



OPERATIONS COMMITTEE AGENDA

Operations Committee Meeting
Monday, August 11, 2014
Tom Davies Square

COUNCILLOR JACQUES BARBEAU, CHAIR

Claude Berthiaume, Vice-Chair

10:45 a.m. OPERATIONS COMMITTEE MEETING
COUNCIL CHAMBER

Council and Committee Meetings are accessible. For more information regarding accessibility, please call 3-1-1 or email clerks@greatersudbury.ca.

DECLARATIONS OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

PRESENTATIONS

1. Report dated August 1, 2014 from the Acting General Manager of Growth & Development regarding Calculation of Taxi Tariff Rates and Increase of Taxi Fares. **4 - 7**
- (ELECTRONIC PRESENTATION) (RECOMMENDATION PREPARED)**
- Guido Mazza, Director of Building Services/Chief Building Official
 - Darlene Barker, Manager of Compliance and Enforcement
 - Ed Stankiewicz, Manager of Financial Planning & Budgeting

(This report recommends an amendment to the by-law regulating the taxi industry that includes a new schedule with a tool for calculating taxi fares and an increase to the current taxi rates.)

REGULAR AGENDA

MANAGERS' REPORTS

- R-1. Report dated July 30, 2014 from the Acting General Manager of Growth & Development regarding Sudbury Landfill - Operational Assessment. **8 - 13**
- (FOR INFORMATION ONLY)**
- (A brief report that will outline the operational assessment of the Sudbury Landfill Site. This will include odour and traffic issues.)
- R-2. Report dated July 23, 2014 from the General Manager of Infrastructure Services regarding Management of Nuisance Beavers. **14 - 15**
- (FOR INFORMATION ONLY)**
- (This report outlines the current policy, practice, legislative requirements and property owner responsibilities for managing nuisance beavers.)
- R-3. Report dated July 23, 2014 from the General Manager of Infrastructure Services regarding On-Street Parking - Main Street, Chelmsford. **16 - 18**
- (RECOMMENDATION PREPARED)**
- (This report recommends that the maximum time limit for parking on portions of Main Street, Chelmsford be increased from one hour to two hours.)
- R-4. Report dated July 23, 2014 from the General Manager of Infrastructure Services regarding On-Street Parking - Davidson Street. **19 - 21**
- (RECOMMENDATION PREPARED)**
- (This report recommends that parking be prohibit on the north side of Davidson Street between the hours of 8:30 a.m. and 4:30 p.m., Monday to Friday inclusive.)

- R-5. Report dated July 23, 2014 from the General Manager of Infrastructure Services regarding All-Way Stop Control - Mont Adam Street at Sunrise Ridge Drive. **22 - 27**
(RECOMMENDATION PREPARED)

(This report details the results of the traffic studies completed regarding an all-way stop and crosswalk at the intersection of Mont Adam Street and Sunrise Ridge Drive and provides a recommendation for traffic control at this intersection.)

- R-6. Report dated July 29, 2014 from the General Manager of Infrastructure Services regarding Winter Sidewalk Maintenance Enhancement. **28 - 78**
(RECOMMENDATION PREPARED)

(This report describes the current policy for winter sidewalk maintenance, and provides a description and cost estimate for enhanced service.)

ADDENDUM

CIVIC PETITIONS

QUESTION PERIOD AND ANNOUNCEMENTS

NOTICES OF MOTION

ADJOURNMENT

BRIGITTE SOBUSH, DEPUTY CITY CLERK

Presented To:	Operations Committee
Presented:	Monday, Aug 11, 2014
Report Date	Friday, Aug 01, 2014
Type:	Presentations

Request for Decision

Calculation of Taxi Tariff Rates and Increase of Taxi Fares

Recommendation

That the City of Greater Sudbury amend By-law 2014-115 to
1) remove and replace Schedule "C" with the Taxi Cost Index tool for determining the taxi tariff rates; and
2) remove and replace Schedule "B" which will reflect an increase of 11% to the current taxi fares, effective September 1, 2014.

Background

On May 13, 2014, Council enacted the Taxi By-law, 2014-115. This by-law provides a system for the licensing, regulation and governing of taxi, limousine and shuttle transportation in the City of Greater Sudbury, including determining the rates of taxi tariffs. The By-law requires that every taxi driver shall charge a passenger a fee for the conveyance of one or more passengers and/or their goods. Schedule "C" in the by-law was intentionally left blank during the enactment of the by-law to allow staff additional time to determine the best tool to calculate taxi tariffs and to consult with the industry.

The method of determining taxi tariff rates in the previous by-law was based on fluctuations in gas prices. This method was reviewed by the consultant during the recent by-law review, Dr. Hara of Hara and Associates. He determined our present method to be unsustainable from both a perspective of staff resources and practicality. It was recommended that Sudbury develop a more sophisticated system that will reflect the true costs of operating a Taxi, such as fuel, insurance, repairs and maintenance, dispatch fees and employee costs. Staff contemplated a taxi cost index be developed to address the needs and costs of owners of Taxis specific to those in Sudbury. The taxi cost index that was developed during the review of the by-law in 2002 was deemed to be sufficient for these purposes, and addresses all the costs relative to operating a Taxi in the City of Greater Sudbury. The Taxi Cost Index as described in Attachment 1 of this report is recommended as the tool to be used annually to calculate changes in the taxi tariff rates and reflected as an amendment to the Taxi By-law in Schedule "C".

Signed By

Report Prepared By

Darlene Barker
Manager of Compliance and
Enforcement
Digitally Signed Aug 1, 14

Division Review

Guido Mazza
Director of Building Services/Chief
Building Official
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Recommended by the Department

Paul Baskcomb
Acting General Manager of Growth &
Development
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Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed Aug 1, 14

Taxi Tariff Rates Determination and Implementation

Staff implemented the Taxi Cost Index tool as recommended for amendment to the by-law to calculate the 2014 costs of operating a Taxi in the City. The calculations show that the costs to operate a taxi in the City has risen 11% since the last tariff rate was approved.

Staff met with the Taxi owners on July 29, 2014 to discuss the increase in operating costs, the Taxi Cost Index Tool that was used and the potential increase in taxi rates to reflect the increase in costs. All taxi owners in attendance at the meeting agreed that the taxi rates should be increased by 11% to reflect costs, effective September 1, 2014. September 1, is the renewal date of the licenses and vehicle inspections occur at this time. The meters can be calibrated to reflect the new rates during the inspections of the vehicles at no additional costs to the taxi owners. The taxi owners also agreed with the schedule recommended by staff for the "Drop" and "Distance" rates included herein. The Wait Time Rate is also recommended to increase by 11% from \$36.75 to \$40.75 for each hour and from \$0.57 to \$0.67 for each minute.

It should be noted for Council's information that the last rate increase for the industry other than that for the H.S.T. harmonization was 12%, 6 years ago in June 2008.

Taxi Tariff Rates		
	Current Fares (from 2010)	Proposed - Sept 1/14
Drop Rate	\$3.50 – 1 st 112 m	\$3.75 – 1 st 100 m
Distance	.25 for each 112 m	.25 for each 100 m
5 km Trip	\$14.50	\$16.00

Attachment 2 to this report is a table copied from Dr. Hara's report to Council showing a comparison of taxi tariff rates with other municipalities. It shows that the proposed rates are within the range of comparator municipalities.

Conclusion

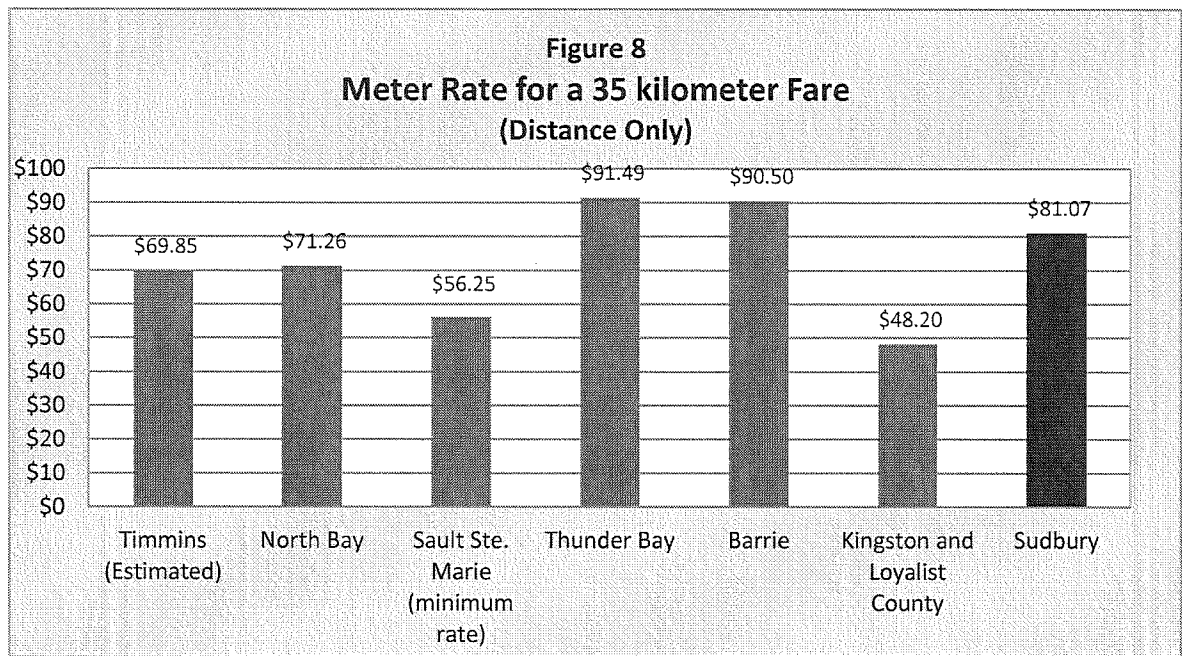
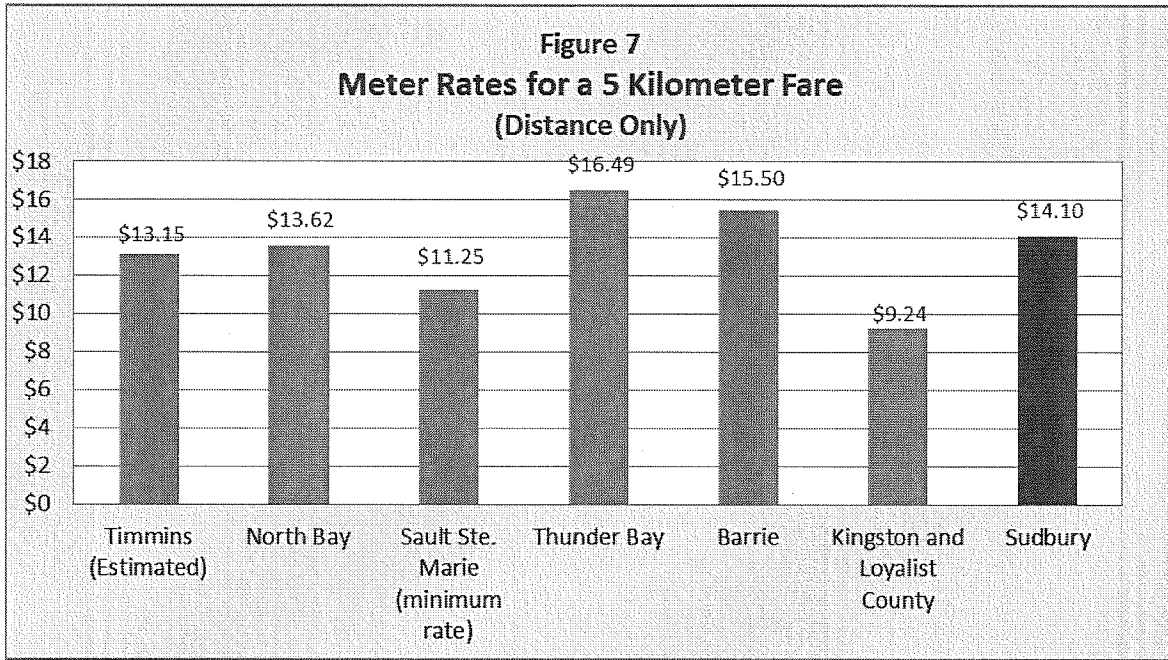
In consultation and with consensus of the taxi owners, staff recommend that Council approve a 11% increase in the taxi tariff rates effective on September 1, 2014, as described in this report. In addition, staff recommend that the Taxi Cost Index used to arrive at this increase be included in the Taxi By-law, 2014-115, Schedule C for future use to determine increases in operating costs of taxi ownership and subsequent increases in taxi tariff rates. These rates will be reviewed annually with the industry and Council starting March 2015.

Worksheet A: Calculation of Taxi Cost Index – June 2014					
A	B	C	D	E	F
Cost Item	Share of Costs March 2002	Proxy Time Series for Cost Item	Current Value June 2014	Percentage Change in Cost Item since March 2002	New Share of Costs 2014
Fuel	12.0	CPI for Gasoline v41691136 Table 326-0020	204.5	95.7	16.1
Repairs and Maintenance	9.6	CPI for Automotive Parts v41691137 Table 326-0020	129.8	31.1	8.6
Employed Driver Returns	26.4	Hourly Wage Transportation & Warehousing v1591431 Table 281-0029	25.29	37.5	24.9
Professional Fees	0.3		25.29	37.5	0.3
Owner Driver Returns	29.2		25.29	37.4	27.5
Insurance	11.3	CPI for Auto Insurance v41691141 Table 326-0020	176.7	82.3	14.1
Depreciation	4.0	CPI for Vehicles v41691132 Table 326-0020	94.5	-4.8	2.6
Return on Investment	1.4		94.5	-4.8	0.9
Dispatch Fees	5.4	CPI All Items v41690973 Table 326-0020	126.9	27.5	4.7
Miscellaneous	0.4		126.9	27.5	0.3
Total	100				100

Explanatory Note:

The Cost Index method is intended to be approximate, not exact. It estimates changes in cost by measuring changes in the cost of commodities and services that taxis share with other sectors of the economy. These changes are measured using publicly available statistics, such as components of the Consumer Price Index maintained by Statistics Canada. The Cost Index method is used because it uses data developed at arm's length from the industry, and avoids potentially lengthy and costly enquiries into the operating costs of individual taxicab owners and brokers. The index does not capture any unusual cost increases resulting from new requirements of operators by the Bylaw or administration of the City of Greater Sudbury.

short-haul (5 kilometer) and long-haul (35 kilometer).¹⁸ The range of meter rates is quite broad. Sudbury falls in the upper third. Rates in Thunder Bay and Barrie are higher, while rates in the other four peer cities are lower.



¹⁸ Distances are calculated based on the published rate was adjusted upwards 8% for HST harmonization, but a record is missing from City electronic records.

For Information Only

Sudbury Landfill - Operational Assessment

Presented To:	Operations Committee
Presented:	Monday, Aug 11, 2014
Report Date	Wednesday, Jul 30, 2014
Type:	Managers' Reports

Recommendation

For Information Only

Background

This report is intended to address the landfill odour issue notice of motion #CC2014-217 passed on June 24, 2014. The report addresses this request on an interim basis with follow-ups to come. In addition, staff is taking the opportunity to update the Committee on traffic congestion issues.

Nuisance Odours

All landfills have the potential to create odours. Certain odours are similar to the garbage smell that is noticed in your household garbage bin. These odours can be mitigated by reducing exposed garbage and applying progressive covering techniques. Some odours are generated during the decomposition or break down of the waste. When waste decays underground, certain landfill gases will produce odours and landfill gas collection systems will help reduce the migration of gas off site. When wastes break down above the ground and start to decompose anaerobically (without oxygen), then odourous gases, as one example, can be released during the turning process. In this case, understanding and finding the right mixture of various wastes and processing in a certain manner will control odours. Odours can also be produced from leachate (liquid that comes into contact with waste). Leachate can be very odourous and described as having an ammonia or sewage-type smell.

Many steps have been undertaken over the last few years to mitigate nuisance landfill odours. A summary is included in Appendix A.

In April 2014, Councillor Kett hosted a public meeting for the residents located south of the site. Attendance was good and residents were able to voice their concerns. It was also a good opportunity to review what waste or waste processes can cause nuisance odours and what actions have been taken to mitigate those odours. At that time, the City did indicate that a consultant would be hired to review site operations.

Residents were also encouraged to immediately contact the City when they have concerns and to consider

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participating in future solid waste advisory panels and/or landfill tours.

Recent Steps

For several months, additional staffing resources have been assigned by the City to ensure site compliance. Monitoring by various staff is daily and communication with the Contractor is frequent. While this has been effective in the short term, a more sustainable solution will be to identify a dedicated position to manage landfill operations.

In response to the concerns voiced, the landfill operating contractor has also assigned one additional senior operator /relief supervisor to periodically assist with key functions and the Contractor's management staff have also been visiting the site several times each week to assess any potential operational issues.

Managing the operation is on-going and the City continues to be involved in process management and quality assurance monitoring.

Additional Reviews

In addition to an internal review being undertaken, a qualified engineering/environmental firm was also retained to assess landfill operations and to conduct specific odour measurements and testing. The following tasks are recommended as a result of the work:

- Inspect the leachate collection system.

Action: This inspection will be completed by the City's new annual sampling and monitoring contractor. Repairs (if required) will then be initiated.

- Increase inspection and monitoring of site operations. This includes, but is not limited to landfill disposal methods, including daily cover, interim and final cover, composting processes, and leachate seep management. The firm has recommended that the City should consider having a full-time staff member on site to oversee all operations.

Action: Increased inspections are currently assigned to various staff. This function is currently under review, including the development of a dedicated Landfill Manager.

- Investigate and Quantify Current Odour Sources – Although the City has conducted an internal review of potential odour sources, an independent and scientific review will be initiated.

Action: The City requested and has received a draft proposal to conduct three main tasks:

- 1) Conduct a three (3) day site visit to obtain first-hand information regarding fugitive odours from the site.
- 2) Identify all odour samples and make screening level odour samples using a portable olfactometer. Develop an odour emission guide based on the site observations and from a library of historical odour measurements from other landfill sites.
- 3) Review the odour levels from the site in order to determine what the current potential impacts are at the off-site receptors through a dispersion modelling study.

Once these tasks are completed, staff will review options for potential improvements.

- Complete a thorough review of the operations contract and whether there's a requirement for more detailed operating plans with instructions.

Action: To be completed once the dedicated Landfill Manager position is designated.

Staff will report back to the Operations Committee once key processes and tasks have been completed.

Traffic Congestion

Visits to the landfill sites spike every Spring as residents clean-up and construction works commence. At the Sudbury Landfill Site, the long line ups have occasionally disrupted traffic on the Kingsway.

Staff are reviewing several options, which include, but are not limited to:

- 1) Additional in-bound laneways at the Sudbury Landfill Site (Refer to Appendix B)
- 2) Additional out-bound laneways at the Sudbury Landfill Site (Refer to Appendix C)
- 3) Traffic count studies at the Walden Transfer Station, the Azilda Landfill and the Hanmer Landfill.
- 4) Review in possible changes to operating hours and process changes.

All options will be reviewed, including the anticipated increase in cost or decrease in revenue. Once the details are available, staff will present options during the 2015 or 2016 budget deliberation process.

APPENDIX A

Item M-1 Landfill Odours

The following motion was presented by Councillor Kett:

CC2014-217 Kett/Landry-Altmann: WHEREAS despite continued efforts by the City of Greater Sudbury staff to mitigate odour issues at the Sudbury Landfill, with such measures as:

- Increased process requirements
- Increased monitoring and inspections including:
- Regular weekly inspections
- Seasonal monitoring-a staff person assigned to be on site for one week per season
- Additional weekly monitoring: two during regular operating hours, one during non operating hours and includes patrolling the neighbourhood
- Installed new camera system
- Installed wind socks
- Dealing with odours in, in coming waste
- Smaller disposal area/tipping face
- Regular meetings with the landfill operator
- Daily inspection reports revised
- New performance tracking
- Development of a more detailed nuisance prevention and management plan
- Development of a more detailed odour testing & prevention checklist;

AND WHEREAS numerous occurrences of rancid odours continue and continue to occur, destroying the right of families in the Moonlight Avenue/Levesque Streets area to enjoy the outdoors;

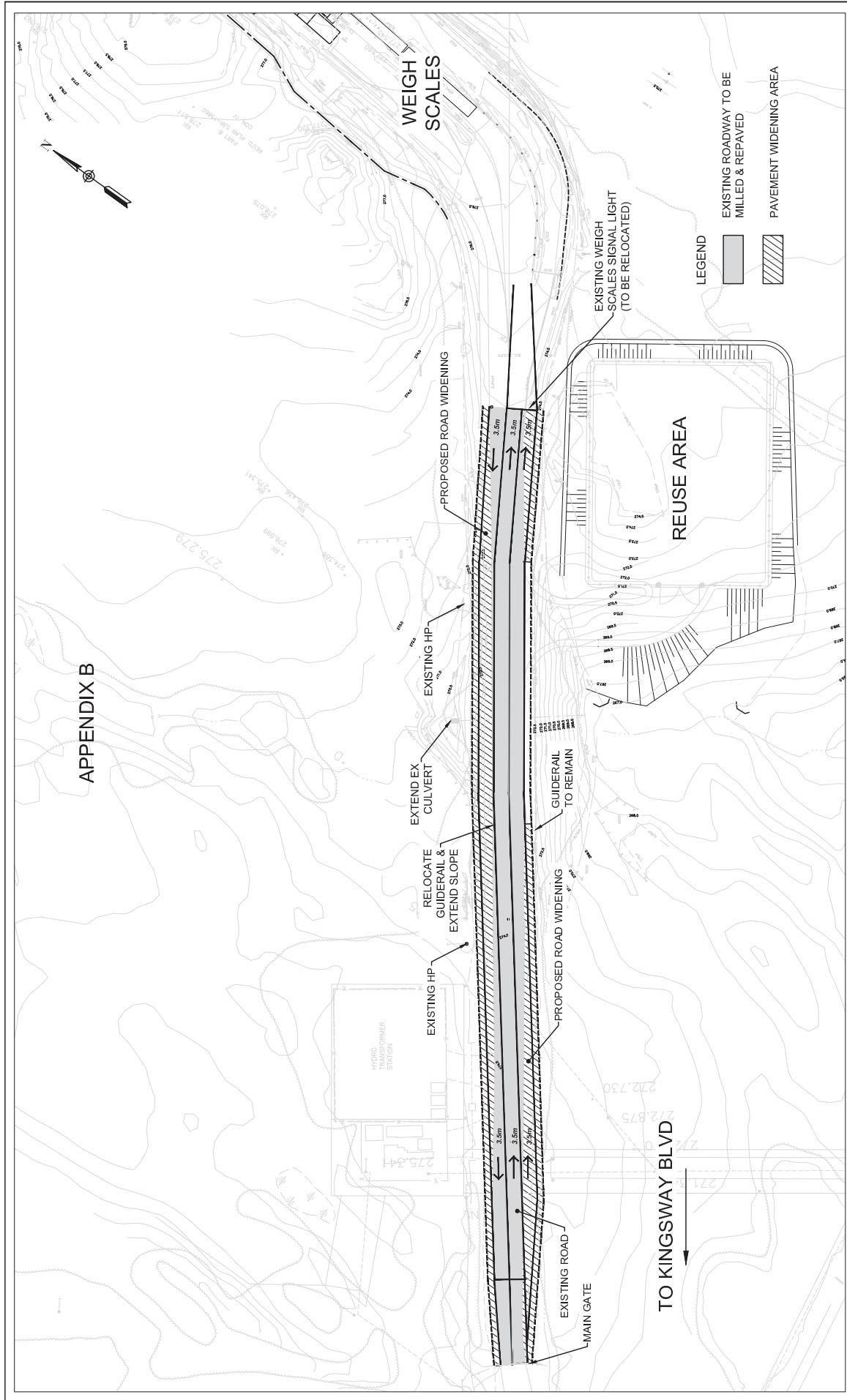
NOW THEREFORE BE IT RESOLVED THAT the City of Greater Sudbury clearly identify the source of these odours by assigning additional staff during all hours of landfill operation;

AND THAT the City of Greater Sudbury investigate ways to end this unacceptable situation;

AND THAT a report showing the alternatives be presented at the August Operations Committee Meeting.

CARRIED

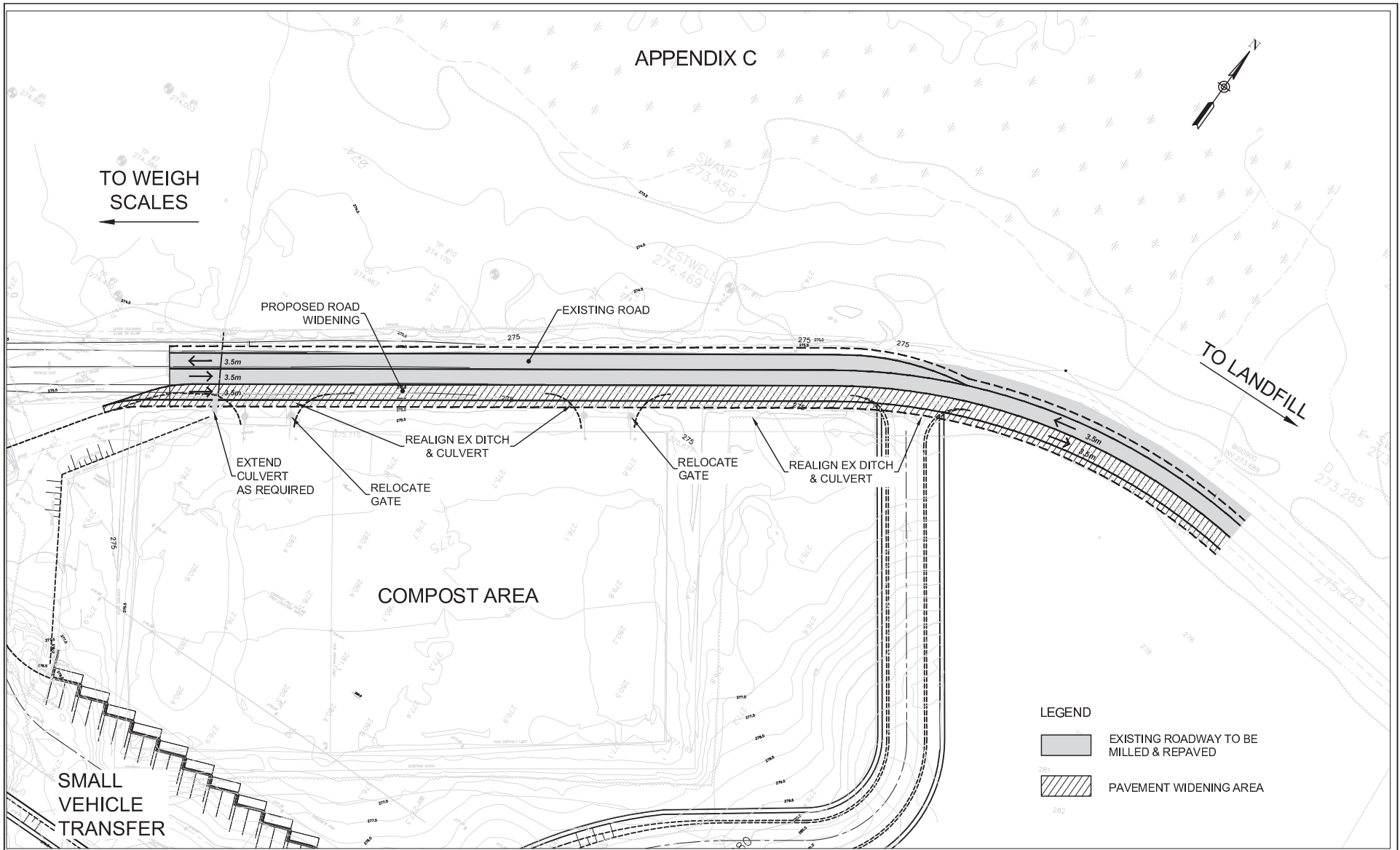
City Council 2014-06-24



APPENDIX B

SUBBURY LANDFILL
 FIGURE No. 3
 INBOUND TRAFFIC LANE WIDENING





 <small>UNION ENVIRONMENTAL MANAGEMENT INC.</small>	Sudbury	SUDBURY LANDFILL FIGURE No. 4 OUTBOUND TRAFFIC LANE WIDENING
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For Information Only

Management of Nuisance Beavers

Presented To:	Operations Committee
Presented:	Monday, Aug 11, 2014
Report Date	Wednesday, Jul 23, 2014
Type:	Managers' Reports

Recommendation

For Information Only

Background

Over the past several years staff and Council have received an increasing number of calls related to the management of nuisance beavers throughout the City. Based on this, staff was asked to prepare an information report detailing the City's responsibilities on these matters. The report outlines the current policy, practice, legislative requirements and property owner responsibilities.

General Information

The north american beaver has been a challenge for municipalities and private property owners for a number of years. Beavers are large rodents that can grow to be 1.2 m in length and weigh up to 30 kgs. They are characterized by features adapted to their aquatic environments such as: webbed feet, dense underfur and large front teeth. They are most active in the fall, working to store enough food (piled outside the lodge) to sustain them through the winter. Their diets include the bark of trees, water plants (pond lilies and cattail roots), shrubs, saplings, grasses, herbs, leaves and fruit. A family of five or six beavers may require in excess of one half hectare of dense poplar trees for its winter food supply.

Beavers construct living areas, called lodges, in lakes, rivers and creeks. A lodge consists of a single room with a floor above the water surface and an underwater tunnel for access. Beaver dams expand the size of the pool around the lodge so the water is deep enough to remain unfrozen along the bottom all winter, which is important so the beavers can still enter and exit the lodge.

The construction activity of beavers can be beneficial, but also cause problems in urbanized areas. Beaver dams can create important wetland habitat for waterfowl and other wildlife, regulate high flow conditions during storm events and reduce downstream bank erosion. In urban areas beaver activity has the potential to cause serious damage to private property and municipal infrastructure (roads, bridges, and culverts). In

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addition, residents may be troubled by aesthetic damage caused by the removal of trees from parklands and their property. Finding the balance between human activities and wildlife has been very difficult at times.

Management of nuisance beavers is governed by several pieces of legislation including the Canadian Fisheries Act, Lakes and Rivers Improvement Act, Public Lands Act, and Fish and Wildlife Conservation Act.

Current Practice for the Management of Nuisance Beavers

The management of nuisance beavers includes trapping and beaver dam removal as well as prevention, exclusion techniques such as tubular culvert protectors. Dam removal is generally ineffective without trapping the beaver, as beavers will usually repair the dam immediately. In the case of trapping and beaver dam removal, staff utilize the services of the Sudbury Area Trappers Council Inc., who in turn call the trapper responsible for the area to complete the work. As part of the trapping process, the trapper sets up their traps and creates a small notch in the beaver dam to entice the beaver into the area to close the hole in the dam. The trappers continue with this process until they are confident they have removed all the nuisance beavers at this location, then the beaver dam can be removed. The time required for this process can range from a few days to several weeks depending on complexity. The City only uses trappers that are licensed by the Ministry of Natural Resources for this purpose. The City's current contract with the Sudbury Area Trappers Council Inc. is for three years with the potential for two additional single year extensions. The three year average spending for trapping is \$50,000 annually.

