# KASAWAL AREA STRUCTURE PLAN



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# KASAWAL AREA STRUCTURE PLAN



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# 1.0 Introduction

## 1.1 PURPOSE

The purpose of the Kasawal Area Structure Plan (ASP) is to describe the land use framework and development objectives for the quarter section of land at the west end of Olds located south of Highway 27 and west 65 Avenue. The Kasawal property includes an area of approximately 51.0 hectares (126 acres) and identified by the Town as future residential development in the Municipal Development Plan.

The Kasawal ASP has been prepared by Stantec Consulting Ltd. on behalf of Marion and Ernie Kasawal.

The Kasawai's commitment through the Area Structure Plan is to develop a balanced community of residential and recreational opportunities with complimentary land uses. In order to achieve this, the Kasawai's intend to integrate the area with interconnected parks and open space linkages, and the development of high-quality residential opportunities. Together, these aspects will provide the Town of Olds with a unique area for community development.

Approval of the Area Structure Plan will provide the basis for proceeding with Kasawal's and the Town of Olds' vision for this area. The ASP provides the opportunity to develop components of the overall vision in the initial phases of development through a variety of housing forms and lifestyles, and by beginning the interconnected multi-use trail system incorporated as an integral part of the overall development concept.

The purpose of this document is to describe the land use pattern and development objectives for the Kasawal ASP. The ASP will implement the land use framework and development objectives by identifying the following:

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

The detailed design of each phase (redistrictings and plans of subdivision) will refine the concept presented by the ASP Bylaw for the Kasawal development.

#### 1.2 DEFINITION OF PLAN AREA

The Kasawal Area Structure Plan consists of land located within the NW ¼ Section 31-32-1-W5 and NE ¼ Section 31-32-1-W5 and includes an area of approximately 51.0 hectares. As shown on Figure 1.0 – Location Context, the ASP is defined by the following boundaries:

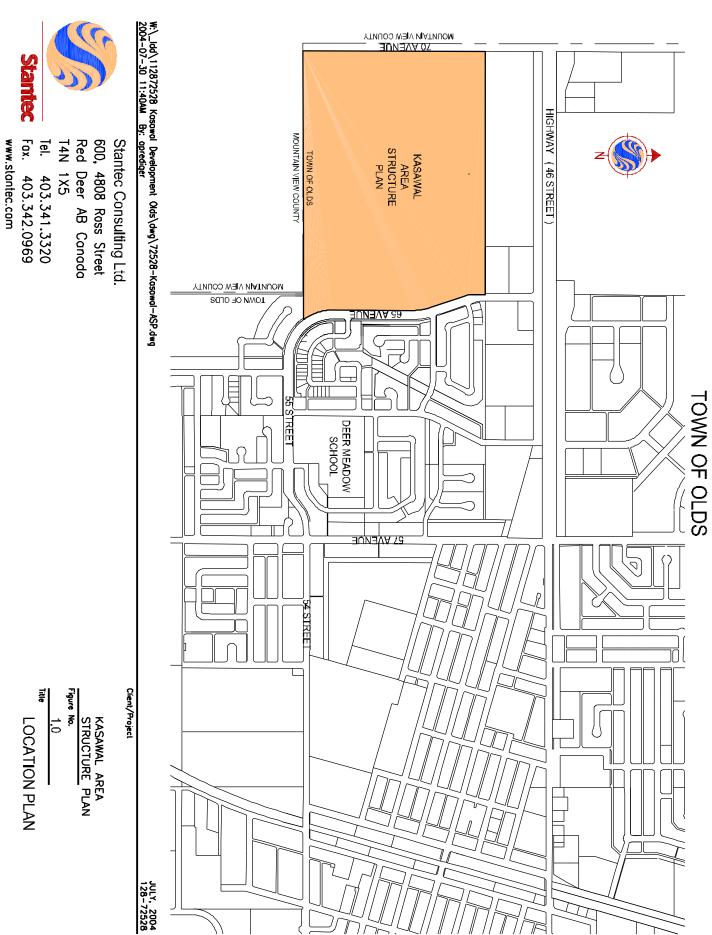
- S North Boundary Future and Existing Commercial Development
- West Boundary − 70<sup>th</sup> Avenue
- **East Boundary** 65<sup>th</sup> Avenue
- South Boundary SE 1/4 Section 31-32-1-W5 (undeveloped farm land)

