

SM

abbreviated

MASTER

PLAN



LINCOLN

Air Force Base

Lincoln, Nebraska

ABBREVIATED MASTER PLAN
LINCOLN A F B

LINCOLN, NEBRASKA

MARCH 1962

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TAB "A" REPORT

LINCOLN AIR FORCE BASE

GENERAL

Geographical Location. Lincoln Air Force Base is located five miles northwest of the City of Lincoln in Lancaster County, Nebraska. Major cities within a 50-mile radius of the Base and their populations are Lincoln, 137,000; Omaha, 315,000; Beatrice, 13,000; and Fremont, 20,000.

Real Estate. The major portion of the Base proper is leased from the City of Lincoln. The City has a municipal terminal and apron located directly north of the Air National Guard area and across the instrument runway from the U.S. Air Force apron and owns an area for a light plane airstrip located east of, and parallel to the instrument runway. The original Naval Air Reserve facility consisting of 96.82 acres more or less, and an additional 16-acre tract have been licensed to the Nebraska Air National Guard. Off-base areas are held by fee simple, license and easement.

Historical Data. The Base was initially activated in 1942 and was known as Lincoln Army Air Field. The Base was de-activated and transferred to the City of Lincoln in 1945.

On 9 June 1952, the base was reactivated as Lincoln Air Force Base. After reactivation the primary mission of the Base was to provide support for a medium jet bomber wing and an air refueling squadron. In October, 1954 the mission of the Base was doubled to two bomb wings and two refueling squadrons. The Base is presently assigned to the 2nd Air Force.

On 16 February 1959 the Lincoln City Council created the Lincoln Airport Authority, the function of which was to investigate and resolve the local civil and private airfield problem. At the present time commercial planes may use only the Air Base Runway. The local airfields are inadequate for this type of aircraft and are also overcrowded by local planes. *A NEW CIVIL RUNWAY IS PRESENTLY UNDER CONSTRUCTION EAST AND PARALLEL TO THE USAF RUNWAY.* There are 12 ICBM sites ~~under construction~~ within 50 miles of the Base. Support facilities for these missiles are at the Base. Two Army Nike-Hercules units are being built 12 to 14 miles south of the Base.

Topographic Conditions. All the facilities of the primary installation, except the family housing areas, parking apron and north $\frac{1}{2}$ of the runway, are located within the flat north-south Oak Creek flood plain. The family housing areas are sited on the slopes of the rolling hills at the west side of the Base. The parking apron and north $\frac{1}{2}$ of the runway are situated on the gentle undulating slopes parallel to and east of the flood plain.

A hill which would violate a 50:1 glide angle approach zone and the Oak Creek channel prevent any extension of the runway to the south. Land topography would permit the extension of the runway to the north for a considerable distance, ^{and the} ~~but a~~ railroad and a highway ^{is being} ~~would have to be~~ relocated ^{and} ~~and~~ alert facilities would not enjoy an efficient relationship with the runway and taxiway system.

There are very few trees on the Base. The main species is the American Elm.

Soil Conditions. Throughout the installation, with the exception of the housing areas, a typical soil section would consist of 1 to 4 feet of organic black silt or clay (OL) underlain with 10 to 20 feet of sandy, silty and/or lean clay (CL) or a fat clay (CH). Beneath these clay layers are fine sand and clayey sand strata with varying layers of clays. The ground water table has a considerable annual and seasonal fluctuation. Ground water generally will be encountered at depths varying from 4 to 25 feet. The average bearing pressure employed for design for general construction purposes has been 1,500 pounds per square foot. A frost depth of 33 inches has been used for design.

Air Space Evaluation. A hill at a point 3,700 feet south of the south end of the runway protrudes into the approach zone 1 foot assuming a 50:1 glide angle and is the only natural obstacle within a 50-mile radius.

Arrow Airport and Union Air Terminal are northeast of Lincoln; these airports are equipped to handle small aircraft only. Omaha Municipal Airport, Offutt Air Force Base and several small airfields are located in the Omaha area. The traffic pattern for the Base is to the west and for Union and Arrow Airports to the east, so there is no conflict between these traffic patterns. Air traffic is controlled in a satisfactory manner. Obstacles are marked and lighted.

Lincoln has a working agreement with the U. S. Air Force which permits the use of the air base landing facilities by commercial and executive type planes.

Weather Conditions.

Contact time 92.8%

Weather conditions in this vicinity are ideal for flying operations. There is much sunshine, averaging 63 percent of the possible time. IFR conditions are created by fog, snow or other natural phenomena. Industrial smoke does not affect flying conditions.

The average annual precipitation is 29.45 inches. Three-fourths of the annual precipitation occurs as rain from April through September. Snowfall averages 31.6 inches per year.

For the period of record the maximum and minimum daily temperatures recorded are 109 F and -23 F respectively. The mean annual maximum and minimum temperatures are 61.5 F and 39.3 F respectively. Moderate humidity levels are usual.

Transportation Facilities. Access to the basic installation is via permanent all weather roads from U. S. Highway 6 to the south, U. S. Highway 34 and Nebraska Highway 2, to the east and northeast, and Interstate Highway 80 to the south and east.

All facilities within this area are adequately served by the road net. The roads are 24, 27 and 30 feet in width and are built of a 2-inch hot-mix asphaltic concrete surface course placed on a 6-inch stabilized base course. Off-base sites, including missile sites, have all-weather access road systems. The access road to the Ammo Storage Annex is permanent flexible type pavement. On-base parking facilities are generally adequate.

Lincoln is served by main lines of the Rock Island and CB&Q Railroads and by feeder lines of the Union Pacific, Chicago and Northwestern and Missouri Pacific Railroads. A spur from the CB&Q Railroad provides rail service to the Base. This spur serves the bulk fuel storage, warehouse and aqua, steam plant, oil storage and missile support areas.

Frontier and United Airlines serve Lincoln with daily flights. Greyhound Lines, American Trailways and Continental Trailways which offer intermediate, transcontinental and charter service, provide bus service to Lincoln.

There are no port facilities.

Health Conditions. No climatic conditions in this area are detrimental to health. There is only a normal incidence of the ordinary communicable diseases. Industrial pollution is negligible.

Recreational Facilities. On-base recreational facilities include a gymnasium, theater, bowling alley, service club, WCO and Officers' Clubs, Youth Center, tennis courts and lighted baseball fields, ^{and} workshops, ~~riding stables and a~~ golf driving range. The lake area in the northwest portion of the Base provides facilities for picnicking, boating, ^{and} fishing ~~and skeet shooting~~. A service ~~club~~ ^{facility} is located on the north bank of the lake.

Lincoln offers many recreational facilities. A new modern civic auditorium is located in downtown Lincoln. Sports, musical, drama, comedy and other programs are presented at this facility. There are six indoor theaters and three outdoor theaters. There are 22 parks and 2 private 18-hole, 1 municipal 18-hole and 2 private 9-hole golf courses in the area.

Religious Facilities include a 300-seat chapel with an educational wing on the Base, and more than 135 churches and religious societies in the Lincoln area.

Educational Facilities. The University of Nebraska, Wesleyan University, Cotner College and Union College in Lincoln offer virtually all types of educational facilities for Air Force personnel. The Lincoln public school system is adequate. General Arnold School located in the Base Housing Area is operated by the Lincoln School System with kindergarten through sixth grade being taught.

The City Library System includes a main library and office located in downtown Lincoln and branch libraries located throughout the city.

BASIC MISSION

The current mission of the installation provides for support of ^{- 99} 90 B47 aircraft, 20 KC 97 aircraft, and ¹²₁₃ SM 65 missiles.

SITE EVALUATION AND MAXIMUM EXPANSION CAPABILITIES

Expansion to the northeast would probably necessitate ^{PURCHASE OF LAND AND RLY} ~~the relocation of~~ both a mainline railroad and a primary highway and ~~any land purchased~~ ^{SUCH PURCHASE} would command a premium farm land price. Expansion directly to the north is limited ~~by a railroad, highway,~~ the confluence of small streams and a small unincorporated community. Expansion to the west and southwest should be at a moderate price for virtually all types of facilities except airfield pavement.

U. S. Highway 6 and Interstate Highway 80 are located within $\frac{1}{2}$ mile south of the south boundary. Both residential and commercial developments are sited in this area. There is a small tract of farm land immediately south of the installation which rises rather rapidly from the base limits. This area is available at moderate cost.

7. [The only expansion currently proposed is the acquiring of a clearance easement at the north end of the runway and an extension of the present clearance easement at the south end of the runway. These are shown on Tabs B-4 and F-1.]

ZONING ORDINANCE

County, city and joint city-county zoning legislation has been enacted and is in effect. Zoning within Lincoln's corporate limits is governed by the Lincoln City Council and in the county by the Lancaster County Commissioners. The three-mile zone about Lincoln's corporate limits is regulated by both these bodies. Adjacent communities have shown a cooperative attitude as evidenced by their zoning ordinances.

AIRFIELD PAVEMENTS

Wind Analysis. In an average year, VFR conditions prevail 92.8% of the time; IFR conditions prevail 5.0% of the time; and the runway is closed 2.1% of the time. The total wind coverage on the N-S primary instrument is 89.9%. During IFR conditions the runway provides 86.2% wind coverage.

Runway and Taxiway Analysis. The N-S primary instrument runway is 200 feet by 12,900 feet, and varies in elevation from 1,156 feet to 1,194 feet. Both ends are equipped with 1,000-foot stabilized overrun sections. The runway should be equipped with 50-foot wide shoulder stabilization.

The taxiways at the north and south ends of the runway are 75 feet wide with 25 foot shoulder stabilization. The east edge of the operational and parking apron is used as a taxiway.

The original east-west and northwest-southeast runways are used as taxiways by the lighter Air National Guard and commercial airplanes. Only in emergency cases may these taxiways be used by the heavier aircraft. These taxiways are 150 feet wide with no shoulder stabilization or blast aprons.

The A-3 taxiway connects the original Air National Guard and Naval Air Reserve aprons to the east-west taxiway and the south end of the north-south runway. This taxiway is suitable for the lighter type aircraft and may be used by heavier aircraft only in emergency cases. This taxiway is 75 feet wide and is equipped with blast pads.

Pavement Evaluation, Runway and Taxiway. The runway and all except the northwest-southeast and east-west taxiways were constructed between 1953 and 1956. The evaluations performed in 1954 and 1955 classify pavement conditions as "New Pavement". In the interim moderate wear and displacement has occurred. In 1960 the runway was overlaid with an asphaltic concrete leveling course to provide a smooth surface.

Allowable capacity gross aircraft loadings assuming dual wheels with 37-inch center to center spacing and 267 square inches of contact area are at least 235,000 pounds for the evaluated pavements. The remaining north segment of the runway and taxiways connecting the runway and the apron were constructed with similar pavement sections and during the same time interval.

No segments east of the runway have been evaluated since reactivation. The original 6-inch concrete northwest-southeast and east-west runways, with one exception, have been overlaid with a 2-inch bituminous surface course and are now used as taxiways. The intersecting portion of these two taxiways is constructed of 9 to 15-inch rigid concrete.

Flexible pavement sections of the runway and south access taxiway consist of a 4-inch asphaltic concrete surface course with a leveling course, a 6-inch base course and a 19- or 33-inch subbase course all placed on a prepared subgrade. The northwest-southeast and east-west taxiway east of the runway consist of the original 6-inch rigid concrete pavement overlaid with a 2-inch bituminous mat. End sections of the northwest-southeast taxiway are 9 to 15 inches of rigid concrete placed on a 4-inch granular filter course. The A-3 taxiway has a 12-inch rigid concrete surface course placed on a 4-inch granular filter course. The remaining segments of the runway and taxiway system consist of 17 to 21 inches of rigid concrete placed on a 4-inch granular filter course.

Expansion Capabilities. Extension of the runway to the north to a length of 15,000 feet is possible but not practical because of ~~the location of the~~ ^{land conditions.} ~~CB&Q Railroad track and U. S. Highway 34.~~ Runway extension to the south is not possible for the Oak Creek channel cannot be relocated further south and also numerous flight hazards would be introduced. The present runway, except for authorized shoulder stabilization, meets the requirements for the basic mission.

Operational Apron. Included in this category are the parking, operational, operational alert, warmup, alert, Air National Guard and wash rack aprons.

Evaluations, available only for the parking, operational and the wash rack aprons, show that, for a dual wheel, 37-inch center to center spacing and 267 square inches of contact area criteria, at least a 235,000-pound allowable gross capacity aircraft loading is permitted. All other operational aprons are similar except the Air National Guard Apron which is evaluated would probably qualify as "Light Duty Pavement".

A 71-inch rigid concrete surface course, a 30-inch base course and a 4-inch granular filter course compose the operational alert apron pavement sections. Certain segments of the parking apron are the original 6- and 10-inch rigid concrete pavements overlaid with 16 and 14 inches respectively, of rigid concrete. The Air National Guard Apron is 12 inches of rigid concrete on a 4-inch granular filter course. The remaining aprons consist of 19 to 23 inches of rigid concrete on a 4-inch granular filter course.

Maintenance Aprons. Calibration hardstands, the power-check pad and hangar access aprons are considered as maintenance aprons. The aprons are generally classified as "Heavy Duty Pavement" except the compass swing base which would probably be classed as a "Light Duty Pavement".

Except for the compass swing base, the maintenance aprons are constructed of a 19- to 24-inch rigid concrete surface course and a 4-inch granular filter course. The compass swing base has a 6- to 9-inch rigid concrete surface and 4-inch granular filter course.

The blast pavement about the power check pad has deteriorated considerably since being used for this purpose.

Transient and Base Flight Aprons. A small section of the operational apron south of Base Operations and the apron south of the Air National Guard facility are assigned as transient and base flight aprons, respectively.

The transient apron is "Heavy Duty Pavement". The base flight apron is "Light Duty Pavement".

The base flight apron is composed of a 12-inch rigid concrete surface course and a 4-inch granular filter course and the transient apron of a 19-inch rigid concrete surface course and a 4-inch granular filter course.

AREA UTILIZATION

Operational Area. One bomber wing and the refueling squadron is situated about the north one-half of the apron and the other bomber wing about the south one-half, with the squadron operations buildings grouped separately immediately west of the respective aircraft parking area. Base Operations, RAPCON, the control tower and the crash and fire station are grouped together at the west edge of the apron. The Air National Guard facilities, grouped together on the east side of the runway, are functional except for the taxiway system.

The facilities to the south of the Air National Guard area are used for maintenance, operational training, storage, and base flight functions by the Air Force. These activities are isolated from the basic installation which creates a severe transportation problem.

With the exception of the transportation problems between the areas east and west of the runway, the operational area enjoys a proper efficient relationship with adjacent areas.

Maintenance Area. The aircraft maintenance facilities provide as efficient and functional a relationship with adjacent areas as is possible considering that maximum use has been made of existing units. The automotive maintenance facilities are complete units in themselves and enjoy proper and efficient relationships with adjacent areas.

Warehouse and Supply Area. The warehouse, open storage and fuel storage areas enjoy a proper and efficient functional relationship with adjacent areas. The bulk of the active warehouse area, including missile supply, is north of 3rd Street. Roads and railroads serve this area adequately. Cold storage facilities are also in this area. The fly-away kit warehouse is located in the ANG area.

Administrative Area. The administrative units for Group and Wing Headquarters do not, except for the two buildings on 9th Street, enjoy proper and efficient relationships with adjacent areas.

Non-tactical squadron administration and supply units are located in dining halls, dormitories and separate small buildings in the operational area. Squadron headquarters units are sited either in the squadron's living or working area.

Air police facilities enjoy a proper and efficient functional relationship with adjacent areas.

Community Area. Community facilities are situated between the officers', airmen's and family living units and enjoy proper and efficient functional relationships with adjacent areas. A small BX is located near the operational area.

Airmen's Housing and Mess. Airmen's housing and mess units are located one tier deep on each side of Oak Creek south of 10th Street. Both tactical and non-tactical units are assigned to these units. The units are properly and functionally located with respect to adjacent areas.

Officers' Housing. The BOQ's are located west of Oak Creek to E Avenue and between 8th and 9th Streets. These units are properly and functionally located.

NCO and Officers' Family Housing. One thousand officers' and NCO family units are constructed on the hills immediately west of Baker Avenue. This housing area is sited as far as possible from the flight line and yet reasonably close to the community area.

Immediately inside the main gate are several additional officers' family and guest house units. These units are well situated with respect to adjacent facilities.

Off-Base Housing. No organized off-base living units have been constructed. Adequate housing is available for personnel and families living off-base. The residential areas of Lincoln are ten to fifteen miles from the Base.

Ordnance Storage Area. The ammo storage annex is located northwest of the basic installation with a clearance between property lines of one mile. This annex enjoys a proper, segregated and functional relationship to the primary installation and adjacent communities. All-weather vehicular access is maintained to this annex.

Hospital Area. Building 1762 in the BOQ area is being used as a dispensary. ~~It is proposed to site a hospital in a more desirable area.~~ ^{A new dispensary is being constructed between 7th and 8th Ave on 7th St.} The dental clinic is suitably located immediately northeast of the airmen's housing area.

A 250-bed U. S. Veterans Hospital is located at the east limits of Lincoln.

UTILITIES

Sanitary Sewage System and Treatment Plant and Refuse Disposal. The entire primary installation is served by a separate sanitary sewage system consisting of lateral sewers flowing from the north and west and connecting at several points to the trunk sewer flowing to the east boundary line. The sewage then flows to the Lincoln municipal sewage treatment plant via a municipal outfall line. The Air National Guard, adjacent Air Force area, and the municipal terminal sanitary sewer lines are connected to this outfall line. All pipe is vitrified clay pipe except for sections under airfield pavement and the siphon at Oak Creek and Cheney Street which are cast iron. Lift stations are located on F Avenue near the stockade ditch and south of the Air National Guard area.

Garbage is removed from the Base by contract garbage haulers and deposited in the city land fill garbage disposal area north of Lincoln. Refuse is disposed of by base forces at a fill area.

