

***PROVINCIALY DESIGNATED HIGHWAYS IMPROVEMENT PROGRAM***

***THE TOWN OF SUSSEX  
NEW BRUNSWICK***



***CAPITAL IMPROVEMENTS PROPOSED  
FOR  
PROVINCIALY DESIGNATED HIGHWAYS  
AND STRUCTURES IN SUSSEX***

***PREPARED FOR  
THE DEPARTMENT OF TRANSPORTATION***

***AUGUST 2018***

# ***PROVINCIALY DESIGNATED HIGHWAYS IMPROVEMENT PROGRAM***

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# Town of Sussex

"GATEWAY TO THE FUNDY EXPERIENCE"

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524 MAIN ST.  
SUSSEX, NEW BRUNSWICK  
E4E 3E4

August 22, 2018

Department of Transportation and Infrastructure  
Kings Place, 440 King Street  
P. O. Box 6000  
Fredericton, N. B.  
E3B 5H1

Attention: Hon. BILL FRASER, Minister of Transportation and Infrastructure

RE: 2019 FIVE YEAR CAPITAL IMPROVEMENT PROGRAM  
PROvincially DESIGNATED HIGHWAYS, TOWN OF SUSSEX

Dear Mr. Minister:

Further to your Departments request Sussex Council is pleased to submit to your Department a proposed Five Year Capital Improvement Program cost shared to partner with your department to upgrade Provincially Designated Highways and Structures within the Town Of Sussex.

Sussex appreciates that your Department has provided funds to upgrade Provincially Designated Highways and Structures to a standard presently enjoyed by other municipalities. The improvements requested in the 2019 Program on Designated Highways consist of upgrades to underground services in preparation for asphalt pavement reconstruction on Leonard Drive from Eveleigh Street to Bryant Drive.

In light of the January 19<sup>th</sup> 2016 announcement of PotashCorp of Saskatchewan ceasing operation in our region our town has had to reevaluate its sustainable cost sharing proposal for designated highways projects. The Town sincerely hopes that the objectives of this Five Year Capital Improvement Program for Provincially Designated Highways in Sussex and Sussex's willingness to partner in this program at fifteen percent (15%) can be achieved jointly with by your Department.

Sincerely,

Marc Thorne, Mayor

encl.

# ***PROVINCIALY DESIGNATED HIGHWAYS IMPROVEMENT PROGRAM***

## ***2.0 PROVINCIALY DESIGNATED HIGHWAYS***

*This section proposes a Five Year Capital Improvement Program for provincially designated highways within the Town Of Sussex totaling \$4,278,798; in 2018 constant dollars. There is no allowance for inflation included in the attached cost estimates but the calculations include an allowance for engineering and project administration. The estimates are based on current construction pricing experienced in the Sussex area.*

*Due to rapid development of the Sussex area and the deterioration of these designated highways makes the completion of this program becomes vital in order to permit the safe and orderly flow of vehicular traffic through the community.*

*A summary of the funds required for the various projects in each of the five years is included in Table "A" and Table "B" of this document. In light of the significant announcement on January 19<sup>th</sup>, 2016 that PotashCorp of Saskatchewan has suspended New Brunswick mining operations, and it is believed to have significant impact to the Town's economic situation in future years, the Town has included for the departments consideration a municipal contribution limited to fifteen percent (15%) of the total approved project costs by the department to assist the department with the much needed attention to these designated highways in Sussex.*

### ***2.1. LEONARD DRIVE***

*Leonard Drive is a principal arterial in this community as it provides a link from Route 1, the four lane highway, and the Smiths Creek area to the regional hospital and schools and to the industrial and business sectors. This arterial also provides a link for traffic from Route #121(Main Street) which serves Sussex Corner, Poley Mountain and beyond, as well as the traffic from downtown Sussex.*

## ***PROVINCIALY DESIGNATED HIGHWAYS IMPROVEMENT PROGRAM***

*Traffic studies were completed by the Town's consultant in 2004, 2012 and again by the Town in 2016. We have previously forwarded a copy of the 2016 traffic study for the Departments reference, files and information. All studies have indicated that the average daily traffic count on Leonard Drive from Eveleigh Street to Bryant Drive exceeds 9,900 vehicles daily. The average daily traffic count on Leonard Drive from Bryant Drive to the Town limit is 5,500 vehicles. The Sussex Health Centre as well as Sussex Regional High School and Sussex Middle School are the main traffic generators in this area. The projected growth for this arterials has been estimated at 1.5% year over year.*