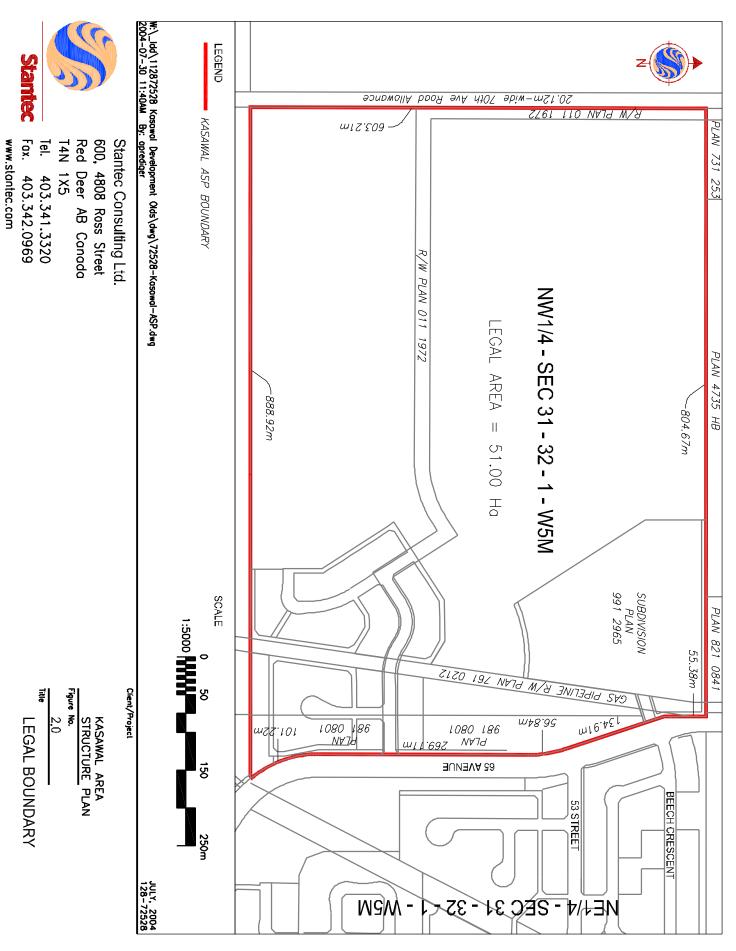
The property is legally described as the remainder of the NW ¼ Section 31, Township 32, Range 1, West of the 5<sup>th</sup> Meridian and the remainder of Blk 12 Plan 981-0801. Figure 2.0 – Legal Boundaries, illustrates the boundary of this development.

The Kasawal ASP constitutes a logical planning unit with respect to identifiable plan boundaries and servicing considerations and is located entirely within the Town of Olds boundary.

#### 1.3 BACKGROUND

The Kasawal Area Structure Plan has been prepared as a Statutory Plan. It adheres to Section 633 of the Municipal Government Act of Alberta and follows the guidelines and policies set forth by the Town of Olds for the development of new areas.





# 2.0 Site Context & Development Considerations

# 2.1 TOPOGRAPHY, SOILS & VEGETATION

As shown on Figure 3.0 – Existing Conditions, the topography of the Kasawal ASP slopes generally from the highest area in the south central portion of the Plan down to the north with the lowest areas in the northwest corner of the Plan. Elevations range from 1032.5m to 1023m for a total difference of approximately 9.5m.

Soils in the area consist of a thin layer of topsoil underlain by silt or clay, underlain by shallow bedbrock. The soil conditions do not present any impediment to urban development.

The area subject to the ASP has remained as vacant agricultural land for a considerable length of time. There is limited vegetation existing on the site aside from a windbreak of trees, which surround the existing acreage, located in the southwest corner of the Plan.

#### 2.2 HISTORICAL RESOURCES

There are no historical resources for this land identified in the current January 2001 publication (2<sup>nd</sup> Edition) of "A Listing of Significant Historical Sites and Areas" from the Alberta Historical Resources Foundation.

