



ELBOW VALLEY AREA STRUCTURE PLAN



Bylaw C-4762-97
Adopted May 27, 1997

MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44
Department of Planning and Development

MUNICIPAL DISTRICT OF ROCKY VIEW NO. 44
BYLAW C-4762-97

A Bylaw of the Municipal District of Rocky View No. 44 to adopt the Elbow Valley Area Structure Plan pursuant to Divisions 4 and 12 of the Municipal Government Act.

WHEREAS the Council of the Municipal District of Rocky View No. 44 wishes to adopt the Elbow Valley Area Structure Plan affecting the lands herein described as:

S ½ 5-24-2-W5M lying west of the Elbow River
All of 6-24-2-W5M
E ½ 1-24-3-W5M lying south of Highway No. 8
NW 1-24-3-W5M lying south of Highway No. 8
N ½ 2-24-3-W5M lying south of Highway No. 8

and

WHEREAS a notice was published on May 13, 1997 and May 20, 1997 in the Calgary Rural Times, a newspaper circulating in the Municipal District of Rocky View No. 44 advising of the Public Hearing for May 27, 1997; and

WHEREAS Council held a Public Hearing and have given consideration to the representations made to it in accordance with Section 692 of the Municipal Government Amendment Act, being Chapter 24 of the Revised Statutes of Alberta 1995, and all amendments thereto.

NOW THEREFORE the Council enacts the following:

1. That Bylaw C-3524-90, as amended by Bylaw C-4287-94, be rescinded.
2. That the Area Structure Plan to be known as the Elbow Valley Area Structure Plan be adopted to provide a framework for subsequent subdivision and development in the:

SE ½ 5-24-2-W5M lying west of the Elbow River
All of 6-24-2-W5M
E ½ 1-24-3-W5M lying south of Highway No. 8
NW 1-24-3-W5M lying south of Highway No. 8
N ½ 2-24-3-W5M lying south of Highway No. 8

and is attached hereto as Schedule "A".
3. That this Bylaw shall come into effect upon third and final reading hereof.

First reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, this 6th day of May, 1997, on a motion by Councillor Wilkinson.

Second reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, this 27th day of May, 1997, on a motion by Councillor Wilkinson.

Third and final reading passed in open Council, assembled in the City of Calgary, in the Province of Alberta, this 27th day of May, 1997, on a motion by Councillor Vincent.

Reeve or Deputy Reeve

Municipal Secretary

**ELBOW VALLEY
AREA STRUCTURE PLAN**

OFFICE CONSOLIDATION - SEPTEMBER 2005

Note: This office consolidation includes the following amending Bylaws:

Bylaw	Description	Date
C-6051-99	Replace Maps no. 6 & 7	May 4, 1999
C-5334-2001	Replace Maps no. 4, 6, 6a & 9.	April 10, 2001
C-5087-99	Replace Maps no. 4 & 9 Replace table no. 2 Replace 4.2.1 Replace a paragraph in section 4.5 Replace 4.5.1 (a) Delete and replace section 4.10.1.1 Delete section 4.10.1.3 & 4.10.1.8 Replace section 4.10.1.4 Amend a portion of section 4.11.2 Amend Map . 6 & 6a	July, 17, 2001
C-5878-2004	Replace Maps no. 1 through 9 Replace 2.2. plan area. Replace table no. 2 Delete section 4.2.5 Replace section 4.7 Delete section 4.9.3	March 09, 2005
C-6127-2005	Add schedule "A" Lott Creek Landowners Land Use Concept Insert paragraph in section 1.3 Amend section 2.2 plan area Table 1 Amend section 4.1 table 2 Amend section 4.4. Amend section 4.5. Amend section 4.10.1 Delete and replace Maps no. 4, 6, 6a & 9.	September, 27, 2005
C-7476-2015	Amend section 4.5	June 14, 2016

NOTE: This document is an office consolidation and amendments have been inserted for ease of reference only. The official Bylaw and all amendments thereto are available from the Administration Office of the M.D. of Rocky View No. 44 and should be consulted for all purposes of interpreting and applying this Bylaw.

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1.0 INTRODUCTION

1.1 PURPOSE OF THE PLAN

The Elbow Valley Area Structure Plan has been prepared pursuant to Part 17, Section 633 of the Municipal Government Act¹.

The Plan is intended to provide "a framework for subsequent subdivision and development of an area of land". In accordance with Section 633 of the Municipal Government Act, a Council of a Municipality may, by bylaw, adopt the Plan as a statutory plan.

As outlined in Section 633(2) of the Municipal Government Act², the Plan:

- (a) must describe
 - i) the sequence of development proposed for the area,
 - ii) the land uses proposed for the area, either generally or with respect to specific parts of the area,
 - iii) the density of population proposed for the area either generally or with respect to specific parts of the area,
 - iv) the general location of major transportation routes and public utilities, and
 - v) may contain any other matters the council considers necessary.

1.2 GENERAL OBJECTIVES OF THE PLAN

The objectives of the Plan are as follows:

- To ensure that the review of any subdivision and/or development proposal is conducted on the basis of approved policies and guidelines for the Plan Area;
- To define a land use strategy that is in accordance with the overall goals and objectives of the Municipal District of Rocky View General Municipal Plan, Bylaw C-3894-92;
- To conform to the provisions of the Municipal Government Act, RSA. 1996, Section 633 and the Subdivision and Development Regulation AR 215/95) with amendments;
- To replace the previous Elbow Valley Area Structure Plan and amendments to it (Bylaw C-3524-90 as amended by Bylaw C-4287-94) and to reflect current provincial and municipal planning policies;
- To provide for a residential settlement which has a recreational focus and commercial support facilities.

¹ Municipal Government Amendment Act, Revised Statutes of Alberta 1996, Chapter m-26 I with amendments in force as of May 24, 1996, government of the Province of Alberta.

² See Supra Note 1

1.3 THE APPROVAL PROCESS

The Municipal District of Rocky View No. 44 requires the preparation of the Plan as a prerequisite to development within the Plan Area.

Consultants were retained by the landowner to prepare the Plan. Following circulation and subsequent reviews, the Plan was presented to Council as a proposed bylaw adopting the Plan as the Elbow Valley Area Structure Plan. The approval of this Area Structure Plan rescinds Elbow Valley Area Structure Plan (Bylaw C-3524-90 and its amendments Bylaw C-4287-94).

Amendments to the Plan have been made to include a land use concept and policy framework for redevelopment of lands located east of and adjacent to the boundary of the City of Calgary (101st Street S.W.) and north of and adjacent to Township Road 240 and the TSUU T'INA Nation. This redevelopment concept has been attached as Appendix 1 and forms part of the policy framework of this Area Structure Plan.

1.4 PLAN IMPLEMENTATION AND AMENDMENT

- 1.4.1 The Elbow Valley Area Structure Plan, adopted by bylaw in accordance with Division 12 of the Municipal Government Act, shall become a statutory document of the Municipal District of Rocky View No. 44.
- 1.4.2 Pursuant to Section 692 of the Municipal Government Act, Council shall hold a Public Hearing with respect to the proposed bylaw before giving second reading.
- 1.4.3 While this Statutory Plan is designed to establish long term planning strategies for the Plan Area, changing considerations (technical, social and economic) may require amendments to the Plan. Pursuant to Section 692 of the Municipal Act, Council shall hold a public hearing prior to giving second reading to any proposed bylaw to implement such amendment.

1.5 PLAN INTERPRETATION

In this Plan:

- 1) "Concept Plan" means a land use concept prepared for the Plan Area.
- 2) "Council" means the Council of the Municipal District of Rocky View No. 44.
- 3) "Development Cell" shall be as set out in the Land Use Bylaw.
- 4) "Development" means
 - i) an excavation or stockpile and the creation of either of them,
 - ii) a building or an addition to or replacement or repair of a building and the construction or placing or any of them in, on, over or under land,
 - iii) a change of use of land or a building or an act done in relation to and or a building that results in or is likely to result in a change in the use of the land or building, or

- iv) a change in the intensity of use of land or a building or an act done in relation to land or a building that results in or is likely to result in a change in the intensity of use of the land or building.
- 5) "Municipality" means the Municipal District of Rocky View No. 44.
- 6) "Plan" means the Elbow Valley Area Structure Plan.
- 7) "Public or quasi-public" means a building or use which is available to the public for the purpose of assembly, instruction, cultural or community activity, including but not limited to, a church, a library, a museum, an art gallery and the recreational, social, or educational activities of a public group or organization.
- 8) "Qualified Professional" means a professional engineer, geologist or geo-physicist licensed to practice in the Province of Alberta in the relevant area of specialization.
- 9) "Residential Settlement" means a year round community in proximity to one or more specific recreational attractions. The range of permitted uses may include but would not be limited to residential units, motel and lodge accommodations, active and passive recreational activities, natural and man-made recreational facilities and required commercial and support services. Land uses within the residential settlement should reflect the central themes of a recreation focused development and a development offering community facilities.
- 10) "Subdivision" means the division of a parcel of land by an instrument pursuant to the Municipal Government Act and "subdivide" has a corresponding meaning.
- 11) "Subdivision Authority" means the subdivision authority established by Bylaw C-4550-95 under Division 3 of the Municipal Government Act.
- 12) "Tentative Plan" is a detailed proposal for subdivision of land and may form the basis for an application to subdivide portions of the plan area.
- 1.5.1 For the purpose of this plan, the boundaries and areas contained within it shall be considered as approximate only, and minor variations, at the sole and unfettered discretion of Council, may not require an amendment to the Plan.

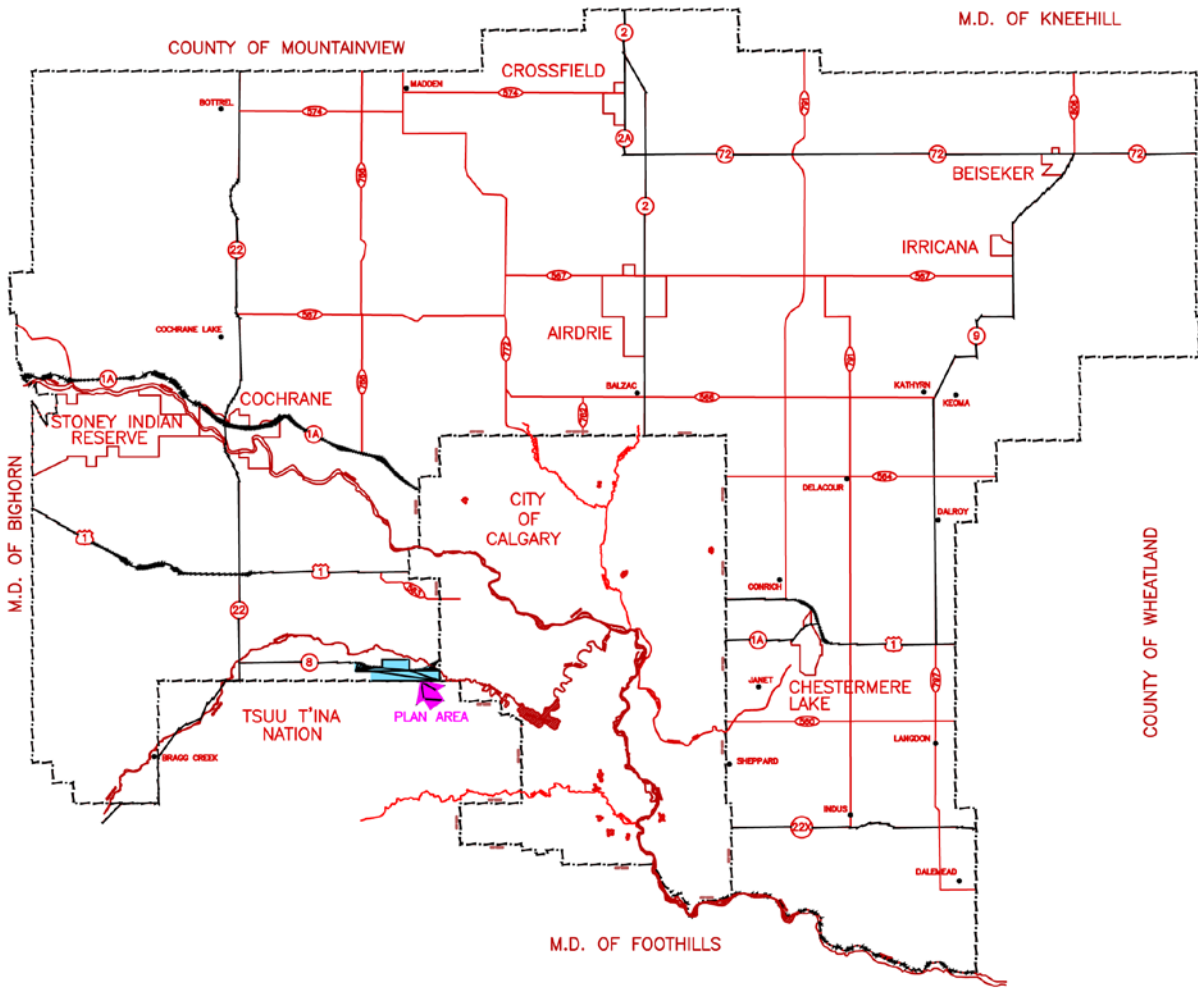
2.0 THE PLAN AREA

2.1 LOCATION

The lands lie to the north and south of Highway 8 near the confluence of Lott Creek and the Elbow River. The easterly boundary of the Plan Area abuts the western City limits of Calgary and the southerly boundary abuts the Tsuu T'ina Nation Reserve No. 145 (Map 1).

2.2 PLAN AREA

Land ownership within the Plan Area comprises ± 1164.41 acres (± 471.63 hectares), not including open road and Highway allowances, and is described and illustrated in Table 1 and Map 2.



ELBOW VALLEY
AREA STRUCTURE PLAN



N.T.S.
DATE: JAN 2004

LOCATION
PLAN

MAP No.

1

Table 1 - Legal Descriptions & Areas

Legal Description	Ac	Ha
Part Block. 23, Plan 7910905 in the NW Sec. 1-24-3-5	65.12	26.35
A portion of the NE Sec. 1-24-3-5	54.50	22.06
SE ¼ Sec. 1-24-2-5	160.00	64.75
NW ¼ Sec. 6-24-2-5	138.04	55.86
NE ¼ Sec. 6-24-2-5	141.94	57.44
SE ¼ Sec. 6-24-2-5	139.48	56.45
SW ¼ Sec.6-24-2-5	159.12	64.4
Block 2, Plan 961 0433 in the SE Sec. 5-24-2-W5M	86.14	34.86
Lot 7, Block 1, Plan 961 0433 in the SE Sec. 5-24-2- W5M	8.35	3.38
Lot 8, Block 1, Plan 961 0433 in the SE Sec. 5-24-2-W5M	9.24	3.74
Lot 4, Block 1, Plan 891 0799 in the SE Sec. 5-24-2-W5M	6.00	2.43
Lot 5, Block 1, Plan 891 0799 in the SE Sec. 5-24-2-W5M	6.69	2.71
Lot 6, Block 1, Plan 891 0799 in the SE Sec. 5-24-2-W5M	5.99	2.42
Lot 9, Block 1, Plan 0312250 in the S ½ 5-24-2-W5M	14.27	5.775
A portion of the SW Sec. 5-24-2-W5M	152.62	61.76
Closed Road Allowances	16.91	6.84
TOTALS	1164.41	471.63

**Hectares determined by conversion.*

2.3 POLICY FRAMEWORK

This Area Structure Plan shall conform to the General Municipal Plan and the City of Calgary/Municipal District of Rocky View Inter-Municipal Fringe Agreement.

2.3.1 The General Municipal Plan

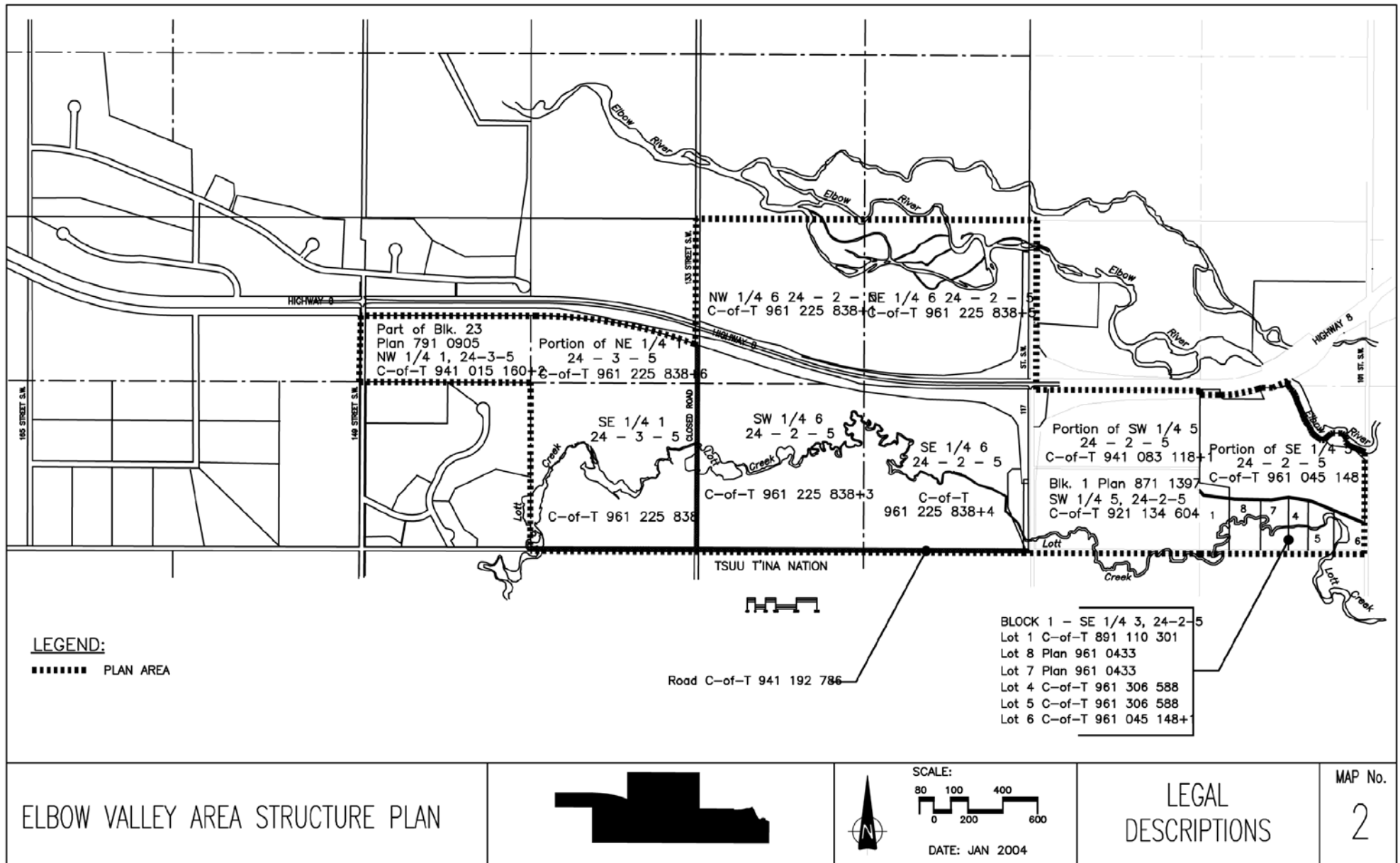
The Municipal District of Rocky View No. 44 General Municipal Plan is the principal Statutory Plan affecting land use within the Municipal District of Rocky View No. 44, and thus the preparation of this Plan has been guided by the General Municipal Plan (GMP)³.

