

**ORDINANCE 06-2**  
**ORDINANCE ENACTING ARTICLE III SUBPARAGRAPH VII OF THE RANSOM**  
**COUNTY NORTH DAKOTA ZONING ORDINANCE RELATING TO:**  
**AIRPORT OVERLAY ZONE**

VII. Purpose. In order to carry out the provisions of these overlay zones, there are hereby created and established certain zones which include all of the land lying beneath the Airport Imaginary Surfaces as they apply to airports in the County of Ransom. Such zones are shown on the current Airport Airspace and Runway Protection Zone drawings, prepared by Moore Engineering, Inc. and dated May 17, 2006.

Further, these overlay zones are intended to prevent the establishment of airspace obstructions in airport approaches and surrounding areas through height restrictions and other land use controls as deemed essential to protect the health, safety, and welfare of the people of the County of Ransom.

**1.0 Special Definitions.**

- 1.1 Utility Runway. A runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight or less.
- 1.2 Visual Runway. A runway that is intended solely for the operation of aircraft using visual approach procedures with no instrument approach procedure3s has been approved, or planned, or indicated on an FAA or state planning document or military service airport planning document.
- 1.3 Non-precision Instrument Runway. A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach procedure has been approved, or planned, or indicated on an FAA or state planning document or military service airport planning document.
- 1.4 Precision Instrument Runway. A runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS), Microwave Landing System (MLS), or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is not indicated by an FAA approved airport layout plan; any other FAA or state planning document, or military service airport planning document.
- 1.5 Airport Imaginary Surfaces. Those imaginary area in space which are defined by the Approach Surface, Transitional Surface, Horizontal

Surface, and Conical Surface and in which any object extending above these imaginary surfaces is an obstruction.

- 1.6 Airport Hazard. Any structure, tree, or use of land which exceeds height limits established by the Airport Imaginary Surfaces.
- 1.7 Approach Surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the Primary Surface. The inner edge of the approach surface is the same width as the Primary Surface and extends to a width of: 1,250 feet for a utility runway having only visual approaches; 1,500 feet for a runway other than a utility runway having only visual approaches; 2,000 feet for a utility runway having a non-precision instrument approach; 3,500 feet for a non-precision instrument runway other than utility, having visibility minimums greater than three-fourths of a statute mile; 4,000 feet for a non-precision instrument runway having visibility minimums as low as three-fourths of a statute mile; and 16,000 feet for precision instrument runways. The Approach Surface extends for a horizontal distance of 5,000 feet at a slope of 2 feet outward to each foot upward (20:1) for all utility and visual runways; 10,000 feet at a slope of 34 feet outward for each foot upward (34:1) for all non-precision instrument runways other than utility; and for all precision instrument runways extends for a horizontal distance of 10,000 feet at a slope of 50 feet outward for each foot upward (50:1); thence slopes upward 40 feet outward for each foot upward (40:1) an additional distance of 40,000 feet.
- 1.8 Primary Surface. A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the Primary Surface extends 200 feet beyond each end of that runway. When the runway has no specially prepared hard surface, or planned hard surface, the Primary Surface ends at each end of that runway. The width of the primary Surface is 250 feet for utility runways having only visual approaches, 500 feet for utility runways having non-precision instrument approaches, 500 feet for other than utility runways having only visual approaches or non-precision instrument approaches with visibility minimums greater than three-fourths of a mile and 1,000 feet for non-precision instrument runways with visibility minimums of three-fourths of a miles or less and for precision instrument runways.
- 1.9 Transitional Surface. Extend seven feet outward for each one foot upward (7:1) beginning on each side of the Primary Surface which point is the same elevation as the runway surface, and form the sides of the approach surfaces thence extending upward to a height of 150 feet above the airport elevation (Horizontal Surface).

- 1.10 Horizontal Surface. A horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of 5,000 feet from the center of each end of the Primary Surface of each visual or utility runway and 10,000 feet from the center of each end of the Primary Surface of all other runways and connecting the adjacent arcs by lines tangent to those arcs.
- 1.11 Conical Surface. Extends 20 feet outward for each one foot upward (20:1) for 4,000 feet beginning at the edge of the horizontal surface (5,000 feet from the center of each end of the Primary Surface of each visual and utility runway or 10,000 feet for all non-precision instrument runways other than utility at 150 feet above and airport elevation) and upward extending to a height of 350 feet above the airport elevation.
- 1.12 Runway Protection Zone (RPZ). An area off the runway end (formerly the clear zone) used to enhance the protection of people and property on the ground. The RPZ is trapezoidal in shape and centered about the extended runway centerline. It begins 200 feet (60 m) beyond the end of the arcs usable for takeoff or landing. The RPZ dimensions are functions of the type of aircraft and operations to be conducted on the runway.
- 1.13 Airport Approach Safety Zone. The land that underlies the approach surface, excluding the RPZ.
- 1.14 Noise Sensitive Areas. Within 1,500 feet of an airport or within established noise contour boundaries exceeding 65 DNL.
- 1.15 Place of Public Assembly. Structure of place which the public may enter for such purposes as deliberation, education, worship, shopping, entertainment, amusement, awaiting transportation, or similar activity.

