Report No. FAA-AAP-78-2 (4)

DOT-FA-75W-3703

NEGATIVE DECLARATION
SECTION 16(c) (4) COORDINATION

for

LIBERTY AIRPORT
Northwest, America
(Model Environmental Impact Statement No. 4)

NOVEMBER 1977

FINAL REPORT

Prepared for

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Office of Airports Programs
Washington, D.C. 20591

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15. Supplementary Notes The document is one of four model environmental impact statements which illustrates the guidance presented in Report Nos. FAA-AP-77-1 and -1A, dated March 1977 and entitled "Environmental Assessment of Airport Development Actions" and Appendix Volume.

16. Abstract This model represents the least complex of the four model environmental impact statements in this series. This document which describes expansion of a general aviation airport in a rural setting does not involve significant impacts on the quality of the human environment and has undergone only limited coordination pursuant to the requirements of Section 16(c)(4) of the Airport and Airway Development Act of 1970, as amended. The impacts of the proposed development are described as minimal. However, a number of points raised in the review by the Department of the Interior led to clarification and some additional information in the text along with responses to each comment given.

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COMMENTARY ON MODEL NO. 4

The enclosed document is entitled "Negative Declaration, Section 16(c)(4) Coordination" to distinguish it from an environmental impact statement (EIS) prepared pursuant to the requirements of the National Environmental Policy Act of 1969 (NEPA), Section 102(2)(C).

> Negative Declaration signifies that this document represents an evaluation by the Federal Aviation Administration (FAA) that the action proposed will not cause significant effect on the quality of the human environment, that it is not highly controversial on environmental grounds, and will not require full coordination with Federal agencies per Section 102(2)(C) of NEPA.
>
> Section 16(c)(4) Coordination in the title refers to the fact that the action involves either an airport location, a runway location, or a major runway extension and, therefore, requires consultation with the Department of the Interior (DOI) and the Environmental Protection Agency (EPA) in accordance with Section 16(c)(4) of the Airport and Airway Development Act of 1970 (P.L. 91-258), as amended.

The airport development action in Model No. 4 includes land acquisition and extension of the existing runway at Liberty Airport, a basic utility general aviation airport in rural Franklin County, Northwest, America. The document also refers to a future construction of a new crosswind runway. However, it specifically notes that this development will be subject to separate environmental assessment prior to construction.

The runway extension requires expansion of the airport boundary and therefore is considered "major" by definition in FAA Order 1050.1B, Appendix 6. The proposed negative declaration was coordinated with DOI and EPA. DOI had several comments which are included in the report and to which responses are given. EPA had no comments.

The report presents an evaluation of the various impact categories sufficient to support a conclusion that they will not create "significant" effects on the environment. Coordination with State and local agencies as required by the Office of Management and Budget Circular A-95 is documented by inclusion of the comments received. Results of the public hearing are also included.

Approval authority for negative declaration/Section 16(c)(4) coordination actions are delegated to the regional director (reference Chapter 9, paragraph 84.a., Order 1050.1B, Appendix 6). Documentation needed to support approval is given in Chapter 9. A principal item to be presented for approval besides the information in the negative declaration itself is the Federal Finding. Regions may develop decision memoranda including the Federal Finding and summarizing the more significant factors relevant to the environmental decision on actions of the type described in Model No. 4. It should be noted that the approval of the Federal Finding by the regional director is subject to review for legal sufficiency by the regional counsel.

Model No. 4 is one of four hypothetical case studies developed under contract by FAA to supplement and illustrate the guidance presented in the FAA report, "Environmental Assessment of Airport Development Actions," issued in May 1977. For more complex situations than that contained herein, the reader is referred to Models 1, 2, and 3, which present fully coordinated NEPA Section 102(2)(C) EISs for parallel runway development at a major air carrier airport and construction of a new general aviation reliever in metropolitan areas and expansion of a general aviation facility in a rural setting. Each has its own unique circumstances including relocation and last resort housing in the first model, expansion into a bay in the second, and an endangered species in the third. Each of the four models include discussion of the principal impact categories to the extent appropriate with the scope of the project and degree of effects.

Table of Contents

	Page
Table of Contents	i
List of Exhibits	iii
List of Tables	iv
Section I: Project Description	1
Description of Proposed Action	1
Purpose	2
Project Setting	2
Section II: Probable Impact on the Environment	4
Noise	4
Land Use	6
Vegetation and Wildlife	7
Soils and Geology	7
Water Resources	9
Water Quality	9
Hydrology	10
Flood Hazard Evaluation	10
Wetlands/Coastal Zone Impacts	12
Air Quality	12
Social Impacts	18
Induced (Secondary) Socioeconomic Impacts	18
Section 4(f) Public Lands	18
Historical and Archaeological Sites	20
Public Utilities and Services	21
Solid Waste	21
Water Supply	21
Sewage Treatment Facilities	21
Energy	22
Section III: Probable Adverse Environmental Effects Which Cannot be Avoided and Actions to Minimize Harm	23

Table of Contents--Continued

	Page
Section IV: Alternatives to the Proposed Action	25
New Site	25
On-Site Alternatives	26
Use of Existing Airports	26
No Project	26
Section V: The Relationship Between Local Short-Term Uses of the Environment and Maintenance and Enhancement of Long-Term Productivity	28
Section VI: Irreversible or Irretrievable Commitments of Resources	29
Section VII: Summary of Public Hearings on Environmental Assessment Report Held on July 16, 1975 at 7:30 p.m., Franklin County Courthouse--Milford	30
Section VIII: Summary of Clearinghouse Review	31
Appendix	
Section 16(c)(4) Coordination Comments and FAA Responses	
Model Statement Instructional Guidance	

List of Exhibits

Exhibit No.		Following Page
1	Locatio . Map	1
2	Vicinity Map	Exhibit 1
3	Airport Layout Plan - Proposed Project . . .	Exhibit 2
4	Noise Exposure Forecast (NEF) Contours Existing Facility - 1975	5
5	Noise Exposure Forecast (NEF) Contours - 1980 & 1990	Exhibit 4
6	Existing Zoning	6
7	Future Land Use	Exhibit 6
8	Topographic Map	10

List of Tables

Table No.		Page
1	Land Uses Adjacent to Airports and the Relationship to NEF Contours	5
2	Airport Area Hydrology	11
3	National Ambient Air Quality Standards	13 & 14
4	Ambient Air Quality Conditions	16
5	Air Quality Box Model Data	17
6	Peak Hour Emission Concentrations	19

SECTION I: PROJECT DESCRIPTION

DESCRIPTION OF PROPOSED ACTION

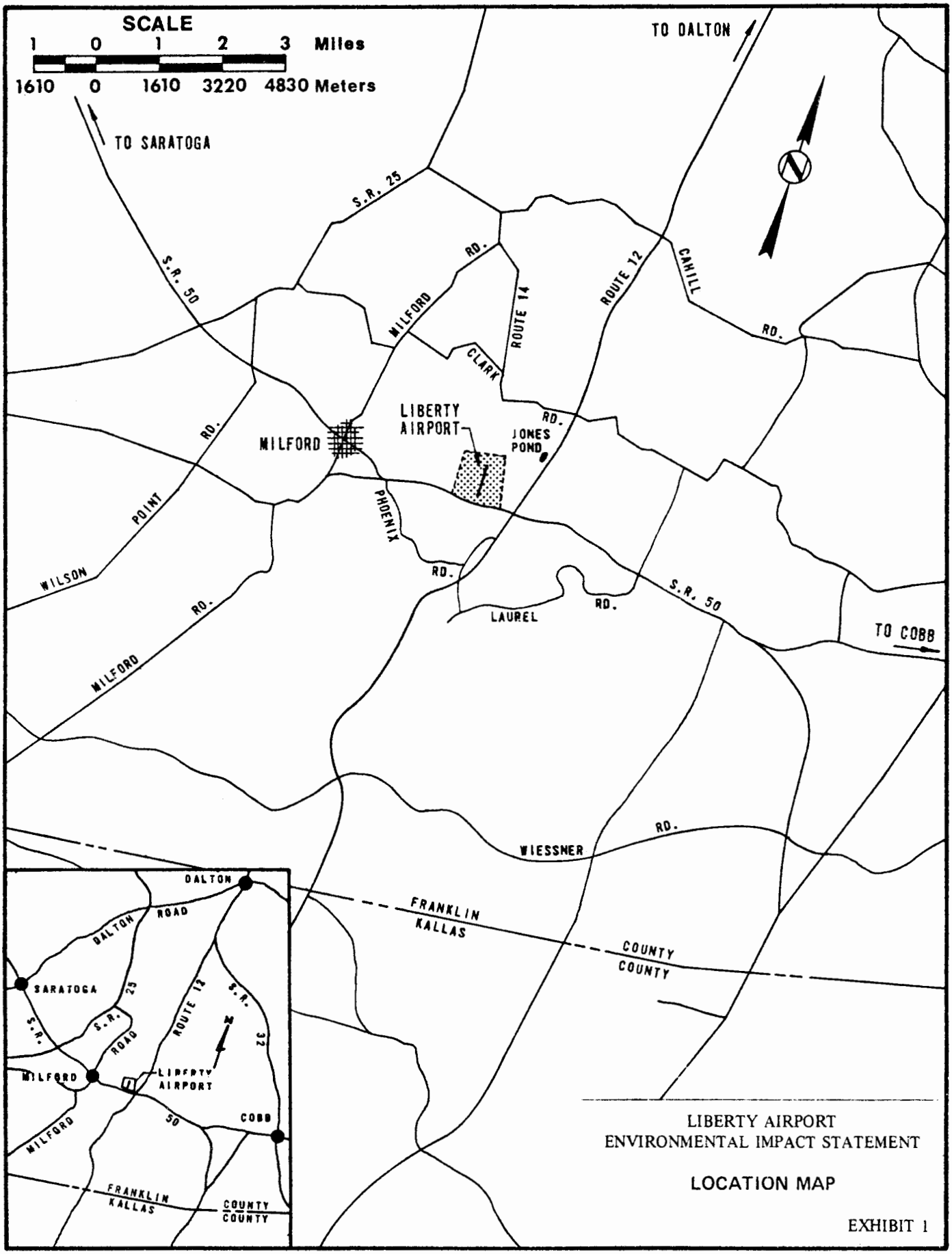
Liberty Airport is a basic utility (stage I) airport located three miles east of the county seat in Northwest, America. Its present facilities include a 3,000-foot by 75-foot paved runway (designated runway 1/19), a single perpendicular taxiway which connects to an aircraft apron, an airport service building, an auto parking area, and a paved access road which extends along the airport's western property line to State Route 50 (see Exhibits 1 and 2).

Present airport activity is comprised of scheduled commuter service, charter and air taxi service, sight-seeing and private flights. The airport almost exclusively serves classes D and E aircraft. A majority of the operations are local. The facility has a very small complement of based aircraft other than the fixed-base operator's (FBO) equipment. There are a total of 14 based aircraft at Liberty Airport. They include: 1-Beech Bonanza, 3-Cessna 150's, 1-Cessna 210, 2-Piper Pacers, 1-Mooney Mite, 1-Aero Commander, 2-Beech Barons, 1-Cessna 310 (Twin), 2-Piper Super Cubs.

In 1975 there was a total of 30,208 operations at Liberty Airport. Of these 18,125 were local and 12,083 were itinerant. Typical general aviation aircraft utilizing the facility, as noted above, are small single- and twin-engine planes, such as Cessna and Piper models.

It is proposed that the airport be expanded to a basic utility (stage II) airport by extending the existing runway to 3,700 feet. Additional facilities proposed include turnarounds at both ends of the runway, runway lighting, apron expansion, and construction of a main hangar building. The action includes the acquisition of approximately 25 acres of land for the proposed runway extension, turnarounds and clear zone easements (see Exhibit 3).

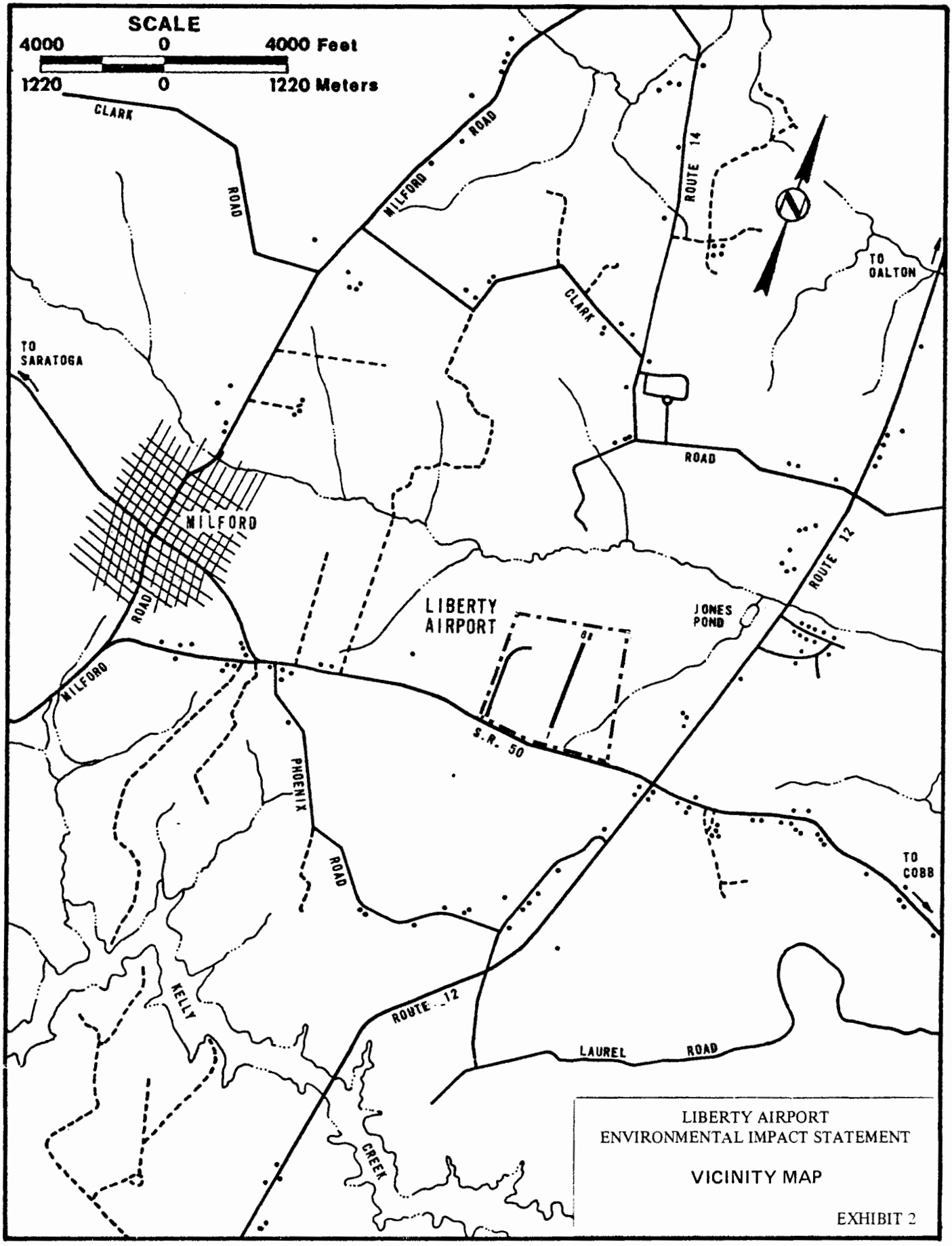
In addition to the proposed improvements, it is planned that provision ultimately be made for the addition of a 3,000-foot crosswind runway. The crosswind runway, as depicted on the airport layout plan (Exhibit 3), would be built entirely on existing airport property, but would require the establishment of additional clear zone easements. This assessment does not include an environmental evaluation of the proposed crosswind runway. This future development will be the subject of a separate assessment prior to construction.



