



City of Grande Prairie
Development Services
Department

**PINNACLE WEST
OUTLINE PLAN**

City of Grande Prairie

May 2005

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Purpose of Plan	1
1.2	Plan Area Location	1
1.3	Policy and Regulatory Context	1
1.4	Ownership and Dispositions	2
1.5	Site Characteristics	2
2.0	DEVELOPMENT PLAN	3
2.1	Plan Objectives	3
2.2	Development Concept	3
2.2.1	General	3
2.2.2	Residential Development	3
2.2.3	Open Space	5
3.0	INFRASTRUCTURE	6
3.1	Transportation Network	6
3.2	Water Distribution	6
3.3	Sanitary Sewer	6
3.4	Stormwater Management	7
3.5	Shallow Utilities	7
4.0	IMPLEMENTATION	8
4.1	Phasing	8
4.2	Proposed Zoning	8

LIST OF MAPS

Map 1	Plan Area Location
Map 2	Existing Conditions
Map 3	Topography
Map 4	Land Use
Map 4A	Tentative Lotting
Map 5	Transportation
Map 6	Water System
Map 7	Sanitary Sewer
Map 8	Storm Drainage
Map 9	Phasing
Map 10	Zoning

LIST OF TABLES

1	Plan Area Composition
2	Land Use Summary
3	Population and Student Generation

1.0 INTRODUCTION

1.1 Purpose of Plan

The Pinnacle West Outline Plan has been prepared on behalf of the owners of the subject lands to provide a detailed framework for the future development of lands in southeast Grande Prairie for residential purposes.

This Outline Plan has been prepared in accordance with Policy 7.2.2 of the City of Grande Prairie Municipal Development Plan. As required by this policy, the Plan addresses the following:

- Physical features and development constraints;
- Future land use and development concept, including lot layout;
- Proposed transportation network, including the approximate alignment of future arterial, collector and local roads;
- Disposition of municipal reserve;
- Proposed servicing for the area; and
- Intended phasing of development.

1.2 Plan Area Location

This Outline Plan applies to 40.2 ha of land that is bounded to the south by 68th Avenue and to the west by 116th Street. The Plan area is to the west of the Pinnacle Ridge neighbourhood. The City boundary is located along the west and south sides of the subject lands as indicated in Map 1.

Other adjacent land uses include the Westpointe and O'Brien Lake neighbourhoods, currently under development to the north and southeast respectively, two farm sites and related agricultural lands to the south, and incidental country residential development to the west.

1.3 Policy and Regulatory Context

The Pinnacle West Outline Plan has been prepared in accordance with the requirements of the Grande Prairie Municipal Development Plan (MDP). This Outline Plan is consistent with MDP policies respecting the utilization of spare servicing capacity and the development of an efficient land use pattern. This Outline Plan is also consistent with the provisions of the Southwest Area Structure Plan, in which the subject site is located.

The Plan area is currently designated as Urban Reserve (UR) in the Grande Prairie Land Use Bylaw. The subject lands will be rezoned to reflect the land uses contained in this Outline Plan prior to subdivision and development approval.

1.4 Ownership and Dispositions

As outlined in Table 1, the Plan area consists of 40 ha of land on five titles. There are no encumbrances on title that affect the future development of the subject lands.

Table 1 – Plan Area Composition

Legal	Owner	Area (ha)
Pt. Lot 7, Flyingshot Lake Settlement	Peterbern Developments Ltd.	6.43
Lot 8, Flyingshot Lake Settlement	Top Realty (GP) Ltd. et. al.	31.65
Road Allowance (Purchased)	Top Realty (GP) Ltd. et. al.	1.23
Pt. Road Allowance	City of Grande Prairie	0.34
Road Plan 2783CL	City of Grande Prairie	0.49
Total		40.14

In order to accommodate development of the proposed neighbourhood, acquisition of the west half of the existing road allowance located on the east side of the Plan area will be required¹.

1.5 Site Characteristics

As illustrated in Map 2 the Plan area is predominantly open meadow with small pockets of tree cover. There is no development in the Plan area at present. A high voltage (144 kV) power line follows the west boundary of the Plan area along 116th Street.

Map 3 shows that the Plan area is characterized by gently sloping topography, with elevations ranging from 670 m on the north boundary to 661 m in the southwest corner (average 2% slope).

¹ The east half of the road allowance was previously acquired and incorporated into the development of the Pinnacle Ridge neighbourhood.

2.0 DEVELOPMENT PLAN

2.1 Plan Objectives

The Pinnacle West Outline Plan is intended to achieve the following objectives:

1. To provide an overall framework for future residential and open space development in the southwest portion of the City that is compatible with development located on, or proposed for, adjacent lands;
2. To provide for the development of an attractive residential neighbourhood;
3. To develop a safe and efficient transportation network that meets the needs of passenger vehicles, pedestrians, cyclists, and public transit; and
4. To develop an efficient municipal servicing and phasing system for the Plan area.

2.2 Development Concept

2.2.1 General

The proposed land use concept for the Pinnacle West Outline Plan is illustrated in Map 4, and a summary of land uses is provided in Table 2. It is proposed that the Plan area be developed for low density and multi-family residential use.

As indicated in Table 2, the net developable area available is approximately 34.6 hectares.

2.2.2 Residential Development

The largest single land use in the Plan is low-density residential development, totaling approximately 18 ha, occupying 45% of the Plan area. A maximum of 592 single family units may be accommodated in the area based on the proposed zoning², however as actual lot sizes are likely to be in the range of 11m to 12.8m in width for a majority of the Plan area, the true yield will approximately 365 lots.

A node of low-rise multi-family development totaling 4.4 ha is also intended for the east side of the Plan area. Assuming an average lot width of 7.5m³, an additional 166 units may be developed at this location. It is assumed that low-rise cluster housing or townhouse complexes that are compatible with adjacent low density residential development would be developed.

² This is based on the minimum lot area of 302m² provided in the Low Density Residential (RL) District.

³ This equates to a lot area of 262.5m² based on a lot depth of 35m.

Table 2 – Land Use Summary

Land Use	Lot 8	Pt. Lot 7	N. Road Allowance	Pt. E. Road Allowance	Area (ha)	Percent
Total Area	32.14	6.43	1.23	0.34	40.14	
Less Existing Road Widening	0.49	0	0	0	0.49	
Net Developable Area	31.65	6.43	1.23	0.34	39.65	100.0
Residential	16.99	4.04	0.87	0.32	22.22	56.0
Single Family	16.99	0	0.87	0	17.86	45.0
Multi-Family	0	4.04	0	0.32	4.36	11.0
Open Space	3.83	0	0.29	0	4.12	10.4
Neighbourhood Parks	1.38	0	0	0	1.38	3.5
School Site	2.45	0	0.29	0	2.74	6.9
Roads	8.73	2.39	0.07	0.02	11.21	28.3
Road Widening	0.89	0.31	0.01	0	1.21	3.1
Internal Roads	7.56	1.81	0.06	0.02	9.45	23.8
Lanes	0.28	0.27	0	0	0.55	1.4
Public Utility Lots	0.15	0	0	0	0.15	0.4
Storm Pond	1.95	0	0	0	1.95	4.9

As illustrated in Table 3, it is anticipated that a total of 2,310 residents may be accommodated in the Plan area, of which 476 are estimated to be of school age. Overall, the area will accommodate a maximum residential density of 19.1 units and 58.2 persons per net developable hectare. A tentative lotting plan is provided in Map 4A.

