

Mammoth Yosemite Airport Mammoth Lakes, California



Airport Layout Plan Update Narrative

January 2015



Reinard W. Brandley

CONSULTING AIRPORT ENGINEER

MAMMOTH YOSEMITE AIRPORT AIRPORT LAYOUT PLAN UPDATE NARRATIVE

*Prepared for
Town of Mammoth Lakes, California*

*Prepared by:
Reinard W. Brandley
Consulting Airport Engineer*

January 2015

The preparation of this document was financed, in part, through the Airport Improvement Program financial assistance from the Federal Aviation Administration as provided under Title 49 U.S.C., Section 47104. The contents do not necessarily reflect the official views or policy of the FAA. Acceptance of this report by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted herein nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public laws.

**MAMMOTH YOSEMITE AIRPORT
AIRPORT LAYOUT PLAN UPDATE NARRATIVE
TOWN OF MAMMOTH LAKES, MONO COUNTY, CALIFORNIA**

TABLE OF CONTENTS

	Executive Summary	ES-1
Chapter 1.	Introduction	1-1
	1-1 General	1-1
	1-2 History	1-1
	1-3 Need for Study	1-3
Chapter 2.	Inventory	2-1
	2-1 Location and Setting	2-1
	2-2 Climate	2-1
	2-3 Geography	2-1
	2-4 Soils and Geology	2-1
	2-5 Ground Access	2-3
	2-6 Airfield Facilities	2-3
	2-7 Building Facilities	2-6
	2-8 Airspace and Navigational Facilities	2-7
	2-9 Obstructions	2-7
	2-10 Industrial and Commercial Property	2-8
	2-11 Drainage and Utilities	2-8
Chapter 3.	Aviation Forecasts	3-1
	3-1 Introduction	3-1
	3-2 Airport Role	3-1
	3-3 Aviation Activity Parameters and Measures to be Forecast	3-1
	3-4 Review of Previous Airport Forecasts	3-2
	3-5 Data Collection	3-2
	3-6 Forecast Methods	3-3
	3-7 Planning Assumptions and Constraints	3-4
	3-8 Commercial Service Overview	3-5
	3-9 Load Factor & Enplanement Data	3-7
	3-10 Evolution of Service and Development of the MMH Growth Plan	3-7
	3-11 Comparable Airport Review	3-12
	3-12 General Aviation	3-14
	3-13 MMH Aviation Forecast 2013 to 2033	3-16
	3-14 Local Support for Airport Development	3-18
Chapter 4.	Demand Capacity Analysis and Facility Requirements	4-1
	4-1 Design Standards	4-1
	4-2 Alternate Airport Study	4-2

Chapter 4.	Demand Capacity Analysis and Facility Requirements (Continued)	
4-3	Airfield Capacity	4-2
4-4	Airline Terminal	4-4
4-5	Runway Length	4-5
4-6	Pavement Strength	4-6
4-7	Taxiway System.....	4-7
4-8	Airfield Safety Areas	4-7
4-9	Navigational Aids	4-8
4-10	Building Restriction Line (BRL)	4-8
4-11	Air Traffic Control Tower	4-8
4-12	General Aviation Requirements	4-9
4-13	Fixed Base Operators (FBO) and Administrative Facilities	4-9
4-14	Helicopter Facilities.....	4-9
4-15	Fueling	4-9
4-16	Airport Maintenance.....	4-10
4-17	Utilities	4-10
4-18	Security.....	4-10
4-19	Land Acquisition	4-11
Chapter 5	Airport Layout Plan Development	5-1
5-1	General	5-1
5-2	Airfield Facilities.....	5-1
5-2.1	Runway	5-1
5-2.2	Heliport	5-2
5-2.3	Taxiways	5-2
5-2.4	General Aviation Facilities	5-3
5-2.5	Terminal Facilities	5-3
5-2.6	Access Road	5-4
5-2.7	Land Acquisition	5-4
5-2.8	Obstruction Lighting	5-4
5-2.9	Runway Safety Area (RSA) and Runway Object Free Area (ROFA)	5-4
5-2.10	Industrial/Commercial Land.....	5-4
Chapter 6	Airport Layout Plan Update.....	6-1
Chapter 7	Environmental.....	7-1
Chapter 8	Airport Financial Plan.....	8-1
Chapter 9	Utilities and Drainage.....	9-1
Chapter 10	Recommendations	10-1
10-1	Airport Reference Code (ARC)	10-1
10-2	Site Analysis	10-1
10-3	Runway.....	10-1

Chapter 10 Recommendations (Continued)

- 10-4 Taxiways..... 10-3
- 10-5 Airline Terminal..... 10-4
- 10-6 General Aviation 10-5
- 10-7 Access Roads..... 10-7
- 10-8 Land..... 10-7
- 10-9 Security..... 10-8
- 10-10 Non Standard Conditions..... 10-8

LIST OF TABLES

Chapter 3. Aviation Forecasts

- 3-1 MMH Historical and Forecast Growth 3-19
- 3-2 MMH & Comparable Airports – Historical and Forecast Growth 3-20
- 3-3 MMH Forecasts 3-21
- 3-4 Comparison of Airport Planning and TAF Forecasts of Based Fixed Wing Aircraft 3-22
- 3-5 Comparison of Airport Planning and TAF Forecasts of Annual Operations – Fixed Wing Aircraft..... 3-23

Chapter 4. Demand Capacity Analysis and Facility Requirements

- 4-1 Airport Reference Code Parameters..... 4-1
- 4-2 Airport Design Standards – MMH 4-3
- 4-3 Pavement Condition Numbers PCN – MMH..... 4-7

LIST OF PLATES

Chapter 3. Aviation Forecasts

- 3-1 Historical and Forecast based Aircraft Trends 3-24
- 3-2 Historical and Forecast Annual Aircraft Operation Trends..... 3-25
- 3-3 MMH and Comparable Airports - Annual Enplaned Passengers Historical and Forecast 3-26
- 3-4 MMH and Comparable Airports – Annual Commercial Operations Historical and Forecast..... 3-27
- 3-5 MMH and Comparable Airports – Annual Total Operations Historical and Forecast..... 3-28

LIST OF EXHIBITS

Chapter 2. Inventory

- 1 Location Map 2-2
- 2 Airport Photomap 2-4
- 3 Terminal Area Photomap 2-5
- 4 Aeronautical Section Map 2-10
- 5 MMH Growth Plan - 2013 to 2023 3-10
- 6 Peer Market Comparisons 3-13
- 7 Mammoth Yosemite Airport Turbine Aircraft Visits 1999-2013 .. 3-15
- 8 Letter of Support from MMSA to FAA 3-29
- 9 Letter of Support from Mammoth Lakes Tourism..... 3-31
- 10 Letter of Support from Inyo County Superintendent of Schools . 3-32

AIRPORT PLANS

REDUCED SIZE INCLUDED IN REPORT – FULL SIZE SUBMITTED SEPARATELY

- Title and Index..... Sheet No. 1
- Airport Layout Plan – Existing – B III..... Sheet No. 2
- Data Tables..... Sheet No. 3
- Non-Standard Conditions Tables Sheet No. 4
- Terminal Area Layout Plan..... Sheet No. 5
- Proposed Declared Distance for Runway 9-27 Sheet No. 6
- Future Declared Distance for Runway 9-27 Sheet No. 7
- Airport Airspace Drawing – Existing Layout Sheet No. 8
- Airport Airspace Drawing – Future Layout Sheet No. 9
- Airport Airspace Plan and Profile – Existing and Future Layout..... Sheet No. 10
- Inner Portion of Approach Surface Plan – Existing Sheet No. 11
- Inner Portion of Approach Surface Plan – Future Sheet No. 12
- ALUC Airport Safety Zone Plan/Land Use Plan (Existing Runway) ... Sheet No. 13
- Airport Property Map – Exhibit “A” Sheet No. 14

APPENDICES

Appendix A Alternate Airport Site Development Study

Appendix B Airport Capital Improvement Program (ACIP)

EXECUTIVE SUMMARY

Mammoth Yosemite Airport (MMH), located 7 miles east of the Town of Mammoth Lakes immediately to the north of U.S. Highway 395, serves the commercial and general aviation needs of the Mammoth Lakes area. The main attractions to Mammoth Lakes include the Mammoth Mountain Ski Area (MMSA), Devils Postpile National Monument, fishing, boating, hiking, biking, mountain recreation, festivals, and other arts & cultural events. It is near the east entrance to Yosemite National Park, the Inyo National Forest, and several wilderness areas.

With the backing of Mammoth Mountain Ski Area (MMSA), Mammoth Lakes Tourism (MLT), the Town of Mammoth Lakes (Town), and Mono County, (collectively the “Air Partners”) a commercial passenger airline service program has been initiated. All entities are committed to significantly enhance, expand, and sustain this program for the long term. In the winter of 2012/13 up to six daily airline flights operated at this airport – three by Alaska Air using Bombardier Q400 aircraft and three by United Airlines using CRJ700 aircraft. The flight program is expected to increase to a point where there will be 82,435 enplaned passengers by the year 2023. Over the next 10-year planning period it is expected that the Q400 and CRJ700 will remain the critical aircraft at the airport. Larger aircraft that can accommodate up to 150 passengers such as the B737 or A319 may see service at the airport beyond 2024, but the current planning horizon is 2023. Commercial operations and security are currently accommodated in an interim airline terminal that has very limited capacity with a single gate.

There are eight small general aviation aircraft currently based at the airport and the population base is not expected to support much increase in based aircraft.

There are extensive itinerant aircraft operations at MMH with aircraft ranging from small single engine aircraft to the business jet aircraft up to the Gulfstream G-V class. These aircraft serve Mammoth Lakes from the Central and Western United States.

The fixed base operator has constructed 94 hangars on the airport ranging from small glider storage buildings to large hangars that accommodate business jets. These hangars have been sold to individual owners throughout the Central and Western United States so that they can hangar their aircraft when they visit the Mammoth Lakes area. This itinerant aircraft operation is expected to continue and increase.

MMH is currently classified as Airport Reference Code (ARC) B III by the FAA’s Airport Reference Code classification system. Several aircraft of the ARC C III class, both commercial and private, now use the airport. Because ARC C III class aircraft currently use the airport, it is recommended that any proposed new development be designed, wherever feasible, to meet ARC C III standards. This will mitigate the need for reconstruction should the airport classification change to ARC C III at some point in the future.

This Airport Layout Plan Update identifies areas on the airport that need updating and expansion. The major items include the following:

1. Runway – The single Runway 9-27 meets the requirements for wind coverage and capacity, but it should be extended. Extension to 8,200 feet is possible within land owned by the Airport. Extensions to 9,000 feet are possible if the Airport acquires from the USFS the land between current airport property and Hot Creek Road right of way. It is recommended that the Airport acquire this property in order to reserve the capability of extending the runway to 9,000 feet and to protect the airport from improper development of this land. The runway width of 100 feet meets FAA requirements for the current fleet of aircraft and for C III aircraft with takeoff weights less than 150,000 pounds. Forecast growth indicates that aircraft anticipated to utilize the airport within the forecast period will operate at gross takeoff weights less than 150,000 pounds. The airport has the potential to widen the runway if it becomes necessary. The runway shoulders will also need to be widened from 12 to 20 feet.

Declared distances should be applied to provide a 1,000-foot clearway at each end of the runway so as to increase the total takeoff distance available (TODA) by 1,000 feet for each direction of operation.

The runway pavement sections are adequate to serve existing aircraft and proposed aircraft operations for the next 20 years so far as deep-seated distress is concerned. Deep-seated distress contributes to a fatigue-type failure of the total pavement section caused by repeated loading. The recently completed Pavement Maintenance Management Plan indicates that if forecast traffic is realized and B 737 class aircraft are added in 10 years (2024), at the rate of 350 departures per year the total remaining life of the runway pavement will be reduced to 20 years (2034) and the taxiways to 15 years (2028).

The asphalt pavement on the runway and taxiways has a polymer-modified asphalt to retard or eliminate the formation of thermal cracking caused by extreme daily temperature variations. These pavements are in excellent condition but should be inspected annually. Any defects that develop should be corrected by normal maintenance procedures. If at a later date thermal cracking begins as evidenced by transverse cracks spaced at 200 to 500 feet, then the installation of a jointing system should be considered to control the width of the cracks and to allow normal maintenance of the pavements.

2. Taxiways – All existing taxiways are 50 feet wide. The Q400 aircraft wheelbase is wide, and the taxiway edge safety margin is only 8 feet. It is recommended that the taxiways be widened to 75 feet, that the taxiway-to-taxiway and taxiway-to-runway fillets be widened to FAA minimums, and that 25-foot paved shoulders be added to each side of the taxiways. The pavement sections for the taxiways are adequate to support proposed traffic for the next 20 years and maintenance procedures listed for the runway applies to the taxiways.

3. Airline Terminal – The existing interim airline terminal is over-crowded when more than one aircraft is on the ground at the same time. The small size will limit the number of commercial operations that can be accommodated until a new terminal is constructed. The winter airline service is designed mainly to accommodate skiers. The skiing visitors wish to arrive at MMH on Thursday or Friday before 10:00 a.m. and leave Sunday or Monday after 5:30 p.m. so as to maximize time on the ski slopes. As a result, commercial operations are concentrated on Thursday and Friday before 10:00 a.m. and Sunday and Monday after 5:30 p.m., leading to peaking of airline activity during these periods. A recently completed Terminal Area Study indicates the need for a 40,000 square foot terminal to be built as soon as possible. This terminal would have three gates, which will handle multiple Q400 aircraft, and would be expandable to six gates. It is recommended that this terminal be developed as early as possible. Necessary roads and automobile parking lots will be required to serve the increased number of passengers using the airport.
4. Commercial Aviation Apron – The Terminal Area Study indicates the need for a commercial apron that can accommodate three Q400 or similar aircraft and would be expandable to accommodate six aircraft. Currently, deicing operations of commercial aircraft occur at the terminal gate, which takes time and decreases the capacity of the apron. It is recommended that a separate deicing pad be developed away from the terminal to decrease the time that the aircraft park at the terminal and thus increase capacity. The separate deicing pad can also be designed to collect and dispose of excess deicing fluids.
5. General Aviation Apron – The general aviation apron has a current capacity of 74 small aircraft tie down positions. During holidays and busy weekends there are more itinerant aircraft visiting the airport than can be comfortably accommodated. It is recommended that additional general aviation apron be constructed in the future. At least 300,000 square feet of new pavement will be required to meet the projected need.
6. General Aviation Hangars – There are adequate hangars on the airport to serve forecast needs for the next 10 years and beyond.
7. Access Roads – Currently MMH is served from U.S. Highway 395 by Hot Creek Hatchery Road and Airport Road. The access road in front of the proposed new terminal and adjacent automobile parking facilities will be required to serve the passengers using the new terminal. Provision should be made to widen the access road in the future to provide emergency access to the facility. This roadway system can continue to serve the airport.
8. Land – All land surrounding the airport belongs to the United States Forest Service (USFS) or the Los Angeles Department of Water and Power (LADWP). It is critical that the Airport work closely with these agencies and the County

Airport Land Use Commission to ensure none of this land is released for any development that may have an adverse effect on the operation and/or safety of operations at MMH. The airport should consider acquisition of the land currently leased from the LADWP so that it would have fee simple title ownership rights over the majority of airport property. The parcels that make up the airport property, plus potential property interests are shown on the Airport Property Map, Exhibit A, and include:

Existing (246.53 acres):

Parcel A – 196.23 Acres – Airport Property – Existing – Fee Simple Title

Parcel B – 33.00 Acres – 50-year Lease LADWP – Existing – Future Acquisition

Parcel C – 17.30 Acres – USFS Special Use Permit – Existing – Future Acquisition

Future (98.62 acres):

Parcel D – 34.86 Acres – Auto Parking Lot and Apron – USFS – Future Lease or Acquisition

Parcel E – 18.88 Acres – RPZ Runway 27 – LADWP – Future Acquisition

Parcel F – 5.76 Acres – RPZ Runway 27 – LADWP – Future Acquisition

Parcel G – 39.12 Acres – RPZ Runway 9 – USFS – Future Lease or Acquisition

It is recommended Parcels B, E, and F be acquired in fee simple title from LADWP. It is recommended a 50-year special use permit be acquired from USFS on Parcels D and G or that Parcels C, D, and G be acquired in fee simple title from USFS.

9. Security – Current fencing at the airport includes chain link fencing in the terminal area and barb wire fencing for the remaining portion of the airport. New 8-foot chain link fencing should be constructed around the entire airport to protect against human and wildlife incursions.
10. Non-Standard Conditions – Several non-standard conditions exist at this airport. Several can be corrected with the reasonable expenditure of funds and these should be corrected as soon as funding becomes available. There are some non-standard conditions that cannot be corrected at this time for economic, environmental, or, land use reasons; these are listed on Sheet 4, “Non-Standard Conditions,” of the Airport Layout Plan drawings. These non-standard conditions can be safely accommodated as required by maintaining appropriate minimums of ceiling and visibility or possibly instituting appropriate operational procedures, depending on the size of the aircraft operating. Any operational procedure put in place would not have a significant effect on aircraft operations or cause

significant delays because the frequency of operation of larger aircraft at the airport is minimal.

Other existing non-standard conditions are caused by objects located in the outer edges of the runway and taxiway object free areas. Doe Ridge and several of the hangars penetrate the runway and taxiway object free area and/or Part 77 surfaces on the north side of the airport. It is recommended that a line of obstruction lights be constructed parallel to the runway and located 390 feet from the centerline of the runway to clearly identify the inner edge of these obstructions.

Portions of Highway 395, including the roadway and right of way fence, are within the ROFA and trucks on the road penetrate the Part 77 transitional surfaces. It is not economically feasible at this time to relocate the runway or the highway to correct these deficiencies. These non-standard conditions should be evaluated in the next planning cycle. These non standard conditions have had little or no effect on existing or forecast aircraft operations. No immediate remedial action is proposed, but these issues should be reviewed if any operational problems are perceived during the next planning program.

All existing non-standard conditions, together with proposed actions to deal with these deficiencies, are indicated on Sheet No. 4 of the ALP update plans included in this report.

CHAPTER 1. INTRODUCTION

1-1 General

Mammoth Yosemite Airport (MMH) is located in the Sierra Nevada mountain range east of the divide in a moderately broad valley. It is located 7 miles east of the Town of Mammoth Lakes (Town) adjacent to U.S. Highway 395. Up until 2008 the airport served the general aviation fleet with mostly itinerant operations bringing in visitors to enjoy the recreation facilities in and around Mammoth Lakes including the Mammoth Mountain Ski Area (MMSA), Devils Postpile National Monument, fishing, boating, hiking, biking, mountain recreation, festivals, and other arts & cultural events. It is near the east entrance to Yosemite National Park, the Inyo National Forest, and several wilderness areas. Some modest airline service was provided prior to 2008. Beginning in 2008, scheduled airline service has been provided to MMH.

1-2 History

World War II through 1965: Mammoth Yosemite Airport (MMH) was originally constructed by the United States (U.S.) Army for use as an auxiliary landing strip during World War II. The original dimensions of the landing strip were less than 4,000 feet in length by 30 feet in width. Mono County acquired part of the airfield from the U.S. Army after the war and renamed it Long Valley Field. The runway was an unpaved dirt strip and the airport was a seasonal facility closed by winter snows until it was paved in 1959. The airport was operated as an unattended landing strip until the early 1960s.

1965 to 1978: In 1965 the runway was extended to 5,000 feet and widened to 100 feet. Also at this time, the runway was relocated 300 feet to the north on USFS land to accommodate the future widening of U.S. Highway 395, which runs adjacent to the airport. The airport was renamed Mammoth Lakes Airport and private interests operated the airfield. Mammoth Sky Lodge Corporation, then the airport operator, extended the runway to 6,500 feet in 1971. A terminal building and an airport office, currently used as an FBO office and pilots' lounge, were constructed in 1972. During this time the airport became formally known as Mammoth-June Lakes Airport. In 1973 Sierra Pacific Airlines initiated service using Convair 440 aircraft and served Mammoth Lakes until 1980.

1978 to 1992: Mono County entered into an agreement with Mammoth Sky Lodge Corporation to acquire all airport property in 1978 from the USFS; however, the acquisition of the airport was not consummated until 1980. Mono County reestablished public operation of the airport in 1980. Mono County began an airfield improvement program in 1983. Using funds received under the Airport Improvement Program (AIP) a new runway, 7,000 feet by 100 feet, was constructed.

1992 to 1995: The Town of Mammoth Lakes acquired the airport from Mono County in September 1992. United Express operated flights from Mammoth Lakes to Fresno, using 19-seat Jetstream 31 turboprop aircraft for the winter seasons of 1993 and 1994. Service reliability problems associated with overbooking and the 19-seat Jetstream aircraft led to passenger dissatisfaction, causing United Express to discontinue service. Additionally, Trans World Express terminated flight operations in 1995 due to reorganization of its major code share partner, Trans World Airlines. This reorganization of Trans World Airlines was required under Chapter 11 of the Federal Bankruptcy Code.

1997 to 2007: In 1997 new airport development was proposed for the airfield. Previous plans for the crosswind runway and supporting taxiways and golf course were abandoned. An extension of the current Runway 9-27 from 7,000 to 9,000 feet was proposed, as was the construction of a hotel/condominium complex.

The new airport development, reviewed in the 1997 EIR, included both airside and landside developments by a private developer. Airside improvements included the proposed building of up to 94 private and public use hangars, an aviation fuel storage complex, and facilities for the operation of a fixed base operator (FBO). Landside development consisted of a hotel and residential condominium complex, retail development, a restaurant complex, and a recreational vehicle park. Eventually 94 hangars and the airport water system were constructed but, for a variety of reasons, the bulk of the development was never constructed. Eventually, the developer sued the Town for breach of contract and prevailed. A settlement was reached in September of 2012, which dissolved the development agreement and returned development rights back to the airport.

In the late 1990s the Town and American Airlines proposed a large development project for MMH. The project included a longer and wider runway, a new terminal building, and related infrastructure to support Boeing 757 service from Dallas and Chicago and was based on a forecast of 330,000 annual passenger enplanements after 20 years. This project was enjoined in Federal court in 2003. After the injunction the Town has worked to initiate airline service at the airport. In 2005 an Environmental Impact Statement (EIS) was prepared to accommodate the Town's scaled-back vision for the airport. The EIS provided for regional commercial air service using aircraft of 80 seats or less, 8 flights daily in the winter, and summer service, all to regional markets. The EIS also approved the remodel of an existing airport structure, which is now the interim terminal building.

In 2000 the Town of Mammoth Lakes changed the name of the airport from Mammoth Lakes Airport to Mammoth Yosemite Airport.

2007 to 2013: By 2007 all the pavements at the airport had shown severe cracking caused by thermal stresses. In 2008 the entire runway/taxiway complex at the airport was reconstructed.

Air service began in December of 2008 with one flight daily from LAX flown by Alaska Airlines using the 76 seat Bombardier Q400. In 2010 United Airlines using the 70-seat Bombardier CRJ700 began service from SFO. Summer air service started in 2010 with Alaska Air from LAX. In the winter of 2010-11 air service had four daily flights. In the winter of 2013-14 there were up to six flights on peak days, with three flights by United Airlines and three by Alaska Air. The 2013-14 destinations included LAX, SNA, SAN, and SFO. Commercial air service has been highly successful as evidenced by the growth in the number of flights, markets, and passenger loads, particularly from the LAX and SAN area. Due to increased interest, for the 2014-15 season, flights have been added on a limited basis to LAS and DEN.

Prior to 2012 all airline contracts were negotiated by Mammoth Mountain Ski Area (MMSA) and any required subsidies were paid to the airline by MMSA. Since 2013 airline contracts are negotiated and subsidized as necessary by both MMSA and Mammoth Lakes Tourism (MLT). MLT is an independent body that is funded through a Tourism Business Improvement District (TBID) paid by local business and a portion of the Town of Mammoth Lakes transient occupancy tax. MLT is able to pay the bulk of the airline subsidy from funds generated by the TBID.

With six flights daily passenger overcrowding in the existing interim terminal building is a major problem. Issues include passengers waiting at the security boarding gate and outside the building with minimal waiting areas away from inclement weather. Flight delays at other airports can exacerbate the capacity problems both in the terminal area and the commercial ramp area. Issues include crowding of the ticket counters, TSA security checkpoints, hold rooms, rest rooms, baggage handling facilities, and space on the ramp for aircraft parking.

With six flights daily and the peaking of commercial operations required to attract the skiers, daily passenger overcrowding in the existing interim terminal building is a major problem, particularly during the winter ski season. All sections of the existing terminal are overcrowded. The hold room size is such a major problem that the Airport erected a temporary sprung structure as a temporary hold room, and the hold room capacity is still inadequate.

1-3 Need for Study

MMH is used by itinerant general aviation aircraft ranging in size from the small single-engine and twin-engine aircraft to large turbojet aircraft such as the Gulfstream G V. These aircraft are used to bring visitors to Mammoth Lakes to

enjoy the recreation facilities available in the area. This general aviation activity is expected to continue and increase.

There are currently 8 general aviation aircraft based at MMH – six are single-engine aircraft and two are twin-engine aircraft. The number of based aircraft at MMH is not expected to increase significantly.

An Airport Layout Plan was conditionally approved by the Federal Aviation Administration (FAA) on August 14, 2014. This Airport Layout Plan updates the 2000 ALP and brings current all the airport development requirements to safely accommodate the current and ten and twenty year forecast of airport activity and changes in FAA Standards.

A Terminal Area Study to identify airline terminal facility development required to accommodate forecast airline traffic was also completed in 2014. The results of this study were used in the development of the Airport Layout Plan Update Narrative. This Airport Layout Plan Narrative provides the results of studies conducted and research performed to provide the basis for the updated Airport Layout Plan.

The Town's General Plan supports year-round commercial air service as well as upgrades and improvements at the airport. The Airport Layout Plan Update is consistent with the General Plan of the Town.

This Airport Layout Plan and Narrative Report has been prepared to accommodate existing and forecast growth conditions and provide guidance for development of the airport to accommodate existing and forecast growth. It is important that the Airport Layout Plan be reviewed and updated periodically to plan for and accommodate any changes that develop. Flexibility has been incorporated into the Airport Layout Plan to allow for changes at the airport if and when they become necessary.

CHAPTER 2. INVENTORY

This inventory chapter provides data on existing conditions, including airside and building area facilities, airspace utilization, navigation aids, meteorological data, and air traffic data at the MMH.

2-1 Location and Setting

MMH is located in the eastern edge of the Sierra Nevada. It is a mountainous area with moderately broad valleys. The airport is located 7 miles east of the Town of Mammoth Lakes immediately to the north of U.S. Highway 395. The runway centerline is parallel to the adjacent US 395 highway centerline.

The nearest airports to the MMH are general aviation airports including Bishop, 32 miles to the southeast, Lee Vining, 22 miles to the northwest, and Bridgeport, 47 miles to the northwest. The nearest passenger commercial airports are Reno – 170 miles, Fresno – 190 miles, Sacramento – 220 miles, SFO Bay Area – 258 miles, Las Vegas – 310 miles, and LAX – 320 miles.

The location of the airport and adjacent facilities is shown on Exhibit 1.

2-2 Climate

MMH is located in the Sierra Nevada with an Airport elevation of 7,135 feet. During the summer the weather is generally clear and warm with no major rainfall. A few thunderstorms occur in the area during the summer. In the winter the weather is fairly cold with significant snow. Over the past ten years, MMSA, located approximately 10 miles to the west of this airport, has an average snowfall of 420 inches, with a high (over the last ten years) of 669 and a low of 222 inches. Throughout the year the weather is generally VFR conditions except during snowstorms in the winter, at which time visibilities and ceilings become very low. There is a significant range in temperature of approximately 30 to 40 degrees F from day to night. This differential occurs summer and winter.

2-3 Geography

The general area is mountainous. The airport is located in the Sierra Nevada Mountains. The airport is located adjacent to the mountains in a moderately wide valley.

2-4 Soils and Geology

The soils at the airport are generally waterborne clean sands with small gravel. They have a very high coefficient of permeability. Short ditches on the airport are adequate to infiltrate all of the storm water from the paved areas in the terminal and general aviation area. There are significant volcanic deposits in the Mammoth area, but none on the airport itself.

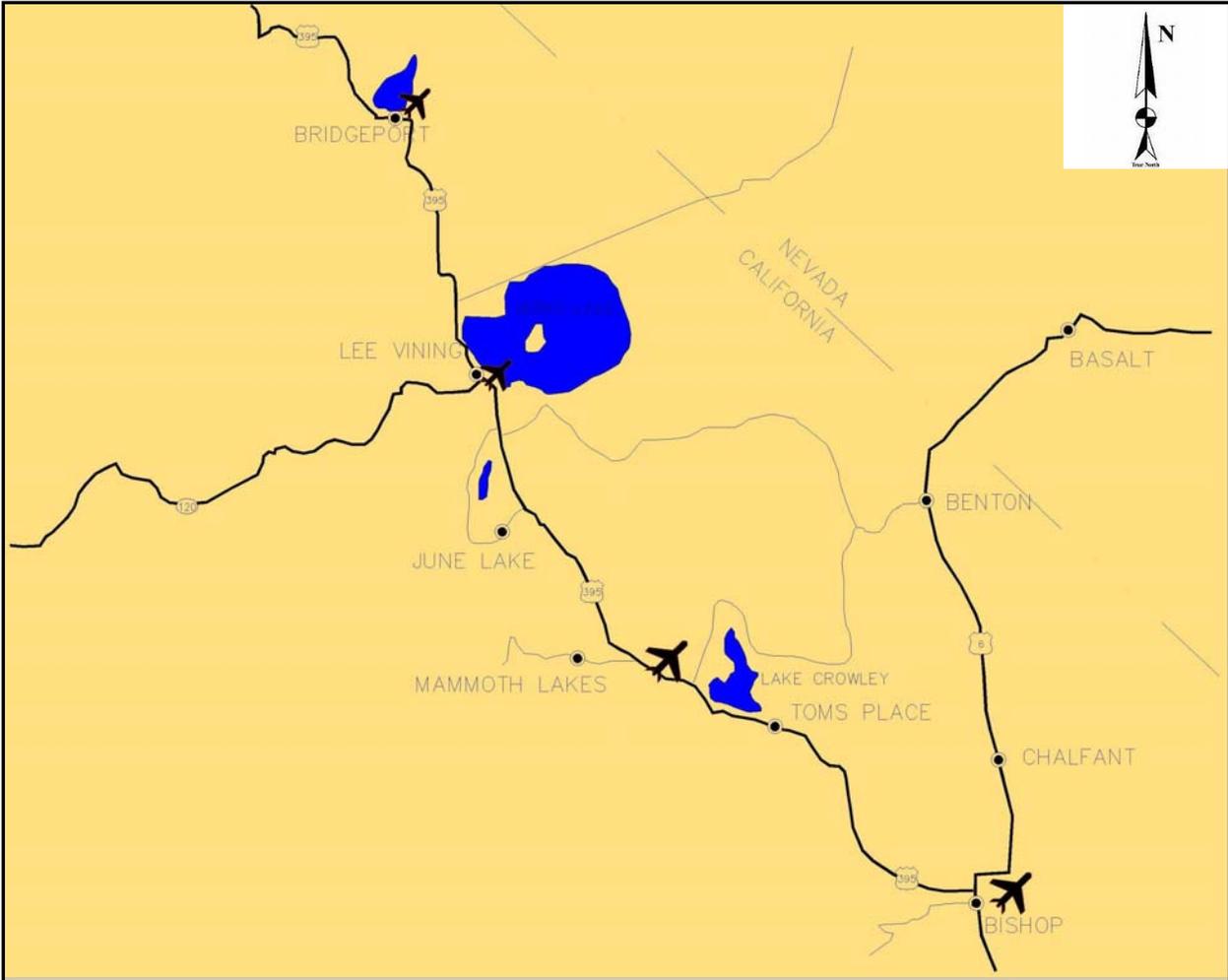


Exhibit 1
Location Map
Mammoth Yosemite Airport

2-5 Ground Access

MMH is located immediately adjacent to U.S. Highway 395. Access to the airport is from Highway 395 by way of Hot Creek Hatchery Road and Airport Road. This roadway system can continue to serve the airport.

2-6 Airfield Facilities

The airfield consists of features and facilities required to accommodate safe and efficient current and future aircraft operations. The airfield includes a runway, taxiways, aircraft parking aprons, hangar facilities, fixed base operators, and an interim airline terminal building. The major airfield facilities at this airport consist of the following:

- Runway 9-27 is 7,000 feet long by 100 feet wide with 12-foot paved shoulders. The runway has full-length runway sighting distance. The runway is lighted by a medium intensity runway lighting system.
- Taxiway A is parallel to Runway 9-27 and spaced at 300-foot centerline-to-centerline distance from the runway. The taxiway is 50 feet wide, runs the full length of the runway, and has holding aprons at each approach end of the runway. There are no paved shoulders on the taxiways.
- Cross Taxiways A1, A2, A3, A4, and A5 connect the runway and the parallel taxiway. These taxiways are 50 feet wide. There are no paved shoulders on these taxiways.
- The aircraft parking apron consists of 58,000 square feet of 12-inch Portland cement concrete and 417,000 square feet of flexible pavement section. There are 74 tie down spaces for small aircraft on the apron.
- A series of tee hangars and storage hangars have been constructed at the airport and are served by hangar taxilanes.
- There are two areas of privately owned hangars on leased airport property. These are designated as the East Hangars and the West Hangars and face the airfield.
- Access to the airport is by way of Airport Road off from Hot Creek Hatchery Road, which is a 24-foot wide paved dead-end road.
- There are two proposed automobile parking lots located near the new commercial terminal building which will provide approximately 130 parking spaces. The existing interim airline terminal has approximately 124 automobile parking spaces.
- All pavements on the airport, except the small PCC apron section, are flexible with an asphalt surface course.

In Exhibit 2 the Airport Photomap shows the general layout and surrounding area of the airport. Exhibit 3 is a Terminal Area Photomap that shows the main terminal area facilities.



Exhibit 2
Airport Photomap
Mammoth Yosemite Airport



Exhibit 3
Terminal Area Photomap
Mammoth Yosemite Airport

2-7 Building Facilities

Airline and Support Facilities:

In 2008, an existing equipment maintenance building was remodeled for use as an interim airline terminal. This 5,000 square foot building currently handles nearly all commercial operations, including electronic check-in kiosks, baggage check and passenger check-in. It is also utilized for TSA screening and the secure passenger waiting area, including restrooms. Airline baggage pick up is located outside of the building. The building also houses rental car operations. Apart from these passenger areas, the building also includes areas for TSA baggage screening, lost baggage storage, and airline and TSA storage lockers. Any time there is more than one commercial aircraft on the ground, most parts of the terminal facility experience severe congestion. It has been found to be too small to accommodate existing traffic, let alone the forecast increased traffic.

In 2011, a fabric 2,250 square foot membrane structure (Sprung Structure) was erected adjacent to the terminal to serve as an additional hold room. This structure, which has a projected useful life of approximately 20 years, includes additional restrooms, a non-secure passenger waiting area and a minimal food and beverage operation. A communication system does enable waiting passengers to hear airline arrival and departure and other announcements.

Other ground transportation providers are typically stationed outside, using movable kiosks.

General Aviation:

There is one Fixed Base Operator (FBO) office and pilots' lounge on the airport, a small Airport Manager's Office, and an electrical and telephone vault.

Ninety-four hangars on the airport were constructed by the FBO on leased property of which ninety-one were sub-leased to individual aircraft owners and three retained by the FBO. One of the FBO hangars is sub-leased by the airport as an ARFF/maintenance unit. The other two hangars are sub-leased to individual aircraft owners. Tenants typically store their airplanes indoors each year when they come to the area for skiing and other recreational activities.

These ninety-four hangars consist of the following units:

<u>West</u>	<u>East</u>	<u>FBO</u>	<u>Unit Size</u>
--	16	--	60' x 56' = 3,360 sq. ft.
--	3	--	72' x 70' = 5,040 sq. ft.
22	--	--	10' x 36' = 360 sq. ft.
30	--	--	42' x 40' = 1,680 sq. ft.
20	--	--	50' x 48' = 2,400 sq. ft.
--	--	3	72' x 70' = 5,040 sq. ft.

Airport Leased Hangars:

Thirty-five hangars have been constructed at the airport on land leased by the airport to individual owners. One of these hangars is owned by the airport and used for storage of equipment. The remaining tenants typically store their airplanes indoors each year when they come to the area for skiing and other recreational activities. These hangars were constructed at different times and range in size from 1,077 to 3,480 Square feet.

Water System:

There is a 1,080 square foot building that houses domestic water pumps and electrical switch-gear. There are two wells that are enclosed with small removable covers adjacent to the pump station and a 450,000 gallon storage tank.

2-8 Airspace and Navigational Facilities

MMH is located 24 miles south of V244, 18 miles southwest of V381, and 9 miles southeast of V230. Aircraft flying V230 and V244 are generally at high altitudes and aircraft operating at MMH are not affected by those operations.

Exhibit 4 is a copy of a portion of the SFO Sectional, which shows the relationship of the airport to other facilities.

There is a VOR at Bishop, California, which is located 32 miles to the southeast of the airport, but terrain does not allow acquisition of the VOR transmission at lower altitudes in the vicinity of MMH. MMH has an AWOS III P to provide current weather conditions to the pilots. MMH has published instrument approaches using GPS to Runway 27 and a GPS approach to Runway 27 circling to land on Runway 9.

2-10 Obstructions

Studies have shown there are a number of items located around the airport that are considered obstructions based on FAR Part 77. Major obstructions include:

- Doe Ridge: Doe Ridge, located north of the threshold of Runway 27 is an obstruction to both the transitional surface and the horizontal surface.
- Highway 395 Utility Poles: One power pole and one telephone pole on the south side of the runway immediately north of U.S. Highway 395 penetrate the transitional surface and are lighted with solar-powered obstruction lights.
- Benton Crossing Utility Poles: A floodlight pole and power pole on Benton Crossing Road to the east of the airport are obstructions to the threshold siting departure surface but only penetrate that surface by 2 to 4 feet. These poles are proposed to be lighted with solar powered obstruction lights or lowered.

- Mountains: The mountains to the south, west, and northwest penetrate the Part 77 horizontal surface and the conical surface.
- East Hangars: The East hangars are within the Runway Object Free Area. A portion of the east hangars is located in front of the Building Restriction Line.
- West Hangars: Several of the west hangars penetrate the threshold siting surface on the north side of the airport.
- Portions of Highway 395 are within the ROFA and trucks operating on this highway penetrate runway departure surfaces.

The Airport proposes to install a row of obstruction lights parallel to and 390 feet north of the runway centerline to clearly identify the edge of Doe Ridge and the East and West Hangars.

Obstruction lights are in place at the top of the power and telephone poles located south of the runway and are proposed to be installed on the floodlight and power pole at Benton Crossing Road. Obstruction lights are also in place on Doe Ridge.

2-10 Industrial and Commercial Property

All lands surrounding the airport are owned by the USFS or the Los Angeles Department of Water and Power (LADWP) and are not readily available for industrial/commercial development.

2-11 Drainage and Utilities

Water is provided by on-site wells and storage tanks. A pump system provides domestic low flows and has a high capacity fire flow pump. The storage tank is a 450,000 gallon bolted steel tank that provides operational and fire storage. The water system is owned and operated by the Town of Mammoth Lakes.

Sewer facilities currently consist of septic tanks and leaching fields, which are very effective due to the high coefficient of permeability of the sand and gravel soils. It is proposed with future development to construct a package sewage treatment plant at the airport and to continue to use leach fields for disposal of effluent. No water is to be released on the surface of the ground.

Electrical service is provided by Southern California Edison. Telephone service is provided by Verizon. There is no natural gas service at the airport. Propane, stored in tanks located adjacent to the terminal building, airport office, FBO building, FBO hangars, and the east & west hangars, is used to heat buildings on the airport.

The airport is also served by the Digital 395 fiber optic cable that can provide high speed communications and internet service. This facility was completed in 2014.

There is no off-site drainage from or onto the airport. All storm water infiltrates the ground, except in paved areas, where the storm water is collected and carried to ditches or leach fields and rapidly infiltrates into the ground.

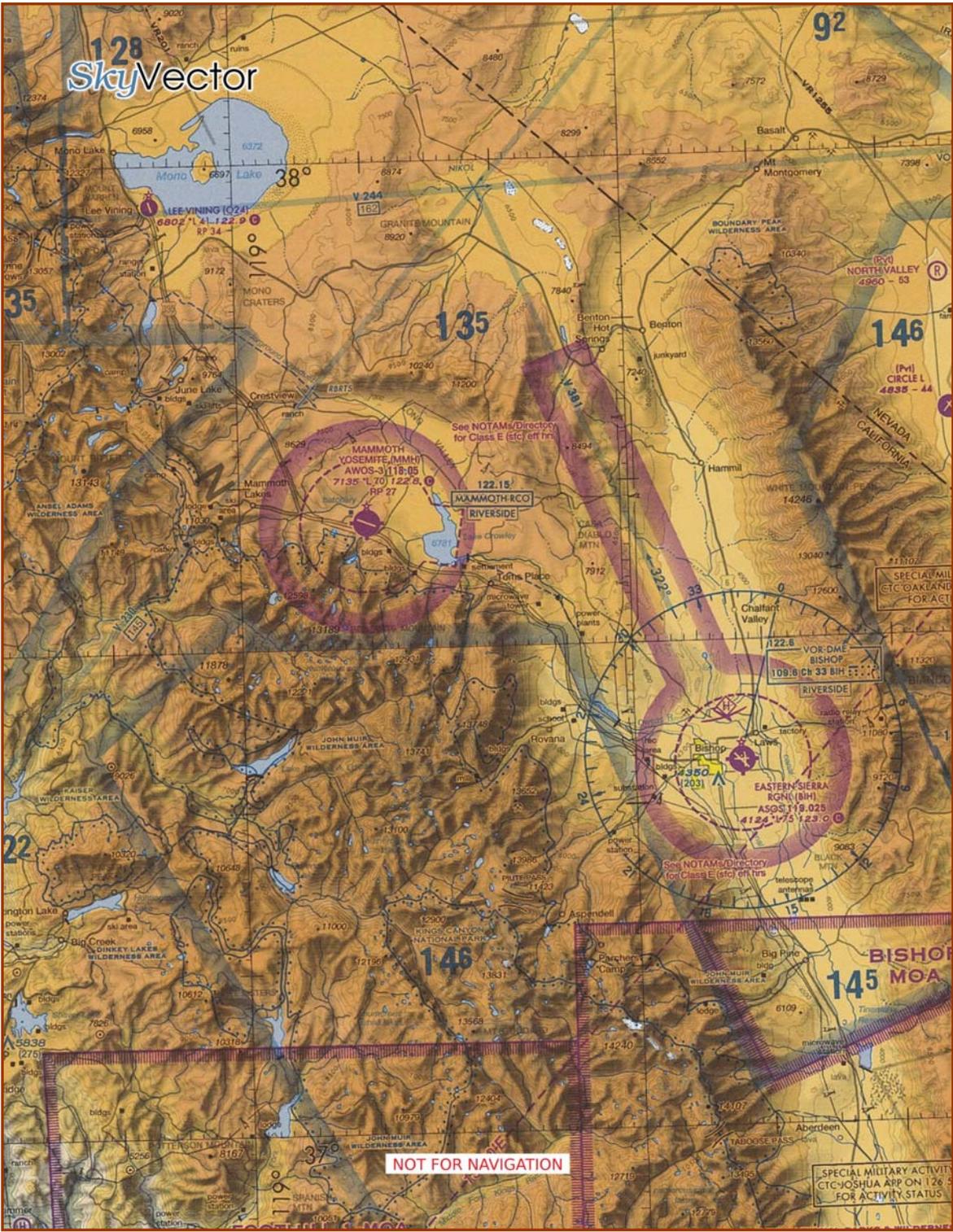


Exhibit 4
Aeronautical Section Map
Mammoth Yosemite Airport

CHAPTER 3. AVIATION FORECASTS

3-1 Introduction

The aviation forecasts provide estimates for future aviation demand at the airport. Projections of aviation demand are important in the planning process as they provide the basis for the orderly development of the airport including:

- Documentation of the role of the airport and determination of the type of aircraft to be accommodated in the ten and twenty year planning period
- Evaluation of the capacity of existing airport facilities and their ability to accommodate proposed expansion.
- Estimation of extent of airside and landside facilities required to accommodate forecast traffic beyond the ten year forecast.

The MMH aviation forecast considers various sources of information, including: The MMH Growth Plan 2013 to 2023, analysis and comparison of peer resort airport enplanements and aircraft operations; trend forecasts based on population and economic factors; and share analysis based on share of traffic at MMH as compared to FAA Western Pacific, Northwest Mountain Region Airports, and other airports located in the United States. Using this information the Town forecasts 82,435 enplanements in 2023 and 3,746 commercial operations (each take-off or landing is a single operation).

3-2 Airport Role

MMH has previously served and will continue to serve as an airport that provides service for general aviation and commercial aircraft from the Central and Western United States, bringing visitors to the recreation facilities available in the area including skiing, fishing, hiking, biking, festivals and other arts and cultural events, and access to Yosemite National Park. MMH is included in the FAA's National Plan of Integrated Airport Systems (NPIAS) and is classified as a Primary airport. Primary airports are those that have scheduled commercial service and enplane more than 10,000 passengers in a year.

3-3 Aviation Activity Parameters and Measures to be Forecast

The major activities and measures to be forecast include:

- Airline Enplanements
- Scheduled Commercial Operations
- General Aviation Operations (Itinerant, Local)
- Based Aircraft

3-4 Review of Previous Airport Forecasts

Historical forecasts for commercial operations at MMH are obsolete and do not reflect the current activity and plans at the airport. Today a different market strategy is being pursued for the airport, so historical forecasts for commercial operations will not be used for this study.

Historical forecasts for general aviation activity were reviewed for this study and found to be consistent with current forecasts.

3-5 Data Collection

The most recent FAA Terminal Area Forecast (TAF) was obtained for historical and forecast aviation activity for the entire United States, the FAA Western Pacific Region, and MMH. Forecasts presented in the California Aviation System Plan (CASP) were obtained and reviewed. This CASP data is from 2005 and does not represent current conditions. Airline historical and forecast data were obtained for peer airports similar to MMH that serve major ski resorts, ski resorts with similar skier days, national parks, and mountain recreational areas. The additional data collected included the following:

3-5.1 Population

The population of the Town of Mammoth Lakes and all of Mono County was obtained. It was found that the population for all of Mono County is 14,074 persons. The population of the county has remained relatively stable over the last decade, increasing by a little over 1,000 persons since 2000. The population is not expected to increase significantly over the next decade.

3-5.2 Employment

The major employment in the area is the service industry, (including lodging, food services, and retail services) with the government (Town, County, State, and Federal) being the second largest employment sector.

3-5.3 Annual Aircraft Operations

Historical and forecast annual aircraft operations were obtained from the FAA TAF, CASP reports and airport records. Annual operation forecasts for airline service are as reflected in the MMH Growth Plan (Exhibit 5) and MMH Aviation Forecast 2013 to 2033 (Article 3-13).

3-5.4 Fleet Mix

Fleet mix data were acquired from the Airport and from the MMH Growth Plan. The general aviation fleet mix ranges from light single-engine propeller aircraft to light twin-engine propeller aircraft to the small jet powered aircraft, larger piston aircraft, and the large jet powered aircraft of the Gulfstream V class. The fleet mix for the airlines is as indicated in the MMH Growth Plan. The airlines currently use Q400 and CRJ700 aircraft, which are expected to continue serving MMH over the 10-year planning period. The MMH Growth Plan also contemplates service by larger aircraft, such as B737, at some point beyond 2023. Those larger aircraft could be better accommodated if the runway is extended to 8,200 or greater in the future.

3-5.5 Helicopter Operations and Based Helicopters

There are no based helicopters at the airport. Helicopter operations are limited to a small number of military, police, USFS, medical emergency, and fire suppression agencies.

3-5.6 Based Aircraft

Historical based aircraft data were collected from the FAA TAF, CASP and airport records. TAF indicates four current based aircraft and no increase over the next ten years. Airport inventory indicates that there are currently eight based aircraft at the airport and that there have been eight to ten based aircraft at the airport for the past six to eight years.

3-6 Forecast Methods

The forecast passenger enplanement and commercial aircraft departures for the 10-year period, 2013 to 2023, were largely based on the MLT Growth Plan. The forecasts for the following 10-year period, 2023 to 2033, were based on the assumption that the growth rate in the later years would be comparable to the average forecast growth rate for the peer airports studied. Airline passenger and operations forecasts are discussed further below.

For based aircraft and local general aviation operations, trend analyses were conducted using population and employment as comparable features. Share analyses were used with share of based aircraft and operations compared to the total National and Western Pacific Region numbers. In the trend analysis historical data were used to develop a reasonable relationship between the number of based aircraft or number of aircraft operations per unit of population or employment. This ratio was applied to the forecast population data available from local agencies. The trend analysis is only valid at MMH for based aircraft and local aircraft operations. Itinerant aircraft operations, airline passenger enplanements, and commercial operations are not dependent on local population

or employment, but rather on the recreational facilities available in the area and the ability of MMH to identify and secure airline contracts in skier market areas. The existing and forecast number of based aircraft is small, as are the local operations, and will have little effect on the requirements for development at the airport.

Forecasts for general aviation itinerant operations were established by historical data obtained from Airport Management. In addition to the small single and twin-engine propeller driven aircraft that utilize the airport, there are significant numbers of larger propeller driven and turbojet aircraft that bring people to the airport for skiing and other recreational activities. The use of this airport by larger aircraft has increased significantly over the past ten years and this trend is expected to continue.

3-7 Planning Assumptions and Constraints

The MMH Growth Plan and resultant MMH commercial airline forecast is essentially an unconstrained forecast and assumes airport infrastructure can be constructed as needed to facilitate the implementation of the Growth Plan. The main assumptions and recognized constraints are as follows:

3-7.1 Assumptions:

- The existing airline service will continue and grow as envisioned by the MMH Growth Plan (Exhibit 5) and MMH Aviation Forecasts 2013 to 2033 (Article 3-13).
- Existing terminal facilities (terminal building, terminal apron, terminal parking, and access road) will remain the same as they are today, for at least the next four years.
- A new terminal facility will be constructed and available for use starting with the 2019-20 winter season. The new facilities will provide the capability to accommodate additional flights during peak hours.
- The Q400 is the current design aircraft and is forecast to remain so for the next ten or more years. The CRJ700 also provides commercial service and is also forecast to remain in service at MMH.
- The existing runway length (7,000 feet) and current declared distances will remain the same for the next ten years or more, with the exception of TODA which, pending an FAA Aeronautical Survey, will be extended to 8,000 feet for Runways 9 and 27. These distances are:
 - Take off Run Available (TORA) – 7,000 feet
 - Take off Distance Available (TODA) – 7,000 feet (future 8,000 feet)
 - Accelerated Stop Distance Available (ASDA) - 7,000 feet
 - Landing Distance Available (LDA) - 7,000 feet.

- General aviation apron requirements through the ten year horizon will expand somewhat to accommodate larger itinerant aircraft operations on weekends and holidays.

3-7.2 Constraints:

- Terminal Building – The existing airline terminal building is overcrowded during daily peak hours and only one flight can be processed at a time.
- The terminal does not provide the level of service that travelers to ski resorts are accustomed to, regarding comfort, convenience, time of travel and scheduling. In general, the current temporary terminal does not meet the traveling public’s expectations when visiting a ski resort.
- Terminal Apron – The size of the existing terminal apron limits aircraft parking to two aircraft maximum. While the apron can accommodate these two aircraft, even that requires careful coordination to appropriately park and maneuver the aircraft. This limits peak hour operations and would prevent full implementation of the MMH Growth Plan.
- Runway Length – The airport is at 7,135-foot elevation and the runway is 7,000 feet long. The Q400 and CRJ700 aircraft currently used at MMH cannot always operate at full load due to high-density altitude in the summer. The airlines find it necessary to off-load passengers or limit bookings during hot weather conditions because of the runway length limitation. Implementing a TORA of 8,000 should help alleviate this problem until the runway can be lengthened. During the winter ski season, density altitude is typically not a problem for either aircraft.

3-8 Commercial Service Overview

MMH has had varying levels of passenger service dating back to 1973 and running through 1996 when commercial service ceased. The service varied over that time in terms of airlines, aircraft type and destinations. Airlines included Sierra Pacific, Trans World Express, Royal Sky West and United Express. Destinations included, among others, Los Angeles, San Francisco and Fresno. Various turboprop aircraft with seat size ranging from 19 to about 44 were used including Convair 440, BAE 146, Beech 1900 and Jetstream 31. Annual enplanements ranged from a low of around 400 to high of about 16,600 according to the FAA Terminal Area Forecast.

Aside from MMH, the nearest passenger commercial airport to Mammoth Lakes is Reno-Tahoe International (RNO) in Reno, Nevada. RNO is used by many travelers for access to the gaming venues in Reno and to ski areas in the Lake Tahoe area. RNO is over 170 road miles from Mammoth Lakes, which is too far

to provide convenient air service to the Mammoth Lakes and Mammoth Mountain Ski Area (MMSA).

Under normal circumstances, it is not profitable for airlines to offer service to small communities such as Mammoth Lakes. There are, however, examples of small communities that enter into what is known as a Minimum Revenue Guarantee Contract (MRGC) with an airline in order to secure regular scheduled service (also known as an air carrier subsidy). Under the MRGC, the community essentially purchases seats from the airline in order to bring air service to an airport that airlines would not otherwise chose to serve. MRGCs are common at a number of small community airports that are near ski resorts.

Recognizing the benefits that schedule airline service brings to a community, a local partnership (the Air Partners), was established to implement a MRGC program for service to MMH. The Air Partners consist of the Town of Mammoth Lakes (Town), Mammoth Lakes Tourism (MLT) and Mammoth Mountain Ski Area (MMSA), supported by a consultant that specializes in airline service analysis and negotiation. The Air Partners entered into a MRGC with Alaska Airlines, which started seasonal (winter) service to MMH in December 2008, and then expanded to year round service in 2010. A MRGC with United Airlines was also established and United began operating seasonal (winter) service in December 2010. Since these two carriers started operating at MMH, passenger enplanements have grown significantly from 19,798 in 2010 (when year round service was initiated at MMH) to 30,858 in 2013.

To develop a MRGC, a cost for the season is negotiated with the airline based on a passenger demand forecast and other marketing factors. As the airline sells tickets, the revenue is credited to the contract. If the total amount of the revenue meets or exceeds the total cost of the program, the local entity pays nothing. If the revenue does not meet the goal, the local entity pays the airline the difference – this is the “revenue guarantee” required by the airlines and generally referred to as an airline subsidy.

From 2008 to 2013, MMSA was the lead negotiator with the airlines for the MRGCs. Beginning in 2014 MMSA and MLT became the lead negotiators for the MRGCs, in consultation with the Town. MLT became the primary funder of the subsidy in 2014. MLT taking the lead in funding the subsidy was made possible by the creation of a new revenue guarantee funding mechanism, the Mammoth Lakes Tourism Business Improvement District (MLTBID). MLTBID was formed by public referendum in which local businesses agreed to a special tax on themselves for the purpose of marketing the town as a resort destination with a unique brand. A portion of the funds raised by the MLTBID tax, approximately \$4.7 million annually, will be used to support commercial air service by funding MRGCs. MLT and MMSA are able to leverage revenue guarantee money to sustain existing markets and open new markets, as mature markets require less or possibly no subsidy. MMSA originally paid all of the subsidies under the

MRGCs and will continue to pay any amount of subsidy required, over and above that portion of MLTBID taxes committed to the MRGCs. Airline contracts are negotiated and executed on an annual basis with MMSA with the MLT and the Town participating in the process.

3-9 Load Factor & Enplanement Data

The load factor is the percentage of seats filled in comparison to the total number of seats on an aircraft. Load Factor can be used as a measure of market performance, an indicator of what level subsidies are required to sustain the MRGCs and in helping the Air Partners make decisions about continuation of MRGCs.

Demand for flights to MMH is directly related to the quality of skiing at MMSA, and is susceptible to the annual snowfall level. Records indicate the average snowfall is 420 inches, but it's not unusual to receive over that amount in a season. In addition, MMSA has the ability to make snow, typically starting sometime in November, extending the ski season in both directions. In 2013, California experienced its third straight year of drought. The air service history to date, including these drought years, demonstrates the Air Partners commitment to the MRGC program. MMH's average 2013 load factor was fifty four percent, which the Air Partners consider a success. The success of air service in the face of one of the worst droughts in California's history, suggests load factors in existing markets should continue to rise and that new markets can be introduced.

3-10 Evolution of Service and Development of the MMH Growth Plan

The Air Partners formulate and maintain an "MMH Growth Plan" to guide the development of air service at MMH. The current plan is reflected in Exhibit 5 and is the basis for the commercial service forecast. This section describes the evolution of the plan to date and the strategy for continuing development of air service at MMH.

The past four years' experience (2010-2013) has demonstrated that some of MMH's city pairs did not produce the anticipated number of enplanements. In some areas, service from one city pair would detract from service to another city pair. For example, the service between John Wayne Airport (SNA) in Santa Ana, California and MMH was found to have a low load factor and, in fact, decreased the number of passengers that would use the Los Angeles International Airport (LAX) to MMH flights. As a result, SNA-MMH service was dropped in the 2014-15 season. This was also the case with the San Jose International (SJC)-MMH flights, where the SJC flights negatively impacted passenger levels on the San Francisco International (SFO) flights.

It has been a challenge for the Air Partners to fill available seats for mid-week flights, so their focus is now on customizing the day of week travel in each

market. As the passenger demand within the market is more fully understood markets will be analyzed so as to boost load factor from inception. New markets will be analyzed to assess competition and their flight patterns, connecting flights origins and destinations, winter season activity of competitors, cost per operation, and ability to link multiple flight schedules. Entering new markets with seven day a week service will typically not be done, instead flights will be scaled back during certain times of the month and days of the week and increased when passengers want to fly. For example, service to Las Vegas (LAS) will start with flights on Monday and Thursday and be expanded when justified by demand. Some existing service may be scaled back, for example the LAX second flight may fly only four times a week instead of seven. This will allow MMH to leverage subsidy payments to the new or existing routes that require it. If a route no longer needs a subsidy, that money can be shifted to initiate a new route or expand an existing route. The approach going forward for the current markets of Los Angeles (LAX), San Diego (SAN) and San Francisco (SFO) is to target Thursdays, Fridays, Sundays, and Mondays as main demand days for service during the winter. Flights during other days of the week will be reduced. A similar growth concept will apply to proposed new markets such as Denver (DEN), Las Vegas (LAS), and Phoenix (PHX). Some existing service may be scaled back, for example the second daily LAX flight may fly only four times a week instead of seven. The operations will initially target these high demand days of the week. Some markets, such as DEN, will start with only a Saturday flight, but may expand to Sundays and Fridays when there is information developed and available to evaluate the passenger traffic. Each market will be tested and the Air Partners will make annual decisions about any proposed schedule changes.

A market will typically be given two to three years to determine if service within that market should be continued. The Air Partners continuously evaluate and adjust service within each market with the goal of keeping load factors above sixty percent after three years of service, depending on the market. Markets can be eliminated if they do not perform well enough and new markets initiated. The Air Partner's goal is not necessarily to eliminate all airline subsidies, but to use them effectively to increase visitation to Mammoth Lakes and its tourist based industries.

MMH Growth Plan: The marketing and funding strategies used to develop the MMH Growth Plan are discussed above. Key factors considered in the development of the plan include:

- The formation of the Air Partners (Town of Mammoth Lakes, Mammoth Mountain Ski Area, Mammoth Lakes Tourism)
- The ability to purchase seats with Minimum Revenue Guarantee Contracts (MRGC) from the airlines
- Air service funding sources such as the Mammoth Lakes Tourism Business Improvement District (MLTBID)

- Mammoth Lakes Tourism's (MLT) marketing strategies
- Historic MMH air service data and performance between 2008 and 2013
- Comparable airports growth
- Peer market studies
- Level of Service comparisons to other ski markets
- Peer resort load factor analysis
- Second home owners
- And other information

The *MMH Growth Plan 2013 to 2023* is presented in Exhibit 5. The Plan reflects an actual number of departures forecast. The number of scheduled departures would be higher, but Exhibit 5 assumes a ten percent loss in scheduled departures during winter and 2 percent loss during summer due to weather, mechanical, or other reasons

In summary, the Air Partners have the ability to purchase seats in markets that traditionally travel to Mammoth Lakes, or have large skier populations, or have hub airports, which provide airline connection opportunities to increase access to MMH by national and international skiers. Using the growth plan and applying a sixty percent load factor to the number of seats projected for purchase from the airlines, MMH is forecasting 82,435 enplanements by the year 2023.

MMH Growth Plan 2013 to 2018

Exhibit 5

Winter Scheduled Air Service (Dec 1 to Apr 30)

Terminal Opens

				2013 Actual		2014		2015		2016		2017		2018	
Aircraft				Total	Seats	Total	Seats	Total	Seats	Total	Seats	Total	Seats	Total	Seats
City	Type	Seats	Airline	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season
LAX	Q-400	76	AS	112	8,512	135	10,260	135	10,260	135	10,260	135	10,260	135	10,260
LAX	Q-400	76	AS	109	8,284	116	8,816	116	8,816	116	8,816	116	8,816	135	10,260
LAX	Q-400	76	AS											38	2,888
SNA	RJ	66	UA	108	7,128										
SAN	Q-400	76	AS	52	3,952	77	5,852	77	5,852	77	5,852	77	5,852	77	5,852
SAN	Q-400	76	AS											38	2,888
SFO	RJ	70	UA	108	7,128	135	9,450	135	9,450	135	9,450	135	9,450	135	9,450
SFO	RJ	70	UA	108	7,128	77	5,390	77	5,390	77	5,390	77	5,390	77	5,390
DEN	RJ	70	UA			15	1,050	19	1,330	19	1,330	19	1,330	30	2,100
SEA	RJ	70	AS											10	700
PDX	Q-400	76	AS												
LAS	Q-400	76	AS			38	2,888	38	2,888	38	2,888	38	2,888	64	4,864
PHX	RJ	70	AA											38	2,660
DFW	RJ	70	AA												
Totals				597	42,132	593	43,706	597	43,986	597	43,986	597	43,986	777	57,312
						4%		1%		0%		0%		30%	

Spring/Summer/Fall Scheduled Air Service (May 1 to Nov 30)

Terminal Opens

				2013 Actual		2014		2015		2016		2017		2018	
Aircraft				Total	Seats	Total	Seats	Total	Seats	Total	Seats	Total	Seats	Total	Seats
City	Type	Seats	Airline	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season
LAX	Q-400	76	AS	168	12,768	176	13,376	205	15,580	205	15,580	205	15,580	205	15,580
LAX	Q-400	76	AS							47	3,572	47	3,572	47	3,572
LAX	Q-400	76	AS												
SNA	RJ	66	UA												
SAN	Q-400	76	AS												
SAN	Q-400	76	AS												
SFO	RJ	66	UA											47	3,102
SFO	RJ	66	UA												
DEN	RJ	70	UA												
SEA	RJ	70	AS												
PDX	Q-400	76	AS												
LAS	RJ	70	US												
PHX	RJ	70	AA												
DFW	RJ	70	AA												
Totals				168	12,768	176	13,376	205	15,580	252	19,152	252	19,152	299	22,254
						5%		16%		23%		0%		16%	

Total Year Round Scheduled Air Service

Terminal Opens

				2013 Actual		2014		2015		2016		2017		2018	
Aircraft				Total	Seats	Total	Seats	Total	Seats	Total	Seats	Total	Seats	Total	Seats
City	Type	Seats	Airline	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season
LAX	Q-400	76	AS	280	21,280	311	23,636	340	25,840	340	25,840	340	25,840	340	25,840
LAX	Q-400	76	AS	109	8,284	116	8,816	116	8,816	163	12,388	163	12,388	182	13,832
LAX	Q-400	76	AS	0	0	0	0	0	0	0	0	0	0	38	2,888
SNA	RJ	66	UA	108	7,128	0	0	0	0	0	0	0	0	0	0
SAN	Q-400	76	AS	52	3,952	77	5,852	77	5,852	77	5,852	77	5,852	77	5,852
SAN	Q-400	76	AS	0	0	0	0	0	0	0	0	0	0	38	2,888
SFO	RJ	66	UA	108	7,128	135	9,450	135	9,450	135	9,450	135	9,450	182	12,552
SFO	RJ	66	UA	108	7,128	77	5,390	77	5,390	77	5,390	77	5,390	77	5,390
DEN	RJ	70	UA	0	0	15	1,050	19	1,330	19	1,330	19	1,330	30	2,100
SEA	RJ	70	AS	0	0	0	0	0	0	0	0	0	0	10	700
PDX	Q-400	76	AS	0	0	0	0	0	0	0	0	0	0	0	0
LAS	RJ	70	US	0	0	38	2,888	38	2,888	38	2,888	38	2,888	64	4,864
PHX	RJ	70	AA	0	0	0	0	0	0	0	0	0	0	38	2,660
DFW	RJ	70	AA	0	0	0	0	0	0	0	0	0	0	0	0
Totals				765	54,900	769	57,082	802	59,566	849	63,138	849	63,138	1,076	79,566
						4%		4%		6%		0%		26%	

Note: A 10 percent cancellation rate been applied to all winter operations and a two percent cancellation rate has been applied to summer operations.

Exhibit 5

MMH Growth Plan 2019 to 2023

Exhibit 5 Winter Scheduled Air Service (Dec 1 to Apr 30)

				2019		2020		2021		2022		2023	
City	Aircraft Type	Seats	Airline	Total	Seats	Total	Seats	Total	Seats	Total	Seats	Total	Seats
				Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season
LAX	Q-400	76	AS	135	10,260	135	10,260	135	10,260	135	10,260	135	10,260
LAX	Q-400	76	AS	135	10,260	135	10,260	135	10,260	135	10,260	135	10,260
LAX	Q-400	76	AS	38	2,888	38	2,888	38	2,888	38	2,888	38	2,888
SNA	RJ	70	UA	38	2,660	38	2,660	38	2,660	38	2,660	38	2,660
SAN	Q-400	76	AS	77	5,852	77	5,852	116	8,816	116	8,816	116	8,816
SAN	Q-400	76	AS	38	2,888	77	5,852	77	5,852	77	5,852	77	5,852
SFO	RJ	70	UA	135	9,450	135	9,450	135	9,450	135	9,450	135	9,450
SFO	RJ	70	UA	77	5,390	77	5,390	77	5,390	77	5,390	77	5,390
DEN	RJ	70	UA	30	2,100	30	2,100	77	5,390	77	5,390	77	5,390
DEN	RJ	70	UA							30	2,100	30	2,100
SEA	RJ	70	AS	30	2,100	30	2,100	30	2,100	77	5,390	116	8,120
PDX	Q-400	76	AS	30	2,280	30	2,280	30	2,280	77	5,852	77	5,852
LAS	Q-400	76	AS	38	2,888	38	2,888	77	5,852	116	8,816	116	8,816
PHX	RJ	70	AA	38	2,660	38	2,660	77	5,390	77	5,390	77	5,390
DFW	RJ	70	AA			10	700	30	2,100	30	2,100	77	5,390
Totals				839	61,676	888	65,340	1,072	78,688	1,235	90,614	1,321	96,634
					8%		6%		20%		15%		7%

Spring/Summer/Fall Scheduled Air Service (May 1 to Nov 30)

				2019		2020		2021		2022		2023	
City	Type	Seats	Airline	Operations	Per Season								
				LAX	Q-400	76	AS	205	15,580	205	15,580	205	15,580
LAX	Q-400	76	AS	101	7,676	101	7,676	101	7,676	101	7,676	101	7,676
LAX	Q-400	76	AS										
SNA	RJ	70	UA									47	3,290
SAN	Q-400	76	AS			47	3,572	47	3,572	47	3,572	47	3,572
SAN	Q-400	76	AS										
SFO	RJ	70	UA	47	3,290	47	3,290	47	3,290	47	3,290	47	3,290
SFO	RJ	70	UA					47	3,290	47	3,290	47	3,290
DEN	RJ	70	UA										
DEN	RJ	70	UA										
SEA	RJ	70	AS										
PDX	Q-400	76	AS										
LAS	RJ	70	US										
PHX	RJ	70	AA			58	4,060	58	4,060	58	4,060	58	4,060
DFW	RJ	70	AA										
Totals				353	26,546	458	34,178	505	37,468	505	37,468	552	40,758
					19%		29%		10%		0%		9%

Total Year Round Scheduled Air Service

				2019		2020		2021		2022		2023	
City	Aircraft Type	Seats	Airline	Total	Seats	Total	Seats	Total	Seats	Total	Seats	Total	Seats
				Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season	Operations	Per Season
LAX	Q-400	76	AS	340	25,840	340	25,840	340	25,840	340	25,840	340	25,840
LAX	Q-400	76	AS	236	17,936	236	17,936	236	17,936	236	17,936	236	17,936
LAX	Q-400	76	AS	38	2,888	38	2,888	38	2,888	38	2,888	38	2,888
SNA	RJ	70	UA	38	2,660	38	2,660	38	2,660	38	2,660	85	5,950
SAN	Q-400	76	AS	77	5,852	124	9,424	163	12,388	163	12,388	163	12,388
SAN	Q-400	76	AS	38	2,888	77	5,852	77	5,852	77	5,852	77	5,852
SFO	RJ	70	UA	182	12,740	182	12,740	182	12,740	182	12,740	182	12,740
SFO	RJ	70	UA	77	5,390	77	5,390	124	8,680	124	8,680	124	8,680
DEN	RJ	70	UA	30	2,100	30	2,100	77	5,390	77	5,390	77	5,390
DEN	RJ	70	UA							30	2,100	30	2,100
SEA	RJ	70	AS	30	2,100	30	2,100	30	2,100	77	5,390	116	8,120
PDX	Q-400	76	AS	30	2,280	30	2,280	30	2,280	77	5,852	77	5,852
LAS	RJ	70	US	38	2,888	38	2,888	77	5,852	116	8,816	116	8,816
PHX	RJ	70	AA	38	2,660	96	6,720	135	9,450	135	9,450	135	9,450
DFW	RJ	70	AA			10	700	30	2,100	30	2,100	77	5,390
Totals				1,192	88,222	1,346	99,518	1,577	116,156	1,740	128,082	1,873	137,392
					11%		13%		17%		10%		7%

Note: A 10 percent cancellation rate been applied to all winter operations and a two percent cancellation rate has been applied to summer operation

3-11 Comparable Airport Review

There are several airports in the Western United States that are located in areas of small population, but serve major ski areas, summer recreation facilities, and, in several cases, National Parks. These resorts are similar in size and facilities to MMSA, and have successful air service programs. A detailed comparison of peer resort airplane enplanements and commercial operations was made that included Yampa Valley, Eagle County, Aspen/Pitkin, Glacier Park, Montrose Regional, and Friedman Memorial (Sun Valley) Airports. These airports were chosen as they have similar population bases and similar recreation facilities to MMH. It is reasonable to expect MMH will have a growth rate similar to that of these peer review airports. It must be noted all of the peer review airports also subsidize the commercial operations. These airports generally find load factors above 50% acceptable.

