

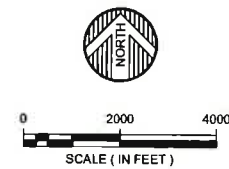
# AIRPORT ZONING PLAN BACKUS MUNICIPAL AIRPORT CASS COUNTY, MINNESOTA



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4	LAND USE MAP
5	RUNWAY 15 SAFETY ZONES MAP
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

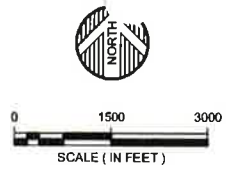
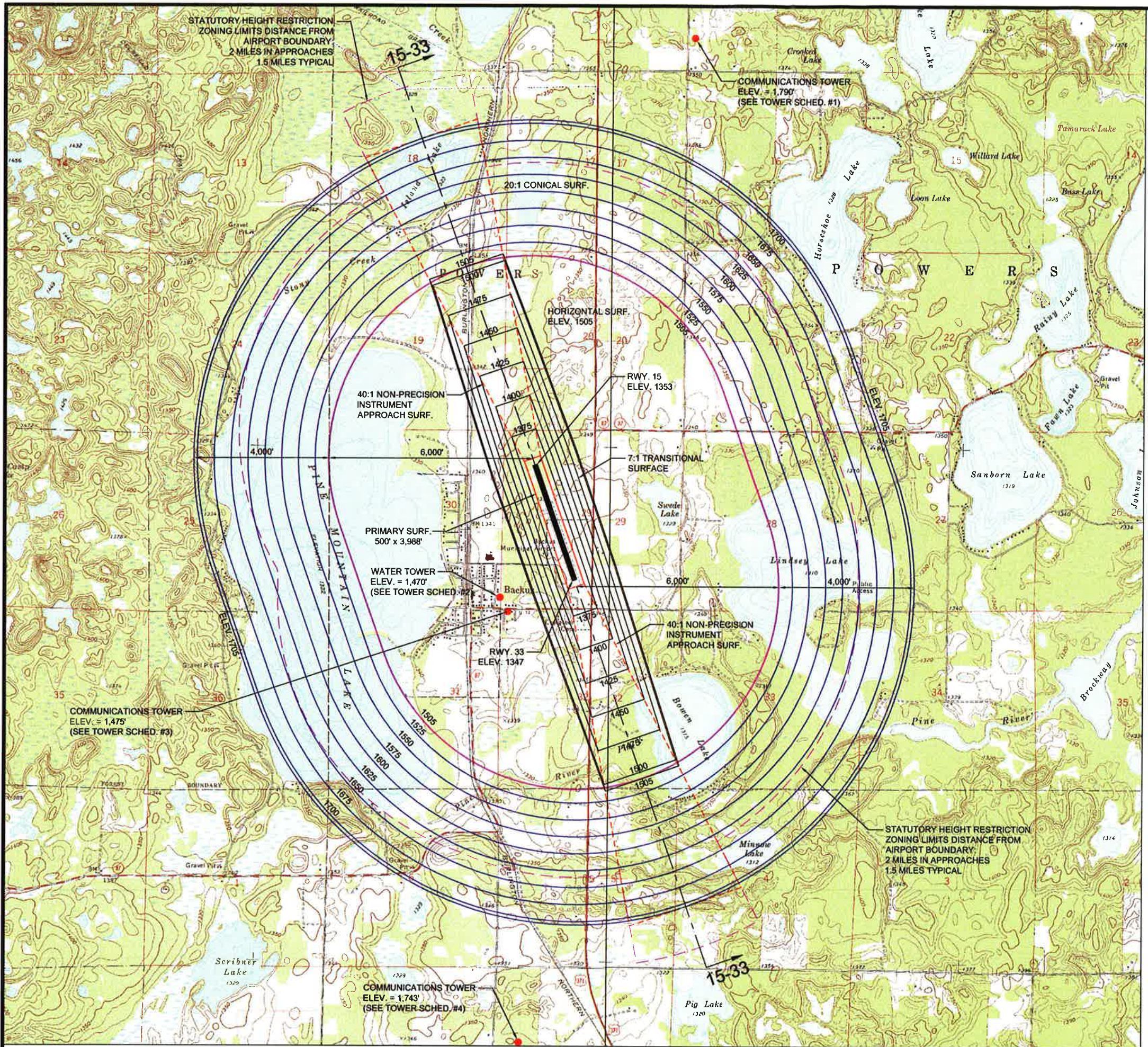
CURRENT: BACKUS QUADRANGLE - 1970  
MILDRED QUADRANGLE - 1970

