

Town of Sylvan Lake

Meadowlands Resort Outline Plan

May 2015



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1 Introduction

1.1 Purpose of the Plan

This Outline Plan (“Plan”) provides a framework for the development and expansion of the Meadowlands Golf Club and RV Park in the Town of Sylvan Lake. The Site is currently developed with a golf course, clubhouse, maintenance buildings and a RV campground.

The proposed development includes:

- Conversion of the golf course driving range to a bare-land residential condominium of approximately 106 recreational residential units;
- Development of approximately 36 low density residential lots and 26 medium density lots;
- Expansion of the campground to around 120 spaces; and,
- Development of a 4.1 ha commercial site.

Due to the nature of the development, Meadowlands Resort will offer a unique recreational lifestyle to its residents and further support the position of the Town of Sylvan Lake as a preeminent regional destination for recreation activities in Alberta.

Meadowlands Golf Club and RV Park is referred to as the Meadowlands Resort throughout this Plan.

The Plan should be read with reference to Appendix A – Meadowlands Resort Background Studies and Technical Reports. This appendix contains the technical studies which examine the constraints and preliminary engineering design in detail.

1.2 Site Location

Meadowlands Resort comprises NW21 38-1-5 and Descriptive Plan 9222877, Block 1, Lot 1 (the “Site”). The 59.8 hectare Site shares its southern boundary with the southern boundary of the Town of Sylvan Lake. Figure 1 provides the Site location. The Site is conveniently positioned at the junction of Highway 11 (David Thompson Highway) and 50th Street. The Site is surrounded on the north and west by developing or future residential communities. To the South is rural Red Deer County. The City of Red Deer’s downtown is about 20 km to the east via Highway 11.

2 Development Considerations

This section sets out the planning policy and results of technical studies that influence the nature of the development proposed for the Site.

2.1 Policy and Studies

2.1.1 Sylvan Lake/Red Deer County Inter-Municipal Development Plan

The Inter-Municipal Development Plan (“IDP”) was adopted by both Councils in 2011. The IDP provides a policy framework to coordinate decisions between the Town and County regarding development, as decisions made by either municipality can affect the other.

Through its Land Use Concept the IDP identifies the Site as a Recreational Area with a Residential Area in the northwest corner. Recreational Areas may provide for private recreational uses and development. Residential Areas may include recreational uses when set out in the detailed land use concept of an Area Structure Plan, such as the South Area Structure Plan.

2.1.2 Municipal Sustainability Plan

The Town of Sylvan Lake Municipal Sustainability Plan (“MSP”) was completed in 2010 and provides a road map leading to a sustainable future. It specifically addresses the idea of enhancing natural areas, encouraging healthy growth of the built environment, and establishing economic sustainability in order to foster and build a strong community.

Relevant goals of the MSP include looking at ways to:

- Preserve and enhance the natural environment;
- Encourage mixed uses;
- Promote dark skies; and,
- Promote aesthetically pleasing developments by creating architectural landmarks and ensuring that public spaces are designed for both functionality and aesthetics.


The MSP sets out a goal to provide diverse leisure opportunities for both residents and visitors throughout the year.

The proposed condominium and commercial development along with the enhancement to the golf course directly addresses Sylvan Lake’s MSP by allowing for the improvement and provision of public spaces that encourage sustainable, meaningful, attractive and economically viable growth.

The MSP states that one of the Town’s greatest strengths is the provision of a wide range of recreation and leisure opportunities. The proposed development will build on this strength in support of the MSP’s goals.

2.1.3 Growth Strategy

The Town of Sylvan Lake Growth Strategy, approved in 2008, includes many planning considerations that apply to this site. It identifies the Town of Sylvan Lake’s vision to be a Town



where natural beauty is celebrated, a spirit of neighbourhood and belonging exists, where people are connected and where a balance between small town atmosphere and growth is maintained.

The Growth Strategy identifies that Sylvan Lake will continue to grow over time and that this growth ensure a mix of land uses including residential, commercial, and industrial uses. In addition to this, it suggests that a range of housing types and forms be offered in order to accommodate a mix of age and income levels. Sylvan Lake's Growth Strategy plan also describes a nurturing of park networks and recreational spaces that can facilitate informal social interaction and reinforce community identity by creating a distinct sense of place.

The Growth Strategy identifies the site for the uses of major public open space, commercial and residential land uses. The proposed development is generally compliant with the preferred land use concept identified in the strategy.

2.1.4 Municipal Development Plan

The Town of Sylvan Lake Municipal Development Plan Bylaw 111/96 ("MDP") is a statutory plan that provides broad long-range policies regarding the community's vision for the future development of the Town. The Outline Plan generally conforms to the policies of the MDP.

The following goals are set out in the MDP:

- 1) *To sustain and enhance the natural beauty of Sylvan Lake through commitments that will protect green areas, emphasize environmental considerations in the planning process and ensure effective waste management practices.*

The proposed development creates additional public green space through an MR contribution and the creation of a public trail network adjacent to the golf course.

- 2) *Take action in planning and implementing cost effective infrastructure programs to meet the challenges of growth and economic diversification.*

The provision of infrastructure outlined in this plan has been designed, and will be staged, to capture efficiencies.

- 3) *Determine the social and recreational needs of the community and prioritize the implementation of projects and services based on available resources.*

The commercial aspects of the proposed development will support creation of employment opportunities and site improvements will add to the recreational opportunities available by creating a higher quality golf course and campground experience.

Residential objectives are established in section 1.3, including these relevant ones that are addressed throughout this outline plan:

- To minimize conflicts between different housing types and between residential and other land uses.

- To facilitate access to adequate housing regardless of people's income ability or structural or functional needs.
- To encourage innovation and good design in housing development.

The MDP provides design guidance which is reflected in the design of the proposed development. This includes a high level of connectivity through streets with sidewalks and trail networks, a mix of clearly delineated housing types, consolidated Municipal Reserve with trail network, and a compliant population density.

A Commercial objective is established to enhance the commercial sector in terms of quality and quantity. Of particular relevance in policy 2.3.4 which states that the Town will encourage the development of tourism in and around Sylvan Lake through cooperation with interested parties to improve attractions and infrastructure. The development on and around Meadowlands Golf Course will enable improvements to the golf course itself as well as the campground and proposed recreational residential condo.

The MDP also discusses recreational objectives for conveniently located active and passive recreational facilities and establishment of reserves for municipal purposes. The development proposed in the Meadowlands Outline Plan entails a centralized Municipal Reserve and trail network, which will be augmented through a cash-in-lieu amount to achieve the ten percent requirement of the Municipal Government Act.

2.1.5 Recreation, Parks, and Open Space Master Plan (2010)

This study provides direction and sets priorities for the future development of recreation, parks, and cultural opportunities and associated facility development in the Town of Sylvan Lake for a ten year planning horizon. Figure 10 of this document proposes a multi-way trail running east-west through the Site skirting the golf course, with a connection to the north across Memorial Trail. 50th Street also includes a multi-way trail. These multi-way trails are identified as long-term opportunities. The study also proposed an urban side path along the Memorial Trail frontage of the Site as a medium term opportunity.

2.1.6 50 Street and Memorial Trail Transportation and Planning Study (Draft, 2010)

This study is a preliminary functional report for 50th Street from Pelican Place to Highway 11 and for Memorial Trail from 60th Street to Highway 20. This study provides conceptual designs for Memorial Trail and 50th Street which are relevant to development of the Site.

2.1.7 South Area Structure Plan

The South Area Structure Plan Bylaw 1426/2007 ("SASP") was created to guide development in the southern portion of the Town. Meadowlands Resort is located in the south centre of the SASP planning area. The SASP's Land Use Concept identifies the Site as a golf course with perimeter residential nodes at the north and west Site boundary, and a commercial area at the northwest corner of the Site. Maximum residential density is not to exceed 40 persons per gross hectare. The proposal generally reflects the distribution of these land uses. The SASP requires that an Outline Plan be prepared prior to development within its boundaries. The Meadowview Resort Outline

Plan reflects the requirements of the SASP and its vision. The contents of this Outline Plan meet the information requirements set out in the SASP.

One specific requirement of the SASP is for an Outline Plan to make available two properties for the development of social spaces, including daycare facilities, religious assemblies, or adult/social care spaces. In response, the Development Concept includes “CNS” – Neighbourhood Shopping District and “R2” – Medium Density Residential which can be used if required for these purposes. Both of these land use districts include the Discretionary Uses of day care facility, and the R2 District also includes social care facilities. The application of these Districts in the proposed development will meet the intent of the SASP policy 7.2.5 for social spaces.

The Town is preparing amendments to the SASP. The amendments are anticipated to be consistent with this Plan.

2.1.8 Land Use Bylaw

The Town of Sylvan Lake Land Use Bylaw 1555/2010 zones the property Urban Reserve (“UR”). The UR District is intended to preserve land for future development, such as that proposed through this Outline Plan. Amendments to the Land Use District Map D1 are required to redistrict the property to reflect the land uses outlined in the Meadowview Resort land use concept. It is intended that the following Land Use Districts will apply to the plan area through a redesignation.

- The Commercial area will be redesignated to “CNS” Neighbourhood Shopping Centre.
- The Residential area will be redesignated to “R-1” Low Density Residential and “R-2” Medium Density Residential.
- The Campground, Recreational Resort Condo Site, and Golf Course will be redesignated “RF” Recreation Facility District.


2.2 Environmental Considerations

This section summarizes the results of studies of the natural environment completed to support the Outline Plan. These findings are summarized in Figures 2 and 3 which represent the constraints and opportunities to proposed development which have influenced the creation of the land use concept for the Meadowlands Resort and the policies of this Outline Plan.

2.2.1 Terrain and Soils

A geotechnical assessment was undertaken for the site by Parkland Geotechnical Consulting Ltd. in May of 2005. In 2014 Parkland Geotechnical Consulting Ltd reviewed the report and determined it remained suitable for its intended use. Based on the analysis conducted, which included several test holes (150 mm in diameter and 6 m in depth), the site soils are characterized by a topsoil layer over lacustrine (till), over weathered bedrock. The analysis determined that the glacial deposits (till) was found at 0.2m below grade and the bedrock layer was generally found between 0.5m – 2.8m below grade and that the competency of the bedrock increases with depth.

The geotechnical assessment identified that the site conditions are suitable for the proposed residential development. Recommendations were also provided to ensure that the site is stripped of topsoil and organics prior to pre-grading and that the site be brought up to subgrade level using



an approved fill. Site specific geo-technical investigations should be undertaken for the commercial sites once an individual lot layout is determined.

2.3 Man Made Considerations

This section summarizes the results of studies on the influences of the historic usage of the Site to support the Outline Plan. These findings are summarized in Figures 3, 4 and 5 which represent constraints and opportunities to development which have influenced the creation of the land use concept for the Meadowview Resort and the policies of this Outline Plan. Studies and reports on some of these items can be found in Appendix A.

2.3.1 Land Ownership

There are two legal parcels within the Plan area. Meadowlands Development Corporation is the controlling partner for both parcels.

2.3.2 Archaeology, Heritage and Culture


A Historical Resources Overview (HRO) was conducted for the Site by Bison Historical Services. The HRO determined that there was no evidence of historical resources, given that the majority of the Site was used as parkland historically. Based on air photos and topographic analysis, the proposed development area consists of a draped moraine that has a flat to undulating topography with local relief less than three meters. There are signs of cultivation activities in the NW and NE quadrants, increasing the likelihood of not finding historical resources. A Historical Resources Impact Assessment (HRIA) was not required. The Historical Resources Act Review and Clearance letter is attached in Appendix A.

2.3.3 Environmental Site Assessments

A Phase I Environmental Site Assessment was conducted by EXH Engineering Services Ltd. in September of 2005 to review the site for potential environmental risks associated with the property. The assessment revealed staining near the fuel tanks and the shop and that areas of environmental concern included the locations near the maintenance buildings (specifically, near to the fuel tanks, the burn pit, and the area surrounding the gas well). Additionally, a confined feeding operation (CFO) was located at the east of the property may impact or have implications for a proposed development from an odour perspective (a more recent Phase 1 Environmental Assessment does not identify this as a potential issue).

Based on the findings, it was recommended that development of the property exclude the areas around the shop, burn pit, equipment storage and well site. Additionally, the report conveyed that when and if these areas become developed, that a drilling program will need to be implemented to test for hydrocarbon, metal, and chemical contamination.

A Phase II Environmental Site Assessment was conducted by EXH Engineering Services Ltd. in May of 2006. Based on the Phase II Assessment, EXH concluded that there is no significant hydrocarbon, pesticide, herbicide, or metal contamination of the soil on the Site surrounding the fuel tanks and storage areas. Also there was found to be no salt contamination in the soil on the south and west of the oil and gas lease site.



Based on the Phase II Environmental Analysis Assessment, EXH concluded that there was very little evidence of significant environmental contamination within the subsurface soils. The assessment relates directly to the potential hydrocarbon, pesticide, herbicide and salt contamination at various locations on the site around the petroleum storage tanks and other chemical storage areas.

A Phase 1 Environmental Site Assessment was undertaken by WSP in 2014. The purpose of redoing the Phase 1 assessment was to ensure that there were no new items of concern stemming from uses in the intervening years since the EXH Engineering Services original Phase 1 assessment took place. The WSP report notes that there was no observed changes in the land uses between 2002 and 2013.

The WSP report revealed evidence of potential impact by hydrocarbons in the soil under the secondary containment unit of the above ground storage tanks in the maintenance area and hydrocarbons in the former well-site drilling sumps. Neither of these areas are identified for development in this plan. Further, the report identifies that a Phase II Environmental Site Assessment should be undertaken to identify the scope of the possible contamination. Should these areas be subject to development in the future then a Phase II Environmental Assessment should first be conducted.