A summary of peer market comparisons is included in Exhibit 6. A summary of enplaned passengers, commercial operations, and total operations for each of these peer review airports is included in Table No. 3-2 and Plates No. 3-3, 3-4, and 3-5. For comparison purposes the MMH Historical and Forecast Data are included in these plates and table.

PEER MARKET COMPARISONS							
	Aspen	Eagle	Yampa Valley	Montrose	Sun Valley	Glacier Park	Mammoth
2010 Enplanements	217,434	204,675	111,770	95,622	53,871	174,163	19,768
2010 Population *	15,932	54,216	23,592	41,830	22,740	93,849	13,185
Enplanements per Population unit	13.6	3.8	4.7	2.3	2.4	1.9	1.5
2010 Skier Days	1,400,000	1,620,000	1,000,000	430,000	362,317	360,000	1,460,000
Enplanements per Skier Day	0.16	0.13	0.11	0.22	0.15	0.48	0.01
1Q 2011 Load Factor	64.6%	68.1%	71.5%	71.9%	66.1%	84.5%	61.5%
Percent of Traffic in 1st Quarter	47.1%	73.7%	77.2%	46.2%	35.1%	22.7%	57.8%
1Q 2011 Average Fare	\$248	\$259	\$177	\$208	\$178	\$215	\$115

Source: Mammoth Lakes Economic Forecast & Revitalization Strategies; Diio Mi; US Census
ALP Narrative Report - Peer Review - Mead & Hunt (February 2012)

*Mono County Population

Exhibit 6 Peer Market Comparisons

3-12 General Aviation

MMH serves the Town and surrounding recreational areas. Aviation activity generally results from demand for access to the MMSA, Devils Postpile National Monument, fishing, boating, hiking, biking, mountain recreation, hot springs, festivals and other arts and cultural events. It is near the east entrance to Yosemite National Park, the Inyo National Forest, and several wilderness areas.

Aviation activity levels result from interaction of demand and supply factors. The demand for aviation is generally a function of demographic and economic activities. At MMH year-round recreation activities are the main attraction. Supply factors that influence activity levels include cost, competition, and remoteness. While there are very few aircraft based at this airport, there is significant activity by general aviation aircraft bringing visitors to the area.

MMH currently has eight aircraft based at the airport. Six are single engine and two are small twin engine. The based aircraft population is not expected to change appreciably in the forecast period since the local population consists of service and government employees that generally do not own and operate private aircraft.

While locally based operations at the airport are minimal – less than 10% of total operations – there are a significant number of itinerant operations at the airport. MMH serves itinerant GA aircraft ranging in size from the light single-engine propeller aircraft to the large jets up to the Gulfstream V class. A record of GA Turbine Aircraft visits to MMH has been kept since 1999 and is shown on Exhibit 7. While the number of visits of turbine aircraft varies from year to year, it is noted that since 2003 there have been more than 1,000 annual visits of turbine aircraft. In addition MMH has numerous military operations as the airport is located near the USMC's Mountain Warfare Training Center, Pickel Meadows. The airport also sees a substantial number of USFS operations for firefighting and law enforcement operations. MMH also has a large number of itinerant operations related to medevac trips.

There are three other general aviation airports within fifty miles of MMH. According to FAA Airport Master Records, Eastern Sierra Regional Airport in Bishop, California, serves sixty four based aircraft, Lee Vining Airport has one based aircraft, and Bryant Field in Bridgeport, California, has one based aircraft.

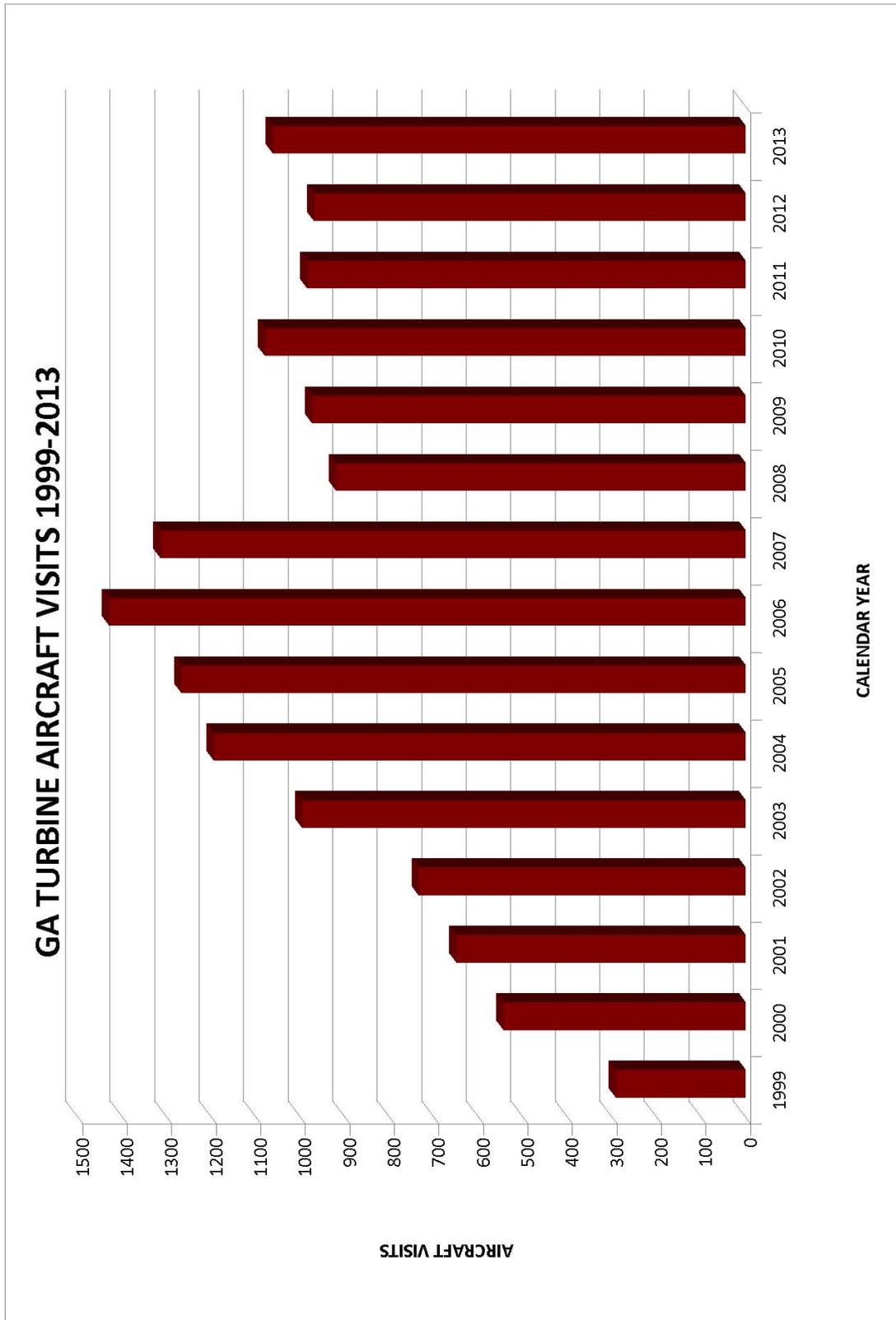


Exhibit 7
Turbine Aircraft Visits – 1999-2013

3-13 MMH Aviation Forecast 2013 to 2033

Historical and forecast aviation activity at MMH from 2010 to 2033 is summarized below:

MMH SUMMARIZATION AND DOCUMENTATION OF AIRPORT PLANNING FORECASTS								
Year	Seats	Enplanements	Q400 Operations	CRJ700 Operations	Total Commercial Operations	Itinerant Operations	Local Operations	Total Operations
Historic								
2010	47,588	19,798	1,228	14	1,242			
2011	51,582	26,196	1,116	278	1,394			
2012	56,242	27,246	926	638	1,564			
2013	54,900	30,858	882	648	1,530	5,900	620	8,050
Forecast								
2014	57,082	34,249	1,008	530	1,538			
2015	59,566	35,740	1,066	538	1,604			
2016	63,138	37,883	1,160	538	1,698			
2017	63,138	37,883	1,160	538	1,698			
2018	79,566	47,740	1,350	802	2,152	6,350	670	9,172
2019	88,222	52,933	1,442	942	2,384			
2020	99,518	59,711	1,690	1,002	2,692			
2021	116,156	69,694	1,768	1,386	3,154			
2022	128,082	76,849	1,862	1,618	3,480			
2023	137,392	82,435	1,862	1,884	3,746	6,700	730	11,176
2024								
2025	161,000							
2026								
2027								
2028	202,000	92,401			4,055	7,200	770	12,025
2029								
2030	236,000					7,220	790	
2031								
2032								
2033	297,000	106,344			4,340	7,700	820	12,860

Note: Each take-off and landing is a single operation.

Enplanements are calculated as 60% of the seats available (Load Factor of 60%).

3-13.1 Airport Operations Forecast

Airport operations have been broken down into three categories - local operations, itinerant operations, and commercial operations. The MMH Growth Plan, as described above, has been used to forecast the number of commercial operations. MMH is anticipating 3,746 commercial operations by 2023.

The projected increase in commercial operations is reasonable when compared to the operations at the peer review airports shown on Table No. 3-3 and Plate No. 3-4. The shape of the airline operation curve for MMH after the first few years of operations is similar to that existing and forecast for the peer review airports. The peer review airports generally showed a more rapid increase in the initial years of operation than does MMH. This is due to terminal facility restraints discussed previously that limit access to ski markets that MLT has targeted.

MMH is forecasting 730 local general aviation operations, and 6,700 itinerant general aviation operations in 2023. The historic and forecast operations are presented in Table No. 3-1, Table No. 3-3, Plate No. 3-2, Plate No. 3-4, and Plate No. 3-5. This data shows a significant increase in itinerant operations and commercial operations over the ten year forecast period, but a fairly small increase in local operations.

3-13.2 Design Aircraft

FAA defines the critical aircraft for planning purposes to be the largest aircraft group that has more than 500 operations per year. The Q400 meets this standard through the forecast period and is the critical aircraft. The Q400 is also the design aircraft for the new terminal building.

3-13.3 Fleet Mix Forecast

The fleet mix ranges from small single-engine aircraft to the small twins, large twin engine propeller aircraft, and small jets to large jets including Gulfstream V aircraft. The current commercial operations use Q400 aircraft and CRJ700 aircraft. The design aircraft, based on current and forecast operations, is the Q400.

3-13.4 Based Aircraft Forecast

The number of aircraft based at MMH is basically a function of local population and employment. The population of the Town of Mammoth Lakes and Mono County is small and the rate of growth is projected to be small. The employment is basically service and government. This type population, population growth, and employment do not support large numbers of based aircraft or local operations. There are eight aircraft based at the airport at this time: six light single engine aircraft and two twin-engine aircraft. Records indicate that for the past six to eight years the number of based aircraft has ranged from six to ten.

Trend analyses using population and employment as a base and share analyses using TAF for the Western Pacific Region and the total United States as a base, it is forecast that within ten years there will be ten aircraft based at the airport and that the local operations will only increase by a small amount. The number of based aircraft forecast and existing are shown on Table No. 3-3 and Plate No. 3-1. It will be noted that for the same period TAF indicates that there are only four aircraft based at the airport at this time and there will be no increase over the ten year period, which does not match existing conditions.

3-13.5 Helicopters – Based Helicopters and Helicopter Operations Forecast

There are no based helicopters at the airport, and those that use the airport are mainly fire service and U.S.F.S., military, medical evacuations, or agencies involved in fire suppression. Helicopter operations are not expected to experience much growth.

3-13.6 Comparison of MMH Aviation Forecast to FAA-TAF Forecasts

Comparisons of MMH forecasts to TAF forecasts of based aircraft and total operations have been prepared and are shown in Table No. 3-4 for the based aircraft and Table No. 3-5 for the total operations. It will be noted that the ratio of MMH forecasts to TAF forecasts for based aircraft range from 200% for the base year to 225% for the base year plus 10 years. This is brought about by the low values that TAF shows for based aircraft currently and no increase in over ten years. They show four aircraft based in the base year; whereas, actual count shows eight aircraft.

The comparison of MMH forecasts to TAF forecasts of annual enplaned passengers, annual commercial operations, and annual total operations is presented in Table No. 3-5. It will be noted that the ratio of MMH forecasts to TAF forecasts for enplaned passengers ranges from 107% in the base year to 285% in the base year plus ten years and for commercial operations the ratio ranges from 153% for the base year to 375% in the base year plus ten years. For total operations the ratio of MMH forecasts to TAF forecasts ranges from 97% in the base year to 135% in the base year plus ten years. The reason for these large discrepancies is that TAF does not anticipate the airline traffic development at MMH and does not consider any increase in airline or corporate aircraft operations for the ten year forecast period.

3-14 Local Support for Airport Development

There is significant support in the community for expansion of airline and itinerant general aviation activity growth at MMH. Typical letters of support from business, government, and local agencies are presented as Exhibits 8, 9, and 10.

TABLE NO. 3-1

MMH HISTORICAL AND FORECAST GROWTH

Year	Airline Seats	Enplaned Passengers*		Airline Operations*		Itinerant Operations		Local Operations		Total Operations	
		TAF	MMH	TAF	MMH	TAF	MMH	TAF	MMH	TAF	MMH
HISTORIC											
2008		0		0		5,389		1,896	600	7,285	
2009		5,021	6,157	120	0	5,389	5,600	1,896	600	7,405	
2010		18,252	19,798	1,000	1,242	5,389	5,600	1,896	600	8,285	
2011	81,888	24,471	26,196	1,000	1,394	5,389	5,700	1,896	605	8,285	
2012	68,038	28,917	27,246	1,000	1,564	5,389	5,800	1,896	612	8,285	
2013	54,900	28,917	30,858	1,000	1,530	5,389	5,900	1,896	620	8,285	8,050
FORECAST											
2014	57,082	28,917	34,249	1,000	1,538	5,389		1,896		8,285	
2015	59,566	28,917	35,740	1,000	1,604	5,389		1,896		8,285	
2016	63,138	28,917	37,883	1,000	1,698	5,389		1,896		8,285	
2017	63,138	28,917	37,883	1,000	1,698	5,389		1,896		8,285	
2018	79,566	28,917	47,740	1,000	2,152	5,389	6,350	1,896	670	8,285	9,172
2019	88,222	28,917	52,933	1,000	2,384	5,389		1,896		8,285	
2020	99,518	28,917	59,711	1,000	2,692	5,389		1,896		8,285	
2021	116,156	28,917	69,694	1,000	3,154	5,389		1,896		8,285	
2022	128,082	28,917	76,849	1,000	3,480	5,389		1,896		8,285	
2023	137,392	28,917	82,435	1,000	3,746	5,389	6,700	1,896	730	8,285	11,176
2024		28,917		1,000		5,389		1,896		8,285	
2025	161,000	28,917		1,000		5,389	6,900	1,896	745	8,285	
2026		28,917		1,000		5,389		1,896		8,285	
2027		28,917		1,000		5,389		1,896		8,285	
2028	202,000	28,917	92,401	1,000	4,055	5,389	7,200	1,896	770	8,285	12,025
2029		28,917		1,000		5,389		1,896		8,285	
2030	236,000	28,917		1,000		5,389	7,220	1,896	790	8,285	
2031		28,917		1,000		5,389		1,896		8,285	
2032		28,917		1,000		5,389		1,896		8,285	
2033	297,000	28,917	106,344	1,000	4,340	5,389	7,700	1,896	820	8,285	12,860

*Note: MMH enplanements are calculated as 60% of the seats available (Load Factor of 60%).

TABLE NO. 3-2
MMH and Comparable Airports
Historical and Forecast Growth

Year	Yampa Valley			Eagle County Regional			Aspen-Pitkin CO			Glacier Park International			Friedman Memorial			Montrose Regional			Mammoth Yosemite Airport							Year				
	Enplaned Passengers	Airline Operations	Total Operations	Enplaned Passengers	Airline Operations	Total Operations	Enplaned Passengers	Airline Operations	Total Operations	Enplaned Passengers	Airline Operations	Total Operations	Enplaned Passengers	Airline Operations	Total Operations	Enplaned Passengers	Airline Operations	Total Operations	Seats Available	Enplaned Passengers*		Airline Operatures*		Itinerent Operatures			Local Operatures		Total Operatures	
	TAF	TAF		TAF	TAF		TAF	TAF		TAF	TAF		TAF	TAF		TAF	TAF			TAF	MMH	TAF	MMH	TAF	MMH		TAF	MMH	TAF	MMH
1976	11,500			5,157			109,525			31,657			18,093			16,008				16,141										1976
1977	8,109			4,604			93,369			38,082			19,000			16,422				9,836										1977
1978	12,175			4,448			128,824			43,542			22,000			23,352				16,626										1978
1979	15,070			2,947			137,632			51,372			24,000			32,736				16,230										1979
1980	12,012			14			132,128			39,141			14,924			26,963				2,373										1980
1981	9,801			0			112,149			36,690			5,680			23,097				5,161										1981
1982	3,984			13,453			120,539			41,039			2,587			21,581				5,681										1982
1983	1,296			0			127,674			53,158			12,384			35,333				3,950										1983
1984	22			0			153,971			52,751			25,240			24,110				402										1984
1985	132			0			173,189			53,743			29,537			19,900				2,183										1985
1986	573			0			190,709			57,052			21,833			21,375				4,403										1986
1987	24,495			0			257,311			47,044			29,007			22,850				3,053										1987
1988	35,544			63			227,475			57,317			37,218			24,325				3,211										1988
1989	45,419			300			214,841			67,473			39,912			25,800				6,986										1989
1990	44,862	1,800	7,630	8,398	4,814	20,664	214,067	11,052	41,259	69,776	12,270	65,190	34,712	4,824	46,066	24,120	0	28,448	5,247		2,900		17,030		4,000		23,930		1990	
1991	59,355	3,932	8,256	29,749	1,484	21,234	204,137	12,935	47,662	79,069	12,465	64,715	38,938	9,337	53,719	25,425	0	23,014	5,897		3,000		17,030		4,000		24,030		1991	
1992	55,953	3,668	6,442	34,558	1,458	21,208	234,511	14,228	47,889	85,914	10,500	40,700	50,614	11,078	65,672	28,330	10	25,910	5,777		3,000		17,030		4,000		24,030		1992	
1993	63,866	3,668	6,442	53,200	2,048	21,798	250,981	14,102	47,315	88,937	10,500	40,700	54,066	9,767	63,019	37,096	40	25,940	9,328		3,000		17,030		4,000		24,030		1993	
1994	62,778	3,918	6,692	62,347	1,755	6,425	251,533	13,956	45,438	102,995	11,400	40,500	65,336	9,939	66,931	36,053	60	27,812	8,169		1,500		9,030		3,000		13,530		1994	
1995	81,549	8,982	11,806	77,167	6,699	27,399	204,907	8,894	43,934	114,845	10,670	62,050	63,109	8,570	54,245	40,867	160	19,610	7,518		1,500		9,030		3,000		13,530		1995	
1996	95,643	10,518	13,960	109,118	3,097	25,458	206,672	10,166	42,614	121,176	11,450	58,730	67,179	9,229	71,223	43,284	100	23,217	1,762		1,500		9,100		3,000		13,600		1996	
1997	105,906	7,138	10,602	164,415	4,364	29,511	217,343	14,396	44,612	133,275	8,660	55,460	60,356	7,596	64,320	55,591	104	23,540	0		1,200		9,050		3,000		13,250		1997	
1998	104,428	5,146	8,635	173,041	5,944	30,030	251,448	16,945	47,067	133,502	13,450	76,015	60,771	8,738	61,984	62,721	106	23,744	0		1,200		9,050		3,000		13,250		1998	
1999	109,066	5,436	8,950	172,429	7,847	33,307	219,909	11,036	44,510	142,698	13,730	64,610	66,996	10,443	58,296	72,119	107	23,969	0		800		9,050		3,000		12,850		1999	
2000	110,561	6,672	10,211	183,502	10,440	39,355	214,358	14,225	49,586	156,384	15,044	65,924	71,463	13,825	67,278	66,976	110	24,194	0		800		9,050		3,000		12,850		2000	
2001	102,290	5,670	11,278	173,478	10,327	39,267	363,654	15,843	46,042	159,376	15,044	65,924	63,540	12,768	52,375	71,098	2,000	23,964	0		800		9,050		3,000		12,850		2001	
2002	104,815	4,004	9,673	163,948	10,926	40,735	336,561	17,155	47,018	156,964	14,107	48,364	65,572	16,122	57,100	70,510	2,059	24,194	0		800		9,050		3,000		12,850		2002	
2003	100,475	4,098	9,828	166,416	11,270	43,341	192,251	16,629	43,780	169,265	15,914	50,761	72,621	14,733	44,473	67,813	2,081	24,387	0		800		9,050		3,000		12,850		2003	
2004	117,604	4,566	10,356	187,549	11,257	38,980	180,519	17,302	43,256	173,985	16,109	62,083	71,128	14,469	45,300	72,129	2,103	24,578	0		800		9,050		3,000		12,850		2004	
2005	125,563	4,762	10,614	209,764	11,316	41,041	191,579	17,834	44,778	195,385	19,250	65,602	69,604	15,228	43,978	77,203	2,247	25,206	0		0		9,100		3,000		12,800		2005	
2006	131,864	4,853	10,762	213,891	11,852	40,774	202,137	19,009	44,464	174,305	15,049	52,252	69,003	15,377	41,442	81,264	2,269	25,380	0		0		5,389		1,896		7,285		2006	
2007	140,765	4,947	10,914	228,421	13,053	42,033	180,951	19,022	42,947	185,390	16,459	55,017	67,863	14,220	48,220	93,110	2,292	25,558	0		0		5,389		1,896		7,285		2007	
2008	140,289	7,578	13,843	217,914	12,758	42,842	215,833	21,006	46,536	189,254	10,983	37,470	66,564	13,390	36,239	87,582	5,412	17,791	0		0		5,389	5,600	1,896	600	7,285		2008	
2009	122,076	6,862	12,399	180,272	8,994	31,302	207,165	18,444	40,924	162,826	9,116	28,502	50,540	10,929	29,243	90,943	5,412	17,791	5,021	6,157	120	0	5,389	5,600	1,896	600	7,405		2009	
2010	110,715	6,862	12,399	201,484	11,380	35,061	226,684	18,297	38,292	172,383	8,868	29,267	52,861	11,136	31,450	94,849	5,054	22,505	18,252	19,798	1,000	1,242	5,389	5,600	1,896	600	8,285		2010	
2011	105,750	5,273	9,677	190,739	10,664	32,484	204,287	17,755	37,121	178,282	8,836	28,150	50,985	10,195	28,304	89,283	5,054	22,505	24,471	26,196	1,000	1,394	5,389	5,700	1,896	605	8,285		2011	
2012	103,449	6,134	10,582	175,086	11,435	36,574	224,379	18,995	37,718	184,754	8,685	25,286	48,618	9,471	26,969	78,735	5,105	22,686	28,917	27,246	1,000	1,564	5,389	5,800	1,896	612	8,285		2012	
2013	106,289	6,251	10,744	178,803	11,664	36,766	229,741	19,217	37,077	187,646	8,771	24,905	50,308	9,635	25,869	78,983	5,154	22,866	28,917	30,858	1,000	1,530	5,389	5,900	1,896	620	8,285	8,050	2013	
2014	109,205	6,371	10,909	182,603	11,895	37,120	235,232	19,441	37,423	190,595	8,859	25,069	52,057	9,804	26,188	79,235	5,205	23,050	28,917	34,249	1,000	1,538	5,389		1,896	630	8,285		2014	
2015	112,203	6,494	11,077	186,489	12,134	37,483	240,854	19,669	37,774	193,602	8,947	25,234	53,866	9,975	26,510	79,492	5,258	23,239	28,917	35,740	1,000	1,604	5,389		1,896		8,285		2015	
2016	115,283	6,618	11,248	190,461	12,377	37,851	246,612	19,898	38,126	196,668	9,038	25,403	55,738	10,150	26,838	79,755	5,309	23,427	28,917	37,883	1,000	1,698	5,389		1,896		8,285		2016	
2017	118,447	6,746	11,421	194,522	12,625	38,225	252,505	20,130	38,483	199,797	9,129	25,572	57,675	10,327	27,169	80,022	5,362	23,620	28,917	37,883	1,000	1,698	5,389		1,896		8,285		2017	
2018	121,699	6,877	11,599	198,671	12,881	38,608	258,539	20,368	38,847	202,990	9,221	25,743	59,681	10,506	27,504	80,294	5,415	23,815	28,917	47,740	1,000	2,152	5,389	6,350	1,896	670	8,285	9,172	2018	
2019	125,040	7,010	11,779	202,912	13,141	38,996	264,718	20,608	39,213	206,247	9,316	25,917	61,754	10,690	27,845	80,571	5,468	24,013	28,917	52,933	1,000	2,384	5,389		1,896		8,285		2019	
2020	128,472	7,146	11,963	207,245	13,405	39,389	271,043	20,851	39,584	209,567	9,412	26,093	63,901	10,876	28,189	80,856	5,521	24,213	28,917	59,711	1,000	2,692	5,389		1,896					

**Table No. 3-3
MMH Forecasts**

**A. Forecast Levels
Base Year: 2013**

	Base Yr. Level	Annual Operations*					Average Annual Compound Growth Rates - Percent						
		Base Yr. + 1 Yr.	Base Yr. + 5 Yrs.	Base Yr. + 10 Yrs.	Base Yr. + 15 Yrs.	Base Yr. to +20	Base Yr. + 1 Yr.	Base Yr. + 5 Yrs.	Base Yr. + 10 Yrs.	Base Yr. + 15 Yrs.	Base Yr. to +20		
Passenger Enplanements													
Air Carrier	30,858	34,249	47,740	82,435	92,401	106,344	10.99	9.12	10.33	7.59	6.38		
Commuter	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		
TOTAL	30,858	34,249	47,740	82,435	92,401	106,344	10.99	9.12	10.33	7.59	6.38		
Operations - Fixed Wing													
<i>lineraut</i>													
Air carrier	1,530	1,538	2,152	3,746	4,055	4,340	0.52	7.06	9.37	6.71	5.35		
Commuter/air taxi	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		
Total Commercial Operations													
General aviation	5,900	6,000	6,350	6,700	7,200	7,700	1.69	1.48	1.28	1.34	1.34		
Military	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		
Local													
General aviation	620	630	670	730	770	820	1.61	1.56	1.65	1.45	1.41		
Military	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		
TOTAL Operations	8,050	8,168	9,172	11,176	12,025	12,860	1.47	2.64	3.34	2.71	2.37		
Instrument Operations	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00		
Peak Hour Operations	4.0	4.1	4.8	5.6	6.2	6.6	2.50	3.71	3.42	2.96	2.54		
Cargo/mail (enplaned + deplaned tons)													
Based Aircraft - Fixed Wing													
Single Engine (Nonjet)	6	6	6	7	7	8	0.00	0.00	1.55	1.03	1.45		
Multi Engine (Nonjet)	2	2	2	2	2	2	0.00	0.00	0.00	0.00	0.00		
Jet Engine	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		
Other	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		
TOTAL	8	8	8	9	9	10	0.00	0.00	1.18	0.79	1.12		
Helicopter**													
Based helicopters	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		
Helicopter operations	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		
TAF Total Operations	8,285	8,285	8,285	8,285	8,285	8,285	0.00	0.00	0.00	0.00	0.00		
TAF Based Aircraft	4	4	4	4	4	4	0.00	0.00	0.00	0.00	0.00		

*Airline forecast operations and enplaned passengers adjusted to indicate flights canceled due to weather and mechanical problems. Used 8%.
**Helicopter based and operations are not included in data for total operations.

B. Operational Factors

	Base Yr. Level	Base Yr. + 1 Yr.	Base Yr. + 5 Yrs.	Base Yr. + 10 Yrs.	Base Yr. + 15 Yrs.	Base Yr. to +20 Yrs.
Average aircraft size (seats)						
Air carrier	74	74	74	74	81	81
Commuter	0	0	0	0	0	0
Air taxi	0	0	0	0	0	0
Average enplaning load factor						
Air carrier	49	60	60	60	60	60
Commuter	0	0	0	0	0	0
Air taxi	0	0	0	0	0	0
GA operations per based aircraft	815	829	877	826	886	852

Sources: F.A.A. Terminal Area Forecasts (TAF)
Mammoth Yosemite Airport
Prepared by: Reinard W. Brandley, Consulting Airport Engineer

Table No. 3-4
Mammoth Yosemite Airport (MMH)
Comparison of Airport Planning and TAF Forecasts
of Based Fixed Wing Aircraft

	Year	Airport Forecast (AF)	TAF	AF/TAF (%)
Total Based Aircraft - Fixed Wing				
Base yr. - 2013	2013	8	4	200
Base yr. + 5 yrs.	2018	8	4	200
Base yr. + 10 yrs.	2023	9	4	225
Base yr. + 15 yrs.	2028	9	4	225
Base yr. + 20 yrs.	2033	10	4	250

Note: TAF data is on a U.S. government fiscal year basis (October through September).

Reason for discrepancy:

1. TAF assumed no increase in forecast annual operations since 1995.
2. Normal growth of airport operations expected to relate to population and employment growth.

Sources: F.A.A. Terminal Area Forecasts (TAF)
Mammoth Yosemite Airport (MMH)

Prepared by: Reinard W. Brandley, Consulting Airport Engineer

Table No. 3-5
Mammoth Yosemite Airport (MMH)
Comparison of Airport Planning and TAF Forecasts
of Enplaned Passengers & Annual Departures -
Fixed Wing Aircraft

	Year	Airport Forecast (AF)*	TAF	AF/TAF (%)
Passenger Enplanements				
Base yr. - 2013	2013	30,858	28,917	107
Base yr. + 5 yrs.	2018	47,740	28,917	165
Base yr. + 10 yrs.	2023	82,435	28,917	285
Base yr. + 15 yrs.	2028	92,401	28,917	320
Base yr. + 20 yrs.	2033	106,344	28,917	368
Commercial Operations				
Base yr. - 2013	2013	1,530	1,000	153
Base yr. + 5 yrs.	2018	2,152	1,000	215
Base yr. + 10 yrs.	2023	3,746	1,000	375
Base yr. + 15 yrs.	2028	4,055	1,000	406
Base yr. + 20 yrs.	2033	4,340	1,000	434
Total Operations				
Base yr. - 2013	2013	8,050	8,285	97
Base yr. + 5 yrs.	2018	9,172	8,285	111
Base yr. + 10 yrs.	2023	11,176	8,285	135
Base yr. + 15 yrs.	2028	12,025	8,285	145
Base yr. + 20 yrs.	2033	12,860	8,285	155

Note: TAF data is on a U.S. government fiscal year basis (October through September).

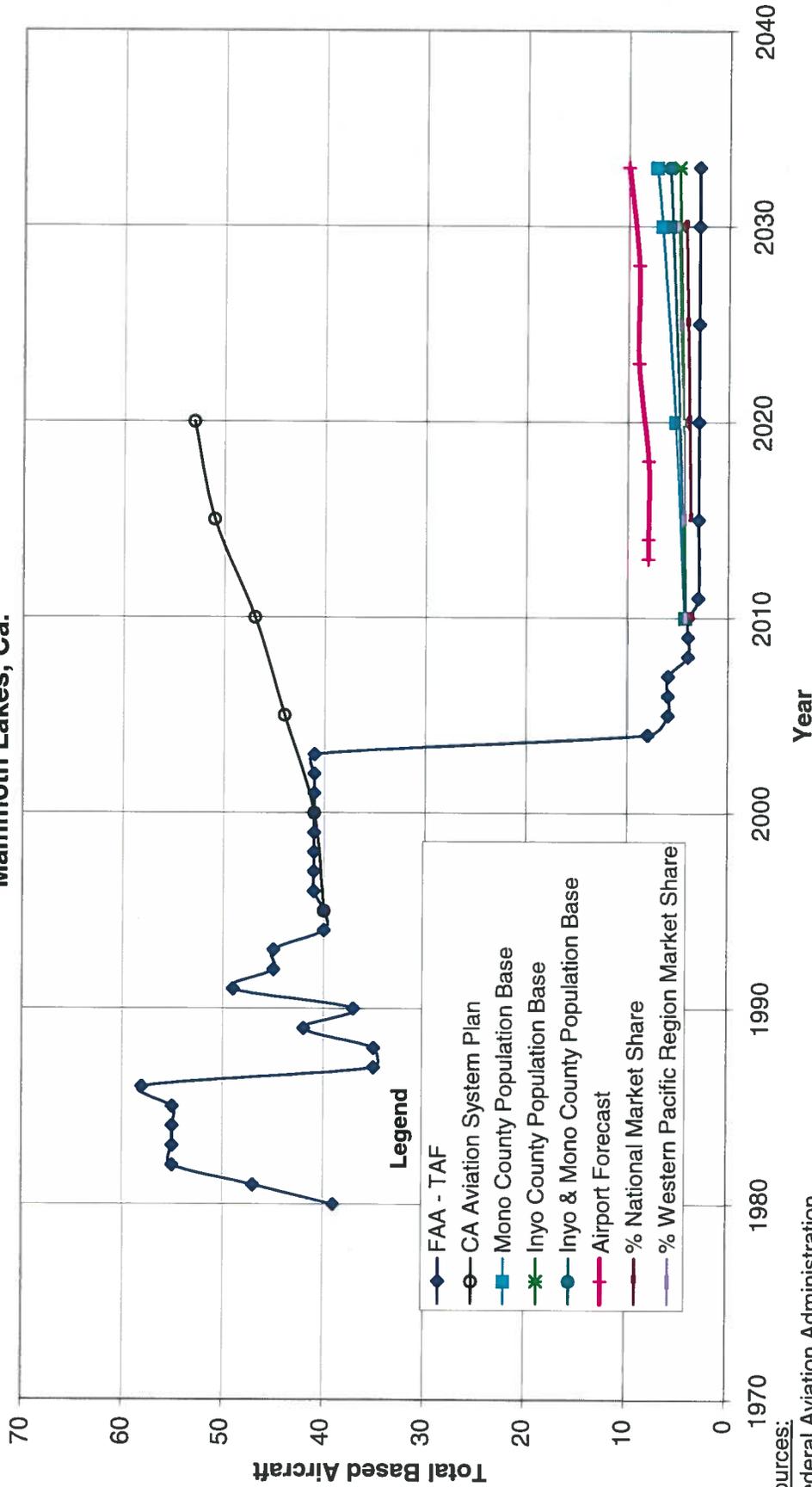
Reason for discrepancy:

1. TAF assumed no increase in forecast annual departures since 1995.
2. Normal growth of airport operations expected to relate to introduction of airline services, increased itinerant departures to provide access to recreational facilities, and population and employment growth.

Sources: F.A.A. Terminal Area Forecasts (TAF)
Mammoth Yosemite Airport (MMH)

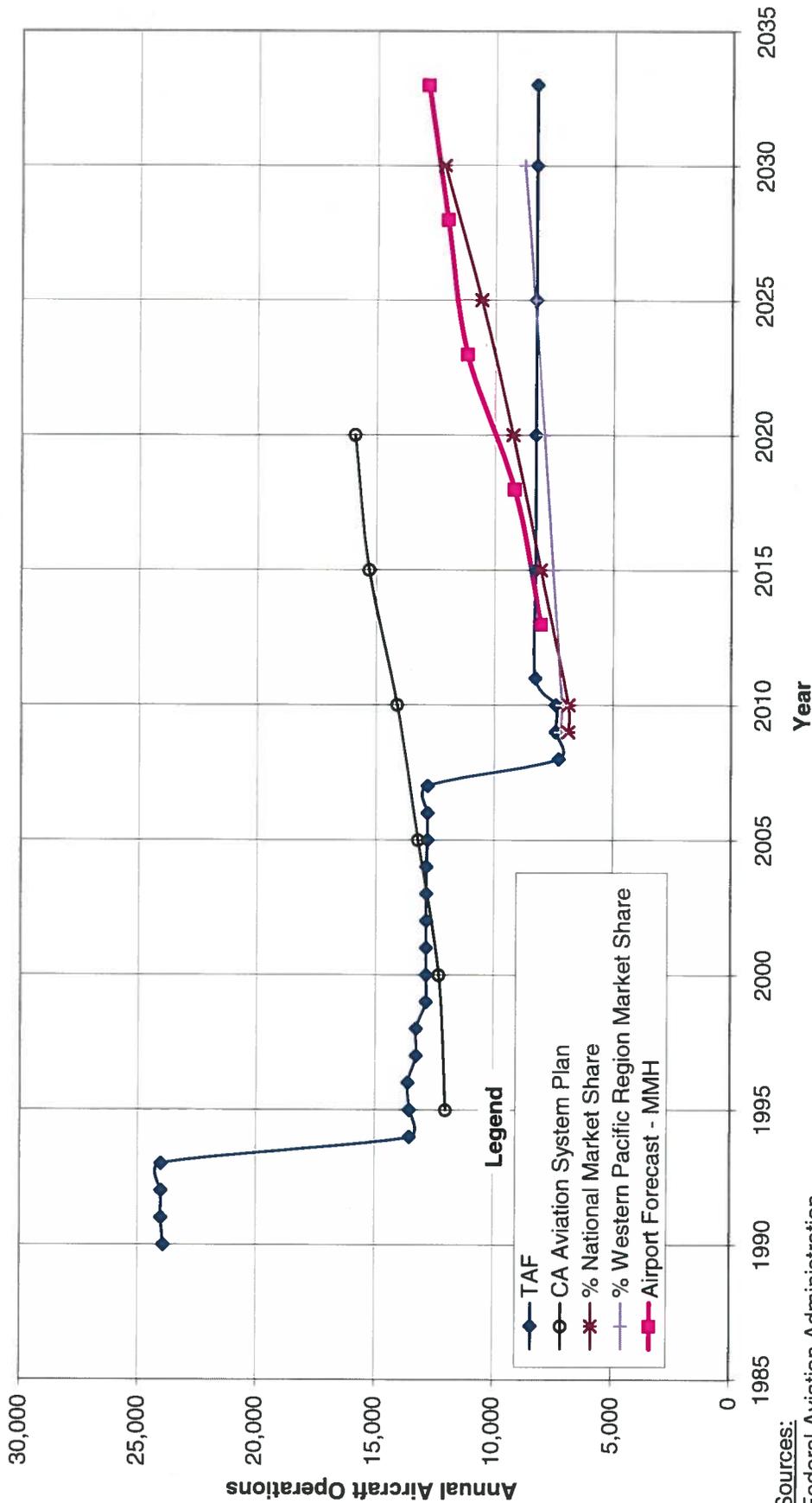
Prepared by: Reinard W. Brandley, Consulting Airport Engineer

Plate 3-1
Historical & Forecast Based Aircraft Trends
Mammoth Yosemite Airport,
Mammoth Lakes, Ca.



Sources:
 Federal Aviation Administration
 Ca. Aviation System Plan
 Ca. Department of Finance
 Town of Mammoth Lakes - Planning

Plate 3-2
 Historical & Forecast Annual Aircraft Operation Trends
 Mammoth Yosemite Airport, Mammoth, Ca.



Sources:
 Federal Aviation Administration
 Ca. Aviation System Plan
 Ca. Department of Finance
 Town of Mammoth Lakes - Planning

Plate 3-3
MMH and Comparable Airports
Annual Enplaned Passengers Historical & Forecast

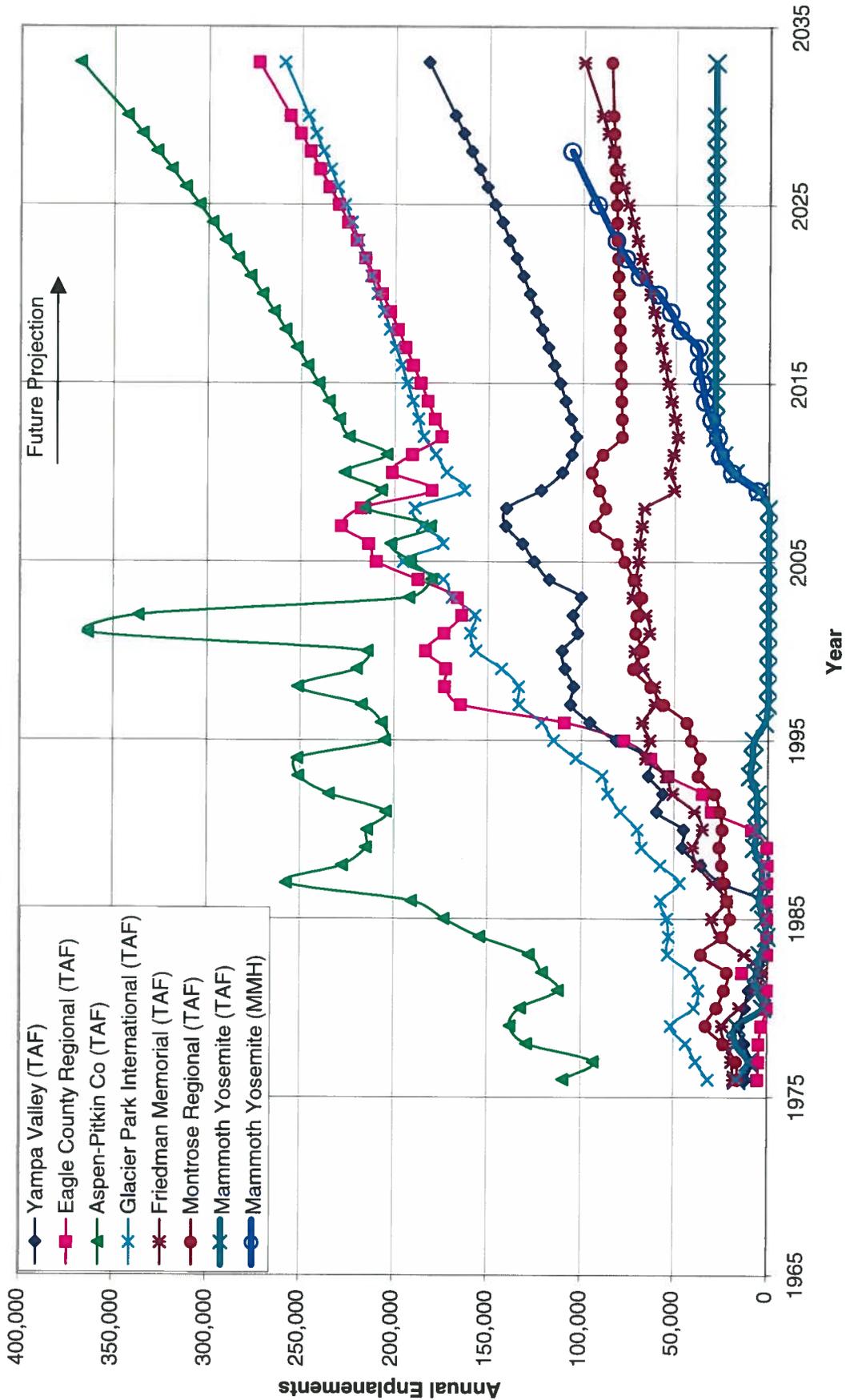


Plate 3-4
MMH and Comparable Airports
Annual Commercial Departures - Historical and Forecast

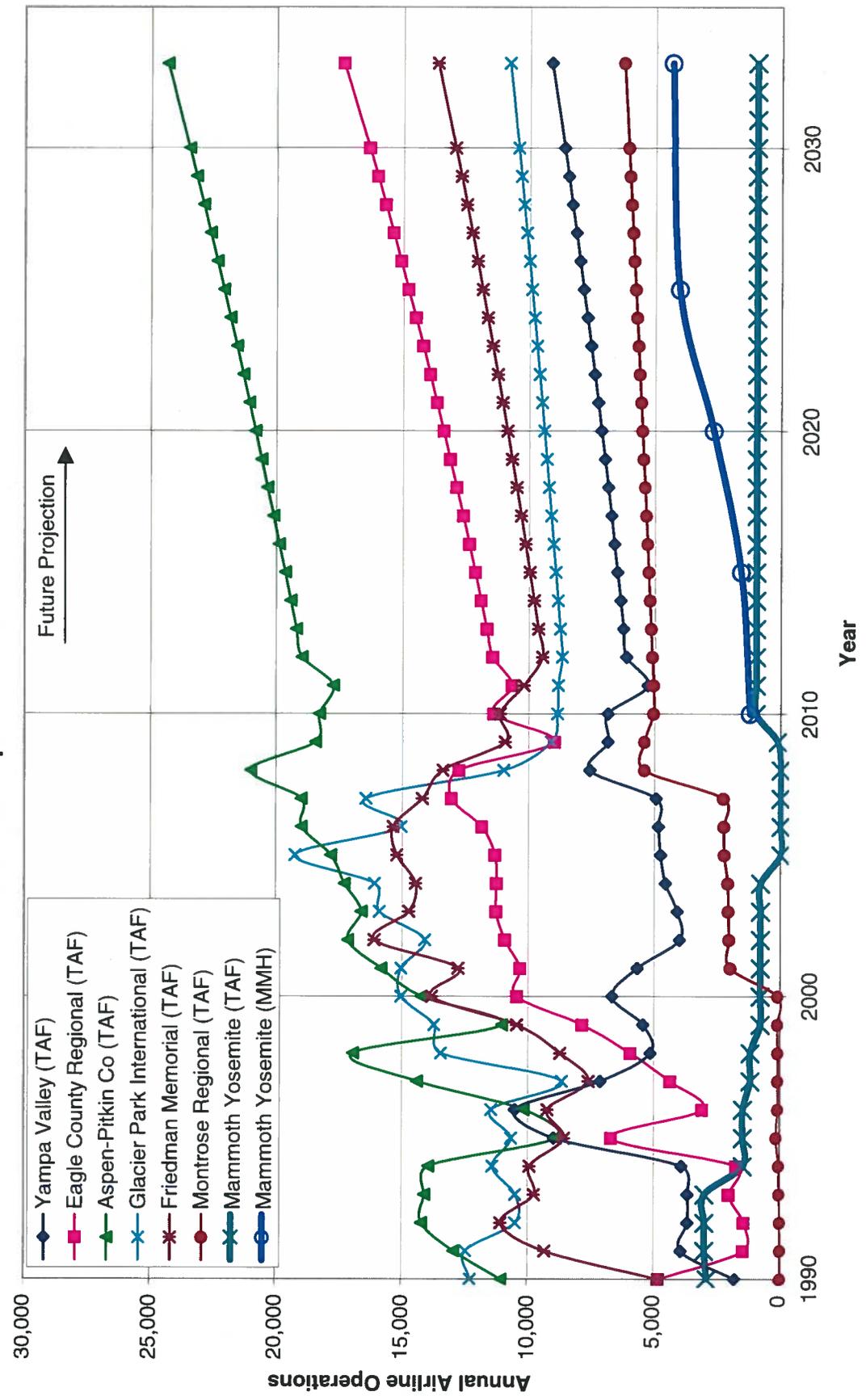
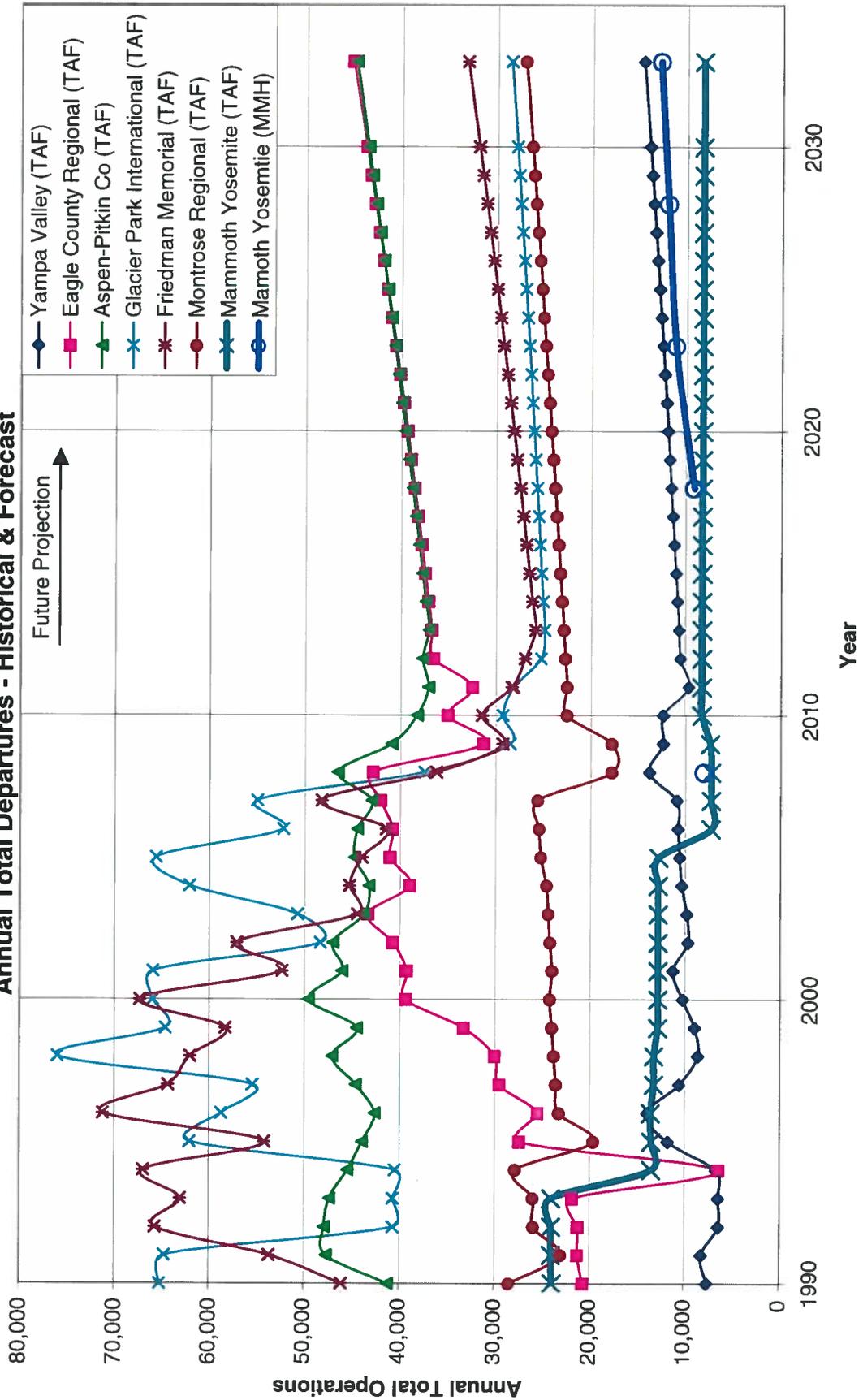


Plate 3-5
MMH and Comparable Airports
Annual Total Departures - Historical & Forecast



April 8, 2013

Katherine Kennedy
Federal Aviation Administration
San Francisco, Airports District Office
1000 Marina Blvd., Suite 220
Brisbane, CA 94005-1853



Dear Katherine,

As part of the process for approving the Mammoth / Yosemite ALP submission, Mammoth Mountain Ski Area were asked to provide a written expression of our commitment to the Mammoth / Yosemite (MMH) air service program. Mammoth Mountain Ski Area has been at the forefront of bringing air service to Mammoth Lakes and the surrounding region since the inception of the program and we are committed to continuing to support the effort to grow air service into MMH as a long-term strategic initiative.

A primary business strategy for Mammoth Mountain Ski Area, and the town of Mammoth Lakes, is to become a year-round, destination resort that attracts visitors from all across the US and from key international countries. Fundamental to this strategy is the need to provide easy access via air to the destination on a year-round basis. As such, our commitment to the growth of the MMH air program is financially significant each year with support for air subsidy payments to the airlines, marketing of air service locally, in the US and abroad, providing transportation services to arriving and departing air passengers, and funding consultants to help with the planning and expansion of the program.

We are committed to continuing this support because it is a fundamental part of our business plan and we know that a robust and growing air service program in Mammoth Lakes and the surrounding region has significant financial benefits. Specifically:

1. Air service provides for significant growth in tourism revenue to Mammoth Mountain, the town of Mammoth Lakes and the entire region. Air service improves the perception of Mammoth/Mono County as a vacation destination and opens markets, beyond those that can drive, to consider a vacation in the area. In addition, our most frequent customers who already drive to Mammoth can now make more trips to the area due to the shorter flight times when compared to driving.

Several quantitative research studies have shown that many guests flying into Mammoth would not have made the trip without air access, making them incremental visitors to the area. Based on this research, incremental visitors can represent as much as 80-85% of the enplanements in new markets. And even in a primary market like Los Angeles where we have traditionally drawn customers who drive to the region, over 40% of customers on the LAX flights say they would not have made the trip to the area without air service. Given an average stay of 3+ days in the area and spending of over \$110 per person/per day in the winter season, this provides a huge financial return to both Mammoth Mountain and the local area. In addition, as tourism grows the local tourism tax base is expanded as well.

Exhibit 8 Letter of Support from MMSA to FAA

Mammoth Yosemite ALP, page 2

To illustrate this, assume that all flights from LAX, SFO, SAN and SNA in winter averaged a 60% incremental rate. Winter enplanements from these flights so far this year (December 2012 through March 2013) were 19,676. As a result, incremental revenue was \$3.9MM (19,796 X 60% incremental rate x 3 days per person x \$110 per day). This is revenue that would not have been realized had the flights not been in place to bring these guests to the area.

2. Air service helps to broaden the economic base for the region by allowing more businesses and individuals to consider living and working in the area. We know that air service, like roads, water, broadband internet, and cell service, is a fundamental need for a growing community. In a community like Mammoth Lakes that is a significant distance from other population centers, regular flight service is especially critical for economic development. The easy connectivity to other places that regular air service provides allows more people to consider working and living in the area. This then expands the labor pool for local businesses including our own; it increases the market of people buying primary and secondary residences; and it grows the tax base for the region with more business, sales and real estate tax collections.

Since the first winter flights started in December of 2008, the number of air carriers serving MMH has expanded to include both Alaska and United; cities served have grown from just LAX to now include San Francisco (SFO), San Diego (SAN) and Orange County (SNA); service is now year-round from LAX; and the connections provided through SFO and LAX now make MMH easily accessible to just about anywhere in the world. As a result, enplanements have grown from 6,157 in the first full calendar year of 2009, to over 27,000 in calendar year 2012 – a growth of 338% in just three years.

This growth in the MMH air service program, and the potential for future growth, has major financial benefits to Mammoth Mountain Ski Area and to all of the local businesses in the region and we are committed to providing the support needed to continue this key driver of growth and profitability for our business and for the community.

Sincerely yours,



Howard E. Pickett
Chief Marketing Officer
Mammoth Mountain Ski Area, LLC

Exhibit 8

Letter of Support from MMSA to FAA



Mammoth Lakes Tourism
 P.O. Box 48
 Mammoth Lakes, CA 93546

January 27, 2015

To Whom It May Concern:

I am writing to express Mammoth Lakes Tourism's support for Mammoth Yosemite Airport and continued air service the Mammoth Lakes and Mono County. Air service for our region has been a major focus of our business plan and the effort gets stronger each and every year. With Mammoth Lakes' somewhat remote location, air service is imperative and will play a major role in our development moving forward and our continued economic viability and growth as a resort destination.

Over the past half-dozen years, we have forged solid relationship through our air consultant, Kent Myers, at AirPlanners with both United and Alaska Airlines. Our commitment is to continue exploring new markets and carriers to grow air service to Mammoth Yosemite Airport in the coming years both winter, and summer. Just this year we expanded our winter service to include Denver, CO and Las Vegas, NV opening up new region, national and international opportunities for Mammoth Lakes. The partnership between Mammoth Lakes Tourism, the Town of Mammoth Lakes and Mammoth Mountain Ski Area has developed this into a strong program including a dedicated funding structure to support current, and future air service subsidies.

Air service is a key economic driver for Mammoth Lakes and Mono County, not just now, but in the future. Developers look for consistent and easy access when considering locations to build. The expansion of air service over the past six years has shown Mammoth Lakes' commitment to growth and prosperity. Currently air travelers spend in excess of \$40 million annually in Mammoth Lakes and that number can only rise moving forward. Terminal expansion, additional airline partners and new markets will take our region to a new level of access and growth.

The commitment to air service for Mammoth Yosemite Airport is stronger now than it has ever been in the past and our recent successes and growth in both service and enplanements are proof positive that air service will be a major focus for us as we move forward.

Please feel free to contact me at 760-417-2004 with any questions or comments.

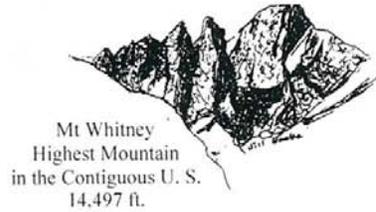
Sincerely,

John J. Urdi III
 Executive Director
 Mammoth Lakes Tourism

Mammoth Lakes Tourism – 2520 Main Street – P.O. Box 48 – Mammoth Lakes, CA 93546 – www.VisitMammoth.com

Exhibit 9

Letter of Support from Mammoth Lakes Tourism



Inyo County Superintendent of Schools
Dr. Terence K. McAteer

Brian Pickens, Manager
 Mammoth-Yosemite Airport
 1300 Airport Road
 Mammoth Lakes, CA 93546

January 21, 2015

Dear Mr. Pickens,

On behalf of Mono County Superintendent of Schools, Stacey Adler and I, we wish to tell you how important the Mammoth-Yosemite Airport is for our two public entities. Dr. Adler and I both run charter schools based in Southern California, which serve a select clientele – inner-city high school dropouts. We have over 2000 students in 24 sites that we oversee.

The ability to get to Los Angeles on a very frequent basis is absolutely essential. Without the air service, we probably would not have entered into the out-of-county charter school business because of proximity issues. With the charters, Mono and Inyo Schools benefit to the tune of over two million dollars annually along with the employment of many local jobs to provide fiscal and academic expertise to these schools. Staff, community members, and the two of us are certainly "frequent flyers" out of your airport.

Many citizens do not know about our charters: YouthBuild Charter School of California, San Diego Urban Corps, Orange County Conservation Corps, and the Los Angeles Conservation Corps. Check out these successful educational, environmental, and youth development programs on the web.

As noted above, without the year-round air service our relationship with our charters would be very difficult. We would be pleased to represent our sincere interests in the continuation of the air service at any opportunity.

In appreciation,

Terence K. McAteer

166 Grandview Drive · Bishop, CA 93514
 (760) 873-3262 ext 401 · Fax (760) 873-3324

Exhibit 10

Letter of Support from Inyo County
 Superintendent of Schools

CHAPTER 4. DEMAND CAPACITY ANALYSIS AND FACILITY REQUIREMENTS

4-1 Design Standards

The new FAA Advisory Circular 150/5300-13A entitled, *Airport Design*, sets forth recommended runway and taxiway design standards for all Airport Reference Codes (ARC). The FAA classifies airports by Airport Reference Code (ARC), which is based on two separate aircraft characteristics, namely:

- Aircraft Approach Category – Based on the approach speed of the aircraft on landing, and
- Airplane Design Group (ADG) – Based on aircraft wingspan and tail height.

FAA has established runway design standards for airports designed to accommodate aircraft in a given ARC. A listing of the Aircraft Approach Category and Airplane Design Group for each Airport Reference Code (ARC), together with the designated approach speed, tail height, and wingspan, is presented in Table No. 4-1:

TABLE NO. 4-1 - AIRPORT REFERENCE CODE PARAMETERS

Aircraft Approach Category	
Category	Approach Speed (knots)
A	< 91
B	91 to < 121
C	121 to < 141
D	141 to < 166
E	166 or more

Airplane Design Group (ADG)		
Group No.	Total Height (ft.)	Wing Span (ft.)
I	< 20	< 49
II	20 to < 30	49 to < 79
III	30 to < 45	79 to < 118
IV	45 to < 60	118 to < 171
V	60 to < 66	171 to < 214
VI	66 to < 80	214 to < 262

Airport Reference Code is designated a combination of Aircraft Approach Category and Airplane Design Group; i.e. ARC B III.

MMH is currently approved as an ARC B III airport. Some of the airline aircraft and many of the business jet aircraft currently using MMH are rated as ARC C III. It is proposed to maintain the current classification of MMH as ARC B III during this planning period. Airline service forecasts indicate the potential of requiring a future change to ARC C III beyond the planning period. It is, therefore, recommended that all new development at the airport be designed to meet both ARC B III and C III standards whenever feasible.

The design standards for the current and future airport facilities at MMH are set forth in Table No. 4-2. Included in this table are the existing and proposed future parameters for MMH. Also included are the current recommended FAA airport standards for both ARC B III and C III.

4-2 Alternate Airport Study

At the request of the FAA the Town of Mammoth Lakes evaluated the benefits and costs of expanding the existing airport, reconfiguring the existing airport, or constructing a totally new airport at an alternate site. This evaluation has been prepared and the results are presented in Appendix A. A total of six alternative layouts were evaluated. The results of this study show that from an economical, environmental, and land use standpoint it is not feasible to consider reconfiguring the existing airport or developing an entirely new site. As a result, the demand capacity analysis and facility requirements and remaining portions of this report have been prepared for the development of the existing MMH to meet forecast requirements.

4-3 Airfield Capacity

FAA Advisory Circular 150/5060-5, *Airport Capacity and Delay*, contains guidelines for determining airfield capacity and delays. The annual service volume (ASV) is a reasonable estimate of the maximum annual capacity of airfield facilities. The existing MMH with a single runway has an ASV of approximately 230,000 annual operations. In 2013 the total annual operations at MMH were 8,050. By 2023 projected total annual operations is 11,176, which is 4.8 percent of the ASV. FAA recommends that when the annual demand ASV ratio approaches 60 percent, planning should be underway for increasing the capacity of the facility. By the time it reaches 80 percent the work should be accomplished to increase the capacity and thus decrease delays. The annual operations at the airport in 10 years are expected to be only 4.8 percent of ASV.

TABLE No. 4-2 – AIRPORT DESIGN STANDARDS – MMH

RUNWAY DATA TABLE	RUNWAY 9-27		FAA STANDARDS	
	Existing	Future		
	Runway 9 - Runway 27	Runway 9 - Runway 27	B-III	C-III
Approach Category and Design Group	B-III	C-III	B-III	C-III
Approach Visibility Minimums	Visual - 1 1/4 Mile	Visual - 1 1/4 Mile	> 1 Mile	> 1 Mile
FAR Part 77 Category Runway	V - NP	V - NP		
Runway Reference Code (RRC)	B/III/VIS - B/III/5000	C/III/VIS - C/III/5000		
Design Aircraft	Q400	B737-700		
Design Aircraft Main Gear Width (MGW) (Ft.)	33.2	23.0		
Wingspan of Critical Design Aircraft (Ft.)	93.3	112.5		
Approach Speed of Critical Design Aircraft (Knots)	129	130		
Maximum Certified Takeoff Weight of Critical Design Aircraft (Lbs.)	65,200	154,500		
Maximum Certified Landing Weight of Critical Design Aircraft (Lbs.)	62,000	129,200		
Percentage Wind Coverage				
10.5 Knot Crosswind	93.3	93.3		
13 Knot Crosswind	95.6	95.6		
16 Knot Crosswind	97.8	97.8		
20 Knot Crosswind	99.1	99.1		
Runway Line of Site	Full	Full		
Maximum Runway Gradient (Percent)	1.45	1.45	0 to +/- 2.00	0 to +/- 1.50
East Quarter of Runway Gradient (Runway 27) (Percent)	1.06 - 1.45	0.80	0 to +/- 2.00	0 to +/- 0.80
West Quarter of Runway Gradient (Runway 9) (Percent)	0.48 - 1.03	0.80	0 to +/- 2.00	0 to +/- 0.80
Runway Design Code (RDC)	B/III/VIS - B/III/5000	C/III/VIS - C/III/5000		
Runway Length (Ft.)	7,000	8,200	--	--
Runway Width (Ft.)	100	100	100	100
Shoulder Width (Ft.)	12	20	20	20
Runway Pavement Surface	Asphalt, Grooved	Asphalt, Grooved		
Pavement Design Strength (1,000 lb. Gross Aircraft)	80 S, 150 D	80 S, 150 D		
Pavement Classification Number	32/F/B/X/T	32/F/B/X/T		
Runway Marking	NP - NP	NP - NP		
Runway Lighting	MIRL	MIRL		
Blast Pad Width (Ft.)	144	144	140	140
Blast Pad Length (Ft.)	200	200	200	200
Crosswind Component (Knots)	16	16	16	16
Runway Safety Area - Length Beyond Departure End (Ft.)	600	1,000	600	1,000
Runway Safety Area - Length Prior to Threshold (Ft.)	600	600	600	600
Runway Safety Area - Width (Ft.)	300	500	300	500
Runway Object Free Area - Length Beyond Runway End (Ft.)	600	1,000	600	1,000
Runway Object Free Area - Length Prior to Threshold (Ft.)	600	600	600	600
Runway Object Free Area - Width (Ft.)	720	720	800	800
Runway Obstacle Free Zone - Length Beyond Runway End (Ft.)	200	200	200	200
Runway Obstacle Free Zone - Width (Ft.)	400	400	400	400
Runway Departure Surface (OCS)	40:1	40:1		
Threshold Siting Surface (TSS)	20:1	20:1		
Approach Runway Protection Zone - Length (Ft.)	1,000	1,700	1,000	1,700
Approach Runway Protection Zone - Inner Width (Ft.)	500	500	500	500
Approach Runway Protection Zone - Outer Width (Ft.)	700	1,010	700	1,010
Approach Runway Protection Zone - Acres	13.770	29.465	13.770	29.465
Departure Runway Protection Zone - Length (Ft.)	1,000	1,700	1,000	1,700
Departure Runway Protection Zone - Inner Width (Ft.)	500	500	500	500
Departure Runway Protection Zone - Outer Width (Ft.)	700	1,010	700	1,010
Departure Runway Protection Zone - Acres	13.770	29.465	13.770	29.465
Runway Centerline to Parallel Runway Centerline (Ft.)	--	--	--	--
Runway Centerline to Holding Position (Ft.)	220	270	220	270
Runway Centerline to Parallel Taxiway/Taxilane Centerline (Ft.)	300	300	300	400
Runway Centerline to Aircraft Parking Area (Ft.)	400	500	400	500
Taxiway Design Group (TDG)	3	5	3	5
Taxiway Width (Ft.)	50	75	50	75
Taxiway Edge Safety Margin (Ft.)	8.4	15	10	15
Taxiway Shoulder Width (Ft.)	0	25	20	25
Taxiway Pavement Surface	Asphalt	Asphalt		
Taxiway Pavement Design Strength (1,000 lb. Gross Aircraft)	80 S, 150 D	80 S, 150 D		
Taxiway Lighting	Retroreflective Edge Markers	MITL		
Taxiway Safety Area - Width (Ft.)	118	118	118	118
Taxiway Object Free Area - Width (Ft.)	181 (90.3' North)	181 (90.3' North)	186	186
Taxilane Object Free Area - Width (Ft.)	67 (33.5' North)	67 (33.5' North)	162	162
Taxiway Centerline to Parallel Taxiway/Taxilane Centerline (Ft.)	100	100	152	152
Taxiway Centerline to Fixed or Movable Object (Ft.)	90.3	90.3	93	93
Taxilane Centerline to Fixed or Movable Object (Ft.)	33.5 (North)	33.5 (North)	39.5	39.5
Taxiway Wingtip Clearance (Ft.)	35 (West Taxilane), 44 (E. Hgr)	26 (West Taxilane), 34 (E. Hgr)	34	34
Taxilane Wingtip Clearance (Ft.)	15	15	15	15

The single runway will provide adequate capacity for the foreseeable future at this airport with minimal delays.

