ANOKA COUNTY-BLAINE AIRPORT

JANES FIELD

ASSESSMENT OF ENVIRONMENTAL EFFECTS METROPOLITAN AIRPORTS COMMISSION'S SEVEN YEAR CAPITAL IMPROVEMENT PLAN 1993 - 1999

FOR THE

METROPOLITAN AIRPORTS COMMISSION

BY

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ASSESSMENT OF ENVIRONMENTAL EFFECTS

Anoka County-Blaine Airport - Janes Field
Metropolitan Airports Commission Seven Year Capital Improvement Plan

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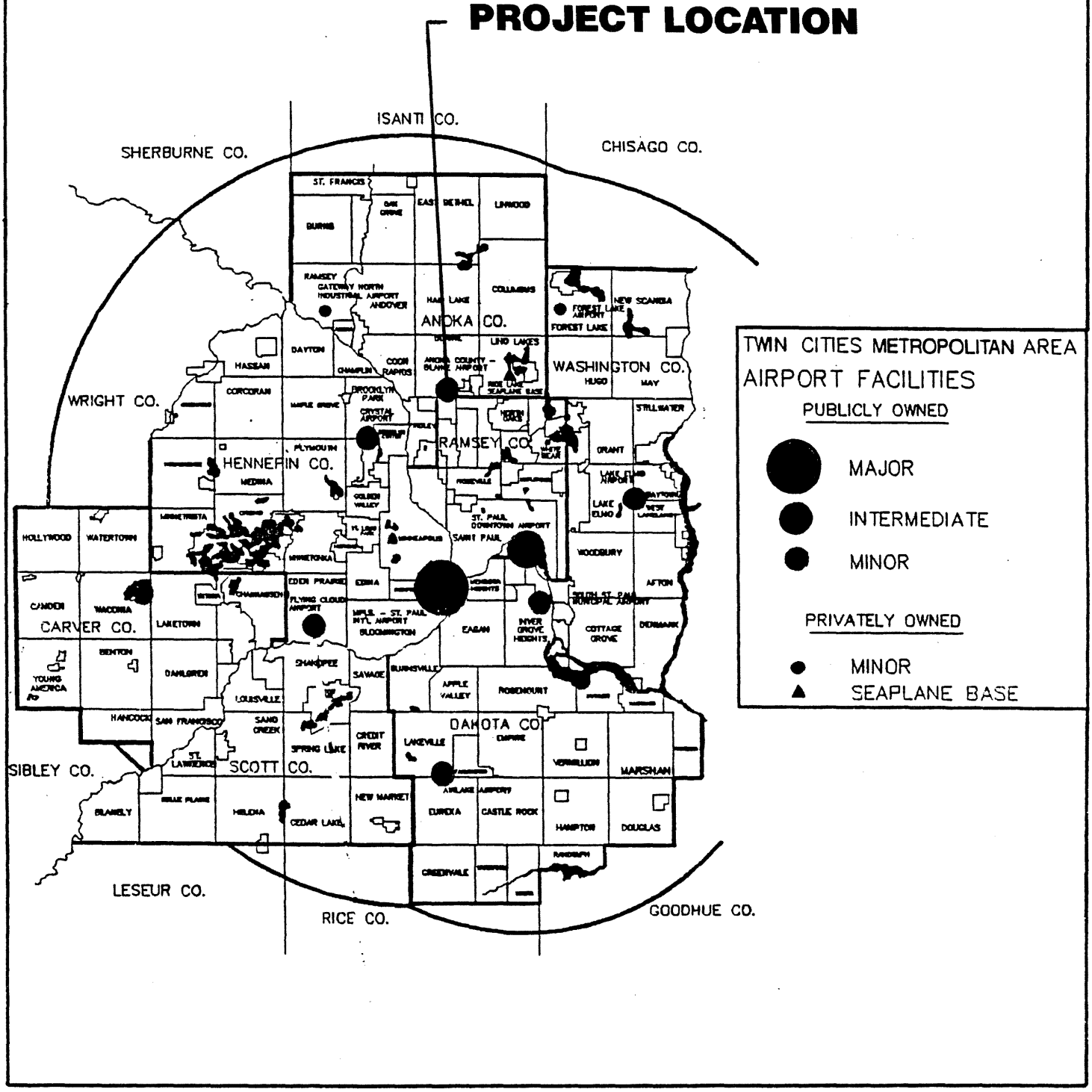