With respect to the density and form of development contemplated by this Plan, Section 6.4.2 of the GMP states:

“... the Municipality encourages proposals for country residential subdivision and development where proposed parcel densities are directly related to one or more of the following:

- a) the carrying capacity of the lands contained in the proposal having regard to site conditions, environmental considerations and impacts, community context and other factors that may have been considered in the design of the proposal,

³ Municipal District of Rocky View No. 44, General Municipal Plan, Bylaw C-3894-92, adopted by October 6, 1992



- b) the suitability and availability of municipal and private services necessary to support the proposal,
- c) a mixed-use recreation attraction and settlement proposal,
- d) an innovative rural/residential development supported by the provisions of a site-specific area structure plan.

This Plan addresses the requirements of the GMP in that it establishes a mixed-use recreational and residential settlement, with particular emphasis relating to the sensitivity of the environment as outlined in Section 6 4.2 of the GMP.

2.3.2 *City of Calgary/Municipal District of Rocky View Inter-Municipal Fringe Agreement*

In September of 1995, the City of Calgary/Municipal District of Rocky View No. 44 Inter-Municipal Fringe Agreement came into effect. This is an interim agreement until such time as an Inter-Municipal Development Plan can be adopted. The lands located east of 117 Street (portions of the south half of Section 5-24-2-W5) are within the area defined by the interim agreement (Map 3). This Plan is recognized in this interim Inter-municipal Agreement by the City of Calgary.

The lands are legally described as:

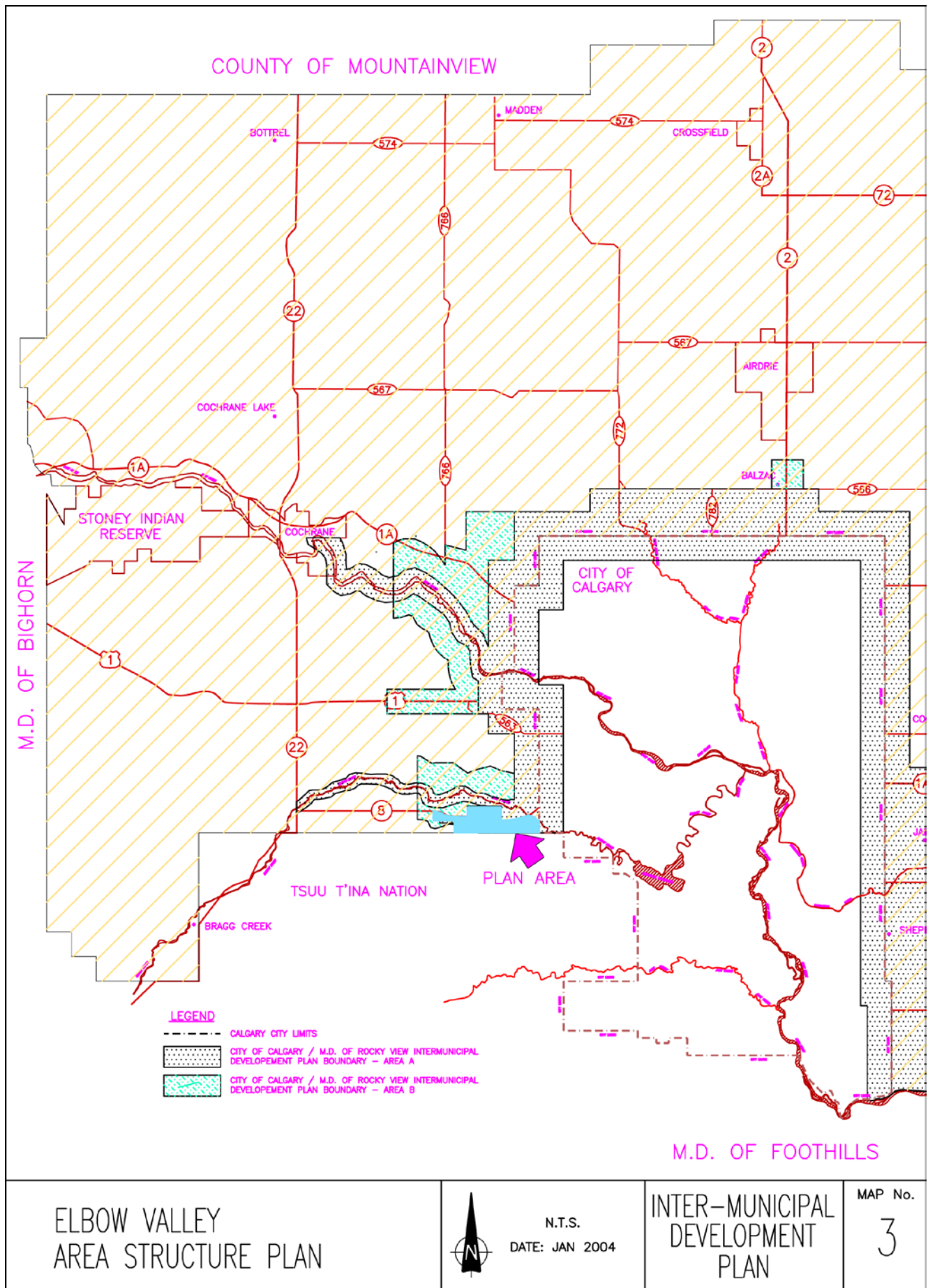
- Block 2, Plan 961 0433 in the SE 5-24-2-W5M
- Lot 7, Block 1, Plan 961 0433 in the SE 5-24-2-W5M
- Lot 8, Block 1, Plan 9610433 in the SE 5-24-2-W5M
- Lot 1, Block 1, Plan 891 0799 in the SE 5-24-2-W5M
- Lot 4, Block 1, Plan 891 0799 in the SE 5-24-2-W5M
- Lot 5, Block 1, Plan 891 0799 in the SE 5-24-2-W5M
- Lot 6, Block 1, Plan 891 0799 in the SE 5-24-2-W5M
- Block 1, Plan 871 1397 in the SW Sec. 5-24-2-W5M
- A portion of the SW 5-24-245M

The existing land use designation of these lands is Recreational commercial District.

3.0 THE PLAN GOALS AND PRINCIPLES

3.1 PLAN GOAL

The goal of the Plan is to facilitate the implementation of a master planned residential settlement in accordance with the highest design, environmental and aesthetic standards.



3.2 PRINCIPLES OF DEVELOPMENT

The principles of development for the Plan Area are as follows:

- i) to provide for the development of recreational uses, amenities and supportive uses;
- ii) to ensure that suitable community services are provided;
- iii) to provide pedestrian/bicycle/nature trails for the use and benefit of the residential settlement;
- iv) to allow the provision of a variety of residential land uses connected by the recreational focus of the settlement;
- v) to provide for development that recognizes and is sensitive to the natural characteristics of the site;
- vi) to allow planning flexibility with respect to housing type, parcel size and density;
- vii) to provide, where appropriate, commercial uses to serve primarily the needs of the recreational and residential uses within the residential settlement;
- viii) to allow for land ownership based upon condominium ownership;
- ix) to provide open space for private use and to allow the use of open space areas for active and passive recreational activities and facilities which are compatible with the sensitivity of the area;
- x) to encourage innovative land planning and development techniques;
- xi) to address historic sites in the Plan Area as directed by, and in consultation with, Alberta Community Development;
- xii) to minimize the loss of better quality agricultural land in accordance with the soils rating;
- xiii) to encourage the blending of natural features (i.e. wooded areas) into the development to ensure the least impact on the terrain and to mitigate surface water run-off and soil erosion during and after development;
- xiv) to establish environmental impact control policies;
- xv) to prohibit building development within the floodway, as adopted by the Municipal District of Rocky View No. 44 and approved by Alberta Environmental Protection);
- xvi) to restrict the development of building sites within the 1:100 year flood fringe to those areas which can be appropriately filled and which will not adversely affect the water courses to the satisfaction of Alberta Environmental Protection;
- xvii) to establish flood fringe management guidelines to guide and control development within the flood fringe;
- xviii) to ensure all development is supported by an Environmental Overview Report satisfactory to Alberta Environmental Protection and the Municipal District of Rocky View No. 44;
- xix) to ensure that school and recreational land needs can be met, if necessary, through the provision of municipal school reserve, municipal reserve and

environmental reserve, as required by the municipality and/or the Rocky View School Division;

- xx) to provide stormwater management and utility infrastructure services which will protect downstream communities;
- xxi) to establish future highway requirements that will provide for the safe and efficient movement of traffic in accordance with the requirements of Alberta Transportation and Utilities;
- xxii) to develop an efficient and safe internal roadway and service road system;
- xxiii) to phase development in a logical and efficient manner;
- xxiv) to design a community which will minimize, on-going maintenance costs to the residents of the settlement area and to the municipality; and
- xxv) to promote development practices which use existing on-site natural resources wherever possible.

4.0 IMPLEMENTATION OF OBJECTIVES AND DEVELOPMENT PRINCIPLES

4.1 INTRODUCTION

This section discusses the implementation of the Area Structure Plan objectives and principles of development identified in Section 3.2 as applied to the Elbow Valley study area and reflected in the Concept Plan (Map 4).

The Elbow Valley Area Structure Plan provides the Municipal District of Rocky View No. 44 with a master planned residential settlement consisting of recreational land use, recreational support facilities, commercial land use and residential land use. The Concept Plan shown on Map 4, depicts a residential settlement comprised of major recreational components which include, a golf course and its associated facilities, a private naturalized recreational lake area, a community centre, ponds, an educational interpretative area, a settlement centre and residential land use.

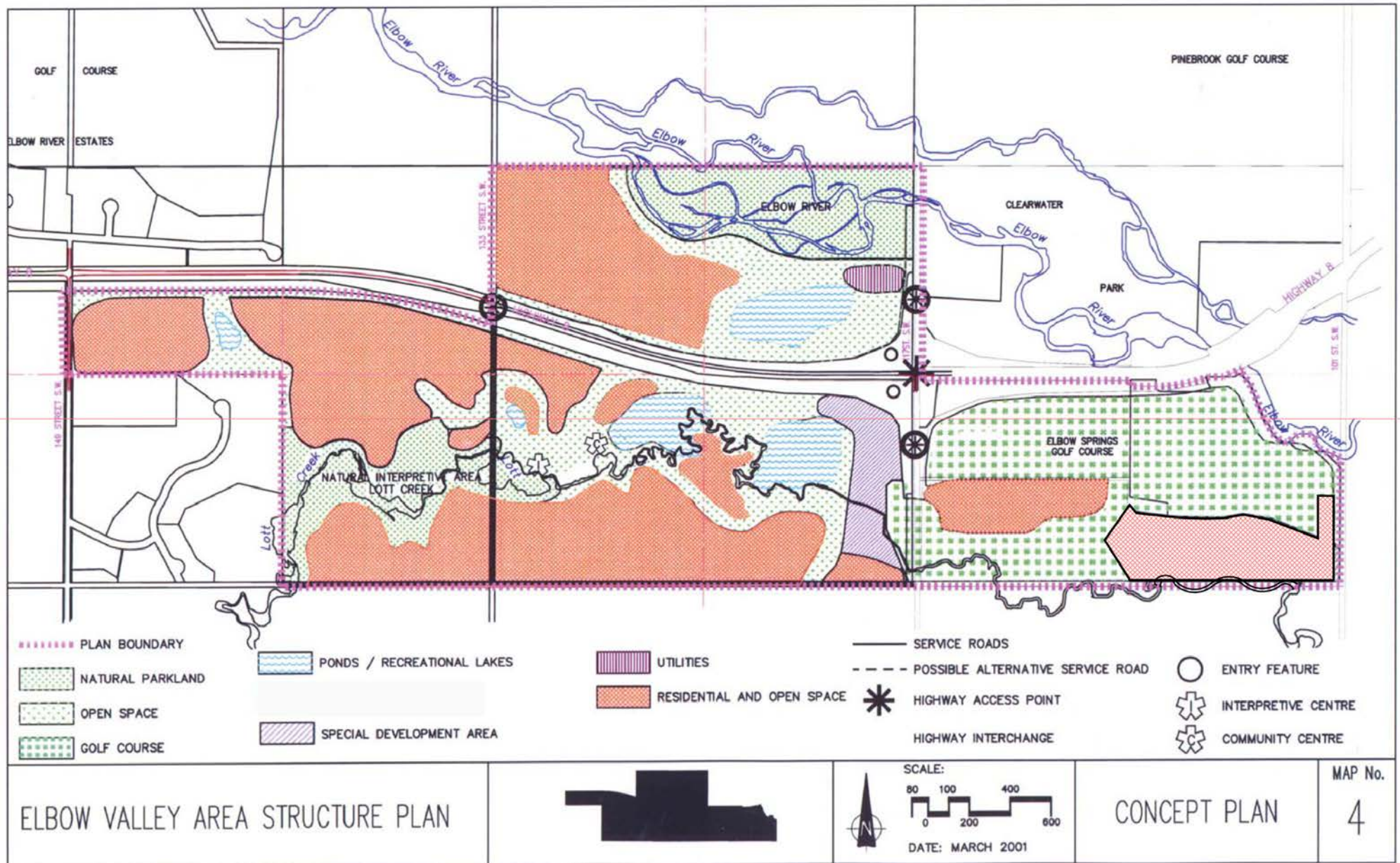
The principle behind the residential settlement concept suggests that a site with physical characteristics suitable for Intensive recreational uses requires support facilities and that the opportunity for the development of these support facilities should be allowed. A residential settlement is a broadening of the uses normally allowed in a rural area. These uses include commercial, residential, and active and passive recreational uses with all land use reflecting the central theme of a recreation development.

The following table summarizes the approximate existing and proposed land areas for each type of land use.

Table 2 - Land Uses (As outlined on Map 4)

Land Use	Ac.	Ha.	%
Open Space/Parks/Lakes and Ponds	425	172	36.0
Utility Facilities	28	11.3	2.4
Special Development Area/ Settlement Centre	26	10.6	2.2
Residential & Associated Open Space	485	196.3	41.1
Existing Elbow Springs Golf Course	196	79.2	16.6
Future Road Widening/Interchange (Portion yet to be dedicated)	20	8.1	1.7
TOTALS	1180	477.5	100.0

**The land areas provided in Table 2 are approximate only and may vary without requiring amendment to this Plan.*



4.2 OPEN SPACE AND RECREATION FACILITIES

Principles (as per Section 3.2)

- i) To provide for the development of recreational uses, amenities and supportive uses;*
- ii) To ensure that suitable community services are provided;*
- iii) To provide pedestrian and bicycle paths for the use and benefit of the residential settlement;*
- v) To provide a type and level of development that recognizes and is sensitive to the natural characteristics of the site;*
- ix) To provide open space for private use and to allow the use of open space for active and passive recreational activities and facilities which are compatible with the sensitivity of the area; and*
- xxvi) To promote development practices which use existing on site natural resources, wherever possible.*

4.2.1 OPEN SPACE AMENITIES

Pursuant to the six principles listed above, in total, the open space and recreation elements include:

a) Golf Course (Principle i.):

Approximately 204 acres (82.6 hectares) within the Plan Area will be developed for a 27-hole golf course located within Sections 5 and 6 south of Highway 8.

b) Recreational Lake Area (Principles i. and xxv.):

Approximately 45 acres (18 hectares) located within the floodway/fringe area of the south ¼ of Section 6 designated for a private recreational lake. Portions of the land designated for the recreational lake area have been previously disturbed by stripping and grading. Material extracted for the lake will be used in on-site construction.

The lake area is intended to provide a recreational focus and an aesthetic presence for the community.

c) Community Centre (Principle ii.):

The community centre is proposed to be located in the centre of the settlement. It will be a place for the community to gather and will become the focal point of community life for the residents. This area is also the meeting place of a number of the land's natural features. The north-south Elbow River escarpment joins in with the Lott Creek Valley at this point. There is a transition from upland prairie to the west/northwest to river valley bottom to the east, to treed undulating hills to the south. This is also where Lott Creek transitions from the well-defined natural valley to the west to a dispersed and modified water course to the east.

The centre will provide support services for the natural and man-made recreational amenities (i.e. equipment rentals, training). It also provides a range of support services for the residences such as community meeting rooms,

homeowner's association administration facilities, fitness facilities, crafts and hobby facilities and food services.

(d) Lott Creek Interpretative Area (Principles ii. and ix.)

Lott Creek meanders through the southwesterly portion of the lands in a well-defined waterway. There are a number of beaver ponds in this area as well as substantial vegetation growth. This portion of Lott Creek has remained in its natural state and is significantly different than the portion of Lott Creek lying to the east of the north-south escarpment. It is proposed that these westerly portions of Lott Creek be maintained in their existing state as a natural interpretive area. Uses in this area that are supportive of these lands could include trails and pathways, historical sites, wildlife observation, amphitheatre and environmental educational facilities and other similar passive uses.

An interpretive centre is proposed at the easterly end of the Lott Creek Interpretive Area in proximity to the community centre. This facility may contain educational and community related facilities, for the use of the residents.

(e) Elbow River Natural Preserve (Principles i., v. and ix.):

The land encompassing both the north and south shorelines of the Elbow River may be dedicated as environmental reserve to the Municipal District of Rocky View No. 44, or it could be protected with an Environmental Easement as provided for in the Municipal Government Act. At the discretion of the municipality, it may consist of active and passive recreational pursuits, including hiking and equestrian trails, interpretive trail and picnic areas. This area could be made accessible to the public, or it could be protected as a natural preserve.

(f) North Community/Recreational Lands (Principles i, ii. and ix.):

The remainder of the floodway north of Highway 8 is designated for open space. This will provide continuity to the Elbow River Natural Preserve and Clearwater Park. This area may include a community park and active and passive open space uses

(g) Open Space Linkages & Pedestrian/Bicycle/Nature Trails (Principle iii.)

The open space linkages will connect the recreational uses and natural amenities to the residents. A network of private pedestrian/bicycle and nature pathways is also proposed to be developed throughout the area. It will provide links to all of the key features of the residential land uses and specific locations and alignments shall be established at the tentative plan of subdivision stage.

(h) Lakes and Ponds (Principles ix. and v.)

A number of private man-made lakes and ponds are proposed for the Plan Area. These facilities are intended to serve several functions including:

- (a) visual amenity;
- (b) recreational uses;
- (c) wildlife habitat; and
- (d) stormwater facilities.

The design and construction of any man made lakes shall be carried out by a qualified professional to the satisfaction of the Municipal District of Rocky View No. 44 and Alberta Environmental Protection.

4.2.2 RESIDENTIAL DEVELOPMENT CELLS

In conjunction with residential units, development cells may contain passive and/or active recreation open spaces. These lands may function as open space linkages and stormwater management areas. The size and location of these open space areas will be determined at Tentative Plan stage.

4.2.3 As per Municipal Policy, public regional recreation trail connections will:

- (a) provide an east-west connection through the development on the south side of Highway 8 in order to provide connections to external regional trails as well as connect the residents of the plan area with the school site;
- (b) provide access to the Elbow River Natural Preserve in a compatible and coordinated fashion with the trail network proposed for the adjacent land;
- (c) connect the north cell to regional trails as well as the school site; and
- (d) provide for a north-south connection between the regional trails at either 133 Street S. W. or 149 Street S. W., to the satisfaction of Alberta Transportation and Utilities.

Specific pathway alignments and construction phasing will be determined at the tentative plan stage.

4.2.4 Public Regional recreational trails, if required by Council, may be provided on public road rights-of-way or highway right-of-ways, in accordance with Policy #702 of the M.D. of Rocky View No. 44, as amended.

4.2.5 Special Development Area

A special development area is proposed on the southwest corner of Highway 8, west of 117 Street SW. This area may contain, in conjunction with the uses discussed in Section 4.2, Open Space and Recreational facilities, open spaces uses associated with its principle and adjacent uses

4.3 SPECIAL DEVELOPMENT AREA

Principles (as per Section 3.2)

- ii. To ensure that suitable community services are provided;*
- iv. To allow the provision of a variety of residential land uses connected by the recreational focus of the settlement;*
- v. To provide for development that recognizes and is sensitive to the natural characteristics of the land; and*
- vii. To provide, where appropriate, commercial uses to serve primarily the needs of the recreational and residential uses within the residential settlement.*

The land designated Special Development Area is located on the South side of Highway 8, west of 117 Street, between the private recreational lake area and the existing 27-hole golf course. Due to the location of these lands at the primary project entry, this area will serve as the gateway to the community.