## **2.0 No Development Area (ND)**

### **2.1 Purpose and Intent**

The purpose of this zone is to protect airport facilities from incompatible uses; to provide for future airport expansion; and to preserve lands adjacent to airports for future commercial and light industrial uses which will be directly dependent on air transportation.

### **2.2 Uses Permitted**

The following uses are permitted subject to issuance of a land use permit:

- A. Accepted Farming Practices.

- B. Air cargo terminals.
- C. Aircraft sales, repair, service, storage, and schools related to aircraft operations, and facilities on the airport property essential for the operation of airports, such as fuel storage, hangar use, F.B.O. offices, etc.
- D. Air passenger terminals.
- E. Public and semi-public buildings, structures, and uses essential to the welfare of an area, such as fire stations, pump stations, and water storage.
- F. Taxi and bus terminals.
- G. Snack shops for airport patrons and employees.
- H. Other uses where the ongoing operations and the use must be directly dependent upon and directly associated with the Airport.

### 2.3 Uses Subject to a Conditional Use Permit

The following conditional uses will be permitted by the County, provided they meet all the criteria outlines in Section 2.

- A. Light industrial.
- B. Truck terminals.

### 2.4 Conditional Use Criteria.

The County may grant a Conditional Use Permit for uses described in Section 2 if each of the below criteria is met, as determined by the County Commissioners.

- A. The ongoing operations or the use must be directly dependent upon and directly associated with the airport.
- B. The use shall not discharge smoke, fumes, noise, sewage, or other nuisances beyond the property on which it is located.
- C. The use shall not conflict with any present or planned operations of the airport.
- D. Height Restriction standards will be met.

## 2.5 Limitations of Use.

In an Airport Development Zone area, the following conditions shall apply.

A. Liquid and Solid Wastes:

Storage of animal, vegetable, or other wastes which attract insects, rodents, or birds or otherwise create a health hazard shall be prohibited.

B. Discharge Standards:

There shall be no emission of smoke, fly ash, dust, vapor, gases, or other forms of air pollution that may cause nuisance or injury to human, plant, or animal life, or to property, or that may conflict with any present or planned operations of the airport.

C. Lighting:

1. Sign lighting and exterior lighting shall not project directly into an adjoining residential zone.
2. Unless necessary for safe and convenient air travel, sign lighting and exterior lighting shall not project directly into the runway, taxiway, or approach zone.

D. Landscaping:

1. Site plan(s) submitted with an application for a land use permit must include a landscaping plan which shows the location and type of plant materials.
2. New uses which abut a residential zone shall provide and maintain a dense evergreen landscape buffer, sight obscuring fence, or landscaped berm which attains a (mature) height of at least six (6) feet.
3. All unused property shall be maintained in native or existing vegetative ground cover or planted grass, shrub, and barkdust, or other suitable ground cover in an uncluttered manner.
4. Responsibility for establishment and maintenance of landscaping rests with the property owner.

E. Parking:

1. Site plan(s) submitted with an application for a land use permit must include a parking plan which shows the location and number of parking spaces, circulation patterns, and ingress and egress provisions.
2. All industrial uses within a No Development Area shall provide at least two parking spaces for every three employees on the major shift during normal season.
3. All Commercial Uses shall follow the Zoning Ordinance for the required number of parking spaces.
4. All parking lots shall have an all weather surface.
5. Adequate provisions for safe and convenient circulation, ingress, and egress shall be provided.

F. Glare and Electro-magnetic Interference:

1. Building materials shall not produce glare which may conflict with any present or planned operations of the airport.
2. No use may produce electro-magnetic interference which may conflict with any present or planned operations of the airport.

**3.0 Limited Development Area (LD). In an LD Area, the following regulations shall apply:**

**3.1 Uses Permitted Outright. In an LD Area, the following uses and their accessory uses are permitted outright:**

- A. Airport.
- B. Farm use, excluding livestock feed or sales yard and excepting those uses set forth in subsection (2) of this section.

