

COUNTRY PLAINS ESTATES
AREA STRUCTURE PLAN

TOWN OF STONY PLAIN

PREPARED FOR:
LOMAX DEVELOPMENTS LTD.
STONY PLAIN, ALBERTA

APRIL, 1998

BYLAW 2034/D&P/97

**BEING A BYLAW OF THE TOWN OF STONY PLAIN IN THE PROVINCE OF
ALBERTA FOR THE PURPOSE OF ADOPTING THE COUNTRY PLAINS ESTATES
AREA STRUCTURE PLAN**

WHEREAS Section 633(1) of the Municipal Government Act 1994 enables the Municipal Council to adopt by bylaw an area structure plan for the purpose of providing a framework for subsequent subdivision and development of an area of land in a municipality;

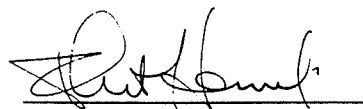
AND WHEREAS the Country Plains Estates Area Structure Plan addresses the requirements of an area structure plan as outlined in Section 633(2) of the Municipal Government Act 1994;

NOW THEREFORE, the Council of the Town of Stony Plain in the Province of Alberta, pursuant to authority conferred upon it by the Municipal Government Act 1994 enacts as follows:


1. That this Bylaw shall be cited as the "Country Plains Estates Area Structure Plan";
2. Schedule "A" attached hereto is hereby adopted as part of this Bylaw.
3. That this Bylaw shall come into force and take effect upon the date of third reading and signing in accordance with Section 213, Municipal Government Act 1994.

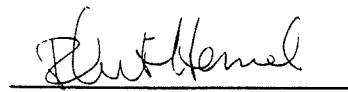
Read a first time this 8th day of September, A.D. 1997.


Mayor Donna Cowan


Phil Hamel
Town Manager

Read a second time this 27th day April, A.D. 1998.


Deputy Mayor Don Dobing


Phil Hamel
Town Manager

Read a third time this 27th day April, A.D. 1998.


Deputy Mayor Don Dobing

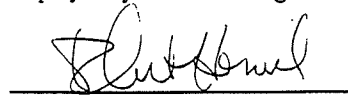

Phil Hamel
Town Manager

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**COUNTRY PLAINS ESTATES
AREA STRUCTURE PLAN
TOWN OF STONY PLAIN**

1.0 INTRODUCTION

1.1 LOCATION

The Country Plains Estates Area Structure Plan area (the subject site) comprises approximately 64.4 ha (159 ac.) in the southeastern corner of Stony Plain. The boundaries of the subject site are on the North, 79 Avenue; on the east and south, the Town's boundaries; and on the west, Golf Course Road. The legal description of the area is NW 19-52-27-W4.

1.2 PURPOSE

The purpose of the Area Structure Plan is to provide a land use and servicing plan for the subject site: including a proposed road system, and service areas for sanitary sewer, water supply, and storm drainage systems including connection points to the Town systems. As well, a staging plan should form part of the Plan.

It is the intention to develop part of the subject site in an innovative, large-lot residential format – an "estates" form – providing both an alternative lifestyle within the town of Stony Plain, and some transition between more dense residential densities of the town and the less dense country residential densities of the surrounding areas within the adjacent Parkland County.

1.3 PHYSICAL ENVIRONMENT

The physical environment of the subject site is as follows:

1.3.1 Topography and Drainage

The topography of most of the site could be characterized as rolling to gently rolling. Elevations range from about 716 m (2349 ft.) in the west-central portion of the subject site to about 708 m (2323 ft.) in the pond in the northeastern sector of the subject site.

A large area in the north eastern sector of the subject site is fairly low-lying – either forming a small pond or simply low-lying land in relation to the pond. In addition, the land tends to fall generally towards the east – to Atim Creek. There are a number of small hummock areas within the subject site where localized surface drainage is poor.

1.3.2 Vegetation

Almost the entire subject site outside the pond area is cultivated. There is a small tree line near the southwestern corner of the Tentative Plan Area. There is considerable amount of vegetation surrounding the pond area. Most of the tree and bush stands have little value, but should be preserved as much as possible in any development, as the stands are the main visual element in the surrounding landscape.

1.3.3 Soil Classification

The Canadian Land Inventory - Capability for Agriculture indicates soil classification types 2 and 3, with some moderate limitations to agriculture, due to terrain. The CLI does not indicate a separate classification for the pond and surrounding area due to the scale of the CLI information, but it would be considered to be type O- Organic, in most assessments.

1.3.4 Sub-surface Geology

Geological mapping by the Alberta Research Council indicates the predominant subsoil in the subject site are glacial lake bed deposits consisting of bedded sand, silt and some clay underlain by minor till and Cretaceous sandstone bedrock of the Wapiti Formation.

Preliminary geotechnical analysis has been carried out on the subject site. Results show that the majority of the subject site has no limitations to development. However, the area of the pond and the area to the northeast of the pond show high water table, which would be a severe limitation to normal residential development.

1.4 MAN-MADE ENVIRONMENT

The man-made environment on the subject site is as follows:

1.4.1 Land Use

The subject site is currently used predominantly for agricultural purposes. One small, 3 ac. Parcel in the southwestern corner of the subject site is used for residential purposes. As well, a cemetery is located on the northern boundary of the subject site, west of the pond. Finally, there are two small vacant parcels in the subject quarter section – one in the northwestern and one in the northeastern corner of the subject quarter section. There is a farmstead on the north side of the quarter.

To the south and east of the subject site, the land is predominantly in varying levels of agricultural use. West of the subject site is the former Westerra Institute Campus, now for the most part, unused. North of the subject site is a vacant urban land. Northwest of the subject site, the land is currently undergoing residential urbanization.

1.4.2 Major Roadway Network

79 Avenue and Golf Course Road, which are the two roadways adjacent to the subject site, are both Arterial Roads. No other existing roadways affect the subject site.

1.4.3 Sanitary Sewage Disposal

The subject site is currently not serviced with the Town's sewage collection or disposal system. The Town system does service, however, the former Westerra site west of the subject site. The intent is for the initial 22 acre development to be serviced by the Westerra line. In the future when a new trunk sewer is constructed north of the subject site, the service will be re-directed to the new trunk sewer. There is sufficient capacity in the Westerra line to service the 22 acre property in the interim, based on the intended density of residential development planned.

1.4.4 Water Supply System

The subject site is currently not serviced with the Town's water supply system. The system does service, however, the former Westerra site west of the subject site. Capacity exists in that line for development of the 22 acre parcel.

1.4.5 Storm Drainage System

There is no municipal storm drainage system currently affecting the subject site. The site should be developed with an overall storm water management plan utilizing the natural pond area for storage and discharging to Atim Creek. Predevelopment flow rates from lands beyond the quarter section that naturally flow through the development must be routed through the storm water management system. Approval from Alberta Environmental Protection under the Water Resources Act is required.

1.4.6 Land Ownership

Dennis and Chrystal Meads own the small, 3 ac. residential parcel in the southwestern corner of the subject site. Adjacent to this parcel is a 17 ac. vacant parcel owned by 607697 Alberta Ltd. The German Evangelical Lutheran St. Matthews Church owns and operates the cemetery on the northern boundary of the subject site. Finally, Otto Carl Hennig owns the large land holding on the quarter section, plus the two vacant parcels at the northeastern and northwestern corners of the subject site. Land ownership is shown on the accompanying Ownership Map, Figure No. 1.

2.0 PROPOSED DEVELOPMENT

2.1 FUTURE LAND USE PLAN

(Rev 04/14/98)

The Future Land Use Plan for the Area Structure Plan is presented on Figure No. 2. The concept of the Plan is generally as follows:

- a. residential development in the northern half of the quarter section (except for the commercial, institutional, and Reserve areas noted below), with two multi-family sites (to be developed at townhouse densities) and the rest to be single family housing at conventional urban densities,
- b. institutional use (the existing cemetery, plus an expansion),
- c. residential development in the southern half of the quarter section at an "estates" or almost rural density – with lot sizes ranging from 0.3 to just over 0.4 ac.,
- d. a small Public Utility Lot to be used as a storm water outlet location for the 22 acre development planned for the southwest corner of the subject property.
- e. buffers are located between the residential areas and the Arterial Roads. Municipal Reserve Credit will not be given for these Municipal areas.
- f. a small Municipal Reserve park in the northwestern quadrant of the quarter section,
- g. Environmental Reserve where appropriate, and,
- h. a large Municipal Reserve area located between the pond and the eastern boundary of the subject site.