WIDSETH SMITH NOLTING  
ENGINEERS  
ARCHITECTS  
LAND SURVEYORS  
ENVIRONMENTAL SERVICES

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



ULTIMATE APPROACH SURFACE DIMENSIONS			
RUNWAY	INNER WIDTH	LENGTH	OUTER WIDTH
15	500'	10,000'	3,500'
33	500'	10,000'	3,500'

- NOTES:
- ALL ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL.
  - ESTABLISHED AIRPORT ELEVATION 1355 M.S.L.
  - IMAGINARY SURFACE DIMENSIONS SHOWN ARE FAA AND MNDOT CRITERIA.
  - THE AERIAL CONTOURS ILLUSTRATE THE HEIGHT LIMITATIONS WITHIN EACH ZONE.
  - ZONING APPLIES TO AREAS UNDERLYING THE IMAGINARY SURFACE BOUNDARIES.
  - A SLOPE SUCH AS 20:1 EXPRESSES THE HORIZONTAL DISTANCE OF 20' TO THE VERTICAL DISTANCE OF 1'.
  - THE USGS BASE MAP IS A PICTORIAL REPRESENTATION AND IS NOT TIED TO THE COORDINATE SYSTEM OF THE AIRPORT.

- LEGEND:
- TURF RUNWAY SURFACE
  - PRIMARY SURFACE EL. 1,355 FT.
  - TRANSITIONAL SURFACE EL. 1,355 - 1,505 FT.
  - HORIZONTAL SURFACE EL. 1,505 FT.
  - CONICAL SURFACE (20:1) EL. 1,505 - 1,705 FT.
  - - - - APPROACH SURFACE (40:1) EL. 1,355 - 1,605 FT.
  - - - - HEIGHT RESTRICTION LIMITS

SCHEDULE OF TOWERS: (SOURCE FCC ASR & CITY FILES)

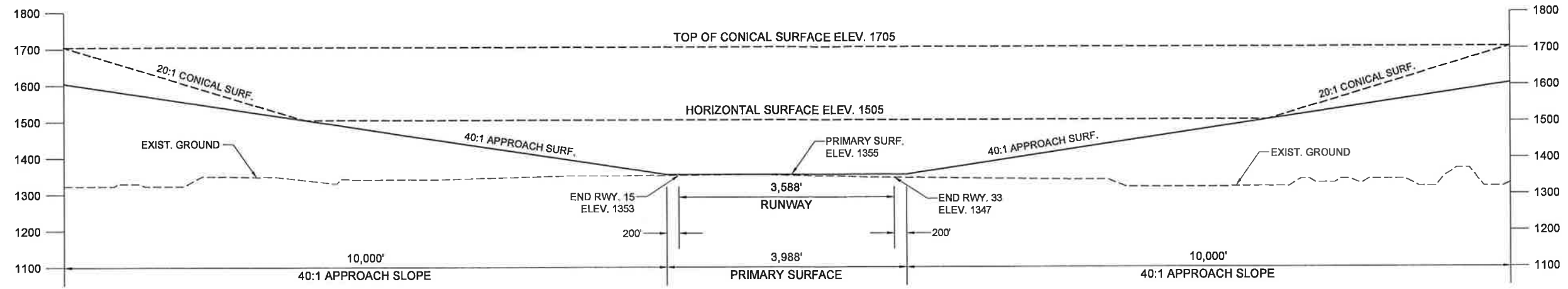
- RURAL CELLULAR CORPORATION - TOWER  
SITE EL. - 1,370 FT.  
HGHT. OF STRUCTURE - 420 FT.  
STRUCTURE EL. - 1,790 FT.
- CITY OF BACKUS - WATER TOWER  
SITE EL. - 1,342 FT.  
HGHT. OF STRUCTURE - 128 FT.  
STRUCTURE EL. - 1,470 FT.
- STATE OF MINNESOTA - TOWER  
SITE EL. - 1,355 FT.  
HGHT. OF STRUCTURE - 120 FT.  
STRUCTURE EL. - 1,475 FT.
- SBA TOWERS II, LLC - TOWER  
SITE EL. - 1,343 FT.  
HGHT. OF STRUCTURE - 400 FT.  
STRUCTURE EL. - 1,743 FT.

