
Conceptual Scheme SE 14-52-22-W4

April 2017



Revision: #

Conceptual Scheme

SE 14-52-22-W4

1. PURPOSE

- 1.1. The purpose of a Conceptual Scheme (CS) is as follows:
- a) To provide a framework for the subsequent subdivision and/or development of land within the Country Residential Policy Area and the Agricultural Small Holdings Policy Area of the Municipal Development Plan (MDP);
 - b) To establish a potential plan of future subdivision or development that applies to a specific lot of land; and
 - c) To ensure that the subdivision under review does not prohibit the ability of remnant lots, or adjacent lots, to be further subdivided in the future. This can be achieved through improved subdivision design and the protection of land for future road dedication to provide access to remnant lands owned by the applicant or adjoining lands.
- 1.2. As per Strathcona County Council Policy statement SER-008-019, the proposed Conceptual Scheme is necessary in this case as:
- a) The land being proposed for redistricting or subdivision is within the Agriculture Small Holdings Policy Area of the MDP;
 - b) The proposed subdivision would result in more than two lots on the quarter section; and
 - c) There is a need to coordinate development planning or servicing of adjoining lands.

2. OVERVIEW

- 2.1. **Legal Descriptions:** (see *Figure 2 – Location Plan* and *Figure 3 – Air Photo*)
- a) SE 14-52-22-W4 (48.56 ha)
 - b) Pt. SE 14-52-22-W4 (16.19 ha)
- 2.2. **Existing Land Uses:** (see *Figure 3 – Air Photo*)
- a) SE 14-52-22-W4 (48.56 ha): two single detached dwellings with accessory buildings.
 - b) Pt. SE 14-52-22-W4 (16.19 ha): cultivated.
- 2.3. **Adjacent Land Uses:**
- a) North: Two lots zoned AG Agriculture General District consisting of 16.19 ha each, and the country residential subdivision of Dasmarrinas Estates;
 - b) East: Range Road 221 beyond lies five AG Agriculture General District consisting of three 16.0 ha lots and two lots, one of 3.24 ha and 12.46 ha;
 - c) South: Township Road 522 and the country residential subdivision of Century Estates.
 - d) West: Two AG Agriculture General District lots consisting of 16.0 ha and 7.0 ha; and two RA Rural Residential/Agriculture District consisting of 16.0 ha and 25.65 ha.
- 2.4. **Canada Land Inventory Soil Rating:** The subject property consists of Class 4 soils. The lot is used for a residence and for haying, the MDP policy area will allow for consideration of further fragmentation of the subject lands.
- 2.5. **Eligibility of subdivision:** The quarter section has been previously subdivided for a 40 acre first lot out, and based on equitable distribution of subdivision allows for consideration of up to six lots within the SE 14-52-22-W4 and two lots within the Pt. SE 14-52-22-W4.

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- 2.6. **Municipal Development Plan:** The subject lands are located within the Agriculture Small Holdings Policy Area of the Municipal Development Plan (Bylaw 1-2007). This policy area allows for the subdivision of land in accordance with the requirements for an approved Conceptual Scheme.
- 2.7. **Land Use Bylaw:** The subject lands are currently districted AG Agriculture: General. Pursuant to Land Use Bylaw 6-2015, redistricting to an appropriate land use district will be required prior to subdivision approval.
- 2.8. **Public Engagement:** A Public Information Meeting was held on April 24, 2017 and was attended by nine residents. No objections were received at the meeting.

3. CONCEPTUAL SCHEME (DESIGN CONCEPT)

- 3.1. The goal of the Conceptual Scheme is to establish a framework for development of the land that compliments and enhances the traditional rural residential lifestyle found in the area, while ensuring that the policies and guidelines within the applicable statutory plans and bylaws are addressed. The objective of the Conceptual Scheme is to illustrate the potential developable area, lot yield, reserve dedications and access/road locations.
- 3.2. This Conceptual Scheme contemplates the potential subdivision of the quarter section into a total of eight (8) lots.
- 3.3. The phased development concept shown in Figures 5 through 8 is conceptual and may be subject to modification at the time of subdivision if further investigation warrants the change (see **Section 8 – Development Criteria**). Final lot sizes and dimensions will be determined at time of subdivision and rezoning.

4. ENVIRONMENTAL CONSIDERATIONS

- 4.1. A Biophysical Assessment was prepared by Strathcona County in October of 2011 for the SE 14-52-22-W4. The Assessment consisted of a field reconnaissance and air photo analysis to identify landscape features, vegetation and wildlife. The information was used to make recommendations for Environmental and Municipal Reserve dedications. An update to the biophysical may be required based on the proposed plan.

4.1.1. Landscape Overview

Overall, the landscape was undulating with a change in elevation from the east (746 m) to west (740 m). Several small ephemeral wetlands exist across the property. Narrow shelterbelts border the property on all four sides. A remnant of a poplar forest surrounds the two residences on the south side of the property. A relatively large, degraded wetland exists in the far southeast corner of the quarter section.

The most significant landscape features are the intermittent stream that runs from the northeast corner southwest towards the adjacent quarter section and the remnant poplar stand that surrounds the residences.

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4.1.2. Vegetation and Wildlife

Approximately 90% of the subject property has been cleared of upland vegetation and has been under agricultural management for at least four decades. Oats were the main crop being cultivated on the subject property at the time of the site investigation. Sheep are also being raised on the property and are kept in fenced areas just to the north and west of the residences.

