

JUNE  
2023



WHEATLAND COUNTY  
**DE HAVILLAND FIELD  
AREA CONCEPT PLAN**

Revised on  
**JUNE 2023**

Submitted to  
**WHEATLAND COUNTY**

Prepared by  
**B&A**



De Havilland Field is a once in a lifetime opportunity to build a new aerospace industry in Southern Alberta. It will be strategically located within the heart of Wheatland County along Highway 1. The main anchor of De Havilland Field will be De Havilland Aircraft of Canada Ltd. De Havilland will create a comprehensive array of aerospace facilities including manufacturing, aircraft assembly, maintenance and repair, logistics and customer support. The facilities will be supported by a dynamic office campus and an aerodrome that will accommodate the delivery of completed aircraft. The aviation business park and aerodrome will be purposefully designed to attract and cluster a broad range of aviation supply chain partners, other aviation aerospace companies, and related spin offs. De Havilland Field will support technological innovation, employment, and economic diversification in Alberta's aviation industry.





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SUBMITTED TO:



PREPARED BY:



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## + VISION & PRINCIPLES

### 1.1 INTRODUCTION

The De Havilland Field Area Concept Plan (ACP) comprises 631.0 hectares (1,559.2 acres) of land located in the western portion of Wheatland County, along Highway 1 and between the Town of Strathmore and the City of Chestermere. It is intended that the Plan Area accommodates an aircraft manufacturing facility and an associated business park made up of industrial and commercial uses. The ACP was prepared to guide the development of the Plan Area by providing direction on the future land uses, transportation network and servicing. This ACP is subsidiary to Wheatland County's Municipal Development Plan and the West Highway 1 Area Structure Plan (ASP).

### 1.2 VISION

De Havilland Field is a once in a lifetime opportunity to build a new aerospace industry in Southern Alberta. It will be strategically located within the heart of Wheatland County along Highway 1. The main anchor of De Havilland Field will be De Havilland Aircraft of Canada Ltd. De Havilland will create a comprehensive array of aerospace facilities including manufacturing, aircraft assembly, maintenance and repair, logistics and customer support. The facilities will be supported by a dynamic office campus and an aerodrome that will accommodate the delivery of completed aircraft. The aviation business park and aerodrome will be purposefully designed to attract and cluster a broad range of aviation supply chain partners, other aviation aerospace companies, and related spin offs. De Havilland field will support technological innovation, employment, and economic diversification in Alberta's aviation industry.

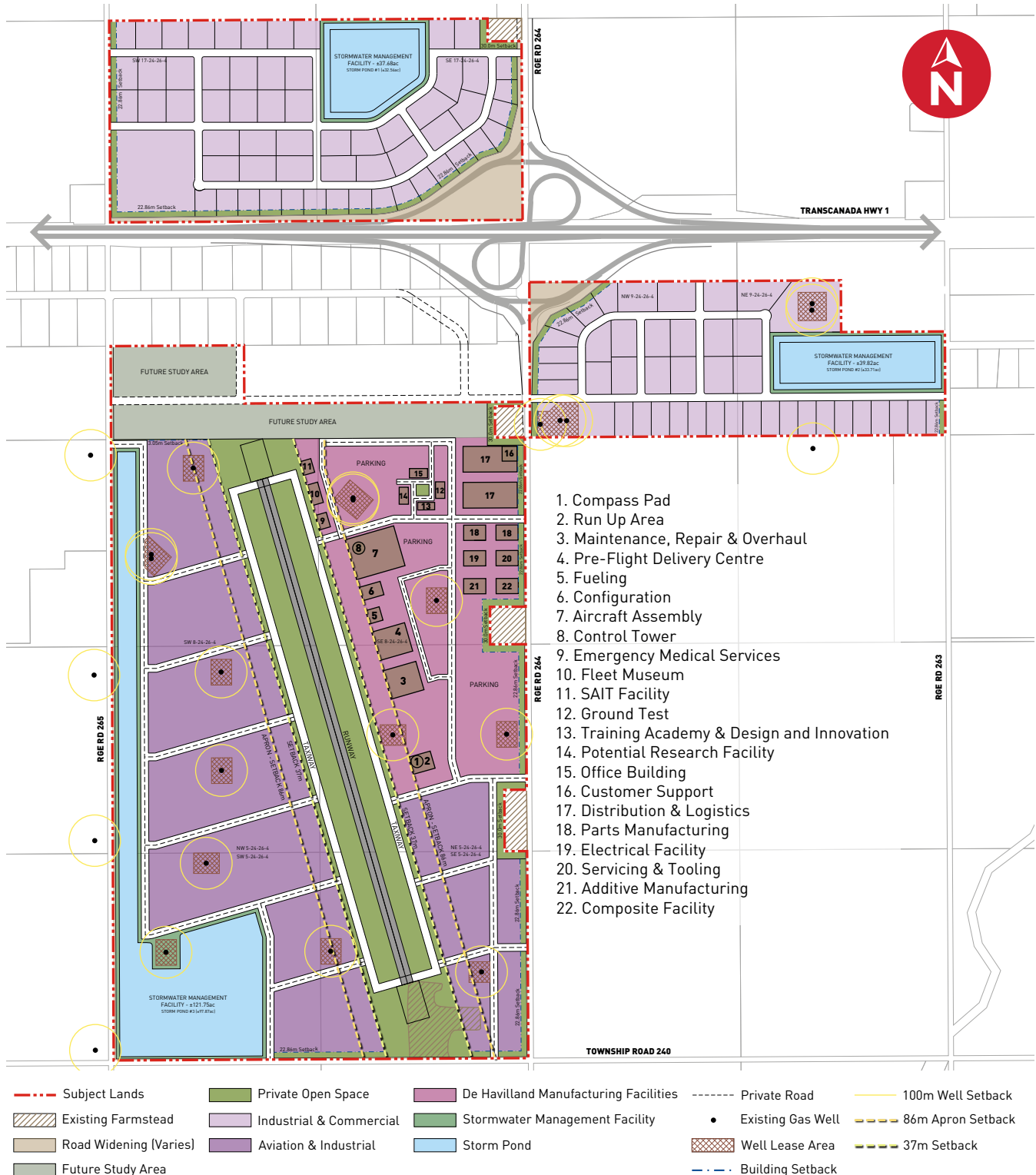
### 1.3 PRINCIPLES

The following principles provided a foundation for the preparation of the De Havilland Field Area Concept Plan:

- + **Synergies:** The business park design will generate synergies and networking opportunities between the various aviation, industrial and commercial uses and De Havilland's various business industries.
- + **Sensitive Design:** The business park will be built in a manner that is respectful of its surrounding context by incorporating design features that mitigates impacts on neighbours while establishing a prominent presence along adjacent roads.
- + **Efficiency:** The road network will offer multiple routes to move vehicles efficiently through the business park while establishing safe connections with the surrounding road system.
- + **Servicing:** De Havilland Field will be a fully serviced business park that incorporates reliable water, sanitary and stormwater systems that ensures the continuous operation of commerce.



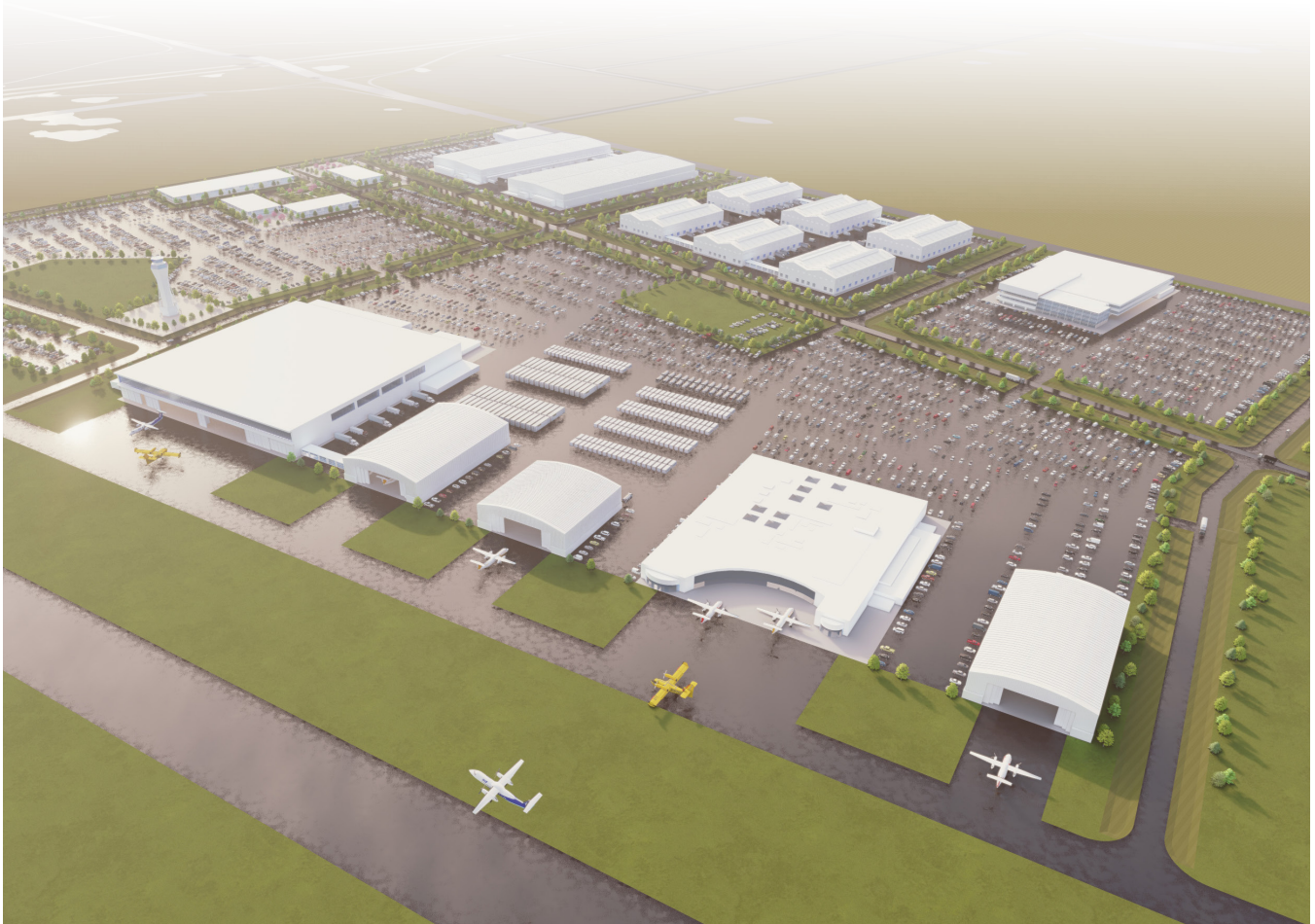
FIGURE 1: CONCEPT PLAN



## + CONTEXT

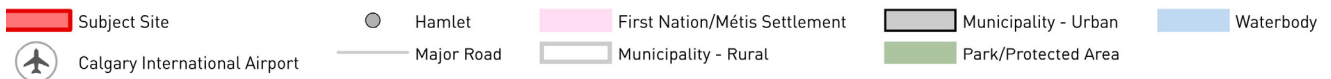
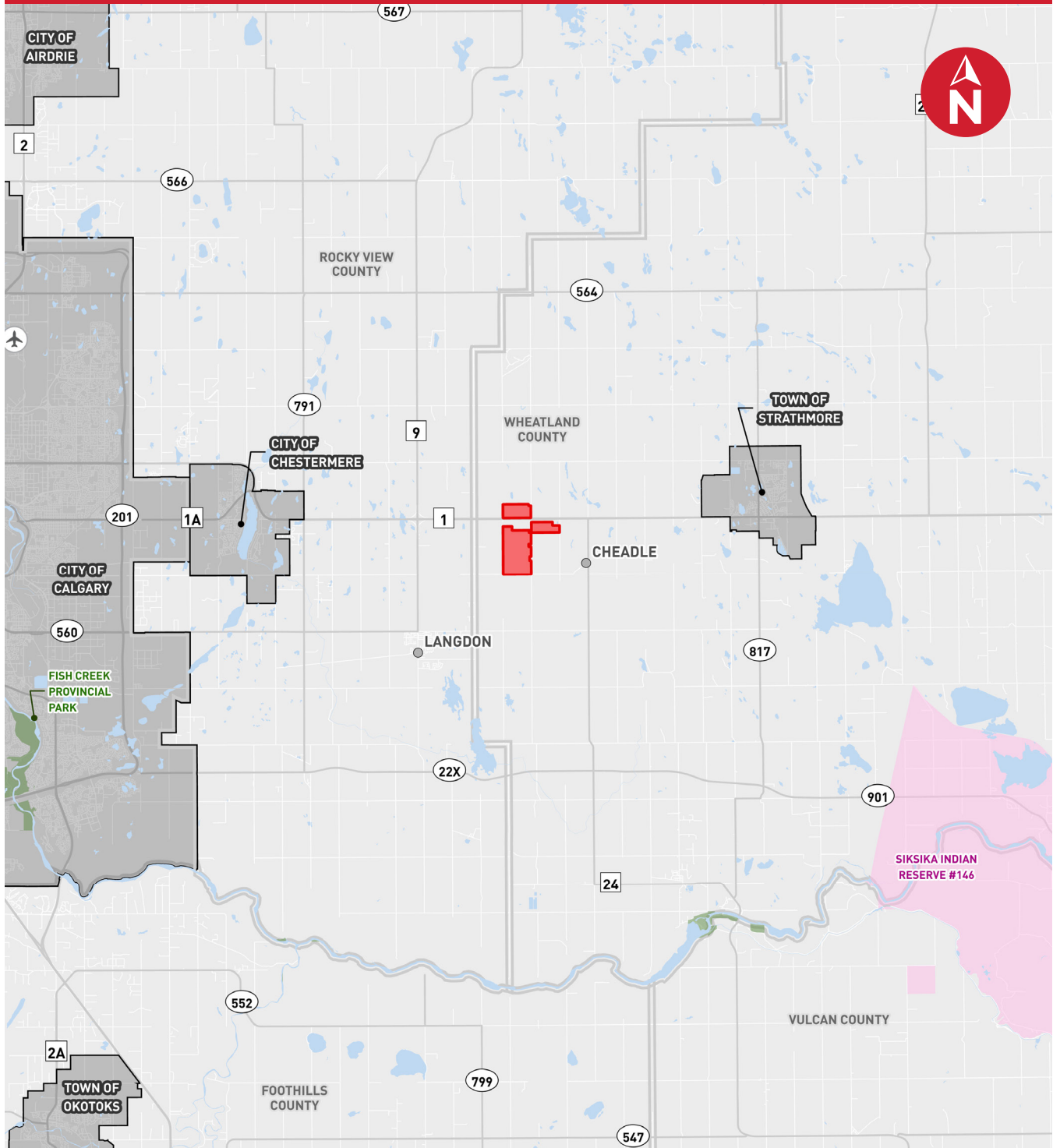
### 2.1 LOCATION

The Plan Area is in the western portion of Wheatland County. The Town of Strathmore is approximately 11 kilometres to the east, the City of Chestermere is approximately 13 kilometres to the west and the Hamlet of Cheadle is 8 kilometres to the southeast. Other nearby jurisdictions include Rocky View County to the west and the Siksika First Nation which is 37 km to the southeast. In terms of transportation routes, Highway 1 bisects the subject site east-west while Highway 797 is to the west and Highway 24 is to the east.





