FLYING CLOUD AIRPORT

ASSESSMENT OF ENVIRONMENTAL EFFECTS OF THE METROPOLITAN AIRPORTS COMMISSION'S SEVEN YEAR CAPITAL IMPROVEMENT PLAN

FOR THE
METROPOLITAN AIRPORTS COMMISSION

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SEPTEMBER 1990

ASSESSMENT OF ENVIRONMENTAL EFFECTS

Flying Cloud Airport
Metropolitan Airports Commission Seven Year Capital Improvement Plan

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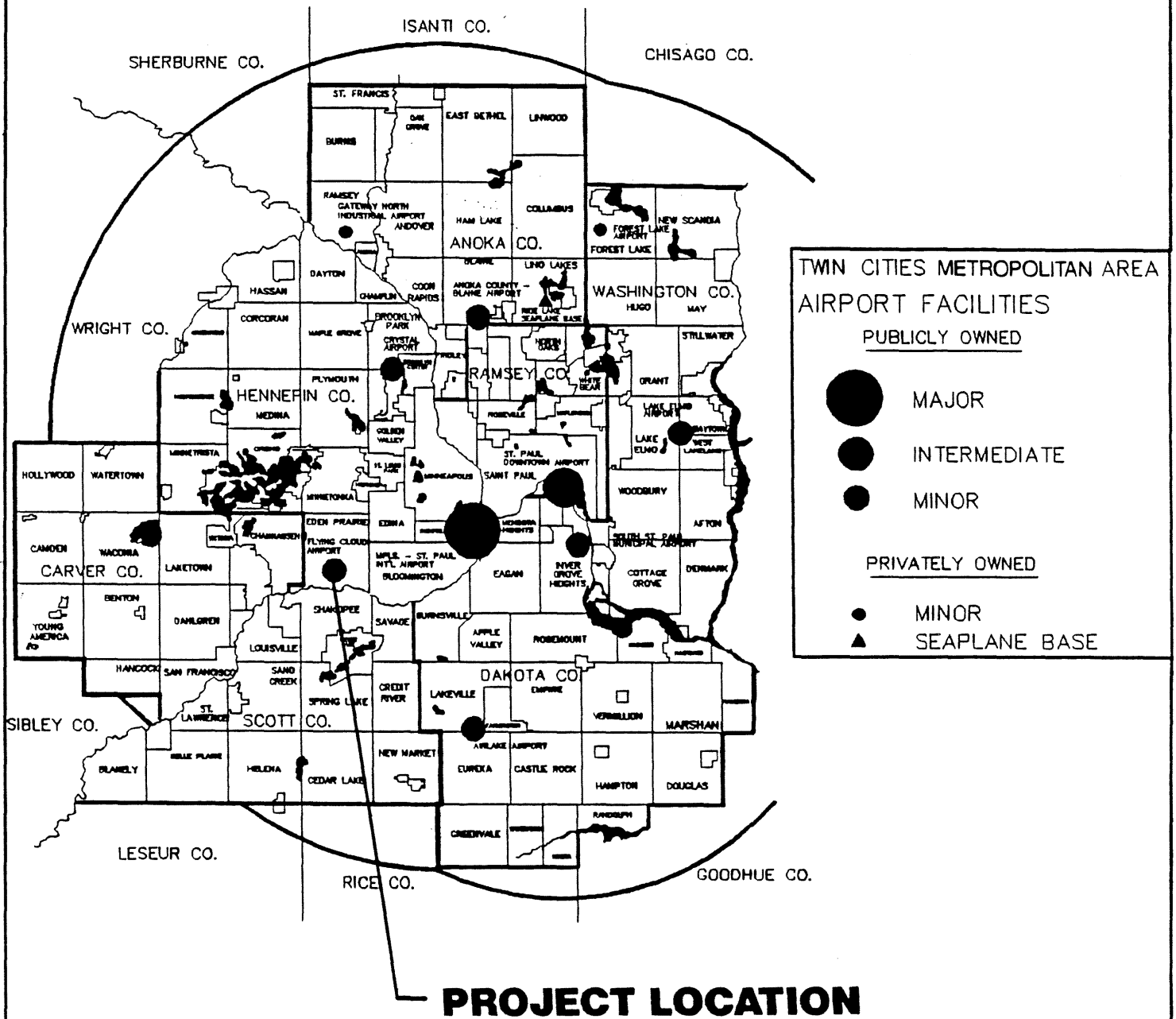


ASSESSMENT OF ENVIRONMENTAL EFFECTS

FLYING CLOUD AIRPORT

FIGURE

1

ASSESSMENT OF ENVIRONMENTAL EFFECTS

Flying Cloud Airport
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 (1991-1997) for Flying Cloud Airport.