Management of beaver on private land is the responsibility of individual landowners. Property owners may be held liable for damages as a result of inaction on their part to deal with a beaver dam on their property. The Ontario Ministry of Agriculture, Food and Rural Affairs states the following regarding the responsibility to remove beaver dams or natural blockages "If the watercourse was a municipal drain, your municipality has the authority and responsibility to maintain the drain. But municipalities have no authority to remove blockages from a natural watercourse. The conservation authority or Ministry of Natural Resources also has no authority to go onto private land to remove naturally-occurring blockages." (reference: www.omafra.gov.on.ca/english/landuse/drain-eref/natural.htm).

The municipality has the authority to remove beaver dams from private property if they represent a threat to municipal infrastructure. Should a beaver dam located on private property represent a threat to municipal infrastructure, a letter will be sent to that property owner requesting that the beaver dam be removed within a reasonable and defined timeframe. The letter will include details on how to address the problem, and the potential liability. If the property owner fails to respond within the deadline, the City will proceed to correct the problem and may pursue the recovery of these costs. Should the beaver dam be determined an emergency by City Staff, the City will act immediately to remove the beaver dam while providing as much notice to the property owner as possible.

Request for Decision

On-Street Parking - Main Street, Chelmsford

Presented To: Operations Committee

Presented: Monday, Aug 11, 2014

Report Date Wednesday, Jul 23, 2014

Type: Managers' Reports

Recommendation

THAT the City of Greater Sudbury increase the maximum time limit for parking on the north side of Main Street, from Errington Avenue to O'Connor Street, from one hour to two hours, between the hours of 9:00 a.m. to 6:00 p.m.;

AND THAT the City of Greater Sudbury increase the maximum time limit for parking on the south side of Main Street, from Errington Avenue to Cote Avenue, from one hour to two hours at all times;

AND THAT a by-law be presented to amend Traffic and Parking By-law 2010-1 in the City of Greater Sudbury to implement the recommended changes in accordance with the report dated June 23, 2014 from the General Manager of Infrastructure Services regarding On-Street Parking - Main Street, Chelmsford.

Background

Roads and Transportation Services staff received a request from the Councillors for Wards 3 and 4 to increase the maximum time limit for parking in the commercial area of Main Street in Chelmsford from one to two hours (see Exhibit 'A').

Currently, parking on the north side of Main Street, from Errington Avenue to O'Connor Street, is restricted to a maximum period of one hour between 9:00 a.m. and 6:00 p.m. each day. Parking on the south side of Main Street, from Errington Avenue to Cote Avenue, is restricted to a maximum period of one hour at all times. Parking is also prohibited at all times on Main Street, near the intersections of Errington Avenue, O'Connor Street and Cote Avenue.

The City of Greater Sudbury restricts parking to a maximum duration of four hours unless otherwise stated. In many commercial areas of the City, the maximum period has been reduced to ensure that convenient short term parking is available for customers of the area. Generally, shorter maximum time limits result in higher turnover rates for parking which increases the likelihood of finding a parking space. Based on the nature of the business, higher or lower maximum parking time limits may be desired. The commercial areas

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Recommended by the C.A.O.

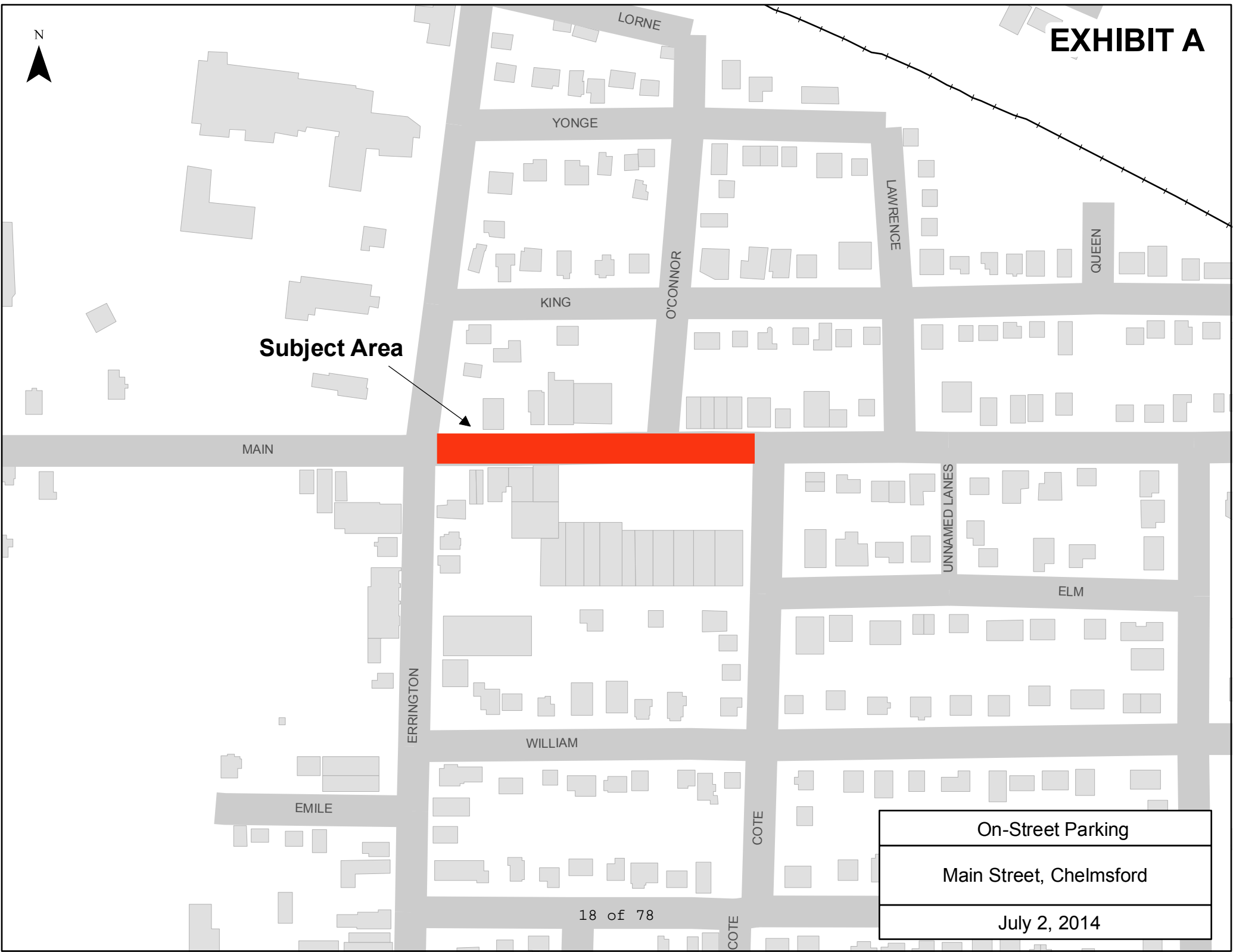
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of Capreol and Copper Cliff are examples where two hour maximum time limits have been implemented. Information from the Councillors indicates that many of the local property owners support an increase in the maximum time limit from one to two hours. Roads and Transportation Services staff have no objection to the requested change.

EXHIBIT A

N

Subject Area



On-Street Parking
Main Street, Chelmsford
July 2, 2014

Request for Decision

On-Street Parking - Davidson Street

Presented To:	Operations Committee
Presented:	Monday, Aug 11, 2014
Report Date	Wednesday, Jul 23, 2014
Type:	Managers' Reports

Recommendation

THAT the City of Greater Sudbury prohibit parking on the north side of Davidson Street between the hours of 8:30 a.m. and 4:30 p.m., Monday to Friday inclusive;

AND THAT a by-law be presented to amend Traffic and Parking By-law 2010-1 in the City of Greater Sudbury to implement the recommended changes all in accordance with the report dated July 23, 2014 from the General Manager of Infrastructure Services regarding On-Street Parking - Davidson Street.

Background

Roads and Transportation Services staff received a request from the Councillor for Ward 12 to review options for prohibiting parking on the north side of Davidson Street. Residents and City of Greater Sudbury Compliance and Enforcement staff have expressed concerns regarding traffic problems being created with parking on the street, especially during the winter months when the presence of snow banks narrows the road.

Davidson Street is a local roadway that connects MacKenzie Street to College Street and is located immediately south of Sudbury Secondary School (see Exhibit 'A'). Currently, parking is prohibited on the south side of Davidson Street from 8:30 a.m. to 4:30 p.m., Monday to Friday. Parking on the north side is permitted at all times and is frequently used by staff and students of Sudbury Secondary School and the Sudbury Public Library.

Davidson Street is constructed with a wider than usual asphalt width of 11 metres. Typically, local roads are 9 metres wide and collector roads are 10 metres wide. Prior to the 2013 school year, the north side of Davidson Street was used for a number of years as a school bus loading zone for Sudbury Secondary School.

In order to determine what type of parking restriction would be preferred by the majority of property owners, the Councillor for Ward 12 sent out surveys with various options. Only one survey was returned indicating support for prohibiting parking on the north side of Davidson Street from 8:30 a.m. to 4:30 p.m., Monday to

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Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
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Friday. The Ward Councillor supports this recommendation and staff has no objections. Vehicles that are currently parking on Davidson Street will be relocated to other roadways in the area if the recommendation is approved.

N

BAKER

Sudbury Secondary School

UNNAMED LANES

UNNAMED LANES

ADIE

UNNAMED LANES

COLLEGE

MACKENZIE

Subject Area



DAVIDSON

Main Library

FROOD

STEANNE

EVERGREEN

UNNAMED LANES

FIR

On-Street Parking

Davidson Street, Sudbury

July 2, 2014

Request for Decision

All-Way Stop Control - Mont Adam Street at Sunrise Ridge Drive

Presented To: Operations Committee

Presented: Monday, Aug 11, 2014

Report Date Wednesday, Jul 23, 2014

Type: Managers' Reports

Recommendation

THAT the City of Greater Sudbury maintain the current traffic control at the intersection of Mont Adam Street at Sunrise Ridge Drive, in accordance with the report dated July 23, 2014 from the General Manager of Infrastructure Services regarding All-Way Stop Control - Mont Adam Street at Sunrise Ridge Drive.

Background

The Ward Councillor submitted a petition signed by 36 area residents requesting that an all-way stop and crosswalk be installed at the intersection of Mont Adam Street and Sunrise Ridge Drive for the purpose of slowing down traffic (see Exhibit 'A'). As a result of this request, staff were directed to bring forth a report on the appropriateness of an all-way stop at the intersection of Mont Adam Street at Sunrise Ridge Drive.

Mont Adam Street at Sunrise Ridge Drive is a "T" intersection located approximately 300 metres north of Lloyd Street (M.R. 55) within Ward 12 (see Exhibit 'B'). Mont Adam Street is a local roadway with an average annual daily traffic (AADT) volume of approximately 5,600 and with a sidewalk on the west side. From Lloyd Street to Mountain Street, Mont Adam Street has a steep grade which plateaus near Sunrise Ridge Drive. The grade of Mont Adam Street is approximately 9 percent north and south of Sunrise Ridge Drive. Sunrise Ridge Drive is a divided local roadway which leads into the Sunrise Ridge Estates subdivision. Currently traffic on Sunrise Ridge Drive is controlled with a stop sign.

A turning movement count was conducted on June 2, 2014 to determine if an all-way stop is warranted. Based on the traffic volumes on Mont Adam Street, the arterial/major collector thresholds apply to this intersection. Applying the data from the turning movement count to the City's Minimum Volume Warrant indicates that the vehicle and pedestrian volume from Sunrise Ridge Drive meets only 14 percent of the minimum volume requirements for an all-way stop (see Exhibit 'C'). There were a total of 24 pedestrians (11 children and 13 adults) who crossed Mont Adam Street during the eight peak hours. It should be noted that eight of the children who crossed Mont Adam Street did so while a school bus stopped traffic on Mont

Signed By

Report Prepared By

Dave Kivi
Co-ordinator of Transportation & Traffic Engineering Services
Digitally Signed Jul 23, 14

Division Review

David Shelsted
Director of Roads & Transportation Services
Digitally Signed Jul 23, 14

Recommended by the Department

Tony Cecutti
General Manager of Infrastructure Services
Digitally Signed Jul 23, 14

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed Jul 23, 14

Adam Street.

A review of the City's collision information from 2011 to 2013 revealed that there were no collisions at this intersection during this three year period. For an arterial/major collector roadway, the Collision Warrant requires a minimum of four collisions per year over a three year period.

Roads and Transportation Services staff also reviewed sight distances at this intersection. When reviewing sight distance at an intersection, there are two types of sight distances that are typically considered, "approach sight" distance and "stopping sight" distance. "Approach sight" distance considers a scenario where the vehicle from the side street fails to stop at the intersection. Based on the speed limit of the main roadway, you are able to calculate the sight distance required for a driver to perceive that the vehicle from the side street will not stop and be able to react in time to avoid a collision. For this intersection, sight lines for northbound traffic are restricted by the pump house and hydro transformer installed near the intersection. For southbound traffic, sight distance is restricted by the decorative wall installed in the northeast corner of the intersection. "Stopping sight" distance is the distance required by a driver to bring the vehicle to a stop when an object on the roadway becomes visible. For northbound vehicles, the stopping sight distance is limited by the crest of the hill. For southbound vehicles, stopping sight distance is met at this intersection.

Roads and Transportation Services staff also reviewed Mont Adam Street under the Traffic Calming Program, however due to the grade of the roadway (greater than 8 percent), it does not qualify. Installing traffic calming devices on roadways with a grade greater than 8 percent is not recommended because they can become a hazard during slippery conditions.

Recommendation

All-way stops are often requested by residents in response to concerns on their street such as vehicle speeding, traffic volume, and safety for pedestrians and cyclists. Road authorities take guidance from the Ontario Traffic Manual when determining when and where to install stop signs. "The purpose of the Ontario Traffic Manual (OTM) is to provide information and guidance for transportation practitioners and to promote uniformity of treatment in the design, application and operation of traffic control devices and systems across Ontario. The objective is safe driving behaviour, achieved by a predictable roadway environment through the consistent, appropriate application of traffic control devices. Further purposes of the OTM are to provide a set of guidelines consistent with the intent of the Highway Traffic Act and to provide a basis for road authorities to generate or update their own guidelines and standards."

The City has adopted a revised Warrant for the Installation of All-Way Stop Signs, which reduces the thresholds required to meet the requirements for all-way stop approval. The reduced warrant does not change the purpose of a stop sign. "The purpose of the stop sign is to clearly assign right-of-way between vehicles approaching an intersection from different directions when traffic signals are not warranted or not yet installed and it has been determined that a yield sign is inadequate."

In general, "all-way stops should only be considered at the intersection of two relatively equal roadways having similar traffic volume demand and operating characteristics".

As indicated above, the traffic volumes, pedestrian volumes and collision history do not warrant the installation of an all-way stop at the intersection of Mont Adam Street at Sunrise Ridge Drive. Additionally, requiring vehicles to stop on steep grades may create operational issues during slippery conditions. Roads and Transportation Services staff recommends that traffic control remain unchanged at this intersection.

Due to the restricted sight lines, staff recommends that "hidden intersection ahead" signs and "pedestrian ahead" signs be installed on Mont Adam Street to advise drivers of the upcoming intersection and crossing pedestrians.

Joscelyne Landry-Altmann - Fwd: Traffic Study for Mount Adam

From: Glen Haslam
To: Joscelyne Landry-Altmann <Joscelyne.Landry-Altmann@city.greatersudbury.o...>
Date: 6/5/2011 10:00 AM
Subject: Fwd: Traffic Study for Mount Adam
Attachments: IMG.pdf; Mount Adam Traffic Study.pdf

----- Forwarded message -----

From: **Glen Haslam**
Date: Sun, Jun 5, 2011 at 9:58 AM
Subject: Traffic Study for Mount Adam
To: Glen Haslam

Hi: Joscelyne,
The residents of Sunrise Ridge have all supported the idea of a traffic study of Mount Adam for the purpose of slowing traffic down. We would like a stop signs at the entrance to Sunrise Ridge and a crosswalk from the sidewalk across the road.

Thanks
Glen Haslam
President of Sunrise Ridge neighbourhood Association

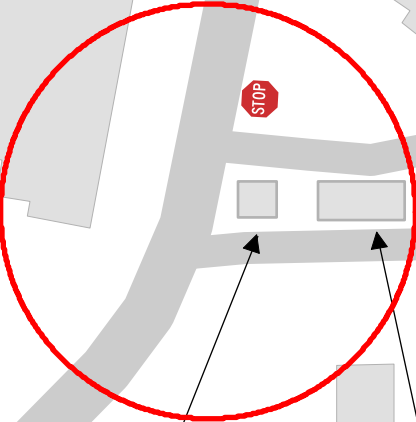


MOUNTAIN

UNNAMED PRIVATE

SUNRISE RIDGE

Subject Intersection



STOP

Hydro Transformer

Pump House

MONT ADAM

BROCK

All-Way Stop
Mont Adam Street at Sunrise Ridge Drive
July 8, 2014

EXHIBIT: C

CITY OF GREATER SUDBURY ALL-WAY STOP WARRANTS

Location:	Mont Adam St at Sunrise Ridge Dr	Date:	June 9, 2014
Date of TM Count:	June 2, 2014	Analyst:	JR
Type of Intersection:	T		
Roadway Type	Arterial/Major Collector		
AADT of Main Road:	5600		

All-Way Stop Warrant Summary

Warrant #1	Minimum Vehicle Volume	14	%
Warrant #2	Collision History	0	%
Warrant #3	Traffic Control Signals	No	Y/N

All-Way Stop Warranted? **No** Y/N

Warrant #1 - Minimum Vehicle Volume					
Roadway Type	Arterial/Major Collector	Minor Collector	Local	Vehicles per hour	Percent Compliance
AADT	> 5000	1000 - 5000	< 1000		
Count Period	7 hours	4 peak hours	4 peak hours		
Total vehicle volume from all approaches is ≥	500/hr	350/hr	250/hr	494	99%
Veh + Pedestrian volume from side street is ≥	200/hr	140/hr	N/A	28	14.1%
Traffic Split	70/30	70/30	70/30	95/5	17%

Warrant #2 - Collision History					
Roadway Type	Arterial/Major Collector	Minor Collector	Local	Total Number of Collisions	Percent Compliance
Total Collisions over a 3 year period	12*	9*	6*	0	0%

Warrant #3	Traffic Control Signals are warranted and urgently needed, signs to be used as interim measures.	No	Y/N
-------------------	---	-----------	------------

* Only those collisions susceptible to relief through multi-way stop control must be consider (i.e. right angle and turning types).

- If the intersection meets warrant # 1, then the all-way stop is recommended regardless of the remaining warrants.
- If the intersection does not meet warrant #1 and does not meet warrant #2, then the all-way stop is not recommended.
- If the intersection does not meet warrant #1 and does meet warrant #2, then the all-way stop is recommended.

Presented To:	Operations Committee
Presented:	Monday, Aug 11, 2014
Report Date	Tuesday, Jul 29, 2014
Type:	Managers' Reports

Request for Decision

Winter Sidewalk Maintenance Enhancement

Recommendation

THAT the City of Greater Sudbury direct Staff to provide an implementation plan to the Finance and Administration Committee for consideration in the 2015 Budget process for the 2015/2016 winter season.

Finance Implications

If this proposal is accepted by Council, a budget option will be prepared for the Finance and Administration Committee to consider in the 2015 Budget.

Background

See attachment.

Signed By

Report Prepared By

Randy Halverson
Manager of Operations
Digitally Signed Jul 29, 14

Division Review

David Shelsted
Director of Roads & Transportation
Services
Digitally Signed Jul 29, 14

Recommended by the Department

Tony Cecutti
General Manager of Infrastructure
Services
Digitally Signed Jul 29, 14

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed Jul 31, 14

1. Background

To respond to many questions and concerns received by Councillors and the public regarding sidewalk policies and standards, it was deemed appropriate to bring a report forward to Council.

Council has identified the importance of year-round mobility for pedestrians with an emphasis on a healthy community, and supporting alternative forms of transportation in a sustainable economic manner. Council further resolved that the City of Greater Sudbury accept the challenge to become the most pedestrian friendly City in Ontario by 2015 (resolution #2007-226). With increasing frequency, residents of our community have been expressing interest in a more active transportation network. These comments are received at various infrastructure public consultation sessions, at various advisory group meetings, and to some extent through the ACR system. In keeping with Council's resolution and the interests of the community, it is recommended that the City perform winter maintenance on all designated sidewalks within the City.

There is approximately 425 kilometres of sidewalks connecting neighbourhoods within the City. The City provides winter maintenance to approximately 325 kilometres (75%) of these sidewalks. There are approximately 45 kilometres of 1.2 metres (4-foot) wide sidewalks and 55 kilometres of 1.5 metre (5-foot) wide sidewalks scattered throughout the City that remain unmaintained during the winter months. In order to maintain narrow (1.2m width) sidewalks, specialty plowing equipment is required. The majority of the 1.2 metre wide sidewalks are located in the communities of Coniston, Copper Cliff, Falconbridge, Garson, Levack, Lively, and Onaping. In many instances, the City inherited these sidewalks which were initially constructed by local mining companies to their respective standards of the time.

In addition, there are many walkways that connect to parks and roads that do not have winter maintenance.

1.1 Winter Sidewalk Maintenance Service Level

Winter sidewalk maintenance involves plowing and sanding sidewalks to reduce slip hazards and provide safe passage for pedestrians during the winter months.

City policy dictates that sidewalks be plowed and sanded once a snow accumulation of 8 centimetres (cm) has fallen or they are to be sanded when ice is detected. The City's current service level allows up to 24 hours after a winter storm has ended to complete a single pass on any of the maintained sidewalks. Sidewalks will remain snow packed throughout the winter.

During non-events, sidewalks are patrolled by road supervisors on a regular basis and spot plowed and/or sanded as deemed necessary.

Winter maintenance service levels provided throughout the City are the same service levels provided by the former area municipalities prior to amalgamation. Since amalgamation, all new sidewalks, including walkways between roads, that link to an existing sidewalk network receive year-round maintenance.

1.2 Winter Sidewalk Maintenance Equipment

Sidewalk winter maintenance is performed with Municipal Tractors (MT's). Operators utilize a straight blade plow or a snow blower depending on weather conditions and available snow storage. They maintain a sidewalk width of approximately 1.5 metres per pass. When plowing with a straight blade, snow is directed either towards the road or property line. Either option is chosen depending on existing circumstances. Snow blowing is required when there is no snow storage available for sidewalk plowing or during heavy snow falls due to the depth of snow.

The City employs a single shift for each sidewalk route. As such, winter maintenance of sidewalks has been designed to the following schedule;

- Time to plow and sand after an 8 cm accumulation of snow = 8 hours
- Time to snow blow and sand after an 8 cm accumulation of snow = 12 hours
- Time to sand after ice is detected = 8 hours (no plowing or snow blowing)

Sidewalk Snow Blowing



Sidewalk Plowing



1.3 Current Sidewalk Maintenance Times / Distances

The City provides winter maintenance on approximately 325 kilometres of sidewalk, which are divided into 19 routes. Service data for these routes from six randomly chosen snow storms during the 2012/2013 winter is summarized in Table 1. The 2012/2013 winter was deemed to be a normal / typical Sudbury winter. Table 1 indicates the average length of each sidewalk route, total “deadhead” time, and the average time to plow and sand a single pass during a typical 8 cm snow storm. “Deadhead” time refers to the unproductive time that exists within each sidewalk maintenance route. “Deadhead” time includes, but is not limited to, travel time between a depot and a sidewalk route, travel time between sidewalk locations within each route, time to fuel and conduct circle checks, time for scheduled employee lunch and break time. During severe winter storm conditions, “deadhead” time increases when additional sanding is required on sidewalks and the MT's must travel back to their respective depots on multiple occasions to reload with sand in these circumstances.

Naturally, servicing sidewalks located farther away from a maintenance depot increases “deadhead” time. Communities such as Azilda, Broder, Coniston, Copper Cliff, Falconbridge, Garson, Val Caron and Val Therese are situated a significant distance away from the closest depot. In order to meet service times, these areas maintain a less sidewalks than those found in

communities closer to a maintenance depot such as Downtown Sudbury, Gatchel, Lively and most of New Sudbury. Travel time between sidewalk locations and travel time to and from each respective depot for winter sand contributes quite significantly to “deadhead”. Appendix 2 provides a list of presently maintained sidewalk routes throughout the City.

As depicted in Table 1, the MT’s are fully utilized for the majority of the City’s sidewalks routes.

Table 1 – Summary of six (6) random snow storms during the 2012 / 2013 winter season

Maintenance Sections	Sidewalk Routes	General Route Area Description	Plow & Sand Only (Hrs.)	
			Includes "deadhead" Time	
			(typical 8 cm snow storm)	
South	1 ODD	Nepahwin Lake Area (Regent, Paris, Walford, Loaches)	13.0	
	1 EVEN			
	2 ODD	Old Hospital Area (Paris, York, Ontario, Riverside)	7.3	
	2 EVEN			
	3 ODD	Copper Cliff / Gatchell Area (Southview, Lorne)	10.3	
	3 EVEN			
	4 ODD	Downtown Area (St. Anne, Elm, Elgin, Durham, Paris, Brady)	7.7 (Note 1)	
	4 EVEN			
	5 ODD	Westend Area (Elm, Lorne, Douglas, Regent, Beatty)	10.0	
	5 EVEN			
	6 ODD	Donovan Area (Frood, Burton, Jean, Kathleen, Lansdowne)	10.0	
	6 EVEN			
	7 ODD	Flour Mill West (Notre Dame, Kathleen, Morin, College, Cambrian Hts.)	9.0	
	7 EVEN			
8	Southend (Long Lk., Algonquin, Brenda, Martindale, Country Side)	10.3		
SE	1	Garson / Skead Road / Coniston	10.7	
	2	Minnow Lake (Kingsway, Howey, Bancroft, Second)	10.0	
	3	Flour Mill East / Lasalle West (Mountain, Notre Dame, Lasalle, Arthur)	8.3	
	4	New Sudbury East (Lasalle, Madison, B. Downe, Auger, Falconbridge)	8.0	
	5	New Sudbury West (Lasalle, Barry Downe, Woodbine, Attlee, Gemmell)	8.5	
SW	1	Lively	8.4	
NE	1	Valley East (Val Caron, Val Theresse, Blezard, McCrea Hts.)	10.3	
	2	Capreol / Hanmer	6.0	
NW	1	Azilda	7.8	
	2	Chelmsford	11.3 (Note 2)	
	3A & 3B	Levack & Dowling	6.6	

Note 1: Two MT's are required due to the additional sidewalks width in the downtown area.

Note 2: A single operator is utilized for the Levack and Dowling sidewalk routes.

1.4 Comparison to Other Northern Municipalities

The City's average sidewalk route length is very similar to other northern Ontario municipalities. The other municipalities maintain between 70% and 100% of their sidewalks. Table 2 provides a summary of winter sidewalk maintenance in some other Northern Ontario municipalities. Many of these municipalities use the unmaintained sidewalks for snow storage during the winter periods. This provides a cost savings to these municipalities.

Table 2 – Comparison of Winter Sidewalk Maintenance in other Northern Ontario Municipalities

Plowing and Abrasives Application Comparison of Large Northern Ontario Municipalities							
Road Authority	Snow Plowing	Sidewalk Priority	Snow Accumulation Trigger	Response for a Single Pass	Abrasives Applied	Other Notes	Avg. Approx. Length
Greater Sudbury	Sidewalks	All Maintained Sidewalks	8 cm	4 to 24 Hrs.	Sand	19 Routes	28 km
Downtown Sudbury sidewalks are maintained weekly (Mon. - Fri) from midnight to 8am. City maintains 325 kilometres of 425 kilometres of sidewalk. 1 shift is utilized.							
Timmins	Sidewalks	All Maintained Sidewalks	8 - 10 cm	8 - 16 Hrs.	Sand	6 Routes	22 Km
Priority sidewalks are maintained on a daily basis (Mon - Fri). One (1) shift is utilized. Approximately 50% of all sidewalks are maintained in winter. Rest are used for snow storage.							
North Bay	Sidewalks	All Maintained Sidewalks	8 cm	Up to 12 Hrs.	Sand	5 Routes	26 Km
All sidewalks are maintained. Total length is 130 kilometres. 8 hour turnaround. Average route length is ~26 kilometers long established sidewalk beats. 1 shift is utilized.							
Sault Ste Marie	Sidewalks	All Maintained Sidewalks	5 cm	Up to 12 Hrs.	Sand	9 Routes	26 Km
Total of 328 kilometres sidewalks of which 231 kilometres are maintained (~70%). MT units are utilized on 9 routes. Avg. route length is ~28 kilometres (longest is 30 kilometres). 1 shift (snow or shine) from 4 a.m. to noon weekly (Mon to Fri).							
Thunder Bay	Sidewalks	High Priority Sidewalks	5 cm	14 - 36 Hrs.	Salt or Sand	15 Total Routes	30 Km
	Sidewalks	Low Priority Sidewalks	5 cm	Up to 72 Hrs.			
All sidewalks are maintained. Approximately 493 Kilometres. All sidewalks are 5 foot (1.5m) wide. Average beat length is 30 Kilometres. 8am - 4.30pm sidewalk shift is utilized and a night shift if required.							
MMS ¹	Sidewalks	There is no provincial minimum standard for winter sidewalk maintenance (snow events)					

¹ Minimum Maintenance Standards according to the Municipal Act of Ontario

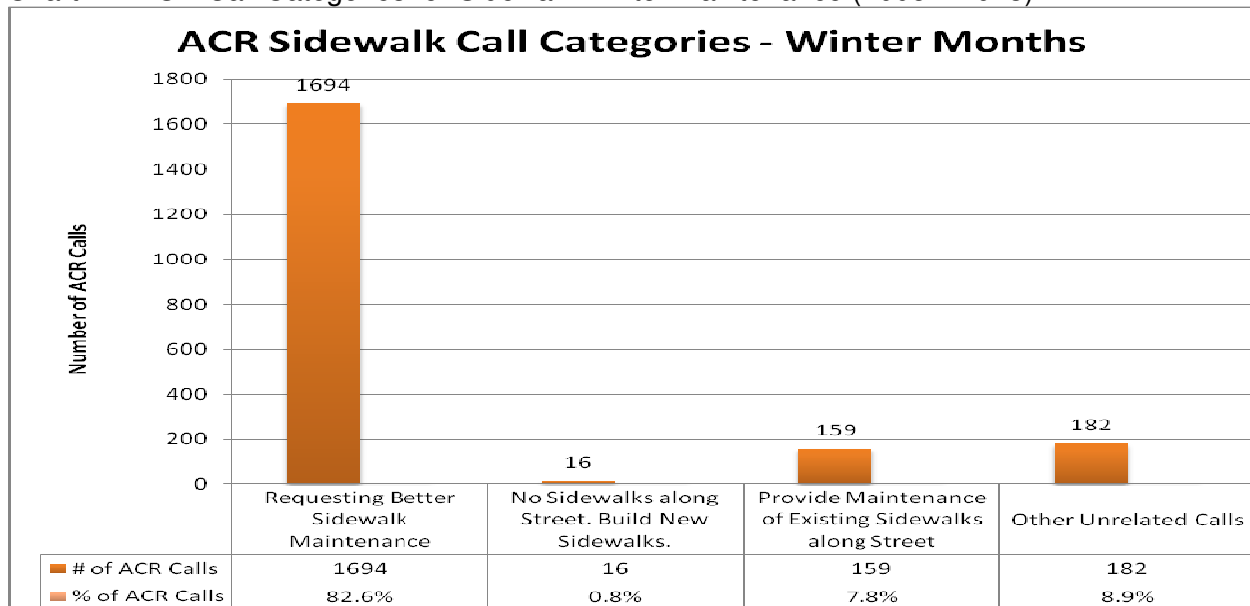
Considering Sudbury’s added “deadhead” time due to its vast geography, the City’s sidewalk route lengths and route completion times are consistent with other Northern Ontario municipalities. Many Southern Ontario communities have similar sidewalk route lengths. Some make it a requirement that their citizens maintain municipal sidewalks fronting their property.