Pursuant to Section 643 of the Municipal Government Act, 'the existing farming operation may continue at its current size with no expansion or additions. This use may continue in accordance with the previous statement, until such time as development within the north half of the quarter section proceeds'.

2.1.1 Environmental Reserve

Of the subject site's 64.4 ha (159 ac.), almost 14% - the pond area plus some land surrounding it, together with the land generally lying below the 709 m contour line on the eastern boundary of the quarter section which makes up the subject site - is designated as Environmental Reserve, which is land considered not suitable for development under normal circumstances.

The pond area is required to remain undeveloped to provide storm water retention for the subject area. The maximum release flow rate allowable for development lands in the Town of Stony Plain is between 15 and 20 cfs per square mile. Therefore, a target release rate from the storm water management pond is 20 cfs per square mile (0.0022 cu.m./s/ha). Predevelopment flow rate from lands beyond the quarter section that naturally flow through the development area must be routed through the stormwater management system. The discharge from the stormwater management pond should be to the east towards Atim Creek. A landscaped overflow channel through the municipal reserve would be an amenity to the development plus following a more natural discharge pattern.

2.1.2 Municipal Reserves

The large municipal reserve area located generally between the pond and the eastern boundary of the subject site is due to two main reasons. Firstly, the narrowness of the land between the floodplain of Atim Creek and the pond, there is little land that could be developed in this area. Secondly, most of this area is subject to fairly high water tables, and thus, development for conventional uses would be more expensive than the norm.

Municipal Reserves are located strategically on the west side of the pond and near the proposed multi-family residential areas.

A small Municipal Reserve site is located within the northwestern quadrant of the quarter section, within the conventional single family residential neighborhood.

2.1.3 Institutional Use

The cemetery on the northern boundary of the subject site, west of the pond, will remain and continue to operate. The cemetery owners have indicated a desire to make a minor expansion and this is accommodated within the Tentative Plan. This expansion will also serve a secondary purpose of permitting a future re-alignment of the entrance to the cemetery from 79 Avenue to the north/south Major Collector, should the Town and the cemetery wish to do so.

(Rev 04/14/98)

2.1.4 Multi-family Residential Uses

Multi-family residential uses – to be developed at row house densities (40 units/ha – 16.2 units/ac.) in accordance with the existing regulations in the town's Land Use Bylaw – are shown on two select sites. One is at the northern entrance to the neighborhood, at the intersection of 79 Avenue with the north/south Major Collector Road, and the other is located southeast of the pond and with good access to an arterial and/or major collector road. The southeastern of these areas require special construction techniques during development to overcome any site considerations.

2.1.5 Conventional Single Family Residential Development

Single family residential development, at conventional Town densities of about 16 units/gross ha (20/net ha) (6.5/gross ac.- 16.25/net ac.) (with a normal lot size averaging approximately 500 sq. m. (5380 sq.ft.)), which is only slightly larger than the required parcel size in accordance with the existing regulations in the Town's Land Use Bylaw for the R-1A District), will occur in the northern portion of the subject area north of the east/west Major Collector Road. This area is suitable for residential development, with good access to the rest of the Town and proximity to the Reserve areas of Atim Creek and the pond. This will serve as a transition area between the existing Town residential area to the north and northwest of the subject site and the lower density residential area to the south.

2.1.6 Low Density Single Family (Estates) Residential Development

Low density single family residential development – at an "estates" density average of approximately 6 dwelling/ha (2.5/ac.) will occur in the southern portion of the subject area, south of the east/west Major Collector Road. Lot sizes will range from a minimum of 1340 sq.m. (14424 sq. ft. – 0.33 ac.) to a normal maximum of 1800 sq.m. (19,350 sq.ft. – 0.44 ac.), though some lots may be larger due to subdivision design parameters and limitations. As well, maximum frontage for residential lots in this area will be maintained except where required in order to provide for reasonable subdivision design within cul-de-sacs. This area is suitable for residential development, and will serve as a transition area between conventional Town residential densities and the very low density country residential development in Parkland County to the south of the subject site.

2.1.7 Public Utility Lot

(Rev.04/14/98)

The small Public Utility Lot is strategically located on the south side of the east/west Major Collector Road in order to provide for an overland outlet for the storm water runoff from the 22 acre development.

2.1.8 Land Use Distribution

Table 1 identifies the proposed land uses for the subject site as illustrated on Figure No. 2. This data is separated between the area north of the east/west Major Collector Road and the area south of the east/west Major Collector Road in order to reflect the division between the conventional residential density area and the low density residential area. *Note that all numbers are approximates.*

TABLE 1
LAND USE DISTRIBUTION

Land Use ha (ac.)	North of Major Collector	South of Major Collector	Percent of GDA
RESIDENTIAL			
Single Family (conventional density)	9.7 (24.1)	0	17.7
Single Family (estates)	0	20.3 (50.14)	36.6
Multi-Family	1.6 (3.9)	0	2.9
PARK (MR/MSR)			
Parks	6.1 (14.5)	0	10.7
BUFFERS	0.8 (2.0)	0.25 (0.6)	1.9
CIRCULATION			
Arterial Road Widening	0.4 (1.0)	0.2 (0.5)	1.0
Major Collectors	1.5 (3.7)	2.2 (5.4)	6.7
Local	4.1 (10.1)	4.9 (12.1)	16.3
INSTITUTIONAL			
Cemetery	6.0 (14.8)	0	10.9
PUBLIC UTILITY LOT			
Storm Water Facility	0	0.3 (0.65)	0.5
GROSS DEVELOPABLE AREA (GDA)	27.3 (67.5)	28.2 (68.4)	
ENVIRONMENTAL RESERVES	8.7 (21.5)	0.3 (0.8)	
TOTAL	36.5 (91.4)	28.0 (69.2)	

Note: Rounding has occurred.

2.2 RESIDENTIAL UNITS, POPULATION AND SCHOOL GENERATION

2.2.2 Units and Population

Table 2 provides the number of residential units and the population which would be generated for the Plan area. Numbers of persons per unit are based on figures used in other Area Structure Plans in the Town.

TABLE 2

RESIDENTIAL UNIT AND POPULATION GENERATION

		Net Units/Ha	Ha.	No. of units	Percent of Total Units	Person/ Unit	Persons
Single Family (conventional density)		20	9.5	190	51	3.3	627
Single (estates)	Family	6	20.3	122	32	3.3	403
Multi-family		40	1.6	64	17	2.0	128
TOTAL			32.4	376			1158

This works out to an overall density of 7.98 persons per ha in the Area Structure Plan area. It should be noted that the major reason for this being fairly low is the large amount of Environmental Reserve which will be provided in the Plan area.

2.2.2 Student Generation and Schools

TABLE 3

STUDENT GENERATION FACTORS PER HOUSEHOLD

<u>Housing Type</u>	<u>Elementary</u>	<u>Junior High</u>	<u>Senior High</u>
Single Family	.54	.27	.3
Medium Density	.15	.08	.05

TABLE 4

STUDENT POPULATION GENERATION

<u>Housing Type</u>	<u>Elementary</u>	<u>Junior High</u>	<u>Senior High</u>
Single Family	168	84	94
Medium Density	10	5	3
TOTAL	178	89	97

Expected student generation, using factors by housing type used in other Area Structure Plans in the Town which are shown on Table 3, are shown on Table 4. These are estimates only.

By using the Alberta Education mean class size of 25 full time equivalent students for all grades, the number of classrooms required by the student population to be generated in the Plan area is noted in Table 5.

TABLE 5

SCHOOL CLASSROOM GENERATION

<u>Housing Type</u>	<u>Elementary</u>	<u>Junior High</u>	<u>Senior High</u>
Single Family	6.7	3.4	3.8
Medium Density	0.4	0.2	0.1
TOTAL	7.1	3.6	3.9

These classroom numbers are small, and show that the Plan area does not require, and cannot support a school on its own. Rather, the existing and proposed schools in nearby neighborhoods can accommodate the school children generated from this Plan area.

