A. Inventory of Existing Conditions

Master Plan

Nephi Municipal Airport

A. Inventory of Existing Conditions

INTRODUCTION. Nephi Municipal Airport is a vital part of the national airport system, as well as an integral component of the Utah Continuous Airport System Plan (UCASP) within the State of Utah. According to the UCASP, the Airport is a designated General Aviation Regional Airport, and represents a vital and significant regional economic asset.

The most recent *Master Planning* effort for Nephi Municipal Airport, in the form of an Airport Layout Plan Update was completed in 1995. During the intervening years, changes within the aviation industry and local conditions necessitate updating the master plan to ensure Nephi Municipal Airport's continued development. The focus of this document will be on the total aviation facility and its environs, with the overall planning goal being the development of an aviation facility that can accommodate future demand and that is not significantly constrained by its environs. This initial *INVENTORY* chapter will examine three basic elements involved with the existing and future development of Nephi Municipal Airport. These elements are: the airport facilities (runways, taxiways, aircraft parking aprons, hangars, maintenance facilities, ground access, etc.); the relationship to the airport/airspace system; and, the airport environs. In addition, the last section in this chapter identifies issues that will influence future activity and facilities at the Airport. Subsequent chapters will detail the Airport's forecasts of aviation activity, the ability of airport facilities to safely and efficiently meet the needs associated with the projected aviation activity, the compatibility of the Airport with surrounding land uses, and recommended future development within and around airport property. This Airport Master Plan is intended to provide a comprehensive evaluation of the Airport, and results in a long-term facilities and operational plan for the Airport.

As illustrated in the following figure, entitled *AIRPORT LOCATION MAP* the Airport is located in central Utah, within the eastern portion of Juab County, approximately eighty-five (85) miles south of Salt Lake City. The topography of Juab County ranges from high mountain peaks to arid desert near the Nevada border, with a combination of fertile valleys and desert lands positioned within the various mountain ranges. The Juab Valley is located between the San Pitch Mountain Range and the West Hills, and includes the fertile farm land in and around Nephi City.

Figure A1 Airport Location Map

Source: Yahoo Maps, April 2008.

Nephi Municipal Airport

The existing north-south runway alignment, which is parallel with the mountains to the east and the hills to the west, is properly oriented to accommodate the stronger winds that are channeled through the Valley. In addition, water run-off/drainage pattern of the Valley is directed to the Mona Reservoir, then to Utah Lake, and finally to the Great Salt Lake.

Airport Role and Facilities

Nephi Municipal Airport currently serves the general aviation needs of the community by providing many aviation-related services, including: business-related flying, recreational flying, flight training, air charters, air ambulance, hangar leasing and sales, and aerial surveillance, along with other aviation–related activities, such as firefighting base for the Bureau of Land Management (BLM).

The Airport, which is owned and operated by Nephi City, is classified as a General Aviation Airport by the FAA's National Plan of Integrated Airport Systems (NPIAS). The day to day operation of the Airport is the responsibility of the City Administrator, who coordinates the management of the Airport with the City Council, and is responsible for compliance with all federal, state, and local regulations that pertain to the operation of the facility. It should also be noted that the management of Nephi Municipal Airport is directly correlated with its designated role, which influences both Capital Improvements Programming and revenue generation opportunities.

As shown in Figure A2, entitled *AIRPORT VICINITY MAP*, Nephi Municipal Airport is located approximately three (3) miles northwest of the City, outside the corporate boundary of the City, and entirely within the jurisdiction of Juab County.

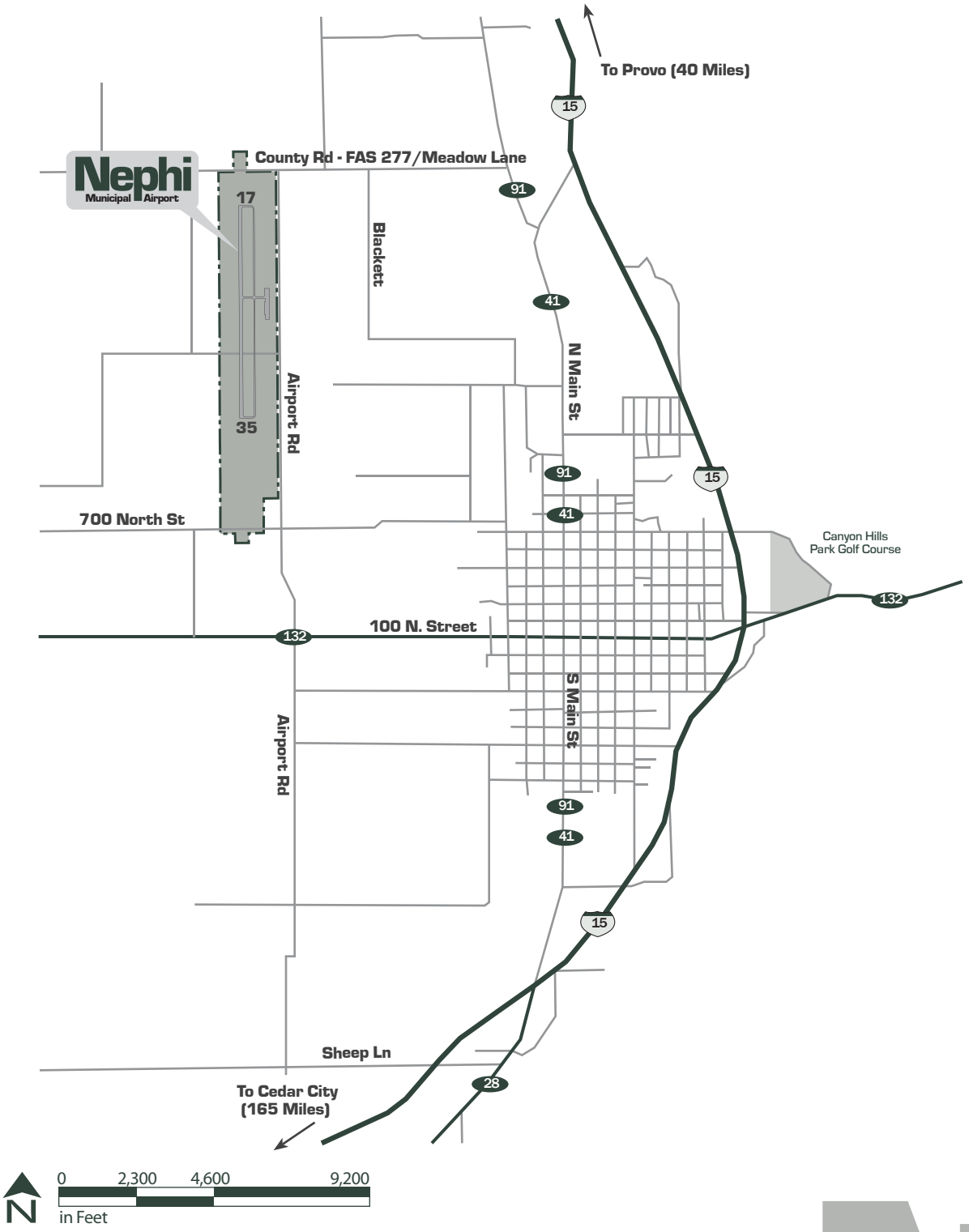

Figure A2 Airport Vicinity Map

Source: Google Maps, March, 2008.

Nephi Municipal Airport

Airside Facilities

Nephi Municipal Airport is operated with a single runway that is oriented in a general north-south direction, and is supported by a system of parallel and connecting taxiways. Figure A3, entitled *EXISTING AIRPORT LAYOUT,* provides a graphic presentation of the existing airport facilities. Additional airport information includes:

- **Airport Reference Point: Latitude N 39° 44′ 11.70″ and Longitude W 111° 52′ 12.20″**
- **FAA Site Number: 25228.A**
- **Airport Elevation: 5,005 feet above mean sea level (AMSL) estimated**
- **Acreage: 428 acres[1]**
- **Mean Normal Temperature of hottest month: 93° F (July)**

Runways

Runway 17/35. The single runway at the Airport, Runway 17/35[2], is 6,298 feet in length and 100 feet in width. The runway is constructed of asphalt[3], considered to be in good condition, and has a gross weight bearing capacity of 21,000 pounds for the single-wheel, and 30,000 pounds for dual-wheel main landing gear configuration. The runway is equipped with pilot-controlled Medium Intensity Runway Lights (MIRL) and two light precision approach path indicators (PAPIs) located on the left-hand side of each runway end. In addition, each runway is also equipped with runway end identifier lights (REILs).

Taxiways

In addition to Runway 17/35, the airside facilities at Nephi Municipal Airport consist of a parallel taxiway system that provides access between the runway surfaces and the landside aviation use areas.

Taxiway "A". Taxiway "A" is the parallel taxiway system serving Runway 17/35 at the Airport. This taxiway, which is constructed of asphalt, is 35 feet in width and has three connector taxiways that link the runway with the existing general aviation facility development on the east side of the Airport. Taxiway "A" is located on the east side of the runway and is separated from the runway by 400 feet (centerline to centerline). For night use, the taxiway system is equipped with a medium intensity taxiway lighting system (MITL). Taxiway "A" is served by a connecting taxiway (i.e., Taxiway "B" located approximately midfield (providing direct access to the aircraft parking apron),

[1] Does not include existing avigation easements.

[2] The runway was previously oriented at 16/34, and updated to 17/35 in 2010.

[3] A runway overlay project was completed in 2003.

and two connecting taxiways located off each runway end. Each connecting taxiway links Taxiway "A" to the landside development area east of Runway 17/35.

Landside Facilities

The primary landside development area at the Airport consists of a linear layout, running north to south along the east side of the Airport. These facilities include Aviation Service Operator (ASO) facilities, aircraft storage hangars, aircraft parking aprons, fuel storage facilities (including Jet A and AvGas sales/dispensing), and access roadways.

Aprons. There is one aircraft parking apron at Nephi Municipal Airport that is located on the east side Runway 17/35, adjacent to Taxiway "A". This public-use general aviation ramp is centrally located with respect to the runway facility and consists of a combination of transient and based aircraft apron. Access to this ramp is provided by one midfield connecting taxiway. This combined apron area has approximately 106,500 square feet of aircraft parking and movement area.

Commercial Aviation & Hangar Facilities. The Airport is served by one Single Activity Service Operator (SASO), which manages the Airport's self-service fueling operation, and provides aircraft ramp parking and hangar leasing/sales. There is also one older Quonset style hangar located directly south the ASO facilities, with two older and two new executive hangars extending down the length of the aircraft apron. The following table, entitled *AIRPORT BUILDING & HANGAR FACILITIES,* provides generalized inventory information about the hangars and associated support buildings located on the Airport.

Table A1
AIRPORT BUILDING & HANGAR FACILITIES

Building #	Building Type	Ownership	Size	Condition
1	Corporate Executive Hangar	Private	80′ x 80′	Very Good
2A	Hangar Restrooms	Sponsor	14′ x 18′	Very Good
2B	Office Trailer/Pilots' Lounge	Sponsor	15′ x 60′	Good
3	Quonset Hangar (Airport Maintenance Building)	Sponsor	40′ x 60′	Fair
4	Executive Hangar	Private	50′ x 60′	Good
5	Executive Hangar	Private	22′ x 40′	Good
6	Executive Hangar	Private	46′ x 60′	Excellent
7	Executive Hangar	Private	60′ x 95′	Excellent

Source: 2006 Aerial Photography and Nephi City Personnel.