2.2.3 Open Space

The following is a detailed breakdown of municipal reserve allocation:

- A 2.74 ha parcel of land is allocated in the northeast corner of the Plan area to accommodate a portion of a proposed joint school site in accordance with the Southwest Area Structure Plan.
- Two large neighbourhood parks, averaging 0.69 ha in size are to be provided in the Plan area. The furnishing of these parks will be discussed in detail in the Parks Design Report.

The reserve lands allocated in the Plan area exceeds slightly the 10% maximum requirement as provided for in the Municipal Government Act.

Table 3 – Population and Student Generation

Population Generation		
SF Residential Land Area		17.9 ha
Max. Number of SF Units	Minimum 302 m ² lot size	592 ⁴
Max. SF Population	592 units @ 3.2 ppu	1,894
MF Residential Land Area		4.36 ha
Number of MF Units	Average 262.5 m ² lot size	166
MF Population	166 units @ 2.5 ppu	415
Total Population		2,309
Student Generation⁵		
Total Students	20.6% of Population	476
Total Public	66.2% of Total Students	315
Total Separate	33.8% of Total Students	161
Public School Students		
Total Students		315
Total K-9	73.8% of Students	232
Total 10-12	26.2% of Students	83
Separate School Students		
Total Students		161
Total K-9	78.1% of Students	126
Total 10-12	21.9% of Students	35

⁴ Yield is reduced to 365 lots if an average lot area of 490 m² is assumed, reducing the single family population to 1,168.

⁵ Based on school enrolments as of October 31, 2004.

3.0 INFRASTRUCTURE

3.1 Transportation Network

As illustrated in Map 5, the Plan area is served by two arterial roadways: 68th Avenue to the south and 116th Street to the west, both of which are two-lane gravel roadways at present. According to the City's Transportation Master Plan, both roadways are to be ultimately constructed to a four-lane divided standard. In order to accommodate the eventual upgrading of these roads, lands along the west and south boundaries of the Plan area have been set aside for widening. In addition, lots backing on to these roads have been designed with extra depth in order to accommodate noise attenuation measures.

Major collector access to the Pinnacle West area is provided from 68th Avenue at 114th Street, and from 116th Street at Pinnacle Drive. Both of these collector roads provide connections to adjacent lands to the north and east. The balance of the Plan area is to be served by a network of local roads. In addition, approximately 17% of the proposed lots are to be served by rear lanes.

Accommodation for pedestrians and cyclists is provided through the development of an asphalt trail and concrete sidewalk network that provides connections to future trails in Pinnacle Ridge and Westpointe along the arterial roadways. Internal connections are provided to the school site.

3.2 Water Distribution

Generally there will be two main feeds to the Plan area. A 300mm connection is planned to the east corner of the Plan area to Pinnacle Ridge. The second 300mm connection is planned to the north of the Plan area into Westpointe. The proposed looped water system for the Plan area is illustrated on Map 6.

Additional information pertaining to the water distribution/fire system is outlined in the detailed design report for water.

3.3 Sanitary Sewer

A network of 200mm and 250mm gravity sanitary sewer mains is proposed to ultimately discharge to the West Sanitary Trunk line in accordance with the 2005 Sanitary Sewer Master Plan. In the interim, the sanitary system will discharge to a temporary lift station located in the southwest corner of the Plan area. The temporary lift station will discharge via a temporary forcemain to the existing 250mm main located at the southwest corner of Pinnacle Ridge, ultimately tying into a 375mm main near the 68th Avenue and 108th Street (Wapiti Road) intersection. There is a possibility the future West trunk alignment would allow for the connection of the Pinnacle West gravity system directly to the West trunk, thus eliminating the need for a lift station.

Additional detailed information pertaining to the sanitary system is outlined in the design report for sanitary.

3.4 Stormwater Management

The Plan area consists of a single drainage basin. As illustrated in Map 8, stormwater from the development area will be collected by a series of stormwater mains in conjunction with an overland flow path and directed to a storm detention pond proposed in the low lying area in the southwest corner of the neighbourhood. This pond will have capacity to store the 1:100 year storm event and will outfall at predevelopment levels south to the Flyingshot Creek system.

Additional information pertaining to the storm drainage system is outlined in the detailed design report for stormwater management.

3.5 Shallow Utilities

All shallow utilities (natural gas, power, telephone) are to be extended into the Plan area by the individual franchise holders as required.

In accordance with City policy, with the exception of the 25kV sub-transmission main feeder line along 116th Street and the 25kV line located on the north side of 68th Avenue, any overhead distribution lines located adjacent to residential areas will be installed underground at the Developer's expense.

