

**BY-LAW NO. 2847 OF THE  
COUNTY OF GRANDE PRAIRIE NO. 1**

A by-law of the County of Grande Prairie No. 1 in the  
Province of Alberta, to adopt the attached WEST  
CLAIRMONT Area Structure Plan for SEC 23-72-6-W6

**WHEREAS** the Municipal Government Act, Statutes of Alberta, 2000, Chapter M-26. and amendments thereto, authorizes a Council to provide a framework for the subdivision and development of an area of land within the Municipality; and

**WHEREAS** the Council of the County of Grande Prairie No. 1 has properly notified the owners of land within the development area, pursuant to provisions of the Municipal Government Act, Statutes of Alberta, 2000, Chapter M-26, and amendments thereto.

**NOW THEREFORE** the Council of the County of Grande Prairie No. 1 duly assembled, hereby enacts as follows:


1. That this By-law shall be known as the **"WEST CLAIRMONT AREA STRUCTURE PLAN BY-LAW"**.
2. That the West Clairmont Area Structure Plan document is attached to this by-law as an appendix and forms part of this by-law.
3. That this by-law shall take effect on the date of its final passage by Council.

READ A FIRST AND SECOND TIME THIS 20th DAY OF May A.D. 2008.

  
REEVE

  
COUNTY ADMINISTRATOR

READ A THIRD AND FINAL TIME THIS 2nd DAY OF September A.D. 2008.

  
REEVE

  
COUNTY ADMINISTRATOR

Office of Tim Hawnt  
Assistant Deputy Minister  
Transportation and Civil Engineering Division

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Edmonton AB T6B 2X3  
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June 3, 2008

Mr. Bill Rogan  
County Administrator  
County of Grande Prairie No. 1  
10001 – 84<sup>th</sup> Ave  
Clairmont AB T0H 0W0

Dear Mr. Rogan:

Re: **WEST CLAIRMONT AREA STRUCTURE PLAN AMENDMENT**

Alberta Transportation has reviewed the West Clairmont Area Structure Plan (ASP), regarding the future development located adjacent to Highway 2. The ASP addresses the department's concerns and is approved to meet the requirements of Section 14 of the Subdivision and Development Regulation.

Please forward a copy of the ASP once it has received third reading and the approval of council to our Operations Manager in Grande Prairie, Mr. Tom Williams, at the following address:

Alberta Transportation  
1<sup>st</sup> Floor, Provincial Building  
10320 – 99<sup>th</sup> Street  
Grande Prairie AB T8V 6J4

The department supports continued co-operation on planning matters between the County of Grande Prairie and Alberta Transportation.

Sincerely,



Tim Hawnt, P.Eng.  
Assistant Deputy Minister

cc: Tom Williams

# **WEST CLAIRMONT AREA STRUCTURE PLAN**

**(Sec. 23-72-6-W6M)**

**“Final ASP”**

**Amended by:**

**Land Architects Ltd.**

**In association with**



**Beirsto Lehnert Ketchum Engineering Ltd.**

**August 2008**

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## 1.0 INTRODUCTION

### 1.1 Purpose of Plan

The West Clairmont Area Structure Plan has been prepared to provide a framework for future development of a section of land in the Clairmont area of the County of Grande Prairie No. 1.

The primary objective of this Plan is to provide a framework for the development of the subject lands for industrial purposes in a manner that is consistent with the goals, objectives and policies of the County of Grande Prairie No. 1. In addition, as the site fronts onto a primary highway, the requirements of Alberta Transportation also need to be accommodated. The Plan establishes the future land use and circulation pattern proposed for the site, and provides details respecting proposed servicing for the area.

This Area Structure Plan has been prepared in accordance with the Municipal Government Act, the Subdivision and Development Regulation, and the County of Grande Prairie Municipal Development Plan.

### 1.2 Plan Area

The land affected by this Area Structure Plan is located immediately west of the Hamlet of Clairmont, approximately 4 km north of the City of Grande Prairie as illustrated in Map 1. The Plan area consists of one section of land (23-72-6-6) totaling approximately 258 ha as outlined in Table 1 below. The policies of this plan will apply to this area.

**Table 1 – Plan Area Composition**

<b>Legal</b>	<b>Owner</b>	<b>Area (ha)</b>
Pt. NW 23-72-6-W6M	Marmit Plastics	8.1
NW 23-72-6-W6M	127950 Alberta Ltd.	55.7
NE 23-72-6-W6M	564609 Alberta Ltd.	51.8
SW 23-72-6-W6M	127950 Alberta Ltd.	56.5
Lot 1, Plan 0721286	J.A. Saffon/J.K. Thomson	8.217
SE 23-72-6-W6M	Multiple Industrial Lot Owners	59.1
Lot 2, Plan 0020037	J. & A. Knobloch/U. Becker	1.6
Lot 3, Plan 0020037	George James	1.2
Lot 4, Plan 0020037	564609 Alberta Ltd.	3.3
Road Plans		12.6
<b>Total</b>		<b>258.1</b>

The site is bounded to the east by Highway 2 and to the west and north by local roads (Township Road 724 and Range Road 62). The Plan area is surrounded by agricultural lands to the north, south and west. The Plan area is also abutted by a small number of country residential parcels to the west, and the new County municipal complex and other industrial development to the south. The Hamlet of Clairmont and the Northgate Industrial Park are situated across Highway 2 to the east.

### **1.3 Existing Conditions**

The majority of the Plan area is currently in agricultural production. As shown on Map 2, non-agricultural uses include five residences, and a commercial development (car sales) at the northeast corner of NE 23. Industrial development has occurred in the SE 23.

The east side of the Plan area is traversed by a high pressure gas line that runs parallel to Highway 2. There is an existing gas well located on the SW 23. There is very little native vegetation in the Plan area, with treed areas limited to its northeast corner. A poorly drained area is located in the west-central portion of the Plan area.

An existing landfill just north of the northwest corner of the plan area has a development setback which may restrict development in that area.

The Plan area is characterized by a large hill that crests in the W½ of 23 as illustrated in Map 3. From this point, the ground elevation drops by approximately 16 m (1.4% grade) to the northeast corner of the Plan area, 7 m (1.6%) to the poorly drained area noted above, and 11 m (1%) to the southeast. Elevations range from approximately 696 m at the highest point to 680 m at the northeast corner.

### **1.4 Policy Framework**

#### **1.4.1 County of Grande Prairie Municipal Development Plan**

The County of Grande Prairie Municipal Development Plan identifies the lands located in the Highway 2 corridor for future industrial use. The predominant land uses in the ASP are consistent with this policy direction.

#### **1.4.2 County of Grande Prairie Land Use Bylaw**

A majority of the Plan area is currently designated as Agricultural (AG) in the County's Land Use Bylaw. The exception is part of the NE 23 which has one parcel zoned as Highway Industrial (RM-4), and a parcel on the NW 23 zoned as Country Residential (CR-5). The SE quarter has been designated Highway Industrial (RM-4) and medium industrial (RM-2). In order to facilitate the development of these lands for commercial and industrial purposes, it is intended that the Plan area be rezoned to the appropriate districts as a prerequisite to subdivision.

#### **1.4.3 Clairmont Planning and Servicing Areas Study**

The Clairmont Planning and Servicing Areas Study establish logical area structure plan and servicing areas for lands in the vicinity of Clairmont. This study was prepared in order to address future development in a comprehensive and coordinated manner. This Area Structure Plan corresponds to planning area P4 as defined in the Study.

#### 1.4.4 Subdivision and Development Regulation

The preparation of the plan is consistent with Section 14 of the Subdivision and Development Regulation of the Province of Alberta. It is intended that the plan receive the approval of the Minister of Transportation pursuant to this section.

## 2.0 DEVELOPMENT CONCEPT

### 2.1 Goals of the Plan

The West Clairmont Area Structure Plan has been prepared in accordance with the following goals and objectives.

1. To provide a sound planning framework for the future development of the Plan area that is consistent with the goals of the County of Grande Prairie No. 1.
2. To contribute to the continued economic development of the Clairmont area through the development of the plan area for industrial purposes.
3. To protect and maintain the operational safety and integrity of the Highway 2 and 43 corridors.
4. To establish an efficient and economical development concept for the Plan area.

### 2.2 Land Use Concept

A detailed breakdown of land uses proposed for the Plan Area is provided in Table 2. The overall development concept proposed for the area is illustrated in Map 4. The intent of this plan is to provide a generalized land use plan with a conceptual lot layout that will be subject to further refinement at the time of subdivision and survey.