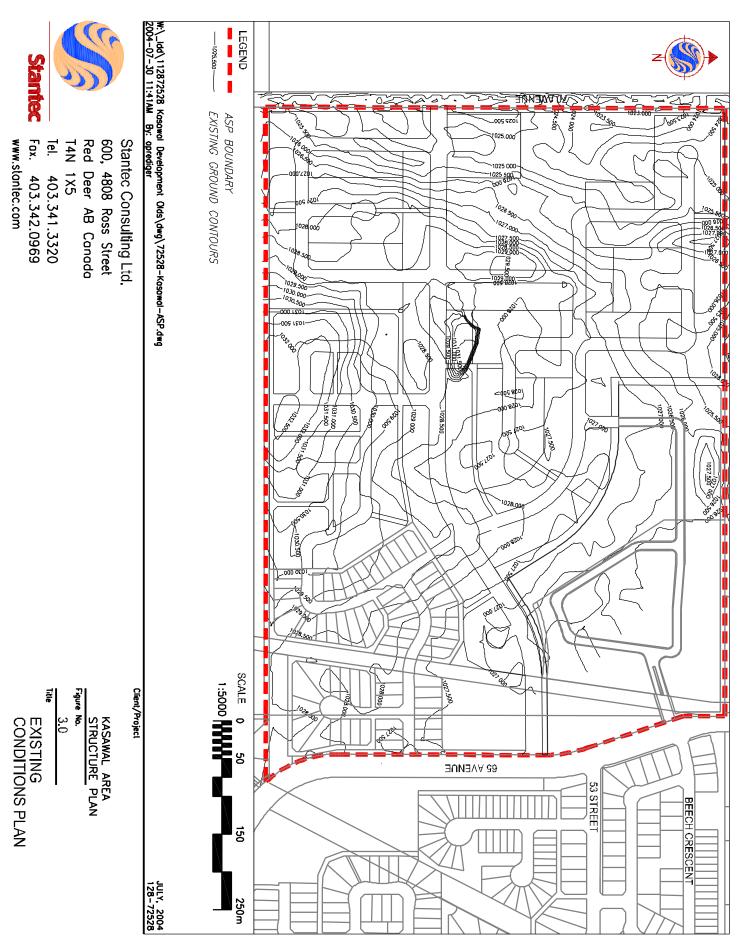
#### 2.3 EXISTING FEATURES

The only nature feature on this property is any existing stand of trees in the southwest corner of the quarter section. Within this stand of trees there is an existing acreage, complete with a manufactured home and shed.

In the northeast corner of the Plan area is the existing Silver Lynx manufactured home park. There is also an existing topsoil pile located in the center of the proposed development.

#### 2.4 EXISTING LAND USE

The subject area has been vacant agricultural land since the early 1900's. Utility right-of-ways are registered on the land for ATCO Gas for a gas line that extends north – south through the east end of the property. There is also an existing easement registered for a sanitary trunk that extends east – west through the Plan area and then along the west boundary of the property.



## 2.5 SURROUNDING DEVELOPMENT

There is proposed commercial development for the lands directly to the north, between this development and the highway, which includes a new RCMP police station and a proposed grocery store.

Directly east of the Kasawal development exists residential development.

The lands to both the west and south are within the jurisdiction of Mountain View County and are currently undeveloped and are used for agricultural proposes.

# 3.0 Development Objectives & Principles

#### 3.1 DEVELOPMENT OBJECTIVES

The Kasawal ASP has been prepared as a comprehensively planned residential neighbourhood taking advantage of both the natural topography, location attributes of the area. The main objectives of the Kasawal ASP are:

- to develop a Plan consistent with the general intent and purpose of the Town of Olds Municipal Development Plan (MDP);
- s to provide a framework to deliver high quality, comprehensively planned residential areas by defining the general pattern and composition of land uses, linkages, servicing designs and development staging;
- to address and accommodate existing uses (i.e. existing utility corridors and surrounding transportation routes) affecting the Plan; and
- s to ensure the implementation of the Plan takes place on an orderly, phased basis.

## 3.2 DEVELOPMENT OBJECTIVES

Development of the various land uses within the Kasawal ASP is defined through the following general principles:

## 3.2.1 Residential

- Encourage a variety of housing types, including single detached housing, row housing and manufactured homes. All housing forms and options will recognize consumer preferences and be in conformance with municipal standards and policies set forth by the Town of Olds.
- **S** Encourage pedestrian friendly streetscapes and building siting.
- § Provide direct and safe pedestrian linkages to the community nodes such as the commercial area to the north, open space areas, and the school site.
- S Locate residential development to take advantage of features such as stormwater management facilities, parks / open spaces and utility corridors.
- Orient larger parcels of medium density residential development adjacent to the collector and / or major collector road system to provide easy access and, where appropriate, to provide a transitional land use between adjacent single family development and major roads.

# 3.2.2 Municipal Reserves and Educational / Community Facilities

- Provide a school and park site for educational and community association facilities within the neighbourhood and surrounding communities through the dedication of municipal reserves.
- S Locate and size these sites to address the student and overall populations generated within designated catchment areas.
- Allow for the provision of dispersed park space within the neighbourhood to provide open space and opportunities for recreation for residents through the dedication of Municipal Reserves.
- Where possible and economically viable and sustainable, utilize the existing utility corridors to provide pedestrian linkages and open space recreational opportunities.

# 3.2.3 Transportation

- Provide a logical, safe and efficient transportation system within the Plan area to address pedestrian, bicycle and other multi-use modes, and the transit / vehicular transportation needs of residents moving to, from and within the Kasawal ASP as well as the adjacent areas.
- Protect a corridor for the future improvement of roadways along the east side of 70<sup>th</sup> Avenue.
- Provide non-vehicular circulation options throughout the Kasawal area with special attention to linkages to the school / park site.
- Minimize walking distances by creating an interconnected street network and providing walkways where roadway connections are not feasible.

