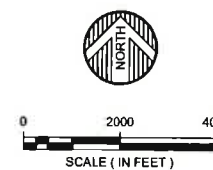


AIRPORT ZONING PLAN BACKUS MUNICIPAL AIRPORT CASS COUNTY, MINNESOTA



INDEX TO SHEETS	
SHEET NO.	DESCRIPTION
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2	AIRSPACE ZONING MAP
3	AIRSPACE SECTIONS
4	LAND USE MAP
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6	RUNWAY 33 SAFETY ZONES MAP

JOINT AIRPORT ZONING BOARD	
APPROVAL:	KEN KOSTIAL, ZONING BOARD CHAIRMAN
DATE:	



BASEMAP: USGS 7.5 MINUTE SERIES TOPOGRAPHIC
CASS COUNTY, MINNESOTA

CURRENT: BACKUS QUADRANGLE - 1970
MILDRED QUADRANGLE - 1970

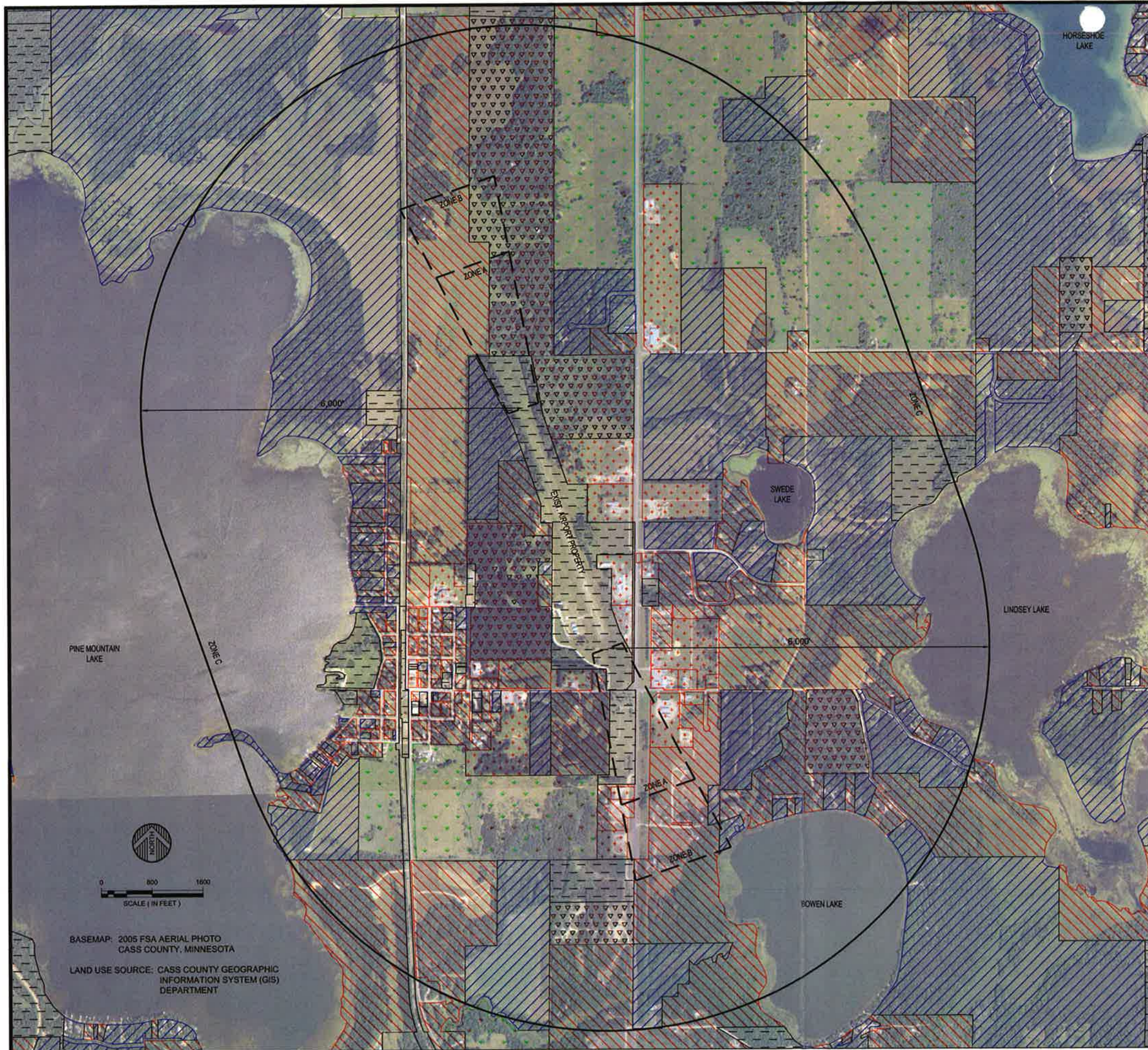
ENGINEERS
ARCHITECTS
LAND SURVEYORS
ENVIRONMENTAL SERVICES

WIDSETH SMITH NOLTING

DATE: FEBRUARY 2010
SCALE: AS SHOWN
DRAWN BY: W.W.J.
CHECKED BY: T.M.H.
JOB NUMBER: 0103B0026

BACKUS MUNICIPAL AIRPORT - ZONING PLAN
CITY OF BACKUS
CASS COUNTY, MINNESOTA
TITLE SHEET

SHEET NO. 1
1 of 6



AIRPORT LANDING DIMENSIONS					
RUNWAY	SAFETY ZONE	INNER WIDTH	LENGTH	OUTER WIDTH	SLOPE
15/33	A	500'	2,392'	1,218'	40:1
	B	1,218'	1,196'	1,576'	40:1
	C	6,000' RADIUS FROM END OF PRIMARY SURFACE			

SAFETY ZONE USE RESTRICTIONS:

SOURCE: BACKUS MUNICIPAL AIRPORT ZONING ORDINANCE

GENERAL: Subject at all times to the height restrictions set forth in Section IV B, no use shall be made of any land in any of the Safety Zones defined in Section V A which creates or causes interference with the operations of radio or electronic facilities on the airport or with radio or electronic communications between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and other lights, results in glare in the eyes of pilots using the airport, impairs visibility in the vicinity of the airport, or otherwise endangers the landing, taking off, or maneuvering of aircraft.

ZONE A: Subject at all times to the height restrictions set forth in Subsection IV B and to the general restrictions contained in Subsection V B 1, areas designated as Zone A shall contain no buildings, temporary structures, exposed transmission lines, or other similar above-ground land use structural hazards, and shall be restricted