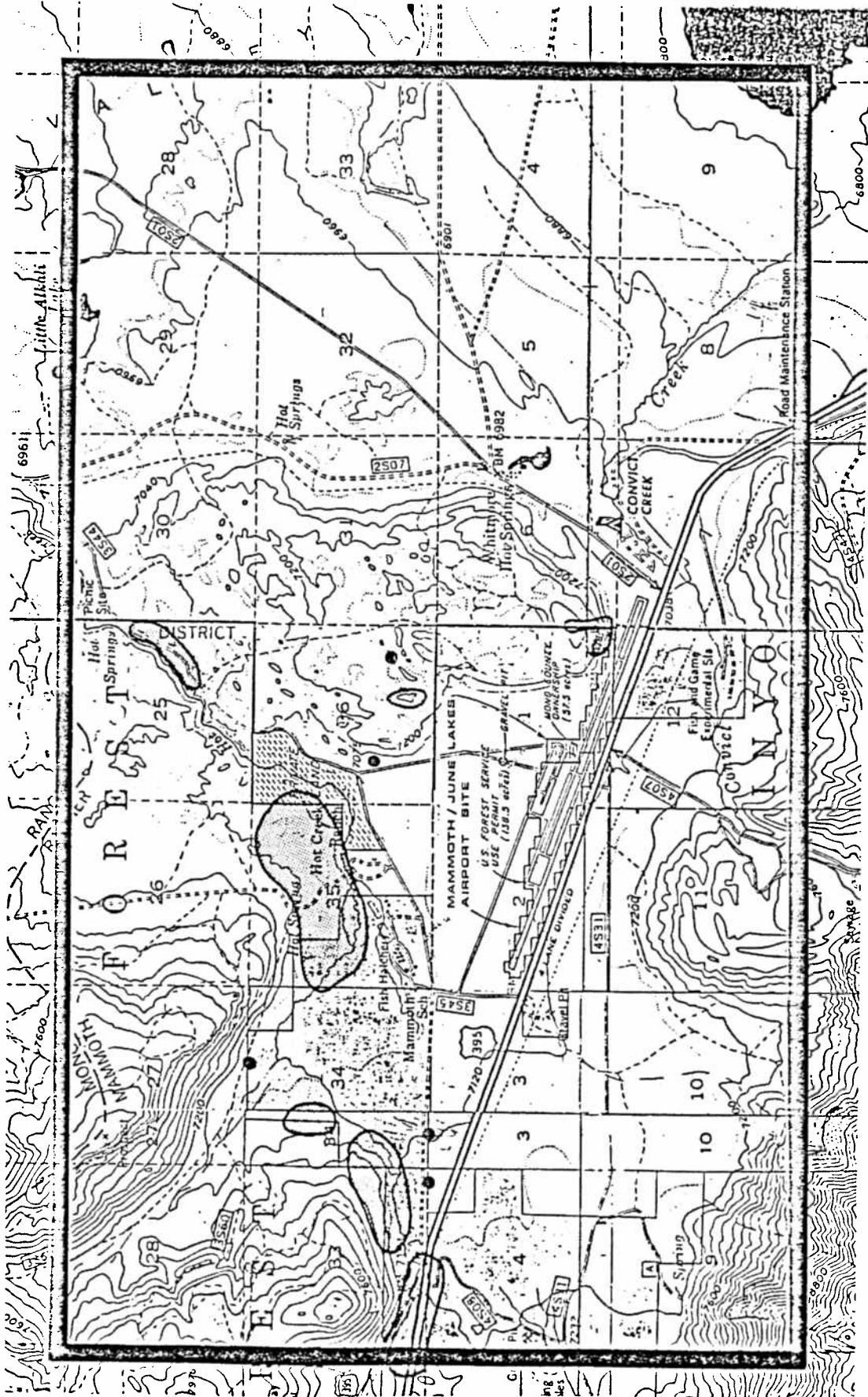
1. Visually offensive land uses shall be adequately screened.
2. Earthwork, grading and vegetative removals shall be minimized.
3. All site disturbances shall be revegetated with plants and landscaping which are in harmony with the surrounding environment. A landscaping plan shall be submitted and approved for all projects.
4. Existing access roads to scenic highways shall be utilized whenever possible. Construction of new access roads,

frontage roads, or driveways adjacent to scenic highways shall be avoided, except where essential for safety and welfare.

5. The number, type, size, height, and design of on-site signs shall be strictly regulated. Use permits are required for all signs. No off-site signs are permitted.
6. All new utility installations must be installed underground.

Airport Development District. It is anticipated that most of the development within the ADD zone will be situated adjacent to the existing airport road alignment. Although this location is generally outside the of 1,000 foot county scenic highway corridor, the visual impacts of limited light industrial/manufacturing land uses are significant. The following design standards shall be enforced for development in the airport area.

1. Large exposed cut and fill slopes shall be avoided. All site grading shall be contoured to blend with the existing topography. Bonds or other security shall be provided to guarantee site restoration in accordance with grading permit requirements.
2. Extensive site landscaping shall be required to provide visual screening. Where appropriate, landscaping berms and contour grading shall be utilized to minimize visual impacts. Minimum landscaping area shall be 20% of gross site area. The use of lawn grass and other high water demand landscaping shall be minimized.
3. The height of all building structures shall be 35 feet. Other height provisions of the Mono County Zoning and Development Code shall apply except as specifically modified by this plan for runway surfaces, approach surfaces or clear zones. Minimum separation between building structures shall be 20 feet.
4. Design, color, and materials for all buildings, fences, and appurtenant structures shall be compatible with the natural setting. Earth tone colors and natural materials should be emphasized. All building elevations and colors shall be subject to ALUC approval.
5. All developed sites shall present a neat and clean appearance to adjoining roadways and land uses. All storage areas, utility tanks, and other potentially unsightly facilities shall be screened with natural material fences or vegetation.
6. All utilities within the ADD zone shall be constructed underground. Exterior lighting shall be shielded and indirect and shall be minimized to that necessary for security and safety.



**ARCHAEOLOGICAL  
STUDY AREAS**

● Isolated Site or Lithic Scatter



○ Potentially Significant Occupation Area

**FIGURE 22**  
08  
(Revised)

7. All development within the ADD zone shall be required to obtain trash removal service and provide an adequate number of fenced and screened receptacles.

Mass Earthwork and Grading. The most critical mitigation for visual impacts associated with large-scale grading activities is to complete the work in as short a time period as possible and initiate revegetation immediately. The following considerations shall be included in grading permit requirements for all large scale earthwork projects.

1. Removal of vegetation shall be restricted to those areas that require grading or are to be landscaped. Tree removals shall be minimized. All large-scale projects shall be phased in accordance with County Public Works Department requirements.
2. All grading and earthwork activities must be completed by November 1, and disturbed areas shall be stabilized or reseeded prior to November 15.
3. Irrigation systems must be provided to insure the establishment of revegetation.

Archaeological and Cultural Resources. There appears to be little potential for significant sites within the most intensive land use designations of the Airport Land Use Plan. No archaeological resources are known to exist within the Airport Development District, although several sites have been identified within the proposed golf course project area, and preliminary studies have been conducted. Efforts to preserve archaeological resources suggest the following:

1. Construction should be planned to avoid archaeological sites.
2. Permanent conservation easements may be provided to preserve archaeological resources.
3. Archaeological sites may be capped or covered with a layer of soils before building on the sites.
4. Parks, greenspace, or other open space can be incorporated into projects to preserve archaeological sites.

The following shall be required for all development projects within the airport planning area:

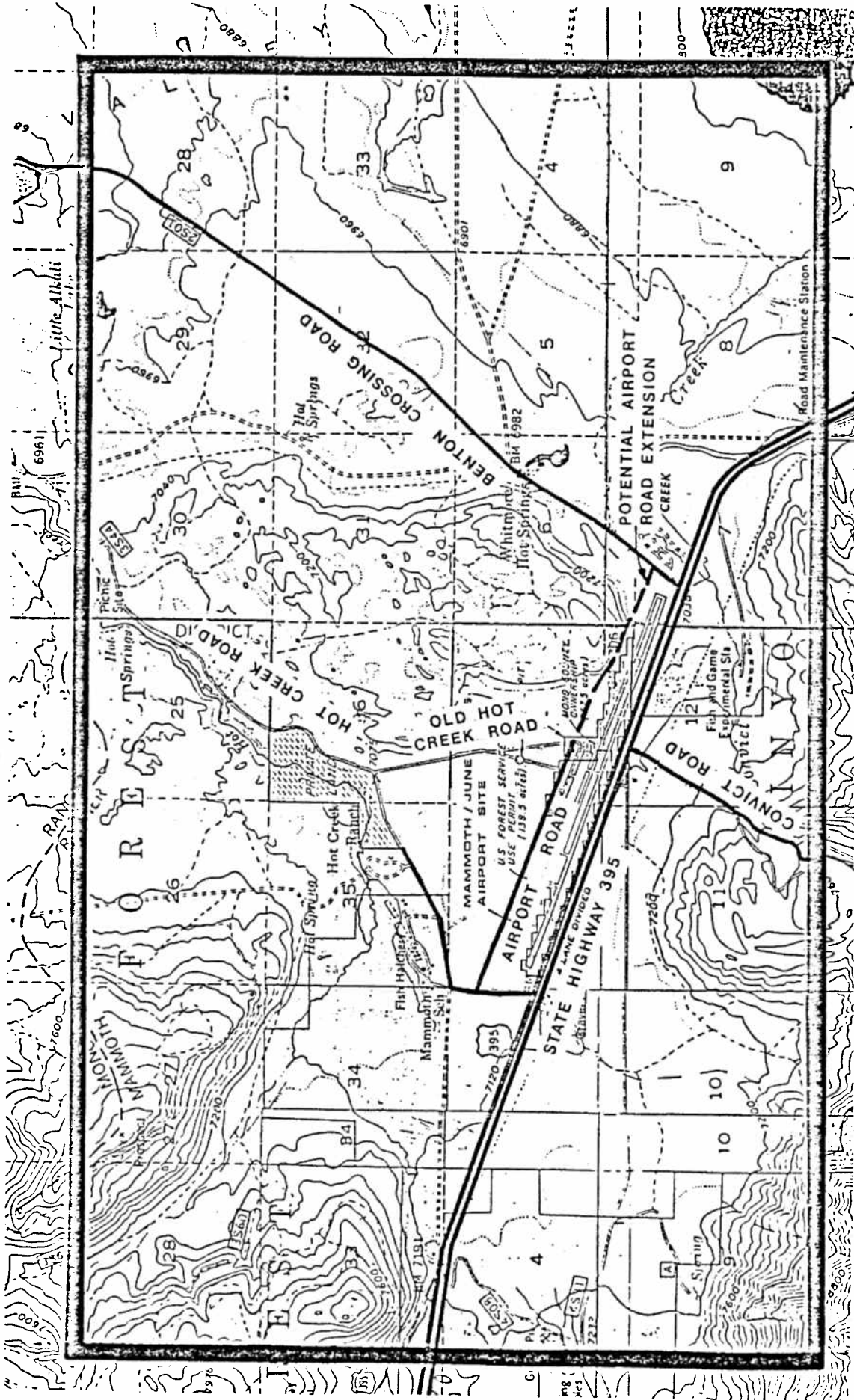
1. Site-specific archaeological surveys shall be conducted for all development proposals within the planning area. If warranted, detailed archaeological investigations shall be conducted to

determine the significance of identified resources.

2. All grading and construction permits shall include requirements for archaeological preservation. If archaeological evidence is discovered during construction, work shall be suspended and the Mono County Planning Department and the Inyo National Forest shall be notified.
3. Wherever feasible, archaeological sites shall be preserved in an undisturbed state as recommended in the alternative CEQA mitigation measures.

Traffic and Transportation. The following considerations are necessary to reduce the potential impacts of airport development on the local roadway system.

1. No additional roadway intersections or driveway access on State Highway 395 are permitted unless considered necessary for safety reasons.
2. The existing intersection at Airport Road and State Highway 395 should eventually be expanded and improved as traffic volumes warrant. Consideration should be given to providing turning lanes on Airport Road and acceleration/deceleration lanes on Highway 395.
3. Construction of an alternate access road from the south via Benton Crossing Road should be reconsidered. Archaeological studies should be conducted to determine if the existing site is significant and if roadway construction would necessarily impact the site.
4. Intersection improvements at Benton Crossing Road and Convict Lake Road should be evaluated and implemented if traffic volumes and/or traffic safety considerations warrant.
5. Mass transit facilities should be incorporated into the airport development plan to reduce dependence on automobile access. A regularly scheduled shuttle bus system to Mammoth Lakes should be developed, either by private interests or public agencies. Improved taxi service and alternative transit systems should also be promoted for the airport area.



**ROADWAY  
CIRCULATION SYSTEM**

### CROSS WIND RUNWAY

An update of the Airport Master Plan is currently under way, which will study the cross wind runway proposal in detail. The basic purpose of the cross wind runway is to improve aircraft safety during high wind periods, but preliminary environmental and ground safety concerns indicate that the new runway must be carefully considered and evaluated.

The only general area considered feasible for the cross wind runway is shown on Figure 24, the location of an old abandoned dirt runway. The landing approach from the north is directly over the Hot Creek Gorge and the existing Hot Creek Ranch. Aside from safety considerations, the environmental impacts associated with noise and disturbance of an existing sage grouse lek are significant. The assumed southerly takeoff/departure pattern would place Highway 395 directly under the most critical clear zone of the cross wind runway. It would also alter the general airport traffic pattern towards the community of Mammoth Lakes, the major population center of Mono County. Installation of the cross wind runway would also necessitate considerable construction disturbances and major earthwork activities in close proximity to the Hot Creek Fish Hatchery which is an environmentally sensitive location. Aircraft noise and activity impacts could adversely affect the operation of the Hatchery.