This assessment examines the cumulative environmental effects of all the listed capital improvement projects at the airport from 1991 to 1997. 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 1991 through 1997. 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
FLYING CLOUD AIRPORT
METROPOLITAN AIRPORTS COMMISSION

See Note	Project Description	1991	1992	1993	1994	1995	1996	1997
^*	Airport Landscaping	$50,000						
^*	Disposal Area Cleanup	$50,000						
^*	Land Acquisition	$100,000						
(2)	Security Fencing	$110,000						
^*	Equip Bldg Fuel Tank Replacement		$50,000					
(1)	Pavement Rehabilitation		$250,000		$250,000		$250,000	
*	Utility Connections		$1,500,000					
	Yearly Totals	$310,000	$1,800,000	$0	$250,000	$0	$250,000	$0

NOTES:

^ Item discussed in Previous Assessment of Environmental Effects.

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

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

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

D. CUMULATIVE ENVIRONMENTAL EFFECTS

Following is a summary of the cumulative environmental effects by impact category. Appendix A contains an analysis of environmental effects on a project-by-project basis.

D.1 Noise Impacts

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

D.2 Traffic Impacts

The cumulative effects of the project 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

Positive water quality effects will result from the disposal area clean-up projects on land that the MAC currently owns and the land it intends to acquire for approach protection for Runway 18, and also from Eden Prairie's municipal water supply system connections. The total amount of impervious surface will also be reduced on the property being acquired and partially cleared. The results of the Equipment Building Fuel Tank Replacement tests will determine the extent of water quality impacts, both positive and negative, and the mitigation that may be required (i.e. tank replacement, spill/overflow protection).

D.5 Light Emissions Impact

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

D.6 Sewage Impacts

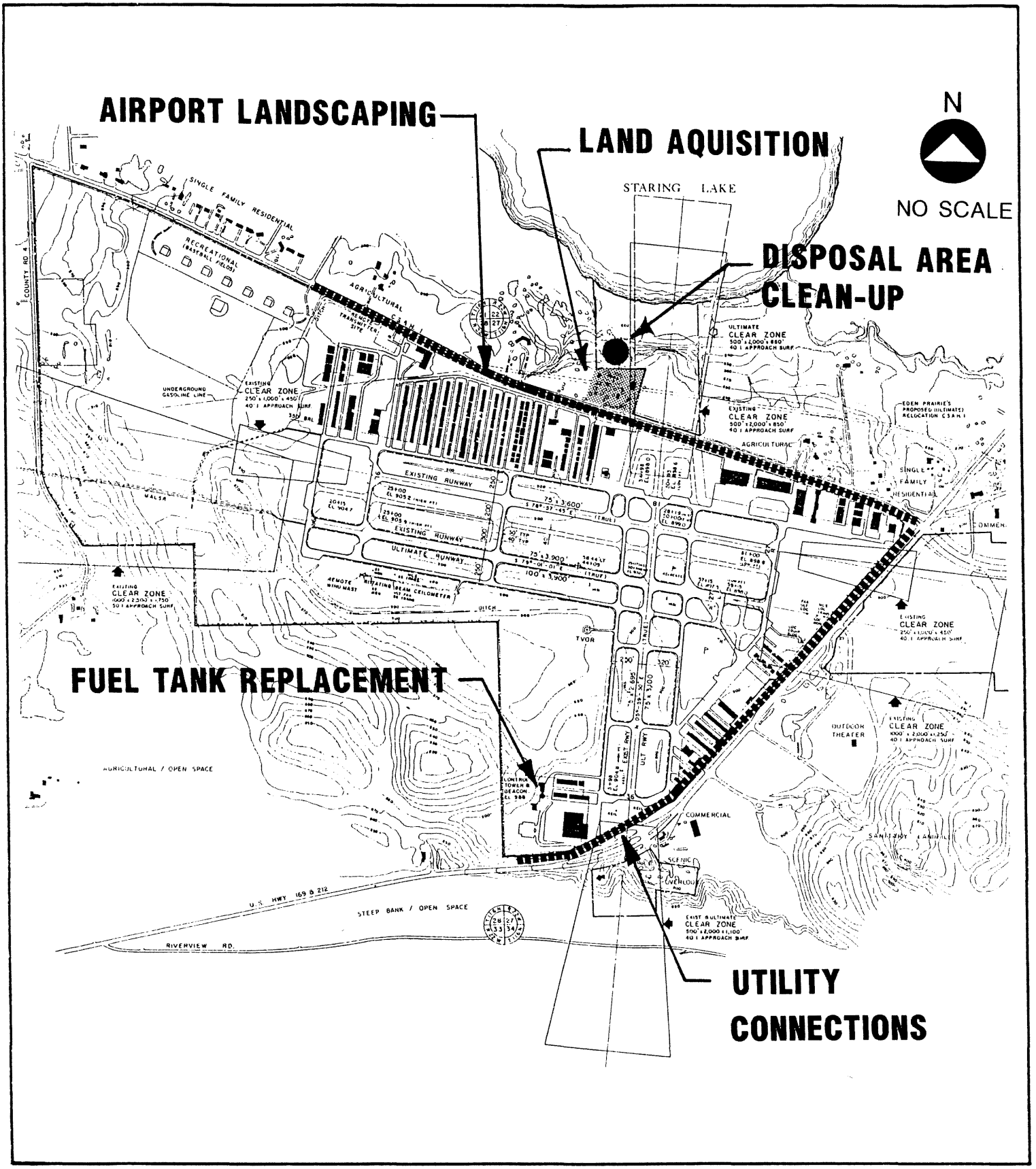
Positive social impacts will occur with the removal of individual septic systems on land being acquired and for several airport buildings, (notably FBO's and the control tower), which will have access to Eden Prairie's municipal sewer system. This will improve on-site groundwater quality and reduce contamination hazards by transferring wastewater collection to the continuously monitored MWCC system.

