

## Granite Engineering Services

a division of 1709425 Ontario Limited

### **Traffic Brief**

**Project #:** 2018-0017  
**Report #:** 2020-0017-002  
**Date:** June 10<sup>th</sup>, 2020  
**Project Address:** 1240 Anderson Line, Coldwater

Prepared for:

Cipponeri Holdings Inc.

Prepared by:

Granite Engineering Services  
122 Kimberley Avenue  
Bracebridge, Ontario P1L 1Z8  
705-640-0401  
[www.graniteengineeringservices.ca](http://www.graniteengineeringservices.ca)

**Table of Contents**

- 1. Introduction.....1
- 2. Proposed Development.....1
  - 2.1 Existing Site .....1
  - 2.2 Road Network.....2
  - 2.3 Pre-development Traffic Flows.....2
    - 2.3.1 Morning Pre-Development Traffic Flows .....3
    - 2.3.1 Table A – Morning Pre-Development Traffic Flows – 2 Hour Span.....3
    - 2.3.2 Evening - Pre-Development Traffic Flow .....3
    - 2.3.3 Table B – Evening Pre-Development Traffic Flows – 2 Hour Span.....4
- 3. Proposed Development.....5
  - 3.1 Proposed Development.....5
  - 3.2 Site Access.....5
  - 3.3 Anticipated Travel Routes.....5
  - 3.4 Projected Trip Generation .....6
    - 3.4 Table C – Projected Trip Generation.....7
    - 3.4.1 Single Dwelling Units.....7
    - 3.4.2 Retirement Facility.....8
  - 3.5 Future Conditions .....8
- 4. Conclusion .....9
- Appendix A .....10
  - Draft Plan of Sub-division .....11
- Appendix B .....12
  - County of Simcoe Official Plan – Schedule A1 – Coldwater Settlement Plan....13
- Appendix C .....15
  - Township of Severn - Schedule B - Transportation & Servicing.....16

Appendix D .....	17
Oro-Medonte Municipal Drain Culvert.....	18
Running Under Anderson Line.....	18
Appendix E .....	19
E-1 .....	19
E-2.....	19
E-3.....	19
Illustration of Road Network .....	20
E-1 – Street view from Anderson Line West down Grey Street: .....	21
E-2 – Street view Southeast to Anderson Line from Grey Street intersection:....	21
E-3 – Street view from Anderson Line West down Donlands Crescent .....	22
E-4 – Street view Southeast down Anderson Line from Donlands Crescent.....	22
E-5 – Street view Northwest to Grey Street from Donlands Crest.: .....	23
E-6 – Street view from approximate Sub-Division entrance Southeast down Anderson Line:.....	23
E-7 – Street view from approximate Sub-Division entrance Northwest up Anderson Line:.....	24
Appendix F.....	25
County of Simcoe Solid Waste Management Road Design Standards .....	25
County of Simcoe Solid Waste Management Road Design Standards .....	26
Appendix G.....	28
Anticipated Travel Routes: .....	29
Appendix H.....	30
Township of Severn’s Standard Drawing No. 20.....	31

## **1. Introduction**

GES was requested by the Director of Public Works for the Town of Coldwater, in the Township of Severn, to prepare a Traffic Brief in support of the Draft Plan of Sub-division (Appendix A) proposed at 1240 Anderson Line in Coldwater, Ontario. In the following brief GES reviewed (from a transportation perspective): the site access, site traffic volumes and the potential impacts to the adjacent road system.

## **2. Proposed Development**

### **2.1 Existing Site**

The site for the proposed Draft Plan of Subdivision at 1240 Anderson Line in the Township of Severn consists of a parcel of land that is 6.14 ha in area. It is currently defined as Settlement Living Area per the Township of Severn Official Plan. A large portion of the property is currently being cultivated for agricultural use; the current farm field is spread over the proposed site as well as the adjoining property to the southeast (1358 Anderson Line). The remainder of the property consists of a wooded area with a thin strip of trees, tall grasses and shrubs along the northern and the eastern edges of the site. The southwest section of the property has a larger wooded area that is part of a designated wetland - approximately 0.45 ha. The municipal drain Medonte Drain #1, runs along the northly and northwesterly site boundaries and discharges into the Coldwater River. Immediately adjacent to the site's northern property line (across Medonte Drain #1) there is an existing residential area along Donlands Crescent.

The site is accessed off Anderson Line which is currently a Rural Local Road that runs along the western edge of the Town of Coldwater. Downtown Coldwater is a short distance away and is accessed via Gray Street which is about 200 m to the northwest via Anderson Line. A Key Plan of Subdivision and the County of Simcoe Official Plan, Schedule A1 – The Coldwater Settlement Plan as shown in Appendix B depicts the road layout for the Town of Coldwater.

## **2.2 Road Network**

As per Schedule B of the Township of Severn Transportation Master Plan (Appendix C), Anderson Line is currently Rural Local Road (Design 300, MtnC Class 5) under the jurisdiction of the Township of Severn. The road is oriented north-south alongside the study area and has a 2-lane cross section providing one lane of travel in each direction. There are grass shoulders bordered by ditches on both sides of Anderson line in both directions. There is a large culvert under Anderson Line at the point of the Oro Medonte #1 Municipal Drain (illustrated in Appendix D). The road is posted at 60 km/h and thus a design speed of 70 km/h has been assumed (posted speed limit plus 10 km/h on lower speed roads). As per the Transportation Master Plan of Severn Township, a local road located within a rural area is intended to provide safe and efficient movement of traffic as well as provide access to abutting lands. Although Anderson line is classified as a “rural local road” it acts as a “collector” road at this time.

The study area road network is illustrated in Appendix E, E-1 through E-7.

## **2.3 Pre-development Traffic Flows**

Below are the pre-development traffic flows for peak travel times (7:30-9:30 AM & 4-6 PM). These numbers were calculated on site by GES staff.

### 2.3.1 Morning Pre-Development Traffic Flows

The morning study was completed between 7:30 AM and 9:30 AM on March 10, 2020. There was an even distribution of vehicles that moved passed the counting location during the first and second hour of the study. There were 16 passenger vehicles during each hour of this period of which only one was a mid-size delivery truck.

Of the traffic, 78% was headed southeast toward Highway 12 and 22% heading northeast toward Coldwater. This is equivalent to 1 vehicle every 4 minutes.

As outlined in Table A, in the two-hour span during which the morning portion of the study was conducted, there was a total of 32 vehicles.

**2.3.1 Table A – Morning Pre-Development Traffic Flows – 2 Hour Span**

Time	Type	Northwest (To Coldwater)	Southeast (to HWY 12)	TOTAL	% of vehicles going NW	% of vehicles going SE
7:30 AM – 8:30 AM	Passenger Vehicle	3	12	16	25	75
7:30 AM – 8:30 AM	Misc. Larger Vehicles	1				
8:30 AM – 9:30 AM	Passenger Vehicle	3	13	16	18.75	81.25
<b>TOTAL:</b>		7	25	32	21.88	78.13

### 2.3.2 Evening - Pre-Development Traffic Flow

In the evening, the first half of the first hour was noticeably busier than the remainder of the study period. From 4-4:30 PM approximately 60% of the vehicles for that

hour had passed by the counting location. From 5-5:30 PM approximately 56.25% of the vehicles moved passed the counting location.