If after careful consideration the cross wind runway is found to be essential for aircraft safety, then the ALUC will need to amend its policies and land use plan.

### EMERGENCY PLANNING

The Mammoth/June Lake Airport is the primary aircraft access point for Mono County. Disruption of airport activities during a major seismic or volcanic event would hamper emergency assistance efforts, medical evacuation, and could significantly lengthen emergency response times.

The Mammoth/June Lake Airport Master Plan Update will review on going efforts for emergency planning. Such efforts will identify maximum size and type of aircraft for emergency delivery/evacuation, alternative airport sites for air needs, and possible improvements for upgrading of emergency response use.

During an major event the Director of Emergency Services, State of California, or the Federal Government may as deems necessary subject all airports within the County to the following, but not limited to, for the protection of life and or property.



Commandeering the use of an airport.  
 Commandeering the use of or grounding of private aircraft.  
 Commandeering all AVGAS and fuel at the location.  
 Restricting the use of the airport.  
 Restricting the use of airspace and or its closure.

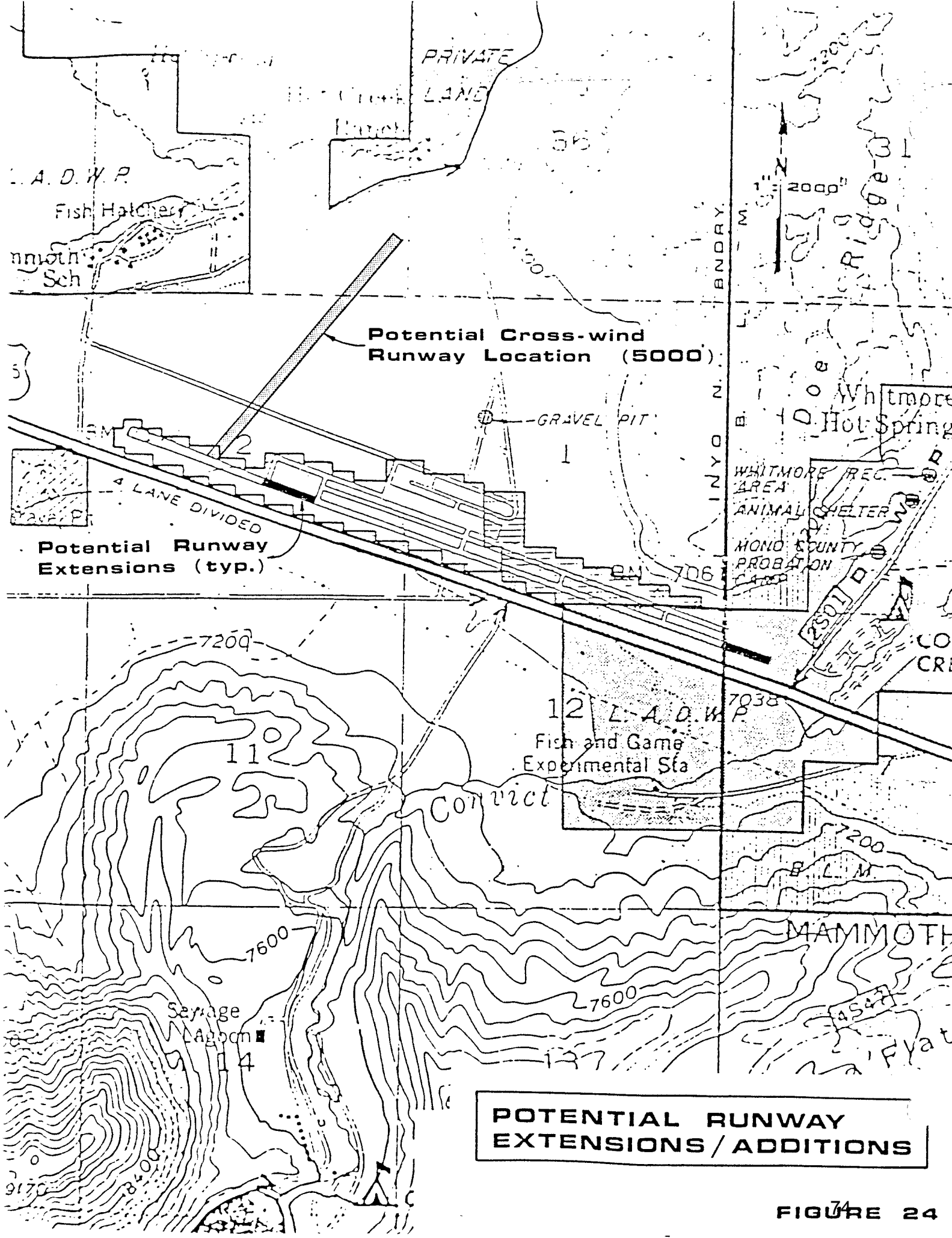
In the event that people are asked to leave an area, sufficient fuel would be available for use to get to another airport that has a sufficient supply.

APPROVAL REQUIREMENTS:

The proposed Airport Land Use Plan requires the following approvals from Mono County and governmental agencies:

<u>Agency</u>	<u>Approval</u>
Mono County Airport Land Use Commission	Airport Land Use Plan Airport Land Use Policy Draft EIR/Final EIR
Mono County Planning Commission	Zoning and Development Code Revisions General Plan Amendment
Mono County Board of Supervisors	Draft EIR/Final EIR Zoning and Development Code Revisions General Plan Amendment
U.S.D.A. Forest Service Inyo National Forest	Environmental Assessment Forest Plan Amendment Special Use Permits Airport Land Exchange
State of California, Office of Planning and Research	Environmental Review Procedures General Plan Amendment

Provisions of California state law require that Mono County must make its general plan consistent with the Airport Land Use Plan. This is generally accomplished by incorporating the ALUP into the county general plan and amending applicable implementation regulations including zoning ordinances and building codes as necessary. If the county does not agree with certain elements of the ALUP, it can adopt different provisions only if specific findings are made that the changes are consistent with the purposes of state law regarding airport land use. The change in the ALUP and the necessary findings must be adopted by a four-fifths vote.



**POTENTIAL RUNWAY  
EXTENSIONS / ADDITIONS**

FIGURE 24

The Mono County Planning Commission is an advisory agency to the Board of Supervisors for zoning, land use, and development matters. Although the Planning Commission does not have the authority to approve or disapprove the ALUP, any corresponding amendments to the general plan or zoning ordinances must be reviewed by the commission.

The Airport Land Use Commission has no jurisdiction over federal lands. The U.S. Forest Service is the administering agency for Inyo National Forest lands within the planning area. Approval of the Airport Land Use Plan by the U.S. Forest Service will amend those portions of the Mammoth-Mono Unit Plan affected by the plan. It is anticipated that following appropriate review and comment, the Airport Land Use Plan will eventually be incorporated into the Forest Plan for the Inyo National Forest.

#### INTER-GOVERNMENTAL PLANNING

Two federal agencies are directly affected by this planning, the Bureau of Land Management and the U.S. Forest Service. Each have planning units that overlap within the Mammoth/Junc Lake Airport Planning Boundary. Since both agencies have been participants in preparation of the plan and environmental document, and input reflects current policies and practices of resource and land management. These two agencies also intend to initiate necessary amendments in order to make the plan a viable and mutually approved document. This falls within the intent and objectives of the plan.

Certain plan conflicts will take time to resolve, since they are subject to the expiration of existing leases. In particular, leases for exploration and development of geothermal resources existing on either BLM or Forest Service land that could be in conflict with the objectives and policies of this land use plan. When leases are subject to renewal, or new leases, the NEPA process will review such proposals in light of this plan.

APPENDIX A

Airport Development District  
(Chapter 19.47)

Mono County Zoning and Development Code  
Adopted January 6, 1987

## CHAPTER 19.47

### A-D DISTRICT - AIRPORT DEVELOPMENT

#### Section:

- 19.47.010 Intent.
- 19.47.020 Uses permitted.
- 19.47.030 Uses permitted subject to director review.
- 19.47.040 Uses permitted subject to use permit.
- 19.47.050 Development standards.
- 19.47.060 Special provisions.
- 19.47.070 Yards.
- 19.47.080 Lot area.
- 19.47.090 Building height.
- 19.47.100 Density.
- 19.47.110 Lot coverage.
- 19.47.120 Fences, screening and landscaping.

#### 19.47.010 Intent.

The intent of the A-D, Airport Development, District is to encourage, and protect the appropriate development of retail, commercial, industrial and other related uses on airport lands, both public and privately owned, and on suitable land adjacent or in proximity to an airport.

#### 19.47.020 Uses Permitted.

The following uses shall be permitted in the A-D district, plus such other uses as the Commission finds to be similar and not more obnoxious or detrimental to the public health, safety and welfare.

- A. Airports and airstrips, subject to all applicable regulations of the Federal Aviation Administration;
- B. Facilities incidental to the safe operation and routine maintenance of airports and airstrips (e.g., light, radio, and radar facilities);
- C. Aircraft:
  - 1. Fueling and defueling facilities,
  - 2. Parking,
  - 3. Washing and cleaning (non-commercial),
- D. Private (non-commercial) aircraft storage and hangers;
- E. Agricultural and grazing of vacant land;
- F. Pilot instruction and supplies;

G. Fixed base operator;

**19.47.030 Uses permitted subject to director review.**

The following uses shall be permitted in accordance with the requirements of Chapter 19.40 and subject to the review and approval of the Director of Public Works, and concurrence of the Planning Director.

- A. Uses which, in the opinion of the noted Director's, are accessory or incidental to operation of an airport and **which are found not to be** materially detrimental to the public welfare or injurious to contiguous property or improvements, have no substantial impacts on public agencies, nor are not expected to be controversial, or environmentally sensitive. Such uses may be subject to conditions deemed necessary for the protection of the public health, safety, and welfare.
- B. All the permitted uses in .020, if determined necessary by the Director of Public Works and the Planning Director.

The Director's may designate such conditions, in connection with the granting of the Directors Review, as is deems necessary to secure compliance with the purposes and intents airport development plan. Such conditions may including, but not are not limited to: street and drainage improvements, noise control, visual impacts, landscaping, building height, and signing.

Whenever the performance of any condition is required by the granting of a Directors Review, and accomplishment is to occur at or after a specified time, the Director's may require the developer involved to execute a covenant agreement, in a form approved by the County Counsel, which shall contain the requirements imposed, and shall be recorded in the office of the County Recorder. The Director shall issue and record releases from such covenants when they are no longer applicable to the use.

A notice setting forth any imposed conditions shall be mailed to the developer and engineer and shall state the procedure for filing possible appeals.

**19.47.040 Uses permitted subject to use permit.**

- A. Terminal facilities;
- B. All commercial activities related to aviation (e.g., airline and air freight offices and facilities, aircraft service and repair shops, flight training schools);
- C. Aircraft and aviation accessory sales;

- D. Professional offices;
- E. Retail sales and services conducted within an airport terminal building or hotel, resort hotel/motel: (Plus other such uses as the Commission determines to be similar and not more obnoxious or detrimental.)
  - 1. Bakery,
  - 2. Ballroom,
  - 3. Banquet rooms,
  - 4. Barber shop,
  - 5. Beauty parlor,
  - 6. Book, magazine store,
  - 7. Cleaning and laundry agency,
  - 8. Clothing stores,
  - 9. Cocktail lounge,
  - 10. Confectionery,
  - 11. Delicatessen,
  - 12. Florist,
  - 13. General merchandise,
  - 14. Gift store,
  - 15. Photographic supplies,
- F. Food service establishments;
- G. Hotels, motels, and resort hotels/motels;
- H. Public buildings or uses;
- I. Transportation services, automobile fueling;
- J. Limited light industrial uses;
- K. Warehouses, enclosed storage and distribution facilities;

**19.47.050 Development Standards.**

Unless otherwise specified in an approved Use Permit or as specified in the standards of a detailed development plan for a particular airport, the development standards contained in Sections 19.47.060 - 19.47.120 and Chapter 19.03 shall apply to all land and structures in the AD district.

**19.47.060 Special Provisions.**

- 1. No use shall be permitted which would interfere with the landing or taking off of aircraft at any airport or otherwise constitute an airport hazard, whether or not such would otherwise be permitted under the provisions of this Chapter.
- 2. No operation shall emit electrical, electronic, or radio emissions which will interfere, obstruct or adversely affect the operation of air navigation aids

and radio communications or which in any manner violate the applicable provisions of the Federal Air Regulations of the Federal Aviation Administration.

3. Utilities. Facilities for the distribution of gas, water, telephone, cable television and electricity, etc., shall be undergrounded.

#### **19.47.070 Yards**

The following minimum yard requirements are applicable unless building lines have been established or optional design standards are used.

- A. Front. Each lot in the AD district shall have a front yard of not less than 20 feet, of which 80 percent shall be landscaped.
- B. Side. None, except as required by other regulations, and except that buildings, structures, or edifices shall not be less than 50 feet from the centerline of any public roadway.
- C. Rear: 10 Feet.

#### **19.47.080 Lot Area.**

The minimum lot area shall be ten thousand (10,000) square feet.