D.7 Wetland Impacts

No known wetlands are in the project area.

D.8 Residential Relocation Impacts

One residential property will be taken with the land acquisition for approach protection. The residents of this property will be relocated in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646), which provides that assistance be granted to persons, businesses, farms, and non-profit organizations that may be displaced by public improvements.



ASSESSMENT OF ENVIRONMENTAL EFFECTS
FLYING CLOUD AIRPORT
CIP IMPACT PROJECTS

FIGURE
2

APPENDIX A

ENVIRONMENTAL ANALYSIS OF INDIVIDUAL PROJECTS

I. PROJECTS BEGINNING IN 1991

The following projects are included in the MAC's Capital Improvement Projects for 1991 and have the potential to effect the environment:

- Airport Landscaping
- Disposal Area Clean-up
- Land Acquisition

I.A. AIRPORT LANDSCAPING

To improve the airport's aesthetics and compatibility with adjacent development, landscaping improvements will be made between CSAH 1 and Building Area No. 4 on the airport's north side. An easement exists for the Williams Pipeline in this area, so improvements will not be installed directly over the line. A vegetative site barrier of tall shrubs or low trees not to exceed building height at maturity will be selected. Environmental effects will be positive as these visual improvements are implemented; however, snow removal along CSAH 1 may require additional vegetative setback to avoid winterkill from salt spray, etc.

I.B. DISPOSAL AREA CLEAN-UP

An accumulation of debris and other materials has been located in an area presumed to be on Commission property; a property survey will be required to determine the boundary between Commission property and the adjacent land owner. The debris must be cleaned up consistent with current criteria. If the materials are on Commission property, this project will provide for appropriate testing, removal and disposal of the materials. Recovery of the costs associated with the project will be pursued with the adjacent land owner.

I.C. LAND ACQUISITION

The project involves the acquisition of approximately 3.8 acres of private property in the approach to Runway 18 to improve approach protection (consistent with FAA guidelines). One hobby farm (including residence and outbuildings) will be removed, and an outdoor storage/dumping area will be eliminated on the same property. Positive environmental effects include the clean-up of a domestic waste storage area, less chance of detriment to water quality, and less impervious surface.

- Residential Relocation Impacts

  One residential unit will be taken for the land acquisition. The residents of the owner-occupied unit will be relocated according to the provisions of The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646), which provides that assistance be granted to persons, businesses, farms, and non-profit organizations which may be displaced by public improvements. The relocated residents of the unit could also benefit from a new location away from the airport (i.e. airport noise, safety hazards, and light emissions).

