Rural Addressing Project

December 2004

ADDRESSING GUIDELINES

Alberta
Municipal Affairs

MUNICIPAL ADDRESSING PROJECT :

BACKGROUND:

Early in 2004, a survey of rural municipalities was conducted by AAMD&C to identify which municipalities currently have a municipal addressing program in place and, for those that don't, the reasons why they have not proceeded with developing an address scheme. The results of the survey indicated:

- The majority of the rural municipalities do not have a municipal addressing system in place.
- The main reasons for not implementing an address system:
    - Cost – average cost to build and implement an address system (with signage)D was approximately $140,000.
    - Most difficult in rural areas; P.O. & Box numbers have no relationship to spatial location.
    - Staff – many staff do not have the technical background to design and build an address system.
    - Lack of provincial standards
    - Low priority (relative to cost and other issues) for taxpayers and council
- 50% plan to implement addressing system in future.

The ALTA system at LTO, was implemented in 1988 to support the title, document and plan registration processes and search requests. SPIN is a Web enabled public system that allows world wide search, view and download of registered survey plans in TIFF format as well as other government land related information. Titles can be accessed by linc number, title number, legal description or by geographic location. LTO records, title data, contains the owner mailing address but not the municipal address of parcel.

Previously, legal descriptions were the only means of accessing LTO data; however, with the development of the Internet and web technology, and the redevelopment of ALTA and SPIN, individuals now have direct access to LTO data. Most property owners know their address but not their legal description.

With the development of mapping systems, GIS technology, Facility / Asset Management Systems and in conjunction with the evolving GPS technology, there is now a greater need to have municipal-wide addresses with geo-codes. Addresses are the preferred manner for accessing spatial data. Addresses with geo-codes (knowing where people live) are fundamental to an effective Emergency Response System.

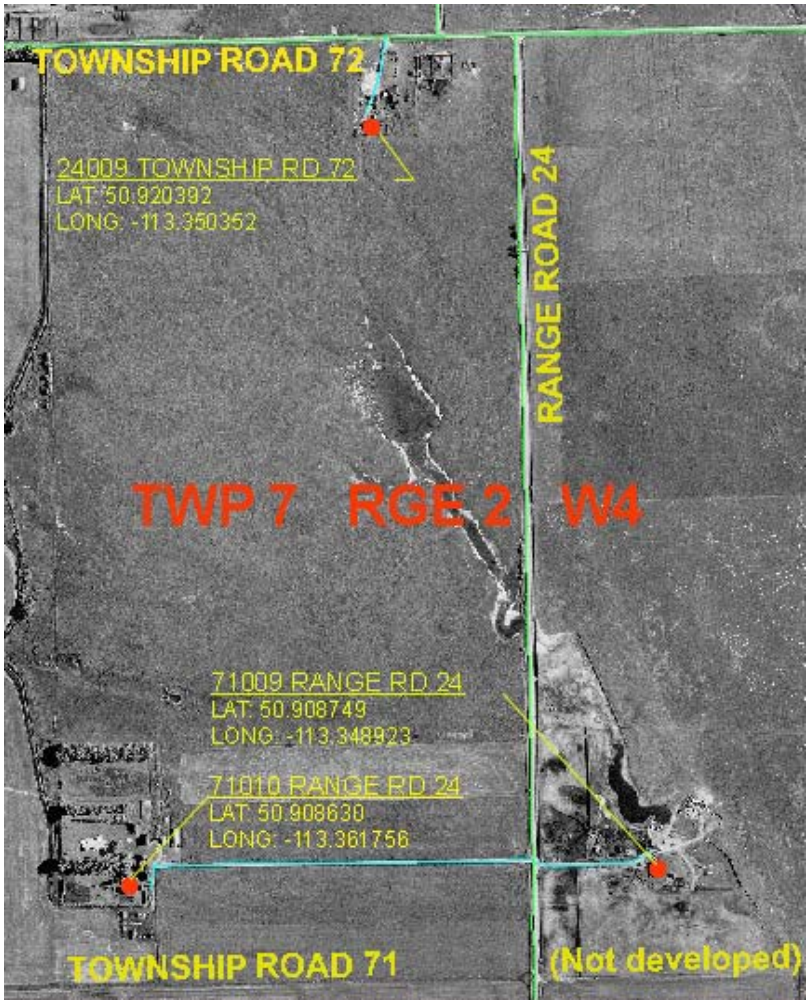
As a result of the survey, Municipal Affairs, in conjunction with Spatial Data Warehouse (SDW), AltaLIS, AUMA and AAMD&C, conducted a pilot project to evaluate the opportunity to assist municipalities in developing and implementing an addressing scheme for their respective jurisdictions.
Under the direction of the Title Mapping Project Committee, chaired by Deputy Minister Brad Pickering, two municipalities were selected to be part of a pilot addressing project.

The intent was to review current address systems; develop standards, specifications and guidelines that could be adopted by others, and to develop mapping routines and batch processes that would simplify the process and reduce the costs for implementing an address scheme.

STATUS:

Addressing templates for the entire province are available. These templates are based on a 40-meter grid interval as proposed in the specification guidelines. The current format is Microstation Dgn in a NAD83 10tm projection. The grid is based on the ATS fabric of June 2004. Other formats could also be created as required, ie. ESRI shape, AutoCAD, ESRI Geodatabase. These templates are a first step towards rural municipalities creating their own addressing and will help offset that cost.

The following addressing document explains the proposed addressing system. Many examples and illustrations are included along with details on how to handle non-standard situations. Canada Post reviewed this specification in November 2004 and found it to adhere to their recommendations and guidelines.



ADDRESSING SPECIFICATIONS

A review and analysis of existing municipal addressing systems was undertaken to come up with a standard system that would accommodate other Alberta municipalities. This specification is based on a compilation of these preliminary studies.

The addressing systems of Rockyview, Brazeau, Parkland, Lacombe, Foothills and Red Deer were reviewed. Typically, access to rural residences are from the adjacent road allowances; all the rural addressing schemes were developed around the layout for the Alberta Township Survey system. Most systems based their numbering scheme on a system which divided the length of the road allowances into intervals, ranging from 6 to 100 meters; these intervals were referenced to the township and range road identifier. The AltaLIS grid template is based on a 40-meter interval, to accommodate both rural, and subdivision densities.

STANDARD GRID TEMPLATE RULES

- Basic grid is derived from the township and range roads
- The grid is based on a 40 meter interval, starting in the far southeast section corner (See appendix A). Note that for the purposes of addressing, virtual township roads exist between all sections whether an actual road allowance exists or not. This is referred to as the blind line.
- Reset interval to zero at each section line
- 40 meter grid starts over at quarter line but address interval continues to section line
- Any remaining portions of the section less than 3 meters in width will be included in the preceding interval
- Any remaining portions of the section greater than 3 meters will create an additional interval (See appendix B)
- Interval numbers increase in the north and west direction
- Odd interval numbers are on the south and the east
- Even interval numbers are on the north and the west

- Address number is a maximum 6 digit number in all cases; (For multiple primary residences located off the same primary access, the suffix, ie. “A”, is not considered as part of the 6 digits. This is discussed further in subsequent bullets)

    - The left two or three digits are allocated for the township or range reference road.
    - The right three digits represent the interval number. The interval number must always be three digits therefore the values can require preceding zeros.

  Example: 25003 TWP RD 74

    - 25(Reference Road is Range Road 25)
    - 003 (Interval 3 in 40 meter grid west from Range Road 25 – Odd number indicates location on south side)
    - off south side of Township Road 74

    (See appendix C)

  There are no exceptions to the maximum 6-digit number. Canada Post is restricted to a 6 digit number. Four digit reference roads in northern Alberta will be discussed in subsequent bullets.

ASSIGNING ADDRESSES

- The particular address of a parcel is determined by the location of the access road (driveway) as it intersects the grid road.

- The general concept of this addressing guide is as follows; the physical location of the address text will be situated at the residence. From this physical location a latitude/longitude can be derived for vehicle location (i.e. air ambulance). The address textual information defines the access location on the primary road.

- For multiple primary residences located off the same primary access, the first building off the access will be labeled with an “A” designation, the second a “B” designation and so forth, moving from the township/range road inward along the access road (See appendix D)

- For residences with more than one access point, select the access that appears to be the primary. If there is no clear primary access, select the first access moving in a clockwise direction starting at the east boundary of the section (See appendix E).

- In all cases, a road must have a name. Roads that are not statutory road allowances must be named either with a County defined named (i.e. Lyndon Creek Rd), a Highway or Secondary Road Number, or a variation of the township and range road naming convention as discussed in subsequent bullets.

- When an unnamed primary road does not fall on a standard township or range road, yet runs parallel to, then the addressing follows one of two scenarios:

    1. If the primary road is relatively close to the original road allowance location, the township/range road name is assumed to be the same (See appendix F)

    2. If the primary road is located more so on the quarter line, then it is labeled according to the more southerly township road or more easterly range road, and pre-pended with an ‘A’, ‘B’ and so forth.

        Example: 250027 TWP RD. 92A
        250028 TWP RD. 92B
        (See appendix G)

- When an original road allowance diverts from its standard direction, then the name remains as the range or township name. A hydrological feature is an example of a reason for the diversion (See appendix H)

- Generally to determine if a road is a primary road or merely a long private drive, a rule of thumb is: if the road was surveyed and registered by Plan of Survey at Land Titles Office, then it is in fact a primary road. (See appendix J)

- If a township road coincides with a named road i.e. Secondary Road 511, then use the ‘named’ road for the road name (See appendix K)

IRREGULAR ROADS

- Irregular roads are uniquely named roads that may or may not follow the basic grid pattern of the township or range roads determined by the original township survey system of the late 1800’s. Generally these roads consist of Highways, Secondary Roads and Forestry roads.

- The first step in addressing irregular roads is to determine which direction the road is primarily heading in. The interval numbering will be based off this selection. If the direction is north-south then the interval numbering will be based off a township road. If the direction is east-west, then the interval numbering will be based off a range road.

- The interval number is based on the distance or the number of intervals off the range or township road. For a quick reference in determining the interval number use Appendix L. Based on the distance from the nearest intersection with a relevant grid road to the access point, use the chart to determine the interval number.

Example: Addressing an access 1743 meters north of Twp Rd 63 on Secondary Rd 810, west side (See appendix M)

1. Secondary Rd 810 is primarily a north/south direction road therefore it is considered a range road

2. 1743 meters north of Township Road 63 on Secondary Rd 810 translates to interval 88

3. Full address would be 63088 Secondary Rd 810

(See appendix N and P for more illustrations on concepts of irregular roads)

- Appendix Q illustrates a common scenario on irregular roads whereby the interval number occupies the three-digits reserved.

- Addresses for residences off Highway service roads will be addressed off the Highway (See appendix R)

SUBDIVISIONS

- **Subdivision definition**: generally refers to a subdivision layout that is not part of a hamlet, village, summer village, or town. Subdivisions within these geo-administrative areas may already have addressing assigned. The governing body should be consulted prior to assigning a municipal address.

