

Town of Lacombe

Airport Development Plan

Prepared by:
The Town of Lacombe

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Airport Development Plan

1.0 INTRODUCTION

1.1 PLAN PURPOSE AND OBJECTIVES

The purpose of this Development Plan is to provide a framework for subsequent subdivision and development of the Airport lands as shown in Figure 1. The objectives of the Plan are as follows:

- To ensure that the Town's plans, including all statutory plans in place and the Land Use Bylaw, that relate to the Airport are in conformity to recent changes in the *Municipal Government Act*, as the Aviation Protection Areas (AVPA) Program was rescinded throughout the province.
- To identify the purpose of the Airport and describe what long-term impacts the Airport has on the community.
- To identify the current role of the Airport and determine its present and potential future use by key stakeholders, which are comprised of the following four targeted aviator user groups: recreation, large commercial, small business and government.
- Develop a master plan for the future development of the Airport, including infrastructure relating to the development of new hangar sites (private and commercial) and taxiways and other operational technologies related to operations.
- Identify general access locations to the Plan area and links to other future growth areas, as well as existing Town transportation networks.
- To establish future approaches to the operations and maintenance of the facility which will facilitate the timely renewal of aging infrastructure so that any future capital expenses can be budgeted for. Present operation of the Airport is the responsibility of the Lacombe Flying Club. Present membership is 130 individuals, of which a core group of 30 individuals are very active members.

1.2 BACKGROUND

The Town undertook a major annexation of agricultural land from Lacombe County in 1999, which included for the most part, land holdings of the Canadian University College. These lands are generally located to the north, northwest, and west of the Town's built-up area. With this infusion of developable lands came the need to prepare a number of land use planning documents to guide subdivision and development decisions. Council has made the following decisions related to the Airport and the lands within the general vicinity in chronological order:

- Adopted the North Area Structure Plan on April 24, 2000, and established the location of major transportation corridors throughout the Town, and identified that Airport Road (63 Avenue) was to be considered an important east-west collector.
- Council adopted an Outline Plan for the lands immediately to the west in 2000, by Park Pacific Developments Ltd., which provided for creation of a residential area called Terrace Heights.
- A developer proposing to create a unique residential area for aviation enthusiasts, whereby individual lots would include both a residence and a hangar, contacted the Town. The Council supported this concept and the Terrace Heights Outline Plan was amended in 2001 to include this land use. At the same time the Land Use Bylaw was amended to create the "Residential - Airpark Community" (R-AC) District and to redesignate approximately 12 acres of lands to the west of the current runway.
- With the development occurring northwest of the Airport the extension and upgrades to Brownstone Drive/Terrace Heights Drive imminent, this would provide a critical link from C & E Trail to 63 Avenue and Highway 2A, and serve the future residential neighborhoods that were

envisioned in the North Area Structure Plan and provide opportunities to create an access for the Airport.

- Council struck a Steering Committee to redraft the Land Use Bylaw, and as part of that review in 2001, Parkland Community Planning Services, under contract to the Town, provided a discussion paper which noted that the Airport District was obsolete as it referenced the AVAP Program guidelines. The new Land Use Bylaw #300 was adopted with the guidelines removed, but these guidelines will be included in Appendix "A" of this document.
- In 2001 Council approved the Terms of Reference for the review of the existing Airport Redevelopment Plan (1994) and the Steering Committee first met on June 24, 2002. This plan is an accumulation of those discussions and is hereby presented to Council for ratification, with or without amendments.

1.3 PLAN AREA & LAND OWNERSHIP

The Airport Development Plan Area is situated north of 63 Avenue and west of Highway 2A at the north end of the Town. The Airport is accessible from these two roads, which are defined as arterial roads in the Town of Lacombe's Transportation Study and the Municipal Development Plan. A number of residential subdivisions surround the Plan area. To the south is English Estates, to the west is Hearthstone and to the northwest is the developing area of Terrace Heights.

The Town of Lacombe is the sole landowner, and the following table lists the affected legal descriptions and titled areas within the Plan area.

MAP No.	LEGAL DESCRIPTION	AREA in acres (ha)
1	Plan 762 1329	46.75 (18.92)
2	Plan 832 0722	21.20 (8.58)
3	Plan 002 0711	25.0 (10.11)
4	Plan 5330 MC	cancelled
5	Plan 932 3329, Block 1, Lot 2	0.97 (0.39)
6	Plan 032 6097, Block 1, Lot 1 PUL	6.14 (2.483)
TOTAL		100.06 (40.49)

1.4 VITAL STATISTICS

1.4.1 The Town of Lacombe, with a population of 9,946 is located on Highway 2 approximately 20 kilometres north of Red Deer. The Town has experienced strong population growth over the past several years and, because of its corridor location, there is the prospect of continued long term growth in a 2% to 4% range annually.

1.4.2 The vital statistics for the Lacombe Airport are as follows:

Elevation	2,800 Ft. (853.4M)
Runaway Length	3,000 Ft. (914.4M)
Runaway Width	75 Ft. (22.86M)
Radio Frequency	Unicomm 122.8

N.D.B. Frequency	244 KHZ
Existing Hangars	30
Formal Tie Down	10 aircraft
Aircraft to date	36 approx.

1.5 PLAN INTERPRETATION

The policies contained in this Plan are written to provide some flexibility in response to potential changes that may occur in the subdivision and development of the Plan area.

In this Plan:

1. "Plan" means the Airport Development Plan.
2. "Plan area," means the area shown in Figure 1 of this Plan.
3. "Land Use Bylaw" means the Town of Lacombe Land Use Bylaw No. 300, adopted by Council pursuant to the *Municipal Government Act*, and any succeeding Land Use Bylaw.
4. "Municipal Development Plan" means the Town of Lacombe Municipal Development Plan, Bylaw No. 63, adopted by Council pursuant to the *Municipal Government Act*, and any succeeding Municipal Development Plan.
5. "North Area Structure Plan" means the Town of Lacombe North Area Structure Plan, Bylaw No. 267, adopted by Council pursuant to the *Municipal Government Act*, and any succeeding North Area Structure Plan.
6. "Subdivision Approving Authority" means the Lacombe Municipal Planning Commission.
7. "Outline Plan" means an intermediate plan between an Area Structure Plan and a Tentative Plan and is a means for the Subdivision Approving Authority, Municipality and the Developer(s) to evaluate a proposed plan as to its suitability for subdivision.
8. "Tentative Plan" is a detailed proposal for development of a site and may form the basis for application for subdivision or a development permit.
9. "Council" means the Council of the Town of Lacombe.
10. All other words and expressions have the meanings assigned to them in the Land Use Bylaw and the *Municipal Government Act*.

2.0 CONSTRAINTS AND OPPORTUNITIES

2.1 *EXISTING DEVELOPMENT AND PURPOSE*

2.1.1 PURPOSE OF THE AIRPORT

The Airport acts as a supplementary source of transportation for people and goods to and from Lacombe. The airport supports three user groups: recreation, commerce, and government. Although the Airport cannot be considered a major transportation alternative it does carry the potential to be a benefit to the community. The location of the Airport within our municipal boundaries offers convenience to users. There is some commercial traffic but this is relegated to pickup and delivery of goods. On an annual basis approximately 1000 take off's and landings occur. Approximately 30 of these commercially oriented flights. On numerous occasions air ambulances have utilized the facility for critical patient transports to larger centers.

2.1.2 HANGARS

One of the primary constraints for future development in the Plan area is the number of existing improvements. More than half of the hangars are in very close proximity to the westerly boundary. The goal of the Plan is to be mindful of the location of the existing hangars, accessory buildings, the existing taxiway and overall drainage patterns when determining the future land use directions.

Figure 3 shows existing improvements (approximate locations derived from air photos) as well as existing private driveways.

2.1.3 TAXIWAYS

Existing taxiways will not change in configuration.