#### **19.47.090 Building Height.**

The maximum building height shall be 35 feet above grade. The height may be reduced whenever necessary to prevent interference with the landing or taking off of aircraft or to comply with FAA standards.

#### **19.47.100 Density.**

The maximum population density shall be as follows:

- A. No residential development shall be permitted.
- B. Hotel/motels 40 units per acre.  
(Limited on site housing for employees only.)

#### **19.47.110 Lot Coverage.**

The maximum lot coverage (see definition 19.01.730) shall be seventy (70%) percent.

#### **19.47.120 Fences, screening and landscaping.**

Fences and/or screening shall be required when abutting any residential district. Any uses subject to use permit shall be



required to either landscape (per approved landscape plan) or leave in natural open space (i.e., ungraded) all areas not covered by impervious surfaces. Any combination of the above is acceptable.

APPENDIX B

Mono County Zoning and Development Code

Chapters:

- 19.16 I-P District - Industrial Park
- 19.17 I - District - Industrial
- 19.18 O-A District - Open Area
- 19.19 P-A District - Public Agency
- 19.20 PUD District - Planned Unit Development

## CHAPTER 19.16

### I-P DISTRICT - INDUSTRIAL PARK

#### Sections:

- 19.16.010 Intent.
- 19.16.020 Uses permitted (reserved).
- 19.16.030 Permitted subject to Director's review and approval.
- 19.16.040 Uses permitted subject to use permit.
- 19.16.050 Lot area/District area.
- 19.16.060 Lot dimensions.
- 19.16.070 Density.
- 19.16.080 Building height.
- 19.16.090 Yards.
- 19.16.100 Space between buildings.
- 19.16.110 Lot coverage.
- 19.16.120 Fences, screening and landscaping.
- 19.16.130 Locational standards.

#### 19.16.010 Intent.

The IP, industrial park, district is intended to provide for a combination of light and moderate industrial uses which do not in their maintenance, assembly, manufacture or plan of operation create smoke, gas, odor, dust, sound, vibration, soot or lighting to a degree which might be obnoxious or offensive to persons conducting business in this or any other adjacent district. If applicable, Nuisance and Hazard Standards outlined in Section 19.03.240 shall apply.

See Chapter 19.03, General Provisions, to determine uses and requirements that apply to all districts.

#### 19.16.020 Uses permitted.

The following uses may be permitted in the IP district, plus such uses as the Commission finds to be similar and not more obnoxious or detrimental to the public health, safety and welfare:

- A. Any proposed change of use when conducted within an existing, conforming, legally developed structure, for those uses listed in Sections 19.16.030 and .040.

#### 19.16.030 Uses permitted subject to Director's review and approval.

The following uses may be permitted in the IP district, subject to review and approval by the Director. Any other uses as the Director finds to be similar and not more obnoxious or detrimental to the public health, safety and welfare may also be permitted.

- A. All permitted uses if deemed necessary by the Director.
- B. Light industrial.
  - 1. Agricultural uses, nurseries, greenhouses,
  - 2. Offices, business and professional,
  - 3. Laboratories,
  - 4. Commercial laundries and dry cleaning establishments,
  - 5. Wholesale sales and warehousing,
  - 6. Vehicle repair garages and shops,
  - 7. Manufacture of:
    - a. Clothing, household effects, art, jewelery, silverware, ceramics, leathergoods (assembly only) toys, and electronics.
  - 8. Upholstery,
  - 9. Shops for the assembly or completion of finished paper, wood, or metal products.
  - 10. Editorial and designing, printing, lithography, bookbinding.
  - 11. Painting, plumbing, electrical, cabinet and glass shops.
  - 12. Public buildings and uses (see definitions),
  - 13. Light equipment rental and/or storage yards,
  - 14. Storage yard for construction materials and equipment,
  - 15. Lumber yards and building materials, wholesale and retail, (but not lumber mills),
  - 16. Temporary buildings and appurtenant structures to allowed use.
  - 17. Storage of recreational vehicles, boats and miscellaneous recreational related equipment,
  - 18. Recycling centers,
  - 19. Signs as per 19.35.

**19.16.040 Uses permitted subject to use permit.**

The following uses shall be permitted in the IP district, subject to use permit plus other uses as the Commission finds to be similar and not more obnoxious or detrimental to the public health, safety and welfare:

- A. Industrial condominiums,
- B. Firewood processing and storage.
- C. Tank farms,
- D. Freight terminals.

**19.16.050 Lot area/District area.**

- A. Lot area: The minimum lot area of an individual lot within an IP district shall be ten thousand (10,000) square feet.
- B. District area: The minimum district area shall be ten acres. If abutting zoning districts have commercial or industrial zoning designations and existing uses in these abutting properties are compatible, a minimum zoning district area of five (5) acres may be considered.

**19.16.060 Lot dimensions.**

The minimum lot dimensions shall be as follows:

- A. Width, seventy-five (75) feet.
- B. Depth, one hundred (100) feet.

**19.16.070 Density.**

There are no population density requirements in the IP district. Residential uses are not permitted.

**19.16.080 Building height.**

No building or structure in the IP district shall have a height greater than forty (40) feet.

**19.16.090 Yards.**

The following minimum yard requirements are applicable unless building lines have been established or optional design standards are used.

- A. For those uses listed in Section 19.16.030:
  - 1. Front. Each lot shall have a front yard of not

less than twenty (20) feet.

2. Side. No requirements, although this may be modified by the Director, depending on adjacent uses (existing or proposed).
  3. Side, corner lot. Ten (10) feet along street frontage.
  4. Rear. Each lot shall have a rear yard of five (5) feet; although this may be modified by the Director.
- B. For those uses listed in Section 19.16.040:
1. Front. Each lot shall have a front yard of not less than twenty (20) feet.
  2. Side. Each lot shall have a side yard of not less than ten (10) feet unless modified by the Commission.
  3. Side, corner lot. Ten (10) feet along street frontage.
  4. Rear. Each lot shall provide a rear yard not less than ten (10) feet unless modified by the Commission.
- C. When an IP district abuts any residential district, no yard shall be less than twenty (20) feet along the abutting property line.

**19.16.100 Space between buildings.**

The minimum space between exterior walls of buildings on the same lot shall be ten feet.

**19.16.110 Lot coverage.**

The maximum lot coverage shall be eighty (80) percent. See definition 19.01.730, lot coverage.

**19.16.120 Fences, screening and landscaping.**

Screening, fences, and/or landscaping may be required when the character of the proposed use, the size and location of the building site or the nature of adjacent uses are such as to require screening and will be determined as part of the use permit review, or Director's review process.

**19.16.130 Locational standards.**

Before siting a proposed use in the IP district, proof that it conforms with Section 19.03.240, Nuisances & Hazards, shall be submitted.

CHAPTER 19.17

I - DISTRICT - INDUSTRIAL

**Sections:**

- 19.17.010 Intent.
- 19.17.020 Uses permitted.
- 19.17.030 Uses permitted subject to use permit.
- 19.17.040 Locational standards.
- 19.17.050 Lot area/District area.
- 19.17.060 Density.
- 19.17.070 Building height.
- 19.17.080 Lot coverage.
- 19.17.090 Fences, screening and landscaping.

**19.17.010 Intent.**

The I, Industrial, district is intended to create, preserve and enhance areas for heavy industrial use which cause moderate to high degrees of environmental nuisances or hazards. The operations permitted here may to some degree impact surrounding districts by virtue of nuisances as defined in 19.03.240. Less restriction is placed upon outdoor use and storage. The functional and visual character of the district is such that it should be located in areas that are relatively remote from residential and commercial development.

See Chapter 19.03, General Provisions, to determine uses and requirements that apply to all districts.

**19.17.020 Uses permitted.**

The following uses shall be permitted in the I district, plus such other uses as the Commission finds to be similar and not more obnoxious or detrimental to the public health, safety and welfare:

A. Those uses listed as permitted under IP plus:

- 1. Caretaker unit, (1 per district);
- 2. Heavy vehicle storage and maintenance;

**19.17.030 Uses permitted subject to use permit.**

The following uses may be permitted subject to use permit:

A. Those listed under the IP district plus:

- 1. General manufacturing such as hatch plant, asphalt and textile and lumber mills.
- 2. Alternative energy generation plants in addition to



those listed in 19.03.040 such as:  
photovoltaic, mirrors, and biomass conversion;

3. Refining of petroleum and its products;
4. Smelting of metals such as: copper, iron, tin and zinc;
5. Solid waste;
6. Distillation of alcohol;
7. Junkyards;
8. Auto wrecking and salvage yards;
9. Commercial excavation and mining of stone and earth materials;
10. Food processing, canning, and similar uses.

**19.17.040 Locational standards.**

Before siting a proposed use in the I district, proof shall be provided that it conforms with Section 19.03.240 Nuisances and Hazards.

**19.17.050 Lot area/District area.**

- A. Lot area: The minimum lot area shall be ten thousand (10,000) square feet.
- B. District area: The minimum district area shall encompass a minimum area of thirty (30) acres except upon finding the dependence of a location on a resource (e.g., gravel pit).

**19.17.060 Density.**

There are no population density requirements for the I district. Residential uses are not permitted, with the exception of caretaker units.

**19.17.070 Building height.**

No building or structure in the I district shall have a height greater than forty (40) feet, unless approved by the Director.

**19.17.080 Lot coverage.**

The maximum lot coverage shall be eighty (80) percent. See definition 19.01.730, lot coverage.

**19.17.090 Fences, screening and landscaping.**

Screening and fences will be required when the character of the proposed use and the size and location of the building site are such as to require screening. Landscaping is encouraged in the front yard setback. Fence height may exceed six (6) feet, but shall not interfere with necessary sighting requirements for vehicles.

CHAPTER 19.18

O-A DISTRICT - OPEN AREA

**Sections:**

- 19.18.010 Intent.
- 19.18.020 Uses permitted.
- 19.18.030 Uses permitted subject to use permit.
- 19.18.040 Lot area/District area.
- 19.18.050 Lot dimensions.
- 19.18.060 Density.
- 19.17.070 Lot coverage.
- 19.17.080 Fences, screening and landscaping.

**19.18.010 Intent.**

The OA, open area, district is intended to protect and to hold for future generations open space which is in private ownership. Typical uses include stream environment zones, greenbelts, floodplains and other hazard areas.

See Chapter 19.03, General Provisions, to determine uses and requirements that apply to all districts.

**19.18.020 Uses permitted.**

The following uses shall be permitted in the OA district, plus such other uses as the Commission finds to be similar and not more obnoxious or detrimental to the public health, safety and welfare:

- A. Crop and tree farming; (including Christmas tree farms);
- B. Bikeway, pedestrian ways, equestrian trails, crosscountry ski touring, ski back trails;
- C. Wildlife preserves.

**19.18.030 Uses permitted subject to use permit.**

The following uses may be permitted subject to use permit:

- A. Recreation areas requiring significant modification of natural landscape, (e.g., golf courses, tennis courts, commercial stables, alpine ski runs);
- B. Accessory buildings and uses including barns, stables and farm buildings;
- C. Water storage tanks.

**19.18.040 Lot area/District area.**

No minimum lot or district area.

**19.18.050 Lot dimensions.**

There are no requirements for this district.

**19.18.060 Density.**

There are no population density requirements for the OA district. Residential uses are not permitted.

**19.18.070 Lot coverage.**

Maximum coverage of lot by all structures shall be twenty (20) percent. See definition 19.01.730, lot coverage.

**19.18.080 Fences.**

There are no requirements for this district. Screening and/or landscaping may be required as part of the use permit process.

CHAPTER 19.19

P-A DISTRICT - PUBLIC AGENCY

**Sections:**

- 19.19.010 Intent.
- 19.19.020 Uses permitted.
- 19.19.030 Uses permitted subject to use permit.
- 19.19.040 Lot area/District area.
- 19.19.050 Lot dimension.
- 19.19.060 Density.
- 19.19.070 Lot coverage.

**19.19.010 Intent.**

The PA, public agency, district is intended to provide for the use of land within the County which is in public ownership (e.g., Federal, State, County, and in some cases the City of L.A.) in accordance with sound planning and environmental practices. Uses shall have resource and recreational orientations.

See Chapter 19.03, General Provisions, to determine uses and requirements that apply to all districts.

**19.19.020 Uses permitted.**

- A. Grazing of horses, cattle, sheep and goats;
- B. Small scale recreational uses (e.g., pack station);
- C. Structure accessory to the uses listed above;
- D. Other uses, as permitted by the public landowner. ✓

**19.19.030 Uses permitted subject to use permit.**

In some cases the County may not have permitting authority due to federal or state jurisdiction, it is, however, the intention of the County to review these proposals and to comment as necessary.

- A. Large scale recreational uses, including ski facilities, commercial concessions, "summer homes subdivision," etc.;
- B. Mining;
- C. Public utility buildings, structures and uses, including activity involved in the exploration, development, utilization and construction of hydroelectric and geothermal power plants;

✓ D. Other uses which (in the opinion of the Director) may result in a potentially adverse environmental impact.

**19.19.040 Lot area/District area.**

There is no minimum lot or district area in this district.

**19.19.050 Lot dimensions.**

There are no minimum or maximum dimensions required.

**19.19.060 Density.**

Proposed densities shall be reviewed on a case-by-case basis by the Planning Director.

**19.19.070 Lot coverage.**

There are no maximum impervious coverage restrictions; however, any proposed use shall retain adequate natural, undisturbed open areas to prevent off-site impacts from surface run-off.