**3.2 Conditional Uses. In an LD Area, the following uses and their accessory uses are permitted when authorized in accordance with the requirements of this Section and Section 2 of this ordinance:**

- A. Farm accessory buildings and uses.
- B. Mining, quarrying, or other extraction activity, including the processing or refining of ore or other raw materials.
- C. Utility facility necessary of public service.
- D. Golf Course.
- E. Water supply and treatment facility.
- F. Manufacturing and warehousing.
- G. Retail and wholesale trade facilities.

2.3 Use Limitations. In an LD Area, the following limitations and standards shall apply to all uses permitted:

- A. The height of any structure or part of a structure such as chimneys, towers, antennas, etc. shall be limited according to requirements established by the County or any governmental agency relative to uses in the vicinity of an airport, but in no case shall any building or structure exceed 35 feet.
- B. In approach zones beyond the Runway Protection Zones, no meeting place for public or private purposes which is designed to accommodate more than 25 persons at any one time shall be permitted, nor shall any residential use be permitted.
- C. All parking demand created by any use permitted by this section shall be accommodated on the subject premises entirely off-street.
- D. No use permitted b this section shall require the backing of traffic onto a public or private street or road right-of-way to accommodate ingress or egress to any use or the premises thereof.
- E. There shall not be more than one ingress and one egress from properties accommodating uses permitted by this section per each 800 feet of frontage on an arterial or per each 300 feet of frontage on a collector. If necessary to meet this requirement, permitted uses shall provide for shared ingress and egress.
- F. No use permitted under the provisions of this section that generates more than 30 truck-trailer or other heavy equipment trips per day to and from the subject property shall be permitted to locate on a lot adjacent to or across from a residential use or lot in a duly platted

subdivision, nor shall a residential use or lot be permitted adjacent to or across the street from an existing or planned use that is expected to generate such traffic.

- G. No use permitted under the provisions of this section that generates more than 20 auto-truck trips during the busiest hour of the day to and from the premises shall be permitted unless served directly by an arterial or collector, or other improved street or road designed to serve such types of uses, and in no case shall such traffic be permitted to utilize a street or road which passes through a residential use area.
- H. Any use permitted under the provisions of this section that is determined to be incompatible with an existing or planned use adjacent thereto or across the street from shall be screened from such incompatible uses by densely planted trees and shrubs or sight-obscuring fencing.
- I. Mining or quarry operation permitted by subsection (2)(B) of this section may not be permitted if such use will allow or cause ponding which is likely to attract birds.
- J. No use permitted by subsection (2)(C) of this section shall permit any power lines to be located in clear zones and any power line located within an approach zone shall be in conformance with designated approach slope ratios.
- K. No use permitted by this section shall be allowed if such use is likely to attract an unusual quantity of birds, particularly birds which are normally considered high flight.

3.4 Design and Use Criteria. In the consideration of an application for a proposed use in an LD Area, the Commission shall take into account the impact of the proposed use on nearby residential and commercial uses, on resource carrying capacities, on the capacity of transportation and other public facilities and services, and on the appearance of the proposal. In approving a proposed use the Commission shall find that:

- A. Proposal is in compliance with the Airport Master Plan, and more specifically, the Land Use Element thereof.
- B. Proposal is in compliance with the Comprehensive Plan.
- C. Proposal is in compliance with the intent and provisions of this ordinance and more particularly with this section.



- D. That economic and environmental considerations are in balance.
- E. That any social, economical, physical, or environmental impacts are minimized.
- F. Any application for a proposed use in an LD Area may be denied if, in the opinion of the Planning Commission, the proposed use is not related to the present land use patterns in the area.
- G. An application for a proposed use in an LD Area may be denied if the applicant fails to demonstrate that the proposed use is essential to the public interest and to the full development of the area.
- H. In approving a proposed use in an LD Area, the Commission shall be satisfied that the applicant is fully appraised of the County's policy relative to development in the area in relation to the existing airport and accessory uses thereof.
- I. The Planning Commission may require establishment and maintenance of screenings, the use of glare resistant material in construction and landscaping, or may attach other similar conditions or limitations that will serve to reduce hazards to airport operations.

3.5 Additional Requirements. As a condition of approval of any use proposed within an LD Area, the County may require:

- A. An increase in required setbacks.
- B. Additional off-street parking and loading facilities and building standards.
- C. Limitations on signs or lighting, time of operations, points of ingress and egress, and building heights.
- D. Additional landscaping, screening, and other improvements.
- E. Any other conditions considered necessary to achieve compliance with the intent and purpose of this ordinance and policies of the Comprehensive Plan.