From 4-5 PM there was a total of 40 vehicles. The majority were passenger vehicles, however this number includes 1 school bus, 1 dump truck and 1 cube/delivery truck. 57.5% of the vehicles were headed northwest toward Coldwater and the remaining 42.5% were headed southeast toward Highway 12/Orillia. This is equivalent to 1 vehicle every 1.5 minutes.

Between 5-6 PM there was a total of 32 vehicles that passed the subject lands. Of these vehicles, 65.5% were headed northwest and the remaining 34.4% were headed southeast. That is the equivalent of 1 vehicle passing nearly every 2 minutes.

As outlined in Table B, in the two-hour span during which the evening portion of the study was conducted, there was a total of 72 vehicles. Of these, 61% of the traffic was heading northwest, and 39% were headed southeast.

### 2.3.3 Table B – Evening Pre-Development Traffic Flows – 2 Hour Span

Time	Type	North West (To Coldwater)	South East (to HWY 12)	TOTAL	% of vehicles going NW	% of vehicles going SE
4 PM – 5 PM	Passenger Vehicle	23	14	40	57.5	42.5
4 PM – 5 PM	Misc. Larger Vehicles		3			
5 PM – 6 PM	Passenger Vehicle	21	11	32	65.6	34.4
<b>TOTAL:</b>		<b>44</b>	<b>28</b>	<b>72</b>	<b>61.1</b>	<b>38.9</b>

### **3. Proposed Development**

#### **3.1 Proposed Development**

The proposed Draft Plan of Subdivision for 1240 Anderson Line in the Township of Severn will be a residential development consisting of 42 residential lots. There is a larger lot for a proposed 3 storey retirement facility and a smaller lot for the stormwater management pond facility. All are located on the proposed road (Street A) which will be accessed from Anderson Line. The area of the site at the far west corner consists of wetland and will be left undisturbed as per suggested in the Environmental Impact Study.

#### **3.2 Site Access**

The proposed subdivision development of 42 residential lots and a proposed 3 storey retirement facility will be accessed from a proposed road currently referred to as Street A. This street runs perpendicular to Anderson Line, 97 meters south of Donlands Crescent. The proposed road will be approximately 318 meters in length. The retirement facility will be accessed from a cul-de-sac at the end of the proposed road. The road will have a 20.0 meter right-of-way and a 6.0 meter wide asphalt surface with sidewalks on both sides. Its cross section will follow the Township of Severn's Standard Drawing No. 203 (Appendix H) for local residential roads, as well as the County of Simcoe Solid Waste Management Road Design Standards document for local residential road widths and turning radius's (Appendix F).

#### **3.3 Anticipated Travel Routes**

The subject lands are located at the South-East side of Coldwater and run along Anderson Line (outlined in orange in Appendix B). As the site is only 25 to 35 minutes from Orillia, Barrie, and Midland, it is an attractive place to reside and/or work. The lands are also only a 5-minute drive to Highway 400. Based on the



location of the proposed development, there are two major paths of travel: Anderson Line to Highway 12/ Orillia (shown in blue in Appendix B) or Anderson Line to Gray Street to Highway 400 (shown in green in Appendix B). Appendix G outlines the anticipated travel routes that are most likely to be taken by the drivers residing in the proposed development.

**3.4 Projected Trip Generation**

Table C below was tabulated using the proposed breakdown of the development (42 single dwelling homes and 1 retirement facility). GES estimates that the proposed single-family development will generate 32 two-way trips in the morning and an additional 42 two-way trips during the evening in 2-hour periods respectively. This will increase the morning traffic by approximately 1 car every 4 minutes and the evening traffic by 1 car every 3 minutes. These numbers are a slight variation that is experienced in “rush hour” traffic and will not make a significant impact on the road network.

In a two hour span the proposed retirement facility will generate 51 two-way trips in the morning and in the evening from employee vehicles. This will increase the morning and evening traffic by 1 car every 2.5 minutes.

**3.4 Table C – Projected Trip Generation**

Land Use	Number of Units	Estimated Number of Vehicles	AM Peak Hour		PM Peak Hour	
			Rate	Total Trips	Rate	Total Trips
Proposed Single-Family Dwelling	42	42	0.75	32	1.00	42
Proposed Retirement Facility	1	79	0.65	51	0.65	51

**3.4.1 Single Dwelling Units**

It is expected that the morning traffic flow will stay consistent to pre-development patterns with 75% of the vehicles leaving the sub-division and turning right heading southeast on Anderson line toward Highway 12 and Orillia. Thusly, 25% of the vehicles will turn left slightly increasing in travel left (Northwest) out of the development toward Gray Street.

In the evening, again assuming traffic patterns will stay consistent to pre-development patterns, over 60% of the vehicles will come northwest up Anderson Line from Highway 12 to the proposed development, with the remaining 40% coming from Gray Street.

As demonstrated, with respect to the vehicles from the single dwelling units, the overall trips generated by the proposed development during “rush hour” times will likely result in negligible impacts to the operations of the existing road networks and traffic flows.

### **3.4.2 Retirement Facility**

It has been calculated using size and use of building, along with municipal by-laws, that approximately 50 staff and 29 visitor/tenant parking spots will be needed. This estimate can/will be adjusted once final design is completed to achieve exact numbers. Using these numbers, the flow of traffic coming into and out of the sub-division during peak travel times will increase by 50 vehicles. It is estimated that 50% will come from the population of the Town of Coldwater, while the other 50% of these will come from the surrounding area. As these vehicles will be going in opposite the direction of the residential peak traffic flow, it should not impact the operation of the existing road networks and traffic flows.

### **3.5 Future Conditions**

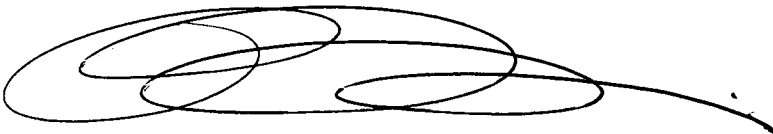
As per the County of Simcoe Official Plan, the next area of settlement is highlighted in red on the County of Simcoe Official Plan, Schedule A1, Settlement of Coldwater. As seen in Appendix B it is approximately 600 meters north on Anderson Line. Traffic from any future sub-divisions in that area will presumably increase flow Southbound on Anderson Line passing Street A (Appendix A) of this proposed sub-division. However, there are no sub-division known at this time to be in the pre-development stage for that area.

The proposed sub-division (Draft Plan of Sub-division – Appendix A), is the most southerly allowable developable area along Anderson Line. The parcel of land directly south of the propose sub-division is not within the County of Simcoe Official Plan (see Appendix B) and is designated as Prime Agricultural. Due to this designation the County of Simcoe will not support any development of that land at this time.

#### **4. Conclusion**

The proposed development for 1240 Anderson Line in the Township of Severn consists of 42 residential lots and a 3-storey retirement facility all to be located on the proposed road (Street A) which will be accessed from Anderson Line. Upon completion of the development, it is estimated that the residential vehicle traffic on Anderson Line will increase by 32 vehicles exiting the sub-division, while 50 employment related vehicle will enter the sub-division during the morning commute time. In the evening, the estimated residential traffic entering the sub-division will increase the traffic on Anderson Line by 42 vehicles; and similarly, 50 employment related vehicles will be exiting.

