East Hill
Major Area Structure Plan

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THE CITY OF Red Deer

Bylaw 3499/2013

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1.0 Introduction

1.1 Area Location

The plan area is shown on Figure 1 and contains approximately 64 quarter sections of land.

1.2 Enabling Legislation

The East Hill Major Area Structure Plan (MASP) has been adopted by The City of Red Deer as a statutory plan in accordance with Section 633 of the Municipal Government Act (MGA). This section describes an area structure plan as providing a framework for subsequent rezoning, subdivision and development of an area of land. In addition to this plan it is The City's policy to require individual neighbourhood area structure plans for each quarter section of those lands that are serviceable, prior to considering land use districting and subdivision. These plans must comply with the East Hill Major Area Structure Plan.

1.3 Background

The East Hill Major Area Structure Plan has its origin in the original East Hill Concept Plan prepared in 1977-1978 containing 17 quarter sections of land with an area of 1100 hectares (2720 acres). At that time only four of these quarter sections were located inside the City and the remaining 13 quarters were located in Red Deer County.

[1]The original East Hill Concept Plan has subsequently been amended by City Council in 1985 and 1989; it was converted to an area structure plan in 1993 and again amended in 1998, 2001, 2003, 2005, 2011, 2012, and 2021. During this time the plan responded to changes in Provincial legislation, City boundary expansions that added undeveloped and annexed lands to the plan, updated land use, servicing and transportation information, and the need to identify environmentally significant natural areas and school and commercial locations. In 2021 the Molly Banister Drive alignment protection within NE ¼ Section 4 was replaced with one potential four-lane collector Piper Creek crossing extending from Molly Banister Drive to 22 Street.

1.4 Planning Framework

The East Hill Major Area Structure Plan is one of a series of inter-related planning documents adopted by the City of Red Deer including the Red Deer County and City of Red Deer Intermunicipal Development Plan and the Municipal Development Plan.

[1] Bylaw 3499/B-2021

The three objectives of the 2013 update to the East Hill Major Area Structure Plan are:

1. To incorporate the 2009 annexation area to the east in City planning documents
2. To complete a comprehensive review of the East Hill MASP
3. To include direction provided by Council adopted planning tools including:

- Community Assets Needs Assessment: A Directional Plan for the City of Red Deer of November, 2008 (adopted as a planning tool November 17, 2008)

- Northland Drive/20 Avenue Functional Planning Study March 2009 (adopted as a planning tool for the basis of detailed design June 1, 2009)

- River Valley and Tributaries Park Concept Plan of July 2010 (adopted as a planning tool July 26, 2010)

- Environmental Master Plan adopted as a planning tool April 2011

- Commercial Market Opportunities Study June 2010 (adopted as a planning tool August 23, 2010)

- Red Deer City Council Strategic Direction 2012-2014

- EL&P Transmission System 2011-2025 Master Plan (adopted as a planning tool April 16, 2012)

2.0 Vision

2.1 VISION for 2025

The more recently completed neighbourhoods of the East Hill community are easily identified by their compact land use pattern, sustainable environment, walkable streets and green spaces linking neighbourhoods to commercial sites, natural areas, parks, school sites and other community gathering places. Transit stops are located in places of activity such as commercial areas, higher density residential, parks and schools. Transit, which supports the idea of utilizing other modes of transportation, becomes part of everyday journeys. Neighbourhoods support mixed mobility offering convenient connected places to live and work. Streets are designed with priority users in mind (vehicle, transit, pedestrian, cyclist) and work together to provide different mobility options. The combined network supports a balanced modal split. There are continuous and direct routes for pedestrians. Neighbourhood hubs have amenities for everyday life.

Each neighbourhood reflects a special image and character of mixed housing linked by inviting streetscapes, walkways and enhanced open spaces. Neighbourhoods provide liveable and appropriate housing choices with more examples of acceptable higher density areas. The neighbourhoods are caring in that they have services to support the well-being, recovery, and treatment of citizens in welcoming and inclusive settings. Schools and other public institutions are constructed as architectural landmarks in the neighbourhood. Houses are intimately related to the sidewalk and tree lined wide walkways create a comfortable pedestrian setting. Friends and neighbours meet along streets, sidewalks, and points of interest.

Trails tie the neighbourhood network to the recreational network and places of interest throughout the community. A variety of active and passive parks, from large neighbourhood parks to linear parks are strategically located throughout the neighbourhoods, creating linkages and a sense of community.

Preservation of the environment is diligently practiced. The natural scenic areas along the Red Deer River Valley and its tributary and ravines, including creeks and seasonal streams, have been preserved and enhanced to form the backdrop for a shared trails system, used for cross-country skiing, jogging, walking, biking and roller-blading. Rest areas, look outs and interpretive sites contain recreational amenities that are actively used. Natural treed areas and wetlands remind residents of their heritage and enhance the open space system.

Servicing is provided in an efficient and environmentally-friendly manner. Green infrastructure, recycling and energy conservation are efficiently practiced. The natural systems of the area are utilized and enhanced to provide aesthetic and recreational value. Dry storm water ponds and constructed wetlands are found throughout the community providing amenity to the neighbourhoods while effectively and naturally managing storm water volume and enhancing run-off water quality.

(Originally adapted for The City of Red Deer from 'Heritage Valley Servicing Concept Design Brief', 2001, City of Edmonton and the "From Strength to Strength" Red Deer City Council Strategic Direction 2011)

2.2 Plan Goal

To provide the broad planning direction for development in a manner which facilitates the economically, socially and ecologically sustainable building out of the plan area as a desirable place for healthy living, education, work and recreation for individuals and families of all ages and with varying needs and desires.

2.3 Plan Objectives

1. To manage growth to create vital, well-integrated compact communities
2. To establish an infrastructure and services framework that is sustainable
3. To provide for livable and appropriate housing choices
4. To provide for caring neighbourhoods
5. To provide mixed mobility options of walking, cycling, transit, and driving to regional, district and local destinations
6. To facilitate the creation of employment opportunities in the plan
7. To protect and enhance green space
8. To identify future commercial sites

3.0 Existing Site Characteristics

3.1 Natural Areas (Preservation Potential) - Figure 2

The topography of the plan area consists of generally flat land, rising gradually towards the east. Most of the undeveloped land in the plan area has been used primarily for agricultural purposes with limited vegetation, trees, wetlands and seasonal streams remaining. The Red Deer River valley and several major ravines are located in the plan area.

Figure 2, East Hill Natural Areas, is based on the City's Ecospace (Natural Habitat) Evaluation Process and Ecological Profiles which are updated regularly to preserve and enhance Red Deer's natural environment through community planning. Figure 2 identifies Existing Natural Area Categories including seasonal stream drainage courses, wetlands and a variety of natural areas, including treed areas, other vegetation growth and escarpment. Figure 2 also identifies Potential Wildlife Corridor and Movement Zones Based on Natural Area Proximity including potential zones in adjoined and isolated natural areas and those associated with the river and escarpments. Additional detail, including shelter belts; small tree stands; large tree stands; wetlands; and seasonal streams, make up the Existing Natural Area categories and are described further in the Ecological Profiles. These zones are all described and each divided further into different sub-zones based on specific characteristics e.g. wetlands into classes; tree stands into coniferous vs. deciduous and all of these sub-zones have associated inventory data.

Figure 2 also identifies the preservation potential within the plan area, including the extent that these may relate to features outside of the plan boundary. Preservation potential areas include all existing natural areas and are a combination of drainage patterns and natural features serving as wildlife corridors and significant reserves of biodiversity. The preferred outcome is to preserve these areas intact as natural features either within environmental reserve or municipal reserves or alternatively to incorporate them with storm water management facilities.

The neighbourhood area structure plans shall consider how best to preserve the natural areas as shown on Figure 2 in conjunction with the more detail ecological profiles produced by administration for each subarea. The neighbourhood area structure plan and/ or the multi-neighbourhood plan will outline the rationale for the areas that are to be preserved.

Since natural features and associated wildlife are not confined to man-made boundaries, a number of natural areas are positioned outside of the plan boundary but retain close connection to natural areas within. Preservation potential areas located outside of the plan area boundaries are conceptual and will be determined at a later time. The City will endeavor to work with Red Deer County, the landowners, developers and other interested parties to develop a regional approach to conservation of natural areas in the Red Deer region.

3.2 Natural Resource Extraction - Figure 3

Figure 3 provides an overview of the oil and gas activities in the general East Hill area including: active and abandoned wells, active and abandoned pipelines, compressor stations, gas plants, batteries and injection facilities. This map illustrates the level of oil & gas development in this area. Figure 3 shall not require amendment if additional oil and gas facilities are approved in the East Hill MASP area. The Energy Resource Conservation Board (ERCB) is presently responsible for regulation of the oil and gas industry.

The developer shall work with the licensee of any oil and gas facilities during the development of the neighbourhood plan. In addition, the developer shall also work with the licensee during the construction phase to ensure all appropriate authorizations are obtained, for example, permission to disturb areas above the pipeline or to remove an abandoned pipeline along with the caveat on title. The neighbourhood plan, after consultation with the licensee, shall include:

- The location of all oil or gas wells, pipelines or facilities, their sour level classification (if appropriate) and the current licensee.
- The results of the environmental assessment of any abandoned oil or gas well, pipeline or facility. A phase 2 environmental assessment will be required if the well file shows there was an earthen flare pit, drilling sump, oil or water storage tanks or buried tanks on the site. A reclamation and/or remediation certificate shall be required before surface development is permitted.
- The property line setback distance from any active or abandoned oil or gas well, pipeline, or facility to the surface development.
- The outcome of discussions regarding the need for a greater setback from any abandoned well site.
- The exact location of the each abandoned well.
- A plan on how to co-exist with any active oil or gas wells, pipelines or facilities including, for example, access and the appropriate setbacks.

An existing high pressure TransCanada pipeline (sweet gas) cuts through the East Hill MASP. This pipeline has an 18 m wide right-of-way. An additional 7 meter setback from the edge of the right-of-way has been suggested by the operator. Therefore, the principle building must be located 7 meters from the edge of the right-of-way. If the characteristics of the pipeline change, with the operators consent, the Development Officer may reduce the setback requirement.

3.3 Landfills - Figure 4

The Subdivision and Development Regulation of the Province do not permit certain uses such as schools, hospital, food establishments or residences within a certain distance of active and closed landfill sites. The restricted development area is 450 m from the operating Waste

Management Facility and 300 meter from the three closed landfill sites as generally shown on Figure 4. More detailed policy direction for development within the landfill restrictive development setback shall be included in the neighbourhood area plan and included in the Land Use Bylaw.