2.3.4 Gas Infrastructure

Within the north central portion of the Plan area there is an active gas well. This gas well is serviced by a gas gathering line which generally runs north to Memorial Trail across private lands and through Municipal Reserve. This Plan does not propose any new development of a type restricted by the Alberta Energy Regulator within the required 100 m development setback. Lands within the 100 metre setback are proposed to be used for Municipal Reserve and a stormwater management facility.

2.3.5 Meadowlands Golf Course

A portion of the existing Meadowlands Golf Course occupies the majority of the Plan area. The components within the golf course include:

- Approximately half of the 18 golf holes
- Maintenance buildings and yard
- Golf course trails
- Clubhouse and parking area

Some golf holes will be shifted to accommodate the low density residential uses proposed in the north of the site and also the Recreational Resort Condo Area in the southwest corner of the site. The maintenance buildings and yard may be relocated.

2.3.6 Campground

North of the clubhouse is an existing private campground. The campground has undergone several expansions. Access to and from the campground is from the clubhouse road off of 50th Street.

This Plan contemplates tying the campground to urban services (water and sanitary) and an increase to 120 sites from the current number.

2.4 Community Consultation

Scheffer Andrew Ltd. held an open house on November 13, 2014. The event was held at the Meadowlands Golf Club from 6:00-8:30 PM and was advertised in the Sylvan Lake News for the two weeks preceding the open house.

In addition to the developer and consultant team, there were nine people in attendance at the open house. While there were questionnaires available for attendees to provide information, none were completed.

One request for information was received in the following week, which notified the developer of a nearby kennel operation that wished to be recognized.

Overall the response from attendees was positive.

Figure 1: Open House



3 Vision and Guiding Principles

The vision describes, at a broad high level, how the Meadowlands Resort will look and function when the Plan area is fully developed. The vision for the Plan area:

“THE MEADOWLANDS RESORT IS A HIGH QUALITY DEVELOPMENT THAT PROVIDES FOR A RANGE OF HOUSING AND RECREATION OPTIONS AND FURTHERS THE TOWN’S IMAGE AS A RECREATION DESTINATION.”

3.1 Guiding Principles

The Plan further defines the vision by establishing overarching principles. Four principles are outlined below and represent key ingredients to achieving the vision and are intended to shape growth by guiding the subsequent development concepts (land use, transportation, and servicing) and the implementation policies. Through the implementation of this Plan development within the Meadowlands Resort will occur based on the following principles:

1. ORDERLY & EFFICIENT EXPANSION

Provide a blueprint for expansion of the Town in an orderly and efficient development and servicing pattern.

Orderly and efficient expansion can be achieved through the following objectives:

- Provide efficient and economically feasible expansion of the Town’s infrastructure in terms of both capital investment and long-term maintenance.
- Conform to the Town’s infrastructure planning and studies.
- Conform to Provincial legislation and regulations.
- Establish development policies to guide growth.

2. DIVERSE & INCLUSIVE DEVELOPMENT

Provide a development that accommodates a variety of land uses to meet residents’ housing, working, social, and recreational needs. Including providing housing options which meet the needs of a wide range of people.

A diverse and inclusive development can be achieved through the following objectives:

- Provide convenient commercial uses to meet residents and visitor’s needs.
- Encourage a variety of short-term to long-term housing accommodations ranging from campground to low and medium density residential.



3. WALKABLE & CONNECTED DEVELOPMENT

Provide a development that is safely and conveniently navigable by foot, bicycle and vehicle.

A walkable and connected development can be achieved through the following objectives:

- Provide a built environment that considers various modes of transportation (i.e. vehicular, bicycle, and pedestrian).
- Provide a development that considers connections within and beyond the Plan boundary.

4. ENHANCED RECREATIONAL OPPORTUNITIES

Provide for diverse high quality leisure and recreation opportunities for both residents and visitors.

Enhanced recreational opportunities can be achieved through the following objectives:

- Preserve and enhance the Town's recreational opportunities.
- Increase the quantity of visitor and recreational accommodation.

4 Land Use Concept

This section outlines and describes the land use areas within this Plan and provides an accounting of the land use distribution.

The Land Use Concept shown in Figure 6 will form the basis for more detailed planning applications. These applications may be expected to change from those lot areas and land use areas set forth by Figure 6 due to outcomes from more detailed site planning and engineering.

4.1 Golf Course

Within this Plan the Golf Course area retains enough land to allow for the potential to:

- Expand golf facilities (i.e. clubhouse, maintenance/storage yard, event facilities),
- Reconfigure the clubhouse access, and
- Expand and formalize the clubhouse's parking area.

This Plan maintains the golf course, with relocation of several holes and conversion of the driving range to accommodate intended development. Proposed development (described in the below sections) is set back a minimum of 75 m from the centre line of the fairways to provide a margin of safety to the developments from errant golf balls.

The Plan proposes to re-designate the Golf Course to an appropriate Land Use District (Recreation Facility District) from Urban Reserve. The Golf Course is viewed as an asset to the recreational nature of the community and redevelopment should be in keeping with relevant planning policies. The redevelopment of the Golf Course to a different use would likely require an amendment to the Municipal Development Plan, South Area Structure Plan and this Outline Plan.

4.2 RV Campground

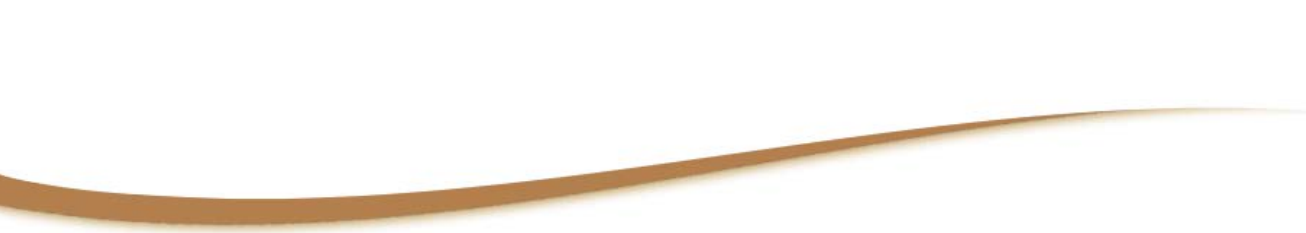
An existing Recreational Vehicle ("RV") Campground is located adjacent to 50th Street. The campground consists of about 90 existing sites with the intent to expand to 120 sites with private seasonal services. A Development Permit is required for expansion. The Outline Plan anticipates that the RV Campground will be re-designated to "RF" Recreation Facility District from Urban Reserve. A Development Permit will be required for expansion.

4.3 Recreational Resort (Condo Site)

In the southwest corner, adjacent to 50th Street and Highway 11, will be a Recreational Resort development with year-round services. To accommodate this development the existing golf course driving range will be converted to recreational resort accommodation.

The development will provide needed recreational accommodation options in proximity to amenities such as local golf facilities and Sylvan Lake. The Recreational Resort will provide accommodation for:

- Recreational Vehicles (such as motor homes or holiday trailers), and
- Park Model Units.



The development will be structured as a bare-land condominium where the individual lots are sold, and the maintenance of the roads and common areas are the responsibility of the condominium board. Intended road standards are discussed in the Transportation section of this Plan and also in the Traffic Impact Assessment prepared in support of this plan by Scheffer Andrew Ltd.

The developer of the site intends to establish guidelines and controls implemented through sale/lease agreements to maintain development quality and to regulate minimum Park Model/RV standards.

The development will benefit from the adjacent amenity of the golf course and clubhouse, as well internal private trails and amenity areas. The adjacent fairway of the golf course (hole #10) will be buffered from the RV lots by a stormwater management facility owned by the condominium association. The Recreational Resort will feature landscaped open space and leisure/golf cart pathways providing passive recreation, pedestrian/golf cart circulation, and connections to the golf course and clubhouse.

The current designation for this site is Urban Reserve. The intended redesignation is to the “RF” - Recreation Facility District.

4.4 Residential


There are 2.22 ha of “R1” Low Density Residential and 0.94 ha “R2” Medium Density Residential land at the northern edge of the Plan area along Memorial Trail. This small block of residential will offer attractive views of the golf course and be within walking distance of neighbourhood commercial uses and the golf course clubhouse while providing a diversity of housing choice, and recreational connections through the adjacent multi-use trails.

It is projected that this area could generate 36 units in a single family detached housing format in the R1 District and, by example, a further 26 units in duplex or semi-detached format in the R2 District. While Figure 6 Land Use Concept includes duplex homes, other types of medium density housing formats (such as row houses or 4-plexes) are also allowable housing forms in the R2 District. Market demands at the time of development may dictate that a more intensive residential development form is preferred over the semi-detached presented in the Development Concept. The technical supporting plans appended to this report include analysis of a more intensive residential format to enable the developer to adapt to changing market demands.

The lot layout shown in Figure 6 is conceptual and may change to reflect greater understanding of site conditions, engineering, and the market’s preferred housing forms. The proposed Land Use District is R1 Low Density Residential District and R2 Medium Density as conceptually delineated in the Development Concept.

4.5 Commercial

Adjacent to the intersection of 50th Street and Memorial Trail in the northwest is 4.11 ha of commercial. The site is located within the growing south end where in the future there will be a



number of residents and visitors within a five minute walk of the development. Additionally, as the Town grows this commercial site will benefit from good visibility and traffic volume from the adjacent roadways.

It is anticipated that the site will feature a mix of neighbourhood and district commercial uses such as restaurant, grocery store, retail shops, bakery, etc. The site is projected to have around 100,000 ft² (9,290 m²) of commercial space, though this may change based on market demands. The proposed Land Use District is the “CNS” Neighbourhood Shopping Centre District.

4.6 Parks and Open Space

This Plan features private and public open space opportunities. The Trails and Open Space Concept are shown in Figure 7.

The private open space takes the form of the Meadowlands Golf Course and future amenity space and trails within the Resort Recreational Area (condo site). The private open space will be retained and maintained under private ownership.

The public open space takes the form of a linear east/west trail corridor in the north of the Plan, which also provides public access to the West Pond which is the publicly owned stormwater management facility and includes the dry overflow pond.

The east/west trail corridor serves a dual purpose in that it provides a setback area between the campground and commercial uses, and an east/west pedestrian and bicycle link in a manner that corresponds with the Recreation, Parks and Open Spaces Master Plan. The trail connection will provide a safe and attractive access from the commercial destination node to the residential area and future development lands east of the Plan area. The width of the trail corridor is generally 20 m. The corridor will feature landscaping, trees, a trail, and benches.

The public open space will be dedicated as Municipal Reserve at the time of subdivision amounting to 4.34 ha.

4.6.1 Municipal Reserve

Most of the Gross Development Area is private open space, however the Development Concept provides for 4.34 hectares of Municipal Reserve in keeping with the recreational nature of the development. This excludes stormwater pond areas below the 1:100 year 24 hour water level. The Recreational Resort will have its own private open space to satisfy the needs of the residents of the resort. The balance of the required 5.928 ha of Municipal Reserve required to make up the necessary ten percent of the gross development area will be provided through a cash-in-lieu option.

The Municipal Reserve includes a portion of the gas pipeline and also provides an access to the public Stormwater Management Facility (West Pond). The overflow stormwater management area is also within the Municipal Reserve area but will not store water except during exceptional storm events (greater than 1:100 year) so is suitable to account for Municipal Reserve.

4.7 Public Utility Lot

The land to be identified as a Public Utility Lot includes only the area of the West Pond that is below the 1:100 year 24 hour water level. The West Pond is discussed in section 6.3.1.1 and also in the technical appendices to this Plan. The PUL area is 0.81 ha.

4.8 Land Use Distribution

The below table displays the land use statistics for the Plan area.

Table 1 – Land Use Statistics

	Area (ha)	% of GDA
Gross Developable Area (GDA)	59.28	
Net Developable Area	59.28	100%
Low Density Residential	2.22	3.7%
Medium Density Residential	0.94	1.6%
Recreational Resort	7.29	12.3%
Commercial	4.14	7.0%
RV Campground	4.74	8.0%
Golf Course	33.61	56.7%
Municipal Reserve	4.34	7.3%
Public Utility Lots	0.81	1.4%
Arterial and Local Roadways	1.20	2.0%

5 Transportation Concept

This section describes access to the development areas and internal circulation. The Transportation Concept is displayed in Figure 11. Refer to Appendix A for additional detail on street concepts.

5.1 Highway 11

Alberta Transportation has long term plans to construct an interchange at the intersection of Highway 11 and Highway 20. It is not anticipated that additional road right-of-way will be required within the Plan area to accommodate the interchange however land will be required from the NE 21 38-1-5 (quarter section to the east of the Plan area. Also, in the long-term the Province intends to close the existing right-in/right-out at the intersection of Highway 11 and 50th Street.

No access from the Plan area directly to Highway 11 is planned.

5.2 50th Street

The long-term role of 50th Street will be greatly diminished once the right-in/right-out intersection at Highway 11 is closed, and thus no additional road right-of-way is required. To improve the development/road interface in the short to medium term a linear Municipal Reserve buffer is located between 50th Street and the development.

Access to/from 50th Street is limited to three accesses from the Plan area:

- Access in the south from the Resort Recreational Condo area;
- Shared joint access between the Golf Course and RV Campground which also provides emergency access to the Resort Recreational Condo by way of a proposed access easement; and,
- Private driveway access to the Commercial development.

Spacing of the accesses exceeds TAC guidelines for a collector road which is functionally the level at which 50th Street currently operates and will operate at in the future.

