

Vision: *The City of Greater Sudbury is a growing, world-class community bringing talent, technology and a great northern lifestyle together.*



Agenda

Traffic Committee

meeting to be held

Friday, June 17th, 2011

at 4:00 pm

Committee Room C-12, Tom Davies Square

TRAFFIC COMMITTEE AGENDA

For the 2nd Traffic Committee Meeting
to be held on **Friday, June 17, 2011**
Committee Room C-12, Tom Davies Square at 4:00 pm

COUNCILLOR ANDRÉ RIVEST, CHAIR

Joscelyne Landry-Altmann, Vice-Chair

(Please ensure that cell phones and pagers are turned off)

DECLARATIONS OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

MANAGERS' REPORTS

1. Report dated May 27, 2011 from the General Manager of Infrastructure Services regarding Maximum Speed Limit - South Bay Road, Sudbury. **4 - 10**
(RECOMMENDATION PREPARED)
(City staff received a request from Ward 10 Councillor, Frances Caldarelli, Jo-Anne Palkovits, President and CEO of the St. Joseph's Health Centre and Leo Therrien, Executive Director of the Maison Vale Inco Hospice, to reduce the speed limit from 50 km/h to 40km/h on South Bay Road from Ramsey Lake Road to the east end. This report outlines the criteria used by staff to evaluate the maximum posted speed limit based on the physical characteristics of the road and recommend that the maximum posted speed limit remain 50km/h.)
2. Report dated May 27, 2011 from the General Manager of Infrastructure Services regarding Maximum Posted Speed Limit - Municipal Road 80, Hanmer. **11 - 16**
(RECOMMENDATION PREPARED)
(City staff received a request from Ward 5 Councillor, Ron Dupuis, to review the maximum posted speed limit on Municipal Road 80 from Yorkshire Drive to Dominion Drive. This report outlines the criteria used by staff to evaluate that the maximum posted speed limit based on the physical characteristics of the road and recommends the maximum posted speed limit be changed from 80 km/h to 70km/h from Yorkshire Drive to Dominion Drive.)

3. Report dated June 1, 2011 from the General Manager of Infrastructure Services regarding Elm Street - Lorne Street to Paris Street, Sudbury, On-Street Parking. **17 - 24**
(RECOMMENDATION PREPARED)
(This report was requested at the Traffic Committee meeting held on March 21, 2011, wherein the Committee directed staff "to prepare a report regarding the proposal to allow on-street parking on Elm Street including bicycle lanes as proposed by the Downtown Village Development Corporation and Downtown Sudbury BIA".)
4. Report dated May 27, 2011 from the General Manager of Infrastructure Services regarding Traffic Control - 1) Redwood Subdivision, Sudbury, Phase 1 and 2) Sunrise Ridge Estates Subdivision, Phase 2, Sudbury. **25 - 28**
(RECOMMENDATION PREPARED)
(Two (2) new subdivisions are currently being developed in the City of Greater Sudbury. As part of these developments, the City of Greater Sudbury will assume new public roadways. To provide for a safe and orderly flow of traffic, traffic control signs will be required at newly created intersections. This report recommends that a by-law be passed to amend Traffic and Parking By-Law 2010-1 in the City of Greater Sudbury.)
5. Report dated May 27, 2011 from the General Manager of Infrastructure Services regarding New Traffic Signal Installations - Main Street (M.R. 24) at Sixth Avenue, Lively. **29 - 30**
(RECOMMENDATION PREPARED)
(As part of the City's Capital Construction Program, new traffic signals are being constructed at the intersection of Main Street (M.R. 24) and Sixth Avenue, Lively. The contract for this project will be tendered this summer by the City and it is expected that the new signals will be operational later this summer. An amendment to the City's Traffic and Parking By-Law 2010-1 is required to implement the new traffic signals.)

Adjournment (Resolution Prepared)

FRANCA BORTOLUSSI, DEPUTY CITY CLERK

LIZ COLLIN, COUNCIL SECRETARY

Presented To:	Traffic Committee
Presented:	Friday, Jun 17, 2011
Report Date	Friday, May 27, 2011
Type:	Managers' Reports

Request for Decision

Maximum Speed Limit - South Bay Road, Sudbury

Recommendation

That the speed limit on South Bay Road from Ramsey Lake Road to the east end remain at 50 km/h, and;

That staff forward the results of the speed studies to the Greater Sudbury Police Service, and request that they increase the level of enforcement in the area all in accordance with the report from the General Manager of Infrastructure Services dated May 27, 2011.

Background:

The City's Traffic and Transportation staff received a request from Ward 10 Councillor, Frances Caldarelli, Jo-Anne Palkovits, President and CEO of the St. Joseph's Health Centre and Leo Therrien, Executive Director of the Maison Vale Inco Hospice, to reduce the speed limit on South Bay Road from Ramsey Lake Road to the east end from 50 km/h to 40 km/h (**see Exhibit 'A'**).

At the October 13, 2010 meeting, City Council adopted the use of the Canadian Guidelines for Establishing Posted Speed Limits, published by the Transportation Association of Canada (TAC), for evaluating posted speeds on arterial and major collector roadways. These guidelines assess appropriate posted speed limits based primarily on the classification, function and physical characteristics of a roadway.

South Bay Road is a collector roadway located in Sudbury and provides a connection between Ramsey Lake Road and the Lake Laurentian Conservation Area. South Bay Road also provides access to Laurentian University, St. Joseph's Villa, Maison Vale INCO Hospice and St. Joseph's Health Centre (**see Exhibit 'B'**).

South Bay Road is constructed to a rural standard with asphalt shoulders, from Ramsey Lake Road to the Athletic Building Road. It has gravel shoulders from the Athletic Building Road to the east end.

Due to the physical characteristics of the roadway, staff evaluated South Bay Road in three segments:

Signed By

Report Prepared By

Dave Kivi
Co-ordinator of Transportation & Traffic
Engineering Services
Digitally Signed May 27, 11

Division Review

Robert Falcioni, P.Eng.
Director of Roads and Transportation
Services
Digitally Signed May 27, 11

Recommended by the Department

Greg Clausen, P.Eng.
General Manager of Infrastructure
Services
Digitally Signed May 30, 11

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed May 30, 11

1. Ramsey Lake Road to Athletic Building Road
2. Athletic Building Road to Arlington Boulevard
3. Arlington Boulevard to the East End

Applying the physical characteristics of each segment to the new Canadian Guidelines and using a functional classification of a “two lane rural undivided major collector” yields the total risk scores and recommended speed limits detailed in **Exhibits ‘C’, ‘D’ and ‘E’** and summarized in the table below:

	Segment	Total Risk Score	Recommended Posted Speed Limit (km/h)
1.	Ramsey Lake Road to Athletic Building Road	25	70
2.	Athletic Building Road to Arlington Boulevard	28	70
3.	Arlington Boulevard to East End	40	60

Staff also completed speed studies on South Bay Road, south of Ramsey Lake Road and west of Arlington Boulevard, on March 1, 2011. The study south of Ramsey Lake Road was conducted just south of the entrance to the Maison Vale INCO Hospice and recorded the speeds of over 6,750 vehicles. The average speed recorded was 63 km/h while the 85th percentile speed was 71 km/h. The 85th percentile speed is the speed at or below which 85 percent of drivers are travelling and is generally accepted as a good indicator of an appropriate speed limit. The study west of Arlington Boulevard was conducted just east of house # 1452 South Bay Road and recorded the speeds of just over 1,000 vehicles. The average recorded speed was 54 km/h while the 85th percentile speed was 64 km/h.

Although the results of the TAC Guidelines, and speed studies, indicates that the speed limit could be increased, staff recommends that the existing speed limit on South Bay Road remain at 50 km/h. Further, staff recommends that the results of the speed studies be forwarded to the Greater Sudbury Police Service with a request for increased enforcement on South Bay Road.

Additionally, City staff conducted ball bank studies to measure the “comfortable” speed of the horizontal curves along South Bay Road. The horizontal curves from Ramsey Lake Road to Arlington Boulevard had measured “comfortable” speeds of greater than or equal to 50 km/h. Most of the curves east of Arlington Boulevard had “comfortable” speeds of less than 50 km/h. City staff will arrange to have appropriate curve warning signs installed on this section of South Bay Road to further enhance safety.



August 6, 2010

Mr. Bill Lautenbach, General Manager
Growth and Development
City of Greater Sudbury
PO Box 5000, Station A
200 Brady Street
Sudbury, Ontario P3A 5P3

Dear Mr. Lautenbach,

RE: Bylaw to 40 km/hour speed limit on South Bay Road

We are writing to request your assistance in reducing the speed limit on a portion of South Bay Road to 40 km/hour.