The maximum hourly capacity at the MMH is 98 VFR operations or 59 IFR operations. The estimated peak hourly VFR operations at MMH were 3.8 in 2013 and increase to 5.2 in 2023, which is well within the hourly capacity of the airport.

Wind data indicate that Runway 9-27 has a wind coverage of 93.3 percent at 10.5 knots, 95.7 percent at 13 knots, 97.8 percent at 16 knots, and 99.1 percent at 20 knots crosswind. FAA recommends runway orientation and number of runways constructed at an airport to provide 95 percent wind coverage. The single runway at MMH meets this requirement. MMH experiences a few short periods where very strong southerly winds occur that are 90 degrees from the runway orientation. These winds reach velocities of 110 to 120 miles per hour. With winds of this velocity it is not practical to land or take off aircraft even if the wind were straight down the runway. It is, therefore, concluded that the single Runway 9-27 will provide adequate operational capacity and that there is no need for a crosswind runway.

4-4 Airline Terminal

When airline service began in 2008, it was necessary to develop a new airline terminal. Several factors required that this interim terminal be located within the walls of existing buildings and that no construction could occur outside these limits. The largest building available was the equipment storage, ARFF, and maintenance facility, which had an area of 5,000 square feet. This building was modified to provide for the requirements of the airlines, TSA, rental car agencies, and passengers. This building, with only one gate and a holding room that can accommodate only one flight, is already too small for its purpose. It was necessary in the fall of 2011 to erect a temporary 2,250 square foot Sprung structure adjacent to the terminal building to be used as an additional passenger holding area. It is urgent that a new terminal facility be constructed that will satisfy and accommodate the rapid growth that is occurring at this airport.

A Terminal Area Study has been completed for this airport. This study shows that initial requirements of the airport for existing traffic and traffic forecast in the planning period (0 to 10 years) will require a new terminal having approximately 40,000 square feet consisting of airline ticketing, airline baggage facilities, TSA facilities, holding rooms, food courts, and other amenities.

The current plan provides for three gate positions and has the capability of expanding to a total of six. A new aircraft parking apron will be required, which will have three parking positions that can accommodate a variety of aircraft including the Q400 and CRJ700 and potential use by large aircraft of the B 737 class. The terminal apron is capable of being expanded to six aircraft parking positions.

MMH is located in the Sierra Nevada at an elevation of 7,135 feet and experiences significant snow fall and frost in the winter months. Deicing facilities are required for aircraft operating at this airport. A separate deicing apron is included in the Airport Layout Plan. This separate deicing apron will decrease the time an aircraft parks on the apron and will provide facilities to capture and treat deicing liquids used to deice the aircraft. This will increase the capacity of the terminal apron and avoid the risk of passengers walking on pavements covered by deicing liquids. These deicing facilities will meet FAA requirements.

New automobile parking facilities will be required, which initially will be located on each side of the terminal building because of property ownership constraints at this time. Provision will be made to expand the parking lot on the north side of the access road as needed with the appropriate use permit from the USFS.

Access to the airport is by a single dead-end road (Airport Road) from Hot Creek Hatchery Road.

Airport Administration will be included in the terminal on a second floor.

4-5 Runway Length

FAA Advisory Circular 150/5325-4B, *Runway Length Requirements for Airport Design*, provides generalized plans for runway length requirements. The airplane manufacturer provides detailed runway length requirement curves for each aircraft type produced. Variables included in these runway length requirements for each aircraft are gross takeoff weight, air temperature, runway altitude, runway gradient, and condition of the runway pavement such as wet, dry, or icy.

The current runway at MMH is 7,000 feet long. The Q400 being operated by Alaska/Horizon Airlines has to off-load passengers on hot days in the summer months because of the short runway and high temperature. With the increase in summer airline activity the runway may eventually have to be lengthened. It is proposed to designate a 1,000-foot long clearway at each end of the runway and utilize "Declared Distances" for each end of the runway, which will increase the "Take Off Distance Available" (TODA) by 1,000 feet and increase the runway takeoff distance available to 8,000 feet.

The airport currently owns enough land at the west end of the runway to extend the runway by 1,200 feet to increase the runway length to 8,200 feet. With the current airline and large general aviation turbine aircraft operations, there is a demonstrated need for a longer runway at MMH. It is recommended that the runway be extended 1,200 feet, for a total length of 8,200 feet, which would particularly help with summer operations.

The longer runway (8,200 feet) would also give the MLT and airlines more flexibility to add aircraft of the B737 class on routes that indicated demand. While it would be desirable for MLT and the airlines to have the option of adding B 737 class aircraft to the potential fleet, it is more important to develop the expanded terminal facilities as early as possible. Due to funding limitations, it is not anticipated that any runway extension could be considered prior to 2024 (10 years).

The existing runway is 100 feet wide, which meets FAA requirements for ARC B III and C III airports where maximum takeoff weight of the aircraft using the runway is less than 150,000 pounds. The airport has the capability of increasing the width of the runway to 150 feet to accommodate ARC C III aircraft with takeoff weights exceeding 150,000 pounds. It is not recommended to design for the 150-foot wide runway until a need for accommodating heavier ARC C III aircraft has been identified. The paved shoulders on the runway are currently 12 feet wide but could be widened to 20 feet to meet ARC C III standards.

4-6 Pavement Strength

Pavement evaluation studies and pavement design calculations indicate the current pavements on the runway and taxiways have a load-bearing capacity of 85,000 pound single gear and 150,000 pound dual gear, which is adequate for the airline aircraft proposed for use at the airport. The current critical and forecast aircraft is the Q400, which has a Maximum Take Off Weight of 65,200 pounds on dual gear. If heavier aircraft are introduced at the airport, the runway strengths can be increased by the use of asphalt overlays or by removing the existing asphalt and strengthening the section.

The existing aprons are not designed for the heavier loads. New construction for the airline terminal apron will provide design for dual wheel loads up to 250,000 pounds to accommodate future airline aircraft possibilities. The additional cost in new construction to increase the strength from 150,000 to 250,000 pounds on dual gear aircraft involves the addition of inexpensive aggregate subbase at the bottom of the section; whereas, upgrading an existing apron for a terminal requires expensive complete reconstruction.

F.A.A. requires that the Pavement Condition Number (PCN) of all pavements on the airport be designated on the Airport Layout Plan and included in the Airport Master Record, Form 5010. The PCN values of the different pavement sections on the airport have been determined based on published pavement strength values and are summarized in Table No. 4-3:

TABLE NO. 4-3
PAVEMENT CONDITION NUMBERS PCN - MMH

Item	PCN	Pavement Strength Dual Gear Aircraft (lbs.)
Runway 9-27	32	150,000
Taxiways A, A1, A2, A3, A4, A5	32	150,000
PCC Terminal Apron	25	100,000
AC Terminal Apron	23	90,000
G.A. Apron	11	48,000

4-7 Taxiway System

The existing taxiways serving Runway 9-27 are 50 feet wide and are constructed with asphalt pavement surfacing. The parallel taxiway runs full length of the runway and is located 300-foot centerline-to-centerline distance from the runway. There are five cross taxiways. A holding apron exists at each end of the runway. The pavements on these taxiways were reconstructed in 2008 using a polymer-modified asphalt for the bituminous surface course and are in very good condition. These pavements have a strength of 150,000 pounds dual gear and 85,000 pounds single gear. There are no paved shoulders on the existing taxiway.

The FAA standard for an ARC B III airport for runway centerline to taxiway centerline is 300 feet. The existing facility meets this requirement. The proposed terminal facilities will be located far enough north of the runway to allow for future relocation of the parallel taxiway to meet FAA criteria for ARC C III if necessary.

The existing taxiways at MMH are 50 feet wide, which meets FAA standards for B III airports and Taxiway Design Group 3. The Q400 aircraft used by Alaska Airlines is categorized as a Taxiway Design Group 5 aircraft. It is, therefore, recommended that all taxiways be widened to 75 feet total width and that a 25-foot wide paved shoulder be constructed on each side of the taxiway. All fillets at taxiway-to-runway and taxiway-to-taxiway intersections should be constructed to meet the new FAA standards as set forth in Advisory Circular 150/5300-13A.

4-8 Airfield Safety Areas

Airfield safety area requirements are set forth in FAA Advisory Circular 150/5300-13A and FAR Part 77. The Airport Design Manual defines the requirements for runway protection zones (RPZ), runway safety areas (RSA), and runway object free areas (ROFA). Part 77 defines the surfaces surrounding the airport above which objects penetrating those surfaces will affect navigable airspace. These

surfaces include primary surface, approach surface, transitional surface, horizontal surface, and conical surface. MMH currently has several features that do not conform to FAA Standards for ARC B III. These non-standard conditions and the Town's proposed actions are presented in detail in Chapter 10, Recommendations and on Sheet No. 4 of the Airport Layout Plan drawings. MMH runway and taxiways meet all safety area requirements.

4-9 Navigational Aids

There are no navigational aids at MMH other than Runway End illumination Lights (REIL) and Precision Approach Path Indicators (PAPI). Eastern Sierra Regional Airport in Bishop, which is located 32 miles to the southeast, has a VOR but terrain blocks the signal when aircraft descend into the MMH. MMH has published GPS approaches to Runway 27 plus circling to land on Runway 9. As an aid to pilots the airport has an AWOS III P, which operates continuously.

4-10 Building Restriction Line (BRL)

The building restriction line defines the minimum distance a building should be located from the centerline of the runway. The distance from the runway centerline that the building restriction line can be set is a function of the height of the building and the controlling FAA criteria. The existing East Hangars are located at a distance of 390 feet from the centerline of the runway. The building restriction line has been set at 400 feet from the centerline of the runway so that it is located at the Runway Object Free Area (ROFA) boundary.

The height of building allowed at this location is set forth in FAR Part 77 and in Advisory Circular 150/5300-13A. At 400 feet from the runway centerline Part 77 indicates that the top of the building should be no more than 21 feet above the elevation of the adjacent runway centerline. Advisory Circular 150/5300-13A Section 308 defines requirements for Obstacle Free Zone (OFZ) penetration and allows a building located 400 feet from runway centerline to be 31 feet above the elevation of the adjacent runway centerline. Advisory Circular 150/5300-13A was published 9-28-2012; whereas, Part 77 is an old publication. Advisory Circular 150/5300-13A also specifically shows the Obstacle Free Zone in the airport operations area and is used in this study as the controlling document. The East Hangars are 10 feet inside the BRL and penetrate the Part 77 surface by 16 feet and are within the ROFA and are considered to be an obstruction.

4-11 Air Traffic Control Tower

MMH does not have an Air Traffic Control Tower at this time. Should the need arise in the future; provision has been made on the Airport Layout Plan for the siting of an Air Traffic Control Tower.

4-12 General Aviation Requirements

Currently there are eight general aviation aircraft based at the airport and the growth in based aircraft is projected to be small. There are 129 hangars at the airport, most of which are privately owned and are used by pilots throughout the Central and Western United States to store their aircraft while visiting the Mammoth Lakes area. Many of these hangars are included in a pool that is operated by the fixed base operator to provide hangar space as available for other aircraft that visit the airport. There is no demand for additional hangars.

The existing East Hangars are approximately 10 feet in from the outer edge of the Runway Object Free Area (ROFA). These are private hangars operating under a ground lease. It is proposed to consider relocating the hangars when the lease expires.

The existing general aviation tie down apron has a capacity for 74 tie down spaces, which will accommodate small aircraft. On holidays and many weekends throughout the year there are more than 70 aircraft that visit the airport and require tie down space. These aircraft range from small single-engine airplanes to the large business jets of the G-V category. The Airport has need for additional general aviation apron to accommodate the aircraft that visit the airport on weekends and holidays. It is estimated that an additional 300,000 square feet of apron will be required in the near future.

4-13 Fixed Base Operators (FBO) and Administrative Facilities

There is one FBO at MMH at this time. Provision is made in the Airport Layout Plan to provide space for at least one additional FBO.

Airport Administration is currently housed in a small building immediately west of the interim airline terminal facility. Additional facilities are needed for Airport Administration. These are planned to be included in the new terminal development.

4-14 Helicopter Facilities

Helicopter operations are few and intermittent at MMH. There is no need for special helicopter landing or parking facilities.

4-15 Fueling

One hundred low-lead aviation fuel and Jet-A fuel are available at the airport. The storage facilities are located in the west hangar area and fueling is performed by truck. This fueling operation is adequate at this time and will be increased as needed.

The existing fuel tanks are approximately 10 feet in from the outer edge of the Runway Object Free Area (ROFA). These are private facilities operating under a

ground lease. It is proposed to consider relocating the fueling facilities when the lease expires.

4-16 Airport Maintenance

Airport maintenance is currently provided by the Town of Mammoth Lakes through the Public Works Department. Currently, maintenance equipment is stored in a hangar leased from Hot Creek Aviation. A new maintenance / ARFF building will be required with the development of planned facilities.

4-17 Utilities

Existing utilities at the airport are adequate and can be expanded to accommodate the development of this airport.

Water for MMH is provided by on-site wells and storage tanks. A pump system provides domestic low flows and has a high capacity fire flow pump. The storage tank is a 450,000 gallon bolted steel tank that provides operational and fire storage. The water system is owned and operated by the Town of Mammoth Lakes.

Electrical service is provided by Southern California Edison. Telephone service is provided by Verizon. There is no natural gas service at the airport. Propane, stored in tanks located adjacent to the terminal building, airport office, FBO building, FBO hangars, and the east & west hangars, is used to heat buildings on the airport.

The airport is also served by the Digital 395 fiber optic cable that can provide high speed communications and internet service. This facility was completed in 2014.

There is no off-site drainage from or onto the airport. All storm water infiltrates the ground, except in paved areas, where the storm water is collected and carried to ditches or leach fields and rapidly infiltrates into the ground.

The sewage disposal system is made up of septic tanks and leach fields. The soils at this site are very permeable and leaching fields are effective. As development progresses it is proposed that a new package sewage treatment plant be constructed. The discharge from that plant will continue to be disposed of by underground leach fields.

4-18 Security

Current fencing at the airport consists of a six-foot chain link fence with one automatic vehicle gate in the terminal area with four strand barbed wire fencing around the rest of the airport. It is proposed to completely fence the airport

property with 8-foot chain link fence to provide security and prevent wildlife from entering the airport.

When the new terminal is constructed, security will be enhanced by alarming all doors that open onto the Air Operations Area and installing cameras at critical locations within the building, along the edge of the apron, at gates, and in other strategic locations.

4-19 Land Acquisition

The Airport owns in fee simple title much of the land on which the airport is currently located. There is a section on the east end of the airport where the land is owned by Los Angeles Department of Water and Power (LADWP). The Airport has a 50-year lease from LADWP for this land. The Town would like to acquire that area in fee simple title from the LADWP at some time in the future. This will put the majority of airport property into fee simple title, which is desirable for control, and allow the airport to reduce rent obligations to third parties.

Land owned by USFS indicated for airport use can be purchased, or long-term special use permits would be satisfactory.

CHAPTER 5. AIRPORT LAYOUT PLAN DEVELOPMENT

5-1 General

On August 14, 2014, FAA issued a letter to the Town of Mammoth Lakes conditionally approving an updated Airport Layout Plan. Based on forecast needs, recommendations have been made for future development of MMH. These recommendations are presented in the Airport Layout Plan drawings, which consist of 14 sheets.

The Alternate Site Development Studies show that it is not economically feasible to develop any new site for MMH and that the existing airport facilities should be expanded to accommodate the forecast traffic.

This chapter describes the proposed development of the airport.

5-2 Airfield Facilities

5-2.1 Runway

Runway 9-27 at MMH is 7,000 feet long by 100 feet wide. The airport is located in the Sierra Nevada at an elevation of 7,135 feet. With the current commercial operations during hot summer weather the airlines have had to off-load passengers due to the length of runway available. It is indicated that the runway should, in the future, be extended 1,200 feet, for a total length of 8,200 feet.

It is recommended that Declared Distances be utilized for both Runway 9 and Runway 27 departures. On both ends of the runway a 1,000-foot long by 500-foot wide clearway should be established. Using the clearways the declared distances for each runway will be:

- Takeoff Run Available (TORA) – Full Runway Length
- Takeoff Distance Available (TODA) – Full Runway Length plus 1,000 feet
- Accelerated Stop Distance Available (ASDA) – Full Runway Length
- Landing Distance Available (LDA) – Full Runway Length

Departures from Runway 9 are clear of any obstructions penetrating the threshold siting distance plane except for a street light and power pole at Benton Crossing Road that penetrate the departure FSS for Runway 9 by 2 to 4 feet.

Departures from Runway 27 have obstructions at each side of the OCS. On the north side some of the West Hangars penetrate the 40:1 departure plane and on the south side trucks on Highway 395 penetrate the departure plane.

For approaches to Runway 27 and departures from Runway 27 portions of the west hangars penetrate the northern edge of the threshold siting distance surface.

Both ends of the existing runway have blast pads that meet FAA ARC B III standards. When the runway is extended, standard blast pads should be constructed beyond the end of the extended runway.

The paved shoulders on Runway 9-27 are currently 12 feet wide. It is recommended that they be widened to 20 feet to meet FAA standards.

There is adequate capacity with the single runway to accommodate existing and forecast aircraft operations at this airport.

Peak hour forecast operation of the airport only utilizes 5.5 percent of runway capacity in 2023. If necessary, operational restrictions can be imposed during ARC C III operations without having a significant effect on operations or delays.

Runway Object Free Area and Taxiway Object Free Area requirements for ARC C III aircraft operations are not met with the current airport layout. The East Hangars and Taxiway A are within these areas. There are currently some business and airline aircraft operating at MMH that are classified as ARC C III. It is likely that airlines may introduce additional ARC C III aircraft to MMH in the future. In anticipation of this, new development will be designed, wherever feasible, to meet ARC C III standards so they will not require reconstruction if the airport classification changes to ARC C III. If necessary, special operating requirements on the airport could be instituted whenever an ARC C III aircraft operates on the runway or taxiway without causing any significant delays.

Wind studies indicate that Runway 9-27 provides more than 95 percent wind coverage. A crosswind runway is not required at MMH.

5-2.2 Helicopter

There is no need for special helicopter landing and parking facilities at this airport due to the minimal use of this equipment.

5-2.3 Taxiways

The existing taxiways meet most ARC B III requirements and adequately serve the existing runway. The holding aprons at each end of the runway will need to be enlarged to accommodate larger design aircraft. In the future, when the runway is extended, new cross taxiway and holding aprons should be completed with the extension. The runway centerline to taxiway centerline distance meets FAA general requirements for ARC B III standards.

All of the existing taxiways at MMH are 50 feet wide. To meet Taxiway Edge Safety Margin requirements the taxiway width should be 75 feet minimum for the Q400 aircraft. Aircraft using and forecast to use MMH are within Taxiway Design Group (TDG) 5 as defined by FAA. TDG 5 taxiways are required to be 75 feet wide. It is recommended that all taxiways at MMH that are used by airline aircraft be widened to 75 feet, properly sized fillets be constructed at each taxiway intersection, and 25-foot wide shoulders be constructed on all taxiways.

The parallel taxiway is designated as Taxiway “A” and the cross taxiways are designated as Taxiways “A1 through “A5”.

5-2.4 General Aviation Facilities

The existing general aviation apron has tie down space available for 70 or more small aircraft. On holidays and busy weekends the ramp can be near capacity. There is a need for additional apron in the near future for general aviation tie down at this airport.

5-2.5 Terminal Facilities

The interim airline terminal that was constructed in 2008 is too small to appropriately accommodate the existing passenger loads. The enplaned passengers are expected to grow from 30,858 in 2013 to 82,435 by 2023. The existing interim terminal is only 5,000 square feet. It is necessary to construct a new terminal facility at this airport at the earliest possible time. This facility will include a new terminal building having approximately 40,000 square feet and three loading gate positions. A new airline apron will be required adjacent to the new terminal building to accommodate three gate positions. Space should be reserved to increase the size of the terminal apron to accommodate up to six airline aircraft on the apron at one time. New automobile parking lots will be required and the access road will need to be updated in front of the new terminal. Provisions will be made on all these facilities to enable them to be expanded to six gates and additional apron parking positions should that become necessary in the future. Administration facilities will be included in the terminal.

The major airline activity occurs in the winter, and many of the jet aircraft using the airport will require deicing before departure. It is, therefore, recommended that a separate deicing pad be constructed to deice these aircraft. This pad should slope to a center collection inlet structure and all of the deicing fluids diverted to a holding tank and disposed of properly off site.

5-2.6 Access Road

Access to the existing interim terminal facility and proposed new terminal is by a single dead-end road from U.S. Highway 395 by way of Hot Creek Hatchery Road and Airport Road. In the future, widening this road to provide emergency access to the airport may be desirable.

5-2.7 Land Acquisition

The airport has an interest in acquiring land from the LADWP so as to have fee simple title of the land used by the airport. Other possible land acquisitions from the USFS would be to acquire additional area for expansion of automobile parking facilities, long term expansion of the general aviation apron, and the extension of the runway to the west.

5-2.8 Obstruction Lighting

On the north side of the airport several obstructions as defined by FAR Part 77 and FAA Advisory Circular 150/5300-13A exist. It is recommended that a row of flashing red obstruction lights be constructed at a distance of 390 feet north of the runway centerline, parallel to the runway centerline and spaced at no more than 3,000 feet to identify the southerly edge of these obstructions. The obstructions include Doe Ridge, the East Hangars, and some of the West Hangars that penetrate the runway Object Free Area.

5-2.9 Runway Safety Area (RSA) and Runway Object Free Area (ROFA)

The Runway Safety Areas meet FAA standards for an ARC B III category airport. The east hangars, west hangars, and Doe Ridge to the north of the runway, the U.S. Highway 395 right of way fence, and the soil between the RSA and the highway are within the ROFA and do not meet FAA standards for an ARC B III airport. It is recommended that the obstructions to the north of the runway be identified by a row of obstruction lights as identified in Section 5-2.8 above. It is recommended that the existing soil that penetrates the ROFA to the south of the runway be excavated from the outer edge of the RSA to a point 10 feet north of the highway right-of-way fence (approximately 363 feet south of runway centerline) and the soil penetration of the ROFA plane on the outer 37 feet of the ROFA, for the highway right-of-way fence, and for vehicles operating on U.S. Highway 395 next to the airport continue to be reviewed in future planning periods.

5-2.10 Industrial/Commercial Land

The land surrounding the airport is owned by the USFS and by LADWP and is not generally available at this time for commercial or industrial use.

CHAPTER 6. AIRPORT LAYOUT PLAN UPDATE

The Airport Layout Plan set of drawings has been conditionally approved by FAA and is included with this report in reduced scale. A table of contents of the drawings is indicated below, along with a general description of information provided on the drawings.

Sheet No. 1 – Title and Index

Sheet No. 2 – Airport Layout Plan – Existing – ARC B III – The Airport Layout Plan shows existing facilities, short-term proposed development, and ultimate development for the existing ARC B III classification. This plan also shows recommended areas to be reserved for unanticipated growth.

Sheet No. 3 - Data Tables – The wind rose, runway data tables, runway end data tables, declared distance tables, and airport data tables are included on this sheet. This information provides the dimensional details of items shown on the Airport Layout Plan.

Sheet No. 4 – Non-Standard Conditions Tables – This drawing indicates items that currently deviate from FAA standards for ARC B III airports. The tables also indicate the actions to be taken to correct or mediate these deviations.

Sheet No. 5 – Terminal Area Layout Plan – This sheet shows an expanded scale drawing of the terminal area facilities.

Sheet No. 6 – Proposed Declared Distance for Runway 9-27 – This drawing shows plan and profile for the proposed declared distances for Runway 9 and Runway 27. On this plan a 1,000-foot clearway is proposed for each end of the runway, which allows a corresponding increase of TODA from 7,000 feet to 8,000 feet for the existing runway.

Sheet No. 7 – Future Declared Distance for Runway 9-27 – This drawing shows plan and profile for the declared distances for future Runway 9 and Runway 27. On this plan a 1,000-foot clearway is proposed for each end of the runway, which allows a corresponding increase of TODA from 8,200 feet to 9,200 feet for the future runway.

Sheet No. 8 – Airport Airspace Drawing – Existing Layout - The Airport Airspace Plan is a drawing that depicts the critical surfaces for this airport as defined by FAR Part 77 and as they relate to existing topography. This plan also shows the areas where existing ground penetrates the Part 77 imaginary surfaces.

Sheet No. 9 – Airport Airspace Drawing – Future Layout – This drawing shows the same information as Sheet No. 8 with required modifications for the future runway extension.

Sheet No. 10 – Airport Airspace Plan and Profile – Existing and Future Layout – This drawing depicts the plan and profile along the runway centerline out to the upper edge of the transitional surfaces. The profile shows the extended runway centerline and the composite profile based on the highest terrain across the width of the approach surface.

Sheet No. 11 – Inner Portion of Approach Surface Plan – Existing - This drawing shows the plan/profile of the approaches to Runway 9 and Runway 27 for existing conditions. This drawing also shows all items that penetrate the imaginary surface.

Sheet No. 12 – Inner Portion of Approach Surface Plan – Future – This drawing shows the same information as Sheet No. 11 modified as required for the runway extension.

Sheet No. 13 – ALUC Airport Safety Zone Plan/Land Use Plan (Existing Runway) – This drawing represents the land use recommendations as developed by the State of California Department of Transportation. The plan is based on frequency of accidents that have occurred on airports throughout the state and provides recommendations for zoning to be considered by sponsors.

Sheet No. 14 – Airport Property Map – Exhibit A – The Airport Property Map includes property boundary descriptions for all land owned or leased by the Airport and indicates areas recommended to be acquired.

MAMMOTH YOSEMITE AIRPORT

MAMMOTH LAKES, CALIFORNIA

AIRPORT LAYOUT PLAN

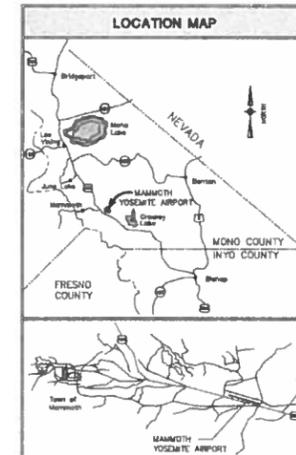
JULY 2014

SHEET INDEX

1. TITLE & INDEX
2. AIRPORT LAYOUT PLAN - EXISTING - BIII
3. DATA TABLES
4. NON-STANDARD CONDITIONS TABLES
5. TERMINAL AREA LAYOUT PLAN
6. PROPOSED DECLARED DISTANCES FOR RUNWAY 9-27
7. FUTURE DECLARED DISTANCES FOR RUNWAY 9-27
8. AIRPORT AIRSPACE DRAWING - EXISTING LAYOUT
9. AIRPORT AIRSPACE DRAWING - FUTURE LAYOUT
10. AIRPORT AIRSPACE PLAN AND PROFILE - EXISTING AND FUTURE LAYOUT
11. INNER PORTION OF APPROACH SURFACE PLAN (EXISTING)
12. INNER PORTION OF APPROACH SURFACE PLAN (FUTURE)
13. ALUC AIRPORT SAFETY ZONE PLAN / LAND USE PLAN (EXISTING RUNWAY)
14. AIRPORT PROPERTY MAP - EXHIBIT "A"



STATE OF CALIFORNIA



TOWN OF MAMMOTH LAKES :

APPROVED: _____ DATE: _____
 Grady Dutton - Public Works Director

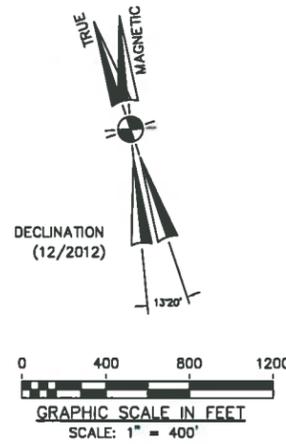
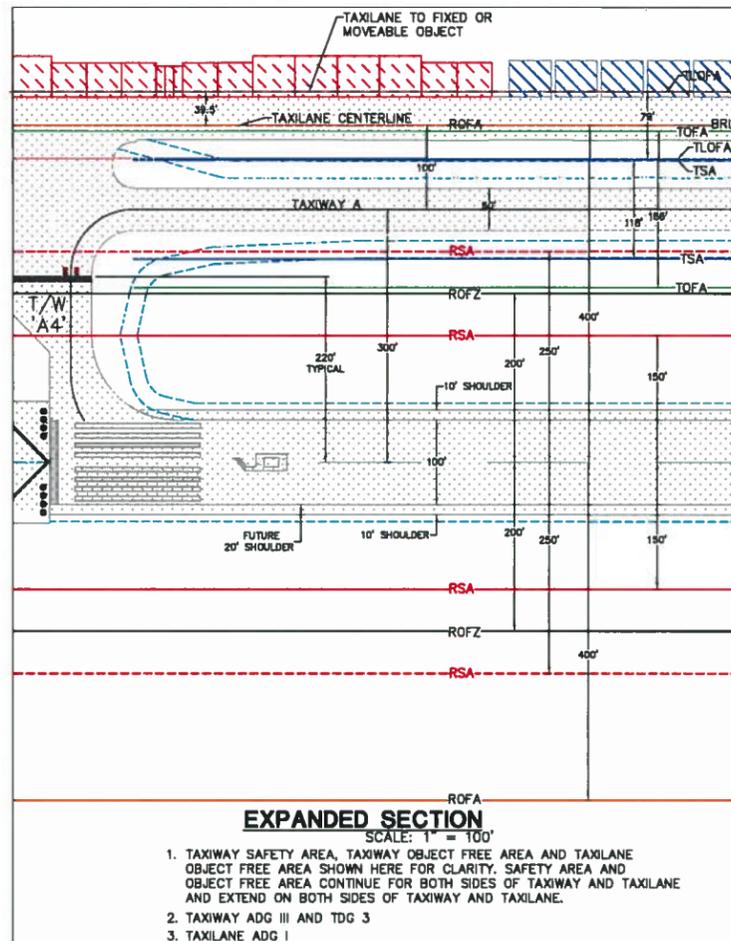


DESIGNED BY :

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 LOMIS, CALIFORNIA

JULY 16 2014

DATE



INVENTORY					
No.	FACILITY	TOP ELEV.	No.	FACILITY	TOP ELEV.
1	EXISTING INTERIM TERMINAL BUILDING & BEACON	7144.4	24E	SUPPLEMENTAL WIND CONE EAST END TO BE RELOCATED	
2	FUTURE ADMINISTRATION BUILDING	7127.0	24W	SUPPLEMENTAL WIND CONE WEST END TO BE ELIMINATED	
3	SHORT TERM PASSENGER HOLD ROOM - (SPRUNG STRUCTURE)	7122.2	25	FUEL STORAGE TANKS (HOT CREEK)	
4	AIRPORT OFFICE	7120.3	26	AV. GAS STORAGE, SELF SERVICE (HOT CREEK)	
5	ELECTRICAL & TELEPHONE VAULT	7121.9	27	WATER STORAGE TANK	7123.6
6	AIRPORT FUEL STORAGE	7125.8	28	WATER STORAGE PUMP HOUSE	7119.4
7	EXISTING PILOTS LOUNGE	7125.8	29	WELL #99-1 GRND. ELEV. 7095.4'	
8	EXISTING FBO OFFICE	7138.9	30	WELL #99-2 GRND. ELEV. 7094'	
9	AIRCRAFT HANGARS A1 THRU A6 (PRIVATE ON LEASE LAND)	7138.8	31	AIRPORT WELL (ABANDONED)	
10	AIRCRAFT HANGARS B1 THRU B6 & C1 THRU C6	7140.0	32	EXISTING POWER POLE WITH OBSTRUCTION LIGHT	7157.0
11	AIRCRAFT HANGARS D1 THRU D5	7142.3	33	EXISTING TELEPHONE POLE WITH OBSTRUCTION LIGHT	7098.0
12	AIRCRAFT HANGARS E1 THRU E4	7141.6	34	EXISTING STREET LIGHT	7088.3
13	AIRCRAFT HANGARS F1 THRU F2	7158.1	35	EXISTING POWER POLE	7085.0
14	AIRCRAFT HANGARS FBO1 THRU FBO3 (HOT CREEK)	7145.7	36	DOE RIDGE OBSTRUCTION LIGHT	
15	AIRCRAFT HANGARS G1 THRU G6 (AIRPORT HANGARS)	7153.4	37	EXISTING LONG TERM VEHICLE PARKING (HOT CREEK)	
16	AIRCRAFT HANGARS H1 THRU H4 (HOT CREEK)	7154.4	38	FUTURE TERMINAL BUILDING	7142.0
17	WEST EXECUTIVE HANGARS 1 THRU 72 (HOT CREEK)	7154.0	39	FUTURE TERMINAL APRON	
18A	HANGAR 3 THRU 6 (HIGH POINT)	7153.8	40	FUTURE DEICING RAMP	
18B	HANGAR 15 THRU 16 (HIGH POINT)	7154.4	41	FUTURE LONG TERM VEHICLE PARKING LOT (HOT CREEK)	
18C	HANGAR 25 THRU 28 (HIGH POINT)	7154.0	42	FUTURE AUTOMOBILE PARKING LOT	
18D	HANGAR 38 THRU 39 (HIGH POINT)	7153.8	43	FUTURE RENTAL CAR PARKING LOT	
18E	HANGAR 50 THRU 53 (HIGH POINT)	7153.7	44	FUTURE TIEDOWN APRON	
18F	HANGAR 62 THRU 65 (HIGH POINT)	7153.8	45	FUTURE ATCT	
17A	EAST CORPORATE HANGARS 1 THRU 19 (HOT CREEK)	7134.9	46	FUTURE ARFF / SNOW EQUIPMENT BUILDING	
17B	CORPORATE HANGAR 1 (HIGH POINT)	7131.1	47	FUTURE AWOS	
17C	CORPORATE HANGAR 5 (HIGH POINT)	7128.0	48	FUTURE FIXED BASED OPERATOR SITE	
17D	CORPORATE HANGAR 10 (HIGH POINT)	7123.2	49	FUTURE SEGMENTED CIRCLE AND WINDCONE	
18	TERMINAL APRON		50	FUTURE SEWAGE TREATMENT PLANT AND LEACHING FIELD	
19	TIEDOWN APRON		51	FUTURE APRON & PARKING LOT STORM WATER LEACHING FIELD	
20	P.A.P.I.		52	FUTURE OBSTRUCTION LIGHT	
21	REIL		53	EXISTING GREEN CHURCH - PUBLIC ASSEMBLY	7074.8
22	AWOS TOWER	7097.8	54	AC SURFACE BLAST PAD	
23	WIND CONE AND SEGMENTED CIRCLE		55	EXISTING AIRPORT BEACON	7147.9
			56	FUTURE TERMINAL APRON EXPANSION	
			57	US HIGHWAY 395 VEHICLE TRAFFIC	7156.0

DECLARED DISTANCES			
	RUNWAY 9 - 27		
	EXISTING R/W 9	FUTURE R/W 27	
TAKEOFF RUN AVAILABLE	7000	8200	
TAKEOFF DISTANCE AVAILABLE	8000	9200	
ACCELERATE STOP DISTANCE AVAILABLE	7000	8200	
LANDING DISTANCE AVAILABLE	7000	8200	

OBSTRUCTIONS TO RUNWAY 27 OCS 40:1 DEPARTURE					
No.	FACILITY	OFFSET FROM R/W C	TOP ELEV.	PROPOSED CORRECTION	ACTION
18B	HANGAR 15 THRU 16	433' RT	7154.4	INSTALL ROW OF RED OBSTRUCTION LIGHTS	
18C	HANGAR 25 THRU 28	433' RT	7154.0	INSTALL ROW OF RED OBSTRUCTION LIGHTS	
18D	HANGAR 38 THRU 39	433' RT	7153.8	INSTALL ROW OF RED OBSTRUCTION LIGHTS	
18E	HANGAR 50 THRU 53	433' RT	7153.7	INSTALL ROW OF RED OBSTRUCTION LIGHTS	
57	VEHICLES ON US HWY 395	440' LT	7156.0	NO NEAR TERM DISPOSITION SPECIAL DEPARTURE PROCEDURE IN PLACE	

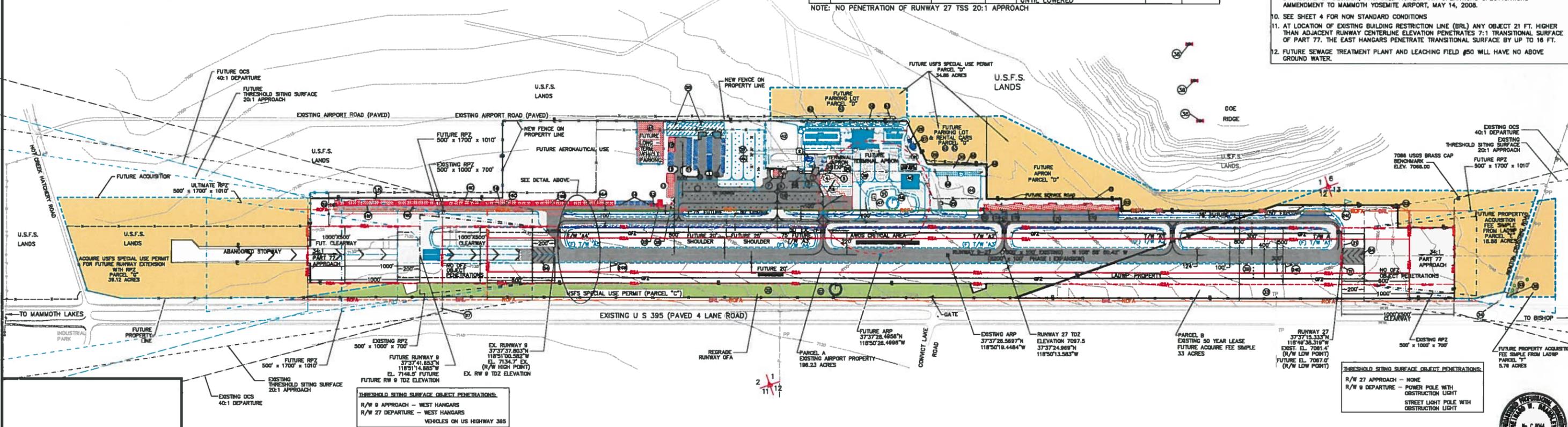
NOTE: NO PENETRATION OF RUNWAY 27 TSS 20:1 APPROACH

OBSTRUCTIONS TO RUNWAY 9 OCS 40:1 DEPARTURE					
No.	FACILITY	OFFSET FROM R/W C	TOP ELEV.	PROPOSED CORRECTION	ACTION
34	EXISTING STREET LIGHT	425' LT	7088.3	INSTALL RED OBSTRUCTION LIGHT UNTIL LOWERED	
35	EXISTING POWER POLE	355' LT	7085.0	INSTALL RED OBSTRUCTION LIGHT UNTIL LOWERED	

NOTE: NO PENETRATION OF RUNWAY 27 TSS 20:1 APPROACH

LEGEND	EXISTING	FUTURE
GROUND CONTOUR	-7070	
AIRPORT PROPERTY LINE		
RUNWAY SAFETY AREA (RSA)		
RUNWAY OBJECT FREE AREA (ROFA)		
RUNWAY OBJECT FREE ZONE (OFZ)		
BUILDING RESTRICTION LINE (BRL)		
RUNWAY PROTECTION ZONE		
THRESHOLD SITING SURFACE (TSS)	APPROACH	
OBSTACLE CLEARANCE SURFACE (OCS)	DEPARTURE	
TAXIWAY SAFETY AREA (TSA)		
TAXIWAY OBJECT FREE AREA (TOFA)		
TAXILANE OBJECT FREE AREA (TLOFA)		
AIRFIELD PAVEMENT		
AIRCRAFT MOVEMENT AREA		
AIRPORT PROPERTY		
SPECIAL USE PERMIT		
FACILITIES		
ROAD (PAVED)		
DIRT/GRAVEL ROAD		
FENCE	5 STRAND BARB WIRE (4')	CHAIN LINK (6')
RUNWAY THRESHOLD LIGHT		
SUPPLEMENTAL WINDCONE		
HOT CREEK LEASE		
SECTION CORNER		
AIRPORT REFERENCE POINT		
OBSTRUCTION LIGHT		

- NOTES:**
- ALL COORDINATES BASED ON NORTH AMERICAN DATUM (NAD 83)
 - ALL ELEVATIONS BASED ON NAVD 88. REFERENCE USGS BENCH MARK 7086 B 1905 B 10, PID #R0401.
 - WIND DATA FROM AWOS ON SITE 12/30/00 TO 2/10/12.
 - THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR NAVIGATIONAL PURPOSES.
 - RUNWAY RSA, ROFA AND ROFZ, TAXIWAY AND TAXILANE TSA, TOFA AND TLOFA SHOWN ON EXPANDED SECTION FOR CLARIFICATION.
 - AIRCRAFT DESIGN GROUP FOR WEST HANGAR TAXILANE AREA IS ADG I.
 - ALL CLEARWAYS ARE 500' WIDE x 1000' LONG.
 - DUE TO CHANGE IN MAGNETIC DECLINATION RUNWAY 9-27 MARKING WILL BE CHANGED TO RUNWAY 10-28 WITHIN 5 YEARS.
 - * Q400 IS A CII AIRCRAFT AND IS THE CRITICAL AIRCRAFT AT MAMMOTH YOSEMITE AIRPORT BY RECORD OF DECISION, PROPOSED HORIZON AIR OPERATIONS SPECIFICATIONS AMENDMENT TO MAMMOTH YOSEMITE AIRPORT, MAY 14, 2008.
 - SEE SHEET 4 FOR NON STANDARD CONDITIONS
 - AT LOCATION OF EXISTING BUILDING RESTRICTION LINE (BRL) ANY OBJECT 21 FT. HIGHER THAN ADJACENT RUNWAY CENTERLINE ELEVATION PENETRATES 7:1 TRANSITIONAL SURFACE OF PART 77. THE EAST HANGARS PENETRATE TRANSITIONAL SURFACE BY UP TO 16 FT.
 - FUTURE SEWAGE TREATMENT PLANT AND LEACHING FIELD #50 WILL HAVE NO ABOVE GROUND WATER.



FAA DISCLAIMER
THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPicted THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER

TOWN OF MAMMOTH LAKES
STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
MAMMOTH LAKES, CALIFORNIA
AIRPORT LAYOUT PLAN - EXISTING - BIII

NO.	REVISIONS	BY	APR	DATE

DATE JULY 16, 2014
SHEET NUMBER 2 OF 14 SHEETS

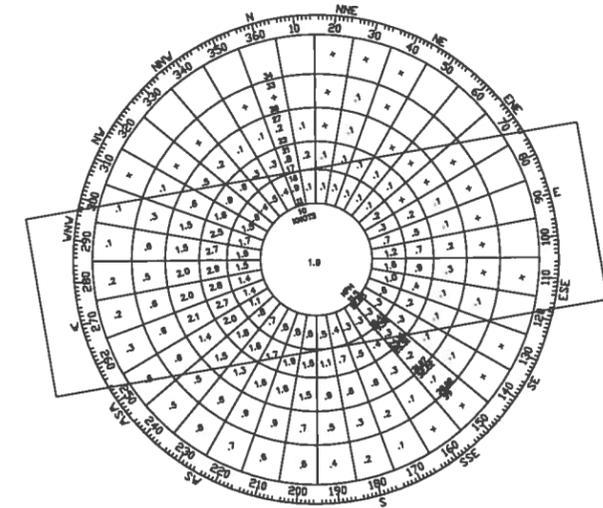


NOTES:

- (1) STAGE LENGTH, RUNWAY WIDTH AND RESTRICTIONS LIMITS AIRCRAFT MCTOW TO 150,000 LBS.
- (2) WEST TAXILANE LIMITED TO B-I AIRCRAFT.
- (3) EXISTING RUNWAY OBJECT FREE AREA (ROFA) DIMENSIONS ARE: WIDTH - 720', LENGTH PRIOR TO THRESHOLD - 600', LENGTH BEYOND THRESHOLD - 600'. THESE ARE EXISTING DIMENSIONS AND DO NOT MEET B/III STANDARDS OF 800 FT WIDTH DUE TO EXISTENCE OF U.S. HIGHWAY 395 ROW FENCE TO THE SOUTH.

RUNWAY DATA TABLE

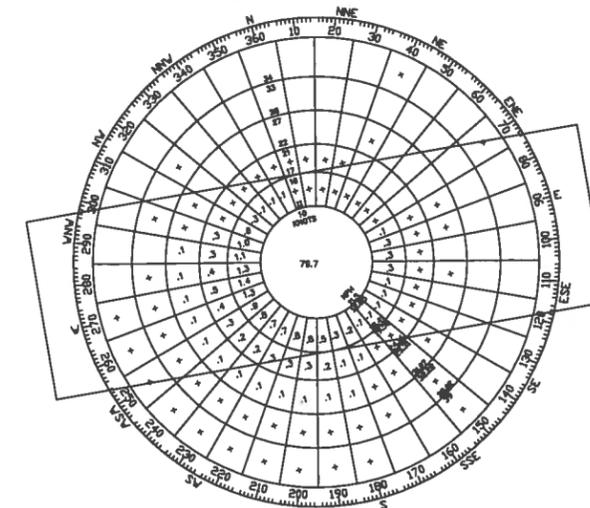
		RUNWAY 9 - 27		FAA STANDARDS	
		EXISTING	FUTURE	B-III	C-III
		R/W 9 ---- R/W 27	R/W 9 ---- R/W 27		
AIRPORT REFERENCE CODE (ARC)		B-III	C-III		
APPROACH VISIBILITY MINIMUMS		VISUAL ---- 1 1/4 MI.	VISUAL ---- 1 1/4 MI.	>1 MI.	>1 MI.
FAR PART 77 CATEGORY RUNWAY		V ---- NP	V ---- NP		
RUNWAY REFERENCE CODE (RRC)		B/III/VIS ---- B/III/5000	C/III/VIS ---- C/III/5000		
DESIGN AIRCRAFT		Q400	B737-700		
DESIGN AIRCRAFT MAIN GEAR WIDTH (MGW)		33.2	23.0		
WINGSPAN OF CRITICAL DESIGN AIRCRAFT (FT.)		93.3	112.5		
APPROACH SPEED OF CRITICAL DESIGN AIRCRAFT		129	130		
MAXIMUM CERTIFIED TAKEOFF WEIGHT OF CRITICAL DESIGN AIRCRAFT (LBS)		65,200	154,500 (1)		
MAXIMUM CERTIFIED LANDING WEIGHT OF CRITICAL DESIGN AIRCRAFT (LBS)		62,000	129,200		
PERCENTAGE WIND COVERAGE					
10.5 KNOT CROSSWIND PERCENT		93.3	93.3		
13 KNOT CROSSWIND PERCENT		95.6	95.6		
16 KNOT CROSSWIND PERCENT		97.8	97.8		
20 KNOT CROSSWIND PERCENT		99.1	99.1		
RUNWAY LINE OF SIGHT		FULL	FULL		
MAXIMUM RUNWAY GRADIENT		1.45	1.45	0 TO +/- 2.00	0 TO +/- 1.50
EAST QUARTER OF RUNWAY GRADIENT (R/W 27)		1.06 - 1.45	0.80	0 TO +/- 2.00	0 TO +/- 0.80
WEST QUARTER OF RUNWAY GRADIENT (R/W 9)		0.48 - 1.03	0.80	0 TO +/- 2.00	0 TO +/- 0.80
RUNWAY DESIGN CODE (RDC)		B/III/VIS ---- B/III/5000	C/III/VIS ---- C/III/5000		
RUNWAY LENGTH		7000	8200		
RUNWAY WIDTH		100	100	100	100
SHOULDER WIDTH		12	20	20	20
RUNWAY PAVEMENT SURFACE		ASPHALT, GROOVED	ASPHALT, GROOVED		
PAVEMENT DESIGN STRENGTH 1,000 LB GROSS AIRCRAFT		80 S, 150 D A	80 S, 150 D A		
PAVEMENT CLASSIFICATION NUMBER (PCN)		32 F/B/X/T A	32 F/B/X/T A		
RUNWAY MARKING		NP ---- NP	NP ---- NP		
RUNWAY LIGHTING		MIRL	MIRL		
BLAST PAD WIDTH		144	144	140	140
BLAST PAD LENGTH		200	200	200	200
CROSSWIND COMPONENT		16	16	16	16
RUNWAY SAFETY AREA - LENGTH BEYOND DEPARTURE END		600	1000	600	1000
RUNWAY SAFETY AREA - LENGTH PRIOR TO THRESHOLD		600	600	600	600
RUNWAY SAFETY AREA - WIDTH		300	500	300	500
RUNWAY OBJECT FREE AREA - LENGTH BEYOND RUNWAY END		600	1000	600	1000
RUNWAY OBJECT FREE AREA - LENGTH PRIOR TO THRESHOLD		600	600	600	600
RUNWAY OBJECT FREE AREA - WIDTH		720	720	800	800
RUNWAY OBSTACLE FREE ZONE - LENGTH BEYOND RUNWAY END		200	200	200	200
RUNWAY OBSTACLE FREE ZONE - WIDTH		400	400	400	400
RUNWAY DEPARTURE SURFACE (OCS)		40:1	40:1		
THRESHOLD SITING SURFACE (TSS)		20:1	20:1		
APPROACH RUNWAY PROTECTION ZONE - LENGTH		1700	1700	1000	1700
APPROACH RUNWAY PROTECTION ZONE - INNER WIDTH		500	500	500	500
APPROACH RUNWAY PROTECTION ZONE - OUTER WIDTH		700	1010	700	1010
APPROACH RUNWAY PROTECTION ZONE - ACRES		13.770	29.465	13.770	29.465
DEPARTURE RUNWAY PROTECTION ZONE - LENGTH		1000	1700	1000	1700
DEPARTURE RUNWAY PROTECTION ZONE - INNER WIDTH		500	500	500	500
DEPARTURE RUNWAY PROTECTION ZONE - OUTER WIDTH		700	1010	700	1010
DEPARTURE RUNWAY PROTECTION ZONE - ACRES		13.770	29.465	13.770	29.465
RUNWAY CENTERLINE TO PARALLEL RUNWAY CENTERLINE					
RUNWAY CENTERLINE TO HOLDING POSITION		220	270	220	270
RUNWAY CENTERLINE TO PARALLEL TAXILANE/TAXILANE CENTERLINE		300	300	300	400
RUNWAY CENTERLINE TO AIRCRAFT PARKING AREA		400	500	400	500
TAXIWAY DESIGN GROUP (TDG)		3	5	3	5
TAXIWAY WIDTH		50	75	50	75
TAXIWAY EDGE SAFETY MARGIN		8.4	15	10	15
TAXIWAY SHOULDER WIDTH		0	25	20	25
TAXIWAY PAVEMENT SURFACE		ASPHALT	ASPHALT		
TAXIWAY PAVEMENT DESIGN STRENGTH 1,000 LB GROSS AIRCRAFT		80 S, 150 D A	80 S, 150 D A		
TAXIWAY LIGHTING		RETROREFLECTIVE EDGE MARKERS	MITL		
TAXIWAY SAFETY AREA - WIDTH		118	118	118	118
TAXIWAY OBJECT FREE AREA - WIDTH		181 (90.3' NORTH)	181 (90.3' NORTH)	188	188
TAXILANE OBJECT FREE AREA - WIDTH		67 (33.5' NORTH)	67 (33.5' NORTH)	182	182
TAXIWAY CENTERLINE TO PARALLEL TAXIWAY/TAXILANE CENTERLINE		100	100	152	152
TAXIWAY CENTERLINE TO FIXED OR MOVABLE OBJECT		90.3	90.3	93	93
TAXILANE CENTERLINE TO FIXED OR MOVABLE OBJECT		33.5 (NORTH)	33.5 (NORTH)	39.5 (2)	39.5 (2)
TAXIWAY WINGTIP CLEARANCE		35 (WEST TAXILANE), 44 (EAST HGR)	28 (WEST TAXILANE), 34 (EAST HGR)	34	34
TAXILANE WINGTIP CLEARANCE		15	15	15 (2)	15 (2)



MAX HOURLY GUST WIND COVERAGE

TIME PERIOD	R/W 9-27			
	10.5 Kts 11.5 MPH	13.0 Kts 15 MPH	16.0 Kts 18.4 MPH	20.0 Kts 23 MPH
ALL DAY	53.32%	62.41%	71.87%	82.89%

SOURCE: MAMMOTH YOSEMITE AIRPORT AWOS CLIMATOLOGICAL DATA (BASED ON MAGNETIC NORTH) FOR MAMMOTH YOSEMITE AIRPORT, JAN. 9, 2001 TO SEPT. 9, 2012 (9,240 HOURLY READINGS).



AVERAGE HOURLY WIND WIND COVERAGE

TIME PERIOD	R/W 9-27			
	10.5 Kts 11.5 MPH	13.0 Kts 15 MPH	16.0 Kts 18.4 MPH	20.0 Kts 23 MPH
ALL DAY	93.33%	95.67%	97.8%	99.1%

SOURCE: MAMMOTH YOSEMITE AIRPORT AWOS CLIMATOLOGICAL DATA (BASED ON MAGNETIC NORTH) FOR MAMMOTH YOSEMITE AIRPORT, DEC. 30, 2000 TO SEPT. 10, 2012 (33,496 HOURLY READINGS).

RUNWAY END DATA

RUNWAY 9 - 27			
		EXISTING	FUTURE
		R/W 9 ---- R/W 27	R/W 9 ---- R/W 27
RUNWAY END COORDINATES		37°37'37.803"N ---- 118°51'00.582"W	37°37'15.333"N ---- 118°49'38.319"W
APPROACH SURFACE SLOPE - TSS		20:1	20:1
DEPARTURE SURFACE SLOPE - OCS		40:1	40:1
NAVIGATIONAL AIDS		NONE ---- GPS	NONE ---- GPS
VISUAL AIDS		NONE ---- REIL, PAPI	NONE ---- REIL, PAPI
APPROACH VISIBILITY MINIMUMS		VISUAL ---- 1 1/4 MI.	VISUAL ---- 1 1/4 MI.
TOUCHDOWN ZONE ELEVATION		7134.7	7146.5
RUNWAY HIGHEST ELEVATION		7097.5	7097.5
RUNWAY LOWEST ELEVATION		7061.4	7067.0
OFZ PENETRATIONS - POWER POLE WITH OBSTRUCTION LIGHTS		YES ---- YES	YES ---- YES
THRESHOLD SITING SURFACE PENETRATIONS		YES ---- NO	YES ---- NO
OBSTACLE CLEARANCE SURFACE PENETRATIONS		YES ---- YES	YES ---- NO
14 CFR PART 77 APPROACH CATEGORY		34:1	34:1

AIRPORT DATA TABLE

	EXISTING	FUTURE
AIRPORT ELEVATION	7134.7	7146.5
AIRPORT REFERENCE POINT (ARP) COORDINATES	37°37'26.5697"N 118°50'19.4484"W	37°37'28.4956"N 118°50'28.4996"W
AIRPORT NAVIGATION AIDS	GPS, BEACON	GPS, BEACON
MISC. FACILITIES	AWOS, LIGHTED WINDCONES	AWOS, LIGHTED WINDCONES
MEAN MAX. TEMP. (HOTTEST MONTH)	82° F (JULY)	82° F (JULY)
AIRPORT REFERENCE CODE (ARC)	B-III	C-III
AIRPORT MAGNETIC DECLINATION NOAA.GOV DEC. 2012	13°20'	
NPIS SERVICE LEVEL	CS	CS

DECLARED DISTANCES

RUNWAY 9 - 27			
		EXISTING	FUTURE
		R/W 9 ---- R/W 27	R/W 9 ---- R/W 27
TOUCHDOWN ZONE ELEVATION		7134.7	7146.5
TAKEOFF RUN AVAILABLE (TORA)		7000	8200
TAKEOFF DISTANCE AVAILABLE (TODA)		8000	9200
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)		7000	8200
LANDING DISTANCE AVAILABLE (LDA)		7000	8200

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT OPERATED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER

6125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

TOWN OF MAMMOTH LAKES
STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT
MAMMOTH LAKES, CALIFORNIA

DATA TABLES

NO.	REVISIONS	BY	APR	DATE
1	UPDATED PCN AND PAVEMENT DESIGN STRENGTH	DB	RWB	12/19/14



**ARC B III NON-STANDARD CONDITIONS - AC 150/5300-13A
TO BE CORRECTED AS FUNDING BECOMES AVAILABLE**

ITEM No.	DESCRIPTION	EXISTING	B III STANDARD	PROPOSED ACTION
1	RUNWAY			
a.	RUNWAY SHOULDER WIDTH - FT.	12	20	WIDEN SHOULDERS
2	RUNWAY OBJECT FREE - ROFA			
a.	SOIL BETWEEN RSA LIMIT AND US HIGHWAY 395 ROW	250	400	GRADE FROM 250' TO 360' SOUTH OF RUNWAY
b.	SUPPLEMENTAL WINDCONE EAST END - FT.	150	400	RELOCATE SUPPLEMENTAL WINDCONE
c.	SUPPLEMENTAL WINDCONE WEST END - FT.	150		ELIMINATE WINDCONE
d.	SEGMENTED CIRCLE AND WINDCONE	300	400	RELOCATE, SEE INVENTORY #49
3	TAXIWAY OBJECT FREE AREA - TOFA			
a.	EAST HANGARS - FT. *	90.5	93	INSTALL ROW OF OBSTRUCTION LIGHTS
4	RUNWAY APPROACH AND DEPARTURE SURFACES - TSS			
a.	WEST HANGARS #25-#28 - TSS APPROACH SURFACE *	433' NORTH	500' +	INSTALL ROW OF RED OBSTRUCTION LIGHTS
b.	WEST HANGARS #15-#53 - OCS DEPARTURE SURFACE *	433' NORTH	500' +	INSTALL ROW OF RED OBSTRUCTION LIGHTS
c.	ONE STREET LIGHT, ONE POWER POLE AT BENTON CROSSING ROAD - R/W 9 40:1 OCS DEPARTURE	PENETRATING OCS		INSTALL RED OBSTRUCTION LIGHTS UNTIL LOWERED
5	TAXIWAY			
a.	TAXIWAY EDGE SAFETY MARGIN - FT.	8.4	15	WIDEN ALL TAXIWAYS TO 75'
b.	TAXIWAY FILLET RADIUS - TAXIWAY TO TAXIWAY - FT.	50	TAPER FILLET	TAPER FILLET TO TAXIWAY DESIGN GROUP 5
c.	TAXIWAY SHOULDER WIDTH - FT.	0	25	ADD 25' SHOULDER
6	TAXILANE OBJECT FREE AREA			
a.	FUEL FARM	36	39.5	RELOCATE FUEL STORAGE TANKS

* FORM 7460 APPROVED BY FAA PRIOR TO CONSTRUCTION

**ARC B III NON-STANDARD CONDITIONS - AC 150/5300-13A
ACTIONS**

ITEM No.	DESCRIPTION	EXISTING	B III STANDARDS	ACTION
1	RUNWAY OBJECT FREE AREA - OFA			
a.	US HIGHWAY 395 ROW FENCE & 14' SOIL SLOPE - FT.	360' SOUTH SIDE	400	NO NEAR TERM DISPOSITION
b.	EAST HANGARS - FT. *	390.5' NORTH SIDE	400	FAA DETERMINATION LETTER (FORM 7460-1) ISSUED - 5/26/99 OBSTRUCTION LIGHTS ON TOP OF HANGARS PROPOSE TO INSTALL ADDITIONAL ROW OF OBSTRUCTION LIGHTS SEE NOTE No. 3
c.	ONE POWER POLE AND ONE TELEPHONE POLE SOUTH OF RUNWAY - FT. **	374' SOUTH SIDE	400	FAA DETERMINATION LETTER (FORM 7460-1) ISSUED - 6/25/09 OBSTRUCTION LIGHTS TOP OF POLES
2	RUNWAY TSS APPROACH AND OCS DEPARTURE SURFACES			
a.	US HIGHWAY 395 FENCE - RUNWAY 27 OCS 40:1 DEPARTURE OR TSS 20:1 APPROACH	374' SOUTH SIDE	500' +	NO NEAR TERM DISPOSITION SPECIAL DEPARTURE PROCEDURE IN PLACE
b.	VEHICLES ON US HIGHWAY 395 - RUNWAY 27 OCS 40:1 DEPARTURE OR TSS 20:1 APPROACH	440' SOUTH SIDE	500' +	NO NEAR TERM DISPOSITION SPECIAL DEPARTURE PROCEDURE IN PLACE
3	TAXIWAY			
a.	TAXIWAY CENTERLINE TO TAXILANE CENTERLINE - WEST HANGARS - FT. *	100	152	FAA DETERMINATION LETTER (FORM 7460-1) ISSUED - 5/26/99 SEE NOTE No. 3
b.	TAXIWAY CENTERLINE TO FIXED OR MOVEABLE OBJECT - EAST HANGARS - FT. *	90.5	93	FAA DETERMINATION LETTER (FORM 7460-1) ISSUED - 5/26/99 OBSTRUCTION LIGHTS ON TOP OF HANGARS PROPOSE TO INSTALL ADDITIONAL ROW OF OBSTRUCTION LIGHTS. SEE NOTE No. 3
4	TAXILANE - WEST HANGARS *, ***			
a.	TAXILANE OBJECT FREE AREA - WEST HANGARS - FT. *, ***	67	79	FAA DETERMINATION LETTER (FORM 7460-1) ISSUED - 5/26/99 PROPOSE TO INSTALL ADDITIONAL ROW OF OBSTRUCTION LIGHTS. SEE NOTE No. 3
b.	TAXILANE CENTERLINE TO FIXED OR MOVEABLE OBJECT - WEST HANGARS - FT. *, ***	33.5	39.5	FAA DETERMINATION LETTER (FORM 7460-1) ISSUED - 5/26/99 PROPOSE TO INSTALL ADDITIONAL ROW OF OBSTRUCTION LIGHTS. SEE NOTE No. 3

* FORM 7460 APPROVED BY FAA PRIOR TO CONSTRUCTION

** LIGHTED WITH SOLAR POWERED OBSTRUCTION LIGHTS

*** WEST HANGAR TAXILANE LIMITED TO B-1 AIRCRAFT

NOTES:

- MAMMOTH YOSEMITE AIRPORT IS CURRENTLY ARC-B III.
- FAR PART 77 STANDARDS HAVE BEEN INCLUDED IN DETERMINING NON-STANDARD CONDITIONS.
- LONG TERM, WHEN HANGAR LEASE EXPIRES EAST HANGARS, WEST HANGARS AND FUEL STORAGE FACILITIES CAN BE RELOCATED OUT OF OBJECT FREE AREA AND ALLOW WIDENING OF THE RUNWAY CENTERLINE TO TAXIWAY CENTERLINE DISTANCE TO MEET FAA STANDARDS.
ANY NEW CONSTRUCTION WILL BE LOCATED TO MEET FUTURE CIII STANDARDS.

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

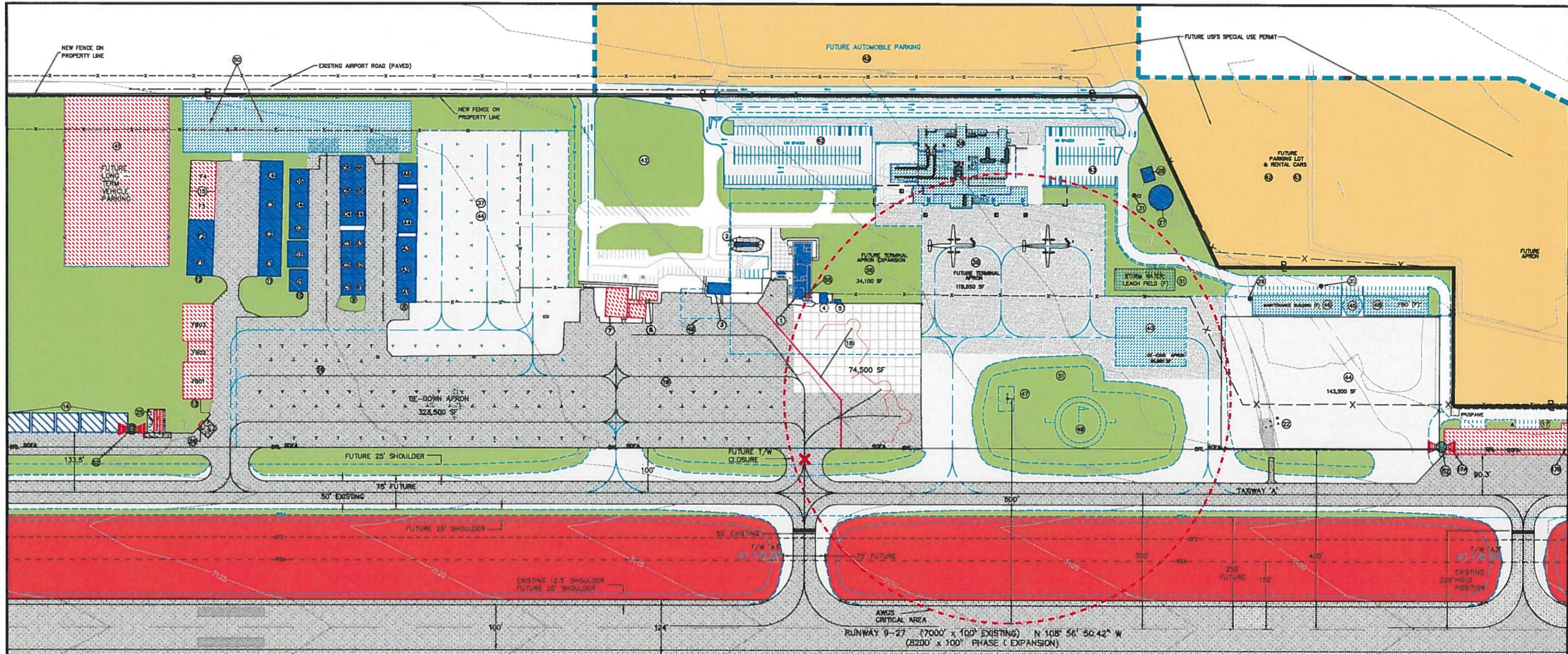
APPROVED _____ DATE _____
GRADY DUTTON - DIRECTOR OF PUBLIC WORKS



TOWN OF MAMMOTH LAKES
STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
MAMMOTH LAKES, CALIFORNIA
NON-STANDARD CONDITIONS TABLES

NO.	REVISIONS	BY	APR	DATE



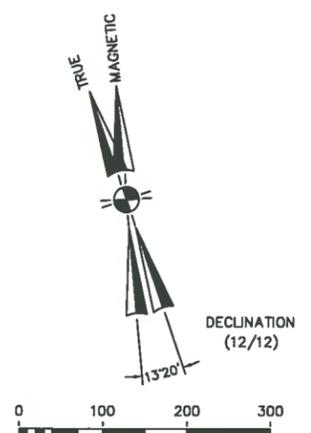


BUILDING INVENTORY

No.	FACILITY	TOP ELEV.	No.	FACILITY	TOP ELEV.	No.	FACILITY	TOP ELEV.
1	EXISTING INTERIM TERMINAL BUILDING & BEACON	7144.4	17	EAST CORPORATE HANGARS 1 THRU 19 (HOT CREEK)		40	FUTURE DEICING RAMP	
2	FUTURE ADMINISTRATION BUILDING	7127	17A	CORPORATE HANGAR 1 (HIGH POINT)	7134.9	41	FUTURE LONG TERM VEHICLE PARKING LOT (HOT CREEK)	
3	SHORT TERM PASSENGER HOLD ROOM-(SPRUNG STRUCTURE)	7127	17B	CORPORATE HANGAR 5 (HIGH POINT)	7131.1	42	FUTURE AUTOMOBILE PARKING LOT	
4	AIRPORT OFFICE	7122.2	18	EXISTING TERMINAL APRON		43	FUTURE RENTAL CAR PARKING LOT	
5	ELECTRICAL & TELEPHONE VAULT	7120.3	19	TIEDOWN APRON		44	FUTURE TIEDOWN APRON	
6	AIRPORT FUEL STORAGE	7121.9	22	AWOS TOWER	7097.8	45	FUTURE ATCT	
7	EXISTING PILOTS LOUNGE (HOT CREEK)	7125.8	25	FUEL STORAGE TANKS (HOT CREEK)		46	FUTURE ARFF / SNOW EQUIPMENT BUILDING	
8	EXISTING FBO OFFICE (HOT CREEK)	7125.8	26	AV. GAS STORAGE, SELF SERVICE (HOT CREEK)		47	FUTURE AWOS	
9	AIRCRAFT HANGARS A1 THRU A6 (PRIVATE ON LEASE LAND)	7138.9	27	WATER STORAGE TANK	7123.6	48	FUTURE FIXED BASED OPERATOR BUILDING	
10	AIRCRAFT HANGARS B1 THRU B3 & C1 THRU C3	7136.8	28	WATER STORAGE PUMP HOUSE	7119.4	49	FUTURE SEGMENTED CIRCLE AND WINDCONE	
11	AIRCRAFT HANGARS B4 THRU B6 & C4 THRU C6	7136.8	29	WELL #99-1 GRND. ELEV. 7095.4'		50	FUTURE SEWAGE TREATMENT PLANT AND LEACHING FIELD	
12	AIRCRAFT HANGARS D1 THRU D2	7141.2	30	WELL #99-2 GRND. ELEV. 7094'		51	FUTURE APRON & PARKING LOT STORM WATER LEACHING FIELD	
13	AIRCRAFT HANGARS D3 THRU D5	7140	31	AIRPORT WELL (ABANDONED)		52	FUTURE OBSTRUCTION LIGHT	
14	AIRCRAFT HANGARS E1 THRU E4	7142.3	37	EXISTING LONG TERM VEHICLE PARKING (HOT CREEK)		55	EXISTING AIRPORT BEACON	7147.9
15	AIRCRAFT HANGARS F1 & F2	7141.8	38	FUTURE TERMINAL BUILDING	7142.0	56	FUTURE TERMINAL APRON EXPANSION	
16	AIRCRAFT HANGARS FBO1 (HOT CREEK)	7158.1	39	FUTURE TERMINAL APRON				
17	AIRCRAFT HANGARS FBO2 (HOT CREEK)	7149.7						
18	AIRCRAFT HANGARS FBO3 (HOT CREEK)	7147.9						
19	AIRCRAFT HANGARS G1 THRU G6 (AIRPORT HANGARS)	7145.7						
20	AIRCRAFT HANGAR PADS ONLY - F3 & F4 (HOT CREEK)	7145.7						

NOTES:
 1. PORTIONS OF THE EAST HANGARS PENETRATE THE RUNWAY OBJECT FREE AREA (ROFA) AND THE BUILDING RESTRICTION LINE (BRL). ACTION TAKEN - FAA DETERMINATION LETTER (FORM 7460-1) ISSUED 5/26/99.
 2. SEE SHEET 4 FOR NON STANDARD CONDITIONS.