ASSESSMENT OF ENVIRONMENTAL EFFECTS

ANOKA COUNTY - BLAINE AIRPORT

FIGURE

1

ASSESSMENT OF ENVIRONMENTAL EFFECTS

Anoka County-Blaine Airport - Janes Field
Metropolitan Airports Commission Seven Year Capital Improvement Plan

A. INTRODUCTION

This report, prepared in response to the requirements of Minnesota Statutes 1986, Chapter 473, amended by Minnesota Statutes 1988, Chapter 664, presents an assessment of the environmental effects of projects in the Commission's seven-year capital improvement plan (1993-1999) for Anoka County-Blaine Airport.

This assessment examines the cumulative environmental effects of all the listed capital improvement projects at the airport from 1993 to 1999. Many of the projects listed entail only repair or rehabilitation of existing facilities. Such work would not affect the before/after usage of the facilities, and as such would not add to or subtract from the cumulative environmental effects. The projects included in the evaluation are those that have the potential of altering, creating, or in some manner affecting the environmental impact categories listed below.

B. IMPACT CATEGORIES USED TO ASSESS ENVIRONMENTAL EFFECTS

Aircraft Noise

The types of projects which might impact the effects of noise on the environment are new or lengthened runways, new or lengthened taxiways, new maintenance hangars, facilities that may increase operations, and noise insulation and other noise mitigation measures.

Vehicular Traffic

The types of projects which might impact the effects of traffic at the airport or to the surrounding community are new buildings or building additions, new parking spaces or structures, and new or modified roadways or roadway systems.

Air Quality

Air quality impacts at the airport will be primarily caused by changes in vehicular or aircraft activity. Projects which might have an impact will generally be the same projects which affect aircraft noise or vehicular traffic.

Water Quality

Projects which might affect water quality are those which create additional runoff (new pavements or buildings), fire suppression systems, new retention basins, or projects which might affect the groundwater.

Light Emissions

Projects evaluated under this category are airport beacons, lights associated with new runways or taxiways and lights associated with new roadways, parking lots, or ramps.

Sewage

Those projects which have the potential to increase sewage discharged into the sewage disposal system are new or expanded buildings or other changes that significantly alter the number of people using a facility.

Wetland Impact

All projects are evaluated to see if they would entail the full or partial filling of wetlands.

Residential Relocation Impacts

Residential relocation impacts are associated with land acquisition projects that will displace occupied residential units.

C. PROJECTS WITH POTENTIAL ENVIRONMENTAL EFFECTS

Table 1 is a listing of all the projects included in the MAC's Capital Improvement Plan for the years 1993 through 1999. Those projects determined to not contribute to the cumulative environmental effects at the airport are so noted on Table 1. The notations are keyed by number in order to better explain the type of work the project entails and why this type of project will not contribute to the cumulative environmental effects.

TABLE 1
ANOKA COUNTY – BLAINE AIRPORT
METROPOLITAN AIRPORTS COMMISSION

See Note	Project Description	1993	1994	1995	1996	1997	1998	1999
*	Air Traffic Control Tower	$1,800,000						
* *	Building Area Development – NW							$2,160,000
^ * *	Building Area Development – West		$1,825,000					
(2)	Deer Fence	$80,000						
(1)	Ditch Cleaning	$50,000	$125,000		$50,000		$50,000	
(1)	Pavement Rehabilitation		$150,000		$150,000		$200,000	
*	Radisson Road Site Clean–up	$500,000						
	Yearly Totals	**$2,430,000**	**$2,100,000**	**$0**	**$200,000**	**$0**	**$250,000**	**$2,160,000**

NOTES:

^ Items discussed in previous Assessment of Environmental Effects.

* The items marked with an arterisk have potential effects that are discussed in the text.