**FIGURE 2: LOCATION**



## 2.2 SITE DESCRIPTION

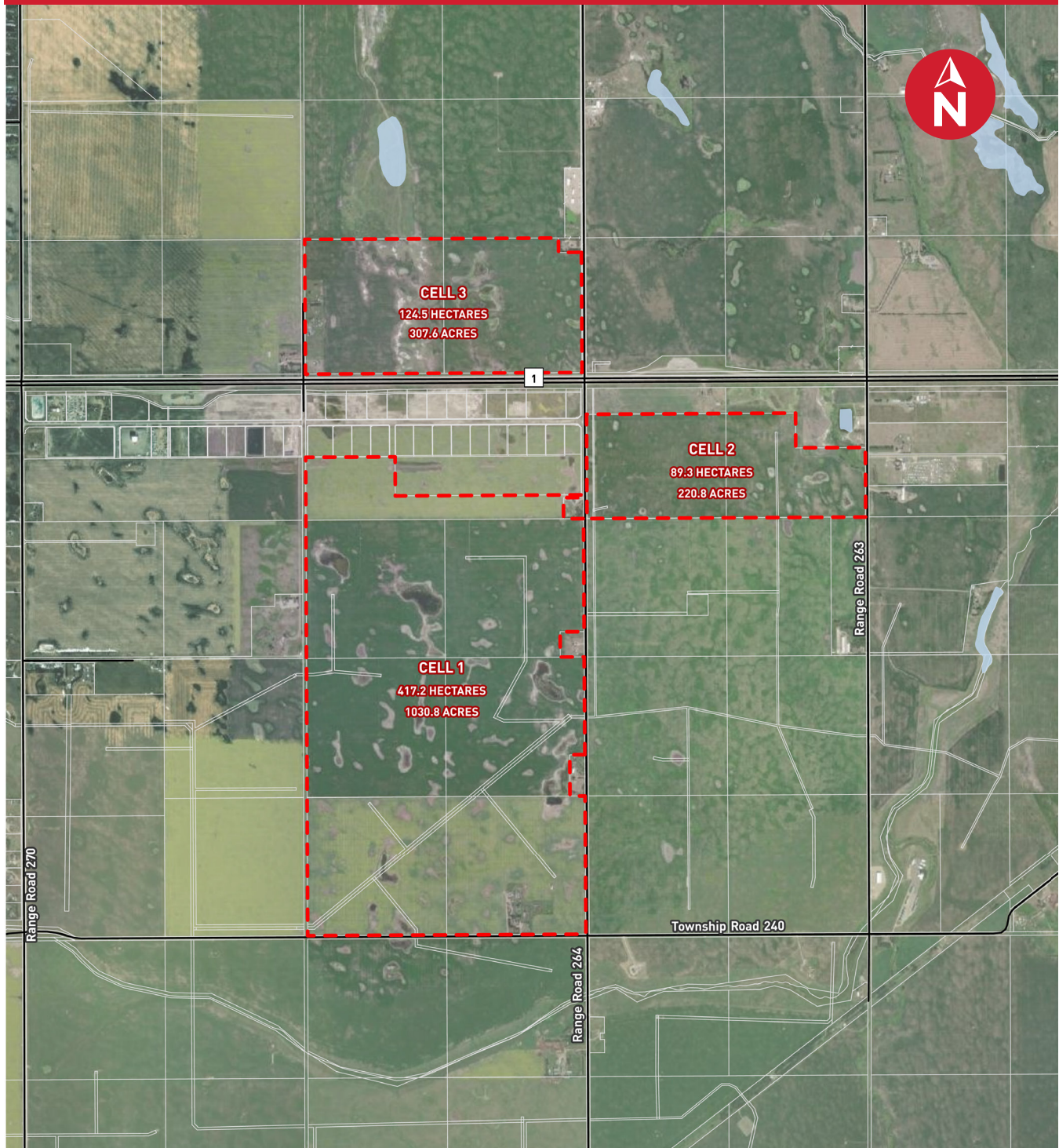
The Plan Area contains approximately 631.0 hectares (1,559.2 acres) and consists of three development cells located on the north and south sides of Highway 1. The following provides the legal description and size of each of the parcels within each cell:

TABLE 1: LEGAL DESCRIPTION		
Property Description	Area	
	ha	ac
Cell 1	417.2	1030.8
SW 8-24-26 W4M	64.8	160.0
SE 8-24-26 W4M	62.7	154.9
NW 5-24-26 W4M	64.8	160.0
NE 5-24-26 W4M	62.7	154.9
SW 5-24-26 W4M	64.8	160.2
SE 5-24-26 W4M	64.8	160.2
Block 3, Plan 0112375	32.5	80.3
Cell 2	89.3	220.8
NW 9-24-26 W4M	48.7	120.4
NE 9-24-26 W4M	40.6	100.3
Cell 3	124.5	307.6
SW 17-24-26 W4M	63.0	155.8
SE 17-24-26 W4M	61.5	151.9

Note: Areas are as per the land title and subject to change upon confirmation at subdivision.



FIGURE 3: PARCEL BOUNDARIES

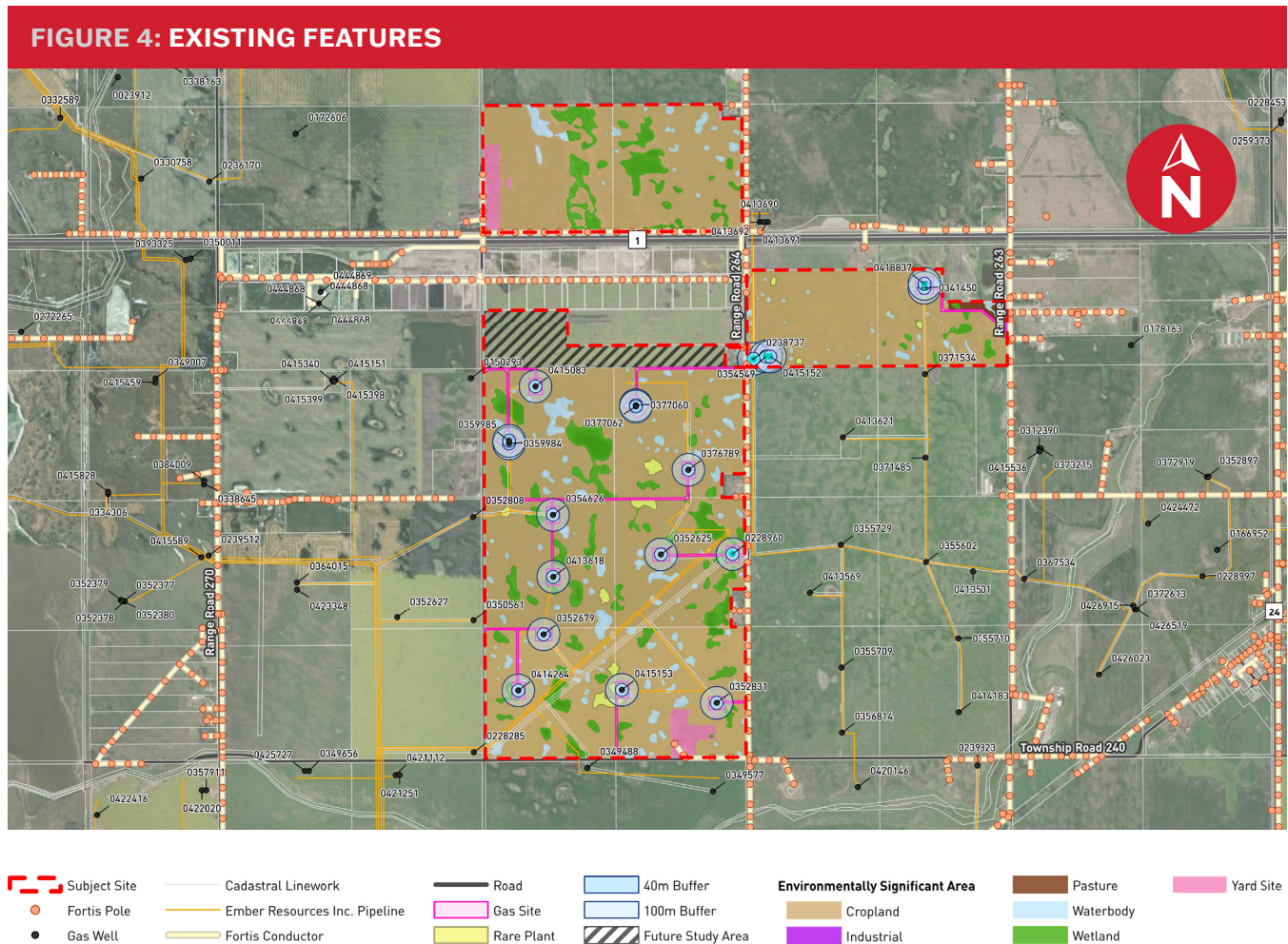


Subject Site    
 Cadastral Linework    
 Road    
 Waterbody



## 2.3 EXISTING CONDITIONS/FEATURES

The Plan Area consists of cultivated agricultural land with intermittent watercourses, ephemeral waterbodies and marshes distributed throughout. A gently rolling topography characterizes the Plan Area with the land sloping down predominantly west to east. Within the Plan boundaries, there are nineteen active gas wells. In addition to the gas wells, there are sixteen high pressure natural gas pipelines situated within the Plan Area. An existing residence is located within Cell 1 and a yard site is within Cell 3.



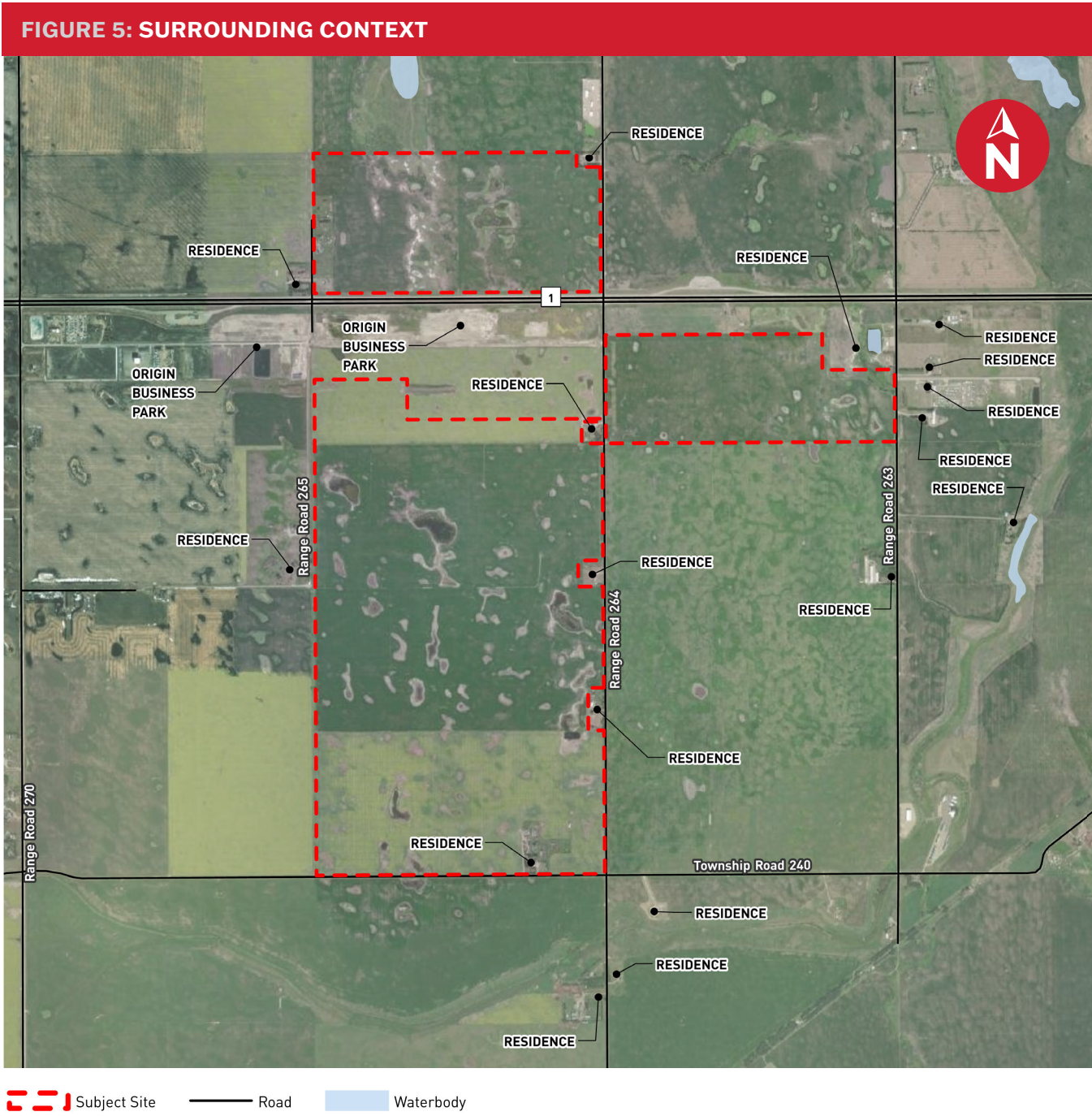
## 2.4 SURROUNDING CONTEXT

A variety of external uses surrounding the subject site. Cell 1 is bound by Range Road 264 to the east, Township Road 240 to the south and Range Road 265 to the west. One residence is located to the west and three residences are located to the east. The surrounding area is mainly comprised of agricultural lands with the existing Origin Business Park located to the north.