1.5 Active Citizens Requests – Sidewalk Winter Maintenance

A review of all the calls recorded by the Active Citizen Requests (ACR) system pertaining to sidewalk winter maintenance indicated that 2,051 calls were received over the past five (5) years. These calls were apportioned and divided into the following categories:

- Requesting better Sidewalk Maintenance (i.e. icy, not plowed, need sanding) –1,694 (82%)
- Install New Sidewalks (i.e. splash pad only, have to walk on road etc) – 16 (1%)
- Maintain Existing Sidewalks (i.e. plows one side only, no plowing currently) – 159 (8%)
- Other Sidewalks complaints/concerns (i.e. lawn and other damage, spills) – 182 (9%)

Chart 1 – ACR Call Categories for Sidewalk Winter Maintenance (2008 – 2013)



The category labeled “Provide Maintenance of Existing Sidewalks along Street” includes service requests to maintain existing sidewalks that presently do not receive winter maintenance. They predominantly include sidewalks on residential streets that do not link to an existing sidewalk maintenance route, sidewalks on both sides of residential streets, 1.2 metre wide sidewalk maintenance (39 of the 159 calls), sidewalks that do not belong to the City (21 of the 159 calls) and sidewalk maintenance requests that have already been granted (81 of the 159 calls).

Table 3 provides a further breakdown of ACR calls received for “Provide Maintenance of Existing Sidewalks along Street” on residential streets.

Table 3 - ACR - Requesting Winter Maintenance of Existing Sidewalks (2008 - 2013)

Description	ACR Calls		Maintenance Section				
	# of Calls	% of All Calls	S	SE	SW	NE	NW
The City is presently maintaining (by 2014) some of the unmaintained sidewalks	81	4%	45	22	1	12	1
Provide Maintenance of 1.5 metre Sidewalks	18	1%	6	9	2	1	0
Provide Maintenance of 1.2 metre Sidewalks	39	2%	0	20	16	1	2
Provide Other Maintenance (MTO Sidewalks, not warranted)	21	1%	5	13	2	0	1
Total ACR Calls	159	8%					

Of the 159 ACR calls received over the past five (5) years, requesting sidewalk maintenance of existing unmaintained sidewalks, only 57 calls for maintenance have gone unfulfilled. To put it in perspective, only 3% of all ACR calls received over the past five (5) years ask that the City maintain existing sidewalks on residential streets that presently do not receive winter maintenance.

1.6 Existing Capacity for Sidewalk Winter Maintenance

The winter sidewalk maintenance budget was approximately \$831,000 in 2013 and \$848,000 in 2007. Over that same period of time approximately 28.5 kilometres of new sidewalk have been added to the existing winter sidewalk maintenance routes in accordance with current City policy. Figure 1 of Appendix 1 illustrates the recently (2007 – 2013) added sidewalks. Over the course of this period the number of pieces of sidewalk maintenance equipment remained the same, therefore no capital expenditures were required. This is an indication that the current sidewalk winter maintenance policy has provided flexibility to expand sidewalk winter maintenance in order to meet the growth of the City over the past few years with minimal impacts to the Operating Budget.

However, Table 1 indicates that actual service times have reached and / or exceeded design times for winter sidewalk maintenance. Table 2 indicates that the City's sidewalk route lengths are comparable with other northern municipalities. Both tables suggest that there is no further capacity available within the current service model to continue to expand winter maintenance of new sidewalks.

1.7 Implications of Maintaining Additional Sidewalk Routes

1.7.1 Equipment and Labour Requirements

There is approximately 100 kilometres of unmaintained sidewalk within the City. The majority of unmaintained sidewalks are located in areas where “deadhead” time is significant (i.e. Azilda, Broder, Coniston, Copper Cliff, Falconbridge, Garson, Val Caron and Val Therese communities) or where there are 1.2 meter wide sidewalks (i.e. Coniston, Copper Cliff, Falconbridge, Garson, Levack, Lively, and Onaping communities). Providing winter maintenance for these sidewalks will require the creation of new (additional) sidewalk routes.

In some instances, two (2) separate sidewalk routes may be required within the same community because it involves maintenance of both 1.2 metre and 1.5 metre wide sidewalks (i.e. Coniston, Copper Cliff, Garson and Lively). As such, a total of six (6) additional sidewalk winter maintenance routes need to be created in order to fulfill this proposal.

Six (6) additional MT's along with six (6) additional temporary employees will be required to facilitate the enhanced service standard described. The full implementation capital acquisition cost is approximately \$900,000 (\$150,000 per MT).

At full implementation, the associated annual maintenance and labour cost is approximately \$210,000 (\$35,000 per MT) and \$210,000 (\$35,000 per operator) respectively. The maintenance cost includes additional fuel usage and repair costs.

The above cost estimates are based on providing the service with City Staff. Any future implementation plan will consider contract services or a blended service. The above cost estimates do not include all walkways between parks and roads.

1.7.2 Direct and Indirect Impacts of Enhanced Sidewalk Winter Maintenance

Unmaintained sidewalks function as snow storage for roadway snow. Once winter maintenance of these sidewalks commences, additional roadway snow removal may be required depending on the severity of any given winter season. The cost associated with performing the additional

snow removal is not included in this report because it varies from year to year and is difficult to quantify.

Both Sides of Sidewalk Plowed (Montague St., north of Jean St.)



Narrower Road Width (requires more snow removal)

One Side of Sidewalk Plowed (Montague St., south of Jean St.)



Wider Road Width (requires less snow removal)

Many sidewalks are located adjacent to Transit bus stops. Although the City currently maintains several hundred bus stops, a large number remain unmaintained. Hence, additional sidewalk maintenance will inevitably result in additional bus stop snow removal. This will have an impact on the Transit operating budget.

Additional winter maintenance of sidewalks may impact lane width thereby reducing day time on-street parking and residential parking on narrower streets (i.e. Donovan, West end, Flour Mill and Garson areas).

Residents who receive the enhanced sidewalk maintenance service will have to get accustomed to a second windrow of snow at the end of their driveway.

Advanced communication of the service change can mitigate the downsides of additional winter sidewalk maintenance while promoting the positive outcomes.

2. Summary

Council has identified the importance of year-round mobility for pedestrians with an emphasis on a healthy community, and supporting alternative forms of transportation in a sustainable economic manner. Council further resolved that the City of Greater Sudbury accept the challenge to become the most pedestrian friendly City in Ontario by 2015 (resolution #2007-226). With increasing frequency, residents of our community have been expressing interest in a more active transportation network. These comments are received at various infrastructure public consultation sessions, at various advisory group meetings, and to some extent through the ACR system. In keeping with Council's resolution and the interests of the community, it is recommended that the City perform winter maintenance on all designated sidewalks within the City.

The cost of providing year-round winter maintenance to all sidewalks is significant with an estimated requirement of \$900,000 in capital equipment purchases and in excess of \$420,000 in annual operations and maintenance costs. These costs will vary with weather conditions. Full

implementation of this policy could be completed in one year; however, due to the significant financial requirements, it is recommended that implementation be phased in over several years. Phasing reduces the impact to the City's budget in any one year, and allows staff some time to optimize winter maintenance operations in each operating section to accommodate the new policy. The greatest disadvantage of a phased approach is the reality that there will be varied levels of service throughout the City until full implementation has been achieved.

Should Council approve this recommendation, Staff will provide an implementation plan for deliberations during the 2015 budget and subsequent budgets. A phased approach could take five or more years to implement. The implementation plan will provide recommendations for prioritization of new winter sidewalk maintenance routes, allowing Council to consider strategies for staging service levels.

Appendices

Appendix 1: Figure 1 - Newly (within the past five (5) years) maintained 1.5 metre wide sidewalks

Appendix 2: All current sidewalk maintenance routes

Newly Maintained Sidewalks

— Maintained Sidewalks

— 28.5 km Newly Maintained Sidewalks (2007-2013)

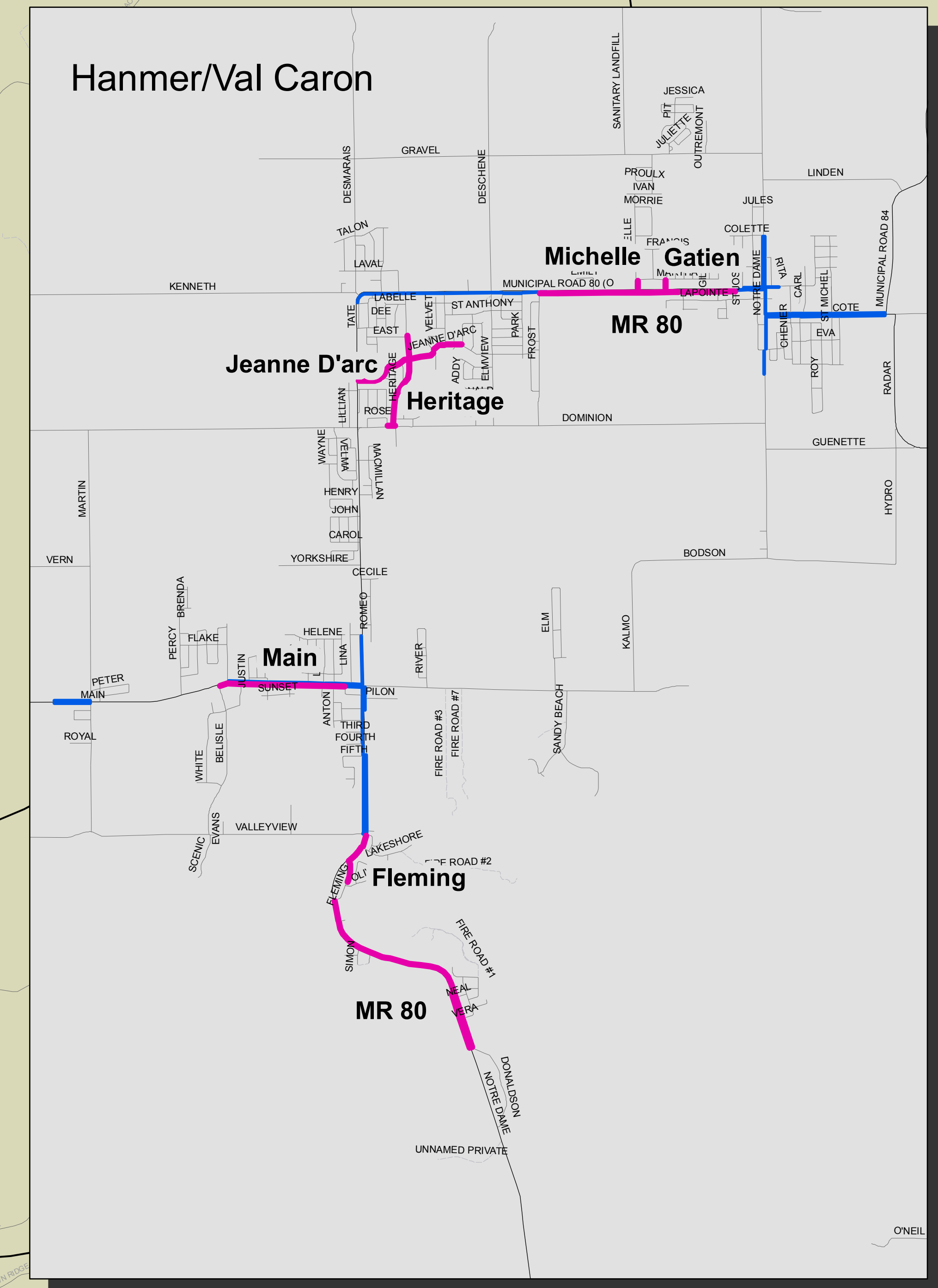
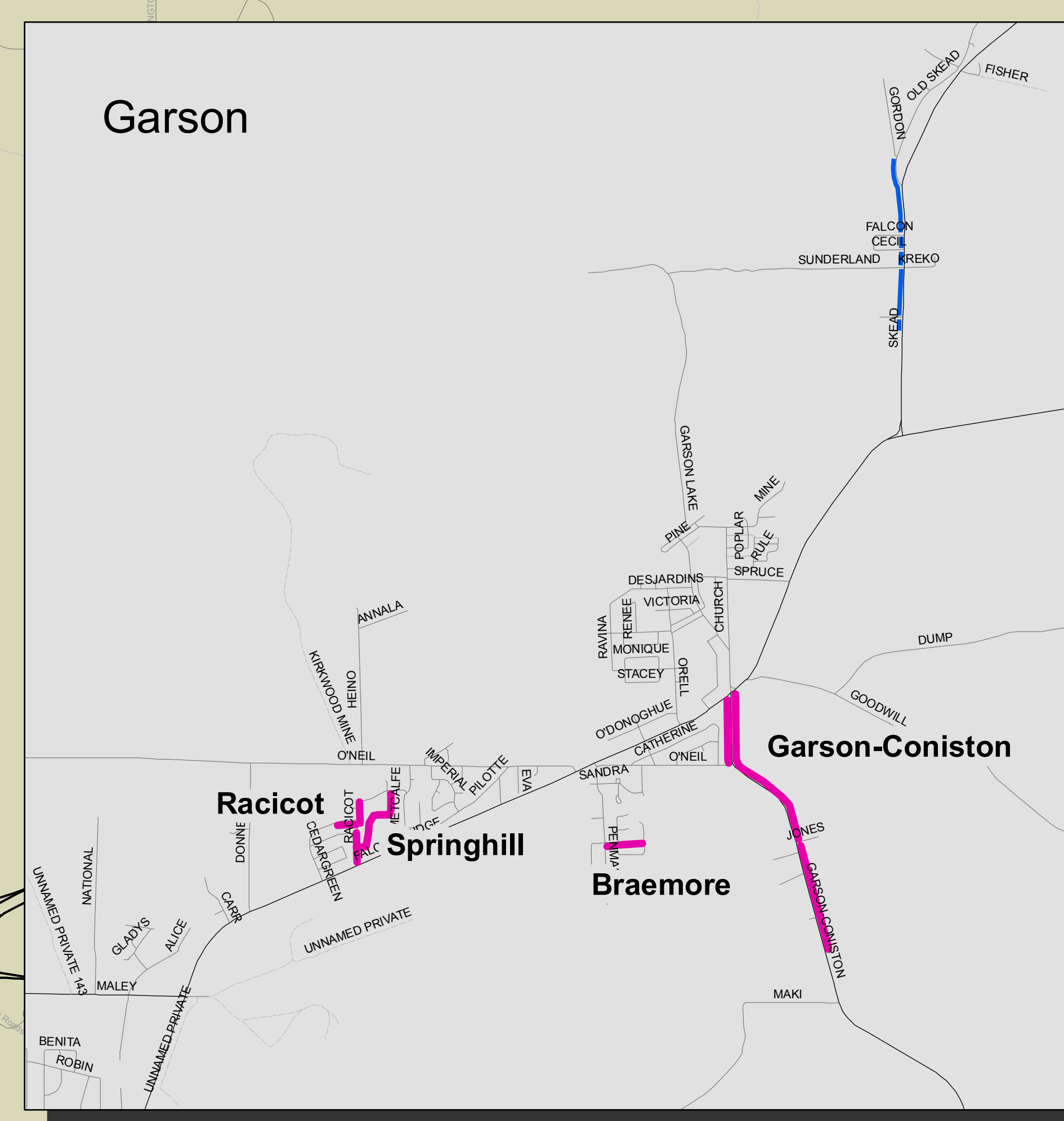
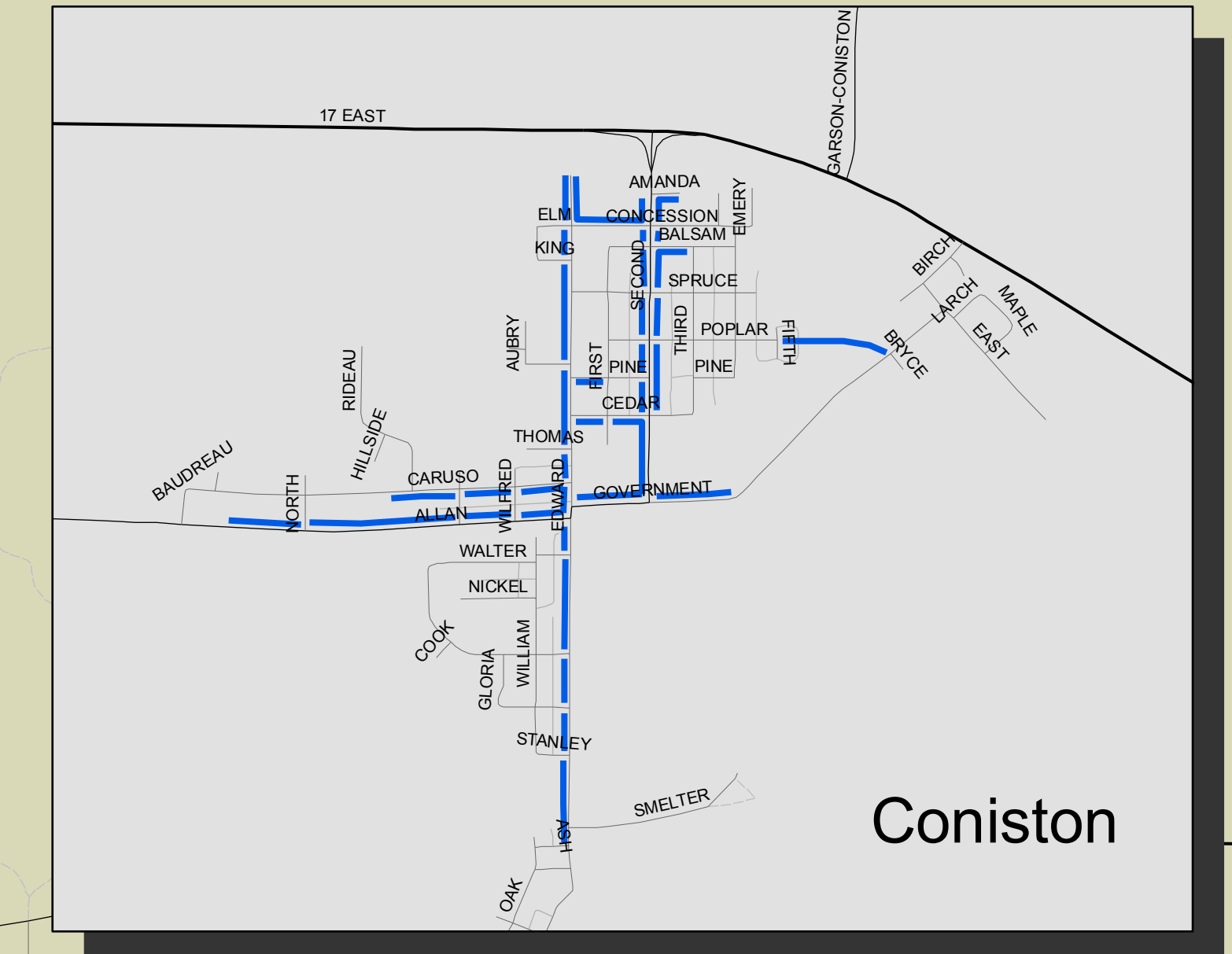
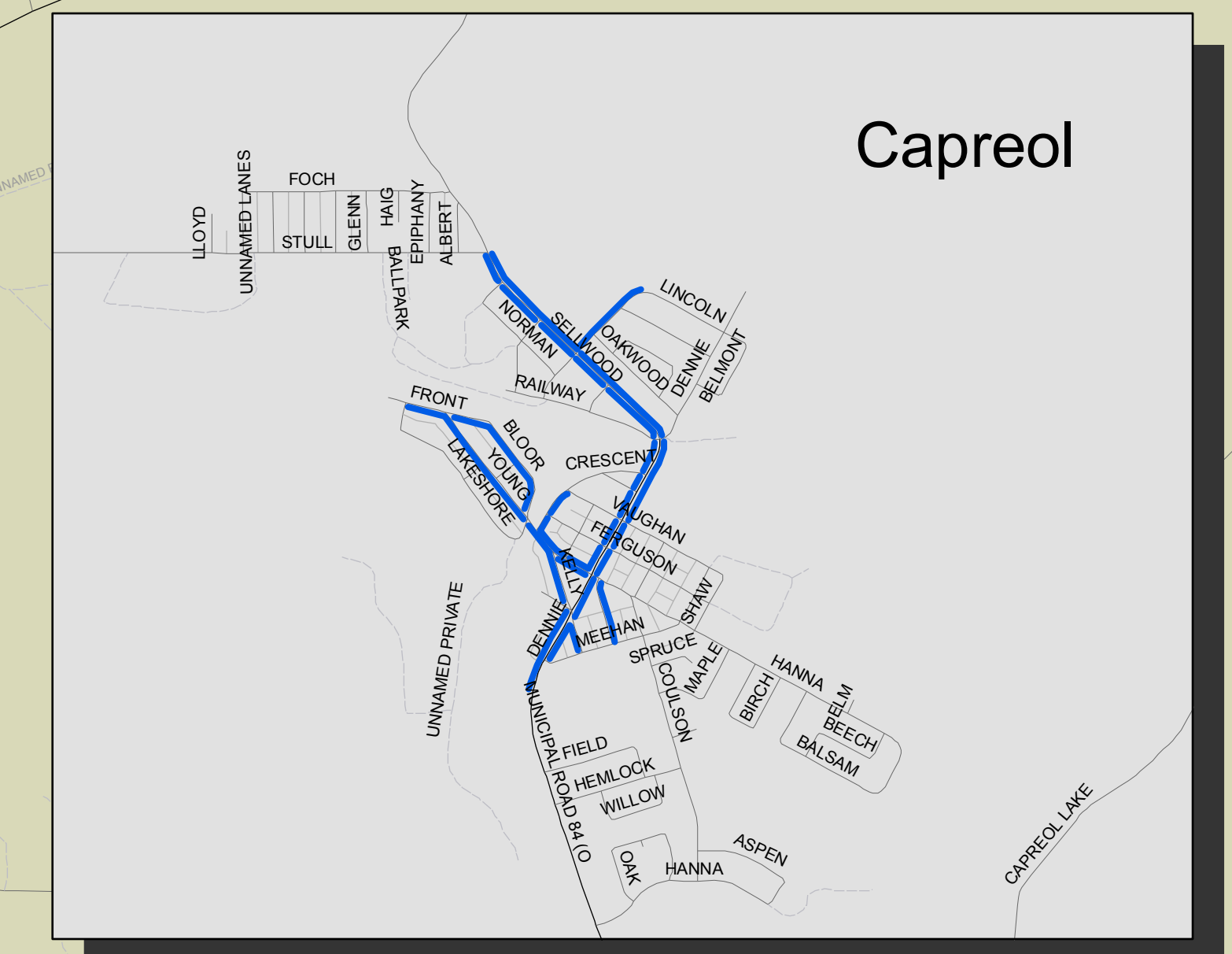
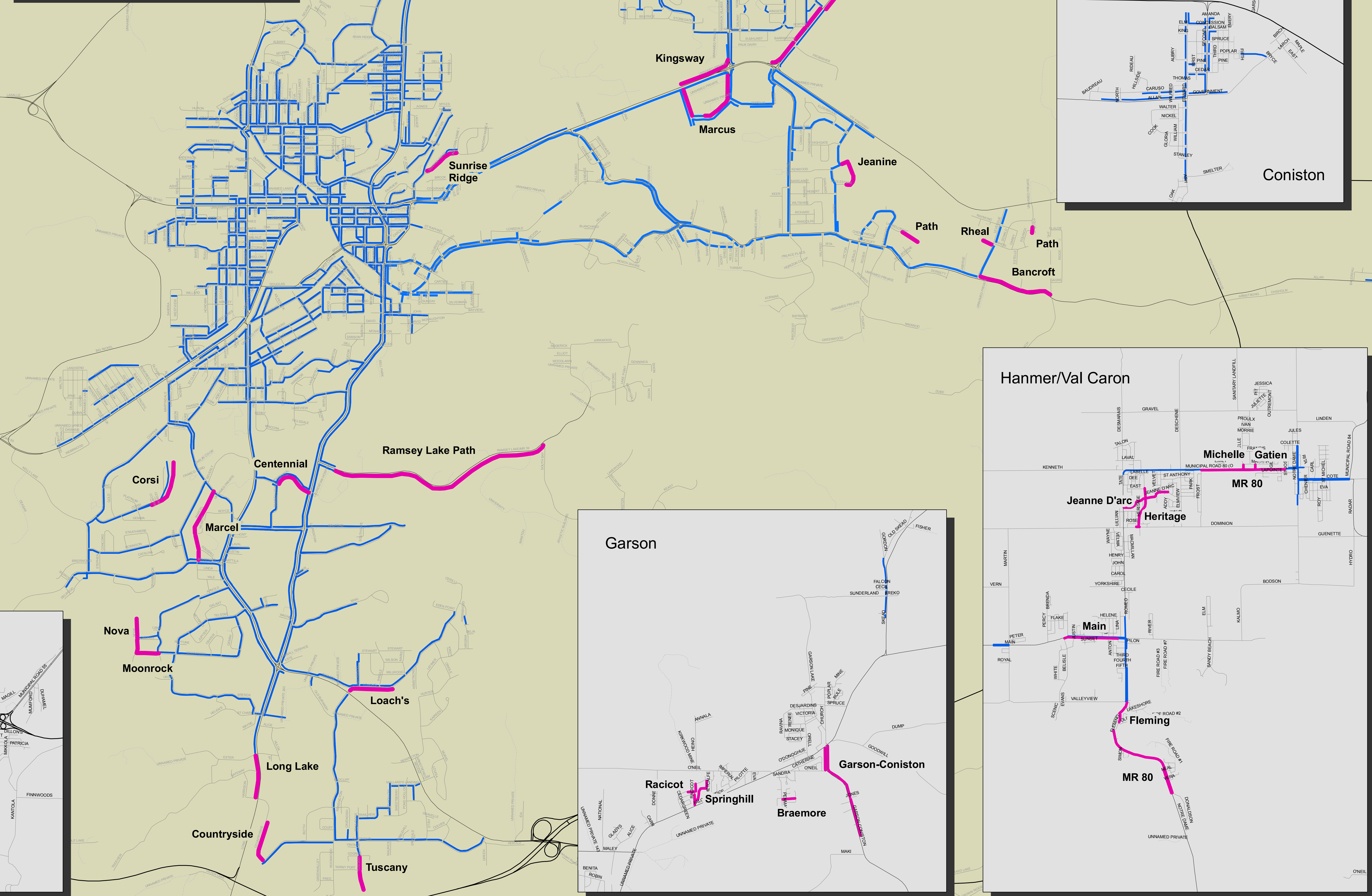
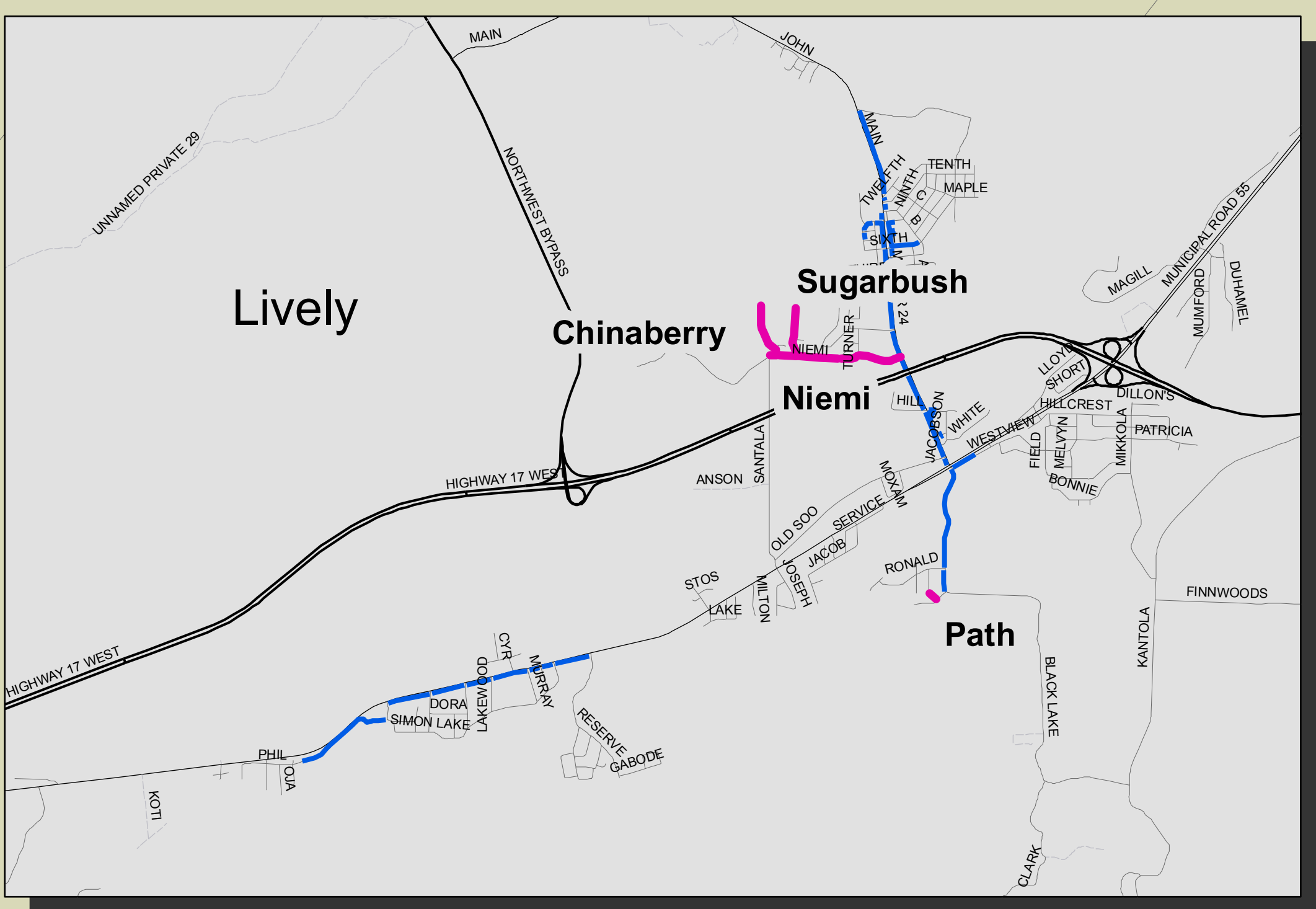
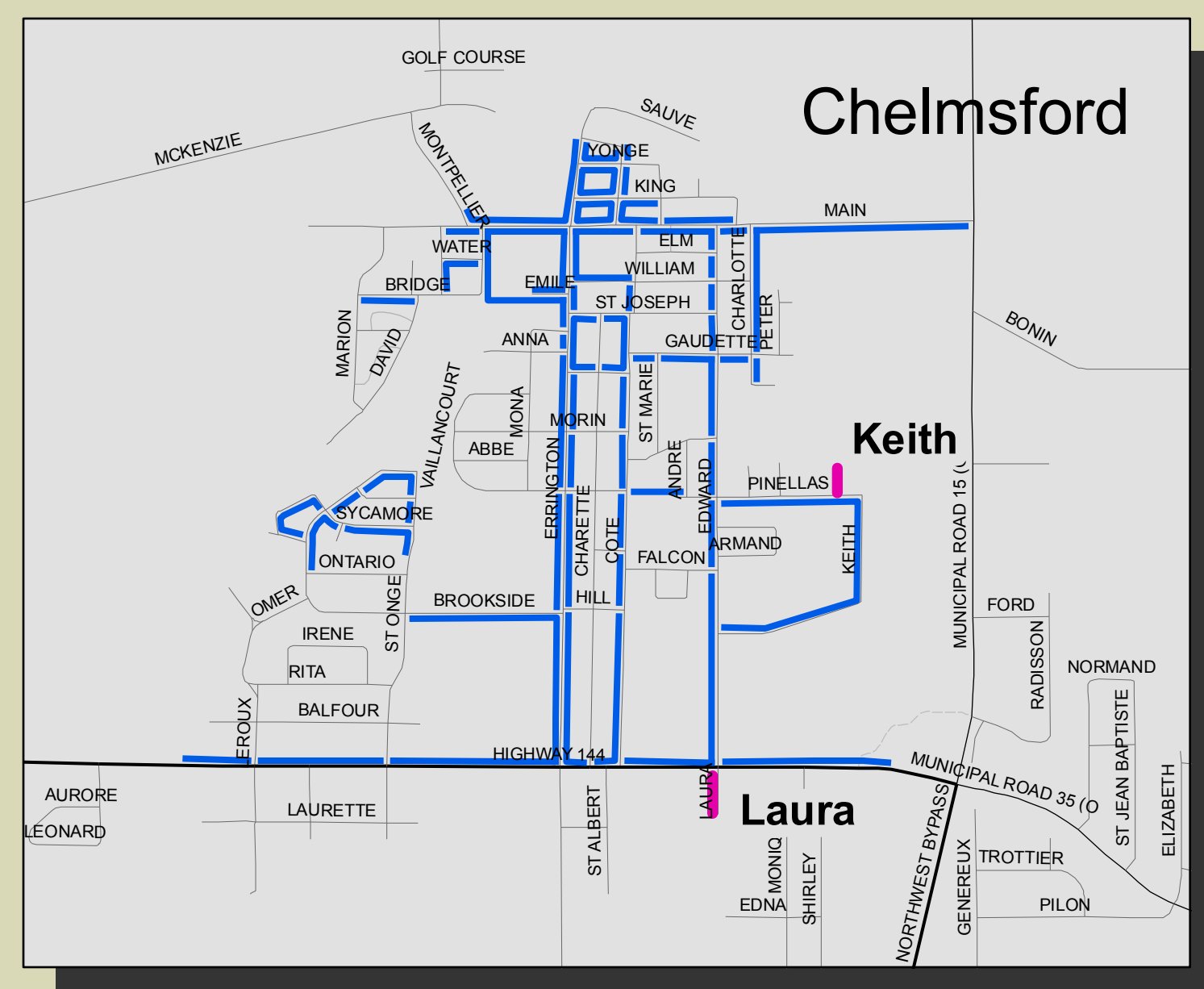
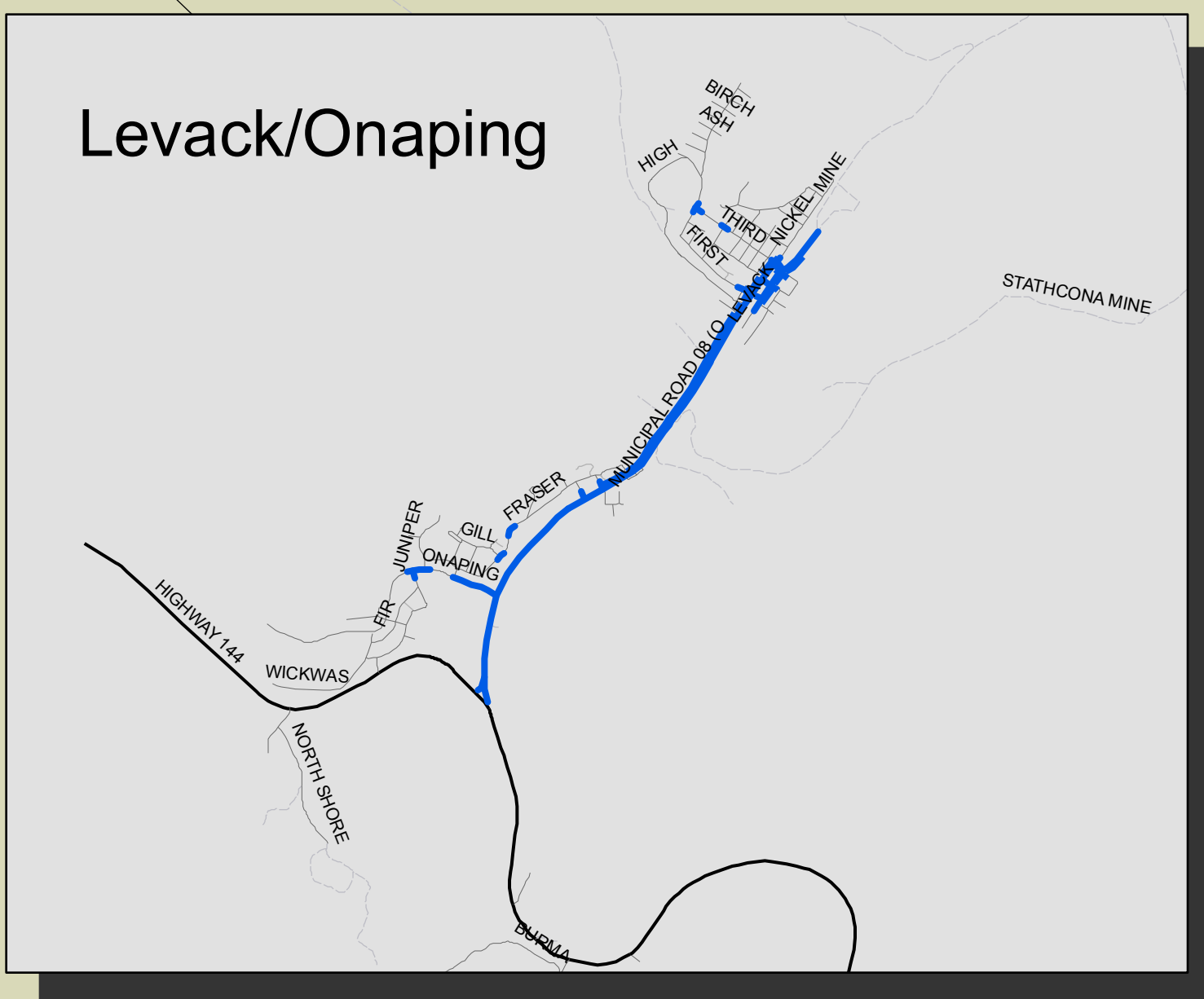
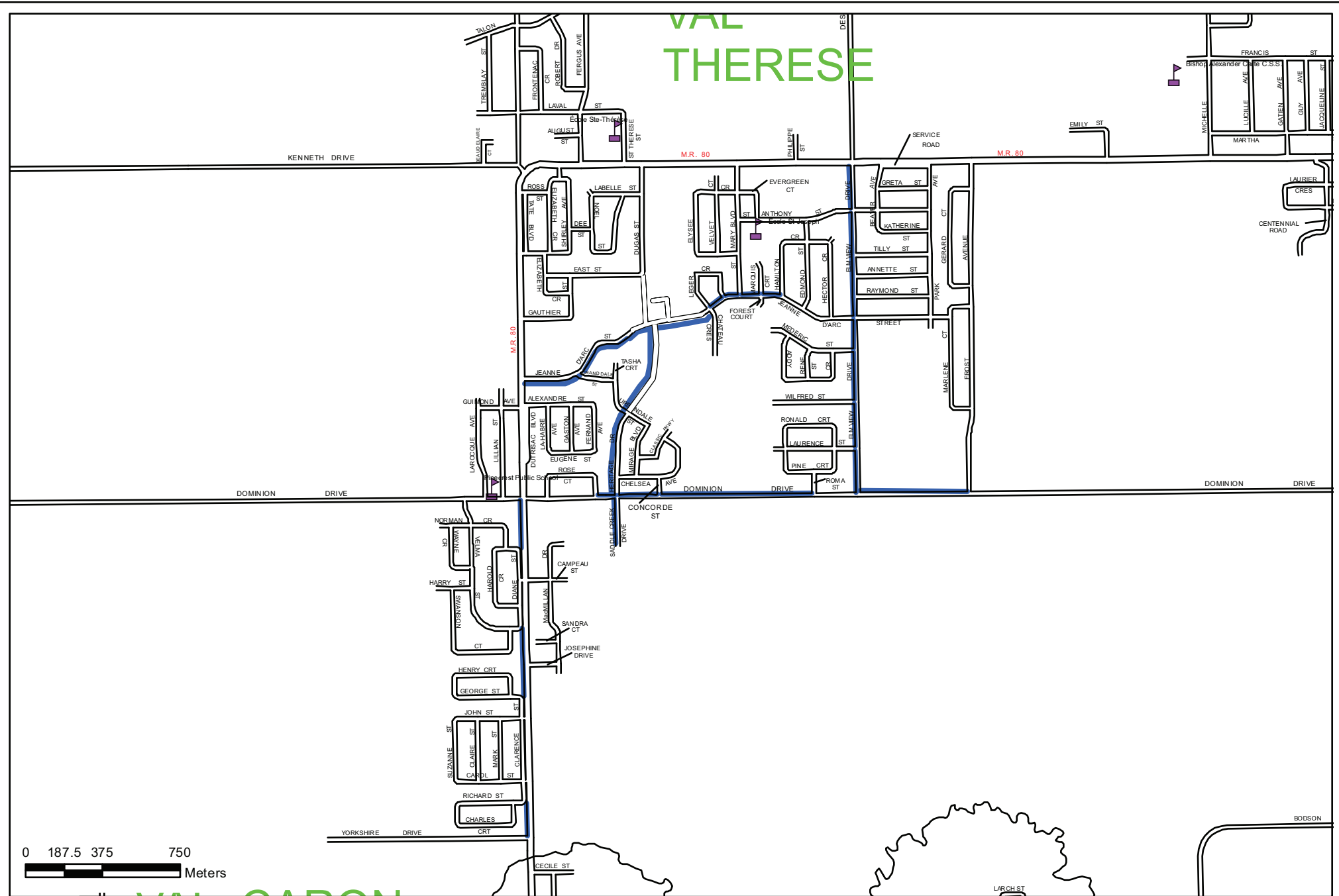