* * Projects which are covered in the text and also in other environmental documents (EA/EIS/EAW).

(1) A rehabilitation or maintenance project which does not physically alter the original size.

(2) A structural or mechanical modification that does not increase size or passenger handling capacity.

D. CUMULATIVE ENVIRONMENTAL EFFECTS

The following is a summary of the cumulative environmental effects by impact category.

D.1 Aircraft Noise Impacts

The projects expected to impact aircraft noise at the airport are the west and northwest building area development. Increasing the size of the building area will increase the number of based aircraft at the airport. This will result in an increase in number of operations at the airport. As part of the State EIS/Federal EA prepared in April, 1986, a brief noise analysis was completed. The noise analysis included the two building area projects plus other improvements which are not in the capital improvement plan. The number of operations analyzed for the noise analysis was therefore higher than the increase which will occur from the building area. The results of that analysis showed the increase in noise over the next 20 years to be minor and acceptable according to FAA standards. Therefore, the cumulative effects of the building area projects themselves are not expected to create significant noise impacts. However, as indicated in Section VII.A. of Appendix A, the noise model was run for a somewhat different runway layout than is now planned. It may therefore be desirable to reanalyze noise impacts in the future when the scope of the northwest building area project is better defined.

D.2 Traffic Impacts

The cumulative effects of the projects are not expected to create significant impacts to vehicular traffic.

D.3 Air Quality Impacts

The cumulative effects of the projects are not expected to create significant impacts to air quality.

D.4 Water Quality Impacts

The cumulative effects of the projects are expected to increase runoff by 40 cfs for a five year storm event. This will be discharged into the existing airport drainage system. It will likely be necessary to add detention basin(s) and possibly skimmers in order to attenuate the runoff increases and adequately treat the water quality of the effluent.

D.5 Light Emissions Impact

The cumulative effects of the projects are not expected to create significant light emissions impacts.

D.6 Sewage Impacts

As each individual hangar is constructed, permits for wastewater will be obtained from the MAC and the local governmental units. Inflammable waste traps are required to be installed in each individual hangar wastewater system which will contain oil and cleaning fluids associated with aircraft and vehicle maintenance.

D.7 Wetland Impacts

The northwest building area development may effect wetlands. Any wetlands affected must be properly mitigated.

D.8 Residential Relocation Impacts

The cumulative effects of the projects are not expected to create residential relocation impacts.