In consideration of the available capacity of the road network, the traffic volumes that will be generated by the proposed development will have a negligible impact overall.




**Paul Brunskill, P.Eng.**

## **Appendix A**

### **Draft Plan of Sub-division**

DRAFT PLAN OF SUBDIVISION OF  
**PART OF LOT 76**  
**REGISTRAR'S COMPILED PLAN 1721**  
 TOWNSHIP OF SEVERN  
 COUNTY OF SIMCOE

SCALE 1:1250  


SPEERLING SURVEYING INC.  
 ONTARIO LAND SURVEYOR

PART 1 51R-20737  
 RESIDENTIAL  
 70 71 72 73 74

PART 1 51R-1255  
 68 69 70 71 72 73 74

REGISTRAR'S COMPILED PLAN 1721

REGISTRAR'S COMPILED PLAN 1721

REGISTRAR'S COMPILED PLAN 1721

REGISTRAR'S COMPILED PLAN 1721

REGISTRAR'S COMPILED PLAN 1721

REGISTRAR'S COMPILED PLAN 1721

REGISTRAR'S COMPILED PLAN 1721

REGISTRAR'S COMPILED PLAN 1721

REGISTRAR'S COMPILED PLAN 1721

EXISTING

RESIDENTIAL

ROAD ALLOWANCE BETWEEN CONCESSIONS 12 AND 13  
 ANDERSON LINE

DOWNLANDS COURT  
 REGISTERED PLAN 51M-810

PART L  
 51R-33460

PART 3  
 51R-40881

PART 5  
 51R-1255

PART 2  
 51R-1255

PART 6 RD-490

PART 7 RD-490

PART 8 RD-490

PART 9 RD-490

PART 10 RD-490

PART 11 RD-490

PART 12 RD-490

PART 13 RD-490

PART 14 RD-490

PART 15 RD-490

PART 16 RD-490

PART 17 RD-490

PART 18 RD-490

PART 19 RD-490

PART 20 RD-490

PART 21 RD-490

PART 22 RD-490

PART 23 RD-490

PART 24 RD-490

PART 25 RD-490

PART 26 RD-490

PART 27 RD-490

PART 28 RD-490

PART 29 RD-490

PART 30 RD-490

PART 31 RD-490

PART 32 RD-490

PART 33 RD-490

PART 34 RD-490

PART 35 RD-490

PART 36 RD-490

PART 37 RD-490

PART 38 RD-490

PART 39 RD-490

PART 40 RD-490

PART 41 RD-490

PART 42 RD-490

PART 43 RD-490

PART 44 RD-490

PART 45 RD-490

PART 46 RD-490

PART 47 RD-490

PART 48 RD-490

PART 49 RD-490

PART 50 RD-490

PART 51 RD-490

PART 52 RD-490

PART 53 RD-490

PART 54 RD-490

PART 55 RD-490

PART 56 RD-490

PART 57 RD-490

PART 58 RD-490

PART 59 RD-490

PART 60 RD-490

PART 61 RD-490

PART 62 RD-490

PART 63 RD-490

PART 64 RD-490

PART 65 RD-490

PART 66 RD-490

PART 67 RD-490

PART 68 RD-490

PART 69 RD-490

PART 70 RD-490

PART 71 RD-490

PART 72 RD-490

PART 73 RD-490

PART 74 RD-490

PART 75 RD-490

PART 76 RD-490

PART 77 RD-490

PART 78 RD-490

PART 79 RD-490

PART 80 RD-490

PART 81 RD-490

PART 82 RD-490

PART 83 RD-490

PART 84 RD-490

PART 85 RD-490

PART 86 RD-490

PART 87 RD-490

PART 88 RD-490

PART 89 RD-490

PART 90 RD-490

PART 91 RD-490

PART 92 RD-490

PART 93 RD-490

PART 94 RD-490

PART 95 RD-490

PART 96 RD-490

PART 97 RD-490

PART 98 RD-490

PART 99 RD-490

PART 100 RD-490

PART 101 RD-490

PART 102 RD-490

PART 103 RD-490

PART 104 RD-490

PART 105 RD-490

PART 106 RD-490

PART 107 RD-490

PART 108 RD-490

PART 109 RD-490

PART 110 RD-490

PART 111 RD-490

PART 112 RD-490

PART 113 RD-490

PART 114 RD-490

PART 115 RD-490

PART 116 RD-490

PART 117 RD-490

PART 118 RD-490

PART 119 RD-490

PART 120 RD-490

PART 121 RD-490

PART 122 RD-490

PART 123 RD-490

PART 124 RD-490

PART 125 RD-490

PART 126 RD-490

PART 127 RD-490

PART 128 RD-490

PART 129 RD-490

PART 130 RD-490

PART 131 RD-490

PART 132 RD-490

PART 133 RD-490

PART 134 RD-490

PART 135 RD-490

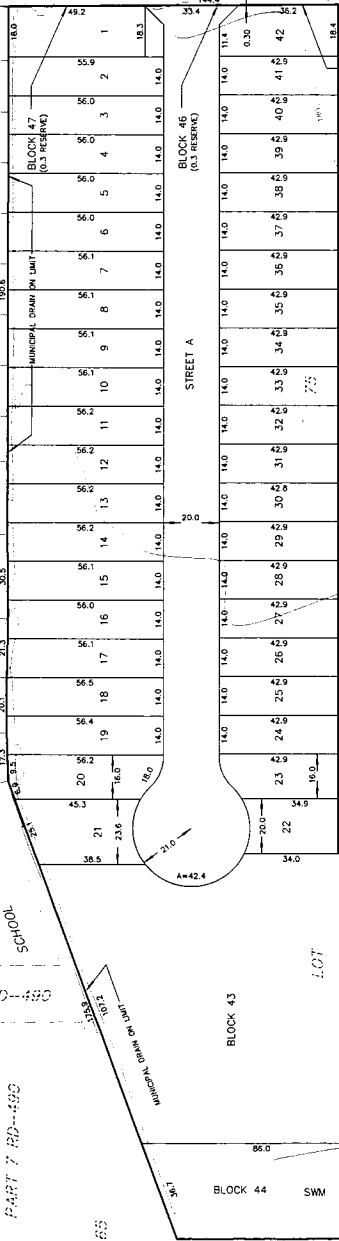
PART 136 RD-490

PART 137 RD-490

PART 138 RD-490

PART 139 RD-490

PART 140 RD-490



OTHER LANDS OWNED BY APPLICANT  
 REGISTRAR'S COMPILED PLAN 1721

EXISTING MULTI-USE RECREATIONAL TRAIL  
 (FORMER CANADIAN PACIFIC RAILWAY)

INFORMATION REQUIRED UNDER  
 SECTION 51(17) OF THE PLANNING  
 ACT R.S.O. 1990, c.P.13

- (a) SHOWN ON PLAN
- (b) SHOWN ON PLAN
- (c) SHOWN ON PLAN
- (d) REFER TO LAND USE SCHEDULE SHOWN HEREON
- (e) SHOWN ON PLAN
- (f) SHOWN ON PLAN
- (g) WATER SUPPLY AVAILABLE
- (h) CLAY/SILT/CLAY OVERLYING SANDY SILT TILL
- (i) SHOWN ON PLAN
- (j) SHOWN ON PLAN
- (k) SHOWN ON PLAN
- (l) NONE