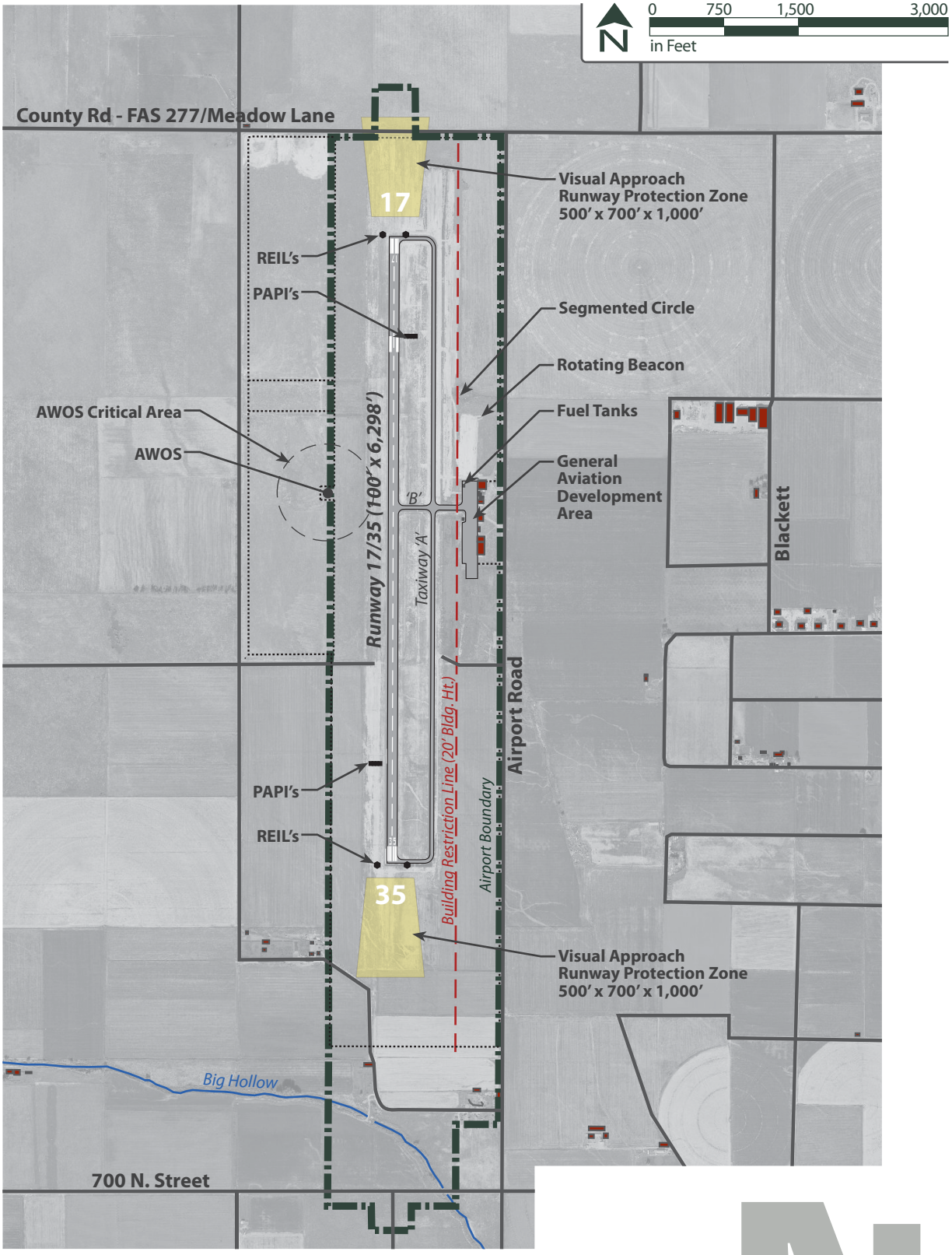

Figure A3 Existing Airport Layout

Nephi Municipal Airport

Source: Airport Layout Drawing, by Barnard Dunkelberg & Co., 1995 & As Built Construction Drawings, by Creamer & Noble Engineers, 2007.

The layout and location of the various airport buildings and hangar types were illustrated in Figure A3, entitled *EXISTING AIRPORT LAYOUT*. A detail view of the terminal/hangar development area, which includes building numbers that are keyed to Table A1, is also presented on the following illustration, entitled *EXISTING LANDSIDE DEVELOPMENT AREA DETAIL.* In addition, according to information obtained from Nephi City, there are approximately six construction requests/inquiries for aircraft storage facilities.

Fuel Storage Facility. Currently, aviation fuels are stored in two above ground storage tanks: one AvGas tank and one Jet A tank, with each having a storage capacity of 6,000 gallons. The SASO is responsible for fuel delivery and maintaining the storage tanks to current Environmental Protection Agency (EPA) standards. Nephi City receives a minimum fuel flowage fee of three cents per gallon of fuel sold, and the fuel sales records for the past five years are presented in the following table, entitled *AIRPORT FUEL SALES, 2004-2008*. As can be noted, there has been a moderate increase in AvGas sales at the Airport over the past five years with a corresponding increase in Jet A fuel sales for the same period. The fuel sales were negatively impacted during 2006-2007 due to the construction of the new runway facility. In addition, overall fuel sales have increased by 56.0% at the Airport since 2004.

Table A2
AIRPORT FUEL SALES, 2004-2008

Year	AvGas	% Increase	Jet A	% Increase	Total Fuel	% Increase
2004	$3,134	---	$1,333	---	$4,467	---
2005	$8,237	62.0%	$18,220	92.7%	$26,457	83.1%
2006	$9,315	11.6%	$32,990	44.8%	$42,305	37.5%
2007	$11,568	19.5%	$22,740	-45.1%	$34,308	-23.3%
2008	$12,440	7.0%	$28,820	21.1%	$41,259	16.8%

Source: Nephi City and Mt. Nebo records.

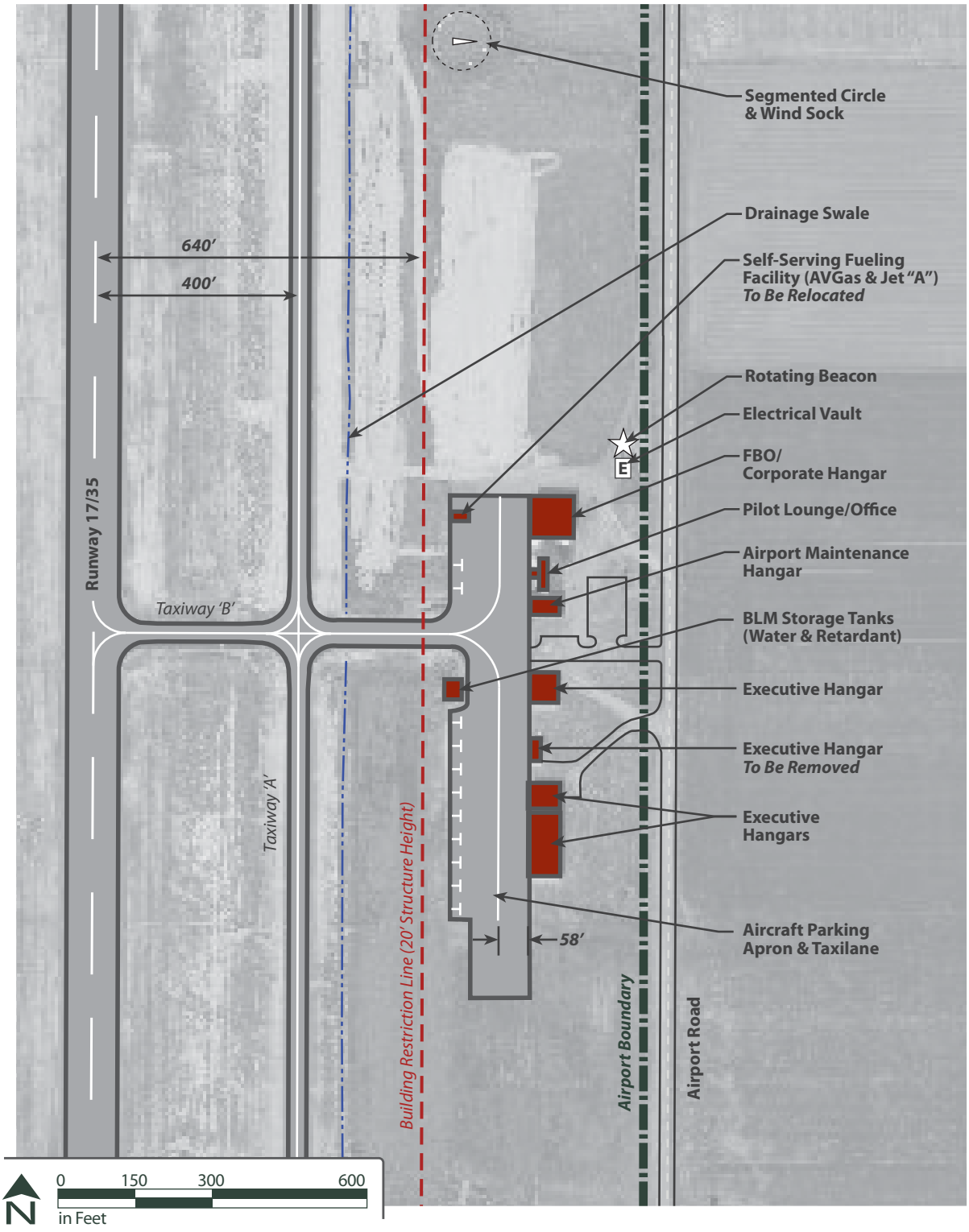

Figure A4 Existing Landside Development Area Detail

Source: Airport Layout Drawing, by Barnard Dunkelberg & Co., 1995 & As Built Construction Drawings, by Creamer & Noble Engineers, 2007.

Nephi Municipal Airport

Single-Engine Air Tanker (SEAT) Firefighting Base. At present, Nephi Municipal Airport is designated by the Bureau of Land Management as a temporary location for a Single-Engine Air Tanker (SEAT) firefighting base. Although it is recommended, there is no formal agreement between the BLM and Nephi City for the use of the Airport as a temporary SEAT firefighting base. According to information contained in the *2007 State Aviation Plan*, prepared by the Bureau of Land Management Utah State Office, "temporary bases are sites used on a temporary or intermittent basis. (i.e., heli-spots and remote airstrips). Sites not located on BLM land must be pre-approved by the land owner and appropriate BLM management. Each site should be cataloged as to location, description, local hazards, use procedures, agreements, and contacts. Inspections and maintenance are completed as necessary to meet agency safety standards."

When activated on an as-needed basis during the summer fire season (i.e., June-September), the Nephi SEAT firefighting base operation consists of two to four Air Tractor 802 tanker aircraft that are staged from the existing general aviation apron and managed from the existing office/trailer. The tanker aircraft are refueled on the Airport from the existing self-service fueling facility and re-loaded with water or retardant from two 6,000 gallon above ground storage tanks that are located adjacent to the general aviation apron and central connector taxiway. In addition, the Nephi Volunteer Fire Department currently provides a support role to the SEAT Base when in operation by trucking in water from an offsite location to replenish the water storage supplies. This required fire department support role could be eliminated with the extension of City water service lines to the Airport, which currently relies upon wells for its water supply. The BLM has also expressed some interest in establishing a permanent SEAT Base installation at the Airport that would likely be activated on a seasonal basis, and their proposed facility requirements will be documented in a later chapter of this document.

