
Conceptual Scheme NW 19-53-21-W4

August 2015

Revision: #

Conceptual Scheme

NW 19-53-21-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 parcel of land; and
 - c) To ensure that the subdivision under review does not prohibit the ability of remnant parcels, or adjacent parcels, 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 parcels 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) NW 19-53-21-W4 (64.35 ha)
- 2.2. **Existing Land Uses:** (see *Figure 3 – Air Photo*)
- a) NW 19-53-21-W4 (64.35 ha): single detached dwelling with accessory buildings.
- 2.3. **Adjacent Land Uses:**
- a) North: Township Road 534 and two parcels zoned RA Rural Residential/Agriculture consisting of 8.1 ha and 24.1 ha
 - b) East: Four parcels zoned AG Agriculture General District consisting of 16.0 ha within the NE 19-53-21-W4, beyond lies Range Road 215.
 - c) South: One AG Agriculture General District parcel; consisting of 64.8 ha within the SW 19-53-21-W4.
 - d) West: Range Road 220 and ten parcels zoned AG Agriculture General District ranging in size from 4.2 ha to 8.1 ha within the NE 24-53-21-W4.
- 2.4. **Canada Land Inventory Soil Rating:** The subject property consists of Class 4 soils. The parcel is used for a residence and for the grazing of cattle, the MDP policy area will allow for consideration of further fragmentation of the subject lands.
- 2.5. **Eligibility of subdivision:** The quarter section has not been subdivided and based on equitable distribution of subdivision allows for consideration of up to eight parcels within the conceptual scheme subject lands.

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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 , 2015

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 parcel into a total of eight (8) parcels.
- 3.3. The development concept shown in Figures 6 & 7 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 redistricting.

4. ENVIRONMENTAL CONSIDERATIONS

- 4.1. A Biophysical Assessment was prepared by Strathcona County in June of 2015 for the the NW 19-53-21-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 hummocky, knob and kettle terrain, with elevations up to 740 meters on the tops of knobs and down to as low as 721 meters in the bottoms of kettles. The most significant landscape features are the altered and unaltered wetlands, particularly the large wetland in the southwest corner, two wetlands in the northeast and the remaining forested areas.

4.1.2. Vegetation and Wildlife

Approximately 80% of the subject property has been cleared of upland vegetation and has been under agricultural management for several decades. Historical air photos and onsite observations show that this property has been primarily used for pasture, the

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NW 19-53-21-W4

pasture was noted to be in good condition and no signs of over grazing were present, very few weeds were noticed on the subject property.

The forest structure within the shelterbelts and tree stands varies from well-developed herbaceous ground cover with low shrub and tall shrub layers to poorly developed, with only grass cover due to grazing activities. The age class of the forested areas differs from very mature (shelterbelts) to relatively young (southwest wetland). The mature tree stands are consistent (even aged), indicating that a larger forest existed prior to agricultural clearing with the younger stands representing a change in farming practices (less grazing). The overall diversity of the forested areas is moderately high.

The large wetland in the southwest corner of the subject property appears to be permanent and has had a small dugout added off to the north side for watering livestock. This wetland is part of a larger wetland complex and drainage system that flows through neighboring properties before finding its way into Pointe-Aux-Pins Creek about 5 kilometers to the west.

There were two other smaller permanent wetlands identified on the north half of the property, one along the east border and the other near middle of the northeast quadrant of subject property. It is possible that these two wetlands are connected during times of very high rainfall but no obvious link was apparent during the site investigation.

There were at least 12 ephemeral (seasonal) wetlands on the subject property which fluctuate seasonally and provide a water storage and habitat function for birds and amphibians. Typical wetland vegetation, which indicates wet soils and water at or below surface, was present. These ephemeral wet areas were distinguished by abundant growth of grasses and occasional willows.