PUD DISTRICT - PLANNED UNIT DEVELOPMENT

**Sections:**

- 19.20.010 Intent.
- 19.20.020 Scope.
- 19.20.030 Definitions.
- 19.20.040 Applicability.
- 19.20.050 Open space.
- 19.20.060 Site resource utilization.
- 19.20.070 Site and structure relationship.
- 19.20.080 Perimeter.
- 19.20.090 Bonus items.
- 19.20.100 Application procedures.

**19.20.010 Intent.**

It is the intent of this chapter to achieve development superior to that which can be achieved through the application of conventional development standards. Specifically, the purposes of this chapter are:

- The encouragement of design flexibility through the use of performance standards.
- Greater administrative flexibility in reviewing development plans.
- Minimum disruption and maximum utilization of natural site resources.
- The allowance of mixed land uses where desirable and compatible.
- The encouragement of excellence through density bonuses.
- The permitting of density transfer (i.e., clustering) within the site, or from abutting property to encourage efficient design and land planning.

**19.20.020 Scope.**

- A. The PUD, Planned Unit Development, district is intended to be a combination of the following development controls: zoning use permit, and subdivision.
- B. The total density of a Planned Unit Development project shall be determined by the General Plan for the particular property, except where increased densities are granted by the Commission through the bonus density or transfer of density provisions of this chapter.

- C. The adequacy of the development proposal in meeting the requirements of this chapter shall be determined by the Commission.
- D. Unless specifically changed within this section, all adopted County ordinances, standards and policies apply to a Planned Unit Development project, including those set forth in the Mono County General Plan. The Commission may alter adopted standards, except standards adopted by the Board where, in their opinion, the altered standards would more adequately serve the intent and purposes of this section.

**19.20.030 Definitions.**

For the purpose of this chapter, the following words and phrases shall have the meaning indicated:

- A. "Abandon" means to cease intending or attempting to perform for a period of six (6) months or more.
- B. "Development restrictions" include, but are not limited to any of the following restrictions on private property adjacent to the project.
  - 1. Open space easements.
  - 2. Density transfers and clustering as defined in 19.20.090.
  - 3. Conveyance of development rights to the County, or other public entity.
  - 4. Zoning restrictions on development.
- C. "Homes association" means a private organization composed of residents within the Planned Unit Development project which may own common property and shall be responsible for the maintenance and management of commonly owned property.
- D. "Micro" means a subsection of the Planned Unit Development.
- E. "Open space" means the total area of land or water within boundaries of a Planned Unit Development designed and intended for use and enjoyment as open space areas.
  - 1. Open space includes:
    - a. Areas of the site not covered by buildings, paved areas or accessory structures except recreational structures.
    - b. Land which is accessible and available to all occupants of dwelling units for which use the space is intended.



2. Open space does **not** include:
  - a. Proposed and existing street right-of-ways and private streets.
  - b. Open parking areas, driveways.
  - c. School sites.
  - d. Commercial, industrial or office areas, and the buildings, accessory buildings, parking and loading facilities thereof.
3. "Open space, Common", means open space within a Planned Unit Development owned, designed and set aside for use by all occupants of the Planned Unit Development or by occupants of a designated portion of the Planned Unit Development. Common open space is not dedicated to the public and is owned and maintained by a private organization made up of the open space users.
4. "Open space, Private" means that open space directly adjoining the living areas of dwelling units, which is intended for the private enjoyment of the residents of the dwelling unit. Private open space shall, in some manner, be defined such that its boundaries are evident (e.g., by tract map, site plan, as well as physically discernable once the project is built).
- F. **"Phase"** means any contiguous part or portion of a total Planned Unit Development project which is developed as a unit in the same time period and to which all regulations of the Planned Unit Development apply.
- G. **"Planned Unit Development"** means an area of land, controlled by the applicant, to be developed as a single, unified project which meets the standards, regulations, criteria and intent set forth in this section.
- H. **"Project"** means the total Planned Unit Development area, with boundaries as defined in the preliminary plan.
- I. **"Private Streets"** shall mean the streets and roads within the project, used for general travel, not dedicated to the public, and shall not be construed to mean driveways, alleys or parking areas.

**19.20.940 Applicability.**

- A. In making an application for Planned Unit Development, the applicant must show the following:
  1. The property in question shall be comprised of 20 gross acres or more, unless reduced by the area general plan. A smaller parcel may be developed as a Planned Unit

Development, provided the applicant can show that such proposed Planned Unit Development can meet the regulations and intent set forth in this chapter without injury to the public health, safety and welfare.

Use of the PUD district is encouraged for large parcels adjacent to designated scenic highways.

**19.20.050 Open Space.**

- A. The Planned Unit Development project shall have a minimum of 40 percent private and common open space, not including balcony area.
- B. Provisions for the maintenance and management of the common open space and common facilities shall be reviewed and approved by the Planning Commission. Such approval shall be based on the following criteria:
  - 1. The applicant shall establish a Home Owners Association prior to the selling of any lot or permitting the occupancy of any dwelling unit.
  - 2. The Homes Association by-laws, restrictions and articles of incorporation shall include the necessary regulations required by the Federal Housing Administration. Other standards may be approved by the Commission.

**19.20.060 Site resource utilization.**

- A. The Planned Unit Development shall be designed and developed in such a manner as to minimize the cutting of trees, disturbance of ground cover, cut-and-fill work, drainage alterations and hillside development.
- B. All new dirt work and exposed slopes shall be suitably stabilized in accordance with Chapter 13.08 of the Mono County Code. Scarred and erosion-prone areas shall be stabilized with appropriate planting.
- C. A preliminary drainage analysis and grading plan shall be prepared and shall accompany the Preliminary Development Plan.

**19.20.070 Site and structure relationship.**

- A. The spacing of building shall be governed by the requirements for adequate light and air, proper access, fire regulations and the need for visual and auditory privacy.
- B. Whenever possible, dwelling units shall be arranged to take advantage of views and vistas with consideration given to "micro"-climate control and pleasing relationships of

building mass.

- C. Building height, bulk and "micro" coverage are regulated only inasmuch as they meet the performance criteria set out above.
- D. No structure for human habitation shall be placed in an environmentally hazardous, fragile or unique area.

**19.20.080 Perimeter.**

- A. Properties adjacent to the Planned Unit Development shall be protected from adverse influences of traffic, land uses, building scale and density by the combined use of screening, setbacks and land use location.
- B. Perimeter planning and coordination are required to assure continuity in the community facilities and services. The applicant shall demonstrate that the development proposal can be adequately served by community facilities and services without undue public expenditure.
- C. Planned Unit Development projects which are within wildland fire hazard areas as defined in the Mono County Safety Element shall develop perimeter areas in accordance with standards set forth in that element (e.g., a 30 foot open area strip adjacent to USFS or BLM land).

**19.20.090 Bonus Items.**

- A. One hundred percent (100%) transfer of the density indicated on the General Plan is permitted within the project, provided all other performance criteria are met. This transfer of density may include a transfer of density from immediately adjacent or contiguous property for which development restrictions have been obtained in favor of this project.
  - 1. To be eligible for density transfer, adjacent private lands must meet the following criteria:
    - a. Private lands from which the density is being transferred must be free of hazards or other physical constraints that prohibit the construction of residential dwellings.
    - b. Private lands from which the density is being transferred must be shown on the General Plan as developable for residential dwellings.
- B. All open space within the project utilized for density transfer must be common open space.
- C. All Planned Unit Development projects developed in areas where the average slope is less than ten percent (10%) may

exceed the General Plan recommended density for dwelling units by fifteen percent (15%).

- D. A bonus of 25% in dwelling unit density will be awarded to projects proposing to construct at least 25% of the units within an affordable housing price range as defined in Government Code Section 65915 et seq.
- E. An additional bonus in dwelling unit density, up to ten percent (10%) above that indicated in the General Plan for the area, may be granted by the Planning Commission provided one of the following criteria is met:
  - 1. A publicly valuable item is provided, preserved or enhanced which could otherwise require the expenditure of public monies.
  - 2. A public or quasi-public item is provided above and beyond the normal expectations.
  - 3. An amenity, convenience or excellence is provided above and beyond normal expectations (e.g., state-of-art energy efficient units, new and innovative design techniques such as sod roofs).
- F. In all cases, the granting of density bonuses must further the purpose and intent of the Planned Unit Development provision of this chapter.

#### **19.20.100 Application procedures.**

##### **A. Preapplication conference:**

- 1. The applicant shall meet with the Land Development Technical Advisory Committee (LDTAC) prior to filing a Preliminary Plan. The applicant shall submit a sketch plan of his proposal which shall include the following items:
  - a. A U.S.G.S. or similar map which indicate the property boundary and all property within five hundred (500) feet of the exterior boundary.
  - b. An existing and proposed land-use map including all property boundary and all property within five hundred (500) feet of exterior boundaries showing the location of general land uses and housing types.
- 2. The LDTAC shall indicate the general acceptability of the proposal and shall inform the applicant of possible problems and needs for interagency coordination. Additionally, the Committee shall issue the applicant an information packet containing copies of ordinances, policies and schedules which will regulate the proposed

development.

3. Minutes of all meetings will be kept and made available to all persons involved.

**B. Submittal items:**

1. The applicant shall submit to the Department all information required on the official application check list with any additions as determined by the record minutes of the preapplication conference.

**C. Preliminary Development Plan:**

1. The applicant shall file a Preliminary Development Plan which shall include such information as will enable the Commission to judge whether the proposal meets the adopted criteria and fulfills the purposes set out in this chapter. Such an application shall also constitute a request for a district zone change to PUD.
2. Such information shall include, but not necessarily be limited to:
  - a. A written statement of identification, relationship to adopted plans, and assurances of public services and facilitate.
  - b. A map showing site characteristics and constraints.
  - c. A map indicating general street locations, proposed land uses, general locations of building with housing types noted, and community facilities.
  - d. A drainage and grading analysis.
  - e. Estimated tabulations summarizing various aspects of the project.
  - f. Any additional public amenities as specified in any applicable area general plan.
3. A filing fee established by the Board shall be charged when a Planned Unit Development application is made. A Preliminary Development Plan application shall be filed when all information requested is submitted.
4. The Commission shall hold a public hearing on the Preliminary Development Plan. Upon completion of the public hearing, and upon approval by the Commission, the Preliminary Plan shall be referred to the Board with a recommendation to approve conditionally. If the Commission denies the application, the matter shall die

unless appealed to the Board as provided in Chapter 19.42.

5. If the Commission approved the Preliminary Development Plan, the Board shall hold a public hearing on the Preliminary Plan. The Board shall approve or disapprove the Preliminary Plan. If the Preliminary Plan is not approved, the Board shall notify the applicant in writing why the Plan was not in the public interest. If the Preliminary Plan is approved, **all of the conditions of the Plan shall become conditions of the zone change to PUD.** The Board shall withhold the second reading of the enabling ordinance for the zone change until final maps are recorded for each phase.
6. In the event that a Preliminary Development Plan is given approval and thereafter, but prior to approval of a Final Development Plan for the total project or any phase of the project, the applicant shall choose to abandon said Preliminary Development Plan and shall so notify the Commission in writing; or shall fail to obtain approval of a Final Development Plan within thirty-six (36) months of the Preliminary Development Plan approval, the Preliminary Development Plan including the PUD district zone change shall be withdrawn unless application for extension has been made to and approved by the Commission.

**D. Final Development Plan:**

1. An application for approval of a Final Development Plan may be filed for all the land included in a Planned Unit Development or for any phase thereof.
2. The Final Development Plan shall include such information as required by the Commission including but not limited to:
  - a. A map showing final development proposals and tabulations (e.g., density, coverage, parking, etc.).
  - b. A tentative subdivision map of the Planned Unit Development or phase thereof.
3. Those projects which are less than 50 acres in area and which have only one (1) phase in the project, may submit all information required in the Preliminary Development Plan and the Final Development Plan concurrently. Such a project shall combine the necessary review stages and public hearings into one (1) process.
4. The Final Development Plan shall be deemed to be in substantial compliance with the Preliminary Development Plan, providing any modification by the applicant of

the Preliminary Development Plan, as approved, does not:

- a. Increase the average land-use intensity or density of the over-all project.
  - b. Involve a reduction of the area set aside for common open space.
  - c. Involve a change of use (e.g., residential to commercial).
5. In a phased development, safeguards shall be required in the form of easements or bonds or other commitments for open space requirements that will protect the integrity of the total project.
6. The Commission shall either approve or disapprove the Final Development Plan.
- a. If the Final Development Plan is not approved, the Commission shall notify the applicant in writing the reason why it is not in conformance with the Preliminary Development Plan.
  - b. In the event of such refusal, the applicant may refile a modified Final Development Plan.
7. An approved or conditionally approved Final Development Plan, including tentative tract map, shall expire 24 months after its approval or conditional approval unless an extension is granted as hereinafter provided. The expiration of the approved or conditionally approved Final Development Plan, including tentative tract map, shall terminate all proceedings and no final or parcel map or all or any portion of the real property included within such tentative tract map shall be filed for record without first processing a new Final Development Plan, including tentative tract map. The Commission may approve extension of time for a period or periods not exceeding a total of 36 months. Any application of a developer for such extension of time shall be made in writing to the Commission not less than 60 days prior to the expiration date. Such extension of time is subject to the subdivision extension fee found in the County Schedule of Fees. If the final map is not recorded within the approved extension, then the Final Development Plan, including tentative tract map, must be refiled.
- a. Prior to recordation of the final map, the following items shall be filed with the appropriate agency:
    - i. Documentation of easements, covenants, deeds, and Home Association by-laws,

restrictions and articles of incorporation.