2.3 PEDESTRIAN CIRCULATION AND OPEN SPACE SYSTEM (Rev 04/08/98)

The pedestrian circulation network and open space system facilitates easy access to the park system and the Environmental Reserves of Atim Creek and the pond, as well as forming components of the Town's community open space system. Main linkages will be provided to the pond and to Atim Creek.

These pedestrian linkages will utilize the east/west Major Collector Road, and various walkways between the residential culs-de-sac, together with the local street pattern.

The recreation facilities within the Plan area will be primarily passive in nature. The natural areas relating to Atim Creek and the pond will have some development to enhance the passive enjoyment of the recreation pursuit, but it is suggested that a lower level of development within these areas will actually enhance as well as preserve the recreation potential of the areas. The developer will be required at the Development Agreement Stage to include for construction of pathways and recreational amenities (ie benches, play structures).

Most all of the Municipal Reserve area is located in the northern portion of the Plan area. With the large lots proposed for the southern portion of the Plan area, there is little need for a small park (or "tot lot") here. Residents will have sufficient land on their own properties to provide active recreation opportunities for young children.

The buffers provided between the residential areas and the Arterial Roads will be developed with berms to town specifications, to help attenuate visual conflicts and noise.

2.4 VEHICULAR CIRCULATION

The vehicular circulation network as illustrated on Figure No. 3 is based on traditional vehicular circulation concepts. Boundary roads (79 Avenue and Golf Course Road) are Arterial Roads.

The major east/west and north/south roads are to be considered Major Collector Roads with right-of-way widths of 20 m (66 Ft.), except for the north/south Major Collector lying south of the east/west Major Collector, which is to be constructed at a rural rather than an urban standard. Access onto these roads is to be limited. The location of these roads is generally in the middle of the subject site, thereby providing good access to the whole of the Plan area. The Roads are shown as continuing on to the east to cross Atim Creek and to the south, both to provide access into areas not currently within the Town, but which may, in the future, be developed for urban purposes. These roads are to be developed to Collector standards.

All other roadways are to be Local Roads, providing direct access for most of the development on the subject site. North of the Major East/West Collector Road, the local roads will be developed to conventional Town urban residential standards with right-of-way widths of 18 m (59ft.). In the estates: portion of the Plan area, these roads will be developed to a lesser, but still urban standard, with right-of-way widths of 30 m (100 ft.)

as illustrated in Figure 4. The pattern of these local roads will consist primarily of loops, bays, and culs-de-sac. This type of road pattern fulfills the cellular concept of development and limits through traffic on local streets, thus providing quiet residential areas.

Minor changes to the road pattern shown on Figure No. 3 may occur at the tentative plan of subdivision stage to take into account the minor details of design which have no relevance at the scale of an Area Structure Plan.

3.0 - SERVICING SCHEME

3.1 SITE GRADING

Some minor grading of areas adjacent to the flood susceptible areas of the pond and Atim Creek will be undertaken in order to "square off" parcel areas. No extensive filling of the flood susceptible areas will be undertaken. Grading plans will be prepared as part of the engineering designs for each subdivision area, and pre-grading will occur as development proceeds.

3.2 SANITARY SEWERAGE SYSTEM

3.2.1 Off Site Services

The former Westerra Institute site is serviced by a sewer trunk main which has capacity to service the initial 22-acre development (part of the "estates" area). In the interim period, sewage will be directed from the 22 acre development to the Westerra sanitary sewer main.

The Town plans to develop a future trunk main in the general location of the north/south Major collector road in the Plan area. It will enter the Tentative Plan Area from the north and end approximately where the two Major collector Roads intersect. When the trunk main is built, sewage will be directed into that trunk main from the entire Tentative Plan Area.

3.2.2 On Site Services

When the new trunk main is developed, all the sewage in Tentative Plan Area will be directed to the new sanitary sewer trunk main. The alignment of the trunk main will be determined at the tentative subdivision plan phase of design and the development of the lands through which the new trunk main travels.

A general outline of the proposed sanitary sewerage scheme is shown on Figure No. 5.

3.3 WATER SUPPLY AND DISTRIBUTION SYSTEM

3.3.1 Off Site Services

A 300 mm diameter water main is located on Golf Course Road, and a 450 mm diameter water main stub is located on 79 Avenue at Golf Course Road. These mains have sufficient capacity to service the Plan area.

3.3.2 On Site Services

Watermains, connection with the mains noted above, will connect with the loop through the Plan area. The exact locations of these facilities will be determined at the tentative subdivision plan phase of design and development. No reservoir is expected to be necessary within the Plan area.

A general outline of the proposed water supply scheme is shown on Figure No. 6.

3.4 STORM WATER MANAGEMENT SYSTEM

3.4.1 Existing (Natural) Drainage

As indicated above, natural drainage on the subject site is primarily to the pond and/or to Atim Creek. The pond drains to Atim Creek, along the drainage ditch on the south side of 79 Avenue before discharging to Atim Creek. The adjacent Southeast Stony Plain Area Structure Plan provides a drainage system, together with a storm water detention pond, for this system.

As development proceeds in the Tentative Plan Stage, upgrading of the storm pond outlet to Atim Creek will be required.

It should be noted that the predevelopment stormwater runoff from the proposed 22 Acre development currently drains naturally to a small swale which traverses the quarter section, and enters the pond at its southern end.

3.4.2 Proposed Drainage System

It is proposed that the existing stormwater drainage pattern be used and enhanced as development proceeds in the Tentative Plan Area.

All drainage from the Plan area will be directed to the pond, and thence to Atim Creek.

A central structure and swale will release flow easterly to Atim Creek at predevelopment rates. Stage I drainage to the pond (from the western half of the "estates" area) will be by a temporary swale or piped system.

In the interim, until the northern and eastern halves of the quarter section develop, storm drainage from the first phase will have to be carefully controlled. This will be done through the establishment of small storm water management facility (a Pond) at the northeastern corner of the Phase I site. Storm water will be released from this facility at pre-development flows into the existing swale which currently drains the Phase I area into the pond. A pipe may be used for drainage from the 22 acre development to the central storm water pond.

A general outline of the proposed storm water management scheme is shown on Figure No. 7.

3.5 OTHER UTILITIES

Other utilities (power, telephone, cable, street lighting, etc.) will be developed within the Plan area to current Town standards.