LIBERTY AIRPORT
ENVIRONMENTAL IMPACT STATEMENT

LOCATION MAP

EXHIBIT 1



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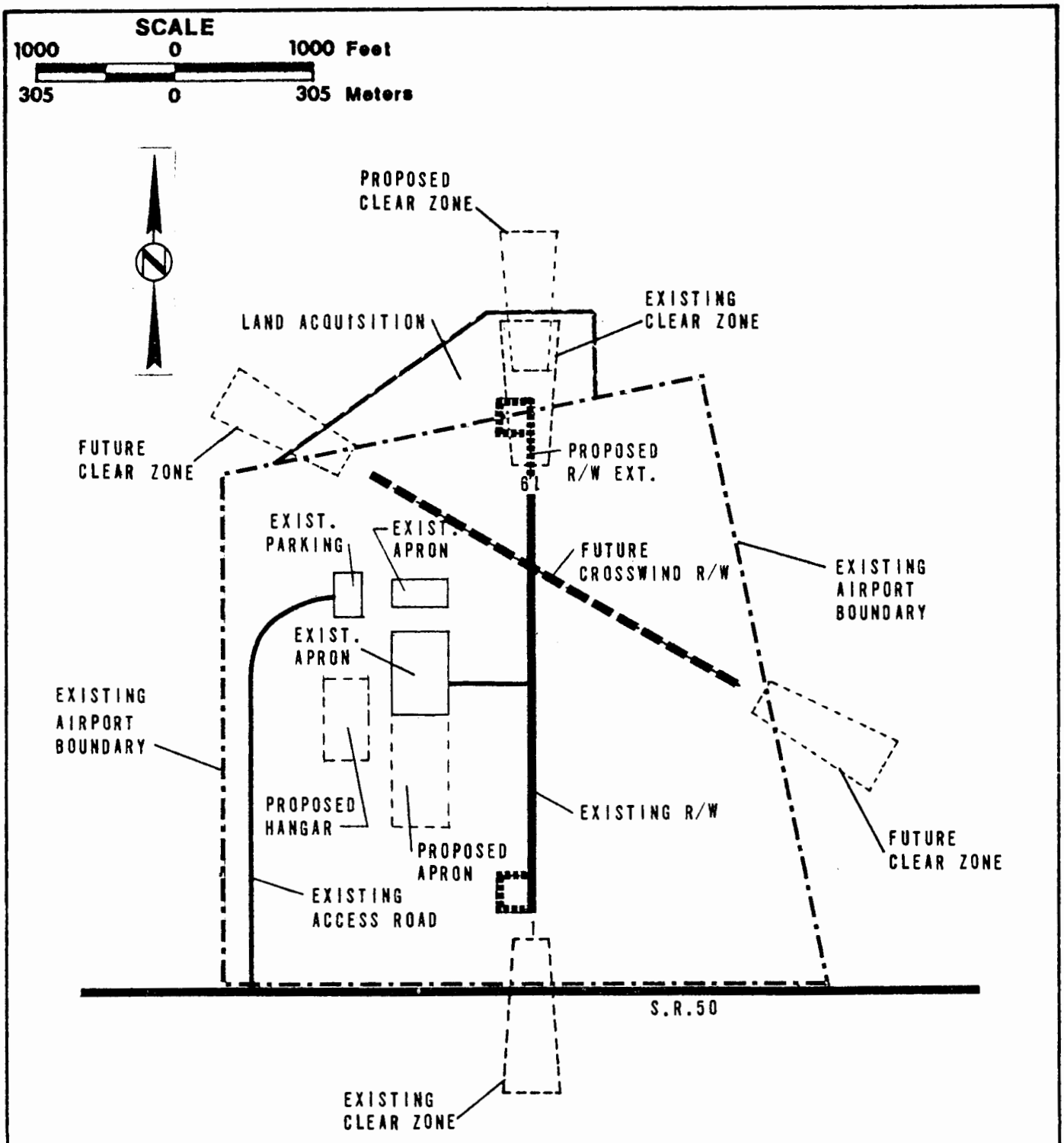
VICINITY MAP

EXHIBIT 2



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AIRPORT LAYOUT PLAN
PROPOSED PROJECT

EXHIBIT 3

PURPOSE

The present airport, by its configuration and general classification, accommodates approximately 75 percent of the propeller general aviation fleet under 12,500 pounds. The proposed runway extension will improve the airport's level of service by safely accommodating virtually all (95 percent) of the propeller general aviation fleet under 12,500 pounds. This commitment is consistent with meeting the increasing aviation needs of the general community and the county government. The National Airport System Plan (NASP) and the State System Plan are reasonably consistent with the annual operational forecasts that have been prepared for this airport. Projected usage of this facility is forecast to increase by approximately 50 percent, from 30,208 operations in 1975 to 45,000 operations in 1980. Annual operations are forecasted to reach 60,000 by 1990. In addition, a basic utility (stage II) airport is now considered minimum fundamental development for inclusion in the NASP.

The present runway configuration provides only 93 percent allowable crosswind coverage. The ultimate addition of a crosswind runway at the Liberty Airport will provide about 99 percent coverage and will contribute to a safer operation during those periods (10 percent) when the crosswind component is critical.

The proposed project will provide a more efficient facility to handle general aviation aircraft making trips to and from this area for such reasons as emergencies, recreation, and business opportunities. In addition, with the increased length of runways at the airport, the excellent and only major medical facility in the County will be within twin-engine aircraft range of the State's main hospital center at Pride City. Finally, almost all types of general aviation piston aircraft--with higher payloads and in hot weather--will be able to utilize the expanded airport facility.

PROJECT SETTING

The proposed project is located in the central portion of Franklin County, approximately two miles east of the county seat of Milford. Franklin County is located in the remote northwestern section of the state, considerably removed from the major population centers. The County's estimated year-round population was approximately 35,000 in 1974. The central activity center for the County is Milford, the county seat, with a 1974 population of 12,000. The area surrounding Milford, including the proposed project, is primarily rolling hills and plains devoted to the

farming of such crops as wheat, corn, barley, and oats. The economic base of the County is dependent on farming and the raising of livestock and domestic fowl.

Primary access to and from Franklin County is via State Route 50. Numerous other state and county maintained roadways connect Milford with other communities in the County. Nearby communities within close proximity to Liberty Airport include Dalton, 15 miles to the north, with a population of 2,000; Cobb, 10 miles to the east, with a population of 1,300; and Saratoga, 10 miles to the northwest, with a population of 2,200. These towns are all presently served by the Liberty Airport. There are also some scattered communities with populations over 1,000 persons within 20 miles of Liberty Airport. The nearest airport in the vicinity is Allan Field (basic utility stage I airport), 25 miles to the east of Liberty Airport.

At the present time there are no other proposed Federal actions planned in the vicinity of the proposed project.

SECTION II: PROBABLE IMPACT ON THE ENVIRONMENT

NOISE

The evaluation of existing and future aircraft-generated noise levels was based on a Noise Exposure Forecast (NEF) study of present and proposed conditions. Computations for NEF values were based on the methodology and graphs found in the Handbook for Developing Noise Exposure Contours for General Aviation Airports, developed by Bolt, Beranek, and Newman, Inc. in October, 1975. Worksheets used in this analysis are contained in the Appendix, pages A-1 through A-6. The NEF criteria considers the following parameters: absolute noise levels, noise spectrum, maximum tone, noise duration, aircraft type, mix of aircraft, number of operations, runway utilization, flight path, operating procedures, and time of day. Table 1 describes land use compatibility and noise exposure.

Activities in areas exposed to values above NEF 40 should be able to tolerate higher noise levels. Residential development is not recommended in these areas. In areas with exposure less than NEF 30, few activities would be affected by aircraft noise. The area between the 30 and 40 contours is a transition zone where, subjectively, noise may or may not be acceptable, depending on the specific land usage, building construction involved, ambient noise, and time of day.

Contours of existing NEF levels are shown in Exhibit 4 and are based on current average annual operations of 30,208. The NEF 30 contour extends to the ends of runway 1/19, entirely within airport property. Contours for NEF 25 and 20 extend approximately 300 and 3,300 feet, respectively, from each end of runway 1/19. Present noise impact is minimal due to the type of aircraft using the facility (single- and twin-engine general aviation aircraft) and the compatibility of the surrounding agricultural land use. Also, as stated earlier, few activities, if any, would be affected if located beyond the NEF 30 level.

The 1980 NEF contours for the extended runway 1/19 are shown in Exhibit 5 and are based on annual runway usage of 45,000 operations. The NEF 30 contour remains on airport property. NEF 25 will extend 1,800 feet downrange, while NEF 20 will extend 5,800 feet from the ends of the runways.

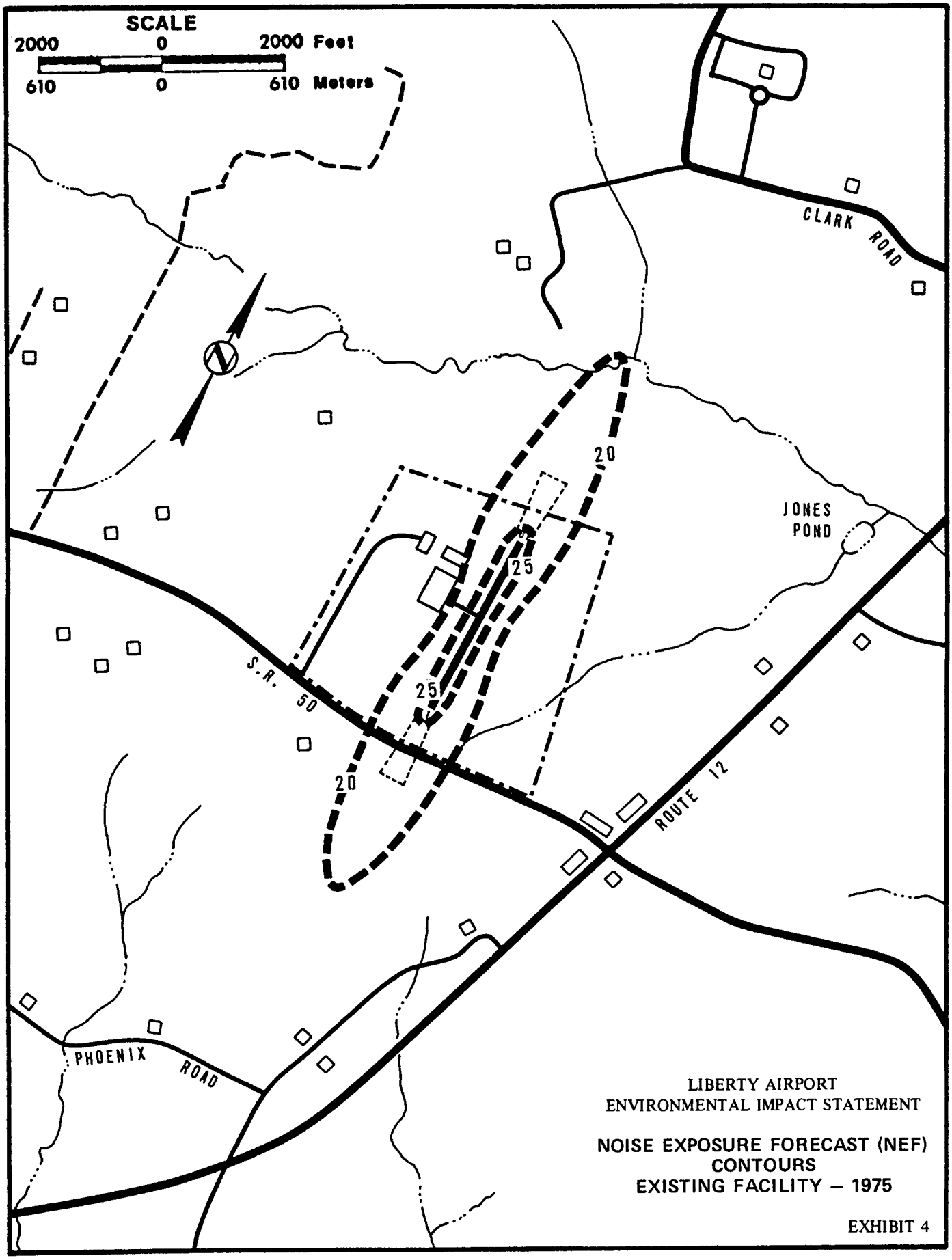
Contours were also developed for runway 1/19 for the projected long-range (1990) level of activity at the airport. These contours are also shown on Exhibit 5.

Table 1

Land Uses Adjacent to Airports and the Relationship to NEF Contours

Noise Exposure Forecast (NEF) Values	*Remarks*
20-30	Few activities will be affected by aircraft sounds, although building designs for especially sound-sensitive activities, such as auditoriums, churches, schools, hospitals, and theatres should consider sound control in areas close to the airport. Detailed studies by qualified personnel are recommended for outdoor amphitheatres and similar places of public assembly in the general vicinity of the airport.
30-40	Activities where uninterrupted communication is essential should consider sound exposure in design. Generally, residential development is not considered a suitable use, although multi-family developments where sound control features have been incorporated in building design might be considered. Open-air activities and outdoor living will be affected by aircraft sound. The construction of auditoriums, schools, churches, hospitals, theatres, and similar activities should be avoided within this zone where possible.
>40	Land should be reserved for actvities that can tolerate a high level of sound exposure, such as some agricultural, industrial, and commercial uses. No residential developments of any type are recommended. Sound-sensitive activities such as schools, offices, hospitals, churches, and similar activities should not be constructed in this area unless no alternative location is possible. All regularly occupied structures should consider sound control in design.

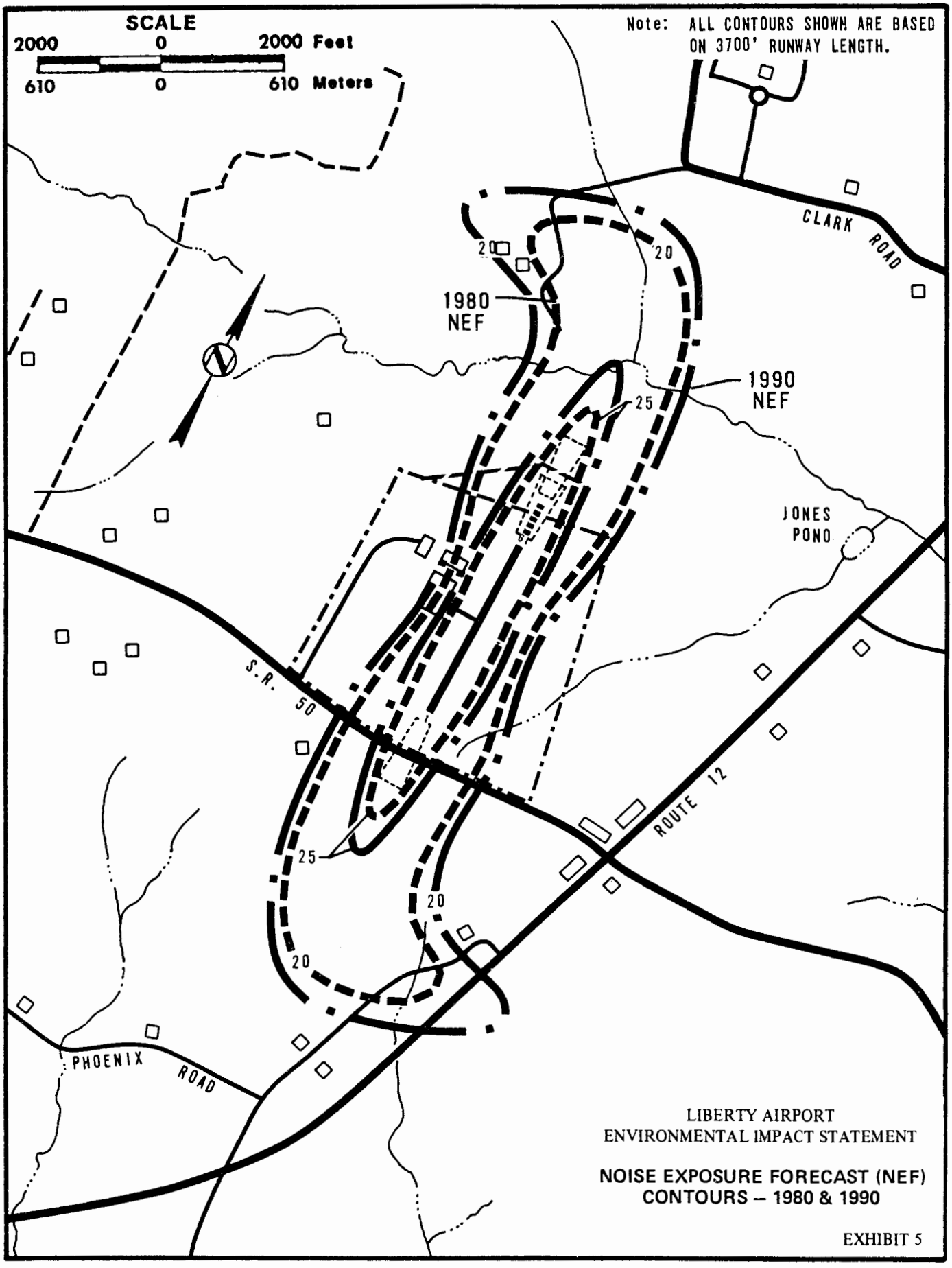
Source: *Airport Master Plans*, Federal Aviation Administration AC150/5070-6 (Washington, D. C.: Government Printing Office, 1971), Table 3, p. 47.