SCHEDULE OF LAND USES

BLOCK/LOT	LAND USE	UNITS	AREA
1-42	SINGLE FAMILY RESIDENTIAL	47	29262.30 M <sup>2</sup>
43	RECREATION	1	12035.00 M <sup>2</sup>
44	STORM WATER MANAGEMENT	1	2355.50 M <sup>2</sup>
45-47	0.3m <sup>2</sup> RESERVES	2	356.50 M <sup>2</sup>
	STREET		6078.10 M <sup>2</sup>
TOTALS		43	50860.90 M <sup>2</sup> (5.02 Ha)

ELEVATIONS  
 ELEVATIONS SHOWN ARE GEODETIC IN ORIGIN

METRIC  
 ALL DISTANCES SHOWN ARE IN METRES AND CAN BE CONVERTED  
 TO FEET BY DIVIDING BY 0.3048

OWNER'S CERTIFICATE  
 I, VITO CIPPONERI, HAVING THE AUTHORITY TO BIND THE CORPORATION  
 HEREBY AUTHORIZE PLAN MUSKOKA TO SUBMIT THIS DRAFT PLAN  
 OF SUBDIVISION FOR APPROVAL.

VITO CIPPONERI, PRESIDENT  
 CIPPONERI HOLDINGS INC.

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LANDS  
 SHOWN ON THIS PLAN ARE CORRECTLY SHOWN AND  
 RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY  
 AND CORRECTLY SHOWN.

ERNEST G. SPEERLING, O.L.S.

