

BYLAW 4-2007

A BYLAW OF STRATHCONA COUNTY IN THE PROVINCE OF ALBERTA, FOR THE PURPOSE OF ADOPTING the Laurin Industrial Park (formerly Sherwood Industrial Park West) Area Structure Plan.

WHEREAS Council previously adopted the Sherwood Industrial West Area Structure Plan, Bylaw 68-2001; and

WHEREAS it is deemed advisable to replace the Sherwood Industrial Park West Area Structure Plan Bylaw; and

WHEREAS it is deemed advisable to adopt the Laurin Industrial Park Area Structure Plan;

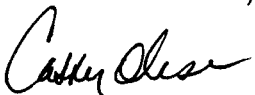
NOW THEREFORE, the Council of Strathcona County, duly assembled, pursuant to the authority conferred upon it by the *Municipal Government Act, R.S.A. 2000 c.-M-26* and amendments thereto, enacts as follows:

1. That Bylaw 4-2007 is to be cited as the "Laurin Industrial Park Area Structure Plan".
2. That Schedule "A" attached hereto is hereby adopted as part of this Bylaw.
3. That Bylaw 68-2001 is hereby repealed.
4. This Bylaw comes into effect after third reading and upon being signed.

Read a first time this 20 day of February, 2007.

Read a second time this 20 day of February, 2007.

Read a third time and finally passed this 20 day of February, 2007.



Mayor



Manager,
Legislative and Legal Services

Date Signed: February 23, 2007

Laurin Industrial Park

Area Structure Plan

October 2006

Prepared by:

Avillia
developments 



**Area Structure Plan
Laurin Industrial Park**

PREFACE

The Area Structure Plan (ASP) for the Laurin Industrial Park, as encapsulated in this document, is replacing the original and approved Area Structure Plan. The original ASP, under the name "Sherwood Industrial Park West", was submitted in June 2001 by Stantec Consulting Ltd. and was approved as Bylaw 68-2001 on 21 August 2001 by Strathcona County Council.

Avillia Developments has met with administration from Strathcona County over the last year to discuss the changes to the site layout for the Laurin Industrial Park. County Administration suggested that the entire Area Structure Plan Document be updated, not just the portions which reflect changes to the original. Avillia Developments, working on behalf of 1121378 Alberta Ltd. (the majority land owner), agreed that a revised ASP would be submitted as a new document; however, with all relevant portions of the original remaining intact.

As one reads through this document, it will become obvious that the intent of the document and goal of the development of this land has not changed from what is identified in the previously approved Area Structure Plan. The subject area's boundary has not changed, its zoning designation IM (Medium Industrial) has not changed, and the infrastructure needs (water, sanitary sewer, storm water management and road accesses) are predominately the same - just updated to reflect the new site layout.

Various studies, which accompany this revised Area Structure Plan are either new (i.e. Biophysical Investigation) or have been updated (i.e. Storm Water Management Plan) in order to adhere to current County standards. Therefore, the purpose of this revised ASP is to clearly show the changes to the existing ASP and provide background on technical issues related to the new plan.

All references to the Area Structure Plan in this document will be referring to the revised ASP - now renamed the Laurin Industrial Park Area Structure Plan. Any reference to the previously approved ASP will be specifically stated.

SUMMARY

The Laurin Industrial Park Area Structure Plan (ASP) has been prepared to describe what and how will be developed on the proposed Laurin Industrial Subdivision. It explains the essential elements of subdivision development - land uses and infrastructure servicing.

The Laurin Industrial Subdivision consists of approximately 86.2 hectares of land located within the west half of Section 29-52-23-W4. The subject property is bounded on the north by 92 Avenue, on the west by 17 Street, on the south by the Sherwood Park Freeway, and on the east by the half section line.

Given that industrial lands to the north, west, south and even east of the Plan Area are fully or partially developed, it is surprising that no development has yet occurred here. A previous Area Structure Plan, referred to as Sherwood Industrial West ASP, was prepared and approved in 2001; however no development has taken place.

Although similar in terms of land uses and servicing to the previously approved ASP in 2001, the Laurin Industrial Park contains a road network different enough to require an ASP amendment. Furthermore, the increase in size of the average industrial lot, and hence the fewer number, also supports an ASP Amendment.

The proposed infrastructure servicing plan presents a logical extension of adjacent infrastructure. The onsite water, sanitary, storm, and roadway plans ensure a practical and efficient servicing scheme.

This ASP is consistent with Strathcona County's Municipal Development Plan, Land Use Bylaw, and Industrial Development Plans. This subdivision, which is districted Medium Industrial (IM), will help address the need for large-sized industrial parcels once it is constructed.



Area Structure Plan
Laurin Industrial Park

TABLE OF CONTENTS

PREFACE.....	I
SUMMARY.....	II
TABLE OF CONTENTS	III
LIST OF FIGURES	IV
1.0 INTRODUCTION	1
1.1 PURPOSE.....	1
1.2 SUBJECT LANDS.....	1
1.3 BACKGROUND	1
1.4 PLAN OBJECTIVE.....	3
2.0 SITE CONDITIONS.....	4
2.1 TOPOGRAPHY	4
2.2 SOILS	4
2.3 ENVIRONMENTAL SITE ASSESSMENT.....	6
2.4 BIOPHYSICAL INVESTIGATION.....	6
2.5 HISTORICAL RESOURCES	10
2.6 EXISTING LAND USES	10
2.7 SURROUNDING DEVELOPMENT.....	11
3.0 DEVELOPMENT CONCEPT	12
3.1 CONCEPT PLAN	12
3.2 LAND USE	12
3.3 ENVIRONMENTAL RESERVE	14
3.4 MUNICIPAL RESERVE	14
3.5 STORM WATER MANAGEMENT FACILITIES	14
3.6 ENHANCED WETLAND	14
3.7 INDUSTRIAL USE	14
3.8 TRANSPORTATION / ROW / PUL	15
4.0 ENGINEERING SERVICES.....	16
4.1 STORMWATER DRAINAGE.....	16
4.2 SANITARY SERVICING.....	18
4.3 WATER SERVICING	20
4.4 TRANSPORTATION	22



**Area Structure Plan
Laurin Industrial Park**

4.5	SHALLOW UTILITIES	22
5.0	IMPLEMENTATION	24
5.1	DEVELOPMENT STAGING.....	24
5.2	REDISTRICTING & SUBDIVISION	24

LIST OF FIGURES

1.0	- LOCATION PLAN	2
2.0	- EXISTING FEATURES	5
3.0	- HABITAT AREA DESIGNATION	8
4.0	- NATURAL AREA	9
5.0	- DEVELOPMENT CONCEPT	13
6.0	- STORM DRAINAGE CONCEPT	17
7.0	- SANITARY CONCEPT	19
8.0	- WATER CONCEPT	21
9.0	- ROAD ALIGNMENT CONCEPT	23
10.0	- DEVELOPMENT STAGING	25



Area Structure Plan Laurin Industrial Park

1.0 INTRODUCTION

1.1 PURPOSE

The purpose of the Laurin Industrial Park Area Structure Plan (ASP) is to provide a document which describes how the subject lands will be developed; both in terms of land uses and infrastructure. This ASP follows the guidelines and policies set forth by Strathcona County for the development of new industrial areas. Further, this document fulfils the requirement set by Strathcona County to provide a plan and descriptive document that allows the County to approve the Area Structure Plan as bylaw. The Laurin Industrial Park ASP has been prepared as a Statutory Plan that adheres to Section 633 of the Municipal Government Act of Alberta.

1.2 SUBJECT LANDS

The Laurin Industrial Park Area Structure Plan consists of land located within the west half of Section 29-52-23-W4 and includes an area of approximately 86.2 hectares. The NW ¼ Section of 29-52-23-W4 is owned by 1121378 Alberta Ltd. while the SW ¼ Section of 29-52-23-W4 is owned by Denron Developments Ltd.