LIBERTY AIRPORT
ENVIRONMENTAL IMPACT STATEMENT

NOISE EXPOSURE FORECAST (NEF) CONTOURS
EXISTING FACILITY – 1975

EXHIBIT 4



LIBERTY AIRPORT
ENVIRONMENTAL IMPACT STATEMENT

NOISE EXPOSURE FORECAST (NEF) CONTOURS – 1980 & 1990

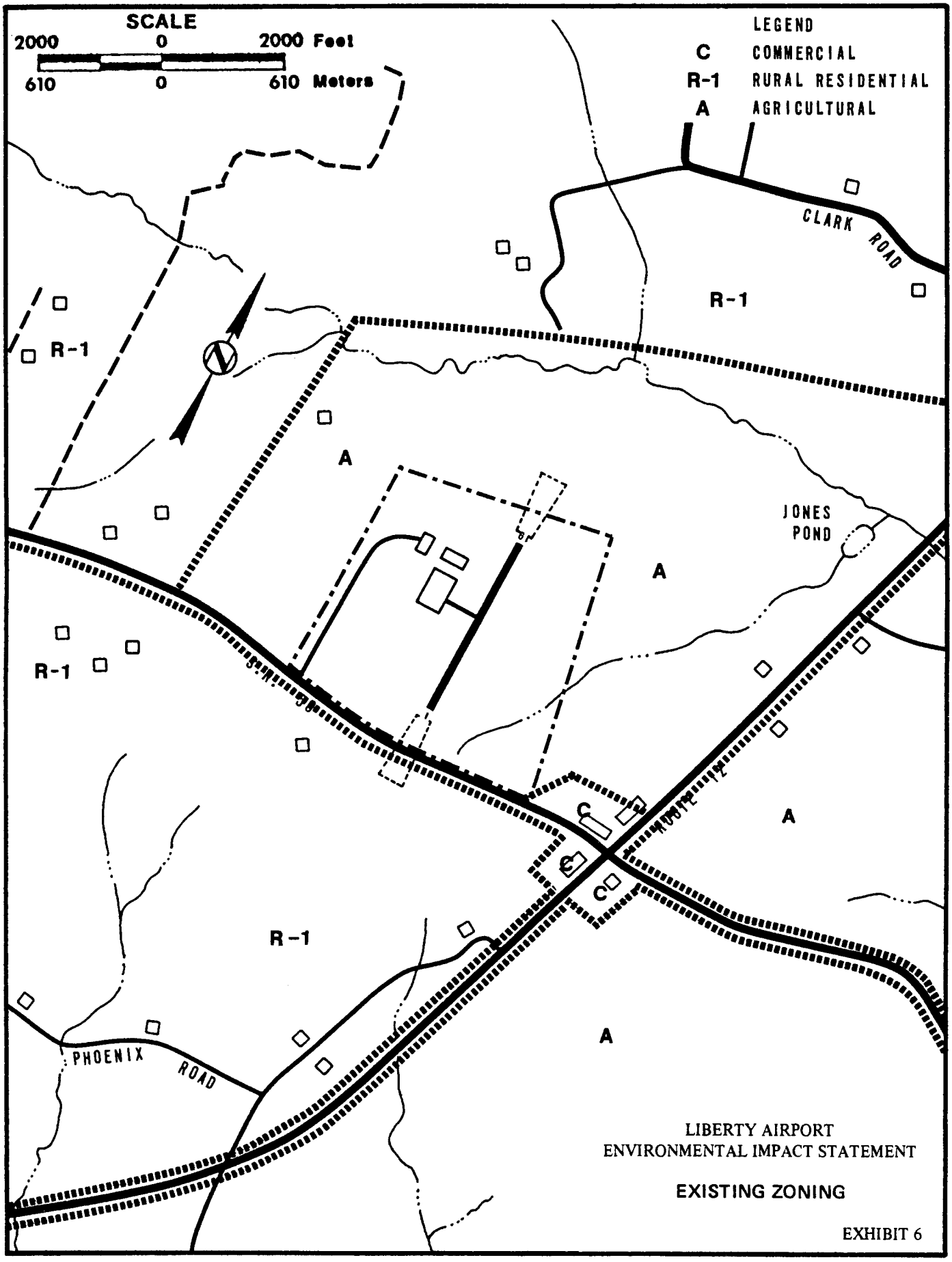
EXHIBIT 5

Future noise impact due to project construction and operation will be minimal, as the off-site exposure will remain less than the NEF 30 level. In addition, the proposed zoning within the contours (as indicated on the recently adopted 1990 County Master Plan) calls for the retention of agricultural uses, with a scattering of farm residences. Also, the County is developing an airport district zoning ordinance to enforce their 1990 Master Plan. The purpose of such an ordinance is the prevention of incompatible land uses on property adjacent to the airport. This point is discussed in greater detail in the next section on Land Use.

LAND USE

The airport and its proposed expansion is incorporated into the 1990 Master Plan for the County. Existing land use in the vicinity of the airport is primarily open space devoted to farming or other agricultural purposes, with a scattering of farm residences (see Exhibit 6). Future land use, as indicated in the Master Plan, is expected to remain in agriculture in the vicinity of the airport (see Exhibit 7). The proposed project is in compliance with the goals and objectives of the County's Master Plan. A statement from the Franklin County Planning and Zoning Commissioner is contained in the Appendix of this report, page A-7.

The County, in association with the development of the 1990 Master Plan, is in the process of drafting a new zoning ordinance and subdivision regulations. As these elements are being developed in cooperation with the Planning and Zoning Board, the Airport Authority is drafting appropriate land use mechanisms to assure that only compatible land uses are allowed in the vicinity of the airport. This will be accomplished by the establishment of an airport zoning district, which will allow only specified compatible uses. These uses include open space, uses such as agriculture (the present primary land use), forest and land reserves, golf courses and parks. Other desirable uses include industrial parks, warehouses, and allied aircraft and aviation-related industries. These types of uses, in conjunction with land use controls, provide a safeguard against incompatible uses being allowed in the vicinity of the airport both for the immediate project and in the future for the ultimate development of a crosswind runway.



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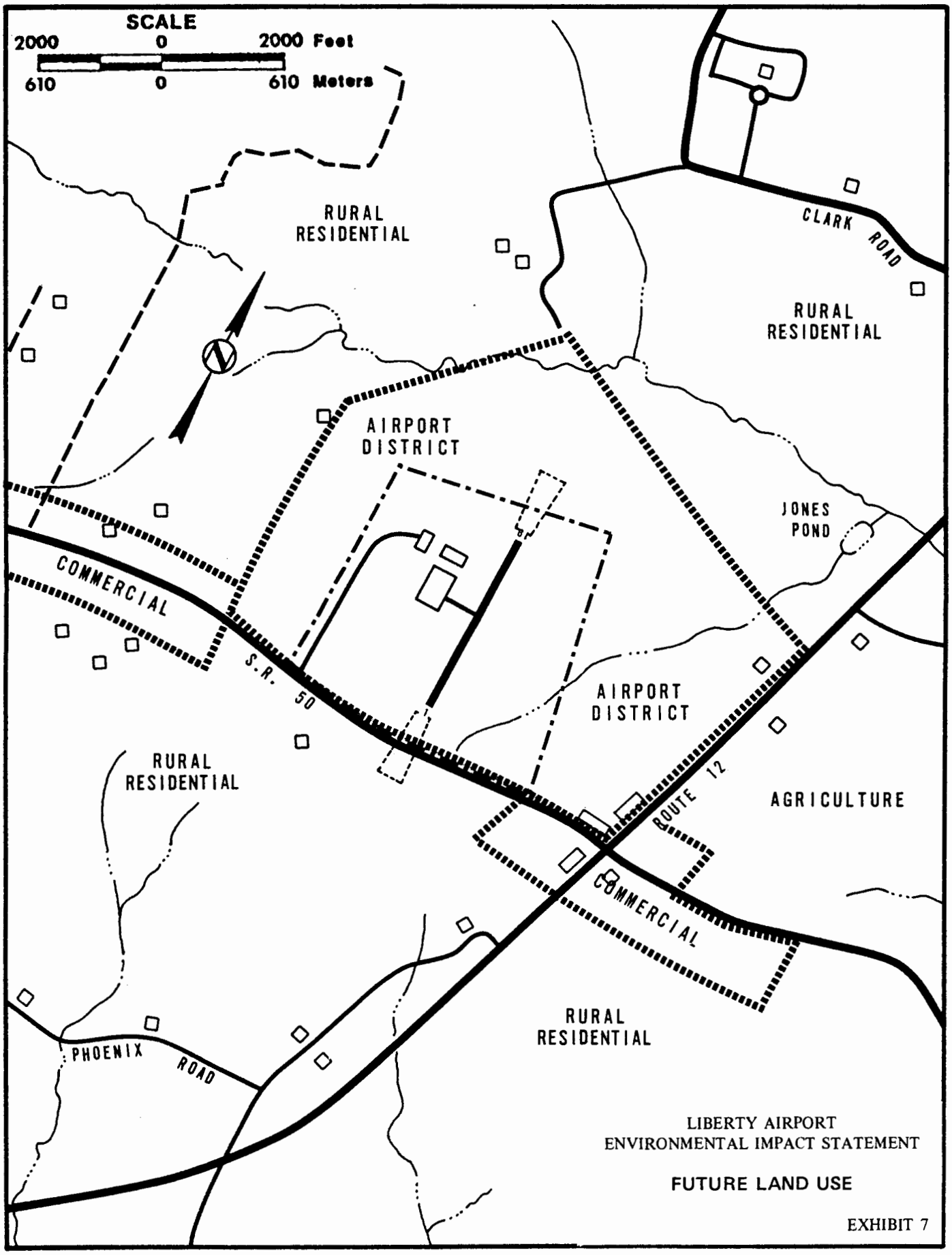
EXISTING ZONING

EXHIBIT 6



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ENVIRONMENTAL IMPACT STATEMENT

FUTURE LAND USE

EXHIBIT 7

VEGETATION AND WILDLIFE

The proposed project will necessitate the acquisition of 25 acres of farm land. Of this amount approximately 23 acres are tillable and two are wooded. This wooded area is made up entirely of hedgerows between tillable fields.

The tillable acreage is periodically plowed and planted in crops. Common crops include wheat, corn, potatoes, and alfalfa.

Tree dominate hedgerows in the project area. Common species seen in field observations include white pine *(Pinus strobus)*, red pine *(P. resinosa)*, sugar maple *(Acer saccharum)*, and red maple *(A. rubrum)*.

Animals common to this agricultural habitat include deer mouse *(Peromyscus maniculatus)*, rabbit *(Sylvilagus backmani)*, western harvest mouse *(Reithrodontomys megalotis)*, meadow vole *(Microtus pennsylvanicus)*, and ring-necked pheasant *(Phasianus colchicus torquatus*. No endangered species of plants or animals are known to occur or would be expected to occur in or near the project site.[1]

Impact upon wildlife will not be significant. Displacement and some mortality of wildlife will occur due to clearing and construction on approximately 12 acres. Smaller, less mobile species will inevitably perish and even the more mobile mammals may encounter competition as they attempt to relocate in adjacent habitats. The remaining 13 acres acquired for the airport expansion will not be altered and will therefore remain as available habitat for displaced wildlife.

SOILS AND GEOLOGY

Franklin County is part of the dissected glacial-drift plain that was covered to various depths by two silty wind-laid loess formations.[2] In many places dissection has removed both of these known deposits, exposing the glacial-drift and locally the bedrock formations known as Dakota sandstone and Permian limestone and shale.

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[1] Interview: October 1, 1975, William Gannon, State Department of Wildlife.

[2] Source: Soil Survey Report, Franklin County, U. S. Department of Agriculture.

Franklin County is located in the West-Central Rolling Hills of the Great Plains physiographic region. The County is characterized as a broad elongated basin, with its axis followed throughout by Salt Creek, tributaries of which have produced minor irregularities in the outline of the basin. The uplands are moderately to strongly rolling. The nearly level or gently undulating alluvial lands, principally along Salt Creek and its larger tributaries, occupy a relatively large part of the County.

Drainage is chiefly northward and eastward to the James River through Salt Creek and its tributaries. As a whole the County is well drained.

All the soils in the County have developed under the influence of a vegetation of tall grass except those occupying part of the bottom lands and part of the most steeply sloping areas. Most of them are very dark and highly granular in the surface layers, friable throughout, and easily penetrated by air, roots, and water. Only a few contain significant quantities of lime, but so far as crops are concerned, none seems to be deficient in calcium.

On the basis of use capability and productivity, as influenced chiefly by depth and friability of soil material and character of parent material, the soils are grouped as follows: (1) Deep and medium-deep friable soils of the loessal uplands; (2) deep heavy soils of the loessal uplands; (3) deep and medium-deep friable soils of the glacial uplands; (4) deep heavy soils of the glacial uplands; (5) shallow friable soils of the glacial and bedrock uplands; (6) deep friable soils of the terraces; (7) deep heavy soils of the terraces; and (8) alluvial and colluvial soils.

The first two of the above mentioned soil groups are found on the airport site. The first group includes the Sharpsburg soils. These soils, occupying the undulating to gently rolling loess-mantled uplands, are the most extensive in the County. They have a dark surface soil, clayey but fairly friable subsoil, and ample fertility, and are among the most productive in this general region. Most of these soils are cultivated and are used for all the crops common to the Corn Belt.

The deep heavy soils of the loessal uplands include the Butler and Crete series. These differ from those of the Sharpsburg chiefly in having a dense claypan layer in the upper part of the subsoil and a horizon of lime enrichment in the lower part. They are used for growing all the crops common to this region but are better suited to small grains than to corn.

Erosion control problems will be minimal because of the relatively flat terrain and flat grades of the areas of construction.

The construction will involve approximately 15,000 cubic yards of embankment material which will be obtained on-site from apron and ditch areas. Ditch side slopes and similar isolated sharp slopes will be protected temporarily during construction and permanently upon completion of construction with seeding or sod. All unpaved areas will be turfed.

All erosion control and sediment control techniques will be incorporated into the construction phase of the project. Both the temporary requirements during the construction phase and the permanent measures planned for the operational phase will be in accordance with the latest directives and requirements of the State Department of Transportation and with the Regulations and Rules of Procedures of the State Department of Environmental Protection, as well as conforming to the requirements and specifications of the Franklin County Sediment Control Ordinance and the Franklin Soil Conservation District.

WATER RESOURCES

Water Quality

The only watercourse on airport property is a swale on the west, draining north, and an intermittent stream on the eastern side of the existing runway which flows in a northeasterly direction. Approximately a mile north of the airport property, this watercourse enters Jones' Pond, which is four acres in size. Water quality of the stream itself is difficult to determine due to the intermittence of flow. Water samples collected regularly by the State Department of Environmental Protection provide a good indication of stream quality. A summary table of water quality conditions in the pond can be found in the Appendix, on page A-8.

No construction is anticipated in the immediate area of the intermittent stream, but construction of the expanded facility will temporarily affect the quality of runoff. Erosion will be minimal due to the gentle slopes of the terrain and shallow fills in the areas of construction. Measures to control erosion include flattened embankment side slopes, sediment traps, temporary holding ponds, and applications of seed and mulch or sod to finished slopes as soon after grading as possible. These measures will limit erosion and stream turbidities. A temporary increase in stream turbidities is expected when storms occur as soils are being moved during the construction period. With project completion turbidities will return to preconstruction levels.

Leaks or spills of aircraft oriented petroleum wastes could occur in the hangar, apron, or fuel storage areas. These small quantities

will be removed by absorbent materials or by mechanical means. Incorporation of oil and grease traps in the hangar and apron areas will also reduce the hazard of spilled materials being flushed into the area's watercourses. Oil collected in the traps will be pumped into salvage vehicles on a regular basis.

Hydrology

The site is relatively level with elevations ranging from 400 to 425 feet above sea level (see Exhibit 8). Present runoff is low and velocities are not excessive. All drainage presently enters ditches which parallel the runway. Due to both the level terrain of the airport property and the grassed areas maintained, peak rates of runoff from the site are less than would be expected from the surrounding agricultural areas. Table 2 contains airport area hydrological data.

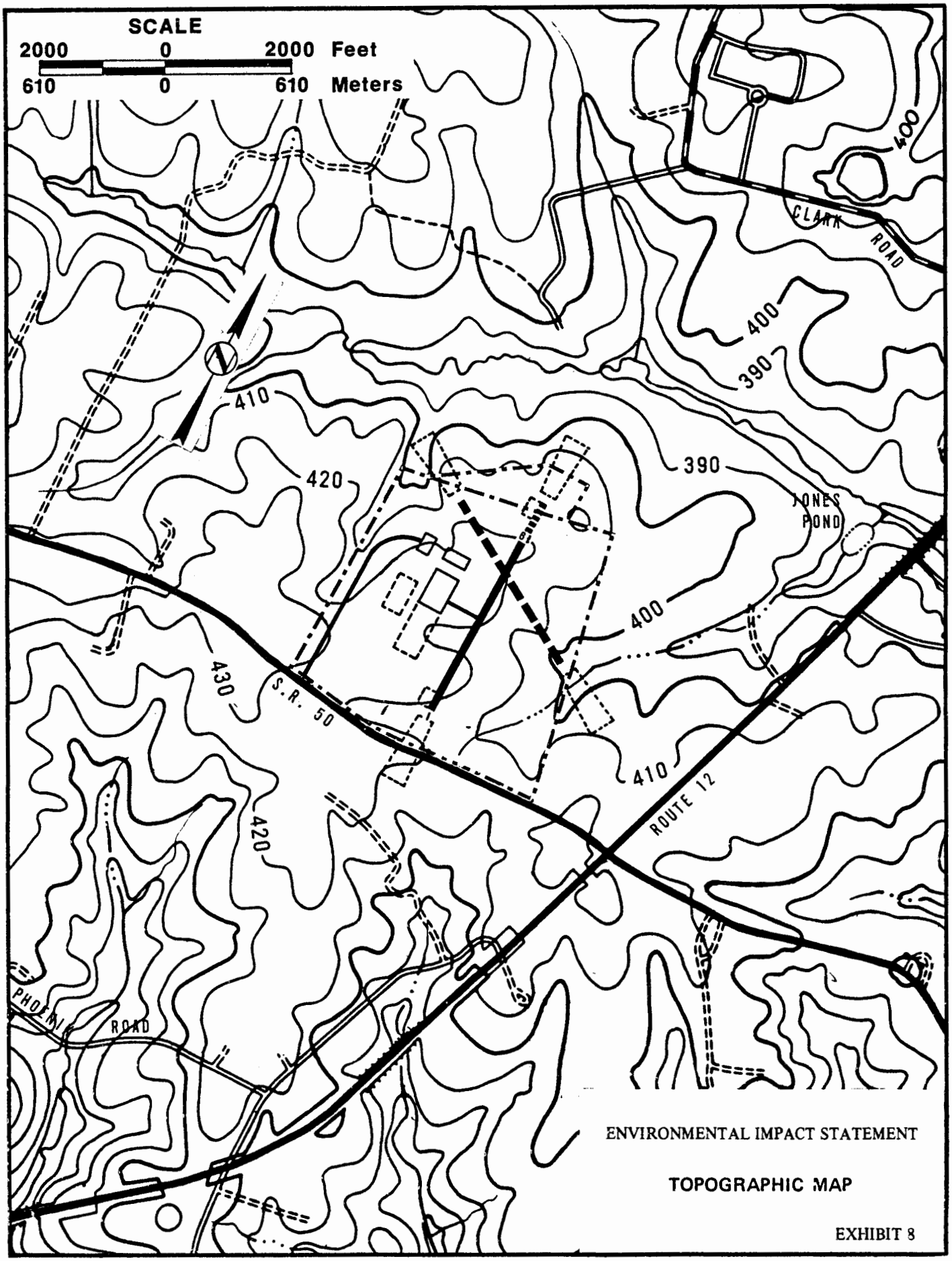
The entire runway extension will drain in a northerly direction. Clearing and grubbing will cause a minimal change in the rate of runoff from that which exists under the present agricultural use. Design and construction of the various expansion components will include provisions for drainage structures to convey runoff.