### **2.1.1. EVELEIGH STREET TO ROSEMOUNT AVENUE**

*This section of Leonard Drive; which has a lineal length of 0.168 km; requires asphalt restoration that will involve pulverizing areas of existing asphalt pavement to facilitate shaping of the street and the placing of 100 mm of Type "B" asphalt and 40 mm of Type "D" asphalt concrete on this street in order to complete this work in 2019 estimated at \$260,503.00, in 2018 constant dollars.*

### **2.1.2. ROSEMOUNT AVENUE TO KENNEDY DRIVE**

*This section of Leonard Drive; which has a lineal length of 0.290 km; requires asphalt restoration that will involve pulverizing areas of existing asphalt pavement to facilitate shaping of the street and the placing of 100 mm of Type "B" asphalt and 40 mm of Type "D" asphalt concrete on this street in order to complete this work in 2019 estimated at \$224,703.00, in 2018 constant dollars.*

## ***PROVINCIALY DESIGNATED HIGHWAYS IMPROVEMENT PROGRAM***

### ***2.1.3. KENNEDY DRIVE TO BRYANT DRIVE***

*This section of Leonard Drive; which has a lineal length of 0.340 km; requires asphalt restoration that will involve pulverizing areas of existing asphalt pavement to facilitate shaping of the street and the placing of 100 mm of Type “B” asphalt and 40 mm of Type “D” asphalt concrete on this street in order to complete this work in 2019 estimated at \$282,182.00, in 2018 constant dollars.*

### ***2.1.4. BRYANT DRIVE TO TURNER COURT***

*This section of Leonard Drive; which has a lineal length of 0.209 km; is proposed to be upgraded in the Five Year Capital Improvement Program between 2021 to 2023. It will be proposed to begin an upgrade in 2021 to complete the construction of a storm sewer for a cost of \$171,428.00 in this construction season, and in 2022 to construct a concrete curb and gutter for an amount of \$97,000.00 and the pulverizing of existing asphalt pavement to facilitate shaping of the street and the placing of 100 mm of Type “B” asphalt and 40 mm of Type “D” asphalt concrete for an amount of \$180,468.00 in 2023; for a total estimated amount of \$448,896.00; in 2018 constant dollars.*

### ***2.1.5. TURNER COURT TO TOWN LIMIT***

*This section of Leonard Drive; which has a lineal length of 0.447 km; is also proposed to be upgraded in the Five Year Capital Improvement Program between 2021 to 2023. It will be proposed to complete the construction of a storm sewer for a cost of \$331,149.00 in 2020, to construct a concrete curb and gutter for an amount of \$190,468.00 in 2022 and the pulverizing of existing asphalt pavement to facilitate shaping of the street and the placing of 100 mm of Type “B” asphalt*

## ***PROVINCIALY DESIGNATED HIGHWAYS IMPROVEMENT PROGRAM***

*and 40 mm of Type “D” asphalt concrete for an amount of \$364,388.00 in 2023; for a total estimated amount of \$886,005.00; in 2018 constant dollars.*

### ***2.2. EVELEIGH STREET***

*Eveleigh Street is part of the provincial street network which links traffic with the community center, the regional hospital and education facilities from traffic that flows from Route #1 and traffic that flows from downtown Sussex and the Village Of Sussex Corner and beyond from Route #121.*

#### ***2.2.1. LEONARD DRIVE TO ROSEMOUNT AVENUE***

*This section of Eveleigh Street; which has a lineal length of 0.381 km; is proposed to be upgraded in the Five Year Capital Improvement Program between 2018 to 2020. It will be proposed to build on the construction of a storm sewer completed in 2017. It is proposed to complete the storm sewer design in the amount of \$19,444 and to construct a concrete curb and gutter for an amount of \$167,958.00 in 2019. It is planned to pulverize of existing asphalt pavement to facilitate shaping of the street and the placing of 100 mm of Type “B” asphalt and 40 mm of Type “D” asphalt concrete for an amount of \$312,614.00 in construction season 2019; for a total estimated amount of \$500,017.00, in 2018 constant dollars.*

#### ***2.2.2. MARBLE- EVELEIGH - ROSEMOUNT***

*Longer term, it is planned that An improvement be implemented in accordance with the recent recommendation as outlined on Page 19 of the Town's 2016 WSP Traffic Study be constructed to facilitate an improvement of traffic flow on Eveleigh Street as well as Leonard Drive. It is proposed to complete this*