BASEMAP: USGS 7.5 MINUTE SERIES TOPOGRAPHIC CASS COUNTY, MINNESOTA  
CURRENT: BACKUS QUADRANGLE - 1970 MILDRED QUADRANGLE - 1970

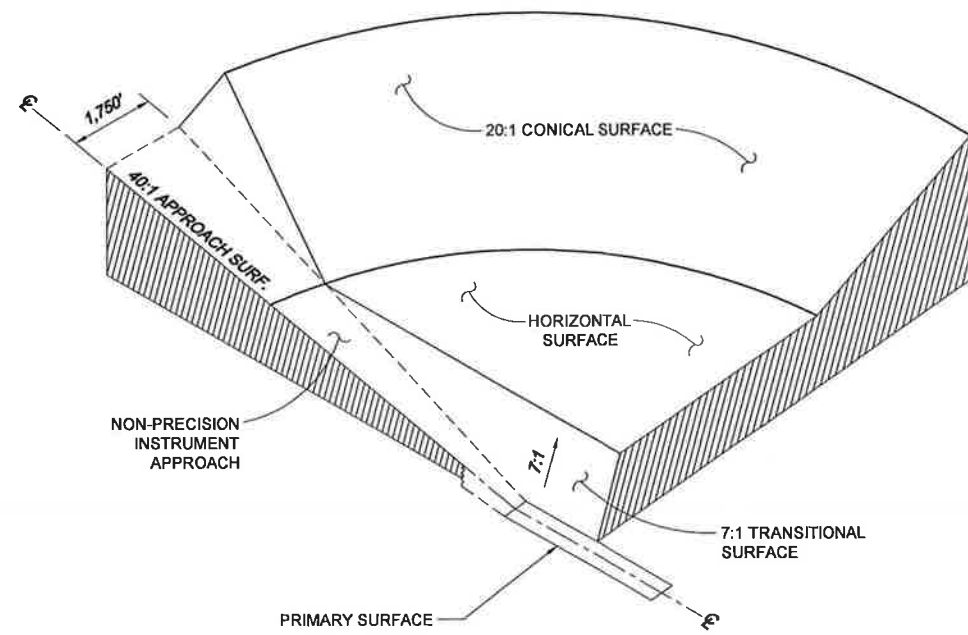
ALABAMA, AK, ARIZONA, AR, CALIFORNIA, CO, CT, DC, DE, FL, GA, HI, ILLINOIS, IN, IOWA, KS, KY, LA, MA, MD, ME, MI, MN, MO, NE, NH, NJ, NY, NC, ND, OH, OK, OR, PA, RI, SC, SD, TN, TX, VA, VT, WA, WI, WY  
 ENGINEERS ARCHITECTS LAND SURVEYORS ENVIRONMENTAL SERVICES  
**WIDSETH SMITH NOLTING**  
 www.wsn.com  
 LICENSE NO. DATE:

DATE	SCALE	DOWN BY	CHECKED BY	JOB NUMBER
FEBRUARY 2010	AS SHOWN	WWJ	TMH	0103B0026

**BACKUS MUNICIPAL AIRPORT - ZONING PLAN**  
 CITY OF BACKUS  
 CASS COUNTY, MINNESOTA  
**AIRSPACE ZONING MAP**  
 SHEET NO. **2**  
 SHEET 2 OF 6