Figure 1.0, Location Plan, provides the area context of the subject lands. Specifically, the ASP is defined by the following boundaries:

- North Boundary - 92 Avenue
- West Boundary - 17 Street
- East Boundary - east ½ Section of 29-52-23-W4
- South Boundary - Sherwood Park Freeway

In examination of the Location Plan, it is evident that the Laurin Industrial Park supports development in a logical manner - in terms of planning and infrastructure. The Medium Industrial zoning is consistent with adjacent land uses. Providing underground and roadway infrastructure to these lands is easily achieved through the rational extension of services from the north, south, and west.

1.3 BACKGROUND

The preparation of the Laurin Industrial Park Area Structure Plan is intended to ready these lands for development by illustrating and supporting land-use and servicing.

The original Laurin Industrial Park ASP (formerly know as the Sherwood Industrial Park ASP) was established 25 years ago in 1981. The subject lands (west ½ of 29-52-23-W4) was considered for a Restricted Industrial (RI) District. The lands to the east of the subject lands (east ½ of 29-52-23-W4), were actually included in the original ASP and were identified as General Industrial (GI).



LAURIN INDUSTRIAL
LOCATION PLAN

CONCEPT ONLY
SUBJECT TO
DETAILED DESIGN
N.T.S.

Figure 1

OCTOBER 2006



Area Structure Plan
Laurin Industrial Park

Since 1981, the lands around the boundary of this ASP experienced varied growth. The Strathcona County Municipal Development Plan (Bylaw 38-98), which was approved in 1998, identified that the subject lands are included in the Light/Medium Industrial Area of Strathcona County. The 2001 Land Use District Map for the Sherwood Park Urban Service Area (Bylaw 8-2001) confirms the districting of the subject lands as IM (Medium Industrial).

In 2001, Strathcona County adopted a new ASP for the Laurin Industrial Park (again named the Sherwood Industrial Park). This ASP now only concentrated on the westerly half of the entire 29-52-23-W4 Section. Though approved, no improvements were ever carried out on this site.

1.4 PLAN OBJECTIVE

The Objective of this Area Structure Plan is:

"To provide a plan for the development of an industrial subdivision within Strathcona County which:

- *Is complimentary to adjacent development;*
- *Supports County Planning Documents (i.e. Strathcona County Municipal Development Plan (MDP);*
- *Adheres to current Servicing and engineering Standards;*
- *Provides a framework to deliver a high quality, comprehensively planned industrial subdivision; and*
- *Allows for the feasible delivery of fully-serviced land parcels that responds to market needs for Medium Industrial use."*

Approval of the Laurin Industrial Park Area Structure Plan will lead to the commencement of development for the subject lands. The location of these lands, within the context of other the built-up areas, means that existing underground and roadway infrastructure will be better utilized. Tax revenue from usage of these subdivided parcels will provide Strathcona County with additional revenue with only marginally higher County services requirements (i.e. snow removal).

This ASP describes how the development objective creates a plan which identifies the, size, location, and land use of the subject lands. The ASP further identifies how underground and roadway infrastructure needs are addressed.

The Laurin Industrial Park ASP has been prepared as a comprehensively planned industrial area which addresses existing conditions such as:

- topography
- pipeline rights-of-way
- existing trees and natural areas
- current overland water courses
- boundary infrastructure
- future development of adjacent areas



2.0 SITE CONDITIONS

As shown on Figure 2.0, Existing Features, the subject area is a combination of tree stands and cleared land. The cleared areas were once used for agricultural purposes but there has been limited crop-use since the early 1980s. The barren land has mostly been used for grazing over the last number of years.

2.1 TOPOGRAPHY

The topography of the Laurin Industrial Park Lands illustrates a ridge in the northern end of the Subject area running east and west. The land north of this ridge generally slopes to the northwest; while the land south of the ridge generally slopes to a gully in the midpoint of the western boundary. The southern portion of the subject area slopes to both the southwest and southeast area of the site (refer to Figure 4.0 - Storm Drainage Concept).

The elevation of the ridge is approximately 714.0 m on at the east end, and 709.0 m on the west end. The northwest corner of the site drops to about 706.0 m. The gully on the western boundary drops to about 692.0 m. The eastern pipeline ROW splits drainage along the southern portion of the site; hence two low areas (southwest and southeast) lay at about the 690.0 m elevation.

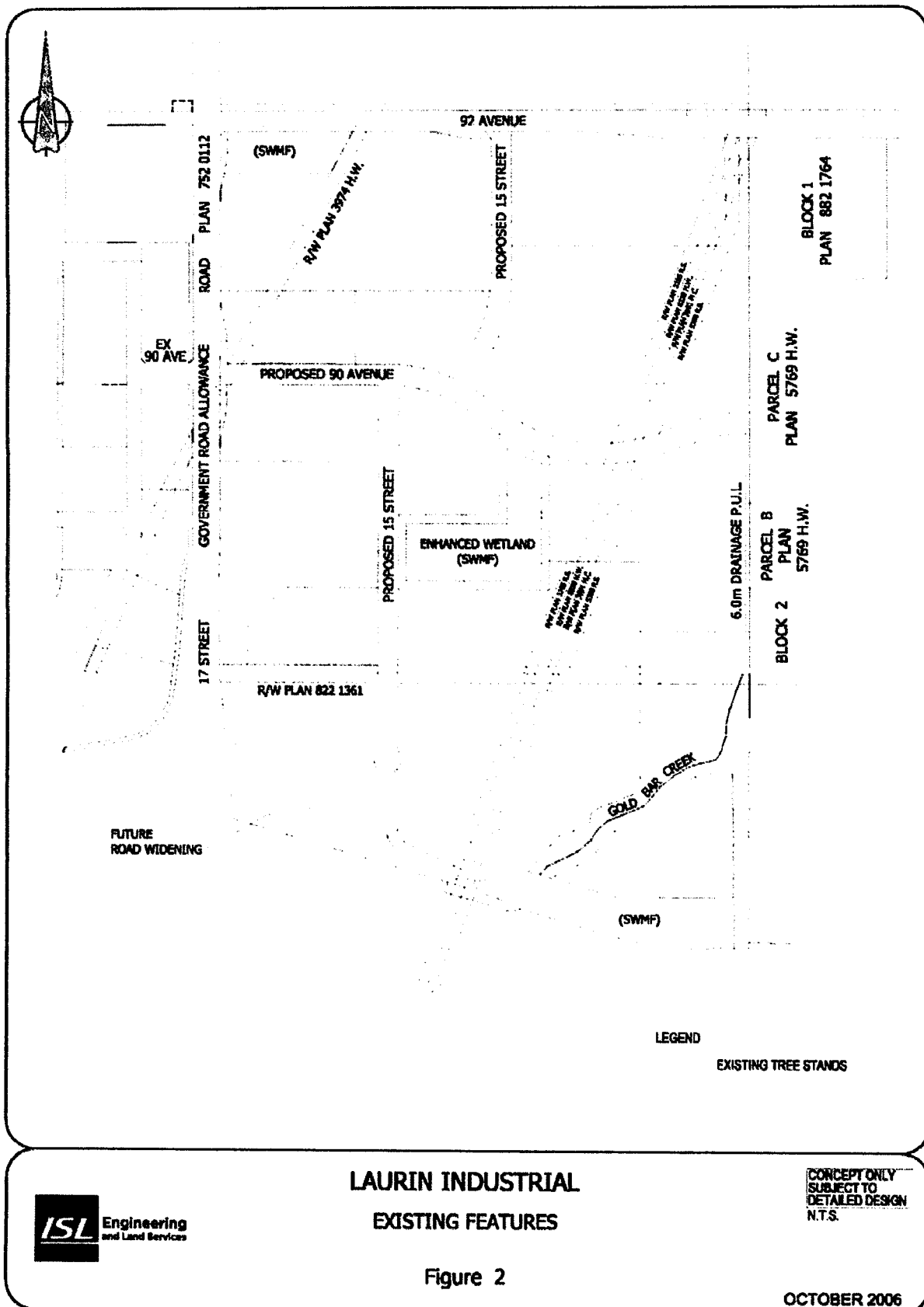
2.2 SOILS

A Geotechnical Investigation was conducted for this area in 1981. From that study, a variety of soil types were found on and under this ASP subject area. This is not surprising given the size of this land, the topography, and the permanent and seasonal water courses.

