October 2006



1. PURPOSE

1.1 The purpose of a Conceptual Scheme (CS) is to provide supporting rationale for the potential subdivision of this land to accommodate rural residential/agricultural development and to coordinate development planning of adjoining lands. The CS, as stated in Council Policy statement SER-008-019, is required:

- 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;
- 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 Furthermore, as per Council Policy statement SER-008-019, the proposed Conceptual Scheme is essential for the following reasons:

- a) The land being proposed for redistricting or subdivision is within the Agricultural/Large Rural Residential Policy Area of the MDP and is 16 ha (40 ac) or more in size; or
- b) The land being proposed for redistricting or subdivision has the potential to be further subdivided; or
- c) The proposed subdivision would result in more than two parcels on the quarter section; or
- d) There is a need to coordinate development planning or servicing of adjoining lands.

2. OVERVIEW

2.1 The proposed Conceptual Scheme has been prepared by Strathcona County Planning and Development Services in support of a Land Use Bylaw Amendment application and future proposed subdivision. Russ Burrell has submitted an application on behalf of 1205315 Alberta Ltd. to rezone 54.48 hectare (134.63 acres) parcel from AG Agriculture: General District to DC Direct Control District in order to allow the future subdivision of nine (9) parcels ranging in size from approximately 2.6 ha (6.5 ac) to 6.4 ha (15.9 ac).

3. CONCEPTUAL SCHEME (DESIGN CONCEPT)

3.1 The proposed Conceptual Scheme encompasses the entire NE ¼ of Section 9, Township 53, Range 21, west of the 4th Meridian (Figure 2) and has been prepared in consultation with the affected and adjacent landowners of the quarter section. The goal of the Conceptual Scheme is to establish a framework for the potential future subdivision and development of the land while ensuring that the policies and guidelines within the applicable statutory plans and bylaws are adhered to. The objectives of the Conceptual Scheme are to illustrate the potential developable area(s), potential lot yield, potential access locations and potential reserve land (Environmental Reserve, Municipal Reserve and Conservation Easement).

4. BACKGROUND INFORMATION

- 4.1 Legal Description: NE 9-53-21-W4
- 4.2 Canada Land Inventory Rating: Class 3 & 4
- **4.3** Adjacent Land Uses:
- a) North: Highway 16 (Yellowhead)
- b) South: Country residential Subdivision of Beverly Hills
- c) East: Range Road 213
- d) West: Three AG Agriculture: General parcels, two at 16.2 ha (40.02 ac) and one consisting of 22.8 ha (56.36 ac)

5. MUNICIPAL DEVELOPMENT PLAN

5.1 The subject land is located within the Agricultural/Large Rural Residential Policy Area of the Municipal Development Plan. The policy area supports large rural residential development subject to:

- a) Section 10.18(a): Maximum parcel density shall not exceed eight (8) parcels per quarter section.
- b) Section 10.18(b): Suitable environmental conditions exist for on-site water supply and on-site sewage disposal.
- c) Section 10.18(c): The subject land is redistricted under the Land Use Bylaw, to an appropriate land use district other than an AG Agriculture: General District or AD Agriculture: Future Development District.
- d) Section 10.18(d): The subject land contains one contiguous developable acre (0.4 ha) of land.
- e) Notwithstanding Section 10.18(a), the maximum parcel density of the Agricultural/Large Rural Residential Policy Area may be increased up to a maximum of ten (10) parcels per quarter section, subject to the following:
 - i) Section 10.18(1) (a): Council has adopted a Conceptual Scheme that has been prepared in accordance with County policy.
 - ii) Section 10.18(1)(b): Where in the opinion of the County, the land includes priority upland habitat (forest and grassland) that is of significant ecological value to the community; and one of the following methods is used to conserve that habitat:
 - 1) One additional lot for each 3.2 hectares (8 acres) of land, over and above the normal 10% requirement, that is voluntarily dedicated as municipal reserve for the purpose of habitat protection; or
 - 2) One additional lot for each 8.0 hectares (20 acres) of land that is conserved under a voluntary conservation easement for the purpose of habitat protection; or
 - 3) One additional lot for each 4.0 hectares (10 acres) of land that is registered under separate title, for the purposes of conserving significant habitat. These lands shall be districted for conservation purposes under the land use bylaw, and ideally would be owned and operated by a local homeowners association or nature conservancy group.
- f) Section 10.18(1) (c): The related subdivision and development is designed in such a way so as to minimize the amount of tree removal; and,
- g) Section 10.18(1) (d): Internal road access is provided to each of the existing and proposed lots that are part of the subject lands.

h) Section 10.18(3): Council may establish a policy in the Council Policy Handbook outlining the circumstances, under which a Conceptual Scheme is required, as well as the purpose, general content and procedures required for the preparation and adoption of a Conceptual Scheme.