Important health care facilities are located on this stretch of road; that is St. Joseph's Villa, a 128-bed long-term care home, St. Joseph's Continuing Care Centre, a chronic hospital named under the Public Hospitals Act and the Maison Vale Inco Hospice. Residents, patients, families, visitors, volunteers and staff travelling to our facilities use the road to walk and / or ambulate by wheelchair on the roadside. Safety is a concern as drivers currently exceed the posted limit of 50 km/hour. As protectors of our community's most vulnerable, we trust that the City will support our request to reduce the speed limit.

We see the need for this reduced speed limit from the intersection of Ramsey Lake Road/South Bay Road to the intersection of South Bay Road/Athletic Building Road on the University property. We have attached a map indicating this zone.

We understand that a new bylaw can be passed at City Council to post a 40km/hour speed limit. Through this letter, we are formally applying for this change. We would like to work with you, at your earliest convenience to spearhead this initiative.

Thank you for your continued support of our organizations.

Yours truly,

Jo-Anne Palkovits
President & CEO
St. Joseph's Health Centre

Leo Therrien
Executive Director
Maison Vale Inco Hospice

cc. Frances Calderilli, Councillor, Ward 10

ST. JOSEPH'S HEALTH
CENTRE OF SUDBURY
CENTRE DE SANTÉ
ST-JOSEPH DE SUDBURY

1125 Lakeshore Blvd. East
Sudbury, ON N3B 3C9
Tel: (705) 671-2336

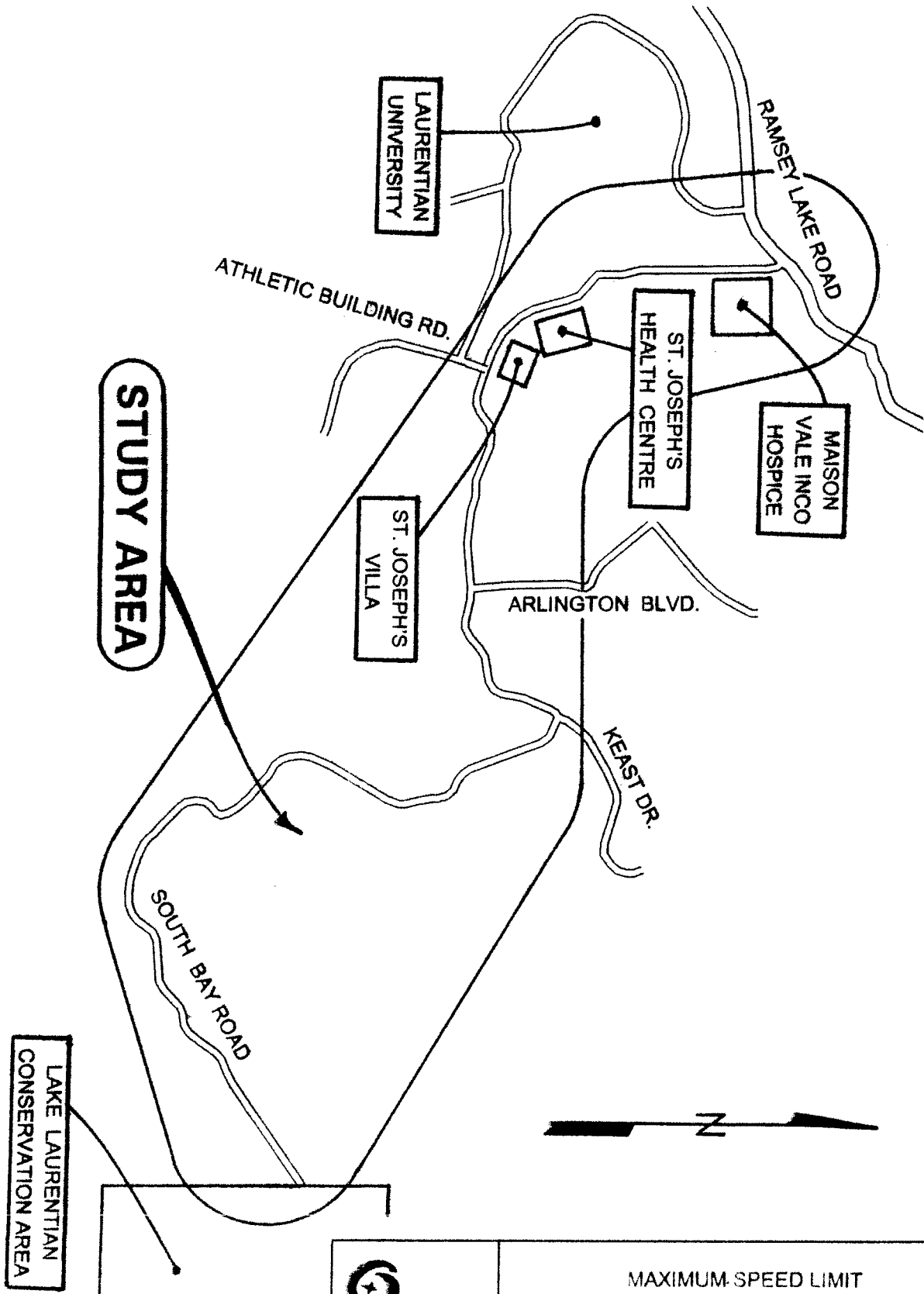
ST. JOSEPH'S VILLA
OF SUDBURY
VILLA ST-JOSEPH
DE SUDBURY


1280 Lakeshore Blvd. East
Sudbury, ON N3B 3C9
Tel: (705) 671-2336

ST. JOSEPH'S
HOSPITAL
CENTRE DE SANTÉ
ST-JOSEPH DE SUDBURY
CENTRE DE SANTÉ
ST-JOSEPH DE SUDBURY

1125 Lakeshore Blvd. East
Sudbury, ON N3B 3C9
Tel: (705) 671-2336

EXHIBIT: B



 Sudbury	MAXIMUM SPEED LIMIT		
	SOUTH BAY ROAD, SUDBURY		
	NOT TO SCALE	Page 7 of 30	011 05-17



Automated Speed Limit Guidelines FORM A - Automated Speed Limit Guidelines Spreadsheet

Version:
10-Apr-09

Name of Corridor:	South Bay Road		
Segment Evaluated:	Ramsey Lake Road	to	Athletic Building Road
Geographic Region:	Sudbury		
Road Agency:	City of Greater Sudbury		
Road Classification:	Collector	Length of Corridor:	850 m
Urban / Rural:	Rural	Design Speed: (Required for Freeway, Expressway, Highway)	km/h
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	50 km/h
Major / Minor:	Major	Prevailing Speed: (85th Percentile - for information only)	70.8 km/h
# Through Lanes Per Direction:	1 lane	Policy: (Maximum Posted Speed)	

		RISK	Score
A1	GEOMETRY (Horizontal)	Medium	4
A2	GEOMETRY (Vertical)	Lower	2
A3	AVERAGE LANE WIDTH	Lower	1
B	ROADSIDE HAZARDS	Medium	6
C1	PEDESTRIAN EXPOSURE	Medium	2
C2	CYCLIST EXPOSURE	Medium	2
D	PAVEMENT SURFACE	Lower	3
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	Number of Occurrences	0
	STOP controlled intersection	0	
	Signalized intersection	0	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	Number of Occurrences	4
	Left turn movements permitted	6	
	Right-in / Right-out only	0	
E3	NUMBER OF INTERCHANGES	Number of Occurrences	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	N/A	0

Total Risk Score:

24

Recommended Posted
Speed Limit (km/h):

As determined by road characteristics

70

As determined by policy

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments:



Automated Speed Limit Guidelines FORM A - Automated Speed Limit Guidelines Spreadsheet

Version:
10-Apr-09

Name of Corridor:	South Bay Road		
Segment Evaluated:	Athletic Building Road	to	Arlington Boulevard
Geographic Region:	Sudbury		
Road Agency:	City of Greater Sudbury		
Road Classification:	Collector	Length of Corridor:	600 m
Urban / Rural:	Rural	Design Speed: (Required for Freeway, Expressway, Highway)	km/h
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	50 km/h
Major / Minor:	Major	Prevailing Speed: (85th Percentile - for information only)	64.4 km/h
# Through Lanes Per Direction:	1 lane	Policy: (Maximum Posted Speed)	