5.3 Memorial Trail

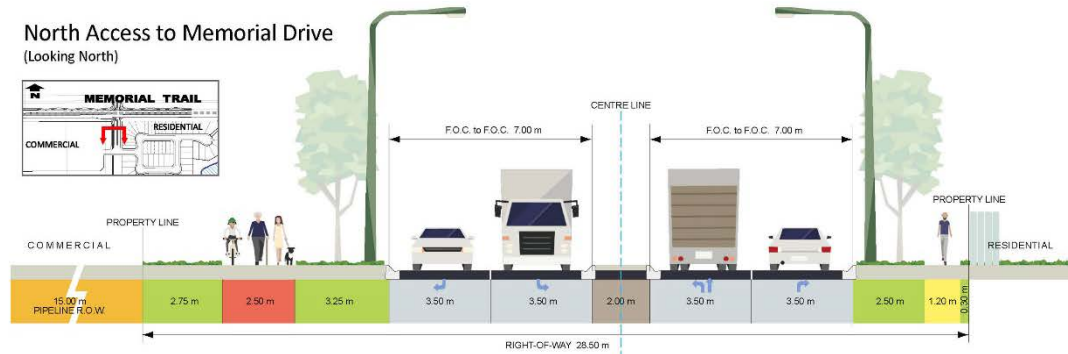
No changes to the Town's current planning of Memorial Trail are proposed with the exception that the intersection of Memorial Trail and 50th Street needs to be closely examined prior to its improvement. Current transportation studies have made assumptions on future traffic patterns however these assumptions cannot currently be validated as it would require the complete closure of the intersection of Highway 11 and 50th Street with sufficient time for new traffic patterns to be developed.

Currently the Town's planning for Memorial Trail is that it will be expanded to a four lane divided arterial roadway with limited access. To accommodate the expansion a 10 metre linear strip along the entire north boundary of the Plan area is required for road right-of-way. The land will be acquired through purchase by the Town, or dedication at the time of subdivision, dependent on the timing of road construction.

Access to/from Memorial Trail for the Plan area is restricted to a single all-turns intersection that has been aligned with the access with the proposed development access to the north in Crestview. No other access to Memorial Trail from parcels in the Plan area is proposed or planned.

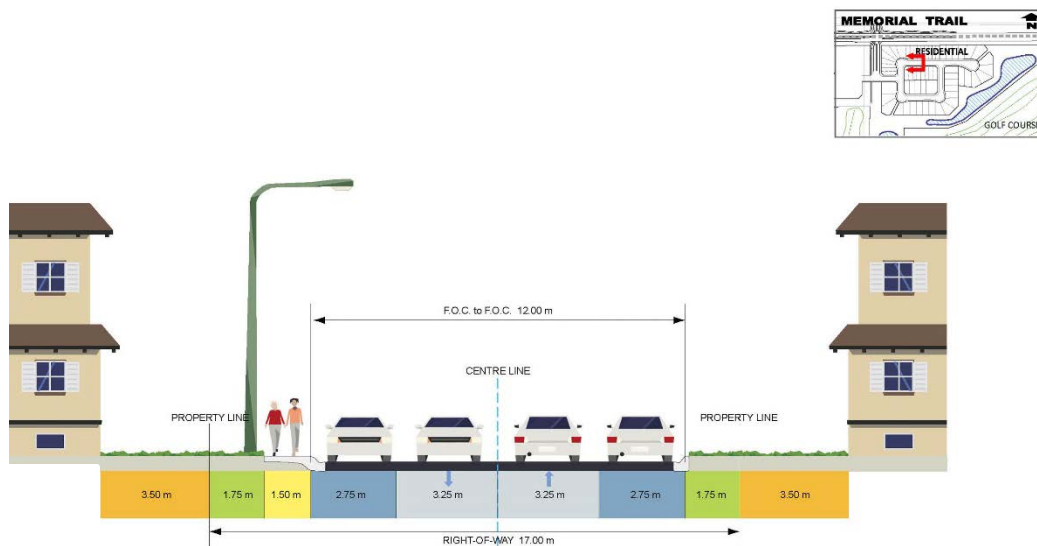
5.4 Entrance Road from Memorial Trail

The joint entrance roadway for the Commercial site, single family residential site, oil well access and stormwater management pond access is planned to meet or exceed the Town's standards for a collector road. An additional strip of land has been added to the west (left) of the Town's standard collector road section because this land is currently a gas well line utility right of way (UROW) which would be partly in the proposed collector road right of way. The land also allows for a trail to provide the pedestrian connectivity from the Plan area to Memorial Trail and a larger buffer to the commercial site.



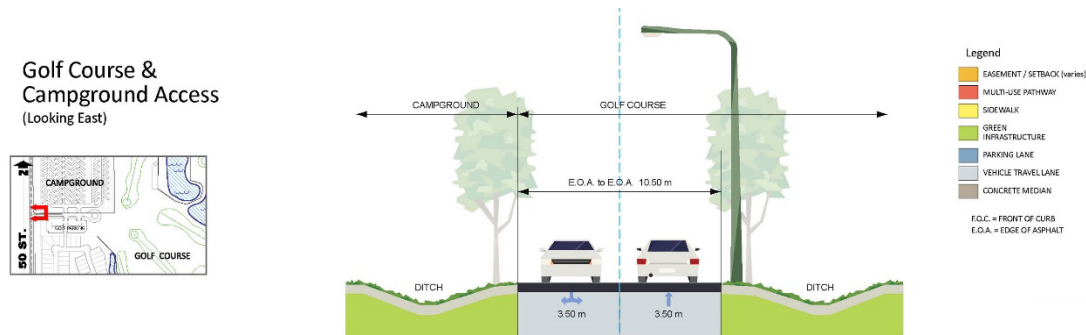
5.5 Local Residential Roads

The residential area is proposed to have public roads built to the Town's current local residential road standard. Refer to Appendix A for additional detail on street concept example below.



5.6 Access to the Golf Course and Condo Site Access

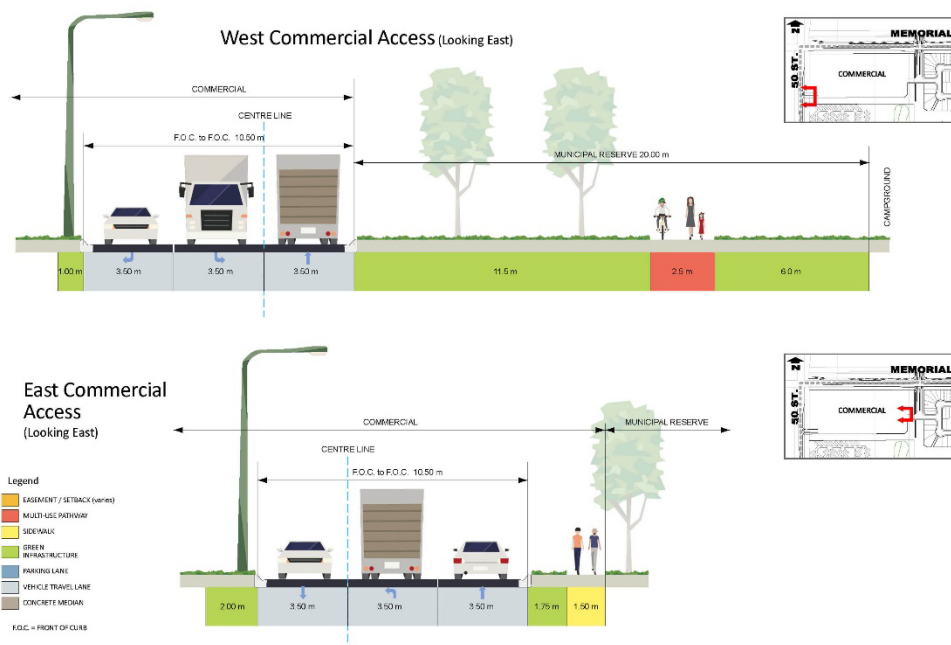
The access to the Golf Course and the Resort Recreation area will have the same configuration of access. The traffic at these accesses was found to require only a basic simple access. As such only a simple access is proposed at these locations. Refer to Appendix A for additional detail on street concept below.



5.7 Access to the Commercial Site

The access to the Commercial site was found to require exclusive left turn bays to maintain desirable levels of service. As such the access to 50th Street will be constructed with an exclusive southbound left turn bay and a left turn lane for west bound left turning vehicles.

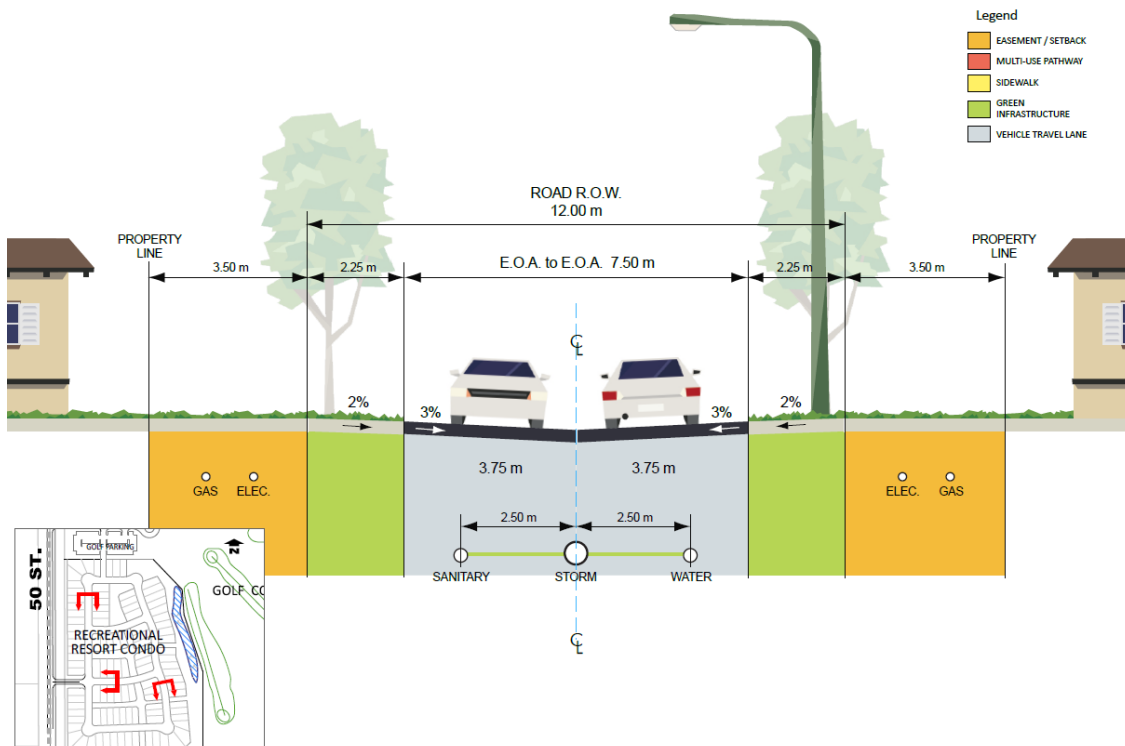
The access to the commercial site on the east side of the commercial site will include an exclusive lane for east bound left turning vehicles. Refer to Appendix A for additional detail on street concepts above.



5.8 Private Roads

The Golf Course, RV Campground, Resort Recreational area, and Commercial development will all have private roads. The private roads will be owned, operated and maintained by the land owners and/or condominium boards. Standard sections for these roads will be submitted with each proposed development application.

The road cross section for the private roads in the Resort Recreational area are shown in the figure below. Road structure for the Resort Recreational Condo will be in accordance with the Town of Sylvan Lake's local roadway standards.



6 Servicing Concept

The general servicing concept is described below. At the time of subdivision or development permit application modelling and design will be completed to refine the concept.

6.1 Water

Figure 8 identifies the proposed water services and Appendix A includes a servicing report.

The elevation boundary of the Town's middle and upper pressure zones transects the site. Based on the elevations the commercial area, the northwest 75% of the campground, southwest 30% of the condominium site are located within the upper pressure zone. Based on the elevations the golf course club house, residential and the remainder of the campground and condo sites are in the middle pressure zone.

The water servicing of the subject area requires two connections to the existing water network to meet Sylvan Lake Design Guidelines. The best way to achieve this is to:

- First extend the water main south from the Crestview subdivision, north of the Meadowlands Resort, to service the golf course clubhouse and campground; and,
- Second extend the water main south from the reservoir in 50th Street to the condo site.

The planned loop through the commercial site will ensure that adequate fire protection is available for the commercial site and there is sufficient flow for the future development in NW21 38-1-5.

Initially the golf course club house and campground will be in the middle pressure zone. Once the connection to the water reservoir is made, to keep the water network simple, the whole site will be in the upper pressure zone with a PVR at the tie-in to the development to the north which is in the middle pressure zone.

6.2 Sanitary

Figure 9 identifies the proposed sanitary system concept, and Appendix A includes a report. The following sanitary sewage collection system is proposed:

- Sanitary sewage will be drained by gravity from the commercial area and single family residential area on the north side of the Site. This will require the north residential site to be raised approximately 0.5 to 1.0 metres on the road and front of the residential properties; raising of the residential site will likely lend itself to the creation of some walkout lots.
- For the remainder of the subject area, the sanitary sewage is collected to a lift station near the golf course clubhouse. From the lift station, a force main shall run east across the golf course and north to a manhole of the above proposed gravity sewage system. The ownership, operation and maintenance of the lift station will have to be resolved as three distinct properties will drain to the lift station.
- Examination of the possibility of draining the entire subject area via gravity was made but, this option has the following downsides:

- The depth of the sanitary main will be insufficient to allow for gravity servicing of basements at the condo site and at the golf course clubhouse,
- The sanitary sewer mains will require insulation for frost protection,
- All pipe grades will be at the minimum allowable by standards, and
- There is little flexibility in design and very low tolerance of errors.

