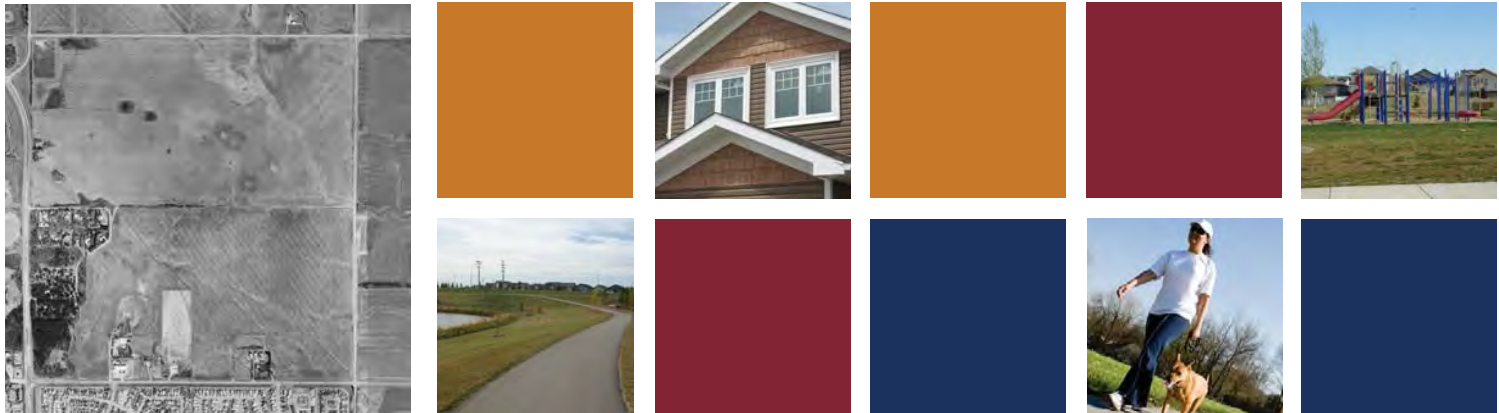


Timberstone Park



NEIGHBOURHOOD AREA STRUCTURE PLAN

Timberstone Park Developments Ltd.
City of Red Deer

Adopted: Bylaw 3217/E-2008 (April 7, 2008)

Amended: Bylaw 3217/B-2011 (June 26, 2010)

Bylaw 3217/C-2012 (July 23, 2012)

Bylaw 3217/A-2014 (November 10, 2014)

Prepared by:
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1.0 Introduction

1.1 PURPOSE

The purpose of the Timberstone Park Neighbourhood Area Structure Plan is to describe the land use framework and development objectives for the parcel of land legally described as SW ¼ 23-38-27-W4M. It is located on the east side of Red Deer just east of 30 Avenue and north of 55 Street, Highway 11, and is adjacent to the existing College Park subdivision. The development encompasses an area of approximately 48.04 hectares (118.7 acres). The quarter section was recently annexed into the City and is included in the City of Red Deer's East Hill Major Area Structure Plan (MASP).

Stantec Consulting Ltd. has prepared this report at the request of Timberstone Park Developments Ltd.

Through the NASP, Timberstone Park Developments Ltd. proposes to develop a community of complementary land uses with a balance of both residential and recreational developments. In order to achieve this, they will incorporate into the plan various interconnected parks and open spaces to provide a very desirable community development.

This document will describe the land use pattern and the development objectives for the Timberstone Park NASP. The NASP will implement the land use framework and development objectives by identifying the following:

- the size and location for various land uses;
- the alignment of roadways and lanes;
- the open park system;
- the proposed development density;
- servicing concepts for deep utility servicing; and
- the development staging sequence.

The detailed design of each phase (redistrictings and plans of subdivision) will refine the concept presented by the NASP bylaw for the Timberstone Park NASP.

1.2 PLAN AREA

The subject lands are shown on **Figure 1.0 – Location Plan** and are located in the southwest quarter of Section 23-38-27-W4M in southeast Red Deer. The NASP is defined by the following boundaries:

North Boundary – Undeveloped agricultural land owned by the City of Red Deer (Timberlands NASP)

West Boundary – College Park and 30 Avenue

East Boundary – Undeveloped agricultural land (Future Urban Development)

South Boundary – 55 Street (Highway 11)

The property is legally described as the SW $\frac{1}{4}$ Section 23, Township 38, Range 27, West of the 4th Meridian. **Figure 2.0 – Legal Boundary**, illustrates the boundary of this development.

The Timberstone Park NASP constitutes a logical planning unit with respect to identifiable plan boundaries and servicing considerations and is consistent with the area identified in the East Hill Major Area Structure Plan.

1.3 POLICIES & RELEVANT PLANNING DOCUMENTS

The following relevant documents have been reviewed and referenced in preparation of this NASP report:

- City of Red Deer East Hill Major Area Structure Plan
- City of Red Deer Municipal Development Plan
- City of Red Deer – Neighbourhood Planning Guidelines and Standards
- Geotechnical Investigation for the Timberstone Park property
- City of Red Deer Ecological Profile on these lands
- City of Red Deer Trails Master Plan (October 2005)
- Environmental Site Assessment of the property

The Timberstone Park Neighbourhood Area Structure Plan has been prepared as a Statutory Plan. It adheres to Section 633 of the Municipal Government Act of Alberta and follows the guidelines and policies set forth by the City for the development of new areas. These policies and guidelines are outlined in the City's Municipal Development Plan, the East Hill Major Area Structure Plan and City of Red Deer Neighbourhood Planning Guidelines and Standards.

The East Hill Major Area Structure Plan provides a framework for orderly and economic growth of the City's southeast residential neighbourhoods in order to create safe and healthy living



67 STREET

COLLEGE PARK

PROPOSED AREA STRUCTURE PLAN

MICHENER CENTER

55 STREET (HIGHWAY 11) FUTURE COLLECTOR

30 AVENUE

CLEARVIEW

ROSEDALE

EASTVIEW

DEER PARK

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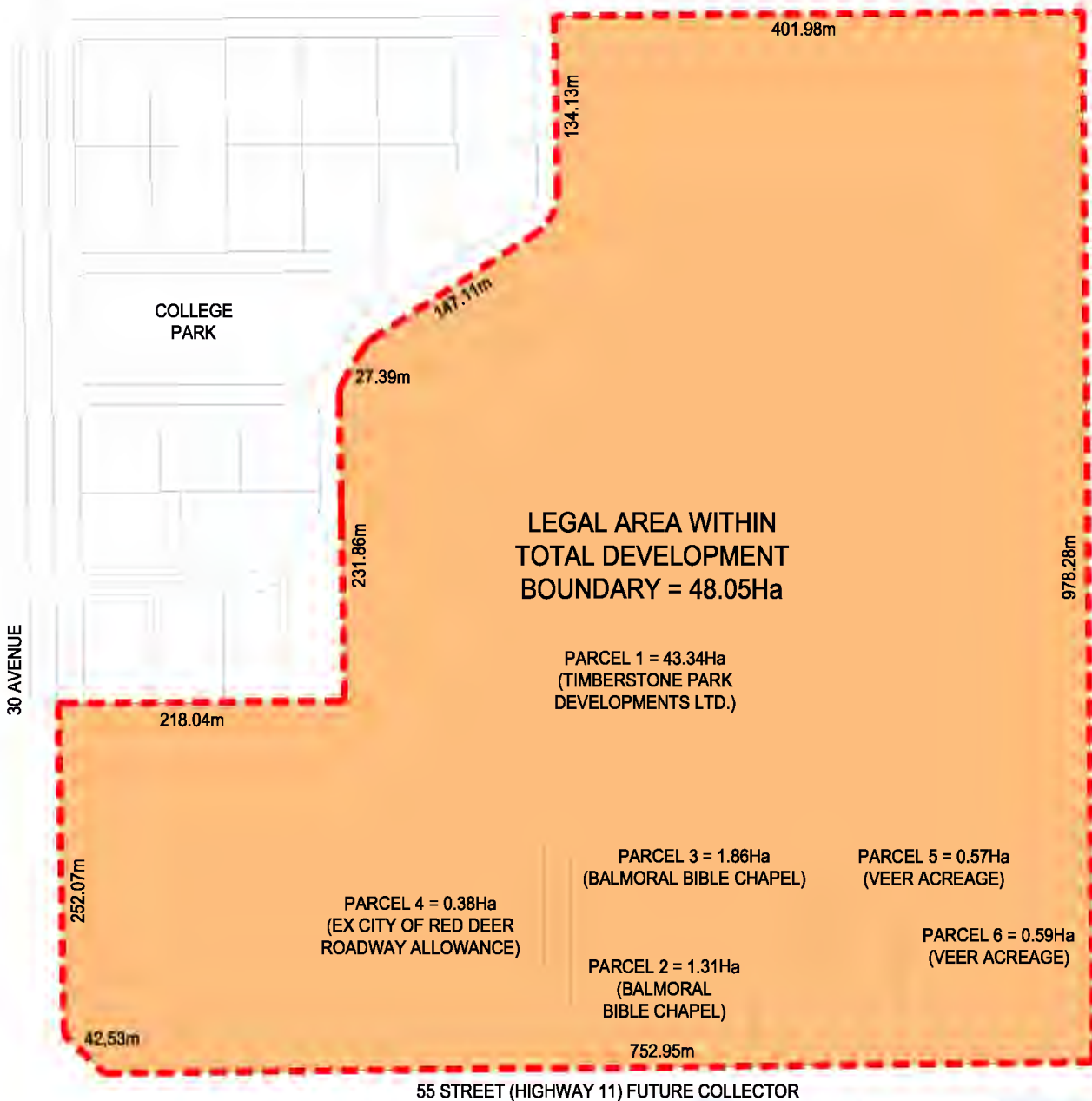


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Figure No.
1.0

Title
LOCATION
PLAN



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Title

**LEGAL
 BOUNDARY**

**TIMBERSTONE PARK
NEIGHBOURHOOD AREA STRUCTURE PLAN
Introduction**

environments. It was created in 1977 and has been amended on several occasions since this time and it has just recently gone through another major amendment to include lands recently annexed in the northeast corner of Red Deer. This Plan sets out the broader transportation and land use objectives for multiple quarter sections in East Red Deer, which includes locations of collector roads, locations of arterial roads, identifying recreational sites, identifying trail systems and allocating the various residential land uses.

The City of Red Deer Municipal Development Plan (MDP) outlines broad policies for guiding growth and changes in the City for the next 25 years and is in the process of being updated. Among many other things the MDP sets out the following policies regarding neighbourhood designs:

- The Neighbourhood Planning Guidelines and Standards to guide the creation of sustainable neighbourhoods.
- The residential density in new neighbourhoods shall be a minimum of 14.8 dwelling units per developable hectare.
- The City shall continue to require a mix of housing types and forms in all residential neighbourhoods.
- The City shall encourage the creation of a wide variety of housing forms.

One of the other policies in the MDP states:

“In addition to environmental reserve dedication, the City should use tools such as land purchase, land swaps, tax incentives, reserve dedication, leasing and conservation agreements or easements, and other similar mechanisms as a means of conserving natural features, both within and in areas surrounding Red Deer.”

Conservation Easements are defined in the document as follows:

“An agreement registered against title whereby a landowner grants to another person or organization provisions for the protection, conservation and enhancement of the environment, including the protection, conservation and enhancement of biological diversity and natural scenic or aesthetic values. A conservation agreement may provide for recreational use, open space use, environmental education use, and research and scientific studies of natural ecosystems.”