During the site investigation direct wildlife sightings included songbirds, red-tailed hawk, waterfowl, wood frogs and deer, indirect sightings included moose (scat) and a great horned owl (vocalization). Other wildlife expected to live on or near the property include rodents, such as voles and porcupines as well as mesocarnivores like foxes, coyotes and skunks.

Overall, the diversity of landscape and plant communities across the subject property is moderate. The remaining shelterbelts provide important wildlife corridors for larger species like deer and moose while the permanent and ephemeral wetlands offer excellent habitat for local wildlife, specifically reptiles, amphibians and birds. Several species were observed directly or indirectly during the site reconnaissance (refer to Appendix A). The priority habitat primarily occurs in the southwest corner of the property and within the remaining tree stands and shelterbelts. Wetlands and those areas that have not been previously altered for agriculture should be conserved. Reserves should be dedicated in such a way to conserve representative lands across the subject property.

5. MUNICIPAL AND ENVIRONMENTAL RESERVES

- 5.1. It is recommended Environmental Reserve dedicated to conserve the wetlands and drainage within the subject property.

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- 5.2. Municipal Reserve should be dedicated to the full extent owing to create a protective buffer around the wetlands on the subject property and provide habitat connections where feasible. MR will be based on 10% of the land area less that area owing as ER. In order to maintain lands designated at ER, a MR buffer around the wetlands and around the adjacent upland poplar forest is recommended.
- 5.3. 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.
 - 5.3.1. 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;
 - 5.3.2. Retain upland forest stands, to maintain habitat diversity and connectivity, as MR;
 - 5.3.3. Investigate the applicability of Conservation Easements, Environmental Reserve Easements and Drainage easements to conserve wetland, drainage and upland forest features that have accessibility limitations;
 - 5.3.4. Work with the existing topography to the maximum extent as a means of conserving the existing drainage features and landscape character; and
 - 5.3.5. Consult with Alberta Environment and Strathcona County regarding any changes to topography which may influence drainage.

6. TRANSPORTATION

- 6.1 Range Road 220 adjacent to this quarter section is currently recognized as a Class II unimproved roadway and has an existing right-of-way of 20 metres. In accordance with Strathcona County policy SER-012-004, a 10 metre strip of land is required along the length of the subject quarter section adjacent to Range Road 220 including a 10 x 10 coner cut at the intersection of Range Road 220 and Township Road 534. 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 534 adjacent to this quarter section is currently recognized as a Class IV unimproved roadway and has an existing right-of-way of 20 metres. In accordance with Strathcona County policy SER-012-004, a 5 metre strip of land is required along the length of the subject quarter section adjacent to Township Road 534. 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.
- 6.3 Access is to be provided to the proposed lots by way of single or shared access approaches to each of the proposed parcels.
- 6.4 All accesses are to be constructed and/or upgraded in accordance with Strathcona County Design and Construction Standards.

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- 6.5 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 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 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.
- 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 by a qualified professional.
- 7.5. Two ATCO Gas right of ways are registered on the quarter section under instruments 1983PM and 7007SR measuring 9.14 meter in width along the entire length of the parcel along Range Road 220 and Township Road 534.
- 7.6. At time of subdivision, the applicant may be required to provide a stormwater management and site grading plan prepared by a qualified professional to the satisfaction of Strathcona County.
- 7.7. 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
- 7.8. 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 redistrict the subject lands to an appropriate land use district prior to endorsement of any subdivision.
- 8.2. Any application to subdivide must be in accordance with the 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.