It is recommended that the commercial area and residential area on the north side of the Site be drained by gravity.

6.3 Storm Water Management

Figures 10 and 10A identify the stormwater management concept. Appendix A includes a stormwater management report. The following description summarizes the preliminary design.

The existing golf course and RV Park mostly occupies the Plan area. The site generally drains towards a low spot in the middle of the quarter section (the existing pond's water surface elevation is approximately 778.5). It also appears that approximately one third of the quarter section to the east also drains into the low spot. The golf course has numerous drainage ditches that direct runoff into the low spot. Drainage of the low spot appears to be mostly from infiltration and evaporation as the golf course would be substantially flooded before ponding reaches the overland spill elevation of 781.5 on the north side of the subject area. The golf course currently pumps excess water to the north ditch of Highway 11 east of the site. The golf course also currently uses runoff collected in the low area by several purpose-built ponds to irrigate the golf course.

The proposed development of the Site will increase its percentage of imperviousness resulting in increased peak and volume flows. These increased flows could potentially decrease the quality of the runoff. The stormwater management concept is to:

- Provide onsite detention to store runoff from the Site:
 - And allow the golf course to continue to use runoff collected for irrigation; and,
 - Where excessive runoff for irrigation occurs, to allow off-peak pumping of the stored water to downstream receiving lands at less than predevelopment flows.
- Provide manmade facilities to improve water quality.
- Manage runoff from the development to:
 - Reduce to acceptable levels the inconvenience caused by surface ponding within the development area from a 1 hour duration 1:5 year rainfall event,
 - Reduce to acceptable levels the potential risk of property damage from flooding from a 1-hour duration 1:100 year rainfall event, and
 - Prevent flooding during a 24-hour duration 1:100 year rainfall event.
- Utilize the existing topography as much as practical to minimize the work required to develop stormwater management facilities.

The proposed development includes a bare-land condo site to be built on the existing driving range in the southwest corner of the Site. It is proposed that the condo site include a stormwater management facility to provide attenuation of peak flows from the condo site, as well as, providing increased separation from the golf course. As this storm facility will be located on the condo site it will be owned, operated and maintained by the condominium corporation.

6.3.1 Stormwater Storage Facilities

Three stormwater storage facilities are proposed to be located in the low spot in the center of the quarter section. These ponds are referred to as the West Pond (a wet pond comprised on Municipal Reserve and a Public Utility Lot), the Central Pond (a wet pond owned by the Golf Course) and the East Overflow Pond (dry pond in the Municipal Reserve). A schematic of the proposed relation between these ponds is found in Figure 10A.

6.3.1.1. West Pond

The West Pond is a wet pond planned to be a municipal stormwater management pond with the following characteristics:

- Dedicated to the Town of Sylvan Lake to own, operate and maintain;
- Receives and treats runoff from developed sites;
- Discharges to the Central Pond storage facility;
- Area below the 1:100 year 24 hour water level will be dedicated to the Town as Public Utility Lot and land above the 1:100 year 24 hour water level will be dedicated as Municipal Reserve;
- Public controlled access is required with vehicle access to all control structures and routine maintenance areas;

6.3.1.2. Central Pond

The Central Pond is a wet pond planned as an irrigation storage/stormwater management facility with the following characteristics:


- Owned and managed by the golf course;
- Receives flows from the golf course and overflows from the municipal stormwater management pond (West Pond);
- Irrigation pumping inlets for irrigation of the golf course.

6.3.1.3. East Overflow Pond

The East Overflow Pond is a dry pond stormwater management facility:

- Located within the Municipal Reserve and suitable for recreation uses when not in an overflow state;
- Receives flows from the golf course;
- Receives overflows from the Central Pond.

The operational philosophy of the three pond approach is that the West Pond will have a normal water surface elevation approximately 1.0 metres higher than the Central Pond, with a small control structure between the two ponds. The control structure will allow for runoff from the West Pond to flow into the Central Pond when the normal water surface elevation is exceeded in the West Pond.



During and after a major rainfall event both ponds will have the same water surface elevation, but as the golf course draws down the golf course pond the water surface elevation in the West Pond will be maintained at its normal water surface elevation while the Central Pond can be drawn down further. This setup has the advantage of maximizing stored water volume for the golf course at the same time as minimizing water level fluctuations in the West Pond. The East Overflow Pond provides extra storage for use during extremely wet weather and extreme rainfall events and is not planned to store water from a 1:100 year event and is therefore suitable to locate within the Municipal Reserve.

Water in excess of the Central Pond's storage capacity for irrigation purposes will be pumped to the north ditch of Highway 11 east of the site. It is possible that the existing storm main could be extended south to provide an emergency overflow to protect the residential area from flooding during extreme wet weather without requiring reliance on pumping.

The low area currently has ponds located in it for golf course irrigation uses. These ponds will be redeveloped into stormwater management facilities.

6.3.1.4. Recreational Resort (Condo Site) Pond

There is a fourth pond proposed for the bare-land condominium site to be built on the existing driving range on the southwest corner of the site. It is proposed that this site include a stormwater management facility to provide attenuation of peak flows from the condominium site as well as providing increased separation from the golf course. As this facility will be located on the condominium site it will be owned, operated and maintained by the condominium association.

6.4 Shallow Utilities

There are no major servicing concerns regarding shallow utilities. All shallow utilities will be extensions of those already in place.

7 Implementation

The implementation strategy of this Plan outlines a basic structure and sequence for future development phases and provides implementation policies for achieving the vision and principles.

7.1 Implications for Adopting the Plan

This Plan has been prepared to be generally consistent with relevant local and provincial legislation, plans, bylaws, and regulations. Consistency with the following key municipal documents may need to be addressed due to both the adoption of this Plan and the eventual adoption of numerous plans and bylaws currently in draft form. Proposed amendments to the following documents may require amendments to the Plan:

- Municipal Development Plan (MDP)
- South Area Structure Plan (SASP)

Amendments to the land use designations within the Land Use Bylaw will be required prior to the approval of subdivision or development of any portion of the Plan area. Deviation from the Land Use Concept or policies set out in this plan will require amendments to this Area Structure Plan, excepting a change in the type of development on lands identified as the R2 District so long as the proposed change conforms to the R2 District list of uses.

7.2 Development Phasing and Sequence

The Plan area will be developed in four phases. Phasing is dependent on a number of matters, including market demands. The exact timing of each phase may change and the sequence of phasing may change where an efficient and effective servicing outcome can be maintained.

Figure 12 displays the development phasing and Figures 12A, B, C and D correspond to each phase of development. Each phase of development has infrastructure pre-requisites / co-requisites. These may have already been completed with a prior stage or may need to be completed for the phase to be developed. By listing all of the infrastructure prerequisites / co-requisites for each phase an orderly pattern for development can be observed, although if for market reasons it becomes desirable to develop one phase before another the work required for that phase is clearly laid out because there is no assumption that the phases have developed sequentially.


INFRASTRUCTURE PREREQUISITES / CO-REQUISITES		RV Campground expansion & Golf Clubhouse upgrades	Recreational Resort (Condo Site)	Residential Area	Commercial Area
Existing infrastructure that does not require upgrading is not listed.					
Transportation					
Access to 50 th Street			✓		✓
Access to Memorial Trail				✓	✓
Potable Water Distribution					
Watermain extended from the existing watermain in the Crestview community south across memorial trail		✓	✓	✓	✓
Watermain extended from Memorial Trail south and then west across the golf course		✓	✓		
Water connection to the condominium site from the water line constructed from the Crestview Subdivision			✓		
Watermain down 50th Street from the existing water reservoir to the condo site and installation of a PRV valve on the waterline to the north approximately where the line crosses Memorial Trail			✓		
Sanitary Sewage Collection					
Sanitary sewer main extended from the existing sewermain in the Crestview community south across memorial trail		✓	✓	✓	✓
Public sanitary lift station constructed near the golf course clubhouse and a forcemain extended from the lift station east and then north to the sanitary sewer main extended from the Crestview community. (Alternately a gravity sanitary sewer main could be extended across the golf course on the same alignment		✓	✓		
Sanitary connection to the condominium site from the sanitary line constructed from the Crestview Subdivision			✓		
Sanitary lift station		✓	✓		
Stormwater Management					
Stormwater main across the golf course to the existing storm ponds		✓	✓		
Stormwater management facility (private)			✓		
Expansion of the Stormwater management facilities				✓	✓
Miscellaneous					
Golf clubhouse parking lot upgrade		✓			
All servicing for the Residential Area				✓	
Municipal Reserve, including the trail network				✓	
Revisions to the Golf Course,				✓	

7.3 Implementation Policies

The below policies will guide growth and development of the Plan area and assist with implementation of the Plan's vision and principles.


7.3.1 Development Policies

- 7.3.1.1. Subdivision and development shall be consistent with the Municipal Government Act, provincial regulations, municipal plans and regulations.
- 7.3.1.2. Low Density Residential shall provide housing forms that primarily consist of single detached dwellings.
- 7.3.1.3. Medium Density Residential shall provide housing forms that are of a multi-unit format (e.g. semi-detached, row houses, stacked row houses) as the market preference requires at the time of a subdivision application and in accordance with the R2 District.
- 7.3.1.4. Residential uses that back on to Memorial Trail shall have a visually impermeable fence no less than 2 metres in height.
- 7.3.1.5. The Resort Recreational Condo Area shall accommodate the development of recreational vehicles, and also those park model units which comply with the definition of Park Model Trailers in Canadian Standards Association standard CAN/CSA-Z241 Series-03, Park Model Trailers. Unless otherwise defined in CAN/CSA-Z241 Series-03 the maximum floor area for a Park Model Trailer is 50.17 m².
- 7.3.1.6. Architectural controls for the Resort Recreational Condo Area shall be created and enforced by the land owner to control the quality, condition, size and age of the units.
- 7.3.1.7. Pedestrian connections within the Commercial area shall be designed to be barrier-free and clearly marked to enable reasonable access by people with disabilities, seniors and/or children.
- 7.3.1.8. Parking lots within the Commercial area shall be broken up by landscaped islands and/or strips to reduce the appearance of large open asphalt parking areas.
- 7.3.1.9. Commercial developments should consider the views to the open space corridor and golf course through site and building design.
- 7.3.1.10. If more than one building is planned for the Commercial area, the design should result in the creation of a group of integrated buildings expressing their inter-relationship through the use of similar architectural elements such as window shapes, materials, colours and textures, and through integration of parking areas, pedestrian connections and signage.
- 7.3.1.11. Within the Commercial area strategically placed landscaping features, berms, and fencing shall be installed where appropriate to screen utility meters, garbage enclosures, outdoor storage areas, and loading areas from public view.

- 
- 7.3.1.12. Within the Commercial area accessory buildings and areas (i.e. loading, service and outdoor storage areas) should include design elements which reflect the design of the principal building.
 - 7.3.1.13. Geo-technical investigations are required for the Commercial Area prior to development and once a lot layout or commercial pad layout has been finalized.
 - 7.3.1.14. An Environmental Site Assessment is required prior to development of the Resort Recreational area to provide guidance in the remediation of the septic field.
 - 7.3.1.15. Should any archaeological resources, paleontological resources and/or historic period sites be encountered during any activities associated with land disturbance operations Alberta Culture must be contacted pursuant to the *Historical Resources Act*.
 - 7.3.1.16. Development adjacent to the golf course should consider providing view corridors to the golf course.
 - 7.3.1.17. All new development shall be setback at least 50 m from the centre line of the nearest golf tee box/fairway/green to ensure safety.
 - 7.3.1.18. The Plan area shall be designed as a safe community for residents, by employing Crime Prevention Through Environmental Design (CPTED) principles in the design of public and private spaces.
 - 7.3.1.19. Development adjacent to gas and oil wells shall be in accordance with the Subdivision and Development Regulation.
 - 7.3.1.20. Continued access for the gas well operator shall be accommodated through the development's Municipal Reserve and private lands as set out through the utility right of way.
 - 7.3.1.21. Developers shall employ mitigation measures to ensure that accumulation and spread of construction debris and erosion is limited.

7.3.2 Servicing Policies

- 7.3.2.1. Utility rights-of-way for municipal infrastructure and access shall be provided to the satisfaction of the Town.
- 7.3.2.2. The design of the stormwater management system shall consider Alberta Transportation's plans for the upgrade of Highway 11.
- 7.3.2.3. The infrastructure within the boundaries of the Resort Recreation Condo Area (including the stormwater management facility) shall be owned, operated and maintained by the land owner.
- 7.3.2.4. Fire hydrants shall be installed during each phase of development as required to ensure adequate spacing for fire department access.

- 
- 7.3.2.5. Stormwater pond areas being dedicated to the Town below the 1:100 year 24 hour water level shall be dedicated as a Public Utility Lot.
 - 7.3.2.6. The Commercial Area and the Residential Area shall have a sanitary system which is drained by gravity.
 - 7.3.2.7. The Golf Course, RV Campground and Recreational Resort (Condo Site) shall be serviced by a lift station pumping into the gravity system constructed to service the Commercial Area and the Residential Area.

7.3.3 Transportation Policies

- 7.3.3.1. All public roadways, intersections and accesses shall be developed to meet or exceed the Town's standards.
- 7.3.3.2. All deviation from the Town's standards in the development of private roadways shall be approved by the Town.
- 7.3.3.3. Transportation and servicing infrastructure shall be designed to accommodate lands outside of the Plan area, where appropriate, to the satisfaction of the Town.
- 7.3.3.4. Roadways within the Plan area shall be designed to accommodate the safe and efficient conveyance of protective and emergency services.
- 7.3.3.5. Where roadways and key pedestrian corridors intersect the design of the crossing will have special attention given to ensure the safety and efficient movement of pedestrians and bicyclists.
- 7.3.3.6. Pedestrian and bicyclist infrastructure (benches, street trees, lighting, bike stands, etc.) should be considered in key trail and road corridors.
- 7.3.3.7. No accesses to Highway 11 from the development will be considered.
- 7.3.3.8. No direct access (i.e. driveways, right-in/right-out) for individual parcels to Memorial Trail shall be considered.