All drainage facilities will be designed on the basis of the increased quantities of flow for a five-year storm. Surface runoff from the runway extension will leave the paved surface in sheet flow and enter the parallel shallow side ditches for conveyance to the north. Maximum flow in the side ditches is estimated to be about 32 cubic feet per second (cfs). Maximum depth of flow will be in the range of 1.2 to 1.6 feet, depending upon the stage of maintenance (mowing) established by the Authority.

FLOOD HAZARD EVALUATION

Consultation with soil conservation officials and further evaluation of available maps and reports indicate that the project is not located in or adjacent to a floodplain or an area prone to flooding.

The topography of the project area is relatively flat, with a variation of approximately 25 feet. The only significant body of water in the area is Jones' Pond, located approximately one mile to the northeast of the airport. A small intermittent stream located on the eastern boundary of the airport property flows into the pond. This stream is not subject to flooding.



ENVIRONMENTAL IMPACT STATEMENT

TOPOGRAPHIC MAP

EXHIBIT 8

Table 2

Airport Area Hydrology

Ditch Location & Number	*Drainage Area (Acres)*	*Time of Concentration (Minutes)*	*Rainfall Intensity- i_5 (5-Year)*	*Coefficient of Runoff (c)*	*Q_5 5-Year Runoff (cfs)*	*Depth of Flow in Side Ditch (Feet)*	
						n= .03*	*n*= .06*
No. 1 West of runway, flowing south	50	40	1.8	.35	32	1.2	1.6
No. 2 West of runway, flowing north	40	30	2.1	.35	29	1.0	1.5
No. 3 East of runway, flowing south	15	18	2.8	.40	17	0.7	1.1
No. 4 East of runway, flowing north	21	20	2.6	.40	22	0.9	1.3

* n = coefficient of roughness.

WETLANDS/COASTAL ZONE IMPACTS

The proposed project will have no impact on wetlands, swamps or bogs. There are no such areas located within the study area or within three miles of the project. Therefore, compliance with the state Wetland Act, which requires a permit before construction can proceed, is not required.

The requirement for coordination and review of the project by the designated state coastal zone agency (in compliance with the Federal Coastal Zone Management Act of 1972) is not applicable. The project is not located within the designated state coastal zone and therefore will have no impact.

AIR QUALITY

Existing Conditions

The proposed airport is located in Franklin County and is within the Milford Valley Air Quality Control Region (AQCR). This AQCR is classified as Priority III for carbon monoxide (CO), hydrocarbons (HC), nitrogen oxides (NO_X), and photochemical oxidants (ozone), sulfur dioxide (SO_2) and particulate matter. Priority III indicates pollution levels well within national and state standards. The region is not classified as an Air Quality Maintenance Area (AQMA). National air quality standards are shown in Table 3.

The operation of Liberty Airport will not involve the number of aircraft operations nor include parking areas which would necessitate the filing of an Indirect Source Permit. Detailed information on the review of indirect sources and regulations is published in the *Federal Register*, Volume 39, No. 38, February 25, 1974. On June 22, 1975, the EPA announced an indefinite postponement on the enforcement of the Indirect Source Regulations for parking areas.

The Federal Clean Air Act of 1970 (Public Law 90-140) provided the authority for the Environmental Protection Agency (EPA) to issue national standards to protect ambient air quality. These standards apply to pollution from all sources, including aircraft. The ambient air standards were published and promulgated in *Federal Register* [36(84)] April 30, 1971. The EPA also established Emission Control Standards and Test Procedures for aircraft-generated pollutants. These regulations

Table 3

National Ambient Air Quality Standards

Pollutant	
Carbon monoxide (Primary and secondary standards are the same)	- 10 milligrams per cubic meter (9 ppm), maximum eight-hour concentration not to be exceeded more than once per year.
	- 40 milligrams per cubic meter (35 ppm), maximum one-hour concentration not to be exceeded more than once per year.
Nitrogen dioxide (Primary and secondary standards are the same)	- 100 micrograms per cubic meter (0.05 ppm), annual arithmetic mean.
Hydrocarbons (non-methane) (Primary and secondary standards are the same)	- 160 micrograms per cubic meter (0.24 ppm), maximum three-hour concentration (6-9 a.m.) not to be exceeded more than once per year. For use as a guide in devising implementation plans to meet the oxidant standards.
Particulate matter Primary standard	- 75 micrograms per cubic meter, annual geometric mean.
	- 260 micrograms per cubic meter, maximum 24-hour concentration not to be exceeded more than once per year.
Secondary standard	- 60 micrograms per cubic meter, annual geometric mean, as a guide to be used in assessing implementation plans to achieve the 24-hour standard.
	- 150 micrograms per cubic meter, maximum 24-hour concentration not to be exceeded more than once per year.

Table 3--Continued

Pollutant	
Sulfur dioxide Primary standard	- 80 micrograms per cubic meter, annual arithmetic mean.
	- 365 micrograms per cubic meter, maximum 24-hour concentration not to be exceeded more than once per year.
Secondary standard	- 1,300 micrograms per cubic meter, maximum three-hour concentration not to be exceeded more than once per year.
Photochemical Oxidant (Primary and secondary standards are the same)	- 160 micrograms per cubic meter, maximum one-hour concentration not to be exceeded more than once per year.

National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effect of a pollutant.

Source: Environmental Protection Agency, "National Primary and Secondary Ambient Air Quality Standards," *Federal Register*, 36 (84), April 30, 1971 p. 8187.

were published in the *Federal Register* July 17, 1973. The promulgated emission standards are based on new aircraft classifications adopted by EPA.

The application of EPA aircraft emission standards to all aircraft engines, assuming that these standards are met on time, indicates drastic reductions of aircraft-generated pollutants during the next ten years.

Ambient conditions shown in Table 4 reflect the results of the County's monitoring program.

Impact

The impact of the proposed project on air quality was determined using a "Box Model" technique. The Box Model method of air quality computation uses the emissions generated in a unit landing and takeoff operation as the basic parameter for estimates. This is called an LTO cycle. The dimensions of a selected box are associated with aircraft type. The length of the box is a typical distance between the locations where the aircraft descends to 1,100 meters above the runway on approach, and reaches 1,100 meters again on departure. The width of the box is arbitrary, though 1,600 meters is suggested here. Box dimensions for the aircraft types using Liberty Airport are shown in Table 5.

Table 5 also shows total emissions in terms of pounds per engine for the typical aircraft. Total emissions resulting in a peak hour, an average day, or from annual operations may be estimated in terms of the forecast number of LTO cycles for each condition.

Table 5 then shows concentrations of emissions determined for the aircraft types and for each LTO cycle, assuming that total emissions for each cycle are dispersed uniformly throughout the box. The values shown in the table assume a wind speed of one meter per second. This speed is representative of the more extreme conditions regarding pollution. During a typical hour when wind speed is, for example, ten meters per second, concentrations would be ten percent of the indicated values because air in the box is being replaced by new air at ten meters per second instead of one meter per second.

Determination of the pollutant concentrations for the peak hour of operation involves the summation of concentrations computed for each aircraft type during that hour.

Table 4

Liberty Airport
Ambient Air Quality Conditions

	Ambient Conditions[a]		
		1974	
Pollutant	*PPM*	*ug/m*^{3}	*mg/m*^{3}
Carbon Monoxide	0.31 (1-Hour Period)		.27 (1-Hour Period)
Hydrocarbons	0.01[b] (1-Hour Period)	36[b] (1-Hour Period)	
Nitrogen Dioxide	0.005 (1-Hour Period)	9 (1-Hour Period)	
Sulfur Oxide	0.0010 (Ann. Arith. Mean)	3 (Ann. Arith. Mean)	
Particulates		15 (Ann. Arith. Mean)	

[a] Source: Franklin County Department of Health and Public Safety.

[b] Excluding background methane.

Table 5

Air Quality Box Model Data

Type Aircraft	LTO Cycle Mins.	Closed Box Model Dimensions (Meters) Length	Width	Depth	Volume Cubic Meters
General aviation turboprop	14.5	22,500	1,600	1,100	$39,400 \times 10^6$
General aviation piston	17.9	27,600	1,600	1,100	$48,600 \times 10^6$

Emission Factor Ratings Per Aircraft LTO Cycle (lbs. per engine)

Type Aircraft	Particulates	Sulfur Oxides	Carbon Monoxide	Hydrocarbons	Nitrogen Oxides
General aviation turboprop	0.20	0.180	3.100	1.100	1.200
General aviation piston	0.02	0.014	12.200	0.400	0.047

Source: Compilation of Air Pollution Emission Factors, Second Edition, U. S. Environmental Protection Agency, Table 3.2 - 1.3, April, 1973.

Emission Concentrations Per Aircraft LTO Cycle

Type Aircraft	No. of Engines	Particulates ug/m^3	Sulfur Oxides ug/m^3	Carbon Monoxide mg/m^3	Hydrocarbons ug/m^3	Nitrogen Oxides ug/m^3
General aviation turboprop	2	0.005	0.004	0.0001	0.025	0.027
General aviation piston	2	0.0004	0.0002	0.0003	0.007	0.0009
	1	0.0002	0.0001	0.0001	0.004	0.0005

Peak hour operations used in this analysis are tabulated below:

G/A	1975			1980			1990		
Aircraft	T/O	L	LTO	T/O	L	LTO	T/O	L	LTO
2-engine	0	0	0	2	1	2	2	2	2
1-engine	4	4	4	5	5	5	7	6	7

The peak hour emissions are summarized in Table 6. Comparison with the standards given earlier indicate that the peak hour emissions are expected to be well within acceptable criteria.

SOCIAL IMPACTS

The proposed runway extension will not displace any individuals, homes, or businesses. However, it will require the acquisition of 25 acres of existing agricultural land.

INDUCED (SECONDARY) SOCIOECONOMIC IMPACTS

The expansion of facilities at Liberty Airport is not expected to significantly alter the character of the area by spurring new industries and businesses to locate in the County. However, some new businesses may be expected to locate near the county seat because the airport will be able to accommodate longer-range aircraft.

SECTION 4(f) PUBLIC LANDS

The nearest public park and recreation area (Hyde Park) to the project, is located in the City of Milford approximately two miles west of Liberty Airport. Hyde Park is a 10-acre facility located on the western perimeter of Milford. Available activities include picnic areas, barbecue pits, playground equipment and one ball field. There are no other park or recreation areas within a five-mile radius of the project. There are also no wildlife or waterfowl reservations within a 10-mile radius of the project.

Table 6

Peak Hour Emission Concentrations

Pollutant	1975		1980		1990	
	PPM	ug/m^3	PPM	ug/m^3	PPM	ug/m^3
Carbon Monoxide	<0.001	0.40	0.0011	1.30	0.0013	1.50
Hydrocarbons	<0.001	0.016	<0.001	0.048	<0.001	0.056
Nitrogen Dioxide	<0.001	0.002	<0.001	0.0061	<0.001	0.0071
Sulfur Dioxide	<0.001	0.0004	<0.001	0.0013	<0.001	0.0015
Particulates		0.0008		0.0026		0.0030

Further, consultation with the Franklin County Department of Recreation and Parks indicates that there are presently no plans for a recreational facility or park in the area encompassed by the airport development plan. Correspondence containing the above information is included in the Appendix on page A-9.

Based on the above information, there are no anticipated adverse impacts on any park, recreational or wildlife reservation area as a result of project development.

HISTORICAL AND ARCHAEOLOGICAL SITES

Contact has been made with the State Historical Trust and the Franklin County Historical Society concerning the project's impact on national, state, and local sites of historical significance. No such sites were identified within the airport study area. Further consultation with the State Historic Preservation Officer indicated that no sites on or eligible for the National Register of Historic Places would be affected by the proposed action. Correspondence to this effect is included in the Appendix, pages A-11 and A-17.

In addition, the State Archaeologist was contacted regarding sites of archaeological significance. No known sites in the study area had been recorded, nor were any expected to exist. A preliminary survey of the site by the State Archaeologist's staff found no evidence of any archaeological resources that would be affected by the project.

If archaeological resources are uncovered during construction, work will be stopped and the State Archaeologist will be notified and given the opportunity to investigate. Verification of contact with the State Archaeologist is in the Appendix, pages A-13 and A-18.

PUBLIC UTILITIES AND SERVICES

Solid Waste

Airport solid wastes are being disposed of presently at the county sanitary landfill, located approximately 10 miles to the west of the airport off State Route 50. Solid waste produced at the airport averages 100 pounds per week.

Solid wastes resulting from construction and expanded airport operations will be trucked to the county landfill. This landfill has sufficient capacity to accommodate all county solid wastes as well as all airport solid wastes for the next 10 years. Construction wastes will be transported by private contractors as required. The only exception will be mulch materials, which will be reused over planted areas and for composting landscape work. It is estimated that airport solid waste generation would approximate 150 pounds per week by 1980.

Correspondence concerning the adequacy of the county sanitary landfill to handle solid waste generated from the proposed project is found in the Appendix on page A-14.

Water Supply

One well, providing water to the existing hangar/office building, presently serves the airport. The capacity of this well is approximately 700 to 750 gpd according to the County Health Department and is being used to its capacity. The well is drilled to a depth of 250 feet.

The well penetrates a fairly deep confined aquifer which is reported to be capable of providing a much higher yield than presently drawn. Well drawdown is not specifically known. Water samples from the airport system are taken quarterly for routine testing. Bacteriological results show no negative results. With completion of the project, the present system will require improvements in storage and to the distribution system to provide an additional 300 gpd. An additional well will be needed to serve the new hangar building. The entire airport area is underlain by the same aquifer that provides water for the surrounding communities. The underground water supply is readily available and is in sufficient quantity to accommodate the proposed expansion project.

Sewage Treatment Facilities

Present sewage facilities consist of a septic tank serving the present hangar building, with a capacity of approximately 1,000 gallons. This system would be able to accommodate the aircraft passenger volumes expected from the proposed project. It is not anticipated that all passengers and pilots will use the facilities; rather, use would be primarily by airport employees. Therefore, the present septic system is adequate to meet the demands of the expanded airport. Periodic (yearly) cleaning and maintenance will be required to keep the system operating properly and in compliance with applicable state and local health regulations. There has not been, nor is there expected to be any contamination of the aquifer water supply due to the presence of a continuous imperious clay layer approximately 50 feet below the surface of the project area.

ENERGY

Electric power for the operation of Liberty Airport is provided by the Franklin Power Company. With airport expansion, increased electrical usage in the form of additional heat, air conditioning, lighting fixtures, and runway lights will be required. Electrical usage is expected to increase from the present level of 1,000 kilowatt hours per month to approximately 2,000 kilowatt hours per month. The increase in the amount of power required for the expansion has been evaluated and discussed with representatives of Franklin Power Company. Their evaluation has shown that the expansion will not necessitate or require installation of additional powerline service.

Runway extension and the ultimate provision of a crosswind runway will not significantly increase fuel consumption by either aircraft or related ground transportation by automobile.

SECTION III: PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED AND ACTIONS TO MINIMIZE HARM

The following section summarizes measures proposed to minimize some project impacts and unavoidable adverse effects.

- Removal from cultivation of approximately 25 acres of agricultural land. This will cause displacement and some mortality of wildlife in the project area.

  Although 25 acres of additional land will be acquired for the project, only 12 acres will be cleared for runway construction and clear zones. The remaining 13 acres will not be altered and will therefore remain as valuable habitat for displaced wildlife.

- A transient increase in stream turbidity will occur during the construction period due to erosion of cleared areas. However, this will diminish as the project is paved and replacement cover planted. In addition, erosion and sedimentation controls will be incorporated into the project design to reduce pollution of the on-site stream.

- Noise exposure will increase in agricultural land along the axis of the existing runway 1/19 by 1980 and along the new crosswind runway by 1990.

  However, the impact due to project completion will be minimal since the noise level of airport property will be less than NEF 30.

  In addition, within the influence of the NEF 20 contour, proposed zoning in the 1990 County Master Plan calls for retention of agricultural uses. Finally, in conjunction with project development, the County is developing an

airport district zoning ordinance to enforce the 1990 Master Plan to prevent incompatible land uses on property adjacent to the airport.

- Air pollution emissions in the area will increase with added usage of the facility.

  Improvements in both aircraft and automotive engines will, however, offset some of this increase.

SECTION IV: ALTERNATIVES TO THE PROPOSED ACTION

NEW SITE

In early 1972, the Airport Authority conducted a feasibility study to evaluate two alternative courses of action: (1) expansion of the existing facility and (2) development of a completely new site.

Although the study identified that there are other sites near Liberty Airport which would be suitable for airport development, the alternative of a new site was deemed not prudent for the following reasons:

- A new site would require the conversion of 400 to 500 acres of existing agricultural land to an entirely new airport facility. This represents a much greater commitment of farm land to public use than the 25 acres which would be acquired for the proposed action.