5.2 The Conceptual Scheme illustrates the proposed land use bylaw amendment application and future proposed subdivision for the balance of the quarter section (Figure 2). The maximum lot yield (maximum parcel density for the quarter section) shall not exceed ten (10) parcels for the entire quarter section. Please note that the developable areas are approximate and may change at the subdivision stage.

6. LAND USE BYLAW

6.1 Pursuant to the Land Use Bylaw 8-2001, the subject lands are proposed to be redistricted to DC Direct Control District. The purpose of the DC District is to foster a rural residential lifestyle on properties smaller than rural residential parcels that provides for the preservation and protection of environmentally sensitive lands and habitat that are of significant ecological value to the community

6.2 The DC District requires lots to be a minimum of 60 metres in width except in the case of an irregular shaped lot (such as a pie lot) and have a minimum area of 2.0 hectares (5 acres).

6.3 A Land Use Bylaw Amendment has been submitted concurrently to rezone approximately 54.89 hectares (134.63 acres) of the NE 9-53-21-W4 from AG Agriculture General to DC Direct Control District.

7. CURRENT SITE USES

7.1 The quarter section is currently divided in two parcels. There is a RA Rural Agriculture/Residential parcels consisting of 5.42 ha (13.4 ac) in the north east corner of the quarter section and the remnant AG Agriculture: General parcel of 55.3 ha (136.63 acres).

7.2 The subject parcel (remnant parcel) is vacant and currently appears to be cultivated for hay.

7.3 The 13.4 acre parcel identified as PT of the NE 9-53-21-W4 has an established dwelling.

7.4 The Conceptual Scheme proposes an Environmental Reserve (ER) dedication of 2.0 ha +/- (5.0 ac +/-), proposed Municipal Reserve (MR) dedication of 12.7 ha +/- (31.4 ac +/-) as required under section 661(a) and (b) of the MGA and a proposed Conservation Easement area of 5.6 ha +/- (13.75 ac +/-). The proposed reserve areas are subject to change based on the completed Biophysical Assessment and subject to final calculation upon subdivision.

8. SITE CONSIDERATIONS & PROPERTY INFORMATION

8.1 The general topographic relief of the quarter section is characterized as rolling with scattered shallow depressions supporting a system of ephemeral wet areas as well as more permanent wetlands and remnant upland forest stands.

8.3 The subject property contains some priority upland as identified in the Priority Landscape Ecology Assessment (PLEA) of Strathcona County.

9. ENVIRONMENTAL CONSIDERATIONS

9.1 The Strathcona County Prioritized Landscape Ecology Assessment (PLEA) identifies lands within the quarter section that have significant ecological value and should be protected by municipal reserve, environmental reserve, conservation easements and environmental reserve easements.

9.2 The (PLEA) identifies the following features in the NE 9-53-21-W4M:

a) Ua: Upland poplar

9.3 Pursuant to the MDP, Section 4 — Environmental Management, "in areas where native vegetation is important for soil conservation, water resource protection or wildlife habitat, Strathcona County will discourage further clearing or development, unless it is demonstrated to the County's satisfaction that these resources will not be negatively affected."

9.4 Subject to the MGA Section 664(1), the owner of the parcel of land that is the subject of a proposed subdivision may be required to provide part of that parcel of land as Environmental Reserve if it consists of: a swamp, gully, ravine, coulee, natural drainage course, land that is subject to flooding or is unstable, a strip of land, not less than 6 metres in width abutting the bed and shore of any lake, river, stream or other body of water for the purpose of preventing pollution or providing public access to and beside the bed and shore. In addition, the applicant will be required to provide Municipal Reserve.

9.5 A Biophysical Assessment was conducted on the subject parcel in September of 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.

9.6 The site assessment consisted of an onsite survey of vegetation communities, topographical features, and wildlife on the subject property. An assessment was needed to determine wetlands and watercourses subject to claim as Environmental Reserve. Other environmental features important for conservation, such as potential wildlife corridors, Species at Risk, unique landforms, etc., can be protected through the dedication of Municipal Reserves and/or other conservation mechanisms. An air photo evaluation and literature search were initially undertaken to identify potential areas of interest within the subject property and its relationship to adjacent properties. Wildlife trails, cleared areas, wetland margins and watercourses were traveled in order to assess and observe the subject property firsthand.