PERLING SURVEYING INC.  
 ONTARIO LAND SURVEYOR

36 NIGHTINGALE CRES.  
 BARRIE, ON L4N 8A5  
 (905) 964-5553

DRAWN BY  
 EGS: G.S.  
 DATE  
 JUNE 8, 2020  
 SCALE  
 1:1250  
 FILE  
 18-333

## **Appendix B**

**County of Simcoe Official Plan – Schedule A1 – Coldwater Settlement Plan**

**Key Plan of Proposed Sub-Division**

Township of Severn  
Schedule A1  
Coldwater Settlement Area







0 250 500 Meters



**Legend**

Road Network selection

-  PROVINCIAL HIGHWAY
-  COUNTY ROAD
-  LOCAL ROAD
-  PRIVATE ROAD



Settlement Boundary



Country Residential



Settlement Employment Area



Highway Employment



Settlement Living Area



Major Recreation Area



Resort Commercial



Rural



Shoreline Residential



Settlement Employment SP Area



Settlement Living SP Area



Greenlands

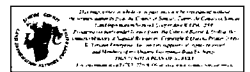


Environmental Protection Area



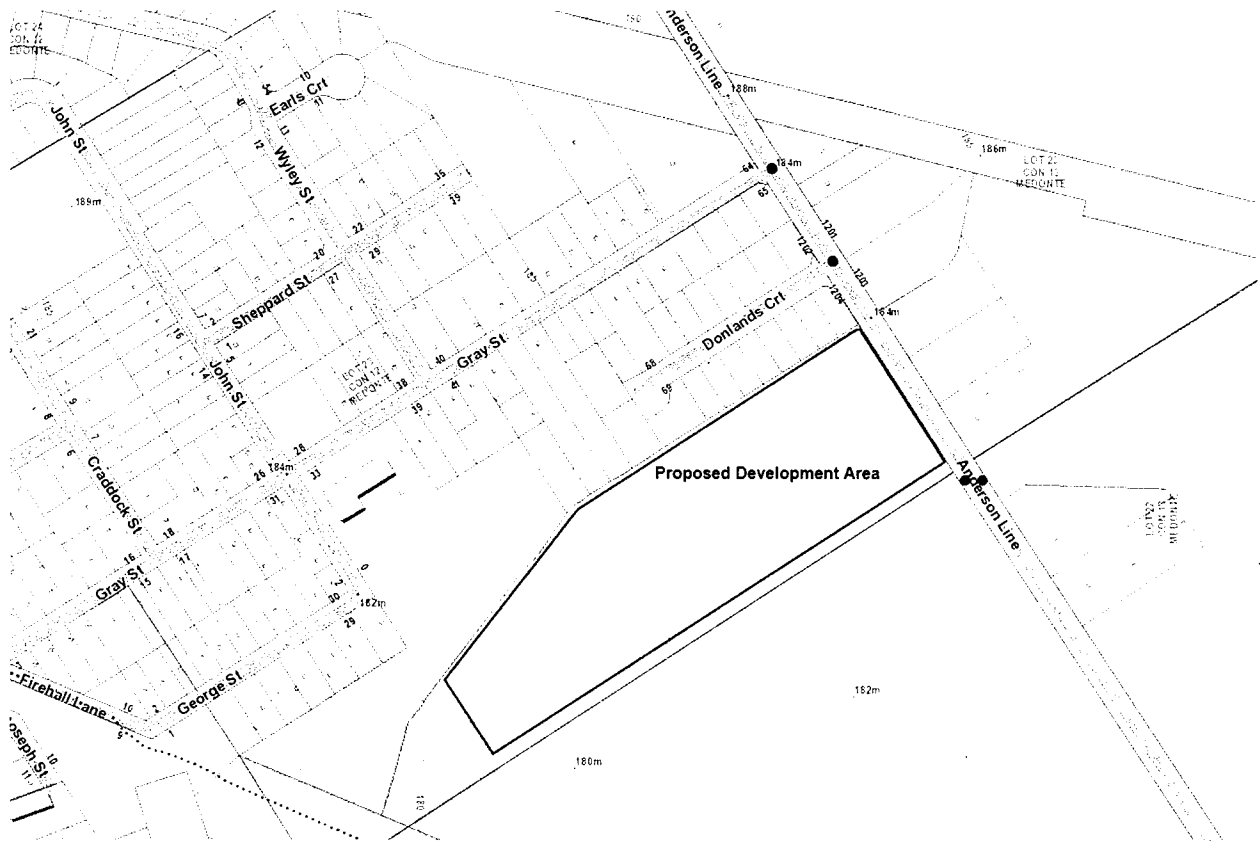
Agricultural Land

\* SP = Special Policy





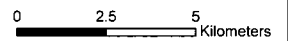
# Key Plan of Proposed Sub-Division



## **Appendix C**

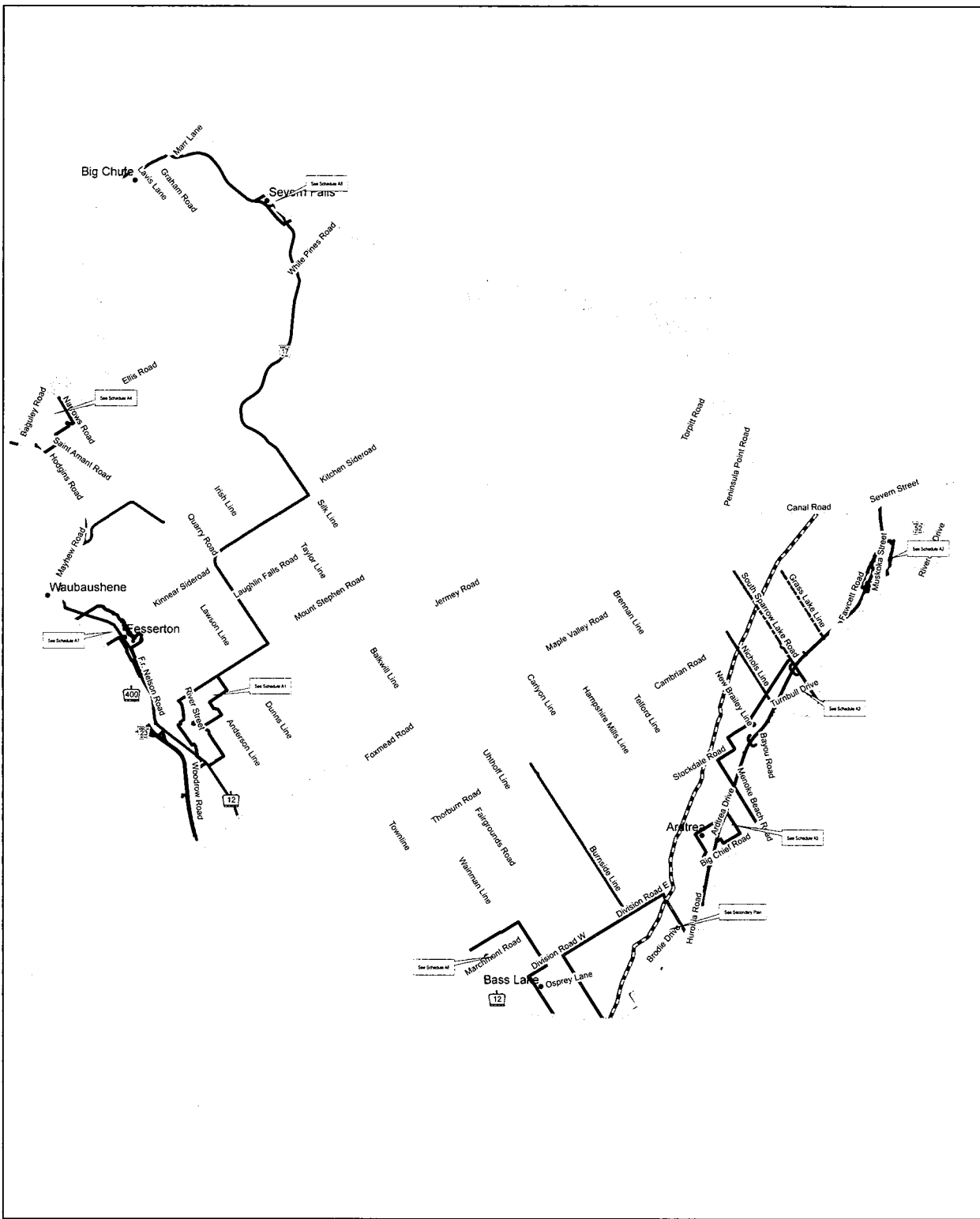
### **Township of Severn - Schedule B - Transportation & Servicing**

Township of Severn  
Schedule B  
Transportation & Servicing



**SEVERN TRANSPORTATION**

- Aterials and County
- Existing Major Haul Route
- Existing Minor Haul Route
- Provincial Freeway
- Provincial Highway
- Trans Canada Pipeline
- ☐ Settlement Boundary
- Municipal Border
- middlecities
- E911SLRN

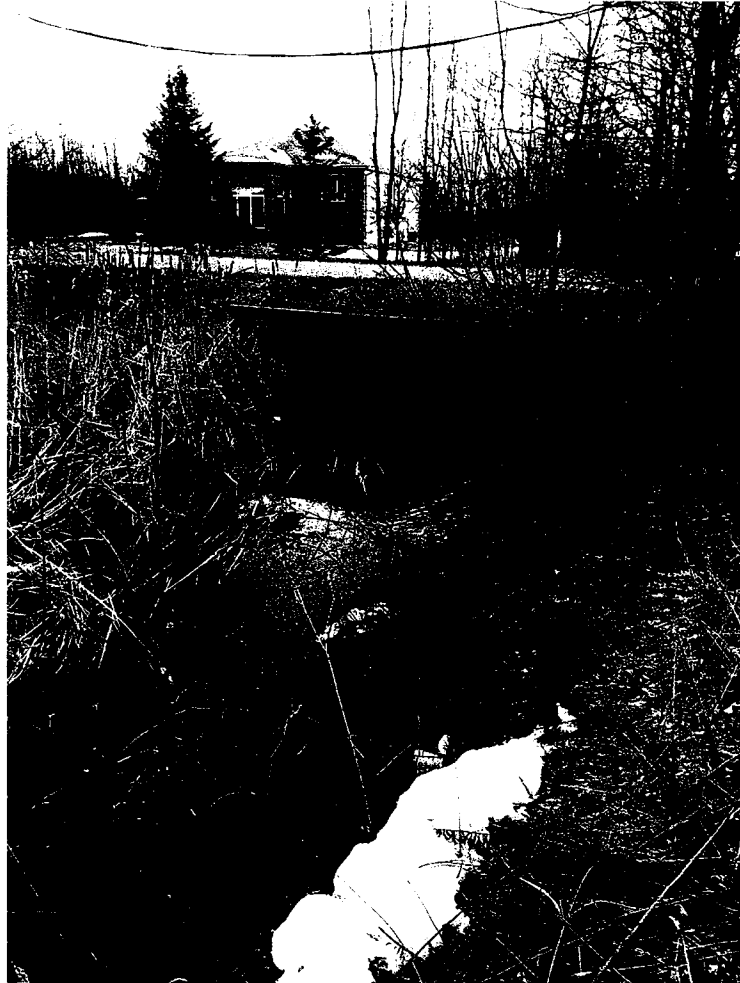


This map is intended to provide information only and does not constitute a guarantee, warranty, or representation of any kind. The Township of Severn is not responsible for any errors or omissions on this map. The Township of Severn is not responsible for any damages or losses resulting from the use of this map. The Township of Severn is not responsible for any claims or liabilities arising from the use of this map. The Township of Severn is not responsible for any claims or liabilities arising from the use of this map.