The site generally consists of a surface mantle of black organic topsoil ranging from 100mm in some areas to 900mm in others - the latter being predominant in the low lying areas. The subsoil (which lies under the topsoil) is divided into three broad groups.

The first group in the northern third of the site consists of a thin layer of silty clay and silty clay till. These are generally light brown, moist, stiff, and contain traces of sand. Underlying this soil is the poorly lithified clay shales and sandstones of the Edmonton formation which contains interbedded coal layers.

The second group, which is located in the central portion of the subject lands, shows sandy clay till immediately below the topsoil. It is of a grey brown colour near the surface and becomes darker grey as the depth increases. This till stratum contains numerous sand lenses.



The third group, located in the southern part of the ASP area, contains highly variable soil conditions. These conditions are somewhat poorer than those found in the first two groups. In general, underlying the topsoil is a layer of dirty clay sand which overlays a thin layer of light brown silty clay or sandy clay till. It was found that soils in this area are sandier, moister, and softer.

2.3 ENVIRONMENTAL SITE ASSESSMENT

An Environmental Site Assessment was conducted for the subject property in November of 2000. Based on a review of the information within this Phase I ESA, three areas of potential environmental concern were identified. They were, however subsequently deemed as low concern.

First, it was observed that small traces of car wash sands were present outside the eastern boundary of the subject lands. Although there is the possibility that these sands could contain metals and may leach onto the site, the small quantity of sand would have little, if any, negative impact on the site.

Second, there have been some repairs conducted on the pipelines that traverse the site through two pipeline rights-of-way on the subject lands. It has been confirmed that soil remediation has been done and releases granted. There have been no pipeline incidents reported since the submission of the ESA in 2000.

Third, the construction debris landfill, located outside the subject lands to the southeast, may or may not contain materials that could impact the Subject Property. Historically, it was noted that runoff waters from the landfill had an oily sheen; however, water that currently runs along the southern border of the landfill (and ultimately onto the subject lands) has no sheen and no stressed vegetation was observed.

2.4 BIOPHYSICAL INVESTIGATION

A Biophysical Investigation was conducted in September 2005 and an assessment report was submitted to the County. This section summarizes the objective and findings of this assessment.

The objective of the Biophysical Investigation was to determine the importance and conservation value of various natural areas contained within this Area Structure Plan. The investigation consisted of a biophysical survey to assess and determine the significance of any identified wetlands and woodlots. The investigation also included recommendations on how any identified wetlands and woodlots may be incorporated into the development. Finally, the investigation also included a general vegetation and wildlife survey, a review of existing reports, maps and an aerial photograph review.



Area Structure Plan
Laurin Industrial Park

With the completion of the biophysical investigation and accompanying assessment, document review, and aerial photograph review, it was concluded that:

- No rare plants or animals were observed during the site reconnaissance
- Potential negative environmental impacts to natural areas from development include the loss of woodlands and the alternation or loss of historical drainage courses/ephemeral wetlands
- Connectivity with adjacent natural areas will be reduced

The natural areas were prioritized as a function of their potential for sustainable ecological conservation and wildlife habitat as follows:

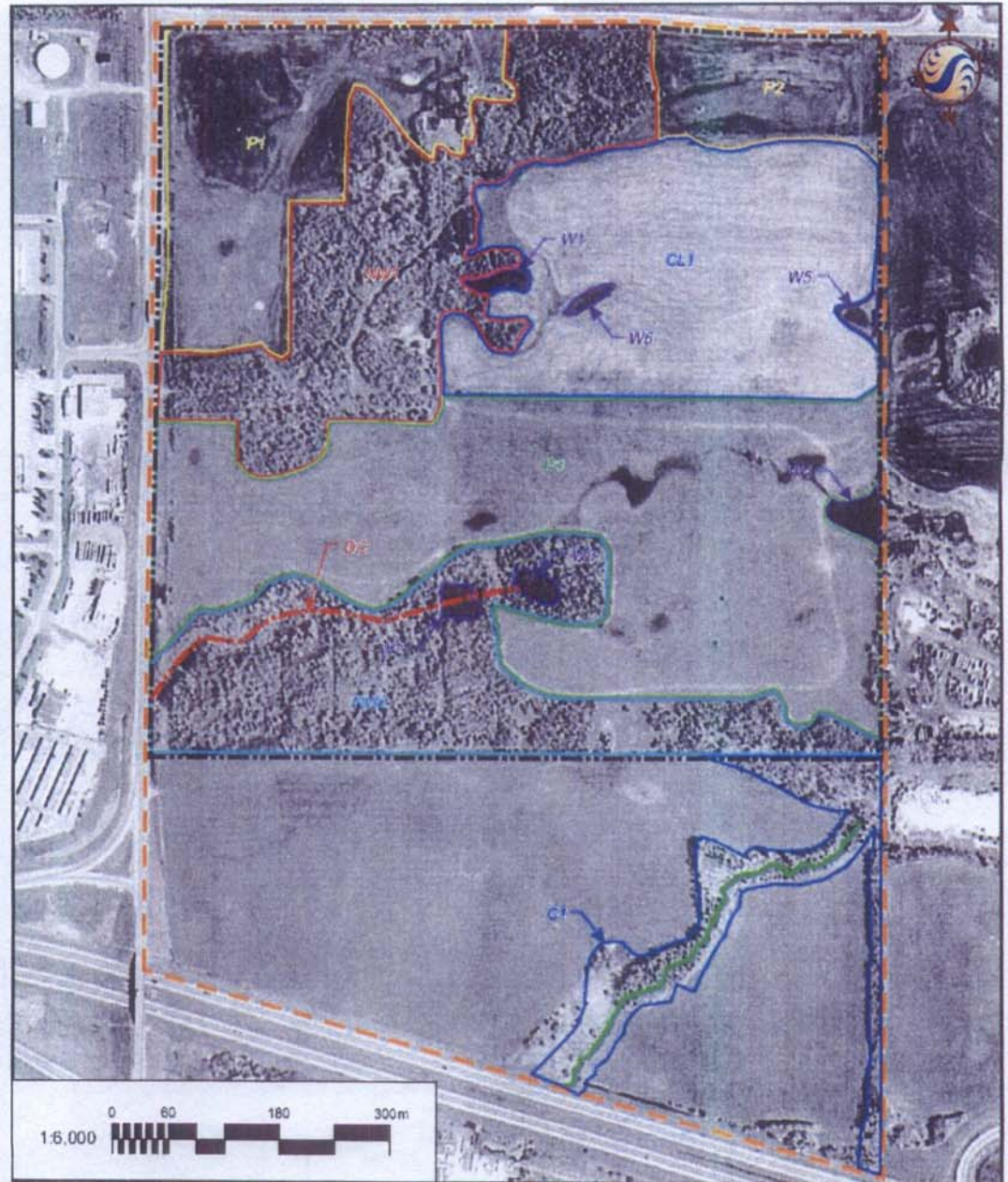
- Unnamed creek: high priority
- Portion of poplar/aspen forest along the southern border of the NW1/4 section: moderate priority
- The wetland (W3 on Figure 3): low-moderate priority

Based on the ecological assessment, the following recommendations were provided:

- Retain the creek (C1 on Figure 3) and its associated riparian area located on the SW ¼ of the Section 29
- Retain as much of the drainage course as possible
- If the existing topography is changed during development, the drainage patterns should be preserved, as much as possible
- If possible, consider incorporating wetland (W3 on Figure 2.3.1) into the industrial park design
- An area of 0.048 ha located in SW ¼ of Section 29 is designated as Environmental Reserve (ER) (Figure 4), and 3.48 ha is designated as Municipal Reserve (MR). The latter encompasses the wooded areas bordering the creek and portions of the southeast border of the ASP Amendment area (Figure 4).