## ***PROVINCIALY DESIGNATED HIGHWAYS IMPROVEMENT PROGRAM***

*work in 2020 and the construction is estimated at \$150,000.0; in 2018 constant dollars.*

### ***2.3. LEONARD DRIVE / MAIN STREET INTERSECTION***

*Leonard Drive is a principal arterial in this community as it provides a link from Route 1, the four lane highway, and the Smiths Creek area to the regional hospital and schools and to the industrial and business sectors. This arterial also provides a link for traffic from Route #121(Main Street) which serves Sussex Corner, Poley Mountain and beyond, as well as the traffic from downtown Sussex.*

*A WSP Traffic studies were completed by the Town's consultant in 2015 identified significant improvements at this critical intersection. This study was previously forwarded to the Department of Transportation and Infrastructure in 2016 for reference and for department files and information. All studies have indicated that the average daily traffic count on Leonard Drive from Eveleigh Street to Bryant Drive exceeds 9,900 vehicles daily. The average daily traffic count on Leonard Drive from Bryant Drive to the Town limit is 5,500 vehicles. The Sussex Health Centre as well as Sussex Regional High School and Sussex Middle School are the main traffic generators in this area. The projected growth for this arterial has been estimated at 1.5% year over year.*

#### ***2.3.1. LEONARD DRIVE / MAIN STREET RIGHT TURN LANE***

*The WSP study identified lane improvements to improve traffic flow at this critical intersection. The study identified an improvement in developing an enhanced right turn lane travelling south bound on Leonard turning westerly on Main Street. It also identified minor widening of the south side of Main Street to accommodate lane reconfiguration travelling east west. This would*



## ***PROVINCIALY DESIGNATED HIGHWAYS IMPROVEMENT PROGRAM***

*facilitate a separated right turn lane traveling west bound off Main onto Leonard.*

*It will be proposed to construct this improvement in 2022 for a total estimated amount of \$297,575.00, in 2018 constant dollars. The improvement consists of installing storm sewer in the amount of \$44,636, concrete curb and gutter in the amount of \$89,273.00 and asphalt lane widening and intersection asphalt resurfacing estimated at \$165,666.00*

### ***2.3.2. LEONARD DRIVE / MAIN STREET - ROUNDABOUT***

*The WSP study identified a significant functional shift away from a signalized intersections to improve traffic flow at this critical intersection. No date has been given for this intersection improvement. It has been estimate by WSP Consulting Engineers in the amount of \$1,984,000.00, in 2018 constant dollars.*

## ***PROVINCIALY DESIGNATED HIGHWAYS IMPROVEMENT PROGRAM***

### ***3.0 PROVINCIALY DESIGNATED STRUCTURES***

*There are three streams running through the Town Of Sussex: namely, Trout Creek, Wards Creek and Parsons Brook. Trout Creek and Wards Creek are flowing year-round while Parsons Brook is usually dry in mid-Summer.*

*These streams are all subject to severe flooding, especially during Spring run-off, because of their large drainage areas. The run-off from these streams runs into the Kennebecasis River which forms part of the western boundary of the Town. Four bridges crossing these streams are within the Town limits.*

*Although, based on present conditions, these structures meet the needs of the Town in 2016 and the foreseeable future, they still require evaluation each year. The Maple Avenue Structure sidewalk / pedestrian crossing is currently closed to mechanized equipment due to structural concerns.*

*The responsibility for the design, construction and maintenance of these structures is a direct function of the Department Of Transportation and it has been observed by the Town that a preliminary survey for the Maple Avenue Bridge was completed by the Department Of Transportation in 2006.*

*In regards to the Maple Avenue Bridge, the Council would like to have aesthetic input into the design of the new bridge and be made aware of the tentative schedule for the replacement of this bridge.*