4.0 IMPLEMENTATION

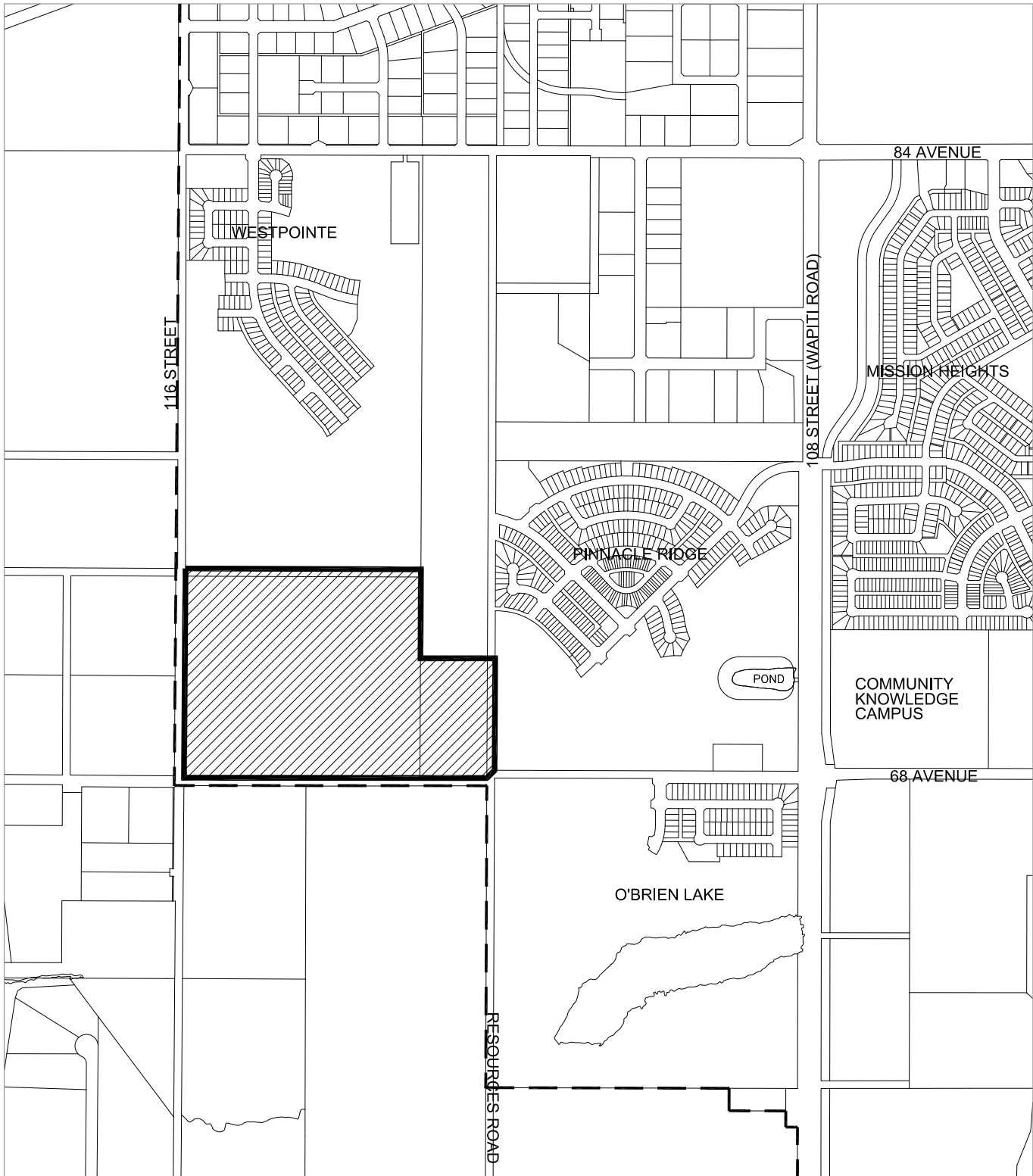
4.1 Phasing

A tentative phasing plan is provided in Map 9. It is intended that development of the subject lands start at the east end of the Plan area in order to take advantage of the gravity feeds into the Pinnacle Ridge sewer system. Development will then proceed to the west and north as conditions warrant.

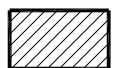
Notwithstanding the above, the school site may be developed in advance of Phase 3 subject to the agreement of the owner, the City, the public and separate school boards and Aquatera Utilities Inc. with respect to the provision of access and services.

4.2 Proposed Zoning

Proposed zoning for the Plan area is identified in Map 10. The areas slated for single family residential development will be zoned under the Low Density Residential (RL) District of the Land Use Bylaw. Combined Density Residential (RC) zoning is proposed for the multi-family node located on the east side of the Plan area. The school site will be zoned under the Public Service (PS) District. All zoning changes will be made concurrently with Outline Plan approval in advance of subdivision.



PINNACLE WEST OUTLINE PLAN CITY OF GRANDE PRAIRIE



PLAN AREA



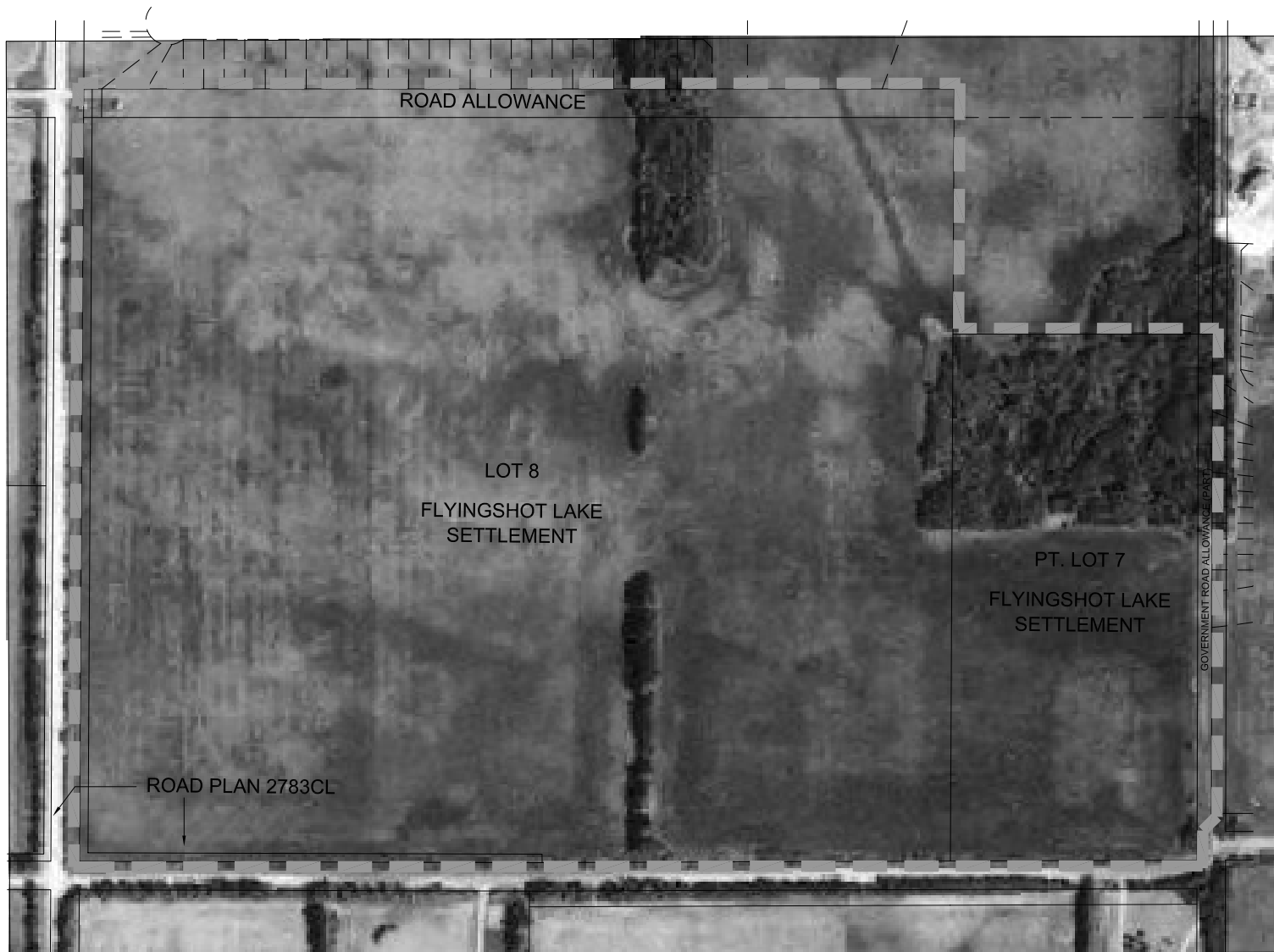
CITY BOUNDARY

MAP 1 - PLAN AREA LOCATION

SCALE : N.T.S.