to those uses which will not create, attract, or bring together an assembly of persons thereon. Permitted uses may include, but are not limited to, such uses as agriculture (seasonal crops), horticulture, animal husbandry, raising of livestock, wildlife habitat, light outdoor recreation (non-spectator), cemeteries, automobile parking, and existing lumber yard supply storage.

ZONE B: Subject at all times to the height restrictions set forth in Subsection IV B, and to the general restrictions contained in Subsection V B 1, areas designated as Zone B shall be restricted in use as follows:

- a. Each use shall be on a site whose area shall not be less than three acres.
- b. Each use shall not create, attract, or bring together a site population that would exceed 15 times that of the site acreage.
- c. Each site shall have no more than one building plot upon which any number of structures may be erected.
- d. A building plot shall be a single, uniform, and non-contrived area, whose shape is uncomplicated and whose area shall not exceed the following minimum ratios with respect to the total site area:

Site Area at least (Acres)	But Less Than (Acres)	Ratio of Site Area to Bldg. Plot Area	Building Plot Area (sq. ft.)	Max. Site Population (15 persons/Acre)
3		12:1	10,900	45
	4	12:1		
4		10:1	17,400	60
	6	10:1		
6		8:1	32,600	90
	10	8:1		
10		6:1	72,500	150
	20	6:1		
20	and up	4:1	218,000	300

- e. The following uses are specifically prohibited in Zone B:
Churches, hospitals, schools, theaters, stadiums, hotels, motels, trailer courts, campgrounds, and other places of frequent public or semi-public assembly.

ZONE C: Zone C is subject only to height restrictions set forth in Section V B, and to the general restrictions contained in Section V B 1.

LAND USE LEGEND: (BASED ON CASS COUNTY ZONING CLASSIFICATIONS)

- PUBLIC (CITY, COUNTY, STATE)
- AGRICULTURAL
- TIMBER / FORESTRY
- INDUSTRIAL / COMMERCIAL
- SEASONAL RECREATIONAL
- RESIDENTIAL

PINE MOUNTAIN LAKE

LINDSEY LAKE

BOWEN LAKE

EAST AIRPORT PROPERTY

HORSESHOE LAKE



0 800 1600
SCALE (IN FEET)