2.1.4 STORMWATER POND

In 2000 a storm water retention pond was constructed on the east side of the Airport and was registered at Land Titles Office by Plan 032 6097. It was constructed to help manage flows of storm water into Wolf Creek. This storm water pond will be a permanent fixture and will therefore prohibit development to the east. It should be noted that during a 1:100 year storm event the drainage of storm water is by surface across the airport property from west to east. All development of the airport must preserve this overland drainage for in 1:100 year event.

2.1.5 TERMINAL/CLUBHOUSE

The existing terminal building also serves as a clubhouse. The present building is approximately 30 years old. Floor space is limited (750 sq. ft.) and age and standard of building finish is not up to today's expectations of a public building.

2.2 *FUTURE IMPROVEMENTS*

2.2.1 EXTENSION OF RUNWAY

Presently and in the future the need for a significant runway extension is not a priority. There is no significant benefit for runway extension given the potential cost. The usual motivator for runway extension is the need to accommodate larger aircraft. The primary user today and in the future will be the recreational flyer.

2.2.2 FUTURE DEVELOPMENT

One of the primary opportunities for future development in the Plan area is the continuing need for recreation hangar sites. Recreational flying, although expensive, seems to be the cornerstone of the Lacombe Airport. Whether this strength will continue is dependent upon how recreational flying is viewed by the next generation of potential pilots. Rising insurance premiums and changing lifestyles may have an impact on the casual aviator. If development northwards of additional hangars does occur, the Town should investigate the possibility of moving the high-pressure gas main and right of way crossing the airport.

More than half of the hangars are in very close proximity to the westerly boundary. It is not anticipated that the Airport will see exceptional growth rates in the future. Growth will be methodical and subject to the economy of the day. The long-term impact on the community will be no different than what it is today. It is conceivable that with continued residential development occurring on the west boundary of the Airport that this may cause some concerns to new residents in the area. A buffer on the west boundary of the airport could be created with the creation of residential units constructed on the airport property with attached hangar. This development would cater to the avid aviator who is comfortable with living at the airport and the types activities and noise that might bother others.

The creation of commercial businesses was examined and it was determined that there was a need for a qualified aviation mechanic. The location of this business would not be a major concern since it would be hangar based. The committee felt it was highly unlikely that other forms of commercial business would locate to Lacombe given the greater commercial orientation of the Red Deer Airport.

With no need to increase the runway length presently and in the future, the size of aircraft presently using the Airport will remain constant. The only potential area for complaint from the public would be from a considerable rise in air traffic volumes. This considerable increase in air traffic seems unlikely.

2.2.3 UTILITY SERVICING

For the Plan area it is anticipated that development of the hangar area to the north of the existing hangars will proceed east from Brownstone Drive, then north. The Town's sanitary sewage system has been extended north along Brownstone/Terrace Heights Drive to accommodate gravity flow from the residential growth areas of Terrace Heights and College Heights. Sewer service may be tied to this main line to the new terminal building as required. Water services will be assisted by the provision of a feeder main in the same roadway. Current wells will be closed and connection will be mandatory for new hangar developments if builder owners desire utility connections. Storm water from the Airport can be directed to the Airport Storm Pond, which was constructed in 2001.

2.2.4 TERMINAL BUILDING

It is anticipated that at some point in the future the need to construct a new terminal building may become a priority. The construction of the new terminal building should occur in approximately 10 years if air traffic volumes warrant. The size of the new terminal should be approximately 1,500 sq. ft. and construction cost estimate would be roughly \$150,000 in today's dollars. In the immediate future the Flying Club is looking to expand the existing terminal building by adding an additional 400 sq. ft. This will improve the flexibility of the building with space to hold meetings and other social events.








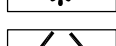


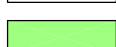

2.2.5 SITE SECURITY

Concerns have been raised about ease of access to the airfield. It is not uncommon to find unauthorized vehicles driving on the runway from time to time. In order to alleviate some potential problems a proper fence and gate should be erected on the perimeter. The quality and height of the fence should be increased when being placed on the south and west boundaries of the Airport. The south and west perimeters are closest to the traveling public and residential areas. If the main entrance of the Airport is relocated to the west boundary, the existing south entrance should be gated/secured and not accessible to the public. The move of main entrance to the west boundary would be dependent upon the construction of the new terminal building. If there is not need for a new terminal building the change in main entrance location may not be a factor. There may need to be some form of inner perimeter to prevent vehicles from easily accessing the taxiway and runway.

Town of Lacombe Airport Development Plan

Figure 2 - Future Development Concept Plan

LEGEND

-  Existing Airport Boundary
-  Airport Expansion area
-  Existing runway and taxiway
-  Existing gravel overrun area
-  Future runway and taxiway extension
-  Future gravel overrun area
-  Existing PUL used for Stormwater Pond
-  Existing Access (to become a secondary access)
-  Future Main Access
-  Hangars
-  Future Hangars
-  Facility/Service Areas

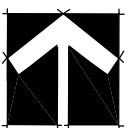
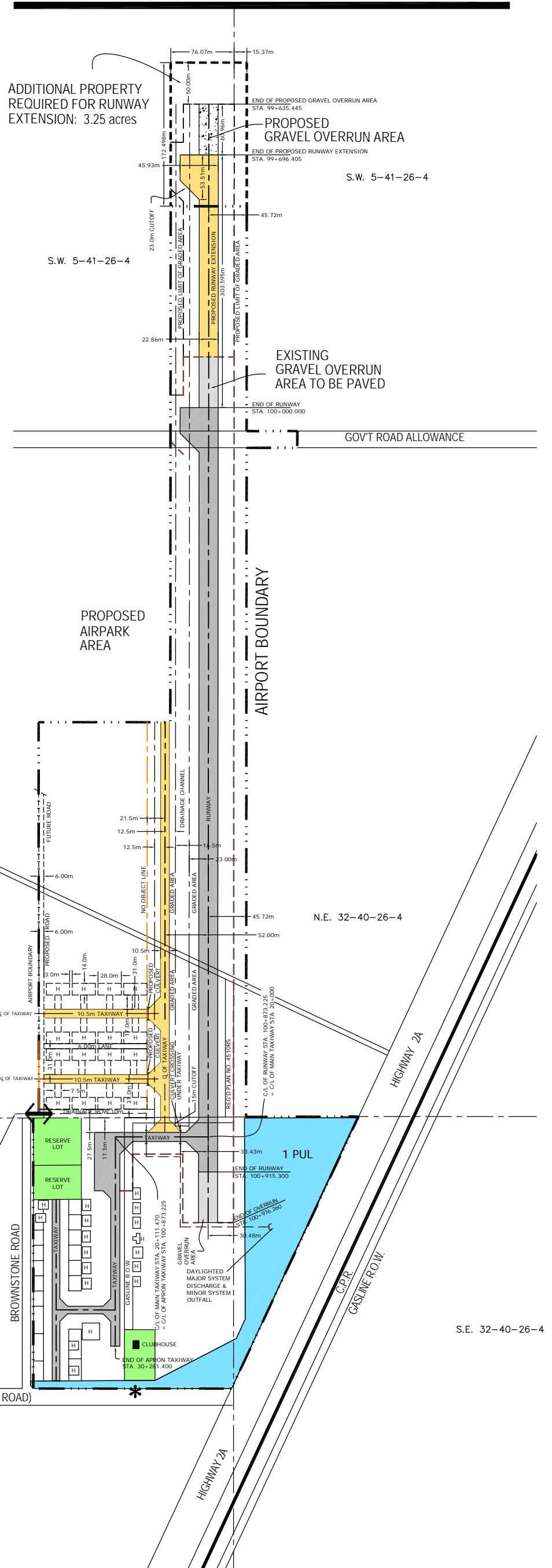
NOTES:

THE EXISTING LACOMBE AERODROME HAS BEEN CLASSIFIED AS FOLLOWS

1. WINGSPAN UP TO BUT NOT INCLUDING 24m
2. OUTER MAIN GEAR WHEEL SPAN UP TO BUT NOT INCLUDING 6m
3. AEROPLANE REFERENCE FIELD LENGTH 800m UP TO BUT NOT INCLUDING 1200m

CODE NUMBER = 2
CODE LETTER = B

THE TAXI WAY NETWORK CONFORMS TO AERODROME STANDARDS FOR A 2-B SERVICE LEVEL ONLY



SCALE: 1 : 2500
DATED: January 2004
MAPPING BY: Lacombe Planning & Development Services

Airport Development Plan

3.0 PLAN POLICIES

3.1 GENERAL

3.1.1 OBJECTIVE

To ensure that the Outline Plan and any future amendments conform to the statutory documents of the Town of Lacombe, namely the Municipal Development Plan and the North Area Structure Plan.