Figure 1



NORTHEAST SECTION 2013-2014

Date: October 28, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

SIDEWALK 1

1 of 3

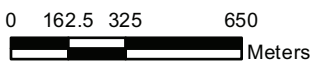
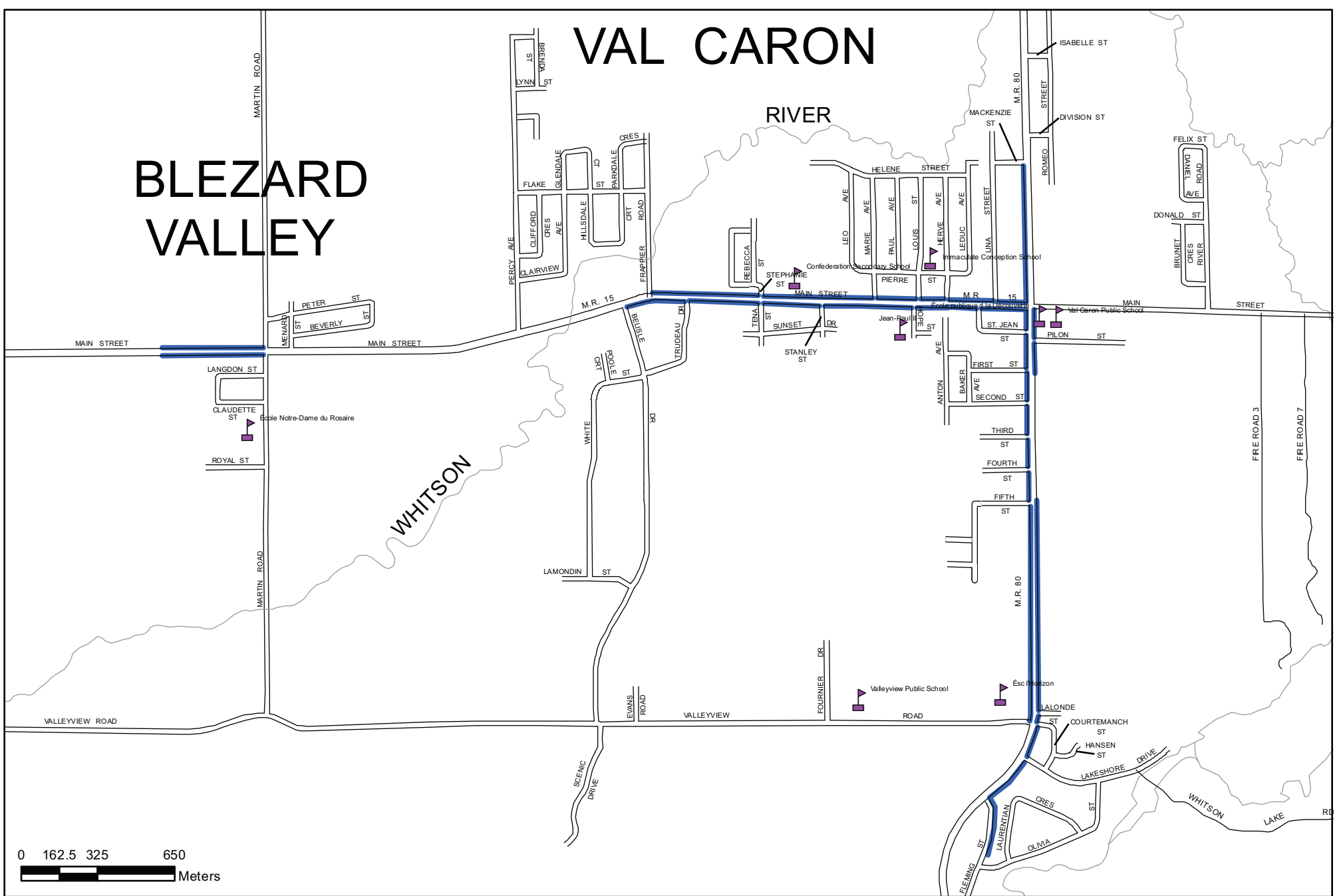
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BLEZARD VALLEY

VAL CARON

RIVER

WHITSON



NORTHEAST SECTION 2013-2014

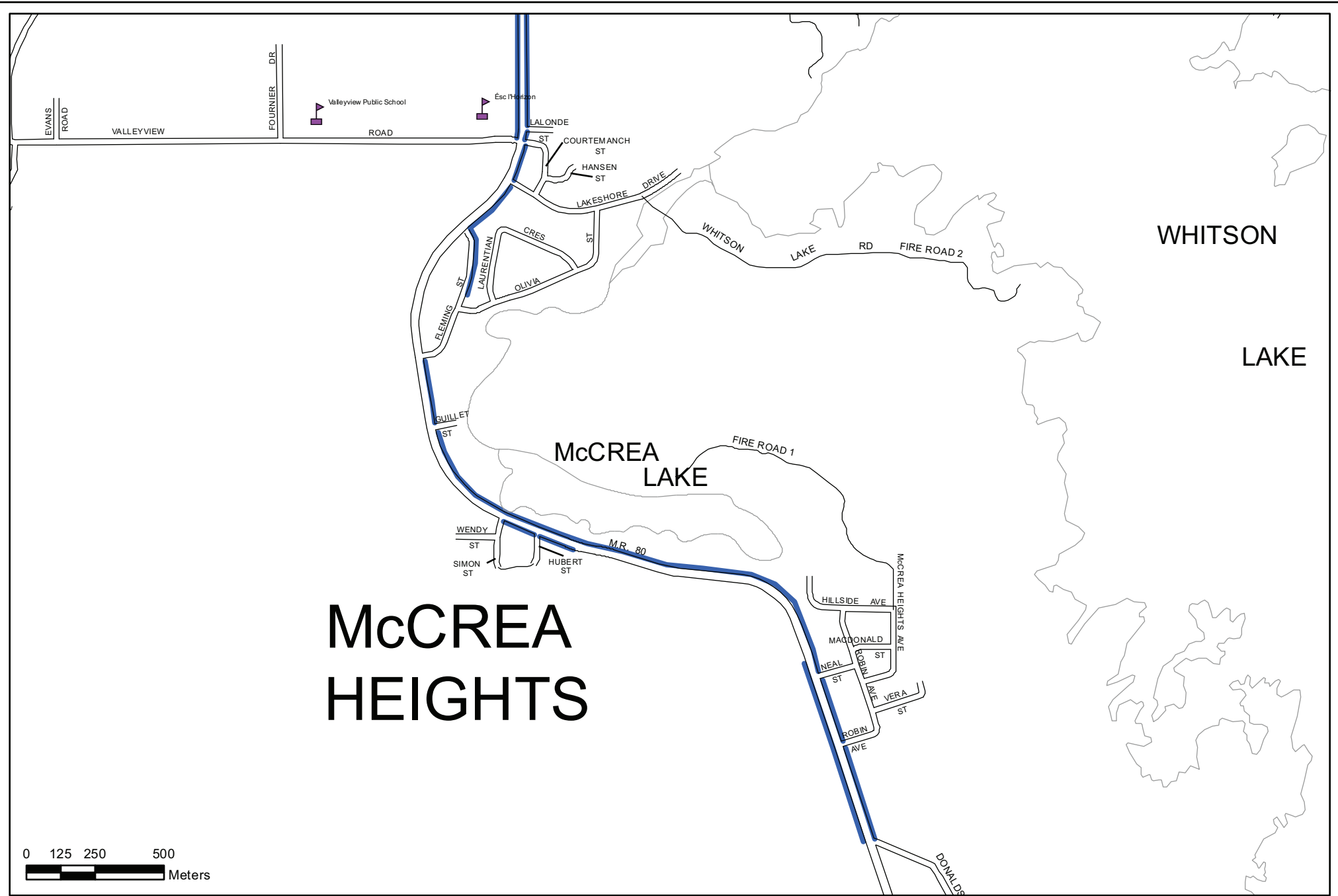
SIDEWALK 1

Date: October 23, 2013

2 of 3

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S-1252



McCREA HEIGHTS

NORTHEAST SECTION 2013-2014

Date: October 23, 2013

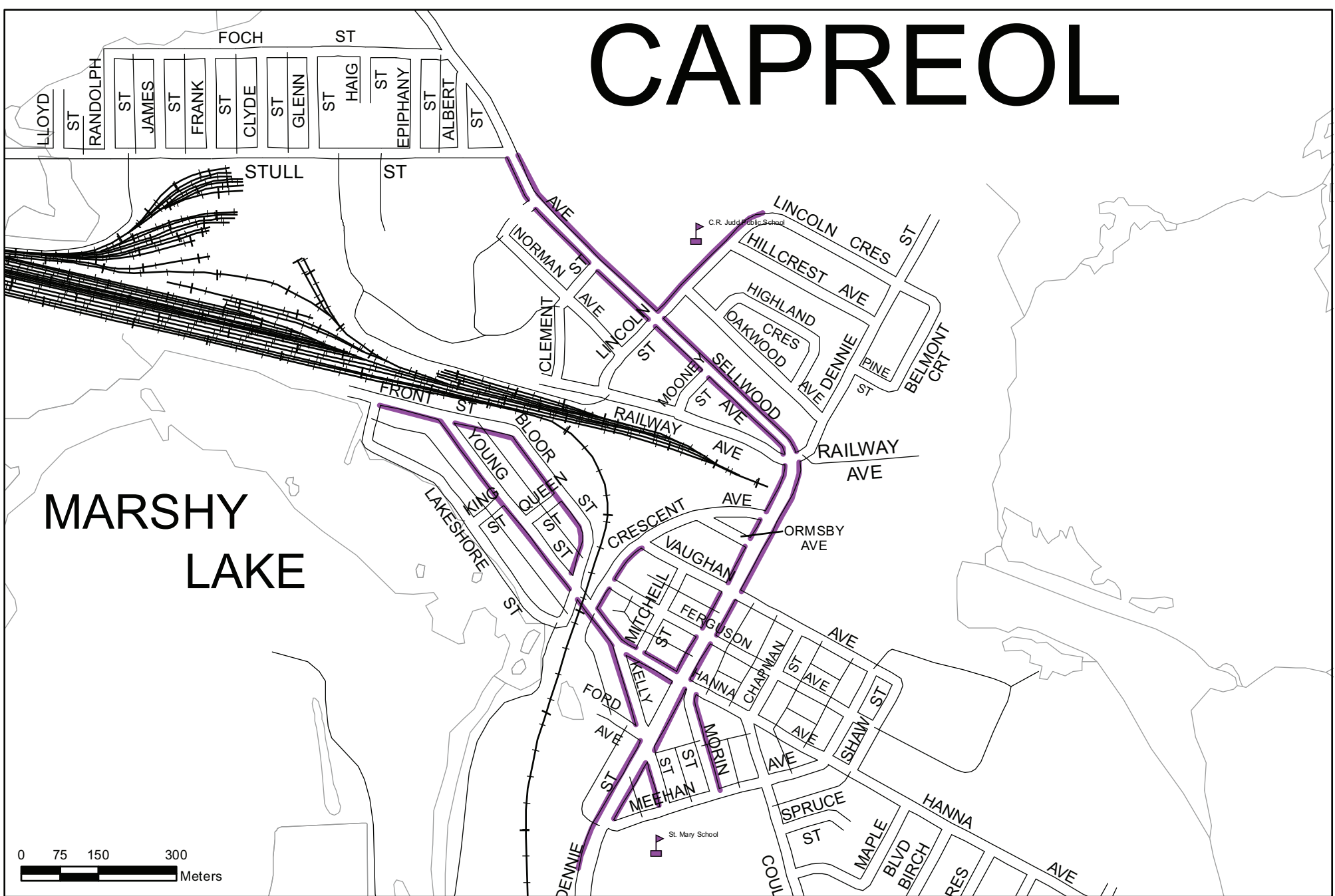
Created by Planning Services, Growth & Development Department, City of Greater Sudbury