Storm Drainage and Industrial Waste Systems. The primary installation is served by extensive separate storm drainage systems. Storm water runoff is brought to these storm drains by short ditches or pavement with curb and gutter. Very few sections of the original World War II system remain. Design of the drainage system has been based on the short duration, high-intensity thunderstorms which are common in this locality.

The airfield pavement area is served by an elaborate system which performs very satisfactory. Shoulders and low areas about the runway, alert aprons, and taxiways are drained by this system. A large north to south storm drain located at the west third point drains the parking apron. Rigid airfield pavements are equipped with subdrain systems which conduct to the storm drains.

The wash rack and industrial waste facility are at the northwest corner of the apron. Wastes from this wash rack may be processed through a waste treatment plant. This plant has a nominal capacity of 60 gallons per minute. Flow from the wash rack may by-pass this plant and go by gravity to the storm drain.

Drainage from all sectors of the installation is good, except for a few isolated cases. The system and appurtenances are in good condition.

Water Supply System and Treatment Plant. Water is obtained from the Lincoln system through a 16-inch transmission line connecting to the base water system at a meter pit near the southeast corner of the Base.

Water is routed from the meter pit through a 12-inch line to the municipal terminal, Air National Guard and adjacent Air Force facilities. A 16-inch line bearing northwest from the meter pit connects to a chlorinator building which serves the basic installation.

A 600,000-gallon elevated steel storage tank, located in the Air National Guard area, is equipped with cathodic protection. A booster pump station to provide adequate fire demand flows is situated near the base of the tower.

In the chlorinator building is a hydraulic valve actuated by a pressure control in the manhole by the two 1,000,000-gallon on-ground prestressed concrete storage tanks at the west edge of the Base. Chlorination equipment is ~~to be~~ installed, *soon. and fluoridation is to be installed soon.*

A 750,000-gallon reinforced concrete on-ground storage tank and a pump station supply the deluge systems in the two field maintenance hangars.

The municipal transmission line to the Base is designed to supply 4,000,000 gpd. There is an average domestic water usage of 713,450 gallons per day. Present storage for fire protection is maintained for a demand of 500,000 gallons in 4 hours. Future fire demand should be unchanged. Domestic usage is estimated to increase to 800,000 gallons per day.

Water mains are constructed of cast iron pipe except in the family housing areas and the 4-inch line going to the Ammo Storage Annex which are transite pipe.

~~The water system is in a good state of repairs and operating characteristics are good except for the low pressure in the housing area, which should be improved by completion of a new booster pump station in the housing area.~~

100,437,000
Central Heating System. *3,000* The central heating plant has a capacity of *143,692,000* Btu/hr or *4,292* BHP, generated by three 1,000 BHP ~~units~~ *325 BHP* generating units with a working pressure of 100 psi. This heating plant may be fired by ~~coal~~, fuel oil or gas.

Steam is distributed to the operational, maintenance, training, airmen and officer quarters and community facilities areas via overhead insulated steam and condensate lines. There are a few underground ~~cables~~ ^{CONDUITS} in the operational area.

The processing steam load for the central heating plant is presently 1,272,000 Btu/hr. Dining halls, air conditioning units and motor pool and aircraft maintenance units are users of processing steam.

In the Air National Guard Area steam is generated by 2 gas or fuel oil fired 175 BHP generators operating at 50 psi working pressure. Steam is distributed by underground steam lines, condensate lines, and high pressure steam return lines.

Steam for the Air Force facilities to the south is generated by two 140 BHP gas or fuel oil fired generators with a total capacity of 280 BHP or 4,250,000 Btu/hr. Steam is distributed by overhead insulated steam and condensate lines.

Gas System. Natural gas for the primary installation is provided by Western Power and Gas Company through a meter and pressure regulating pit located at the east boundary line directly across from the power check pad.

Gas is distributed throughout the primary installation by wrapped, cast iron, galvanized and black pipelines with metering and regulating devices appropriately located. Gas is distributed to the heating plant, LOX plant, warehouse area and housing areas at a pressure of 30 psi. Local distribution is made at a pressure of 5 psi.

The Air Base has a firm gas commitment of ~~1,800,000~~ ^{1,845,000} cfd. Maximum consumption to date has been approximately ~~65%~~ ^{100%} of this capacity.

Electrical Power and Street Lighting Facilities. Electrical power is furnished the primary installation by the ~~City of Lincoln~~ ^{BUREAU OF RECREATION} over a 34.5 KV transmission line entering the Base from the south. Substation capacities are the limiting capacity factors.

The main substation is an open type substation. Transformers are single phase, oil immersed, self-cooled, with a capacity of 5,000 KVA. There are 10 feeders equipped with oil circuit breakers at this station. Maximum demand to date was 3,840 KW.

The substation for the housing area is a unit type station. Transformers are 3-phase, oil immersed, self-cooled, with forced air cooling and a present capacity of 1,725 KVA. There are two feeders protected by air circulating circuit breakers. Maximum demand to date was 1,540 KW.

The substations at the Missile Assembly and Oxygen Building are the open type and equipped with oil immersed self-cooled transformers rated at 2,000 KVA per station. They are protected with fuses.

The distribution system in the Air National Guard and adjacent Air Force area is owned by the City of Lincoln. Power for this station is obtained from the east-west 34.5 KV transmission line which crosses under the runway. This station is of the open type and equipped with oil immersed self-cooled transformers rated at 1,500 KVA. Fuses protect the two feeders. The maximum demand to date was 700 KW.

A primary system voltage of 2,400/4,160 and a secondary system voltage of 110/208 is universal on the primary installation. Street light circuits are of the series type except in the Air National Guard area where they are multiple wired.

Connection is made to the Norris Rural Public Power District's 12.5 KV line at the east entrance to the Ammo Storage Annex. The substation is located south of the elevated water storage tank and has a capacity of 500 KVA as limited by the ~~oil immersed self-cooled transformers~~. Maximum demand to date was 216 KW. ^{EMERGENCY ELECTRICAL POWER PLANT.}

Airfield Lighting. High intensity marker lights have been placed throughout the length of the north-south runway. Blue taxiway markers are placed on the east edge of the apron and taxiways west of the runway. Blue taxiway marker lights are placed on the east-west taxiway from the Air Force apron to approximately the municipal terminal apron. The A-3 taxiway is also lighted with blue taxiway markers. There is threshold and tailbar lighting at the north end of the runway. The south end of the runway is equipped with threshold, tailbar and 3,000 feet of approach lighting.

The airfield lights are controlled at the transformer vault and the control tower. Wiring is underground and accomplished by ducts and direct burial cable.

Telephone, Telegraph and Fire Alarm System. The system is owned and serviced by the Lincoln Telephone and Telegraph Company.

Except in the airfield pavement area, virtually all cables are aerial. Circuits are not assigned permanently as telephone and telegraph circuits but are interchangeable to meet the situation. Capacities are variable.

Fire reporting phones are connected directly through the communications building to the fire station. There are fire reporting phones in the Air National Guard and adjacent Air Force area but these calls must be relayed at the communications building to the fire station. In Building 1580, a warehouse, an automatic fire reporting device is connected directly to the fire station.

Communications and NavAids. This Base is equipped with control tower radio, RAPCON, ILS ~~glide slope~~ facility, UHF Direction Finder, ~~CCA~~ ~~facility~~, ~~Homing Beacon~~ and TVOR NavAids. All these units except the ILS system are Air Force property. FAA operated VORTAC and radio range stations are located north of the Base.

Liquid Fuel System. For the primary installation, the basic liquid fuel system consists of a jet fuel and avgas bulk storage area, fuel transfer pump house and two fuel transfer lines, six immediate pump houses with storage tanks and twenty meter pits and hydrants.

In the bulk storage area, avgas storage is provided by one 10,000-barrel and one 30,000-barrel welded steel floating roof storage tank. Jet fuel is stored in one 35,000-barrel and one 55,000-barrel welded steel floating roof storage tank. Tanks may be filled from railroad tank cars or trucks. These facilities are provided with cathodic protection. JP-4 FUEL TANKS MAY ALSO BE FILLED BY COMMERCIAL PIPELINE.

The bulk water-alcohol, mogas, lube oil, de-icing fluid, used oil and contaminated fuel storage facilities are divided into three groups. At the north end are four 33,000-gallon welded steel storage tanks for contaminated fuel and alcohol. The middle group of tanks consists of seven 25,000-gallon steel underground tanks for alcohol and mogas. The south group is used to store lube oil and de-icing fluid.

Storage facilities in the Air National Guard area consist of one 5,000-barrel jet fuel, one 5,000-barrel avgas, and one 2,500-barrel jet fuel earth covered steel storage tank.

SECURITY FACILITIES

All sectors of the Base are bounded by a perimeter fence except the boundary to the east of the Air National Guard area. Traffic check houses are located at the northeast entrance, main gate and the entrance to the Air National Guard area. The flight line and building area to the west are separated by a flight-line fence with gate houses appropriately placed. Areas with high priority ratings are patrolled by security guards and dogs.

Bulk fuel storage, motor pool, ATE, water storage and electrical transformer areas are fenced. Cyclone fences with barbed wire aprons are installed about the Target Intelligence Building and Special Weapons Training Area. The operational Alert Apron and Readiness Building area is enclosed by a security fence. The Ammo Storage Annex is enclosed by a boundary fence, and a cyclone fence with a barbed wire apron.

Security flood lights are placed in the Ammo Storage Annex, about the Special Weapons Building, the Control Tower, on the Air National Guard Hangar, in the ANG fuel storage area, and about the Readiness Alert Building.

Additional boundary fence is needed to close in the boundary to the west of the Air National Guard Area. A flight line fence and a security fence about the Ammo Storage Building 610 is also needed.

SUMMARY

Lincoln AFB meets most requirements for a multi-mission base. It has one active runway, a N-S primary instrument runway. Structures and buildings, with the exception of most temporary buildings, are in good usable condition. A final air space evaluation cannot be made until the local municipal airfield problem is resolved.

MISSILE FACILITIES ADDENDUM

LINCOLN AIR FORCE BASE

History. Sites for the Atlas missile facilities supported by Lincoln Air Force Base were selected during the period from September 1958 to March 1960. Geological investigations were conducted concurrently by the Corps of Engineers. Construction on the first site was begun on 1 April 1960 and the "brick and mortar" phase of construction on the last site was completed 10 October 1961. The site activation was initiated 15 June 1961 on a joint occupancy basis and the sites were accepted by the Air Force in November 1961.

Description. The Lincoln AFB Atlas missile facility is a 1 x 12 configuration with one SM-65 F Intercontinental Ballistic Missile located at each of the 12 sites. The sites are distributed in a rough circle, with an average radius of 35 to 40 miles, about the Base. Each missile is stored in a vertical position in a reinforced concrete lined pit or "silo" of hardened construction. It is elevated from this silo to the surface of the ground for launching. Principal components at each launch site are the silo, which houses the missile, the fueling equipment, diesel-electric generators, the launch platform for raising the missile to firing position and environmental control equipment. The Launch Control Center, connected to the silo by a tunnel, houses the communication equipment, launch control console and personnel. Supporting facilities at the site include water supply and treatment, sanitary sewage disposal and diesel fuel storage.

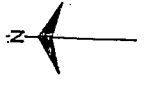
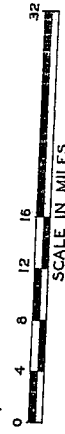
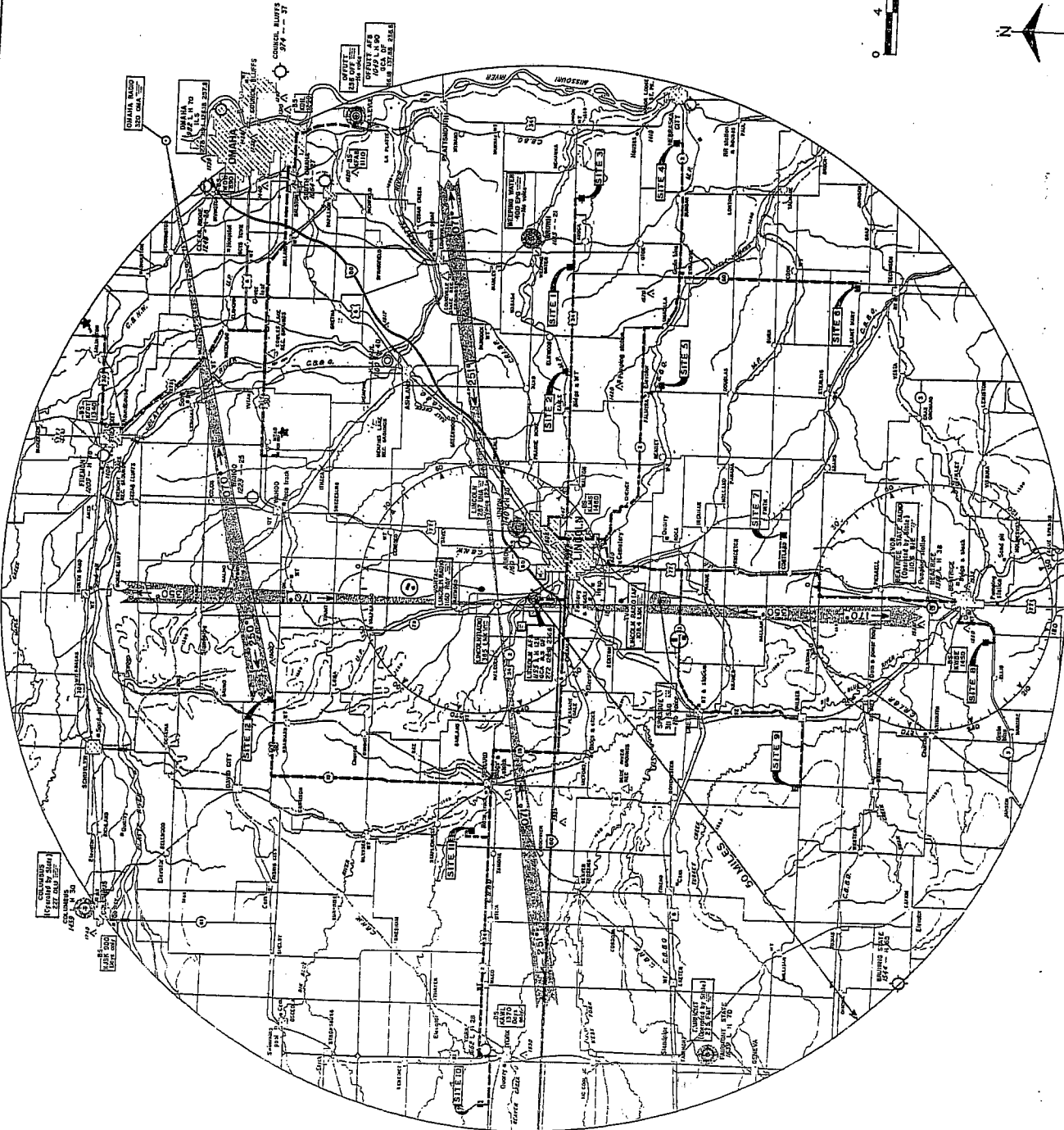
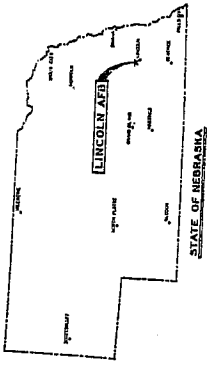
Utilities. Electrical power is generated on the site by two 500 KW diesel fueled engine generator. Water is obtained from wells located either on the site or nearby. Minimum design capacity of each well is 15 gpm. Water is treated by chlorination at all sites, and also, at one site, by the addition of polyphosphate. Sanitary sewage is treated by means of a septic tank, sand filter and drain field.

Support Base Facilities.

Distance from the support base, Lincoln AFB, in road miles, to each of the sites is as follows:

Site No. 1 = 32 $\frac{1}{2}$ miles	Site No. 7 = 30 miles
Site No. 2 = 42 miles	Site No. 8 = 52 miles
Site No. 3 = 24 miles	Site No. 9 = 48 miles
Site No. 4 = 51 miles	Site No. 10 = 51 miles
Site No. 5 = 28 miles	Site No. 11 = 24 miles
Site No. 6 = 54 miles	Site No. 12 = 46 miles

The roads and bridges involved in these routes all have a minimum load carrying capacity of 17,000 pounds per axle. Short take off and landing (STOL) strips may be provided at each site to provide for high priority transportation between the sites and the Base. Support facilities located at the Base consist of RP-1 storage, Precision Measuring Equipment Laboratory (Bldg. 648), a new Assembly and Maintenance Facility, Re-entry Vehicle Facility (Bldg. 2770), and AFW Supply (Bldg, 1580). A 25-ton per day Liquid Oxygen Generating Plant with storage capacity of 52,000 gallons has been provided at the Base.