**Table 2 - Land Use Area Estimates**

Land Use Category	NW 23	NE 23	SW 23	SE 23	Total	Percent
<b>Gross Developable Area</b>	<b>64.3</b>	<b>64.3</b>	<b>64.7</b>	<b>64.7</b>	<b>258.0</b>	
Less Road Plans	(0.6)	(6.4)	0.0	(5.6)	(12.6)	
Add Road Closure	0.0	2.0	0.0	0.0	2.0	
<b>Net Developable Area</b>	<b>63.7</b>	<b>59.9</b>	<b>64.7</b>	<b>59.1</b>	<b>247.4</b>	<b>100.0</b>
<b>Industrial &amp; Commercial</b>	<b>55.7</b>	<b>52.4</b>	<b>54.85</b>	<b>54.8</b>	<b>217.8</b>	<b>88.0</b>
Highway Industrial (RM-4)	0	25	3.68	19.3	48.0	19.4
Rural Medium Industrial (RM-2)	55.7	27.4	45.34	35.5	155.4	66.3
Comprehensive Commercial (CC)	0.0	0.0	2.58	0.0	2.58	1.0
Well Site	0.0	0.0	1.49	0.0	1.49	0.6
Well Site ROW	0.0	0.0	1.76	0.0	1.76	0.4
<b>Roads</b>	<b>7.0</b>	<b>7.5</b>	<b>6.79</b>	<b>4.3</b>	<b>25.6</b>	<b>10.3</b>
<b>Storm Pond<sup>1</sup></b>	<b>0.0</b>	<b>0.0</b>	<b>3.06</b>	<b>0.0</b>	<b>3.06</b>	<b>1.2</b>
<b>Municipal Reserve<sup>2</sup></b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2.2</b>	<b>0.4</b>

<sup>1</sup> If not required pursuant to Section 3.4, the land occupied by the storm pond may be considered as Municipal Reserve.

<sup>2</sup> The balance of municipal reserve owing is to be dedicated as cash-in-lieu as outlined in Section 2.4.

- 2.2.1 In order to protect adjacent residential development from the effects of proposed industrial and commercial sites, landscaped buffers with screening and berming shall be provided in accordance with County requirements. Such measures are to be accommodated as on-site landscaping on individual lots and along roadways that are adjacent to future residential; specifically Range Road 62 and Township Road 724.

## **2.3 Industrial & Commercial Development**

- 2.3.1 As noted in Table 2, approximately 218 ha (88.0%) of the Plan area is to be developed for industrial and commercial purposes. Uses encouraged in this area are those that are characteristic of other industrial parks in the vicinity, and would be administered under the following:

Highway Industrial (RM-4) (48.0 ha (19.4%)) and Rural Medium Industrial (RM-2) (163.9 ha (66.3%)) would make up the majority of the land use;

Comprehensive Commercial (CC) development, totaling approximately (2.6 ha (1.0%)), is proposed along Bauman Road on the southern half of the plan area to aid as a transition to adjacent residential Districts and take advantage of the high traffic visibility.

- 2.3.2 All industrial and commercial development in the Plan area shall be the subject of a high level of design and landscaping in accordance with County requirements. This is a result of the high degree of visibility that these locations afford.
- 2.3.3 All industrial and commercial development will be serviced with municipal water and sewer systems.
- 2.3.4 Development in this area will be encouraged by design to adopt environmentally sustainable development schemes. This may include the inclusion of building designs that minimize the ecological footprint through the use of energy efficient systems, orientations and roof top storage. Grading may be aided by the use of filter strips and developing bioswales for water quality.
- 2.3.5 Development in this area will attempt to orientate their projects so that the focus is the building rather than the storage component. Landscaping shall be done in such a manner to enhance the building façade and to draw attention away from storage.
- 2.3.6 Development in the northwest area of the plan shall recognize the designated landfill setback distances and ensure that no occupied buildings are present within those boundary limitations. This area shall be used for storage, landscaping and utilities. Any such development shall be consistent with the subdivision regulations and Alberta Environment.

## **2.4 Municipal Reserve**

- 2.4.1 In accordance with the Municipal Government Act, a maximum of 10% of the Plan area (24.74 ha) may be provided as municipal reserve. Due to previous subdivision activity in the NE 23, 1.2 ha of municipal reserve has already been dedicated as cash-in-lieu<sup>3</sup>.
- 2.4.2 The balance of the municipal reserve owing (18.14 ha) shall be provided to the County as cash-in-lieu as a condition of subdivision approval.

<sup>3</sup> A deferred reserve caveat in the amount of 5.7 ha (14 ac) is registered on the title.

- 2.4.3 A portion of the land in the northwest corner of the NW 23 may need to be left unused to comply with landfill setbacks. It is expected that an application will be made to Alberta Environment to reduce this setback. Should no reductions occur then only non occupied building development will be allowed within the setback limits. No MR credit is to be granted for this area.
- 2.4.4 Trails are to be incorporated into the design. They shall be a minimum 3m in asphalt width. They may be less if incorporated as a sidewalk portion of the roads. The trails shall be to the latest County standards. If not adjacent to roads the trails are to be adopted within a 10m MR strip as indicated on Map 5.

### **3.0 TRANSPORTATION AND SERVICING**

#### **3.1 Road Network**

As illustrated in Map 5 primary access to the Plan area is to be obtained from existing locations along Highway 2 at the northeast and southeast corners of the Plan area. A Traffic impact assessment has been completed for the area. Alberta Transportation and the County will use this information to satisfy any concerns prior to any subdivision applications being entertained. The development of roads in the plan area is consistent with the overall transportation strategy for the area. The regional transportation system is outlined on Map 5A.

- 3.1.1 The traffic impact assessment (TIA) identifies future traffic generation expected from the area. The Area Structure Plan identifies all road rights-of-way requirements based on the information produced from the TIA to ensure compatibility with the County Roads Study and roads standards included therein.
- 3.1.2 Internal vehicle circulation is to be accommodated by a looped road system that has been designed to accommodate commercial and industrial traffic. All roads are to be constructed and paved in accordance with County specifications at the expense of the developer. In those instances where a proposed road straddles a property line, the cost of road construction shall be shared by the affected landowners. All internal roads are to be constructed as per County standards. All arterial roads are to have a minimum right-of-way of either 50 or 60 metres. All right of way widths are identified on Map 5.
- 3.1.3 With the exception of existing lots fronting onto Township Road 724, all lots shall be accessed by the internal road system. No direct highway access will be permitted. In the interests of safety, it is proposed that those existing lots fronting onto Township Road 724 be developed with shared approaches. No highway frontage service roads are proposed for the Plan area, and much of the existing service road located in the northeast corner of the Plan area is to be closed and replaced by the internal road system. In addition, it is proposed that the gas well lease access road be closed and direct access be obtained from an internal subdivision road that will abut the site.
- 3.1.4 Direct access to the Bauman Road. (84<sup>th</sup> Avenue) will be restricted to proposed accesses as indicated in Map 5. Those properties currently having direct access to Bauman Road may be required to remove the accesses in the future. Additional future accesses may be restricted to right-in/right-out only.
- 3.1.5 Through the subdivision process, additional land may be required by the County from the developer to provide for the future widening of Range Road 62 and Township Road 724.

- 3.1.6 Improvements to the perimeter roads of Range Road 62 and Township Road 724 will create a benefiting area. The benefiting area would be those quarters that are adjacent to these roads. The County will require new development occurring in the benefiting area to pay levies to recover a portion of the costs for these improvements. A potential levy will be based on current levy rates to construct the improvements. At the discretion of the County, developers may choose to build the perimeter roads and be credited back for the transportation levies that are payable.
- 3.1.7 Bauman Road shall be recognized as a 4 land divided arterial in this Plan. All future planning approvals will recognize the status of this road that requires no less than a 60 meter wide right-of-way. This arterial road is part of a planned urban arterial ring road concept in the County connecting Bauman Road to the west with Range Road 63 (116<sup>th</sup> Street) and to the east with Range Road 55 (84<sup>th</sup> Street). Additional ROW may be required for at major intersections.
- 3.1.8 The County may impose a transportation levy to pay for additional transportation upgrades in the area.
- 3.1.9 It is proposed that this area be developed to an urban standard which will consist of underground storm sewer and roads with a curb and gutter profile. There are areas that will have a rural cross section to be consistent with previous road extensions.
- 3.1.10 In the event that a developer wishes to close a road he will be responsible to develop a replacement road prior to any road closure being approved. Once this road is constructed to an acceptable County standard, the land occupied by the original road that was closed, will revert back to the developer at no cost. This would apply to the road in the NE 23 and the road planned for the water reservoir PUL location that is proposed to be moved.
- 3.1.11 Trails incorporated into the plan area shall adhere to the dimensions outlined in Map 5B. They shall be a minimum 3m in asphalt width. They may be less if incorporated as a sidewalk portion of the roads. The trails shall be to the latest County standards. If not adjacent to roads the trails are to be adopted within a 10m MR strip.