Area Structure Plan
Laurin Industrial Park



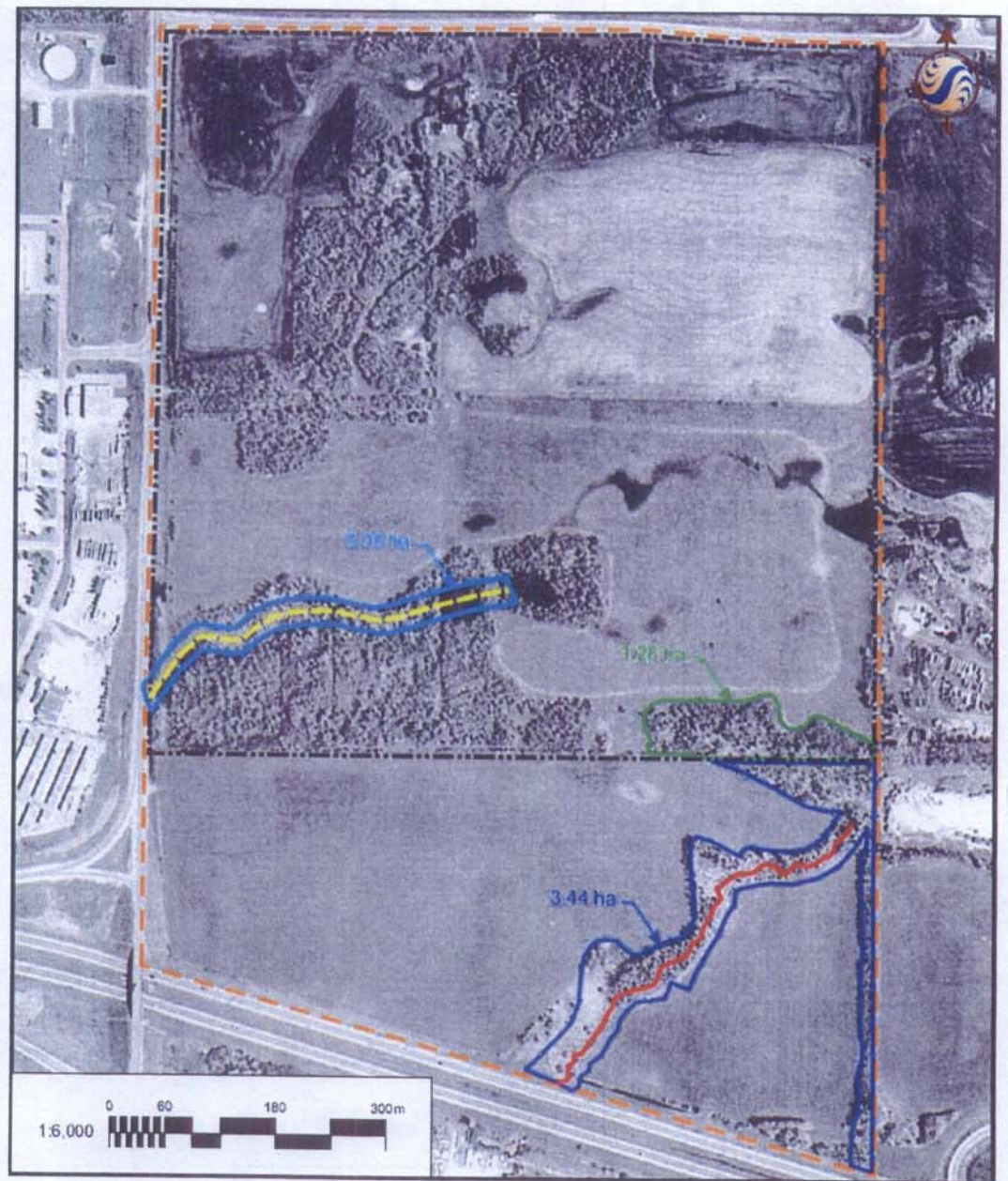
Legend

---	ASP Amendment Area	W2	Wetland
---	Subject Property	W3	Wetland
DC	Drainage Course	P1	Pasture
C1	Creek	P2	Pasture
CL1	Cultivated	P3	Pasture
NW1	North Wooded Area	W4	Depression Area
NW2	South Wooded Area	W5	Depression Area
W1	Wetland	W6	Depression Area

Figure 3 - Habitat Area Designations



Area Structure Plan
Laurin Industrial Park



- Legend
- ASP Amendment Area
 - - - Subject Property
 - MR
 - ER
 - Potential MR
 - Potential ER
 - Potential CE

Figure 4 - Natural Areas

2.5 HISTORICAL RESOURCES

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

2.6 EXISTING LAND USES

There are five pipelines crossing the site in a northeast to southwest direction and the Regional Water Line runs east-west along the quarter line.

The pipelines crossing the site are:

1. R/W Plan 3974 HW - (northwest ROW)
Owned by Terasen Pipelines Inc.
- High Pressure Pipeline carrying Low Vapour Pressure Petroleum products in liquid form.
2. R/W Plan 6338 H - (east ROW)
Owned by Pembina Pipeline Co.
- High Pressure Pipeline carrying Low Vapour Pressure Petroleum products in liquid form.
- Abandoned Pipeline
3. R/W Plan 6557 MH - (east ROW)
Owned by Rimbey Pipe Line Co. Ltd.
- High Pressure Pipeline carrying High Pressure Vapour Gas products (propane)
4. R/W Plan 3165 RS - (east ROW)
Owned by PB Canada Ltd.
- High Pressure Pipeline carrying Natural Gas Liquid (NGL)
5. R/W Plan 5398 RS (east ROW)
Owned by Imperial Oil Ltd.
- High Pressure Pipeline carrying Low Vapour Pressure Petroleum products (gasoline, diesel, jet fuel) in liquid form.

Prospective lot owners will be made aware of the 15 m setback requirement from the edge of the right of way for industrial buildings (1 m for accessory buildings); and will be put in contact with the pipeline companies to receive any additional limitations that they may impose including crossing of the pipelines.

In March of 1989 Laidlaw Waste Systems made application for the development of a Sanitary Landfill & waste Management Facility on the NW quarter section. The application was subsequently abandoned.

An old residence and associated farm buildings are located in the north-central part of the plan area. More specifically, assessment records list a Garage (1954), Shop (1955), single-wide mobile home (1984) as improvements on the property. There is also photographic evidence of an



Area Structure Plan
Laurin Industrial Park

older single dwelling, older barn, and newer fabric Quonset. A commercial hayride operation has been operated by Dick Laurin where arable land to the east is being used for hay and oats and the remainder of the parcel is used for grazing the hayride horse stock. All of these buildings and operation will be destroyed prior to completing the servicing of the respective lot that they sit on.

2.7 SURROUNDING DEVELOPMENT

Areas adjacent to the Laurin Industrial Park ASP are either already developed as industrial, zoned for industrial, or designated for future industrial in the Strathcona County Municipal Development Plan.

3.0 DEVELOPMENT CONCEPT

3.1 CONCEPT PLAN

The development concept for the Laurin Industrial Park subdivision has been prepared in response to current market demands for Medium Industrial uses in Strathcona County and the region.

The land use layout (see Figure 5) differs from the originally approved ASP in terms of fewer, but generally larger, lots. The road alignment has also changed to provide for a more efficient use of space, while maintaining access to all parcels within the site and allowing for potential future connections. This ASP constitutes a logical planning unit with respect to identifiable boundaries and servicing considerations.

When developing the layout Concept, various factors, such as topography, adjacent infrastructure, roadway access, pipeline ROWs, parcel sizes, parcel shapes, and parcel locations were all taken into account. After numerous iterations, a Concept Plan was developed on which the ASP is based. The ASP addresses all of these aforementioned factors in an acceptable, favourable, and integrated manner.