- Increased construction time and materials would be more expensive as opposed to the proposed runway extension. This would mean the construction of all new facilities versus constructing only a 700-foot runway extension and hangar and acquiring only 25 acres of additional property.

  The cost associated with the construction of a new airport with similar facilities would range from $2.35 million to $2.55 million, depending on the alternate site location. This total includes the cost of land acquisition and all site preparation.

  The estimated cost of the runway extension and related facilities as described herein is approximately $0.5 million.

- There would be much more substantial adverse environmental impacts associated with the development of a new site versus the minimal impacts resulting from expansion of the

existing facility. The primary impacts are those associated with the siting of the new facility: removal of vegetation, displacement of wildlife, increased potential for soil erosion during land clearing, increased runoff, development and extension of public services, and commitment of existing productive farming resources.

ON-SITE ALTERNATIVES

Development of the existing site was predicated on using the existing runway system for expansion. The existing location of runway 1/19 and its proximity to State Route 50 precluded consideration of extending the runway to the south. Therefore, the only feasible alternative was the extension to the north.

USE OF EXISTING AIRPORTS

The closest airport to Liberty Airport is Allan Field, a 45 minute drive to the east. Allan Field is limited in that it cannot accommodate projected aircraft types because of its short turf runways and therefore does not present a viable alternative site to provide increased accessibility to the region.

In addition, due to its even more distant relationship to population areas in the County, expansion of this site, rather than Liberty Airport, was deemed inefficient in solving the problem of providing efficient service to the more populous areas of the County.

NO PROJECT

The present airport, by its configuration and general classification, accommodates approximately 75 percent of the propeller general aviation fleet under 12,500 pounds. The proposed runway extension will improve the airports' level of service by safely accommodating virtually all (95 percent) of the propeller general aviation fleet under 12,500 pounds. As previously noted, Allan Field

is unable to accommodate projected aircraft types due to its short turf runways, and because of its more remote location, unable to provide efficient service.

The no project alternative would continue to limit the air traffic capability of this area and thereby possibly limit the area's potential business opportunities.

SECTION V: THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The short-term impact of the proposed Liberty Airport expansion largely involves the construction period, when clearing and construction operations will temporarily disturb the local environment.

In terms of the natural environment, there will be a temporary increase in the turbidity of the intermittent stream on-site. However, erosion controls will limit this problem and no continuing sedimentation is anticipated. In addition to erosion controls, soils would be sprayed with water to prevent excessive dust problems.

Construction equipment will temporarily increase ambient noise levels. However, the incremental increase would also be of short duration and would terminate upon project completion. The operation of the expanded facilities will, over the long-term, introduce only a minimal amount of additional aircraft noise in agriculturally zoned land to the north and south of the airport.

In summary, the long-term gains of increased safety, efficiency and service to the area more than outweighs the short-term adverse environmental impacts described above. As noted all of the negative impacts will be limited to the construction period and will disappear with the completion of construction operation. The introduction of only a minimal amount of additional aircraft noise, although long-term, is offset by the immediate benefits of improved safety, efficiency and service to this area.

SECTION VI: IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES

The expansion of the Liberty Airport represents a loss of vegetation for airport use. Implicit in this commitment is the reduction of natural habitat and wildlife. However, this loss does not represent a significant impact when compared to the total biotic inventory of the County.

The improvement of the airport is a fundamental commitment to improvement of general aviation operations and safety and to the support of the area's business community. Construction of airport facilities will involve the irreversible commitment of materials and manpower. However, the project will not significantly affect the County's supply of construction materials. Though it is recognized that the site could be physically abandoned at some time in the future, its contribution to general aviation is itself irreversible, i.e., the aviation services provided to the County over the life of the facility are not reversible.

SECTION VII: SUMMARY OF PUBLIC HEARING ON ENVIRONMENTAL ASSESSMENT REPORT HELD ON JULY 16, 1975 AT 7:30 P.M., FRANKLIN COUNTY COURTHOUSE--MILFORD

In compliance with the requirements of the Airport and Airway Development Act of 1970 (P.L. 91-258), the Liberty Airport Authority afforded the public the opportunity to request a public hearing on the proposed expansion of Liberty Airport, located three miles west of Milford, the Franklin county seat. The Airport Authority advertised in the Milford *Daily Times* on June 2 and June 9, 1975 that a public hearing on the environmental impacts of the proposed expansion of Liberty Airport would be held on July 16, 1975 at the Franklin County Courthouse. It was also stated in the notice that the assessment report was available for public review at the Franklin County Courthouse and all public libraries in the City of Milford.

The hearing was held as scheduled in the Franklin County Courthouse at Milford, with approximately 45 people in attendance. The Chairman of the Airport Authority presided at the public hearing. He opened the hearing with a discussion of the Airport Master Plan and its associated aspects including environmental effects.

There were no opponents to the project. However, several issues were raised. One issue concerned the relationship of the proposed project to the 1990 County Master Plan. It was explained by the Planning and Zoning Commissioner that the extension of the runway is consistent with the future development plans of the County. In addition, an airport district zone is being developed to ensure compatible land uses in areas adjacent to Liberty Airport.

The only other issue raised concerned the financing of the project. It was pointed out that the Federal Aviation Administration (FAA) would provide funding to cover 75 percent of airport expansion costs, with the remainder (25 percent) equally divided between the state and county governments.

Upon completion of questions and comments concerning the project, the Chairman explained the assessment report would be submitted to FAA for their review and processing.

SECTION VIII

SUMMARY OF CLEARINGHOUSE REVIEW

STATE CLEARINGHOUSE COORDINATOR
Office of Intergovernmental Coordination

state office building
capitol city avenue
america, u.s.a.

August 20, 1975

Airport Authority
Liberty Airport
Northwest, America

Re: SCH 14859 -- Liberty Airport Project
Milford, Franklin County

Sirs:

The above listed project was received in this office and disseminated to various state departments for review on August 6, 1975. The following had no adverse comments regarding the project:

State Department of Transportation
State Historic Trust
State Archeologist
Franklin County Planning and Zoning Commission
State Department of Parks
Franklin County Department of Recreation and Parks
Franklin County Historical Society
Franklin County Department of Public Works

Comments received by this office are summarized below:

1. State Department of Environmental Protection

Requests information regarding if and when there would be open burning of waste materials resulting from clearing operations in the expansion of the existing runway.

2. Soil Conservation Service

The Service has no adverse comments but requests that a drainage plan for the proposed project be submitted to their office for review.

3. State Department of Health and Mental Hygiene

The Department has no adverse comments and has certified that there is reasonable assurance the subject project will be executed in such a manner which will not cause contravention of National Ambient Air Quality Standards or State Air Quality Control Regulations.

These comments are aimed at assuring that your project is coordinated at all levels of government. The State Clearinghouse would appreciate knowledge of any communications that you might have with the commenting agencies.

Sincerely,

Bob Briggs

Bob Briggs
State Clearinghouse Coordinator

BB/slm

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Post Office Box 1000
Northwest, America

August 1, 1975

State Clearinghouse Coordinator
Office of Intergovernmental Coordination
State Office Building
Capitol City Avenue
America, USA

Attention: Mr. Bob Briggs

Re: Expansion of Liberty Airport

Gentlemen:

We have reviewed the environmental assessment for the above referenced project and have the following comment:

1. Please furnish information concerning if and when there would be open burning of waste materials resulting from clearing operations.

Upon clarification of this point, this agency will have no further comments concerning this project.

Thank you for your cooperation.

Very truly yours,

Edward P. Allan

Edward P. Allan

EPA/rd

SOIL CONSERVATION SERVICE

Franklin Soil Conservation District

Federal Building
Northwest America

August 2, 1975

State Clearinghouse Coordinator
Office of Intergovernmental Coordination
State Office Building
Capitol City Avenue
America, USA

Attention: Mr. Bob Briggs

Re: Expansion of Liberty Airport

Dear Sir:

A review of the environmental assessment has been conducted by our office for the above referenced project and we concur in its findings.

However, we would request that a drainage plan for the project be submitted to this office prior to beginning construction.

Sincerely,

William E. Sallak

William E. Sallak
Director

WES/sd

DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Post Office Box 578
City of Milford
Northwest, America

August 5, 1975

State Clearinghouse Coordinator
Office of Intergovernmental Coordination
State Office Building
Capitol City Avenue
America, USA

Attention: Mr. Bob Briggs

Re: Expansion of Liberty Airport

Dear Sir:

This is to certify that there is reasonable assurance the subject project will be executed in a manner which will not cause contravention of National Ambient Air Quality Standards or State Air Quality Control Regulations.

Very truly yours,

Peter R. Francis
Director

PRF/lm

RESPONSES TO
STATE CLEARINGHOUSE REVIEW COMMENTS

Response to the State Department of Environmental Protection regarding open burning of waste materials.

There will be no open burning of waste materials generated from construction activities. All solid wastes will be hauled by private contractor to the Franklin County landfill, located approximately ten miles west of the airport. The landfill can handle expected airport solid wastes. Life expectancy of the landfill is approximately ten years. A letter from the Franklin County Department of Public Works stated that there is sufficient capacity; it is found in the Appendix, page A-14, of the Assessment Report.

Response to the Soil Conservation Service regarding airport drainage plan.

A comprehensive drainage plan will be submitted to the Soil Conservation Service for their review and comment.

There is no requirement for a regional clearinghouse review for Liberty Airport.

APPENDIX

1975

Airport Name	Liberty Airport (Model #4)		
Runway Designation	1/19		
Runway Length	3,000'		
Traffic Pattern (check one)	Left Hand ☒	Right Hand ☐	
		Propeller	Jet
Number of Operations/Year		30,208	—
Runway Utilization	Runway		
	1	50 %	— %
	19	50 %	— %
	Total	100 %	— 100 %
Percentage of Propeller or Jet Operations between 2200 and 0700		10 %	— %
Twin Engine Operations as Percentage of all Propeller Operations		0 %	
Turbojet Operations as Percentage of all Jet Operations			— %
Flight Path (check one)	Sketch ☐	Map ☐	Other ☐
Notes			

FIGURE 2. FORM FOR COLLECTING AIRPORT OPERATIONAL INFORMATION

Runway Designation 1975 (cont'd)	1/19	
Runway Length	3,000 ft.	
Type of Operation (check one)	Propeller ☒	Jet ☐
Number of Operations/Year on this Runway (Propeller or Jet)	½ operations	15,104 (1)
Percentage of Operations Between 2200 and 0700	10 %	
Adjustment Factor from Figure 6		2.55 (2)
If Propeller, Twin Engine Operations As Percentage of Propeller Operations	0 %	
Adjustment Factor from Figure 4		0.84 (3)
If Jet, Turbojet Operations as Percentage of Jet Operations	— %	
Adjustment Factor from Figure 5		— (3)
Adjustment for Larger Aircraft or Fleet Projections (Section VI - A, B)*	—	— (4)
Total Adjusted Operations (1) x (2) x (3) x (4)		32,352

From Tables 1-6 Find Contour Code

Turn to Contour Set	Circle One From Each Set				From Contour Code Write Down Value of Contour Alongside Letter Code, Where Applicable
	(NEF)	(P)	(100)	(1)	A =
	LDN	J	075	2	B =
	CNR		050	3	C =
				4	(D) = 20 - 6300' from T/O roll
				5	(E) = 25 - 3300' " " "

*See Section VI for Calculation Steps

FIGURE 3. CONTOUR CALCULATION WORKSHEET

Airport Name	Liberty Airport — 1980 (Model #4)		
Runway Designation	1/19		
Runway Length	3,700'		
Traffic Pattern (check one)	Left Hand ☒	Right Hand ☐	
		Propeller	Jet
Number of Operations/Year		45,000	—
Runway Utilization	Runway		
	1	50 %	— %
	19	50 %	— %
	Total	— 100 %	— 100 %
Percentage of Propeller or Jet Operations between 2200 and 0700		9 %	— %
Twin Engine Operations as Percentage of all Propeller Operations		19 %	
Turbojet Operations as Percentage of all Jet Operations			— %
Flight Path (check one)	Sketch ☐	Map ☐	Other ☐
Notes	—		

FIGURE 2. FORM FOR COLLECTING AIRPORT OPERATIONAL INFORMATION

Runway Designation 1980 (cont'd.)	1 / 19		
Runway Length	3,700 ft.		
Type of Operation (check one)	Propeller ☒	Jet ☐	
Number of Operations/Year on this Runway (Propeller or Jet)			22,500 (1)
Percentage of Operations Between 2200 and 0700	9 %		
Adjustment Factor from Figure 6			2.4 (2)
If Propeller, Twin Engine Operations As Percentage of Propeller Operations	19 %		
Adjustment Factor from Figure 4			1.36 (3)
If Jet, Turbojet Operations as Percentage of Jet Operations	— %		
Adjustment Factor from Figure 5			— (3)
Adjustment for Larger Aircraft or Fleet Projections (Section VI - A, B)*	—		— (4)
Total Adjusted Operations (1) x (2) x (3) x (4)			73,440

From Tables 1-6 Find Contour Code

Turn to Contour Set	Circle One From Each Set				From Contour Code Write Down Value of Contour Alongside Letter Code, Where Applicable
	(NEF)	(P)	(100)	1	A =
	LDN	J	075	(2)	B =
	CNR		050	3	(C) = 20 - 9500' from t/o roll
				4	(D) = 25 - 5500' " " "
				5	(E) = 30 - 3000' " " "

*See Section VI for Calculation Steps

FIGURE 3. CONTOUR CALCULATION WORKSHEET

Airport Name	Liberty Airport 1990 (Model # 4)		
Runway Designation	1/19		
Runway Length	3,700'		
Traffic Pattern (check one)	Left Hand ☒	Right Hand ☐	
		Propeller	Jet
Number of Operations/Year		60,000	
Runway Utilization	Runway		
	1	50 %	— %
	19	50 %	— %
	Total	100 %	100 %
Percentage of Propeller or Jet Operations between 2200 and 0700		9 %	— %
Twin Engine Operations as Percentage of all Propeller Operations		19 %	
Turbojet Operations as Percentage of all Jet Operations			— %
Flight Path (check one)	Sketch ☐	Map ☐	Other ☐
Notes			

FIGURE 2. FORM FOR COLLECTING AIRPORT OPERATIONAL INFORMATION

Runway Designation 1990 (cont'd.)	1 / 19	
Runway Length	3,700 ft.	
Type of Operation (check one)	Propeller ☒ Jet ☐	
Number of Operations/Year on this Runway (Propeller or Jet)		30,000 (1)
Percentage of Operations Between 2200 and 0700	9 %	
Adjustment Factor from Figure 6		2.4 (2)
If Propeller, Twin Engine Operations As Percentage of Propeller Operations	19 %	
Adjustment Factor from Figure 4		1.36 (3)
If Jet, Turbojet Operations as Percentage of Jet Operations	— %	
Adjustment Factor from Figure 5		— (3)
Adjustment for Larger Aircraft or Fleet Projections (Section VI - A, B)*	—	— (4)
Total Adjusted Operations (1) x (2) x (3) x (4)		97,920

From Tables 1-6 Find Contour Code

Turn to Contour Set	Circle One From Each Set				From Contour Code Write Down Value of Contour Alongside Letter Code, Where Applicable
	(NEF)	(P)	(100)	(1)	A =
	LDN	J	075	2	B =
	CNR		050	3	(C) = 20 - 10,500' from t/o roll
				4	(D) = 25 - 6,300' " " "
				5	(E) = 30 - 3,300' " " "

*See Section VI for Calculation Steps

FIGURE 3. CONTOUR CALCULATION WORKSHEET

FRANKLIN COUNTY PLANNING AND ZONING COMMISSION

County Office Building
Northwest, America 10000

March 13, 1975

Airport Authority
Liberty Airport
Northwest, America

Re: Liberty Airport Proposed Expansion

Gentlemen:

The Franklin County Planning and Zoning Commission has endorsed the proposed expansion of Liberty Airport. The proposed project is consistent with our recently completed 1990 Master Plan. In fact, because the expanded airport is included in the Master Plan, an airport district zoning ordinance is being prepared to prevent incompatible uses locating adjacent to the airport.

We foresee no problems in the development of this project as it regards Franklin County's development.

Thank you for the opportunity to comment on this project.

Very truly yours,

FRANKLIN COUNTY PLANNING
AND ZONING COMMISSION

Bob Weiss

Bob Weiss, Chairman

BW/rd

WATER QUALITY
JONES' POND
STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Sample Number	I-Sp5	I-S5	I-F5	I-W6
Date	4 April 75	6 July 75	17 Oct. 75	6 Jan. 76
Water Temperature	51°F	73°F	54°F	35°F
Total Suspended Solids	2.0	2.0	5.0	2.0
BOD^5	<5.0	<5.0	<5.0	<5.0
COD	7.0	10.0	11.0	10.0
Total PO^4 as P	<0.1	0.1	<0.1	<0.1
Total Phosphates	<.1	0.1	<0.1	<0.1
Total NO^3 as N	1.3	1.0	1.5	1.5
Total N				
Fecal Coliforms	150/100 ml	200/100 ml	100/100 ml	100/100 ml

Summary of samples contained in State Department of Environmental Protection Record Book 1975-2-1.

FRANKLIN COUNTY
DEPARTMENT OF RECREATION AND PARKS
One West Street
Northwest, America 10000

April 16, 1975

Airport Authority
Liberty Airport
Northwest, America

Subject: Liberty Airport Proposed Expansion

Gentlemen:

In reply to your inquiry regarding the proposed expansion of Liberty Airport, the Recreation and Parks Commission does not have and does not anticipate having a recreational or park area in the area encompassed by the airport development plan. In addition, we foresee no environmental impacts which may result from the project affecting any county recreational facility.