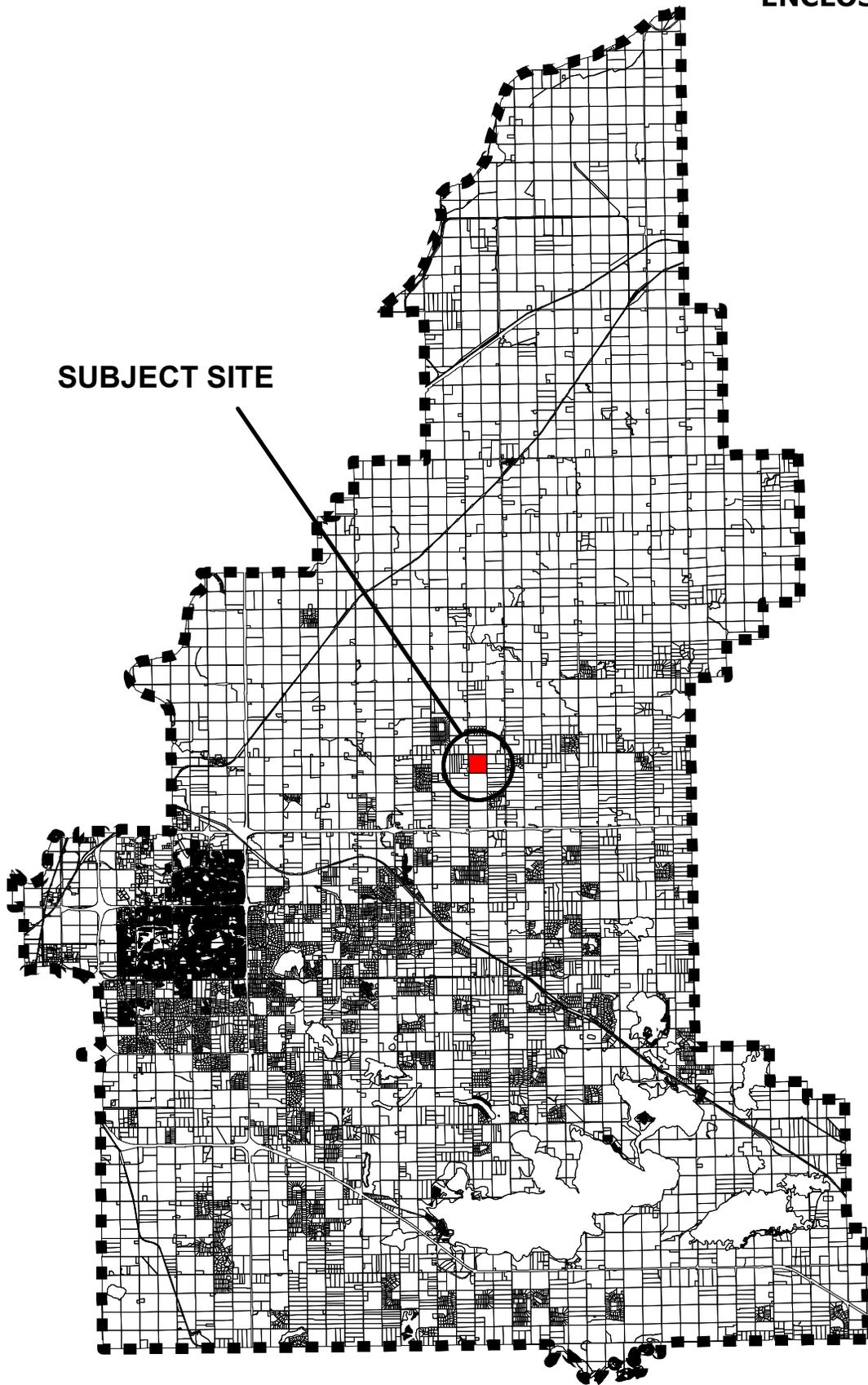
Conceptual Scheme

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- 8.3. The applicant/landowner may, through the redistricting 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.
- 8.4. 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 redistricting and/or subdivision application. Strathcona County standards at the time of redistricting and subdivision shall be adhered to.
- 8.5. The design and development of future parcels 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 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, Sustainable Resource Development and Strathcona County.
- 8.6. Development adjacent to slopes, wetlands and water courses shall conform to environmental setbacks contained within the Land Use Bylaw and any other regulatory document.
- 8.7. 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.
- 8.8. Final location of property lines and parcel areas shall be determined as time of subdivision. All proposed lots shall comply with the regulations of the Land Use Bylaw.
- 8.9. Any further 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
FIGURE 1**