		RISK	Score
A1	GEOMETRY (Horizontal)	Medium	4
A2	GEOMETRY (Vertical)	Lower	2
A3	AVERAGE LANE WIDTH	Medium	2
B	ROADSIDE HAZARDS	Lower	3
C1	PEDESTRIAN EXPOSURE	Higher	3
C2	CYCLIST EXPOSURE	Higher	3
D	PAVEMENT SURFACE	Lower	3
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	Number of Occurrences	1
	STOP controlled intersection	0	
	Signalized intersection	0	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	Number of Occurrences	6
	Left turn movements permitted	7	
	Right-in / Right-out only	0	
E3	NUMBER OF INTERCHANGES	Number of Occurrences	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	Lower	1

Total Risk Score:

28

Recommended Posted
Speed Limit (km/h):

As determined by road characteristics

70

As determined by policy

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments:



Automated Speed Limit Guidelines

FORM A - Automated Speed Limit Guidelines Spreadsheet

EXHIBIT: E

Version:
10-Apr-09

Name of Corridor:	South Bay Road		
Segment Evaluated:	Arlington Boulevard	to	East End
Geographic Region:	Sudbury		
Road Agency:	City of Greater Sudbury		
Road Classification:	Collector	Length of Corridor:	2,500 m
Urban / Rural:	Rural	Design Speed: (Required for Freeway, Expressway, Highway)	km/h
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	50 km/h
Major / Minor:	Major	Prevailing Speed: (85th Percentile - for information only)	km/h
# Through Lanes Per Direction:	1 lane	Policy: (Maximum Posted Speed)	

		RISK	Score
A1	GEOMETRY (Horizontal)	Higher	6
A2	GEOMETRY (Vertical)	Medium	4
A3	AVERAGE LANE WIDTH	Medium	2
B	ROADSIDE HAZARDS	Medium	6
C1	PEDESTRIAN EXPOSURE	Higher	3
C2	CYCLIST EXPOSURE	Higher	3
D	PAVEMENT SURFACE	Lower	3
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	Number of Occurrences	2
	STOP controlled intersection	1	
	Signalized intersection	0	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	Number of Occurrences	8
	Left turn movements permitted	41	
	Right-in / Right-out only	0	
E3	NUMBER OF INTERCHANGES	Number of Occurrences	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	Higher	3

Total Risk Score:

40

Recommended Posted Speed Limit (km/h):

As determined by road characteristics

60

As determined by policy

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments:

Presented To:	Traffic Committee
Presented:	Friday, Jun 17, 2011
Report Date	Friday, May 27, 2011
Type:	Managers' Reports

Request for Decision

Maximum Posted Speed Limit - Municipal Road 80, Hanmer

Recommendation

That the speed limit on Municipal Road 80 from Yorkshire Drive to Dominion Drive be reduced to 70 km/h, and;

That a by-law be passed by City Council to amend the Traffic and Parking By-Law 2010-1 in the City of Greater Sudbury to implement the recommended change all in accordance with the report from the General Manager of Infrastructure Services dated May 27, 2011.

Background:

At the March 21, 2011 Traffic Committee meeting, a request from Ward 5 Councillor, Ron Dupuis, to review the posted speed limit on Municipal Road 80 (M.R. 80) from Yorkshire Drive to Dominion Drive was approved for study.

At the October 13, 2010 meeting, City Council adopted the use of the Canadian Guidelines for Establishing Posted Speed Limits, published by the Transportation Association of Canada, for evaluating posted speeds on arterial and major collector roadways. These guidelines assess appropriate posted speed limits based primarily on the classification, function and physical characteristics of a roadway.

This segment of M.R. 80 is located in the former Town of Valley East and is classified as a primary arterial roadway due to its importance in the City's road network. It is constructed to a rural standard with two (2) lanes for northbound traffic, two (2) lanes for southbound traffic and a two-way centre turning lane. On the west side of the roadway there is an off-road paved trail that is used by both cyclists and pedestrians (**see Exhibit 'A'**). The existing speed limit through this section of M.R. 80 is 80 km/h. The speed limit is reduced to 60 km/h south of Yorkshire Drive.

Recently, a parcel of land on the east side of M.R. 80, between Yorkshire Drive and Josephine Drive, has been rezoned to permit a large scale commercial development. Through the rezoning process it was identified that this commercial development will require a full movement driveway south of Carol Street, a right-in only driveway south of John Street and a set of traffic signals at the John Street intersection. The Traffic Impact Study prepared in support of the development indicates that traffic patterns will change with

Signed By

Report Prepared By

Dave Kivi
Co-ordinator of Transportation & Traffic
Engineering Services
Digitally Signed May 27, 11

Division Review

Robert Falcioni, P.Eng.
Director of Roads and Transportation
Services
Digitally Signed May 27, 11

Recommended by the Department

Greg Clausen, P.Eng.
General Manager of Infrastructure
Services
Digitally Signed May 30, 11

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed May 30, 11

development of the mall, and “it is likely that conditions will warrant extending the 60 km/h zone northward past the New Valley Centre. The City should carry out a review of the speed limit when this development takes place”.

Due to this pending commercial development, staff evaluated M.R. 80 as two (2) different segments. The first segment is from Yorkshire Drive to Josephine Drive and the second is from Josephine Drive to Dominion Drive. Staff further evaluated the Yorkshire Drive to Josephine Drive based on the current conditions and the future conditions that included the proposed commercial development.

Applying the current physical characteristics of each segment to the new Canadian Guidelines and using a functional classification of a “four lane rural undivided major arterial” yields a total risk score of 53 and a recommended posted speed limit of 70 km/h for the section from Josephine Drive to Dominion Drive (**see Exhibit ‘B’**). The segment from Yorkshire Drive to Josephine Drive resulted in a total risk score of 43 and a recommended posted speed limit of 80 km/h (**see Exhibit ‘C’**). Although both segments of road are similarly constructed, the Josephine Drive to Dominion Drive segment scored a higher risk score and a lower recommended posted speed limit due to the high number of residential driveways that exist on the east side of the roadway.

Applying the future physical characteristics of the Yorkshire Drive to Josephine Drive segment, that includes full development of the New Valley Centre, to the new Canadian Guidelines and using a functional classification of a “four lane rural undivided major arterial” yields a total risk score of 51 and a recommended posted speed limit of 70 km/h (**see Exhibit ‘D’**). The increased risk score for this segment is due to the future traffic signals that will be installed and the additional driveways that will be required by the commercial development.

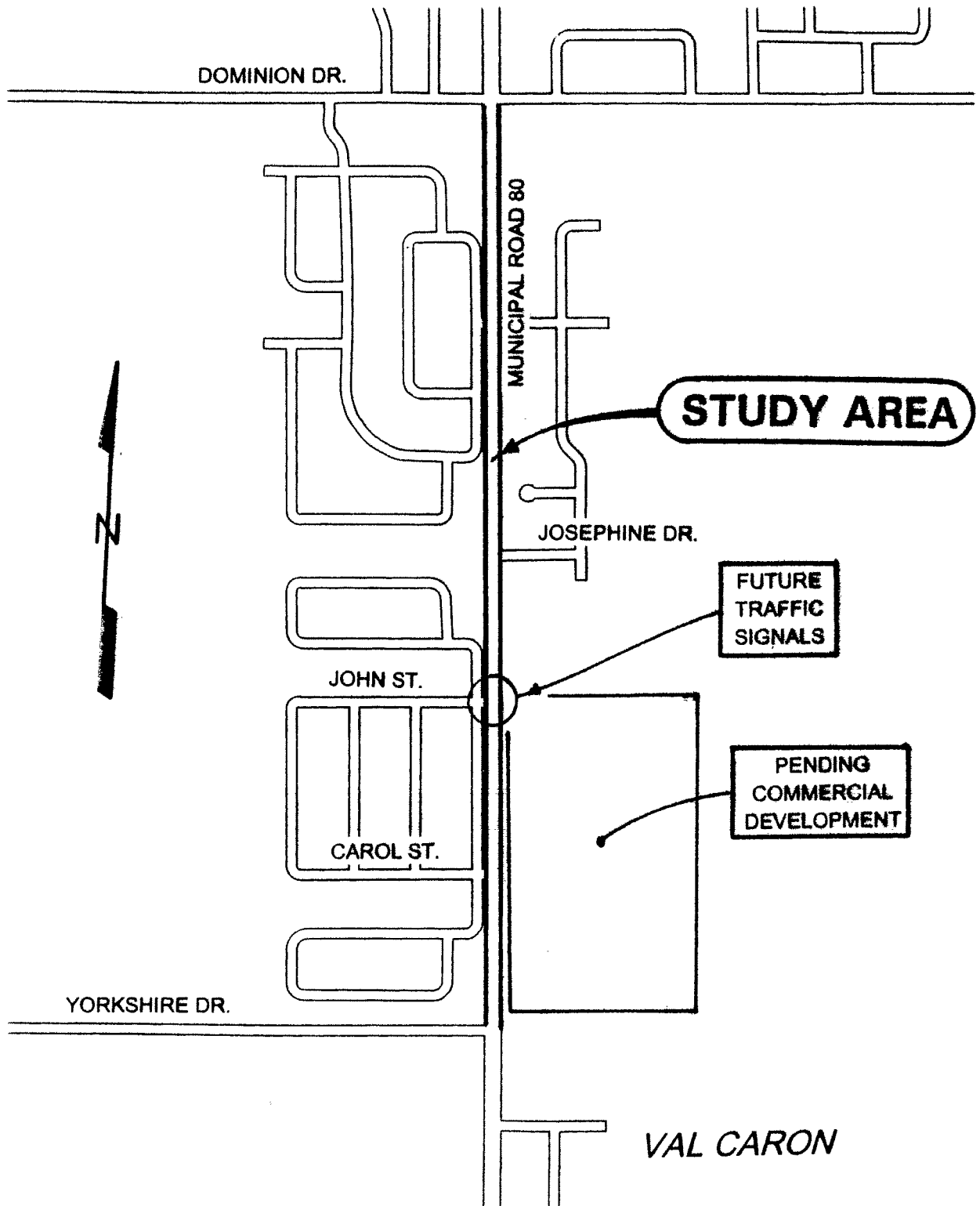
Staff also completed a speed study in this area of M.R. 80 on June 10, 2010. The study was conducted 200 metres north of Yorkshire Drive and recorded the speeds of over 31,000 vehicles. The average speed recorded was 82 km/h while the 85th percentile speed was 91 km/h. The 85th percentile speed is the speed at or below which 85 percent of drivers are travelling and is generally accepted as a good indicator of an appropriate speed limit.