## **Appendix D**

### **Illustration of Culvert Running Under Anderson Line**

**Oro-Medonte Municipal Drain Culvert  
Running Under Anderson Line**



## **Appendix E**

### **Illustration of Road Network**

**E-1 – Street view from Anderson Line West down Grey Street**

**E-2 – Street view Southeast to Anderson Line from Grey Street intersection**

**E-3 – Street view from Anderson Line West down Donlands Crest.**

**E-4 – Street view Southeast to Anderson Line from Donlands Crest.**

**E-5 – Street view Northwest to Grey Street from Donlands Crest.**

**E-6 – Street view from approximate Sub-Division entrance Southeast down  
Anderson Line**

**E-7 – Street view from approximate Sub-Division entrance Northwest up  
Anderson Line**

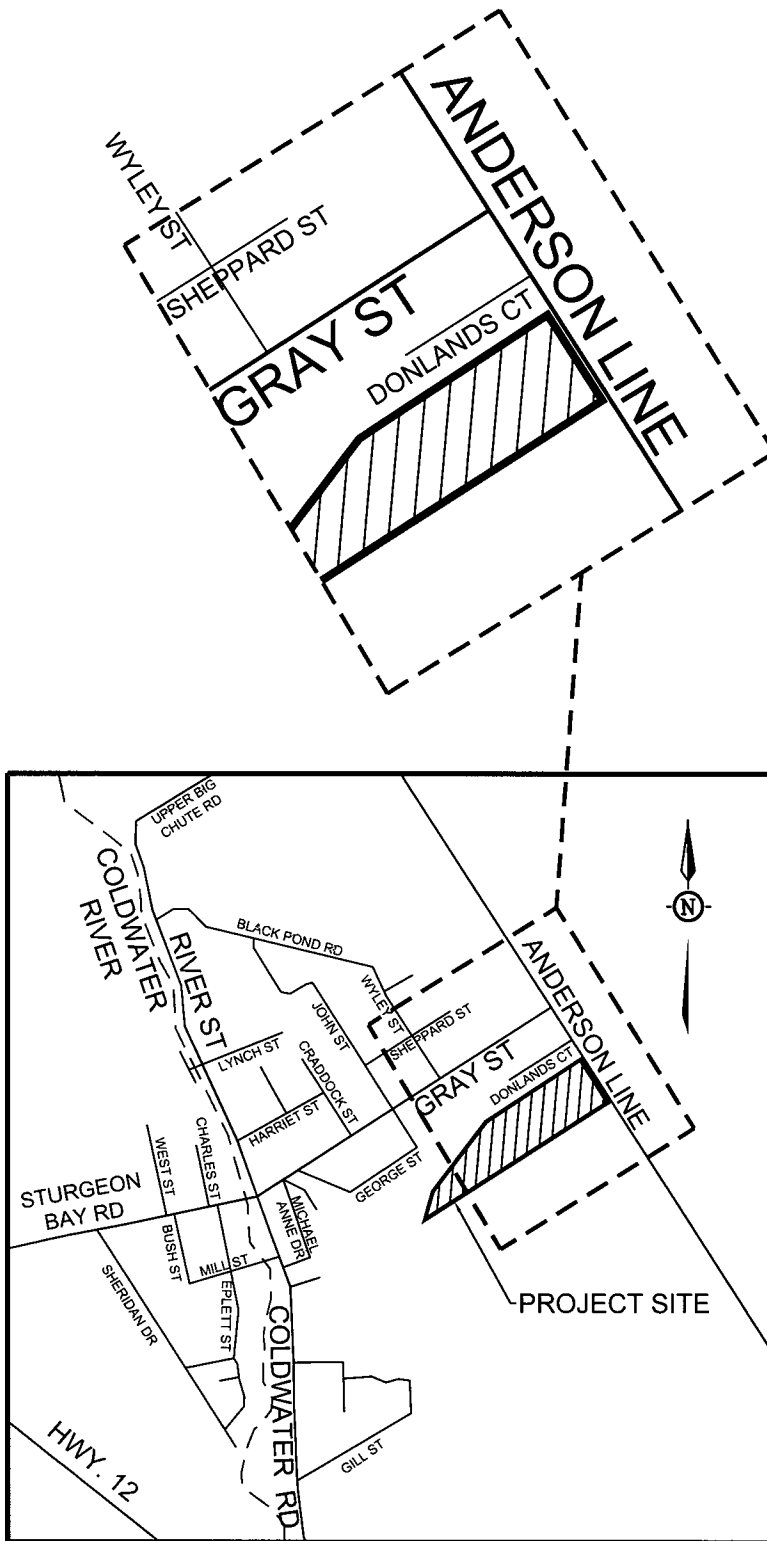


Illustration of Road Network (N.T.S)