The uncleared aspen poplar forest that remains around the residences is in decline but still provides a wide diversity of species including aspen, balsam poplar, willow, a shrub layer and herbaceous ground cover. Several wildlife species were observed directly or indirectly during the site reconnaissance.

The shelterbelt areas mostly consist of aspen poplar with some balsam poplar and willow. A shrub layer exists within the shelterbelt that includes prickly rose, red osier dogwood and beaked hazelnut. The stands are mostly evenly aged and starting to decline with the exception of the part of the south shelterbelt. The width of the shelterbelts varies from about 3 meters to over 10 meters. Several deer beds were observed along the length of the west shelterbelt.

The ephemeral wetland areas associated with this landscape fluctuate seasonally and provide a water storage function. Typical wetland vegetation, which indicates wet soils and water at or below surface, are present. The wet areas are distinguished by abundant growth of water loving plant species that include cattails, horsetail, rushes and other graminoids. Many of the ephemeral wetlands on the subject property are connected via the unnamed intermittent stream that runs from the northeast corner of the site southwest. Several other ephemeral wetlands and the permanent wetland, in the far southeast corner, are independent of the intermittent stream and likely serve as localized groundwater recharge.

The permanent wetland in the far southeast corner of the property appears to have been degraded by agricultural and pipelining activities. This wetland possesses native wetland species and a willow zone. No open water was observed during the site visit.

Overall, the diversity of landscape and plant communities across the subject property is relatively low. Those areas that have not been previously altered for agriculture should be conserved. The intermittent stream should also be considered for conservation as it provides a valuable function for both drainage and wildlife habitat.

5. MUNICIPAL AND ENVIRONMENTAL RESERVES

- 5.1. Environmental Reserve (ER) shall be dedicated to conserve the wetland in the southeast corner of the SE 14-52-22-W4 for its direct access from the road right of way.
- 5.2. Alternative methods of protection shall be used to protect drainage where access is limited using Environmental Reserve Easements (ERE) and drainage easements.

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- 5.3. Municipal Reserve (MR) may be dedicated to create a protective buffer around the wetland in the southeast corner of the quarter section. MR will be based on 10% of the land area less that area owing as ER and ERE.
- 5.4. The remainder of Municipal Reserves shall be dedicated as cash in-lieu to address deficiencies in the physical land dedication.
- 5.5. Reserves shall be fenced or delineated using marker posts in accordance with County Design and Construction Standards, boundaries of the reserves shall be determined by the County at the time of final survey.
- 5.6. The following recommendations refer to activities that should be undertaken to facilitate development of a rural residential area in a way that incorporates, and therefore conserves, the biophysical resources.
 - 5.6.1. Retain the significant wetland features, including a minimum buffer of 10 m, to maintain the hydrological functions (surface water storage, water quality improvement, wildlife habitat, recreation potential, aesthetics) as ER;
 - 5.6.2. Retain upland forest stands, to maintain habitat diversity and connectivity, as MR;
 - 5.6.3. Investigate the applicability of Conservation Easements, Environmental Reserve Easements and Drainage easements to conserve wetland, drainage and upland forest features that have accessibility limitations;
 - 5.6.4. Work with the existing topography to the maximum extent as a means of conserving the existing drainage features and landscape character; and
 - 5.6.5. Consult with Alberta Environment and Strathcona County regarding any changes to topography which may influence drainage.

6. TRANSPORTATION

- 6.1 Range Road 221 adjacent to this quarter section is currently recognized as a Class II unimproved roadway and has an existing right-of-way of 20 meters. In accordance with Strathcona County policy SER-012-004, a 10 meter strip of land is required along the length of the subject quarter section adjacent to Range Road 221. Land dedication by survey will be required at time of the subdivision. Dedication is subject to change and will be dedicated in accordance with the most current Road Dedication Policy.
- 6.2 Township Road 522 adjacent to this quarter section is currently recognized as a Class II unimproved roadway and has an existing right-of-way of 20 meters. In accordance with Strathcona County policy SER-012-004, a 10 meter strip of land is required along the length of the subject quarter section adjacent to Township Road 522. Land dedication by survey will be required at time of the subdivision. Dedication is subject to change and will be dedicated in accordance with the most current Road Dedication Policy.

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- 6.3 A 10x10 meter corner cut will be required at the intersection of Township Road 522 and Range Road 221. Land dedication by survey will be required at time of the subdivision. Dedication is subject to change and will be dedicated in accordance with the most current Road Dedication Policy.
- 6.4 Access is to be provided to the proposed lots by way of single or shared access approaches to each of the proposed lots in accordance with the County Design and Construction Standards.
- 6.5 All accesses are to be constructed and/or upgraded in accordance with Strathcona County Design and Construction Standards.
- 6.6 Any newly created lots will be subject to payment of the rural road levy. The levy will be charged at the current rate at time of subdivision endorsement.