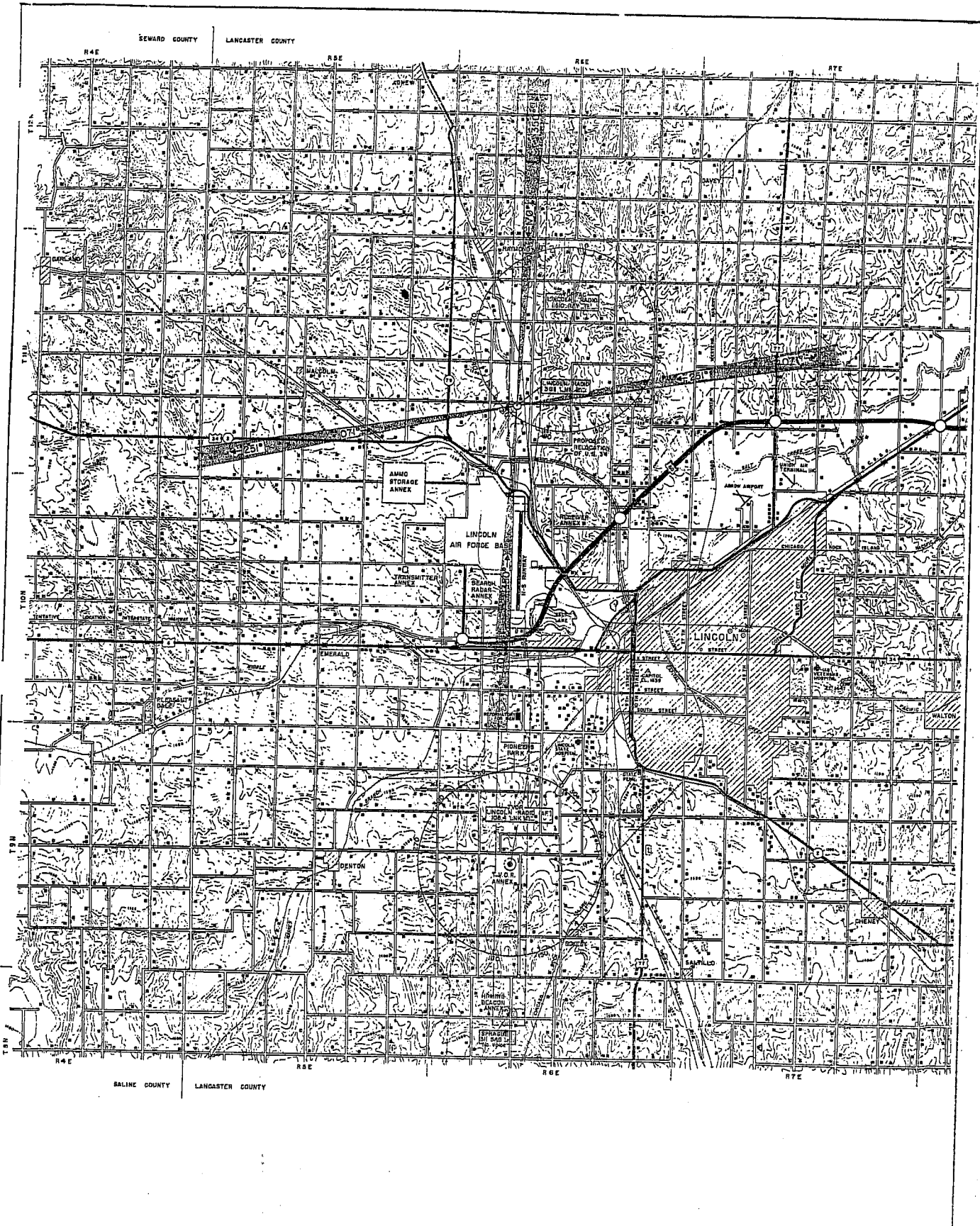


DEPARTMENT OF THE AIR FORCE
STRATEGIC AIR COMMAND
REGIONAL MAP
LINCOLN AFB

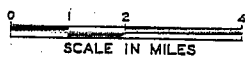
TAB - NO.
B-1

SH. 1 OF 1

FOR OFFICIAL USE ONLY - AFR 11-30



BALINE COUNTY LANCASTER COUNTY

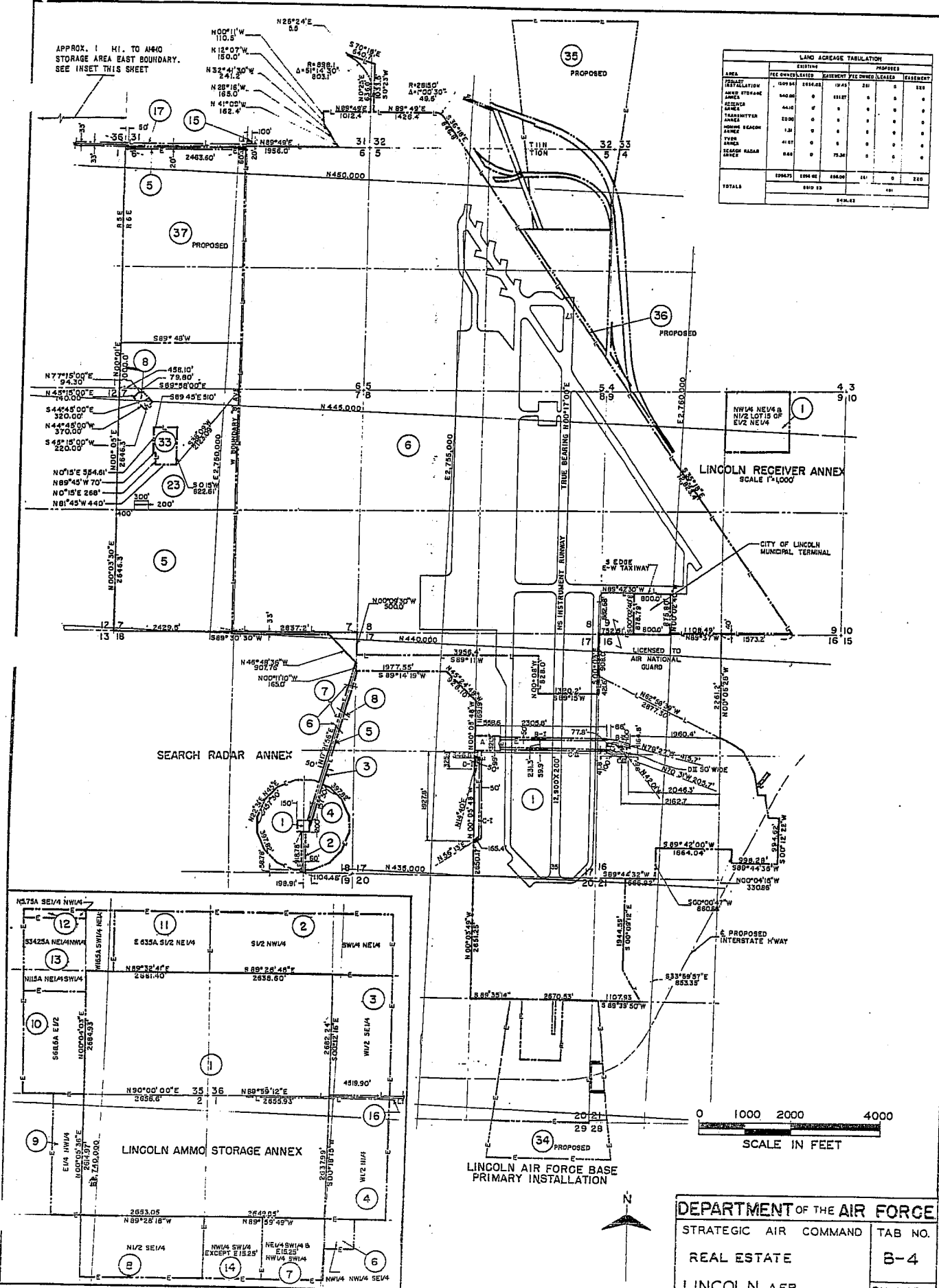


DEPARTMENT OF THE AIR FORCE	
STRATEGIC AIR COMMAND	TAB NO.
VICINITY MAP	B-2
LINCOLN AFB	SH. 1 OF 1

FOR OFFICIAL USE ONLY- AFR 11-30

APPROX. 1 MI. TO A440 STORAGE AREA EAST BOUNDARY. SEE INSET THIS SHEET

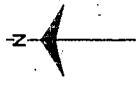
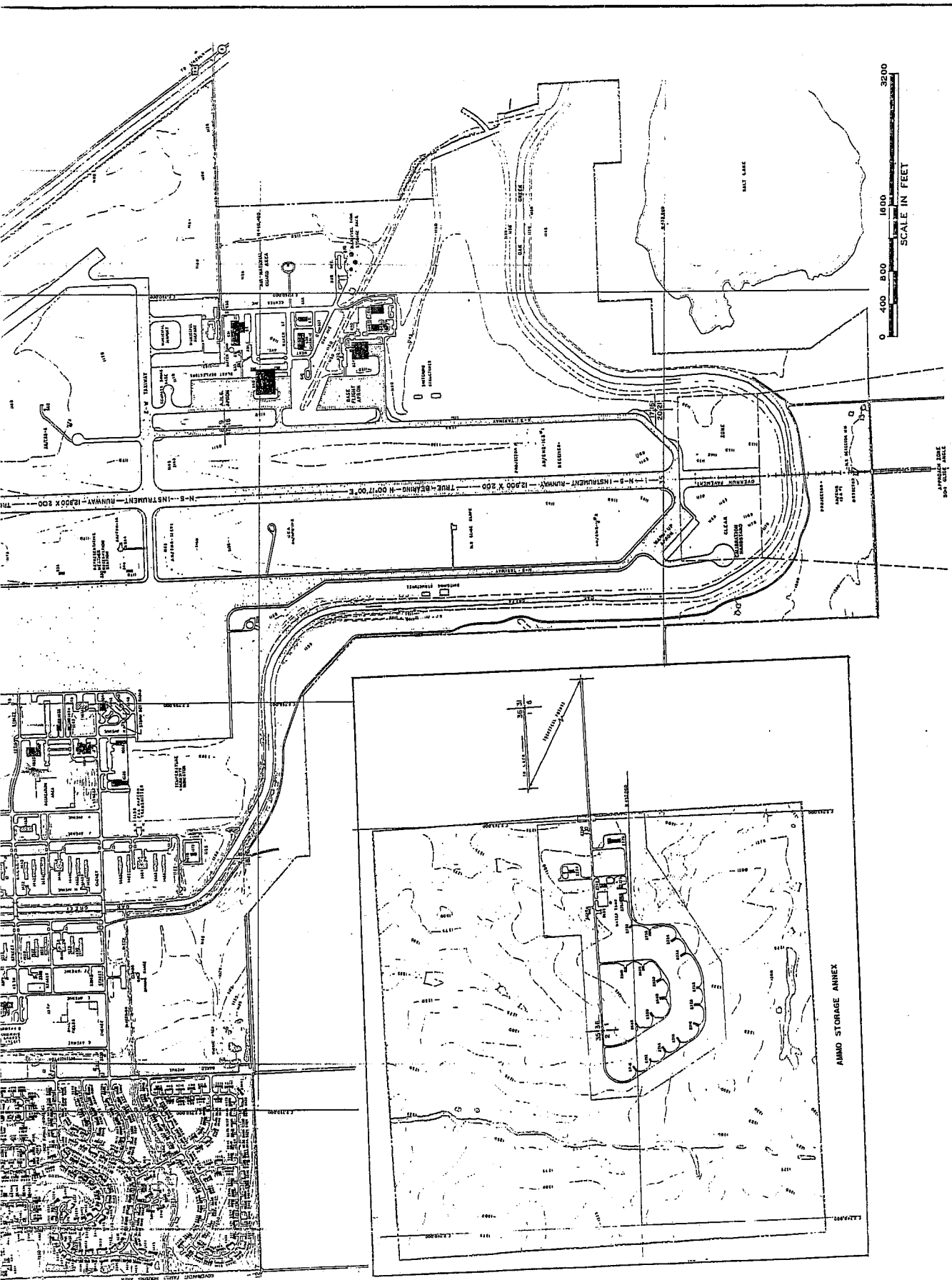
LAND ACRES TABULATION					
AREA	EXISTING		PROPOSED		TOTAL
	ACRES	FRAC.	ACRES	FRAC.	
DEVELOPMENT	1009.88	0	1009.88	0	1009.88
AMMO STORAGE	540.00	0	540.00	0	1089.88
SEARCH RADAR	44.10	0	44.10	0	1133.98
TRANSITWAY	2000.00	0	2000.00	0	1333.98
HOMER SEARCH	1.30	0	1.30	0	1335.28
TRUCK	41.00	0	41.00	0	1376.28
SEARCH RADAR	0.00	0	75.30	0	1451.58
ADJACENT	0.00	0	0.00	0	1451.58
TOTALS	1096.18	0	1096.18	0	2547.76



DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND TAB NO. B-4
 REAL ESTATE
 LINCOLN AFB
 SH. 1 OF 1

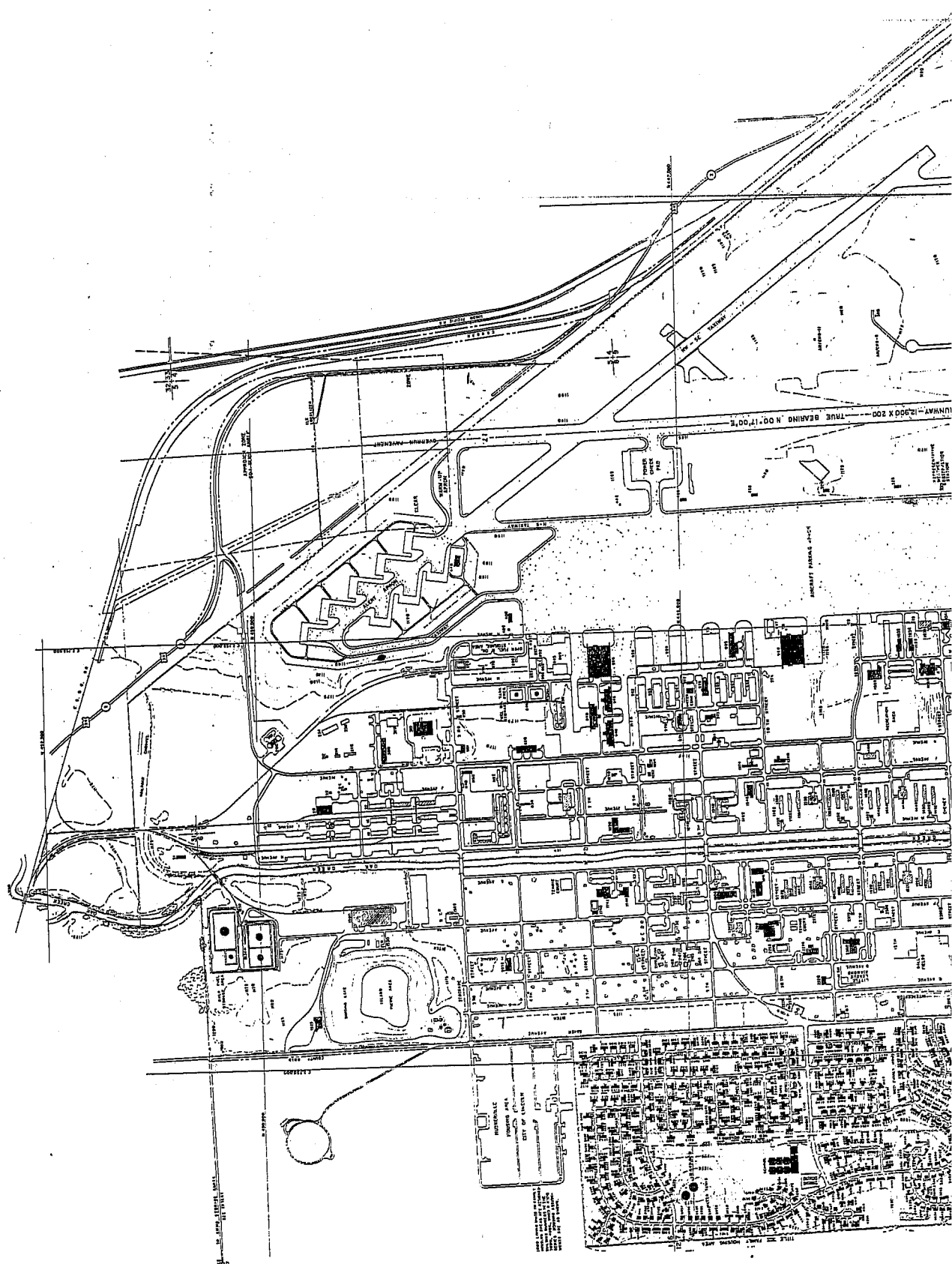
PAVEMENT IDENTIFICATION	SUBGRADE	SUBBASE		BASE		SURFACE		TOTAL THICKNESS (IN.)	LIFE CATEGORY	ALLOWABLE GROSS AIRCRAFT LOADING IN POUNDS			PAVEMENT CONDITION
		CBR OR "K" CLASS VALUE	THICKNESS OR "K" CLASS VALUE	CBR OR "K" CLASS VALUE	THICKNESS	THICKNESS	FLEXURAL STRENGTH (PSI)			TYPE	THICKNESS (IN.)	100 PSI TIRES	
Parking Apron 14" Overlay	CL-CH	10" Rigid Concrete Overlay K60	14	Rigid Concrete	700	Capacity Full 165,000+ Minimum 165,000+ Emergency 165,000+ Frost (Unrestricted) 165,000+ Frost (Restricted) 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	285,000 345,000+ 665,000+ 260,000+ 335,000	550,000 550,000 665,000+ 485,000 640,000	"C" base pvt)=0.75 Overlay - New Condition
Parking Apron 16" Overlay	CL-CH	6" Rigid Concrete Overlay K60	16	Rigid Concrete	700	Capacity Full 165,000+ Minimum 165,000+ Emergency 165,000+ Frost (Unrestricted) 165,000+ Frost (Restricted) 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	285,000 345,000+ 665,000+ 260,000+ 335,000	550,000 550,000 665,000+ 485,000 640,000	"C" base pvt)=0.35 Overlay - New Condition
Parking Apron New Pavement	CL-CH	SW K65	20	Rigid Concrete	730	Capacity Full 165,000+ Minimum 165,000+ Emergency 165,000+ Frost Cond. (Unrestricted) 165,000+ Frost Cond. (Restricted) 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	165,000+ 165,000+ 165,000+ 165,000+ 165,000+	300,000 300,000 345,000+ 270,000 345,000	575,000 575,000 665,000+ 505,000 665,000	New Condition
Operational Apron	CL	SW K70	19	Rigid Concrete	655	Capacity Full 160,000+ Minimum 160,000+ Emergency 160,000+ Frost (Unrestricted) 155,000+ Frost (Restricted) 155,000+	160,000+ 160,000+ 160,000+ 155,000+ 155,000+	160,000+ 160,000+ 160,000+ 155,000+ 155,000+	160,000+ 160,000+ 160,000+ 155,000+ 155,000+	160,000+ 160,000+ 160,000+ 155,000+ 155,000+	200,000+ 200,000+ 200,000+ 220,000+ 220,000+	482,000 482,000 685,000+ 415,000 445,000+	New Condition
Wash Rack	CL-CH	SW K70	20	Rigid Concrete	655	Capacity Full 160,000+ Minimum 160,000+ Emergency 160,000+	160,000+ 160,000+ 160,000+	160,000+ 160,000+ 160,000+	160,000+ 160,000+ 160,000+	160,000+ 160,000+ 160,000+	275,000 275,000 345,000+ 345,000+	525,000 525,000 665,000+ 665,000+	New Condition
NS Runway Sta. 120-137 x 5900'	CL CH ML	GW CBR 40 23	4	Hot Mix Asphaltic Concrete	4	Capacity Full 220,000+ Minimum 220,000+ Emergency 220,000+	220,000+ 220,000+ 220,000+	220,000+ 220,000+ 220,000+	220,000+ 220,000+ 220,000+	220,000+ 220,000+ 220,000+	265,000 265,000 310,000+ 310,000+	400,000 400,000 445,000+ 445,000+	New Condition
NS Runway Sta. 137-156 x 2700'	CL CH ML	GW CBR 40 37	4	Hot Mix Asphaltic Concrete	4	Capacity Full 220,000+ Minimum 220,000+ Emergency 220,000+	220,000+ 220,000+ 220,000+	220,000+ 220,000+ 220,000+	220,000+ 220,000+ 220,000+	220,000+ 220,000+ 220,000+	290,000 310,000 310,000+ 310,000+	445,000+ 445,000+ 445,000+ 445,000+	New Condition
NS Runway Sta. 206-216	CL CH	K70	19	Rigid Concrete	610	Capacity Full 155,000+ Minimum 155,000+ Emergency 155,000+ Frost (Unrestricted) 155,000+ Frost (Restricted) 155,000+	155,000+ 155,000+ 155,000+ 155,000+ 155,000+	155,000+ 155,000+ 155,000+ 155,000+ 155,000+	155,000+ 155,000+ 155,000+ 155,000+ 155,000+	155,000+ 155,000+ 155,000+ 155,000+ 155,000+	235,000 235,000 305,000 335,000+ 210,000	445,000 445,000 595,000 665,000+ 390,000	New Condition
Power Check Pad and Taxiway	CL CH	K70	19	Rigid Concrete	610	Capacity Full 155,000+ Minimum 155,000+ Emergency 155,000+ Frost (Unrestricted) 155,000+ Frost (Restricted) 155,000+	155,000+ 155,000+ 155,000+ 155,000+ 155,000+	155,000+ 155,000+ 155,000+ 155,000+ 155,000+	155,000+ 155,000+ 155,000+ 155,000+ 155,000+	155,000+ 155,000+ 155,000+ 155,000+ 155,000+	235,000 235,000 305,000 335,000+ 270,000	445,000 445,000 595,000 665,000+ 515,000	New Condition