Aircraft Rescue and Firefighting Facility (ARFF). The Airport does not presently have an Aircraft Rescue and Fire Fighting (ARFF) facility on the field; however, fire protection services for the facility are provided by the Juab County Special Service Fire District from the fire station located in downtown Nephi City.

Automated Weather Observing System (AWOS) III. The Airport is presently served by an Automated Weather Observing System (AWOS) III. The AWOS III facility measures the following weather parameters: wind speed, wind gusts, wind direction, wind variable direction, temperature, dew point, altimeter setting, density altitude, visibility, variable visibility, precipitation, day/night, cloud height, and sky condition. The AWOS III will provide a minute-by-minute update of this weather data to airborne pilots via VHF radio frequency and/or via telephone.

Potential National Guard Armory Facility. South Valley Regional Airport (previously named Salt Lake City Airport II) is home to the Utah National Guard Army Aviation Support Facility, which primarily operates a combination of AH-64 Apache and UH-60 Blackhawk helicopters. This National Guard facility has historically utilized Nephi Municipal Airport for a limited number of annual touch-and-go training operations, that originate from South Valley Regional Airport, but also includes operations to and from the Utah Test and Training Range (UTTR) located in Utah's West Desert.

Preliminary planning is underway between the Utah National Guard and Nephi City for the possible future development of a new National Guard Armory on approximately 30 acres adjacent to the northwest boundary of the Airport. According to Guard personnel, the new Armory could accommodate a variety of aviation and aviation-related support roles for the Utah National Guard and provide an ongoing economic engine for the City and County. A possible development scenario could include the relocation/dispersal of some of the aviation assets (i.e., a percentage of the AH-64 Apache and/or UH-60 Blackhawk helicopters and their associated support functions) from South Valley Regional Airport to Nephi Municipal Airport, which would provide an alternate basing/staging location for response to natural disasters and /or security threats. The new facility would likely necessitate the development of hangars, operations buildings, maintenance facilities, and various support facilities, and vehicular access to the Armory would be provided from the existing county road that parallels the northern boundary of the Airport. In addition, the National Guard would provide security for the Armory, and thus enhance the overall security for the entire Airport.

Existing Ground Access and Parking Facilities

Ground Access. Due to the Airport's generally rural location within Juab County, there are a variety of north-south and east-west county roads that provide easy access to the existing landside facilities located on the east side of the Airport. Airport Road runs in a north-south orientation and provides vehicular access to the main entrance of the Airport and to the existing airport facilities. The newly paved airport entrance road extends westward from Airport Road and terminates at a controlled vehicular access gate and security fencing that surrounds the aircraft parking apron and existing hangar facilities. Airport access from the south is provided by 100 North Street/State Highway (SH) 132, which runs in an east-west orientation, and links Airport Road with the Nephi City downtown area and Interstate 15 (I-15). A county road, with an east-west orientation, borders the Airport to the north, and links Airport Road with SH 41/91/North Main Street and I-15. I-15 is the only north-south interstate highway within the State of Utah, and extends from the Canadian border to Los Angeles, California. In addition, I-15 intersects with both I-70 and I-80, which are the primary east-west vehicular access routes across the State.

Automobile Parking Facilities. There are several informal vehicular parking areas associated with the Airport's landside development (i.e., the ASO hangar and office trailer, and aircraft storage facilities) located on the east side of the Airport.

Existing Airport Utilities and Services

A description of the existing utility infrastructure serving Nephi Municipal Airport was obtained from interviews with the Nephi City Administrator and other utility providers. These services include electric power, standard and cellular telephone communications, fiber optics (west of the Airport), water, sewer, stormwater management, solid waste disposal, natural gas, and Internet. A brief description of these utilities and services is presented in the following text and illustrated in the following figure, *EXISTING AIRPORT UTILITY SYSTEM LAYOUT*.

Electricity. Rocky Mountain Power (RMP) provides electrical service to Juab County (wherein the Airport is located); Nephi City Power provides power within Nephi City limits. RMP is a division of PacifiCorp and serves over 525,000 customers in Utah. The existing electrical service to the Airport is reported to have adequate capacity to serve existing and future loads. Therefore, it is estimated that the distribution lines, which serve the Airport, are of adequate capacity to support additional aviation development demand of the facility.

Telephone. Telephone service to Nephi Municipal Airport and Juab County is provided by Qwest, which is based in Salt Lake City, Utah. In addition to telephone service, Qwest also provides DSL service and Internet services, including private dedicated services to customers throughout the City and County. It is estimated that current telephone services are sufficient to meet the projected growth of the region.

Existing cellular communications providers to Nephi Municipal and Juab County include AT&T Wireless and Air Touch Cellular Communications, Verizon, Qwest and many others. It should be noted that the FAA regulates the siting of towers that exceed 200 feet in height and smaller towers within 20,000 feet of a 3,200-foot runway or longer (i.e., Nephi Municipal Airport) at a 100:1 slope with filing requirements for FAA Form 7460-1 "Notice of Proposed Construction or Alteration."

Water. Currently the only potable water available at the Airport is from a small well near the SASO. This well only has enough capacity to serve the SASO, public restrooms and water the lawn adjacent to the SASO building. Nephi City water terminates approximately 1 to 1 ½ miles from the Airport, depending upon which line would be used. These existing lines are 8" C-900 lines with an estimated pressure of 100 psi. These lines can be extended to the Airport in the future and will be able to

provide the necessary volume and pressure needed for expansion and fire protection. Additional feeder lines will need to be constructed to serve future aviation development areas within airport property.

Sanitary Sewer. Nephi City wastewater system consists of a conveyance system and a total containment system of sewer lagoons. The City is responsible for the main sewer lines (sewers in streets and other public right-of-ways), while the property owners are responsible for the sewer laterals from homes and businesses to the main lines. The conveyance system to the lagoons is an 18" line that crosses the Airport, under the runway.

Currently the public restrooms and the SASO building on the Airport are connected to a septic tank. The restrooms and additional facilities on the Airport could be connected to the sanitary sewer system, although a lift station will have to be installed to move the sewage to the outflow line. It is estimated that the wastewater system has adequate capacity to support additional aviation development demand for the Airport.

Stormwater. Nephi City has recently completed a Watershed Protection and Stormwater Master Plan. Currently, the stormwater drainage system within Nephi City consists of a passive open conveyance accomplished through a system of curb and gutter, flood channels and irrigation ditches. Stormwater at the Airport is currently accommodated by a combination of open ditches and underground piping that ranges in size from 24 to 30 inches. The area between Taxiway "A" and the runway is covered with a system of catch basins and piping that moves the water to the north or the south then onto the west side. Once the water sheet reaches the west side, it then flows into open fields owned by the City. A small detention pond on the northwest corner of the Airport controls the flow of storm water off airport property.

Solid Waste Disposal. Nephi City's solid waste department provides municipal solid waste collection and disposal services to residential and business customers within the existing City limits and at the Airport. In the future as the requirement grows, airport users could be required to contract for solid waste collection with private contractors. Both the City and Juab County haul their solid waste to the local, state-approved landfill, which is located approximately four miles south/southwest of the Airport, and meets the recommended 10,000-foot separation criteria for airport siting, as specified by Advisory Circular (AC) 150/5200-33B, entitled *HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS.* In addition, there is not an approved hazardous waste disposal system in the city or county.

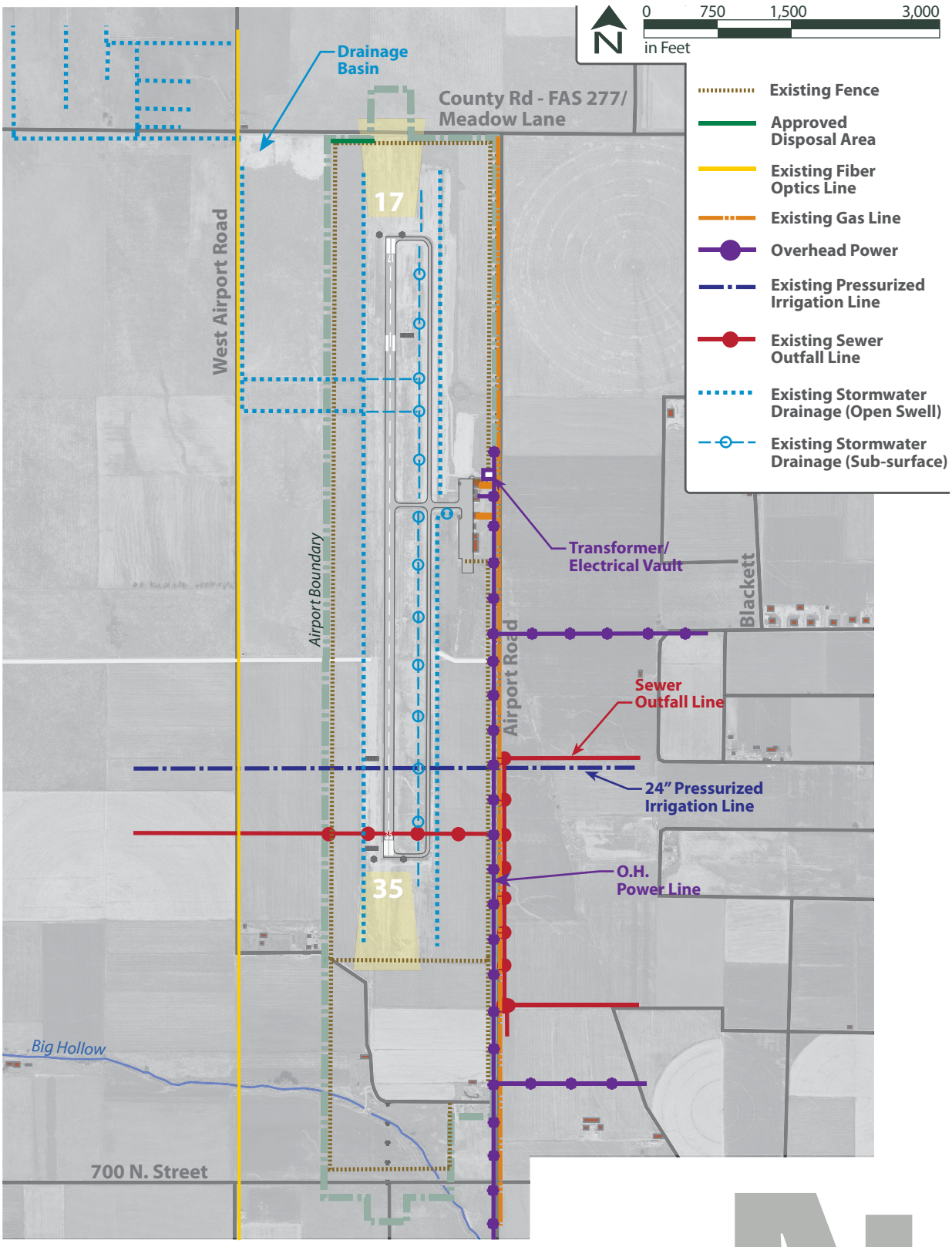

Figure A5 Existing Airport Utility System Layout

Source: Airport Layout Drawing, by Barnard Dunkelberg & Co., 1995 & As Built Construction Drawings, by Creamer & Noble Engineers, 2007.