A second speed study was conducted in the 60 km/h zone, 200 metres south of Isabelle Street. The results of the study show that the average speed was 75 km/h and the 85th percentile speed was 84 km/h.

Although the Canadian Guidelines recommended posted speed limit, based on current conditions, from Yorkshire Drive to Josephine Drive is 80 km/h, staff recommends the maximum speed limit be reduced to 70 km/h for the entire section from Yorkshire Drive to Dominion Drive. This 70 km/h zone will provide a transition between the 80 km/h speed limit north of Dominion Drive and 60 km/h speed limit south of Yorkshire Drive. It will also be appropriate for the future commercial development proposed for the area. Based on the speed studies, significant police enforcement will be required to bring operating speeds more closely in line with the recommended speed limit of 70 km/h.

An amendment to the City's Traffic and Parking By-Law 2010-1 is required to implement the recommended change to reduce the speed on Municipal Road 80 from Yorkshire Drive to Dominion Drive to 70 km/h.

EXHIBIT: A





Automated Speed Limit Guidelines FORM A - Automated Speed Limit Guidelines Spreadsheet

Version:
10-Apr-09

Name of Corridor:	Municipal Road 80		
Segment Evaluated:	Josephine Drive	to	Dominion Drive
Geographic Region:	Valley East		
Road Agency:	City of Greater Sudbury		
Road Classification:	Arterial	Length of Corridor:	810 m
Urban / Rural:	Rural	Design Speed: (Required for Freeway, Expressway, Highway)	km/h
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	80 km/h
Major / Minor:	Major	Prevailing Speed: (85th Percentile - for information only)	91.22 km/h
# Through Lanes Per Direction:	2+ lanes	Policy: (Maximum Posted Speed)	

		RISK	Score
A1	GEOMETRY (Horizontal)	Lower	3
A2	GEOMETRY (Vertical)	Lower	3
A3	AVERAGE LANE WIDTH	Medium	6
B	ROADSIDE HAZARDS	Medium	6
C1	PEDESTRIAN EXPOSURE	Lower	2
C2	CYCLIST EXPOSURE	Lower	3
D	PAVEMENT SURFACE	Lower	3
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	Number of Occurrences	12
	STOP controlled intersection	0	
	Signalized intersection	1	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	Number of Occurrences	15
	Left turn movements permitted	25	
	Right-in / Right-out only	0	
E3	NUMBER OF INTERCHANGES	Number of Occurrences	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	N/A	0

Total Risk Score:

53

Recommended Posted
Speed Limit (km/h):

As determined by road characteristics

70

As determined by policy

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments:



Automated Speed Limit Guidelines FORM A - Automated Speed Limit Guidelines Spreadsheet

Version:
10-Apr-09

Name of Corridor:	Municipal Road 80 (current conditions)		
Segment Evaluated:	Yorkshire Drive	to	Josephine Drive
Geographic Region:	Valley East		
Road Agency:	City of Greater Sudbury		
Road Classification:	Arterial	Length of Corridor:	850 m
Urban / Rural:	Rural	Design Speed: (Required for Freeway, Expressway, Highway)	km/h
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	80 km/h
Major / Minor:	Major	Prevailing Speed: (85th Percentile - for information only)	91.22 km/h
# Through Lanes Per Direction:	2+ lanes	Policy: (Maximum Posted Speed)	

		RISK	Score
A1	GEOMETRY (Horizontal)	Lower	3
A2	GEOMETRY (Vertical)	Lower	3
A3	AVERAGE LANE WIDTH	Medium	6
B	ROADSIDE HAZARDS	Higher	9
C1	PEDESTRIAN EXPOSURE	Medium	4
C2	CYCLIST EXPOSURE	Lower	3
D	PAVEMENT SURFACE	Lower	3
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	Number of Occurrences	9
	STOP controlled intersection	0	
	Signalized intersection	0	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade, railroad crossing	0	
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	Number of Occurrences	3
	Left turn movements permitted	4	
	Right-in / Right-out only	0	
E3	NUMBER OF INTERCHANGES	Number of Occurrences	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	N/A	0

Total Risk Score:

43

Recommended Posted
Speed Limit (km/h):

As determined by road characteristics

80

As determined by policy

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments:



Automated Speed Limit Guidelines FORM A - Automated Speed Limit Guidelines Spreadsheet

Version:
10-Apr-09

Name of Corridor:	Municipal Road 80 (with future commercial development)		
Segment Evaluated:	Yorkshire Drive	to	Josephine Drive
Geographic Region:	Valley East		
Road Agency:	City of Greater Sudbury		
Road Classification:	Arterial	Length of Corridor:	850 m
Urban / Rural:	Rural	Design Speed: (Required for Freeway, Expressway, Highway)	km/h
Divided / Undivided:	Undivided	Current Posted Speed: (For information only)	80 km/h
Major / Minor:	Major	Prevailing Speed: (85th Percentile - for information only)	91.22 km/h
# Through Lanes Per Direction:	2+ lanes	Policy: (Maximum Posted Speed)	

		RISK	Score
A1	GEOMETRY (Horizontal)	Lower	3
A2	GEOMETRY (Vertical)	Lower	3
A3	AVERAGE LANE WIDTH	Medium	6
B	ROADSIDE HAZARDS	Higher	9
C1	PEDESTRIAN EXPOSURE	Medium	4
C2	CYCLIST EXPOSURE	Lower	3
D	PAVEMENT SURFACE	Lower	3
E1	NUMBER OF INTERSECTIONS WITH PUBLIC ROADS	Number of Occurrences	16
	STOP controlled intersection	0	
	Signalized intersection	1	
	Roundabout or traffic circle	0	
	Crosswalk	0	
	Active, at-grade railroad crossing	0	
E2	NUMBER OF INTERSECTIONS WITH PRIVATE ACCESS DRIVEWAYS	Number of Occurrences	4
	Left turn movements permitted	5	
	Right-in / Right-out only	1	
E3	NUMBER OF INTERCHANGES	Number of Occurrences	0
	Number of interchanges along corridor	0	
F	ON-STREET PARKING	N/A	0

Total Risk Score:

51

Recommended Posted
Speed Limit (km/h):

As determined by road characteristics

70

As determined by policy

The recommended posted speed limit may be checked against the prevailing speeds of the roadway and the road's safety performance.

Comments:

Request for Decision

Elm Street - Lorne Street to Paris Street, Sudbury, On-Street Parking

Presented To:	Traffic Committee
Presented:	Friday, Jun 17, 2011
Report Date	Wednesday, Jun 01, 2011
Type:	Managers' Reports

Recommendation

That on-street parking NOT be permitted on Elm Street between Lorne Street and Paris Street, and;

That the proposed Transportation Study Report review the need and timing for the Ste. Anne Road extension and other road network improvements to reduce traffic volumes on Elm Street, and;

That bicycle routes through downtown be planned based on recommendations contained in the Downtown Sudbury Master Plan that is currently being prepared and the proposed Transportation Study Report, all in accordance with the report from the General Manager of Infrastructure Services dated June 1, 2011.