3.1.2 POLICIES

- 1) All subdivision and development shall conform to the following statutory documents adopted by Council:
 - (i) The Municipal Development Plan
 - (ii) The North Area Structure Plan
 - (iii) The Land Use Bylaw
- 2) No subdivision or development shall be approved that is inconsistent with the provisions contained within the *Subdivision and Development Regulations*
- 3) The Airport Vicinity Protection Area (AVPA) that were rescinded throughout the province, and that were in effect under the previous Land Use Bylaw #73 have been included in Appendix A of this document. As these regulations were removed from the current Land Use Bylaw #300, they have no effect on subdivision and development approvals, and the purpose of inclusion is to establish the effect that aviation activities has on the subject lands and adjacent lands.

3.2 FACILITY IMPROVEMENTS & OPERATION

3.2.1 OBJECTIVE

To provide for an overall approach to manage the Airport so that a budget is defined and financial support is adequate to support the maintenance of infrastructure and equipment for the life expectancy of the Airport.

3.2.2 POLICIES

- 1) Upgrades to terminal building/clubhouse

The Plan, on Figure 2, shows the existing administration/terminal building, which doubles as a clubhouse for the Lacombe Flying Club. The building is used for Flying Club meetings and as a base of operations for larger social events like the Fly In Breakfast. Upgrades to this facility are necessary and presently the club would like to expand the building's existing floor space. Expansion of the building will not be a problem and may be a benefit in extending the life of the building until such time as a new terminal building is constructed.

The future of the terminal building is to move it north of its present location to an area, which would be at the north end of the existing hangers and the south end of the new hanger area. (See Figure 2) This would trigger a move of the main entrance of the airfield from its present location off of 63rd Avenue at the south end of the airfield to the west side

of the airfield using Hanging Stone Drive. This new building would be approximately 1500 square feet. The existing terminal building could be left as is and continued to be used as the meeting area for the Flying Club.

2) Airport Operations and Status

The present operator of the Airport is the Lacombe Flying Club. Annually, the Town of Lacombe forwards to the club an amount of money equal to taxes collected from the hangars located at the airport. The Town also assists by providing insurance for Airport operations. The Town finds it advantageous that the club, maintain its role as airport operator and manager. The standards being met by the club are set by the federal government. There are two levels of standards established by the federal government for airports our size. Originally the club attempted to run at the higher "Certified" standard but found the impending equipment upgrades and operational expectations difficult. The club determined it was more practical to drop the Airport to the "Registered" standard.

The "Registered" standard requires the following

- Airport must be kept safe and meet all the specified standards required by Transport Canada
- Pilot is responsible for his/her decision to land at the Airport. This is especially critical during inclement weather conditions.
- Flying Club is responsible for maintaining the Airport and facilitating use at its own discretion rather than according to the AOM.
- Yearly audits are performed by Transport Canada to guarantee specific standards are maintained.

3) Capital Improvements for the Airport

Identified below are the capital improvement projects for the Airport. Timing for these projects is dependent upon resources. If resources are available the following timelines are desirable.

Improvement Details:	Costs	Timeline
New terminal building - 1500 square feet at \$100/sq. ft	\$150,000	2013/2014
Perimeter Fencing - 1000 meters of 6-foot chain link fence at \$10/ft.	35,000	2004/2005
Future pavement of new hangar space	75,000	2005 - 2008
Development of additional hangar areas	100,000	2005 - 2008
Lighting improvements	30,000	2005 - 2008
	Total: \$390,000	

3.3 FINANCIAL CONSIDERATIONS

Future improvements to the Airport should occur as finances permit. Sources of funding that should be considered are the Town, County, Provincial and Federal grants, Lacombe Flying Club, and community fundraising. The general operations of the airport will continue to be under the umbrella of the Lacombe Flying Club. The Town will maintain close ties to the Flying Club to ensure that airport operations are kept up to the standards of a "Registered" Airport as per the Transport Canada standards. The Town will continue to assist where able with some of the operational challenges, which may be beyond the resources of the Lacombe Flying Club.

3.4 *MARKETING & PROMOTION*

The Lacombe Airport will continue to support recreational aviation pursuits as it always has. There is no major change predicted to occur with regards to commercial aviation development. Due to Lacombe's location and size, the opportunity to grow a vibrant commercial base of businesses that are airport related is unlikely.

Promotion of the Airport to potential businesses and additional users would best be met by an effective promotional campaign spearheaded by the Economic Development Board. The committee feels that there is some real potential for growth given the additional space for hangar development. The present position of the Red Deer Airport Authority is not to actively support recreational pilots. These individuals are looking for a centralized base of operations. Lacombe offers an excellent location and plenty of land available for new hangar development. Economic development could take an active role in promoting the development of these future hangar sites, which would in turn stimulate activity at the Airport and potentially attract aviation-based businesses. There is also a need to attract an airplane mechanic to the airport, which could create positive spinoff for the present and future owners of aircraft.

3.5 *IMPLEMENTATION*

Implementation of the plan will be dependent upon funding and Town resources. Promotion of the Airport by the Economic Development Department of the Town should begin immediately. When new promotional brochures about the Town are printed, where feasible adjustments should be made to the brochures to actively promote the Airport for economic and recreational use.

3.6 *REVIEW AND AMENDMENTS*

This plan should be reviewed every three years, or at least once per elected term of Town Council.

APPENDIX 'A'
AVPA – AIRPORT VICINITY PROTECTION AREA
GUIDELINES

AVPA AIRPORT VICINITY PROTECTION AREA

(Excerpt from Land Use Bylaw No. 73 – Schedule C)

LACOMBE AIRPORT PROTECTION AREA OVERLAY DISTRICT

General Purpose :

To provide for the protection of the Lacombe Airport from development within the vicinity of the airport which, because of height, emissions into air, electronic interference or other associated hazards, may detrimentally affect the present and future operation of the airport, and

To ensure that development and land uses which may be affected the noise associated with the operation of the Lacombe Airport are not developed too close to the airport facility.

Definitions:

1. (1) In this Overlay District,
 - a) "airport" means the Lacombe Airport facility located within the Airport District as shown on Map 1.
 - b) "Airport District (A-P)" means the land use district shown in Schedule A and prescribed in Schedule C of this Bylaw and shown on Map 1.
 - c) "airport runway" means the area of land within the airport that is used or intended to be used for the take-off and landing of aircraft;
 - d) "Airport Rural Area (A-R)" means that portion of the Overlay District lying within Lacombe County and administered under the Lacombe County Land Use Bylaw
 - e) "Airport Urban Area (A-U)" means that portion of the Overlay District contained within the Town covering underlying lands not included in the Airport District (A-P), as shown on Map 1.
 - f) "airport zoning reference point elevation" means the airport zoning reference point elevation of the runway as described in Schedule 2;
 - g) "basic strip" means a basic strip as described in Schedule 2;
 - h) "electronic facilities restricted area" means the restricted area around the Non-Directional Beacon (NDB) as shown on Map 4.
 - h) "NEF" means noise exposure forecast;
 - i) "Contour" means a numbered contour as shown in Schedule 2;
 - j) "outer surface" means the outer surface as described in Schedule 2;
 - k) "Overlay District" means the Lacombe Airport Protection Area Overlay District the regulations for which are prescribed in Schedule C of this bylaw and the area of which is set out on Map 1.
 - l) "take-off/approach surface" means a take-off and approach surface as described in Schedule 2;
 - m) "transitional surface" means a transitional surface as described in Schedule 2.