A broad range of land uses for this location may include commercial/institutional, residential, recreational open space, and associated infrastructure.

- 4.3.1 Specific land uses shall be contained within an overall development plan for the Special Development Area, which plan shall be subject to Council's review and approval.
- 4.3.2 Prior to tentative plan approval for any part of the Special Development Area, the overall development plan, noted in 4.3.1 of this Bylaw, for the entire Special Development Area shall be provided for Council review and approval.
- 4.3.3 Proposed commercial and institutional land uses:
- a) shall be scaled to serve primarily the Plan Area;
 - b) may have access from public roads if required by Council;
 - c) shall be architecturally controlled based upon the overall architectural theme including landscaping, paved parking areas, street lighting etc.;
 - d) should consist of recreation-related uses such as specialty shops for golf, tennis and water recreation-related activities;
 - e) should consist of local commercial uses such as home office support services, convenience stores, auto service stations, banking facilities, and personal, medical, business and public facilities;
 - f) should provide for a conference centre and lodging to accommodate private and public users; and
 - 9) may also include residential uses at Council's sole and unfettered discretion instead of, or in conjunction with, the commercial uses.
- 4.3.4 No building development shall occur within the floodway of the Elbow River and/or Lott Creek as defined on Map 6 pursuant to the Canada/Alberta Flood Damage Reduction Program.

4.4 GOLF COURSE

This area at the east limits of the Plan in the south ½ of Section 5-24-2-W5M contains a golf course and opportunity for integration of residential land uses.

4.5 RESIDENTIAL LAND USE

Principles (as per Section 3.2):

- iv. To allow the provision of a variety of residential land uses connected by the recreational focus of the settlement;*
- v. To provide a type and level of development that recognizes and is sensitive to the natural characteristics of the site;*
- vi. To planning flexibility with respect to housing type, parcel size and density;*
- vii. To provide the opportunity for land ownership based on condominium;*
- ix. To provide open space for public and private uses and to allow the use of open space areas for active and passive recreational activities which are compatible with and sensitive to natural areas;*
- x. To encourage innovative land planning and development techniques; and*

xxiv. *To design a community that will minimize on going maintenance costs to the residents of the settlement area and to the municipality.*

Residential land uses in the settlement are intended:

- (a) to provide an on-site population or user group that will use the recreation facilities. It is expected that the resident population will comprise the principal user group of the recreational facilities;
- (b) to provide for higher density residential land uses which require a higher level of servicing with respect to sewer, water and roads. The higher density supports the provision of recreational and support facilities needs at levels much higher than would normally be expected in rural areas;
- (c) to provide a level of servicing which will moderate the environmental impact of all land uses such that groundwater wells and septic tank and tile fields are not required;
- (d) to provide for a variety of residential land use forms which fits best with the land, and preserves natural features wherever possible.

The density of the residential land use within the development cells will be primarily a function of site characteristics and suitability. The site characteristics that have collectively presented the opportunity for recreational land use do not necessarily favor residential land use. Subsequently, the site presents only a finite number of opportunities for residential development distributed throughout the Plan Area. Development of these areas as a conventional Country Residential subdivision with two acre lots would result in uneconomical communal servicing.

Residential clusters are provided for within the Plan Area at various densities, allowing for a maximum total of 990 dwelling units. A maximum of 750 dwelling units may be permitted within the residential areas shown on Map No. 4 in that portion of the Plan Area which is located west of 117 Street S.W. (Range Rd. 25), and a maximum of 240 dwelling units may be permitted within the residential areas shown on Map No. 4 in that portion of the Plan which is located east of 117 Street S.W. (Range Rd. 25). Specific densities, building types and locations shall be determined by Direct Control Bylaw and Tentative Plan.

Through the use of residential clusters, the opportunity exists to maximize the development potential of each site, amortize servicing costs and moderate potential impacts between land uses. The clustered residential nodes should function as planned neighborhood cells within the greater residential community.

4.5.1 The establishment of a Homeowner's Association through condominium ownership:

- (a) is the fundamental principle upon which this residential settlement that is located west of 117 Street SW (Rge. Rd. 25) is founded;
- (b) provides the opportunity for the development and maintenance of private internal roads and private community open space and recreation facilities;
- (c) facilitates the implementation of maintenance and security programs; and
- (d) allows for more control in detailed site planning on a building envelope basis.

4.5.2 Membership privileges for the recreational and supportive components of the Plan will be tied to the individual land title by the use of caveats and restrictive covenants through condominium ownership.

- 4.5.3 In order to retain most of the natural attributes of the site (i.e. vegetation, view and topography), residential land uses shall occur in such a manner so as to minimize impact upon the landscape.
- 4.5.4 The cluster concept provides an opportunity to emphasize the attributes offered by the natural setting. This is achieved through the development of an open space system that is sensitive to the natural environment.

4.6 LANDS WITH HISTORICAL SIGNIFICANCE

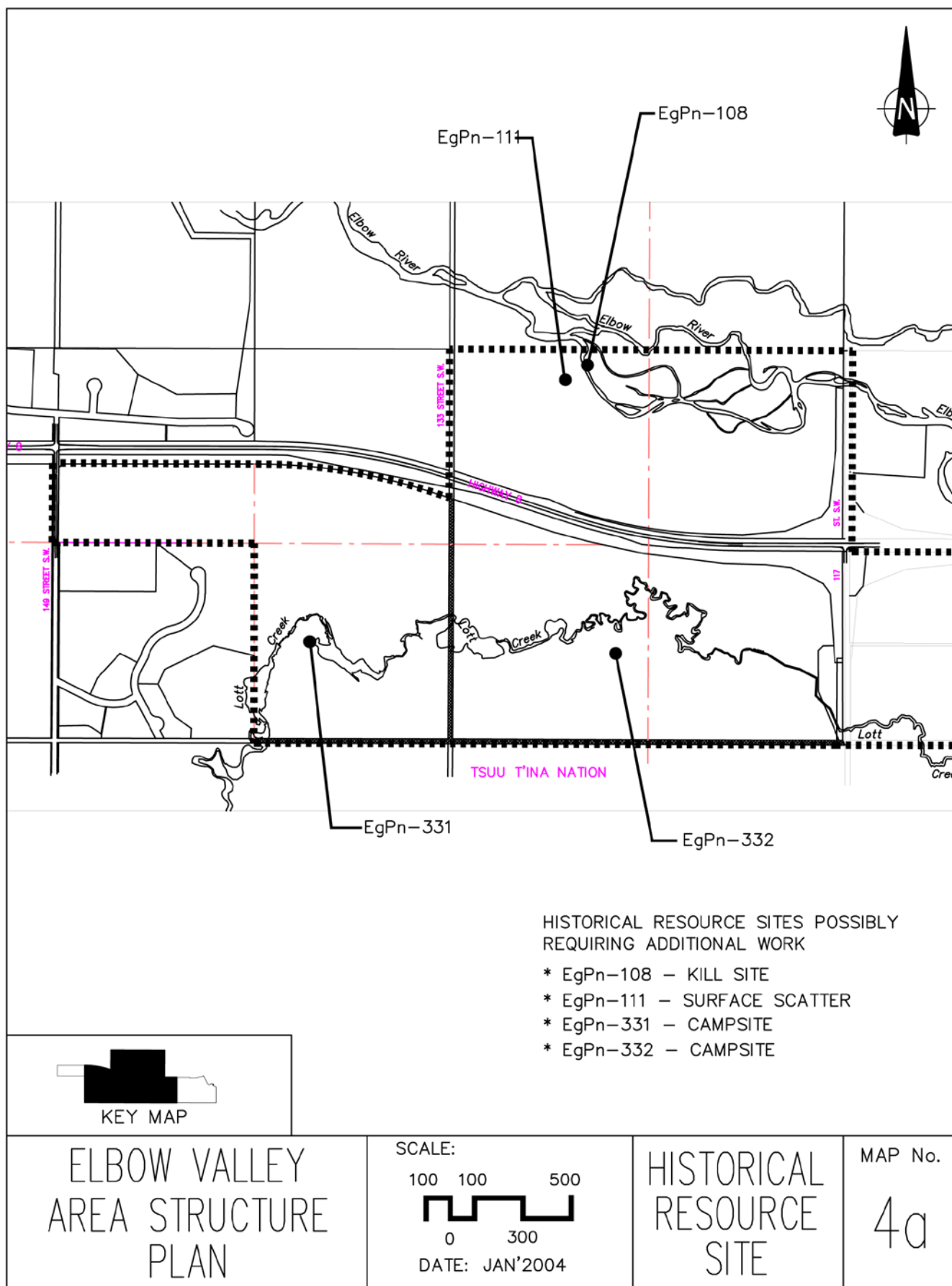
Principles (as per Section 3.2):

- v. To provide a type and level of development that recognizes and is sensitive to the natural characteristics of the site; and*
- xi. To address significant historic sites in the Plan Area as directed by, and in consultation with, Alberta Community Development.*

A Historical Resources Overview⁴ was carried out in July of 1989 at which time four prehistoric sites of significance were discovered. The locations are generally identified on Map 4a. Development shall avoid disturbance of these sites or ensure that appropriate mitigating action is carried out. One of the sites may require further excavation in accordance with Alberta Community Development specifications and direction and the preparation of a summary report.

- 4.6.1 All subdivision and development and mitigating actions within the Plan shall adhere to the requirements of Alberta Community Development with respect to sites of historic significance.

⁴ Elbow Valley Historical Resources Overview, Bison Historical Services Ltd., October 1989



4.7 AGRICULTURAL LANDS

Principles (as per Section 3.2):

- v. To provide type and level of development that recognizes and is sensitive to the natural characteristics of the site.*

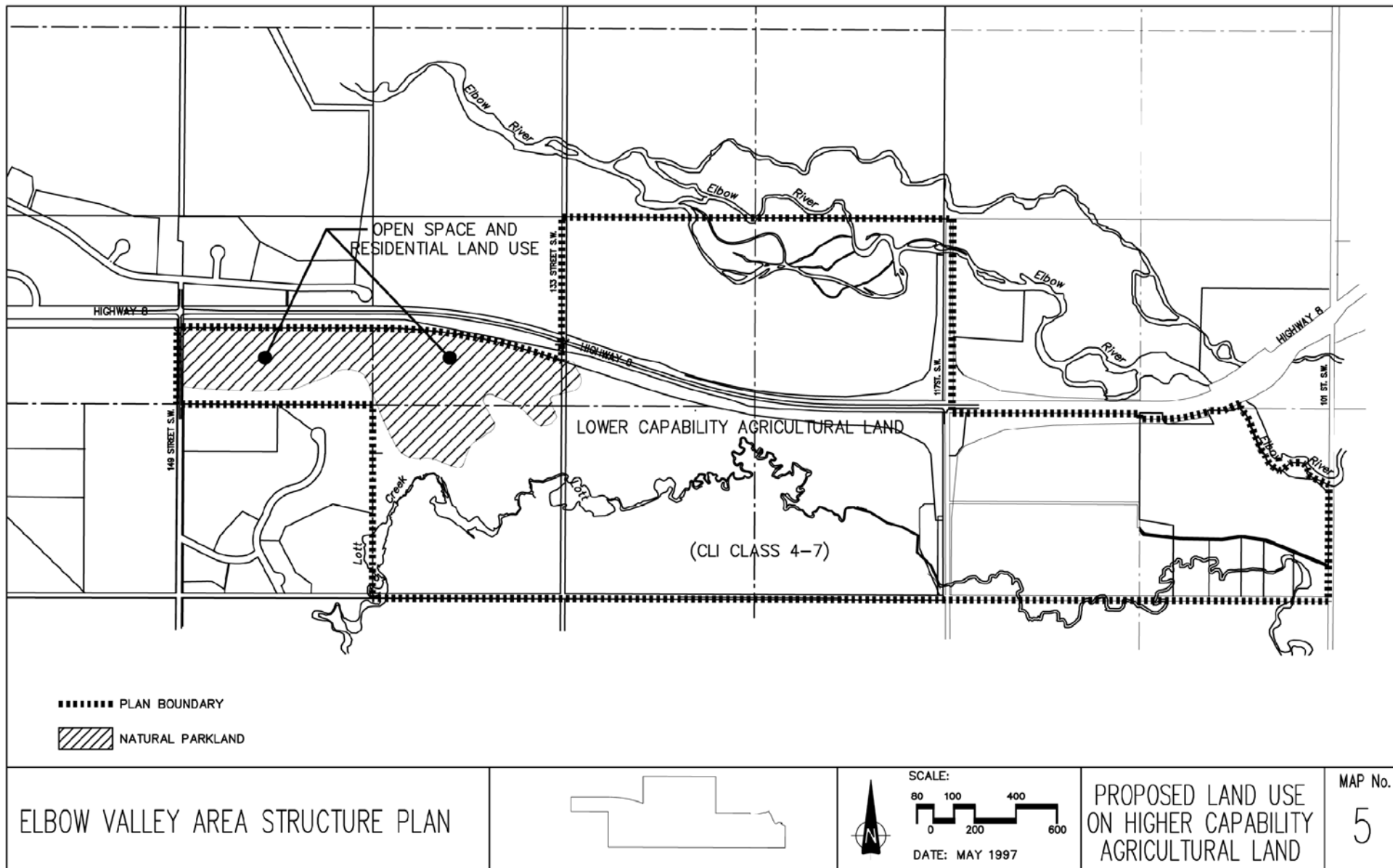
The Plan Area is generally comprised of lower quality agricultural land, predominantly CLI Classes 4, 5, 6 and 7 (see Map 5). However, excluding lands required for highway widening, there are approximately 152 acres (61.5 hectares) of higher capability agricultural land located in the western portion of the Plan Area.

- 4.7.1 In accordance with Map 5, development of non-agricultural uses on better quality agricultural lands within the Plan Area shall be permitted on land that represents a logical progression of land uses and planned phasing. It is also permitted on land fragmented by roads and other non-agricultural land uses and which do not negatively impact adjacent agricultural land use.

4.8 ENVIRONMENTAL MANAGEMENT

Principles (as per Section 3.2):

- v. To provide a type and level of development that recognizes and is sensitive to the natural characteristics of the site;*
- xii. To establish the blending of natural features (i.e. wooded areas] into the development to ensure the least impact on the terrain and to mitigate surface water run-off and soil erosion during and after development;*
- xiv. To establish environmental impact control policies; and*
- xviii. To ensure all development is supported by an Environmental Overview Report satisfactory Alberta Environmental Protection and the Municipal District of Rocky View No. 44.*



There are five aspects of the environment that must be addressed in the Plan. These include:

- a) open space and natural areas;
- b) land subject to potential flooding;
- c) sewage disposal;
- d) stormwater management; and
- e) slope stability.

4.8.1 OPEN SPACE AND NATURAL AREAS

Section 4.2 outlines the general provisions for the open space and natural areas.

4.8.1.1 Areas that are inappropriate for residential uses may be used for recreational uses such as golf courses, lakes, ponds and park areas to the satisfaction of Alberta Environmental Protection and the Municipal District of Rocky View No. 44.

4.8.1.2 Prior to the issuance of development permits for any development on the lands or the endorsement of any plan of subdivision by the municipality, an Environmental Overview Report shall be prepared to the satisfaction of Alberta Environmental Protection and the Municipal District of Rocky View No. 44.

4.8.1.3 As a condition of subdivision approval, a grading plan detailing proposed lot and building grades may be required to the satisfaction of the Municipal District of Rocky View No. 44 for all lands within the plan but particularly for those lands in the Flood Fringe of the Elbow River and Lott Creek. Detailed site design for subdivision purposes shall consider the preservation of important natural features such as groves of trees, landforms, natural water features and such similar elements

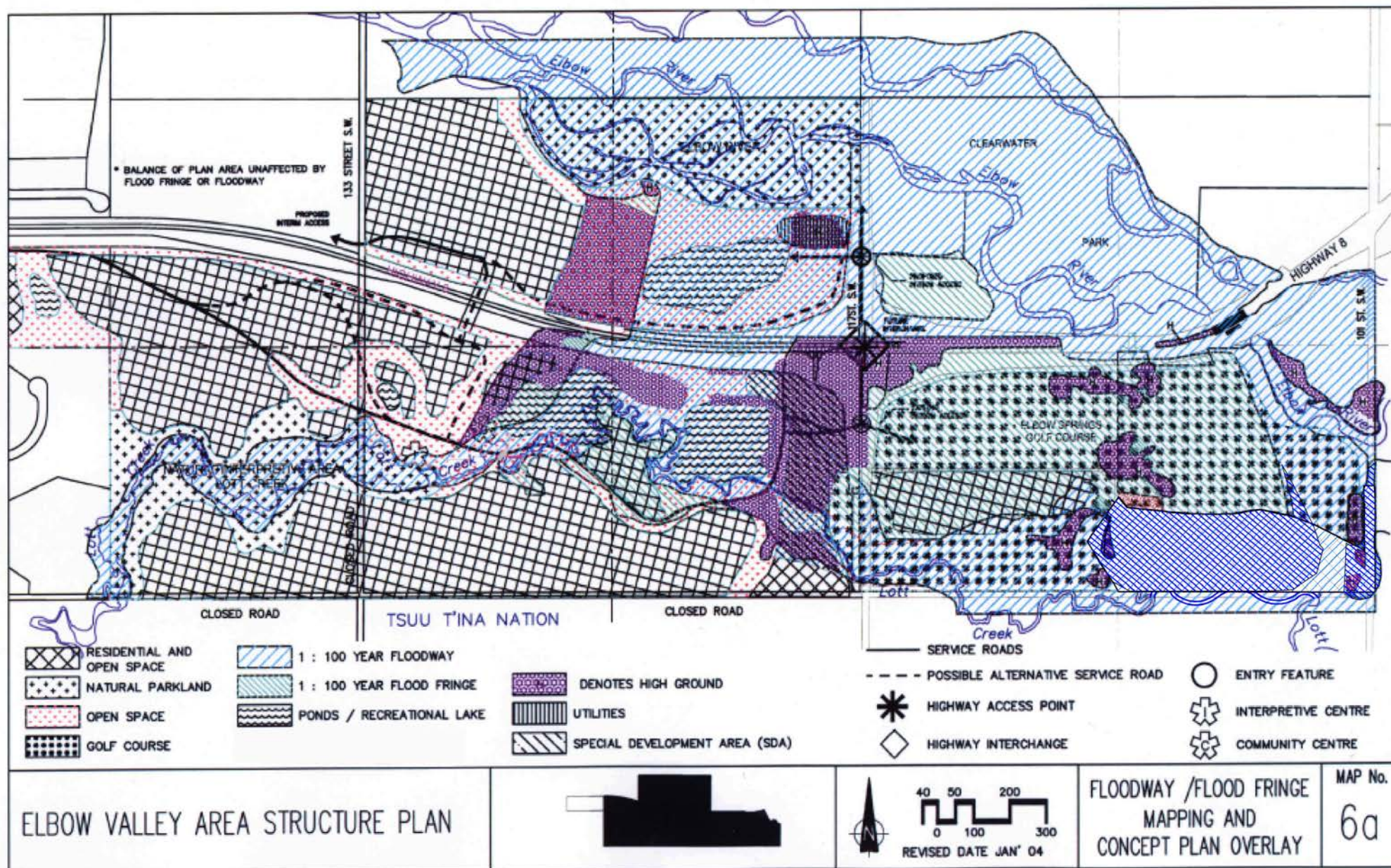
4.8.1.4 Caveats, restrictive covenants and building envelope plans may be used to protect natural areas.