4.0 Development - Figure 5

The development concept illustrated on Figure 5 provides for a mix of appropriate land uses in the East Hill MASP. All development within the plan area must be preceded by an approved neighbourhood area structure plan based on the requirements of this East Hill MASP. All new neighbourhood area structure plans shall meet shall meet the design density of 14.8 dwelling units per developable hectare.

4.1 Neighbourhood Design Principles

The neighbourhood area structure and area redevelopment plans shall indicate how they are meeting or exceeding each of the design principles as set out below.

Principle 1: Unique Neighbourhoods

Each neighbourhood has a distinct identity fostering community's pride and a sense of belonging. Arrival features, focal points, natural elements, public art and other symbols of the community are integrated at important intersections and other locations within the neighbourhood. Architecture and site design express creativity, a distinct 'look and feel' for each neighbourhood, including relationships between buildings and public space, size of homes, street widths, block sizes, choice of materials and architectural character.

Principle 2: Integrated Parks & Community Spaces

Each neighbourhood offers high quality public spaces, with a variety and mix of leisure and recreational opportunities. Open spaces are well connected and integrated. Public space is accessible and suitable to a range of ages and abilities. Active and passive spaces provide areas to congregate, socialize, recreate, be physically active and spend time outdoors.

Principle 3: Mixed Land Uses

Each neighbourhood has a mix of land uses and densities that provide options to live, learn, work, and play. More intensive land uses are connected and focused around transit, alternative transportation modes and parks. All citizens can easily access daily shopping and recreational needs in their neighbourhood regardless of mode choice.

Principle 4: Compact Urban Form and Density

Each neighbourhood is designed to use land wisely and efficiently. Higher density housing is clustered and located with commercial and institutional uses and public transit stops. Higher density areas gradually transition to lower density areas. Density supports a mix of uses and viable transit ridership.

Principle 5: Multi-Modal Choice

Each neighbourhood offers real mobility choices for residents to travel to, from and within the neighbourhood. Streets and trails are well connected to encourage active modes of travel. Traffic and parking are managed and do not dominate the neighbourhood.

Principle 6: Resilient & Low Impact Neighbourhoods

Each neighbourhood is designed to be resilient and adapt to changing conditions such as growth rates, demographics, regional context, energy price changes, climate change and change in residents needs and preferences. Cost effective neighbourhoods are designed with consideration for construction, long term maintenance, operation and resident affordability. Neighbourhoods are planned to accommodate a variety of future uses that will allow buildings, public spaces and amenities to be adapted efficiently as needed.

Principle 7: Safe and Secure Neighbourhoods

Each neighbourhood is designed to promote citizen's health and well-being and increased overall neighbourhood safety and social interaction. Streets are designed for pedestrian and cyclist safety. Residents know their neighbours, feel confident to play, walk, cycle, and take transit, use neighbourhood spaces and access community amenities.

Principle 8: Housing Opportunity & Choice

Neighbourhoods provide a mixture of buildings, unit sizes, and housing types. Housing options provide choice within the neighbourhood, appealing to a range of incomes, family types and opportunities for 'aging in place'.

Principle 9: Natural Areas & Ecosystem Enhancement

Each neighbourhood contains natural open spaces and is sensitive to the existing land conditions and local ecology. Neighbourhoods are designed to include existing or enhanced natural and conservation areas or are a response to natural features. This may include greenways, wetlands, watercourses, woodlots and native plant vegetation.

4.2 Commercial

[2]Commercial designations except future neighbourhood commercial and mixed use commercial shall be shown on the Generalized Land Use Concept for East Hill. Commercial designations within the plan shall include arterial commercial, district commercial and existing neighbourhood commercial. No regional shopping centre shall be pre-designated at this time. Consideration of a regional shopping centre shall be considered during the next five year review or earlier if so determined by Council. The types of potential commercial within the East Hill MASP area are defined below.

Arterial Commercial: vehicle-oriented uses fronting on major roads, developed at a relatively low density and serving the city and region.

District Centre Commercial: a local-oriented shopping centre, generally 4-6 hectares (10-15 acres) in size anchored by a grocery store and containing a mix of retail, service, and locally-oriented office uses, and serving as a focal point for multifamily housing and civic uses. The intent is that a district commercial centre be within a ten minute walking distance from the majority of residential dwellings.

Mixed Use Commercial: allows for a variety and mix of commercial and residential uses in the context of a sustainable, healthy and pedestrian focused neighbourhood. The neighbourhood area structure plan would define the location or locations of mixed use commercial. No pre-designation or amendment to the Generalized Land Use Concept for East Hill would be required.

Neighbourhood Commercial: a small local-oriented commercial project containing convenience retail and service uses meeting the day-to-day needs of nearby residents and containing uses such as convenience store, hair care, food/beverage, movie rental, and small retail. In rough terms, there would be one of these in each quarter section of new development. The neighbourhood area structure plan would define the location or locations of convenience commercial. No pre-designation or amendment to the Generalized Land Use Concept for East Hill would be required.

4.3 Restricted Commercial Site

Figure 5 identifies an area for "Commercial" use north along 19 Street on SE ¼ Section 4-38-27-4 which is part of the Sunnybrook South NASP. The uses in this area will be similar to the C4 Commercial (Major Arterial) District except for those uses not permitted through the Subdivision and Development Regulation as the majority of the lands are within 300 m of The City's closed landfill. Restrictions may also be required to building form such as not allowing

[2] 3499/C-2016 (adopted August 15, 2016)

basements. The Land Use Bylaw shall carry out this intent to limit commercial uses and potentially building form.

4.4 Regional Trail System

The River Valley and Tributaries Park Concept Plan outlines the proposed major trails network in the East Hill area**.** The Environmental Master Plan refers to connecting people to parks, pathways and trails in the Transportation Actions & Core Direction to Protect & Enhance Green Space. The neighbourhood plans will show the connections to the regional trails.

The proposals from the current park concept map and The River Valley and Tributaries Park Concept Plan are shown, where appropriate, in the Generalized Land Use Concept Map of the East Hill MASP- Figure 5. The City of Red Deer will explore the potential of using AltaLink's right of way as part of the trail system as it has done in the past as the city expands. The present trails adjacent to 22 Street under the AltaLink transmission line are very successful and well used. A major trail is proposed to connect McKenzie Trails and the River Bend Golf Course area. The new bridge crossing over the Red Deer River, as part of the North Highway Connector, will contain a trail to link the East Hill MASP area to the Three Mile Bend area. Continuous trails are also proposed on select segments of smaller waterways.

As development extends towards River Bend recreation area the roadway will be improved, which will include sidewalks. Trails connections will be available through the McKenzie trail system and the trail system in the neighbourhoods to the west of the extension of 30 Avenue.

The trail is proposed along the AltaLink easement east of the proposed 20 Avenue. To achieve pedestrian connectivity a realignment of collector roadway links may be required to allow for safe crossing or possibly a pedestrian overpass of arterial roads**.**

4.5 Roadways - Figure 5

The principles of sustainable community development apply also to the design of residential streets (i.e. collector and local roadways). These streets are integral components of community space and should reflect the function of the street and the type and intensity of the adjacent land uses. Roadways will incorporate all modes of transportation.

There are four classes of roadways in the East Hill Major Area Structure Plan: local roadways, collector roadways, arterial roadways and expressways. Most quarter sections abut an arterial roadway on one or two sides and have an internal collector roadway system that links with existing collector roadways in adjoining neighbourhoods. The majority of residential development will be located on local roadways, and to a lesser amount on collector roadways.

4.5.1 Local Roadways

Local roadways are not identified on Figure 5. The alignment of local roadways will be determined as part of the neighbourhood area structure plan.

4.5.2 Collector Roadways

Future collector roadways are not to be are identified on Figure 5; however, existing collector roadways are shown. Typically a collector roadway provides direct frontage access to abutting land uses, provides public parking on both sides, accommodates snow storage, serves as a transit route and provides sidewalks for transportation mode alternatives to the motorcar.

The alignment of collector roadways will be generally based on minimum intersection spacing onto arterial roadways as well as the requirement for collector street linkages between adjacent neighbourhoods without creating opportunities for shortcutting between arterial roadways or incompatible land uses. Collector roadways must provide efficient and effective circulation of traffic within each neighbourhood and efficient and effective connections to adjacent arterial roadways. The location of collector roadways will be determined as part of the neighbourhood area structure plan process and not pre-designated.

[3]The proposed Piper Creek crossing options shown within NE ¼ Section 4 serve to ensure that the planning of the NE ¼ Section 4 accommodates a possible future crossing into the neighbourhood design without adversely affecting any future decisions regarding a possible roadway crossing over Piper Creek. The Neighbourhood Area Structure Plan for NE ¼ Section 4 will include space for one four lane collector roadway that would extend from Molly Banister Drive to 22 Street, if it is deemed required for transportation connections in the future.

4.5.3 [4]Arterial Roadways

Arterial roadways provide for the movement of large volumes of traffic, including truck and transit routes, by connecting major areas of traffic generation within the City. As efficient flow of traffic is the primary function of this classification of roadway, direct residential lot access is not permitted to/from an arterial roadway. The proposed arterial roadway network is shown on Figure 5: Generalized Land Use Concept – East Hill. Right in/ right out site accesses for major non-residential developments such as district and regional shopping centres, high schools or other major public facilities are not shown and may be permitted after more detailed traffic analysis.

[3] Bylaw 3499/B-2021

[4] Bylaw 3499/B-2021

Intersections and junctions onto arterial roadways are infrequent and appropriately designed, therefore all turn intersections onto divided arterials are provided at 400 m to 800 m intervals to effectively channel traffic from the major collector network.

Arterial roadways, as shown on Figure 5: Generalized Land Use Concept – East Hill within the plan area consist of the following:

1. 30 Avenue
2. 40 Avenue
3. 22 Street between 30 and 40 Avenues
4. 32 Street
5. 50 (Ross) Street, and
6. 67 Street westbound from a point approximately 800 m west of 20 Avenue; and
7. Delburne Road (19 Street)

4.5.4 Expressways

The expressway classification of road reflects the highest level of roadway function in the plan area. Expressways require a 60 to 90 m right-of-way and a desirable intersection spacing of 800 m to 1600 m. Where expressways intersect with major arterials and/or highways, a grade-separated intersection may eventually be required. The Northland Drive/20 Avenue Functional Planning Study of March 2009 has determined that, at the 188,000 population horizon that diamond-type interchanges will be required on 30 Avenue and the bridge crossing, 20 Avenue at 67 Street, 20 Avenue at 32 Street, and Delburne Road (19 Street). Expressways within the plan area are: 67 Street (Highway 11) eastbound from a point 800 m west of 20 Avenue; 20 Avenue, and Northland Drive with its river crossing and linkage to Highway 11A. The eastward extension of 67 Street reflects the future alignment of Highway 11 that has been protected by a Provincial Ministerial Order.