- ii. Sureties and performance bonds covering open space areas, dedicated public improvements, and items as determined by the Commission. The amount of the performance bonds shall be reviewed annually by the appropriate agency.
8. No changes may be made in the approved Final Development Plan before, during or after the construction of the Planned Unit Development except upon application by the applicant to the appropriate agency under the procedures provided below:
- a. Minor changes such as the location and siting of building and structures may be authorized by the director, if required by engineering or other circumstances not foreseen at the time the Final Development land was approved. These changes shall be made prior to recording the final subdivision map.
  - b. Major changes, such as changes in use, any rearrangement of lots, locks, and building tracts, any changes in the provision of common open spaces and all other modifications shall be approved by the Commission. The Commission shall hold a public hearing to consider such major changes. No amendments may be made in the approved Final Development Plan unless they are shown to be required by changes in conditions that have occurred since the Final Development Plan was approved or by changes in the General Plan and adopted development policy of the community.
9. Upon recordation of the final map or application for building permits, the District Zone Change Ordinance to PUD for that phase shall be adopted by the Board.



APPENDIX C  
Airport Noise Impact Analysis

COMPUTER MODELING ASSUMPTIONS

AVERAGE ANNUAL COMMUNITY NOISE EQUIVALENT LEVEL  
MAMMOTH LAKES AIRPORT

	1980	1995	
		With Project	Without Project
1. <u>ANNUAL RUNWAY OPERATIONS:</u> (Takeoff or Landing)			
a. Four Engine Turboprop .....	--	2,600	--
b. Two Engine Turboprop .....	--	1,600	6,700
c. Business Turbojet .....	--	300	--
d. Business Turbofan .....	--	900	--
e. General Aviation Twin Engine Turboprop ...	5,400	--	2,600
f. General Aviation Twin Engine Propeller ...	8,000	12,000	12,000
g. General Aviation Single Engine Propeller .	24,000	36,000	36,000
	<u>37,400</u>	<u>53,400</u>	<u>57,300</u>

2. AVERAGE DAY OPERATIONS: Annual Operations ÷ 365

3. ANNUAL OPERATIONS ALLOCATION BY RUNWAY END:

a. Turboprop, Turbojet, and Turbofan:

Runway	Takeoff	Landing
9 .....	50%	35%
27 .....	50%	65%

b. General Aviation Propeller:

Runway	Takeoff	Landing
9 .....	40%	40%
27 .....	60%	60%

	1980	1995	
		With Project	Without Project
4. <u>RUNWAY LENGTH:</u>			
Runway 9-27 .....	6,500'	9,000'	6,500'

5. ANNUAL OPERATIONAL DISTRIBUTION BY TIME OF DAY:

	Turboprop, Turbojet and Turbofan	General Aviation Propeller
Day (0700 - 1800 Hrs): .....	90%	93%
Evening (1800 - 2200 Hrs): .....	5%	5%
Night (2200 - 0700 Hrs): .....	5%	2%

6. ANNUAL TAKEOFF PROFILES: Air carrier and business jet takeoff profiles assume a trip length of 500 nautical miles and standard piloting procedures.

7. ANNUAL LANDING PROFILES: Landing profiles assume maximum allowable landing weight and a 3.0° glide slope.

8. PROGRAM: The program used to model the aviation noise environment is WECNEF: A digital Computer Program for Computation of Noise Exposure Forecast Contours. This is a proprietary update of Program FAA-No-70-6 to account for latest noise data and departure procedures.

MAMMOTH LAKES AIRPORT  
 "NO PROJECT" ALTERNATIVE  
 AIRCRAFT AND OPERATIONS FORECAST

	<u>1975</u>	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>
<b>BASED AIRCRAFT</b>					
Single Engine:	21	30	36	42	46
Multi Engine:	<u>7</u>	<u>10</u>	<u>12</u>	<u>13</u>	<u>14</u>
Total	28	40	48	55	60
<b>ANNUAL AIRCRAFT OPERATIONS</b>					
Local	14,000	19,200	23,300	26,400	28,800
Itinerant:	<u>12,800</u>	<u>18,200</u>	<u>20,000</u>	<u>24,500</u>	<u>28,500</u>
Total	26,800	37,400	43,300	50,900	57,300
Single Eng. Prop.	17,400	24,000	28,800	33,000	36,000
Multi Eng. Prop:	5,500	8,000	9,600	11,000	12,000
Business Jet:			Nil	Nil	Nil
Airline					
Small turboprop	3,900	5,400	2,600	2,600	2,600
Large turboprop	-	-	2,300	4,300	6,700
Electra/Jet	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total	26,800	37,400	43,300	50,900	57,300
PEAK MONTH	2,700	3,800	4,400	5,100	5,730
PEAK DAY	130	190	220	260	265
PEAK HOUR	20	28	33	39	40

Notes:

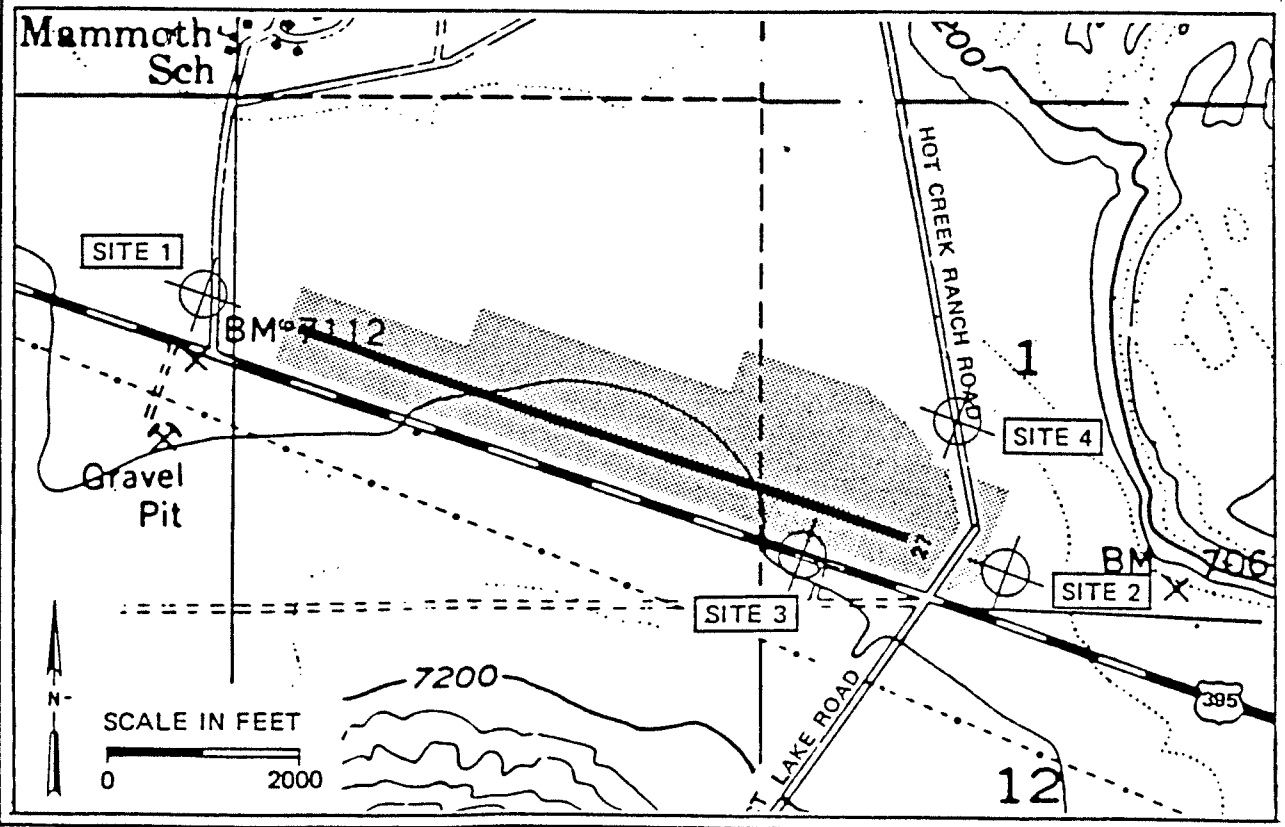
1. Runway is assumed to remain at its current length and no other new development is constructed.
2. Small turboprops include Handly Page jetstreams or similar aircraft; large turboprops include Convair 580's or similar aircraft.
3. Number of aircraft operations increase because lower seating capacity aircraft must accommodate the same forecast passenger demand.

**FIGURE 15: SOUND LEVEL MEASUREMENTS, EXISTING CONDITIONS**

Field testing of noise levels around Mammoth Lakes Airport was undertaken to determine the degree of change between current noise levels and forecast conditions. On November 13, 1979, sound level readings were taken using a General Radio 1551C Sound Level Meter with A, B, and C level frequency filters. Readings were taken in the late morning; a strong wind blowing at the time may have created a somewhat higher background noise level than is normal.

- Measurements were taken at four sites: two sites were each approximately one thousand feet off either end of the runway along the extended centerline, one was approximately three hundred feet south of the runway adjacent to U.S. Highway 395, and one was along Hot Creek Ranch Road approximately 1,200 feet north of the runway. The background noise levels at the four sites ranged from 44 dBA to 47 dBA. The peak single event noise levels at sites # 1 and # 2 were from Cessna 420 Aircraft (landing noise at site # 1 and touchdown noise at site # 2) and from trucks at sites # 3 and # 4.

	SITE 1	SITE 2	SITE 3	SITE 4
Background Noise Level	47 dBA	46 dBA	46 dBA	44 dBA
Single Event Noise Level	88 dBA	92 dBA	95 dBA	88 dBA