4.8.2 LAND SUBJECT TO POTENTIAL FLOODING

Principles (as per Section 3.2):

- xv. *To prohibit building development within the floodway;*
- xvi. *To restrict the development of building sites within the 1:100 year floodplain to those areas that can be appropriately filled and which will not adversely affect the watercourses;*
- xvii. *To establish floodplain management guidelines to guide and control development within the floodplain; and*
- xviii *To allow the use of open space areas for active and passive recreational activities and facilities which are compatible with the sensitivity of the area.*

Alberta Environmental Protection conducted a flood Damage Reduction program study for this portion of the Elbow River in 1996, upon which Map 6 of this plan is based.



Floodway/Flood Fringe limits may be re-computed by the developer in support of proposed channelization for Lott Creek, access roads, lake development and housing development. However, the M.D. of Rocky View shall not be obligated in any way to accept or adopt such re-computations whether or not Alberta Environmental Protection accepts or rejects them.

A detailed hydrological study, as prepared by a qualified professional, outlining the appropriate mitigating action and building restrictions for development within the flood fringe lands will be reviewed and commented on by Alberta Environmental Protection prior to the issuance of any development permit for the lands or submission of any plan of subdivision.

4.8.2.1 Subdivision or development of residential uses within lands prone to 1:100 year flooding in the flood fringe of Lott Creek and the Elbow River shall only be permitted if flood proofing is based upon the guidelines of Alberta Environmental Protection and to the satisfaction of the Municipality.

4.8.2.2 Notwithstanding anything to the contrary in this Plan, no building shall occur within the Floodway, as shown on Map No. 6, unless the limits of the Floodway have been amended, approved, and adopted by both Alberta Environmental Protection and the Municipal District of Rocky View No.44.

4.8.3 SEWAGE DISPOSAL

See section 4.10.1 for the environmental management provisions and policies related to sewage disposal.

4.8.4 STORMWATER MANAGEMENT

See section 4.10.3 for the environmental management provisions and policies related to stormwater management.

4.8.5 SLOPE STABILITY

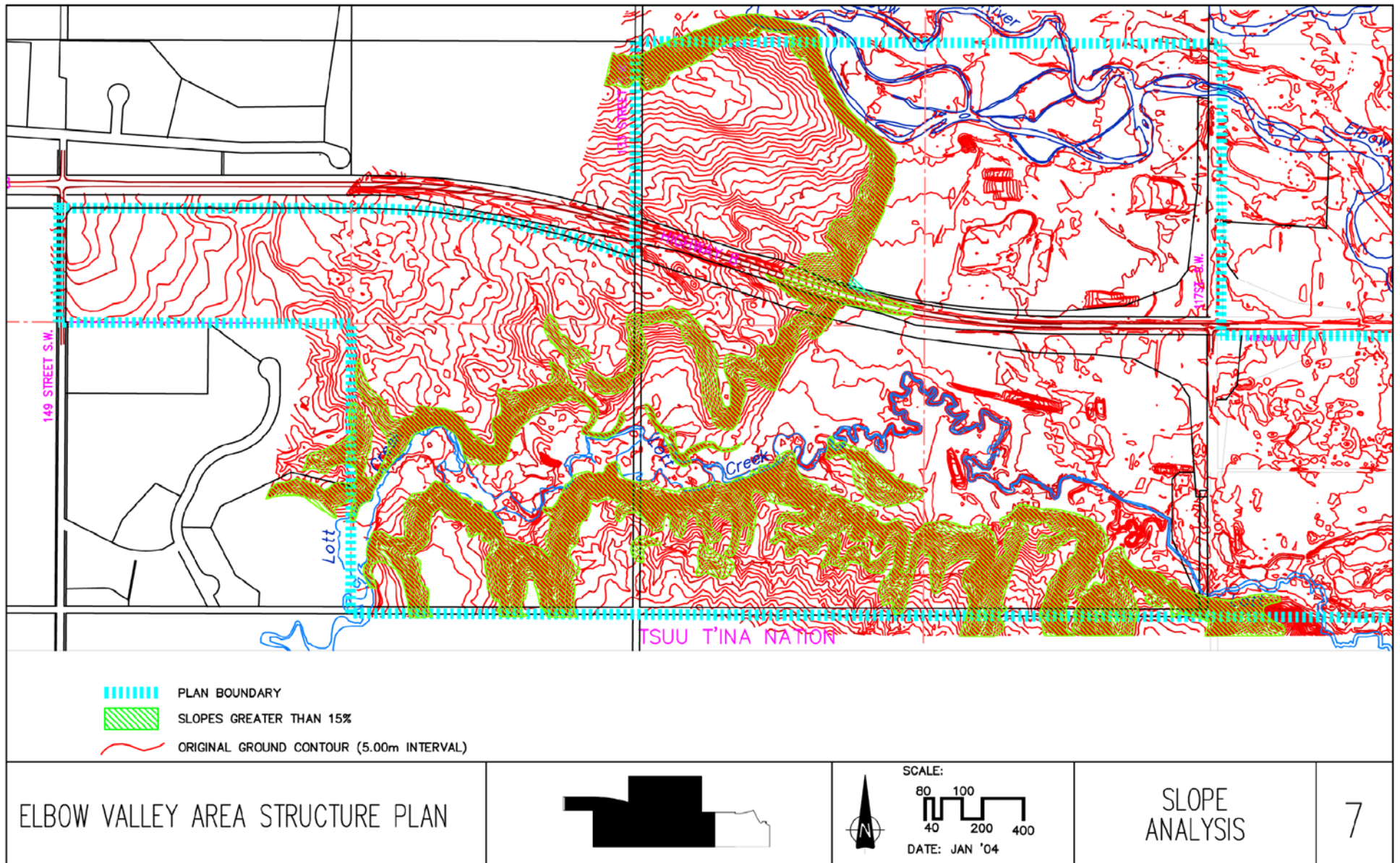
Approximately 68 acres (27.5 hectares) of the Plan Area are characterized by slopes between 15 and 24 percent (see Map 7). While a geo-technical⁵ report completed in March of 1990 concluded that the slopes may be developable under certain conditions. Municipal practice has been to preclude the development of buildings and structures from slopes of 15 % or greater.

The integrity of the development principles will be realized by:

- (a) regulating grading and cut and fill operations to ensure the greatest retention of natural character of the hill areas; and
- (b) encouraging imaginative and Innovative building designs in order to create buildings suited to wooded or open areas

4.8.5.1 Slopes exceeding 15 % may be included within a condominium lot at the discretion of Council, provided they remain undeveloped and are protected from any and all development with a Restrictive Covenant registered on title, to the satisfaction of the Municipality.

⁵ Elbow Valley Golf and Country Club, Phase 1, Geo-Technical Report, Volume 1, Site Conditions and Development Recommendations. Geo-Engineering (MST) Ltd. March, 1990



4.8.5.2 Any subdivision or development shall recognize the slope conditions of lands in the Plan Area. Where slope modification is proposed, the slope stability shall be investigated by a qualified professional and slope stabilization undertaken where necessary, to the satisfaction of the Municipal District of Rocky View No. 44 and Alberta Environmental Protection.

4.9 RESERVE LANDS

4.9.1 ENVIRONMENTAL RESERVES

Principles (as per Section 3.2):

- v. To provide a type and level of development that recognizes and is sensitive to the natural characteristics of the site;*
- ix. To provide open space for private and use and to allow the use of open space areas for active and passive recreational activities and facilities which are compatible with the sensitivity of the area;*
- xiii. To encourage the blending of natural features (i.e. wooded areas) into the development, to ensure the least impact on the terrain and to mitigate surface water run-off and soil erosion during and after development; and*
- xv. To prohibit building development within the floodway as adopted by the Municipal District of Rocky View No. 44 and approved by Alberta Environmental Protection.*

Under Section 664 of the Municipal Government Act, a Subdivision Authority may require the registered owner of a parcel of land to provide as environmental reserve, land that consists of:

- 1) a swamp, gully, ravine, coulee or natural drainage course;
- 2) land that is subject to flooding or is, in the opinion of the Subdivision Approving Authority, unstable; or
- 3) a strip of land, not less than 6 meters in width, abutting the bed and shore of any lake, river, stream or other body of water for the purpose of:
 - a) preventing pollution; or
 - b) providing public access to and beside the bed and shore.

This section of the Municipal Government Act also provides the opportunity to provide any portion of land that was to be considered as environmental reserve as an environmental reserve easement.

The Concept Plan for the Plan Area (Map 4) identifies land within the active Elbow River that should be protected and may be available for public access. The balance of the lands are proposed as open space, golf course, lakes and ponds, and pathways/trails.

Environmental Reserve, at the discretion of Council, could include the floodways adjacent to the Elbow River and Lott Creek. Slopes determined to be geo-technically unstable shall be identified and incorporated as part of the common lands to be administered by the Condominium Association. In addition, lands identified as having a 15% slope and greater on Map 7 may also be defined as common open space lands to be administered by the Condominium. These areas will be more precisely determined

at the tentative plan stage in conjunction with the required geo-technical study and Elbow River/Lott Creek floodway study.

4.9.1.1 Should the municipality decide to designate areas of the plan as Environmental Reserve, these could be more precisely determined at tentative plan stage.

4.9.1.2 Notwithstanding 4.9.1.1, the land identified as "Elbow River" - Natural Parkland (see Map 4) may be dedicated as Environmental Reserve or protected with an Environmental Easement as provided for in the Municipal Government Act, at the discretion of Council.

4.9.2 MUNICIPAL RESERVES

Principle (as per Section 3.2):

ix. To provide open space for private land use and to allow the use of open space areas for active and passive recreational activities and facilities which are compatible with the sensitivity of the area.

Under Section 666(1) of the Municipal Government Act:

"a subdivision authority may require the owner of a parcel of land that is the subject of a proposed subdivision:

- (a) to provide part of that parcel of land as municipal reserve, school reserve or municipal and school reserve,
- (b) to provide money in place of municipal reserve, school reserve or municipal and school reserve, or
- (c) to provide any combination of land or money referred to in clauses (a) and (b)."

4.9.2.1 Up to ten (10) percent of the land may be dedicated as municipal reserve in accordance with the Municipal Government Act, at the discretion of Council, as the Subdivision Authority.

4.9.2.2 Land that is required for regional highways and interchanges that is subject to dedication or acquisition by the Province of Alberta, is not included in Municipal Reserve calculations.

4.9.2.3 Any land within the flood fringe that has been made developable by filling or other mitigating action will be considered in municipal reserve calculations.

4.9.2.4 Municipal Reserve requirements may be more precisely determined at the Tentative Plan stage, and at the discretion of Council, may be provided through the dedication of municipal reserve land, deferral of reserves to later phases, and/or cash-in lieu of land in accordance with the Municipal Government Act. However, Council may generally determine reserve requirements and/or locations prior to adoption of this Plan and incorporate same herein.

4.9.2.5 Any land dedicated as Municipal Reserve pursuant to the Municipal Government Act shall, at the discretion of Council, have public road access provided to it.

4.10 UTILITY SERVICING

Principles (as per Section 3.2):

- xxi. To provide stormwater management and utility infrastructure services which will protect downstream communities;*
- xxv. To design a community which will minimize ongoing maintenance costs to the residents of the settlement area and to the municipality; and*
- xxvi. To promote development practices which use existing on-site natural resources wherever possible.*

The Concept Plan (Map 4) indicates a “Utilities” area on the north side of Highway 8. This site may be used for the major utility treatment and distribution facilities and shall be elevated above the 1:100 flood elevation. However, notwithstanding any other policy in this Plan, specific components of the utility infrastructure, such as pumping and lift stations and distribution lines (but not sewage treatment facilities) may be located throughout the Plan Area with precise locations to be determined at the tentative plan stage. All of the foregoing shall be to the satisfaction of Alberta Environmental Protection.

Assurances in the form of Restrictive Covenants, to be registered on individual titles, and/or an agreement with a private utility company, with respect to the responsibility for the maintenance and operation of the water and sewer infrastructure, will be provided to the satisfaction of the M.D. of Rocky View #44 and Alberta Environmental Protection prior to the approval of any development permit or the endorsement of any tentative plan of subdivision.

4.10.1 WASTEWATER COLLECTION, TREATMENT AND DISPOSAL

- 4.10.1.1 Wastewater collection, treatment and disposal systems required to accommodate subdivision and/or development in the Plan Area shall be provided by direct connection to the City of Calgary sanitary sewer infrastructure.
- 4.10.1.2 A collection system using sewage holding tanks is not considered an appropriate wastewater collection, treatment and disposal system to accommodate subdivision and/or development within the Plan Area.
- 4.10.1.3 Phasing of the wastewater collection, treatment and disposal system shall be determined during the tentative plan preparation stage of the first phase of development. The Developer shall provide for wastewater collection, treatment and disposal in accordance with the provisions of this Plan.
- 4.10.1.4 The wastewater collection, treatment and disposal system may be phased to accommodate subdivision and/or development.
- 4.10.1.5 The design, operation and maintenance of any proposed wastewater collection, treatment and disposal system shall comply with Alberta Environmental Protection requirements and conditions and pursuant to 4.10.1.3(c) above, the City of Calgary and the MD of Rocky View.
- 4.10.1.6 No effluent or treated wastewater shall be allowed to discharge to any river, waterway or water body.

4.10.1.7 The Municipal District of Rocky View will apply for wastewater connection and servicing from the City of Calgary from the existing Elbow Valley Wastewater System prior to subdivision approval.

4.10.2 WATER SUPPLY AND DISTRIBUTION

4.10.2.1 The water supply and distribution system required to service the subdivision and/or development within the Plan Area shall be determined at the tentative plan preparation stage and shall comprise a privately operated supply and distribution system utilizing an alluvial or groundwater source acceptable to the Municipality and Alberta Environmental Protection or a direct connection to the City of Calgary potable water infrastructure.

4.10.2.2 Any water distribution and/or supply system required to service subdivision and/or development within the Plan Area shall be constructed to Municipal and Alberta Environmental Protection design standards and obtain all necessary licenses, permits and approvals from Alberta Environmental Protection as may be required to divert, distribute and/or use water.

4.10.2.3 Any water distribution and/or supply system required to service development within the Plan Area, shall require a reservoir of sufficient capacity and design to provide volumes, pressure, levels of service and fire flow protection to the Plan Area as deemed appropriate by the Municipality and Alberta Environmental Protection.

4.10.2.4 The design, operation, maintenance and monitoring of any proposed water treatment facility shall comply with Alberta Environmental Protection's regulations and conditions as amended from time to time.

4.10.3 STORMWATER MANAGEMENT

4.10.3.1 A stormwater management plan shall be prepared and coordinated by a qualified professional to the satisfaction of Alberta Environmental Protection and the Municipal District of Rocky View No. 44. The Storm Water Management Plan will involve the application of "Best Management Practices" in which post-development flows will equal pre-development flows. In principle, there should be no directed discharge into the Elbow River or Lott Creek. However, should there be a necessity to do so, it must have Alberta Environmental Protection approval.

4.10.3.2 Prior to tentative plan approval, a master drainage and grading plan shall be prepared by a qualified professional for the development area. This Plan shall address overland flows from all areas and shall be to the satisfaction of Alberta Environmental Protection and the Municipal District of Rocky View No. 44.

4.10.4 SHALLOW UTILITIES

4.10.4.1 Extension of shallow utilities throughout the plan area shall be the responsibility of the developer. The right-of-way and servicing requirements should be determined at the tentative plan preparation stage.

4.10.5 FIRE PROTECTION

A network of fire hydrants supplemented by water from the lakes/ponds may be used in the event of an emergency, where necessary, subject to approval by the Municipal District of Rocky View No. 44 pursuant to "Provincial Fire Commissioner Standards".

4.10.5.1 Prior to approval of any development permit for the lands, and/or any tentative plan, the developer shall ensure that water distribution and fire protection is satisfactory to

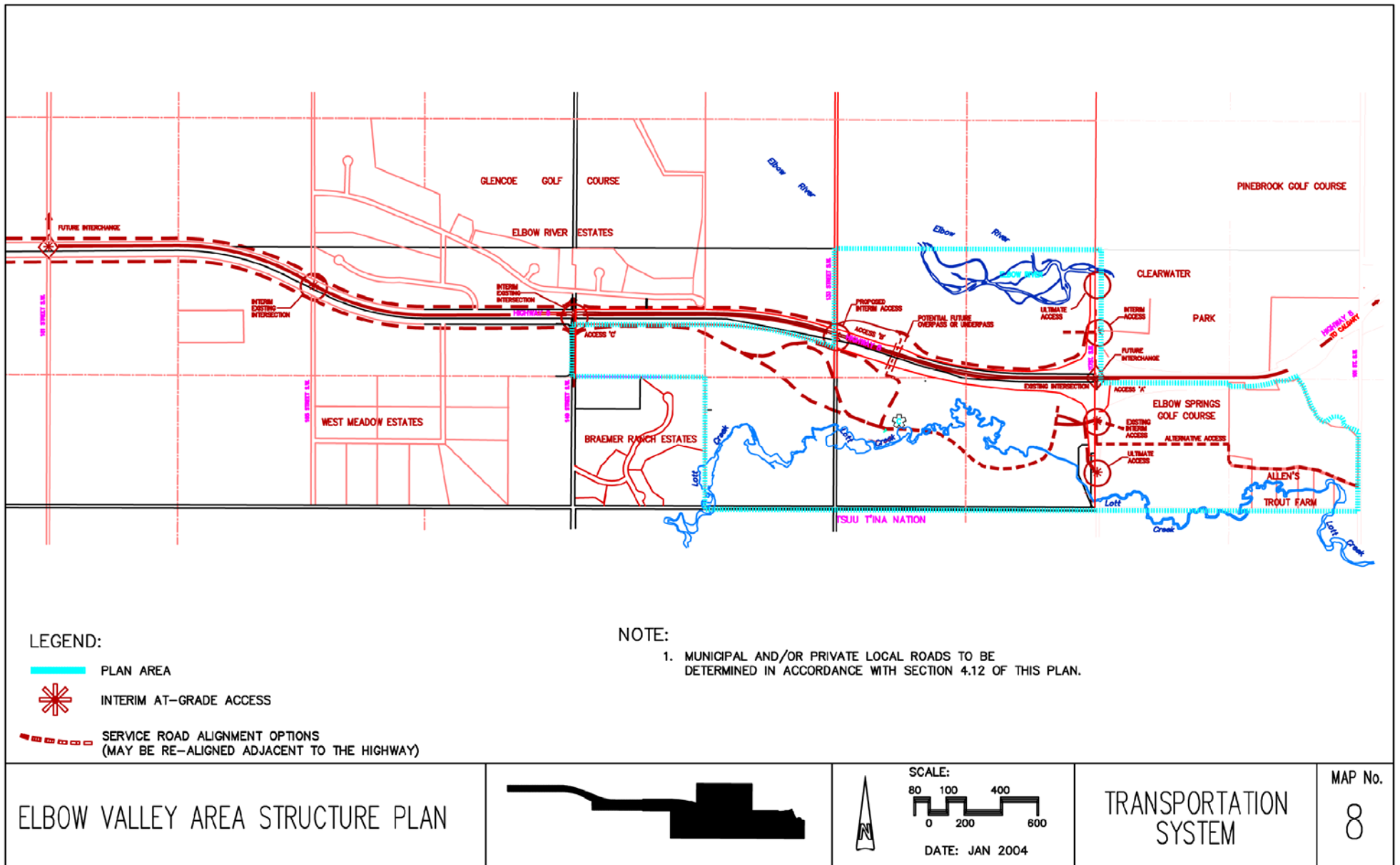
the Municipal District of Rocky View No. 44 pursuant to the "Provincial Fire Commissioner Standards".

4.11 TRANSPORTATION

Principles (as per Section 3.2):

- v. To provide a type and level of development that recognizes and is sensitive to the natural characteristics of the site.*
- x. To encourage innovative land planning and development techniques.*
- xxi. To establish future highway requirements that will provide for the safe and efficient movement of traffic in accordance with the requirements of Alberta Transportation and Utilities.*
- xxii. To develop an efficient internal roadway and service road system.*
- xxiv. To design a community that will minimize on-going maintenance costs to the residents of the settlement area and to the Municipality.*
- xxv. To promote development practices which use existing on-site natural resources, wherever possible.*

Map 8 outlines the Transportation System for the Plan Area.