SIDEWALK 1

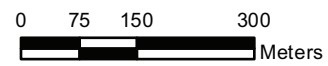
3 of 3

Vehicle: S-1252

CAPREOL



MARSHY
LAKE



NORTHEAST SECTION 2013-2014

SIDEWALK 2

Date: October 23, 2013

1 of 2

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

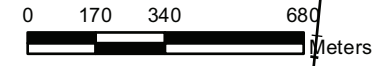
Vehicle: S-234

THERESE

HANMER

← See Inset

Inset VAL THERESE



NORTHEAST SECTION 2013-2014

SIDEWALK 2

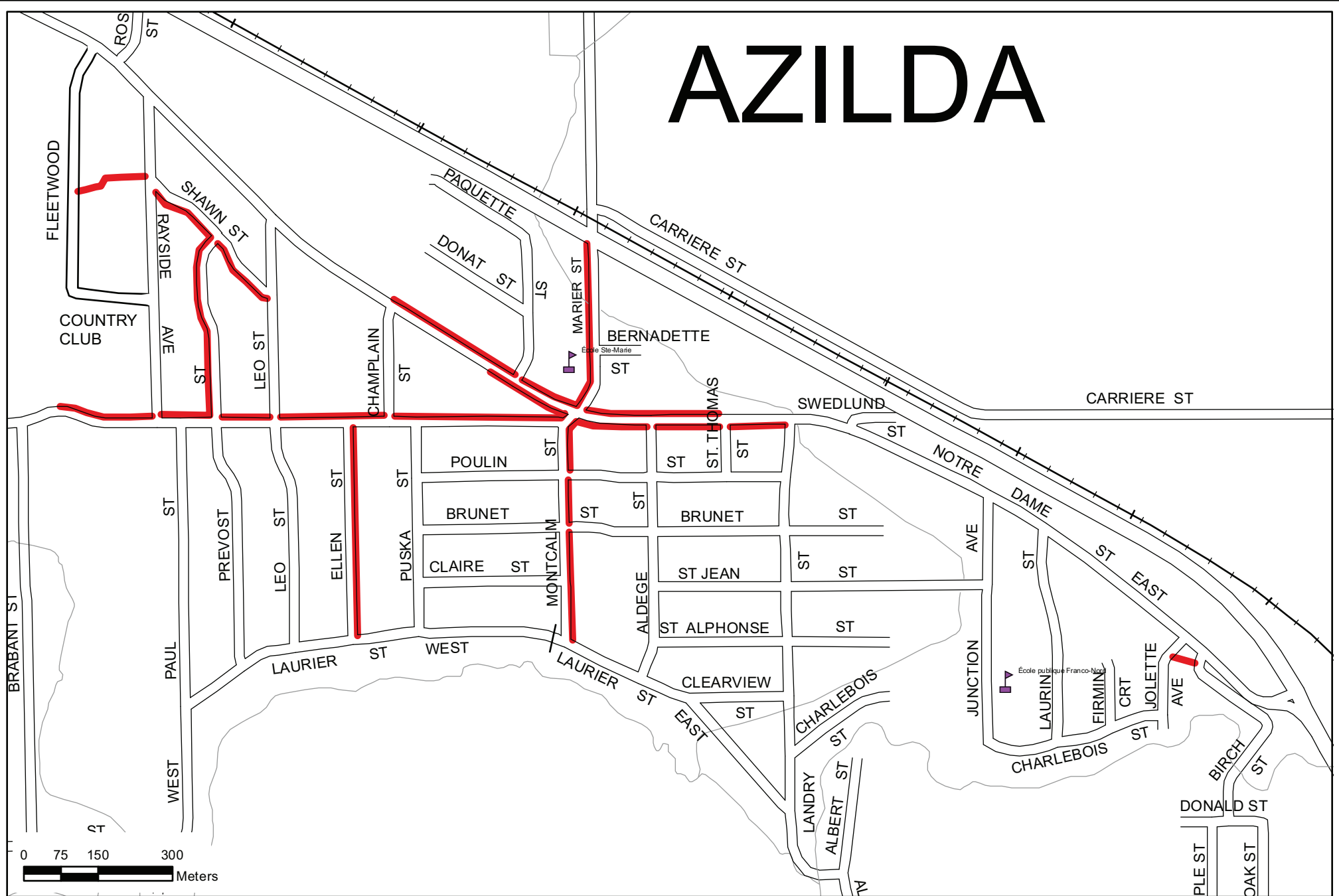
Date: October 28, 2013

2 of 2

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S-234

AZILDA



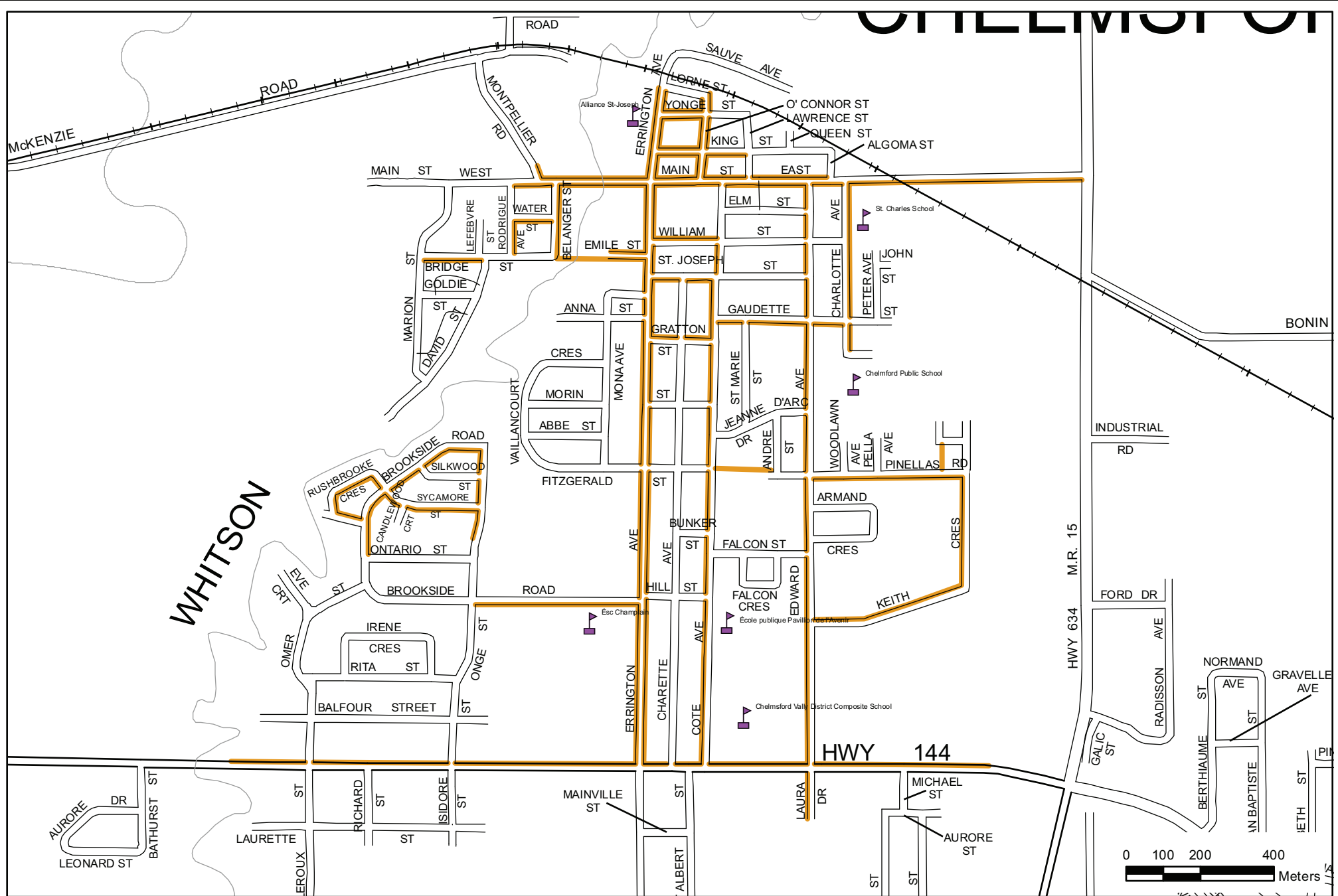
NORTHWEST SECTION 2013-2014

SIDEWALK 1

Date: October 30, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S256



NORTHWEST SECTION 2013-2014

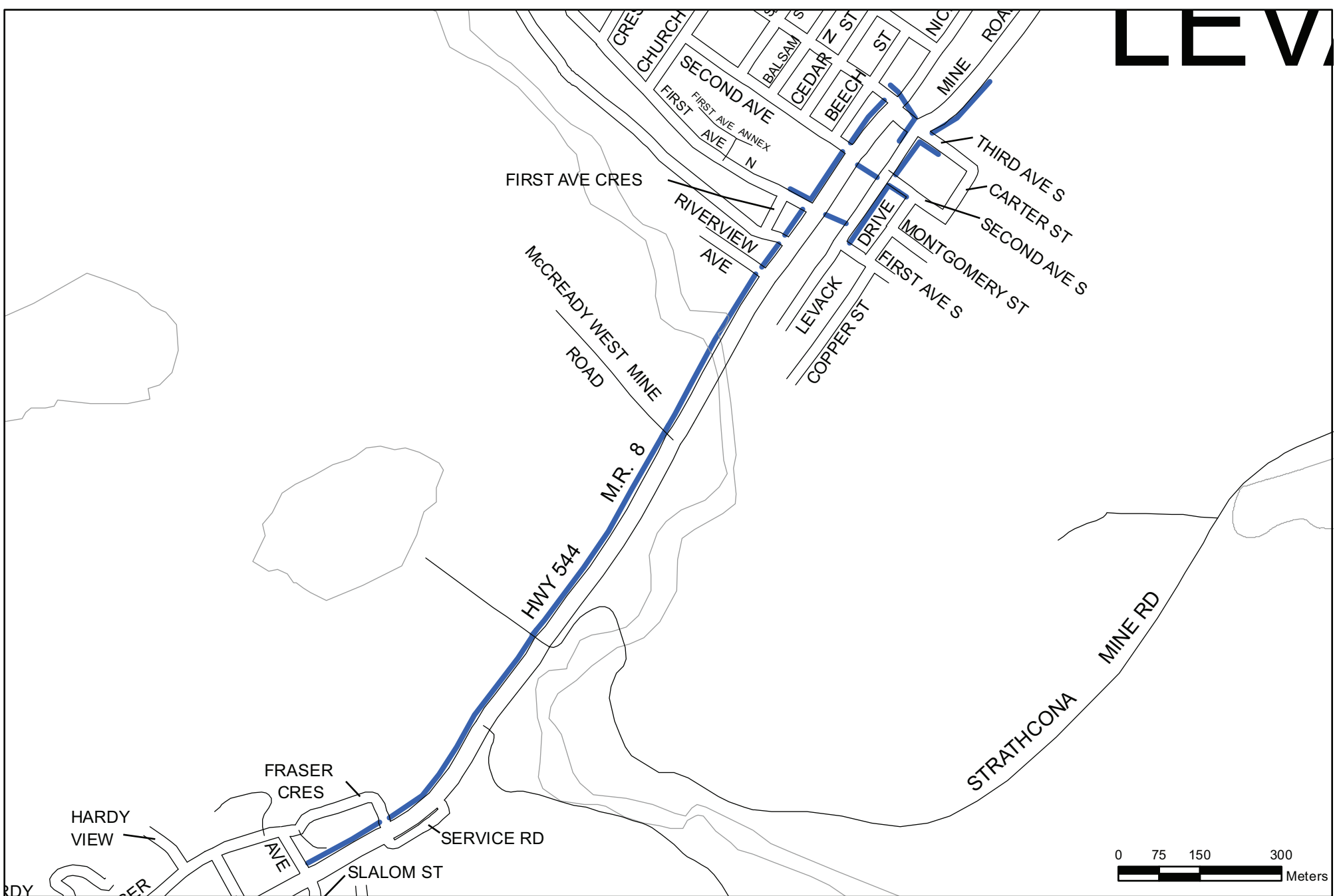
SIDEWALK 2

Date: October 30, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S251

LEVEL

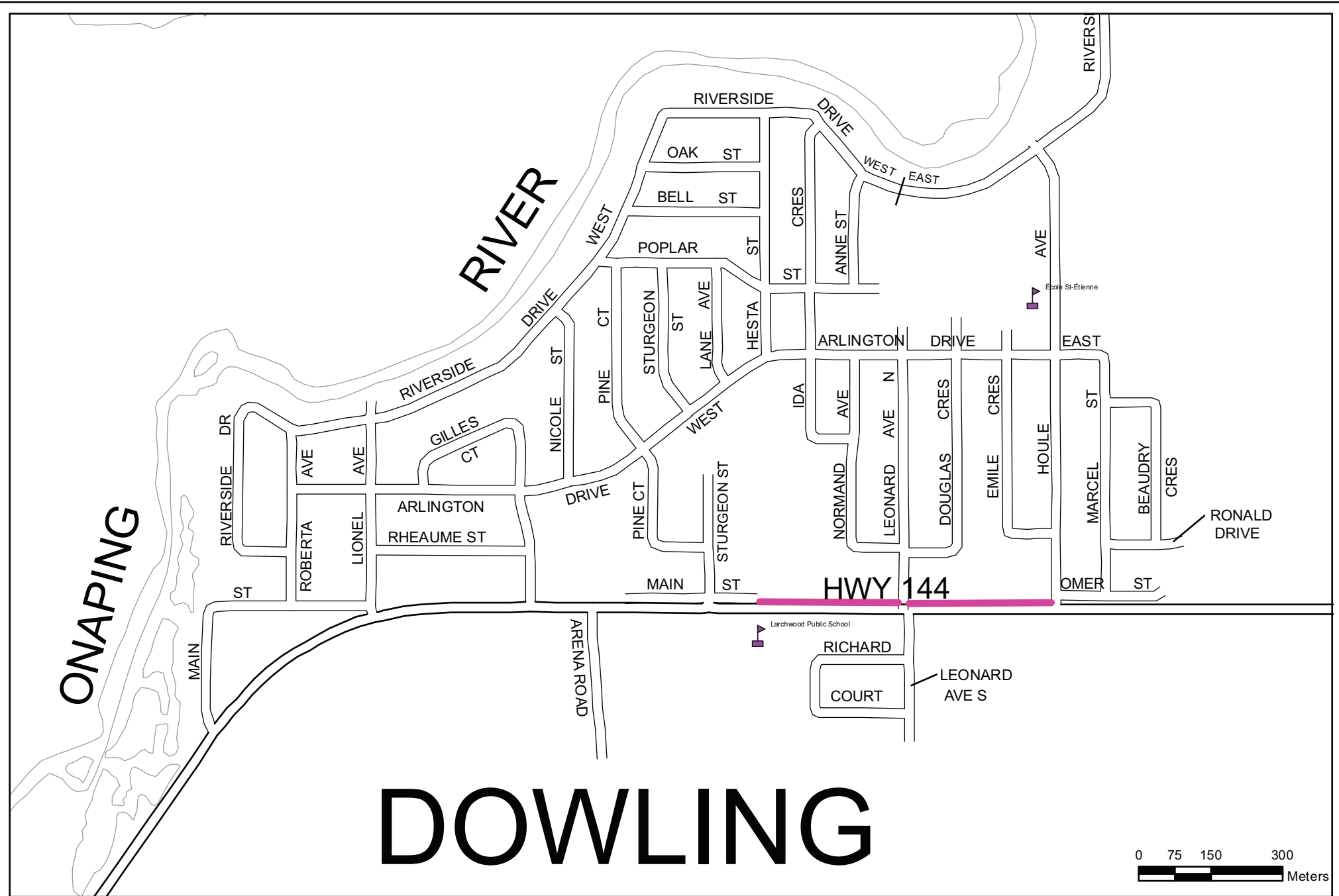


NORTHWEST SECTION 2013-2014

SIDEWALK 3

Date: October 30, 2013
 Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S258



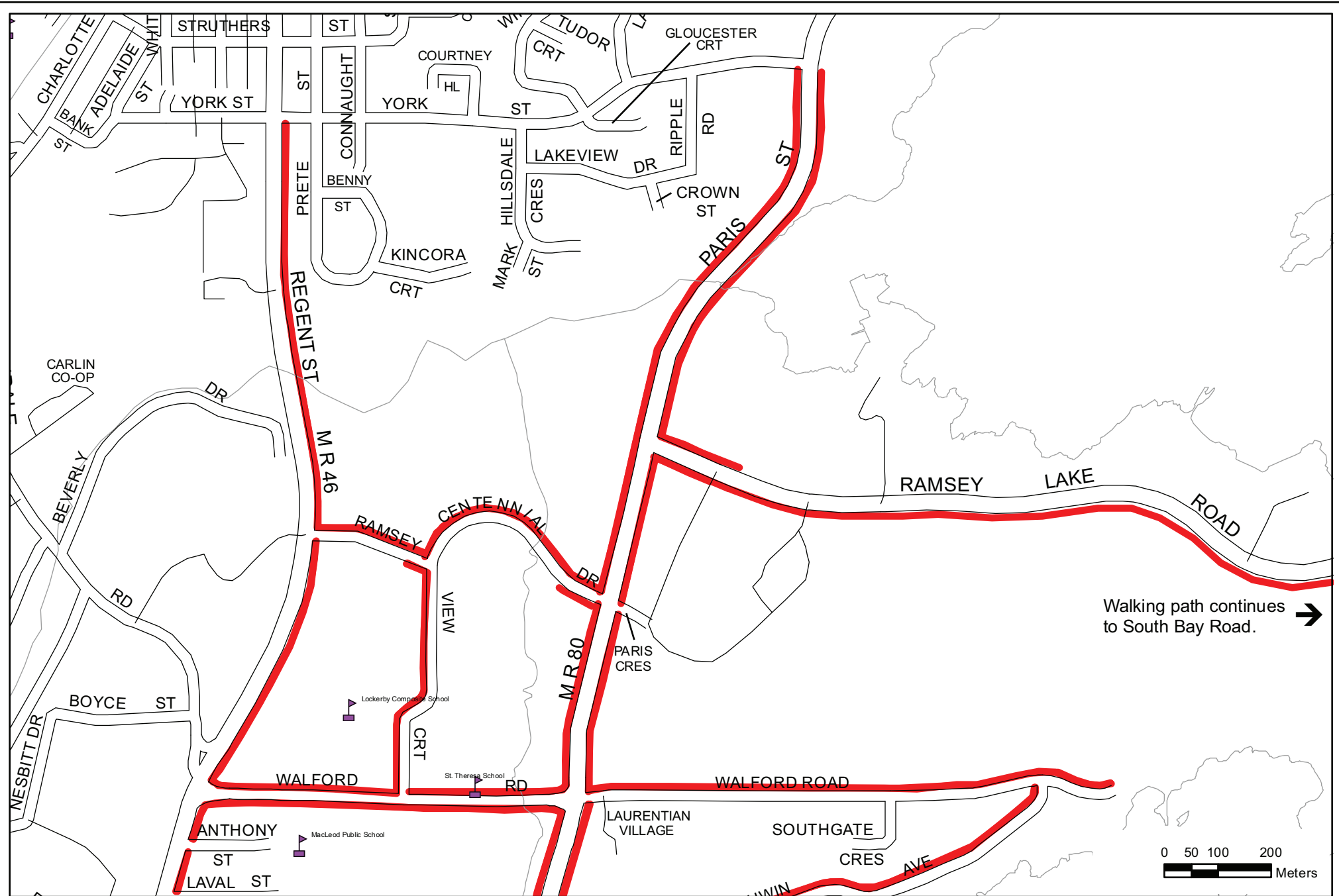
NORTHWEST SECTION 2013-2014

SIDEWALK 4

Date: October 30, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: Spare Unit S259