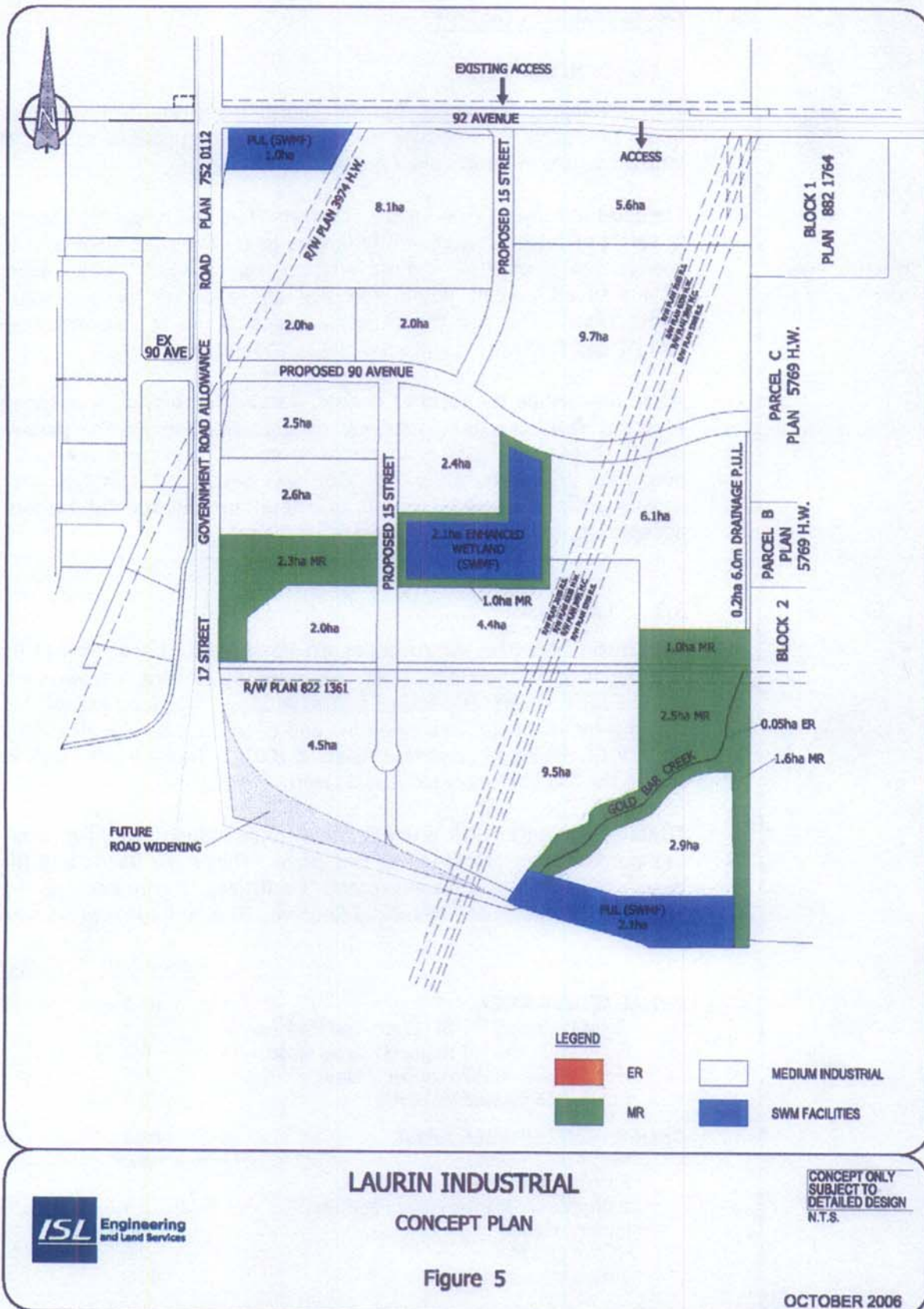
3.2 LAND USE

The Laurin Industrial ASP covers approximately 86.2 hectares (213.0 acres). It is bounded on the north, west, and south by existing roadways while the east bounds current and future industrial land. The land use of this ASP is Medium Industrial (as described in, and is consistent with, the Strathcona County IM zoning in Land Use Bylaw 8-2001). The subject lands are also within the 1.5 km Heavy Industrial Overlay (IH-O)

Although the entire ASP is under the Medium Industrial zoning, other land-use purposes are identified in this plan. These are Roads and Rights of Way, Storm Water Management Facilities, Environmental Reserve, Enhanced Wetlands and Municipal Reserve. The land use statistics are:

	<u>Area (ha)*</u>	<u>% of GDA</u>
INITIAL GROSS AREA	85.3	
Road Widening (17 St / Sherwood Park Fwy.)	1.5	
Road Widening (17 St accel / decel lanes)	0.3	
Road Widening (92 Ave decel lane)	0.1	
Environmental Reserve (ER)	0.1	
GROSS DEVELOPABLE AREA	83.3	100.0
Municipal Reserve	8.0	9.6
Enhance Wetland	2.2	2.7
Storm Water Management Facilities	3.1	3.7
Internal Roads	3.7	4.4
ROWs and PULs	2.0	2.4
Industrial Land (IM)	64.3	77.2

* Note: Areas subject to change with detailed design and subdivision





3.3 ENVIRONMENTAL RESERVE

Based upon the Biophysical Investigation, a small portion of this site, Gold Bar Creek, has been identified as Environmental Reserve (ER). The area is only about 0.05 ha, however a tree buffer (MR) will be retained to assist in the protection of the Environmental Reserve.

3.4 MUNICIPAL RESERVE

As with the Environmental Reserve, it was recommended in the Biophysical Assessment Report which areas may be ideal for Municipal Reserve (MR) dedication. The most sensitive areas identified (adjacent to Gold Bar Creek, and the drainage course ravine) have been retained. Other heavily treed areas and an area surrounding the Enhanced Wetland have also been identified as Municipal Reserve. The total estimated area of the MR is about 8.0 hectares, which provides approximately 9.6% dedication over the entire site. If the total MR dedication is less than 10.0%, then the development of the land will require payment in lieu of land dedication. This will be provided to the County at time of Development Agreement.

3.5 STORM WATER MANAGEMENT FACILITIES

Storm water management facilities (three) have been located in the most practical areas in the Laurin Industrial ASP. Low points, land flow, access, and industrial-use continuity all play an important role in determining the optimal locations of the SWMFs. The overall storm water and drainage for this area is described in detail in Section 4.

3.6 ENHANCED WETLAND

The Biophysical Report identified two small water bodies in the middle of the ASP Area. These wetlands are fed by overland flows from the ASP area, as well as some rerouted over flows from the lands to the east. In order to maintain these wetlands after this area is developed, the two wetlands will be incorporated into an Enhanced Wetland. This Wetland will act as one of the three SWMFs (see above) and be bounded by Municipal Reserve (see above). The estimated size of this wetland is 2.1 ha plus the MR.

3.7 INDUSTRIAL USE

As identified previously, the majority of land within the Laurin Industrial Park ASP is designated Medium Industrial (IM). The proximity of this site to the Sherwood Park Freeway and to Highway 216 allows for easy and proper access (employment and trucking) to the subject lands.

Industrial uses allowed under the IM district include manufacturing, assembly, distribution, service and repair, and other similar uses which

carry out a portion of their operation outdoors or require storage areas. Although it has not been fully determined who will be operating on each parcel, the type of operation will be consistent with the ASP and IM zoning as well as the IH-O Heavy Industrial Overlay. Further, each parcel has been designed to allow for ample-sized building envelopes which will adhere to Pipeline and other setbacks.

3.8 TRANSPORTATION / ROW / PUL

The transportation network within the Laurin Industrial Park ASP was developed to ensure proper and easy access to both 17 Street and 92 Avenue. The internal roadways provide good access to each industrial parcel while minimizing overall road area.

Since this land is within Strathcona County's Urban Service Boundary, the roads will be constructed to an Urban Standard: 24 metres ROW for an Industrial Collector, and 20 metre ROW for Industrial Local roads. Future road widening has been identified on the southwest and western portions of the site to accommodate a potential 17 Street / Sherwood Park Freeway grade separation as well as acceleration and deceleration lanes for 90 Ave and 92 Ave. Section 4 provides further detail regarding roads.

The existing Utility ROW that bisects the ASP area east-west will be retained. As well, a 6-metre wide PUL has been identified along the eastern boundary of the site to provide for drainage to the Gold Bar Creek.