- Subdivisions will be numbered clockwise using an increment of 4

- Odd interval numbers are on the south and the east if possible

- Even interval numbers are on the north and the west if possible

- Subdivision parcels are numbered according to the number of parcels, not based on the grid system or driveway location (See appendix S)

NORTHERN ALBERTA TOWNSHIP REFERENCE ROADS

- The 6 digit civic number Canada Post restriction is mandatory. The first three digits are allocated to the reference road. The three-digit field can accommodate the reference road for all locations within Alberta except north of Township 99. The township reference roads north of Township 99 require 4 digits. To satisfy the three-digit requirement the fourth digit will be dropped from the township reference road. (See appendix T)

- Full addresses should include the Geo - Administrative name, as there will be duplication in the municipal addresses across the province. (See appendix U and appendix V)

CANADA POST CONSIDERATIONS

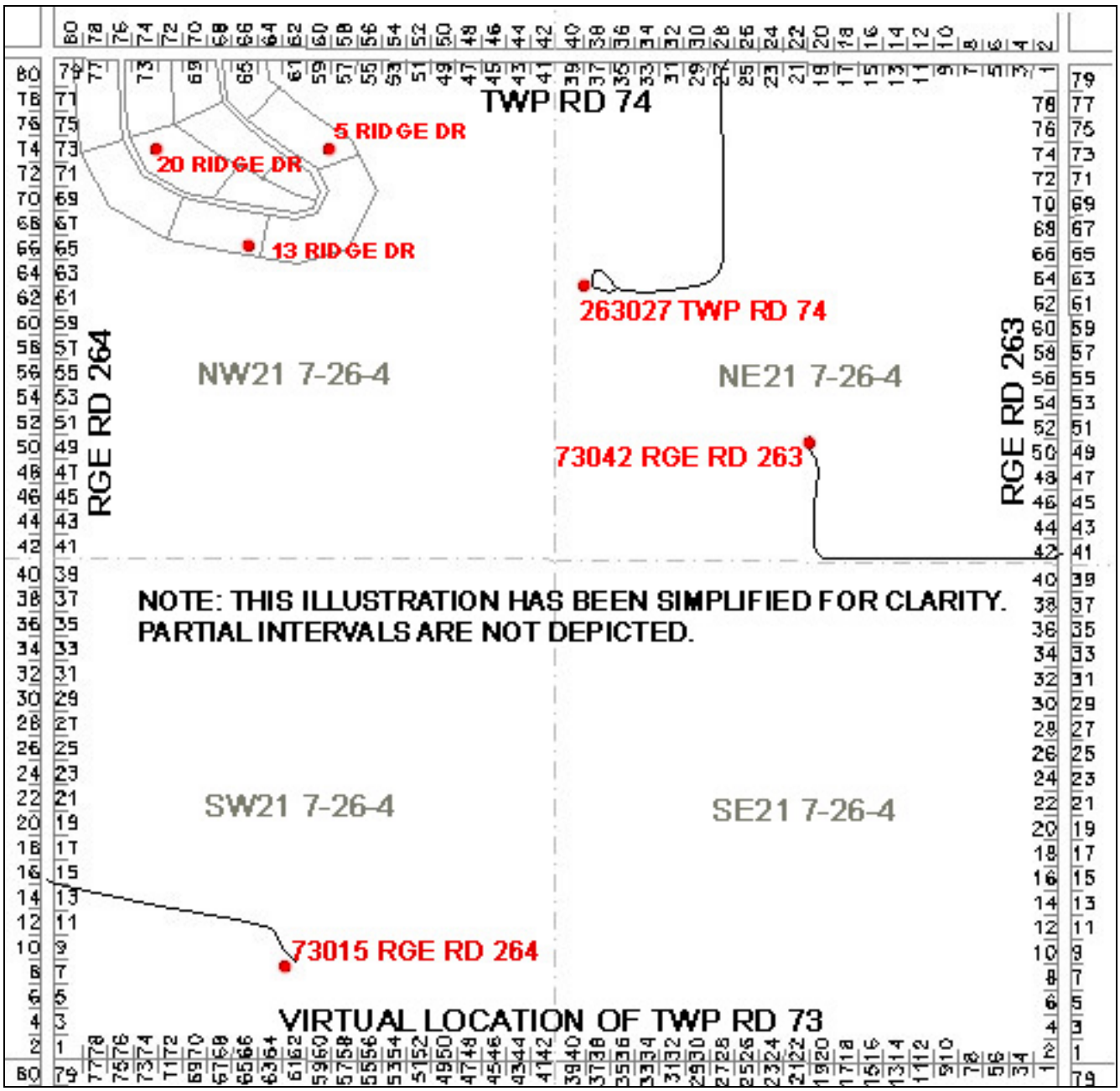
- All abbreviations are to follow Canada Post regulations including:

Township Road	Twp Rd
Range Road	Rge Rd

- For more comprehensive Canada Post Addressing information which includes a complete list of abbreviations refer to document http://www.canadapost.ca/personal/tools/pg/manual/b03-e.asp

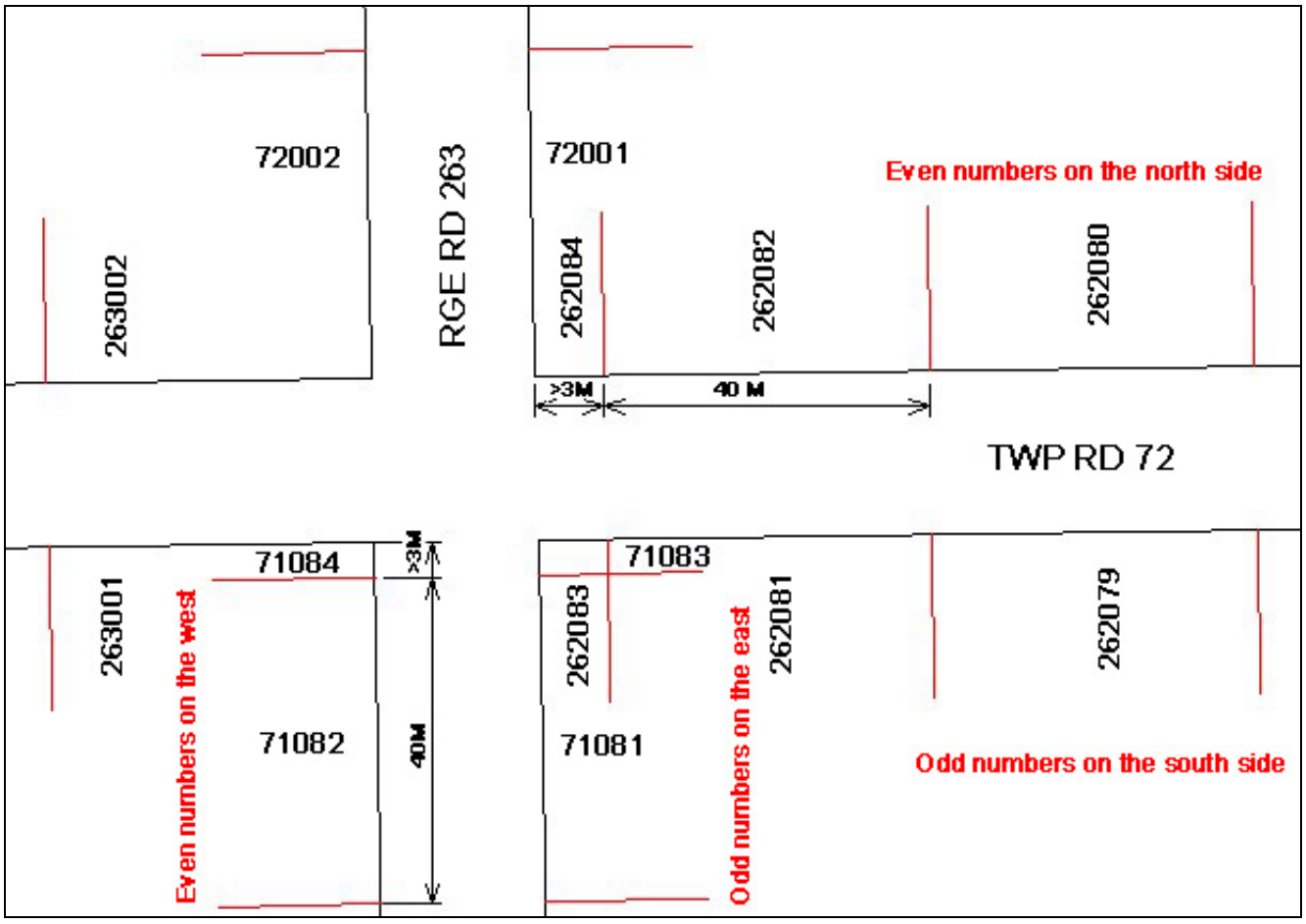
- Canada Post has summarized guidelines for Civic addressing in Alberta municipalities (See appendix W)

Appendix A



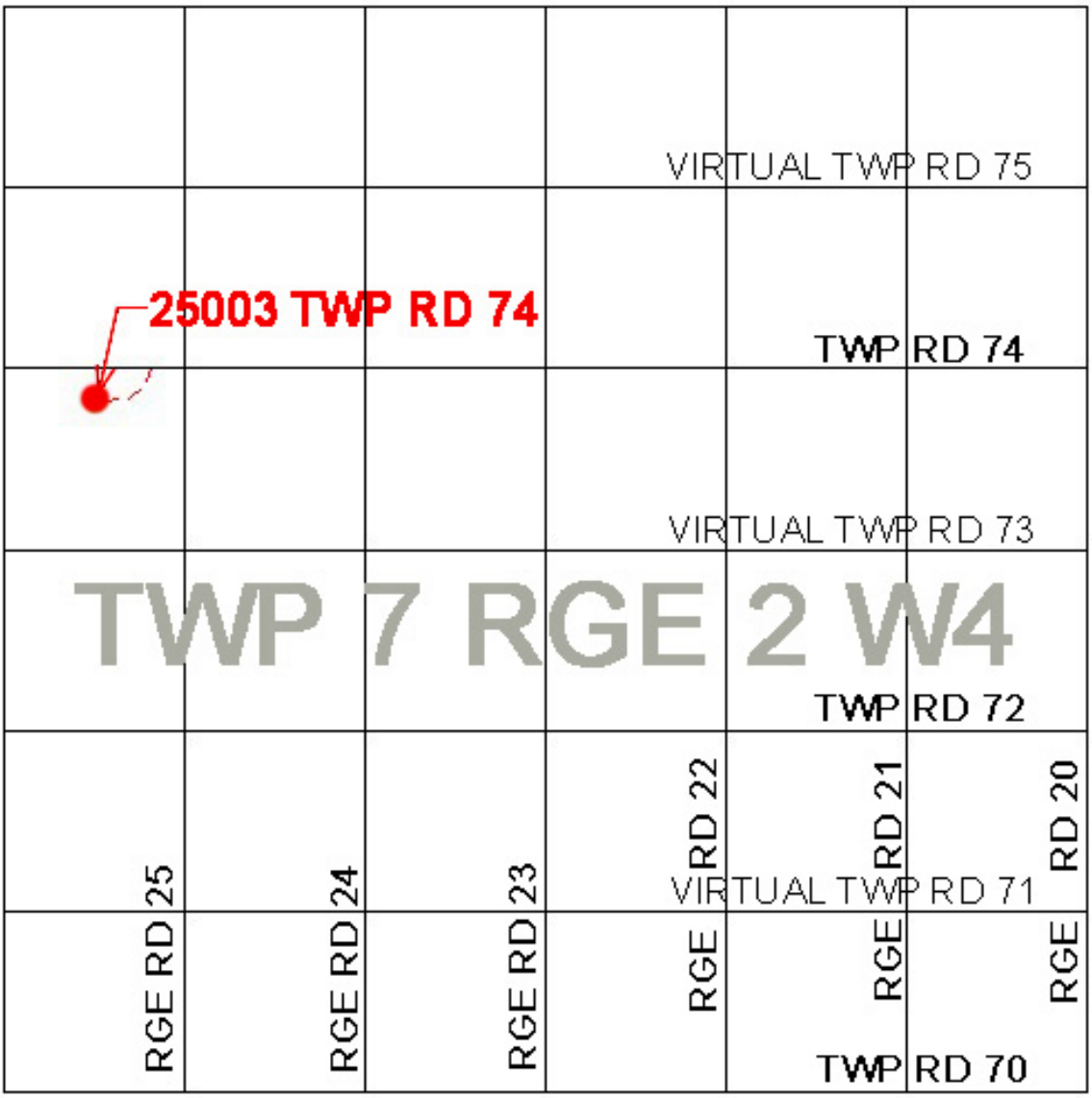
STANDARD 40 METER GRID ADDRESSING LAYOUT