The Timberstone Park NASP Bylaw complies with the East Hill Major Area Structure Plan and will apply to the new MDP that is currently being amended to reflect the 2004 annexation.

2.0 Site Context & Development Considerations

2.1 TOPOGRAPHY, SOILS & VEGETATION

Presently, the site is undeveloped farmland and as shown on **Figure 3.0 – Existing Conditions**, the site topography is gently rolling with some small hills and ground elevations that range between a high of approximately 896 m and a low of approximately 890 m. The land slopes slightly downward to the northwest while a drainage swale in the centre of the quarter section meanders in a northwesterly direction.

Parkland Geotechnical Consulting Ltd. completed an Environmental Site Assessment for this property in February of 2005 and a disturbed uncultivated area was noted in the approximate centre of the quarter section from the 1970's until present. This depression was found to contain buried topsoil and old construction rubble but does not contain any sanitary waste and the material is not expected to pose an environmental health risk to the property. This is based on the more than thirty test pits dug into this area in 2003 that revealed only topsoil in this vicinity and this was also verified from accounts from the landowner and local contractors who hauled material into this site. This fill site depression contour is identified on **Figure 3.0 – Existing Conditions**.

This site is presently identified in the City of Red Deer Land Use Bylaw as a hazard area. Because of existing nuisance material a request will be made to Parkland Community Planning Services to amend the land use bylaw, reflecting the reduced setback required for development and any required mitigation measures.

The local vegetation on the site consists of a significant stand of trees in the southwest corner of the site a line of trees along the north property line, some trees around the existing acreages, grass on the existing ProFly Golf Centre (driving range) and the remainder of the site is vacant agricultural land.

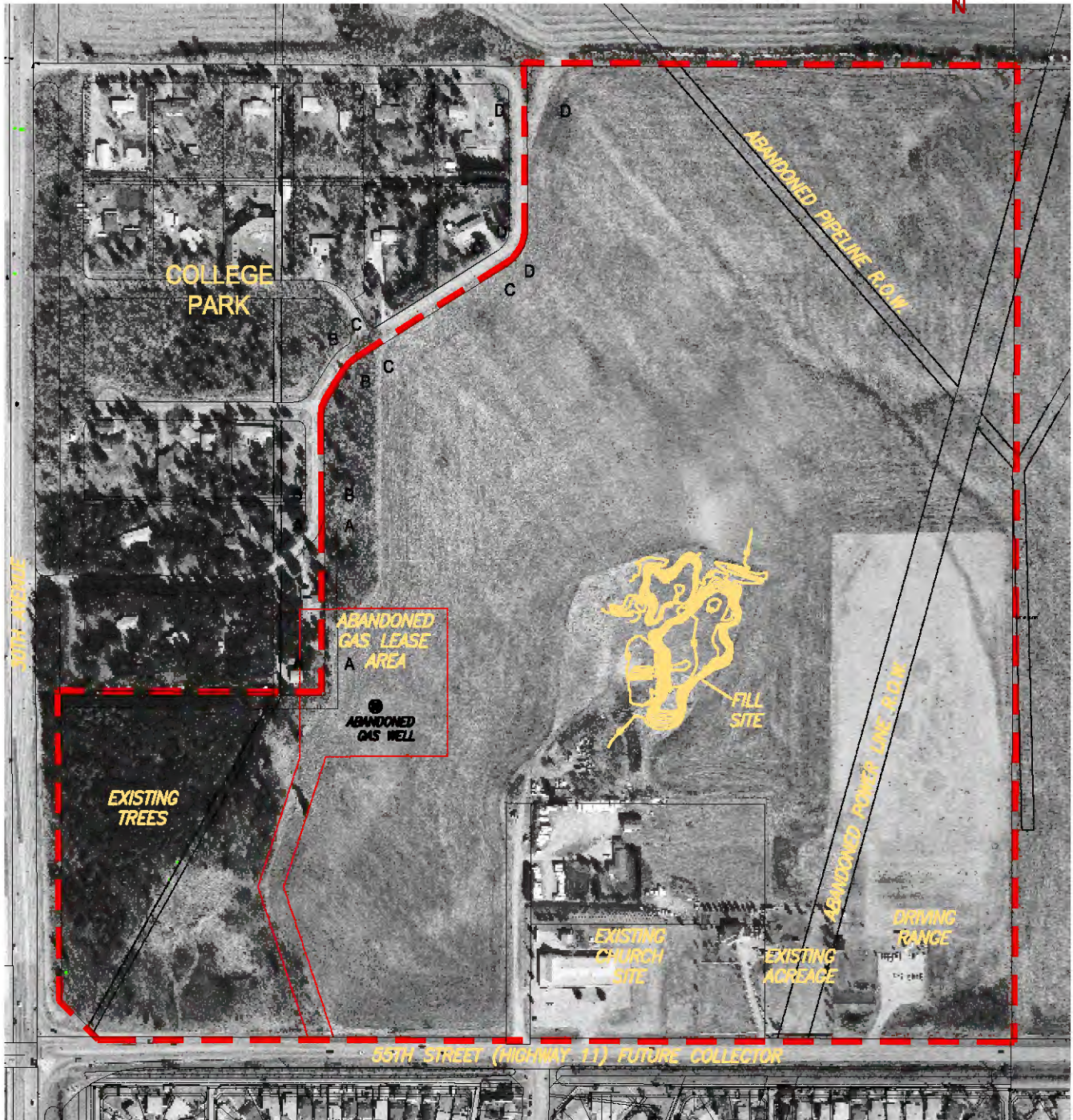
The Parkland Geotechnical Consulting Ltd. report states that the soils on this site consist of topsoil overlying extensive deposits of lacustrine sand, silt and clay. In higher elevations on the site, sand is found above the lacustrine soils and these lacustrine deposits are underlain by clay till.

2.2 ENVIRONMENTAL SITE ASSESSMENT / ABANDONED GAS WELL

The February 2005 Environmental Site Assessment report for Timberstone Park Developments Ltd. by Parkland Geotechnical, assigned this proposed development an environmental risk rating of “low” and no additional environmental site investigation is required at this time.

LEGEND

-  NASP BOUNDARY
-  CONTOURS



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Figure No.

3.0

Title

**EXISTING
 CONDITIONS**

The assessment identified that an oil and gas well were formerly located on the property. Geotechnical drilling on the site undertaken in 2002 did not reveal any indication of contamination. While there was no indication of contamination, residual hydrocarbons may exist in the vicinity of the well site but if present these hydrocarbons would likely be localized to the vicinity of the former well site. With the assistance of the Energy and Utilities Board (EUB) the abandoned well was uncovered in the summer of 2006 and the precise location was surveyed. When the abandoned well was uncovered there was evidence that the well had been reclaimed. However, no reclamation certificate was ever issued because at the time of reclamation in 1962, this was not a Provincial requirement. Based on this information, the Plan has been developed so that the well is located in a Municipal Reserve (MR) and that the well set back is at least 5 m from any permanent structures, 3 m from any underground utilities, and that there is sufficient working space in the unlikely event that a drilling rig requires access to the well.

2.3 NATURAL FEATURES / ECOLOGICAL PROFILE

An ecological profile was prepared for this Plan area in March 2003. This report was prepared by the City of Red Deer Recreation, Parks & Culture Department and called the Ecological Profile of the College Park Natural Area. This report makes the following recommendations in regards to preserving existing natural features in the Timberstone Park lands:

- The existing “seasonal stream” drainage infrastructure which stretches through the northeast corner of the Plan should be developed to assure that the stream’s variable rate of flow and its organic content remain stable and intact once it leaves the profile area and continues to be available for the downstream ecology of McKenzie Trails ravine.
- An existing stand of trees along the east boundary of College Park that should be preserved intact because there is a healthy, mixed stand of deciduous and coniferous trees and a wildlife corridor is evident in this area. Also this natural area provides a buffer between houses in the established College Park area and any new development to the east.
- The existing tree stand in the extreme southwest corner should be preserved intact in a natural state to enhance a future nearby residential development. This area includes mixed poplar and spruce which provides a rich habitat for a wide variety of plant and animal species.

Upon careful consideration of all the recommendations in the Ecological Profile, not all the recommendations could be implemented into the Plan due to engineering reasons or cost implications. Relevant details of the implementation of the Ecological Profile recommendations are as follows:

- Because the southwest stand of trees was considered the most significant natural feature on the subject lands approximately 2.99 hectares of this feature will be preserved which includes all of the trees located on the west side of the ATCO Pipelines high pressure gas line. 2.5 hectares of this area will be exchanged for an equivalent parcel of residential land from the quarter section to the north (Timberlands) owned by the City as per an agreement in principle between Timberstone Park Developments and the City.
- Also some of the existing trees located along the east side of College Park will be retained in the Plan. In order to accomplish this goal, a 10 m wide strip of trees along the west edge of this natural area will be preserved in order to enhance the character of the new development and provide a buffer for the existing College Park neighbourhood. This 10 m strip will be a combination of Municipal Reserve (MR) dedication and conservation easement, with the conservation easement being a condition of subdivision.
- The existing seasonal drainage course, which cuts through the northeast corner of the development, will not be preserved. Because of the impacts of urban development, the natural drainage course for this channel will be cut off and runoff from adjacent lands will be intercepted by an underground pipe system.

2.4 HISTORICAL LAND USE

The subject area has been used for agricultural purposes since the early 1900's. However in the early 1960's the existing College Park subdivision was developed in the northwest corner of the quarter section. Then in the 1980's and 1990's the ProFly Golf Centre (driving range) was developed in the southeast corner of the property, as well as the Balmoral Bible Chapel and the existing acreage at the south end of the property.

2.5 EXISTING PARCELS IN THE PLAN AREA

There are six existing legal subdivided parcels of land located within the Plan area (refer to Figure 2.0). These include:

Parcel 1 – This is a parcel of 43.34 hectares and will be developed by Timberstone Park Developments Ltd.

Parcel 2 and 3 – These two parcels are currently owned by the Church. Parcel 2 is 1.31 hectares and contains the existing Balmoral Bible Chapel. Parcel 3 is 1.86 hectares and was recently purchased for the Balmoral Bible Chapel and contains some existing buildings.

Parcel 4 – This is an existing roadway allowance, currently owned by the City, which provides legal access to parcel 3. This roadway allowance is proposed to be closed and redeveloped.

Parcel 5 and 6 – These two parcels belong to a private landowner. The west parcel is 0.57 hectares and contains the private land owner's home. The east parcel is 0.59 hectares and is currently vacant.

2.6 ADJACENT LANDS AND SURROUNDING DEVELOPMENT

The existing Rosedale Meadows subdivision is located directly south of the Timberstone Park lands across 55 Street. This quarter section, which consists of primarily single family residential homes, was fully built out in the 1990's.

The adjacent quarter section to the east is primarily agricultural land with the exception of an existing acreage in the southwest corner of the quarter. This property also contains an existing gas well, which is located within 50 m of the east boundary of the Timberstone Park Lands. Records indicate that this gas well was reclaimed in 1988. There are no setback requirements from existing or abandoned facilities on this quarter which will impact development in Timberstone Park. Also, the East Hill Area Structure Plan identifies this quarter section for future residential development.