City Council adopted the 20th Avenue alignment when they approved the Northland Drive/20 Avenue Functional Planning Study in June 2009. Since that time, a significant amount of planning and right of way purchases have occurred along 20th Avenue to accommodate the future expressway. Detailed design of intersections will include investigation of roundabouts. The expressway will be developed in phases in conjunction with the increase in traffic volumes with 2 lanes (one lane each way) occurring over the next 6-10 years. No time-frame estimate is available for additional lane construction. Any construction is subject to approval in the Capital Budget by City Council.

4.6 Multi-neighbourhood Sports Fields and High Schools

A multi-neighbourhood park/school site, containing city-wide sports fields with a possible field house and high school sites for the Catholic, Francophone, and the Public School authorities, of approximately 24 hectares (60 acres), is identified at the north east corner of the intersection of 67 Street and 30 Avenue in Section 26.

The City and school authorities recognize the potential efficiencies for land use and capital costs that could be realized by sharing facilities with community and health organizations. In addition, other community uses such as a theatre, medical centre, library, should be explored. Consideration for these types of uses should be made during the overall site planning. In addition, consideration shall be given to the relationship between the schools/recreational area and the adjacent residences. The intent is to provide for a transition from the playing fields and schools to the residences.

4.7 Emergency Services - Figure 5

[5]Figure 5 identifies the following five potential new locations for future emergency services facilities that could accommodate fire, ambulance and/or other community:

1. Adamson Avenue at the corner of 22 Street
2. On the west side of 40 Avenue near the intersection of 22 Street within the NE ¼ Section 4-38-27-W4.
3. On the west side of 30 Avenue at the intersection of 55 Street within the SE ¼ Section 22-38-27-W4.
4. Within Timberlands North NASP as determined by that Plan.
5. On the east side of 30 Avenue near the intersection of the north side of Lees Street and 30 Avenue within the SE ¼ Section 11-38-27-W4.

4.8 Schools - Figure 5

The K-9 school designation means a school building that could contain from kindergarten (K) through to grade 9 with any grade combinations permitted. The present usual categories are: grades K-5 (elementary school), or grades 6-9 (middle school). A high school could contain any combination of grades from 7 to 12.

Typically the location of all K-9 sites are planned to occur in conjunction with a neighbourhood park site internal to the neighbourhood. The requirement for and location of proposed school sites will be determined at the neighbourhood area structure plan level guided by the general location shown on Figure 5.

[5] 3499/A-2015

The overall high schools site, as shown off 30 Avenue at 67 Street on Figure 5, is to be in conjunction with the major playing fields.

This East Hill MASP encourages the school boards to decide if a school site is required within a quarter section development as early as possible. This is to ensure that, if municipal reserve is not required for a large school site, then the size of the neighbourhood park site could be reduced and the municipal reserve could be utilized as smaller parkettes and/or linear parks with neighbourhood trails that are distributed throughout the neighbourhood. In addition, existing vacant sites shall be reviewed to determine if they are still appropriate to retain for future school development.

5.0 Municipal Utility Services and Development Sequencing

Ecologically sustainable development principles suggest that potential exists within undeveloped areas of the East Hill community to combine natural features with servicing requirements. This is often referred to as green infrastructure. Examples include the Michael O'Brian Wetlands near 55 Street and 30 Avenue has combined storm water management with an existing wetland to create a multi-purpose facility with storm drainage and natural interpretative functions.

Neighbourhood ecological profiles must be considered when developing servicing plans for the consideration of potential multi-purpose features.

More detail on water, sanitary, sewer and stormwater for this area can be found in City of Red Deer 2009 Greater East Hill Functional Servicing Study prepared by Stantec Consulting Limited in July 2011.

5.1 Storm Water Drainage - Figure 6

Surface water runoff from the East Hill area is drained through buried pipe systems and overland surface systems to the Red Deer River directly or via Piper and Waskasoo Creeks (see Figure 6). The City has a policy of restricting direct storm water discharges into the creeks and river in order to limit increased rates of runoff from urban developments. The restrictions are imposed through the use of a storm water collection system that incorporates water retention and detention facilities.

A number of "dry-ponds" are presently in use in the East Hill area. These public utilities were designed so that they may also serve, in part, as neighbourhood play fields and recreation/open space areas. Recently policy has changed so that these dry ponds are no longer constructed with play fields in them. The City supports alternative methods of storm water management, including the creation of permanent man-made storm water ponds with the incorporation of natural marshes or wetlands into the overall storm water system (i.e. green infrastructure). Constructed wetlands, which are supported, have been constructed in Vanier Woods East and Clearview North, for example. The East Hill MASP supports the piloting of low impact storm water management practices, which is consistent with the direction provided in the Environmental Master Plan.

5.2 Sanitary Sewer - Figure 7

The proposed sanitary sewer system is generally shown on Figure 7. This collection system will be designed to use a combination of sewage lift stations and gravity trunk mains to direct all sewage to the wastewater treatment plant located at the north end of the City along the river. As new development occurs, the extension of existing and new trunk mains will permit all areas within the boundaries of the East Hill Major Area Structure Plan to be serviced.

5.3 Water Distribution - Figure 8

The City of Red Deer obtains raw water from the Red Deer River. Water treatment is accomplished with two plants located at the river. The City's water distribution system for the East Hill area consists of a combination of water pressure zones, booster pump stations, water reservoirs, and trunk mains to adequately distribute water to meet domestic and fire flow demands.

5.4 Development Sequence - Figure 9

The development sequence map provides an overall logical engineering sequence for development for the East Hill MASP. This sequence provides an efficient growth pattern for this area. This does not compare these areas to development to other areas of the city. This will assist in guiding the capital investments of the city; however, Figure 9 is not to be used to predict what may actually happen or in what timeframe.

5.5 Electrical Power Transmission - Figure 10

The existing high voltage transmission lines, which are owned by AltaLink, are identified on Figure 10. A 100m consultation/potential constraint area is included to ensure that the appropriate conversations are had with AltaLink in regards to Alberta Electric Utility Code (AEUC) and the potential impact when developing adjacent to the right-of-way (ROW). The actual constraints area will be determined, as part of the planning process, in consultation with AltaLink as it depends on several factors.

The need for additional transmission facilities to provide electrical service to the north east area has been identified by the Alberta Electric System Operator (AESO) as part of the provincial system. The approximately 3.3 acres substation site and 1.6 km transmission line (25m right-of-way) that is proposed by City of Red Deer, Electric Light & Power department provides the best technical and practical location. The proposed substation and transmission line requires approval by the Alberta Utilities Commission (AUC). The City of Red Deer, Electric Light & Power department undertook a separate consultation with stakeholders as a required part of the AUC process.

Aerial lines are required to distribute electrical power to existing and new neighborhoods. These distribution lines are usually located within the arterial road right-of-ways. Detailed locations will be determined at the neighbourhood planning stage.

6.0 Implementation

The success of any plan depends on the degree to which efforts are made to implement and integrate the plan's direction into decision making. The East Hill MASP provides the means whereby Council, the Development Authority, Administration, and citizens can evaluate situations or proposals**.** Where a matter is not addressed in this East Hill MASP, guidance shall be sought from the Municipal Development Plan (MDP) and the Intermunicipal Development Plan (IDP).

6.1 Key Words

Where the words "shall", "should" and "may" are used in the East Hill MASP they are to be interpreted as follows:

- "Shall" policies are mandatory and must be complied with,
- "Should" policies mean compliance to the principle is required but the method and level of compliance is subject to the discretion of the applicable authority on a case by case basis,
- "May" policies are discretionary with the level of compliance determined on a case by case basis by the applicable authority.

6.2 Plan Amendments

The City or a landowner may initiate an amendment to this East Hill MASP. The City shall assemble or require the submission of such background information as is considered necessary to support the amendment prior to the start of the amendment process. Amendments shall be made to other statutory plans, concurrently, if it is required to maintain consistency between documents.

6.3 Preparation of More Detailed Plans

The East Hill MASP shall be implemented through the preparation of neighbourhood area structure plans for all undeveloped quarter sections and/or other undeveloped parcels of land within the plan area. All neighbourhood area structure plans within the plan area shall be consistent with the East Hill Major Area Structure Plan. The policies of the East Hill MASP shall be further refined and implemented through the preparation, adoption, and day-to-day application of neighbourhood area structure plans, area redevelopment plans, the Land Use Bylaw, and subdivision applications. All of the various types of applications shall be consistent with other statutory documents.

The City shall continue to ensure that appropriate stakeholders (e.g. landowners, School Authorities, neighbouring municipalities) and the general public are consulted and have input into all area structure and area redevelopment plans as these plans are being prepared.

All area redevelopment plans shall be consistent with the East Hill MASP.

6.4 Public Engagement

As part of the process of managing physical growth and changes in the community, The City shall facilitate public input on matters of general or specific planning interest, wherever possible.

Public input may be obtained using a variety of techniques such as open houses, public meetings, focus groups, citizen advisory groups, workshops and surveys. The techniques and processes used may vary, based on the nature of the plan or matter being considered. Public input may be sought at any or all levels of decision making including concept development, detailed design and implementation. Input should be facilitated as early in the decision making process as possible.

In making a decision on a planning matter, City Council shall consider, but not be bound by, the input received from the public and shall balance the input received with other considerations including the long term land use planning interests of the broader community.

The City shall also continue to make existing planning policies available to the public and tell residents of the outcome of key planning decisions.

6.5 Planning for New Multi-Neighbourhood Areas

The East Hill MASP encourages planning on a multi-neighbourhood level. If a multi-neighbourhood higher level plan is completed, it shall be adopted concurrently with the first neighbourhood area structure plan for an area. This multi-neighbourhood plan shall contain the arterial and collector road pattern, broad land uses including environmental and open space areas. This multi-neighbourhood type level plan, prepared by all land owners, shall be adopted as a minor amendment to the East Hill MASP. This would allow other land owners certainty as to the road network and broad land uses even if the land owner is not prepared to undertake a neighbourhood area structure plan at the same time.

6.6 Plan Review

The East Hill MASP should undergo a comprehensive review and updated every five years. The East Hill MASP may require a review earlier because of factors such as annexation, or a major change in strategic direction, for example.

6.7 Amendments to the East Hill MASP

Provided the intent of the East Hill MASP is maintained, a minor adjustment to proposed land use boundaries or roadway alignments may be made where necessary without an amendment.