## **3.2 Sanitary Sewer**

The sanitary sewer for the plan area is broken down into 4 primary drainage basins, which shall conform to design and sizing in accordance with the Clairmont Sanitary Master Plan. The existing sanitary lines that were installed to accommodate the County office and the Precision lands service the southeast corner. This area is referred to as drainage basin (B) in Map 6. These lands drain downstream into Clairmont into the lift station that was constructed as part of the Northgate development. As such there is a levy associated with tying into this portion of the line. The entire SE 23 is accommodated in this basin as well as some peripheral areas. Many of these peripheral areas can be serviced with the option of this drainage basin or the adjacent ones.

Another drainage system (D) is shown in the northeast quarter. It is the intention here to drain these portions across Highway 2 and into the existing Clairmont gravity system. The downstream pipe is only 200mm within the Hamlet and as such may need to be upgraded in the future to accommodate the increased flows. The upgrading of this line could be easily undertaken when the new force main to the

sewage lagoon is constructed. Design costs and upgrades (if necessary) shall be determined at time of subdivision with due consideration given to the master plan undertaken for the Hamlet.

In addition, future upgrades to the main lift station, or a new regional lift station, will need to be constructed to accommodate the additional flows from this area and drainage basin (B).

The other drainage system (A) is a system that will ultimately drain to a lift station to be situated in the NW 11-72-6-W6M, which is topographically the lowest point. Map 6A identifies all the area that will ultimately be drained by gravity to the lift station, which will pump the sewage northward along Range Road 62 and ultimately tie into the Clairmont force main located along Township Road 724. A right of way along the lands adjacent to Range Road 62 will be required for these purposes. The existing east-west force main from Clairmont has the capacity for some additional combined flow before force main upgrades are required. Upgrades will need to take into context future expansion on both sides of Highway 2 and integrate all other needed improvements.

The drainage basin includes a significant amount of land to the south, which causes many of the pipes in the plan area to be oversized, occasionally over trenched and the lift station made larger. The location of the lift station will necessitate an agreement between landowners in the form of rights-of-way and cost sharing arrangements to make this location effective. A preliminary estimate indicates that the cost of the fore mentioned items is approximately \$1.35 million (2003 dollars). The benefiting area is approximately 501.9 Ha. The benefiting area is identified on Map 6A. A levy to recapture the costs of the installation is presently in place. Developer costs are entirely recoverable from each upstream quarter at the time of initial subdivision.

Future staging of the lift station upgrade requirements will be necessary for operational and pump efficiency purposes. Timing of this is at the discretion of Aquatera.

The Clairmont off-site levy Bylaw No. 2657 is no longer in effect, but connection fees are in place. It should be noted that there is a small area along Range Road 62 on the quarter directly west of the plan area that could be included in the drainage basin. This area has been accounted for in any proposed levies.

The last drainage basin (C) is topographically isolated from the other systems. This area is unique in that it can be serviced by one of two options. The first option would be to construct a separate lift station or a low-pressure system that could pump directly into the hamlet force main or the force main proposed for Range Road 62 as part of the drainage basin (A) requirements.

The second option would be to install a gravity system and use the force main that exists along Township Road 722. Presently the force main gravity drains itself for large portions of the line once the lift station pumps stop. It may be possible to have a gravity system with storage, check valves and flow sensors that will drain into this force main when it is not being used. During pumping events the system would have to be designed to avoid back flow. This system would have operational concerns and as such a design proposal would need to be approved by the County and Aquatera prior to acceptance of this methodology.

### 3.2.1 All new development in the plan area will be serviced with municipal sanitary sewer services.



- 3.2.2 Existing development with private sewage disposal systems can remain in place until a sanitary sewer system is installed on lands adjacent to the existing development. When the services are available, the existing development must connect to the new system at the owner's expense.
- 3.2.3 Where the development of an area is contingent upon a servicing system to be developed in another area outside the plan area, the land may not be developed until the servicing is available.
- 3.2.4 Offsite levies will be established in the plan area to assist in the upgrading of existing municipal infrastructure required to service the development.
- 3.2.5 The County will require new development occurring in the benefiting area to compensate developers in the plan area for expenses incurred in providing municipal services to the area.
- 3.2.6 The sanitary sewer system will be sized to accommodate the area identified on Map 6A.

### **3.3 Water Servicing**

- 3.3.1 Water for this plan area will come from crossover connections to water access points on the east side of Highway 2 and shall conform to the Clairmont Water System Master Plan including subsequent revisions.

A preliminary analysis shows there are sufficient flows to accommodate the 1200 IGPM (95 LPS) required by the County, if sufficient cross connections are installed. The flows are sufficient on the east end but become progressively weaker as one moves to the west. Also in the topographically higher sections hydrant flows are reduced. Looping at a minimum of two locations has been completed which assists in increasing the fire flows. A cross connection to the system installed at the County Office provides this opportunity to increase flows when they fall below the County requirements. Also improvements to the feeder line from the Clairmont Pump house to a location in Northgate has resulted in an increase flows in the range of 20 L/s.

Map 7 depicts the proposed location and sizings of the future water system. To maintain consistency, all tie-ins across Highway 2 are to be treated as benefiting larger areas, the costs for which will be shared and recovered through levies that are assessed across a broader benefiting geographical area.

- 3.3.2 If an additional storage reservoir and pumping system is needed a location has been provided in the Plan area. The costs associated with constructing this shall be recovered through off-site levies. It should be noted that the proposed location is different than the land previously dedicated for such purposes. The intent is to close this portion and move the potential location to the west.
- 3.3.3 The County may establish an offsite levy to assist in improving infrastructure required to service this development. Connection fees are in place and should be confirmed as per the phased development proposed.
- 3.3.4 The County will require new development occurring in the benefiting area to compensate developers in the plan area for expenses incurred in providing municipal services to the area.
- 3.3.5 If fire flows are insufficient to meet FUS guidelines or building codes then alternative internal pumps and sprinklers may be needed to mitigate risks.

### 3.4 Storm Water Management

Storm water management shall be required for quantity and quality control. Quantity control is required to reduce the potential impacts of urban storm water run-off on drainage ditches and watercourses (i.e. higher rates of erosion), and limit the potential for flooding on developed lands during major storm events. Quality control is required to mitigate any potential for environmental contamination of nearby bodies of water.

Storm water for the plan area drains to four distinct watercourses as depicted in Map 8. In the northeast (Drainage basin "D") the water is presently directed to the Highway 2 ditch and then subsequently downstream into Ferguson Lake. It is the intent of this plan to retain pre-existing flows via a collection of small retention ponds. Presently these flows travel through Clairmont via highway ditches. In the event that there is the potential to reroute the flows and avoid going through Clairmont this would be the preferred option. The potential exists for this either on the Alberta Transportation ditch or on adjacent private lands. A survey of the ditch adjacent to Highway 2 indicates that it would require re-grading for this to occur. If this were to be entertained it would require Alberta Transportation approval.

Another significant drainage system is that of Drainage Basin "B", which covers the southeast portions of the plan area. This basin crosses over to the quarters south of the plan area and includes the County Office. Additional culverts across Highway #2 and the downstream railroad have been constructed to allow for the change from a rural to industrial landscape. Any requirements for wet ponds near Clairmont Lake would also be recoverable through levies.

It is the intent of this ASP to use small retention ponds to limit flows to pre-existing rates for drainage basins "A", "C" and "D". Clairmont Lake has been identified as the retention pond for Basin "B". Ducks Unlimited operates a weir system on this lake that is successfully being used to regulate flows and maintain lake levels.

In the northwest, drainage basin "C" drains ultimately into Ferguson Lake and its adjoining wetlands. Flows in this area will be restricted to pre-development flows via small retention ponds. The land presently drains to a low area identified as Storm Pond on the map. Presently the water from this area drains in a man made ditch westerly to Ferguson Lake. Without serious modifications to the range road this is still the most plausible location for the outfall and outfall from the SWM pond should keep to pre development flows. Negotiations for a permanent right of way or PUL may be necessary with the downstream owners should they feel its present location is unsuitable.

Drainage basin "A" flows south. This basin works its way slowly southward and onto multiple quarters to the south. Ultimately this watercourse takes itself to Bear Creek. Fortunately, as part of the Four Mile Corner overpass construction two large ponds were created to supply fill for that project. These ponds were prudently placed within the downstream watercourse of this basin and as such will act effectively as SWMs for this basin. This will also prove affective in minimizing downstream approach and road culverts that are required. Accommodating these flows, however, will require somewhat of a concerted effort to ensure proper drainage patterns are maintained. This will likely mean the provision of PULs or drainage easements to accommodate flows. In Map 8 the location of PULs are shown. The cost of converting these ponds to properly operating storm water management systems is relatively small. The costs associated with their expansion/conversion will be recovered through "Endeavor to Assist" agreements at the subdivision and development stages.