The City owns the quarter section directly to the north. Currently this property is agricultural land but is also used as a snow storage area for the City's Public Works Dept. It also contains an abandoned well at the west central portion of the quarter. In 2007, a new Neighbourhood Area Structure Plan, NW Timberlands, was approved by City Council which will see this property developed as a mixture of commercial and residential development in 2008.

Directly across 30 Avenue is land owned by the Province of Alberta which contains their Michener Centre Facility. It also contains the recently completed Michener Storm Water Management Facility, a City of Red Deer water booster station, and the Safety City facility. As identified in the East Hill Area Structure Plan, these lands will eventually be re-developed as a new residential neighbourhood.

The existing College Park neighbourhood borders the northwest corner of the Timberstone Park NASP. This neighbourhood was recently annexed into the City and consists of 21 acreage lots which are all typically larger than 1 acre in size. This existing neighbourhood is heavily treed and the residents of this neighbourhood are currently making an Area Redevelopment Plan to protect the character of this existing neighbourhood.

2.7 EXISTING UTILITIES

There is an existing high-pressure gas line located at the southwest corner of the Timberstone Park Plan, which extends through from 55 Street, north through the existing stand of trees in this corner of the development and into the existing College Park neighbourhood.(see Figure 3.0) This gas line is owned and maintained by ATCO Pipelines. It contains sweet gas and will not impede development since there are no setbacks required by Alberta Energy and Utilities Board regulations. Because of this, typically, residential development can proceed to the edge

of the right-of-way but there are strict regulations guiding development over top of this right-of-way. Also a proximity agreement may be required from ATCO Pipelines when work is occurring within 30 m of this line.

There is also an existing oil pipeline right-of-way that stretches through the northeast corner of this quarter section. This pipeline was abandoned several years ago (this right-of-way may still require a legal discharge). Similarly, there is an existing transmission line right-of-way, which is located along the east edge of the proposed development. This overhead power line was also abandoned and removed several years ago.

3.0 Development Objectives

The Timberstone Park NASP has been prepared as a comprehensively planned residential neighbourhood taking advantage of the existing treed areas on the west and southwest corner of the plan and of the existing topography of the land. The main objectives of the Timberstone Park NASP are:

- To develop a plan consistent with the general intent and purpose of the City of Red Deer Municipal Development Plan (MDP), the East Hill Area Structure Plan and the City of Red Deer Neighbourhood Planning Guidelines and Standards.
- To provide a framework to deliver high quality, comprehensively planned residential areas by defining the general pattern and composition of land uses, linkages, servicing designs and development staging.
- To ensure the implementation of the plan takes place on a phased and orderly basis.

3.1 DEVELOPMENT PRINCIPLES

Development of the various land uses within the Timberstone Park NASP is defined through the following general principles:

3.1.1 Residential

- Encourage a variety of housing types including single detached housing, semi-detached row housing, multi-family and single family condominium development. All housing forms and options will recognize consumer preferences and be in conformance with municipal standards and policies set forth by the City.
- Encourage pedestrian friendly streetscapes.
- Provide direct and safe pedestrian linkages to the community nodes as well as adjacent developments.
- Locate residential development to take advantage of features such as stormwater management facilities and existing natural features.
- Orient larger parcels of medium density residential development adjacent to the collector road system to provide easy access and, where appropriate, to provide a transitional land use between adjacent single family development and major roads.

3.1.2 Municipal Reserves & Educational / Community Facilities

- Provide a park site to service the active and passive recreational needs for this community as well as for adjacent neighbourhoods.
- Allow for the provision of dispersed park space within the neighbourhood to provide open space recreation opportunities for residents through the dedication of MR.
- Where possible and economically viable and sustainable, utilize Stormwater Management Facilities to provide pedestrian linkages and open space recreational opportunities.

3.1.3 Transportation

- Provide a safe and efficient transportation system within the plan area to address pedestrian, bicycle and other multi-use modes of transportation, and the transit / vehicular transportation needs of residents moving to, from and within the Timberstone Park NASP as well as to adjacent arterial roadways.
- Provide non-vehicular circulation options throughout the Timberstone Park area with special attention to linkages to the Central Park and the Stormwater Management Facility.
- Minimize walking distances by creating an interconnected street network and providing walkways where roadway connections are not feasible.

3.1.4 Ecological Stewardship

- Develop land in an efficient manner and encourage intensive urban development.
- Incorporate open spaces into compatible land uses, such as the Stormwater Management Facilities and the utility corridor to optimize the use of these areas.
- Encourage naturalized landscaping on public and private lands to the extent acceptable to the City to minimize environmental and economic costs associated with their maintenance.
- Promote the development of open spaces and walkway linkages for pedestrian, bicycle and other multi-use travel, and connect them to the surrounding areas.
- Encourage energy efficient construction and other innovative building and infrastructure techniques.
- Follow wherever possible the recommendations presented in the ecological profile.

4.0 Development Concept

4.1 NEIGHBOURHOOD UNIT

The Timberstone Park neighbourhood development concept is based upon a response to current and anticipated market trends within Red Deer and the Red Deer region. An analysis of these trends and an assessment of their implications assisted in shaping the plan with respect to the type, shape, size, and locations of various land uses.

The Timberstone Park NASP is comprised of 48.04 hectares of land and is bounded on the south and west by existing major roadways and existing development and by future development to the north and east. These boundary conditions create a logical planning unit and the basis for the design as shown on **Figure 4.0 – Development Concept** and **Figure 5.0 – Development Concept with Aerial**. The land use statistics and number of residential units are represented in Table 1 and Table 2 following the Development Concept.

4.2 RESIDENTIAL

All land within the Timberstone Park development is intended for residential development complemented with a significant amount of open space. A mix of low, medium, and high density residential dwelling units is described and will be implemented based on market conditions and consumer preferences at the time of development.















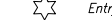
4.3 BARE LAND CONDOMINIUM

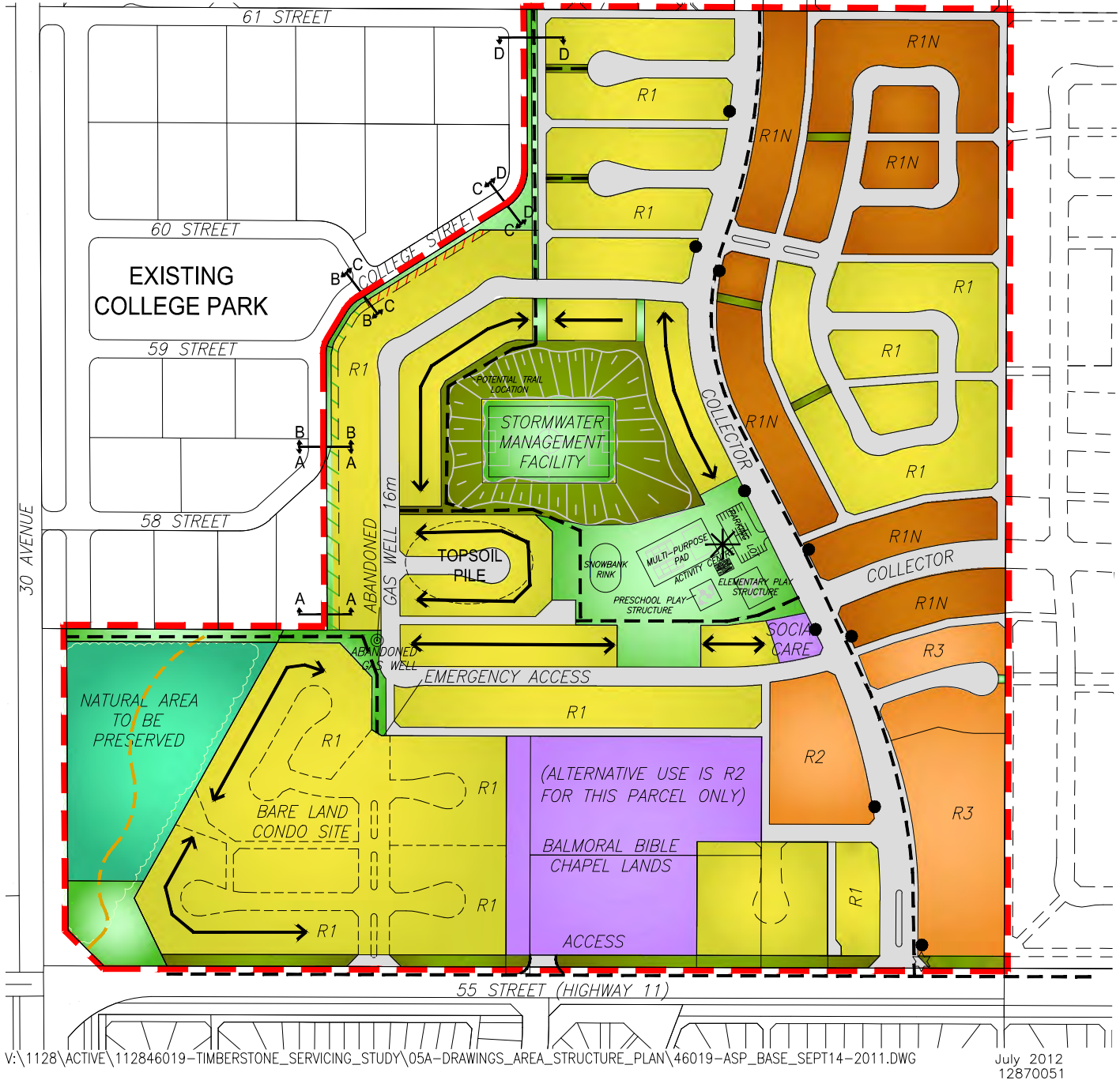
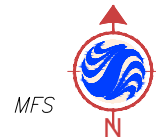
Phase One of Timberstone Park will be constructed as a bare-land condominium project. This phase of the community will consist of 82 single family units and have provision for landscaped open space.

The bare-land condominium designation will allow for an alternative to the traditional provision of services and allow the developer to meet market demand for communities which offer an enhanced level of service.

The area will offer enhanced aesthetics through explicit architectural controls and enhanced landscaping, such as treed boulevards, separate sidewalks, and ornamental street lighting. This approach is congruent with the Red Deer Growing Smarter plans call for the creation of visually appealing and identifiable neighbourhoods. Though an alternative manner of development, the general sense of this area of the community will be similar to that of traditionally developed neighbourhoods.

Services within the condominium site including roads, deep and shallow utilities, open space area will be owned and maintained by a Condominium Association. Because of this, snow removal, garbage pick-up and landscape maintenance will be coordinated through this Association.