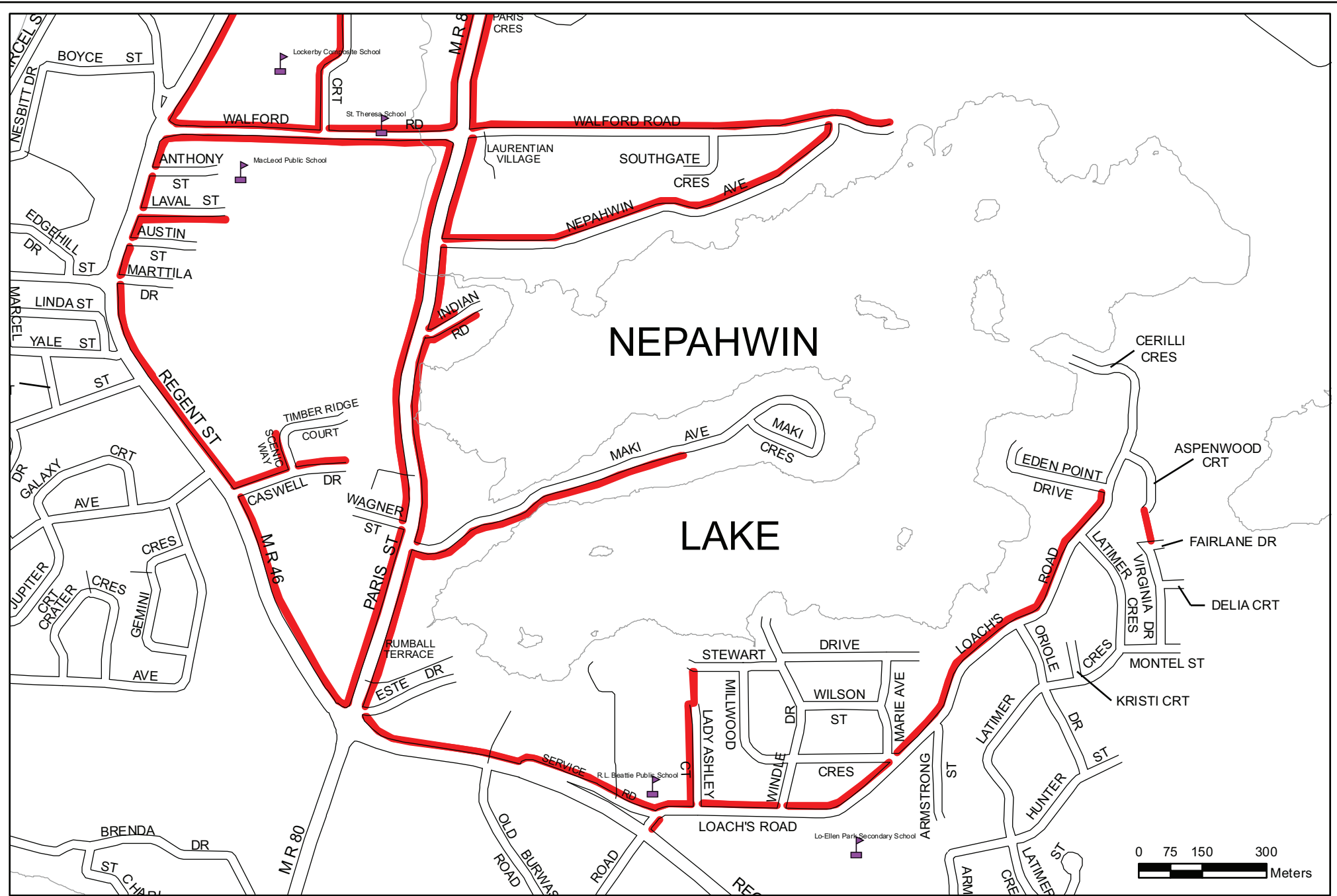


SOUTH SECTION 2013-2014

SIDEWALK 1 ODD

Date: October 30, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

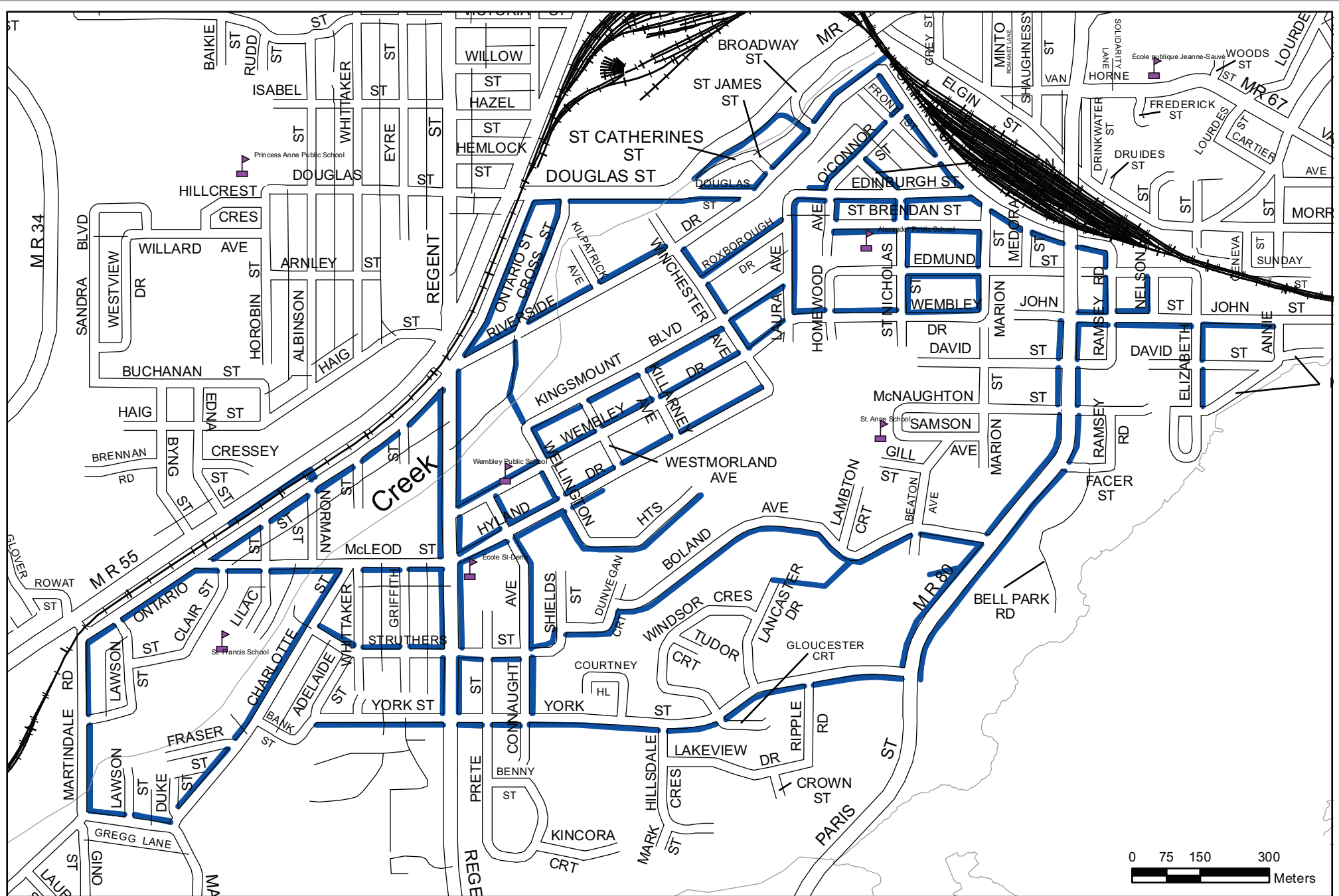


SOUTH SECTION 2013-2014

SIDEWALK 1 ODD

Date: October 30, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

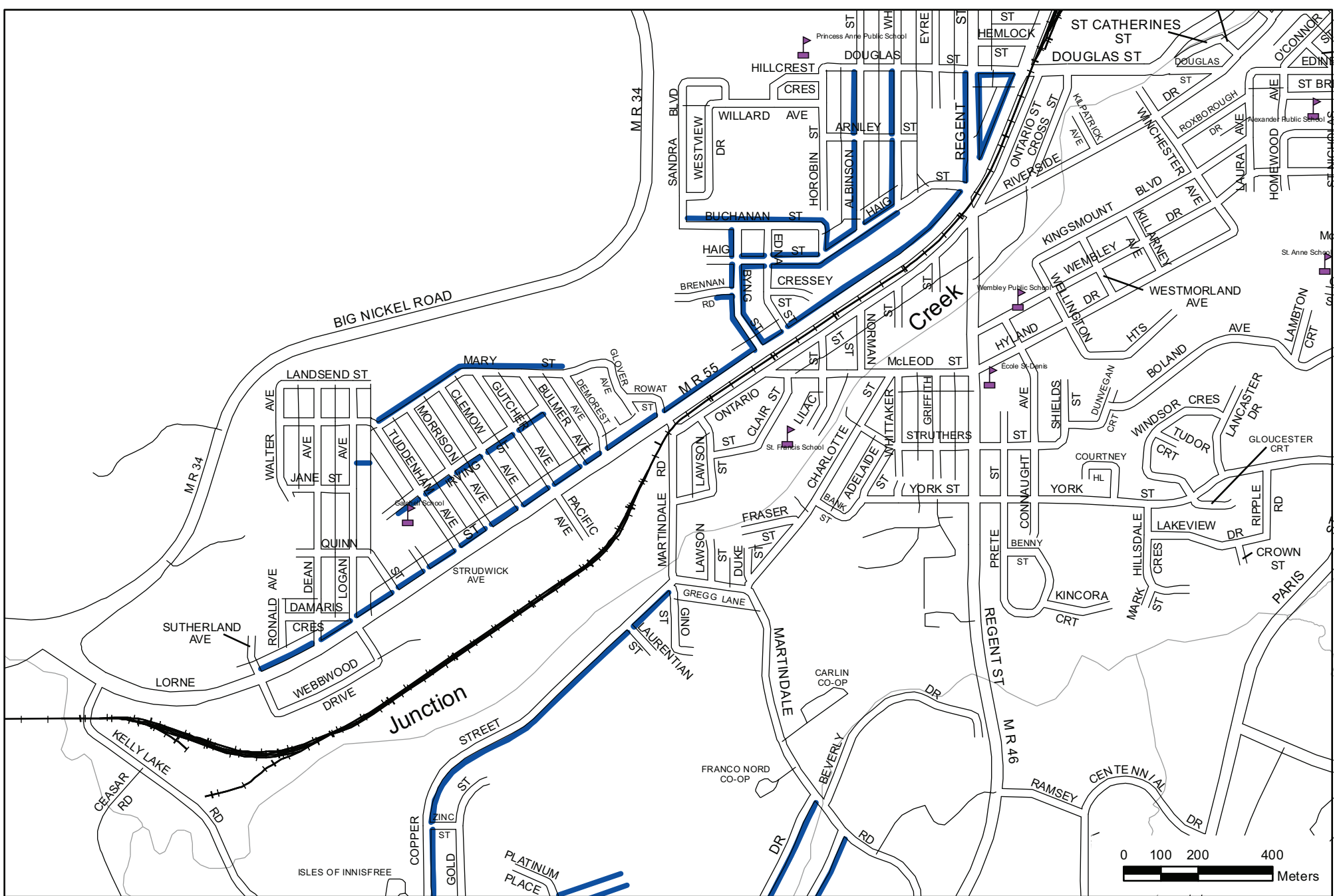


SOUTH SECTION 2013-2014

SIDEWALK 2 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

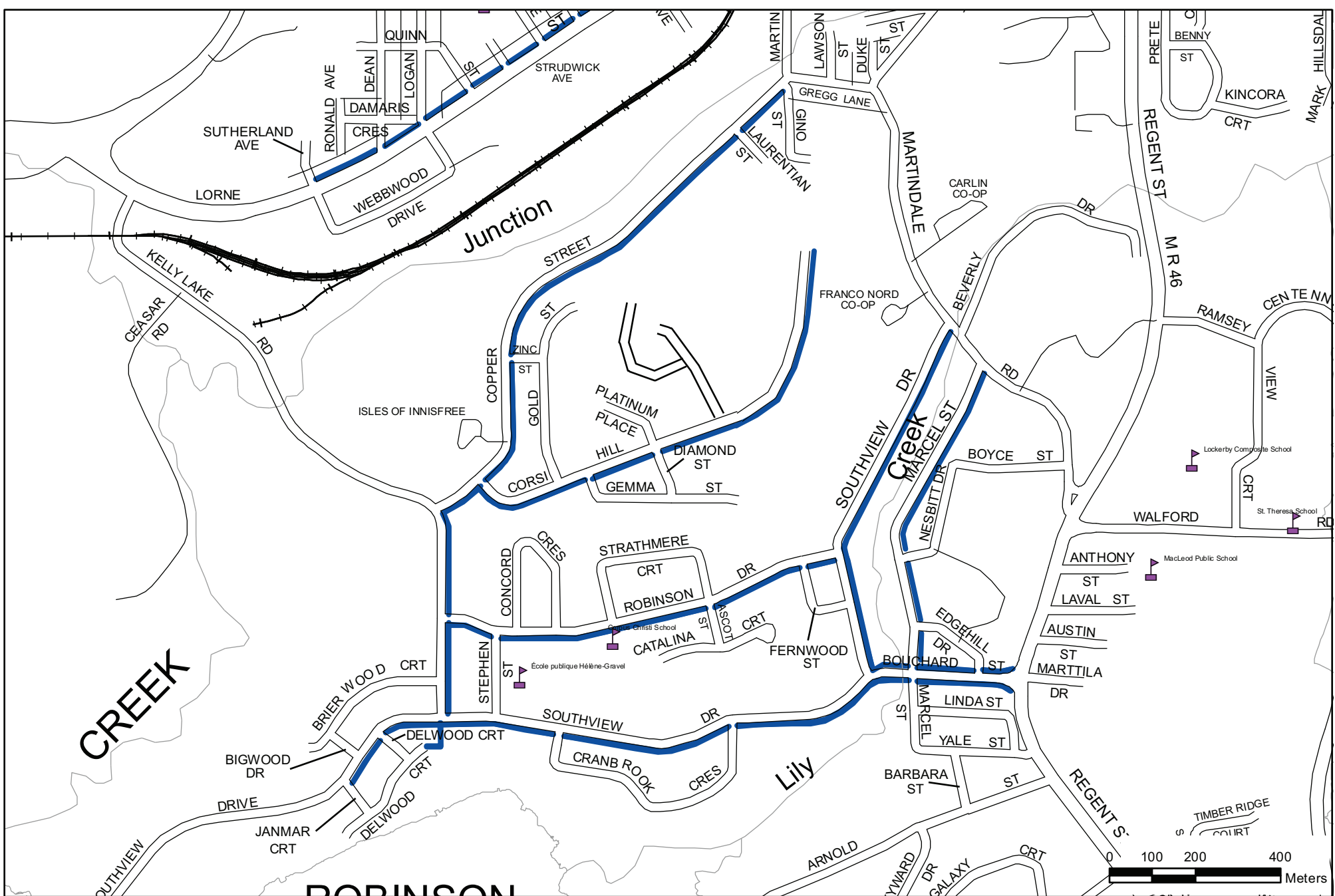


SOUTH SECTION 2013-2014

SIDEWALK 3 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury



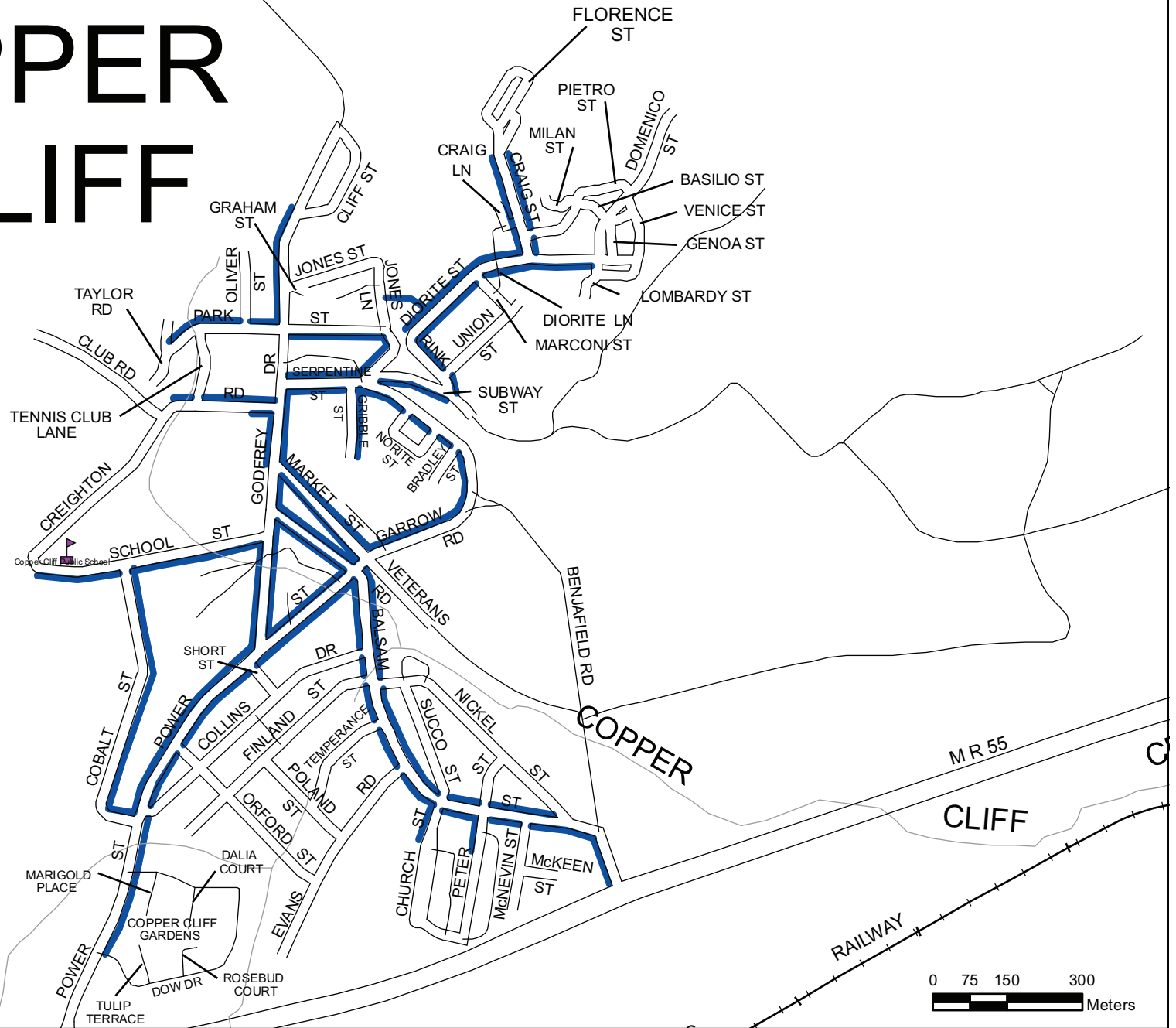
SOUTH SECTION 2013-2014

SIDEWALK 3 ODD

Date: October 30, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

COPPER CLIFF

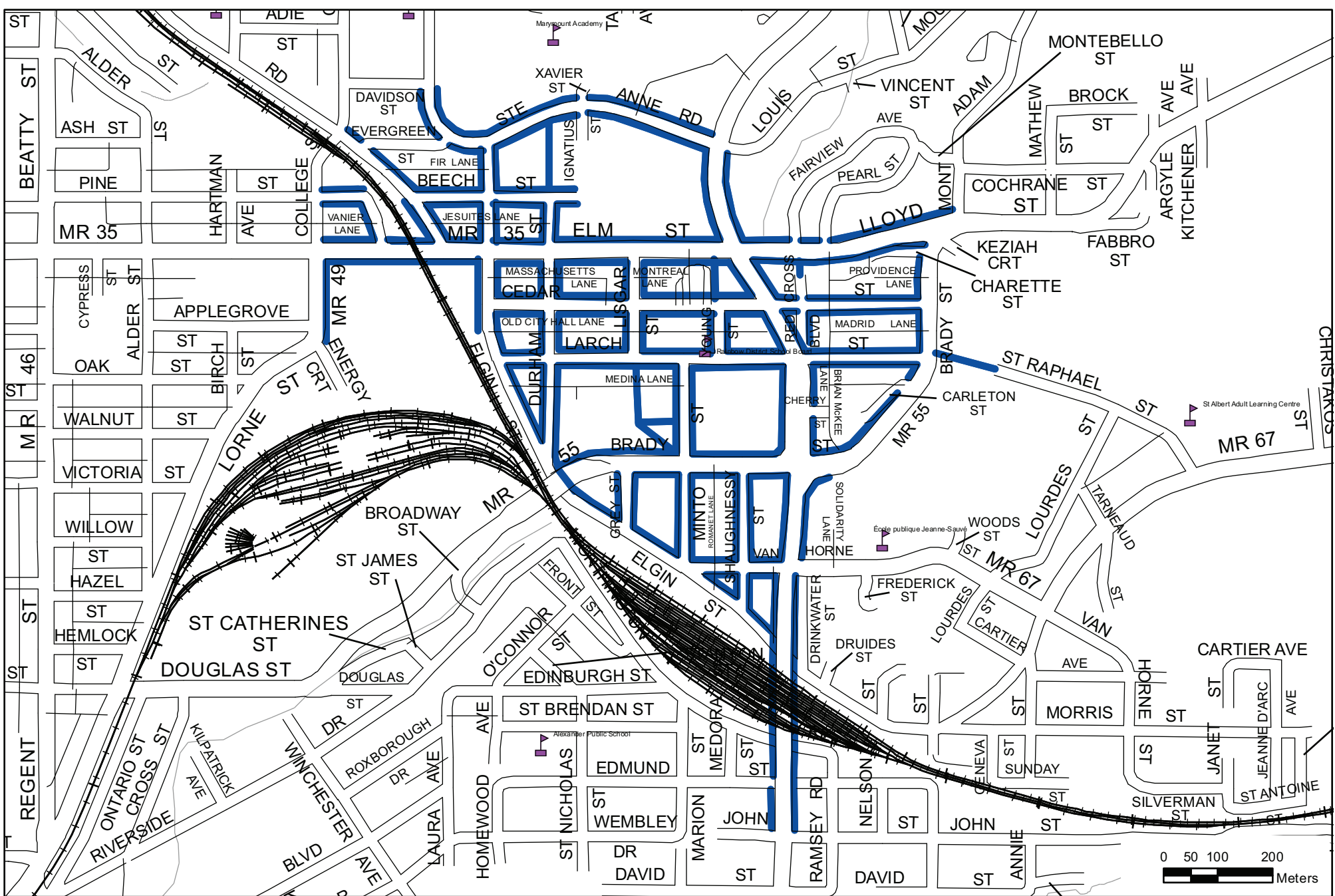


SOUTH SECTION 2013-2014

SIDEWALK 3 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

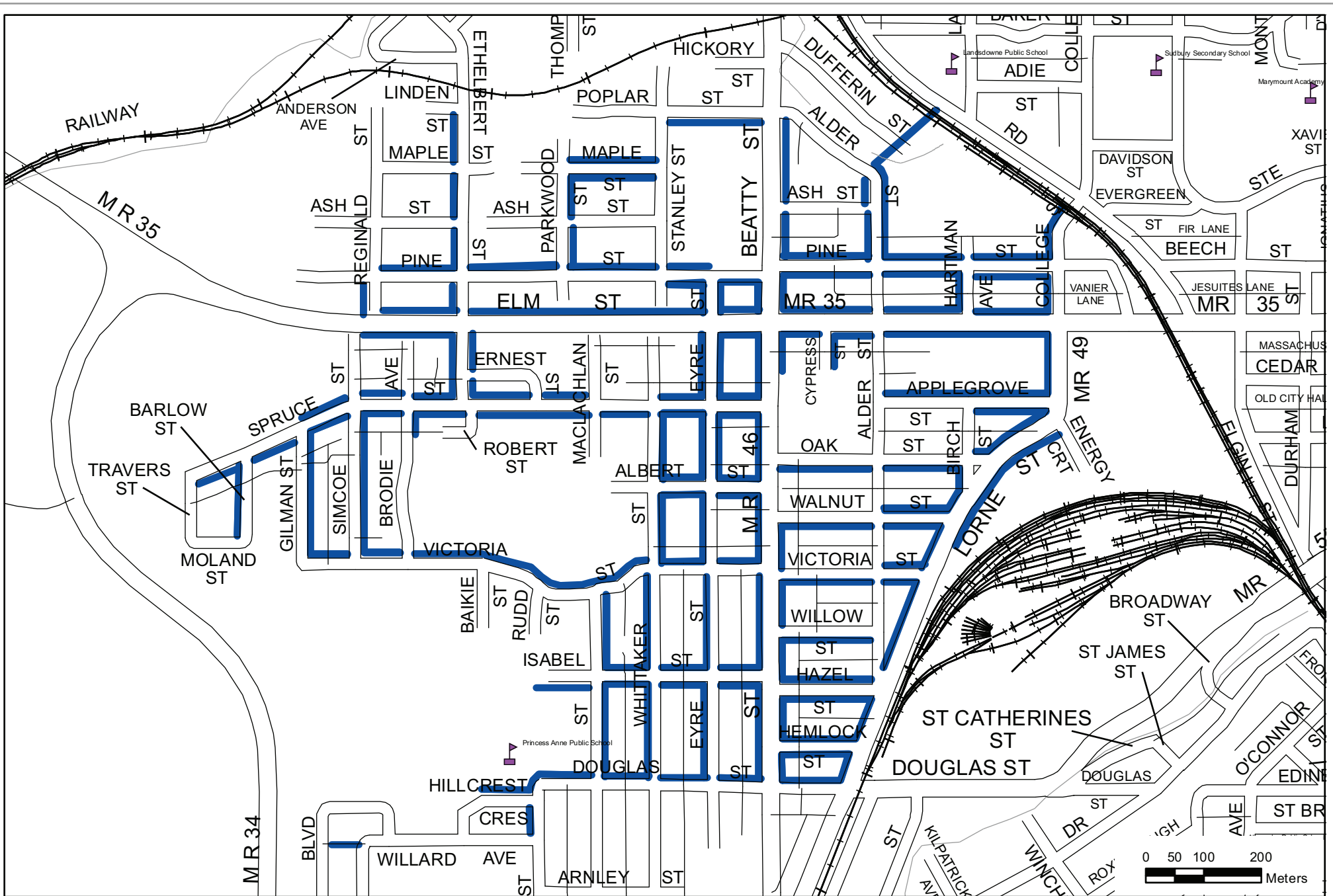


SOUTH SECTION 2013-2014

SIDEWALK 4 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

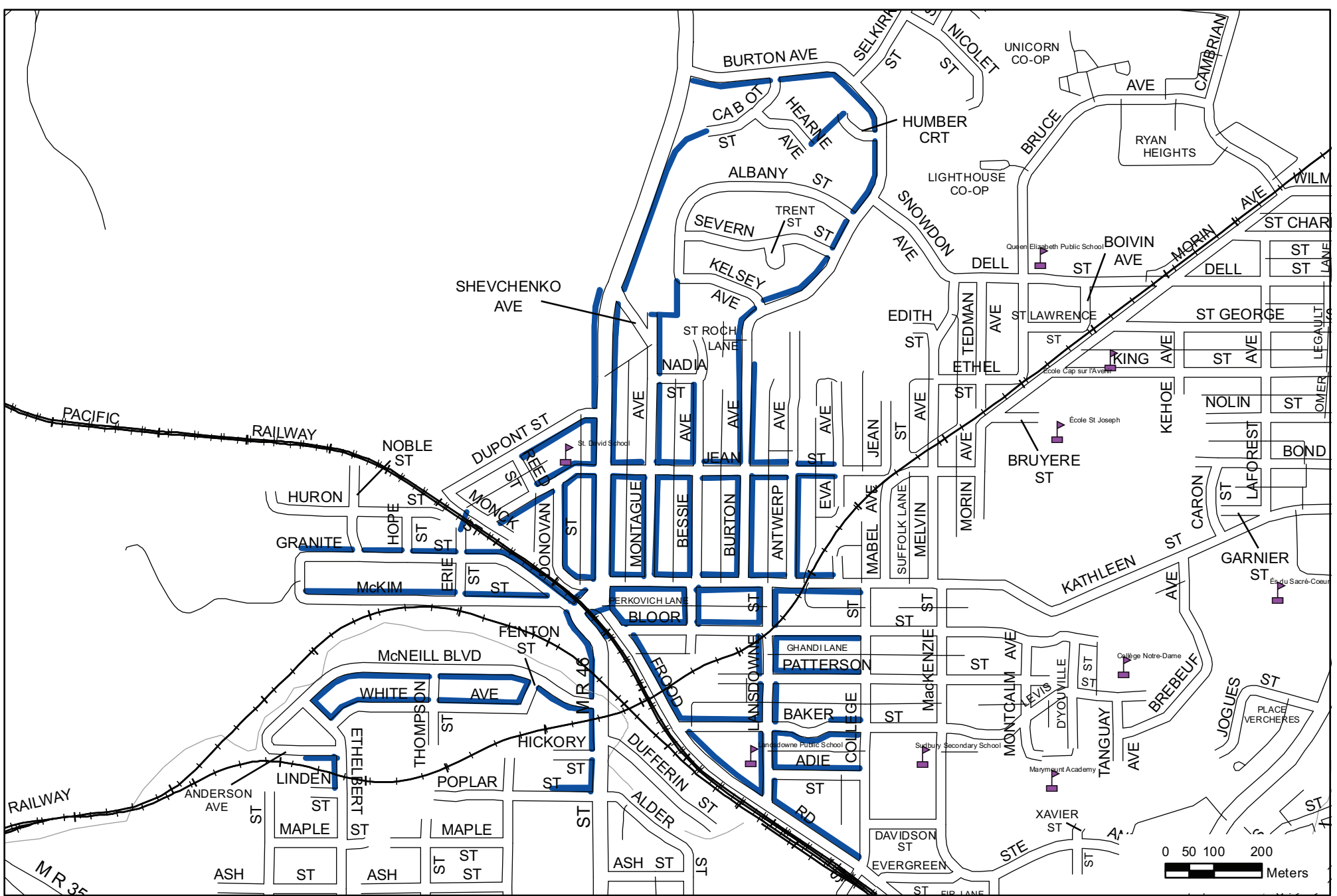


SOUTH SECTION 2013-2014

SIDEWALK 5 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