Cell 2 is bound by Range Road 263 to the east and by Range Road 264 to the west. A residence is located to the northeast and another residence is located to the west while the existing Origin Business Park is located northwest of the cell. To the north and south are lands being used for agricultural purposes.

Cell 3 is bounded by Range Road 264 to the east, Highway 1 to the south and Range Road 265 to the west. A residence is located northeast and another is located to the southwest of the cell. The lands to the north, west and east are mainly used for agricultural purposes. South and across Highway 1 is the existing Origin Business Park.



# 2.5 POLICY CONTEXT

The Wheatland County Municipal Development Plan and the West Highway 1 Area Structure Plan establish a policy framework for the Plan Area. Outside of policy, the Wheatland County Land Use Bylaw regulates development of the Plan Area. The following identifies the policy direction and requirements of each document with respect to the development of the Plan Area.

## Wheatland County Municipal Development Plan

The Wheatland County Municipal Development Plan (MDP) is a policy document adopted by Wheatland County Council that provides general direction for growth over the next 30 years. The MDP recognizes the benefits of commercial and industrial development and has identified designated areas for such development. The West Highway 1 Area Structure Plan (ASP) is a designated area for commercial and industrial development due to its site-specific suitability.

FIGURE 6: WHEATLAND COUNTY MUNICIPAL DEVELOPMENT PLAN



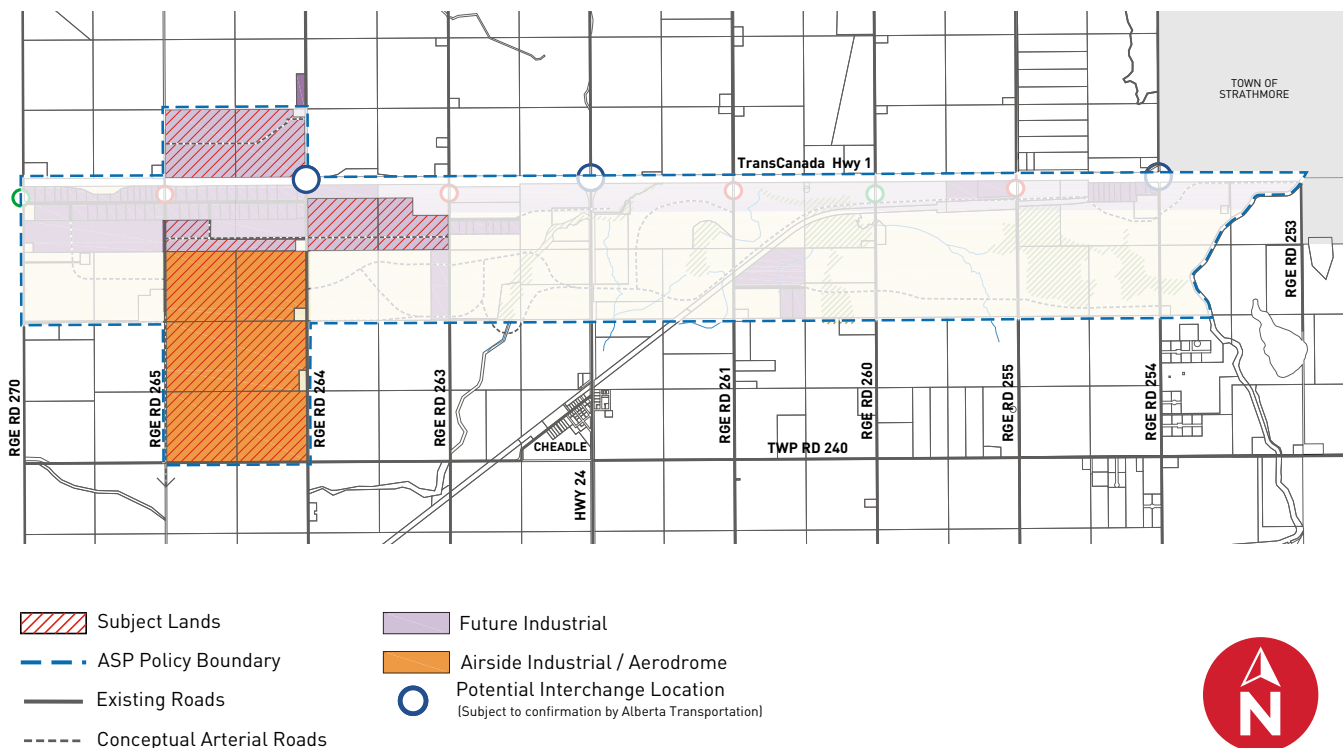
## West Highway 1 Area Structure Plan

The West Highway 1 Area Structure Plan (ASP) provides a framework for the future subdivision and development of lands in Wheatland County along Highway 1 between Rocky View County and the Town of Strathmore. The Plan Area is bounded to the north by Highway 1, to the west by Rocky View County and to the east by the Western Irrigation District canal. The Plan Area extends south of Highway 1 by approximately 1.6 kilometres. Portions of the Area Concept Plan are identified as:

- + Potential Development Area;
- + Potential Development Areas with Access Constraints; and
- + Conceptual Arterial Road Options.

The remainder of Area Concept Plan is outside of the current ASP boundary. The ASP needs to be amended to incorporate the entirety of the Area Concept Plan as illustrated in Figure 7.

**FIGURE 7: PROPOSED WEST HIGHWAY 1 AREA STRUCTURE PLAN AMENDMENT**



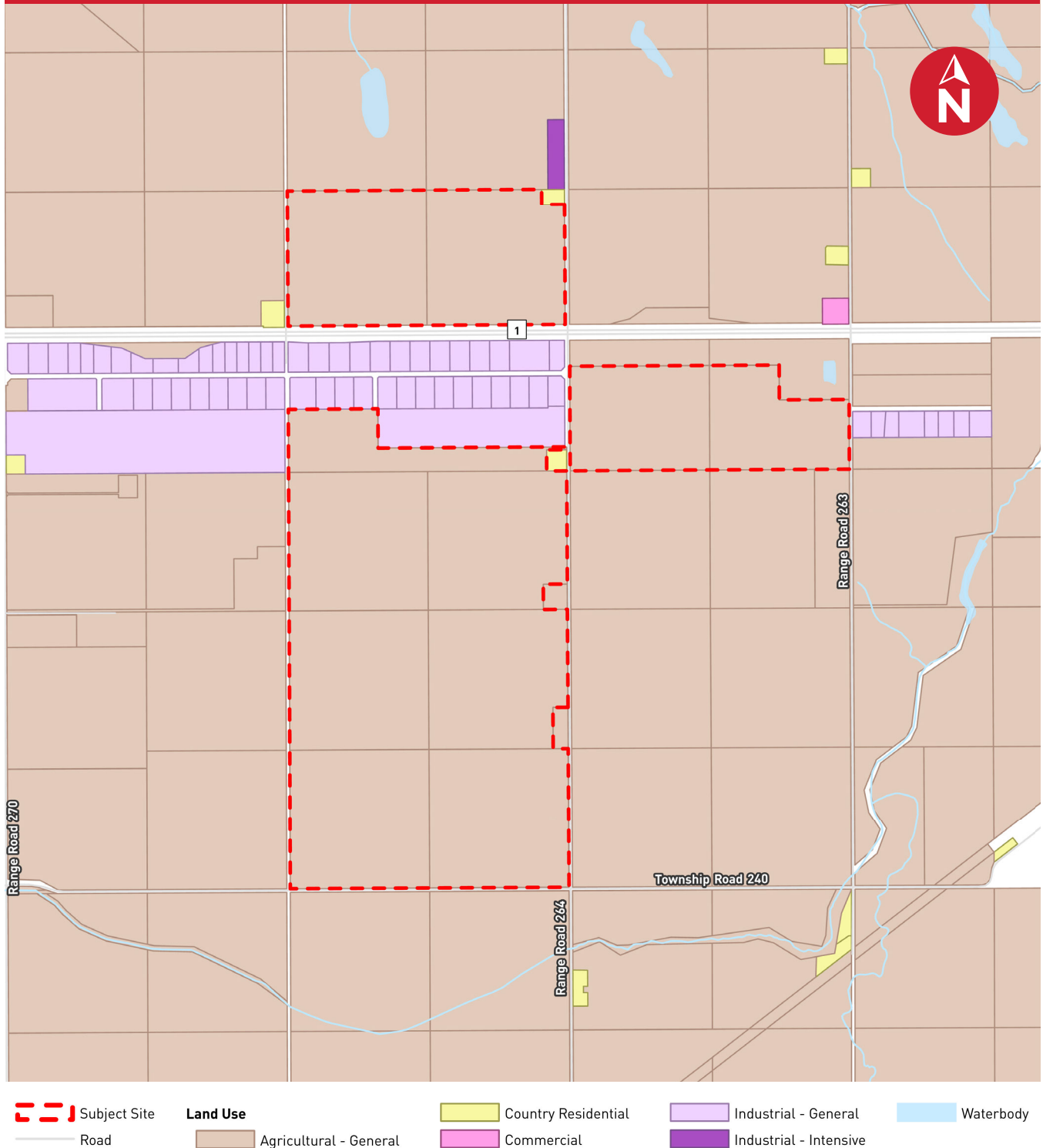


## 2.6 EXISTING LAND USE CONTEXT

The Plan Area is currently designated Agricultural General District (AG) under the Wheatland County Land Use Bylaw. The purpose of the district is to promote and accommodate agricultural land and preserve the agrarian character of the County. The district allows for a variety of agricultural activities as well as supportive uses. Industrial development is not allowed under this district.



FIGURE 8: EXISTING LAND USE DISTRICTS



## + DEVELOPMENT FRAMEWORK

The Plan Area has been divided into three development cells that group compatible and complementary land uses together. Access to all three development cells will be provided from Range Road 264, Township Road 240, and undeveloped Range Road 265 after it is constructed.

Each cell includes multiple phases of development. The first phase is to establish the first portion of the aerodrome and supporting stormwater infrastructure. Phase 2 - 3 will see the completion of the aerodrome and the commencement of the business park. The final phases will witness the full build-out of the development including all stormwater management facilities.

### 3.1 CELL 1

The main anchor of Cell 1 will be De Havilland Aircraft company of Canada. De Havilland will create a comprehensive array of aerospace facilities including manufacturing, aircraft assembly, maintenance and repair, logistics and customer support. The facilities will be supported by a dynamic office campus and an aerodrome that will accommodate the delivery of completed aircraft. The aviation business park and aerodrome will be purposefully designed to attract and cluster a broad range of aviation supply chain partners, other aviation aerospace companies, and related spin offs.

The layout of Cell 1 is mainly governed by the length and orientation required for the safe landing and takeoff of critical aircraft. Variables that determine the length of the runway are the type of aircraft where larger aircraft typically require a longer runway. The orientation is determined by average wind speed, wind direction and type of aircraft where smaller aircraft are less tolerant to crosswinds. An aviation consultant determined that, after considering these variables, a runway length of 2,041 metres (6,698 feet) and an NNW-SSE orientation was optimal for the aircraft that De Havilland intends to land and takeoff from the site. The result is that the airfield divides Cell 1 into two halves. De Havilland Aircraft of Canada Limited is anticipated to be located in the northeast portion of the cell. Other aviation aerospace companies will be situated in the southeast and west portions of Cell 1 where they can take advantage of access to the runway. The lots within Cell 1 are anticipated to be larger in size with their own private internal road networks with access to Range Roads 264 and 265 and Township Road 240. The private roads will be maintained by either the landowner or a condominium corporation. Responsibility for maintaining the private roads will be determined at subdivision. The northern portion of Cell 1 (Block 3, Plan 0112375) is identified as a Future Study Area.

Development in Cell 1 is anticipated to be constructed in a minimum of 4 phases (see Figure 17, Phasing) to ensure that development proceeds in a logical manner and to allow for incremental construction of infrastructure. Phase 1 is expected to contain the De Havilland manufacturing facility, the northern half of the runway and two stormwater management ponds.



### 3.2 CELL 2

Cell 2 will accommodate uses that need less exposure to Highway 1 but closer proximity to the aviation components found in Cell 1. Similar to Cell 3, uses within Cell 2 are anticipated to include offices, warehouses, manufactures and distributors. Commercial uses such as gas stations, convenience stores, hotels and restaurants should also be anticipated closer to Highway 1. It is expected that the cell will be divided mainly into smaller industrial lots ranging in size from 0.8 ha to 1.6 ha (2 ac to 4 ac) with the odd larger lot to accommodate larger uses. The cell is to be divided into a semi-grid system of streets with access to Range Road 263 and 264.

Cell 2 consists of 3 phases, which will develop based on market demand and the timing of development within Cell 1.

### 3.3 CELL 3

Cell 3 is well situated to accommodate businesses requiring exposure to the Highway 1 as well as a quick connection to aviation uses to the south via a future overpass. Uses within Cell 3 are anticipated to mainly include offices, warehouses, manufactures and distributors. Commercial uses such as gas stations, convenience stores, hotels and restaurants should also be anticipated, especially adjacent to Highway 1.

It is expected that the cell will be divided mainly into smaller industrial lots ranging in size 0.8 ha to 1.6 ha (2 ac to 4 ac) with the odd lot being larger in size. The cell is to be divided into a semi-grid system of streets with access to Range Roads 264 and 265.