- | | | | | | |
|---|-------|---|---|---|--|
|  | PUL |  | Municipal Reserve |  | Trail |
|  | R1 |  | Municipal Reserve (Land Swap) |  | Multi-Purpose Trail |
|  | R1N |  | Place of Worship/
Social Care Facility/Day Care/
Retirement/Assisted Living/
PS Church |  | Potential 2 Storey
Walkout Basement |
|  | R2/R3 |  | Restricting Covenant |  | Potential Bus Stop |
| | |  | Conservation
Easement |  | Gathering Place |
| | | | |  | Entry Feature Sign |



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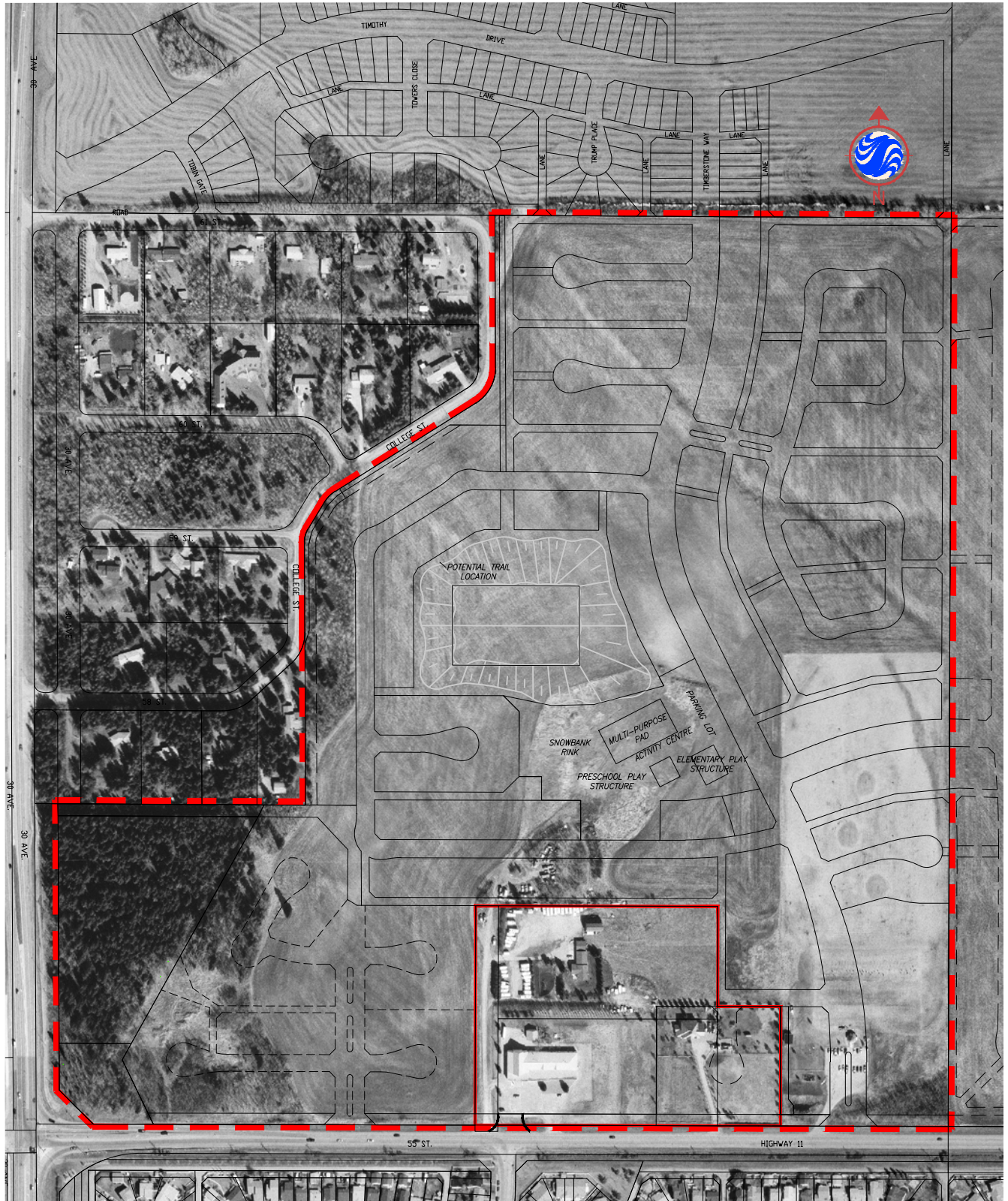


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Figure No.
 4.0

Title
 DEVELOPMENT
 CONCEPT



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Figure No.

5.0

Title

**CONCEPT PLAN
WITH AERIAL PHOTO**

A trail linkage is proposed through the condominium site to link open space areas to the north of this site to 55 Street and also link the condominium site to the Timberstone Central Park System.

4.4 LOW DENSITY RESIDENTIAL (R1)

The majority of lots proposed in the Timberstone Park development will be conventional detached dwellings with the R1 designation. These lot types are spread throughout the development concept but are primarily concentrated on the west side of the Plan. These lots are in close proximity to the many amenities offered in this development, which include the central park, stormwater detention facility, and linear park connections to the remainder of the neighbourhood.

Within the low density (R1) areas identified in the plan, the housing forms will consist of single detached housing catering to a variety of lot and home sizes. These lots will typically be around 35 m deep with shallower and deeper lots around expanded bulbs and in the closes. Larger lots are contemplated around the central park and stormwater management facility, in particular adjacent to the existing College Park neighbourhood.

Development of the low density and smaller lot residential areas will be planned in clusters / cells to provide a greater sense of identity for the various sub-areas and to help create a safe pedestrian environment. The area, number of dwelling units and population attributed to the low density and smaller lot residential developments are identified in Table 1.

Some lots could be developed to accommodate two storey walk out basements. These potential lots have been identified on the Concept Plan. Two storey walkouts will not be allowed adjacent to the existing College Park neighbourhood.

The developer will install a maximum 1.8m common privacy fence along the east property boundary of the 0.59 ha acreage parcel as shown on **Figure 2.0 – Legal Boundary**, located to the west of the proposed lane and block of R1 residential lots lying west of the collector entrance roadway at 55 Street. The location of the fence will be within the boundary of the acreage parcel. Smaller lot residential (R1N)

Because of a continuing demand and need for a more affordable lot and housing option, this plan has made provision for narrow detached lots which fall under the R1N land use designation. Front yard driveways are prohibited on these lots and therefore to meet the parking needs for these homes rear lane access is a necessity. These lots will range in width from 10.5 m to 11.6 m and will typically be 36.6 m in depth.

In the Timberstone Park plan, narrow lots are concentrated along the two collector roads and a P-loop to the northeast.

The “Big House” Concept Representations



4.5 MULTI-FAMILY RESIDENTIAL (R2 / R3)

To accommodate a high demand for multi-family housing, there are several sites identified for multi-family housing. The largest of these is in the southeast corner of the Timberstone Park development. The density of this site will be based on R3 development criteria, although the site will be developed with a combination of buildings that may be as diverse as apartment buildings, row housing and duplexes. This site is well served by direct access to the collector roadway network and is in close proximity to the central park site. A second R3 site is located adjacent to the larger multi-family site; this area is envisioned to be developed as row homes with a public roadway.

The area zoned R2 in the southeast corner of the plan, directly to the north of the existing acreage, will be developed as a “Big House” multi family project.

The “Big House” form of multi-family residential is characterized by a building constructed in a manner that reflects the form and character of a larger single family home. The “Big House” concept serves to provide a higher level of density within an area while maintaining a more human scale. Furthermore, it provides an effective transition from the higher to lower density areas of the community. Representations of the built form of this type of project can be found on the previous page 4.5.

If an assisted living facility is proposed to be developed, the development authority will take into consideration potential impacts on adjacent parcels. Mitigation of potential impacts could be achieved through such measures as requiring a higher standard of landscaping, the provision of fencing and/or screening, the siting of the building on the parcel and limits on building height.

4.6 PLACE OF WORSHIP SITE AND SOCIAL CARE SITE

The Place of Worship site is the existing Balmoral Bible Chapel. The Balmoral Bible Chapel also owns the parcel of land directly north of the existing church site.

A social care site is provided on the main collector road and backing onto the southwest corner of the central park site. If the social care site is not acquired for this purpose, it will revert to low density residential (R1). Prior to this, the social care site must be advertised for a six-month period in the local paper.

4.7 FUTURE URBAN DEVELOPMENT

The two land parcels directly east of the Balmoral Bible Chapel have been identified on the Plan as R1 development. Future access will be accommodated off the proposed collector roadway to the east, or the local road to the north.

Currently, there are no plans to re-develop the Balmoral Bible Chapel lands. However, an alternate use of R2 (multi-family) has been identified on the plan for the north parcel. If re-development occurs which is different from the current zoning identified on the Plan, the NASP will require an amendment.

4.8 PARKS AND OPEN SPACES

4.8.1 Active Recreation Park Site

An Active Recreational Park is proposed in the central area of the proposed development. This site is approximately 4.80 hectares in size and will be developed by the City with standard park amenities, which will include two play structures, a multi-purpose pad, and an outdoor hockey rink. Also a class “A” soccer field is proposed in the bottom of the stormwater detention pond at the north end of this Park (refer to **Figure 6.0 – Central Park Concept**).

Once the community has reached a point where it is 50% developed, the City of Red Deer Recreation, Parks & Culture Department will construct the playgrounds. The construction of the remaining facilities such as the multi-purpose pad and snowbank rink and soccer field typically are not completed until a community association for the neighbourhood is formed.

4.8.2 Preserved Natural Area

A 2.90 hectares site in the southwest corner of the plan will be preserved as a natural area as recommended by the EHMASP. This natural park space containing a mature tree stand will be accessible at the north and south ends by trail linkages, as well as a “natural trail” running through the tree stand. The area located west of the ATCO Pipelines right-of-way will be swapped to the City in exchange for an equivalent parcel of residential land from the quarter section to the north.

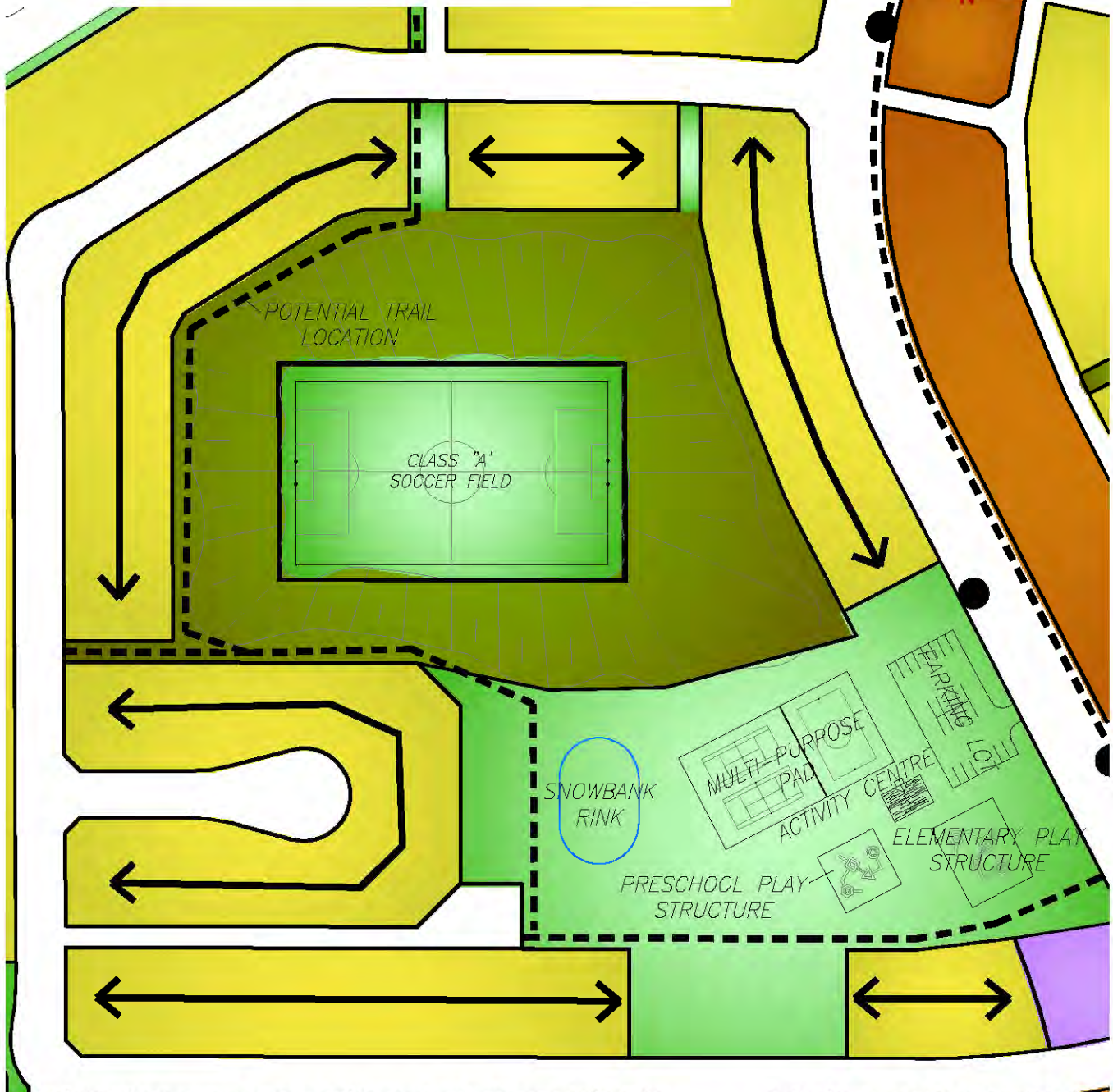
Also a strip of trees will be preserved, at the southeast corner of College Park, along the east boundary of the new neighbourhood, and protected with a combination of conservation easement and municipal reserve dedication. The intent of this conservation easement to preserve these existing trees in their natural state is to allow no development in this easement area. This conservation easement, which is defined in the glossary of terms in the City’s MDP, will be a condition of subdivision.