7. SERVICING AND UTILITIES

- 7.1. Prior to acceptance of a subdivision application, geotechnical testing shall be conducted on the proposed undeveloped lots by a qualified professional so that suitable locations can be chosen for building sites and private sewage disposal systems. The report is to include a development area plan showing the suitable building site locations in accordance with Alberta Environment and Parks, and Strathcona County criteria.
- 7.2. Drainage easements and/or public utility lots may be required for overland drainage that exists, needs to be relocated and/or is required for stormwater management. The applicant will be required to contact Alberta Environment and Parks regarding any potential drainage licenses and/or approvals for the conveyance of drainage from either onsite or offsite lands.
- 7.3. Existing and proposed private sewage system discharge locations shall comply with Provincial set-back requirements set out by Alberta Municipal Affairs at the time of subdivision.
- 7.4. At time of subdivision, the applicant may be required to provide a surface drainage assessment to address pre- and post-development drainage and recommendations to eliminate any negative impacts on adjacent or downstream areas. The assessment is to be completed to the satisfaction of the County.
- 7.5. At time of subdivision, the applicant may be required to provide information prepared by a qualified professional regarding groundwater availability for domestic purposes in accordance with the Water Act
- 7.6. At time of subdivision the applicant will be responsible for confirming and coordinating the provision of shallow utilities with the appropriate companies.

8. DEVELOPMENT CRITERIA

- 8.1. The applicant/landowner will be required to rezone the subject lands to an appropriate land use district prior to endorsement of any subdivision.