No amendments to the servicing concepts are required to reflect change determined as a result of more detailed work.

No amendments to the overall development sequence are required as long as the overall intent is being maintained.

The access points of the collector roadways onto adjacent arterial roadways as proposed are fixed and cannot be changed without a plan amendment, because this may affect landowners in existing subdivisions.

6.8 Superseding of Red Deer County Plans

All adopted Red Deer County statutory plans that fall entirely or partly within the boundary are superseded and fully replaced by the East Hill MASP area. These include the following area structure plans: Spruce Woods, Thompson, and Divide Hills. Therefore the appropriate City statutory plan will apply in any development situation.

6.9 Land Use Bylaw and Subdivision

All applications for Land Use Bylaw amendments and subdivision shall conform to the general intent of the East Hill MASP and the applicable neighbourhood plan. The intent of the East Hill MASP and the MDP is to limit fragmentation of land by discouraging subdivision until urban style development can occur at urban densities. Consideration may be given to a limited range of uses, potentially for a specific timeframe, provided they would not diminish the ability for urban style development in the long term. On-site water and sanitary servicing could be considered for these developments. These type of developments may be considered without an adopted statutory neighbourhood plan being in place.

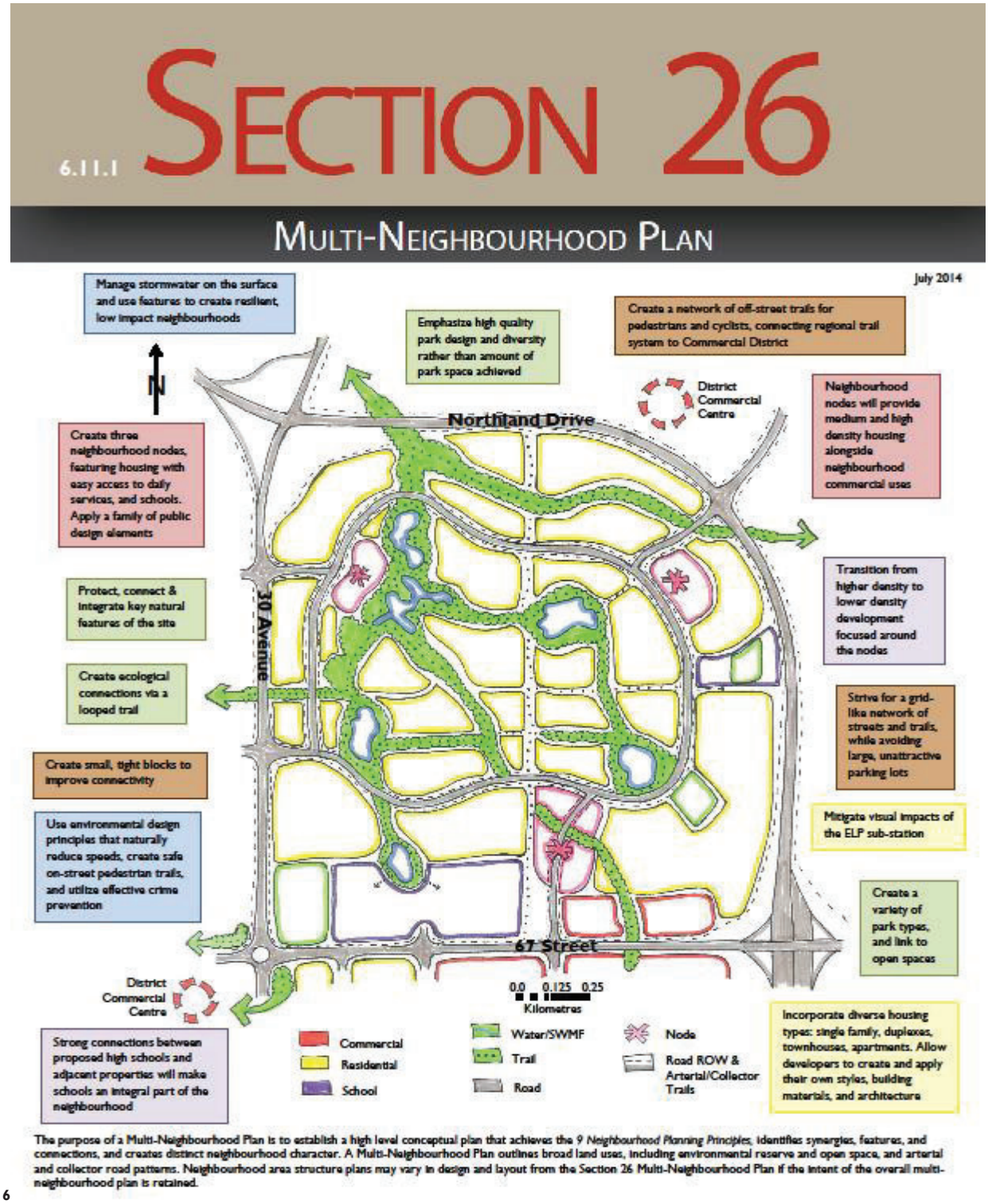
6.10 Capital and Operating Budgets

Various policies in this East Hill MASP may suggest spending by The City in order to achieve successful implementation. Pursuant to the Municipal Government Act, this East Hill MASP does not commit City Council to any funding decisions. The funding for any proposals of this East Hill MASP shall be considered during The City's budget process along with other funding priorities.

6.11 Multi-neighbourhood Plans

(Note: New multi-neighbourhood plans would be added here as adopted by amendment)

6.11.1 Section 26



[6] 3499/A-2014

6.11.2 Clover Valley - Section 35

The purpose of a Multi-Neighbourhood Plan is to establish a high level conceptual plan that achieves the 9 *Neighbourhood Planning Principles*, identifies synergies, features, and connections, and creates distinct neighbourhood character. A Multi-Neighbourhood Plan outlines broad land uses, including environmental reserve and open space, and arterial and collector road patterns. Neighbourhood area structure plans may vary in design and layout from the Section 35 Multi-Neighbourhood Plan if the intent of the overall multi-neighbourhood plan is retained. The completion of a multi-neighbourhood plan does not mean that the land is development ready. Development readiness will be determined by the sequencing of services of the lands within the overall city servicing context and approval of capital expenditures by Council.

7

[7] 3499/A-2018

6.11.3 Beaumont - Section 13

The purpose of a Multi-Neighbourhood Plan is to establish a high level conceptual plan that achieves the 9 *Neighbourhood Planning Principles*, identifies synergies, features, and connections, and creates distinct neighbourhood character. A Multi-Neighbourhood Plan outlines broad land uses, including environmental reserve and open space, and arterial and collector road patterns. Neighbourhood area structure plans may vary in design and layout from the Section 13 Multi-Neighbourhood Plan if the intent of the overall multi-neighbourhood plan is retained. The completion of a multi-neighbourhood plan does not mean that the land is development ready. Development readiness will be determined by the sequencing of services of the lands within the overall city servicing context and approval of capital expenditures by Council.