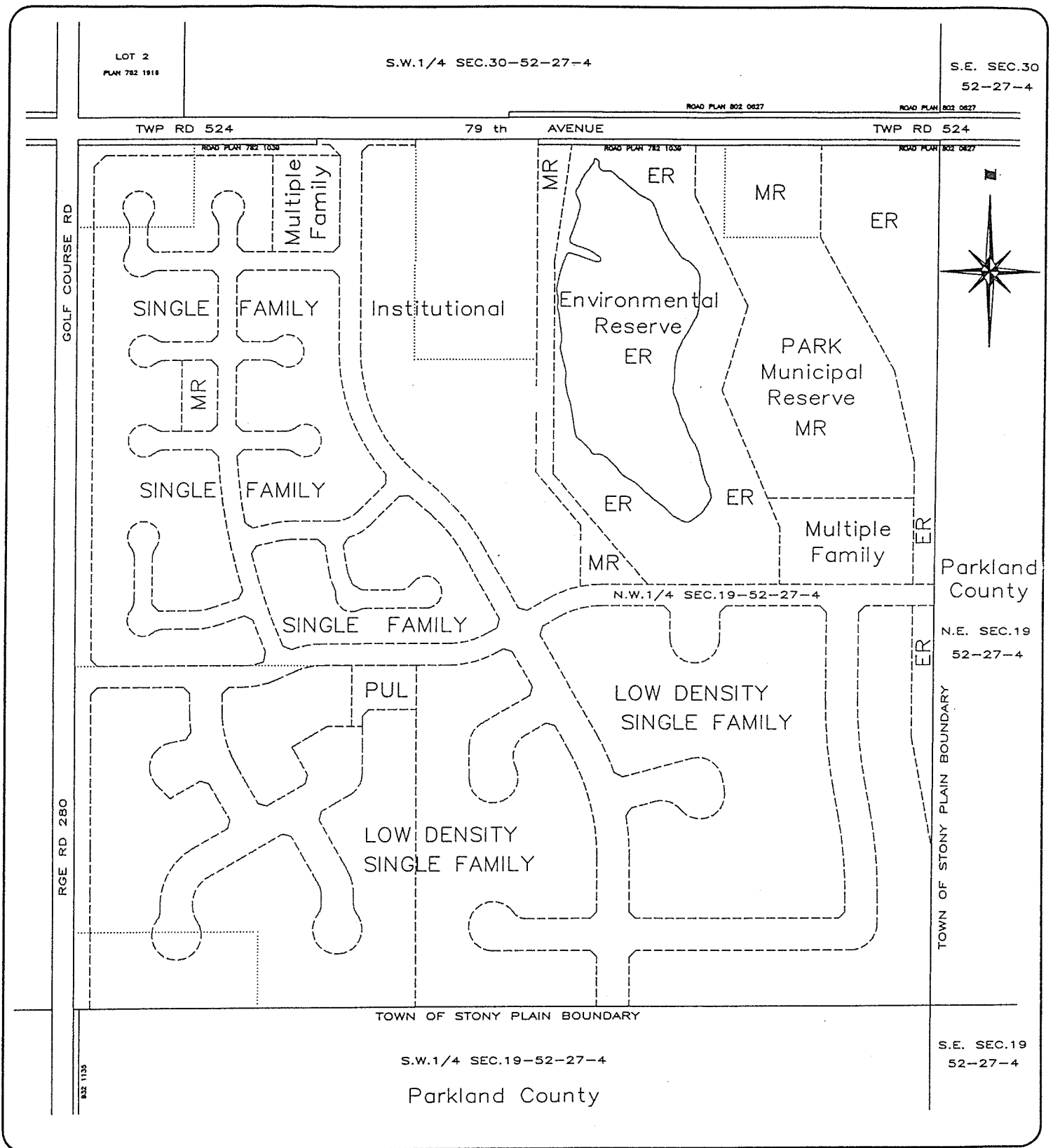
4.0 DEVELOPMENT STAGING

The sequence of development staging is based on three major criteria. First, initial stages will have proximity to existing Arterial Roads. Since these access features are currently Golf Course Road and 79 Avenue, lands adjacent to these routes should be considered for first phase development. The second staging criteria is servicing. Lands in the vicinity and within the capacities of the existing sewer and water trunk mains on the former Westerra site and on 79 Avenue can be serviced by and to them. Finally, the development timing plans of the involved owners will also determine eventual staging.

This staging approach is presented in this general form to allow maximum flexibility for alterations as a reflection of growth pressures, Town policies, and owner priorities.

However, the first phase of development will be in the southwestern corner of the Plan area, where a small residential "estates" area tentative plan, which can be provided with water supply and sewage disposal services from the Westerra and 79 Avenue trunks, and which can drain to the pond, as described above, will be developed first. Detailed engineering design at the tentative plan stage will deal with the exact location of service lines and drainage ways, and with the location and design of lots and roads.

FIGURE No.



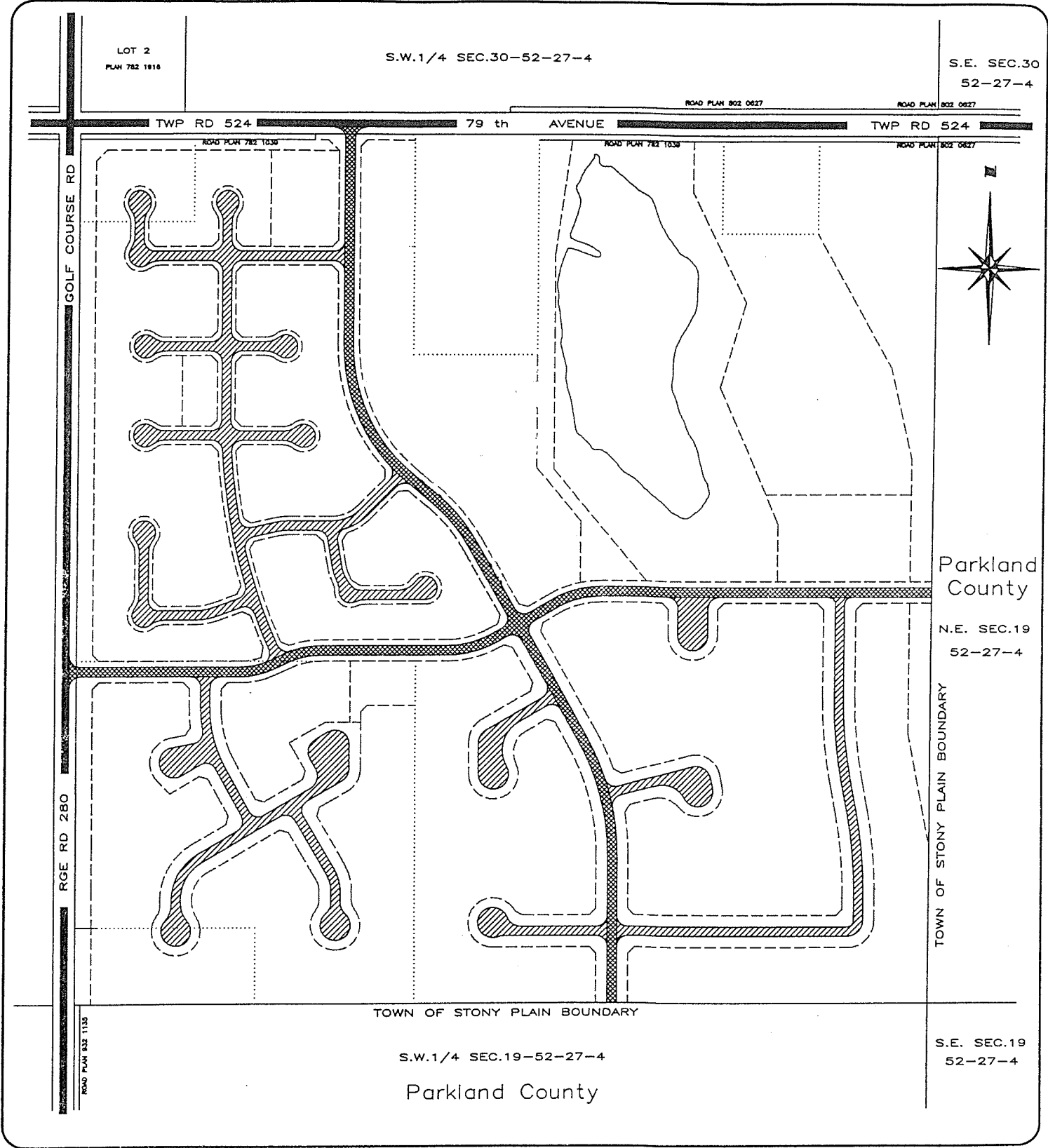
FUTURE LAND USE PLAN
AREA STRUCTURE PLAN (N.W. 1/4 SEC. 19-52-27-4) TOWN OF STONY PLAIN

LEGEND	
1. Single Family	R-1A
2. Low Density Single Family	ESTATES
3. Multiple Family	-
4. Institutional	-
5. Commercial	-
6. Municipal Reserve	MR
7. Environmental Reserve	ER
8. Public Utility Lot	PUL

APR 19 1998

Scale: 1:5000
Dated: 1998/ 3/ 2

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FIGURE No.