Background:

At the Traffic Committee meeting held on March 21, 2011, the Committee directed staff "to prepare a report regarding the proposal to allow on-street parking on Elm Street as proposed by the Downtown Village Development Corporation and Downtown Sudbury BIA including bicycle lanes".

Elm Street between Lorne Street and Paris Street is designated as a secondary arterial roadway and forms part of a major east/west link in the City's road network (**see Exhibit 'A'**). At one time, Elm Street was also a major link in the provincial highway system providing a connection between Highway 17 East and West. In 1990, daily traffic volumes on Elm Street were 22,000, east of Durham Street. With construction of the Brady Street extension, and Highway 17 By-Pass in the 1990's, daily traffic volumes have been reduced to 20,500, east of Lorne Street, and 16,000, east of Durham Street. Traffic counts indicate that hourly traffic volumes are fairly consistent between 8:00 a.m. and 6:00 p.m. During the afternoon peak hour, traffic volumes range from 1,500 to 2,000 along Elm Street through downtown.

Between Lorne Street and Lisgar Street, Elm Street is constructed with four (4) lanes of traffic, and wide sidewalks on both sides. The road has an asphalt surface width of approximately 42 feet which results in lane widths of 10 to 11 feet which are narrow for an arterial roadway. As there are no left turn lanes within

Signed By

Report Prepared By

Dave Kivi
Co-ordinator of Transportation & Traffic
Engineering Services
Digitally Signed Jun 1, 11

Division Review

Robert Falcioni, P.Eng.
Director of Roads and Transportation
Services
Digitally Signed Jun 1, 11

Recommended by the Department

Greg Clausen, P.Eng.
General Manager of Infrastructure
Services
Digitally Signed Jun 1, 11

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed Jun 1, 11

this section of Elm Street, left turn prohibitions are in place at Elgin Street, Durham Street, and Frood Road, at certain times of the day. The intersection of Elm Street and Lisgar Street is widened to provide a westbound left turn lane.

In 2001 a report was presented to Council that recommended that on-street parking **not** be allowed on Elm Street due to the reduced Level of Service (LOS) as a result of the congestion of the corridor.

CAPACITY ANALYSIS

Existing Conditions

Based on existing turning movement counts at the signalized intersections from Lorne Street to Paris Street, staff has undertaken a capacity analysis for the afternoon peak hour for this section of Elm Street. The results of the capacity analysis are shown on Table 'A' below. As indicated, the major movements at the intersections are currently operating at a reasonable Level of Service (LOS) of 'B' to 'D'. The westbound through movement on Elm Street at Elgin Street is currently nearing capacity. Currently, average operating speed from Lorne Street to Paris Street is calculated at 19 km/h.

Scenario # 1 – Parking on Both Sides, No Diversion of Traffic

Staff completed a second analysis assuming that parking was permitted along both sides of Elm Street, between Lorne Street and Lisgar Street. The results of the analysis show that serious congestion will occur along Elm Street with Level of Service ranging from 'E' to 'F'. Average travel speed through the study area is estimated to be 11 km/h after parking is allowed.

Table A

SUMMARY OF INTERSECTION CAPACITY ANALYSIS PM PEAK HOUR					
Scenario	Parameters	Elm @ Elgin		Elm @ Durham	
		EBT	WBT	EBT	WBT
Existing	V/C	0.67	0.84	0.35	0.57
	Approach Delay	23.8	42.5	21.6	10.5
	LOS	C	D	C	B
	Maximum Queue Length	67	109	62	20
Parking on Both Sides with no diverted traffic	V/C	0.91	1.55	0.66	0.93
	Approach Delay	56.3	386.2	55.9	431.8
	LOS	E	F	E	F
	Maximum Queue Length	141	288	103	179
Parking on Both Sides with diverted traffic	V/C	0.73	0.85	0.41	0.42

diverted traffic	Approach Delay	26.2	56.2	24.3	8.4
	LOS	C	E	C	A
	Maximum Queue Length	93	132	76.5	19
Level of Service (LOS)		Delay per Vehicle (Seconds)			
A		≤ 10			
B		>10 and ≤ 20			
C		>20 and ≤ 35			
D		>35 and ≤55			
E		>55 and ≤80			
F		>80			

The reduction of the Level of Service (LOS) is consistent with the analysis of the 2001 Council Report for on-street parking on Elm Street.

Scenario # 2 – Parking on Both Sides. With Diverted Traffic

Due to the high level of congestion and delay on Elm Street, created by the on-street parking, many drivers will choose to divert to alternate routes and by-pass the downtown all together. In order to determine the number of trips that may be diverted from Elm Street, and the alternate routes that would be taken, the City's Transportation Model was utilized. The Transportation Model was developed in support of the City's 2006 Official Plan, and is based on household surveys, and census tract information.

Exhibit 'B' shows the change in hourly traffic volumes on the road network after parking is permitted along both sides of Elm Street. As shown on the Exhibit, traffic volumes are significantly reduced on Elm Street in the westbound direction by 300 to 480 vehicles per hour (vph). Eastbound traffic is also reduced by 150 to 195 vph. While the reduced traffic volumes provide a benefit to capacity on Elm Street, the diverted traffic will adversely impact a number of other corridors in the City. Some of the routes that will be impacted include:

- Beech Street and Frood Road
- Brady Street, Douglas Street and Lorne Street south of Douglas Street
- College Street, Evergreen Lane/Davidson Street and Ste. Anne Road
- MacKenzie Street and Kathleen Street
- LaSalle Boulevard

While some of these roadways such as Brady Street are designated as arterial roads and are intended to carry commuter traffic from other areas of the City, many are not. Frood Road, College Street, MacKenzie Street, Kathleen Street and others are designated as collector roads with residential development on both sides. They are not intended to be used as cut through routes for drivers avoiding congestion along the City's major arterial roadways. It is estimated that 3,000 to 5,000 vehicle trips per day may be diverted away from Elm Street to these other roads.

The Transportation model indicates that capacity problems and congestion will occur on College Street as

well as parts of Elm Street and Brady Street if parking was permitted.

A more detailed capacity analysis was completed for the signalized intersections on Elm Street, with the volumes adjusted. Due to on-street parking, the results confirm that capacity problems will still occur if parking is permitted. Level of service for eastbound traffic on Elm Street will fall to “D” and “E”.

Based on the capacity problems that will be created, and diversion of traffic through residential areas, staff does not recommend that parking be permitted on Elm Street.

Parking Details

Based on as-built drawings, and a site review, it is estimated that approximately 44 parking spaces could be provided on Elm Street. Parking has not been included east of Lisgar Street due to the mid-block uncontrolled pedestrian crossing. Parking has also not been included on the north side of Elm Street, west of the CPR tracks, and adjacent to the planter boxes in front of the Rainbow Centre. Parking within close proximity to the signalized intersections (15 to 18 metres) is not permitted to provide very short right hand turn lanes, and allow for the turning movements of large trucks, fire trucks and busses.

There are currently a total of 3,490 public and private parking spaces within the downtown. The additional parking spaces on Elm Street would represent a 1.3 percent increase in total parking spaces.

Implementation of parking on Elm Street will require the installation of approximately 24 parking meters, or seven (7) to eight (8) pay and display machines. In addition, approximately 36 parking signs on 18 supports will be required.

Trains

Canadian Pacific Railway currently has a three (3) track, at grade, crossing of Elm Street, located west of Frood Road. This railway crossing currently causes substantial delays to traffic on Elm Street and intersecting streets. Reducing Elm Street to one (1) lane will result in greatly increased delays and create much longer traffic queues. The effects of the congestion will remain long after the train has cleared the crossing.

Ste. Anne Road Extension

The 2005 Transportation Study indicates that the westerly extension of Ste. Anne Road to College Street will provide relief to Elm Street between Lorne Street and Frood Road. Moderate traffic reductions will also occur on Elm Street from Frood Road to Paris Street. The attached **Exhibit ‘C’** shows the change in traffic volumes that will result if Ste. Anne Road were extended and parking was permitted on both sides of Elm Street.