**E-1 – Street view from Anderson Line West down Grey Street:**



**E-2 – Street view Southeast to Anderson Line from Grey Street intersection:**





**E-3 – Street view from Anderson Line West down Donlands Crescent**



**E-4 – Street view Southeast down Anderson Line from Donlands Crescent**



**E-5 – Street view Northwest to Grey Street from Donlands Crest.:**



**E-6 – Street view from approximate Sub-Division entrance Southeast down Anderson Line:**

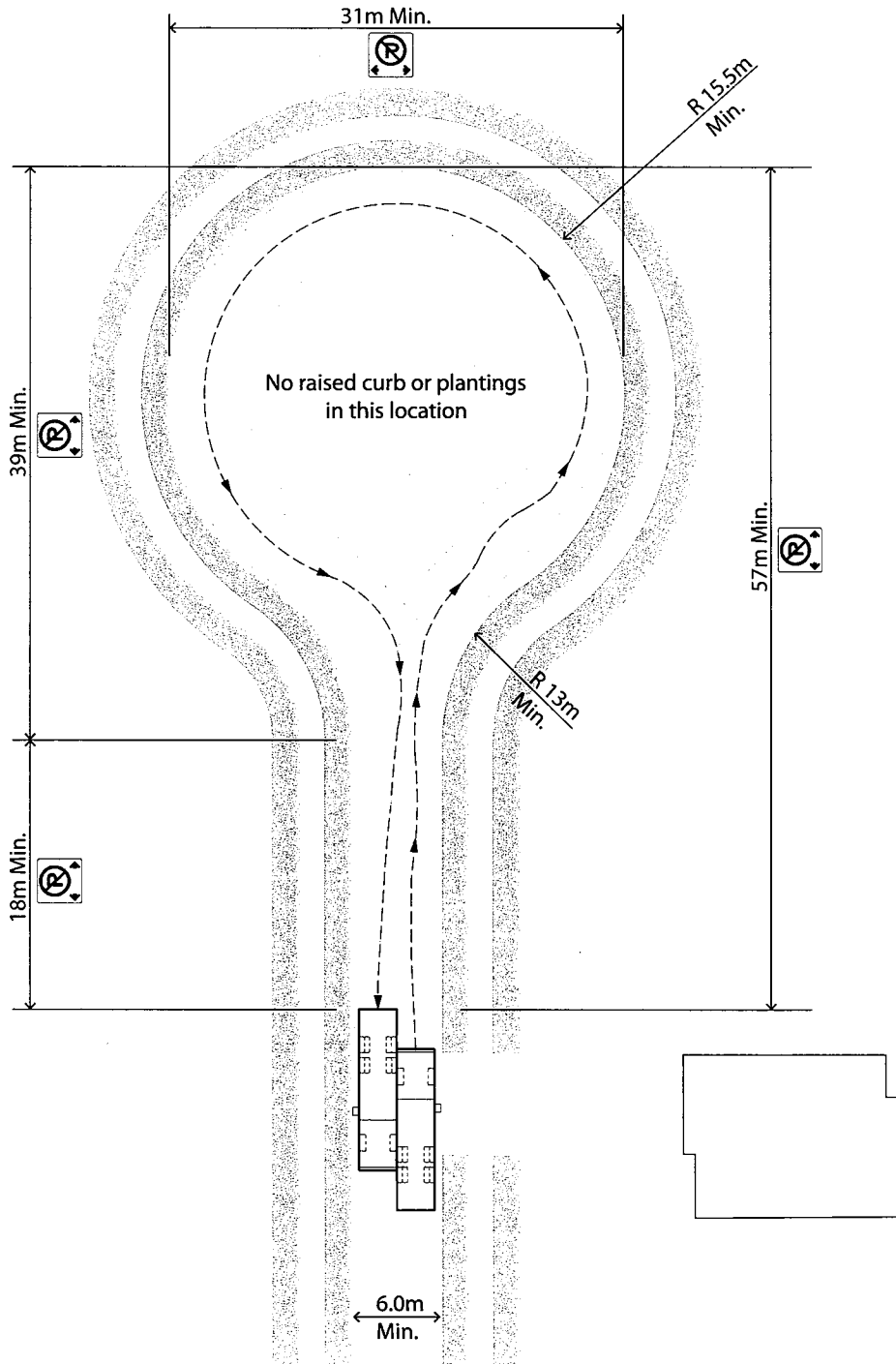


**E-7 – Street view from approximate Sub-Division entrance Northwest up  
Anderson Line:**





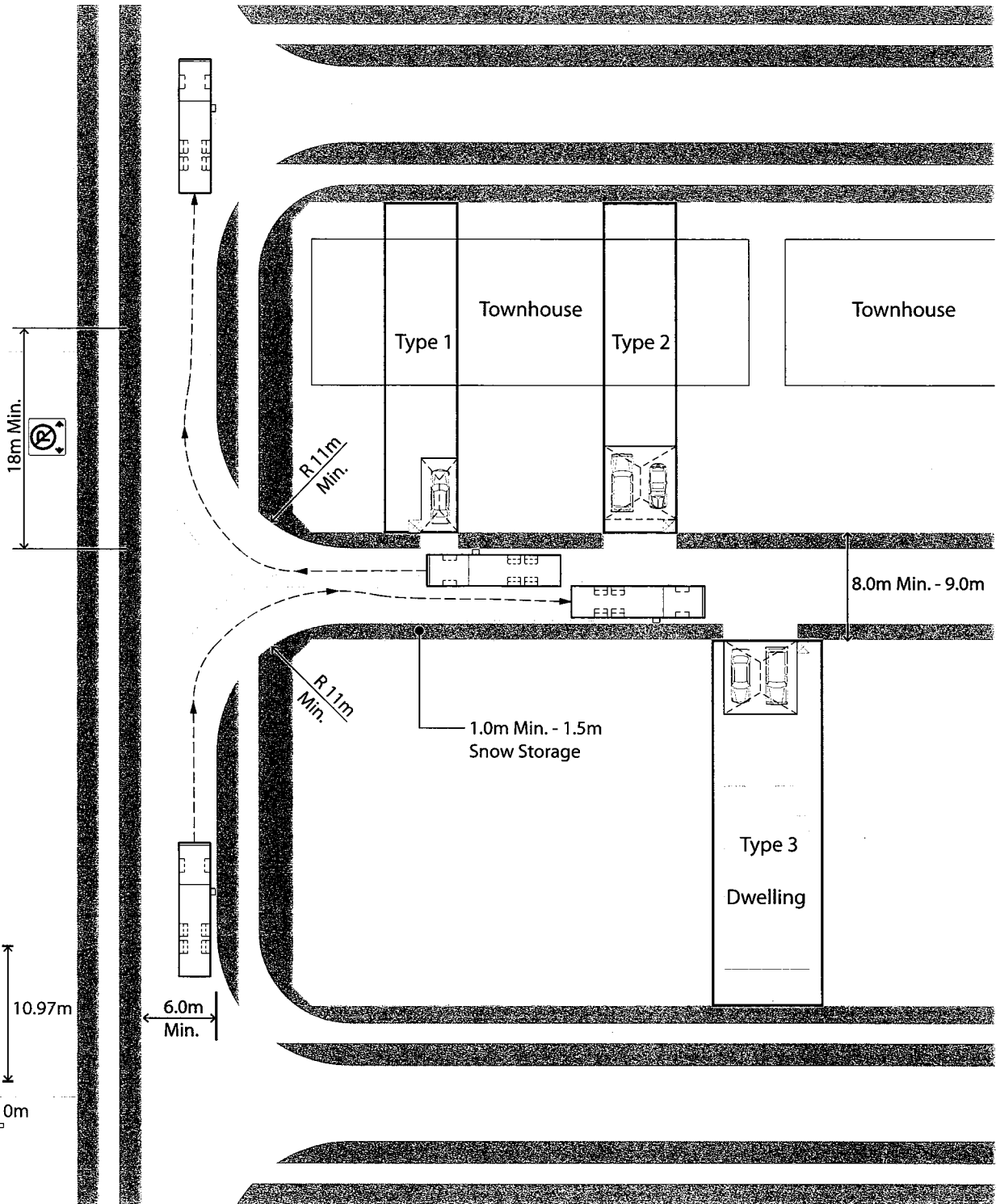
## **Appendix F**

### **County of Simcoe Solid Waste Management Road Design Standards**



**LEGEND**

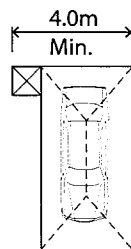
-  Vehicle Turning Swept Path
-  Vehicle Turning Centreline
- Curb Radius = 15.5m (Min.)



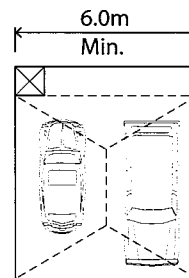
**LEGEND**

- Vehicle Turning Swept Path
- Vehicle Turning Centreline
- Curb Radius = 10m (Min.)