LEGEND	EXISTING	FUTURE
AIRPORT PROPERTY LINE	---	---
RUNWAY SAFETY AREA (RSA)	--- RSA ---	--- RSA ---
RUNWAY OBJECT FREE AREA (ROFA)	--- ROFA ---	
RUNWAY OBJECT FREE ZONE (OFZ)	--- OFZ ---	
BUILDING RESTRICTION LINE (BRL)	--- BRL ---	--- BRL ---
AIRFIELD PAVEMENT	[Pattern]	[Pattern]
AIRCRAFT MOVEMENT AREA	[Pattern]	[Pattern]
RUNWAY SAFETY AREA	[Color]	[Color]
AIRPORT PROPERTY	[Color]	[Color]
FACILITIES	[Pattern]	[Pattern]
HOT CREEK LEASE	[Pattern]	
ROAD (PAVED)	---	---
DIRT/GRAVEL ROAD	---	---
FENCE	---	---



FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

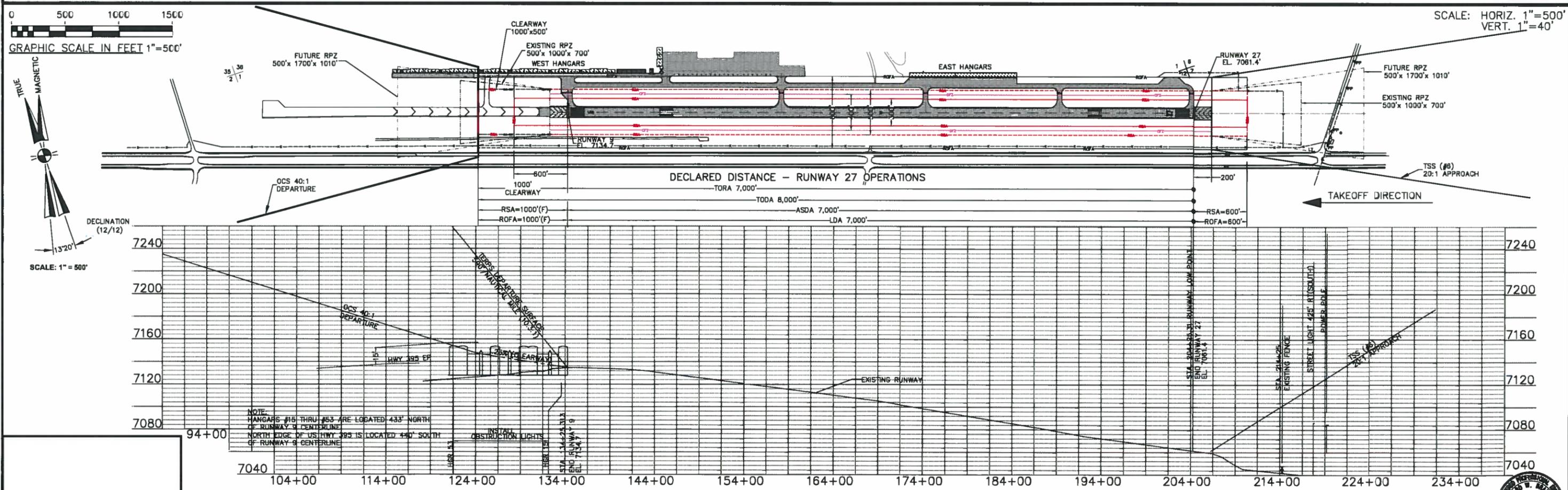
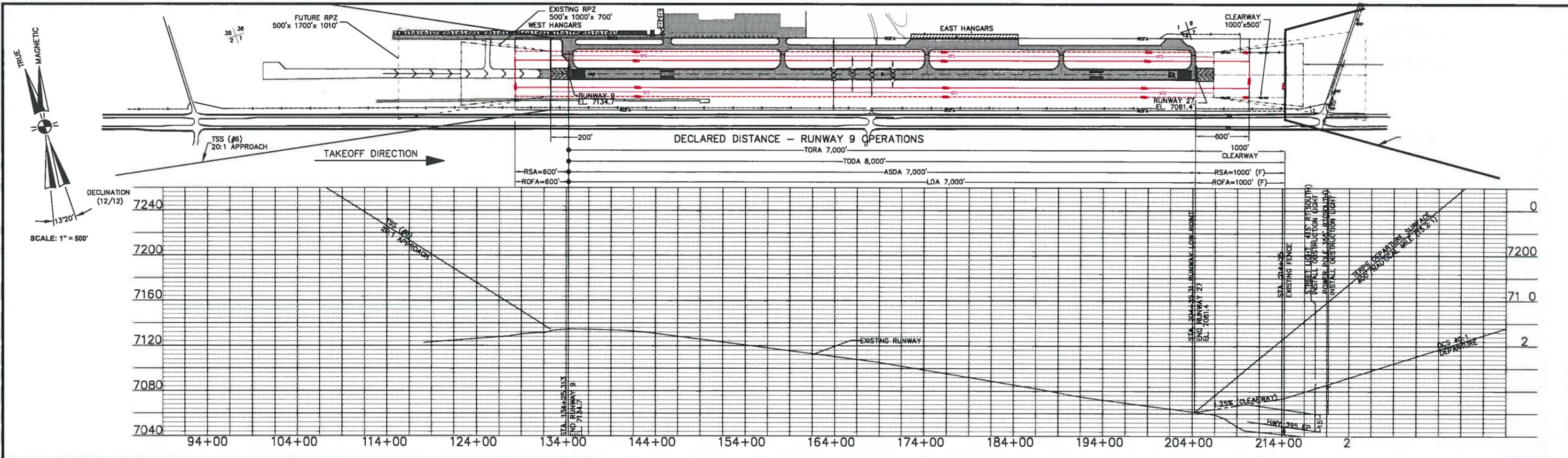
APPROVED _____ DATE _____
 GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
TERMINAL AREA LAYOUT PLAN

NO.	REVISIONS	BY	APR	DATE

DATE JULY 16, 2014
 SHEET NUMBER 5 OF 14 SHEETS



FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER

6125 King Road, Suite 201 • Leominster, California 95850 • (916) 852-4725

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA

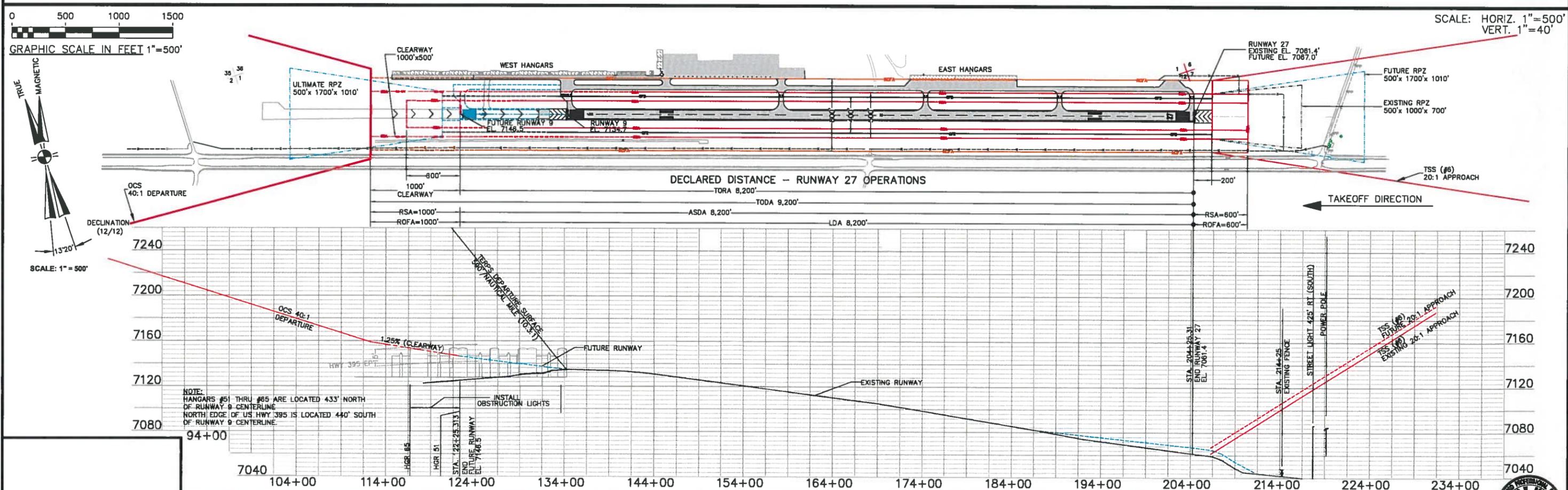
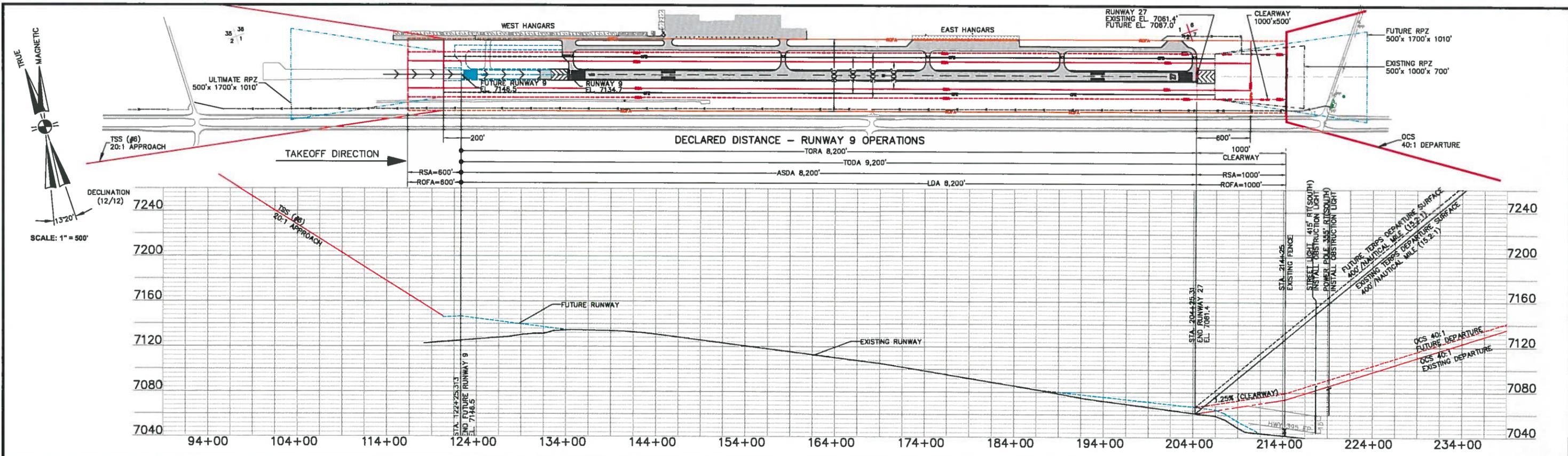
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA

PROPOSED DECLARED DISTANCES FOR RUNWAY 8-27

NO.	REVISIONS	BY	APR	DATE

DATE JULY 16, 2014
 SHEET NUMBER 6 OF 14 SHEETS

FAA APPROVAL



NOTE:
 HANGARS #51 THRU #65 ARE LOCATED 433' NORTH
 OF RUNWAY 9 CENTERLINE
 NORTH EDGE OF US HWY 395 IS LOCATED 440' SOUTH
 OF RUNWAY 9 CENTERLINE.

FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY
 REFLECT THE OFFICIAL VIEWS OR POLICY OF
 THE FAA. ACCEPTANCE OF THIS PLAN BY
 THE FAA DOES NOT IN ANY WAY
 CONSTITUTE A COMMITMENT ON THE PART
 OF THE UNITED STATES TO PARTICIPATE IN
 ANY DEVELOPMENT DEPICTED THEREIN NOR
 DOES IT INDICATE THAT THE PROPOSED
 DEVELOPMENT IS ENVIRONMENTALLY
 ACCEPTABLE IN ACCORDANCE WITH
 APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER

G.E. 8044
 8125 King Road, Suite 201 • Loomis, California 95660 • (916) 852-4725

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA

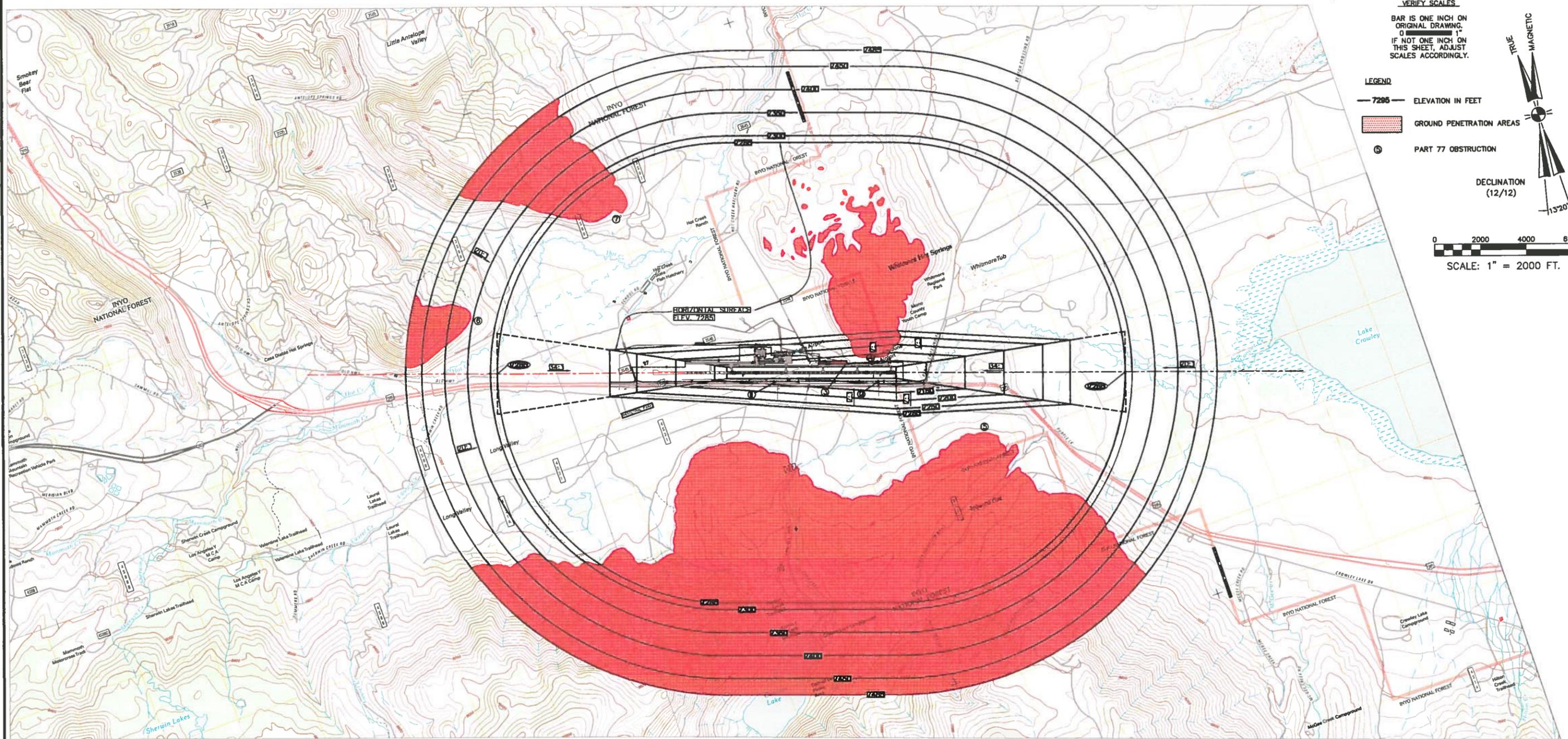
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA

FUTURE DECLARED DISTANCES FOR RUNWAY 9-27

NO.	REVISIONS	BY	APR	DATE

DATE JULY 16, 2014

SHEET NUMBER
 7 OF 14 SHEETS



VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING.
 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LEGEND
 — 7295 — ELEVATION IN FEET
 [Red Shaded Area] GROUND PENETRATION AREAS
 (6) PART 77 OBSTRUCTION

DECLINATION (12/12)
 TRUE MAGNETIC
 -13°20'

0 2000 4000 6000
 SCALE: 1" = 2000 FT.

OBSTRUCTION	DISTANCE FROM R/W THRESHOLD		OFFSET	DISPOSITION
	R/W 9	R/W 27		
① SO, CAL EDISON POLE	1355'		370' RIGHT	EXISTING OBSTRUCTION LIGHT REMOVE POLE AFTER CABLE PLACED UNDERGROUND
② VERIZON POLE		580'	374' LEFT	EXISTING OBSTRUCTION LIGHT REMOVE POLE AFTER CABLE PLACED UNDERGROUND
③ EAST HANGARS		1982'	390.3' RIGHT	INSTALL ROW OF OBSTRUCTION LIGHTS RELOCATE HANGARS AFTER LEASE EXPIRES
④ DOE RIDGE		790'	655' RIGHT	EXISTING OBSTRUCTION LIGHTS
⑤ SOUTH MOUNTAINS			2620' LEFT	-
⑥ LITTLE ANTELOPE HILL	11340' PRIOR		WEST HILLSIDE	EXISTING OBSTRUCTION LIGHT
⑦ NORTHWEST HILLSIDE			NORTHWEST HILLSIDE	-

PORTIONS OF USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
 BLOODY MTN, CA 2012
 OLD MAMMOTH, CA 2012
 WHITMORE HOT SPRINGS, CA 2012
 CONVICT LAKE, CA 2012

- NOTE:**
- EXISTING USGS BASE MAP CONTOUR INTERVAL IS 40 AND 80 FEET.
 - EXISTING USGS BASE MAP DATUM IS NAD 83
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1978 AND 1979, REVISED BY AERIAL PHOTOS IN 2010 AND LIMITED FIELD CHECKED IN 2009. CONTOURS FROM NATIONAL DATA SET OF 1999. ALL CONTOURS, DISTANCES AND ELEVATIONS ARE IN FEET.
 - ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET).
 - NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP SHEET 14
 - GROUND PENETRATIONS TO FAA PART 77. TREES ON GROUND WERE NOT EVALUATED.
 - PRIMARY SURFACE WIDTH = 500'
 - SEE SHEET No. 10 FOR PLAN AND PROFILE OF RUNWAY APPROACH AND DEPARTURE CORRIDOR.

FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT IDENTIFIED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED DATE
 GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 6125 King Road, Suite 201 • Loomis, California 95650 • (916) 632-4725

COUNTY OF MONO
 STATE OF CALIFORNIA

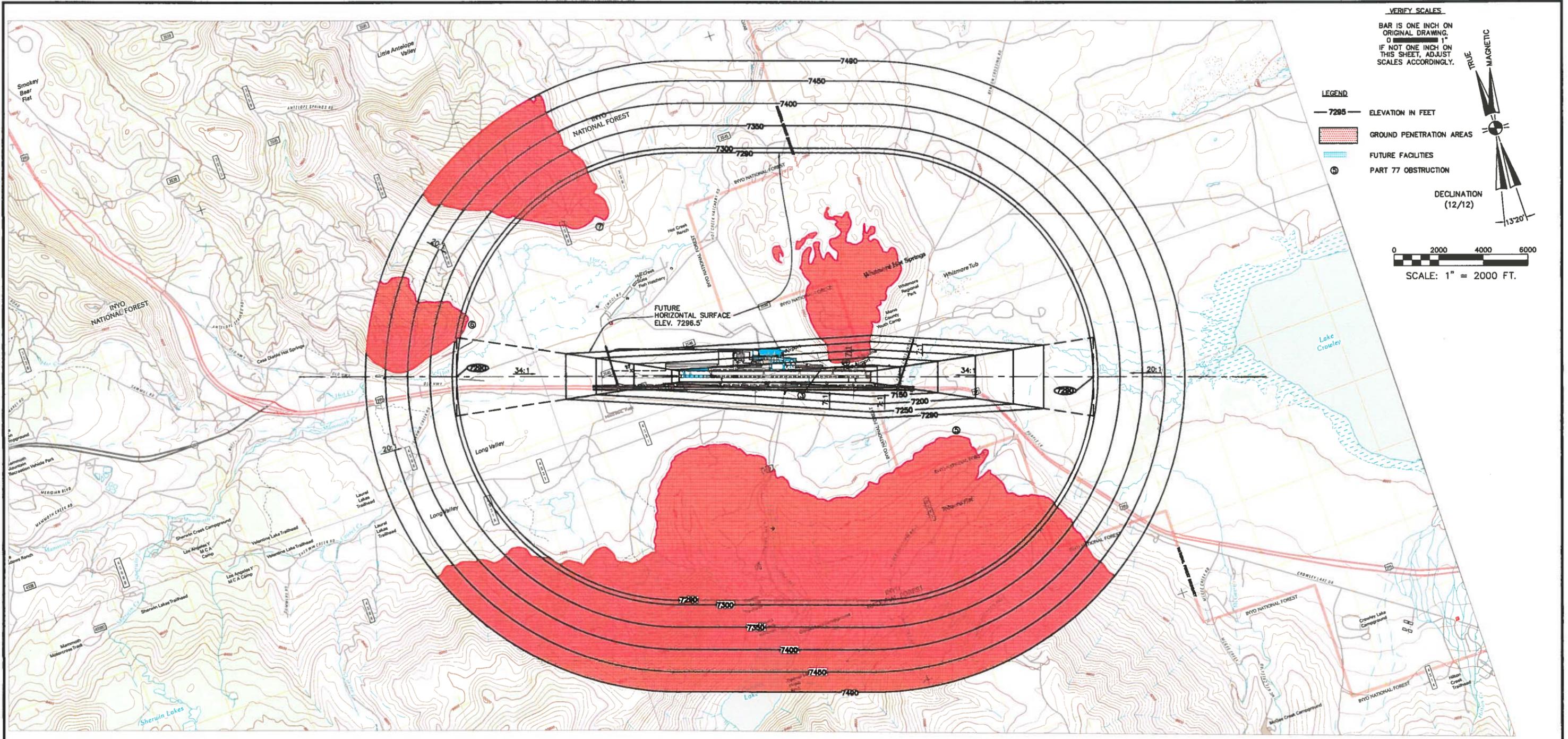
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA

AIRPORT AIRSPACE DRAWING - EXISTING LAYOUT

NO.	REVISIONS	BY	APP	DATE

DATE JULY 16, 2014
 SHEET NUMBER
 8 OF 14 SHEETS

FAA APPROVAL



VERIFY SCALES
 BAR IS ONE INCH ON ORIGINAL DRAWING.
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

LEGEND

- 7295 — ELEVATION IN FEET
- [Red shaded area] GROUND PENETRATION AREAS
- [Blue dashed area] FUTURE FACILITIES
- (S) PART 77 OBSTRUCTION

DECLINATION (12/12)
 -13°20'

0 2000 4000 6000
 SCALE: 1" = 2000 FT.

OBSTRUCTION	DISTANCE FROM R/W THRESHOLD		OFFSET	DISPOSITION
	R/W 9	R/W 27		
① SO, CAL EDISON POLE	1355'		370' RIGHT	EXISTING OBSTRUCTION LIGHT REMOVE POLE AFTER CABLE PLACED UNDERGROUND
② VERIZON POLE		580'	374' LEFT	EXISTING OBSTRUCTION LIGHT REMOVE POLE AFTER CABLE PLACED UNDERGROUND
③ EAST HANGARS		1982'	390.3' RIGHT	INSTALL ROW OF OBSTRUCTION LIGHTS RELOCATE HANGARS AFTER LEASE EXPIRES
④ DOE RIDGE		790'	655' RIGHT	EXISTING OBSTRUCTION LIGHTS
⑤ SOUTH MOUNTAINS			2620' LEFT	-
⑥ LITTLE ANTELOPE HILL	9700' PRIOR		WEST HILLSIDE	EXISTING OBSTRUCTION LIGHT
⑦ NORTHWEST HILLSIDE			NORTHWEST HILLSIDE	-

PORTIONS OF USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
 BLOODY MTN, CA 2012
 OLD MAMMOTH, CA 2012
 WHITMORE HOT SPRINGS, CA 2012
 CONVICT LAKE, CA 2012

- NOTE:**
- EXISTING USGS BASE MAP CONTOUR INTERVAL IS 40 AND 80 FEET.
 - EXISTING USGS BASE MAP DATUM IS NAD 83
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 2010 AND LIMITED FIELD CHECKED IN 2009. CONTOURS FROM NATIONAL DATA SET OF 1999. ALL CONTOURS, DISTANCES AND ELEVATIONS ARE IN FEET.
 - ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET).
 - NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP SHEET 14
 - GROUND PENETRATIONS TO FAA PART 77. TREES ON GROUND WERE NOT EVALUATED.
 - PRIMARY SURFACE WIDTH = 500'
 - SEE SHEET No. 10 FOR PLAN AND PROFILE OF RUNWAY APPROACH AND DEPARTURE CORRIDOR.

FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

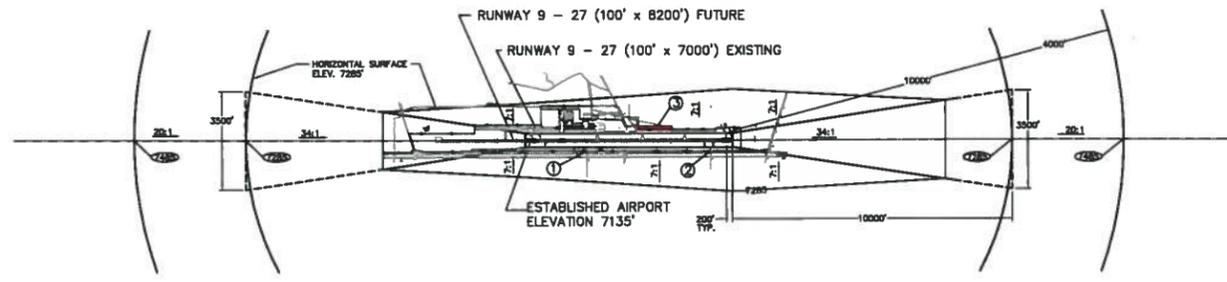
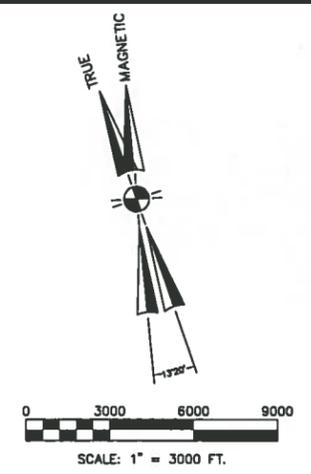
Reinold W. Brandley
 CONSULTING AIRPORT ENGINEER

COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
AIRPORT AIRSPACE DRAWING - FUTURE LAYOUT

NO.	REVISIONS	BY	APP	DATE

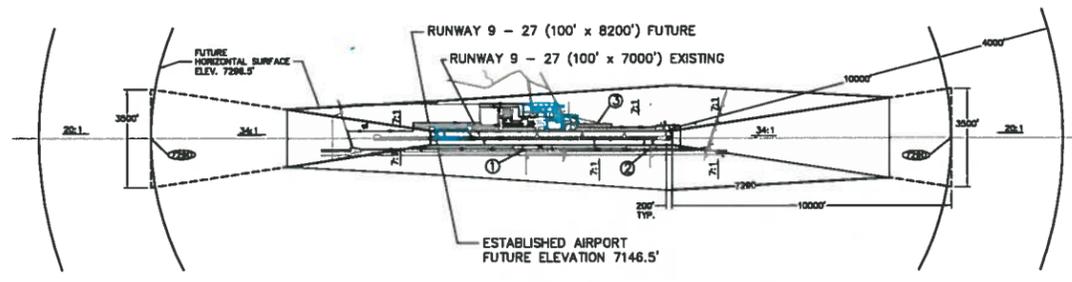
DATE JULY 16, 2014
 SHEET NUMBER 9 OF 14 SHEETS

VERIFY SCALES.
 BAR IS ONE INCH ON ORIGINAL DRAWING.
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.



EXISTING RUNWAY APPROACH AND DEPARTURE CORRIDOR PLAN
 SCALE 1" = 3000'

NOTE: SEE SHEET No. 8 FOR OVERALL AIRPORT AIRSPACE DRAWING



FUTURE RUNWAY APPROACH AND DEPARTURE CORRIDOR PLAN
 SCALE 1" = 3000'

NOTE: SEE SHEET No. 9 FOR OVERALL AIRPORT AIRSPACE DRAWING

PART 77 GENERAL NOTES:

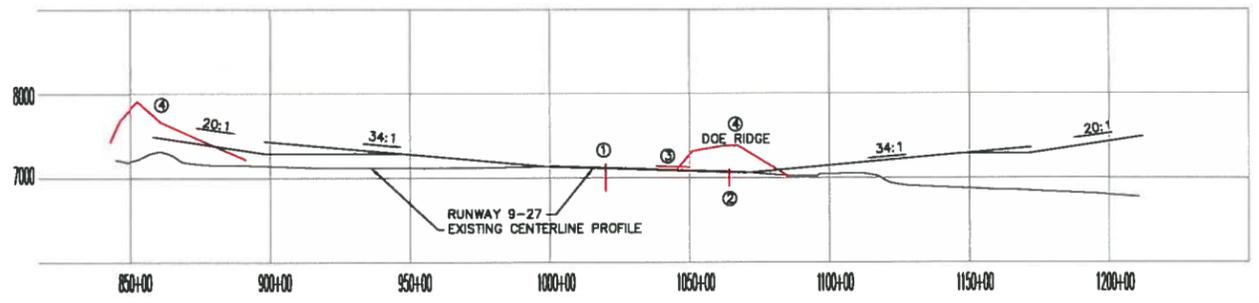
1. PRIMARY SURFACE WIDTH - 500'
2. PART 77 CLASSIFICATION - C (VISIBILITY MINIMUMS GREATER THAN 3/4 MILE)
3. RADIUS OF HORIZONTAL SURFACE - 5000'
4. APPROACH SLOPE 34:1

PART 77 PENETRATIONS

- ① SO. CAL. EDISON POLE (WITH OBSTRUCTION LIGHT) AND LINE CROSSING HWY 395, 1355' FROM RUNWAY 9 AND 370 FT. RIGHT. ELEV. TOP OF POLE 7157'
- ② VERIZON POLE (WITH OBSTRUCTION LIGHT) AND POWER LINE CROSSING HWY 395, 580' FROM RUNWAY 27 AND 374 FT. LEFT. ELEV. TOP OF POLE 7098
- ③ EAST HANGARS, 390.3' FROM RUNWAY CENTERLINE, TOP ELEVATION 7123 TO 7135, PENETRATE TRANSITIONAL SURFACE UP TO 16'.
- ④ GROUND PENETRATIONS SEE SHEET No. 8 AIRPORT AIRSPACE DRAWING

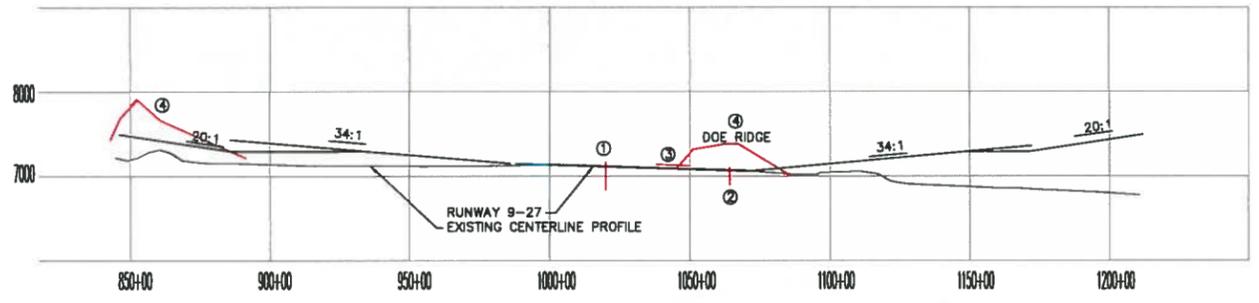
PART 77 PENETRATIONS

- ① SO. CAL. EDISON POLE (WITH OBSTRUCTION LIGHT) AND LINE CROSSING HWY 395, 1355' FROM RUNWAY 9 AND 370 FT. RIGHT. ELEV. TOP OF POLE 7157'
- ② VERIZON POLE (WITH OBSTRUCTION LIGHT) AND POWER LINE CROSSING HWY 395, 580' FROM RUNWAY 27 AND 374 FT. LEFT. ELEV. TOP OF POLE 7098
- ③ EAST HANGARS, 390.3' FROM RUNWAY CENTERLINE, TOP ELEVATION 7123 TO 7135, PENETRATE TRANSITIONAL SURFACE UP TO 16'.
- ④ GROUND PENETRATIONS SEE SHEET No. 9 AIRPORT AIRSPACE DRAWING



EXISTING RUNWAY APPROACH AND DEPARTURE CORRIDOR PROFILE
 SCALE: HORIZ. 1" = 3000'
 VERT. 1" = 1000'

NOTE: SEE SHEET No. 8 FOR OVERALL AIRPORT AIRSPACE DRAWING



FUTURE RUNWAY APPROACH AND DEPARTURE CORRIDOR PROFILE
 SCALE: HORIZ. 1" = 3000'
 VERT. 1" = 1000'

NOTE: SEE SHEET No. 9 FOR OVERALL AIRPORT AIRSPACE DRAWING

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 8125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

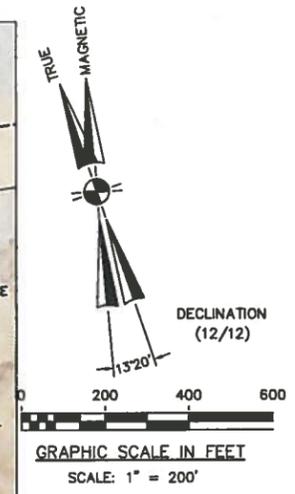
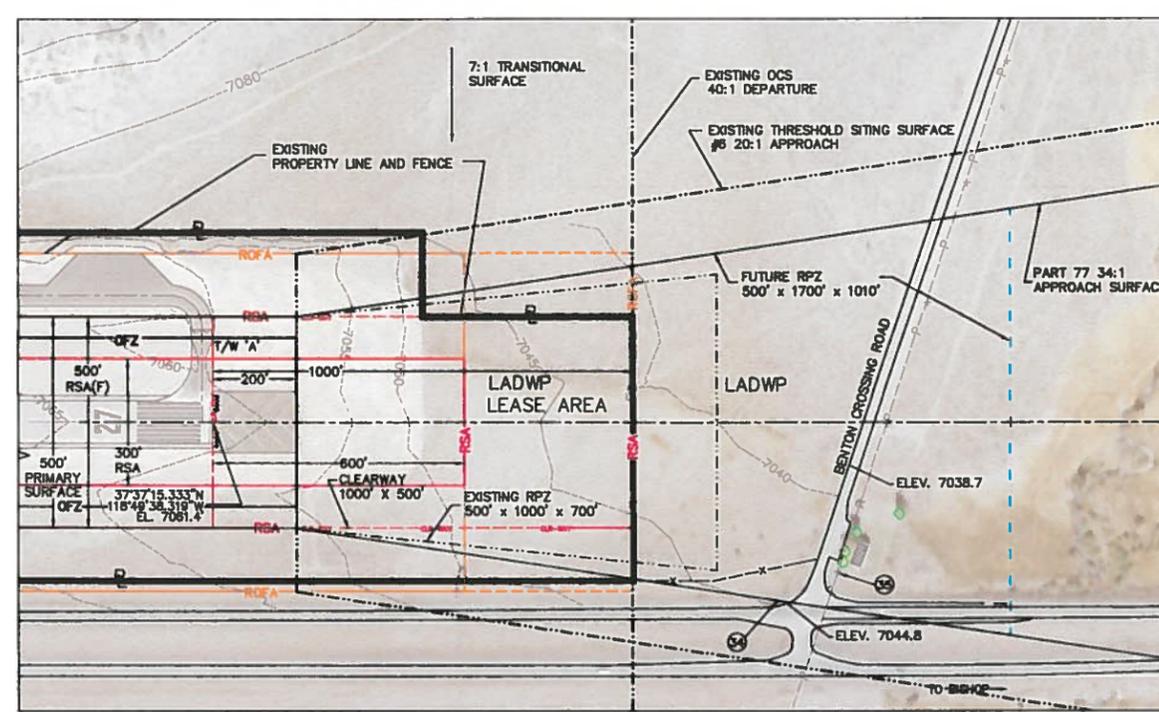
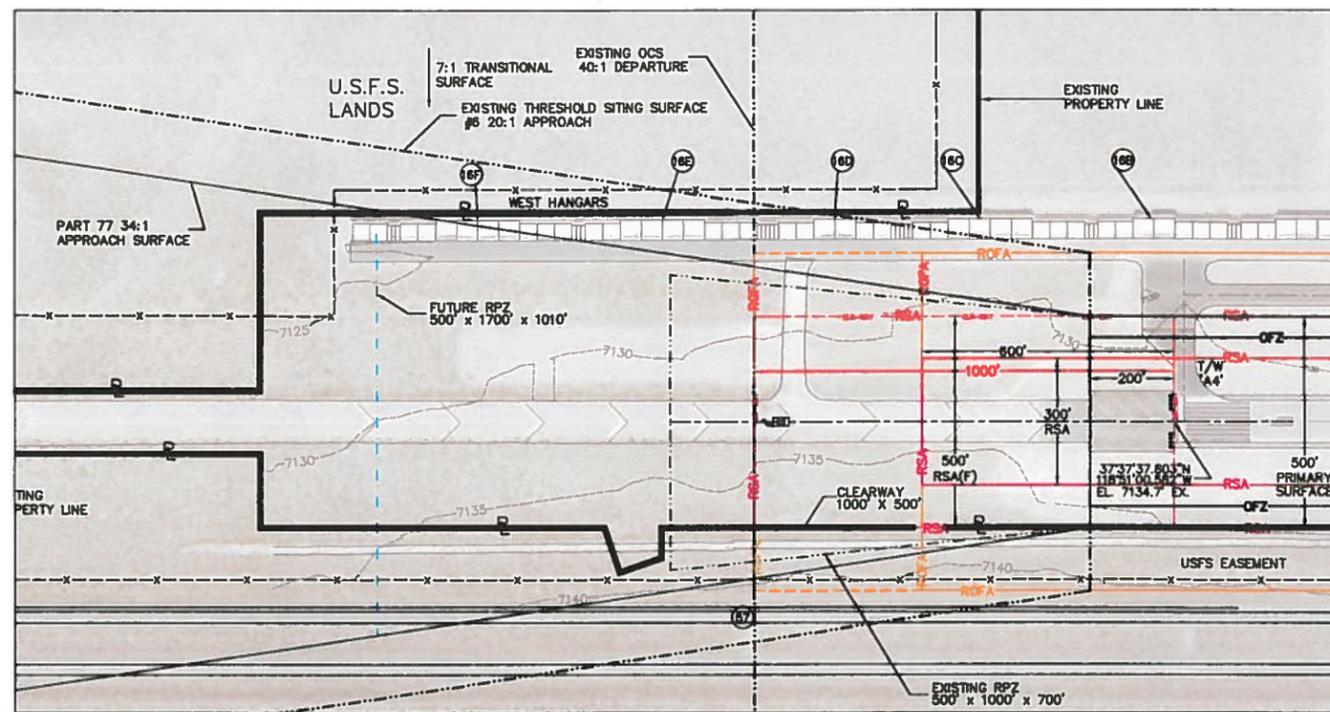
COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
AIRPORT AIRSPACE PLAN AND PROFILE -
EXISTING AND FUTURE LAYOUT

NO.	REVISIONS	BY	APP.	DATE



DATE JULY 16, 2014
 SHEET NUMBER
 10 OF 14 SHEETS

FAA APPROVAL



OBSTRUCTIONS OCS 40:1 DEPARTURE

No.	FACILITY	OFFSET FROM R/W C	TOP ELEV.	DISPOSITION
16B	HANGAR 15 THRU 16	433' RT(NORTH)	7154.4	INSTALL ROW OF RED OBSTRUCTION LIGHT
16C	HANGAR 25 THRU 28	433' RT(NORTH)	7154.0	INSTALL ROW OF RED OBSTRUCTION LIGHT
16D	HANGAR 38 THRU 39	433' RT(NORTH)	7153.8	INSTALL ROW OF RED OBSTRUCTION LIGHT
16E	HANGAR 50 THRU 53	433' RT(NORTH)	7153.7	INSTALL ROW OF RED OBSTRUCTION LIGHT
57	VEHICLES ON US HWY 395	440' LT(SOUTH)	7156.0	NO NEAR TERM DISPOSITION SPECIAL DEPARTURE PROCEDURE IN PLACE

RUNWAY 9

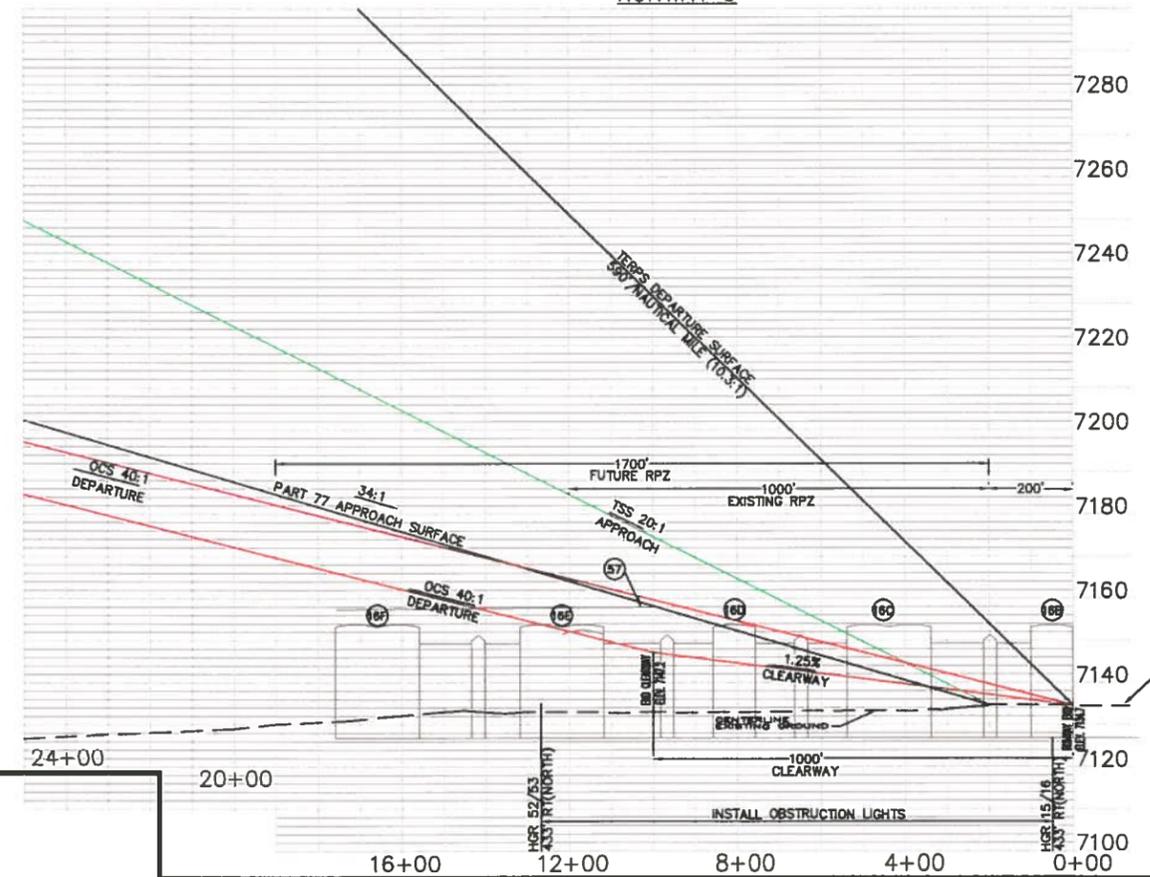
NOTE:
 1. SEE SHEET No. 4 FOR NON STANDARD CONDITIONS
 2. RUNWAY LINE OF SIGHT IS FULL LENGTH OF RUNWAY

OBSTRUCTIONS TO OCS 40:1 DEPARTURE

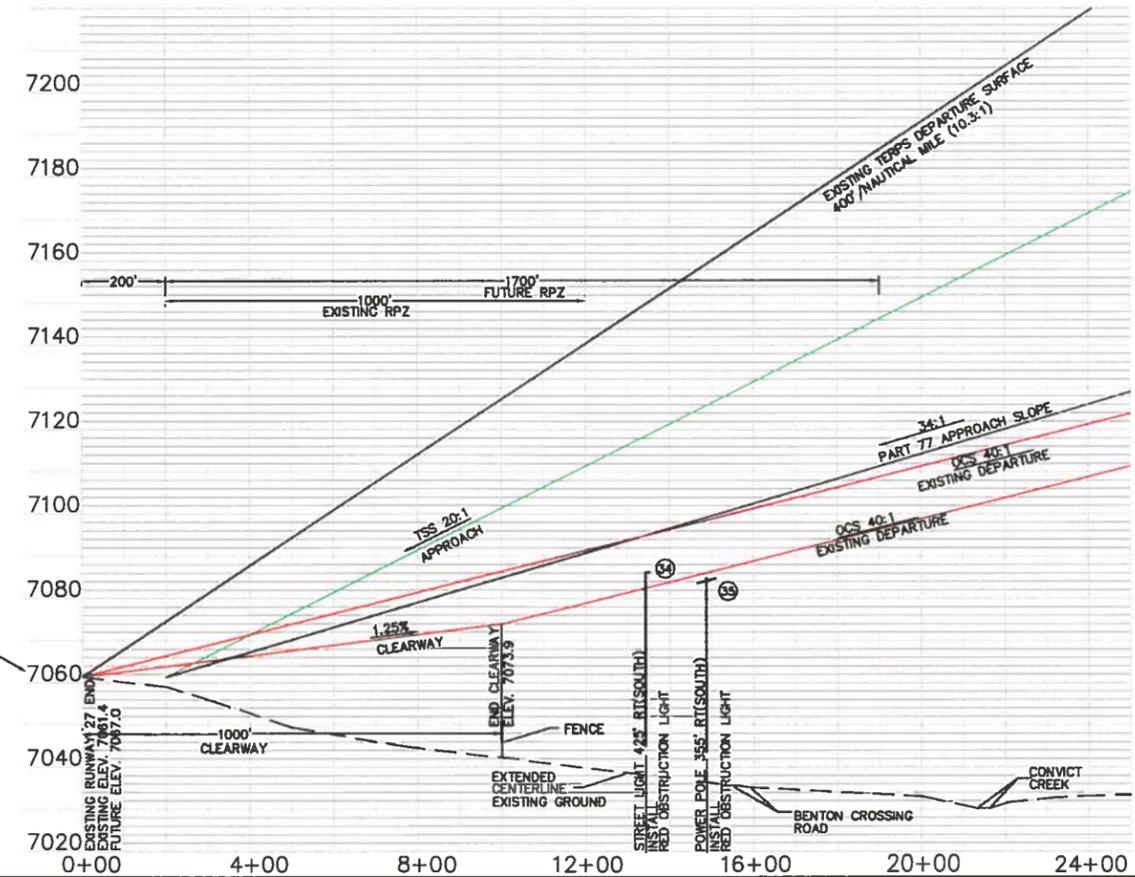
No.	FACILITY	OFFSET FROM R/W C	TOP ELEV.	DISPOSITION
34	EXISTING STREET LIGHT	425' RT(SOUTH)	7086.3	INSTALL RED OBSTRUCTION LIGHT UNTIL LOWERED
35	EXISTING POWER POLE	355' RT(SOUTH)	7085.0	INSTALL RED OBSTRUCTION LIGHT UNTIL LOWERED

RUNWAY 27

NOTE: NO PENETRATION OF APPROACH TSS



PROFILE
 SCALE:
 HORIZ: 1"=200'
 VERT: 1"=20'



SCALE:
 HORIZ: 1"=200'
 VERT: 1"=20'

FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREON NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinard W. Bradley
 CONSULTING AIRPORT ENGINEER

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
INNER PORTION OF APPROACH SURFACE PLAN (EXISTING)

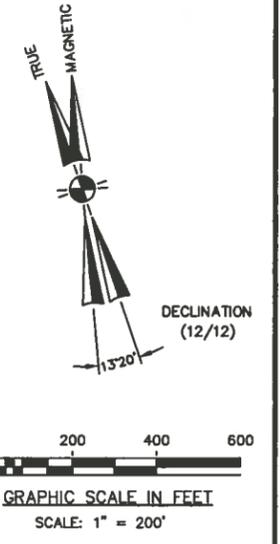
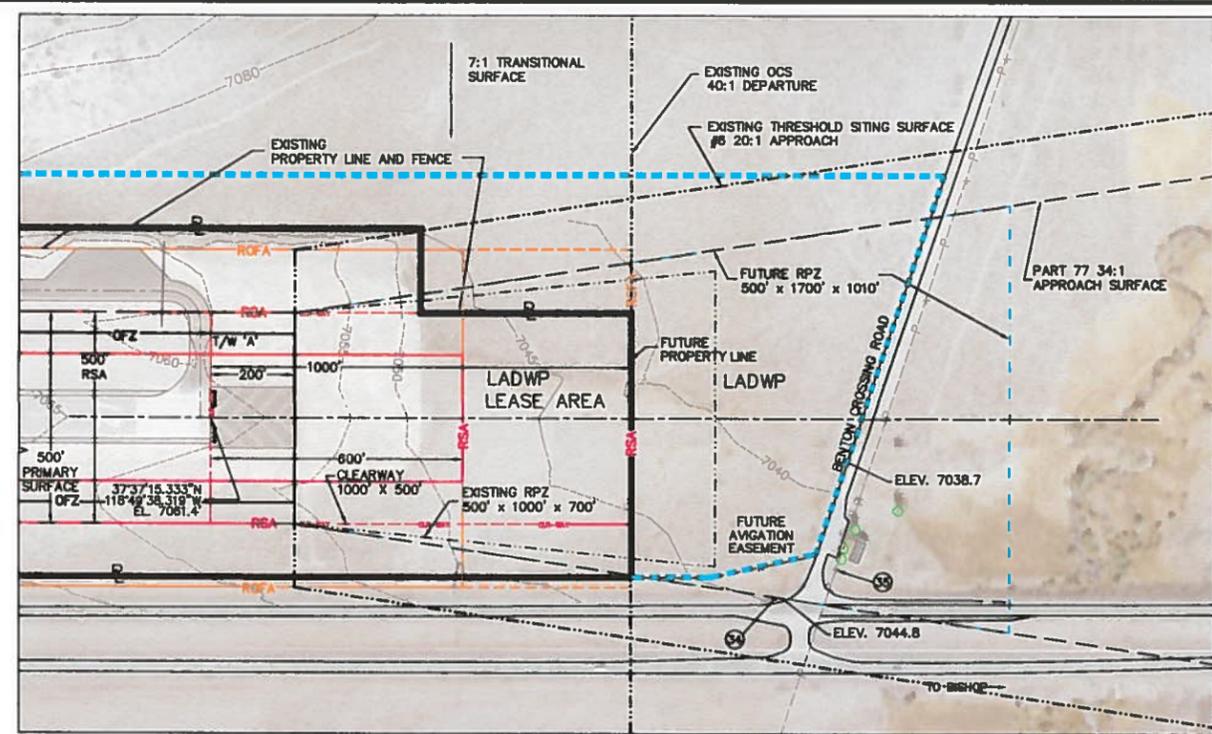
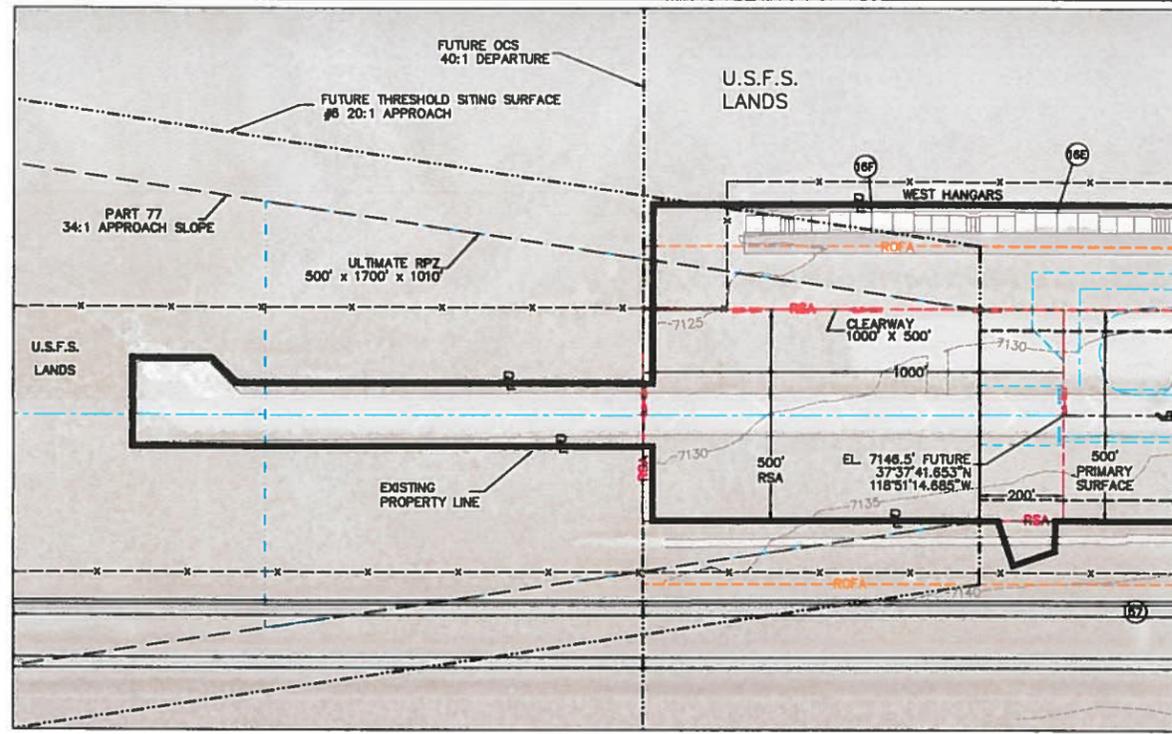
NO.	REVISIONS	BY	APR	DATE



DATE JULY 16, 2014
 SHEET NUMBER
 11 OF 14 SHEETS

FAA APPROVAL

8128 King Road, Suite 201 • Leoma, California 96850 • (916) 652-4725



OBSTRUCTIONS TO OCS 40:1 DEPARTURE

No.	FACILITY	OFFSET FROM R/W &	TOP ELEV.	DISPOSITION
18E	HANGAR 50 THRU 53	433' RT(NORTH)	7153.7	INSTALL ROW OF RED OBSTRUCTION LIGHT
18E	HANGAR 62 THRU 65	433' RT(NORTH)	7153.8	INSTALL ROW OF RED OBSTRUCTION LIGHT
	LITTLE ANTELOPE HILL	9600' BEYOND, 1700' RT	-	EXISTING OBSTRUCTION LIGHT

PLAN

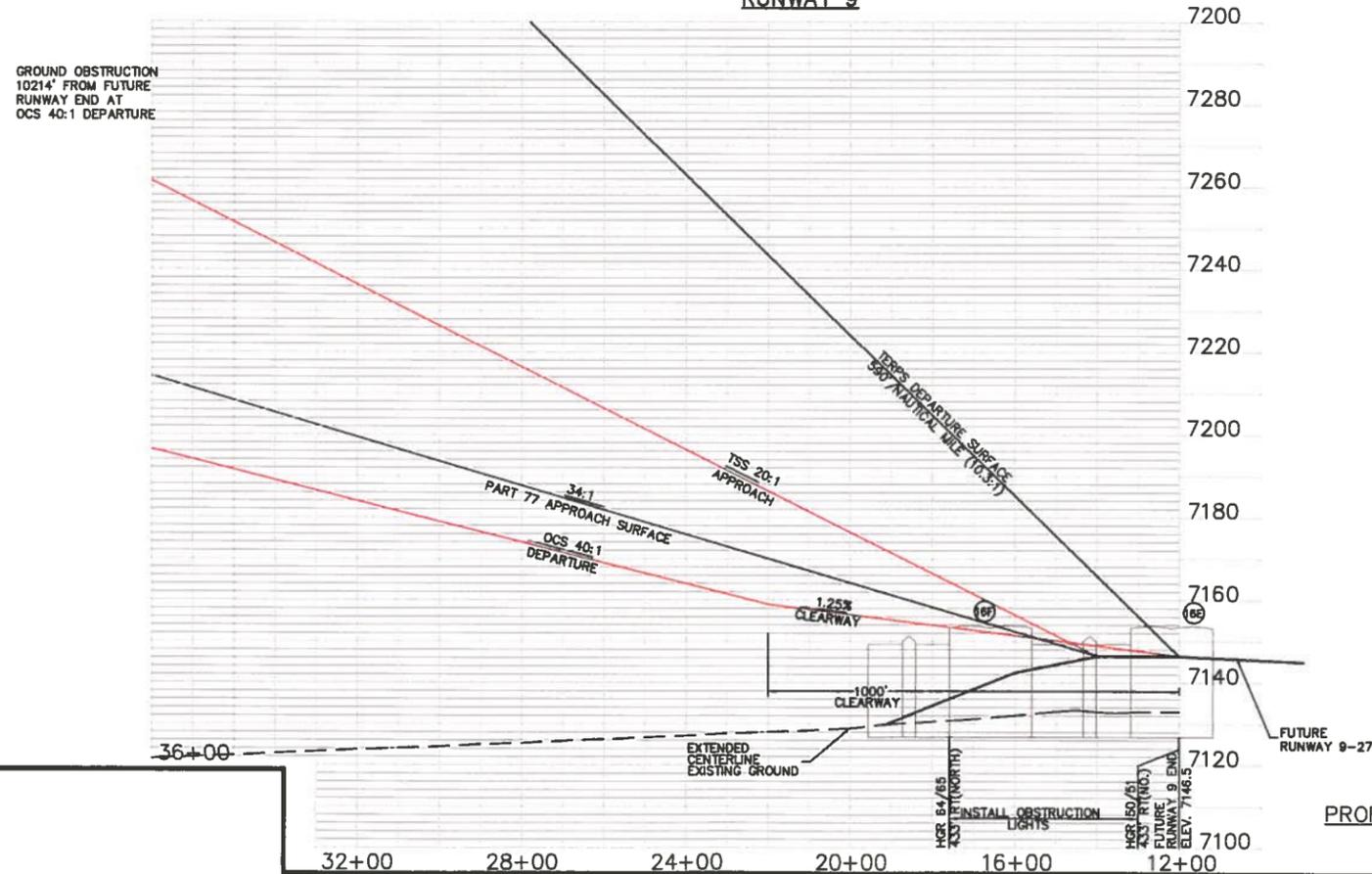
NOTE:
 1. SEE SHEET No. 4 FOR NON STANDARD CONDITIONS
 2. RUNWAY LINE OF SIGHT IS FULL LENGTH OF RUNWAY

OBSTRUCTIONS TO OCS 40:1 DEPARTURE

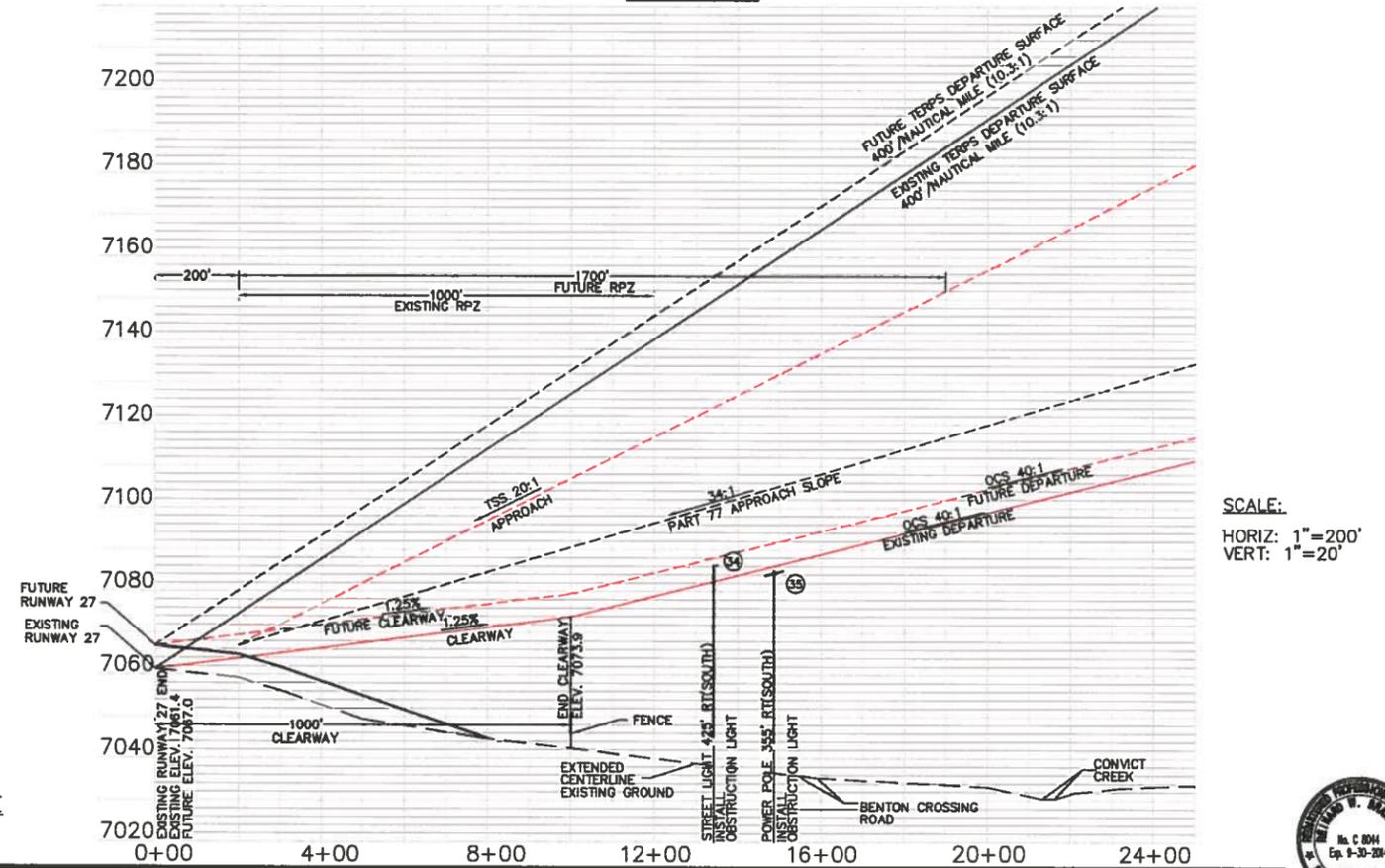
No.	FACILITY	OFFSET FROM R/W &	TOP ELEV.	DISPOSITION
34	EXISTING STREET LIGHT	425' RT(SOUTH)	7086.3	INSTALL RED OBSTRUCTION LIGHT UNTIL LOWERED
35	EXISTING POWER POLE	355' RT(SOUTH)	7085.0	INSTALL RED OBSTRUCTION LIGHT UNTIL LOWERED

NOTE: NO PENETRATION OF APPROACH TSS

RUNWAY 9



RUNWAY 27



PROFILE

SCALE:
 HORIZ: 1"=200'
 VERT: 1"=20'

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinhard W. Brandley
 CONSULTING AIRPORT ENGINEER

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA

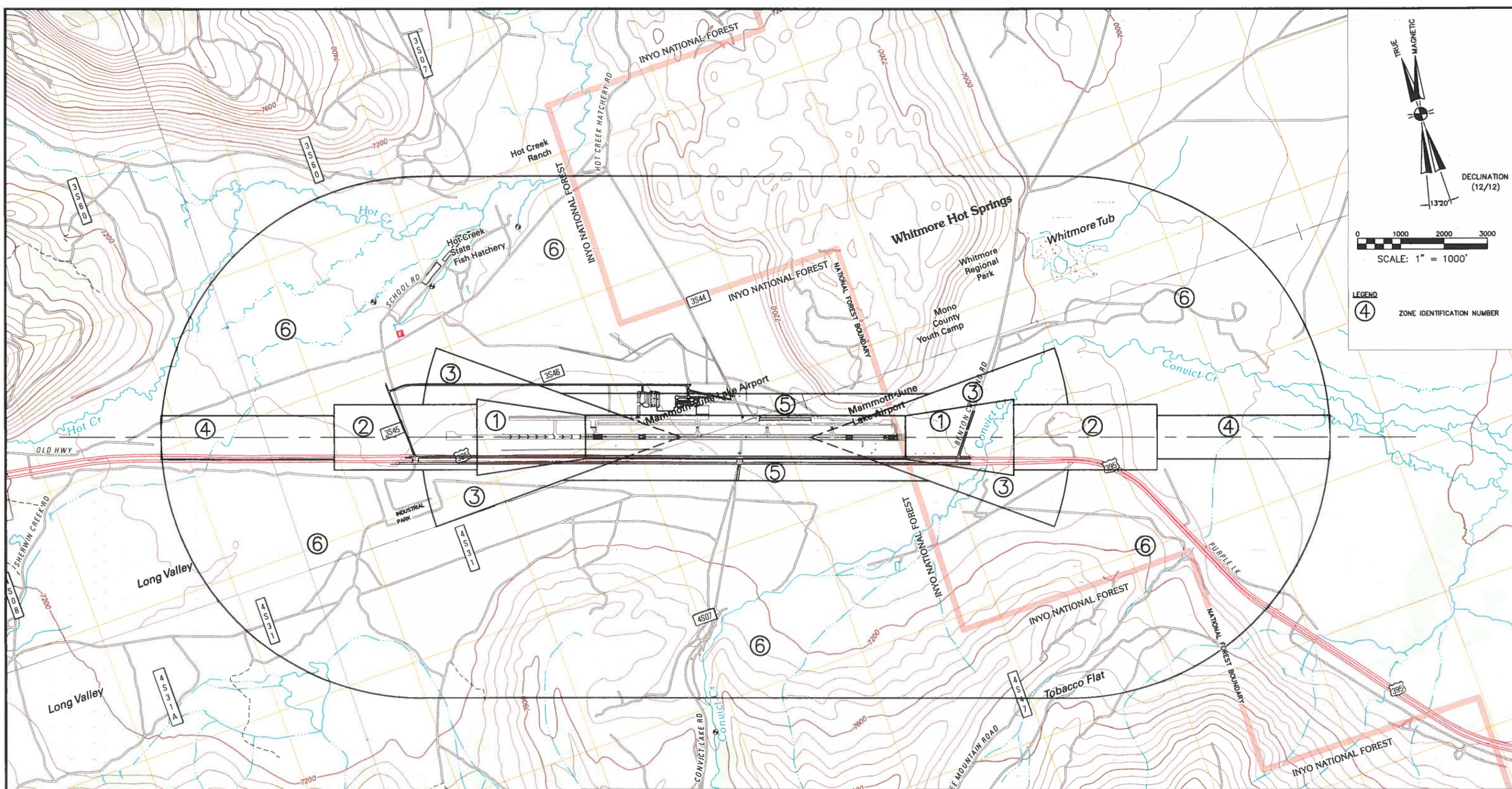
INNER PORTION OF APPROACH SURFACE PLAN (FUTURE)

NO.	REVISIONS	BY	APR	DATE



DATE JULY 18, 2014
 SHEET NUMBER
 12 OF 14 SHEETS

FAA APPROVAL



MAGNETIC
DECLINATION
(12/12)
-13'20"

0 1000 2000 3000
SCALE: 1" = 1000'

LEGEND
④ ZONE IDENTIFICATION NUMBER

ALUC LAND USE RECOMMENDATIONS

ZONE	SAFETY ZONE NAME	POPULATION DENSITY OF USE	RESIDENTIAL LAND USE	SPECIAL FUNCTIONS
1	RUNWAY PROTECTION ZONE	0-10/ACRE	PROHIBITED	PROHIBITED
2	INNER SAFETY ZONE	40-60/ACRE	10 ACRES/DWELLING	PROHIBITED
3	INNER TURNING ZONE	40-60/ACRE	2-10 ACRES/DWELLING	PROHIBITED
4	OUTER SAFETY ZONE	60-100/ACRE	2-5 ACRES/DWELLING	AVOIDED
5	SIDELINE SAFETY ZONE	40-60/ACRE	2-5 ACRES/DWELLING	AVOID ASSEMBLIES OVER 60/ACRE
6	TRAFFIC PATTERN ZONE	150/ACRE	4-6 DWELLINGS/ACRE	AVOID ASSEMBLIES OVER 150/ACRE

PORTIONS OF USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
 BLOODY MTN, CA 2012
 OLD MAMMOTH, CA 2012
 WHITMORE HOT SPRINGS, CA 2012
 CONVICT LAKE, CA 2012

- NOTE:
- EXISTING USGS BASE MAP CONTOUR INTERVAL IS 40 AND 80 FEET.
 - EXISTING USGS BASE MAP DATUM IS NAD 83
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 2010 AND LIMITED FIELD CHECKED IN 2009. CONTOURS FROM NATIONAL DATA SET OF 1999. ALL CONTOURS, DISTANCES AND ELEVATIONS ARE IN FEET.
 - ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET).
 - NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP SHEET 11.
 - SAFETY COMPATIBILITY ZONES SHOWN FROM CALIFORNIA AIRPORT LAND USE PLANNING HANDBOOK -- 2011 -- PG. 3-17, FIG 3A.