7.3.2 Open Space Policies

- 7.3.3.9. In accordance with the Municipal Government Act Municipal Reserve will be dedicated at the time of subdivision.
- 7.3.3.10. The landscaping of public parks and open space shall incorporate xeriscape principles through the utilization of vegetation that minimizes or eliminates fertilization, mowing, pest control and irrigation.
- 7.3.3.11. Approximately 10% of the total area of the Resort Recreational development shall be designed for the purpose of private common open/amenity space.



20340_location.dgn

Figure 1 Location

Meadowlands Development Corp.

Sylvan Lake, AB

April 2015

Scale: 1:15000



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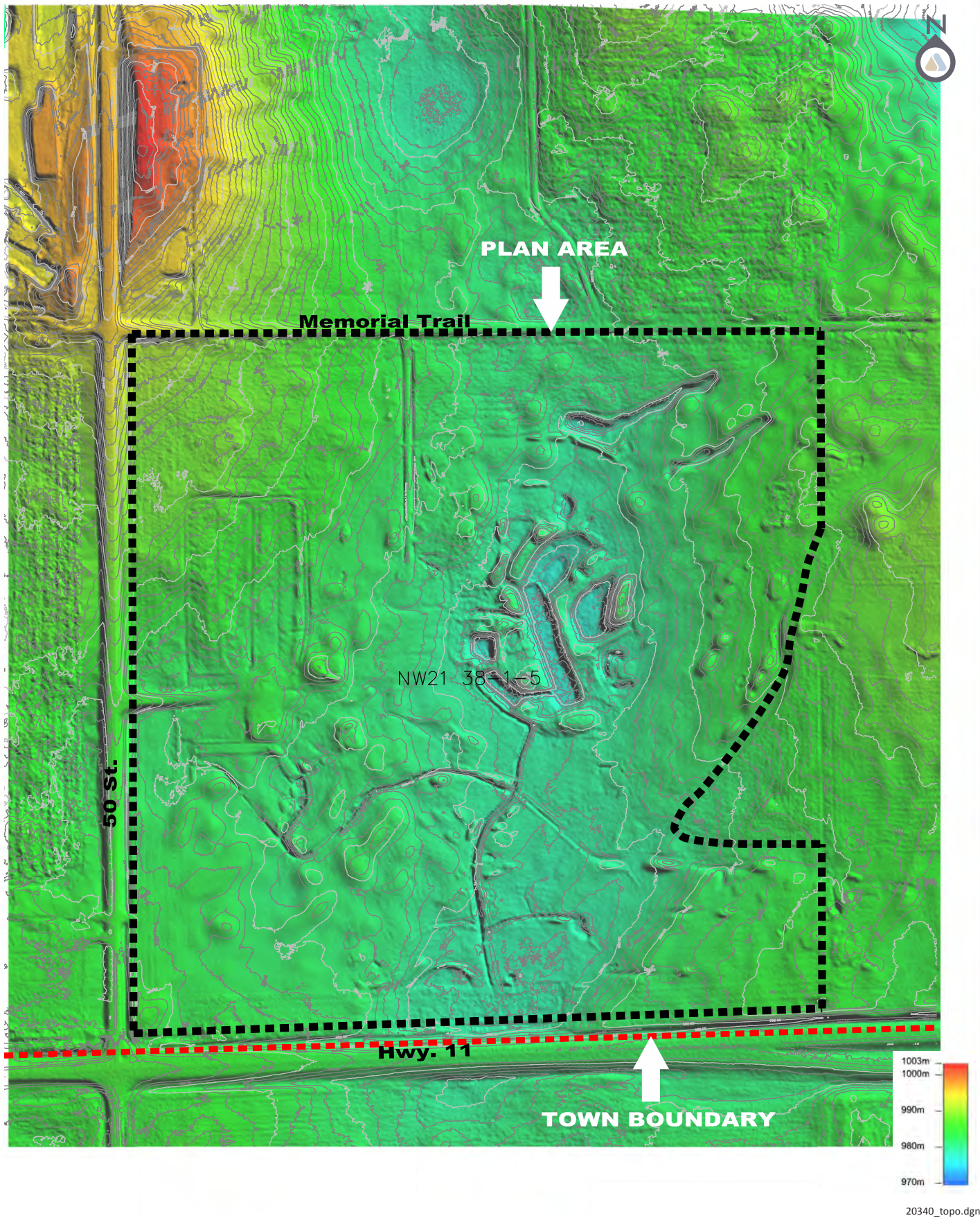


Figure 2 Topography

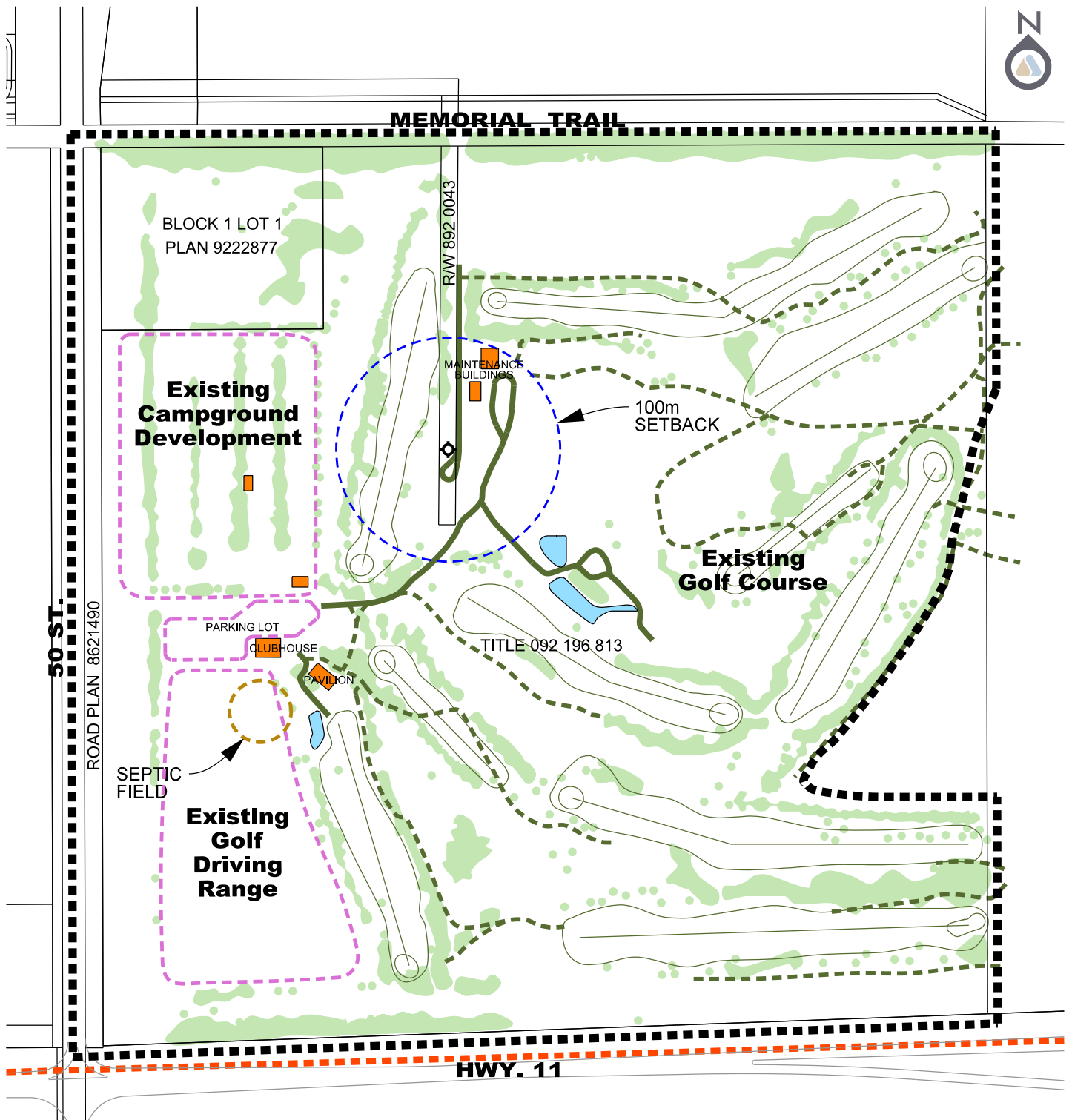
Meadowlands Development Corporation

Sylvan Lake, AB April 2015 Scale: 1:6000



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LEGEND

- Well Head
- 100m Setback from Active Well
- Existing Building
- Existing Storm Pond

- Existing Vegetation
- Golf Course Trail
- Access Road
- Plan Area
- Town Boundary

20340_constraints.dgn

Figure 3 Environmental & Manmade Constraints

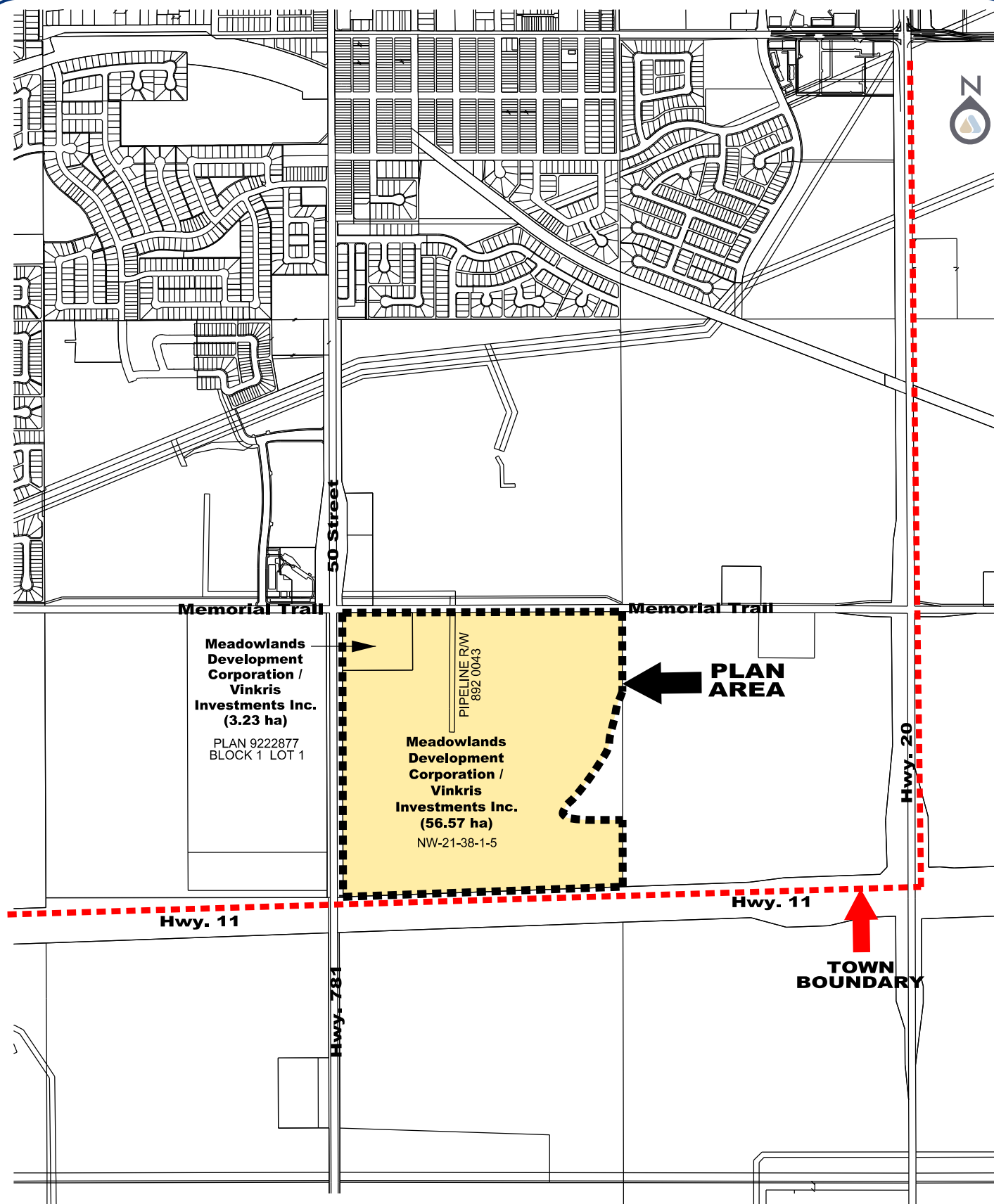
Meadowlands Development Corp.