FUTURE TRANSPORTATION PLAN AREA STRUCTURE PLAN (N.W.1/4 SEC.19-52-27-4) TOWN OF STONY PLAIN

LEGEND

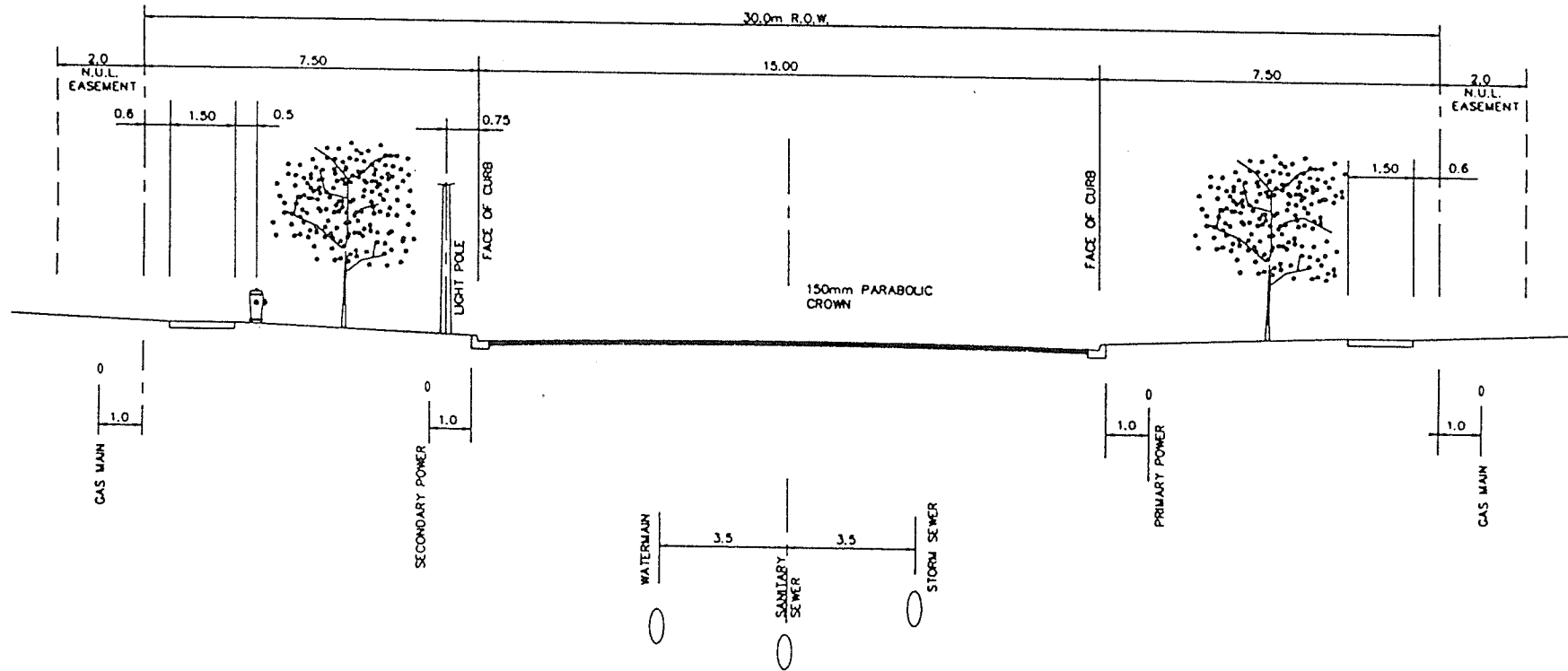
- 1. Major Collector
- 2. Local
- 3. Arterial

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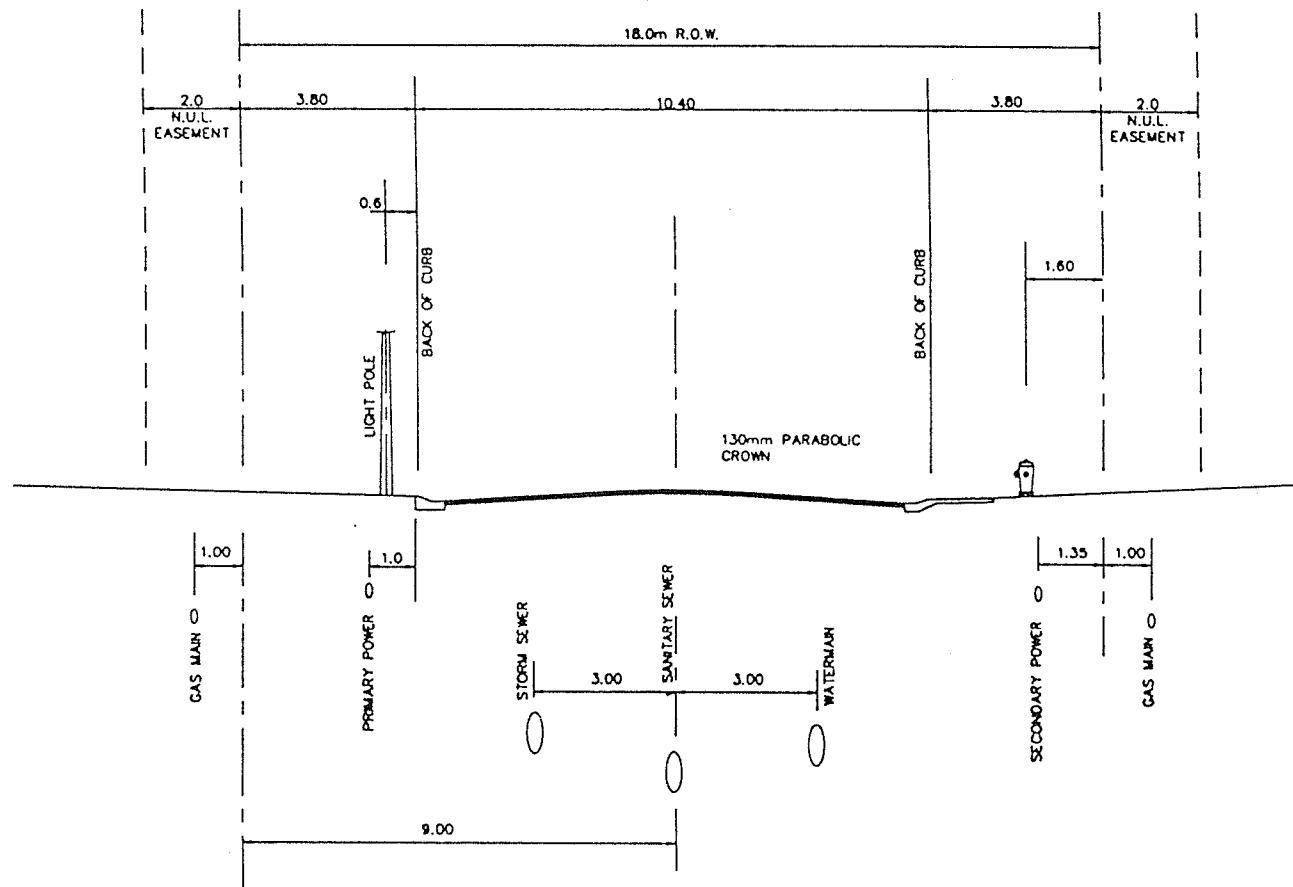
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Dated: 1998/ 3/ 2

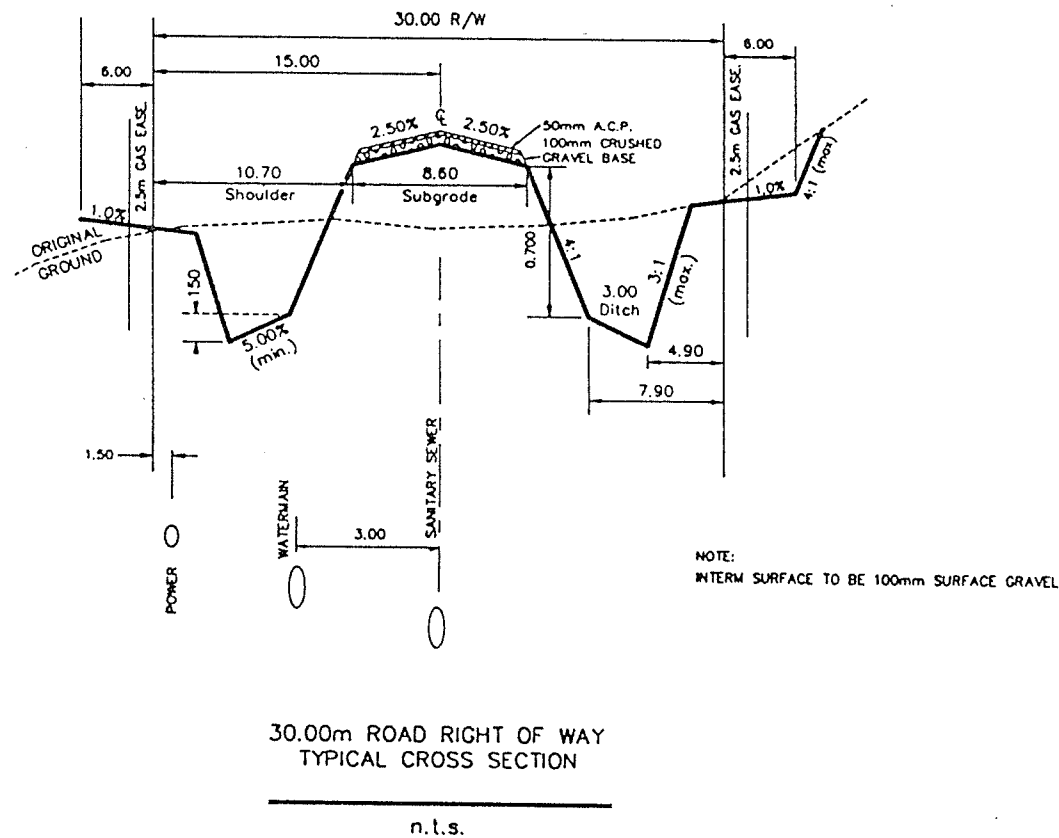
3
FIGURE No.