Nephi Municipal Airport

Natural Gas. Natural gas service within Nephi City and a portion of Juab County is provided by the Nephi City Municipal Gas System. A 2-inch line is located along the right-of-way on Airport Road to the east of the Airport. Some of the existing hangars and other facilities at the Airport are currently connected to this line. It is estimated that the existing line will meet the needs of the Airport during the 20-year period of the plan.

Internet/Fiber Optic. Wireless Internet service is offered in Nephi City and the airport area by NeboNet, with headquarters in Nephi, Utah. NeboNet offers speeds up to 8 megabytes (MB) per second. Fiber Optic service is not currently available at the Airport. A long-line fiber optic cable does run along West Airport Road but is only for long line transmission; however, wireless Internet service may be available for airport users in the future.

Airspace System/Navigation and Communication Aids

As with all airports, Nephi Municipal Airport functions within the local, regional, and national system of airports and airspace. The following narrative provides a brief description of the Airport's role as an element within these systems.

Air Traffic Service Areas and Aviation Communications

Within the continental United States, there are some 21 geographic areas that are under Air Traffic Control (ATC) jurisdiction. Air traffic services within each area are provided by air traffic controllers in Air Route Traffic Control Centers (ARTCCs). The ARTCCs provide air traffic service to aircraft operating on IFR flight plans within controlled airspace, and primarily during the en route phase of flight. The airspace overlying Nephi Municipal Airport is contained within the Salt Lake City ARTCC jurisdiction, and this coverage area includes the airspace in portions of Utah, Nevada, Oregon, Idaho, and Wyoming.

Terminal Radar Approach Control (TRACON) facilities utilize air traffic controllers and radar to direct aircraft during the departure, descent, and approach phases of flight that are transitioning to or from the en route phase of flight. Once an arriving aircraft is within the destination airport's airspace, and that airport has an air traffic control tower (ATCT), the aircraft is handed off by the TRACON to the local air traffic controller. Aircraft that are approaching or departing an airport are subject to air space and air traffic control designed to serve one primary purpose, the safe separation of one aircraft from another. There are two basic flight regimes: those operating under Instrument Flight Rules (IFR) that depend on air traffic controllers for separation and those operating under Visual Flight Rules (VFR) that depend primarily on the "see and be seen" principle for separation.

Aircraft operating under VFR conditions may contact the ARTCC, the TRACON, or the local air traffic control tower (ATCT) and request traffic advisory services. Traffic advisory service is used to alert pilots of other air traffic known in the vicinity of or within the flight path of the aircraft. Because Nephi Municipal Airport currently offers only visual approaches to the Airport and does not have an ATCT, VFR traffic operating into and out of Nephi Municipal Airport should broadcast their intentions on the CTAF/UNICOM frequency.

The primary means of controlling aircraft employed by air traffic controllers is computerized radar systems that are supplemented with two-way radio communications. Altitude assignments, speed adjustments, and radar vectors are examples of techniques used by controllers to ensure that aircraft maintain proper separation. The specified lateral and vertical separation criteria for aircraft used by controllers are as follows:

- **Lateral Aircraft Separation: three miles (radar environment)**
- **Lateral Aircraft Separation: five miles (non-radar environment)**
- **Vertical Aircraft Separation: 1,000 feet (below 29,000 feet) and 2,000 feet (29,000 feet and above)**

In early 2008, the FAA authorized the installation of a new air surveillance radar (ASR) system at Provo Municipal Airport. The ASR will allow air traffic controllers in both Provo and Salt Lake City to improve the monitoring of aircraft at each facility by eliminating the exiting radar shadow that exists below 10,000 feet at Provo and southern Utah County for the Salt Lake City controllers. This additional radar coverage will also benefit aircraft operators at Nephi Municipal Airport for both the existing VFR traffic and future approach/departure services.

Nephi Municipal Airport can be found on the Las Vegas sectional aeronautical chart. Aviation communication facilities associated with the Airport include the Common Traffic Advisory Frequency (CTAF)/UNICOM on frequency 122.8.

Airspace

The local airspace surrounding Nephi Municipal Airport is uncontrolled, which is designated as Class G airspace. As a general rule, no air traffic control services are provided; however, traffic advisories may be issued on a workload permitting basis. Based upon the Airport's current efforts to establish an instrument approach procedure (IAP), the existing Class G airspace surrounding the Airport would have to be re-designated to Class E airspace, which applies to general controlled airspace and control zones at airports without air traffic control towers. The Class E Airspace is typically represented as a five (5) statute mile radius circular area around the Airport and includes any extension necessary to include instrument approach and departure paths. Class E Airspace includes the controlled airspace extending upward from 700 feet to 1,200 feet above the airport

elevation. These areas are generally designated at outlying airports with low activity and with non-precision instrument approach procedures.

Navigational Aids

A variety of navigational facilities is currently available to pilots around Nephi Municipal Airport, whether located at the field or at other locations in the region. Many of these navigational aids are available to en-route air traffic as well. The navigational aids (NAVAIDS) available for use by pilots in the vicinity of the Nephi Municipal Airport are VORTAC and VOR/DME facilities.

A VORTAC (VHF Omnidirectional Range/Tactical Air Navigation) is a ground-based electronic navigation aid transmitting very high frequency signals, 360 degrees in azimuth oriented from magnetic north, with equipment used to measure, in nautical miles, the slant range distance of an aircraft from the navigation aid. A VORTAC provides VOR azimuth, TACAN azimuth, and TACAN distance measuring equipment (DME) at one site. The Delta VORTAC (116.1) is located approximately 39 nautical miles southwest of the Airport and the Fairfield VORTAC (116.6) is located approximately 31 nautical miles north-northwest of the Airport.

A VOR/DME system is a Very High Frequency Omnidirectional Range Station with Distance Measuring Equipment transmitting very high frequency signals, 360 degrees in azimuth oriented from magnetic north. This DME equipment is used to measure, in nautical miles, the slant range distance of an aircraft from the navigation aid. The Provo Terminal VOR/DME (108.4) is located approximately 30 nautical miles north of the Airport.

There is also a network of low-altitude published federal airways (i.e., Victor airways) in the vicinity of Nephi Municipal Airport, which traverse the area and span between the regional ground-based VOR/DME and VORTAC equipment. Victor airways include the airspace within parallel lines located four NMs on either side of the airway and extend 1,200 feet above the terrain to, but not including, 18,000 feet AMSL. When an aircraft is flying on a federal airway below 18,000 feet AMSL, the aircraft is operating within Class E airspace. In addition, several existing visual navigational aids are located on the Airport and available to pilots. These include a rotating beacon and a lighted wind cone with segmented circle, located on the east side of the Airport and north of the general aviation apron area. Each runway end is also equipped with PAPIs, which provide descent guidance for the visual segment of the approach, and are configured for a 3.0-degree glide path angle.

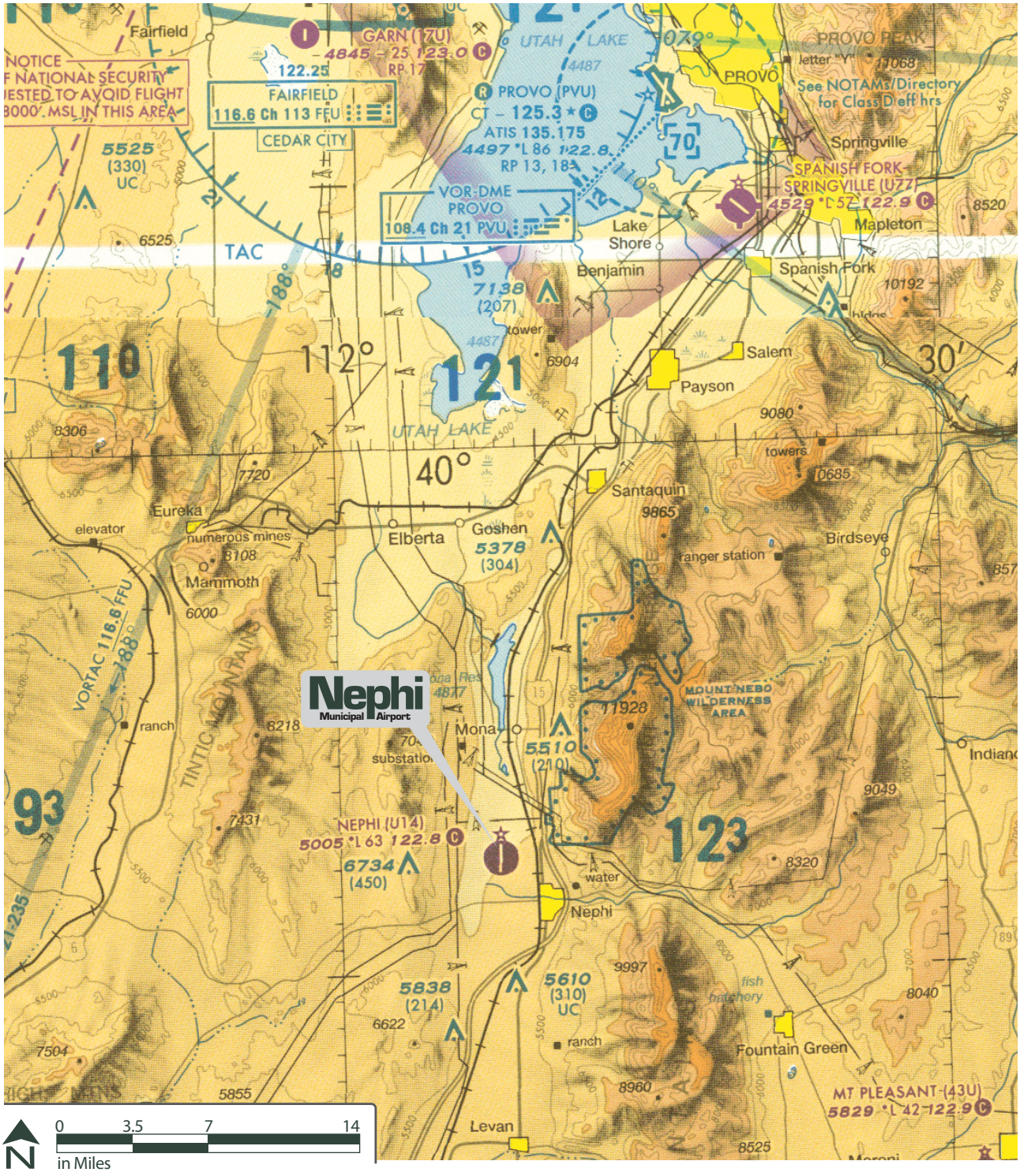

Figure A6 Airspace/NAVAIDS Summary

Source: Sectional Charts, Salt Lake City 79 South & Las Vegas 79 South, Volume 0804, April 2008.

En route VFR traffic operating at Nephi Municipal Airport may utilize all of the previously mentioned en route NAVAIDs in addition to dead reckoning and visual navigation. Upon entering the terminal area the abovementioned visual NAVAIDs provide additional guidance to the runway ends and touchdown zones. Aircraft operating within the airport traffic pattern follow standard left hand traffic patterns for each runway end, and as identified previously, only visual approaches are currently available at the Airport. The approximate boundary location of these established traffic patterns are presented in the following figure, entitled *EXISTING AIRPORT TRAFFIC PATTERNS*.