### 3.2.4 Ecological Stewardship

- S Develop land in an efficient manner and encourage intensive urban development.
- Incorporate open spaces into compatible land uses such as the stormwater management facilities and the utility corridors to optimize the use of these areas.
- Encourage naturalized landscaping on public and private lands to the extent acceptable to the Town of Olds to minimize environmental and economic costs associated with their maintenance.
- Promote the development of open spaces and walkway linkages for pedestrian, bicycle and other multi-use travel, and connect them to the surrounding areas.
- § Encourage energy efficient construction and other innovative building and infrastructure techniques.

# 4.0 Development Concept

#### 4.1 NEIGHBOURHOOD UNIT

The development concept for the Kasawal ASP has been prepared in response to current and anticipated residential market trends within the Town of Olds and the Central Alberta region. An analysis of these trends and an assessment of their implications assist in shaping the Plan with respect to the type, size and location of various land uses.

The Kasawal ASP is comprised of 51.0 hectares of land and is bounded on the north by future commercial development, to the east an existing major collector road, to the west a future major collector road, and to the south undeveloped farmland located in Mountain View County. These boundary conditions create a logical planning unit and the basis for the design as shown on Figure 4.0 – Development Concept. The land use statistics and densities are represented in Table 1 and Table 2 following the Development Concept.

## 4.2 RESIDENTIAL

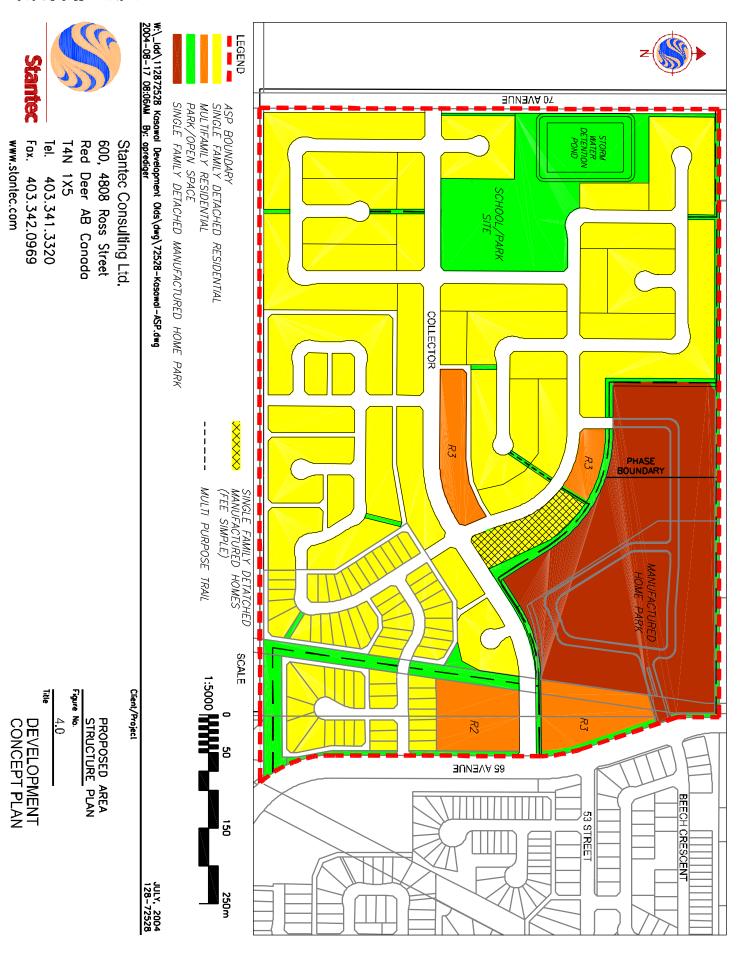
The majority of land within the Kasawal Plan is intended for residential development. A mix of low and medium density residential dwelling units is described and will be implemented based on market conditions and consumer preferences at the time of development.

#### 4.2.1 Low Density Residential

As shown on Figure 4.0, consideration has been given to the location of low density residential in proximity to the amenities offered by the stormwater management facilities, school / park sites and utility corridors. Within the low density residential and smaller lot residential areas identified in the Plan, housing forms will consist of single detached housing catering to a variety of lot and home sizes. These lots will typically have an average lot depth of 36 meters. Generally, the lots in the northwest portion of the neighbourhood will have larger frontage width, than those in the southeast portion of the Plan. Where it can be accommodate by the grade of the land, these lots will be designed for walkout basements.

#### 4.2.2 Medium Density Residential (R2 / R3)

Market trends in medium density residential development point to a growing interest in more lifestyle oriented housing and thus a shift of locating medium density sites closer to low density housing and oriented away from arterial roadways. The Kasawal Plan proposes that the medium density residential (MDR) sites be more integrated into the community with direct or close access off the collector roadways. These sites are situated in close proximity to the pipeline corridors and pedestrian linkages allowing convenient access to the neighbourhood amenities.