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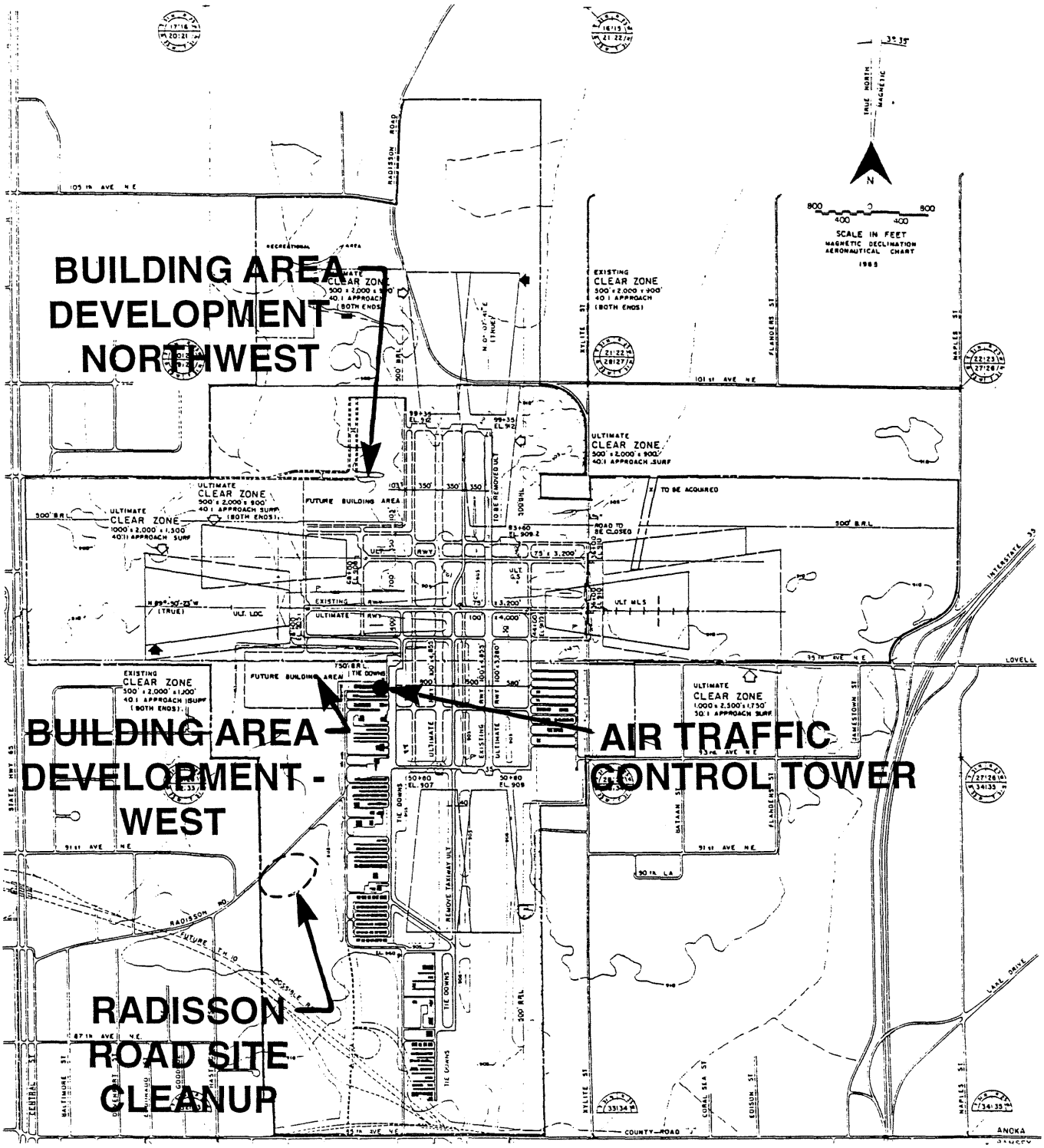


ASSESSMENT OF ENVIRONMENTAL EFFECTS
ANOKA COUNTY - BLAINE AIRPORT
CIP IMPACT PROJECTS

FIGURE 2

APPENDIX A

ENVIRONMENTAL ANALYSIS OF INDIVIDUAL PROJECTS

I. PROJECTS BEGINNING IN 1993

The following projects are included in the MAC's Capital Improvement Projects for 1993 and have the potential to affect the environment:

I.A Air Traffic Control Tower
I.B Radisson Road Site Clean-up

I.A AIR TRAFFIC CONTROL TOWER

The feasibility of and need to construct an air traffic control tower is currently being evaluated. The staffing of a new facility is also being discussed with the FAA. The State of Minnesota has committed $1,000,000 toward the construction of a tower. If a decision on the need and staffing of a new tower can be made, construction of a new tower could begin in 1993.

As part of the State EIS/Federal EA prepared in April 1986, an Informational Appendix was prepared which briefly evaluated impacts from Phase 2 and Phase 3 of the Airport's Master Plan recommendations. Included in this are the impacts of an Air Traffic Control Tower (ATCT). At the time the EIS/EA was prepared, an ATCT was being manned on weekends by the Minnesota Air National Guard, but has not been operational for several years. It is unknown, at this time, if the old tower site will be used to construct the new tower.

Traditionally, an ATCT for this type of airport occupies a small area with a small number of employees; therefore stormwater runoff, sewer, and vehicular traffic impacts should be minimal.

- **Aircraft Noise**

  Having an ATCT on site would better regulate traffic flows and enhance safety around the airport. The tower will not increase demand; therefore, aircraft operations and noise from aircraft operations should not increase as a result.

I.B RADISSON ROAD SITE CLEAN-UP

An existing debris disposal site on the west side of the airport near Radisson Road is being evaluated during 1992 for possible contaminated materials which must be removed and properly disposed. The extent of clean-up will not be known until

the study is complete in late 1992. Depending on the results of this study, site clean-up could start in 1993.