4.0 ENGINEERING SERVICES

4.1 STORMWATER DRAINAGE

Storm water drainage concept has been updated for the Laurin Industrial Park ASP. Figure 6, Storm Drainage Concept, illustrates the plan to handle surface run-off for this area. The ASP area has been divided into three catchment areas: north, central and south.

The northern catchment area, approximately 12 ha, is bounded by 92 Avenue on the north, 17 Street on the west, the ridge on the site to the south, and the quarter line on the east. Overland flow from this area currently flows north through two culverts: one close to 17 Street, the other close to the eastern boundary of the ASP.

The central catchment area, approximately 48.5 ha, is bounded by the ridge to the north, 17 Street to the west, the quarter line to the south, and the ASP boundary to the east. Overland flow drains to a small wetland located on the west-central portion of the Plan area.

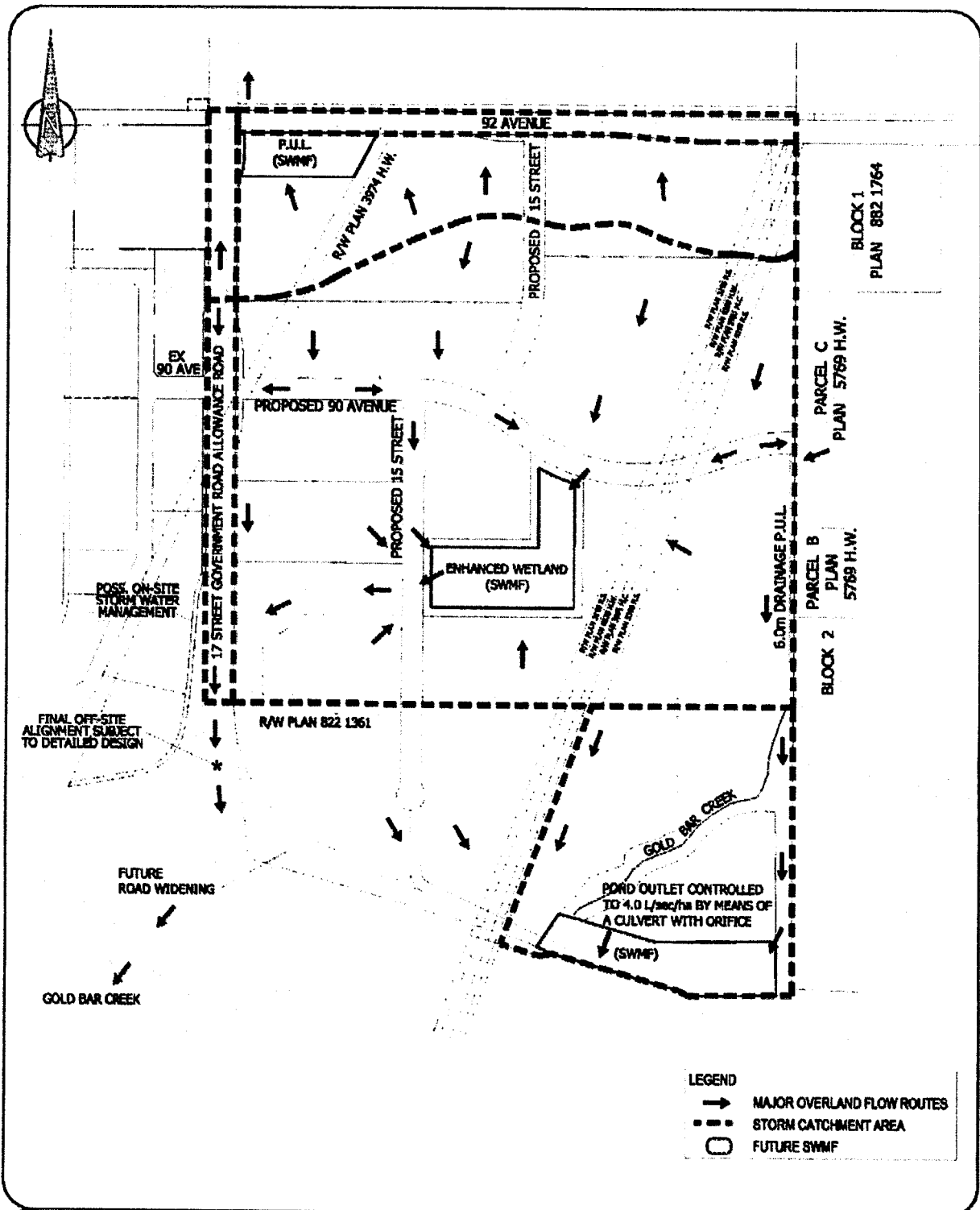
The southern catchment area, approximately 21.7 ha, is bounded by the quarter line to the north, 17 Street to the west, the Sherwood Park freeway to the south, and the ASP boundary to the east. Overland flow drains to Gold Bar Creek which crosses under the Sherwood Park Freeway through a culvert.

The Gold Bar Creek Area Master Plan, prepared by UMA, sets some design criteria for dealing with storm water runoff in the Gold Bar Creek basin; for which the Laurin Industrial Park ASP is part. Gold Bar Creek itself flows through the south-eastern portion of the site and a tributary flows through the northern portion. Both of these drainage courses have limited capacity. Because of this and the need to protect properties and control erosion downstream, storm water management is required as part of the development.

The purpose of the storm water management facilities would be to temporarily store storm water run-off from the developed areas and release flows to the drainage courses at a rate equivalent to that existing prior to development. This scheme would take the form of three separate storage facilities - one for each catchment area.

Each storm water management facility would consist of an excavated pond (or wetland) which is sized to accommodate the storage needed to retain a 1:100 year storm event without exceeding the discharge rate.

Storm run-off would be directed from individual sites on the surface to road side ditches and ultimately to the storage pond within its identified catchment area. Outflows from the ponds into the existing drainage courses would be controlled by culverts and orifices.



LAURIN INDUSTRIAL STORM DRAINAGE CONCEPT

CONCEPT ONLY
SUBJECT TO
DETAILED DESIGN
N.T.S.



Figure 6

OCTOBER 2006



**Area Structure Plan
Laurin Industrial Park**

The northern catchment area will have SWM pond at the northeast corner of the site. A culvert, under 92 Avenue, will direct the discharge of the pond north along the east side of 17 Street.

The central catchment area will have SWM pond at the west-central portion of the site. Discharge would be directed south along the east side of 17 Street, then through a culvert to the west side of 17 Street. Eventually, the water crosses the Sherwood Park Freeway then makes it way into Gold Bar Creek.

The southern catchment area will have SWM pond at the southeast corner of the site. An orifice will control the discharge into Gold Bar Creek which then enters a culvert, under the Sherwood Park Freeway.

Details regarding discharge rates and catchment areas can be found in the February 2006 Laurin Industrial Park Storm Water Management Report.