NW 19-53-21-W4

 **Subject Area**

PLANNING & DEVELOPMENT SERVICES



Drawn By: M. Fraser

File No.: 4090-2015CS003

Date Drawn: July 10, 2015

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4090 Land Use-Conceptual Scheme\2015\
2015CS003 Western General\MAPS

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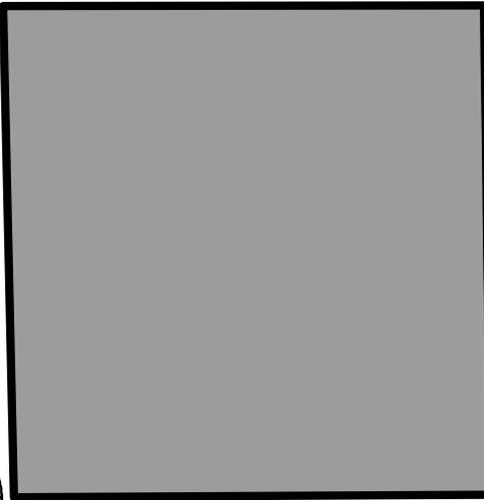
ENCLOSURE 4

RANGE ROAD 220

TOWNSHIP ROAD 534

RANGE ROAD 215

RANGE ROAD 220



LOCATION MAP FIGURE 2

NW 19-53-21-W4

 Subject Area

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ENCLOSURE 4

TOWNSHIP ROAD 530

RANGE ROAD 220



**AIR PHOTO
FIGURE 3**

NW 19-53-21-W4

 **Subject Area**

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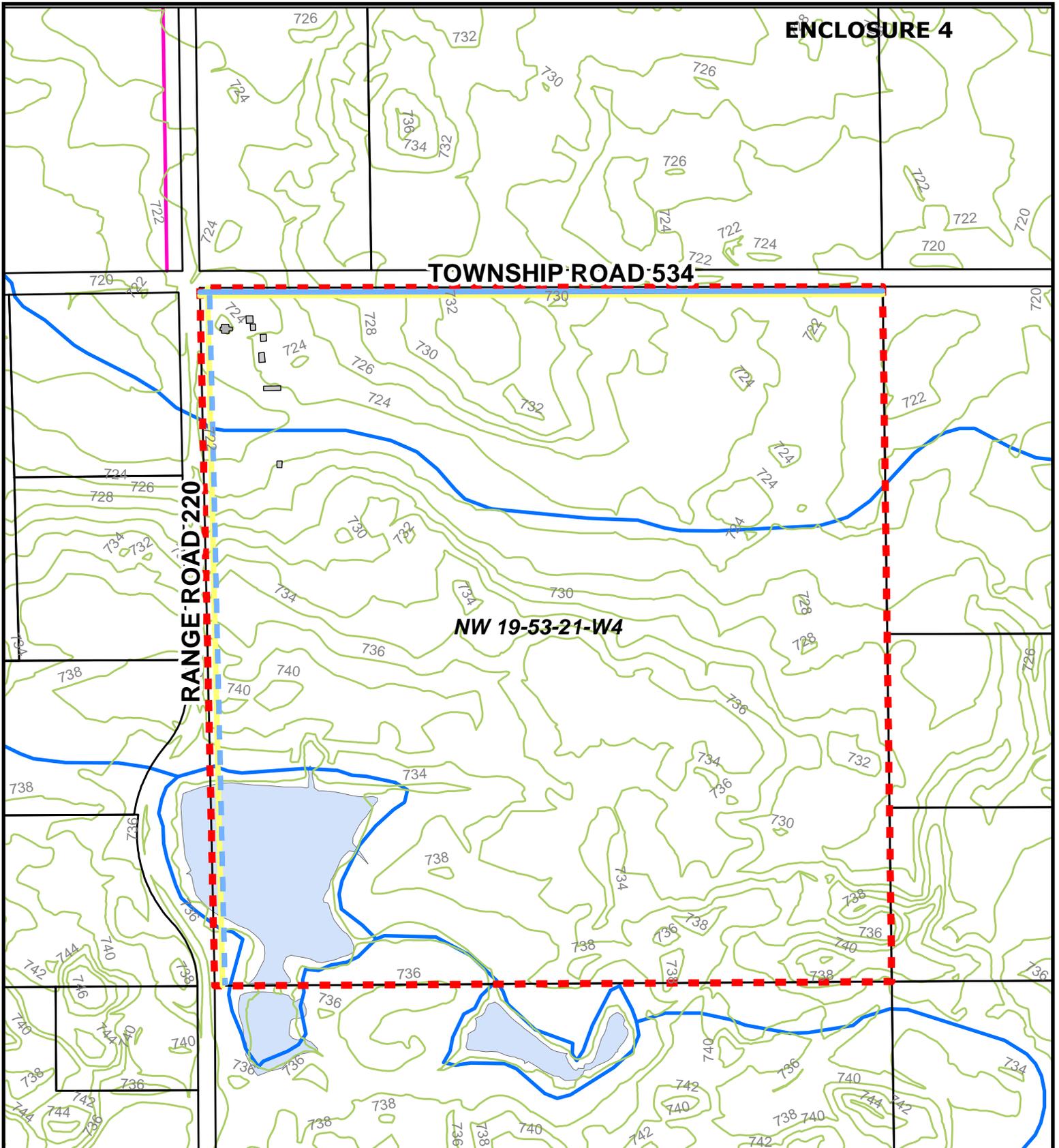
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SITE FEATURES - FIGURE 4