May 2005





LEGEND

PINNACLE WEST OUTLINE PLAN CITY OF GRANDE PRAIRIE



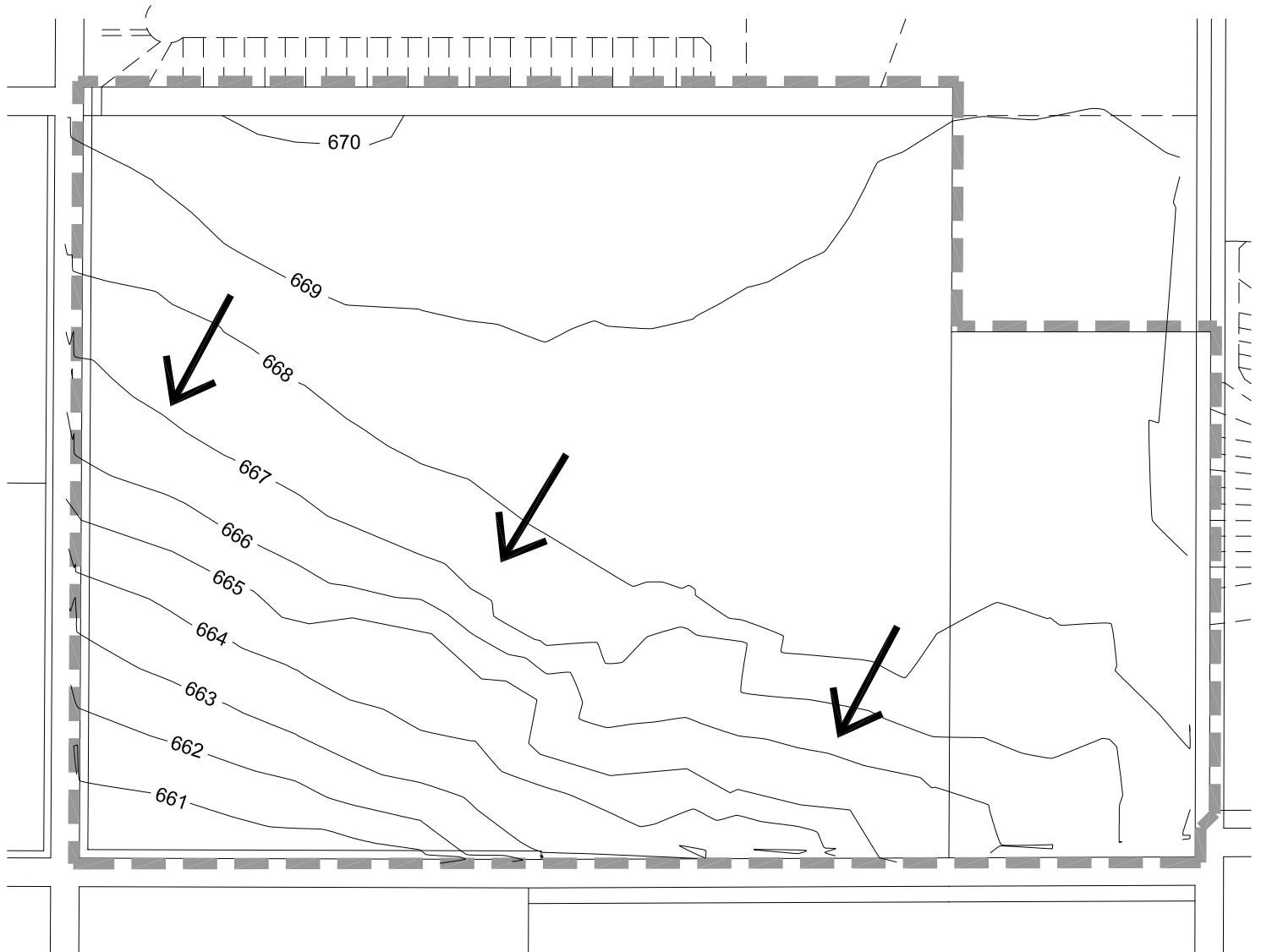
— — — PLAN BOUNDARY

MAP 2 - EXISTING CONDITIONS

SCALE : N.T.S.

May 2005





LEGEND

- 661 ELEVATION
- 1M CONTOUR
- DIRECTION OF FLOW
- PLAN BOUNDARY

PINNACLE WEST OUTLINE PLAN

CITY OF GRANDE PRAIRIE

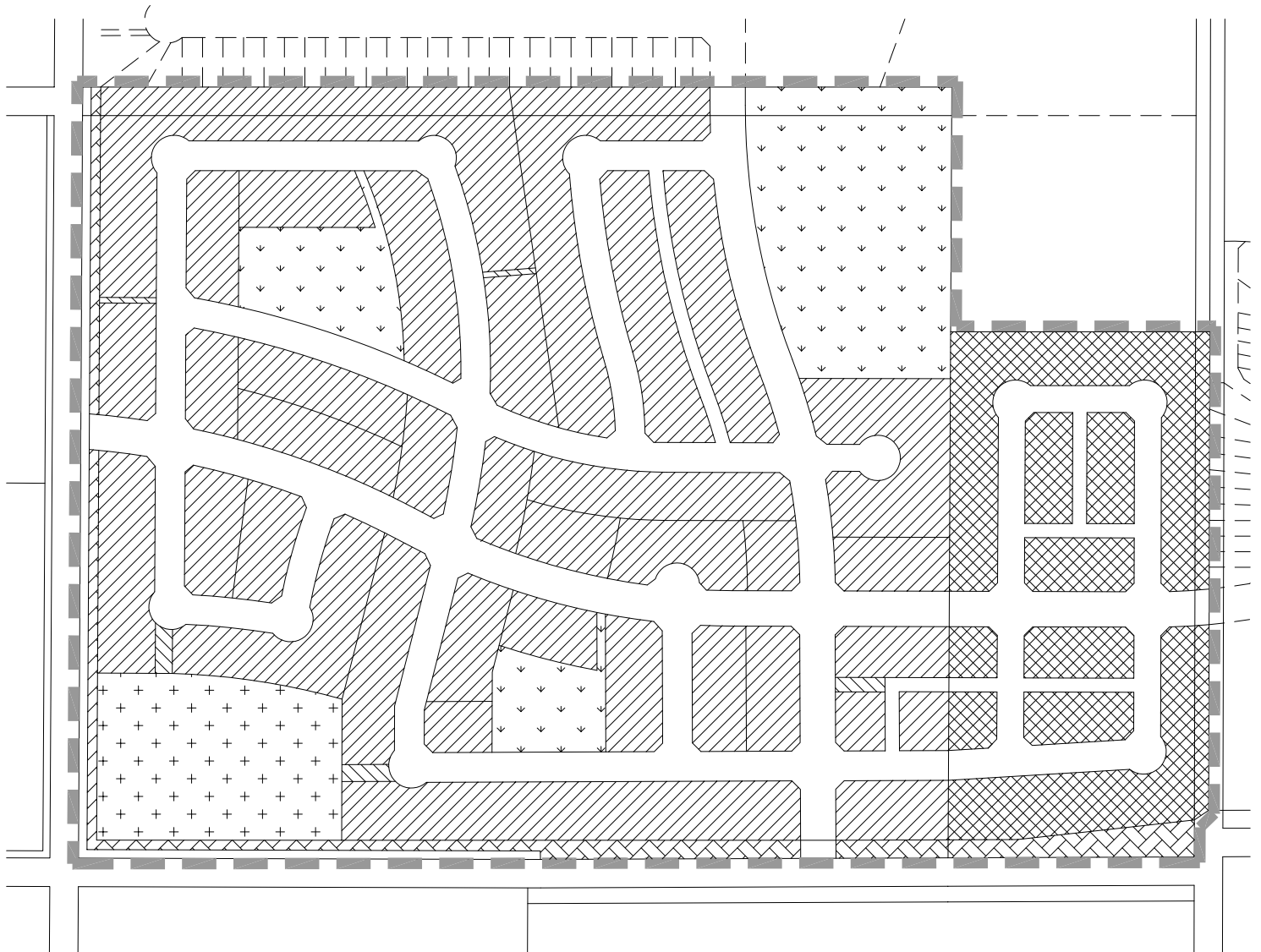


MAP 3 - TOPOGRAPHY




SCALE : N.T.S.