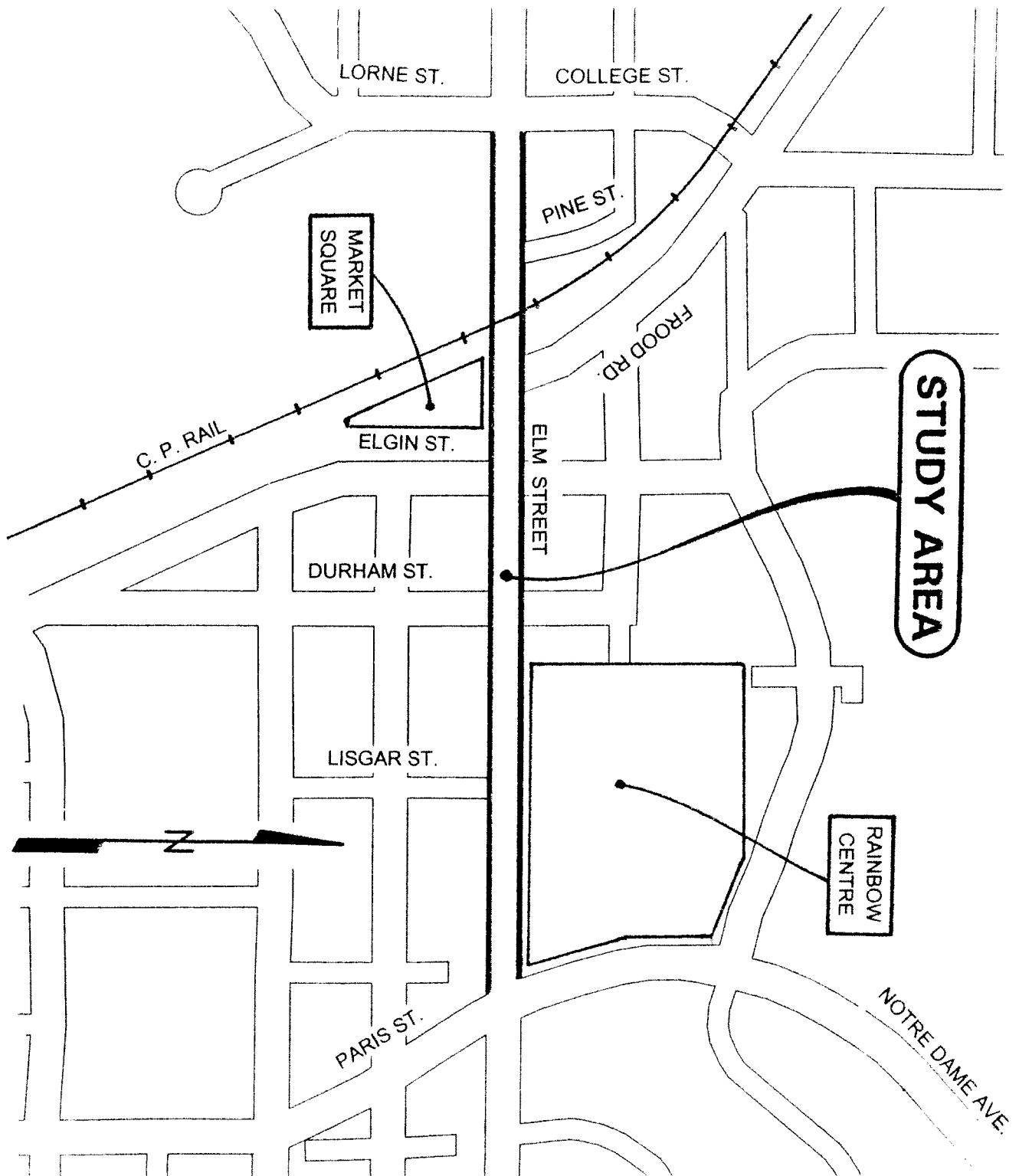
The 2005 Transportation Study recommended that the City “undertake detailed feasibility/operational studies for this improvement to address area growth or other localized operational deficiencies”.

There continues to be a desire to reduce traffic volumes on Elm Street through downtown to allow for on-street parking, and other right-of-way beautification initiatives. Therefore, staff recommends that the proposed Transportation Study Report review the need and timing for the Ste. Anne Road extension, and other road network improvements that may be required to reduce traffic volumes on Elm Street.

Bicycle Lanes

Due to the narrow cross-section and high traffic volumes on Elm Street, bicycle lanes are not recommended. The Downtown Sudbury Master Plan is currently reviewing bicycle routes and related infrastructure for downtown. Preliminary findings of the study indicate that bicycle lanes/paths be provided on the Ste. Anne Road/Frood Road/Elgin Street corridors to facilitate travel through the downtown. The proposed Transportation Study Report will also undertake a review of bicycle facilities in the City that will build on supporting documents such as the Sustainable Mobility Plan, and Bicycle Technical Master Plan. It is recommended that bicycle facilities through downtown Sudbury be planned based on the recommendations contained in the Downtown Sudbury Master Plan and proposed Transportation Study Report.

EXHIBIT: A



ELM STREET
LORNE STREET to PARIS STREET

ON - STREET PARKING

NOT TO SCALE

Page 22 of 30

2011-05-17

2009 PM Peak - Volume Difference

Positive
Negative

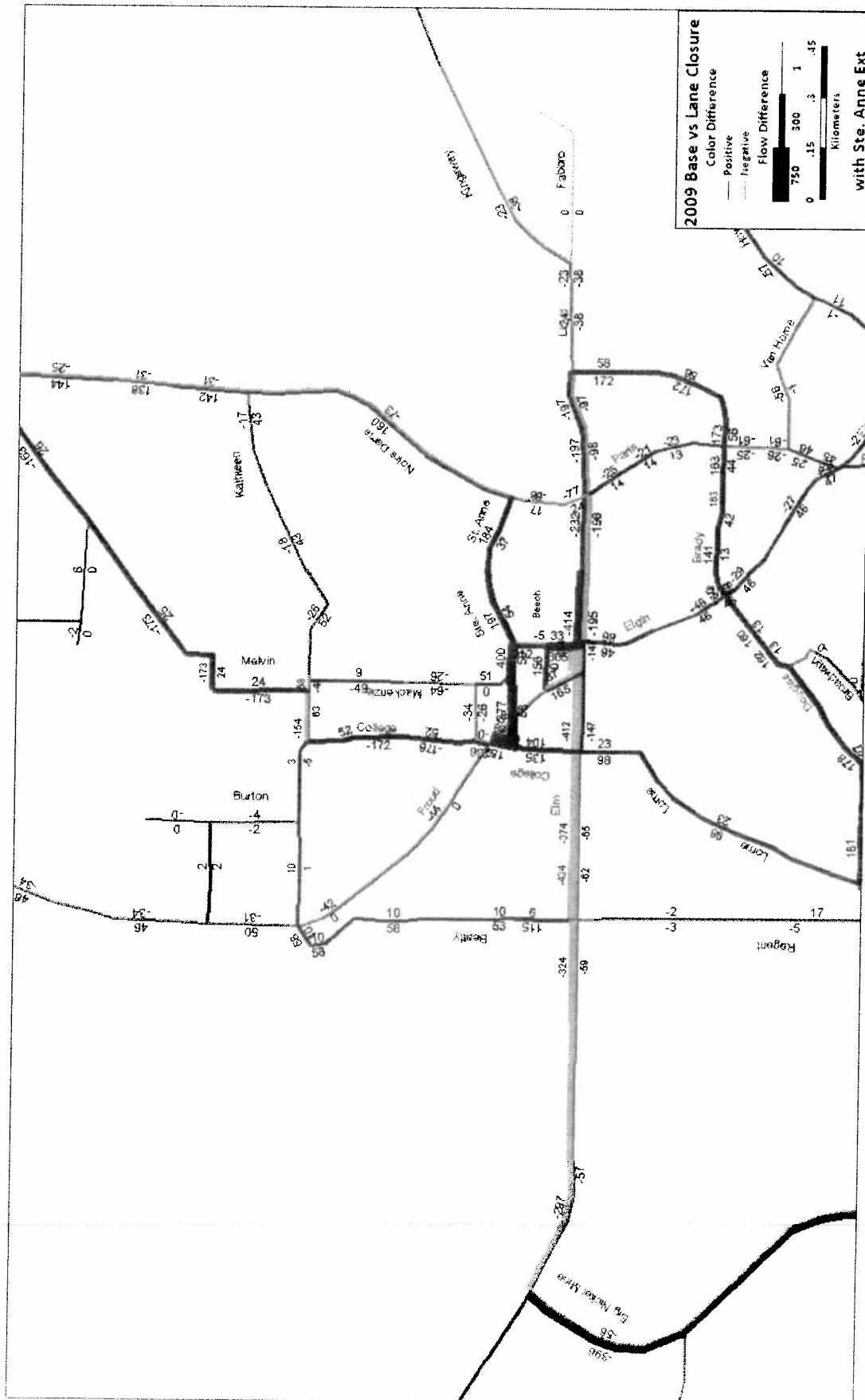
Flow Difference

0 250 500 750 1000 1250 1500 1750 2000 2250 2500 2750 3000 3250 3500 3750 4000 4250 4500 4750 5000