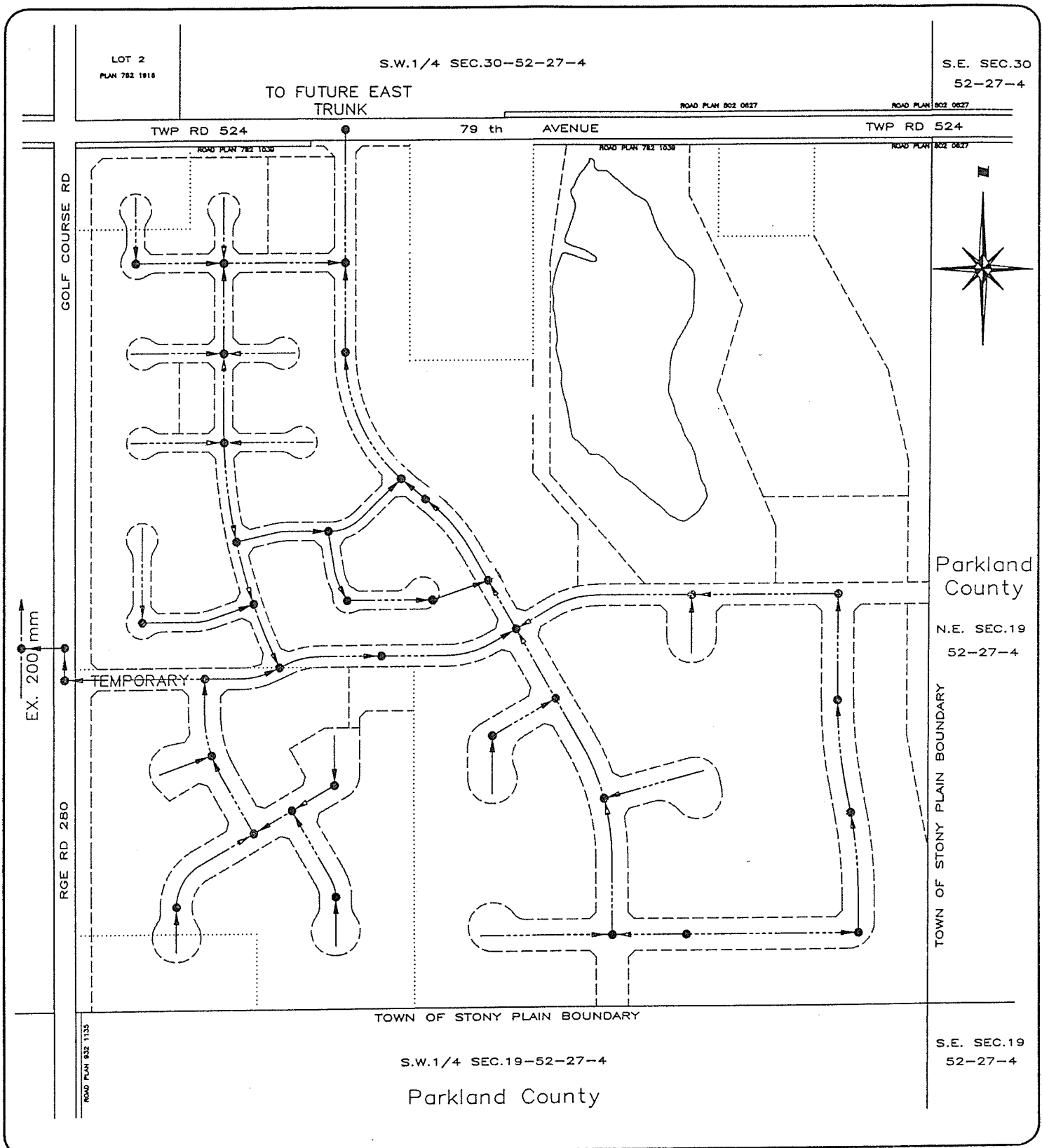
COUNTRY PLAINS ESTATES:
COLLECTOR ROAD
FIGURE 4a



COUNTRY PLAINS ESTATES
RESIDENTIAL ROAD
FIGURE 4b



COUNTRY PLAINS ESTATES
RURAL RESIDENTIAL ROAD
FIGURE 4c



SANITARY SEWERAGE SYSTEM
AREA STRUCTURE PLAN (N.W.1/4 SEC.19-52-27-4) TOWN OF STONY PLAIN

LEGEND

1. Sanitary Sewer ————— 200 mm

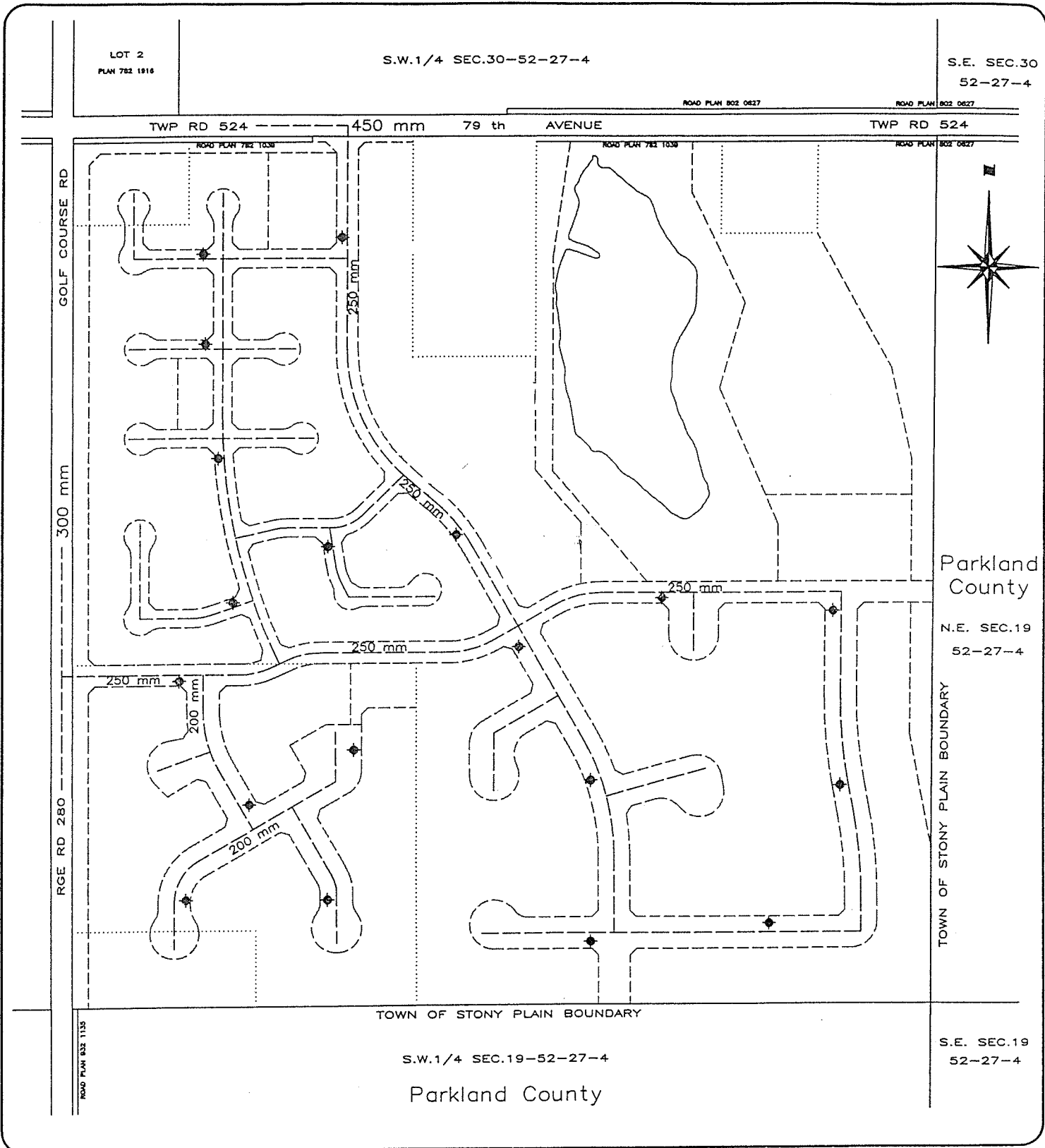
2.