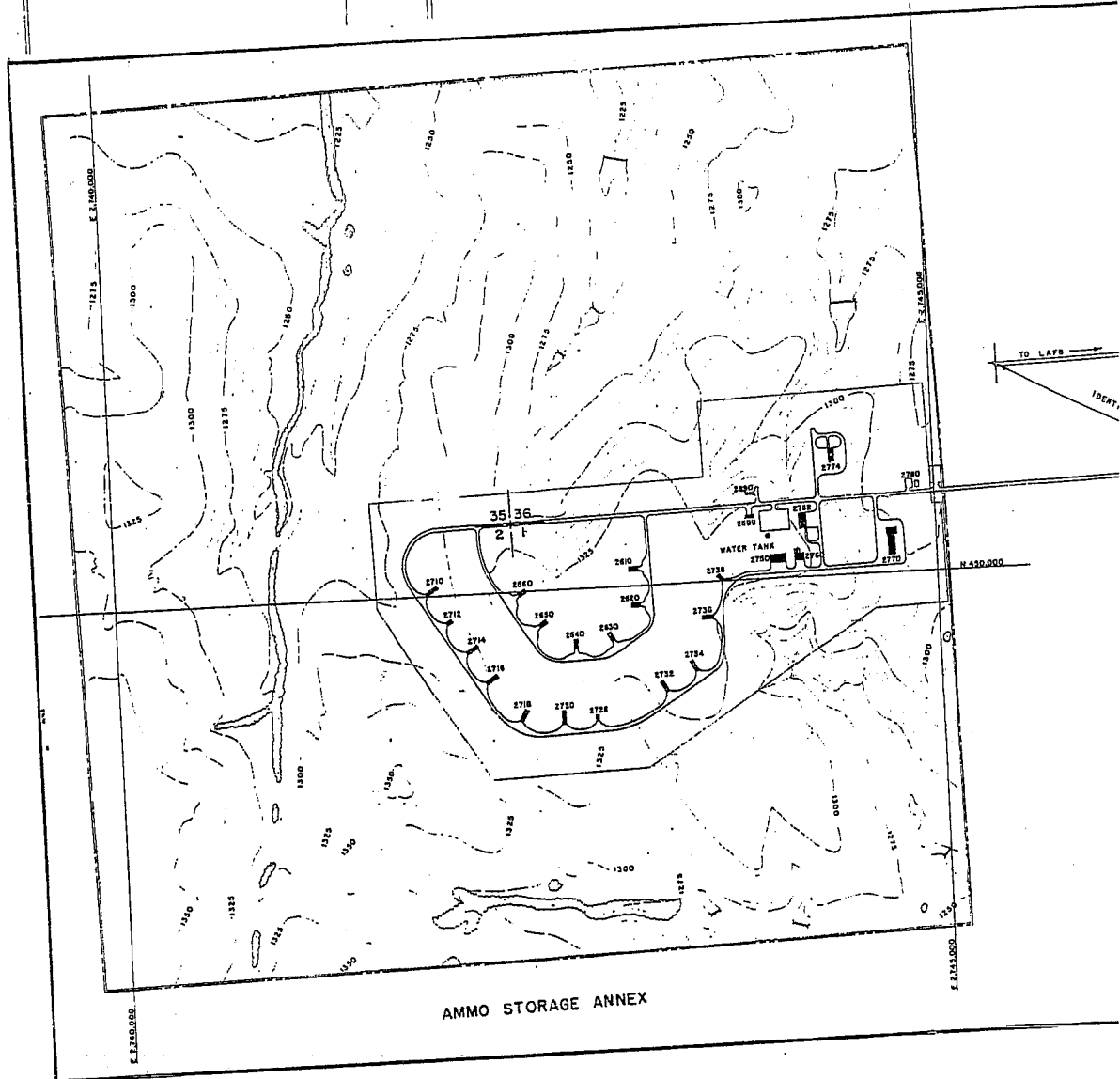
Notes:
1) Pavements evaluated in accordance with the "Manual for the Evaluation of Flexible Pavements in the Zone of the Interior."
2) A plus sign is used to indicate where the evaluation is above the highest curve in aforesaid manual.
3) Evaluations presented by the Corps of Engineers in report form June 1955.



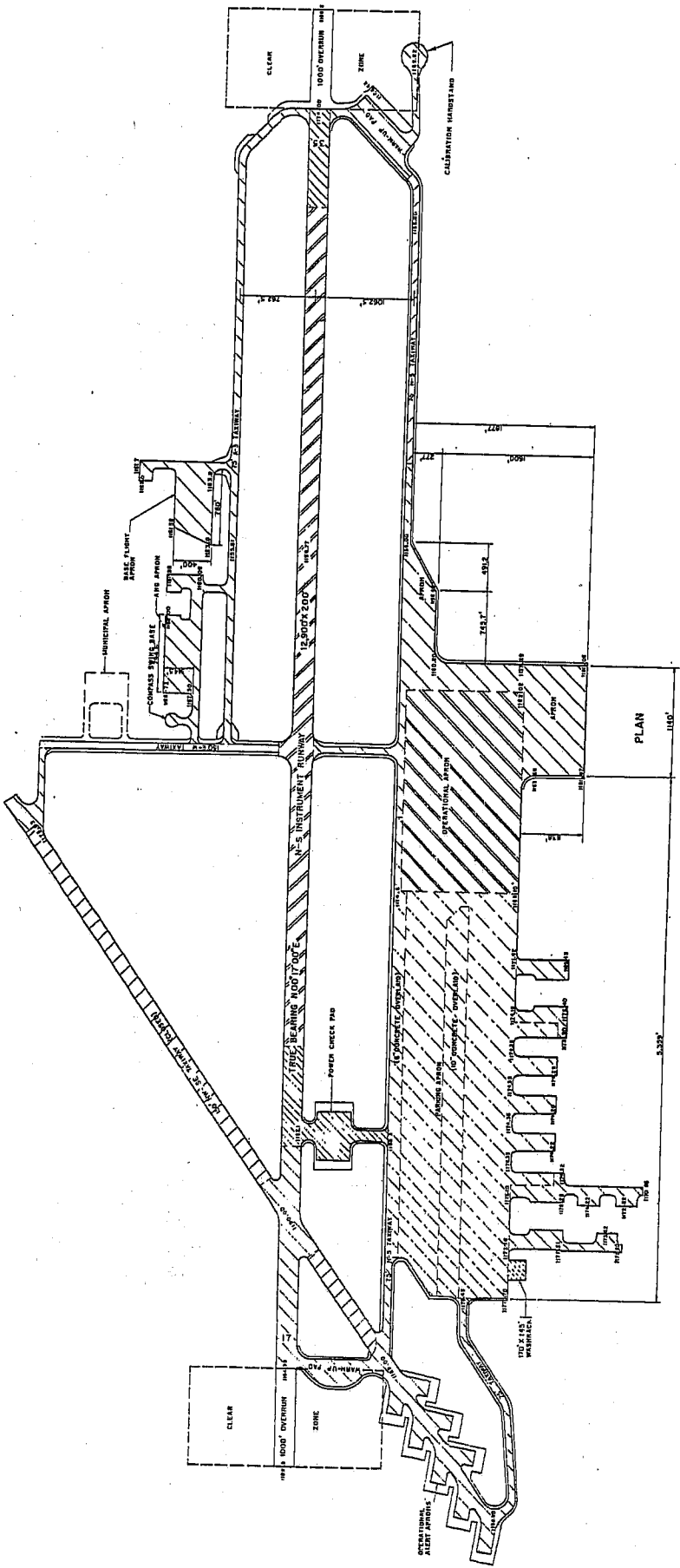
0 400 800 1600 2000
SCALE IN FEET

DEPARTMENT OF THE AIR FORCE
STRATEGIC AIR COMMAND TAB NO.
BASIC LAYOUT PLAN C-1
LINCOLN AFB SH. 1 OF 1





FOR OFFICIAL USE ONLY



- AIRFIELD PAVEMENTS**
- RIBB AIRFIELD PAVEMENT CAPACITY 33,000 POUNDS
 - RIBB AIRFIELD PAVEMENT CAPACITY 284,000 POUNDS
 - RIBB AIRFIELD PAVEMENT CAPACITY 278,000 POUNDS
 - RIBB AIRFIELD PAVEMENT CAPACITY 262,000 POUNDS
 - RIBB AIRFIELD PAVEMENT CAPACITY 200,000 POUNDS
 - RIBB AIRFIELD PAVEMENT CAPACITY 150,000 POUNDS
 - FLEXIBLE AIRFIELD PAVEMENT CAPACITY 280,000 POUNDS
 - FLEXIBLE AIRFIELD PAVEMENT CAPACITY 150,000 POUNDS
 - STABILIZED SHOULDER

NOTE: AIRFIELD PAVEMENT CONTROL ELEVATION
 PAVEMENT STRENGTH CAPACITIES BASED ON
 MAX. WHEEL CONTACT AREA. SOURCE: CORP
 OF ENGINEERS AND ARCHITECTS, WASHINGTON, D.C.
 DATED DECEMBER 1954, WAREH 1954, AND
 1955.

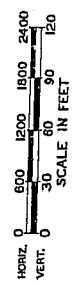
DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND
 AIRFIELD PAVEMENT PLAN C-5
 LINCOLN AFB
 TAB NO.
 SH. 1 OF 1

FOR OFFICIAL USE ONLY- AFR 11-30

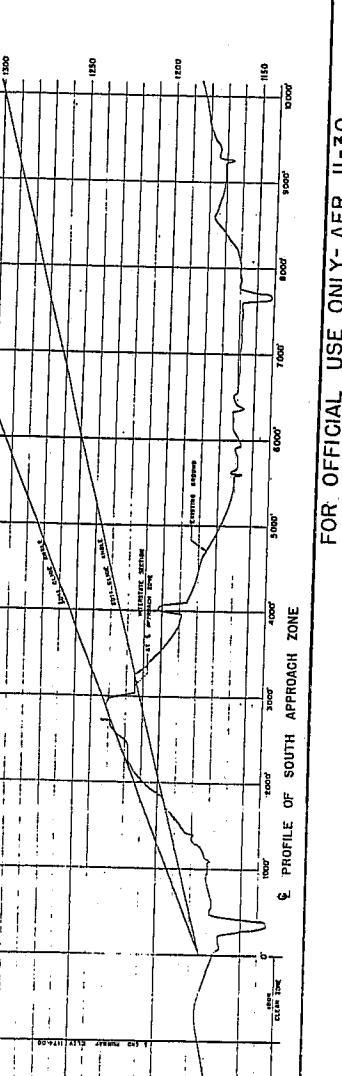
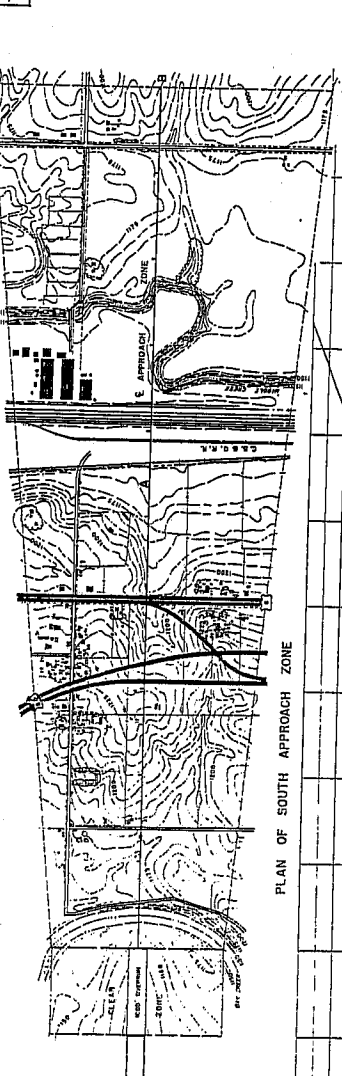
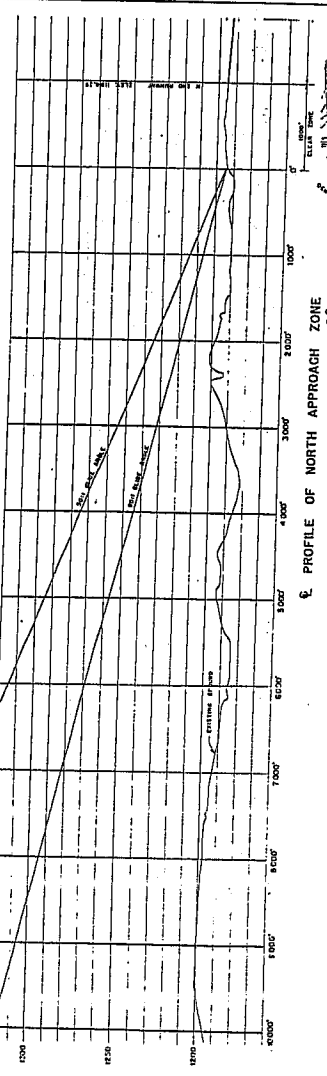
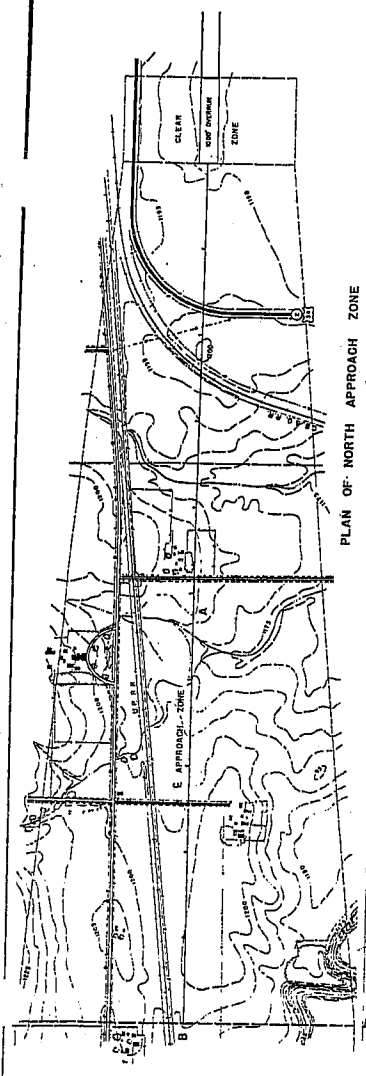
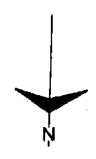
NO.	DESCRIPTION	ELEV ABOVE GROUND MSL	DISTANCE SOUTH OF AIRWAY CENTERLINE	DISTANCE EAST ON WEST SIDE OF AIRWAY CENTERLINE	NO.	DESCRIPTION	ELEV ABOVE GROUND MSL	DISTANCE SOUTH OF AIRWAY CENTERLINE	DISTANCE EAST ON WEST SIDE OF AIRWAY CENTERLINE
1	Building	1284	204	150' E	32	Building	1318	14	198' E
2	Building	1280	248	310' E	33	Building	1308	20	158' E
3	Building	1279	249	20' W	34	Building	1265	30	413'
4	Building	1223	350	420' E	35	Telephone Line	1235	20	410'
5	Building	1220	353	380' E	36	Telephone Line	1245	20	460'
6	Building	1220	353	500' E	37	Building	1245	19	442'
7	Building	1215	351	348' E	38	Building	1248	18	740' E
8	Building	1219	351	348' E	39	Building	1231	8	640'
9	Building	1221	352	700' E	40	Building	1249	28	600'
10	Building	1229	352	770' E	41	Building	1229	8	482'
11	Building	1228	352	690' E	42	Building	1227	17	1910'
12	Building	1232	352	370' E	43	Building	1225	18	330' E
13	Building	1232	352	370' E	44	Building	1225	18	290' E
14	Building	1229	352	370' E	45	Building	1225	18	306' E
15	Power Line	1230	352	370' E	46	Power Line	1240	33	458' W
16	Power Line	1229	352	370' E	47	Building	1214	24	5300'
17	Power Line	1229	352	370' E	48	Building	1225	22	700' W
18	Power Line	1229	352	370' E	49	Site	1222	20	4700'
19	Building	1247	357	4180' E	50	Building	1244	11	4400'
20	Building	1247	357	4180' E	51	Building	1244	11	4400'
21	Building	1247	357	4180' E	52	Building	1244	11	4400'
22	Building	1247	357	4180' E	53	Building	1244	11	4400'
23	Building	1247	357	4180' E	54	Building	1244	11	4400'
24	Building	1247	357	4180' E	55	Building	1244	11	4400'
25	Building	1247	357	4180' E	56	Building	1244	11	4400'
26	Building	1247	357	4180' E	57	Building	1244	11	4400'
27	Power Line	1245	357	4180' E	58	Power Line	1213	25	4100'
28	Building	1242	357	4180' E	59	Site at Conventine	1213	25	4100'
29	Building	1242	357	4180' E	60	Site at Conventine	1213	25	4100'
30	Building	1242	357	4180' E	61	Site at Conventine	1213	25	4100'
31	Trailer Park	1234	357	4180' E	62	Site at Conventine	1213	25	4100'

No structure at 80 = 1 gila
Angle in north approach zone.