Kilometers

With Elm St Lane Closure

Exhibit C – Change in 2009 PM Peak Volumes with Parking on Both Sides and Ste. Anne Extension



Presented To:	Traffic Committee
Presented:	Friday, Jun 17, 2011
Report Date	Friday, May 27, 2011
Type:	Managers' Reports

Request for Decision

Traffic Control - 1) Redwood Subdivision, Sudbury, Phase 1 and 2) Sunrise Ridge Estates Subdivision, Phase 2, Sudbury

Recommendation

That traffic at the intersection of Jeanine Street and Kenwood Street be controlled with a "Yield" sign facing eastbound traffic on Kenwood Street, and;

That traffic at the intersection of Jeanine Street and Chloe Court be controlled with a "Yield" sign facing eastbound traffic on Chloe Court, and;

That traffic at the intersection of Kingsview Drive and Fieldstone Drive be controlled with a "Yield" sign facing southbound traffic on Fieldstone Drive, and;

That a by-law be passed by City Council 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 from the General Manager of Infrastructure Services dated May 27, 2011.

Background:

1. Redwood Subdivision, Phase 1

Phase 1 of Redwood Subdivision is currently being developed in Minnow Lake (**see Exhibit "A"**). The City of Greater Sudbury will assume Jeanine Street and Chloe Court as public roads.

At the north end, Jeanine Street and Kenwood Street intersect and form a "T" intersection. Yield signs are appropriate when sight lines are good and stopping is not always required. It is recommended that traffic at this intersection be controlled with a "Yield" sign facing eastbound traffic on Kenwood Street. This is a standard form of traffic control at a "T" intersection.

At the south end, Jeanine Street and Chloe Court intersect and form a "T" intersection. It is recommended that traffic at this intersection be controlled with "Yield" sign facing eastbound traffic on Chloe Court.

2. Sunrise Ridge Estates Subdivision, Phase 2

Sunrise Ridge Estates Subdivision, Phase 2 is currently being developed near downtown (**see Exhibit "B"**). The City of Greater Sudbury will assume Kingsview Drive and Fieldstone Drive as public roads.

Signed By

Report Prepared By

Dave Kivi
Co-ordinator of Transportation & Traffic
Engineering Services
Digitally Signed May 27, 11

Division Review

Robert Falcioni, P.Eng.
Director of Roads and Transportation
Services
Digitally Signed May 27, 11

Recommended by the Department

Greg Clausen, P.Eng.
General Manager of Infrastructure
Services
Digitally Signed May 30, 11

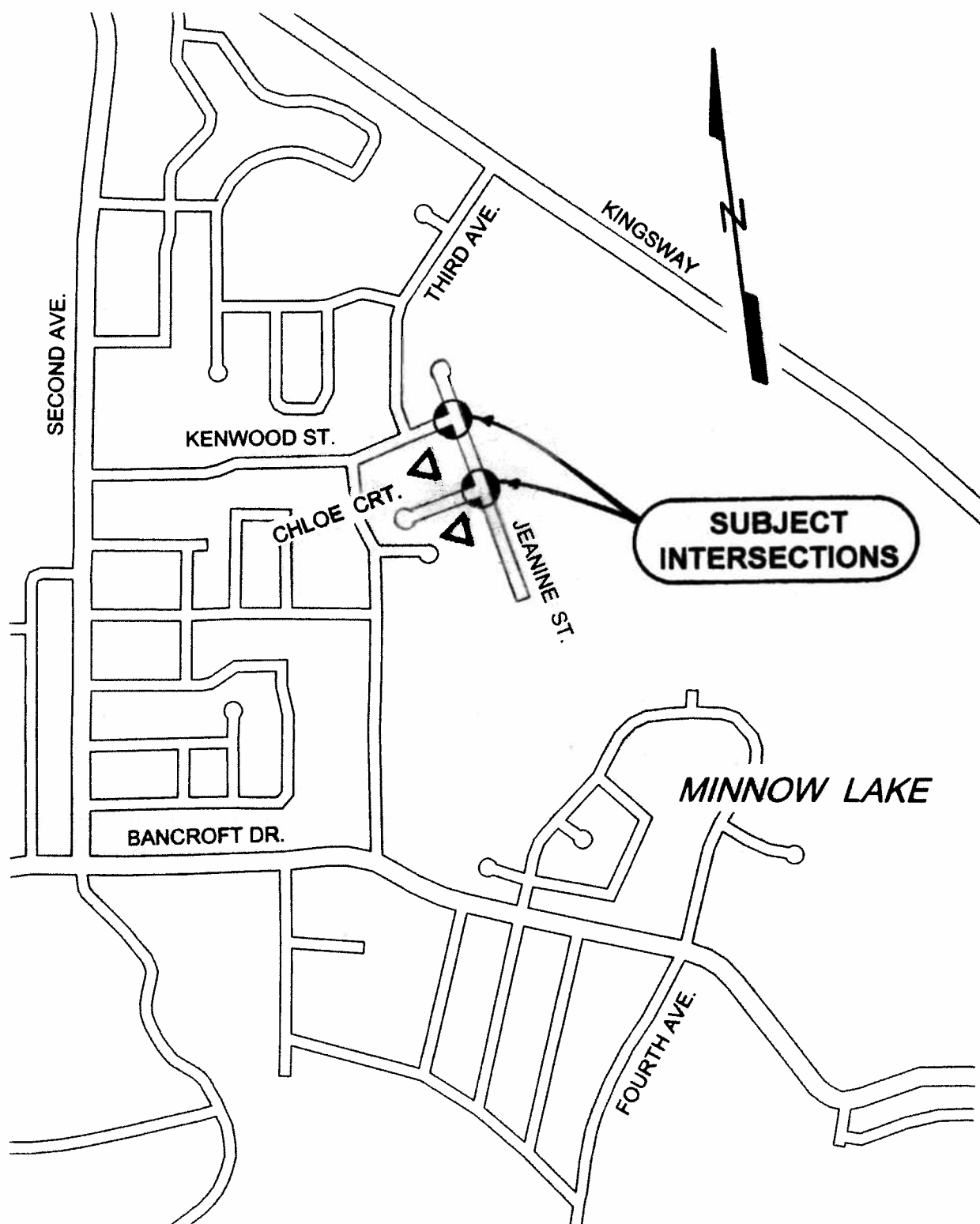
Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed May 30, 11

Kingsview Drive intersects with Fieldstone Drive and forms a "T" intersection. Yield signs are appropriate when sight lines are good and stopping is not always required. It is recommended that traffic at this intersection be controlled with a "Yield" sign facing southbound traffic on Fieldstone Drive.

It is recommended that a by-law be passed to amend Traffic and Parking By-Law 2010-1 in the City of Greater Sudbury to implement the above recommended change.