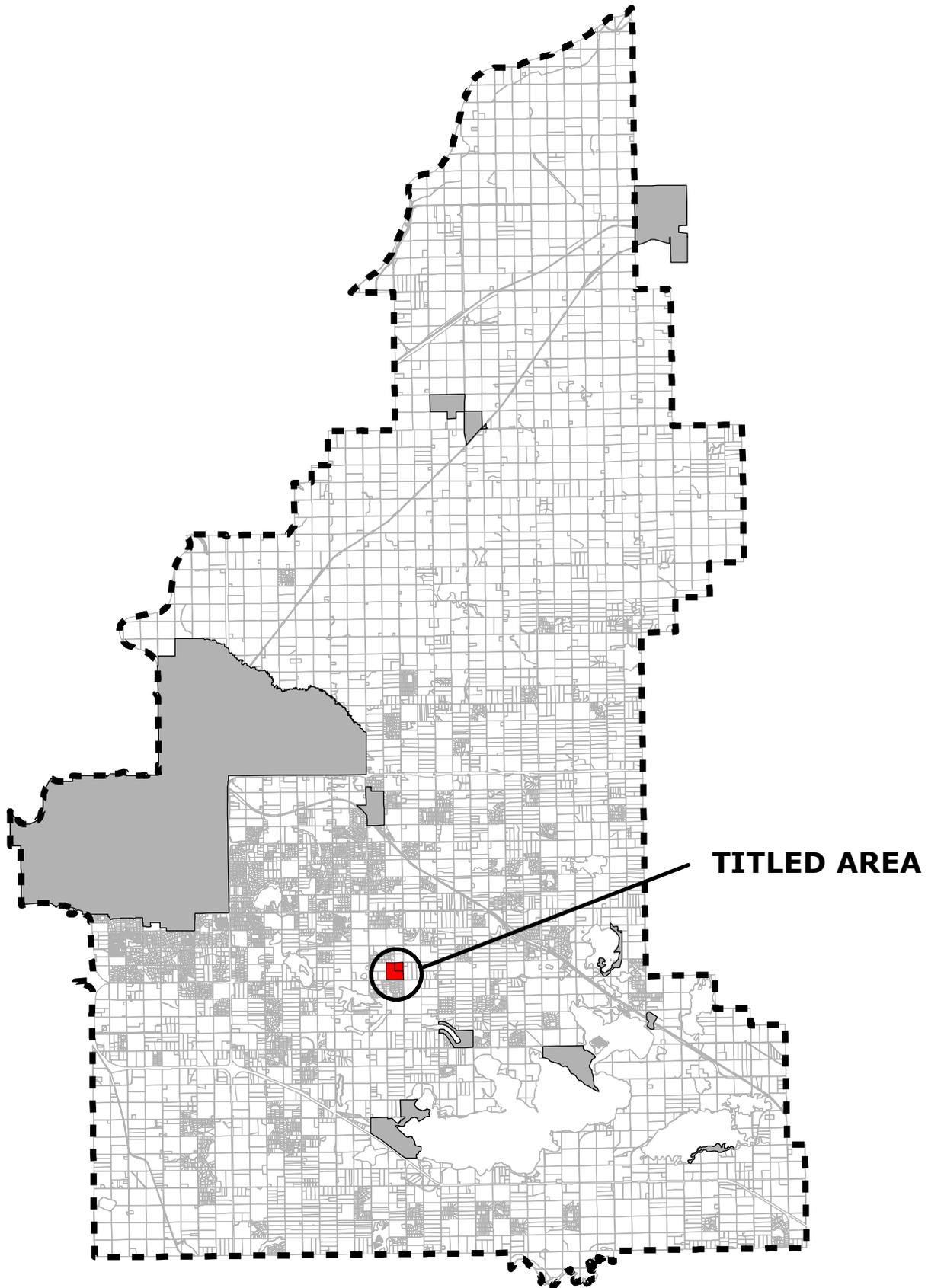
Conceptual Scheme

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- 8.2. The concept is contemplated to be developed in two phases and the requirements within the conceptual scheme document are applicable to each phase regardless of their order of development.
- 8.3. Any application to subdivide must be in accordance with the County Council approved Conceptual Scheme and cannot preclude any further subdivision considered within the plan area. Any proposed changes to the plan may require an application to amend the Conceptual Scheme.
- 8.4. The applicant/landowner may, through the rezoning and/or subdivision application process, be required to address the provision of private sewage systems, the construction of required accesses, internal road layout, rural road levies, approval and inspection fees and any other matter deemed applicable, to the satisfaction of Strathcona County.
- 8.5. Technical considerations, including a geotechnical assessment, traffic impact assessment, stormwater management report, noise attenuation assessment and any other studies deemed appropriate by Strathcona County, shall be addressed to the satisfaction of Strathcona County at the time of rezoning and/or subdivision application. Strathcona County standards at the time of rezoning and subdivision shall be adhered to.
- 8.6. The design and development of future lots should protect and develop amenities to take advantage of natural topography and other environmental features such as unique tree stands and water courses. Alberta Environment and Parks, and Strathcona County shall be consulted regarding any changes to topography which may influence drainage. No alterations to drainage courses, waterbodies, water courses or wetlands are permitted without the prior approval of Alberta Environment and Parks, Sustainable Resource Development and Strathcona County.
- 8.7. Development adjacent to slopes, wetlands and water courses shall conform to environmental setbacks contained within the Land Use Bylaw and any other regulatory document.
- 8.8. Where the proposal requires the owner/developer to construct or upgrade municipal infrastructure, a development agreement with Strathcona County is required. All development construction costs will be borne by the owner/developer.
- 8.9. Final location of property lines and lot areas shall be determined as time of subdivision. All proposed lots shall comply with the regulations of the Land Use Bylaw.
- 8.10. Any proposal to alter the boundaries of the subdivision within the quarter section will require an amendment to this Conceptual Scheme or must be in conformance with the Conceptual Scheme Policy SER-008-019.

9. COMPLIANCE WITH OTHER LEGISLATION

- 9.1. Nothing in this Conceptual Scheme shall be interpreted as relieving a person from complying with federal, provincial or municipal statutes or bylaws. In the event of a conflict between any of the provisions of this Conceptual Scheme and the provisions of any statute or bylaw, the provisions of the statute or bylaw shall prevail.



RURAL LOCATION MAP

SE 14-52-22-W4

FIGURE 1

 **TITLED AREA**

FILE NUMBER: 4090-2016CS006

 **STRATHCONA COUNTY**
DATE DRAWN: Apr 25, 2017



DASMARINAS
ESTATES

52249 RNG RD 222

RNG RD 221

TWP RD 522

TWP RD 522

CENTURY
MEADOWS

CENTURY
ESTATES

22151 TWP RD 522

52150 RNG RD 221

RNG RD 221

LOCATION MAP

FIGURE 2

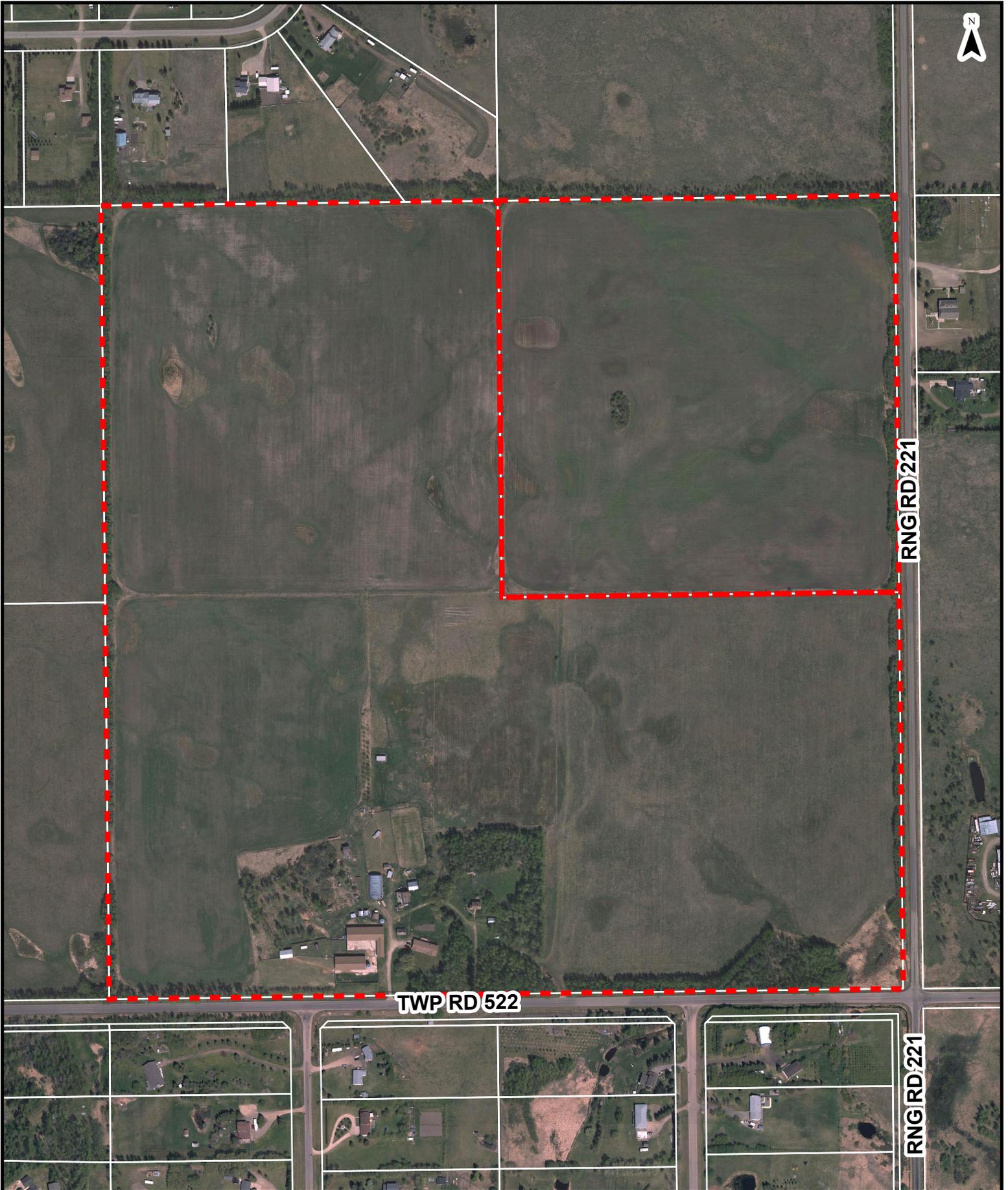
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 TITLED AREA