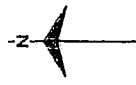
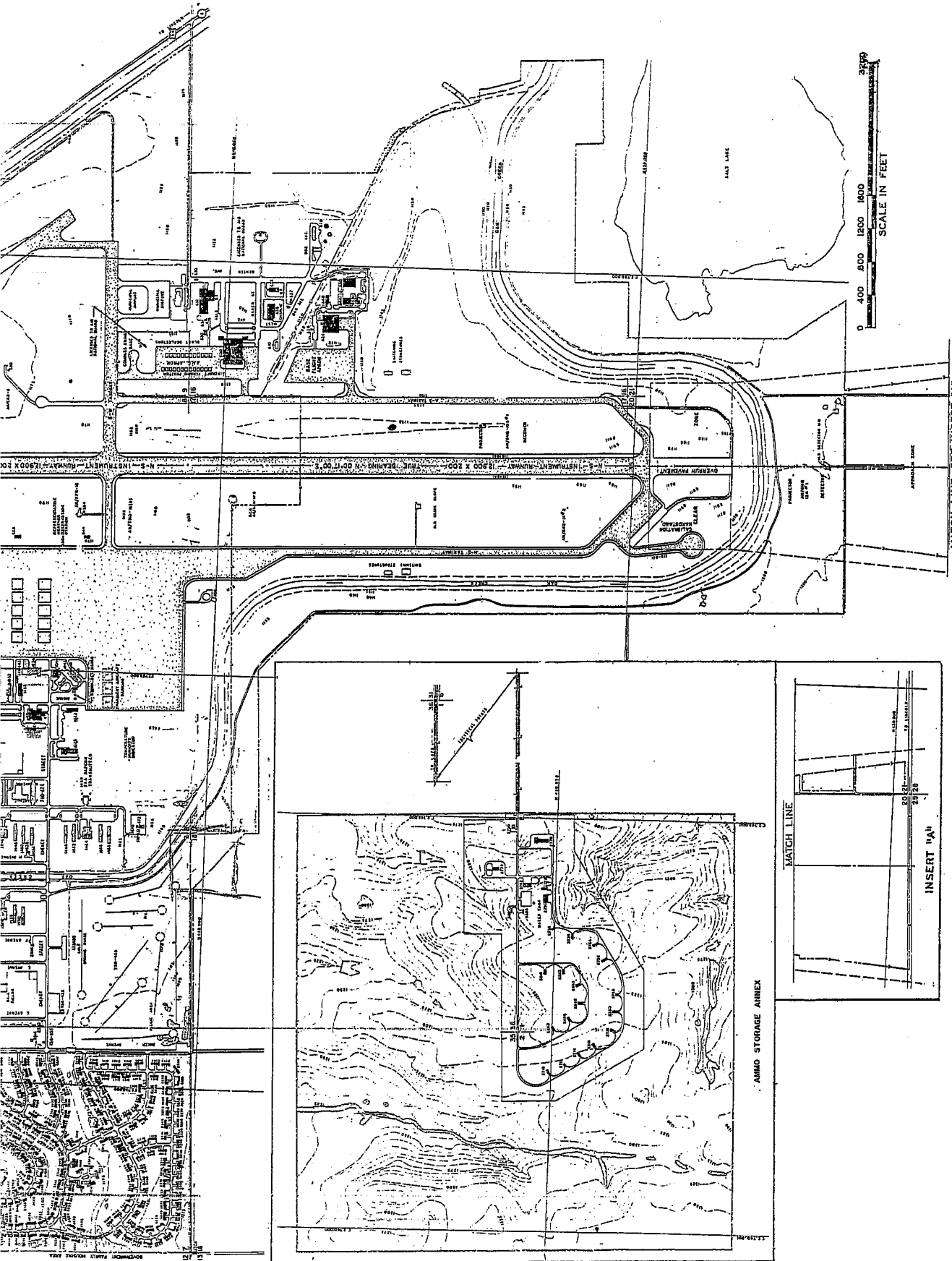
• Structure shown by solid lines
of approach zone contour
data obtained from "STATE TOPOGRAPHIC AND
PLANNING AIRWAY 51 - 20 - 12/20/57/1954."



DEPARTMENT OF THE AIR FORCE
STRATEGIC AIR COMMAND
FLIGHT HAZARDS
LINCOLN AFB
E-2
SH. 1 OF 1

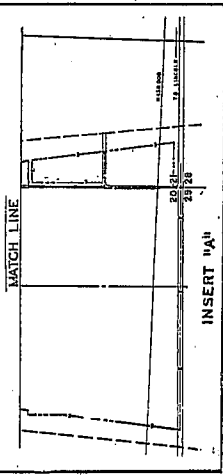


FOR OFFICIAL USE ONLY - AFR II-30

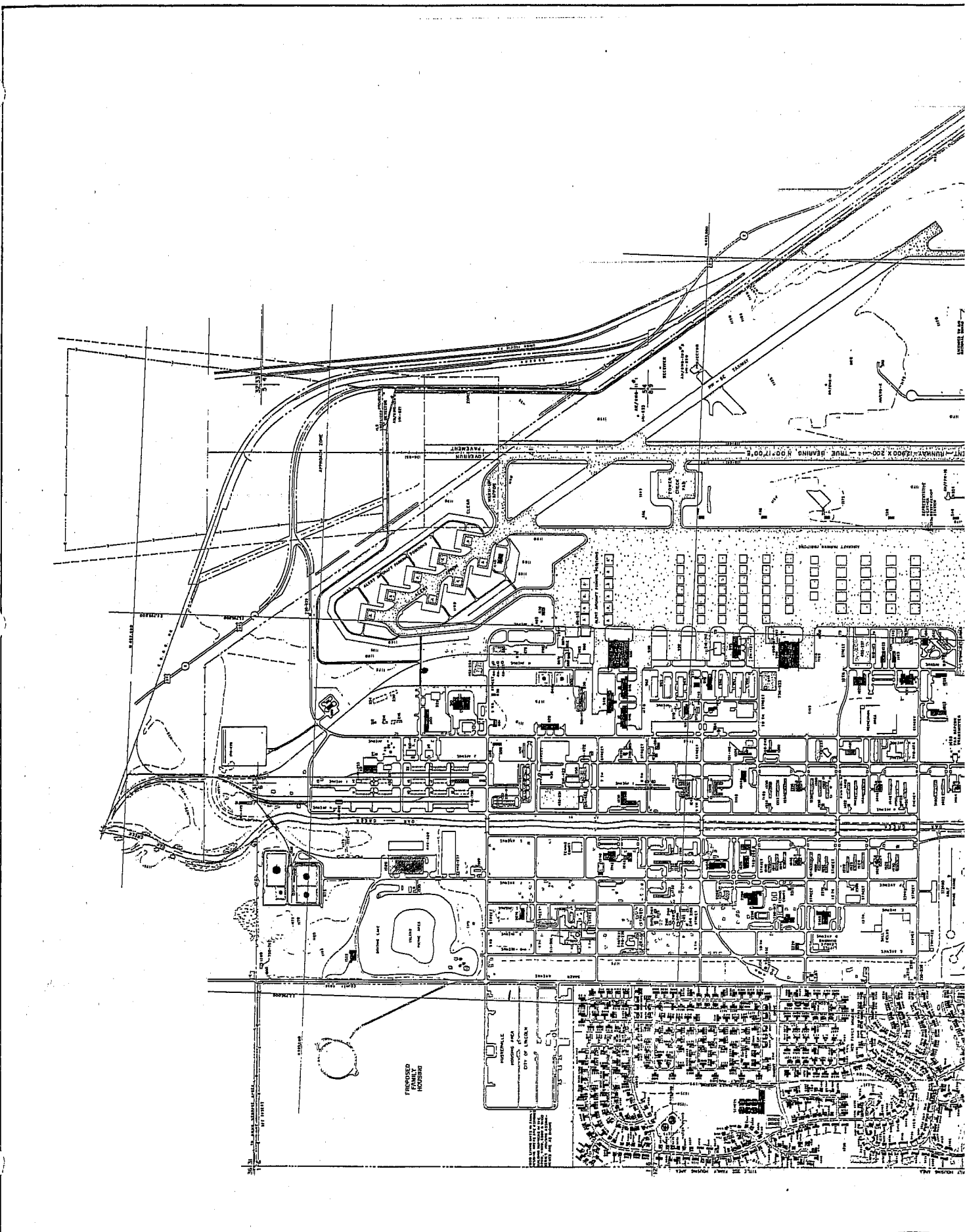


DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND TAB NO.
BASIC MISSION PLAN F-1
 LINCOLN AFB SH. 1 OF 1

MATCH LINE. SEE INSERT "A"



AMMO STORAGE ANNEX



ELEVATIONS IN SLOPING SOUTH
Approach Zone A
End of Runway Elevation 1174

DIST. FROM END OF CLEAR ZONE	TOTAL WIDTH OF RUNWAY	SLOPE	HEIGHT ABOVE RUNWAY ELEVATION	ELEV. M.S.L.
0'	1,000'	0	0	1,174
1,000'	1,100'	50 to 1	20'	1,154
2,000'	1,200'	50 to 1	40'	1,134
3,000'	1,300'	50 to 1	60'	1,114
4,000'	1,400'	50 to 1	80'	1,094
5,000'	1,500'	50 to 1	100'	1,074
6,000'	1,600'	50 to 1	120'	1,054
7,000'	1,700'	50 to 1	140'	1,034
8,000'	1,800'	50 to 1	160'	1,014
9,000'	1,900'	50 to 1	180'	994
10,000'	2,000'	50 to 1	200'	974

ELEVATIONS IN SLOPING NORTH
Approach Zone B
End of Runway Elevation 1174

DIST. FROM END OF CLEAR ZONE	TOTAL WIDTH OF RUNWAY	SLOPE	HEIGHT ABOVE RUNWAY ELEVATION	ELEV. M.S.L.
0'	1,000'	0	0	1,174
1,000'	1,100'	50 to 1	20'	1,154
2,000'	1,200'	50 to 1	40'	1,134
3,000'	1,300'	50 to 1	60'	1,114
4,000'	1,400'	50 to 1	80'	1,094
5,000'	1,500'	50 to 1	100'	1,074
6,000'	1,600'	50 to 1	120'	1,054
7,000'	1,700'	50 to 1	140'	1,034
8,000'	1,800'	50 to 1	160'	1,014
9,000'	1,900'	50 to 1	180'	994
10,000'	2,000'	50 to 1	200'	974

ELEVATIONS IN SLOPING SOUTH ZONE E
Distance Measured Perpendicularly From Extended Centerline of Runway
End of Runway Elevation 1174

DISTANCE FROM EXTENDED C. OF RUNWAY	TOTAL WIDTH OF ZONE D	EDGE OF ZONE D	DISTANCE FROM SLOPE	SLOPE	HEIGHT	ELEV. M.S.L.
2,000'	4,000'	0'	0	0	200'	1,174
2,350'	4,700'	350'	7 to 1	250'	1,421	1,421
2,700'	5,400'	700'	7 to 1	300'	1,471	1,471
3,050'	6,100'	1,050'	7 to 1	350'	1,524	1,524
3,400'	6,800'	1,400'	7 to 1	400'	1,579	1,579
3,750'	7,500'	1,750'	7 to 1	450'	1,626	1,626
4,100'	8,200'	2,100'	7 to 1	500'	1,674	1,674

ELEVATIONS IN SLOPING NORTH ZONE E
Distance Measured Perpendicularly From Extended Centerline of Runway
End of Runway Elevation 1174

REFERENCE ELEVATION	STA.	RUNWAY DIST. FROM C.	SLOPE	HEIGHT ABOVE RUNWAY ELEVATION	ELEV. M.S.L.
1174 - North End of Runway	87 + 00	1,000'	0	0	1,174
	87 + 80	1,500'	7 to 1	71.4'	1,245.4
	87 + 00	2,000'	7 to 1	142.8'	1,316.8
	87 + 00	2,500'	7 to 1	214.2'	1,388.2
1174 - South End of Runway	171 + 00	1,000'	0	0	1,174
	171 + 00	1,500'	7 to 1	71.4'	1,245.4
	171 + 00	2,000'	7 to 1	142.8'	1,316.8
	171 + 00	2,500'	7 to 1	214.2'	1,388.2
	216 + 00	1,500'	7 to 1	71.4'	1,245.4
	216 + 00	2,000'	7 to 1	142.8'	1,316.8
	216 + 00	2,500'	7 to 1	214.2'	1,388.2

ELEVATIONS IN SLOPING ZONE F
All Distances Measured From Airfield Reference Point

DISTANCE	HEIGHT	SLOPE	ELEV. M.S.L.
10,000'	150'	0	1,145
11,000'	200'	20 to 1	1,195
12,000'	250'	20 to 1	1,245
13,000'	300'	20 to 1	1,295
14,000'	350'	20 to 1	1,345
15,000'	400'	20 to 1	1,395
16,000'	450'	20 to 1	1,445
17,000'	500'	20 to 1	1,495

DISTANCE FROM END OF RUNWAY	TOTAL WIDTH OF ZONE	SLOPE	HEIGHT	ELEV. M.S.L.
2,000'	4,000'	0	200'	1,174
2,350'	4,700'	7 to 1	250'	1,424
2,700'	5,400'	7 to 1	300'	1,474
3,050'	6,100'	7 to 1	350'	1,524
3,400'	6,800'	7 to 1	400'	1,574
3,750'	7,500'	7 to 1	450'	1,624
4,100'	8,200'	7 to 1	500'	1,674