May 2005





LEGEND

-  SINGLE FAMILY
-  MULTI-FAMILY
-  MUNICIPAL RESERVE

-  PUBLIC UTILITY LOT
-  ROAD WIDENING
-  STORM POND

— — — PLAN BOUNDARY

PINNACLE WEST OUTLINE PLAN

CITY OF GRANDE PRAIRIE



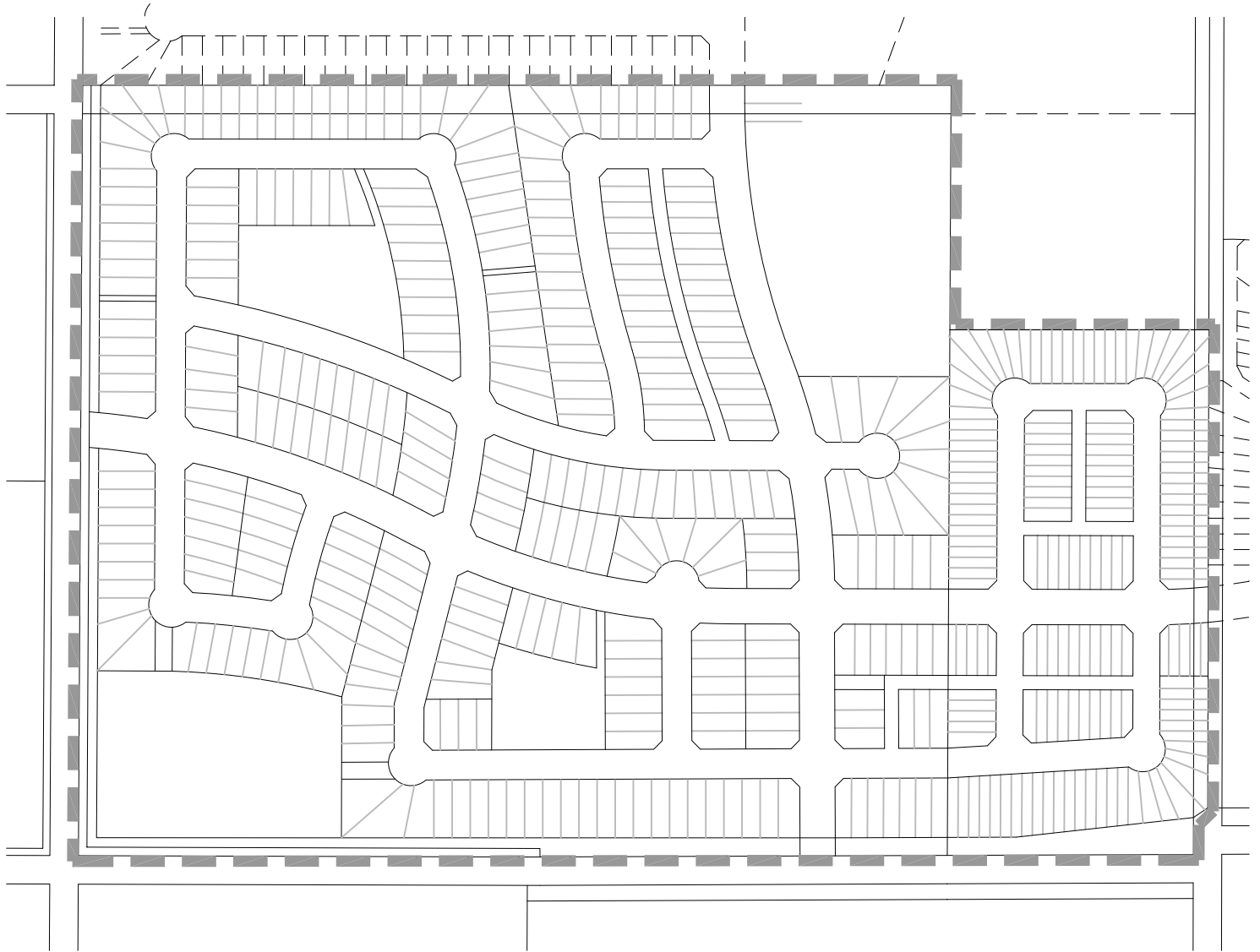
MAP 4 - LAND USE

SCALE : N.T.S.

May 2005

ISL

gpec
CONSULTING LTD.



LEGEND

PINNACLE WEST OUTLINE PLAN

CITY OF GRANDE PRAIRIE



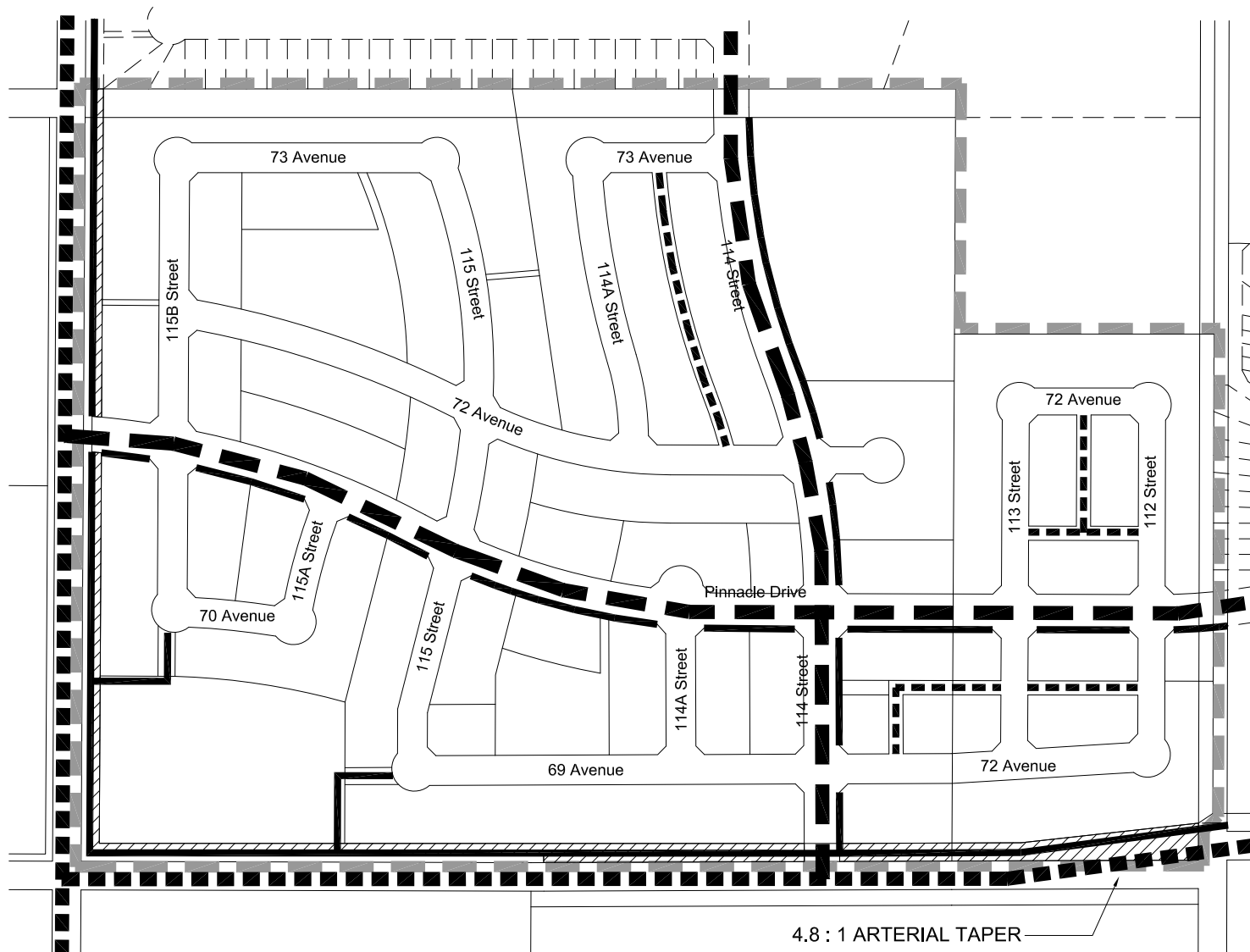
— — — PLAN BOUNDARY

MAP 4A - TENTATIVE LOTTING




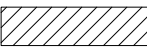


SCALE : N.T.S.