BASEMAP: 2005 FSA AERIAL PHOTO
CASS COUNTY, MINNESOTA

LAND USE SOURCE: CASS COUNTY GEOGRAPHIC
INFORMATION SYSTEM (GIS)
DEPARTMENT

ENGINEERS ARCHITECTS
LAND SURVEYORS
ENVIRONMENTAL SERVICES
WISSETH SMITH NOLTING

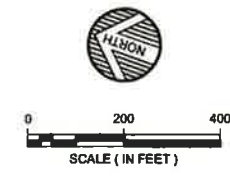
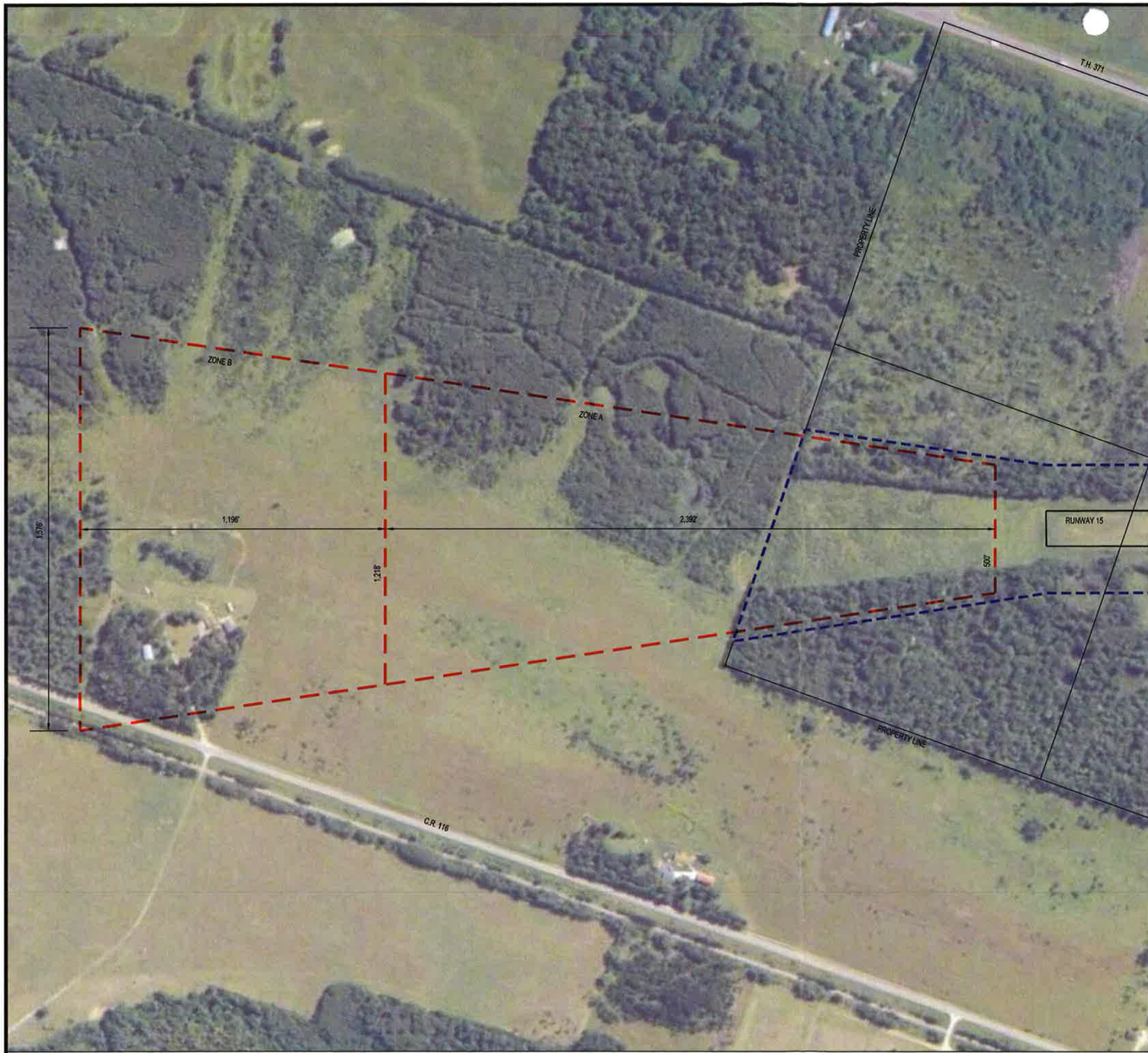


DATE: _____ LIC. NO. _____
JOB NUMBER: 010300026

DATE	REVISIONS DESCRIPTION	BY
FEBRUARY 2010	ALL SHOWN	W.W.J.

DATE: _____ SCALE: _____
DRAWN BY: W.W.J. CHECKED BY: T.A.H.