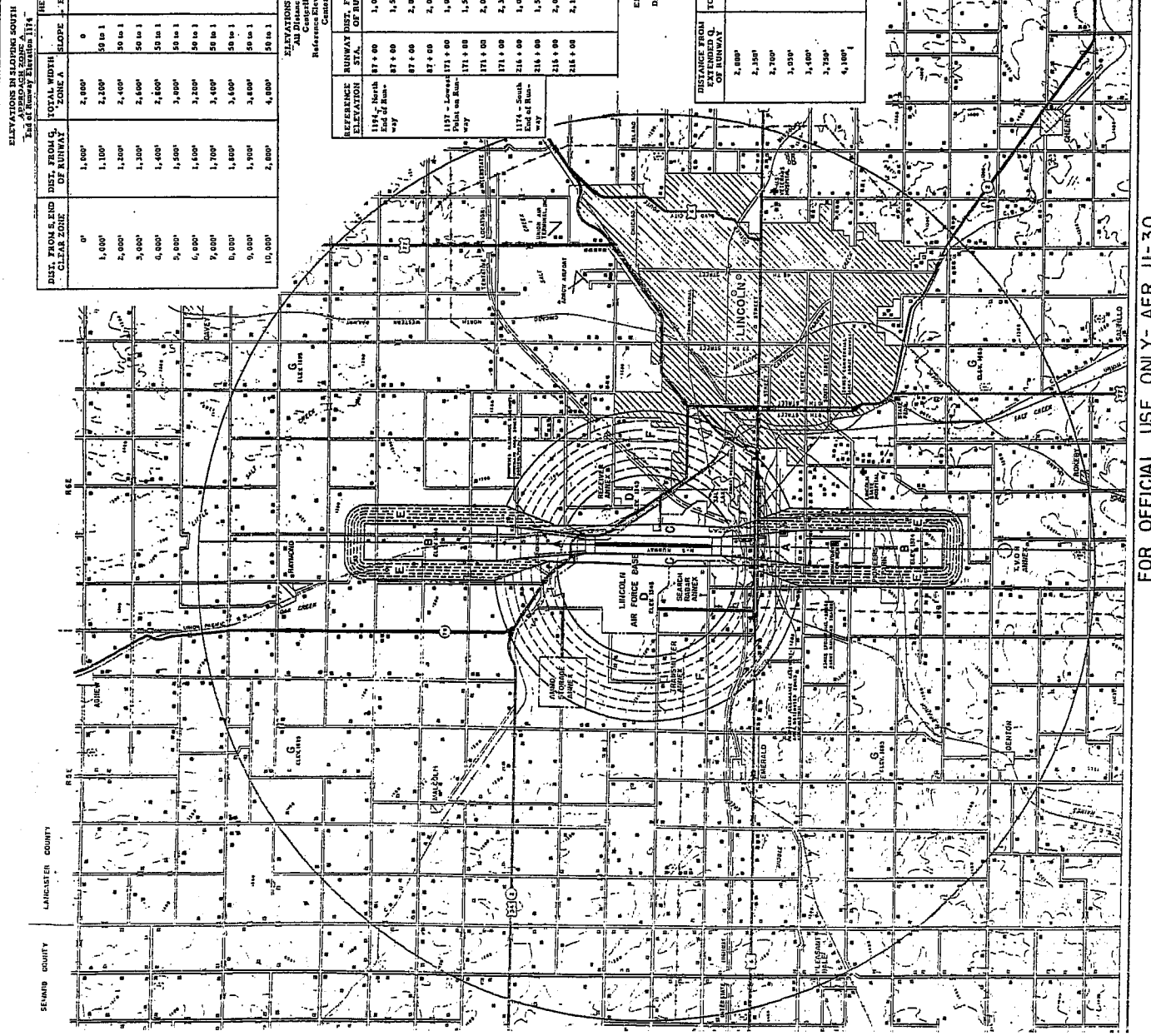


DEPARTMENT OF THE AIR FORCE
STRATEGIC AIR COMMAND
ZONING PLAN
LINCOLN AFB

TAB NO. F-4

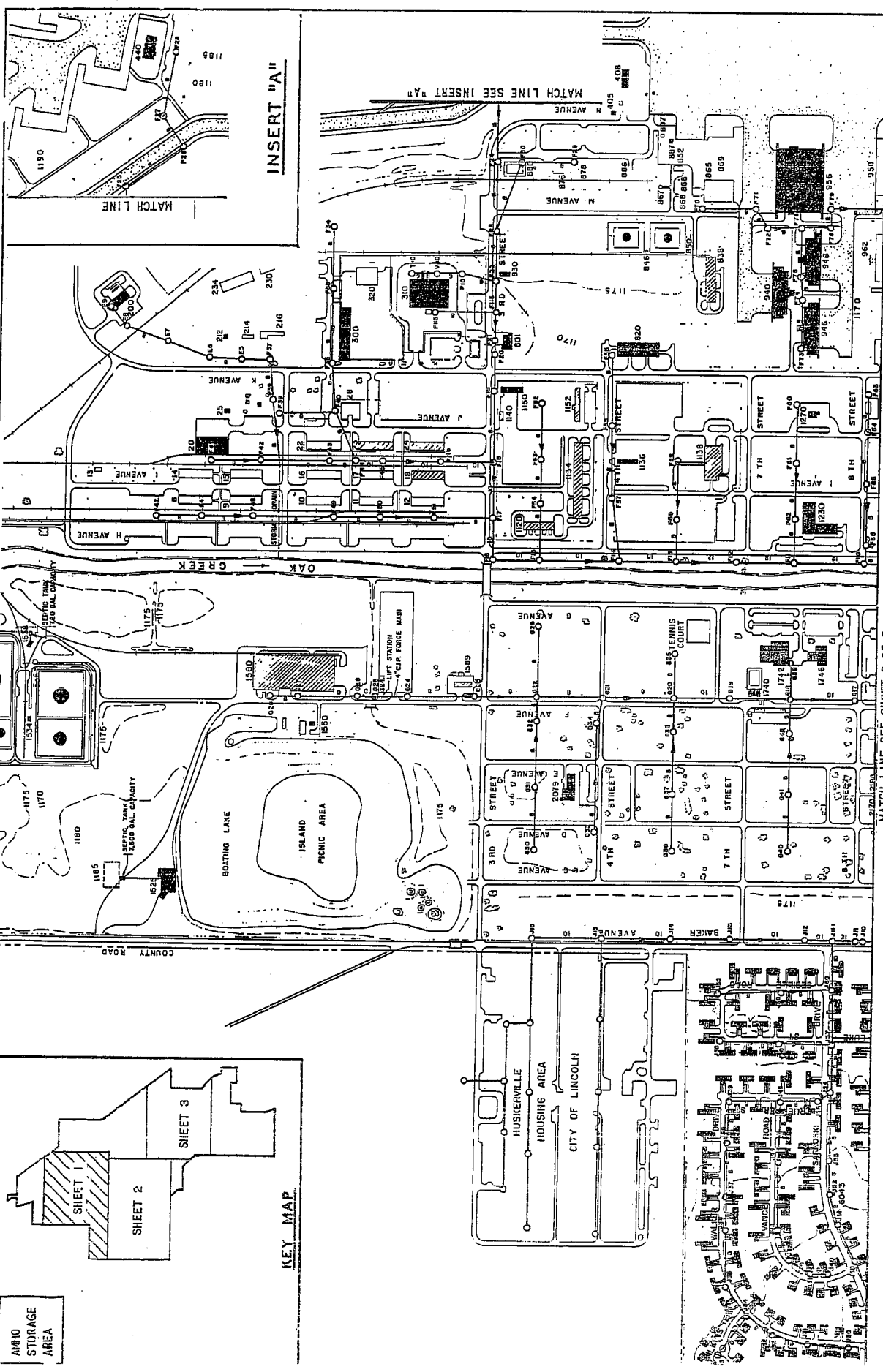
SH-1 OF 1

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Sanitary Sewage System and Treatment Plant and Refuse Disposal. The entire primary installation is served by a separate sanitary sewage system consisting of lateral sewers flowing from the north and west and connecting at several points to the trunk sewer flowing to the east boundary line. The sewage then flows to the Lincoln municipal sewage treatment plant via a municipal outfall line. The Air National Guard, adjacent Air Force area, and the municipal terminal sanitary sewer lines are connected to this outfall line. All pipe is vitrified clay pipe except for sections under airfield pavement and the siphon at Oak Creek and Cheney Street which are cast iron. Lift stations are located on F Avenue near the stockade ditch and south of the Air National Guard area.

Garbage is removed from the Base by contract garbage haulers and deposited in the city land fill garbage disposal area north of Lincoln. Refuse is disposed of by base forces at a fill area.

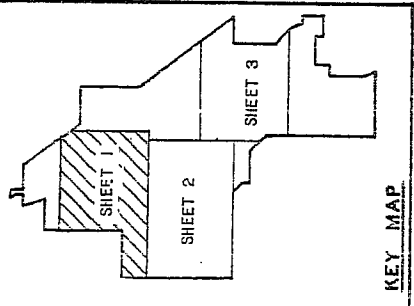


DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND TAB NO. G-S
 SANITARY SEWERAGE SYSTEM
 LINCOLN AFB



SCALE IN FEET

AMMO STORAGE AREA



KEY MAP

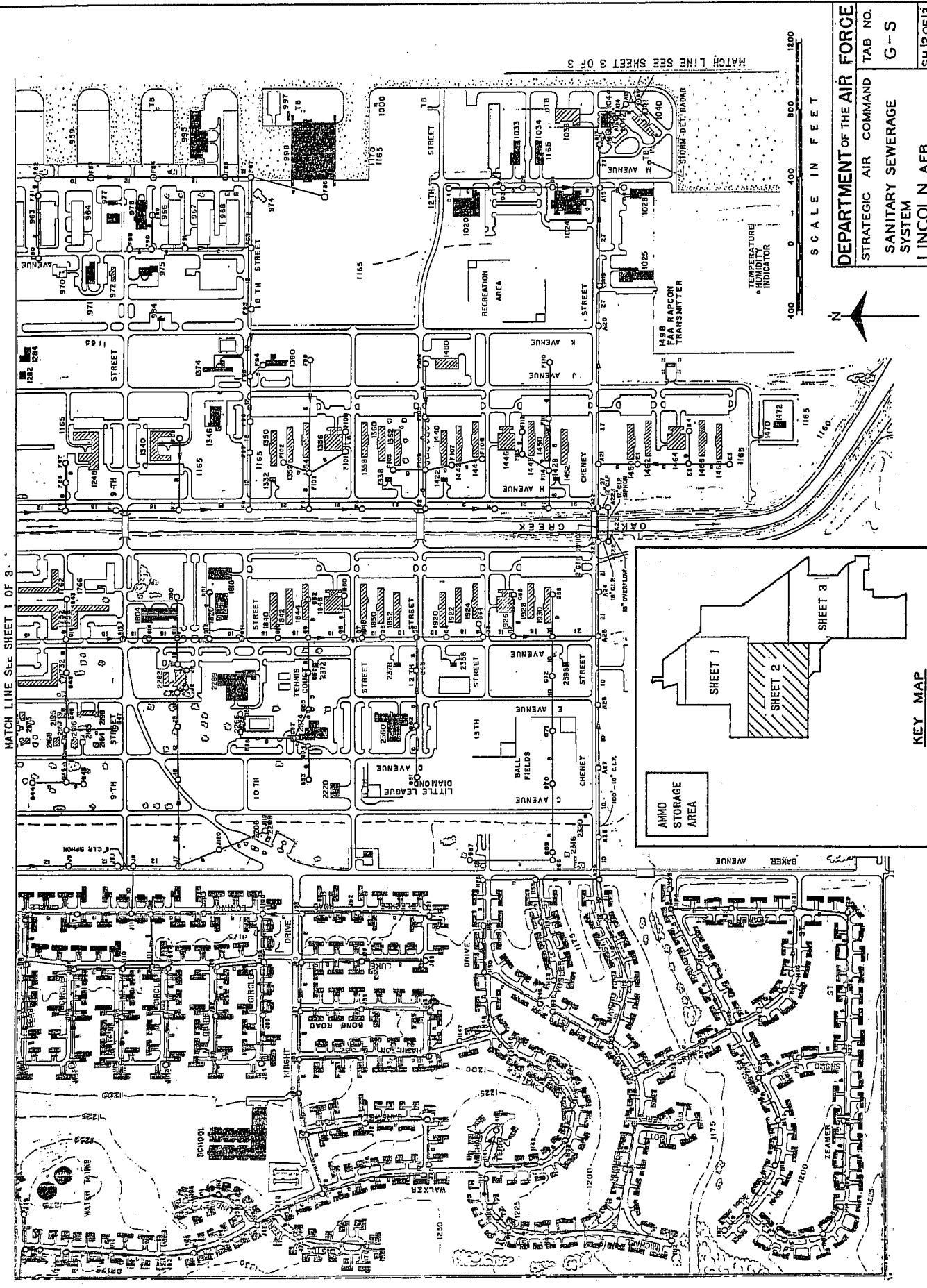
HUSKERVILLE HOUSING AREA
 CITY OF LINCOLN

MATCH LINE SEE SHEET 2 OF 3

MATCH LINE SEE INSERT "A"

INSERT "A"

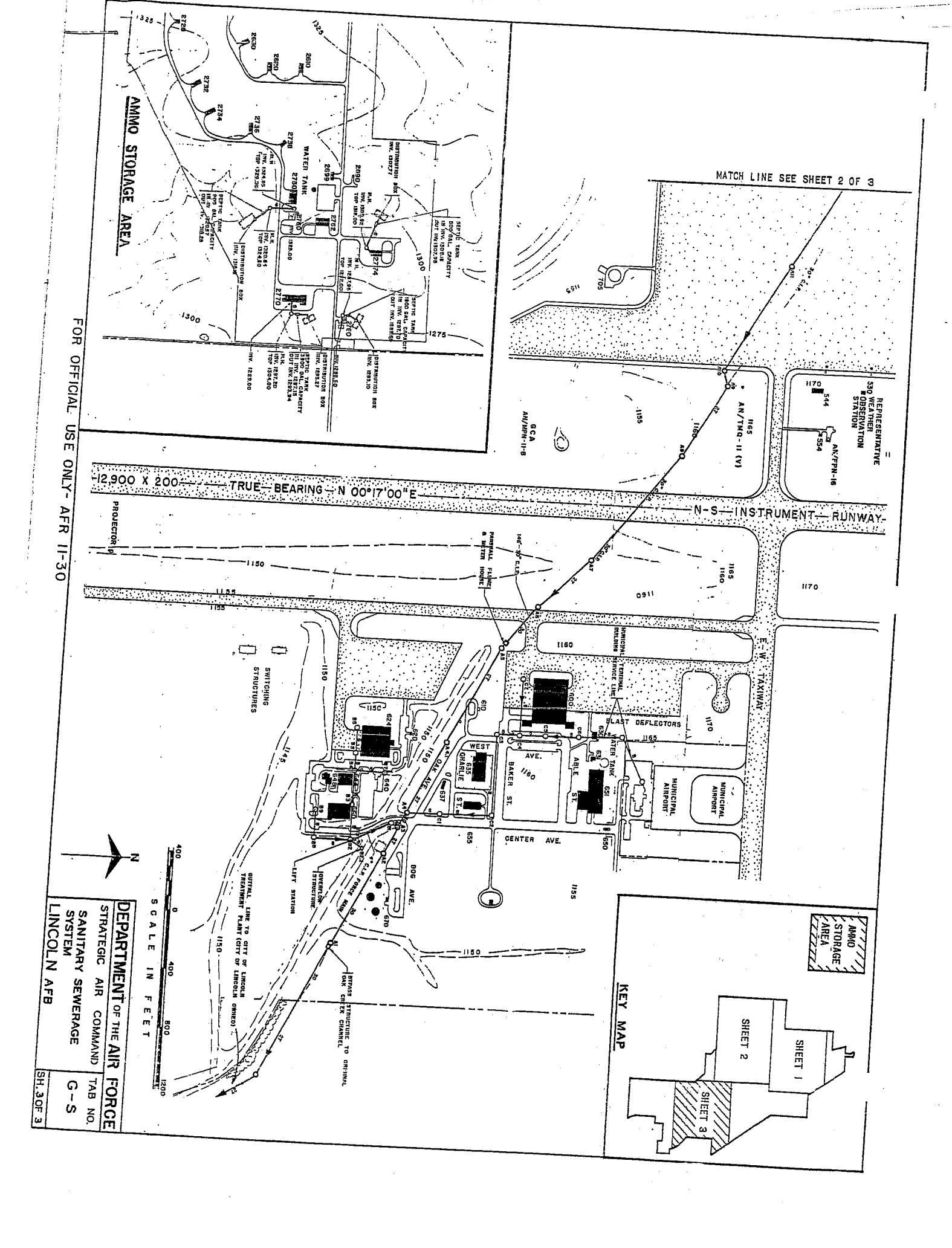
MATCH LINE SEE SHEET 1 OF 3



DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND TAB NO. G-5
 SANITARY SEWERAGE SYSTEM
 LINCOLN AFB

SH.12 OF 13

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AMMO STORAGE AREA

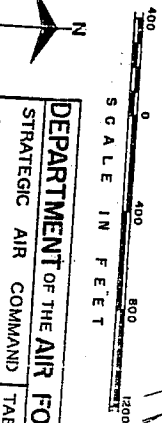
MATCH LINE SEE SHEET 2 OF 3

REPRESENTATIVE WEATHER OBSERVATION STATION
AN/PPN-16
AN/AMN-11-8
AN/TM-11 (V)

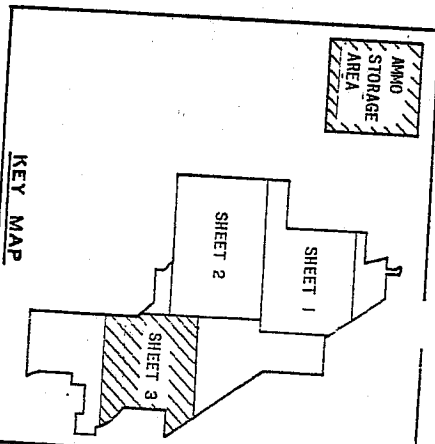
2,900 X 200 - TRUE BEARING - N 00°17'00"E
N-S INSTRUMENT RUNWAY

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PROJECTOR

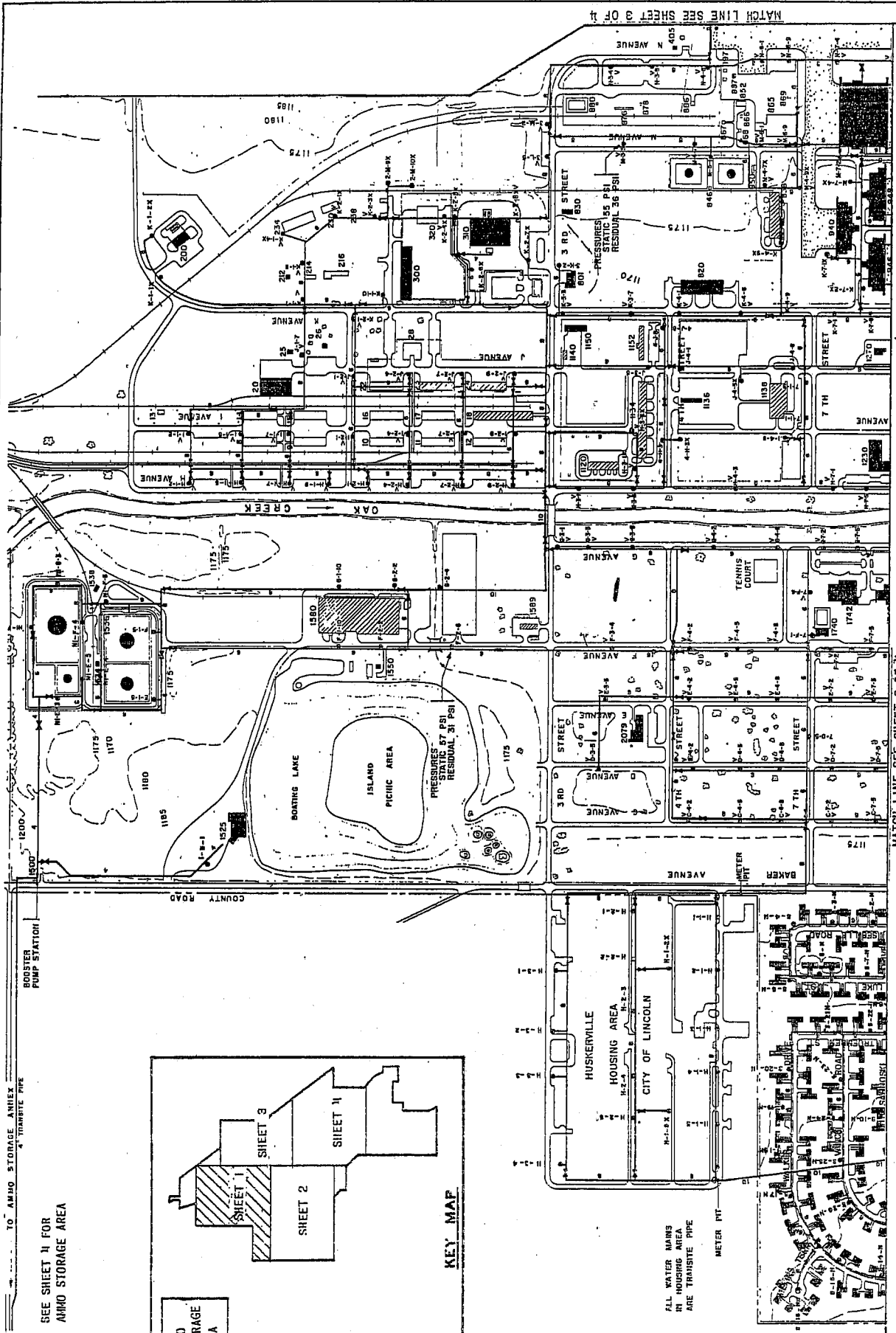


SCALE IN FEET



KEY MAP

DEPARTMENT OF THE AIR FORCE
STRATEGIC AIR COMMAND
SANITARY SEWERAGE SYSTEM
LINCOLN AFB
TAB NO. G-5
SH. 30F. 3



DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND
 WATER SUPPLY SYSTEM
 LINCOLN AFB