8

[8] 3499/A-2016

Figure 1: Plan Area

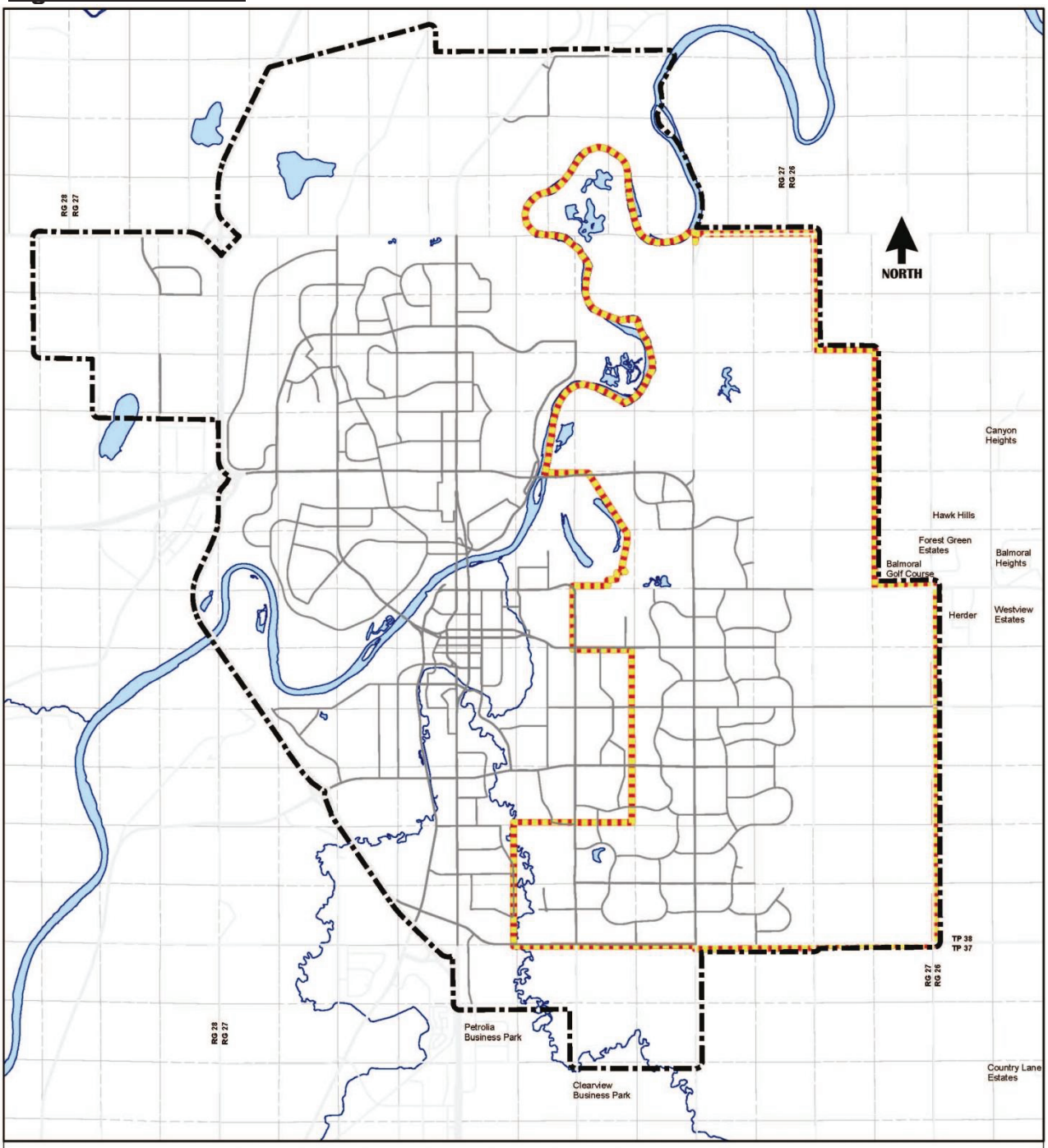


Figure 1: Plan Area - East Hill

Plan Boundary City Boundary

THE CITY OF Red Deer

April 29, 2013

Figure 2: Natural Areas

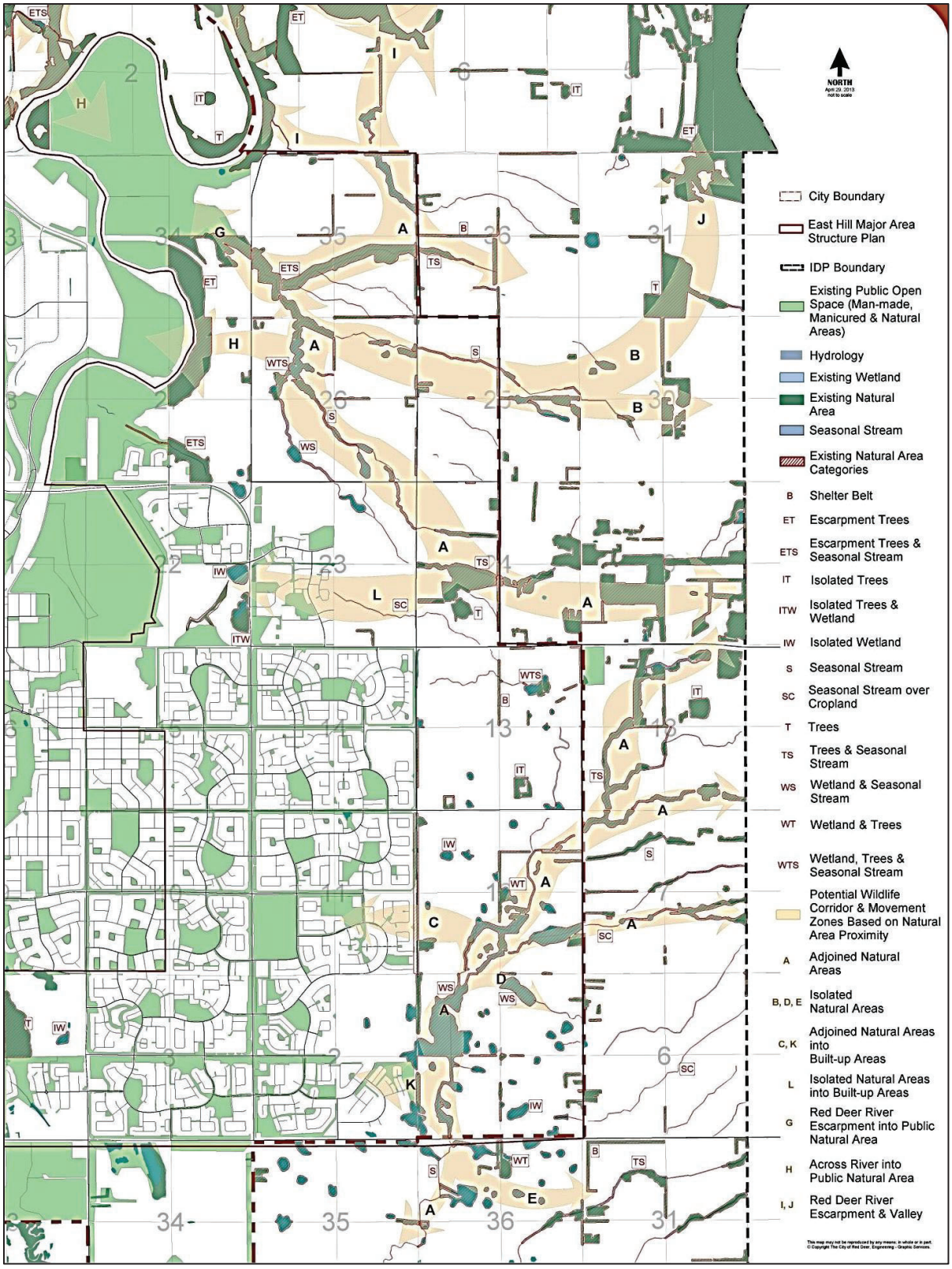


Figure 3: Natural Resource Extraction

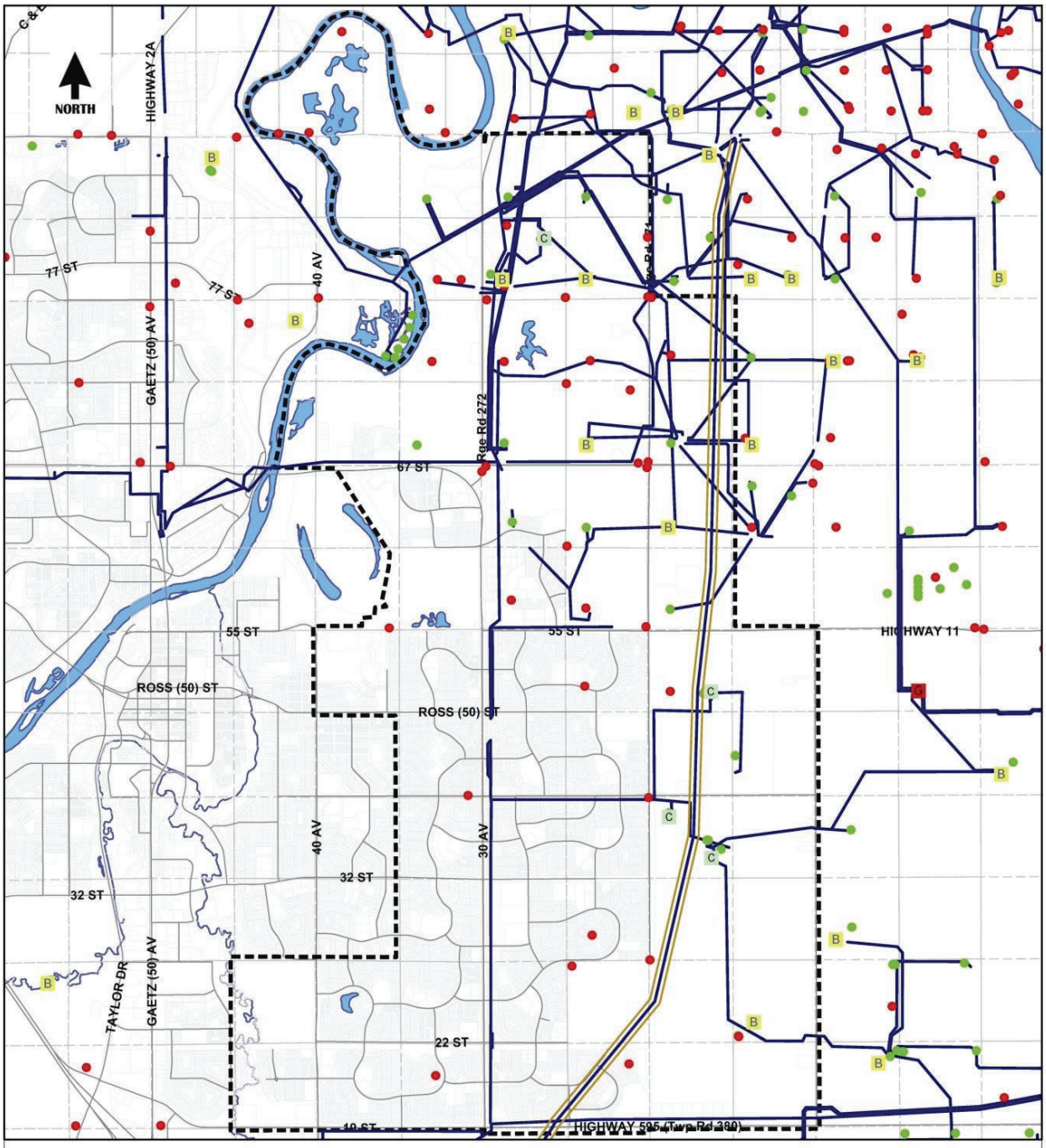


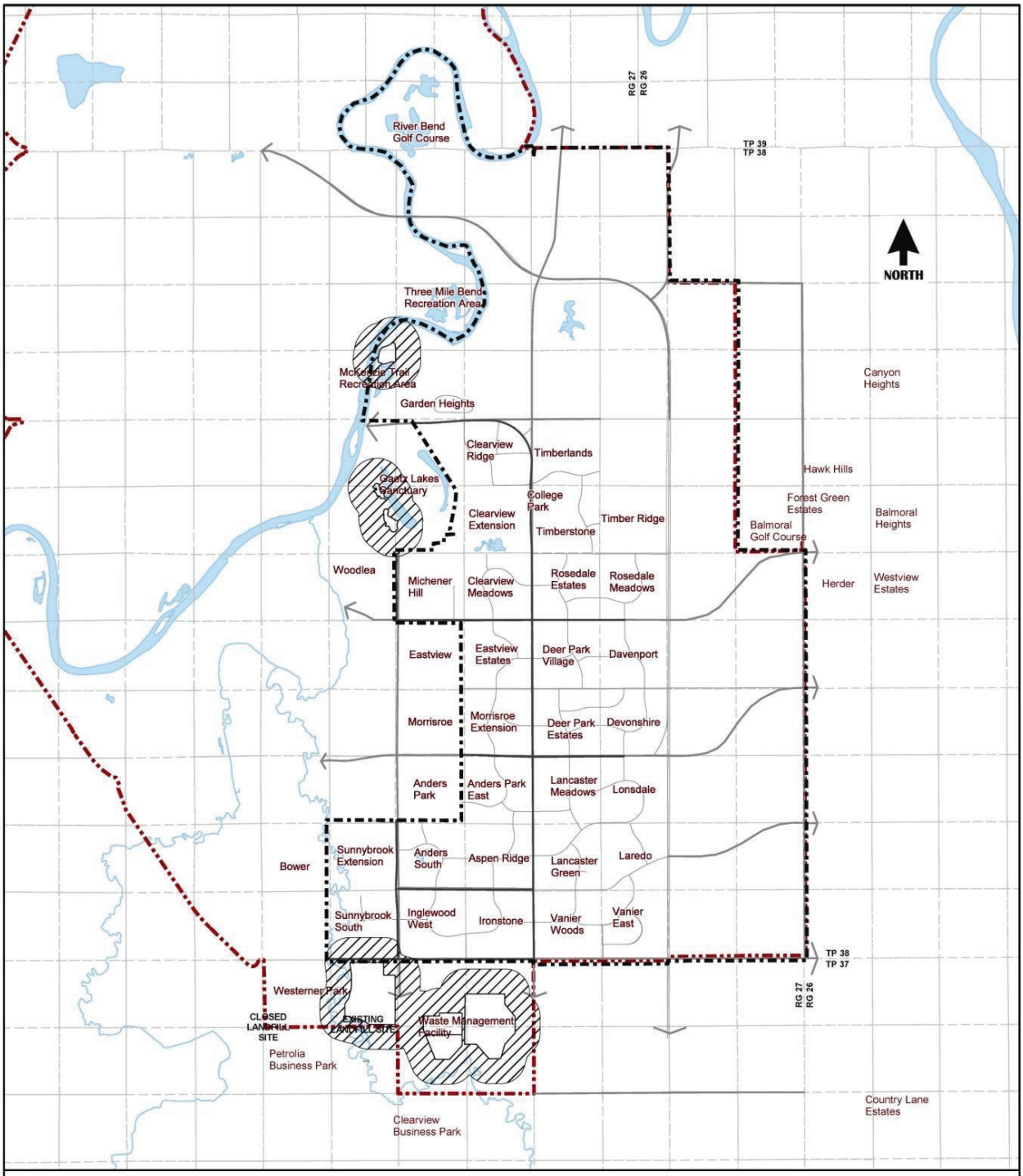
Figure 3: Natural Resource Extraction - East Hill