4.8.3 Walkways & Multi-Use Trail

The Timberstone Park NASP is designed with a neighbourhood pathway system to convey pedestrian and bike traffic throughout the neighbourhood with links to adjacent roadways, adjacent developments and the community recreational and park areas. This system is consistent with the layout and intent of the larger trail and pathway network described in the EHMASP.

A 2.5 m separate walk will be constructed along the collector road network providing a continuous link from 55 Street to future developments to the north and east. Also, a trail network links the collector walk to the central park areas with convenient greenway connections to existing and proposed residential areas.

- | | | | | | |
|---|-------|---|--|---|--|
|  | PUL |  | Municipal Reserve |  | Entry Feature Sign |
|  | R1 |  | Municipal Reserve (Land Swamp) |  | Multi-Purpose Trail |
|  | R1N |  | Place of Worship/
Social Care Facility/Day Care/
Retirement/Assisted Living/
PS Church/Alternative Residential use R1 |  | Trail |
|  | R2/R3 |  | Conservation Easement |  | Potential 2 Storey
Walkout Basement |
| | | | |  | Potential Bus Stop |
| | | | |  | Gathering Place |



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Figure No.

6.0

Title

**CENTRAL PARK
 CONCEPT**

The cost of all trail development including those within the Bare Land Condominium, with the exception of those trails within the central park site, shall be the responsibility of the developer. The ongoing maintenance of those trails sections falling within the Bare Land Condominium shall be the responsibility of the Condominium Association.

Typical cross sections of the proposed trails are shown on **Figure 7.0 – Road/Trail Cross-Sections**.

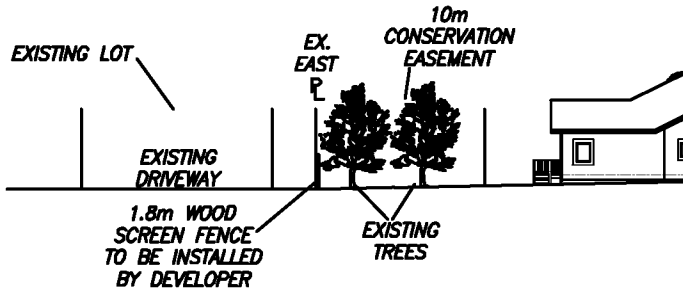
4.8.4 Bare-Land Condominium Park and Open Space Connectivity

Though the parks occurring within the bare-land condominium phasing of the project will be located on private property, they will be incorporated into the surrounding area to ensure park and open space connectivity to the rest of the community. The parks and open spaces will be accessible to all members of the community and will be an integral part of the Timberstone Park neighbourhood pathway system. In order to ensure this integration, a legal instrument such as a caveat may be utilized to guarantee public access to the park and trail system.

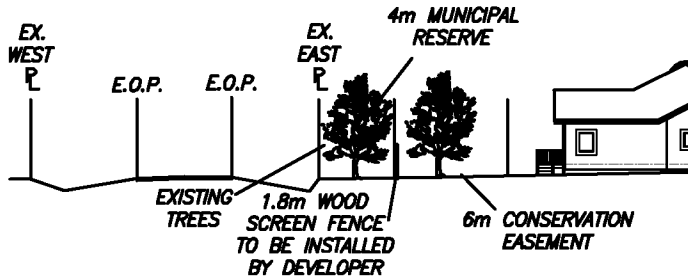
4.8.5 Landscape Buffer Strip Adjacent to College Park

The following landscape buffer is proposed between Timberstone Park and the existing College Park neighbourhood:

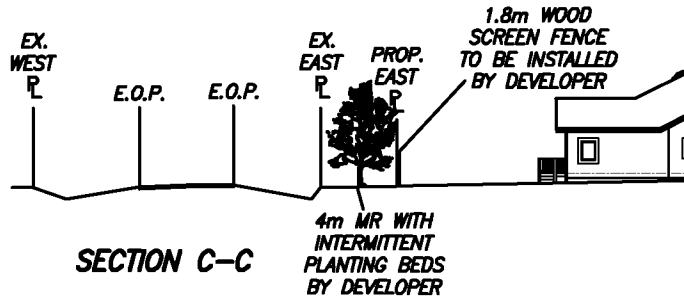
- 1) At the extreme south end of College Park, as shown by cross section A-A, a 10 m wide conservation easement is proposed in order to preserve a strip of trees and provide a landscape buffer between an existing residential lot in the College Park neighbourhood. This conservation easement will be a condition of subdivision and will be reviewed by the College Park community at the time of subdivision. Also, a fence will be installed on the College Park property line.
- 2) Along College Street at the south end of College Park, as shown by cross section B-B, a 4 m wide MR and 6 m wide conservation easement is proposed in order to preserve a strip of trees and provide a landscape buffer between the existing neighbourhood. This conservation easement will be a condition of subdivision and will be reviewed by the College Park community at the time of subdivision. Also, a fence will be installed 4 m east of the College Park property line.
- 3) North of this section B-B- there are no existing trees and instead, as illustrated by section C-C on **Figure 7.0 – Road/Trail Cross-Sections**, a 4 m wide MR is proposed complete with continuous plantings and a six foot high treated wood fence both installed by the developer. This fence will be set at an elevation at least as high as the adjacent College Street roadway.



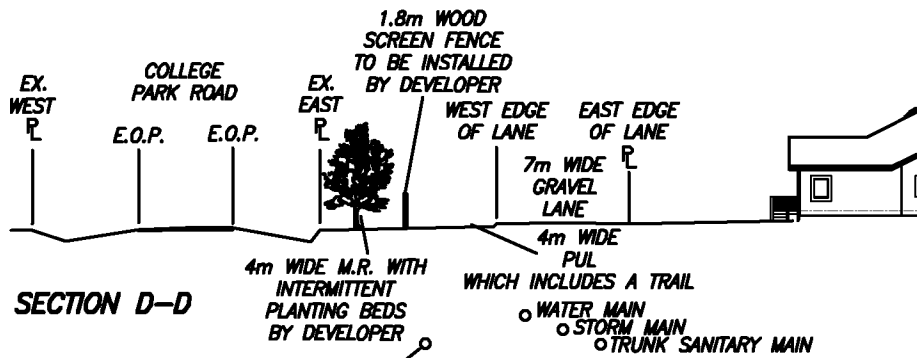
SECTION A-A



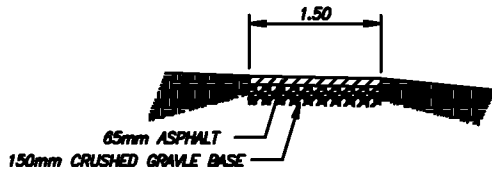
SECTION B-B



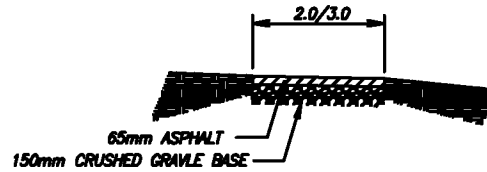
SECTION C-C



SECTION D-D



1.50m PAVED PATH



2.0m OR 3.0m PAVED PATH

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7.0
Title
ROAD/TRAIL
CROSS SECTIONS

In addition, the developer will plant trees in the western 6 metres of the lots in this area and put in place a restricting covenant or other legal instrument to provide for the retention of trees.

- 4) As shown on **Figure 4.0 – Development Concept** and detailed on Section D-D on **Figure 7.0 – Road/Trail Cross-Sections**, an 8 m wide combined MR and PUL are proposed between a proposed laneway and the existing College Park neighbourhood at the north end of College Street and Timberstone Park. The developer will be planting continuous native plantings (possibly transplanting trees from existing Plan area) in this landscape strip as well as installing a six foot wood fence between the 4 m wide public utility lot (PUL) and 4 m wide MR lots. The developer will work closely with the Parks department to determine what type of plantings will be utilized when development proceeds in this area. The proposed fence will be treated wood and solid with no openings.
- 5) Along the south boundary of College Park some trees will be removed to accommodate a 10.5 m wide PUL, which is the same width as the existing drainage easement at this location. This PUL will accommodate proposed deep utility servicing as well as a multi-purpose trail to service and provide pedestrian access to the Timberstone Park development. A 6 foot high wood fence will be installed by Timberstone Park Developments along the rear of the existing College Park residences at this location.

The existing ditch located along the south and east boundary of College Park will be retained to ensure that there are no detrimental impacts to the existing drainage pattern from the College Park neighbourhood. The proposed lots at this location, along the east boundary of College Park, will be split drainage with the front half of the lot draining east to the roadway and the east half to the existing drainage ditch at the rear of the lots.

4.8.6 Topsoil Stock Piles

A topsoil stockpile is proposed for this development and will likely be located near the east boundary of the Timberstone Park Development. This pile will be sized to accommodate the landscaping needs of residential lots and open spaces in this development. Any excess topsoil will be disposed of in the 55 Street berm or disposed off-site.

4.8.7 Gathering Places

One gathering place has been identified on the Plan. This site is located within the central park site. With the proposed bus stop and many recreational amenities offered at this location, many residents are expected to gather in this vicinity.

4.9 EDUCATIONAL & COMMUNITY FACILITIES

As identified on the East Hill Area Structure Plan and also reflected within this NASP there is no school site contemplated on these lands.

4.10 STORMWATER MANAGEMENT FACILITIES

One stormwater management facility (dry pond) is proposed for this neighbourhood, which is located in a depression on the quarter and therefore takes advantage of the existing topography. It is in a central location in the Plan, is surrounded by residential homes, and will contain a Class A soccer field, which will make this facility an active recreational amenity for the entire neighbourhood.

