
Conceptual Scheme

NW 7-54-20-W4

October 2007



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/Large Rural Residential Policy Area of the Municipal Development Plan;
- 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 was within the Agricultural/Large Rural Policy Area of the MDP at the time of application and is 16 ha (40 ac) or more in size; and
- b)** The proposed subdivision would result in more than two parcels on the quarter section

OVERVIEW

2.1 Legal Description: NW 7-54-20-W4 (See Figure 1 for location)

2.2 Existing Land Use: One 160 acre parcel districted AG Agricultural General District, used for cultivation

2.3 Existing Development: There is an existing single detached dwelling with accessory structure established within the south west corner of the quarter section.

2.4 Canada Land Inventory Rating: Class 3 & Class 5

2.5 Adjacent Land Uses:

- a)** North: Township Road 542 and three 39 ac AG parcels and one parcel of 37.9 ac districted 2006-13. The northerly quarter has a Conceptual Scheme adopted by Council on November 7, 2006. (SW 18-54-20-W4)
- b)** South: One AG parcel consisting of 156 ac (SW 7-54-20-W4)
- c)** East: Range Road 205A and one AG parcel of 132 ac (NE 7-54-20-W4)
- d)** West: Range Road 210; two AG parcels consisting of 151 ac and 8.5 ac.

2.6 Municipal Development Plan (MDP): Municipal Development Plan(MDP) Bylaw 1-2007, reclassified the subject land from the Agriculture/Rural Residential Policy Area of the previous MDP 38-98 to the Beaver Hills Moraine Policy Area, which does not allow for more than two parcels per quarter section. MDP Policy 17.11, however, allows for further processing of conceptual scheme applications deemed complete prior to the adoption of the new MDP.

2.7 Land Use Bylaw (LUB): The subject land is currently districted as AG. Pursuant to the LUB 8-2001, the lands must be redistricted to DC Direct Control prior to subdivision approval. The purpose of the DC District is to provide a mechanism to create districts with land use regulations for a specific site when the control by other districts would be inappropriate or inadequate. In this case, the proposed parcel size would fall between the RA Rural Residential/Agriculture and AG Agriculture: General District.

CONCEPTUAL SCHEME (DESIGN CONCEPT)

The proposed Conceptual Scheme encompasses the entire NW ¼ of Section 7, Township 54, Range 20, West of the 4th Meridian and has been prepared in consultation with the affected and adjacent landowners of the quarter section. The objective of the Conceptual Scheme is to illustrate the potential developable area, lot yield, access locations and reserve land (Environmental Reserve, Municipal Reserve and Conservation Lot).

3.1 Based on the concept agreed upon by the landowner and administration as shown in Figure 2, **four (4) lots are proposed** for the entire quarter section without any further opportunity for subdivision. Please note that the development concept shown on Figure 2 is conceptual and may change at the time of future subdivision if further investigation of the quarter section identifies additional constraints to development. Lot sizes and dimensions will be finalized at time of subdivision.

SITE CONSIDERATIONS

4.1 The general topographic relief of the quarter section is characterized as knob and kettle topography with numerous ridges alternating with low swales and depressions that form wetlands and watercourses typical of the Beaver Hills Moraine.

4.2 Access to the quarter is gained from three sides of the quarter section, Range Road 210, Township Road 542 and Range Road 205A.

ENVIRONMENTAL CONSIDERATIONS

5.1 A Biophysical Assessment was conducted on the subject parcel on October 31, 2006. The purpose of the site assessment was to determine the potential for lands to be claimed by Strathcona County as reserves and/or for the conservation of environmentally significant areas during the subdivision process as provided under the Municipal Government Act and Municipal Development Plan. The following considerations were taken from the Site Assessment and Reserve Identification Report.

5.2 The subject property is located in the Beaver Hills Moraine physiographic region of Strathcona County. The subject property has an undulating topography with numerous hills and ridges alternating with low swales and depressions that form wetlands and watercourses typical of the Moraine. This topographical expression, commonly referred to as knob and kettle topography, often results in a convoluted and interconnected network of watercourses, wetlands, and waterbodies which have widely variable characteristics on spatial and temporal scales. Soils on the subject property are predominantly Class 5, meaning there are severe limitations on the range of crops feasible for agricultural production. The land was cleared in the past for agricultural uses and is currently being used as a perennial hay crop.