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER

8125 King Road, Suite 201 • Loomis, California 95850 • (916) 682-4725

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
**ALUC AIRPORT SAFETY ZONE PLAN /
 LAND USE PLAN (EXISTING RUNWAY)**

NO.	REVISIONS	BY	APR	DATE



DATE JULY 16, 2014
 SHEET NUMBER
 13 OF 14 SHEETS

FAA APPROVAL

LEGEND

- ORIGINAL AIRPORT PROPERTY RELEASED TO USFS (SEE NOTE 1)
- ACQUIRED AIRPORT PROPERTY FROM USFS (SEE NOTE 1)
- EXISTING LADWP LEASED AREA TO BE ACQUIRED FEE SIMPLE
- EXISTING HOT CREEK AVIATION LEASE AREA
- EXISTING SPECIAL USE PERMIT C FROM USFS
- EXISTING PROPERTY LINE
- FUTURE PROPERTY LINE
- ORIGINAL PATENT LINE
- BUILDING RESTRICTION LINE
- 3 PARCEL OR LEASE NUMBER
- EXISTING RUNWAY OBJECT FREE AREA
- EXISTING RUNWAY SAFETY AREA
- FUTURE RUNWAY OBJECT FREE AREA
- FUTURE RUNWAY SAFETY AREA

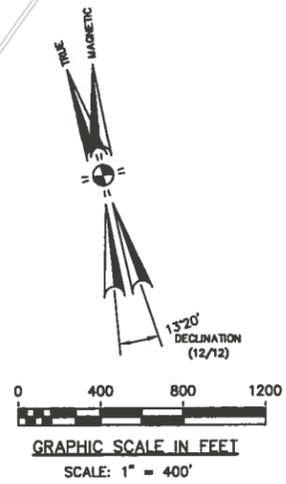
INFORMATION OBTAINED FROM DATA FOUND IN:
 RECORD OF SURVEY NO. 36-127
 SHEET 1 - 5
 DATED JUNE 1998
 BLM DEPENDENT SURVEY 44 292-C,D,E & (R.S. 36-127, BK.3, PG 60)

AIRPORT AND SURROUNDING AREA PROPERTY

PARCEL No.	DESCRIPTION	STATUS	AREA IN ACRES	FAA PARTICIPATION	REMARKS
A	AIRPORT PROPERTY	EXISTING	198.23	NONE	CORRECTED PATENTS 04-85-171 & 04-85-0108. FEE SIMPLE ACQUIRED. SEE NOTE 1
B	50 YEAR LEASE (2010-2060) LADWP PROPERTY	EXISTING	33	-	TO BE ACQUIRED - FEE SIMPLE
C	USFS SPECIAL USE PERMIT TO REMAIN	EXISTING	17.3	NONE	AIRPORT PROPERTY LINE TO US 395 ROW
D	ACQUIRE USFS SPECIAL USE PERMIT	FUTURE	34.86	-	ACQUIRE FEE SIMPLE OR LONG TERM SPECIAL USE PERMIT FROM USFS
E	RPZ RUNWAY 27 - LADPW	FUTURE	18.88	-	ACQUIRE FEE SIMPLE TITLE FROM LADPW
F	RPZ RUNWAY 27 - LADPW	FUTURE	5.78	-	ACQUIRE FEE SIMPLE TITLE FROM LADPW
G	RPZ RUNWAY 9 - USFS	FUTURE	39.12	-	ACQUIRE FEE SIMPLE OR LONG TERM SPECIAL USE PERMIT FROM USFS

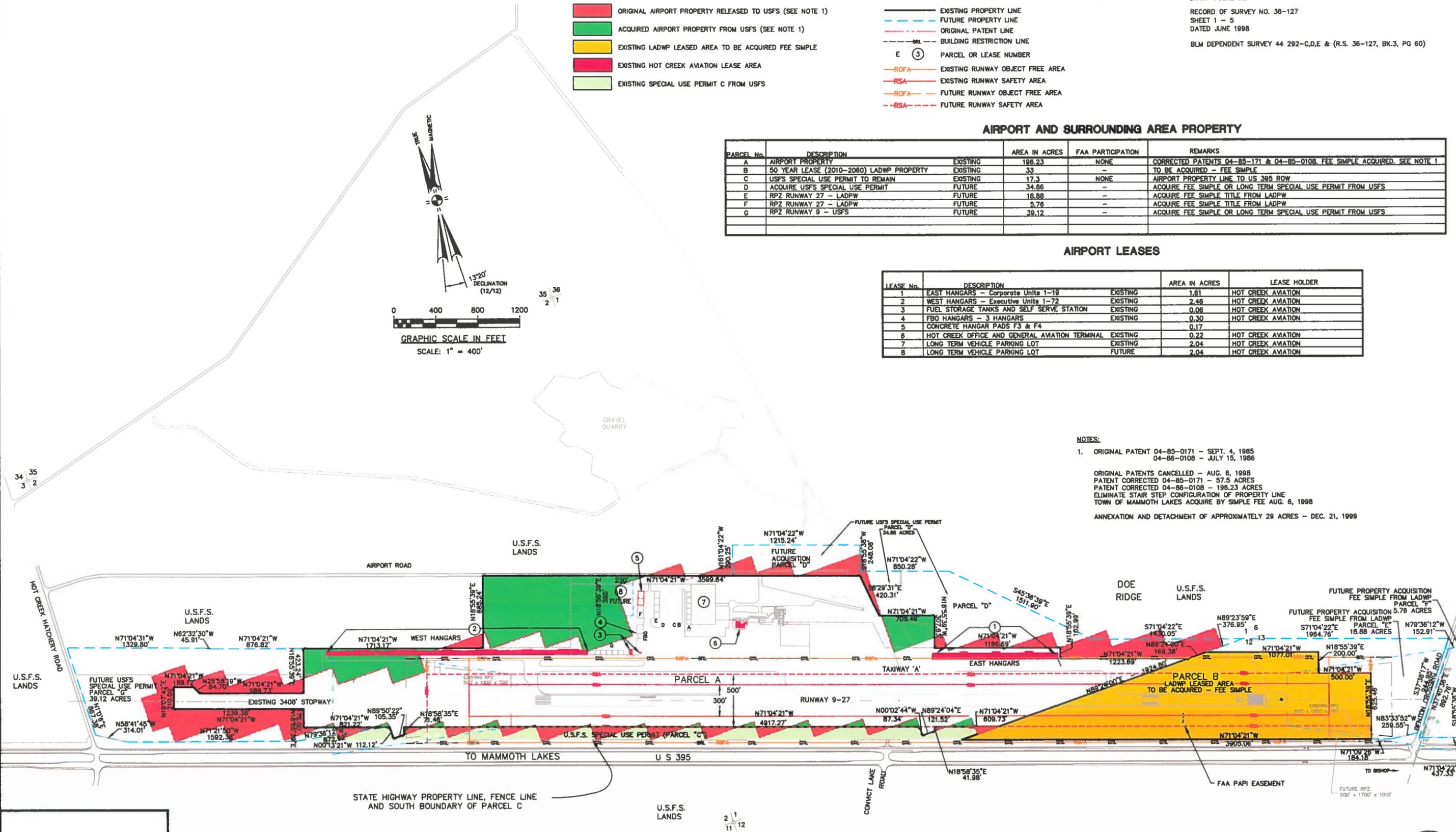
AIRPORT LEASES

LEASE No.	DESCRIPTION	STATUS	AREA IN ACRES	LEASE HOLDER
1	EAST HANGARS - Corporate Units 1-19	EXISTING	1.61	HOT CREEK AVIATION
2	WEST HANGARS - Executive Units 1-72	EXISTING	2.48	HOT CREEK AVIATION
3	FUEL STORAGE TANKS AND SELF SERVE STATION	EXISTING	0.08	HOT CREEK AVIATION
4	FBO HANGARS - 3 HANGARS	EXISTING	0.30	HOT CREEK AVIATION
5	CONCRETE HANGAR PADS F3 & F4	EXISTING	0.17	HOT CREEK AVIATION
6	HOT CREEK OFFICE AND GENERAL AVIATION TERMINAL	EXISTING	0.22	HOT CREEK AVIATION
7	LONG TERM VEHICLE PARKING LOT	EXISTING	2.04	HOT CREEK AVIATION
8	LONG TERM VEHICLE PARKING LOT	FUTURE	2.04	HOT CREEK AVIATION



NOTES:

- ORIGINAL PATENT 04-85-0171 - SEPT. 4, 1985
 04-86-0108 - JULY 15, 1986
- ORIGINAL PATENTS CANCELLED - AUG. 6, 1998
 PATENT CORRECTED 04-85-0171 - 57.5 ACRES
 PATENT CORRECTED 04-86-0108 - 198.23 ACRES
 ELIMINATE STAIR STEP CONFIGURATION OF PROPERTY LINE
 TOWN OF MAMMOTH LAKES ACQUIRE BY SIMPLE FEE AUG. 6, 1998
 ANNEXATION AND DETACHMENT OF APPROXIMATELY 28 ACRES - DEC. 21, 1999



FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 GRADY DUTTON - DIRECTOR OF PUBLIC WORKS

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
AIRPORT PROPERTY MAP - EXHIBIT 'A'

NO.	REVISIONS	BY	APR	DATE



DATE JULY 16, 2014
 SHEET NUMBER
 14 OF 14 SHEETS

FAA APPROVAL

CHAPTER 7. ENVIRONMENTAL

The development of the new terminal facilities, other airport improvements, and grading required to improve ROFA deviations to the south of the runway will require detailed environmental reviews and clearances. Upon approval of the ALP, an application will be filed with the Federal Aviation Administration for funding of environmental studies required.

A Wildlife Hazard Assessment (WHA) for MMH has been completed and a final report is expected by February 28, 2015. This report identifies deer and several varieties of birds as potential hazards to aircraft operations.

CHAPTER 8. AIRPORT FINANCIAL PLAN

There are several Capital Improvement Projects required to maintain adequate aviation activity at MMH. Most of these projects are eligible for Federal grants to aid in the financing of these projects. The Federal aid program is the FAA Airport Improvement Program (AIP) and it contributes up to 90.66 percent of the development costs.

Annually, each airport submits to the FAA an Airport Capital Improvement Program (ACIP) in which they list the projects for which the Airport desires funding and prioritize the projects in order of importance to the Airport. The ACIP also includes a preliminary cost estimate of each project. An ACIP has been prepared, which has been submitted to FAA this year. A copy of this ACIP Summary of Project Costs table that was submitted this year is included in Appendix B to this report.

Local funding is required for the following items at the airport:

- Matching funds for Federal grants
- Cost of construction of Capital Improvement Projects not eligible for Federal funding
- Maintenance costs
- Operating costs
- Administrative costs

It is the goal of the Airport to develop income sources so the airport development and operation costs are financed by airport income and grants. Sources of income available to the Airport include:

- Federal airport improvement program grants (AIP)
- Landing fees
- Apron fees
- Terminal building rents
- Passenger facility charges (PFC)
- Fuel sales
- Hangar rent
- Tie down fees
- FBO and commercial/industrial land leases and sales
- Airplane and airport local taxes

It will require a significant early expenditure to construct the required new terminal facility. If adequate Federal funding is not available to cover these costs, the Airport could consider obtaining a Letter of Intent (LOI) from the FAA to include future year funding and the possible sale of bonds to cover the capital costs. These bonds can be

paid off from income from the airport and from future FAA airport improvement program grants and/or Passenger Facility Charges (PFC).

CHAPTER 9. UTILITIES AND DRAINAGE

Storm water drainage at this site is accommodated by percolation into the existing soils. There is no runoff into or off from the airport. The only runoff that is experienced during storms is that on paved areas. The storm water runoff from these paved areas is carried to shallow ditches or leach fields and allowed to infiltrate into the ground. The soils at this site are so pervious that it only requires short ditches to accommodate all the storm water from large paved areas. This drainage system will continue to be used for future development.

Domestic water and water for fire protection is provided by wells and is stored in a 450,000 gallon storage tank. These facilities are adequate to serve the water requirements for the proposed development and for fire protection.

Electrical and telephone services are provided by Southern California Edison and Verizon. Internet connectivity is provided by Digital 395 fiber optic cable. These agencies are capable of expanding service for the new development.

Existing sewage disposal is accommodated by septic tank and underground leach fields, which are very effective at this location. For future development it is proposed to construct a package sewage treatment plant, but still dispose of the effluent by underground leach fields.

CHAPTER 10. RECOMMENDATIONS

As a result of the Airport Layout Plan Update study and the conditional approval by FAA of the ALP, a series of recommendations have been developed to provide a guide for the future development of MMH.

10-1 Airport Reference Code (ARC)

MMH is currently classified as an ARC B III airport and it is recommend that it operate under ARC B III but that any new development at the airport meets ARC C III standards so they will not need to be modified if ARC C III is eventually established at this airport.

10-2 Site Analysis

An evaluation of the six alternate site developments as compared to developing the existing airport to accommodate forecast traffic showed that all sites, except for the development of the existing airport, had a prohibitive development cost and also had significant land use and environmental barriers. As a result of these studies, it is concluded that none of the alternate sites are viable options. It is, therefore, recommended that the existing airport be expanded to accommodate the forecast traffic.

10-3 Runway

10-3.1 Single Runway

Currently MMH has one runway, Runway 9-27, which is 7,000 feet long by 100 feet wide. Wind studies and capacity studies indicate that a single runway oriented in the east-west direction is adequate. A crosswind runway is not justified and, because of the large mountains to the south, would not be usable for most aircraft. It is recommended that the current single runway continue to be utilized without a crosswind runway.

10-3.2 Length

The 7,000-foot runway is not an ideal length for year round commercial operations because some aircraft must reduce their loads when temperatures climb above about 80 degrees in the summer. It is recommended the runway be extended 1,200 feet to the west. By acquiring the USFS land between the airport west property line and Hot Creek Hatchery Road, the runway can be extended a total of 2,000 feet to the west to provide a 9,000-foot runway. It is recommended that the Airport acquire this USFS land to maintain the possibility of future runway extensions to 9,000 feet and protect the airport from commercial or industrial development.

The development of the terminal facilities is a high priority item and requires significant funds to accomplish. It is, therefore, anticipated that any runway lengthening project cannot be considered for at least 10 years (2024).

10-3.3 Width

The runway currently is 100 feet wide, which meets ARC B III standards. In addition 100 feet also meets ARC C III requirements for aircraft with takeoff weights less than 150,000 pounds. No widening of the runway will be required within the forecast period. It is recommended provisions be taken to ensure that no airport project would preclude widening the runway to 150 feet in the future so as to conform to ARC C III requirements in the future if needed.

10-3.4 Shoulders

The shoulders on the runway are non-standard. The current paved shoulders are 12 feet wide. Twenty-foot wide shoulders are standard for a 100-foot wide runway used by ARC B III type aircraft. It is recommended that the shoulders be expanded to a 20-foot width.

10-3.5 Gross Allowable Aircraft Weight

The runway and taxiways at MMH were reconstructed in 2008. The pavement section consists of 3 inches of AC, 6 inches of aggregate base, 10 inches of aggregate subbase, and 16 inches of recompacted Sand subgrade. The California Bearing Ratio (CBR) of the recompacted Sand subgrade soil is 12 and of the undisturbed Sand subgrade soil is 6. These pavement sections will adequately support and provide more than a 20-year life for operations of aircraft having a gross weight of 150,000 pounds on dual gear and 85,000 pounds on single gear. This will allow 1,200 annual departures of aircraft of these weights. If the number of departures of aircraft on dual gear weighing more than 150,000 pounds is more than 1,200 per year, then the forecast pavement life will be less than 20 years.

The aprons are not designed with the heavier sections and will not support these loadings, but these pavements will be reconstructed as part of the terminal development project. It is recommended that aprons designed to support airline aircraft be designed to support dual gear aircraft with a gross weight of 250,000 pounds to provide a long life pavement and capability to support larger aircraft in the future. The added cost of constructing a new pavement section to support a heavier aircraft is small since it only requires the construction of a slightly thicker section of aggregate subbase.

10-3.6 Declared Distances

Declared distances are feasible and recommended for this site in order to allow turbojet aircraft to operate with heavier loadings. The take-off run available (TORA), accelerated stop distance available (ASDA) and landing distance available (LDA) will be total length of existing paved runway or extended paved runway since there are no threshold displacements or relocations. There is the capability and need to use a 1,000-foot clearway at each end of the runway, present and future, and use declared distance such as to increase the take-off distance available (TODA) by 1,000 feet more than the TORA for each direction of operation. The TORA, ASDA, and LDA will be the total length of the runway.

10-3.7 Runway Lighting

Runway lighting is by medium intensity runway edge lights, which are 30 inches above the ground to accommodate heavy snow conditions. These are satisfactory for current conditions. It is recommended, the Airport maintain the capability to upgrade these lights to high intensity runway lights if required.

10-4 Taxiways

All existing taxiways, both parallel and cross, are 50 feet wide, which meets the Taxiway Design Group requirements for TDG 3 aircraft but MMH's critical aircraft is the Q 400 which is Taxiway Design Group (TDG) TDG-5, which requires a 75-foot wide taxiway.

The Q400 aircraft currently used at MMH has a wheel base on the main gear that has a taxiway edge margin of 8 feet with the 50-foot wide taxiways; whereas, FAA standards call for a 10-foot minimum margin for aircraft of this TDG. To accommodate the Q400 aircraft it is recommended that all taxiways used by the airline and large business jet aircraft be widened to 75 feet, that all fillets at taxiway intersections be reconstructed to FAA minimums, and that a 25-foot wide paved shoulder be added to each side of the taxiways.

The parallel taxiway centerline is 300 feet from the centerline of Runway 9-27. The 300-foot spacing with the type of aircraft currently using and forecast to use the airport meets the ARC B III standards. Aircraft with wingspans less than 100 feet can operate with a 300-foot runway to taxiway centerline spacing without penetrating the runway Object Free Zone (OFZ) or Runway Safety Area (RSA).

There are no taxiway lights on any of the taxiways because of heavy snow and snow plowing requirements. The Airport uses retroreflective markers, which has proven to be satisfactory.

It is recommended that the parallel taxiway remain in its present location. However, actions should not be taken at the airport which would preclude moving

the taxiway should the airport pursue an ARC C III runway taxiway separation of 400 feet.

The parallel taxiway is designated as Taxiway “A” and the cross taxiways are designated as Taxiways “A1 through “A5”.

The east hangar buildings are within the Object Free Area of both the runway and the parallel taxiway by approximately 10 feet. They also project into the Part 77 space by 16 feet. Correcting this condition is not within the scope of this planning period, however, future ALP’s should continue to review this non-standard condition.

10-5 Airline Terminal

The existing interim airline terminal constructed in 2008 has a floor plan area of 5,000 square feet. The limitation on size was due to constraints imposed on new construction by the controlling environmental document. The terminal is already too small for commercial operations, and a temporary “Sprung” tent like structure was erected in 2010 to accommodate traffic. A Terminal Area Study has been completed for this site, and it is recommended that a new terminal building of approximately 40,000 square feet be constructed as soon as possible. This new terminal will have three gates, which can accommodate existing and forecast critical aircraft (Q400). It should be designed to accommodate occasional ARC C III aircraft such as the B737 or other aircraft of that type that seat 100-160 people. This is accomplished by adequate spacing and the ability to expand the terminal to accommodate six gate positions. Airport apron, deicing pads, roads, automobile parking, and other amenities capable of accommodating forecast traffic and of expanding to accommodate future unanticipated traffic should be planned, but only those facilities forecast to be required in the 10-year forecast period constructed.

The site selection study described in Appendix A of this narrative indicates the recommended location of the new airline terminal. Two specific sites were identified. One site has the south edge of the airline apron matching the south edge of the existing general aviation apron to provide close proximity to the runway and taxiways. This location would make it very difficult to meet ARC C III runway taxiway separation requirements. The second site moves the terminal facilities to the north so that the terminal itself is adequately served by an extension of Airport Road. This site allows possible relocation of the taxiway without affecting the terminal or terminal apron and is the recommended site for the new development. This more northern site is recommended.

The major airline activity occurs in the winter, and many of the jet aircraft using the airport will require deicing before departure. Deicing on the apron is incompatible from an environmental standpoint and ties up valuable terminal apron space for longer periods than necessary. It is, therefore, recommended

that a separate deicing pad be constructed to deice these aircraft. This pad should slope to a center collection inlet structure and all of the deicing fluids diverted to a holding tank and disposed of off site.

10-6 General Aviation

10-6.1 General Aviation Activity

General Aviation (GA) is and is forecast to continue to contribute the major number of aircraft operations at MMH regardless of the growth of commercial activity due to the large number of itinerant aircraft that use the airport. Itinerant aircraft operations at MMH are significant and are forecast to have significant growth during the 10-year forecast period. The major facilities that attract itinerant aircraft to MMH are the winter skiing at Mammoth Mountain, summer hiking, boating and fishing, and mountain sightseeing.

Itinerant aircraft that visit MMH range from small single engine and twin-engine propeller driven aircraft to larger turboprop aircraft to small to medium sized turbojet to large turbojet aircraft, including the Falcon 50 and Gulfstream G V. Several GA aircraft using MMH are classified as ARC C III.

Local GA activity, as measured by the number of based aircraft and local aircraft operations, is small due to the small local population and type of employment available. There are only 8 small aircraft currently based at MMH and the 10-year forecast anticipates a small growth to 10 aircraft.

10-6.2 Existing General Aviation (GA) Facilities

The existing facilities available to serve GA consists of the following:

- 1 Fixed Base Operator (FBO)
- 1 Pilots' Lounge associated with the FBO Office
- 1 Fueling Facility providing 100 LL AvGas and Jet-A Fuel
- 74 Tie Down Positions for Small Aircraft
- 129 Hangars.

10-6.3 General Aviation Forecast Needs

The existing and proposed runway and taxiway system at MMH is adequate to serve forecast needs of the general aviation fleet.

The existing aviation fueling facilities at MMH are adequate or can readily be expanded as needed to serve the forecast general aviation and airline fleet. The existing fueling facilities are within the ROFA for ARC C III aircraft and provisions should be made to relocate them outside of the ROFA.

Currently there is only one fixed base operator (FBO) at MMH. It is recommended provisions be made as shown on the Airport Layout Plan to add one or two FBOs as needed. All FBO plots should be large enough to accommodate full-service FBOs or special service FBOs.

The existing aircraft parking apron at MMH consists of 475,000 square feet of pavement, 58,000 square feet of which consists of 12 inches of Portland cement concrete over aggregate base and the remaining 417,000 square feet consists of an asphalt pavement surface. These aprons have the capacity to tie down 74 small single or twin engine aircraft. Currently these aprons are filled to capacity on holiday periods and on many weekends with aircraft ranging from the small single engine aircraft to the large turbojet aircraft.

The airlines operating out of the temporary terminal building use most of the Portland cement concrete apron and the asphalt apron to the south of the concrete apron, leaving space for only 36 small aircraft tie down spaces. When the new terminal is constructed, the apron space currently used by the airlines will revert back to general aviation use as long as the airline operation only requires three gate positions.

It is recommended that an additional aircraft tie down apron of at least 300,000 square feet be constructed at MMH soon to provide tie down space for the itinerant aircraft using and forecast to use the airport.

The 12-inch Portland cement concrete (PCC) apron is in good condition and is designed to support dual gear aircraft weighing up to 80,000 pounds and single gear aircraft weighing up to 50,000 pounds. The asphalt pavement sections are in poor to good condition with significant pavement cracking and some raveling. The bearing capacity of these pavements is fairly low and they need to be reconstructed soon. With the type operation experienced at MMH when there are times that several large turbojet aircraft are at the airport at the same time, flexibility in operating procedures is required. It is recommended that the existing PCC pavements be maintained as is and that the joints be resealed to protect the pavement section. It is also recommended that all existing asphalt pavement sections be reconstructed and that the new 300,000 square foot apron be constructed. To provide flexibility in operation of the aprons it is recommended that all general aviation aprons be designed to support dual gear aircraft weighing 80,000 pounds and single gear aircraft weighing 50,000 pounds at gross takeoff conditions.

10-6.4 Hangars

There are currently 129 hangars at the airport ranging in size from small glider storage facilities to large turbojet hangar facilities. These hangars are privately owned on leased ground. There is no current demand for additional hangars and none in the foreseeable future.

Ninety one of the hangars are located close to the runway and taxiway and some of them infringe on the object free area and/or threshold siting planes of both the runway and taxiway. Depending on the development of the airport, it may require relocation of many of these hangars in the future. FAA Form 7460-1 was filed and accepted by the FAA for the construction of both the east and west hangars (91 hangars) before they were constructed.

10-7 **Access Roads**

Currently MMH is served from U.S. Highway 395 by Hot Creek Hatchery Road and Airport Road. In the future, widening this road to provide emergency access to the airport may be desirable. Future development of the airport may require secondary access to the airport. Provisions should be made so as not to preclude the addition of a second access road into the airport if needed in the future.

10-8 **Land**

All of the land surrounding the airport belongs to the USFS or LADWP. The Airport has fee simple title to significant portions of the airport and long-term leases from USFS and LADWP for the remaining land. It is recommended that the Airport obtain ownership or long-term lease of additional land as shown on Exhibit A of the Airport Layout Plan to serve any potential expansion. A summary of airport land ownership is listed below:

Existing (246.53 acres):

Parcel A – 196.23 Acres – Airport Property – Existing – Fee Simple Title

Parcel B – 33.00 Acres – 50-year Lease LADWP – Existing – Future Acquisition

Parcel C – 17.30 Acres – USFS Special Use Permit – Existing – Future Acquisition

Future (98.62 acres):

Parcel D – 34.86 Acres – Auto Parking Lot and Apron – USFS – Future Lease or Acquisition

Parcel E – 18.88 Acres – RPZ Runway 27 – LADWP – Future Acquisition

Parcel F – 5.76 Acres – RPZ Runway 27 – LADWP – Future Acquisition

Parcel G – 39.12 Acres – RPZ Runway 9 – USFS – Future Lease or Acquisition

The land surrounding the airport is either USFS land or LADWP land. It is recommended the airport work closely with these agencies to ensure that none of this land is released for any development that has an adverse effect on the operation or safety of operations at MMH.

10-9 Security

Current fencing at the airport includes chain link fencing in the terminal area and barbed wire fencing for the remaining portion of the airport. The existing terminal building and facilities are equipped with required security facilities including coded locks on gates and doors and security cameras. It is recommended that chain link fencing be constructed around the entire airport. This fencing should be 6-foot chain link in the terminal area and 8-foot chain link in all other areas. The 8-foot chain link fence is desirable to discourage deer from jumping the fence. All access gates should be coded. With the new terminal building, doors that have access to the apron should be alarmed and security cameras installed at critical areas within the terminal, on the apron, and at the access gates.

10-10 Non-Standard Conditions

A number of facilities and existing land masses at MMH deviate from standards as set forth in FAA Advisory Circular 150/5300-13A. The listing of non-standard conditions is included on Sheet No. 4, Non-Standard Condition Tables, of the Airport Layout Plan. Some of the non-standard conditions can be corrected when funding becomes available. These are listed separately under the table entitled, “ARC B III Non-Standard Conditions – AC 150/5300-13A, To be Corrected as Funding Becomes Available.” There is also a series of non-standard conditions that from economic, environmental, and land use standpoint cannot readily be corrected. These are listed under the table entitled “ARC B III Non-Standard Conditions AC 150/5300-13A, Actions” which lists deviations to standards that will need to be revisited in the future airport layout plans.

Major non-standard conditions are the penetration of the runway object free area and taxiway object free area by the hangar buildings and Doe Ridge on the north side of the runway; soil, highway right-of-way fence, and traffic on sections of Highway 395 that penetrate the outer edges of the Runway OFA and the threshold siting distance plane on the south side of the runway.

**MAMMOTH YOSEMITE AIRPORT
AIRPORT LAYOUT PLAN UPDATE NARRATIVE**

**Appendix A
Alternate Airport Site Development Study**

APPENDIX A

**MAMMOTH YOSEMITE AIRPORT
ALTERNATE AIRPORT SITE DEVELOPMENT STUDY**

In the winter of 2011-12 with airline service established to Mammoth Yosemite Airport, it became clear that existing facilities would not be able to accommodate growth at the airport. In 2012 plans were being developed to expand facilities at the airport to accommodate forecast growth. It became apparent that, a new terminal facility would be needed and possibly, developing the airport to meet ARC C III standards. There are several constraints and limitations to growth at the existing airport site. Before committing the funds necessary to adequately expand the existing airport, it was decided to conduct a study to determine the feasibility and cost of expanding the existing airport or constructing an entirely new airport. This site feasibility study was done at the request of the FAA and with the idea that all sites would be evaluated with ARC C III standards. Expansion plans for the existing airport consisted of several concepts, including the relocation of U.S. Highway 395. The results of this study were submitted in report form in March 2012 and are included in this report as Appendix A.

This study was based on developing an airport that would accommodate the airline and general aviation traffic to Mammoth Lakes and would accommodate airline and business jet aircraft up to the FAA Airport Runway Classification (ARC) C III. While the current airport runway classification is ARC B III, it is prudent to base alternate airport standards on ARC C III classification since the Q400 and some of the business jets using the airport are C III classification, and long-term development should not preclude ARC to be upgraded to C III at MMH.

**MAMMOTH YOSEMITE AIRPORT
AIRPORT LAYOUT PLAN UPDATE NARRATIVE
TOWN OF MAMMOTH LAKES, MONO COUNTY, CALIFORNIA**

APPENDIX A – ALTERNATE AIRPORT SITE DEVELOPMENT STUDY

TABLE OF CONTENTS

A-1	Purpose and Need.....	A-1
A-2	Design Requirements	A-4
A-3	Site Selection and Analysis	A-5
A-3.1	Basis of Selection.....	A-5
A-3.2	Sites Selected for the Study	A-6
A-3.3	Site Analysis.....	A-7
a.	Site No. 1.....	A-7
b.	Site No. 2.....	A-9
c.	Site No. 3.....	A-10
d.	Site No. 4.....	A-11
e.	Site No. 5.....	A-14
f.	Site No. 6.....	A-16
A-3.4	Preliminary Cost Analysis.....	A-17
A-4	Recommendations.....	A-20

LIST OF TABLES

Table No.	Title	
A-1	Design Requirements	A-4
A-2	F.A.A. Design Standards – Advisory Circular 150/5300-13	A-5
A-3	Existing Obstruction Study – Site No. 1	A-8
A-4	Existing Obstruction Study – Site No. 2.....	A-10
A-5	Existing Obstruction Study – Site No. 3.....	A-11
A-6	Existing Obstruction Study – Site No. 4.....	A-13
A-7	Existing Obstruction Study – Site No. 5.....	A-15
A-8	Existing Obstruction Study – Site No. 6.....	A-16
A-9	Preliminary Development Cost Estimate	A-19

LIST OF PLATES

Plate No.	Title	
A-1	Site No. 1 – Existing Doe Ridge Cross Section – West View.....	A-23
A-2	Doe Ridge – West View Site No. 1 – OFZ Surface 6:1 Only.....	A-24
A-3	Doe Ridge – West View Site No. 1 – Part 77 Surface – 7:1 Only	A-25
A-4	Doe Ridge – West View Site No. 1 – Part 77 Surface 7:1 with Horizontal Surface.....	A-26
A-5	Site No. 1 – Existing Doe Ridge Cross Section – East View	A-27
A-6	Doe Ridge – East View Site No. 1 – OFZ Surface 6:1 Only	A-28
A-7	Doe Ridge – East View Site No. 1 – Part 77 Surface – 7:1 Only.....	A-29
A-8	Doe Ridge – East View Site No. 1 – Part 77 Surface 7:1 with Horizontal Surface.....	A-30
A-9	Doe Ridge – Excavation Area – Site No. 1 – OFZ Surface 6:1 Only.....	A-31
A-10	Doe Ridge – Excavation Area – Site No. 1 – Part 77 Surface 7:1 Only.....	A-32
A-11	Doe Ridge – Excavation Area – Site No. 1 – Part 77 Surface 7:1 with Horizontal Surface	A-33
A-12	Airport Site Location Plan	A-34
A-13	Alternate Airport – Airport Layout Plan – Site #1	A-35
A-14	Airport Airspace Drawing – Site #1	A-36
A-15	Airport Airspace Photograph – Site #1.....	A-37
A-16	Runway Profile – Site #1.....	A-38
A-17	Approach Profiles – Site #1	A-39
A-18	Alternate Airport – Airport Layout Plan – Site #2	A-40
A-19	Airport Airspace Drawing – Site #2	A-41
A-20	Airport Airspace Photograph – Site #2.....	A-42
A-21	Runway Profile – Site #2.....	A-43
A-22	Approach Profiles – Site #2	A-44
A-23	Airport Airspace Drawing – Site #3	A-45
A-24	Airport Airspace Photograph – Site #3.....	A-46
A-25	Alternate Airport – Airport Layout Plan – Site #4A – Relocate Existing Facilities	A-47
A-26	Alternate Airport – Airport Layout Plan – Site #4B – Maintain Existing Facilities	A-48

LIST OF PLATES
(CONTINUED)

Plate No.	Title	
A-27	Airport Airspace Drawing – Site #4	A-49
A-28	Airport Airspace Photograph – Site #4	A-50
A-29	Runway Profile – Site #4	A-51
A-30	Approach Profiles – Site #4	A-52
A-31	Alternate Airport – Airport Layout Plan – Site #5	A-53
A-32	Airport Airspace Drawing – Site #5	A-54
A-33	Airport Airspace Photograph – Site #5	A-55
A-34	Runway Profile – Site #5	A-56
A-35	Approach Profiles – Site #5	A-57
A-36	Alternate Airport – Airport Layout Plan – Site #6	A-58
A-37	Airport Airspace Drawing – Site #6	A-59
A-38	Airport Airspace Photograph – Site #6	A-60
A-39	Runway Profile – Site #6	A-61
A-40	Approach Profiles – Site #6	A-62

APPENDIX A. ALTERNATE AIRPORT SITE DEVELOPMENT STUDY

A-1 Purpose and Need

MMH is located in the eastern slopes of the Sierra-Nevada Mountain Range. It is difficult to develop an airport in this region that meets all F.A.A. standards due to the existence of mountains and ridges in this area. The existing airport is located in a valley between the high mountain ridges to the south and Doe Ridge to the north. Further to the north another range of high mountains exists. The original airport was designed as a general aviation airport and meets most F.A.A. requirements for an Airport Reference Code (ARC) B III category airport. Airlines are now serving the airport with Bombardier Q400 aircraft and the CRJ 700 aircraft and it is proposed to upgrade the airport to an ARC C III.

It is anticipated that aircraft of the Boeing 737 class will be utilized in the near future for additional service at the airport. It is forecast that in five years the annual enplaned passenger total will reach 56,000, which is constrained largely by terminal capacity. Major airlines are currently discussing with the MMSA and the Town of Mammoth Lakes the possibility of providing service using aircraft up to the Boeing 737 class.

The airport has extensive itinerant operations in which aircraft fly into the Mammoth area in the winter for skiing and in the summer for mountain recreation activities. Aircraft using this facility range from the small single-engine propeller-driven aircraft to the large business jets up to the Grumman Gulfstream G V. Many of these business jets are classified as ARC C III. The airport occasionally experiences enough aircraft parked at the airport to fill the entire tie down apron.

MMH is located at an elevation of 7,135 feet. Aircraft operations at this altitude require long runways and gentle approaches. It is proposed to design the airport as an ARC C III airport so as to meet all existing and possible future requirements and to provide the runway width and length to accommodate these aircraft at the high altitudes.

The major specific areas in which the existing airport does not meet F.A.A. standards for an ARC C III include:

- Runway/taxiway centerline spacing is 300 feet; whereas, 400 feet is recommended Runway Shoulder Width is inadequate
- Taxiway width is 50 feet whereas 54 feet is required to provide 10-foot taxiway edge safety margin for the Q400 aircraft
- Taxiway shoulder width is inadequate
- Runway object free areas are encroached upon by the ground and fence at the northern portion of Highway 395 right of way and the East Hangars
- Taxiway object free areas are encroached upon by existing hangars

- Portions of Doe Ridge penetrate the runway object free zone as defined in F.A.A. Advisory Circular 150/5300-13 and the FAR Part 77 7:1 transitional areas and horizontal surface areas
- Mountains to the southwest and northwest penetrate the Part 77 horizontal surface and conical surface.

Reconstruction of the existing airport to meet the most critical requirements of F.A.A. would require:

- Moving the runway centerline 37 feet to the north such that the runway object free area is outside of the highway right-of-way and fence
- Constructing widened shoulders on the runway
- Abandoning the existing parallel taxiway and constructing a new taxiway 400 feet from the new runway location
- Removing and replacing all of the existing hangars, a total of 134 units
- Removing and replacing all administrative buildings, FBO buildings, and FBO apron
- Relocating the access road and parking lots.

Doe Ridge, as it currently exists with relation to the existing runway as shown in this study, penetrates the Part 77 transitional 7:1 surfaces and horizontal surface. Significant excavation will be required from Doe Ridge to modify the shape of Doe Ridge such that it will not penetrate these surfaces. In order to show a visual concept of the effect of Doe Ridge, a series of photographs were taken from the east side of Doe Ridge looking west and from the west side of Doe Ridge looking east.

Plates No. A-1 through A-4 are a West View of Doe Ridge showing the following:

- On Plate No. A-1 a photograph of the west view of Doe Ridge shows as lines those portions of the ridge that penetrate the Part 77 7:1 transitional surface, the Part 77 horizontal surface, and the OFZ surface 6:1 slope. F.A.A. Advisory Circular 150/5300-13 specifies a minimum object free zone (OFZ) on both sides of a runway. For MMH this OFZ begins 400 feet from the centerline of the runway, rises vertically 28 feet, and then extends at a 6:1 slope. The OFZ slope is above the Part 77 7:1 transitional surface, as shown on this plate.
- On Plate No. A-2 the westerly view photograph of Doe Ridge has been photo-shopped to show the appearance of Doe Ridge after the OFZ surface is removed.
- On Plate No. A-3 the westerly view photograph of Doe Ridge has been photo-shopped to show the appearance of Doe Ridge after the excavation to meet Part 77 transitional surface - 7:1 only.

- On Plate No. A-4 a photo of the westerly view has been photo-shopped to show the appearance of Doe Ridge after excavating to meet Part 77 7:1 transitional surfaces and horizontal surface.

Plates No. A-5 through A-8 are the East View of Doe Ridge showing the following:

- Plate No. A-5 is a photo from the west looking east that shows Doe Ridge with the Part 77 and OFZ surfaces designated.
- Plate No. A-6 is a photo of an easterly view of Doe Ridge that has been photo-shopped to show the appearance of Doe Ridge after excavation has been made to meet the OFZ surface 6:1 only.
- Plate No. A-7 is an easterly view photo of Doe Ridge showing the appearance of Doe Ridge after excavation has been made to meet Part 77 transitional surface - 7:1 only.
- Plate No. A-8 is an easterly view of Doe Ridge where the photo has been photo-shopped to show the appearance of Doe Ridge after the excavation has been completed to meet Part 77 transitional surface 7:1 and horizontal surface.

In order to indicate the extent of excavation required on Doe Ridge to meet various requirements of F.A.A., Plate No. A-9 was prepared which shows the area of Doe Ridge that would require excavation to meet the OFZ surface - 6:1 only requirements. Plate No A-10 indicates the area of Doe Ridge that would be affected to meet the Part 77 transitional surface - 7:1 only. Plate No. A-11 shows the area of Doe Ridge that would be affected to meet all requirements of Part 77 transitional surfaces - 7:1 and horizontal surface.

Extensive modifications of Doe Ridge would be required to meet F.A.A. requirements for obstruction clearance. To meet the requirements for object free zone as defined in F.A.A. Advisory Circular 150/5300-13, it would be necessary to remove approximately 3 million cubic yards of material from the south end of Doe Ridge. To meet the Part 77 7:1 transitional surface requirements, it would be necessary to remove approximately 9 million cubic yards of material from the south end of Doe Ridge. To meet Part 77 horizontal surface requirements, it would be necessary to remove an additional 20 million cubic yards from the top of Doe Ridge for a total of 29 million cubic yards.

In cases where it is not practical to remove major obstructions F.A.A. allows the use of obstruction lights to identify the line behind which obstructions occur. If the existing airport is expanded, it is proposed to install a line of flashing red obstruction lights along the south edge of Doe Ridge to clearly identify the edge of the area that is considered to be an obstruction. The east hangar units and some of the west hangar units are also considered obstructions. If the existing

airport is expanded, the row of obstruction lights will extend along the south face of the hangars.

Whenever a major development, as proposed for MMH, is considered and there are significant constraints at the existing airport, it is important to evaluate the benefits and costs of expanding the existing airport, reconfiguring the existing airport, or constructing a totally new airport at an alternate site. This evaluation has been prepared and a development study has been conducted for expanding the existing airport, reconfiguring the existing airport, and for developing a totally new airport. Six alternate reconfigured layouts or new sites were evaluated. The results of this study are summarized in this chapter of the Airport Layout Plan Narrative.

A-2 Design Requirements

The basic design requirements for the Mammoth Yosemite Airport have been determined and are listed in Table No. A-1.

For comparison purposes, the F.A.A. design standards for the ARC C III have been summarized and are included in Table No. A-2.

TABLE NO. A-1 MAMMOTH YOSEMITE AIRPORT – ALTERNATE AIRPORT STUDY DESIGN REQUIREMENTS	
Airport Reference Code (ARC)	C III
Design Aircraft	Boeing 737
Design Approach	Non Precision Instrument No Vertical Guidance
Approach Visibility	Greater than ¾ mile
Enplaned Passengers	5 year - 60,000 20 year - 135,000
Airline Parking Apron to Accommodate:	Initial - 3 – B 737 Ultimate - 6 – B 737
RPZ	500' x 1,010' x 1,700' – 34:1 Approach Slope
Departure Slope (Threshold Siting)	Instrument 40:1 to 10,200 feet
Runway Length	9,000 feet
Access Road	2 – 12 foot lanes + 8 foot shoulders
Obstruction Removal	All obstructions removed that penetrate Part 77 primary surfaces, runway protection zone, and 7:1 transitional surfaces. Obstructions not removed that penetrate horizontal surface or conical surface.
Existing Hangars	No new or relocated hangars required for Site No. 6, but area set aside for future hangars.
Land Acquisition Constraints	Same at each site – Forest Service and/or LADWP ownership.

TABLE NO. A-2	
MAMMOTH YOSEMITE AIRPORT – ALTERNATE AIRPORT STUDY	
F.A.A. DESIGN STANDARDS – ADVISORY CIRCULAR 150/5300-13	
Airport Reference Code (ARC)	C III
Approach Visibility – Statute Mile	> 3/4
Primary Surface Width (feet)	500
Runway Centerline to Taxiway Centerline (feet)	400
Runway Width (feet)	100
Runway Shoulder Width (feet)	20
Runway Blast Pad Width (feet)	140
Runway Blast Pad Length (feet)	200
Runway Safety Area Width (feet)	500
Runway Safety Area Length Prior to Landing Threshold (feet)	600
Runway Safety Area Length Beyond R/W End (feet)	1,000
Runway Object Free Area Width (feet)	800
Runway Object Free Area Length Beyond R/W End (feet)	1,000
Runway Obstacle Free Zone Width (feet)	400
Runway Instrument Departure Surface Slope	40:1
Taxiway Width (feet)	50
Taxiway Shoulder Width (feet)	20
Taxiway Safety Area Width (feet)	118
Taxiway Object Free Area Width (feet)	186

In the mountainous regions of the Mammoth Lakes area it is difficult to develop an airport that meets all F.A.A. requirements for obstruction clearance, provides unobstructed approach and departure paths, and is in a location that is readily accessible from the Town of Mammoth Lake and the ski area. The goal in this study is to evaluate the ability of each site considered to meet all F.A.A. requirements, to provide adequate access to the town and ski facilities, and to provide the best approach and departure paths and least obstacles to airplane operations.

A-3 Site Selection and Analysis

A-3.1 Basis of Selection

Factors that were considered in the selection analysis of the Alternate Airport are as follows:

- Disturbance to existing airport during construction
- Accommodate forecast traffic
- Reserve space for unanticipated growth beyond forecast
- Conform to F.A.A. standards as much as possible
- Minimize obstructions to flight operations
- Distance and access to Town of Mammoth Lakes and ski areas
- Costs

→ Environmental constraints

C-3.2 Sites Selected for the Study

Six different sites have been selected for this study and are designated as Sites 1 through 6. These sites are described below:

Site No. 1 – Site No. 1 uses the existing runway location and alignment. The centerline of the runway is moved 37 feet to the north such that the highway right of way and fence are outside of the object free area and the runway is extended 2,000 feet to the west. Site No. 1 is hereinafter referred to as, “Existing Runway Extended 2,000 ft. to the West.”

Site No. 2 – Site No. 2 uses the existing runway location and alignment. The centerline of the runway is moved 37 feet to the north such that the highway right of way and fence are outside of the object free area and the runway is extended 2,000 feet to the east. With this extension Benton Crossing Road is relocated. Site No. 2 is hereinafter referred to as, “Existing Runway Extended 2,000 ft. to the East.”

Site No. 3 – The total runway and airport is moved 7,000 feet to the west so the 40:1 departure surface clears Doe Ridge. The centerline of the runway is located parallel to Highway 395 and 400 feet north of the north highway right-of-way line. Site No. 3 is hereinafter referred to as, “Relocate Airport 7,000 ft. to the West.”

Site No. 4 – For Site No. 4 Highway 395 is relocated to the south side of the valley, the runway, existing electrical power and telephone lines, and other airport facilities are relocated to the south such that they parallel the relocated highway, and the runway centerline is located 400 feet north of the north right-of-way line for the relocated highway. The east end of the runway is located immediately south of the east end of the existing runway and the runway is extended 2,000 feet to the west. Site No. 4 is hereinafter referred to as, “Move Runway 750 to 1,550 ft. South and Extend 2,000 ft. to the West.”

At Sites No. 4 and 5 it would be possible to leave the existing hangars, FBO, and general aviation apron as they now exist and provide extended taxiway access to the new runway. This possibility has been analyzed for Site No. 4. Site No. 4A considers entirely new airport facilities where all general aviation facilities are relocated convenient to the new runway. Site No. 4B considers the condition where all existing general aviation facilities would remain where they currently exist. The same options are available for Site No. 5 but no special detailed study was prepared since the same facility orientation and cost determined for Site No. 4 would apply for Site No. 5.

Site No. 5 – For Site No. 5 Highway 395 is relocated to the south side of the valley, the runway, existing electrical power and telephone lines, and other airport facilities are relocated to the south such that they parallel the relocated highway, and the runway centerline is located 400 feet north of the north right-of-way lien for the relocated highway. The west end of the runway is located immediately south of the west end of the existing runway and the runway is extended 2,000 feet to the east. With this extension Benton Crossing Road is relocated. Site No. 5 is hereinafter referred to as, “Move Runway 750 to 1,550 ft. South and Extend 2,000 ft. to the East.”

Site No 6 – Site No. 6 is located on an entirely new site, which is located approximately 7 miles to the northeast of the existing airport on a large open area. This site is located immediately north of Lake Crowley and is adjacent to the northern portion of Benton Crossing Road. Site No. 6 is hereinafter referred to as, “Relocate Airport 7 miles to Northeast.”

The location of the runway for each of these sites is indicated on the U.S. quad sheet as shown on Plate No. A-12.

C-3.3 Site Analysis

A description of each site and an analysis of the constraints, advantages, and benefits of each site are included in this section.

A-3.3.1 Site No. 1

On Site No. 1 the runway centerline is moved 37 feet to the north of the existing runway centerline so that the highway right of way and fence are outside the runway object free area. The parallel taxiway is located with 400-foot spacing between runway centerline and taxiway centerline. All of the existing hangars are removed and relocated. The existing FBO operations and access road and general aviation apron are relocated. The drawings depicting Site No. 1 are included in this report as follows:

- Plate No. A-13 – Alternate Airport - Airport Layout Plan – Site #1 – This drawing shows the details of the proposed development
- Plate No. A-14 - Airport Airspace Drawing showing the Part 77 surfaces and all obstructions to those surfaces
- Plate No. A-15 – Airport Airspace Photograph – The same Part 77 surfaces and obstructions as shown on Plate No. A-14 are included on a Google Earth aerial photograph.

- Plate No. A-16 – Runway Profile - A proposed profile for the new runway is shown.
- Plate No. A-17 – Approach Profiles - The approach profiles for the runway are shown. These profiles include the 34:1 approach, the Part 77 approach surfaces, the 40:1 departure plane, and a 3° approach surface.

The layout of the airport meets F.A.A. requirements for an ARC C III airport and satisfies the requirements for airline operation, aircraft storage facilities, aircraft apron, FBO, access roads, and other facilities. The approach surface drawings show significant areas that have land obstructions that are above the Part 77 control surfaces. Doe Ridge violates the 7:1 transitional surface and the horizontal surface. The mountains to the south, west and northwest violate the horizontal surface requirements and the conical surface requirements. A summary showing the existing obstructions at Site 1 is included in Table No. A-3.

TABLE NO. A-3 MAMMOTH YOSEMITE AIRPORT – ALTERNATE AIRPORT STUDY EXISTING OBSTRUCTION STUDY SITE NO. 1 – EXISTING RUNWAY EXTENDED 2,000 FT. TO THE WEST	
Part 77 – Primary Surfaces	None
Part 77 – 7:1 Transitional Surfaces	Doe Ridge
Part 77 – Horizontal Surface	Doe Ridge, Mountains to South, West & Northwest of Runway
Part 77 – Conical Surface	Mountains to South, West, & Northwest of Runway
AC 150/5300-13 – 40:1 Instrument Departure Surfaces	Mountains at the West End of the Departure Surface
Runway Safety Area (RSA)	None
Runway Object Free Area (OFA)	None
Taxiway Safety Area (TSA)	None
Taxiway Object Free Area (OFA)	None
Remarks - Site 1 Runway Location: <ul style="list-style-type: none"> • Move existing runway centerline 37' to north of existing runway centerline such that Runway OFA is outside of highway right of way. • Extend runway 2,000 feet to the west 	

Plate No. A-16 shows the runway profile for this site. Ideally, sight distances on an airport of this type provide clear sight distance for the full length of the runway. However, with a parallel taxiway half runway

clear sight distance is acceptable. At this site the airport only has half runway clear sight distance.

The approach profiles depicted on Plate No. A-17 show that there are no obstructions to the Part 77 surfaces, the 40:1 departure surfaces, or a 3^o approach surface.

With this site access to the highway, to the town and to the ski area is good and access to the terminal, parking lot, and general aviation facilities is also good. The access road runs between the terminal and the future main parking lot, which is satisfactory in this instance since the access road only serves the airport and related activities.

A-3.3.2 Site No. 2

Site No. 2 is the same as Site No. 1 except that the 2,000-foot extension is to the east of the existing runway instead of to the west. All airfield facilities, spacing, and location are the same as in Site No. 1. The extension to the east requires relocation of the Benton Crossing Road intersection with Highway 395 and the relocation of a portion of Benton Crossing Road. This relocation requires the crossing of an existing creek in this area. Significant fill ranging up to 24 feet deep is required for the east portion of the extension and the existing creek will either have to be piped through the runway protection zone or relocated around it. The drawings depicting Site No. 2 are included in this report as follows:

- Plate No. A-18 – Alternate Airport - Airport Layout Plan – Site #2
- Plate No. A-19 - Airport Airspace Drawing showing the Part 77 surfaces and all obstructions to those surfaces
- Plate No. A-20 – Airport Airspace Photograph – The same Part 77 surfaces and obstructions as shown on Plate No. 23 are included on a Google Earth aerial photograph.
- Plate No. A-21 – Runway Profile
- Plate No. A-22 – Approach Profiles

A summary showing the existing obstructions remaining at Site 2 is included in Table No. A-4.

With this plan Doe Ridge is still an obstruction to the Part 77 7:1 transitional surfaces and the horizontal surface. The mountains to the south, west and northwest are still obstructions as defined by Part 77, although the amount of land that is an obstruction in the west and the northwest is less than shown in Site No. 1.

The overall approaches to the airport from the west are somewhat better than for Site No. 1 since the threshold is further east. The runway clear sight distance is full length.

With this site access to the highway, to the town and to the ski area is good and access to the terminal, parking lot, and general aviation facilities is also good. The access road runs between the terminal and the future main parking lot, which is satisfactory in this instance since the access road only serves the airport and related activities.

TABLE NO. A-4 MAMMOTH YOSEMITE AIRPORT – ALTERNATE AIRPORT STUDY EXISTING OBSTRUCTION STUDY SITE NO. 2 – EXISTING RUNWAY EXTENDED 2,000 FT. TO THE EAST	
Part 77 – Primary Surfaces	None
Part 77 – 7:1 Transitional Surfaces	Doe Ridge
Part 77 – Horizontal Surface	Doe Ridge, Mountains to South & Northwest of Runway
Part 77 – Conical Surface	Mountains to South, West, & Northwest of Runway
AC 150/5300-13 – 40:1 Instrument Departure Surfaces	None
Runway Safety Area (RSA)	None
Runway Object Free Area (OFA)	None
Taxiway Safety Area (TSA)	None
Taxiway Object Free Area (OFA)	None
Remarks - Site 2 Runway Location: <ul style="list-style-type: none"> • Move existing runway centerline 37' to north of existing runway centerline such that Runway OFA is outside of highway right of way. • Extend runway 2,000 feet to the east 	

A-3.3.3 Site No. 3

On Site No. 3 the runway is moved 7,000 feet to the west but is still located parallel to and 400 feet north of the north right-of-way line and fence of existing Highway 395. The existing obstructions at this site are shown on Table No. A-5. The drawings depicting Site No. 3 are included in this report as follows:

- ➔ Plate No. A-23 - Airport Airspace Drawing showing the Part 77 surfaces and all obstructions to those surfaces

- Plate No. A-24 – Airport Airspace Photograph – The same Part 77 surfaces and obstructions as shown on Plate No. A-23 are included on a Google Earth aerial photograph.

With this site location Doe Ridge is still an obstruction to the horizontal surface requirements, the mountains to the west and northwest are much more significant obstructions to aircraft operations, and approaches from the west are inhibited by terrain. The southern portion of Doe Ridge is also within the 40:1 departure plane on the east end of the runway.

The terrain in the area of Site No. 3 makes it impractical to give further consideration to this site.

TABLE NO. A-5 MAMMOTH YOSEMITE AIRPORT – ALTERNATE AIRPORT STUDY EXISTING OBSTRUCTION STUDY SITE NO. 3 – RELOCATE AIRPORT 7,000 FT. TO THE WEST	
Part 77 – Primary Surfaces	None
Part 77 – 7:1 Transitional Surfaces	Doe Ridge, Mountains to the West
Part 77 – Horizontal Surface	Doe Ridge, Mountains to South, West, Northwest, and North
Part 77 – Conical Surface	Mountains to South, West, Northwest, and North
AC 150/5300-13 – 40:1 Instrument Departure Surfaces	Doe Ridge, Mountains to the West
Runway Safety Area (RSA)	None
Runway Object Free Area (OFA)	None
Taxiway Safety Area (TSA)	None
Taxiway Object Free Area (OFA)	None
Remarks - Site 3 Runway Location: <ul style="list-style-type: none"> • Move existing runway centerline 37' to north of existing runway centerline such that Runway OFA is outside of highway right of way. • Move runway 7,000 feet west of existing runway and extend it 2,000 feet to the west. 	

A-3.3.4 Site No. 4

On Site No. 4 the runway is relocated to the south of the existing runway and reoriented slightly so that the Part 77 7:1 transitional surfaces are not violated by either the mountains to the south or Doe Ridge. With this plan Highway 395 and the existing power and telephone lines must be relocated to the south of the new runway. With this plan the existing hangars and part of the existing aircraft tie

down apron are not impacted, but will be located a significant distance from the runway, making taxiway access awkward.

In order to analyze the impact of leaving the general aviation facilities (hangars, FBO, and apron) at their current location and as an alternate relocating the general aviation facilities so they will have convenient access to the runway, two different airfield layouts were analyzed:

Site 4A – In Site 4A the existing general aviation facilities are abandoned and new facilities constructed that are convenient to the runway. Plate No. A-25 shows the general layout of the airport with all general aviation facilities relocated.

Site 4B – In Site 4B the existing general aviation facilities are left in place and new taxiways are constructed to provide aircraft access to the runway. Plate No. A-26 shows the general layout of the airport with all existing general aviation facilities remaining at the existing location.

The drawings depicting Site No. 4 are included in this report as follows:

- Plate No. A-25 – Alternate Airport - Airport Layout Plan – Site #4A – Relocate Existing Facilities – The first Airport Layout Plan for Site No. 4 has been prepared to show the layout whereby the existing airfield facilities have been abandoned and replaced with new facilities conveniently located to the new runway. This plan is designated as Site #4A.
- Plate No. A-26 – Alternate Airport – Airport Layout Plan – Site #4B – Maintain Existing Facilities – The second airport layout plan for Site #4 has been prepared to show the layout whereby the existing hangars and tie down aprons are maintained. With this plan the access road is revised from that shown for Site #4A. This plan is designated as Site #4B.
- Plate No. A-27 - Airport Airspace Drawing – Same for both Sites #4A and #4B
- Plate No. A-28 – Airport Airspace Photograph - Same for both Sites #4A and #4B
- Plate No. A-29 – Runway Profile – Same for both Sites #4A and #4B
- Plate No. A-30 – Approach Profiles – Same for both Sites #4A and #4B.

Either Site #4A or Site #4B would adequately serve both the airline operations and the general aviation operations. Site #4A is a cleaner and more logical layout, but is somewhat more expensive than Site #4B since it would be necessary to relocate hangars and FBO facilities with the Site #4A plan.

Access to the airport is adequate with both plans but is smoother and easier for the public to navigate with the Site #4A layout.

The Airport Airspace Drawing and Photograph as shown on Plates A-27 and A-28 identify land areas that are indicated as obstructions to the Part 77 surfaces. A summarization of existing obstructions is shown in Table No. A-6.

With this plan the 7:1 transitional surfaces are not penetrated by any obstruction. Doe Ridge and the mountains to the south, west, and northwest are shown as obstructions penetrating the Part 77 horizontal surface and/or conical surfaces.

The approaches from the west are improved over the Sites #1 and #2 layouts, and the approach from the east is also improved.

The Runway Profile provides a full runway length clear sight distance. There are no obstructions in the approach or departure plane.

With this plan approximately 5 miles of Highway 395 must be relocated, but access to the airport is good from relocated Highway 395 and access to the town and the ski areas is also good.

TABLE NO. A-6 MAMMOTH YOSEMITE AIRPORT – ALTERNATE AIRPORT STUDY EXISTING OBSTRUCTION STUDY – SITE NO. 4 MOVE RUNWAY 750 TO 1,550 FT. SOUTH AND EXTEND 2,000 FT. TO THE WEST	
Part 77 – Primary Surfaces	None
Part 77 – 7:1 Transitional Surfaces	None
Part 77 – Horizontal Surface	Doe Ridge, Mountains to South, West, & Northwest
Part 77 – Conical Surface	Mountains to South, West, and Northwest
AC 150/5300-13 – 40:1 Instrument Departure Surfaces	None
Runway Safety Area (RSA)	None
Runway Object Free Area (OFA)	None
Taxiway Safety Area (TSA)	None
Taxiway Object Free Area (OFA)	None

TABLE NO. A-6
MAMMOTH YOSEMITE AIRPORT – ALTERNATE AIRPORT STUDY
EXISTING OBSTRUCTION STUDY – SITE NO. 4
(CONTINUED)

Remarks - Site 4 Runway Location:

- Relocate Highway 395 to the south
- Move runway south from existing location to keep Doe Ridge out of the 7:1 transitional surfaces
- Revise orientation of runway
- Extend runway 2,000 feet to the west

A-3.3.5 Site No. 5

The airport layout for Site No. 5 is the same as for Site No. 4A except that the runway is moved 2,000 feet to the east and the east portion of the service road is modified. With this plan the intersection of Benton Crossing Road with Highway 395 is moved to the east, and the creek crossing of the runway extended safety area and runway protection zone must be accommodated in a culvert or the stream relocated around the end of the RPZ. Portions of Benton Crossing Road are relocated in this plan. The drawings depicting Site No. 5 are included in this report as follows:

- Plate No. A-31 – Alternate Airport - Airport Layout Plan – Site #5
- Plate No. A-32 - Airport Airspace Drawing
- Plate No. A-33 – Airport Airspace Photograph
- Plate No. A-34 – Runway Profile
- Plate No. A-35 – Approach Profiles

A summarization of existing obstructions is shown in Table No. A-7.

TABLE NO. A-7 MAMMOTH YOSEMITE AIRPORT – ALTERNATE AIRPORT STUDY EXISTING OBSTRUCTION STUDY – SITE NO. 5 MOVE RUNWAY 750 TO 1,550 FT. SOUTH AND EXTEND 2,000 FT. TO THE EAST	
Part 77 – Primary Surfaces	None
Part 77 – 7:1 Transitional Surfaces	None
Part 77 – Horizontal Surface	Doe Ridge
Part 77 – Conical Surface	Mountains to South, West, and Northwest
AC 150/5300-13 – 40:1 Instrument Departure Surfaces	None
Runway Safety Area (RSA)	None
Runway Object Free Area (OFA)	None
Taxiway Safety Area (TSA)	None
Taxiway Object Free Area (OFA)	None
Remarks - Site 5 Runway Location: <ul style="list-style-type: none"> • Relocate Highway 395 to the south • Move runway south from existing location to keep Doe Ridge out of the 7:1 transitional surfaces • Revise orientation of runway • Extend runway 2,000 feet to the east 	

In the study of this plan the new airport facilities are included, but it would be possible to maintain the existing hangars, FBO and aircraft parking apron as they currently exist and as shown for Site No. 4 on Airport Layout Plan Site #4B. A drawing showing this option has not been included.

Site No. 5 requires approximately 22 feet of fill at the east end of the runway.

With this site, as shown on Plates A-32 and A-33, there are no land obstructions to the 7:1 transitional surfaces. Doe Ridge and the mountains to the south penetrate the horizontal surface. The mountains to the south, west, and northwest penetrate the conical surface but to a lesser extent than for Site No. 4.

Approaches to and departures from the west are slightly better than for Site No. 4 since the threshold is moved 2,000 further to the east. Departures to and arrivals from the east are very good.

With this plan approximately 5 miles of Highway 395 must be relocated, but access to the airport is good from relocated Highway 395 and access to the town and the ski areas is also good.

A-3.3.6 Site No. 6

Site No. 6 is an entirely new airport located on a new site. This new site is located approximately 7 miles to the northeast of the existing airport in a fairly open area. The site is located immediately north of the northern end of Benton Crossing Road approximately a mile and a half northwest of Crowley Lake. The drawings depicting Site No. 6 are included in this report as follows:

- Plate No. A-36 – Alternate Airport - Airport Layout Plan – Site #6
- Plate No. A-37 - Airport Airspace Drawing
- Plate No. A-38 – Airport Airspace Photograph
- Plate No. A-39 – Runway Profile
- Plate No. A-40 – Approach Profiles

A summarization of existing obstructions is shown in Table No. A-8.

TABLE NO. A-8 MAMMOTH YOSEMITE AIRPORT – ALTERNATE AIRPORT STUDY EXISTING OBSTRUCTION STUDY SITE NO. 6 – RELOCATE AIRPORT 7 MILES TO NORTHEAST	
Part 77 – Primary Surfaces	None
Part 77 – 7:1 Transitional Surfaces	None
Part 77 – Horizontal Surface	Minor Sections at Northeast Edge
Part 77 – Conical Surface	Minor Sections to the Northeast
AC 150/5300-13 – 40:1 Instrument Departure Surfaces	None
Runway Safety Area (RSA)	None
Runway Object Free Area (OFA)	None
Taxiway Safety Area (TSA)	None
Taxiway Object Free Area (OFA)	None
Remarks - New airport site located 7 miles northeast of existing airport in open area northwest of Crowley Lake. Runway reoriented from the bearing of existing runway.	

The basic layout of the airport for this site is the same as that for the other sites. With this plan it is not proposed to relocate any of the

aircraft storage hangars. The existing airport could be left open for general aviation purposes. The airport layout provides good service and good access for aircraft and for vehicular traffic. The airport access road would be a stub road in from Benton Crossing Road.

The Airport Airspace drawings show that there are no obstructions to the Part 77 transitional surfaces, approach surfaces, or horizontal surface except for some minor obstructions in the northeast portion of the horizontal surface. There are also some minor obstructions within the conical surface north and northeast of the site.