The one impact category that may be affected is water quality.

- **Water Quality**

  This project could result in an improvement to water quality, if contaminated materials are found at the site and subsequently removed. Until testing for contamination is complete, the water quality impacts cannot be conclusively assessed.

II. PROJECTS BEGINNING IN 1994

The following project is included in the MAC's Capital Improvement Program for 1994 and has the potential to affect the environment:

II.A West Building Area Development

II.A. WEST BUILDING AREA DEVELOPMENT

It is expected the east building area will be leased by 1992 and the development of additional hangar construction area south of Runway 8/26 and west of Runway 17/35 will be required. This development was recommended in the Master Plan Update completed in 1983. Alternative development schemes were evaluated in 1991 and a phased construction of the building area is planned to begin in 1994.

The environmental impacts of this project were addressed in a State EIS/Federal EA prepared for the airport in April, 1986.

- **Aircraft Noise**

  Increasing the size of the building area will increase the number of based aircraft at the airport. This will result in an increase in the number of operations at the airport.

  The results of the noise analysis conducted for the EA State EIS/Federal EA showed the increase in noise over the next 20 years to be minor and acceptable according to FAA Standards.

- **Water Quality**

  According to the Final Draft Report Volume of the State EIS/Federal EA prepared for the airport *(Hoyle Tanner & Associates, pp.5-40)*, an analysis indicated that stormwater discharge into County Ditch #41 for a five year storm will increase by 13.3 cfs from 127.2 cfs to 140.5 cfs. Discharge for a 100 year storm will increase by 24.9 cfs from 236.1 cfs to 261.0 cfs. It will likely be necessary to add a detention basin in order to attenuate the increased flow rates. It may also be necessary to add facilities such as skimmers to meet the new requirements of the EPA for NPDES permits.

III. PROJECTS BEGINNING IN 1995

There are no projects beginning in 1995 that have the potential to effect the environment.

IV. PROJECTS BEGINNING IN 1996

There are no projects beginning in 1996 that have the potential to effect the environment.

V. PROJECTS BEGINNING IN 1997

There are no projects beginning in 1997 that have the potential to effect the environment.

VI. PROJECTS BEGINNING IN 1998

There are no projects beginning in 1998 that have the potential to effect the environment.

VII. PROJECTS BEGINNING IN 1999

The following project is included in the MAC's Capital Improvement Program for 1999 and has the potential to effect the environment:

VII.A Northwest Building Area Development

VII.A. NORTHWEST BUILDING AREA DEVELOPMENT

Development of additional hangar space is expected to be needed by 1999. An approximate 45 acre building area would be constructed to the northwest of the existing runways. This development was recommended in the Master Plan

completed in 1983.

This building area development was included in an analysis entitled an Informational Appendix to the State EIS/Federal EA prepared for the airport in April 1986. The appendix analyzed the development of Phase 2 and 3 of the Airport Master Plan. Regulatory approval was not sought for this building area development at the time the EIS/EA was approved. The purpose of the informational appendix was to provide a description of environmental impacts which may occur from Phase 2 and Phase 3 development. The impacts discussed herein are largely based upon the findings of the Informational Appendix.

- **Aircraft Noise**

  Noise contours were generated for full Phase 2 and Phase 3 development which includes the northwest building area development as well as other airport development, including runways which are not currently in the CIP nor likely to be added in the near future.

  The result of the noise analysis showed the 65 Ldn contour completely on airport property. Anything beyond the 65 Ldn contour is considered a compatible land use. It is therefore likely that noise impacts from the building expansion will be minimal. However, it is impossible to say this with absolute certainty without running noise contours for the existing runway layout with the northwest building area added. It may be beneficial to run noise contours in the future when the scope of the project is better defined.

- **Vehicular Traffic**

  The Informational Appendix shows traffic levels in the area of the airport will not be significant to create capacity problems with the road network.