II. PROJECTS BEGINNING IN 1992

The following projects are included in the MAC's Capital Improvement Program for 1992 and have the potential to affect the environment:

- Equipment Building Fuel Tank Replacement
- Utility Connections

II.A. EQUIPMENT BUILDING FUEL TANK REPLACEMENT

Recent Environmental Protection Agency regulations regarding underground storage tanks (UST) include comprehensive corrosion/spill/overflow prevention and leak detection requirements. The age (1963 installation) and condition of the four Equipment Building tanks (2,000 gallons diesel; 1,000 gallons diesel; 1,000 gallons unleaded gasoline; and 1,500 gallons waste oil) dictate that complete replacement could be necessary. Positive effects will include the elimination of potential ground water contamination. The results of tests conducted to determine potential leakage will determine whether tanks must be replaced at this time.

II.B. UTILITY CONNECTIONS

Flying Cloud Airport is currently served by individual septic systems and private wells, and borders the Metropolitan Urban Service Area (MUSA) on its north and east sides. Eleven thousand linear feet of sewer and water service will be extended to the control tower and FBO buildings with new 8" mains, beginning at Mitchell Road and continuing on MAC property adjacent to CR1 and TH 169, and ending at the control tower. Positive social environmental effects will be obtained by the provision of municipally-controlled and monitored utility services, capping of several existing wells with questionable water quality, and elimination/clean up of several individual septic systems. Cumulatively, these improvements will provide improved potable water supplies and waste distribution methods at Flying Cloud Airport, as well as an enhancement to existing Air Rescue and Fire Fighting protection facilities.

APPENDIX B

1991 CAPITAL IMPROVEMENT PROJECTS
1992 CAPITAL IMPROVEMENT PROGRAM

1991 CAPITAL IMPROVEMENT PROJECTS
RELIEVER AIRPORTS

FLYING CLOUD AIRPORT

AIRPORT LANDSCAPING - $50,000

The Flying Cloud Advisory Commission and the City of Eden Prairie have suggested landscaping be accomplished along the airport's northern boundary to improve the airport's aesthetics and compatibility with adjacent development. Previously approved by the Commission.

DISPOSAL AREA CLEAN-UP - $50,000

An accumulation of debris and other materials has been located in an area presumed to be on Commission property; a property survey will be required to determine the boundary between Commission property and the adjacent land owner. The debris must be cleaned up consistent with current criteria. If the materials are on Commission property, this project will provide for appropriate testing, removal and disposal of the materials. Recovery of the costs associated with the project will be pursued with the adjacent land owner.

LAND ACQUISITION - $100,000

The FAA strongly encourages airport owners to acquire/control property in the runway approach areas. In the approach to Runway 18, Commission property nearly surrounds private property in the runway clear zone. Acquisition of the approximate 3.8 acre parcel would provide additional approach protection for the airport. Previously approved by the Commission.

SECURITY FENCING - $110,000

The north, east and a portion of the south boundaries of the airport were previously fenced to limit unauthorized access to the airport's operational areas. It is proposed the western boundary now be fenced to provide a total perimeter fence system. Previously approved by the Commission.

1992 CAPITAL IMPROVEMENT PROGRAM
RELIEVER AIRPORTS

FLYING CLOUD AIRPORT

EQUIPMENT BUILDING FUEL TANK REPLACEMENT - $50,000

Recent Environmental Protection Agency regulations regarding underground storage tanks (UST) include comprehensive corrosion/spill/overflow prevention and leak detection requirements. Existing MAC underground tanks at the airport will be reviewed in 1991 to determine what will be required to comply with EPA regulations.

PAVEMENT REHABILITATION - $250,000

Periodically, it is necessary to rehabilitate aircraft operational 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 operational conditions. A pavement condition survey will be conducted in 1991 to determine the extent of work required.

UTILITY CONNECTIONS - $1,500,000

The airport currently borders the Metropolitan Urban Service Area (MUSA) on its north and east sides and, therefore, private wells and individual septic systems are scattered throughout the airport. The City of Eden Prairie has expressed a desire to extend city water and sewer mains to serve the airport property. It is proposed the extension of these utilities to the airport be evaluated and a more specific recommendation be submitted when the CIP is updated for the 1992 construction season.