Appendix B



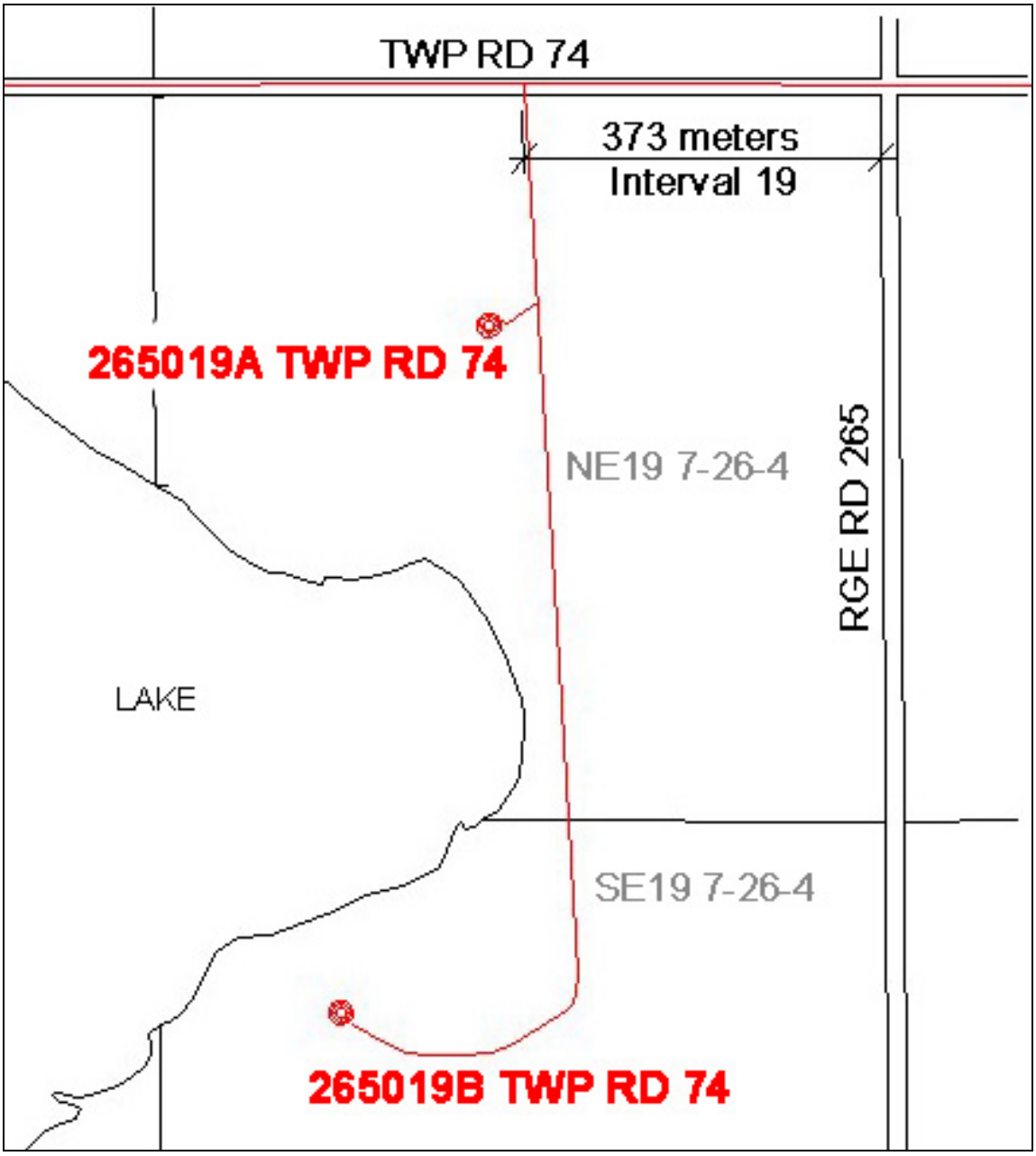
DETAILS OF 40 METER GRID AND PARTIAL INTERVALS

Appendix C



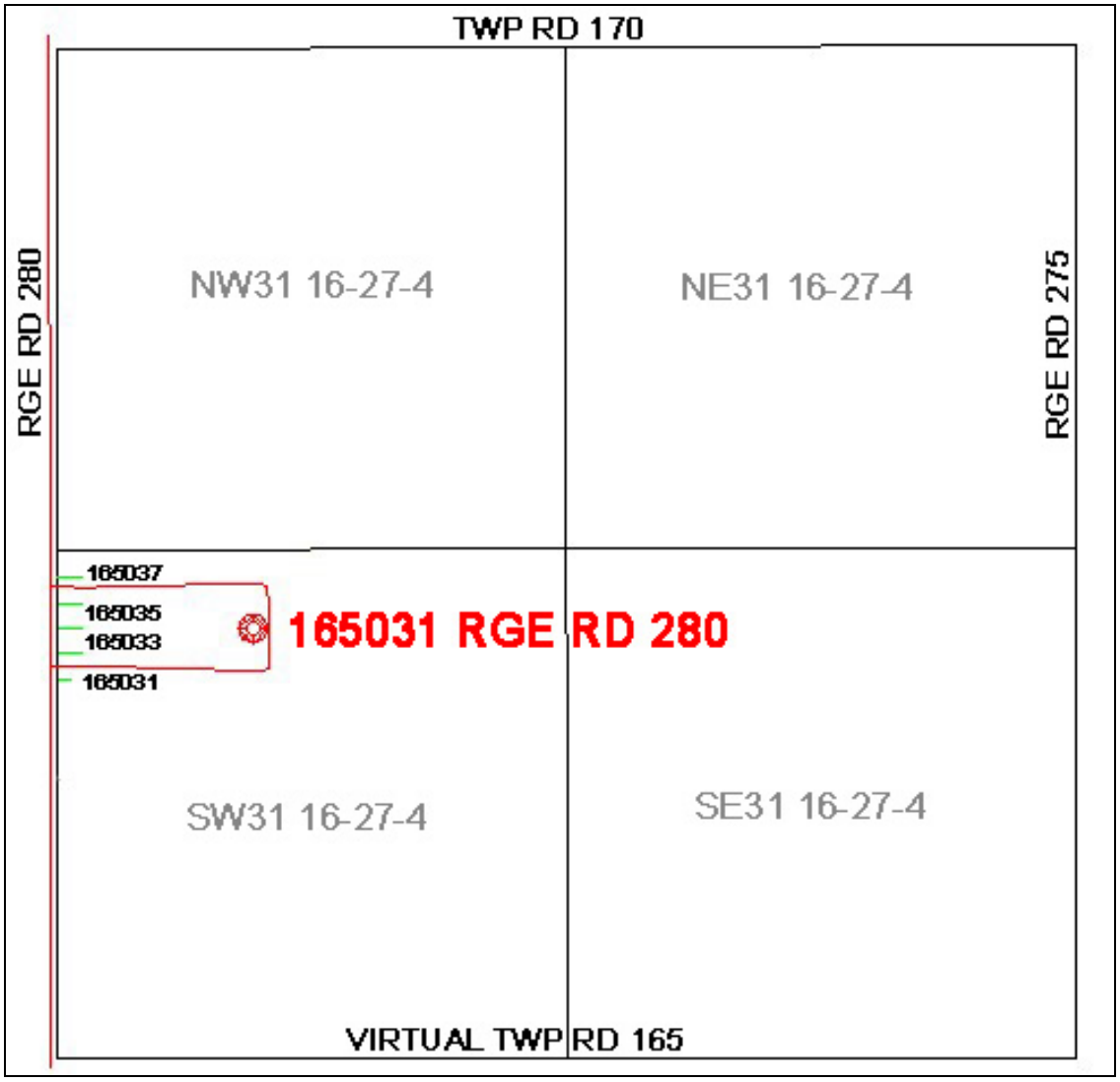
TOWNSHIP/RANGE REFERENCE ROAD EXAMPLE

Appendix D



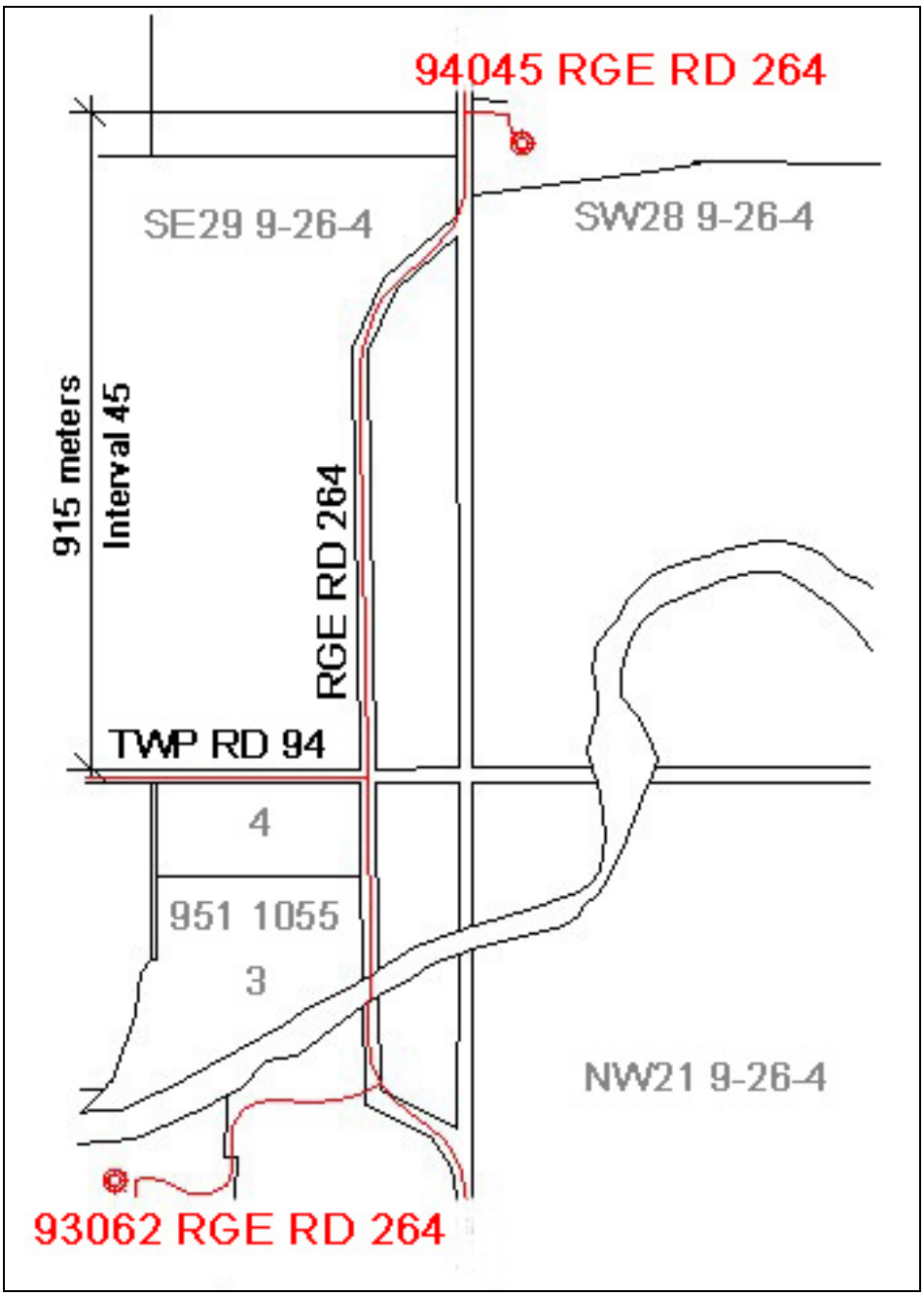