4.11.1 EXTERNAL ROADS

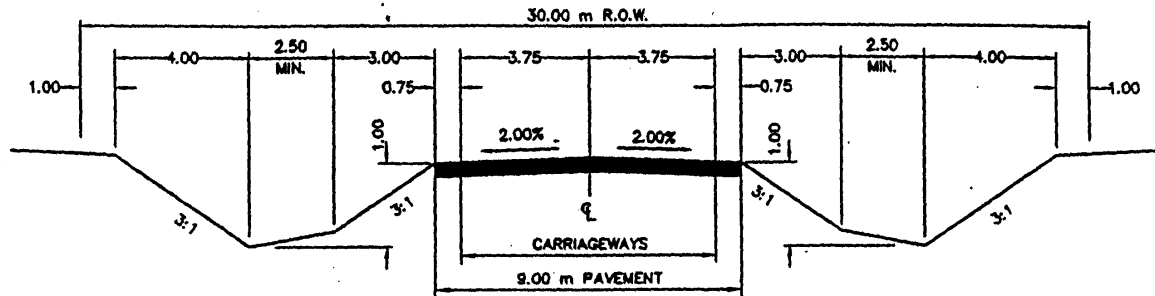
Regional access is provided by Provincial Highway 8, an existing 2-lane road connecting the city of Calgary with Highway 22 to the west.

Alberta Transportation and Utilities has approved the temporary use of two existing public road intersections for the lands covered by the Plan (see Map 8). Access "A" identifies an existing access at 117 Street SW. Access "C" identifies the Glencoe Golf and Country Club access at 149 Street S.W.

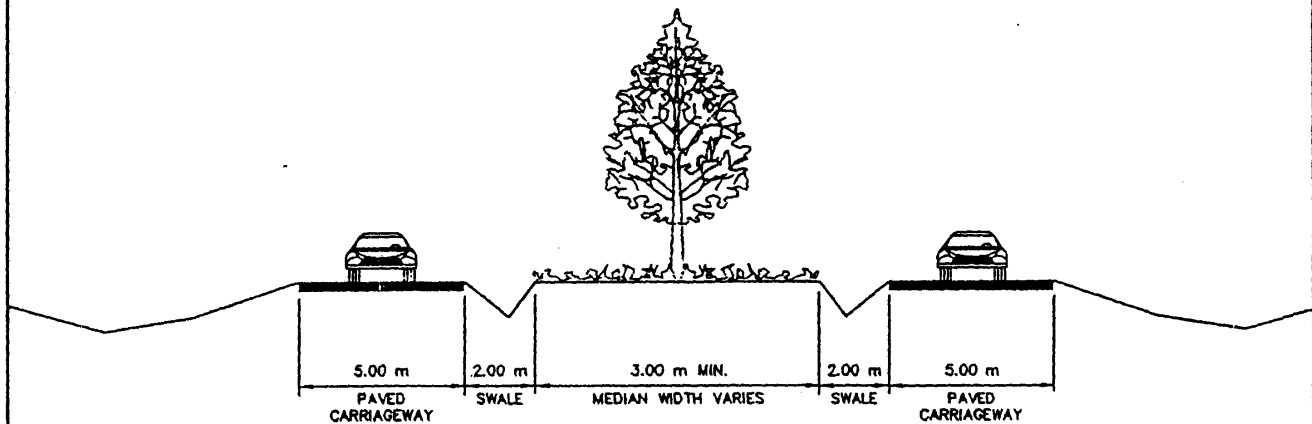
The long-term plans for Highway 8 include an upgrade to a multi-lane divided facility with grade-separated access. Access "A" is the proposed site of a future interchange. Highway widening requirements have been determined for the ultimate road facility and the lands have been transferred to Alberta Transportation for that portion within Sections 1 and 6. However, these long-term plans are currently under review and the results of any functional planning study on Highway 8 shall not necessitate an amendment to this Plan.

Access "B" is for a potential interim intersection at 133 Street SW. This intersection would be used until such time as the overall service roads are built and Highway 8 is upgraded to grade-separated intersection standard.

- 4.11.1.1 All subdivision and development shall be in conformity with the relevant guidelines of Alberta Environmental Protection and Alberta Transportation and Utilities.
- 4.11.1.2 Subdivision and development plans shall recognize that Alberta Transportation & Utilities requires additional land for widening of Highway 8 and for future interchanges. The specific requirements will be determined at tentative plan stage.
- 4.11.1.3 A traffic impact analysis shall be provided during the tentative plan preparation stage in order to determine the interim and long-term improvements that will (may) be required at both existing intersections and along Highway 8 in the vicinity of the development. Such improvements shall be to the satisfaction of the Municipal District of Rocky View No. 44 and Alberta Transportation & Utilities, and may be included as conditions of subdivision approval.
- 4.11.1.4 Any proposed highway crossing, by way of underpass or overpass, contemplated in this Plan is subject to approval by Alberta Transportation & Utilities.
- 4.11.1.5 An interim at-grade intersection at 133 Street SW and Highway 8 is subject to approval by Alberta Transportation and Utilities.
- 4.11.1.6 Any subsequent functional planning studies for Highway 8 which recommend Improvements shall not necessitate an amendment to this Plan.
- 4.11.1.7 Noise attenuation and visual screening shall be determined pursuant to 4.11.1.3 above, and any requirements shall be included as conditions of subdivision approval.
- 4.11.1.8 The master drainage and grading plan pursuant to section 4.10.3 above, shall ensure that the highway ditch is not used to collect stormwater from the development area.



SERVICE ROADS
(PUBLIC ROAD)



DIVIDED SERVICE ROADS – SWALE
(PUBLIC ROADS)

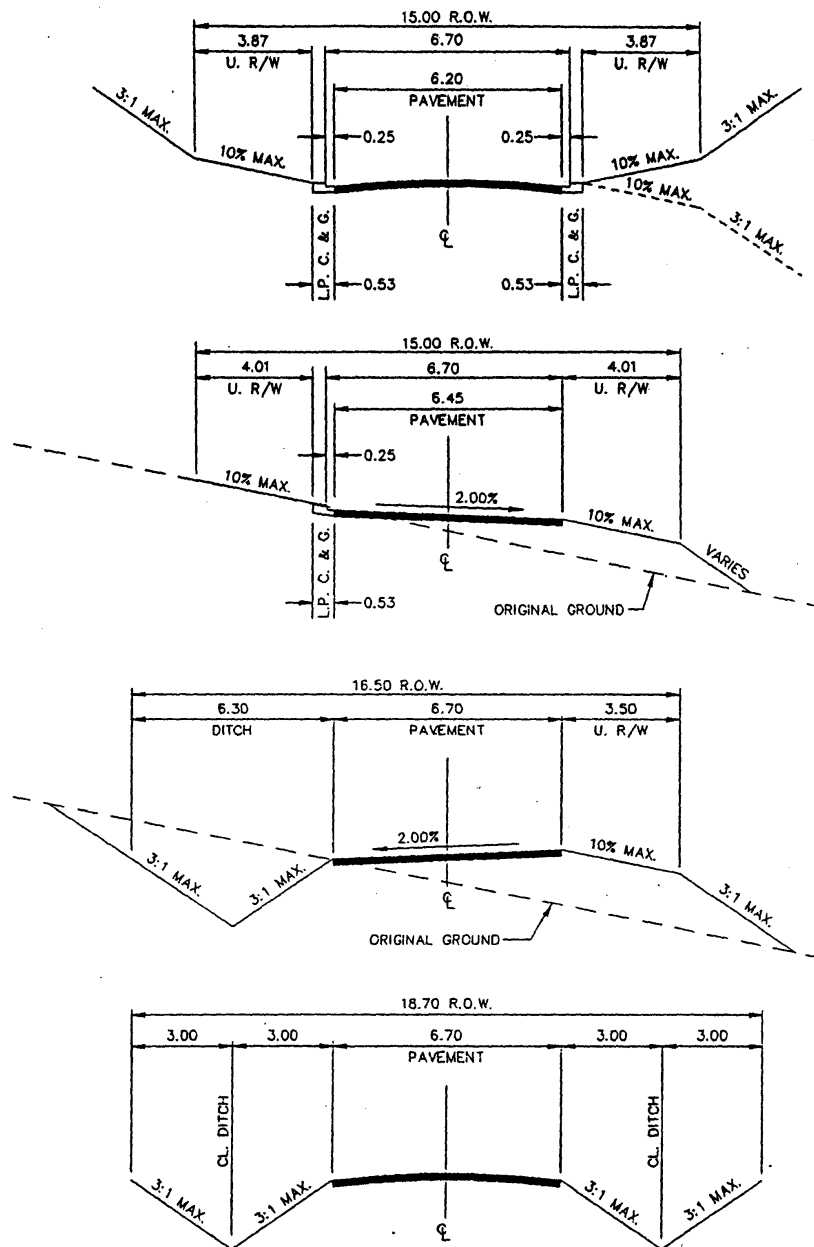
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ELBOW VALLEY
AREA STRUCTURE PLAN

N.T.S.
DATE: MAR ' 1997

SAMPLE
SERVICE ROAD
CROSS-SECTIONS

FIGURE
1



NOTES:

1. ROADWAYS TO BE OWNED AND OPERATED BY A HOMEOWNERS ASSOCIATION OR CONDOMINIUM ASSOCIATION.
2. DEEP UTILITIES TO BE PLACED UNDER PAVEMENT
3. MINIMUM PAVEMENT WIDTH FOR CUL-DE-SAC IS 12.00 m radius to back of curb.
4. FOR DIVIDED ENTRIES MINIMUM PAVEMENT WIDTH SHALL BE 4.50 METRES AND A MINIMUM MEDIAN WIDTH OF 3.0 METRES.

ELBOW VALLEY
AREA STRUCTURE PLAN

N.T.S.
VERTICAL
EXAGGERATION 2X
DATE: APR' 1997

SAMPLE PRIVATE
RESIDENTIAL ROAD
CROSS-SECTIONS

FIGURE

2

4.11.2 INTERNAL ROADS

In the long-term, all at-grade highway intersections may be eliminated and a network of service collector roads will be required to connect to proposed Interchange locations. Alberta Transportation and Utilities has indicated that an internal service road system is an acceptable alternative to service roads paralleling the highway. Sample cross-sections are shown in Figure 1.

- 4.11.2.1 A service collector road may be constructed as a public road at the discretion of the municipality in consultation with Alberta Transportation and Utilities.
- 4.11.2.2 The service (collector) road alignment may be located internal to the subdivision and/or adjacent to the highway as approved by the Municipality in consultation with Alberta Transportation and Utilities.
- 4.11.2.3 Service (collector) road design and construction shall conform to the Municipal District of Rocky View No. 44 standards as adopted by Council and amended from time to time. Sample cross sections, as shown in Figure 1, are current examples only and may be subject to change.
- 4.11.2.4 The proposed service (collector) roads will provide access between the areas north and south of Highway 8, therefore a pedestrian overpass may or may not be required, pursuant to section 4.11.1.3 above.

Other than the service (collector) road, all internal roadways shall be developed as private roads under bareland condominium ownership. Notwithstanding the foregoing sentence, the municipality may consider the use of public roads as internal subdivision roads for that portion of the Plan area located east of 117 Street SW (Rge. Rd. 25).

The design standards for the internal roads will take into account the comprehensive nature of the proposed development, site characteristics, the form of residential development proposed and the interrelationship with the proposed recreational amenities, and be pursuant to the MD of Rocky View standards.

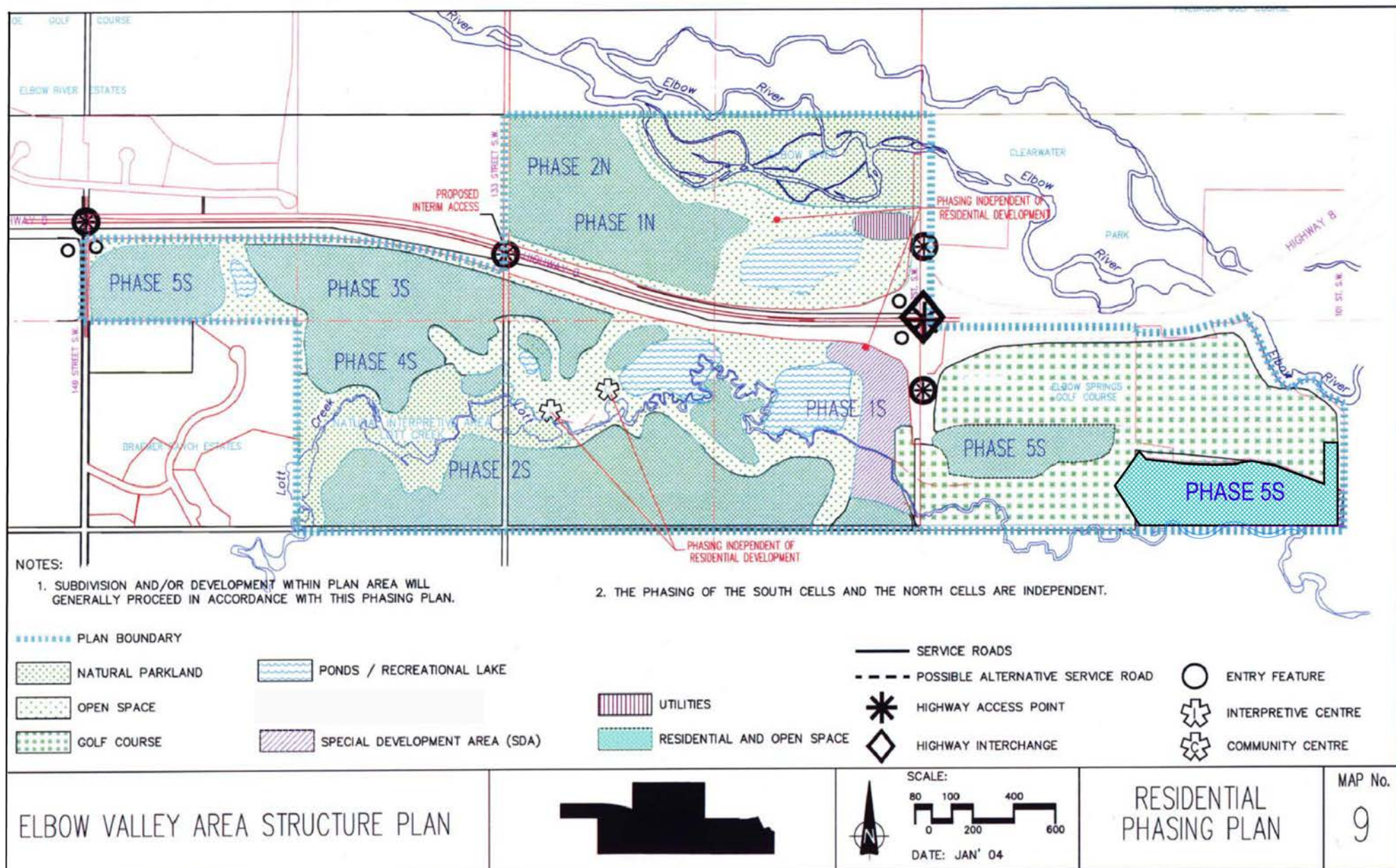
- 4.11.2.5 Notwithstanding any municipal policies to the contrary, the internal road standards and access shall be in conformity with the principles of this Plan. Examples of appropriate cross-sections, as shown in Figure 2, are current examples only and may be subject to change. However, the internal and external road standards throughout the Plan Area should be consistent in accordance with current Municipal Policy.
- 4.11.2.6 Security gates may comprise an element of the private road system.
- 4.11.2.7 All private roads shall be constructed and maintained at the expense of the Developer and subsequently, the future residents through the bylaws of a condominium corporation.

4.12 PHASING

Principle (as per Section 3.2):

xxiii To phase development in a logical and efficient manner.

Map 9 provides for phasing within the Plan Area. Phasing will generally occur in a east to west direction. Utility servicing and recreation amenities shall be provided concurrently with subdivision approvals of each phase in accordance with the provisions of this Plan.



- 4.12.1 Subdivision and/or development within the Plan Area will generally proceed in accordance with the phasing established in Map 9. Specific phasing boundaries and sequence will be determined at the Tentative Plan stage.
- 4.12.2 The development and phasing for the lands north of Highway 8 may occur independently from the lands to the south, subject to Policy 4.12.5.
- 4.12.3 Substantial completion of approved phases shall be required prior to subdivision approval by Council for subsequent phases. For the purposes of this Plan, substantial completion shall mean endorsement Of the Final Plan of Survey for the approved phase and registration of same at Land Titles, prior to the approval of a Plan of subdivision for the next phase or phases.
- 4.12.4 Notwithstanding Policy 4.12.1, the development of the Special Development Area or open space and recreation lands may occur at any time during the project development subject to Policy 4.12.5.
- 4.12.5 The Municipality, at its sole discretion, may issue development approval for the provisions of roads, recreational facilities and/or utilities necessary to service the Plan Area.

5.0 SCHEDULE “A”

Forming Part of Bylaw C-6127-2005

A Land Use Concept and Policy Framework for a portion of the S ½ of Section 5-24-2-W5M comprising approximately ± 60.81 acres (± 24.609 ha).

Lott Creek Landowners Land Use Concept

Lott Creek Landowners Land Use Concept
Elbow Valley Area Structure Plan

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1.0 Introduction

The Land Use Concept and Future Land Use Scenario presented forms part of and is an Appendix to the Elbow Valley Area Structure Plan (EVASP). The policy framework is intended to guide future development and subdivision of the plan area in the conversion of these lands from Recreational Commercial to Residential land uses. The Land Use Concept is more descriptive than the policies contained within the EVASP and relates a proposed redevelopment of the existing lands with existing development on adjacent lands.

1.1 Community Vision

The vision for this proposed community within the EVASP provides for a blend of high-quality housing types that will complement and become seamlessly integrated with the existing development in the EVASP and its surroundings. Throughout the planning process for this community, the utmost respect has been demonstrated toward neighbouring land uses, stakeholders, environmental values, and the stewards of those values. Stakeholders and stewards such as the Tsuu T'ina Nation, the Elbow Springs Golf Club, the residents of Elbow Valley and Lott Creek Grove, the City of Calgary, Alberta Environment, and the Municipal District of Rocky View will continue to be consulted and involved in planning and decision-making processes as this community develops, matures, and becomes home to approximately 150 households in the years to come.

Key to this community's vision and identity is its relationship to the natural environment. Development of the community provides a critical opportunity to rehabilitate Lott Creek and the important habitat within and surrounding the creek. Numerous species inhabit or migrate through the area, which supports a rich ecological community. Rehabilitation of Lott Creek will provide a significant benefit to the environmental quality of the Elbow River valley.

Along with rehabilitation of the creek, the lands supporting residential development will be removed from the flood risk areas of both Lott Creek and the Elbow River. Areas of fill will be designed, engineered, and constructed to the highest standards. Best management practices will be utilized to properly control stormwater in the community and to protect water quality in Lott Creek and the Elbow River.

Sanitary sewer and water servicing will be provided by piped regional systems that meet or exceed all environmental, public health, maintenance, and regulatory standards. Lott Creek Drive will provide safe public access to the community and internal private roads will be built to urban standards.

The proposed blend of high-quality single-detached estate homes and semi-detached villas will complement and add value to the surroundings. An important aspect of this design concept will be the maintenance of the existing open government road allowance at Township Road 240 (50th Avenue) to provide a natural buffer area between the new community and the Tsuu T'ina Nation to the south. Naturalized landscaping, natural areas, and trails will connect the community with the rest of Elbow Valley, offering calm and quiet walking opportunities for community residents and their visitors.