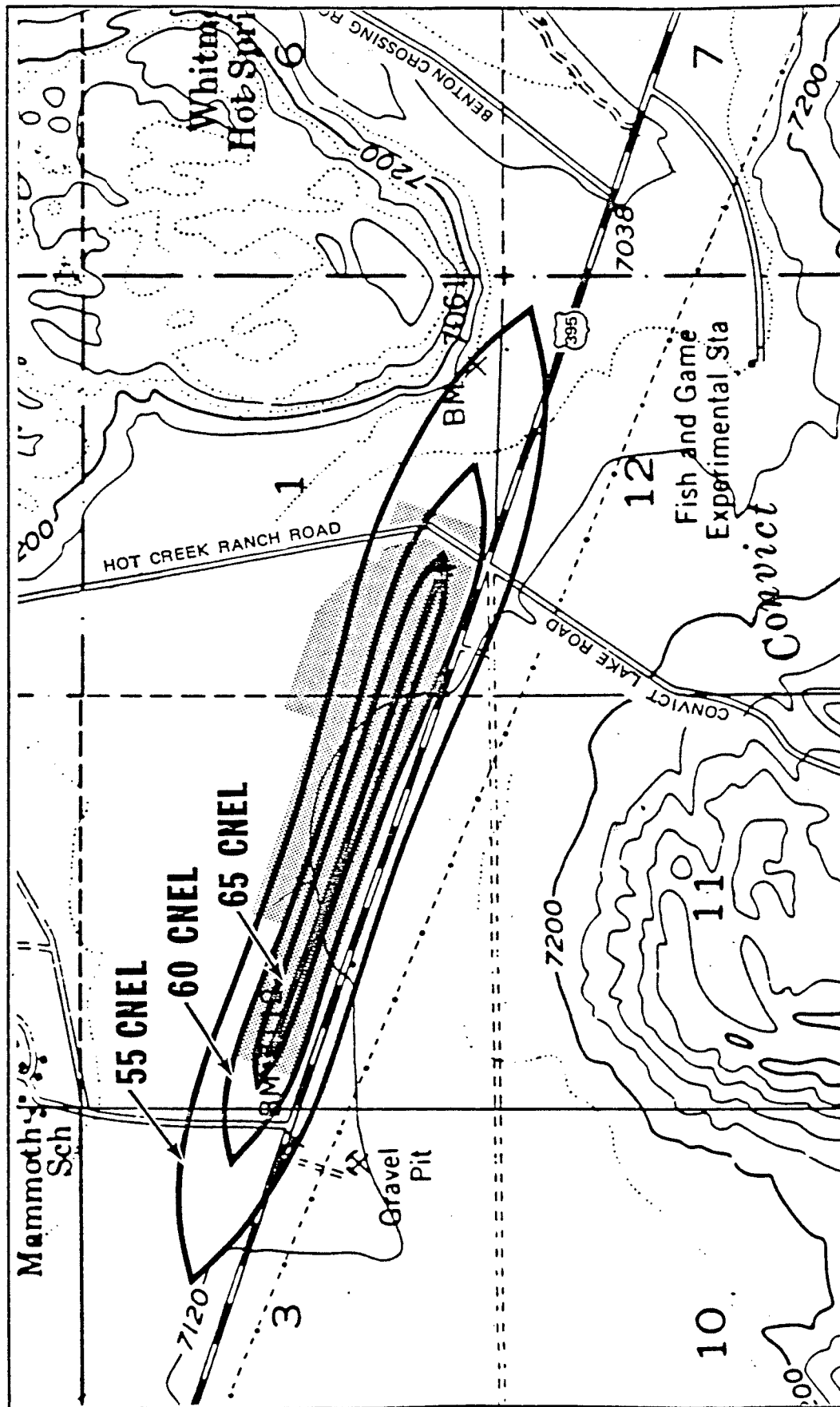



FIGURE 12: CNEL CONTOURS, 1980

 AIRPORT LEASE AREA


  
 SCALE IN FEET
   

  
 0 1000 2000 3000

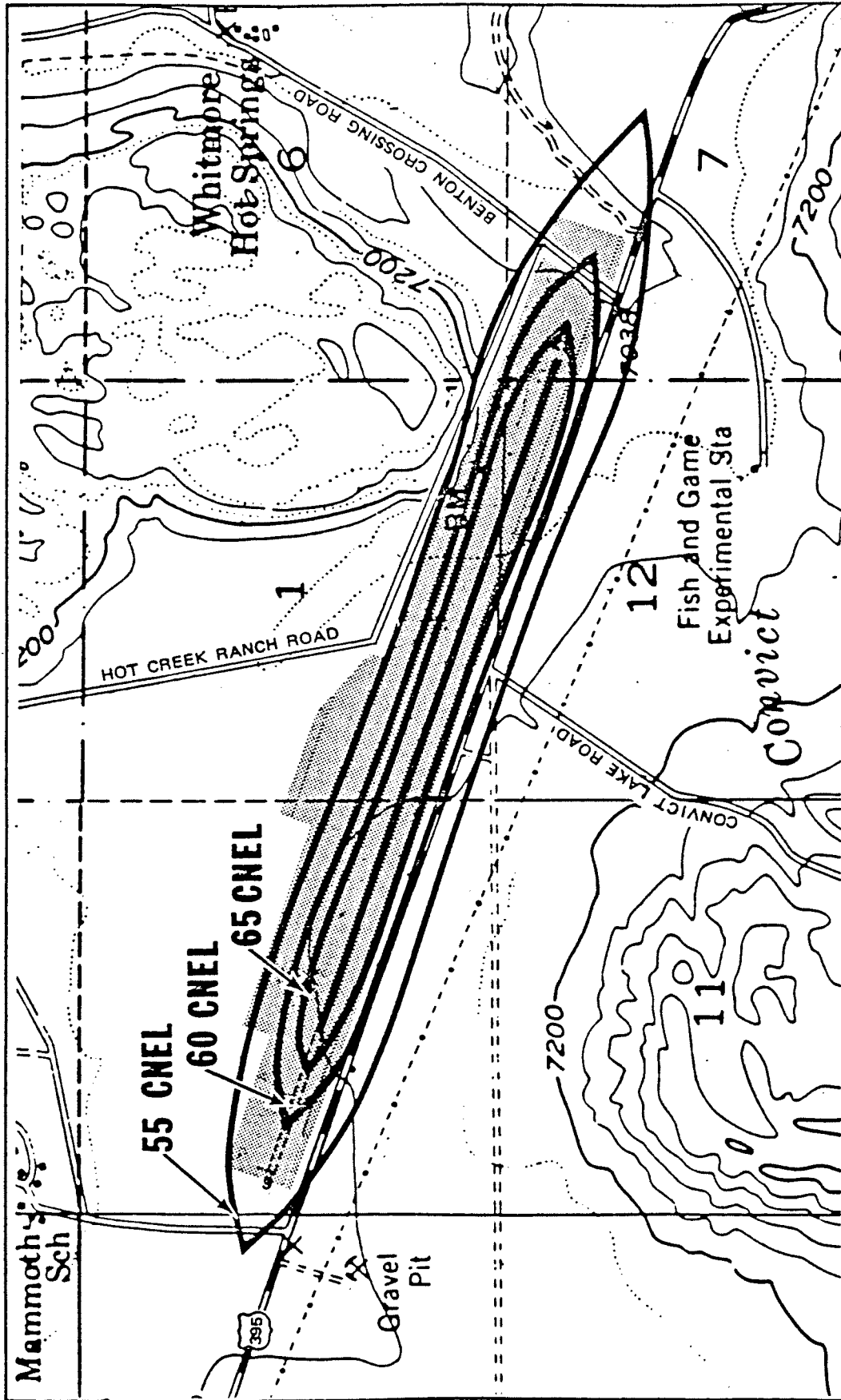



FIGURE 13: CNEL CONTOURS WITH PROPOSED IMPROVEMENTS, 1995

 FUTURE AIRPORT LEASE AREA

 SCALE IN FEET  
 0 1000 2000 3000

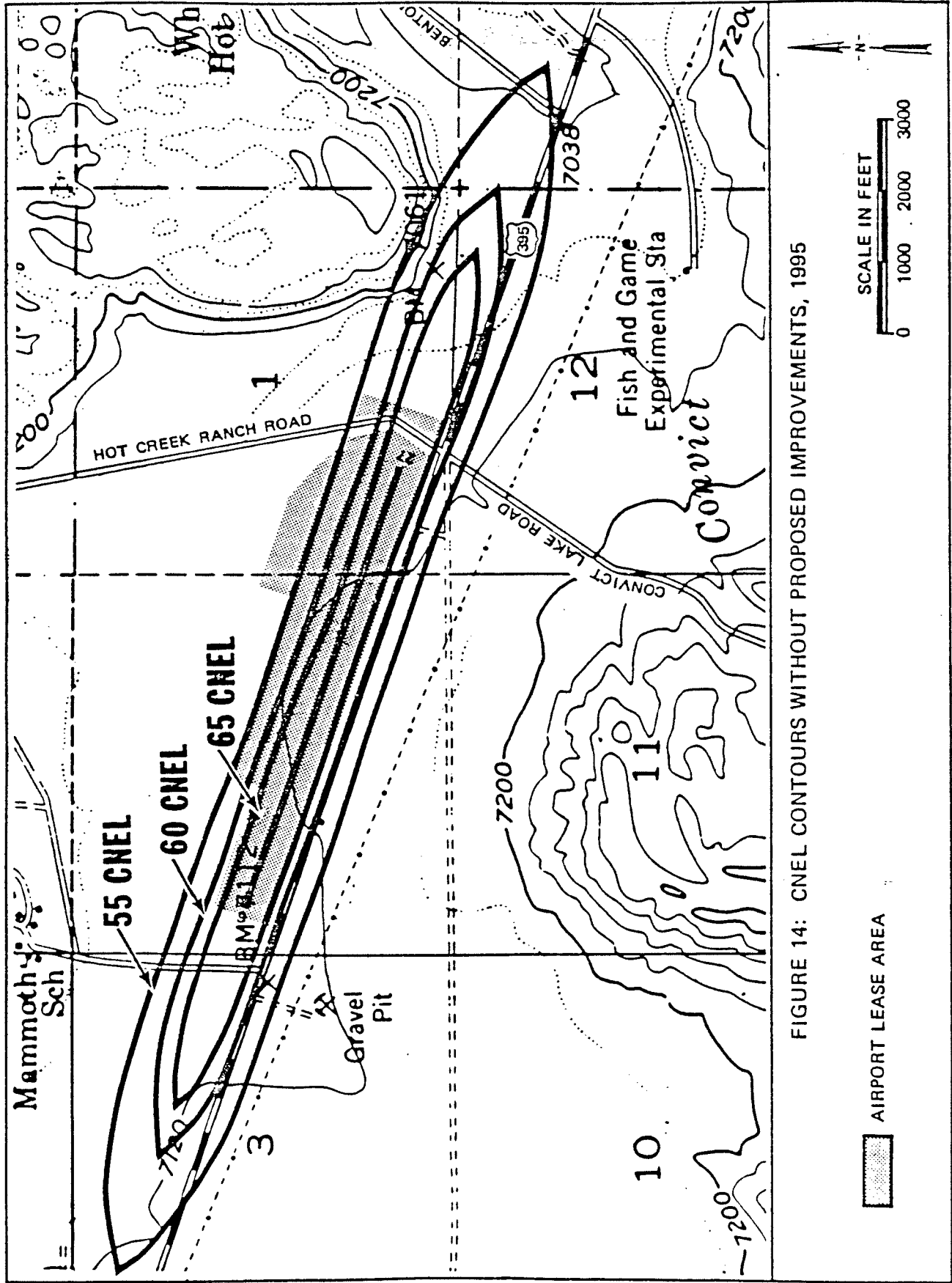
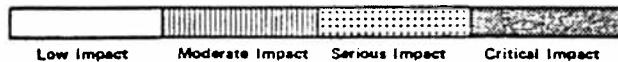


FIGURE 14: CNEL CONTOURS WITHOUT PROPOSED IMPROVEMENTS, 1995

HUMAN ACTIVITY	IMPACT ESTIMATE FOR COMMUNITY NOISE EQUIVALENT LEVEL (CNEL) VALUE							
	40	50	60	70	80	90	100	
Intensive Conversation								
Casual Conversation								
Telephone Use								
Sleeping								
Eating								
Reading								
Classroom, Lecture								
Live Theater								
Watching Television & Films								
Listening to Music								
Public Events, Assemblies								
Spectator Sports								
Physical Recreation								
Outdoor Activities								
Extended Child Care								
Shopping								
Technical Manual Work								
Manual Work								



**Low Impact:** Activity can be performed with little or no interruption from aircraft noise, though noise may be noticeable above background levels.

**Moderate Impact:** Activity can be performed but with some interference from aircraft noise due to level or frequency of interruptions.

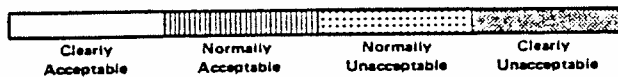
**Serious Impact:** Activity can be performed but only with difficulty in the aircraft noise environment due to level or frequency of interruptions.

**Critical Impact:** Activity cannot be performed acceptably in the aircraft noise environment.

FIGURE 10: AVIATION NOISE IMPACT ON HUMAN ACTIVITIES



LAND USE CATEGORY	STANDARD LAND USE CODE	LAND USE INTERPRETATION FOR COMMUNITY NOISE EQUIVALENT LEVEL (CNEL) VALUE					
		40	50	60	70	80	90
Residential - Single Family, Duplex, Mobile Homes	11						
Residential - Multiple Family, Dormitories, etc.	11,12,13,19						
Transient Lodging	15						
School Classrooms, Libraries, Churches	68 7111						
Hospitals, Nursing Homes	651						
Auditoriums, Concert Halls, Music Shells	721						
Sports Arenas, Outdoor Spectator Sports	722						
Playgrounds, Neighborhood Parks	761, 762						
Golf Courses, Riding Stables, Water Rec., Cemeteries	741, 743, 744						
Office Buildings, Personal, Business and Professional	61, 62, 63, 69, 65						
Commercial - Retail, Movie Theaters, Restaurants	53, 54, 56, 57, 59						
Commercial - Wholesale, Some Retail, Ind., Mfg., Util.	51, 52, 64, 2, 3, 4						
Manufacturing, Communications (Noise Sensitive)	35, 47						
Livestock Farming, Animal Breeding	815, 816, 817						
Agriculture (except Livestock), Mining, Fishing	81, 82, 83, 84,85,91,93						
Public Right-of-Way	45						
Extensive Natural Recreation Areas	91, 92, 93, 99, 7491, 75						



**Clearly Acceptable:** The noise exposure is such that the activities associated with the land use may be carried out with essentially no interference from aircraft noise.

**Normally acceptable:** The noise exposure is great enough to be of some concern but common building constructions will make the indoor environment acceptable, even for sleeping quarters. The outdoor environment will be normally acceptable for residential area recreation and play.

**Normally Unacceptable:** The noise exposure is significantly more severe so that unusual and costly building constructions are necessary to ensure adequate performance of activities. The outdoor environment will be normally unacceptable for residential area recreation and play.

**Clearly Unacceptable:** The noise exposure at the site is so severe that construction costs to make the indoor environment acceptable for performance of activities would be prohibitive. The outdoor environment would be intolerable for normal residential use.

FIGURE 11: NOISE COMPATIBILITY INTERPRETATION

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May 16, 1986

NOISE IMPACT ANALYSIS

PROPOSED MAMMOTH/JUNE LAKES AIRPORT HOTEL

INTRODUCTION

The proposed Mammoth/June Lakes Airport Hotel development would encompass approximately four acres immediately adjacent to the existing airport building area. This hotel/resort complex would include a three story hotel building with 150 rooms, parking facilities, a golf course, and ancillary structures. The purpose of this report is to assess the noise impacts of airport activity on the proposed project.

Methodology

There were four parts to the methodology employed in this analysis:

- o Sound level readings of aircraft operations were taken at the airport.
- o Various sources, including published material and interviews with individuals familiar with the airport's activity, were used to estimate the current level and distribution of aircraft operations.
- o The recorded sound level data were used to calibrate the standard aircraft performance inputs of a computer-generated noise model.
- o The calibrated performance data together with the activity data were employed to develop a set of noise contours for the airport. The contours for three different activity levels are presented in Figures 1, 2, and 3.

## Conclusions

The Community Noise Equivalent Levels at the hotel site would not constitute a significant impact even at an airport activity level higher than expected to occur within the foreseeable future. The impacts from individual aircraft noise events, however, may be significant although infrequently occurring. Measures to mitigate some of this impact are available.

## AIRCRAFT ACTIVITY

### Current Activity

As is typical of airports which do not have an air traffic control tower, there are no comprehensive counts of aircraft activity maintained at the Mammoth/June Lakes Airport. However, from the various sources which are available, it is possible to develop a reliable estimate of current activity.

The most useful data are the counts maintained of certain aircraft operations at the airport. These counts are tallied daily from radio communications between aircraft and the airport office between the hours of 8:00 a.m. and 5:00 p.m. Airport personnel estimate that these counts represent anywhere from 50% to 90% of total aircraft operations. Other data examined included fuel sales records and based and transient tiedown fees collected for February 1984 through February 1986. Additionally, published Federal Aviation Administration (FAA) data contained in Terminal Area Forecasts and Airport Master Records for 1977 and 1982 were reviewed although these sources indicated significantly higher activity levels than could be substantiated from the other data. A final source was the California Division of Aeronautics which indicated that, in a June 1985 airport visit, the annual activity level was estimated by the airport manager at approximately 15,000 operations; a figure approximately 50% greater than the recorded figures for that time period.