- (2) For the purposes of this Overlay District, a reference to a land use, structure or development may include an accessory land use, structure or development, as the case may be.

Application of Overlay District Provisions

2. The Overlay District provisions apply to a development wholly or partly within the boundary of that portion of the Overlay District that lies within the Town of Lacombe, that being the Airport District (A-P) and Airport Urban Area (A-U). The Airport Rural Area (A-R) is administered under the Lacombe County Land Use Bylaw.

Land use Areas

3. The Overlay District is divided into the following land use areas, namely,
 - a) the Airport District (A-P)
 - b) the Airport Rural Area (A-R), and
 - c) the Airport Urban District (A-U) as shown on Map 1.
4. For the purposes of this section, one land use is substantially similar to another if, in the opinion of the development authority,
 - a) its intention is the same as that of the other,
 - b) it is no more sensitive to external noise than the other,
 - c) it does not attract birds,
 - d) it does not generate a large amount of smoke or dust, and
 - e) it does not exceed the height limitations in section 6.

Obstruction or Interference with Aeroplane Operation

5. The development authority may refuse a development permit application that may otherwise be allowed under this Bylaw, if the development has the potential to:
 - a) attract birds, or
 - b) create large amounts of smoke or dust

Noise Exposure

6. The development authority, subject to requirements set out elsewhere in this Bylaw, shall issue a development permit for a development that involves a land use that is designated "P" in Table 1 or is substantially similar to such a land use.
7. The development authority, subject to requirements set out elsewhere in this Bylaw, may issue a development permit for a development that involves a land use that is designated "C" followed by a number in Table 1 or is substantially similar to such a land use.
8. The development authority shall not issue a development permit for a development that involves a land use that

- a) is designated "NA" in Table 1 or is substantially similar to such a land use, or
- b) is not listed in Table 1

Height limitations

9. The development authority may issue a development permit for a development if no point of the development will exceed the height of any of the following surfaces:

- a) the take-off/approach surfaces;
- b) the transitional surfaces.

as defined in Schedule 2 and set out on Map 3.

10. For the purposes of section 8,

- a) if the development is a railway, the highest point of the development shall be deemed to be 6 metres higher than the actual height of the rails, and
- b) if the development is a highway or public roadway, the highest point of the development shall be deemed to be 4.5 metres higher than the actual height of the part of the highway or public roadway on which vehicles travel.

Electronic facilities

11. The development authority may refuse a development application if

- a) the development will exceed the maximum height limitations indicated in Map 4, or
- b) the development may have the potential to interfere electronically with the operation of the non-directional beacon (NDB), or

12. The development authority shall refuse a development application for any development proposed within the NDB restricted area shown on Map 4

13. For the purposes of section 11

- a) if the location of a development lies between 2 numbered contours shown in Map 4, the maximum height limitation applicable to the development is the height limitation represented by the lower of the 2 numbered contours, or
- b) if the location of a development lies between a numbered contour and the boundary of the protection area shown in Map 4, the maximum height limitation applicable to the development is the height limitation represented by the numbered contour.

Schedules, Maps and Tables As Part of Bylaw

14. Schedules 1 and 2, Table 1 and Maps 1,2,3 and 4 are attached to and form part of this Overlay District

SCHEDULE 1
Lacombe Airport Protection Area Overlay District
Land Use in Relation to Noise Exposure Forecast Areas

1 In this Schedule,

- a) "C" followed by a number, where it appears in one of the NEF area columns in Table 1 opposite a particular land use, means that the land use is subject to the conditions set out in Clause 3 below bearing the same letter and number;
- b) "NA", where it appears in one of the NEF area columns in Table 1 opposite a particular land use, means that the land use is not allowed in that NEF area;
- c) "NEF 25- Area" means the NEF area that lies between the 25 NEF Contour and the boundary of the protection area;
- d) "NEF 25-30 Area" means the NEF area that lies between the 25 NEF Contour and the 30 NEF Contour;
- e) "NEF 30-35 Area" means the NEF area that lies between the 30 NEF Contour and the 35 NEF Contour;
- f) "NEF 35-40 Area" means the NEF area that lies between the 35 NEF Contour and the 40 NEF Contour;
- g) "NEF 40+ Area" means the NEF area enclosed by the 40 NEF Contour;
- h) "P", where it appears in one of the NEF area columns in Table 1 opposite a particular land use, means that the land use in that NEF area is unconditionally permitted by this Regulation;
- i) "residential replacement or infill" means a new residential development that does not exceed the intensity of use designated for the site in the land use by-law of the municipal corporation before the coming into force of this Regulation and
 - i) that will replace a residential development that has been demolished or destroyed, or
 - ii) that is to be built on a lot that, before the coming into force of this Regulation, is
 - (A) registered under the Land Titles Act, and
 - (B) designated for residential development in a statutory plan.

2 Developments existing before the coming into force of this Overlay District shall be deemed to comply with the exterior acoustic insulation requirements set out in this Schedule.

3. In this Schedule, the following land use conditions apply as indicated on Table 1

"C1" Construction shall conform to the exterior acoustic insulation requirements of Part 11 of the Alberta Building Regulation, 1985 (Alta. Reg. 186/85) or successor regulations, for those NEF areas other than the NEF <25 Area unless otherwise stated in this Bylaw. Where this condition is specified, the development officer shall indicate on the development permit the noise contours between which the proposed development site would be located for reference of the building inspector at the time of the building permit application.

"C2" Development Approval is discretionary and may be given if the Development Authority is satisfied that the use and development proposed is appropriate. A referral to Transport Canada, Alberta Transportation and Utilities, other aviation authorities or expertise may be required.

"C3" The development shall not include structures for the seating of spectators except as varied to allow seating that, in the opinion of the Development Authority, is of a minor nature.















4. In this Schedule, the following performance criteria used to determine permitted, conditional or prohibited land uses shall apply as indicated in Table 1
 - 1) Uses that involve continuous human occupancy (e.g. residential use)
 -  conditional approval (C1) above the 25 NEF Contour
 -  not permitted above the 30 NEF Contour
 - 2) Uses that involve continuous human occupancy but comprise residential replacement or infill
 -  conditional approval (C1) above the 25 NEF Contour
 - 3) Uses that involve temporary medium term human occupancy where the majority of people occupy the space for an 8-hour work period (employee oriented) (e.g. commercial/office uses, restaurants and hotels)
 -  conditional approval (C1) above the 30 NEF Contour
 -  not permitted above the 40 NEF Contour
 - 4) Uses that involve temporary short term human occupancy where the majority of people occupy the space temporarily (customer oriented) (e.g. drive-in restaurants, vehicle and equipment sales)
 -  not permitted above the 40 NEF Contour
 - 5) Uses that involve the indoor assembly of people(e.g. clubs, fraternal organizations)
 -  conditional approval (C1) above the 30 NEF Contour
 -  not permitted above the 40 NEF Contour
 - 6) Uses that involve outdoor recreation
 -  conditional approval (C3) above the 30 NEF Contour
 - 7) Uses that involve outdoor accommodation (e.g. camping, R.V. trailer park)
 -  not permitted above the 35 NEF Contour
 - 8) Uses that may attract birds or produce large quantities of smoke, dust or both
 -  referral required (C2)
 - 9) Uses that, because of their nature, are not adversely affected by external noise due to limited or no human occupancy or sufficient internal noise generation
 -  permitted
 - 10) Uses that may be adversely affected by external noise, but do not involve human occupancy (e.g. kennel, fur farm)
 -  referral required (C2) above the 25 NEF Contour
 - 11) Other uses require specific determination of noise compatibility
 -  referral required (C2)