The County may implement a review process at the time of development permit to ensure any businesses wishing to locate within any of the plan areas do not impose any undue or unreasonable environmental risk to the area as part of their normal operations. Based on the nature of the zoning only certain areas will be at elevated risk of this occurring

- 3.4.1 Storm water management shall be required for quantity and quality control. Storm drainage will be provided as indicated on Map 8.
- 3.4.2 A storm drainage master plan for all the drainage areas (or one for each basin) will be prepared for the area prior to any subdivision in that drainage basin. The plan will identify development standards for the storm pond and all required drainage passageways that need to be protected and the timing of the required improvements. The improvements must be done no later than the time the land is accepted as Municipal Reserve (if applicable). This Master Plan will consider and provide recommendations for, the entire drainage basins impacted by development in this plan area and identify how storm water will be managed within the drainage basins at build-out, assuming an urban development standard is applied throughout each drainage basin. This may involve modeling of storm water run-off to ensure that downstream areas will be adequately protected from flooding in later years and recommend levies that will address the costs of downstream improvements.
- 3.4.3 Throughout the plan areas it is conceivable, based on the topography, that PULs or drainage easements will be required to properly handle overland drainage.
- 3.4.4 Any storm water pond required for the development will designated as a public utility lot.
- 3.4.5 Any development that will increase flows beyond predevelopment levels or any changes to highway ditches that may result will require the approval of Alberta Transportation.

### **3.5 Shallow Utilities**

- 3.5.1 All shallow utilities (natural gas, power, telephone) are to be extended into the Plan area by the individual franchise holders as required.
- 3.5.2 Shallow utilities may be located outside road rights-of-way in easements registered in the name of the County of Grande Prairie No. 1.
- 3.5.3 Any overhead power lines located adjacent to residential areas are to be installed underground at the developer's expense.
- 3.5.4 ATCO Pipelines presently has a high-pressure gas line that bisects the easterly quarters in a north south direction. Any development will require that the line be moved or accommodations be made in the development pattern to ensure that no buildings are constructed over these lines. All appropriate crossing agreements are to be in place with ATCO Pipelines prior to constructing parking lots over this line.

### **3.6 Lot Grading**

3.6.1 A grading plan for each subdivision plan will be prepared by the Developer in accordance with County standards, prior to approval of any subdivision plan within the Area Structure Plan boundary, with the intent that all future building projects conform to the grading plan.

3.6.2 The grading plan is intended to ensure that surface drainage from all lots is directed to the roadside ditches and storm retention ponds as provided in Section 3.4.

## **4.0 IMPLEMENTATION**

### **4.1 Phasing**

The proposed timing of development in the Plan area will be dependent on market conditions and the logical extension of municipal services. The overall proposed phasing is proposed on Map 9.

As illustrated in Map 9, it is intended that development initially occur in the northwest, northeast and southeast corners of the Plan area in proximity to Highway 2 and Bauman road accesses. Subsequent development would then proceed north and northwesterly.

### **4.2 Proposed Zoning**

Proposed zoning for the Plan area is identified in Map 4. The commercial areas will be slated for Comprehensive Commercial (CC) Districts of the Land Use Bylaw. The industrial areas will be zoned under the Rural Medium Industrial (RM-2) and Highway Industrial (RM-4) Districts. All zoning changes will be made in advance of subdivision approval.

### **4.3 Subdivision and Development**

4.3.1 All developers shall be required to enter into development agreements with the County as a condition of subdivision approval. The matters to be included in these agreements will include but not be limited to the provision of roads and municipal services, and the payment of off-site levies. The agreements will also address the matters relating to benefiting areas.

4.3.2 Detailed engineering drawings and specifications for roads, water, sanitary sewer, and storm drainage shall be prepared by the developer and approved by the County and Aquatera Utilities Inc. prior to subdivision approval on the subject lands.

4.3.3 The lot sizes and yields identified in this Plan are conceptual.

4.3.4 The re-subdivision of lots in the Plan area may be supported without amendment to the Plan provided that the resulting lot sizes meet the minimum requirements of the Land Use Bylaw, and the capacity of servicing systems is not negatively affected. Where possible, buildings should be sited in a way that allows for the future re-subdivision of lots.

### **4.4 Benefiting Areas**

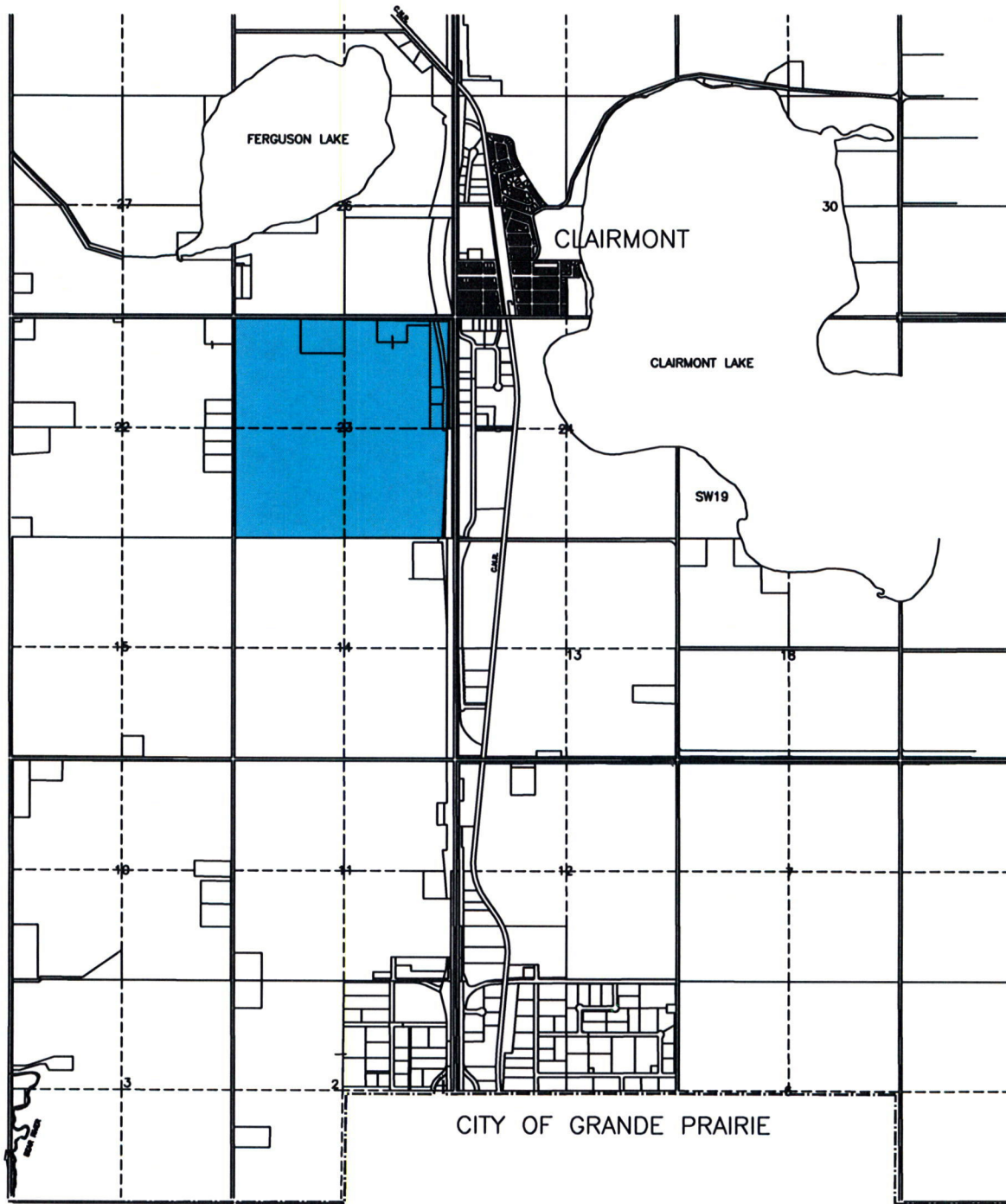
4.4.1 Where municipal infrastructure is developed that provides a benefit to lands outside of the plan area, the County will assist in collecting a portion of the costs of the infrastructure from the said lands that benefit from the infrastructure at the time the lands that benefit initiate subdivision or development activities.