4.11 TRANSPORTATION

The system of roads proposed for the Timberstone Park neighbourhood provides its residents and the surrounding traveling public with safe access for this area to the rest of Red Deer.

4.11.1 Arterial / Expressway Roadways

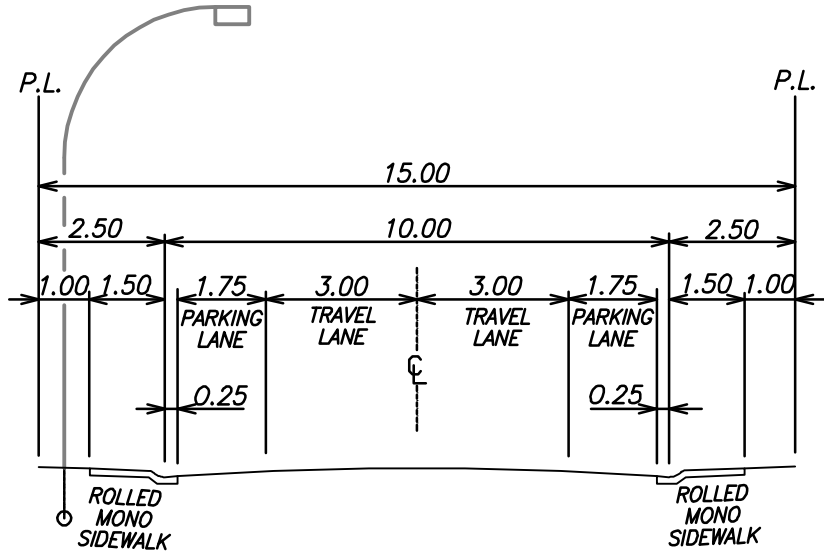
The updated East Hill Area Structure Plan designates the following roadways adjacent to the Timberstone Park NASP as arterial roadways or collector roadways:

- 30 Avenue (east side) – arterial roadway
- 55 Street / Highway 11 (south side) – collector road

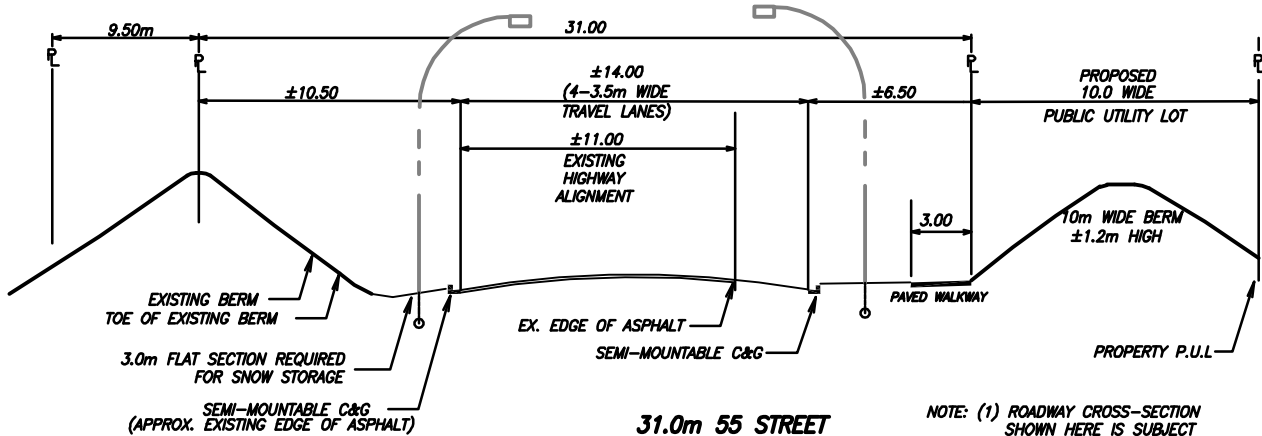
According to the updated East Hill Area Structure Plan, 55 Street will eventually be a collector road. This will occur once Highway 11 is re-routed to a new configuration on 67 Street. Access to 55 Street is proposed at two locations. The first is at the approximate midpoint between Rutherford Drive and 30 Avenue which serves only the bare land condominium development. The second is near the east boundary of this proposed development. As shown on the Plan a 10 m wide strip is proposed along the north side of 55 Street to accommodate additional land to construct a berm between 55 Street and the new neighbourhood. This berm will provide some sound attenuation for 55 Street.

In conjunction with the development of Timberstone Park, 55 Street will be upgraded to an urban standard complete with curb and gutter and storm sewer. This roadway will also be widened to the north. A traffic study has been completed to confirm the roadway cross section but preliminary indications are that it will be a 4-lane undivided collector standard. This roadway cross section is illustrated on **Figure 8.0 – Roadway/55th Street Cross-Sections** and requires final approval from the Engineering Services Department at the detailed design stage.

30 Avenue to the west is classified as a City arterial roadway. It currently functions as the major north-south connector road through east Red Deer. The section of 30 Avenue that borders the



15/10 UNDIVIDED LOCAL ROADWAY



**31.0m 55 STREET
COLLECTOR ROADWAY
N.T.S.**

- NOTE: (1) ROADWAY CROSS-SECTION SHOWN HERE IS SUBJECT TO CHANGE.
 (2) FIRST 30 METRES EAST OF 30 AVENUE WILL BE DIVIDED
 (3) STREET LIGHT LOCATIONS TO BE DETERMINED AT DETAIL DESIGN

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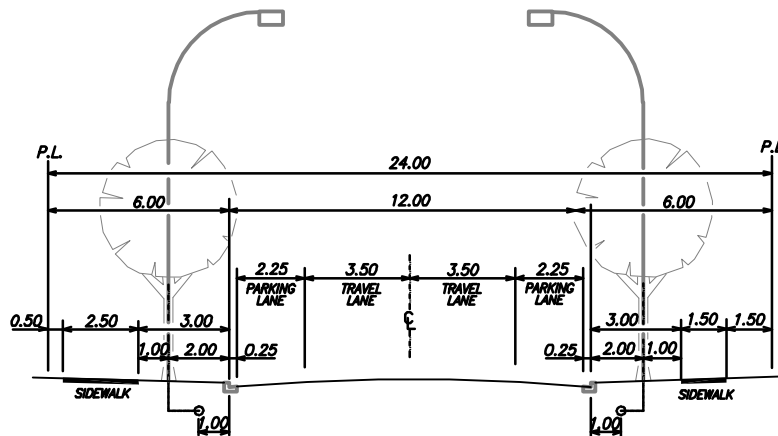
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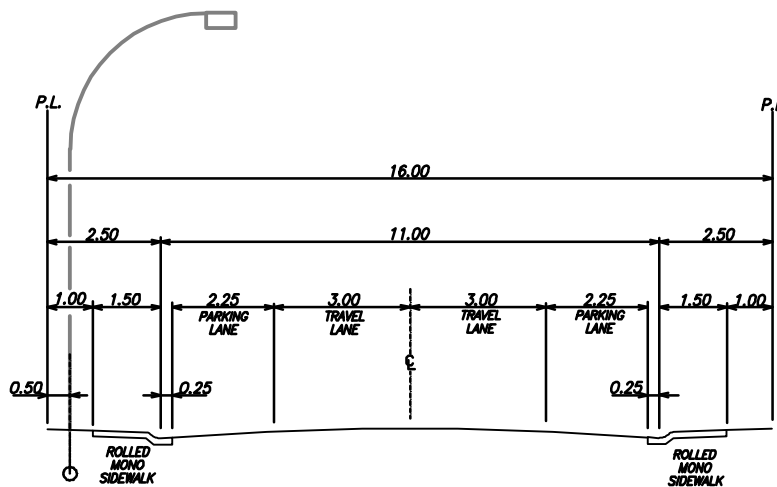
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Figure No.
 8.0

Title
 ROADWAY/55 STREET
 CROSS SECTIONS



**24.0m UNDIVIDED
COLLECTOR ROADWAY**



16/11 UNDIVIDED LOCAL ROADWAY

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Figure No.

9.0

Title

**ROADWAY
CROSS SECTIONS**

subject land has already been constructed to its ultimate alignment and thus no additional land is required to be given up by this development.

4.11.2 Collector Roadways

The NASP provides two collector roadways linking the local roads to the rest of the City.

The first collector roadway connects to 55 Street, approximately 100 m west of the east boundary of this development. It then runs approximately 300 m north to connect to the second collector roadway proposed for this neighbourhood. This second collector stretches to the east boundary of Timberstone Park in order to provide a connection point to the future development to the east. It also stretches north to link this neighbourhood to the future residential development to the north, as well as to a proposed east / west collector that will provide access to and from 30 Avenue to Timberstone Park.

All Collector roads will have a carriageway width of 12 m wide and, as per the new City of Red Deer Guidelines, will have a 2.5 m multi-use trail and a 1.5 m separate sidewalk complete with boulevard tree planting, as shown in **Figure 9.0 – Roadway Cross-Sections**.

The collector road entrances will include entrance features to enhance the character and provide distinct identity for the Timberstone Park community. The collector entrance onto 55 Street will be divided, but will have two travel lanes and a parking lane in both directions to accommodate parking for adjacent homes that front onto this roadway.

4.11.3 Local Roads

The system of local roads has been planned to provide access to individual development cells while at the same time discouraging outside traffic from short cutting through local roads. Local roads will have a 10 m wide carriage way and a 15 m wide right-of-way, except for the local roadway directly west of the storm pond which will have an 11 m wide carriageway and a 16 m wide right of way. All local roads will have monolithic curb and gutter sidewalks on each side of the roadway.

Typical cross sections of 15 / 10 and 16 / 11 local roads are shown on **Figure 9.0 – Roadway Cross-Sections**.

4.11.4 Laneways

Preserving natural areas has dictated that a significant number of lots back onto green open space areas. The remaining lots will be provided with a rear lane. These rear lanes will be designed to City standards and will be 7 m wide. Any lanes adjacent to MR or PUL will have post and cable fence installed to prevent shortcutting.

4.12 EMERGENCY SERVICES

The East Hill Major Area Structure Plan does not identify an emergency services site within the boundary of this development.

This development falls outside of the City's Emergency Services Department's four-minute travel time planning guideline. However there is a future emergency service site proposed in the EHASP on either the quarter section directly to the west or the one to the north.

5.0 Site Servicing

5.1 STORMWATER MANAGEMENT

One stormwater management facility (SWMF) is proposed for the Timberstone Park lands to manage and control major stormwater events. This facility will be located in the centre of the development and will manage stormwater from both the minor storm system as well as stormwater from the major storm system for the entire development. This stormwater management facility is approximately 2.7 hectares in size and will be a dry pond facility.

All storm sewers within the development will be sized to accommodate a 1 in 5 year stormwater event with stormwater being conveyed on the streets to the stormwater management facilities during large stormwater events. All stormwater, other than possibly the SW (Phase 1 corner), from the Timberstone Park development will discharge into the future storm trunk to be extended from the 67 Street storm outfall to the Red Deer River. Currently stormwater piping is shown to be directed into the north system but if it is determined that there is sufficient capacity in the 30 Avenue system at the detailed servicing study stage, then a pipe will be extended through a public utility lot located south of College Park and connecting to the existing 30 Avenue storm pipe system. If there is capacity in this pipe it would accommodate storm flows from the P-loop in the southwest corner of Timberstone Park.