Pipeline
Setbacks from TransCanada Pipeline
Gas Plant
Battery
Compressor Station
Active Well
Abandoned Well
Plan Boundary

THE CITY OF Red Deer
April 29, 2013

* Map intended to illustrate current oil and gas development in the area and is not to be considered an accurate depiction of location.

Figure 4: Landfills



[9]Figure 5: Generalized Land Use Concept - East Hill

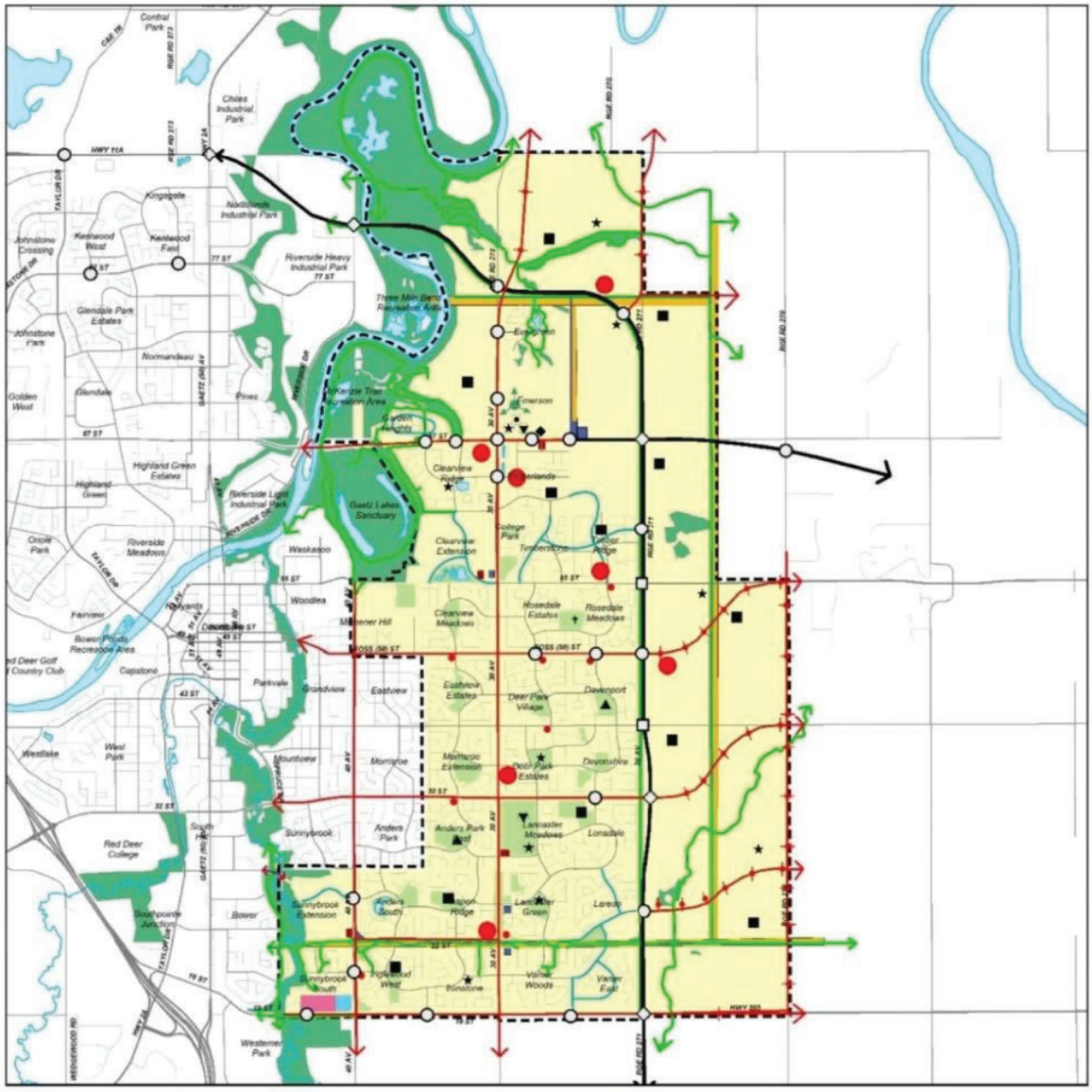


Figure 5: Generalized Land Use Concept - East Hill

- Expressway and Grade Separation (Gradual build-out starting with two lanes)
- Arterial Road
- Piper Creek Protected Crossing (Molly Banister Drive)
- Collector Road
- Proposed Regional Park
- Potential Emergency Services Location
- Existing Parks & Natural Areas
- Restricted Commercial
- Potential Natural Areas
- Major Electrical Transmission Corridor
- Public Utility Site
- Public Service
- Residential
- Arterial Commercial
- Regional Trail
- Neighbourhood Commercial Centre
- District Commercial Centre
- Public K-9 School
- Catholic Elementary School
- Catholic High School
- Catholic K-9 School
- Public High School
- Public Elementary School
- Francophone Co-located High School
- Interchange
- Right In Right Out
- Signal
- Intersection
- Plan Boundary

* Locations shown are conceptual

January 8, 2024

Note: Any reference to a specific school authority in this plan is only an indication of a school authority's site preference. The allocation of identified school sites will be determined by the Joint Use Committee. (Bylaw 3499/A-2021)

[9] Bylaw 3499/A-2015, 3499/B-2016 (adopted August 15, 2016), 3499/B-2021 (Aug 31, 2021), 3499/A-2023 (Jan 8, 2024)