1.2 Purpose and Objectives

The purpose of this land use concept is to provide a comprehensive planning framework with a goal of providing for the redevelopment of the plan area from Recreational Commercial to a Residential Community. It will address land uses, infrastructure, environment, transportation, flood risk management and integration with adjacent development and the existing community. The following objectives have been identified as central to this land use concept:

- To create a compatible residential community with a recreation focus that will be integrated into the existing community.
- To create a residential community that is sensitive to adjacent land within the City of Calgary and Tsuu T'ina Nation.
- To provide for Community input and public participation initiatives as part of the plan preparation process. To provide for the opportunity and inclusion of the City of Calgary and the Tsuu T'ina Nation in the preparation of policy and development of the Land Use Concept.
- To create a residential community that is sustainable and free of hazards being responsive to the natural characteristics of the region.
- The primary issues surrounding intensification of the subject lands for residential development are water, wastewater and stormwater management. Water management is critical in this area in terms of flood management and development of stormwater strategies.
- To develop a restoration plan for a portion of Lott Creek and remove of a portion of the plan area from the Flood Risk Area of Lott Creek and the Elbow River based on sound watershed and ecological planning that improves water quality and fish habitat and does not negatively impact existing upstream and downstream users.
- To provide policy statements and present the Developer's commitment for the development of the subject lands.

1.3 Plan Area

The subject lands are shown on Map 1 and comprise the following lots (from west to east):

Plan 0312250 Lot 9:	14.27 acres	5.775 hectares
Plan 9610433 Lot 8:	9.24 acres	3.740 hectares
Plan 9610433 Lot 7:	8.35 acres	3.379 hectares
Plan 8910799 Lot 4:	6.00 acres	2.428 hectares
Plan 8910799 Lot 5:	6.70 acres	2.711 hectares
Plan 8910799 Lot 6:	6.00 acres	2.428 hectares
<u>Portion of Plan 0312251</u>	<u>± 4.97 acres</u>	<u>± 2.009 hectares</u>
TOTAL	± 55.53 acres	± 22.470 hectares

1.4 History

The lands within the plan area as illustrated on Map 1 have been subject to a variety of land uses including agricultural, recreational and residential. The lands are currently designated for recreation and commercial land uses in accordance with the Recreation Business District (B-4). The following describes the current uses on the subject lands (see Map 4: Aerial Photograph):

- Lot 9 is developed as a commercial trout farm.
- Lots 7 and 8 are vacant and undeveloped.
- Lot 4 is partially developed with a single-detached home and the Elbow Lake RV Park.
- Lot 5 is developed with one single-detached home.
- Lot 6 is developed with one single-detached home.
- The ± 5-acre portion of Plan 0312251 is developed for residential and golf course uses.

The majority of these lands are currently located within the floodways of Lott Creek and the Elbow River. Historically, Lott Creek flowed from the west, through the subject lands and towards the Tsuu T'ina nation lands to the south. Past development has channeled Lott Creek and degraded the natural riparian zone associated with Lott Creek across the subject lands.

2.0 Site Assessment

An understanding of the physical characteristics of the plan area is important in the preparation of a sustainable community. The protection and enhancement of the natural environment and significant features is essential to maintaining and improving the integrity of the Elbow Valley community and the region.

2.1 Existing Development

As discussed in the History Section, the subject lands contain a number of existing uses and associated structures. None of the existing structures are designated as historical and have no known historical significance. As redevelopment is implemented in accordance with this Land Use Concept, the existing uses, structures, residences, and development will be removed, reclaimed, or integrated with the new development. In the interim, all existing non-residential buildings and uses within the Plan Area shall be deemed to be non-conforming buildings and non-conforming uses in accordance with the Alberta Municipal Government Act. Any building, landscaping, or development that is retained will be compatible with the new residential community.

Policy 2.1.1 Existing development shall be removed, reclaimed, or integrated with the new development to the satisfaction of the Municipal District of Rocky View.

Policy 2.1.2 Existing non-residential land uses and buildings within the Plan Area may continue to operate and will be considered non-conforming uses and non-conforming buildings and will be subject to the requirements of the Municipal Government Act.

2.2 Topography

The topography of the Plan Area is gently undulating without significant relief features. The land generally slopes from west to east and slightly southward towards Lott Creek and the base of an escarpment which rises steeply on Tsuu T'ina Nation lands. No drainage is received from Tsuu T'ina Nation due to the construction of a berm along the road allowance (Twp. Rd. 240 / 50th Avenue). Historically, Lott Creek had meandered through both the Plan Area and the lands to the south within the Tsuu T'ina Nation, where it ultimately flows eastward into the Elbow River. The water that is currently present is fed by a number of natural springs in the area. The Plan Area contains no topographical constraints or hazards that will require mitigation prior to development.

Policy 2.2.1 All new development shall be guided by an approved Stormwater Management Plan that identifies appropriate Best Management Practices for both water quality and quantity.

2.3 Elbow River and Lott Creek Flood Risk Area

As part of a Provincial and Federal Flood Reduction Program conducted in 1996, Alberta Environment has identified a significant portion of the Plan Area to be contained within the 1:100 year floodplain of the Elbow River and Lott Creek. Map 6 of the EVASP is based on this floodplain mapping. As part of the planning process for this Land Use Concept, an engineering report was prepared to integrate the water related issues that need to be addressed with regard

to the proposed residential development and Lott Creek restoration and flood diversion. The highlights of that report include:

- hydraulic study of Lott Creek in order to ascertain whether the 1:100 year flood can be safely passed through a proposed flood diversion channel and to evaluate its impact on the adjacent water regime;
- recommendations to restore Lott Creek to a naturalized state within the 50th Avenue road allowance and development area (see Map 5);
- a recommendation to construct a 1:100 year floodway along the south boundary of the development area for safe passage of 108 cubic meters of stormwater from upstream areas (see Map 5);
- Best Management Practices such as onsite stormwater detention facilities to enhance the water quality of discharge back into Lott Creek;
- a recommendation to conduct a feasibility study at the subdivision stage for the establishment of substantial fish habitat areas upstream of the development on the Elbow Springs Golf Club lands;
- a recommendation to create a homeowners' association to administer maintenance of stormwater detention facilities and the sensitive naturalized Lott Creek floodway area
- recommendations to minimize impacts on adjacent stakeholders.

A conceptual flood risk line, based upon the findings of this engineering report, is shown on Map 3 of this Land Use Concept. Detailed construction drawings prepared by a qualified professional engineer, showing ultimate construction grades and a surveyed flood risk line, shall require Alberta Environment approval of a license under the auspices of the Alberta Water Act prior to subdivision within the Plan Area. Residential development within the final approved flood risk area shall be strictly prohibited.

2.4 Soils and Vegetation

The area surrounding the proposed development contains mixed riparian and gravelly soils typical of stream valleys in the prairies and foothills. Soils located within the Elbow River Floodplain are characterized by coarse soils with rapid, internal drainage and high water tables. The soils within the proposed development area have been subject to a significant degree of disturbance from a variety of agricultural, residential, commercial, and recreational uses over the past century.

Because of the historic land uses and the presence of riparian areas within the Tsuu T'ina Nation to the south, vegetation is generally characterized as grass and scrub cover, with little natural forest in the low-lying areas. Natural conditions of Lott Creek would have had a fairly developed riparian zone that would have been an important component to the functioning of a healthy watershed. Past historical lands uses within the Plan area have degraded the functionality of the natural riparian buffer in the area that provided a natural transition between Lott Creek and the higher, upland area.

The Plan Area has been landscaped and altered to enhance the existing residential, recreational, and commercial uses.

2.5 Biophysical Assessment

The local springs and meandering channel of Lott Creek provide significant opportunities for fish and wildlife habitat. The area offers food, water, and resting places for migratory birds and is well connected with wildlife corridors to the south and west. Nonetheless, historic activities, practices, and patterns of land use within the Plan Area have significantly altered the natural characteristics of the land. It is expected that this riparian habitat is to be restored and enhanced with any proposed development improving erosion, water quality, wildlife and fish habitat, increasing the overall diversity of the Plan Area. A Biophysical Impact Assessment is expected to be completed in support of any development proposals in the area to characterize the biophysical resources in the project area, evaluate their significance and recommend mitigation measures respecting the project.

Policy 2.5.1 A Biophysical Impact Assessment shall be required in support of the Lott Creek Restoration and Flood Diversion proposal and shall make recommendations respecting the establishment of a riparian buffer adjacent to Lott Creek and protect and enhance existing and proposed new fish habitat.

Policy 2.5.2 Biophysical Impact Assessments prepared in support of proposed Development within the Plan Area are to be prepared to the satisfaction and be consistent with the mandates of the Municipal District of Rocky View, Alberta Environment and the Department of Fisheries and Oceans Canada.

2.6 Geotechnical Investigations

Due to the mixed riparian and gravelly soils and subsoil underlying the Plan Area and the history of disturbance from existing and past land uses, comprehensive geotechnical investigations will be required prior to any development in accordance with this Land Use Concept.

2.7 Archaeological and Historical Resources

Lott Creek and the Elbow River Valley contain numerous archaeological sites and the potential for development to impact historical resources is considered high. Prior to approval of subdivision within the plan area and in consultation with Alberta Community Development a Historical Resources Impact Assessment will be required.

Policy 2.7.1 In accordance with the Historical Resources Act, a Historical Resources Impact Assessment (HRIA) and mitigative studies are required to the satisfaction of Alberta Community Development, Cultural Facilities and Historical Resources Division and the Municipal District of Rocky View.

Policy 2.7.2 The HRIA shall be included with an application for subdivision and prior to Development proceeding within the plan area to the satisfaction of Alberta Community Development, Cultural Facilities and Historical Resources Division and the Municipal District of Rocky View.

3.0 Future Land Use Scenario

3.1 Community Context and Land Use Change

The existing land use at the time of preparation of this Land Use Concept for the plan area was Recreation Business (B-4) District. Lands to the north and west are designated B-4 District as is currently developed as part of the Elbow Springs Golf and Country Club. The purpose and intent of this district is to allow for a wide range of recreational business uses. Lands to the east are contained within the City of Calgary with access provided through the Plan Area due to the channel location of the Elbow River. Lands to the south are undeveloped and contain the Lott Creek floodplain and Elbow River Escarpment contained within the Tsuu T'ina Nation lands. The residential communities of Lott Creek Grove and Elbow Valley are located to the west.

3.2 Subdivision Design Principles

The Concept illustrated on Map 3 provides a design where the following principles have been applied:

1. The minimum single-detached residential lot size would be 0.25 acres or 0.10 hectares (11,000 square feet or 1,000 square metres), although the typical single-detached residential lot size would be greater than 20,000 square feet.
2. The minimum semi-detached residential lot size would be 0.18 acres or 0.075 hectares (8,000 square feet or 750 square metres). Each double lot containing a two-unit building would have a minimum area of 0.36 acres or 0.15 hectares (16,000 square feet or 1,500 square metres).
3. To extend the Municipal Road Network and Lott Creek Drive to 101st Street and the boundary of the City of Calgary.
4. To extend the existing pathway system to the west, from the communities of Lott Creek Grove and Elbow Valley, to the Planning Area and 101st Street and the boundary of the City of Calgary.
5. Ownership based on private ownership in the form of a Bareland Condominium.
6. The Developable Area of each parcel for residential development shall be located entirely outside the floodways of Lott Creek and the Elbow River.
7. Residential development cells may also contain utility lots for stormwater management facilities, including privately owned pond and stream amenity features to be maintained by a homeowners' association to the satisfaction of Municipal District of Rocky View and Alberta Environment.
8. The relocation and restoration of Lott Creek and Flood Diversion Channel and location of potential stormwater facilities adjacent to Township Road 240 (50th Avenue) providing for open space and a buffer between new residences and the Tsuu T'ina Nation.

3.3 Lot Size, Density and Distribution and Building Form

The concept plan as illustrated on Map 3 is envisioning an urban overlay affecting seven (7) existing titles. The concept has been designed around identified Development Cells based on ownership. Thoughtful siting and massing of residences and the selective use of colour and material are essential to a successful development. Substantial detail must be paid to building form at the time of subdivision and phasing of development within the Plan Area. The residential development cells are organized as follows:

Residential Cell Maximums		Single-Detached	Semi-Detached	Cell Areas
Cell 1:	32 units	25 units	10 units	5.775 ha (14.27 ac)
Cell 2:	32 units	25 units	10 units	3.740 ha (9.24 ac)
Cell 3:	24 units	20 units	10 units	3.379 ha (8.35 ac)
Cell 4:	20 units	16 units	8 units	2.428 ha (6.00 ac)
Cell 5:	20 units	12 units	18 units	2.711 ha (6.70 ac)
Cell 6:	8 units	4 units	8 units	2.428 ha (6.00 ac)
Cell 7:	8 units	4 units	8 units	2.009 ha (4.97 ac)
TOTAL *	144 units	106 units possible	72 units possible	22.47 ha (55.53 ac)

Policy 3.3.1 Notwithstanding the total possible numbers for single-detached and semi-detached units, no more than the maximum number of units for each cell and for the entire development (150 units) shall be developed.

Policy 3.3.2 Subdivision is anticipated to be under private ownership by Bareland Condominium in accordance with the Condominium Property Act.

Policy 3.3.3 Site and building design criteria should be incorporated into new development demonstrating its compatibility with the land and adjacent uses. The criteria should include, but not be limited to attention to impervious surface coverage per lot; building height and profile; building materials of local origins or character and colours; building and site development envelope; site plan and landscaping plan.

Policy 3.3.4 Building Site locations shall be appropriately setback from the Flood Risk Area and Flood Diversion Channel of Lott Creek and be buffered though the use of natural landscaping to reduce negative edge effects on Lott Creek.

Policy 3.3.5 Architectural, Landscaping and Site Development Standards shall be established at the subdivision stage and be registered on title of each lot by caveat or restrictive covenant within the Plan Area.

3.4 Pedestrian Connections and Pathway Development

Walkways offer a form of passive recreation and community connection. Municipal Reserve will be dedicated to create a public pathway along Lott Creek Drive, which will connect the new community with the existing Municipal Reserve open space and pathway system in the EVASP.

- Policy 3.4.1** A system of linear parks and walkways should be developed throughout the Plan Area to link individual parks and create an interconnected and continuous system of open spaces and provide connections to existing walkways and linear park in the area.
- Policy 3.4.2** If a risk management assessment confirms the safety of the proposed pathway route within the rights-of-way or the road allowance, the Municipality may consider this as an alternative.
- Policy 3.4.3** Standards for the various classifications of walkways will be to the satisfaction of the Municipality, and have regard for on-going and long-term maintenance, upgrading and liability.
- Policy 3.4.4** Maintenance and upkeep responsibility for walkways will be established in agreement between the Municipality and a registered association and should be defined at the time of subdivision.

3.5 Municipal Reserve

The Municipality shall take Municipal Reserve within the Plan Area through dedication of land, cash-in-lieu of reserve land, or some combination of both at the time of subdivision approval.

- Policy 3.5.1** Municipal Reserves may be provided by either land or cash-in-lieu of the land. Cash-in-lieu funds should be utilized to purchase land for municipal and/or school reserve sites in alternative, more suitable locations or for pathways.
- Policy 3.5.2** The maintenance and operation of municipal reserve land will be through a variety of initiatives including agreements between the Municipality and/or its agents and private organizations providing a 'hands on' management of the land.

3.6 Environmental Reserve and Environmental Reserve Easement

Under conditions specified in the Municipal Government Act, the Municipality may take Environmental Reserve or suggest Environmental Reserve Easements be registered on title at the time of subdivision approval. Conditions within the Plan Area that may warrant Environmental Reserve or Environmental Reserve Easements include:

- a. the natural drainage course of Lott Creek;
- b. land that is subject to flooding; and
- c. a strip of land, not less than 6 metres in width, abutting the bed and shore of Lott Creek for the purpose of:
 - i. preventing pollution, or
 - ii. providing public access to and beside the bed and shore.

- Policy 3.6.1** The protection and enhancement of the environment through the use of effective tools including environmental reserve, environmental reserve easement and/or conservation easements as methods of preserving environmentally significant or sensitive areas should be encouraged.
- Policy 3.6.2** The registration of Environmental Reserve Easements, with the agreement of the landowner, shall be preferred over dedication of Environmental Reserve.

Policy 3.6.3 In addition to Environmental Reserve and Environmental Reserve Easement, the protection and enhancement of the environment can also be protected through a variety of instruments such as the use of overland drainage easements, restrictive covenants, private parks, and conservation easements.

4.0 Transportation and Infrastructure

The Plan Area is located approximately 1 kilometre south of Highway 8. Access is currently via a private access easement agreement along the north side of the property which is an extension of the Municipal Road Network and Lott Creek Drive. The current Access Easement Agreement will be dedicated as a public roadway and constructed to M.D. of Rocky View standards. Road construction costs would be borne by the adjacent of affected landowners in the study area.

The continuation of Lott Creek Drive along the previously registered access easement is the most logical means of providing adequate vehicular access to this new community. To the west of the Plan Area, Lott Creek Drive consists of an 11-metre wide road surface, paved to a rural collector standard within a 25-metre public road right-of-way. The portion of Lott Creek Drive to be dedicated as public roadway within the Plan Area will similarly contain 11 metres of road width, but will be paved to a hamlet collector standard within the 20-metre right-of-way of the pre-existing access easement. This slightly narrower right-of-way with hamlet collector status, combined with the S-curve at the entrance to the Elbow Springs Golf Club, recognizes the pre-existing conditions associated with the golf course and will serve to calm traffic as it enters the Plan Area.

Policy 4.0.1 A Traffic Impact Analysis (TIA) should be prepared in support of an application for first phase of subdivision within the Plan Area. The TIA shall consider development of the Plan Area at full build out and potential impacts on the existing surrounding uses, the Municipal road network and Provincial Highway System to the satisfaction of Alberta Infrastructure and Transportation and the Municipal District of Rocky View.

Policy 4.0.2 Developers shall be required to provide for road network upgrades necessary to accommodate new subdivision and development so the Municipal District of Rocky View is not obliged to do so.

4.1 External Road Network

The Plan Area is bounded on the east by 101st Street SW within the City of Calgary and on the south by an undeveloped government road allowance along the Township Road 240 (50th Avenue) alignment. Upgrades to 101st Street will not be required to serve any new development within this Land Use Concept. Any future upgrades to the 101st Street roadway will be subject to the approval of the City of Calgary. The Township Road 240 (50th Avenue) government road allowance will remain open but undeveloped in order to provide for both the rehabilitation of Lott Creek and a buffer between the Plan Area and the Tsuu T'ina Nation.

To the west of the Plan Area, Lott Creek Drive provides full vehicular access via Lott Creek Boulevard to Highway 8. Traffic signals at the intersection of Lott Creek Boulevard and Highway 8 control all vehicular turning movements for full and safe access into and out of the EVASP.

Policy 4.1.1 External roads shall be constructed in accordance with Municipal Servicing Standards for Subdivisions and Road Construction Servicing Standards for Subdivision and Road construction as amended.

- Policy 4.1.2** Lott Creek Drive shall be dedicated and constructed to 101st Street and the boundary of the Municipal District of Rocky View and the City of Calgary prior to endorsement and registration of first phase of subdivision within the Plan Area, to the satisfaction of the Municipal District of Rocky View.
- Policy 4.1.3** Township Road 240 (50th Avenue) is an undeveloped road allowance and should function as a buffer between the Tsuu T'ina Nation and the Plan Area.
- Policy 4.1.4** New road construction and design located within the road allowance of 101st Street shall be approved and developed in accordance with the City of Calgary Road Design Standards.
- Policy 4.1.5** Consideration of any future road closures within or adjacent to the Plan Area shall not negatively impact adjacent and/or surrounding land or future development possibilities.

4.2 Internal Road Network

All internal roads shall be developed as private roads under Bareland Condominium ownership, with 15-metre rights-of-way. The homeowners' association shall be responsible for and maintain internal roads so the Municipality is not obliged to do so.