May 2005





LEGEND

- | | | | |
|---|----------------------------|---|---------------|
|  | ARTERIAL |  | LANE |
|  | COLLECTOR
(MAJOR/MINOR) |  | ROAD WIDENING |
|  | PEDESTRIAN LINK/TRAIL | | |
|  | PLAN BOUNDARY | | |

PINNACLE WEST OUTLINE PLAN

CITY OF GRANDE PRAIRIE



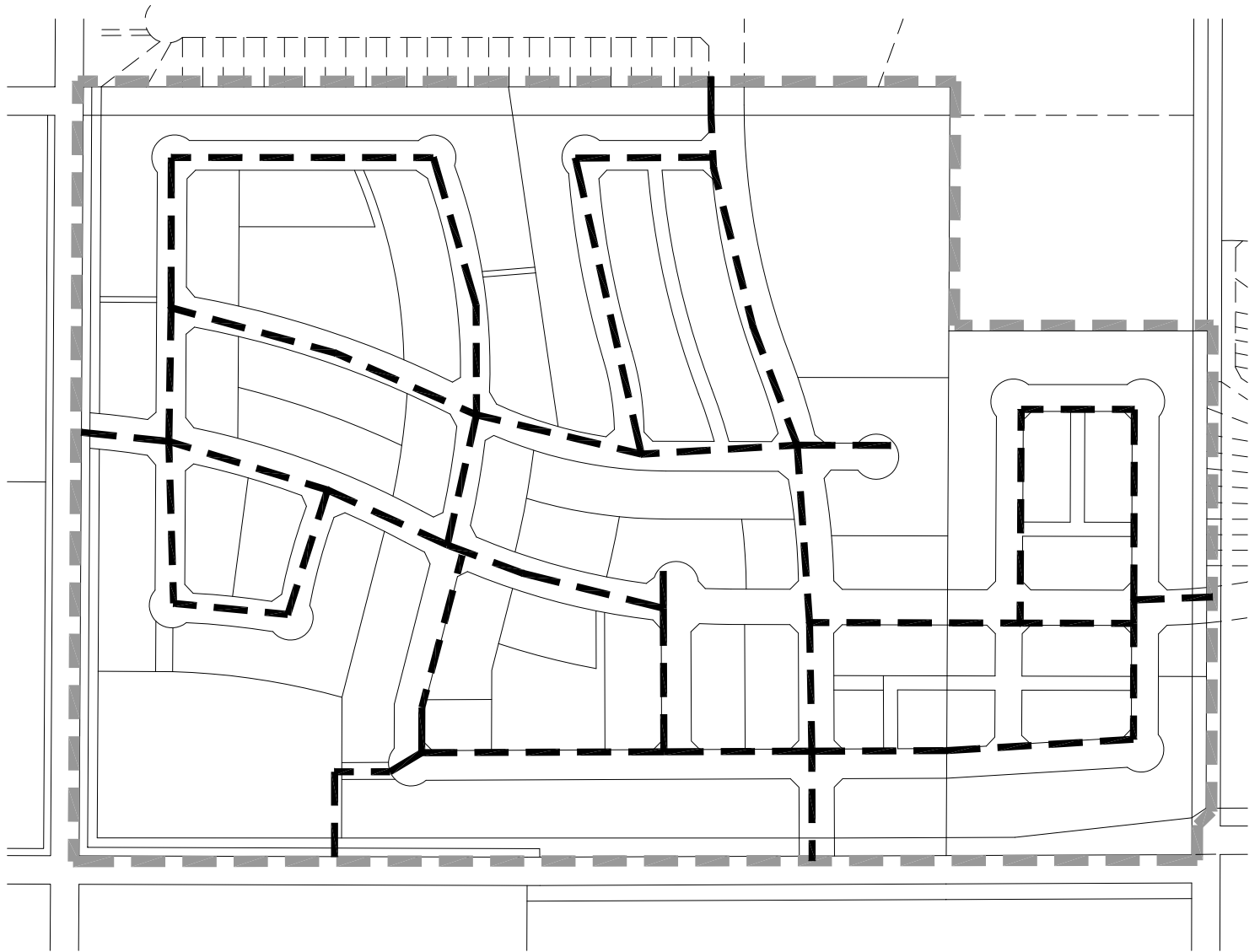
MAP 5 - TRANSPORTATION

SCALE : N.T.S.

May 2005

ISL

opac
CONSULTING LTD.