Sylvan Lake, AB April 2015 Scale: 1:5000



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20340_ownership.dgn

Figure 4 Land Ownership

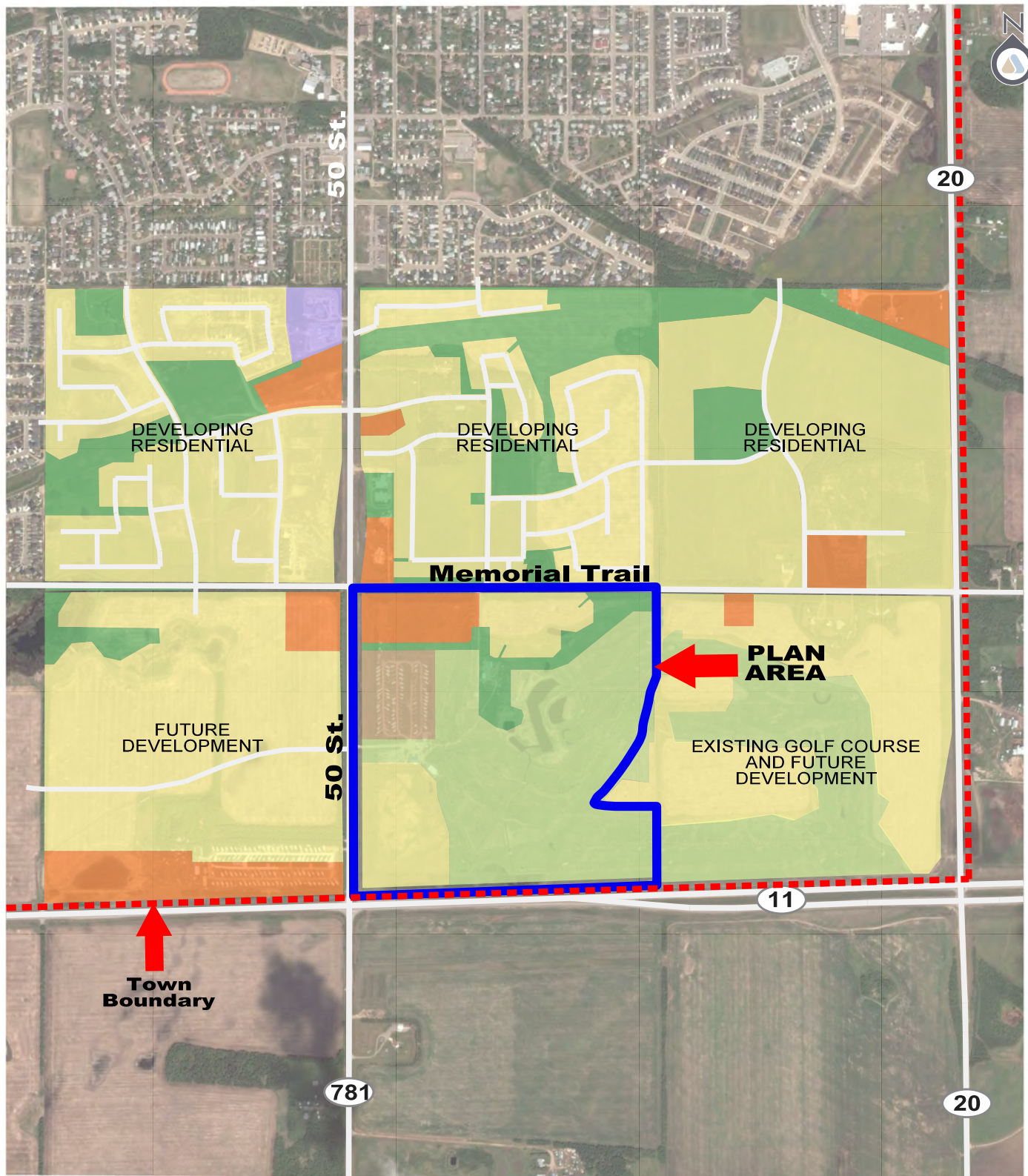
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LEGEND

 Residential	 Golf Course
 Open Space	 Campground
 Commercial	 Institutional

20340_surround}.pdf

Figure 5 Surrounding Uses

Meadowlands Development Corporation

Sylvan Lake, AB 28 April 2015 Scale: 1:15000

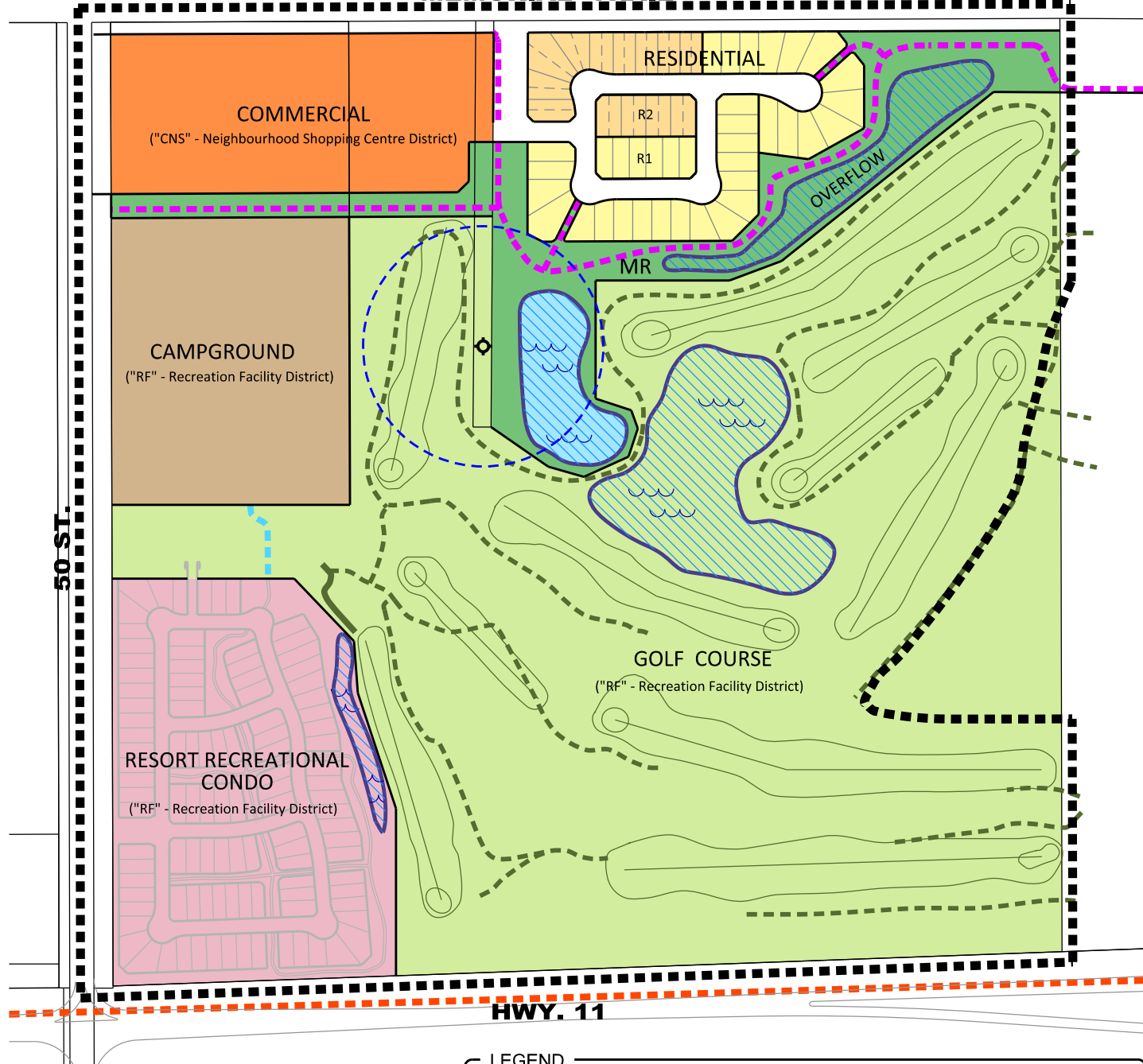


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MEMORIAL TRAIL



LEGEND

R1 - Low Density Res.	Commercial	Public (Community) Trail
R2 - Medium Density Res.	Existing Campground	Private Trail
Modular Home Park	Open Space (MR)	Well Head
Stormwater Mgmt. Facility	Golf Course	100m Setback from Active Well
Storm Pond (Golf Course/Resort Recreational Condo)	Golf Cart Trail	Town Boundary
	Golf Course Road	Plan Area Boundary

20340_devconcept.dgn

Figure 6 Land Use Concept

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Sylvan Lake, AB April 2015 Scale: 1:5000



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Total MR: 4.34 ha

LEGEND	
	Open Space (MR)
	Golf Course
	Golf Cart Trail
	Community Trail
	Private Trail
	Sidewalk
	Stormwater Mgmt. Facility
	Storm Pond (Golf Course/ Resort Recreational Condo)
	Town Boundary
	Plan Area Boundary
	Golf Course Road