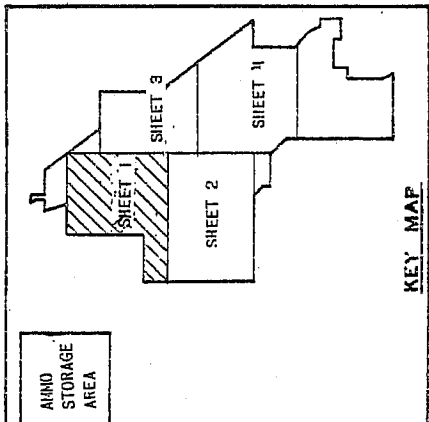
SH. 1 OF 4

MATCH LINE SEE SHEET 2 OF 4

400 0 400 800 1200
 SCALE IN FEET

MATCH LINE SEE SHEET 3 OF 4

FOR OFFICIAL USE ONLY- AFR II-30



SEE SHEET 11 FOR
 AMMO STORAGE AREA

TO AMMO STORAGE ANNEX
 4" TRANSITE PIPE

ALL WATER MAINS
 IN HOUSING AREA
 ARE TRANSITE PIPE



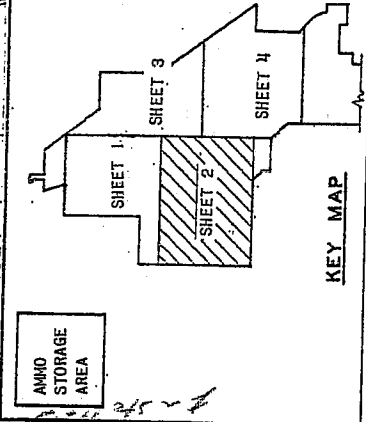
MATCH LINE SEE SHEET 1 OF 11

MATCH LINE SEE SHEET 4 OF 4

DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND
 WATER SUPPLY SYSTEM
 LINCOLN AFB

SH. 2 OF 4

SCALE IN FEET
 0 400 800 1200



KEY MAP

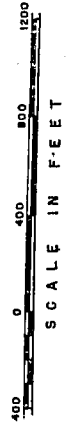
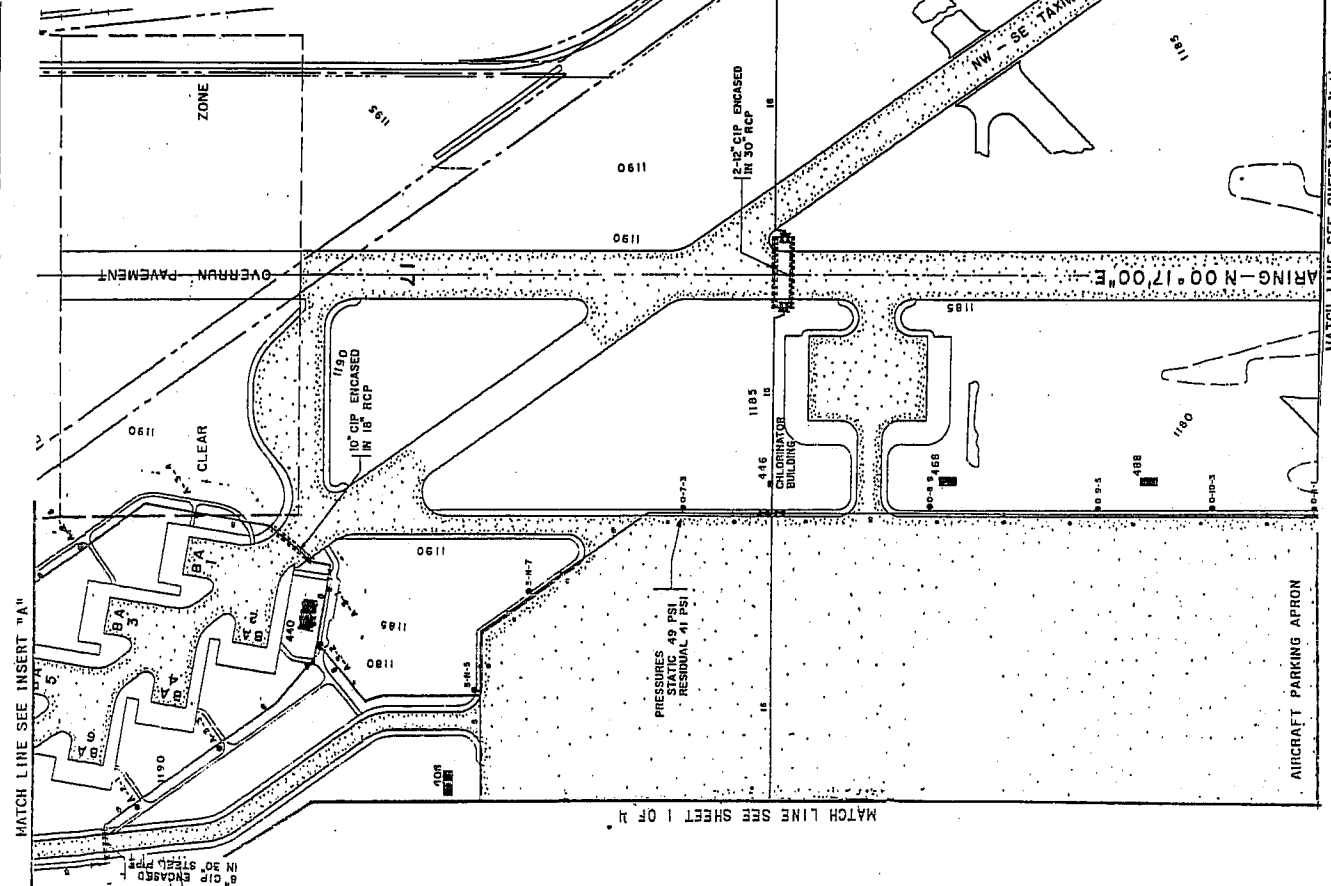
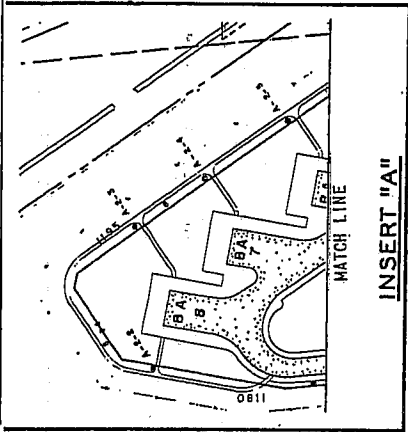
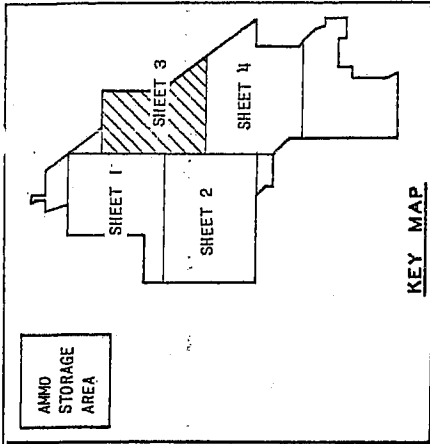
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75,000 GALLON
 REINFORCED CONCRETE
 WATER STORAGE TANK

FIA RAYCOB
 TRANSMITTER
 14600-14605
 14620-14625
 14640-14645
 14660-14665
 PRESSURES
 STATIC 80 PSI
 RESIDUAL 48 PSI

2-1000 GALLON
 GROUND LEVEL
 CONCRETE
 WATER STORAGE TANKS

ALL WATER MAINS
 IN HOUSING AREA
 ARE TRANSITE PIPE



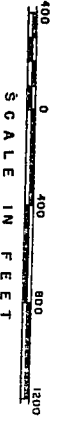
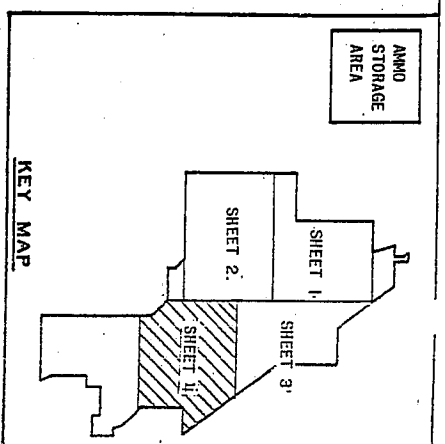
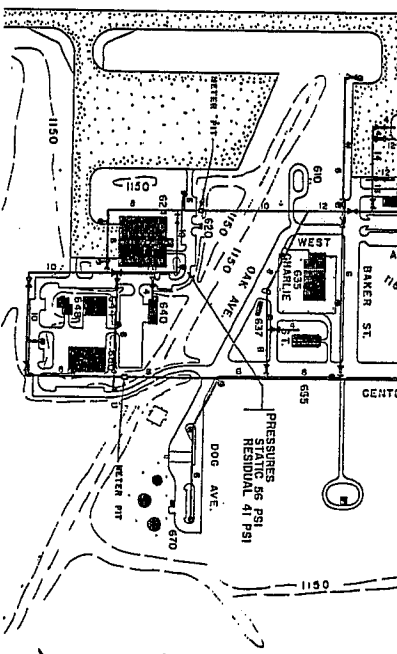
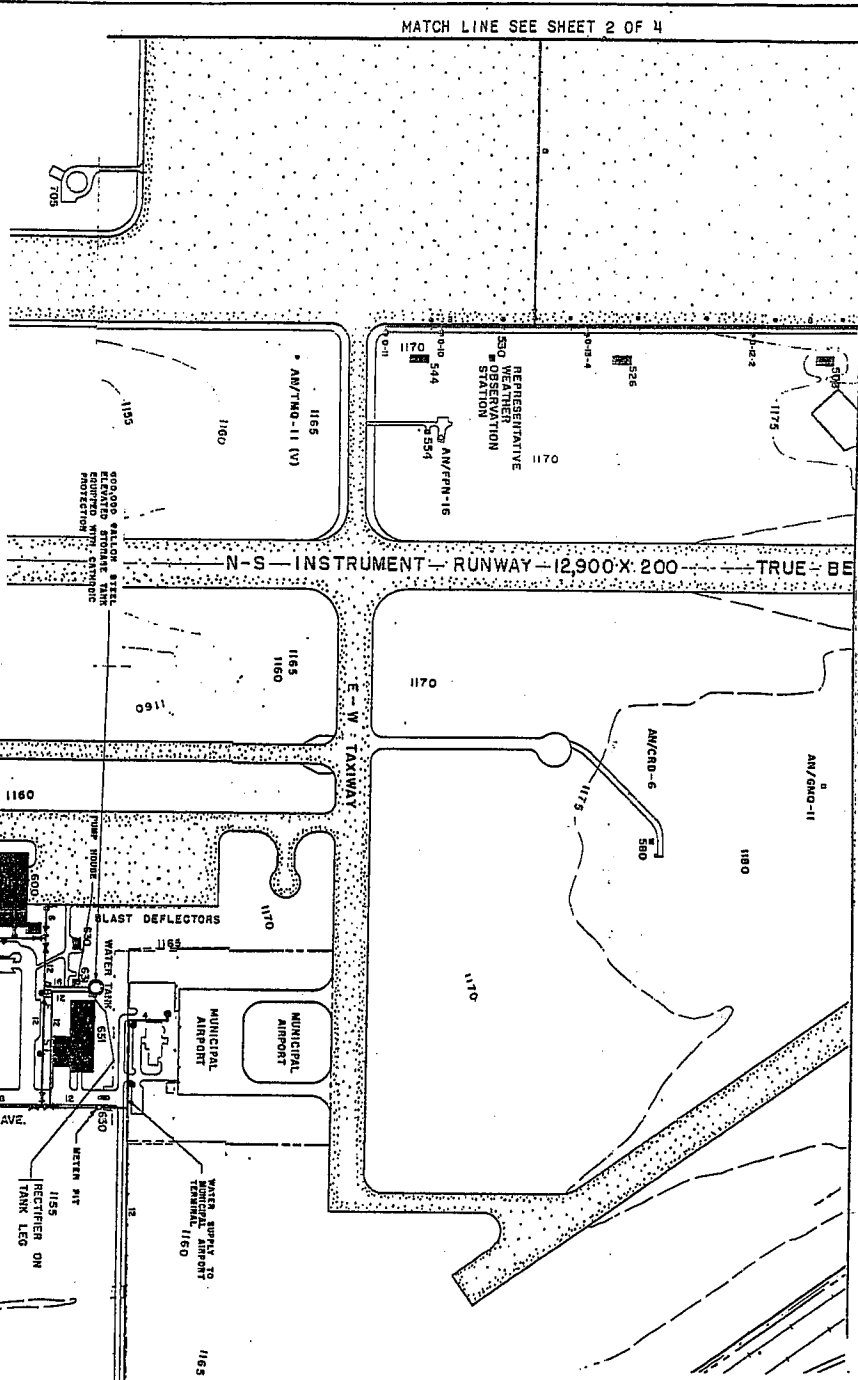
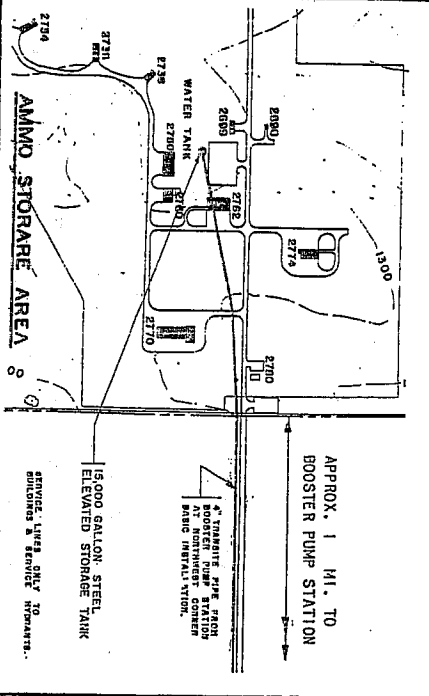
DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND TAB NO.
 WATER SUPPLY SYSTEM G-W
 LINCOLN AFB SH. 3 OF 4

MATCH LINE SEE INSERT "A"

MATCH LINE SEE SHEET 1 OF 4

MATCH LINE SEE SHEET 4 OF 4

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DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND
 WATER SUPPLY SYSTEM
 LINCOLN AFB

TAB NO. G-W
 SH. 4 OF 4

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Electrical Power and Street Lighting Facilities. Electrical power is furnished the primary installation by the City of Lincoln over a 34.5 KV transmission line entering the Base from the south. Substation capacities are the limiting capacity factors.

The main substation is an open type substation. Transformers are single phase, oil immersed, self-cooled, with a capacity of 5,000 KVA. There are 10 feeders equipped with oil circuit breakers at this station. Maximum demand to date was 3,840 KW.