3.

APR 19 1998

Scale: 1:5000
Dated: 1998/ 3/ 2

5
FIGURE No.



**WATER SUPPLY & DISTRIBUTION SYSTEM
AREA STRUCTURE PLAN (N.W.1/4 SEC.19-52-27-4) TOWN OF STONY PLAIN**

LEGEND

1. Water Main 200 mm

2.

3.

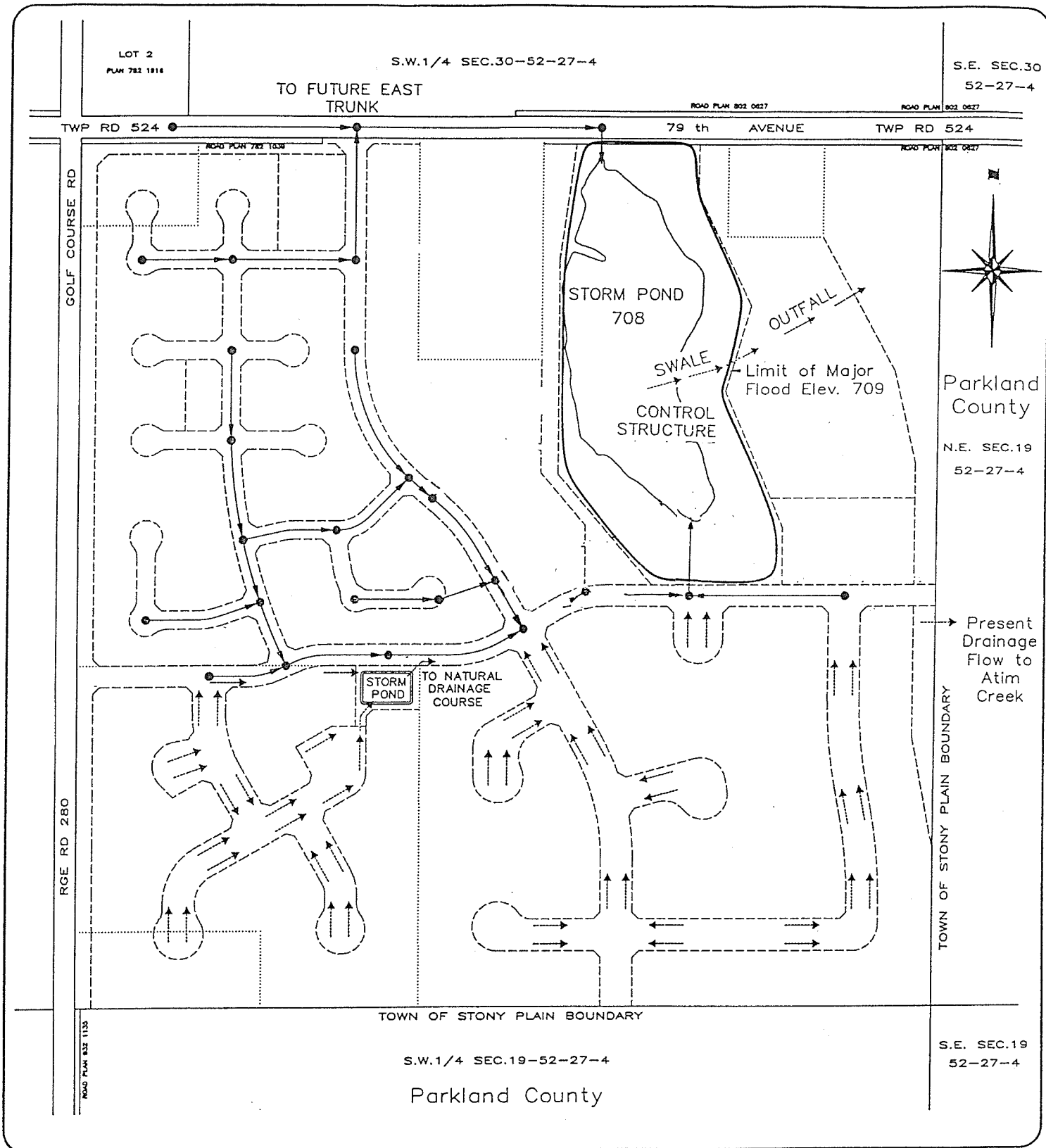
Vetric

APR 19 1998

Scale: 1:5000
Dated: 1998/ 3/ 2

6

FIGURE No.