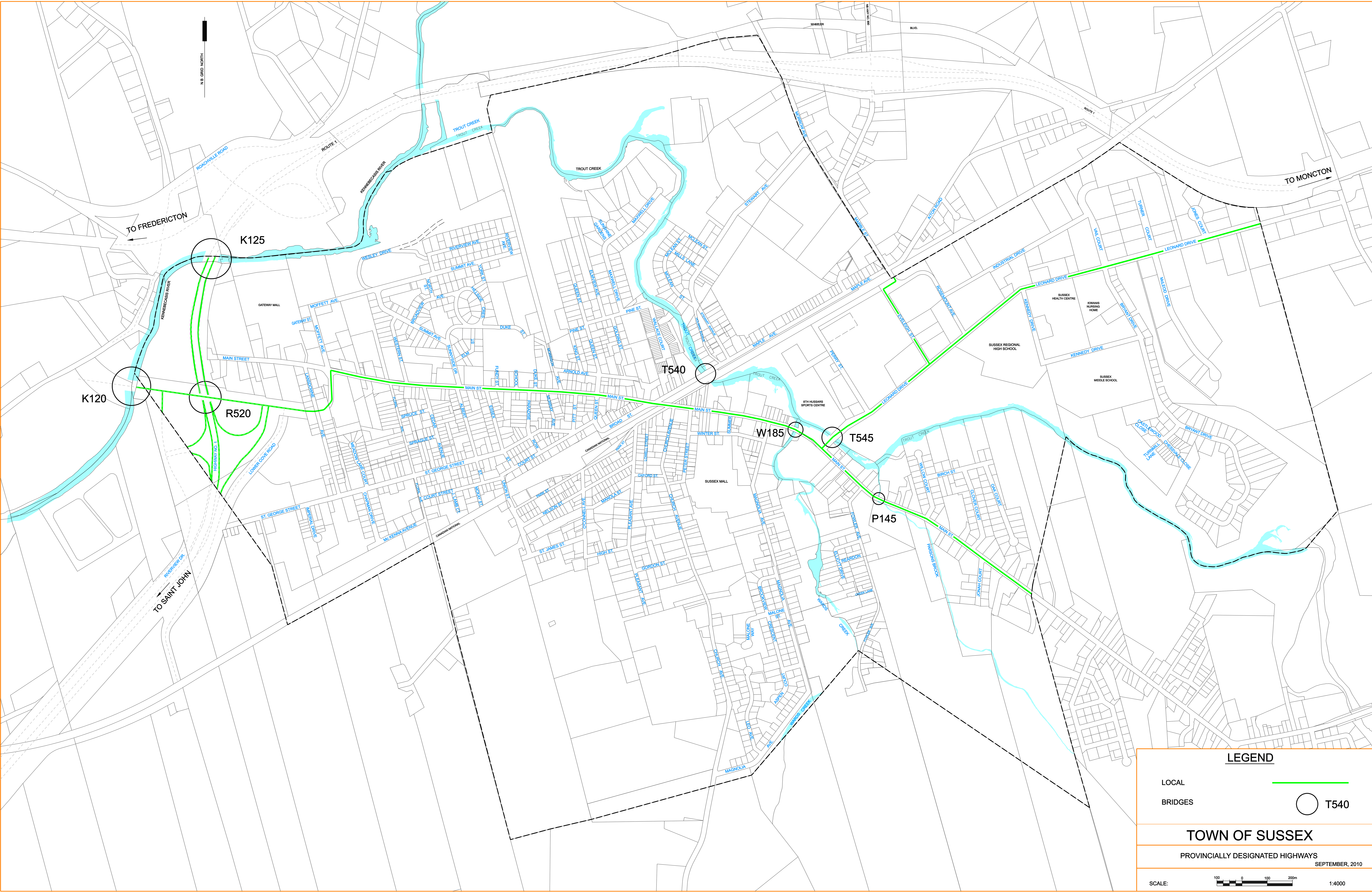
**THE TOWN OF SUSSEX, N. B.**  
**PROVINCIALY DESIGNATED HIGHWAYS**  
**FIVE YEAR CAPITAL IMPROVEMENT PROGRAM BY PROJECT**  
**2019**  
**TABLE "A"**

REF.#	DESCRIPTION	2019	2020	2021	2022	2023	FUTURE	TOTAL
<b>2.1</b>	<b><u>LEONARD DRIVE</u></b>							
	2.1.1. EVELEIGH ST. TO ROSEMOUNT AVE.	260,503						260,503
	2.1.2. ROSEMOUNT AVE. TO KENNEDY DRIVE.	224,703						224,703
	2.1.3. KENNEDY DR. TO BRYANT DR.	282,182						282,182
	2.1.4. BRYANT DR. TO TURNER CT.			171,428	97,000	180,468		448,896
	2.1.5. TURNER CT. TO TOWN LIMIT			331,149	190,468	364,388		886,005
<b>2.2</b>	<b><u>EVELEIGH STREET</u></b>							
	2.2.1. LEONARD DR. TO ROSEMOUNT AVE.	187,403	312,614					500,017
	2.2.2. INTERSECTION EVELEIGH / ROSEMOUNT		150,000					150,000
<b>2.3</b>	<b><u>LEONARD DRIVE / MAIN STREET INTERSECTION</u></b>							
	2.3.1. LEONARD DR. AT MAIN STREET, RIGHT TURN LANE.				297,575			
	2.3.2. LEONARD DR. AT MAIN STREET ROUNDABOUT.						1,984,000	
<b>PROJECT ESTIMATE</b>		<b>\$954,790</b>	<b>\$462,614</b>	<b>\$502,576</b>	<b>\$585,042</b>	<b>\$544,857</b>	<b>\$1,984,000</b>	<b>5,033,880</b>
<b>MUNICIPAL FUNDING CONTRIBUTION (15%)</b>		<b>\$143,219</b>	<b>\$69,392</b>	<b>\$75,386</b>	<b>\$87,756</b>	<b>\$81,729</b>	<b>\$297,600</b>	<b>755,082</b>
<b>NBDT&amp;I FUNDING REQUEST (85%)</b>		<b>\$811,572</b>	<b>\$393,222</b>	<b>\$427,190</b>	<b>\$497,286</b>	<b>\$463,128</b>	<b>\$1,686,400</b>	<b>4,278,798</b>