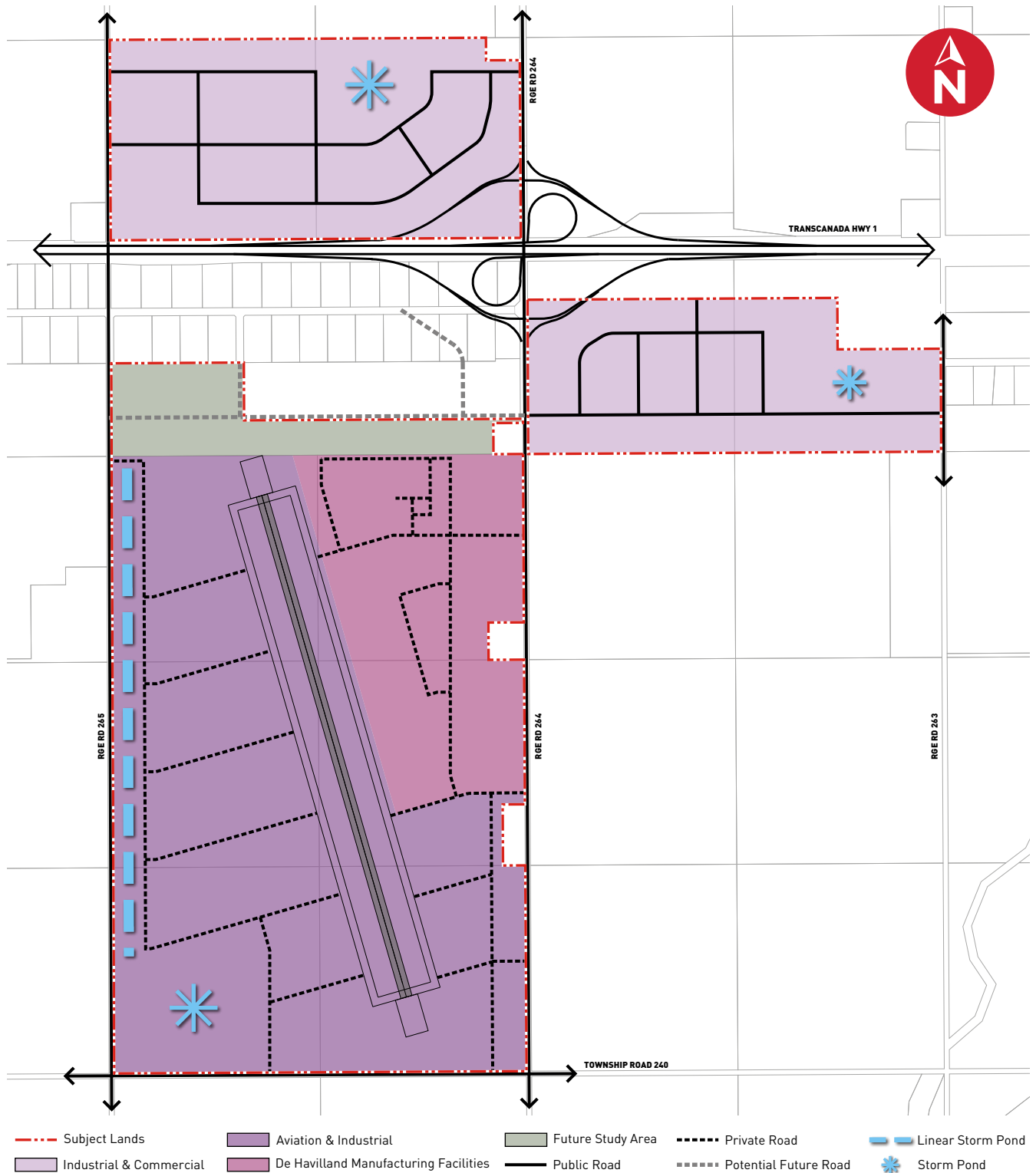
Cell 3 consists of two phases with the timing of development to be determined.

**Policy 3.3.1:** Subdivision and development should comply with the Development Framework - Figure 9 recognizing that this figure is intended to show the anticipated block pattern and land uses. Minor deviations from the anticipated block pattern and land uses may be accepted by the Approving Authority without an amendment to this Plan. Where a subdivision or development permit application proposes a major deviation from Figure 9, an amendment to this Plan should be required.

**Policy 3.3.2:** Municipal Reserve dedication and/or cash-in-lieu of Municipal Reserve dedication shall be provided in accordance with Section 666 of the Municipal Government Act.

**Policy 3.3.3:** The phasing of development for each cell should proceed as identified in Section 7.0 and shown on Figure 17.

**FIGURE 9: DEVELOPMENT FRAMEWORK**



## + LAND USES

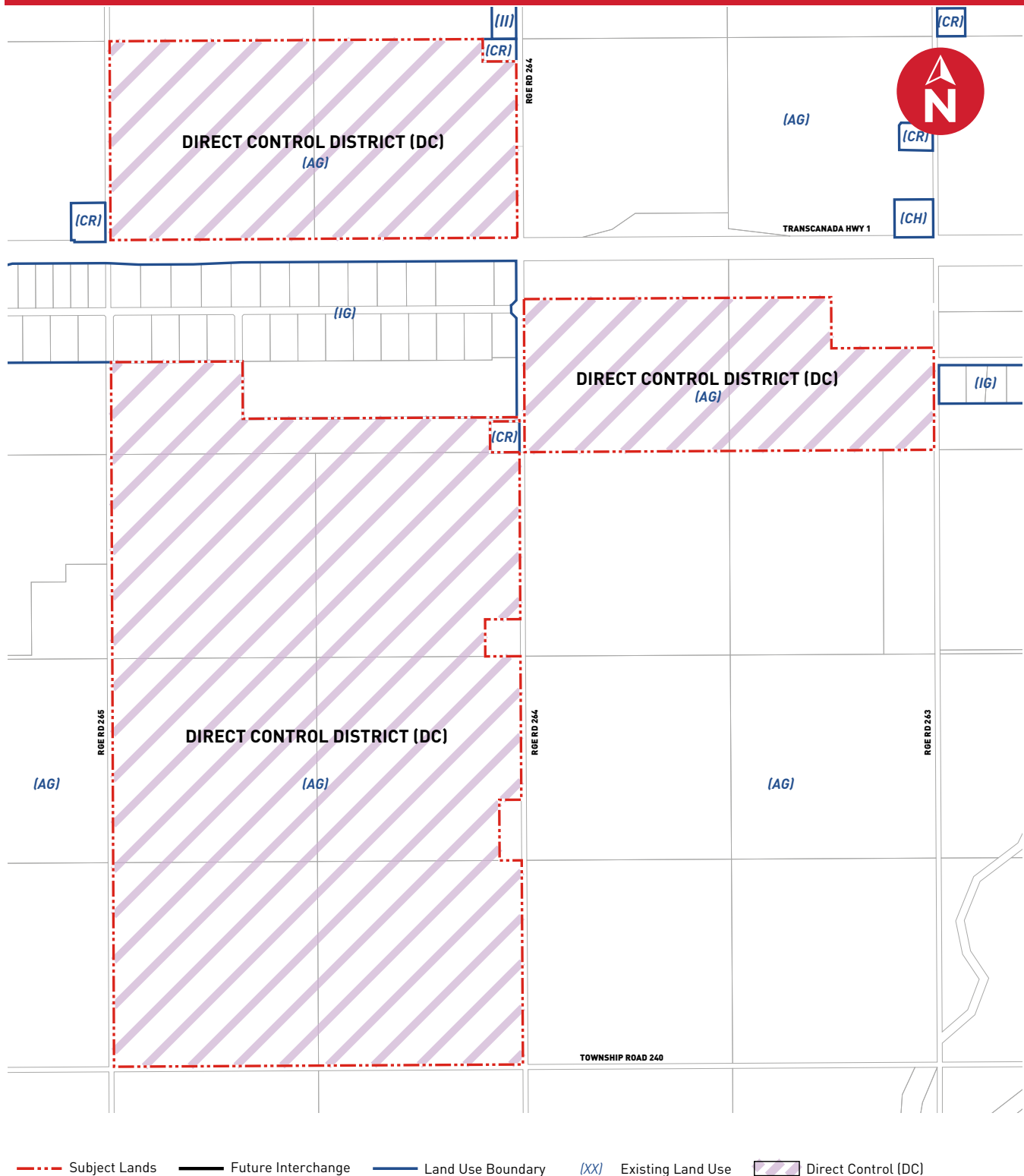
To achieve the vision for De Havilland Field, the Plan Area is proposed to be redesignated to provide for aviation, business, industrial, and commercial uses. The current Wheatland County Land Use Bylaw does not currently include a land use district that accommodates all the envisioned uses for the Plan Area. In this regard, a Direct Control district has been proposed in order to accommodate these unique uses. It is intended that the Industrial General District (IG) and the Commercial Highway District (CH) serve as a basis for the preparation of the Direct Control district. The Direct Control district is to incorporate the Airport Operational Facility (Aerodrome) definition from the Land Use Bylaw. The following provides background on these portions of the Land Use Bylaw:

- + **Industrial General District (IG):** The purpose of this district is to provide for light or medium industrial development that has minimal to no impact on adjacent landowners in terms of a nuisance effect. Applicable uses that this district accommodates include, but are not limited to, Industrial – Light, Industrial - Medium, Office, Outdoor Storage and Stockpile.
- + **Commercial Highway District (CH):** The purpose and intent of this district is to promote and accommodate commercial development adjacent to major transportation corridors in the County that provide services to residents and those travelling through the County. Applicable uses accommodated by this district include, but are not limited to, Commercial Storage, Restaurant, Truck Stop, Hotel and Retail Establishment.
- + **Airport Operational Facility (Aerodrome):** This use means the development on a site for the operation of an aircraft facility including facilities for landing / takeoff, facility maintenance, firefighting and safety equipment, offices related to the operation of the facility, utilities, parking areas and passenger facilities. Both public and private airstrips and operational facilities fall under this definition.

**Policy 4.1:** Future development of the land shall proceed in accordance with the Direct Control District prepared for the Plan Area.



**FIGURE 10: LAND USE CONCEPT**



## + INTERFACE

The following section provides approaches for future development to mitigate impacts on surrounding uses as well as establishing a prominent presence within Wheatland County.

### 5.1 AERODROME

Transport Canada document *TP312: Aerodrome Standards and Recommended Practices – Land Aerodromes* provides layout standards for aerodrome design. The standards form part of the overall safety specifications to satisfy the requirements of aerodrome certification. The Canadian government requires registration be gained before a new aerodrome can be constructed.

While aviation is under Federal jurisdiction, it is important to note that TP312 does incorporate height and setback limitations for structures in proximity of an aerodrome. Specifically, the Obstacle Limitation Surfaces (OLS) establish the limits that objects may project into the airspace associated with an aerodrome so that aircraft operations may be conducted safely. The OLS consists of the takeoff and approach surfaces, a transitional surface, and an outer surface. These surfaces extend both horizontally and vertically around the aerodrome, and they define the airspace that needs to be maintained free of obstacles. Much of the area under the OLS is typically located beyond the aerodrome property line. The dimensions of the OLS are based on the instrument or non-instrument runway system capable of accommodating, in this case, an Aircraft Group Number (AGN) IV aircraft. The resulting OLS is presented in Figure 11.

The following identifies the horizontal setbacks requirements for structures from the runway and the associated height restriction:

- + **Taxiway:**
  - Horizontal setback: 122 m from runway centreline to taxiway centreline
  - Corresponding maximum height: 0 m
- + **Building with no apron:**
  - Horizontal setback: 159 m (122 m + 37 m) from runway centreline
  - Corresponding maximum height: 9.25 m above runway elevation
- + **Building with single aircraft parked on apron**
  - Horizontal setback: 213 m (122 m + 37 m + 54m) from runway centreline
  - Corresponding maximum height: 22.5 m above runway elevation
- + **Building with two aircraft parked on apron**
  - Horizontal setback: 245 m (122 m + 37 m + 86 m) from runway centreline
  - Corresponding maximum height: 27.0 m above runway elevation

The Plan Area has been laid out in a manner that respects the OLS.

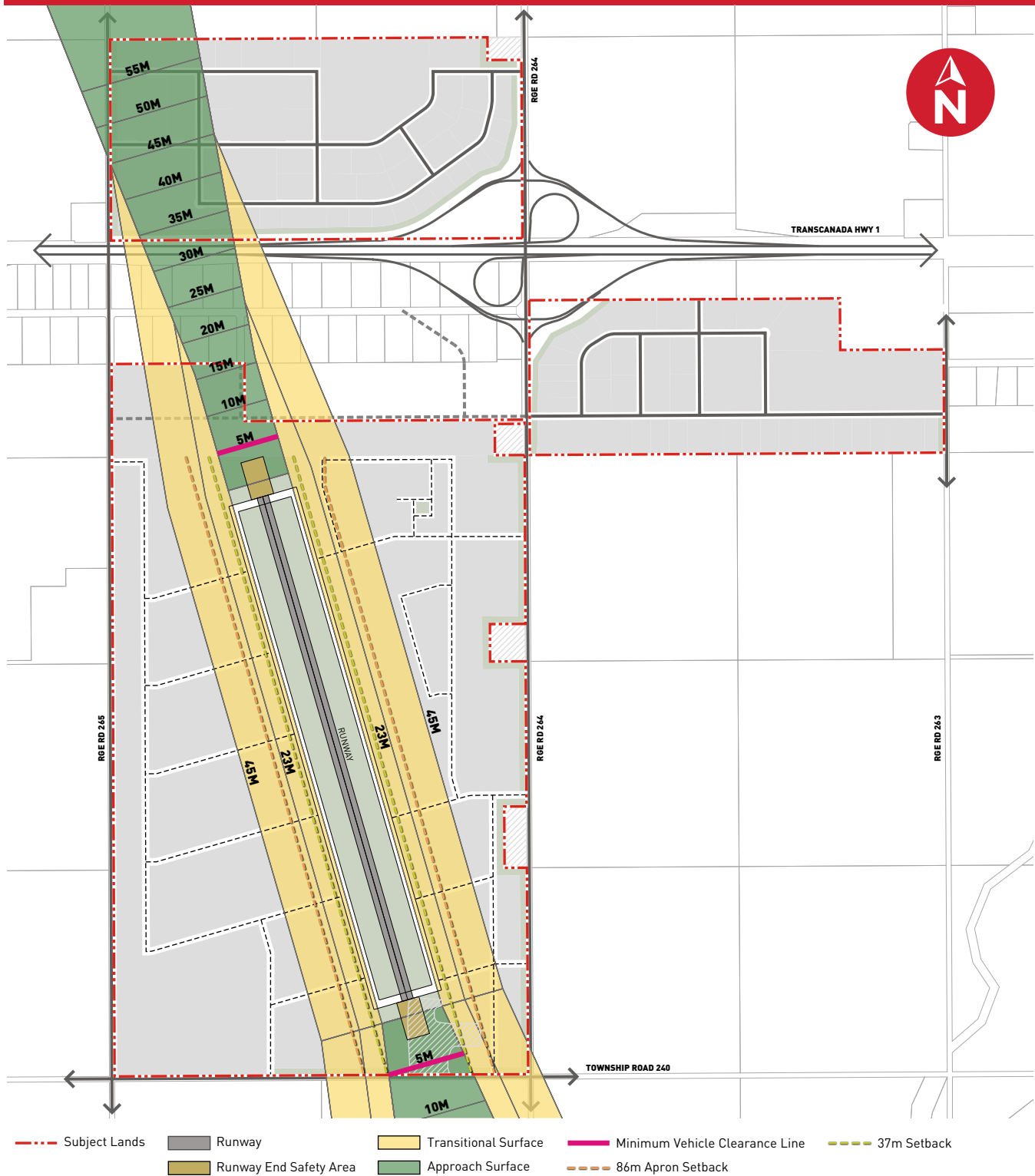
**Policy 5.1.1:** The developer shall obtain aerodrome registration from Transport Canada before construction of the aerodrome.