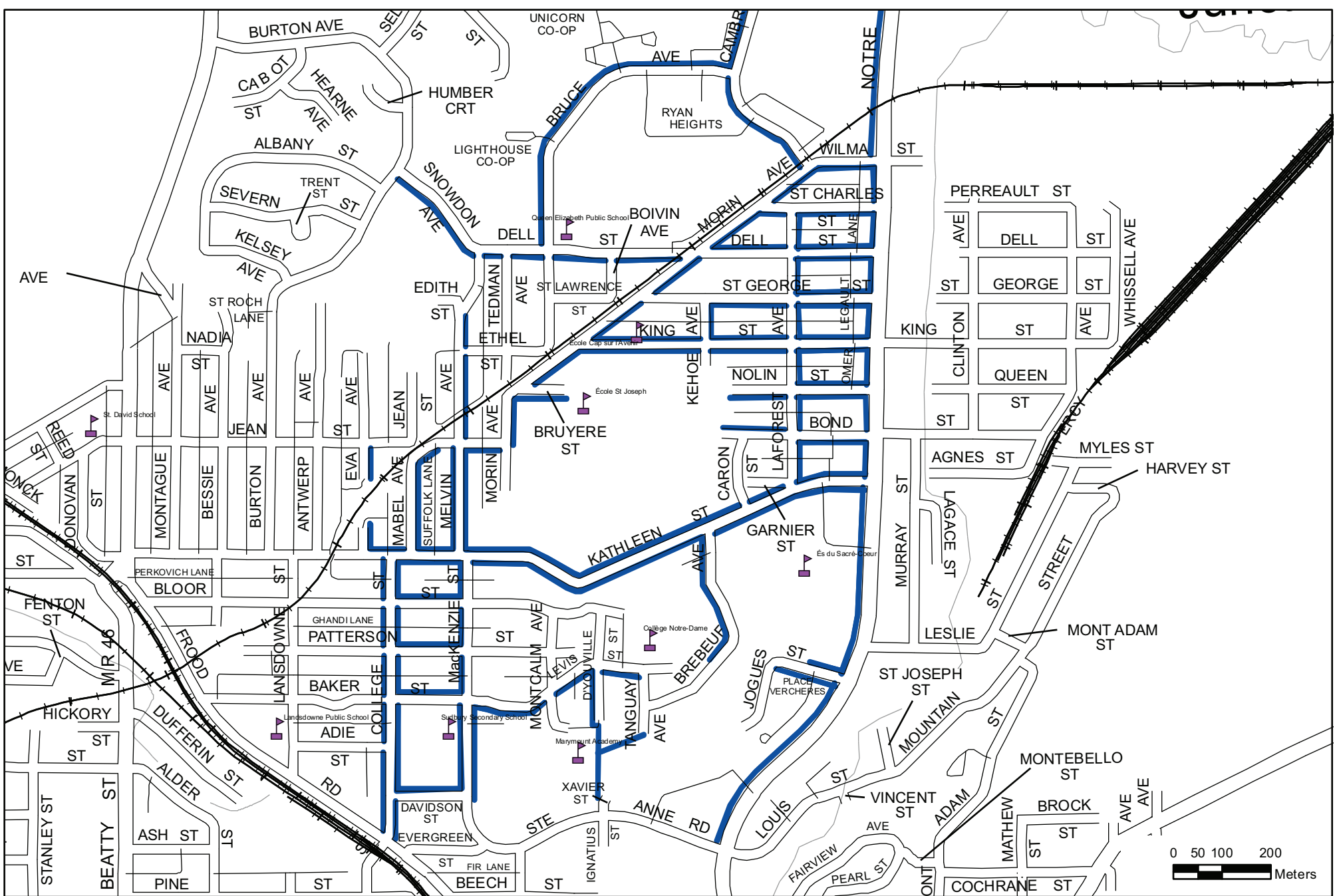


SOUTH SECTION 2013-2014

SIDEWALK 6 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

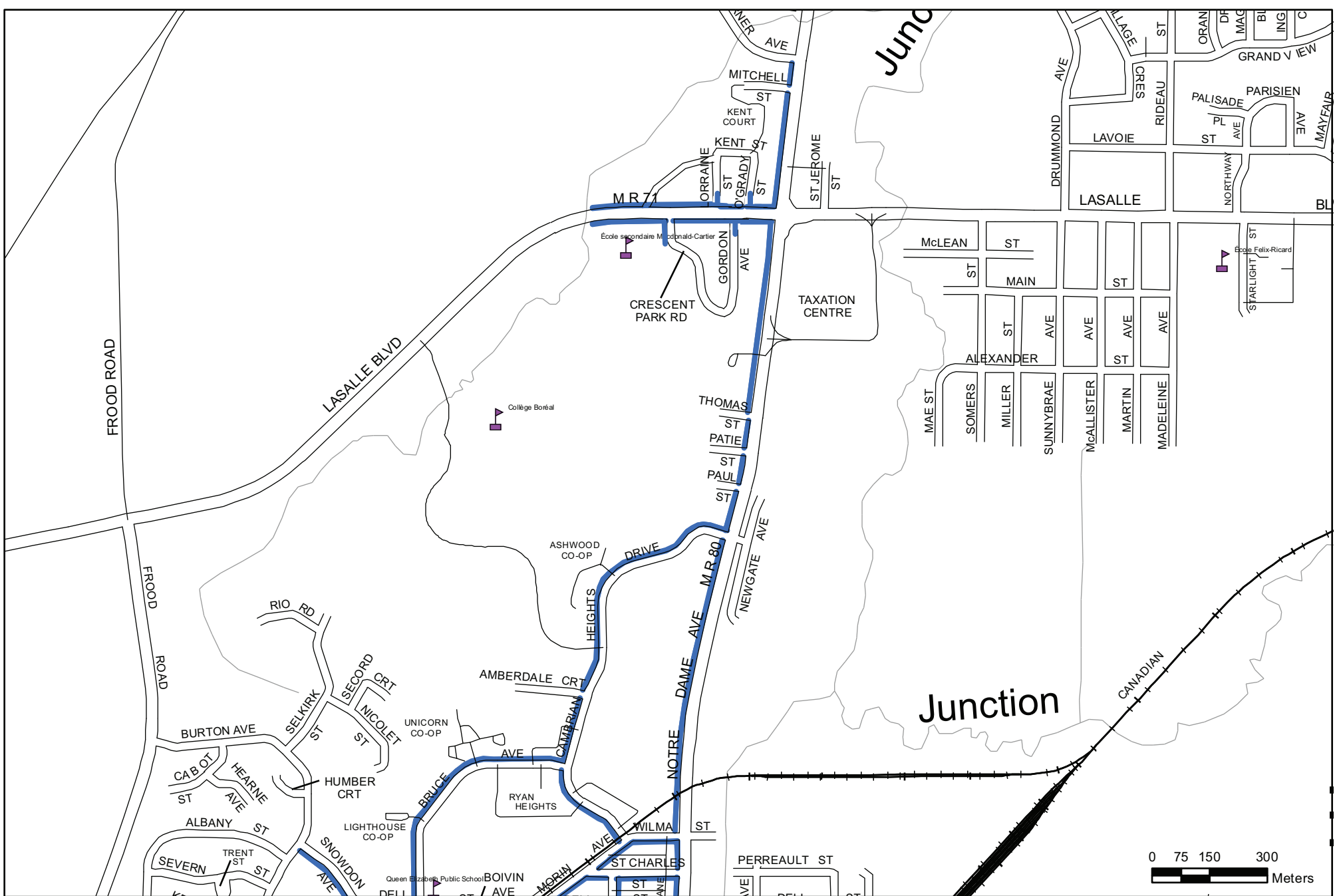


SOUTH SECTION 2013-2014

SIDEWALK 7 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

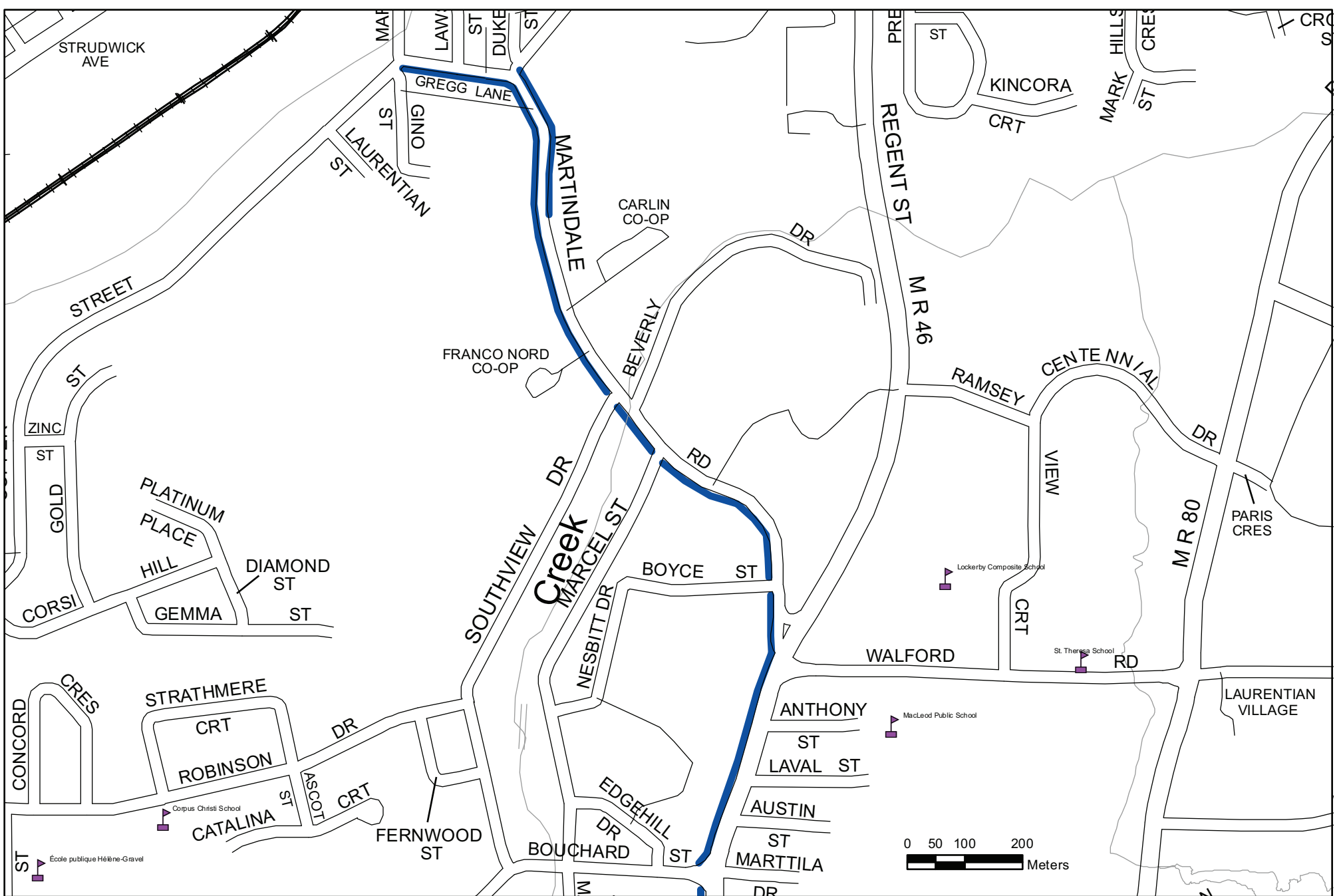


SOUTH SECTION 2013-2014

SIDEWALK 7 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

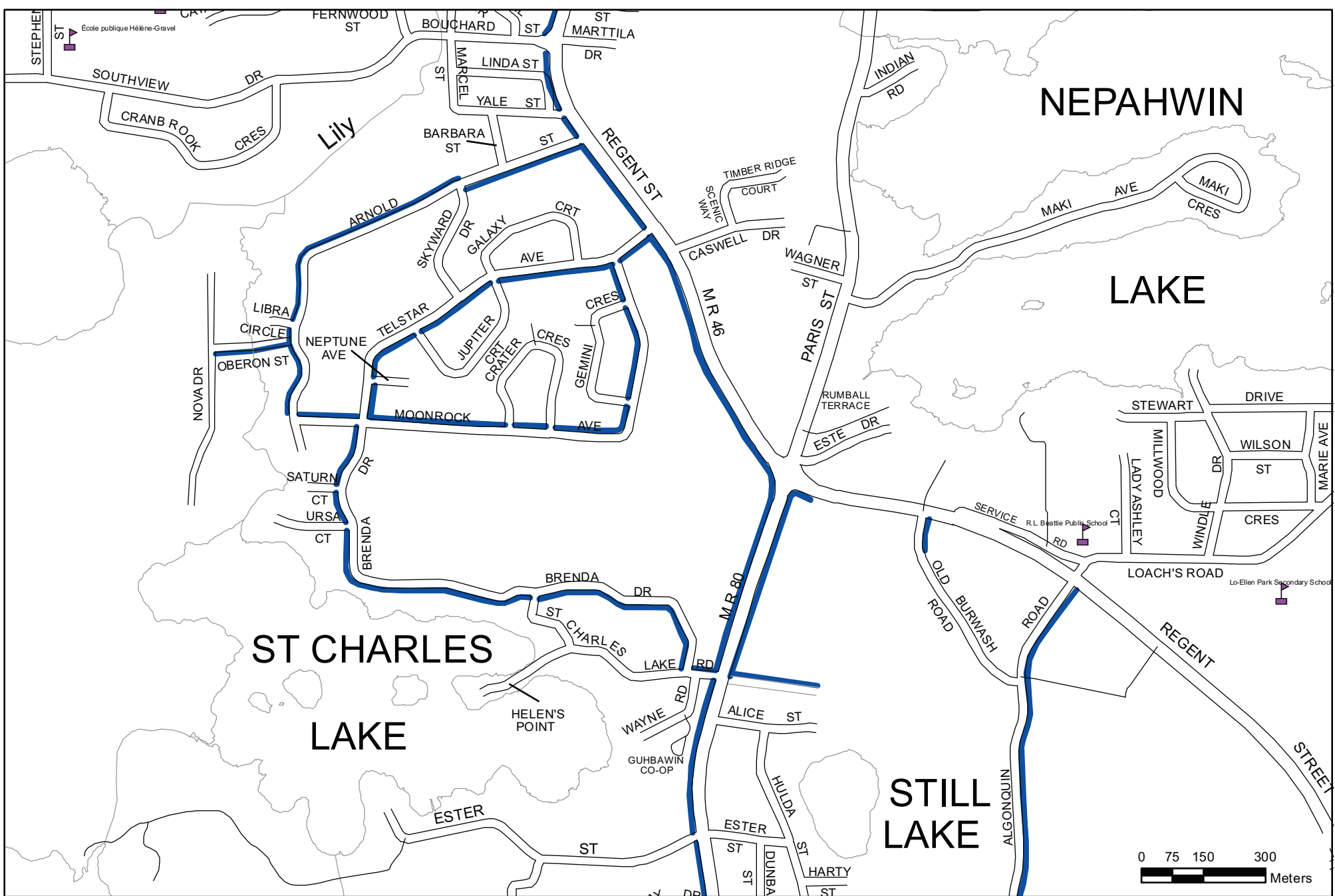


SOUTH SECTION 2013-2014

SIDEWALK 8 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

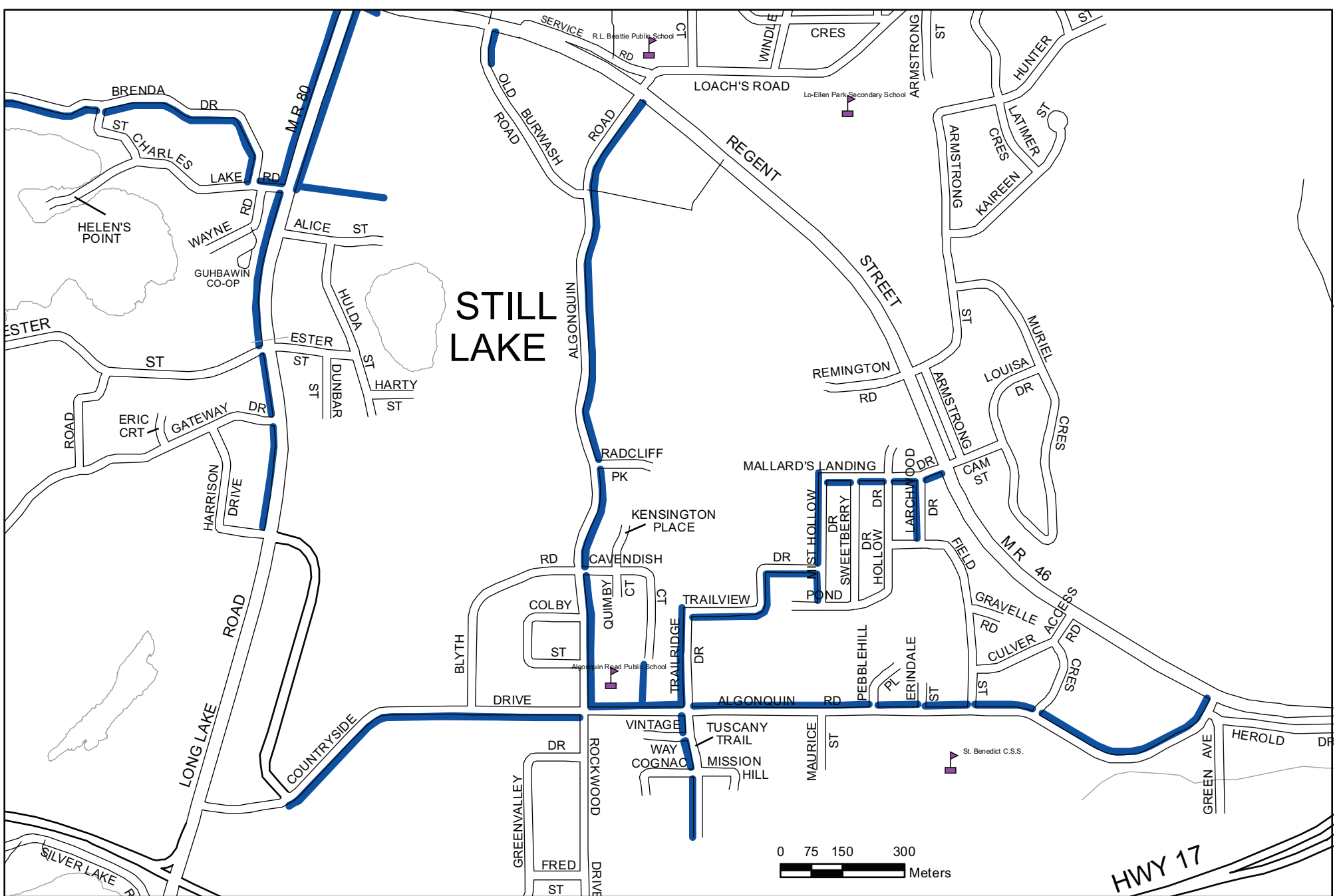


SOUTH SECTION 2013-2014

SIDEWALK 8 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury



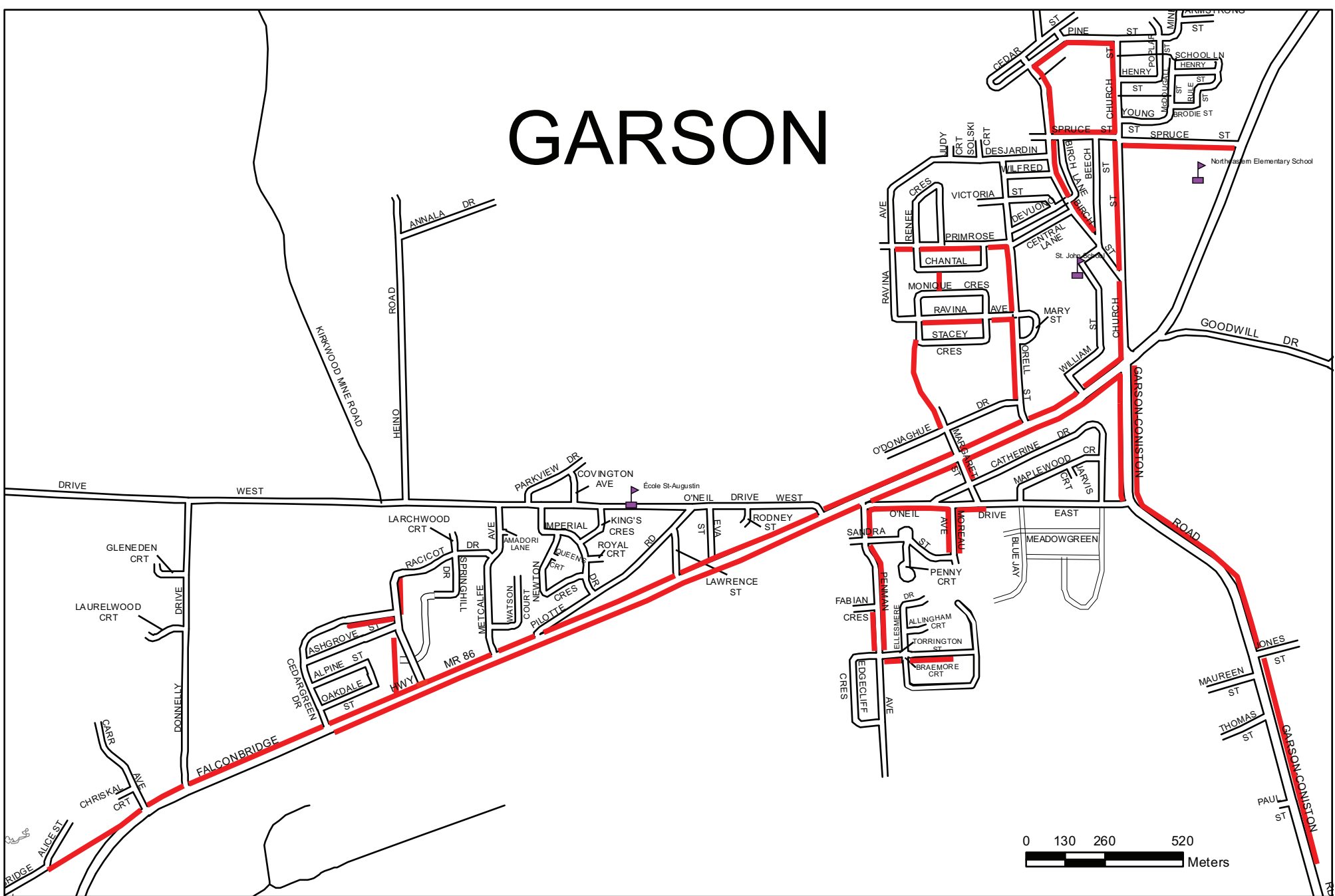
SOUTH SECTION 2013-2014

SIDEWALK 8 ODD

Date: October 29, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

GARSON



SOUTHEAST SECTION 2013-2014

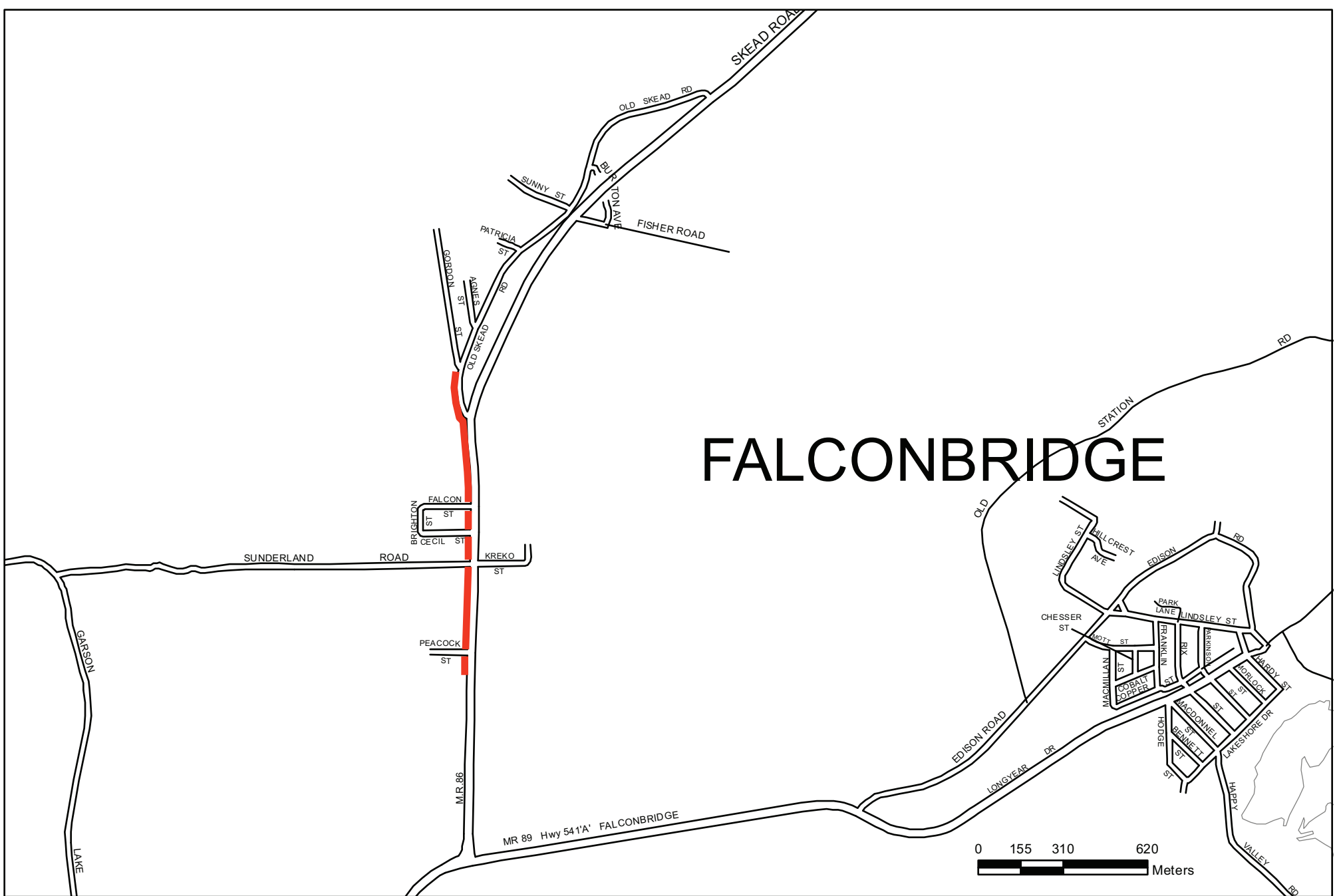
Date: October 24, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

SIDEWALK 1A

1 of 1

Vehicle: S257



FALCONBRIDGE

SOUTHEAST SECTION 2013-2014

SIDEWALK 1B

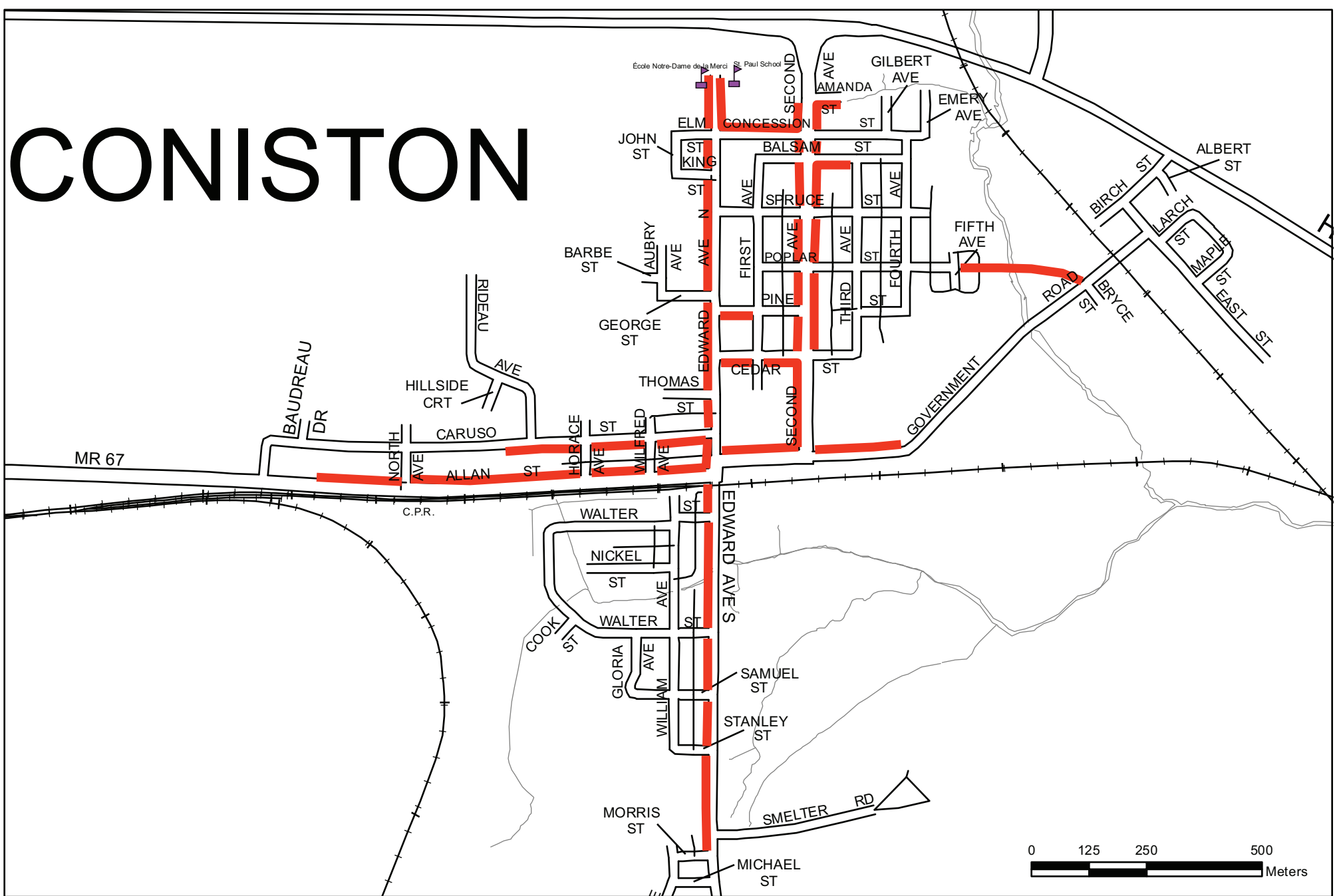
Date: October 17, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S257