9.7 Landscape: Overall, the terrain was rolling with scattered shallow depressions supporting a system of ephemeral wet areas as well as more permanent wetlands and remnant upland forest stands. The upland poplar forests remaining on the subject property are typical of mixed wood forest slightly degraded by agriculture. No permanent creeks were observed on the site, however, ephemeral drainage swales were observed.

ENVIRONMENTAL CONSIDERATIONS CONT'D

A drainage swale extends from Range Road 213 to the west. This drainage swale and associated wetland areas supports a small amount of standing water, and the vegetation indicates there is some permanency on the landscape. The ephemeral drainage swales and wet areas are not important habitat features as they are routinely cultivated and do not support wetland vegetation. The more permanent forested uplands that have been surrounded by agricultural development are the most significant features on the landscape.

9.8 Vegetation: Approximately 70% of the subject property has been cleared of forest and wetland vegetation and has been under agricultural management for decades. The priority habitat occurs along the west boundary.

The uncleared portion of the subject property along the west boundary are covered by a mosaic of mixed wood aspen, balsam poplar, and white spruce and associated small localized wetlands. The well developed forest structure includes diverse herbaceous ground cover, low shrub and tall shrub layers. The age class of this forest is estimated to be between 40 and 60 years. The area is fenced and it is apparent that livestock grazed the area in the past, as weedy species are prevalent throughout. With the relatively recent removal of livestock, the understory layers have rebounded, resulting in diverse structural variety (canopy tree differences), landscape variety (rolling terrain) and plant community variety (shrub layers below the canopy). This area, being the most intact biologically and largest habitat block, has the highest priority for conservation.

A central north-south tree line was observed as well. This remnant forest stand was a typical fenceline. The trees were very decadent and the understory was low in diversity. Overall, this tree stand was poor in health and therefore low in conservation value. There were very few wildlife species within this tree stand, compared to the large area along the west boundary.

There is a small birch forest stand along the south boundary. This stand was significant with respect to its dominant birch overstory and fern layer. This was unique on the landscape and was simply a portion of a larger forest stand extending to the south.

There was one larger significant wetland located in the northeast portion of the subject property. This wetland appeared to be an extension of a drainage corridor east of Range Road 213. There was no open water on site during the reconnaissance, but the vegetation species and soils indicated that this was a significant permanent wetland. The grasses, sedges, rushes and willows provide significant wildlife habitat that differs from the uplands.

A smaller wetland was observed along Range Road 213. This wetland was classified as a typical pothole wetland. Open water was present within the wetland, as well as typical zones of vegetation.

Overall, the diversity of landscape and plant communities across the subject property should be conserved. Environmental and Municipal Reserves should be dedicated in such a way to conserve representative lands across the subject property.

9.9 Direct observations of wildlife in the area were typical of the timing of the assessment. Ungulates dominated the landscape and their presence was noted through indirect observations,

ENVIRONMENTAL CONSIDERATIONS CONT'D

such as browse, scat and trails. Red-tailed hawks were prevalent throughout the subject property and immediate area. Songbirds were abundant throughout the upland forest and wetland areas.

9.10 Reserve Recommendation

- a) Environmental Reserve (ER) be dedicated for the permanent wetlands to the full extent described under the Municipal Government Act. It is recommended that a minimum 7.5 m buffer adjacent to all ER areas be taken for access purposes.
- b) Municipal Reserve (MR) be dedicated to the full extent owing for the maintenance of forested habitat based on 10% of the land area less that area owing as ER. The west forest stand and associated wetlands should be conserved, as they provide connections to the forested lands to the south of the subject property.
- c) Conservation Easement Agreements between the landowner and Strathcona County would also be beneficial in habitat conservation. The agreement would be registered against the title of each lot. Depending on the layout of the conceptual scheme, a Conservation Easement may be appropriate to
- d) 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.
 - retain the significant wetland features, including a minimum buffer of 7.5 m, to maintain the hydrological functions (surface water storage, water quality improvement, wildlife habitat, recreation potential, aesthetics) as ER
 - retain upland forest stands, to maintain habitat diversity and connectivity, as MR
 - investigate the applicability of Conservation Easements to conserve upland forest areas
 - work with the existing topography to the maximum extent as a means of conserving the existing drainage features and landscape character
 - consult with Alberta Environment and Strathcona County regarding any changes to topography which may influence drainage
 - remove fencing to facilitate wildlife movement