For the purposes of this study it was assumed that the actual current activity level lies somewhere between the upper and lower limits indicated by the FBO

and the recorded monthly figures. A 1986 annual activity level of 16,000 operations was estimated for evaluation purposes.

### Forecast Activity

FAA Terminal Area Forecasts (TAF) for the years 1980 through 1995 were reviewed as a basis for developing activity forecasts to be used in assessing the airport's potential future noise impacts. The most recent actual activity level indicated in the TAF, though, is 39,000 annual operations in 1982, more than double the 16,000 operations activity level estimated herein. The TAF projects that annual operations will increase to 51,000 in 1995, approximately a 30% growth.

Because of the discrepancy in the base year data, two future activity levels scenarios were assessed for noise impact purposes. In the first scenario, the 30% growth projection was applied to the current estimate of 16,000 annual operations, resulting in a total of 21,000 annual operations. The second scenario directly uses the 51,000 operations figure from the TAF.

The two future activity levels were assumed to include only general aviation operations. Since regularly scheduled flights by large, transport-type, airline aircraft are a reasonable future prospect at the Mammoth/June Lakes Airport, a modest number of operations by such aircraft was added to the forecast levels. Specifically, two daily flights by the Convair 580 and an average of one flight per week by a DC-9-80 were included. Both of these aircraft are relatively noisy compared to other aircraft of similar size which could be used for service to the airport. The BAe-146, for example, is an aircraft which could be suited to future use at Mammoth/June Lakes.

Activity attributable to the proposed hotel complex is not directly reflected in these forecasts. Considering the size of the facility, the amenities planned to be offered, and the location immediately adjacent to the aircraft terminal area, it is reasonable to assume that the hotel will attract some additional general aviation and perhaps airline activity to the airport, especially if its proximity to the airport is well advertized. A rough esti-

mate of this activity level is 200 to 400 general aviation aircraft operations per year (based upon only 1% to 2% of the hotel patrons arriving by general aviation). Possibly 500 to 1,000 airline passengers also could be attributable to the hotel development.

No specific years are assigned to the two forecast scenarios. For impact analysis purposes, however, it can be assumed that the 21,000 operations level represents a mid-1990's projection and the 51,000 operations figure is probably at least a 20-year forecast. More refined activity forecasts will be developed as part of the forthcoming Airport Master Plan Study.

### Activity Distribution

Information on current aircraft mix, time-of-day distribution, runway utilization, and flight track utilization and location was determined from the interviews, supplemented by field observations and wind rose data. The same distributions were assumed for the future scenarios as for the present activity. The activity distributions entered into the noise model are summarized in Table 1. Average flight track locations are plotted in Figure 4.

### NOISE IMPACTS

Noise impacts from airport activity at the proposed project site were assessed through a combination of in-field noise measurements and computer noise modeling. The field measurements provide an indication of the individual event impacts of airport activity and also were used to calibrate the noise model. The model generates the composite noise impact data.

### Sound Level Monitoring and Model Calibration

Single Event Level (SEL) noise readings of approximately 60 operations were recorded over a two day period in mid-April 1986. Measurements were made at several locations along the aircraft flight track as well as near the hotel site. The aircraft monitored included a variety of single and twin-engine,

propeller aircraft plus one Convair-580 operation, but no business or airline jets.

At the near edge of the hotel site (approximately 550 feet from the runway centerline), the median SEL's were determined to be about 80 and 83 dB for small and large single-engine planes, respectively, and 85 dB for twins. A typical business jet (e.g. the Lear 35) is calculated to generate an SEL of about 96 dB at the site, the Convair-580 about 85 dB, and the DC-9-80 slightly above 100 dB.

(Note: Single Event Levels are an integrated measure of the energy of a sound event, calculated with reference to a one second event duration. For aircraft noise events, SEL's always exceed the actual maximum decibel level.)

Calibration of the noise model was necessary to account for the effects of the airport's high elevation (7,128 feet) on aircraft performance. An analysis by aircraft type at each of eight monitoring stations was performed to correlate SEL field measurements with expected noise levels at each point. Further calibration was done to reflect the above average (compared to nationwide fleet mix) ratio of turbo-charged and other high horsepower, single-engine, propeller-driven aircraft operated at the airport. Two types of single-engine aircraft were included in the noise model inputs for this reason.

### Noise Model

The noise model was run to generate the Community Noise Equivalent Level (CNEL) contours shown in Figures 1, 2, and 3 for the 16,000, 21,000, and 51,000 general aviation operations scenarios, respectively.

As the drawings illustrate, the 55 dB CNEL contour remains approximately within the airport boundaries even in the highest activity scenario. A 65 dB CNEL contour occurs only in the high activity case and it is essentially confined to the runway.

The Community Noise Equivalent Level at the edge of the hotel site nearest the runway is calculated to be approximately 50 dB at the present time. For the high and low forecast scenarios, it would be about 55 and 52 dB, respectively.

### ANALYSIS

State airport noise standards specify that no residences should be located within an airport's 65 CNEL contour. This level, however, has been found not to be very representative of the acceptability of noise impacts at small to medium sized general aviation airports. Most communities around such airports have adopted a 60 CNEL standard for residential land use and in some cases a 55 CNEL is used. Considering the low level of activity at the Mammoth/June Lakes Airport and the nature of the surrounding land use, a 55 CNEL criterion appears reasonable. A higher level -- 60 CNEL -- though, should be considered acceptable for uses such as a hotel, especially with the extent of insulation required for the area's climate.

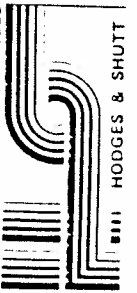
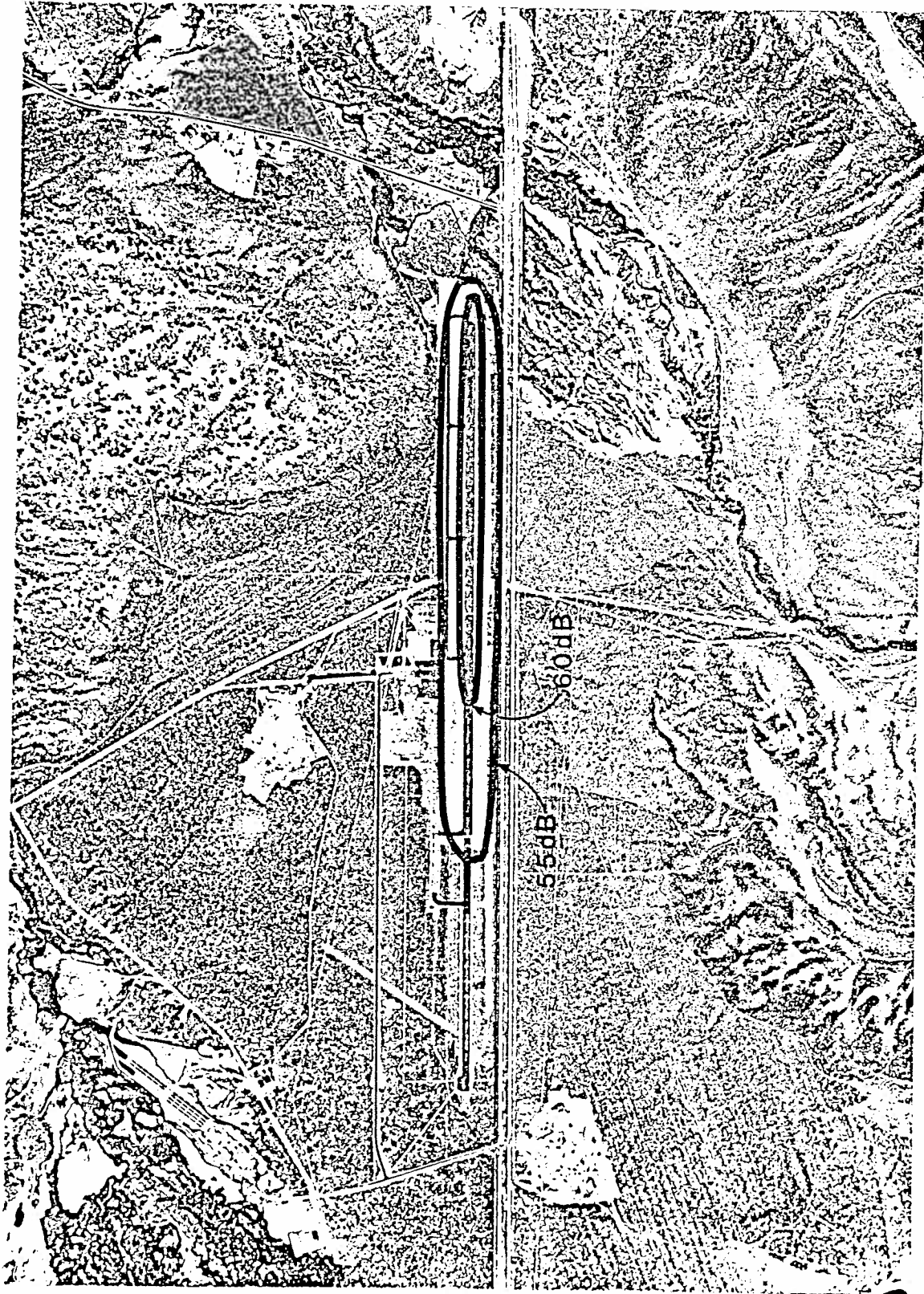
From the analysis conducted here, it is concluded that the Community Noise Equivalent Level at the hotel site does not represent a significant noise impact. The Single Event Levels for the loudest aircraft that might operate at the airport, however, do constitute a potential adverse impact for which mitigation should be considered.

Several types of individual event, aircraft noise impacts are possible at the site. Aircraft takeoffs, for which the decibel levels are as noted above, are only one source. Another loud source is from landing jets which sometimes apply thrust reverse as a means of braking. This practice may not be necessary at Mammoth/June Lakes Airport because of the long runway, but it is a possibility. Thrust reversal tends to cause the noise to be projected laterally from the runway and thus could be significant at the hotel site. A third, and probably the most common, source would be from engine testing or run-ups conducted in the airport building area. It is assumed, however, that this activity would be limited to propeller-driven aircraft. A final factor to be considered is that the surrounding high mountains and other local conditions can cause sound to reflect in unusual ways. The impacts at the hotel

site or other locations in the airport vicinity thus may not be quite as predicted by the noise model or even as determined from a relatively few field measurements.

The opportunity for some mitigation of noise impacts presents itself in development of the hotel complex. Two of the noise sources, thrust reversal and run-ups, can be attenuated by facing windows away from the airport, providing extra insulation on the airport side of buildings, and/or by installation of intervening walls, earthen barriers, or dense foliage. These measures also would be of some benefit with regard to aircraft takeoffs.





NOISE IMPACT AREA  
16,000 ANNUAL G.A. OPERATIONS-1986

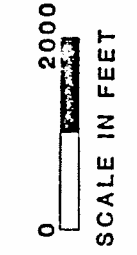
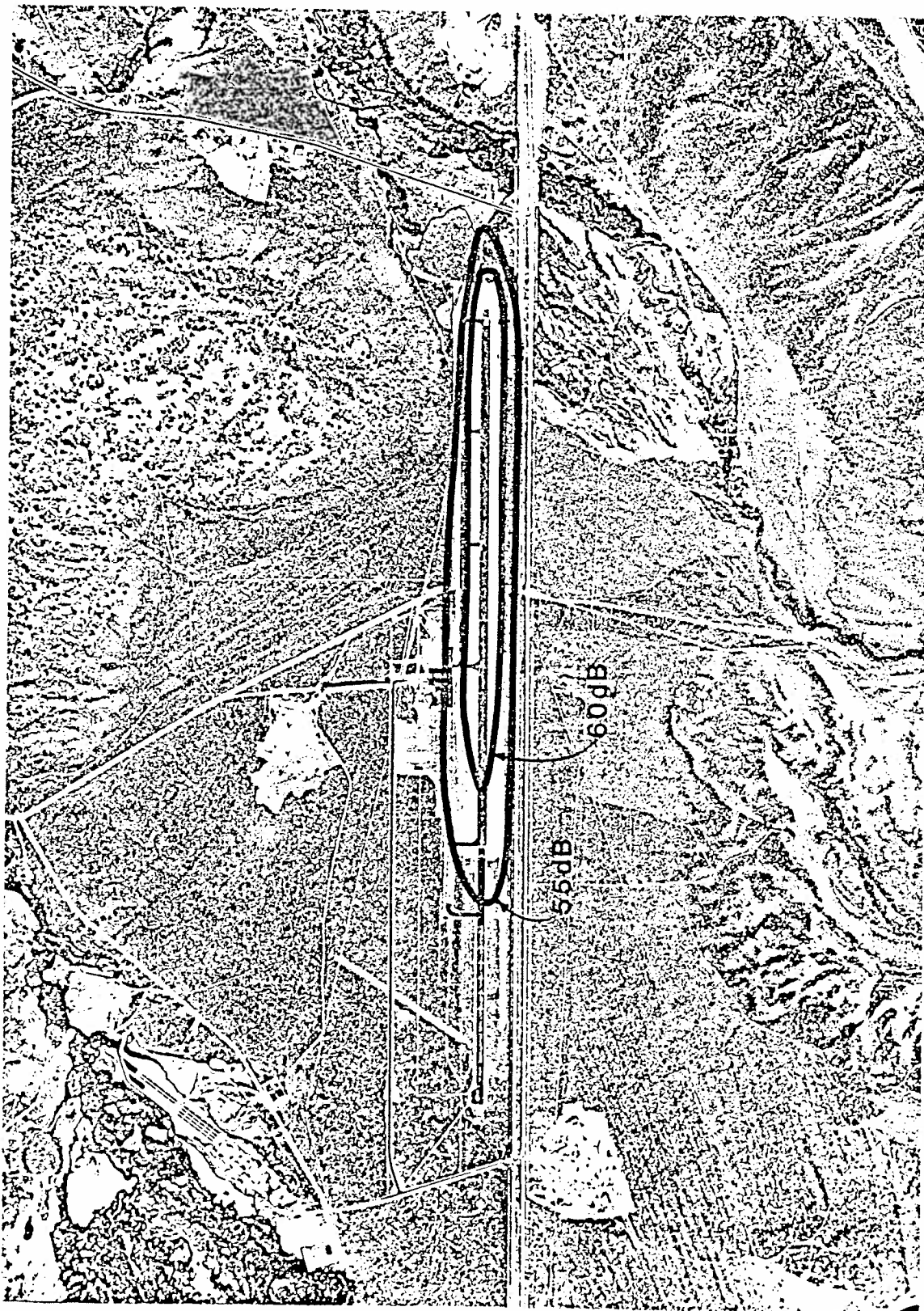