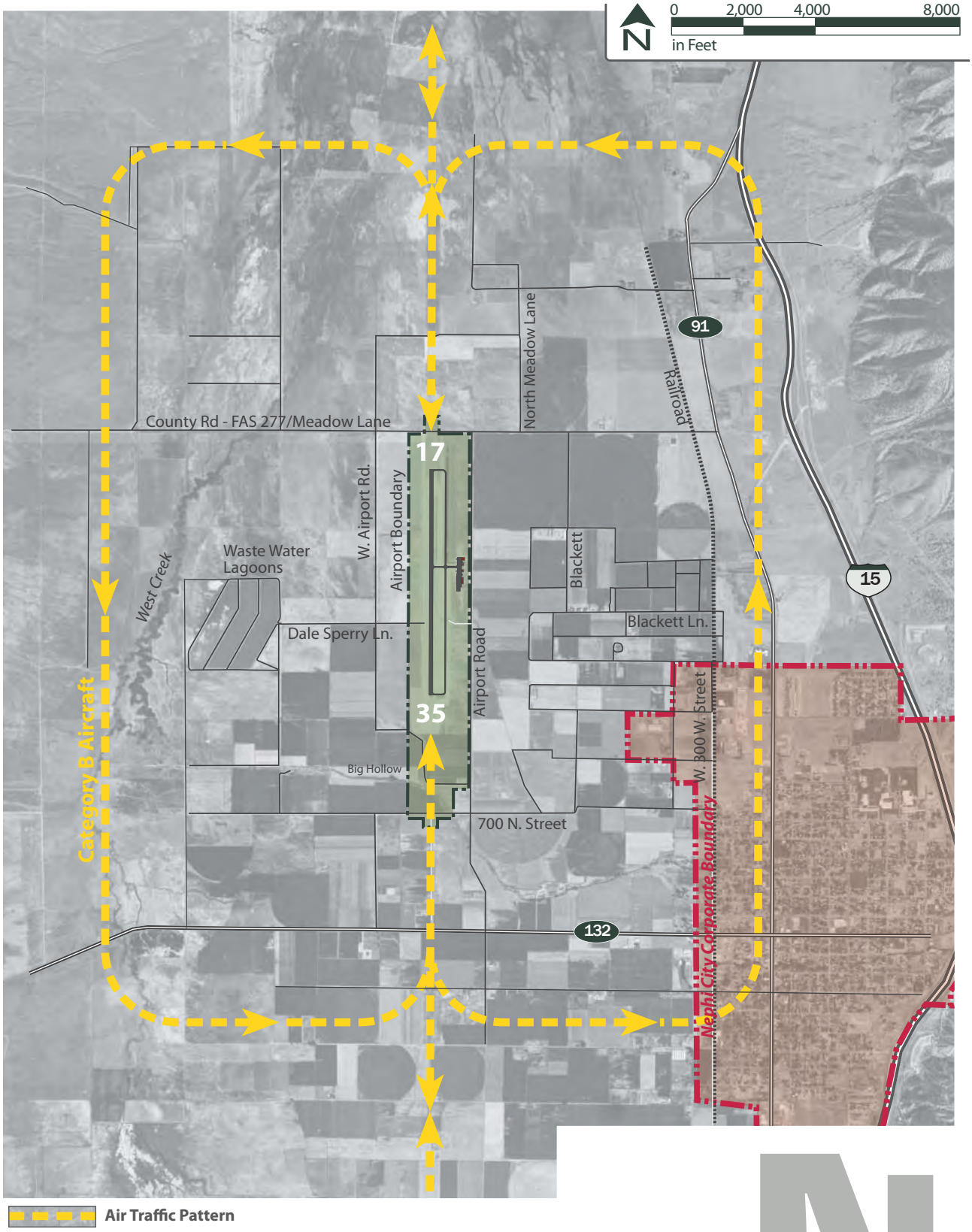

Figure A7 Existing Airport Traffic Patterns

Source: Figure 6-3-11 Traffic Pattern Airspace from Order JO 7400.26, Procedures for Handling Airspace Matters.

Nephi Municipal Airport

Airports Inventory

An airport service area evaluation has been prepared, which identifies surrounding airports relative to Nephi Municipal Airport (within an approximate 30-mile radius) and assesses their existing role, airside facilities/services, and operational data. Four public-use airports[4] (Manti-Ephraim Airport, Mount Pleasant Airport, Spanish Fork-Springville Airport, and Provo Municipal Airport) have been identified for analysis and are presented in Figure A6, entitled *SURROUNDING AIRPORTS INVENTORY (30-MILE RADIUS).* The following table, entitled *PUBLIC USE AIRPORTS WITHIN A 30-MILE RADIUS,* summarizes and compares the information compiled for the four surrounding public use airports with the existing data for Nephi Municipal Airport. This information will be utilized to assess the varying degrees of influence that surrounding airports have on Nephi Municipal Airport's demand for aviation-related services.

The four public-use airports are described as follows:

Manti-Ephraim Airport (41U). Elevation of 5,500 feet AMSL and coordinates of 39° 19' 44.86" N, 111° 36' 52.70" W. The Airport consists of one paved runway. Runway 3/21 is 4,584 feet long, 75 feet wide, constructed of asphalt with a porous friction course surface treatment and equipped with MIRLs. This airport does not have any published instrument approaches. Manti-Ephraim Airport recorded approximately 900 aircraft operations in 2004, and currently has three based single-engine aircraft. The airport services include hangar and tiedown storage for transient aircraft.

The available facilities include a rotating airport beacon, CTAF/Unicom, and segmented circle. Manti-Ephraim Airport is located approximately 27 NMs southeast of Nephi Municipal Airport.

Mount Pleasant Airport (43U). Elevation of 5,829 feet AMSL and coordinates of 39° 28' 28.86" N, 111° 28' 30.67" W. The Airport consists of one paved runway, Runway 2/20. Runway 2/20 is 4,260 feet long, 60 feet wide, constructed of asphalt and equipped with MIRLs. This airport currently does not have any published instrument approaches. For 2006, 43N recorded approximately 2,275 operations and currently has nine single-engine based aircraft and two ultra-lights (11 total based aircraft). The airport services include tiedown storage for transient aircraft. The available facilities include a rotating airport beacon, CTAF, and a lighted wind indicator. Mount Pleasant Airport is located approximately 22 NMs southeast of Nephi Municipal Airport.

[4] There were no military or private-use airports located within the 30-mile radius.

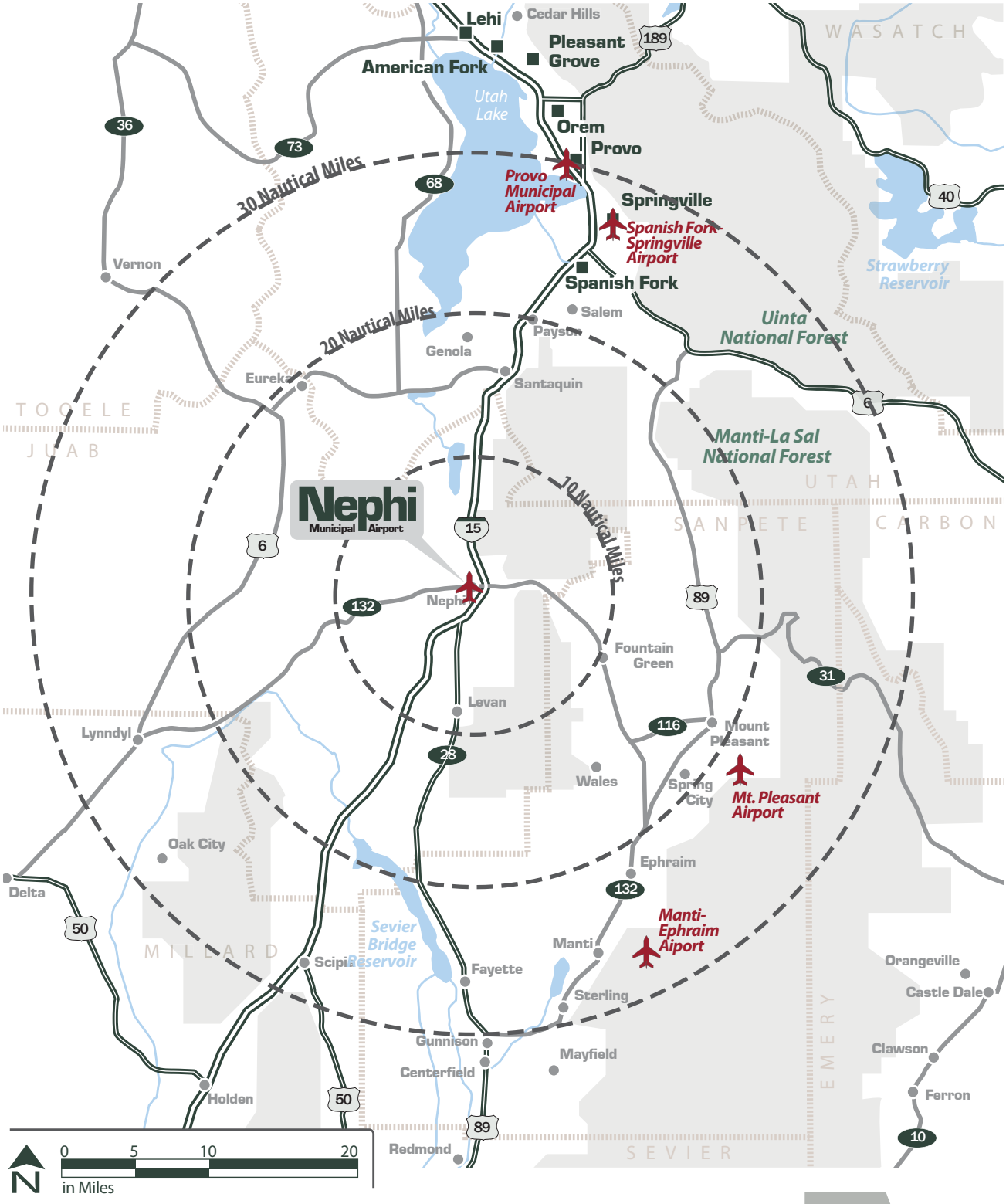

Figure A8 Surrounding Airports Inventory (30-Mile Radius)

Source: Google Earth, April 2008.

Nephi Municipal Airport

Spanish Fork-Springville Airport (U77). Elevation of 4,529 feet AMSL and coordinates of 40° 08' 29.83" N, 111° 39' 40.72" W. The Airport consists of one paved runway, Runway 12/30. Runway 12/30 is 5,700 feet long, 100 feet wide, constructed of asphalt and equipped with MIRLs. This airport currently does not have any published instrument approaches. For 2005, U77 recorded approximately 52,700 aircraft operations and currently has 111 based aircraft (86 single-engine, 15 multi-engine, five helicopters, three gliders, and two ultra-light aircraft). The airport services include fuel sales, tiedown and hangar storage for transient aircraft, major airframe and powerplant service, and bulk oxygen. The available facilities include a rotating airport beacon, CTAF, lighted wind indicator, and a segmented circle. Spanish Fork-Springville Airport is located approximately 26 NMs north of Nephi Municipal Airport.