5.3 Significant Features:

5.3.1 Waterbodies/Creeks:

A waterbody is located in the southwest corner however it appears the landowner is in the process of modifying it and incorporating it into the farmstead landscape. It is unknown if the Province has approved the disturbances to this waterbody. Two relatively small permanent wetland areas were found in the northeast and southeast corners. The southeast wetland is

surrounded by a mature mixedwood forest stand predominated by aspen and balsam poplar. The wetland in the northeast is surrounded by a developing mixedwood forest predominated by aspen. Several small depressional areas can be seen on the airphotos and were found on the property. The vegetation and soils suggest these areas are periodically inundated with water and are ephemeral receiving their source of water through spring runoff and periods of high precipitation. One large depression in the north central area of the quarter section appears to have been ditched to dry out and maintain the land for agriculture. A tributary of the Ross Creek watershed bisects the property entering the south side about 550 meters east of the southwest corner and leaving the property on the west side about midway between the southwest and northwest corners. This watercourse appears to have been dredged sometime in the past to improve its local drainage function. The majority of the riparian vegetation has been cleared and the land is farmed up to the edge of the bank however some willow shrub appears to be recolonizing the channel. The land on both sides slopes toward this watercourse which then flows in a northwest direction toward the North Saskatchewan River. It is not known if the any of the drainage alterations observed were approved by the Province.

5.3.3 Vegetation Coverage:

The forest structure of the southeast woodland appears to have been impacted and suppressed by grazing over time and currently lacks diversity in the herbaceous ground cover and low shrub layers. Typically the forest understory will recover rapidly once grazing is eliminated or controlled with a reduced grazing rate. The age class of this forest is estimated to be between 50 and 75 years. The size and characteristics of the trees suggests a mature stand approaching an old growth or late seral stage where under natural conditions trees die and get blown down or broken off resulting in plentiful snags, an abundance of coarse woody materials on the ground, and gaps in the forest canopy. Normally the increased sunlight reaching the forest floor through the gaps promotes suckering of aspen and other trees and an uneven age structure of the trees develops. The increased sunlight also stimulates the growth of the understory, and the release of suppressed or dormant understory species. Grazing and past environmental events, such as late spring snowfalls, drought cycles, winds, etc., may contribute to tree mortality and may influence the transition into old growth characteristics. Within the forested area trembling aspen dominate the upland areas whereas balsam poplar dominates the low, moist areas and the ecotone between the upland and the wetland areas.

The forest surrounding the northeast wetland appears to be in a developing or early seral stage. This area of the property appears to have been cleared and hayed in the past but is now being left to revert back to natural vegetation. The age class of this forest is estimated to be 25 years or younger, it is currently predominated by willows, herbaceous plants and grasses but aspen/balsam poplar have become well established and are expected to dominate the stand within a few years.

5.3.4 Wildlife

Evaluating wildlife and Species-at-Risk in the area was limited by the time of year and the absence of a majority of migrants. White-tailed deer (*Odocoileus virginianus*) appear to be the dominant mammals found on the property, their presence was noted through observation of bedding areas, browse, scat, and trails on the property. Similar signs of coyote (*Canis latrans*) were observed. Due to the complex of wetland/upland habitats, songbirds, woodpeckers, waterfowl and raptors are expected to be diverse and abundant in the forested areas. The Ross Creek tributary provides connectivity through the surrounding landscape and provides a significant wildlife corridor to link larger habitat blocks on adjacent lands, thereby increasing the significance of the subject property.

RESERVE RECOMMENDATIONS (AS PER BIOPHYSICAL REPORT)

5.4 Environmental Reserve (ER):

The bed and shore of the Ross Creek tributary will likely be subject to claim by the Province. The waterbody in the southwest corner has been highly disturbed but may be claimed by the Province or otherwise may be claimed by the municipality. It is doubtful the Province would claim the bed and shore of any of the wetlands under crown ownership. Irregardless, the wetlands in the northeast and southeast corners, and the floodable areas adjacent the watercourse are clearly subject to Environmental Reserve (ER) dedication as per the Municipal Government Act. It is recommended that a 7.5 to 10.0 m buffer outside of the riparian zone be included in the ER dedication for access and maintenance purposes. If there is a disagreement with this assessment, the exact area to be dedicated would require a more detailed site assessment through a topographical survey and/or a more detailed biophysical survey of plant communities, this would be the responsibility of the landowner to provide.