BACKUS MUNICIPAL AIRPORT - ZONING PLAN
CITY OF BACKUS
CASS COUNTY, MINNESOTA
LAND USE ZONING MAP



AIRPORT ZONING DIMENSIONS				
RUNWAY	SAFETY ZONE	INNER WIDTH	LENGTH	OUTER WIDTH
15/33	A	500'	2,392'	1,218'
	B	1,218'	1,196'	1,576'
	C	8,000' RAD. FROM END OF PRIMARY SURF.		

RUNWAY END COORDINATES		
RUNWAY	LATITUDE	LONGITUDE
15	46° 49' 54.53" N	94° 30' 33.02" W
33	46° 49' 21.09" N	94° 30' 16.01" W

- LEGEND:**
- PARCEL LINE
 - - - - AIRPORT PROPERTY BOUNDARY
 - TURF RUNWAY EDGE (APPROX.)
 - - - - SAFETY ZONE BOUNDARY (A & B)

BASEMAP: 2005 FSA AERIAL PHOTO
CASS COUNTY, MINNESOTA

ENGINEERS ARCHITECTS LAND SURVEYORS ENVIRONMENTAL SERVICES

WIDSETH SMITH NOLTING

ALABAMA ARIZONA ARKANSAS CALIFORNIA COLORADO CONNECTICUT DELAWARE FLORIDA GEORGIA ILLINOIS INDIANA IOWA KANSAS KENTUCKY LOUISIANA MAINE MARYLAND MASSACHUSETTS MICHIGAN MINNESOTA MISSISSIPPI MISSOURI MONTANA NEBRASKA NEVADA NEW HAMPSHIRE NEW JERSEY NEW MEXICO NEW YORK NORTH CAROLINA NORTH DAKOTA OHIO OKLAHOMA OREGON PENNSYLVANIA RHODE ISLAND SOUTH CAROLINA SOUTH DAKOTA TENNESSEE TEXAS UTAH VERMONT VIRGINIA WISCONSIN WYOMING

DATE: FEBRUARY 2010

SCALE: AS SHOWN

DRAWN BY: W.J.J.

CHECKED BY: T.M.H.

JOB NUMBER: 010300026

DATE: _____

BY: _____

REVISIONS DESCRIPTION: _____

DATE: _____

REV: _____

DATE: _____

BY: _____

REVISIONS DESCRIPTION: _____

DATE: _____

REV: _____

BACKUS MUNICIPAL AIRPORT - ZONING PLAN

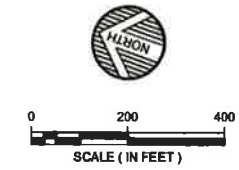
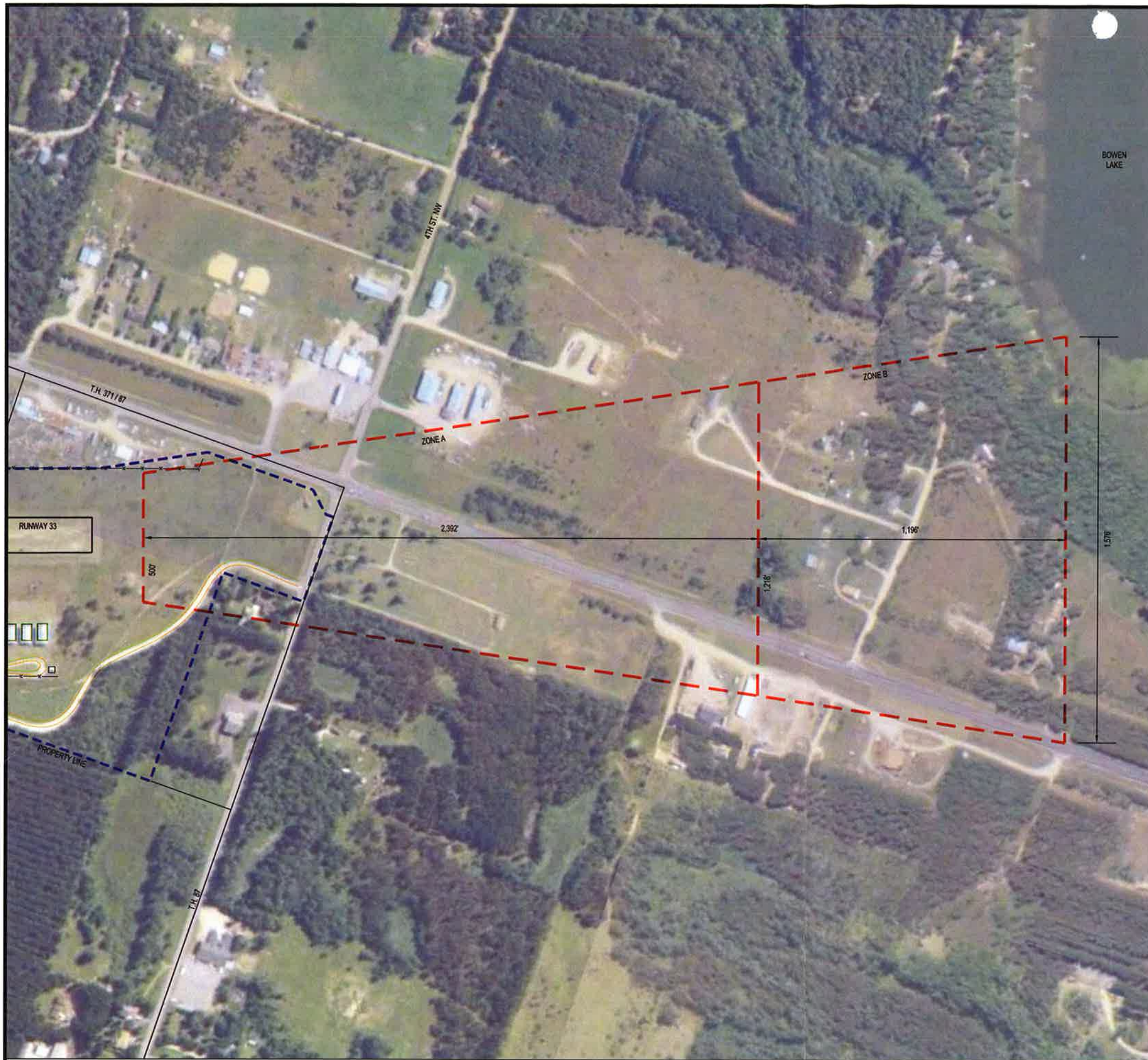
CITY OF BACKUS