Table 1
Land Uses that are Permitted, Discretionary or Not Allowed
In Noise Exposure Forecast Areas

Airport District (A-P)

Within the Lacombe Airport Protection Area Overlay District on underlying lands included in Airport District (A-P), the following provisions apply:

Land Use	Performance Criteria	Noise Exposure Forecast Areas					
		NEF <25 Area	NEF 25-30 Area	NEF 30-35 Area	NEF 35-40 Area	NEF >40 Area	
Airport related uses	9		P	P	P	P	P
Farming	9		P	P	P	P	P

Airport Rural Area (A-R)

The Airport Rural Area (A-R) refers to that portion of Lacombe Airport Protection Area Overlay District lying within Lacombe County and administered under the Lacombe County Land Use Bylaw

Land Use	Performance Criteria	Noise Exposure Forecast Areas				
		NEF <25 Area	NEF 25-30 Area	NEF 30-35 Area	NEF 35-40 Area	NEF >40 Area
Agricultural						
- Farm building	9P	P	P	P	P	
- Farming	9P	P	P	P	P	
- Feedmill	8C2	C2	C2	C2	C2	
- Grain elevators	8C2	C2	C2	C2	C2	
- Intensive agriculture	8C2	C2	C2	C2	C2	
- Sales & service outlet for farm equipment	4P	P	P	P	NA	
- Seed cleaning plant	8C2	C2	C2	C2	C2	
- Sod farm	9P	P	P	P	P	
- Other	11	C2	C2	C2	C2	C2
Auto wreckers	9P	P	P	P	P	
Chemical products plant	8C2	C2	C2	C2	C2	
Clinic, medical & health services	3P	P	C1	C1	NA	
Coal, gravel & sand workings	8C2	C2	C2	C2	C2	
Convenience, grocery store	4P	P	P	P	NA	
Equipment & machinery storage	9P	P	P	P	P	
Kennel	10	P	C2	C2	C2	C2
Light industrial						
- Office or laboratory	3P	P	C1	C1	NA	
- Other	9P	P	P	P	P	
Manufacturing of asphalt	8C2	C2	C2	C2	C2	
Mobile home	1P	C1	NA	NA	NA	
Motel, hotel	3P	P	C1	C1	NA	

Land Use	Performance Criteria	Noise Exposure Forecast Areas				
		NEF <25 Area	NEF 25-30 Area	NEF 30-35 Area	NEF 35-40 Area	NEF >40 Area
Oil & gas plant & uses ancillary to the oil & gas industry	8C2	C2	C2	C2	C2	
Outdoor Recreation						
- Campgrounds	7P	P	P	NA	NA	
- Golf course	6P	P	C3	C3	C3	
- Playgrounds	6P	P	C3	C3	C3	
- Public park	6P	P	C3	C3	C3	
- R.V. parking facility	7P	P	P	NA	NA	
- Riding stable	10	P	C2	C2	C2	C2
- Other	11	C2	C2	C2	C2	C2
Propane sales	9P	P	P	P	P	
Public & quasi-public						
- Arenas	5P	P	C1	C1	NA	
- Cemetery	9P	P	P	P	P	
- Church	5P	P	C1	C1	NA	
- Colleges	3P	P	C1	C1	NA	
- Community centre	5P	P	C1	C1	NA	
- Hospital & nursing home	1P	C1	NA	NA	NA	
- Library	3P	P	C1	C1	NA	
- School	3P	P	C1	C1	NA	
- Sewage lagoon, treatment plant	8C2	C2	C2	C2	C2	
- Swimming pool	5P	P	C1	C1	NA	
- Thermal electric plant	8C2	C2	C2	C2	C2	
- Waste disposal transfer sites & incinerators	8C2	C2	C2	C2	C2	
- Water reservoir, treatment plant	8C2	C2	C2	C2	C2	
- Other	11	C2	C2	C2	C2	C2
Radio, TV or other communication towers	9P	P	P	P	P	
Railway lines	9P	P	P	P	P	
Ready mix concrete plant	8C2	C2	C2	C2	C2	
Residential	1P	C1	NA	NA	NA	
Residential infill & replacement	2P	C1	C1	C1	C1	
Restaurant	3P	P	C1	C1	NA	
Riding stable	10	P	C2	C2	C2	C2
Service stations	4P	P	P	P	NA	
Taverns, beverage rooms & cocktail lounges	3P	P	C1	C1	NA	

Airport Urban District (A-U)

Within the Lacombe Airport Protection Area Overlay District on underlying lands not included in Airport District (A-P), the following provisions apply:

Land Use	Performance Criteria	Noise Exposure Forecast Areas				
		NEF 25- Area	NEF 25-30 Area	NEF 30-35 Area	NEF 35-40 Area	NEF 40+ Area
Auto wrecking yards	9P	P	P	P	P	
Cartage & freight terminals	9P	P	P	P	P	
Clinic, medical, health services	3P	P	C1	C1	NA	
Commercial recreation & entertainment facilities						
- Campgrounds	7P	P	P	NA	NA	
- Drive-in theatres	4P	P	P	P	NA	
- Golf course	6P	P	C3	C3	C3	
- R.V. parking facility	7P	P	P	NA	NA	
- Taverns, beverage rooms & cocktail lounges	3P	P	C1	C1	NA	
- Other	11	C2	C2	C2	C2	C2
Day care	3P	P	C1	C1	NA	
District shopping centres	3P	P	C1	C1	NA	
Drive-in businesses	4P	P	P	P	NA	
Extraction of non-renewable resources						
- Gravel & sand pit	8C2	C2	C2	C2	C2	
- Oil & gas plant	8C2	C2	C2	C2	C2	
- Mechanized excavation, stripping & grading	8C2	C2	C2	C2	C2	
- Other	11	C2	C2	C2	C2	C2
Farming	9P	P	P	P	P	
Feed mills & grain elevators	8C2	C2	C2	C2	C2	
Funeral homes	4P	P	P	P	NA	
Heavy equipment assembly, sales & service	4P	P	P	P	NA	
Heavy manufacturing						
- Chemical products plant	8C2	C2	C2	C2	C2	
- Manufacturing of asphalt	8C2	C2	C2	C2	C2	
- Ready mix concrete plant	8C2	C2	C2	C2	C2	
- Other	11	C2	C2	C2	C2	C2
Kennel	10	P	C2	C2	C2	C2
Light manufacturing						
- Office or laboratory	3P	P	C1	C1	NA	
- Other	11	C2	C2	C2	C2	C2
Livestock auction markets	8C2	C2	C2	C2	C2	
Mobile home park	1P	C1	NA	NA	NA	
Mobile homes	1P	C1	NA	NA	NA	
Neighbourhood convenience & grocery stores	4P	P	P	P	NA	
Open storage yards	9P	P	P	P	P	

Land Use		Performance Criteria	Noise Exposure Forecast Areas				
Area	Area		NEF 25- Area	NEF 25-30 Area	NEF 30-35	NEF 35-40	NEF 40+
Parking facilities		9P	P	P	P	P	
Public & quasi-public							
- Arenas		5P	P	C1	C1	NA	
- Campgrounds		7P	P	P	NA	NA	
- Church		5P	P	C1	C1	NA	
- Community centre		5P	P	C1	C1	NA	
- Golf course		6P	P	C3	C3	C3	
- Hospital & nursing home		1P	C1	NA	NA	NA	
- Library		3P	P	C1	C1	NA	
- Public parks & playground		6P	P	C3	C3	C3	
- School		3P	P	C1	C1	NA	
- Swimming pools		5P	P	C1	C1	NA	
- Other		11	C2	C2	C2	C2	C2
Repair services		4P	P	P	P	NA	
Residential		1P	C1	NA	NA	NA	
Residential infill & replacement		2P	C1	C1	C1	C1	
Sales & service outlets for autos, trucks, recreation vehicles & mobile homes		4P	P	P	P	NA	
Sales & service outlets for farm equipment		4P	P	P	P	NA	
Seed cleaning plant		8C2	C2	C2	C2	C2	
Services for travelling public							
- Motel & hotel		3P	P	C1	C1	NA	
- Restaurant		3P	P	C1	C1	NA	
- Service stations		4P	P	P	P	NA	
- Other		11	C2	C2	C2	C2	C2
Signs		9P	P	P	P	P	
Temporary mobile commercial sales		4	P	P	P	P	NA
Utilities							
- Municipal shop & storage yard		9P	P	P			
- Offices		3	P	P	C1	C1	NA
- Public incinerator		8	C2	C2	C2	C2	C2
- Sanitary landfill site		8	C2	C2	C2	C2	C2
- Sewage treatment plant		8	C2	C2	C2	C2	C2
- Solid waste transfer station		8	C2	C2	C2	C2	C2
- Thermal electric plant		8	C2	C2	C2	C2	C2
- Water reservoir		8	C2	C2	C2	C2	C2
- Other		11	C2	C2	C2	C2	C2
Veterinary clinic		10	P	C2	C2	C2	C2
Veterinary hospital		10	P	C2	C2	C2	C2
Warehousing		9	P	P	P	P	P