NW 19-53-21-W4

Conceptual Scheme =
Approx. 64.5 ha (159.00 ac)

2m Contours

9.14 Gas Pipeline R/W

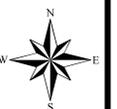
10 m Road Widening

5 m Road Widening

Buildings

Stream

PLANNING & DEVELOPMENT SERVICES



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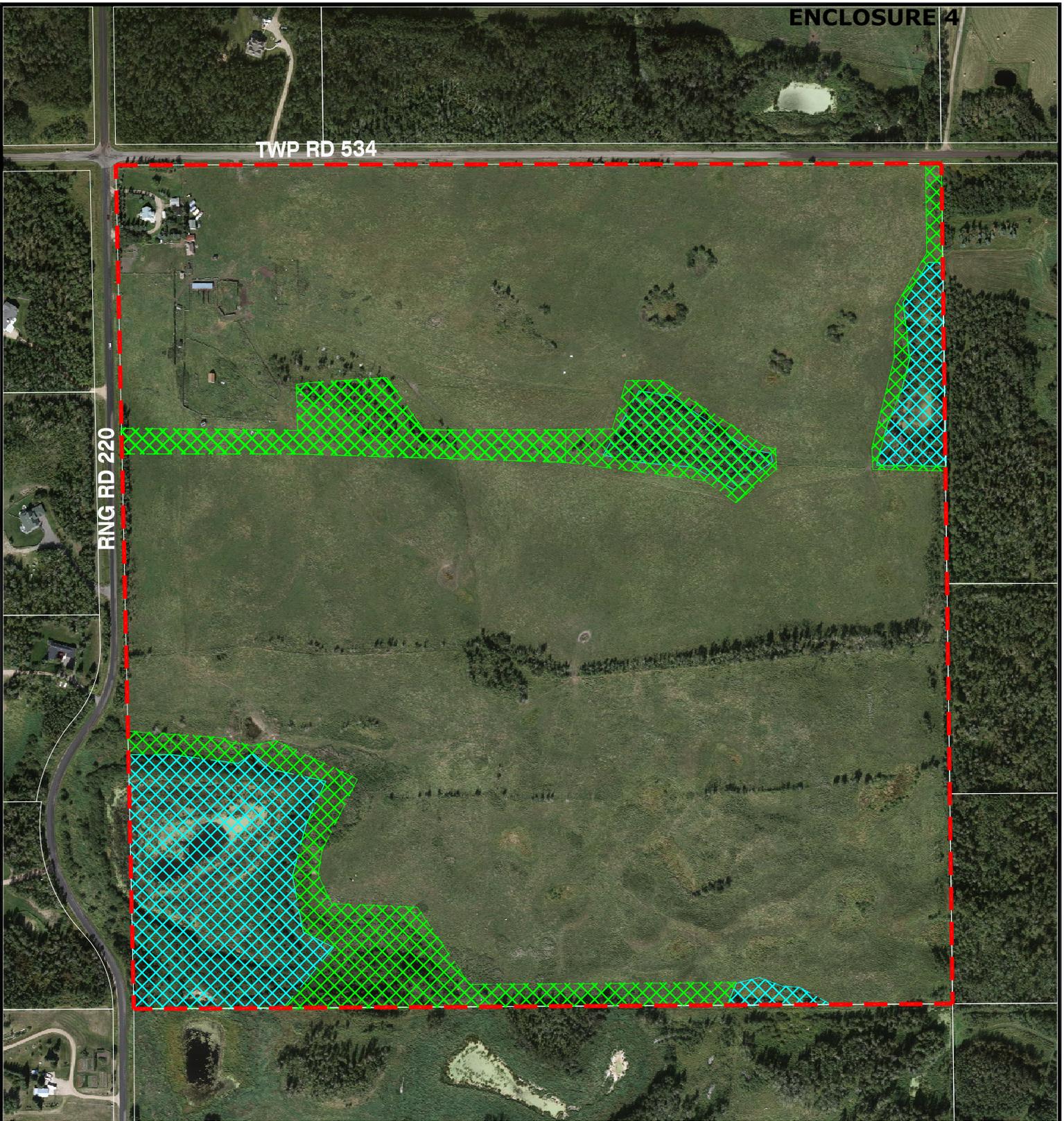
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TWP RD 534

RNG RD 220



BIOPHYSICAL- FIGURE 5
NW 19-53-21-W4

-  Conceptual Scheme =
Approx. 64 ha (159 ac) ±
-  Proposed Environmental Reserve =
Approx 14.3 ac ±
-  Proposed Municipal Reserve =
Approx 14.5 ac ±

PLANNING & DEVELOPMENT SERVICES

 STRATHCONA
COUNTY



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TWP RD 534

RNG RD 220

Lot 8 (5.2 ac) ±

Lot 7 (5.4 ac) ±

Lot 6 (8.1 ac) ±

Lot 5 (9.4 ac) ±

Lot 4 (9.2 ac) ±

Lot 2 (22.3 ac) ±

Lot 3 (20.1 ac) ±

Lot 1 (53.2 ac) ±

CONCEPTUAL SCHEME - FIGURE 6
NW 19-53-21-W4

-  Conceptual Scheme =
Approx. 64 ha (159 ac) ±
-  10m Road Widening
-  5m Road Widening
-  Proposed Environmental Reserve =
Approx 14.3 ac ±
-  9.14 Gas Pipeline R/W
-  Proposed Municipal Reserve =
Approx 14.5 ac ±
-  Proposed Joint Access