LEGEND

--- WATER LINE

--- PLAN BOUNDARY

PINNACLE WEST OUTLINE PLAN

CITY OF GRANDE PRAIRIE

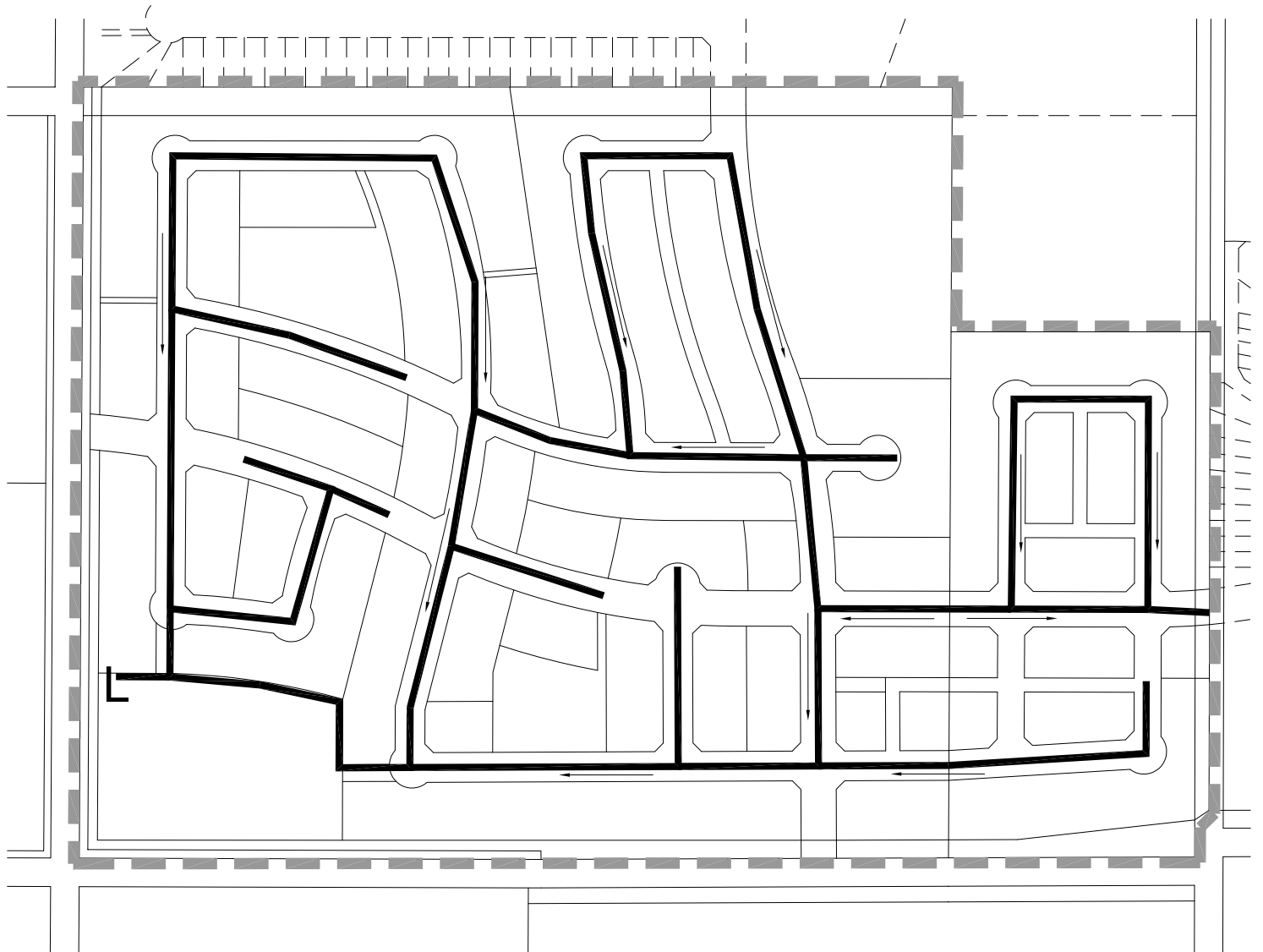


MAP 6 - WATER SYSTEM


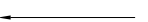


SCALE : N.T.S.

May 2005





LEGEND

-  SEWER LINE
-  DIRECTION OF FLOW
-  LIFT STATION
-  PLAN BOUNDARY

PINNACLE WEST OUTLINE PLAN

CITY OF GRANDE PRAIRIE



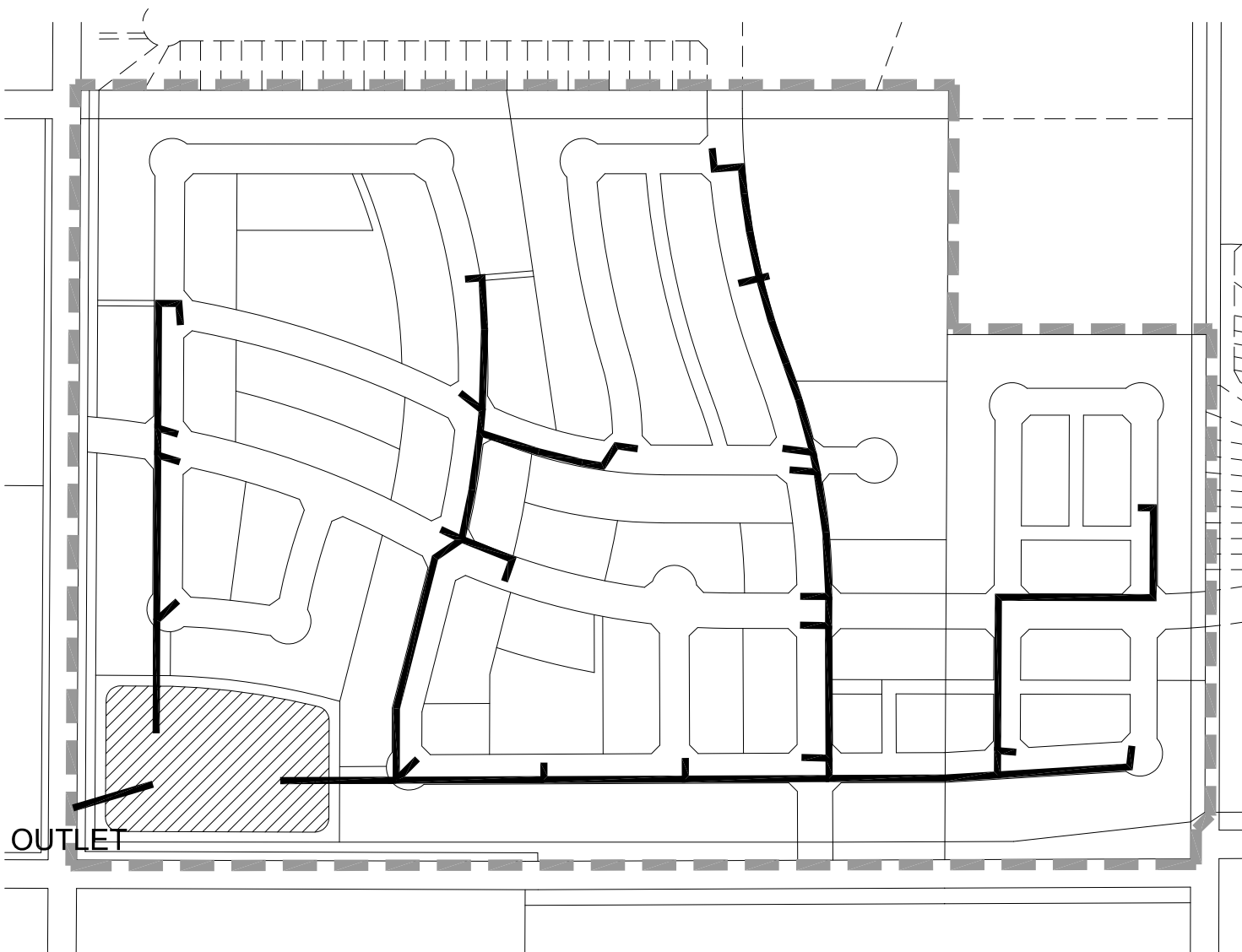
MAP 7 - SANITARY SEWER

SCALE : N.T.S.

May 2005

ISL

opac
CONSULTING LTD.