SCHEDULE 2
Lacombe Airport Protection Area Overlay District
Height Limitations

Basic strip

1. The basic strip is a rectangular area measured 60 metres out from each end of the runway, 45 metres on each side of the centre line of the runway and with a total length of 1034 metres.

Take-off/Approach surfaces

2. There are take-off/approach surfaces abutting and extending out from each end of the basic strip and in each case the surface is an imaginary surface consisting of an inclined plane
 - a) the commencement of which coincides with the end of the basic strip,
 - b) that rises at a slope ratio of 1:30 measured from the end of the basic strip,
 - c) that diverges outward on each side as it rises, at a rate of 10% measured from the respective projected sides of the basic strip, and
 - d) that ends at its intersection with the outer surface.

Transitional surfaces

3. There is a transitional surface associated with each side of the basic strip, and in each case the transitional surface is an imaginary surface consisting of an inclined plane that
 - a) commences at and abuts the sides of the basic strip,
 - b) rises at a slope ratio of 1:7 from an elevation at the centre point of the runway opposite the proposed development, and measured from the sides of the basic strip, and
 - c) ends at its intersection with the outer surface and the take-off/approach surfaces.

Airport zoning reference point elevation

4. The airport zoning reference point elevation is the elevation used to establish the height of outer surface and for the purpose of this Bylaw is deemed to be 844.9 metres above sea level.

Outer surface

5. The outer surface of the protection area is an imaginary common plane established at a constant elevation of 45 metres above the airport zoning reference point elevation and extending to the boundary of the overlay district

General

6. The area locations of the take-off/approach surfaces and transitional surfaces are represented as shown on Map 3, but if any discrepancy exists between the description of the take-off/approach surfaces or transitional surfaces in this Schedule and their location on Map 3, the description in this Schedule prevails.

AIRPORT DISTRICT (A-P)

General Purpose:	To provide an area for the operation of an airport
Permitted Uses:	Uses relating to the operation of an airport including runways, taxiways, aircraft parking areas, navigation equipment and lights Terminal and Passenger Facilities Aircraft hangars Accessory Uses
Discretionary Uses:	Fuel Storage and Dispensing Equipment Residential dwelling unit for operator, caretaker or facility supervisor
Minimum Front Yard:	9.14 m (30 ft.)
Minimum Side Yard:	3.05 m (10 ft.)
Maximum Building Height:	6.10 (20 ft.) or less where required
Supplementary Regulations:	All uses must comply with the regulations in Schedule B and in the Lacombe Airport Protection Area Overlay District

FLOOD RISK AREA REGULATIONS DISTRICT

Definitions

"Flood Risk Area" shall mean the area of land below the 1 in 100 year flood elevation along the Wolf Creek as shown on the Flood Risk Map.

"One (1) in One Hundred (100) Year Flood Elevation" shall mean the water level reached during a flood which has a one percent (1%) probability of being equalled or exceeded in any year as determined in accordance with technical criteria established for the Canada-Alberta Flood Damage Reduction Program.

"Floodway" shall mean that portion of the Flood Risk Area which contains the stream channel and adjacent areas of the floodplain where the flood waters are deepest, fastest and most destructive.

"Flood Fringe" shall mean that portion of the floodplain between the Floodway and the outer boundary of the Flood Risk Area.

"Flood proofing", with respect to new structure, building or building extension, shall mean a design, manner of construction or siting thereof for the purpose of preventing damage by floods of a specified magnitude.

Development Restrictions

1. Notwithstanding any other provision of this by-law, a permitted use for a site that is located in the Flood Risk Area shall be deemed a discretionary use.
2. A development permit application for a site that is partially or wholly located in a Flood Risk Area shall be subject to the following:
 - a) Development within the Floodway shall be restricted to the following
 - i) structures and associated works for flood control
 - ii) public utilities, including bridges and pedestrian walkways that do not obstruct the flow
 - iii) public parks and outdoor recreational land uses that do not obstruct the flow
 - iv) agricultural land uses which do not obstruct the flow
 - v) replacement of an existing structure or building on the same foundation
 - b) New development within the Flood Fringe shall be subject to the following requirements:
 - (i) development shall be restricted to buildings or structures which can be adequately protected to minimize potential flood damage,
 - (ii) the first floor and all mechanical and electrical installations within any structures or buildings shall be a minimum of 0.5 metres above the 1:100 year flood elevation,
 - (iii) buildings shall have no habitable floor space developed below the 1:100 year flood elevation.
 - c) The applicant must provide information on the grade elevations of the proposed building site, the Building, as well as the building openings and mechanical or electrical equipment all referenced to Geodetic elevations.

FLOOD RISK AREA REGULATIONS DISTRICT

3. Before a development permit is issued, the Development Officer may require that the applicant provide a certificate containing the seal and signature of a registered Professional Engineer or Architect indicating that the requirements listed under a) to c) have been met, and that the building or structure is adequately protected against flood damage to the 1:100 year flood elevation.