The existing stormwater in the present College Park neighbourhood is handled via ditch drainage which is directed to the existing storm system that is located on 30 Avenue. Because of the significant grade from east to west, this stormwater cannot be directed to the new system in Timberstone Park and will continue to be directed to the 30 Avenue system.

This existing drainage system includes an existing ditch and drainage easement along the east boundary of College Park that conveys some storm runoff from College Park to 30 Avenue. A complete analysis of how this ditch will function in relation to the proposed new development will be completed at the servicing study and detailed design stages.

All stormwater facilities and storm sewers will be designed in accordance with The City of Red Deer Design Guidelines and will become the responsibility of the City to maintain after a two year maintenance period.

The Major Regional Stormwater system and the storm sewer concept for these lands are shown on **Figure 10.0 – Major Regional Storm Concept Plan** and **Figure 11.0 – Storm Sewer Plan**. The trunk storm system shown on Figure 11.0 varies somewhat from the alignments shown in the East Hill Area Structure Plan in order to reduce the depth and therefore cost of installation.



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Legend

- EXISTING 67 STREET & 20 AVENUE STORM
- EXISTING DRAINAGE CHANNEL
- MAJOR OVERLAND DRAINAGE
- NEW STORM DUTCH MAIN
- PROPOSED 67 STREET & 20 AVENUE STORM MAIN
- REALIGNED 67 STREET & 20 AVENUE STORM MAIN
- DRAINAGE BASIN FOR FUTURE
- PROPOSED POND AREA
- ABANDONED STORM MAIN

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Figure No.

10.0

Title

MAJOR REGIONAL
 STORM CONCEPT PLAN

- LEGEND**
-  NASP BOUNDARY
 -  TRUNK STORM MAIN
 -  MAIN STORM
 -  MAJOR OVERLAND DRAINAGE
 -  MANHOLE AND FLOW DIRECTION



ALTERNATIVE OPTION TO ACCOMMODATE STORM FLOW FROM THE P-LOOP IN THE SW CORNER ONLY IF THERE IS CAPACITY IN THE 30 AVE SYSTEM.

NATURAL AREA TO BE PRESERVED

EX. ROAD ALLOWANCE

BALMORAL BIBLE CHAPEL LANDS

CONNECT TO ROSEDALE SYSTEM

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Figure No.

11.0

Title

**STORM SEWER
PLAN**

5.2 SANITARY SEWER SERVICING

The proposed development will be serviced from the existing Waskasoo Regional Sewer Line (WRSL). The trunks need to be extended from the 30 Avenue and 67 Street intersection through the quarter section to the north of this site. A separate connection to the Waskasoo Line is contemplated directly south of the existing College Park Neighbourhood, to accommodate sanitary flows from the residential parcel in the southwest corner of the Plan. It has been confirmed that the Waskasoo line was designed and has sufficient capacity to accommodate sanitary flows from this area.

However, as noted above it is unclear at this time if there is sufficient capacity in the storm system to accommodate storm flows from the P-loop in the southeast corner. Therefore, sanitary flows from this area will also be directed north into the new sanitary trunk system unless it is also determined that there is capacity in the 30 Avenue storm system as well. If this option is determined to be viable, the sanitary connection would also be routed through the PUL located south of College Park. The sanitary trunk through the Timberstone Park lands will be sized to accommodate the servicing of the quarter section to the east.

The overall conceptual sanitary sewer system is shown on **Figure 12.0 – Sanitary Sewer Plan**.

The majority of the sanitary pipes will be 200 mm in diameter, except for the sanitary trunk, which will be between 250 mm and 375 mm in diameter. All sanitary sewer facilities will be designed in accordance with the City of Red Deer Design Guidelines and will become the responsibility of the City to maintain after a two year maintenance period.







5.3 WATER DISTRIBUTION

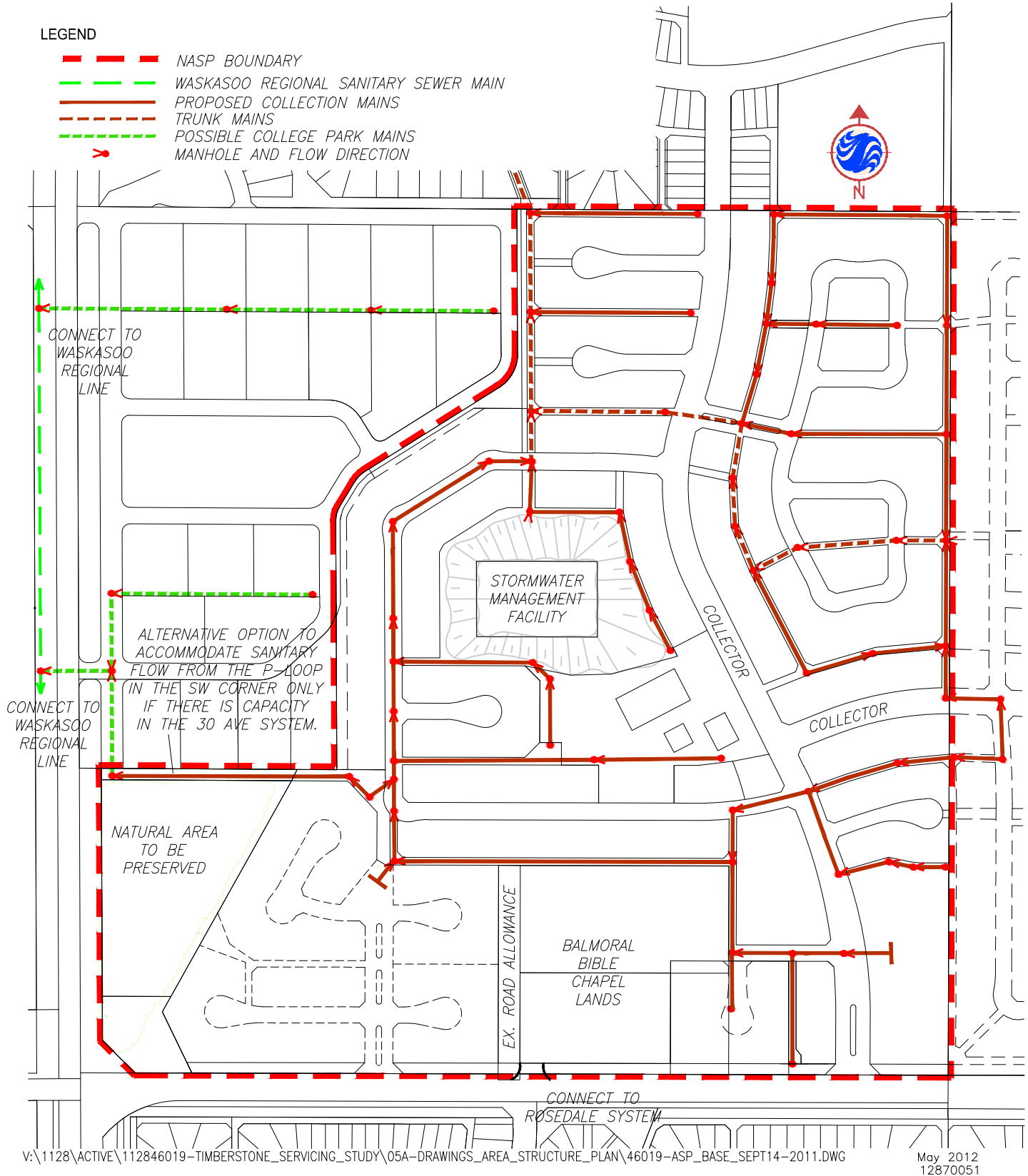
The overall water distribution system needed to service Timberstone Park is shown on Figure 13.0. In 2007, the City will extend a 400 mm diameter water trunk down the west side of 30 Avenue, which will serve as the main feeder to this development. A connection to this trunk will be extended from 30 Avenue along an alignment just south of College Park, to service the existing houses that back onto this line as well as the new residential areas. The water system will also have two connections to the 300 mm water main along the north lane of the Rosedale subdivision.

Three water stubs will be provided for Timberstone Park to accommodate future water service to College Park. Three water stubs will be provided to College Park at the location shown on **Figure 13.0 – Water Distribution Plan**.

All water main facilities will be designed in accordance with the City of Red Deer Design Guidelines and will become the responsibility of the City to maintain after a two year maintenance period.

LEGEND

-  NASP BOUNDARY
-  WASKASOO REGIONAL SANITARY SEWER MAIN
-  PROPOSED COLLECTION MAINS
-  TRUNK MAINS
-  POSSIBLE COLLEGE PARK MAINS
-  MANHOLE AND FLOW DIRECTION



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Figure No.

12.0

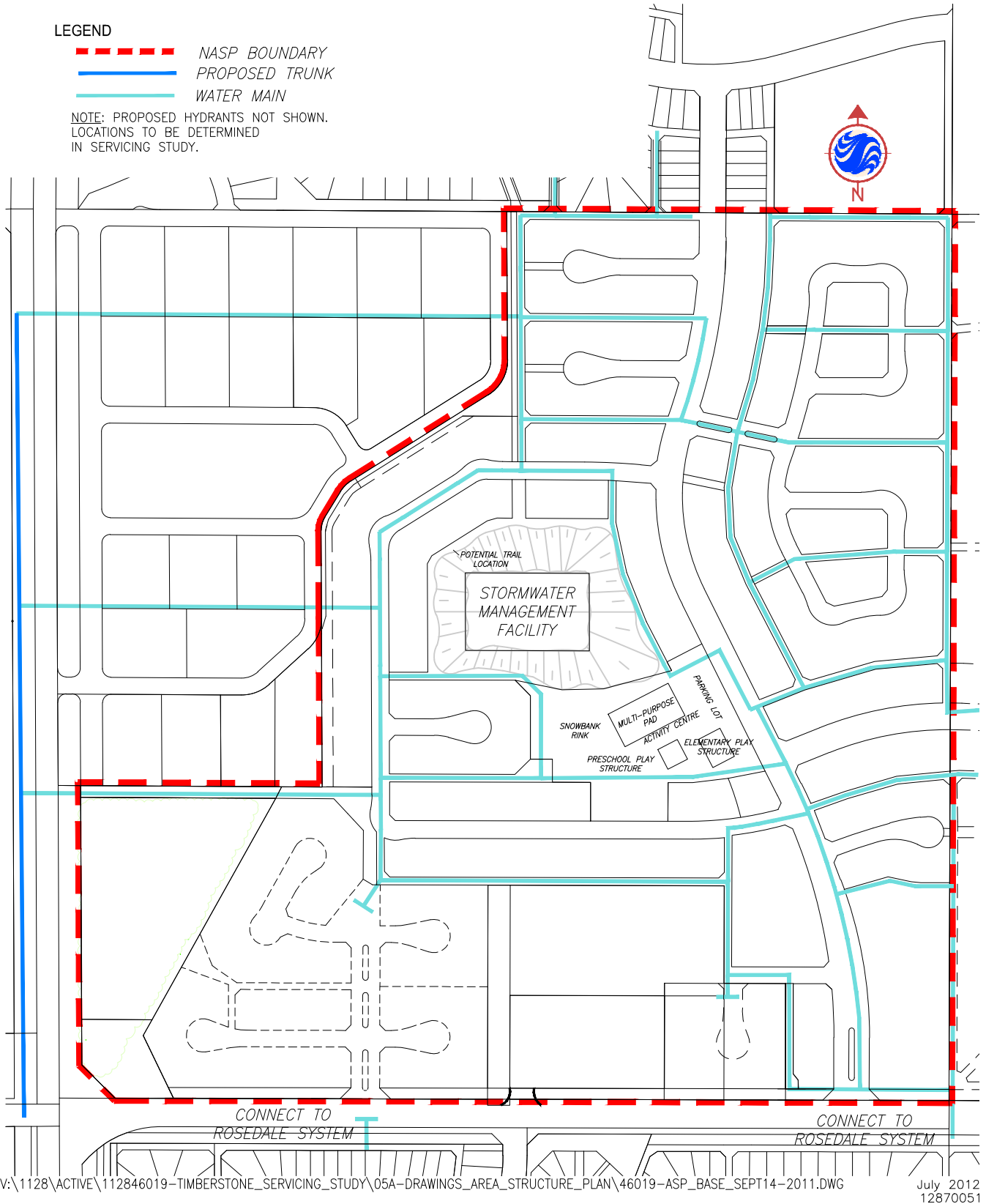
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**SANITARY
SEWER PLAN**

LEGEND

-  NASP BOUNDARY
-  PROPOSED TRUNK
-  WATER MAIN

NOTE: PROPOSED HYDRANTS NOT SHOWN.
 LOCATIONS TO BE DETERMINED
 IN SERVICING STUDY.