Figure 6: Storm Servicing Concept

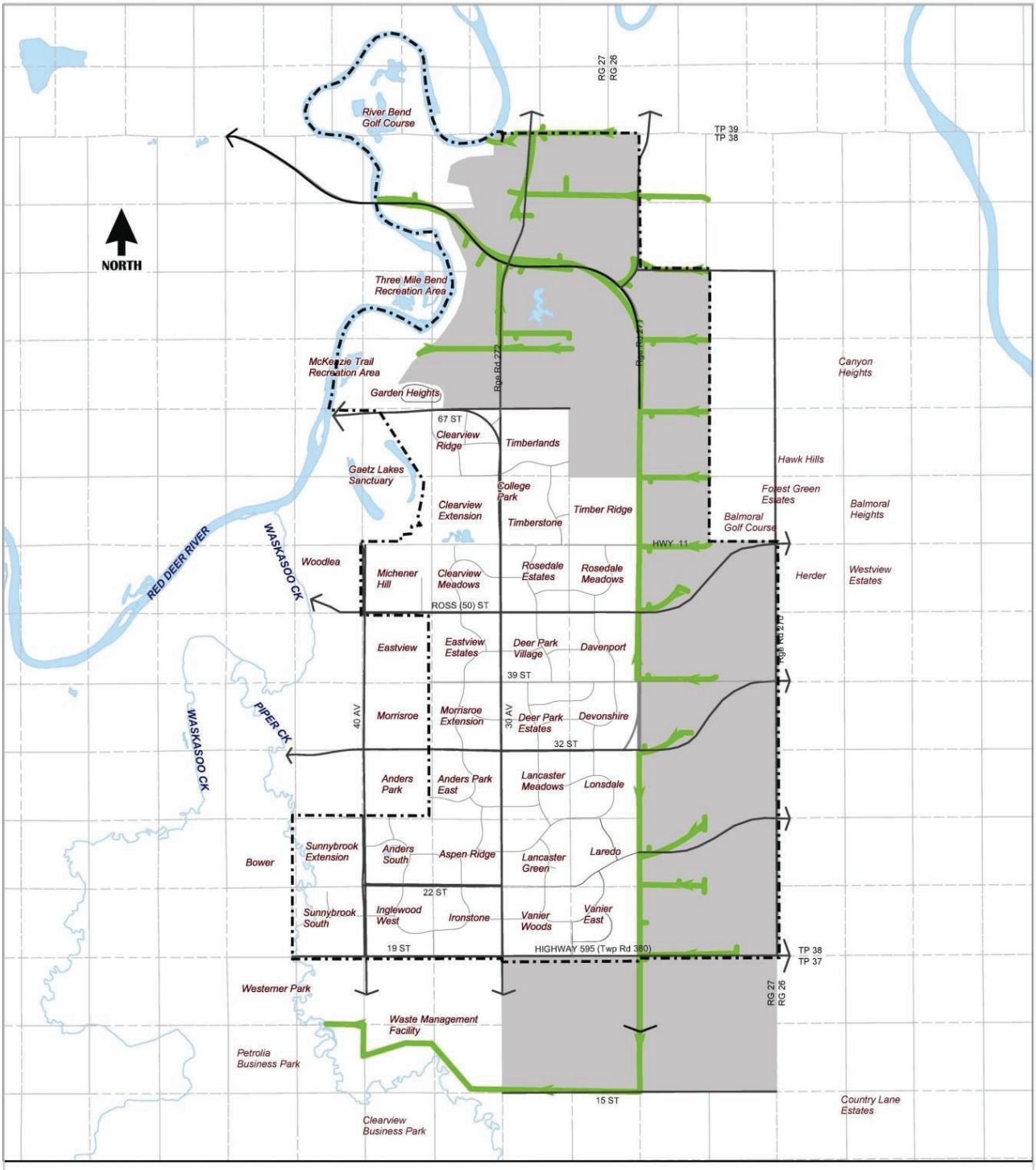


Figure 6: Storm Servicing Concept - East Hill

Proposed Trunk | Service Area | Plan Boundary

THE CITY OF Red Deer

April 29, 2013

Figure 7: Sanitary Servicing Concept

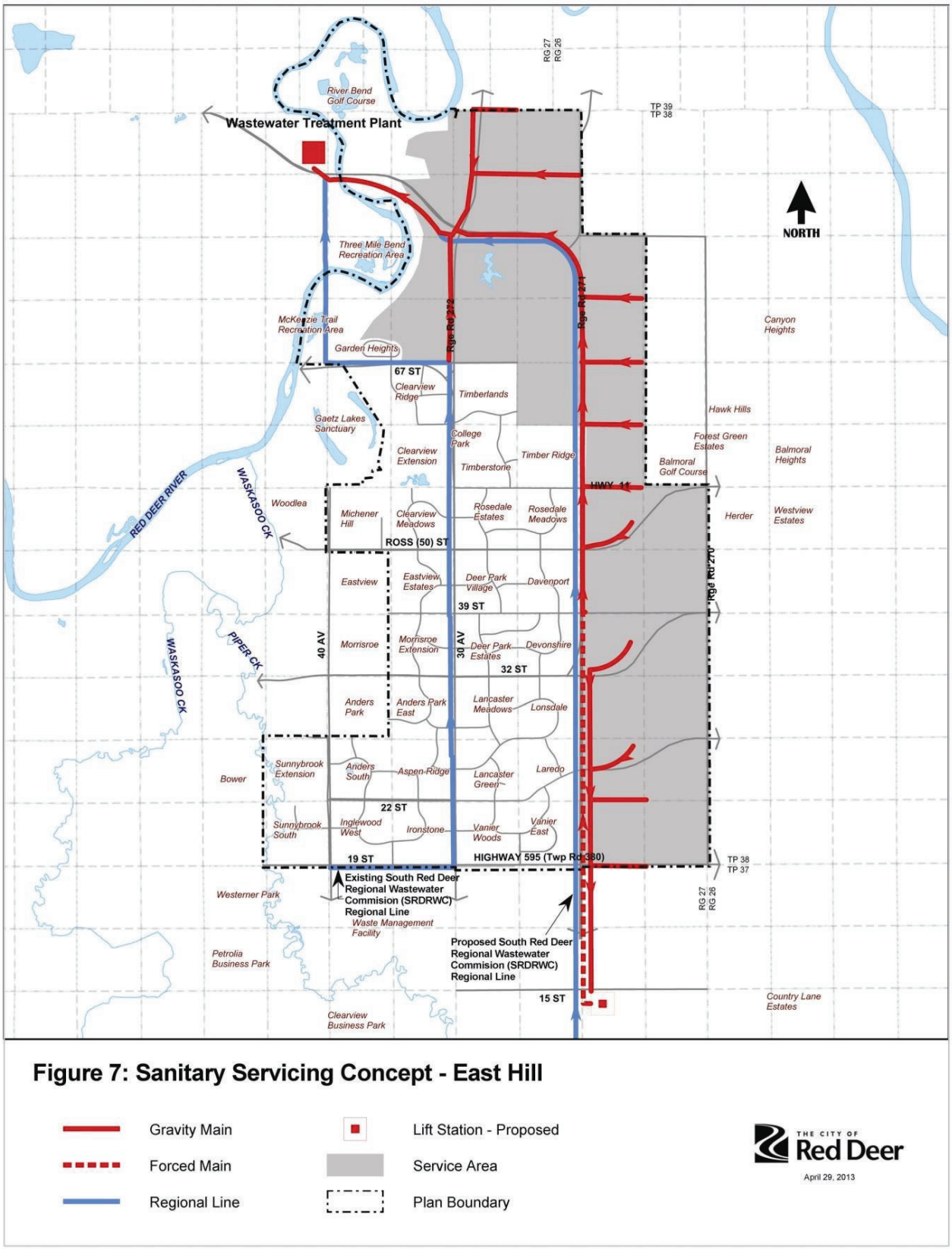


Figure 7: Sanitary Servicing Concept - East Hill

Gravity Main
Forced Main
Regional Line
Lift Station - Proposed
Service Area
Plan Boundary

THE CITY OF Red Deer

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Figure 8: Water Servicing Concept