20340_openspace.dgn

Figure 7 Trails & Open Space

Meadowlands Development Corporation

Sylvan Lake, AB

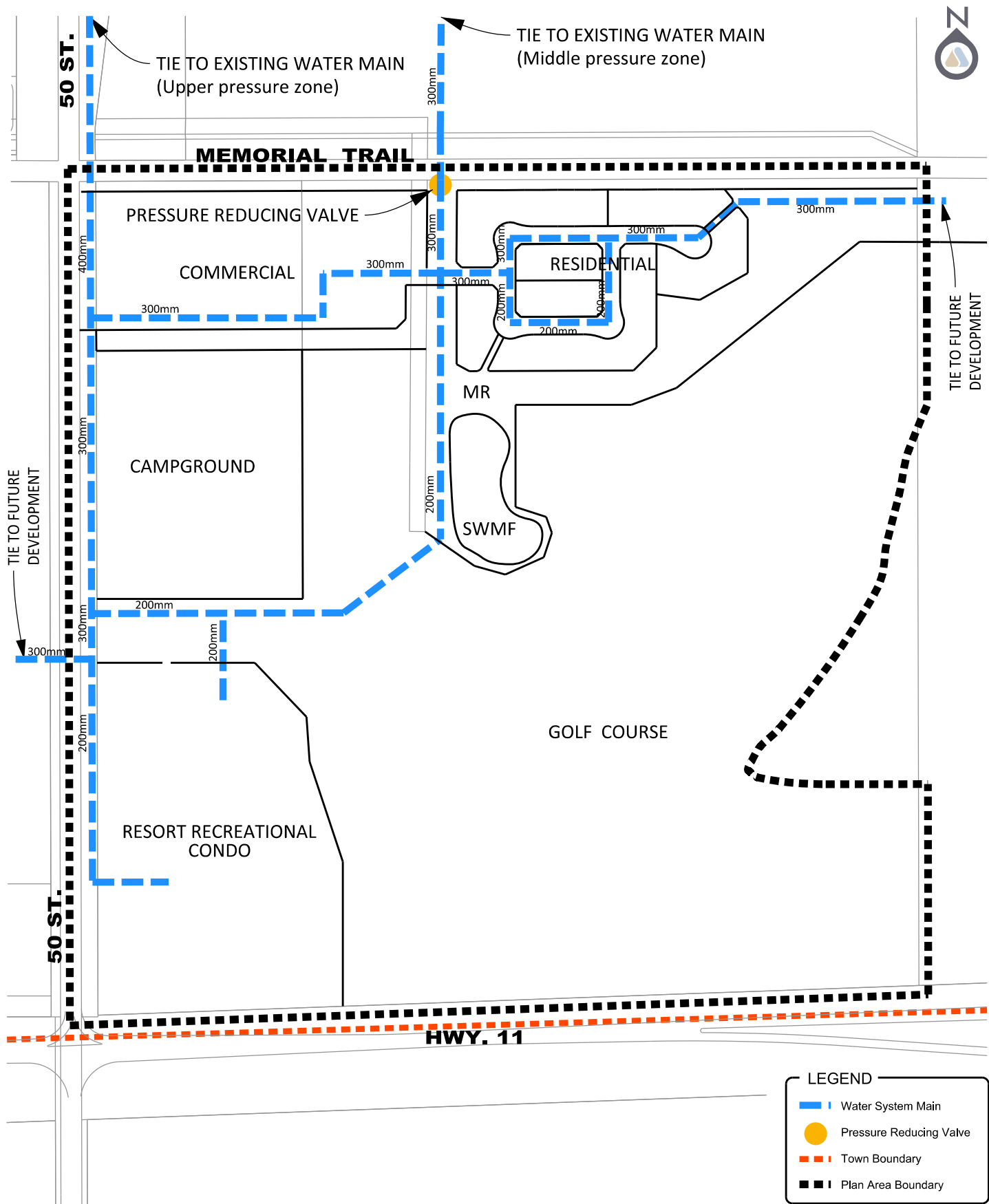
April 2015

Scale: 1:5000



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20340_water.dgn

Figure 8 Water System Concept

Meadowlands Development Corporation

Sylvan Lake, AB

April 2015

Scale: 1:5000



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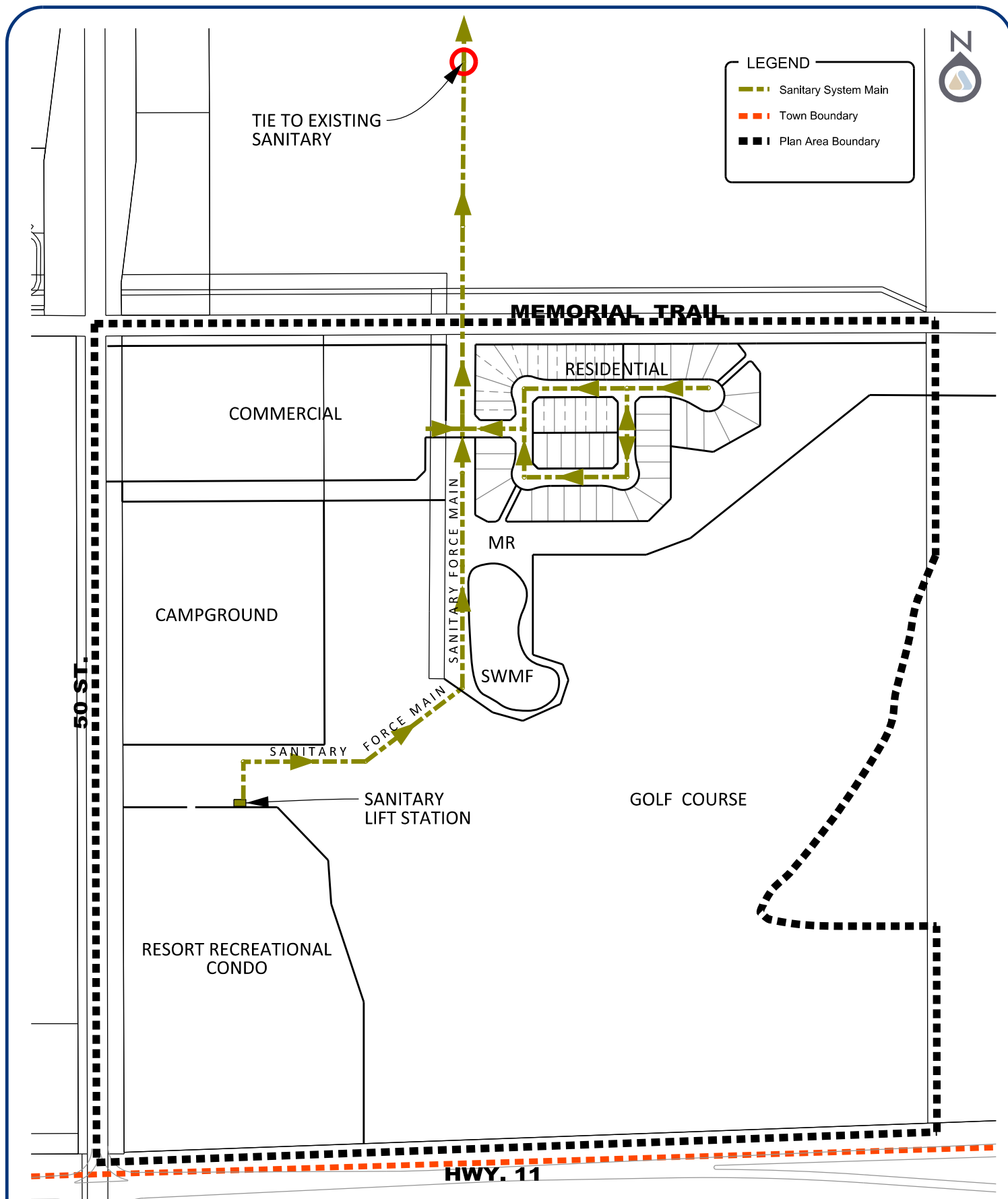
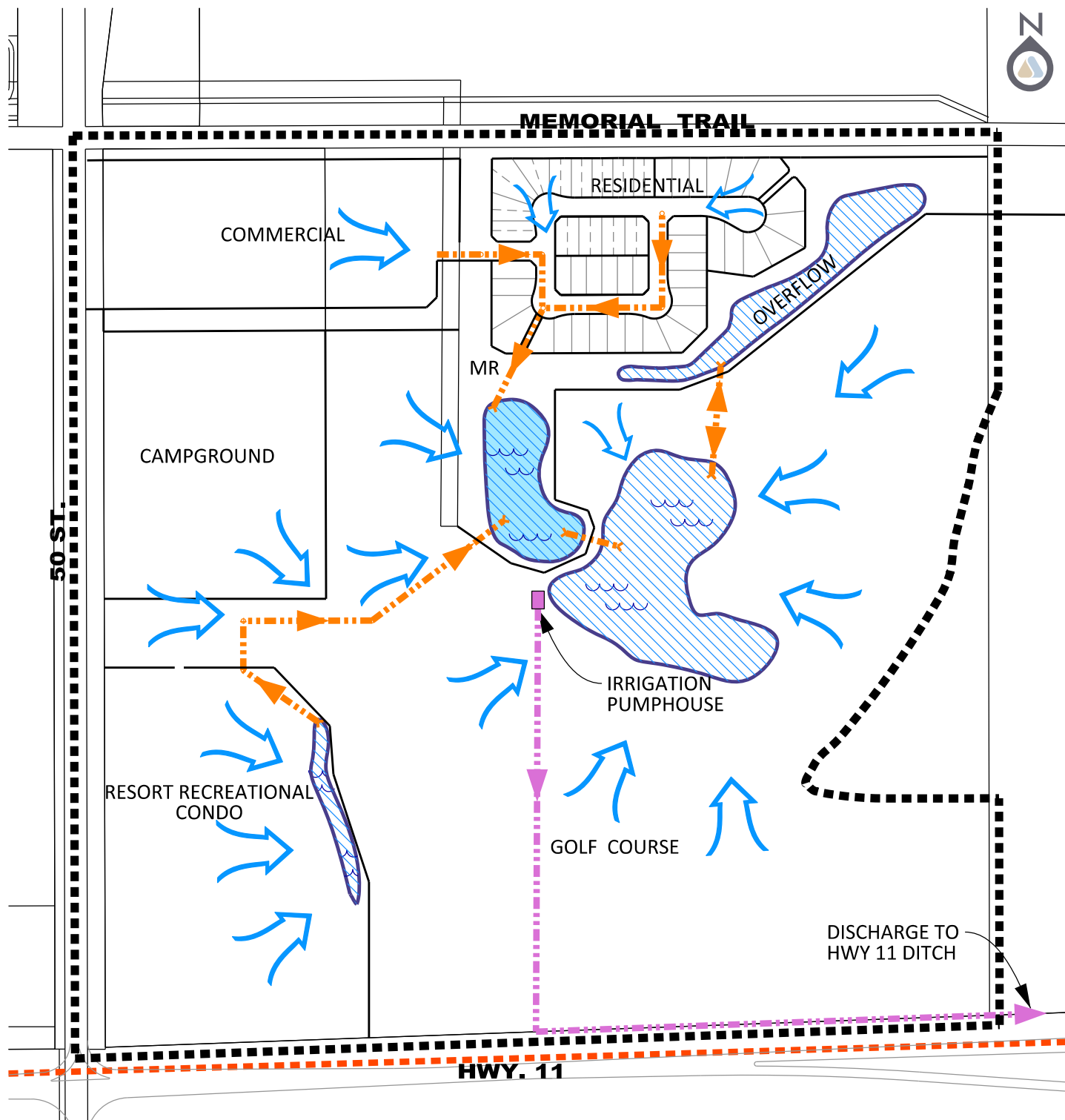


Figure 9 Sanitary System Concept
 Meadowlands Development Corporation
 Sylvan Lake, AB April 2015 Scale: 1:5000





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LEGEND

- Stormwater System Main
- Overland Flow Direction
- Pump Outlet (Extremely High Water Conditions)

-  Stormwater Management Facility
-  Storm Pond (Golf Course / Resort Recreational Condo)
- Town Boundary
- Plan Area Boundary

20340_storm.dgn

Figure 10 Stormwater Concept

Meadowlands Development Corporation

Sylvan Lake, AB April 2015 Scale: 1:5000



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Figure 10A

Stormwater
Management
Schematic

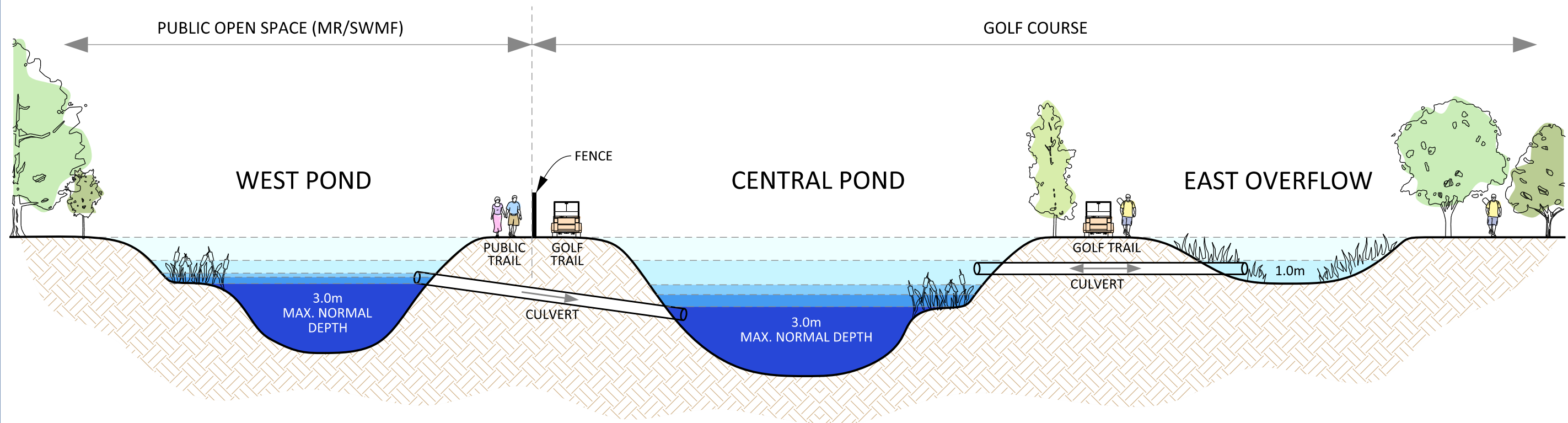
Meadowlands
Development
Corporation



Sylvan Lake,
AB

April 2015

Scale: NTS



Legend

- Normal water level
- 1:5 year storm, 1 hour event
- 1:100 year storm, 1 hour event
- 1:100 year storm, 24 hour event
- (2) 1:100 year storm, 24 hour events