MULTIPLE ADDRESSES LOCATED OFF A SINGLE DRIVEWAY

Appendix E



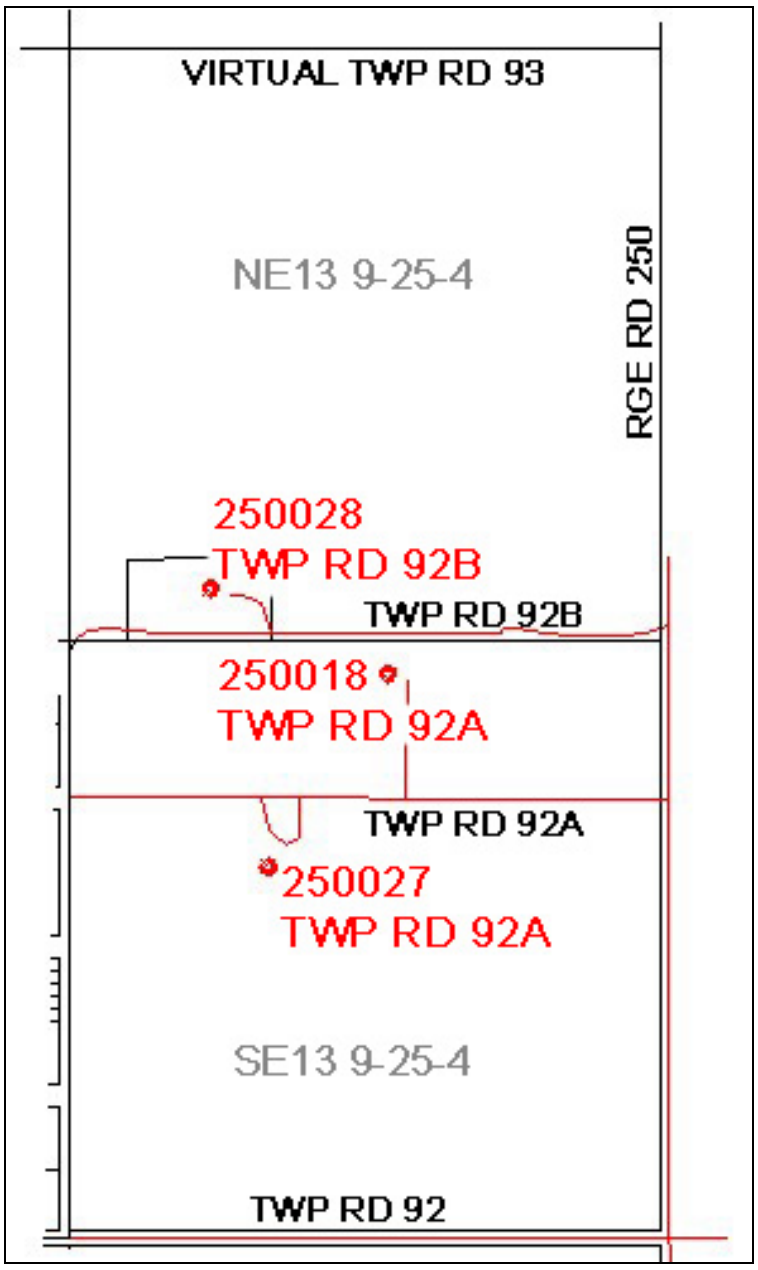
MULTIPLE DRIVEWAY FOR A SINGLE RESIDENCE

Appendix F



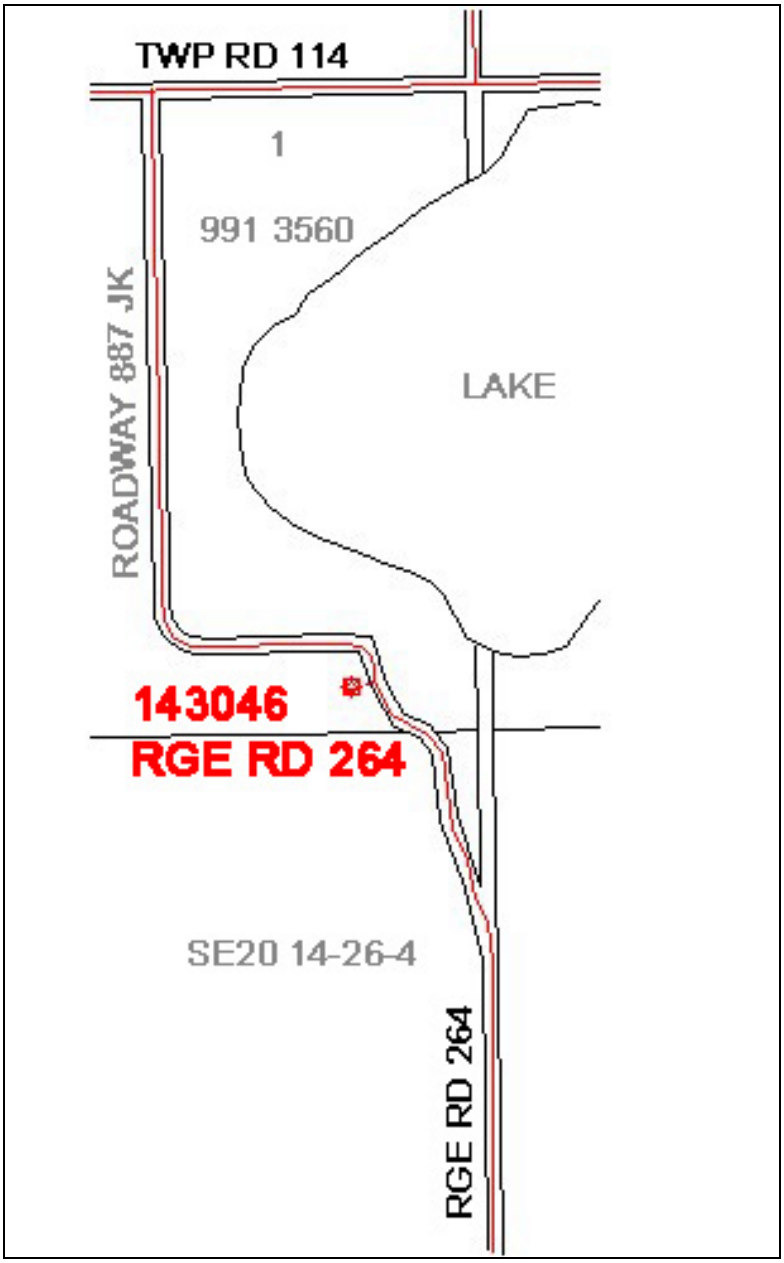
ROAD NAME REMAINS AS RANGE ROAD EVEN THOUGH ROAD DIVERTS FROM ORIGINAL ROAD ALLOWANCE