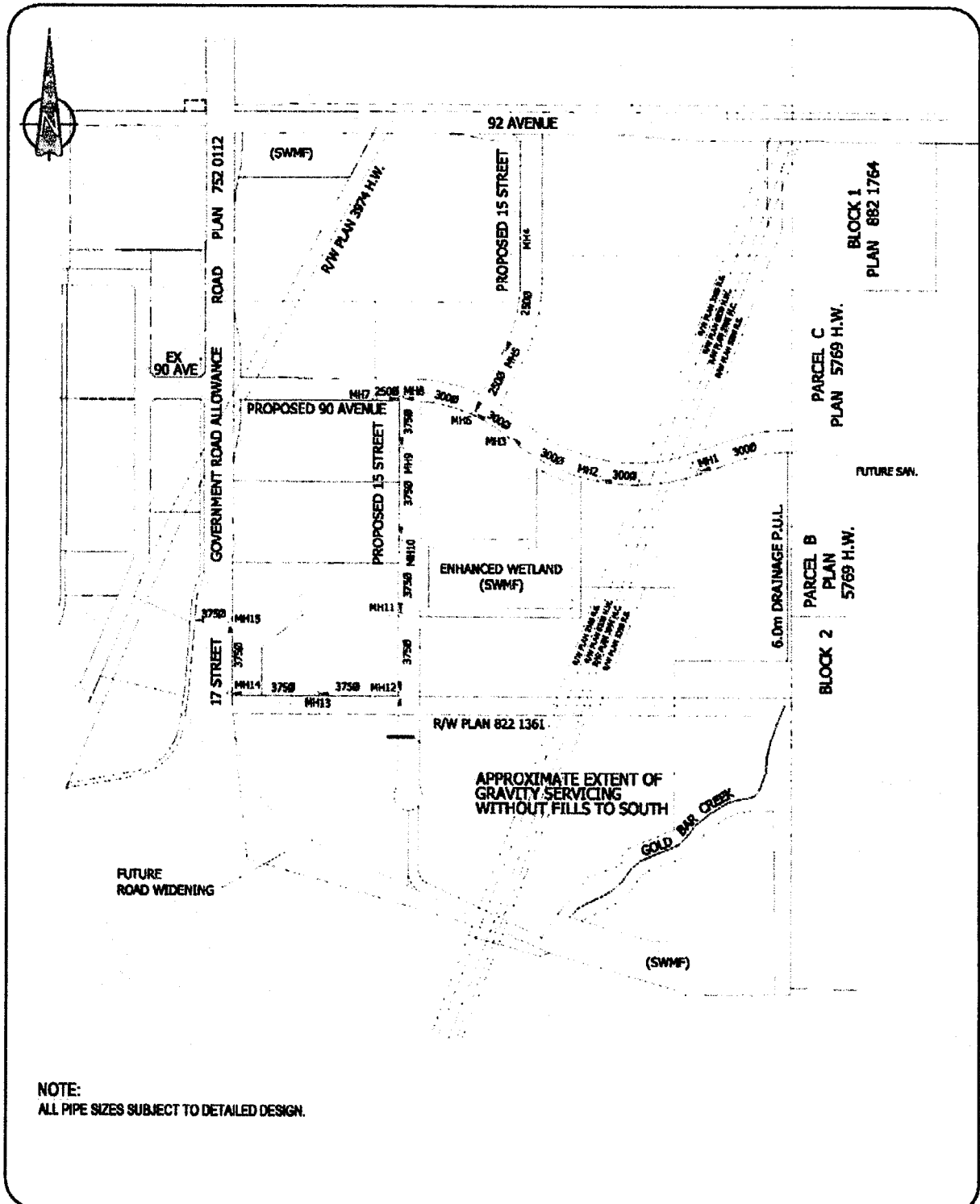
4.2 SANITARY SERVICING

Sanitary sewage for the Laurin Industrial ASP would be discharged to the Sanitary Sewer system by means of connecting to a 375mm stub located west of 17 Street (see Figure 7). The existing system to the west of 17 Street was sized to include the subject lands.

Sanitary sewers will be extended throughout the Plan Area constructing the lines along the main spine road of this site. The sanitary line would be laid as deep as possible to accommodate the two parcels to the south of the quarter line. This sanitary line would then allow for gravity drainage from buildings constructed close to the quarter-line.

The size of the buildings, the elevation of the floor slab, and the amount to which the ground in the area is raised, will all determine how far south buildings can be constructed to ensure they will be serviceable by the gravity sanitary sewer. Figure 7 indicates the approximate location of the end of the sanitary sewer to the south. Even though the extent of the gravity servicing can be increased by raising the ground in this area, the existing ground elevation still permits buildings that are constructed on both of the parcels to be gravity service with sanitary sewer.

The deepening of the sanitary sewer will also allow for the lands to the east to connect to this sanitary sewer. Detailed Engineering will confirm the pipe sizes and depths for the sanitary system throughout this site. Information on the entire sanitary sewer network (pipe sizes, grades, depths, etc.) will be available in the supplementary Servicing Report for the Laurin Industrial Park.



Laurin Industrial Sanitary Sewer Concept

CONCEPT ONLY
SUBJECT TO
DETAILED DESIGN
N.T.S.

Figure 7

OCTOBER 2008



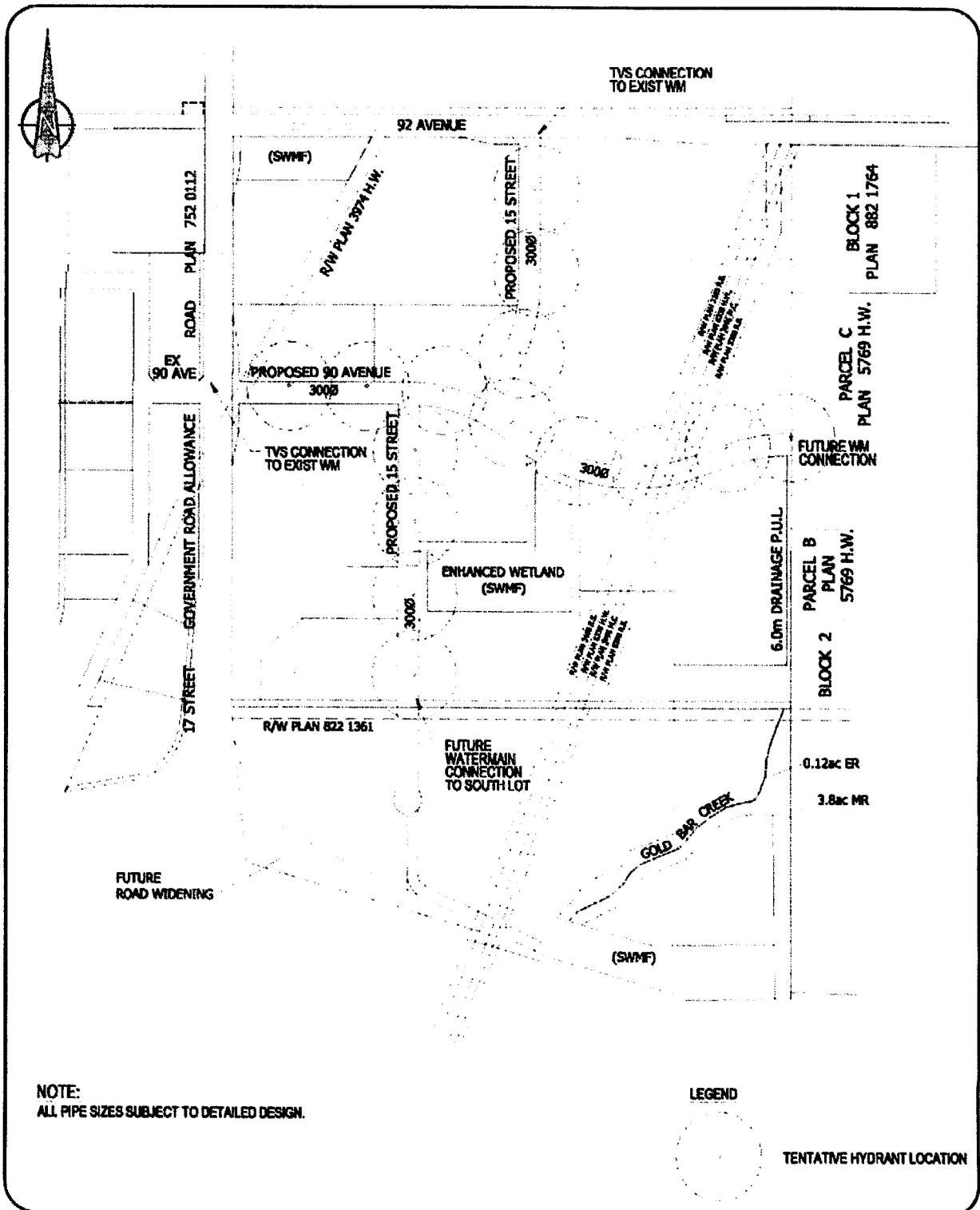
4.3 WATER SERVICING

There are several existing water supply lines through and adjacent to the Plan Area. There are three existing water mains along 92 Avenue adjacent to the north boundary of the site: 150mm, 250mm and 375mm diameters. There is a waterline along 17 Street to the west, and a 900mm high pressure transmission main along the quarter line which bisects this land.