Provo Municipal Airport (PVU). Elevation of 4,497 feet AMSL and coordinates of 40° 13' 09.10" N, 111° 43' 24.10" W. The Airport consists of two paved runways, Runway 13/31 and Runway 18/36, and one helipad, Helipad H1. Runway 13/31 is 8,599 feet long, 150 feet wide, constructed of asphalt with a porous friction course surface treatment and is equipped with HIRLs and PAPIs. Runway 18/36 is 6,614 feet long and is 150 feet wide, constructed of asphalt and is equipped with MIRLs and PAPIs. Helipad H1 is 40 feet long by 40 feet wide, and is constructed of concrete. Runway 13 has four published instrument approaches (Runway 13 ILS or LOC/DME, RNAV (GPS), VOR/DME, VOR). For 2007, Provo Municipal Airport recorded approximately 172,000 aircraft operations and currently has 166 based aircraft (120 single-engine, 25 multi-engine, four jets, and 17 helicopters). The airport services include fuel sales, tiedown and hangar storage for transient aircraft, major airframe and powerplant service, bottled and bulk oxygen, air ambulance, charter, flight instruction, aircraft rentals, and aerial surveillance. The available facilities include a rotating airport beacon, CTAF, AWOS, lighted wind indicator, segmented circle, and a control tower. Provo Municipal Airport is located approximately 30 NMs north of Nephi Municipal Airport.

Table A3
PUBLIC USE AIRPORTS WITHIN A 30-MILE RADIUS

Airport Name	City	Airport Identifier	Distance To U14	Transient Aircraft Storage	Total Based Aircraft	SE	ME	Jet	HC	UL	GL	Average Operations Per Day	Airport Ownership	Airport Use	ATCT	IAP
Nephi Municipal Airport	Nephi	U14	---	Tiedowns & Hangars	**10***	7	1	0	2	0	0	17	Nephi City	Public	No	No
Manti-Ephraim Airport	Manti	41U	27NMs SE	Tiedowns & Hangars	**3**	3	0	0	0	0	0	2	Manti City & Ephraim City	Public	No	No
Mount Pleasant Airport	Mount Pleasant	43U	22 NMs SE	Tiedowns	**11**	9	0	0	0	2	0	6	Mt Pleasant City	Public	No	No
Spanish Fork-Springville Airport	Spanish Fork	U77	26 NMs N	Tiedowns & Hangars	**111**	86	15	0	5	2	3	144	Spanish Fork City & Springville City	Public	No	No
Provo Municipal Airport	Provo	PVU	30 NMs N	Tiedowns & Hangars	**166**	120	25	4	17	0	0	471	Provo City	Public	Yes	Yes

Sources: Website airnav.com, FAA Form 5010-1, *Airport Master Record*, and Nephi Municipal Airport Staff.
* FAA National Based Aircraft Inventory Program, 2007.

Notes: SE: Single-Engine (piston and turboprop)
ME: Multi-Engine (piston and turboprop)
Jet: Business Jet
HC: Helicopter
UL: Ultralight
GL: Glider
ATCT: Airport Traffic Control Tower
IAP: Instrument Approach Procedure

Airport Environs

Nephi Municipal Airport is located outside the city limits of Nephi and is entirely within the Juab County jurisdiction. Because the operation of an airport influences surrounding land use, and surrounding land use has an influence on the operation of an airport, it is critical to document the existing and proposed land use types in the area near the Airport. The following text and illustrations describe existing land use and existing zoning within the Nephi Municipal Airport environs.

Existing Land Use

The existing land uses in the general vicinity of the Airport primarily follow the existing zoning patterns of Juab County and Nephi City, and are illustrated on Figure A9 entitled *GENERALIZED EXISTING LAND USE*. The existing land use for airport property is categorized as Industrial, with primarily agricultural uses surrounding the Airport that include scattered rural residential development located north, northeast, east, southeast, and south of the Airport. There are no noise sensitive land uses (e.g., churches, schools, or hospitals) located within the immediate environs of the Airport, and the City's existing waste water treatment plant is located less than one mile west of the Airport.

Additionally, two small Wildlife Management Areas (WMAs), which are the Burraston Ponds WMA and Nephi WMA, are located within the airport vicinity. The Burraston Ponds WMA, located within Juab County, approximately one mile south of the Mona Reservoir (approximately six miles north of the Airport) contains approximately 180 acres, with three ponds within the center of the Juab Valley that discharge flows intercepted by nearby springs into Currant Creek. The Nephi WMA located less than two miles northwest of the Airport, contains approximately 152 acres, supporting emergent marsh along West Creek, an extensive wet meadow complex, and riparian habitats.

Existing Zoning

Figure A10, *GENERALIZED EXISTING ZONING,* provides a graphic summary of the land use zoning pattern in the area surrounding the Airport. The area illustrated encompasses portions of Juab County and Nephi City, with the map depicting the generalized zoning for each jurisdiction.

Zoning is the public regulation of the use of land. It involves the adoption of ordinances that divide a community into various districts or zones. Each district will allow a certain use of land within that zone, such as residential, commercial, and industrial (and many others). Typical zoning regulations address things such as the height of a building, number of people that can occupy a building, lot area, setbacks, parking, signage, and density.

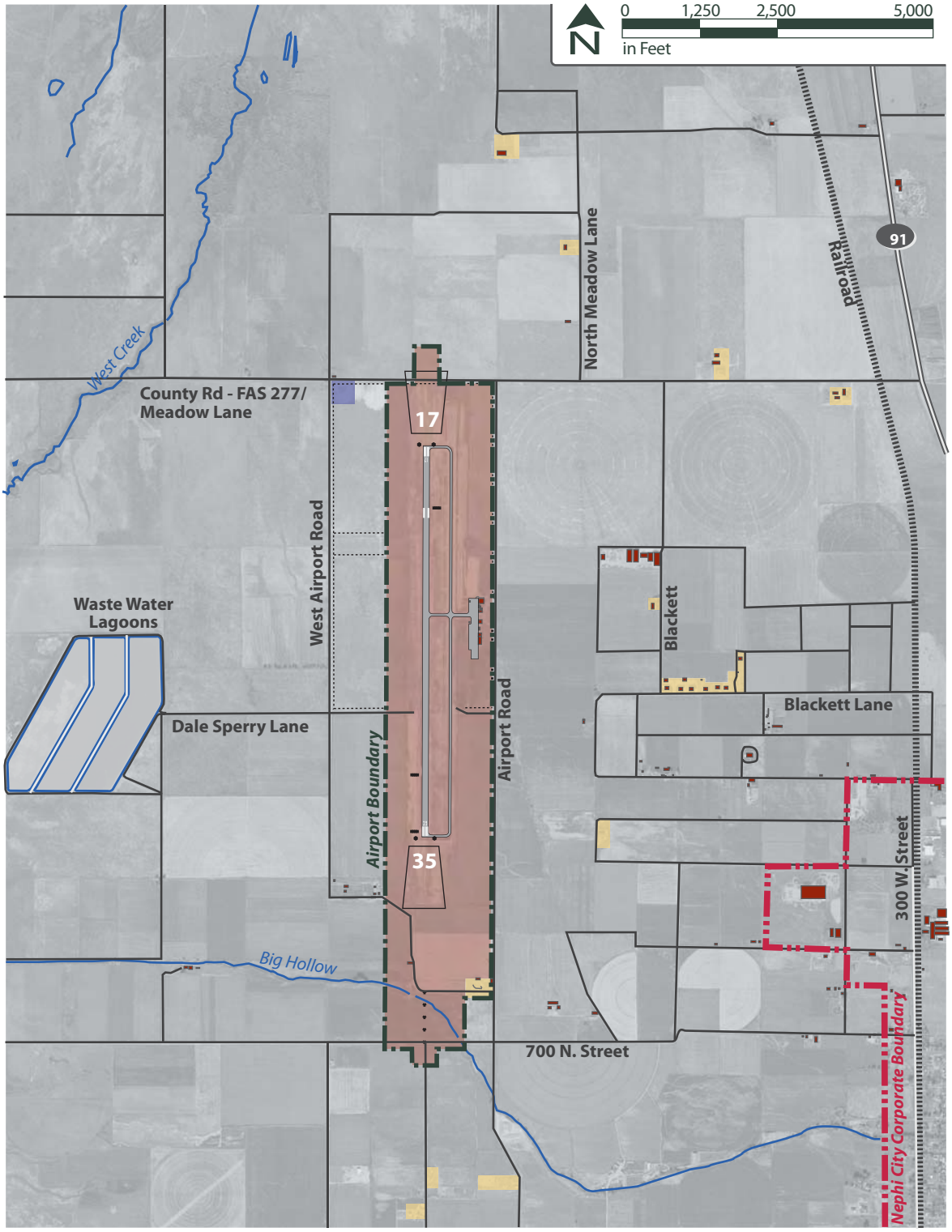

Figure A9 Generalized Existing Land Use

Source: Juab County Planning Department & Nephi City.

Nephi Municipal Airport

Reviews of the existing zoning designations in the vicinity of the Airport reflect a combination of Industrial and Agricultural districts for airport property. The Airport itself and land immediately surrounding the Airport to the east, south, and west are zoned as Industrial. The majority of the land surrounding the Airport is generally categorized as Agricultural with development density requirements for single family residential uses that range from one lot of 50 to 160 acres. Residential zoning occurs to the northeast and southeast of the Airport. There is also an area of Highway Commercial zoning south of the Airport, with a portion of the Nephi City corporate boundary located southeast of the Airport and represented by a combination of three city zoning districts.

In addition, Juab County has established an airport overlay zoning regulation that limits the height of objects within the area surrounding the Airport in the interest of the health, safety, and general welfare of the County, and to promote and preserve the function and utility of airport and aircraft activities within appropriate areas. The use of the land within an airport overlay zone affects the safe and efficient operation of the Airport and aircraft that use the Airport, as well as affects the influences from airport operations such as noise, vibrations, fumes, dust, smoke, fuel particles, and other annoyances. These overlay zoning guidelines are specified within the Juab County Land Use Code, Section 12-1-27 Airport Protection.

The Airport Height Zoning Map for Nephi Municipal, which will be included in Appendix One for reference, is made up of five (5) zones (i.e., *Runway Non-Precision Instrument Approach Zone, Runway Precision Instrument Approach Zone, Transition Zone, Horizontal Zone, and Conical Zone)*. In addition, an excerpt from the Juab County Land Use Code, describing the height limitations within each zone, is also included in Appendix One.

It should also be noted that the Wasatch Front Regional Council has published a guide, entitled *Compatible Land Use Planning Guide for Utah Airports*, to provide airport sponsors with a quick reference resource for land use compatibility issues, and to ensure FAA grant-in-aid program compliance (i.e., grant assurances) regarding the compatible use of land adjacent to, or in the vicinity of, the Airport. This planning guide utilizes a series of "planning templates" that have been established to identify development guidelines (i.e., No Development, Limited Development, and Controlled Development) within the defined airport influence area. These guidelines also provide recommendations for development densities that are designed to balance the need for protection of the Airport and the safety, including the quality of life, for property owners within the airport influence area. At present, the underlying county zoning in the vicinity of the Airport does a reasonable job in protecting the facility from the encroachment of incompatible land uses.