We hope this information will be of assistance to you. If we can be of further assistance, do not hesitate to call.

Very truly yours,

DEPARTMENT OF RECREATION AND PARKS

Wilbur Thomas

Wilbur Thomas
Administrator

WT/rd

STATE DEPARTMENT OF PARKS

State Office Building
Capitol City Avenue
America, U.S.A.

Edward Johnson
Commissioner

Howard Jones
Assistant Commissioner

April 4, 1975

Airport Authority
Liberty Airport
Northwest, America

Re: Liberty Airport Proposed Expansion

Gentlemen:

We have reviewed the plan for the expansion of Liberty Airport and can find no objection to this project.

It is our opinion that this project will not affect any state recreational facility or the Department's environmental policies and regulations.

Thank you for considering the Department of Parks in this matter.

Very truly yours,

STATE DEPARTMENT OF PARKS

Edward Johnson

Edward Johnson
Commissioner

EJ/rd

FRANKLIN COUNTY HISTORICAL SOCIETY

County Office Building
Northwest, America 10000

April 22, 1975

Airport Authority
Liberty Airport
Northwest, America

Gentlemen:

To the best of my knowledge there are no sites of historical significance within the area for the proposed expansion of Liberty Airport.

Thank you for your consideration in this matter.

Very truly yours,

FRANKLIN COUNTRY HISTORICAL SOCIETY

Martin Phillips

Martin Phillips

MP/rd

DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
Division of Cultural Affairs
State Historical Trust

1035 Johnson Building

Capitol City Avenue
America 10000

April 23, 1975

Airport Authority
Liberty Airport
Northwest, America

Re: Liberty Airport Extension
Franklin County

Gentlemen:

Upon review of state files and survey results, we have determined that there are no known historic structures or sites of state significance located within the proposed project area.

Thank you for your cooperation.

Very truly yours,

STATE HISTORICAL TRUST

Jack Smith

Jack Smith
Historical Administrator

JS/slm

DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
Division of Cultural Affairs
State Archeologist

1035 Johnson Building

Capitol City Avenue
America 10000

April 25, 1975

Airport Authority
Liberty Airport
Northwest, America

Re: Liberty Airport Expansion Project

Gentlemen:

In response to your recent request regarding the possible existence of archeological sites in the project area, this office conducted a thorough record search of possible sites in this area.

As a result of this effort, we have determined that there are no recorded sites within or adjacent to the project area, nor did we find any indication that such sites may exist.

However, should archeological resources be uncovered during construction operations, all work in that area should be halted and this office notified immediately so that an investigation may be conducted.

Very truly yours,

DEPARTMENT OF ECONOMIC AND
COMMUNITY DEVELOPMENT

Edward Marshall

Dr. Edward Marshall
State Archeologist

EM/slm

FRANKLIN COUNTY DEPARTMENT OF PUBLIC WORKS
County Office Building
Northwest, America 10000

May 1, 1975

Liberty Airport Authority
Liberty Airport
Northwest, America

Re: Liberty County Airport
Expansion Project

Sirs:

This is in response to your inquiry regarding the County's present and future landfill capacity to accommodate solid wastes generated by the proposed Liberty Airport expansion.

The present landfill, located ten miles to the west of the airport, handles existing airport solid wastes. The landfill has a life expectancy of approximately ten years. Therefore, the Department of Public Works anticipates no problem in properly disposing of any solid wastes generated by the project.

If we can be of further assistance, please contact our office.

Very truly yours,

DEPARTMENT OF PUBLIC WORKS

Melvin Banks

Melvin Banks
Sanitation Engineer

MB/rd

MILFORD
DAILY TIMES

June 10, 1975

Airport Authority
Liberty Airport
Northwest, America

Dear Sir:

Enclosed please find a copy of the public hearing notice text that appeared in the *Daily Times* on June 2, 1975 and June 9, 1975.

Very truly yours,

John A. Prince

John A. Prince
Notary Public and
Chief of Advertising
and Public Notice Section
Milford Daily Times

JAP/slm

Enclosure

NOTICE OF OPEN PUBLIC HEARING CONCERNING PROPOSED AIRPORT DEVELOPMENT

AT

FRANKLIN COUNTY COURTHOUSE
MILFORD

On July 16, 1975 at 7:30 p.m. there will be convened an open public hearing to consider the expansion of Liberty Airport.

Place of Meeting. The hearing will be held at Franklin County Courthouse.

Purpose of Hearing. To consider the economic, social and environmental effects of the airport expansion and their consistency with the goals and objectives of such planning as has been carried out for this area.

Conduct of Meeting. Representatives of the Liberty Airport Authority will at the outset present a summary of their views concerning the airport's and the proposed project's social, economic, and environmental impact, and its consistency with locally carried out planning activities.

Other persons present will then be afforded the opportunity to present written or oral view (whether in favor of, in opposition to, or by way of proposed revision of, the project).

All oral comments will be recorded.

Availability of Published Information. The Liberty Airport Authority has prepared the draft Environmental Impact Assessment Report, which outlines proposed project and summarizes the environmental impacts which are expected to occur. Any person desiring to review this report may do so at all public libraries in the City of Milford and the Franklin County Courthouse.

John A. Prince
Notary Public

DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
Division of Cultural Affairs
State Historic Trust

1035 Johnson Building **Capitol City Avenue**
America 10000

November 25, 1976

Airport Authority
Liberty Airport
Northwest, America

Re: Liberty Airport Extension
Franklin County

Gentlemen:

Based on a review by this office, it is acknowledged that no historic sites on the National Register, nor any historic sites eligible for the Register, are located in the area of your proposed airport expansion.

Very truly yours,

Jack Smith

Jack Smith
Historical Administrator
(Acting) State Historic
Preservation Officer

JS:mnr

DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
Division of Cultural Affairs
State Archaeologist

1035 Johnson Building

Capitol City Avenue
America 10000

October 25, 1976

Airport Authority
Liberty Airport
Northwest, America

Re: Liberty Airport Expansion Project

Gentlemen:

In response to your continuing concern regarding the existence of archaeological sites in your project area, our office has undertaken a preliminary archaeological survey of the airport site.

Members of my staff have searched the area but have failed to discover a single archaeological site that would be affected by airport construction.

It is concluded that you can proceed with the planned expansion without adversely affecting the area's archaeological resources.

Thank you for your concern and for the assistance of your staff during the survey.

Very truly yours,

Edward Marshall

Dr. Edward Marshall
State Archaeologist

EM:nl

SECTION 16(c)(4) COORDINATION

COMMENTS AND FAA RESPONSES

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

In reply refer to:
(ER-76/33)

MAR 25 1976

Comment No.

Dear Mr. Perrett:

We have completed our review of the environmental assessment report for Liberty Airport, Northwest, America, (Model Environmental Impact Statement No. 4), and offer the following comments.

GENERAL COMMENTS

The assessment presents very little quantitative information in evaluation of potential impacts for a reviewer to judge the severity of the impacts of the project for himself rather than relying on the general conclusory statements found throughout the document. (1)

Lengthy demonstrations of analytical techniques are located under the Noise and Air Quality headings in Section II. Although these demonstrations may have value, we would point out that a description of techniques should not be substituted for specific data and analysis of impacts related to the proposed action. (2)

It would be helpful to provide a summary section at the outset, including a concise statement of the proposed action, all interrelated Federal actions, if any; and a summary of environmental impacts and alternatives.

The physiographic province in which the proposed airport site occurs should be identified in order to assist reviewers in applying prior knowledge of the natural physical setting in their estimates of probable impacts that have not been fully evaluated in the assessment report. Also, no topographic map of the site has been provided, nor any description of topography in sufficient detail to evaluate probable amounts of earthwork, potential construction problems, or relief-related environmental impacts likely to be involved in the proposed airport expansion. (3)

Comment No.

No information on geology of the area of proposed construction has been provided in the assessment report. Although any environmental problems related to geologic conditions should be recognizable from preconstruction investigations or from prior experience with construction and maintenance of the existing runway and other facilities, it would be advisible to provide a summary of such experience, of what is known of geologic conditions, and of what investigations are planned. The relation of geologic conditions to such serious potential impacts as failure of foundations and seismic damage should also be discussed in the assessment report. The report should also include evaluations of potential impacts on any mineral resources. Terms such as "NASP" and "basic utility Stage I airport" should be defined in the text. (4)

SECTION 16(c)(4) COMMENTS

The National Environmental Policy Act of 1969 established environmental analysis responsibilities and procedures for all Federal actions under Section 102(2)(C). The requirements in Section 16(c)(4) of the Airport and Airway Development Act of 1970 were established after the enactment of NEPA and apply specifically to three types of Federal-aid airport projects -- airport location, major runway extension, or runway location. In addition, Section 16(c)(4) established specific environmental analysis responsibilities and procedures for these types of projects if they will have an adverse effect, i.e., that a finding be made by the Secretary of Transportation in consultation with the Secretary of the Interior and the Environmental Protection Agency, "that no feasible and prudent alternative exists and that all possible steps have been taken to minimize such adverse effect." Hence, Section 16(c)(4) requires a more stringent environmental burden of proof for the consideration of alternatives and mitigation of adverse effect than does NEPA's disclosure requirement. (5)

Although not explicitly stated in FAA directives, it is clear from our experience in reviewing FAA environmental documents that Section 16(c)(4) actions are considered by FAA to require less than the full NEPA analysis. It appears that, in FAA's opinion, the only difference between a negative declaration and a Section 16(c)(4) document is procedure, i.e., that the latter must be circulated, by statutory requirement, to the Department of the Interior and the Environmental Protection Agency for review and comment.

Comment No.

Since Section 16(c)(4) compliance is viewed by FAA as a process requiring less than full NEPA analysis, the environmental statements we have reviewed for Section 16(c)(4) actions generally have not contained a finding of no feasible and prudent alternative and all possible steps to minimize adverse effect, and none have contained separate, identifiable documentation which would adequately support such a finding.

The environmental assessment for the proposed runway extension at Liberty Airport is no exception to this lack of a finding and supporting documentation. It contains a minimal analysis of the question of feasible and prudent alternatives. The section, "Actions to Minimize Harm" (pp. 20-21), is brief, general, and incomplete. In order to satisfy our interpretation of Section 16(c)(4), the present report needs a far more detailed discussion of the need for the project, better analysis of alternatives, specific identification of adverse effects and steps to minimize them, and a finding that "no feasible and prudent alternative exists and that all possible steps have been taken to minimize such adverse effects." (6)

SPECIFIC COMMENTS

Page 1. A more detailed description of the proposed action should be provided so specific impacts can be identified and analyzed. The discrete actions involved in expansion of the airport should be identified, e.g., vegetation clearing, excavation, construction, and operation as required for each part of the expansion described in paragraph 4. Ownership of all lands to be acquired should be stated. (7)

The text itself suggests information which should have been included in describing the proposal. Water supply is discussed on page 18 and there is no quantification on how much water is used at the existing airport facility, and how much use is anticipated after expansion. The discussion of sewage treatment facilities on page 18 leads a reviewer to wonder what sanitary facilities will be available to persons other than airport employees. The discussion of energy on page 19 suggests the questions; how much electrical power is now used, and how much use is anticipated following expansion? A better discussion of full usage both by aircraft and (8)

Comment No.

by autos and trucks using the airport is also needed. The project description fails to indicate what insecticides and herbicides may be used, and it does not adequately discuss hazardous and toxic materials generated, or measures for their disposal. It does not describe landscaping and other conservation measures planned as part of the proposal.

Page 2. The report indicates that the proposed project "will provide a more efficient facility to handle general aviation aircraft making trips to and from this area for such reasons as emergencies, recreation, and business opportunities", yet it provides no current or projected data illustrating the need for aircraft expansion. We suggest that a documented demonstration of need should be one of the most important parts of a proposal. (9)

Page 6. Exhibits 4, 5, 6, and 7 would be more meaningful if they showed the locations of existing rural residences and farmhouses. Also, if it is known that certain properties have been divided for subdivision developments, such areas should be identified. Further, the Land Use Section should discuss why the Airport District does not extend south of S.R. 50, and, in this area, east to Route 12, to encompass most of the area impacted by NEF 20. Expansion of the District northward also should be discussed. (10)

Page 8. A brief reference to "shallow fills in the areas of construction" is made, but no information is given on the approximate volume of fill required, on the maximum or average depths of fill; on the proposed source of the fill material; or on the type of material. All of these would have a bearing on determination of environmental impacts of the proposed construction. (11)

In view of increased surface runoff, both as sheet-flow from increased paved surfaces (paragraph 2) and as storm-water drainage from additional service facilities, effects on water-quality characteristics and storage capacity of Jones Pond should be assessed and discussed in the report. (12)

Although some ground-water aspects have been briefly considered, the assessment report should be more comprehensive. In particular, the following needs clarification or more adequate treatment:

1. A brief description of the physical and hydrologic (13)

Comment No.

characteristics of the aquifers affected and of related rock materials (e.g., aquicludes) should be given. This information should include typical water-bearing characteristics and typical yields. All aquifers to the base of the affected hydrogeologic section should be included, because the potential exists for impacts on aquifers untapped for the project and lying at shallower depth than the aquifer used.

2. A second well is planned to augment the water supply (p. 18). Future demands for water have simply been extrapolated from past use, according to the assessment report (p. 18). Yet, the purpose of the project is to upgrade the airport as a base for longer flights and heavier payloads (pp. 2, 15). Thus, greater per capita use of water can be anticipated. Furthermore, plans are to expand the number of operations about 50 percent, thus further increasing demand for water. The nature of the aquifer is not given; however, the report should indicate what mitigating measures will be taken to minimize mutual well interference and assure maximum efficiency from each well. In addition, the report should indicate what measures are to be taken to prevent leakage of contaminants down the annular opening around the well casings. (14)

3. The assessment report mentions that the aquifers to be used are protected against infiltration of surface contaminants or pollutants by a layer of comparatively impermeable clay at about 50 feet (p. 19). However, no consideration is given to the unconfined aquifer that will lie above the impervious layer and which may have impacts on the human environment of the site. These impacts should be considered. (15)

4. No information is given on the current quality of ground water in the aquifers of the area that will be affected by the project. Such data should be included with applicable information from Federal, State, or other standards. (16)

Comment No.

Page 15. It can be deduced from the first paragraph that dispersion of air pollutants will occur. The impact of this dispersion on air quality in the surrounding area should be discussed. Despite the analysis provided, the discussion still fails to show the difference between existing air quality and air quality levels expected after airport expansion. (17)

Under "Social Impacts" the report must describe existing social activities and their locations before it can be determined whether or not the social environment would be impacted by the proposal. This might also be the best place to identify population and growth characteristics of the area, and assumptions for future population growth as appropriate, as this information is required to analyze the need for the proposed action. (18)

The secondary or induced impacts associated with new businessess locating in proximity to the expanded airport should be discussed. Although the assessment report states that the character of the area will not be significantly altered by new businessess (p. 15), the no project alternative (p. 23), indicates that potential business opportunities are important considerations in the project. (19)

The existing economy of the area is not adequately discussed anywhere in the document, nor are potential impacts of the proposal on the economy specifically identified or analyzed. A better discussion of existing economic activities and any known, anticipated economic development is needed. All activities must be identified so that their interrelationships with the proposed action and potential cumulative environmental impacts can be analyzed. (20)

The assessment report does not adequately identify cultural resources nor does it adequately assess the project's potential impacts on these resources. The requirements for Federal agency compliance with cultural resource preservation procedures are documented in 36 CFR 800 and DOT Order 5610.1B. Consultation with the State Historic Preservation Officer is mandatory. His comments should be included in the document. Consultation with the latest issue of the National Register of Historic Places, including monthly supplements, should be documented in the report. (21)

Comment No.

The Office of the State Historic Preservation Officer, which often includes the State Archeologist, is an advisory body. They alert the Federal agency of known cultural resources. It is not their responsibility to determine the presence or absence of cultural resources. It is the responsibility of the Federal agency to take steps (36 CFR 800) to identify, at the earliest possible time in the planning stage, both known and presently unrecorded cultural resources. Unless the State Historic Preservation Office can document that adequate onsite surveys for cultural (historic, archeological, architectural) resources or other investigations have occurred, it is the responsibility of the Federal agency to initiate surveys or other studies and provide documentation and discussion in the assessment report. We would also point out that until all the requirements of 36 CFR 800 are met, no valid Section 4(f) determination can be made. (22)

Page 18. The nature of the materials in the area of the septic-tank drain field should be addressed and impacts of septic-tank operation specifically considered. The volume of the tank is not in itself adequate information for considering the impacts of the operation. (23)

Page 21. No data or facts appear anywhere in the report to support the assertion that "Improvements in both aircraft and automotive engines will, however, offset this slight increase [in air pollution emissions], and the level of air quality can be expected to improve over existing conditions." Clarification of this statement is needed. (24)

Page 22. The "Alternatives" section should identify and describe potential environmental impacts of each alternative so that a systematic analysis of the impacts of the proposed action and all alternatives can be accomplished. For a decision-maker to develop a reasonable understanding of financial and environmental risks associated with the proposed action, a fairly detailed analysis of each alternative's environmental benefits, costs, and risks must be presented. (25)

Page 24. The discussion of the relationship between short-term uses and long-term productivity does not address itself adequately to the long-term productivity of the environment. It deals with the "long-term" mainly in terms of airport benefits rather than benefits to the overall human-environment system. (26)

Comment No.