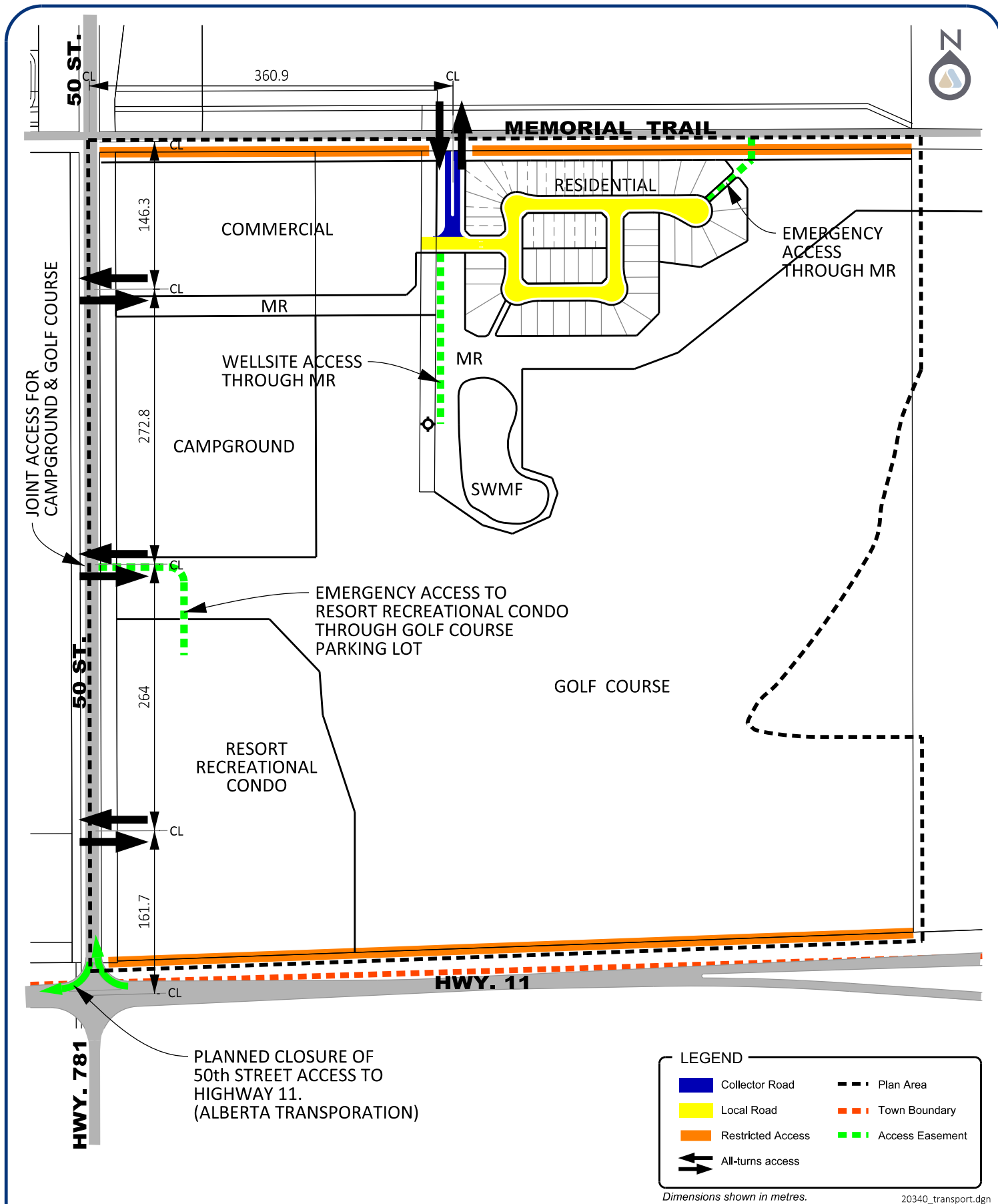


Figure 11 Transportation Concept

Meadowlands Development Corporation

Sylvan Lake, AB

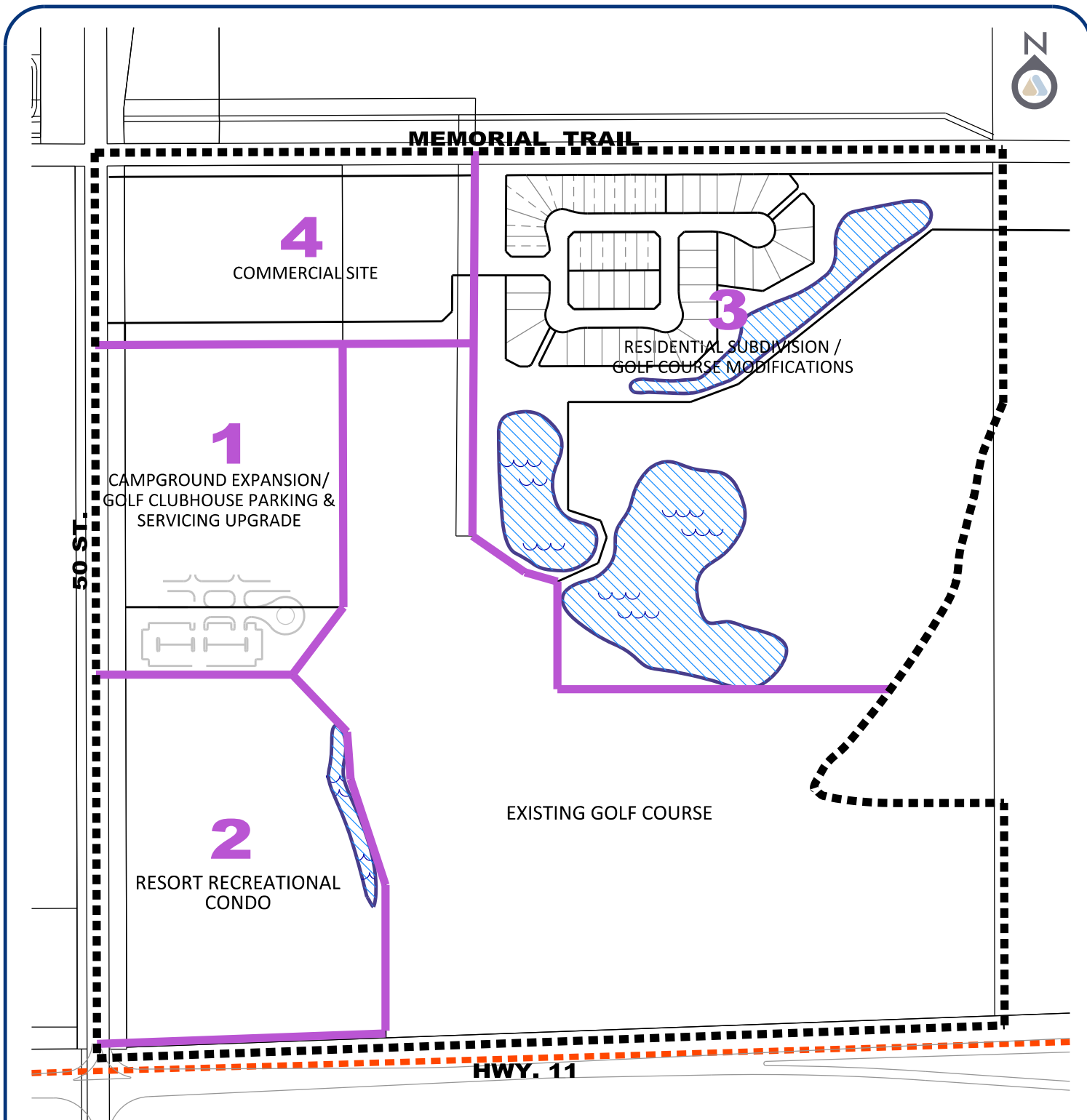
April 2015

Scale: 1:5000



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Figure 12 Phases of Development

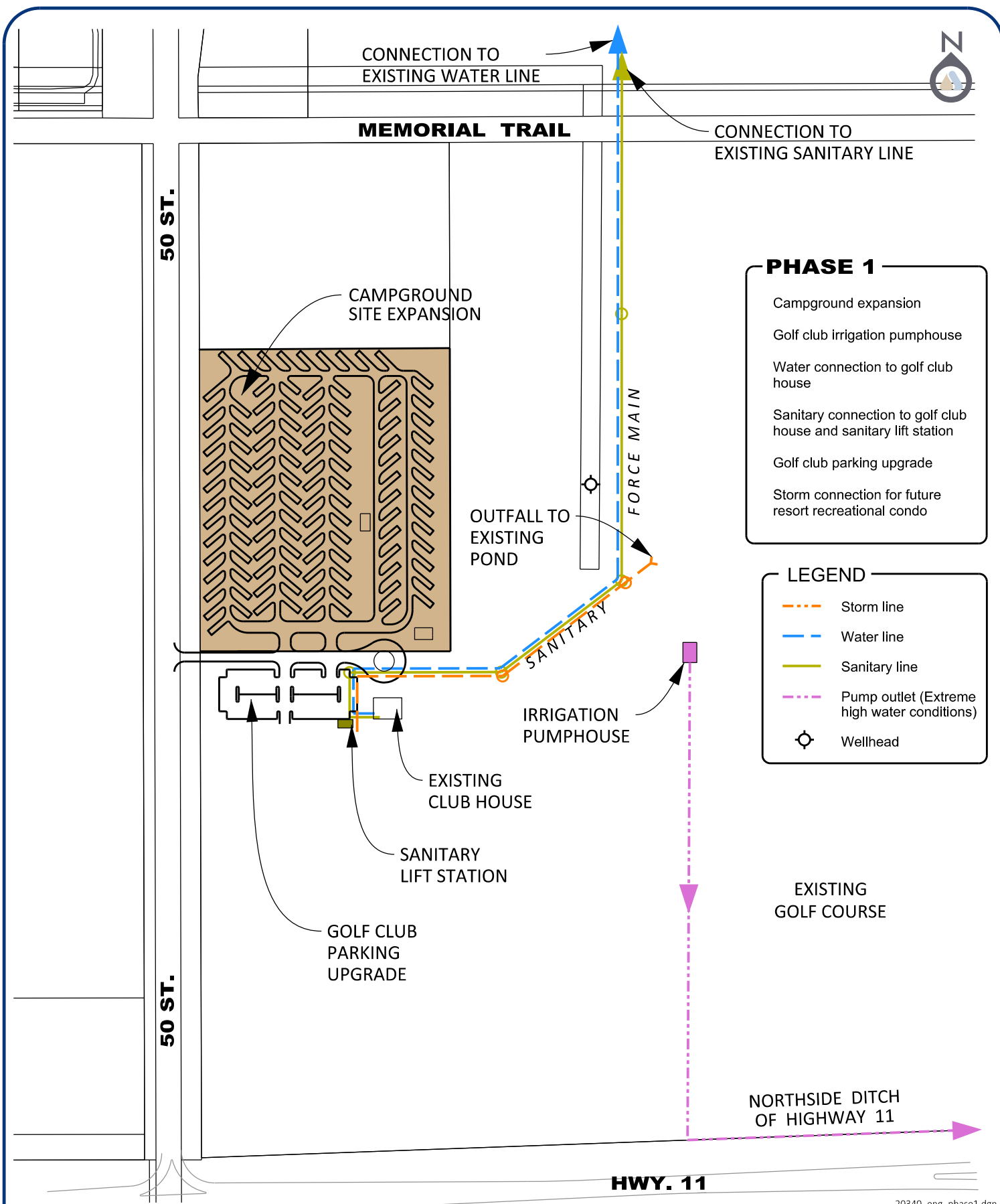
Meadowlands Development Corporation

Sylvan Lake, AB April 2015 Scale: 1:5000



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20340_eng_phase1.dgn

Figure 12A Phase 1 - Engineering Design

Meadowlands Development Corp.

Sylvan Lake, AB April 2015 Scale: 1:4000



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**MEMORIAL TRAIL**

CONNECTION TO
EXISTING WATER LINE

50 ST.

PHASE 2

Resort recreational condo,
including all servicing

Storm system for resort
recreational condo

Access from 50th Street and
Emerg. access from Golf parking

Water connection along 50th Street

Sanitary connection to resort recreational
condo from existing line (Phase 1)

CAMPGROUND SITE

WELLHEAD

WATER
CONNECTION
TO EXISTING
LINE
(PHASE 1)

EXISTING GOLF COURSE

EMERG. ACCESS

CLUBHOUSE

EXISTING SANITARY
LIFT STATION (PHASE 1)

RESORT RECREATIONAL
CONDO
STORM POND

ACCESS
FROM
50TH STREET

RESORT RECREATIONAL
CONDO
CONCEPTUAL
DESIGN ONLY

HWY. 11

50 ST.

20340_eng_phase2.dgn

Figure 12B Phase 2 - Engineering Design

Meadowlands Development Corporation

Sylvan Lake, AB

January 2015

Scale: 1:4000



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FUTURE RESIDENTIAL

WATER CONNECTION TO
FUTURE DEVELOPMENT (EAST)



MEMORIAL TRAIL

ACCESS FROM
MEMORIAL DRIVE

CONNECTIONS FOR
COMMERCIAL SITE
SERVICING (PHASE 4)

RESIDENTIAL SITE

OVERFLOW

CAMPGROUND
SITE

MR

GOLF COURSE REVISIONS

SWMF

GOLF COURSE
STORM POND

EXISTING
GOLF COURSE

EXISTING
GOLF COURSE

RESORT RECREATIONAL
CONDO

PHASE 3

Residential site
Access to residential site
(Memorial Drive)
All servicing for residential site
including expanded SWMF
MR including trail system
Golf course revisions including
expanded storm ponds

LEGEND

-  Storm line
-  Water line
-  Sanitary line
-  Golf trail
-  Storm pond
-  Wellhead

20340_eng_phase3.dgn

Figure 12C Phase 3 - Engineering Design

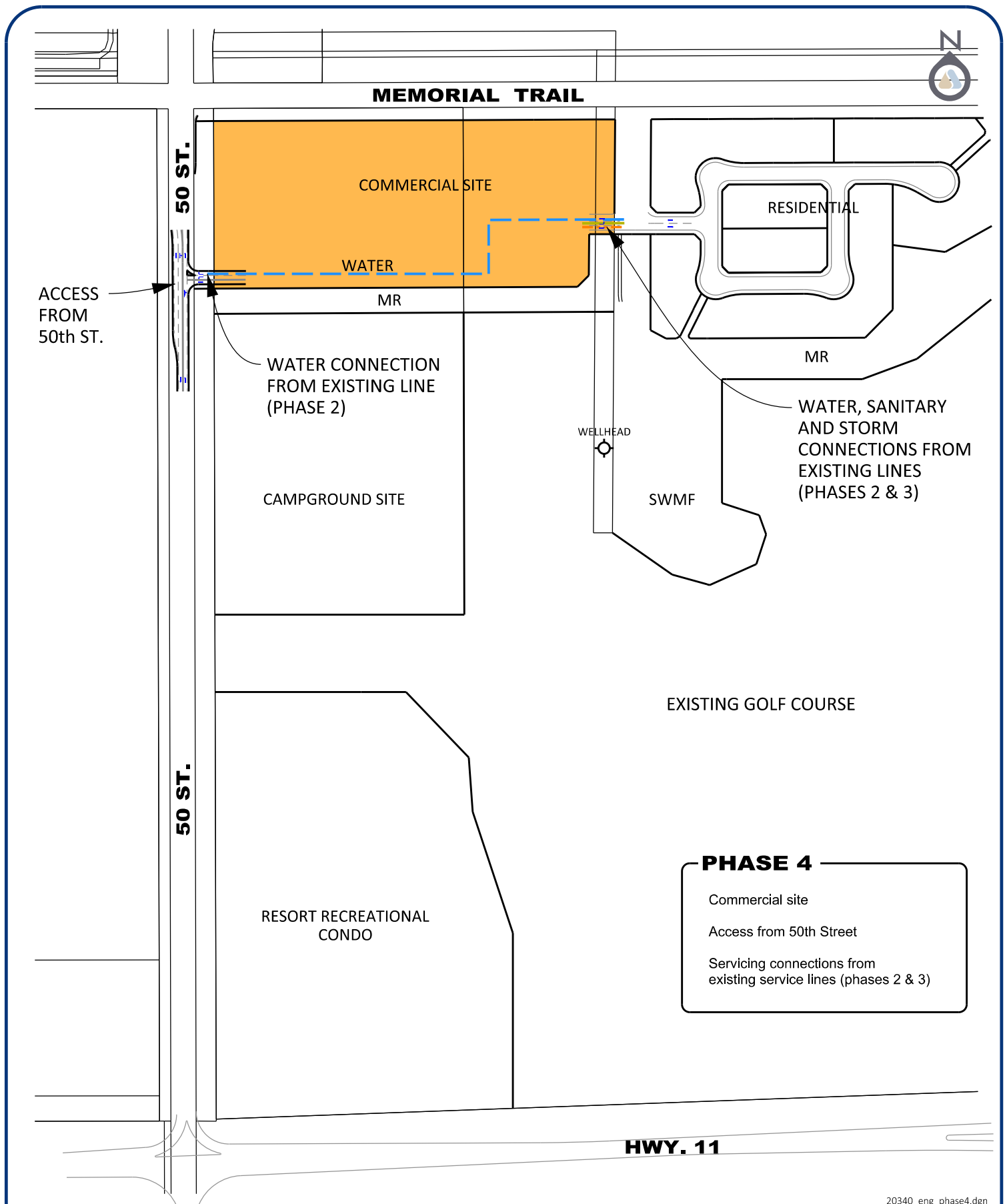
Meadowlands Development Corporation

Sylvan Lake, AB April 2015 Scale: 1:4000



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20340_eng_phase4.dgn

Figure 12D Phase 4 - Engineering Design

Meadowlands Development Corporation

Sylvan Lake, AB

April 2015

Scale: 1:4000



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