- **Water Quality**

  The Informational Appendix found that the effects of development of Phase 2 and 3 on stormwater quality will be minimal. The northwest building area will implement extensive precautions against stormwater contamination. According to the Final Draft Appendix Volume, State EIS/Federal EA for the airport *(Hoyle Tanner & Associates, pp.1-5)*, an analysis of storm water discharge into County Ditch #41 for a five year storm will increase discharge by 26.7 cfs form 127.2 cfs to 153.9 cfs.

Discharge for a 100 year storm will increase by 49.7 cfs from 236.1 cfs to 285.8 cfs. It will likely be necessary to add a detention basin in order to attenuate the increased flow rates. It may also be necessary to add facilities such as skimmers to meet the new requirements of the EPA for NPDES permits.

- **Sewage Impacts**

  As each individual hangar is constructed, permits for wastewater will be obtained from the MAC and the local governmental units. Inflammable waste traps are required to be installed in each individual hangar wastewater system which will contain oil and cleaning fluids associated with aircraft and vehicle maintenance.

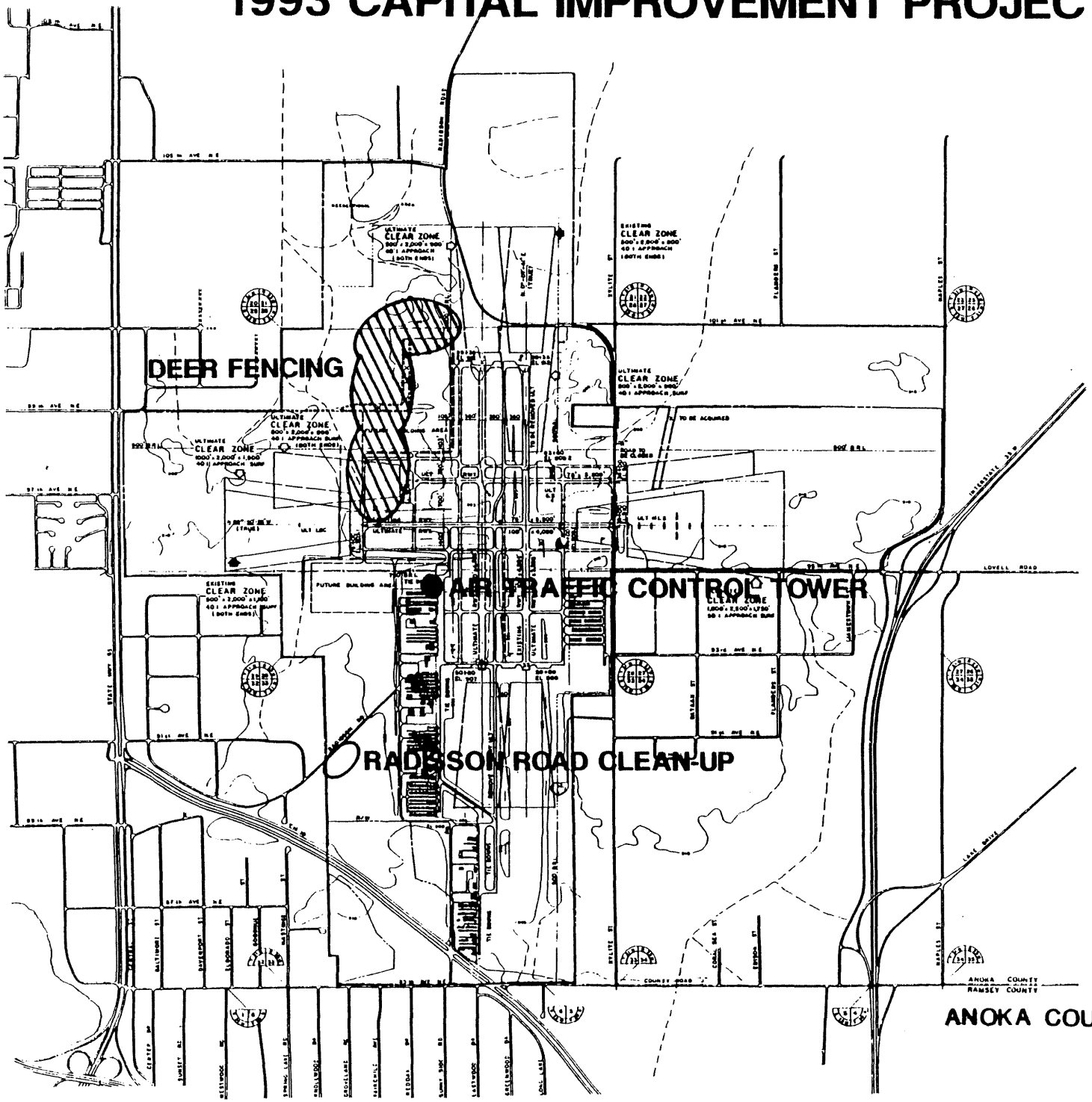
- **Wetland Impacts**

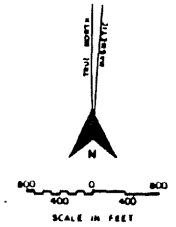
  The northwest building area, as shown in the EIS/EA would impact approximately 16.7 acres of wetlands. The MAC indicated that alternative development schemes were being evaluated which may show less wetland impacts. If wetlands are impacted, they must be properly mitigated in an off site location. Further study of this should be done when the project is better defined as the year 1999 approaches.

APPENDIX B

1993 CAPITAL IMPROVEMENT PROJECTS
1994 CAPITAL IMPROVEMENT PROGRAM

1993 CAPITAL IMPROVEMENT PROJECTS





ANOKA COUNTY-BLAINE AIRPORT

FEBRUARY 1990

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AIR TRAFFIC CONTROL TOWER - $1,800,000

The feasibility of and need to construct and staff an air traffic control tower is currently being evaluated. The staffing of a new facility is also being discussed with the FAA. The State of Minnesota has committed $1,000,000 towards the construction of a tower. If a decision on the need and staffing of a new tower can be made. construction of a new tower could begin in 1993.

DEER FENCE - $80,000

A perimeter security fence has been installed in phases encompassing the airport. The last segment of perimeter fence was installed in 1992. There is, however, a small herd of deer which live on the airport and pose a threat to landing and departing aircraft. The outside security fence is not high enough to keep deer off of airport property and, in addition, there are roadway openings in the security fence through which deer can enter the airport. In order to keep deer away from the runways, its is proposed to construct a fence within the perimeter of the outside security fence to redirect the herd's movement away from the runways.