Floodway - Acceptable Land Uses

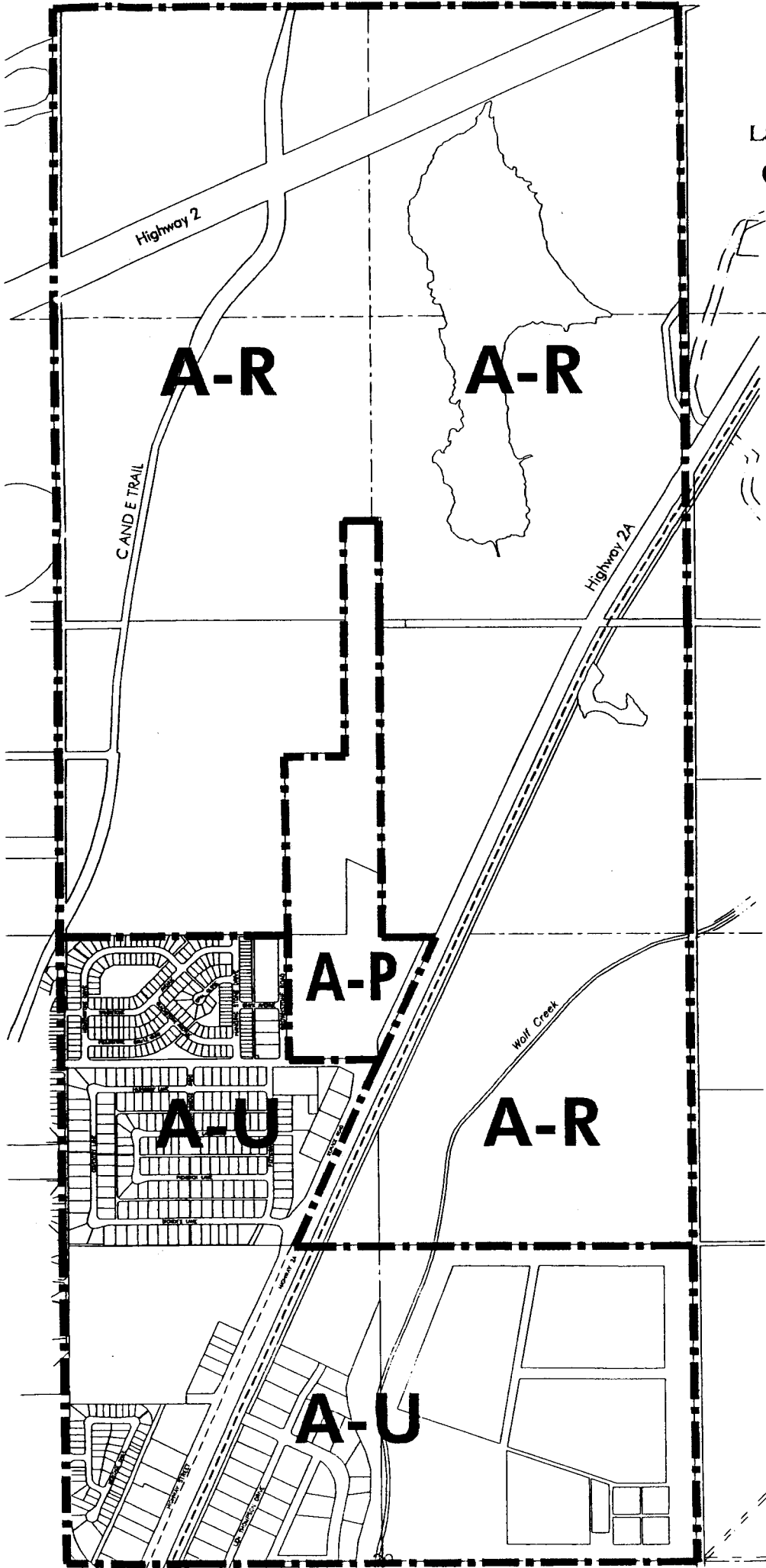
Land use in the floodway has to be of non-obstructing nature. The main objective of the Flood Damage Reduction Program (FDRP) is to maintain the capacity of the floodway so that the design flood can be safely passed. Acceptable land uses:

1. Temporary structure for agriculture use.
2. Parks and Recreation - parks, playgrounds, campgrounds, golf courses, open air buildings (Picnic shelters, band shells, etc.), structural facilities for recreational use that are flood proofed and present minimal obstruction to flow.
3. Roads and parking facilities
4. Bike and ski trails and related facilities
5. Road and pedestrian bridges
6. Structures and associated works for flood control
7. Flora and fauna preservation areas
8. Boat and canoe launching sites
9. Horticultural nurseries and botanical gardens
10. Public utilities adjacent to and across the water course, pumping station inlets and outfalls.

As the situation of each floodway is unique, a detailed review by Alberta Environmental Protection may be required to determine the suitability of proposed developments. The above, therefore, is only a general guideline.

Lacombe Airport Protection Area
OVERLAY DISTRICT

Land Use Districts
Map 1



 Overlay District boundary

A-P Airport District

A-U Airport Urban District

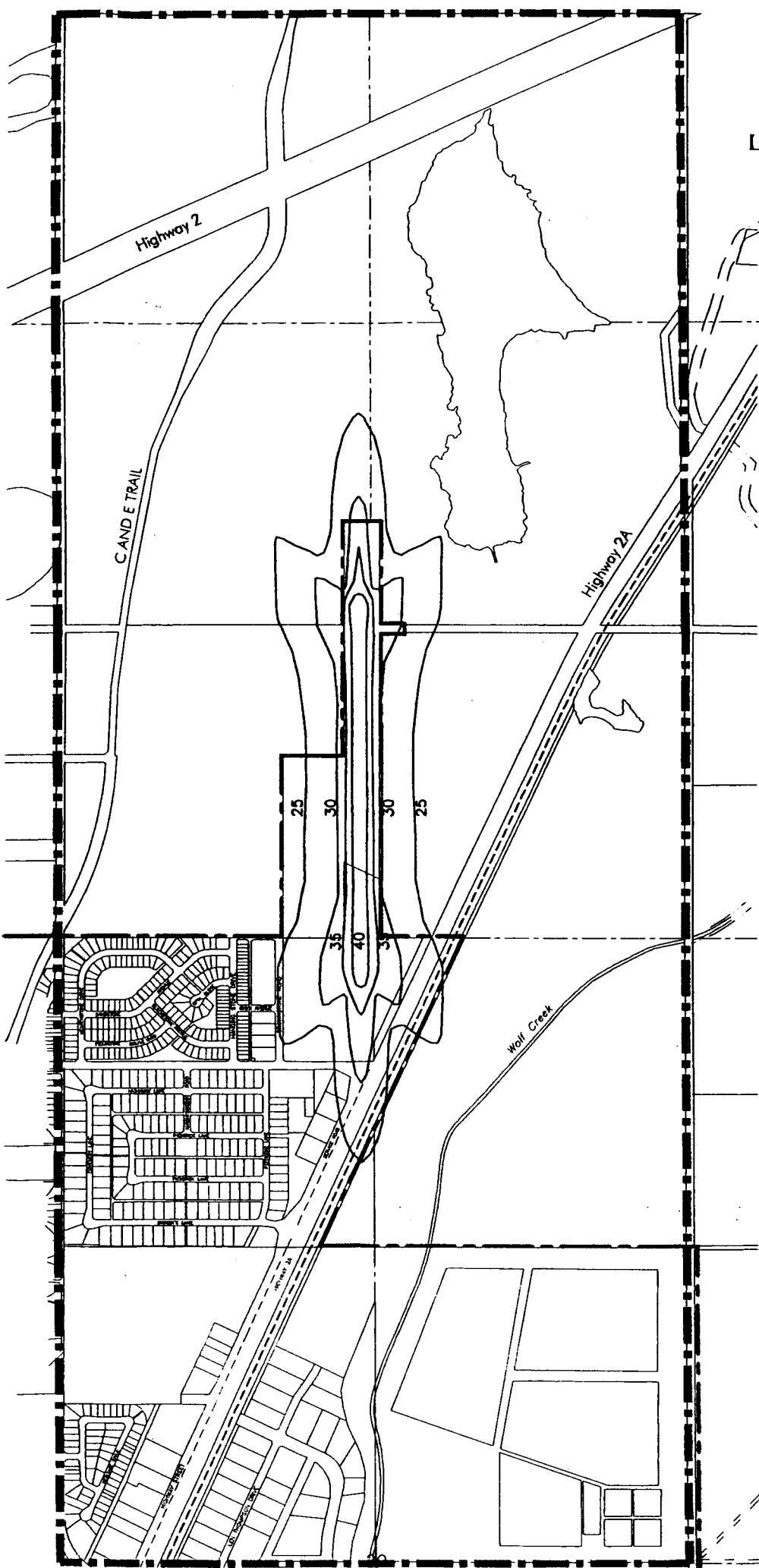
A-R Airport Rural District




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Lacombe Airport Protection Area OVERLAY DISTRICT