**Policy 5.1.2:** Within the Plan Area, the developer shall establish setback and height restrictions in proximity of the aerodrome that are in compliance with Transport Canada requirements and guidelines. These restrictions may be established through caveats on title or through other mechanisms acceptable to Transport Canada.





FIGURE 11: OBSTACLE LIMITATIONS SURFACES



## 5.2 GAS WELLS & PIPELINES

There are nineteen active gas wells within the Plan Area. The landowner has been in contact with the operator to determine what options are available to accommodate the development. Should the wells be abandoned, a minimum setback of a five metre radius around the well must be maintained. The developer is strongly encouraged to also consider providing an access route to the well wide enough to allow vehicle entry to the site.

Should the wells remain active, the Alberta Government has issued Directive 56 which identifies setbacks between wells and surface improvements. Surface improvements such as industrial plants, aircraft runways and taxiways and institutional buildings must be setback a minimum of 100 metres from the well centre. Surface improvements such as surveyed roads and road allowances must be setback a minimum of 40 metres from the centre of the well head. In addition, the well lease boundaries, which is the total surveyed area planned for disturbance by the operator, will need to be respected.

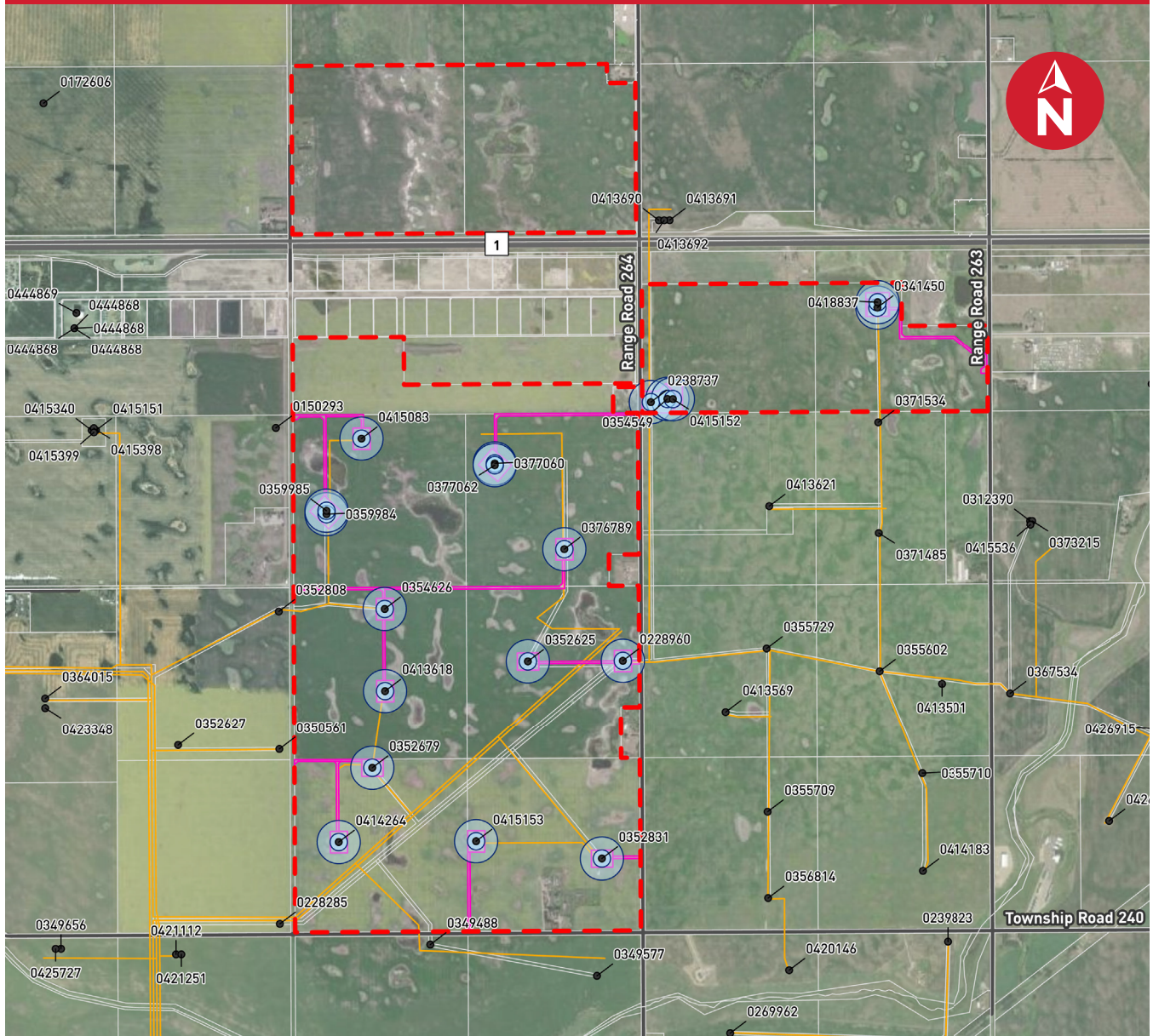
There are sixteen high pressure natural gas pipelines situated within the Plan Area. According to Alberta Environment, the pipelines contain no H<sub>2</sub>S. As per the Alberta Government's Directive 56, buildings only need to be situated outside of the pipeline right-of-way. Roads are typically allowed to cross the pipeline right-of-way when found acceptable by the operator.

It is noted that the layout of the development has taken into account well setbacks and pipelines. In this regard, the runway, development and streets have been located as to avoid conflict with gas wells and pipelines. Further assessment of the incorporation of the gas wells and pipelines will be undertaken at the detailed design stage.

**Policy 5.2.1:** Development shall be setback from active/abandoned gas wells and pipelines in accordance with applicable Provincial requirements.

**Policy 5.2.2:** Wells and pipelines shall be integrated into the subdivision design in order to allow for the continued operation and/or maintenance of the active/abandoned gas wells and pipelines.

FIGURE 12: GAS WELLS & PIPELINES



- |              |                               |          |             |
|--------------|-------------------------------|----------|-------------|
| Subject Site | Cadastral Linework            | Road     | 40m Buffer  |
| Gas Well     | Ember Resources Inc. Pipeline | Gas Site | 100m Buffer |



### 5.3 SCREENING & BUFFERING

The Plan Area will be exposed to major regional roads including Highway 1 and important local roads including Township Road 240 and Range Roads 263 and possibly future Range Road 265. To ensure a respectable presence along these roads, development is to follow the ***Wheatland County Landscape & Screening Guidelines***. These guidelines identify the level of landscaping expected adjacent to a roadway depending on the type of development. Full screening is expected for garbage and waste areas and mechanical and electrical equipment. Partial screening is expected for outdoor storage areas, vehicle parking and storage, material stockpile areas and loading areas. Buffer screening is expected for parking lots and sales lots. In addition, the Direct Control bylaw is anticipated to include a 22.86 metre building setback requirement from the right-of-way of a Township Road, Range Road or highway.

**Policy 5.3.1:** Development should comply with the Wheatland County Landscape & Screening Guidelines unless federal aviation standards take precedence.

**Policy 5.3.2:** Development shall reflect the setbacks provided within the Direct Control District.

## 5.4 RESIDENCES

There are four residences directly adjacent to and outside of the Plan Area. To limit the impact of future development on these residents, a setback of approximately 30 meters from the property line is proposed. The setback area will include landscaping that mitigates the impact of the development on the residences.

**Policy 5.4.1:** Development should be setback a minimum of 30 metres from property line of a parcel that contains a residential dwelling. Landscaping within the setback area should achieve at least partial screening as defined by the Wheatland County Landscape & Screening Guidelines.

## 5.5 DARK SKY

Part of the enjoyment of living in the County is the ability to view the night sky and gaze at the stars. Furthermore, dark skies allow wildlife to continue their natural nocturnal functions. In this regard, the County's Land Use Bylaw includes requirements for reducing light pollution and the nuisance effect of bright lights for adjacent landowners, while protecting wildlife and wildlife habitat.

**Policy 5.5.1:** Outdoor lighting for all development, including landscaping designs for public spaces, should comply to dark sky lighting requirements of the Wheatland County Land Use Bylaw unless federal aviation standards take precedence.

## + SERVICING STRATEGIES

### 6.1 WATER SERVICING

The purpose of these policies is to provide for a suitable water distribution system designed to serve the urban development needs throughout the Plan Area. Four methods of water distribution have been considered for De Havilland Field:

- + Recycling and reuse of stormwater for non-potable water supply purposes;
- + Construct a feeder-main, pump station and reservoir within the Plan Area to receive flows from the East Calgary Regional Waterline;
- + Construct a feeder-main, pump station and reservoir within the Plan Area to receive flows from the Langdon Water Works; and
- + Alternatives including water wells, cisterns and diversion from the Bow River.

The final method of water servicing will be determined at the subdivision and/or development permit stage.

**Policy 6.1.1:** The preferred water servicing system for the Plan Area is identified on Figure 13 to adequately and efficiently serve the ultimate development of the Plan Area. The water servicing system may be modified at the subdivision and/or development permit stage to the satisfaction of the municipality.

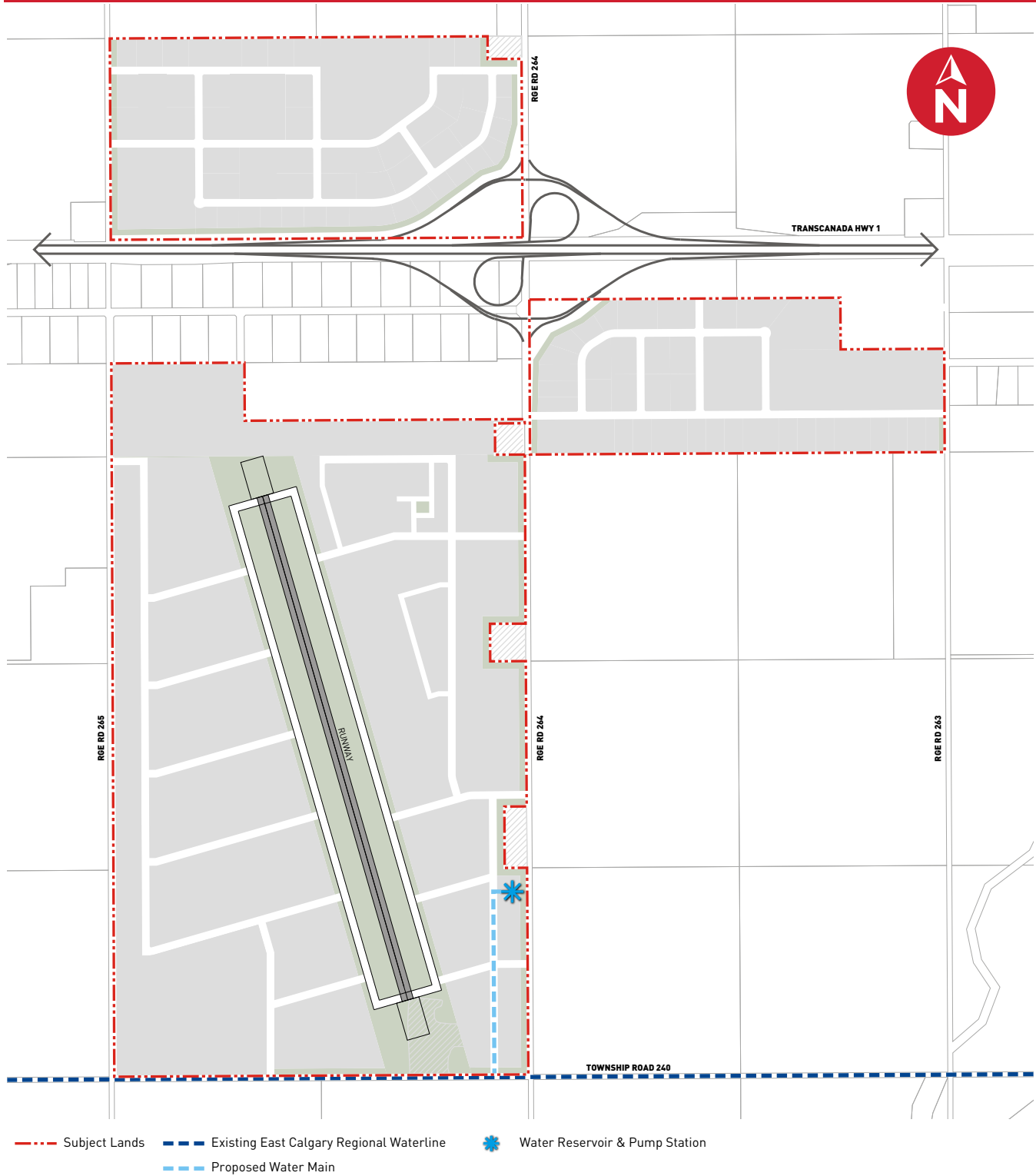
**Policy 6.1.2:** Water conservation methods are encouraged to be incorporated into development including drought tolerant landscaping, water efficient plumbing fixtures and the capture and reuse of rainwater.

**Policy 6.1.3:** Interim servicing solutions should be adopted during the servicing of the initial phases at the discretion of the Approving Authority.