EXHIBIT: A




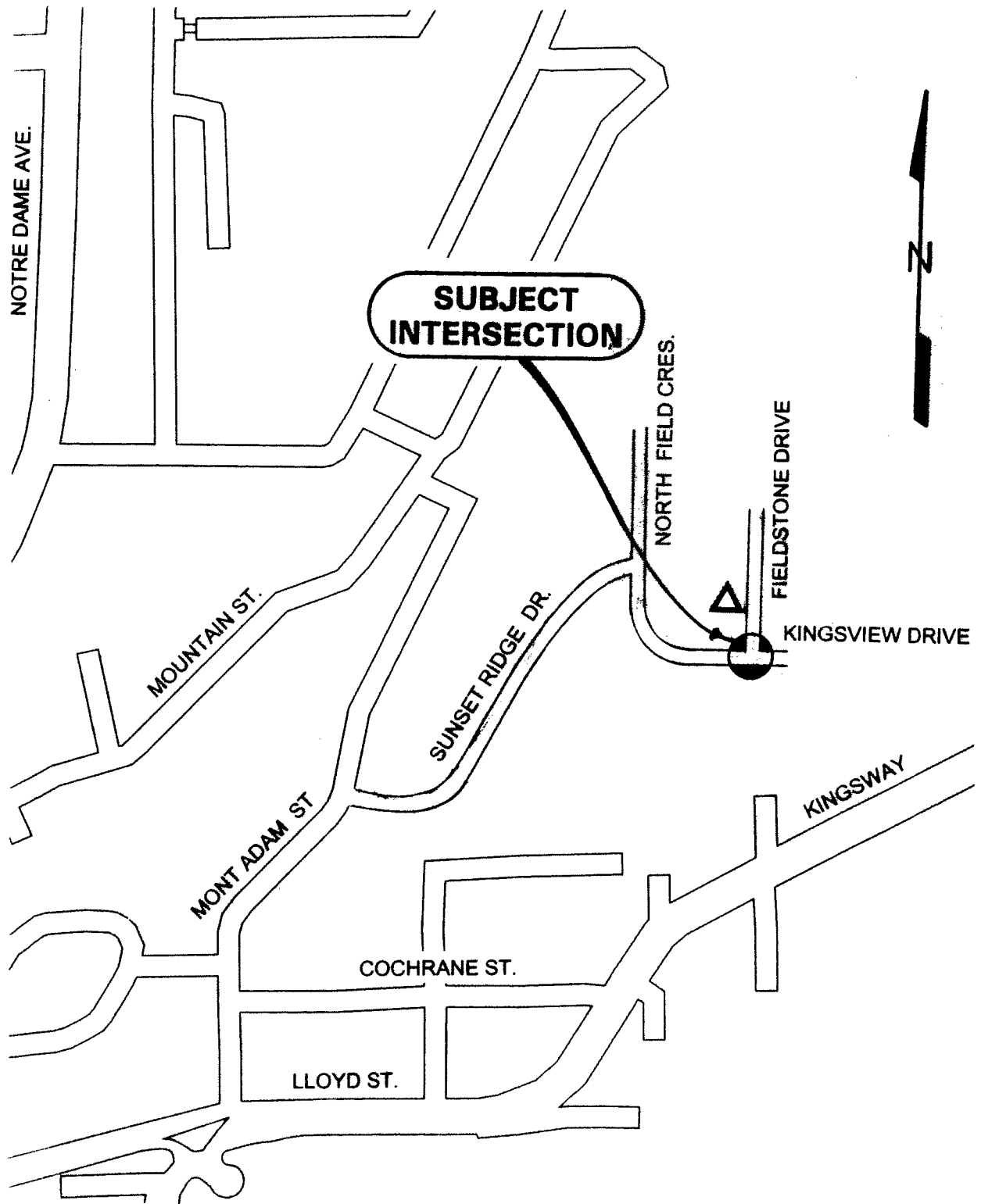
 Sudbury	REDWOOD SUBDIVISION PHASE 1		
	TRAFFIC CONTROL		
	NOT TO SCALE	Page 27 of 30	11-05-17

EXHIBIT: B



SUNRISE RIDGE ESTATES SUBDIVISION
PHASE 2

TRAFFIC CONTROL

NOT TO SCALE

Page 28 of 30 011-05-17

Presented To:	Traffic Committee
Presented:	Friday, Jun 17, 2011
Report Date	Friday, May 27, 2011
Type:	Managers' Reports

Request for Decision

New Traffic Signal Installations - Main Street (M.R. 24) at Sixth Avenue, Lively

Recommendation

That traffic signals be installed at the intersection of Main Street (M.R. 24) and Sixth Avenue as approved as part of the 2011 Capital Roads Budget, and;

That a by-law be passed by City Council to amend Traffic and Parking By-Law 2010-1 in the City of Greater Sudbury to implement the recommended change in accordance with the report from the General Manager of Infrastructure Services dated May 27, 2011.

Finance Implications

The funding for the installation of the traffic signals has been provided for in the 2011 Capital Budget.

Background:

As part of the City's 2011 Capital Construction Program, new traffic signals are being constructed at the intersection of Main Street (M.R. 24) and Sixth Avenue in Lively (**see Exhibit "A"**). The contract for this project will be tendered by the City and it is expected that the new signals will be operational later this summer.

An amendment to the City's Traffic and Parking By-Law 2010-1 is required to implement the new traffic signals.

Signed By

Report Prepared By

Dave Kivi
Co-ordinator of Transportation & Traffic
Engineering Services
Digitally Signed May 27, 11

Division Review

Robert Falcioni, P.Eng.
Director of Roads and Transportation
Services
Digitally Signed May 27, 11

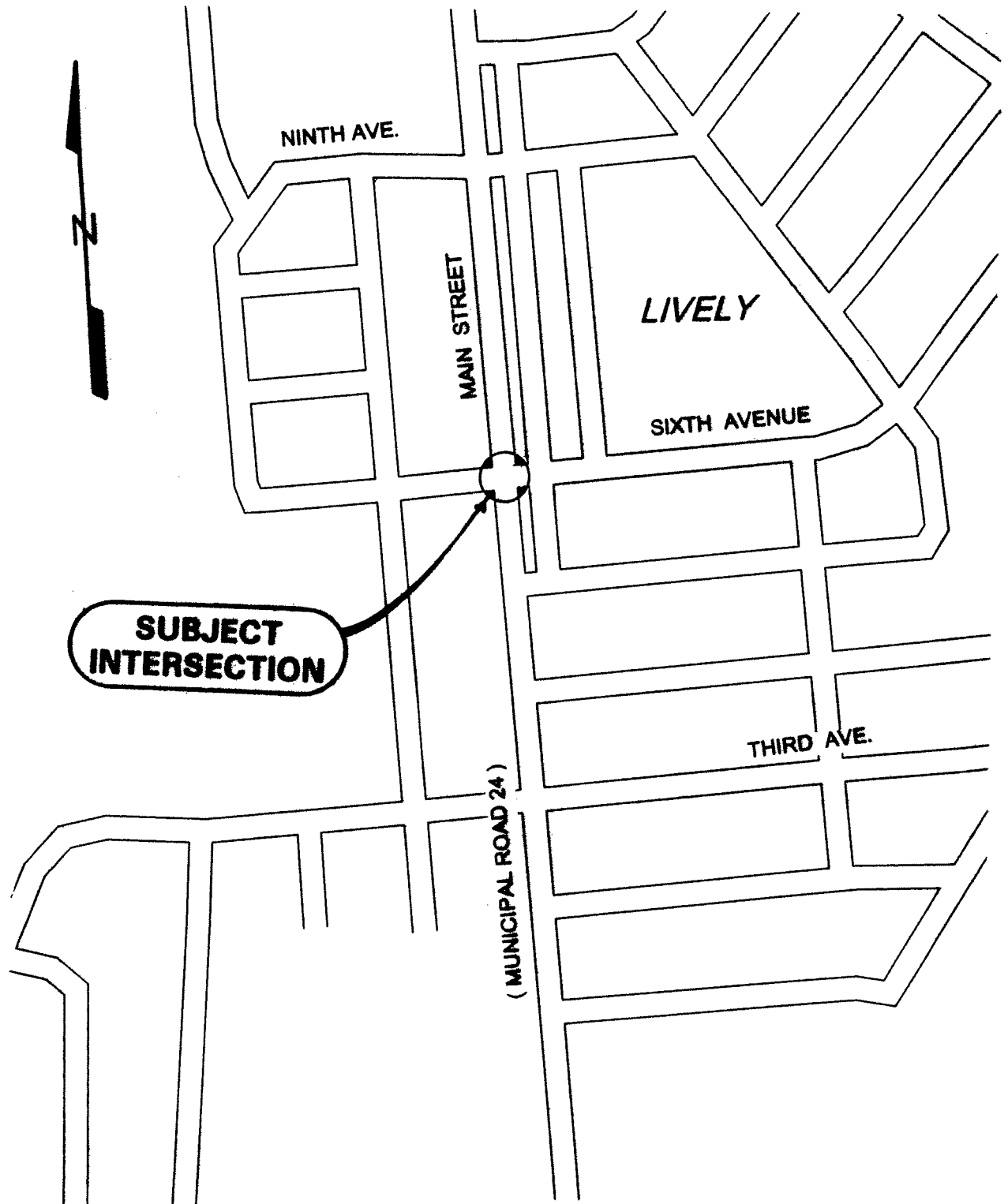
Recommended by the Department

Greg Clausen, P.Eng.
General Manager of Infrastructure
Services
Digitally Signed May 30, 11

Recommended by the C.A.O.

Doug Nadorozny
Chief Administrative Officer
Digitally Signed May 30, 11

EXHIBIT: A



INTERSECTION of MAIN ST. (MR 24)
and SIXTH AVENUE

NEW TRAFFIC SIGNAL INSTALLATION

NOT TO SCALE

Page 30 of 30 2011-05-17