**THE TOWN OF SUSSEX, N. B.**  
**PROVINCIALY DESIGNATED HIGHWAYS**  
**FIVE YEAR CAPITAL IMPROVEMENT PROGRAM BY PROJECT COMPONENT**  
**2019**  
**TABLE "B"**

<b>REF.#</b>	<b>DESCRIPTION</b>	<b>STORM SEWER</b>	<b>CONCRETE CURB &amp; GUTTER</b>	<b>ASPHALT PAVEMENT</b>	<b>TOTAL</b>
<b>2.1</b>	<i>2019 Table B</i>				
	<b><u>LEONARD DRIVE</u></b>				
	<i>2.1.1. EVELEIGH ST. TO ROSEMOUNT AVE.</i>			<i>260,503</i>	<i>260,503</i>
	<i>2.1.2. ROSEMOUNT AVE. TO KENNEDY DRIVE.</i>			<i>224,703</i>	<i>224,703</i>
	<i>2.1.3. KENNEDY DR. TO BRYANT DR.</i>			<i>282,182</i>	<i>282,182</i>
	<i>2.1.4. BRYANT DR. TO TURNER CT.</i>	<i>171,428</i>	<i>97,000</i>	<i>180,468</i>	<i>448,896</i>
	<i>2.1.5. TURNER CT. TO TOWN LIMIT</i>	<i>331,149</i>	<i>190,468</i>	<i>364,388</i>	<i>886,005</i>
<b>2.2</b>	<b><u>EVELEIGH STREET</u></b>				
	<i>2.2.1. LEONARD DR. TO ROSEMOUNT AVE.</i>	<i>19,444</i>	<i>167,958</i>	<i>312,614</i>	<i>500,017</i>
	<i>2.2.2. INTERSECTION EVELEIGH / ROSEMOUNT</i>	<i>22,500</i>	<i>45,000</i>	<i>82,500</i>	<i>150,000</i>
<b>2.3</b>	<b><u>LEONARD DRIVE / MAIN STREET INTERSECTION</u></b>				
	<i>2.3.1. LEONARD DR. AT MAIN STREET, RIGHT TURN LANE .</i>	<i>44,636</i>	<i>89,273</i>	<i>163,666</i>	<i>297,575</i>
	<i>2.3.2. LEONARD DR. AT MAIN STREET ROUNDABOUT.</i>	<i>297,600</i>	<i>595,200</i>	<i>1,091,200</i>	<i>1,984,000</i>
<b>PROJECT ESTIMATE</b>		<b><i>\$886,757</i></b>	<b><i>\$1,184,898</i></b>	<b><i>\$2,962,225</i></b>	<b><i>\$5,033,880</i></b>
<b>MUNICIPAL FUNDING CONTRIBUTION (15%)</b>		<b><i>\$133,014</i></b>	<b><i>\$177,735</i></b>	<b><i>\$444,334</i></b>	<b><i>\$755,082</i></b>
<b>NBDT&amp;I FUNDING REQUEST (85%)</b>		<b><i>\$753,743</i></b>	<b><i>\$1,007,163</i></b>	<b><i>\$2,517,891</i></b>	<b><i>\$4,278,798</i></b>

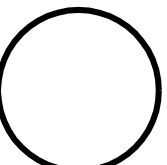




LEGEND

LOCAL

BRIDGES



T540

TOWN OF SUSSEX

PROVINCIALY DESIGNATED HIGHWAYS  
SEPTEMBER, 2010

SCALE: 1:4000