Figure 8, Water Distribution Concept, identifies how the Plan Area will be serviced by water. A connection will be made from the west along 90 Avenue on the west side of 17 Street. A further connection will be made from the north to the 375 mm main along 92 Avenue. These two connections will allow two water source points for the Plan Area and allow for some looping. Since these two water sources are in differed pressure zones, a Pressure Reducing Valve will be required to maintain proper and consistent water pressures in the Plan Area.

Although the 900mm high pressure transmission line cuts through the lower third of the property, the connection to this line is not supported by the County. The water mains will therefore temporary end at the quarter line until future looping to the south and/or east is constructed.

Water network analysis will be completed during the detailed engineering stage to ensure the adequate sizing of mains for consumption and fire protection throughout the Plan Area.



LAURIN INDUSTRIAL
WATER DISTRIBUTION CONCEPT



CONCEPT ONLY
SUBJECT TO
DETAILED DESIGN
N.T.S.

Figure 8

OCTOBER 2008



4.4 TRANSPORTATION

As identified earlier in this ASP, the transportation network has been developed to allow for proper circulation within the Plan Area, as well as good access to 92 Avenue and 17 Street (see Figure 9).

A Traffic Impact Assessment (TIA) was conducted and submitted to the County in September 2001. Although the internal layout of the road network has changed, the external access points are almost the same. There is an access to 17 Street at 90 Avenue which is identical to the 2001 ASP. Even though there is now only one access to 92 Avenue from the site instead of two, the reduction in the number of parcels in this Plan Area may mean that the double left turn identified in the previous TIA for the at the 92 Avenue / 17 Street intersection (westbound to southbound movement) is no longer required. The TIA will be reviewed again to confirm whether this is the case or not.

Based on the TIA results, there will be the need for the eventual installation of traffic signals at the 17 Street / 90 Avenue intersection. The reasoning is not so much intersection capacity, but the existing grade on 17 Street impedes the sight distance of oncoming vehicles. Furthermore, signalization will allow for large trucks (a mainstay of Medium Industrial land use) to enter 17 Street easier than if the intersection was unsignalized. The County has indicated the Laurin Industrial Park will be responsible for 50% of the cost for signalizing this intersection.

Other improvements to the external roadway connections will include the construction of acceleration and/or deceleration lanes for the 17 Street / 90 Avenue intersection, 17 Street / 92 Avenue intersection, and the 15 Street / 92 Avenue intersection. Additional road ROW dedication will be provided to account for the road widening requirements.

The roads within the Plan Area will be constructed to the current County Standards of an urban cross-section (paved road with curb and gutter). The Industrial Collector Road (90 Avenue) will have a 24-metre ROW with a 13.5 metre carriage way; where the Industrial local road will have a 20-metre ROW with an 11.0 metre carriage way. Further, all internal roads will be street lit.

4.5 SHALLOW UTILITIES

All shallow utilities will be extensions of those already in place in adjacent developments. Adequate infrastructure is available to accommodate the proposed development.



Area Structure Plan
Laurin Industrial Park

5.0 IMPLEMENTATION

5.1 DEVELOPMENT STAGING

The Laurin Industrial Park ASP contains only two land owners. The largest portion of land, everything north of the quarter line, is held by 1121378 Alberta Ltd. (the initiator of this ASP).

After review of market conditions and possible demand for serviced Medium Industrial lots, 1121378 Alberta Ltd. is anticipating the development of their land will all occur at once. Given this, the ASP will only have two stages - 60.5 ha to the north, then 21.7 ha to the south. Figure 10, Staging Concept, illustrates the Staging Plan.

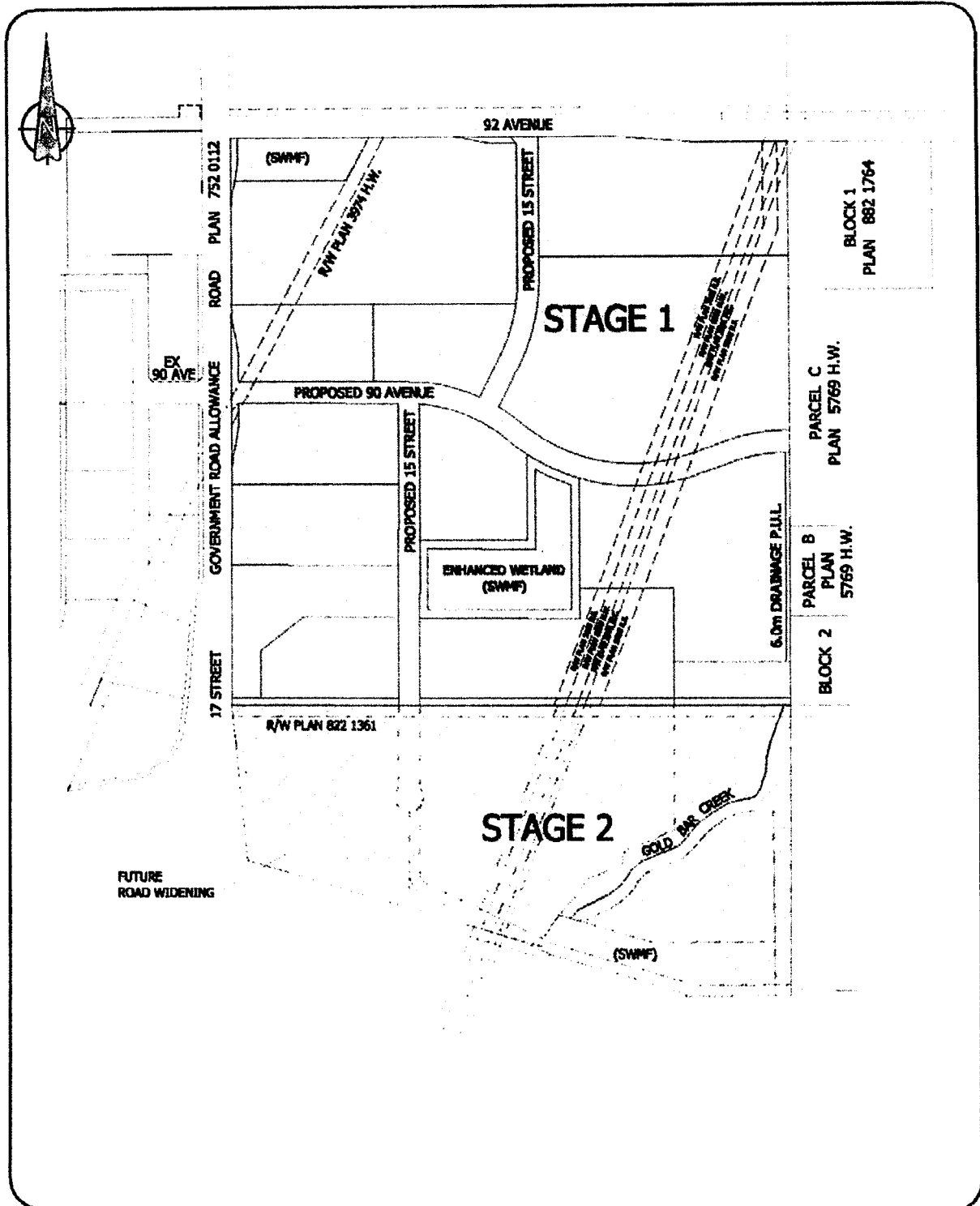
Temporary road turnarounds, if required due to staging, will be identified at time of subdivision.

5.2 REDISTRICTING & SUBDIVISION

The land is currently zoned IM (Medium Industrial) hence redistricting is not required.

Although the land is zoned IM, it is also located within the IH-O (Heavy Industrial Transition Overlay) 1.5 Km. This means that all development and building on all lots will comply with the IH-O guidelines.

Subdivision will occur separately for each stage, and be undertaken by the respective land owner.



LAURIN INDUSTRIAL **STAGING CONCEPT**

CONCEPT ONLY
SUBJECT TO
DETAILED DESIGN
N.T.S.

Figure 10

OCTOBER 2006