FILE NUMBER: 4090-2016CS006

 STRATHCONA
COUNTY

DATE DRAWN: Apr 25, 2017



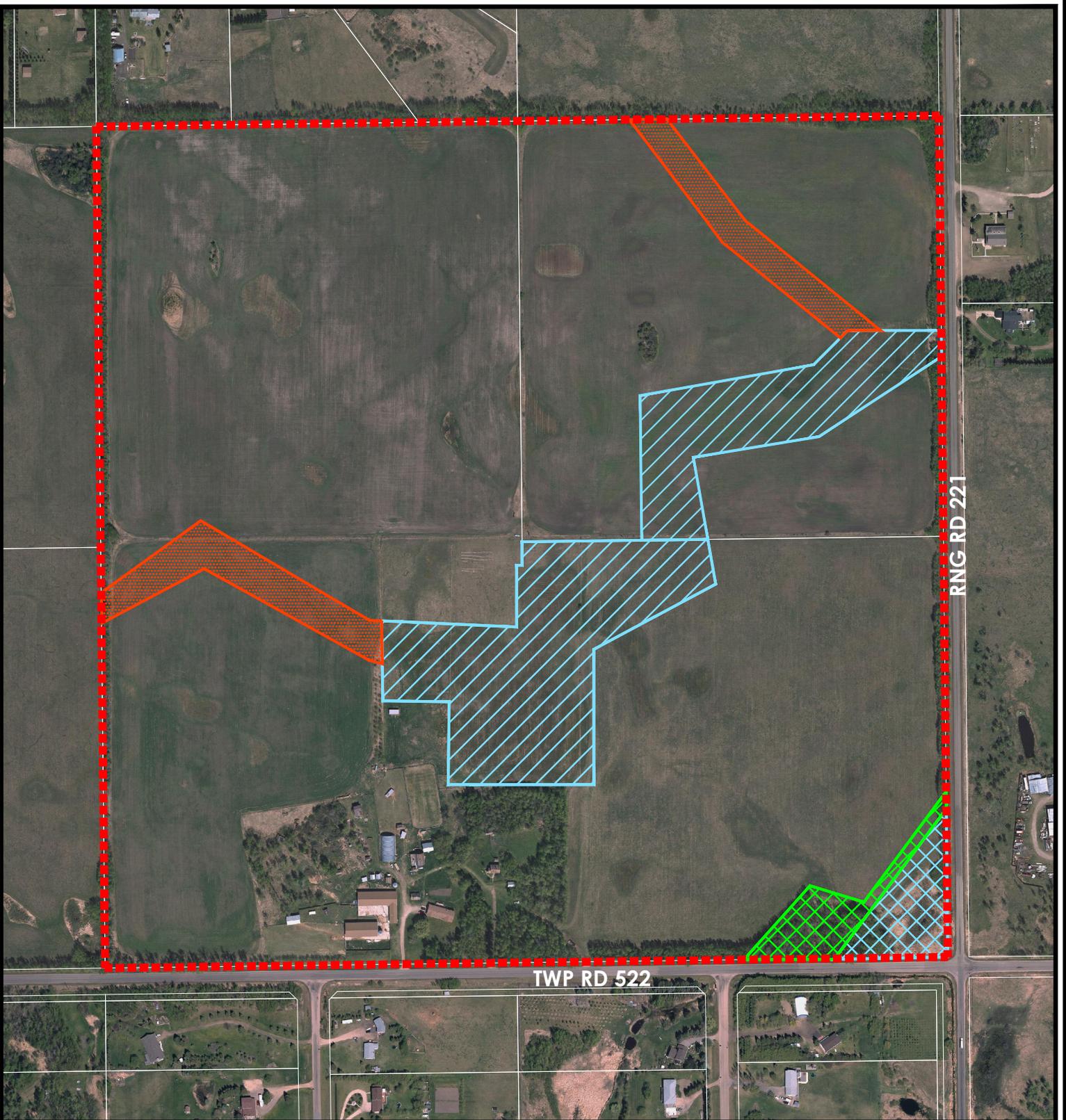
AIRPHOTO MAP
SE 14-52-22-W4

FIGURE 3

 **TITLED AREA**

FILE NUMBER: 4090-2016CS006

 **STRATHCONA COUNTY**
DATE DRAWN: Apr 21, 2017



CONCEPTUAL SCHEME - BIOPHYSICAL
SE 14-52-22-W4 **FIGURE 4**

- Conceptual Scheme =
Approx. 64.9 ha (160 ac) ±
- Proposed Drainage Easement
Approx. 1.93 ha (4.77 ac) ±
- Proposed Municipal Reserve
Approx. 0.62 ha (1.54 ac) ±
- Proposed Environmental Reserve
Easement Approx. 6.31 ha (15.59 ac) ±
- Proposed Environmental Reserve
Approx. 0.77 ha (1.91 ac) ±