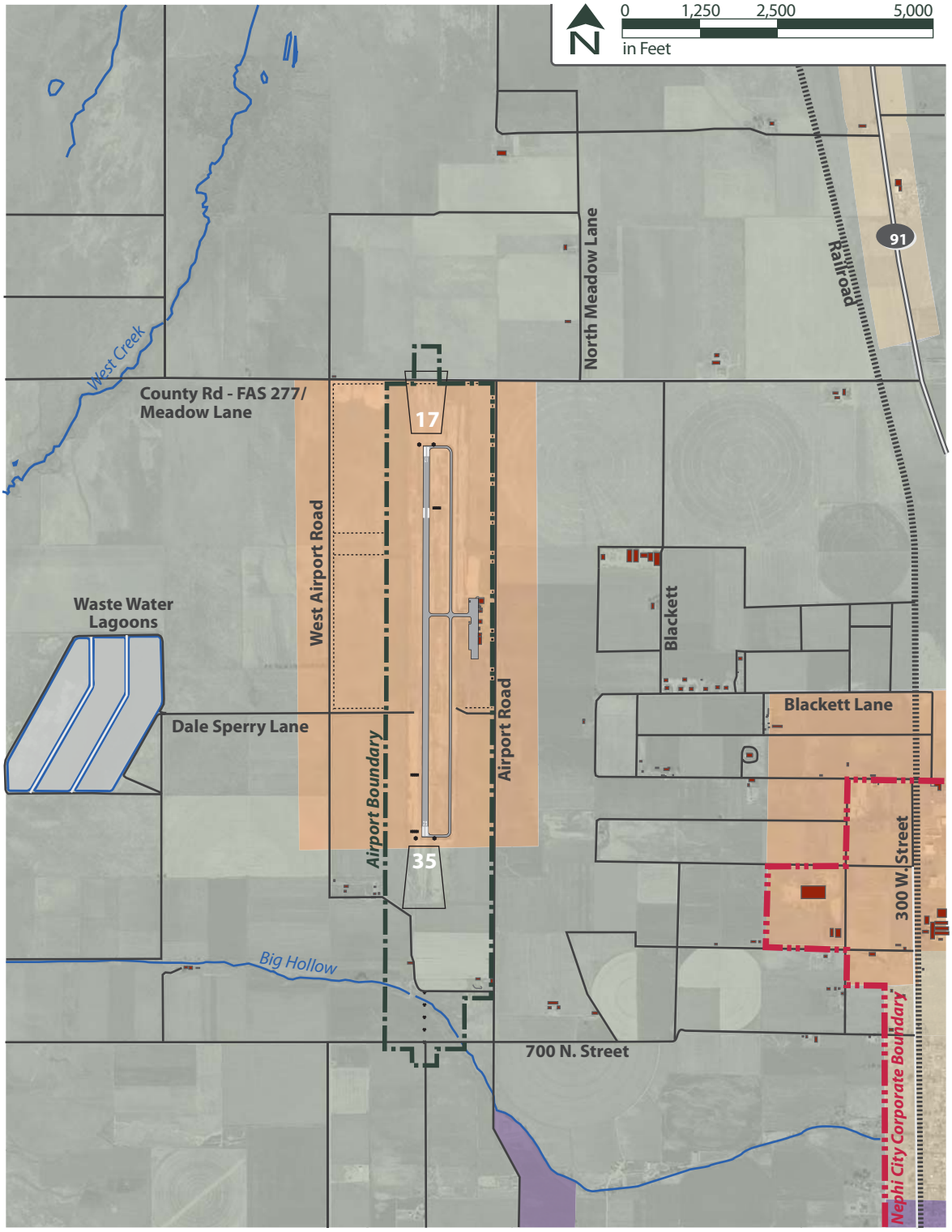

Figure A10 Generalized Existing Zoning

Source: Juab County Planning Department & Nephi City.

Nephi Municipal Airport

Environmental Review Inventory

The consideration of environmental factors during the airport planning process is necessary to provide the airport sponsor with enough information to help expedite any subsequent environmental processing that may be required in support of airport development projects. A brief description of the various impact categories is identified in the text below.

Noise and Compatible Land Use

Noise is generally defined as unwanted sound, and, as such, the determination of acceptable levels is subjective. The basic unit in the computation of day-night sound level (DNL) is the Sound Exposure Level (SEL). An SEL is computed by adding the decibels adjusted dB(A) level for each second of a noise event above a certain threshold. For example, a noise monitor located in a quiet residential area [40 dB(A)] receives the sound impulses of an approaching aircraft and records the highest dB(A) reading for each second of the event as the aircraft approaches and departs the site. Each of these one-second readings is then added logarithmically to compute the SEL.

The computation of DNL involves the adding, weighting, and averaging of each SEL to achieve the DNL level in a particular location. The SEL of any single noise event occurring between the hours of 10:00 p.m. and 7:00 a.m. is automatically weighted by adding 10 dB(A) to the SEL to account for the assumed additional irritation perceived during that time period. All SELs are then averaged over a given time period (day, week, year) to achieve a level characteristic of the total noise environment. DNL levels usually are depicted as grid cells or contours. Grid cells are squares of land of a specific size that are entirely characterized by a noise level. Contours are interpolations of noise levels based on the centroid of a grid cell and drawn to connect all points of similar level. Contours appear similar to topographical contours and form concentric "footprints" about a noise source. These footprints of DNL contours drawn about an airport are used to predict community response to the noise from aircraft using that airport.

Hazardous Wildlife Attractants

As mentioned previously, the City's existing waste water treatment plant is located less than one mile west of the Airport. The Burraston Ponds WMA is located approximately six miles north of the Airport, and the Nephi WMA is located less than two miles northwest of the Airport. Retention and settling ponds, recreational use ponds, wastewater and storm water treatment facilities, ponds resulting from mining activities, and drinking water intake and treatment facilities can frequently attract large numbers of potentially hazardous wildlife, such as birds.

According to FAA Advisory Circular 150/5200-33-B, *Hazardous Wildlife Attractants On or Near Airports,* the FAA recommends that minimum separation criteria be established between the air operations area (AOA) and certain land uses that can potentially attract hazardous wildlife. Any solid waste disposal facility (i.e. sanitary landfill) or water management facility (i.e. wastewater treatment facilities, storm water management facilities, etc.) located within 5,000 feet of all runways planned to be used by piston-powered aircraft, or within 10,000 feet of all runways planned to be used by turbine aircraft, is considered by the FAA to be an incompatible land use because of the potential for conflicts between bird habitat and low-flying aircraft.

For Nephi Municipal Airport, the 10,000-foot separation criteria would be applicable, and this criterion is presented on the following illustration, entitled *HAZARDOUS WILDLIFE ATTRACTANT BOUNDARY MAP*. However, the 1996 Environmental Assessment (EA) concluded that since the Airport is not located directly between the waste water treatment plant and the existing wildlife areas northwest of the Airport, and the fact that no bird strikes have been reported in the vicinity of the Airport, the existing less-than-standard separation criteria was determined to be not significant. In addition, it was concluded that the Airport's location would not impact Nephi City's future ability to expand the existing waste water treatment facility in the future; however, the City should incorporate measures, developed in consultation with a wildlife damage management biologist, to minimize hazardous wildlife attractants.

Air and Water Quality

The U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for six criteria air pollutants: carbon monoxide (CO), ozone (O_3), particulate matter (PM_{10}), sulfur dioxide (SO_2), oxides of nitrogen (NO_x), and lead (Pb). According to the EPA, the area is currently in compliance with all National Ambient Air Quality Standards (NAAQS). The closest non-attainment area is Provo, Utah, which is approximately 42 miles from the Airport. Generally, the FAA uses the number of passengers and number of aviation operations as an indicator of potential air quality concerns. These numbers help decide whether the project requires further air quality analysis. Federal Aviation Administration Order 5050.4A states, "No air quality analysis is needed if the Airport is a commercial service airport and has less than 1.3 million passengers and less than 180,000 general aviation operations forecasts annually." The forecast operations by the end of the 20-year planning period (20,112) are far below the threshold required to do an air quality analysis. Short-term air quality impacts may be expected from temporary construction activities such as heavy equipment pollutant emissions, fugitive dust resulting from cut and fill activities, and the operation of portable concrete batch plants. Compliance with all applicable local, state, and federal air quality regulations and permitting requirements will be the responsibility of all contractors.

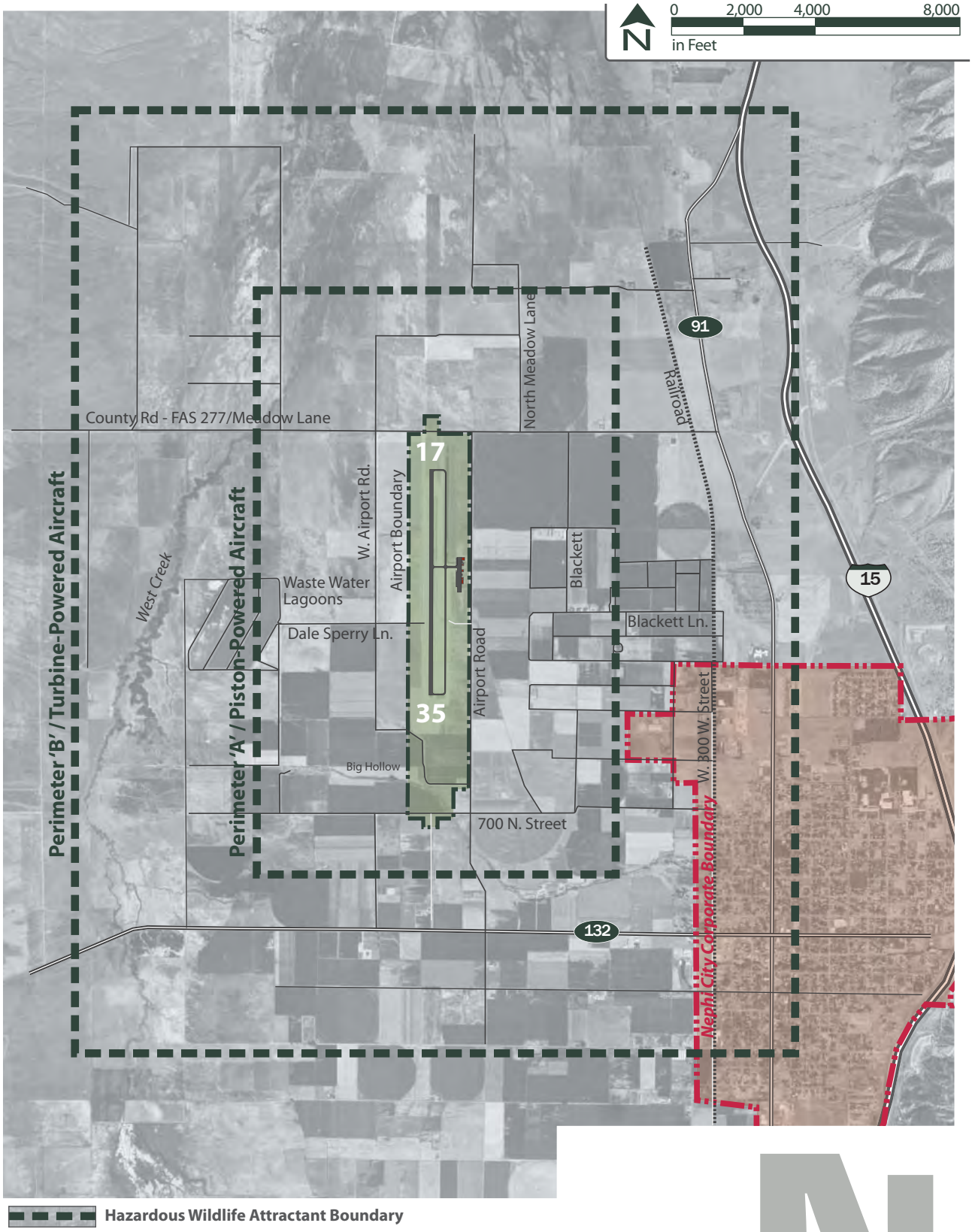

Figure A11 Hazardous Wildlife Attractant Boundary Map

Source: "Hazardous Wildlife Attractants On or Near Airports", AC No. 150/5200-33B, dated 8/28/2007.