Internal private roads will be developed to hamlet residential standards to the satisfaction of the Municipal District of Rocky View. All residential lots within the Plan Area will be provided with direct access from internal private roads only. No direct vehicular access to any residential lots will be provided from Lott Creek Drive.

- Policy 4.2.1** Internal roads shall be constructed in accordance with Municipal Servicing Standards for Subdivisions and Road Construction Servicing Standards for Subdivision and Road construction as amended.

4.3 Emergency Access

Alberta Infrastructure and Transportation maintains jurisdiction over all access to Highway 8. Emergency access to Highway 8 is provided from lands to the east of 101st Street within the City of Calgary via an access easement along the north side of the Elbow Springs Golf Club. While a connection to this emergency access from the Plan area is physically possible, any emergency use of the easement for the benefit of lands within the Plan Area will be subject to the consent of the parties to the pre-existing Emergency Access Agreement and the approval of Alberta Infrastructure and Transportation.

- Policy 4.3.2** Emergency Access to the Provincial Highway System shall be approved at the discretion of Alberta Infrastructure and Transportation.

4.4 Lott Creek Restoration and Flood Risk Management

The primary issues surrounding intensification of the subject lands for residential development are water, wastewater and stormwater management. Ecological Planning and water management is critical in this area in terms of flood management, development of stormwater strategies and restoration and enhancement of riparian and fish habitat. The re-establishment

Lott Creek Landowners Land Use Concept
Elbow Valley Area Structure Plan

of the Lott Creek Riparian Area and designation of appropriate setbacks from development is strongly encouraged in association with the engineering and realignment of Lott Creek and the construction of a new Flood Diversion Channel.

An Integrated Water Management Plan has been prepared in support of this Land Use Concept that addressed these issues on a comprehensive scale. It has been demonstrated that topographical modifications could be made to Lott Creek and the Floodway without negatively impacting the previously determined Flood conditions. The highlights of the report are detailed below:

- The restoration of Lott Creek to a naturalized state within the Plan Area.
- Realignment of Lott Creek and the 1:100 Floodway.
- Best Management Practices respecting enhancement of water quality.
- Stormwater Management from within the Plan Area.
- Feasibility of establishing fish habitat along Lott Creek and existing ponds.
- Minimizing Impact on adjacent Stakeholders.

Conclusions

1. The model results show that the flood levels both within the development area and upstream are acceptable.
2. No hydraulic impact is expected upstream of the Plan Area. The upstream reach would remain undisturbed.
3. The proposed development does satisfy the “0.3 metre rise” criterion of AE and the City of Calgary.
4. The proposed modified flood way and channel excavation will provide a comprehensive and not piecemeal solution for flood conveyance through the Plan Area.
5. The report only addresses the hydraulic aspects of the proposed encroachment and not other impacts or regulatory requirements associated with the work.
6. The hydraulic impact on the Tsuu T’ina Nation lands has been kept to a minimum.
7. The southerly fishponds on Allen’s lands will have to be eliminated. Inlet control and backflow protection at the outlet will need to be constructed upstream and downstream of the fish farm operation or relocated to another location.

Recommendations

1. Erosion protection and bank stabilization should be addressed in the detailed construction drawings and analysis of site material.
2. Hydraulic control of the fishpond inlet will be provided for flood level to limit inflow to 5000 gal/min. Also, back flow protection should be provided at the outlet of the fishponds during flood events. Inlet and outlet controls will be required for the fish farm. Based on the hydraulic analysis, the proposed encroachment should be accepted.
3. Further consultation with the Tsuu T’ina Nation will be required to receive their input into the details of the development proposal.

Alberta Environment has been an involved stakeholder and has reviewed this Land Use Concept and proposed Flood Diversion and Flood Mapping Changes. Formal applications will be required for a complete technical review under the Water Act and/or the Environmental Protection and Enhancement Act. Applications will be required to be submitted concurrently with application for subdivision approval.

- Policy 4.4.1** Future subdivision shall conform to the floodway limits as established to the satisfaction of Alberta Environment.
- Policy 4.4.2** A complete application, to modify and alter the location of the Elbow River Floodway and relocate and restore a portion of Lott Creek, shall be applied for to Alberta Environment in accordance to the requirements of the Water Act. This application shall be applied for and accepted by Alberta Environment concurrently with an application for Subdivision with the Municipal District of Rocky View.
- Policy 4.4.3** The Municipal District of Rocky View is to ensure that the review process of future development plans within the Plan Area from other Federal and Provincial agencies is verified for completeness.
- Policy 4.4.4** Proposed development shall not result in the harmful alteration, disruption or destruction of fish habitat in accordance with the Fisheries Act to the satisfaction of the Department of Fisheries and Oceans Canada (DFO). Prior to subdivision approval, relevant studies and studies detailing the proposed works shall be submitted to DFO for approval.
- Policy 4.4.5** Proposed changes to the Flood Risk Area shall involve and have consideration for all Stakeholders, including the Tsuu T'ina Nation, the City of Calgary and adjacent residents and Developments within the Municipal District of Rocky View.
- Policy 4.4.6** A Riparian Area and appropriate set backs shall be established adjacent to Lott Creek that will buffer the proposed development from Lott Creek, reducing potential negative edge effects.
- Policy 4.4.7** Dwellings shall be located outside of the Flood Risk Area of Lott Creek and the Elbow River to the satisfaction of Alberta Environment and the M.D. of Rocky View.
- Policy 4.4.8** Maintenance and Operation issues respecting the long-term functioning of the proposed floodway diversion channel shall be a key issue to be addressed during the approval of any floodway modification. The maintenance and operation should be funded by the stakeholders located within the benefiting area.

4.5 Stormwater Management

A variety of stormwater management approaches and techniques may be implemented within the Plan Area, including either a single centralized stormwater management pond or several ponds dispersed throughout the Plan Area (see Map 5). The feasibility of placing stormwater management ponds within the flood risk area will be investigated in consultation with Alberta Environment. Best Management Practices are methods to handle stormwater to protect water quality in a watershed and maintain predevelopment flow and water quantities within a drainage area. Best Management Practices are to be applied both in a regional (catchment) approach and a site-by-site approach. To capitalize on the benefits of a Best Management Practice, they

must be integrated into the planning and design of a stormwater management system based on the characteristics of the site. Irrespective of the details in the ultimate stormwater management solution, Best Management Practices respecting enhancement of water quality shall be implemented to the satisfaction of the Municipal District of Rocky View and Alberta Environment.

Policy 4.5.1 Best Management Practices shall be integrated into the planning and design of a stormwater management system based on the characteristics of the site.

4.6 Water Supply and Distribution

Water distribution suppliers service the majority of the lands within the Elbow Valley ASP area. New residential development located within the Plan Area will be serviced by an existing water provider and distribution system.

Policy 4.6.1 Connection to an existing water distribution system is required for residential purposes. The water supply system shall be designed to accommodate domestic residential development as well as fire fighting to the satisfaction of the M.D. of Rocky View.

4.7 Wastewater Management

A shared wastewater collection and sanitary sewer pipe system shall be provided by direct connection to the existing sanitary infrastructure located in the Plan Area and Lott Creek Drive. Wastewater is discharged into the City of Calgary for treatment. The Municipal District of Rocky View will apply for wastewater servicing to the City of Calgary with at the subdivision application stage. Alternate or temporary methods of disposal shall require approval by the Municipal District of Rocky View and Alberta Environment prior to Subdivision Approval.

Policy 4.7.1 Notwithstanding Policies 4.10.1.1 and 4.10.1.2 of the Utility Servicing Section of the EVASP, an alternate wastewater collection, treatment and disposal system may be permitted, if approval from the City of Calgary is denied, to the satisfaction of the Municipal District of Rocky View and Alberta Environment.

Policy 4.7.2 Notwithstanding 4.10.1.2 temporary on-site wastewater servicing may be considered to the satisfaction of the Municipal District of Rocky View and Alberta Environment.

Policy 4.7.3 The operation of a collection system should ensure that the disposal and treatment of wastewater does not create any negative environmental impacts within the sub-basin.

4.8 Solid Waste

Solid Waste Management will be the responsibility of the residents living within the plan area and implemented by a private service provider. Recycling options shall be addressed as part of the Solid Waste Management Plan.

Policy 4.8.1 A Solid Waste Management Plan should be considered at the subdivision approval stage to the satisfaction of the Municipal District of Rocky View.

Policy 4.8.2 Recycling opportunities throughout the Plan Area are encouraged minimizing any impacts of development on the environment.

4.9 Shallow Utilities

Shallow Utilities provide an essential service, such as telephone, natural gas, electricity, and cable and are available to the Plan Area. The landowner is responsible for the coordination and installation of these utilities.

Policy 4.9.1 Shallow Utilities will be provided by the appropriate utility company at the sole expense of the Developer. The Developer will provide all necessary easements and right of way plans necessary for extension of services.

Policy 4.9.2 To avoid any interference with the beauty of the night sky, all outdoor lighting should limit any off-site light pollution.

5.0 Subdivision and Development Phasing

The development cells shown in Map 3 illustrate how subdivision and development within the Plan Area may be staged according to individual phases. Likewise, cells may be developed in combination to achieve greater efficiencies or economies of scale. Based upon market demand, economic feasibility, and other considerations, decisions as to the timing, staging, and phasing of development will be determined by the developer. Nonetheless, certain approvals and comprehensive infrastructure improvements will be required prior to development of any cell or cells within the Plan Area, in accordance with the following policies.

Policy 5.0.1 Lott Creek Drive shall be extended to 101st Street and the boundary of the Municipal District of Rocky View and the City of Calgary prior to endorsement and registration of any subdivision located within the Plan Area, to the satisfaction of the Municipal District of Rocky View.

Policy 5.0.2 At the time of subdivision, any proposed development within the Plan Area that proposes changes to the Elbow River Flood Risk Area and Flood Risk Mapping, all necessary approvals and consents are to be obtained from Alberta Environment.

Policy 5.0.3 An application for the construction and restoration of Lott Creek and realignment of the Floodway shall be applied for under the Water Act to Alberta Environment concurrently with an application for Subdivision with the Municipal District of Rocky View.

6.0 Consultation

Consultation has been undertaken throughout the planning process with the Municipal District, other government agencies (Alberta Infrastructure and Utilities, Alberta Environment, Fisheries and Oceans Canada), key stakeholders (Tsuu T'ina Nation, City of Calgary, Elbow Springs Golf Club, Springbank Community Planning Association) and the public at large. Affected parties have been engaged to varying degrees, at different times and frequencies, and according to various levels of detail, depending on their amount of interest and the stage in the planning process. This section describes the public consultation and stakeholder engagement conducted during the planning process in general terms, followed by a more specific description and policies with respect to ongoing consultation with the Tsuu T'ina Nation.

6.1 Open Houses and Stakeholder Meetings

The proponents of the proposed development held an open house to receive public commentary on the proposed Land Use Concept on February 16, 2005, at the Elbow Springs Golf Club. An open house notice was advertised in two consecutive issues of the Rocky View Weekly and was distributed by hand to Municipal District ratepayers residing within approximately four miles of the Plan Area.

Approximately 20 members of the public attended the open house. Information presented at the meeting included land and development statistics, flood risk mapping and data, access considerations, an explanation of the planning process, anticipated housing types, and the proposed Land Use Concept. A register and comment sheets were provided for the public to record their views. No noteworthy opposition was expressed by the members of the public in attendance, although concerns and questions were raised with respect to flood risk management and the potential traffic impacts that the new community would generate.

The development proponents also consulted directly with the Municipal District of Rocky View, Alberta Environment, Alberta Transportation and Infrastructure, Fisheries and Oceans Canada, the City of Calgary, the Elbow Springs Golf Club, the Tsuu T'ina Nation, the Springbank Community Planning Association, and the Calgary River Valleys Committee. As follow-up to the public open house, the proponents met specifically with Municipal District staff, Alberta Environment, and the Tsuu T'ina Nation on February 18, 2005, to discuss specific matters of importance to the Tsuu T'ina Nation.

Much of the direct stakeholder consultation addressed floodway and flood fringe issues related to residential development on the subject lands, with presentations and discussions of specific information with respect to proposed amendments to flood mapping in the area and rehabilitation of Lott Creek. Development concepts and transportation were also frequent points of discussion with stakeholders.

6.2 Tsuu T'ina Nation

In addition to the February 2005 meeting with Municipal District staff, Alberta Environment, and the Tsuu T'ina Nation, the development proponents met with the Band Administration at the Tsuu T'ina Nation on three other occasions: once in November 2004 and twice in March 2005. The second meeting in March 2005 included a tour of the Tsuu T'ina lands to the south of the Plan Area. The purpose of the meetings at the Tsuu T'ina Nation was to discuss specific issues with respect to:

- buffering and compatibility of land uses,
- access, particularly to government road allowances,
- water quality and quantity in Lott Creek,
- stormwater management,
- trespass,
- disposal of unexploded Department of National Defence ordnance on the First Nation lands,
- future consultation among the developers, the Municipal District of Rocky View, and the Tsuu T'ina Nation.

These issues were resolved with commitments from the development proponents:

- to keep the adjacent government road allowance open but undeveloped to provide for rehabilitation of Lott Creek and a buffer between the proposed development and the Tsuu T'ina Nation,
- to mitigate stormwater and other environmental impacts of development on water quality and quantity in Lott Creek,
- to maintain ongoing consultation with the Tsuu T'ina Nation with respect to a number of issues including but not limited to trespass, public safety, and joint surveillance of boundary areas,
- to draft a memorandum of understanding with the Tsuu T'ina Nation addressing the issues noted above.

The draft memorandum of understanding with the Tsuu T'ina Nation forms the basis of the following policies with respect to consultation among the developers, the Municipal District of Rocky View, and the Tsuu T'ina Nation.

Policy 6.2.1 The Municipal District of Rocky View and the landowners within the Plan Area shall respect the Township Road 240 (50th Avenue) government road allowance as a buffer between the Tsuu T'ina Nation and the Plan Area, which is contained entirely within the Municipal District of Rocky View.

Policy 6.2.2 Appropriate uses of the Township Road 240 (50th Avenue) government road allowance between the Tsuu T'ina Nation and the Plan Area include rehabilitation and realignment of Lott Creek, floodway, stormwater management, natural vegetation, and wildlife habitat, including natural fisheries.

Lott Creek Landowners Land Use Concept
Elbow Valley Area Structure Plan

- Policy 6.2.3** Subject to the mutual agreement of the Municipal District of Rocky View, the landowners within the Plan Area, and the Tsuu T'ina Nation, joint stewardship, management, or surveillance of the Township Road 240 (50th Avenue) government road allowance may be shared from time to time by any or all of these three parties.
- Policy 6.2.4** There shall be no construction of any buildings within the established Riparian Areas of Lott Creek adjacent to Township Road 240 (50th Avenue) government road allowance.
- Policy 6.2.5** Unless otherwise agreed by the Municipal District of Rocky View, the landowners within the Plan Area, and the Tsuu T'ina Nation, access to lands controlled by each of these three parties shall be guaranteed along the adjacent government road allowance existing and open at the time of adoption of this Land Use Concept.
- Policy 6.2.6** Under no circumstances shall the Municipal District of Rocky View, the landowners within the Plan Area, or the Tsuu T'ina Nation undertake any actions that would result in negative impacts on water resources, fisheries, or stormwater management on lands controlled by either of the other of these parties without the prior consultation and consent of both of those parties.
- Policy 6.2.7** Subject to the mutual agreement of the Municipal District of Rocky View, the landowners within the Plan Area, and the Tsuu T'ina Nation, joint stewardship, management, or surveillance of the water resources, fisheries, or stormwater management may be shared from time to time by any or all of these three parties.
- Policy 6.2.8** The Municipal District of Rocky View, the landowners within the Plan Area, and the Tsuu T'ina Nation shall consult with the other parties with respect to any of the matters addressed by this Land Use Concept. Such consultation shall be substantive, timely, respectful, and open to the degree deemed appropriate by all three of these parties.

7.0 Implementation

The primary purpose of this Land Use Concept is to provide a policy framework to guide future land use amendments prepared on behalf of private landowners. The Municipal District of Rocky View Council considers such land use amendment applications for approval by bylaw at public hearings.

Approved land use amendments will conform to the policies contained in this Land Use Concept as well as the policies of the Elbow Valley Area Structure Plan that apply within this Plan Area. Land use redesignation and subdivision of the lands will be guided by these policies and will remain subject to Municipal Approval. Development agreements between the Municipal District of Rocky View and the developer will be required as a condition of development approval and will ensure that the conditions and regulations of the Municipal District of Rocky View Land Use Bylaw, applicable Direct Control Bylaws and this Land Use Concept are addressed to the satisfaction of the Municipality.

As established under Section 5.0 of this Land Use Concept, the Development Cells shown in Map 3 illustrate how subdivision and development within the Plan Area may be staged, according to either individual phases or a combination of phases. Nonetheless, certain comprehensive infrastructure improvements and approvals will be required prior to development of any cell or cells within the Plan Area. Such comprehensive infrastructure improvements and approvals shall include both the extension of Lott Creek Drive to 101st Street and all necessary approvals from Alberta Environment for any proposed changes to the Elbow River Flood Risk Area and Flood Risk Mapping.

Policy 7.0.1 The Lott Creek Landowners Land Use Concept shall be amended and attached as Appendix 1 to the Elbow Valley Area Structure Plan and adopted by Bylaw in accordance with the Municipal Government Act, and is a statutory document of the Municipality.

Policy 7.0.2 The policies contained within the Elbow Valley Area Structure Plan shall apply in addition to the policies contained within the Lott Creek Landowners Land Use Concept, unless otherwise stated.