LEGEND



SEWER LINE



STORM POND



PLAN BOUNDARY

PINNACLE WEST OUTLINE PLAN

CITY OF GRANDE PRAIRIE

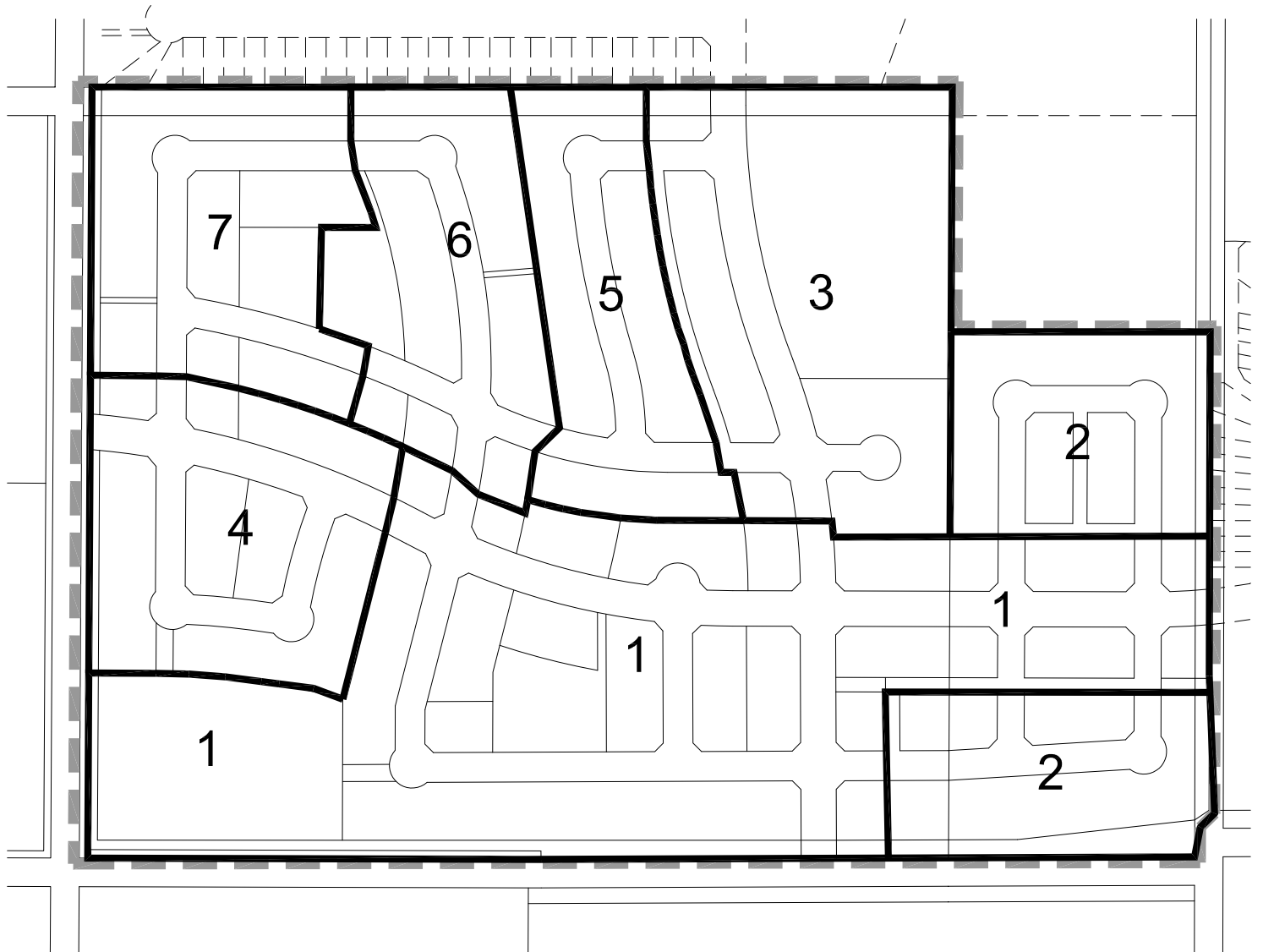


MAP 8 - STORM SEWER

SCALE : N.T.S.

May 2005





LEGEND

1 DEVELOPMENT PHASE (TENTATIVE)



— — — PLAN BOUNDARY

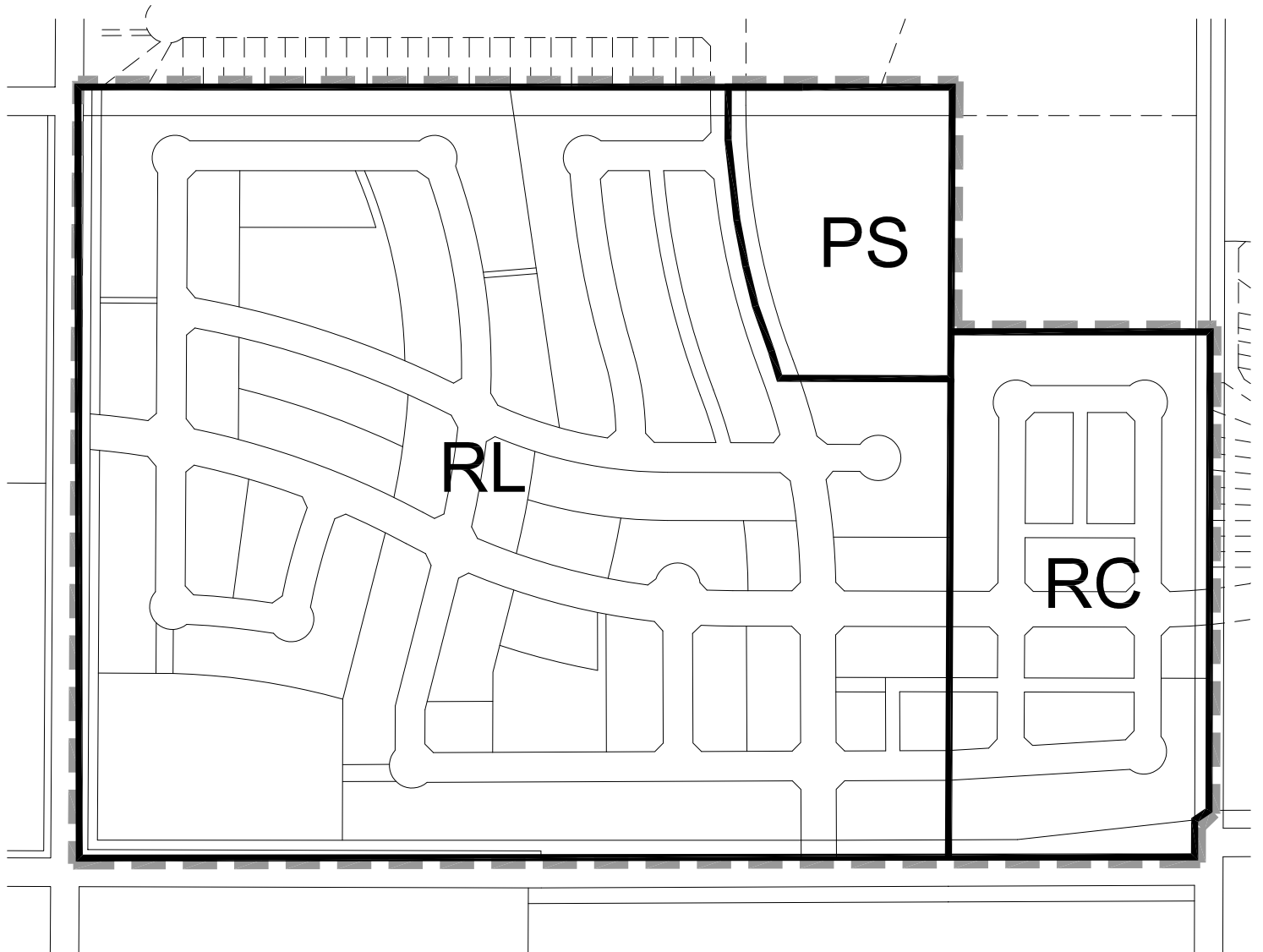
MAP 9 - PHASING

SCALE : N.T.S.

May 2005

ISL

opac
CONSULTING LTD.



LEGEND

- RL** LOW DENSITY RESIDENTIAL
- RC** COMBINED DENSITY RESIDENTIAL
- PS** PUBLIC SERVICE

— — — PLAN BOUNDARY

PINNACLE WEST OUTLINE PLAN

CITY OF GRANDE PRAIRIE



MAP 10 - PROPOSED ZONING

SCALE : N.T.S.

May 2005