CASS COUNTY, MINNESOTA

RUNWAY 15 SAFETY ZONES MAP

SHEET NO. 5

SHEET 5 OF 6



AIRPORT ZONING DIMENSIONS				
RUNWAY	SAFETY ZONE	INNER WIDTH	LENGTH	OUTER WIDTH
15/33	A	500'	2,392'	1,218'
	B	1,218'	1,196'	1,576'
	C	6,000' RAD. FROM END OF PRIMARY SURF.		

RUNWAY END COORDINATES		
RUNWAY	LATITUDE	LONGITUDE
15	48° 49' 54.53" N	94° 30' 33.02" W
33	48° 49' 21.09" N	94° 30' 16.01" W

LEGEND:

- PARCEL LINE
- AIRPORT PROPERTY BOUNDARY
- TURF RUNWAY EDGE (APPROX.)
- SAFETY ZONE BOUNDARY (A & B)

BASEMAP: 2005 FSA AERIAL PHOTO
CASS COUNTY, MINNESOTA

WIDSETH SMITH NOLTING

ENGINEERS ARCHITECTS LAND SURVEYORS ENVIRONMENTAL SERVICES

ALABAMA ARIZONA ARKANSAS CALIFORNIA COLORADO CONNECTICUT DELAWARE FLORIDA GEORGIA ILLINOIS INDIANA IOWA KANSAS KENTUCKY LOUISIANA MAINE MARYLAND MASSACHUSETTS MICHIGAN MINNESOTA MISSISSIPPI MISSOURI MONTANA NEBRASKA NEVADA NEW HAMPSHIRE NEW JERSEY NEW MEXICO NEW YORK NORTH CAROLINA NORTH DAKOTA OHIO OKLAHOMA OREGON PENNSYLVANIA RHODE ISLAND SOUTH CAROLINA SOUTH DAKOTA TEXAS UTAH VERMONT VIRGINIA WISCONSIN WYOMING

DATE: _____ L.C. NO. _____

BY: _____

REVISIONS DESCRIPTION

DATE	REV#	DESCRIPTION
FEBRUARY 2010	AS SHOWN	

DATE: FEBRUARY 2010
SCALE: AS SHOWN
DRAWN BY: W.W.J.
CHECKED BY: T.M.H.
JOB NUMBER: 010300026

BACKLUS MUNICIPAL AIRPORT - ZONING PLAN
CITY OF BACKLUS
CASS COUNTY, MINNESOTA
RUNWAY 33 SAFETY ZONES MAP

SHEET NO. **6**

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