**SECTION RUNWAY 15-33**  
 HORIZONTAL SCALE: 1" = 2000'  
 VERTICAL SCALE: AS SHOWN



WIDSETH SMITH NOLTING  
 ENGINEERS ARCHITECTS LAND SURVEYORS ENVIRONMENTAL SERVICES

DATE: FEBRUARY 2010  
 SCALE: AS SHOWN  
 DRAWN BY: W.W.J.  
 CHECKED BY: T.M.H.  
 JOB NUMBER: D10380026

BACKUS MUNICIPAL AIRPORT - ZONING PLAN  
 CITY OF BACKUS  
 CASS COUNTY, MINNESOTA  
 AIRSPACE SECTIONS

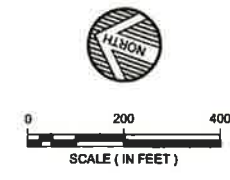
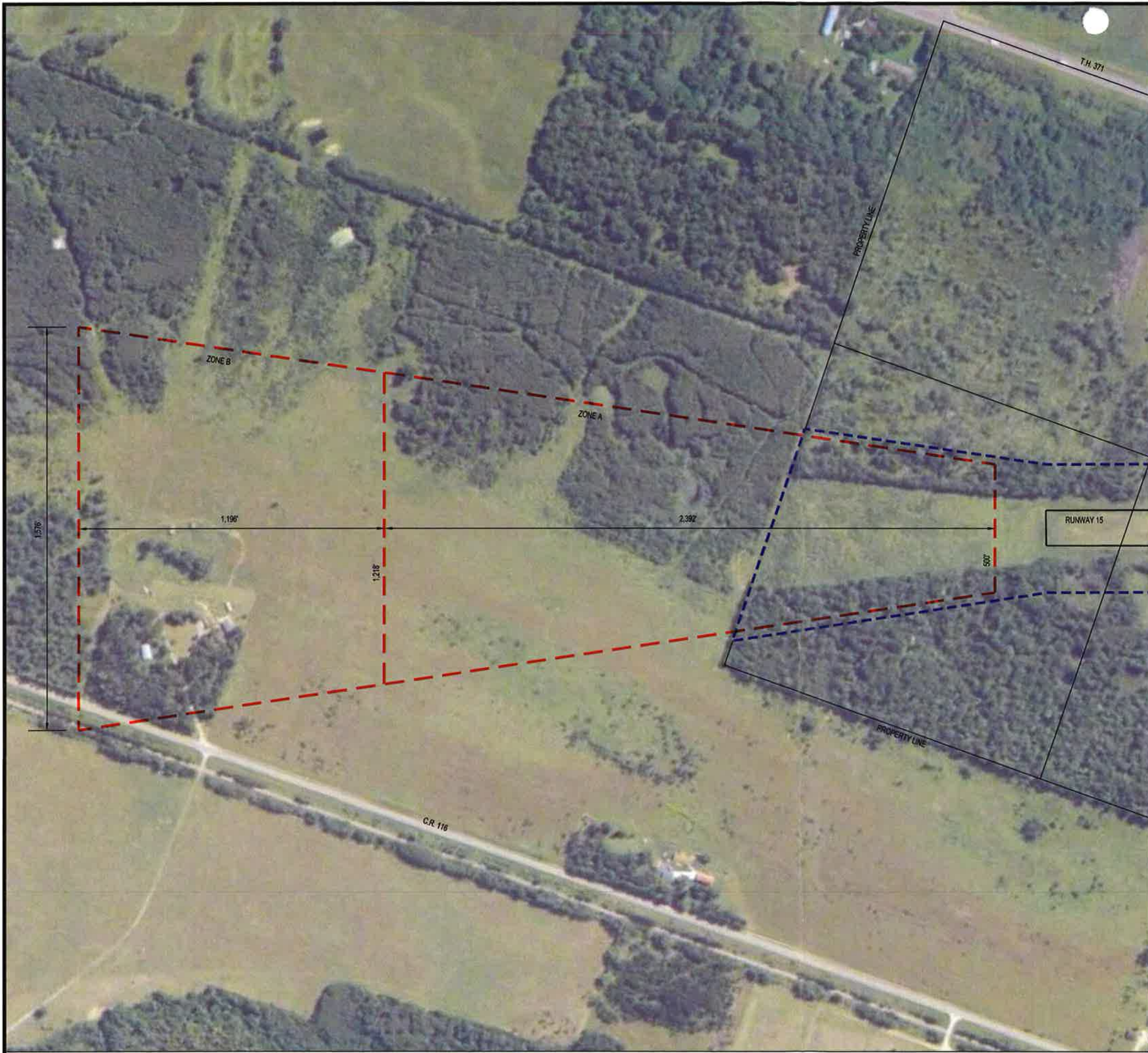
REV#	DATE	DESCRIPTION

BY: \_\_\_\_\_  
 L.C. NO. \_\_\_\_\_  
 DATE \_\_\_\_\_

SHEET NO. **3**  
 SHEET 3 of 6

J:\01038-City of Backus\010380026-Backus Airport Zoning Plan\010380026-Backus Airport Zoning Plan\CADD\CIVIC-AIRSPACE-MAP.dwg Plotted by: Wade Jackson 3/11/2010 8:43:57 AM © 2010 WIDSETH SMITH NOLTING





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: \_\_\_\_\_ LIC. NO. \_\_\_\_\_

BY: \_\_\_\_\_

REVISIONS DESCRIPTION: \_\_\_\_\_

DATE	REV#	DESCRIPTION
FEBRUARY 2010	AS BROWN	W.J.J.
	DRAWN BY: T.M.H.	CHECKED BY: T.M.H.

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

BACKLUS MUNICIPAL AIRPORT - ZONING PLAN  
 CITY OF BACKLUS  
 CASS COUNTY, MINNESOTA

RUNWAY 16 SAFETY ZONES MAP

SHEET NO. 5

SHEET 5 OF 6