Figure 1

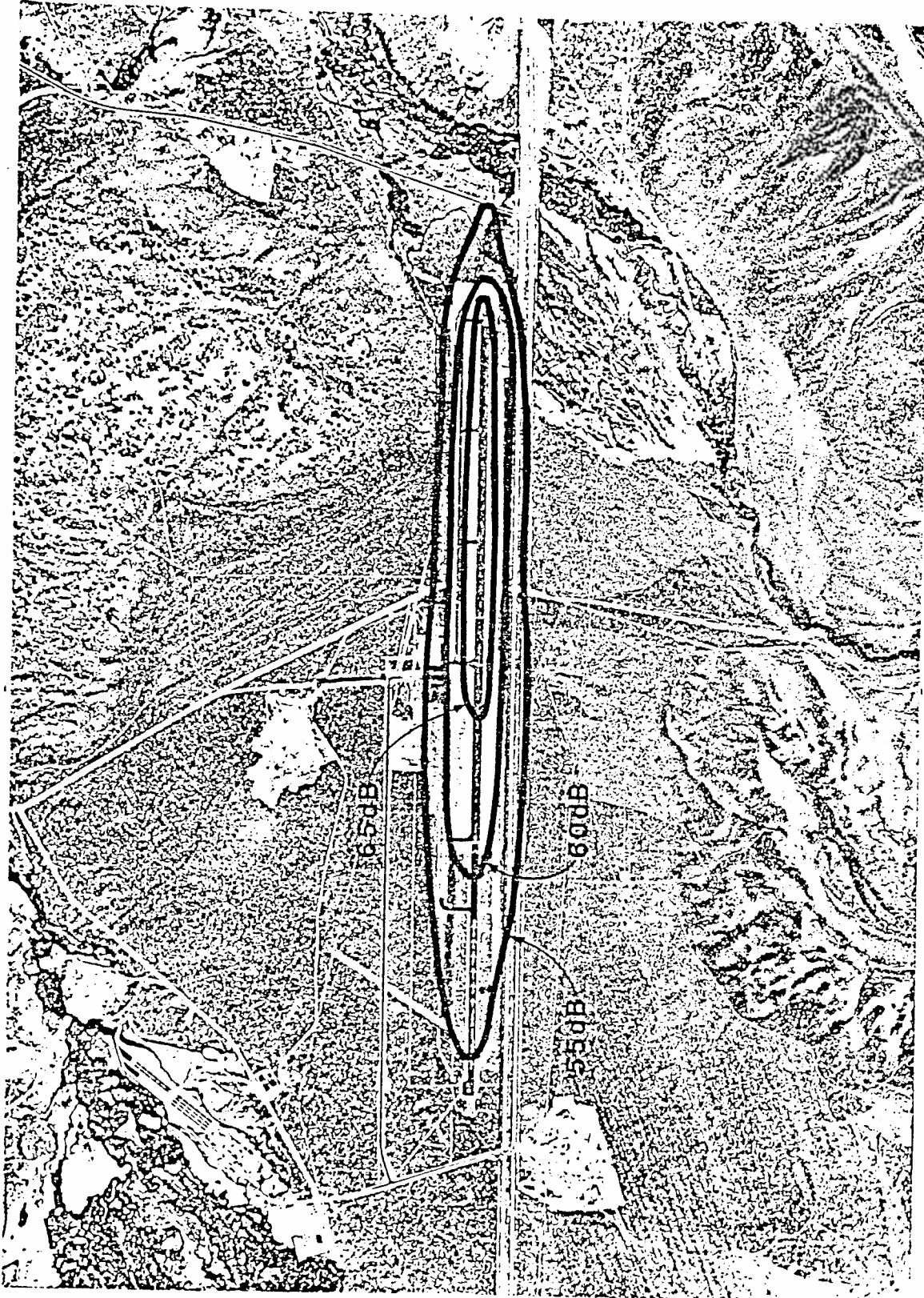


0 2000  
SCALE IN FEET



Figure 2

NOISE IMPACT AREA  
21,000 ANNUAL G.A. OPERATIONS



0 2000  
SCALE IN FEET

Figure 3

NOISE IMPACT AREA  
51,000 ANNUAL G.A. OPERATIONS



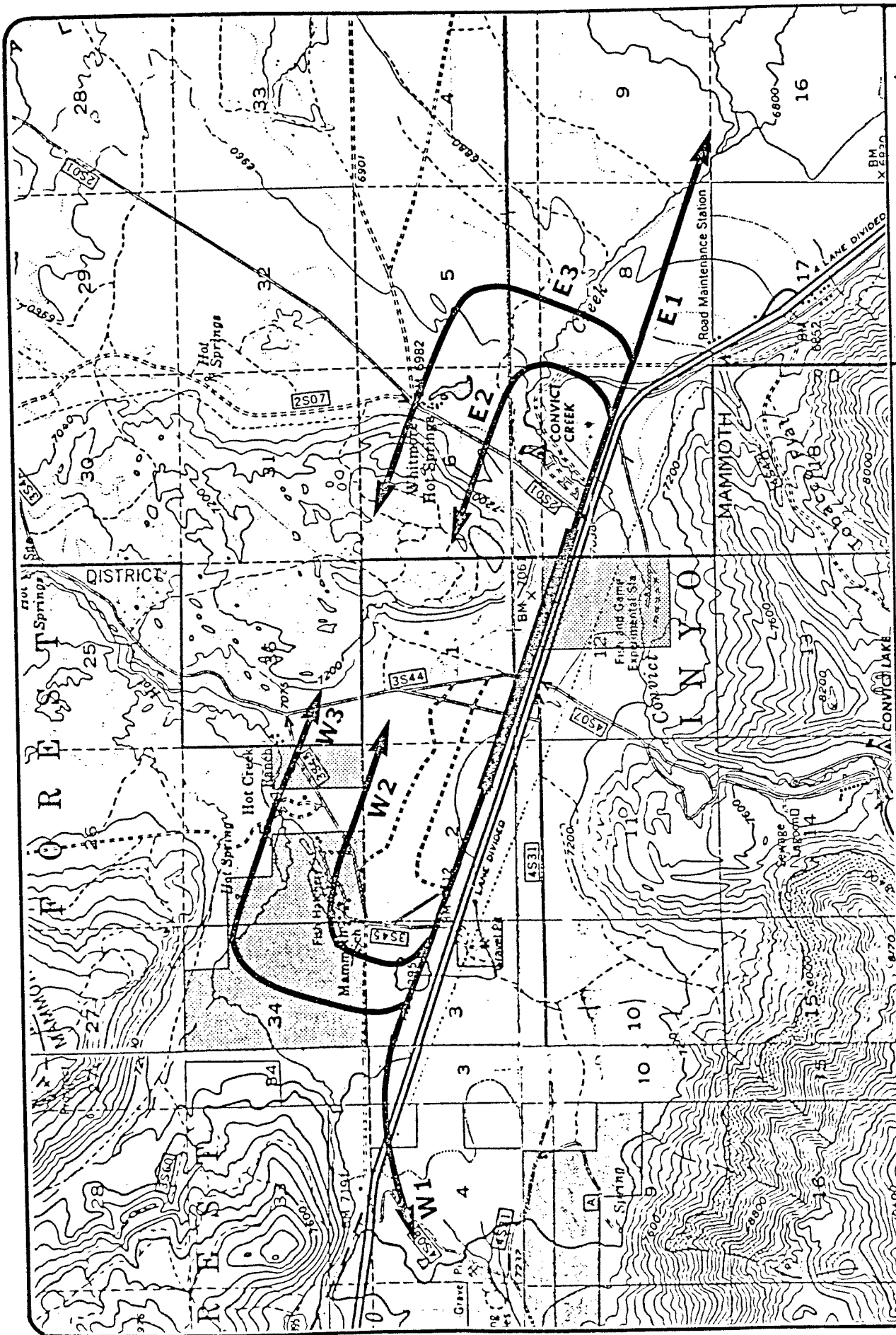


Figure 4

0 4000



Feet

FLIGHT TRACKS

AVIATION PLANNING SERVICES



HODGES & SHUTT

TABLE 1  
NOISE MODEL INPUT DATA  
MAMMOTH/JUNE LAKES AIRPORT

AIRCRAFT MIX	Aircraft Type (16,000 Annual G.A. Operations)	Total Operations (16,000 G.A. Operations)		LINE OF DAY			Percent of All Operations		
		Annual	Average Day	Percentage	Day 7:00 a.m. 7:00 p.m.	Evening 10:00 p.m. 10:00 p.m.	Night 10:00 p.m. 7:00 a.m.		
	Single-Engine	6,400	17.5	40.0	97.3	1.8	0.9		
	Single-Engine Turbo	6,400	17.5	40.0	97.3	1.8	0.9		
	Twin-Engine	2,720	7.5	17.0	94.7	3.5	1.8		
	Small Business Jet (e.g., Lear 35)	400	1.1	3.0	99.5	0.5	0.0		
	Total	16,000	43.8	100.0					
	Aircraft Type (21,000 Annual G.A. Operations)	Total Operations		Percent of All Operations					
	Annual	Average Day	Percentage	Day 7:00 a.m. 7:00 p.m.	Evening 10:00 p.m. 10:00 p.m.	Night 10:00 p.m. 7:00 a.m.			
	Single-Engine	8,400	23.0	37.3					
	Single-Engine Turbo	8,400	23.0	37.3					
	Twin-Engine	3,570	9.8	16.0	97.3	1.8	0.9		
	Small Business Jet (e.g., Lear 35)	630	1.7	2.8	97.3	1.8	0.9		
	Convair 580	1,400	3.8	6.2	94.7	3.5	1.8		
	DC9-80	100	0.3	0.4	99.5	0.5	0.0		
	Total	22,500	61.6	100.0	99.5	0.5	0.0		
	Aircraft Type (51,000 Annual G.A. Operations)	Total Operations		Percent of Landings			Percent of Takeoffs		
	Annual	Average Day	Percentage	Runway	Runway	Runway	Runway	Runway	
	Single-Engine	20,400	55.9	38.9	9	27	9	27	
	Single-Engine Turbo	20,400	55.9	38.9	20	60	20	60	
	Twin-Engine	8,675	23.8	16.5	20	60	20	60	
	Small Business Jet (e.g., Lear 35)	1,525	4.2	2.9	20	60	20	60	
	Convair 580	1,400	3.8	2.6	20	60	20	60	
	DC9-80	100	0.3	0.2	9	27	9	27	
	Total	52,500	143.9	100.0					

ELIGHT TRACKS

ELIGHT TRACKS (continued)

	Percent of Landings - Runway 9		
	W1	W2	W3
Single-Engine	35	55	10
Single-Engine Turbo	35	55	10
Twin-Engine	35	55	10
Small Business Jet (e.g., Lear 35)	100	0	0
Convair 580	100	0	0
DC9-80	100	0	0

	Percent of Landings - Runway 27		
	E1	E2	E3
Single-Engine	60	30	10
Single-Engine Turbo	60	30	10
Twin-Engine	70	20	10
Small Business Jet (e.g., Lear 35)	100	0	0
Convair 580	100	0	0
DC9-80	100	0	0

	Percent of Takeoffs - Runway 9		
	F1	F2	F3
Single-Engine	60	10	30
Single-Engine Turbo	60	10	30
Twin-Engine	75	25	0
Small Business Jet (e.g., Lear 35)	100	0	0
Convair 580	100	0	0
DC9-80	100	0	0

	Percent of Takeoffs - Runway 27		
	W1	W2	W3
Single-Engine	40	20	10
Single-Engine Turbo	40	20	10
Twin-Engine	40	60	10
Small Business Jet (e.g., Lear 35)	100	0	0
Convair 580	100	0	0
DC9-80	100	0	0

EASI

MESI

E1 Straight Out  
 E2 Wide Turn  
 E3 Tight Turn

W1 Straight Out  
 W2 Wide Turn  
 W3 Tight Turn