Page 25. The discussion of resource commitments should clarify whether the analysis is, or is not, based on the assumption that the expansion site could be converted to other use at some time in the future. If possible conversion is assumed, the statements on loss of vegetation, natural habitat, and wildlife would not be entirely true. Irreversible or irretrievable commitment of the resources and manpower used in construction should also be addressed. The meaning of the phrase, "its [the site's] contribution to the general aviation related activity is itself irreversible," should be clarified. (27)

Page 30. It is indicated in the correspondence dated August 2, 1975, that the Soil Conservation Service concurred in the findings of the environmental assessment. We assume that this assessment contained information similar to that in the present document. The present document makes no mention of soils and fails to provide any indication that soils or subsurface geologic conditions in the area of proposed earthwork have been investigated or are known. In the absence of this information, we fail to see how the Soil Conservation Service could concur in findings relative to impact on soils unless such a judgement was based on prior knowledge of soil conditions in the area. In any case, since some reviewers, including the general public, may have insufficient knowledge of soils and other subsurface conditions of the project area, they should be given the benefit of such knowledge by inclusion of a concise summary of what is known, or of what investigations are planned prior to construction. (28)

Page A-1, et seq. The type of information that belongs in the Appendix should be clarified. The present report is inconsistent in this regard. For example, under "Water Quality and Water Resources" (pp. 7-8), no Federal or State standards are provided, and existing water quality measurements are placed in the appendix. Under "Air Quality" (pp. 9-15), both the national ambient air quality standards and existing ambient air quality conditions appear in the body of the document. (29)

Page A-13. The Federal agency, in this instance, should not equate this type of response as satisfying its responsibility. If the State Archeologist had provided an adequate report on the area involved, it would have provided the Federal agency with information to include in the environmental assessment. In this (30)

Comment No.

case, the archeologist has alerted the Federal agency that no sites are known. It is the Federal agency's responsibility to initiate a professional study of the area and evaluate if any significant sites are located in the project area. Section 106 of the National Historic Preservation Act of 1966 is applicable to sites on, and those determined eligible for listing on, the National Register and the procedures of 36 CFR 800 must be followed in regard to them.

The agency, through consultation with the State Historic Preservation Officer, should evaluate located sites for potential eligibility for listing in the National Register. For those sites found to be potentially eligible and for those whose potential eligibility is questionable, the agency should request a determination of eligibility from the Secretary of the Interior. (31)

We hope that our comments will aid you in preparing a final environmental assessment for this project.

Sincerely yours,

Stanley R. Boremus

Deputy Assistant Secretary of the Interior

Mr. Elliott B. Perrett, Jr.
Environmental Planning Branch, AAS-410
Airports Planning Division, Airports Service
Federal Aviation Administration
Washington, D.C. 20591

RESPONSES TO COMMENTS BY
THE U. S. DEPARTMENT OF THE INTERIOR

Response to Comment No. 1:

The additional information provided in response to agency comments supplements the quantitative data contained in the Negative Declaration.

Response to Comment No. 2:

It is agreed that technical description should not be substituted for specific impact analysis. It is felt, however, that the technical demonstrations in this specific document have value in presenting the basic approach and concepts of the analyses. Both the Noise and Air Quality sections include evaluation of project impact.

Response to Comment No. 3:

Information regarding the site's physical setting and a topographic map have been added to the Negative Declaration in sections on Soils and Geology, and Water Resources.

Response to Comment No. 4:

Information on the geologic conditions of the area has also been added in the Negative Declaration.

Further consultation with the local Soil Conservation Service, the County Engineer's Office, and the State Geologist revealed that the development of the airport at the existing site would not affect any mineral resources.

The "NASP" is the National Airport System Plan for the development of public airports in the United States. The development shown in the NASP represents that development necessary to attain various levels of service under certain assumptions about future traffic levels and operating rules. In operational terms, the NASP identified those projects of potential Federal interest and on which Federal funds may be spent under the Airport Development Aid Program.

The selection of the type of airport required is based upon an analysis of the frequency and kinds of aircraft utilizing or forecast to utilize the airport. The "Basic Utility" classification is applied to airports which accommodate approximately 95 percent of the general aviation propeller fleet under 12,500 pounds (maximum gross weight).

Response to Comment No. 5:

As indicated in FAA's environmental guidelines, the action choice involving only 16(c)(4) coordination is a form of negative declaration. A negative declaration is a document that constitutes FAA's evaluation that a particular action will not significantly affect the human environment or otherwise require full coordination pursuant to NEPA Section 102(2)(C).

However, the decision to process a particular action with a Negative Declaration is the result of an evaluation of potential impacts which begins in the initial stages of the planning process.

The degree of adverse effect on the environment is the primary factor in determining the detail required in assessing alternatives. After the project planning stage when basic alternatives are proposed, general broad scale environmental effects are considered and a development alternative is proposed as the project. When further detailed environmental assessment of the proposed alternative yields no significant adverse effect, then the initial assessment of the other alternatives is sufficient for Section 16(c)(4) purposes.

It is further noted that the FAA environmental finding is prepared <u>after</u> the required consultation with DOI and EPA.

Response to Comment No. 6:

Responses to specific items herein provide additional information requested in this comment.

Response to Comment No. 7:

The description of the project identifies those component items to be constructed. Construction, siting, and/or operational impacts are presented in the discussions of the various impact categories (disciplines). The land to be acquired is under private ownership of a single owner who will be compensated for the area taken.

Response to Comment No. 8:

The existing levels of usage have been added to the sections of the Negative Declaration dealing with the appropriate impact category. Any use of insecticides and/or herbicides used as part of maintenance will be controlled by applicable Federal and local regulations.

The discussion of measures to mitigate effects on water resources has been supplemented in the Negative Declaration. Extensive landscaping for this proposed action at an existing airport is not required, though may be undertaken by local officials after project completion.

Response to Comment No. 9:

The agency agrees that a documented demonstration of need is an integral part of the environmental document. Additional information regarding projections of aircraft usage has been added to the Negative Declaration.

Response to Comment No. 10:

Rural residences and farmhouses have been added to the appropriate exhibits in the Negative Declaration. None of the areas designated "Rural Residential" in the County's Master Plan will be divided for subdivision developments.

The limits of the Airport Zoning District were determined based on considerations of noise exposure limits, physical boundaries, and private property ownership.

Few activities will be affected in areas where noise exposure is less than NEF 30. The NEF 30 contour is confined to the airport property under existing and projected conditions. It is not reasonable to extend the proposed zoning requirements into areas well beyond the realistic limits of airport impact.

Response to Comment No. 11:

Information available from preliminary engineering estimates has been added to the Negative Declaration.

Response to Comment No. 12:

Although the runway extension will produce a paved surface producing sheet flow, computations utilizing the project's coefficient of runoff show that, after construction, the area will produce less total runoff than the surrounding fully cultivated fields. It is not anticipated that the construction of the runway extension and other facilities that reduce the area of agricultural usage in the Jones Pond drainage area will degrade existing water quality.

The storage capacity of Jones Pond will not be altered by the project.

Response to Comment No. 13:

A description of the characteristics of the affected aquifer has been added to the Negative Declaration.

Response to Comment No. 14:

Operations are expected to increase as much as 50 percent by 1980. However, it is not considered reasonable to expect more than a minimal increase in water use above the average consumption per operation. The addition of a single well drawing less than a gallon a minute will not cause any interference on adjacent wells. The well will be designed to established County Standards which will safeguard leakage of surface waters around the well casing.

Response to Comment No. 15:

The loess soils which lie immediately under the airport property and above the clay layer are not a source of water supply for any use.

Response to Comment No. 16:

An addition to the section on Water Supply has added information on the quality of the groundwater.

Response to Comment No. 17:

The classification of the Air Quality Control Region and the available county monitoring results indicate that air quality in the region is relatively good. The impact analysis shows the comparison between existing and future peak hour aircraft emissions. A comparison of these emissions with National Standards indicates that there will be no significant adverse effect on air quality. Any further dispersion analysis is not warranted for this particular action.

Response to Comment No. 18:

Many aspects of the "social environment" are addressed in separate impact sections of the document, i.e., land use, recreational areas, cultural resources, and public services. Population growth is noted in the section on project need. The remaining parts of the "social environment" include such items as relocation and community disruption. The proposed runway extension and related facilities will not require the displacement of any individuals or businesses and will not disrupt community activities.

Response to Comment No. 19:

Since the proposed action involves a runway extension at an existing general aviation airport, the incremental induced impacts are not considered to be significant, as opposed to that level of induced development expected as a result of construction of a new site. No unplanned alterations in land use patterns are expected to occur; no significant change in the economic base is expected; no shift in county demographic patterns is necessary to support the expansion; and county services will not be overburdened.

Though the expansion is not expected to create significant induced impacts, the ability to accommodate almost the entire general aviation fleet still remains a consideration for local business interests.

Response to Comment No. 20:

The scope of the proposed action is such that the extent of the project's economic stimulus is limited. The project's main purpose is to upgrade existing facilities to serve existing and projected general aviation demands.

Response to Comment No. 21:

A review of the National Register of Historic Places was made and revealed that no national histroic sites are located on or near the project site. Additional correspondence from the State Historic Preservation Office is referenced in the Negative Declaration.

Response to Comment No. 22:

Preliminary surveys to identify the location of cultural resources may be necessary when there is reason to believe that such resources may exist and may be destroyed by the project. Based on additional information obtained from the State Archaeologist, it was determined that no archaeological sites would be affected and that no further surveys were necessary.

Response to Comment No. 23:

The materials in the area of the drain field are as described in the section on Soils and Geology. The 1,000 gallon septic tank size serving the facility poses no disposal problem. An installation of this size would not be unacceptable at a distance of 100 feet from a well used for domestic supply.

Response to Comment No. 24:

Clarification of the impact on air quality has been added to the Negative Declaration.

Response to Comment No. 25:

Some additional information on alternatives has been added to the Negative Declaration. See Response to Comment No. 5.

Response to Comment No. 26:

The long-term productivity of the adjacent farm land will not be adversely affected by the relatively small land acquisition for airport purposes. For this type of project, which has less than significant environmental effects, the discussion of short-term/long-term trade-offs as presented is considered adequate.

Response to Comment No. 27:

The discussion of resource commitments has been clarified in the Negative Declaration.

Response to Comment No. 28:

As indicated in a previous response, information on soils and geology and associated project impacts has been added to the Negative Declaration.

Response to Comment No. 29:

Where information or standards are used directly in the impact analysis and evaluation, they are placed with the appropriate text. Supporting documentation not used directly in the impact evaluation can be appended or referenced.

Response to Comment No. 30:

See Response to Comment No. 22.

Additional consultation with the State Archaeologist is referenced in the Negative Declaration and its appendix.

Response to Comment No. 31:

See Response to Comment No. 21.

MODEL STATEMENT

INSTRUCTIONAL GUIDANCE

MODEL STATEMENT INSTRUCTIONAL GUIDANCE

This section of the Model Statement is for instructional purposes only. It is intended to show by comparison the FAA's initial evaluation of a particular impact or other section of the document and the FAA's final evaluation in response to Federal coordination and comments. To do this, selected sections of the impact document prior to coordination are shown side-by-side with the corresponding sections of the document after coordination. The sections selected for this purpose are those which changed significantly as a result of coordination and comment.

PURPOSE

The present airport, by its configuration and general clasification, accommodates approximately 75 percent of the propeller general aviation fleet under 12,500 pounds. The proposed runway extension will improve the airport's level of service by safely accommodating virtually all (95 percent) of the propeller general aviation fleet under 12,500 pounds. This commitment is consistent with meeting the increasing aviation needs of the general community and the county government. Projected usage of this facility is forecast to increase by approximately 50%, from 30,208 operations in 1975 to 45,000 operations in 1980. In addition, a basic utility (stage II) airport is now considered minimum fundamental development for inclusion in NASP.

The present runway configuration provides only 93 percent allowable crosswind coverage. The ultimate addition of a crosswind runway at the Liberty Airport will provide about 99 percent coverage and will contribute to a safer operation during those periods (10 percent) when the crosswind component is critical.

The proposed project will provide a more efficient facility to handle general aviation aircraft making trips to and from this area for such reasons as emergencies, recreation, and business opportunities. In addition, with the increased length of runways at the airport, the excellent, and only major medical facility in the County will be within twin-engine aircraft range of the State's main hospital center at Pride City. Finally, almost all types of general aviation piston aircraft -- with higher payloads and in hot weather -- will be able to utilize the expanded airport facility.

PROJECT SETTING

The proposed project is located in the central portion of Franklin County, approximately two miles east of the county seat of Milford. Franklin County is located in the remote northwestern section of the state, considerably removed from the major population centers. The County's estimated year-round population was approximately 35,000 in 1974. The central activity center for the County is Milford, the county seat, with a 1974 population of 12,000. The area surrounding Milford, including the proposed project, is primarily rolling hills and plains devoted to the farming of such crops as wheat, corn, barley, and oats. The economic base of the County is dependent on farming and the raising of livestock and domestic fowl.

Prior to Coordination

PURPOSE

The present airport, by its configuration and general classification, accommodates approximately 75 percent of the propeller general aviation fleet under 12,500 pounds. The proposed runway extension will improve the airport's level of service by safely accommodating virtually all (95 percent) of the propeller general aviation fleet under 12,500 pounds. This commitment is consistent with meeting the increasing aviation needs of the general community and the county government. The National Airport System Plan (NASP) and the State System Plan are reasonably consistent with the annual operational forecasts that have been prepared for this airport. Projected usage of this facility is forecast to increase by approximately 50 percent, from 30,208 operations in 1975 to 45,000 operations in 1980. Annual operations are forecasted to reach 60,000 by 1990. In addition, a basic utility (stage II) airport is now considered minimum fundamental development for inclusion in the NASP.

The present runway configuration provides only 93 percent allowable crosswind coverage. The ultimate addition of a crosswind runway at the Liberty Airport will provide about 99 percent coverage and will contribute to a safer operation during those periods (10 percent) when the crosswind component is critical.

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After Coordination and Response

None

Prior to Coordination

SOILS AND GEOLOGY

Franklin County is part of the dissected glacial-drift plain that was covered to various depths by two silty wind-laid loess formations.[2] In many places dissection has removed both of these known deposits, exposing the glacial-drift and locally the bedrock formations known as Dakota sandstone and Permian limestone and shale.

Franklin County is located in the West-Central Rolling Hills of the Great Plains physiographic region. The County is characterized as a broad elongated basin, with its axis followed throughout by Salt Creek, tributaries of which have produced minor irregularities in the outline of the basin. The uplands are moderately to strongly rolling. The nearly level or gently undulating alluvial lands, principally along Salt Creek and its larger tributaries, occupy a relatively large part of the County.

Drainage is chiefly northward and eastward to the James River through Salt Creek and its tributaries. As a whole the County is well drained.

All the soils in the County have developed under the influence of a vegetation of tall grass except those occupying part of the bottom lands and part of the most steeply sloping areas. Most of them are very dark and highly granular in the surface layers, friable throughout, and easily penetrated by air, roots, and water. Only a few contain significant quantities of lime, but so far as crops are concerned, none seems to be deficient in calcium.

On the basis of use capability and productivity, as influenced chiefly by depth and friability of soil material and character of parent material, the soils are grouped as follows: (1) Deep and medium-deep friable soils of the loessal uplands; (2) deep heavy soils of the loessal uplands; (3) deep and medium-deep friable soils of the glacial uplands; (4) deep heavy soils of the glacial uplands; (5) shallow friable soils of the glacial and bedrock uplands; (6) deep friable soils of the terraces; (7) deep heavy soils of the terraces; and (8) alluvial and colluvial soils.

The first two of the above mentioned soil groups are found on the airport site. The first group includes the Sharpsburg soils. These soils, occupying the undulating to gently rolling loess-mantled uplands, are the most extensive in the County. They have a dark surface soil, clayey but fairly friable subsoil, and ample fertility, and are among the most productive in this general region. Most of these soils are cultivated and are used for all the crops common to the Corn Belt.

The deep heavy soils of the loessal uplands include the Butler and Crete series. These differ from those of the Sharpsburg chiefly in having a dense claypan layer in the upper part of the subsoil and a horizon of lime enrichment in the lower part. They are used for growing all the crops common to this region but are better suited to small grains than to corn.

Erosion control problems will be minimal because of the relatively flat terrain and flat grades of the areas of construction. The construction will involve approximately 15,000 cubic yards of embankment material which will be obtained on-site from apron and ditch areas. Ditch side slopes and similar isolated sharp slopes will be protected temporarily during construction and permanently upon completion of construction with seeding or sod. All unpaved areas will be turfed.

All erosion control and sediment control techniques will be incorporated into the construction phase of the project. Both the temporary requirements during the construction phase and the permanent measures planned for the operational phase will be in accordance with the latest directives and requirements of the State Department of Transportation and with the Regulations and Rules of Procedures of the State Department of Environmental Protection, as well as conforming to the requirements and specifications of the Franklin County Sediment Control Ordinance and the Franklin Soil Conservation District.

After Coordination and Response

WATER QUALITY AND WATER RESOURCES

The only watercourse on airport property is a swale on the west, draining north, and an intermittent stream on the eastern side of the existing runway which flows in a northeasterly direction. Approximately a mile north this watercourse enters Jones' Pond, which is four acres in size. Water quality of the stream itself is difficult to determine due to the intermittence of flow. Water samples collected regularly by the State Department of Environmental Protection provide a good indication of stream quality. A summary table of water quality conditions in the pond can be found in the Appendix, on page A-8.