Most of the medium density parcels are likely to be developed on a self-contained basis, but in some cases opportunities exist to develop street-oriented town housing designs. These developments will be integrated alongside low density residential housing through sensitive streetscape design and attention to transitioning.

Four sites are proposed for this development, which includes an R2 and R3 site fronting onto 65 Avenue. The third site is a proposed R3 site located in the central portion of the Plan adjacent to the collector road. The final site backs onto the lineal park, adjacent to the manufactured home park.

# 4.2.3 Single Family Detached Manufactured Homes

The existing Silver Lynx manufactured home park is located in the southeast corner of the Plan. As shown on the ASP this park will extend to the east. High standards established in the first phase of this development will carry forward into additional phases to the east. All lots developed in this park will be rental units.

A second location for manufactured homes is identified for fee simple lots, which will be located directly west of the Silver Lynx Park. These lots would be made available for homeowners that want to own their own manufactured home lot.

#### 4.3 PARKS AND OPEN SPACES

#### 4.3.1 School / Park Site

A large central park site has been identified in the west central portion of the Plan. This site has been sized to accommodate a future school. This site will be in close proximity to 70 Avenue to accommodate the many students, which would be bussed to this location, without significant disruption to local traffic flows. It will also be in close proximity to the proposed stormwater detention pond, which would be designed to accommodate the recreational needs of the school; which could include a soccer field or ball diamond. In the event a school does not go here, the site would be developed entirely as a recreational park.

In order to provide a suitable building site for the school, there may be a requirement for adjustment to the siting to accommodate varieties in soil conditions. The ultimate configuration will be designed to the satisfaction of the School Board.

A large stormwater facility will be situated in the northwest corner of this park to provide stormwater detention during major stormwater events from the majority of this development. This facility must be located in this vicinity to take advantage of the low-lying area. As previously mentioned this facility will be designed to accommodate a soccer field or ball diamond.

#### 4.3.2 Linear Park Sites

There are two lineal parks planned for this neighbourhood. The first utilizes the existing gas line right-of-way at the east end of this site. The park will provide a green linkage from the residential areas in the southeast to the main collector roadway. The second is located between the manufactured home park and residential areas to the west, which provides for transition between land-uses and a pedestrian access to the northwest corner of the Plan area

The developer will be responsible to grade and landscape these parks as well as all other MSR, walkways, boulevards, green spaces and trails to the Town of Olds design standards.

# 4.3.3 Walkways and Multi-Use Trail

The Kasawal ASP is designed with an extensive neighbourhood pathway system to convey pedestrian and bike traffic throughout the neighbourhood and linking to adjacent major collectors roadways, adjacent developments, and the school / park site.

These multi-purpose trails will be constructed along the ATCO gas line corridor, as well as the lineal park that extends past the south limits of the Silver Lynx manufactured home park and into the school / park site. These trails will typically be 2.50m wide and asphalt paved.

#### 4.3.4 Utility Corridors and Stormwater Management Facilities

The existing gas line corridors and public utility lots provide additional opportunities for pedestrian linkages. As well, the stormwater management facility will be used for recreational activities which could accommodate a soccer field or a baseball diamond. These facilities however must ensure a safe environment for all users while maintaining the integrity of the stormwater control function for which they are designed.

#### 4.4.5 Soil Stock Piles

Besides the existing topsoil located in the center of the Plan area, a second pile will be placed temporarily on the school site. These piles will be sized to accommodate the landscaping needs of residential lots in this development as well as all the park sites. Any excess topsoil will eventually be hauled and disposed of off-site.

#### 4.4 TRANSPORTATION

The system of roads proposed for the Kasawal neighbourhood provides its residents and the surrounding, traveling public with safe and efficient access from this area.

#### 4.4.1 Collector Roads

The Plan provides one main east / west collector road linking the Plan area to Olds' existing roadway infrastructure. This collector road will connect to 65 Avenue to the east, which is an existing major collector roadway that links to Highway 27 (46 Street). It then connects to 70 Avenue to the west. 70 Avenue currently exists as a two lane gravel rural cross section. It will eventually be upgraded to a major collector road, which also connects to Highway 27. In order to accommodate this a 6.0 meter wide road widening has been allowed for in this Plan along the east side of the existing road allowance.

The proposed collector road will have a carriage width of 11.0 meters and a right-of-way width of 20.0 meters wide. All collector roads will be designed as per Town of Olds design standards.

#### 4.4.2 Local Roads

The system of local roads has been planned to provide access to individual development cells while at the same time discouraging outside traffic from short cutting through local roads. Local roads will have a 9.5 meter wide carriage way and a 15.0 meter wide right-of-way for any lots that have rear lanes. For lots that do not have rear lanes the local roads will be 10.5 meters wide complete with a 17.0 meter wide right-of-way. All local roads will have monolithic curb and gutter sidewalks on one side of the roadway.