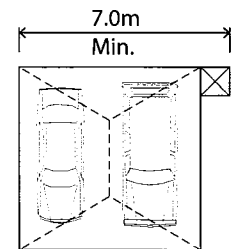
Set-Out Location = 1m x1m



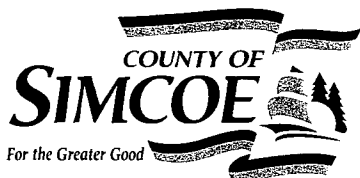
Type 1



Type 2



Type 3

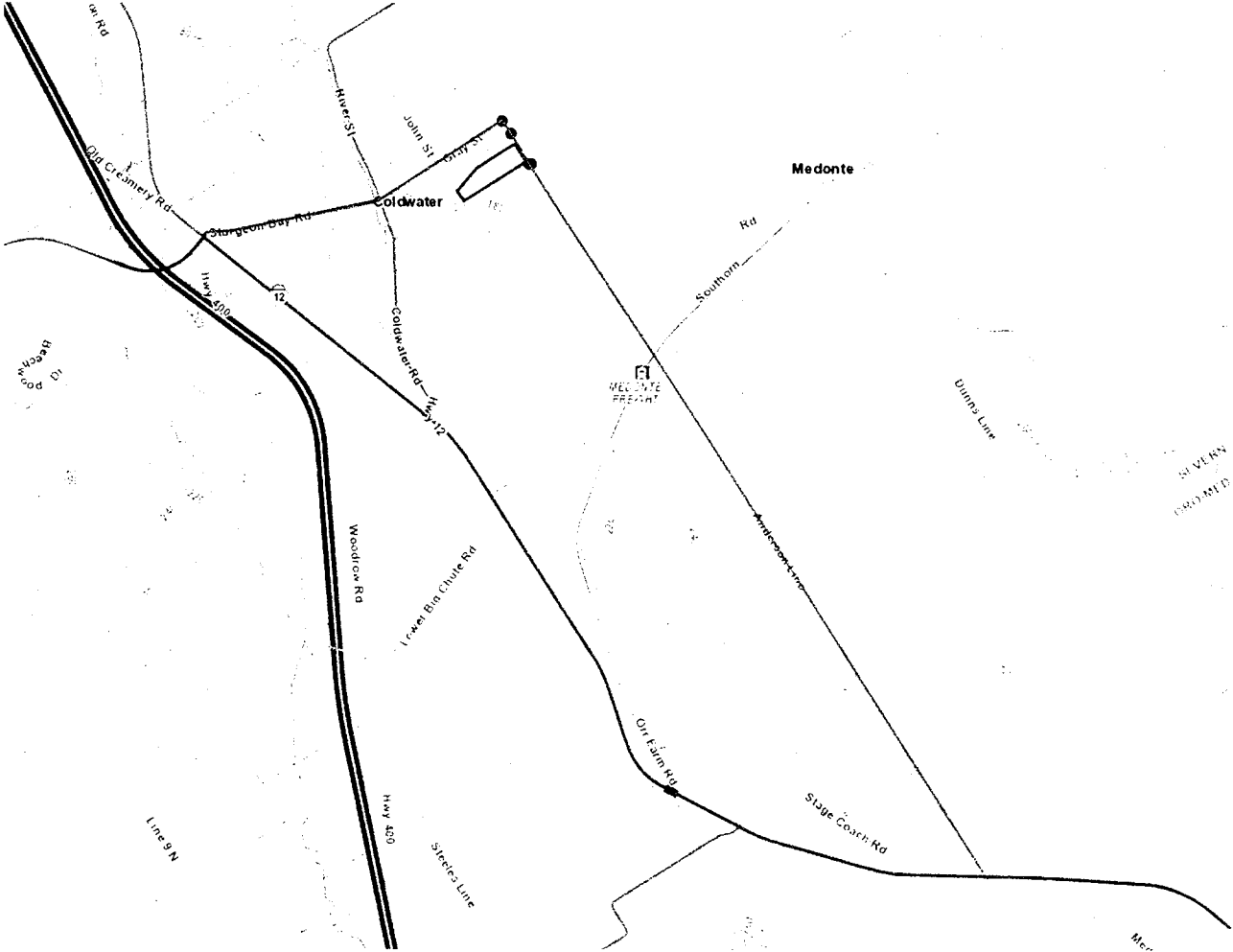


**Rear Lane Standard**

## **Appendix G**

### **Anticipated Travel Routes**

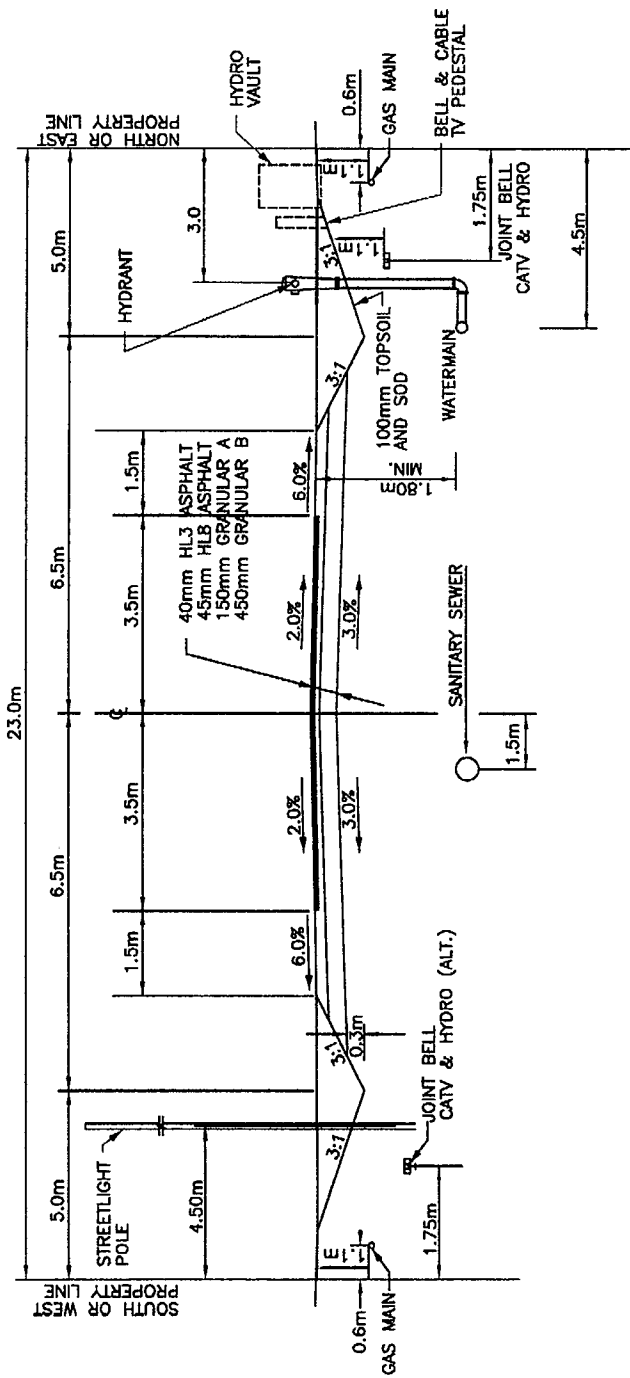
**Anticipated Travel Routes:**





**Appendix H**

**Township of Severn's Standard Drawing No. 20**



**NOTES:**

1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.
2. MINIMUM PAVEMENT AND ROAD STRUCTURE DESIGN AS PER TOWNSHIP DESIGN CRITERIA OR AS PER GEOTECHNICAL INVESTIGATION RECOMMENDATION.
3. ALL SERVICE LOCATIONS SHOWN ARE FOR GUIDELINE PURPOSES ONLY AND MAY DEVIATE AS PER THE DIRECTION OF THE TOWNSHIP WHEN STANDARD LOCATION CANNOT BE ACHIEVED.
4. ALL WATER CURB STOPS TO BE PLACED ON STREETLINE.
5. A 3.0m WIDE PLATFORM AREA SHALL BE CONSTRUCTED FOR EACH FIRE HYDRANT. THE MINIMUM CULVERT LENGTH SHALL BE 6.5m AND THE MINIMUM DIAMETER SHALL BE 400mm. PLATFORM AREAS SHALL BE RESTORED WITH 100mm TOPSOIL AND SOD.
6. TREES TO BE PLACED IN LOCATIONS AS PER APPROVED LANDSCAPE PLAN.

NO.	REVISION	APR'D	DATE	APR'D:	DATE:
					NOV/06
				DRAWN:	NTS
<b>TOWNSHIP OF RAMARA</b>					
<b>RURAL (PAVED) - LOCAL RESIDENTIAL</b>				<b>STD. No. 203</b>	
23.0m ROAD ALLOWANCE					
7.0m ASPHALT SURFACE					