The site is relatively level with elevations ranging from 400 to 425 feet above sea level. Present runoff is low and velocities are not excessive. The entire site drains in a northerly direction. Clearing and grubbing will cause a minimal change in the rate of runoff from that which exists under the present agricultural use. Design and construction of the various expansion components will include provisions for drainage structures to convey runoff.

All drainage facilities will be designed on the basis of the increased quantities of flow for a five-year storm. Surface runoff from the runway extension will leave the paved surface in sheet flow and enter the parallel shallow side ditches for conveyance to the north. Maximum flow in the side ditches is estimated to be about 20 cubic feet per second (cfs). Maximum depth of flow will be in the range of 1.2 to 1.5 feet, depending upon the stage of maintenance (mowing) established by the Authority.

No construction is anticipated in the immediate area of the intermittent stream, but construction of the expanded facility will temporarily affect the quality of runoff. Erosion will be minimal due to the gentle slopes of the terrain and shallow fills in the areas of construction. Measures to control erosion include flattened embankment side slopes, sediment traps, temporary holding ponds, and applications of seed and mulch or sod to finished slopes as soon after grading as possible. These measures will limit erosion and stream turbidities. A temporary increase in stream turbidities is expected when storms occur as soils are being moved during the construction period. With project completion turbidities will return to preconstruction levels.

Leaks or spills of aircraft oriented petroleum wastes could occur in the hangar, apron, or fuel storage areas. These small quantities will be removed by absorbent materials or by mechanical means. Incorporation of oil and grease traps in the hangar and apron areas will also reduce the hazard of spilled materials being flushed into the area's watercourses. Oil collected in the traps will be pumped into salvage vehicles on a regular basis.

Prior to Coordination

WATER RESOURCES

Water Quality

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Hydrology

The site is relatively level with elevations ranging from 400 to 425 feet above sea level (see Exhibit 8). Present runoff is low and velocities are not excessive. All drainage presently enters ditches which parallel the runway. Due to both the level terrain of the airport property and the grassed areas maintained, peak rates of runoff from the site are less than would be expected from the surrounding agricultural areas. Table 2 contains airport area hydrological data.

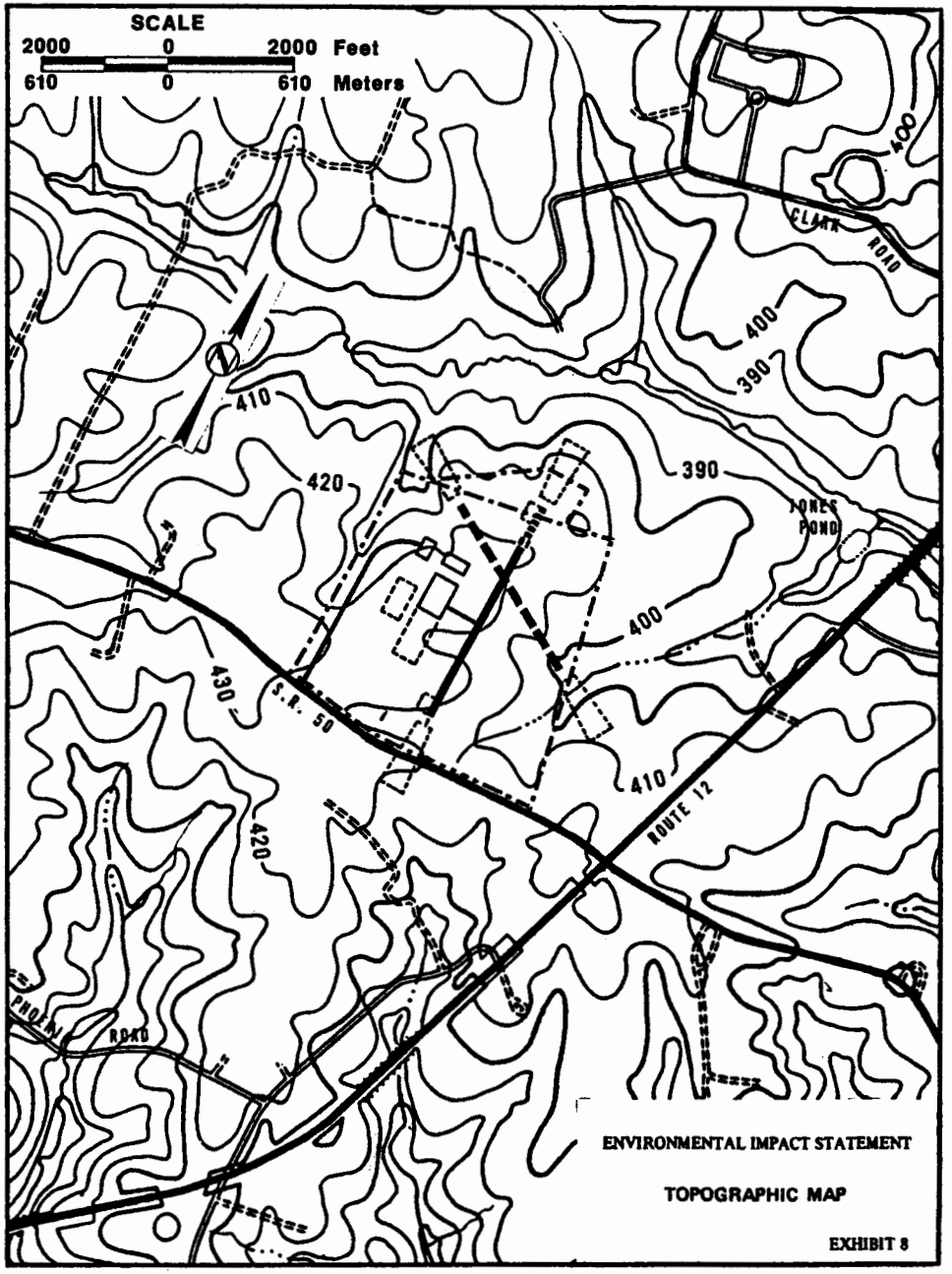
The entire runway extension will drain in a northerly direction. Clearing and grubbing will cause a minimal change in the rate of runoff from that which exists under the present agricultural use. Design and construction of the various expansion components will include provisions for drainage structures to convey runoff.

All drainage facilities will be designed on the basis of the increased quantities of flow for a five-year storm. Surface runoff from the runway extension will leave the paved surface in sheet flow and enter the parallel shallow side ditches for conveyance to the north. Maximum flow in the side ditches is estimated to be about 32 cubic feet per second (cfs). Maximum depth of flow will be in the range of 1.2 to 1.6 feet, depending upon the stage of maintenance (mowing) established by the Authority.

After Coordination and Response

None

Prior to Coordination



After Coordination and Response

Table 2

Airport Area Hydrology

Ditch Location & Number	Drainage Area (Acres)	Time of Concentration (Minutes)	Rainfall Intensity- i_5 (5-Year)	Coefficient of Runoff (c)	Q_5 5-Year Runoff (cfs)	Depth of Flow in Side Ditch (Feet) n*= .03	Depth of Flow in Side Ditch (Feet) n*= .06
No. 1 West of runway, flowing south	50	40	1.8	.35	32	1.2	1.6
No. 2 West of runway, flowing north	40	30	2.1	.35	29	1.0	1.5
No. 3 East of runway, flowing south	15	18	2.8	.40	17	0.7	1.1
No. 4 East of runway, flowing north	21	20	2.6	.40	22	0.9	1.3

* n = coefficient of roughness.

11

After Coordination and Response

None

Prior to Coordination

SECTION 4(f) PUBLIC LANDS

The nearest public park and recreation area (Hyde Park) to the project, is located in the City of Milford approximately 2 miles west of Liberty Airport. Hyde Park is a 10-acre facility located on the western perimeter of Milford. Available activities include picnic areas, bar-b-que pits, playground equipment and one ball field. There are no other park or recreation areas within a five-mile radius of the project. There are also no wildlife or waterfowl reservations within a 10-mile radius of the project.

Further, consultation with the Franklin County Department of Recreation and Parks indicates that there are presently no plans for a recreational facility or park in the area encompassed by the airport development plan. Correspondence containing the above information is included in the Appendix on page A-9.

Based on the above information, there are no anticipated adverse impacts on any park, recreational or wildlife reservation area as a result of project development.

HISTORICAL AND ARCHEOLOGICAL SITES

Contact has been made with the State Historical Trust and the Franklin County Historical Society concerning the project's impact on national, state, and local sites of historical significance. No such sites were identified within the airport study area. Correspondence to this effect is included in the Appendix, page A-11.

In addition, the State Archeologist was contacted regarding sites of archeological significance. No known sites in the study area have been recorded, nor are any expected to exist. However, if archeological resources are uncovered during construction, work will be stopped and the State Archeologist will be notified and given the opportunity to investigate. Verification of contact with the State Archeologist is in the Appendix, page A-13.

Prior to Coordination

Further, consultation with the Franklin County Department of Recreation and Parks indicates that there are presently no plans for a recreational facility or park in the area encompassed by the airport development plan. Correspondence containing the above information is included in the Appendix on page A-9.

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HISTORICAL AND ARCHAEOLOGICAL SITES

Contact has been made with the State Historical Trust and the Franklin County Historical Society concerning the project's impact on national, state, and local sites of historical significance. No such sites were identified within the airport study area. Further consultation with the State Historic Preservation Officer indicated that no sites on or eligible for the National Register of Historic Places would be affected by the proposed action. Correspondence to this effect is included in the Appendix, pages A-11 and A-17.

In addition, the State Archaeologist was contacted regarding sites of archaeological significance. No known sites in the study area had been recorded, nor were any expected to exist. A preliminary survey of the site by the State Archaeologist's staff found no evidence of any archaeological resources that would be affected by the project.

If archaeological resources are uncovered during construction, work will be stopped and the State Archaeologist will be notified and given the opportunity to investigate. Verification of contact with the State Archaeologist is in the Appendix, pages A-13 and A-18.

After Coordination and Response

Solid Waste

Airport solid wastes are being disposed of presently at the county sanitary landfill, located approximately ten miles to the west of the airport off State Road 50.

Solid wastes resulting from construction and expanded airport operations will be trucked to the county landfill. This landfill has sufficient capacity to accommodate all county solid wastes as well as all airport solid wastes for the next 10 years. Construction wastes will be transported by private contractors as required. The only exception will be mulch materials, which will be reused over planted areas and for composting landscape work.

Correspondence concerning the adequacy of the county sanitary landfill to handle solid waste generated from the proposed project is found in the Appendix on page A-14.

Water Supply

One well, providing water to the existing hangar/office building, presently serves the airport. The capacity of this well is approximately 700 to 750 gpd according to the County health department and is drilled to a depth of 250 feet. With completion of the project, the present system will require improvements in storage and to the distribution system. An additional well will be needed to serve the new hangar building. The entire airport area is underlain by the same aquifer that provides water for the surrounding communities. The underground water supply is readily available and is in sufficient quantity to accommodate the proposed expansion project.

Sewage Treatment Facilities

Present sewage facilities consist of a septic tank serving the present hangar building, with a capacity of approximately 1,000 gallons. This system would be able to accommodate the aircraft passenger volumes expected from the proposed project. It is not anticipated that all passengers and pilots will use the facilities; rather, use would be by airport employees. Therefore, the present septic system is adequate to meet the demands of the expanded airport. Periodic (yearly) cleaning and maintenance will be required to keep the system operating properly and in compliance with applicable state and local health regulations. There has not been, nor is there expected to be any contamination of the

Prior to Coordination

Solid Waste

Airport solid wastes are being disposed of presently at the county sanitary landfill, located approximately 10 miles to the west of the airport off State Route 50. Solid waste produced at the airport averages 100 pounds per week.

Solid wastes resulting from construction and expanded airport operations will be trucked to the county landfill. This landfill has sufficient capacity to accommodate all county solid wastes as well as all airport solid wastes for the next 10 years. Construction wastes will be transported by private contractors as required. The only exception will be mulch materials, which will be reused over planted areas and for composting landscape work. It is estimated that airport solid waste generation would approximate 150 pounds per week by 1980.

Correspondence concerning the adequacy of the county sanitary landfill to handle solid waste generated from the proposed project is found in the Appendix on page A-14.

Water Supply

One well, providing water to the existing hangar/office building, presently serves the airport. The capacity of this well is approximately 700 to 750 gpd according to the County Health Department and is being used to its capacity. The well is drilled to a depth of 250 feet.

The well penetrates a fairly deep confined aquifer which is reported to be capable of providing a much higher yield than presently drawn. Well drawdown is not specifically known. Water samples from the airport system are taken quarterly for routine testing. Bacteriological results show no negative results. With completion of the project, the present system will require improvements in storage and to the distribution system to provide an additional 300 gpd. An additional well will be needed to serve the new hangar building. The entire airport area is underlain by the same aquifer that provides water for the surrounding communities. The underground water supply is readily available and is in sufficient quantity to accommodate the proposed expansion project.

After Coordination and Response

aquifer water supply due to the presence of a continuous imperious clay layer approximately 50 feet below the surface of the project area.

ENERGY

Electric power for the operation of Liberty Airport is provided by the Franklin Power Company. With airport expansion, increased electrical usage in the form of additional heat, air conditioning, lighting fixtures, and runway lights will be required. The increase in the amount of power required for the expansion has been evaluated and discussed with representatives of Franklin Power Company. Their evaluation has shown that the expansion will not necessitate or require installation of additional powerline service.

Runway extension and the ultimate provision of a crosswind runway will not significantly increase fuel consumption by either aircraft or related ground transportation by automobile.

Prior to Coordination

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Present sewage facilities consist of a septic tank serving the present hangar building, with a capacity of approximately 1,000 gallons. This system would be able to accommodate the aircraft passenger volumes expected from the proposed project. It is not anticipated that all passengers and pilots will use the facilities; rather, use would be primarily by airport employees. Therefore, the present septic system is adequate to meet the demands of the expanded airport. Periodic (yearly) cleaning and maintenance will be required to keep the system operating properly and in compliance with applicable state and local health regulations. There has not been, nor is there expected to be any contamination of the aquifer water supply due to the presence of a continuous imperious clay layer approximately 50 feet below the surface of the project area.

ENERGY

Electric power for the operation of Liberty Airport is provided by the Franklin Power Company. With airport expansion, increased electrical usage in the form of additional heat, air conditioning, lighting fixtures, and runway lights will be required. Electrical usage is expected to increase from the present level of 1,000 kilowatt hours per month to approximately 2,000 kilowatt hours per month. The increase in the amount of power required for the expansion has been evaluated and discussed with representatives of Franklin Power Company. Their evaluation has shown that the expansion will not necessitate or require installation of additional powerline service.

Runway extension and the ultimate provision of a crosswind runway will not significantly increase fuel consumption by either aircraft or related ground transportation by automobile.

After Coordination and Response

SECTION IV: ALTERNATIVES TO THE PROPOSED ACTION

NEW SITE

In early 1972, the Airport Authority conducted a feasibility study to evaluate two alternative courses of action: 1) expansion of the existing facility and 2) development of a completely new site.

Although there are other sites near Liberty Airport, which would be suitable for airport development, the alternative of a new site was deemed not prudent or feasible for the following reasons:

A. A new site would require the conversion of 400 to 500 acres of existing agricultural land to an entirely new airport facility. This would mean the construction of all new facilities versus constructing only a 700-foot runway extension and hangar and acquiring only 25 acres of additional property.

B. Increased construction time and materials would be vastly more expensive as opposed to the proposed runway extension.

C. There would be much more substantial adverse environmental impacts associated with the development of a new site versus the minimal impacts resulting from expansion of the existing facility.

ON SITE ALTERNATIVES

Development of the existing site was predicated on using the existing runway system for expansion. The existing location of runway 1/19 and its proximity to State Route 50 precluded consideration of extending the runway to the south. Therefore, the only feasible alternative was the extension to the north.

USE OF EXISTING AIRPORTS

The closest airport to Liberty Airport is Allan Field, a 45 minute drive to the east. Allan Field is limited in that it cannot accommodate projected aircraft types because of its short turf runways and therefore does not present a viable alternative site to provide increased accessibility to the region.

In addition, due to its even more distant relationship to population areas in the county, expansion of this site, rather than Liberty Airport, was deemed inefficient in solving the problem of providing efficient service to the more populous areas of the County.

Prior to Coordination

SECTION IV: ALTERNATIVES TO THE PROPOSED ACTION

NEW SITE

In early 1972, the Airport Authority conducted a feasibility study to evaluate two alternative courses of action: (1) expansion of the existing facility and (2) development of a completely new site.

Although the study identified that there are other sites near Liberty Airport which would be suitable for airport development, the alternative of a new site was deemed not prudent for the following reasons:

- A new site would require the conversion of 400 to 500 acres of existing agricultural land to an entirely new airport facility. This represents a much greater commitment of farm land to public use than the 25 acres which would be acquired for the proposed action.

- Increased construction time and materials would be more expensive as opposed to the proposed runway extension. This would mean the construction of all new facilities versus constructing only a 700-foot runway extension and hangar and acquiring only 25 acres of additional property.

  The cost associated with the construction of a new airport with similar facilities would range from $2.35 million to $2.55 million, depending on the alternate site location. This total includes the cost of land acquisition and all site preparation.

  The estimated cost of the runway extension and related facilities as described herein is approximately $0.5 million.

- There would be much more substantial adverse environmental impacts associated with the development of a new site versus the minimal impacts resulting from expansion of the existing facility. The primary impacts are those associated with the siting of the new facility: removal of vegetation, displacement of wildlife, increased potential for soil erosion during land clearing, increased runoff, development and extension of public services, and commitment of existing productive farming resources.

After Coordination and Response