7.1 Associated Reports

Integrated Water Management Study

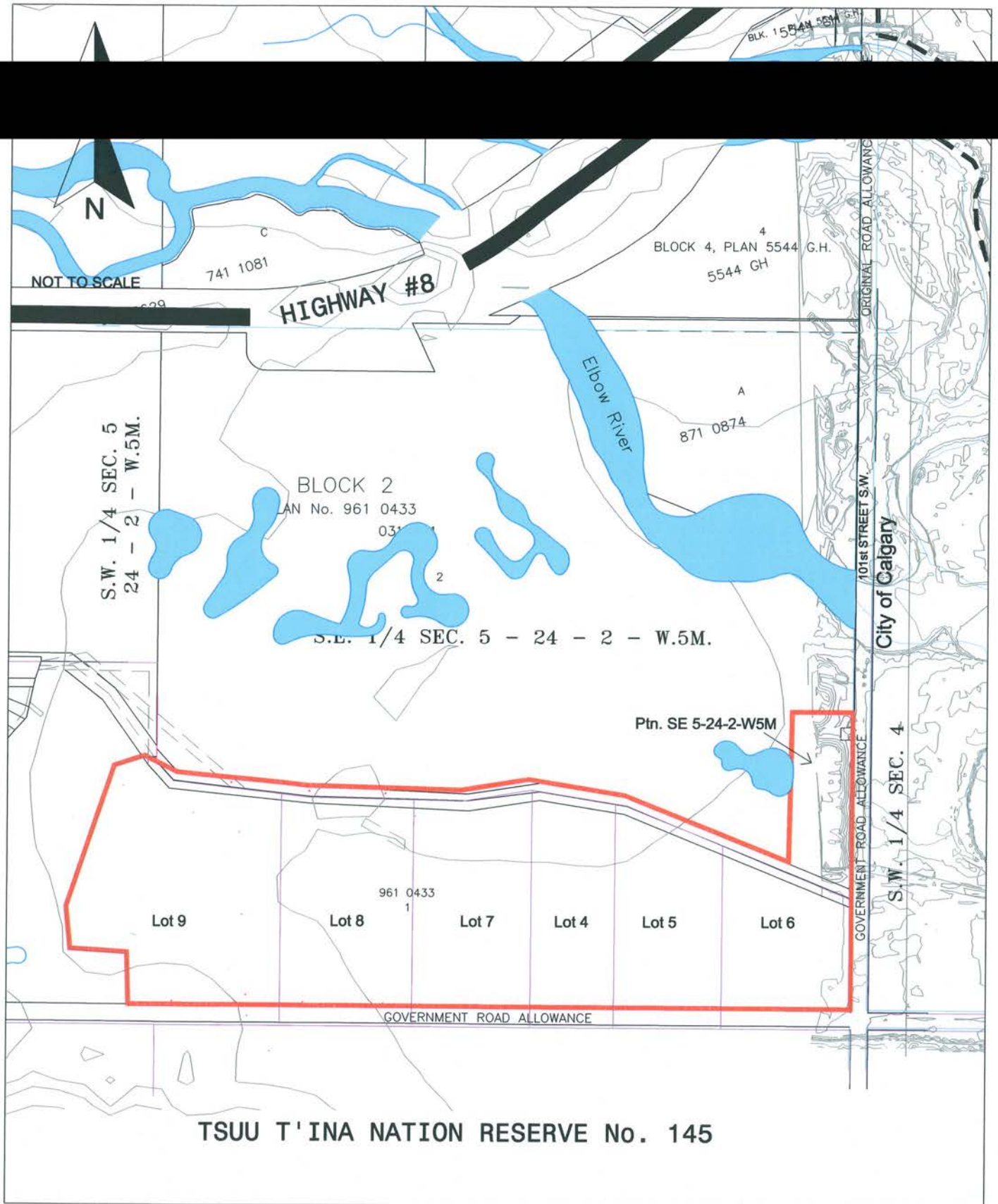
Prepared for review by Alberta Environment & the Municipal District of Rocky View
On behalf of the Lott Creek Landowners Group
Prepared by TC Engineering Ltd.
February 2005

Historical Resources Overview

Prepared for review by Alberta Community Development
On behalf of the Lott Creek Landowners Group
Prepared by FMA Heritage Resources Consultants Inc.
December 2004

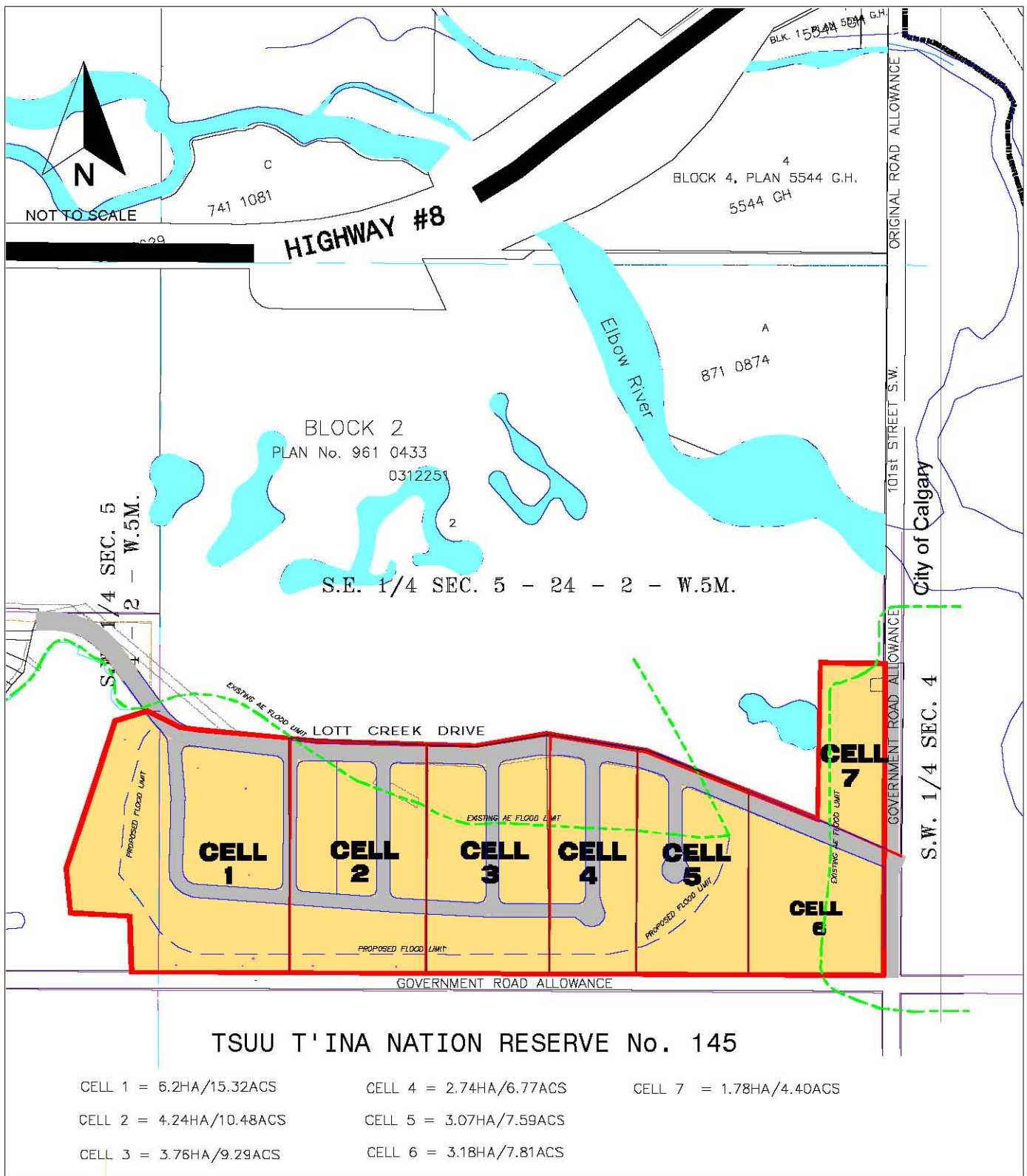
8.0 Maps

- Map 1: Existing Subdivision**
- Map 2: Proposed Direct Control District and Development Cells**
- Map 3: Concept Plan**
- Map 4: Aerial Photograph**
- Map 5: Lott Creek Restoration and Development Concept**
- Map 6: Lott Creek Buffering Concept**



— SUBJECT SITE

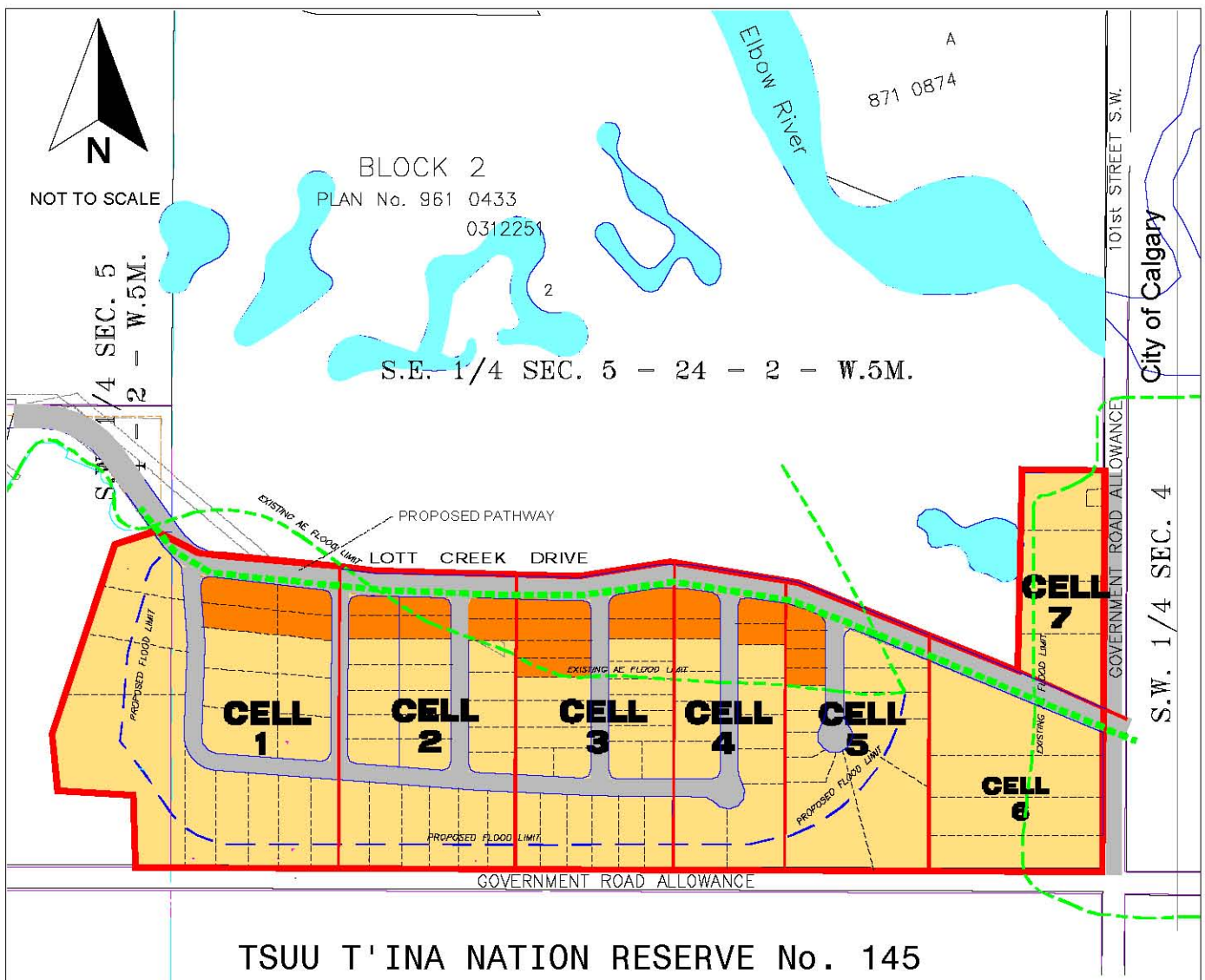
Map 1:
EXISTING SUBDIVISION
Submitted to M.D. of Rocky View



— SUBJECT SITE

Map 2:
PROPOSED DIRECT CONTROL DISTRICT
and DEVELOPMENT CELLS
Submitted to M.D. of Rocky View

February, 2005



RESIDENTIAL CELL MAXIMUMS*

	TOTAL	SINGLE- DETACHED	SEMI- DETACHED		TOTAL	SINGLE- DETACHED	SEMI- DETACHED
CELL 1	32	25	10	CELL 4	20	16	8
CELL 2	32	25	10	CELL 5	20	12	18
CELL 3	24	20	10	CELL 6	8	4	8
				CELL 7	8	4	8

*NOTE: Sizes, numbers and types of lots shown on this plan are conceptual and are intended for illustration purposes only.

SUBJECT SITE

Map 3: CONCEPT PLAN

Submitted to M.D. of Rocky View

February, 2005

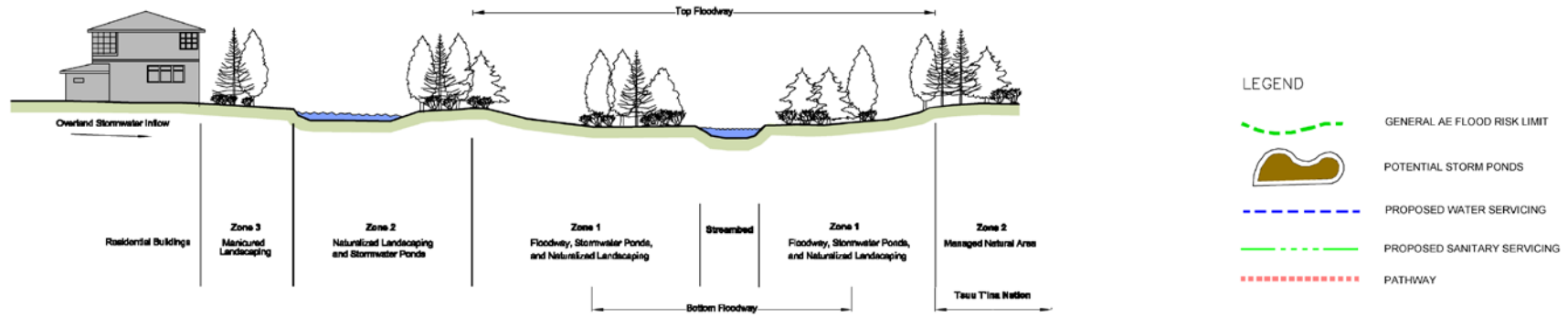


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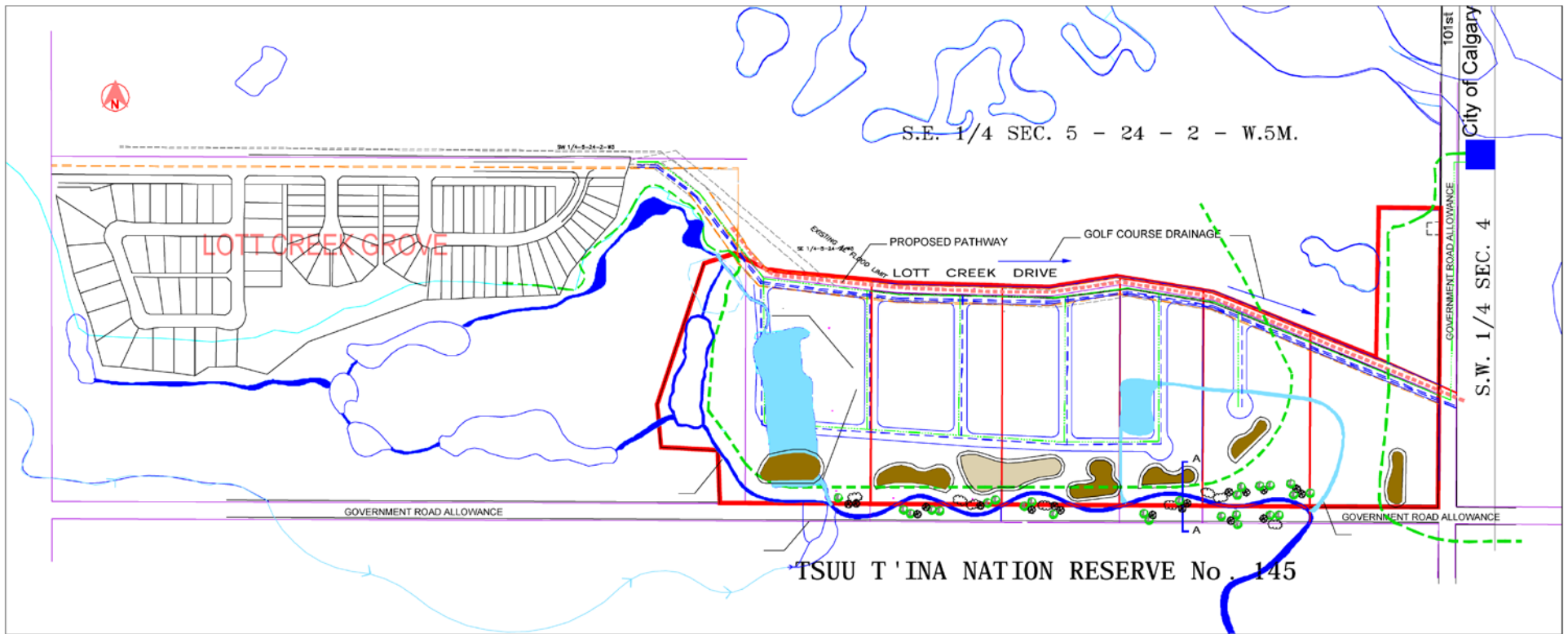
Map 4:
AERIAL PHOTOGRAPH
Submitted to M.D. of Rocky View

February, 2005

Lott Creek Landowners Land Use Concept Elbow Valley Area Structure Plan



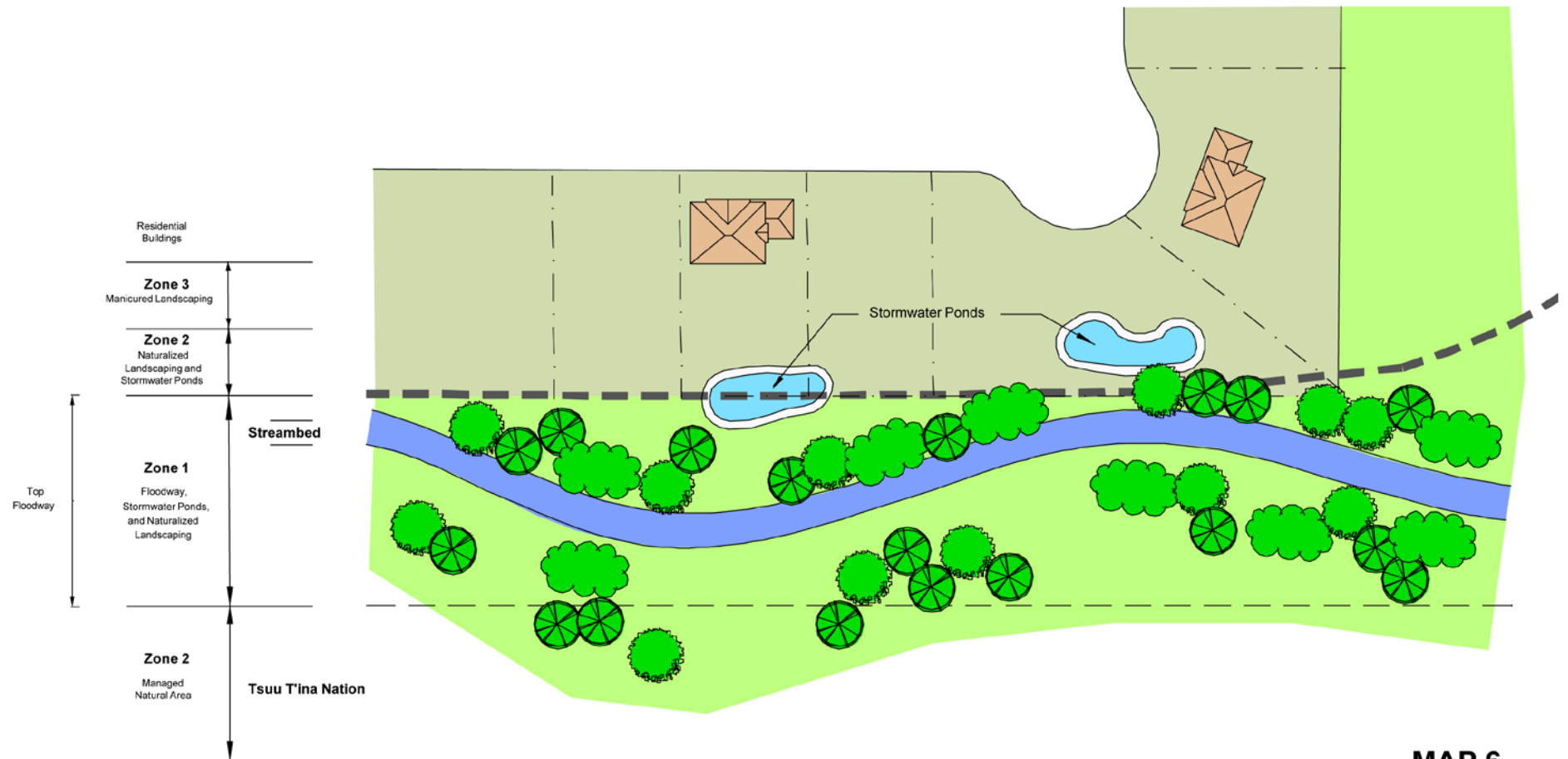
SECTION A-A NTS



PLOTTED: 06/07/15
FILENAME: SEC_4_145_Station Concept.dwg

MAP 5
LOTT CREEK RESTORATION AND DEVELOPMENT CONCEPT

Lott Creek Landowners Land Use Concept
Elbow Valley Area Structure Plan



MAP 6
LOTT CREEK BUFFERING CONCEPT