#### **4.0 Height Restricted Development Area (HR).**

##### **4.1 Height Limitations**

Except as otherwise provided in this Ordinance, no structure shall be erected, altered, or maintained, and no tree shall be allowed to grow in any zone created by this Section to a height in excess of the applicable height limit herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

- A. Utility Runway Visual Approach Zone - Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
- B. Utility Runway Non-precision Instrument Approach Zone - Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
- C. Runway Larger Than Utility Visual Approach Zone - Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
- D. Runway Larger Than Utility With A Visibility Minimum Greater Than  $\frac{3}{4}$  Mile Non-precision Instrument Approach Zone - Slopes thirty-four (34) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline.
- E. Runway Larger Than Utility With A Visibility Minimum As Low As  $\frac{3}{4}$  Mile Non-precision Instrument Approach Zone - Slopes thirty-four (34) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline.
- F. Precision Instrument Runway Approach Zone - Slopes fifty (50) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway

centerline; thence slopes upward forty (40) feet horizontally for each foot vertically to an additional horizontal distance of 40,000 feet along the extended runway centerline.

- G. Transitional Zones - Slope seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the primary surface and the approach surface, and extending to a height of 150 feet above the airport elevation which is 100 feet above mean sea level. In addition to the foregoing, there are established height limits sloping seven (7) feet outward for each one (1) foot upward beginning at the sides of and at the same elevation as the approach surface, and extending to where they intersect the conical surface.
- H. Horizontal Zone - The horizontal zone is established for visual approach airports by swinging arcs of 5,000 feet radii from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal zone does not include the approach and transitional zones.
- I. Conical Zone - Slopes 20 feet outward for each foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending outward to a distance of 4,000 feet and to a height of 350 feet above the airport elevation.
- J. Excepted Height Limitations - Nothing in this Section shall be construed as prohibiting the construction or maintenance of any structures, or growth of any tree to a height of up to 20 feet above the surface of the land.

#### 4.2 Use Restrictions

Notwithstanding any other provisions of this Section, no use may be made of land or water within any zone established by this Section, in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and other, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.

#### 4.3 Nonconforming Uses

- A. Regulations Not Retroactive - The regulations prescribed by this Section shall not be construed to require the removal, lowering, or

other change or alternation of any structure or tree not conforming to the regulations as of the effective date of this Section, or otherwise interfere with the continuance of a nonconforming use. Nothing contained herein shall require any change in the construction, alternation, or intended use of any structure, the construction or alternation of which was begun prior to the effective date of this Section, and is diligently prosecuted.

- B. Marking and Lighting - Notwithstanding the preceding provision of this Section, the owner of any existing nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the Airport Authority to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport obstruction. Such markers and lights shall be installed, operated, and maintained at the expense of the Airport Authority.

#### 4.4 Permits

- A. Future Uses - Except as specifically provided in a, b, and c hereunder, no material change shall be made in the use of land, no structure shall be erected or otherwise established, and no tree shall be planted in any zone hereby created unless a permit therefore shall have been applied for and granted. Each application for a permit shall indicate the purpose for which the permit is desired, with sufficient particularity to permit it to be determined whether the resulting use, structure, or tree would conform to the regulations herein prescribed. If such determination is in the affirmative, the permit shall be granted. No permit for a use inconsistent with the provisions of this Ordinance shall be granted unless a variance has been approved in accordance with Section 2.
1. In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any tree or structure less than seventy-five (75) feet of vertical height above the ground, except when, because of terrain, land contour, or topographic features, such tree or structure would extend above the height limits prescribed for such zones.
  2. In areas lying within the limits of the approach zones, but at a horizontal distance of not less than 4,200 feet from each end of the runway, no permit shall be required for any tree or structure less than seventy-five (75) feet of vertical height above ground, except when such tree or structure would

extend above the height limit prescribed for such approach zones.

3. In the area lying within the limits of the transition zones beyond the perimeter of the horizontal zone, no permit shall be required for any tree or structure less than seventy-five (75) feet of vertical height above the ground, except when such tree or structure, because of terrain, land contour, or topographic features, would extend above, the height limit prescribed for such transition zones.

Nothing contained in any of the foregoing exceptions shall be construed as permitting or intending to permit any construction, or alternation of any structure, or growth of any tree in excess of any of the height limits established by this Ordinance except as set forth in Section 2.