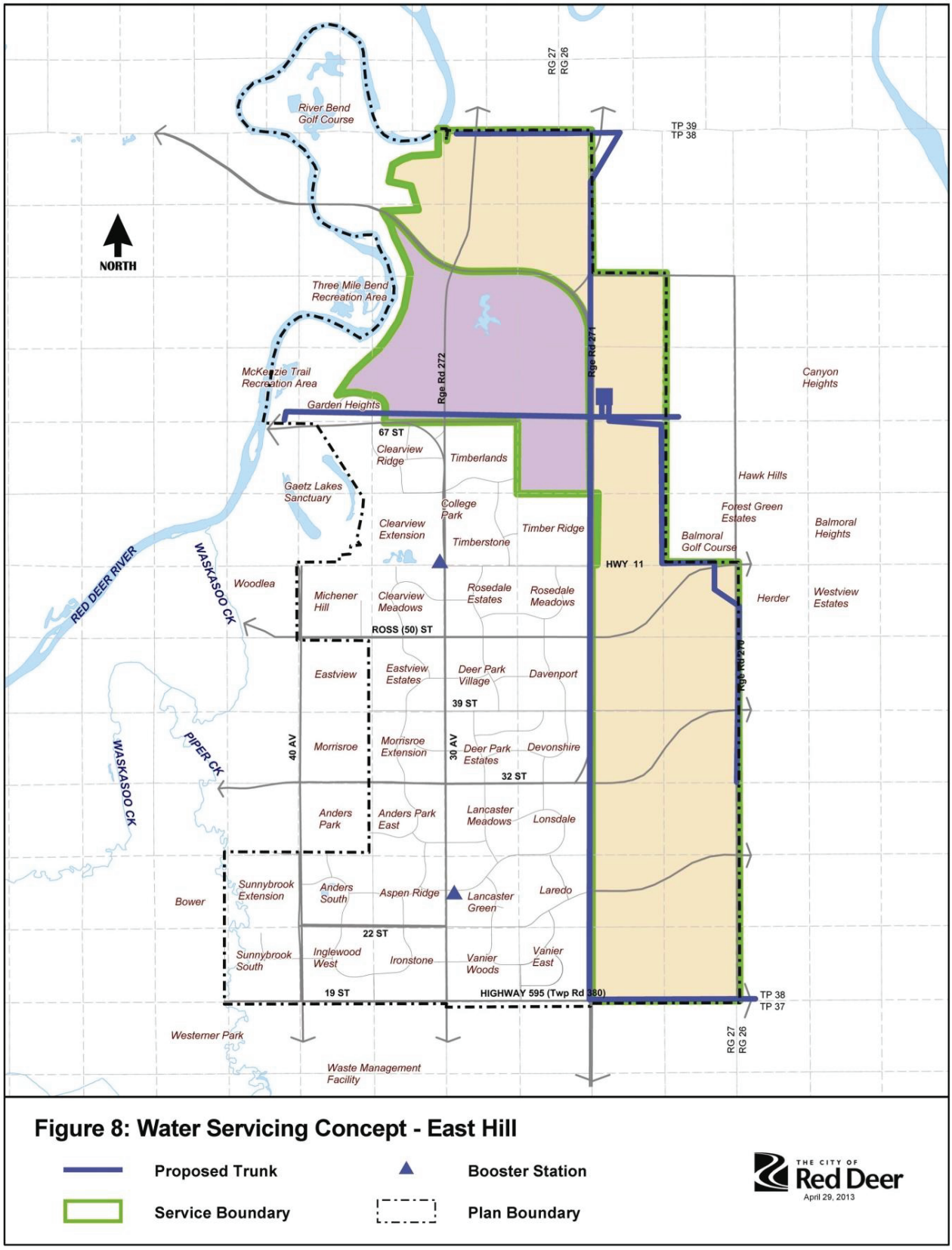


Figure 9: Potential Development Sequencing

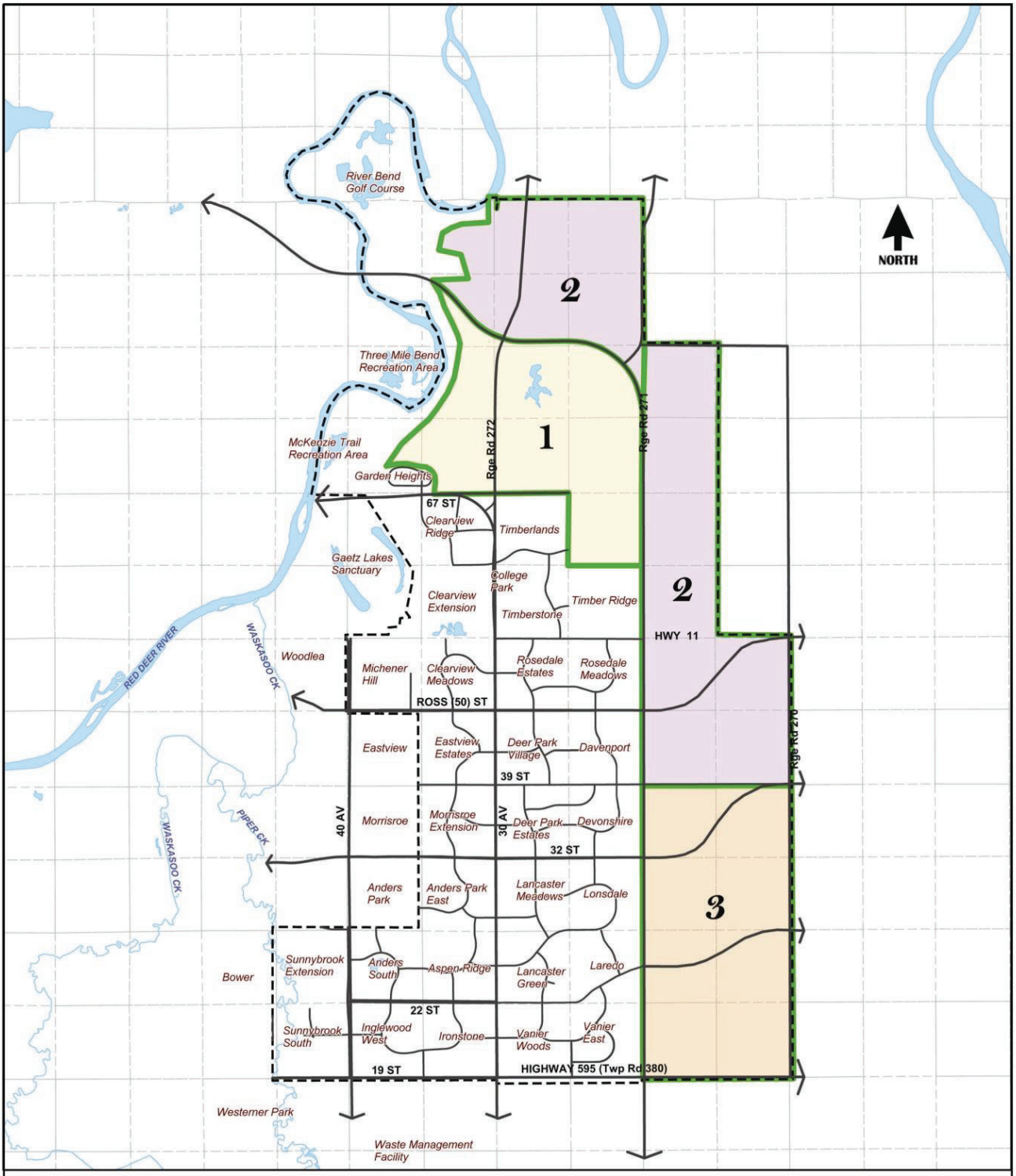


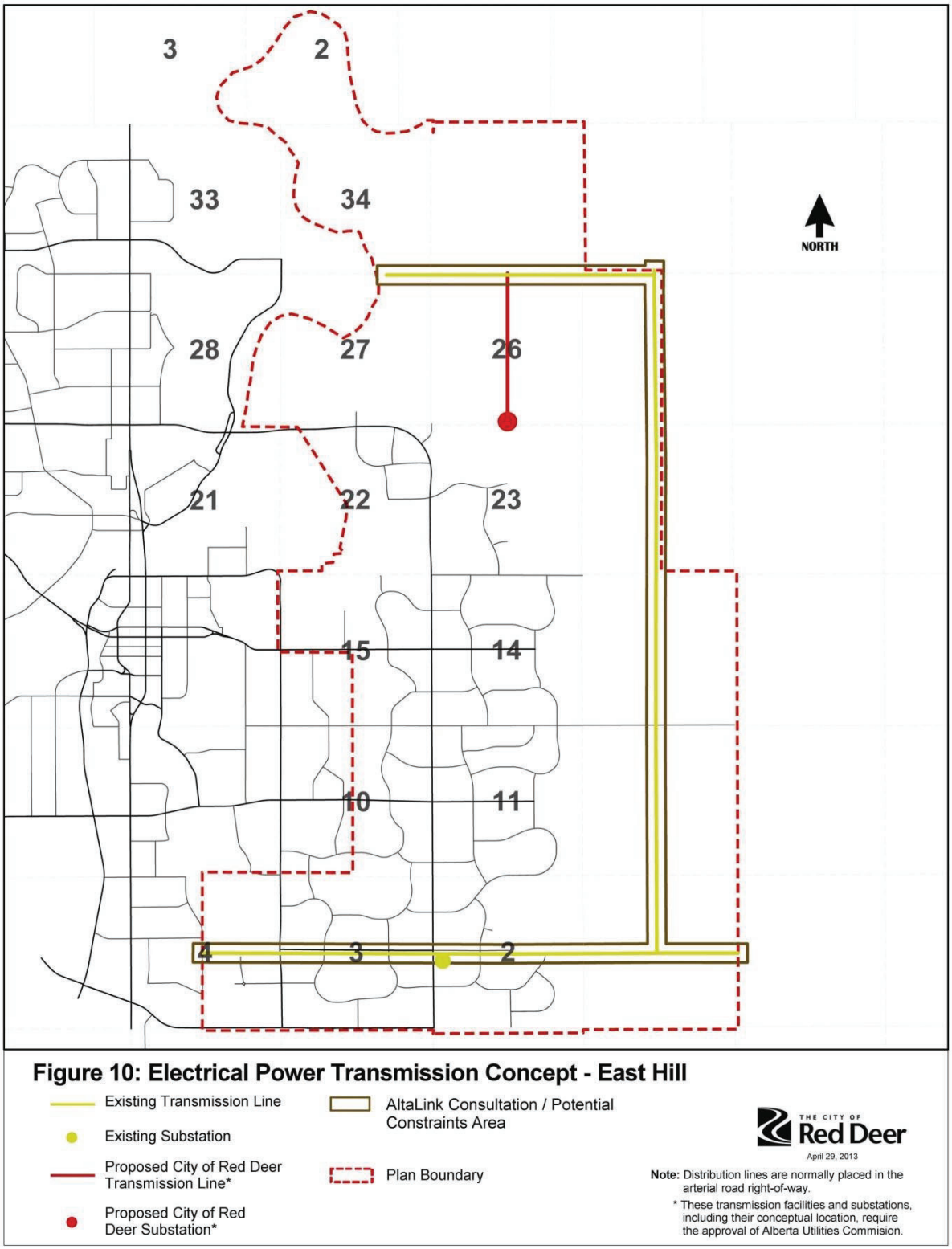
Figure 9: Potential Development Sequencing - East Hill

1 Potential Development Sequencing Plan Boundary

THE CITY OF Red Deer

April 29, 2013

Figure 10: Electrical Power Transmission Concept



Attachment A: Notes for Figure 2 Natural Areas Map

Existing Natural Area Categories

B- Shelter Belt (Usually poplar trees and associated herbaceous understory; vary in width)

ET - Escarpment Trees (Red Deer River Escarpment with both coniferous and deciduous trees; new and old-growth)

ETS - Escarpment Trees & Seasonal Stream (Stream running through treed escarpment; likely has associated drainage impacts)

IT - Isolated Trees (Area usually smaller in size with poplar trees and associated herbaceous understory; isolated by surrounding cropland or other development)

ITW - Isolated Trees & Wetland (Usually intact wetland surrounded by trees; isolated by surrounding cropland or other development)

IW - Isolated Wetland (Vary in size and extent of surrounding riparian zone; isolated by surrounding cropland or other development)

S - Seasonal Stream (Often links natural areas and can be associated with natural features and/or cropland)

SC- Seasonal Stream Over cropland (Normally not associated with significant native habitat)

T - Trees (Usually larger in size; may have both deciduous and coniferous trees and herbaceous understory)

TS- Trees and Seasonal Stream (Trees/shrubs and streams associated with each other as a result of drainage; often found at the upper-reach source or downstream destination of the seasonal stream flow)

WS - Wetland & Seasonal Stream (Wetlands and streams associated with each other as a result of drainage)

WT- Wetland & Trees (Wetlands buffered with surrounding shrubs and trees, often extensive and fragmented in area)
WTS- Wetland, Trees & Seasonal Stream (Large natural areas with multiple habitat types and associated features)

Potential Wildlife Corridor/Movement Zones Based on Natural Area

A - Adjoined Natural Areas (A contiguous series of natural areas and habitat types)

B, D, E - Isolated Natural Areas (A stand-alone wetland, treed area or other natural area usually surrounded by cropland or development)

C, K - Adjoined Natural Areas into Built-up Areas (A series of natural areas directly adjacent to a built-up developed area)
L- Isolated Natural Areas into Built-up Areas (A series of isolated natural areas adjacent to a built-up developed area)

G - Red Deer River Escarpment into Public Natural Area (River escarpment of varying height associated with a valley consisting primarily of built-up developed areas and natural areas on floodplains)

H - Across the River into Public Natural Area (Represents multiple potential river crossing areas leading into publicly owned natural areas and associated parkland)

I, J-Red Deer River Escarpment & Valley (River escarpment of varying height associated with a valley consisting primarily of agricultural lands and natural areas on floodplains. There is an increase in mapped seasonal stream sites in the East Hill MASP area, the following information is intended to help clarify some of the terminology pertaining to seasonal streams as it has been referenced for a number of years in various city ecological profiles, plans and so forth. The initial intention was to define these streams in a simple manner, mainly differentiating 'seasonally' flowing from 'permanently' flowing, and displaying non-habitat surrounded streams from habitat surrounded streams, keeping in mind that there are always some exceptions to the established definitions: 'Permanently' flowing water is found in city creeks (e.g. Piper and Waskasoo) and the river, or may be permanently flowing as a result of sustained ground water seepage, being spring-fed or by some other consistent flow.

Seasonal streams is the general name that has been used to differentiate them from permanently flowing water. Seasonal streams are often dry, non-flowing and not necessarily positively confirmed until conveying water due to spring snowmelt and/or seasonal rainfall. However, telltale signs of traditional drainage patterns, even in dry years, are usually evident on aerial photographs.
Seasonal streams are sometimes referred to as ephemeral streams, swales, trenches, temporary streams or just the lowest point on the land through which gravity tends to convey water when enough precipitation is present.
Seasonal streams are further broken down to include non-habitat streams that have little or no associated natural feature vegetation except possible agricultural crops and habitat streams with associated natural feature vegetation ranging from basic sedge grasses, other semi-aquatic and aquatic plants, to willow, poplar and other trees surrounding.
Natural features, both in the upstream and downstream reaches, are associated with the flow channels of seasonal streams. These natural features are usually in-place because of the periodic flow of water. There may be middle stretches of the flow channels that are dry and not necessarily evident e.g. across agricultural land that may be cropped in during dryer years, but re-appear as a flow channel once precipitation returns. Because of their reliance on seasonal streams, certain wetlands also go through similar phases of being cropped-over in dry years and then re-establish when precipitation levels return to normal; landowners are aware of these

cycles and occasionally experience some crop loss in the area of the wetland as it re-establishes.
The classification of seasonal streams is open to other interpretations, descriptions and names if more detailed clarification is required, and classification is not necessarily limited to the above definitions.

Potential Wildlife Corridor/Movement Zones are intended to highlight potential movement of wildlife between both adjoining habitat and isolated habitat areas inside and outside of the city into surrounding natural areas (a number of these have been verified with wildlife sightings and with historical and more recent observations and data). Wildlife is often only thought of as large mammals requiring physically linked habitats, or corridors, to move about. In fact a very high percentage of wildlife consists of waterfowl, songbirds and invertebrates (e.g. insects like dragonflies, pollinators and other beneficial insects) that also require habitat to survive as urban areas become built up and filled in. This is where smaller isolated habitat areas that eventually become preserved and assimilated in neighborhoods and commercial and industrial areas play a crucial role in sustaining lesser profile wildlife species.