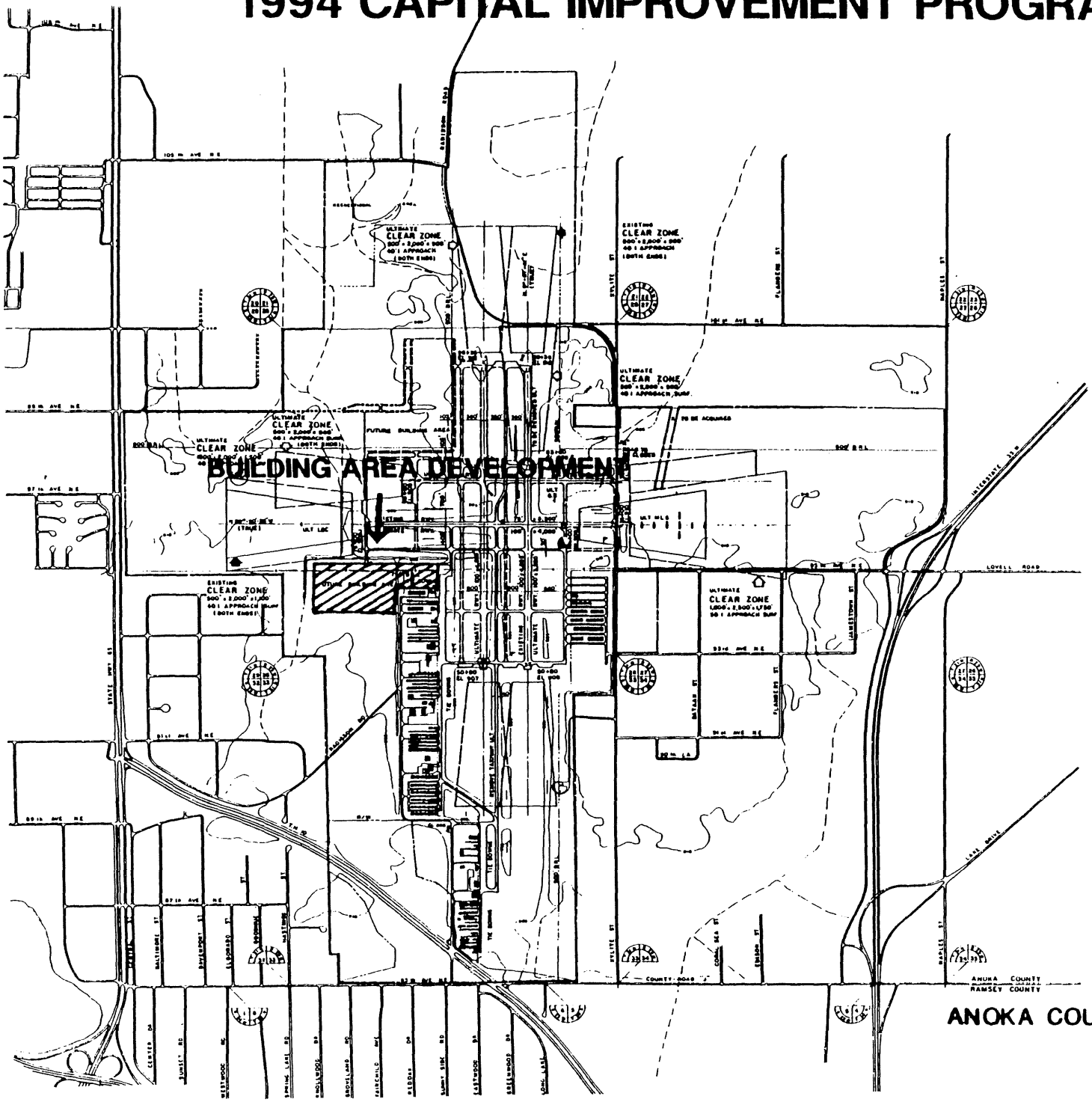
DITCH CLEANING - $50,000

Drainage at the airport has been a continual problem for some time. Recent construction projects have included the cleaning of segments of drainage ditch which has proven to be a definite improvement to the problem. This project is programmed in anticipation of additional work being required in 1993. Previously approved by the Commission.

RADISSON ROAD SITE CLEAN-UP - $500,000

An existing debris disposal site on the west side of the airport near Radisson Road is being evaluated during 1992 for possible contaminated materials which must be removed and properly disposed of. The extent of clean-up will not be known until the study is complete in late 1992. Depending on the results of this study, site clean-up could start in 1993.

1994 CAPITAL IMPROVEMENT PROGRAM



ANOKA COUNTY-BLAINE AIRPORT

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ANOKA COUNTY-BLAINE AIRPORT

BUILDING AREA DEVELOPMENT - $1,825,000

It is expected the east building area will be leased by 1992 and development of additional hangar construction area south of Runway 8/26 and west of Runway 17/35 will be required. This development was recommended in the Master Plan Update completed in 1983. Alternative development schemes were evaluated in 1991 and a phased construction of the building area is planned to begin in 1994.

DITCH CLEANING - $125,000

Drainage at the airport has been a continual problem for some time. Recent construction projects have included the cleaning of segments of drainage ditch which has proven to be a definite improvement to the problem. This project is programmed in anticipation of additional work being required in 1994. Previously approved by the Commission.

PAVEMENT REHABILITATION - $150,000

Periodically, it is necessary to rehabilitate aircraft operation areas (runways, taxiways, aprons) through bituminous overlays, sealcoats, or in some instances, reconstruction, to restore the surfaces to a smooth, even condition and improve overall operating conditions. A condition survey will be conducted in 1993 and a specific recommendation will be available when the CIP is updated for the 1994 construction season.