Approaches from both the east and west and departures to the east and west are good and clear of obstructions.

The soils at this site are volcanic in nature, classified as pumice. These soils are loose and difficult to compact. In order to construct a long life pavement section in this area, it will be necessary to place a minimum of three feet of embankment materials under all pavement sections. These embankment materials must consist of stable soils that can be readily compacted. These soils should consist of rock blasted from the hillsides or decomposed granite taken from local quarries.

This site is an additional 8 or 9 miles travel distance from the town and ski resorts than the other sites. Seven miles of this travel will be on Benton Crossing Road, which is a lower standard road than Highway 395. Access to the town and ski resort is not as good from this site as it is from the other sites.

C-3.4 Preliminary Cost Analysis

Preliminary cost analyses have been conducted for all sites except Site No. 3. A summary of these costs is included in Table No. A-9. The cost summary shows preliminary estimates for the major airfield facilities at each site, including:

- Site Grading and Drainage
- Airfield Facilities
- Terminal Facilities
- Access Road
- Benton Crossing Road
- US Highway 395 Relocation
- Creek Crossing
- Utilities
- Relocate Power and Telephone Lines
- Hangar Relocation
- Doe Ridge Excavation
- Stabilization Embankment

Additional costs for contingencies, environmental studies, engineering design and project management, and administrative costs have been added to provide an indication of the relative cost of developing each site. All costs have been calculated based on 2012 prices.

Significant land acquisition will be required for the development of each of these sites. The land will have to be obtained from the Forest Service and/or LADWP. It was not possible at this time to obtain costs for land acquisition, so in Table No. A-9 the area of land that would be required for the airfield development and the area of land required for the U.S. Highway 395 relocation are indicated. On Sites No. 4 and 5 where the Highway 395 is relocated, it has been assumed that if the Airport acquired the land for the new right of way and deeded it to the Highway Department, the Highway Department would deed the existing highway right of way to the Airport at a no-cost exchange. As a result, the areas indicated for the airfield development do not include the existing Highway 395 right of way.

TABLE NO. A-9
MAMMOTH YOSEMITE AIRPORT – ALTERNATE AIRPORT STUDY
PRELIMINARY DEVELOPMENT COST ESTIMATE (x 1,000)

Site No.	1	2	4A	4B	5	6
Site Grading and Drainage	\$ 7,500	\$ 19,500	\$ 7,500	\$ 7,500	\$ 19,500	\$ 20,000
Airfield Facilities	26,000	26,000	28,000	28,000	28,000	28,000
Terminal Facilities	22,000	22,000	22,000	22,000	22,000	22,000
Access Road	2,000	2,000	3,000	3,000	3,500	2,000
Benton Crossing Road	0	2,000	0	0	2,000	0
US 395 Relocation	0	0	18,000	18,000	18,000	0
Creek Crossing	0	1,000	0	0	1,000	4,000
Utilities	2,000	2,000	2,000	1,800	2,000	8,000
Relocate Power & Telephone Lines	0	0	4,000	4,000	4,000	0
Hangar Relocation	28,000	28,000	28,000	0	28,000	0
Doe Ridge Excavation	45,000	45,000	0	0	0	0
Stabilization Embankment	0	0	0	0	0	24,000
Total Construction	\$ 132,500	\$ 147,500	\$ 112,500	\$ 84,300	\$ 128,000	\$ 108,000
Contingencies - 15%+	20,000	22,000	17,000	13,000	19,000	16,000
Environmental Studies	5,000	5,000	5,000	5,000	5,000	5,000
Design and Construction Management	33,000	37,000	28,000	21,000	32,000	27,000
Administrative Costs	10,000	10,000	10,000	10,000	10,000	10,000
Total Project Cost	\$ 200,500	\$ 221,500	\$ 172,500	\$ 133,300	\$ 194,000	\$ 166,000
Land Acquisition - Acres	344	386	368	368	436	611

Notes:

1. Airfield Facilities include all construction related to runway, taxiway, and general aviation apron.
2. Terminal Facilities include airline terminal building, apron, parking lots, ARFF building, and maintenance building.
3. Doe Ridge Excavation includes excavation of all sections of Doe Ridge that penetrate the Part 77 7:1 transitional surfaces only.
4. Highway 395 Relocation includes construction costs only of relocating U.S. Highway 395 where required, not including land acquisition costs.
5. Hangar Relocation Costs include cost to relocate all tenant-owned corporate hangars and tee hangars.
6. Land Acquisition – No costs available for land acquisition. Area required for land acquisition at each site is included.
7. Site No. 3 was eliminated from consideration due to obstructions to the west. No cost estimates were prepared.
8. Site No. 1 – If Doe Ridge Excavation is eliminated, it will be necessary to import 1,500,000 cubic yards of embankment material at \$12 per cubic yard, for a total cost of \$18,000,000.
9. Sites 4 and 5 – Calculations of acres of land to be required for development of Sites 4 and 5 are based on the assumption that when land is acquired for the relocation of Highway 395 and deeded to the State, the State would transfer ownership of the existing Highway 395 right of way to the Airport at no additional cost.

A-4 RECOMMENDATIONS

All six development sites were evaluated using the same airfield layout and, as a result, are equal in that respect.

Site No. 3 should be removed from any consideration due to the close proximity of obstructions to the west. No further evaluation has been made for this site.

From an obstruction and access consideration, Site No. 6 is significantly better than any of the other sites. Sites No. 4 and 5 have less critical obstructions than do Sites No. 1 and 2. Site No. 2 has less obstructions and better approaches from the west than Site No. 1. Site No. 5 has less critical obstructions and better approaches from the west than Site No. 4.

Sites No. 4 and 5 require relocation of five miles of Highway 395, which will affect the cost of the project. Sites No. 1 and 2 require significant excavation of the south portion of Doe Ridge if it is required to clear the Part 77 7:1 transitional surface. Approximately 9 million cubic yards of rock will have to be removed from this area. Sites No. 4 and 5 do not require the removal of any rock from Doe Ridge to clear the 7:1 transitional surfaces from obstructions. If it becomes necessary to remove all obstructions on Doe Ridge above the horizontal surface, then for Sites No. 1, 2, 4, and 5 it will require the removal of an additional 20 million cubic yards of rock from Doe Ridge.

From a cost standpoint Sites No. 1, 2, 4A, 5, and 6 are similar, with the costs of Sites No. 4A, 5, and 6 being somewhat lower than Sites 1 and 2. The cost of Site No. 1 and 2 developments includes \$45,000,000 for Doe Ridge excavation, which is not required at the other sites. If the requirement to remove a section of Doe Ridge is waived, then the costs of Sites 1 and 2 become more nearly the same as Sites 4A, 5, and 6.

Sites No. 1, 2, 4, and 5 have good access to Highway 395 and are in reasonably close proximity to the town and to the ski areas. Site No. 6 is 8 to 10 miles further from the town and the ski areas than the other sites and seven miles of this extra travel distance is on secondary roads, making Site No. 6 less accessible to town.

From the standpoint of obstruction clearance and approaches to the thresholds of the runway, Site No. 6 is the preferred site.

Sites No. 4 and 5 have been located in such a manner as to minimize the excavation required to provide obstruction clearance to the transitional surfaces of Part 77 and have good access to Highway 395 and close proximity to the town and the ski areas.

From an overall standpoint the close proximity to the public areas and access of Sites No. 1, 2, 4, and 5 are such as to make these sites preferable over Site No. 6. Of these sites, Sites No. 2 and 5 provide better approaches from the west and departures to the east than Sites No. 1 and 4 and are, therefore, preferred.

Sites No. 4 and 5 provide an entirely new airport runway and facilities. This runway and other facilities could be more easily constructed without disrupting existing airport facilities than could Site No. 1 or 2. If Site No. 1 or 2 were accepted, then the airport would have to be closed down while the new facilities were constructed.

As a result of these considerations, the ranking of the sites is as follows:

- 1 – #5
- 2 - #4
- 3 - #6
- 4 - #2
- 5 - #1

All of the sites studied, except for Site No. 3, provide significant improvement to airport operations at the MMH. Should budgetary and other constraints rule out the development shown in Sites 1, 2, 4, 5, and 6, the existing airport can be upgraded to provide airline service and general aviation operations, including the business jets, provided modifications to standards can be obtained from F.A.A. and wherever practical to correct deviations to standards. These modifications to standards would include runway to taxiway spacing; building and fence penetration into the object free area of the runway and taxiway; and penetration of Doe Ridge into the FAR Part 77 7:1 transitional surfaces, horizontal surfaces, and conical surfaces. The existing runway can be widened and shoulders constructed. The existing taxiway can also be widened and shoulders constructed. If F.A.A. will approve the use of aircraft-specific analysis for runway centerline to taxiway centerline spacing, the existing 300-foot runway centerline to taxiway centerline is satisfactory. The development of any of the six alternate sites studied will require extensive land acquisition and detailed environmental studies. These requirements will add significant cost and delays in the development of the airport.

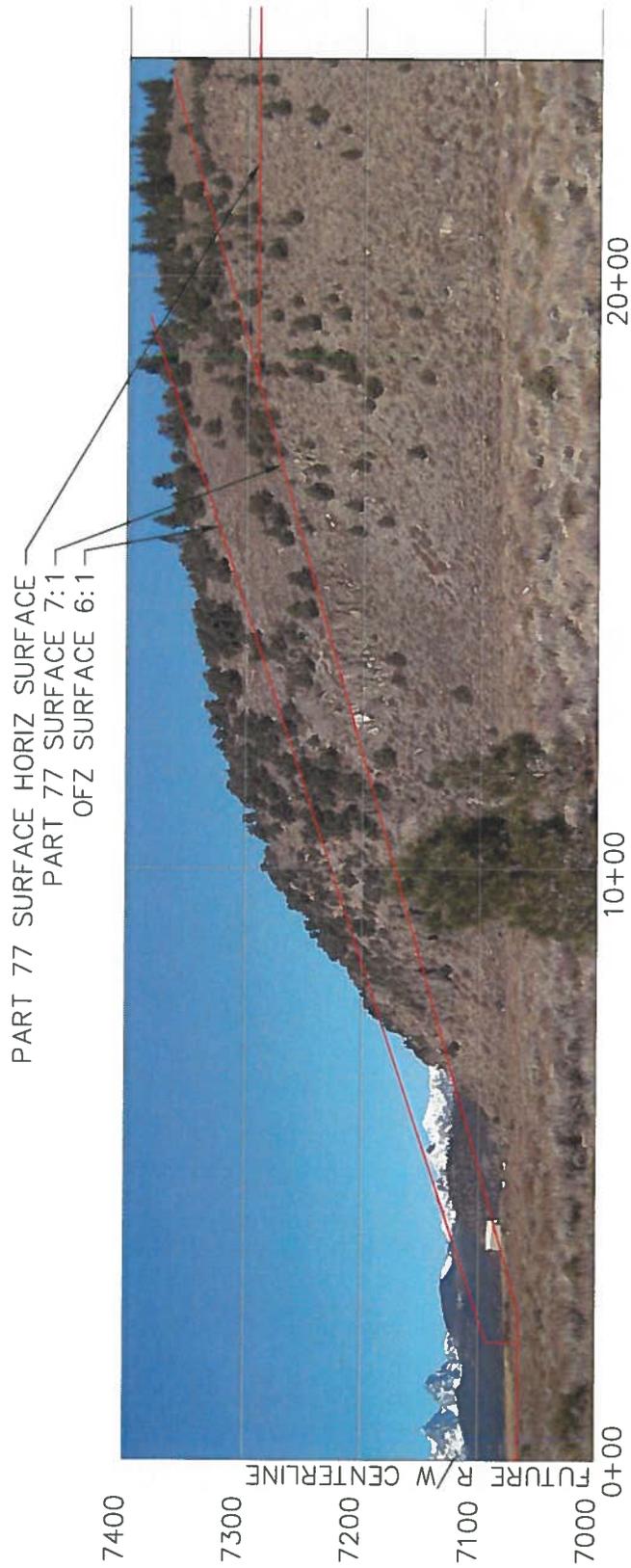
Taking into account all benefits, development costs, land acquisition costs and constraints, and environmental costs and constraints, it is concluded that it is not practical to consider the development of any of the alternate sites considered and to proceed with the development of the existing airport. It is also recommended that the airport actively pursue a program to upgrade the airport whenever practicable to eliminate existing deviations from F.A.A. standards and to request modification to standards from F.A.A. for those conditions that are impractical to improve.

The runway can be extended 2,000 feet to either the east or the west. The east extension is more expensive, but provides better departures to and arrivals from the west and better runway clear sight distance, which would improve operational capabilities of the larger aircraft.

If the existing airport runway and taxiway facilities are left in place, it is recommended that the proposed new terminal facilities be located such that at some future date the airport facilities shown for Site No. 1 or Site No. 2 can be constructed without relocating the new terminal facilities.

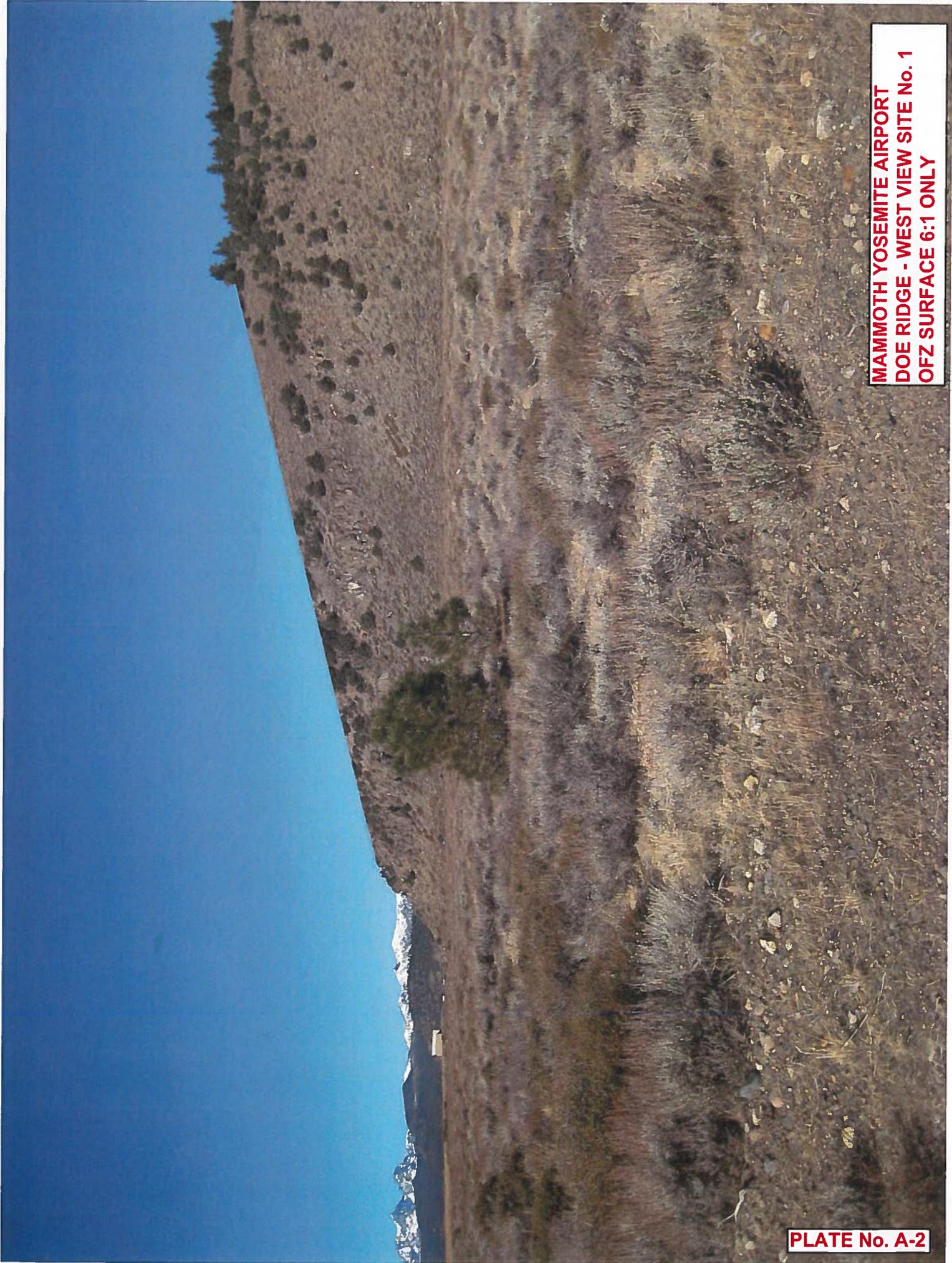
The cost of developing any one of the five sites studied makes it impractical at this time to consider any of the alternate sites. Land use and environmental issues related to the development of Sites 1 through 6 will further increase the development costs of any of the alternate sites and significantly delay the much-needed expansion of the airport to accommodate the existing and proposed airline traffic. It is, therefore, recommended that the existing airport be expanded as necessary to accommodate the forecast growth but that the new terminal facilities be located far enough from the current runway centerline such that Sites 1 or 2 could be developed in the future without requiring any modification to the new terminal facilities.

It is further recommended that existing deviations from F.A.A. standards be remedied wherever possible and that F.A.A. approval for modification to standards be obtained for those conditions that cannot be corrected.



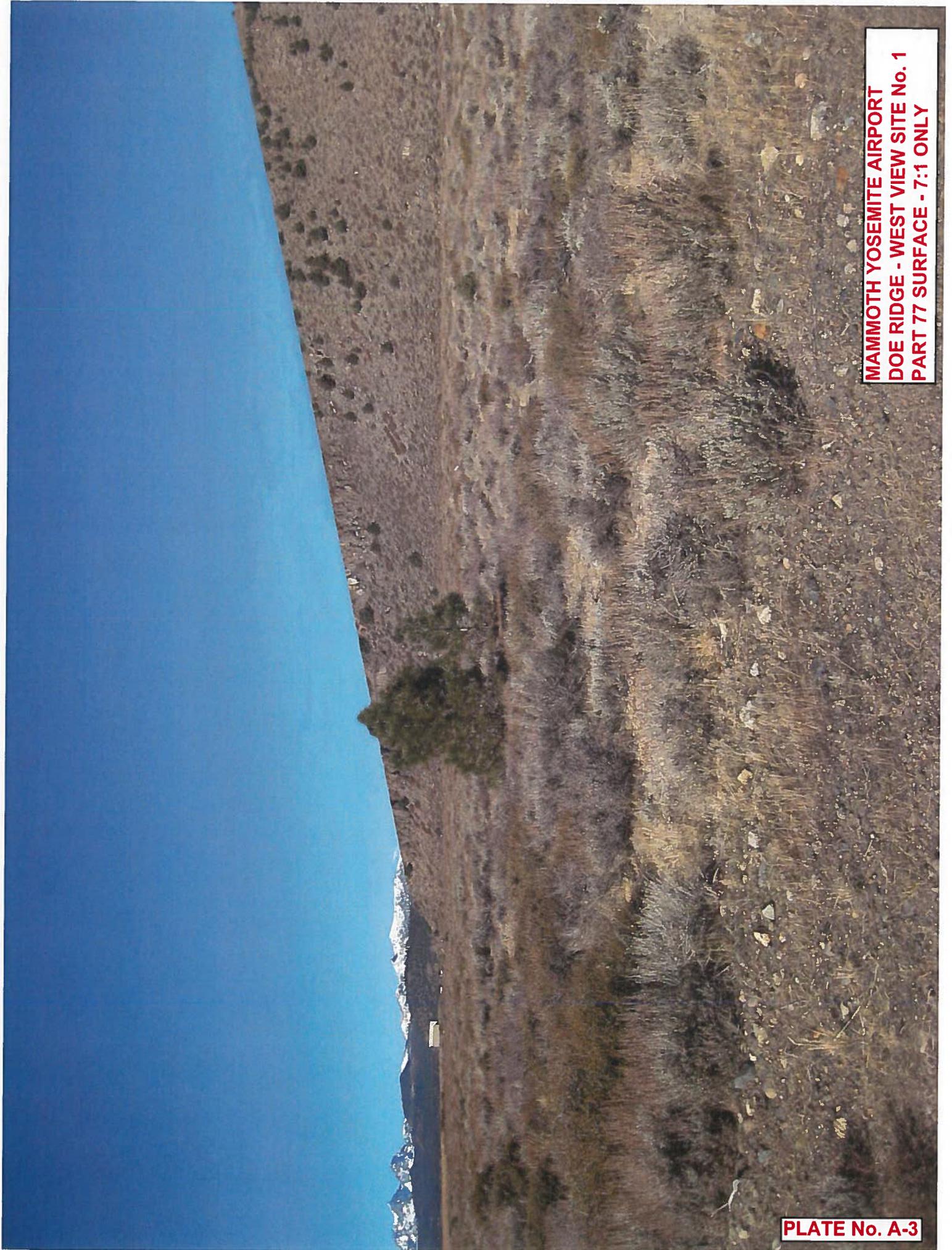
MAMMOTH YOSEMITE AIRPORT – SITE No. 1
EXISTING DOE RIDGE CROSS SECTION
WEST VIEW

HORIZONTAL SCALE 1"=300'
 VERTICAL SCALE 1"=150'



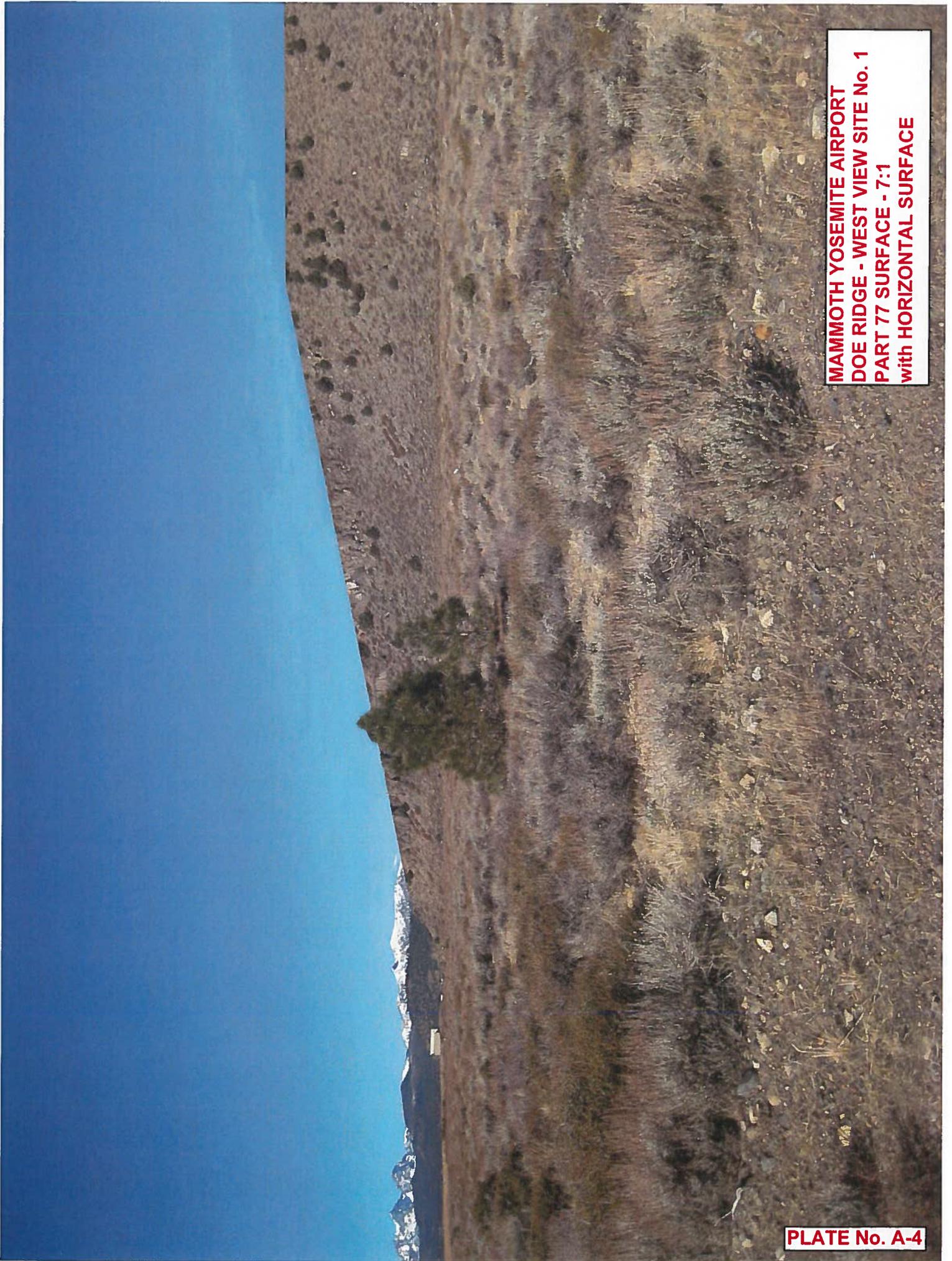
**MAMMOTH YOSEMITE AIRPORT
DOE RIDGE - WEST VIEW SITE No. 1
OFZ SURFACE 6:1 ONLY**

PLATE No. A-2



**MAMMOTH YOSEMITE AIRPORT
DOE RIDGE - WEST VIEW SITE No. 1
PART 77 SURFACE - 7:1 ONLY**

PLATE No. A-3



**MAMMOTH YOSEMITE AIRPORT
DOE RIDGE - WEST VIEW SITE No. 1
PART 77 SURFACE - 7:1
with HORIZONTAL SURFACE**

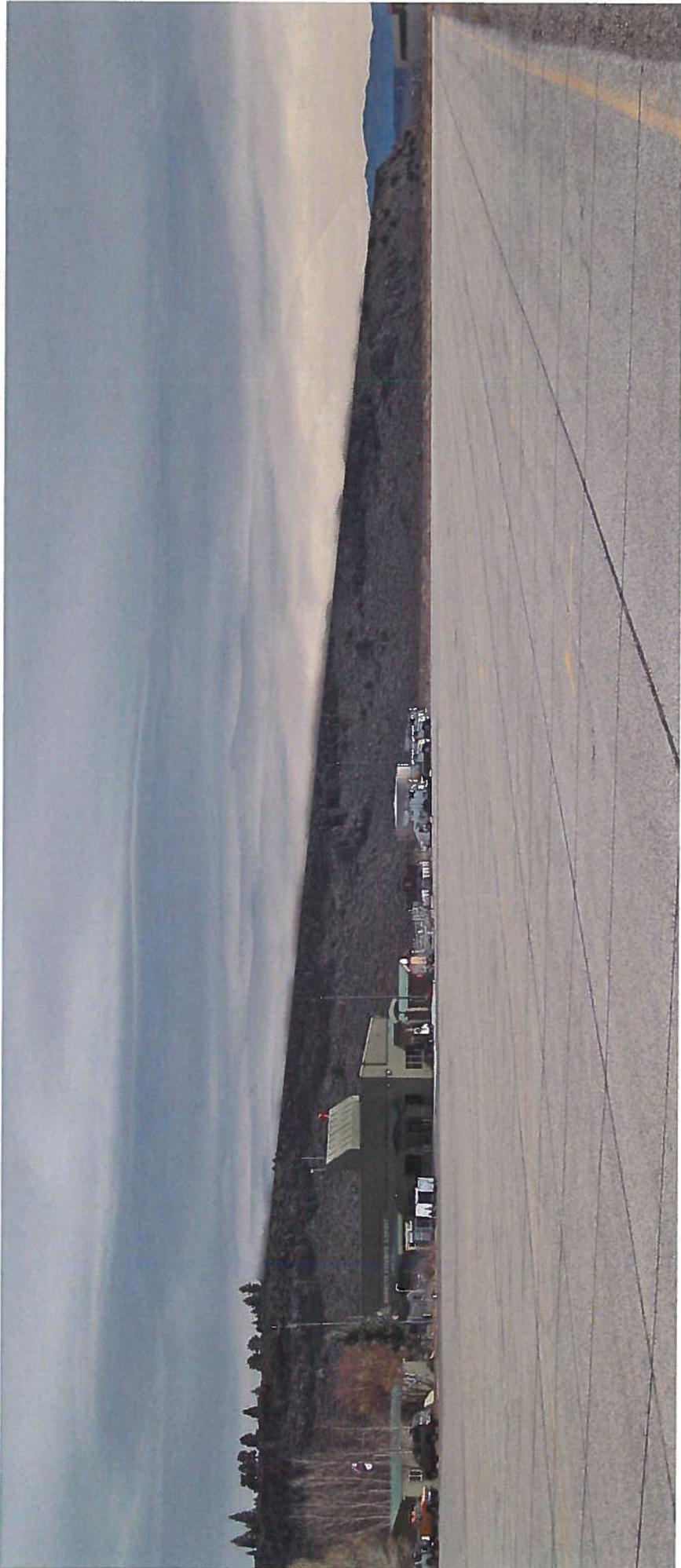


MAMMOTH YOSEMITE AIRPORT – SITE No. 1
EXISTING DOE RIDGE CROSS SECTION
EAST VIEW

HORIZONTAL SCALE 1" = 400'
 VERTICAL SCALE 1" = 600'



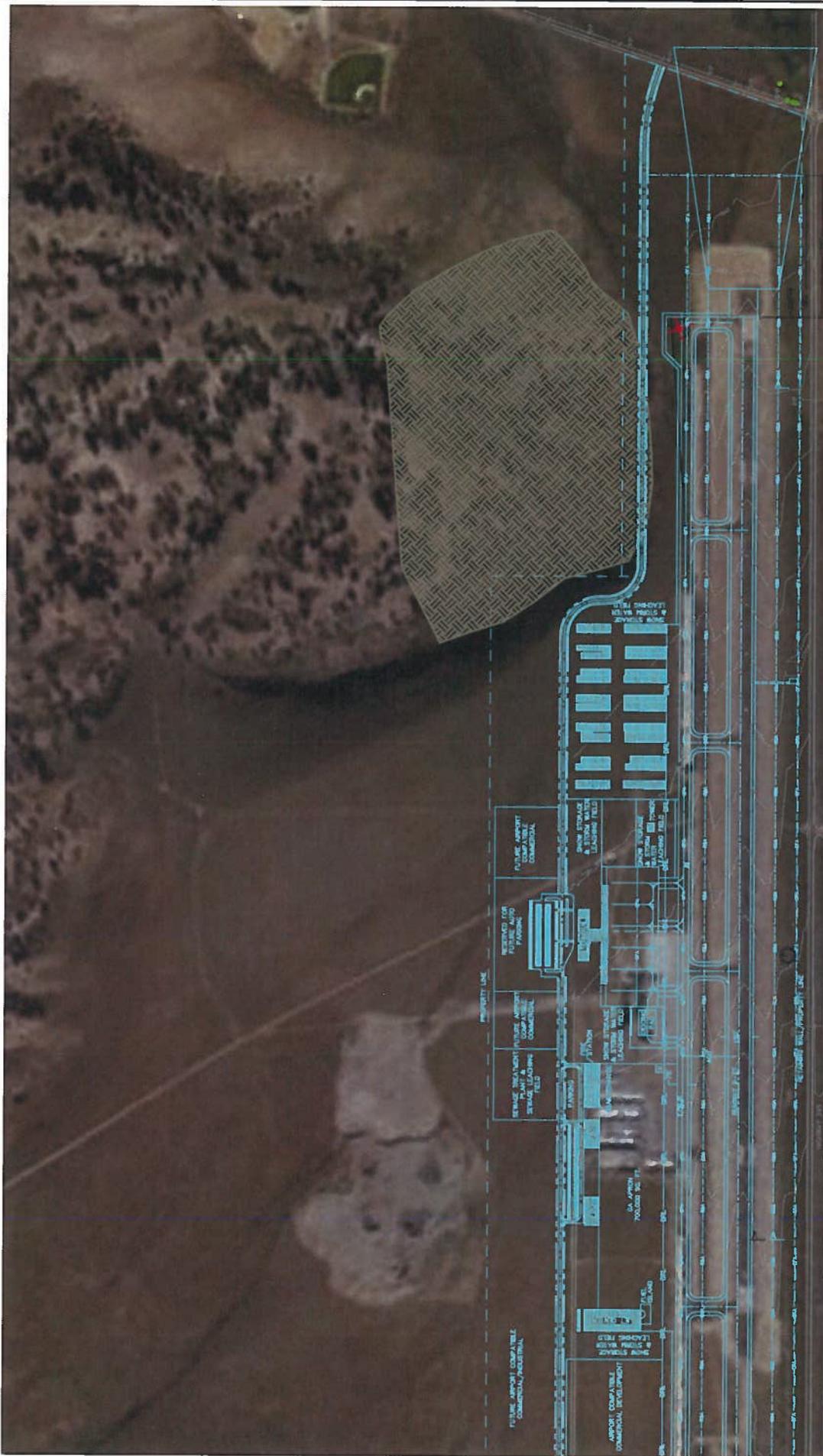
**MAMMOTH YOSEMITE AIRPORT
DOE RIDGE - EAST VIEW SITE No. 1
OFZ SURFACE 6:1 ONLY**



**MAMMOTH YOSEMITE AIRPORT
DOE RIDGE - EAST VIEW SITE No. 1
PART 77 SURFACE - 7:1 ONLY**



**MAMMOTH YOSEMITE AIRPORT
DOE RIDGE - EAST VIEW SITE No. 1
PART 77 SURFACE 7:1
with HORIZONTAL SURFACE**



AREA OF EXCAVATION

MAMMOTH YOSEMITE AIRPORT
 COUNTY OF MONO
 STATE OF CALIFORNIA
 MAMMOTH LAKES, CALIFORNIA
DOE RIDGE - EXCAVATION AREA - SITE No. 1
PART 77 SURFACE - 771 ONLY

PREPARED BY: **Richard W. Bradley**
 CONSULTING AIRPORT ENGINEER
 818 Hwy 99, Suite 200 • Camanche, California 93208 • (503) 884-1729

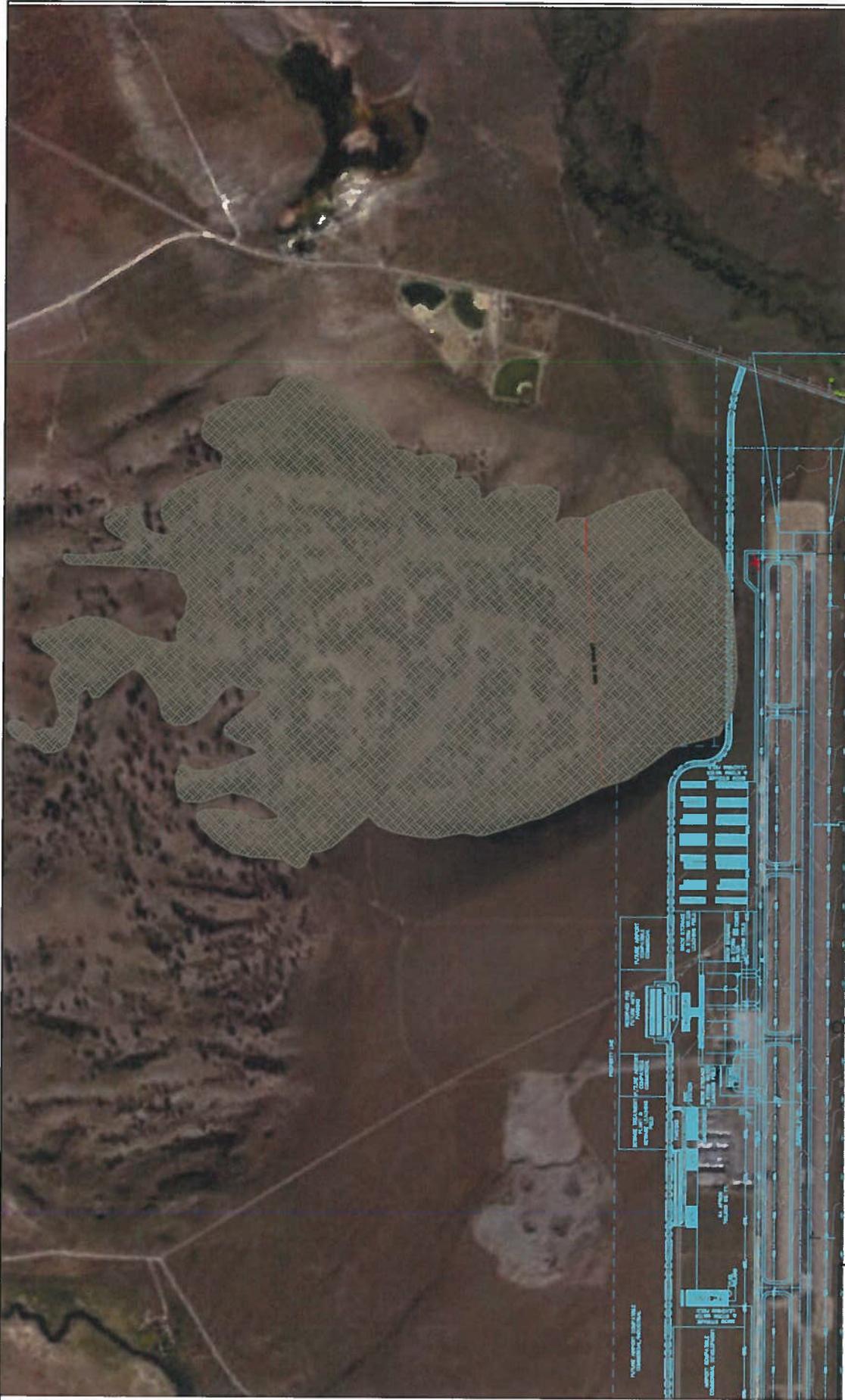
NO.	BY	DATE

APPROVED: _____ DATE: _____
 FAA

APPROVED: _____ DATE: _____
 AIRPORT MANAGER

APPROVED: _____ DATE: _____
 FAA

NOV. 23, 2010



AREA OF EXCAVATION

GRAPHIC SCALE IN FEET	SCALE: 1" = 400'	DATE	NOV. 22, 2010
COUNTY OF MONO	STATE OF CALIFORNIA	PROJECT	MAMMOTH YOSEMITE AIRPORT
MAMMOTH YOSEMITE AIRPORT		CALIFORNIA	
MAMMOTH LAKES,		DOE RIDGE - EXCAVATION AREA - SITE No. 1	
PART 77 SURFACE - 7% WITH HORIZONTAL SURFACE		PART 77 SURFACE - 7% WITH HORIZONTAL SURFACE	

Robert W. Brandley
REGISTERED PROFESSIONAL ENGINEER
No. 40827 - CIVIL

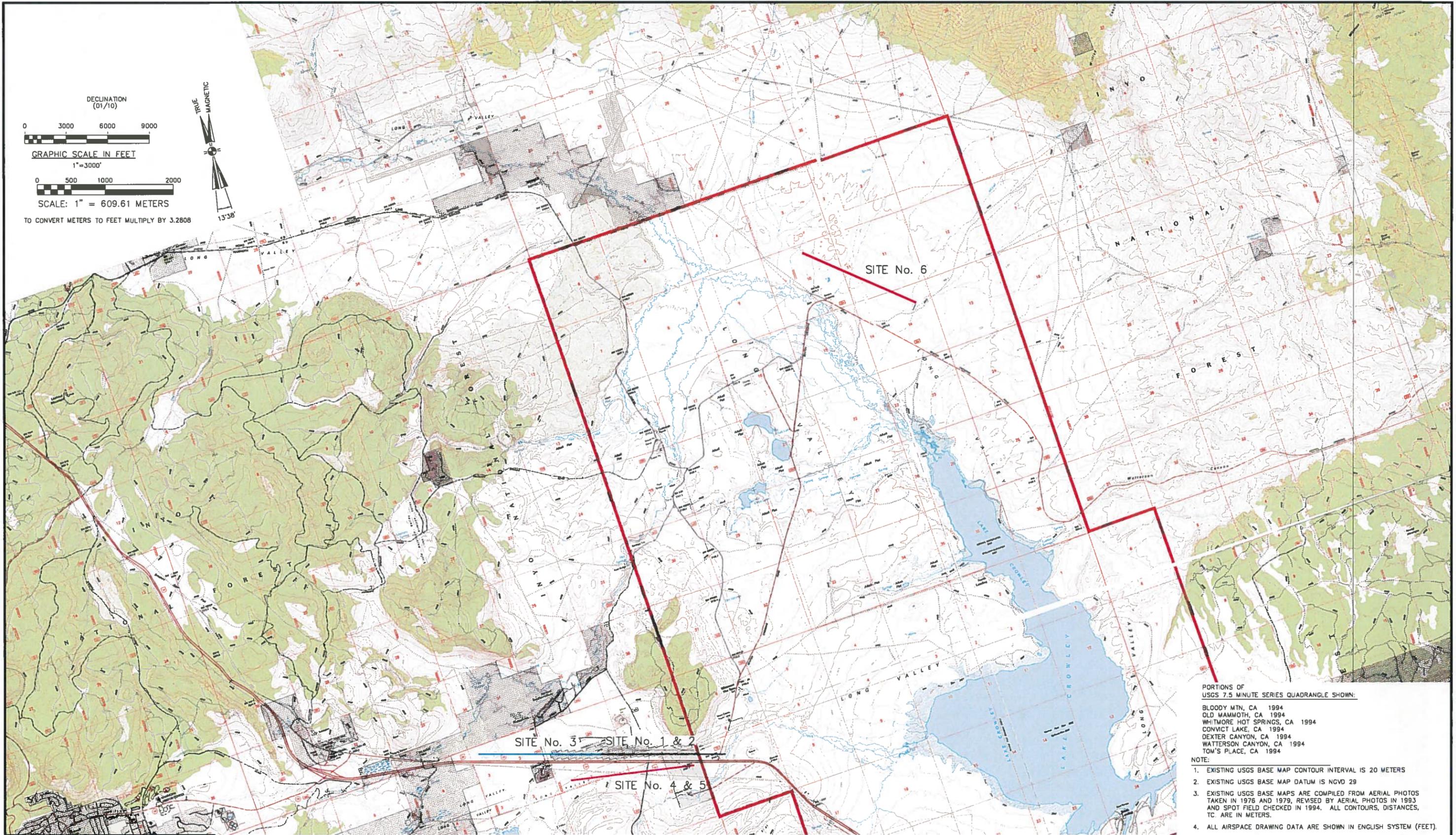
0100 City Road, Suite 201 • Lamont, California 93549 • (509) 825-2729

FAA DISCLAIMER
THE ENGINEER HAS NOT CONDUCTED A VISUAL SURVEY OF THE SITE AND HAS NOT BEEN ADVISED BY ANY OTHER PARTY OF ANY CHANGES TO THE SITE. THE ENGINEER HAS CONDUCTED A VISUAL SURVEY OF THE SITE AND HAS BEEN ADVISED BY ANY OTHER PARTY OF ANY CHANGES TO THE SITE. THE ENGINEER HAS CONDUCTED A VISUAL SURVEY OF THE SITE AND HAS BEEN ADVISED BY ANY OTHER PARTY OF ANY CHANGES TO THE SITE. THE ENGINEER HAS CONDUCTED A VISUAL SURVEY OF THE SITE AND HAS BEEN ADVISED BY ANY OTHER PARTY OF ANY CHANGES TO THE SITE.

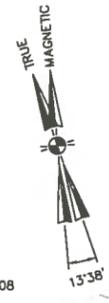
APPROVED
AIRPORT MANAGER

APPROVED
FAA

DATE



DECLINATION (01/10)
 0 3000 6000 9000
 GRAPHIC SCALE IN FEET
 1" = 3000'
 0 500 1000 2000
 SCALE: 1" = 609.61 METERS
 TO CONVERT METERS TO FEET MULTIPLY BY 3.2808



PORTIONS OF USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
 BLOODY MTN, CA 1994
 OLD MAMMOTH, CA 1994
 WHITMORE HOT SPRINGS, CA 1994
 CONVICT LAKE, CA 1994
 DEXTER CANYON, CA 1994
 WATTERSON CANYON, CA 1994
 TOM'S PLACE, CA 1994

NOTE:
 1. EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
 2. EXISTING USGS BASE MAP DATUM IS NGVD 29
 3. EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
 4. ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET)
 5. NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP

FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 AIRPORT MANAGER

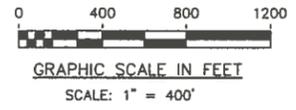
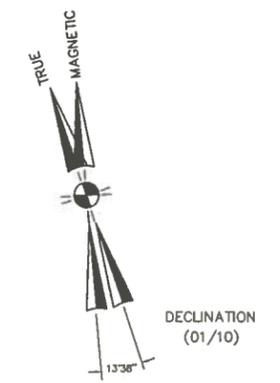
Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 8125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MONO COUNTY, CALIFORNIA
AIRPORT SITE LOCATION PLAN

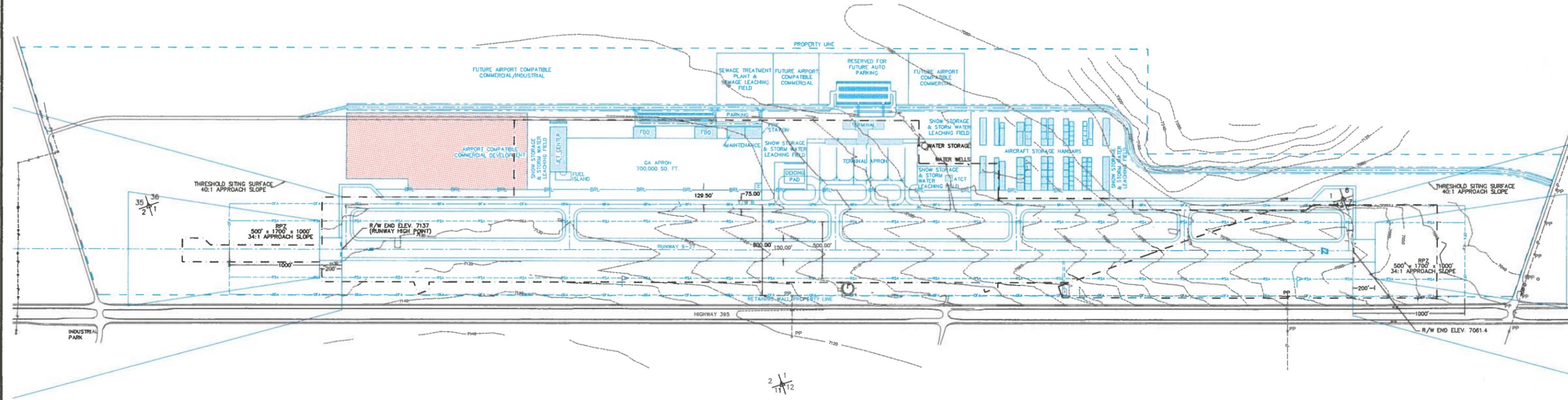
NO.	REVISIONS	BY	APR	DATE

PROFESSIONAL ENGINEER
 REINARD W. BRANDLEY
 No. C 8044
 Exp. 9-30-2012
 CIVIL
 STATE OF CALIFORNIA
 DATE DEC. 15, 2010
 PLATE No. A-12

- LEGEND**
- EXISTING GROUND CONTOUR
 - EXISTING ROADS
 - - - EXISTING AIRPORT PROPERTY LINE
 - NEW AIRPORT FACILITIES
 - NEW AIRPORT PROPERTY LINE
 - NEW AIRPORT OBJECT FREE AREA
 - NEW AIRPORT RUNWAY SAFETY AREA
 - ▨ NEW AIRPORT BUILDING



NOTE:
 ALL AIRPORT DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET).
 AIRPORT ELEVATIONS ARE NAVD 88 DATUM.



FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 AIRPORT MANAGER - _____

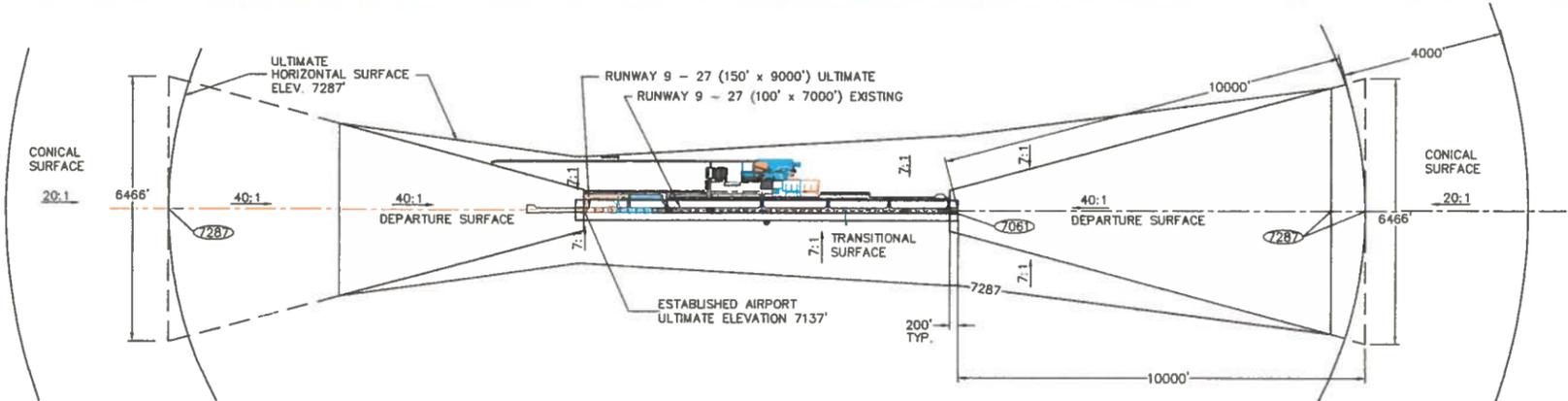
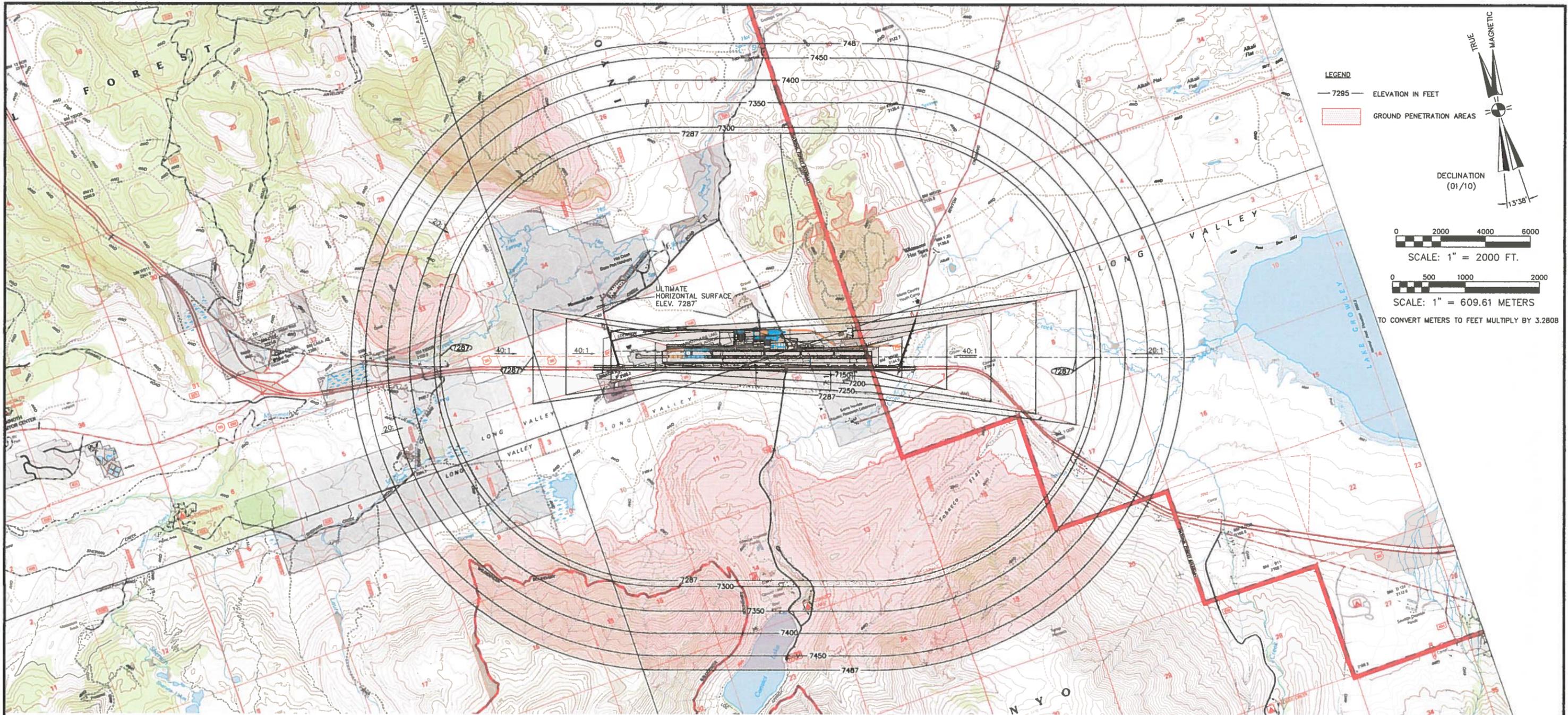
G.E. 8044
Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 6125 King Road, Suite 201 • Loomis, California 95890 • (916) 652-4725

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
ALTERNATE AIRPORT
AIRPORT LAYOUT PLAN - SITE No. 1

NO.	REVISIONS	BY	APR	DATE

REINARD W. BRANDLEY
 No. C 8044
 Exp. 9-30-2012
 CIVIL
 STATE OF CALIFORNIA
DATE DEC 15, 2010
 PLATE No. A-13

APPROVED _____ DATE _____
 FAA



PORTIONS OF
USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
BLOODY MTN, CA 1994
OLD MAMMOTH, CA 1994
WHITMORE HOT SPRINGS, CA 1994
CONVICT LAKE, CA 1994
DEXTER CANYON, CA 1994
WATTERSON CANYON, CA 1994
TOM'S PLACE, CA 1994

- NOTE:
- EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
 - EXISTING USGS BASE MAP DATUM IS NAVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
 - ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NAVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
 - NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
FAA

APPROVED _____ DATE _____
AIRPORT MANAGER - RAYMOND JARVIS

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER

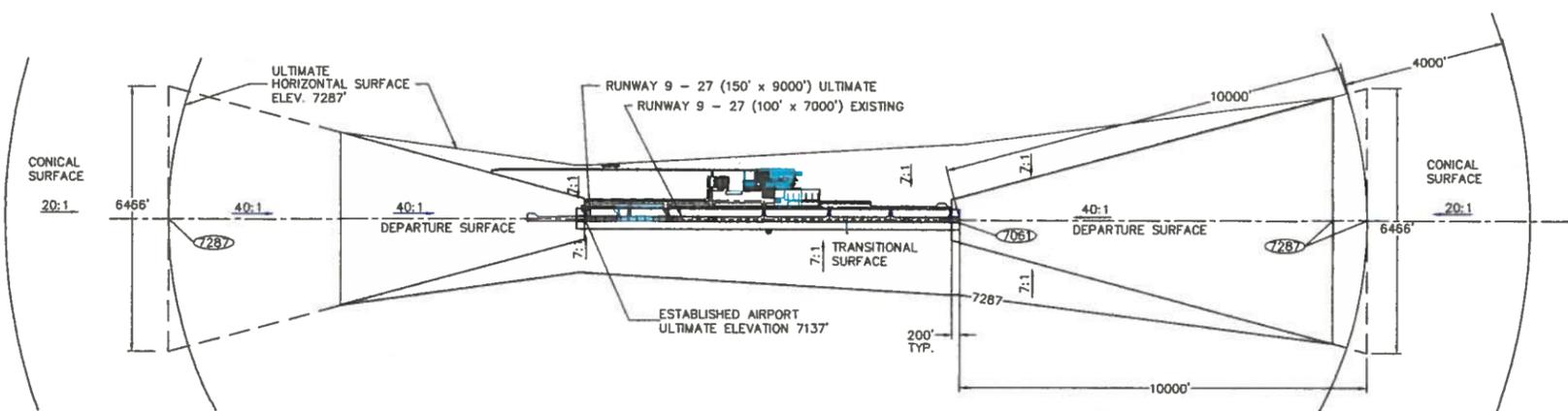
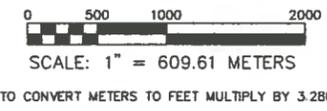
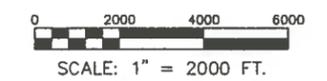
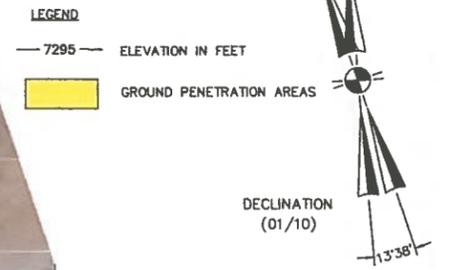
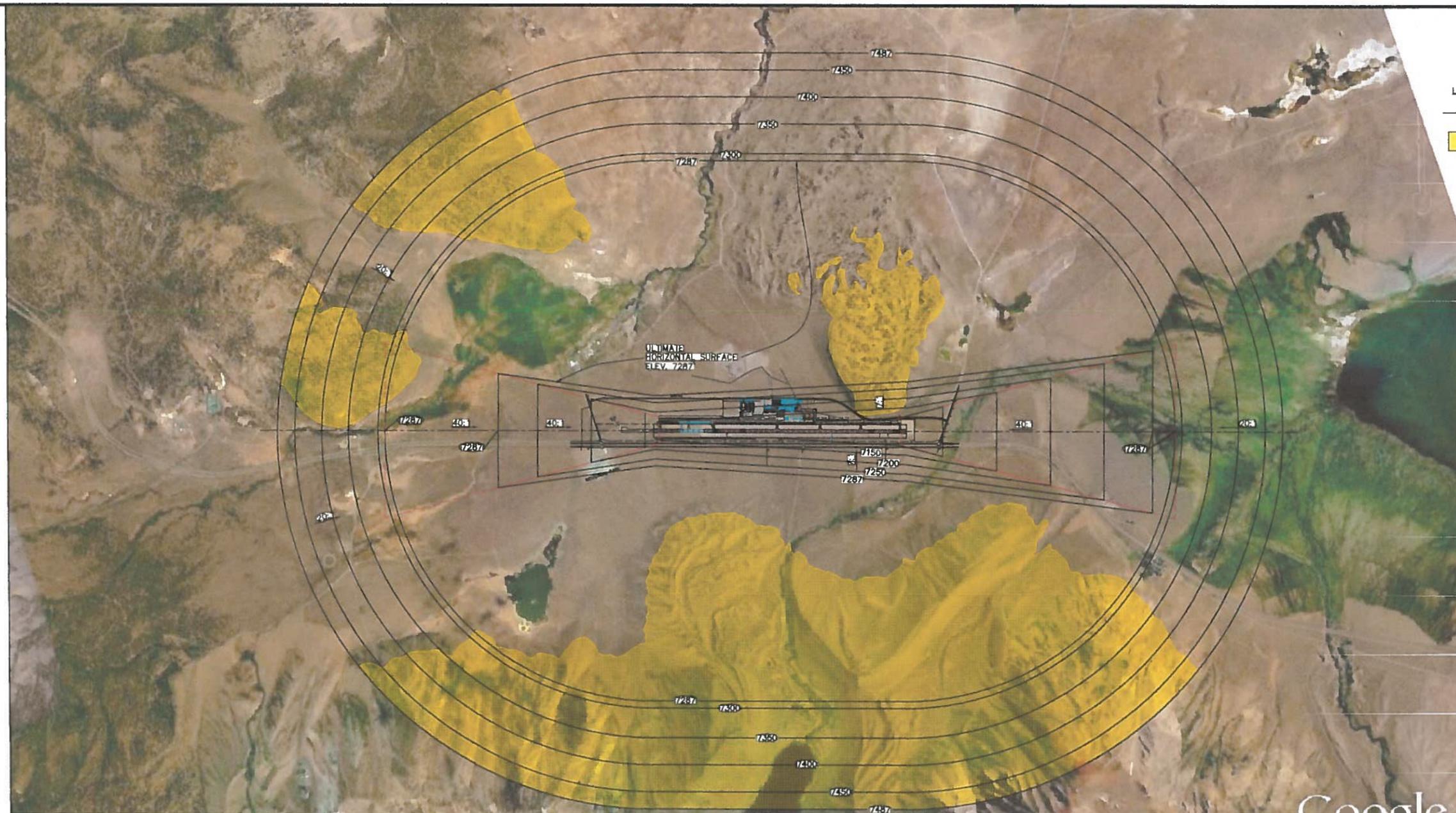
6125 King Road, Suite 201 • Loomis, California 95650 • (916) 652-4725

STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
MAMMOTH LAKES, CALIFORNIA
AIRPORT AIRSPACE DRAWING - SITE No. 1

NO.	REVISIONS	BY	APPR	DATE



DATE DEC. 15, 2010
PLATE No. A-14



- PORTIONS OF USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
- BLOODY MTN, CA 1994
 - OLD MAMMOTH, CA 1994
 - WHITMORE HOT SPRINGS, CA 1994
 - CONVICT LAKE, CA 1994
 - DEXTER CANYON, CA 1994
 - WATTERSON CANYON, CA 1994
 - TOM'S PLACE, CA 1994

- NOTE:
- EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
 - EXISTING USGS BASE MAP DATUM IS NAVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
 - ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NAVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
 - NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED IN 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____

AIRPORT MANAGER - RAYMOND JARVIS


Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 8125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

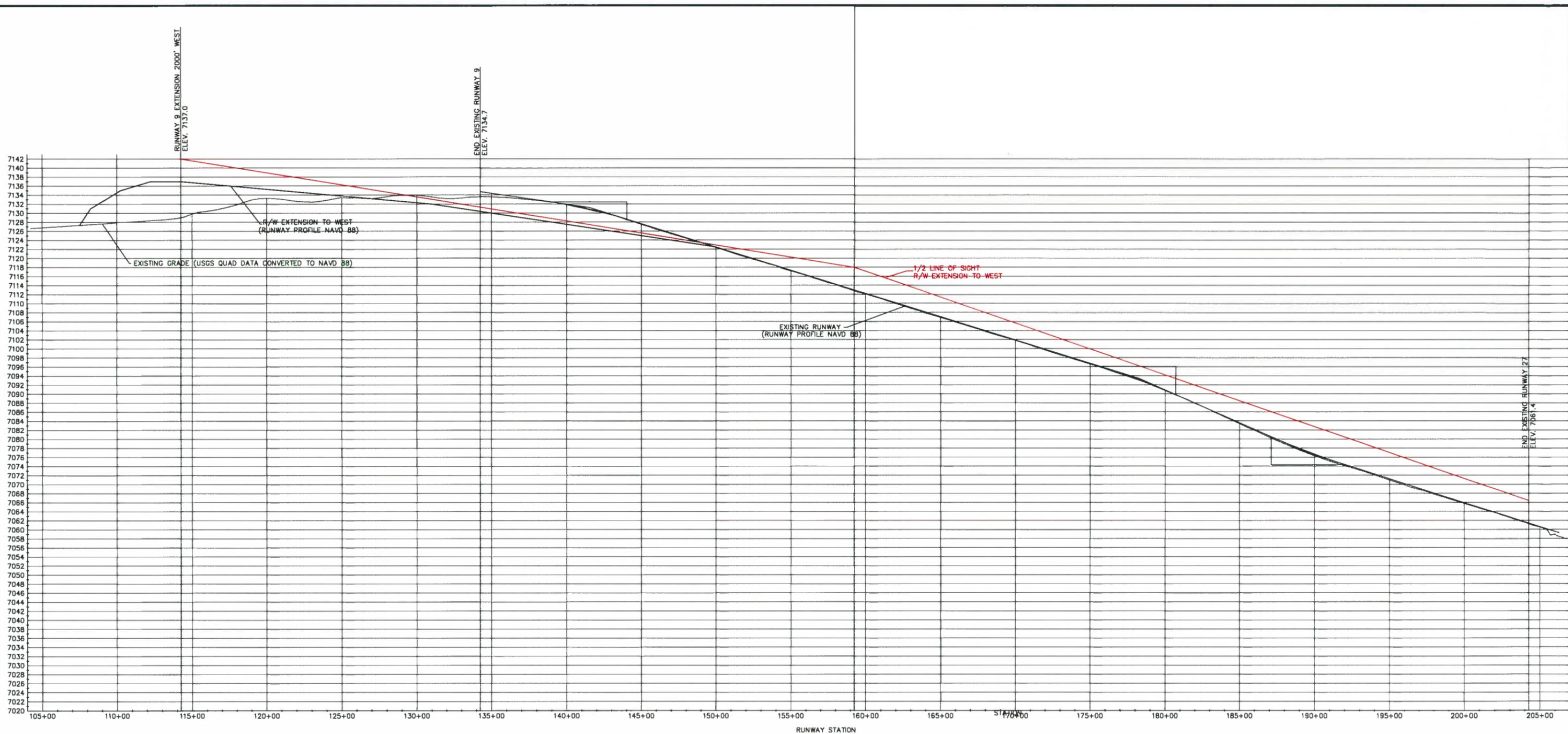
COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
AIRPORT AIRSPACE PHOTOGRAPH - SITE No. 1

NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010
 PLATE No. A-15

APPROVED _____ DATE _____
 FAA



- NOTE:
- EXISTING GRADE PROFILE COMPILED FROM 2007 TOPO SURVEY AND USGS MAPS. USGS QUAD MAP DATA CONVERTED TO ENGLISH SYSTEM. CONVERT METERS TO FEET MULTIPLY BY 3.2808
 - AIRPORT PROFILE DATA AND 2007 TOPO SURVEY DATUM IS NGVD 88
 - EXISTING USGS BASE MAP DATUM IS NGVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS ARE IN METERS.
 - ALL AIRPORT PROFILE DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NGVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.