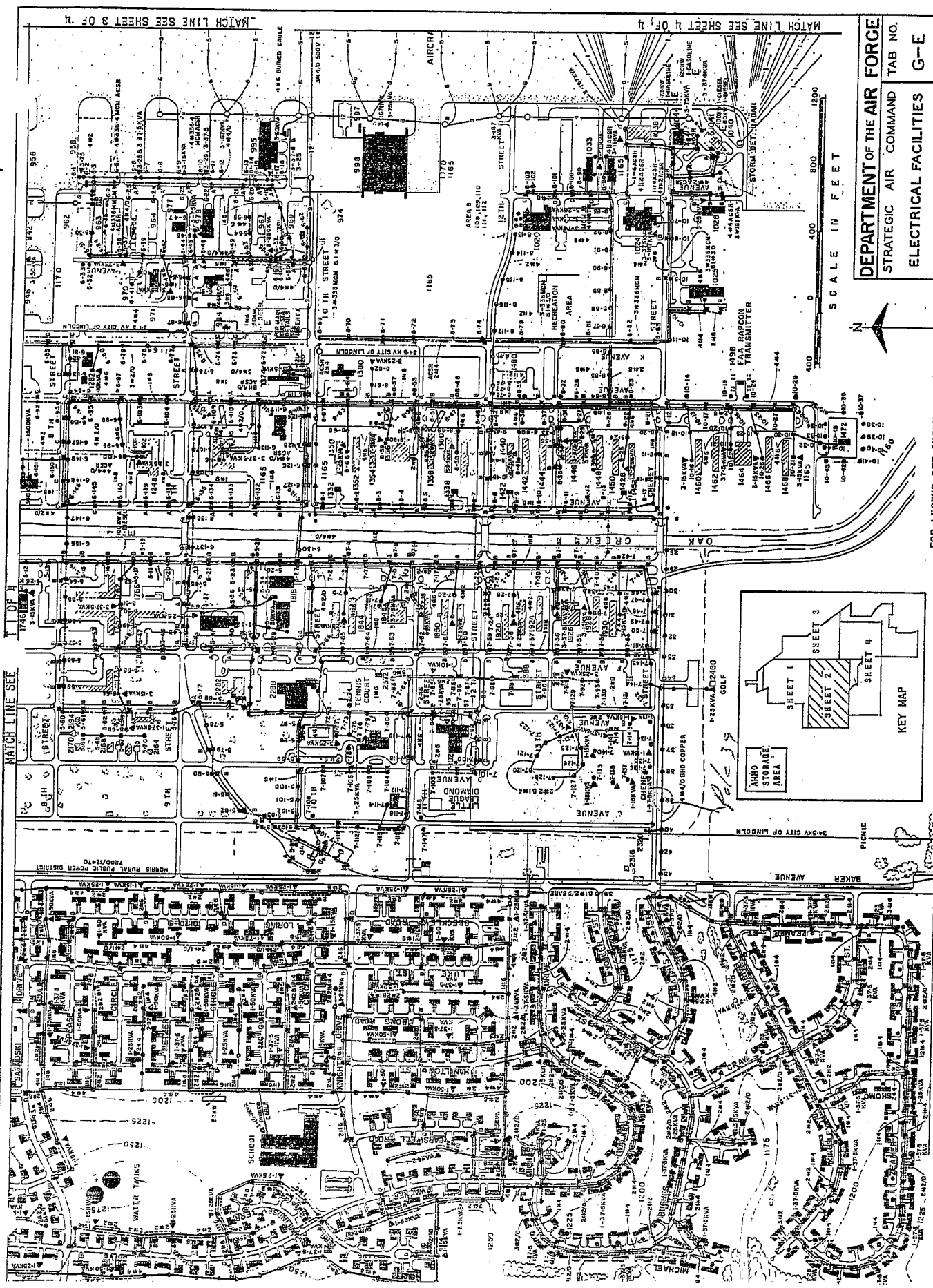
The substation for the housing area is a unit type station. Transformers are 3 phase, oil immersed, self-cooled with forced air cooling and a present capacity of 1,725 KVA. There are two feeders protected by air circulating circuit breakers. Maximum demand to date was 1,540 KW.

The substations at the Missile Assembly and Oxygen Building are the open type and equipped with oil immersed self-cooled transformers rated at 2,000 KVA per station. They are protected with fuses.

The distribution system in the Air National Guard and adjacent Air Force area is owned by the City of Lincoln. Power for this station is obtained from the east-west 34.5 KV transmission line which crosses under the runway. This station is of the open type and equipped with oil immersed self-cooled transformers rated at 1,500 KVA. Fuses protect the two feeders. The maximum demand to date was 700 KW.

A primary system voltage of 2,400/4,160 and a secondary system voltage of 110/208 is universal on the primary installation. Street light circuits are of the series type except in the Air National Guard area where they are multiple wired.

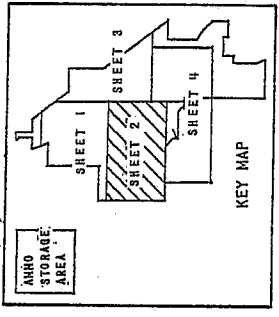
Connection is made to the Norris Rural Public Power District's 12.5 KV line at the east entrance to the Ammo Storage Annex. The substation is located south of the elevated water storage tank and has a capacity of 500 KVA as limited by the oil immersed self-cooled transformers. Maximum demand to date was 216 KW.



SCALE IN FEET

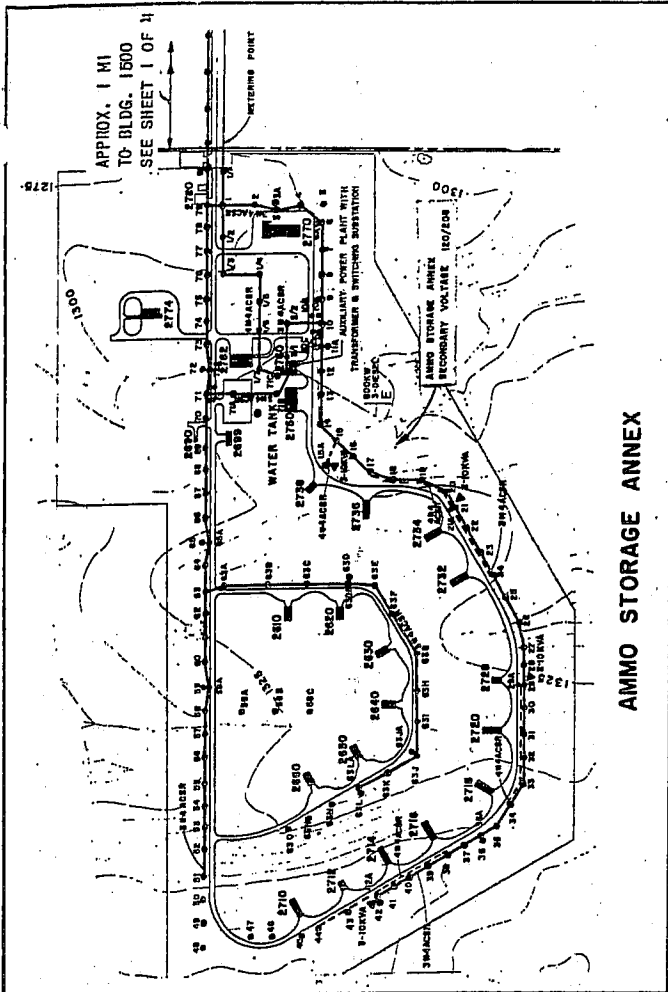


DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND TAB NO.
 ELECTRICAL FACILITIES G-E
 LINCOLN AFB SH.2 OF 4

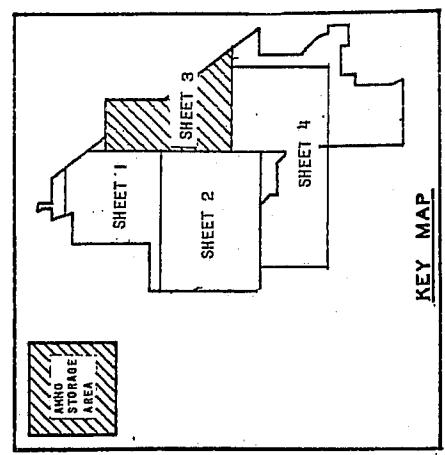


FOR LEGEND SEE SHEET 3 OF 4

FOR OFICIAL USE ONLY - AFR 11-30

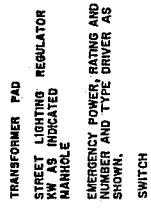


AMMO STORAGE ANNEX

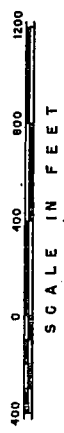


KEY MAP

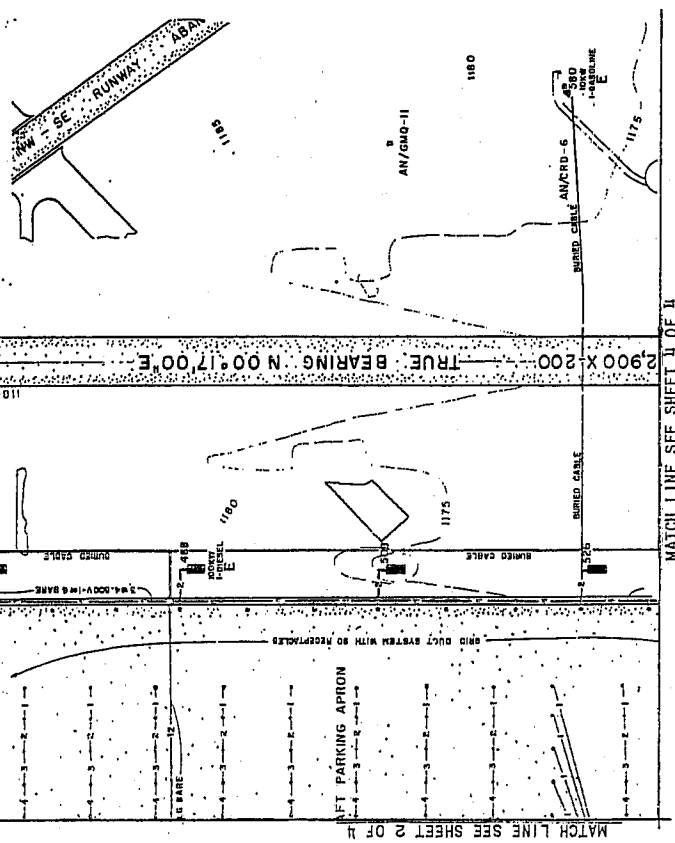
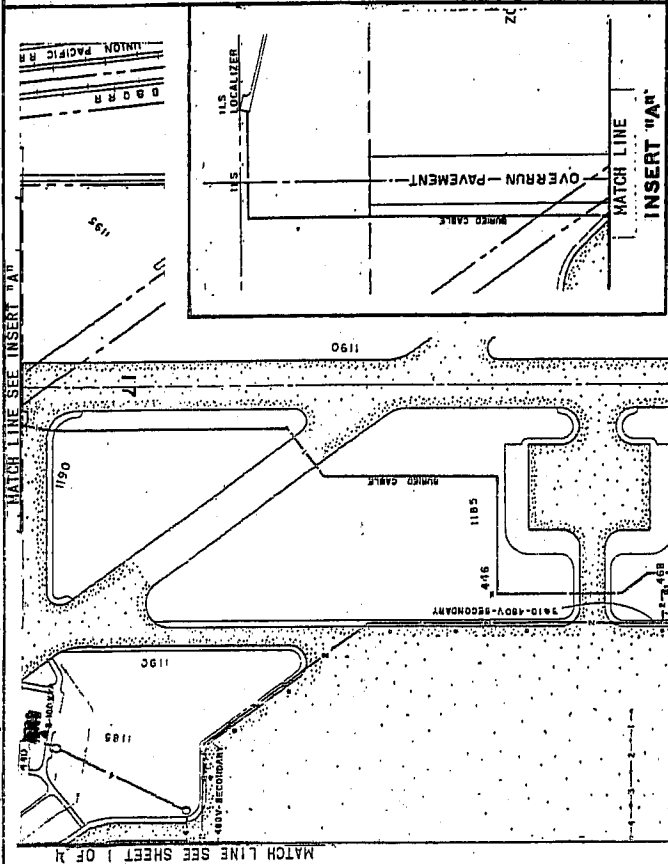
- ELECTRICAL SYSTEM**
- PRIMARY NUMBER AND WIRE SIZE AS SHOWN
 - SECONDARY NUMBER AND WIRE SIZE AS SHOWN
 - STREET LIGHTING NUMBER AND WIRE SIZE AS SHOWN
 - UNDERGROUND DUCT WITH NUMBER OF UNDERGROUND DUCT
 - TRANSFORMER NUMBER AND POLE AND POLE NUMBER
 - STREET LIGHT
 - A BOWL REFRACTOR LUMINAIRE WITH 4000 LUMEN LAMP
 - B WITH REFLECTION LUMINAIRE WITH 2500 LUMEN LAMP
 - C RADIAL WAVE REFLECTOR WITH 2500 LUMEN LAMP
 - D 8000 LUMEN LAMP
 - TRANSFORMER PAD
 - STREET LIGHTING REGULATOR KW AS INDICATED
 - MANHOLE
 - EMERGENCY POWER, RATING AND NUMBER AND TYPE DRIVER AS SHOWN
 - SWITCH



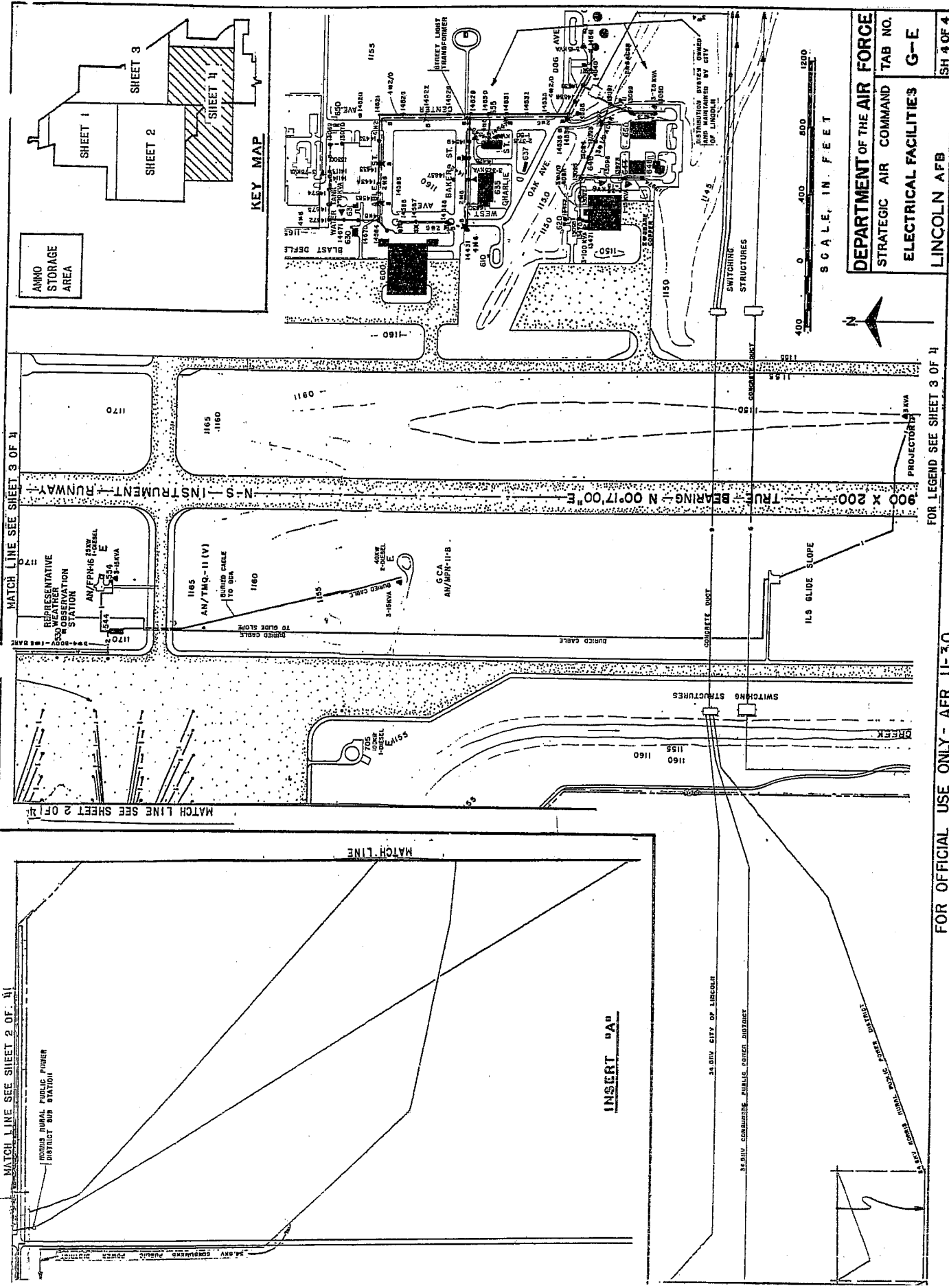
NOTE: PRIMARY VOLTAGE 2400/4160
SECONDARY VOLTAGE 120/208
STREET LIGHT CIRCUIT SERIES WIRED



DEPARTMENT OF THE AIR FORCE
STRATEGIC AIR COMMAND TAB NO. G-E
ELECTRICAL FACILITIES
LINCOLN AFB SH.3 OF 4



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DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND TAB NO.
 ELECTRICAL FACILITIES G-E
 LINCOLN AFB SH 4 OF 4



MATCH LINE SEE SHEET 3 OF 4

MATCH LINE SEE SHEET 2 OF 4

FOR LEGEND SEE SHEET 3 OF 4

FOR OFFICIAL USE ONLY - AFR 11-30

INSERT

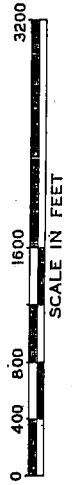
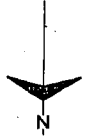
HOODS JOURNAL PUBLIC POWER DISTRICT 5th DIVISION

35 DIV CITY OF LINCOLN

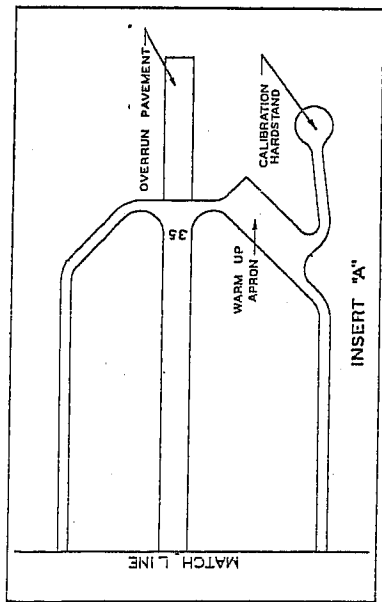
35 DIV COMMUNITIE PUBLIC POWER DISTRICT

35 DIV CITY OF LINCOLN

DEPARTMENT OF THE AIR FORCE
 STRATEGIC AIR COMMAND TAB NO. -
 AIRCRAFT PARKING PLAN
 LINCOLN AFB
 SH. I OF I



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MATCH LINE, SEE INSERT "A"