**Policy 6.1.4:** The developer will work with the Municipality to obtain necessary utility rights-of-way within public road allowances, if required, to facilitate connections to municipal services when available.



FIGURE 13: PREFERRED WATER NETWORK



## 6.2 SANITARY SERVICING

The purpose of these policies is to provide for a suitably designed sanitary sewer to service the urban development needs throughout the Plan Area. Six methods of sanitary distribution have been considered for De Havilland Field:

- + Constructing a new wastewater treatment facility within the Plan Area and irrigating crops with the treated effluent;
- + Constructing a force main to connect with the existing Langdon wastewater treatment facility;
- + Constructing a force main to connect with the existing Strathmore wastewater treatment facility;
- + Constructing a force main to connect with the existing Calgary wastewater treatment facility via the Chestermere lift station;
- + Constructing a new wastewater treatment facility within the Plan Area and discharging into the Bow River via a new force main; and
- + Constructing a new wastewater treatment facility within the Plan Area and discharging into Weed Lake.

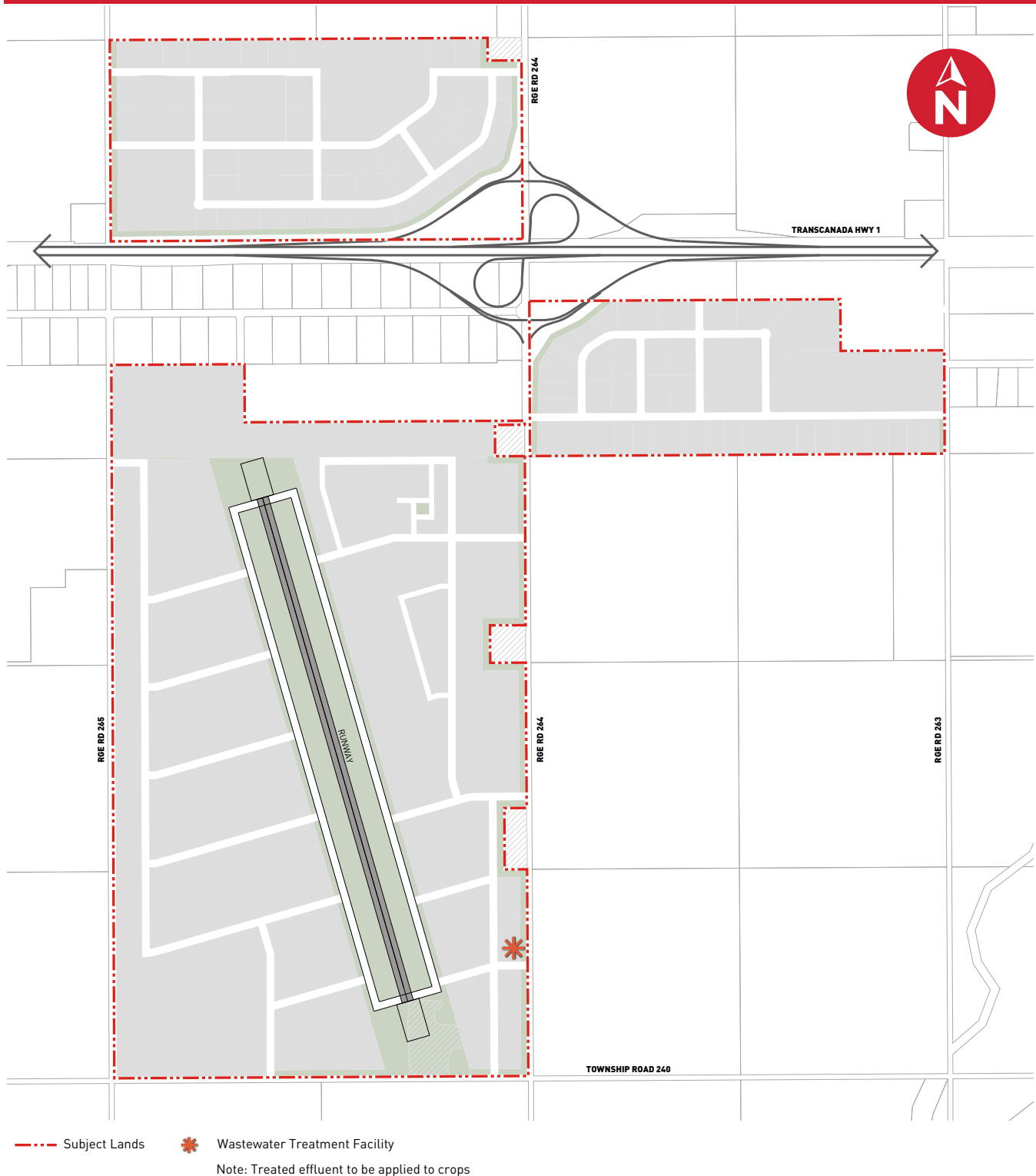
The final method of sanitary servicing will be determined at the subdivision and/or development permit stage.

**Policy 6.2.1:** The preferred sanitary servicing system for the Plan Area is identified on Figure 14 to adequately and efficiently serve the ultimate development of the Plan Area. The sanitary servicing system may be modified at the subdivision stage to the satisfaction of the municipality.

**Policy 6.2.2:** Interim servicing solutions should be adopted during the servicing of the initial phases at the discretion of the Approving Authority.

**Policy 6.2.3:** The developer will work with the Municipality to obtain necessary utility rights-of-way within public road allowances, if required, to facilitate connections to municipal services when available.

**FIGURE 14: PREFERRED SANITARY NETWORK**





### 6.3 STORMWATER SERVICING

A Conceptual Level Stormwater Management Report (CL-SWMR) for the De Havilland Field development was completed to prepare options to manage storm water generated by the development. The CL-SWMR analyzed a conceptual a drainage system and provided options for stormwater management storage and evaporative systems to meet interim and the ultimate condition requirements for the lands. The study area was based upon the subject lands and immediately adjacent lands tied to the subject lands by local topography and existing drainage patterns, as determined by LiDAR DEM 15 data. This report reviewed an interim condition (partially developed) and an ultimate condition (fully developed) scenario.

Five methods of stormwater management have been considered for De Havilland Field:

- + Evaporation;
- + Onsite irrigation;
- + Mechanical evaporation;
- + Constructing a force-main to the Co-operative Stormwater Management Initiative regional stormwater management system; and
- + Constructing a force-main to the Weed Lake Ditch.

The stormwater management options analyzed in the report assisted in demonstrating overall project viability. It was concluded that the conceptual development area can be serviced by a comprehensive integrated stormwater management system that uses evaporation, irrigation, and mechanical evaporation. Alternatively, the area could be serviced by the Cooperative Stormwater Management Initiative (CSMI) system (subject to Wheatland County participation in the CSMI partnership or some other similar arrangement being made).

The final method of stormwater management will be determined at the subdivision and/or development permit stage.

**Policy 6.3.1:** The preferred stormwater management system for the Plan Area is identified on Figure 16 to serve the ultimate development of the Plan Area adequately and efficiently. The stormwater management servicing system may be modified at the subdivision and/or development permit stage to the satisfaction of the Municipality.

**Policy 6.3.2:** Figure 15 identifies the ultimate stormwater management facility locations. The shape, size and configurations of each facility shall be determined at the applicable subdivision and/or development permit stage to meet required stormwater management requirements at the discretion of the Approving Authority.

**Policy 6.3.3:** Interim stormwater management facilities may be proposed at the subdivision and/or development permit stage where the ultimate facility is not available to accept stormwater. Where applicable, a strategy for transitioning stormwater management from the Interim facility to the ultimate shall be identified at the appropriate subdivision and/or development permit stage.

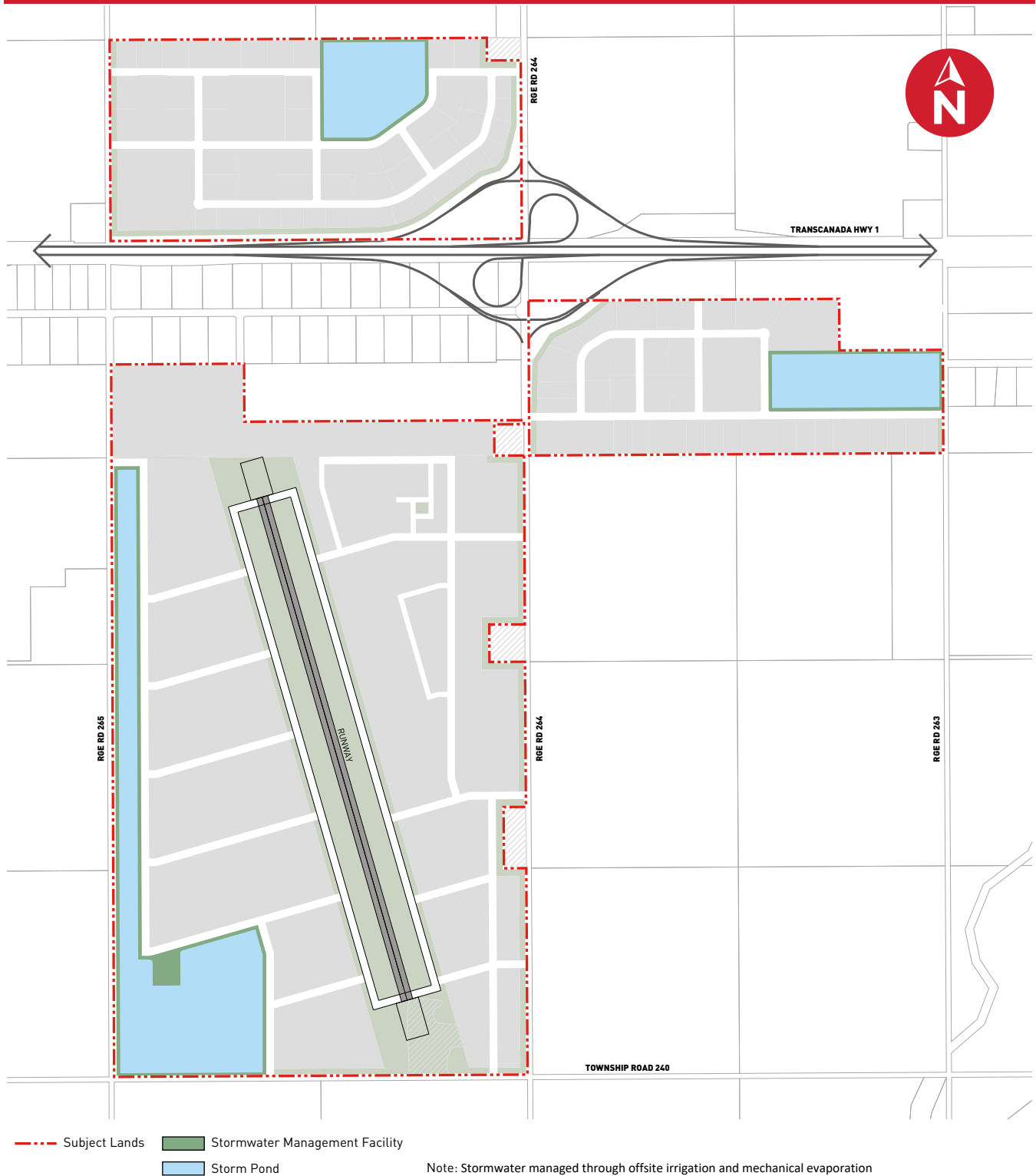
**Policy 6.3.4:** The stormwater system will be constructed in accordance with the requirements of Wheatland County, the Alberta government and approved stormwater management plans.

**Policy 6.3.5:** Low-Impact Development measures, such as rain gardens, permeable pavement, bio-retention facilities, rain barrels, vegetated rooftops and increased topsoil cover, are encouraged throughout the Plan Area to reduce runoff volumes. Water re-use for purple pipe and irrigation purposes is also encouraged if supported by the Approving Authority.

**Policy 6.3.6:** A Stormwater Management Plan shall be submitted by the developer for each development phase/cell at the subdivision and/or development permit stage.

**Policy 6.3.7:** The developer will work with the Municipality to obtain necessary utility rights-of-way within public road allowances, if required, to facilitate connections to municipal services when available.

**FIGURE 15: PREFERRED STORMWATER NETWORK**





## 6.4 TRANSPORTATION

A robust and integrated transportation network will be key to ensuring the success of De Havilland Field. The various businesses will expect to move their goods and services quickly to various destinations. Employees will want to reach their place of work in a timely manner. The safe and efficient movement of vehicles around and through the business park will be paramount in supporting networking opportunities and partnerships. To achieve such a transportation network, the following is envisioned at full development build-out:

- + Building of a new interchange at Highway 1 and Range Road 264;
- + Constructing, upgrading and/or widenings of Range Road 263, 264 and 265 and Township Road 240;
- + Laying out a new internal road network for each development cell; and
- + Realigning roads within and extending new roads to the Origin Business Park.

A Transportation Impact Assessment (TIA) was completed for the Plan Area that examined the full buildout of the ACP and the ASP. The TIA also considered a scenario where the full buildout of the ASP is duplicated on the north side of Highway 1. The TIA assumed that development of De Havilland Field, and the related office and manufacturing uses will also include the full buildout of the surrounding road network. All scenarios in the study assumed the development of a grade-separated interchange at the intersection of Highway 1 and Range Road 264.

The TIA indicated that substantial improvements would be required to the road network as further development increased. The intersection analysis found that all study intersections would operate acceptably with the recommended mitigation measures for the 20-Year full buildout of the site by 2042.

### Highway 1 and Range Road 264 Intersection

The TIA analysis assumed the interchange of Range Road 264 & Highway 1 would be constructed as a split-diamond interchange (see Figure 16) at Opening Day (2025). A Split Diamond interchange is frequently used as the first stage of a multiple stage evolution of an interchange so that loops can be added to create the ultimate interchange design as traffic volumes warrant an increase in capacity. At the 2042 horizon, the interchange will need to be improved to a partial cloverleaf interchange (see Figure 16), adding northbound and southbound left turn loops. The Provincial government will be responsible for the construction of, upgrades to and phasing of the interchange.

### Range Roads 263, 264 and Township Road 240

Access to the De Havilland Field development Cell 1 will be provided from Range Road 264, Township Road 240 and Range Road 265. Range Road 264 will function as a high-volume arterial road providing multiple site access locations.