SCALE: HORIZ. 1" = 300'
VERT. 1" = 10'

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
AIRPORT MANAGER - _____

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 C.E. 0044
6125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

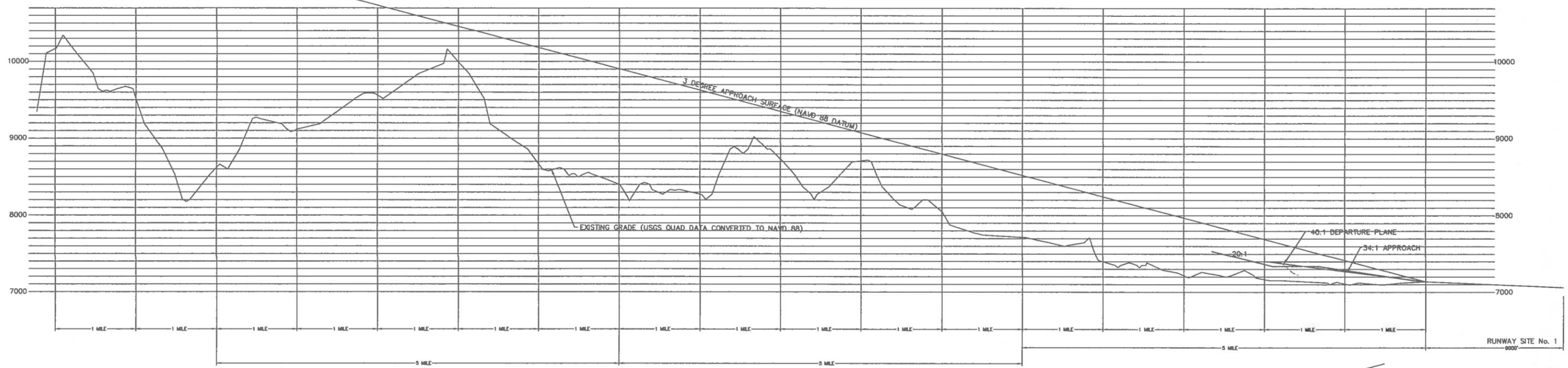
TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MONO COUNTY, CALIFORNIA
RUNWAY PROFILE - SITE No. 1

NO.	REVISIONS	BY	APR	DATE



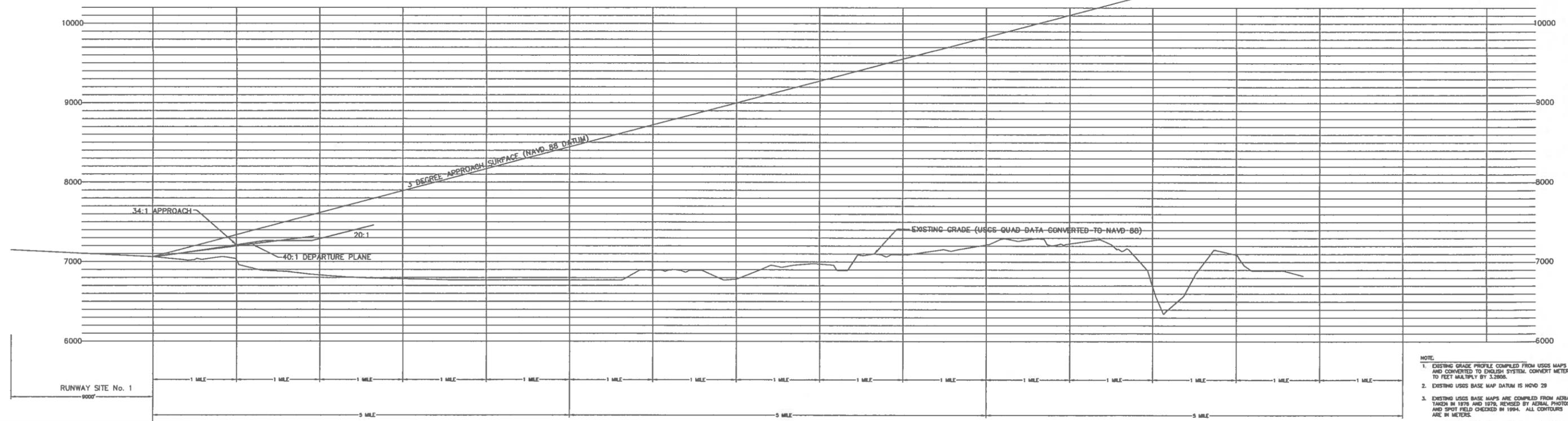
DATE DEC. 15, 2010
PLATE No. A-16

SCALE: HORIZ. 1" = 3000'
VERT. 1" = 600'



RUNWAY 9 APPROACH - SITE No. 1

SCALE: HORIZ. 1" = 3000'
VERT. 1" = 600'



RUNWAY 27 APPROACH - SITE No. 1

- NOTE:
- EXISTING GRADE PROFILE COMPILED FROM USGS MAPS AND CONVERTED TO ENGLISH SYSTEM. CONVERT METERS TO FEET MULTIPLY BY 3.2808.
 - EXISTING USGS BASE MAP DATUM IS NAVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1975 AND 1976, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS ARE IN METERS.
 - ALL AIRPORT PROFILE DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NAVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
FAA

APPROVED _____ DATE _____
AIRPORT MANAGER - RAYMOND JARVIS

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 8125 King Road, Suite 201 • Leornis, California 95650 • (916) 652-4725

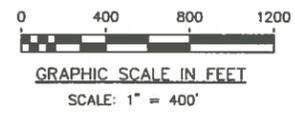
COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
APPROACH PROFILE - SITE No. 1

NO.	REVISIONS	BY	APP	DATE

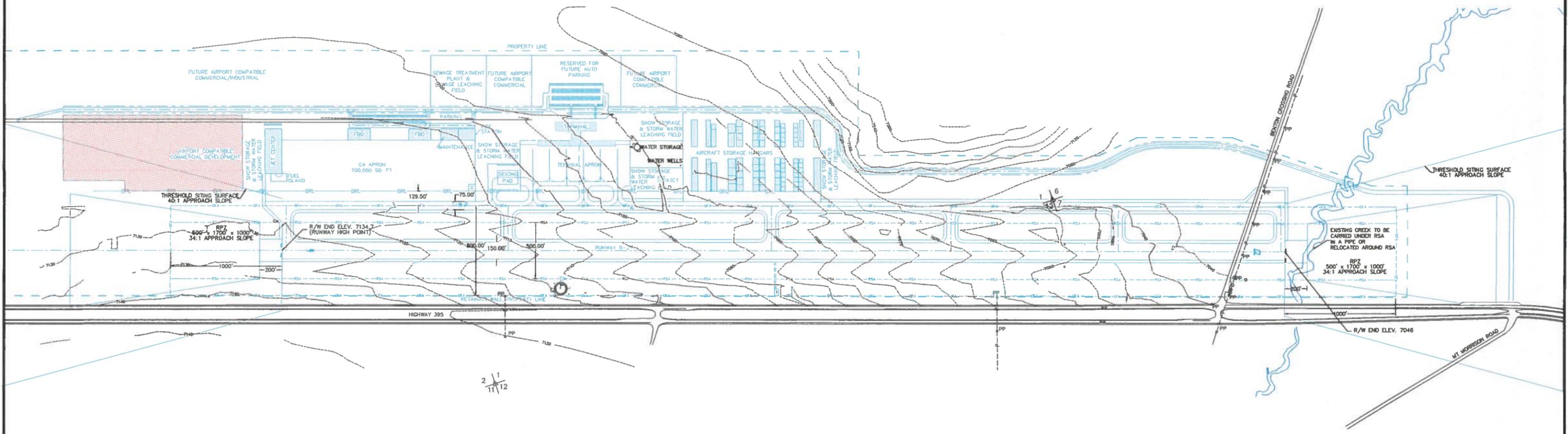
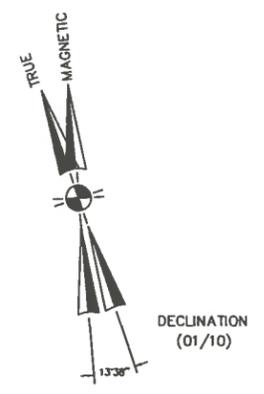


DATE DEC. 15, 2010
PLATE No. A-17

- LENGEND**
- EXISTING GROUND CONTOUR
 - EXISTING ROADS
 - - - EXISTING AIRPORT PROPERTY LINE
 - NEW AIRPORT FACILITIES
 - NEW AIRPORT PROPERTY LINE
 - NEW AIRPORT OBJECT FREE AREA
 - NEW AIRPORT RUNWAY SAFETY AREA
 - NEW AIRPORT BUILDING



NOTE:
 ALL AIRPORT DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET).
 AIRPORT ELEVATIONS ARE NAVD 88 DATUM.



FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

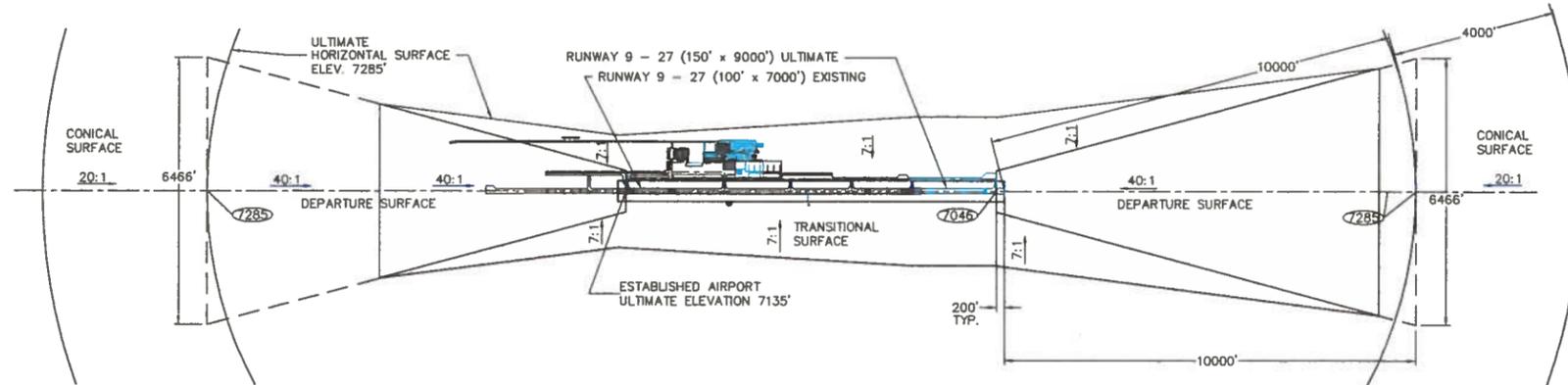
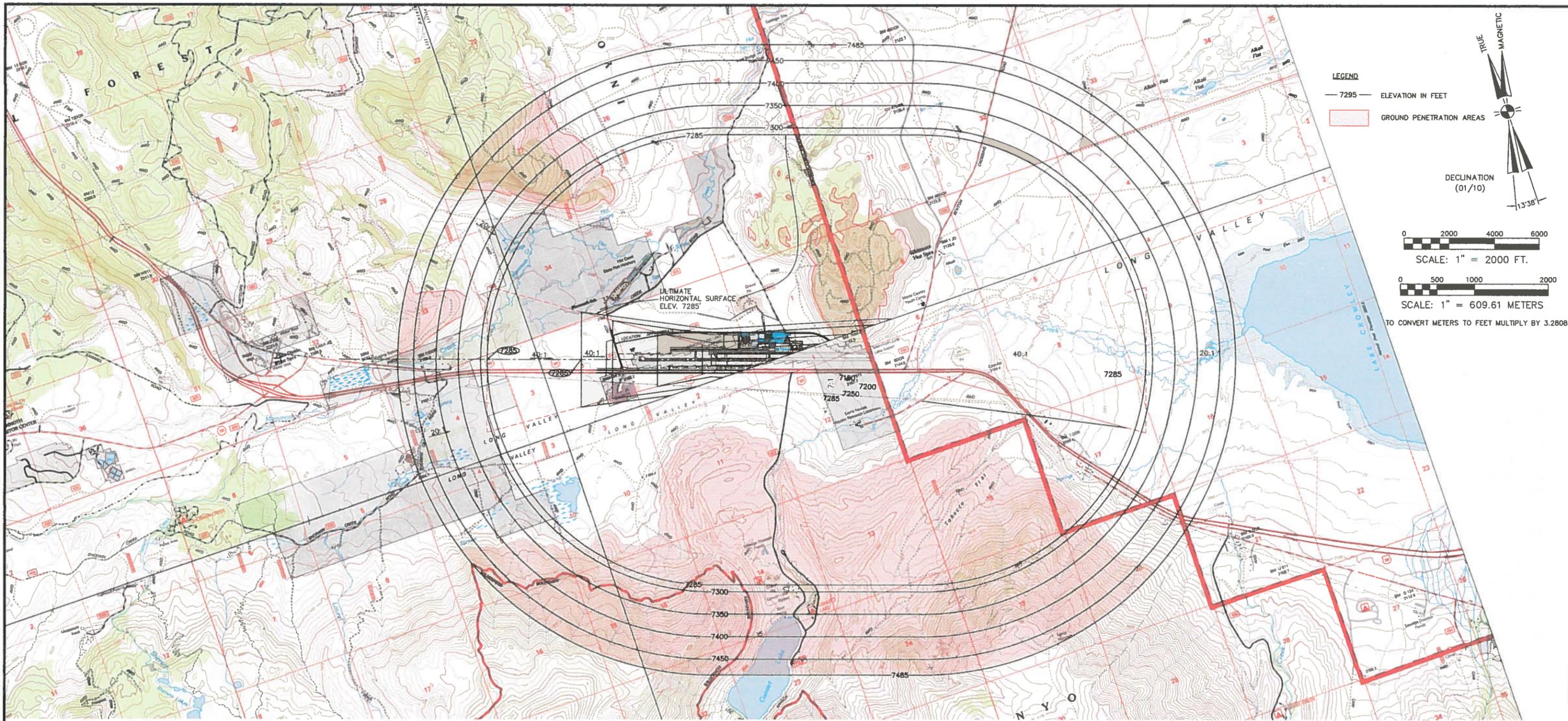
APPROVED _____ DATE _____
 AIRPORT MANAGER — _____

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 C.E. 0044
 6125 King Road, Suite 201 • Leominster, California 95650 • (916) 852-4725

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
ALTERNATE AIRPORT
AIRPORT LAYOUT PLAN - SITE No. 2

NO.	REVISIONS	BY	APP	DATE

DATE DEC. 15, 2010
PLATE No. A-18



PORTIONS OF USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:

- BLOODY MTN, CA 1994
- OLD MAMMOTH, CA 1994
- WHITMORE HOT SPRINGS, CA 1994
- CONVICT LAKE, CA 1994
- DEXTER CANYON, CA 1994
- WATTERSON CANYON, CA 1994
- TOM'S PLACE, CA 1994

NOTE:

1. EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
2. EXISTING USGS BASE MAP DATUM IS NAVD 29
3. EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
4. ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NAVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
5. NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED IN 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
FAA

APPROVED _____ DATE _____
AIRPORT MANAGER - RAYMOND JARVIS

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER

8125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

COUNTY OF MONO
STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT
MAMMOTH LAKES, CALIFORNIA

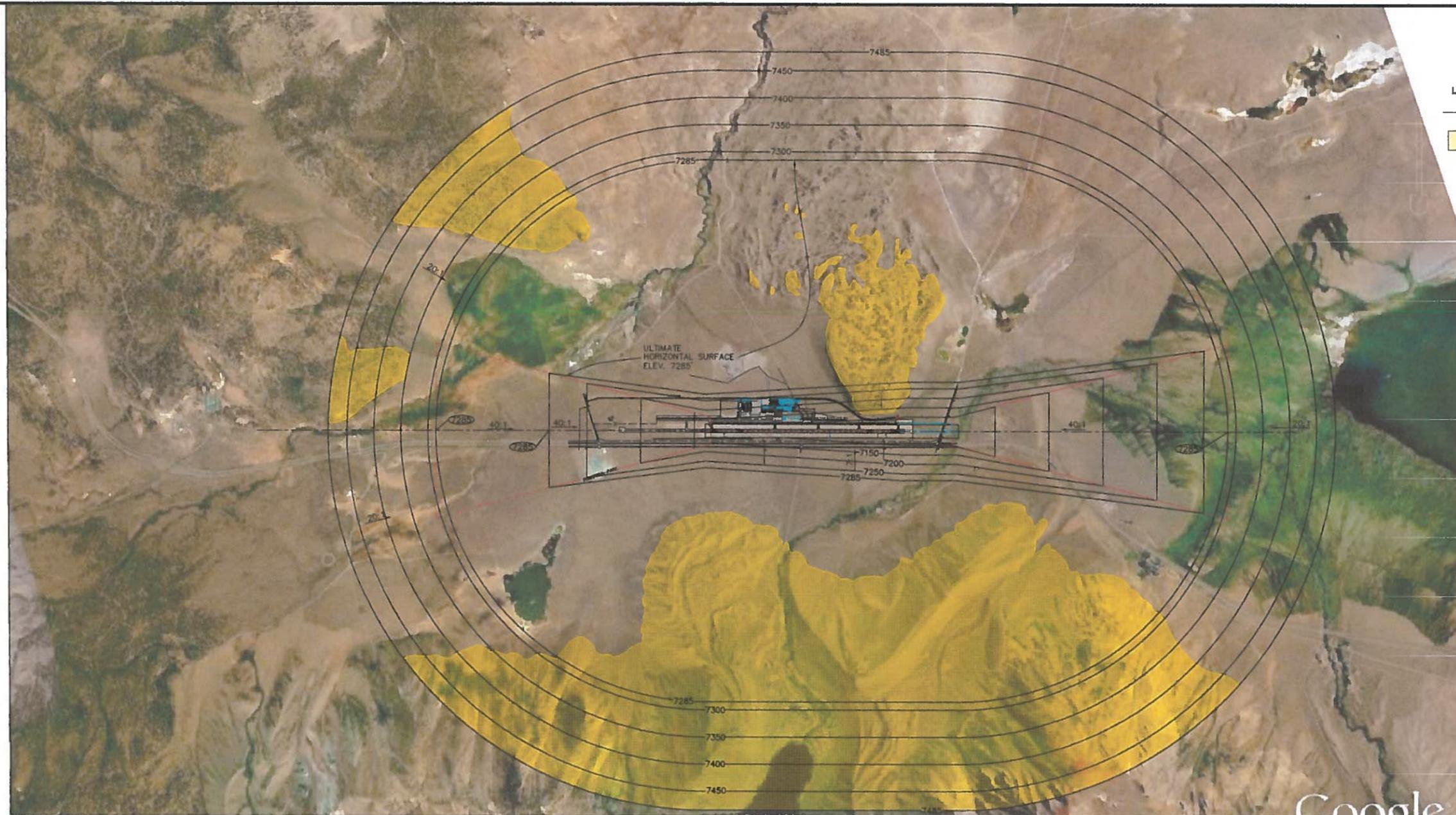
AIRPORT AIRSPACE DRAWING - SITE No. 2

NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010

PLATE No. A-19



LEGEND

— 7295 — ELEVATION IN FEET

Ground Penetration Areas

DECLINATION (01/10)

TRUE MAGNETIC

13°38'

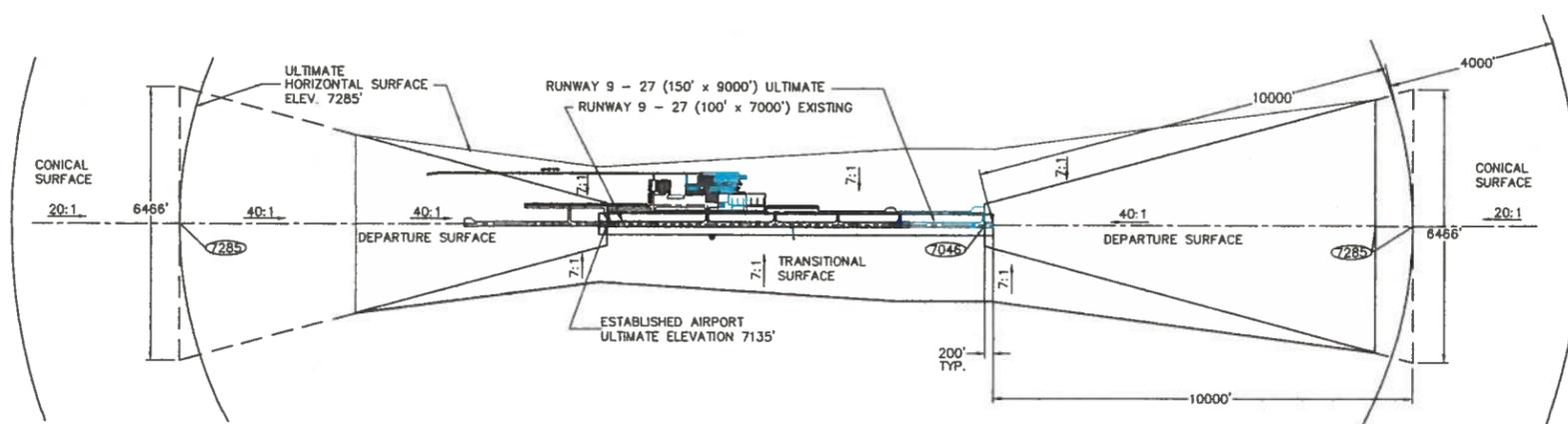
0 2000 4000 6000

SCALE: 1" = 2000 FT.

0 500 1000 2000

SCALE: 1" = 609.61 METERS

TO CONVERT METERS TO FEET MULTIPLY BY 3.2808



PORTIONS OF
USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:

BLOODY MTN, CA 1994
 OLD MAMMOTH, CA 1994
 WHITMORE HOT SPRINGS, CA 1994
 CONVICT LAKE, CA 1994
 DEXTER CANYON, CA 1994
 WATTERSON CANYON, CA 1994
 TOM'S PLACE, CA 1994

- NOTE:
- EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
 - EXISTING USGS BASE MAP DATUM IS NAVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
 - ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NAVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
 - NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____

AIRPORT MANAGER — RAYMOND JARVIS


Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 6125 King Road, Suite 201 • Leornis, California 95850 • (916) 882-4725

COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
AIRPORT AIRSPACE PHOTOGRAPH - SITE No. 2

NO.	REVISIONS	BY	APR	DATE

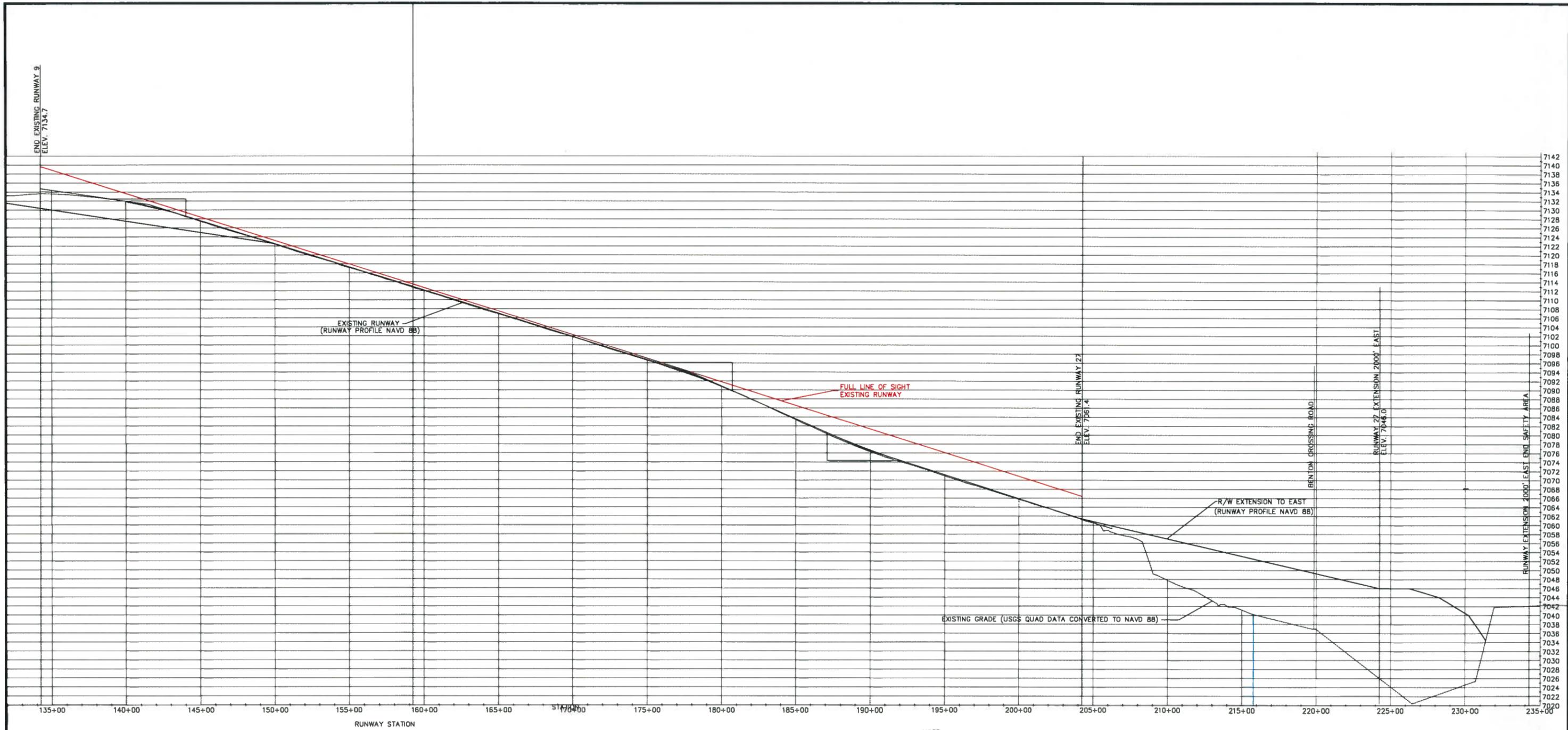


DATE DEC. 15, 2010

PLATE No. A-20

APPROVED _____ DATE _____

FAA



- NOTE:
- EXISTING GRADE PROFILE COMPILED FROM 2007 TOPO SURVEY AND USGS MAPS. USGS QUAD MAP DATA CONVERTED TO ENGLISH SYSTEM. CONVERT METERS TO FEET MULTIPLY BY 3.2808
 - AIRPORT PROFILE DATA AND 2007 TOPO SURVEY DATUM IS NGVD 88
 - EXISTING USGS BASE MAP DATUM IS NGVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS ARE IN METERS.
 - ALL AIRPORT PROFILE DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NGVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.

SCALE: HORIZ. 1" = 300'
VERT. 1" = 10'

FAA DISCLAIMER
THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
AIRPORT MANAGER - _____

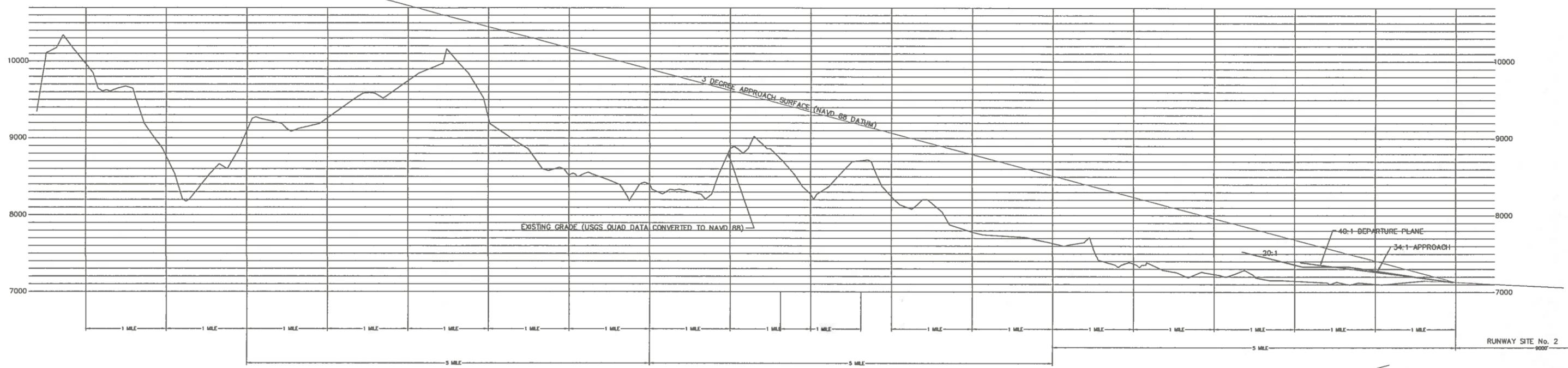
Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
C.E. 6044
8125 King Road, Suite 201 • Leoma, California 95650 • (916) 852-4725

TOWN OF MAMMOTH LAKES
STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
MONO COUNTY, CALIFORNIA
RUNWAY PROFILE - SITE No. 2

NO.	REVISIONS	BY	APR	DATE

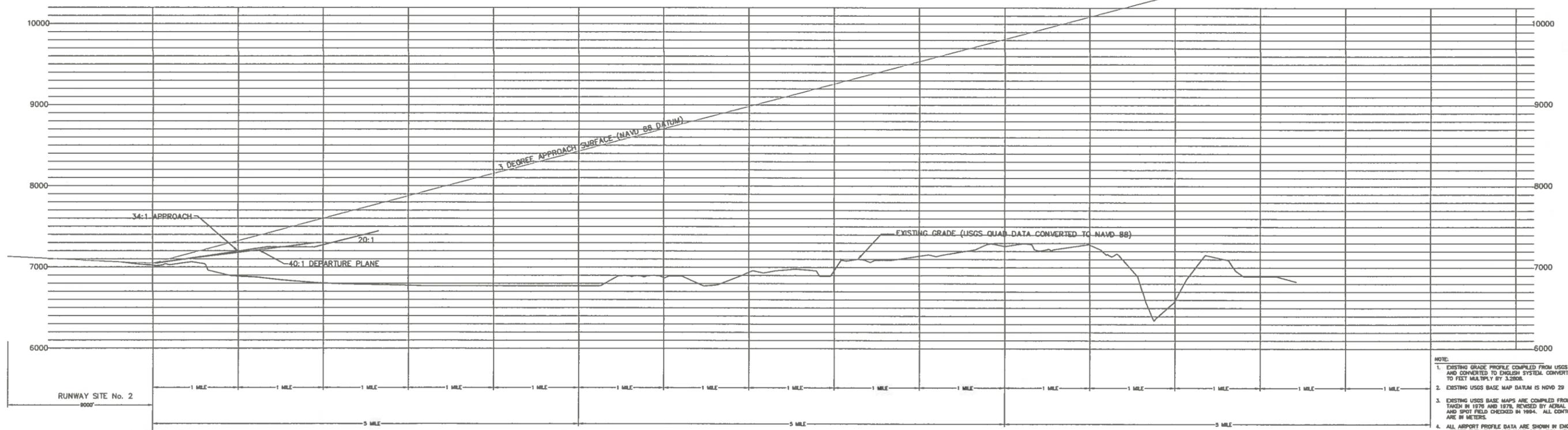
DATE DEC. 15, 2010
PLATE No. A-21

SCALE: HORIZ. 1" = 3000'
VERT. 1" = 600'



RUNWAY 9 APPROACH - SITE No. 2

SCALE: HORIZ. 1" = 3000'
VERT. 1" = 600'



RUNWAY 27 APPROACH - SITE No. 2

- NOTE:
- EXISTING GRADE PROFILE COMPILED FROM USGS MAPS AND CONVERTED TO ENGLISH SYSTEM. CONVERT METERS TO FEET MULTIPLY BY 3.2808.
 - EXISTING USGS BASE MAP DATUM IS NAVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1978. REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS ARE IN METERS.
 - ALL AIRPORT PROFILE DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. HWD 25 DATUM TO NAVD 88 DATUM IS +4.08 FT.

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
FAA

APPROVED _____ DATE _____
AIRPORT MANAGER - RAYMOND JARVIS


Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 8125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

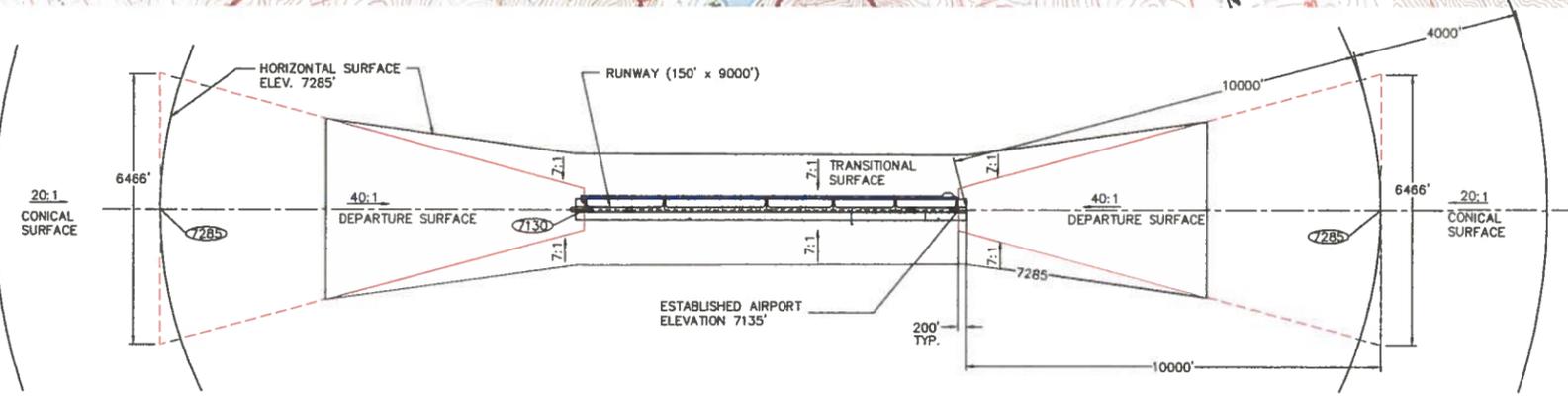
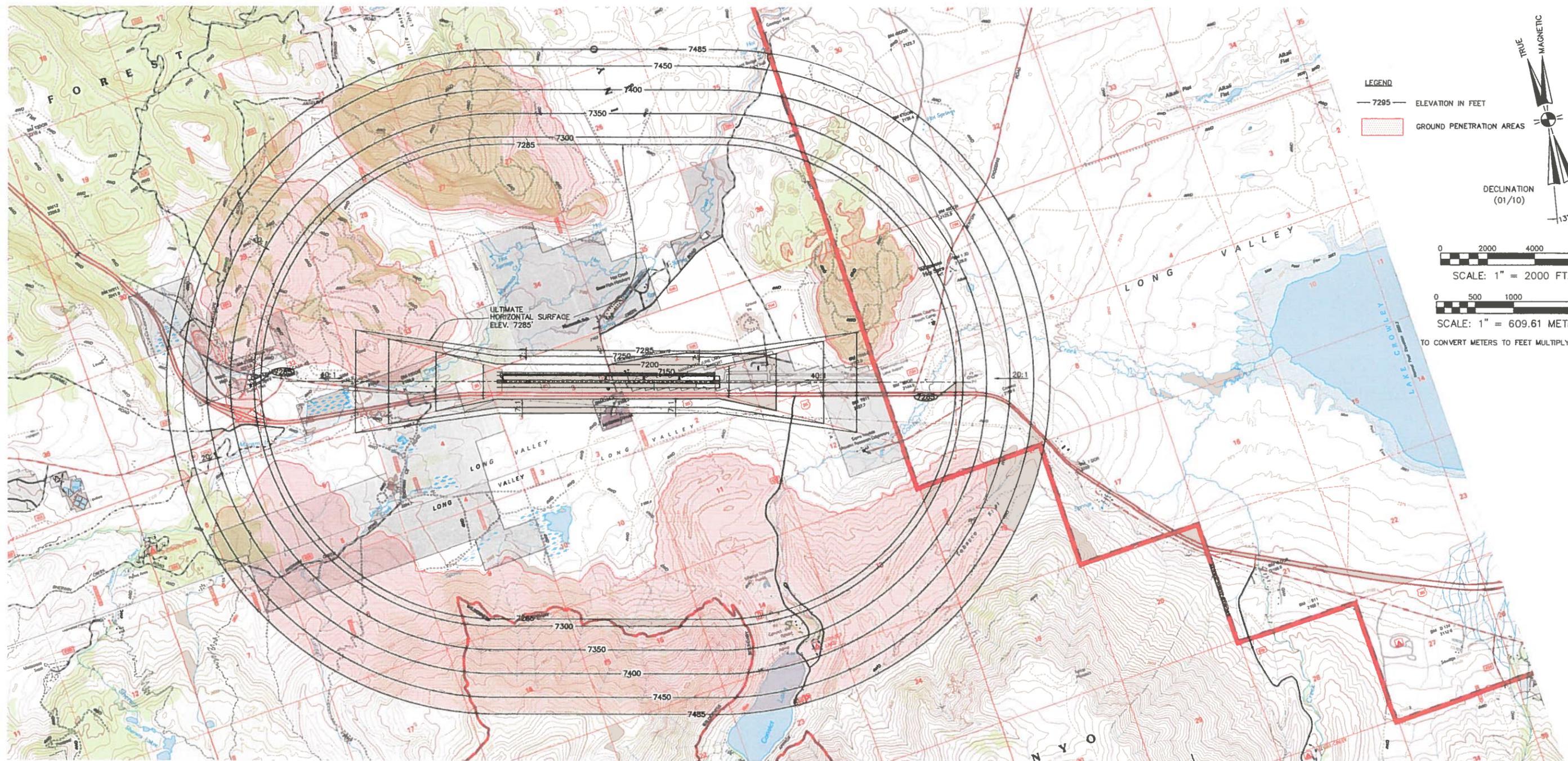
COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
APPROACH PROFILE - SITE No. 2

NO.	REVISIONS	BY	APP	DATE



DATE DEC. 15, 2010

PLATE No. A-22



PORTIONS OF
USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
BLOODY MTN, CA 1994
OLD MAMMOTH, CA 1994
WHITMORE HOT SPRINGS, CA 1994
CONVICT LAKE, CA 1994

- NOTE:
1. EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
 2. EXISTING USGS BASE MAP DATUM IS NAVD 29
 3. EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
 4. ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NAVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
 5. NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
FAA

APPROVED _____ DATE _____
AIRPORT MANAGER - RAYMOND JARVIS

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER

6125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

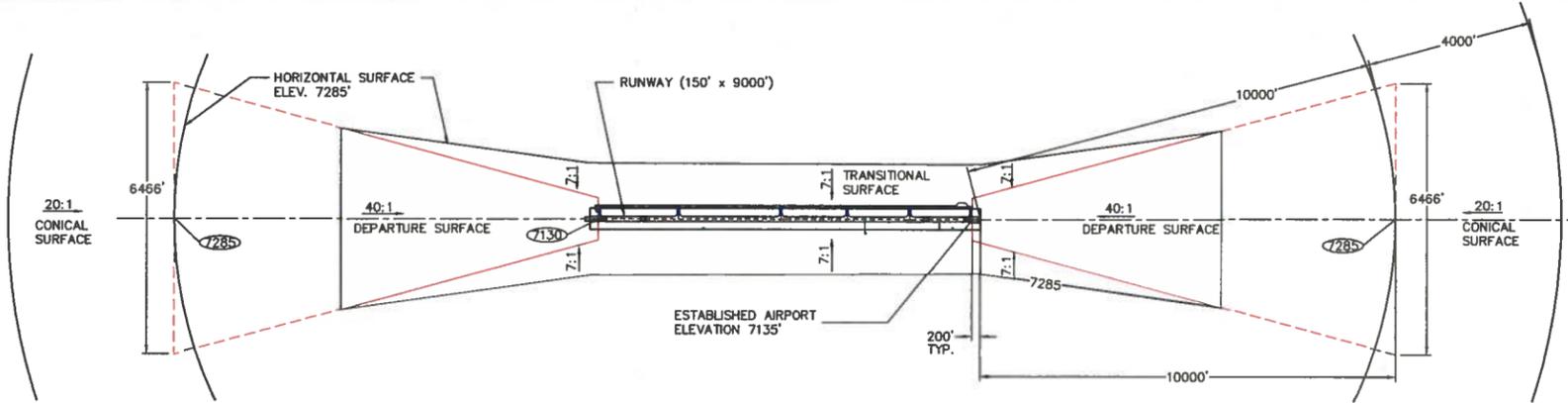
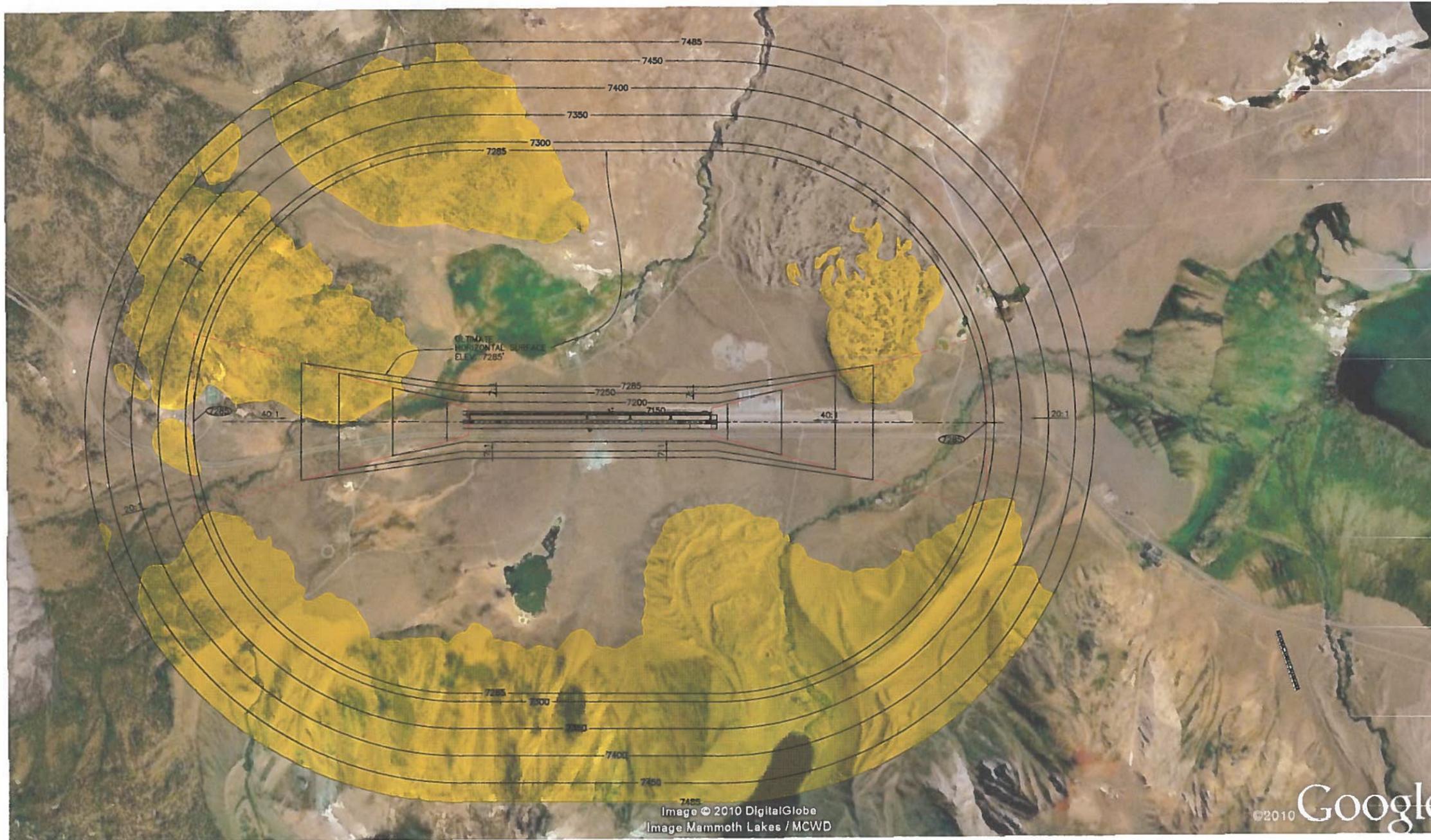
COUNTY OF MONO
STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
MAMMOTH LAKES, CALIFORNIA
AIRPORT AIRSPACE DRAWING - SITE No. 3

NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010

PLATE No. A-23



PORTIONS OF
USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
BLOODY MTN, CA 1994
OLD MAMMOTH, CA 1994
WHITMORE HOT SPRINGS, CA 1994
CONVICT LAKE, CA 1994

- NOTE:
1. EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
 2. EXISTING USGS BASE MAP DATUM IS NGVD 29
 3. EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
 4. ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NGVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
 5. NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP

FAA DISCLAIMER
THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
AIRPORT MANAGER - RAYMOND JARVIS


Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 8125 King Road, Suite 201 • Leominster, California 95650 • (916) 852-4725

COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
AIRPORT AIRSPACE PHOTO - SITE No. 3

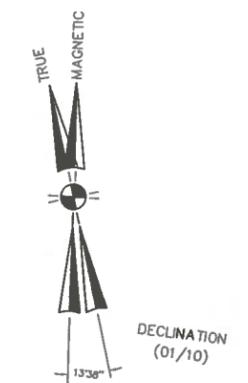
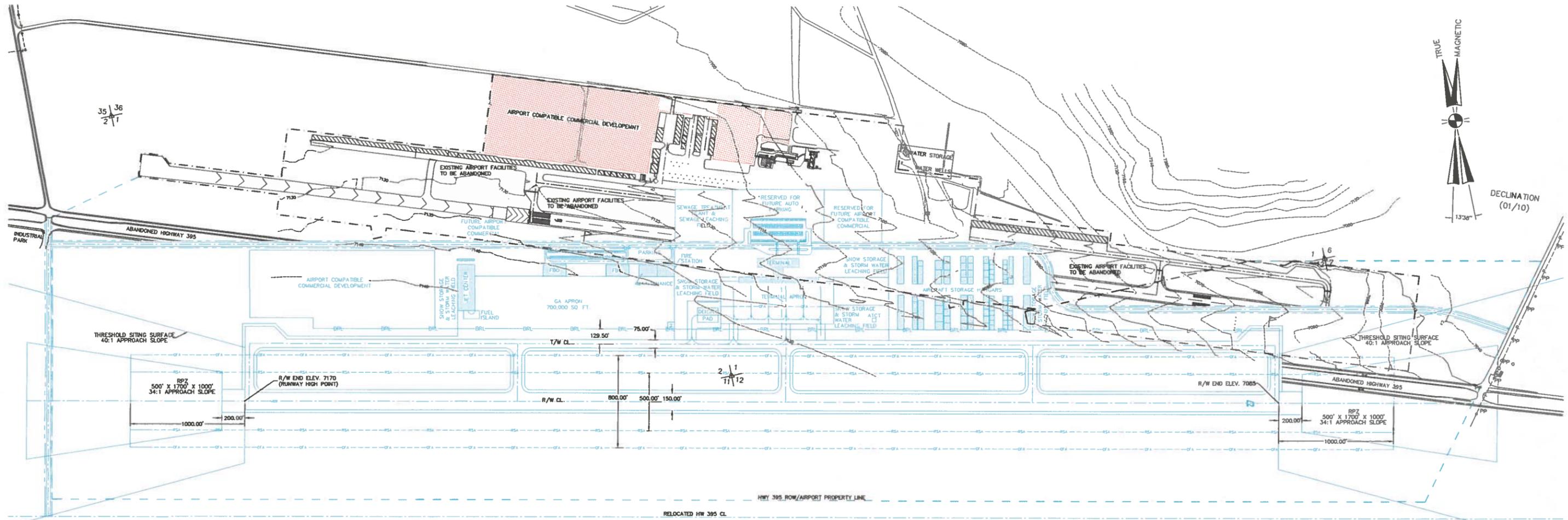
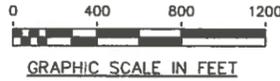
NO.	REVISIONS	BY	APR	DATE


DATE DEC. 15, 2010
PLATE No. A-24

APPROVED _____ DATE _____
FAA

- LEGEND**
- EXISTING GROUND CONTOUR
 - EXISTING AIRPORT FACILITIES
 - EXISTING AIRPORT PROPERTY LINE
 - NEW AIRPORT FACILITIES
 - NEW AIRPORT PROPERTY LINE
 - NEW AIRPORT OBJECT FREE AREA
 - NEW AIRPORT RUNWAY SAFETY AREA
 - NEW AIRPORT BUILDING

NOTE:
 ALL AIRPORT DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET).
 AIRPORT ELEVATIONS ARE NAVD 88 DATUM.



FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREON NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 FAA

APPROVED _____ DATE _____
 AIRPORT MANAGER -- _____

6125 King Road, Suite 201 • Leominster, California 95650 • (916) 652-4725

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER

TOWN OF MAMMOTH LAKES
 MONO COUNTY CALIFORNIA

MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA

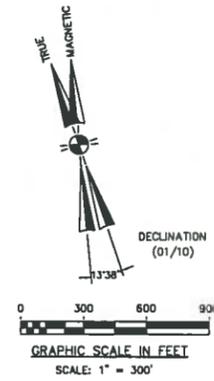
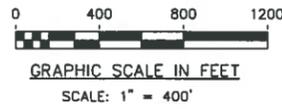
ALTERNATE AIRPORT - AIRPORT LAYOUT PLAN
SITE No. 4a - RELOCATE EXISTING FACILITIES

NO.	REVISIONS	BY	APR	DATE

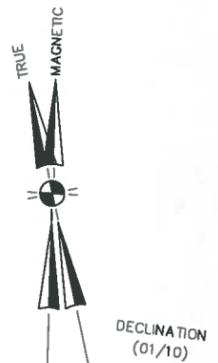
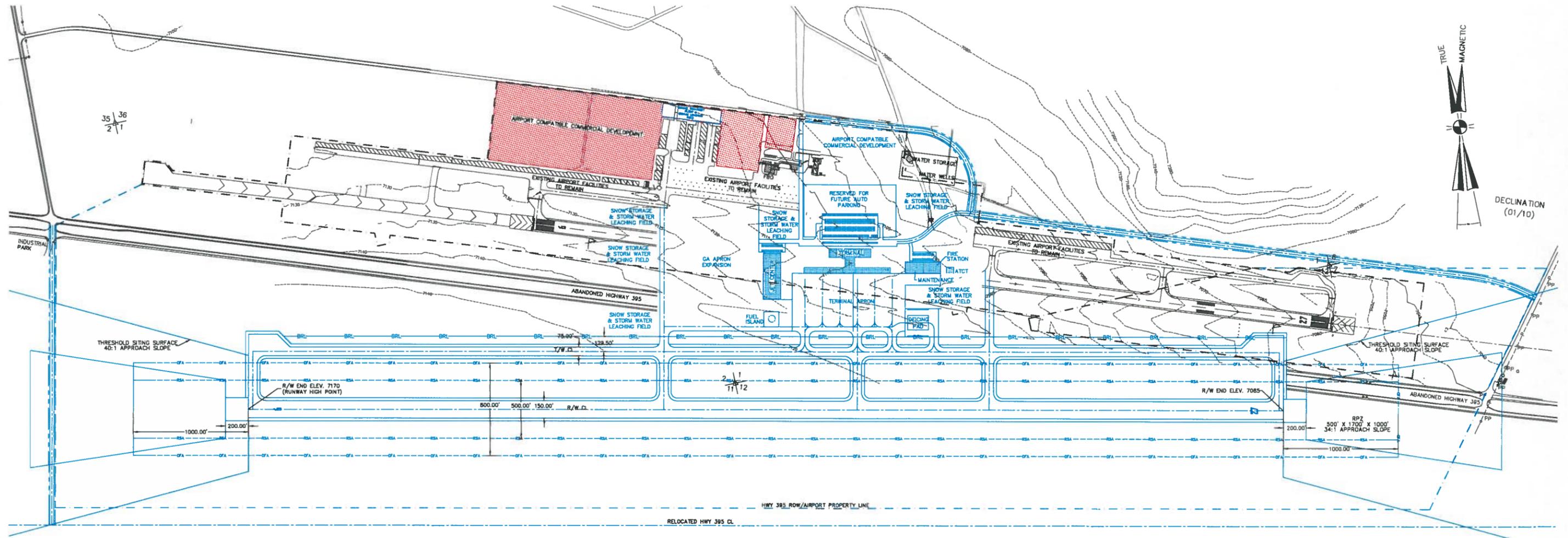


DATE DEC. 15, 2010
 PLATE No. A-25

- LEGEND**
- EXISTING GROUND CONTOUR
 - EXISTING AIRPORT FACILITIES
 - - - EXISTING AIRPORT PROPERTY LINE
 - NEW AIRPORT FACILITIES
 - - - NEW AIRPORT PROPERTY LINE
 - - - NEW AIRPORT OBJECT FREE AREA
 - - - NEW AIRPORT RUNWAY SAFETY AREA
 - - - NEW AIRPORT BUILDING RESTRICTION LINE
 - NEW AIRPORT BUILDING



NOTE:
ALL AIRPORT DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET).
AIRPORT ELEVATIONS ARE NAVD 88 DATUM.



FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEW OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
FAA

APPROVED _____ DATE _____
AIRPORT MANAGER - _____

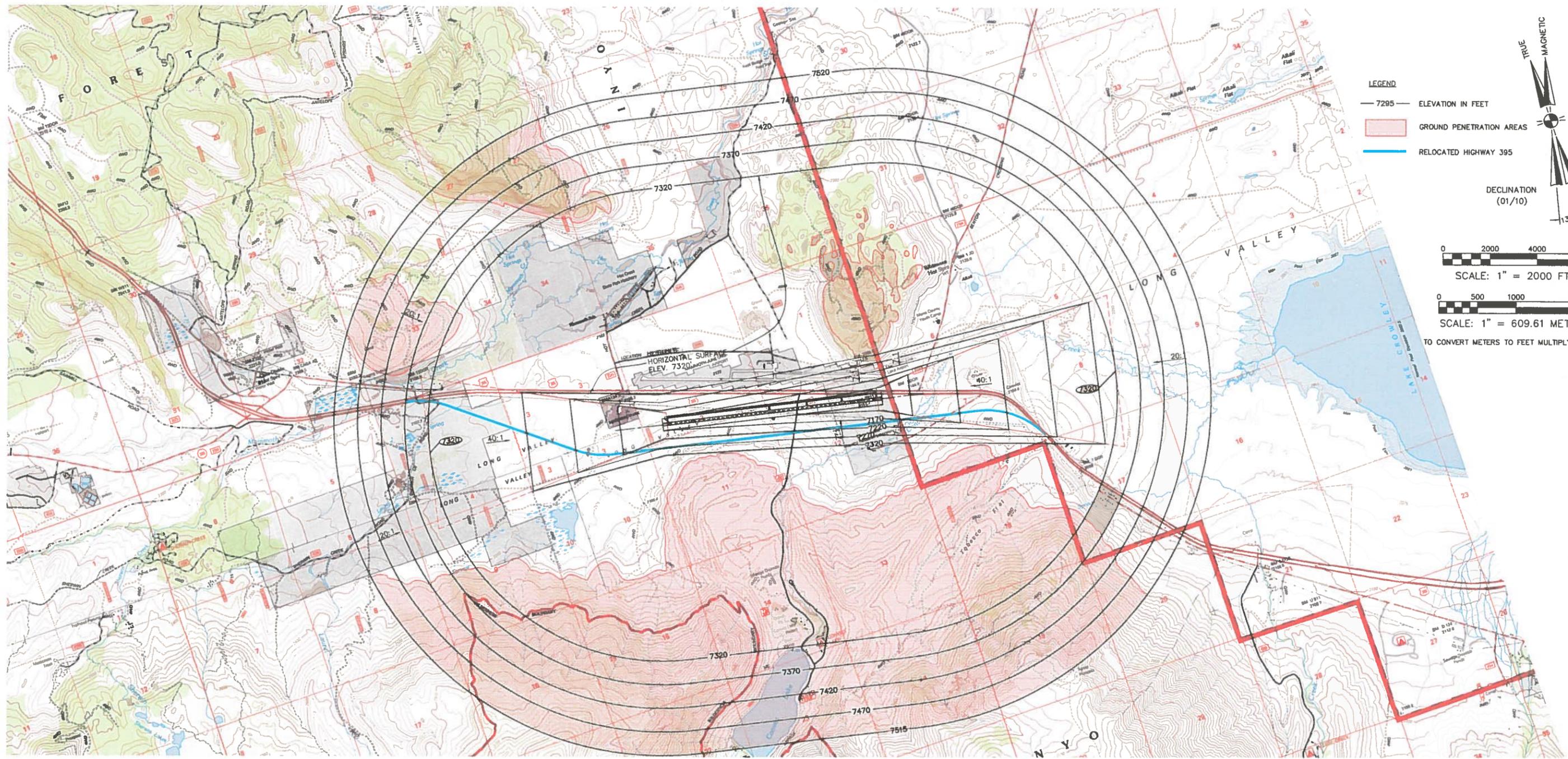
Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
C.E. 8044
8125 King Road, Suite 201 • Leoma, California 95850 • (916) 852-4725

TOWN OF MAMMOTH LAKES
MONO COUNTY CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
MAMMOTH LAKES, CALIFORNIA
ALTERNATE AIRPORT - AIRPORT LAYOUT PLAN
SITE No. 4b - MAINTAIN EXISTING FACILITIES

NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010
PLATE No. A-26



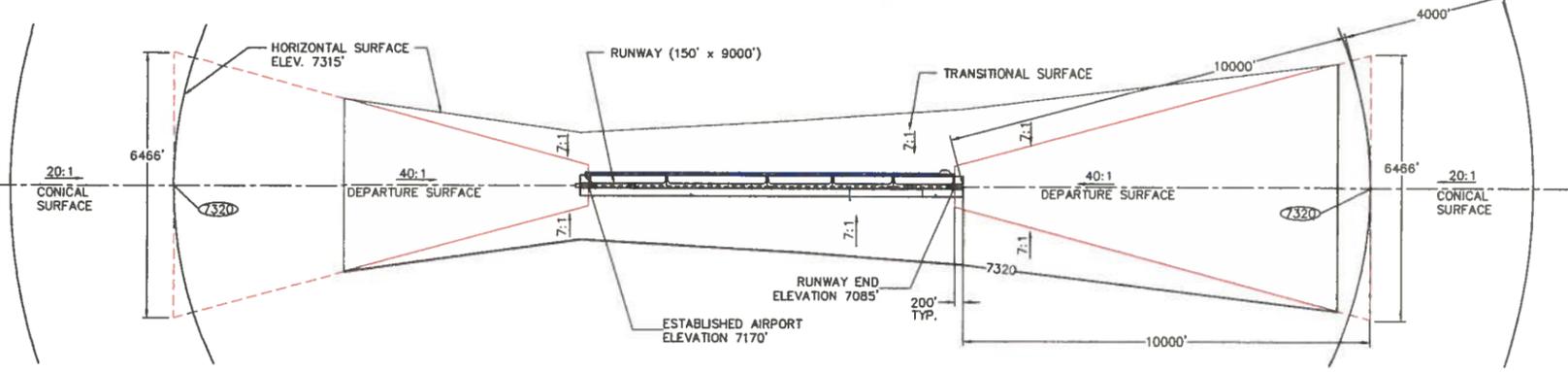
LEGEND

- 7295 — ELEVATION IN FEET
- Ground Penetration Areas
- Relocated Highway 395

DECLINATION (01/10)
13°38'

0 2000 4000 6000
SCALE: 1" = 2000 FT.

0 500 1000 2000
SCALE: 1" = 609.61 METERS
TO CONVERT METERS TO FEET MULTIPLY BY 3.2808



PORTIONS OF USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:

- BLOODY MTN, CA 1994
- OLD MAMMOTH, CA 1994
- WHITMORE HOT SPRINGS, CA 1994
- CONVOCT LAKE, CA 1994
- DEXTER CANYON, CA 1994
- WATTERSON CANYON, CA 1994
- TOM'S PLACE, CA 1994

NOTE:

- EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
- EXISTING USGS BASE MAP DATUM IS NGVD 29
- EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
- ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NGVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
- NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
FAA

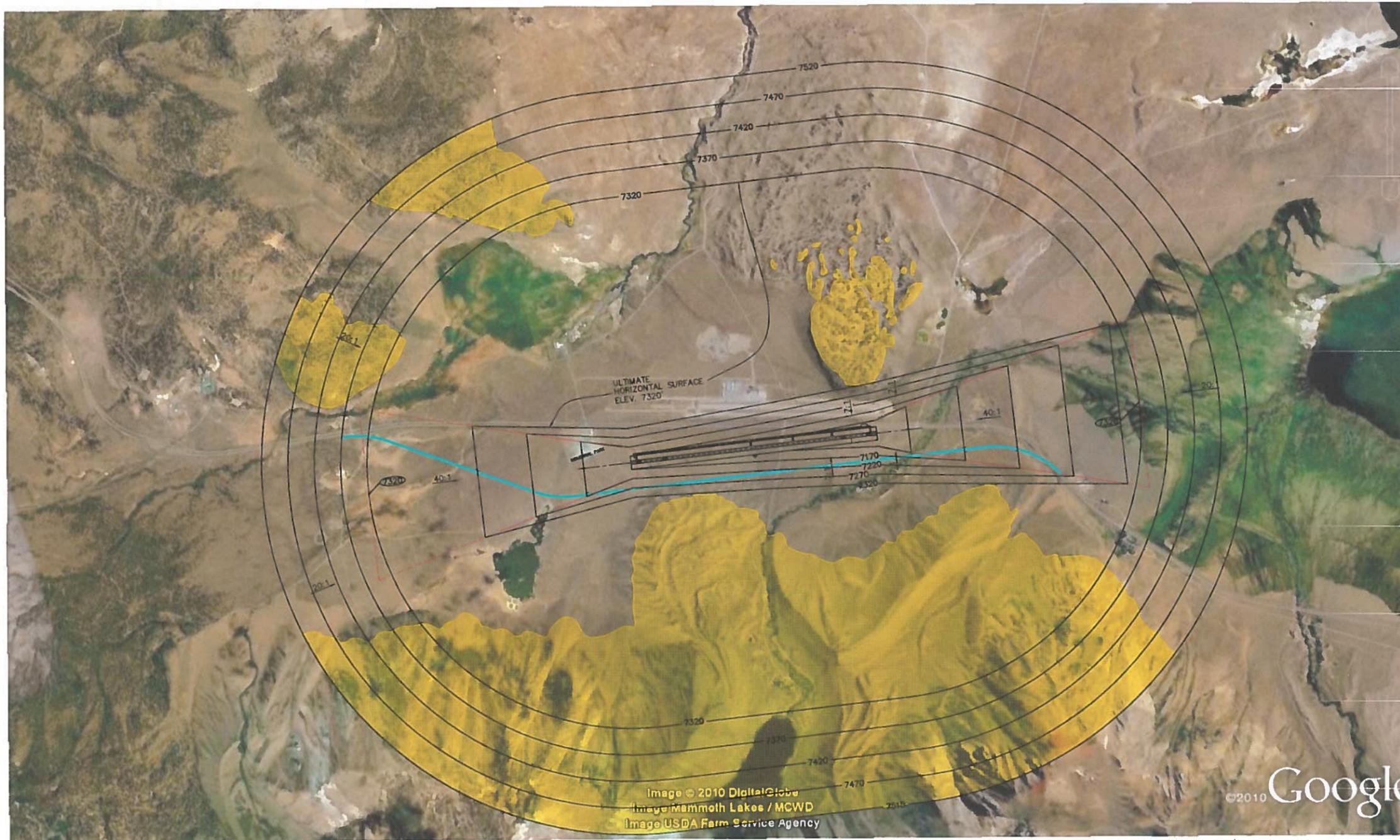
APPROVED _____ DATE _____
AIRPORT MANAGER - RAYMOND JARVIS


Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 6125 King Road, Suite 201 • Loomis, California 95650 • (916) 652-4725

COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
AIRPORT AIRSPACE DRAWING - SITE No. 4

NO.	REVISIONS	BY	APR	DATE

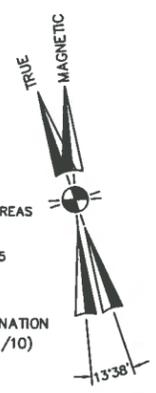
DATE DEC. 15, 2010
 PLATE No. A-27



LEGEND

- 7295 — ELEVATION IN FEET
- GROUND PENETRATION AREAS
- RELOCATED HIGHWAY 395

DECLINATION (01/10)

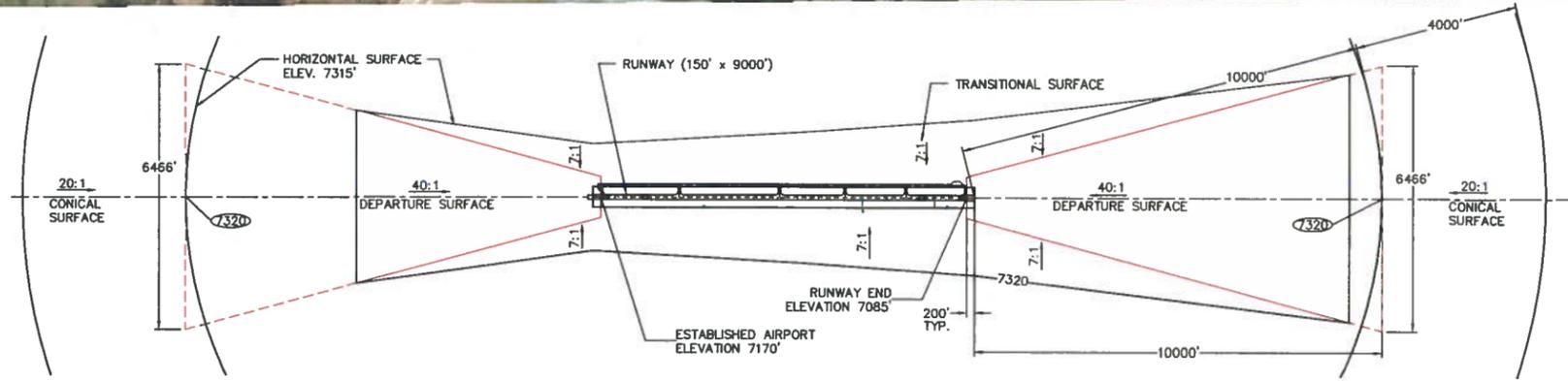


SCALE: 1" = 2000 FT.



SCALE: 1" = 609.61 METERS

TO CONVERT METERS TO FEET MULTIPLY BY 3.2808



PORTIONS OF USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:

- BLOODY MTN, CA 1994
- OLD MAMMOTH, CA 1994
- WHITMORE HOT SPRINGS, CA 1994
- CONVOCT LAKE, CA 1994
- DEXTER CANYON, CA 1994
- WATTERSON CANYON, CA 1994
- TOM'S PLACE, CA 1994

NOTE:

1. EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
2. EXISTING USGS BASE MAP DATUM IS NAVD 29
3. EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
4. ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NAVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
5. NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
FAA

APPROVED _____ DATE _____
AIRPORT MANAGER - RAYMOND JARVIS

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER

8125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

COUNTY OF MONO
STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT
MAMMOTH LAKES, CALIFORNIA

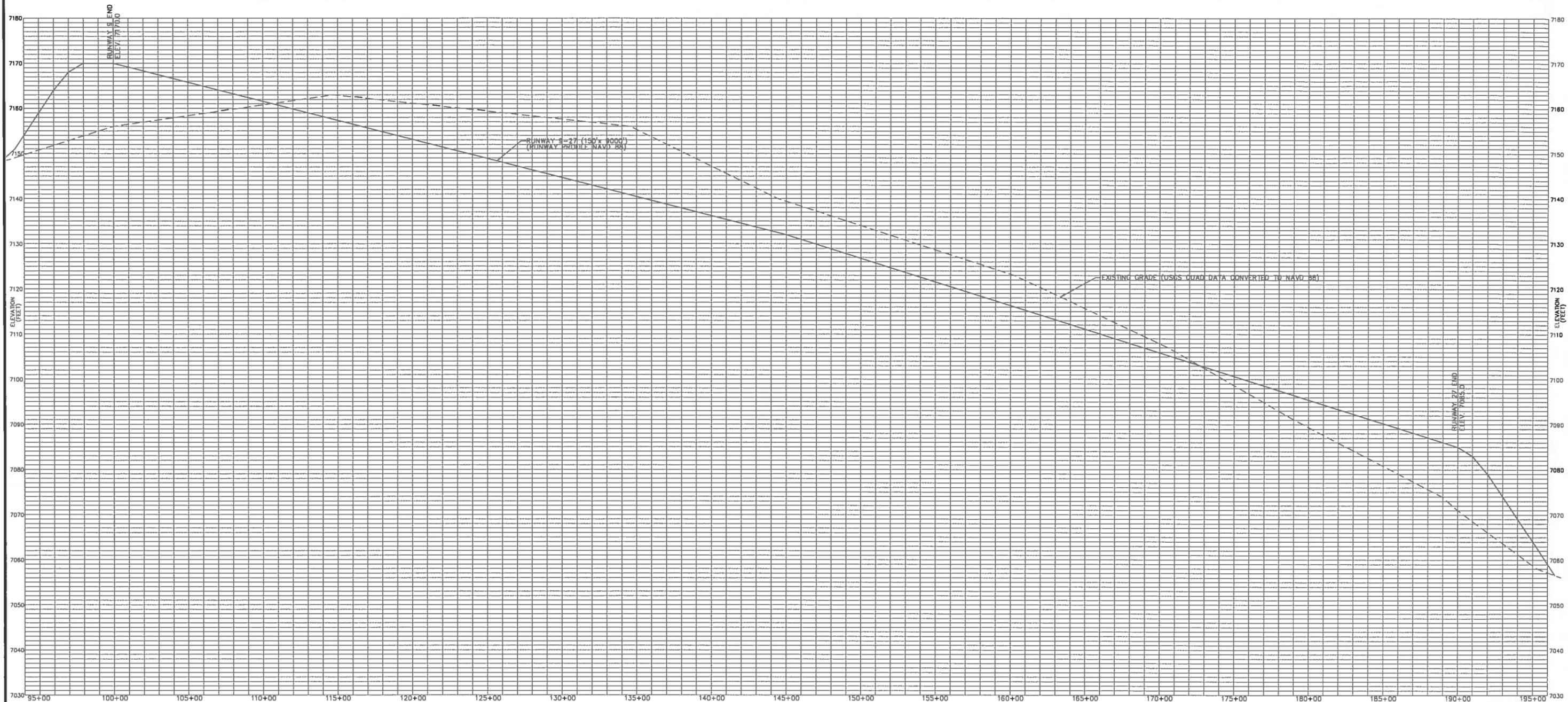
AIRPORT AIRSPACE PHOTO - SITE No. 4

NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010

PLATE No. A-28



SCALE: HORIZ. 1" = 300'
VERT. 1" = 10'

NOTE:

- EXISTING GRADE PROFILE COMPILED FROM USGS MAPS. USGS QUAD MAP DATA CONVERTED TO ENGLISH SYSTEM. CONVERT METERS TO FEET MULTIPLY BY 3.2808. BY 3.2808
- ALL AIRPORT PROFILE DATA IS SHOWN IN NAVD 88 DATUM.
- EXISTING USGS BASE MAP DATUM IS NGVD 29
- EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS ARE IN METERS.
- ALL AIRPORT PROFILE DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NGVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

DATE

APPROVED AIRPORT MANAGER - DATE

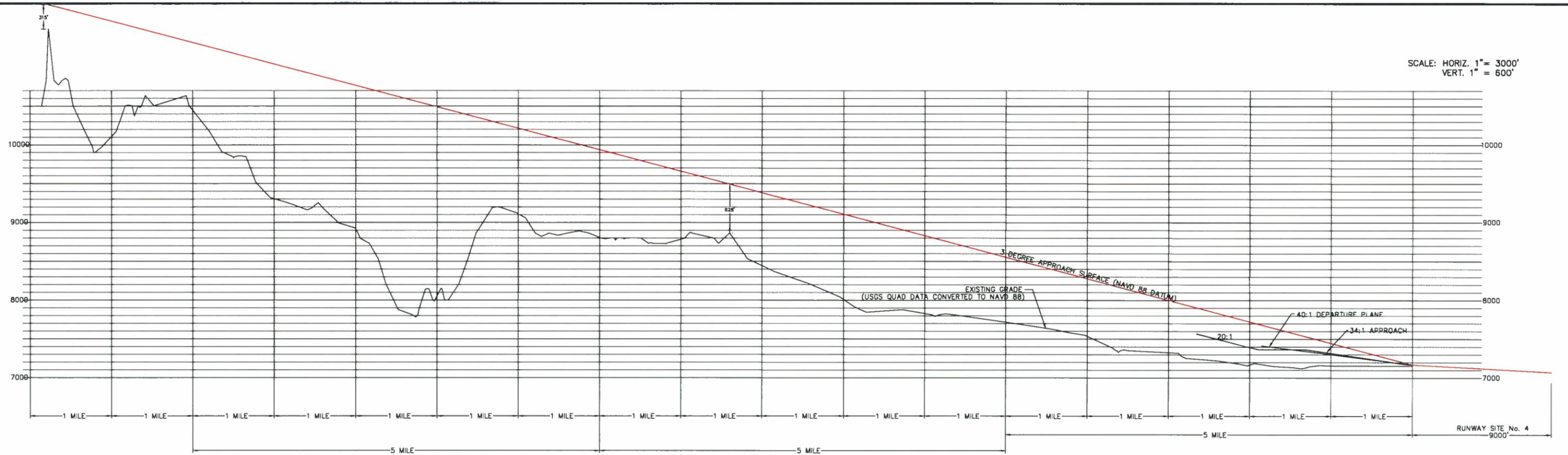

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 C.E. 8044
 6125 King Road, Suite 201 • Loomis, California 95650 • (916) 832-4725

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MONO COUNTY, CALIFORNIA
RUNWAY PROFILE - SITE No. 4

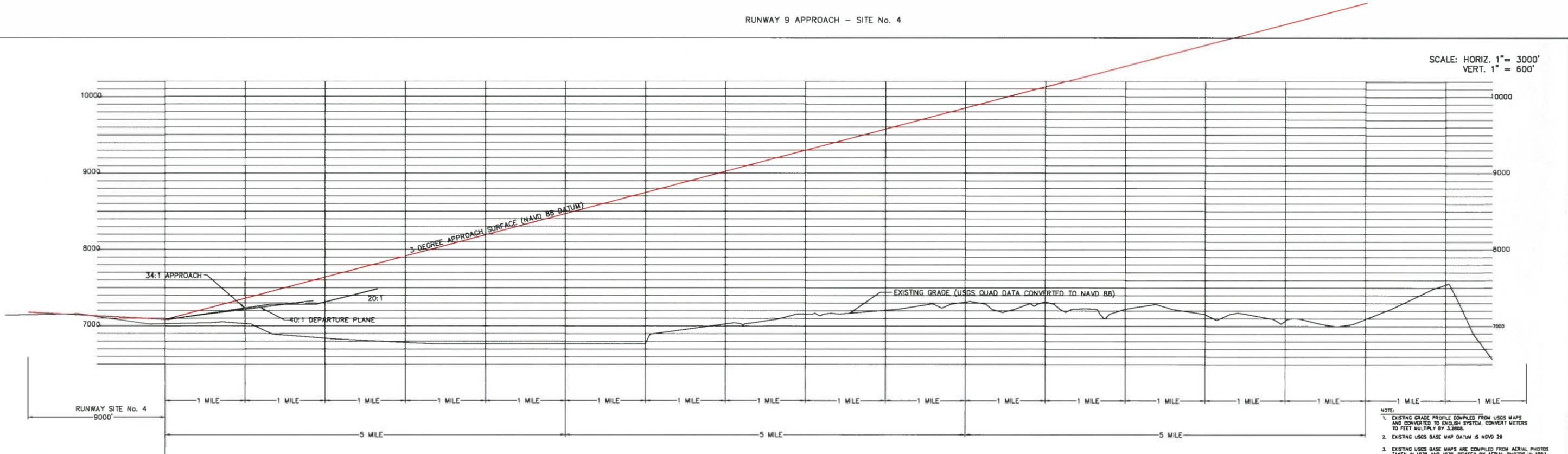
NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010
PLATE No. A-29



RUNWAY 9 APPROACH - SITE No. 4



RUNWAY 27 APPROACH - SITE No. 4

- NOTE:
- EXISTING GRADE PROFILE COMPILED FROM USGS MAPS AND CONVERTED TO ENGLISH SYSTEM. CONVERT METERS TO FEET MULTIPLY BY 3.2808.
 - EXISTING USGS BASE MAP DATUM IS NAVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1979 AND 1978, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS ARE IN METERS.
 - ALL AIRPORT PROFILE DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM, NAVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.

FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 AIRPORT MANAGER - RAYMOND JARVIS

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 8125 King Road, Suite 201 • Loomis, California 95850 • (916) 832-4725

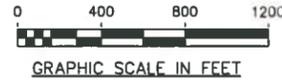
COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
APPROACH PROFILE - SITE No. 4

NO.	REVISIONS	BY	APR	DATE

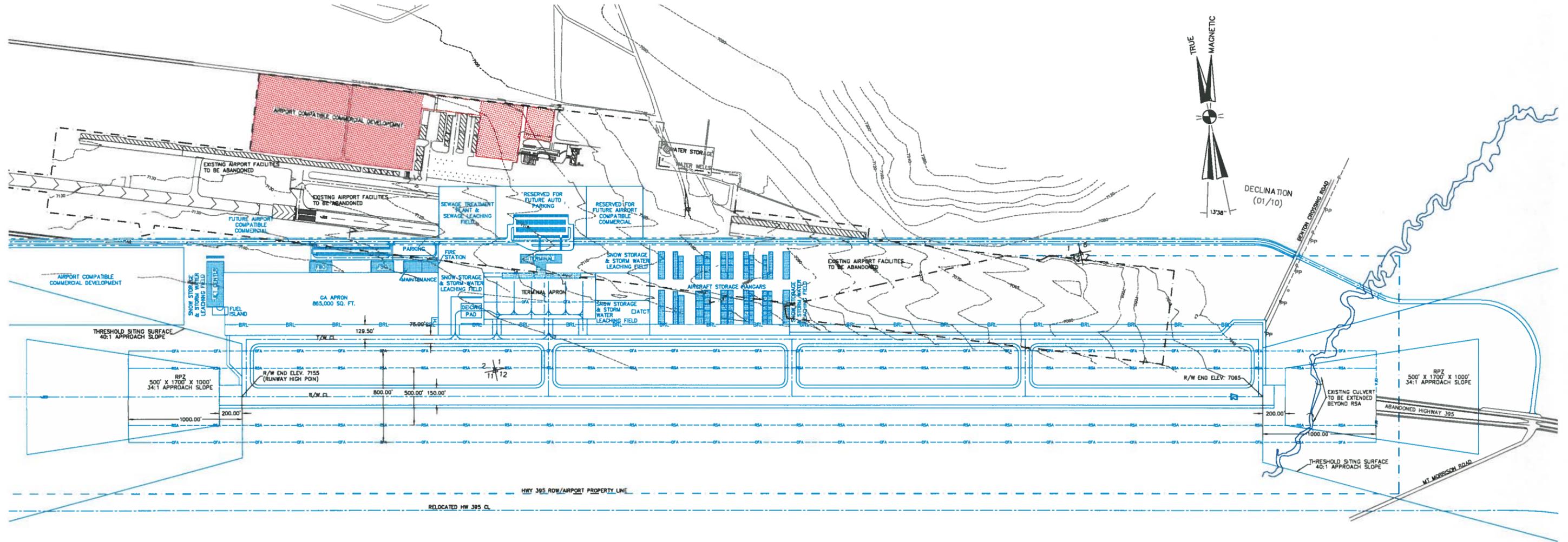
REGISTERED PROFESSIONAL ENGINEER
 No. C 804
 Exp. 9-30-2012
 CIVIL
 STATE OF CALIFORNIA
DATE DEC. 15, 2010
PLATE No. A-30

APPROVED _____ DATE _____
 FAA

- LEGNEND**
- EXISTING GROUND CONTOUR
 - - - EXISTING AIRPORT FACILITIES
 - - - EXISTING AIRPORT PROPERTY LINE
 - NEW AIRPORT FACILITIES
 - - - NEW AIRPORT PROPERTY LINE
 - NEW AIRPORT OBJECT FREE AREA
 - NEW AIRPORT RUNWAY SAFETY AREA
 - NEW AIRPORT BUILDING



NOTE:
ALL AIRPORT DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET).
AIRPORT ELEVATIONS ARE NAVD 88 DATUM.



FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
FAA

APPROVED _____ DATE _____
AIRPORT MANAGER - _____

C.E. 6044

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER

8125 King Road, Suite 201 • Loomis, California 95850 • (916) 852-4725

TOWN OF MAMMOTH LAKES
MONO COUNTY CALIFORNIA

MAMMOTH YOSEMITE AIRPORT

MAMMOTH LAKES, CALIFORNIA

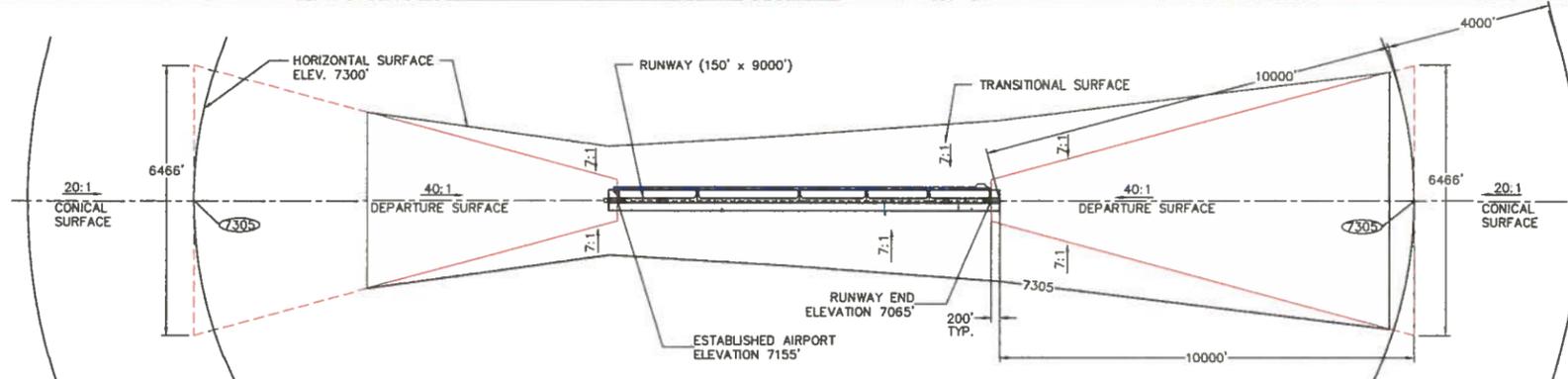
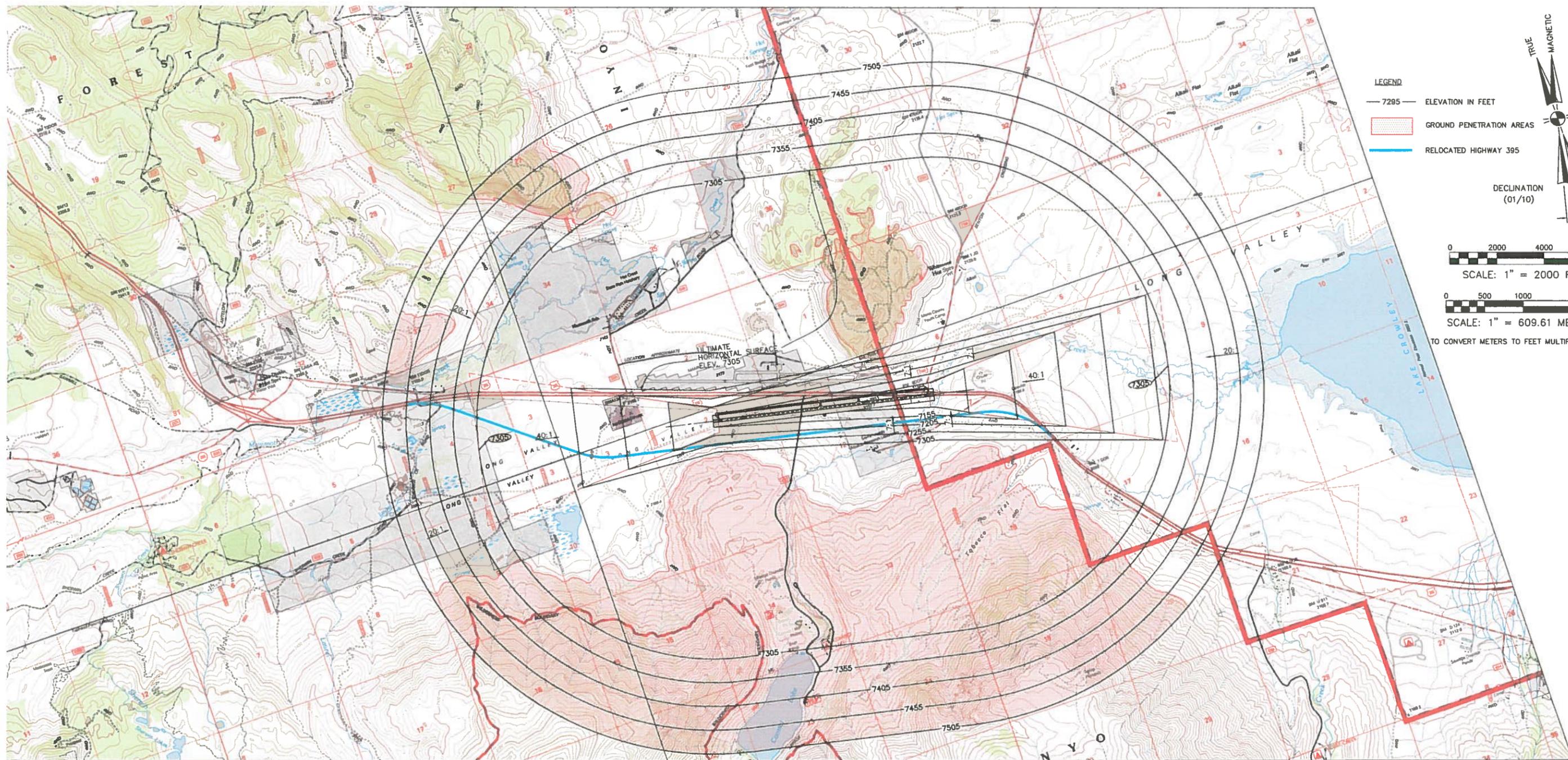
**ALTERNATE AIRPORT
AIRPORT LAYOUT PLAN - SITE No. 5**

NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010

PLATE No. A-31



PORTIONS OF USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
 BLOODY MTN, CA 1994
 OLD MAMMOTH, CA 1994
 WHITMORE HOT SPRINGS, CA 1994
 CONVICT LAKE, CA 1994
 DEXTER CANYON, CA 1994
 WATTERSON CANYON, CA 1994
 TOM'S PLACE, CA 1994

NOTE:
 1. EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
 2. EXISTING USGS BASE MAP DATUM IS NGVD 29
 3. EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
 4. ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NGVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
 5. NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY

FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 AIRPORT MANAGER - RAYMOND JARVIS

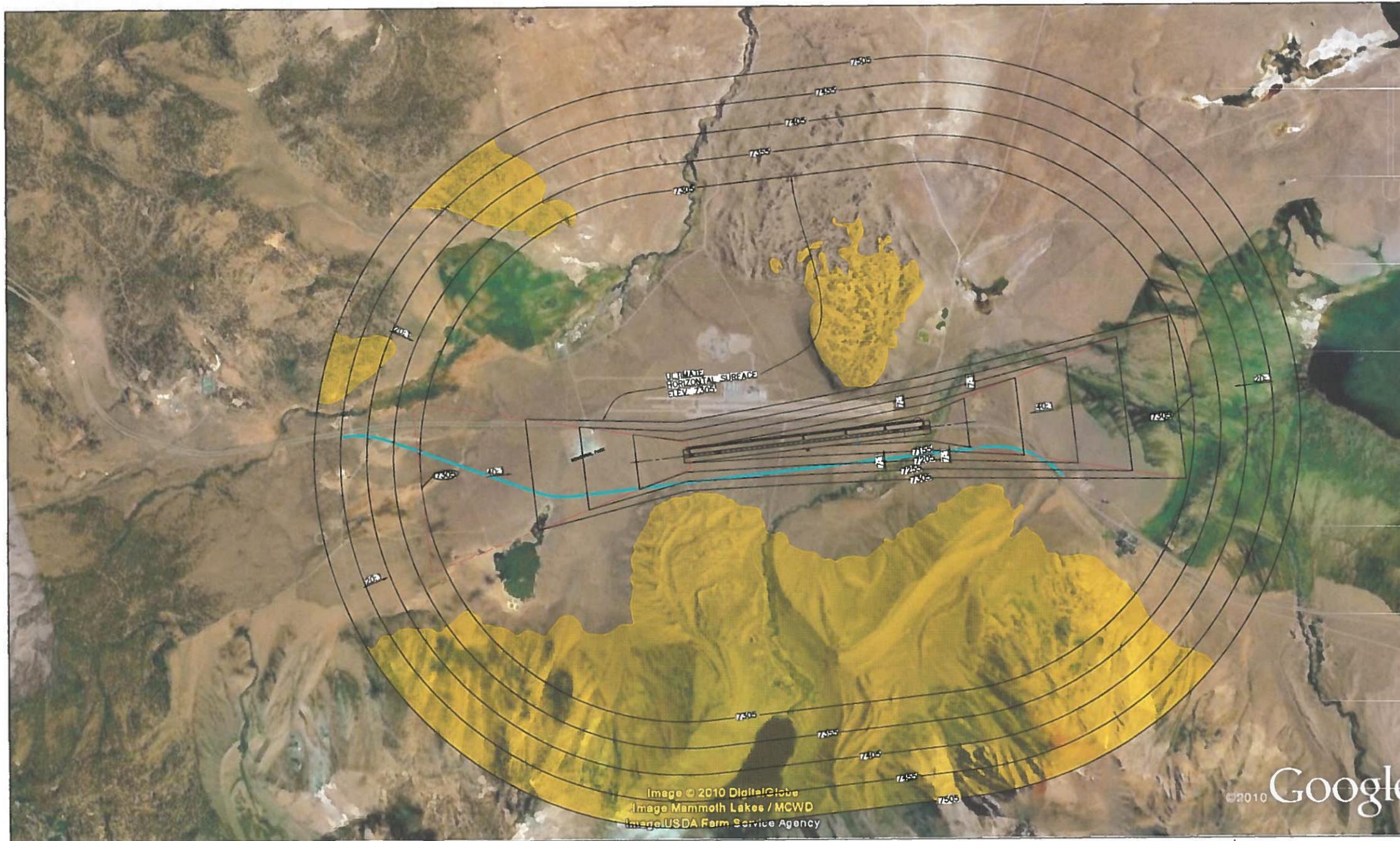
Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 8125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
AIRPORT AIRSPACE DRAWING - SITE No. 5

NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010
 PLATE No. A-32



LEGEND

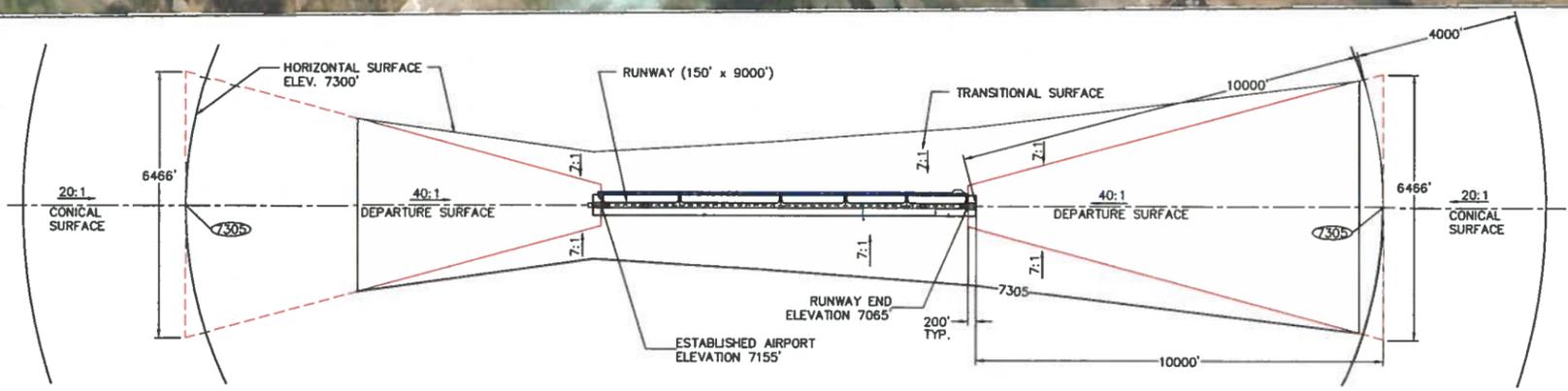
- 7295 — ELEVATION IN FEET
- GROUND PENETRATION AREAS
- RELOCATED HIGHWAY 395

DECLINATION (01/10)
13°38'

0 2000 4000 6000
SCALE: 1" = 2000 FT.

0 500 1000 2000
SCALE: 1" = 609.61 METERS

TO CONVERT METERS TO FEET MULTIPLY BY 3.2808



- PORTIONS OF USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
- BLOODY MTN, CA 1994
 - OLD MAMMOTH, CA 1994
 - WHITMORE HOT SPRINGS, CA 1994
 - CONVICT LAKE, CA 1994
 - DEXTER CANYON, CA 1994
 - WATTERSON CANYON, CA 1994
 - TOM'S PLACE, CA 1994
- NOTE:
- EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
 - EXISTING USGS BASE MAP DATUM IS NGVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
 - ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NGVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
 - NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY

APPROVED _____ DATE _____
FAA

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

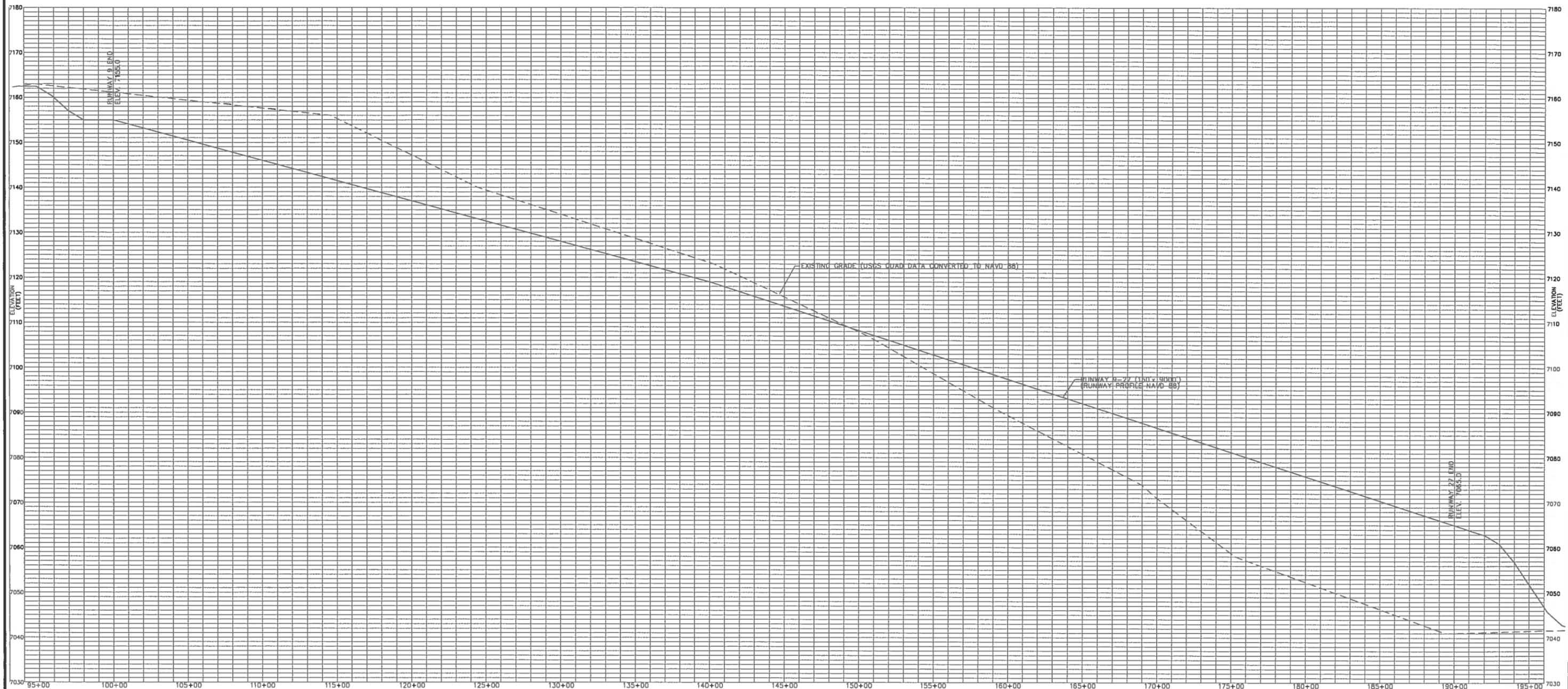
APPROVED _____ DATE _____
AIRPORT MANAGER - RAYMOND JARVIS


ReInard W. Brandley
 CONSULTING AIRPORT ENGINEER
 6125 King Road, Suite 201 • Loomis, California 95650 • (916) 652-4725

COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
AIRPORT AIRSPACE PHOTO - SITE No. 5

NO.	REVISIONS	BY	APR	DATE


 DATE DEC. 15, 2010
 PLATE No. A-33



SCALE: HORIZ. 1" = 300'
VERT. 1" = 10'

- NOTE:
- EXISTING GRADE PROFILE COMPILED FROM USGS MAPS. USGS QUAD MAP DATA CONVERTED TO ENGLISH SYSTEM. CONVERT METERS TO FEET MULTIPLY BY 3.2808. BY 3.2808
 - ALL AIRPORT PROFILE DATA IS SHOWN IN NAVD 88 DATUM.
 - EXISTING USGS BASE MAP DATUM IS NGVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS ARE IN METERS.
 - ALL AIRPORT PROFILE DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NGVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

DATE _____

APPROVED _____ DATE _____
AIRPORT MANAGER - _____


Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 6125 King Road, Suite 201 • Loomis, California 95850 • (916) 852-4725

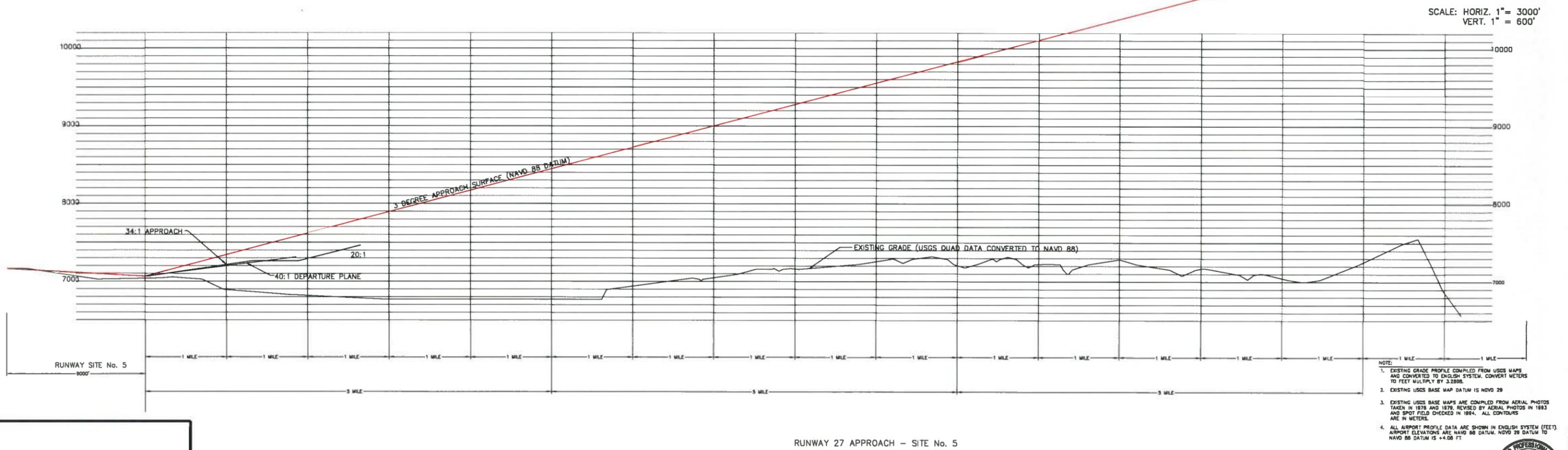
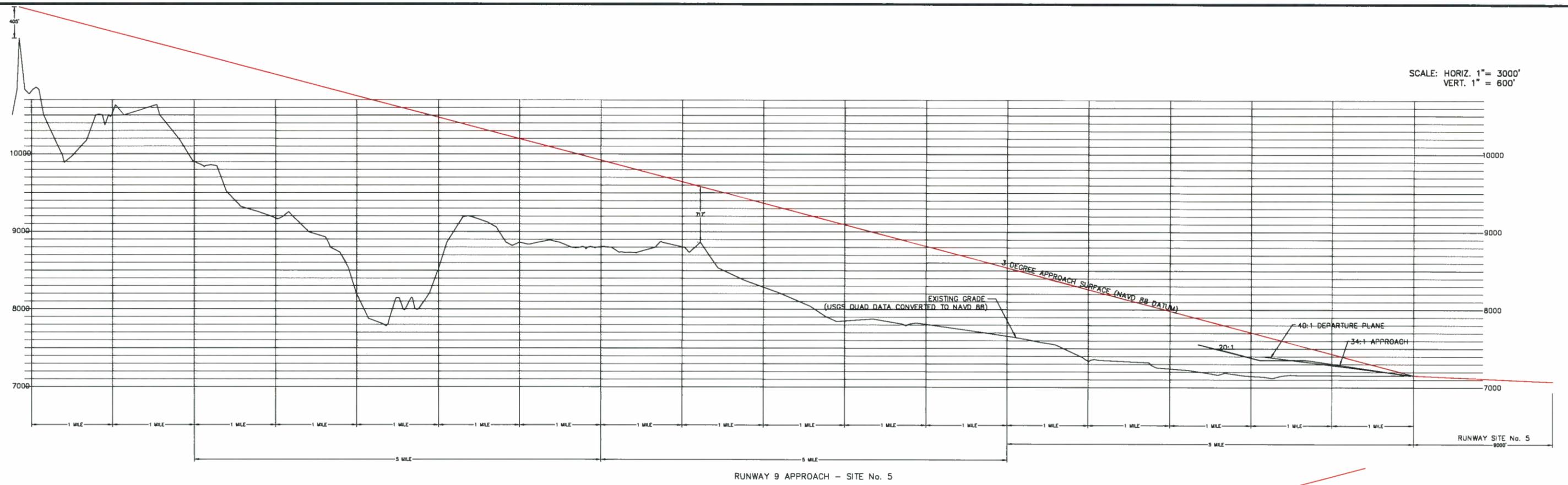
TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MONO COUNTY, CALIFORNIA
RUNWAY PROFILE - SITE No. 5

NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010

PLATE No. A-34



NOTE:
 1. EXISTING GRADE PROFILE COMPILED FROM USGS MAPS AND CONVERTED TO ENGLISH SYSTEM. CONVERT METERS TO FEET MULTIPLY BY 3.2808.
 2. EXISTING USGS BASE MAP DATUM IS NAVD 29
 3. EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1978 AND 1979. REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS ARE IN METERS.
 4. ALL AIRPORT PROFILE DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NAVD 29 DATUM TO NAVD 88 DATUM IS +4.06 FT.

APPROVED
 FAA

FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED
 AIRPORT MANAGER - RAYMOND JARVIS

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 8125 King Road, Suite 201 • Loomis, California 95650 • (916) 652-4725

COUNTY OF MONO
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
APPROACH PROFILE - SITE No. 5

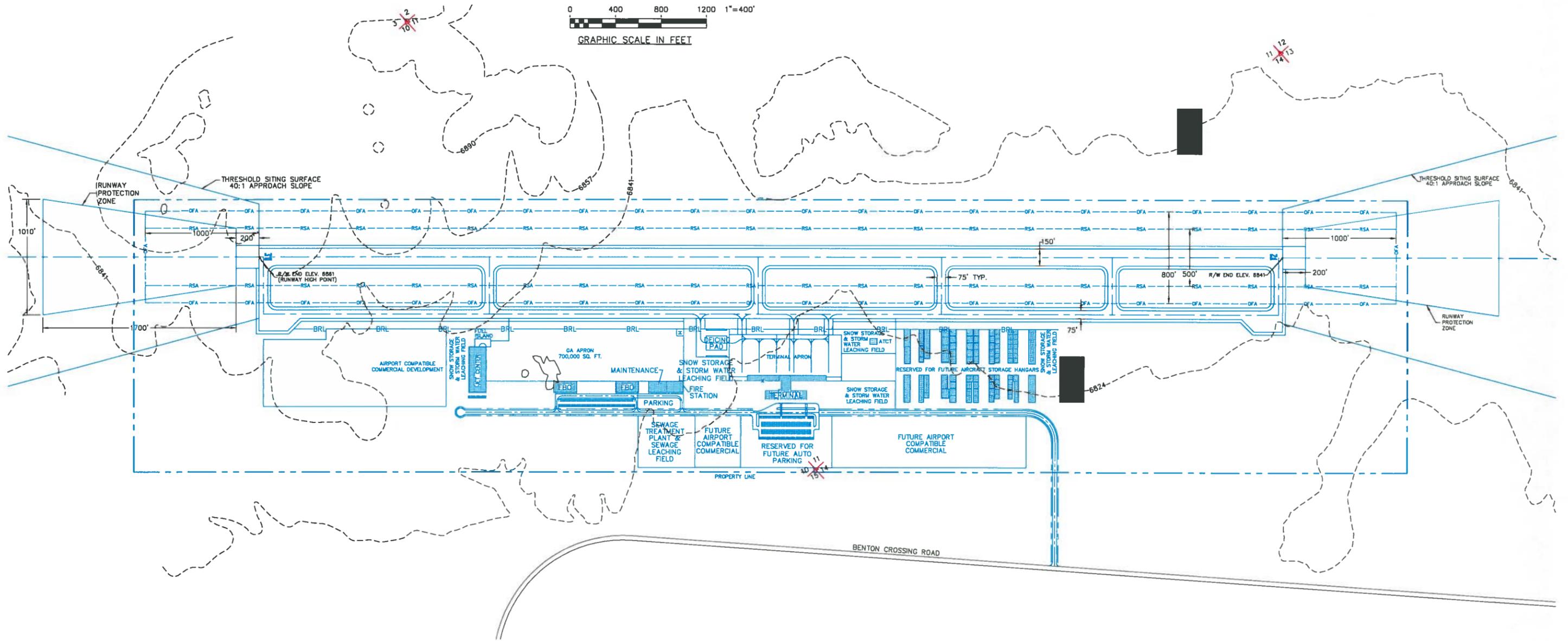
NO.	REVISIONS	BY	APR	DATE

REGISTERED PROFESSIONAL ENGINEER
 No. C 594
 Exp. 9-30-2012
 CIVIL
 STATE OF CALIFORNIA
 DATE DEC. 15, 2010
 PLATE No. A-35

NOTE:
 ALL AIRPORT DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET).
 AIRPORT ELEVATIONS ARE NAVD 88 DATUM.



- LEGEND**
- EXISTING GROUND CONTOUR
 - EXISTING ROADS
 - EXISTING AIRPORT PROPERTY LINE
 - NEW AIRPORT FACILITIES
 - NEW AIRPORT PROPERTY LINE
 - OFA NEW AIRPORT OBJECT FREE AREA
 - RSA NEW AIRPORT RUNWAY SAFETY AREA
 - NEW AIRPORT BUILDING



FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 AIRPORT MANAGER - _____

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 C.E. 8044
 8125 King Road, Suite 201 • Leominster, California 95830 • (916) 852-4725

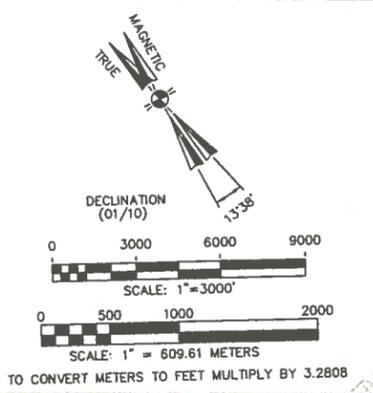
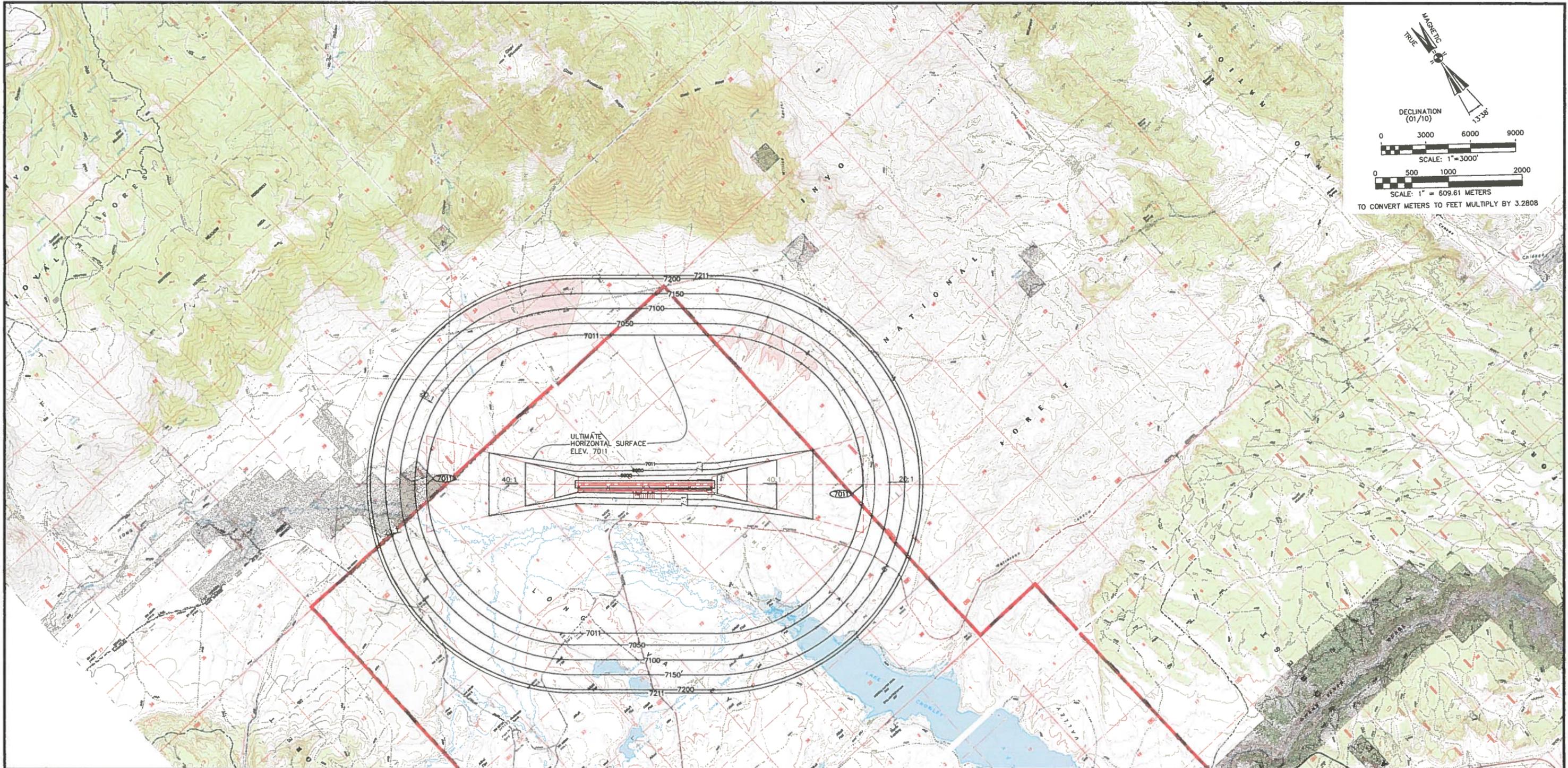
TOWN OF MAMMOTH LAKES
 MONO COUNTY CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MAMMOTH LAKES, CALIFORNIA
ALTERNATE AIRPORT
AIRPORT LAYOUT PLAN - SITE No. 6

NO.	REVISIONS	BY	APR	DATE

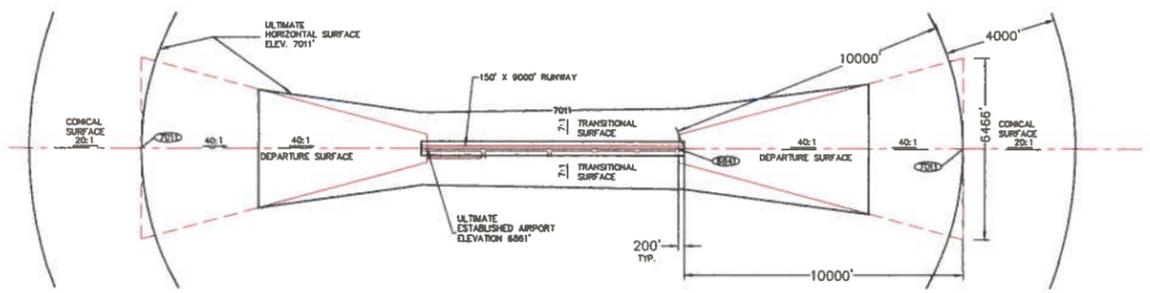


DATE DEC. 15, 2010
 PLATE No. A-36

APPROVED _____ DATE _____
 FAA



LEGEND
 7295 ELEVATION IN FEET
 GROUND PENETRATION AREAS



PORTIONS OF
 USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:
 WHITMORE HOT SPRINGS, CA 1994
 GLASS MOUNTAIN, CA 1994
 DEXTER CANYON, CA 1994
 WATERSON CANYON, CA 1994
 TOM'S PLACE, CA 1994
 BANNER RIDGE, CA 1994
 CASA DIABLO MOUNTAIN, CA 1994

- NOTE:**
- EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
 - EXISTING USGS BASE MAP DATUM IS NAVD 29
 - EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC. ARE IN METERS.
 - ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NAVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
 - NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP

FAA DISCLAIMER
 THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 AIRPORT MANAGER - _____

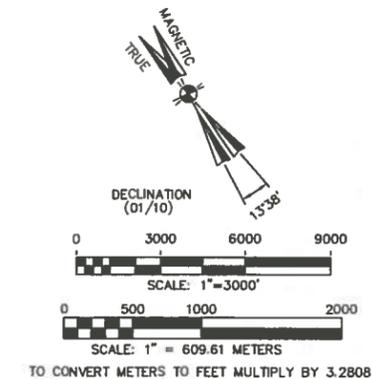
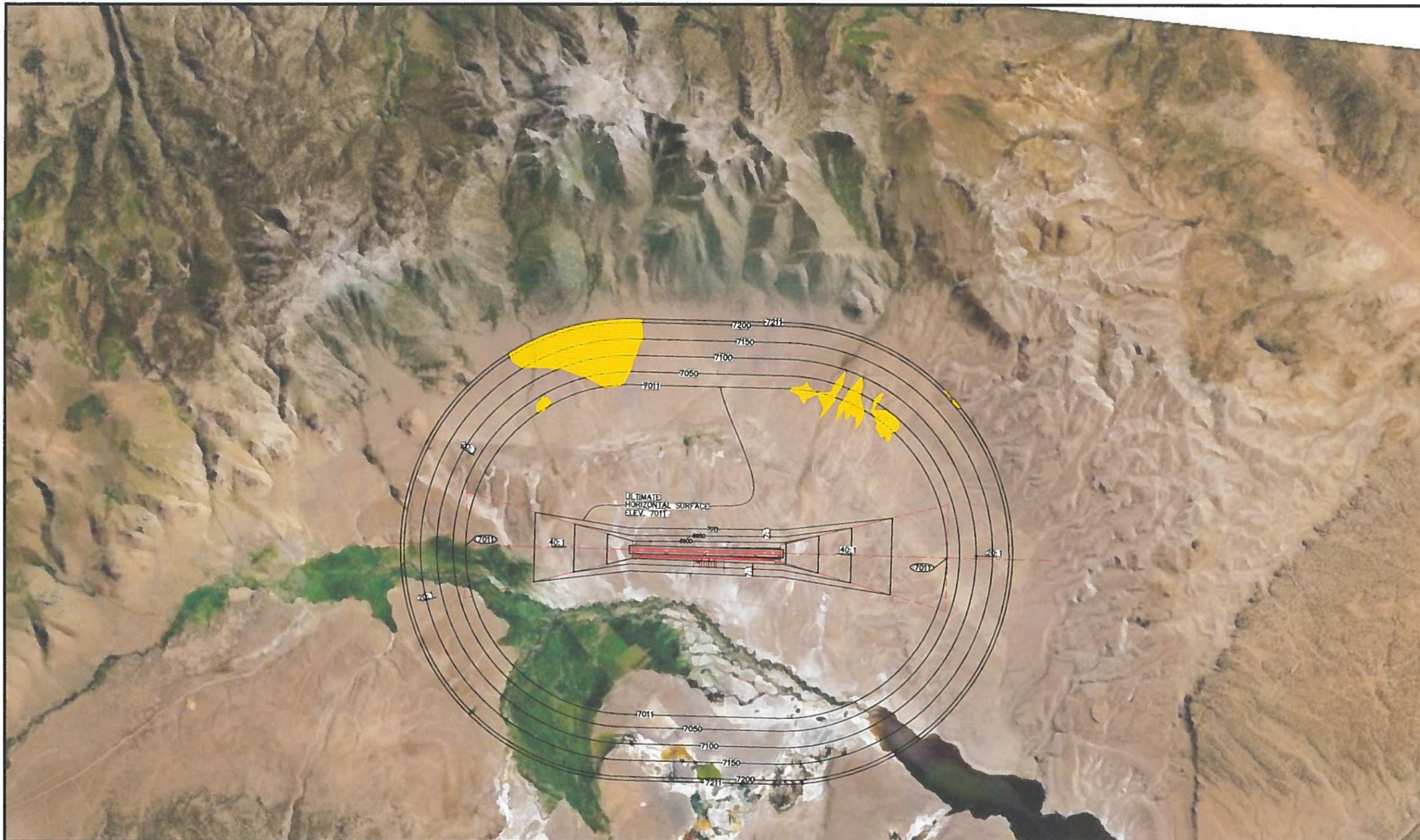
Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 C.E. #044
 6125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
 MONO COUNTY, CALIFORNIA
AIRPORT AIRSPACE DRAWING - SITE No. 6

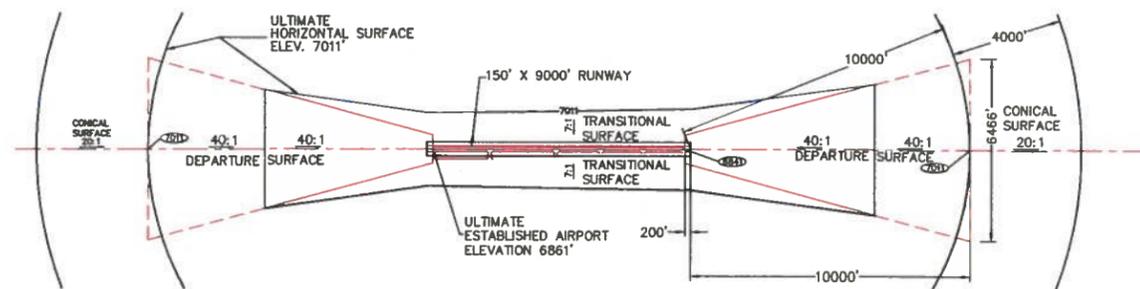
NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010
 PLATE No. A-37



LEGEND
 7295 ELEVATION IN FEET
 [Yellow Box] GROUND PENETRATION AREAS



PORTIONS OF
 USGS 7.5 MINUTE SERIES QUADRANGLE SHOWN:

- WHITMORE HOT SPRINGS, CA 1994
- GLASS MOUNTAIN, CA 1994
- DEXTER CANYON, CA 1994
- WATTERSON CANYON, CA 1994
- TOM'S PLACE, CA 1994
- BANNER RIDGE, CA 1994
- CASA DIABLO MOUNTAIN, CA 1994

- NOTE:**
1. EXISTING USGS BASE MAP CONTOUR INTERVAL IS 20 METERS
 2. EXISTING USGS BASE MAP DATUM IS NGVD 29
 3. EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS, DISTANCES, TC, ARE IN METERS.
 4. ALL AIRSPACE DRAWING DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NGVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.
 5. NATIONAL FOREST BOUNDARY SHOWN ON USGS BASE MAP AS EXISTED ON 1994. LAND TRADES HAVE MODIFIED AIRPORT PROPERTY AS SHOWN ON AIRPORT PROPERTY MAP

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
 FAA

APPROVED _____ DATE _____
 AIRPORT MANAGER - _____

Reinard W. Brandley
 CONSULTING AIRPORT ENGINEER
 C.E. 8044
 6125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

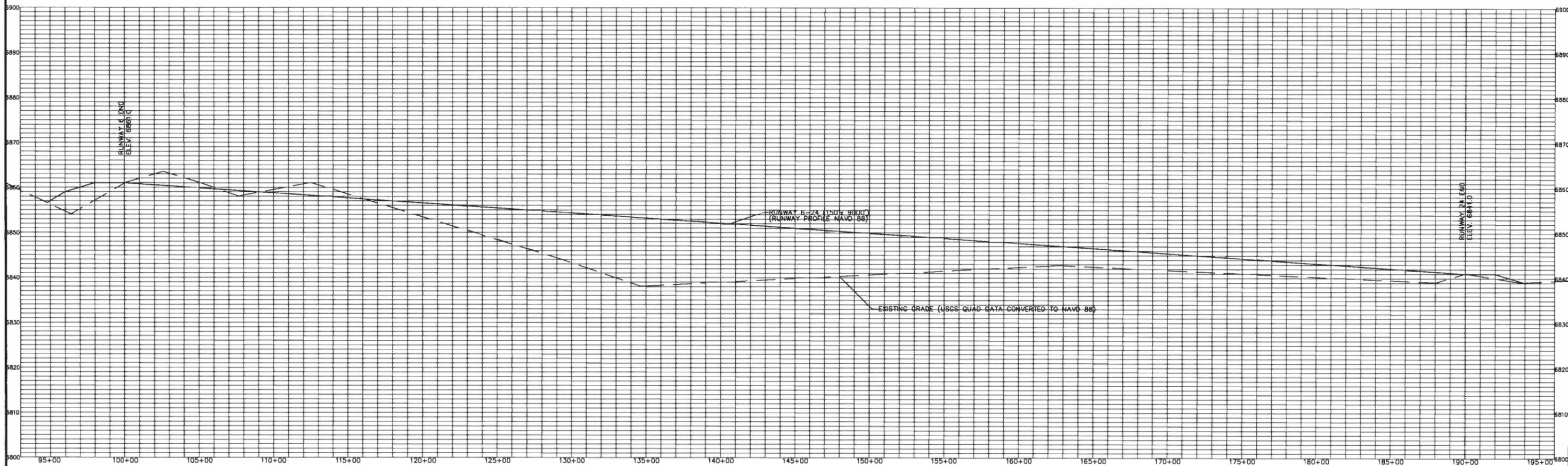
TOWN OF MAMMOTH LAKES
 STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT
 MONO COUNTY, CALIFORNIA
AIRPORT AIRSPACE PHOTOGRAPH - SITE No. 6

NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010
 PLATE No. A-38



NOTE:

1. EXISTING GRADE PROFILE COMPILED FROM 2007 TOPO SURVEY AND USGS MAPS. USGS QUAD MAP DATA CONVERTED TO ENGLISH SYSTEM. CONVERT METERS TO FEET MULTIPLY BY 3.2808
2. AIRPORT PROFILE DATA AND 2007 TOPO SURVEY DATUM IS NAVD 88
3. EXISTING USGS BASE MAP DATUM IS NGVD 29
4. EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1976 AND 1979, REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS ARE IN METERS.
5. ALL AIRPORT PROFILE DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NGVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.

SCALE: HORIZ. 1" = 300'
VERT. 1" = 10'

FAA DISCLAIMER

THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

DATE _____

APPROVED _____ DATE _____
AIRPORT MANAGER - _____

C.E. 8044

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER

8125 King Road, Suite 201 • Loomis, California 95650 • (916) 852-4725

TOWN OF MAMMOTH LAKES
STATE OF CALIFORNIA

MAMMOTH YOSEMITE AIRPORT

MONO COUNTY,

CALIFORNIA

RUNWAY PROFILE - SITE No. 6

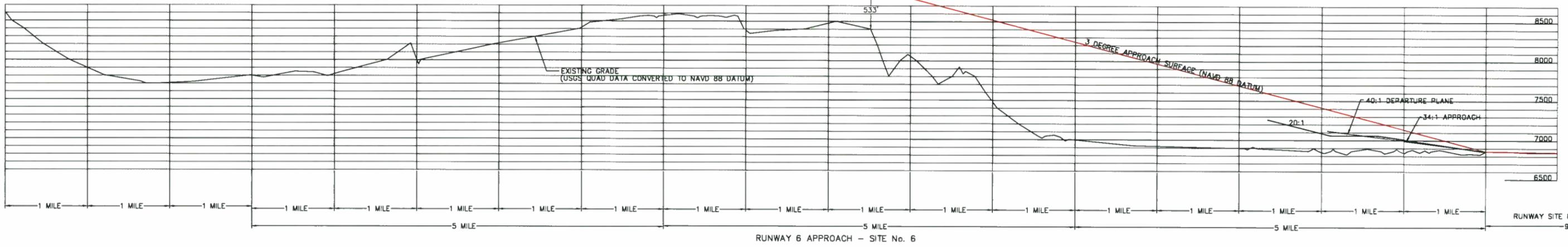
NO.	REVISIONS	BY	APR	DATE



DATE DEC. 15, 2010

PLATE No. A-39

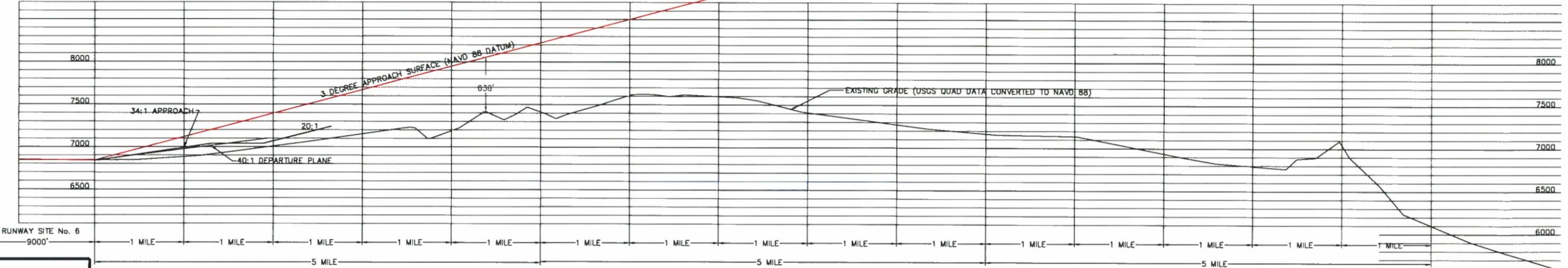
SCALE: HORIZ. 1" = 3000'
VERT. 1" = 600'



RUNWAY 6 APPROACH - SITE No. 6

- NOTE:
1. EXISTING GRADE PROFILE COMPILED FROM USGS MAPS AND CONVERTED TO ENGLISH SYSTEM. CONVERT METERS TO FEET MULTIPLY BY 3.2808.
 2. EXISTING USGS BASE MAP DATUM IS NAVD 29
 3. EXISTING USGS BASE MAPS ARE COMPILED FROM AERIAL PHOTOS TAKEN IN 1978 AND 1979; REVISED BY AERIAL PHOTOS IN 1993 AND SPOT FIELD CHECKED IN 1994. ALL CONTOURS ARE IN METERS.
 4. ALL AIRPORT PROFILE DATA ARE SHOWN IN ENGLISH SYSTEM (FEET). AIRPORT ELEVATIONS ARE NAVD 88 DATUM. NAVD 29 DATUM TO NAVD 88 DATUM IS +4.08 FT.

SCALE: HORIZ. 1" = 3000'
VERT. 1" = 600'



RUNWAY 24 APPROACH - SITE No. 6

FAA DISCLAIMER
THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THIS PLAN BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED THEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

APPROVED _____ DATE _____
AIRPORT MANAGER - _____

Reinard W. Brandley
CONSULTING AIRPORT ENGINEER
C.E. 6044
6125 King Road, Suite 201 • Loomis, California 95650 • (916) 632-4725

TOWN OF MAMMOTH LAKES
STATE OF CALIFORNIA
MAMMOTH YOSEMITE AIRPORT
MONO COUNTY, CALIFORNIA
APPROACH PROFILE - SITE No. 6

NO.	REVISIONS	BY	APR	DATE

REINARD W. BRANDLEY
No. C 8044
Exp. 9-30-2012
CIVIL
STATE OF CALIFORNIA
DATE DEC. 15, 2010
PLATE No. A-40

APPROVED _____ DATE _____
FAA

**MAMMOTH YOSEMITE AIRPORT
AIRPORT LAYOUT PLAN UPDATE NARRATIVE**

**Appendix B
Airport Capital Improvement Program (ACIP)**

MAMMOTH YOSEMITE AIRPORT
MAMMOTH LAKES, MONO COUNTY, CALIFORNIA

AIRPORT CAPITAL IMPROVEMENT PROGRAM - 2015 thru 2026

Project/ Priority No.	Shown on ALP	Project Type	Development Year	Environmental Status	Description	Construction Cost	Engineering & Administration	Total Project Cost	F.A.A. Participation	Sponsor Participation
1	Yes	D	2015	3/3/14	Reconstruct General Aviation Aircraft Parking Apron A3 and Portion of Apron A2 - Construction	\$1,570,000	\$ 300,000	\$ 1,870,000	\$ 1,695,342	\$ 174,658
2	Yes	D	2015	10/21/14	Obstruction Light Row - North Side, Relocate Wind Socks and Segmented Circle - Engineering	-	34,000	34,000	30,824	3,176
3	--	E	2015	N/A	Wildlife Hazard Management Plan	-	20,000	20,000	18,132	1,868
4	Yes	D	2015		18% Terminal Design for Environmental Scoping/Planning/Project Formulation Cost	-	294,000	294,000	266,540	27,460
5	--	P	2015	N/A	Airport Land Use Compatibility Plan (ALUC)					
Total 2015						\$1,570,000	\$ 648,000	\$ 2,218,000	\$ 2,010,839	\$ 207,161
6	Yes	E	2016	--	Airline Terminal: Building, Apron, Access Road, Automobile Parking Lot, Utilities - Environmental	\$ -	\$ 570,000	\$ 570,000	\$ 516,762	\$ 53,238
7	Yes	D	2016	10/21/14	Obstruction Light Row - North Side - Construction	210,000	40,000	250,000	226,650	23,350
8	Yes	D	2016	10/21/14	Relocate Wind Socks and Segmented Circle - Construction	81,000	16,000	97,000	87,940	9,060
9	Yes	D	2016	N/A	Replace ARFF Vehicle - Acquisition	800,000	10,000	810,000	734,346	75,654
Total 2016						\$ 1,091,000	\$ 636,000	\$ 1,727,000	\$ 1,565,698	\$ 161,302
10	Yes	D	2017	2016	Airline Terminal Building - Architectural Design	\$ -	\$ 1,600,000	\$ 1,600,000	\$ 1,450,560	\$ 149,440
11	Yes	D	2017	2016	Terminal Access Road, Automobile Parking Lot, Terminal Area Utilities - Engineering	-	420,000	420,000	380,772	39,228
12	Yes	D	2017	2016	Airline Terminal Apron - Engineering	-	510,000	510,000	462,366	47,634
13	Yes	D	2017	2016	North Hangar Taxilanes - 2" Mill and Fill - Engineering	-	38,000	38,000	34,451	3,549
Total 2017						\$ -	\$ 2,568,000	\$ 2,568,000	\$ 2,328,149	\$ 239,851
14	Yes	D	2018	2016	Airline Terminal Building - Construction	\$ 15,532,000	\$ 2,951,000	\$ 18,483,000	\$ 16,756,688	\$ 1,726,312
15	Yes	D	2018	2016	Airline Terminal Apron, Access Road, Automobile Parking Lot, Terminal Area Utilities, Deicing Pad, and Terminal Apron Taxiways - Construction	9,100,000	1,730,000	10,830,000	9,818,478	1,011,522
16	Yes	D	2018	2016	North Hangar Taxilanes - 2" Mill and Fill	292,000	56,000	348,000	315,497	32,503
Total 2018						\$ 24,924,000	\$ 4,737,000	\$ 29,661,000	\$ 26,890,663	\$ 2,770,337
17	Yes	E	2019	--	Wildlife/Security Fence and Cameras - Environmental	\$ -	\$ 50,000	\$ 50,000	\$ 45,330	\$ 4,670
18	Yes	E	2019	--	LADWP & U.S. Forest Service Land Acquisition and/or Use Permits - Environmental	-	50,000	50,000	45,330	4,670
19	Yes	P	2019	N/A	Airport Layout Plan Narrative Including Updated ALP Drawings	-	180,000	180,000	163,188	16,812
20	Yes	E	2019	--	Grade Runway Object Free Area From RSA Edge to Highway 395 ROW Fence Line - Environmental	-	30,000	30,000	27,198	2,802
21	Yes	E	2019	--	ARFF Building and Administration Building, Apron, and Building Access Road - Environmental	-	100,000	100,000	90,660	9,340
22	Yes	D	2019	N/A	Pavement Maintenance/Management Program Update	-	65,000	65,000	58,929	6,071
23	Yes	D	2019	2018	Crack Repair - Runway, Taxiway, and Aprons - Engineering	-	49,000	49,000	44,423	4,577
Total 2019						\$ -	\$ 524,000	\$ 524,000	\$ 475,058	\$ 48,942
24	Yes	D	2020	2019	LADWP & U.S. Forest Service Land Acquisition and/or Use Permits - Land	\$ 100,000	\$ 20,000	\$ 120,000	\$ 108,792	\$ 11,208
25	Yes	D	2020	2019	Grade Runway OFA from RSA Edge to Highway 395 ROW Fence Line - Engineering	-	250,000	250,000	226,650	23,350
26	Yes	D	2020	2019	Wildlife/Security Fence and Cameras - Engineering	-	100,000	100,000	90,660	9,340
27	Yes	D	2020	2019	ARFF Building and Administration Building, Apron, and Building Access Road - Engineering	-	350,000	350,000	317,310	32,690
28	Yes	D	2020	2018	Crack Repair and Crack Seal - Runway, Taxiway, and Aprons	426,000	81,000	507,000	459,646	47,354
Total 2020						\$ 526,000	\$ 801,000	\$ 1,327,000	\$ 1,203,058	\$ 123,942
29	Yes	D	2021	2019	Grade Runway Object Free Area From Runway Safety Area Edge to Highway 395 ROW Fence Line - Construction	\$ 2,982,000	\$ 570,000	\$ 3,552,000	\$ 3,220,243	\$ 331,757
30	Yes	D	2021	2019	Wildlife/Security Fence and Cameras - Construction	738,000	140,000	878,000	795,995	82,005
Total 2021						\$ 3,720,000	\$ 710,000	\$ 4,430,000	\$ 4,016,238	\$ 413,762
31	Yes	E	2022	--	Widen Taxiways, Widen R/W Shoulders, Widen Holding Apron, New G.A. Apron - Environmental	\$ -	\$ 120,000	\$ 120,000	\$ 108,792	\$ 11,208
32	Yes	D	2022	2019	ARFF Building and Administration Building - 8,800 sq. ft. - Construction	1,838,000	350,000	2,188,000	1,983,641	204,359
33	Yes	D	2022	2019	ARFF Building and Maintenance Building Apron & Building Access Road - Construction	1,856,000	350,000	2,206,000	1,999,960	206,040
Total 2022						\$ 3,694,000	\$ 820,000	\$ 4,514,000	\$ 4,092,392	\$ 421,608
34	Yes	D	2023	2022	Widen Taxiways, Widen R/W Shoulders, Widen Holding Apron, Reconstruct East GA Apron A2, New G.A. Apron - Engineering	\$ -	\$ 660,000	\$ 660,000	\$ 598,356	\$ 61,644
35	Yes	D	2023	2022	Saw and Seal New Joints - Runway, Taxiway, Apron; East Hangar Taxilane - Mill and Fill - Engineering	-	120,000	120,000	108,792	11,208
Total 2023						\$ -	\$ 780,000	\$ 780,000	\$ 707,148	\$ 72,852
36	Yes	D	2024	2022	Widen Taxiways from 50' to 75' to Meet Taxiway Edge Safety Margin for Q400 & 25' Wide Shoulders - Construction	\$ 2,905,000	\$ 550,000	\$ 3,455,000	\$ 3,132,303	\$ 322,697
37	Yes	D	2024	2022	Widen Runway Shoulders to 20' - Construction	1,300,000	250,000	1,550,000	1,405,230	144,770
38	Yes	D	2024	2022	Widen Aircraft Holding Aprons - Construction	315,000	60,000	375,000	339,975	35,025
39	Yes	D	2024	2022	Reconstruct East General Aviation Aircraft Parking Apron A2 - Construction	1,410,000	270,000	1,680,000	1,523,088	156,912
40	Yes	D	2024	2022	Saw and Seal New Joints - Runway, Taxiway, Apron	711,000	135,000	846,000	766,984	79,016
41	Yes	D	2024	2022	East Hangar Taxilane - Mill and Fill	265,000	50,000	315,000	285,579	29,421
42	Yes	D	2024	2023	Taxiway A5, A, and A1 - 4-inch Overlay; Crack Repair and Seal Apron A1 and A3; West Hangar Taxilanes - Mill and Fill - Engineering	-	230,000	230,000	208,518	21,482
Total 2024						\$ 6,906,000	\$ 1,545,000	\$ 8,451,000	\$ 7,661,677	\$ 789,323
43	--	D	2025	N/A	Pavement Maintenance/Management Program	\$ -	\$ 80,000	\$ 80,000	\$ 72,528	\$ 7,472
44	Yes	D	2025	2022	New General Aviation Apron (179,000 sq. ft.) - Construction	1,405,000	270,000	1,675,000	1,518,555	156,445
45	Yes	D	2025	2023	Taxiway A5, A, and A1 - 4-inch Overlay	1,706,000	325,000	2,031,000	1,841,305	189,695
Total 2025						\$ 3,111,000	\$ 675,000	\$ 3,786,000	\$ 3,432,388	\$ 353,612
46	Yes	E	2026	2023	Crack Repair and Seal Apron A1 and A3	\$ 104,000	\$ 20,000	\$ 124,000	\$ 112,418	\$ 11,582
47	Yes	D	2026	2023	West Hangar Taxilanes - Mill and Fill*	430,000	80,000	510,000	462,366	47,634
48	Yes	E	2026	--	Runway 9-27 Extension - Environmental	-	120,000	120,000	108,792	11,208
49	Yes	D	2027	2026	Runway 9-27 Extension - Engineering	-	360,000	360,000	326,376	33,624
50	Yes	D	2028	2026	Runway 9-27 Extension - 100' x 1,200' - Construction	3,616,000	690,000	4,306,000	3,903,820	402,180
Total 2026 thru 2028						\$ 4,150,000	\$ 1,270,000	\$ 5,420,000	\$ 4,913,772	\$ 506,228
TOTAL PROJECT COSTS						\$ 49,692,000	\$ 15,714,000	\$ 65,406,000	\$ 59,297,080	\$ 6,108,920

*Only 25 feet of the tee hangar taxilanes are eligible for Federal participation.