Appendix G



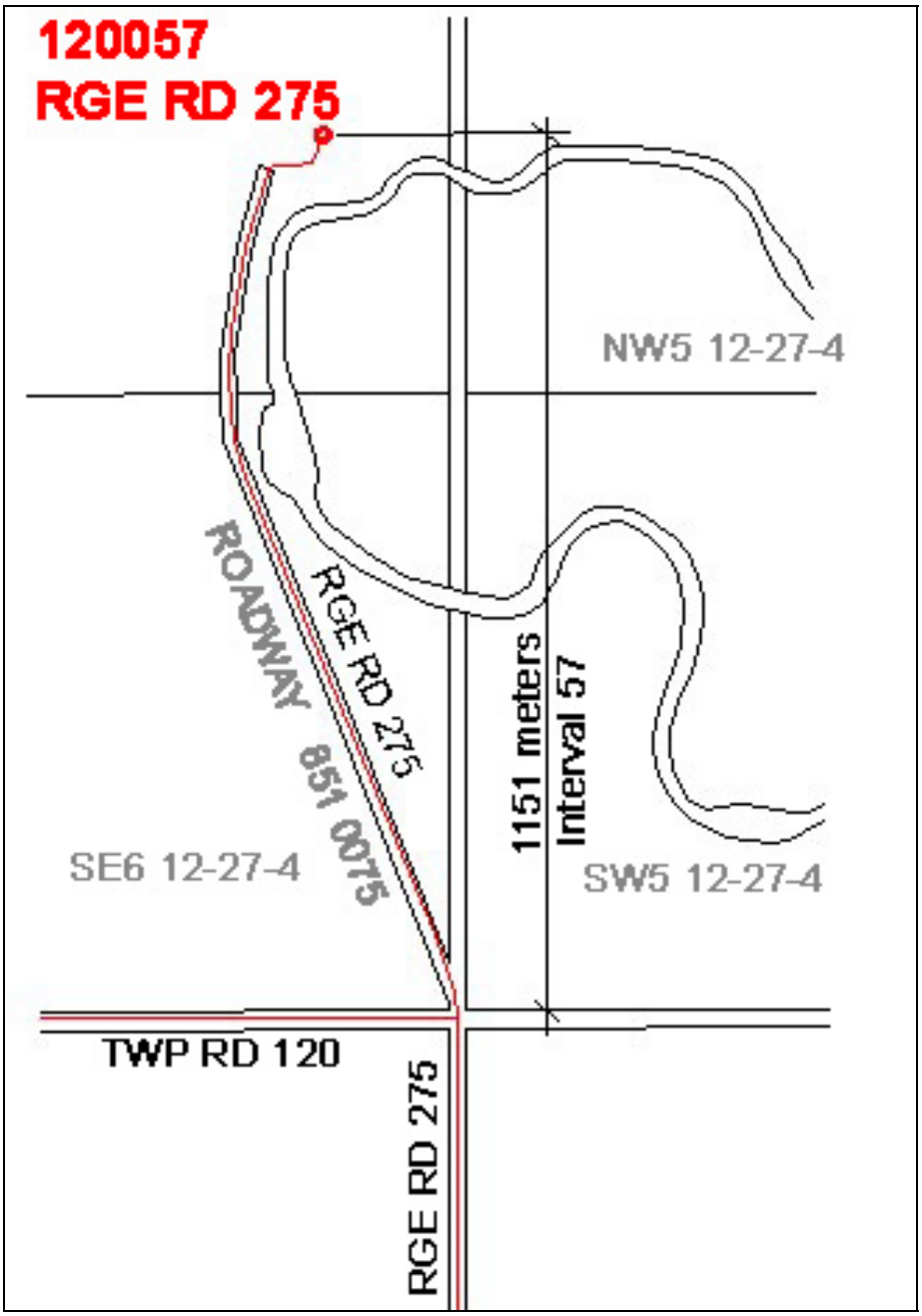
NAMING OF NON-STANDARD PARALLEL GRID ROADS

Appendix H



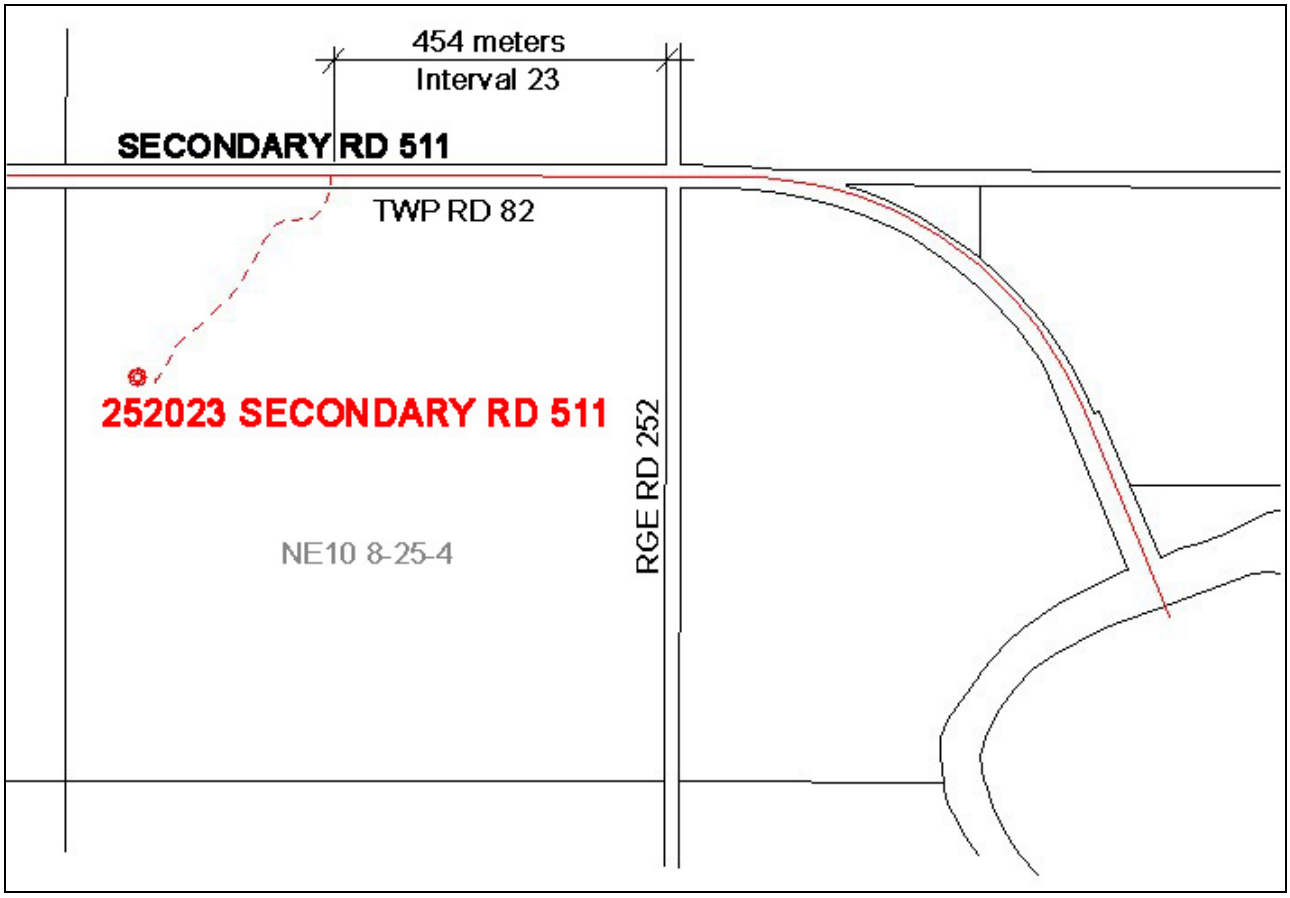
ORIGINAL ROAD ALLOWANCE DIVERSION

Appendix J



PLAN OF SURVEY DETERMINES THAT THE ROADWAY IS A PRIMARY ROAD NOT A DRIVEWAY

Appendix K



NAMED ROAD IS COINCIDENT WITH ORIGINAL ROAD ALLOWANCE GRID

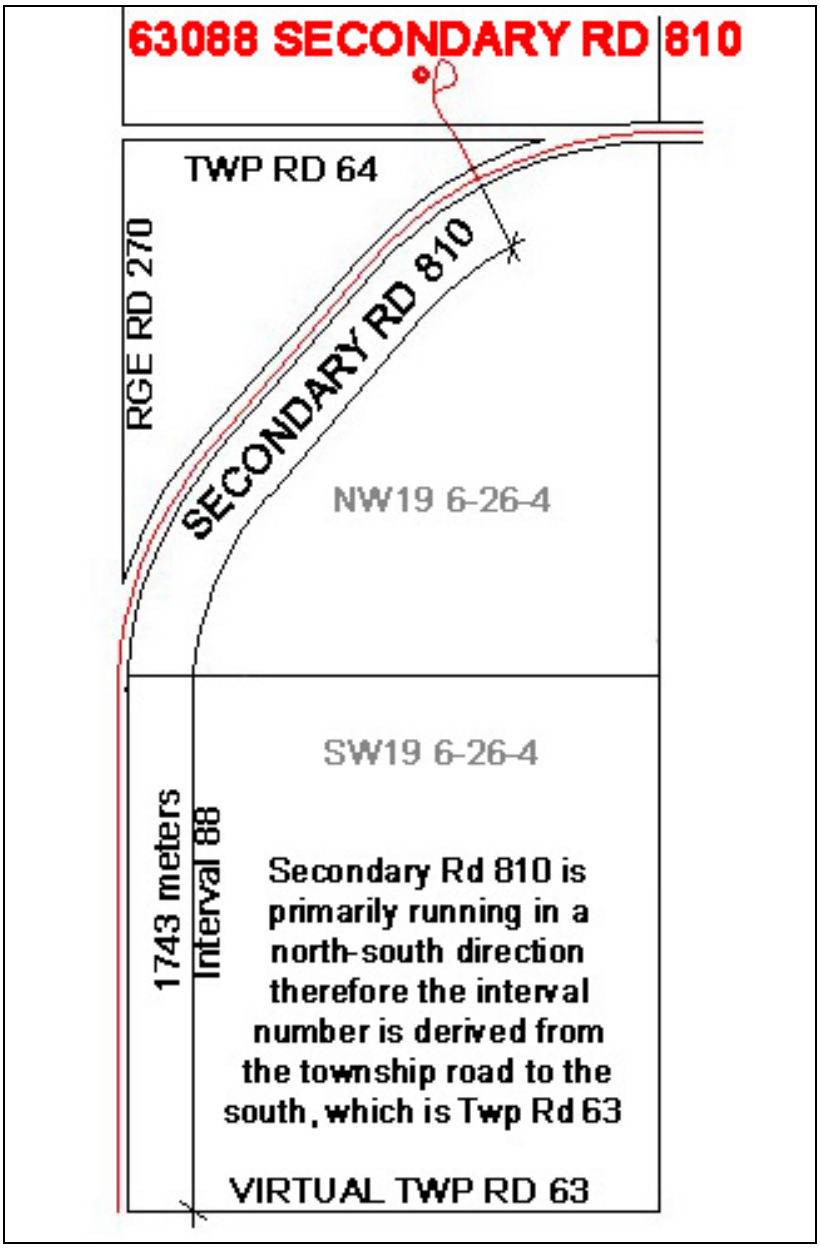
- USE THE NAMED ROAD IN THE ADDRESS

Appendix L

DISTANCE (m)	GRID INTERVAL	
	NORTH/WEST	EAST/SOUTH
2000	100	99
1960	98	97
1920	96	95
1880	94	93
1840	92	91
1800	90	89
1760	88	87
1720	86	85
1680	84	83
1640	82	81
1600	80	79
1560	78	77
1520	76	75
1480	74	73
1440	72	71
1400	70	69
1360	68	67
1320	66	65
1280	64	63
1240	62	61
1200	60	59
1160	58	57
1120	56	55
1080	54	53
1040	52	51
1000	50	49
960	48	47
920	46	45
880	44	43
840	42	41
800	40	39
760	38	37
720	36	35
680	34	33
640	32	31
600	30	29
560	28	27
520	26	25
480	24	23
440	22	21
400	20	19
360	18	17
320	16	15
280	14	13
240	12	11
200	10	9
160	8	7
120	6	5
80	4	3
40	2	1
0		