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July 2012
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ORIGINAL SHEET - ANSI A



Stantec

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Client/Project

TIMBERSTONE PARK
 DEVELOPMENTS LTD.
 TIMBERSTONE PARK

Figure No.

13.0

Title

**WATER DISTRIBUTION
 PLAN**

5.4 SHALLOW UTILITIES

Shallow utility services will be provided by the following companies:

- ATCO Gas (Natural Gas)
- City of Red Deer E.L. & P. Department (Electricity and Streetlights)
- Telus Communications (Telephone)
- Shaw Cable (Cable Television)

The shallow utility alignments will be established during preparation of the servicing study for the Timberstone Park Lands.

6.0 Plan Implementation

6.1 DEVELOPMENT STAGING

Infrastructure to service the first phase of Timberstone Park will be extended into this development from the existing services located along 55 Street. Subsequent phases will be serviced from a new sanitary and storm trunk, which will be extended into these lands from the north. Each successive stage will be developed with the logical and economical extension of these municipal services with the intent of meeting the needs of the regional and local housing market.

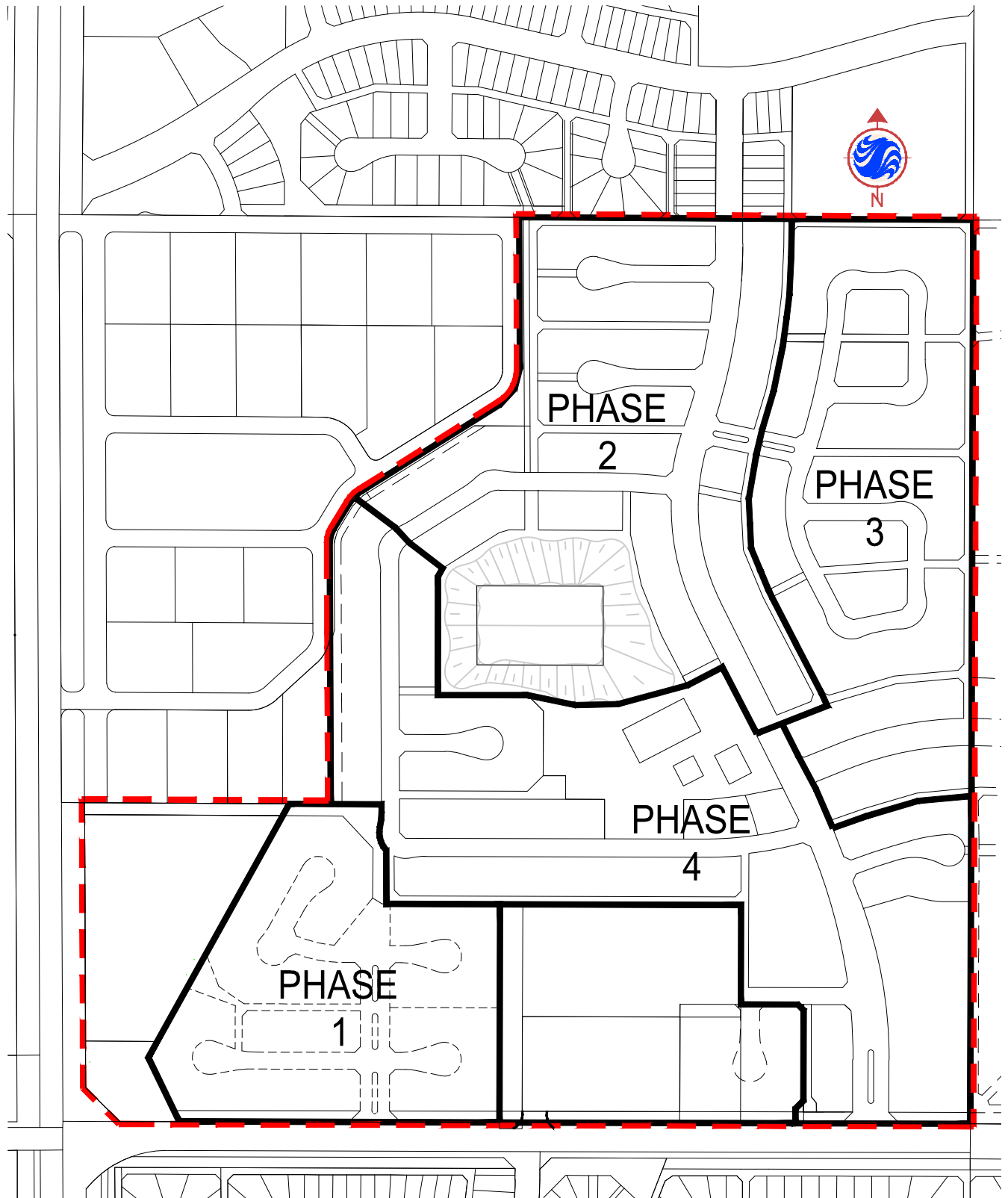
As shown on **Figure 14.0 – Proposed Phasing**, the first phase is expected to start in the southwest corner. Then development will proceed to the northwest corner of the Timberstone Park Plan and extend in a southeasterly direction. This phasing order, however, could significantly change depending on the location of offsite services at the time of development. The phasing boundaries are shown conceptually and may vary from those shown when redistricting and subdivision applications are made. As well, portions of separate phases may be developed concurrently if there is sufficient demand and/or if the municipal servicing is made more efficient as a result.

It is anticipated that the storm pond will be constructed (or a portion of the pond) with development of Phase 1.

6.2 REDISTRICTING AND SUBDIVISION

Redistricting and subdivision applications, to conform to the land use designations described in the NASP, will be undertaken as necessary. Guided by the City of Red Deer MDP, the East Hill ASP and the Timberstone Park NASP, redistrictings and subdivisions will be required to adhere to the City of Red Deer Land Use Bylaw and the informational requirements necessary for each application.

The Land Use Bylaw map identifying a hazard area within the Plan will be amended prior to any re-districting application.



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**PHASING
PLAN**

6.3 PLAN AMENDMENTS

An amendment to an adopted NASP is required for any change in the Plan, such as:

- A change in proposed land use (such as from single family to narrow lot housing or multi-family housing, or vice-versa);
- To reflect a change in other documents affecting planning and land use in the area (such as an amendment to a Major Area Structure Plan); and
- The elimination or addition of any public road or lane, or reclassification of a road, unless the road or lane is self-contained within a multi-family site.

**TIMBERSTONE PARK
NEIGHBOURHOOD AREA STRUCTURE PLAN**

Table 1: Land Use Allocation: Timberstone Park

May 2012

LAND USE CATEGORY / COMPONENT	AREA (ha)	% OF PLAN AND AREA	NUMBER OF DWELLING UNITS
Gross Plan Area	48.04	100.00%	
Arterial Road Widening	0.00		
Net Developable Area	48.04	100.00%	
Scenario A: Total Residential Development with no re-development of the private acreage or Balmoral Church Sites and Social Care Site	26.66	55.50%	682
The total housing stock in the base scenario is made up as follows:			
Conventional Detached Dwellings (R1)	11.54	24.02%	243
Bare Land Condo Site (R1)	5.79	12.05%	82
Narrow Lot Detached Dwellings (R1N)	5.09	10.06%	108
Semi-Detached Dwellings (R1A)	0	0.00%	
Multi-Family Dwellings (R2 / R3)	3.09	6.43%	248
Existing Private Acreage	1.15	2.39%	1
Option 1: Social Care Site Developed as Detached Dwellings (R1)	0.14	0.29%	3
Social Care Site	0.14	0.29%	3
Balmoral Bible Chapel Lands	3.03	6.31%	
Existing COR Road Allowance	0.38	0.79%	
Open Space	9.07	18.88%	
Municipal Reserves	4.10*	8.53%	
Public Utilities Lots	2.54	5.29%	
Natural Area S.W. corner to be preserved (Land Swap)	2.40	5.00%	
Transportation	8.62	17.94%	
Collector Roadways	2.55	5.31%	
Local Roadways	3.85	8.01%	
Lanes	2.22	4.62%	
Scenario B: Total Residential Development with Social Care Site developed as R1, and the private acreage re-developed as R1	27.31	56.85%	693
Scenario C: Total Residential Development with Social Care Site developed as R1, and the private acreage re-developed as R1, and north Balmoral site redeveloped as R2	29.56	61.53%	778

* In the event that the private acreage or the Balmoral Church Sites re-develop, these developments will be responsible to provide 10% municipal reserve or money in lieu.

** Timberstone Park Developments Ltd. M.R. requirement is 4.04 Ha which is 10% of the land they own in the development concept less the natural area in the S.W. corner.

**TIMBERSTONE PARK
NEIGHBOURHOOD AREA STRUCTURE PLAN
Plan Implementation**

Table 2: Density and Housing Mix: Timberstone Park

Density (du/ha)

A) Density (Excluding College Park Lands)		
1	Scenario A (Private acreage site and Balmoral Church site with no redevelopment and Social Care Site as intended use)	14.20
2	Scenario B (Private acreage site developed as R1, Social Care Site as R1 and no re-development of Balmoral church site)	14.43
3	Scenario C (Private acreage site developed as R1, Social Care Site as R1, and north Balmoral site as R2)	16.19
B) Density (Including College Park Lands) = 62.89 Ha Total Area		
1	Scenario D (Private acreage site developed as R1, Social Care Site as R1 and north Balmoral site as R2, and no redevelopment of College Park Neighbourhood (21 units).	12.70
2	Scenario E (Private acreage site developed as R1, Social Care Site as R1, no re-development of College Park Neighbourhood (21 units), and North Balmoral site re-developed as R3 (150 units).	13.73
3	Scenario F (Private acreage site development as R1, social care site as R1, north Balmoral site re-developed as R3 (150 units), and College Park Neighbourhood re-development as R1 (150 units).	15.82
Housing Mix – Based on Scenario A		Percentage of Total
	Detached and semi-detached dwellings as a % of the total housing stock	63%
	Multi-family dwelling units as % of the total housing stock	37%
	Ratio of detached dwellings to semi-detached dwelling units	N/A
	Narrow lot land area as a % of the total residential land area	16%
	Lots for detached dwelling with secondary suite as a % of the total number of R1 lots	N/A