#### 4.4.3 Laneways

Lanes are identified for lots located in the southeast corner of the neighbourhood. These lots will typically be smaller in size and often will not have front attached garages. Rear lanes along these lots will provide for rear parking and opportunities for detached garages. As per town guidelines lanes will be 6.0 meters wide, and these lanes will be paved with asphalt.

Lots that do not have rear lanes, when backing onto another lot, will be constructed with a concrete drainage swale to convey drainage between these lots.

# 5.0 Engineering Services

## 5.1 STORMWATER DRAINAGE

One large Stormwater Management Facility (SWMF) will be incorporated into the layout for the Kasawal Plan to properly manage and control major storm events. This facility will be located in the southwest corner of the neighbourhood, adjacent to the school site. This facility will be sized to accommodate stormwater detention for 1:100 year storm events, and will provide an extensive area of open space and recreational opportunities.

All storm sewers within the development will be sized to accommodate a 1 in 5 year stormwater event with a majority of stormwater being conveyed on the streets to the stormwater detention facility during extreme stormwater events. The west third of this development will discharge into the existing 1050 storm trunk along 65 Avenue. The remainder of the development will be directed to a proposed new storm system that will connect to the proposed storm detention pond and will discharge at a restricted rate into the existing drainage draw into the adjacent lands to the west.

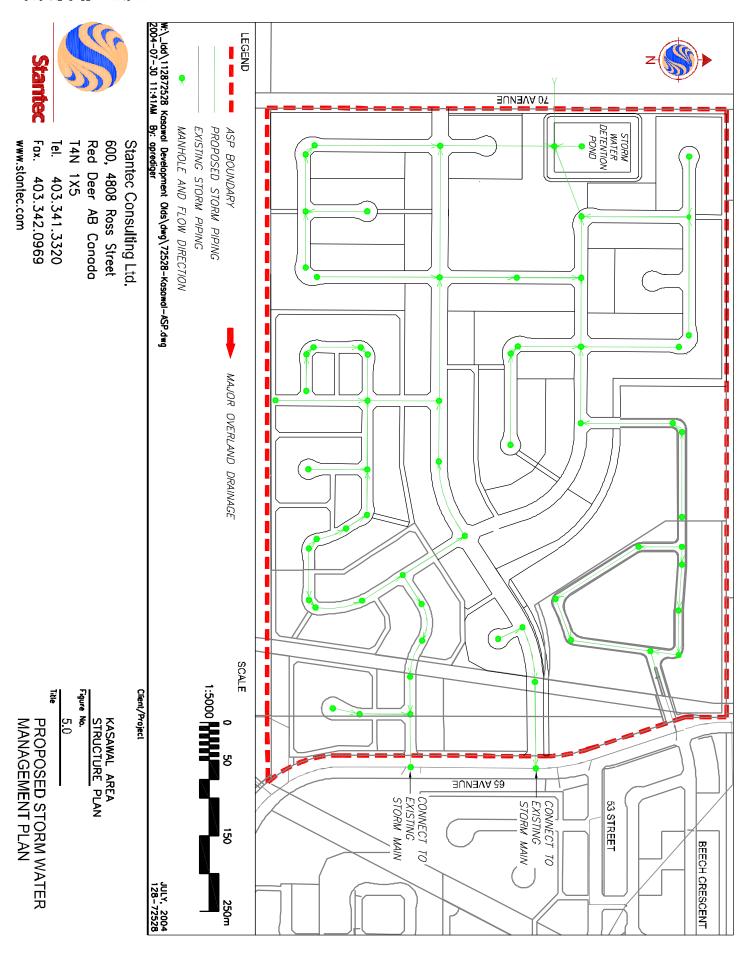
All stormwater facilities and storm sewers will be designed in accordance with the Town of Olds Design Guidelines and will become the responsibility of the Town of Olds to maintain after a two year period, with the exception of the manufactured home park.