Noise Exposure Forecast Contours Map 2



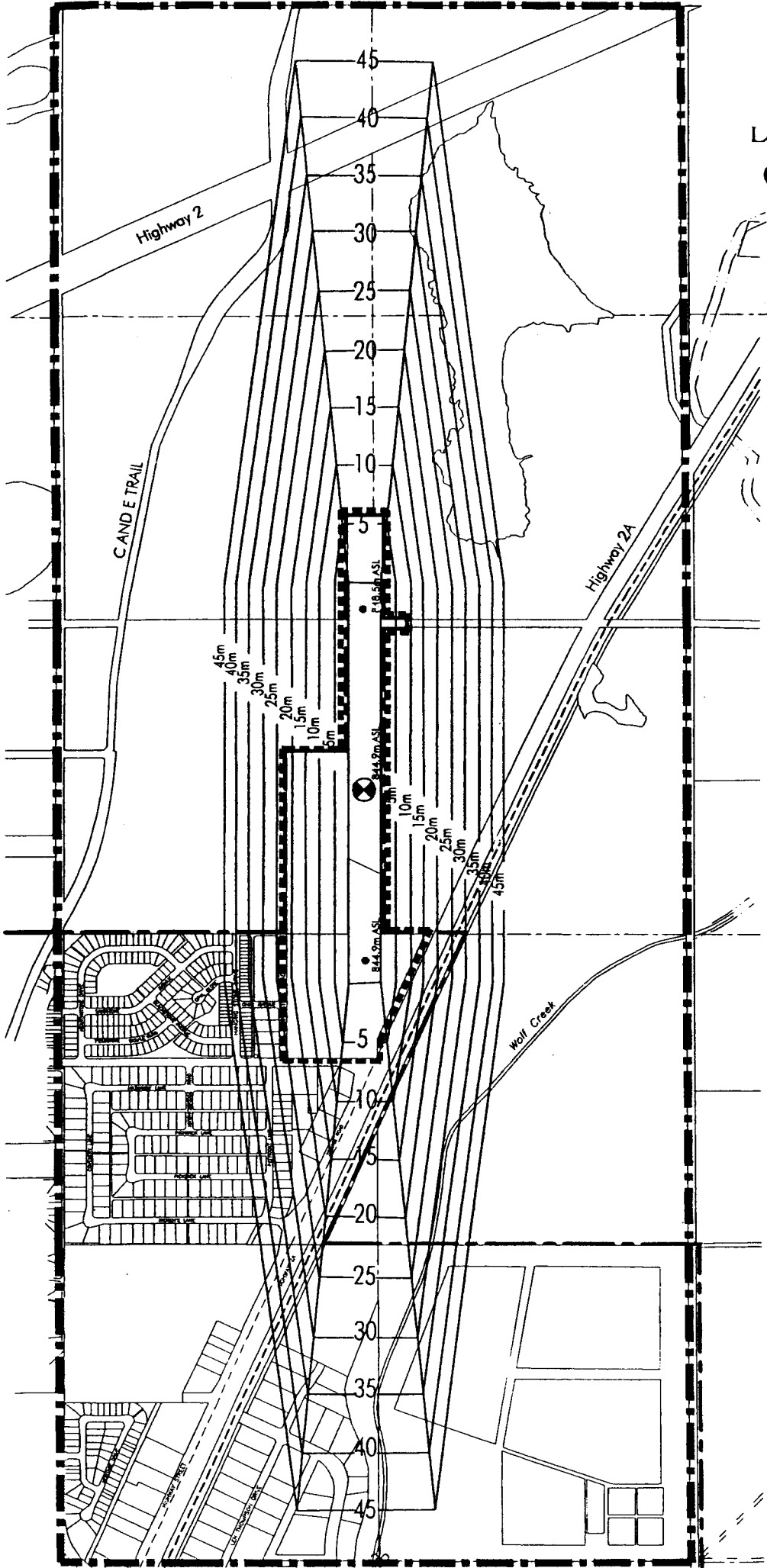
-  Overlay District boundary
-  Municipal boundary
-  NEF Contours

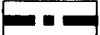

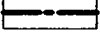

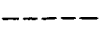


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Lacombe Airport Protection Area OVERLAY DISTRICT

Height Limitations Contours Map 3



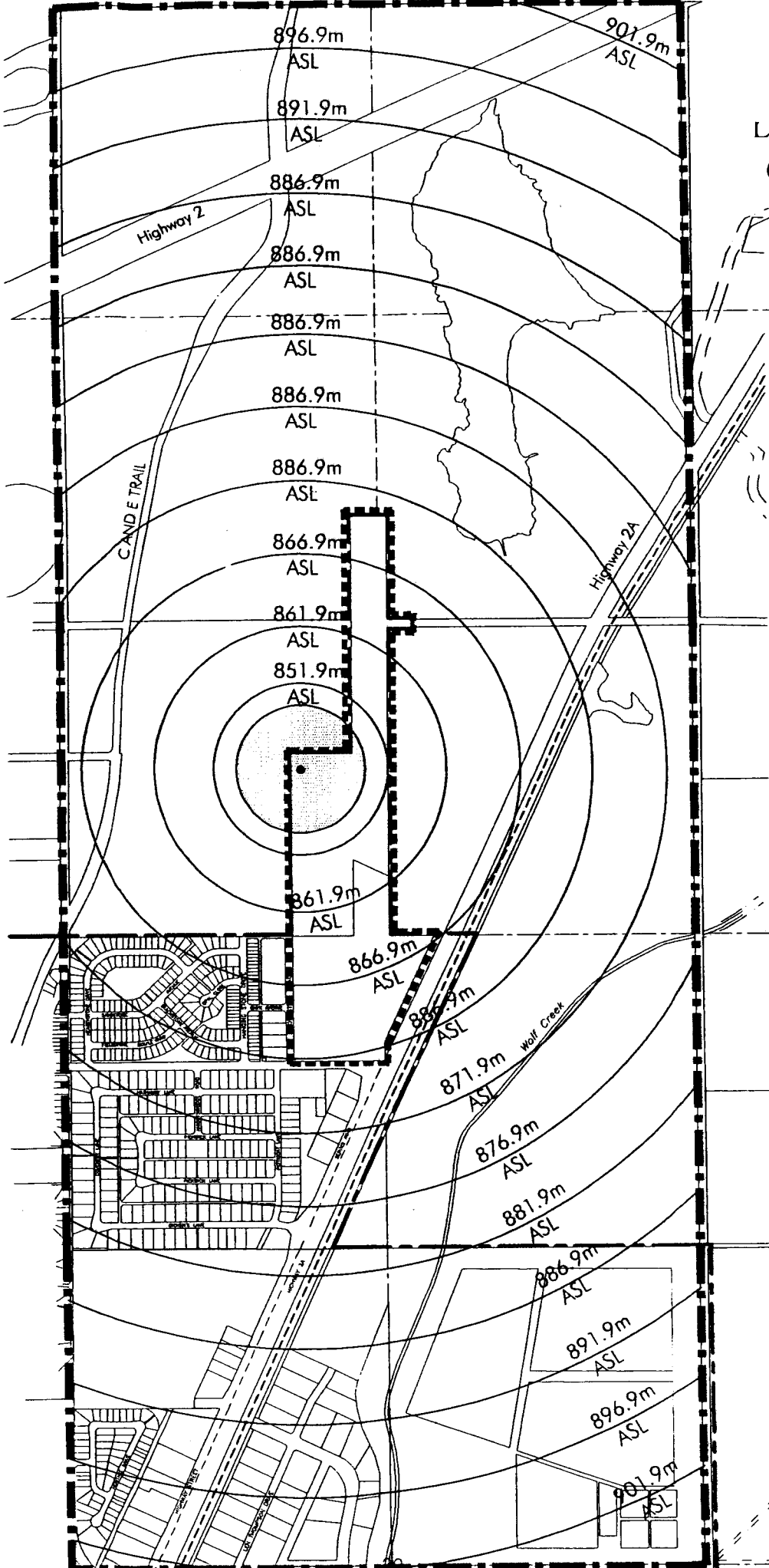
-  Overlay District boundary
-  Airport property boundary
-  Municipal boundary
-  20m Height Limitation Contour
-  Basic Strip
-  Airport Zoning Reference Point Elevation (844.9 metres ASL)
-  End of runway elevation







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Lacombe Airport Protection Area OVERLAY DISTRICT

Electronic Facilities Protection Map 4



-  Overlay District boundary
-  Airport property boundary
-  Municipal boundary
-  NDB Location
-  NDB Restricted Area
-  Height Limitation Contour
(5 metre interval commencing at centre point of NDB Location)

SCALE 1:15,000