- B. Existing Uses - No permit shall be granted that would allow the establishment or creation of an obstruction or permit a nonconforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of this Ordinance or any amendments thereto or than it is when the application for a permit is made. Except as indicated, all applications for such a permit shall be granted.
- C. Nonconforming Uses Abandoned or Destroyed - Whenever the County Commissioners determine that a nonconforming tree or structure has been abandoned or more than 80 percent torn down, physically deteriorated, or decayed, no permit shall be granted that would allow such structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations.
- D. Variances - Any person desiring to erect or increase the height of any structure, or permit the growth of any tree, or use property, not in accordance with the regulations prescribed in this Section, may apply to the Board of Adjustment for a variance from such regulations. The application for variance shall be accompanied by a determination from the Federal Aviation Administration as to the effect of the proposal on the operation of air navigation facilities and the safe, efficient use of navigable airspace. Such variances shall be allowed where it is duly found that a literal application or enforcement of the regulations will result in unnecessary hardship and relief granted, will not be contrary to the public interest, will not create a hazard to air navigation, will do substantial justice, and will be in accordance with the spirit of this Section. Additionally, no application for variance to the requirements of this Section may be

considered by the Board of Adjustment unless a copy of the application has been furnished to the Airport Authority for advice as to the aeronautical effects of the variance. If the Airport Authority does not respond to the application within 15 days after receipt, the Board of Adjustment may act on its own to grant or deny said application.

- E. Obstruction Marking and Lighting - Any permit or variance granted may, if such action is deemed advisable to effectuate the purpose of this Section and be reasonable in the circumstances, be so conditioned as to require the owner of the structure or tree in question to install, operate, and maintain, at the owner's expense, such markings and light as may be necessary. If deemed proper by the Board of Adjustment, this condition may be modified to require the owner to permit the obstruction marking and lighting, at its own expense, to install, operate, and maintain the necessary markings and lights.

**5.0 Procedures. An application seeking a conditional use under Section 2 above, shall provide the following information:**

- 5.1 Property boundary lines as they relate to the Airport Imaginary Surfaces.
- 5.2 Location and height of all existing and proposed buildings, structures, utility lines, and roads. The Ransom County Commissioners shall notify the owner of the airport and North Dakota Aeronautics Commission on land use permits or zone changes within 5,000 feet of a visual and 10,000 feet of instrument airport so as to provide North Dakota Aeronautics Commission an opportunity to review and comment.

**6.0 Limitations.**

- 6.1 To meet the standards established in FAA Regulations, Part 77, no structure shall penetrate into the Airport Imaginary Surfaces.
- 6.2 No place of public assembly shall be permitted in the Airport Development Zone or RPZ.
- 6.3 No structure or building shall be allowed within the RPZ.
- 6.4 Whenever there is a conflict in height limitations prescribed by this overlay zone and the primary zoning district, the lowest height limitation fixed shall govern; provided, however, that the height limitations here imposed shall not apply to such structures customarily employed for aeronautical purposes.

- 6.5 No glare producing materials shall be used on the exterior of any structure located within the Limited Development Zone.
- 6.6 In noise sensitive areas (within 1,500 feet of an airport or within established noise contour boundaries of 65 DNL above for identified airports) where noise levels are a concern, a declaration of anticipated noise levels shall be attached to any building permit, land division appeal, deed, and mortgage records. In areas where the noise level is anticipated to be 65 DNL and above, prior to issuance of a building permit for construction of noise sensitive land use (real property normally used for sleeping or normally used as schools, churches, hospitals, or public libraries) the permit applicant shall be required to demonstrate that a noise abatement strategy will be incorporated into the building design which will achieve an indoor noise level equal to or less than 65 DNL. The planning and building department will review building permits or noise sensitive developments.
- 6.7 No development that attracts or sustains hazardous bird movements from feeding, watering, or roosting across the runways and/or approach and departure patterns of aircraft. Planning authority shall notify North Dakota Aeronautics Commission of such development (e.g., waste disposal sites and wetland enhancements) within the airport overlay zone so as to provide North Dakota Aeronautics Commission an opportunity to review and comment on the site in accordance with FAA AC 150/5200-33.

The balance of this Ordinance shall continue in force with no changes.

OFFERED BY COMMISSIONER Steve Dick and placed on its first reading this 5<sup>th</sup> day of September, 2006.

PLACED on its second and final reading, passed and approved and adopted this 17<sup>th</sup> day of October, 2006.

  
Ron Torbenson, Chairman

ATTEST:

  
Connie Gilbert, Auditor