PLANNING & DEVELOPMENT SERVICES



Drawn by: S. McCann

File No.: 4090-2016CS006

Date Drawn: Jan 04, 2017

Dwg No.:

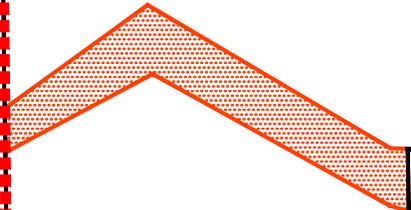
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Scale: Not to scale

PHASE I

PROPOSED LOT 1
26.059 ha
64.365 ac



PROPOSED LOT 2
4.482 ha
11.072 ac

PROPOSED LOT 3
4.530 ha
11.188 ac

PROPOSED LOT 4
3.758 ha
9.282 ac

PROPOSED LOT 6
4.230 ha
10.447 ac

PROPOSED LOT 5
4.164 ha
10.285 ac

RNG RD 221

TWP RD 522

CONCEPTUAL SCHEME - PHASE 1

SE 14-52-22-W4

FIGURE 5

-  Conceptual Scheme = Approx. 64.9 ha (160 ac) ±
-  Proposed Drainage Easement Approx. 1.93 ha (4.77 ac) ±
-  Proposed Municipal Reserve Approx. 0.62 ha (1.54 ac) ±
-  Proposed Environmental Reserve Easement Approx. 6.31 ha (15.59 ac) ±
-  Existing Access
-  Proposed Access
-  Joint Access
-  Proposed Environmental Reserve Approx. 0.77 ha (1.91 ac) ±

PLANNING & DEVELOPMENT SERVICES

 **STRATHCONA COUNTY**



Drawn by: S. McCann

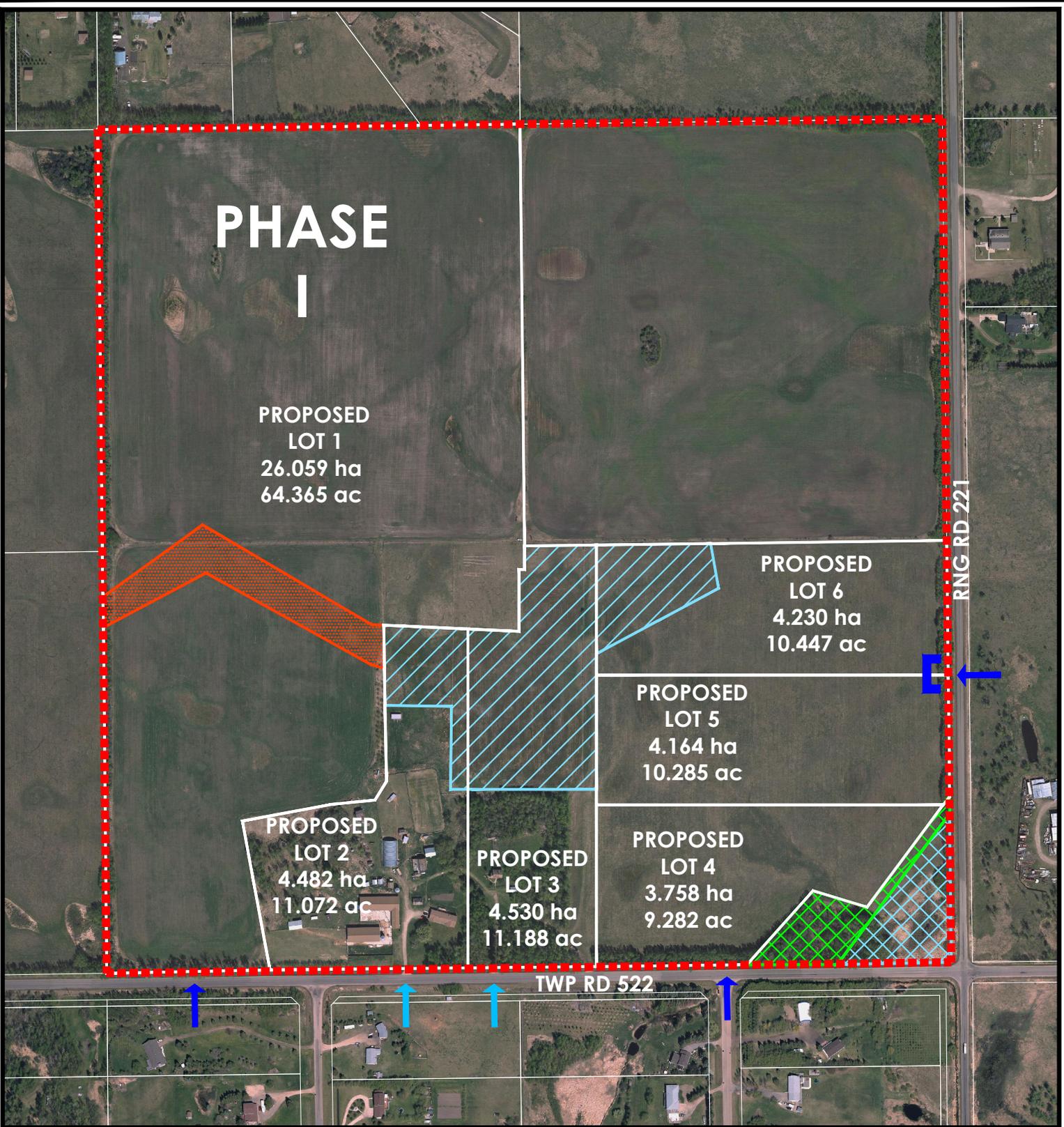
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Revision Date:

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4090 Land Use Bylaw -Conceptual Plans\
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PHASE I

PROPOSED LOT 1
26.059 ha
64.365 ac

PROPOSED LOT 6
4.230 ha
10.447 ac

PROPOSED LOT 5
4.164 ha
10.285 ac

PROPOSED LOT 2
4.482 ha
11.072 ac

PROPOSED LOT 3
4.530 ha
11.188 ac

PROPOSED LOT 4
3.758 ha
9.282 ac

TWP RD 522

RNG RD 221

CONCEPTUAL SCHEME - PHASE 1

SE 14-52-22-W4

FIGURE 6

-  Conceptual Scheme = Approx. 64.9 ha (160 ac) ±
-  Proposed Drainage Easement Approx. 1.08 ha (2.67 ac) ±
-  Proposed Municipal Reserve Approx. 0.62 ha (1.54 ac) ±
-  Proposed Environmental Reserve Easement Approx. 4.01 ha (9.91 ac) ±
-  Proposed Environmental Reserve Approx. 0.77 ha (1.91 ac) ±
-  Existing Access
-  Proposed Access
-  Joint Access

PLANNING & DEVELOPMENT SERVICES



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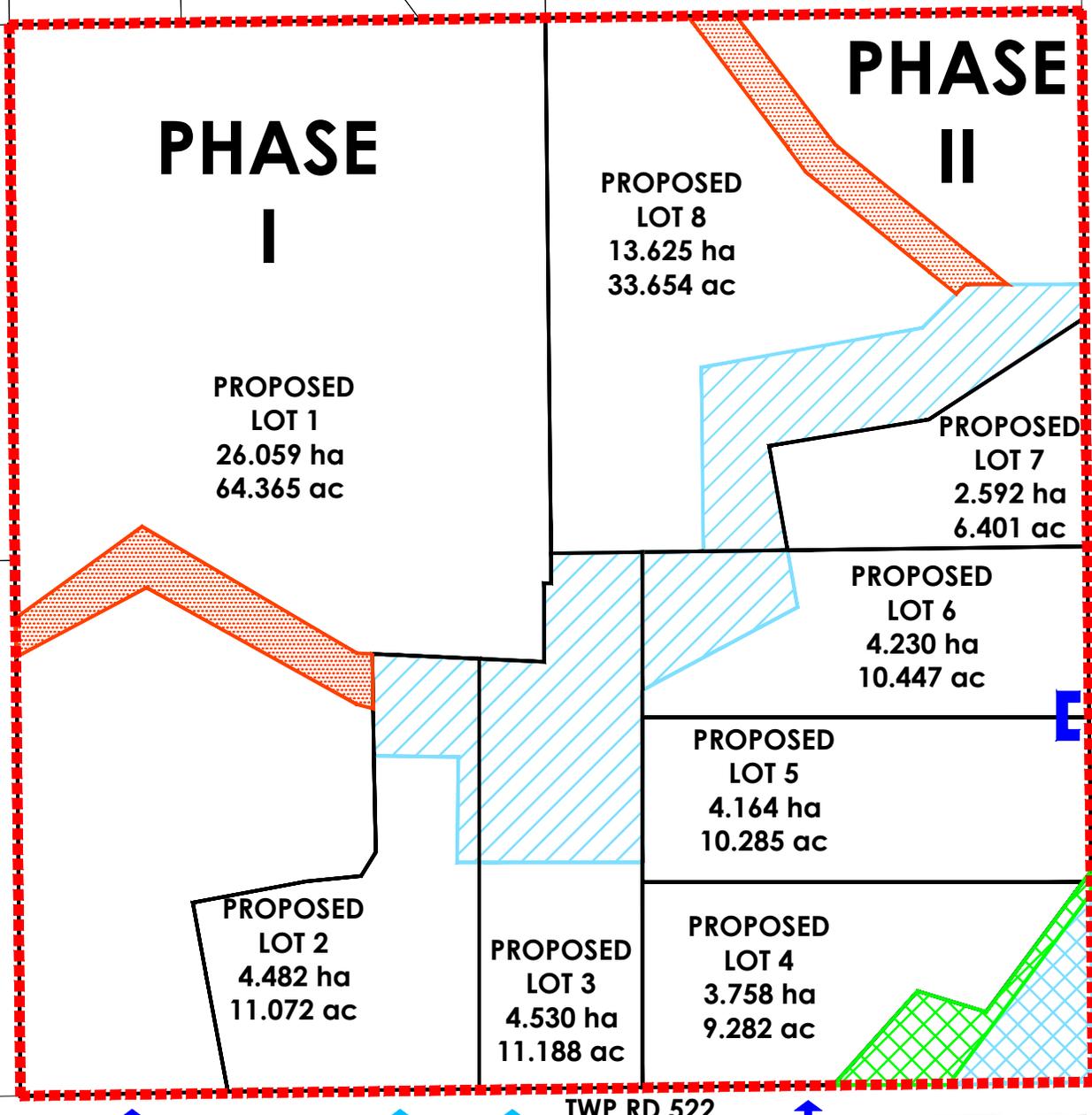
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CONCEPTUAL SCHEME - PHASE 2
SE 14-52-22-W4 **FIGURE 7**