As development proceeds in each Cell, updated TIAs will be required at the subdivision and/or development permit stage to determine the required offsite road upgrades/improvements along Range Roads 263, 264, 265, and Township Road 240.

**Policy 6.4.1:** The road network should be constructed to accommodate the anticipated traffic volumes as generally shown in Figure 16. The final road network, road cross-sections and right-of-ways required to accommodate the anticipated traffic volumes shall be determined at the subdivision stage.

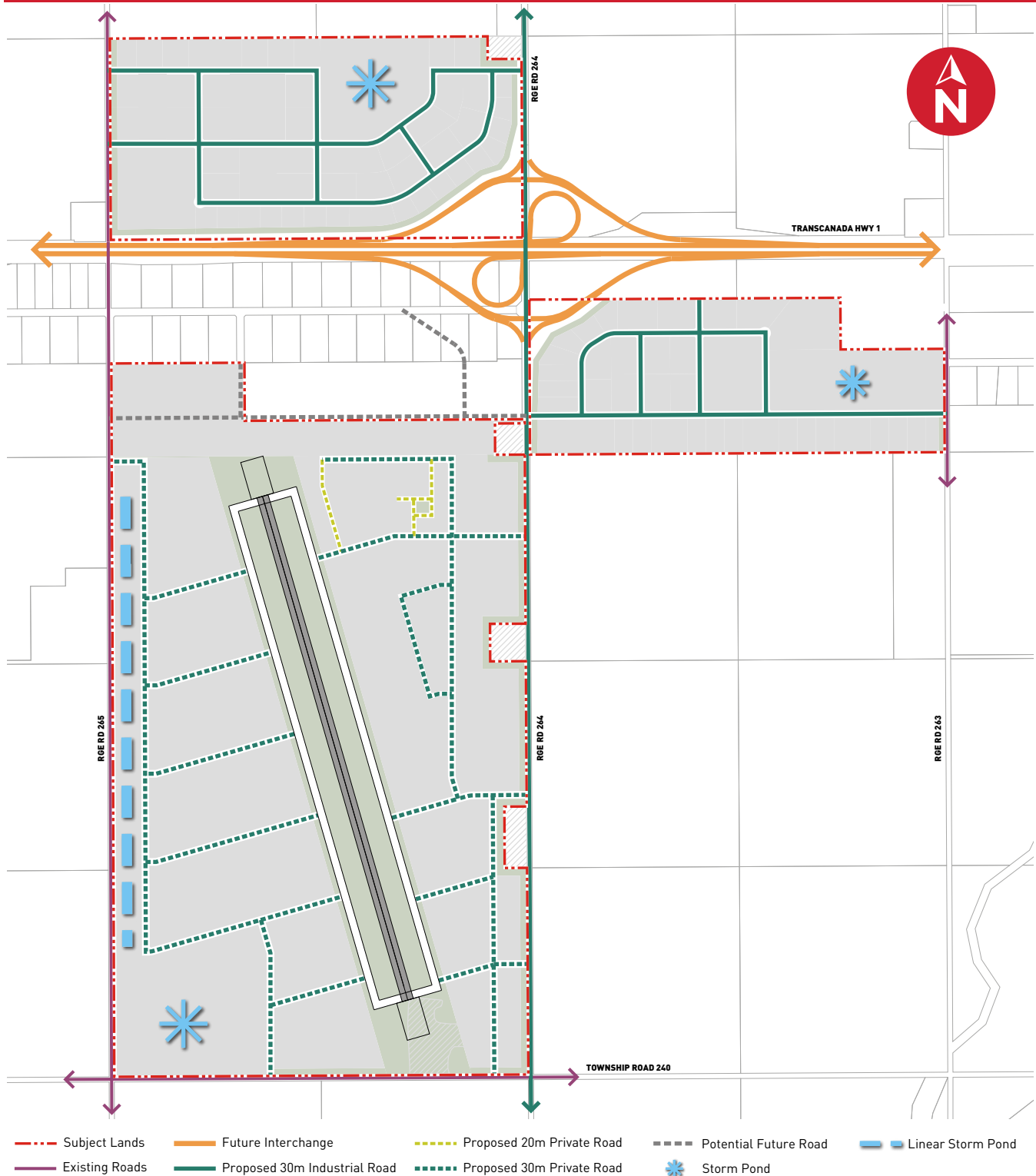
**Policy 6.4.2:** A Traffic Impact Assessment (TIA) shall be provided at the time of application submission, in support of all subdivision and development permit applications. A TIA update may be provided, at the discretion of the County, in support of an application proposed within a Phase that has previously provided an approved TIA that accommodates all development within that particular Phase.

## 6.5 COMMUNITY, PROTECTIVE AND EMERGENCY SERVICES

The following identifies the manner in which emergencies will be responded to within De Havilland Field:

- + Primary fire response will be provided by the Wheatland West Fire Department with secondary response from Carseland Fire Department, and Mutual Aid Fire Departments including Langdon and the Town of Strathmore;
- + Policing will be provided by the RCMP detachment in the Town of Strathmore. Emergency Response will be provided through the 911 system with dispatch of ambulance services from the Town of Strathmore; and
- + Emergency Medical Services will be established on site by the developer to respond to aerodrome related emergencies.

FIGURE 16: TRANSPORTATION NETWORK



## + PHASING

The purpose of the following policy is to provide for the phasing of development in a logical manner to minimize infrastructure costs and to ensure appropriate connectivity. Figure 17 identifies the parcels that are anticipated to be developed first based on market need and proximity to access and services. Phase 1 is expected to include the first stage of the De Havilland manufacturing facility, half the runway and a stormwater management pond. Phase 2 and 3 are expected to witness the completion of the De Havilland manufacturing facility, the final half of the runway and the commencement of the business park. The timing of development after Phase 3 is to be determined.

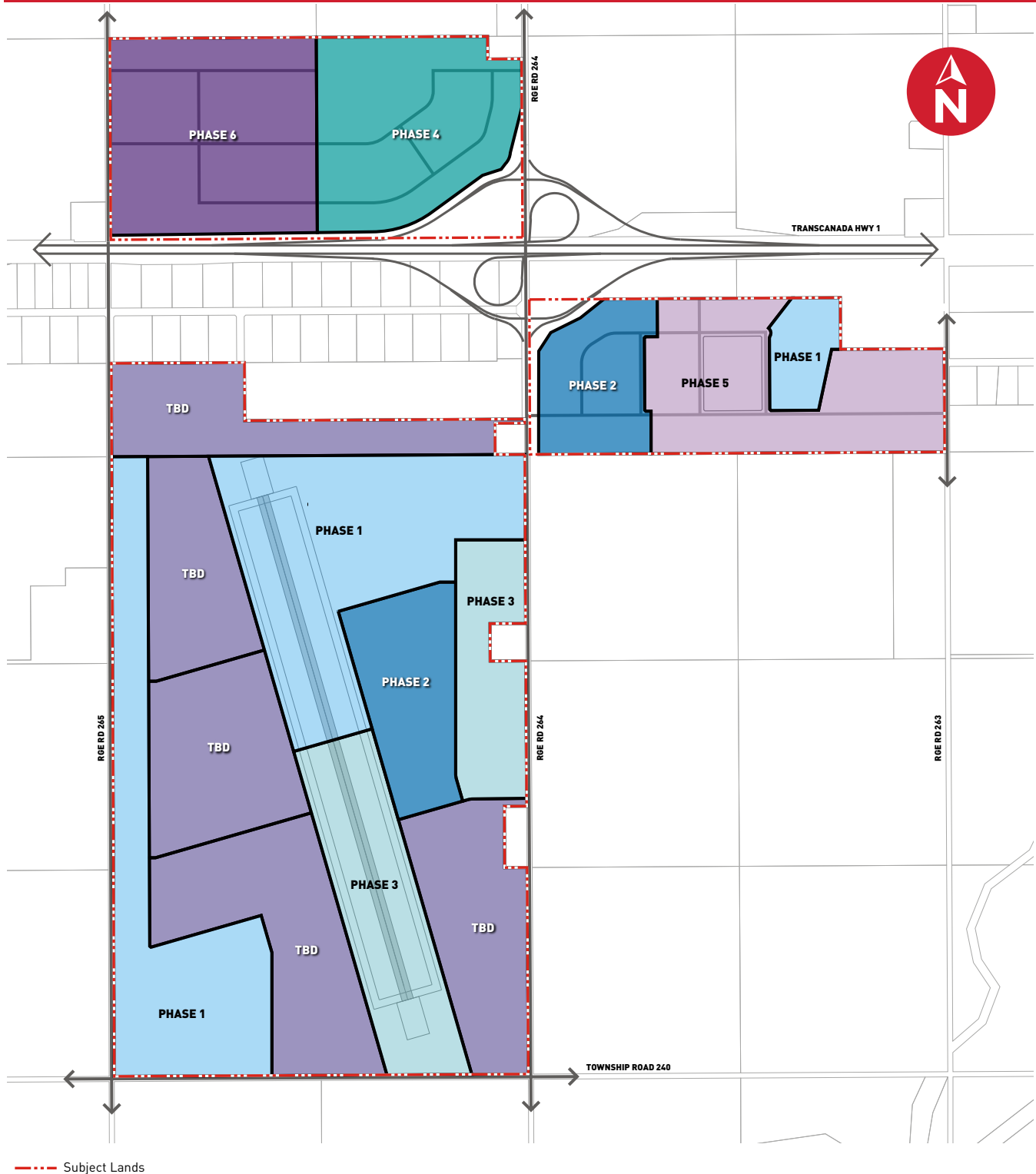
**Policy 7.1:** The phasing of development should comply with Phasing - Figure 17, recognizing that this figure is intended to show the generally anticipated sequence of development and may be adjusted upon market demand.

**Policy 7.2:** Notwithstanding policy 7.1, the Municipality may allow for any portion of the Plan Area to commence development without an amendment to this Plan where they are satisfied that the necessary access and servicing can be provided.

**Policy 7.3:** Relevant supporting studies or study updates shall be submitted for each phase of development which may include but not limited to a Transportation Impact Assessment, a Biological Impact Assessment, a Geotechnical Study or an Environment Site Assessment.



FIGURE 17: PHASING



## + IMPLEMENTATION

Adoption of the De Havilland Area Concept Plan will be a prerequisite to Wheatland County Council considering the redesignation application for the subject lands. Consultation with key stakeholders including Alberta Transportation will occur as the development proceeds and servicing details are finalized at the subdivision and/or development permit stage.

The purpose of the following policy is to provide direction on the implementation of the policies contained within the ACP.

**Policy 8.1:** Land use redesignations, subdivision and development permit applications shall comply with the policies of this Plan and any other relevant policies, requirements or legislation.







APPENDIX

# A

## PUBLIC ENGAGEMENT

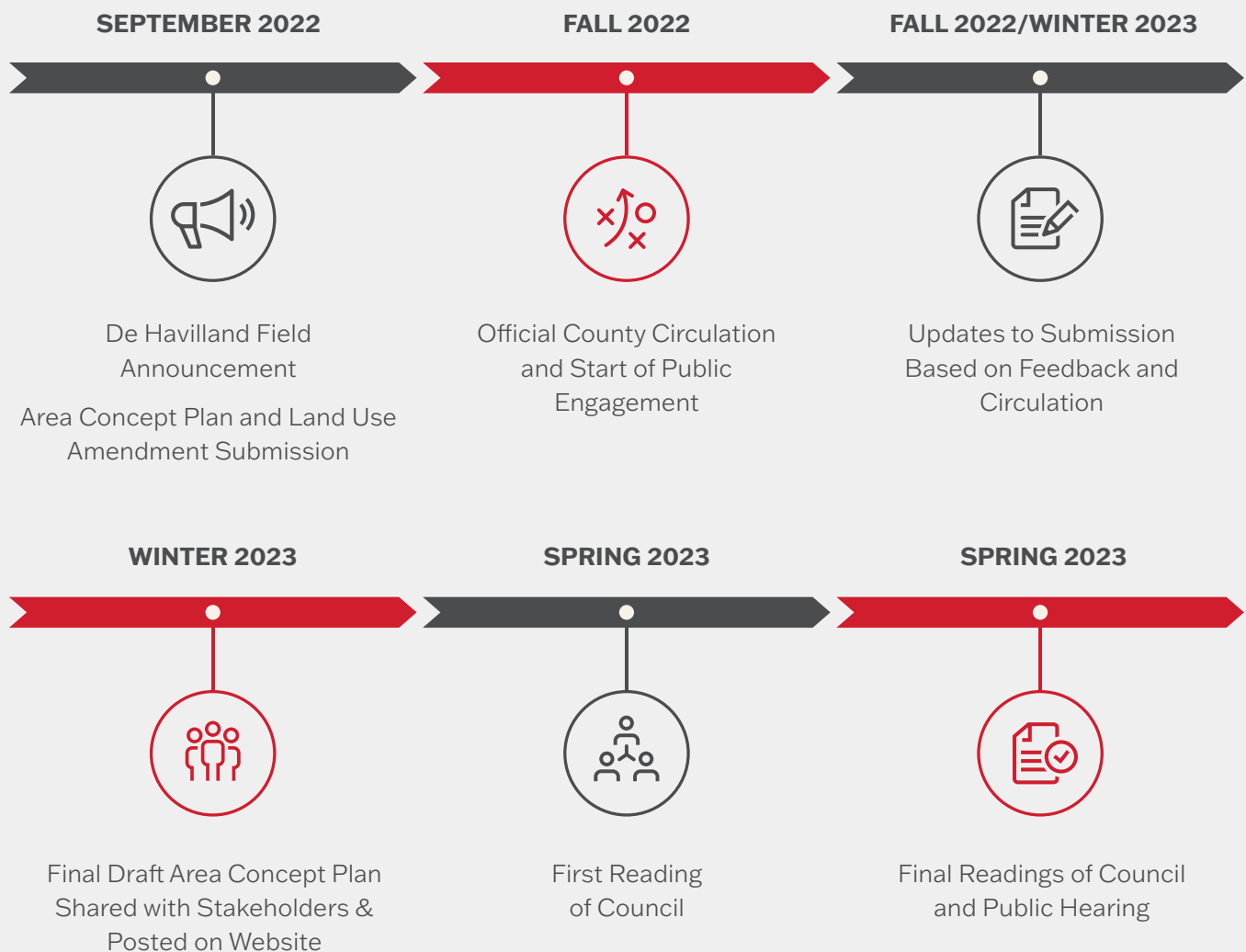




## + ENGAGEMENT

A public engagement strategy was launched to garner feedback on the project from adjacent landowners and relevant stakeholders. It is anticipated that one round of public engagement would occur during the review process. The engagement culminated with an engagement summary report. The following timeline identifies how engagement was integrated into the overall approval process.