4.4.2 The efforts to collect costs from benefiting areas will expire within 20 years of the initial approval of this plan.

#### **4.5 Levies**

4.5.1 All levies identified in the plan shall be collected at the time of subdivision.

4.5.2 In addition to the levies identified in this plan, developers may be required to pay a connection fee to Aquatera Utilities Inc. Developers are required to pay Aquatera utilities infrastructure charges in effect at the time of payment.



## LEGEND:



PLAN AREA

## WEST CLAIRMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## ASP LOCATION MAP 1



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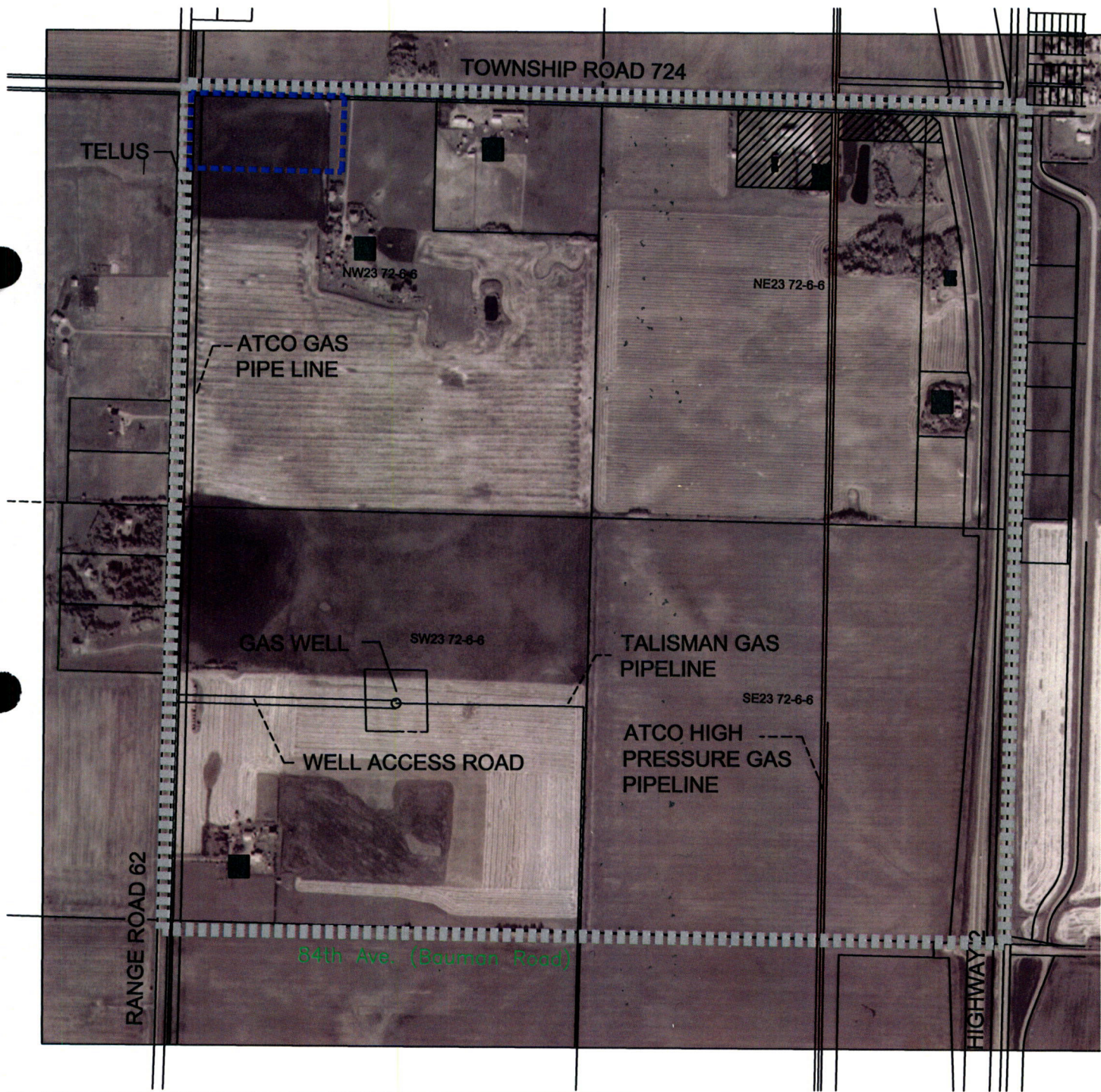
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## LEGEND:

-  EXISTING RESIDENCE
-  EXISTING COMMERCIAL USE
-  PLAN AREA
-  LANDFILL SETBACK (IF NECESSARY)

## WEST CLAIRMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## EXISTING CONDITIONS

## MAP 2



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## LEGEND:

- 680 CONTOUR ELEVATION
- 5M CONTOUR INTERVAL
- 1M CONTOUR INTERVAL
- ← FLOW DIRECTION
- PLAN AREA
- TRAIL SYSTEM

## WEST CLAIMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## TOPOGRAPHY MAP 3



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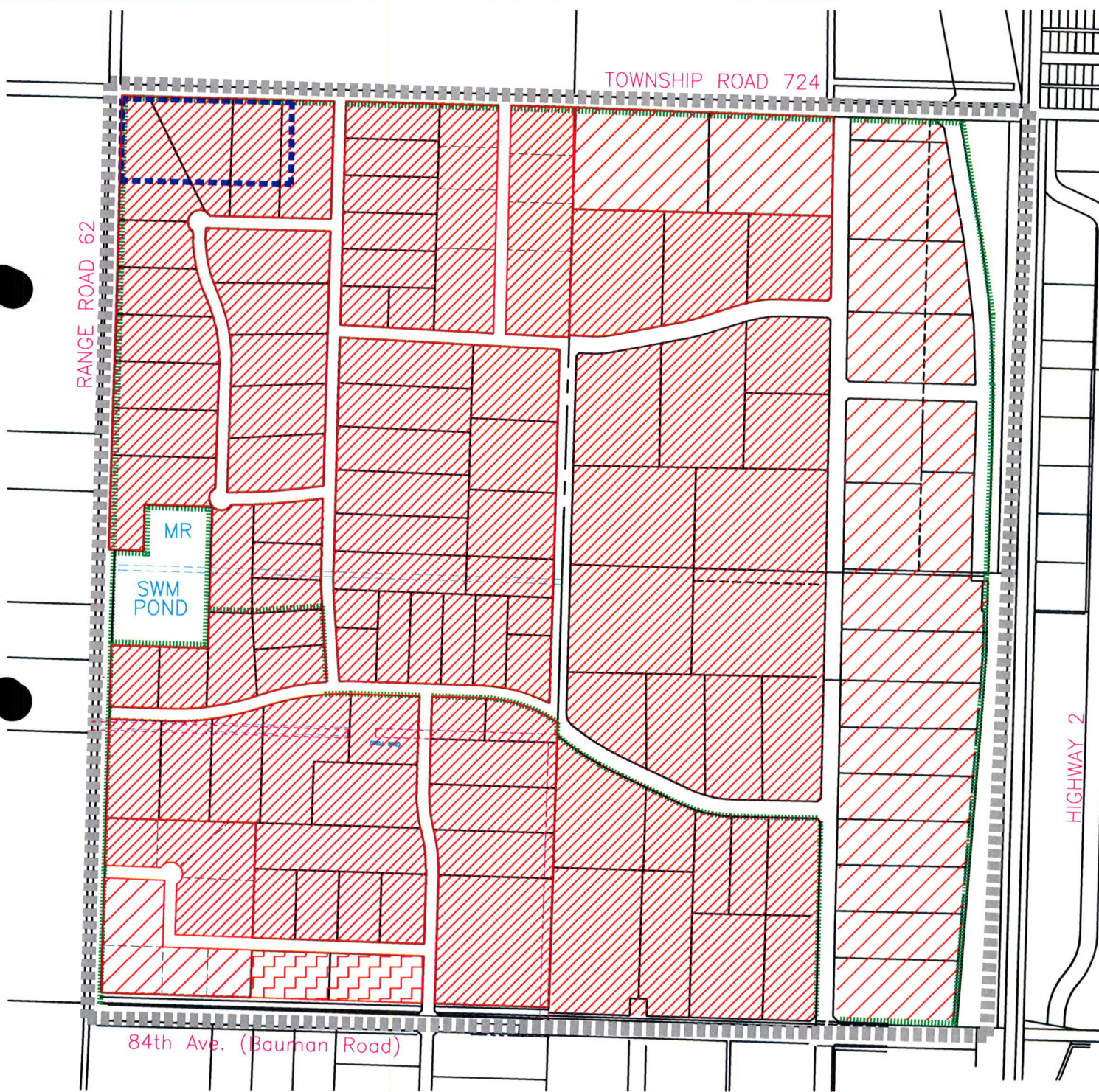
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## LEGEND:

-  COMPREHENSIVE COMMERCIAL (CC)
-  HIGHWAY INDUSTRIAL (RM-4)
-  RURAL MEDIUM INDUSTRIAL (RM-2)
-  TRAIL SYSTEM
-  PLAN AREA
-  LANDFILL SETBACK (IF NECESSARY)
-  PIPELINE ROW

## WEST CLAIRMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## DEVELOPMENT CONCEPT AND PROPOSED ZONING

MAP 4

  
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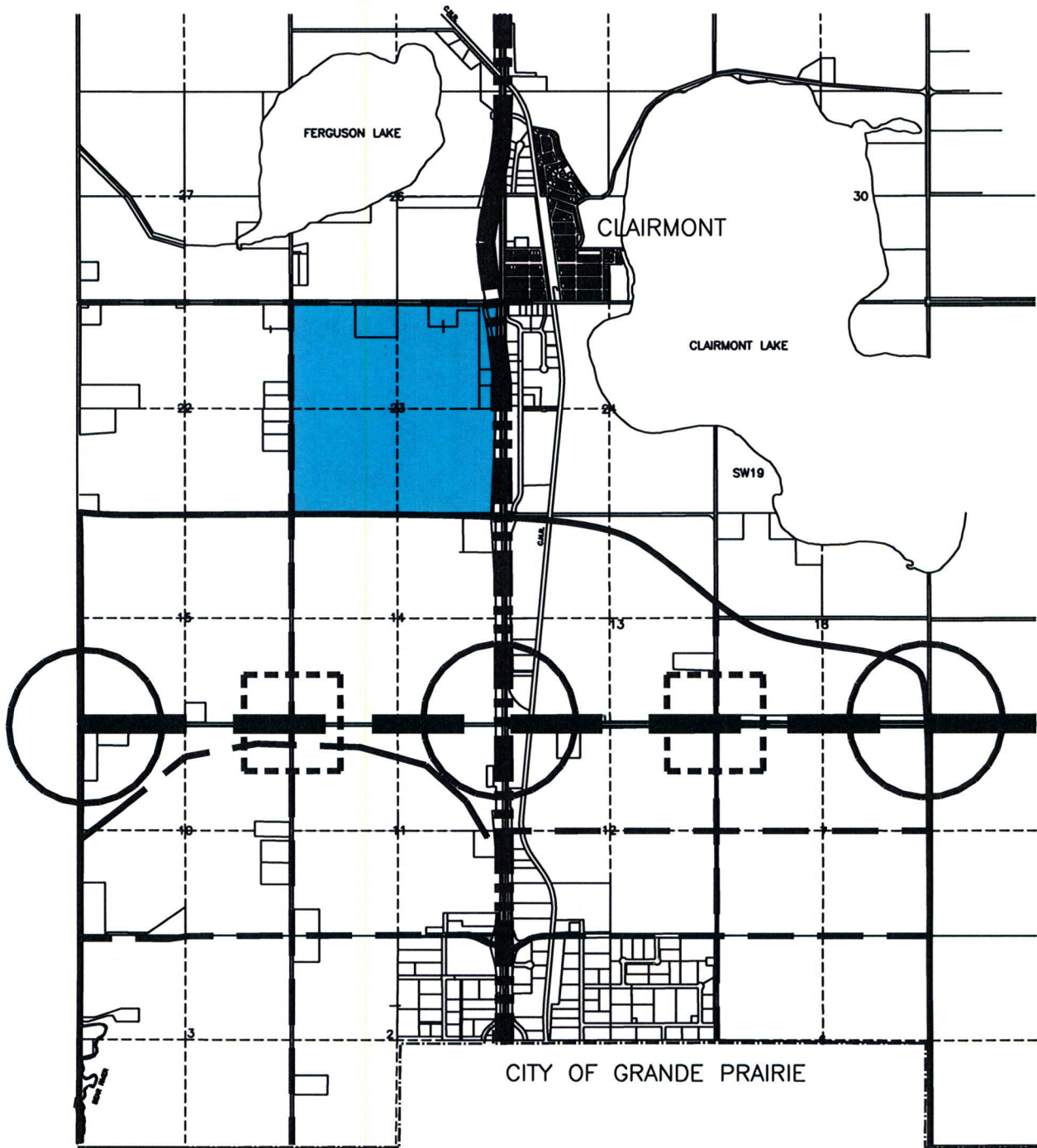


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## LEGEND:

- HIGHWAY 2
- HIGHWAY 43
- ARTERIAL ROAD
- COLLECTOR

- INTERCHANGE
- FLYOVER
- PLAN AREA

## WEST CLAIRMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## FUTURE REGIONAL TRANSPORTATION NETWORK MAP 5A



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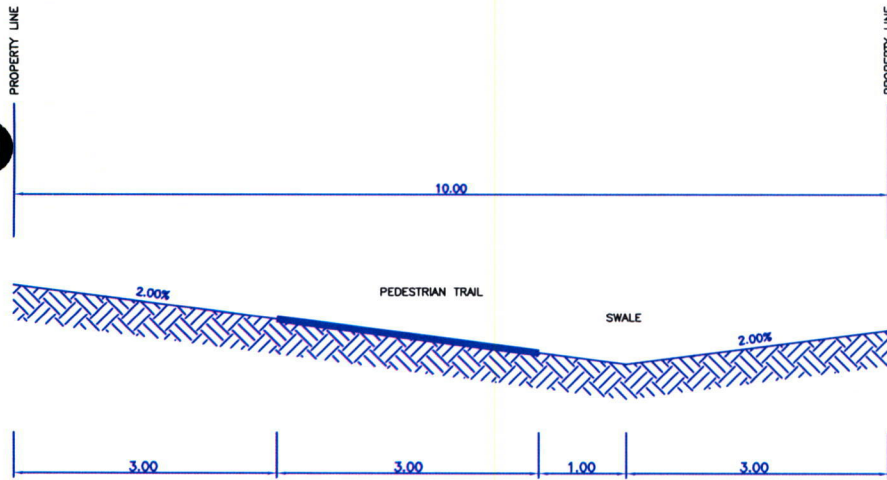
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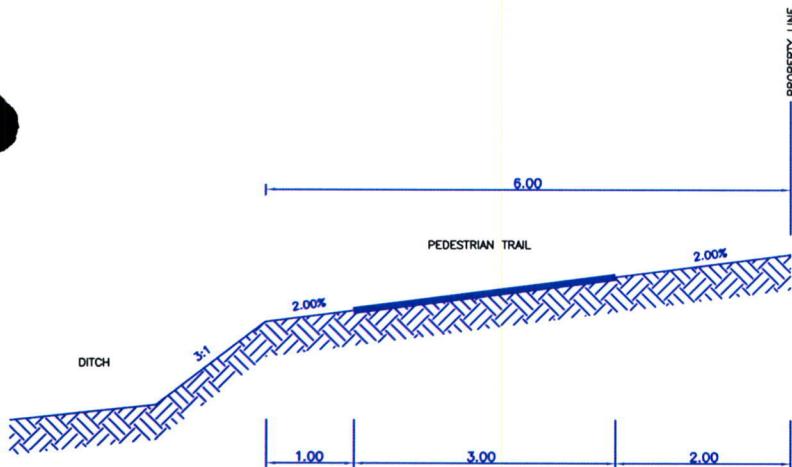
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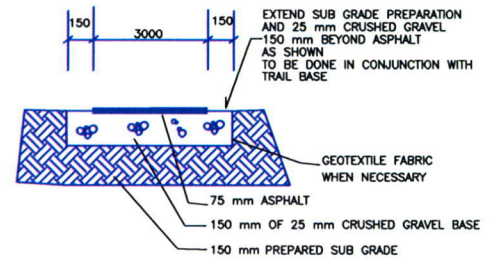




**PUL w/ PEDESTRIAN TRAIL/SWALE**



**PUL w/ PEDESTRIAN TRAIL/DITCH**



**PEDESTRIAN TRAIL**

**LEGEND:**

# WEST CLAIRMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## PEDESTRIAN TRAIL MAP 5B



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## LEGEND:

- PROPOSED SANITARY MAIN  
(ALL LINES ARE 250 MM UNLESS  
OTHERWISE NOTED)
- PROPOSED FORCE MAIN
- DRAINAGE BASIN BOUNDARY
- PLAN AREA
- TRAIL SYSTEM