STORM WATER MANAGEMENT SYSTEM AREA STRUCTURE PLAN (N.W. 1/4 SEC. 19-52-27-4) TOWN OF STONY PLAIN

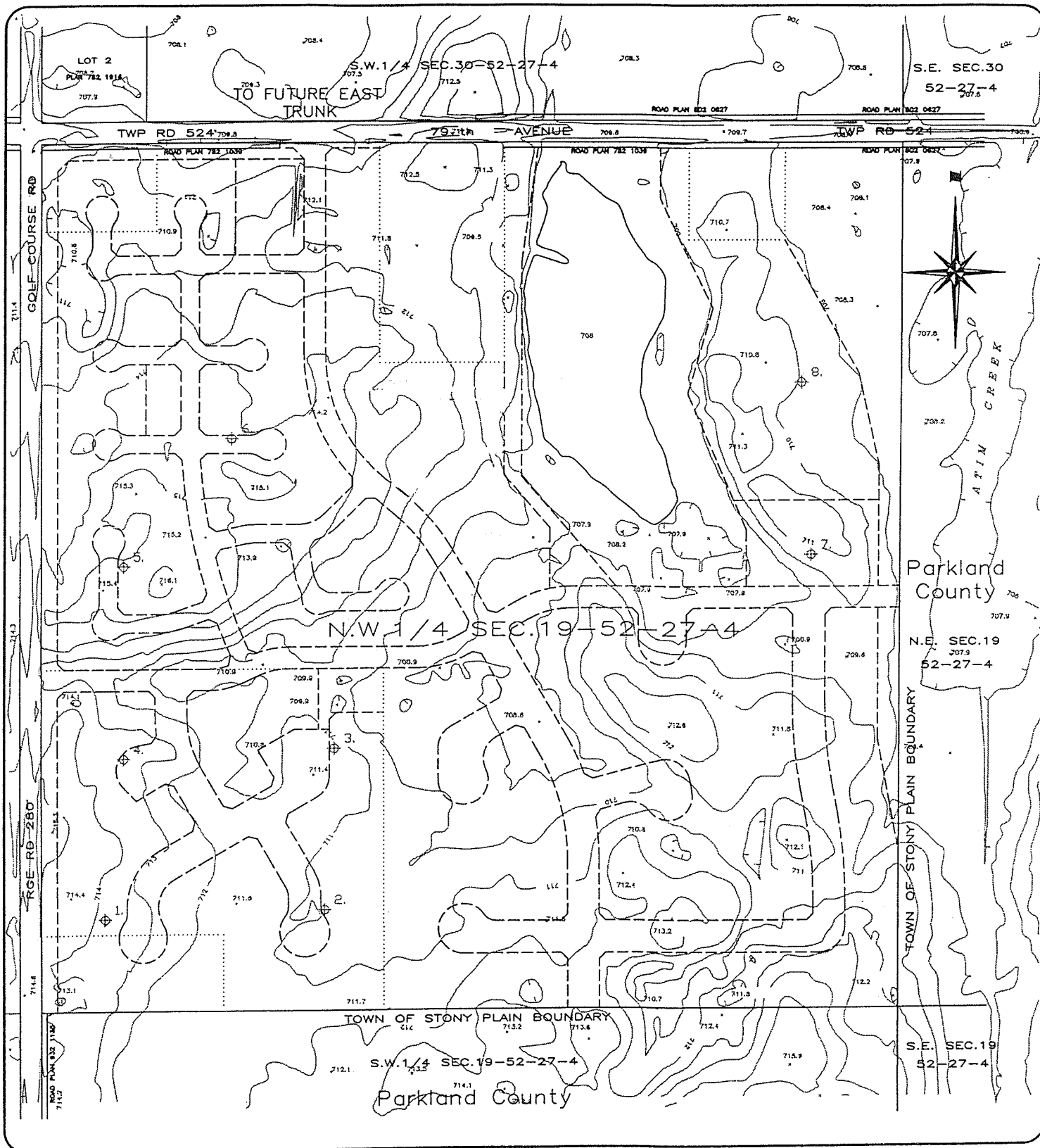
LEGEND

1. Storm Sewer
2. Surface Drainage
3. ditch

Atetric

Scale: 1:5000
Dated: 1998/ 3/ 2

7
FIGURE No.



TOPOGRAPHIC MAP

AREA STRUCTURE PLAN (N.W.1/4 SEC.19-52-27-4) TOWN OF STONY PLAIN

LEGEND

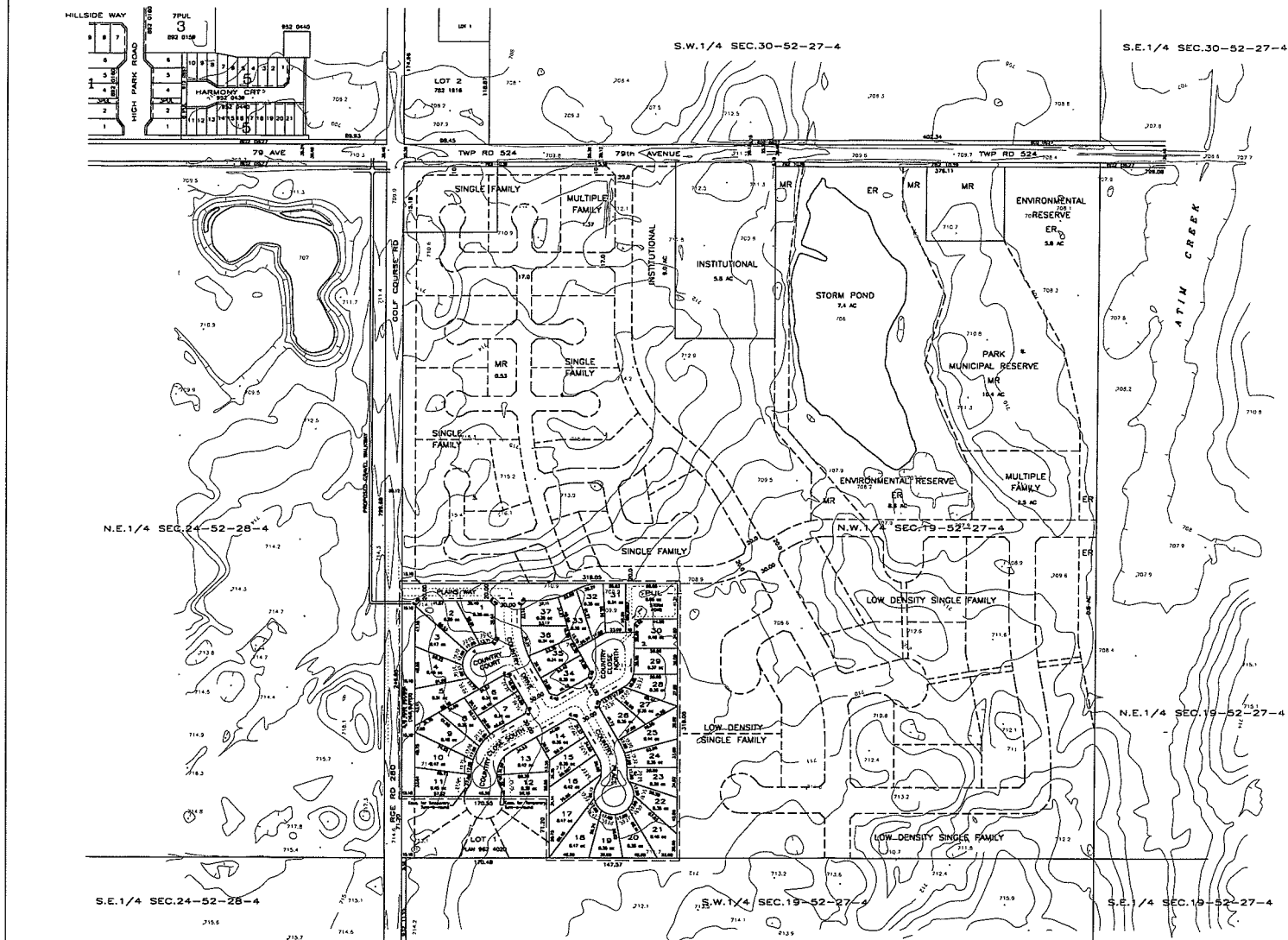
1. TESTHOLE LOCATION (via Client) ... 1.
- 2.
- 3.
- 4.

etric

APR 19 1998

Scale: 1:5000
Dated: 1998/ 3/ 2

8
FIGURE No.



NOTES:

1. AREA REFERRED TO SHOWN THUS 8.90 ha ± (22.0 Acs ±) AND CONTAINS
2. ALL DISTANCES AND ELEVATIONS ARE SHOWN IN METRES AND DECIMALS THEREOF.
3. ARC DISTANCES ARE SHOWN ALONG CURVED BOUNDARIES.
4. ALL CORNER CUT OFFS ARE 6.0 METRES BY 6.0 METRES.
5. CONTOURS ARE SHOWN AT 1.0 METRE INTERVAL AND SUPPLIED BY ALBERTA ENVIRONMENTAL PROTECTION, RESOURCE DATA DIVISION.
6. ALL LOT DIMENSIONS / LOT AREAS ARE APPROXIMATE AND WILL BE FINALIZED UPON LEGAL FIELD SURVEY.
7. MR - DENOTES MUNICIPAL RESERVE.
8. PUL - DENOTES PUBLIC UTILITY LOT.
9. ER - DENOTES ENVIRONMENTAL RESERVE.

NO.	DATE	DESCRIPTION	BY	APP.
1	88/04/23	ISSUE WITH AREA STRUCTURE PLAN	LJO	
REVISIONS				

LEGEND

----- PROPOSED SURFACE DITCH DRAINAGE WITH DIRECTION OF FLOW

TESTHOLE LOCATION (Water table elevations taken by registered owner)

JOB NO.	50013
DATE	1998/02/13
DESIGNED BY	X.Y.Z.
DRAWN BY	X.Y.Z.
CHECKED BY	E.J.D.
APPROVED BY	E.J.D.

DURRANCE PROJECTS LIMITED

LOMAX DEVELOPMENTS LTD.
COUNTRY PLAINS ESTATES

TENTATIVE PLAN
N.W. 1/4 SEC 19, TWP.52, RGE.27, W.4TH M.

SCALE	DRAWING NO.	SHEET
1 : 2000	5013-01	1 OF 1