10. TRANSPORTATION

10.1 A 5 meter road widening will be required adjacent to Range Road 213 at the time of future subdivision.

10.2 A 30 meter undeveloped service road dedication is required adjacent to Highway 16 to the satisfaction of Alberta Transportation for the provision of future access. (As shown in Figure 2) Highway 16 is classified as a Freeway and therefore access will ultimately be permitted at interchange locations only. In this regard Alberta Infrastructure and Transportation has indicated

that the removal of the intersection of Range Road 213 with Highway 16 will be required in the future. In view of this removal, a future traffic circulation network has been developed. This future traffic circulation network is shown on the attached Figure 4. The future removal of the intersection of the Highway 16 and Range Road 213 may be initiated by Alberta Infrastructure and Transportation or by Strathcona County as a result of further subdivision and/or development in the area that effects the operation of the intersection. Figure 4 depicts the future flow of traffic to Township Road 530 with connections to Highway 16 at Range Road 211 and Highway 824.

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

10.4 The developer(applicant) will be required to address Noise Attenuation to the satisfaction of Strathcona County's Engineering Servicing Standards – Rural Service Area.

11. SERVICING

11.1 The appropriate servicing for water and sewer will be determined at the time of subdivision to the satisfaction of Strathcona County.

12. DEVELOPMENT 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 was developed from policies, standards and regulations within the various applicable bylaws and statutory plans and from information gathered at meetings with landowners within the NE 9-53-21-W4 and the surrounding area. Additional development criteria may be identified at a more detailed subdivision stage.

12.1 The proposed Conceptual Scheme (Figure 2) illustrates the proposed land use bylaw amendment that has been applied for and the future proposed subdivision. The Conceptual Scheme identifies the potential developable areas on the balance of the quarter section, taking into consideration undevelopable areas such as environmental reserve, municipal reserve and conservation easement, as well as an internal roadway location from Range Road 213.

12.2 The developer (applicant) will, through the subdivision application process be required to address servicing for water and sewer, access locations, internal road layout, municipal reserve, environmental reserve, environmental reserve easements and potential conservation easement requirements, geo-technical considerations/constraints, approval fees, rural road levies and any other requirements deemed appropriate by Strathcona County at that time

12.3 Technical considerations including a biophysical assessment or stormwater management report and any other studies deemed appropriate by Strathcona County to be addressed, if required, to the satisfaction of Strathcona County at the time of subdivision. At all times County standards shall be maintained.

12.4 Future development shall only be allowed based on the provision of internal road access to individual parcels. Potential locations for internal road access are shown on Figure 2.

12.5 For development to proceed to the level outlined on Figure 2, an internal road must be constructed, to Strathcona County's Engineering Servicing Standards – Rural Service Area to provide access to the proposed parcels.

DEVELOPMENT CRITERIA CONT'D

12.6 For development to proceed to the level outlined on Figure 2, a 30 meter service road right of way must be dedicated along the northern boundary of the quarter section to the satisfaction of Alberta Transportation.

12.7 Development within the quarter section will maintain a rural residential lifestyle on properties of approximately 2.0 hectares (5.0 acres) or larger

12.8 For development to proceed to the level outlined on Figure 2, environmental reserve must be dedicated for wetland areas and watercourses to the full extent described under the Municipal Government Act at the time of subdivision.

12.9 For development to proceed to the level outlined on Figure 2, municipal reserve must be dedicated to the full extent owing for the maintenance of upland habitat, based on 10% of the land area less that area owing as environmental reserve at the time of subdivision.

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

12.11 For future development to proceed to the level outlined on Figure 2 a development agreement will be required to address the construction of an internal roadway and any offsite improvements required.

12.12 Prior to development, 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 for on-site private sewage disposal systems.

12.13 At all times all lots shall comply with the requirements of the appropriate land use district.

12.14 The approximate base developable area is 50.9 hectares +/- (125.8 acres +/-). Based on the developable and undevelopable areas illustrated in Figure 2, 10 lots are proposed for the entire quarter section, including the existing 13.4 acre parcel in the north east corner. Please note that the development concept shown on Figure 2 is conceptual and may change at the time of future subdivision. Further investigation of the quarter section may identify constraints to development on the quarter section.

13. SUBDIVISION APPROVAL

13.1 Notwithstanding any other issues that may arise through the subdivision review process, the following will be addressed as conditions of subdivision:

- a) Final location of property lines and parcel areas may be adjusted at the time of subdivision, however, shall comply with the maximum density and minimum lot areas of the Land Use Bylaw District for the lands.
- b) Any other conditions which may be applicable.

14. COMPLIANCE WITH OTHER LEGISLATION

14.1 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.