5.5 Municipal Reserve (MR):

The most important upland habitat areas are the forested lands located in the southeast corner. Municipal Reserve (MR) should be dedicated to the full extent owing for the maintenance of upland habitat adjacent to the wetlands based on 10% of the land area less that area owing as ER and/or lands claimed by the Province. Since the area subject to ER dedication has not been determined, the amount of land to be dedicated as MR is difficult to quantify. The configuration and location of MR lands to be dedicated should complement the lands dedicated as ER to form one larger habitat block and maintain its function as a wildlife corridor.

5.6 Additional Recommendations

An Environmental Reserve Easement (ERE) and/or a Conservation Easement Agreement (CE) between the landowner and Strathcona County could be considered as alternate mechanisms for wetland and upland habitat conservation. The agreement would be registered against the title of the lots being created.

5.7 Reserve Dedication

Administration has agreed to the landowners' request that no reserves be taken under this concept. per Section 663 (b) of the Municipal Government Act Rev. Stats. of AB 2000 as the parcels are deemed to be 16ha in size prior to road dedication and that the intent of the parcels is for agricultural purposes.

TRANSPORTATION AND UTILITIES

7.1 At the time of future subdivision, all existing and proposed access locations will be finalized and must be to the satisfaction of Strathcona County's Engineering Servicing Standards.

7.4 The appropriate servicing for water and sewer will be determined at the time of subdivision to the satisfaction of Strathcona County. Prior to subdivision approval, percolation and water table testing will be conducted on the proposed lots by a qualified professional so that suitable locations can be chosen for building sites and private sewage disposal systems.

Conceptual Scheme

NW 7-54-20-W4

DEVELOPMENT/SUBDIVISION CRITERIA

To assist in the preparation of future redistricting and subdivision applications the following list of Development Criteria have been developed for reference. The criteria were developed from policies, standards and regulations within the various applicable bylaws and statutory plans and from information gathered at meetings with adjacent landowners.

8.1 The developer (applicant) will, through the subdivision application process be required to pay all approval fees and rural road levies, to the satisfaction of Strathcona County.

8.2 Technical considerations including a second biophysical assessment, stormwater management report and any other studies deemed appropriate by Strathcona County will be addressed, if required, to the satisfaction of Strathcona County at the time of subdivision.

8.3 No reserves will be taken per Section 663 (b) of the Municipal Government Act Rev. Stats. of AB 2000. As the parcels are deemed to be 16ha prior to road dedication, Strathcona County will not require reserves for parcels having agriculture intent.

8.4 Development within the quarter section will maintain a rural agriculture lifestyle on properties of approximately 15.0 hectares (37 acres) or larger.

8.5 For development to proceed to the level outlined on Figure 2:

- a)** Road Dedication of 5 meters will be required adjacent to Range Road 210, Township Road 542 and Range Road 205A.

8.6 Development adjacent to slopes, wetlands and water courses shall conform to environmental setbacks contained within the Land Use Bylaw 8-2001.

8.7 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.