-  Conceptual Scheme = Approx. 64.9 ha (160 ac) ±
-  Proposed Drainage Easement Approx. 1.93 ha (4.77 ac) ±
-  Proposed Municipal Reserve Approx. 0.62 ha (1.54 ac) ±
-  Proposed Environmental Reserve Easement Approx. 6.31 ha (15.59 ac) ±
-  Existing Access
-  Proposed Access
-  Joint Access
-  Proposed Environmental Reserve Approx. 0.77 ha (1.91 ac) ±

PLANNING & DEVELOPMENT SERVICES



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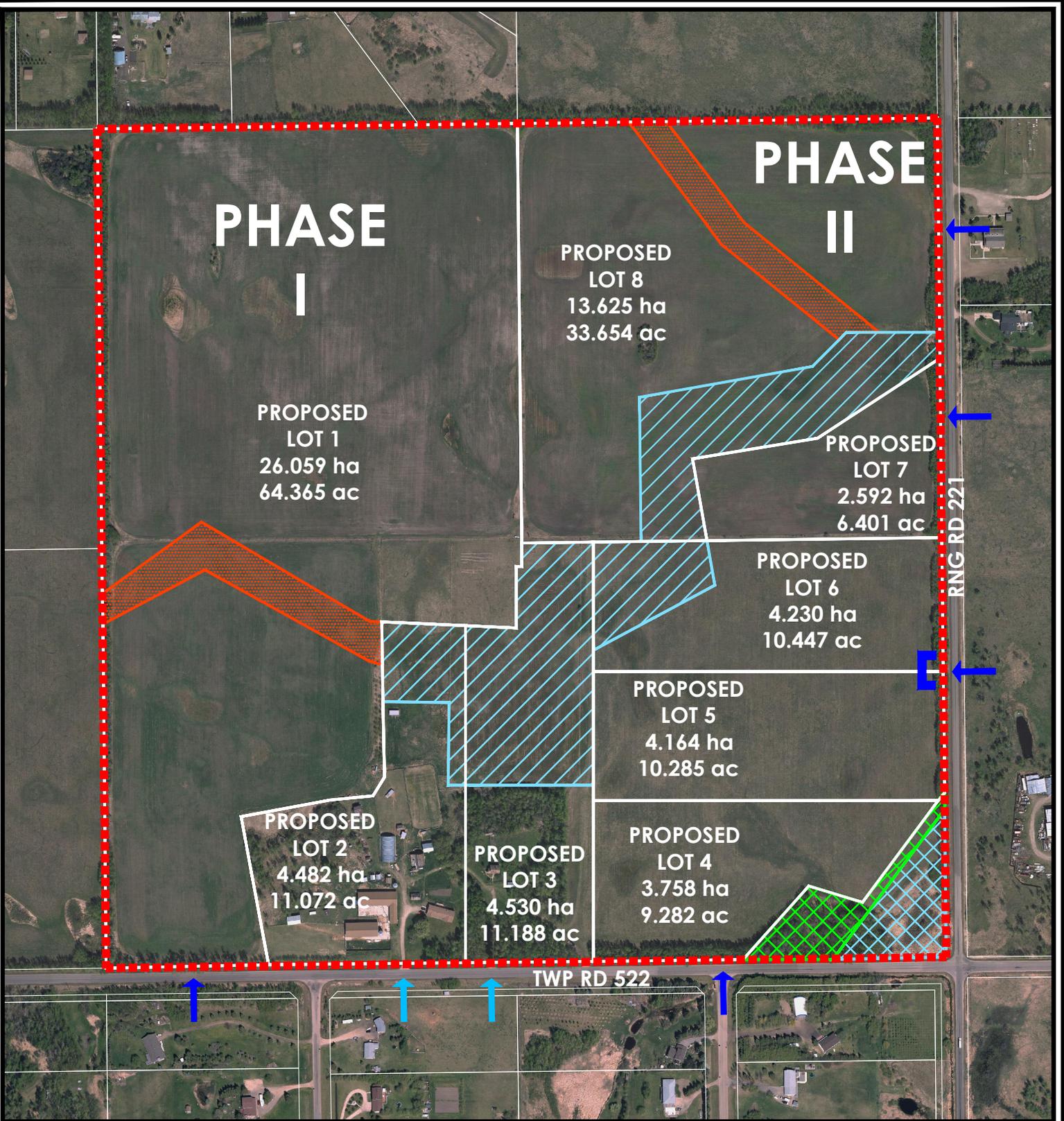
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CONCEPTUAL SCHEME - PHASE 2

SE 14-52-22-W4

FIGURE 8

- Conceptual Scheme = Approx. 64.9 ha (160 ac) ±
- Proposed Drainage Easement Approx. 1.93 ha (4.77 ac) ±
- Proposed Municipal Reserve Approx. 0.62 ha (1.54 ac) ±
- Proposed Environmental Reserve Easement Approx. 6.31 ha (15.59 ac) ±
- Proposed Environmental Reserve Approx. 0.77 ha (1.91 ac) ±
- Existing Access
- Proposed Access
- Joint Access

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