## WEST CLAIRMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## SANITARY SERVICING MAP 6



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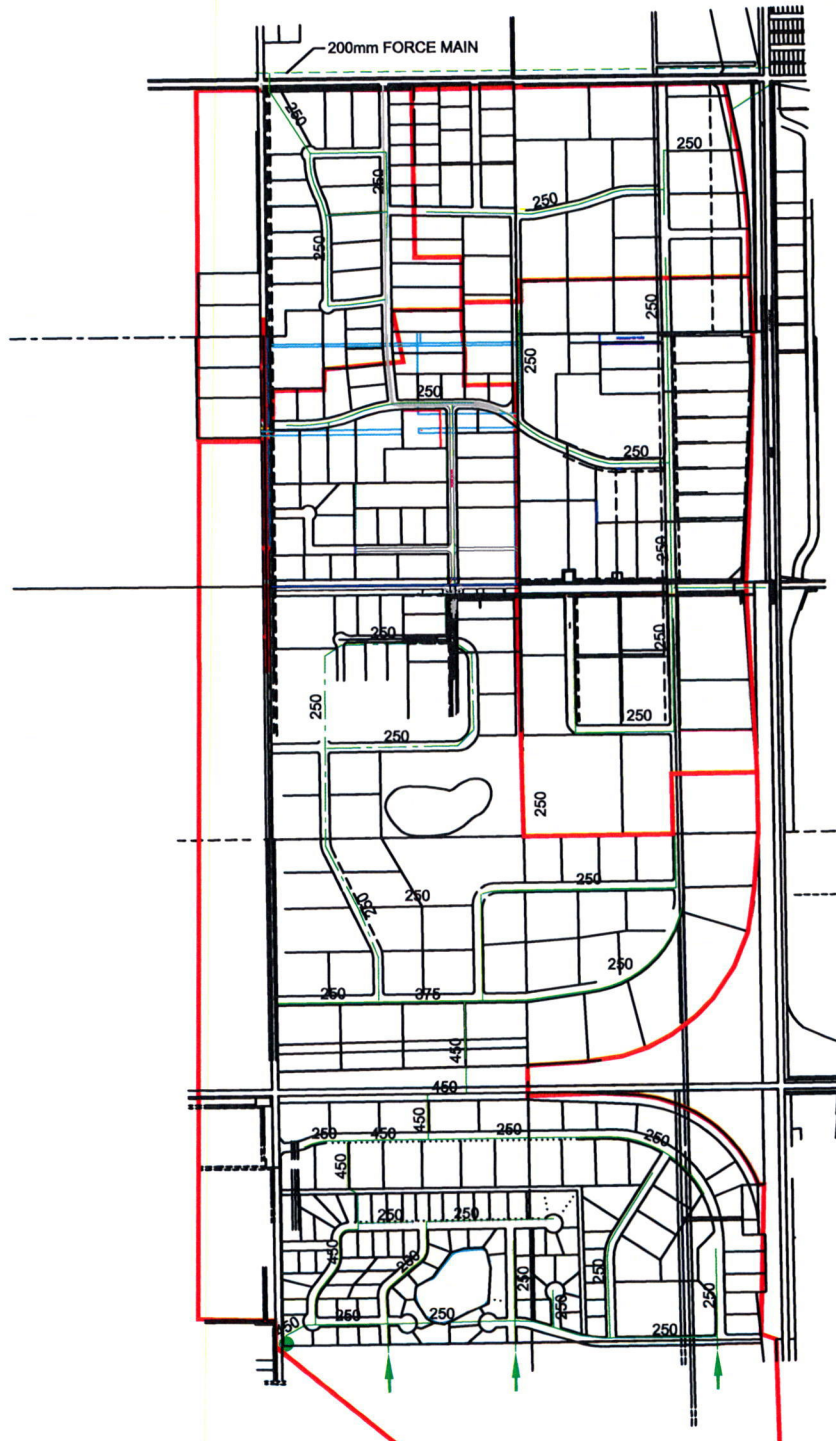
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## LEGEND:

## WEST CLAIRMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## SANITARY SEWER LEVY AREAS MAP 6A

250

PROPOSED SANITARY MAIN AND SIZE  
(ALL LINES ARE 250 MM UNLESS  
OTHERWISE NOTED)

SANITARY FORCE MAIN

BASIN AREAS



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## LEGEND:

## WEST CLAIRMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

-  EXISTING WATER MAIN
-  FUTURE WATER MAIN
-  HYDRANT FLOWS BASED ON A MINIMUM 2 TIE-INS ACROSS HIGHWAY 2
-  PLAN AREA
-  TRAIL SYSTEM

## WATER SERVICING MAP 7

  
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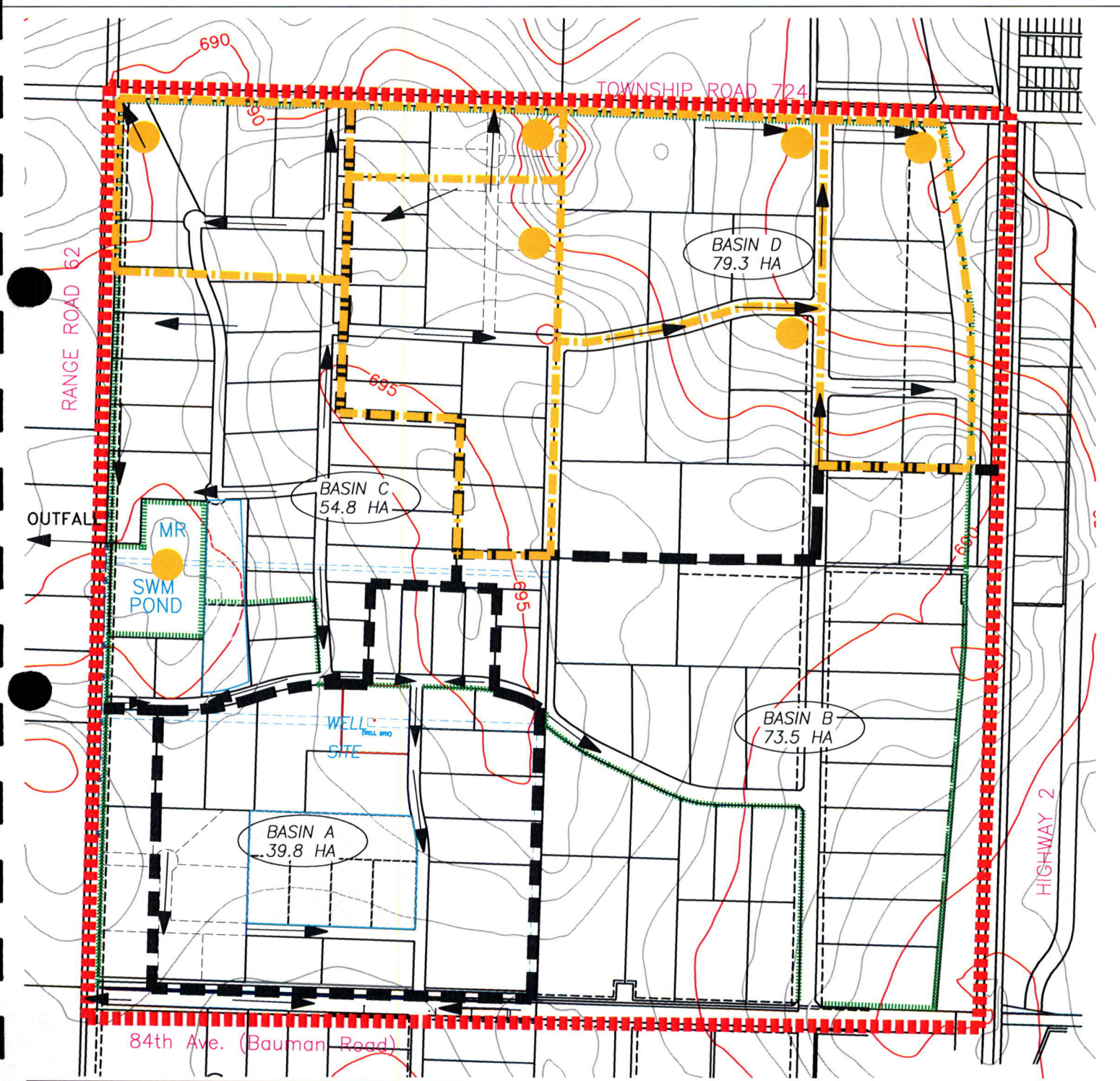


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## LEGEND:

## WEST CLAIRMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## STORM WATER MANAGEMENT CONCEPT

MAP 8

- DRAINAGE BASIN BOUNDARIES
- FLOW DIRECTION
- EASEMENTS REQUIRED
- TRAIL SYSTEM
- PLAN AREA

- TENTATIVE STORM  
WATER MANAGEMENT  
POND
- SECONDARY DRAINAGE  
BASIN BOUNDARY



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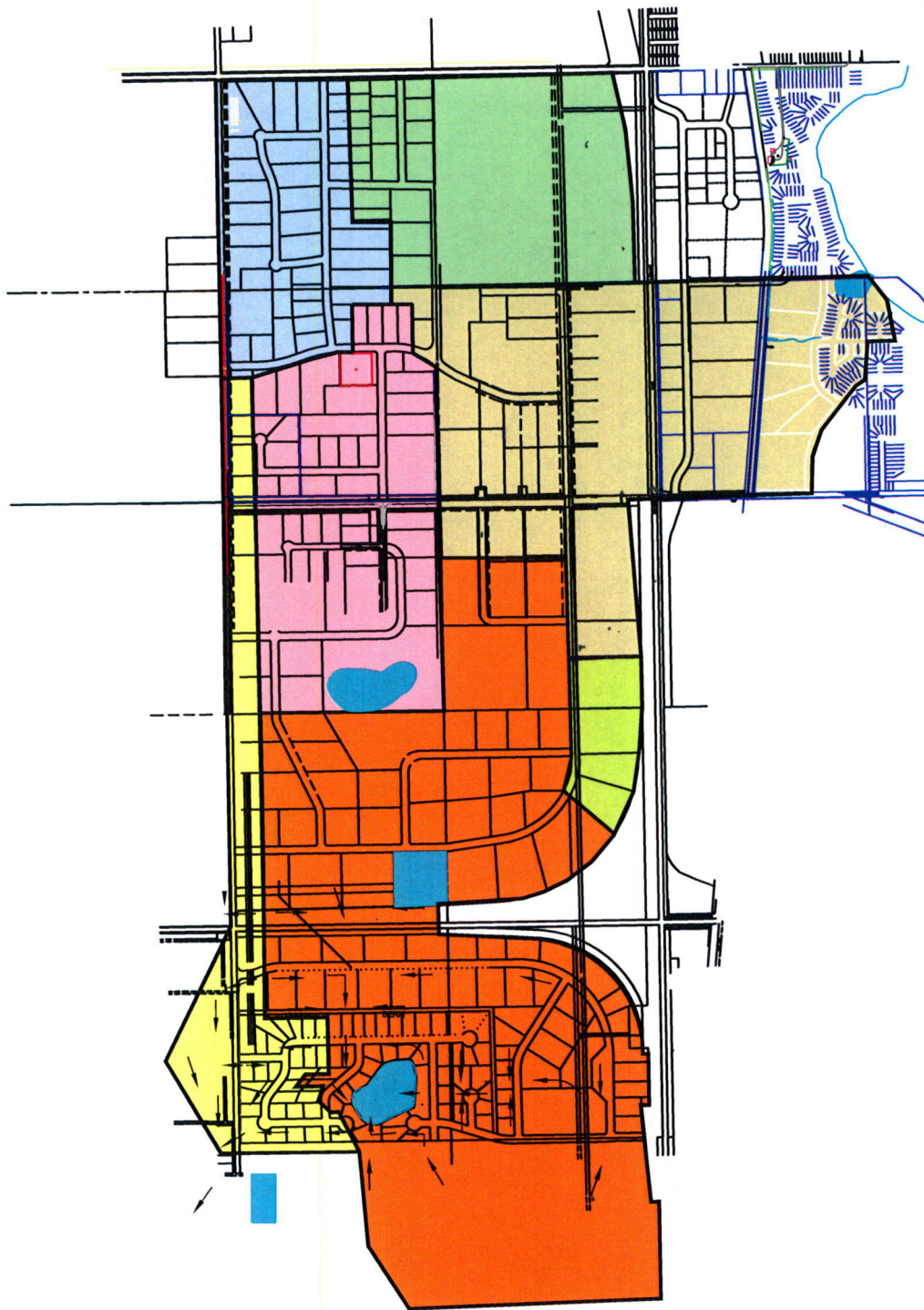


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## LEGEND:

- |  |   |  |
|--|---|--|
|  SWM PONDS        |  DRAINAGE ZONE C |  DRAINAGE DIRECTION |
|  DRAINAGE ZONE A1 |  DRAINAGE ZONE D |  |
|  DRAINAGE ZONE A  |  DRAINAGE ZONE E |  |
|  DRAINAGE ZONE B  |  DRAINAGE ZONE F |  |

## WEST CLAIMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## STORM SERVICING LEVY AREAS

MAP 8A



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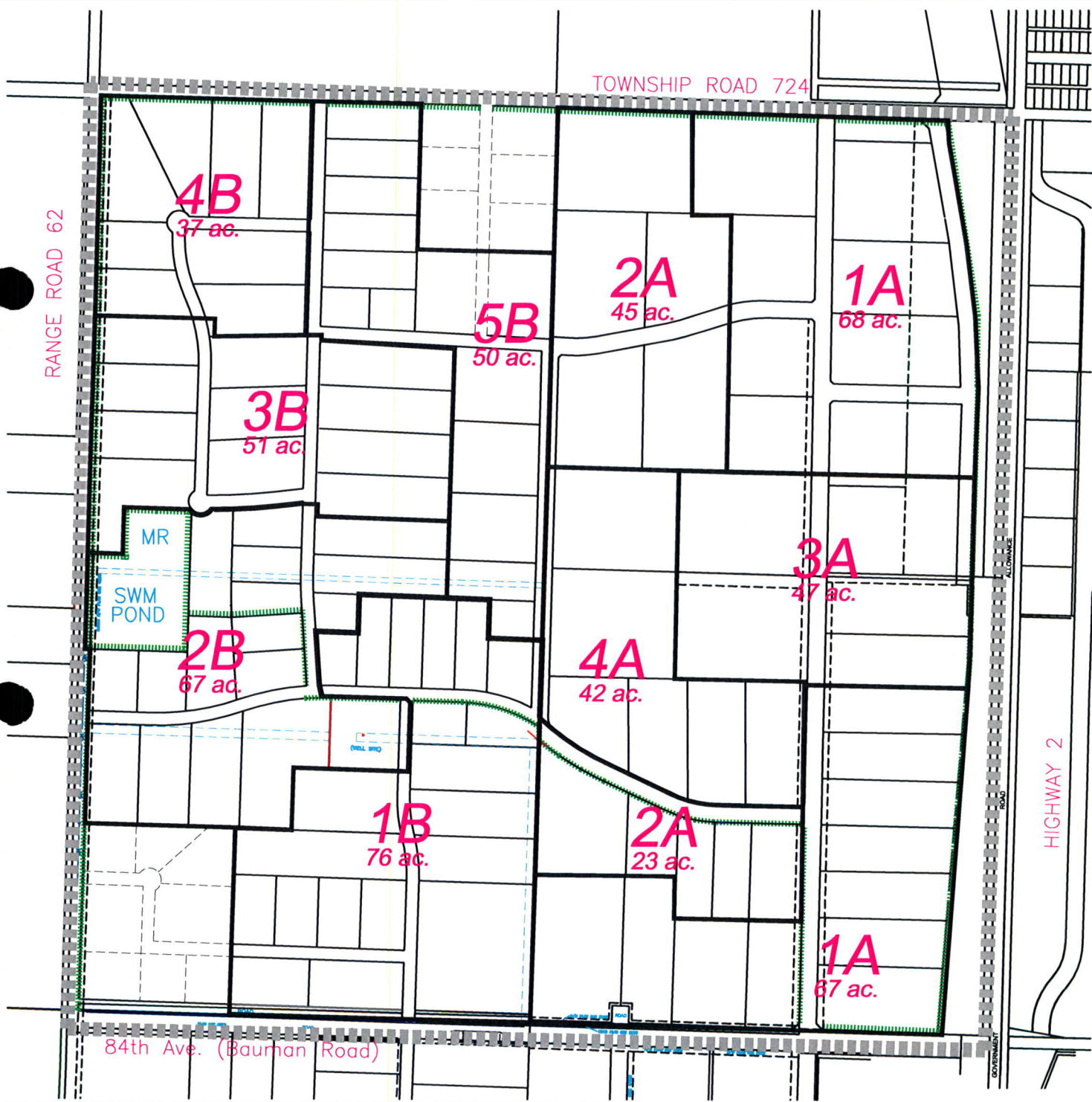
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## LEGEND:

-  PHASES
-  PLAN AREA
-  TRAIL SYSTEM

## WEST CLAIRMONT AREA STRUCTURE PLAN

COUNTY OF GRANDE PRAIRIE No. 1

## PROPOSED PHASING MAP 9



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