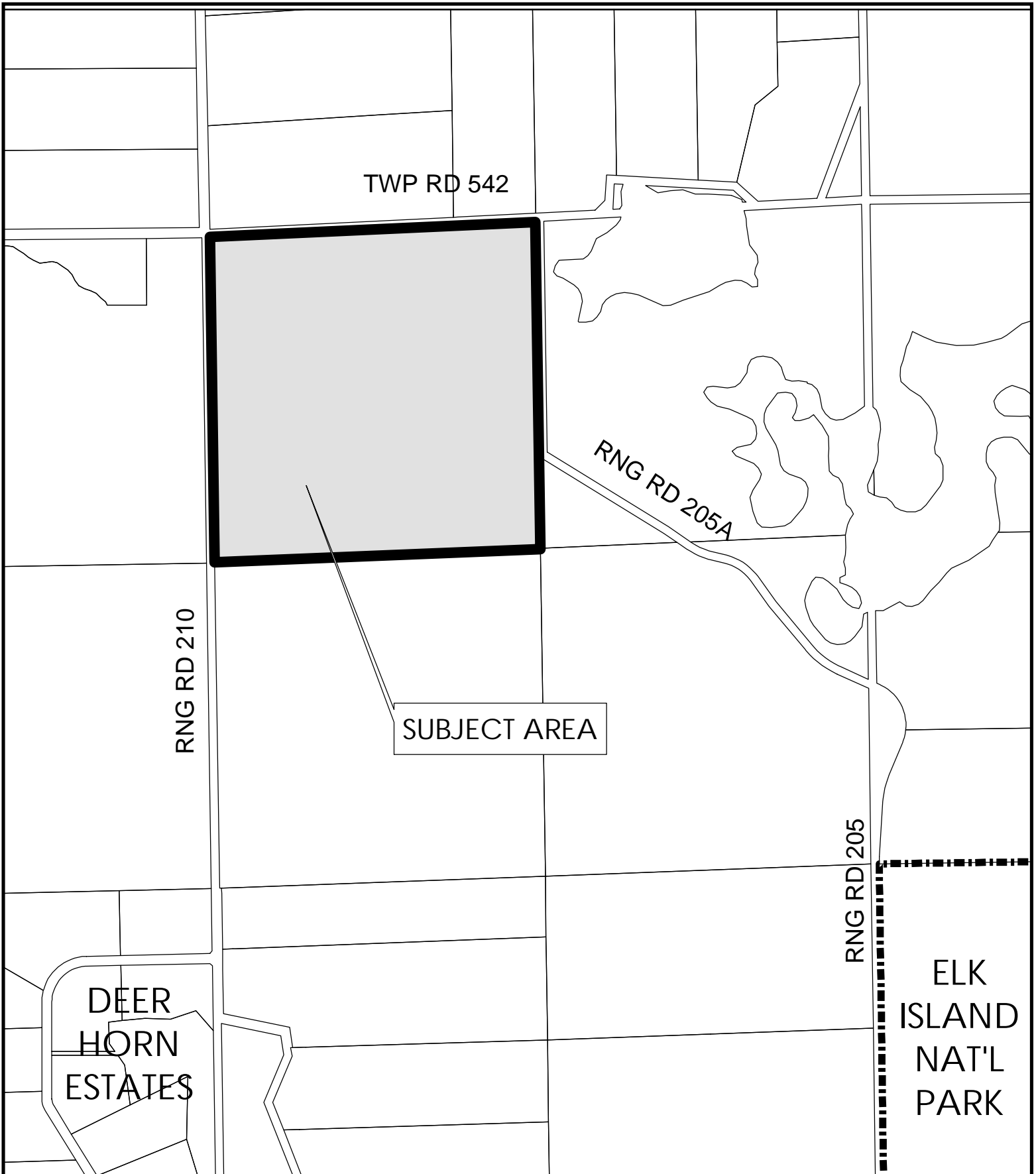


FIGURE 1
NW 7-54-20-W4



PLANNING & DEVELOPMENT SERVICES

Strathcona
County

Drawn By: C. Moriartey

File No.: 4070-2006A033

Date Drawn: Oct 3, 2007

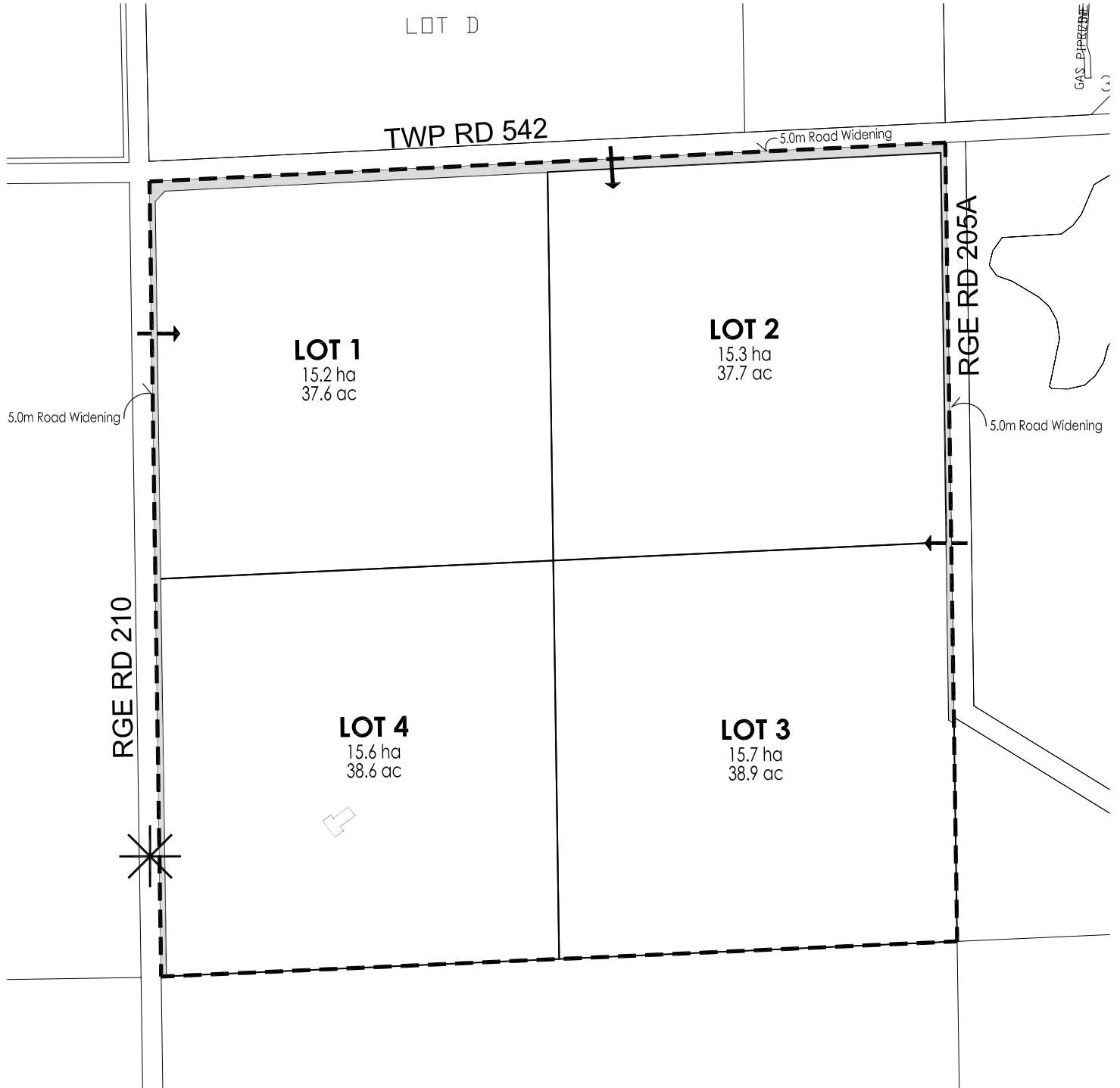
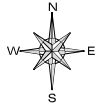
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4070 4070 Land Use Bylaw - Zoning Amendments\
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CONCEPTUAL SCHEME

NW 7-54-20-W4



Legend

- Proposed Subdivision =
- Lot 1 - 15.2 ha (38 ac) ±
- Lot 2 - 15.3 ha (38 ac) ±
- Lot 3 - 15.7 ha (39 ac) ±
- Lot 4 - 15.6 ha (39 ac) ±

→ Potential Access Location

□ Existing Dwellings

* Existing ACCESS

Gross Developable Area =
Approx. 61.8 ha (152.7 ac) ±

FIGURE 2
CONCEPTUAL SCHEME NW 7-54-20-W4

PLANNING & DEVELOPMENT SERVICES

Drawn by: C.Moriarty	Dwg No.: P40M0002	R1
Date Drawn: 09/28/2007	Adopted:	Scale: NOT TO SCALE

Strathcona
County



FIGURE 3
NW 7-54-20-W4



PLANNING & DEVELOPMENT SERVICES



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File No.: 4070-2006A033

Date Drawn: Oct 3, 2007

Revision Date: mmm dd, year

Dwg No.:
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