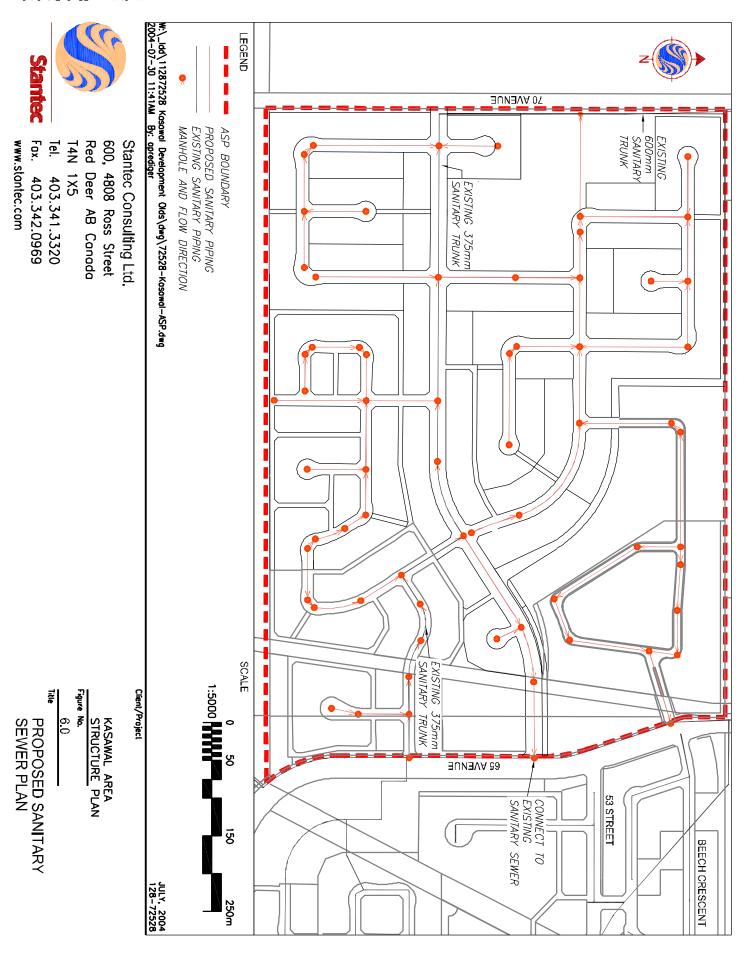
The major drainage and the overall storm system are shown in Figure 5.0. For now the size of the stormwater detention pond has been approximated until the Stormwater Management Report has been finalized. In that the event the area of the detention pond increases, residential areas shown to the south and east of the pond may have to be reduced in size to accommodate the increased pond area required for stormwater management. Based on the outcome of this report the Plan will be amended accordingly.

#### 5.2 SANITARY SERVICING

The sanitary sewer system to service this development is presented in Figure 6.0. As shown, the northeast corner of the Plan area will be serviced off of the existing sanitary trunk located in 65 Avenue. The remainder of the development will be serviced off of the existing 375mm sanitary trunk, which is routed along the proposed collector road alignment. This line has been sized to accommodate all sanitary flows from this development.

The majority of sanitary pipes in this development will be 200mm dia. except for the existing sanitary trunk. More detail on sanitary system will be provided when the detailed engineering stage is completed.





All sanitary sewer facilities will be designed in accordance with the Town of Olds Design Guidelines and will become the responsibility of the Town of Olds to maintain after a two year period, with the exception of those in the manufactured home park.

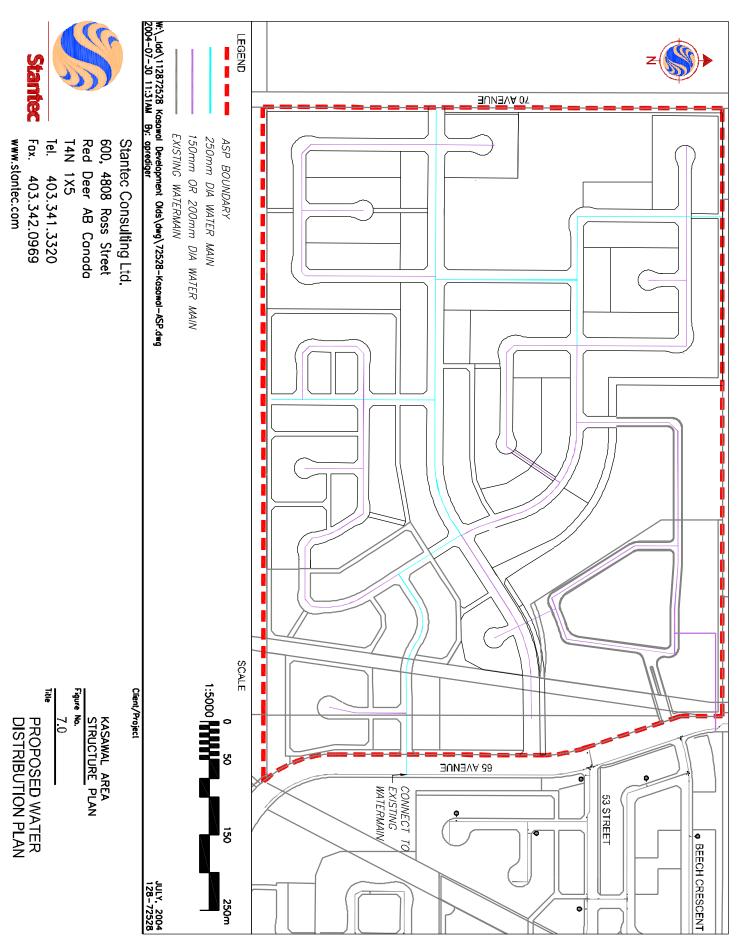
#### 5.3 WATER DISTRIBUTION

The overall water distribution system needed to service the Plan area is shown conceptual on Figure 7.0. This system will be an extension of the existing water system that runs along a portion of 65 Avenue. These lines will be looped to the proposed school and eventually the commercial site to the north. More detail analysis of the water system will be completed with the detailed design.