### WHEATLAND COUNTY APPROVAL PROCESS



## WHAT WE DID

The engagement activities were undertaken to support approval processes for Wheatland County, Transport Canada, and the Impact Assessment Agency of Canada. The activities introduced the project to the community and promoted the open house events. A summary of the results from the engagement is shared below.

Specific Transport Canada notifications were required to support the 45-day Official Consultation Period and overlapped with broader public outreach efforts.

## PUBLIC OUTREACH

### Official Announcement Event - September 21, 2022

The official announcement introduced De Havilland Field, a new aircraft manufacturing facility located in Wheatland County, Alberta. The news release was posted on the project website.

Selected media coverage:

**Calgary Herald** - De Havilland to open massive aircraft manufacturing plant east of Calgary (...)

**CBC** - De Havilland to build airplane manufacturing plant east of Calgary, Kenney Says (...)

**Strathmore Times** - De Havilland announces new campus to be developed in Wheatland County (...)

### DeHavillandField.com - Launched September 21, 2022

The project website was launched shortly after the official announcement event to provide details about the project, timeline, and key project resources. The website connects stakeholders with job opportunities and provides engagement opportunities for community members. As of December 2022, there have been:

- + Over 13,000 unique visits to the website;
- + 275 users referred to the De Havilland Canada careers page;
- + Over 50 stakeholders signing up for project updates; and
- + Over 50 messages directed to [info@dehavillandfield.com](mailto:info@dehavillandfield.com)

## Notification Letters

Date Sent	Letter & Purpose	Distribution Area
September 20, 2022	<b>Notice of Announcement</b> Advanced notice of Sept. 21 public announcement was hand-delivered to adjacent neighbours.	Adjacent (bordering) rural residents and the Hamlet of Cheadle
October 26, 2022	<b>Invitation to Cheadle Open House</b> The invitation was hand-delivered to residents nearby neighbours. The letter also provided details for the Strathmore and Langdon events.	Within 1 mile of site as well as the Hamlet of Cheadle
November 4, 2022	<b>4 km Event Invitation</b> To adhere to Transport Canada requirements, a letter was hand-delivered to residents within 4km of site to share information about the project and invite stakeholders to attend the Langdon and Strathmore open house events.	Outside of one mile and Cheadle, within 4km of site
November 24, 2022	<b>Aerodrome Notice</b> A letter was sent by registered mail to all aerodromes and helipads within 30 NM of the proposed aerodrome to share project information and contact information. Feedback was requested by January 15, 2023.	30 NM (nautical miles)

## Open Houses

The project team hosted three public events to share detailed information, respond to questions, and collect community feedback.

Cheadle Neighbor Coffee Chat	
Date	Monday, November 7, 2022, 4:00 to 7:00 pm
Venue	Cheadle Hall, 10 Malone Ave, Cheadle
Details	As the closest and most impacted stakeholders, adjacent landowners and residents of the Hamlet of Cheadle were invited to attend a drop-in coffee chat to meet the team in-person and discuss the project. Promotions: A letter invitation was hand-delivered to area landowners and residents of Cheadle.

Langdon Open House	
Date	Tuesday, November 8, 2022, 5:00 to 8:00pm
Venue	The Track Golf Club, Events Building - 333 Boulder Creek Dr, Langdon
Details	<p>The drop-in event was hosted in one of two larger centres surrounding the site to provide opportunity for the public to learn more about the project.</p> <p>Promotions: The event was advertised broadly to the entire community through:</p> <ul style="list-style-type: none"> <li>+ Site signage promoting project, website, and events;</li> <li>+ Newspaper ads ran in the Strathmore Times &amp; Rocky View Weekly for two weeks;</li> <li>+ Letter invitation to residents within 4 km of site; and</li> <li>+ Dehavillandfield.com</li> </ul>

Strathmore Open House	
Date	Wednesday, November 9, 2022, 5:00 to 8:00pm
Venue	Livestock Pavilion, Strathmore & District Ag Society – 33 Wheatland Trail, Strathmore
Details	<p>The drop-in event was hosted in one of two larger centres surrounding the site to provide opportunity for the public to learn more about the project.</p> <p>Promotions: The event was advertised broadly to the entire community through:</p> <ul style="list-style-type: none"> <li>+ Site signage promoting project, website, and events;</li> <li>+ Newspaper ads ran in the Strathmore Times &amp; Rocky View Weekly for two weeks;</li> <li>+ Letter invitation to residents within 4 km of site; and</li> <li>+ Dehavillandfield.com</li> </ul>



## WHAT WE HEARD

Stakeholders provided their feedback at the public open houses, through emails to the project team and through feedback forms, both written and online. The feedback gathered during public outreach has been compiled, reviewed, and summarized into themes.

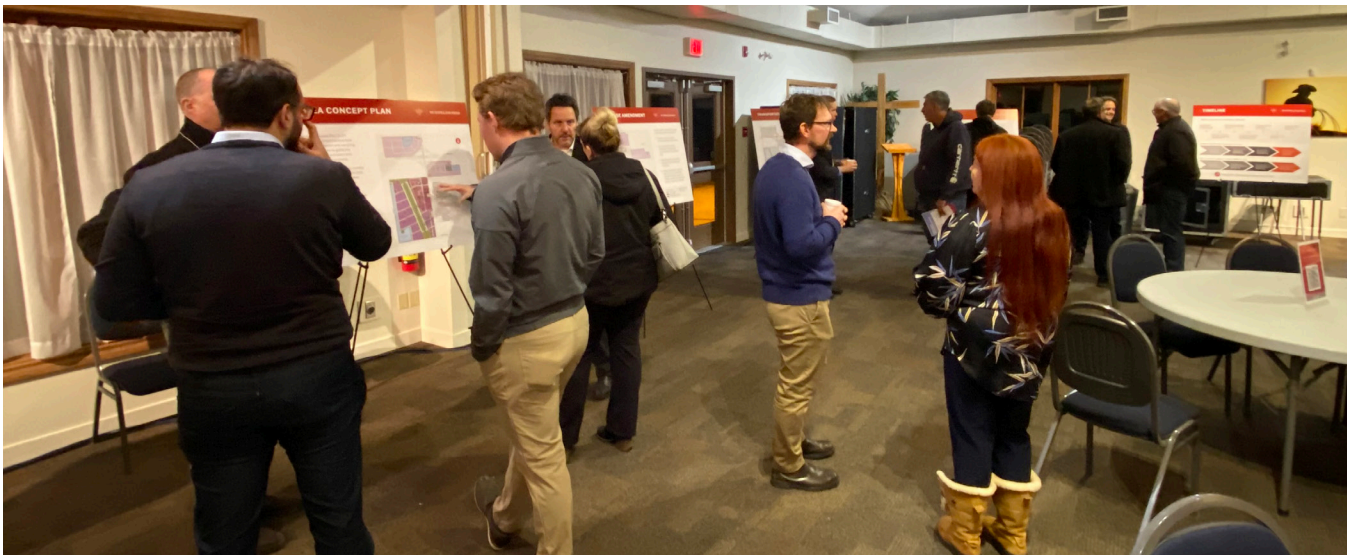
Hundreds of community members attended the three public events hosted by De Havilland Field. Attendees expressed excitement for the project, the job opportunities, and the economic opportunity for the region. 42 comment forms were collected at the in-person events.

Adjacent neighbours mostly attended the Cheadle event, which was advertised exclusively to neighbours within a one-mile radius and the Hamlet of Cheadle. Adjacent neighbours more frequently provided written feedback through comments forms and by email. Their questions and comments are reflected in the key themes and frequently asked questions.

Through the outreach, we received:

**57 comment forms** - We received 42 written and 15 online comment forms. The comment forms asked community members to share their questions and comments about the project.

**Over 50 emails** received through the website and [info@dehavillandfield.com](mailto:info@dehavillandfield.com). Most of the emails were inquiries on partnerships, career, and contractor opportunities. Eight emails were from community members sharing their questions



**Key Themes**

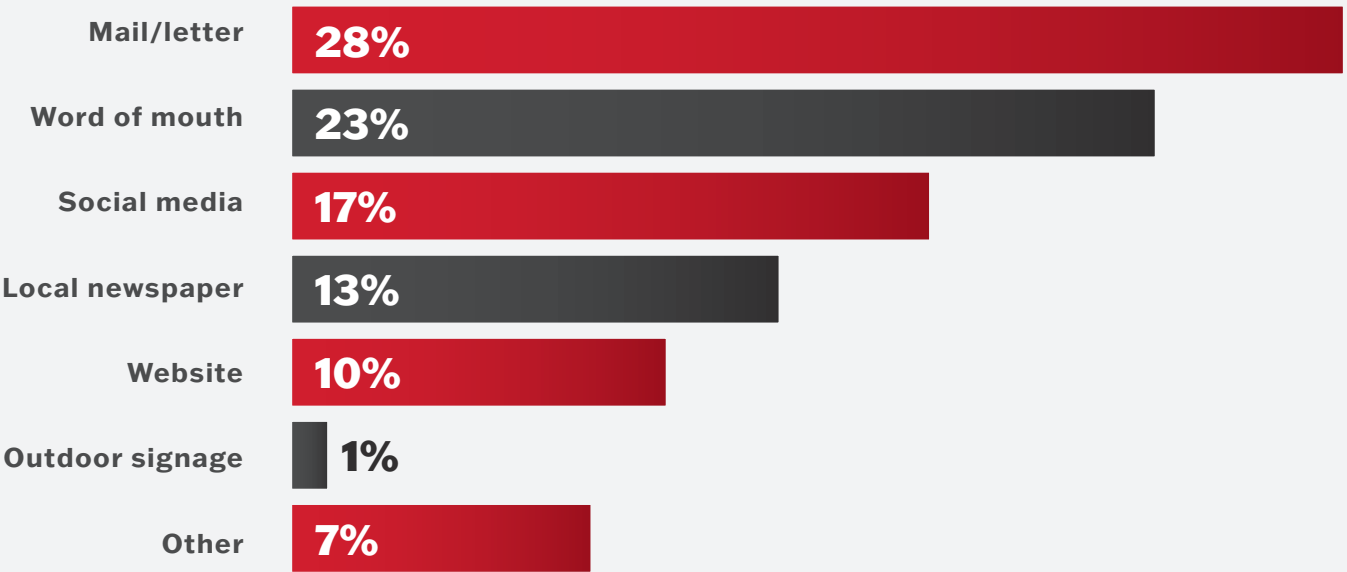
The comments received were grouped into themes. The themes were based on distinct comments received through written comment forms, online comment forms and stakeholder emails. Based on comments received at the events and through comment forms, the broader community expressed support and excitement about the opportunity.

Neighbouring stakeholders were more likely to express concern for impacts to their quality of life. Neighbours also represent most of the feedback received by email. The most common themes from adjacent neighbours were related to transportation impacts, quality of life matters, and aerodrome questions.

**PUBLIC ENGAGEMENT EVALUATION**

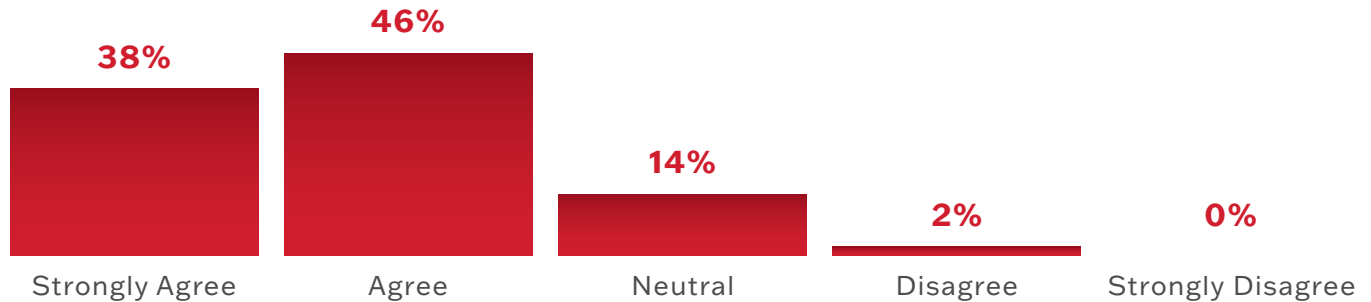
The comment forms posed four questions about the public engagement program. Responses to the questions are shared below.

**How did you hear about the open house (please select all that apply)?**

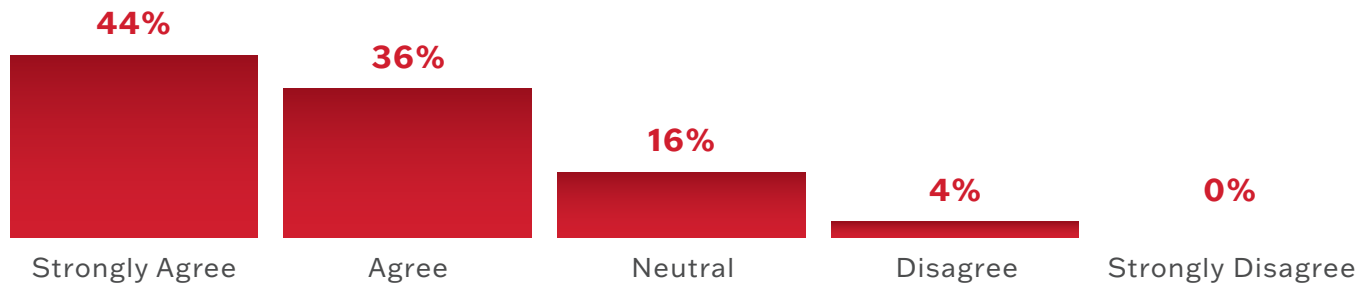


### To help us improve future engagement, please share how your experience was today

The open house was informative and provided me with a sufficient understanding of the De Havilland Field project.



The project team were able to answer my questions and provide relevant information.



I have a sufficient understanding of the project process and next steps.