PLANNING & DEVELOPMENT SERVICES



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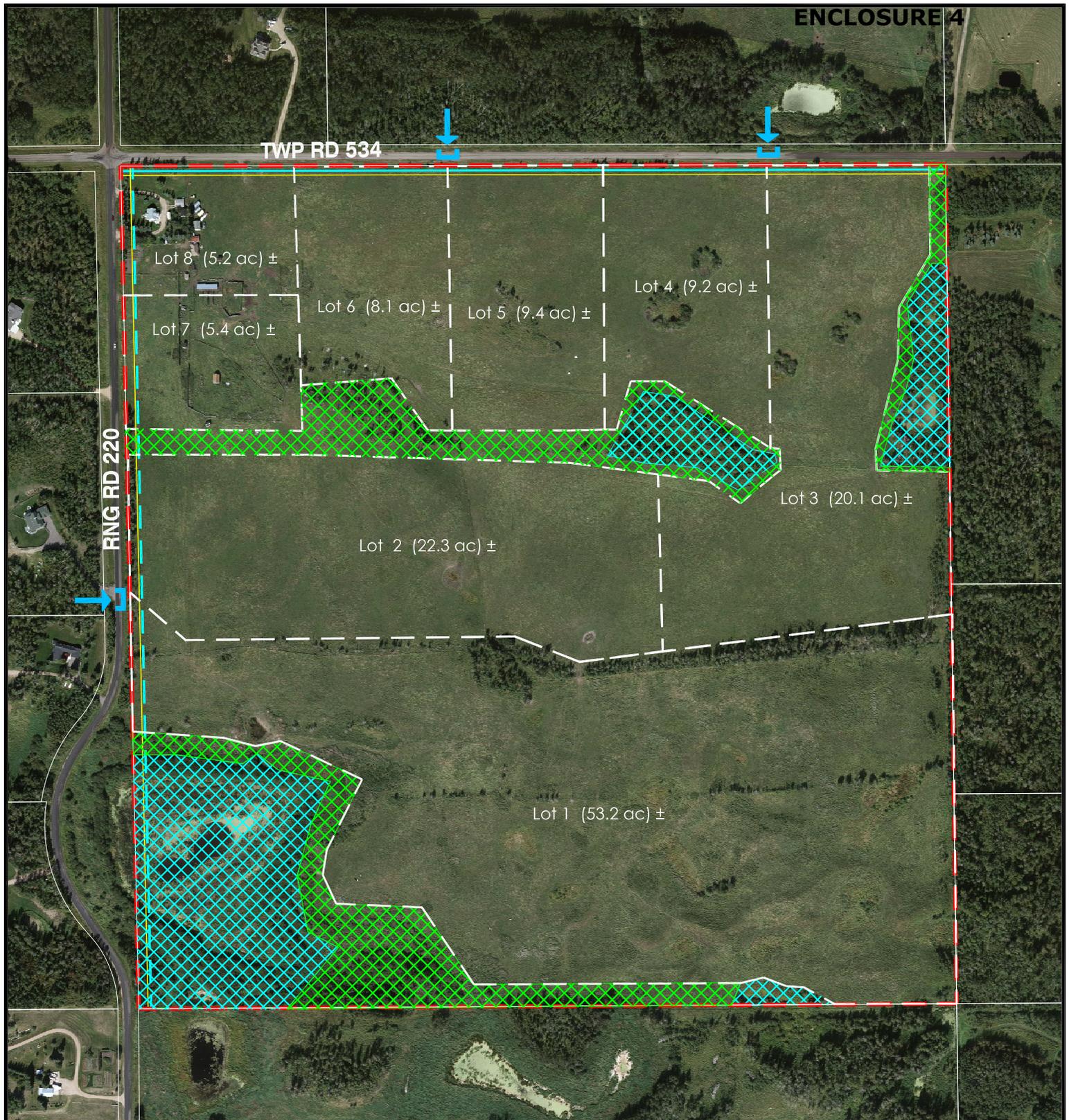
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CONCEPTUAL SCHEME - FIGURE 7
NW 19-53-21-W4

- Conceptual Scheme =
Approx. 64 ha (159 ac) ±
- 10m Road Widening
- Proposed Environmental Reserve =
Approx 14.3 ac ±
- Proposed Municipal Reserve =
Approx 14.5 ac ±
- Proposed Joint Access
- 9.14 Gas Pipeline R/W

PLANNING & DEVELOPMENT SERVICES



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