All watermains will be designed in accordance with the Town of Olds Design Guidelines and will become the responsibility of the Town of Olds to maintain for a two year period, with the exception of those in the manufactured home park.

#### 5.4 SHALLOW UTILITIES

There are no major servicing concerns regarding shallow utilities (gas, power, telephone and cable). All shallow utilities will be extensions of those already in place in adjacent developments, including the existing overhead power line that extends along the west boundary of the Kasawal Plan area. Shallow utility alignment will be as shown in typical Town of Olds standards and will have easements registered to protect these alignments.



# 6.0 Implementation

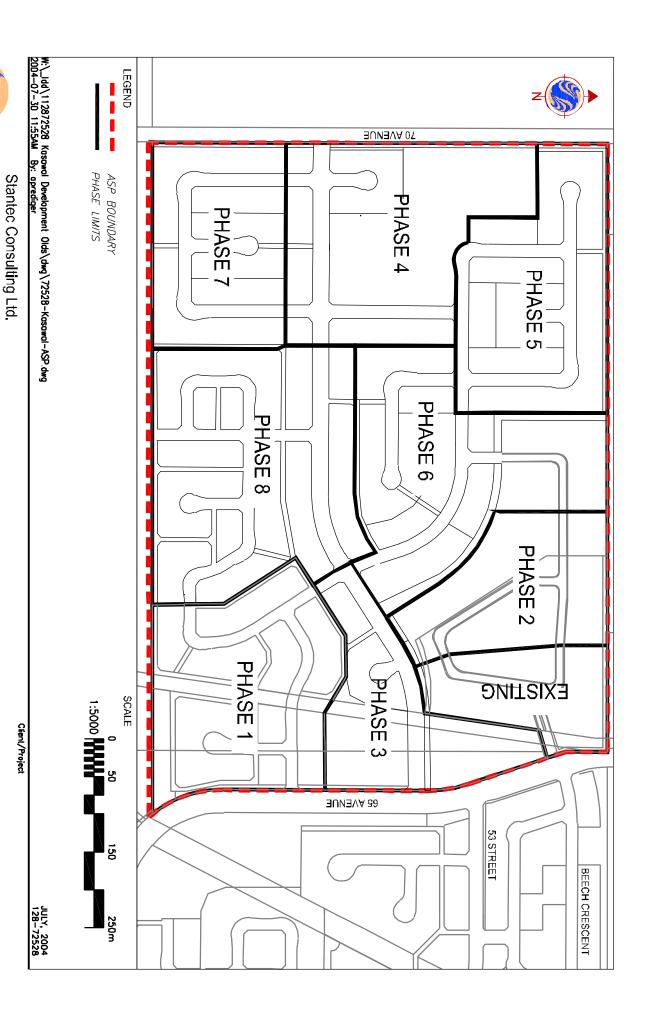
## 6.1 DEVELOPMENT STAGING

Infrastructure to service the Kasawal ASP will be extended into the neighbourhood from 65 Avenue to service the first three phases. Because of the grade of the land sanitary and storm servicing will then be extended from 70 Avenue and extending easterly for Phases 4 and on. Each successive stage will be developed with the logical and economical extension of these municipal services with the intent of meeting the needs of the regional and local housing market.

As shown on Figure 8.0 - Phasing, the phasing is generally expected to begin in the southeast and northeast corners and extend westerly. The phasing boundaries are shown conceptually and may vary from those of actual redistricting and subdivision applications. As well, portions of separate phases may be developed concurrently if there is sufficient demand and / or if the engineering design is made more efficient as a result.

## 6.2 REDISTRICTING & SUBDIVISION

Redistricting and subdivision applications to conform to the land use designations described in the ASP will be undertaken as necessary. Guided by the Town of Olds MDP and the Kasawal ASP, redistrictings and subdivisions will be required to adhere to the Town of Olds Land Use Bylaw and the informational requirements necessary for each application.



600, 4808 Ross Street Red Deer AB Canada T4N 1X5

Figure No.

KASAWAL AREA STRUCTURE PLAN

PROPOSED PHASING

www.stantec.com

403.341.3320 403.342.0969