Nephi Municipal Airport

Contractors doing work at the Airport will be required to follow guidelines outlined in the Federal Aviation Administration's Advisory Circular 150/5370-10A, *Standards for Specifying Construction of Airports*, which is the FAA's guidance to airport sponsors concerning protection of the environment during construction. The final plans and specifications for any project will incorporate the provisions of AC 150/5370-10A to ensure minimal impact due to erosion, air pollution, sanitary waste, and the use of chemicals. Additionally, a National Pollutant Discharge Elimination System (NPDES) permit, administered by the Utah Department of Environmental Quality, may be required for construction projects.

Historical, Architectural, Archaeological, and Cultural Resources

Section 106 of the National Historic Preservation Act requires federal agencies, or their designated representatives, to take into account the effects of their undertakings on historic properties, which include archaeological sites, buildings, structures, objects, or districts. Several sites in Nephi are listed on the National Register of Historic Places (NRHP). None of these sites is close to airport property. The National Register lists one restricted site in Nephi, which could potentially be located within the airport vicinity. In addition, a cultural resource survey was conducted as an element of the 1996 Environmental Assessment (EA). Two archaeological sites, a prehistoric lithic and ground stone scatter and a historic trash scatter were located during the survey, but none of the sites were found to meet the eligibility requirements of the NRHP.

Prior to any major airport projects in the future, the Utah Division of State History, Historic Preservation Office will need to be contacted. Additionally, should any construction activity expose buried archaeological material, work would stop in that area, and both the FAA and the Utah Division of State History will be contacted.

Threatened and Endangered Species

The *Endangered Species Act*, as amended, requires each federal agency to ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat of such species. According to the U.S. Fish and Wildlife Service (USFWS), there are 42 threatened and endangered species (plants and animals) located within the state of Utah. Table A5, *JUAB COUNTY FEDERALLY LISTED WILDLIFE SPECIES OR SPECIES OF SPECIAL CONCERN*, lists the candidate species or federally listed species (under the *Endangered Species Act*) and species of concern within Juab County. Before any major projects could be undertaken, the Airport would need to determine if these threatened and endangered species are located on Airport property, within the proposed project area. If the species are found to be present, and depending on potential impact, an

Environmental Assessment or Environmental Impact Statement may have to be prepared prior to project implementation.

Table A4
JUAB COUNTY FEDERALLY LISTED WILDLIFE SPECIES OR SPECIES OF SPECIAL CONCERN

Common Name	Scientific Name	State Status
American White Pelican	*Pelecanus erythrorhynchos*	SPC
Bald Eagle	*Haliaeetus leucocephalus*	S-ESA
Bobolink	*Dolichonyx oryzivorus*	SPC
Burrowing Owl	*Athene cunicularia*	SPC
California Floater	*Anodonta californiensis*	SPC
Dark Kangaroo Mouse	*Microdipodops megacephalus*	SPC
Eureka Mountainsnail	*Oreohelix eurekensis*	SPC
Ferruginous Hawk	*Buteo regalis*	SPC
Fringed Myotis	*Myotis thysanodes*	SPC
Grasshopper Sparrow	*Ammodramus savannarum*	SPC
Greater Sage-Grouse	*Centrocercus urophasianus*	SPC
Kit Fox	*Vulpes macrotis*	SPC
Leatherside Chub	*Gila copei*	SPC
Lewis's Woodpecker	*Melanerpes lewis*	SPC
Long-billed Curlew	*Numenius americanus*	SPC
Pygmy Rabbit	*Brachylagus idahoensis*	SPC
Short-eared Owl	*Asio flammeus*	SPC
Three-toed Woodpecker	*Picoides tridactylus*	SPC
Townsend's Big-eared Bat	*Corynorhinus townsendii*	SPC
Utah Physa	*Physella utahensis*	SPC
Western Toad	*Bufo boreas*	SPC
Yellow-billed Cuckoo	*Coccyzus americanus*	S-ESA

Source: State of Utah Natural Resources, Division of Wildlife Resources – Utah Conservation Data Center.

Wetlands

Wetlands are basically defined as areas inundated by surface or groundwater with a frequency sufficient to support vegetation or aquatic life requiring saturated or seasonally saturated soil conditions for growth and reproduction. The airport terrain generally slopes to the north and northwest. Several drainage swales are located on airport property, west of the runway, with extensive growth which serves as erosion control. Potential wetlands located within the airport vicinity include West Creek, which is located approximately one mile northwest of the Airport, and

Big Hollow channel, which intersects airport property and is approximately 2,500 feet south of the Runway 35 threshold. In 2007, the U.S. Army Corps of Engineers verified jurisdiction of three channels within the Nephi area to be Waters of the U.S., regulated under Section 404 of the *Clean Water Act*[5]. This jurisdiction includes the entirety of the Big Hollow channel.

In addition, the 1996 Environmental Assessment (EA) indicated that a small wet-meadow wetland was identified on the north end of airport property (See Appendix Two for mapping of the wetland from the 1996 EA). This wet-meadow wetland area contains approximately 0.1 acres of wetlands. Additionally, a canal area is located on the south end of the Airport, and is hydrologically supported by water for irrigation purposes. However, the 1996 EA indicated that no channels were identified as waters of the U.S. within the area.

If any proposed projects would impact these wetlands, the Airport will coordinate with the U.S. Army Corps of Engineers, and some further environmental analysis may be necessary. Should there be any mitigation measures identified, contractors would be required to follow guidelines outlined in the FAA's AC 150/5370-10A to minimize the impacts to the environment, including wetlands.

Farmland

According to the National Soil Survey by the National Resources Conservation Service (NRCS), there are several areas of land on and surrounding the Airport that are considered to be prime farmland and farmland of statewide importance.

The north sections of land within airport property are composed of Benjamin silty clay loam, Musinia silty clay loam (moist), zero to two percent slopes, and Hansel silt loam, zero to two percent slopes. The soil types found on the southern area of the Airport are Musinia silty clay loam (moist), zero to two percent slopes, and Juab loam, zero to two percent slopes. Benjamin silty clay loam and Hansel silt loam are considered farmland of statewide importance, and Juab loam and Musinia silty clay loam, if irrigated, are considered to be prime farmland. All of these soils are located on Airport property, and online mapping of the property from the Natural Resources Conservation Service (NRCS) website was generated and is included for reference in Appendix Two.

[5] Letter received from the U.S. Department of the Army, Corps of Engineers, April 13, 2007. Verification of the waters of the U.S. jurisdictional determination is valid for five years. Waters of the United States (below the ordinary high watermark) include the Salt Creek channel (from the headwaters to the Old North Diversion inlet), the Old North Diversion channel, and the entirety of the Big Hollow channel. These waters are tributaries of Utah Lake, which verifies regulation under the *Clean Water Act*, Section 404.

Consultation with the U.S. Department of Agriculture (USDA) and the NRCS is required to determine if the Farmland Protection Policy Act (FPPA) applies to the land or applies to any land to be converted from non-agricultural use as a result of any proposed projects.

Floodplains

Executive Order 11988 directs federal agencies to take action to reduce the risk of flood loss, minimize the impact of floods on human safety, health, and welfare, and restore and preserve the natural and beneficial values served by floodplains. The Airport is not located within a designated 100-year floodplain.

Section 4(f) Property

Section 4(f) of the Department of Transportation Act (recodified at 49 USC, Subtitle I, Section 303) provides that no publicly-owned park, recreation area, wildlife or waterfowl refuge, or land of a historic site that is of national, state, or local significance will be used, acquired, or affected by programs or projects requiring federal assistance for implementation. Currently, there are no Section 4 (f) potential resources within the immediate vicinity of the Airport.

Financial Inventory

The primary goal of this task is to gather materials that summarize the financial management of the Airport. In addition, it is important to develop an understanding of the financial structure, constraints, requirements and opportunities for airport activities as related to the development of a capital improvement program. The documents that have been gathered and reviewed for this financial inventory will be used to formulate a reasonable and financially sound Capital Improvement Program (CIP) with which to fund projects identified in the master planning process.

An airport is both a public service and a business and must be operated as both. Financial assistance to public airports is often provided by city, county, state, federal, and private sources where available. In return, the Airport provides jobs, promotes development, and supplies economic benefits to the area that it serves, as well as providing a major element of the public transportation system. This is the public service component. From a business standpoint, the Airport has the ability to generate certain revenues and, therefore, the obligation to do so. The most successful and satisfactory method of accomplishing this is through a combination of fair and equitable fees and charges associated with the use of airport facilities. It is a federal requirement that airport-generated revenues be used at the Airport. Airport revenues can be derived from leases, rental rates, airfield fees and charges, airlines, cargo operators, and other operating revenue.

In consideration of these issues, the Airport's financial statements have been gathered for fiscal years 2004 through 2008. An initial review of the financial documentation for the Nephi Municipal Airport (see Table A5 below) indicates that the facility has operated with a mostly positive cash flow, excluding depreciation, for each of the past five years. Major sources of revenue for the Airport include: hangar leases, ground space leases, and fuel flowage royalties.

Table A5
REVENUE AND EXPENSE SUMMARY, 2004-2008

Year	Operating Revenues	Non-Operating Revenues (1)	Operating Expenses (2)	Non-Operating Expenses	Net Income / (Loss)
2004	$10,512	$2,095,084	$5,540	$1,902,348	$197,708
2005	$11,011	$2,403,781	$5,686	$2,623,266	($214,160)
2006	$9,171	$1,684,800	$6,142	$1,655,230	$32,599
2007	$12,333	$2,014,838	$6,455	$1,851,655	$169,061
2008	$13,353	$220,638	$5,133	$291,455	($62,597)

Source: Nephi City financial records.
(1) Total includes both State and Federal grants.
(2) Total does not include depreciation expenses.

In addition, the Airport's current CIP (November 2010) that is on file with the Utah Division of Aeronautics has also been reviewed. The projects, which are detailed in the appendix of this document (see Appendix Three), include:

- **Update Master Plan and Installation of an Automated Weather Reporting System**
- **Various taxilane construction projects**
- **Construction of a Snow Removal Equipment (SRE) building**
- **Acquisition of Snow Removal Equipment**
- **Various runway/taxiway pavement management and maintenance projects**
- **Construct airport entrance road & auto parking**

In consideration of the projects that have been completed to date, the current CIP represents a total estimated expenditure of $1,563,421 that would be shared between federal, state, and local funding sources through the year 2013. Of this total, $1,368, 421 would be eligible for federal funding at a 95% of the total project cost. The remaining State-eligible projects, totaling $195,000 would be funded at 90% of the total project cost by the State.