CONISTON



SOUTHEAST SECTION 2013-2014

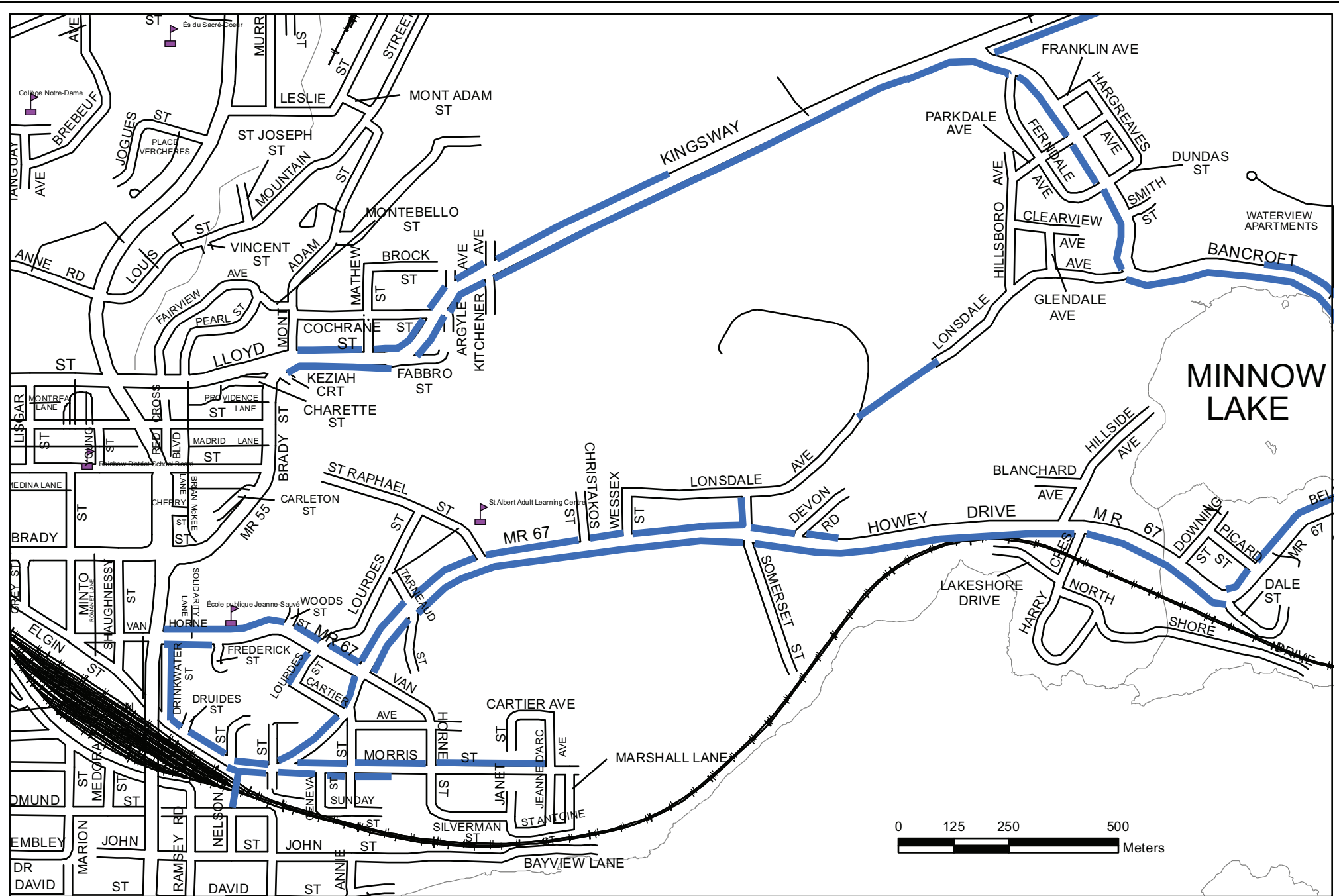
SIDEWALK 1C

Date: October 17, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S257



SOUTHEAST SECTION 2013-2014

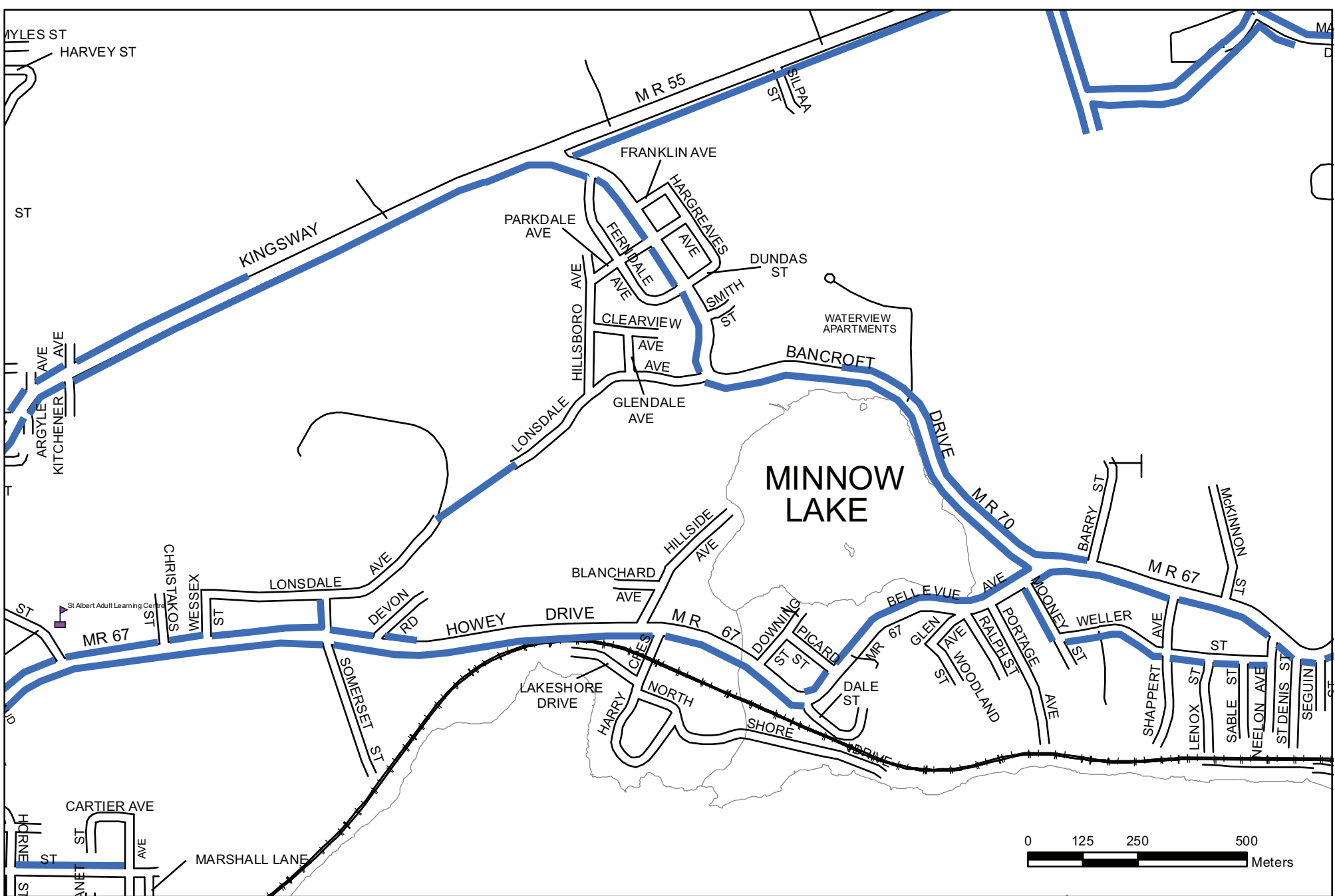
SIDEWALK 2A EVEN

Date: October 17, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S244



SOUTHEAST SECTION 2013-2014

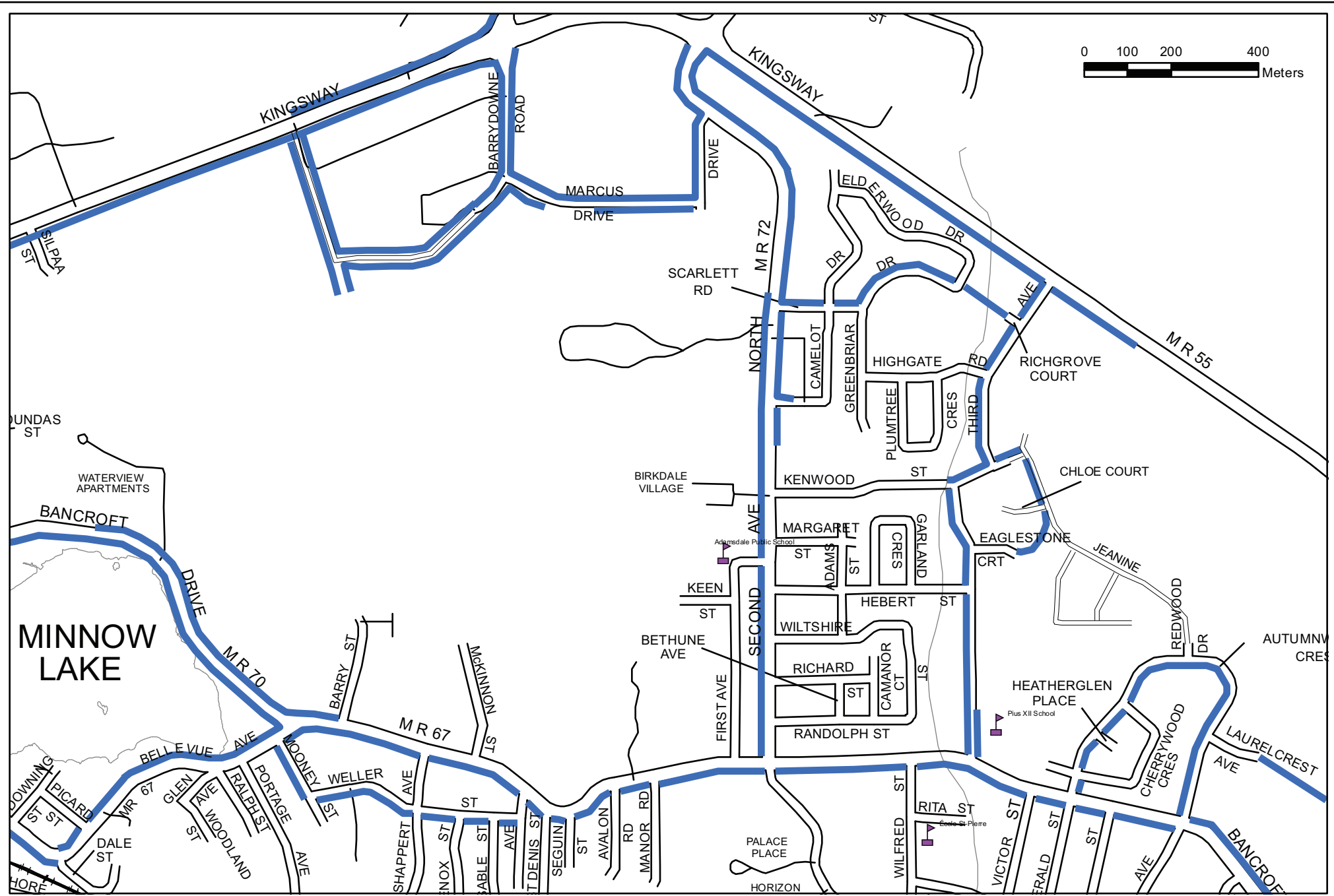
SIDEWALK 2B EVEN

Date: October 24, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S244



SOUTHEAST SECTION 2013-2014

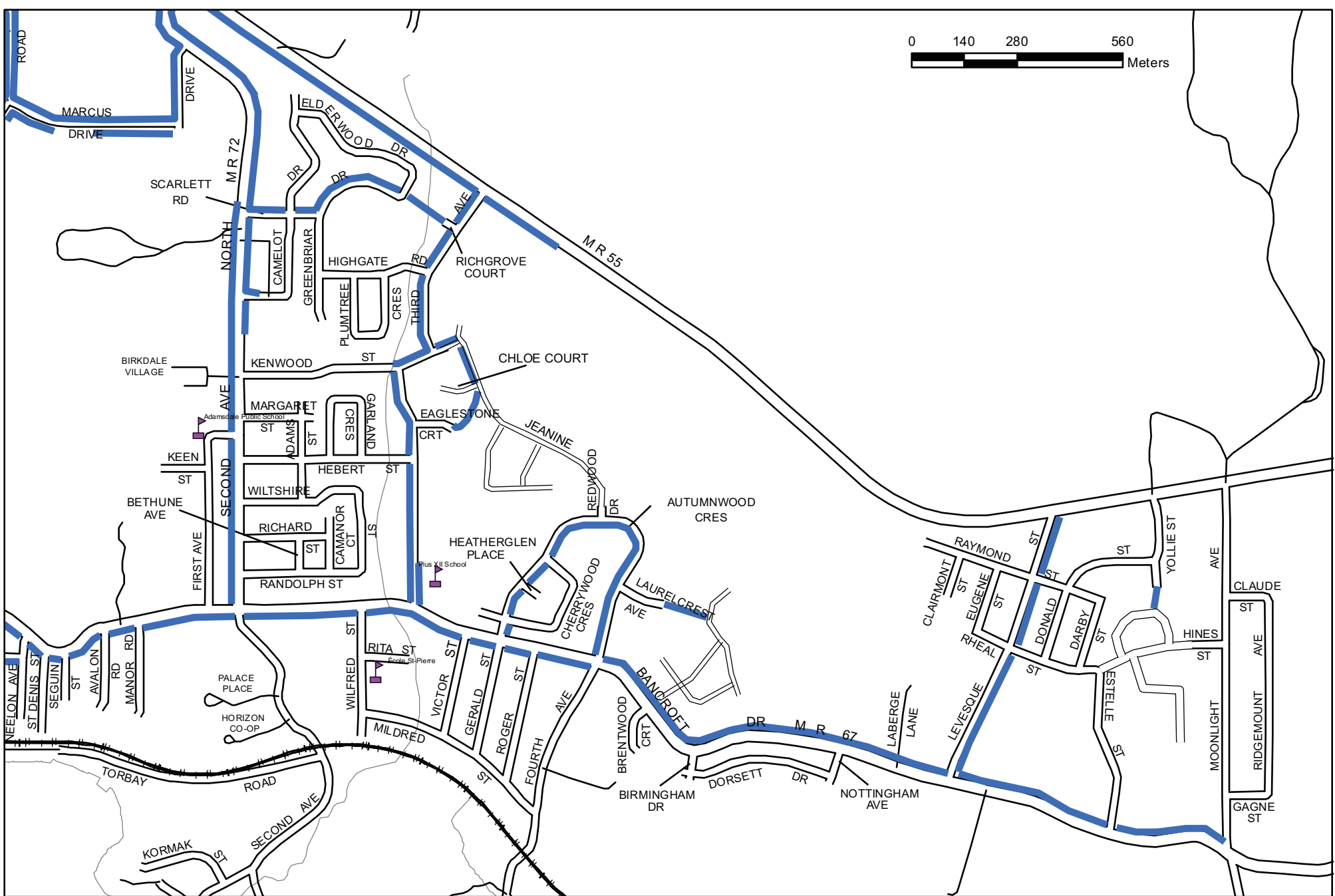
SIDEWALK 2C EVEN

Date: October 17, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

1 of 1

Vehicle: S244



SOUTHEAST SECTION 2013-2014

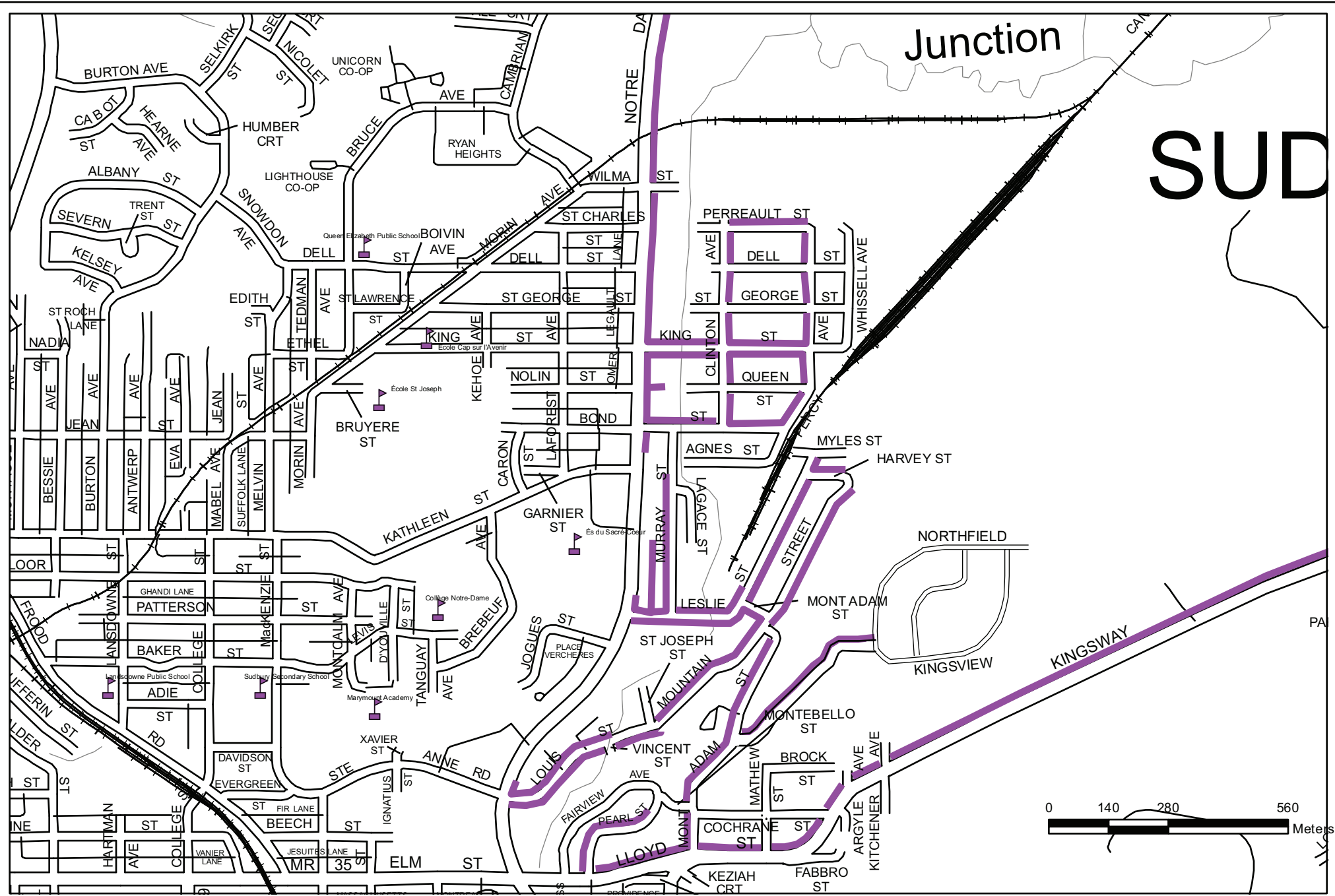
SIDEWALK 2D EVEN

Date: October 24, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S244



SOUTHEAST SECTION 2013-2014

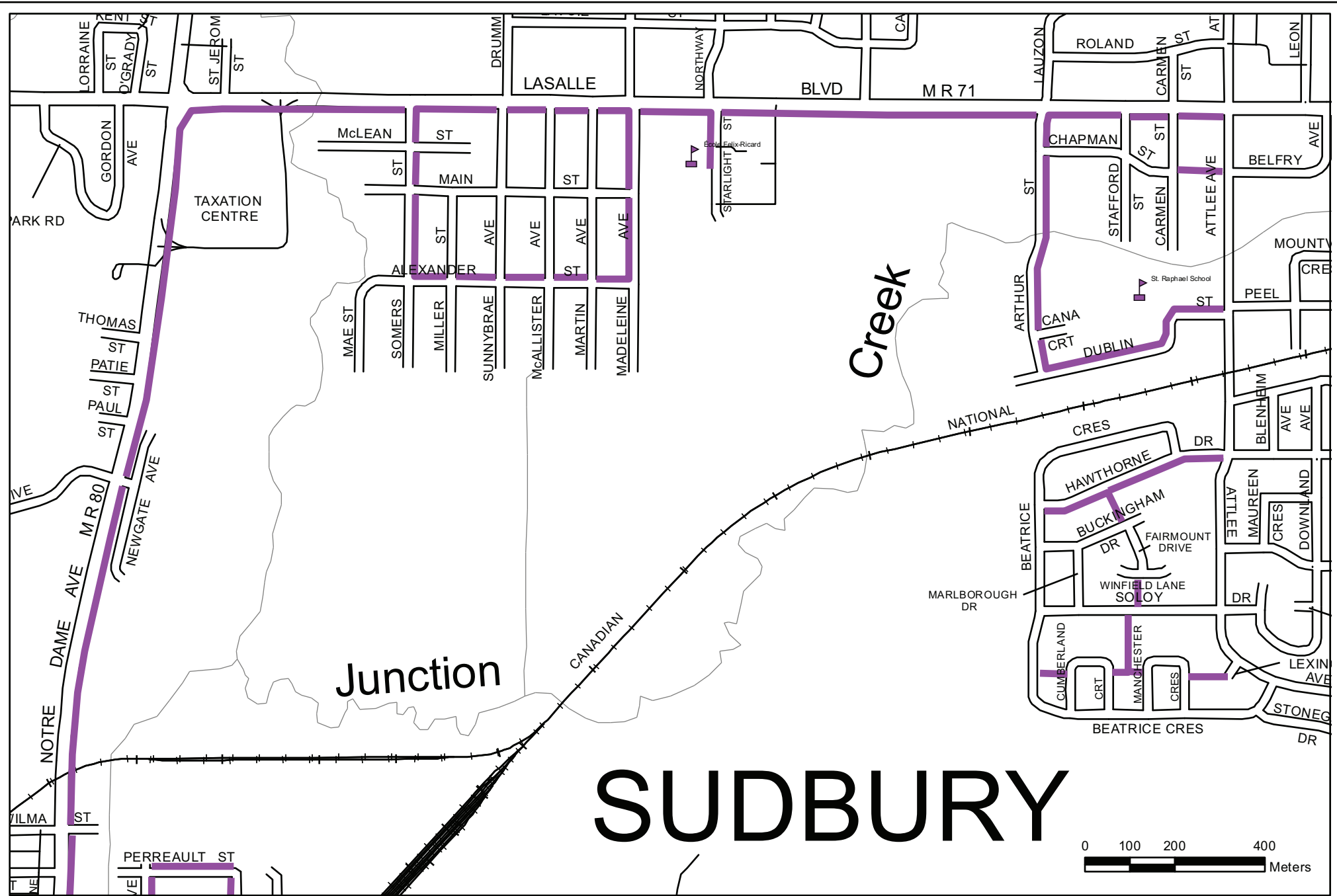
SIDEWALK 3A EVEN

Date: October 17, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S241



SUDBURY

SOUTHEAST SECTION 2013-2014

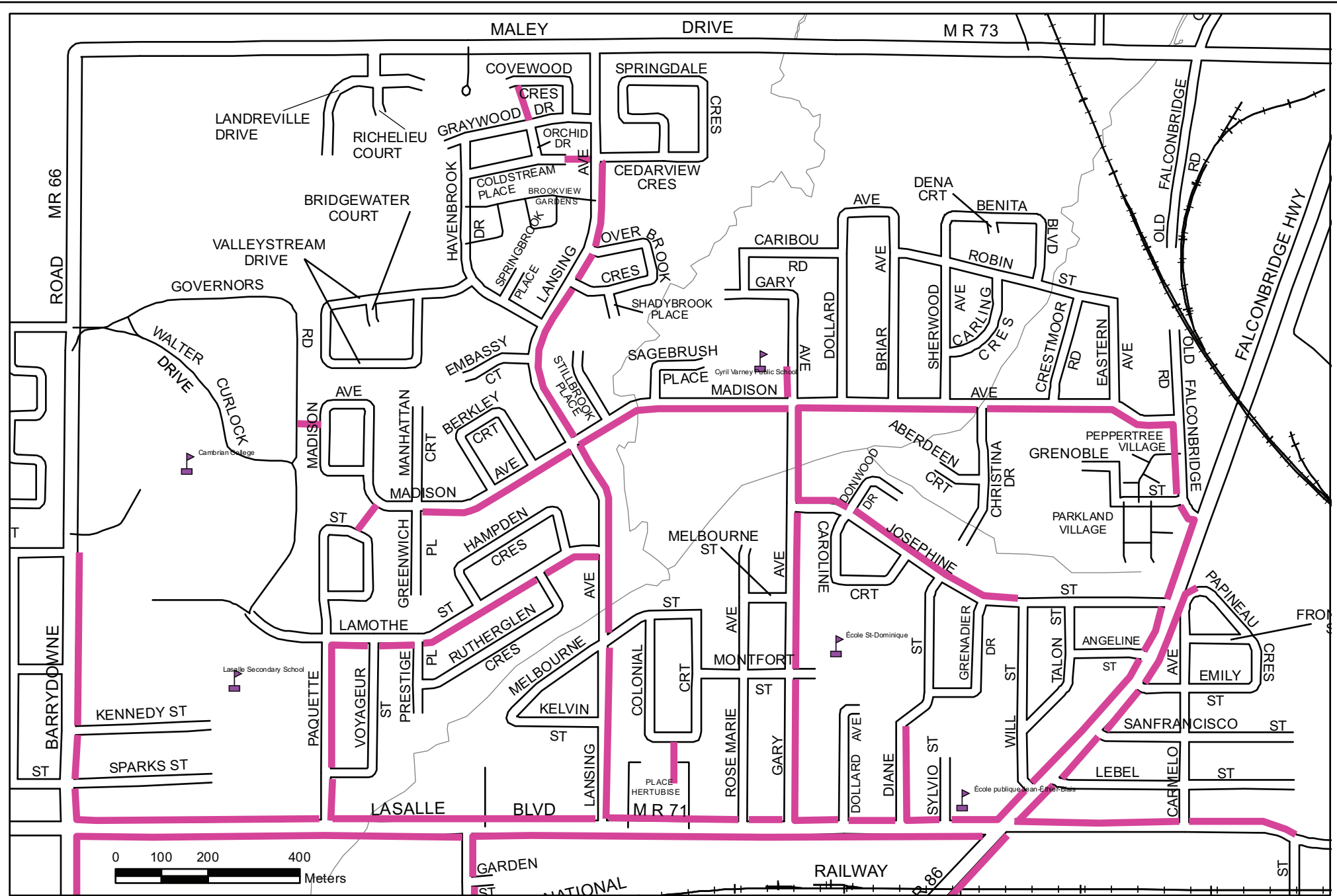
SIDEWALK 3B EVEN

Date: October 17, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S241



SOUTHEAST SECTION 2013-2014

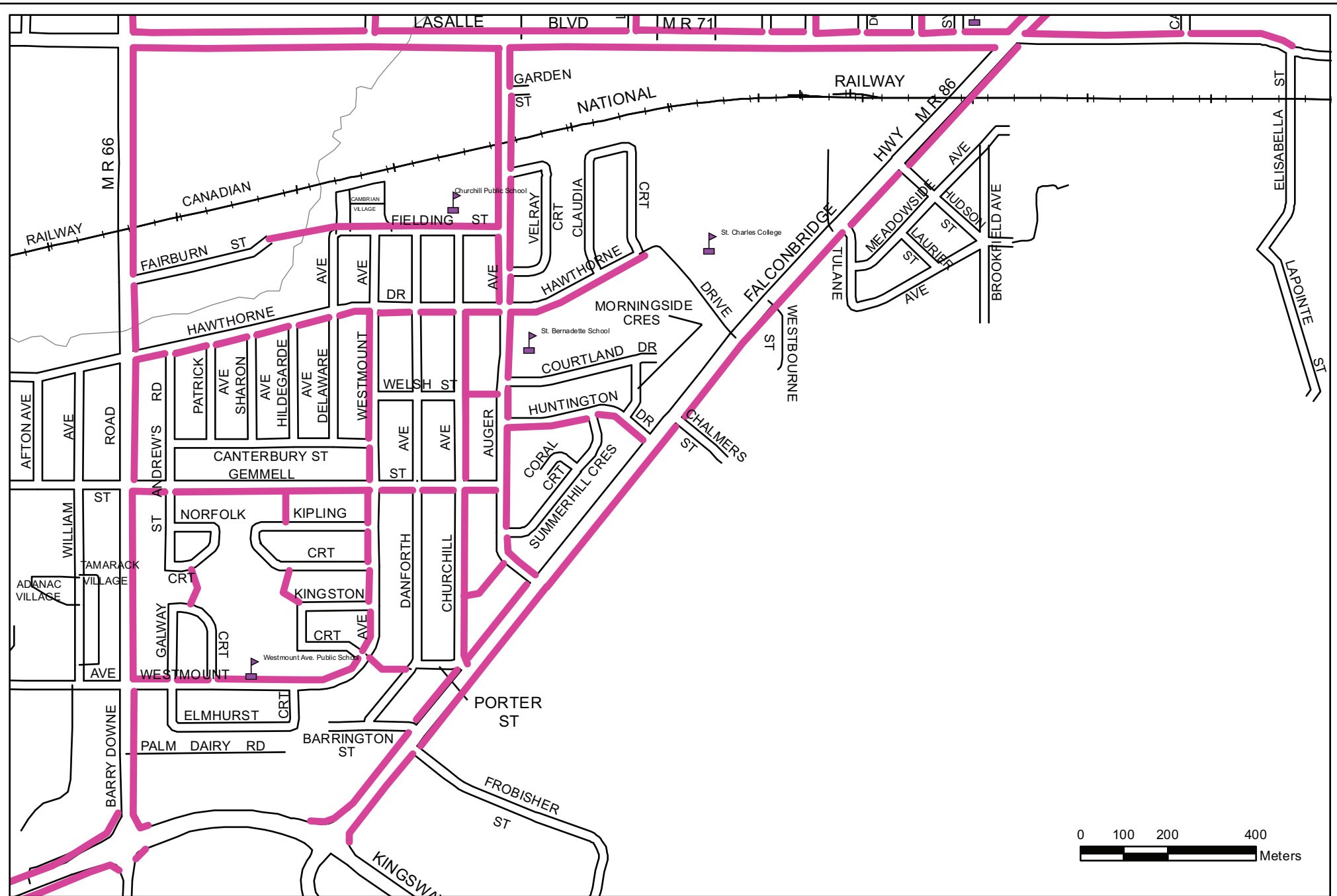
SIDEWALK 4A EVEN

Date: October 17, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S237



SOUTHEAST SECTION 2013-2014

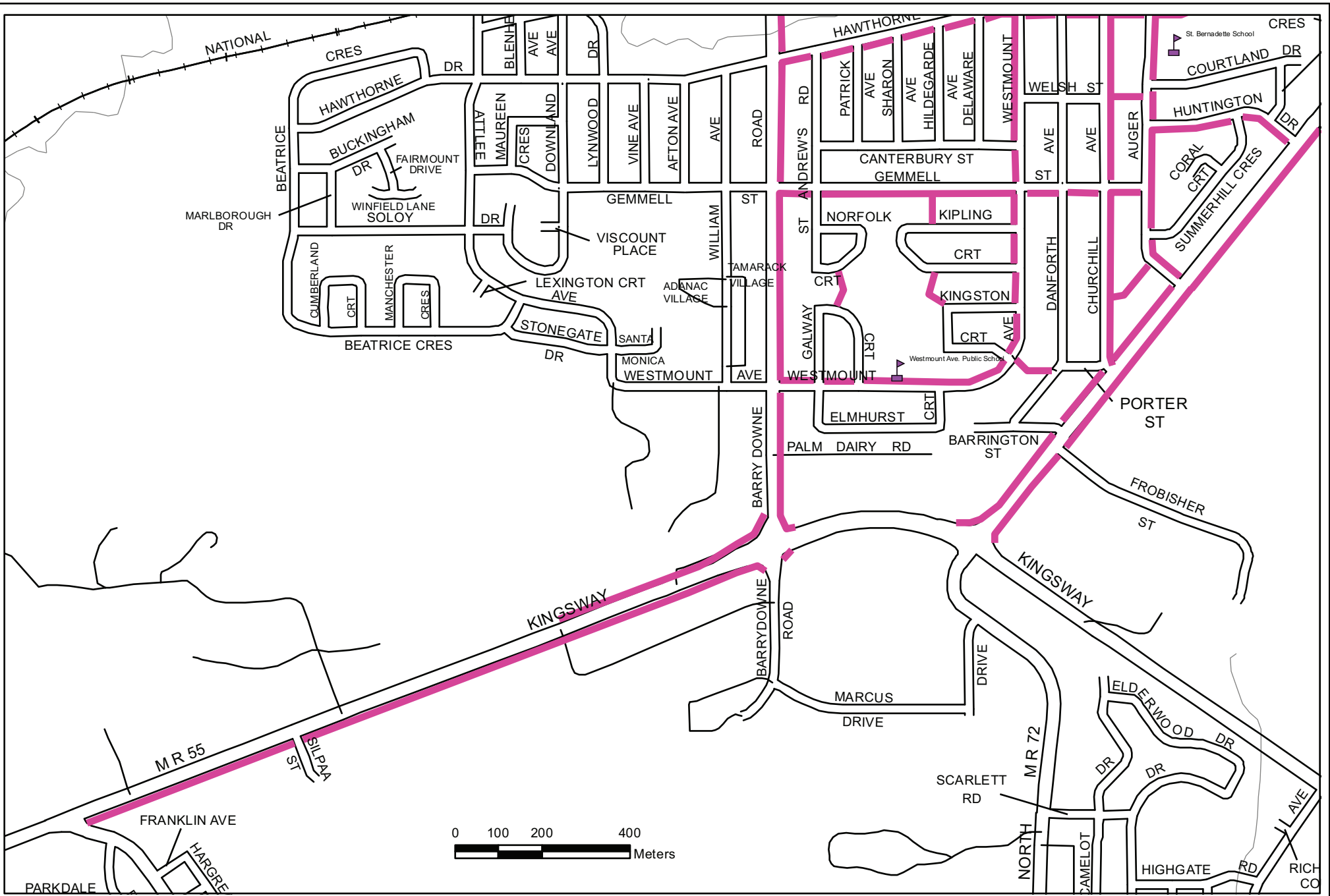
SIDEWALK 4B EVEN

Date: October 17, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S237



SOUTHEAST SECTION 2013-2014

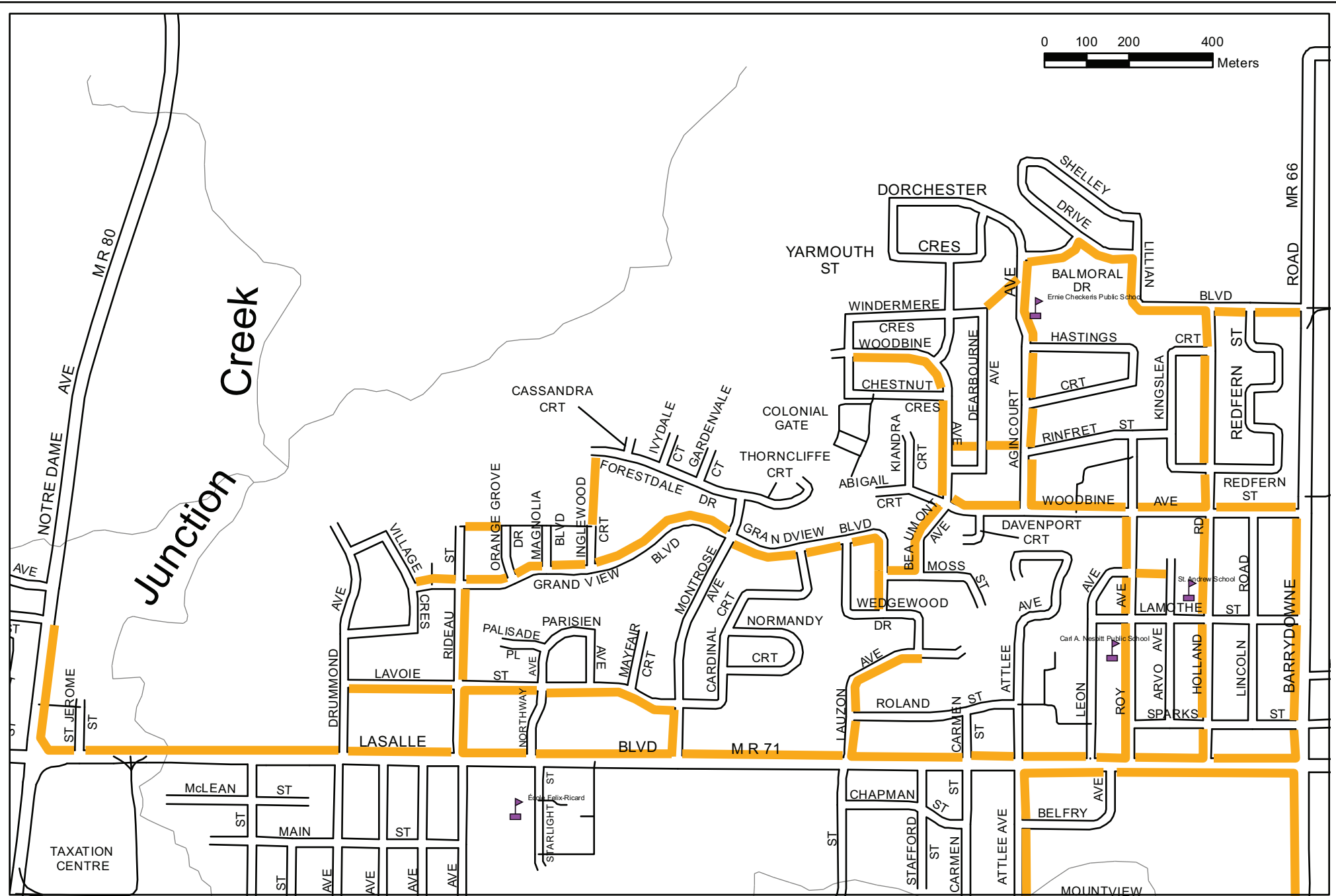
SIDEWALK 4C EVEN

Date: October 17, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S237



SOUTHEAST SECTION 2013-2014

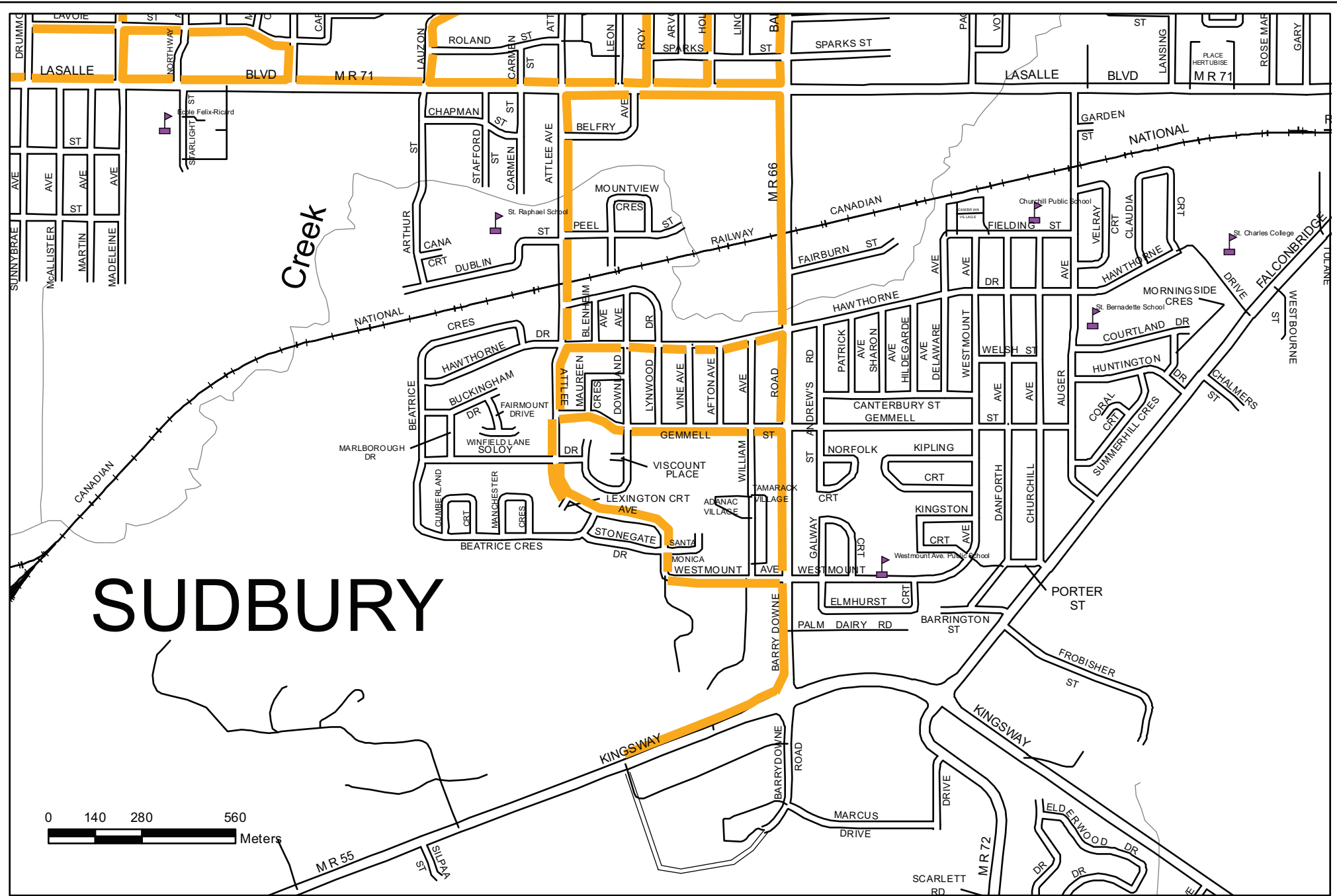
SIDEWALK 5A EVEN

Date: October 17, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S254



SOUTHEAST SECTION 2013-2014

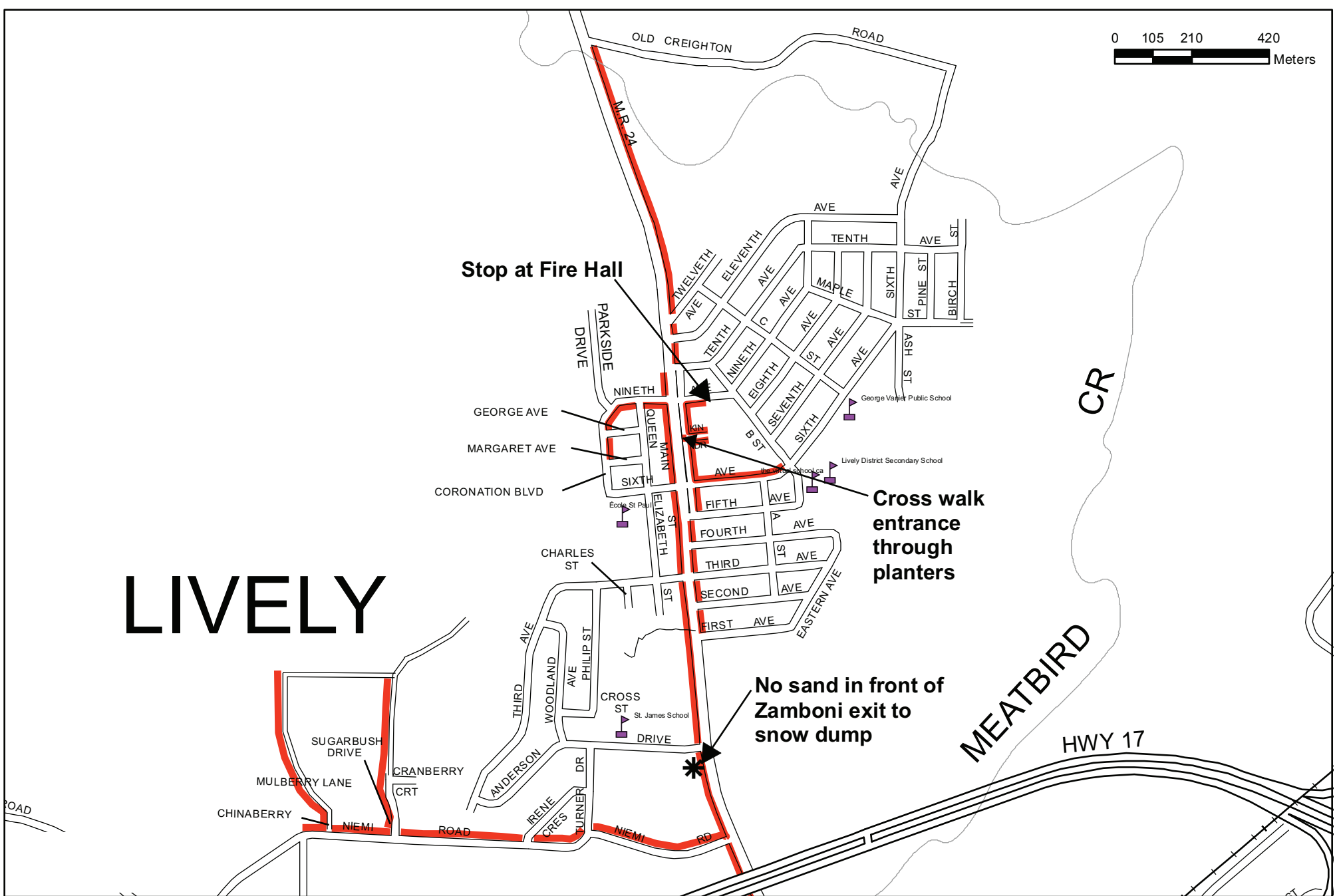
SIDEWALK 5B EVEN

Date: October 24, 2013

1 of 1

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

Vehicle: S254

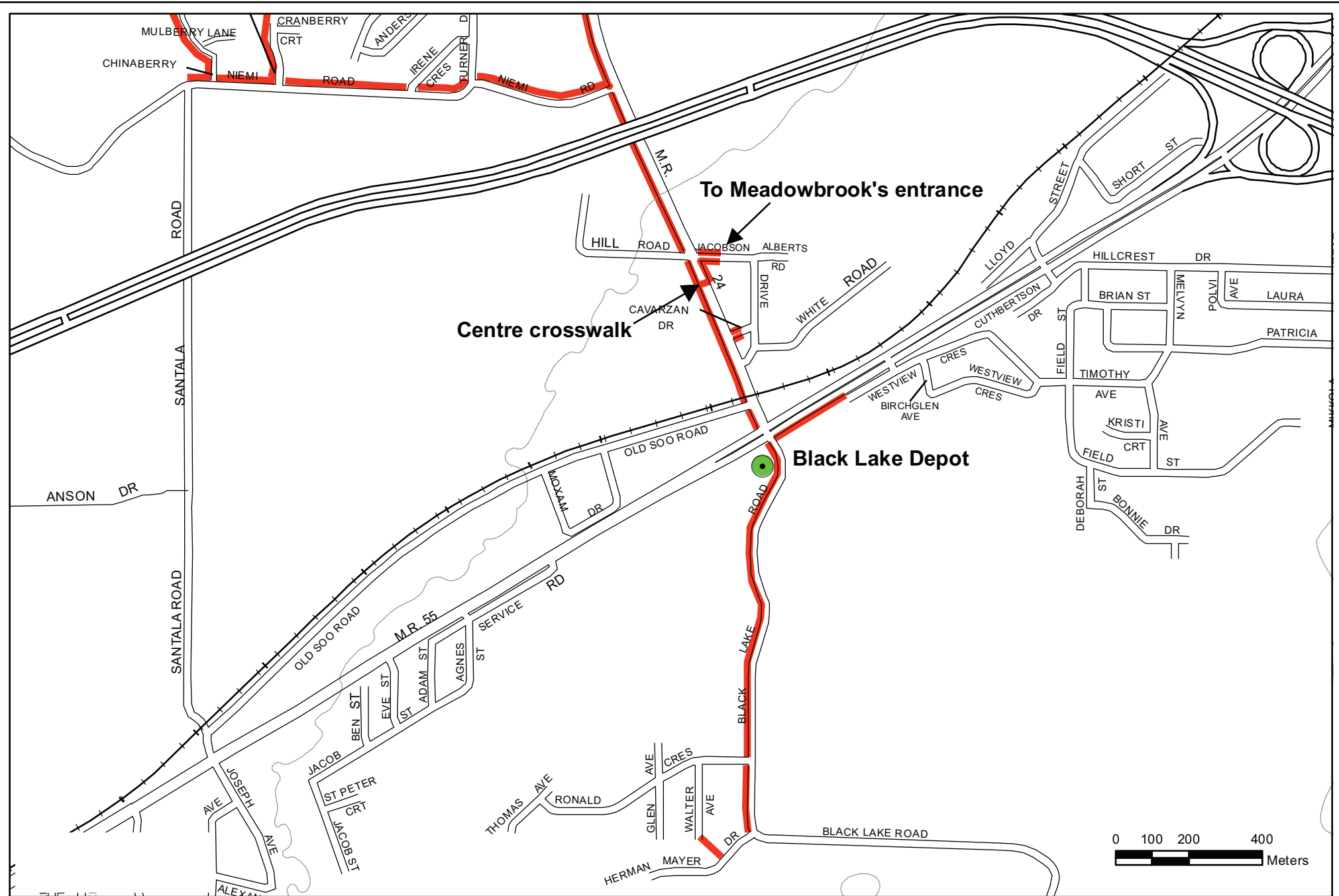


SOUTHWEST SECTION 2013-2014

SIDEWALK 1

Date: November 1, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury

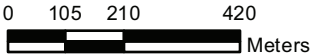


SOUTHWEST SECTION 2013-2014

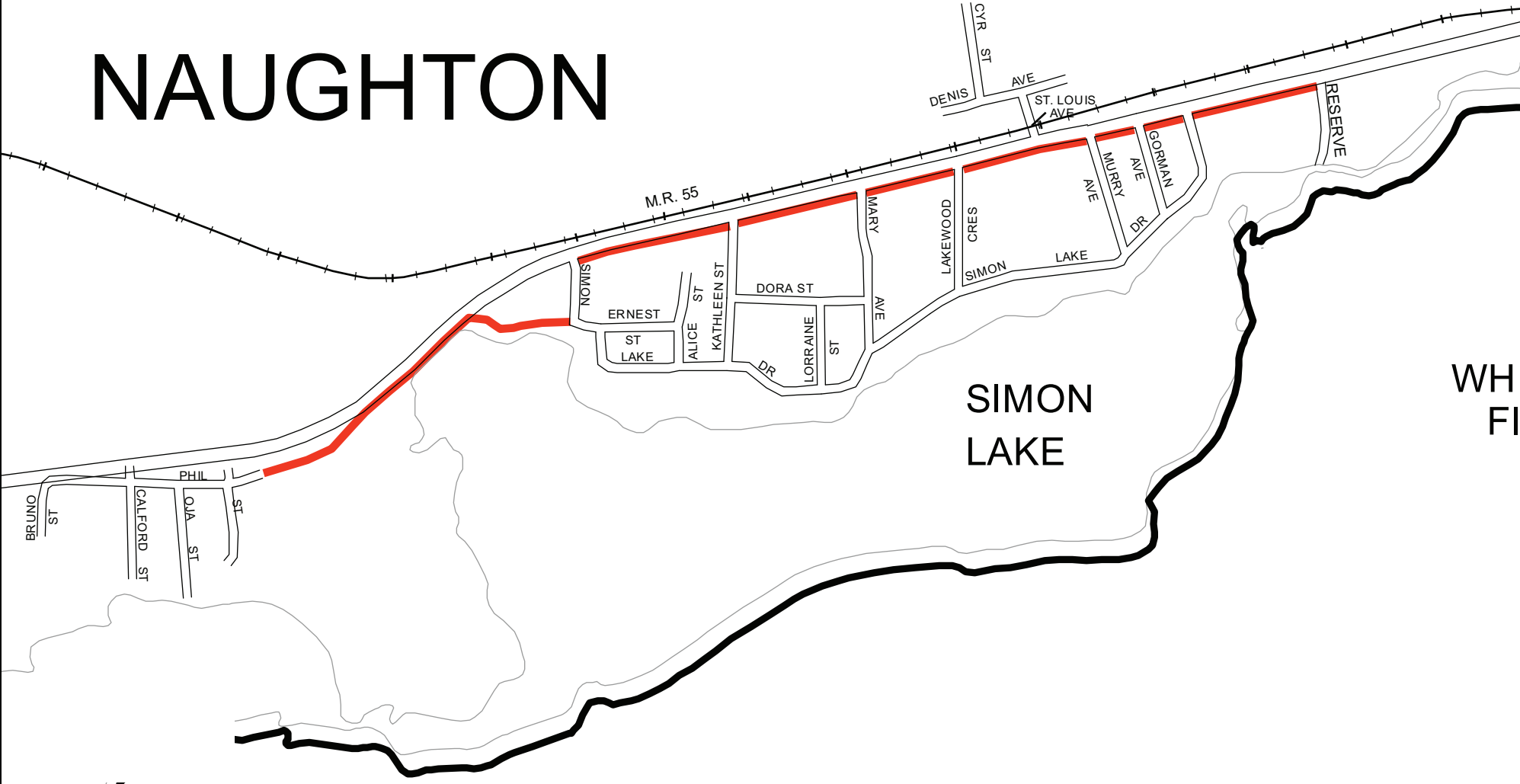
SIDEWALK 1

Date: November 1, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury



NAUGHTON



SOUTHWEST SECTION 2013-2014

SIDEWALK 1

Date: November 1, 2013

Created by Planning Services, Growth & Development Department, City of Greater Sudbury