QUICK REFERENCE - DISTANCE & GRID INTERVAL NUMBER

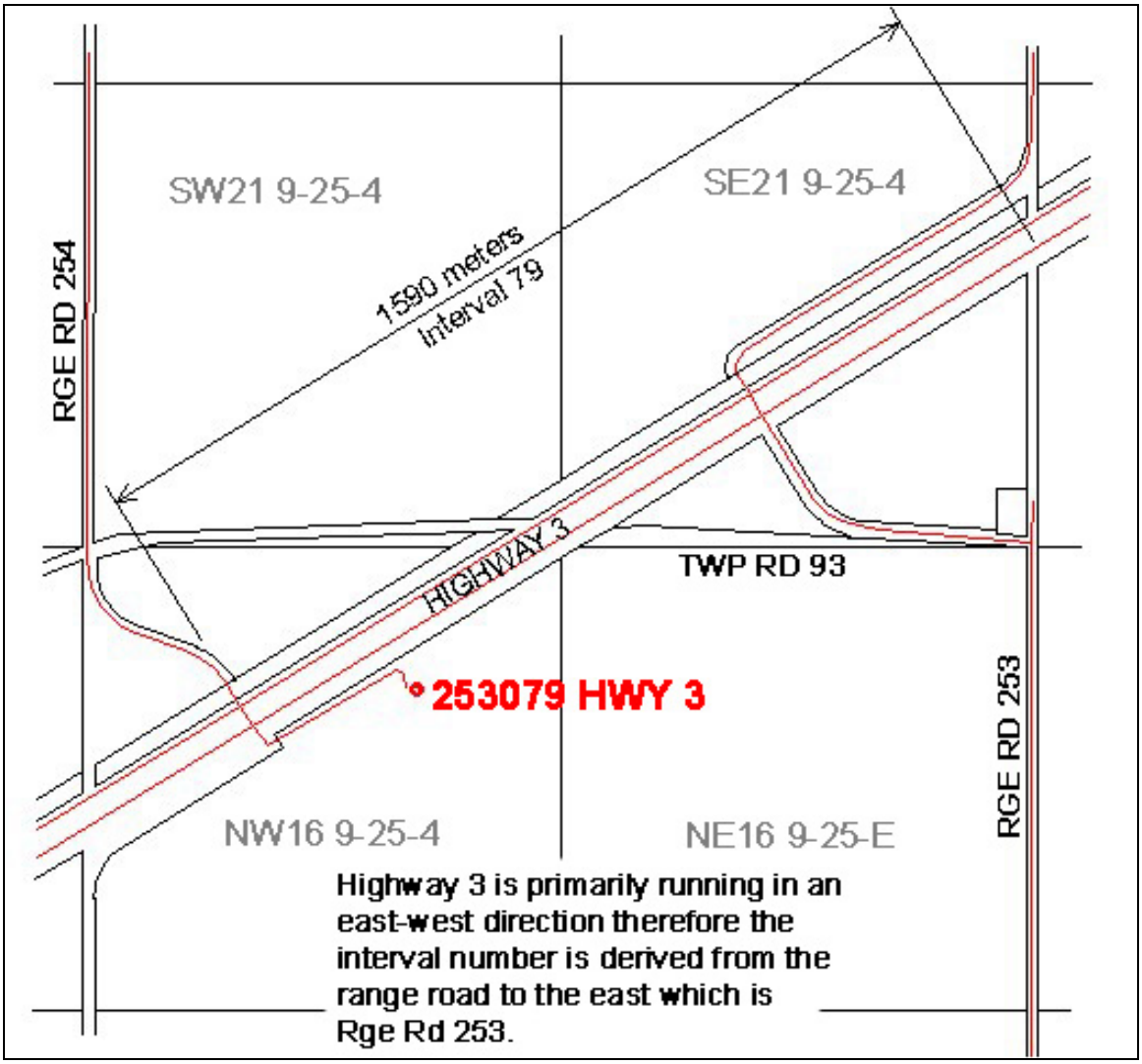
Appendix M



IRREGULAR ROAD ADDRESSING EXAMPLE

- INTERVAL IS CALCULATED AS DISTANCE FROM REFERENCE ROAD

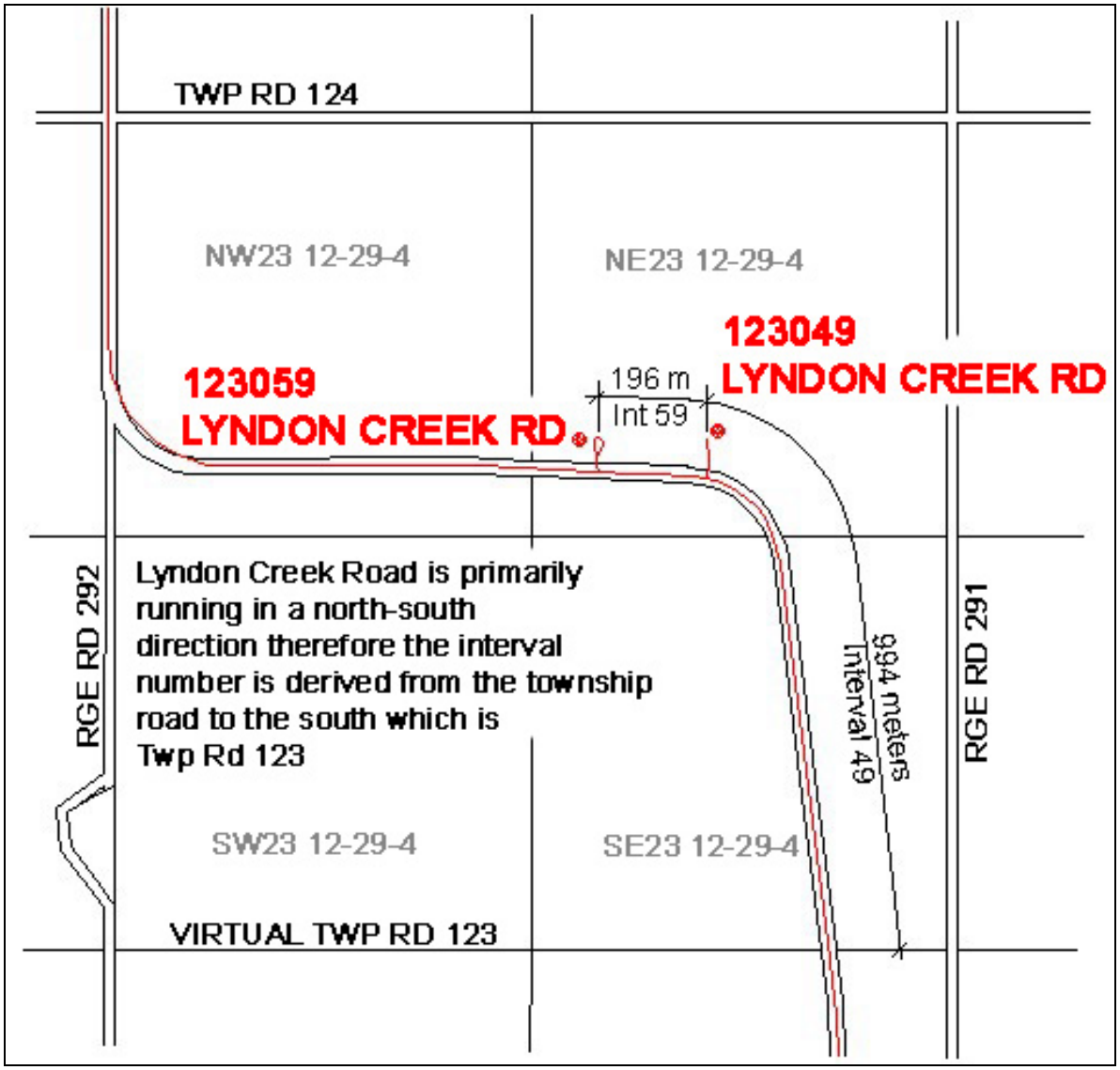
Appendix N



IRREGULAR ROAD ADDRESSING EXAMPLE

- ROAD INTERVALS INCREASE IN A WESTERNLY DIRECTION

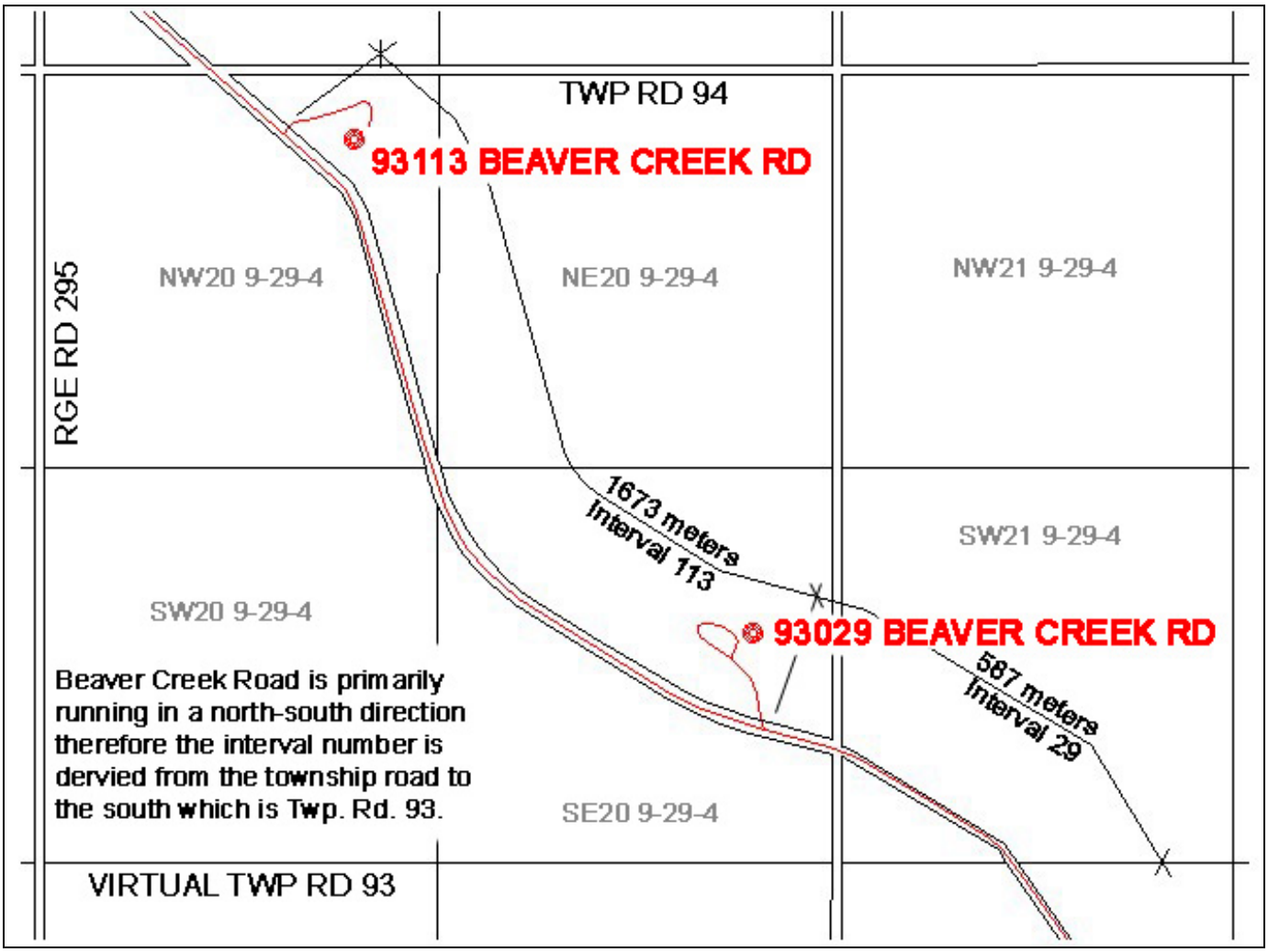
Appendix P



IRREGULAR ROAD ADDRESSING EXAMPLE

- ROAD CHANGES ORIENTATION FROM NORTH-SOUTH TO EAST-WEST

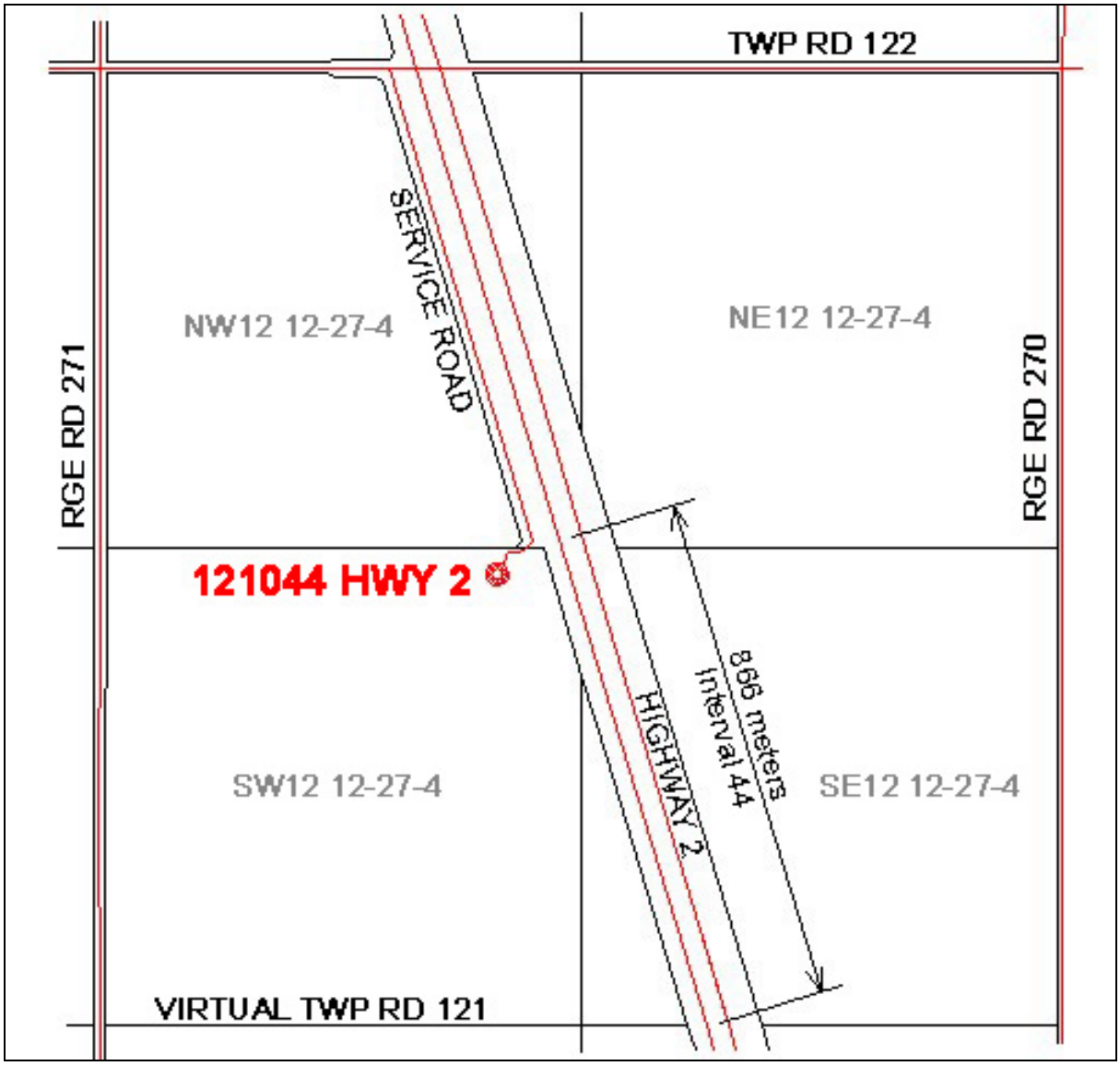
Appendix Q



IRREGULAR ROAD ADDRESSING EXAMPLE

- INTERVAL NUMBERS GREATER THAN 99

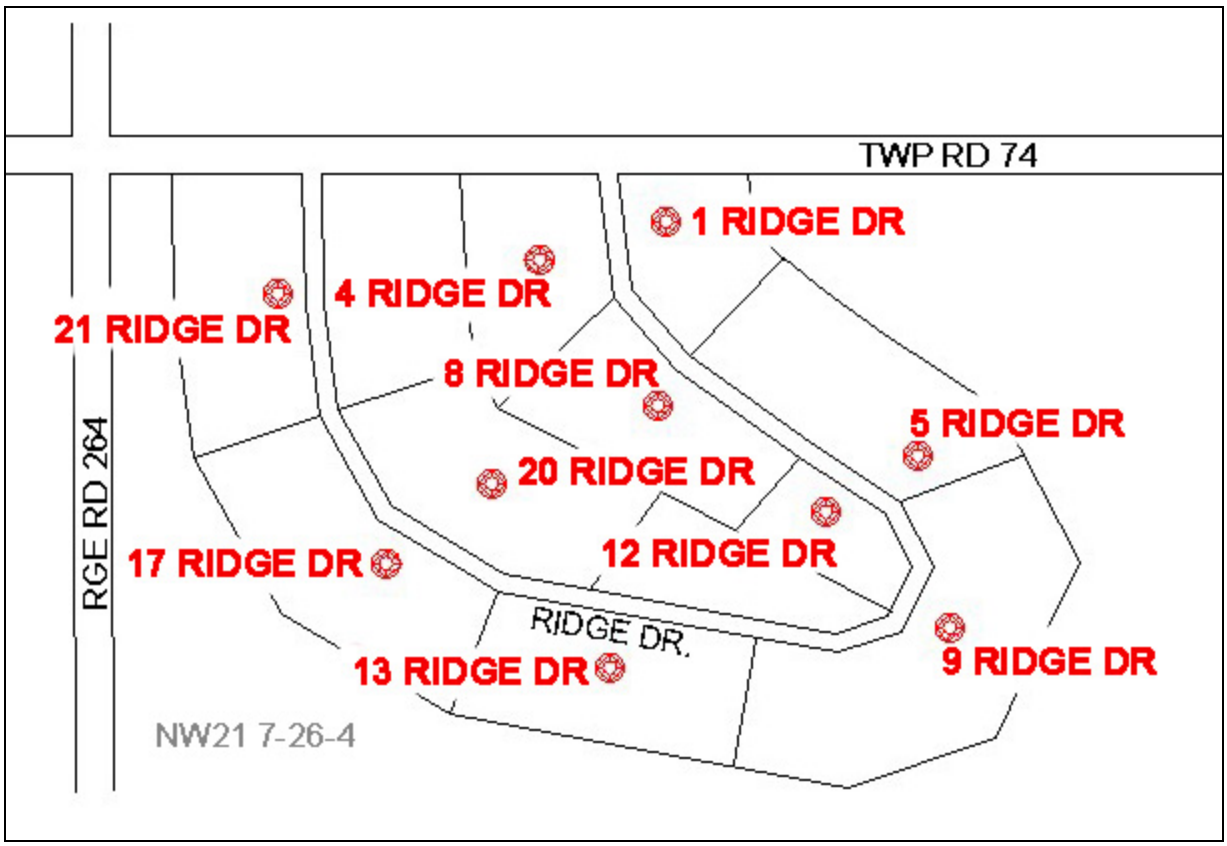
Appendix R



BUILDING ACCESS OFF SERVICE ROAD

- ADDRESS AS IF THE ACCESS WAS OFF THE HIGHWAY

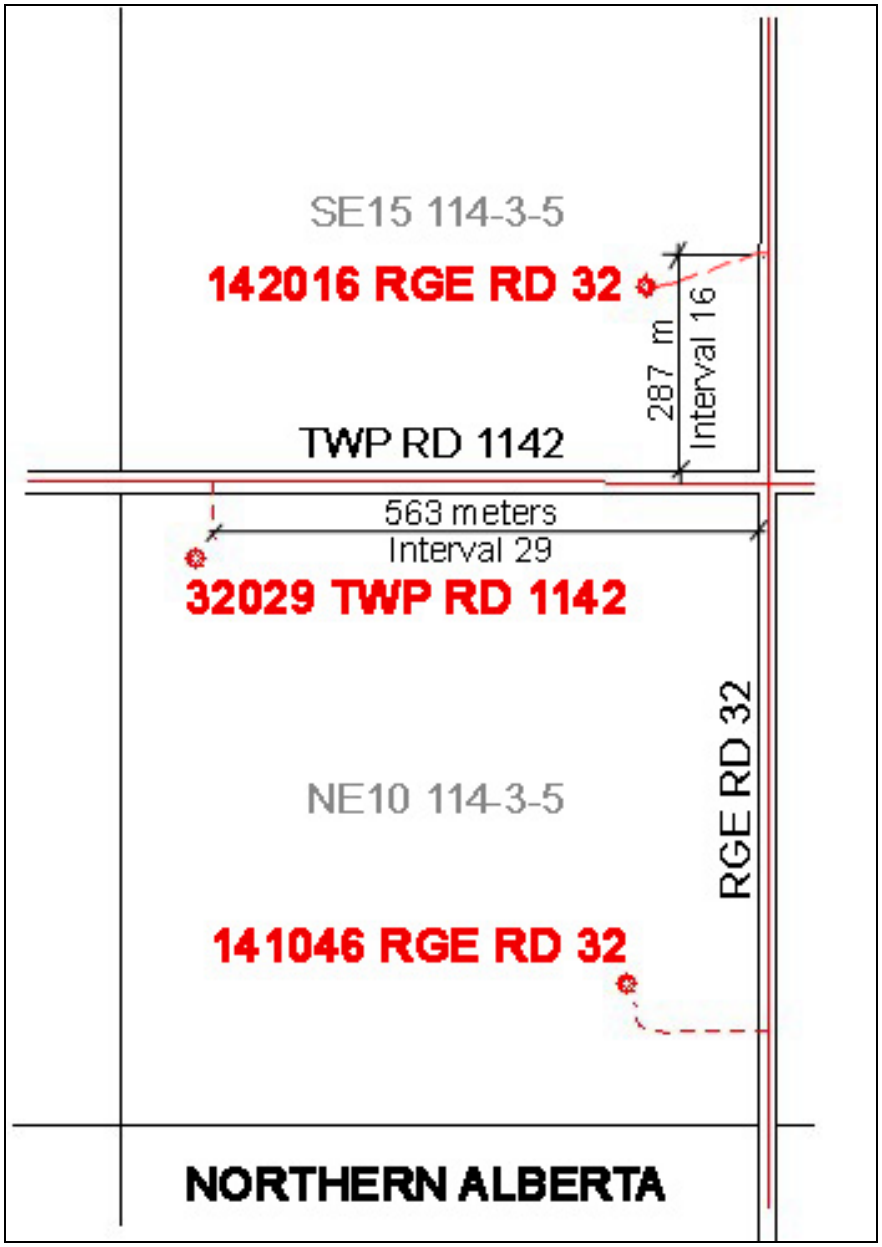
Appendix S



TYPICAL RURAL SUBDIVISION ADDRESSING LAYOUT

- ADDRESSES INCREASE IN A CLOCKWISE DIRECTION
- ODD ADDRESSES ARE ON THE SOUTH AND EAST
- EVEN ADDRESSES ARE ON THE NORTH AND WEST

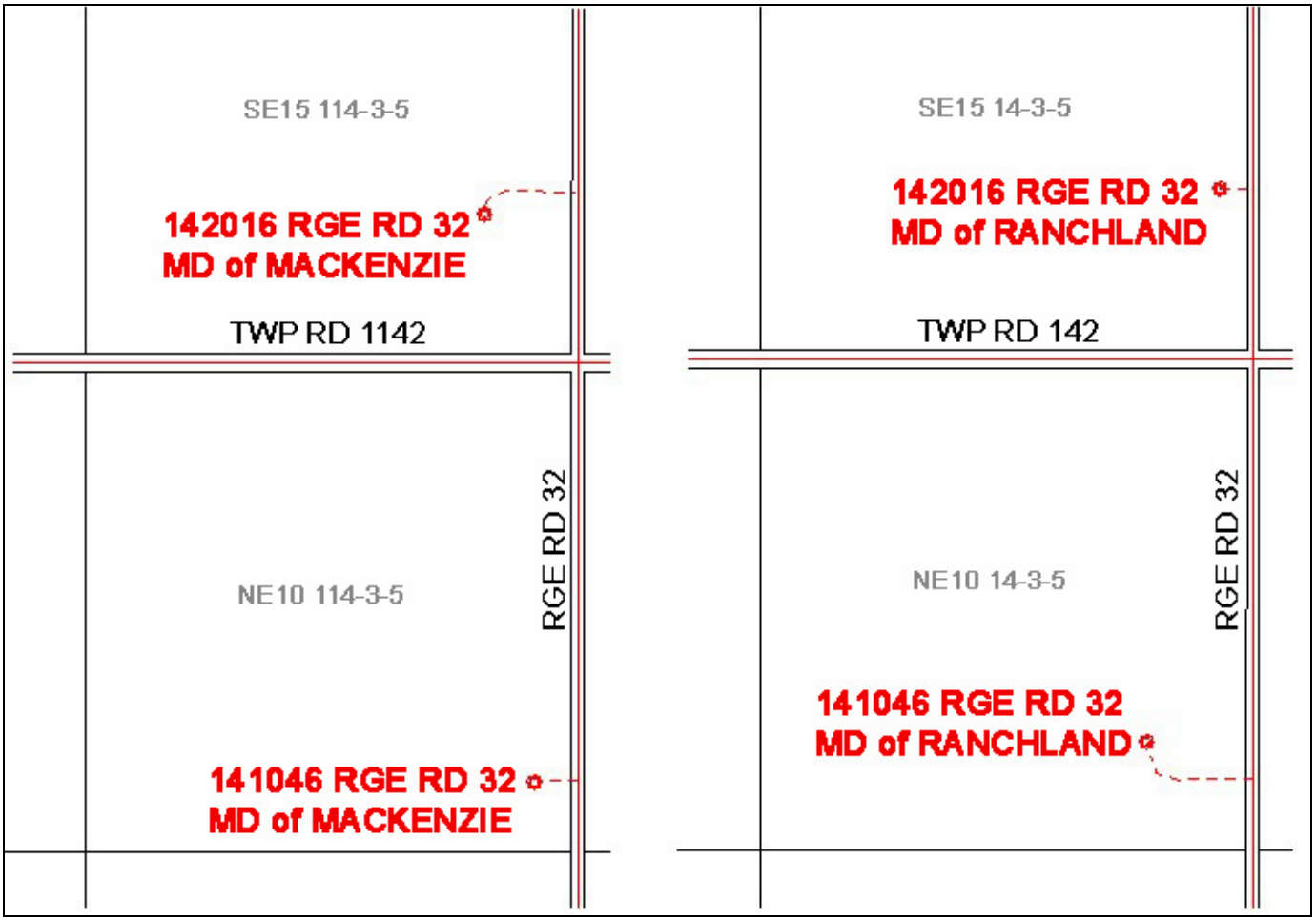
Appendix T



NORTHERN ALBERTA - TOWNSHIPS ARE OVER 99

- DROP THE HUNDREDTH PLACE TO LIMIT REFERENCE ROAD TO 3 DIGITS

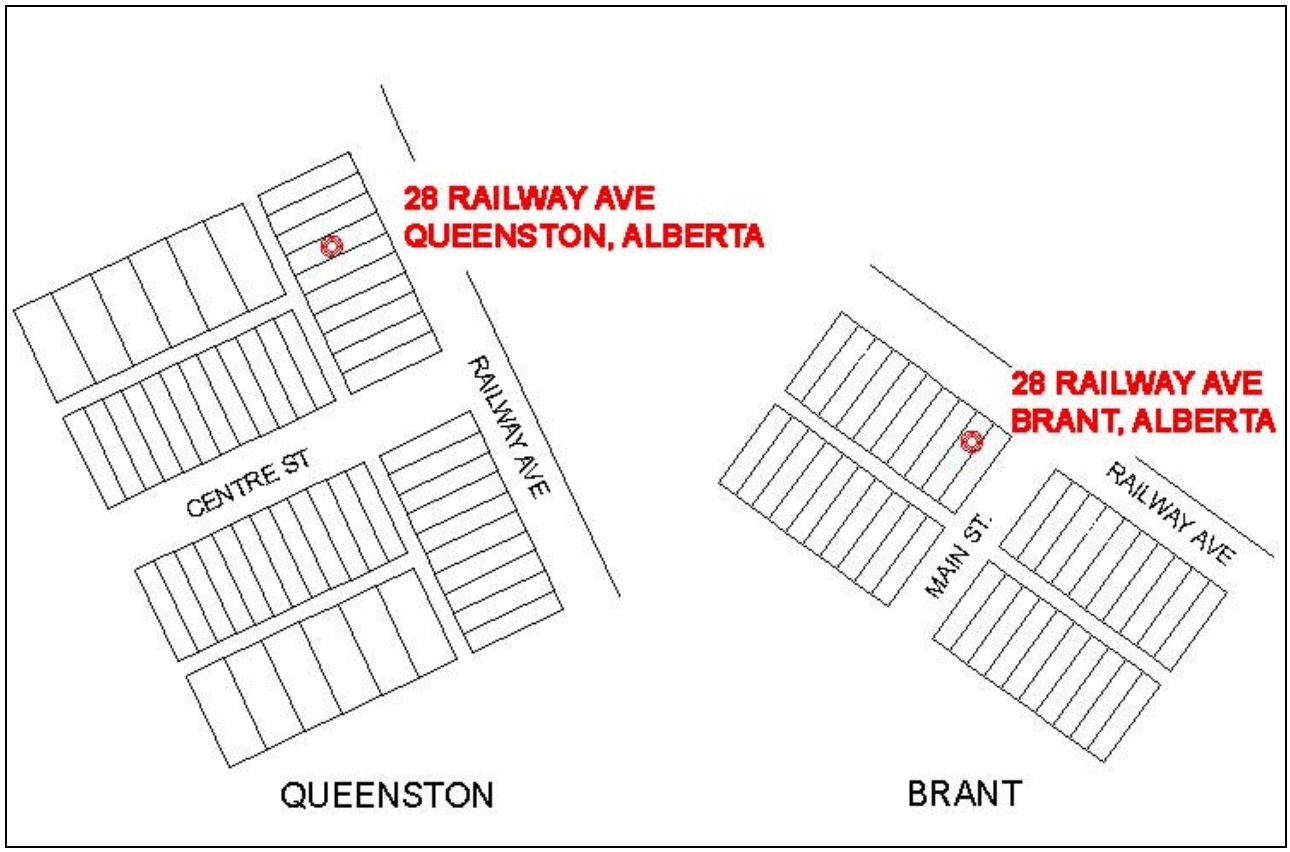
Appendix U



GEO-ADMINISTRATIVE NAMES

- SHOULD BE INCLUDED AS PART OF THE ADDRESS, BECAUSE AN ADDRESS ALONE COULD BE DUPLICATED IN SOUTHERN AND NORTHERN ALBERTA

Appendix V



GEO-ADMINISTRATIVE NAMES

- SHOULD BE INCLUDED AS PART OF THE ADDRESS, BECAUSE AN ADDRESS ALONE COULD BE DUPLICATED IN DIFFERENT HAMLETS, VILLAGES OR TOWNS

Appendix W

CANADA POST ADDRESSING GUIDELINES 2002

- COMMUNITY & ROADWAY NAMING
- SELECTING ROADWAY NAMES
- THEMES
- CUL_DE_SAC ADDRESSING
- OPTIMUM ADDRESSING
- CANADA POST CORPORATION ACCEPTABLE STANDARDS

COMMUNITY & ROADWAY NAMING GUIDELINES

- HISTORICAL EVENT OR NAME
- GEOGRAPHIC / LANDMARK
- UNIQUE - NO PHONETIC SIMILARITY i.e. Sans Dr. phonetically sounds like Sands Dr.
- 1ST SYLLABLE DIFFERENT
- NO ABREVIATIONS i.e. Corporate Dr. abbreviated to Corp. Dr.
- NO HYPHEN OR APOSTROPHE i.e. Three-Bay Rd. or Elle's Pl.
- MORE THAN 2 WORD NAMES DISCOURAGED i.e. Mount McKenzie Lake Blvd.

SELECTING ROADWAY NAMES

- THOROUGHFARE ROADS NEED NOT RELATE TO NEIGHBORHOOD i.e. Highway #1 can run straight through Wells Subdivision without changing to a locally named road

- DISTINCT

- MAX LENGTH 14 CHARACTERS

- PREFIXES, ABBREVIATIONS, HYPHENATED, APOSTROPHE, 3 OR MORE WORDED NAMES NOT PERMITTED

- CULS-DE-SAC IN COMMUNITY SHARE SAME NAME

- STREET TYPES NOT TO BE USED WITH THE SAME ROADWAY NAME:

  WAY - BAY
  ROAD - DRIVE

i.e. Blue Lake Way, Blue Lake Rd. Blue Lake Dr., Blue Lake Bay

- ALPHABETICAL NAMES NOT PERMITTED i.e. A Street

- THROUGHFARES BE NUMBERED USING A GRID SYSTEM - MINIMAL DEVIATION

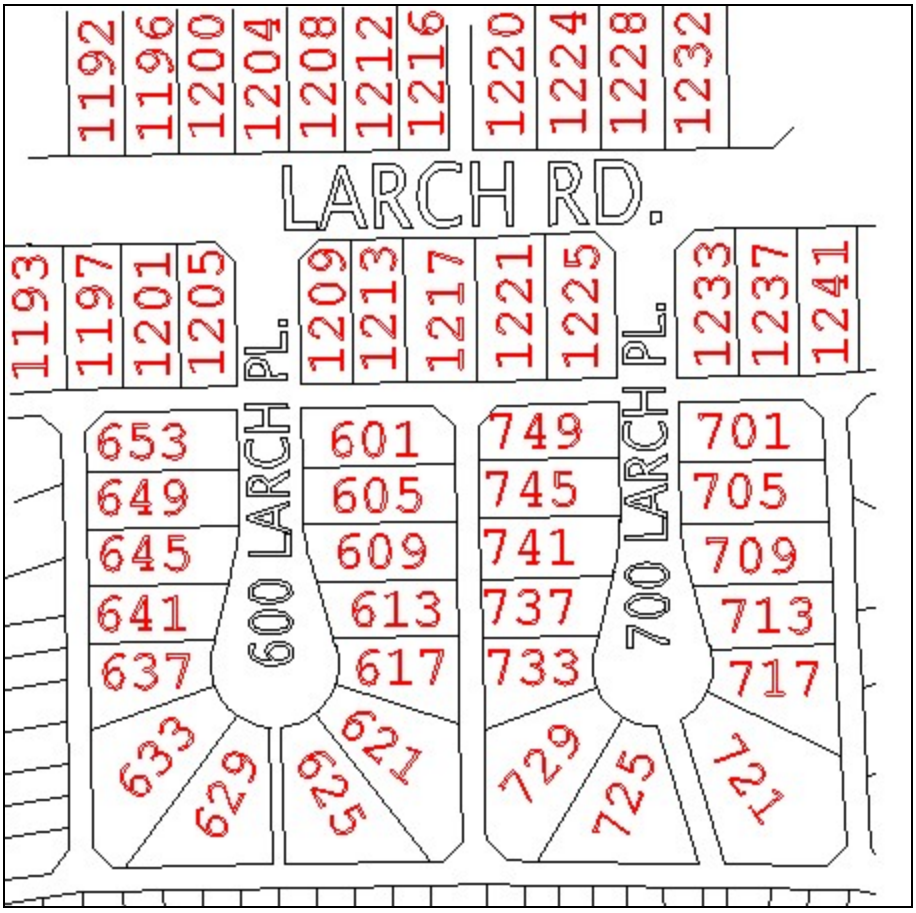
- USE ONE SYSTEM FOR TOWN, CITY OR MUNICIPAL DISTRICT

THEMES

- SIMPLE
- COMMONLY UNDERSTOOD
- WITHSTAND TEST OF TIME
- NO CONFLICT WITH NAMES ALREADY IN USE
- NEED NOT BE ENGLISH i.e. Las Lobos Dr.
- DISTINCTION REQUIRED
  i.e. Wolf vs. Wolfe unacceptable

CUL-DE-SAC ADDRESSING

- SERIES SIMILARLY NAMED 100 – 200 – 300 – 400



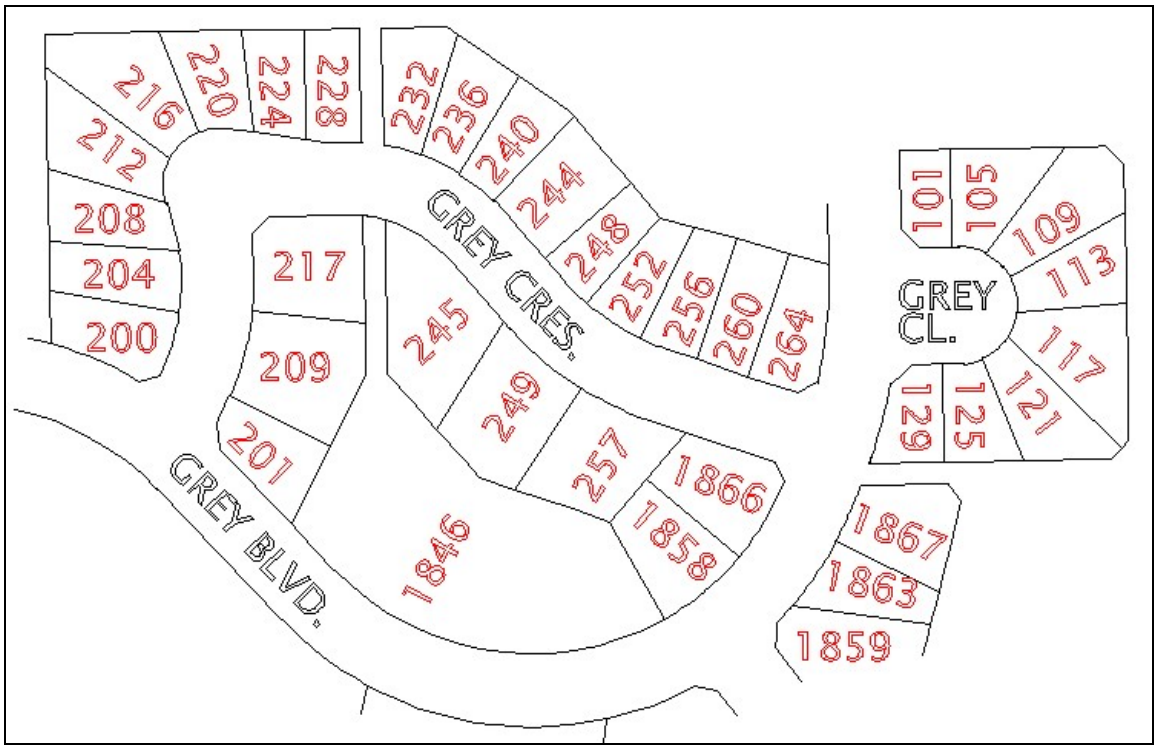
- NORMALLY SEQUENCED AS
  103, 107, 111, 115 etc OR 204, 208, 212, 216 etc

- NUMBERS CAN BE CONSECUTIVE
  2, 3, 4, 5 IF NO DUPLEXING

- BAY, CLOSE, CRESCENT, COVE, GREEN, LOOP, MEWS, PLACE

OPTIMUM ADDRESSING

- BLVD: MAIN THROUGHFARE
- DRIVE: ALTERNATE MAIN ROAD
- CLOSE, CRES, PLACE, VIEW & WAY ROAD NAMES
- NO DUPLICATE NUMBERS FOR EASE OF LOCATION



- ON GRID BLVD 1700’s, 1800’s, 1900’s
  OR STREET 25000’s, 25100’s, 25200’s

- CLOSE 100’s, 24 ADDRESSES
  CRES 200’s, 300’s, 48 ADDRESSES
  VIEW 400’s, 24 ADDRESSES OR LESS
  WAY 500’s, 24 ADDRESSES OR LESS
  PLACE SEVERAL – 600 TO 1500

CANADA POST ACCEPTABLE STANDARDS

- MAXIMUM # OF CHARACTERS

ADDRESS	6	
SUFFIX	1	
APT / UNIT	5	
ROAD NAME	30	
ROAD TYPE	6	i.e. BAY, COURT
DIRECTION	2	
MUNICIPALITY	30